Appendix A. Agency Acceptance Letters

Acceptance letters from FHWA and from CDOT are on file for this project.

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Appendix B. FHWA PEL Questionnaire

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SH 66 Planning and Environmental Linkages Study

FHWA PEL Questionnaire

This questionnaire is intended to act as a summary of the planning process and ease the transition from the planning study to a NEPA analysis. Often, there is no overlap in personnel between the planning and NEPA phases of a project, and much (or all) of the history of decisions, etc., is not passed along. Different planning processes take projects through analysis at different levels of detail. Without knowing how far, or in how much detail a planning study went, NEPA project teams often re-do work that has already been done.

Planning teams need to be cautious during the alternative screen process; alternative screening should focus on purpose and need/corridor vision, fatal flaw analysis and possibly mode selection. This may help minimize problems during discussions with resource agencies. Alternatives that have fatal flaws or do not meet the purpose and need/corridor vision cannot be considered viable alternatives, even if they reduce impacts to a particular resource. This questionnaire is consistent with 23 CFR 450 (Planning regulations) and other FHWA policy on Planning and Environmental Linkage process.

Instructions: These questions should be used as a guide throughout the planning process. The questionnaire should be filled out as the study progresses. It is a beneficial tool to keep leadership and program managers up to date on a study's progress. When a PEL study (i.e. corridor study) is started, this questionnaire will be given to the project team. Some of the basic questions to consider are: "What did you do?", "What didn't you do?" and "Why?". When the team submits the study to FHWA for review, the completed questionnaire will be included with the submittal. FHWA will use this questionnaire to assist in determining if an effective PEL process has been applied before NEPA processes are authorized to begin. The questionnaire should be included in the planning document as an executive summary, chapter, or appendix.

1. Background:

a) What is the name of the PEL document and other identifying project information (e.g. subaccount or STIP numbers)?

- SH 66 Planning and Environmental Linkages Study Report
- CDOT Project No: STA 0661-014
- CDOT Project Code: 21003

b) Who is the lead agency for the study? (FHWA, FTA, CDOT, Local Agency)

- CDOT

c) Provide a brief chronology of the planning activities (PEL study) including the year(s) the studies were conducted. (Include project start date and end date).

- Study began – October 2016
- Purpose and Need – January 2017 through September 2017
- Public Open House Series #1 – April 2017
- Final Corridor Conditions Report (CCR) – September 2017
- Developed Risk and Resiliency (R&R) PEL Process – August 2017 through July 2018
- Public Open House Series #2 – April 2019
- Draft Access Control Plan (ACP) and Public Open House Series – July 2019
- Public Open House Series #3 – September 2019
- Alternatives Development and Screening complete – September 2019
- Draft PEL Report available – October 2019
- Final Access Control Plan available – October 2019
- Final PEL Report available – November 2019
- Study concluded – November 2019

d) Provide a description of the existing transportation corridor, including project limits, length of study corridor, modes, number of lanes, shoulder, access control and surrounding environment (urban vs. rural, residential vs. commercial, etc.)

- **Project limits** – McConnell Drive in Lyons to Weld County Road (WCR) 19
- **Length of study corridor** – 20 miles
- **Modes** – Includes vehicular, bicycle, pedestrian, bus transit, and freight rail facilities
- **# Lanes** – Generally two lanes (undeveloped areas); four to five lanes near Interstate 25 (I-25), United States Highway 287 (US 287), United States Highway 36 (US 36)
- **Shoulders** – Widths vary widely; depending on classification, between 4 to 12 feet
- **Access control** – Not currently a limited access highway. Includes many uncontrolled accesses. Access Control Plan (ACP) has been developed in parallel with this PEL study
- **Surrounding environment** – Includes a mix of suburban development and open space in Boulder County (western limits) and a mix of suburban development and agricultural uses in Weld County (eastern limits)

e) Who was the sponsor of the PEL study? (CDOT, Local Agency [name the local agency], Other)

- CDOT, with funding support from Denver Regional Council of Governments (DRCOG)

f) Who was included on the study team (Name and title of agency representatives, PMT, TWG, consultants, etc.)?

- **FHWA**: Tricia Sergeson (Transportation Specialist); Brian Dobling (Region 4 Area Engineer/ROW Program Manager)
- **CDOT PMT**: James Zufall (*Project Manager*); Abra Geissler and Brian Varrella (*Resident Engineers*); Jim Eussen (*Region 4 (R4) Planning and Environmental Manager*); Karen Schneiders (*Local Agency Environmental and Planning Manager*); Lindsay Edgar and Sean Brewer (*Statewide PEL Managers*); Tim Bilobran (*R4 Permits Manager*)
- **FHU Consultant Team**: Chris Fasching *(Principal in Charge)*; Alex Pulley *(Project Manager)*; Jodie Snyder *(Deputy Project Manager)*; Amanda Cushing *(Environmental Lead)*; Kelly Leadbetter and Annie McFarland *(Public Engagement Leads)*; Shea Suski *(Travel Demand, Bicycle, and Pedestrians Lead)*; Emma Belmont *(Transit Lead)*; Colleen Guillotte *(Safety Lead)*; Stephanie Anzia *(Railroad Lead)*; Megan Ornelas *(GIS Lead)*, Linda Stuchlik *(Document Support)*; Kate Oberleas, Keith Hidalgo, Dale Tischmak, Jake Lloyd, Brian Fauver, Ryan Walker *(Environmental Resource Specialists)*; Matthew Downey *(Bicycle and Pedestrians)*; Kevin Maddoux *(Quality Assurance Manager)*
- **Atkins Consultant Team**: Jim Hanson *(Traffic Analysis Lead)*; Dave Sprague, Anna Ericson, and Annette Marquez *(Traffic Analysis and Access Control Plan)*; Andrew Holton *(Roadway Lead)*
- **Goodbee & Associates Team**: Elissa Roselyn and Mary Keith Floyd *(Utilities)*
- **All Traffic Data**: Eric Boivin *(Traffic Data Collection)*
- **Technical Advisory Committee (TAC)**: CDOT PMT Members; FHWA; Joe Kubala (Town of Lyons); Paul Glasgow (Town of Lyons); George Gerstle (Boulder County); Jeffery Maxwell (Boulder County); Scott McCarey (Boulder County); Phil Greenwald (City of Longmont); Tyler Stamey (City of Longmont); Jim Angstadt (City of Longmont); Jim Flesher (Weld County); Dawn Anderson (Weld County); Everett Bacon (Weld County); Helen Migchelbrink (Town of Mead); Erika Rasmussen (Town of Mead); Dawn Adams (Town of Mead); Chris Kennedy (Town of Mead); Julie Pasillas (City of Firestone); David Lindsay (City of Firestone); Paula Mehle (City of Firestone); Steve Cook (DRCOG); Nataly Handlos (RTD); Consultant Team.
- **Executive Committee (EC)**: CDOT PMT Members; FHWA; Heather Paddock (CDOT R4); Johnny Olson (CDOT R4); Keith Sheaffer (CDOT R4); Connie Sullivan (Town of Lyons); Victoria Simonsen (Town of Lyons); Deb Gardner (Boulder County); Jeff Moore and Tim Waters (City of Longmont); Scott James (Weld County); Elizabeth Relford (Weld County); Julie Cozad (Weld County); George Heath (Town of Firestone); Colleen Whitlow (Town of Mead); Judy Lubow (RTD); Consultant Team.

g) List the recent, current or near future planning studies or projects in the vicinity? What is the relationship of this project to those studies/projects?

- **Current projects**: SH 66 and 3rd Street (WCR 7) intersection improvements is an active project at the time of this PEL Report.
- **Near future projects**: Near future fiscally-constrained projects include roadway widening (such as SH 66 to four lanes from Hover Street to US 287), managed lanes (on I-25), and transit projects in Boulder and Longmont.
- **Relationship to SH 66 PEL**: These projects and other fiscally-constrained projects along or near SH 66 were included in the PEL study's travel demand model and are documented in **Table 1**.

Table 1. 2040 No Action Fiscally-Constrained Projects Impacting SH 66

Facility	To/From	Location	Improvement
Roadway Projects			
SH 66	Hover Street to US 287	Longmont	Widen to 4 lanes
I-25	SH 66 to WCR 38	North I-25	New managed lane, each direction
17th Avenue	Alpine Street to Ute Creek Drive	Longmont	Widen to 4 lanes
East County Line Road	9th Avenue to SH 66	Longmont	Widen to 4 lanes
Nelson Road	75th Street to Affolter Drive	Longmont	Widen to 4 lanes
Pace Street	5th Avenue to SH 66	Longmont	Widen to 4 lanes
Transit Projects			
SH 119	Foothills Parkway to US 287	Boulder / Longmont	New BRT route
Parking	SH 66 & US 287	Longmont	Relocated Park-n-Ride (150 spots)
Station / Parking	SH 119 & US 287	Longmont	New BRT station (439 spots)

2. Methodology used:

a) Did the Study follow the FHWA PEL Process? If the Study was conducted by another US DOT Agency, provide a crosswalk table to demonstrate how the FHWA Process was utilized.

- Yes, this PEL study followed FHWA's process, according to *CDOT's PEL Handbook* (2016).

b) How did the Study meet each of the PEL Coordination Points identified in 23 USC 168?

FHWA correspondence occurred at the following times. The bolded text represents official coordination point correspondence.

- March 16, 2017 – **Coordination Point # 1:** Reason for the Study and Desired Outcomes Meeting
- June 19, 2017 – **Coordination Point # 2**: Purpose and Need, Goals and Objectives plus CCR approval by email
- November 13, 2017; January 12, 2018; February 20, 2018; and June 25, 2018 – Risk and Resiliency Agency and PEL Team Coordination Meetings
- November 15, 2017 – Email confirmation from FHWA for how to address Risk and Resiliency in PEL Study
- December 12, 2018 – **Coordination Point #3**: Alternatives Development and Screening Review email coordination from FHWA for Level 2/Level 3
- March 25, 2019 – Public Open House preparation and Stakeholder Coordination email update to FHWA

- May 30, 2019 – **Coordination Points #3 and #4**: Alternatives Development and Screening Outcomes and PEL Documentation Next Steps Meeting
- July 26, 2019, and August 16, 2019 – **Coordination Points #3 and #4**: Alternatives Development and Screening Outcomes and PEL Documentation Next Steps Correspondence by email
- September 19, 2019 – PEL Recommendations and Prioritization Correspondence by email

c) What NEPA terminology/language was used and how did you define them? (Provide examples or list)

- **Study Area** – Area surrounding SH 66 that was evaluated in the context of community planning, transportation planning and needs, and environmental resources. The PEL study area is a basis for establishing future NEPA study areas.
- **Purpose and Need** – A purpose and need statement was defined for SH 66 to provide a vision for the SH 66 PEL and to identify the purpose and need for projects as funding becomes available and NEPA efforts begin.
- **Alternatives Development and Screening** – The process of identifying potential options and evaluating whether the options meet SH 66 purpose, need, and goals.
- **No Action Alternative** – Assumes no improvements would be made to the corridor and the surrounding transportation network, except those already committed by a government or an agency or those with identified funds for construction.
- **Environmental Impacts Evaluation** – Identifies impacts to environmental and cultural resources expected under PEL recommendations.
- **Environmental Next Steps** – Discusses agency coordination needs that would arise in NEPA and requirements to avoid, minimize, and mitigate environmental impacts.

d) How do you see these terms being used in NEPA documents?

- These terms will be used in NEPA documents in a similar fashion as they have been used in the PEL study.

e) What were the key steps and coordination points in the PEL decision-making process? Who were the decision-makers and who else participated in those key steps? For example, for the corridor vision, the decision was made by CDOT and the local agency, with buy-in from FHWA, USACE, and USFWS.

- Purpose and Need Development – CDOT PMT and FHWA were the decision makers, with support from the TAC and EC
- Corridor Conditions Establishment – CDOT PMT and FWHA were the decision makers, in coordination with:
  - the SH 66 TAC and EC, DRCOG, and RTD ***(for planning and transportation context)***
  - CDPHE, CPW, EPA, SHPO, USACE, and USFWS ***(for environmental context)***
- Alternatives Development and Screening – CDOT PMT and FHWA were the decision makers, with support from the TAC and EC
- PEL Recommendations – CDOT PMT and FHWA were the decision makers, with support from the TAC and EC
- PEL Prioritization – CDOT PMT and FHWA were the decision makers, with support from the TAC and EC

f) How should the PEL information below be presented in NEPA?

The PEL information presented below should be a foundation for NEPA in terms of:

- Incorporating base planning, transportation, and environmental conditions of the corridor
- Building on the SH 66 purpose and need and goals
- Using findings from the alternatives development and screening to inform NEPA evaluation
- Using environmental findings to scope for NEPA evaluation

3. Agency coordination:

a) Provide a synopsis of coordination with federal, tribal, state and local environmental, regulatory and resource agencies. Describe their level of participation and how you coordinated with them.

Table 2. Agency Coordination Overview

Organization	Coordination Overview
Tribal	No tribal coordination occurred for this project.
FHWA	FHWA was invited to participate on the TAC and Executive Committee, was included throughout the SH 66 PEL process, and was engaged for collaboration at the PEL Coordination Points.
EPA	An introductory letter was mailed to EPA in March 2017. The draft CCR and a follow-up letter were mailed in June 2017. EPA responded in July 2017 to confirm the agency had no input on the CCR.
USACE	An introductory letter was mailed to USACE in March 2017. The draft CCR and a follow-up letter were mailed in June 2017. No input was received on the CCR.
USFWS	An introductory letter was mailed to USFWS in March 2017. The draft CCR and a follow-up letter were mailed in June 2017. No input was received on the CCR.
CDPHE	An introductory letter was mailed to CDPHE in March 2017. The draft CCR and a follow-up letter were mailed in June 2017. No input was received on the CCR.
CPW	An introductory letter was mailed to CPW in March 2017. The draft CCR and a follow-up letter were mailed in June 2017. CPW provided comments related to design and construction of future projects and PEL considerations to account for in the CCR. Updates were incorporated to address CPW's feedback.
SHPO	An introductory letter was mailed to SHPO in March 2017. The draft CCR and a follow-up letter were mailed in June 2017. No input was received on the CCR.

b) What transportation agencies (e.g. for adjacent jurisdictions) did you coordinate with or were involved in the PEL study? This includes all federal agencies if the study is being led by a local agency or transit oriented study seeking to utilize the FHWA PEL Process.

- FHWA
- CDOT
- DRCOG
- RTD

c) What steps will need to be taken with each agency during NEPA scoping?

- CDOT – Would be involved with oversight of projects along SH 66
- FHWA – Would be involved with oversight of federally funded projects
- DRCOG – Would be involved with regional transportation planning decision-making for regionally significant projects
- RTD – Would be involved with RTD station improvements
- EPA – May serve as a cooperating agency depending on the class of NEPA action
- USACE – May serve as a cooperating agency and would be involved with wetland impacts, mitigation, and permitting requirements
- USFWS – May serve as a cooperating agency and would be involved with T&E species impacts and mitigation
- CDPHE – Would be involved with water quality and air quality impacts and mitigation
- CPW – Would be involved with wildlife impacts and mitigation
- SHPO – Would be involved with historic and archaeological impacts and mitigation

4. Public coordination:

a) Provide a synopsis and table of your coordination efforts with the public and stakeholders.

Table 3. Public Coordination Overview

Organization	Coordination Overview
TAC	▪ Meetings occurred with the TAC about every 6 to 8 weeks during development of the CCR, Purpose and Need, and Alternatives Development and Screening ▪ TAC reviews of deliverables occurred with each submittal milestone
EC	▪ Meetings occurred with the EC at key milestones and in advance of public open houses during development of the CCR, Purpose and Need, and Alternatives Development and Screening ▪ EC reviews of deliverables occurred in coordination with the TAC
Coalition	▪ CDOT participated in the monthly SH 66 Coalition meetings, but the Coalition meetings were facilitated by communities along SH 66 ▪ Toward the end of the PEL Study, monthly updates were provided at the Coalition instead of through TAC and EC meetings as TAC and EC members are engaged at the SH 66 Coalition meetings
Public	▪ April 2017 Open House had approximately 55 attendees ▪ April 2019 Open Houses had approximately 110 attendees ▪ July 2019 Open House had approximately 90 attendees ▪ September 2019 Open Houses had approximately 60 attendees ▪ CO 66 PEL website was updated throughout the PEL Study

5. Corridor Vision/Purpose and Need:

a) What was the scope of the PEL study and the reason for doing it?

- Identifies a strategic vision and purpose for SH 66 that addresses safety, mobility, and access needs
- Accounts for environmental resources, community context, and risk/resiliency
- Details the alternatives development and screening process
- Identifies and prioritizes short-term and long-term improvements developed through a collaborative stakeholder and public process

b) What is the vision for the corridor?

- To address and prioritize safety, mobility, and access needs
- To promote efficient and cost-effective solutions and reduce delays in project implementation
- To understand community context, where sensitive environmental resources are located, and how to make SH 66 more resilient

c) What were the goals and objectives?

- **Community Context**: Maintain community context (such as rural character) and enhance the community's exposure along the corridor (through gateways)
- **Environment**: Protect and accommodate natural and cultural resources along the corridor (such as floodplains, open space areas) and minimize environmental impacts (e.g., wildlife crossings, traffic noise concerns)
- **Risk and Resiliency**: Understand physical threats (such as natural hazards) and operational threats (unanticipated traffic increases resulting from unplanned land development); collaborate with communities to establish partnerships; and enhance SH 66 as an evacuation route

d) What is the PEL Purpose and Need statement?

SH 66 transportation improvements are to increase safety; reduce traffic congestion; provide managed access for existing and future development; and improve multimodal mobility of people, goods, and services. The improvements should be resilient, accommodate developing technologies, and strive to complement adjacent community context.

e) What steps will need to be taken during the NEPA process to make this a project-level purpose and need statement?

This Purpose and Need statement addresses the SH 66 corridor from McConnell Drive in Lyons to WCR 19. Depending on the specific project, the Purpose and Need statement may need to be revised to address the specific needs at that location.

6. Range of alternatives considered, screening criteria and screening process:

a) What types of alternatives were looked at? (Provide a one or two sentence summary and reference document.)

This PEL Study included alternatives development and screening (**Chapter 2** of the PEL Report) of:

- Roadway options that would improve safety, mobility, and access, such as highway classification and capacity and intersection improvements
- Bicycle, pedestrian, and transit options that would improve safety and mobility

b) How did you select the screening criteria and screening process?

- The screening process was applicable to the corridor wide alternatives and is applicable to future individual project locations.

c) For alternative(s) that were screened out, briefly summarize the reasons for eliminating or not recommending the alternative(s). (During the initial screenings, this generally will focus on fatal flaws)

- During Level 1 screening, most alternatives were retained for further consideration in Level 2.
- During Level 1 screening, five alternatives were either eliminated or eliminated in the 2020 to 2040 planning horizon:
  - Realigning SH 66 southward (west of I-25) was not retained because the current alignment is the northern edge of Longmont. Movement southward would place SH 66 within Longmont, which would degrade safety, mobility, and access conditions and create other issues for the City's transportation system.
  - Commuter rail, light rail, and bus rapid transit (BRT) were eliminated through 2040 because anticipated ridership does not match the need for these modes. Dedicating a separate transit guideway was also eliminated through 2040 because anticipated transit demand is not viable at this time.

d) How did the team develop Alternatives? Was each alternative screened consistently?

- The team developed alternatives by considering a range of alternatives, then by evaluating roadway alternatives for sections of SH 66 (involving highway classification and number of lanes/capacity).
- Then the team considered roadway intersection improvements that would support the recommended classification and capacity along with potential bicycle, pedestrian, and transit options for SH 66 sections.

e) Which alternatives were recommended? Which should be brought forward into NEPA and why?

- This report summarizes and prioritizes safety, mobility, and access options carried forward to establish a ROW preservation footprint.
- The ROW preservation footprint is considered the collective footprint of all PEL proposed options.
- This footprint is intended to inform decision making at the state and local levels in terms of preserving land and making decisions that do not preclude future transportation improvements identified in this PEL Study.
- The PEL team has identified options that would work operationally that could be evaluated further during NEPA and preliminary engineering.

f) Did the public, stakeholders, and agencies have an opportunity to comment during this process? Summarize the amount of public interest in the PEL Study.

- The public, stakeholders, and agencies did have an opportunity to comment during the alternatives development and screening process.
- The public has been engaged through public open houses, the CO 66 PEL website, and email and phone correspondence with CDOT and the project team. CDOT has ensured that opportunities for public engagement have been available throughout the project.

g) Were there unresolved issues with the public, stakeholders and/or agencies?

- There are no unresolved issues.

7. Planning assumptions and analytical methods:

a) What is the forecast year used in the PEL study?

- The forecast year or planning horizon for the SH 66 PEL Study was 2040 based on DRCOG's travel demand model (FOCUS).

b) What method was used for forecasting traffic volumes?

- The projected SH 66 PEL 2040 traffic volumes are based on the regionally accepted growth developed from the FOCUS model. This model assesses the future weekday morning and evening peak period traffic volumes but does not project growth patterns for weekend traffic. To simulate the weekend conditions, some assumptions were made based on the closest existing continuous count locations where CDOT collects hourly traffic data, which is located on US 36 just east of Estes Park.

c) Are the planning assumptions and the corridor vision/purpose and need statement consistent with the long-range transportation plan?

- Yes, the planning assumptions and corridor vision/purpose and need statement are consistent with the long range transportation plan.

d) What were the future year policy and/or data assumptions used in the transportation planning process related to land use, economic development, transportation costs and network expansion?

- Growth from DRCOG's FOCUS model of traffic volumes between 2015 and 2040 was applied to existing traffic counts along the corridor using a process developed by the National Cooperative Highway Research Program's Report 765 to develop 2040 forecasted daily traffic volumes on segments and peak hour turning movements at intersections.
- Future peak hour intersection turning movements and daily traffic volumes were projected using the approved 2040 DRCOG regional travel demand model.

8. What pieces of the PEL can transfer directly to the NEPA phase of a project?

- Purpose and Need Statement
- CCR Findings
- Alternatives development and Screening documentation
- Risk and Resiliency Findings

9. Resources (wetlands, cultural, etc.) reviewed. For each resource or group of resources reviewed, provide the following:

a) In the PEL study, at what level of detail were the resources reviewed and what was the method of review?

- In the CCR, resources were mapped and foundational information was provided in terms of:
  - Potential agency and stakeholder involvement
  - Resource findings and locations
  - Critical schedule considerations
  - Regulatory setting and general context
  - NEPA pre-scoping considerations
  - Funding, design, construction, and mitigation implications
- In the PEL Report, impacts at the section level are documented, a basis for cumulative impacts is provided, and next steps are summarized.

b) Is this resource present in the area and what is the existing environmental condition for this resource?

- The following resources are present along SH 66: Floodplains and floodways; wetlands and other waters of the us; threatened and endangered (T&E) species, species of special concern, migratory birds and eagles;

park/trail/open space resources and wildlife/waterfowl refuges; utilities; traffic noise; hazardous materials; environmental justice; visual resources; and historic resources.

- The following resources may need to be evaluated in NEPA depending on the context of the project: paleontology, archaeology, farmlands, and air quality.
- The CCR (**Appendix C** of the PEL Report) documents existing environmental conditions through mapping and in a streamlined format.

c) What are the issues that need to be considered during NEPA, including potential resource impacts and potential mitigation requirements (if known)?

- **Floodplains and Floodways:** Design solutions should minimize impacts to the floodplain and be developed cooperatively with US Army Corps of Engineers, Federal Emergency Management Agency, and affected communities. If an alternative encroaches on a regulatory floodway/floodplain, an evaluation is necessary to determine if the encroachment would require a revision to the regulatory floodway (impacts to floodplains may require a Conditional Letter of Map Revision). For alternatives with significant impacts, discuss practicable alternatives or mitigation.
- **Wetlands and Other Waters of the US:** When wetland impacts are expected, build adequate time into the design schedule to allow a wetland delineation and consequent permitting.
- **T&E Species, Species of Special Concern, Migratory Birds and Eagles:** When wildlife impacts are expected, build adequate time into the design schedule to consider temporary and permanent impacts and to allow time for a biological resources report, Senate Bill 40 reporting, consultation, and consequent permitting. Consider development of wildlife crossings or fencing with future projects.
- **Park/Trail/Open Space Resources and Wildlife/Waterfowl Refuges:** When Section 4(f) and Section 6(f) evaluations are necessary, build adequate time into the design schedule to avoid construction delays. Design modifications and/or mitigation considerations may be necessary in the Section 4(f) process. If a Section 6(f) conversion of land is necessary, CDOT must replace the land. The local agency, CPW, and NPS must approve the replacement land. Typically, replacement occurs at a 1:1 ratio.
- **Utilities:** During the design phase, identify and evaluate all utilities (not just major utilities) for impacts from proposed improvements, determine relocation time requirements and cost responsibility, and obtain utility clearance from CDOT. When project-funded relocations are necessary, make available adequate budget. Build adequate time and construction phasing into the schedule to allow utility relocations to avoid construction delays. Adherence to the new subsurface utility engineering statute may be necessary. Additional information is included in **Appendix J** of the PEL Report.
- **Traffic Noise:** Conduct a traffic noise impact and abatement analysis for NEPA. If noise abatement appears likely, solicit the Benefited Receptor Preferences Survey after the Final Office Review but during the NEPA process (for projects anticipated to meet CatEx criteria) or during final design for an EA or an EIS. If a simple majority of benefitting receptors favors abatement, then the project becomes committed to constructing and funding the abatement measure(s). Noise walls may cost about $2 million per mile. The likelihood for abatement to be feasible and reasonable increases with a higher density of impacted receptors.
- **Hazardous Materials:** If a Phase II Environmental Site Assessment and/or remediation activities are required based on a Modified Environmental Site Assessment, Initial Site Assessment, or Phase I ESA findings, there may be substantial delays for property acquisition or construction in the vicinity. Also, a Phase II ESA and remedial activities could require additional funding. These activities are associated with the acquisition of properties. Regarding construction phase implications, hazardous materials concerns within the construction area will require the use of CDOT Standard Specification 250: Environmental, Health and Safety Management. Use a Materials Management Plan if construction activities are anticipated to encounter hazardous materials.
- **Environmental Justice:** Identify low-income and minority populations early so that these populations can become involved and have a meaningful opportunity to participate during every project phase. Specialized outreach may be necessary based on the extent of anticipated impacts and stakeholder concerns. In addition, the project team will need to determine whether language assistance measures are needed to ensure meaningful access to the process. Consideration of businesses and community facilities important to low-income, minority, and LEP populations is also critical.
- **Visual Resources:** The interdisciplinary project team should work with CDOT early (during project scoping) to complete CDOT's visual resources scoping documentation. This scoping process determines the level of

visual impact assessment, establishes a study area, identifies visual resource issues and associated regulations, and initiates public contacts.

- **Historic Resources:** Design solutions should seek ways to avoid or minimize impacts to historic resources in any way possible. For alternatives with significant impacts, discuss practicable alternatives or mitigation. Evaluate sites identified here as potential historic resources for NRHP eligibility to determine historic status.
- **Paleontology:** Before any construction activity, complete a desktop literature review and museum record search to identify geological formations within the corridor that are likely to contain fossils. If the desktop review reveals sensitive areas in the corridor, surveying and potential construction monitoring may be necessary. Clearance from CDOT may be required.
- **Archaeology:** Conduct a file search through the Office of Archaeology and Historic Preservation's online Compass database to identify all previously recorded sites and surveys within 0.5 mile of the corridor. If the desktop review reveals sensitive areas in the corridor, surveying and potential construction monitoring may be necessary. Clearance from SHPO may be required.
- **Farmlands:** If farmland of importance or prime farmland is found within the corridor, consider and take care to minimize overall impacts to prime farmland during design and construction. Clearance from the USDA – Natural Resources Conservation Service may be necessary.
- **Air Quality:** The entire study area is included in the Denver Ozone Nonattainment Area, portions of the study area are in the Denver Particulate Matter 10 Attainment/Maintenance Areas, and portions of the study area are in the Longmont Carbon Monoxide Attainment/Maintenance Area. Project level conformity analyses (40 CFR 93) will be required for those areas from a regional and/or local perspective. Additional air quality analysis (mobile source air toxics and greenhouse gases) applies statewide to projects (primarily if the project is at the EA or EIS level). Clearance from CDPHE's Air Pollution Control Division may be required.

d) How will the data provided need to be supplemented during NEPA?

- A quantitative evaluation, using GIS spatial analysis, was completed for:
  - Floodplains and Floodways
  - Wetlands and Other Waters of the US
  - T&E Species, Species of Special Concern, Migratory Birds and Eagles
  - Park/Trail/Open Space Resources and Wildlife/Waterfowl Refuges
- A qualitative assessment, using professional judgement, was completed for:
  - Utilities
  - Traffic Noise
  - Hazardous Materials
  - Environmental Justice
  - Visual Resources
  - Historic Resources
- Data were evaluated at the section level. During NEPA, the limits of the Proposed Action must be evaluated relative to environmental impacts.

10. List resources that were not reviewed in the PEL study and why? Indicate whether or not they will need to be reviewed in NEPA and explain why.

The following resources were not evaluated in the PEL and may need to be reviewed during NEPA depending on the NEPA class of action and also the context of the Proposed Action and project location.

- Geologic Resources and Soil
- Water Quality
- Vegetation and Noxious Weeds
- Fish and Wildlife
- Land Use
- Social Resources

- Economic Resources
- Residential/Business/ROW Relocation
- Energy

11. Were cumulative impacts considered in the PEL study? If yes, provide the information or reference where it can be found.

- Cumulative impacts are addressed in **Chapter 4** of the PEL Report.
- Anticipated next steps are summarized, and cumulative impact resource considerations are noted for each resource.

12. Describe any mitigation strategies discussed at the planning level that should be analyzed during NEPA.

- Anticipated next steps and mitigation strategies have been summarized under Question 9, sub-section C.

13. What needs to be done during NEPA to make information from the PEL study available to the agencies and the public? Are there PEL study products which can be used or provided to agencies or the public during the NEPA scoping process?

- The CCR (**Appendix C** of the PEL Report) was created in a format that will aid in NEPA scoping. One of the considerations for each environmental resource in **Section 4** of the CCR is a NEPA pre-scoping considerations field.
- The PEL Report was also created in a format to aid in NEPA scoping. Information should be easy to process and extract so that it can be pulled into NEPA in a streamlined manner.
- These documents should be readily available to agencies and the public during NEPA scoping.

14. Are there any other issues a future project team should be aware of?

- The proposed bicycle and pedestrian path must be accommodated with safety in mind within the highway clear zone and by providing clearly marked cross-walks at intersections.
- The access road with advisory shoulders option is not an approved treatment in the Manual on Uniform Traffic Control Devices and would require a "request for experiment" to implement.
- SH 66 includes utilities throughout and across the corridor. **Appendix J** of the PEL Report documents utilities and anticipated next steps.
- The ROW preservation footprint does encroach into private property at locations along the corridor. Because the footprint includes the collective footprint of all options that work operationally, ROW impacts could be avoided and/or minimized depending on the project.
- SH 66 through unincorporated Boulder County abuts park and open space lands.
- CDOT and local agencies have partnered in discussions about how to make SH 66 more resilient from a physical threats standpoint and how to ensure trip reliability from an operational standpoint.

15. Provide a table of identified projects and/or a proposed phasing plan for corridor build out.

- This information is provided in Chapter 3 of the PEL Report and on the following pages.

Section 1: McConnell Drive to 87th Street

Near-Term 0-10 years

	LOCATION ON SH 66 (intersection or section)	IDENTIFIED PROBLEM	RECOMMENDED IMPROVEMENT	COST OPINION (See disclaimer)
1A	Section-wide	High rate of access-related crashes; high-use bike corridor with limited shoulders	Construct four-lane cross-section with curb and gutter where missing, install bike lanes and raised median, and consolidate accesses	$3.1 Mil - $4.2 Mil
1A	US 36	Conflicts between vehicles and cyclists/ pedestrians crossing SH 66	Construct grade-separated underpass for cyclists and pedestrians	$550,000 - $750,000
1B	Section-wide	High rate of run-off-road crashes	Install rumble strips	<$100,000
1B	West of 75th St	High rate of run-off-road crashes	Widen shoulders along SH 66 at 75th St and westward	<$150,000
1B	Section-wide	Safety concerns and delays for vehicles entering and exiting the highway from driveways and low-volume roads	Install access road with advisory shoulders to consolidate accesses to SH 66, construct deceleration and acceleration lanes on SH 66 at those intersections	$4.7 Mil - $6.2 Mil
1C	75th St	High rate of intersection-related crashes and conflicts between vehicles/cyclists	Re-assess signal timing and/or consider protected only left turns. Construct grade-separated underpass for cyclists and pedestrians	$550,000 - $750,000
1C	Section-wide	High rate of run-off-road crashes	Install rumble strips Widen shoulders along SH 66 at 75th St and eastward plus at 87th St and westward	<$100,000 $200,000 - $300,000
1C	Section-wide	Safety concerns and delays for vehicles entering and exiting the highway from driveways and low-volume roads	Install access road with advisory shoulders to consolidate accesses to SH 66, construct deceleration and acceleration lanes on SH 66 at those intersections	$1.3 Mil - $1.8 Mil

Mid-Term 5-15 years

	LOCATION ON SH 66 (intersection or section)	IDENTIFIED PROBLEM	RECOMMENDED IMPROVEMENT	COST OPINION (See disclaimer)
1B	Section-wide	Lacks regional bicycle and pedestrian mobility options	Construct bike/pedestrian only connections between segments of the access road with advisory shoulders. Construct trail along BNSF (planned by local agencies; not included in costs)	$550,000 - $700,000
1B	Section-wide	High delay on side streets as development occurs and regional volumes increase	If warranted, install signals as allowed in the ACP (potential considerations: E Highland Dr, 53rd St, and 66th St)	$350,000 - $400,000 per intersection
1C	Section-wide	Lacks regional bicycle and pedestrian mobility options	Construct bike/pedestrian only connections between segments of the access road with advisory shoulders	$500,000 - $650,000

Long-Term 10-20 years

	LOCATION ON SH 66 (intersection or section)	IDENTIFIED PROBLEM	RECOMMENDED IMPROVEMENT	COST OPINION (See disclaimer)
1B	53rd St	Conflicts between vehicles and cyclists/pedestrians crossing SH 66	Construct grade-separated underpass for cyclists and pedestrians	$550,000 - $750,000

Beyond Horizon Year +20 years

	LOCATION ON SH 66 (intersection or section)	IDENTIFIED PROBLEM	RECOMMENDED IMPROVEMENT	COST OPINION (See disclaimer)
1B	Section-wide	Multi-modal and vehicular transportation concerns	Multi-modal and safety transportation improvements	Not calculated; beyond planning horizon
1C	Section-wide	Multi-modal and vehicular transportation concerns	Multi-modal and safety transportation improvements	Not calculated; beyond planning horizon

Section 2: 87th Street to County Line Road

Near-Term 0-10 years

	LOCATION ON SH 66 (intersection or section)		IDENTIFIED PROBLEM	RECOMMENDED IMPROVEMENT	COST OPINION (See disclaimer)
2	Section-wide		High delay at stop-controlled intersections	Restrict left turns out where identified in the ACP and a documented safety need is shown. Monitor and if warranted install signals as allowed in the ACP (potential considerations: 87th St/Airport Rd, Francis St, Alpine St, Pace St, Sundance Dr)	$350,000 - $400,000 per intersection
2	East of 87th St		High rate of run-off-road crashes	Widen shoulders along SH 66 at 87th St and eastward	$250,000 - $400,000
2	87th St/Airport Rd to 95th St/Hover St		Lacks regional bicycle and pedestrian mobility options; densely spaced driveways with direct access to SH 66 near Anhawa St	Construct side path along southern side of SH 66; construct a Frontage Road between Anhawa St and west of Hover St	$700,000 - $1 Mil
2	95th St/Hover St to Erfert St		Failing intersection LOS and long queues approaching Hover St and US 287; lacks regional bicycle and pedestrian mobility options	Construct four-lane cross-section including auxiliary lanes, median, side paths along north and south sides of SH 66 and implement access control recommendations. Add auxiliary lanes and increase capacity at Hover St intersection	$9.6 Mil - $13 Mil
2	US 287		Failing intersection LOS and high rate of intersection-related crashes; multiple public comments/concerns received	Improve intersection; recommend carrying forward displaced left turn or other alternative intersection option	$5.4 Mil - $7.1 Mil
2	Erfert St to Alpine St		Lacks regional bicycle and pedestrian mobility options	Construct side path along southern side of SH 66	$650,000 - $850,000
2	Alpine St to County Line Rd		Failing intersection LOS at County Line Rd, high rate of intersection-related, head-on, and run-off-road crashes through this segment; lacks regional bicycle and pedestrian mobility options	Construct four-lane cross-section including auxiliary lanes, median, side path along south side of SH 66, and implement access control recommendations. Add auxiliary lanes and increase capacity at County Line Rd intersection	$7.5 Mil - $10 Mil

Mid-Term 5-15 years

	LOCATION ON SH 66 (intersection or section)		IDENTIFIED PROBLEM	RECOMMENDED IMPROVEMENT	COST OPINION (See disclaimer)
2	Section-wide		High delay on stop-controlled intersections	Restrict left turns out where identified in the ACP and a documented safety need is shown. Monitor and if warranted, install signals as allowed in the ACP (potential considerations: 87th St/Airport Rd, Francis St, Alpine St, Sundance Dr)	$350,000 - $400,000 per intersection
2	Erfert St to Alpine St		Over capacity as a two-lane highway	Construct four-lane cross-section including auxiliary lanes, median, and implementing access control recommendations. Grade-separate SH 66 over the BNSF railroad	$8.3 Mil - $11 Mil

Long-Term 10-20 years

	LOCATION ON SH 66 (intersection or section)		IDENTIFIED PROBLEM	RECOMMENDED IMPROVEMENT	COST OPINION (See disclaimer)
2	Section-wide		High delay on stop-controlled intersections	Restrict left turns out where identified in the ACP and a documented safety need is shown. Monitor and if warranted, install signals as allowed in the ACP (potential considerations: 87th St/Airport Rd, Francis St, Alpine St, Sundance Dr)	$350,000 - $400,000 per intersection
2	87th St/Airport Rd to 95th St/Hover St		Over capacity as a two-lane highway	Construct four-lane cross-section including auxiliary lanes, median, and implementing access control recommendations	$4.5 Mil - $6 Mil
2	95th St/Hover St		Failing intersection LOS	Improve intersection; recommend carrying forward Partial Displaced Left Turn or other alternative intersection option	$2.8 Mil - $4 Mil
2	Pace St		Lacks safe facility/crossing for bicyclists and pedestrians	Install bicycle and pedestrian grade-separated crossing	$750,000 - $1 Mil

Section 3: County Line Road to 3rd Street (WCR 7)

Near-Term 0-10 years

	LOCATION ON SH 66 (intersection or section)	IDENTIFIED PROBLEM	RECOMMENDED IMPROVEMENT	COST OPINION (See disclaimer)
3	Section-wide	High rate of run-off-road and access-related crashes	Install rumble strips along corridor; add auxiliary lanes where warranted at intersections	<$100,000 $3 Mil -$4 Mil (unless mainline widening occurs first)
3	Section-wide	High delay on stop-controlled intersections	Restrict left turns out where identified in the ACP and a documented safety need is shown. Monitor and if warranted, install signals as allowed in the ACP (potential considerations: WCR 3, WCR 5, WCR 5.5 (interim condition only))	$350,000 - $400,000 per intersection

Mid-Term 5-15 years

	LOCATION ON SH 66 (intersection or section)	IDENTIFIED PROBLEM	RECOMMENDED IMPROVEMENT	COST OPINION (See disclaimer)
3	Section-wide	Over capacity as a two-lane highway and lacks regional bicycle and pedestrian mobility options	Construct four-lane cross-section including auxiliary lanes, median, side path along south side of SH 66, and implement access control recommendations. Grade-separate SH 66 over the Great Western railroad	$16.3 Mil - $22 Mil
3	High delay on stop-controlled intersections	Over capacity as a two-lane highway	Restrict left turns out where identified in the ACP and a documented safety need is shown. Monitor and if warranted, install signals as allowed in the ACP (potential considerations: WCR 3, WCR 5, WCR 5.5 (interim condition only))	$350,000 - $400,000 per intersection

Long-Term 10-20 years

	LOCATION ON SH 66 (intersection or section)	IDENTIFIED PROBLEM	RECOMMENDED IMPROVEMENT	COST OPINION (See disclaimer)
3	East of WCR 5	Conflicts with planned regional trail between vehicles and cyclists/pedestrians crossing SH 66	Construct grade-separated underpass for cyclists and pedestrians if it is not feasible to utilize SH 66 grade-separation over Great Western railroad	$750,000 - $1 Mil
3	Section-wide	High delay on stop-controlled intersections	Restrict left turns out where identified in the ACP and a documented safety need is shown. Monitor and if warranted, install signals as allowed in the ACP (potential considerations: WCR 3, WCR 5, WCR 5.5 (interim condition only))	$350,000 - $400,000 per intersection

Section 4: 3rd Street (WCR 7) to Weld County Road 11

Near-Term 0-10 years

	LOCATION ON SH 66 (intersection or section)	IDENTIFIED PROBLEM	RECOMMENDED IMPROVEMENT	COST OPINION (See disclaimer)
4	WCR 7 to I-25	Lacks regional bicycle and pedestrian mobility options	Construct side path along northern side of SH 66	$650,000 - $850,000
4	WCR 7	Failing intersection LOS	Improve intersection by adding auxiliary lanes and increasing capacity (design currently underway by CDOT/nearby developers)	Not calculated; design currently underway
4	Mead Street	High delay on stop-controlled intersections	Monitor intersection operations and restrict left turns out if a documented safety need is shown	Minimal

Mid-Term 5-15 years

	LOCATION ON SH 66 (intersection or section)	IDENTIFIED PROBLEM	RECOMMENDED IMPROVEMENT	COST OPINION (See disclaimer)
4	WCR 7 to Foster Ridge Dr	Over capacity as a two-lane highway and lacks regional bicycle and pedestrian mobility options	Improve highway to a four-lane cross-section including auxiliary lanes, median, side path along south side of SH 66, and implement access control recommendations. Signalize Foster Ridge Dr when warranted	$2.4 Mil - $3.1 Mil
4	Section-wide	High delay on stop-controlled intersections	Restrict left turns out where identified in the ACP and a documented safety need is shown. Monitor and if warranted, install signals as allowed in the ACP	$350,000 - $400,000 per intersection
4	WCR 9.5 to WCR 11	Over capacity as a two-lane highway and lacks regional bicycle and pedestrian mobility options	Improve highway to a four-lane cross-section including auxiliary lanes, median, side path along south side of SH 66, and implement access control recommendations	$2.6 Mil - $3.4 Mil
4	Mead Street	High delay at stop-controlled intersection and high crash rate	Monitor intersection operations and restrict left turns out if a documented safety need is shown	Minimal
4	WCR 9.5	Failing intersection LOS	Add auxiliary lanes and increase capacity	$370,000 - $500,000

Long-Term 10-20 years

	LOCATION ON SH 66 (intersection or section)	IDENTIFIED PROBLEM	RECOMMENDED IMPROVEMENT	COST OPINION (See disclaimer)
4	Section-wide	Over capacity as a four-lane highway	Improve highway from a four-lane to the ultimate six-lane cross-section	$2.3 Mil - $3 Mil
4	East of WCR 7	Conflicts with planned regional trail between vehicles and cyclists/ pedestrians crossing SH 66	Construct grade-separated underpass for cyclists and pedestrians	$550,000 - $750,000
4	WCR 9.5	Failing intersection LOS	Grade-separate intersection; recommend carrying forward split intersection/partial interchange or other alternative intersection option	$9.6 Mil - $13 Mil

Section 5: Weld County Road 11 to Weld County Road 19

Near-Term 0-10 years

	LOCATION ON SH 66 (intersection or section)	IDENTIFIED PROBLEM	RECOMMENDED IMPROVEMENT	COST OPINION (See disclaimer)
5A	Section-wide	High delay at stop-controlled intersection	Monitor and if warranted, install signals as allowed in the ACP (potential considerations: WCR 11, WCR 11.5 when constructed)	$350,000 - $400,000 per intersection
5A	WCR 11 to WCR 13	High rate of run-off-road and access-related crashes	ininstall rumble strips	<$100,000
5B	WCR 13 to WCR 19	High rate of run-off-road and access-related crashes	Install rumble strips and widen shoulders	$1.4 Mil - $2 Mil
5B	WCR 13	High crash rate at WCR 13	Install eastbound and westbound right turn lanes	$750,000 - $1 Mil

Mid-Term 5-15 years

	LOCATION ON SH 66 (intersection or section)	IDENTIFIED PROBLEM	RECOMMENDED IMPROVEMENT	COST OPINION (See disclaimer)
5A	Section-wide	High delay at stop-controlled intersections	Monitor and if warranted, install signals as allowed in the ACP (potential considerations: WCR 11, WCR 11.5 when constructed)	$350,000 - $400,000 per intersection
5A	WCR 11 to WCR 13	Over capacity as a two-lane highway	Improve highway to a four-lane cross-section including auxiliary lanes, depressed median, side path along south side of SH 66, and implement access control recommendations	$3.9 Mil - $5.1 Mil
5B	Section-wide	High delay at stop-controlled intersections	Monitor and if warranted, install signals as allowed in the ACP (potential considerations: future WCR 15 when constructed, WCR 17N, WCR 17S, WCR 19)	$350,000 - $400,000 per intersection

Long-Term 10-20 years

	LOCATION ON SH 66 (intersection or section)	IDENTIFIED PROBLEM	RECOMMENDED IMPROVEMENT	COST OPINION (See disclaimer)
5A	Section-wide	High delay at stop-controlled intersections	Monitor and if warranted, install signals as allowed in the ACP (potential considerations: WCR 11, WCR 11.5 when constructed)	$350,000 - $400,000 per intersection
5B	Section-wide	High delay at stop-controlled intersections	Monitor and if warranted, install signals as allowed in the ACP (potential considerations: future WCR 15 when constructed, WCR 17N, WCR 17S, WCR 19)	$350,000 - $400,000 per intersection
5B	East of WCR 17N	Conflicts with planned regional trail between vehicles and cyclists/pedestrians crossing SH 66	Construct grade-separated underpass for cyclists and pedestrians	$550,000 - $750,000
5B	Section-wide	Lacks regional bicycle and pedestrian mobility options	Construct side path along southern side of SH 66	$1.7 Mil - $2.3 Mil

Beyond Horizon Year +20 years

	LOCATION ON SH 66 (intersection or section)	IDENTIFIED PROBLEM	RECOMMENDED IMPROVEMENT	COST OPINION (See disclaimer)
5B	Section-wide	Over capacity as a two-lane highway	Improve highway to a four-lane cross-section including auxiliary lanes, depressed median, and implement access control recommendations	Not calculated; beyond planning horizon
5B	WCR 13	Intersection over capacity	Grade-separate intersection; recommend carrying forward split intersection/partial interchange or other alternative intersection option	Not calculated; beyond planning horizon

16. Provide a list of what funding sources have been identified to fund projects from this PEL?

- At the time of this report, an intersection capacity improvement project is underway at SH 66 and WCR 7/3rd Street, involving CDOT, local agencies, and a nearby land developer.
- At the time of this report, the City of Longmont is advancing a highway widening project along SH 66 from Hover Street to US 287.
- CDOT and local agencies will continue collaborating to identify funding sources and funding partnerships, including through the SH 66 Coalition.

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Appendix C. Corridor Conditions Report

The Corridor Conditions Report and associated appendices are available on CDOT's website: https://www.codot.gov/library/studies/co-66-pel/corridor-conditions-report

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Appendix D. Purpose and Need Overview

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1.0 Introduction

The Colorado Department of Transportation (CDOT) is conducting a Planning and Environmental Linkages (PEL) study for approximately 20 miles of State Highway 66 (SH 66) between McConnell Drive in Lyons, Colorado, and Weld County Road 19 (WCR 19). SH 66 is an east-west principal arterial roadway under CDOT jurisdiction. The SH 66 PEL is being conducted to identify existing conditions, anticipated challenge areas, safety, and operational needs along this section of SH 66 and to determine its short-term and long-term transportation priorities.

A review of the highway characteristics such as daily traffic volumes, development density, speed limits, and jurisdictional boundaries revealed five distinct sections, as summarized in **Table 1.1**.

Table 1.1 Summary of Highway Analysis Sections

Section #	Limits	Characteristics
1	McConnell Drive to 87th Street	Primarily rural, higher speed, lower volume, lower density of access points, lower truck volumes
2	87th Street to County Line Road	Primarily urban, high-density development, high density of access points, higher volumes, lower speeds, moderate truck volumes
3	County Line Road to WCR 7/3rd Street	Primarily rural, higher volumes, higher speeds, lower density of access points, moderate truck volumes
4	WCR 7/3rd Street to WCR 11	Primarily centered on the I-25 interchange, higher density of access points, moderate truck volumes
5	WCR 11 to WCR 19	Primarily rural, higher speed, lower volume, lower density of access points, higher truck volumes

2.0 Purpose of the Proposed Action

SH 66 transportation improvements are to increase safety; reduce traffic congestion; provide managed access for existing and future development; and improve multimodal mobility of people, goods, and services. The improvements should be resilient, accommodate developing technologies, and strive to complement adjacent community context.

3.0 Need for the Proposed Action

This section summarizes the transportation needs for the SH 66 corridor and then provides a more detailed description of each need in the corridor. In summary, transportation improvements are needed to address:

- **Safety:** The corridor has experienced higher than expected safety concerns.
  - Vehicular — Several intersection and mainline locations along the SH 66 corridor have a high number of crashes and fatalities; which is not in line with Colorado Moving Towards Zero Deaths on highways.
  - Bicycle — Areas along the corridor have experienced bicycle safety concerns, from recorded incidents, physical characteristics, and cross-street connections.
  - Pedestrian — A number of pedestrian destinations in the corridor do not have sidewalks connecting them, potentially causing unsafe pedestrian movements.
- **Mobility**: The movement of people, goods, and services along the corridor has resulted in mobility challenges that can impede people commuting, recreating, and conducting business along SH 66.
  - Vehicular — Traffic congestion, inadequate intersections that fail to accommodate users' needs, highway design, and unreliable travel times substantially impact the ability of people to move across and along the corridor. Because the corridor provides varied commercial opportunities throughout, efficient connections to I-25 are important. These conditions are expected to worsen in the future as the region grows due to local and regional population and employment growth.
  - Bicycle — Much of the SH 66 corridor, but primarily the western half, is heavily used by bicycles (recreational, commuter, and events). Many areas have insufficient shoulders to accommodate bicycles, and the high speed of SH 66 contributes to a high level of traffic stress for cyclists. Future bicycle destinations in the corridor do not have adequate connections.
  - Pedestrian — Many of the pedestrian destinations in the corridor do not have sidewalks between the destinations. While there are some sidewalks and pedestrian intersection crossings along the corridor, there are inadequate connections between these locations and other pedestrian destinations. Currently, there are no grade-separated pedestrian crossings across SH 66.
  - Transit — Existing and planned transit service along the corridor is primarily focused on north-south connections. There are several challenges related to serving the SH 66 corridor: lack of pedestrian infrastructure to provide safe stopping locations; safety concerns related to stopping on a high-speed road; and the Regional Transit District's (RTD) current service boundaries, which bisect the western half of the corridor and do not include Weld County. As development occurs, transit demands along the corridor are anticipated to increase, but infrastructure, current service boundaries, and traffic congestion are likely to continue to make providing transit challenging in this area.
- **Access:** The current number, locations, and design of public roadway accesses have contributed to traffic operational and safety deficiencies along the corridor. The access need is expected to worsen in the future when more vehicles are using the corridor. Individual private driveways, business accesses directly onto SH 66, and inconsistent access spacing negatively impact safe, reliable, and efficient mobility.

3.1 Safety

A review of all reported crashes between January 1, 2011, and December 31, 2015, was completed and the results are summarized in **Table 3.1**.

Table 3.1 Number of Crashes by Mode, Location, and Severity (2011-2015)

Category	Crash Types	Overall	Section					Overall Percent
			1	2	3	4	5	
Mode of Travel	Single or Multiple Vehicles	894	124	442	108	111	109	99.0%
	Pedestrians	1	0	1	0	0	0	0.1%
	Bicycle	8	3	5	0	0	0	0.9%
Location	Intersection	535	56	306	49	82	42	59.2%
	Driveway	48	19	10	4	3	12	5.3%
	Non-Intersection	320	52	132	55	26	55	35.5%
Severity	Property Damage Only (PDO)	566	76	282	66	70	72	62.7%
	Injury	328	51	161	41	41	34	36.3%
	Fatal	9	0	5	1	0	3	1.0%
Totals	For Each Category	903	127	448	108	111	109	100%

3.1.1 Vehicular

During the five-year period of analyzed data, more than 900 reported crashes occurred within the study limits with:

- 894 crashes (or 99 percent) involving only motorized vehicles
- 8 crashes (less than 1 percent) involving a bicycle
- Only 1 crash (0.1 percent) involving a pedestrian

Further review of the data indicates about 65 percent of all crashes occur at locations where there are intersections or driveways and 35 percent are non-intersection-related events.

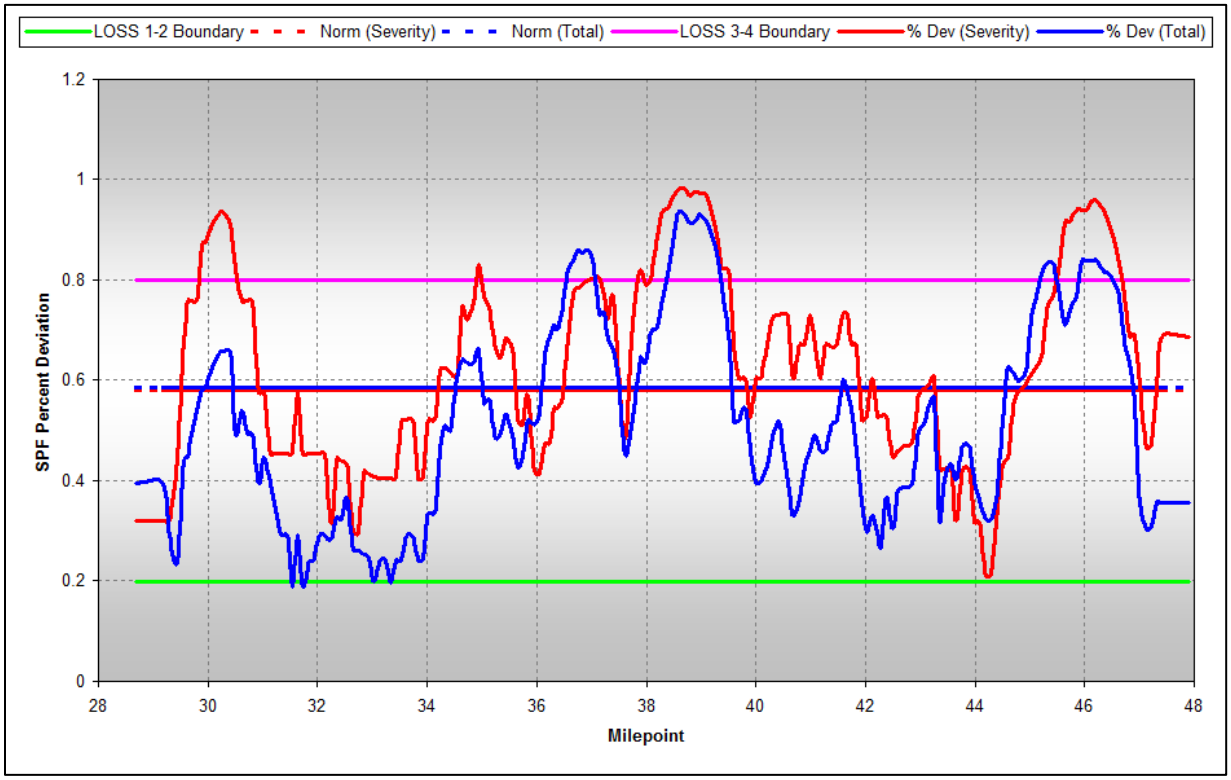
About 37 percent of the crashes resulted in injuries or fatalities, while the remaining 63 percent were property damage only. There were 9 total fatalities between 2011 and 2015, which accounts for about 1 percent of the total number of reported crashes. To provide context, this is more than twice the state average of the number of fatalities compared to total accidents (0.4 percent).

Approximately 50 percent of all crashes occurred in Section 2 of the study area, which is primarily urbanized, with a higher density of development, intersections, and access points, and has higher volumes compared to other study area sections.

Non-intersection crashes account for 35 percent of all crashes (319 of 903) observed in the study area. Rear-end and fixed object crashes were the most common crash types, accounting for 45 percent and 24 percent of all non-intersection collisions, respectively. **Figure 3.1** presents non-intersection crash data. When evaluating all crashes, most of the corridor falls within Level of Service of Safety (LOSS) II, while the following sections fall into the LOSS III category, indicating moderate to high potential for improvement:

- Between Gay Street to Pace Street in Longmont
- Between ¼ mile west of WCR 13 to WCR 17

Figure 3.1 Rural 2-Lane Undivided SPF Analysis – Non-Intersection Crashes



When looking at severity of crashes, the following sections fall into the LOSS IV category indicating a high potential for improvement:

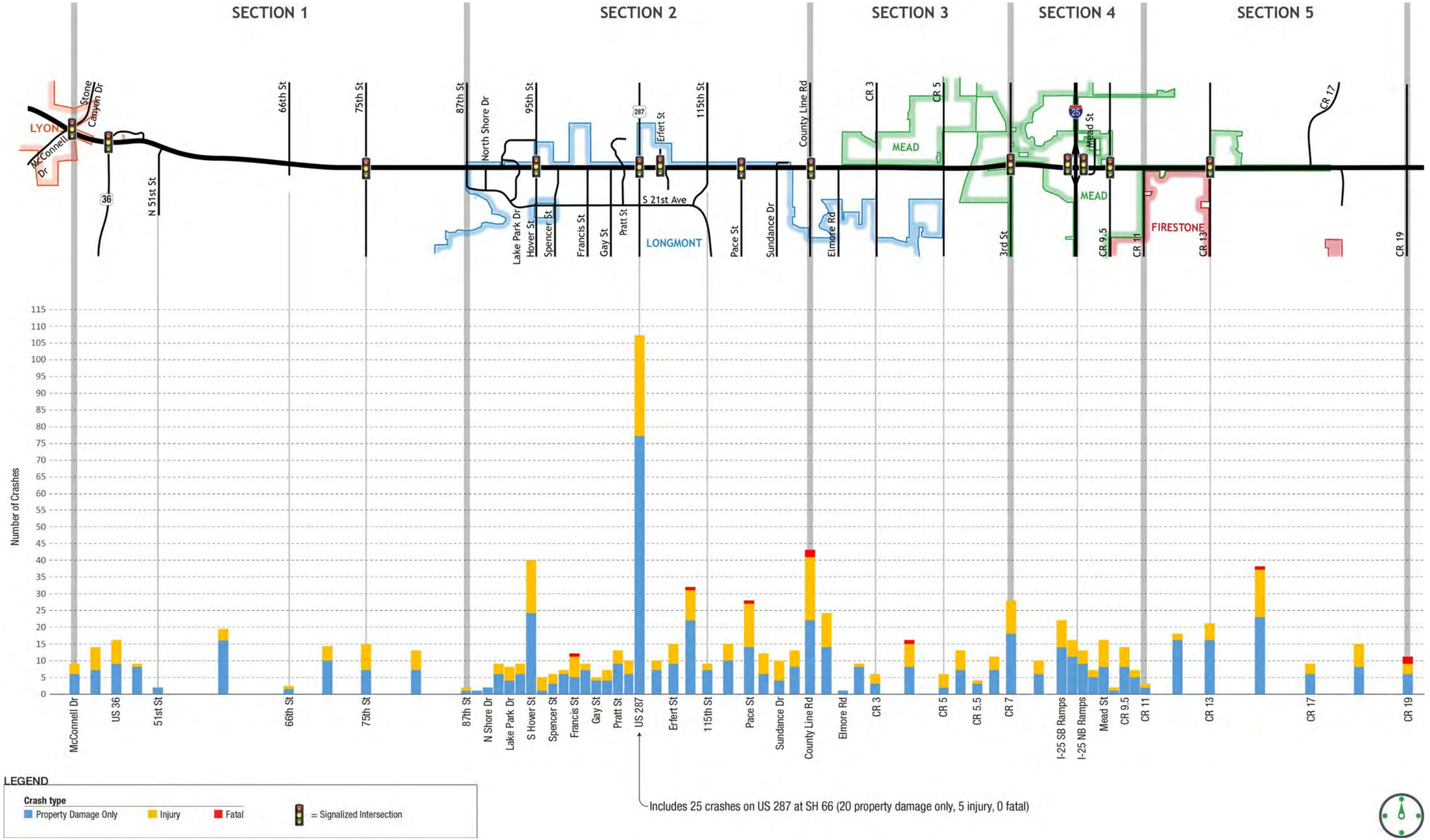
- Between Boulder County Road 47 to 61st Street
- From approximately Pace Street to Elmore Road
- From approximately ½ mile east of WCR 13 to WCR 17

The data also indicate that rear-end crashes accounted for nearly 45 percent (403 crashes) and crashes involving a turning vehicle accounted for another 21 percent (191 turning related crashes) of all crash events within the study area. Typical factors that contribute to these types of crashes include congestion at signalized intersections where drivers may experience unexpected stop-and-go conditions or long delays waiting to turn. In addition, drivers experiencing long delays (poor operations) at stop controlled intersections often take greater risks by accepting shorter gaps in the traffic stream to turn onto or move across SH 66.

In addition, a high density of accesses results in drivers slowing to enter the access locations and having to slow as other vehicles exit the access locations. Another key factor that contributes to crashes is the high number of access locations that do not have turn lanes (left and/or right), resulting in vehicles slowing in the main travel lanes of SH 66 to enter these access locations. In many locations on SH 66, there are only two travel lanes (one in each direction), which, coupled with high travel speeds (higher than 50 miles per hour), exacerbates the situation. A vehicle that wants to turn left into an access location must stop and wait for a gap in oncoming traffic to complete its turn, creating safety issues as vehicles approach at high speeds from behind this stopped vehicle.

Figure 3.2 summarizes the crashes along the SH 66 corridor by location.

Figure 3.2 Summary of Crash Data by Location (January 1, 2011, to December 31, 2015)



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3.1.2 Bicycle and Pedestrian

All reported crashes involving pedestrians or bicycles occurred in Sections 1 and 2 of the study area, which have the highest level of pedestrian and bicycling activities.

Many factors can contribute to crashes involving non-motorized users of the highway. For example, SH 66 has sections that lack continuous facilities (sidewalks or pathways), narrow or non-existent shoulders, a high number of unsignalized intersection crossings, and signalized intersections with no pedestrian phasing to assist with protected crossings (see **Figure 3.3**). Each condition results in pedestrians and bicyclists being exposed to potential conflicts with motorized traffic on and around SH 66. In addition, transit riders experience the same exposures while walking or riding to and from stops, while the transit vehicles themselves are exposed to the same potential issues as the other motorized vehicles using the highway as previously discussed. An increase in crash exposure potential for pedestrians, bicyclists, and transit riders/vehicles is anticipated as development, motorized and unmotorized traffic volumes, and the number of accesses increase along the corridor.

The photos below show areas in the corridor with non-continuous sidewalks and limited pedestrian connections.

Lack of sidewalks on SH 66: *Hover St/SH 66 and Pace St/SH 66 – Sidewalk connections provided south of SH 66, but not extended along SH 66*

Pedestrian crossings *at SH 66/Erfert St and SH 66/I-25*

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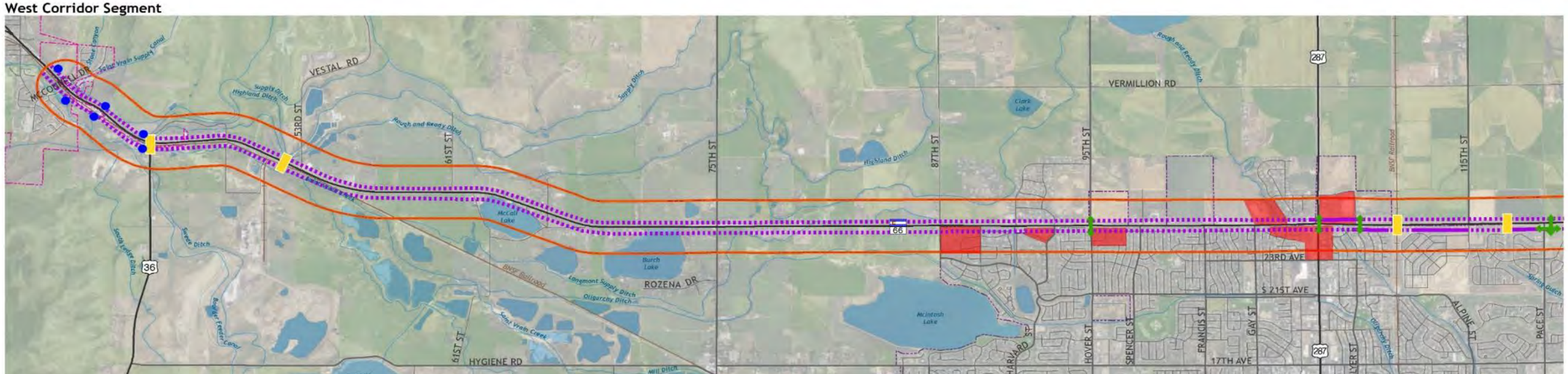
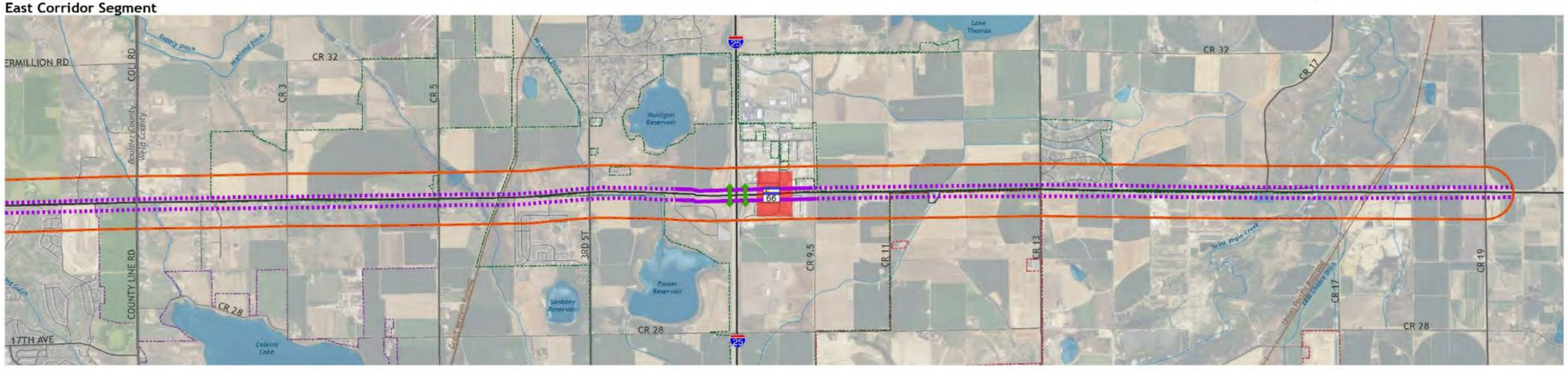
Figure 3.3 Pedestrian Environment

West Corridor Segment



East Corridor Segment



Legend

- Bus Stop
- Existing Sidewalk
- No Sidewalk
- Pedestrian Intersection Crossing
- Pedestrian Destinations (Includes commercial areas, public facilities, & multi-family housing)
- Proposed Grade Separated Crossing
- U.S./State Highway
- Major Roads
- Local Roads
- Railroad
- Parks & Open Space
- County Boundary
- Study Area
- Town Of Firestone
- City Of Longmont
- Town Of Lyons
- Town Of Mead

NORTH

0 0.5 1 Miles

SH 66 Planning and Environmental Linkages Study

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3.1.3 Effect on Other Needs

Finally, crashes on SH 66 cause unpredictable traffic congestion, in addition to the congestion during normal conditions. This non-recurring congestion can further degrade safe, reliable, and efficient mobility along the corridor. As traffic volumes increase in the future, it is likely that the number of crashes will also increase. Improvements to address the factors that contribute to crashes will improve mobility and increase safety.

3.2 Mobility

SH 66 serves many users including daily commuters, circulation for local traffic, trucking delivery routes, visitors to the region, and those pursuing recreational activities.

3.2.1 Vehicular

The existing traffic volumes already exceed capacity at some intersections, resulting in congestion and delays. **Table 3.2** shows the existing and projected future daily traffic volumes at some select locations within the study area. Traffic volumes range from about 12,000 vehicles per day at either end of the study area to a high of 27,000 vehicles per day within Section 2 (the more urbanized section of the study area). The projected future daily traffic volumes on SH 66 are expected to increase between 25 and 50 percent between now and the year 2040.

Table 3.2 Existing and 2040 No Action Daily Traffic Volumes at Select Locations

Section	Location	2017 Existing	2040 No Action	Change
1	Between 51st Street and 66th Street	12,000	15,100	3,100 (26%)
	Between 75th Street and 87th Street	14,000	18,900	4,900 (35%)
2	Between 87th Street and 95th/Hover Street	14,500	21,700	7,200 (50%)
	Between Spencer Street and Francis Street	27,000	36,400	9,400 (35%)
	Between Erfert Street and 115th Street	21,300	28,300	7,000 (33%)
	Between Pace Street and County Line Road	23,350	28,900	5,550 (24%)
3	Between WCR 5 and WCR 7/3rd Street	24,100	31,300	7,200 (30%)
4	Between 3rd Street and I-25	23,600	32,100	8,500 (36%)
	Between I-25 and WCR 9.5	14,100	21,250	7,150 (51%)
5	Between WCR 17 and WCR 19	11,900	15,000	3,100 (26%)

The future increase in traffic volumes will result in more congestion and more delay. **Table 3.3** shows the existing and projected future 2040 No Action level of service (LOS) at the signalized intersections within the study area. Under existing traffic volumes, three signalized intersections (95th/Hover Street, US 287, and WCR 7/3rd Street in Mead) operate at LOS E or F, considered poor operations. However, the 2040 No Action scenario projects eight signalized intersections (nearly triple compared to existing conditions) operating at LOS E or F during the peak hours. Still other intersections will experience degradation in operations by 2040. This degradation in operations across most of the corridor will result in drivers experiencing long delays, slower travel speeds, and much longer travel times along SH 66. This could result in undesirable neighborhood cut-through traffic. In addition to the degradation of

operations at signalized intersections, the number of stop-controlled intersections operating at LOS E or F is projected to increase from 21 locations in 2017 to 25 in 2040. As volumes increase along the corridor, the number of acceptable gaps in SH 66 traffic for vehicles to safely turn onto or across SH 66 is anticipated to further decrease. Delay and congestion and possible safety issues are likely to increase. As is the case currently, vehicles that do turn onto SH 66 will at many locations enter the only available lane of travel and will do so at slow speeds. This situation may result in vehicles on SH 66 having to slow, producing additional delay and congestion and potential safety issues.

Table 3.3 Existing and 2040 No Action Level of Services for Signalized Intersections

Intersection	Existing		2040 No Action	
	AM	PM	AM	PM
McConnell Drive	B	A	B	A
US 36	B	B	B	C
75th Street	B	C	D	F
95th/Hover Street	D	F	F	F
US 287	C	F	F	F
Erfert Street	A	A	A	C
Pace Street	C	C	D	F
County Line Road	D	C	F	F
WCR 7/3rd Street	E	D	F	F
Southbound I-25 Ramps	B	B	B	B
Northbound I-25 Ramps	C	C	C	C
WCR 9.5	C	C	D	F
WCR 13	C	C	E	F

Note: Blue highlighted cells represent a degradation in level of service between Existing and 2040 No Action scenarios, and red font shows intersections with LOS E or F.

Congestion occurs when traffic volumes increase and operations degrade. The degree of congestion can be measured as a ratio of a vehicle's actual travel speed (which accounts for delay, queues, and other capacity reducing impacts) versus the posted speed limit (also known as free-flow speed). The vehicle that experiences very little delay will travel at speeds close to free flow and will encounter low or minor levels of congestion. However, a vehicle that experiences higher levels of delay will travel at much lower speeds and experience a heavy or significant degree of congestion. In existing conditions, the highway users across most of the SH 66 study area (68 percent eastbound to 91 percent westbound) experience low levels of congestion, while the highway users experience heavy to significant congestion on a small amount of the study area (4 percent westbound to 16 percent eastbound). In the 2040 No Action scenario, the highway users are expected to experience low to minor levels of congestion on a smaller portion of the study area (54 percent eastbound and 71 percent westbound) and the users are expected to experience heavy or significant congestion on a higher portion of the study area (25 percent westbound and 32 percent eastbound). The expected increase in congestion in 2040 is consistent with the projected growth in traffic volumes and degradation in operations at most intersections, which may result in increased delays, longer queues, and motorists taking longer than expected, or anticipated, while using SH 66 to commute to work, conduct business, or travel to

recreation activities and destinations. **Figure 3.4** shows the degree of congestion on SH 66 for existing traffic conditions, and **Figure 3.5** shows the expected congestion in the 2040 No Action scenario.

In addition, congestion and LOS affect travel time. The study area is approximately 20 miles in length. Based on speed limits, a vehicle could travel from end-to-end of the study area in approximately 20 minutes, assuming it does not encounter any delay or congestion (free flow conditions). A comparison between the actual travel time to the free flow conditions results in a value called a travel time index. A low travel time index indicates trips with little delay and near free-flow speeds, while a high travel time index is consistent with higher and delay reduced speeds.

The existing travel time index for the entire SH 66 study area ranges from 1.3 to 3.1 depending on the time of day (AM or PM) and direction of travel (eastbound or westbound). Higher values are experienced for eastbound traffic in both time periods. These values are consistent with moderate to high levels of delay caused by congestion along the corridor. Individual sections have travel time indices as high as 4.5 (Section 2, eastbound during the PM) consistent with high delays and congestion through the more urbanized portion of the corridor where there are higher volumes, more access locations, and a greater number of traffic signals. By 2040, the end-to-end travel time indices are expected to increase by as much as 158 percent and by more than 400 percent on some individual sections. Clearly, the projected increase in traffic volumes will result in longer delays and trips for all motorists using all or part of SH 66, indicating the need for improvements to help reduce delay and provide more efficient and reliable mobility.

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Figure 3.4 Existing Congestion on SH 66

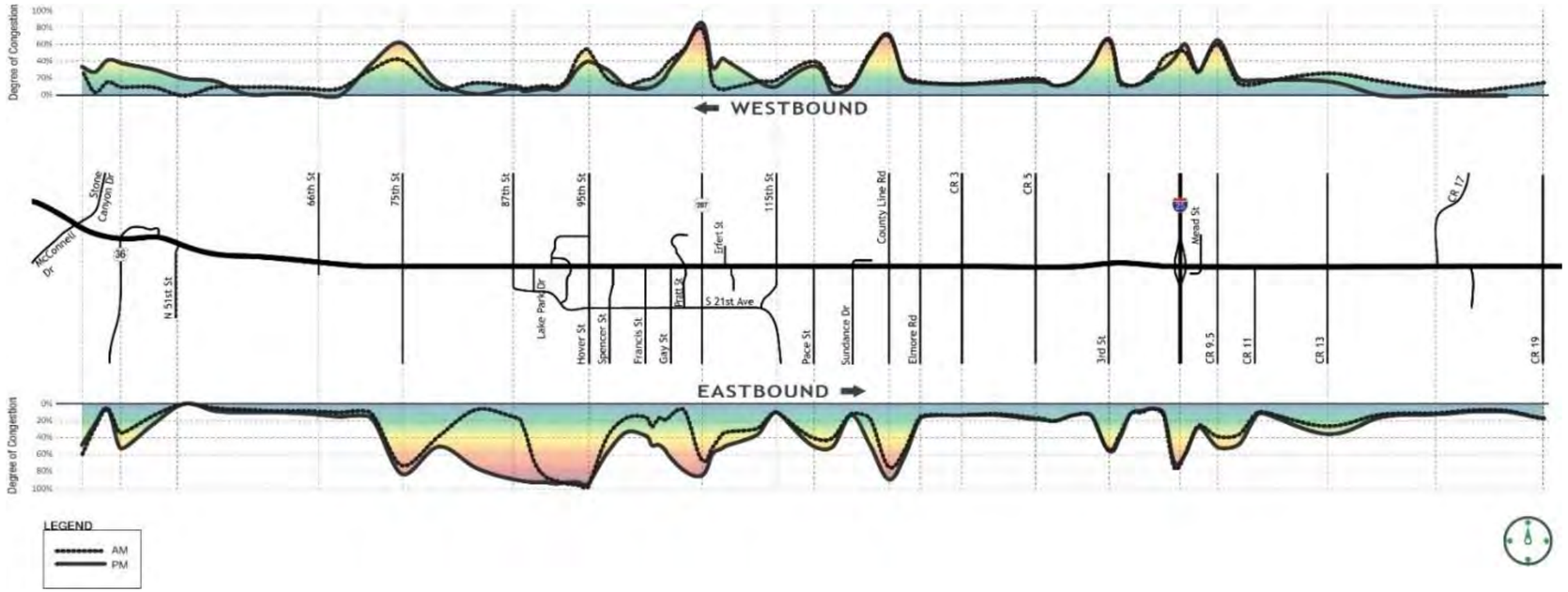
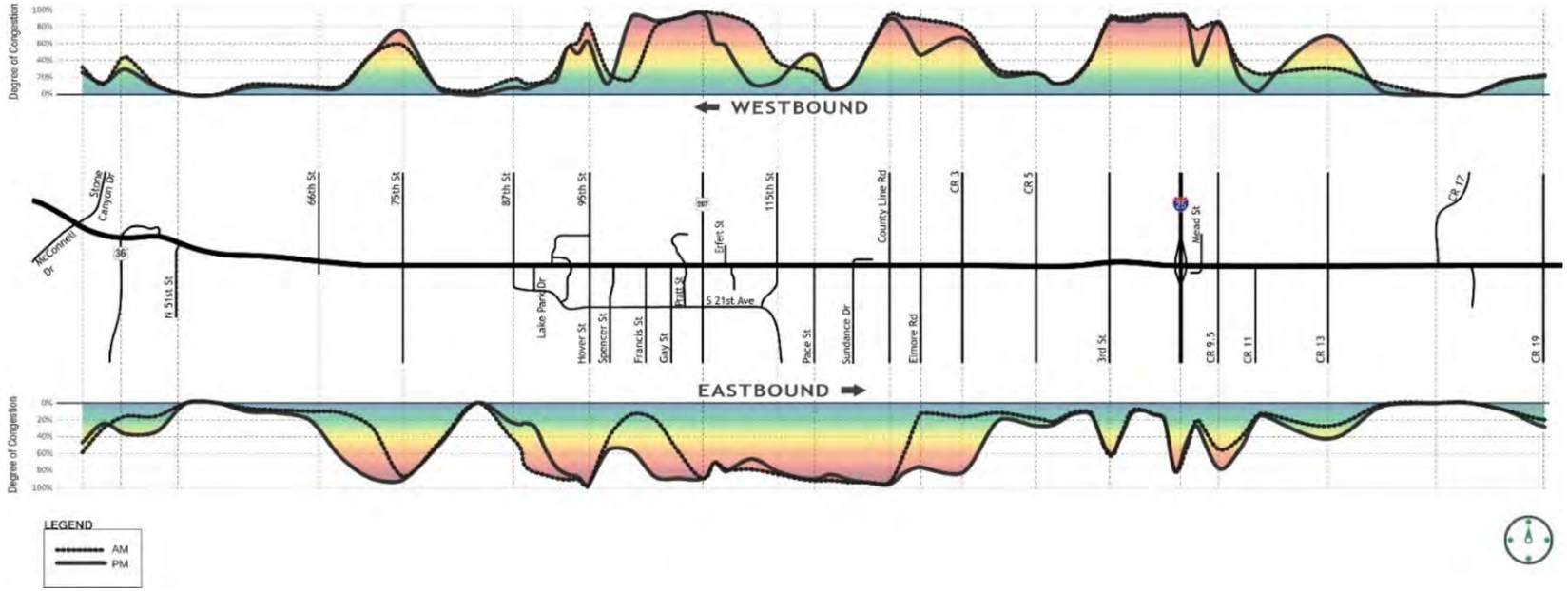


Figure 3.5 2040 No Action Congestion on SH 66



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3.2.2 Bicycle and Pedestrian

Mobility applies to more than just the vehicular traffic on SH 66. Pedestrians attempting to walk along or cross from one side of SH 66 to the other have the benefit of some sidewalks and pedestrian intersection crossings in the corridor; however, there are gaps (lack of connectivity or continuous sidewalks) or inadequacies (narrow shoulders) in the facilities that create difficulties in making some movements across or along SH 66. Pedestrian demands vary throughout the corridor, as depicted in **Figure 3.3,** and gaps in the pedestrian environment are present between pedestrian destinations within the SH 66 study area as well as in more rural areas, where demands are low. In addition, at-grade crossings at intersections currently accommodate the schools located on one side of SH 66 that have many students who travel by foot from the other side of the highway. Currently, only 13 signalized intersections (about one every 1.5 miles) provide protected movements across SH 66 for pedestrians and bicyclists. At these locations, traffic signals protect non-motorized movements, and these intersections typically have marked crosswalks. However, the clear majority of intersections and access locations along SH 66 are not signalized and do not have marked crosswalks. At these locations, the pedestrians and bicyclists are exposed to vehicular movements and must make their crossings at their own risk.

As traffic volumes and congestion levels increase, it is likely that more traffic signals will be added to the intersections along the highway, providing more locations where more comfortable and potentially safer crossings can be made. However, additional development along the highway will also add more access locations. With higher volumes and more accesses, pedestrians and bicyclists will be exposed to a higher potential for conflicts with vehicles. As the congestion levels increase on SH 66, non-motorized users will also experience more difficulty completing trips along and across the highway, as these users may be forced to make long, out of direction trips to use signalized locations, unable to cross at any other location.

Additionally, the SH 66 corridor provides substantial bicycling opportunities for commuting and recreation. This is especially true along the western end of the corridor, which receives the highest amount of bicycle traffic. This section of roadway has wide shoulders (10-feet); however, because of the high speeds of vehicular traffic on SH 66, the level of traffic stress on the cyclists remains high (see **Figure 3.6**). This results in reduced bicycle comfort, which limits usage in the corridor. Typically, only advanced riders are comfortable using a corridor like SH 66 with such high speeds.

Stakeholder input also reflects this situation. The following summarizes the needs identified for bicycling and walking through stakeholder interviews:

- Crossing improvements of SH 66 west of I-25
- Grade-separated crossing of US 36 parallel to SH 66
- Safety improvements at intersections
- Separated facility along SH 66 in Longmont
- Connect Lyons and Longmont with off-street facilities/trails
- Connections to future Platte River Trail and regional trail connections in Weld County

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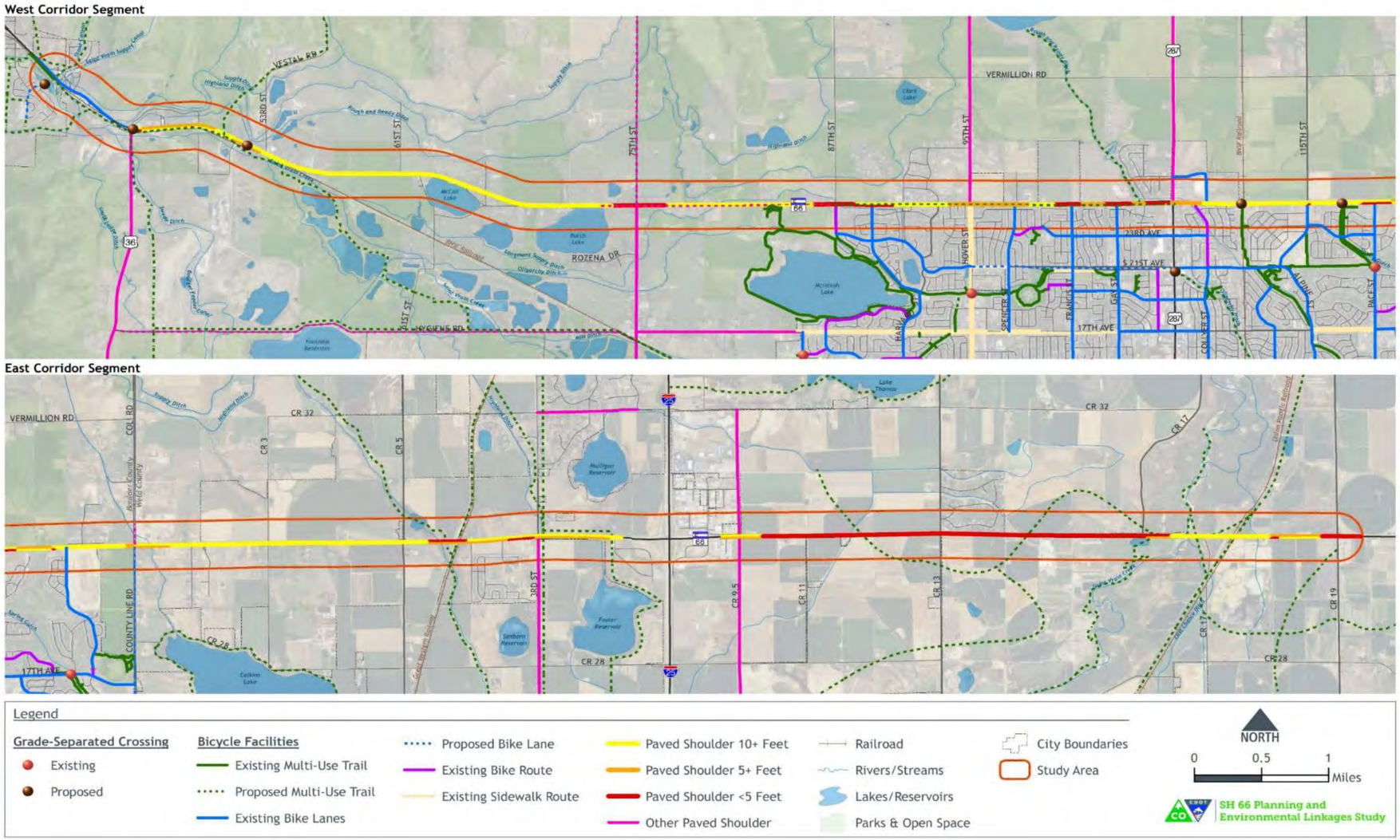
Figure 3.6 Existing and Planning Bicycle Network



Level of Traffic Stress

The Mineta Transportation Institute (MTI) developed level of traffic stress (LTS) as an alternative to bicycle level of service grading of the bicycle network. LTS aims to address the variances in tolerance of stress brought on by vehicular traffic for different user groups. LTS provides a score of comfort ranging from 1 to 4, with LTS 1 feeling safe for all levels of users and LTS 4 only for very experienced and skilled bicyclists—a very small portion of the population. Even with wide shoulders and a portion of US 36 having bike lanes, all segments and just over half of the intersections along the corridor have a high level of traffic stress (LTS 4) due to high speeds and high traffic volumes. The remaining intersections scored LTS 3, meaning most experienced adult bicyclists feel comfortable enough to cross, but groups like the elderly, children, and inexperienced bicyclists would not. The figure below illustrates the LTS scores for segments and intersections along the corridor.

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3.2.3 Transit

Regarding transit, all the fixed-route transit and accompanying Access-a-Ride services in the study area are in Boulder County. RTD's fixed-route bus services are limited in the study area due to its location on the edge of the RTD service area. Routes focus on serving regional travel needs and/or local trips in Longmont. This includes four local Longmont routes and regional routes connecting to Boulder and the Denver metropolitan area. Regional service also connects Lyons and Boulder via US 36. Health First Colorado via Veyo provides Medicaid transportation services, and Heart and Soul Paratransit provides other social service transportation to eligible individuals in the Weld County section of the corridor.

RTD also has two Park-n-Rides near the study area: one on US 287, just south of the corridor, and one in Lyons. A CDOT-maintained Park-n-Ride is also located at I-25 and SH 66, but it is currently used only for ride-sharing purposes.

Census data can be used to help identify areas of high transit propensity, i.e., areas that are likely to support significant transit ridership. The indicators used for this evaluation of transit propensity include areas with high densities of the following population characteristics:

- Age 65 plus
- Individuals with disabilities
- Households below the poverty line
- Households with zero vehicles

The data for the study area suggest that the areas with the highest level of transit propensity are near the US 287/SH 66 intersection. This is supported by the fact that the existing transit routes serving the corridor are focused in this area, and, subsequently, the existing transit ridership is the highest here.

The data also show large percentages of households over the age of 65 on both the east and west ends of the corridor, more than 50 percent and between 26 and 50 percent, respectively. Likewise, both ends of the corridor also have mid to high levels of low-income populations, and the east end has high levels of populations with disabilities. Consistent with other areas in Colorado, there is expected to be an increase in residents who have difficulties with their transportation needs, thereby creating new transit demands in the area.

As transit demands increase along the corridor, the inadequate pedestrian infrastructure and RTD's service boundaries are likely to become more problematic in providing user-friendly services. For example, the current service boundary limits RTD's ability to have stops on the north side of SH 66 in some sections, and no stops can be provided in Weld County because it is not part of RTD's service area.

Finally, as traffic volumes continue to grow, the ability for vehicles (including transit vehicles), pedestrians, and bicyclists to efficiently move along or across SH 66 will become more difficult. Significant degradation in operations are expected to result in long delays, high levels of congestion, and longer than expected trip times. These factors and increased population are likely to increase transit demands requiring more transit options to the corridor. Increased service levels may encounter difficulty if the increase in congestion prevents the ability to provide reliable schedules for routes.

3.3 Access

The study area includes a small portion of US 36 and approximately 20 miles of SH 66 between US 36 and WCR 19 east of I-25. A review of the *State Highway Access Code (*SHAC) indicates that all portions of the study area are classified as either Regional Highway (RA) or Non-Rural Regional Highway (NR-A). Per the SHAC, these types of highways are governed by the following characteristics:

- Medium to high traffic speeds
- Medium to high levels of traffic volumes
- Medium to long distance travel (principal highways serving intra and inter-regional trips)
- Prioritize the through movement of vehicles over providing local access
- Allow one access per abutting parcel if acceptable access cannot be provided from the local street network
- Limit traffic signalized intersections to ½ mile spacing when possible
- Allow other limited access types (right-in-right-out and three-quarter)

Table 3.4 summarizes highway categories within the study area as identified in the SHAC and the number of existing accesses (signalized and unsignalized). Today, the study area includes more than 300 access locations, including 13 signalized intersections. Most unsignalized accesses are driveways providing movement to residential homes and the many businesses that have frontage along the highway. Many access locations are not defined with curb and gutter but with undefined dirt or paved openings that span the full length of the property.

Table 3.4 Existing Access Conditions within the Study Area

Highway	Start	End	Access Category	Number of Access Locations		
				Signalized	Unsignalized	Total
US 36	McConnell Drive	SH 66	Regional Highway	1	32	33
SH 66	US 36	CR 23	Regional Highway	2	109	111
	CR 23	SH 287	Non-Rural Regional Highway	1	32	33
	SH 287	CR 1	Non-Rural Regional Highway	3	29	32
	CR 1	WCR 7/3rd Street (390 feet east of)	Regional Highway	2	34	36
	WCR 7/3rd Street (390 feet east of)	I-25	Non-Rural Regional Highway	0	8	8
	I-25	CR 11	Non-Rural Regional Highway	3	5	8
	CR 11	CR 19	Regional Highway	1	49	50
		Totals		13	298	311

3.3.1 Effect on Other Needs

The current number, locations, and design of accesses contribute to operational and safety deficiencies along the corridor. Many locations do not have turn lanes (right or left), are not delineated by curb and gutter, do not include appropriate accommodations for pedestrians and bicyclists to facilitate movements (including locations where pedestrian and bicycle demands are present), and are spaced at irregular distances along the entire length of the study area.

The number of access locations is expected to increase as additional development occurs along or adjacent to the highway. The increase in traffic and access locations is expected to further degrade the operations and safety for all modes of travel along SH 66. Improvements to the number, location, and design of access locations along SH 66 can help reduce congestion, which, in turn, can help minimize the overall magnitude of improvements needed to provide better operations and safety along the highway. The study area needs improvement in the form of better access control (development of an access control plan) to help reduce the impact of poor access points to operations and safety in the future, along SH 66 and parallel routes.

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Appendix E. Alternative Development and Screening Documentation

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Appendix E-1: Level 1 Alternatives Development and Screening Documentation

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Note: Not all retained alternatives will be appropriate for the entire length of SH 66. Some alternatives may be a consideration for only short select sections.

CONCEPTS	SAFETY Does the alternative improve existing and future conditions with respect to: • Vehicle crashes/fatalities • Bicycle accidents and unsafe facilities • Pedestrian safety and missing sidewalks?			MOBILITY Does the alternative improve the current and future ability to move people, goods, and services along and across SH 66 using: • Automobiles • Bicycles • Pedestrians • Transit			ACCESS Does the alternative improve access to decrease congestion in the corridor?	SUMMARY OF RESULTS	JUSTIFICATION/ADDITIONAL COMMENTS
	Vehicle	Bicycle	Pedestrian	Vehicle	Bicycle	Pedestrian			
No Action	No	No	No	No	No	No	No	Retained	Retained to evaluate as baseline condition.
Functional Class									
Freeway (F-W)	Yes	No	No	Yes	No	No	Yes	Retained	Yes for vehicles/No for other modes.
Enhanced Expressway (E-X)	Yes	No	No	Yes			Yes	Retained	Yes for vehicles/No for other modes.
Standard Expressway (R-A or R-B)	No			No			No	Retained	This is No Action for various sections of the corridor.
Enhanced Arterial (NR-A)	No			No			No	Retained	This is No Action for various sections of the corridor.
Arterial Roadway (NR-B)	No	Yes	Yes	No	Yes	Yes	No	Retained	No for vehicles/Yes for other modes.
Main Street (NR-C)	No	Yes	Yes	No	Yes	Yes	No	Retained	No for vehicles/Yes for other modes.
Highway Capacity									
HOV Lanes	No			Yes	No	No	No	Retained	Yes for vehicles/No for other modes.
Toll Lanes	No			Yes	No	No	No	Retained	Yes for vehicles/No for other modes.
HOT Lanes	No			Yes	No	No	No	Retained	Yes for vehicles/No for other modes.
Additional General Purpose Lanes	No			Yes	No	No	No	Retained	Yes for vehicles/No for other modes.
Intersection Modifications									
Close Access	Yes			Yes			Yes	Retained	
Partial Closure	Yes			Yes			Yes	Retained	
Intersection Reconfiguration	Yes			Yes			Yes	Retained	
Turn Lane Additions/Extended Storage	Yes	No	No	Yes	No	No	Yes	Retained	Yes for vehicles/No for other modes.
Signalization	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Retained	May increase vehicle accidents due to the addition of a traffic signal. Additional signals may add additional delay and reduce vehicle mobility.
Grade-Separated Crossing (No Access)	Yes	No	No	Yes	No	No	Yes	Retained	May make mobility worse due to the need for out-of-direction travel to reach destinations.
Multi-modal Intersection Improvements	Yes	Yes	Yes	No	Yes	Yes	No	Retained	Some multi-modal intersection improvements can benefit vehicles by helping drivers see and avoid non-vehicular users.
Intersection Capacity Improvements	Yes			Yes	Yes	Yes	Yes	Retained	Some design features could provide safety benefit to all modes of travel. As concepts are developed in this study, intersection capacity improvements will be paired with other mode-specific design elements to improve safety for all modes and mobility of non-vehicular modes.
Interchange	Yes			Yes			Yes	Retained	
Safety-Specific Improvements									
Shoulders	Yes	Yes	Maybe	No	Yes	Maybe	No	Retained	Shoulders in some areas could accommodate pedestrian movements.
Guard Rail/Cable Rail	Yes	No	No	No	No	No	Maybe	Retained	Guard rail/cable rail could be used to restrict access.

CONCEPTS	SAFETY Does the alternative improve existing and future conditions with respect to: • Vehicle crashes/fatalities • Bicycle accidents and unsafe facilities • Pedestrian safety and missing sidewalks?			MOBILITY Does the alternative improve the current and future ability to move people, goods, and services along and across SH 66 using: • Automobiles • Bicycles • Pedestrians • Transit			ACCESS Does the alternative improve access to decrease congestion in the corridor?	SUMMARY OF RESULTS	JUSTIFICATION/ADDITIONAL COMMENTS
	Vehicle	Bicycle	Pedestrian	Vehicle	Bicycle	Pedestrian			
Signing	Maybe	Maybe	Maybe	Yes	Maybe	Maybe	Maybe	Retained	Signing could improve safety by restricting movements/designating space of travel for nonvehicle movements, could improve mobility for nonvehicle modes by eliminating confusion and better defining destinations, and could help with access to limit turn movements.
Railroad Crossing Treatment Upgrade	Yes	Yes	Yes	No	Yes	Yes	No	Retained	Treatments could include specific pedestrian and bicycle facilities to improve mobility across tracks.
Interchange Configuration									
Junior Interchanges	Yes	No	No	Yes	No	No	Yes	Retained	Aspects of this configuration does not improve bike/ped safety. Free flow ramps can be less safe to cross.
Diamond	Yes			Yes			Yes	Retained	
Diverging Diamond (DDI)	Yes			Yes			Yes	Retained	
Single Point Urban (SPUI)	Yes	No	No	Yes	No	No	Yes	Retained	This configuration usually eliminates crossing of one of the directions for bike/ped. For example, I-225 and Alameda, bikes and peds cannot cross north/south right at the intersection—they have to go further east to do so.
Full Cloverleaf	Yes			Yes			Yes	Retained	
Partial Cloverleaf	Yes			Yes			Yes	Retained	
Fully Directional	Yes			Yes			Yes	Retained	
Others (esp. at US 287)	Yes			Yes			Yes	Retained	
Intersection Configuration									
Continuous Flow Intersection (CFI)	Yes			Yes			No	Retained	
Continuous Green T	Yes	No	No	Yes	No	No	No	Retained	The free flow traffic lane is challenging for pedestrians and bicycles to cross.
Median U-Turn	Yes			Yes			Yes	Retained	
Restricted Crossing U-Turn	Yes			Yes			Yes	Retained	
Roundabout	Yes	No	No	Yes	No	No	No	Retained	Yes for vehicles/No for other modes.
Quadrant	Yes			Yes			Yes	Retained	
Jughandle	Yes	No	No	Yes	No	No	Yes	Retained	The free flow traffic lane is challenging for pedestrians and bicycles to cross.
Synchronized Split-Phase (Double Crossover)	Yes	No	No	Yes	No	No	Yes	Retained	The free flow traffic lane is challenging for pedestrians and bicycles to cross.
Offset T	Yes			Yes			Yes	Retained	
Alignment									
Bypass Towns	Yes			Yes			Yes	Retained	Retained for consideration within developed areas (only Longmont).
Realign SH 66 to the North (West of I-25)	Yes			Yes			Yes	Retained	Moving to the north is possible but would be costly and would add lane miles to the highway system.

CONCEPTS	SAFETY Does the alternative improve existing and future conditions with respect to: • Vehicle crashes/fatalities • Bicycle accidents and unsafe facilities • Pedestrian safety and missing sidewalks?			MOBILITY Does the alternative improve the current and future ability to move people, goods, and services along and across SH 66 using: • Automobiles • Bicycles • Pedestrians • Transit			ACCESS Does the alternative improve access to decrease congestion in the corridor?	SUMMARY OF RESULTS	JUSTIFICATION/ADDITIONAL COMMENTS
	Vehicle	Bicycle	Pedestrian	Vehicle	Bicycle	Pedestrian			
Realign SH 66 to the South (West of I-25)	No			No			No	**Eliminated**	There is no real option to go south because the highway is currently located along the northern edge of Longmont. Movement south would place SH 66 within the boundaries of Longmont and would degrade safety, mobility, and access conditions, along with creating other issues for the City's transportation system.
Transit Service									
Commuter Rail	No			Yes			No	**Eliminated through current planning horizon (2040)**	Anticipated ridership does not match the need for Commuter Rail through the current planning horizon (2040); the alternative far exceeds the transit needs in the corridor. Ridership for Commuter Rail lines carries 1 to 2 million annual riders. Future corridor needs beyond 2040 may result in situations where this option is viable.
Light Rail	No			Yes			No	**Eliminated through current planning horizon (2040)**	Like Commuter Rail, ridership does not match the need for Light Rail through the current planning horizon (2040). Light Rail averages 29,000 daily riders, compared to SH 66 projected demands of only 500 to 750 daily riders.
Bus Rapid Transit	No			Yes			No	**Eliminated through current planning horizon (2040)**	Like Commuter Rail and Light Rail, ridership does not match the need for a BRT through the current planning horizon (2040). BRTs average 15,600 daily riders compared to SH 66 projected demands of only 500 to 750 daily riders.
Commuter/Express Bus	No			Yes			No	Retained	Meets elements of the Purpose & Need.
Local Transit	No			Yes			No	Retained	Meets elements of the Purpose & Need.
Flexible Route	No			Yes	No	No	No	Retained	Meets elements of the Purpose & Need.
Expanded Human Service Transit	No			Yes	No	No	No	Retained	Meets elements of the Purpose & Need.
Transit Infrastructure									
Separate Transit Guideway	No			Yes			No	**Eliminated through current planning horizon (2040)**	Provides the necessary infrastructure for alternatives like Commuter Rail, Light Rail, and BRT, which do not currently meet the needed ridership and/or suitability for longer trips. Future corridor needs beyond 2040 may result in situations where this option is viable.
Bus Lane (only if Managed Lanes in Level 2A)	No			Yes	No	No	No	Retained	Meets elements of the Purpose & Need.
Transit Queue Jumps	No			Yes	No	No	No	Retained	Meets elements of the Purpose & Need.
Transit Signal Priority	No			Yes	No	No	No	Retained	Meets elements of the Purpose & Need.
Transit Stations/Stops/Amenities	No			Yes	No	No	No	Retained	Meets elements of the Purpose & Need.
Bicycle									
Bike Lanes, On-Street Bike Facilities	No	Yes	No	Yes	Yes	No	No	Retained	Meets elements of the Purpose & Need.
Sidepath (Shared Use Path Proximate to SH 66)	Yes	Yes	Yes	Yes	Yes	Yes	No	Retained	Meets elements of the Purpose & Need.

CONCEPTS	SAFETY Does the alternative improve existing and future conditions with respect to: • Vehicle crashes/fatalities • Bicycle accidents and unsafe facilities • Pedestrian safety and missing sidewalks?			MOBILITY Does the alternative improve the current and future ability to move people, goods, and services along and across SH 66 using: • Automobiles • Bicycles • Pedestrians • Transit			ACCESS Does the alternative improve access to decrease congestion in the corridor?	SUMMARY OF RESULTS	JUSTIFICATION/ADDITIONAL COMMENTS
	Vehicle	Bicycle	Pedestrian	Vehicle	Bicycle	Pedestrian			
Shared Use Paths, Trails, Off-Street Bike Facilities	Yes	Yes	Yes	Yes	Yes	Yes	No	Retained	Meets elements of the Purpose & Need.
Parallel On-Street Bike Route (Local, County Roads)	Yes	Yes	No	Yes	Yes	No	No	Retained	Meets elements of the Purpose & Need.
Enhanced At-Grade Bike Crossings	Yes	Yes	No	No	Yes	Yes	No	Retained	Meets elements of the Purpose & Need.
Grade-Separated Bike Crossings	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Retained	Fully meets the Purpose & Need.
Pedestrian									
Sidewalks	Yes	Yes	Yes	Yes	Yes	Yes	No	Retained	Meets elements of the Purpose & Need.
Sidepath (Shared Use Path Proximate to SH 66)	Yes	Yes	Yes	Yes	Yes	Yes	No	Retained	Meets elements of the Purpose & Need.
Shared Use Paths, Trails	Yes	No	Yes	Yes	Yes	Yes	No	Retained	Meets elements of the Purpose & Need.
Enhanced At-Grade Pedestrian Crossings	Yes	No	Yes	No	No	Yes	No	Retained	Meets elements of the Purpose & Need.
Grade-Separated Pedestrian Crossings	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Retained	Fully meets the Purpose & Needs.
Concepts Contributing to System/Program Alternatives									
ITS	No			Yes			No	Retained	
Intelligent Mobility/Technology	Yes			Yes			No	Retained	
TDM	Yes			Yes			No	Retained	
Maintenance	Yes			No			No	Retained	
Parallel Facilities	Yes			Yes			Yes	Retained	Assumes traffic is decreased on SH 66 and moved to the alternative route.
Local Street Grid Network	No			Yes			No	Retained	

Appendix E-2: Level 2 Alternatives Development and Screening Documentation

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1.0 Level 2 Evaluation

The following evaluation criteria were developed to compare how well each highway interchange/intersection, segment, and alternative option in Level 2 screening meets the Purpose and Need and goals of the project. The performance measures are a mix of qualitative and quantitative assessments, and are based on the criteria and the data available at this stage of development.

Table 1. Level 2 Evaluation Criteria and Performance Measures

Category	Criteria	Performance Measure
Safety	Ability to address unsafe physical or operational conditions for vehicles	Lower than average crash rate (1.15 rural; 1.5 urban)
	Reduce bicycle/vehicle crash potential	Conflict points with vehicles Crossing type, length, and spacing Qualitative assessment of bicyclist perception of comfort and safety Impact on level of traffic stress (LTS)
	Facilitate safer pedestrian connections	Conflict points with vehicles Crossing type, length, and spacing Qualitative assessment of pedestrian perception of comfort and safety
Mobility	Roadway capacity related to 2040 travel demand	Volume over capacity ratio
	Travel time objectives	Achievement of future travel time index goals
	Enhanced transit service opportunities	Demand to/from adjacent land use Travel speed/delays and/or ability to make stops Stop availability and/or access for pedestrians and bicyclists
	Enhanced bicycle mobility opportunities	Demand to/from adjacent land use Connectivity/safe crossing opportunities
	Enhanced pedestrian mobility and connectivity opportunities	Demand to/from adjacent land use Connectivity/safe crossing opportunities
Access	Strategic access consolidation	Opportunities to reduce access points
Resiliency	Ability to reduce encroachment on potential roadway threats	Minimize railway, floodplain, and drainageway encroachment
	Improved emergency evacuations	
Community Context	Design and operational context related to local community surroundings	Design and operational context related to local community surroundings
	Impacts on existing community	Impacts on existing community

Environmental Considerations	Impacts on environmental and cultural resources within the built and natural environment	Impacts on environmental and cultural resources within the built and natural environment

The color ratings shown with the performance measures in the following screening matrices are used as a visual indication of the comparative characteristics of a criterion between options. The colors are not used as an indication of a decision (i.e., an option with many "red" ratings was not automatically rendered unreasonable). The colors are a general indication of the following:

- Green = Comparatively beneficial and/or minor impacts
- Yellow = Comparatively neutral benefits and/or moderate impacts
- Red = Comparatively negative and/or major impacts

The color ratings for each criterion used in the sections are defined below.

1.1 Safety

1.1.1 Ability to address unsafe conditions for vehicles

- Green = Potential for substantial crash reduction
- Yellow = Little to no change to crash reduction expected
- Red = Increased potential for vehicular crashes

1.1.2 Reduce bicycle/vehicle crash potential

- Green = Potential for substantial reduction in bicycle/vehicle conflicts and LTS
- Yellow = Little reduction in bicycle/vehicle conflicts and/or LTS
- Red = No change or increase in bicycle/vehicle conflicts and/or LTS

1.1.3 Facilitate safer pedestrian crossings

- Green = Expected substantially safer pedestrian crossings
- Yellow = Little to no change in the safety of pedestrian crossings
- Red = Reduced safety to pedestrian crossings expected

1.2 Mobility

1.2.1 2040 Roadway capacity related to travel demand

- Green = volume / capacity ratio of less than 0.70
- Yellow = volume / capacity ratio between 0.71 and 0.85
- Red = volume / capacity ratio of greater than 0.85

1.2.2 Future travel time objectives

- Green = travel time index of less than 1.25
- Yellow = travel time index between 1.26 and 1.45
- Red = travel time index greater than 1.45

1.2.3 Enhanced planned transit service opportunities

- Green = Substantial improvement in transit service opportunities

- Yellow = Minor to moderate improvements in transit service opportunities
- Red = No, or negative improvement in transit service opportunities

1.2.4 Bicycle mobility opportunities

- Green = Substantial improvement in bicycle mobility
- Yellow = Minor to moderate improvement in bicycle mobility
- Red = No, or negative improvement in bicycle mobility

1.2.5 Pedestrian mobility opportunities

- Green = Substantial improvement in pedestrian mobility
- Yellow = Minor to moderate improvement in pedestrian mobility
- Red = No, or negative improvement in pedestrian mobility

1.3 Access

1.3.1 Strategic access consolidation

- Green = Provides opportunity for substantial access consolidation
- Yellow = Provides opportunity for moderate access consolidation
- Red = Provides very little opportunity for access consolidation

1.4 Resiliency

1.4.1 Ability to minimize railway, floodplain, and drainageway encroachment

- Green = Substantially avoids encroaching on railways, floodplains, and drainageways
- Yellow = Moderately avoids encroaching on railways, floodplains, or drainageways
- Red = Does not avoid encroaching on railways, floodplains, or drainageways

1.4.2 Ability to improve emergency evacuations

- Green = Substantially improves emergency evacuations
- Yellow = Moderately improves emergency evacuations
- Red = Does not improve emergency evacuations

1.5 Community Context

1.5.1 Design and operational context

- Green = Very consistent with surrounding design and operational context
- Yellow = Moderately consistent with surrounding design and operational context
- Red = Inconsistent with surrounding design and operational context

1.5.2 Impacts on existing community

- Green = Little to no impacts on existing community and properties
- Yellow = Moderate number of properties in the community impacted
- Red = Many, or majority of surrounding community and properties impacted

1.6 Environmental Considerations

1.6.1 Environmental and cultural resource impacts

- Green = Minor to no impacts to surrounding natural and cultural environment
- Yellow = Moderate impacts to surrounding natural and cultural environment
- Red = Major impacts to surrounding built or natural and cultural environment

2.0 Evaluation Summary of Results

The evaluation matrix summarizes the recommendation for each option as follows:

- Carried Forward - Option will be evaluated further as part of corridor alternative with further definition and conceptual design
- Not Recommended – Option will not be evaluated further in this study due to comparatively negligible benefits and higher impacts than other options
- Eliminated – Option does not meet the Purpose and Need established with this study, or the option is unreasonable due to impacts and/or infeasibility

Section	Alternative	Safety			Mobility							Risk and Resiliency		Access	Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
		Vehicle	Bicycle	Pedestrian	Vehicle				Bicycle	Pedestrian									
		Does the alternative result in lower than average crash rates for like-facilities (1.2 rural, 2.0 urban)?	*Does the alternative reduce the potential for bicycle / vehicle crashes?*	*Does the alternative create opportunities for safer pedestrian connections?*	*Does the alternative provide sufficient capacity to handle travel demand in 2040?*		*Does the alternative achieve future travel time objectives? (Goal TTI = 1.25)*		*Does the alternative enhance and / or allow current and planned transit service?*	*Does the alternative provide increased alternatives for bicycle mobility?*	*Does the alternative create enhanced pedestrian connectivity along and across SH 66?*	*Does the alternative avoid encroachment into identified thre at areas?*	*Does the alternative facilitate emergency evacuation/acc ess potential?*	*Does the alternative allow for strategic access consolidation?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environment and cultural resources?*		
					AM	PM	AM (EB/WB)	PM (EB/WB)											
1A - McConnell Dr. — Highland Dr.	No Action (Regional Highway) 4 lanes	No. Segment is currently at 2.3.	No. Even with bike lanes, the speed limit and number of lanes create a high-stress environment.	No. High speed and infrequent safe crossings via signals or other treatments.	0.32	0.38	1.25 / 1.18	1.43 / 1.17	Maybe. Allows but does not provide enhanced services in the future with limited pedestrian and stop facilities.	No. Infrequent safe crossings via signals or other treatments in an area with existing and planned development.	No. Infrequent safe crossings via signals or other treatments in an area with existing and planned development.	No change from existing. Near the floodplain/ floodway, avalanche/ debris/rock-fall/landslide wildfire risk areas and railroad. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	No change from existing.	Maybe	Yes	Yes	Yes. Environmental impacts are not anticipated.	Not Recommended	
	Expressway 4 lanes	Likely. With grade separations and no driveway access.	Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations and fewer accesses to cross.	Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations.	0.22	0.26	1.30 / 1.23	1.44 / 1.19	Maybe. If including some type of bike/ped crossing and transit facilities.	Maybe. With grade separation but reduces with less frequent crossings.	Maybe. With grade separation but reduces with less frequent crossings.	No change from existing. Near the floodplain/ floodway, avalanche/ debris/rock-fall/landslide wildfire risk areas and railroad. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	No change from existing.	No	No	Maybe	Maybe. Environmental impacts may be anticipated. Resource impacts could be avoided, minimized, or mitigated to avoid substantial impact.	Not Recommended	Need to enhance the intersection at US 36 to accommodate faster traffic and longer queues for EB AM.

Section	Alternative	Safety			Mobility							Risk and Resiliency		Access	Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
		Vehicle	Bicycle	Pedestrian	Vehicle					Bicycle	Pedestrian								
		Does the alternative result in lower than average crash rates for like-facilities (1.2 rural, 2.0 urban)?	*Does the alternative reduce the potential for bicycle / vehicle crashes?*	*Does the alternative create opportunities for safer pedestrian connections?*	*Does the alternative provide sufficient capacity to handle travel demand in 2040?*		*Does the alternative achieve future travel time objectives? (Goal TTI = 1.25)*		*Does the alternative enhance and / or allow current and planned transit service?*	*Does the alternative provide increased alternatives for bicycle mobility?*	*Does the alternative create enhanced pedestrian connectivity along and across SH 66?*	*Does the alternative avoid encroachment into identified thre at areas?*	*Does the alternative facilitate emergency evacuation/acc ess potential?*	*Does the alternative allow for strategic access consolidation?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environment and cultural resources?*		
					AM	PM	AM (EB/WB)	PM (EB/WB)											
1A - McConnell Dr. — Highland Dr. (Continued)	Enhanced Arterial Roadway 5 lanes	Maybe. With some access management and raised medians.	Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations and fewer accesses to cross.	Maybe. High speed creates a high-stress environment, and wider crossings create more conflicts when at grade, but crossings are safer with grade separations and fewer accesses to cross.	0.47	0.56	1.19 / 1.16	1.41 / 1.15	Maybe. If including some type of bike/ped crossings and transit facilities.	Maybe. With grade separation, but reduces with less frequent crossings.	Maybe. With grade separation, but reduces with less frequent crossings.	No. Near the floodplain/ floodway, avalanche/ debris/rock-fall/landslide wildfire risk areas and railroad. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	No change from existing.	Yes	Yes	Yes	Maybe. Environmental impacts may be anticipated. Resource impacts could be avoided, minimized, or mitigated to avoid substantial impact.	Not Recommended	The delay is longer EB in the PM approaching US 36. Recommend enhancements to the US 36 intersection.
	Non-Rural Arterial Roadway 4 lanes	***Maybe. With prohibition of left turns given no center lane.***	***Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations and fewer accesses to cross.***	***Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations and fewer accesses to cross.***	***0.47***	***0.56***	***1.19 / 1.16***	***1.41 / 1.15***	***Maybe. If including some type of bike/ped crossings and transit facilities.***	***Maybe. With grade separation, but reduces with less frequent crossings.***	***Maybe. With grade separation, but reduces with less frequent crossings.***	***No. Near the floodplain/ floodway, avalanche/ debris/rock-fall/landslide wildfire risk areas and railroad. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).***	***No change from existing.***	***Maybe***	***Maybe***	***Yes***	***Maybe. Environmental impacts may be anticipated. Resource impacts could be avoided, minimized, or mitigated to avoid substantial impact.***	***Carried Forward***	
	Arterial Roadway 4 lanes	Maybe. With prohibition of left turns given no center lane.	Yes. Improved traffic stress if speed is < 40 mph. Shorter signal spacing provides more safe crossing opportunities.	Yes. If slower speed, having shorter signal spacing provides more safe crossing opportunities.	0.52	0.56	1.19 / 1.16	1.41 / 1.15	Yes. Better crossings to access transit facilities (bus stops and pullouts). This area has the potential for local service needs.	Yes. Shorter signal spacing provides more safe crossing opportunities.	Yes. Shorter signal spacing provides more safe crossing opportunities.	No. Near the floodplain/ floodway, avalanche/ debris/rock-fall/landslide wildfire risk areas and railroad. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	No change from existing.	Maybe	Maybe	Yes	Maybe. Environmental impacts may be anticipated. Resource impacts could be avoided, minimized, or mitigated to avoid substantial impact.	Not Recommended	

Section	Alternative	Safety			Mobility							Risk and Resiliency		Access	Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
		Vehicle	Bicycle	Pedestrian	Vehicle					Bicycle	Pedestrian								
		Does the alternative result in lower than average crash rates for like-facilities (1.2 rural, 2.0 urban)?	*Does the alternative reduce the potential for bicycle / vehicle crashes?*	*Does the alternative create opportunities for safer pedestrian connections?*	*Does the alternative provide sufficient capacity to handle travel demand in 2040?*		*Does the alternative achieve future travel time objectives? (Goal TTI = 1.25)*		*Does the alternative enhance and / or allow current and planned transit service?*	*Does the alternative provide increased alternatives for bicycle mobility?*	*Does the alternative create enhanced pedestrian connectivity along and across SH 66?*	*Does the alternative avoid encroachment into identified thre at areas?*	*Does the alternative facilitate emergency evacuation/acc ess potential?*	*Does the alternative allow for strategic access consolidation?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environment and cultural resources?*		
					AM	PM	AM (EB/WB)	PM (EB/WB)											
1A - McConnell Dr. — Highland Dr. (Continued)	Main Street 5 lanes	No. Increased access and on-street parking would likely increase crashes.	Yes. Traffic stress is reduced significantly, especially with a speed < 35 mph, but adding more access points creates more conflict points when traveling along the segment.	Maybe. Slower speed makes it more comfortable and easier to cross, but wider crossings can increase conflicts. Planned land use location does not support a need for this classification.	1.53	1.83	1.15 / 1.12	1.27 / 1.08	Yes. Better crossings to access transit facilities (bus stops and pullouts). This area has the potential for local service needs.	Yes. Signals/ HAWKS improve connectivity.	Yes. Signals/ HAWKS improve connectivity.	No. Near the floodplain/ floodway, avalanche/ debris/rock-fall/landslide wildfire risk areas and railroad. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	No change from existing.	No	Yes	Yes	Maybe. Environmental impacts may be anticipated. Resource impacts could be avoided, minimized, or mitigated to avoid substantial impact.	Not Recommended	The number of accesses in this stretch leads to a lower capacity.
1B - Highland Dr. — 75th St.	No Action (Regional Highway) 2 lanes	Yes. Crash rate is below average today.	No. High speed creates a high level of traffic stress and infrequent safe crossings via signals or other treatments.	No. High speed and infrequent safe crossings via signals or other treatments.	0.60	0.64	2.43 / 3.69	4.56 / 1.11	Maybe. Low demand stretch. Few, if any, stops are likely to be needed. Transit travel speed is good, but stopping and merging would be difficult with only 2 travel lanes.	No. Infrequent safe crossings via signals or other treatments, but few land uses to generate/ attract, so strategic signals may be sufficient.	No. Infrequent safe crossings via signals or other treatments, but few land uses to generate/ attract, so strategic signals may be sufficient.	No. Near the floodplain/ floodway, avalanche/ debris/rock-fall/landslide area, wildfire risk area, and railroad. Also, a higher risk due to an industry owned overhead structure near a railroad corridor. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	No change from existing.	Maybe	Yes	No	Yes. Environmental impacts are not anticipated.	Not Recommended	The large backup on 75th St. is the main cause for delays in this area.
	Expressway 2 lanes	Yes. Crash rate is already below average today. Option would improve it more-so.	Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations and fewer accesses to cross. May limit dangerous mid-block crossings.	Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations. May limit dangerous mid-block crossings.	0.39	0.42	2.89 / 4.52	11.6 / 4.33	Maybe. Low demand stretch. Few, if any, stops are likely to be needed. Transit travel speed is good, but stopping and merging would be difficult with only 2 travel lanes.	Maybe. With grade separation; reduces with less frequent crossings but few land uses to generate/ attract.	Maybe. With grade separation; reduces with less frequent crossings but few land uses to generate/ attract.	No. Near the floodplain/ floodway, avalanche/ debris/rock-fall/landslide area, wildfire risk area, and railroad. Also, a higher risk due to an industry owned overhead structure near a railroad corridor. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	No change from existing.	No	Maybe	Maybe	Maybe. Environmental impacts may be anticipated. Resource impacts could be avoided, minimized, or mitigated to avoid substantial impact.	Not Recommended	WBLT onto US 36 has a large queue, possible double left with upgrade to US 36 to accommodate. EB to 75th St. has a large queue.

Section	Alternative	Safety			Mobility							Risk and Resiliency		Access	Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
		Vehicle	Bicycle	Pedestrian	Vehicle					Bicycle	Pedestrian								
		Does the alternative result in lower than average crash rates for like-facilities (1.2 rural, 2.0 urban)?	*Does the alternative reduce the potential for bicycle / vehicle crashes?*	*Does the alternative create opportunities for safer pedestrian connections?*	*Does the alternative provide sufficient capacity to handle travel demand in 2040?*		*Does the alternative achieve future travel time objectives? (Goal TTI = 1.25)*		*Does the alternative enhance and / or allow current and planned transit service?*	*Does the alternative provide increased alternatives for bicycle mobility?*	*Does the alternative create enhanced pedestrian connectivity along and across SH 66?*	*Does the alternative avoid encroachment into identified thre at areas?*	*Does the alternative facilitate emergency evacuation/acc ess potential?*	*Does the alternative allow for strategic access consolidation?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environment and cultural resources?*		
					AM	PM	AM (EB/WB)	PM (EB/WB)											
1B - Highland Dr. — 75th St. (Continued)	Enhanced Arterial Roadway 2 lanes	Yes. Crash rate is already below average today (0.2). Option would improve it more-so.	Maybe. High speed creates a high-stress environment. Crossings are safer with grade separations and fewer accesses to cross. May limit dangerous mid-block crossings.	Maybe. High speed creates a high-stress environment. Crossings are safer with grade separations. May limit dangerous mid-block crossings.	0.91	0.97	2.34 / 3.01	9.49 / 3.09	Maybe. Low demand stretch. Few, if any, stops are likely to be needed. Transit travel speed is good, but stopping and merging would be difficult with only 2 travel lanes.	Maybe. With grade separation; reduces with less frequent crossings but few land uses to generate/ attract.	Maybe. With grade separation; reduces with less frequent crossings but few land uses to generate/ attract.	No. Near the floodplain/ floodway, avalanche/ debris/rock-fall/landslide area, wildfire risk area, and railroad. Also, a higher risk due to an industry owned overhead structure near a railroad corridor. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	No change from existing.	Maybe	Yes	Yes	Maybe. Environmental impacts may be anticipated. Resource impacts could be avoided, minimized, or mitigated to avoid substantial impact.	Not Recommended	Faster speed, quicker to back up PM delays for EB approaching 75th St. and WB approaching US 36. Recommend enhancing both intersections to accommodate higher speeds and future volume.
	Rural Highway 3 lanes	Yes. Crash rate is already below average today. Option would improve it more-so	No. High speed creates a high level of traffic stress and infrequent safe crossings via signals or other treatments.	No. High speed and infrequent safe crossings via signals or other treatments.	0.60	0.64	2.73 / 4.53	15.8 / 5.02	Maybe. Low demand stretch. Few, if any, stops are likely to be needed. Transit travel speed is good, but stopping and merging would be difficult with only 2 travel lanes.	No. Infrequent safe crossings via signals or other treatments, but few land uses to generate/ attract, so strategic signals may be sufficient.	No. Infrequent safe crossings via signals or other treatments, but few land uses to generate/ attract, so strategic signals may be sufficient.	No. Near the floodplain/ floodway, avalanche/ debris/rock-fall/landslide area, wildfire risk area, and railroad. Also, a higher risk due to an industry owned overhead structure near a railroad corridor. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	Yes	Yes	Yes	Yes	Maybe. Environmental impacts may be anticipated. Resource impacts could be avoided, minimized, or mitigated to avoid substantial impact.	Not Recommended	WBLT onto US 36 has a large queue, possible double left with upgrade to US 36 to accommodate. EB to 75th St. has a large queue.

Section	Alternative	Safety			Mobility							Risk and Resiliency		Access	Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
		Vehicle	Bicycle	Pedestrian	Vehicle				Bicycle	Pedestrian									
		Does the alternative result in lower than average crash rates for like-facilities (1.2 rural, 2.0 urban)?	*Does the alternative reduce the potential for bicycle / vehicle crashes?*	*Does the alternative create opportunities for safer pedestrian connections?*	*Does the alternative provide sufficient capacity to handle travel demand in 2040?*		*Does the alternative achieve future travel time objectives? (Goal TTI = 1.25)*		*Does the alternative enhance and / or allow current and planned transit service?*	*Does the alternative provide increased alternatives for bicycle mobility?*	*Does the alternative create enhanced pedestrian connectivity along and across SH 66?*	*Does the alternative avoid encroachment into identified thre at areas?*	*Does the alternative facilitate emergency evacuation/acc ess potential?*	*Does the alternative allow for strategic access consolidation?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environment and cultural resources?*		
					AM	PM	AM (EB/WB)	PM (EB/WB)											
1B - Highland Dr. — 75th St. (Continued)	***Regional Roadway with cable barrier and depressed median 4 lanes***	Yes. Crash rate is already below average today. Option would improve it more-so.	***Maybe. Improved traffic stress if speed is < 40 mph. Shorter signal spacing provides more safe crossing opportunities; however, adding more access points creates more conflict points when traveling along this low-density segment.***	***Maybe. If slower speed, having shorter signal spacing provides more safe crossing opportunities, but wider crossings than current, but land use does not support the need for frequent crossings via signals.***	***0.46***	***0.50***	***1.13 / 2.28***	***2.21 / 1.09***	***Maybe. Low demand stretch. Few, if any, stops are likely to be needed. Transit travel speed is ok. Would make stopping easier if a few stops are desired.***	***Yes. Shorter signal spacing provides more safe crossing opportunities; however, land use does not support the need for frequent crossings via signals.***	***Yes. Shorter signal spacing provides more safe crossing opportunities; however, land use does not support the need for frequent crossings via signals.***	***No. Near the floodplain/ floodway, avalanche/ debris/rock-fall/landslide area, wildfire risk area, and railroad. Also, a higher risk due to an industry owned overhead structure near a railroad corridor. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).***	***Yes***	***No***	***No***	***No***	***Maybe. Environmental impacts may be anticipated. Resource impacts could be avoided, minimized, or mitigated to avoid substantial impact.***	***Carried Forward***	***Intersections of 75th St. and US 36 cause most of the delay and should be enhanced.***
	Arterial Roadway 2 lanes	Yes. Crash rate is already below average today. Option would likely have little impact as it is similar to existing conditions.	Maybe. Improved traffic stress if speed is < 40 mph. Shorter signal spacing provides more safe crossing opportunities; however, adding more access points creates more conflict points when traveling along this low-density segment.	Yes. If slower speed, having shorter signal spacing provides more safe crossing opportunities, but land use does not support the need for frequent crossings via signals.	0.93	0.99	2.34 / 3.01	9.49 / 3.09	Maybe. Low demand stretch. Few, if any, stops are likely to be needed. Transit travel speed is ok. Would make stopping easier if a few stops are desired. Two lanes would make merging difficult.	Yes. Shorter signal spacing provides more safe crossing opportunities; however, land use does not support the need for frequent crossings via signals.	Yes. Shorter signal spacing provides more safe crossing opportunities; however, land use does not support the need for frequent crossings via signals.	No. Near the floodplain/ floodway, avalanche/ debris/rock-fall/landslide area, wildfire risk area, and railroad. Also, a higher risk due to an industry owned overhead structure near a railroad corridor. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	No change from existing.	Yes	Yes	Yes	Maybe. Environmental impacts may be anticipated. Resource impacts could be avoided, minimized, or mitigated to avoid substantial impact.	Not Recommended	

Section	Alternative	Safety			Mobility						Risk and Resiliency		Access	Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
		Vehicle	Bicycle	Pedestrian	Vehicle				Bicycle	Pedestrian								
		Does the alternative result in lower than average crash rates for like-facilities (1.2 rural, 2.0 urban)?	*Does the alternative reduce the potential for bicycle / vehicle crashes?*	*Does the alternative create opportunities for safer pedestrian connections?*	*Does the alternative provide sufficient capacity to handle travel demand in 2040?*		*Does the alternative achieve future travel time objectives? (Goal TTI = 1.25)*		*Does the alternative enhance and / or allow current and planned transit service?*	*Does the alternative provide increased alternatives for bicycle mobility?*	*Does the alternative create enhanced pedestrian connectivity along and across SH 66?*	*Does the alternative avoid encroachment into identified thre at areas?*	*Does the alternative facilitate emergency evacuation/acc ess potential?*	*Does the alternative allow for strategic access consolidation?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environment and cultural resources?*		
					AM	PM	AM (EB/WB)	PM (EB/WB)										
1C - 75th St. — 87th St.	No Action (Regional Highway) 2 lanes	Yes. Crash rate is already about average today (1.0).	No. High speed and congestion create a high level of traffic stress and infrequent safe crossings via signals or other treatments.	No. High speed and infrequent safe crossings via signals or other treatments	0.71	0.72	1.22 / 1.46	1.30 / 1.57	Maybe. Low demand stretch. Few, if any, stops are likely to be needed. Transit travel speed is good, but stopping and merging would be difficult with only 2 travel lanes.	No. Infrequent safe crossings via signals or other treatments, but few land uses to generate/ attract, so strategic signals may be sufficient.	No. Infrequent safe crossings via signals or other treatments, but few land uses to generate/ attract, so strategic signals may be sufficient.	Yes. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	No change from existing	No	No	Maybe	Yes. Environmental impacts are not anticipated.	Not Recommended	75th Street intersection has long EB (AM & PM) queues and NB (PM) queues. Recommend enhancements to the intersection. May require additional through lanes to accommodate the amount of traffic.
	Expressway 2 lanes	Yes. Crash rate is already at the average today. Option would improve it more-so.	Maybe. High speed and congestion create a high-stress environment, but crossings are safer with grade separations and fewer accesses to cross. May limit dangerous mid-block crossings.	Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations. May limit dangerous mid-block crossings.	0.48	0.49	1.21 / 1.34	1.27 / 1.34	Maybe. Low demand stretch. Few, if any, stops are likely to be needed. Transit travel speed is good, but stopping and merging would be difficult with only 2 travel lanes.	Maybe. With grade separation; reduces with less frequent crossings but few land uses to generate/ attract.	Maybe. With grade separation; reduces with less frequent crossings but few land uses to generate/ attract.	Yes. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	No change from existing	Maybe	No	No	Maybe. Environmental impacts may be anticipated. Resource impacts could be avoided, minimized, or mitigated to avoid substantial impact.	Not Recommended	
	Enhanced Arterial Roadway 2 lanes	Yes. Crash rate is already at the average today. Option would improve it more-so.	Maybe. High speed and congestion create a high-stress environment, but crossings are safer with grade separations and fewer accesses to cross. May limit dangerous mid-block crossings.	Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations. May limit dangerous mid-block crossings.	0.71	1.13	1.17 / 1.29	1.23 / 1.31	Maybe. Low demand stretch. Few, if any, stops are likely to be needed. Transit travel speed is good. Would make stopping and merging difficult with only 2 travel lanes.	Maybe. With grade separation; reduces with less frequent crossings but few land uses to generate/ attract.	Maybe. With grade separation; reduces with less frequent crossings but few land uses to generate/ attract.	Yes. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	No change from existing	Maybe	Maybe	Maybe	Maybe. Environmental impacts may be anticipated. Resource impacts could be avoided, minimized, or mitigated to avoid substantial impact.	Not Recommended	
	Rural Highway 3 lanes	Yes. Crash rate is already at the average today. Option would improve it more-so.	No. High speed creates a high level of traffic stress and infrequent safe crossings via signals or other treatments.	No. High speed and infrequent safe crossings via signals or other treatments.	0.71	0.72	1.26 / 1.40	1.34 / 1.43	Maybe. Low demand stretch. Few, if any, stops are likely to be needed. Transit travel speed is good. Would make stopping and merging difficult with only 2 travel lanes.	No. Infrequent safe crossings via signals or other treatments, but few land uses to generate/ attract, so strategic signals may be sufficient.	No. Infrequent safe crossings via signals or other treatments, but few land uses to generate/ attract, so strategic signals may be sufficient.	Yes. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	Yes	Yes	Yes	Yes	Yes	Maybe. Environmental impacts may be anticipated. Resource impacts could be avoided, minimized, or mitigated to avoid substantial impact.	Not Recommended	

Section	Alternative	Safety			Mobility						Risk and Resiliency		Access	Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
		Vehicle	Bicycle	Pedestrian	Vehicle				Bicycle	Pedestrian								
		Does the alternative result in lower than average crash rates for like-facilities (1.2 rural, 2.0 urban)?	*Does the alternative reduce the potential for bicycle / vehicle crashes?*	*Does the alternative create opportunities for safer pedestrian connections?*	*Does the alternative provide sufficient capacity to handle travel demand in 2040?* AM	*Does the alternative provide sufficient capacity to handle travel demand in 2040?* PM	*Does the alternative achieve future travel time objectives? (Goal TTI = 1.25)* AM (EB/WB)	*Does the alternative achieve future travel time objectives? (Goal TTI = 1.25)* PM (EB/WB)	*Does the alternative enhance and / or allow current and planned transit service?*	*Does the alternative provide increased alternatives for bicycle mobility?*	*Does the alternative create enhanced pedestrian connectivity along and across SH 66?*	*Does the alternative avoid encroachment into identified thre at areas?*	*Does the alternative facilitate emergency evacuation/acc ess potential?*	*Does the alternative allow for strategic access consolidation?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environment and cultural resources?*		
1C - 75th St. — 87th St. (Continued)	Rural Highway 5 lanes	Yes. Crash rate is already at the average today. Option would improve it more-so	No. Added capacity alleviates congestion concerns, but high speed creates a high level of traffic stress and infrequent safe crossings via signals or other treatments.	No. High speed and infrequent safe crossings via signals or other treatments that are wide to cross.	0.37	0.37	1.20 / 1.24	1.26 / 1.33	Yes. Low demand stretch. Few, if any, stops are likely to be needed. Transit travel speed is good. Additional travel lanes would make stopping/ merging easier if a few stops are desired.	No. Infrequent safe crossings via signals or other treatments, but few land uses to generate/ attract, so strategic signals may be sufficient.	No. Infrequent safe crossings via signals or other treatments, but few land uses to generate/ attract, so strategic signals may be sufficient.	Yes. The area also is subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattack.	Yes	Yes	No	No	Maybe. Environmental impacts may be anticipated. Resource impacts could be avoided, minimized, or mitigated to avoid substantial impact.	Not Recommended	
	Regional Roadway with cable barrier and depressed median 4 lanes	***Yes. Crash rate is already at the average today. Option would improve it more-so.***	***Maybe. Improved traffic stress if speed is < 40 mph. Shorter signal spacing provides more safe crossing opportunities; however, adding more access points creates more conflict points when traveling along this low-density segment.***	***Maybe. If slower speed, having shorter signal spacing provides more safe crossing opportunities, but wider crossings than current and land use do not support the need for frequent crossings via signals.***	***0.58***	***0.58***	***1.12 / 1.20***	***1.18 / 1.24***	***Maybe. Low demand stretch. Few, if any, stops are likely to be needed. Transit travel speed is ok. Would make stopping easier if a few stops are desired. May be a good transition to Section 2.***	***Yes. Shorter signal spacing provides more safe crossing opportunities; however, land use does not support the need for frequent crossings via signals.***	***Yes. Shorter signal spacing provides more safe crossing opportunities; however, land use does not support the need for frequent crossings via signals.***	***Yes. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).***	***Yes***	***Maybe***	***Maybe***	***Maybe***	***Maybe. Environmental impacts may be anticipated. Resource impacts could be avoided, minimized, or mitigated to avoid substantial impact.***	***Carried Forward***	
	Arterial Roadway 2 lanes	Maybe. Crash rate is already at the average today. Option would likely have little impact as it is similar to existing conditions.	Maybe. Improved traffic stress if speed is < 40 mph. Shorter signal spacing provides more safe crossing opportunities; however, adding more access points creates more conflict points when traveling along this low-density segment.	Yes. If slower speed, having shorter signal spacing provides more safe crossing opportunities, but land use does not support the need for frequent crossings via signals.	1.13	1.16	1.17 / 1.29	1.23 / 1.31	Maybe. Low demand stretch. Few, if any, stops are likely to be needed. Transit travel speed is ok, but 2 travel lanes make merging difficult.	Yes. Shorter signal spacing provides more safe crossing opportunities; however, land use does not support the need for frequent crossings via signals.	Yes. Shorter signal spacing provides more safe crossing opportunities; however, land use does not support the need for frequent crossings via signals.	Yes. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	No change from existing	Maybe	Maybe	Maybe	Maybe. Environmental impacts may be anticipated. Resource impacts could be avoided, minimized, or mitigated to avoid substantial impact.	Not Recommended	Because traffic is being metered at 75th and 87th, demand volumes are not able to be fully processed.

Section	Alternative	Safety			Mobility						Risk and Resiliency		Access	Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
		Vehicle	Bicycle	Pedestrian	Vehicle				Bicycle	Pedestrian								
		Does the alternative result in lower than average crash rates for like-facilities (1.2 rural, 2.0 urban)?	*Does the alternative reduce the potential for bicycle / vehicle crashes?*	*Does the alternative create opportunities for safer pedestrian connections?*	*Does the alternative provide sufficient capacity to handle travel demand in 2040?*		*Does the alternative achieve future travel time objectives? (Goal TTI = 1.25)*		*Does the alternative enhance and / or allow current and planned transit service?*	*Does the alternative provide increased alternatives for bicycle mobility?*	*Does the alternative create enhanced pedestrian connectivity along and across SH 66?*	*Does the alternative avoid encroachment into identified thre at areas?*	*Does the alternative facilitate emergency evacuation/acc ess potential?*	*Does the alternative allow for strategic access consolidation?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environment and cultural resources?*		
					AM	PM	AM (EB/WB)	PM (EB/WB)										
2 - 87th St — County Line Rd.	No Action (Non-Rural Principal Highway) 2/4 lanes	No. Crash rate (2.2) is above average for urban highways	No. High speed and number of lanes create a high-stress environment.	No. High speed and infrequent safe crossings via signals or other treatments.	0.65	0.74	3.10 / 3.71	5.35 / 3.42	Maybe. Limited ped access and transit facilities are a hindrance. Need to accommodate both local and express (regional) type service needs in this stretch.	No. Infrequent safe crossings via signals or other treatments in an area with existing and planned development.	No. Infrequent safe crossings via signals or other treatments in an area with existing and planned development.	Yes. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	No change from existing	No	Maybe	Yes	Yes. Environmental impacts are not anticipated.	Not Recommended	This section is a prime candidate for technology such as adaptive signals due to the close spacing of signals and high volumes.
	Expressway 4 lanes	***Very Likely. With grade separation and no driveway access.***	***Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations and fewer accesses to cross.***	***Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations.***	***0.33***	***0.37***	***2.00 / 2.20***	***4.55 / 4.25***	***Maybe. Ped access and transit facilities would be slightly improved. More stops may be necessary than those provided at interchanges. Travel speed makes merging into traffic difficult.***	***Maybe. With grade separation, but reduces with less frequent crossings; however, development north is concentrated in a specific area.***	***Maybe. With grade separation, but reduces with less frequent crossings. However, development north is concentrated in a specific area.***	***Maybe. With a grade-separation at the railroad crossing. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).***	***Yes***	***No***	***Yes***	***Maybe***	***Yes. Environmental impacts are not anticipated.***	***Carried Forward***	***Higher speeds and less access do not mix well with the current signal spacing or future planned 12-mile spacing.***
	Enhanced Arterial Roadway 5 lanes	Maybe, with access management and select improvements	Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations and fewer accesses to cross.	Maybe. High speed creates a high-stress environment and wider crossings create more conflicts when at grade, but crossings are safer with grade separations and fewer accesses to cross.	0.76	0.86	1.79 / 2.38	4.42 / 2.04	Maybe. Ped access and transit facilities would be slightly improved. More stops may be necessary than those provided at interchanges. Travel speed makes merging into traffic difficult.	Maybe. With grade separation, but reduces with less frequent crossings.	Maybe. With grade separation, but reduces with less frequent crossings.	Maybe. With a grade-separation at the railroad crossing. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	Yes	Maybe	Yes	Maybe	Yes. Environmental impacts are not anticipated.	Not Recommended	Access eliminated or downgraded to RIRO between causing more movements at the maintained intersections.
	Enhanced Arterial Roadway 4 lanes	Not likely. Minimal improvement anticipated without center lane.	Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations and fewer accesses to cross.	Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations and fewer accesses to cross.	0.76	0.86	1.79 / 2.38	4.42 / 2.04	Maybe. Ped access and transit facilities would be slightly improved. More stops may be necessary than those provided at interchanges. Travel speed makes merging into traffic difficult.	Maybe. With grade separation, but reduces with less frequent crossings.	Maybe. With grade separation, but reduces with less frequent crossings.	Maybe. With a grade-separation at the railroad crossing. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	Yes	Maybe	Maybe	Maybe	Yes. Environmental impacts are not anticipated.	Not Recommended	Access eliminated or downgraded to RIRO between causing more movements at the maintained intersections.

Section	Alternative	Safety			Mobility							Risk and Resiliency		Access	Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
		Vehicle	Bicycle	Pedestrian	Vehicle					Bicycle	Pedestrian								
		Does the alternative result in lower than average crash rates for like-facilities (1.2 rural, 2.0 urban)?	*Does the alternative reduce the potential for bicycle / vehicle crashes?*	*Does the alternative create opportunities for safer pedestrian connections?*	*Does the alternative provide sufficient capacity to handle travel demand in 2040?*		*Does the alternative achieve future travel time objectives? (Goal TTI = 1.25)*		*Does the alternative enhance and / or allow current and planned transit service?*	*Does the alternative provide increased alternatives for bicycle mobility?*	*Does the alternative create enhanced pedestrian connectivity along and across SH 66?*	*Does the alternative avoid encroachment into identified thre at areas?*	*Does the alternative facilitate emergency evacuation/acc ess potential?*	*Does the alternative allow for strategic access consolidation?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environment and cultural resources?*		
					AM	PM	AM (EB/WB)	PM (EB/WB)											
2 - 87th St — County Line Rd. (Continued)	Arterial Roadway 5 lanes	Maybe. With access management and select improvements.	Yes. Improved traffic stress if speed is < 40 mph. Shorter signal spacing provides more safe crossing opportunities.	Maybe. If slower speed, having shorter signal spacing provides more safe crossing opportunities, but wider crossings can increase conflicts.	0.78	0.88	1.48 / 1.63	3.43 / 1.79	Maybe. Ped access and transit facilities would be improved. Merging would be easier with lower speeds. Not a "Yes" because 1-mile spacing is not great in the most urban part of the corridor.	Yes. Shorter signal spacing provides more safe crossing opportunities.	Yes. Shorter signal spacing provides more safe crossing opportunities.	Maybe. With a grade-separation at the railroad crossing. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	Yes	Yes	Yes	Maybe	Yes. Environmental impacts are not anticipated.	Not Recommended	Access eliminated or downgraded to RIRO between causing more movements at the maintained intersections.
	Main Street 5 lanes	No. Increased access and on-street parking would likely increase crashes.	Yes. Traffic stress is reduced significantly, especially with a speed < 35 mph, but adding more access points creates more conflict points when traveling along the segment.	Maybe. Slower speed makes it more comfortable and easier to cross, but wider crossings can increase conflicts.	1.78	2.14	1.42 / 1.67	3.10 / 1.83	Maybe. Ped access and transit facilities would be improved and merging would be easier with lower speeds. Seems like this could be broken up a little. Maybe Main Street makes sense (25 mph) partially, but not for the full stretch.	Yes. Signals/ HAWKS improve connectivity.	Yes. Signals/ HAWKS improve connectivity.	Maybe. With a grade-separation at the railroad crossing. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	Yes	Maybe	Maybe	Maybe	Yes. Environmental impacts are not anticipated.	Not Recommended	Better TTI due to lower speeds; basically, speed harmonization to better progress through signals.
3 - County Line Rd. — 3rd St / WCR 7	No Action (Regional Highway) 2 lanes	Yes. Segment is below today (1.0). No improvement would be realized.	No. High speed and congestion create a high level of traffic stress and infrequent safe crossings via signals or other treatments.	No. High speed and infrequent safe crossings via signals or other treatments.	1.02	1.25	1.35 / 1.44	1.23 / 1.62	Maybe. Only for an express service that is not stopping through this stretch. For any local stops and service, this is a No due to no ped/transit facilities. Bus merging would be difficult with 2 lanes and speeds.	No. Infrequent safe crossings via signals or other treatments, but few land uses to generate/ attract, so strategic signals may be sufficient.	No. Infrequent safe crossings via signals or other treatments, but few land uses to generate/ attract, so strategic signals may be sufficient.	Maybe. With a grade-separation at the railroad crossing. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	No change from existing	No	No	Yes	Yes. Environmental impacts are not anticipated.	Not Recommended	

Section	Alternative	Safety			Mobility							Risk and Resiliency		Access	Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
		Vehicle	Bicycle	Pedestrian	Vehicle					Bicycle	Pedestrian								
		Does the alternative result in lower than average crash rates for like-facilities (1.2 rural, 2.0 urban)?	*Does the alternative reduce the potential for bicycle / vehicle crashes?*	*Does the alternative create opportunities for safer pedestrian connections?*	*Does the alternative provide sufficient capacity to handle travel demand in 2040?*		*Does the alternative achieve future travel time objectives? (Goal TTI = 1.25)*		*Does the alternative enhance and / or allow current and planned transit service?*	*Does the alternative provide increased alternatives for bicycle mobility?*	*Does the alternative create enhanced pedestrian connectivity along and across SH 66?*	*Does the alternative avoid encroachment into identified thre at areas?*	*Does the alternative facilitate emergency evacuation/acc ess potential?*	*Does the alternative allow for strategic access consolidation?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environment and cultural resources?*		
					AM	PM	AM (EB/WB)	PM (EB/WB)											
3 - County Line Rd. — 3rd St / WCR 7 (Continued)	***Expressway 4 lanes***	***Yes. Crash rate is already at the average today. Option would improve it more-so.***	***Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations and fewer accesses to cross. May limit dangerous mid-block crossings.***	***Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations and may limit dangerous mid-block crossings. Wider crossings create more conflicts but reduce conflicts from congestion.***	***0.35***	***0.42***	***1.19 / 1.21***	***1.17 / 1.23***	***Maybe. Only for an express service that is not stopping through this stretch. For any local stops and service, this is a No due to limited ped/transit facilities. Potentially a Yes if express service is the priority.***	***Maybe. With grade separation, but reduces with less frequent crossings but few land uses to generate/ attract.***	***Maybe. With grade separation, but reduces with less frequent crossings but few land uses to generate/ attract.***	***Maybe. With a grade-separation at the railroad crossing. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).***	***Yes***	***Yes***	***Maybe***	***Maybe***	***Yes. Environmental impacts are not anticipated.***	***Carried Forward***	
	Enhanced Arterial Roadway 5 lanes	Maybe. With access management.	Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations and fewer accesses to cross.	Maybe. High speed creates a high-stress environment, and wider crossings create more conflicts when at grade, but crossings are safer with grade separations and fewer accesses to cross.	0.81	0.99	1.14 / 1.18	1.15 / 1.20	Maybe. Only for an express service that is not stopping through this stretch. For any local stops and service, this is a No due to limited ped/transit facilities. Potentially a Yes if express service is the priority.	Maybe. With grade separation, but reduces with less frequent crossings.	Maybe. With grade separation, but reduces with less frequent crossings.	Maybe. With a grade-separation at the railroad crossing. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	Yes	Maybe	Maybe	Maybe	Yes. Environmental impacts are not anticipated.	Not Recommended	Only two signals on either end of this section. Otherwise, traffic is free flow with no stop control on the mainline.
	Enhanced Arterial Roadway 4 lanes	Not likely. Without center turn lane, but maybe with access management.	Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations and fewer accesses to cross.	Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations and fewer accesses to cross.	0.81	0.99	1.14 / 1.18	1.15 / 1.20	Maybe. Only for an express service that is not stopping through this stretch. For any local stops and service. this is a No due to limited ped/transit facilities. Potentially a Yes if express service is the priority.	Maybe. With grade separation, but reduces with less frequent crossings.	Maybe. With grade separation, but reduces with less frequent crossings.	Maybe. With a grade-separation at the railroad crossing. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	Yes	Maybe	Maybe	Maybe	Yes. Environmental impacts are not anticipated.	Not Recommended	Side street traffic has trouble finding gaps. Auxiliary lanes for left and right turners and TWLTL may be helpful.

Section	Alternative	Safety			Mobility							Risk and Resiliency		Access	Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
		Vehicle	Bicycle	Pedestrian	Vehicle				Bicycle	Pedestrian									
		Does the alternative result in lower than average crash rates for like-facilities (1.2 rural, 2.0 urban)?	*Does the alternative reduce the potential for bicycle / vehicle crashes?*	*Does the alternative create opportunities for safer pedestrian connections?*	*Does the alternative provide sufficient capacity to handle travel demand in 2040?*		*Does the alternative achieve future travel time objectives? (Goal TTI = 1.25)*		*Does the alternative enhance and / or allow current and planned transit service?*	*Does the alternative provide increased alternatives for bicycle mobility?*	*Does the alternative create enhanced pedestrian connectivity along and across SH 66?*	*Does the alternative avoid encroachment into identified thre at areas?*	*Does the alternative facilitate emergency evacuation/acc ess potential?*	*Does the alternative allow for strategic access consolidation?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environment and cultural resources?*		
					AM	PM	AM (EB/WB)	PM (EB/WB)											
3 - County Line Rd. — 3rd St / WCR 7 (Continued)	Arterial Roadway 4 lanes	Maybe. Not likely. Without center turn lane, but maybe with access management.	Yes. Improved traffic stress if speed is < 40 mph. Shorter signal spacing provides more safe crossing opportunities.	Yes. If slower speed, having shorter signal spacing provides more safe crossing opportunities; wider crossings create more conflicts but reduce conflicts from congestion.	0.82	1.01	1.14 / 1.28	1.15 / 1.20	Maybe. Works ok for express service, especially if TSP can help buses get through traffic lights. Slower speeds make local stops more feasible.	Yes. Shorter signal spacing provides more safe crossing opportunities.	Yes. Shorter signal spacing provides more safe crossing opportunities.	Maybe. With a grade-separation at the railroad crossing. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	Yes	No	Maybe	Maybe	Yes. Environmental impacts are not anticipated.	Not Recommended	
	Main Street 5 lanes	No. Increased access and on-street parking would likely increase crashes.	Yes. Traffic stress is reduced significantly, especially with a speed < 35 mph, but adding more access points creates more conflict points when traveling along the segment.	Maybe. Slower speed makes it more comfortable and easier to cross, but wider crossings can increase conflicts.	1.80	2.29	1.12 / 1.15	1.10 / 1.15	Maybe. Benefits access to transit but would slow down express service greatly.	Yes. Signals/ HAWKS improve connectivity.	Yes. Signals/ HAWKS improve connectivity.	Maybe. With a grade-separation at the railroad crossing. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	Yes	No	No	No	Yes. Environmental impacts are not anticipated.	Not Recommended	Demand volumes exceed capacity, but current intersection limitations meter traffic through the section.

Section	Alternative	Safety			Mobility							Risk and Resiliency		Access	Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
		Vehicle	Bicycle	Pedestrian	Vehicle					Bicycle	Pedestrian								
		Does the alternative result in lower than average crash rates for like-facilities (1.2 rural, 2.0 urban)?	*Does the alternative reduce the potential for bicycle / vehicle crashes?*	*Does the alternative create opportunities for safer pedestrian connections?*	*Does the alternative provide sufficient capacity to handle travel demand in 2040?*		*Does the alternative achieve future travel time objectives? (Goal TTI = 1.25)*		*Does the alternative enhance and / or allow current and planned transit service?*	*Does the alternative provide increased alternatives for bicycle mobility?*	*Does the alternative create enhanced pedestrian connectivity along and across SH 66?*	*Does the alternative avoid encroachment into identified thre at areas?*	*Does the alternative facilitate emergency evacuation/acc ess potential?*	*Does the alternative allow for strategic access consolidation?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environment and cultural resources?*		
					AM	PM	AM (EB/WB)	PM (EB/WB)											
4 - 3rd St. / WCR 7 — WCR 11	No Action (Non-Rural Principal Highway) – 4 lanes	No. Segment is above today (2.2). No improvement would be realized.	No. High speed creates a high level of traffic stress and infrequent safe crossings via signals or other treatments.	No. High speed and infrequent safe crossings via signals or other treatments.	0.40	0.46	1.58 / 6.03	1.87 / 9.68	Maybe. Currently allows express services with no stops. Future should provide connections to PnR at I-25 as CDOT or RTD may provide service.	No. Infrequent safe crossings via signals or other treatments.	No. Infrequent safe crossings via signals or other treatments.	No. Near the I- 25 bridge strike zone. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	No change from existing	Maybe	No	Yes	Yes. Environmental impacts are not anticipated.	Not Recommended	The number of lanes is sufficient of demand volumes, but intersections need improvement.
	Expressway 4 lanes	Maybe. Crash rate would be expected to decrease with this option.	Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations and fewer accesses to cross.	Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations.	0.26	0.30	3.49 / 6.15	2.18 / 8.98	Maybe. Allows express services with no stops. Future should provide connections to PnR at I-25 as CDOT or RTD may provide service here. TSP would benefit transit here.	Maybe. With grade separation but reduces with less frequent crossings.	Maybe. With grade separation but reduces with less frequent crossings.	No. Near the I- 25 bridge strike zone. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	No change from existing	Maybe	Maybe	Maybe	Yes. Environmental impacts are not anticipated.	Not Recommended	AM: EBLT at CR 9.5 causing backups (Mead St. changed to RIRO for access designation for a Std Exp). Heavy left turn at I-25 SB causes backups through Mead St. PM: WB backs up between CR 9.5 and CR 11. EB backs up at CR 9.5 past Mead St. If CR 9.5 is required to handle more left-turn traffic, an enhancement in signal timing or additional left-turn lanes and receiving lanes that merge further north may be helpful Interchange design could alleviate the heavy left turns onto SH 66 and onto the freeway. (Diverging Diamond/roundabouts?)

Section	Alternative	Safety			Mobility							Risk and Resiliency		Access	Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
		Vehicle	Bicycle	Pedestrian	Vehicle					Bicycle	Pedestrian								
		Does the alternative result in lower than average crash rates for like-facilities (1.2 rural, 2.0 urban)?	*Does the alternative reduce the potential for bicycle / vehicle crashes?*	*Does the alternative create opportunities for safer pedestrian connections?*	*Does the alternative provide sufficient capacity to handle travel demand in 2040?*		*Does the alternative achieve future travel time objectives? (Goal TTI = 1.25)*		*Does the alternative enhance and / or allow current and planned transit service?*	*Does the alternative provide increased alternatives for bicycle mobility?*	*Does the alternative create enhanced pedestrian connectivity along and across SH 66?*	*Does the alternative avoid encroachment into identified thre at areas?*	*Does the alternative facilitate emergency evacuation/acc ess potential?*	*Does the alternative allow for strategic access consolidation?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environment and cultural resources?*		
					AM	PM	AM (EB/WB)	PM (EB/WB)											
4 - 3rd St. / WCR 7 — WCR 11 (Continued)	Expressway Arterial Roadway 6 lanes	Maybe. Crash rate would be expected to decrease with this option.	Maybe. High speed and traffic levels create a high-stress environment, but crossings are safer with grade separations and fewer accesses to cross.	Maybe. High speed and traffic levels create a high-stress environment, but crossings are safer with grade separations, though wider crossings create more conflict.	0.17	0.20	3.32 / 1.87	1.70 / 2.16	Maybe. Allows express services with no stops. Future should provide connections to PnR at I-25 as CDOT or RTD may provide service here. TSP would benefit transit here.	Maybe. With grade separation, but reduces with less frequent crossings.	Maybe. With grade separation, but reduces with less frequent crossings.	No. Near the I-25 bridge strike zone. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	Yes	Yes	Yes	Maybe	Yes. Environmental impacts are not anticipated.	Not Recommended	AM: WBLT onto I-25 S heavily favors the far left turning lane to avoid the merge lane with the other left-turn lane, as well as right turners on the ramp. Large queues are observed at CR 9.5 for EBLT. PM: Backups headed WB through the interchange are significantly reduced and do not reach Mead St. Backups at SB CR 9.5 and Mead St. are visibly reduced. WBLT at I-25 S and EBLT at CR 9.5 still have large queues. Upgrades to the CR 9.5 intersection to accommodate additional left-turn traffic.
	Enhanced Arterial Roadway 4 lanes	Maybe. Crash rate would be expected to decrease with this option given access management.	Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations and fewer accesses to cross.	Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations.	0.56	0.65	1.41 / 1.58	1.43 / 3.96	Maybe. Allows express services with no stops. Future should provide connections to PnR at I-25 as CDOT or RTD may provide service here. TSP would benefit transit here.	Maybe. With grade separation, but reduces with less frequent crossings.	Maybe. With grade separation, but reduces with less frequent crossings.	No. Near the I- 25 bridge strike zone. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	No change from existing	Maybe	Yes	Yes	Yes. Environmental impacts are not anticipated.	Not Recommended	AM: Because Mead St. is still full access, the backup at CR 9.5 is reduced. PM: Large queues headed WB through the interchange extend beyond CR 9.5. Recommend interchange design and enhancements to accommodate heavy left turns.
	Arterial Roadway 6 lanes	***Maybe. Crash rate would be expected to decrease with this option given access management.***	***Maybe. Improved traffic stress if speed is < 40 mph, Shorter signal spacing provides more safe crossing opportunities, but adding lanes to maneuver with added traffic may increase traffic stress.***	***Yes. If slower speed, having shorter signal spacing provides more safe crossing opportunities; wider crossings create more conflicts but reduce conflicts from congestion.***	***0.57***	***0.67***	***1.44 / 1.58***	***1.43 / 3.96***	***Maybe. Allows express services with no stops. Future should provide connections to PnR at I-25 as CDOT or RTD may provide service here. TSP would benefit transit here.***	***Yes. Shorter signal spacing provides more safe crossing opportunities.***	***Yes. Shorter signal spacing provides more safe crossing opportunities.***	***No. Near the I-25 bridge strike zone. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).***	***Yes***	***No***	***Yes***	***Yes***	***Yes. Environmental impacts are not anticipated.***	***Carried Forward— Based on current and probable future land uses around the interchange and the likely increase in multimodal (non-vehicle) activity in this area, arterial classification with six-lanes through Section 4 is supported by CDOT and Town of Mead.***	***AM: Because Mead St. is still full access, the backup at CR 9.5 is reduced.*** ***PM: Large queues headed WB through the interchange extend beyond CR 9.5.*** ***Recommend interchange design and enhancements to accommodate heavy left turns.***

Section	Alternative	Safety			Mobility							Risk and Resiliency		Access	Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
		Vehicle	Bicycle	Pedestrian	Vehicle					Bicycle	Pedestrian								
		Does the alternative result in lower than average crash rates for like-facilities (1.2 rural, 2.0 urban)?	*Does the alternative reduce the potential for bicycle / vehicle crashes?*	*Does the alternative create opportunities for safer pedestrian connections?*	*Does the alternative provide sufficient capacity to handle travel demand in 2040?*		*Does the alternative achieve future travel time objectives? (Goal TTI = 1.25)*		*Does the alternative enhance and / or allow current and planned transit service?*	*Does the alternative provide increased alternatives for bicycle mobility?*	*Does the alternative create enhanced pedestrian connectivity along and across SH 66?*	*Does the alternative avoid encroachment into identified thre at areas?*	*Does the alternative facilitate emergency evacuation/acc ess potential?*	*Does the alternative allow for strategic access consolidation?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environment and cultural resources?*		
					AM	PM	AM (EB/WB)	PM (EB/WB)											
4 - 3rd St. / WCR 7 — WCR 11 (Continued)	Main Street 5 lanes	No. Increased access and on-street parking would likely increase crashes.	Yes. Traffic stress is reduced significantly, especially with a speed < 35 mph, but adding more access points creates more conflict points when traveling along the segment.	Maybe. Slower speed makes it more comfortable and easier to cross, but wider crossings can increase conflicts.	1.27	1.57	1.31 / 1.46	1.38 / 3.52	No. The amount of activity with on/off ramps from I-25 makes stopping on SH 66 in this stretch difficult no matter the speed limit.	Yes. Signals/ HAWKS improve connectivity.	Yes. Signals/ HAWKS improve connectivity.	No. Near the I-25 bridge strike zone. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	No change from existing	Maybe	No	Maybe	Yes. Environmental impacts are not anticipated.	Not Recommended	Capacity issues for SH 66; recommend intersection improvements to better accommodate volumes. Recommend interchange design and enhancements to accommodate heavy left turns.
5a - WCR 11 — WCR 13	No Action (Non-Rural Principal Highway to Regional Highway) 2 lanes	Yes. Segment is a little below today (1.1).	No. High speed creates a high level of traffic stress and infrequent safe crossings via signals or other treatments.	No. High speed and infrequent safe crossings via signals or other treatments.	0.63	0.72	1.26 / 1.29	3.28 / 1.27	N/A	No. Infrequent safe crossings via signals or other treatments, but few land uses to generate/ attract, so strategic signals may be sufficient.	No. Infrequent safe crossings via signals or other treatments, but few land uses to generate/ attract, so strategic signals may be sufficient.	Yes. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	No change from existing	Maybe	Maybe	Yes	Yes. Environmental impacts are not anticipated.	Not Recommended	Intersections need improvement to resolve delays.
	Regional Roadway with cable barrier and depressed median 4 lanes	***Yes.*** Segment is a little below today. Option would improve safety more-so.	***Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations and fewer accesses to cross. May limit dangerous mid-block crossings.***	***Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations; wider crossings can increase conflicts.***	***0.21***	***0.24***	***1.19 / 1.00***	***1.33 / 0.99***	***N/A***	***Maybe. With grade separation; reduces with less frequent crossings but few land uses to generate/ attract.***	***Maybe. With grade separation; reduces with less frequent crossings but few land uses to generate/ attract.***	***Yes. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).***	***Yes***	***No***	***Maybe***	***Maybe***	Yes. Environmental impacts are not anticipated.	***Carried Forward***	
	Expressway 6 lanes	Yes. Segment is a little below today. Option would improve safety more-so.	No. High speed and traffic levels create a high-stress environment even though crossings are safer with grade separations and fewer accesses to cross.	No. High speed and traffic levels create a high-stress environment even though crossings are safer with grade separations, and wider crossings create more conflict.	0.14	0.16	1.14 / 1.03	1.27 / 0.95	N/A	Maybe. With grade separation; reduces with less frequent crossings but few land uses to generate/ attract.	Maybe. With grade separation; reduces with less frequent crossings but few land uses to generate/ attract.	Yes. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	Yes	No	No	No	No	Yes. Environmental impacts are not anticipated.	Not Recommended	

Section	Alternative	Safety			Mobility							Risk and Resiliency		Access	Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
		Vehicle	Bicycle	Pedestrian	Vehicle					Bicycle	Pedestrian								
		Does the alternative result in lower than average crash rates for like-facilities (1.2 rural, 2.0 urban)?	*Does the alternative reduce the potential for bicycle / vehicle crashes?*	*Does the alternative create opportunities for safer pedestrian connections?*	*Does the alternative provide sufficient capacity to handle travel demand in 2040?*		*Does the alternative achieve future travel time objectives? (Goal TTI = 1.25)*		*Does the alternative enhance and / or allow current and planned transit service?*	*Does the alternative provide increased alternatives for bicycle mobility?*	*Does the alternative create enhanced pedestrian connectivity along and across SH 66?*	*Does the alternative avoid encroachment into identified thre at areas?*	*Does the alternative facilitate emergency evacuation/acc ess potential?*	*Does the alternative allow for strategic access consolidation?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environment and cultural resources?*		
					AM	PM	AM (EB/WB)	PM (EB/WB)											
5a - WCR 11 — WCR 13 (Continued)	Enhanced Arterial Roadway 4 lanes	Yes. Segment is a little below today. Option should maintain crash rate.	Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations and fewer accesses to cross. May limit dangerous mid-block crossings.	Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations; wider crossings can increase conflicts.	0.44	0.51	1.14 / 0.95	1.27 / 0.93	N/A	Maybe. With grade separation; reduces with less frequent crossings but few land uses to generate/ attract.	Maybe. With grade separation; reduces with less frequent crossings but few land uses to generate/ attract.	Yes. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	Yes	Maybe	No	Maybe	Yes. Environmental impacts are not anticipated.	Not Recommended	
	Arterial Roadway 4 lanes	Yes. Segment is a little below today. Option should maintain crash rate	Yes. Improved traffic stress if speed is < 40 mph. Shorter signal spacing provides more safe crossing opportunities. Added capacity alleviates congestion concerns; however, adding more access points creates more conflict points when traveling along this low-density segment.	Maybe. If slower speed, having shorter signal spacing provides more safe crossing opportunities, but wider crossings than the current ones and land use do not support the need for frequent crossings via signals.	0.45	0.52	1.14 / 0.95	1.27 / 0.93	N/A	Yes. Shorter signal spacing provides more safe crossing opportunities; however, land use does not support the need for frequent crossings via signals.	Yes. Shorter signal spacing provides more safe crossing opportunities; however, land use does not support the need for frequent crossings via signals.	Yes. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	Yes	Yes	No	Maybe	Yes. Environmental impacts are not anticipated.	Not Recommended	

Section	Alternative	Safety			Mobility							Risk and Resiliency		Access	Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
		Vehicle	Bicycle	Pedestrian	Vehicle					Bicycle	Pedestrian								
		Does the alternative result in lower than average crash rates for like-facilities (1.2 rural, 2.0 urban)?	*Does the alternative reduce the potential for bicycle / vehicle crashes?*	*Does the alternative create opportunities for safer pedestrian connections?*	*Does the alternative provide sufficient capacity to handle travel demand in 2040?*		*Does the alternative achieve future travel time objectives? (Goal TTI = 1.25)*		*Does the alternative enhance and / or allow current and planned transit service?*	*Does the alternative provide increased alternatives for bicycle mobility?*	*Does the alternative create enhanced pedestrian connectivity along and across SH 66?*	*Does the alternative avoid encroachment into identified thre at areas?*	*Does the alternative facilitate emergency evacuation/acc ess potential?*	*Does the alternative allow for strategic access consolidation?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environment and cultural resources?*		
					AM	PM	AM (EB/WB)	PM (EB/WB)											
5b - WCR 13 — WCR 19	No Action (Non-Rural Principal Highway to Regional Highway) 2 lanes	No. Segment is slightly above average today (1.23).	No. High speed creates a high level of traffic stress and infrequent safe crossings via signals or other treatments.	No. High speed and infrequent safe crossings via signals or other treatments.	0.58	0.63	1.07 / 1.18	1.16 / 2.55	N/A	No. Infrequent safe crossings via signals or other treatments, but few land uses to generate/ attract, so strategic signals may be sufficient.	No. Infrequent safe crossings via signals or other treatments, but few land uses to generate/ attract, so strategic signals may be sufficient.	No. Near the St. Vrain bridge strike zone. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	No change from existing	Maybe	Maybe	Yes	Yes. Environmental impacts are not anticipated.	Not Recommended	Intersections need improvement to resolve delays.
	Expressway 2 lanes	Yes. Option should improve conditions to better than average.	Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations and fewer accesses to cross. May limit dangerous mid-block crossings.	Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations. May limit dangerous mid-block crossings.	0.38	0.41	1.01 / 1.12	1.11 / 2.36	N/A	Maybe. With grade separation; reduces with less frequent crossings but few land uses to generate/ attract.	Maybe. With grade separation; reduces with less frequent crossings but few land uses to generate/ attract.	No. Near the St. Vrain bridge strike zone. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	No change from existing	Maybe	Maybe	Maybe	Maybe. Environmental impacts may be anticipated. Resource impacts could be avoided, minimized, or mitigated to avoid substantial impact.	Not Recommended	Intersections need improvement to resolve delays.

Section	Alternative	Safety			Mobility							Risk and Resiliency		Access	Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
		Vehicle	Bicycle	Pedestrian	Vehicle					Bicycle	Pedestrian								
		Does the alternative result in lower than average crash rates for like-facilities (1.2 rural, 2.0 urban)?	*Does the alternative reduce the potential for bicycle / vehicle crashes?*	*Does the alternative create opportunities for safer pedestrian connections?*	*Does the alternative provide sufficient capacity to handle travel demand in 2040?*		*Does the alternative achieve future travel time objectives? (Goal TTI = 1.25)*		*Does the alternative enhance and / or allow current and planned transit service?*	*Does the alternative provide increased alternatives for bicycle mobility?*	*Does the alternative create enhanced pedestrian connectivity along and across SH 66?*	*Does the alternative avoid encroachment into identified thre at areas?*	*Does the alternative facilitate emergency evacuation/acc ess potential?*	*Does the alternative allow for strategic access consolidation?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environment and cultural resources?*		
					AM	PM	AM (EB/WB)	PM (EB/WB)											
5b - WCR 13 — WCR 19 (Continued)	Enhanced Arterial Roadway 3 lanes	Yes. Option should improve conditions to better than average.	Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations and fewer accesses to cross. May limit dangerous mid-block crossings.	Maybe. High speed creates a high-stress environment. Wider crossings create more conflicts when at grade, but crossings are safer with grade separations and fewer accesses to cross.	0.88	0.95	0.99 / 1.05	1.09 / 1.90	N/A	Maybe. With grade separation; reduces with less frequent crossings but few land uses to generate/ attract.	Maybe. With grade separation; reduces with less frequent crossings but few land uses to generate/ attract.	No. Near the St. Vrain bridge strike zone. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	No change from existing	Maybe	No	Maybe	Maybe. Environmental impacts may be anticipated. Resource impacts could be avoided, minimized, or mitigated to avoid substantial impact.	Not Recommended	Capacity issues on SH 66.
	Enhanced Arterial Roadway 4 lanes	Maybe. Lack of center lane may not improve safety, but widening might.	Maybe. High speed creates a high-stress environment, but crossings are safer with grade separations and fewer accesses to cross. May limit dangerous mid-block crossings.	Maybe. High speed creates a high-stress environment. Wider crossings create more conflicts when at grade, but crossings are safer with grade separations and fewer accesses to cross.	0.44	0.48	0.92 / 0.98	1.05 / 1.04	N/A	Maybe. With grade separation; reduces with less frequent crossings but few land uses to generate/ attract.	Maybe. With grade separation; reduces with less frequent crossings but few land uses to generate/ attract.	No. Near the St. Vrain bridge strike zone. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	Yes	Maybe	No	No	Maybe. Environmental impacts may be anticipated. Resource impacts could be avoided, minimized, or mitigated to avoid substantial impact.	Not Recommended	
	Rural Highway 2 lanes	No. Too similar to existing conditions, which are a bit higher than average.	No. High speed creates a high level of traffic stress and infrequent safe crossings via signals or other treatments.	No. High speed and infrequent safe crossings via signals or other treatments.	0.58	0.63	1.07 / 1.20	1.16 / 2.66	N/A	No. Infrequent safe crossings via signals or other treatments, but few land uses to generate/ attract, so strategic signals may be sufficient.	No. Infrequent safe crossings via signals or other treatments, but few land uses to generate/ attract, so strategic signals may be sufficient.	No. Near the St. Vrain bridge strike zone. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).	No change from existing	Maybe	No	Maybe	Maybe. Environmental impacts may be anticipated. Resource impacts could be avoided, minimized, or mitigated to avoid substantial impact.	Not Recommended	Intersections need improvement to resolve delays.
	Regional Roadway with cable barrier and depressed median - 4 lanes	***No. Probably. Option could improve current conditions to below average.***	***No. High speed creates a high level of traffic stress and infrequent safe crossings via signals or other treatments.***	***No. High speed and infrequent safe crossings via signals or other treatments, and wider crossings than current create more conflicts.***	***0.58***	***0.63***	***1.07 / 1.20***	***1.16 / 2.66***	N/A	***No. Infrequent safe crossings via signals or other treatments, but few land uses to generate/ attract, so strategic signals may be sufficient.***	***No. Infrequent safe crossings via signals or other treatments, but few land uses to generate/ attract, so strategic signals may be sufficient.***	***No. Near the St. Vrain bridge strike zone. The area is also subject to other corridor-wide threats (e.g., high winds, tornadoes, cyberattacks).***	***Yes***	***Yes***	***Yes***	***Yes***	***Maybe. Environmental impacts may be anticipated. Resource impacts could be avoided, minimized, or mitigated to avoid substantial impact.***	***Carried Forward***	***Intersections need improvement to resolve delays.***

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Appendix E-3: Level 3 Alternatives Development and Screening Documentation

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1.0 Level 3 Evaluation

The following evaluation criteria were developed to compare how well each highway interchange/intersection, segment, and alternative option in Level 3 screening meets the Purpose and Need and goals of the project. The performance measures are a mix of qualitative and quantitative assessments and are based on the criteria and the data available at this stage of development.

Table 1. Level 3 Evaluation Criteria and Performance Measures

Category	Criteria	Performance Measure(s)
Safety	Ability to address unsafe physical or operational conditions for vehicles along corridors or at intersections	Lower than average crash rate: - 1.15 rural; 1.5 urban for corridors - LOSS I or II for intersections Or when LOSS is unavailable Crash rate < 0.15 crashes/million entering vehicles
	Ability to address unsafe conditions for transit operations	Separation of transit vehicles from other modes Stop safety
	Facilitates safer bicycling environment	Separation from other modes Frequency and quality of crossings Bicyclist perception of comfort/safety Suitability given speeds/traffic volumes
	Facilitate safer pedestrian environment	Separation from other modes Frequency and quality of crossings Pedestrian perception of comfort/safety Suitability given speeds/traffic volumes
Mobility	Intersection capacity related to 2040 traffic demand	Intersection Capacity Utilization: Green: ICU < 73% (Corresponding to LOS A, B, or C) Yellow: ICU between 73% and 91% (LOS D or E) Red: ICU > 91% (LOS F or worse)
	Enhanced transit service opportunities	Compatibility with adjacent land use Institutional barriers (i.e., RTD boundary) Route efficiency Stop availability and/or access for pedestrians and bicyclists Transit network connectivity Populations served
	Enhanced bicycle mobility and connectivity opportunities	Compatibility with adjacent land use Network connectivity and consistency

Category	Criteria	Performance Measure(s)
		Attracts more users (lower LTS)
	Enhanced pedestrian mobility and connectivity opportunities	Compatibility with adjacent land use Network connectivity and consistency Attracts more users (increased comfort and aesthetic) ADA accommodation
Access	Strategic access consolidation	Allow for adequate access to adjacent properties: Green = no change in access or less than a mile of out of direction travel required Yellow = 0.5 – 1.0 miles total out of direction travel required for some movements Red = >1.0 mile total out of direction travel required for some movements
Risk	Ability to address physical threats	Minimize encroachment into risk areas
	Facilitate emergency evacuation	Potential to enhance emergency evacuation options
Community Context	Design and operational context related to local community surroundings	Design and operational context related to local community surroundings
	Impacts on existing community	Impacts on existing community
Environmental Considerations	Impacts on environmental and cultural resources within the built and natural environment	Potential to avoid or minimize impacts to environmental and cultural resources within the built and natural environment

The color ratings shown with the performance measures in the following screening matrices are used as a visual indication of the comparative characteristics of a criterion between options. The colors are not used as an indication of a decision (i.e., an option with many "red" ratings was not automatically rendered unreasonable). The colors are a general indication of the following:

- Green = Comparatively beneficial and/or minor impacts
- Yellow = Comparatively neutral benefits and/or moderate impacts
- Red = Comparatively negative and/or major impacts

The color ratings for each criterion used in the sections are defined below.

1.1 Safety

1.1.1 Ability to address unsafe conditions for vehicles

- Green = Potential for substantial crash reduction
- Yellow = Little to no change to crash reduction expected
- Red = Increased potential for vehicular crashes

1.1.2 Ability to address unsafe conditions for transit operations

- Green = Potential for substantial separation from other modes and/or improvement in ability to make safe stops (if warranted)
- Yellow = Little to no change to separation from other modes and/or improvement in ability to make safe stops (if warranted)
- Red = Increased potential for interactions with other modes and/or unsafe stop conditions (if warranted)

1.1.3 Facilitates safer bicycle environment

- Green = Potential for substantial separation from other modes and/or reduction of LTS
- Yellow = Little separation from other modes and/or change in LTS, or no change is acceptable given current or planned bicycle conditions
- Red = No change or increase in interactions with other modes and/or LTS, or no change is unacceptable given current or planned bicycle conditions

1.1.4 Facilitates safer pedestrian environment

- Green = Potential for substantial separation from other modes and/or increased comfort
- Yellow = Little separation from other modes and/or change in comfort, or no change is acceptable given current or planned pedestrian conditions
- Red = No change or increase in interactions with other modes and/or reduction in comfort, or no change is unacceptable given current or planned pedestrian conditions

1.2 Mobility

1.2.1 2040 intersection capacity related to travel demand

- Green = volume / capacity ratio between 0.6 and 0.85
- Yellow = volume / capacity ratio between 0.85 and 0.95
- Red = volume / capacity ratio less than 0.6 or greater than 0.95

1.2.2 Enhanced transit service opportunities

- Green = Substantial improvement in transit access and service opportunities
- Yellow = Minor to moderate improvements in transit access and service opportunities, or no change is acceptable given location's transit needs
- Red = Negative impact to transit access and service opportunities, or no change is unacceptable given location's transit needs

1.2.3 Enhanced bicycle mobility/connectivity opportunities

- Green = Substantial improvement in bicycle connectivity and mobility
- Yellow = Minor to moderate improvement in bicycle connectivity and mobility, or no change is acceptable given current or planned bicycle conditions
- Red = Negative impact to bicycle connectivity and mobility, or no change is unacceptable given current or planned bicycle conditions

1.2.4 Enhanced pedestrian mobility/connectivity opportunities

- Green = Substantial improvement in pedestrian connectivity and mobility

- Yellow = Minor to moderate improvement in pedestrian connectivity and mobility, or no change is acceptable given current or planned pedestrian conditions
- Red = Negative impact to pedestrian connectivity and mobility, or no change is unacceptable given current or planned pedestrian conditions

1.3 Access

1.3.1 Strategic access consolidation

- Green = Achieves access goals by providing adequate opportunity
- Yellow = Some access restriction may result at or near intersection
- Red = Selection of this type would have significant impact to access

1.4 Risk

1.4.1 Ability to address physical threats

- Green = Substantially avoids encroaching on risk areas
- Yellow = Moderately avoids encroaching on risk areas
- Red = Does not avoid encroaching on risk areas

1.4.2 Ability to facilitate emergency evacuation

- Green = Substantially enhances evacuation options
- Yellow = Moderately enhances evacuation options
- Red = Does not enhance evacuation options

1.5 Community Context

1.5.1 Design and operational context

- Green = Very consistent with surrounding design and operational context
- Yellow = Moderately consistent with surrounding design and operational context
- Red = Inconsistent with surrounding design and operational context

1.5.2 Impacts on existing community

- Green = Little to no impacts on existing community and properties
- Yellow = Moderate number of properties in the community impacted
- Red = Many or majority of surrounding community and properties impacted

1.6 Environmental Considerations

1.6.1 Environmental and cultural resource impacts

- Green = Minor to no impacts to surrounding natural and cultural environment
- Yellow = Moderate impacts to surrounding natural and cultural environment
- Red = Major impacts to surrounding built or natural and cultural environment

2.0 Evaluation Summary of Results

The evaluation matrix summarizes the recommendation for each option as follows:

- Carried Forward – Option will be evaluated further as part of corridor alternative with further definition and conceptual design
- Not Recommended – Option will not be evaluated further in this study due to comparatively negligible benefits and higher impacts than other options
- Eliminated – Option does not meet the Purpose and Need established with this study, or the option is unreasonable due to impacts and/or infeasibility

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SH 66 PEL Level 3 Screening – Roadway

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
1A - McConnell Dr. — Highland Dr.	McConnell Drive	Option 1 - No Action	No Action will not improve safety at the intersection.	No. Transit vehicles must stop within the travel lane and/or bike lane, and bus stops near the gas station do not provide dedicated protected space for riders.	No. Undefined access points create conflicts with bicycles.	No. Undefined access points create conflicts with pedestrians.	72.4	56.5	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Near the floodplain/ floodway, avalanche/ debris/rock-fall/landslide area, and railroad areas. The area is subject to other corridor-wide threats.	No change from existing.	Yes	Yes. No impact.	Yes. No change from existing.	Not Recommended	
		Option 2 - No Changes to Intersection	***No changes will not improve safety at the intersection.***	***No change in safety.***	***No change in safety.***	***No change in safety. Improvement in pedestrian environment if done with curb and gutter with the addition of sidewalk.***	***72.4***	***56.5***	***No change to mobility and/or connectivity.***	***No change to mobility and/or connectivity.***	***No change to mobility and/or connectivity. Improvement in pedestrian environment if done with curb and gutter with the addition of sidewalk.***	***No change from existing.***	***No change from existing. Near the floodplain/ floodway, avalanche/ debris/rock-fall/landslide area, and railroad areas. The area is subject to other corridor-wide threats.***	***No change from existing.***	***Yes. Provides definition for driver expectations.***	***Yes***	***Possible impacts may involve St. Vrain floodplain/floodway, wetlands, Preble's meadow jumping mouse (PMJM) and Bald Eagle habitat, adjacent parks, proposed trails, utilities, noise sensitive areas, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Improvement in pedestrian environment if done with curb and gutter with the addition of sidewalk. Near-term disruption, but in the long term, it would support context.***

Note: Level 3 Screening – Roadway Table currently undergoing some final quality checks and formatting updates.

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
1A - McConnell Dr. — Highland Dr.	McConnell Drive	Option 3 - Consolidate Access to the East	Reduces the number of driveways and could improve safety.	Yes. Would improve condition for transit vehicles accessing the bus stop at the gas station.	Yes. Defining access points decreases areas of potential conflict with vehicles and could keep bike lanes clearer of dirt and debris.	Yes. Defining points of access decreases areas of potential conflict with vehicles.	64.7	54.7	Yes. Fewer conflict points with vehicles could lead to a minor improvement in travel time around this bus stop.	No impact on connectivity but may encourage more riders with better definition of where to expect vehicles.	Defining access could better define pedestrian areas and crossings.	No change from existing.	Higher risk with alternative in floodplain/ floodway and near the avalanche/ debris/rock-fall/landslide and railroad areas. The area is subject to other corridor-wide threats.	Moderately enhances evacuation options.	Yes	Somewhat. Reconstruction may be temporarily impactful.	Possible impacts may involve St. Vrain floodplain/ floodway, wetlands, PMJM and Bald Eagle habitat, adjacent parks, proposed trails, utilities, noise sensitive areas, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Work with Town of Lyons to consolidate to two access points (one for industrial access and one for retail access). Consider preserving ROW for bus pull-out should redevelopment occur.
		Option 4 - Roundabout	Roundabouts, when appropriately designed, have been shown to improve safety.	No. This would be a busy roundabout with large recreational vehicles (RVs) that could conflict with bus travel and stops directly adjacent to the roundabout	No. Heavy bicycle volumes through this area, plus heavy traffic volumes, large RVs, and visitors unfamiliar with the area, would likely create an unsafe condition.	No. Heavy traffic volumes, large RVs, and visitors unfamiliar with the area would likely create an unsafe and uncomfortable condition.	0.88	0.54	Yes. If designed to accommodate bus turns, this could limit delay compared to a signal.	No. High traffic volumes in the roundabout could diminish mobility.	No. Would make crossings more difficult.	Provides a location for u-turns for adjacent properties.	Higher risk with alternative in floodplain/ floodway and near the avalanche/ debris/rock-fall/landslide and railroad areas. The area is subject to other corridor-wide threats.	Moderately enhances evacuation options.	Yes. Roundabouts could further create a gateway into Lyons for WB traffic.	Somewhat. Because of ROW needs, a roundabout may be impactful to adjacent properties.	Possible impacts may involve St. Vrain floodplain/floodway, wetlands, PMJM and Bald Eagle habitat, adjacent parks, proposed trails, utilities, noise sensitive areas, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

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Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
1A - McConnell Dr. — Highland Dr.	Nolan Road	Option 1 - No Action	Relatively few crashes. Low potential for safety improvement.	No change in safety.	No change in safety.	No change in safety.	N/A	N/A	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Near the floodplain/ floodway, avalanche/ debris/rock-fall/landslide area, and railroad areas. The area is subject to other corridor-wide threats.	No change from existing.	Yes	Yes. No impact.	Yes. No change from existing.	Not Recommended	
		Option 2 - Right In/Right Out	***Eliminating left turns would slightly improve safety.***	***Yes. Would reduce conflict with higher-risk turning movements of other vehicles.***	***Yes. Improves visibility of bicyclists by reducing the potential of higher-risk turning movements.***	***Yes. Improves visibility of pedestrians by reducing the potential of higher-risk turning movements.***	***N/A***	***N/A***	***No impact on existing service and unlikely that future service would need access.***	***May help attract more riders with a reduction of higher-risk turning movements.***	***May help attract more pedestrians with a reduction of higher-risk turning movements.***	***<0.5 mi out-of-direction travel.***	***Higher risk with alternative in floodplain/floodway and near the avalanche/ debris/rock-fall/landslide and railroad areas. The area is subject to other corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes***	***Somewhat. Rerouting of traffic may be temporarily different.***	***Possible impacts may involve St. Vrain floodplain/floodway, wetlands, PMJM and Bald Eagle habitat, adjacent parks, proposed trails, utilities, noise sensitive areas, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Increases safety, accommodates bike/peds. Access obtained via Stone Canyon. Physical enforcement of RIRO could provide a small pedestrian refuge for people traveling along SH 66, improving safety further.***

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

SH 66 PEL Level 3 Screening – Roadway

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
1A - McConnell Dr. — Highland Dr.	US 36	Option 1 - No Action	No Action will not improve safety at the intersection.	No change in safety.	No change in safety.	No change in safety.	80.2	62.2	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Moderate risk near a railroad corridor. The area is subject to other corridor-wide threats.	No change from existing.	Yes	Yes. No impact.	Yes. No change from existing.	Not Recommended	
		Option 2 - Keep Signalized and Assess Intersection Type Based on Future Development; Consolidate Access to the East; Consider ROW Preservation for Future Transit/Expansion	***Access consolidation could improve safety some, depending on ultimate development.***	***Yes. Consolidated access and clear marking for bikes reduce conflicts with other modes and better define the area for potential future stops.***	***Yes. Defining points of access decreases areas of potential conflict with vehicles.***	***Yes. Defining points of access decreases areas of potential conflict with vehicles.***	***80.2***	***62.2***	***Yes. Would make a future stop here more accessible.***	***No impact on connectivity but may encourage more riders with better definition of where vehicles might be.***	***Defining access could better define pedestrian area.***	***No change from existing.***	***Moderate risk near a railroad corridor. The area is subject to other corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes. Improvements could further create a gateway into Lyons.***	***Somewhat. Reconstruction may be impactful to adjacent properties.***	***Possible impacts may involve the St. Vrain floodplain/floodway, potential wetlands, PMJM and Bald Eagle habitat, adjacent parks, proposed trails, utilities (including a water treatment plant), noise sensitive areas, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Best accommodates bikes/peds while improving mobility.*** ***Operational results are without addition of future development north of SH 66.*** ***Greater improvement in pedestrian environment if done with curb and gutter with the addition of sidewalks.*** ***Greater improvement in bicycle environment if separated bike intersection design is used.*** ***No pedestrian crossings currently exist. Consider a lead pedestrian interval at the signal for greater visibility of crossing pedestrians.***

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

SH 66 PEL Level 3 Screening – Roadway

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
1A - McConnell Dr. — Highland Dr	US 36	Option 3 - Roundabout	Roundabouts, when appropriately designed, have been shown to improve safety.	No. This would be a busy roundabout with large RVs that could conflict with bus travel and stops directly adjacent to the roundabout.	No. Heavy bicycle volumes through this area, plus heavy traffic volumes, large RVs and visitors unfamiliar with the area, would likely create an unsafe condition.	No. Heavy traffic volumes, large RVs and visitors unfamiliar with the area would likely create an unsafe and uncomfortable condition	1.43	1.08	Yes. If designed to accommodate bus turns, this could limit delay compared to a signal.	No. High traffic volumes in the roundabout could diminish mobility.	No. Would make crossings more difficult.	Provides a location for u-turns for adjacent properties.	Moderate risk near a railroad corridor. The area is subject to other corridor-wide threats.	Moderately enhances evacuation options.	Yes. A roundabout could further create a gateway into Lyons.	Somewhat. Constructing a roundabout may be impactful to adjacent properties.	Possible impacts may involve the St. Vrain floodplain/floodway, potential wetlands, PMJM and Bald Eagle habitat, adjacent parks, proposed trails, utilities (including a water treatment plant), noise sensitive areas, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Safety concerns related to less experienced drivers in large RVs navigating the roundabout; accidents within roundabout could impact SH 66 and/or US 36 operations.
1B – Highland Dr. — 75th St.	Highland Drive	Option 1 - No Action	No crashes occurred during the analysis period, but No Action will not help prevent future crashes.	No change in safety.	No change in safety.	No change in safety.	N/A	N/A	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Moderate risk near a railroad corridor. The area is subject to other corridor-wide threats.	No change from existing.	Yes	Yes. No impact.	Yes. No change from existing.	Not Recommended	
		Option 2 - Signalized Intersection, if Warranted, When Future Development Occurs	***Safety impact will depend on the level of development and corresponding traffic levels. Installing a signal creates the potential to increase crash frequency.***	***Yes. Would limit potential conflict with other turning vehicles.***	***Yes. Turning vehicle movements are more predictable and give safer crossing, but added lanes to facilitate decreases comfort (higher LTS).***	***Yes. Turning vehicle movements are more predictable and give safer crossing, but added lanes to facilitate decreases comfort.***	***N/A***	***N/A***	***May slow down future transit but assists access to a future stop.***	***Yes. Makes crossing of SH 66 easier and more defined/ visible.***	***Yes. Makes crossing of SH 66 easier and more defined/ visible.***	***No change from existing.***	***Moderate risk near a railroad corridor. The area is subject to other corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes***	***Yes. Likely no ROW required.***	***Possible impacts may involve St. Vrain floodplain/floodway, potential wetlands, PMJM and Bald Eagle habitat, adjacent parks, proposed trails, utilities (including a water treatment plant), noise sensitive areas, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Best accommodates all movements and bikes/ peds; includes RIRO access in the middle of the existing development. Consider a LPI at the signal for greater visibility of crossing pedestrians.***

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
1B – Highland Dr. — 75th St.	Highland Drive	Option 3 - Channelized T	Safety impact will depend on the level of development and corresponding traffic levels. Could be an improvement over a traffic signal.	Yes. Would limit the potential conflict of EB vehicles turning onto Highland Dr.	Moderate improvement with intersection improvement.	Moderate improvement with intersection improvement.	N/A	N/A	Yes. Could decrease delay from turning vehicles, especially EB.	No mobility improvements; more lanes to cross.	No mobility improvements; more lanes to cross.	No change from existing.	Moderate risk near a railroad corridor. The area is subject to other corridor-wide threats.	Moderately enhances evacuation options.	Yes	Yes	Possible impacts may involve St. Vrain floodplain/floodway, potential wetlands, PMJM and Bald Eagle habitat, adjacent parks, proposed trails, utilities (including a water treatment plant), noise sensitive areas, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Less accommodating to bikes/peds; also does not accommodate traffic from RIRO seeking to U-turn for travel in other direction. Operational results are without addition of future development north of SH 66. Signalized Channelized T would lessen the negative impacts.
1B – Highland Dr. — 75th St.	N 51st Street	Option 1 - No Action	No crashes occurred during the analysis period, but No Action will not help prevent future crashes.	No change in safety.	No change in safety.	No change in safety.	N/A	N/A	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Higher risk near an industry owned overhead structure and near a railroad corridor. The area is subject to other corridor-wide threats.	No change from existing.	Yes	Yes. No impact.	Yes. No change from existing.	Not Recommended	Planned grade-separated trail crossing nearby would lessen crossing issues for bikes/peds, but some on-street crossing activity would remain.

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
1B – Highland Dr. — 75th St.	N 51st Street	Option 2 - Close North Leg and Make Offset 'T' with Highland Drive	Simplifies conflicts as a tee intersection; safety should improve.	Yes. Would limit the potential conflict of WB vehicles turning onto 51st St.	More lanes to cross, but one less leg for parallel travel to cross.	More lanes to cross, but one less leg for parallel travel to cross.	N/A	N/A	Yes. Could decrease delay from turning vehicles, especially WB.	No mobility improvements; more lanes to cross.	No mobility improvements; more lanes to cross.	<0.5 mi out-of-direction travel.	Higher risk near an industry owned overhead structure and near a railroad corridor. The area is subject to other corridor-wide threats.	Moderately enhances evacuation options.	Yes	Somewhat. Change may be temporarily impactful.	Possible impacts may involve St. Vrain floodplain/floodway, potential wetlands, PMJM and Bald Eagle habitat, adjacent parks, proposed trails, utilities (including a water treatment plant), noise sensitive areas, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Signalized Channelized T would lessen the negative impacts. Planned grade-separated trail crossing nearby would lessen crossing issues for bikes/peds, but some on-street crossing activity would remain.
		Option 3 – Close, if Future Redevelopment of the Site Occurs	Consolidation of access should improve safety.	Yes. Closure would eliminate conflict with turning vehicles.	Yes. Closure would eliminate conflict with turning vehicles.	Yes. Closure would eliminate conflict with turning vehicles.	N/A	N/A	Yes. Closure would eliminate potential delay from turning vehicles; future need for transit access is unlikely.	Closure would improve mobility along SH 66 by eliminating turning vehicles but would reduce connectivity to SH 66.	Closure would improve mobility by eliminating turning vehicles, but would reduce connectivity to SH 66.	No change from existing.	Higher risk near an industry owned overhead structure and near a railroad corridor. The area is subject to other corridor-wide threats.	Does not enhance evacuation options.	Yes	Somewhat. May require additional access to Highland Dr.	Yes. Minor to no impacts to surrounding natural and cultural environment.	Not Recommended	Would best address safety, mobility, and access needs. Ensure bike connection to SH 66 to improve bicycle mobility. Planned grade-separated trail crossing nearby would help facilitate any needed off-street connections.
		Option 4 - Close North Leg and Make south leg ¾ movement	***Reduces the number of conflicts; safety should improve.***	***Yes. Would limit the potential conflict of WB vehicles turning onto 51st St.***	***Moderate improvement.***	***Moderate improvement.***	***N/A***	***N/A***	***Yes. Could decrease delay from turning vehicles, especially WB.***	***No mobility improvements; more lanes to cross.***	***No mobility improvements; more lanes to cross.***	***<0.5 mi out-of-direction travel.***	***Higher risk near an industry owned overhead structure and near a railroad corridor. The area is subject to other corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes***	***Somewhat. May require additional access to Highland Dr.***		***Carried Forward***	***Planned grade-separated trail crossing nearby would lessen crossing issues for bikes/peds, but some on-street crossing activity would remain.***

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
1B – Highland Dr. — 75th St.	Private Drives (Access to North Side of SH 66 [Highland Drive to 66th Street])	Option 1 - No Action	1.0 Crashes/Yr No Action will not improve safety at the intersection.	No change in safety.	No change in safety.	No change in safety.	N/A	N/A	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Moderate risk near a railroad corridor. The area is subject to other corridor-wide threats.	No change from existing.	Yes	Yes. No impact.	Yes. No change from existing.	Not Recommended	
		Option 2 - Consolidated Driveways with Access Road with Advisory Shoulder Facility on North Side	***Would improve driveway safety.***	***Yes. Consolidated access, plus Access Road with Advisory Shoulder, reduces conflicts with all modes.***	***Yes. Reduces conflicts with turning vehicles on-street, and Access Road with Advisory Shoulder reduces interactions with vehicles, improves comfort (lowers LTS), reduces vehicle travel speeds, and separates faster bicyclists from slower bicyclists.***	***Yes. Reduces the number of conflict points with turning vehicles on-street, and Access Road with Advisory Shoulder reduces interactions with vehicles, improves comfort, and separates pedestrians from faster bicyclists.***	***N/A***	***N/A***	***May improve travel time potential by limiting turning vehicles to one location rather than multiple.***	***Yes. Connects with planned trails and creates low-volume shared road, which can attract a wider range of user types (with sidepath attached) compared to on SH 66.***	***Yes. Connects with planned trails and creates low-volume shared road, which can attract a wider range of user types (with sidepath attached) compared to on SH 66.***	***<0.5 mi out-of-direction travel.***	***Moderate risk near a railroad corridor. The area is subject to other corridor-wide threats.***	***Moderately enhances evacuation options.***	***Somewhat. Would introduce a new roadway configuration.***	***Somewhat. Changes existing access and driveways.***	***Possible impacts may involve St. Vrain floodplain/floodway, potential wetlands, PMJM and Bald Eagle habitat, adjacent parks, proposed trails, utilities (including a water treatment plant), noise sensitive areas, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Would best address safety, mobility, and access needs.***
1B – Highland Dr. — 75th St.	N 53rd Street (Access to North Side of SH 66 [Highland Drive to 66th Street])	Option 1 - No Action	0.4 Crashes/Yr No Action will not improve safety at the intersection, but crash frequency is low.	No change in safety.	No change in safety. With 53rd serving as current bike access to Rabbit Mountain Open Space, this existing condition has safety concerns.	No change in safety. With 53rd serving as current ped access to Rabbit Mountain Open Space, this existing condition has safety concerns.	N/A	N/A	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Moderate risk near a railroad corridor. The area is subject to other corridor-wide threats.	No change from existing.	Yes	Yes. No impact.	Yes. No change from existing.	Not Recommended	Planned grade-separated trail crossing nearby would lessen crossing issues for bikes/peds, but some on-street crossing activity would remain.

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	Does the intersection type allow adequate access to be provided to adjacent properties?	Does the alternative avoid encroachment into identified threat areas?	Does the alternative facilitate emergency evacuation/ access potential?	Does the alternative match the surrounding community context?	Does the alternative minimize community impacts?	Does the alternative avoid substantial impacts to natural environmental and cultural resources?		
1B – Highland Dr. — 75th St.	N 53rd Street (Access to North Side of SH 66 [Highland Drive to 66th Street])	***Option 2 -Full Movement (with potential to signalize) Access Point for Consolidated Driveways with Access to Advisory Shoulder Facility on North Side***	***If the intersection is signalized it could lead to increased safety.***	***If the intersection is signalized it could lead to increased safety.***	***Yes.***	***Yes.***	***N/A***	***N/A***	***Yes. Could decrease delay from turning vehicles, especially EB.***	***No mobility improvements; more lanes to cross.***	***No mobility improvements; more lanes to cross.***	***No change from existing.***	***Moderate risk near a railroad corridor. The area is subject to other corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes***	***Somewhat. Additional ROW needed for access spacing with Access Road with Advisory Shoulders.***	***Possible impacts may involve St. Vrain floodplain/floodway, potential wetlands, PMJM and Bald Eagle habitat, adjacent parks, proposed trails, utilities (including a water treatment plant), noise sensitive areas, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Signalized Channelized T would lessen the negative impacts. Planned grade-separated trail crossing nearby would lessen crossing issues for bikes/peds, but some on-street crossing activity would remain.***
1B – Highland Dr. — 75th St.	Private Drives (Access to North Side of SH 66 [Highland Drive to 66th Street])	Option 1 - No Action	1.4 Crashes/Yr No Action will not improve safety at the intersection.	No change in safety.	No change in safety.	No change in safety.	N/A	N/A	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Moderate risk near a railroad corridor. The area is subject to other corridor-wide threats.	No change from existing.	Yes	Yes. No impact.	Yes. No change from existing.	Not Recommended	

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	Does the intersection type allow adequate access to be provided to adjacent properties?	Does the alternative avoid encroachment into identified threat areas?	Does the alternative facilitate emergency evacuation/ access potential?	Does the alternative match the surrounding community context?	Does the alternative minimize community impacts?	Does the alternative avoid substantial impacts to natural environmental and cultural resources?		
1B – Highland Dr. — 75th St.	Private Drives (Access to North Side of SH 66 [Highland Drive to 66th Street])	***Option 2 - Consolidated Driveways with Access Road with Advisory Shoulder Facility on North Side***	***Would improve driveway safety.***	***Yes. Consolidated access, plus Access Road with Advisory Shoulder, reduces conflicts with all modes.***	***Yes. Reduces conflicts with turning vehicles on-street, and Access Road with Advisory Shoulder reduces interactions with vehicles, improves comfort (lowers LTS), reduces vehicle travel speeds, and separates faster bicyclists from slower bicyclists.***	***Yes. Reduces the number of conflict points with turning vehicles on-street, and Access Road with Advisory Shoulder reduces interactions with vehicles, improves comfort, and separates pedestrians from faster bicyclists.***	***N/A***	***N/A***	***May improve travel time potential by limiting turning vehicles to one location rather than multiple.***	***Yes. Creates low-volume shared road, which can attract a wider range of user types (with sidepath attached) compared to on SH 66.***	***Yes. Creates low-volume shared road, which can attract a wider range of user types (with sidepath attached) compared to on SH 66.***	***<0.5 mi out-of-direction travel.***	***Moderate risk near a railroad corridor. The area is subject to other corridor-wide threats.***	***Moderately enhances evacuation options.***	***Somewhat. Would introduce a new roadway configuration.***	***Somewhat. Changes existing access and driveways.***	***Possible impacts may involve St. Vrain floodplain/ floodway, potential wetlands, PMJM and Bald Eagle habitat, adjacent parks, proposed trails, utilities (including a water treatment plant), noise sensitive areas, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Would best address safety, mobility, and access needs.***
1B – Highland Dr. — 75th St.	Forest Service Access Road (Access to North Side of SH 66 [Highland Drive to 66th Street])	Option 1 - No Action	No crashes occurred during the analysis period, but No Action will not help prevent future crashes.	No change in safety.	No change in safety.	No change in safety.	N/A	N/A	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Moderate risk near a railroad corridor. The area is subject to other corridor-wide threats.	No change from existing.	Yes	Yes. No impact.	Yes. No change from existing.	Not Recommended	

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	Does the intersection type allow adequate access to be provided to adjacent properties?	Does the alternative avoid encroachment into identified threat areas?	Does the alternative facilitate emergency evacuation/ access potential?	Does the alternative match the surrounding community context?	Does the alternative minimize community impacts?	Does the alternative avoid substantial impacts to natural environmental and cultural resources?		
1B – Highland Dr. — 75th St.	Forest Service Access Road (Access to North Side of SH 66 [Highland Drive to 66th Street])	***Option 2 -3/4 Movement Access Point for Consolidated Driveways with Access Road to Advisory Shoulder Facility on the North Side***	***Auxiliary lanes could improve safety.***	***No change in safety.***	***Yes.***	***Yes.***	***N/A***	***N/A***	***No change to mobility and/or connectivity.***	***No mobility improvements; more lanes to cross.***	***No mobility improvements; more lanes to cross.***	***0.5 - 1.0 mi out-of-direction travel.***	***Moderate risk near a railroad corridor. The area is subject to other corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes***	***Yes***	***Possible impacts may involve St. Vrain floodplain/ floodway, potential wetlands, PMJM and Bald Eagle habitat, adjacent parks, proposed trails, utilities (including a water treatment plant), noise sensitive areas, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Needed to accommodate travel movements. Volumes are not intense from a bike/ped perspective.***
1B – Highland Dr. — 75th St.	Private Drive between Forest Service Access Rd and 61st St (Access to North Side of SH 66 [Highland Drive to 66th Street])	Option 1 - No Action	0.2 Crashes/Yr No Action will not improve safety at the intersection, but crash frequency is low.	No change in safety.	No change in safety.	No change in safety.	N/A	N/A	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes	Yes. No impact.	Yes. No change from existing.	Not Recommended	

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
1B – Highland Dr. — 75th St.	Private Drive between Forest Service Access Rd and 61st St (Access to North Side of SH 66 [Highland Drive to 66th Street])	***Option 2 - Consolidated Driveways with Access Road with Advisory Shoulder Facility***	***Would improve driveway safety.***	***Yes. Consolidated access, plus Access Road with Advisory Shoulder, reduces conflicts with all modes.***	***Yes. Reduces conflicts with turning vehicles on-street, and Access Road with Advisory Shoulder or sidepath reduces interactions with vehicles, improves comfort (lowers LTS), reduces vehicle travel speeds, and separates faster bicyclists from slower bicyclists.***	***Yes. Reduces the number of conflict points with turning vehicles on-street, and Access Road with Advisory Shoulder or sidepath reduces interactions with vehicles, improves comfort, and separates pedestrians from faster bicyclists.***	***N/A***	***N/A***	***May improve travel time potential by limiting turning vehicles to one location rather than multiple.***	***Yes. Creates low-volume shared road, which can attract a wider range of user types (with sidepath attached) compared to on SH 66.***	***Yes. Creates low-volume shared road, which can attract a wider range of user types (with sidepath attached) compared to on SH 66.***	***0.5 - 1.0 mi out-of-direction travel.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes***	***Somewhat. Depending on required ROW.***	***Possible impacts may involve St. Vrain floodplain/floodway, potential wetlands, PMJM and Bald Eagle habitat, adjacent parks, proposed trails, utilities (including a water treatment plant), noise sensitive areas, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Having a sidepath wherever an access road is not necessary will always improve bike/ped safety and increase the likelihood of more user types.***
1B – Highland Dr. — 75th St.	N 61st Street (Access to North Side of SH 66 [Highland Drive to 66th Street])	Option 1 - No Action	No crashes occurred during the analysis period, but No Action will not help prevent future crashes.	No change in safety.	No change in safety.	No change in safety.	N/A	N/A	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes	Yes. Given no impacts to ROW.	Yes. No change from existing.	Not Recommended	
1B – Highland Dr. — 75th St.	N 61st Street (Access to North Side of SH 66 [Highland Drive to 66th Street])	***Option 2 -3/4 Movement Access Point for Consolidated Driveways with Access Road with Advisory Shoulder Facility on the North Side***	***Auxiliary lanes could improve safety.***	***No change in safety.***	***Yes.***	***Yes.***	***N/A***	***N/A***	***No change to mobility and/or connectivity.***	***No mobility improvements; more lanes to cross.***	***No mobility improvements; more lanes to cross.***	***No change from existing.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Somewhat. Would introduce a new roadway configuration, temporarily creating a new context.***	***Depends on ROW needs and whether private ROW would be required for Access Road.***	***Possible impacts may involve St. Vrain floodplain/floodway, potential wetlands, PMJM and Bald Eagle habitat, adjacent parks, proposed trails, utilities (including a water treatment plant), noise sensitive areas, hazardous material sites, visual resources, and historic or potentially historic sites.***	***Carried Forward***	***Would best address safety, mobility, and access needs. Needed to accommodate travel movements. Volumes are not intense from a bike/ped perspective.***

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
1B – Highland Dr. — 75th St.	N 63rd Street	Option 1 - No Action	No crashes occurred during the analysis period, but No Action will not help prevent future crashes.	No change in safety.	No change in safety.	No change in safety.	N/A	N/A	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes	Yes. No impacts.	Yes. No change from existing.	Not Recommended	
		Option 2 - Offset 'T' with 61st Street	Could improve safety.	Yes. Would limit potential conflict of WB vehicles turning onto 61st St.	No safety improvements; more lanes to cross.	No safety improvements; more lanes to cross.	N/A	N/A	Yes. Could decrease delay from turning vehicles, especially EB.	No mobility improvements; more lanes to cross.	No mobility improvements; more lanes to cross.	No change from existing.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Yes	Somewhat. New configuration may be temporarily impactful.	Possible impacts may involve St. Vrain floodplain/floodway, potential wetlands, PMJM and Bald Eagle habitat, adjacent parks, proposed trails, utilities (including a water treatment plant), noise sensitive areas, hazardous material sites, visual resources, and historic or potentially historic sites.	Not Recommended	Signalized Channelized T would lessen the negative impacts.
1B – Highland Dr. — 75th St.	N 61st Street (Access to North Side of SH 66 [Highland Drive to 66th Street])	***Option 3 - 3/4 Movement***	***Eliminating left turn movement will improve safety.***	***Yes. Would reduce conflict with higher-risk turning movements of other vehicles.***	***Yes. Improves visibility of bicyclists by reducing the potential of higher-risk turning movements.***	***Yes. Improves visibility of pedestrians by reducing the potential of higher-risk turning movements.***	***N/A***	***N/A***	***No impact on existing service and unlikely that future service would need access.***	***May help attract more riders with reduction of higher-risk turning movements.***	***May help attract more pedestrians with a reduction of higher-risk turning movements.***	***0.5 - 1.0 mi out-of-direction travel.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes***	***Yes. Alternative access provided at SH 66th and McCall.***	***Possible impacts may involve St. Vrain floodplain/floodway, potential wetlands, PMJM and Bald Eagle habitat, adjacent parks, proposed trails, utilities (including a water treatment plant), noise sensitive areas, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Near-term disruption, but in the long term it would support context. Would be effective only if signalized (which would not fit the highway classification).***

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

Section ID	Intersection	Alternative	Safety				Mobility				Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
1B – Highland Dr. — 75th St.	N 61st Street (Access to North Side of SH 66 [Highland Drive to 66th Street])	Option 4 - Closed	Eliminating the intersection would improve safety.	Yes. Closure would eliminate conflict with turning vehicles.	Yes. Closure would eliminate conflict with turning vehicles.	Yes. Closure would eliminate conflict with turning vehicles.	N/A	N/A	Yes. Closure would eliminate potential delay from turning vehicles; future need for transit access is unlikely.	Closure would improve mobility along SH 66 by eliminating turning vehicles but would reduce connectivity to SH 66.	Closure would improve mobility by eliminating turning vehicles but would reduce connectivity to SH 66.	>1.0 mi out-of-direction travel.	Lower risk. The area is subject to corridor-wide threats.	Does not enhance evacuation options.	Yes	Yes. Emphasizes a highway environment.	Yes. Minor to no impacts to surrounding natural and cultural environment.	Not Recommended	Addresses safety concerns associated with left turns. Ensure bike connection to SH 66 to improve bicycle mobility.
1B – Highland Dr. — 75th St.	Private Drives (Access to North Side of SH 66 [Highland Drive to 66th Street])	Option 1 - No Action	0.4 Crashes/Yr No Action will not improve safety at the intersection, but crash frequency is low.	No change in safety.	No change in safety.	No change in safety.	N/A	N/A	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes	Yes. No impact.	Yes. No change from existing.	Not Recommended	
		Option 2 - Consolidated Driveways with Access Road with Advisory Shoulder Facility on North Side	***Would improve driveway safety.***	***Yes. Consolidated access plus Access Road with Advisory Shoulder reduces conflicts with all modes.***	***Yes. Reduces conflicts with turning vehicles on-street, and Access Road with Advisory Shoulder reduces interactions with vehicles, improves comfort (lowers LTS), reduces vehicle travel speeds, and separates faster bicyclists from slower bicyclists.***	***Yes. Reduces the number of conflict points with turning vehicles on-street, and Access Road with Advisory Shoulder reduces interactions with vehicles, improves comfort, and separates pedestrians from faster bicyclists.***	***N/A***	***N/A***	***May improve travel time potential by limiting turning vehicles to one location rather than multiple.***	***Yes. Creates low-volume shared road, which can attract a wider range of user types (with sidepath attached) compared to on SH 66.***	***Yes. Creates low-volume shared road, which can attract a wider range of user types (with sidepath attached) compared to on SH 66.***	***<0.5 mi out-of-direction travel.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Somewhat. Would introduce a new roadway configuration.***	***Somewhat. Changes existing access and driveways.***	***Possible impacts may involve St. Vrain floodplain/floodway, potential wetlands, PMJM and Bald Eagle habitat, adjacent parks, proposed trails, utilities (including a water treatment plant), noise sensitive areas, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Would best address safety, mobility, and access needs.***
1B – Highland Dr. — 75th St.	N 66th Street	Option 1 - No Action	No crashes occurred during the analysis period, but No Action will not help prevent future crashes.	No change in safety.	No change in safety.	No change in safety.	N/A	N/A	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes	Yes. No impact.	Yes. No change from existing.	Not Recommended	

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	Does the intersection type allow adequate access to be provided to adjacent properties?	Does the alternative avoid encroachment into identified threat areas?	Does the alternative facilitate emergency evacuation/ access potential?	Does the alternative match the surrounding community context?	Does the alternative minimize community impacts?	Does the alternative avoid substantial impacts to natural environmental and cultural resources?		
1B – Highland Dr. — 75th St.	N 66th Street	***Option 2 - Full Movement; Signalized Intersection, if Warranted***	***Safety impact will depend on level of traffic given a signal.***	***Yes. Would limit potential conflict with other turning vehicles.***	***Yes. Turning vehicle movements are more predictable and give safer crossing, but added lanes to facilitate decreases comfort (higher LTS).***	***Yes. Turning vehicle movements are more predictable and give safer crossing, but added lanes to facilitate decreases comfort.***	***N/A***	***N/A***	***May slow down future transit but assists access to a future stop.***	***Yes. Makes crossing of SH 66 easier and more defined/ visible.***	***Yes. Makes crossing of SH 66 easier and more defined/ visible.***	***No change from existing.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes***	***Yes. Minimal ROW is required.***	***Possible impacts may involve potential wetlands, PMJM and Bald Eagle habitat, adjacent parks, proposed trails, utilities (including a water treatment plant), noise sensitive areas, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Relates with closure of 63rd St. Consider a LPI at the signal for greater visibility of crossing pedestrians.***
1B – Highland Dr. — 75th St.	McCall Dr.	Option 1- No Action	0.2 Crashes/Yr No Action will not improve safety at the intersection, but crash frequency is low.	No change in safety.	No change in safety.	No change in safety.	N/A	N/A	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes	Yes. No impact.	Yes. No change from existing.	Not Recommended	
		Option 2 – Right In/Right Out	Eliminating left turn movements will improve safety.	Yes. Would reduce conflict with higher-risk turning movements of other vehicles.	Yes. Improves visibility of bicyclists by reducing the potential of higher-risk turning movements.	Yes. Improves visibility of pedestrians by reducing the potential of higher-risk turning movements.	N/A	N/A	No impact on existing service and unlikely that future service would need access.	May help attract more riders with reduction of higher-risk turning movements.	May help attract more pedestrians with reduction of higher-risk turning movements.	<0.5 mi out-of-direction travel.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Somewhat. Would introduce a new roadway configuration for travelers.	Somewhat. Changes existing access and may be temporarily impactful.	Possible impacts may involve potential wetlands, adjacent parks, proposed trails, utilities (including a water treatment plant), noise sensitive areas, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Physical enforcement of RIRO could provide a small pedestrian refuge for people traveling along SH 66, improving safety further.

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	Does the intersection type allow adequate access to be provided to adjacent properties?	Does the alternative avoid encroachment into identified threat areas?	Does the alternative facilitate emergency evacuation/ access potential?	Does the alternative match the surrounding community context?	Does the alternative minimize community impacts?	Does the alternative avoid substantial impacts to natural environmental and cultural resources?		
1B – Highland Dr. — 75th St.	McCall Dr.	***Option 3 - Right Out Only***	***Eliminating all movements at the skewed intersection will improve safety.***	***Yes. Closure would eliminate conflict with turning vehicles.***	***Yes. Closure would eliminate conflict with turning vehicles.***	***Yes. Closure would eliminate conflict with turning vehicles; however, counterflow pedestrians could be at risk for not being seen.***	***N/A***	***N/A***	***Yes. Closure would eliminate potential delay from turning vehicles; future need for access is unlikely.***	***Yes. Closure would improve mobility along SH 66 by eliminating turning vehicles and right out retains access to SH 66.***	***Yes. Closure would improve mobility by eliminating turning vehicles and right out retains access to SH 66.***	***<0.5 mi out-of-direction travel.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Somewhat. Would introduce a new roadway configuration for travelers.***	***Somewhat. Changes existing access.***	***Yes. Minor to no impacts to surrounding natural and cultural environment.***	***Carried Forward***	***The right in movement could occur from 66th St. Ensure bike/ped connection to SH 66 to retain connectivity. Near-term disruption, but in the long term, it would support context.***
		Option 4 – Close	Eliminating the intersection would improve safety.	Yes. Closure would eliminate conflict with turning vehicles.	Yes. Closure would eliminate conflict with turning vehicles.	Yes. Closure would eliminate conflict with turning vehicles.			Yes. Closure would eliminate potential delay from turning vehicles; future need for transit access is unlikely.	Closure would improve mobility along SH 66 by eliminating turning vehicles but would reduce connectivity to SH 66.	Closure would improve mobility by eliminating turning vehicles but would reduce connectivity to SH 66.		Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Yes	Yes. Emphasizes a highway environment.	Yes. Minor to no impacts to surrounding natural and cultural environment.	Not Recommended	
1C – 75th St. — 87th St.	N 75th Street	Option 1 – No Action	3.0 Crashes/Yr No Action will not improve safety at the intersection.	No change in safety.	No change in safety.	No change in safety.	86.8	110.9	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes	Yes. No impact.	Yes. No change from existing.	Not Recommended	
		Option 2 – Provide Two EB Through Lanes	East-West rear-end crashes may be reduced with improvement.	Yes. Would potentially make for easier merge.	No. Would reduce comfort with lanes added (higher LTS).	No. Would reduce comfort with lanes added; would increase crossing distance.	64.1	62.1	Yes. More throughput and room to merge could improve potential travel time.	No mobility improvements; more lanes to cross.	No mobility improvements; more lanes to cross.	No change from existing.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Yes	Yes. Minimal ROW is required.	Possible impacts may involve PMJM habitat, adjacent parks, proposed trails, utilities, noise sensitive areas, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Would need to extend travel lane farther than it is now to ensure utilization.

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

SH 66 PEL Level 3 Screening – Roadway

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	Does the intersection type allow adequate access to be provided to adjacent properties?	Does the alternative avoid encroachment into identified threat areas?	Does the alternative facilitate emergency evacuation/ access potential?	Does the alternative match the surrounding community context?	Does the alternative minimize community impacts?	Does the alternative avoid substantial impacts to natural environmental and cultural resources?		
1C – 75th St. — 87th St.	N 75th Street	***Option 3 - Capacity Improvements***	***There is some potential for safety improvement.***	***Yes. Would reduce conflicts with other vehicles and improve ability of future transit to make a safe stop.***	***No. Would reduce comfort with lanes added (higher LTS).***	***No. Would reduce comfort with lanes added; may increase crossing distance.***	***79.9***	***87.2***	***Yes. Could reduce potential delay at intersection.***	***No mobility improvements; more lanes to cross.***	***No mobility improvements; more lanes to cross.***	***No change from existing.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes***	***Somewhat. Depends on needed ROW.***	***Possible impacts may involve PMJM habitat, adjacent parks, proposed trails, utilities, noise sensitive areas, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	
1C – 75th St. — 87th St.	Unnamed Rd 0.25 mi west of Table Mtn	Option 1 - No Action	No crashes occurred during the analysis period, but No Action will not help prevent future crashes.	No change in safety.	No change in safety.	No change in safety.	N/A	N/A	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes	Yes. No impact.	Yes. No change from existing.	Not Recommended	
		Option 2 - Full movement (unsignalized) access point for consolidated access on south via Access Road with Advisory Shoulder facility on south side of SH 66	***Would improve driveway safety.***	***Yes. Reduces conflicts with turning vehicles by consolidating to one location and reducing the number of turning movements.***	***Yes. Reduces conflicts with turning vehicles by consolidating to one location and reducing the number of turning movements, improving visibility of bicyclists.***	***Yes. Reduces conflicts with turning vehicles by consolidating to one location and reducing the number of turning movements, improving visibility of bicyclists.***			***May improve travel time potential by limiting turning vehicles to one location rather than multiple.***	***No change to mobility and/or connectivity.***	***No change to mobility and/or connectivity.***		***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Somewhat. Would introduce a new roadway configuration for travelers, which is temporarily disruptive.***	***Somewhat. Changes existing access.***	***Possible impacts may include areas of potential wetlands and PMJM habitat, trails and a high concentration of adjacent parks, utilities, noise sensitive areas, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

SH 66 PEL Level 3 Screening – Roadway

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
1C – 75th St. — 87th St.	Unnamed Rd 0.25 mi west of Table Mtn	Option 3 - Consolidate access on north and south to one Right In/Right Out	Eliminating left turns will improve safety.	Yes. Reduces conflicts with turning vehicles by consolidating to one location and reducing the number of turning movements.	Yes. Reduces conflicts with turning vehicles by consolidating to one location and reducing the number of turning movements, improving visibility of bicyclists.	Yes. Reduces conflicts with turning vehicles by consolidating to one location and reducing the number of turning movements, improving visibility of bicyclists.	N/A	N/A	May improve travel time potential by limiting turning vehicles to one location rather than multiple.	May help attract more riders with reduction of higher-risk turning movements.	May help attract more pedestrians with reduction of higher-risk turning movements.	0.5 – 1.0 mi out-of-direction travel.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Somewhat. Would introduce a new roadway configuration for travelers, which is temporarily disruptive.	Somewhat. Would introduce new travel patterns.	Possible impacts may include areas of potential wetlands and PMJM habitat, trails and a high concentration of adjacent parks, utilities, noise sensitive areas, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Physical enforcement of RIRO could provide a small pedestrian refuge for people traveling along SH 66, improving safety further.
1C – 75th St. — 87th St.	Table Mountain Road	Option 1 - No Action	No crashes occurred during the analysis period, but No Action will not help prevent future crashes.	No change in safety.	No change in safety.	No change in safety.	N/A	N/A	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes	Yes. No impact.	Yes. No change from existing.	Not Recommended	
		Option 2 - Right In/Right Out with possible new connection to Unnamed Road on north side	***Eliminating left turns will improve safety***	***Yes. Would reduce conflict with higher-risk turning movements of other vehicles.***	***Yes. Improves visibility of bicyclists by reducing the potential of higher-risk turning movements.***	***Yes. Improves visibility of pedestrians by reducing the potential of higher-risk turning movements.***	***N/A***	***N/A***	***No impact on existing service and unlikely that future service would need access.***	***May help attract more riders with a reduction of higher-risk turning movements.***	***May help attract more pedestrians with reduction of higher-risk turning movements.***	***>1.0 mi out-of-direction travel.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Somewhat. Would introduce new travel patterns.***	***Somewhat. Changes existing access.***	***Possible impacts may include areas of potential wetlands and PMJM and Bald Eagle habitat, trails and a high concentration of adjacent parks, utilities, noise sensitive areas, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Physical enforcement of RIRO could provide a small pedestrian refuge for people traveling along SH 66, improving safety further. Near-term disruption, but in the long term, it would support context.***

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
2 - 87th St — County Line Rd.	N 87th Street/ Airport Road	Option 1 - No Action	0.4 Crashes/Yr No Action will not improve safety at the intersection, but crash frequency is low.	No change in safety.	No change in safety.	No change in safety.	65.7	71.3	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes	Yes. No impact.	Yes. No change from existing.	Not Recommended	
		Option 2 -Signalize and Capacity Improvements	***Signal may contribute to more east-west rear-ends, but capacity improvements may offset them.***	***Yes. Would reduce conflicts with other vehicles and improve ability of future transit to make a safe stop.***	***Yes. Turning vehicle movements are more predictable and give safer crossing, but added lanes to facilitate decrease comfort (higher LTS).***	***Yes. Turning vehicle movements are more predictable and give safer crossing, but added lanes to facilitate decrease comfort.***	***68.3***	***62.1***	***May slow down future transit but assists access to a future stop.***	***Yes. Makes crossing of SH 66 easier and more defined/ visible but more lanes to cross.***	***Yes. Makes crossing of SH 66 easier and more defined/ visible but more lanes to cross.***	***No change from existing.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes***	***Moderate (as some ROW is needed).***	***Possible impacts may include areas of potential wetlands and PMJM and Bald Eagle habitat, trails and parks, utilities, noise sensitive areas, hazardous material sites, areas with higher low-income and minority populations, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Would address safety, mobility, and access needs but would impact bikes/peds.***

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Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
2 - 87th St — County Line Rd.	N Shore Drive	Option 1 - No Action	LOSS II No Action will not improve safety at the intersection..	No change in safety.	No change in safety.	No change in safety.	61.6	71.8	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes	Yes. No impact.	Yes. No change from existing.	Not Recommended	
		Option 2 - 3/4 Movement	***Eliminating left out will improve safety.***	***Yes. Would reduce conflict with higher-risk turning movements of other vehicles.***	***Yes. Improves visibility of bicyclists by reducing the potential of higher-risk turning movements.***	***Yes. Improves visibility of pedestrians by reducing the potential of higher-risk turning movements.***	***34.6***	***53.3***	***No impact on existing service and unlikely that future service would need access.***	***May help attract more riders with reduction of higher-risk turning movements.***	***May help attract more pedestrians with a reduction of higher-risk turning movements.***	***0.5 - 1.0 mi out-of-direction travel.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Somewhat. Would introduce new travel patterns.***	***Somewhat. Changes existing access.***	***Possible impacts may include areas of potential wetlands and PMJM and Bald Eagle habitat, trails and parks, utilities, noise sensitive areas, hazardous material sites, areas with higher low-income and minority populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***More conflicts with bike/ped.***
		Option 3 - Channelized 'T'	Channelized left turn movements will improve safety.	Yes. Would limit potential conflict of EB vehicles turning onto Highland Dr.	No safety improvements; more lanes to cross.	No safety improvements; more lanes to cross.	37.8	53.3	Yes. Could decrease delay from turning vehicles, especially EB.	No mobility improvements; more lanes to cross.	No mobility improvements; more lanes to cross.	No change from existing.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Yes	Somewhat. Minor ROW needs.	Possible impacts may include areas of potential wetlands and PMJM and Bald Eagle habitat, trails and parks, utilities, noise sensitive areas, hazardous material sites, areas with higher low-income and minority populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Signalized Channelized T would lessen the negative impacts.

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Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
2 - 87th St — County Line Rd.	Anhawa Ave.	Option 1 - No Action	LOSS I No Action will not improve safety at the intersection, but crash frequency is low.	No change in safety.	No change in safety.	No change in safety.	63.5	72.9	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes	Yes. No impact.	Yes. No change from existing.	Not Recommended	
		Option 2 – 3/4 Movement	***Eliminating left out will improve safety.***	***Yes. Would reduce conflict with higher-risk turning movements of other vehicles.***	***Yes. Improves visibility of bicyclists by reducing the potential of higher-risk turning movements.***	***Yes. Improves visibility of pedestrians by reducing the potential of higher-risk turning movements.***	***39.8***	***38.6***	***No impact on existing service and unlikely that future service would need access.***	***May help attract more riders with a reduction of higher-risk turning movements.***	***May help attract more pedestrians with a reduction of higher-risk turning movements.***	***0.5 - 1.0 mi out-of-direction travel.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Somewhat. Would introduce new travel patterns.***	***Somewhat. Changes existing access.***	***Possible impacts may include areas of potential wetlands and PMJM and Bald Eagle habitat, trails and parks, utilities, noise sensitive areas, areas with higher low-income and minority populations, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Near-term disruption, but in the long term, it would support context.***
		Option 3 – Channelized T	Channelized left turn movements will improve safety.	Yes. Would limit potential conflict of EB vehicles turning onto Highland Dr.	No safety improvements; more lanes to cross.	No safety improvements; more lanes to cross.	39.8	45.2	Yes. Could decrease delay from turning vehicles, especially EB.	No mobility improvements; more lanes to cross.	No mobility improvements; more lanes to cross.	No change from existing.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Yes	Somewhat. Minor ROW required.	Possible impacts may include areas of potential wetlands and PMJM and Bald Eagle habitat, trails and parks, utilities, noise sensitive areas, areas with higher low-income and minority populations, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Signalized Channelized T would lessen the negative impacts.

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Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
2 - 87th St — County Line Rd.	Private Drives	Option 1 - No Action	4.8 Crashes/Yr No Action will not improve safety at the intersection.	No change in safety.	No change in safety.	No change in safety.	N/A	N/A	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes	Yes. No impact.	Yes. No change from existing.	Not Recommended	
		Option 2 - Consolidate via Frontage Road with Access to Anhawa Avenue	***Could improve driveway safety.***	***Yes. Reduces conflicts with turning vehicles by consolidating to one location.***	***Yes. Reduces conflicts with turning vehicles by consolidating to one location.***	***Yes. Reduces conflicts with turning vehicles by consolidating to one location.***	***N/A***	***N/A***	***May improve travel time potential by limiting turning vehicles to one location rather than multiple.***	***No change to mobility and/or connectivity.***	***No change to mobility and/or connectivity.***	***0.5 - 1.0 mi out-of-direction travel.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Somewhat. Would introduce new travel patterns.***	***Somewhat. Changes existing access and driveways.***	***Possible impacts may include areas of potential wetlands, utilities, noise sensitive areas, areas with higher low-income and minority populations, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Near-term disruption, but in the long term, it would support context.***
2 - 87th St — County Line Rd.	Lake Park Drive / Jotipa Street	Option 1 – No Action	LOSS IV No Action will not improve safety at the intersection.	No change in safety.	No change in safety.	No change in safety.	83.4	81.2	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes	Yes. No impact.	Yes. No change from existing.	Not Recommended	
		Option 2 - Right In/Right Out on north side	***Would improve safety.***	***Yes. Would reduce conflict with higher-risk turning movements of other vehicles.***	***Yes. Improves visibility of bicyclists by reducing the potential of higher-risk turning movements.***	***Yes. Improves visibility of pedestrians by reducing the potential of higher-risk turning movements.***	***38.5***	***44.6***	***No impact on existing service and unlikely that future service would need access.***	***May help attract more riders with a reduction of higher-risk turning movements.***	***May help attract more pedestrians with a reduction of higher-risk turning movements.***	***0.5 - 1.0 mi out-of-direction travel.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Somewhat. Would introduce new travel patterns.***	***Somewhat. Changes existing access.***	***Likely minor impacts may include utilities, noise sensitive areas, areas with higher low-income and minority populations, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Physical enforcement of RIRO could provide a small pedestrian refuge for people traveling along SH 66, improving safety further.***

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Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
2 - 87th St — County Line Rd.	Lake Park Drive / Jotipa Street	Option 3 - Close	Elimination of intersection would improve safety.	Yes. Closure would eliminate conflict with turning vehicles.	Yes. Closure would eliminate conflict with turning vehicles.	Yes. Closure would eliminate conflict with turning vehicles.	N/A	N/A	Yes. Closure would eliminate potential delay from turning vehicles, and future need for access is unlikely.	Closure would improve mobility along SH 66 by eliminating turning vehicles but would reduce connectivity to SH 66.	Closure would improve mobility by eliminating turning vehicles but would reduce connectivity to SH 66.	0.5 – 1.0 mi out-of-direction travel.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	No	No. Would adversely affect church traffic.	Yes. Minor to no impacts to surrounding natural and cultural environment.	Not Recommended	Ensure bike/ped connection to SH 66 to retain connectivity. Near-term disruption, but in the long term, it would support context.
		Option 4 - ¾ movement on south side	***Would improve safety.***				***37.6***	***43.2***				***0.5 - 1.0 mi out-of-direction travel.***						***Carried Forward***	
2 - 87th St — County Line Rd.	Hover Street/95th Street	Option 1 - No Action	8.0 Crashes/Yr No Action will not improve safety at the intersection.	No change in safety.	No change in safety.	No change in safety.	118.9	157.2	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes	Yes. No impact.	Yes. No change from existing.	Not Recommended	
		Option 2 - Improve 95th Street and Vermillion Road (or ½ mile section line north of SH 66) as an Alternate Route	Turning movements will be converted to through movements; slight improvement in safety is expected.	No change in safety on SH 66.	Reducing traffic along SH 66 may slightly improve safety and comfort.	Reducing traffic along SH 66 may slightly improve safety and comfort.	90.8	98.9	Yes. Reduced delays improve travel time.	Reduced traffic may attract more users, though increased traffic on 95th would impact users crossing SH 66.	Reduced traffic may attract more users, though increased traffic on 95th would impact users crossing SH 66.	No out-of-direction travel for regional north-south traffic.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	No. Does not match current rural context but may match as development occurs.	No. Impactful to adjacent and extended community.	Possible impacts may include areas of potential wetlands and PMJM habitat, utilities, noise sensitive areas, areas with higher low-income and minority populations, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Boulder County is not interested in this option.

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Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	Does the intersection type allow adequate access to be provided to adjacent properties?	Does the alternative avoid encroachment into identified threat areas?	Does the alternative facilitate emergency evacuation/ access potential?	Does the alternative match the surrounding community context?	Does the alternative minimize community impacts?	Does the alternative avoid substantial impacts to natural environmental and cultural resources?		
2 - 87th St — County Line Rd.	Hover Street/95th Street	***Option 3 - Grade-Separation, such as Echelon, SPUI, or Diamond Interchange***	***Reduced conflicts would likely improve safety.***	***Yes. Would limit potential conflict with other turning vehicles.***	***Yes. Fewer conflicts with turning vehicles.***	***Yes. Fewer conflicts with turning vehicles.***	***Varies by alternative; acceptable operations can be obtained***	***Varies by alternative; acceptable operations can be obtained***	***Yes. Reduced delays improve travel time and better facilitates any future transit to/from 95th.***	***Depends on design and which movements are grade-separated, but overall may make more attractive with less conflicting vehicle movements.***	***Depends on design and which movements are grade-separated, but overall may make more attractive with less conflicting vehicle movements.***	***No change from existing.***	***Moderate bridge strike risk. The area is subject to corridor-wide threats.***	***Yes. Substantively enhances evacuation options.***	***Somewhat. May be visually disruptive.***	***Somewhat. Depends on needed ROW.***	***Possible impacts may include areas of potential wetlands, utilities, noise sensitive areas, areas with higher low-income and minority populations, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Design would need to ensure no additional out-of-direction travel necessary for bike/ped connections and address difficulty of crossing free-flow ramps.***
		Option 4 - Innovative intersection Concepts to Address Key Movements	Some potential for safety improvement.	Yes. Would limit the potential conflict with other turning vehicles.	Unlikely. As many innovative designs discussed can make crossings wider and more cumbersome.	Unlikely. As many innovative designs discussed can make crossings wider and more cumbersome.	Would vary by design; merge may be over capacity	Would vary by design; merge may be over capacity	Yes. Reduced delays improve travel time and better facilitate any potential future transit to/from 95th.	Unlikely. As many innovative designs discussed can make crossings wider and more cumbersome.	Unlikely. As many innovative designs discussed can make crossings wider and more cumbersome.	Access would be minimally impacted.	Lower risk. The area is subject to corridor-wide threats.	Yes. Would enhance evacuation options.	Somewhat. Would likely introduce new travel patterns.	Somewhat. Depends on needed ROW.	Possible impacts may include areas of potential wetlands, utilities, noise sensitive areas, areas with higher low-income and minority populations, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Also consider grade separated facility for vehicles and bikes/peds. Near-term disruption, but in the long term, it would support context. Additional analysis to be completed in Level 3.
		Option 5 - Partial Displaced Left Turn (for WB to SB left)	***Some potential for safety improvement.***	***Yes. Would limit potential conflict with other turning vehicles.***	***Yes. Improves visibility of bicyclists by reducing potential of higher-risk turning movements.***	***Yes. Improves visibility of pedestrians by reducing potential of higher-risk turning movements.***	***98.6***	***85.9***	***Yes. Reduced delays improve travel time and better facilitate any potential future transit to/from 95th.***	***May help attract more riders with a reduction of higher-risk turning movements.***	***May help attract more pedestrians with a reduction of higher-risk turning movements.***	***Access would be minimally impacted.***	***Lower risk. The area is subject to corridor-wide threats.***	***Yes. Substantively enhances evacuation options.***	***Somewhat. Would introduce new travel patterns.***	***No. Impactful to adjacent and extended community.***	***Likely minor impacts may include utilities, noise sensitive areas, areas with higher low-income and minority populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	

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Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
2 - 87th St — County Line Rd.	Hover Street/95th Street	Option 6 - Full Displaced Left Turn	Some potential for safety improvement.	Yes. Would limit potential conflict with other turning vehicles.	Yes. Improves visibility of bicyclists by reducing potential of higher-risk turning movements.	Yes. Improves visibility of pedestrians by reducing potential of higher-risk turning movements.	63.4	54.6	Yes. Reduced delays improve travel time and better facilitate any potential future transit to/from 95th.	May help attract more riders with a reduction of higher-risk turning movements.	May help attract more pedestrians with a reduction of higher-risk turning movements.	Access would be minimally impacted.	Lower risk. The area is subject to corridor-wide threats.	Yes. Substantively enhances evacuation options.	Somewhat. Would introduce new travel patterns.	No. Impactful to adjacent and extended community.	Likely minor impacts may include utilities, noise sensitive areas, areas with higher low-income and minority populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	
		Option 7 - Junior Interchange in the NE Quadrant	***Grade separation will reduce vehicle conflicts.***	***Yes. Would limit potential conflict with other turning vehicles.***	***Improves visibility of bicyclists by reducing the potential of higher-risk turning movements, but high-speed merges would be stressful and turns would be challenging.***	***No. Requires multiples crossings of high-speed traffic by pedestrians in every direction.***	***128.4****	***107.5****	***Yes. Reduced delays improve travel time.***	***No. Interchange environment with frequent merges and weaves would be stressful.***	***No. Crossings of high-speed interchange traffic would be stressful.***	***Access would be minimally impacted.***	***Lower risk. The area is subject to corridor-wide threats.***	***Yes. Would enhance evacuation options.***	***Somewhat. Would introduce new travel patterns.***	***No. Impactful to adjacent and extended community.***	***Likely minor impacts may include utilities, noise sensitive areas, areas with higher low-income and minority populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	
2 - 87th St — County Line Rd.	Spencer Street	Option 1 - No Action	1.2 Crashes/Yr No Action will not improve safety at the intersection.	No change in safety.	No change in safety.	No change in safety.	121.7	142.5	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes	Yes. No impact.	Yes. No change from existing.	Not Recommended	Crossing of SH 66 is a concern at this intersection because of bike lanes on Spencer St south of SH 66 and planned development north. There is also a history of crashes with bikes at this intersection.

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
2 - 87th St — County Line Rd.	Spencer Street	Option 2 – Full Movement	Existing conditions allow full movement. No Action will not improve safety at the intersection.	No change in safety.	No. Expansion to 4 lanes will make this intersection wider to cross, reducing level of comfort.	No. Expansion to 4 lanes will make this intersection wider to cross, reducing level of comfort.	72.5	89.9	No change to mobility and/or connectivity.	No mobility improvements; more lanes to cross.	No mobility improvements; more lanes to cross.	No change from existing.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Yes	Yes	Likely minor impacts may include utilities, noise sensitive areas, areas with higher low-income and minority populations, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	
		Option 3 - 3/4 Movement	Reduction in turning movements will improve safety.	Yes. Would reduce conflict with higher-risk turning movements of other vehicles.	Yes. Improves visibility of bicyclists by reducing the potential of higher-risk turning movements.	Yes. Improves visibility of pedestrians by reducing the potential of higher-risk turning movements.	65.8	78.8	No impact on existing service and unlikely that future service would need access.	May help attract more riders with a reduction of higher-risk turning movements but could limit crossings of SH 66 depending on design.	May help attract more pedestrians with a reduction of higher-risk turning movements but could limit crossings of SH 66 depending on design.	<0.5 mi out-of-direction travel.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Somewhat. Would introduce new travel patterns.	Somewhat. Changes existing access.	Likely minor impacts may include utilities, noise sensitive areas, areas with higher low-income and minority populations, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Crossing of SH 66 is a concern at this intersection because of bike lanes on Spencer St south of SH 66 and planned development north.
		Option 4 – Right in/ Right Out	***Reduction in turning movements will improve safety.***	***Yes. Would reduce conflict with higher-risk turning movements of other vehicles.***	***Yes. Improves visibility of bicyclists by reducing the potential of higher-risk turning movements.***	***Yes. Improves visibility of pedestrians by reducing the potential of higher-risk turning movements.***	***65.8***	***76.1***	***No impact on existing service and unlikely that future service would need access.***	***May help attract more riders with a reduction of higher-risk turning movements.***	***May help attract more pedestrians with a reduction of higher-risk turning movements.***	***<0.5 mi out-of-direction travel.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes***	***Somewhat. Near-term impact from new access configuration***	***Likely minor impacts may include utilities, noise sensitive areas, areas with higher low-income and minority populations, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

SH 66 PEL Level 3 Screening – Roadway

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
2 - 87th St — County Line Rd.	Spencer Street	Option 5 - Close; Provide Alternate Connection on North Side with Future Development	Reduction of conflicting turns will improve safety.	Yes. Closure would eliminate conflict with turning vehicles.	Yes. Closure would eliminate conflict with turning vehicles.	Yes. Closure would eliminate conflict with turning vehicles.	N/A	N/A	Yes. Closure would eliminate potential delay from turning vehicles; maintain bicycle and pedestrian access.	Closure would improve mobility along SH 66 by eliminating turning vehicles but would reduce connectivity to and crossing of SH 66.	Closure would improve mobility by eliminating turning vehicles but would reduce connectivity to and crossing of SH 66.	0.5 – 1.0 mi out-of-direction travel.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	No. Changed travel patterns and no access to the animal hospital and church on the north side.	No. No access to the church and animal hospital.	Yes. Minor to no impacts to surrounding natural and cultural environment.	Not Recommended	Would not preclude Hover improvements. Bike/ped accidents frequent at this location. Ensure bike/ped connection to SH 66 to retain connectivity. Crossing of SH 66 is a concern at this intersection because of bike lanes on Spencer St south of SH 66. Should access be given to development on the north side, benefits of closing will be reduced. Near-term disruption, but in the long term, it would support context.
2 - 87th St — County Line Rd.	Francis Street	Option 1 - No Action	LOSS III No Action will not improve safety at the intersection.	No change in safety.	No change in safety.	No change in safety.	112.9	143.3	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes	Yes. No impact.	Yes. No change from existing.	Not Recommended	Crossing of SH 66 is a concern at this intersection because of bike lanes on Francis St south of SH 66 and planned development north.

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
2 - 87th St — County Line Rd.	Francis Street	***Option 2 - Signalize and Capacity Improvements; Provide Access to the North in the Future***	***Could improve safety pending development and associated traffic level. Signal may contribute to rear-end crashes; auxiliary lanes may prevent some.***	***Yes. Would limit potential conflict with other turning vehicles.***	***Yes. Turning vehicle movements are more predictable and give safer crossing, but added lanes to facilitate decreases comfort (higher LTS).***	***Yes. Turning vehicle movements are more predictable and give safer crossing, but added lanes to facilitate decreases comfort.***	***80.2***	***107.1***	***May slow down future transit but assists access to a future stop and would allow Francis St to have a future transit route that uses/ crosses SH 66.***	***Yes. Makes crossing of SH 66 easier and more defined/ visible.***	***Yes. Makes crossing of SH 66 easier and more defined/ visible.***	***No change from existing.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes***	***Somewhat. ROW would be required.***	***Likely minor impacts may include utilities, noise sensitive areas, hazardous materials sites, areas with higher low-income and minority populations, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Consider a LPI at the signal for greater visibility of crossing pedestrians. Crossing of SH 66 is a concern at this intersection because of bike lanes on Francis St south of SH 66 and planned development north.***
2 - 87th St — County Line Rd.	Gay Street	Option 1 - No Action	1.0 Crashes/Yr No Action will not improve safety at the intersection, but crash frequency is low.	No change in safety.	No change in safety.	No change in safety.	130.1	155.2	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes	Yes. No impact.	Yes. No change from existing.	Not Recommended	Crossing of SH 66 is a concern at this intersection because of bike lanes on Gay St south of SH 66 and planned development north.
		Option 2 – Full Movement	Existing conditions allow full movement. No Action will not improve safety at the intersection.	No change in safety.	No. Expansion to 4 lanes will make this intersection wider to cross, reducing level of comfort.	No. Expansion to 4 lanes will make this intersection wider to cross, reducing level of comfort.	78.7	93.0	No change to mobility and/or connectivity.	No mobility improvements; more lanes to cross.	No mobility improvements; more lanes to cross.	No change from existing.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Yes	Yes	Likely minor impacts may include utilities, noise sensitive areas, areas with higher low-income and minority populations, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Crossing of SH 66 is a concern at this intersection because of bike lanes on Gay St south of SH 66 and planned development north.

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	Does the intersection type allow adequate access to be provided to adjacent properties?	Does the alternative avoid encroachment into identified threat areas?	Does the alternative facilitate emergency evacuation/ access potential?	Does the alternative match the surrounding community context?	Does the alternative minimize community impacts?	Does the alternative avoid substantial impacts to natural environmental and cultural resources?		
2 - 87th St — County Line Rd.	Gay Street	***Option 3 – 3/4 Movement***	***Reduction in turning movements will improve safety***	***Yes. Would reduce conflict with higher-risk turning movements of other vehicles.***	***Yes. Improves visibility of bicyclists by reducing the potential of higher-risk turning movements.***	***Yes. Improves visibility of pedestrians by reducing the potential of higher-risk turning movements.***	***69.7***	***88.3***	***No impact on existing service and unlikely that future service would need access.***	***May help attract more riders with a reduction of higher-risk turning movements but could limit crossings of SH 66 depending on design.***	***May help attract more pedestrians with a reduction of higher-risk turning movements but could limit crossings of SH 66 depending on design.***	***0.5 – 1.0 mi out-of-direction travel.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Somewhat. Would introduce new travel patterns.***	***Somewhat. Changes existing access.***	***Yes. Minor to no impacts to surrounding natural and cultural environment.***	***Carried Forward***	
		Option 4 – Close North; Right In/Right Out South	Significant reduction in turning movements will improve safety.	Yes. Would reduce conflict with higher-risk turning movements of other vehicles.	Yes. Improves visibility of bicyclists by reducing the potential of higher-risk turning movements.	Yes. Improves visibility of pedestrians by reducing the potential of higher-risk turning movements.	63.5	87.6	Yes. Closure would eliminate potential delay from turning vehicles; maintain bicycle and pedestrian access.	May help attract more riders with a reduction of higher-risk turning movements but could limit crossings of SH 66 depending on design.	May help attract more pedestrians with a reduction of higher-risk turning movements but could limit crossings of SH 66 depending on design.	0.5 – 1.0 mi out-of-direction travel.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Somewhat. Would introduce new travel patterns.	No. No access to church on north side of road.	Yes. Minor to no impacts to surrounding natural and cultural environment.	Not Recommended	Physical enforcement of RIRO could provide a small pedestrian refuge for people traveling along SH 66, improving safety further. Crossing of SH 66 is a concern at this intersection because of bike lanes on Gay St south of SH 66 and planned development north.
		Option 5 – Close; realign LifeBridge Access to Francis Street	Consolidation of intersections should improve the overall safety.	Yes. Closure would eliminate conflict with turning vehicles.	Yes. Closure would eliminate conflict with turning vehicles.	Yes. Closure would eliminate conflict with turning vehicles.	N/A	N/A	Closure would eliminate potential delay from turning vehicles but would eliminate future access by transit.	Closure would improve mobility along SH 66 by eliminating turning vehicles but would reduce connectivity to and crossing of SH 66.	Closure would improve mobility by eliminating turning vehicles but would reduce connectivity to and crossing of SH 66.	0.5 – 1.0 mi out-of-direction travel.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Somewhat. Would introduce new travel patterns.	Somewhat. Changes existing access.	Yes. Minor to no impacts to surrounding natural and cultural environment.	Not Recommended	Ensure bike/ped connection to SH 66 to retain connectivity. Crossing of SH 66 is a concern at this intersection because of bike lanes on Gay St south of SH 66 and planned development north. Near-term disruption, but in the long term, it would support context.

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

SH 66 PEL Level 3 Screening – Roadway

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
2 - 87th St — County Line Rd.	Pratt Street	Option 1 - No Action	LOSS II No Action will not improve safety at the intersection	No change in safety.	No change in safety.	No change in safety.	N/A	N/A	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes	Yes. No impact.	Yes. No change from existing.	Not Recommended	
		Option 2 - Emergency Access Only to North; Right In/Right Out to South	Fewer turning movements will improve safety.	Yes. Would reduce conflict with higher-risk turning movements of other vehicles.	Yes. Improves visibility of bicyclists by reducing the potential of higher-risk turning movements.	Yes. Improves visibility of pedestrians by reducing the potential of higher-risk turning movements.	N/A	N/A	No impact on existing service and unlikely that future service would need access.	May help attract more riders with a reduction of higher-risk turning movements.	May help attract more pedestrians with a reduction of higher-risk turning movements.	0.5 – 1.0 mi out-of-direction travel.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Somewhat. Would introduce new travel patterns.	Somewhat. Changes existing access.	Yes. Minor to no impacts to surrounding natural and cultural environment.	Not Recommended	Physical enforcement of RIRO could provide a small pedestrian refuge for people traveling along SH 66, improving safety further.
		Option 3 - Close	Elimination of turning movements will improve safety.	Yes. Closure would eliminate conflict with turning vehicles.	Yes. Closure would eliminate conflict with turning vehicles.	Yes. Closure would eliminate conflict with turning vehicles.	N/A	N/A	Yes. Closure would eliminate potential delay from turning vehicles, and future need for access is unlikely.	Closure would improve mobility along SH 66 by eliminating turning vehicles but would reduce connectivity to SH 66.	Closure would improve mobility by eliminating turning vehicles but would reduce connectivity to SH 66.	0.5 – 1.0 mi out-of-direction travel.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Somewhat. Would introduce new travel patterns.	Somewhat. Changes existing access.	Yes. Minor to no impacts to surrounding natural and cultural environment.	Not Recommended	Ensure bike/ped connection to SH 66 to retain connectivity. Near-term disruption, but in the long term, it would support context.
		Option 4 – Right In/Right Out	***Fewer turning movements will improve safety.***	***Yes. Would reduce conflict with higher-risk turning movements of other vehicles.***	***Yes. Improves visibility of bicyclists by reducing the potential of higher-risk turning movements.***	***Yes. Improves visibility of pedestrians by reducing the potential of higher-risk turning movements.***	***N/A***	***N/A***	***No impact on existing service and unlikely that future service would need access.***	***May help attract more riders with a reduction of higher-risk turning movements.***	***May help attract more pedestrians with a reduction of higher-risk turning movements.***	***0.5 – 1.0 mi out-of-direction travel.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Somewhat. Would introduce new travel patterns.***	***Somewhat. Changes existing access.***	***Yes. Minor to no impacts to surrounding natural and cultural environment.***	***Carried Forward***	***Physical enforcement of RIRO could provide a small pedestrian refuge for people traveling along SH 66, improving safety further.***

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
2 - 87th St — County Line Rd.	US 287	Option 1 - No Action	LOSS IV No Action will not improve safety at the intersection.	No change in safety.	No change in safety.	No change in safety.	113.2	127.3	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes	Yes. No impact.	Yes. No change from existing.	Not Recommended	
		Option 2 - Improve 95th Street and Vermillion Road (or ½ mile section line north of 66) as an Alternate Route	Less traffic passing through should result in a slight improvement in safety.	No change in safety.	Reducing traffic along SH 66 may improve comfort slightly.	Reducing traffic along SH 66 may improve comfort slightly.	94.9	94.7	Yes. Reduced delays improve travel time.	Reduced traffic may attract more users.	Reduced traffic may attract more users.	No out-of-direction travel for regional north-south traffic.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	No. Does not match current rural context but may match as development occurs.	No. Impactful to adjacent and extended community.	Possible impacts may include areas of potential wetlands and PMJM habitat, utilities, noise sensitive areas, areas with higher low-income and minority populations, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	
		Option 3 - Grade-Separation, including Diamond Interchange	***Noticeable improvement in safety is anticipated.***	***Yes. Would limit potential conflict with other turning vehicles.***	***Yes. Fewer conflicts with turning vehicles.***	***Yes. Fewer conflicts with turning vehicles.***	***Varies by alternative; acceptable operations can be obtained***	***Varies by alternative; acceptable operations can be obtained***	***Yes. Reduced delays improve travel time.***	***Yes. Makes more attractive with fewer conflicting vehicle movements.***	***Yes. Makes more attractive with fewer conflicting vehicle movements.***	***May require closure of nearby accesses.***	***Moderate bridge strike risk. The area is subject to corridor-wide threats.***	***Yes. Substantively enhances evacuation options.***	***Somewhat. May be visually disruptive.***	***Somewhat. Depends on needed ROW.***	***Possible impacts may include areas of potential wetlands, utilities, noise sensitive areas, hazardous materials sites, areas with higher low-income and minority populations, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Could be a flyover, necessary to accommodate volumes. Design would need to ensure no additional out-of-direction travel necessary for bike/ped connections and address difficulty of crossing free-flow ramps. Design would also need to consider transit access to park-and-ride near Walmart.***

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
2 - 87th St — County Line Rd.	US 287	Option 4 - Innovative Intersection Concepts to Address Key Movements	Potential improvement to safety.	Yes. Would limit potential conflict with other turning vehicles.	Unlikely. As many innovative designs discussed can make crossings wider and more cumbersome.	Unlikely. As many innovative designs discussed can make crossings wider and more cumbersome.	Would vary by design; merge may be over capacity	Would vary by design; merge may be over capacity	Yes. Reduced delays improve travel time.	Unlikely. As many innovative designs discussed can make crossings wider and more cumbersome.	Unlikely. As many innovative designs discussed can make crossings wider and more cumbersome.	Access would be minimally impacted.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Somewhat. Would likely introduce new travel patterns.	Somewhat. Depends on needed ROW.	Possible impacts may include areas of potential wetlands, utilities, noise sensitive areas, hazardous materials sites, areas with higher low-income and minority populations, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Near-term disruption, but in the long term, it would support context. Additional analysis to be completed in Level 3.
		Option 5 –Partial Displaced Left Turn (EB/WB)	Potential improvement to safety.	Yes. Would limit potential conflict with other turning vehicles.	Yes. Improves visibility of bicyclists by reducing the potential of higher-risk turning movements.	Yes. Improves visibility of pedestrians by reducing the potential of higher-risk turning movements.	110.5	125.9	Yes. Reduced delays improve travel time and better facilitate any potential future transit.	May help attract more riders with a reduction of higher-risk turning movements.	May help attract more pedestrians with a reduction of higher-risk turning movements.	May require closures of nearby accesses.	Lower risk. The area is subject to corridor-wide threats.	Yes. Substantively enhances evacuation options.	Somewhat. Would introduce new travel patterns.	No. Impactful to adjacent and extended community.	Possible impacts may include utilities, noise sensitive areas, hazardous materials sites, areas with higher low-income and minority populations, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	Does the intersection type allow adequate access to be provided to adjacent properties?	Does the alternative avoid encroachment into identified threat areas?	Does the alternative facilitate emergency evacuation/ access potential?	Does the alternative match the surrounding community context?	Does the alternative minimize community impacts?	Does the alternative avoid substantial impacts to natural environmental and cultural resources?		
2 - 87th St — County Line Rd.	US 287	*Option 6 - Full Displaced Left Turn*	*Potential improvement to safety.*	*Yes. Would limit potential conflict with other turning vehicles.*	*Yes. Improves visibility of bicyclists by reducing the potential of higher-risk turning movements.*	*Yes. Improves visibility of pedestrians by reducing the potential of higher-risk turning movements.*	*59.7**	*77.3**	*Yes. Reduced delays improve travel time and better facilitate any potential future transit.*	*May help attract more riders with a reduction of higher-risk turning movements.*	*May help attract more pedestrians with a reduction of higher-risk turning movements.*	*May require closure of nearby accesses.*	*Lower risk. The area is subject to corridor-wide threats.*	*Yes. Substantively enhances evacuation options.*	*Somewhat. Would introduce new travel patterns.*	*No. Impactful to adjacent and extended community.*	*Possible impacts may include utilities, noise sensitive areas, hazardous materials sites, areas with higher low-income and minority populations, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward*	
		Option 7 - Split Intersection for WB/Diamond Interchange for EB	*No Action will not improve safety at the intersection.*	*Yes. Would limit potential conflict with other turning vehicles.*	*Yes. Fewer conflicts with turning vehicles.*	*Yes. Fewer conflicts with turning vehicles.*	*103.0**	*133.5**	*Yes. Reduced delays improve travel time.*	*Yes. Makes more attractive with fewer conflicting vehicle movements.*	*Yes. Makes more attractive with fewer conflicting vehicle movements.*	*May require closure of nearby accesses.*	*Moderate bridge strike risk. The area is subject to corridor-wide threats.*	*Yes. Substantively enhances evacuation options.*	*Somewhat. Would introduce new travel patterns.*	*No. Impactful to adjacent and extended community.*	*Possible impacts may include utilities, noise sensitive areas, hazardous materials sites, areas with higher low-income and minority populations, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward*	

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

SH 66 Planning and Environmental Linkages Study

SH 66 PEL Level 3 Screening – Roadway

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	Does the intersection type allow adequate access to be provided to adjacent properties?	Does the alternative avoid encroachment into identified threat areas?	Does the alternative facilitate emergency evacuation/ access potential?	Does the alternative match the surrounding community context?	Does the alternative minimize community impacts?	Does the alternative avoid substantial impacts to natural environmental and cultural resources?		
2 - 87th St — County Line Rd.	US 287	*Option 8 - Echelon*	*No Action will not improve safety at the intersection.*	*Yes. Would limit potential conflict with other turning vehicles.*	*Yes. Improves visibility of bicyclists by reducing the potential of higher-risk turning movements.*	*Yes. Improves visibility of pedestrians by reducing the potential of higher-risk turning movements.*	*61.0**	*74.0**	*Yes. Reduced delays improve travel time.*	*May help attract more riders with a reduction of higher-risk turning movements.*	*May help attract more pedestrians with a reduction of higher-risk turning movements.*	*May require closure of nearby accesses.*	*Moderate bridge strike risk. The area is subject to corridor-wide threats.*	*Yes. Substantively enhances evacuation options.*	*Somewhat. Would introduce new travel patterns.*	*No. Impactful to adjacent and extended community.*	*Possible impacts may include utilities, noise sensitive areas, hazardous materials sites, areas with higher low-income and minority populations, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward*	
		Option 9 - Single Point Urban Interchange	*Noticeable improvement in safety is anticipated.*	*Yes. Would limit potential conflict with other turning vehicles.*	*Improves visibility of bicyclists by reducing the potential of higher-risk turning movements, but high-speed merges would be stressful and turns would be challenging.*	*No. Requires multiple crossings of high-speed traffic by pedestrians in every direction.*	*96.6*	*106.1*	*Yes. Reduced delays improve travel time.*	*No. Interchange environment with frequent merges and weaves would be stressful.*	*No. Crossings of high-speed interchange traffic would be stressful.*	*May require closure of nearby accesses.*	*Moderate bridge strike risk. The area is subject to corridor-wide threats.*	*Yes. Substantively enhances evacuation options.*	*Somewhat. Would introduce new travel patterns.*	*No. Impactful to adjacent and extended community.*	*Possible impacts may include utilities, noise sensitive areas, hazardous materials sites, areas with higher low-income and minority populations, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward*	

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Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
2 – 87th St — County Line Rd.	Wal-Mart Access	Option 1 – No Action	No crashes occurred during the analysis period, but No Action will not help prevent future crashes.	No change in safety.	No change in safety.	No change in safety.	N/A	N/A	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes	Yes. No impact.	Yes. No change from existing.	Not Recommended	
		Option 2 - Close (Reroute Traffic to Erfert Street)	***Safety will improve.***	***Yes. Closure would eliminate conflict with turning vehicles.***	***Yes. Closure would eliminate conflict with turning vehicles.***	***Yes. Closure would eliminate conflict with turning vehicles.***	***N/A***	***N/A***	***Yes. Closure would eliminate potential delay from turning vehicles.***	***Yes. Closure would improve mobility along SH 66 by eliminating turning vehicles.***	***Yes. Closure would improve mobility by eliminating turning vehicles.***	***<0.5 mi out-of-direction travel.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Somewhat. Would likely introduce new travel patterns.***	***Yes***	***Yes. Minor to no impacts to surrounding natural and cultural environment.***	***Carried Forward***	***Different than other closures because bike/ped/ transit have other more attractive options such as US 287 and Erfert St. Near-term disruption, but in the long term, it would support context.***
2 – 87th St — County Line Rd.	Erfert Street	Option 1 – No Action	LOSS III No action will not improve safety at the intersection.	No change in safety.	No change in safety.	No change in safety.	47.6	62.0	No mobility impacts, already signalized so good access preserved to potential future rail station to the north.	No mobility impacts.	No mobility impacts.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from Existing.	Yes	Yes, no impact.	Yes, no change from existing.	***Carried Forward***	Could consider pedestrian leading intervals at the existing signal.
2 – 87th St — County Line Rd.		***Option 2 - Channelized 'T'***	***Channelization of movements should improve safety.***	***Yes, would limit potential conflict of EB vehicles turning onto Erfert St.***	***No safety improvements; more lanes to cross.***	***No safety improvements; more lanes to cross.***	***44.6***	***58.8***	***Yes, could decrease delay from turning vehicles, especially EB.***	***No mobility improvements; more lanes to cross.***	***No mobility improvements; more lanes to cross.***	***No change from existing.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes***	***Yes***	***Yes, minor to no impacts to surrounding natural and cultural environment.***	Not Recommended	***Signalized Channelized T would lessen the negative impacts. Needs bike/ped solution since this could be the most comfortable crossing to Walmart for the neighborhoods south of SH 66.***

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Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
2 – 87th St — County Line Rd.	Railroad Crossing	Option 1 – No Action	No crashes occurred during the analysis period, but no action will not help prevent future crashes.	No change in safety.	No change in safety.	No change in safety.	N/A	N/A	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	N/A	No change from existing. Moderate risk near a railroad corridor. The area is subject to other corridor-wide threats.	No change from existing.	Yes	Yes, no impact.	Yes, no change from existing.	Not Recommended	
		Option 2 – Grade-separated	***Vehicle-Train conflict elimination should improve safety.***	***Yes, eliminates need for bus to stop at tracks, reducing collision potential with trains and vehicles.***	***Yes, eliminates need to cross tracks.***	***Yes, eliminates need to cross tracks.***	***N/A***	***N/A***	***Yes, eliminates delay of stopping at tracks and improves reliability.***	***Yes, makes crossing easier.***	***Yes, makes crossing easier.***	***Accesses may be impacted on the approach grades.***	***Moderate risk near a railroad corridor and bridge strikes. The area is subject to other corridor-wide threats.***	***Yes. Substantively enhances evacuation options.***	***Yes***	***Yes***	***Possible impacts may include trails and parks, areas of potential wetlands, utilities, noise sensitive areas, hazardous materials sites, areas with higher low-income and minority populations, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Long term option.*** ***Would help facilitate bike/ped access to planned future regional rail station and establishment of planned bike/ped grade-separated crossing at this location.***

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Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
2 – 87th St — County Line Rd.	N 115th St. / Alpine St.	Option 1 – No Action	4.8 Crashes/Yr No action will not improve safety at the intersection.	No change in safety.	No change in safety.	No change in safety.	81.4	99.0	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes	Yes, no impact.	Yes, no change from existing.	Not Recommended	Planned grade-separated trail crossing between 115th St. and Pace St. would lessen crossing issues for bikes/peds, but some on-street crossing activity would remain.
		Option 2 - Signalize and capacity improvements	***Could improve safety pending development and associated traffic level. Signal may contribute to rear-end crashes; auxiliary lanes may prevent some.***	***Yes, would limit potential conflict with other turning vehicles.***	***Yes, turning vehicle movements are more predictable and gives safer crossing, but added lanes to facilitate decreases comfort (higher LTS).***	***Yes, turning vehicle movements are more predictable and gives safer crossing, but added lanes to facilitate decreases comfort.***	***59.1***	***68.4***	***May slow down future transit but assists access to a future stop and potential future transit access.***	***Yes, makes crossing of SH 66 easier and more defined/visible.***	***Yes, makes crossing of SH 66 easier and more defined/visible.***	***No change from existing.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes***	***Yes, as long as minimal ROW is needed***	***Likely minor impacts may include trails and parks, utilities, noise sensitive areas, areas with higher low-income and minority populations, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Consider a LPI at the signal for greater visibility of crossing pedestrians.*** ***Planned grade-separated trail crossing between 115th St. and Pace St. would lessen crossing issues for bikes/peds, but some on-street crossing activity would remain.***
2 - 87th St — County Line Rd.	Pace Street	***Option 1 - No Action***	***5.6 Crashes/Yr (0.2 Fatal/Yr) No action will not improve safety at the intersection.***	***No change in safety.***	***No change in safety.***	***No change in safety.***	***109.9***	***127.7***	***No change to mobility and/or connectivity.***	***No change to mobility and/or connectivity.***	***No change to mobility and/or connectivity.***	***No change from existing.***	***No change from existing. Lower risk. The area is subject to corridor-wide threats.***	***No change from existing.***	***Yes***	***No change from existing.***	***Yes***	Not Recommended	***Planned grade-separated trail crossing between 115th St. and Pace St. would lessen crossing issues for bikes/peds, but some on-street crossing activity would remain.***

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Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	Does the intersection type allow adequate access to be provided to adjacent properties?	Does the alternative avoid encroachment into identified threat areas?	Does the alternative facilitate emergency evacuation/ access potential?	Does the alternative match the surrounding community context?	Does the alternative minimize community impacts?	Does the alternative avoid substantial impacts to natural environmental and cultural resources?		
2 - 87th St — County Line Rd.	Pace Street	***Option 2 - Capacity improvements***	***Could improve safety.***	***Yes, would reduce conflicts with other vehicles and improve ability of future transit to make a safe stop.***	***Maybe, reduced comfort with lanes added (higher LTS), but connection to grade-separated crossing may facilitate safer crossings.***	***Maybe, reduced comfort with lanes added, but connection to grade-separated crossing may facilitate safer crossings.***	***62.9***	***82.4***	***Yes, could reduce potential delay at intersection.***	***Yes, connection to grade-separated crossing would provide more connectivity.***	***Yes, connection to grade-separated crossing would provide more connectivity.***	***No change from existing.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes***	***Yes, as long as minimal additional ROW is needed***	***Likely minor impacts may include trails and parks, utilities, noise sensitive areas, hazardous materials sites, areas with higher low-income and minority populations, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Consider a LPI at the signal for greater visibility of crossing pedestrians.*** ***Planned grade-separated trail crossing between 115th St. and Pace St. would lessen crossing issues for bikes/peds, but some on-street crossing activity would remain.***
2 - 87th St — County Line Rd.	Sundance Drive/Rock Lane	Option 1 - No Action	No crashes occurred during the analysis period, but no action will not help prevent future crashes.	No change in safety.	No change in safety.	No change in safety.	85.1	96.9	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes	Yes, no impact.	Yes, no change from existing.	Not Recommended	
		Option 2 - Signalize and consolidate accesses on the north	***Consolidating accesses will improves safety; signal impact will depend on traffic level.***	***Yes, would limit potential conflict with other turning vehicles.***	***Yes, turning vehicle movements are more predictable and gives safer crossing, but added lanes to facilitate decreases comfort (higher LTS).***	***Yes, turning vehicle movements are more predictable and gives safer crossing, but added lanes to facilitate decreases comfort.***	***60.9***	***63.4***	***May slow down future transit but assists access to a future stop.***	***Yes, makes crossing of SH 66 easier and more defined/visible.***	***Yes, makes crossing of SH 66 easier and more defined/visible.***	***0.5 - 1.0 mi out of direction travel for accesses to north.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes***	***Yes***	***Yes, minor to no impacts to surrounding natural and cultural environment.***	***Carried Forward***	***Consider a LPI at the signal for greater visibility of crossing pedestrians.***
		Option 3 - 3/4 movement for north and south and consolidate accesses on the north	Reducing left turn conflicts will improve safety.	Yes, would reduce conflict with higher-risk turning movements of other vehicles.	Yes, improves visibility of bicyclists by reducing potential of higher-risk turning movements.	Yes, improves visibility of pedestrians by reducing potential of higher-risk turning movements.	44.8	58.4	No impact on existing service and unlikely that future service would need access.	May help attract more riders with reduction of higher-risk turning movements.	May help attract more pedestrians with reduction of higher-risk turning movements.	>1.0 mi out of direction travel.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Somewhat; would introduce new travel patterns.	Somewhat; changes existing access.	Yes, minor to no impacts to surrounding natural and cultural environment.	Not Recommended	Near-term disruption, but in the long-term it would support context. Ensure bike/ped connection to SH 66 to retain connectivity.

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SH 66 Planning and Environmental Linkages Study

SH 66 PEL Level 3 Screening – Roadway

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
2 - 87th St — County Line Rd.	Sundance Drive/Rock Lane	Option 4 – Right In/Right Out for north and south; consolidate accesses on the north	Fewer turning movement conflicts should improve safety.	Yes, would reduce conflict with higher-risk turning movements of other vehicles.	Yes, improves visibility of bicyclists by reducing potential of higher-risk turning movements.	Yes, improves visibility of pedestrians by reducing potential of higher-risk turning movements.	46.2	59.5	No impact on existing service and unlikely that future service would need access.	May help attract more riders with reduction of higher-risk turning movements.	May help attract more pedestrians with reduction of higher-risk turning movements.	>1.0 mi out of direction travel.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Somewhat; would introduce new travel patterns.	Somewhat; changes existing access.	Yes, minor to no impacts to surrounding natural and cultural environment.	Not Recommended	Physical enforcement of RI/RO could provide a small pedestrian refuge for people traveling along SH 66, improving safety further.
3 – County Line Rd. — 3rd St / WCR 7	County Line Road	Option 1 - No Action	8.4 Crashes/Yr (0.4 Fatal/Yr) Fatal/Yr) No action will not improve safety at the intersection.	No change in safety.	No change in safety.	No change in safety.	124.3	127.5	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes	Yes, no impact.	Yes, no change from existing.	Not Recommended	Crossings are a concern with bike lanes planned for the southern leg of County Line Rd.
		Option 2 - Capacity improvements to add turn lanes and acceleration lanes	***Potential improvement in safety.***	***Yes, would reduce conflicts with other vehicles and improve ability of future transit to make a safe stop.***	***No, would reduce comfort with lanes added (higher LTS).***	***No, would reduce comfort with lanes added; may increase crossing distance.***	***75.0***	***79.7***	***Yes, could reduce potential delay at intersection.***	***No mobility improvements; more lanes to cross.***	***No mobility improvements; more lanes to cross.***	***No change to access.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes***	***Yes; assuming minimal ROW is needed.***	***Possible impacts may include areas of potential wetlands, open space areas, utilities (including oil/gas production facilities), noise sensitive areas, areas with higher low-income and minority populations, a 303(d) waterbody, visual resources, and potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Crossings are a concern with bike lanes planned for the southern leg of County Line Rd.***

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Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	Does the intersection type allow adequate access to be provided to adjacent properties?	Does the alternative avoid encroachment into identified threat areas?	Does the alternative facilitate emergency evacuation/ access potential?	Does the alternative match the surrounding community context?	Does the alternative minimize community impacts?	Does the alternative avoid substantial impacts to natural environmental and cultural resources?		
3 – County Line Rd. — 3rd St / WCR 7	County Line Road	***Option 3 - Fully Displaced Left Turn***	***Noticeable improvement in safety is anticipated.***				***0.79***	***0.79***				***May require closure of nearby accesses.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes***	***Yes; assuming minimal ROW is needed.***	***Possible impacts may include areas of potential wetlands, open space areas, utilities (including oil/gas production facilities), noise sensitive areas, areas with higher low-income and minority populations, a 303(d) waterbody, visual resources, and potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	
		Option 4 - Grade-separation, such as Echelon, SPUI, or Diamond					***Varies by alternative; acceptable operations can be obtained***	***Varies by alternative; acceptable operations can be obtained***				***May require closure of nearby accesses.***						***Carried Forward***	
3 – County Line Rd. — 3rd St / WCR 7	Elmore Road	Option 1 - No Action	0.2 Crashes/Yr No action will not improve safety at the intersection, but crash frequency is low.	No change in safety.	No change in safety.	No change in safety.	92.9	103.5	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes, no change from existing.	Yes, no change from existing.	Yes, no change from existing.	Not Recommended	

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Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
3 – County Line Rd. — 3rd St / WCR 7	Elmore Road	Option 2 – Right In/Right Out and build parallel road to connect to WCR 1 and WCR 3	Elimination of left turns will improve safety.	Yes, would reduce conflict with higher-risk turning movements of other vehicles.	Yes, improves visibility of bicyclists by reducing potential of higher-risk turning movements.	Yes, improves visibility of pedestrians by reducing potential of higher-risk turning movements.	44.8	59.1	No impact on existing service and unlikely that future service would need access.	May help attract more riders with reduction of higher-risk turning movements.	May help attract more pedestrians with reduction of higher-risk turning movements.	>1.0 mi out of direction travel.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Somewhat; would introduce new travel patterns.	Somewhat; changes existing access.	Yes, minor to no impacts to surrounding natural and cultural environment.	Not Recommended	Also recommend a parallel road south of neighborhoods. Physical enforcement of RI/RO could provide a small pedestrian refuge for people traveling along SH 66, improving safety further.
		Option 3 - Close (emergency access only) and build parallel road to connect to WCR 1 and WCR 3	***Elimination of all turning movements will improve safety.***	***Yes, closure would eliminate conflict with turning vehicles.***	***Yes, closure would eliminate conflict with turning vehicles.***	***Yes, closure would eliminate conflict with turning vehicles.***	***N/A***	***N/A***	***Yes, closure would eliminate potential delay from turning vehicles, future need for access is unlikely.***	***Closure would improve mobility along SH 66 by eliminating turning vehicles, but reduces connectivity to SH 66.***	***Closure would improve mobility by eliminating turning vehicles, but reduces connectivity to SH 66.***	***>1.0 mi out of direction travel.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Somewhat; would introduce new travel patterns.***	***Somewhat; changes existing access.***	***Possible impacts may include bald eagle habitat, areas of potential wetlands, proposed trails, utilities, noise sensitive areas, 303(d) waterbody, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Ensure bike/ped connection to SH 66 to retain connectivity.*** ***Consider adding bicycle lanes and sidewalks on the parallel road facility.*** ***Near-term disruption, but in the long-term it would support context.***
3 – County Line Rd. — 3rd St / WCR 7	Nesting Crane Lane	Option 1 - No Action	0.2 Crashes/Yr No action will not improve safety at the intersection, but crash frequency is low.	No change in safety.	No change in safety.	No change in safety.	N/A	N/A	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes, no change from existing.	Yes, no change from existing.	Yes, no change from existing.	Not Recommended	n/a

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
3 – County Line Rd. — 3rd St / WCR 7	Nesting Crane Lane	Option 2 – Signalize; full movement	Could improve safety pending development and associated traffic level. Signal may contribute to rear-end crashes; auxiliary lanes may prevent some.	Yes, would limit potential conflict with other turning vehicles.	Yes, turning vehicle movements are more predictable and gives safer crossing, but added lanes to facilitate decreases comfort (higher LTS).	Yes, turning vehicle movements are more predictable and gives safer crossing, but added lanes to facilitate decreases comfort.	N/A	N/A	May slow down future transit, but assists access to a future stop.	Yes, makes crossing of SH 66 easier and more defined/visible.	Yes, makes crossing of SH 66 easier and more defined/visible.	No change from existing.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Yes	Yes	Possible impacts may include bald eagle habitat, areas of potential wetlands, proposed trails, utilities, noise sensitive areas, 303(d) waterbody, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Consider a LPI at the signal for greater visibility of crossing pedestrians.
		Option 3 - Channelized 'T'	Channelized turning movements will improve safety.	Yes, would limit potential conflict of EB vehicles turning onto Highland Dr.	No safety improvements; more lanes to cross.	No safety improvements; more lanes to cross.	N/A	N/A	Yes, could decrease delay from turning vehicles, especially EB.	No mobility improvements; more lanes to cross.	No mobility improvements; more lanes to cross.	No change from existing.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Somewhat; would introduce new travel patterns.	Somewhat; changes existing access.	Possible impacts may include bald eagle habitat, areas of potential wetlands, proposed trails, utilities, noise sensitive areas, 303(d) waterbody, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Signalized Channelized T would lessen the negative impacts.
		Option 4 - Close and build parallel road to connect to WCR 1 or WCR 3.	Eliminating turning movements will improve safety.	Yes, closure would eliminate conflict with turning vehicles.	Yes, closure would eliminate conflict with turning vehicles.	Yes, closure would eliminate conflict with turning vehicles.	N/A	N/A	Yes, closure would eliminate potential delay from turning vehicles, future need for access is unlikely.	Closure would improve mobility along SH 66 by eliminating turning vehicles, but reduces connectivity to SH 66.	Closure would improve mobility by eliminating turning vehicles, but reduces connectivity to SH 66.	>1.0 mi out of direction travel.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Somewhat; would introduce new travel patterns.	Somewhat; changes existing access.	Possible impacts may include bald eagle habitat, areas of potential wetlands, proposed trails, utilities, noise sensitive areas, 303(d) waterbody, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Ensure bike/ped connection to SH 66 to retain connectivity. Consider adding bicycle lanes and sidewalks on the parallel road facility. Near-term disruption, but in the long-term it would support context.
		Option 5 - 3/4 Movement and build parallel road to connect to WCR 1 or WCR 3.					***N/A***	***N/A***				***>1.0 mi out of direction travel.***						***Carried Forward***	

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
3 – County Line Rd. — 3rd St / WCR 7	WCR 3	Option 1 - No Action	1.2 Crashes/Yr No action will not improve safety at the intersection.	No change in safety.	No change in safety.	No change in safety.	161.8	201.0	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes, no change from existing.	Yes, no change from existing.	Yes, no change from existing.	Not Recommended	
		Option 2 - Signalize when warranted and capacity improvements	***Could improve safety pending development and associated traffic level. Signal may contribute to rear-end crashes; auxiliary lanes may prevent some***	***Yes, would limit potential conflict with other turning vehicles.***	***Yes, turning vehicle movements are more predictable and gives safer crossing, but added lanes to facilitate decreases comfort (higher LTS).***	***Yes, turning vehicle movements are more predictable and gives safer crossing, but added lanes to facilitate decreases comfort.***	***68.3***	***74.3***	***May slow down future transit, but assists access to a future stop.***	***Yes, makes crossing of SH 66 easier and more defined/visible.***	***Yes, makes crossing of SH 66 easier and more defined/visible.***	***No change from existing.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes***	***Yes, as long as additional ROW is not needed.***	***Possible impacts may include areas of potential wetlands, proposed trails, utilities, noise sensitive areas, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Consider a LPI at the signal for greater visibility of crossing pedestrians.***
		Option 3 - Roundabout	Roundabouts, when appropriately designed, have been shown to improve safety.	No change in safety.	Maybe, slows down traffic compared to uncontrolled intersection, but not as great of safety improvement compared to signal.	Maybe, slows down traffic compared to uncontrolled intersection, but not as great of safety improvement compared to signal.	0.88	1.06	Yes, if designed to accommodate bus turns, this would limit delay compared to a signal and keep access for any future potential transit on WCR 3.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing. Would provide additional u-turn opportunities for accesses to the east and west of intersection.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Somewhat; introduction of newer intersection design.	Yes, depending on ROW needs.	Possible impacts may include areas of potential wetlands, proposed trails, utilities, noise sensitive areas, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Speed limit is 65 mph; driver expectation, Expressway classification. Design would need to facilitate bike and ped activity, such as refuges.
3 – County Line Rd. — 3rd St / WCR 7	WCR 5	Option 1 - No Action	1.2 Crashes/Yr No action will not improve safety at the intersection.	No change in safety.	No change in safety.	No change in safety.	108.8	118.5	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes, no change from existing.	Yes, no change from existing.	Yes, no change from existing.	Not Recommended	Crossings a concern due to planned bike lanes on WCR 5.

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Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
3 – County Line Rd. — 3rd St / WCR 7	WCR 5	***Option 2 – Signalize when warranted and capacity improvements***	***Could improve safety pending development and associated traffic level. Signal may contribute to rear-end crashes; auxiliary lanes may prevent some.***	***No change in safety.***	***No, expansion to 4-lanes will make this intersection wider to cross, reducing level of comfort.***	***No, expansion to 4-lanes will make this intersection wider to cross, reducing level of comfort.***	***66.3***	***71.9***	***No change to mobility and/or connectivity.***	***No mobility improvements; more lanes to cross.***	***No mobility improvements; more lanes to cross.***	***No change from existing.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes***	***Yes, if additional ROW is not needed.***	***Possible impacts may include areas of potential wetlands, proposed trails, utilities, noise sensitive areas, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***A signal would create an improvement by making it safer and more comfortable to cross, improving mobility and connectivity. Consider a LPI at the signal for greater visibility of crossing pedestrians.*** ***Plan to connect to Mead's planned on-street bicycle and sidewalk system.***
		Option 3 - Roundabout	Roundabouts, when appropriately designed, have been shown to improve safety.	No change in safety.	No, slows down traffic compared to uncontrolled intersection, but with planned bike lanes on WCR 5 and SH 66 planned for 4-lanes, this would make it difficult to cross SH 66.	No, slows down traffic compared to uncontrolled intersection, but with planned bike lanes on WCR 5 and SH 66 planned for 4-lanes, this would make it difficult to cross SH 66.	1.00	1.10	Yes, if designed to accommodate bus turns, this would limit delay compared to a signal and keep access for any future potential transit on WCR 3.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing. Would provide additional u-turn opportunities for accesses to the east and west of intersection.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Somewhat; introduction of newer intersection design may be temporarily disruptive.	Yes, depending on ROW needs.	Possible impacts may include areas of potential wetlands, proposed trails, utilities, noise sensitive areas, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Design would need to facilitate bike and ped activity, such as refuges and bike lanes. Plan to connect to Mead's planned on-street bicycle and sidewalk system.
3 – County Line Rd. — 3rd St / WCR 7	Railroad Crossing	Option 1 - No Action	No crashes occurred during the analysis period, but no action will not help prevent future crashes.	No change in safety.	No change in safety.	No change in safety.	N/A	N/A	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Moderate risk near a railroad corridor. The area is subject to other corridor-wide threats.	No change from existing.	Yes, no change from existing.	Yes, no change from existing.	Yes, no change from existing.	Not Recommended	

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Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	Does the intersection type allow adequate access to be provided to adjacent properties?	Does the alternative avoid encroachment into identified threat areas?	Does the alternative facilitate emergency evacuation/ access potential?	Does the alternative match the surrounding community context?	Does the alternative minimize community impacts?	Does the alternative avoid substantial impacts to natural environmental and cultural resources?		
3 – County Line Rd. — 3rd St / WCR 7	Railroad Crossing	***Option 2 - Grade-Separate***	***Elimination of vehicle-train conflicts will improve safety.***	***Yes, eliminates need for bus to stop at tracks, reducing collision potential with trains and vehicles.***	***Yes, eliminates need to cross tracks.***	***Yes, eliminates need to cross tracks.***	***N/A***	***N/A***	***Yes, eliminates delay of stopping at tracks and improves reliability.***	***Yes, makes crossing easier.***	***Yes, makes crossing easier.***	***May require closure of accesses on SH 66 on approach grade.***	***Moderate risk near a railroad corridor and bridge strikes. The area is subject to other corridor-wide threats.***	***Yes. Substantively enhances evacuation options.***	***Yes***	***Yes***	***Possible impacts may include areas of potential wetlands, proposed trails, utilities, noise sensitive areas, hazardous material sites (including a Superfund site), 303(d) waterway, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Could help facilitate planned trail underpass near this location.***
3 – County Line Rd. — 3rd St / WCR 7	WCR 5.5	Option 1 - No Action	0.8 Crashes/Yr No action will not improve safety at the intersection, but crash frequency is low.	No change in safety.	No change in safety.	No change in safety.	N/A	N/A	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Moderate risk near a railroad corridor. The area is subject to other corridor-wide threats.	No change from existing.	Yes, no change from existing.	Yes, no change from existing.	Yes, no change from existing.	Not Recommended	
		Option 2 - Full movement, signalize in interim when railroad is at-grade	***Could improve safety pending development and associated traffic level. Signal may contribute to rear-end crashes; auxiliary lanes may prevent some.***	***Yes, would limit potential conflict with other turning vehicles.***	***Yes, turning vehicle movements are more predictable and gives safer crossing, but added lanes to facilitate decreases comfort (higher LTS).***	***Yes, turning vehicle movements are more predictable and gives safer crossing, but added lanes to facilitate decreases comfort.***	***N/A***	***N/A***	***May slow down future transit, but assists access to a future stop.***	***Yes, makes crossing of SH 66 easier and more defined/visible.***	***Yes, makes crossing of SH 66 easier and more defined/visible.***	***No change from existing.***	***Moderate risk near a railroad corridor. The area is subject to other corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes***	***Yes, if additional ROW is not needed.***	***Possible impacts may include areas of potential wetlands, proposed trails, utilities, noise sensitive areas, hazardous material sites (including a Superfund site), 303(d) waterway, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
3 – County Line Rd. — 3rd St / WCR 7	WCR 5.5	Option 3 – Grade separate with no direct access to SH 66 if railroad is grade-separated	Reducing conflicts will improve safety	Yes, eliminates conflict with turning vehicles.	Yes, eliminates conflict with turning vehicles.	Yes, eliminates conflict with turning vehicles.	N/A	N/A	Yes, closure would eliminate potential delay from turning vehicles, future need for access is unlikely given better alternatives.	Closure would improve mobility along and across SH 66 by eliminating turning vehicles, but reduces connectivity to SH 66.	Closure would improve mobility along and across SH 66 by eliminating turning vehicles, but reduces connectivity to SH 66.	May be >1.0 mi out of direction travel (dependent on final configuration)	Moderate risk near a railroad corridor. The area is subject to other corridor-wide threats.	Moderately enhances evacuation options.	Somewhat as it prioritizes and allows for local circulation; but may be visually disruptive given the grade separation.	Somewhat; changes access to and from the highway; minimizes ROW impact	Possible impacts may include areas of potential wetlands, proposed trails, utilities, noise sensitive areas, hazardous material sites (including a Superfund site), 303(d) waterway, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Consider interim improvement that keeps full movement access until grade-separation is warranted. Would best address safety and mobility needs. Ensure bike/ped connection to SH 66 to retain connectivity.
		Option 4 - Right In/Right Out if/when railroad is grade-separated					***N/A***	***N/A***				***0.5 - 1.0 mi out of direction travel***						***Carried Forward***	
3 – County Line Rd. — 3rd St / WCR 7	Stage Coach Drive	Option 1 - No Action	0.2 Crashes/Yr No action will not improve safety at the intersection, but crash frequency is low.	No change in safety.	No change in safety.	No change in safety.	N/A	N/A	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes, no change from existing.	Yes, no change from existing.	Yes, no change from existing.	Not Recommended	
		Option 2 – 3/4 movement	***Elimination of left turn will improve safety.***	***Yes, would reduce conflict with higher-risk turning movements of other vehicles.***	***Yes, improves visibility of bicyclists by reducing potential of higher-risk turning movements.***	***Yes, improves visibility of pedestrians by reducing potential of higher-risk turning movements.***	***N/A***	***N/A***	***No impact on existing service and unlikely that future service would need access.***	***May help attract more riders with reduction of higher-risk turning movements.***	***May help attract more pedestrians with reduction of higher-risk turning movements.***	***>1.0 mi out of direction travel.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Somewhat; would introduce new travel patterns.***	***Somewhat; changes existing access.***	***Yes, minor to no impacts to surrounding natural and cultural environment.***	***Carried Forward***	
		Option 3 – Right In/Right Out	Elimination of left turn will improve safety.	Yes, would reduce conflict with higher-risk turning movements of other vehicles.	Yes, improves visibility of bicyclists by reducing potential of higher-risk turning movements.	Yes, improves visibility of pedestrians by reducing potential of higher-risk turning movements.	N/A	N/A	No impact on existing service and unlikely that future service would need access.	May help attract more riders with reduction of higher-risk turning movements.	May help attract more pedestrians with reduction of higher-risk turning movements.	>1.0 mi out of direction travel.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Somewhat; would introduce new travel patterns.	Somewhat; changes existing access.	Yes, minor to no impacts to surrounding natural and cultural environment.	Not Recommended	

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

SH 66 PEL Level 3 Screening – Roadway

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
3 – County Line Rd. — 3rd St / WCR 7	Stage Coach Drive	Option 4 - Close	Elimination of all turning movement conflicts will improve safety.	Yes, closure would eliminate conflict with turning vehicles.	Yes, closure would eliminate conflict with turning vehicles.	Yes, closure would eliminate conflict with turning vehicles.	N/A	N/A	Yes, closure would eliminate potential delay from turning vehicles, future need for access is unlikely given better alternatives.	Closure would improve mobility along SH 66 by eliminating turning vehicles but reduces connectivity to SH 66.	Closure would improve mobility by eliminating turning vehicles but reduces connectivity to SH 66.	>1.0 mi out of direction travel.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Somewhat; would introduce new travel patterns.	Somewhat; changes existing access; but no ROW needed.	Yes, minor to no impacts to surrounding natural and cultural environment.	Not Recommended	Other access points/facilities would help facilitate any need to access SH 66.
4 – 3rd St. / WCR 7 — WCR 11	3rd Street/WCR 7	Option 1 - No Action	5.6 Crashes/Yr No action will not improve safety at the intersection.	No change in safety.	No change in safety.	No change in safety.	168.2	183.1	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes, no changes from existing.	Yes, no changes from existing.	Yes, no change from existing.	Not Recommended	Planned grade-separated trail crossing at this location would lessen crossing issues for bikes/peds, but some on-street crossing activity would remain.
		Option 2 –Capacity improvements	***Could improve safety pending development and associated traffic level.***	***Yes, would limit potential conflict with other turning vehicles.***	***Yes, turning vehicle movements are more predictable and gives safer crossing, but added lanes to facilitate decreases comfort (higher LTS).***	***Yes, turning vehicle movements are more predictable and gives safer crossing, but added lanes to facilitate decreases comfort.***	***76.0***	***91.2***	***May slow down future transit, but assists access to a future stop.***	***Yes, makes crossing of SH 66 easier and more defined/visible.***	***Yes, makes crossing of SH 66 easier and more defined/visible.***	***No change from existing.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes***	***Yes, if minimal additional ROW is needed.***	***Yes, minor to no impacts to surrounding natural and cultural environment.***	***Carried Forward***	***Plan to connect to Mead's planned on-street bicycle and sidewalk system.*** ***Planned grade-separated trail crossing at intersection would lessen crossing issues for bikes/peds, but some on-street crossing activity would remain.*** ***Consider a LPI at the signal for greater visibility of crossing pedestrians.*** ***Near-term disruption, but in the long-term it would support context.***

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Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
4 – 3rd St. / WCR 7 — WCR 11	Foster Ridge Road	Option 1 - No Action	0.2 Crashes/Yr No action will not improve safety at the intersection, but crash frequency is low.	If park-n-ride facilitates transit in the future, no changes may make it unsafe for buses to enter/exit.	No change in safety.	No change in safety.	N/A	N/A	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes, no changes from existing	Yes, no changes from existing	Yes, no change from existing.	Not Recommended	Planned grade-separated trail crossing near this location would lessen crossing issues for bikes/peds, but some on-street crossing activity would remain.
		Option 2 - Signalize, when warranted with future development	***Could improve safety pending development and associated traffic level. Signal may contribute to rear-end crashes; auxiliary lanes may prevent some.***	***Yes, if park-n-ride facilitates transit in the future, signal would make entry/exit safer.***	***Yes, turning vehicle movements are more predictable and gives safer crossing, but added lanes to facilitate decreases comfort (higher LTS).***	***Yes, turning vehicle movements are more predictable and gives safer crossing, but added lanes to facilitate decreases comfort.***	***N/A***	***N/A***	***Yes, if park-n-ride facilitates transit in the future, signal would facilitate access more effectively, decreasing delays.***	***Yes, makes crossing of SH 66 easier and more defined/visible.***	***Yes, makes crossing of SH 66 easier and more defined/visible.***	***No change from existing.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes***	***Yes***	***Yes, minor to no impacts to surrounding natural and cultural environment.***	***Carried Forward***	***Planned grade-separated trail crossing near this location would lessen crossing issues for bikes/peds, but some on-street crossing activity would remain.*** ***Consider a LPI at the signal for greater visibility of crossing pedestrians.***
4 – 3rd St. / WCR 7 — WCR 11	I-25 SB Ramps	***Option 1 - No Action***	***4.4 Crashes/Yr No action will not improve safety at the intersection.***	***No change in safety.***	***No change in safety.***	***No change in safety.***	***76.9***	***70.7***	***No change to mobility and/or connectivity.***	***No change to mobility and/or connectivity.***	***No change to mobility and/or connectivity.***	***No change from existing.***	***No change. Moderate risk with bridge strike potential. The area is subject to other corridor-wide threats.***	***No change from existing.***	***Yes***	***Yes***	***Yes, no change from existing.***	***Carried Forward***	***Consider adding an LPI phase at the signal for greater visibility of crossing pedestrians.***
4 – 3rd St. / WCR 7 — WCR 11	I-25 NB Ramps	***Option 1 - No Action***	***2.6 Crashes/Yr No action will not improve safety at the intersection.***	***No change in safety.***	***No change in safety.***	***No change in safety.***	***67.7***	***70.7***	***No change to mobility and/or connectivity.***	***No change to mobility and/or connectivity.***	***No change to mobility and/or connectivity.***	***No change from existing.***	***No change. Moderate risk with bridge strike potential. The area is subject to other corridor-wide threats.***	***No change from existing.***	***Yes***	***Yes***	***Yes, no change from existing.***	***Carried Forward***	***Consider adding an LPI phase at the signal for greater visibility of crossing pedestrians.***

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
4 – 3rd St. / WCR 7 — WCR 11	Mead Street	Option 1 - No Action	3.2 Crashes/Yr No action will not improve safety at the intersection.	No change in safety.	No change in safety.	No change in safety.	85.2	96.8	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes, no changes to existing.	Yes, no changes to existing.	Yes, no change from existing.	Not Recommended	XXXX
		Option 2 - 3/4 movement north and south side with connections to WCR 9.5	***Elimination of left turn movements will improve safety.***	***Yes, would reduce conflict with higher-risk turning movements of other vehicles.***	***Yes, improves visibility of bicyclists by reducing potential of higher-risk turning movements.***	***Yes, improves visibility of pedestrians by reducing potential of higher-risk turning movements.***	***50.3***	***65.3***	***No impact on existing service and unlikely that future service would need access.***	***May help attract more riders with reduction of higher-risk turning movements.***	***May help attract more pedestrians with reduction of higher-risk turning movements.***	***0.5 - 1.0 mi out of direction travel for accesses to north.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Somewhat; would introduce new travel patterns.***	***Somewhat; changes existing access.***	***Possible impacts may include proposed trails, utilities (cell tower), noise sensitive areas, hazardous material sites, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Near-term disruption, but in the long-term it would support context.***
		Option 3 – Right In/Right Out on both sides with U--turn option at WCR 9.5 to go west	Elimination of all left turns will improve safety.	Yes, would reduce conflict with higher-risk turning movements of other vehicles.	Yes, improves visibility of bicyclists by reducing potential of higher-risk turning movements.	Yes, improves visibility of pedestrians by reducing potential of higher-risk turning movements.	50.3	65.3	No impact on existing service and unlikely that future service would need access.	May help attract more riders with reduction of higher-risk turning movements.	May help attract more pedestrians with reduction of higher-risk turning movements.	0.5 – 1.0 mi out of direction travel for accesses to north.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Somewhat; would introduce new travel patterns.	Somewhat; changes existing access.	Possible impacts may include proposed trails, utilities (i.e., cell tower), noise sensitive areas, hazardous material sites, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Near-term disruption, but in the long-term it would support context. Physical enforcement of RI/RO could provide a small pedestrian refuge for people traveling along SH 66, improving safety further.
4 – 3rd St. / WCR 7 — WCR 11	Deere Court	Option 1 - No Action	0.2 Crashes/Yr Crashes/Yr No action will not improve safety at the intersection, but crash frequency is low.	No change in safety.	No change in safety.	No change in safety.	N/A	N/A	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes, no changes to existing.	Yes, no changes to existing.	Yes, no change from existing.	Not Recommended	

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Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
4 – 3rd St. / WCR 7 — WCR 11	Deere Court	Option 2 – Right In/Right Out	Elimination of left turn movements will improve safety.	Yes, would reduce conflict with higher-risk turning movements of other vehicles.	Yes, improves visibility of bicyclists by reducing potential of higher-risk turning movements.	Yes, improves visibility of pedestrians by reducing potential of higher-risk turning movements.	N/A	N/A	No impact on existing service and unlikely that future service would need access.	May help attract more riders with reduction of higher-risk turning movements.	May help attract more pedestrians with reduction of higher-risk turning movements.	<0.5 mi out of direction travel.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Somewhat; introduces new travel patterns.	Somewhat; changes existing access.	Yes, minor to no impacts to surrounding natural and cultural environment.	Not Recommended	Physical enforcement of RI/RO could provide a small pedestrian refuge for people traveling along SH 66, improving safety further.
		Option 3 - Close and provide access to WCR 9.5 and Mead Street on south end of cul-de-sac	***Elimination of all left turns will improve safety.***	***Yes, closure would eliminate conflict with turning vehicles.***	***Yes, closure would eliminate conflict with turning vehicles.***	***Yes, closure would eliminate conflict with turning vehicles.***	***N/A***	***N/A***	***Yes, closure would eliminate potential delay from turning vehicles, future need for access is unlikely.***	***Closure would improve mobility along SH 66 by eliminating turning vehicles, but reduces connectivity to SH 66.***	***Closure would improve mobility by eliminating turning vehicles, but reduces connectivity to SH 66.***	***<0.5 mi out of direction travel.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Somewhat; would introduce new travel patterns.***	***Somewhat; changes existing access.***	***Yes, minor to no impacts to surrounding natural and cultural environment.***	***Carried Forward***	***Ensure bike/ped connection to SH 66 to retain connectivity.***
4 – 3rd St. / WCR 7 — WCR 11	WCR 9.5	Option 1 - No Action	2.8 Crashes/Yr No action will not improve safety at the intersection.	No change in safety.	No change in safety.	No change in safety.	137.3	167.8	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes, no changes to existing.	Yes, no changes to existing.	Yes, no change from existing.	Not Recommended	
		Option 2 - Grade-separate	***Reducing conflicts would improve safety.***	***Yes, would limit potential conflict with other turning vehicles.***	***Yes, less conflicts with turning vehicles along SH 66, but could make bike travel along WCR 9.5 less safe with ramps / more signals.***	***Yes, less conflicts with turning vehicles along SH 66, but could make ped travel along WCR 9.5 less safe with ramps / more signals.***	***Varies by design; acceptable operations can be obtained***	***Varies by design; acceptable operations can be obtained***	***Yes, reduced delays improve travel time for any potential future transit and better facilitates access to/from WCR 9.5.***	***Yes, makes crossing WCR 9.5 easier, but could lead to more out-of-direction travel to/from WCR 9.5.***	***Yes, makes crossing WCR 9.5 easier, but could lead to more out-of-direction travel to/from WCR 9.5.***	***May require closure of nearby accesses.***	***Moderate risk for bridge strikes. The area is subject to corridor-wide threats.***	***Substantively enhances evacuation options.***	***Somewhat; may be visually disruptive to the surrounding area.***	***Somewhat; depends on needed ROW.***	***Possible impacts may include proposed trails, utilities (including oil/gas production facilities), noise sensitive areas, hazardous material sites, areas with higher low-income populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Preferred by Weld County, but improvement is beyond the needs of this planning horizon.*** ***Preserve ROW until funding becomes available.*** ***CR 9.5, so an interchange could make travel to/from WCR 9.5 more difficult.*** ***Consider adding an LPI phase at signals for greater visibility of crossing pedestrians.***

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Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	Does the intersection type allow adequate access to be provided to adjacent properties?	Does the alternative avoid encroachment into identified threat areas?	Does the alternative facilitate emergency evacuation/ access potential?	Does the alternative match the surrounding community context?	Does the alternative minimize community impacts?	Does the alternative avoid substantial impacts to natural environmental and cultural resources?		
4 – 3rd St. / WCR 7 — WCR 11	WCR 9.5	***Option 3 - Capacity improvements***	***Some safety improvement possible.***	***Yes, would reduce conflicts with other vehicles and improve ability of future transit to make a safe stop.***	***No, would reduce comfort with lanes added (higher LTS).***	***No, would reduce comfort with lanes added; may increase crossing distance***	***53.6***	***54.7***	***Yes, could reduce potential delay at intersection.***	***No mobility improvements; more lanes to cross.***	***No mobility improvements; more lanes to cross.***	***No change from existing.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes***	***Yes, as long as minimal additional ROW is needed.***	***Yes, minor to no impacts to surrounding natural and cultural environment.***	***Carried Forward***	***WCR 9.5 is planned to have regionally continuity. There is a coalition in place for this road. Longer-term regional vision is for this to be a major north/ south road to replace I-25 frontage roads.*** ***Consider adding an LPI phase at the signal for greater visibility of crossing pedestrians.***
		Option 4 – Roundabout	Roundabouts, when appropriately designed, have been shown to improve safety.	No, this would be a large roundabout with potential traffic conflicts at stops directly adjacent to the roundabout.	No, heavy traffic volumes through this area and a multi-lane configuration would likely create an unsafe condition.	No, heavy traffic volumes through this area and a multi-lane configuration would likely create an unsafe condition.	1.42	2.76	Yes, if designed to accommodate bus turns, this could limit delay compared to a signal.	No, high traffic volumes in the roundabout could diminish mobility.	No, would make crossings more difficult.	Would provide a location for u-turns for nearby intersections.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Somewhat; introduction of newer intersection design may be temporarily disruptive.	Yes, depending on ROW needs.	Yes, minor to no impacts to surrounding natural and cultural environment.	Not Recommended	
		Option 5 - Partial Displaced Left Turn (for WB and EB left turns)	***Potential improvement to safety.***	***Yes, would limit potential conflict with other turning vehicles.***	***Yes, improves visibility of bicyclists by reducing potential of higher-risk turning movements.***	***Yes, improves visibility of pedestrians by reducing potential of higher-risk turning movements.***	***74.7***	***77.5***	***Yes, reduced delays improve travel time and better facilitates any potential future transit.***	***May help attract more riders with reduction of higher-risk turning movements.***	***May help attract more pedestrians with reduction of higher-risk turning movements.***	***May require closure of nearby accesses.***	***Lower risk. The area is subject to corridor-wide threats.***	***Substantively enhances evacuation options.***	***Somewhat; introduction of newer intersection design may be temporarily disruptive.***	***No; impactful to adjacent and extended community.***	***Possible impacts may include utilities, noise sensitive areas, hazardous materials sites, areas with higher low-income and minority populations, visual resources, and potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	

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Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	Does the intersection type allow adequate access to be provided to adjacent properties?	Does the alternative avoid encroachment into identified threat areas?	Does the alternative facilitate emergency evacuation/ access potential?	Does the alternative match the surrounding community context?	Does the alternative minimize community impacts?	Does the alternative avoid substantial impacts to natural environmental and cultural resources?		
4 – 3rd St. / WCR 7 — WCR 11	WCR 9.5	*Option 6 - Split Intersection for WB/Diamond Interchange for EB*	*Noticeable improvement in safety is anticipated.*	*Yes, would limit potential conflict with other turning vehicles.*	*Yes, less conflicts with turning vehicles.*	*Yes, less conflicts with turning vehicles.*	*91.4*	*102.2*	*Yes, reduced delays improve travel time.*	*Yes, makes more attractive with less conflicting vehicle movements.*	*Yes, makes more attractive with less conflicting vehicle movements.*	*May require closure of nearby accesses.*	*Moderate risk for bridge strikes. The area is subject to corridor-wide threats.*	*Substantively enhances evacuation options.*	*No; does not match current rural context but may match as development occurs.*	*No; impactful to adjacent and extended community.*	*Possible impacts may include utilities, noise sensitive areas, hazardous materials sites, areas with higher low-income and minority populations, visual resources, and potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward*	
		Option 7 - Echelon	*Noticeable improvement in safety is anticipated*	*Yes, would limit potential conflict with other turning vehicles.*	*Yes, improves visibility of bicyclists by reducing potential of higher-risk turning movements.*	*Yes, improves visibility of pedestrians by reducing potential of higher-risk turning movements.*	*0.44*	*0.61*	*Yes, reduced delays improve travel time.*	*May help attract more riders with reduction of higher-risk turning movements.*	*May help attract more pedestrians with reduction of higher-risk turning movements.*	*May require closure of nearby accesses.*	*Moderate bridge strike risk. The area is subject to corridor-wide threats.*	*Substantively enhances evacuation options.*	*Somewhat; introduction of newer intersection design may be temporarily disruptive.*	*No; impactful to adjacent and extended community.*	*Possible impacts may include utilities, noise sensitive areas, hazardous materials sites, areas with higher low-income and minority populations, visual resources, and potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward*	
		Option 8 – Traditional Diamond	*Noticeable improvement in safety is anticipated*	*Yes, would limit potential conflict with other turning vehicles.*	*No, would reduce comfort with high-speed interchange environment and lanes added (higher LTS).*	*No, would reduce comfort with high-speed interchange environment lanes added; may increase crossing distance*	*0.69*	*0.84*	*Yes, reduced delays improve travel time.*	*No, interchange environment with frequent merges and weaves would be stressful.*	*No, crossings of high-speed interchange traffic would be stressful.*	*May require closure of nearby accesses.*	*Moderate bridge strike risk. The area is subject to corridor-wide threats.*	*Substantively enhances evacuation options.*	*No; does not match current rural context but may match as development occurs.*	*No; impactful to adjacent and extended community.*	*Possible impacts may include utilities, noise sensitive areas, hazardous materials sites, areas with higher low-income and minority populations, visual resources, and potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward*	

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Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	Does the intersection type allow adequate access to be provided to adjacent properties?	Does the alternative avoid encroachment into identified threat areas?	Does the alternative facilitate emergency evacuation/ access potential?	Does the alternative match the surrounding community context?	Does the alternative minimize community impacts?	Does the alternative avoid substantial impacts to natural environmental and cultural resources?		
4 – 3rd St. / WCR 7 — WCR 11	WCR 9.5	***Option 9 - Single Point Urban Interchange***	***Noticeable improvement in safety is anticipated***	***Yes, would limit potential conflict with other turning vehicles.***	***Improves visibility of bicyclists by reducing potential of higher-risk turning movements, but high-speed merges would be stressful and turns would be challenging.***	***No, requires multiples crossings of high-speed traffic by pedestrians in every direction.***	***0.76***	***0.95***	***Yes, reduced delays improve travel time.***	***No, interchange environment with frequent merges and weaves would be stressful.***	***No, crossings of high-speed interchange traffic would be stressful.***	***May require closure of nearby accesses.***	***Moderate risk for bridge strikes. The area is subject to corridor-wide threats.***	***Substantively enhances evacuation options.***	***No; does not match current rural context but may match as development occurs.***	***No; impactful to adjacent and extended community.***	***Possible impacts may include utilities, noise sensitive areas, hazardous materials sites, areas with higher low-income and minority populations, visual resources, and potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	
5a – WCR 11 — WCR 13	WCR 11	Option 1 - No Action	0.6 Crashes/Yr Crashes/Yr No action will not improve safety at the intersection, but crash frequency is low.	No change in safety.	No change in safety.	No change in safety.	114.1	115.6	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes, no change from existing.	Yes, no change from existing.	Yes, no change from existing.	Not Recommended	
		Option 2 - Signalize when warranted with future development	***Could improve safety pending development and associated traffic level. Signal may contribute to rear-end crashes; auxiliary lanes may prevent some.***	***Yes, would limit potential conflict with other turning vehicles.***	***Yes, turning vehicle movements are more predictable and gives safer crossing, but added lanes to facilitate decreases comfort (higher LTS).***	***Yes, turning vehicle movements are more predictable and gives safer crossing, but added lanes to facilitate decreases comfort.***	***59.7***	***64.8***	***May slow down future transit, but assists access to a future stop.***	***Yes, makes crossing of SH 66 easier and more defined/visible.***	***Yes, makes crossing of SH 66 easier and more defined/visible.***	***No change from existing.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes***	***Yes, if minimal additional ROW is needed.***	***Possible impacts may include proposed trails, utilities (including oil/gas production facilities), noise sensitive areas, areas with higher low-income populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Consider adding an LPI phase at the signal for greater visibility of crossing pedestrians.***

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Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
5a – WCR 11 — WCR 13	WCR 11	Option 3 – Roundabout	Roundabouts, when appropriately designed, have been shown to improve safety	No change in safety.	Maybe, slows down traffic compared to uncontrolled intersection, but not as great of safety improvement compared to signal.	Maybe, slows down traffic compared to uncontrolled intersection, but not as great of safety improvement compared to signal.	0.82	0.92	Yes, if designed to accommodate bus turns, this would limit delay compared to a signal and keep access for any future potential transit on WCR 11.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing. Would provide additional u-turn opportunities for accesses to the east and west of intersection.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Somewhat; introduction of newer intersection design to a rural context.	Somewhat; depending on ROW needs.	Possible impacts may include proposed trails, utilities (including oil/gas production facilities), noise sensitive areas, areas with higher low-income populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Design would need to facilitate bike and ped activity, such as refuges.
5a – WCR 11 — WCR 13	WCR 11.5	Option 1 - No Action	No crashes occurred during the analysis period, but no action will not help prevent future crashes.	No change in safety.	No change in safety.	No change in safety.	N/A	N/A	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes, no change from existing.	Yes, no change from existing.	Yes, no change from existing.	Not Recommended	
		Option 2 - Signalize when warranted with future development	***Could improve safety pending development and associated traffic level. Signal may contribute to rear-end crashes; auxiliary lanes may prevent some.***	***Yes, would limit potential conflict with other turning vehicles.***	***Yes, turning vehicle movements are more predictable and gives safer crossing, but added lanes to facilitate decreases comfort (higher LTS).***	***Yes, turning vehicle movements are more predictable and gives safer crossing, but added lanes to facilitate decreases comfort.***	***N/A***	***N/A***	***May slow down future transit, but assists access to a future stop.***	***Yes, makes crossing of SH 66 easier and more defined/visible.***	***Yes, makes crossing of SH 66 easier and more defined/visible.***	***No change from existing.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes***	***Yes, as long as minimal ROW is needed (for turn lanes, etc.).***	***Possible impacts may include potential wetlands, proposed trails, utilities (including oil/gas production facilities), noise sensitive areas, areas with higher low-income populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Consider a LPI at the signal for greater visibility of crossing pedestrians.***

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
5a – WCR 11 — WCR 13	WCR 11.5	Option 3 – Roundabout	Roundabouts, when appropriately designed, have been shown to improve safety.	No change in safety.	Maybe, slows down traffic compared to uncontrolled intersection, but not as great of safety improvement compared to signal.	Maybe, slows down traffic compared to uncontrolled intersection, but not as great of safety improvement compared to signal.	N/A	N/A	Yes, if designed to accommodate bus turns, this would limit delay compared to a signal and keep access for any future potential transit on WCR 11.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Somewhat; introduction of newer intersection design to a rural context.	Somewhat, depending on ROW needs.	Possible impacts may include potential wetlands, proposed trails, utilities (including oil/gas production facilities), noise sensitive areas, areas with higher low-income populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Design would need to facilitate bike and ped activity, such as refuges.
5b – WCR 13 — WCR 19	WCR 13/ Colorado Boulevard	Option 1 - No Action	4.2 Crashes/Yr No action will not improve safety at the intersection.	No change in safety.	No, expansion to 4-lanes to the west will make this intersection wider to cross, reducing level of comfort.	No, expansion to 4-lanes to the west will make this intersection wider to cross, reducing level of comfort.	131.7	137.2	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes, no change from existing.	Yes, no change from existing.	Yes, no change from existing.	Not Recommended	
		Option 2 – Grade-separate	***Significant reduction in conflicts should improve safety.***	***Yes, would limit potential conflict with other turning vehicles***	***Yes, less conflicts with turning vehicles.***	***Yes, less conflicts with turning vehicles.***	***Varies by design; acceptable operations can be obtained***	***Varies by design; acceptable operations can be obtained***	***Yes, reduced delays and improve travel time.***	***Yes, makes more attractive with less conflicting vehicle movements.***	***Yes, makes more attractive with less conflicting vehicle movements.***	***May require closure of nearby accesses.***	***Moderate bridge strike risk. The area is subject to corridor-wide threats.***	***Yes. Substantively enhances evacuation options.***	***Somewhat; may be visually disruptive to the surrounding area.***	***Somewhat; depends on needed ROW.***	***Possible impacts may include potential wetlands, proposed trails, utilities (including oil/gas production facilities), noise sensitive areas, areas with higher low-income populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	Does the intersection type allow adequate access to be provided to adjacent properties?	Does the alternative avoid encroachment into identified threat areas?	Does the alternative facilitate emergency evacuation/ access potential?	Does the alternative match the surrounding community context?	Does the alternative minimize community impacts?	Does the alternative avoid substantial impacts to natural environmental and cultural resources?		
5b – WCR 13 — WCR 19	WCR 13/ Colorado Boulevard	***Option 3 - Add capacity improvements***	***Could improve safety.***	***No change in safety.***	***No, expansion to 4-lanes to the west will make this intersection wider to cross, reducing level of comfort.***	***No, expansion to 4-lanes to the west will make this intersection wider to cross, reducing level of comfort.***	***64.2***	***82.4***	***No change to mobility and/or connectivity.***	***No mobility improvements; more lanes to cross.***	***No mobility improvements; more lanes to cross.***	***No change from existing.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes***	***Yes***	***Possible impacts may include potential wetlands, proposed trails, utilities (including oil/gas production facilities), noise sensitive areas, areas with higher low-income populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	
		Option 4 - Roundabout	Roundabouts, when appropriately designed, have been shown to improve safety.	No change in safety.	Maybe, slows down traffic compared to uncontrolled intersection, but not as great of safety improvement compared to signal.	Maybe, slows down traffic compared to uncontrolled intersection, but not as great of safety improvement compared to signal.	1.21	1.22	Yes, if designed to accommodate bus turns, this would limit delay compared to a signal and keep access for any future potential transit on WCR 13.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	Would provide opportunities for u-turns for adjacent accesses.	Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Somewhat; introduction of newer intersection design to a rural context.	Somewhat, depending on ROW needs.	Possible impacts may include potential wetlands, proposed trails, utilities (including oil/gas production facilities), noise sensitive areas, areas with higher low-income populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	
		Option 5 - Partial Displaced Left Turn (for WB and EB left turns)	***Potential improvement to safety***	***Yes, would limit potential conflict with other turning vehicles.***	***Yes, improves visibility of bicyclists by reducing potential of higher-risk turning movements.***	***Yes, improves visibility of pedestrians by reducing potential of higher-risk turning movements.***	***55.8***	***62.8***	***Yes, reduced delays improve travel time and better facilitates any potential future transit.***	***May help attract more riders with reduction of higher-risk turning movements.***	***May help attract more pedestrians with reduction of higher-risk turning movements.***	***May require closure of nearby accesses.***	***Lower risk. The area is subject to corridor-wide threats.***	***Yes. Substantively enhances evacuation options.***	***Somewhat; introduction of newer intersection design may be temporarily disruptive.***	***No; impactful to adjacent and extended community.***	***Possible impacts may include potential wetlands, proposed trails, utilities (including oil/gas production facilities), noise sensitive areas, areas with higher low-income populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	Does the intersection type allow adequate access to be provided to adjacent properties?	Does the alternative avoid encroachment into identified threat areas?	Does the alternative facilitate emergency evacuation/ access potential?	Does the alternative match the surrounding community context?	Does the alternative minimize community impacts?	Does the alternative avoid substantial impacts to natural environmental and cultural resources?		
5b – WCR 13 — WCR 19	WCR 13/ Colorado Boulevard	*Option 6 - Split Intersection for WB/Diamond Interchange for EB*	*Significant reduction in conflicts should improve safety.*	*Yes, would limit potential conflict with other turning vehicles.*	*Yes, less conflicts with turning vehicles.*	*Yes, less conflicts with turning vehicles.*	*76.9*	*62.9*	*Yes, reduced delays improve travel time.*	*Yes, makes more attractive with less conflicting vehicle movements.*	*Yes, makes more attractive with less conflicting vehicle movements.*	*May require closure of nearby accesses.*	*Moderate risk for bridge strikes. The area is subject to corridor-wide threats.*	*Yes. Substantively enhances evacuation options.*	*No; does not match current rural context but may match as development occurs.*	*No; impactful to adjacent and extended community.*	*Possible impacts may include potential wetlands, proposed trails, utilities (including oil/gas production facilities), noise sensitive areas, areas with higher low-income populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward*	
		Option 7 - Echelon	*Significant reduction in conflicts should improve safety.*	*Yes, would limit potential conflict with other turning vehicles.*	*Yes, improves visibility of bicyclists by reducing potential of higher-risk turning movements.*	*Yes, improves visibility of pedestrians by reducing potential of higher-risk turning movements.*	*0.38*	*0.40*	*Yes, reduced delays improve travel time.*	*May help attract more riders with reduction of higher-risk turning movements.*	*May help attract more pedestrians with reduction of higher-risk turning movements.*	*May require closure of nearby accesses.*	*Moderate risk for bridge strikes. The area is subject to corridor-wide threats.*	*Yes. Substantively enhances evacuation options.*	*No; does not match current rural context but may match as development occurs.*	*No; impactful to adjacent and extended community.*	*Possible impacts may include potential wetlands, proposed trails, utilities (including oil/gas production facilities), noise sensitive areas, areas with higher low-income populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward*	
		Option 8 - Traditional Diamond	*Significant reduction in conflicts should improve safety.*	*Yes, would limit potential conflict with other turning vehicles.*	*No, would reduce comfort with high-speed interchange environment and lanes added (higher LTS).*	*No, would reduce comfort with high-speed interchange environment lanes added; may increase crossing distance*	*0.50*	*0.48*	*Yes, reduced delays improve travel time.*	*May help attract more riders with reduction of higher-risk turning movements.*	*May help attract more pedestrians with reduction of higher-risk turning movements.*	*May require closure of nearby accesses.*	*Moderate risk for bridge strikes. The area is subject to corridor-wide threats.*	*Yes. Substantively enhances evacuation options.*	*No; does not match current rural context but may match as development occurs.*	*No; impactful to adjacent and extended community.*	*Possible impacts may include potential wetlands, proposed trails, utilities (including oil/gas production facilities), noise sensitive areas, areas with higher low-income populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward*	

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	Does the intersection type allow adequate access to be provided to adjacent properties?	Does the alternative avoid encroachment into identified threat areas?	Does the alternative facilitate emergency evacuation/ access potential?	Does the alternative match the surrounding community context?	Does the alternative minimize community impacts?	Does the alternative avoid substantial impacts to natural environmental and cultural resources?		
5b – WCR 13 — WCR 19	WCR 13/ Colorado Boulevard	***Option 9 - Single Point Urban Interchange***	***Significant reduction in conflicts should improve safety.***	***Yes, would limit potential conflict with other turning vehicles.***	***Improves visibility of bicyclists by reducing potential of higher-risk turning movements, but high-speed merges would be stressful and turns would be challenging.***	***No, requires multiples crossings of high-speed traffic by pedestrians in every direction.***	***0.75***	***0.41***	***Yes, reduced delays improve travel time.***	***No, interchange environment with frequent merges and weaves would be stressful.***	***No, crossings of high-speed interchange traffic would be stressful.***	***May require closure of nearby accesses.***	***Moderate risk for bridge strikes. The area is subject to corridor-wide threats.***	***Yes. Substantively enhances evacuation options.***	***No; does not match current rural context but may match as development occurs.***	***No; impactful to adjacent and extended community.***	***Possible impacts may include potential wetlands, proposed trails, utilities (including oil/gas production facilities), noise sensitive areas, areas with higher low-income populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	
5b – WCR 13 — WCR 19	Future WCR 15	Option 1 - No Action	0.2 Crashes/Yr Crashes/Yr No action will not improve safety at the intersection, but crash frequency is low.	No change in safety.	No change in safety.	No change in safety.	N/A	N/A	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Lower risk. The area is subject to corridor-wide threats.	No change from existing.	Yes, no change from existing.	Yes, no change from existing.	Yes, no change from existing.	Not Recommended	
		Option 2 – Move J-Bar-B-Road west to the section line (WCR 15), full movement access and signalize if warranted with future development	***Could improve safety pending development and associated traffic level. Signal may contribute to rear-end crashes; auxiliary lanes may prevent some.***	***Yes, closure would eliminate conflict with turning vehicles.***	***Yes, closure would eliminate conflict with turning vehicles.***	***Yes, closure would eliminate conflict with turning vehicles.***	***N/A***	***N/A***	***Yes, closure would eliminate potential delay from turning vehicles, future need for access is unlikely.***	***Yes, closure would improve mobility along SH 66 by eliminating turning vehicles; access to SH 66 not necessary given land uses that would use WCR 13.***	***Yes, closure would improve mobility along SH 66 by eliminating turning vehicles; access to SH 66 not necessary given land uses that would use WCR 13.***	***<0.5 mi out of direction travel.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Somewhat; would introduce new travel patterns.***	***Somewhat; changes existing access.***	***Possible impacts may include potential wetlands, proposed trails, utilities (including oil/gas production facilities), noise sensitive areas, areas with higher low-income populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Near-term disruption, but in the long-term it would support context.***

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

SH 66 Planning and Environmental Linkages Study

SH 66 PEL Level 3 Screening – Roadway

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	Does the intersection type allow adequate access to be provided to adjacent properties?	Does the alternative avoid encroachment into identified threat areas?	Does the alternative facilitate emergency evacuation/ access potential?	Does the alternative match the surrounding community context?	Does the alternative minimize community impacts?	Does the alternative avoid substantial impacts to natural environmental and cultural resources?		
5b – WCR 13 — WCR 19	Future WCR 15	***Option 3 - Roundabout***	***Roundabouts, when appropriately designed, have been shown to improve safety***	***No change in safety.***	***Maybe. Slows down traffic compared to uncontrolled intersection, but not as great of a safety improvement compared to signal.***	***Maybe. Slows down traffic compared to uncontrolled intersection but not as great of a safety improvement compared to signal.***	***N/A***	***N/A***	***Yes. If designed to accommodate bus turns, this would limit delay compared to a signal.***	***No change to mobility and/or connectivity.***	***No change to mobility and/or connectivity.***	***Would provide opportunities for u-turns for adjacent accesses.***	***Lower risk. The area is subject to corridor-wide threats.***	***Moderately enhances evacuation options.***	***Somewhat. Introduction of newer intersection design to a rural context.***	***Somewhat. Depending on ROW needs.***	***Possible impacts may include potential wetlands, proposed trails, utilities (including oil/gas production facilities), noise sensitive areas, areas with higher low-income populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	
5b - WCR 13 — WCR 19	WCR 17 North side	Option 1 - No Action	1.8 Crashes/Yr No Action will not improve safety at the intersection.	No change in safety.	No change in safety.	No change in safety.	56.2	64.0	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Moderate risk in a floodplain/floodway. The area is subject to other corridor-wide threats.	No change from existing.	No change from existing.	Yes. No change. from existing.	Yes. No change from existing.	Not Recommended	Planned grade-separated trail crossing to the east could lessen crossing issues for bikes/peds, but some on-street crossing activity would remain.
		Option 2 - Signalize if Warranted; Capacity Improvements	***Could improve safety pending development and associated traffic level. Signal may contribute to rear-end crashes; auxiliary lanes may prevent some.***	***Yes. Would limit potential conflict with other turning vehicles.***	***Yes. Turning vehicle movements are more predictable and give safer crossing, but added lanes to facilitate decrease comfort (higher LTS).***	***Yes. Turning vehicle movements are more predictable and give safer crossing, but added lanes to facilitate decrease comfort.***	***36.3***	***34.5***	***May slow down future transit but assists access to a future stop.***	***Yes. Makes crossing of SH 66 easier and more defined/visible.***	***Yes. Makes crossing of SH 66 easier and more defined/visible.***	***No change from existing.***	***Moderate risk in a floodplain/ floodway. The area is subject to other corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes***	***Yes. As long as minimal additional ROW is needed.***	***Yes. Minor to no impacts to surrounding natural and cultural environment.***	***Carried Forward***	***Planned grade-separated trail crossing to the east could lessen crossing issues for bikes/peds, but some on-street crossing activity would remain. Consider a LPI at the signal for greater visibility of crossing pedestrians.***

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	Does the intersection type allow adequate access to be provided to adjacent properties?	Does the alternative avoid encroachment into identified threat areas?	Does the alternative facilitate emergency evacuation/ access potential?	Does the alternative match the surrounding community context?	Does the alternative minimize community impacts?	Does the alternative avoid substantial impacts to natural environmental and cultural resources?		
5b - WCR 13 — WCR 19	WCR 17 North side	***Option 3 - Roundabout***	***Would likely reduce severe crash types.***	***No change in safety.***	***Would likely slow down traffic compared to uncontrolled intersection but not as great of a safety improvement compared to signal.***	***Would likely slow down traffic compared to uncontrolled intersection, but not as great of a safety improvement compared to signal.***	***0.36***	***0.60***	***Yes. If designed to accommodate bus turns, this would limit delay compared to a signal and keep access for any future potential transit.***	***No change to mobility and/or connectivity.***	***No change to mobility and/or connectivity.***	***No change from existing. Would provide additional u-turn opportunities for accesses to the east and west of intersection.***	***Moderate risk in a floodplain/ floodway. The area is subject to other corridor-wide threats.***	***Moderately enhances evacuation options.***	***Somewhat. Introduction of newer intersection design to a rural context.***	***Somewhat. Depending on ROW needs.***	***Possible impacts may include floodplain/floodway, potential wetlands, Bald Eagle habitat, proposed trails, utilities, areas with higher low-income populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Planned grade-separated trail crossing to the east could lessen crossing issues for bikes/peds, but some on-street crossing activity would remain. Design would need to facilitate bike and ped activity, such as refuges.***
		Option 4 – Channelized 'T'	Would likely reduce severe crash types.	Yes. Would limit potential conflict of EB vehicles turning onto Highland Dr.	No safety improvements; more lanes to cross.	No safety improvements; more lanes to cross.	33.4	44.5	Yes, could decrease delay from turning vehicles, especially EB.	No mobility improvements; more lanes to cross.	No mobility improvements; more lanes to cross.	No change from existing.	Moderate risk in a floodplain/floodway. The area is subject to other corridor-wide threats.	Moderately enhances evacuation options.	Yes	Yes	Possible impacts may include floodplain/floodway, potential wetlands, Bald Eagle habitat, proposed trails, utilities, areas with higher low-income populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Planned grade-separated trail crossing to the east could lessen crossing issues for bikes/peds, but some on-street crossing activity would remain. Signalized Channelized T would lessen the negative impacts.
5b - WCR 13 — WCR 19	WCR 17 South Side	Option 1 - No Action	No crashes occurred during the analysis period, but no action will not help prevent future crashes.	No change in safety.	No change in safety.	No change in safety.	47.1	59.2	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Moderate risk in a floodplain/floodway. The area is subject to other corridor-wide threats.	No change from existing.	Yes. No change from existing.	Yes. No change from existing.	Yes. No change from existing.	Not Recommended	Planned grade-separated trail crossing to the west could lessen crossing issues for bikes/peds, but some on-street crossing activity would remain.

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	Does the intersection type allow adequate access to be provided to adjacent properties?	Does the alternative avoid encroachment into identified threat areas?	Does the alternative facilitate emergency evacuation/ access potential?	Does the alternative match the surrounding community context?	Does the alternative minimize community impacts?	Does the alternative avoid substantial impacts to natural environmental and cultural resources?		
5b - WCR 13 — WCR 19	WCR 17 South Side	***Option 2 - Signalize if Warranted and Capacity Improvements***	***Could improve safety pending development and associated traffic level. Signal may contribute to rear-end crashes; auxiliary lanes may prevent some.***	***No change in safety.***	***No safety improvements; more lanes to cross.***	***No safety improvements; more lanes to cross.***	***29.8***	***34.5***	***No change to mobility and/or connectivity.***	***No mobility improvements; more lanes to cross.***	***No mobility improvements; more lanes to cross.***	***No change from existing.***	***Moderate risk in a floodplain/ floodway. The area is subject to other corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes***	***Yes***	***Possible impacts may include floodplain/floodway, potential wetlands, bald eagle habitat, proposed trails, utilities, areas with higher low-income or minority populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	
		Option 3 - Roundabout	***Could improve safety at intersection.***	***No change in safety.***	***Maybe. Slows down traffic compared to uncontrolled intersection but not as great of a safety improvement compared to signal.***	***Maybe, slows down traffic compared to uncontrolled intersection but not as great of a safety improvement compared to signal.***	***0.33***	***0.47***	***Yes. If designed to accommodate bus turns, this would limit delay compared to a signal and keep access for any future potential transit.***	***No change to mobility and/or connectivity.***	***No change to mobility and/or connectivity.***	***No change from existing. Would provide additional u-turn opportunities for accesses to the east and west of intersection.***	***Moderate risk in a floodplain/ floodway. The area is subject to other corridor-wide threats.***	***Moderately enhances evacuation options.***	***Somewhat. Introduction of newer intersection design to a rural context.***	***Somewhat. Depending on ROW needs.***	***Possible impacts may include floodplain/floodway, potential wetlands, bald eagle habitat, proposed trails, utilities, areas with higher low-income or minority populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Planned grade-separated trail crossing to the west could lessen crossing issues for bikes/peds, but some on-street crossing activity would remain. Design would need to facilitate bike and ped activity, such as refuges.***
		Option 4 – Channelized 'T'	Channelized movements will improve safety.	Yes. Would limit potential conflict of EB vehicles turning onto Highland Dr.	No safety improvements; more lanes to cross.	No safety improvements; more lanes to cross.	28.9	32.8	Yes. Could decrease delay from turning vehicles, especially EB.	No mobility improvements; more lanes to cross.	No mobility improvements; more lanes to cross.	No change from existing.	Moderate risk in a floodplain/floodway. The area is subject to other corridor-wide threats.	Moderately enhances evacuation options.	Yes	Yes	Possible impacts may include floodplain/floodway, potential wetlands, Bald Eagle habitat, proposed trails, utilities, areas with higher low-income or minority populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Planned grade-separated trail crossing to the west could lessen crossing issues for bikes/peds, but some on-street crossing activity would remain. Signalized Channelized T would lessen the negative impacts.

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

SH 66 Planning and Environmental Linkages Study

SH 66 PEL Level 3 Screening – Roadway

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative have the potential to notably improve safety along the corridor?	Does the alternative allow safer stop access and traffic re-entry by transit vehicles?	Does the alternative facilitate a safer bicycling environment?	Does the alternative facilitate a safer pedestrian environment?	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM	Does the alternative enhance and/or allow current and planned transit service?	Does the alternative enhance bicycle mobility and connectivity along and across SH 66?	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?	**Does the intersection type allow adequate access to be provided to adjacent properties?**	**Does the alternative avoid encroachment into identified threat areas?**	**Does the alternative facilitate emergency evacuation/ access potential?**	**Does the alternative match the surrounding community context?**	**Does the alternative minimize community impacts?**	**Does the alternative avoid substantial impacts to natural environmental and cultural resources?**		
5b - WCR 13 — WCR 19	WCR 19	Option 1 - No Action	2.2 Crashes/Yr (0.4 Fatal/Yr) No Action will not improve safety at the intersection.	No change in safety.	No change in safety.	No change in safety.	61.7	71.3	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	No change from existing.	No change from existing. Moderate risk near a floodplain/ floodway. The area is subject to other corridor-wide threats.	No change from existing.	Yes. No change from existing.	Yes. No change from existing.	Yes. No change from existing.	Not Recommended	
		Option 2 - Signalize if Warranted and Capacity Improvements	***Could improve safety pending development and associated traffic level. Signal may contribute to rear-end crashes; auxiliary lanes may prevent some. Could also reduce fatalities.***	***Yes. Would limit potential conflict with other turning vehicles; signal could include a transit priority signal.***	***Yes. turning vehicle movements are more predictable and give safer crossing, but added lanes to facilitate decrease comfort (higher LTS).***	***Yes. Turning vehicle movements are more predictable and give safer crossing, but added lanes to facilitate decrease comfort.***	***56.7***	***65.1***	***May slow down future transit but assists access to a future stop.***	***Yes. Makes crossing of SH 66 easier.***	***Yes. Makes crossing of SH 66 easier.***	***No change from existing.***	***Moderate risk near a floodplain/ floodway. The area is subject to other corridor-wide threats.***	***Moderately enhances evacuation options.***	***Yes***	***Yes. As long as minimal additional ROW is needed***	***Possible impacts may include floodplain, proposed trails, utilities, noise sensitive areas, areas with higher low-income or minority populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Consider a LPI at the signal for greater visibility of crossing pedestrians.***
5b - WCR 13 — WCR 19	WCR 19	***Option 3 - Roundabout***	***Would likely reduce severe crashes.***	***No change in safety.***	***Maybe, slows down traffic compared to uncontrolled intersection, but not as great of a safety improvement compared to signal.***	***Maybe, slows down traffic compared to uncontrolled intersection but not as great of a safety improvement compared to signal.***	***0.35***	***0.45***	***Yes. If designed to accommodate bus turns, this would limit delay compared to a signal and keep access for any future potential transit.***	***No change to mobility and/or connectivity.***	***No change to mobility and/or connectivity.***	***No change from existing. Would provide additional u-turn opportunities for accesses to the east and west of intersection.***	***Moderate risk near a floodplain/ floodway. The area is subject to other corridor-wide threats.***	***Moderately enhances evacuation options.***	***Somewhat. Introduction of newer intersection design to a rural context.***	***Somewhat; depending on ROW needs.***	***Possible impacts may include floodplain, proposed trails, utilities, noise sensitive areas, areas with higher low-income or minority populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.***	***Carried Forward***	***Design would need to facilitate bike and ped activity, such as refuges.***

*Highest or worst case scenario value used to represent the Intersection Capacity Utilization when multiple nodes present

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
1A - McConnell Dr. — Highland Dr.	McConnell Dr. – Highland Dr (On-Street)	Option 1 - No Action (existing bike lanes)	N/A	No change in safety. Must stop in bike lane to make stops.	No. Vehicle speeds are too high for basic bike lane and bicyclists must interact with buses making stops.	N/A	No change over existing.	No change to mobility and/or connectivity.	No change to mobility and/or connectivity.	N/A	N/A	No. No change from existing. Near the floodplain/ floodway, avalanche/ debris/rock-fall/landslide area, and railroad. The area is subject to other corridor-wide threats.	No. Does not enhance evacuation options.	Yes. No changes to context.	Yes. No impact.	Yes. No impact.	Not Recommended	
		Option 2 – Carry Existing Bike Lanes to US 36	*Moderate safety improvement.*	*Provides some increased separation from bicyclists, but both modes still interact.*	*Yes. Helps define space for bicyclists through busy section, but speeds are too high, impacting comfort (LTS).*	*N/A*	*May improve operations by removing bicyclists from through traffic.*	*No change to mobility and/or connectivity.*	*Yes. Completes connection to US 36 and provides opportunity to carry through intersection onto both SH 66 and US 36, but poor LTS would likely limit use to only advanced bicyclists.*	*N/A*	*N/A*	*No. Higher risk with alternative in floodplain/floodway, near the avalanche/ debris/rock-fall/landslide area, and railroad. The area is subject to other corridor-wide threats.*	*Moderately enhances evacuation options.*	*Yes. A bike lane would complete the street in the community context.*	*Somewhat. As long as additional ROW is not required; may impact business access.*	*Possible impacts may involve St. Vrain floodplain/floodway, wetlands, Preble's meadow jumping mouse (PMJM) and bald eagle habitat, adjacent parks, proposed trails, utilities, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward (Short Term)*	*Would be more advantageous and cost-effective in the short term based on user need and need for less ROW; avoids increased maintenance needs with Options 3 and 4, and vertical obstruction with Option 4. However, it should be noted that vehicle speeds and volumes are too high for this type of facility.*

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
1A - McConnell Dr. — Highland Dr. (Continued)	McConnell Dr. – Highland Dr (On-Street (Continued)	*Option 3 – Buffered Bike Lanes*	*Moderate safety improvement.*	*Provides some increased separation from bicyclists, but both modes still interact.*	*Yes. Defines additional space for bicyclists through busy section and may provide some additional safety improvement, but speeds are too high, impacting comfort (LTS).*	*N/A*	*May improve operations by removing bicyclists from through traffic.*	*No change to mobility and/or connectivity.*	*Yes. Completes connection to US 36 and provides an opportunity to carry through intersection onto both SH 66 and US 36, but poor LTS would likely limit use to only advanced bicyclists.*	*N/A*	*N/A*	*No. Higher risk with alternative in floodplain/floodway, near the avalanche/ debris/rockfall/landslide area, and railroad. The area is subject to other corridor-wide threats.*	*Moderately enhances evacuation options.*	*Yes. A bike lane would complete the street in the community context.*	*Somewhat. As long as additional ROW is not required; may impact business access.*	*Possible impacts may involve St. Vrain floodplain/floodway, wetlands, PMJM and bald eagle habitat, adjacent parks, proposed trails, utilities, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward (Short Term)*	*May provide slightly more safety benefits than a traditional bike lane and is preferred if no additional ROW is required; avoids vertical obstruction with Option 4. However, it should be noted that vehicle speeds and volumes are too high for this type of facility. Increased maintenance for additional striping of buffer may be an issue; would need additional local coordination.*

SH 66 PEL Level 3 Screening – Bicycle, Pedestrian, and Transit

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
1A - McConnell Dr. — Highland Dr. (Continued)	McConnell Dr. – Highland Dr (On-Street) (Continued)	*Option 4 – Separated Bike Lanes*	*Yes. Substantive safety improvement.*	*Yes. Separates bicycles from buses, but design will need to facilitate stops.*	*Yes. Provides physical separation from vehicles.*	*N/A*	*May improve operations by removing bicyclists from through traffic.*	*Design will need to consider existing bus stops.*	*Yes. Continuous connection to US 36, provides an opportunity to carry through intersection onto both SH 66 and US 36, and could attract a broader user type.*	*N/A*	*N/A*	*No. Higher risk with alternative in floodplain/ floodway, near the avalanche/ debris/rock-fall/land-slide area, and railroad. The area is subject to other corridor-wide threats.*	*Moderately enhances evacuation options.*	*Yes. A bike lane would complete the street in the community context.*	*Somewhat. As long as additional ROW is not required; may impact business access.*	*Possible impacts may involve St. Vrain floodplain/floodway, wetlands, PMJM and bald eagle habitat, adjacent parks, proposed trails, utilities, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward (Long Term)*	*Most desired for long term and requires collaboration with Lyons for maintenance because of vertical element (which is a challenge for CDOT Maintenance). CDOT's Strava data report indicates that this section is heavily used by bicyclists. Vehicle speeds and volumes are at a level that warrants a separated facility to improve LTS. LTS is poor even with the current on-street bike lanes.*
	McConnell Dr. – Highland Dr. (Off-Street)	*Option 1 - No Action + Planned*	*Yes. Substantive safety improvement.*	*N/A*	*Yes. Planned sidepath along the south side of US 36 will improve safety by providing a separated and dedicated facility.*	*Yes. Planned sidepath along the south side of US 36 will improve safety by providing a separated and dedicated facility.*	*No impact to vehicular operations.*	*Yes. Planned sidepath along the south side of US 36 will improve access to the bus stop.*	*Yes. Planned sidepath along the south side of US 36 will improve connectivity for all user types.*	*Yes. Planned sidepath along the south side of US 36 will improve connectivity for all user types.*	*N/A*	*No. No change from existing. Near the floodplain/ floodway, avalanche/ debris/rock-fall/land-slide area, and railroad areas. The area is subject to other corridor-wide threats.*	*No. Does not enhance evacuation options.*	*Yes. No changes beyond what has been planned.*	*Yes*	*Yes. No impact from No Action. Potential impacts from planned improvements are unknown.*	*Carried Forward*	*Lyons can no longer build their sidepath west of US 36 because of ditch company coordination.*

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
1A - McConnell Dr. — Highland Dr. (Continued)	McConnell Dr. – Highland Dr. (Off-Street) (Continued)	*Option 2 – Add Pedestrian Sidewalk Pads at Bus Stops*	*Yes. Substantive safety improvement.*	*N/A*	*N/A*	*Yes. Will provide defined rider area with protection.*	*No impact to vehicular operations.*	*Yes. Improves rider experience.*	*N/A*	*Yes. Will make bus stop more accessible to more users.*	*N/A*	*No.Higher risk with alternative in flood-plain/flood-way, near the avalanche/ debris/rock-fall/land-slide area, and rail-road. The area is sub-ject to other corridor-wide threats.*	*Moder-ately enhances evacua-tion options.*	*Yes. Sup-ports access to existing transit.*	*Yes. No ROW antici-pated to be required.*	*Possible impacts may involve St. Vrain flood-plain/floodway, wetlands, PMJM and bald eagle habitat, adja-cent parks, proposed trails, utilities, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward*	*Selected to better accom-modate transit users. Consider pedes-trian mid-block crossing and/or sidewalk connections to nearest inter-section(s) in Level 3.*
	US 36 – Highland Dr. (On-Street)	Option 1 - No Action	N/A	No. If service were provided on SH 66, would have to mix with potential bicy-cle traffic on shoulder.	No. High LTS due to vehicle speeds and volumes, in-tersection at US 36 is difficult to pass through, and shoulder width is limited on the south side near US 36 inter-section.	N/A	No change over existing.	No change to mobility and/or con-nectivity.	No. Only ad-vanced bicy-clists may be comfortable using this section.	N/A	N/A	No. No change from existing. Near the flood-plain/ flood-way, avalanche/ debris/rock-fall/landslide area, and railroad areas. The area is subject to other corridor-wide threats.	No. Does not en-hance evacuation options.	Yes. No changes to context.	Yes. No impact.	Yes. No impact.	Not Recom-mended	

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
1A - McConnell Dr. — Highland Dr. (Continued)	US 36 – Highland Dr. (On-Street) (Continued)	Option 2 - Widen Shoulders to 5+ Feet (where not currently)	Moderate safety improvement.	Slightly. If service were provided on SH 66, would still have to mix with potential bicycle traffic on the shoulder, but more room would make this a little safer.	Slightly. Provides more space for bicycles but still must interact with vehicles, particularly through the intersection with US 36.	N/A	No impact to vehicular operations.	No change to mobility and/or connectivity.	No. Only advanced bicyclists may be comfortable using this section.	N/A	N/A	No. Higher risk with alternative in floodplain/floodway, near the avalanche/ debris/rockfall/landslide area, and railroad. The area is subject to other corridor-wide threats.	Moderately enhances evacuation options.	Yes. Provides a continuous, higher speed bike facility; current facility is heavily used.	Yes. If additional ROW is not required to complete improvements.	Possible impacts may involve St. Vrain floodplain/floodway, wetlands, PMJM and bald eagle habitat, adjacent parks, proposed trails, utilities, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
1A - McConnell Dr. — Highland Dr. (Continued)	US 36 – Highland Dr. (On-Street) (Continued)	*Option 3 – Traditional Bike Lanes*	*Moderate safety improvement.*	*Slightly. If service were provided on SH 66, would still have to mix with potential bicycle traffic on the shoulder, but better definition of bicycle location could improve safety.*	*Yes. Helps define space for bicyclists through busy section, but speeds are too high, impacting comfort (LTS).*	*N/A*	*May improve operations by removing bicyclists from through traffic.*	*No change to mobility and/or connectivity.*	*Yes. Completes connection to US 36, but poor LTS would likely limit use to only advanced bicyclists.*	*N/A*	*N/A*	*No. Higher risk with alternative in floodplain/floodway, near the avalanche/ debris/rockfall/landslide area, and railroad. The area is subject to other corridor-wide threats.*	*Moderately enhances evacuation options.*	*No. Vehicle speeds and volumes are too high for this type of facility.*	*No. Introduces modal conflict, which impacts the community.*	*Possible impacts may involve St. Vrain floodplain/floodway, wetlands, PMJM and bald eagle habitat, adjacent parks, proposed trails, utilities, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward (Short Term)*	*Considered at this location due to existing bicycle lanes west of US 36 that could be extended through the intersection. Would be more advantageous and cost-effective in the short term based on user need and need for less ROW; avoids increased maintenance needs with Options 4 and 5, and vertical obstruction with Option 5. However, it should be noted that vehicle speeds and volumes are too high for this type of facility.*

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
1A - McConnell Dr. — Highland Dr. (Continued)	US 36 – Highland Dr. (On-Street) (Continued)	*Option 4 – Buffered Bike Lanes*	*Yes. Substantive safety improvement.*	*Slightly. If service were provided on SH 66, would still have to mix with potential bicycle traffic on the shoulder, but better definition of bicycle location could improve safety.*	*Yes. Defines additional space for bicyclists through a busy section and may provide some additional safety improvement, but speeds are too high, impacting comfort (LTS).*	*N/A*	*May improve operations by removing bicyclists from through traffic.*	*No change to mobility and/or connectivity.*	*Yes. Completes connection to US 36, but poor LTS would likely limit use to only advanced bicyclists.*	*N/A*	*N/A*	*No. Higher risk with alternative in flood-plain/flood-way, near the avalanche/ debris/rock-fall/land-slide area, and rail-road. The area is subject to other corridor-wide threats.*	*Moderately enhances evacuation options.*	*No. Vehicle speeds and volumes are too high for this type of facility.*	*No. Introduces modal conflict, which impacts the community.*	*Possible impacts may involve St. Vrain flood-plain/floodway, wetlands, PMJM and bald eagle habitat, adjacent parks, proposed trails, utilities, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward (Short Term)*	*May provide slightly more safety benefits than a traditional bike lane and is preferred if no additional ROW is required; avoids vertical obstruction with Option 5. However, it should be noted that vehicle speeds and volumes are too high for this type of facility. Increased maintenance for additional striping of buffer may be an issue; would need additional local coordination.*

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
1A - McConnell Dr. — Highland Dr. (Continued)	US 36 – Highland Dr. (On-Street) (Continued)	*Option 5 – Separated Bike Lanes*	*Yes. Substantive safety improvement.*	*Yes. Separates bicycles from buses, but design will need to facilitate stops.*	*Yes. Provides physical separation from vehicles.*	*N/A*	*May improve operations by removing bicyclists from through traffic.*	*No. With no existing service, it would be difficult to design a facility to support transit. Would need to be retrofitted if service is added. ROW should be reserved for this retrofit.*	*Yes. Provides a continuous connection to US 36 and could attract a broader user type.*	*N/A*	*N/A*	*No. Higher risk with alternative in floodplain/floodway, near the avalanche/ debris/rockfall/landslide area, and railroad. The area is subject to other corridor-wide threats.*	*Moderately enhances evacuation options.*	*Yes. This is a heavily used corridor.*	*Yes. It minimizes modal conflict; if additional ROW is not required.*	*Possible impacts may involve St. Vrain floodplain/ floodway, wetlands, PMJM and bald eagle habitat, adjacent parks, proposed trails, utilities, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward (Long Term)*	*Long-term goal for implementation would require collaboration with local agencies and future developers.* *CDOT's Strava data report indicates that this section is heavily used by bicyclists. Vehicle speeds and volumes are at a level that warrants a separated facility to improve LTS. LTS is poor even with regular on-street bike lanes.* *Planned development for this location would make this section busier, warranting a separated facility.*
		Option 1 - No Action + Planned	*Yes. Substantive safety improvement.*	*N/A*	*Yes. Planned sidepath along the south side of SH 66 will improve safety by providing a separated and dedicated facility.*	*Yes. Planned sidepath along the south side of SH 66 will improve safety by providing a separated and dedicated facility.*	*No impact to vehicular operations.*	*Yes. Planned sidepath along the south side of SH 66 will improve access to a future bus stop.*	*Yes. Planned sidepath along the south side of SH 66 will improve connectivity for all user types.*	*Yes. Planned sidepath along the south side of SH 66 will improve connectivity for all user types.*	*N/A*	*No. Higher risk with alternative in floodplain/floodway and near the avalanche/ debris/rockfall/landslide area. The area could be subject to other corridor-wide threats.*	*No. Does not enhance evacuation options.*	*Yes. No changes beyond what has been planned.*	*Yes*	*Yes. No impact from No Action. Potential impacts from planned improvements are unknown.*	*Carried Forward*	*Assumes developers will build sidewalks in future.*

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
1B - Highland Dr. — 75th St.	Highland Dr. – 75th St. (On-Street)	Option 1 - No Action	N/A	No. If service were provided on SH 66, would have to mix with potential bicycle traffic on shoulder.	No. High LTS due to vehicle speeds and volumes.	N/A	No changes over existing conditions.	No change to mobility and/or connectivity.	No. Only advanced bicyclists may be comfortable using this section.	N/A	N/A	No. No change from existing. Near the flood-plain/ flood-way and railroad. Also in the vicinity of the overhead conveyance structure near 51st Street. The area is subject to other corridor-wide threats.	No. Does not enhance evacuation options.	Yes. No changes to context.	Yes. No impact.	Yes. No impact.	Not Recommended	Consider signs and spot/intersection improvements that raise driver awareness of high bicycle activity along this section.
		Option 2 - Widen Shoulders to 5+ Feet (where not currently)	*Moderate safety improvement.*	*Slightly. If service were provided on SH 66, would still have to mix with potential bicycle traffic on the shoulder, but more room would make this a little safer.*	*Slightly. Provides more space for bicycles but still must interact with vehicles.*	*N/A*	*No impact to vehicular operations.*	*No change to mobility and/or connectivity.*	*No. Only advanced bicyclists may be comfortable using this section.*	*N/A*	*N/A*	*No. Higher risk with alternative near the flood-plain/flood-way and railroad. Also in the vicinity of the overhead conveyance structure near 51st Street. The area could be subject to other corridor-wide threats.*	*Moderately enhances evacuation options.*	*Yes. Provides a continuous, higher speed bike facility; current facility is heavily used.*	*Yes. If additional ROW is not required to complete improvements.*	*Possible impacts may involve St. Vrain flood-plain/ floodway, wetlands, PMJM and bald eagle habitat, adjacent parks, proposed trails, utilities, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward*	*Selected due to off-street solutions for less experienced users, vehicular need for shoulders, maintenance concerns, and preference of advanced riders to be on the street.* *Consider signs and spot/intersection improvements that raise driver awareness of high bicycle activity along this section.*

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
1B – Highland Dr. — 75th St. (Continued)	Highland Dr. – 75th St. (On-Street) (Continued)	Option 3 – Separated Bike Lanes	Yes. Substantive safety improvement.	Yes. If service were provided on SH 66, separates bicycles from buses, but design will need to facilitate stops.	Yes. Provides physical separation from vehicles.	N/A	May improve operations by removing bicyclists from through traffic.	No. With no existing service, it would be difficult to design a facility to support transit. Would need to be retrofitted if service is added. ROW should be reserved for this retrofit.	Yes. Could attract a broader user type.	N/A	N/A	No. Higher risk with alternative near the floodplain/floodway and railroad. Also in the vicinity of the overhead conveyance structure near 51st Street. The area could be subject to other corridor-wide threats.	Moderately enhances evacuation options.	Yes. This is a heavily used corridor.	Yes. It minimizes modal conflict; if additional ROW is not required.	Possible impacts may involve St. Vrain floodplain/ floodway, wetlands, PMJM and bald eagle habitat, adjacent parks, proposed trails, utilities, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	CDOT's Strava data report indicates that this section is heavily used by bicyclists. Regular or buffered bike lanes were not considered for this section because vehicle speeds and volumes are too high for this type of facility and would not lead to an improved LTS. Development is not planned as significantly for this section, so shoulders for breakdowns may be preferred.
	Highland Dr. – 53rd St. (Off-Street)	Option 1 - No Action + Planned	Yes. Substantive safety improvement.	N/A	Yes. Planned sidepath along the south side of SH 66 will improve safety by providing a separated and dedicated facility.	Yes. Planned sidepath along the south side of SH 66 will improve safety by providing a separated and dedicated facility.	No impact to vehicular operations.	Yes. Planned sidepath along the south side of SH 66 will improve access to a future bus stop.	Yes. Planned sidepath along the south side of SH 66 will improve connectivity for all user types.	Yes. Planned sidepath along the south side of SH 66 will improve connectivity for all user types.	N/A	No. No change from existing. Near the floodplain/ floodway and railroad, as well as in the vicinity of the overhead conveyance structure. The area is subject to other corridor-wide threats.	No. Does not enhance evacuation options.	Yes. No changes beyond what has been planned.	Yes. No impacts beyond what is planned.	Yes. No impact from No Action. Potential impacts from planned improvements are unknown.	Not Recommended	

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
1B – Highland Dr. — 75th St. (Continued)	Highland Dr. – 53rd St. (Off-Street) (Continued)	*Option 2 – Advisory Shoulder/ Shared Street + Sidepath Concept on North Side (see 2B map for specific locations of street vs sidepath)*	*Yes. Substantive safety improvement.*	*Yes. If service were provided on SH 66, would reduce locations of local access where vehicles may be slowing down and consolidate into one location; also may reduce interactions with bicycles.*	*Yes. Provides a low-volume road and/or sidepath with low LTS away from high speeds and volumes on SH 66.*	*Yes. Provides a low-volume road and/or sidepath away from high speeds and volumes on SH 66.*	*Minimal impact to vehicular operations.*	*Yes. Facility would improve access to a future bus stop.*	*Yes. Would improve connectivity for all user types.*	*Yes. Would improve connectivity for all user types.*	*N/A*	*No. Higher risk with alternative near the floodplain/floodway and railroad. Also in the vicinity of the overhead conveyance structure near 51st Street. The area could be subject to other corridor-wide threats.*	*Moderately enhances evacuation options.*	*Yes. Provides a lower stress, lower speed environment for users in a rural setting.*	*Yes. As long as ROW isn't required; temporary disruption as all users become familiar with how the facility operates.*	*Possible impacts may involve St. Vrain floodplain/floodway, wetlands, PMJM and bald eagle habitat, adjacent parks, proposed trails, utilities, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward*	*Selected as alternative carried forward for vehicular travel; cost-effective by serving multiple modes with a low-volume/ low-speed facility while also serving a wide spectrum of bicycle and pedestrian users.*
		Option 3 – Sidepath along north side	Yes. Substantive safety improvement.	May reduce interactions with bicycles.	Yes. A sidepath along the north side of SH 66 would improve safety by providing a separated and dedicated facility.	Yes. A sidepath along the north side of SH 66 would improve safety by providing a separated and dedicated facility.	No impact to vehicular operations.	Yes. Facility would improve access to a future bus stop.	Yes. Would improve connectivity for all user types.	Yes. Would improve connectivity for all user types.	N/A	No. Higher risk with alternative near the floodplain/ floodway and railroad. Also in the vicinity of the overhead conveyance structure near 51st Street. The area could be subject to other corridor-wide threats.	Moderately enhances evacuation options.	Yes. Provides a lower stress, lower speed environment for users in a rural setting.	Yes. As long as ROW isn't required; temporary disruption as all users become familiar with how the facility operates, especially at cross streets.	Possible impacts may involve St. Vrain floodplain/ floodway, wetlands, PMJM and bald eagle habitat, adjacent parks, proposed trails, utilities, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Consider if Access Road with Advisory Shoulder + Sidepath concept is not recommended. Would need a planned grade-separated crossing near 51st St in place, as well as a safe crossing of SH 66 at or west of 87th St to be effective, as beyond these two points planned sidepaths/trails are on the south side of SH 66.

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
1B – Highland Dr. — 75th St. (Continued)	53rd St. – 66th St. (Off-Street)	Option 1 - No Action	N/A	N/A	No. Less advanced users would be forced to use the roadway where vehicle speeds and volumes create a high LTS.	No. Less advanced users would be forced to use the roadway where vehicle speeds and volumes create a high stress environment.	No change over existing conditions.	No. Future bus stops would be difficult to access.	No. Less advanced users would not travel along the shoulder, leaving a gap in the network.	No. Less advanced users would not travel along the shoulder, leaving a gap in the network.	N/A	No. No change from existing. Near the floodplain/ floodway and railroad. Also in the vicinity of the overhead conveyance structure near 51st Street. The area is subject to other corridor-wide threats.	No. Does not enhance evacuation options.	Yes. No changes to context.	Yes. No impact.	Yes. No impact.	Not Recommended	With no improvements, a gap for less advanced bike/ped users would exist between the sidepath/trail planned on the south side of SH 66 west of 53rd St and the sidepath planned on the south side of SH 66 east of 87th St. Trail west of 53rd St deviates south along the railroad, creating out-of-direction travel and does not directly connect to Longmont low-stress system.
		Option 2 – Advisory Shoulder/ Shared Street + Sidepath Concept on North Side (see 2B map for specific locations of street vs sidepath)	*Yes. Substantive safety improvement.*	*Yes. If service were provided on SH 66, would reduce locations of local access where vehicles may be slowing down and consolidate into one location.*	*Yes. Provides a low-volume road and/or sidepath with low LTS away from high speeds and volumes on SH 66.*	*Yes. Provides a low-volume road and/or sidepath away from high speeds and volumes on SH 66.*	*Minimal impact to vehicular operations.*	*Yes. Facility would improve access to a future bus stop.*	*Yes. Would improve connectivity for all user types.*	*Yes. Would improve connectivity for all user types.*	*N/A*	*No. Higher risk with alternative near the floodplain/floodway and railroad. Also in the vicinity of the overhead conveyance structure near 51st Street. The area could be subject to other corridor-wide threats.*	*Moderately enhances evacuation options.*	*Yes. Provides a lower stress, lower speed environment for users in a rural setting.*	*Yes. As long as ROW isn't required; temporary disruption as all users become familiar with how the facility operates, especially at cross streets.*	*Possible impacts may involve St. Vrain floodplain/ floodway, potential wetlands, PMJM and bald eagle habitat, adjacent parks, proposed trails, utilities (including a water treatment plant), hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward*	*Selected as alternative carried forward for vehicular travel; cost-effective by serving multiple modes with a low-volume/ low-speed facility while also serving a wide spectrum of bicycle and pedestrian users.*

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
1B – Highland Dr. — 75th St. (Continued)	53rd St. – 66th St. (Off-Street) (Continued)	Option 3 – Sidepath along North Side	Yes. Substantive safety improvement.	May reduce interactions with bicycles.	Yes. A sidepath along the north side of SH 66 would improve safety by providing a separated and dedicated facility.	Yes. A sidepath along the north side of SH 66 would improve safety by providing a separated and dedicated facility.	No impact to vehicular operations.	Yes. Facility would improve access to a future bus stop.	Yes. Would improve connectivity for all user types.	Yes. Would improve connectivity for all user types.	N/A	No. Higher risk with alternative near the floodplain/ floodway and railroad. Also in the vicinity of the overhead conveyance structure near 51st Street. The area could be subject to other corridor-wide threats.	Moderately enhances evacuation options.	Yes, Provides a lower stress, lower speed environment for users in a rural setting; difficult to access from the south.	Yes. As long as ROW isn't required; temporary disruption as all users become familiar with how the facility operates, especially at cross streets.	Possible impacts may involve St. Vrain floodplain/floodway, potential wetlands, PMJM and bald eagle habitat, adjacent parks, proposed trails, utilities (including a water treatment plant), hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Consider if Access Road with Advisory Shoulder + Sidepath concept is not recommended. Would need planned grade-separated crossing near 51st St in place, as well as a safe crossing of SH 66 at or west of 87th St to be effective, as beyond these two points planned sidepaths/trails are on the south side of SH 66.
		Option 4 – Sidepath along South Side	Yes. Substantive safety improvement.	May reduce interactions with bicycles.	Yes. A sidepath along the south side of SH 66 would improve safety by providing a separated and dedicated facility.	Yes. A sidepath along the south side of SH 66 would improve safety by providing a separated and dedicated facility.	No impact to vehicular operations.	Yes. Facility would improve access to a future bus stop.	Yes. Would improve connectivity for all user types.	Yes. Would improve connectivity for all user types.	N/A	No. Higher risk with alternative near the floodplain/ floodway and railroad. Also in the vicinity of the overhead conveyance structure near 51st Street. The area could be subject to other corridor-wide threats.	Moderately enhances evacuation options.	Yes. Provides a lower stress, lower speed environment for users in a rural setting; difficult to access from the north.	Yes. As long as ROW isn't required; temporary disruption as all users become familiar with how the facility operates, especially at cross streets.	Possible impacts may involve St. Vrain floodplain/ floodway, potential wetlands, PMJM and bald eagle habitat, adjacent parks, proposed trails, utilities (including a water treatment plant), hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Would help extend the planned sidepath/trail on the south side of SH 66 west of 53rd St that deviates south along the railroad and connects with the planned sidepath on the south side of SH 66 east of 87th without needing a grade-separated or other enhanced crossing of SH 66.

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
1B - Highland Dr. — 75th St. (Continued)	66th St. – 75th St. (Off Street)	Option 1 - No Action	N/A	N/A	No. Less advanced users would be forced to use the roadway where vehicle speeds and volumes create a high LTS.	No. Less advanced users would be forced to use the roadway where vehicle speeds and volumes create a high stress environment.	No change over existing conditions.	No, future bus stops would be difficult to access.	No, less advanced users would not travel along the shoulder, leaving a gap in the network.	No, less advanced users would not travel along the shoulder, leaving a gap in the network.	N/A	No change from existing. Lower risk. The area could be subject to corridor-wide threats.	No. Does not enhance evacuation options.	Yes. No changes.	Ye. No impact.	Yes. No impact.	Not Recommended	With no improvements, a gap for less advanced bike/ped users would exist between sidepath / trail planned on the south side of SH 66 west of 53rd St and the planned sidepath on the south side of SH 66 east of 87th St. Trail west of 53rd St. deviates south along the railroad, creating out-of-direction travel and does not directly connect to Longmont low-stress system.
		Option 2 – Advisory Shoulder/ Shared Street + Sidepath Concept on North Side (see 2B map for specific locations of street vs sidepath)	*Yes. Substantive safety improvement.*	*Yes. If service were provided on SH 66, would reduce locations of local access where vehicles may be slowing down and consolidate into one location.*	*Yes. Provides a low-volume road and/or sidepath with low LTS away from high speeds and volumes on SH 66.*	*Yes. Provides a low-volume road and/or sidepath away from high speeds and volumes on SH 66.*	*Minimal impact to vehicular operations.*	*Yes. Facility would improve access to a future bus stop.*	*Yes. Would improve connectivity for all user types.*	*Yes. Would improve connectivity for all user types.*	*N/A*	*Yes. Lower risk. The area could be subject to corridor-wide threats.*	*Moderately enhances evacuation options.*	*Yes. Provides a lower stress, lower speed environment for users in a rural setting.*	*Yes. As long as ROW isn't required; temporary disruption as all users become familiar with how the facility operates, especially at cross streets.*	*Possible impacts may involve potential wetlands, PMJM and bald eagle habitat, adjacent parks, proposed trails, utilities (including a water treatment plant), hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward*	*Selected as alternative carried forward for vehicular travel; cost-effective by serving multiple modes with low-volume/low-speed facility while also serving a wide spectrum of bicycle and pedestrian users.*

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
<u>1B</u> – Highland Dr. — 75th St. (Continued)	66th St. – 75th St. (Off Street) (Continued)	Option 3 – Sidepath along North Side	Yes. Substantive safety improvement.	May reduce interactions with bicycles.	Yes. A sidepath along the north side of SH 66 would improve safety by providing a separated and dedicated facility.	Yes. A sidepath along the north side of SH 66 would improve safety by providing a separated and dedicated facility.	No impact to vehicular operations.	Yes. Facility would improve access to a future bus stop.	Yes. Would improve connectivity for all user types.	Yes. Would improve connectivity for all user types.	N/A	Yes. Lower risk. The area could be subject to corridor-wide threats.	Moderately enhances evacuation options.	Yes. Provides a lower stress, lower speed environment for users in a rural setting; difficult to access from the south.	Yes. If ROW isn't required; temporary disruption as all users become familiar with how the facility operates, especially at cross streets.	Possible impacts may involve potential wetlands, PMJM and bald eagle habitat, adjacent parks, proposed trails, utilities (including a water treatment plant), hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Continues off-street bike/ped facility that connects to the Access Road with Advisory Shoulder on the same side of SH 66. Would need planned grade-separated crossing near 51st St in place, as well as a safe crossing of SH 66 at 75th St to be effective, as beyond these two points planned sidepaths/trails are on the south side of SH 66.
		Option 4 – Sidepath along South Side	Yes. Substantive safety improvement.	May reduce interactions with bicycles.	Yes. A sidepath along the south side of SH 66 would improve safety by providing separated and dedicated facility.	Yes. A sidepath along the south side of SH 66 would improve safety by providing separated and dedicated facility.	No impact to vehicular operations.	Yes. Facility would improve access to a future bus stop.	Yes. Would improve connectivity for all user types.	Yes. Would improve connectivity for all user types.	N/A	Yes. Lower risk. The area could be subject to corridor-wide threats.	Moderately enhances evacuation options.	Yes. Provides a lower stress, lower speed environment for users in a rural setting; difficult to access from the north.	Yes. If ROW isn't required; temporary disruption as all users become familiar with how the facility operates, especially at cross streets.	Possible impacts may involve potential wetlands, PMJM and bald eagle habitat, adjacent parks, proposed trails, utilities (including a water treatment plant), hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Would help extend the planned sidepath/trail on the south side of SH 66 west of 53rd St. that deviates south along the railroad and connects with the planned sidepath on the south side of SH 66 east of 87th without needing a grade-separated or other enhanced crossing of SH 66.

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
1C – 75th St. — 87th St.	75th St. – 87th St. (On-Street)	Option 1 - No Action	N/A	No. If service were provided on SH 66, would have to mix with potential bicycle traffic on the shoulder.	No. High LTS due to vehicle speeds and volumes.	N/A	No change over existing conditions.	No change to mobility and/or connectivity.	No. Only advanced bicyclists may be comfortable using this section.	N/A	N/A	Yes. No change from existing. Lower risk. The area could be subject to corridor-wide threats.	No. Does not enhance evacuation options.	Yes. No change to context.	Yes. No impact.	Yes. No impact.	Not Recommended	Consider signs and spot/ intersection improvements that raise driver awareness of high bicycle activity along this section.
		Option 2 - Widen Shoulders to 5+ Feet (where not currently)	*Moderate safety improvement.*	*Slightly. If service were provided on SH 66, would still have to mix with potential bicycle traffic on the shoulder, but more room would make this a little safer.*	*Slightly. Provides more space for bicycles but still must interact with vehicles.*	*N/A*	*No impact to vehicular operations.*	*No change to mobility and/or connectivity.*	*No. Only advanced bicyclists may be comfortable using this section.*	*N/A*	*N/A*	*Yes. Lower risk. The area could be subject to corridor-wide threats.*	*Moderately enhances evacuation options.*	*Yes. Provides a continuous, higher speed bike facility; current facility is heavily used.*	*Yes. If additional ROW is not required to complete improvements.*	*Possible impacts may involve PMJM habitat, adjacent parks, proposed trails, utilities, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward*	*Selected due to off-street solutions for less experienced users, vehicular need for shoulders, maintenance concerns, and preference of advanced riders to be on the street.* *Consider signs and spot/intersection improvements that raise driver awareness of high bicycle activity along this section.*

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
1C - 75th St. — 87th St (Continued)	75th St. – 87th St. (On-Street) (Continued)	Option 3 – Separated Bike Lanes	Yes. Substantive safety improvement.	Yes. If service were provided on SH 66, separates bicycles from buses, but design will need to facilitate stops.	Yes. Provides physical separation from vehicles.	N/A	May improve operations by removing bicyclists from through traffic.	No. With no existing service, it would be difficult to design a facility to support transit. Would need to be retrofitted if service is added. ROW should be reserved for this retrofit.	Yes. Could attract a broader user type.	N/A	N/A	Yes. Lower risk. The area could be subject to corridor-wide threats.	Moderately enhances evacuation options.	Yes. As this is a heavily used corridor.	Yes. As it minimizes modal conflict; if additional ROW is not required.	Possible impacts may involve PMJM habitat, adjacent parks, proposed trails, utilities, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	CDOT's Strava data report indicates this section is heavily used by bicyclists. Regular or buffered bike lanes were not considered for this section because vehicle speeds and volumes are too high for this type of facility and would not lead to an improved LTS. Development is not planned as significantly for this section, so shoulders for breakdowns may be preferred.
	75th St. – Unnamed Rd 0.25 mi west of Table Mtn (Off-Street)	Option 1 - No Action	N/A	N/A	No. Less advanced users would be forced to use the roadway where vehicle speeds and volumes create a high LTS.	No. Less advanced users would be forced to use the roadway where vehicle speeds and volumes create a high stress environment.	No change over existing conditions.	No. Future bus stops would be difficult to access.	No. Less advanced users would not travel along the shoulder, leaving a gap in the network.	No. Less advanced users would not travel along the shoulder, leaving a gap in the network.	N/A	Yes. No change from existing. Lower risk. The area could be subject to corridor-wide threats.	No. Does not enhance evacuation options.	Yes. No change to context.	Yes. No impact.	Yes. No impact.	Not Recommended	With no improvements, a gap for less advanced bike/ped users would exist between the sidepath/trail planned on the south side of SH 66 west of 53rd St and the planned sidepath on the south side of SH 66 east of 87th St. Trail west of 53rd St. deviates south along the railroad, creating out-of-direction travel and does not directly connect to Longmont low-stress system.

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
1C - 75th St. — 87th St (Continued)	75th St. – Unnamed Rd 0.25 mi west of Table Mtn (Off-Street) (Continued)	*Option 2 – Advisory Shoulder/ Shared Street + Sidepath Concept on South Side (see 2B map for specific locations of street vs sidepath)*	*Yes. Substantive safety improvement.*	*Yes. If service were provided on SH 66, would reduce locations of local access where vehicles may be slowing down and consolidate into one location.*	*Yes. Provides a low-volume road and/or sidepath with low LTS away from high speeds and volumes on SH 66.*	*Yes. Provides a low-volume road and/or sidepath away from high speeds and volumes on SH 66.*	*Minimal impact to vehicular operations.*	*Yes. Facility would improve access to a future bus stop.*	*Yes. Would improve connectivity for all user types.*	*Yes. Would improve connectivity for all user types.*	*N/A*	*Yes. Lower risk. The area could be subject to corridor-wide threats.*	*Moderately enhances evacuation options.*	*Yes. Provides a lower stress, lower speed environment for users in a rural setting; difficult to access from the south.*	*Yes. If ROW isn't required; temporary disruption as all users become familiar with how the facility operates, especially at cross streets.*	*Possible impacts may involve PMJM habitat, adjacent parks, proposed trails, utilities, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward*	*Selected as alternative carried forward for vehicular travel; cost-effective by serving multiple modes with low-volume/low-speed facility while also serving a wide spectrum of bicycle and pedestrian users.*
		Option 3 – Sidepath along North Side	Yes. Substantive safety improvement.	May reduce interactions with bicycles.	Yes. A sidepath along the north side of SH 66 would improve safety by providing a separated and dedicated facility.	Yes. A sidepath along the north side of SH 66 would improve safety by providing a separated and dedicated facility.	No impact to vehicular operations.	Yes. Facility would improve access to a future bus stop.	Yes. Would improve connectivity for all user types.	Yes. Would improve connectivity for all user types.	N/A	Yes. Lower risk. The area could be subject to corridor-wide threats.	Moderately enhances evacuation options.	Yes. Provides a lower stress, lower speed environment for users in a rural setting; difficult to access from the south.	Yes, If ROW isn't required; temporary disruption as all users become familiar with how the facility operates, especially at cross streets.	Possible impacts may involve PMJM habitat, adjacent parks, proposed trails, utilities, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Would need planned grade-separated crossing near 51st St. in place, as well as a safe crossing of SH 66 at or west of 87th St. to be effective, as beyond these two points planned sidepaths/trails are on the south side of SH 66.

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
1C – 75th St. — 87th St (Continued)	75th St. – Unnamed Rd 0.25 mi west of Table Mtn (Off-Street) (Continued)	Option 4 – Sidepath along South Side	Yes. Substantive safety improvement.	May reduce interactions with bicycles.	Yes. A sidepath along the south side of SH 66 would improve safety by providing a separated and dedicated facility.	Yes. A sidepath along the south side of SH 66 would improve safety by providing a separated and dedicated facility.	No impact to vehicular operations.	Yes. Facility would improve access to a future bus stop.	Yes. Would improve connectivity for all user types.	Yes. Would improve connectivity for all user types.	N/A	Yes. Lower risk. The area could be subject to corridor-wide threats.	Moderately enhances evacuation options.	Yes. Provides a lower stress, lower speed environment for users in a rural setting; difficult to access from the north.	Yes. If ROW isn't required; temporary disruption as all users become familiar with how the facility operates, especially at cross streets.	Possible impacts may involve PMJM habitat, adjacent parks, proposed trails, utilities, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Would connect with the planned sidepath on the south side of SH 66 east of 87th without needing a grade-separated or other enhanced crossing of SH 66. Would need an improved crossing at 75th St to be effective (connect to facilities proposed as part of this PEL on the north side of SH 66).
		Option 5 – Sidepath Extension of Planned Sidepath along Hygiene Rd from 75th St to Trail around McIntosh Lake, and Sidepath along Airport Rd from McIntosh Lake to SH 66	Yes. Substantive safety improvement.	May reduce interactions with bicycles along SH 66.	Yes. Would improve safety by providing a separated and dedicated facility.	Yes. Would improve safety by providing a separated and dedicated facility.	No impact to vehicular operations.	No. Does not improve access to a future bus stop on SH 66.	Yes. Would improve connectivity for all user types but is less direct than a connection along SH 66.	Yes. Would improve connectivity for all user types but is less direct than a connection along SH 66.	N/A	Yes. Lower risk. The area could be subject to corridor-wide threats.	Moderately enhances evacuation options.	Yes. Provides a lower stress, lower speed environment for users in a rural setting; difficult to access from the north.	Yes. If ROW isn't required; temporary disruption as all users become familiar with how the facility operates, especially at cross streets.	Possible impacts may involve PMJM habitat, adjacent parks, proposed trails, utilities, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Alternative route to create continuous sidepath/trail between Lyons and Longmont. Would provide a connection between Lyons and Longmont but is less direct than the route along SH 66. Would still be a regional benefit but less so for the SH 66 corridor.

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
1C - 75th St. — 87th St (Continued)	Unnamed Rd 0.25 mi west of Table Mtn – 87th St. (Off-Street)	Option 1 - No Action	N/A	N/A	No. Less advanced users would be forced to use the roadway where vehicle speeds and volumes create a high LTS.	No. Less advanced users would be forced to use the roadway where vehicle speeds and volumes create a high stress environment.	No change over existing conditions.	No. Future bus stops would be difficult to access.	No. Less advanced users would not travel along the shoulder, leaving a gap in the network.	No. Less advanced users would not travel along the shoulder, leaving a gap in the network.	N/A	Yes. No change from existing. Lower risk. The area could be subject to corridor-wide threats.	No. Does not enhance evacuation options.	Yes. No change to context.	Yes. No impact.	Yes. No impact.	Not Recommended	With no improvements, a gap for less advanced bike/ped users would exist between the sidepath/trail planned on the south side of SH 66 west of 53rd St and the planned sidepath on the south side of SH 66 east of 87th St. Trail west of 53rd St. deviates south along the railroad, creating out-of-direction travel and does not directly connect to Longmont low-stress system.
		Option 2 – Sidepath along North Side	Substantive safety improvement.	May reduce interactions with bicycles.	Yes. A sidepath along the north side of SH 66 would improve safety by providing a separated and dedicated facility.	Yes. A sidepath along the north side of SH 66 would improve safety by providing a separated and dedicated facility.	No impact to vehicular operations.	Yes. Facility would improve access to a future bus stop.	Yes. Would improve connectivity for all user types.	Yes. Would improve connectivity for all user types.	N/A	Yes. Lower risk. The area could be subject to corridor-wide threats.	Moderately enhances evacuation options.	Yes. Provides a lower stress, lower speed environment for users in a rural setting; difficult to access from the south.	Yes. If ROW isn't required; temporary disruption as all users become familiar with how the facility operates, especially at cross streets.	Possible impacts may involve PMJM habitat, adjacent parks, proposed trails, utilities, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Would need a planned grade-separated crossing near 51st St. in place, as well as a safe crossing of SH 66 at or west of 87th St. to be effective, as beyond these two points planned sidepaths/trails are on the south side of SH 66.

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
1C - 75th St. — 87th St (Continued)	Unnamed Rd 0.25 mi west of Table Mtn – 87th St. (Off-Street) (Continued)	*Option 3 – Sidepath along South Side*	*Yes. Substantive safety improvement.*	*May reduce interactions with bicycles.*	*Yes, A sidepath along the south side of SH 66 would improve safety by providing a separated and dedicated facility.*	*Yes. A sidepath along the south side of SH 66 would improve safety by providing a separated and dedicated facility.*	*No impact to vehicular operations.*	*Yes. Facility would improve access to a future bus stop.*	*Yes. Would improve connectivity for all user types.*	*Yes. Would improve connectivity for all user types.*	*N/A*	*Yes. Lower risk. The area could be subject to corridor-wide threats.*	*Moderately enhances evacuation options.*	*Yes. Provides a lower stress, lower speed environment for users in a rural setting; difficult to access from the north.*	*Yes. If ROW isn't required; temporary disruption as all users become familiar with how the facility operates, especially at cross streets.*	*Possible impacts may involve PMJM habitat, adjacent parks, proposed trails, utilities, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward*	*Would connect with the planned sidepath on the south side of SH 66 east of 87th without needing a grade-separation or other enhanced crossing of SH 66. Would need an improved crossing at 75th St to be effective (connect to facilities proposed as part of this PEL on the north side of SH 66).*
		Option 4 – Sidepath Extension of Planned Sidepath along Hygiene Rd from 75th St to Trail around McIntosh Lake, and Sidepath along Airport Rd from McIntosh Lake to SH 66	Yes. Substantive safety improvement.	May reduce interactions with bicycles along SH 66.	Yes. Would improve safety by providing a separated and dedicated facility.	Yes. Would improve safety by providing a separated and dedicated facility.	No impact to vehicular operations.	No. Does not improve access to a future bus stop on SH 66.	Yes. Would improve connectivity for all user types but is less direct than a connection along SH 66.	Yes. Would improve connectivity for all user types but is less direct than a connection along SH 66.	N/A	Yes. Lower risk. The area could be subject to corridor-wide threats.	Moderately enhances evacuation options.	Yes. Provides a lower stress, lower speed environment for users in a rural setting; difficult to access from the north.	Yes. If ROW isn't required; temporary disruption as all users become familiar with how the facility operates, especially at cross streets.	Possible impacts may involve PMJM habitat, adjacent parks, proposed trails, utilities, hazardous material sites, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	Alternative route to create continuous sidepath trail between Lyons and Longmont. Would provide a connection between Lyons and Longmont but is less direct than a route along SH 66. Would still be a regional benefit, but less so for the SH 66 corridor.

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
2 - 87th St — County Line Rd.	87th St. – County Line Rd. (On-Street)	Option 1 - No Action	N/A	No. If service were provided on SH 66, would have to mix with potential bicycle traffic on shoulder.	No. High LTS due to vehicle speeds and volumes.	N/A	No change over existing conditions.	No change to mobility and/or connectivity.	No. Only advanced bicyclists may be comfortable using this section.	N/A	N/A	Yes. No change from existing. Lower risk. The area could be subject to corridor-wide threats.	No. Does not enhance evacuation options.	Yes. No changes to context.	Yes. No impact.	Yes. No impact.	Not Recommended	Consider signs and spot/intersection improvements that raise driver awareness of high bicycle activity along this section.
		Option 2 - Widen Shoulders to 5+ Feet (where not currently)	*Moderate safety improvement.*	*Slightly. If service were provided on SH 66, would still have to mix with potential bicycle traffic on the shoulder, but more room would make this a little safer.*	*Slightly. Provides more space for bicycles but still must interact with vehicles.*	*N/A*	*No impact to vehicular operations.*	*No change to mobility and/or connectivity.*	*No. Only advanced bicyclists may be comfortable using this section.*	*N/A*	*N/A*	*Yes. Lower risk. The area could be subject to corridor-wide threats.*	*Moderately enhances evacuation options.*	*Yes. Provides a continuous, higher speed bike facility.*	*Yes. If additional ROW is not required to complete improvements.*	*Possible impacts may include areas of potential wetlands and PMJM and bald eagle habitat, trails and parks, utilities, hazardous material sites, areas with higher low-income and minority populations, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward*	*Selected due to off-street solutions for less experienced users, vehicular need for shoulders, maintenance concerns, and preference of advanced riders to be on the street. Safety concerns through this section are primarily at the intersections, which will be addressed in Level 3.* **Consider signs and spot/intersection improvements that raise driver awareness of high bicycle activity along this section.**

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
2 - 87th St — County Line Rd. (Continued)	87th St. – County Line Rd. (On-Street) (Continued)	Option 3 – Separated Bike Lanes	Yes. Substantive safety improvement	Yes. If service were provided on SH 66, separates bicycles from buses, but design will need to facilitate stops.	Yes. Provides physical separation from vehicles.	N/A	May improve operations by removing bicyclists from through traffic.	No. With no existing service, it would be difficult to design a facility to support transit. Would need to be retrofitted if service is added. ROW should be reserved for this retrofit.	Yes. Could attract a broader user type.	N/A	N/A	Yes. Lower risk. The area could be subject to corridor-wide threats.	Moderately enhances evacuation options.	Yes. Provides a lower stress facility to access future development and existing neighborhoods.	Yes. If additional ROW is not required.	Possible impacts may include areas of potential wetlands and PMJM and bald eagle habitat, trails and parks, utilities, hazardous material sites, areas with higher low-income and minority populations, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	CDOT's Strava data report indicates this section is heavily used by bicyclists from 87th St to US 287, and east of US 287 to I-25 also sees high use. Regular or buffered bike lanes were not considered for this section because vehicle speeds and volumes are too high for this type of facility and would not lead to an improved LTS. Planned development through most of this section, coupled with existing development, makes this section busier, warranting a separated facility.
	87th St. – Anhawa Ave. (Off-Street)	*Option 1 - No Action + Planned*	*Yes. Substantive safety improvement.*	*N/A*	*Yes. Planned sidepath along the south side of SH 66 will improve safety by providing a separated and dedicated facility.*	*Yes. Planned sidepath along the south side of SH 66 will improve safety by providing a separated and dedicated facility.*	*No impact to vehicular operations.*	*Yes. Planned sidepath along the south side of SH 66 will improve access to a future bus stop.*	*Yes. Planned sidepath along the south side of SH 66 will improve connectivity for all user types.*	*Yes,. Planned sidepath along the south side of SH 66 will improve connectivity for all user types.*	*N/A*	*Yes. No change from existing. Lower risk. The area could be subject to corridor-wide threats.*	*No. Does not enhance evacuation options.*	*Yes. No changes beyond what has been planned.*	*Yes. No impacts beyond what is planned.*	*Yes. No impact from No Action. Potential impacts from planned improvements are unknown.*	*Carried Forward*	*Sidepath would handle most traffic.*

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
2 - 87th St — County Line Rd. (Continued)	Anhawa Ave. – 95th St. (Off-Street)	Option 1 - No Action + Planned	Yes. Substantive safety improvement.	N/A	Yes. Planned sidepath along the south side of SH 66 will improve safety by providing a separated and dedicated facility.	Yes. Planned sidepath along the south side of SH 66 will improve safety by providing a separated and dedicated facility.	No impact to vehicular operations.	Yes. Planned sidepath along the south side of SH 66 will improve access to a future bus stop.	Yes. Planned sidepath along the south side of SH 66 will improve connectivity for all user types.	Yes. Planned sidepath along the south side of SH 66 will improve connectivity for all user types.	N/A	Yes. No change from existing. Lower risk. The area could be subject to corridor-wide threats.	No. Does not enhance evacuation options.	Yes. No changes beyond what has been planned.	Yes. No impacts beyond what is planned.	Yes. No impact from No Action. Potential impacts from planned improvements are unknown.	Not Recommended	
		Option 2 – Add Sidewalk on North Side	*Moderate safety improvement.*	*N/A*	*Slightly. Bicycles could use the sidewalk or other facilities north in the neighborhood to cross at 95th St.*	*Yes. Provides physical separation from vehicles.*	*No impact to vehicular operations.*	*Yes. Would improve access to a future bus stop.*	*Slightly. Bicycles could use the sidewalk or other facilities north in the neighborhood to cross at 95th St.*	*Yes. Could attract a broader user type.*	*N/A*	*Yes. Lower risk. The area could be subject to corridor-wide threats.*	*Moderately enhances evacuation options.*	*Somewhat. Provides a facility for pedestrians, but there are not many attractors/destinations in this area.*	*Somewhat. If ROW is not required.*	*Possible impacts may include areas of potential wetlands and PMJM and bald eagle habitat, trails and parks, utilities, areas with higher low-income and minority populations, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward*	*Serves existing development, creating a pedestrian facility that connects to planned sidepaths at 95th St.*
	95th St. – County Line Rd. (Off-Street)	*Option 1 - No Action + Planned*	*Yes. Substantive safety improvement.*	*N/A*	*Yes. Planned sidepath along both sides of SH 66 will improve safety by providing a separated and dedicated facility.*	*Yes. Planned sidepath along both sides of SH 66 will improve safety by providing a separated and dedicated facility.*	*No impact to vehicular operations.*	*Yes. Planned sidepath along both sides of SH 66 will improve access to future bus stops.*	*Yes. Planned sidepath along both sides of SH 66 will improve connectivity for all user types.*	*Yes. Planned sidepath along both sides of SH 66 will improve connectivity for all user types.*	*N/A*	*Yes. No change from existing. Lower risk. The area could be subject to corridor-wide threats.*	*No. Does not enhance evacuation options.*	*Yes. No change to context.*	*Yes. No impact.*	*Yes. No impact from No Action. Potential impacts from planned improvements are unknown.*	*Carried Forward*	*Sidepaths would handle most traffic.*

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
3 - County Line Rd. — 3rd St / WCR 7	County Line Rd – 3rd St. / WCR 7 (On-Street)	Option 1 - No Action	N/A	No. If service were provided on SH 66, would have to mix with potential bicycle traffic on the shoulder.	No. High LTS due to vehicle speeds and volumes.	N/A	No change over existing conditions.	No change to mobility and/or connectivity.	No. Only advanced bicyclists may be comfortable using this section.	N/A	N/A	No change from existing. Moderate risk with alternative near a railroad crossing. The area could be subject to other corridor-wide threats.	No. Does not enhance evacuation options.	Yes. No change to context.	Yes. No impact.	Yes. No impact.	Not Recommended	Consider signs and spot/intersection improvements that raise driver awareness of high bicycle activity along this section.
		Option 2 - Widen Shoulders to 5+ Feet (where not currently)	*Moderate safety improvement.*	*Slightly. If service were provided on SH 66, would still have to mix with potential bicycle traffic on the shoulder, but more room would make this a little safer.*	*Slightly. Provides more space for bicycles but still must interact with vehicles.*	*N/A*	*No impact to vehicular operations.*	*No change to mobility and/or connectivity.*	*No. Only advanced bicyclists may be comfortable using this section.*	*N/A*	*N/A*	*Moderate risk with alternative near a railroad crossing. The area could be subject to other corridor-wide threats.*	*Moderately enhances evacuation options.*	*Yes. Provides a continuous, higher speed bike facility; current facility is heavily used.*	*Yes. If additional ROW is not required to complete improvements.*	*Possible impacts may include trails and parks, areas of potential wetlands, utilities, hazardous materials sites, areas with higher low-income and minority populations, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward*	*Selected due to off-street solutions for less experienced users, vehicular need for shoulders, maintenance concerns, and preference of advanced riders to be on the street. Consider signs and spot/intersection improvements that raise driver awareness of high bicycle activity along this section.*

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
3 - County Line Rd. — 3rd St / WCR 7 (Continued)	County Line Rd – 3rd St. / WCR 7 (On-Street)	Option 3 – Separated Bike Lanes	Yes. Substantive safety improvement.	Yes. If service were provided on SH 66, separates bicycles from buses, but design will need to facilitate stops.	Yes. Provides physical separation from vehicles.	N/A	May improve operations by removing bicyclists from through traffic.	No. With no existing service, it would be difficult to design a facility to support transit. Would need to be retrofitted if service is added. ROW should be reserved for this retrofit.	Yes. Could attract a broader user type.	N/A	N/A	Moderate risk with alternative near a railroad crossing. The area could be subject to other corridor-wide threats.	Moderately enhances evacuation options.	Yes. As this is a heavily used corridor; provides a lower stress environment.	Yes. As it minimizes modal conflict; if additional ROW is not required.	Possible impacts may include trails and parks, areas of potential wetlands, utilities, hazardous materials sites, areas with higher low-income and minority populations, visual resources, and historic or potentially historic sites. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	CDOT's Strava data report indicates this section is heavily used by bicyclists. Regular or buffered bike lanes were not considered for this section because vehicle speeds and volumes are too high for this type of facility and would not lead to an improved LTS. Development is not planned as significantly for this section, so shoulders for breakdowns may be preferred.
	County Line Rd – 3rd St. / WCR 7 (Off-Street)	*Option 1 - No Action + Planned*	*Yes. Substantive safety improvement.*	*N/A*	*Yes. Planned sidepath along the south side of SH 66 will improve safety by providing a separated and dedicated facility.*	*Yes. Planned sidepath along the south side of SH 66 will improve safety by providing a separated and dedicated facility.*	*No impact to vehicular operations.*	*Yes. Planned sidepath along the south side of SH 66 will improve access to a future bus stop.*	*Yes. Planned sidepath along the south side of SH 66 will improve connectivity for all user types.*	*Yes. Planned sidepath along the south side of SH 66 will improve connectivity for all user types.*	*N/A*	*No change from existing. Moderate risk with alternative near a railroad crossing. The area could be subject to other corridor-wide threats.*	*No. Does not enhance evacuation options.*	*Yes. No changes beyond what has been planned.*	*Yes. No impacts beyond what is planned.*	*Yes. No impact from No Action. Potential impacts from planned improvements are unknown.*	*Carried Forward*	*Sidepath would handle most traffic.*

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
4 - 3rd St. / WCR 7 — WCR 11	3rd St. / WCR 7 – WCR 9.5 (On-Street)	Option 1 - No Action	N/A	No. If service were provided on SH 66, would have to mix with potential bicycle traffic on the shoulder.	No. High LTS due to vehicle speeds and volumes.	N/A	No change over existing conditions.	No change to mobility and/or connectivity.	No. Only advanced bicyclists may be comfortable using this section.	N/A	N/A	No change. Moderate risk with bridge strike potential. The area is subject to other corridor-wide threats.	No. Does not enhance evacuation options.	Yes. No change to context.	Yes. No impact.	Minor to no impacts surrounding natural and cultural environment.	Not Recommended	Consider signs and spot/intersection improvements that raise driver awareness of high bicycle activity along this section.
		Option 2 - Widen Shoulders to 5+ Feet (where not currently)	*Moderate safety improvement*	*Slightly. If service were provided on SH 66, would still have to mix with potential bicycle traffic on the shoulder, but more room would make this a little safer.*	*Slightly. Provides more space for bicycles but still must interact with vehicles.*	*N/A*	*No impact to vehicular operations.*	*No change to mobility and/or connectivity.*	*No. Only advanced bicyclists may be comfortable using this section.*	*N/A*	*N/A*	*Moderate risk with bridge strike potential. The area is subject to other corridor-wide threats.*	*Moderately enhances evacuation options.*	*Yes. Provides a continuous, higher speed bike facility.*	*Yes. If additional ROW is not required to complete improvements.*	*Possible impacts may include areas of potential wetlands, proposed trails, utilities, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward*	*Selected due to off-street solutions for less experienced users, vehicular need for shoulders, maintenance concerns, and preference of advanced riders to be on the street.* *Consider signs and spot/intersection improvements that raise driver awareness of high bicycle activity along this section.*

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
4 – 3rd St. / WCR 7 — WCR 11 (Continued)	3rd St. / WCR 7 – WCR 9.5 (On-Street) (Continued)	Option 3 – Separated Bike Lanes	Yes. Substantive safety improvement.	Yes. If service were provided on SH 66, separates bicycles from buses, but design will need to facilitate stops.	Yes. Provides physical separation from vehicles.	N/A	May improve operations by removing bicyclists from through traffic.	No. With no existing service, it would be difficult to design a facility to support transit. Would need to be retrofitted if service is added. ROW should be reserved for this retrofit.	Yes. Could attract a broader user type.	N/A	N/A	Moderate risk with bridge strike potential. The area is subject to other corridor-wide threats.	Moderately enhances evacuation options.	Somewhat. Would be challenging to implement in an interchange context.	Somewhat. Some may introduce modal conflict at the interchange.	Possible impacts may include areas of potential wetlands, proposed trails, utilities, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	CDOT's Strava data report indicates this section is heavily used by bicyclists. Regular or buffered bike lanes were not considered for this section because vehicle speeds and volumes are too high for this type of facility and would not lead to an improved LTS. Planned development for this location would make this section busier, and truck traffic is higher in this section, warranting a separated facility.
	WCR 9.5 – WCR 11 (On-Street)	Option 1 – No Action	N/A	No. If service were provided on SH 66, would have to mix with potential bicycle traffic on the shoulder.	No. High LTS due to vehicle speeds and volumes.	N/A	No change over existing conditions.	No change to mobility and/or connectivity.	No. Only advanced bicyclists may be comfortable using this section.	N/A	N/A	Yes. No change from existing. Lower risk. The area is subject to corridor-wide threats.	No. Does not enhance evacuation options.	Yes. No change to context.	Yes. No impact.	Yes. No impact.	Not Recommended	Consider signs and spot/intersection improvements that raise driver awareness of high bicycle activity along this section.

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
4 - 3rd St. / WCR 7 — WCR 11 (Continued)	WCR 9.5 – WCR 11 (On-Street) (Continued)	*Option 2 - Widen Shoulders to 5+ Feet (where not currently)*	*Moderate safety improvement.*	*Slightly. If service were provided on SH 66, would still have to mix with potential bicycle traffic on the shoulder, but more room would make this a little safer.*	*Slightly. Provides more space for bicycles but still must interact with vehicles.*	*N/A*	*No impact to vehicular operations.*	*No change to mobility and/or connectivity.*	*No. Only advanced bicyclists may be comfortable using this section.*	*N/A*	*N/A*	*Yes. Lower risk. The area is subject to corridor-wide threats.*	*Moderately enhances evacuation options.*	*Yes. Provides a continuous, higher speed bike facility.*	*Yes. If additional ROW is not required to complete improvements.*	*Possible impacts may include utilities (including oil/gas production facilities), hazardous material sites, areas with higher low-income populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward*	*Selected due to off-street solutions for less experienced users, vehicular need for shoulders, maintenance concerns, and preference of advanced riders to be on the street.* *Consider signs and spot/intersection improvements that raise driver awareness of high bicycle activity along this section.*
		Option 3 – Separated Bike Lanes	Yes. Substantive safety improvement.	Yes. If service were provided on SH 66, separates bicycles from buses, but design will need to facilitate stops.	Yes. Provides physical separation from vehicles.	N/A	May improve operations by removing bicyclists from through traffic.	No. With no existing service, it would be difficult to design a facility to support transit. Would need to be retrofitted if service is added. ROW should be reserved for this retrofit.	Yes. Could attract a broader user type.	N/A	N/A	Yes. Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Somewhat. Section experiences medium to low use by bicyclists, and this facility type may not be needed.	Yes. As long as ROW is not required.	Possible impacts may include utilities (including oil/gas production facilities), hazardous material sites, areas with higher low-income populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	CDOT's Strava data report indicates this section experiences medium to low use by bicyclists. Regular or buffered bike lanes were not considered for this section because vehicle speeds and volumes are too high for this type of facility and would not lead to an improved LTS. Development is not planned as significantly for this section, so shoulders for breakdowns may be preferred.

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
4 - 3rd St. / WCR 7 — WCR 11 (Continued)	3rd St. / WCR 7 – I-25 SB Ramps (Off-Street)	*Option 1 - No Action + Planned*	*Yes. Substantive safety improvement.*	*N/A*	*Yes. Planned sidepath along both sides of SH 66 will improve safety by providing a separated and dedicated facility.*	*Yes. Planned sidepath along both sides of SH 66 will improve safety by providing a separated and dedicated facility.*	*No impact to vehicular operations.*	*Yes. Planned sidepath along both sides of SH 66 will improve access to future bus stops.*	*Yes. Planned sidepath along both sides of SH 66 will improve connectivity for all user types.*	*Yes. Planned sidepath along both sides of SH 66 will improve connectivity for all user types.*	*N/A*	*Yes. No change from existing. Lower risk. The area is subject to corridor-wide threats.*	*No. Does not enhance evacuation options.*	*Yes. No changes beyond what has been planned.*	*Yes. No impacts beyond what is planned.*	*Yes. No impact from No Action. Potential impacts from planned improvements are unknown.*	*Carried Forward*	*Sidepaths would handle most traffic.*
	I-25 SB Ramps – WCR 11 (Off-Street)	*Option 1 - No Action + Planned*	*Yes. Substantive safety improvement.*	*N/A*	*Yes. Planned sidepath along the south side of SH 66 will improve safety by providing a separated and dedicated facility.*	*Yes. Planned sidepath along the south side of SH 66 will improve safety by providing a separated and dedicated facility.*	*No impact to vehicular operations.*	*Yes. Planned sidepath along the south side of SH 66 will improve access to a future bus stop.*	*Yes. Planned sidepath along the south side of SH 66 will improve connectivity for all user types.*	*Yes. Planned sidepath along the south side of SH 66 will improve connectivity for all user types.*	*N/A*	*Yes. No change from existing. Lower risk. The area is subject to corridor-wide threats.*	*No. Does not enhance evacuation options.*	*Yes. No changes beyond what has been planned.*	*Yes. No impacts beyond what is planned.*	*Yes. No impact from No Action. Potential impacts from planned improvements are unknown.*	*Carried Forward*	*Sidepath would handle most traffic.*

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
5a - WCR 11 — WCR 13	WCR 11 – WCR 13 (On-Street)	Option 1 - No Action	N/A	No. If service were provided on SH 66, would have to mix with potential bicycle traffic on the shoulder.	No. High LTS due to vehicle speeds and volumes.	N/A	No change over existing conditions.	No change to mobility and/or connectivity.	No. Only advanced bicyclists may be comfortable using this section.	N/A	N/A	Yes. No change from existing. Lower risk. The area is subject to corridor-wide threats.	No. Does not enhance evacuation options.	Yes. No change to context.	Yes. No impact.	Yes. No impact.	Not Recommended	Consider signs and spot/intersection improvements that raise driver awareness of high bicycle activity along this section.
		Option 2 - Widen Shoulders to 5+ Feet (where not currently)	*Moderate safety improvement.*	*Slightly. If service were provided on SH 66, would still have to mix with potential bicycle traffic on the shoulder, but more room would make this a little safer.*	*Slightly. Provides more space for bicycles but still must interact with vehicles.*	*N/A*	*No impact to vehicular operations.*	*No change to mobility and/or connectivity.*	*No. Only advanced bicyclists may be comfortable using this section.*	*N/A*	*N/A*	*Yes. Lower risk. The area is subject to corridor-wide threats.*	*Moderately enhances evacuation options.*	*Yes. Provides a continuous, higher speed bike facility in a rural setting.*	*Yes. If additional ROW is not required to complete improvements.*	*Possible impacts may include proposed trails, utilities (including oil/gas production facilities), areas with higher low-income populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward*	*Selected due to off-street solutions for less experienced users, vehicular need for shoulders, maintenance concerns, and preference of advanced riders to be on the street. Consider signs and spot/intersection improvements that raise driver awareness of high bicycle activity along this section.*

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
5a - WCR 11 — WCR 13 (Continued)	WCR 11 – WCR 13 (On-Street) (Continued)	Option 3 – Separated Bike Lanes	Yes. Substantive safety improvement.	Yes. If service were provided on SH 66, separates bicycles from buses, but design will need to facilitate stops.	Yes. Provides physical separation from vehicles.	N/A	May improve operations by removing bicyclists from through traffic.	No. With no existing service, it would be difficult to design a facility to support transit. Would need to be retrofitted if service is added. ROW should be reserved for this retrofit.	Yes. Could attract a broader user type.	N/A	N/A	Yes. Lower risk. The area is subject to corridor-wide threats.	Moderately enhances evacuation options.	Somewhat. Section experiences medium to low use by bicyclists, and this facility type may not be needed.	Yes. As long as ROW is not required.	Possible impacts may include proposed trails, utilities (including oil/gas production facilities), areas with higher low-income populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	CDOT's Strava data report indicates this section experiences medium to low use by bicyclists. Regular or buffered bike lanes were not considered for this section because vehicle speeds and volumes are too high for this type of facility and would not lead to an improved LTS. Development is not planned as significantly for this section, so shoulders for breakdowns may be preferred.
	WCR 11 – WCR 13 (Off-Street)	*Option 1 - No Action + Planned*	*Substantive safety improvement.*	*N/A*	*Yes. Planned sidepath along the south side of SH 66 will improve safety by providing a separated and dedicated facility.*	*Yes. Planned sidepath along the south side of SH 66 will improve safety by providing a separated and dedicated facility.*	*No impact to vehicular operations.*	*Yes. Planned sidepath along the south side of SH 66 will improve access to a future bus stop.*	*Yes. Planned sidepath along the south side of SH 66 will improve connectivity for all user types.*	*Yes. Planned sidepath along the south side of SH 66 will improve connectivity for all user types.*	*N/A*	*Yes. No change from existing. Lower risk. The area is subject to corridor-wide threats.*	*No. Does not enhance evacuation options.*	*Yes. No changes beyond what has been planned.*	*Yes. No impacts beyond what is planned.*	*Yes. No impact from No Action. Potential impacts from planned improvements are unknown.*	*Carried Forward*	*Sidepath would handle most traffic.*

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
5b - WCR 13 — WCR 19	WCR 13 – WCR 19 (On-Street)	Option 1 - No Action	N/A	No. If service were provided on SH 66, would have to mix with potential bicycle traffic on the shoulder.	No. High LTS due to vehicle speeds and volumes.	N/A	No change over existing conditions.	No change to mobility and/or connectivity.	No. Only advanced bicyclists may be comfortable using this section.	N/A	N/A	No change from existing. Moderate risk in a floodplain/ floodway. The area is subject to other corridor-wide threats.	No. Does not enhance evacuation options.	Yes. No change to context.	Yes. No impact.	Yes. No impact.	Not Recommended	Consider signs and spot/intersection improvements that raise driver awareness of high bicycle activity along this section.
		Option 2 - Widen Shoulders to 5+ Feet (where not currently)	*Moderate safety improvement.*	*Slightly. If service were provided on SH 66, would still have to mix with potential bicycle traffic on the shoulder, but more room would make this a little safer.*	*Slightly. Provides more space for bicycles, but still must interact with vehicles.*	*N/A*	*No impact to vehicular operations.*	*No change to mobility and/or connectivity.*	*No. Only advanced bicyclists may be comfortable using this section.*	*N/A*	*N/A*	*Moderate risk in a floodplain/ floodway. The area is subject to other corridor-wide threats.*	*Moderately enhances evacuation options.*	*Yes. Provides a continuous, higher speed bike facility in a rural setting.*	*Yes. If additional ROW is not required to complete improvements.*	*Possible impacts may include floodplain/ floodway, potential wetlands, bald eagle habitat, proposed trails, utilities, areas with higher low-income populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.*	*Carried Forward*	*Selected due to off-street solutions for less experienced users, vehicular need for shoulders, maintenance concerns, and preference of advanced riders to be on the street. Consider signs and spot/intersection improvements that raise driver awareness of high bicycle activity along this section.*

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk and Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the alternative allow sufficient capacity to handle traffic demand in 2040?*	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*		
5b - WCR 13 — WCR 19 (Continued)	WCR 13 – WCR 19 (On-Street) (Continued)	Option 3 – Separated Bike Lanes	Yes. Substantive safety improvement.	Yes. If service were provided on SH 66, separates bicycles from buses, but design will need to facilitate stops.	Yes. Provides physical separation from vehicles.	N/A	May improve operations by removing bicyclists from through traffic.	No. With no existing service, it would be difficult to design a facility to support transit. Would need to be retrofitted if service is added. ROW should be reserved for this retrofit.	Yes. Could attract a broader user type.	N/A	N/A	Moderate risk in a floodplain/flood-way. The area is subject to other corridor-wide threats.	Moderately enhances evacuation options.	Somewhat. Section experiences medium to low use by bicyclists, and this facility type may not be needed.	Yes. As long as ROW is not required.	Possible impacts may include floodplain/flood-way, potential wetlands, bald eagle habitat, proposed trails, utilities, areas with higher low-income populations, and visual resources. Impacts may be avoided, minimized, or mitigated to be insubstantial.	Not Recommended	CDOT's Strava data report indicates this section experiences medium to low use by bicyclists. Regular or buffered bike lanes were not considered for this section because vehicle speeds and volumes are too high for this type of facility and would not lead to an improved LTS. Development is not planned as significantly for this section, so shoulders for breakdowns may be preferred.
	WCR 13 – WCR 19 (Off-Street)	*Option 1 - No Action + Planned*	*Yes. Substantive safety improvement.*	*N/A*	*Yes. Planned sidepath along the south side of SH 66 will improve safety by providing a separated and dedicated facility.*	*Yes. Planned sidepath along the south side of SH 66 will improve safety by providing a separated and dedicated facility.*	*No impact to vehicular operations.*	*Yes. Planned sidepath along the south side of SH 66 will improve access to a future bus stop.*	*Yes. Planned sidepath along the south side of SH 66 will improve connectivity for all user types.*	*Yes. Planned sidepath along the south side of SH 66 will improve connectivity for all user types.*	*N/A*	*No change from existing. Moderate risk in a floodplain/ floodway. The area is subject to other corridor-wide threats.*	*No. Does not enhance evacuation options.*	*Yes. No changes beyond what has been planned.*	*Yes. No impacts beyond what is planned.*	*Yes. No impact from No Action. Potential impacts from planned improvements are unknown.*	*Carried Forward*	*Sidepath would handle most traffic.*

Appendix F. Agency Coordination Summary

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SH 66 Planning and Environmental Linkages Study

Stakeholder Coordination

Meeting Summary

Session	Date	Topics
Agency Kick-Off	10/18/16	Study team intro, PEL process, next steps, corridor discussion
TAC #1	2/8/17	Stakeholder feedback, DRCOG model, corridor conditions, PI plan
Coalition	**2/27/2017**	**Introductions and anticipated next steps for SH 66**
Coalition	**3/24/2017**	**Visioning and partnering related to safety and land use planning and influence on SH 66 PEL/ACP**
Visioning Workshop	4/4/17	Project overview, data collection update, small group sessions
TAC # 2	4/18/17	Visioning workshop summary, Corridor Conditions Report (CCR) status, Purpose and Need (P&N), charter, public meeting
PEL Public Open Houses	**4/25 and 4/26/17**	**Study overview, data collection, CCR, P&N, next steps**
Coalition	**4/28/2017**	**Open house recap, PEL/ACP study limits, next steps**
Coalition	**5/26/2017**	**PEL and community updates**
TAC #3	6/13/17	Final P&N, open house recap, Draft CCR, and alts development and screening next steps
EC #1	**7/24/2017**	**Final P&N, CCR, and alts development and screening overview**
Coalition	**8/25/2017**	**PEL and community updates**
Coalition	**9/19/2017**	**PEL and community updates**
TAC #4	9/21/2017	CCR review, risk and resiliency (R&R), P&N, alternatives development and screening updates
Coalition	**10/27/2017**	**PEL and community updates**
EC #2	**12/14/2017**	**Alternatives screening updates, R&R, stakeholder involvement, ACP**
TAC and Coalition electronic update	January, 2018	Alternatives development and screening, R&R, and public involvement updates
Coalition	**2/22/2018**	**Alternatives screening updates, R&R, stakeholder involvement, ACP**
TAC #5	3/8/2018	Alternatives development and screening and R&R, and statewide PEL consistency

Session	Date	Topics
Coalition	**3/23/2018**	**Alternatives screening updates, R&R, stakeholder involvement, ACP**
Coalition	**4/27/2018**	**PEL/ACP and community updates**
Coalition	**5/25/2018**	**PEL/ACP and community updates**
Coalition	**July, 2018**	**PEL/ACP and community updates**
TAC electronic update	August, 2018	Alternatives development and screening, risk and resiliency, and public involvement updates; next steps for stakeholders
R&R Workshop	8/23/2018	Background, physical threats, and operational threats, partnership opportunities, next steps
TAC #6	10/18/2018	Alternatives development and screening detailed discussions and PEL next steps
Coalition	**December, 2018**	**PEL/ACP and community updates; review of alternatives development and screening, R&R; stakeholder next steps**
Coalition	**January, 2019**	**PEL/ACP and community updates**
Coalition	**February, 2019**	**PEL/ACP and community updates**
Coalition	**March, 2019**	**PEL/ACP and community updates; open house prep**
PEL Public Open Houses	**4/16 and 4/18/2019**	**Alternatives development and screening outcomes and next steps and risk and resiliency**
Coalition	**May, 2019**	**PEL/ACP and community updates**
Coalition	**July, 2019**	**PEL/ACP and community updates; and open house prep; ACP discussions**
Draft ACP Public Open House	**7/25/2019**	**ACP overview, draft access recommendations and general PEL Update**
Coalition	**August, 2019**	**PEL/ACP and community updates; and open house prep; ACP discussions**
PEL/Final ACP Public Open Houses	**9/25 and 9/26/2019**	**Alternatives development and screening Level 3 findings, environmental impacts, future ACP recommendations**
Coalition	**September, 2019**	**PEL/ACP and community updates**
Coalition	**October, 2019**	**PEL/ACP conclusion and report reviews**

Appendix F-1: Environmental Resource Agency Correspondence

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FELSBURG HOLT & ULLEVIG

connecting and enhancing communities

March 24, 2017

Colorado Department of Public Health and Environment
CDPHE/CDOT Liaison
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530
Attn: Ms. Jean Cordova

Subject: SH 66 Planning and Environmental Linkages Study, Corridor Conditions Report and Visioning Workshop, Colorado State Highway 66, Boulder and Weld Counties, Colorado

Dear Ms. Cordova:

The Colorado Department of Transportation (CDOT) is conducting a study referred to as SH 66 Planning and Environmental Linkages (PEL). The objective of the SH 66 PEL Study is to develop a strategic vision for SH 66 between the Town of Lyons and Weld County Road 19, a corridor approximately 20 miles long. The purpose is to identify the safety and operational needs along SH 66 and determine short-term and long-term transportation priorities. The study will encourage collaboration between Transportation Environmental Resource Council (TERC) members including CDOT, Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Regional Transportation District (RTD), and other federal, state and local agencies as outlined in the PEL Partnering Agreement dated June 11, 2009. Short-term and long-term improvements will be prioritized through a collaborative process with stakeholders and the public along the corridor. The final product will include a series of projects with a prioritization/implementation plan that will help to obtain funding for improvements along the corridor.

As part of the SH 66 PEL Study, our team is hosting a Visioning Workshop on Tuesday, April 4th, from 4 to 6 PM at the Mead Town Hall (441 3rd St, Mead, CO 80542) to cast a vision and common purpose for the PEL and corridor. If you are interested in attending, please contact me to receive meeting materials. In addition, a Corridor Conditions Report (CCR) is being prepared to document current conditions of the corridor regarding land use, the transportation system, and environmental resources. The information presented in the CCR will be the basis for developing and evaluating possible transportation improvements within the corridor. Upon completion of the CCR, the report will be forwarded to your agency for your comment. The anticipated distribution date of the CCR is Late Spring 2017. We will send the CCR to your attention unless contact information is provided regarding a different recipient. This letter is to notify your agency of the study and to confirm comment is not requested at this time; however, if you know of a particular area or resource of interest, please bring it to my attention.

Please feel free to contact me with any questions or comments: jodie.snyder@fhueng.com or 720-200-8913.

Sincerely,

Jodie A. Snyder

Jodie A. Snyder, Senior Environmental Scientist
Felsburg Holt and Ullevig

6300 South Syracuse Way, Suite 600 Centennial, CO 80111 tel 303.721.1440 fax 303.721.0832
www.fhueng.com info@fhueng.com

FELSBURG HOLT & ULLEVIG

connecting and enhancing communities

March 24, 2017

Colorado Parks and Wildlife
Northeast Region - Denver
6060 Broadway
Denver, Colorado 80203
Attn: Mr. Brandon Marette

Subject: SH 66 Planning and Environmental Linkages Study, Corridor Conditions Report and Visioning Workshop, Colorado State Highway 66, Boulder and Weld Counties, Colorado

Dear Mr. Marette:

The Colorado Department of Transportation (CDOT) is conducting a study referred to as SH 66 Planning and Environmental Linkages (PEL). The objective of the SH 66 PEL Study is to develop a strategic vision for SH 66 between the Town of Lyons and Weld County Road 19, a corridor approximately 20 miles long. The purpose is to identify the safety and operational needs along SH 66 and determine short-term and long-term transportation priorities. The study will encourage collaboration between Transportation Environmental Resource Council (TERC) members including CDOT, Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Regional Transportation District (RTD), and other federal, state and local agencies as outlined in the PEL Partnering Agreement dated June 11, 2009. Short-term and long-term improvements will be prioritized through a collaborative process with stakeholders and the public along the corridor. The final product will include a series of projects with a prioritization/implementation plan that will help to obtain funding for improvements along the corridor.

As part of the SH 66 PEL Study, our team is hosting a Visioning Workshop on Tuesday, April 4th, from 4 to 6 PM at the Mead Town Hall (441 3rd St, Mead, CO 80542) to cast a vision and common purpose for the PEL and corridor. If you are interested in attending, please contact me to receive meeting materials. In addition, a Corridor Conditions Report (CCR) is being prepared to document current conditions of the corridor regarding land use, the transportation system, and environmental resources. The information presented in the CCR will be the basis for developing and evaluating possible transportation improvements within the corridor. Upon completion of the CCR, the report will be forwarded to your agency for your comment. The anticipated distribution date of the CCR is Late Spring 2017. We will send the CCR to your attention unless contact information is provided regarding a different recipient. This letter is to notify your agency of the study and to confirm comment is not requested at this time; however, if you know of a particular area or resource of interest, please bring it to my attention.

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Felsburg Holt and Ullevig

6300 South Syracuse Way, Suite 600 Centennial, CO 80111 tel 303.721.1440 fax 303.721.0832
www.fhueng.com info@fhueng.com

FELSBURG HOLT & ULLEVIG

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March 24, 2017

U.S. EPA Region 8 (8EPR-N)
1595 Wynkoop Street
Denver, Colorado 80202-1129
Attn: Ms. Carol Anderson

Subject: SH 66 Planning and Environmental Linkages Study, Corridor Conditions Report and Visioning Workshop, Colorado State Highway 66, Boulder and Weld Counties, Colorado

Dear Ms. Anderson:

The Colorado Department of Transportation (CDOT) is conducting a study referred to as SH 66 Planning and Environmental Linkages (PEL). The objective of the SH 66 PEL Study is to develop a strategic vision for SH 66 between the Town of Lyons and Weld County Road 19, a corridor approximately 20 miles long. The purpose is to identify the safety and operational needs along SH 66 and determine short-term and long-term transportation priorities. The study will encourage collaboration between Transportation Environmental Resource Council (TERC) members including CDOT, Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Regional Transportation District (RTD), and other federal, state and local agencies as outlined in the PEL Partnering Agreement dated June 11, 2009. Short-term and long-term improvements will be prioritized through a collaborative process with stakeholders and the public along the corridor. The final product will include a series of projects with a prioritization/implementation plan that will help to obtain funding for improvements along the corridor.

As part of the SH 66 PEL Study, our team is hosting a Visioning Workshop on Tuesday, April 4th, from 4 to 6 PM at the Mead Town Hall (441 3rd St, Mead, CO 80542) to cast a vision and common purpose for the PEL and corridor. If you are interested in attending, please contact me to receive meeting materials. In addition, a Corridor Conditions Report (CCR) is being prepared to document current conditions of the corridor regarding land use, the transportation system, and environmental resources. The information presented in the CCR will be the basis for developing and evaluating possible transportation improvements within the corridor. Upon completion of the CCR, the report will be forwarded to your agency for your comment. The anticipated distribution date of the CCR is Late Spring 2017. We will send the CCR to your attention unless contact information is provided regarding a different recipient. This letter is to notify your agency of the study and to confirm comment is not requested at this time; however, if you know of a particular area or resource of interest, please bring it to my attention.

Please feel free to contact me with any questions or comments: jodie.snyder@fhueng.com or 720-200-8913.

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Felsburg Holt and Ullevig

6300 South Syracuse Way, Suite 600 Centennial, CO 80111 tel 303.721.1440 fax 303.721.0832
www.fhueng.com info@fhueng.com

STATE OF COLORADO

DEPARTMENT OF TRANSPORTATION

Planning & Environmental Section
10601 West 10th Street
Greeley, Colorado 80634

March 24, 2017

Colorado Historical Society
1200 Broadway
Denver, Colorado 80203
Attn: Mr. Edward C. Nichols, SHPO

Subject: SH 66 Planning and Environmental Linkages Study, Corridor Conditions Report and Visioning Workshop, Colorado State Highway 66, Boulder and Weld Counties, Colorado

Dear Mr. Nichols:

The Colorado Department of Transportation (CDOT) is conducting a study referred to as SH 66 Planning and Environmental Linkages (PEL). The objective of the SH 66 PEL Study is to develop a strategic vision for SH 66 between the Town of Lyons and Weld County Road 19, a corridor approximately 20 miles long. The purpose is to identify the safety and operational needs along SH 66 and determine short-term and long-term transportation priorities. The study will encourage collaboration between Transportation Environmental Resource Council (TERC) members including CDOT, Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Regional Transportation District (RTD), and other federal, state and local agencies as outlined in the PEL Partnering Agreement dated June 11, 2009. Short-term and long-term improvements will be prioritized through a collaborative process with stakeholders and the public along the corridor. The final product will include a series of projects with a prioritization/implementation plan that will help to obtain funding for improvements along the corridor.

As part of the SH 66 PEL Study, the PEL team is hosting a Visioning Workshop on Tuesday, April 4th, from 3 to 5 PM at the Mead Town Hall (441 3rd St, Mead, CO 80542) to cast a vision and common purpose for the PEL and corridor. If you are interested in attending, please contact me, and our project team will provide you with meeting materials. In addition, a Corridor Conditions Report (CCR) is being prepared to document current conditions of the corridor regarding land use, the transportation system, and environmental resources. The information presented in the CCR will be the basis for developing and evaluating possible transportation improvements within the corridor. Upon completion of the CCR, the report will be forwarded to your agency for your comment. The anticipated distribution date of the CCR is Late Spring 2017. We will send the CCR to your attention unless contact information is provided regarding a different recipient. This letter is to notify your agency of the study and to confirm comment is not requested at this time; however, if you know of a particular area or resource of interest, please bring it to my attention.

Sincerely,

Jason Marmor, Historian
Colorado Department of Transportation

FELSBURG HOLT & ULLEVIG

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March 24, 2017

US Army Corps of Engineers
Denver Regulatory Office
9307 S. Wadsworth Boulevard
Littleton, Colorado 80128
Attn: Mr. Kiel Downing

Subject: SH 66 Planning and Environmental Linkages Study, Corridor Conditions Report and Visioning Workshop, Colorado State Highway 66, Boulder and Weld Counties, Colorado

Dear Mr. Downing:

The Colorado Department of Transportation (CDOT) is conducting a study referred to as SH 66 Planning and Environmental Linkages (PEL). The objective of the SH 66 PEL Study is to develop a strategic vision for SH 66 between the Town of Lyons and Weld County Road 19, a corridor approximately 20 miles long. The purpose is to identify the safety and operational needs along SH 66 and determine short-term and long-term transportation priorities. The study will encourage collaboration between Transportation Environmental Resource Council (TERC) members including CDOT, Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Regional Transportation District (RTD), and other federal, state and local agencies as outlined in the PEL Partnering Agreement dated June 11, 2009. Short-term and long-term improvements will be prioritized through a collaborative process with stakeholders and the public along the corridor. The final product will include a series of projects with a prioritization/implementation plan that will help to obtain funding for improvements along the corridor.

As part of the SH 66 PEL Study, our team is hosting a Visioning Workshop on Tuesday, April 4th, from 4 to 6 PM at the Mead Town Hall (441 3rd St, Mead, CO 80542) to cast a vision and common purpose for the PEL and corridor. If you are interested in attending, please contact me to receive meeting materials. In addition, a Corridor Conditions Report (CCR) is being prepared to document current conditions of the corridor regarding land use, the transportation system, and environmental resources. The information presented in the CCR will be the basis for developing and evaluating possible transportation improvements within the corridor. Upon completion of the CCR, the report will be forwarded to your agency for your comment. The anticipated distribution date of the CCR is Late Spring 2017. We will send the CCR to your attention unless contact information is provided regarding a different recipient. This letter is to notify your agency of the study and to confirm comment is not requested at this time; however, if you know of a particular area or resource of interest, please bring it to my attention.

Please feel free to contact me with any questions or comments: jodie.snyder@fhueng.com or 720-200-8913.

Sincerely,

Jodie A. Snyder

Jodie A. Snyder, Senior Environmental Scientist
Felsburg Holt and Ullevig

FELSBURG HOLT & ULLEVIG

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March 24, 2017

US Fish and Wildlife Service
Colorado Ecological Services Field Office
Denver Federal Center (MS 65412)
P.O Box 25486
Denver, Colorado 80225
Attn: Ms. Alison Michael

Subject: SH 66 Planning and Environmental Linkages Study, Corridor Conditions Report and Visioning Workshop, Colorado State Highway 66, Boulder and Weld Counties, Colorado

Dear Ms. Michael:

The Colorado Department of Transportation (CDOT) is conducting a study referred to as SH 66 Planning and Environmental Linkages (PEL). The objective of the SH 66 PEL Study is to develop a strategic vision for SH 66 between the Town of Lyons and Weld County Road 19, a corridor approximately 20 miles long. The purpose is to identify the safety and operational needs along SH 66 and determine short-term and long-term transportation priorities. The study will encourage collaboration between Transportation Environmental Resource Council (TERC) members including CDOT, Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Regional Transportation District (RTD), and other federal, state and local agencies as outlined in the PEL Partnering Agreement dated June 11, 2009. Short-term and long-term improvements will be prioritized through a collaborative process with stakeholders and the public along the corridor. The final product will include a series of projects with a prioritization/implementation plan that will help to obtain funding for improvements along the corridor.

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Please feel free to contact me with any questions or comments: jodie.snyder@fhueng.com or 720-200-8913.

Sincerely,

Jodie A. Snyder, Senior Environmental Scientist
Felsburg Holt and Ullevig

6300 South Syracuse Way, Suite 600 Centennial, CO 80111 tel 303.721.1440 fax 303.721.0832
www.fhueng.com info@fhueng.com

FELSBURG HOLT & ULLEVIG

connecting and enhancing communities

June 20, 2017

Colorado Department of Public Health and Environment
CDPHE/CDOT Liaison
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530
Attn: Ms. Jean Cordova

Subject: SH 66 Planning and Environmental Linkages Study, Corridor Conditions Report

Dear Ms. Cordova:

As referenced in a notification letter sent to you on March 24, 2017, the Colorado Department of Transportation (CDOT) is conducting a study referred to as SH 66 Planning and Environmental Linkages (PEL). The objective of the SH 66 PEL Study is to develop a strategic vision for SH 66 between the Town of Lyons and Weld County Road 19, a corridor approximately 20 miles long. The purpose is to identify the safety and operational needs along SH 66 and determine short-term and long-term transportation priorities. The study will encourage collaboration between Transportation Environmental Resource Council (TERC) members including CDOT; Federal Highway Administration (FHWA); Federal Transit Administration (FTA); Regional Transportation District (RTD); and other federal, state and local agencies as outlined in the PEL Partnering Agreement dated June 11, 2009. Short-term and long-term improvements will be prioritized through a collaborative process with stakeholders and the public along the corridor. The final product will include a series of projects with a prioritization/implementation plan that will help agencies obtain funding for improvements along the corridor. Additional information regarding the SH 66 PEL Study can be found at: https://www.codot.gov/library/studies/co-66-pel.

As part of the SH 66 PEL Study, a Corridor Conditions Report (CCR) has been prepared to document current and future conditions of the corridor in terms of land use planning, the transportation system, and environmental resources. The information presented in the CCR is the basis for developing and evaluating possible transportation improvements within the corridor. A digital version of the CCR can be downloaded through the following link. We request your review of this report. Please provide your comments to Jodie Snyder by e-mail (Jodie.Snyder@fhueng.com) or mail (address below) by July 10, 2017. For your convenience, a comment tracking file is available for your use and has been provided to you by e-mail on June 20, 2017.

Thanks for your time and participation. Your input early in the transportation planning process is critical for the successful screening of potential improvements and will allow for expedited project clearance when funding becomes available. Please feel free to contact me with any questions or comments: Jodie.Snyder@fhueng.com or 720-200-8913.

Sincerely,

Jodie A. Snyder

Jodie A. Snyder, Senior Environmental Scientist
Felsburg Holt and Ullevig

6300 South Syracuse Way, Suite 600 Centennial, CO 80111 tel 303.721.1440 fax 303.721.0832
www.fhueng.com info@fhueng.com

FELSBURG HOLT & ULLEVIG

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June 20, 2017

Colorado Parks and Wildlife
Area 2 Wildlife Manager
4207 W CR 16E
Loveland, CO 80537
Attn: Mr. Larry Rogstad

Subject: SH 66 Planning and Environmental Linkages Study, Corridor Conditions Report

Dear Mr. Rogstad:

As referenced in a notification letter sent to you on March 28, 2017, the Colorado Department of Transportation (CDOT) is conducting a study referred to as SH 66 Planning and Environmental Linkages (PEL). The objective of the SH 66 PEL Study is to develop a strategic vision for SH 66 between the Town of Lyons and Weld County Road 19, a corridor approximately 20 miles long. The purpose is to identify the safety and operational needs along SH 66 and determine short-term and long-term transportation priorities. The study will encourage collaboration between Transportation Environmental Resource Council (TERC) members including CDOT; Federal Highway Administration (FHWA); Federal Transit Administration (FTA); Regional Transportation District (RTD); and other federal, state and local agencies as outlined in the PEL Partnering Agreement dated June 11, 2009. Short-term and long-term improvements will be prioritized through a collaborative process with stakeholders and the public along the corridor. The final product will include a series of projects with a prioritization/implementation plan that will help agencies obtain funding for improvements along the corridor. Additional information regarding the SH 66 PEL Study can be found at: https://www.codot.gov/library/studies/co-66-pel.

As part of the SH 66 PEL Study, a Corridor Conditions Report (CCR) has been prepared to document current and future conditions of the corridor in terms of land use planning, the transportation system, and environmental resources. The information presented in the CCR is the basis for developing and evaluating possible transportation improvements within the corridor. A digital version of the CCR can be downloaded through the following link. We request your review of this report. Please provide your comments to Jodie Snyder by e-mail (Jodie.Snyder@fhueng.com) or mail (address below) by July 10, 2017. For your convenience, a comment tracking file is available for your use and has been provided to you by e-mail on June 20, 2017.

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Sincerely,

Jodie A. Snyder

Jodie A. Snyder, Senior Environmental Scientist
Felsburg Holt and Ullevig

6300 South Syracuse Way, Suite 600 Centennial, CO 80111 tel 303.721.1440 fax 303.721.0832
www.fhueng.com info@fhueng.com

FELSBURG HOLT & ULLEVIG

connecting and enhancing communities

June 20, 2017

U.S. EPA Region 8 (8EPR-N)
1595 Wynkoop Street
Denver, Colorado 80202-1129
Attn: Ms. Carol Anderson

Subject: SH 66 Planning and Environmental Linkages Study, Corridor Conditions Report

Dear Ms. Anderson:

As referenced in a notification letter sent to you on March 24, 2017, the Colorado Department of Transportation (CDOT) is conducting a study referred to as SH 66 Planning and Environmental Linkages (PEL). The objective of the SH 66 PEL Study is to develop a strategic vision for SH 66 between the Town of Lyons and Weld County Road 19, a corridor approximately 20 miles long. The purpose is to identify the safety and operational needs along SH 66 and determine short-term and long-term transportation priorities. The study will encourage collaboration between Transportation Environmental Resource Council (TERC) members including CDOT; Federal Highway Administration (FHWA); Federal Transit Administration (FTA); Regional Transportation District (RTD); and other federal, state and local agencies as outlined in the PEL Partnering Agreement dated June 11, 2009. Short-term and long-term improvements will be prioritized through a collaborative process with stakeholders and the public along the corridor. The final product will include a series of projects with a prioritization/implementation plan that will help agencies obtain funding for improvements along the corridor. Additional information regarding the SH 66 PEL Study can be found at: https://www.codot.gov/library/studies/co-66-pel.

As part of the SH 66 PEL Study, a Corridor Conditions Report (CCR) has been prepared to document current and future conditions of the corridor in terms of land use planning, the transportation system, and environmental resources. The information presented in the CCR is the basis for developing and evaluating possible transportation improvements within the corridor. A digital version of the CCR can be downloaded through the following link. We request your review of this report. Please provide your comments to Jodie Snyder by e-mail (Jodie.Snyder@fhueng.com) or mail (address below) by July 10, 2017. For your convenience, a comment tracking file is available for your use and has been provided to you by e-mail on June 20, 2017.

Thanks for your time and participation. Your input early in the transportation planning process is critical for the successful screening of potential improvements and will allow for expedited project clearance when funding becomes available. Please feel free to contact me with any questions or comments: Jodie.Snyder@fhueng.com or 720-200-8913.

Sincerely,

Jodie A. Snyder

Jodie A. Snyder, Senior Environmental Scientist
Felsburg Holt and Ullevig

6300 South Syracuse Way, Suite 600 Centennial, CO 80111 tel 303.721.1440 fax 303.721.0832
www.fhueng.com info@fhueng.com

STATE OF COLORADO

DEPARTMENT OF TRANSPORTATION

Planning & Environmental Section
10601 West 10th Street
Greeley, Colorado 80634

COLORADO
Department of Transportation

June 20, 2017

Colorado Historical Society
1200 Broadway
Denver, Colorado 80203
Attn: Ms. Jennifer Bryant

Subject: SH 66 Planning and Environmental Linkages Study, Corridor Conditions Report

Dear Ms. Bryant:

As referenced in a notification letter sent to you on March 24, 2017, the Colorado Department of Transportation (CDOT) is conducting a study referred to as SH 66 Planning and Environmental Linkages (PEL). The objective of the SH 66 PEL Study is to develop a strategic vision for SH 66 between the Town of Lyons and Weld County Road 19, a corridor approximately 20 miles long. The purpose is to identify the safety and operational needs along SH 66 and determine short-term and long-term transportation priorities. The study will encourage collaboration between Transportation Environmental Resource Council (TERC) members including CDOT; Federal Highway Administration (FHWA); Federal Transit Administration (FTA); Regional Transportation District (RTD); and other federal, state and local agencies as outlined in the PEL Partnering Agreement dated June 11, 2009. Short-term and long-term improvements will be prioritized through a collaborative process with stakeholders and the public along the corridor. The final product will include a series of projects with a prioritization/implementation plan that will help agencies obtain funding for improvements along the corridor. Additional information regarding the SH 66 PEL Study can be found at: https://www.codot.gov/library/studies/co-66-pel.

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Thanks for your time and participation. Your input early in the transportation planning process is critical for the successful screening of potential improvements and will allow for expedited project clearance when funding becomes available. Please feel free to contact me with any questions or comments (jason.marmor@state.co.us or (970) 350-2153).

Sincerely,

Jason Marmor, Historian
Colorado Department of Transportation

FELSBURG HOLT & ULLEVIG

connecting and enhancing communities

June 20, 2017

US Army Corps of Engineers
Denver Regulatory Office
9307 S. Wadsworth Boulevard
Littleton, Colorado 80128
Attn: Mr. Kiel Downing

Subject: SH 66 Planning and Environmental Linkages Study, Corridor Conditions Report

Dear Mr. Downing:

As referenced in a notification letter sent to you on March 24, 2017, the Colorado Department of Transportation (CDOT) is conducting a study referred to as SH 66 Planning and Environmental Linkages (PEL). The objective of the SH 66 PEL Study is to develop a strategic vision for SH 66 between the Town of Lyons and Weld County Road 19, a corridor approximately 20 miles long. The purpose is to identify the safety and operational needs along SH 66 and determine short-term and long-term transportation priorities. The study will encourage collaboration between Transportation Environmental Resource Council (TERC) members including CDOT; Federal Highway Administration (FHWA); Federal Transit Administration (FTA); Regional Transportation District (RTD); and other federal, state and local agencies as outlined in the PEL Partnering Agreement dated June 11, 2009. Short-term and long-term improvements will be prioritized through a collaborative process with stakeholders and the public along the corridor. The final product will include a series of projects with a prioritization/implementation plan that will help agencies obtain funding for improvements along the corridor. Additional information regarding the SH 66 PEL Study can be found at: https://www.codot.gov/library/studies/co-66-pel.

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Thanks for your time and participation. Your input early in the transportation planning process is critical for the successful screening of potential improvements and will allow for expedited project clearance when funding becomes available. Please feel free to contact me with any questions or comments: Jodie.Snyder@fhueng.com or 720-200-8913.

Sincerely,

Jodie A. Snyder

Jodie A. Snyder, Senior Environmental Scientist
Felsburg Holt and Ullevig

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FELSBURG HOLT & ULLEVIG

connecting and enhancing communities

June 20, 2017

US Fish and Wildlife Service
Colorado Ecological Services Field Office
Denver Federal Center (MS 65412)
P.O Box 25486
Denver, Colorado 80225
Attn: Ms. Alison Michael

Subject: SH 66 Planning and Environmental Linkages Study, Corridor Conditions Report

Dear Ms. Michael:

As referenced in a notification letter sent to you on March 24, 2017, the Colorado Department of Transportation (CDOT) is conducting a study referred to as SH 66 Planning and Environmental Linkages (PEL). The objective of the SH 66 PEL Study is to develop a strategic vision for SH 66 between the Town of Lyons and Weld County Road 19, a corridor approximately 20 miles long. The purpose is to identify the safety and operational needs along SH 66 and determine short-term and long-term transportation priorities. The study will encourage collaboration between Transportation Environmental Resource Council (TERC) members including CDOT; Federal Highway Administration (FHWA); Federal Transit Administration (FTA); Regional Transportation District (RTD); and other federal, state and local agencies as outlined in the PEL Partnering Agreement dated June 11, 2009. Short-term and long-term improvements will be prioritized through a collaborative process with stakeholders and the public along the corridor. The final product will include a series of projects with a prioritization/implementation plan that will help agencies obtain funding for improvements along the corridor. Additional information regarding the SH 66 PEL Study can be found at: https://www.codot.gov/library/studies/co-66-pel.

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Thanks for your time and participation. Your input early in the transportation planning process is critical for the successful screening of potential improvements and will allow for expedited project clearance when funding becomes available. Please feel free to contact me with any questions or comments: Jodie.Snyder@fhueng.com or 720-200-8913.

Sincerely,

Jodie A. Snyder, Senior Environmental Scientist
Felsburg Holt and Ullevig

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COLORADO
Parks and Wildlife
Department of Natural Resources
Area 2 - Lon Hagler
4207 W CR 16E
Loveland, CO 80537
P 970.472.4462 | F 970.472.4468

July 5, 2017

Jody Snyder
Felsburg, Holt, and Ullevig
6300 S. Syracuse Way, Ste. 600
Centennial, CO 80111
jodie.snyder@fhueng.com

Re. SH 66 Planning and Environmental Linkages Study - Corridor Conditions Report

Ms. Snyder,

Thank you for the opportunity to comment on the Corridor Conditions Report in the Planning and Environmental Linkages (PEL) Study for State Highway 66 from Lyons to Weld County Road 19. This report aims to document current and anticipated future conditions of the highway corridor regarding land use, the transportation system, and environmental resources and will be the basis for developing and evaluating possible transportation improvements in the corridor.

The corridor is 20 miles long and includes several jurisdictions including Town of Lyons, City of Longmont, Town of Mead, Town of Firestone, Boulder County, and Weld County. It also considers other land use and transportation plans including the Denver Regional Council of Governments' Metro Vision Plan, the Colorado Department of Transportation's North I-25 Environmental Impact Statement, and the St. Vrain Trail Master Plan. Surrounding land use includes small towns with low-density housing, city high-density housing, agriculture, and designated open space.

The report identifies some key wildlife concerns along the project. We also have additional advice and considerations to mitigate impacts to wildlife and suggest improvements to current conditions that may benefit wildlife.

Impacts to the St. Vrain River and associated wetlands:

The St. Vrain River may be impacted by any improvements made to SH 66 in the western and eastern portion of the project area. Best management practices should be included in any plans and practices for construction activities to maintain water quality, control the spread of noxious weeds, and prevent the spread of aquatic nuisance species. Permanent impacts to wetlands, riparian areas, and aquatic habitat should be avoided.

Bridge crossings should be designed with habitat in mind. Channel work related to bridge crossings should avoid using drop structures to achieve grade control. After completion of the bridgework, any bank stabilization should be done using wood-toe log bank stabilization techniques along with willow plantings. This technique offers better stability and provides

habitat for small fish and some terrestrial species such as mink, weasels, and other small terrestrial vertebrates. Avoid using riprap for bank stabilization. Removal of mature trees should be avoided. If cottonwood trees are removed, they should be replaced on a three to one basis. These suggestions will likely be conditions of any future SB-40 authorization associated with this project.

Additionally, bike or pedestrian trails associated with this project should be routed outside of the riparian corridor of the river that serves as a refuge and migration corridor for many species of wildlife including bobcat, deer, turkey, raccoon, coyote, mink, nesting raptors, and other species.

McCall Lake:

McCall Lake is within the study corridor and provides an important recreational opportunity for anglers. Consultation with city of Longmont and CPW will be needed for any impacts to McCall Lake and we ask that any impediments to angler access to the lake as a result of construction activities be limited to the extent possible.

Bald Eagle and other raptor nests:

There are two bald eagle nests in proximity to the study corridor. One is located approximately 375 yards north of SH 66, east of 87th Street. The other is north of SH 66 along the St. Vrain River between Weld County Roads 17 and 19. We recommend no new surface occupancy occur within ¼ mile of these nests and that any construction activity within ½ mile of the nests be avoided between October 15th and July 31st.

Raptors such as red-tailed hawk, Swainson's hawk, great horned owl, osprey, ferruginous hawk, and others will nest in mostly mature trees along the project corridor. Best management practices for avoiding disturbance to raptor and other migratory bird nests should be included in any plans and practices. This should include monitoring by qualified biologists and creation of temporal and spatial buffer zones for any active nest. CPW biologists are available for consultation on impacts to individual nests and can provide standard advice and recommendations for buffer zones. "Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors" available upon request.

Preble's meadow jumping mouse habitat:

Preble's meadow jumping mouse (PMJM) is a federal and state listed threatened species. The Corridor Conditions Report identifies PMJM habitat within the corridor. Future construction plans should include mitigation for impacts to PMJM habitat in consultation with the U.S. Fish and Wildlife Service.

Wildlife crossings and improvements:

In addition to aquatic considerations, we recommend that any bridge replacement include space outside of the riverbed to allow wildlife to cross under the roadway. In combination with high fencing for ½ to 1 mile in either direction of the bridge along the roadway, this could prevent many vehicle-wildlife collisions benefiting wildlife and improving public safety.

It is worth considering installing additional wildlife crossing structures along the highway where feasible. Wildlife would benefit most from crossing structures in the portion just east of Lyons and between mile markers 160-163 and 181.3-194.2. Span underpasses (e.g. oval-shaped) with dirt flooring that are perpendicular to the highway can provide for safe crossings and give wildlife a more open view than concrete box culverts. These should either be separate from drainage culverts or drainage culverts should be constructed so that water drains away from the middle of the span to prevent ice that would hinder movement by wildlife in the winter. If wildlife underpasses are to be installed where deer or elk commonly migrate they should be large enough for these animals to pass through (at least 10 feet tall by 20 feet wide for deer, at least 15 feet tall and 40 feet wide for elk). Underpasses should be no longer than 70 feet if possible. Overpasses should also be examined and considered as a benefit to wildlife and motorists. Any overpass should be greater than 130 feet wide and use existing topography such as hills on either side of the highway. Exclusionary fencing should be used on either side of a crossing.

Finally, we encourage the installation of bat boxes on any new bridge as a benefit to wildlife.

As this is a large project with several considerations for wildlife, we have multiple staff members available to consult and assist as planning for any changes and improvements moves forward. Larry Rogstad, Area Wildlife Manager for Boulder and southern Weld County, will be your primary contact regarding our comments and other concerns. He can be reached at 970-472-4461 or larry.rogstad@state.co.us.

We appreciate being involved in the initial planning stages of improvements to SH 66 and look forward to continuing to provide input as plans move forward. As the population on the Front Range continues to grow transportation needs will increase. We understand it is imperative to meet these needs but also appreciate that proper planning can help mitigate impacts of a growing human population on wildlife and wildlife habitat.

Sincerely,

Kristin Cannon
Acting Area Wildlife Manager

CC: M. Leslie, T. Kroening, L. Rogstad, T. Petersburg, M. Grooms, C. Mettenbrink, J. Koehler, J. Duetsch, K. Cannon

Appendix F-2: Agency Coordination Documentation

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SH 66 Planning and Environmental Linkages Study

Technical Advisory Committee (TAC) Meeting #1

Date and Time: February 8, 2017 | 9 a.m. to 11 a.m.
Location: Longmont's Study Session Conference Room | 350 Kimbark Street, Longmont, CO 80501

Agenda

Introductions

Stakeholder Interview Feedback / Summary

DRCOG Model Update

- Land Use
- Fiscally Constrained Projects
- Other "No Action" Projects?

Existing Condition Status

- Traffic Adjustments (seasonality and other road closures)
- Roadway Configuration
- Bike Facilities
- Environmental
- Utilities

Public Engagement / Plan

- Visioning Workshop
- Project Website and Outreach Methods
- Public Meeting

SH 66 Planning and Environmental Linkages Study

Technical Advisory Committee (TAC) Meeting #1

Date and Time: February 8, 2017 | 9 a.m. to 11 a.m.
Location: Longmont's Study Session Conference Room | 350 Kimbark Street, Longmont, CO 80501

Meeting Summary

Introductions

Meeting purpose is to provide a status update on the project and discuss next steps. If your organization is interested in hosting a future TAC meeting, please let Kelly (FHU) know. We will rotate locations along the corridor.

Stakeholder Interview Feedback / Summary

Our PEL Team met with eight communities and will be finishing interviews this week (with Firestone). We are seeing consensus among communities about future visions for the corridor.

- Kelly (FHU) presented word clouds to represent the most frequently used themes and words that we heard in the interviews. The bigger the word on the word cloud, the more times that word or theme was used.
  - Two main themes came through from asking how stakeholders would describe SH 66 today: gateway and connector. SH 66 supports other corridors (I-25, US 287, SH 119). The closure of US 34 is currently putting more traffic onto SH 66. Other themes included cycling, recreational use, rural characteristics, and tourism.
  - Many references to improvements, transit, technologies, safety, pedestrian, and traffic were noted. Transit and technology were not used to describe current corridor conditions but came up quite a bit in the rest of the discussion.
  - Helen (Town of Mead) mentioned community visions of transit may differ depending on community context. We should consider that different parts of the corridor have different transit needs, such as the Aurora Dairy (many delivery trucks a big employee base traveling to/from the site).
- Overall major themes included gateway, connector, alternative/reliever route, transit, cycling and recreation, access to RMNP and tourism, new development and economy, major utility corridor.
  - Correction to slide per Nataly (RTD): use of the word "previously" on the slide may imply transit is no longer present on SH 66. SH 66 does carry transit routes although some parts of the study area are outside of RTD's boundaries. RTD mentioned it does not want to preclude transit between Lyons and Longmont. Nataly clarified RTD can travel outside district but it cannot stop in or serve those areas.
- Helen (Town of Mead) mentioned we should keep in mind that RTD boundaries may expand some day, which could have important implications in the PEL process.
- The Team also discussed how presentation of a concept can help frame an end result. For example, in Weld County, the use of safety shoulders can be used for vehicles and to accommodate multi-uses or other modes.
- An access control plan will be developed along the PEL study.
- The group had no additional comments. Major themes presented seem to reflect the interviews.

DRCOG Model Update

- Land Use
  - SH 66 PEL is one of the first projects to use the new model. We are fortunate to be able to use the model from the outset instead of having to transition back to it.
  - Shea (FHU) noted the model has added sophistication, especially in relation to land use and the division of household and employment. We now have access to characteristics previously not available (income levels, school age, number of vehicles). Data is available at the parcel level, which is then aggregated up to the TAZ level. The model uses survey data that DRCOG implemented to help inform their trip making process.
- Trips
  - DRCOG refined how the model applies trips in the network. A trip is a tour: home to work to lunch to work to shop to home, for example. It is not simply home to work and then home again. The model captures different modes a bit better and keeps better track of fictitious individuals in terms of car to work, walk to lunch, transit to meeting, etc.
  - Around SH 66, it is harder to load trips into the network. Being on the edge of the DRCOG boundary, we tend to be going into the network.
  - Model does not call out Lyft, Uber, etc., which will be incorporated in the future. We do not know whether VMT will increase or decrease with Uber, Lyft, etc. Taxi is not specifically called out, at this time. Other anticipated DRCOG models will include transit ridership, which is a challenge to capture and improve representation.
  - The model provides information to help decision makers identify the number of lanes needed and the types of facilities to design. The model does not determine that number.
  - DRCOG is also adding in more subtle trips, such as walk trips to bus. Even a trip across the street would count.
- Presentation maps
  - Maps reflect 2015 to 2040 timeframe.
    - *Household growth* – Most growth is primarily down into Firestone, Dacono and eastward, also near Longmont.
    - *Employment growth* - Zone on the east is a misnomer; it is huge and captures a large area. Other large areas of growth include Mead and along US 287.
  - The information currently mapped in the presentation is a snapshot of unmodified model results. **[Action Item:** TAC Members will review the Land Use Explorer web tool and provide FHU marked up information pertaining to population, households, and employment to update/refine the model. Please provide feedback by 2/17/17.**]** Longmont and Mead noted they will change inputs to reflect more accurate information.
  - Dan Jarret (DRCOG) oversees Land Use Explorer tool: http://landuseexplorer.drcog.org/
- Fiscally Constrained Projects
  - Included with No Action in the model:
    - SH 66 widening to 4 lanes
    - I-25 new managed lanes
    - Longmont street widening throughout City
    - Boulder and Longmont new BRT route
    - New Park-n-Ride and new BRT station
  - Fiscally constrained projects have funds to be constructed and will be encompassed within the No Action Alternative.

- **[Action Item**: TAC members and Abra and James (CDOT) will identify other projects to include in the fiscally constrained list by 2/22/17.**]**
  - WCR 7/3rd St and SH 66 in Mead will involve double turn lanes and accel/decel lanes. It is fully funded and includes DRCOG funds. **[Action Item**: Shea (FHU) will add this improvement to the list.]

Existing Corridor Conditions Status

The Corridor Conditions Report will be the first major study deliverable reviewed by the TAC. It describes existing conditions but also conditions into the future. It identifies where things are today and what are they. Considerations include: traffic, utilities, environmental resources. We are noticing that there may be a need to balance improvements vs resources.

- Traffic Adjustments (seasonality and other road closures)
  - Construction closures related to US 34 and SH 119 and seasonality considerations have been made in terms of adjusting traffic volumes.
    - The corridor carries much more traffic in the summer. The counts were completed in November 2016.Team has estimated that there are an additional 2,000 vehicles per day increase on west end and 1,000 vehicles per day increase on east end. **[Action Item:** Abra and James will provide CDOT perspective on adjustments by 2/22/17.**]**
    - For the US 34 closure, traffic will be decreased from SH 66. This estimate will be forthcoming. **[Action Item:** FHU Team will provide this estimate to CDOT by 2/22/17.**]**
    - For SH 119, the team captured traffic when no construction was underway and all lanes were open. No adjustment was made.
  - WestConnects PEL Team completed Friday counts to account for travelers leaving Denver with destinations in the mountains. [**Action Item**: Alex (FHU) will arrange for validation of the traffic counts to help in decision making.] Joe (Town of Lyons) confirmed Saturdays and Sundays are busiest in Lyons
- Roadway Configuration
  - Roadway characteristics example
    - Team is seeking to capture information that we may need when we look at purpose and need and alternatives screening
    - Having information at this scale will assist in the ACP and will be helpful throughout the project
- Bike Facilities
  - Shoulder widths have been mapped and overlaid with existing bike routes
  - The team proposes gauging comfort/perception of cyclists to assess potential needs
  - FHU is reviewing Strava bike data to identify popular travel routes
  - Our team is looking for event data. **[Action Item**: TAC Members will provide information about events we should capture in the SH 66 PEL by 2/22/17.**]**
    - For example, State Patrol now issues permits for special events. [**Action Item**: Kelly will request the last couple year's data.] US Pro Cycling was the last permit issued by CDOT.
- Environmental Resources
  - Jodie (FHU) reported the PEL sets the stage for the environmental review process that occurs during transportation project development. NEPA requirements exist when Federal funds and/or CDOT oversight are included for an improvement.

- At the PEL level, we collect information about the environment to understand where resources occur and how complex they may be, to help develop the purpose and need, and to complete alternatives screening in terms of selecting and recommending an alternative.
- Natural and human environmental resources along the corridor include:
  - Park, trail, open space, and wildlife/waterfowl refuges
  - Hazardous materials
  - Cultural resources
  - Biological resources and wetlands
  - Floodplains
    - Lyons and Longmont have floodplain studies underway or recently completed and will provide preliminary draft CADD or GIS data for incorporation into the Corridor Conditions Report **[Action Item:** Phil (City of Longmont) and Joe (Town of Lyons) will provide data to team by 2/22/17.**]**
    - Longmont also has some drainage concerns in the study area. SH 66 tends to be on an embankment, which can act as a barrier to drainage flows.
  - Traffic noise sensitive areas
  - Environmental justice, including low income and minority populations
  - Visual consistency
  - Other resources considerations will include archaeology, paleontology, air quality, and farmlands.

- Utilities, Ditches, Railroads
  - The team is identifying and mapping existing facilities and considering anticipated future projects. We have identified nearly 100 major utilities, with a heavier concentration in the Longmont area. Three railroad crossings occur along the length of the corridor and one railroad alignment at the far west end parallels SH 66.
  - We are coordinating directly with utility and ditch companies and working with CDOT's Railroad Program Manager and Tim (CDOT Region 4) to address railroad facilities.

Sample Documentation

- We are using a customized format to highlight details important to the PEL decision making process. For example, for floodplains and floodways, the report briefly introduces the resource followed by a detailed table that highlights key information and next steps, with a large corridor map following the table. The document addresses:
  - Which agencies and stakeholders are involved with the resource?
  - What resource features exist and where are they found?
  - What schedule considerations should be noted?
  - What is the regulatory setting?
  - What is important in terms of scoping next steps for environmental considerations?
  - What are some next steps in terms of funding, design, construction, and/or mitigation?
- The template takes a different approach from more technical report-based presentations of material in other PELs you may have reviewed
- Summarizing information in this way will allow the reader to focus on a level of detail that matters in PEL studies

Public Engagement / Plan

- Visioning Workshop – Since we are seeing a lot of consistency in local agency visions for the corridor, which is not always the case, we hope to use the visioning workshop to focus on purpose and need, which is the next major milestone.
  - We want to have corridor conditions data fully available and therefore have delayed the workshop until all information is compiled.
  - Mead has offered to host the visioning workshop.
  - In terms of scheduling, we will provide adequate notice so elected officials can be notified. The session will be set up to follow a structured agenda (not open house style), so participation for the entire time is encouraged. **[Action Item:** TAC Members will let Kelly (FHU) know by 2/17/17 when the best time of day and week would be to maximize involvement from the elected officials.**]**
- Project Website:
  - FHU is compiling information for Jarod (CDOT Region 4) to post to CDOT's website.
  - **[Action Item:** TAC Members will identify by 2/17/17 where on the local agency website CDOT's website should point.**]**
- Public Meeting # 1
  - After the visioning workshop, we will present the purpose and need and get public input.
  - This milestone fulfills an FHWA PEL requirement.
  - Anticipated in late-March. The team will host two public meetings, one in the eastern limits of the study area and one in the western limits of the study area.
  - City of Longmont and Weld County could be available for hosting the meetings. **[Action Item**: Kelly (FHU) will follow up to coordinate details.]
  - The PEL Team can be present to complement other public meetings or open houses as requested by the local agencies.

Next Steps

- Finalize traffic projections
- Hold Visioning workshop (mid-March)
- Finalize Corridor Conditions Report (late-March)
- Purpose and need development
- Public Meeting (late-March)
- Then we will move into alternatives development and screening

SH 66 Planning and Environmental Linkages Study

TECHNICAL ADVISORY COMMITTEE MEETING #1

February 8, 2017 | 9 a.m. to 11 a.m.
Longmont's Study Session Conference Room | 350 Kimbark Street, Longmont, CO 80501

Sign In

First Name	Last Name	Agency	Email
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JAMES	ZUFALL	CDOT - R4	james.zufall@state.co.us

SH 66 Planning and Environmental Linkages Study

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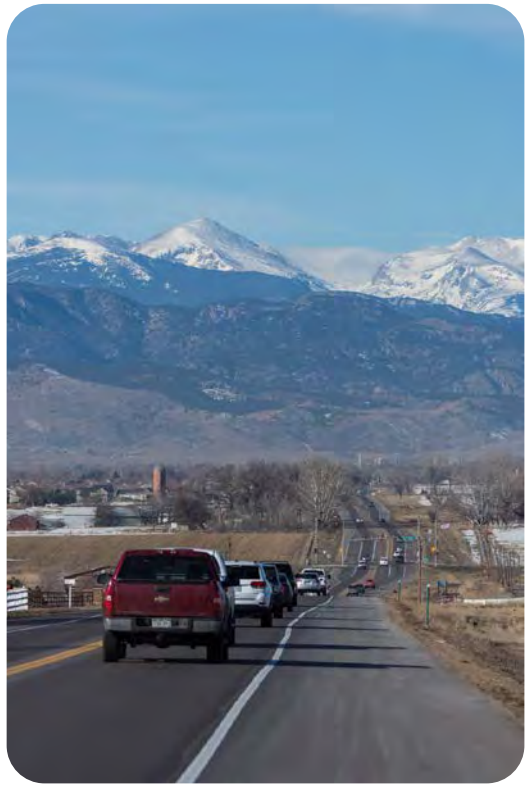
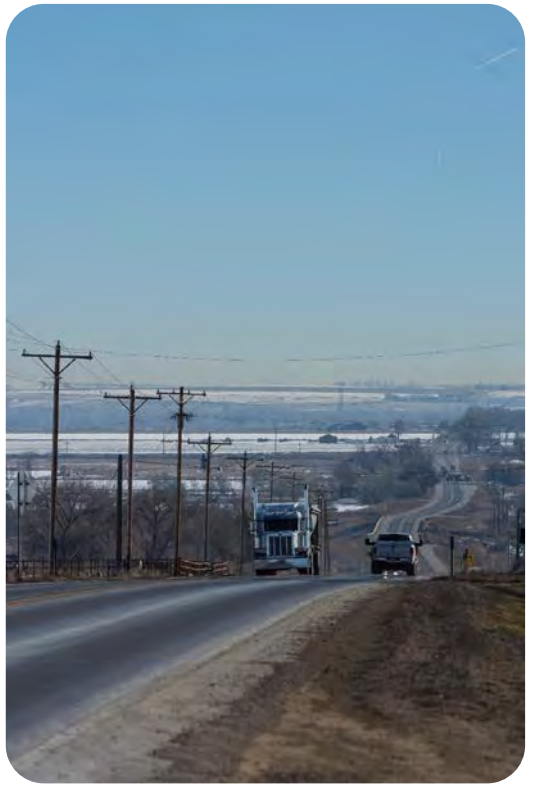
SH 66 Planning and Environmental Linkages Study





SH 66 PEL

Technical Advisory Committee #1

February 8, 2017

Today's Meeting

- Introductions
- Stakeholder Interview Summary Feedback
  - Major Themes
- DRCOG Travel Demand Model Update
  - Land Use
  - Fiscally Constrained Projects / No Action
- Corridor Conditions Report Update
  - Current Conditions
  - Projected Conditions
- Public Engagement Plan
  - Visioning Workshop, etc.
- Next Steps

SH 66 Planning and Environmental Linkages Study

Stakeholder Interview Summary

Interviews

drcog
DENVER REGIONAL COUNCIL OF GOVERNMENTS

CDOT
COLORADO
Department of
Transportation

CITY OF LONGMONT
COLORADO

Boulder
County

Town of
MEAD Colorado

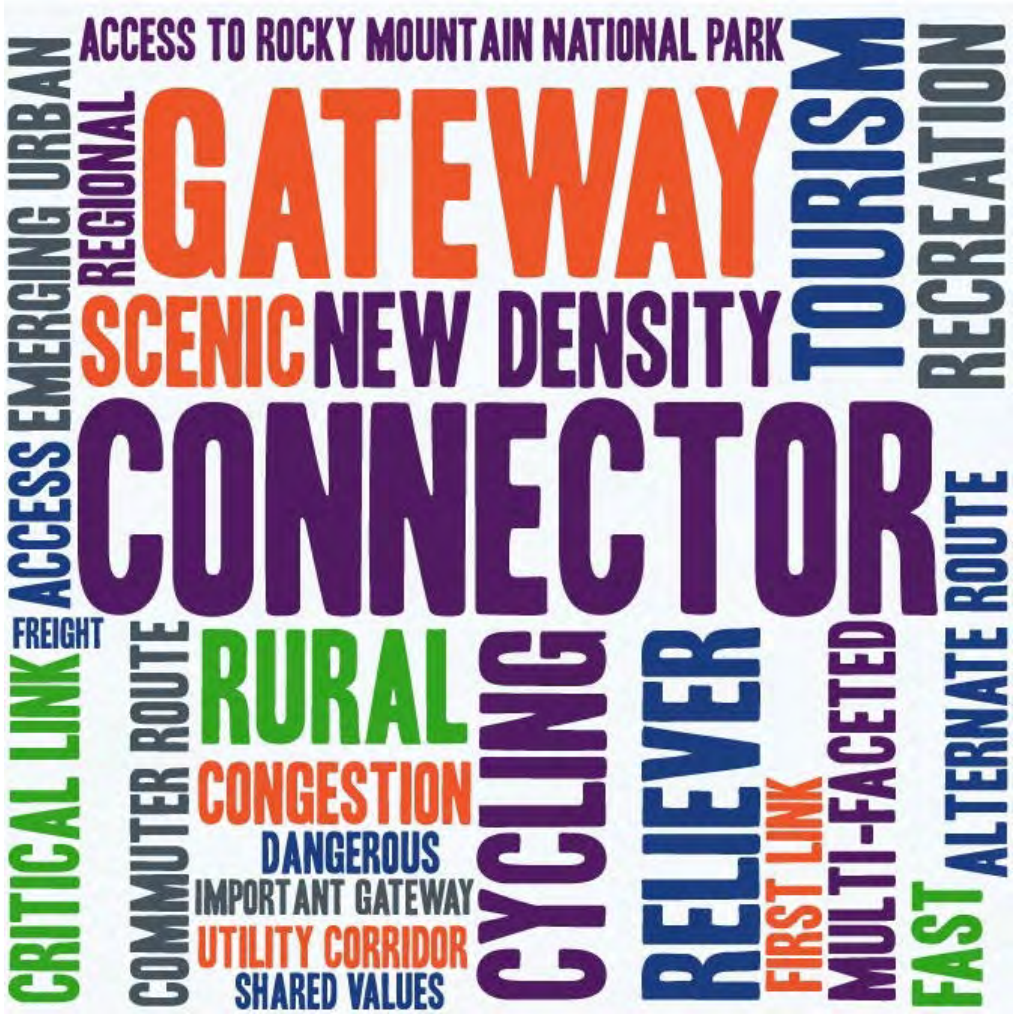
RTD

1861
WELD
COUNTY

LYONS
COLORADO

A COMMUNITY IN MOTION
FIRESTONE
Colorado

Word Clouds


ACCESS TO ROCKY MOUNTAIN NATIONAL PARK
GATEWAY
SCENIC
NEW DENSITY
TOURISM
RECREATION
CONNECTOR
ACCESS
EMERGING URBAN
REGIONAL
CRITICAL LINK
FREIGHT
COMMUTER ROUTE
RURAL
CONGESTION
DANGEROUS
IMPORTANT GATEWAY
UTILITY CORRIDOR
SHARED VALUES
CYCLING
RELIEVER
FIRST LINK
MULTI-FACETED
FAST
ALTERNATE ROUTE


design opportunities
accel/decel
Vrain
major
population
facilities
eastern
onto
Bus
adaptive
Plan
New
route
City
open
based
west
path
work
routes
built
consider
traffic
transit
improvements
high
today
crossing
counts
needs
need
Look
school
BRT
changes
sight
53rd
streets
safety
even
uses
agencies
signal
move
really
flows
bike
allows
critical
near
year
lane
lanes
corridor
east
sees
come
accesses
link
sure
efficiently
possibilities
alternatives
Small
possible
stations
Yes
lines
turn
lot
crossings
now
also
road
I-25
side
north
service
cars
plans
influence
capacity
plan
Line
space
access
trail
data
wants
years
roads
along
pedestrians
extent
just
study
portions
town
place
grow
connection
railroad
intersections
Main
shoulders
construction
control
Karen
locals
Hover
Street
bicycles
travel
south
urban
recreation
regional
support
intersection
incorporate

Major Themes

- **Gateway** | SH 66 is a primary gateway to, and through, multiple communities along the corridor
- **Connector** | SH 66 functions as a primary connecting route for many stakeholders
- **Alternate, Reliever Route** | As SH 119, US 36, US 287, and other regional routes become more congested, SH 66 has been used as a reliever or alternate route
- **Transit |** Transit was previously routed along SH 66. Transit improvements may be needed across SH 66 at US 287 for regional BRT
- **Cycling and Recreation |** SH 66 currently sees many commuting and recreational cyclists. Multiple stakeholders discussed the need for improvements along and across the highway

Major Themes

- **Access to Rocky Mountain National Park and Tourism** | SH 66 is a primary connection to Rocky Mountain National Park and Estes Park that is being more heavily used
- **New Development, Economic Opportunities** | SH 66, particularly in the municipal boundaries, is starting to experience new commercial and residential development adjacent to the corridor
- **Utility Corridor** | Major utilities are located in the right-of-way along SH 66
- **Access Control Plan |** An Access Control Plan is an anticipated and important outcome for many agencies

SH 66 Planning and Environmental Linkages Study

DRCOG Travel Demand Model Update

Travel Demand Model Overview

- Brand new travel demand model using entirely new process
  - More sophisticated population characteristics and land use
  - Parcel-level detail
  - More detailed trip making, improved mode choice
- Still working on 2040 travel demand
- On the periphery of the modelling area

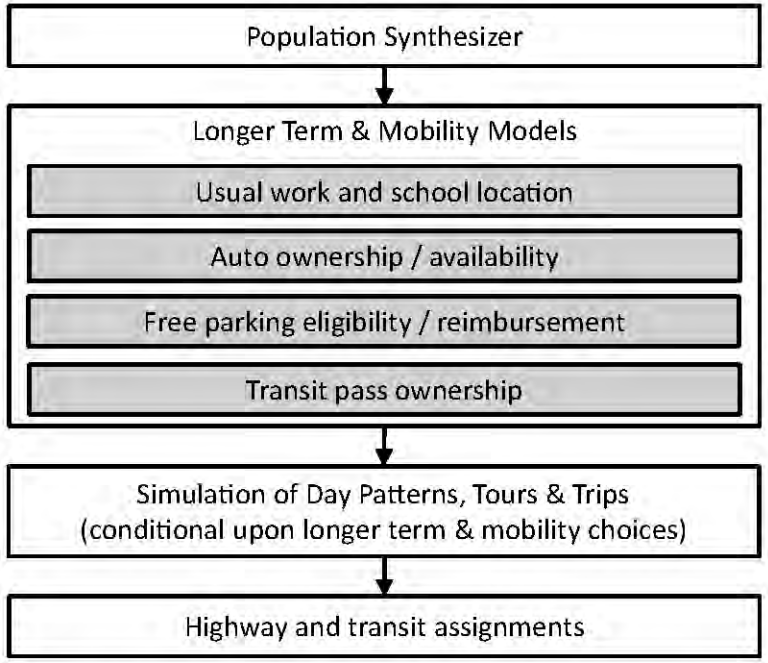


Figure 3.20. *Longer-term and mobility choice models in an activity-based model.*

(*Activity-Based Travel Demand Models: A Primer*, RSG Inc./TRB, 2015)

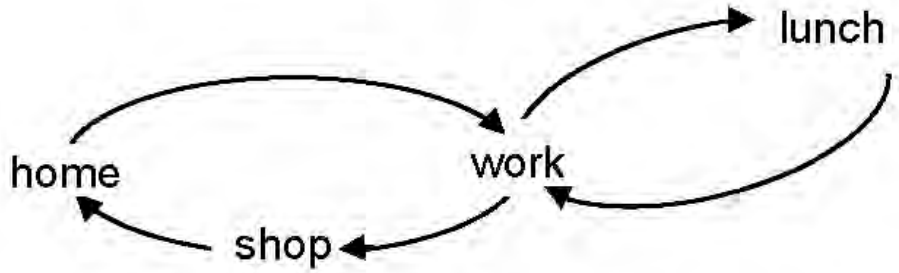
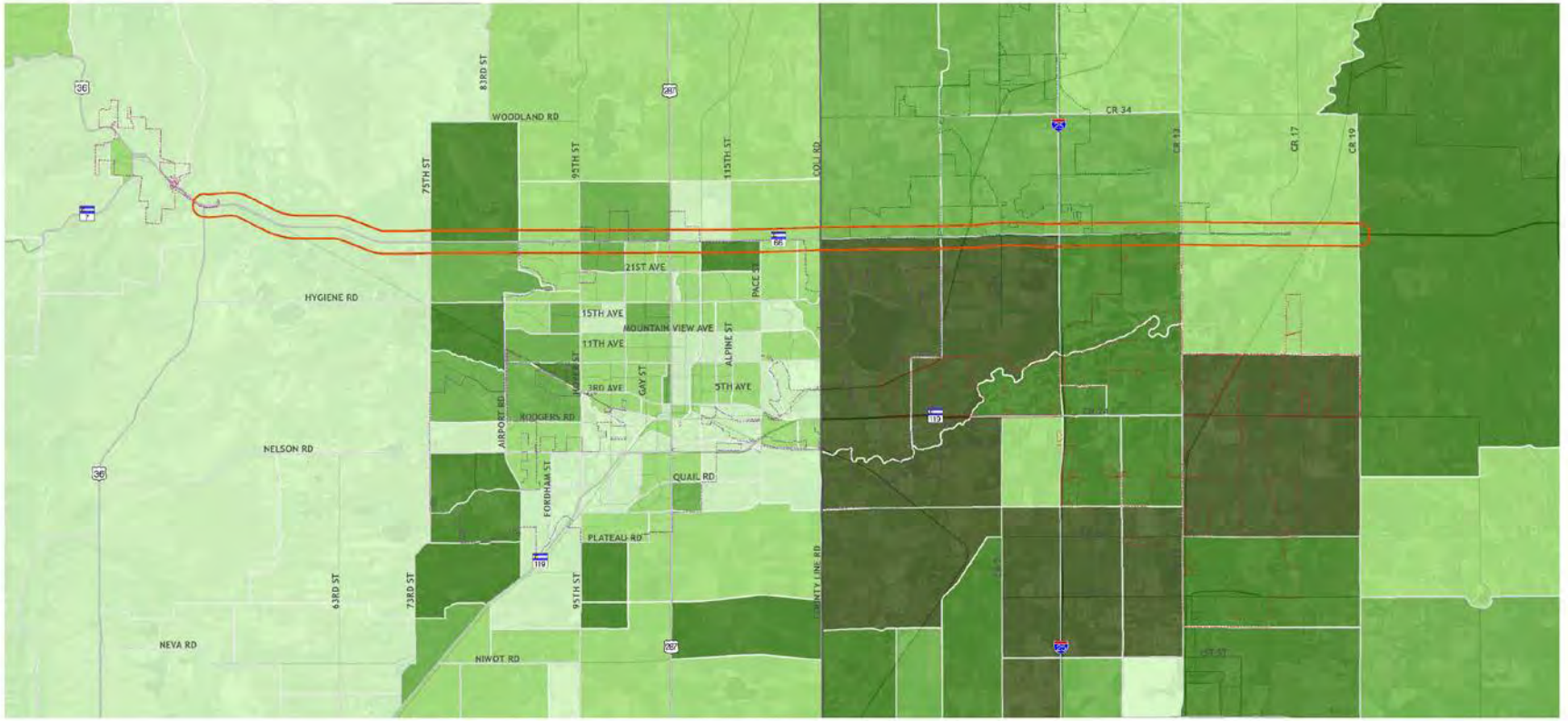


Figure 3.9. *Home-based tour with a work-based subtour.*

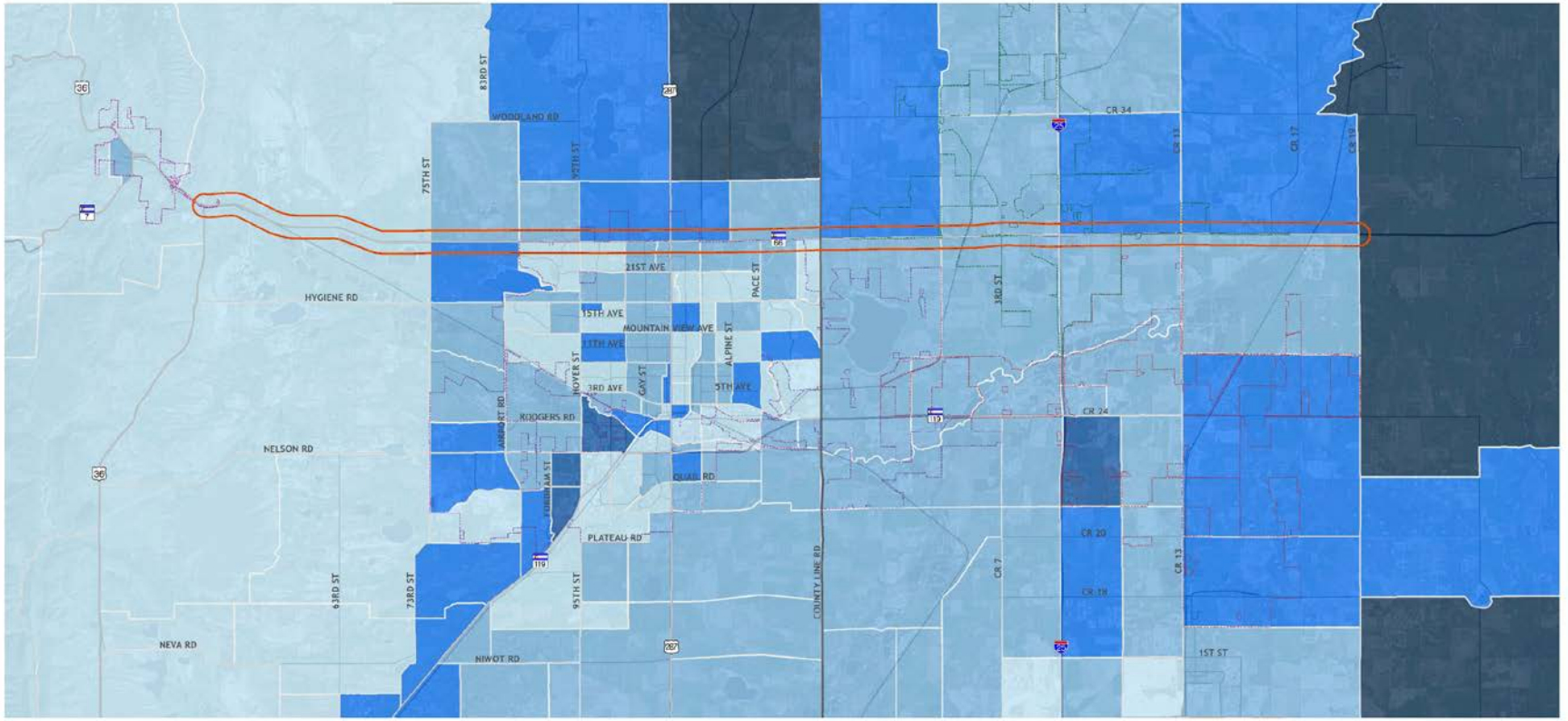
Land Use in the Travel Demand Model

Household Growth: 2015 to 2040



Land Use in the Travel Demand Model

Employment Growth: 2015 to 2040



Fiscally Constrained Projects/No Action

Facility	To/From	Roadway / Transit	Location	Improvement
SH 66	Hover St to US 287	Roadway	Longmont	Widen to 4 lanes
I-25	SH 66 to WCR 38	Roadway	North I-25	New managed lane, each dir
17th Ave	Alpine St to Ute Creek Dr	Roadway	Longmont	Widen to 4 lanes
E County Line Rd	9th Ave to SH 66	Roadway	Longmont	Widen to 4 lanes
Nelson Rd	75th St to Affolter Dr	Roadway	Longmont	Widen to 4 lanes
Pace St	5th Ave to SH 66	Roadway	Longmont	Widen to 4 lanes
SH 119	Foothills Pkwy to US 287	Transit	Boulder / Longmont	New BRT route
SH 66 & US 287	-	Transit	Longmont	New Park-n-Ride (150 spots)
SH 119 & US 287	-	Transit	Longmont	New BRT station (439 spots)

SH 66 Planning and Environmental Linkages Study

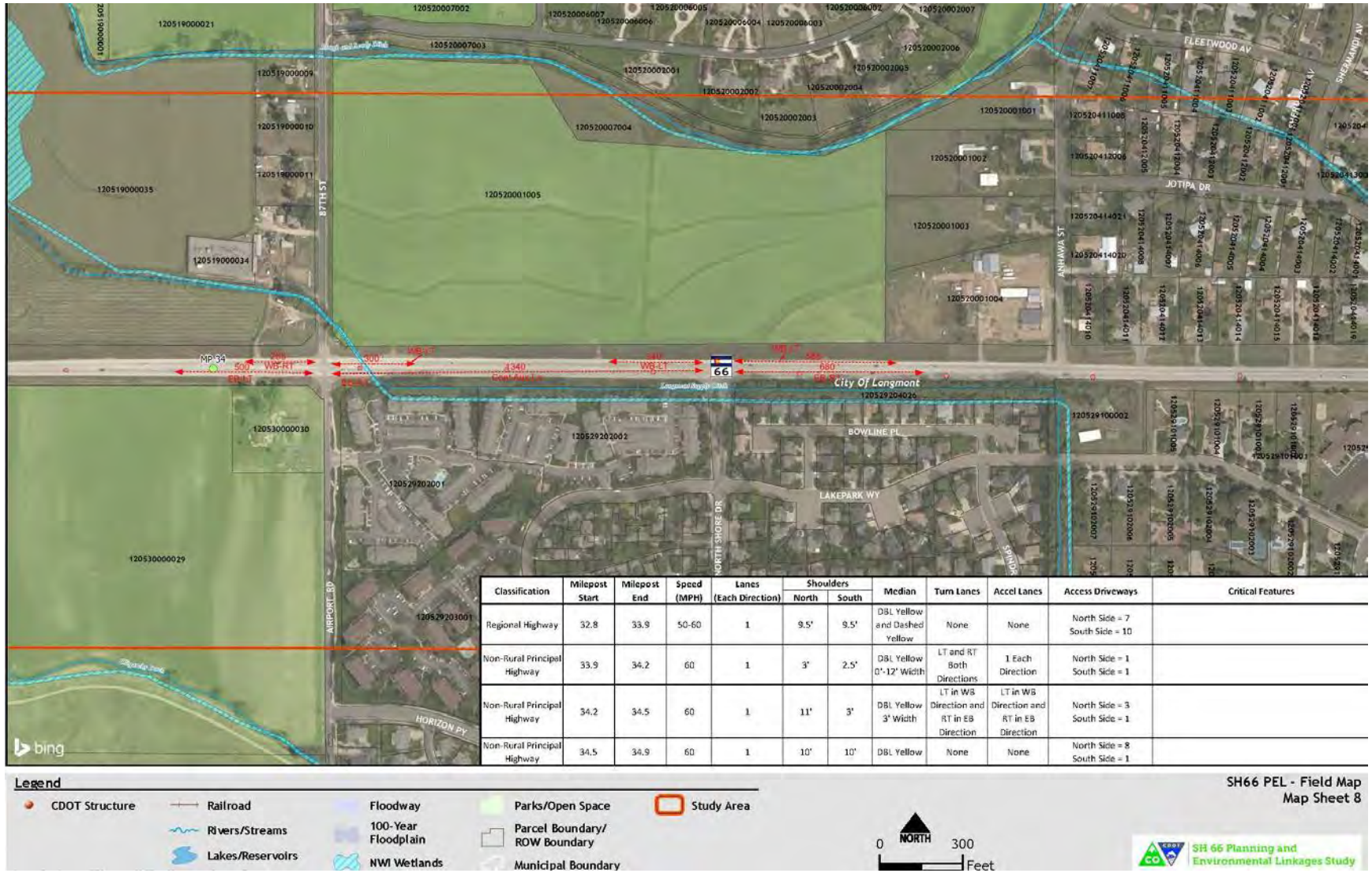
Corridor Conditions Report Status

Traffic Adjustments

- Seasonality adjustments to account for the increase in recreational traffic to Rocky Mountain National Park
- Adjustments to account for:
  - Closure of US 34 (Big Thompson Canyon)
  - SH 119 constructions

Roadway Characteristics Example

- Collecting information on the physical roadway characteristics
- Allows for future development of alternatives
- Assists in development of Access Control Plan

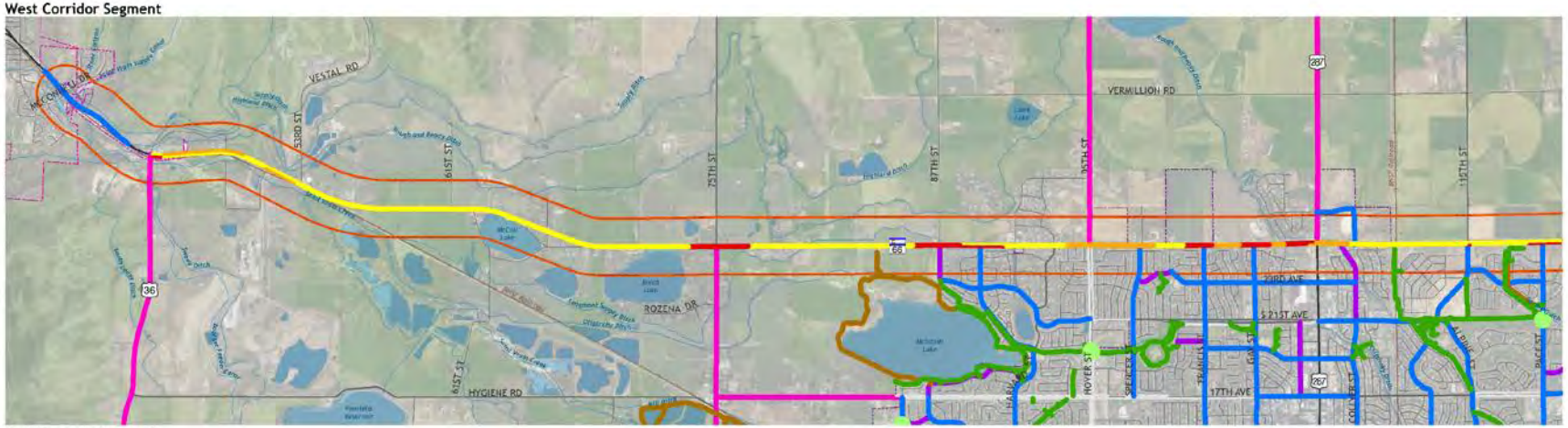


Classification	Milepost Start	Milepost End	Speed (MPH)	Lanes (Each Direction)	Shoulders North	Shoulders South	Median	Turn Lanes	Accel Lanes	Access Driveways	Critical Features
Regional Highway	32.8	33.9	50-60	1	9.5'	9.5'	DBL Yellow and Dashed Yellow	None	None	North Side = 7 South Side = 10	
Non-Rural Principal Highway	33.9	34.2	60	1	3'	2.5'	DBL Yellow 0'-12' Width	LT and RT Both Directions	1 Each Direction	North Side = 1 South Side = 1	
Non-Rural Principal Highway	34.2	34.5	60	1	11'	3'	DBL Yellow 3' Width	LT in WB Direction and RT in EB Direction	LT in WB Direction and RT in EB Direction	North Side = 3 South Side = 1	
Non-Rural Principal Highway	34.5	34.9	60	1	10'	10'	DBL Yellow	None	None	North Side = 8 South Side = 1	

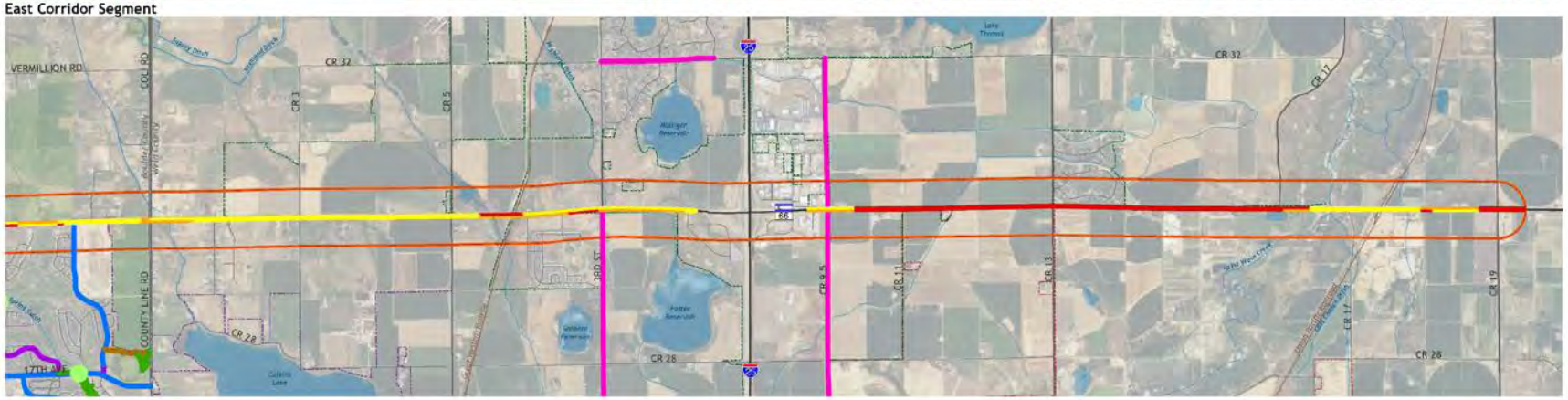
Bike Facilities

- Boulder County Transportation Master Plan
- Boulder County Regional Trails Program
- Envision Longmont Multimodal & Comprehensive Plan
- Lyons Parks, Recreation, Trails & Open Space Master Plan
- Mead Comprehensive Plan
- Firestone Master Plan
- Firestone Public Park and Trail System

West Corridor Segment



East Corridor Segment



Legend

Study Area

Bicycle Facilities

Multi-Use Trail - Paved

Multi-Use Trail - Unpaved

Bike Lanes

Bike Route

Sidewalk Route

Grade-Separated Crossing

Paved Shoulder 10+ Feet

Paved Shoulder 5+ Feet

Paved Shoulder <5 Feet

Other Paved Shoulder

U.S./State Highway

Major Roads

Local Roads

Railroad

Rivers/Streams

Lakes/Reservoirs

Parks & Open Space

County Boundary

Town Of Firestone

City Of Longmont

Town Of Lyons

Town Of Mead

NORTH

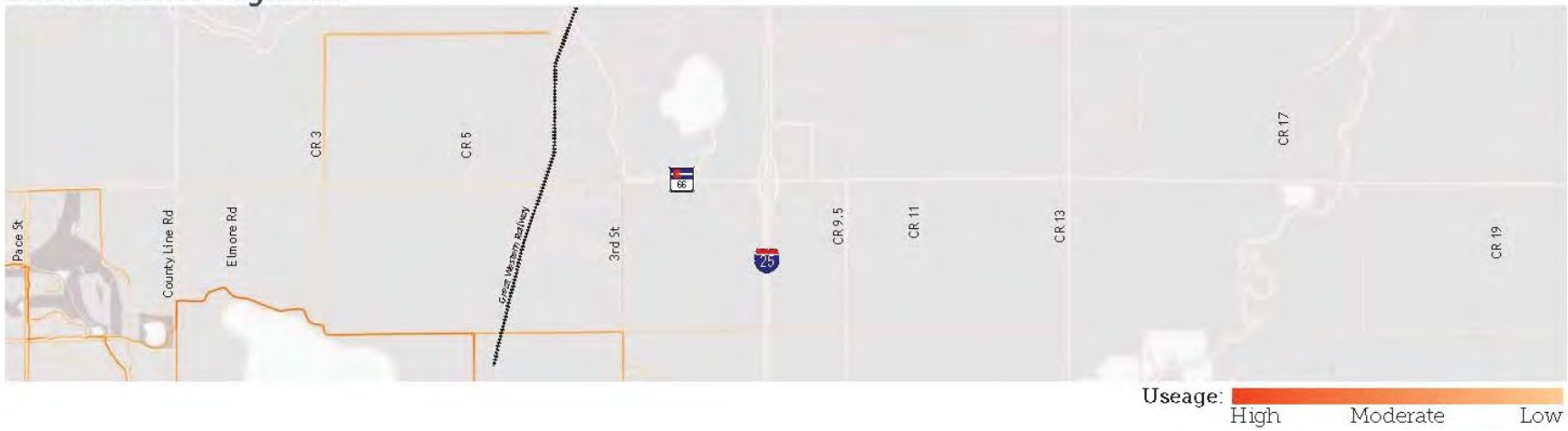
0 0.5 1 Miles

SH 66 Planning and Environmental Linkages Study

Pedestrian Usage

West Corridor Segment

East Corridor Segment



Environmental Resources

- Collecting information on natural/human environment
- Resources important to roadway context and PEL decision-making

Utilities, Ditches, Railroads

- Identifying and mapping existing facilities
- Utility/ditch company, CDOT Specialist coordination

Sample Documentation

SH 66 Planning and Environmental Linkages Study

5.1 Floodplains and Floodways

This section summarizes floodways and floodplains in the study area. The 100-year floodplain, considered the Special Flood Hazard Area (SFHA), has a one percent chance of annual occurrence and is the standard for requiring flood insurance. The floodway is the channel and adjacent floodplain areas that must remain open to discharge the 100-year flood.

Next Steps for Implementation

WHO?	Potential agency and stakeholder involvement	• FHWA • CDOT • FEMA • Local Community Floodplain Administrators • US Army Corps of Engineers
WHAT?	Resource findings	See **Table 5.1** for existing FEMA designated floodplains in the study area.
WHERE?	Resource locations	See **Figure 5.2** for existing FEMA designated floodplains in the study area.
WHEN?	Critical schedule considerations	**Letter of Map Revision (LOMR) or Conditional Letter of Map Revision (CLOMR)** - Impacts to floodplains may require a CLOMR or LOMR. CLOMR and LOMR reviews take up to 90 days for FEMA to process and require approximately ## months to develop. These map revisions are subject to an appeal period and usually become effective within six months after they are issued. **Regulatory Floodways** - If a proposed project will involve a regulatory floodway, the CDOT Hydraulic Engineer or designee must work with local agencies and FEMA to ensure the project is developed consistent with local floodway plans and floodplain management programs. This process can require up to ## months.
WHY?	Regulatory setting and general context	**Executive Order (EO) 11988 Floodplains Management**- All federal-aid projects must make diligent efforts to: • avoid support of incompatible floodplain development • minimize the impact of highway actions that adversely affect the base floodplain • restore and preserve the natural and beneficial floodplain services • be consistent with the standards/criteria of the National Flood Insurance Program (NFIP) In addition to federal and state laws and regulations, local jurisdictions may have ordinances and regulations that must be followed.
HOW?	NEPA Pre-Scoping Considerations	CDOT evaluates the potential footprint of the alternative for all transportation projects to ensure they would not encroach upon or alter floodplains and cause future flooding or other adverse impacts. The floodplain evaluation should be completed when alternatives for the proposed action are first being designed and developed.
NEXT STEPS?	Funding, design, construction, and mitigation implications	Design solutions should minimize impacts to the floodplain and be developed cooperatively with USACE, FEMA, and the affected communities. If an alternative encroaches on a regulatory floodway/floodplain, an evaluation is necessary to determine if the encroachment would require a revision to the regulatory floodway (impacts to floodplains may require a CLOMR). For alternatives with significant impacts, provide a discussion of practicable alternatives or mitigation.

Table 5-1. Floodplains and Floodways

Drainageway	SFHA Description	Regulatory Floodway?
Zone AE		
St. Vrain – in the western and eastern parts of the corridor	Zone AE is part of the SFHA where base flood elevations have been determined.	Yes – in the westernmost part of the corridor
Zone A		
St. Vrain – in the western and eastern parts of the corridor	Zone A is part of the SFHA where base flood elevations have not been determined, but a shaded, generalized floodplain is shown on the FEMA FIRM.	Yes – in the westernmost part of the corridor
Zone X		
Unnamed, throughout the corridor	Zone X is part of the FEMA 500-year flood area, or the area that has as a 0.2 percent annual chance of flooding. On FEMA's Flood Insurance Rate Map, the study area surrounding SH 66 that is not designated as a Zone AE or Zone A is identified as Zone X.	No

Resiliency

In September 2013, a prolonged period of heavy rain and catastrophic flooding occurred in northern Colorado, which lead to extensive damage of infrastructure along drainageways. Communities along the SH 66 PEL Study Area were particularly affected by the heavy flooding.

As such, planning for potential extreme weather impacts could help project stakeholders plan for more resilient infrastructure designs. Across the country and internationally, transportation officials have begun to plan and design transportation infrastructure in consideration of extreme weather events and climate change. While transportation facilities are designed to handle a broad range of impacts based on historic climate conditions, preparing for climate change and extreme weather events is being recognized as critical for protecting integrity of transportation systems and the necessary investment of funds.

FHWA and other transportation agencies offer tools and resources to aid state and local transportation officials. These resources help officials assess potential climate change impacts and ultimately plan, design, and construct more resilient transportation facilities.

Sample Documentation

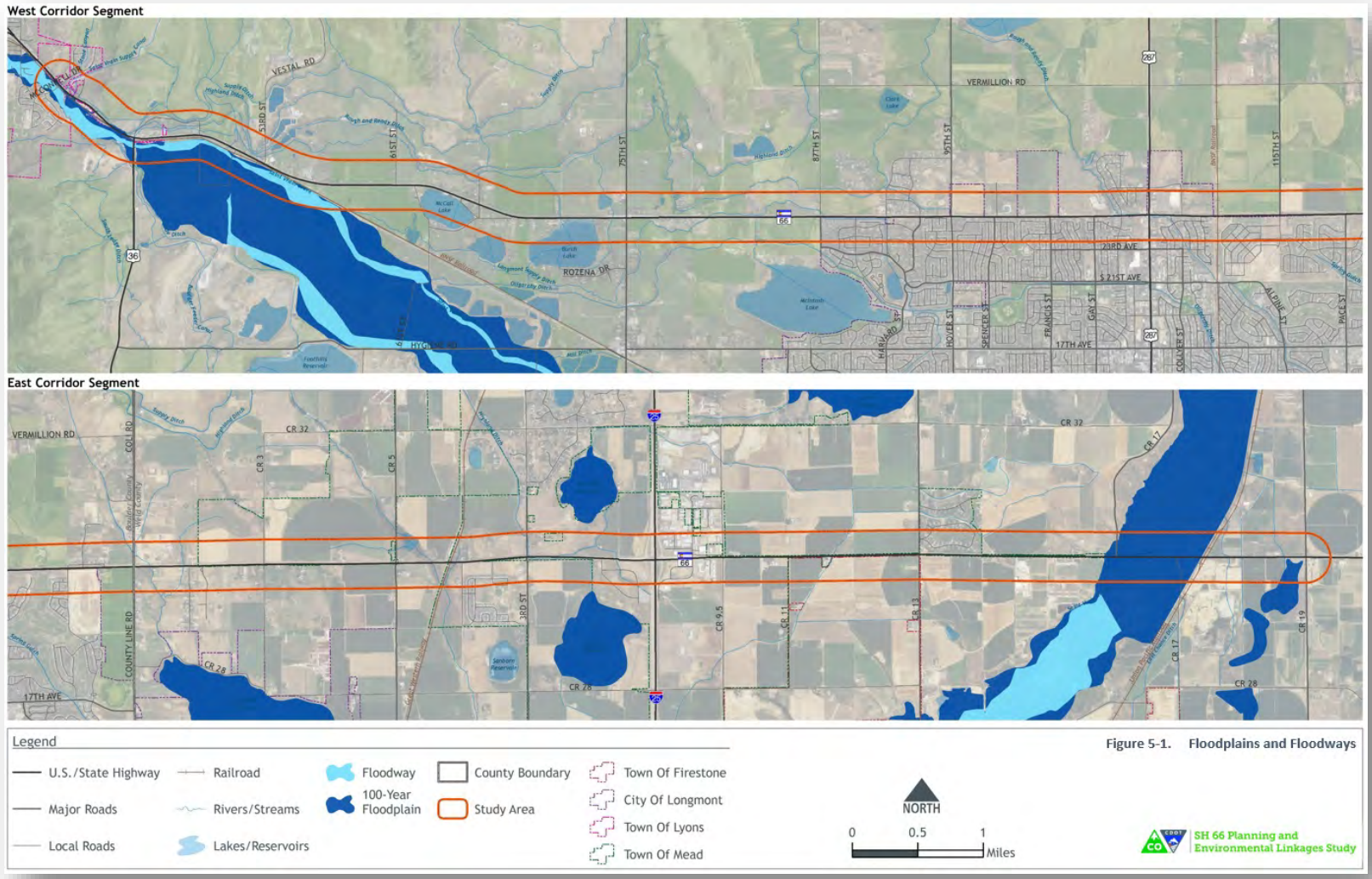


Figure 5-1. Floodplains and Floodways

SH 66 Planning and Environmental Linkages Study

Public Engagement Plan

Visioning Workshop

- Opportunity to hear all stakeholder feedback
- Focus on consensus for Corridor Vision
- Set the stage for the Purpose and Need Statement

Project Website

- Opportunity for distribution of information to the public
- Opportunity for public to provide comments
- Updated regularly with information
- Could be linked to from your website

Public Meeting #1

- After the Visioning Workshop
- Two locations in the corridor
  - Volunteers to host?
- Requirement to have public comment on Purpose and Need
- Late March

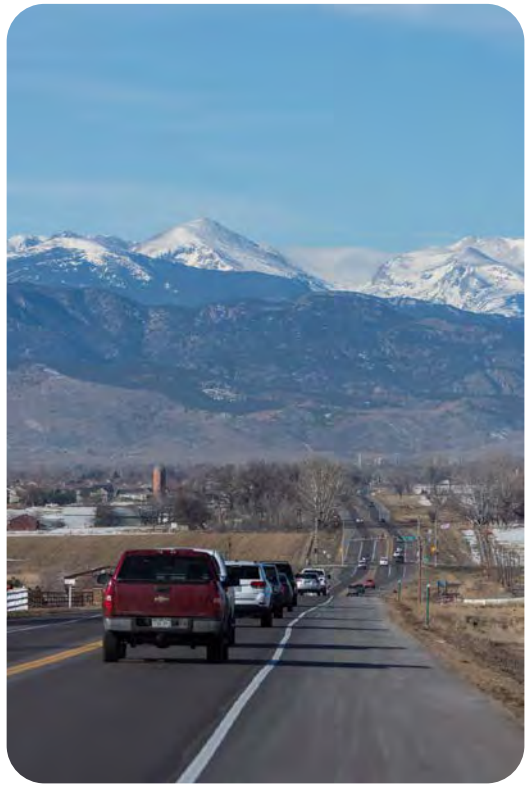
SH 66 Planning and Environmental Linkages Study

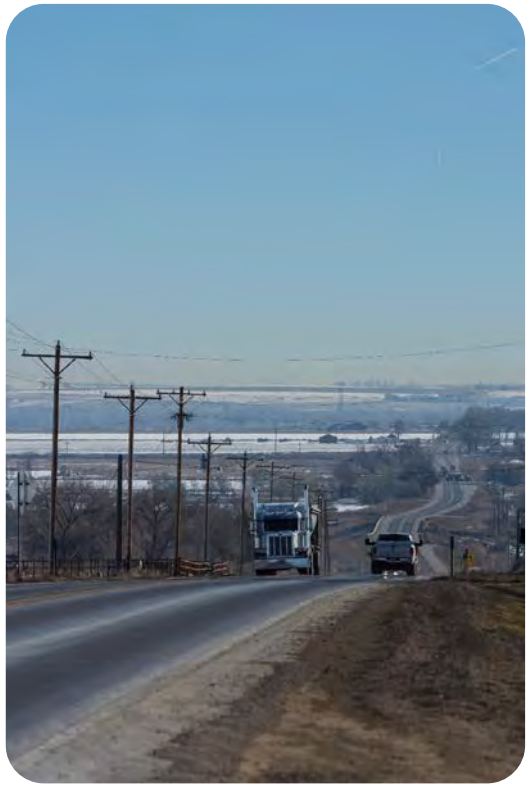
Next Steps

Next Steps

- Finalize the traffic projections
- Visioning Workshop (Mid March)
- Prepare the Corridor Conditions Report for TAC Review (Late March)
- Purpose and Need Development
- Public Meeting (Late March)
- Alternative Development and Screening

SH 66 Planning and Environmental Linkages Study





Thank You!

February 8, 2017

SH 66 Planning and Environmental Linkages Study

Technical Advisory Committee (TAC) Meeting #2

Date and Time: April 18, 2017 | 10 a.m. to 12 p.m.
Location: City of Boulder | 2525 13th St, Boulder, CO 80304 | Large Conference Room

Agenda

Introductions

Visioning Workshop Summary

Corridor Conditions Status and Report

- Planning Context
- Transportation Context
- Environmental Context
- Upcoming TAC Deliverable and Review

Purpose and Need

Charter

Public Meeting

- Logistics
- Anticipated Outcomes
- Overview of Materials

SH 66 Planning and Environmental Linkages Study

Technical Advisory Committee (TAC) Meeting #2

Date and Time: April 18, 2017 | 10 a.m. to 12 p.m.
Location: Boulder County's Large Conference Room | 2525 13th Street, Boulder, CO 80304

Meeting Summary

Introductions

The meeting purpose is to provide a status update on the project and discuss next steps, specifically the project's purpose and need, and the materials for the upcoming public meetings. The TAC Meeting presentation is attached.

Visioning Workshop Summary

Kelly summarized the feedback received during the Visioning Workshop which was held April 4th at the Town of Mead. The purpose of the workshop was to gather technical advisors and elected officials from each local agency to cast a vision and common purpose for the project and the corridor.

Attendees were divided into four working sessions:

- Operations and mobility
- Bicycle, pedestrian, and transit
- Access management and safety
- Other (gateway, environmental resources, tourism, etc.)

Each group spent approximately 15 minutes discussing the following questions:

- What are the greatest challenges today?
- What are the greatest opportunities in the future?
- In an ideal world, what will SH 66 look like?

The following are highlights from the discussions for each topic.

- Operations and mobility
  - SH 66 is becoming a major east-west facility
  - There is a need for strategic widening to four lanes in certain locations
  - High truck traffic impacts SH 66 east of I-25
  - Poor traffic signal timing creates congestion along the corridor
- Bicycle, pedestrian, and transit
  - SH 66 is dangerous for bicyclists and pedestrians
  - Safe crossings are needed, either grade-separated or at the intersections
  - Strategic mobility hubs should be evaluated throughout the corridor
- Access management and safety
  - Access challenges between I-25 and WCR 9.5
  - Roundabout could be considered to improve intersections
  - Strategic management of accesses is needed to improve the corridor

- Other (gateway, environmental resources, tourism, etc.)
  - The rural character is valued along the corridor
  - The project is an opportunity to focus on the resiliency of our infrastructure (and think about extreme events like flooding)
  - SH 66 is a gateway into many communities

A full summary is attached. The information shared at the Visioning Workshop informs the development of the purpose and need.

Corridor Conditions Report

Alex provided an update on the Corridor Conditions Report. The report is a new format which is easier to read and reference. The report is separated into three main categories:

- Planning Context
  - Previous planning efforts by local agencies have been completed which identify specific improvements along and near the SH 66 corridor. The Planning Context section combines all of these recommendations and documents them to use as a starting point for this study.
- Transportation Context
- Environmental Context

Attendees reviewed many of the components of the Corridor Conditions Report, as this information will be presented at the public meeting. The context information is included in the TAC Meeting presentation (attached).

Some immediate revisions were discussed:

- Sundance drive is missing from the Safety Characteristics and will be added.
- The RTD boundary is not clear and will be better defined on the transit map.

Purpose and Need

Attendees reviewed the project's draft purpose and need (document attached). The group agreed that transit should be added as a need for the project.

A draft purpose and need will be provided at the public meetings to receive feedback from the public. Transit will be included in this revised version.

Public Meetings

Public meetings will be held on April 25th and April 26th from 4:30 p.m. to 7:30 p.m. The purpose of the meetings is to present the purpose and need, and existing conditions data. The meetings are an opportunity for the public to learn more about the project and to provide input on the transportation challenges along the corridor.

Charter

A charter has been developed that provides the participation framework for the project. It describes the roles and responsibilities of the TAC and the EC, and emphasizes the importance of participation throughout the project. TAC members are encouraged to review this charter and discuss it with EC members. The charter is anticipated to be signed by EC members at the next Coalition meeting.

Next Steps

- Revise purpose and need; add transit to the purpose and need
- Revise public meeting materials (comments due to CDOT/FHU by COB Thursday, 4/20)
- Discuss recent access permits with Gloria, specifically inquire about Aurora Dairy

SH 66 Planning and Environmental Linkages Study

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Purpose and Need

Charter

Public Meeting

- Logistics
- Anticipated Outcomes
- Overview of Materials

SH 66 Planning and Environmental Linkages Study

TECHNICAL ADVISORY COMMITTEE MEETING #2

Date and Time: April 18, 2017 | 10 a.m. to 12 p.m.
Location: City of Boulder | 2525 13th St, Boulder, CO 80304 | Large Conference Room

Sign In

First Name	Last Name	Agency	Email
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Nataly Handlos	[redacted]	RTD	nataly.handlos@rtd-denver.com
PHIL	GREENWALD	CITY OF LONGMONT	phil.greenwald@longmontcolorado.gov
Chris	Fasching	FHU	Chris.Fasching@FHUENG.COM
Jim	FLESHER	WELD CO.	JFLESHER@WELDGOV.COM
Dawn	Adams	Town of Mead	dadams@townofmead.org
James	Zufall	CDOT	James.Zufall@state.co.us
Jim	Hanson	Atkins	jim.hanson@atkinsglobal.com

SH 66 Planning and Environmental Linkages Study

TECHNICAL ADVISORY COMMITTEE MEETING #2

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Sign In

First Name	Last Name	Agency	Email
DAVID ~~SPRAGUE~~	SPRAGUE	ATKINS	DAVID.SPRAGUE@ATKINSGLOBAL.COM

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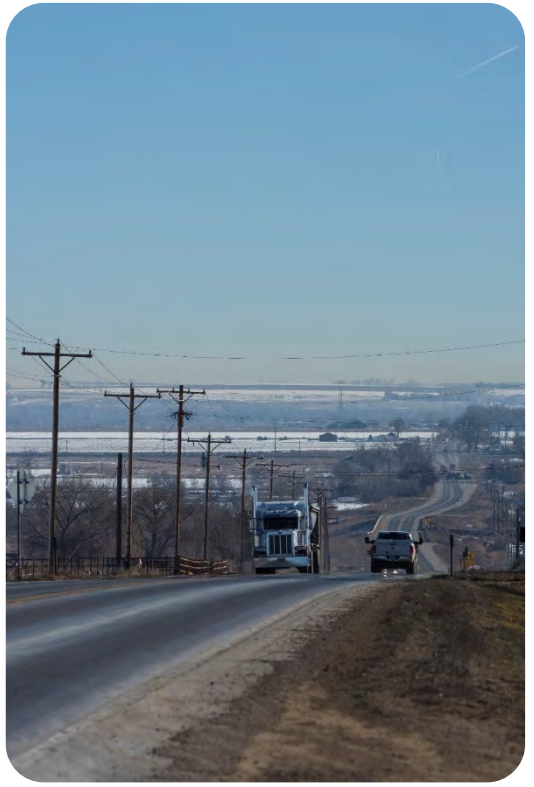
SH 66 Planning and Environmental Linkages Study



April 18, 2017

Technical Advisory Committee #2

Today's Meeting

- Introductions
- Visioning Workshop Summary and Feedback
- Corridor Conditions Report Update
  - Planning Context
  - Transportation Context
  - Environmental Context
- Purpose and Need
- Charter Review
- Public Meeting
  - Logistics
  - Notifications

SH 66 Planning and Environmental Linkages Study

Visioning Workshop Summary

Visioning Workshop Summary (Small Groups)

- Operations and mobility 
- Bicycle, pedestrian, and transit 
- Access management and safety 
- Other 

Questions to Discuss:

- *What are the biggest issues today?*
- *How will these change in the future?*
- *In an ideal world, what would SH 66 look like?*

Operations and Mobility

- Need to consider the impacts of multiple accesses and traffic signals upon mobility
- SH 66 is becoming a major east-west facility
- How to blend mobility and gateway concepts
- There is a need for four lanes on SH 66 in certain locations, such as from US 287 to Hover St
- There is a need to get traffic to the Diagonal Highway (SH 119) quicker
- Sight distance issues just west of WCR 17
- SH 66 is a high-speed corridor and the speed limit needs to be considered and potentially adjusted for a mix of modes
- Desire for smart signals
- Need to consider the higher truck traffic east of I-25
- Consider all options for intersections, such as grade-separation and roundabouts
- Traffic signals and poor timing create congestion along the corridor

Bicycle, Pedestrian, & Transit

- The corridor is currently dangerous for cyclists and pedestrians
- Larger shoulder and multi-use paths are needed
- The cleanliness of the shoulders is a challenge
- There is a growing need for bicycle facilities along the east side of the corridor
- Safely crossing SH 66 is a challenge for bicyclists and pedestrians
- Sidewalks are needed within the communities but potentially not needed in the rural areas, if regional multi-use trails are available
- Safe crossings at intersections, or grade-separated, are needed for active transportation uses
- In order for transit service to work, it would need to be reliable
- Strategic mobility hubs should be evaluated throughout the corridor such as at SH 66 and US 287 in Longmont

Access Management & Safety

- The intersection of WCR 7 and SH 66: high speed environment and high school students crossing the highway—creates an unsafe condition
- Bicycle safety is a major concern along the corridor; specifically at the US 36 and SH 66 intersection and between US 36 and Lyons
- Need for more grade-separated pedestrian and bicycling access for safe crossings of SH 66; a future regional trail underpass is planned on the former UPRR rail line near Firestone
- Access challenges between I-25 and WCR 9.5
- Consider the future needs of transit such as accel/decel/stopping areas for buses
- There is a desire to consolidate access along the corridor
- Roundabouts could be considered to improve intersections
- Extreme fog poses a safety concern

Community Values, Environmental Resources, Other

- Rural character is valued on the east and west side
- Proactive maintenance of floodplains and steams is needed
- Focus on resiliency of infrastructure
- SH 66 as an evacuation route
- Consider wildlife crossings and warnings
- Gateway features that represent the individual communities are desired by many communities
- New development east of I-25 (in Firestone) is changing the character of that area
- Truck traffic along the corridor is a result of industries, such as the oil and gas

SH 66 Planning and Environmental Linkages Study

Corridor Conditions Report Update

Corridor Conditions Report

- New format is easy to read and reference

- Separated into three categories:
  - Planning Context

  - Transportation Context

  - Environmental Context

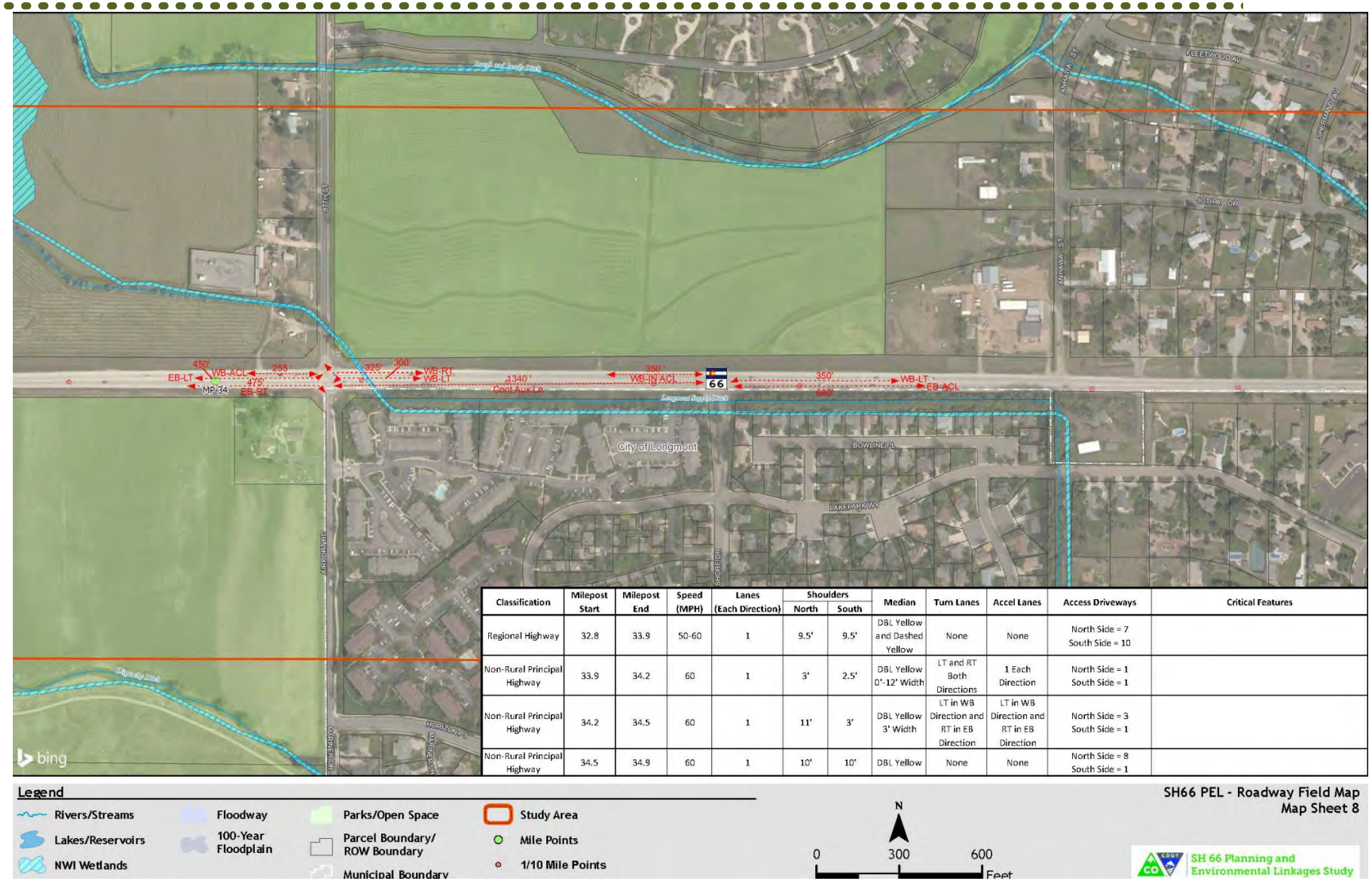
Planning Context

Reviewed and incorporated all comprehensive plans and DRCOG 2040 modeling, as it relates to SH 66

Transportation Context

Physical Characteristics

- Turn lanes/lengths
- Access Points
- Shoulders/Widths
- Medians/Widths



Classification	Milepost Start	Milepost End	Speed (MPH)	Lanes (Each Direction)	Shoulders North	Shoulders South	Median	Turn Lanes	Accel Lanes	Access Driveways	Critical Features
Regional Highway	32.8	33.9	50-60	1	9.5'	9.5'	DBL Yellow and Dashed Yellow	None	None	North Side = 7 South Side = 10	
Non-Rural Principal Highway	33.9	34.2	60	1	3'	2.5'	DBL Yellow 0'-12' Width	LT and RT Both Directions	1 Each Direction	North Side = 1 South Side = 1	
Non-Rural Principal Highway	34.2	34.5	60	1	11'	3'	DBL Yellow 3' Width	LT in WB Direction and RT in EB Direction	LT in WB Direction and RT in EB Direction	North Side = 3 South Side = 1	
Non-Rural Principal Highway	34.5	34.9	60	1	10'	10'	DBL Yellow	None	None	North Side = 8 South Side = 1	

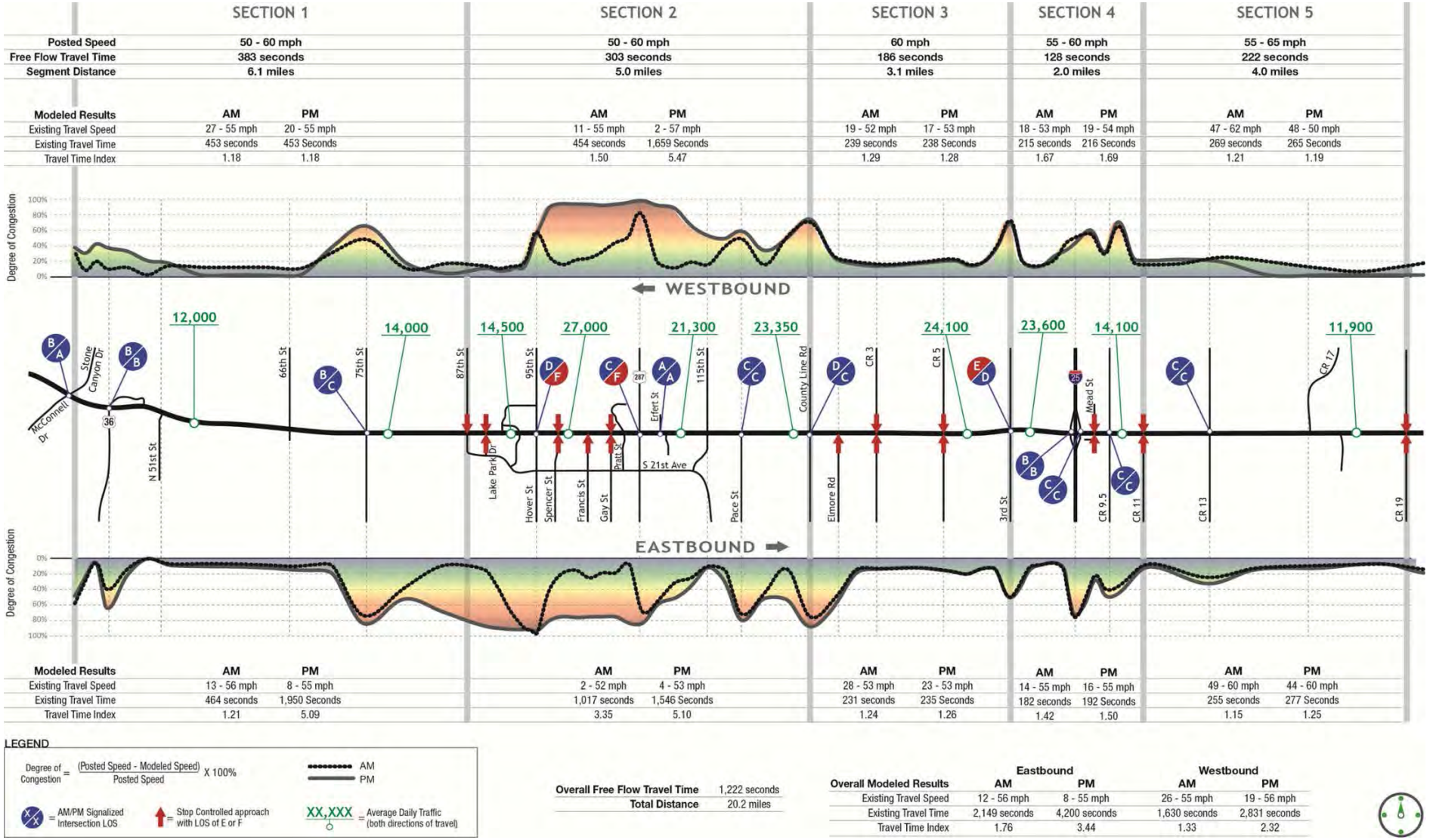
Transportation Context—Current

Current Travel Characteristics

- 18 intersections LOS E/F

TTI

- Corridor 1.33–3.44
- Westbound 1.19–5.47
- Eastbound 1.15–5.10



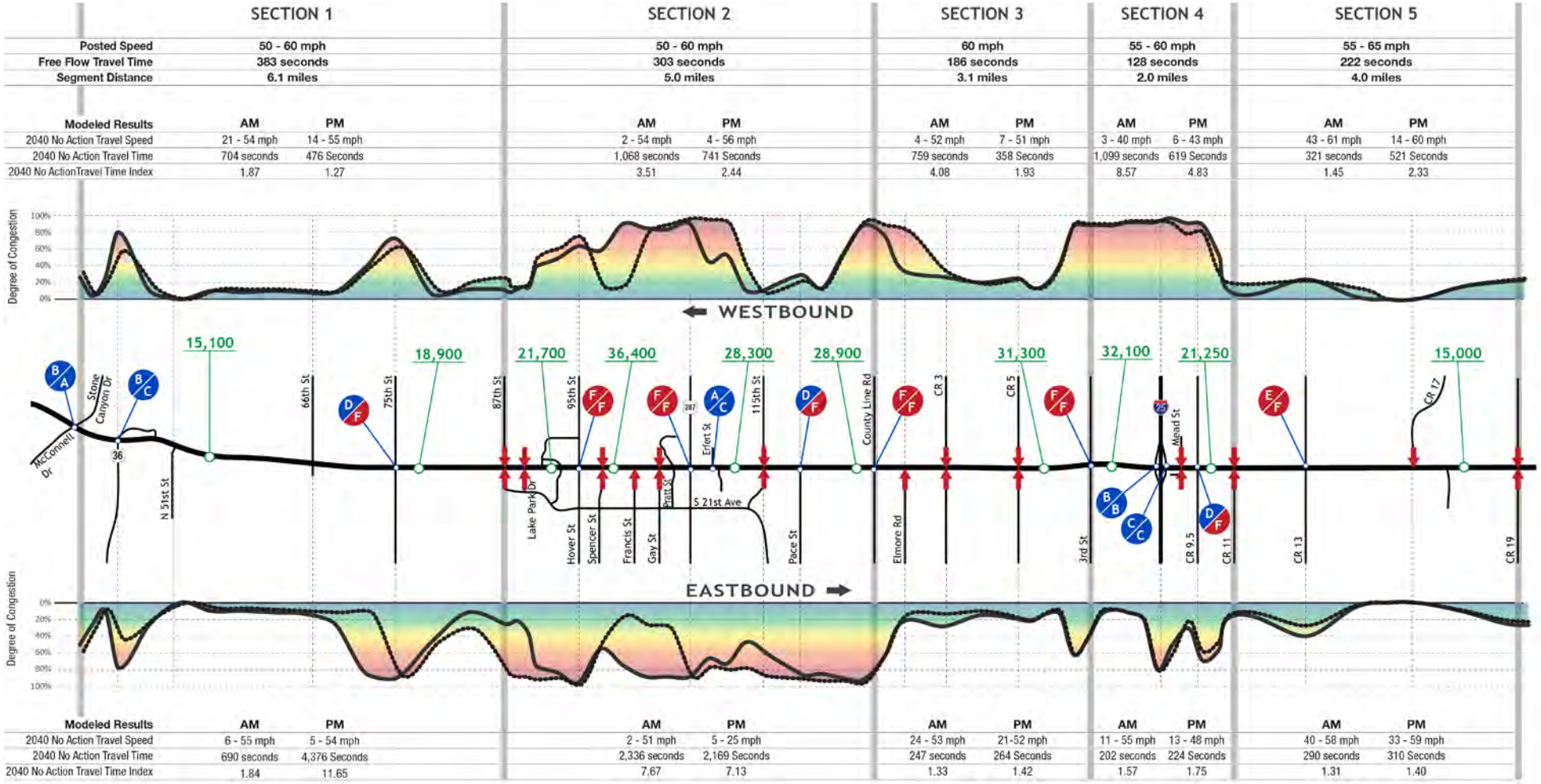
Transportation Context—Future

Future Travel Characteristics

- 7 new LOS E/F (~40% increase)

TTI

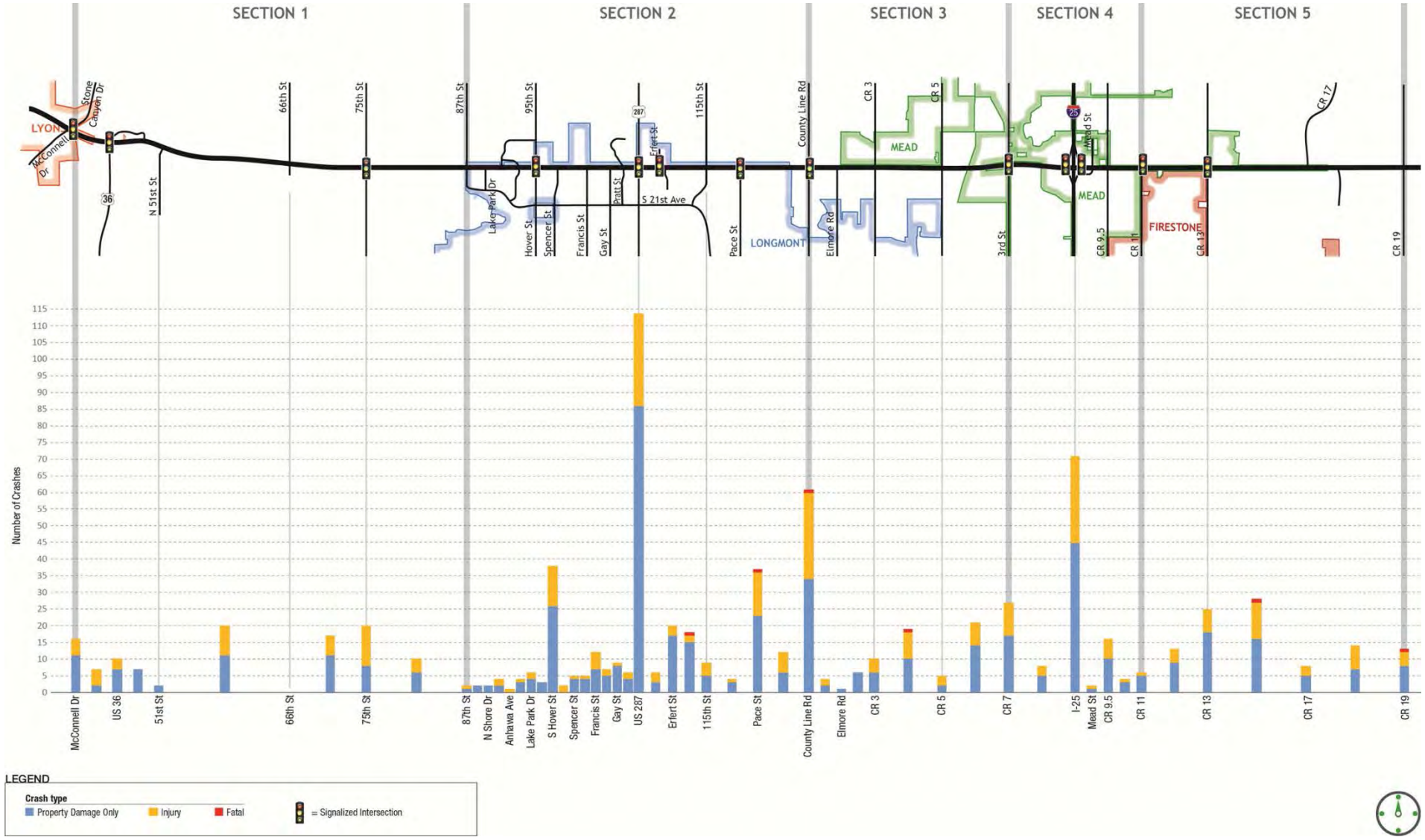
- Corridor 2.23–6.04
- Westbound 1.27–8.57
- Eastbound 1.31–11.65



Transportation Context

Safety Characteristics

- Evaluated 5 Years of Crash Data
- US 287 highest number of crashes
- Six fatalities



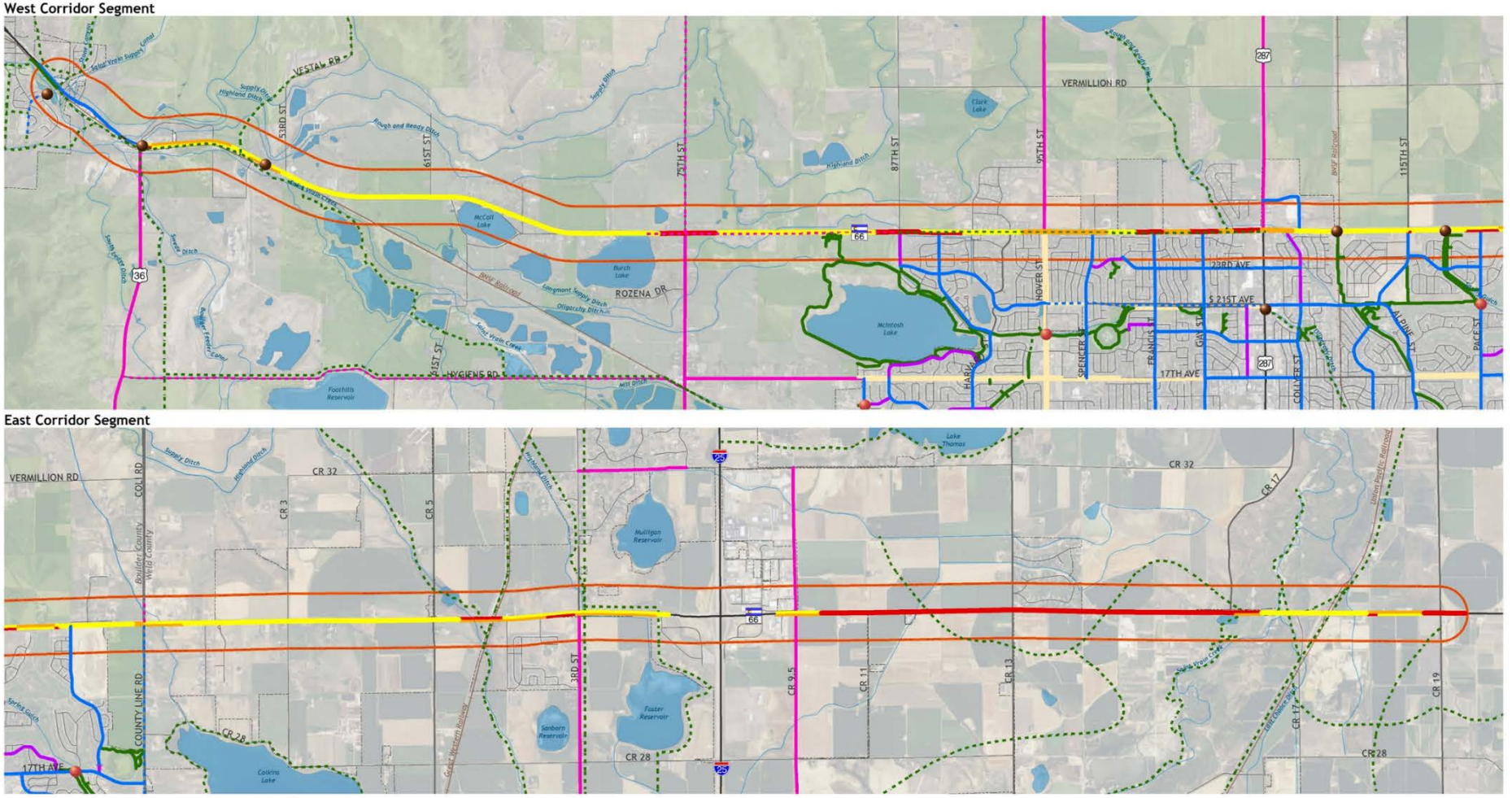
Transportation Context

Bicycle Characteristics

- Evaluated Shoulder Widths
- Existing / Planned Trails / Lanes
- Level of Traffic Stress

West Corridor Segment

East Corridor Segment

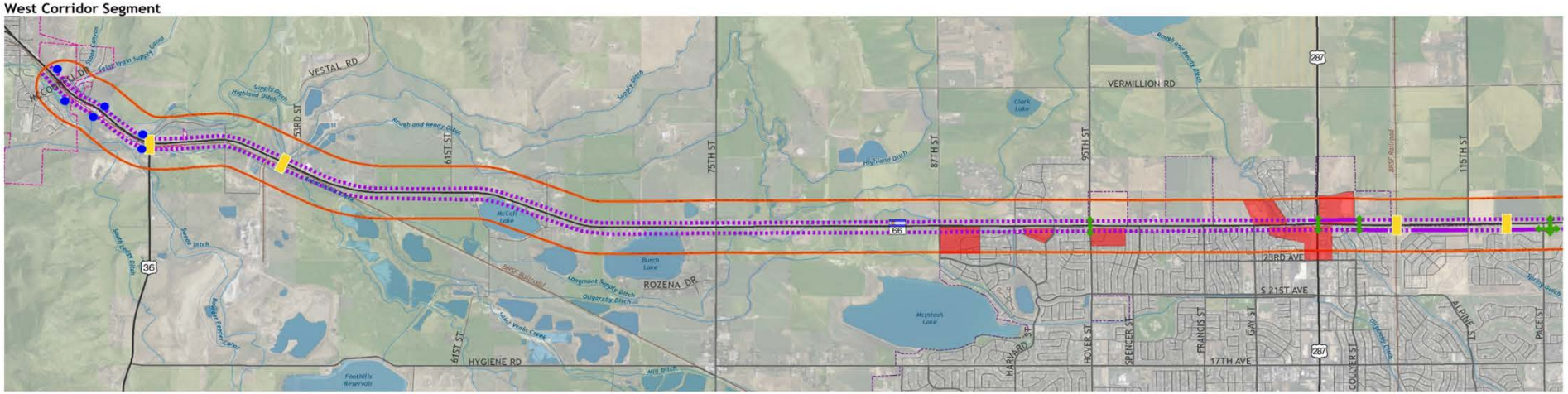


Transportation Context

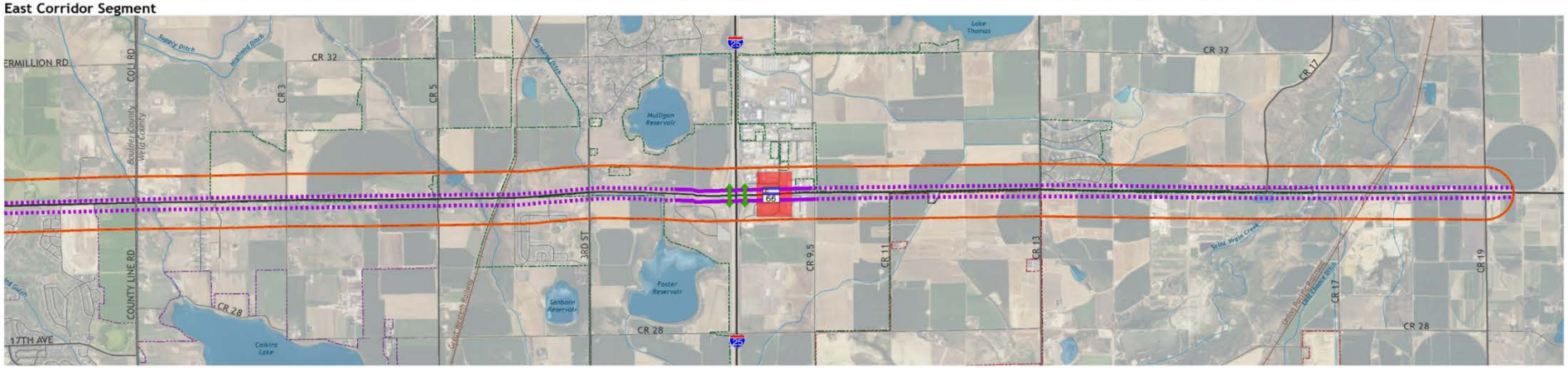
Pedestrian Characteristics

- Identified Pedestrian Destinations
- Existing Sidewalks

West Corridor Segment



East Corridor Segment



Legend

- Bus Stop
- Existing Sidewalk
- No Sidewalk
- Pedestrian Intersection Crossing
- Pedestrian Destinations (Includes commercial areas, public facilities, & multi-family housing)
- Proposed Grade Separated Crossing
- U.S./State Highway
- Major Roads
- Local Roads
- Railroad
- Parks & Open Space
- County Boundary
- Study Area
- Town Of Firestone
- City Of Longmont
- Town Of Lyons
- Town Of Mead

NORTH

0 0.5 1 Miles

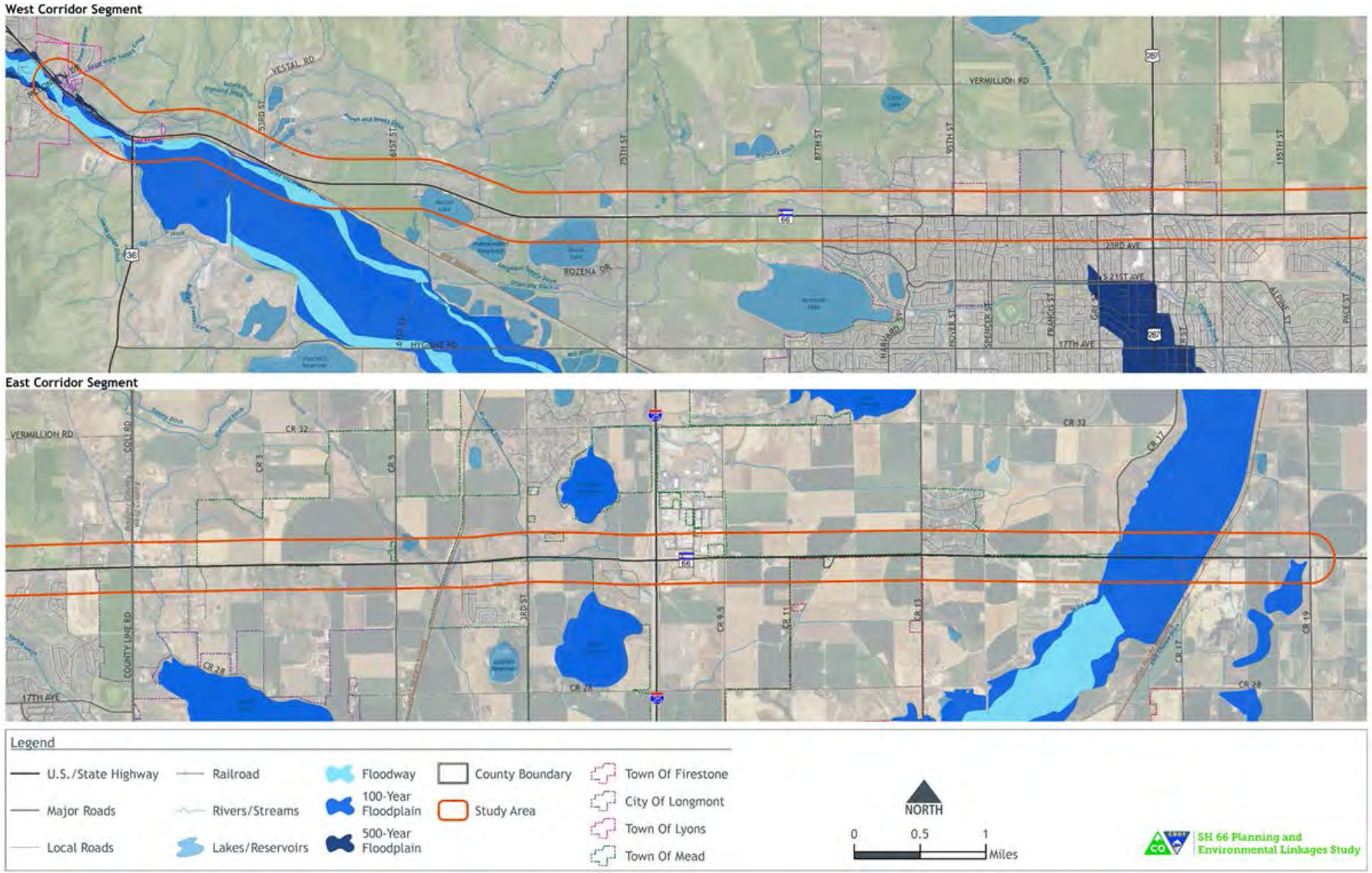
SH 66 Planning and Environmental Linkages Study

Environmental Context

Environmental Characteristics

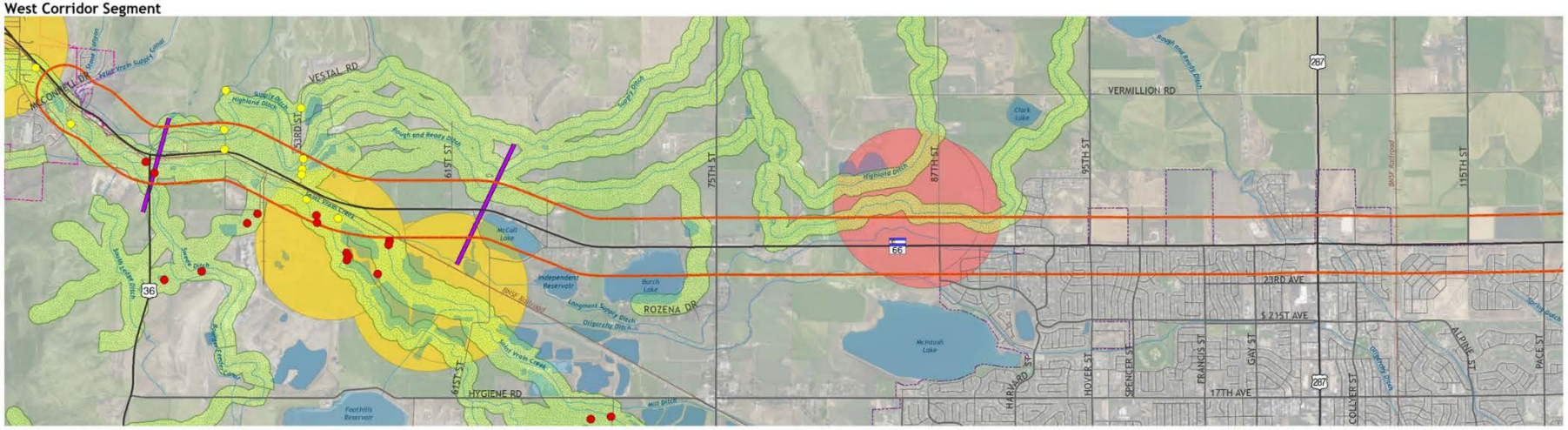
- 10 Resources Documented
  - Floodplains / Floodways
  - Wetlands
  - Threatened and Endangered Species
  - Parks, Trails, Open Space
  - Utilities
  - Traffic Noise
  - Hazardous Materials
  - Visual Consistency
  - Historic Resources

Environmental Context—Floodplains

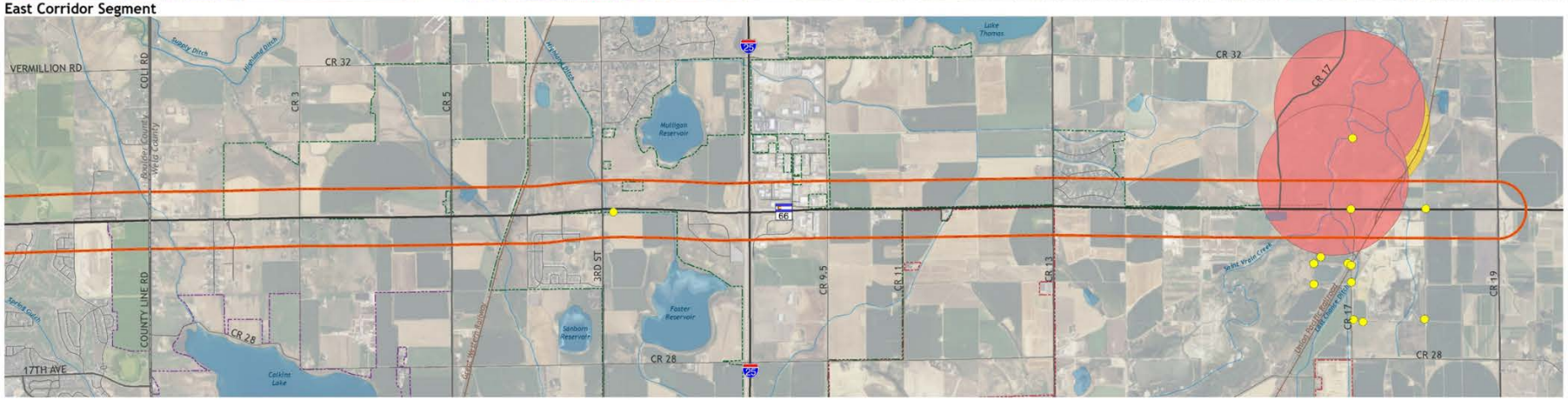


Environmental Context—Threatened & Endangered Species

West Corridor Segment



East Corridor Segment



Legend

Preble's Trapping
- Trapped - Found
- Trapped - Not Found

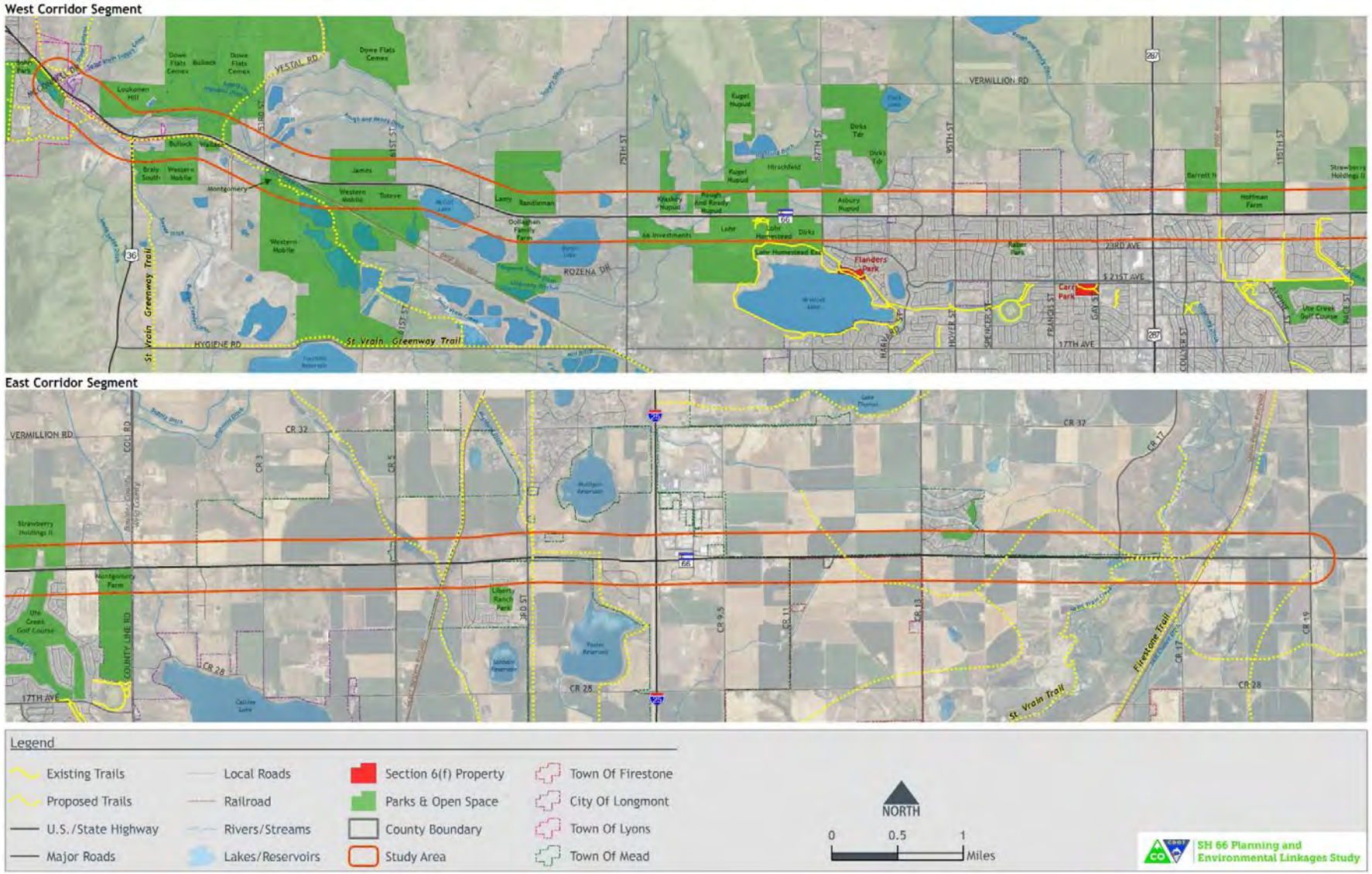
- Overland Habitat Connector
- Active Bald Eagle Nest Site
- Undetermined/Unknown Bald Eagle Nest Site
- Preble's Meadow Jumping Mouse Habitat
- U.S./State Highway
- Major Roads
- Railroad
- Rivers/Streams
- Lakes/Reservoirs
- Parks & Open Space
- County Boundary
- Study Area
- Town Of Firestone
- City Of Longmont
- Town Of Lyons
- Town Of Mead

NORTH

0 0.5 1 Miles

SH 66 Planning and Environmental Linkages Study

Environmental Context—Parks, Trails, Open Space



SH 66 Planning and Environmental Linkages Study

Purpose and Need

Purpose and Need

Basis for the alternative development and screening

Purpose

The purpose of transportation improvements along the SH 66 corridor are to improve safety, reduce existing and future traffic congestion, provide efficient access for existing and future development, and improve mobility and connectivity for all modes of transportation that match the context of the adjacent communities.

Purpose and Need

Needs

- Safety Problem
- Mobility Problem
- Access Problem
- Bicycle Mobility/Safety Problem
- Pedestrian Movement Problem

- *Please review for overarching comments and provide comments by TOMORROW close of business*

SH 66 Planning and Environmental Linkages Study

SH 66 PEL Charter

Stakeholder Charter

- Develop a charter that establishes the framework for participants to work together during the SH 66 PEL
- Describes the roles and responsibilities
- Discusses importance of membership and attendance
- Identifies Operating Guidelines
- Signed by all Stakeholders
- Signed by Executive Committee Members

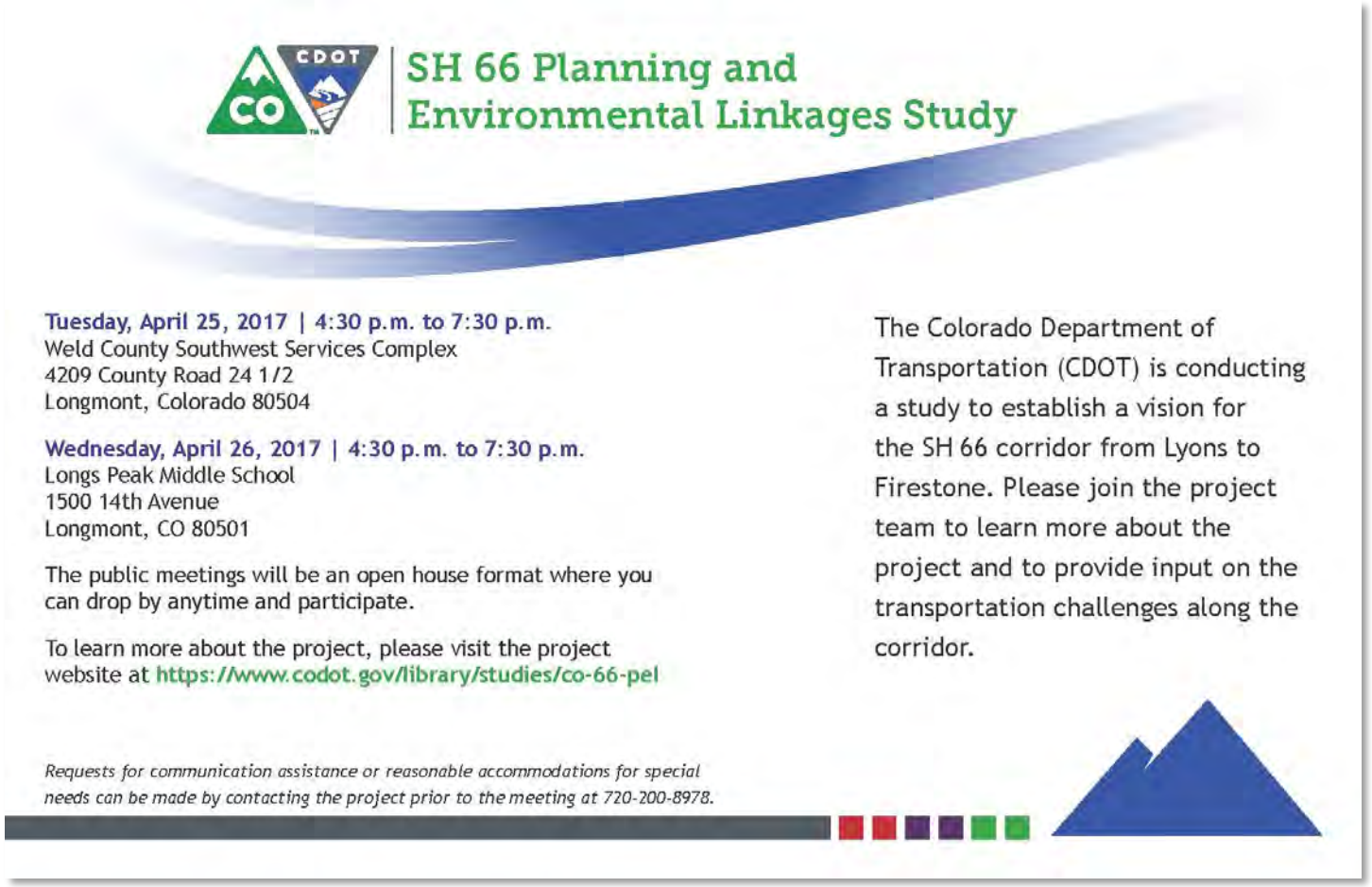
SH 66 Planning and Environmental Linkages Study

Public Meetings

Public Meetings

We need your help in spreading the word!

Facebook, Twitter, website, press releases…



SH 66 Planning and Environmental Linkages Study

Tuesday, April 25, 2017 | 4:30 p.m. to 7:30 p.m.
Weld County Southwest Services Complex
4209 County Road 24 1/2
Longmont, Colorado 80504

Wednesday, April 26, 2017 | 4:30 p.m. to 7:30 p.m.
Longs Peak Middle School
1500 14th Avenue
Longmont, CO 80501

The public meetings will be an open house format where you can drop by anytime and participate.

To learn more about the project, please visit the project website at https://www.codot.gov/library/studies/co-66-pel

Requests for communication assistance or reasonable accommodations for special needs can be made by contacting the project prior to the meeting at 720-200-8978.

The Colorado Department of Transportation (CDOT) is conducting a study to establish a vision for the SH 66 corridor from Lyons to Firestone. Please join the project team to learn more about the project and to provide input on the transportation challenges along the corridor.

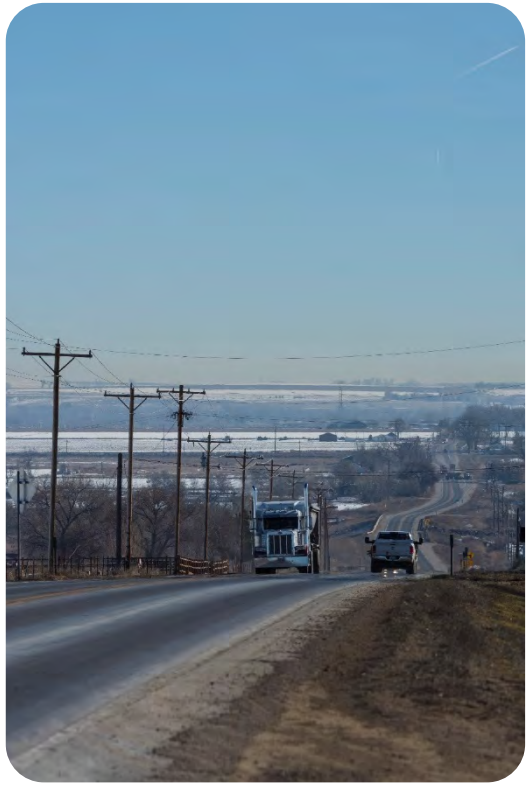
Public Meeting Purposes

- Inform the public of the project's purpose, project schedule, and expectations
- Present existing conditions information and receive feedback from the public
- Present the project's purpose and need and receive feedback from the public

Public Meeting Materials

- Project schedule
- Draft purpose and need
- Existing transportation condition information
  - Operations
  - Safety
  - Transit
  - Bicycle and pedestrian facilities
- Existing environmental condition information
- Ways to be involved
- Next steps

SH 66 Planning and Environmental Linkages Study



Thank You!

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SH 66 Planning and Environmental Linkages Study

Visioning Workshop

Date and Time: April 4, 2017 | 3 p.m. to 5 p.m.
Location: Town of Mead | 441 3rd Street, Mead, Colorado 80542

Meeting Summary

The following is a summary of the presentation and discussion from the Visioning Workshop for the SH 66 Planning and Environmental Linkages (PEL) Study. The purpose of the workshop was to gather technical advisors and elected officials from each local agency to cast a vision and common purpose for the project and the corridor.

Introductions and Presentation

Alex Pulley (FHU) welcomed the attendees and thanked the Town of Mead for hosting the meeting. He initiated a round of introductions from all attendees. A sign-in sheet is attached.

Alex provided an overview presentation which included the workshop's agenda, the project study area, the project schedule, the project team, the structure of the project, and a discussion of a project charter. The presentation slides are attached.

The presentation included an update on the exiting data collection efforts including land use, the transportation system, and environmental resources. All of this information will be summarized in the Corridor Conditions Report. The draft report will be distributed to the TAC for review later in April.

Stakeholder Interviews Summary

Kelly Leadbetter (FHU) provided a summary of the stakeholder interviews. She presented word clouds to represent the most frequently used themes and words that the project team heard in the interviews. The bigger the word on the word cloud, the more times that word or theme was used (see presentation).

Major themes that were discovered from asking how stakeholders would describe SH 66 today included:

- Gateway
- Connector
- Cycling
- Recreational uses
- Rural characteristics
- Tourism

This information was used to establish the discussion topics for each visioning workshop table.

Small Group Sessions

Attendees were divided into four working sessions. Each group spent approximately 15 minutes discussing the following topics:

- Operations and mobility
- Bicycle, pedestrian, and transit
- Access management and safety
- Other (gateway, environmental resources, tourism, etc.)

Each 15 minute discussion focused on three main questions:

- What are the greatest challenges today?
- What are the greatest opportunities in the future?
- In an ideal world, what will SH 66 look like?

The following are highlights from the discussions for each topic.

Operations and Mobility

- Need to consider the impacts of multiple accesses and traffic signals upon mobility
- SH 66 is becoming a major east-west facility
- Need to consider that the goals of the corridor—east and west of I-25 are different
- How to blend mobility and gateway concepts
- There is a need for four lanes on SH 66 in certain locations, such as from US 287 to Hover St
- Need to consider adding turn lanes and capacity at certain intersections
- There is a need to get traffic to the Diagonal Highway (SH 119) quicker
- Site distance issues just west of WCR 17 is insufficient
- SH 66 is a high-speed corridor and the speed limit needs to be considered and potentially adjusted for a mix of modes
- Need to consider the higher truck traffic east of I-25 that serves oil & gas and sand & gravel operations
- Consider all options for intersections, such as grade-separation and roundabouts
- Traffic signals and poor timing create congestion along the corridor; need to consider coordinated/smart signals

Bicycle, Pedestrian, and Transit

- The corridor is currently dangerous for cyclists and pedestrians
- Larger shoulder and multi-use paths are needed for bicycle and pedestrian accommodation

- Strategic mobility hubs should be evaluated throughout the corridor such as at SH 66 and US 287 in Longmont
- The cleanliness of the shoulders is a challenge for cyclists
- There is a growing need for bicycle facilities along the east side of the corridor
- Firestone is building a bike path along the old UPRR railroad land along the St. Vrain River
- Safely crossing SH 66 is a challenge for bicyclists and pedestrians
- Sidewalks are needed within the communities but potentially not needed in the rural areas, if regional multi-use trails are available
- Safe crossings at intersections, or grade-separated, are needed for active transportation uses
- In order for transit service to work, it would need to be reliable, perhaps with a bus-only lane

Access Management and Safety

- The intersection of WCR 7 and SH 66: high speed environment and high school students crossing the highway—creates an unsafe condition
- Bicycle safety is a major concern along the corridor; specifically at the US 36 and SH 66 intersection and between US 36 and Lyons
- Need for more grade-separated pedestrian and bicycling access for safe crossings of SH 66; a future regional trail underpass is planned on the former UPRR rail line
- Access challenges between I-25 and WCR 9.5
- Consider the future needs of transit such as accel/decel/stopping areas for buses
- There is a desire to strategically and safely consolidate access along the corridor
- Roundabouts could be considered to improve intersections
- Extreme fog poses a safety concern between WCR 17 and I-25

Community Values, Environmental Resources, and Other Considerations

- Consider wildlife crossings or warnings
- Seek balance between parks/rural character and developed/urban character
- Rural character is valued on the east and west side, with heavy focus on recreation and wildlife in western portions and oil and gas production in eastern portions; agricultural uses are scattered throughout the corridor
- Proactive maintenance of floodplains and streams is needed with a focus on resiliency of infrastructure and SH 66 as an evacuation route
- Aesthetic consistency along the corridor is desired, with individual gateway features to represent each community
- Include underpasses and overpasses to give neighborhoods continuity north and south of the corridor
- Consider an IGA that addresses topics such as maintenance needs, enforcement, billboards, signage, consistent highway name
- New development east of I-25 (in Firestone) is changing the character of the corridor
- Truck traffic along the corridor is a result of industries, such as the oil and gas
- Should the highway be branded or named to create an identity?

1.0 Introduction

The Colorado Department of Transportation (CDOT) is conducting a Planning and Environmental Linkages (PEL) study for approximately 20 miles of State Highway 66 (SH 66) between McConnell Drive in Lyons, Colorado and Weld County Road 19 (WCR 19). The SH 66 PEL is being conducted to identify existing conditions, anticipated problem areas, safety, and operational needs along this section of SH 66 and to determine its short-term and long-term transportation priorities.

1.1 Purpose of the Proposed Action

The purpose of transportation improvements along the SH 66 corridor is to improve safety, reduce existing and future traffic congestion, provide efficient access for existing and future development, and improve mobility and connectivity for all modes of transportation that match the context of the adjacent communities.

1.2 Need for the Proposed Action

These transportation improvements are needed to address:

- **Safety Problem:** Several intersection and mainline locations along the SH 66 corridor have a higher than expected number of crashes.
- **Mobility Problem:** Traffic congestion, inadequate intersections that fail to accommodate users' needs, highway design, and unreliable travel times substantially impact the ability of people to move across and along the corridor. These conditions are expected to worsen in the future as the region grows due to local and regional population and employment growth.
- **Access Problem:** The current number, locations, and design of public roadway accesses have contributed to traffic operational and safety deficiencies along the corridor. The access problem is expected to worsen in the future, when increased vehicles are utilizing the corridor. There are individual private driveways, business accesses directly onto SH 66, and inconsistent access spacing, which leads to mobility and safety problems.
- **Bicycle Mobility/Safety Problem:** A majority of the SH 66 corridor is a heavily utilized for bicycles (recreational, commuter, and events). There are many areas of the corridor that have insufficient shoulders that can accommodate bicycles or non-advanced riders. This high speed of SH 66 contributes to a high level of traffic stress. There are future bicycle destinations in the corridor that do not have adequate connections.
- **Pedestrian Movement Problem:** There are a number of pedestrian destinations in the corridor, many of which do not have sidewalks between the destinations. While there are some sidewalks and pedestrian intersection crossings in the corridor, there are inadequate connections between these locations and other pedestrian destinations. Currently, there are no grade-separated pedestrian crossings across SH 66.

Operating Charter
SH 66 Planning and Environmental Linkages (PEL) Study

This Charter provides the framework for SH 66 PEL Stakeholders (the "Stakeholders") to participate during the Colorado Department of Transportation (CDOT) SH 66 Planning and Environmental Linkages (PEL) study. The study team will identify the needs along SH 66 and develop a strategic, long-term vision for the corridor (from McConnell Drive in Lyons to Weld County Road (WCR) 19). The goal of the PEL process is to develop a vision for the SH 66 corridor, identify transportation solutions (near, mid, and long-term), prioritize improvements, and develop an access control plan. The PEL study will provide a framework for the implementation for future corridor improvements.

This Charter sets forth a process to help execute the various tasks associated with achieving a successful PEL study and access control plan. This Charter establishes goals, expectations, the SH 66 PEL study scope, schedule, and roles & responsibilities. Finally, this Charter establishes rules of operation to ensure effective and efficient engagement.

The SH 66 Access Control Plan will be separate from and complimentary to the SH 66 PEL Study. The SH 66 Access Control Plan is a legally binding document controlling access in the corridor.

I. PEL Vision

Work collaboratively; build upon and validate past efforts; manage and meet public and stakeholder expectations, develop a vision for SH 66 that includes discrete projects that improve safety and mobility along this important corridor.

II. SH 66 Coalition

Th SH 66 Coalition has recently formed to establish a common goal of improving the SH 66 Corridor. The Coalition provides the member entities a forum to engage in a coordinated and collaborative process to pool resources, identify and implement a common and politically cohesive vision, and transportation improvements for SH 66. When the SH 66 PEL is complete, the SH 66 Coalition continue to work together to identify funding and implement improvements along the corridor.

III. Guiding Principles

Several principles will guide how coordination and outreach for the PEL study will occur. The project team will:

- Establish expectations for the level of participation throughout the PEL study
- Provide multiple ways of participating in the study process that are accessible to different stakeholders or segments of the public
- Identify and confirm issues that need to be addressed through analysis and discussion with the Technical Advisory Committee (TAC), the Executive Committee (EC), and the public
- Provide accessible information and address questions about the study in a timely manner
- Work with key community members to facilitate outreach to their respective agencies, local jurisdictions, organizations, associations, constituents, and the public
- Maintain ongoing open two-way communication channels with stakeholders and the public

- Provide flexibility to be responsive to the corridor stakeholders and change or adapt the public involvement approach as needed within the scope of the project and resource constraintsV

VI. Desired Outcomes

The following identify the desired outcomes of the coordination and outreach effort:

(a) stakeholder input contributing to the study's information base, findings, and recommendations;

(b) stakeholders that are well-informed about the study;

(c) meaningful input by the TAC, EC, and the public that helps CDOT make sound and publicly supported decisions;

(d) an understanding and documentation of the decisions made during the study and the rationale for them; and

(e) an understanding of how the PEL study will move forward and how stakeholders will be involved.

V. Membership and Attendance

At the time of Chartering, the PEL Stakeholders include elected officials and delegated staff from the following: CDOT, Town of Lyons, Boulder County, City of Longmont, Town of Mead, Weld County, Town of Firestone, Federal Highway Administration (FHWA), Regional Transit District (RTD), Colorado State Parks and Wildlife (CPW), and the Denver Regional Council of Governments (DRCOG).

The Stakeholders agree to strive to attend all meetings in person rather than appoint alternate members. Members agree that in-person participation is more desirable than participation by conference call. Any member unable to attend a meeting can still contribute to the PEL by providing agenda items for discussion, reviewing appropriate materials to prepare for discussions in subsequent meetings, and reading and providing input to the meeting summaries.

Stakeholders also agree to compile and share traffic and land use data, past studies, and other data deemed relevant to the study's progress.

Weather Cancellation Policy: If a significant number of members are unable to attend due to weather, meetings will be canceled and rescheduled. As a general guideline, if school buses are canceled in the area of the meeting location or in a number of members' areas, the meeting will be canceled.

VI. Operating Guidelines

The following discussion guidelines will be used to encourage productive deliberations and decision making among the Stakeholders during meetings. The Stakeholders will commit to "best efforts" at following the guidelines and give the facilitators the authority to enforce them.

Discussion Guidelines

1. **It is crucial that everyone have a chance to be heard and to hear others.**
    a. Pay attention to what is being discussed in the meeting and avoid side conversations or distractions (phone calls, etc.).
    b. Allow people to speak and refrain from making interruptions.

c. Be brief and stay on topic.

2. **It is important to find creative, innovative, and mutually beneficial solutions.**
   a. Consider corridor-wide needs while representing their jurisdiction/agency perspective.
   b. Avoid judging ideas prematurely and try to remain open minded.
   c. Look for ways to improve proposals.
   d. Promote positive behaviors that result in agreement.
3. **Disagreements are inevitable; however, they should be focused on the issues involved rather than on the people holding a particular view.**
   a. Raise issues or concerns in a productive fashion and as early as possible.
   b. Address one another in respectful ways.
   c. Document and agree upon criteria for evaluating alternatives.
   d. Clearly articulate, after deliberation and when appropriate, reasons for whether a particular EC or TAC recommendation can be supported.

VII. Roles and Responsibilities

The Stakeholders agree the following roles and responsibilities for Executive Committee Members (EC), Technical Advisory Committee (TAC), consultants, and CDOT. To support a defined and efficient process, the Stakeholders agree to recognize the decision-making authority assigned to each of the entities listed below as related to the SH 66 PEL process.

Executive Committee Members	Technical Advisory Committee	Jurisdiction
Connie Sullivan	Joe Kubala	Town of Lyons
Deb Gardner	George Gerstle	Boulder County
Jeff Moore	Phil Greenwald	City of Longmont
Colleen Whitlow	Helen Migchelbrink	Town of Mead
Julie Cozad	Jim Flesher	Weld County
George Heath	Dave Lindsay	Town of Firestone
N/A	Nataly Handlos	RTD
Steve Cook	Jacob Riger	DRCOG
Larry Rogstad	Brandon Marrette	CPW
Brian Dobling	Patricia Surgeson	FHWA
Johnny Olson/Abra Geissler	James Zufall	CDOT

SH 66 Stakeholder Membership Changes - Avoid Backtracking

To ensure the efficiency and timely completion of the SH 66 PEL process, decision-milestones will be documented and maintained throughout the process. As new EC or TAC members come into the SH 66 PEL process, previous decision-milestones will be observed and will not be re-evaluated unless the entire EC reaches a consensus to backtrack on an issue.

Executive Committee

The EC consists of one elected official from each community and county along the corridor. The EC will provide policy-level guidance on the study process and EC members will represent the interests of their communities. This group will meet at key milestones and decision points in the project (approximately once per quarter) when the project team needs the input and support of the elected officials to proceed. EC meetings will be held in the evenings and rotate locations along the corridor.

If there are issues that the Technical Advisory Committee cannot resolve, these issues will be elevated to the EC to determine next steps.

Members of the EC representing agencies or constituencies will inform their elected colleagues and constituents on an ongoing basis about the issues under discussion and the progress being made in the consensus problem-solving meetings. Members commit to bring their elected officials' and constituents' concerns and ideas to the deliberations. Materials developed for the PEL shall be shared with other elected officials and constituency; stakeholder comments on these materials should be relayed to the Stakeholders.

Technical Advisory Committee (TAC)

CDOT will work closely with other agencies and the corridor's local communities. Coordination will largely occur through the TAC, which is made up of staff from the corridor's local agencies, FHWA, RTD, and DRCOG. The TAC will guide the PEL study process and serve as a sounding board for the technical aspects of the project. Project analyses, evaluations, and recommendations will be vetted through the TAC before being presented to the public and elected officials and before being posted on the project website.

The TAC will meet approximately monthly with the PMT to provide technical input. TAC meetings will be scheduled at different locations along the corridor.

TAC members will serve as the primary point of communication and provider of information to their communities or organizations and will communicate to the PMT when and how to involve their elected officials in the study for recommendation making purposes.

Understanding that some of the smaller communities along the corridor do not have the technical staff to serve on the TAC, the project team will coordinate with each community to plan how best to communicate with and regularly involve them in the planning process.

Project Management Team (PMT)

The Project Management Team (PMT) is comprised of project and task management staff from CDOT, FHWA and the consultant team. The PMT, working with the Stakeholders, leads the project management and communication to guide the project and supports CDOT's decision making for the SH 66 corridor in both the PEL and the Access Control Plan. The PMT will provide support materials and deliverables that will be modified and supplemented throughout the process with input from the EC and TAC.

Signature Page

My signature below indicates commitment and support of the PEL process and the agreements as outlined in this Charter on behalf of my jurisdiction:

_____ _____

Connie Sullivan, Town of Lyons Date:

_____ _____

Deb Gardner, Boulder County Date:

_____ _____

Jeff Moore, City of Longmont Date:

_____ _____

Colleen Whitlow, Town of Mead Date:

_____ _____

Julie Cozad, Weld County Date:

_____ _____

George Heath, Town of Firestone Date:

_____ _____

Nataly Handlos, RTD Date:

_____ _____

Steve Cook, DRCOG Date:

_____ _____

Larry Rogstad, CPW Date:

_____ _____

Brian Dobling, FHWA Date:

_____ _____

Johnny Olson, CDOT Date:

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Longmont, CO 80501

The public meetings will be an open house format where you can drop by anytime and participate.

To learn more about the project, please visit the project website at **https://www.codot.gov/library/studies/co-66-pel**

The Colorado Department of Transportation (CDOT) is conducting a study to establish a vision for the SH 66 corridor from Lyons to Firestone. Please join the project team to learn more about the project and to provide input on the transportation challenges along the corridor.

Requests for communication assistance or reasonable accommodations for special needs can be made by contacting the project prior to the meeting at 720-200-8978.

SH 66 Planning and Environmental Linkages Study

Technical Advisory Committee (TAC) Meeting #3

Date and Time: June 13, 2017 | 1 p.m. to 3 p.m.

CDOT Region 4 Boulder Residency | 1050 Lee Hill Dr. Boulder, Colorado 80302
Tele- and Web-Conference | Call 1-800-882-3610; enter this passcode: 0728448 | Join Skype Meeting

Agenda

Introductions

Public Involvement

- Public Meeting Feedback
- On-going Public Outreach

Corridor Conditions Report

- Planning Context
- Transportation Context
- Environmental Context
- TAC Deliverable and Review

Purpose and Need

Alternative Development & Screening

- Level 1 – Full range of alternatives
- Level 2 – Section/operational classifications and capacity
- Level 3 – Access, mobility, and safety assessments and section concepts
- Level 4 – Intersection/interchange configuration screening

TAC / EC Schedule

SH 66 Planning and Environmental Linkages Study

Technical Advisory Committee (TAC) Meeting #3

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Meeting Notes

Introductions

Attendees provided self introductions. Meeting attendees are noted in the enclosed sign-in sheet. Lindsay Edgar, Tim Bilobran, and Karen Schneiders (CDOT); Jim Flesher (Weld County), and Jodie Snyder (FHU) participated by phone.

Public Involvement

- Public Open Houses – Approximately 50 attendees participated over 2 meetings
  - Received 30 comment forms. Major topics of concern included: the need for turn lanes, safety, excessive speed limit, widening/right of way concerns.
  - Also heard concerns regarding the proposed Martin Marietta mining development.
    - Site is located east of US 36, west of Hygiene Road, and south of SH 66, near CEMEX.
    - Development is not approved at this time and therefore, will not include the land use in this PEL study.
    - CDOT does not have jurisdiction over land uses but will work closely with Boulder County to understand the impacts should the development be approved.
    - George Gerstle is unable to attend today. **[Action Item:** The PEL Team will follow up directly with him to develop a unified approach for addressing land use comments submitted through the PEL Study.**]**
- Website Activity
  - Collected 16 comments through the website so far
  - Major themes of comments include: left turns, cut-through traffic, safety concerns, key intersections, adjacent land developments, transit, bike, and ped facilities, congestion, speed limit, truck traffic, environmental (open space/noise).
  - Individual responses were provided by e-mail to every comment received through the project website.
- On-going Public Outreach
  - Team is continuing to collect comments from the website. Please feel free to direct members of your community to the PEL Study webpage (https://www.codot.gov/library/studies/co-66-pel) for comment submittal.
  - Team has posted Public Meeting materials on study website (https://www.codot.gov/library/studies/co-66-pel/public-participation) and will post upcoming PEL deliverables, including the Corridor Conditions Report and Purpose and Need.

- Team is working with local agencies on messaging regarding unapproved developments.
- Team will provide information to support TAC / EC members at community functions.
- Alex reminded the group that TAC members are the conduit to the EC members and asked that TAC members keep EC members informed and up to date. **[Action Item:** The TAC members will update the EC members appropriately, regarding the meeting.**]**

Corridor Conditions Report

- The draft Corridor Conditions Report (CCR) was e-mailed to the TAC on 6/10/17 and hard copies were provided at the meeting (1 for each community)
- The CCR was developed using data gathered from CDOT, DRCOG, field reconnaissance, and other various municipalities and agencies.
- The report includes a condensed but detailed format with tables, bullets, and graphics. The report includes three sections:
  - Planning Context: Community efforts and DRCOG land use and travel demand model
  - Transportation Context: Physical roadway, travel characteristics, safety, transit, bicycle, and pedestrian
  - Environmental Context: Floodplains, wetlands, wildlife, parks/recreation/open space, utilities, traffic noise, hazardous materials, environmental justice, visual consistency, historic resources
- Detailed appendices are also in the CCR, including a comprehensive roadway mapbook developed by Atkins.
- **Deliverable review**
  - Request is for TAC members to review CCR and provide input on content and anything additional that should be captured in study.
  - **[Action Item:** The TAC members will submit comments to Jodie.Snyder@fhueng.com or Alex.Pulley@fhueng.com by July 10th in Excel file comment tracking form (provided on June 10).**]**
- Once finalized, the CCR will be loaded to the SH 66 PEL Study website and will be used as a basis for the alternatives development and screening process.

Purpose and Need

- The updated Purpose and Need was e-mailed to the TAC on 6/14/17.
- This version builds on the original draft shared at the April TAC Meeting.
- The purpose statement follows:
  - *The purpose of transportation improvements along the SH 66 corridor is to improve safety, reduce existing and future traffic congestion, provide efficient access for existing and future development, and improve mobility and connectivity for people, goods, and services that match the context of the adjacent communities.*
- The needs are categorized as safety, mobility, and access problems. The documentation of needs build on data presented in the CCR and demonstrate the concerns which our team will work to address as the study progresses.
- This version now addresses the transit need.
- **Deliverable review**
  - Request is for TAC members to review Purpose and Need and provide input.

- [Action Item: The TAC members will submit comments to Jodie.Snyder@fhueng.com or Alex.Pulley@fhueng.com by June 27th.]

Alternative Development & Screening

- The draft process diagram presented includes a customized alternative development and screening approach for SH 66.
- The diagram highlights four screening levels and is structed to identify or describe the process at left. From there the input is "filtered" through Evaluation Criteria to generate an outcome.
- The tentative screening levels include:
  - Level 1 – Full range of alternatives
  - Level 2 – Section/operational classifications and capacity
  - Level 3 – Access, mobility, and safety assessments and section concepts
  - Level 4 – Section/Intersection/interchange configuration screening
- The team anticipates that Level 3 will be the most dynamic portion of the development and screening process.
- The TAC offered comments, including:
  - For Level 4 – Make the diagram clearer to depict that overall section concepts are being advanced and not just intersection and interchange concepts.
  - Ensure that process does not play into the concept of screening on costs at this PEL level of study.
  - For Level 4 – Be cautious about getting too specific on promoting any one type of alternative as the only option for a location.
    - Recent projects have shown that alternative options dismissed in the PEL study come back as the viable option for design/construction.
    - The TAC discussed this concept further. The team will be highly selective on eliminating alternatives. Instead, "not recommended" would be the most likely outcome, if an alternative is not advanced.
    - Also, the PEL process allows multiple alternatives to be advanced at any given location, so the team has flexibility to recommend multiple options per location/section.
- [Action Item: The Study Team will update the process diagram to integrate these comments and share another version at the next TAC meeting for further discussion and refinement.]
- The TAC generally agreed that the first levels of the process seem to work well and that our team can begin moving into those next steps. Level 3 and Level 4 will be further refined.

TAC/EC Schedule

- The team discussed that a signed charter is no longer being circulated/requested. Alex reiterated the importance of TAC member communication to the EC members. [Action Item: TAC Members agreed to continue updating elected officials on SH 66 PEL progress that is relevant/important to the elected official.]
- The Final PEL Study will include signatures only to acknowledge that agencies participated, but the Final Access Control Plan (ACP) will include a signed intergovernmental agreement. The ACP is a governing agreement document, whereas the PEL Study is a non-binding planning document.

- The next EC Meeting will be scheduled in the first half of July 2017 to discuss the final Purpose and Need, the Draft CCR, and the alternatives development and screening process.
- The team presented a draft, upcoming TAC/EC Meeting Schedule for the next year. The draft schedule was e-mailed to the TAC on 6/14/17, with a timeframe incorporated for the final round of public meetings.

SH 66 Planning and Environmental Linkages Study

TECHNICAL ADVISORY COMMITTEE MEETING #3

Date and Time: June 13, 2017 | 1 p.m. to 3 p.m.
Location: CDOT Boulder Residency | 1050 Lee Hill Drive, Boulder, CO 80302 | Large Conference Room

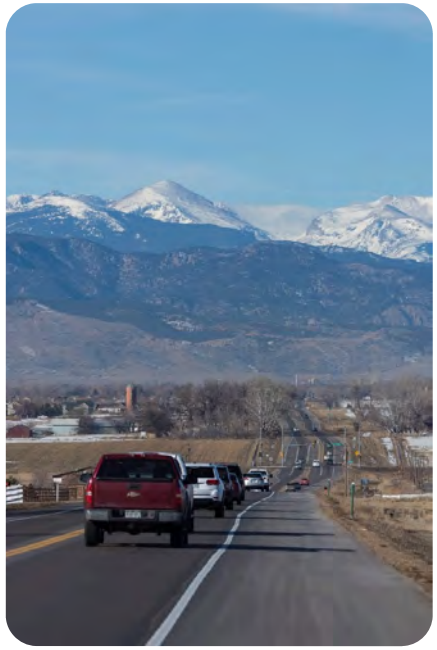
Sign In

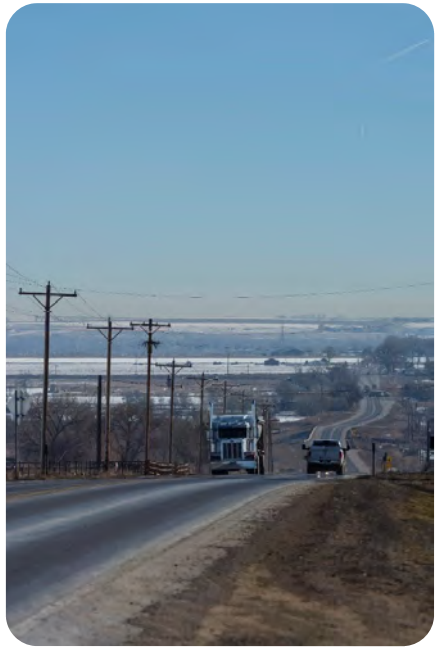
First Name	Last Name	Agency	Email
ANDREW	HOLTON	ATKINS	ANDREW.HOLTON@Atkinsglobal.com
JAMES	ZUFALL	CDOT	James.zufall@State.co.us
Joe	Kubala	Lyons	jKubala@TownofLyons.com
Paul	Glasgow	Lyons	pglasgow@townofLyons.com
ABRA	GEISSLER	CDOT	abra.geissler@state.co.us
Phil	Greenwald	Longmont	phil.greenwald@longmontcolorado.gov
STEVE	COOK	DRCOG	scook@drcog.org
Jim	Hanson	Atkins	jim.hanson@atkinsglobal.com

SH 66 Planning and
Environmental Linkages Study

First Name	Last Name	Agency	Email
BRIAN	DOBLING	FHWA	brian.dobling@dot.gov
TRICIA	SERGESON	FHWA	patricia.sergeson@dot.gov
Chris	Kennedy	Town of Mead	ckennedy@townofmead.org
Alex	Pulley	FHU	alex.pulley@fhueng.com
KELLY	LEADBETTER	FHU	kelly.leadbetter@fhueng.com

SH 66 Planning and Environmental Linkages Study





Technical Advisory Committee (TAC) #3

June 13, 2017

Today's Meeting

- Introductions
- Public Involvement
- Corridor Conditions Report
- Purpose and Need
- Alternative Development & Screening
- TAC / EC Schedule

SH 66 Planning and Environmental Linkages Study

Public Involvement

Public Meeting Feedback

- ~50 attendees, 2 meetings, 30 comment forms
  - left turns
  - traffic noise
  - excessive speed limit
  - widening/right of way concerns
- Concern regarding Martin / Marietta development
- Individual responses provided, if email available

Additional Comments—Website

- Collected 16 comments through website
  - Left turns
  - Cut-through traffic
  - Safety concerns
  - Key intersections
  - Adjacent land developments
  - Transit, bike, and ped facilitates
  - Congestion
  - Speed limit
  - Truck traffic
  - Environmental (open space/noise)
- Individual responses provided

On-going Public Outreach

- Continue to collect comments from website
- Provide Public Meeting materials on website
- Messaging from local agencies regarding unapproved developments
- Project Team will provide information to support TAC / EC members

SH 66 Planning and Environmental Linkages Study

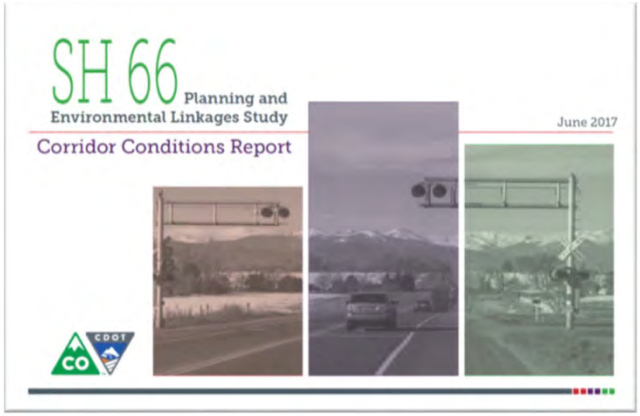
Corridor Conditions Report

Corridor Conditions Report

- Planning Context
  - Community efforts
  - DRCOG and TDM

- Transportation Context
  - Physical Roadway
  - Travel Characteristics
  - Safety
  - Transit
  - Bicycle
  - Pedestrian

- Environmental
  - Floodplains
  - Wetlands
  - Wildlife
  - Parks / Recreation / Open Space
  - Utilities
  - Traffic Noise
  - Hazardous Materials
  - Environmental Justice
  - Visual Consistency
  - Historic Resources



2.0 Planning Context

This section includes information from communities about their individual plans for the SH 66 corridor. It also includes an overview of land use considerations. This information provides useful context for developing a SH 66 vision and assessing potential future improvements along the corridor.

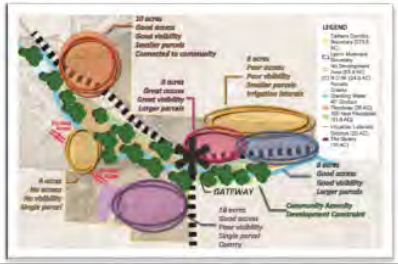
2.1 Review of Existing Planning Efforts

Consideration of existing plans is important because many previous efforts have been completed related to SH 66. A review of existing plans provides a baseline for improvement recommendations. Figure 2.1 at the end of this section includes an overview graphic summarizing community visions for future SH 66 improvements.

Town of Lyons

Lyons Primary Planning Area Master Plan

WHEN?	Plan completed	2016
SOURCE?	Full plan availability	http://www.townoflyons.com/441/Lyons-Primary-Planning-Area-Master-Plan
WHY?	Purpose of plan	▸ Establishes a vision for growth and development within the Planning Area that is acceptable to both Lyons and Boulder County. ▸ Identifies the type and location of desired improvements.
WHAT?	Context	▸ The Eastern Corridor Subarea is the primary subarea adjacent to the SH 66 PEL corridor. ▸ The Subarea vision involves becoming a commercial and employment-anchored gateway that serves locals and visitors and enhances and protects natural amenities. ▸ SH 66 is identified as the town's primary transportation corridor, and the Eastern Corridor Subarea serves as a town and regional gateway. ▸ The Subarea currently includes 45 properties, with 56 developable acres.
NEXT STEPS?	Vision pertaining to SH 66	▸ Become a gateway business district along SH 66 and a gateway neighborhood immediately behind the gateway business district. The gateway business district includes commercial/office, lodging/RV resort, small lot residential, and mixed industrial/office uses. The gateway neighborhood includes small lot/cottage homes, accessory dwelling units, and artisan live/work uses. ▸ US 36/SH 66 and the SH 66 frontage were identified as the most viable opportunity for commercial and employment development in the Planning Area. A US 36/SH 66 roundabout concept is identified.



Lyons Comprehensive Plan

WHEN?	Plan completed	2010
SOURCE?	Full plan availability	http://www.townoflyons.com/195/Town-Comprehensive-Plan
WHY?	Purpose of plan	▸ Provides the framework for decisions affecting the Town's physical, social, and economic realm. ▸ Provides a foundation for policy direction, land use decisions, and public investments. ▸ Develops an integrated mobility system that is safe and easily accessible to all travelers.
WHAT?	Context	Transportation strategies include: ▸ Work with CDOT to establish a safe, attractive, interconnected trail system that enables people, especially school children, to travel safely to schools, parks, downtown and other neighborhoods. ▸ Work with the Regional Transportation District (RTD) and Boulder County to expand and publicize transit options in Lyons. For example, investigate the feasibility of expanding the Y Service to Boulder and transit to Longmont. ▸ Work with Boulder County, CDOT, and the Denver Regional Council of Governments (DRCOG) to identify joint funding opportunities to address Lyons' multimodal transportation needs. ▸ Update Lyons' land use regulations as necessary to promote walking and biking.
NEXT STEPS?	Vision pertaining to SH 66	A subtle gateway is identified at US 36/SH 66. A subtle gateway helps transition visitors into the community core using cohesive landscaping along rights-of-way, welcome signs, small sculptures, etc. An iconic gateway is located along SH 66 just east of the intersection with US 36. An iconic gateway welcome visitors in a visually stimulating and appealing way such as major sculptures, murals, physical gateways, etc.

Other

St Vrain Trail Master Plan

WHEN?	Plan completed	2004
SOURCE?	Full plan availability	http://www.bouldercounty.org/doc/parks/stvraintrailmplan.pdf
WHY?	Purpose of plan	▸ To identify the most viable alternative for a recreational trail adjacent to the Saint Vrain River corridor between Longmont and Lyons. ▸ To create a safe, high-quality recreational trail along the corridor that minimizes impacts to sensitive environmental resources. ▸ To provide Boulder County with trail options and implementation strategies that will result in a feasible trail connection that can be expanded and enhanced over time.
WHAT?	Context	The plan identifies a recommended new 7.5-mile trail alignment south of the existing trail estimated to cost $2.2 million and broken into the following segments from northeast to southeast: ▸ US 36 to 51st Street ▸ 51st Street to 61st/63rd Street ▸ 61st/63rd Street to Crain Hollow Road ▸ Crane Hollow Road to 75th Street ▸ 75th Street to Airport Road ▸ Airport Road to Golden Ponds Park Alternative alignments are anticipated to be considered if the recommended alignment is not feasible.
NEXT STEPS?	Vision pertaining to SH 66	An existing stretch of the Saint Vrain River Trail is located along the south side of SH 66 between Lyons and US 36. The first segment of the recommended trail alignment, listed above, is also located on the south side of SH 66. At 49th Street the trail shifts south of the Saint Vrain River for the remainder of the recommended alignment.

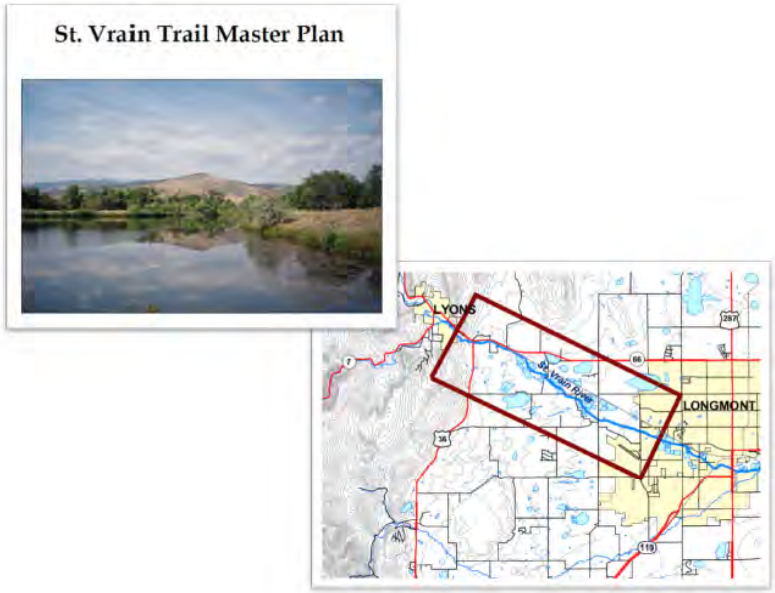


Figure 2.1 Community Visions for Future SH 66 Improvements

Travel Speeds/Travel Times

Key Information

WHO? Travelers

Travelers on SH 66 experience varying degrees of congestion depending on the time of day, day of week, and season of year resulting in uncertainty in the time it will take to complete trips.

HOW? Modeling of traffic

Traffic operations analysis (Synchro 9) was completed for the morning and evening peak hours based on existing geometry, speed limit, control data, and traffic volumes collected in fall 2016. The model was calibrated against actual travel time data obtained from INRIX for the same days that traffic data were collected along SH 66. Modeling parameters (lanes widths, turning speeds, and mandatory lane change positions) were adjusted until modeled travel times were within +/-10 percent of INRIX data. INRIX collects real-time traffic information related to speeds and vehicle counts using anonymous mobile devices such as phones, connected cars, trucks, and other fleet vehicles equipped with GPS locators. Data are maintained in a database accessible by the transportation industry to perform various traffic analytics. Table 3.3 shows the results of the calibration efforts, indicating the modeled travel times were within 7 percent of the actual data. Once the model was calibrated, the seasonally adjusted volumes (Figure 3.2) were used to complete the evaluation the existing operations within the study area.

WHERE? Sections of SH 66

The study area includes more than 20 miles of highway (SH 66 and a short part of US 36 near Lyons) from McConnell Drive (on US 36) to WCR 19 east of I-25. To better understand operating conditions along the roadway, the corridor was divided into smaller sections based on several factors, including volumes, development density, speeds, and jurisdictional boundaries. Based on these factors the corridor was divided into five analysis sections, summarized in Table 3.4.

WHAT? Travel time index

The first measure of effectiveness to be extracted from the models is travel time index (TTI). TTI is a measure of reliability specified by the ratio between the free-flow time to travel a certain distance of a roadway and the actual average time it takes to travel the same distance. The TTI can be used to help identify locations along a roadway experiencing congestion or bottlenecks and needing mitigation. A TTI ratio of 1.0 to 1.25 means there is minimal congestion. A TTI of 1.25 to 1.50 means that the actual time to travel a given length of the corridor took 25 to 50 percent longer than anticipated based on posted speed limit. This is considered a moderate level of congestion. A TTI of 1.5 or higher indicates significant congestion. Table 3.5 summarizes these thresholds.

NEEDS? Congestion

Figure 3.3 shows the results of the operational analysis, including the travel times, speeds, congestion level, and TTI for the five sections and the entire corridor. Eastbound and westbound travelers experience moderate or significant congestion in Section 4 at the area surrounding the I-25 interchange, in the urban area of Section 2 between Hover Street and County Line Road, and near the signalized intersections of Section 1 for both directions of travel.

Analysis results indicate that most sections operate with TTI values between 1.25 and 1.5 (moderate congestion) in both directions of travel during the AM and PM peak hours. A few sections have TTI values greater than 3 (significant congestion), which means trip times for travelers are more than 200 percent longer than under free flow conditions. The worst congestion exists in Section 4 during the AM and PM for westbound traffic (TTI > 1.5), Section 1 in the PM for eastbound traffic (TTI = 4.51), and Section 2 for eastbound traffic in the AM and PM (TTI = 3.61 and 4.54 respectively). The entire corridor operates with TTI values between 1.34 and 3.12, indicating the corridor experiences moderate to significant congestion during the peak periods. Travelers making long trips along SH 66 can expect their trips to require additional time to complete.

Table 3.3 Results of Model Calibration

Travel Direction	Time Period					
	AM			PM		
	Travel Times (minutes)					
	Synchro	INRIX	Difference (%)	Synchro	INRIX	Difference (%)
Eastbound	25.65	24.43	+5	25.82	27.63	-7
Westbound	28.40	28.68	-1	28.88	30.78	-6

Note: Target for calibration was ± 10 percent

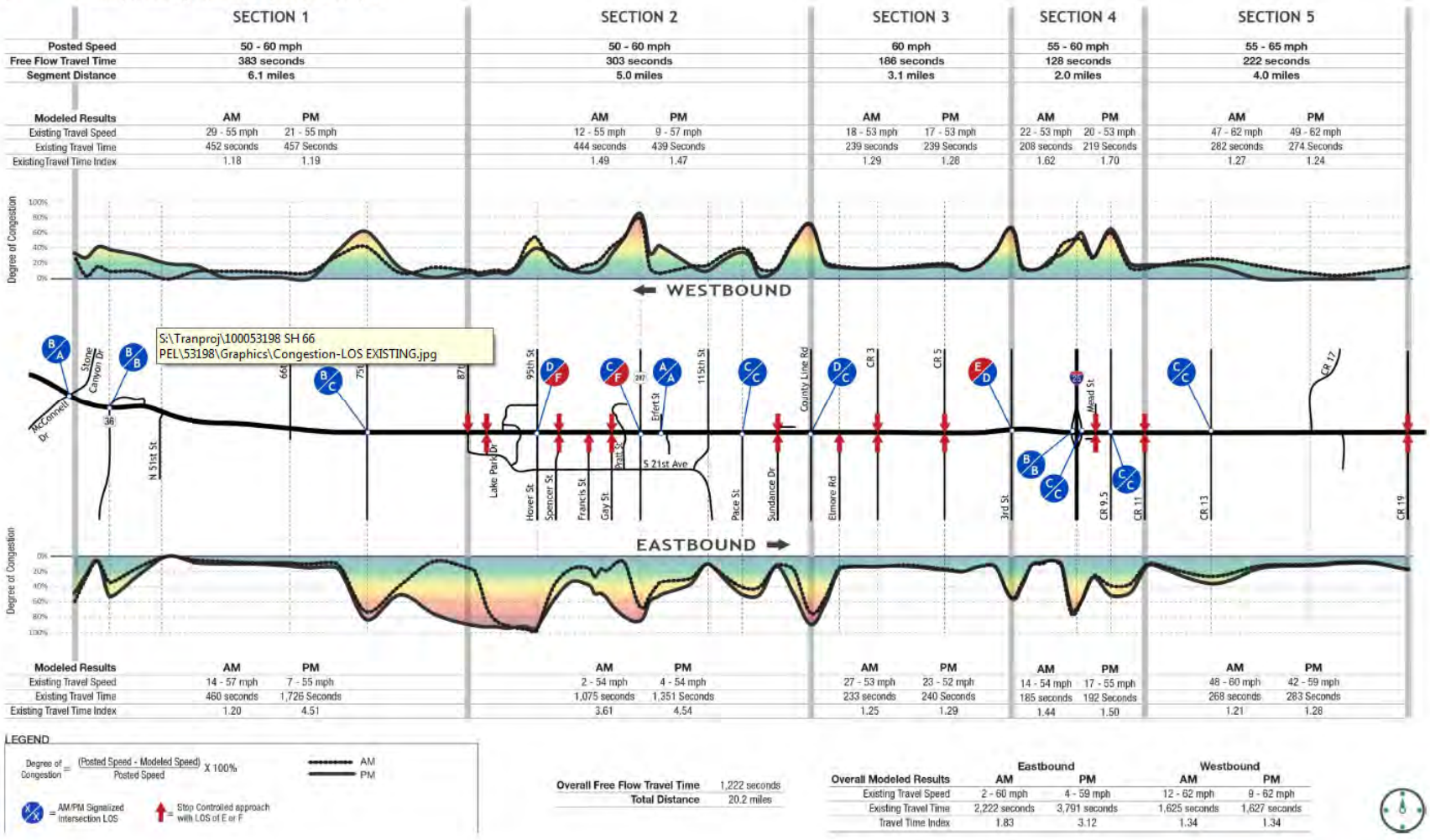
Table 3.4 Summary of Highway Analysis Sections

Section #	Limits	Characteristics
1	McConnell Drive to 87th Street	Primarily rural, higher speed, lower volume, lower density of access points
2	8th Street to County Line Road	Primarily urban, high density development, high density of access points, higher volumes, lower speeds
3	County Line Road to Weld County Road 7	Primarily rural, higher volumes, higher speeds, lower density of access points
4	Weld County Road 7 to Weld County Road 11	Primarily centered on the I-25 interchange, higher density of access points
5	Weld County Road 11 to Weld County Road 19	Primarily rural, higher speed, lower volume, lower density of access points

Table 3.5 Travel Time Index Thresholds

Minimal Congestion	Moderate Congestion	Significant Congestion
1.0 – 1.25	1.25 – 1.5	> 1.5

Figure 3.3 Summary of Existing Conditions Operational Analyses



4.6 Traffic Noise

Consideration of traffic noise along this corridor is important because many properties exist that have noise-sensitive activities. Noise is generally defined as unwanted or excessive sound. FHWA established a regulation, and both FHWA and CDOT have established related guidelines for evaluating noise levels, potential impacts, and potential abatement measures.

Next Steps for Implementation

WHO? — Potential agency and stakeholder involvement

- FHWA
- CDOT
- Local Agencies
- Local property owners and tenants

WHAT? — Resource findings

Noise analyses must be performed on Type I projects if noise-sensitive receptors are present within the project study zone. Type I projects include increasing the number of through traffic lanes or significantly changing the horizontal or vertical alignment of an existing highway.

Table 4.6 summarizes existing noise-sensitive areas in the PEL study area.

WHERE? — Resource locations

Figure 4.6 highlights noise sensitive areas within the 1,000-foot PEL study area, which is more expansive than the noise study zone would be during subsequent NEPA evaluations. During NEPA analysis, the minimal noise study zone would include a 500-foot study zone in all directions from the proposed edge of travelled lanes throughout the extent of the project. For noise evaluations, the study zone may be expanded if warranted.

WHEN? — Critical schedule considerations

Noise evaluations should be performed once:

- proposed alignments for project alternatives have been identified
- traffic projections are available

WHY? — Regulatory setting and general context

23 CFR Part 772: Procedures for Abatement of Highway Traffic Noise and Construction Noise identifies the federal highway noise standards that must be followed in evaluating and abating highway traffic noise pertaining to FHWA projects. This regulation required states to prepare and adopt state-specific guidelines.

CDOT Noise Analysis and Abatement Guidelines provide the Colorado procedural and technical requirements for evaluating highway project traffic noise and considering noise mitigation alternatives where noise impacts are identified. The goal of these guidelines is to develop highway projects in a compatible relationship with noise-sensitive land uses.

HOW? — NEPA pre-scoping considerations

Noise evaluation is conducted for Type I projects to determine if traffic noise would have an impact on any receptors (e.g., homes, schools, parks, offices; either existing or permitted for development). "Impact" is defined as meeting or exceeding Noise Abatement Criteria or an increase in noise of at least 10 decibels. Receptors are typically identified as exterior areas of frequent human use at individual properties.

The evaluation includes identifying land uses and receptors, measuring and modeling existing traffic noise levels, modeling future traffic noise levels, determining future traffic noise impacts, and (if needed) identifying/evaluating abatement measures. For CDOT to recommend noise abatement, the mitigation must be shown to be feasible and reasonable.

NEXT STEPS? — Funding, design, construction, and mitigation implications

A traffic noise impact and abatement analysis will be conducted for NEPA. If noise abatement appears likely, the Benefited Receptor Preferences Survey can be solicited after the Final Office Review but during the NEPA process (for projects anticipated to meet Categorical Exclusion criteria) or during final design for Environmental Assessment or Environmental Impact Statements. If a simple majority of benefitting receptors favors abatement, then the project becomes committed to constructing and funding the abatement measure(s). Noise walls may cost about $2 million per mile. The likelihood for abatement to be feasible and reasonable increases with a higher density of impacted receptors.

Table 4.6 CDOT Noise Abatement Criteria and Noise-Sensitive Areas

Location	Noise-Sensitive Area Summaries	Potential Noise Impact and Abatement Areas
Land Use Category B – 66 dBA Exterior ($L_{eq(h)}$)		
Residential		
Unincorporated Boulder County and Lyons	Rural homes on large parcels (some agricultural), along with medium-density neighborhoods, dispersed along the corridor.	Near McCall Lake and Burch Lake, south of SH 66 in Boulder County.
Longmont	Residential neighborhoods are a predominant land use along the SH 66 Corridor in Longmont.	Between North 87th Street and Sundance Drive, especially south of SH 66.
Weld County, Mead, and Firestone	Rural homes on large parcels (some agricultural), along with medium-density neighborhoods.	Near Elmore Road and just east of Colorado Boulevard in Mead.
Land Use Category C – 66 dBA Exterior ($L_{eq(h)}$)		
Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreational areas, Section 4(f) sites, schools, television studios, trails, and trail crossings		
Unincorporated Boulder County and Lyons	Institutional facilities, places of worship, Section 4(f) sites, recreational areas, and picnic areas dispersed throughout the study area.	Near McCall Lake and Burch Lake, south of SH 66 in Boulder County.
Longmont	Places of worship and an animal hospital located along the corridor.	Between North 87th Street and Sundance Drive.
Weld County, Mead, and Firestone	Within Mead, a golf course just east of Colorado Boulevard.	The golf course.
Land Use Category E – 71 dBA Exterior ($L_{eq(h)}$)		
Hotels, motels, time-share resorts, vacation rental properties, offices, restaurants/bars, and other developed lands, properties or activities not included in Categories A-D or F		
Unincorporated Boulder County, Lyons, Longmont, Weld County, Mead, and Firestone	Category E resources are generally isolated or scattered along the corridor.	Concentrated in multi-business commercial areas.

Notes:

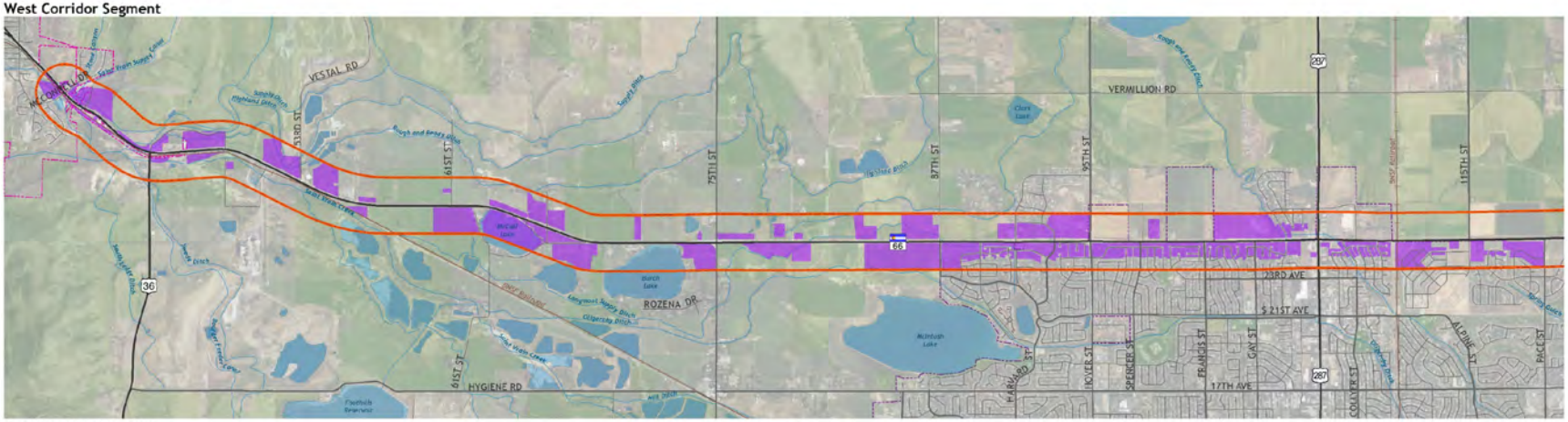
The following land use categories are excluded from this table: A (serene lands), D (interior public spaces), F (agricultural and industrial lands), and G (lands not permitted for development).

dBA = A-weighted decibels

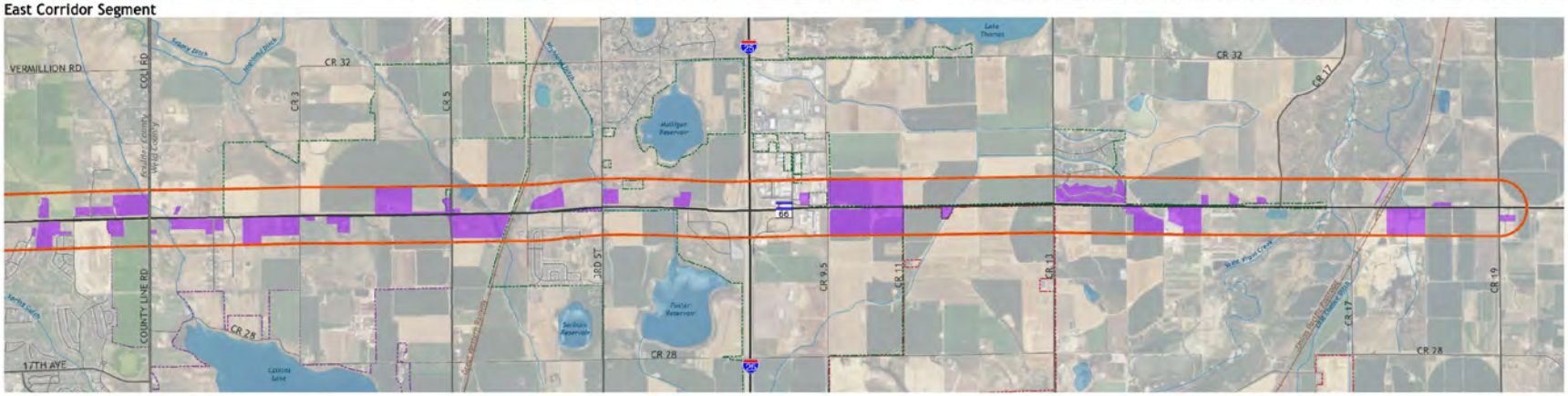
$L_{eq(h)}$ = one-hour equivalent sound level

Figure 4.6 Noise Sensitive Areas

West Corridor Segment



East Corridor Segment



Legend

- Noise Sensitive Areas
- U.S./State Highway
- Major Roads
- Local Roads
- Railroad
- Rivers/Streams
- Lakes/Reservoirs
- Parks & Open Space
- County Boundary
- Study Area
- Town Of Firestone
- City Of Longmont
- Town Of Lyons
- Town Of Mead

Note: The Study Area in this map represents the 1,000-foot PEL study area.

NORTH

0 0.5 1 Miles

SH 66 Planning and Environmental Linkages Study

SH 66 Planning and Environmental Linkages Study

Purpose and Need

Purpose

Basis for Alternative Development and Screening

Purpose

"The purpose of transportation improvements along the SH 66 corridor is to improve safety, reduce existing and future traffic congestion, provide efficient access for existing and future development, and improve mobility and connectivity for people, goods, and services that match the context of the adjacent communities."

Needs

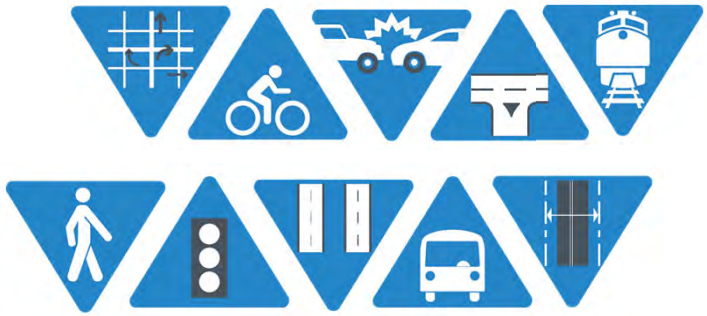
Safety Problem

- *Vehicular*
- *Bicycle*
- *Pedestrian*

Mobility Problem

- *Vehicular*
- *Bicycle*
- *Pedestrian*
- *Transit*

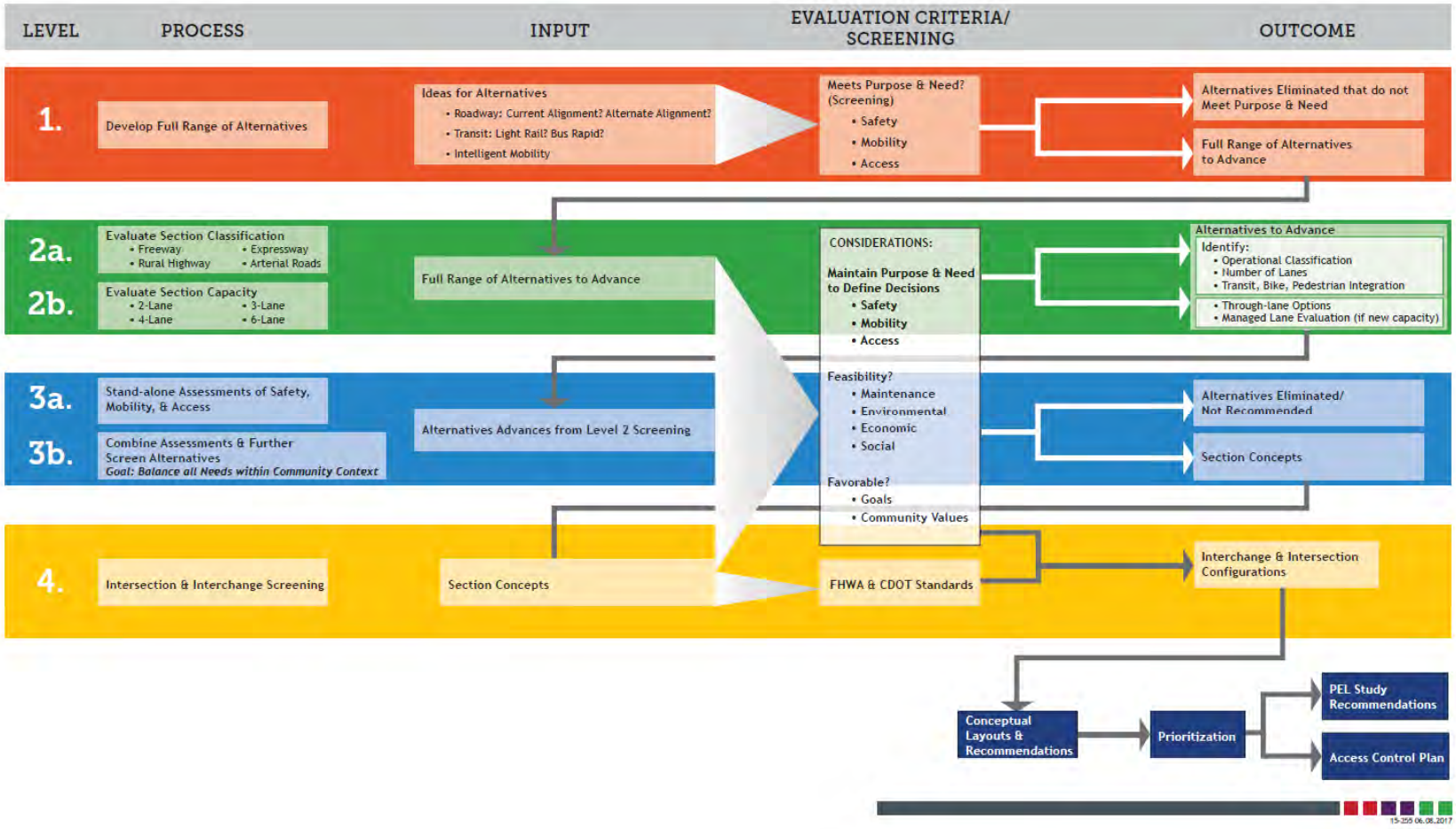
Access Problem



SH 66 Planning and Environmental Linkages Study

Alternative Development & Screening

Alternative Development & Screening



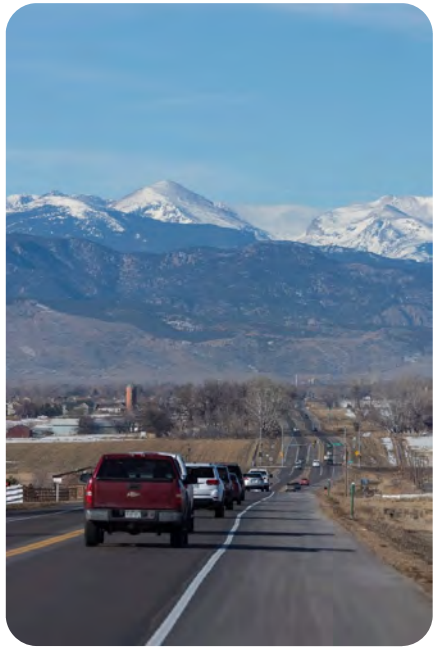
SH 66 Planning and Environmental Linkages Study

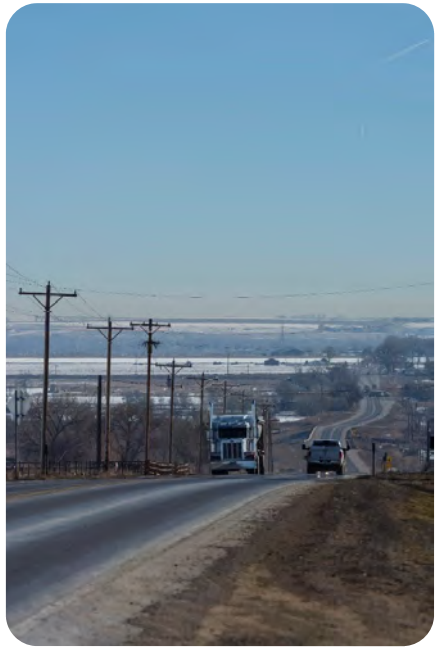
TAC / EC Schedule

Upcoming TAC / EC Schedule

Session	Date	Topics
TAC #3	TODAY	Final P&N, Draft CCR, and alts development and screening overview
EC #1	Early July 2017	Final P&N, CCR, and alts development and screening overview
TAC #4	Late July	Process Overview and Alts Screening Level 1 – Full range of alternatives
TAC #5	Early September	Alts Screening Level 2 – Section/operational classifications and capacity
TAC #6	Mid-October	Alts Screening Level 3 – Access, mobility, and safety assessments and section concepts
TAC #7	Early December	Alts Screening Level 4 – Intersection/interchange configuration screening
EC #2	Mid December	Alternatives screening summary and outcomes
TAC #8	Mid January 2018	Recommendations and ACP
EC # 3	Early February	Recommendations and ACP
TAC # 9	Early March	Prioritization and ACP
EC # 4	Mid March	Prioritization and ACP
TAC #10	Mid April	Draft PEL Study Report and ACP
TAC #11	Late May	Final PEL Study Report and ACP
EC #5	Mid June 2018	Final PEL Study and ACP

SH 66 Planning and Environmental Linkages Study





Thank You!

SH 66 Planning and Environmental Linkages Study

Technical Advisory Committee (TAC) Meeting #4

Date and Time: September 21, 2017 | 1 p.m. to 3 p.m.
Longmont Development Services Center | 385 Kimbark Street, Longmont, CO 80501

Agenda

Introductions

Corridor Conditions Report

- Uploaded to the website
- TAC comment resolution and tracking

Risk & Resiliency

- Background
- Focus on flooding risks along the corridor
- Methodology

Purpose and Need

- Uploaded to the website
- Update with risk and resiliency

Alternative Development and Screening

- Level 1 – Purpose and Need only
    - Methodology
    - Results
- Level 2a – Section/operational classifications and capacity
    - Methodology
    - Draft results
- Level 2b – Combination of alternative types

Upcoming TAC and EC Schedule

SH 66 Planning and Environmental Linkages Study

Technical Advisory Committee (TAC) Meeting #4

Date and Time: September 21, 2017 | 1 p.m. to 3 p.m.
Longmont Development Services Center | 385 Kimbark Street, Longmont, CO 80501

Meeting Summary

Introductions

Meeting attendees provided self introductions. A sign-in sheet is attached.

Corridor Conditions Report

- The latest version has been uploaded to CDOT's SH 66 PEL website: https://www.codot.gov/library/studies/co-66-pel.
  - Please share this update with the public and let us know if you have any questions.
  - This CCR provides details we need to consider in developing and evaluating alternatives. The document will be updated to include risk and resiliency.
  - As a reminder, the document includes planning, transportation, and environmental overviews for both existing and (when available) future conditions.
- The CCR indicates (on page 3-15) that if development plans are approved, such as Martin Marietta, additional sensitivity analysis may be performed.
- Thanks to the TAC for review and input on the document. The final comment resolution and tracking matrices will be e-mailed to respondents and are included with this meeting summary.

Risk & Resiliency

- During the SH 66 PEL Executive Committee Meeting in July, Johnny Olson (CDOT Region 4's Regional Transportation Director) raised risk and resiliency (R&R) as an item he wants the PEL study to integrate. This information can be used to inform decisions about potential risks to transportation assets from natural hazards. In turn, design solutions can be considered as a way to develop more resilient infrastructure – or infrastructure that can better handle extreme weather events.
- CDOT is currently partnering with the consulting firm AEM to assess risk and resiliency statewide for I-70. That effort is evaluating corridor threats, associated risks, and asset criticality related to floods, avalanche, rockfall, and high wind/tornados. The study has resulted in cost comparisons to inform decisions about risk vs resilient solutions.
- For example, if a small culvert is subject to a natural hazard that severely jeopardizes the transportation system and causes major travel interruptions, the overall cost (both CDOT's repair cost as the owner and the "user" cost (i.e., the cost to the traveling public, trucking companies, etc) could be high, even though the culvert cost is relatively low. This R&R assessment gets into that level of detail to help CDOT and communities understand where risk is highest, which highway corridors have the most criticality (i.e., importance to overall CDOT operations), and what those risks or threats may include.
- As a follow-up pilot project, this assessment will be completed for SH 66. Knowing the impact of the September 2013 floods on SH 66 and the surrounding areas, flooding certainly will be one of the threats evaluated. Rail proximity and fire/debris flow (especially west in the corridor) will also be evaluated. The assessment will specifically focus on culverts, bridges, and the roadway prism (in terms of potential scour).

- CDOT would like to evaluate criticality of SH 66 and owner and user costs. That information will be used to inform planning decisions regarding resilient solutions. This assessment can also help position projects for funding should resiliency funds ever become available.
- The TAC expressed support for this R&R assessment and raised the following points:
  - In developing resilient solutions, be sure not to push off the effects onto adjacent property owners
  - Potentially consider hazmat routes, oil & gas pipelines, fracking near the roadways

Purpose and Need

- The latest version has been uploaded to CDOT's SH 66 PEL website: https://www.codot.gov/library/studies/co-66-pel.
  - Please feel free to share this update with the public and let us know if you have any questions.
  - Since the last TAC meeting, updates have been made to the Purpose statement to better accommodate outcomes of assessing risk and resiliency and intelligent mobility.
- *The PEL Study Team inquired about updating the P&N to include R&R. The TAC agreed with that approach.* **[Action Item:** *FHU will update and distribute a revised P&N document that includes a new section for resiliency.***]**

Alternative Development and Screening

- Overview – As a reminder, the alternative development and screening process includes three levels. Today we have draft results for Level 1 and Level 2a for consideration.
- Level 1 – Purpose and Need Screening
  - Methodology - The study team framed questions so that yes is a positive, no is a negative and screened for access, mobility, and safety based on the purpose and need statement. We identified unique alternatives and qualitatively evaluated them as stand-alone alternatives compared to the P&N.
- Results – Three different results of the process include:
  - Retained
    - Meaning: Carried forward to next level of screening
    - Outcome: 31 alternatives were retained and advanced
  - Eliminated
    - Meaning: Removed from all subsequent levels of evaluation. Elimination only happens if an alternative does not meet P&N.
    - Outcome: The study team only eliminated one alternative that could involve rerouting SH 66 south of the current alignment (west of I-25). That option would cause too many issues in the heart of Longmont.
  - Eliminated through Planning Horizon (2040)
    - Meaning: Current projections do not support the alternative, but future studies may prove appropriate for that option.
    - Outcome: The study team eliminated four alternatives through the Planning Horizon (2040): commuter Rail, light Rail, bus rapid transit fixed guideway, separate transit guideway

- *The Grade-Separated Crossing (No Access) should increase safety for bikes/peds on the cross streets, but not along SH 66.*
- The TAC discussed the difference between commuter bus and BRT. George Gerstle (City of Boulder) does not want queue jumps or shoulder running options to be eliminated because BRT is eliminated.
- Per the PEL study team, the distinction between bus service and bus infrastructure is captured in the matrix. Queue jumps and other transit infrastructure are highlighted separately.
- **[Action Item:** *FHU will update the matrix to clarify these points about transit service vs. transit infrastructure.**]***
- *Team will clarify – Eliminate separate transit guideway*

o In summary, the Level 1 assessment is a high-level assessment that helps us identify which alternatives to advance based on the purpose and need.

o **[Action Item:** *TAC members will review the Level 1 screening document and provide comments to Alex Pulley (Alex.Pulley@FHUENG.COM) by Friday, October 6, 2017.***]**

- Level 2a – Section/operational classifications and capacity
  - Methodology
    - o Goal for this task was to identify the vision for functional classification and number of lanes through each section.
    - o Alex presented graphic of functional classifications. They are not directly tied to the access code, but there is a lot of correlation. As such, names and descriptions in the handouts are not always consistent. In general, speed and access spacing define the classifications. The TAC discussed the following topics:
      - Consider renaming the graphics to focus on the need it is trying to address, rather than Rural Highway, Expressway, etc.
      - Consider adding queue jumps in potential multi-modal treatments
    - o Freeway, enhanced expressway, standard expressway, rural highway, arterial roadway, main street
    - o The context of SH 66 generally includes standard expressway, rural highway, arterial. Freeway and enhanced expressway are not recommended.
  - Draft results
    - o *Sub-section 1A* – confirm with Joe on the Town's vision as recent annexation occurred in this section. **[Action Item:** *FHU will contact Joe Kubala from Lyons to discuss these findings.***]**
    - o Sub-section 1B – This section includes a lot of traffic, bikes, and environmental resources (current and future open space, floodplains, historic resources, T&E species, wetlands). There are also a lot of access points through this stretch. This is the section with Martin Marietta. CDOT will request revised traffic assessment pertaining to that potential development.
      - *George concurs that left turns are probably the biggest source of congestion. Three lanes allow more flexibility to think about wider shoulder, potential sidepath for bikes/peds, etc.*

- *75th Street is an intersection that experiences a lot of bikes crossing the SH 66 corridor.*
- *Rabbit Mountain Open Space Trailhead has a lot of bikes/peds in the area too, especially at 66th Street.*
- *This section just had a recent fatality on SH 66.*

- Sub-section 1C – *George mentioned that the County Commissioners will be hesitant about 5 lanes unless we can justify the need. Look at the intersections and left turn pockets first before proposing adding lanes. Make sure that capacity is warranted. Mention and introduce strategy so people understand the context. Proper messaging will be needed if five lanes are ultimately recommended.*
- Section 2 – A big movement includes US 287 to Hover. Access points are pretty well spaced through this section. *Phil mentioned the roadway changes character west of 95st St.* 95th is a transition point. Folks feel that west of 95th, they are in the county.
  - Extend Sub-section 1C to 95th Street.
  - Between Hover and 287, Longmont wants signals at every half mile. Phil wants to check the plan. The team will review the Terry Lake Development Plan
  - Where developments along the highway have undeveloped land northward, could we recommend parallel access routes that feed up to a signal at SH 66 (north of SH 66)? Phil said that development and county boundaries may not permit those parallel routes.
  - Longmont is working with RTD to add a signal at 287 and Pace to improve bus access.
- Section 3 – Kelly illustrated the possibility for parallel access routes near Elmore Road and Nesting Crane where the access road south of the properties could consolidate access to a signalized point on SH 66. Out of direction travel could be minimized to the extent possible.
  - Mead is trying to route traffic to WCR 5.
  - Erika agrees with Section 3 recommendations.
- Section 4 – I-25 runs through this area, and there are a lot of gas stations too. The Project Team is thinking that the 6-lane arterial or the 4-lane expressway works well to accommodate through movements and access.
  - Per Erika, on the southeast side of I-25, there is a lot of opportunity for commercial development.
  - North and south of SH 66 on west side of I-25, Meade has Economic development interest.
  - Erika will follow up internally to discuss the findings. Erika supports the divided roadway.
- Section 5A – Concerns about left turns still exist on east side of highway. Bear Lakes development occurs between SH 119 and SH 66, between CR 11 and 13. The project team took into account those considerations. **[Action Item:** *FHU will contact Jim Flesher from Weld County to discuss these findings.***]**
- Section 5B – Proposed transition to rural highway through this section.

- Level 2b – The next level will seek to combine alternative types. Our next step is to use the classification and capacity visions to help piece together components of access, mobility, safety and other considerations in more detail. The team may rename the classifications to help convey to stakeholders the solutions we are recommending to solve problems we have identified.

Upcoming TAC and EC Schedule

- At the next TAC meeting, we will focus on R&R progress, the updated P&N, and the Level 2b screening results.
- **[Action Item:** *TAC Members agreed to continue updating elected officials on SH 66 PEL progress that is relevant/important to the elected official.***]**

SH 66 Planning and Environmental Linkages Study

TECHNICAL ADVISORY COMMITTEE MEETING #4

Date and Time: September 21, 2017 | 1 p.m. to 3 p.m.
Location: Longmont Development Services Center | 385 Kimbark Street, Longmont, CO 80501

Sign In

First Name	Last Name	Agency	Email
James	Zufall	CDOT	James.d.zufall@state.co.us
Erika	Rasmussen	Town of Mead	erasmussen@townofmead.org
David ~~Sprague~~	Sprague	Atkins	DAVID.SPRAGUE@ATKINSGLOBAL.com
~~Jeff Gerstle~~	Gerstle	B. Co	GGERSOLF@BOULDERCOUNTY.ORG
Phil	Greenwald	Longmont	Phil.Greenwald@Longmontcolorado.gov.
Diane	Marquiss	RTD	diane.marquiss@RTD-Denver.com
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Tricia	Sergyson	FHWA	

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SH 66 Planning and
Environmental Linkages Study

(P)

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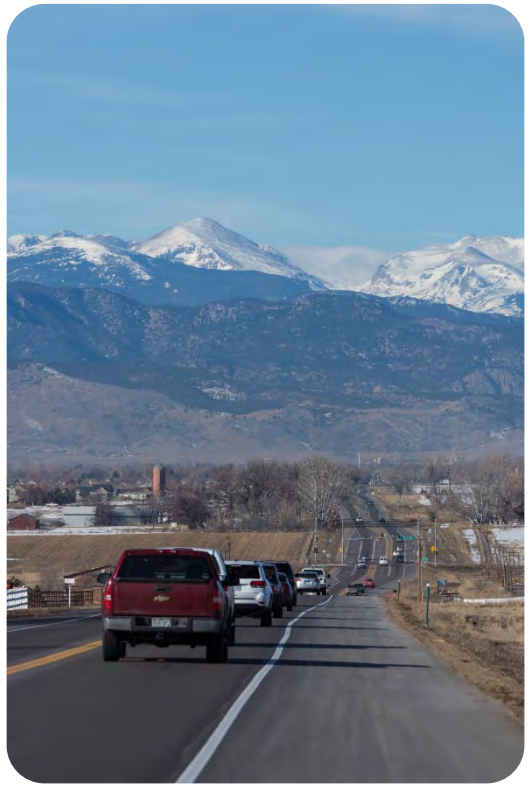
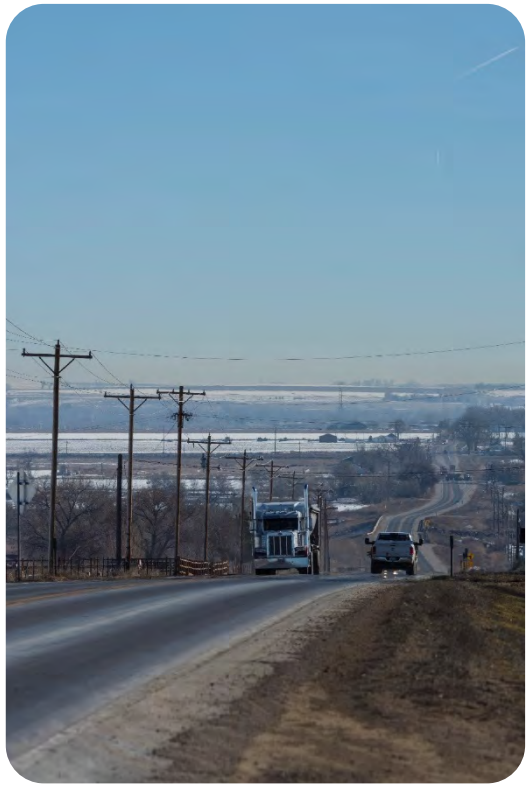
Kelly	Leadbetter	FHU	kelly.leadbetter@fhueng.com

SH 66 Planning and Environmental Linkages Study





September 21, 2017

Technical Advisory Committee (TAC) #4

Today's Meeting

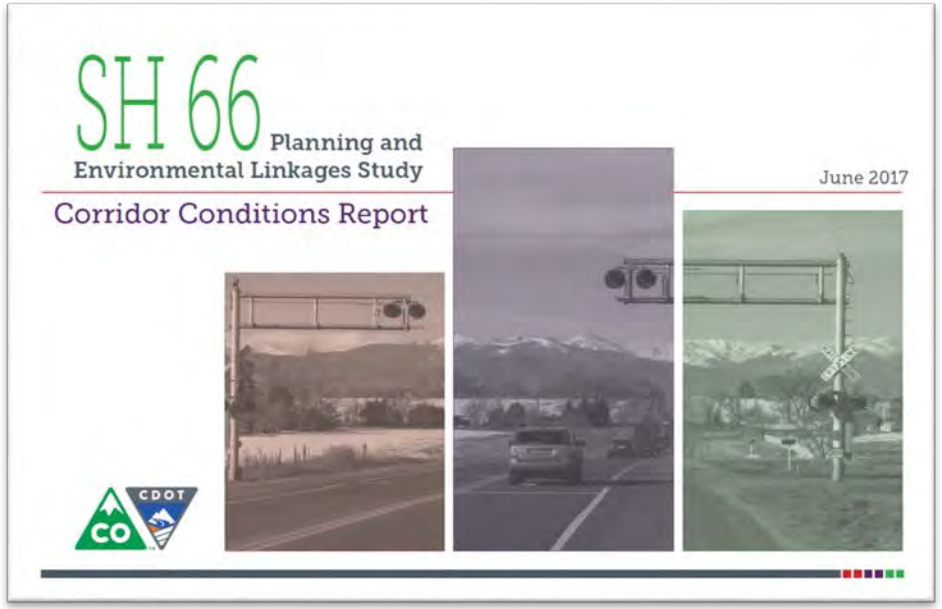
- Introductions
- Corridor Conditions Report
- Risk & Resiliency
- Purpose and Need
- Alternative Development & Screening
  - Level 1 Screening
  - Level 2a Screening
- TAC / EC Schedule

SH 66 Planning and Environmental Linkages Study

Corridor Conditions Report

Corridor Conditions Report

- Incorporated TAC Comments
- Uploaded to the Project Website (https://www.codot.gov/library/studies/co-66-pel)
- Will be updated based on Risk & Resiliency



Planning Context

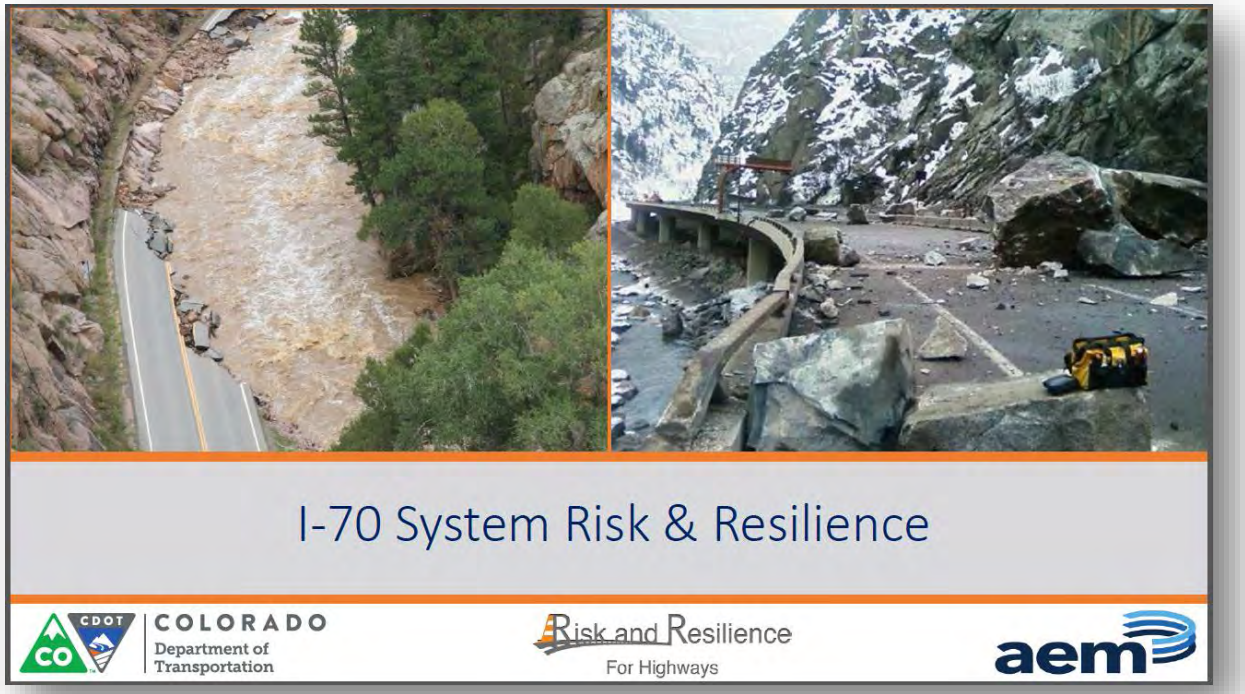
Transportation Context

Environmental

SH 66 Planning and Environmental Linkages Study

Risk and Resiliency

Risk and Resiliency Assessment: Statewide I-70 Pilot Project



Background

- Threats
  - Flood
  - Avalanche
  - Rockfall
  - High wind/tornado
- Evaluated corridor threats, associated risks, and asset criticality
- Resulted in cost comparisons to inform decisions about risk vs resilient solutions

Risk and Resiliency Assessment: SH 66 PEL Pilot Project

- Threats
  - Flood
  - Rail proximity
  - Fire and debris flow

- Assets to consider
  - Culverts
  - Bridges
  - Roadway prism

- Outcomes
  - Criticality and owner/user costs
  - Information to inform planning decisions regarding resilient solutions

SH 66 Planning and Environmental Linkages Study

Purpose and Need

Purpose and Need

- Incorporated comments from TAC and EC

- Resulted in an updated Purpose Statement, with a focus on resiliency and developing technologies

Purpose

"SH 66 transportation improvements are to increase safety; reduce traffic congestion; provide managed access for existing and future development; and improve multimodal mobility of people, goods, and services. The improvements should be resilient, accommodate developing technologies, and strive to complement adjacent community context."

Needs

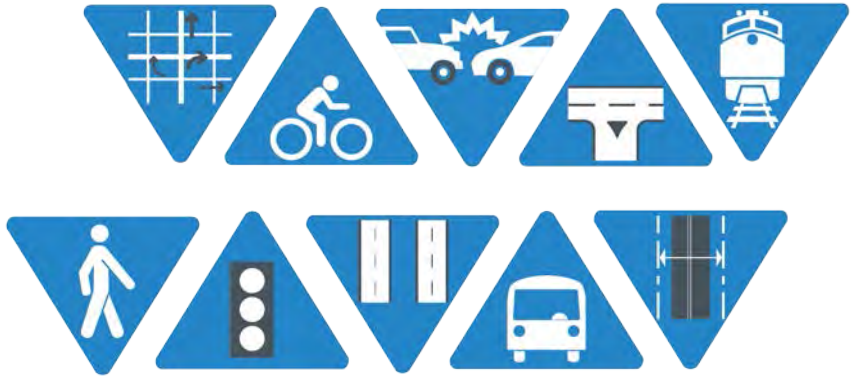
Safety

- *Vehicular*
- *Bicycle*
- *Pedestrian*

Mobility

- *Vehicular*
- *Bicycle*
- *Pedestrian*
- *Transit*

Access

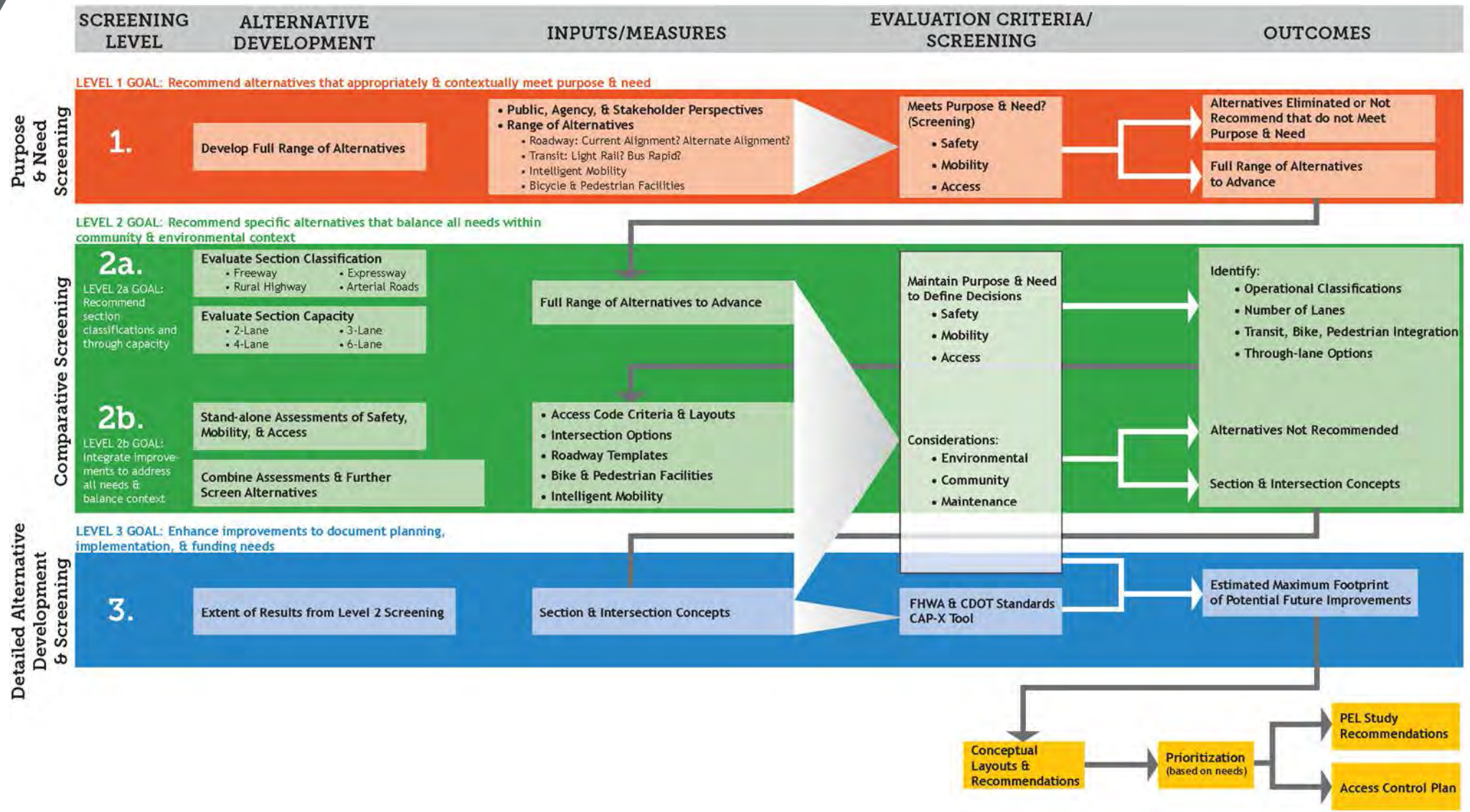


Should Resiliency be added as a Need?

SH 66 Planning and Environmental Linkages Study

Alternative Development & Screening

Alternative Development & Screening



Level 1 Screening – Purpose and Need only

- Identified unique alternatives and evaluated them as stand-alone alternative
- Qualitatively evaluated alternatives against the Needs
  - Safety—Vehicular, Pedestrian, Bicycle
  - Mobility—Vehicular, Pedestrian, Bicycle, Transit
  - Access

- Retained—Carried forward to next level of screening
- Eliminated—Removed from all subsequent levels of evaluation
- Eliminated through Planning Horizon (2040)—Current projections do not support, but future studies may prove appropriate

Level 1 Screening Results

SH 66 PEL Level 1 Screening

Note: Not all retained alternatives will be appropriate for the entire length of SH 66. Some alternatives may be a consideration for only short select sections.

ALTERNATIVE	SAFETY Does the alternative improve existing and future conditions with respect to: • Vehicle crashes/fatalities • Bicycle accidents and unsafe facilities • Pedestrian safety and missing sidewalks?			MOBILITY Does the alternative improve the current and future ability to move people, goods, and services along and across SH 66 using: • Automobiles • Bicycles • Pedestrians • Transit			ACCESS Does the alternative improve access to decrease congestion in the corridor?	SUMMARY OF RESULTS	JUSTIFICATION/ADDITIONAL COMMENTS
	Vehicle	Bicycle	Pedestrian	Vehicle	Bicycle	Pedestrian			
Functional Class									
Freeway (F-W)	Yes	No	No	Yes	No	No	Yes	Retained	Yes for vehicles/No for other modes.
Enhanced Expressway (E-X)	Yes	No	No	Yes			Yes	Retained	Yes for vehicles/No for other modes.
Standard Expressway (R-A or R-B)	No			No			No	Retained	This is No Action.
Enhanced Arterial (NR-A)	No			No			No	Retained	This is No Action.
Arterial Roadway (NR-B)	No	Yes	Yes	No	Yes	Yes	No	Retained	No for vehicles/Yes for other modes.
Main Street (NR-C)	No	Yes	Yes	No	Yes	Yes	No	Retained	No for vehicles/Yes for other modes.
Managed Lanes									
No Managed Lanes (No Action)	No			No			No	Retained	Retained to evaluate as baseline condition.
HOV Lanes	No			Yes	No	No	No	Retained	Yes for vehicles/No for other modes.
Toll Lanes	No			Yes	No	No	No	Retained	Yes for vehicles/No for other modes.
HOT Lanes	No			Yes	No	No	No	Retained	Yes for vehicles/No for other modes.

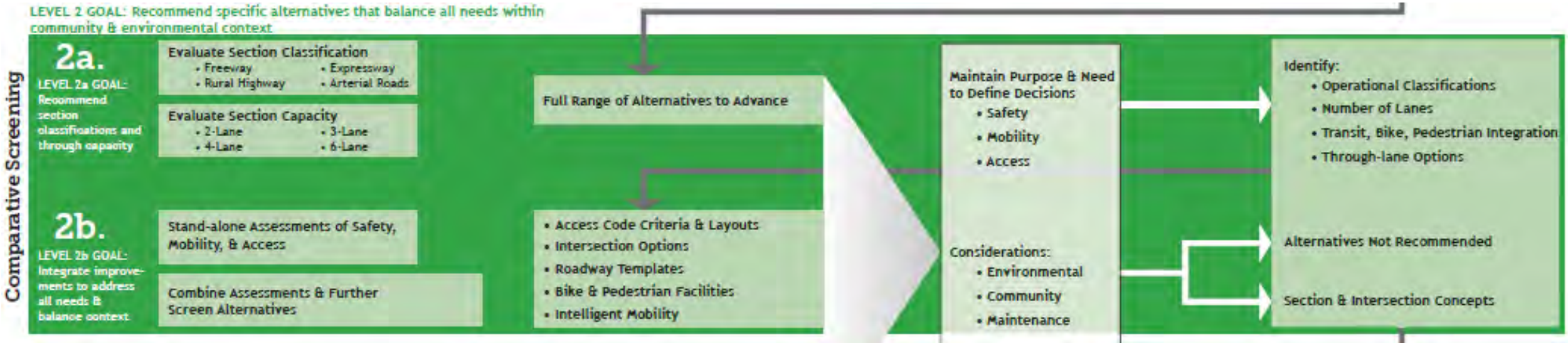
Level 1 Screening Results

- 36 unique alternatives evaluated
- Four alternatives “Eliminated Through Planning Horizon” (2040)
  - *Commuter Rail*
  - *Light Rail*
  - *Bus Rapid Transit*
  - *Separate Transit Guideway*
- One alternative “Eliminated”
  - *Realign SH 66 to the South (West of I-25)*

SH 66 Planning and Environmental Linkages Study

Level 2a Screening

Level 2a Screening – Comparative Screening



Level 2a Only

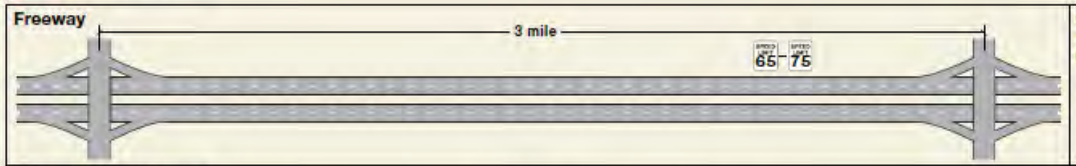
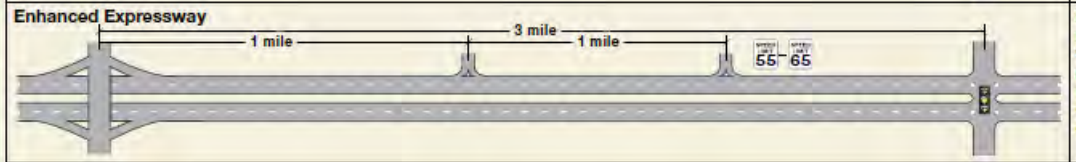
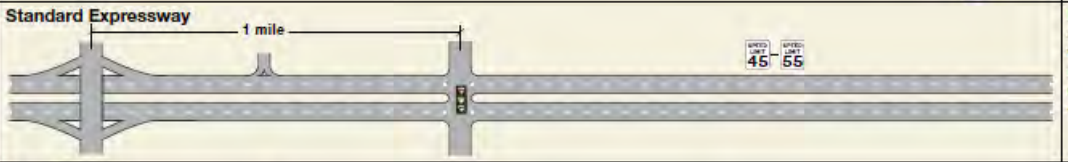
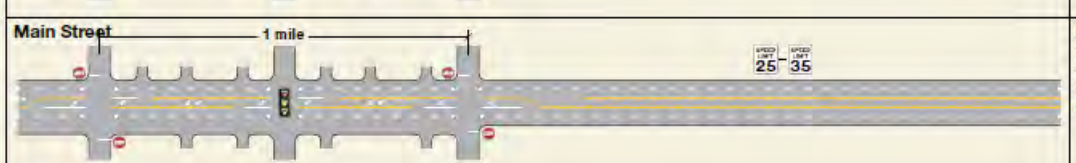
- ***GOAL – Recommend Section Classification and Through Capacity***
- Evaluated alternatives against
  - Safety—Vehicular, Pedestrian, Bicycle
  - Mobility—Vehicular, Pedestrian, Bicycle, Transit
  - Access
  - Community Context
  - Environmental Considerations

Level 2a Screening

- Divided the corridor into six sections
- Identified current classification and capacity
- Balanced Needs and context to provide recommendation for each section

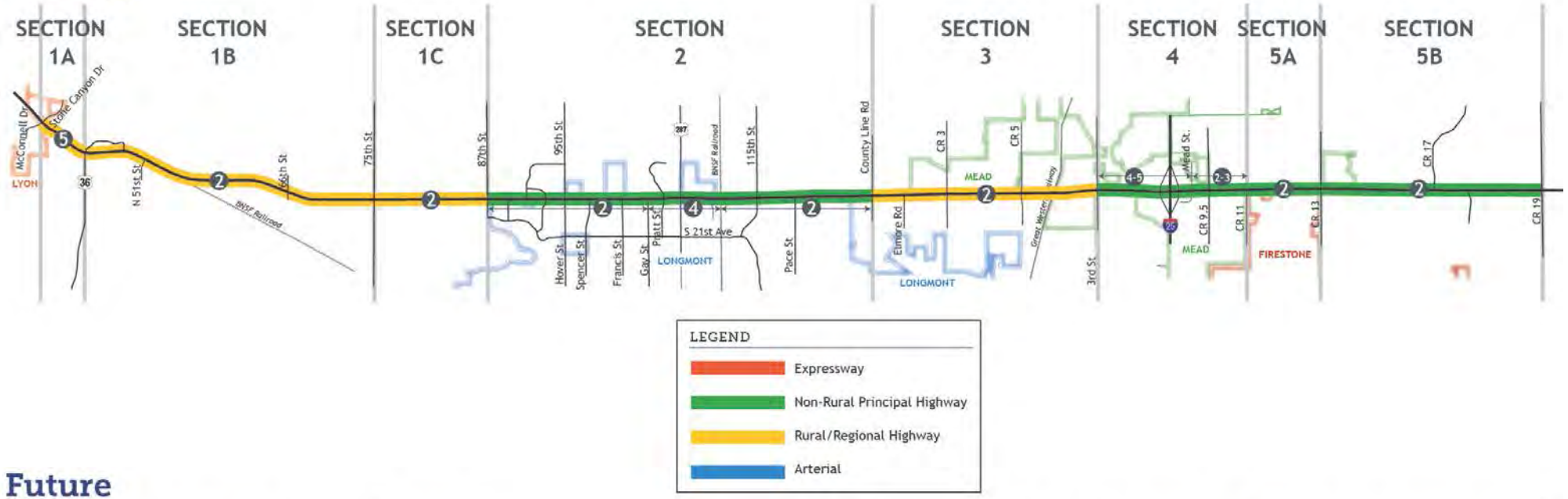
COLORADO Department of Transportation

SH 66 Planning and Environmental Linkages Study

	Description	Access Spacing	Treatment Options	Multi-modal treatments
Freeway 	High speed and high traffic volumes with no direct access	3 mile + desirable, 1 mile + allowable	Grade Separation, directional access	Grade separated pedestrian/bike crossings, transit stops tied into on- and off- ramps, managed lanes
Enhanced Expressway 	High speed and moderately high traffic volumes with limited and possible direct access, multiple lanes in each direction and separated directional travel	1 mile + for interchanges, 3 mile + for controlled intersections, with possible RIRO at half mile	Grade separation, junior interchange, signalization, partial closure (turn restrictions), Continuous Green-T, ThrU Turn intersections, CFI, one-way quad	Grade separated pedestrian/bike crossings, transit stops tied into on- and off- ramps, managed lanes, pedestrian/bike crossings at signalized intersections, transit pull outs
Standard Expressway 	Moderately high speeds and traffic volumes with limited access, multiple lanes in each direction and separated directional travel	1 mile + for full movement, with possible RIRO at half mile	Grade separation, junior interchange, signalization, partial closure (turn restrictions), Continuous Green-T, ThrU Turn intersections, CFI, one-way quad	Grade separated pedestrian/bike crossings, transit stops tied into on- and off- ramps, managed lanes, pedestrian/bike crossings at signalized intersections, transit pull outs
Rural Highway 	Moderate to high speeds with moderate to low traffic volumes	1/2 mile + for full movement intersections with public roadways, maximum of one access per parcel (depending on other roadways that could preclude access) with shared access preferable	Signalization, two-way stop control	Pedestrian/bike crossings at signals, pedestrian/bike crossings at signalized intersections, transit pull outs
Arterial Roadway 	Moderate to low travel speeds and traffic volumes with moderate access	1/2 mile for full movement intersections, with possible 3/4 movement at quarter miles, and RIRO access for each parcel (should share access if possible)	Signalization, partial closure (turn restrictions), Continuous Green-T, ThrU Turn intersections, CFI, two-way stop control	Pedestrian/bike crossing signals, pedestrian/bike crossings at signalized intersections, transit pull outs
Main Street 	Low travel speeds and traffic volumes with significant roadside development and access needs	One access per parcel (should share access if possible)	Signalization, partial closure (turn restrictions), two-way stop control	Pedestrian/bike crossing signals, marked pedestrian/bike crossing, HAWK, pedestrian/bike crossings at signalized intersections, transit pull outs

Level 2a Screening Results

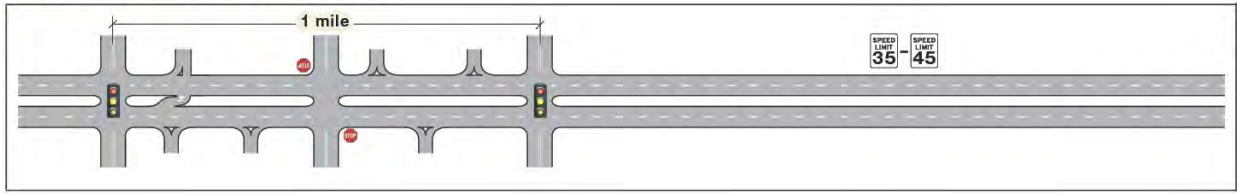
Existing



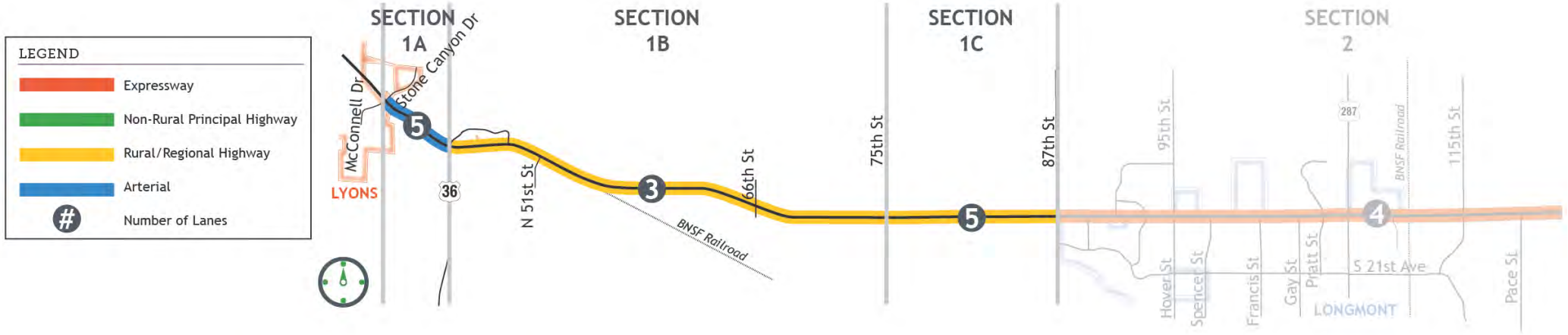
Future

Level 2a Screening Results

Section 1A: Arterial



DESCRIPTION	ACCESS SPACING	TREATMENT OPTIONS	MULTI-MODAL TREATMENTS
Moderate to low travel speeds and traffic volumes with moderate access	1/2 mile for full movement intersections, with possible 3/4 movement at quarter miles, and RIRO access for each parcel (should share access if possible)	Signalization, partial closure (turn restrictions), Continuous Green-T, ThrU Turn intersections, CFI, two-way stop control	Pedestrian/bike crossing signals, pedestrian/bike crossings at signalized intersections, transit pull outs

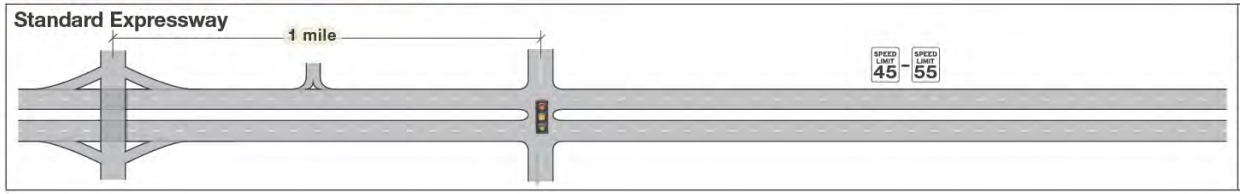


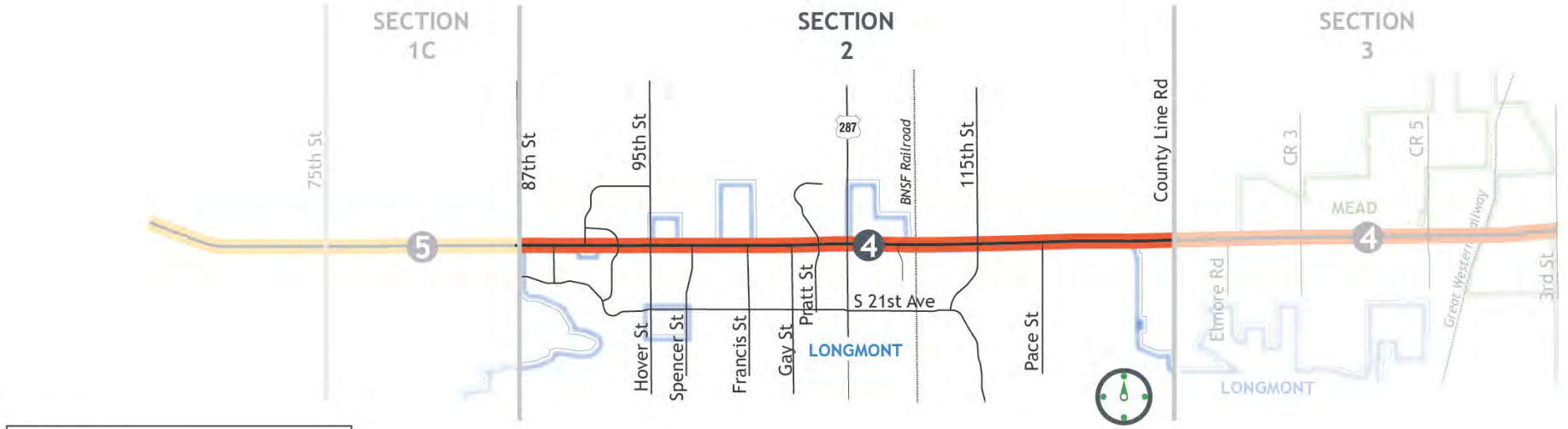
Sections 1B & 1C: Rural/Regional Highway

DESCRIPTION	ACCESS SPACING	TREATMENT OPTIONS	MULTI-MODAL TREATMENTS
Moderate to high speeds with moderate to low traffic volumes	1/2 mile + for full movement intersections with public roadways, maximum of one access per parcel (depending on other roadways that could preclude access) with shared access preferable	Signalization, two-way stop control	Pedestrian/bike crossings at signals, pedestrian/bike crossings at signalized intersections, transit pull outs

Level 2a Screening Results

Section 2: Expressway

	DESCRIPTION	ACCESS SPACING	TREATMENT OPTIONS	MULTI-MODAL TREATMENTS
	Moderately high speeds and traffic volumes with limited access, multiple lanes in each direction and separated directional travel	1 mile + for full movement, with possible RIRO at half mile	Grade separation, junior interchange, signalization, partial closure (turn restrictions), Continuous Green-T, ThrU Turn intersections, CFI, one-way quad	Grade separated pedestrian/bike crossings, transit stops tied into on- and off- ramps, managed lanes, pedestrian/bike crossings at signalized intersections, transit pull outs

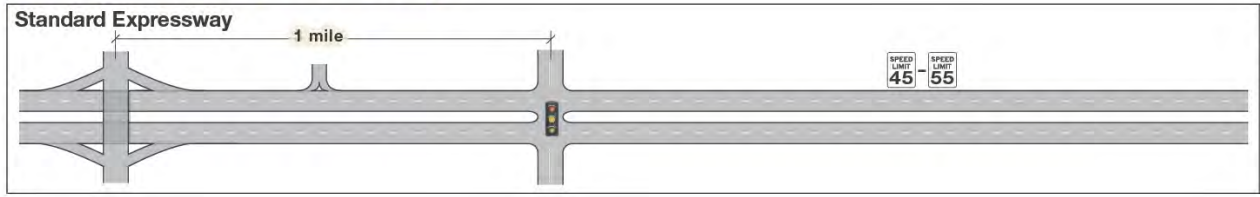


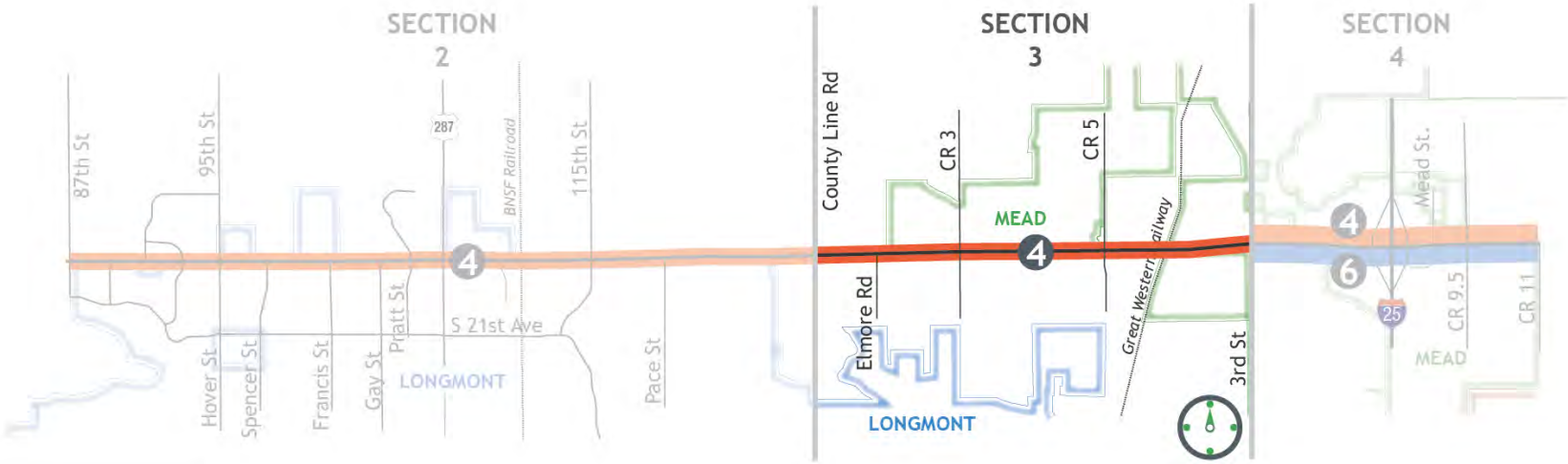
LEGEND

- Expressway
- Non-Rural Principal Highway
- Rural/Regional Highway
- Arterial
- # Number of Lanes

Level 2a Screening Results

Section 3: Expressway

	DESCRIPTION	ACCESS SPACING	TREATMENT OPTIONS	MULTI-MODAL TREATMENTS
Standard Expressway 	Moderately high speeds and traffic volumes with limited access, multiple lanes in each direction and separated directional travel	1 mile + for full movement, with possible RIRO at half mile	Grade separation, junior interchange, signalization, partial closure (turn restrictions), Continuous Green-T, ThrU Turn intersections, CFI, one-way quad	Grade separated pedestrian/bike crossings, transit stops tied into on- and off- ramps, managed lanes, pedestrian/bike crossings at signalized intersections, transit pull outs

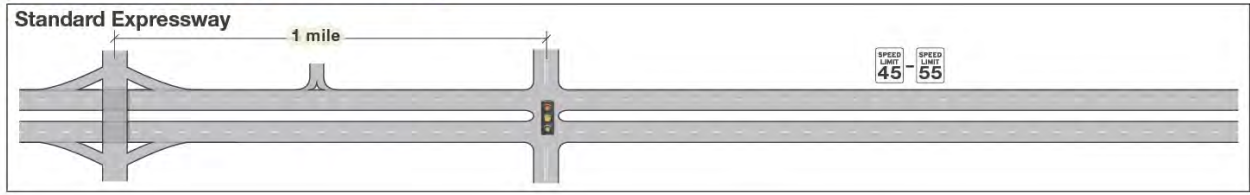


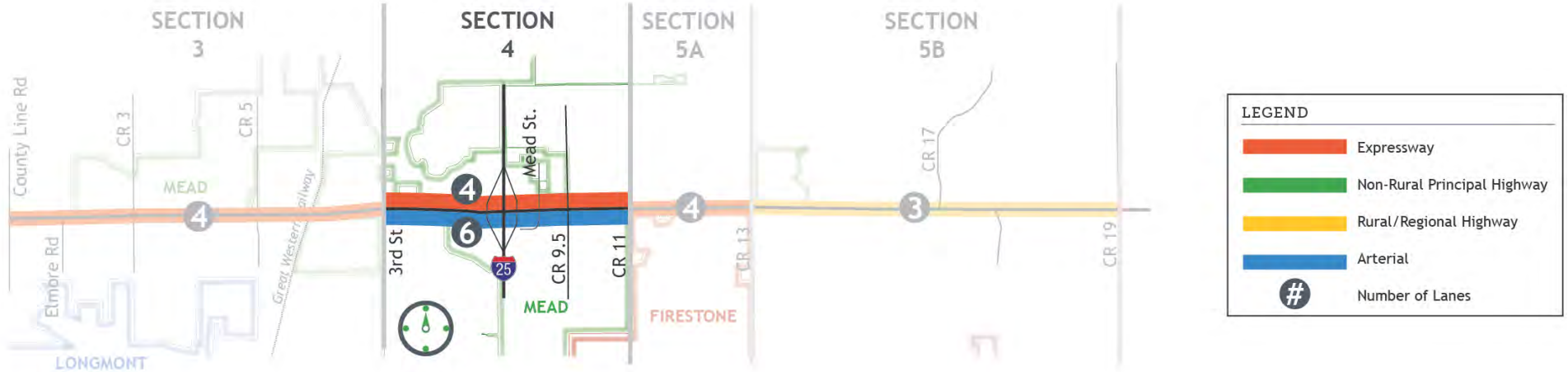
LEGEND

- Expressway
- Non-Rural Principal Highway
- Rural/Regional Highway
- Arterial
- # Number of Lanes

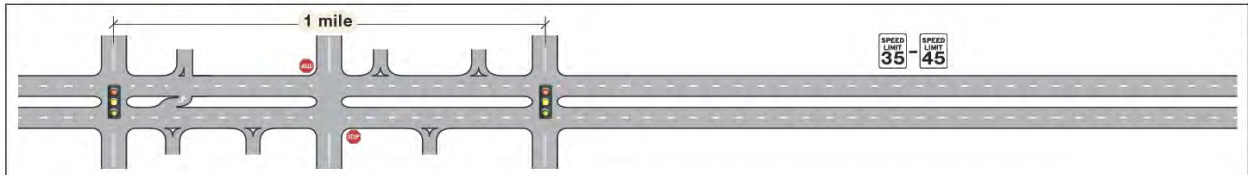
Level 2a Screening Results

Section 4: Expressway

	DESCRIPTION	ACCESS SPACING	TREATMENT OPTIONS	MULTI-MODAL TREATMENTS
	Moderately high speeds and traffic volumes with limited access, multiple lanes in each direction and separated directional travel	1 mile + for full movement, with possible RIRO at half mile	Grade separation, junior interchange, signalization, partial closure (turn restrictions), Continuous Green-T, ThrU Turn intersections, CFI, one-way quad	Grade separated pedestrian/bike crossings, transit stops tied into on- and off- ramps, managed lanes, pedestrian/bike crossings at signalized intersections, transit pull outs

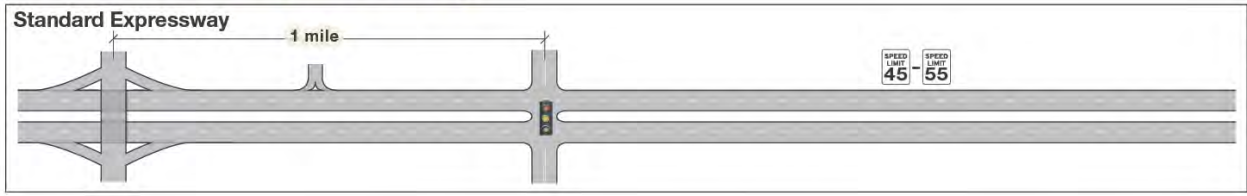


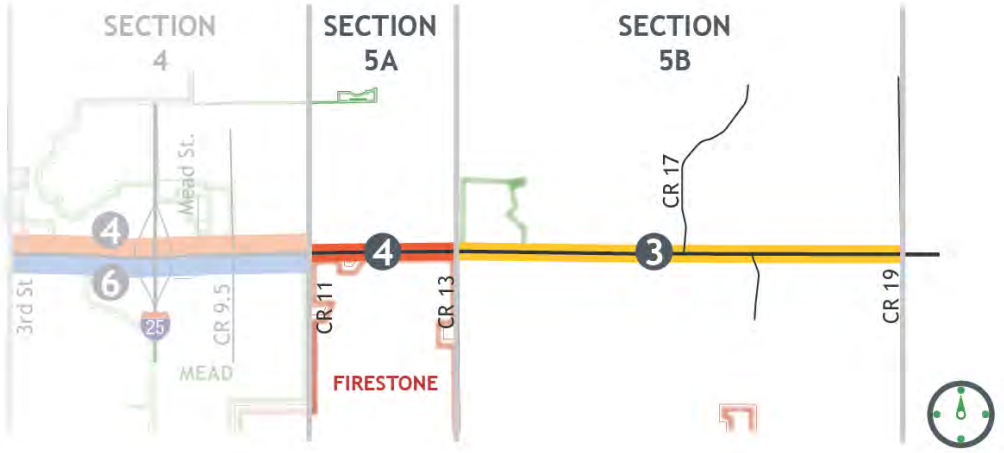
Section 4: Arterial

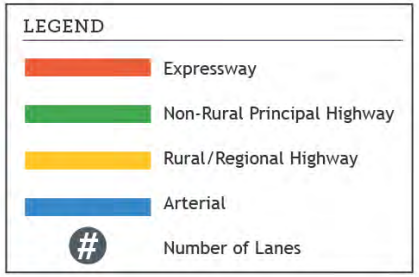
	DESCRIPTION	ACCESS SPACING	TREATMENT OPTIONS	MULTI-MODAL TREATMENTS
	Moderate to low travel speeds and traffic volumes with moderate access	1/2 mile for full movement intersections, with possible 3/4 movement at quarter miles, and RIRO access for each parcel (should share access if possible)	Signalization, partial closure (turn restrictions), Continuous Green-T, ThrU Turn intersections, CFI, two-way stop control	Pedestrian/bike crossing signals, pedestrian/bike crossings at signalized intersections, transit pull outs

Level 2a Screening Results

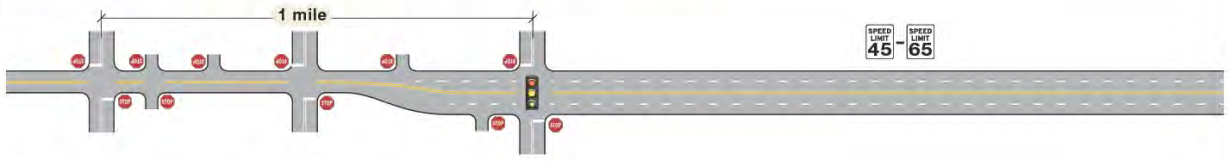
Section 5A: Expressway

	DESCRIPTION	ACCESS SPACING	TREATMENT OPTIONS	MULTI-MODAL TREATMENTS
	Moderately high speeds and traffic volumes with limited access, multiple lanes in each direction and separated directional travel	1 mile + for full movement, with possible RIRO at half mile	Grade separation, junior interchange, signalization, partial closure (turn restrictions), Continuous Green-T, ThrU Turn intersections, CFI, one-way quad	Grade separated pedestrian/bike crossings, transit stops tied into on- and off- ramps, managed lanes, pedestrian/bike crossings at signalized intersections, transit pull outs





Section5B: Rural/Regional Highway

	DESCRIPTION	ACCESS SPACING	TREATMENT OPTIONS	MULTI-MODAL TREATMENTS
	Moderate to high speeds with moderate to low traffic volumes	1/2 mile + for full movement intersections with public roadways, maximum of one access per parcel (depending on other roadways that could preclude access) with shared access preferable	Signalization, two-way stop control	Pedestrian/bike crossings at signals, pedestrian/bike crossings at signalized intersections, transit pull outs

Level 2a Screening Documentation

Currently working to finalize documentation for Level 2a

Would like to hear initial thoughts on draft section recommendations

SH 66 PEL Level 2a Screening

Note: Not all retained alternatives will be appropriate for the entire length of SH 66. Some alternatives may be a consideration for only short select sections.

SECTION	ALTERNATIVE	SAFETY			MOBILITY					ACCESS	COMMUNITY CONTEXT		ENVIRONMENTAL CONSIDERATIONS	SUMMARY OF RESULTS	JUSTIFICATION/ADDITIONAL COMMENTS
		Vehicle	Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian						
		Does the alternative result in lower than average crash rates for like-facilities (1.15 rural, 1.5 urban)?	*Does the alternative reduce the potential for bicycle / vehicle crashes?*	*Does the alternative create opportunities for safer pedestrian connections?*	*Does the alternative provide sufficient capacity to handle travel demand in 2040?*	*Does the alternative achieve future travel time objectives? (Goal TTI ≤ 1.25)*	*Does the alternative enhance and / or allow current and planned transit service?*	*Does the alternative provide increased alternatives for bicycle mobility?*	*Does the alternative create enhanced pedestrian connectivity along and across SH 66?*	*Does the alternative allow for strategic access consolidation?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environment and cultural resources?*		
1A - McConnell Dr. – US 36	No Action (Regional Highway) - 4 lanes														
	Standard Expressway (R-A or R-B) - 4 lanes														
	Enhanced Arterial (NR-A) - 5 lanes														
	Enhanced Arterial (NR-A) - 4 lanes														
	Arterial Roadway (NR-B) - 4 lanes														
	Main Street (NR-C) - 5 lanes														
1B - US 36 – 75th St	No Action (Regional Highway) - 2 lanes														
	Standard Expressway (R-A or R-B) - 2 lanes														
	Enhanced Arterial (NR-A) - 2 lanes														
	Rural Highway - 3 lanes														

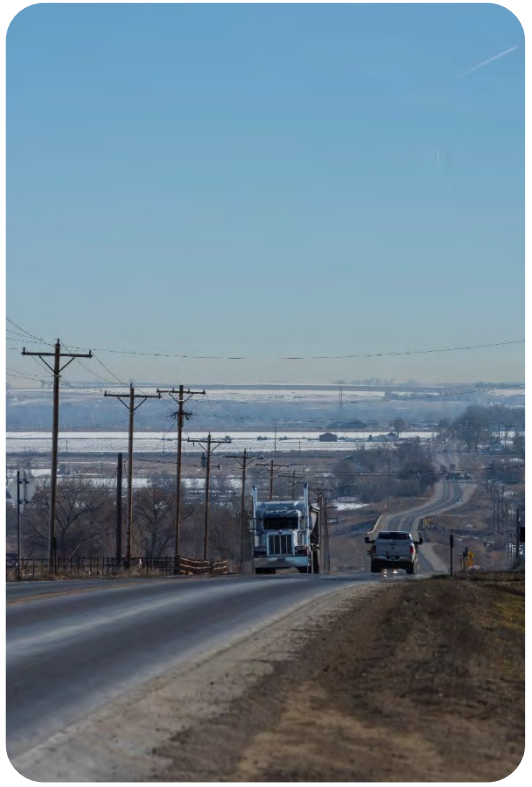
SH 66 Planning and Environmental Linkages Study

TAC / EC Schedule

Upcoming TAC / EC Schedule

Session	Date	Topics
TAC #4	September 21st	Alts Screening Level 2a – Section/operational classifications and capacity
TAC #5	Late October / Early November	Alts Screening Level 2B – Access, mobility, and safety assessments and section concepts
TAC #6	Mid-December	Alts Screening Level 2B – Final Recommendations
EC #2	Mid January	Intersection/interchange configuration screening
TAC #7	Late January 2018	Recommendations and ACP
EC # 3	Mid-February	Recommendations and ACP
TAC #8	Early March	Prioritization and ACP
EC # 4	Mid March	Prioritization and ACP
TAC #9	Mid April	Draft PEL Study Report and ACP
TAC #10	Late May	Final PEL Study Report and ACP
EC #5	Mid June 2018	Final PEL Study and ACP

SH 66 Planning and Environmental Linkages Study



Thank You!

SH 66 PEL Draft Corridor Conditions Report - June 2017							
YOUR NAME (last name, first name)	**YOUR ORGANIZATION**	**SECTION #**	**PAGE**	**COMMENT**	**S, R, E (Substantive, Requested, Editorial)**	**A, R, C (Accepted, Rejected with explanation, Needs Clarification)**	**RESPONSE (by consultant)**
Greenwald, Phil	City of Longmont	2	8,9	HH and EMP growth don't seem to match land use for the Boulder County or City of Longmont		R	In a phone conversation with Phil on 9/6/17, Jodie Snyder called to clarify this concern. Phil noted his concerns relate more broadly to how and where growth is represented in the DRCOG model. The City of Longmont is coordinating with DRCOG to work through and address those concerns. Concerns specifically related to SH 66 were addressed in February/March 2017 when the TAC provided requested household and employment revisions to the SH 66 PEL Team for updating the SH 66 PEL forecast model. Phil confirmed no additional model revisions are requested for the SH 66 PEL Study at this time.
Greenwald, Phil	City of Longmont	3	22	Please match the RTD boundary with the City of Longmont boundary		**A**	Map has been updated as requested.
Greenwald, Phil	City of Longmont	3	25	Strava heat map shows high usage around Lake McIntosh, but McCall Lake (further west) is referenced in the subtext and		**A**	Text has been updated as requested.
Greenwald, Phil	City of Longmont	3	25	Lack of Sidewalks on SH66 map calls out "Hoover" St--should be Hover St.		**A**	Text has been updated as requested.
Greenwald, Phil	City of Longmont	3	26	Please consider the inclusion of the Boulder County Agricultural Center just west of 87th St/SH 66 on the south side of		**A**	Additional pedestrian destinations have been added to the map as requested and discussed.
Flesher, Jim	Weld County	TOC	i	Missing "-"		**A**	Text has been updated as requested.
Flesher, Jim	Weld County	1	2	The RR is no longer relevant		**A**	Map has been updated as requested.
Flesher, Jim	Weld County	2	1	Insert "on the corridor" between		**A**	Text has been updated as requested.
Flesher, Jim	Weld County	2	2	Remove ","		**A**	Text has been updated as requested.
Flesher, Jim	Weld County	2	3	http://www.townofmead.org/sites/default/files/fileattachments/administration/page/49951/20131121_town_of_mead_transportatio		**A**	Text has been updated as noted.
Flesher, Jim	Weld County	2	4	This is outdated. Here is what I would suggest: "Weld County's Functional Classification Map is a component of the Transportation Plan and was last updated in May of 2017. It shows the following county roads intersecting SH 66 as arterial		**A**	Text updated as requested.
Flesher, Jim	Weld County	2	4	Both of these intersections have since been annexed making it unlikely for the		**A**	Text updated to account for annexations.
Flesher, Jim	Weld County	2	4	WCR 21 is outside of the study area.		**A**	Text updated to clarify "one mile east of study area."
Flesher, Jim	Weld County	2	4	Insert: "However, the County's ultimate cross section for rural arterial roads		**A**	Text updated as requested.
Flesher, Jim	Weld County	2	4	Insert "(one mile east of study area)"?		**A**	Text updated as requested.
Flesher, Jim	Weld County	2	4	I could send a screen shot of our Functional Classification Map if you want.		**A**	Functional Classification Map has been included.
Flesher, Jim	Weld County	2	4	Why is this legend here? It looks out of place.		**A**	Map and legend replaced with new graphic from Jim.
Flesher, Jim	Weld County	2	5	Remove "The Colorado Department of Transportation" and change to CDOT.		**A**	Update made as requested.
Flesher, Jim	Weld County	2	5	Insert: "from 84th Avenue to SH 14."		**A**	Update made as requested.
Flesher, Jim	Weld County	2	5	Change "built" to "build."		**A**	Update made as requested.
Flesher, Jim	Weld County	2	5	Insert "between SH 66 and SH 14."		**A**	Update made as requested.
Flesher, Jim	Weld County	4	23	Insert "(CDPHE)"?		**A**	Update made as requested.
Flesher, Jim	Weld County	4	23	Change "area in" to "areas are in."		**A**	Update made as requested.
Flesher, Jim	Weld County	Appendix A	Map Sheet 18	Add any cross streets.		**A**	Update made as requested.
Flesher, Jim	Weld County	Appendix A	Map Sheet 18	Add any cross streets.		**A**	Update made as requested.
Flesher, Jim	Weld County	Appendix A	Map Sheet 20	Add any cross streets.		**A**	Update made as requested.
Flesher, Jim	Weld County	Appendix A	Map Sheet 22	Add any cross streets.		**A**	Update made as requested.
Flesher, Jim	Weld County	Appendix A	Map Sheet 22	Add any cross streets.		**A**	Update made as requested.
Flesher, Jim	Weld County	Appendix A	Map Sheet 23	Add any cross streets.		**A**	Update made as requested.
Flesher, Jim	Weld County	Safety Analysis	2	Figure 1: Does "overturning" mean flipping over or turning too hard?		**A**	In this case, overturning means flipping over.
Flesher, Jim	Weld County	Safety Analysis	12	Shading covers lines on Figure 4.		**A**	Graphic has been updated.
Flesher, Jim	Weld County	Major Utilities	PDF page 127	Move this page after next?		**A**	Page order has been updated.
Flesher, Jim	Weld County	Safety Analysis	PDF page 136	Make same as previous?		**A**	Update made as requested.

SH 66 PEL Level 1 Screening

Note: Not all retained alternatives will be appropriate for the entire length of SH 66. Some alternatives may be a consideration for only short select sections.

CONCEPTS	SAFETY Does the alternative improve existing and future conditions with respect to: • Vehicle crashes/fatalities • Bicycle accidents and unsafe facilities • Pedestrian safety and missing sidewalks?			MOBILITY Does the alternative improve the current and future ability to move people, goods, and services along and across SH 66 using: • Automobiles • Bicycles • Pedestrians • Transit			ACCESS Does the alternative improve access to decrease congestion in the corridor?	SUMMARY OF RESULTS	JUSTIFICATION/ADDITIONAL COMMENTS
	Vehicle	Bicycle	Pedestrian	Vehicle	Bicycle	Pedestrian			
No Action	No	No	No	No	No	No	No	Retained	Retained to evaluate as baseline condition.
Functional Class									
Freeway (F-W)	Yes	No	No	Yes	No	No	Yes	Retained	Yes for vehicles/No for other modes.
Enhanced Expressway (E-X)	Yes	No	No	Yes			Yes	Retained	Yes for vehicles/No for other modes.
Standard Expressway (R-A or R-B)	No			No			No	Retained	This is No Action for various sections of the corridor.
Enhanced Arterial (NR-A)	No			No			No	Retained	This is No Action for various sections of the corridor.
Arterial Roadway (NR-B)	No	Yes	Yes	No	Yes	Yes	No	Retained	No for vehicles/Yes for other modes.
Main Street (NR-C)	No	Yes	Yes	No	Yes	Yes	No	Retained	No for vehicles/Yes for other modes.
Highway Capacity									
HOV Lanes	No			Yes	No	No	No	Retained	Yes for vehicles/No for other modes.
Toll Lanes	No			Yes	No	No	No	Retained	Yes for vehicles/No for other modes.
HOT Lanes	No			Yes	No	No	No	Retained	Yes for vehicles/No for other modes.
Additional General Purpose Lanes	No			Yes	No	No	No	Retained	Yes for vehicles/No for other modes.
Intersections Modifications									
Close Access	Yes			Yes			Yes	Retained	
Partial Closure	Yes			Yes			Yes	Retained	
Intersection Reconfiguration	Yes			Yes			Yes	Retained	
Turn Lane Additions/Extended Storage	Yes	No	No	Yes	No	No	Yes	Retained	Yes for vehicles/No for other modes.
Signalization	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Retained	May increase vehicle accidents due to the addition of a traffic signal. Additional signals may add additional delay and reduce vehicle mobility.
Grade-Separated Crossing (No Access)	Yes	No	No	Yes	No	No	Yes	Retained	May make mobility worse due to the need for out-of-direction travel to reach destinations.
Multi-modal Intersection Improvements	No	Yes	Yes	No	Yes	Yes	No	Retained	
Intersection Capacity Improvements	No			Yes	No	No	Yes	Retained	Capacity improvements do not equal safety improvements and do not help nonvehicle mobility.
Interchange	Yes			Yes			Yes	Retained	

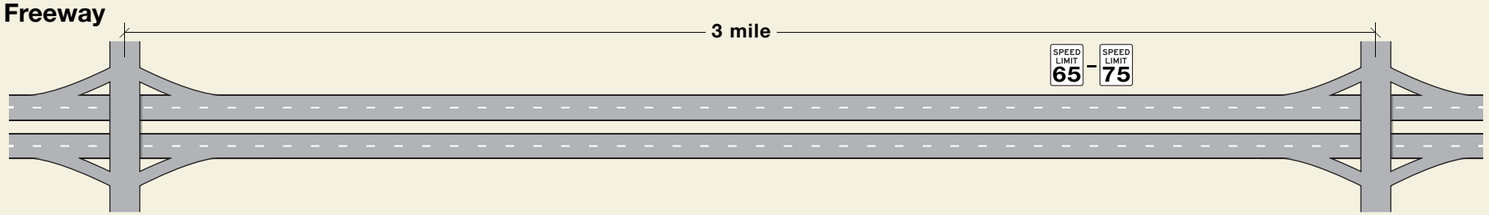
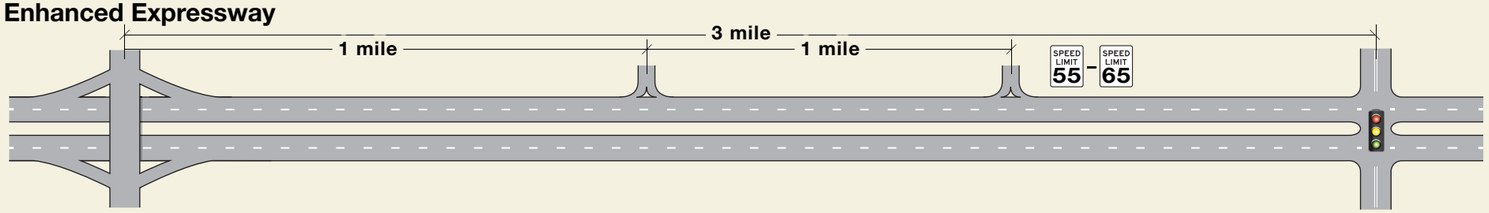
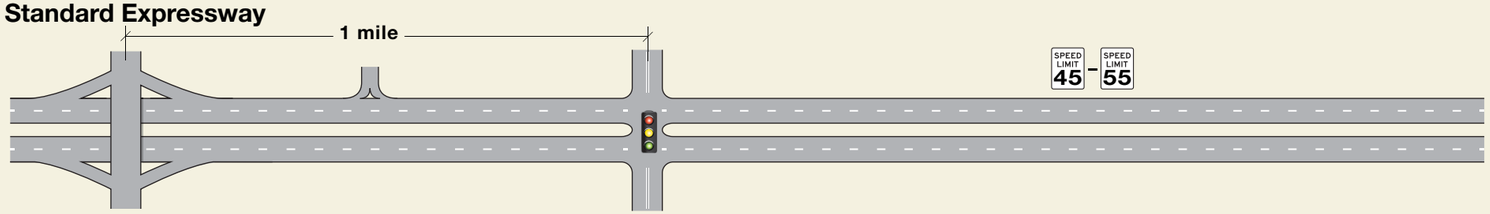
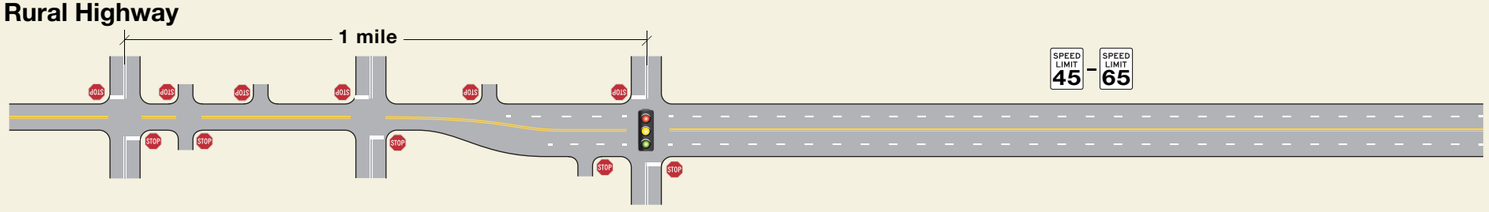
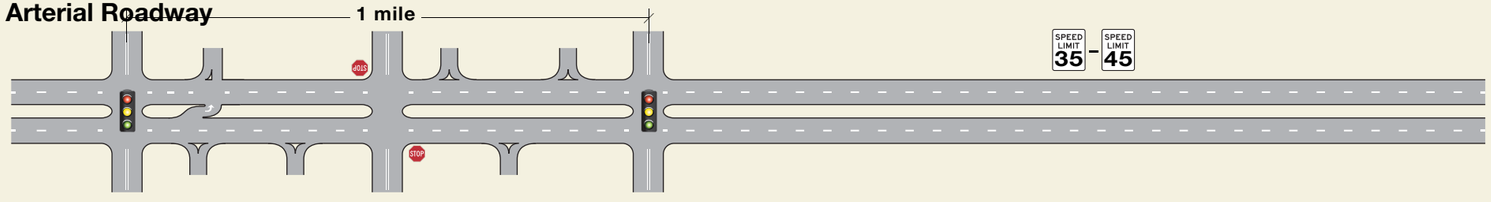
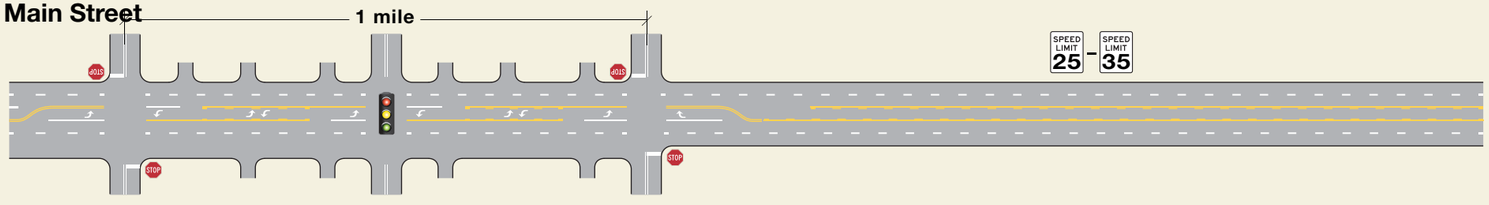
CONCEPTS	SAFETY Does the alternative improve existing and future conditions with respect to: • Vehicle crashes/fatalities • Bicycle accidents and unsafe facilities • Pedestrian safety and missing sidewalks?			MOBILITY Does the alternative improve the current and future ability to move people, goods, and services along and across SH 66 using: • Automobiles • Bicycles • Pedestrians • Transit			ACCESS Does the alternative improve access to decrease congestion in the corridor?	SUMMARY OF RESULTS	JUSTIFICATION/ADDITIONAL COMMENTS
	Vehicle	Bicycle	Pedestrian	Vehicle	Bicycle	Pedestrian			
Safety-Specific Improvements									
Shoulders	Yes	Yes	Maybe	No	Yes	Maybe	No	Retained	Shoulders in some areas could accommodate pedestrian movements.
Guard Rail/Cable Rail	Yes	No	No	No	No	No	Maybe	Retained	Guard rail/cable rail could be used to restrict access.
Signing	Maybe	Maybe	Maybe	Yes	Maybe	Maybe	Maybe	Retained	Signing could improve safety by restricting movements/designating space of travel for nonvehicle movements, could improve mobility for nonvehicle modes by eliminating confusion and better defining destinations, and could help with access to limit turn movements.
Railroad Crossing Treatment Upgrade	Yes	Yes	Yes	No	Yes	Yes	No	Retained	Treatments could include specific pedestrian and bicycle facilities to improve mobility across tracks.
Interchange Configuration									
Junior Interchanges	Yes	No	No	Yes	No	No	Yes	Retained	Aspects of this configuration does not improve bike/ped safety. Free flow ramps can be less safe to cross.
Diamond	Yes			Yes			Yes	Retained	
Diverging Diamond (DDI)	Yes			Yes			Yes	Retained	
Single Point Urban (SPUI)	Yes	No	No	Yes	No	No	Yes	Retained	This configuration usually eliminates crossing of one of the directions for bike/ped. Example: I-225 and Alameda, bikes and peds cannot cross north/south right at the intersection - they have to go further east to do so.
Full Cloverleaf	Yes			Yes			Yes	Retained	
Partial Cloverleaf	Yes			Yes			Yes	Retained	
Fully Directional	Yes			Yes			Yes	Retained	
Others (esp. at US 287)	Yes			Yes			Yes	Retained	
Intersection Configuration									
Continuous Flow Intersection (CFI)	Yes			Yes			No	Retained	
Continuous Green T	Yes	No	No	Yes	No	No	No	Retained	The free flow traffic lane is challenging for pedestrians and bicycles to cross.
Median U-Turn	Yes			Yes			Yes	Retained	
Restricted Crossing U-Turn	Yes			Yes			Yes	Retained	
Roundabout	Yes	No	No	Yes	No	No	No	Retained	Yes for vehicles/No for other modes.
Quadrant	Yes			Yes			Yes	Retained	
Jughandle	Yes	No	No	Yes	No	No	Yes	Retained	The free flow traffic lane is challenging for pedestrians and bicycles to cross.

CONCEPTS	SAFETY Does the alternative improve existing and future conditions with respect to: • Vehicle crashes/fatalities • Bicycle accidents and unsafe facilities • Pedestrian safety and missing sidewalks?			MOBILITY Does the alternative improve the current and future ability to move people, goods, and services along and across SH 66 using: • Automobiles • Bicycles • Pedestrians • Transit			ACCESS Does the alternative improve access to decrease congestion in the corridor?	SUMMARY OF RESULTS	JUSTIFICATION/ADDITIONAL COMMENTS
	Vehicle	Bicycle	Pedestrian	Vehicle	Bicycle	Pedestrian			
Synchronized Split-Phase (Double Crossover)	Yes	No	No	Yes	No	No	Yes	Retained	The free flow traffic lane is challenging for pedestrians and bicycles to cross.
Offset T	Yes			Yes			Yes	Retained	
Alignment									
Bypass Towns	Yes			Yes			Yes	Retained	Retained for consideration within developed areas (only Longmont).
Realign SH 66 to the North (West of I-25)	Yes			Yes			Yes	Retained	Moving to the north is possible but would be costly and would add lane miles to the highway system.
Realign SH 66 to the South (West of I-25)	No			No			No	**Eliminated**	There is no real option to go south because the highway is currently located along the northern edge of Longmont. Movement south would place SH 66 within the boundaries of Longmont and would degrade safety, mobility, and access conditions, along with creating other issues for the City's transportation system.
Transit Service									
Commuter Rail	No			Yes			No	**Eliminated through current planning horizon (2040)**	Anticipated ridership does not match the need for Commuter Rail through the current planning horizon (2040); the alternative far exceeds the transit needs in the corridor. Ridership for Commuter Rail lines carries 1 to 2 million annual riders. Future corridor needs beyond 2040 may result in situations where this option is viable.
Light Rail	No			Yes			No	**Eliminated through current planning horizon (2040)**	Like Commuter Rail, ridership does not match the need for Light Rail through the current planning horizon (2040). Light Rail averages 29,000 daily riders, compared to SH 66 projected demands of only 500 to 750 daily riders.
Bus Rapid Transit	No			Yes			No	**Eliminated through current planning horizon (2040)**	Like Commuter Rail and Light Rail, ridership does not match the need for a BRT through the current planning horizon (2040). BRTs average 15,600 daily riders compared to SH 66 projected demands of only 500 to 750 daily riders.
Commuter/Express Bus	No			Yes			No	Retained	Meets elements of the Purpose & Need.
Local Transit	No			Yes			No	Retained	Meets elements of the Purpose & Need.
Flexible Route	No			Yes	No	No	No	Retained	Meets elements of the Purpose & Need.
Expanded Human Service Transit	No			Yes	No	No	No	Retained	Meets elements of the Purpose & Need.
Transit Infrastructure									
Separate Transit Guideway	No			Yes			No	**Eliminated through current**	Provides the necessary infrastructure for alternatives like Commuter Rail, Light Rail, and BRT, which do not currently meet the needed ridership and/or suitability for longer

CONCEPTS	SAFETY Does the alternative improve existing and future conditions with respect to: • Vehicle crashes/fatalities • Bicycle accidents and unsafe facilities • Pedestrian safety and missing sidewalks?			MOBILITY Does the alternative improve the current and future ability to move people, goods, and services along and across SH 66 using: • Automobiles • Bicycles • Pedestrians • Transit			ACCESS Does the alternative improve access to decrease congestion in the corridor?	SUMMARY OF RESULTS	JUSTIFICATION/ADDITIONAL COMMENTS
	Vehicle	Bicycle	Pedestrian	Vehicle	Bicycle	Pedestrian			
								planning horizon (2040)	trips. Future corridor needs beyond 2040 may result in situations where this option is viable.
Bus Lane (only if Managed Lanes in Level 2A)	No			Yes	No	No	No	Retained	Meets elements of the Purpose & Need.
Transit Queue Jumps	No			Yes	No	No	No	Retained	Meets elements of the Purpose & Need.
Transit Signal Priority	No			Yes	No	No	No	Retained	Meets elements of the Purpose & Need.
Transit Stations/Stops/Amenities	No			Yes	No	No	No	Retained	Meets elements of the Purpose & Need.
Bicycle									
Bike Lanes, On-Street Bike Facilities	No	Yes	No	Yes	Yes	No	No	Retained	Meets elements of the Purpose & Need.
Sidepath (Shared Use Path Proximate to SH 66)	Yes	Yes	Yes	Yes	Yes	Yes	No	Retained	Meets elements of the Purpose & Need.
Shared Use Paths, Trails, Off-Street Bike Facilities	Yes	Yes	Yes	Yes	Yes	Yes	No	Retained	Meets elements of the Purpose & Need.
Parallel On-Street Bike Route (Local, County Roads)	Yes	Yes	No	Yes	Yes	No	No	Retained	Meets elements of the Purpose & Need.
Enhanced At-Grade Bike Crossings	Yes	Yes	No	No	Yes	Yes	No	Retained	Meets elements of the Purpose & Need.
Grade-Separated Bike Crossings	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Retained	Fully meets the Purpose & Need.
Pedestrian									
Sidewalks	Yes	Yes	Yes	Yes	Yes	Yes	No	Retained	Meets elements of the Purpose & Need.
Sidepath (Shared Use Path Proximate to SH 66)	Yes	Yes	Yes	Yes	Yes	Yes	No	Retained	Meets elements of the Purpose & Need.
Shared Use Paths, Trails	Yes	No	Yes	Yes	Yes	Yes	No	Retained	Meets elements of the Purpose & Need.
Enhanced At-Grade Pedestrian Crossings	Yes	No	Yes	No	No	Yes	No	Retained	Meets elements of the Purpose & Need.
Grade-Separated Pedestrian Crossings	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Retained	Fully meets the Purpose & Needs.
Concepts Contributing to System/Program Alternatives									
ITS	No			Yes			No	Retained	
Intelligent Mobility/Technology	Yes			Yes			No	Retained	
TDM	Yes			Yes			No	Retained	
Maintenance	Yes			No			No	Retained	
Parallel Facilities	Yes			Yes			Yes	Retained	Assumes traffic is decreased on SH 66 and moved to the alternative route.
Local Street Grid Network	No			Yes			No	Retained	

COLORADO
Department of Transportation

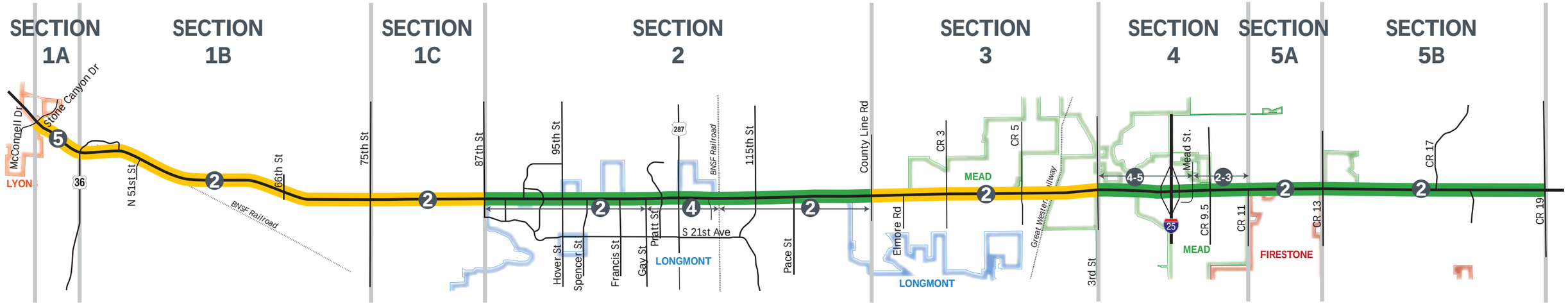
SH 66 Planning and Environmental Linkages Study

	Description	Access Spacing	Treatment Options	Multi-modal treatments
Freeway 	High speed and high traffic volumes with no direct access	3 mile + desirable, 1 mile + allowable	Grade Separation, directional access	Grade separated pedestrian/bike crossings, transit stops tied into on- and off- ramps, managed lanes
Enhanced Expressway 	High speed and moderately high traffic volumes with limited and possible direct access, multiple lanes in each direction and separated directional travel	1 mile + for interchanges, 3 mile + for controlled intersections, with possible RIRO at half mile	Grade separation, junior interchange, signalization, partial closure (turn restrictions), Continuous Green-T, ThrU Turn intersections, CFI, one-way quad	Grade separated pedestrian/bike crossings, transit stops tied into on- and off- ramps, managed lanes, pedestrian/bike crossings at signalized intersections, transit pull outs
Standard Expressway 	Moderately high speeds and traffic volumes with limited access, multiple lanes in each direction and separated directional travel	1 mile + for full movement, with possible RIRO at half mile	Grade separation, junior interchange, signalization, partial closure (turn restrictions), Continuous Green-T, ThrU Turn intersections, CFI, one-way quad	Grade separated pedestrian/bike crossings, transit stops tied into on- and off- ramps, managed lanes, pedestrian/bike crossings at signalized intersections, transit pull outs
Rural Highway 	Moderate to high speeds with moderate to low traffic volumes	1/2 mile + for full movement intersections with public roadways, maximum of one access per parcel (depending on other roadways that could preclude access) with shared access preferable	Signalization, two-way stop control	Pedestrian/bike crossings at signals, pedestrian/bike crossings at signalized intersections, transit pull outs
Arterial Roadway 	Moderate to low travel speeds and traffic volumes with moderate access	1/2 mile for full movement intersections, with possible 3/4 movement at quarter miles, and RIRO access for each parcel (should share access if possible)	Signalization, partial closure (turn restrictions), Continuous Green-T, ThrU Turn intersections, CFI, two-way stop control	Pedestrian/bike crossing signals, pedestrian/bike crossings at signalized intersections, transit pull outs
Main Street 	Low travel speeds and traffic volumes with significant roadside development and access needs	One access per parcel (should share access if possible)	Signalization, partial closure (turn restrictions), two-way stop control	Pedestrian/bike crossing signals, marked pedestrian/bike crossing, HAWK, pedestrian/bike crossings at signalized intersections, transit pull outs

SH 66 Planning and Environmental Linkages Study

Level 2a Screening Operational Classification

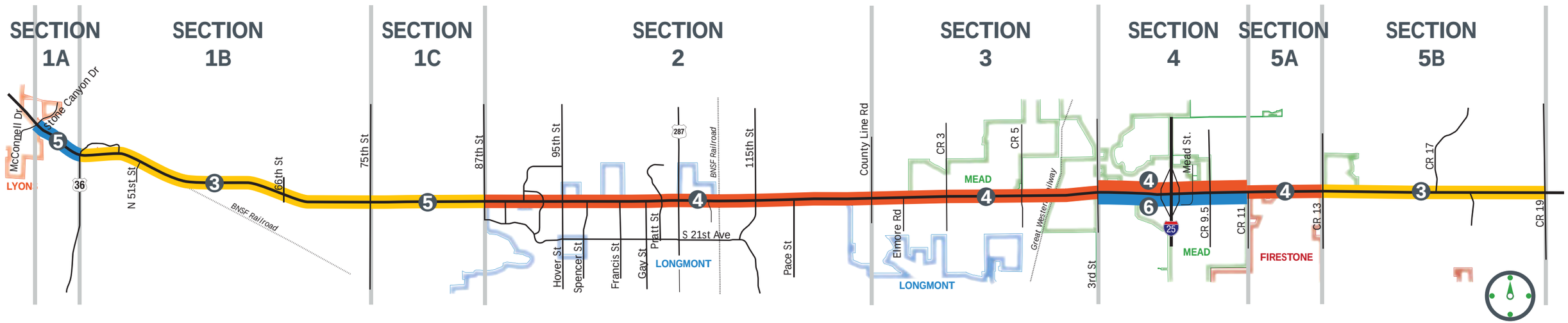
Existing



LEGEND

- Expressway
- Non-Rural Principal Highway
- Rural/Regional Highway
- Arterial

Future



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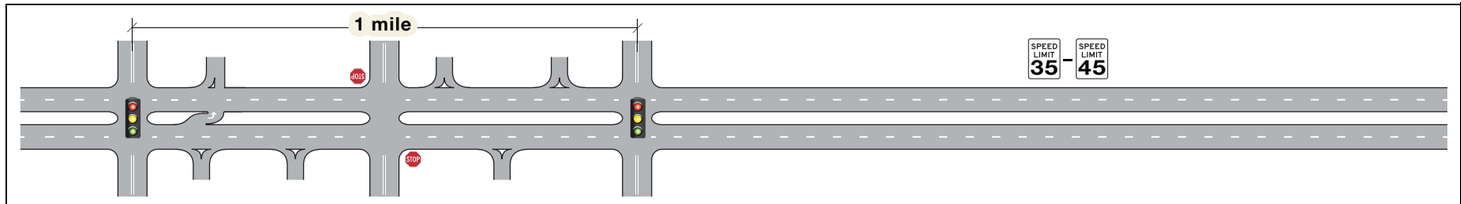
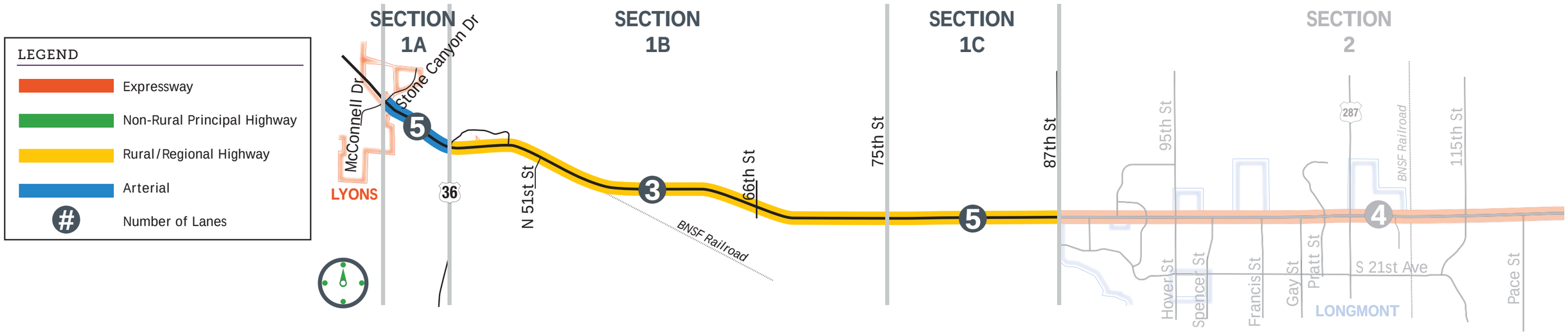
Section 1 Operational Classification

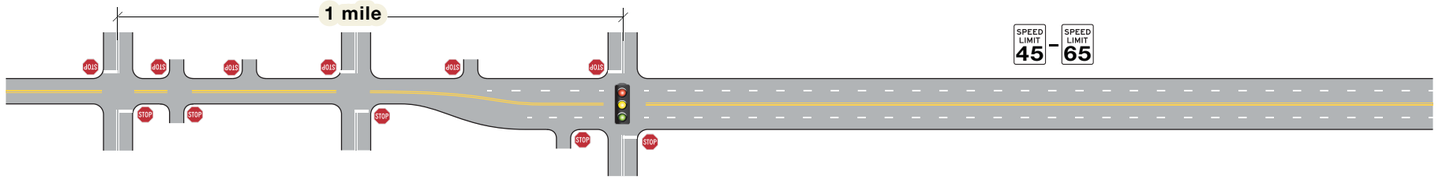
Section 1A: Arterial



DESCRIPTION	ACCESS SPACING	TREATMENT OPTIONS	MULTI-MODAL TREATMENTS
Moderate to low travel speeds and traffic volumes with moderate access	1/2 mile for full movement intersections, with possible 3/4 movement at quarter miles, and RIRO access for each parcel (should share access if possible)	Signalization, partial closure (turn restrictions), Continuous Green-T, ThrU Turn intersections, CFI, two-way stop control	Pedestrian/bike crossing signals, pedestrian/bike crossings at signalized intersections, transit pull outs



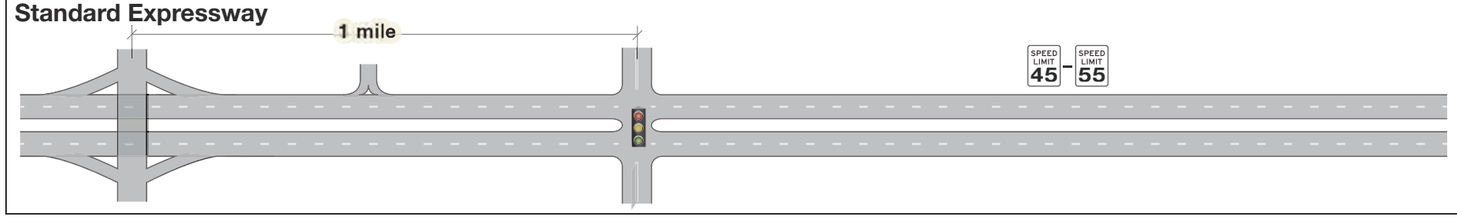
Sections 1B & 1C: Rural/Regional Highway

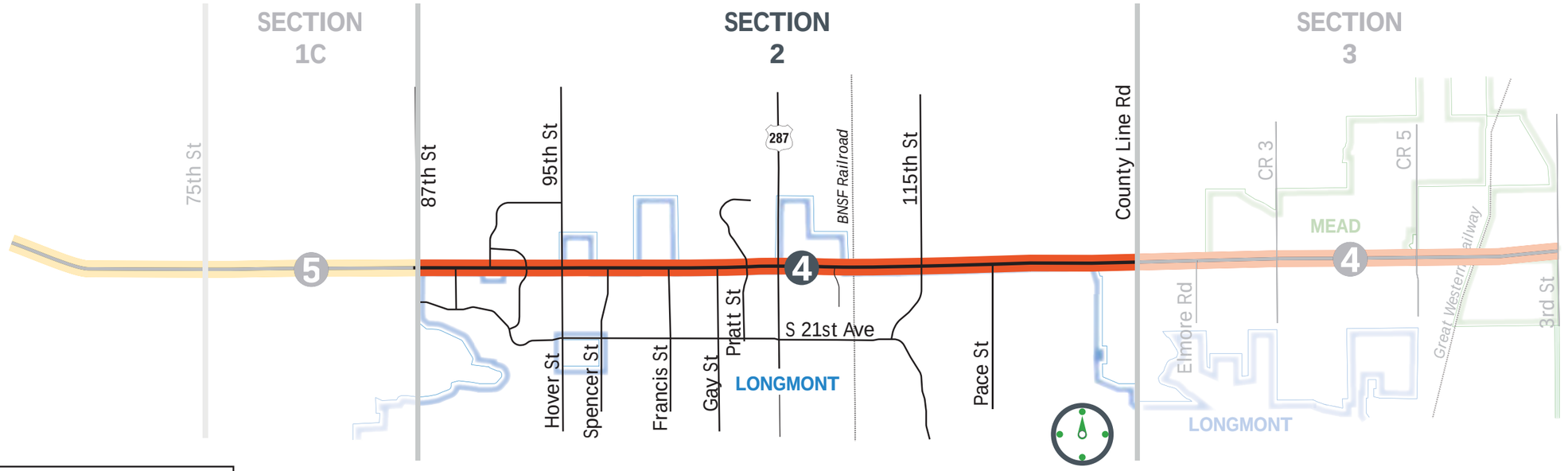


DESCRIPTION	ACCESS SPACING	TREATMENT OPTIONS	MULTI-MODAL TREATMENTS
Moderate to high speeds with moderate to low traffic volumes	1/2 mile + for full movement intersections with public roadways, maximum of one access per parcel (depending on other roadways that could preclude access) with shared access preferable	Signalization, two-way stop control	Pedestrian/bike crossings at signals, pedestrian/bike crossings at signalized intersections, transit pull outs

Section 2 Operational Classification

Section 2: Expressway

	DESCRIPTION	ACCESS SPACING	TREATMENT OPTIONS	MULTI-MODAL TREATMENTS
Standard Expressway 	Moderately high speeds and traffic volumes with limited access, multiple lanes in each direction and separated directional travel	1 mile + for full movement, with possible RIRO at half mile	Grade separation, junior interchange, signalization, partial closure (turn restrictions), Continuous Green-T, ThrU Turn intersections, CFI, one-way quad	Grade separated pedestrian/bike crossings, transit stops tied into on- and off- ramps, managed lanes, pedestrian/bike crossings at signalized intersections, transit pull outs

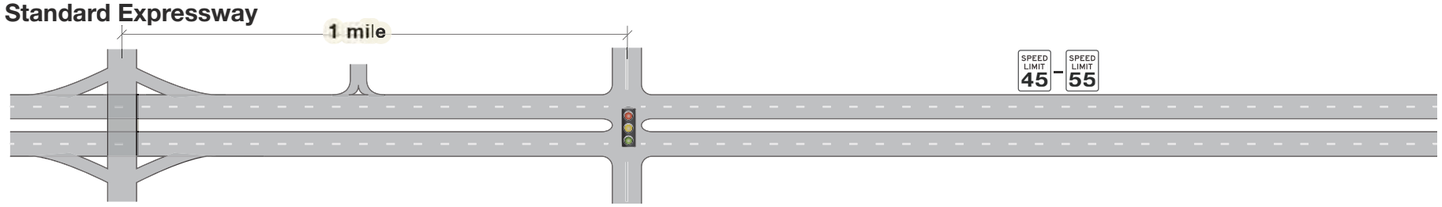


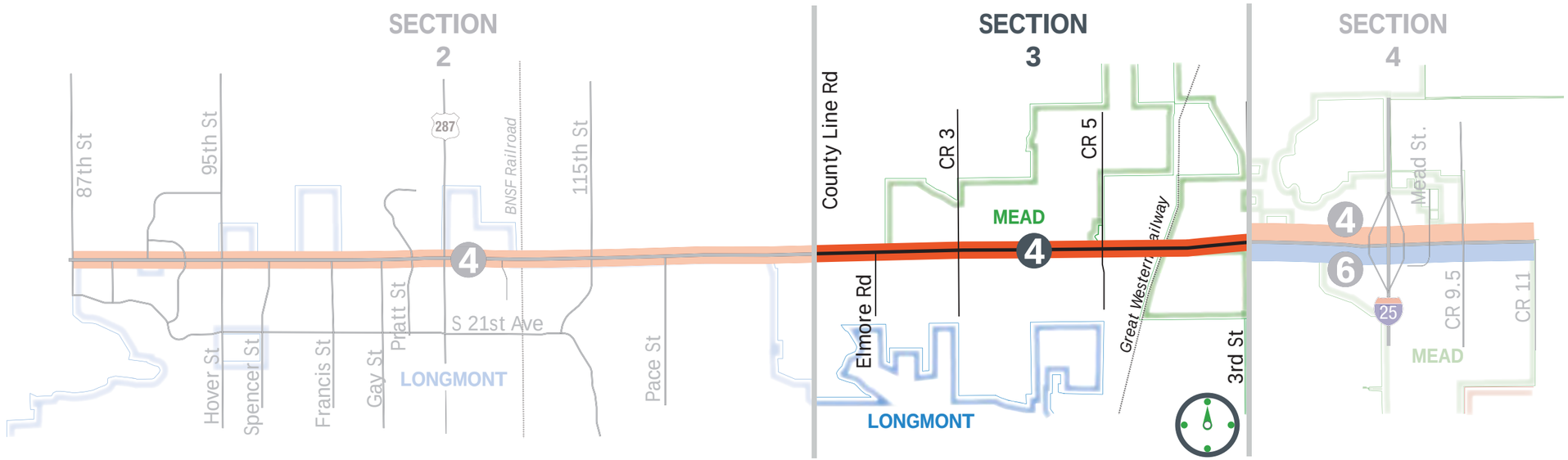
LEGEND

- Expressway
- Non-Rural Principal Highway
- Rural/Regional Highway
- Arterial
- # Number of Lanes

Section 3 Operational Classification

Section 3: Expressway

	DESCRIPTION	ACCESS SPACING	TREATMENT OPTIONS	MULTI-MODAL TREATMENTS
Standard Expressway 	Moderately high speeds and traffic volumes with limited access, multiple lanes in each direction and separated directional travel	1 mile + for full movement, with possible RIRO at half mile	Grade separation, junior interchange, signalization, partial closure (turn restrictions), Continuous Green-T, ThrU Turn intersections, CFI, one-way quad	Grade separated pedestrian/bike crossings, transit stops tied into on- and off- ramps, managed lanes, pedestrian/bike crossings at signalized intersections, transit pull outs

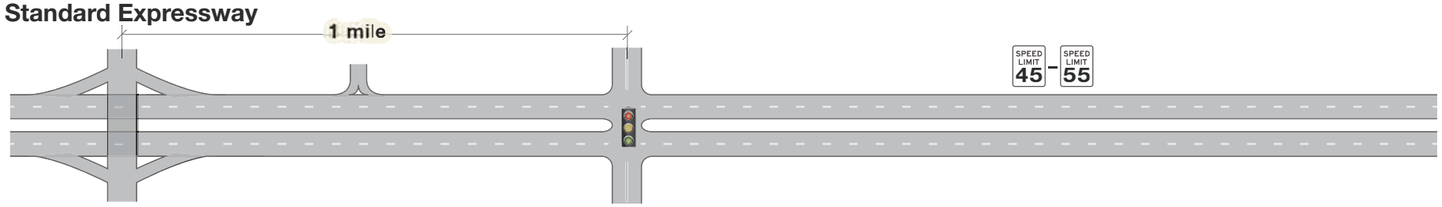


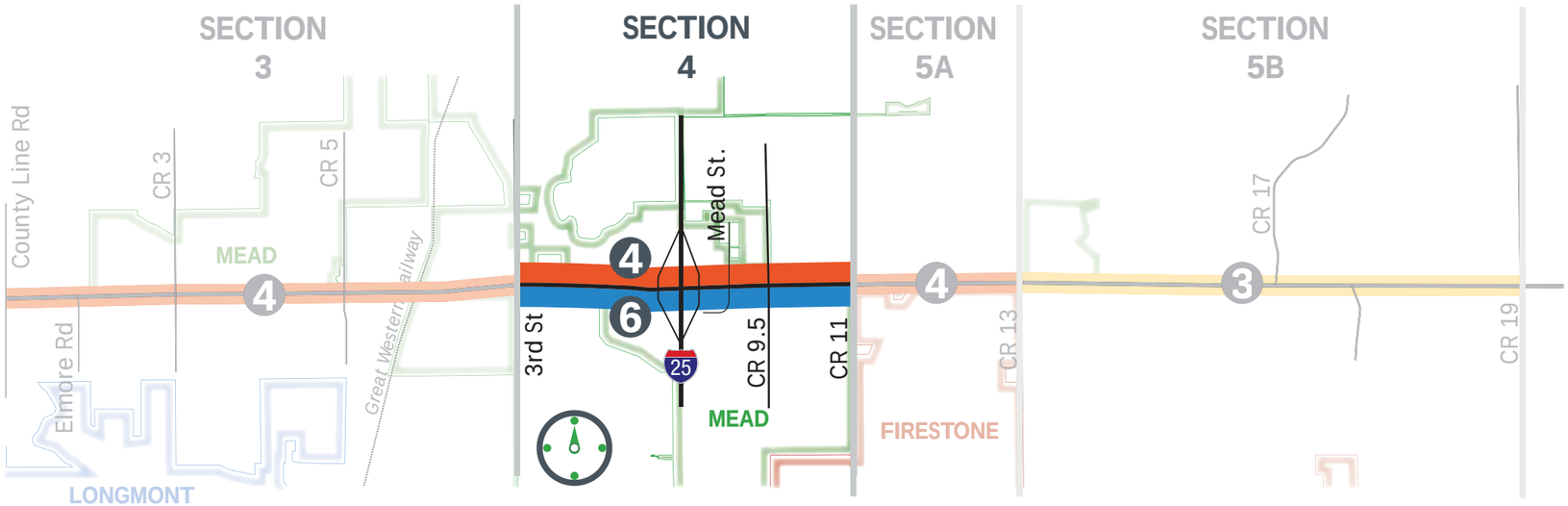
LEGEND

- Expressway
- Non-Rural Principal Highway
- Rural/Regional Highway
- Arterial
- # Number of Lanes

Section 4 Operational Classification

Section 4: Expressway

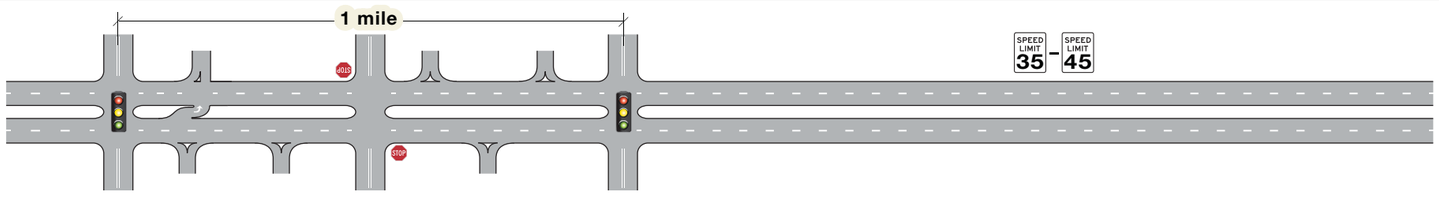
	DESCRIPTION	ACCESS SPACING	TREATMENT OPTIONS	MULTI-MODAL TREATMENTS
Standard Expressway 	Moderately high speeds and traffic volumes with limited access, multiple lanes in each direction and separated directional travel	1 mile + for full movement, with possible RIRO at half mile	Grade separation, junior interchange, signalization, partial closure (turn restrictions), Continuous Green-T, ThrU Turn intersections, CFI, one-way quad	Grade separated pedestrian/bike crossings, transit stops tied into on- and off- ramps, managed lanes, pedestrian/bike crossings at signalized intersections, transit pull outs



LEGEND

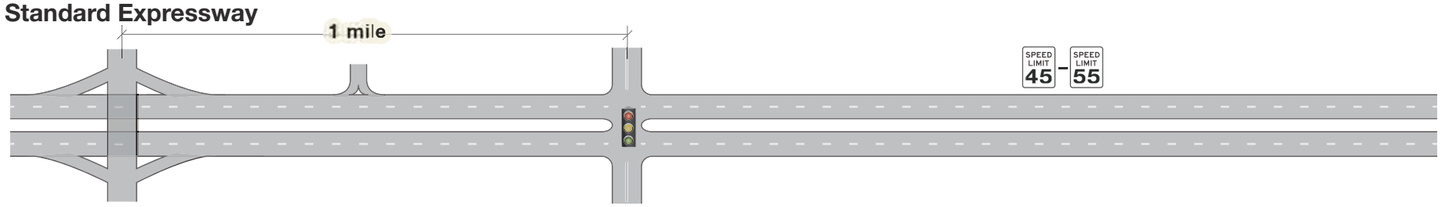
- Expressway
- Non-Rural Principal Highway
- Rural/Regional Highway
- Arterial
- # Number of Lanes

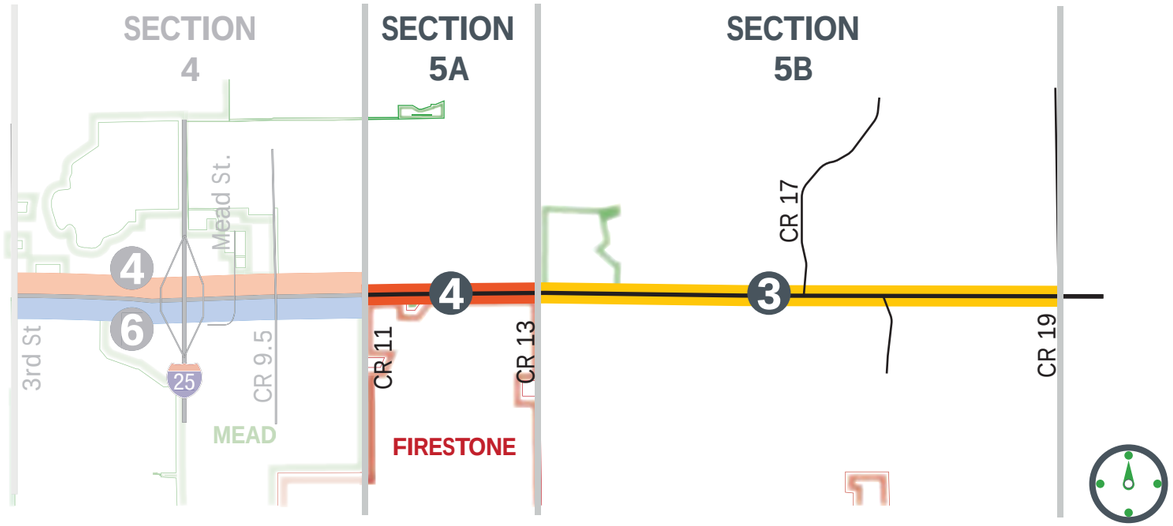
Section 4: Arterial

	DESCRIPTION	ACCESS SPACING	TREATMENT OPTIONS	MULTI-MODAL TREATMENTS
1 mile 	Moderate to low travel speeds and traffic volumes with moderate access	1/2 mile for full movement intersections, with possible 3/4 movement at quarter miles, and RIRO access for each parcel (should share access if possible)	Signalization, partial closure (turn restrictions), Continuous Green-T, ThrU Turn intersections, CFI, two-way stop control	Pedestrian/bike crossing signals, pedestrian/bike crossings at signalized intersections, transit pull outs

Section 5 Operational Classification

Section 5A: Expressway

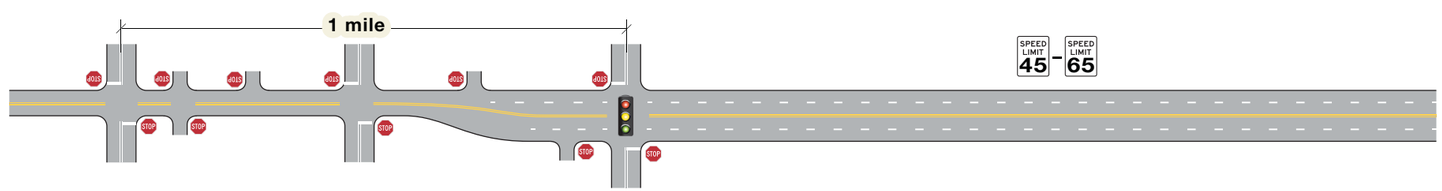
	DESCRIPTION	ACCESS SPACING	TREATMENT OPTIONS	MULTI-MODAL TREATMENTS
Standard Expressway 	Moderately high speeds and traffic volumes with limited access, multiple lanes in each direction and separated directional travel	1 mile + for full movement, with possible RIRO at half mile	Grade separation, junior interchange, signalization, partial closure (turn restrictions), Continuous Green-T, ThrU Turn intersections, CFI, one-way quad	Grade separated pedestrian/bike crossings, transit stops tied into on- and off- ramps, managed lanes, pedestrian/bike crossings at signalized intersections, transit pull outs



LEGEND

- Expressway
- Non-Rural Principal Highway
- Rural/Regional Highway
- Arterial
- # Number of Lanes

Section5B: Rural/Regional Highway

	DESCRIPTION	ACCESS SPACING	TREATMENT OPTIONS	MULTI-MODAL TREATMENTS
	Moderate to high speeds with moderate to low traffic volumes	1/2 mile + for full movement intersections with public roadways, maximum of one access per parcel (depending on other roadways that could preclude access) with shared access preferable	Signalization, two-way stop control	Pedestrian/bike crossings at signals, pedestrian/bike crossings at signalized intersections, transit pull outs

SH 66 Planning and Environmental Linkages Study

SH 66 TAC and EC Electronic Update

January 2018

PEL Updates

Alternatives Development and Screening

- The project team has worked with FHWA and stakeholders to define the screening process, which includes these primary steps:
  - Level 1 includes a full range of high-level alternatives related to roadway functional classification, roadway capacity, intersection modifications and improvements, roadway alignment, transit service, bicycle and pedestrian facilities, and supporting system alternatives
  - Level 2A recommends operational classifications and capacity by roadway section
  - Level 2B will include access, mobility, and safety assessments and concepts by section
  - Level 3 will include section/intersection/interchange configuration screening
- Level 1 and draft Level 2A were reviewed and discussed at the TAC meeting in September. The evaluation spreadsheets for Level 1 is attached.
- The project team received community specific feedback on Level 1 and draft Level 2a from many local agencies and has developed a response for each comment. These responses are provided with this electronic update.
- The project team will be working on the Level 2b alternative development and screening in early 2018. The draft results of Level 2b will be presented at the next TAC meeting.

Risk and Resiliency

- The project team, FHWA, and Region 4 staff, in conjunction with the TAC, determined that risk and resiliency should be incorporated into the project.
- The risk and resiliency assessment will provide CDOT and local agencies information needed to make informed decisions about developing infrastructure that can better withstand extreme weather events and natural hazards, such as flooding.
- The project team, in coordination with the US 34 PEL project team, met with FHWA to discuss the best approach for incorporating risk and resiliency into the planning process. FHWA recommends that risk and resiliency be a project goal, not a part of the project's purpose and need.
- The project team also met with CDOT Region 4 leadership and FHWA staff early in January to determine next steps. Attendees of this meeting agreed that the risk and resiliency analysis will need to be balanced where the level of detail is appropriate for planning decisions and PELs, yet it offers enough perspective to provide a meaningful assessment of risk and resiliency.

Public Involvement

- Public Comments
  - The project team received multiple comments from the public on the purpose and need and the corridor conditions report. The project team sent individual responses to each of the commenters.

- If you receive additional feedback from your residents, please let a project team member know and we will work with you to provide an appropriate response.

- Technical Advisory Committee
  - The next meeting will be held in late February.
  - If you community would like to host the next meeting, please contact Kelly Leadbetter (kelly.leadbetter@fhueng.com).
- Executive Committee
  - If the EC member representing your community needs to change because of election results from November, please contact Kelly Leadbetter (kelly.leadbetter@fhueng.com) so the project team can proactively transition EC representation prior to the next meeting.
  - The next EC Meeting is targeted for first quarter 2018, after the TAC meeting. Level 1, 2A, and 2B will be discussed at this meeting.

SH 66 Planning and Environmental Linkages Study

Technical Advisory Committee (TAC) Meeting #5

Date and Time: March 8, 2018 | 1 p.m. to 3 p.m.
Longmont Development Services Center | 385 Kimbark Street, Longmont, CO 80501

Agenda

Introductions

Project Refresh

Feedback from TAC

- Changes to TAC and EC involvement
- Projects along the corridor for the Coalition
- Recent land developments

Alternative Development and Screening

- Level 2a documentation
- Level 2b next steps

Risk and Resiliency

- Status update
- Approach

Statewide PEL Consistency

Schedule and Next Steps

SH 66 Planning and Environmental Linkages Study

Technical Advisory Committee (TAC) Meeting #5

Date and Time: March 8, 2018 | 1 p.m. to 3 p.m.
Longmont Development Services Center | 385 Kimbark Street, Longmont, CO 80501

Meeting Summary

Introductions

Meeting attendees provided self-introductions. A sign-in sheet is attached.

Project Refresh

- The study corridor is approximately 20 miles, from McConnell Drive in Lyons to WCR 19. The study area includes Weld and Boulder Counties, and the local communities of Lyons, Longmont, Mead, and Firestone.
- The goal of the study is to identify needs along SH 66 and develop a strategic, long-term vision.
- The project team has completed stakeholder interviews, a visioning workshop, one set of public meetings. The project will continue with TAC Meetings, EC Meetings, and additional public outreach and public meetings.
- The Corridor Conditions Report (encompasses planning, environmental, and transportation context) is completed. Please contact FHU if you would like a copy.
- Alex provided an overview of the PEL process and subsequent project development phases. The PEL sets the vision and evaluates alternatives. The PEL makes recommendations, which then will inform an ACP for the corridor. The ACP will be the legal/binding document for the corridor, agreed upon by local agencies. The PEL and ACP will also help define what ROW needs to be preserved.
- Alex presented the project's Purpose and Need, which includes considering safety, mobility, and access needs in terms of transportation. It also includes goals for environmental, community context, and risk/resilience.
- The alternatives development and screening process is broken into three phases: P&N screening (which includes a full range of alternatives), comparative screening (classification/capacity), and then detailed alternatives development and screening.

Feedback from TAC

- Recent Development Updates
  - Lyons has a 7-acre development happening in Section 1B on the eastern side of Highland Drive and has the desire to have that area feel like an extension of downtown. At SH 66 and US 36, Stephen Tebo purchased property on the east side (pump and tiny homes).
  - Per Boulder County, no Martin Marietta updates are available now. They submitted an application to the County, but the County is in the midst of evaluating legal considerations and requirements before moving forward. CDOT and Boulder County will work together as plans unfold.
  - In Longmont, new developments occurring generally are consistent with the comprehensive plan. Some new apartment complexes are being developed ¼ mile south of SH 66 on Main Street and along 17th Street ½ mile south of SH 66 on County Line. There may be some

adjustment to residential uses originally planned as commercial uses. The City also is considering some pre-application projects.

- Barefoot Lakes master planned community is developing in Firestone from south to north to the SH 66 corridor.

- Projects along the corridor for the Coalition
  - Intersection improvements at WCR 7/3rd Street
  - No roundabout planned at US 36 and SH 66
  - Longmont – park near Pace Street
  - Lyons – trying to get a trail along the St. Vrain River and a connection to US 36
- EC and TAC
  - Dawn Anderson is the new TAC member for Weld County, replacing Jim Flesher.
  - Tim Waters is the new Ward/EC member in Longmont; Tyler/Tim will be involved in the TAC at some level as the alternatives development and analysis happens.
  - Lyons' election is next month; current mayor is running unopposed; Paul Glasgow and Joe will be sharing TAC responsibilities.

Alternative Development and Screening

- Level 1 screening is complete
  - 3 alternatives were eliminated through the planning horizon (2040)
    - Commuter Rail
    - Light Rail
    - Separate Transit Guideway
  - One alternative eliminated
    - Realign SH 66 to the south (west of I-25)
- Level 2a documentation
  - Presented preliminary results at last TAC Meeting
  - Draft results today
    - Alex provided an overview of the existing functional classification and lanes for SH 66 today and presented the overview of future results.
    - The detailed tables, the summary tables, and the Level 2a evaluation criteria are provided for TAC review.
    - FHWA does not want PEL study to lock in future decisions. All recommendations can be revisited at a later time, as conditions change.
  - Feedback from TAC Members
    - Section 1A: *Proposed 5-lane arterial*

      Per Lyons, could 1A be extended to the east to include primary planning area? SH 66 is a major route for RMNP access. It's a transition area. Highland Drive will be a north-south street.
    - Section 1B and 1C: *Proposed 2-Lane + Turn Lane Regional Highway*

      Should 1A be extended into 1B? In 1B and 1C – Boulder County inquired that since there are minimal existing access points, some of the land use is open space – there may not be a need for a continuous left turn lane. There was a discussion about

how the potential Martin Marietta development influences these sections and if additional through lanes are needed to address the development, the developer should be responsible for a substantial portion of the additional laneage.

- Section 2: *Proposed 4-lane expressway*

  Intersection provisions will come in the next level of screening. Safety provisions (such as guardrail) also will be evaluated.
- Section 3: *Proposed 4-lane expressway*
- Section 4: *Proposed 6-lane arterial*
- Section 5a: *Proposed 4-lane expressway*
- Section 5b: *Proposed 3-lane regional highway*

- Level 2b next steps
  - Level 2b will focus on the corridor/system level first then consider the intersection level
  - Evaluate effectiveness of alternatives
  - Screen based on P&N and consider the goals such as environment and community context
  - The group discussed CAP-X, which is a tool used to rank data for various intersection types. It identifies how the intersections compare to one another and can help identify what to advance or what might not work well. It provides a very quick assessment to identify fatal flaws or what could have the most potential at a specific location given specific operational characteristics.
  - CAP-X does not account for bicycles. The project team will use the information from CAP-X as a starting point and then consider other factors such as bikes/peds and ROW.
  - For the next phase of alternatives development and evaluation, the project team will want TAC input to ensure we are evaluating the right factors and evaluating them correctly.

Risk and Resiliency

- Status update
  - The SH 66 PEL Team is working closely with CDOT Region 4, CDOT HQ, FHWA, and the US 34 PEL Team to identify an approach for incorporating Risk and Resiliency into this study.
  - In terms of culverts, bridges, and roadway prism, the study will consider the following threats:
    - Floods
    - Rail proximity
    - Fire and debris flows
  - FHWA supports including risk as a project goal but not as a transportation need. Risk will be incorporated in the study similarly as environmental and community context factors. Resilient design considerations would be deferred to future project development phases as that level of detail is not appropriate for planning.
  - CDOT aims to have planning level information about risks and owner/user costs (associated with those risks) that can help inform future decisions about resilient design solutions. Between PEL studies, CDOT wants to ensure statewide consistency in an approach for assessing risk and resiliency. Where possible and appropriate, CDOT also wants to ensure consistency with other statewide efforts (such as the I-70 Pilot Project for Risk and Resilience). The focus for PEL will be to maintain an appropriate level of detail for a planning study but still provide meaningful analysis for decision making. For example, considerations of risk could help inform ROW preservation.

- The group discussed the risk of parallel routes, such as SH 7 or US 34, becoming inoperable and what affect that could have on SH 66. Detour routes may be a consideration in the risk evaluation process.
- The group also discussed how SH 66 has some unique utilities to think about. Those assets may factor into the owner/user cost assessments.

Schedule and Next Steps

- The team anticipates completing Level 2B screening in May and completing Level 3 screening in late Spring.
- The team anticipates beginning ACP efforts during Summer 2018 and wrapping up the ACP and PEL study report and recommendations by the end of 2018.

SH 66 Planning and Environmental Linkages Study

TECHNICAL ADVISORY COMMITTEE MEETING #5

Date and Time: March 8, 2018 | 1 p.m. to 3 p.m.
Location: Longmont Development Services Center | 385 Kimbark Street, Longmont, CO 80501

Sign In

Name	Agency	Email
Abra Geissler	CDOT	abra.geissler@state.co.us
James Zufall	"	James d. Zufall @ state.co.us
Jerry Gerstle	Boulder County	GGERSTLE@BOULDERCOUNTY.ORG
Jim Hanson	Atkins	jim.hanson@atkinsglobal.com
David Sprague	Atkins	DAVID.SPRAGUE@ATKINSGLOBAL.COM
Tyler Stamey	Longmont	Tyler.stamey@longmontcolorado.gov
Chris Fasching	FHU	Chris.Fasching@Fhueng.com
Joe Kubala	Town of Lyons	jKubala@TownofLyons.com

SH 66 Planning and Environmental Linkages Study

TECHNICAL ADVISORY COMMITTEE MEETING #5

Date and Time: March 8, 2018 | 1 p.m. to 3 p.m.
Location: Longmont Development Services Center | 385 Kimbark Street, Longmont, CO 80501

Sign In

Name	Agency	Email
Phil Greenwald	Longmont	phil.greenwald@longmontcolorado.gov
Jim Angstadt	Longmont	jim.angstadt@longmontcolorado.gov
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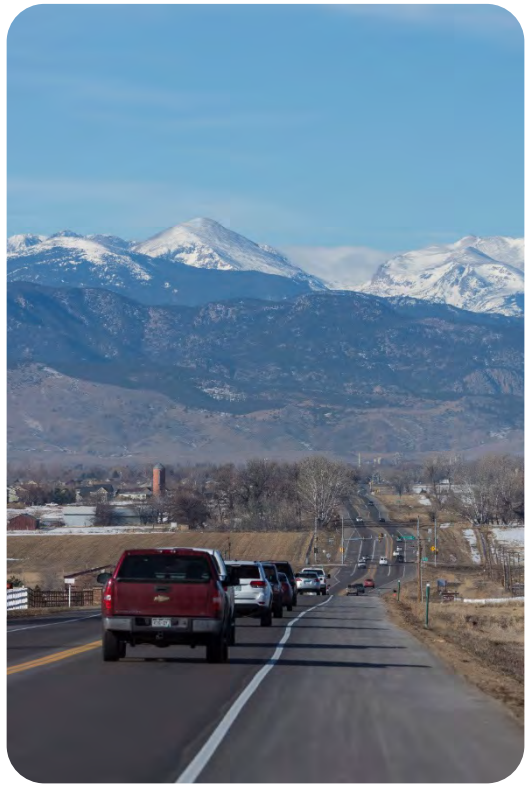
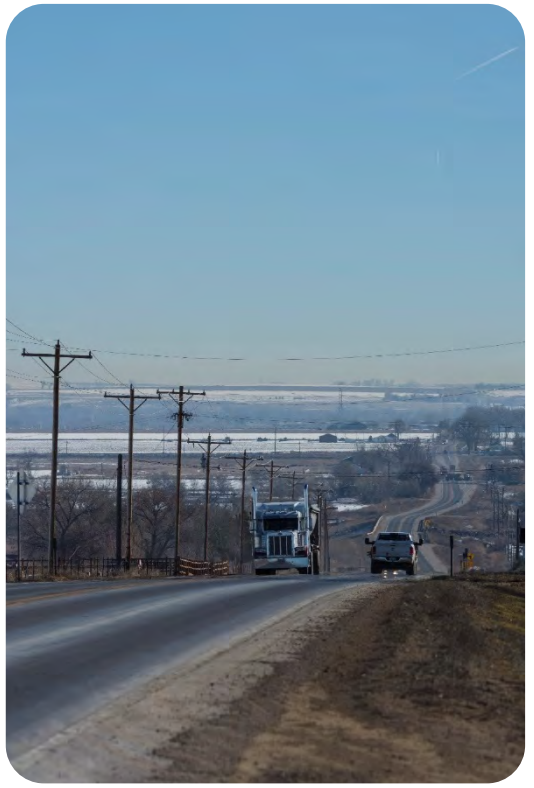
SH 66 Planning and Environmental Linkages Study





March 8, 2018

Technical Advisory Committee (TAC) #5

Today's Meeting

- SH 66 PEL Re-Introduction
- Seeking TAC Feedback
  - Recent Land Development
  - Projects along corridor for SH 66 Coalition
  - Changes to TAC and EC Members
- Alternative Development & Screening
  - Level 2a Documentation
  - Level 2b Next Steps
- Risk & Resiliency Next Steps
  - PEL Statewide Consistency
- Schedule/Next Steps

SH 66 Planning and Environmental Linkages Study

SH 66 PEL Re-Introduction

SH 66 PEL—Re-Introduction

Project Area

- McConnell Drive (Lyons) to Weld County Road 19—*20 miles*
- Two Counties (Boulder and Weld)
- Four Communities (Lyons, Longmont, Mead, Firestone)

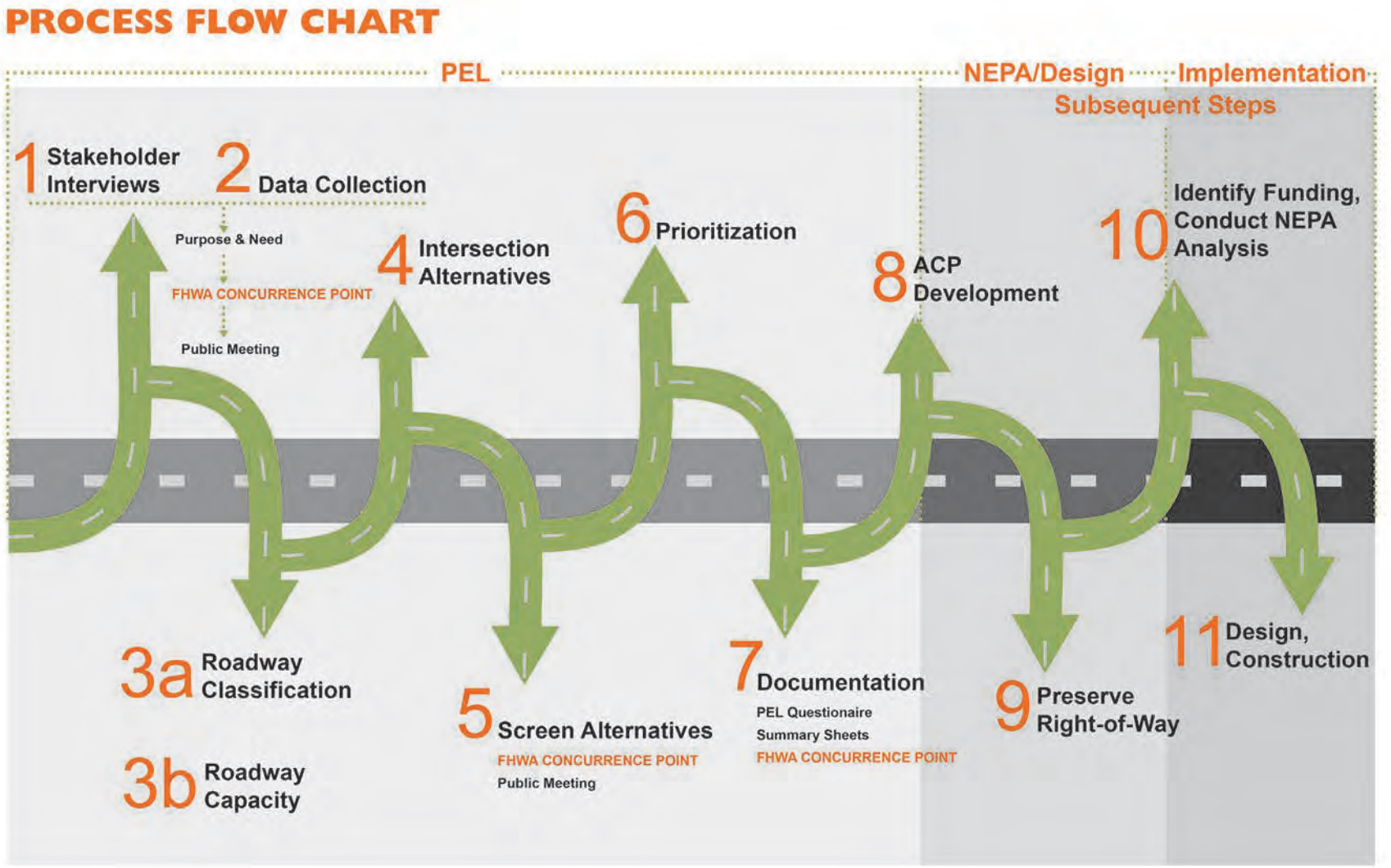
Goal

- Identify the needs along CO 66 and develop a strategic, long-term vision for the corridor.

Activities

- Conducted stakeholder interviews
- Conducted Visioning Workshop
- Two Public Meetings
- Technical Advisory Committee Meetings
- Executive Committee Meetings
- Corridor Conditions Report

SH 66 PEL—Re-Introduction



Purpose

Basis for Alternative Development and Screening

Purpose

"SH 66 transportation improvements are to increase safety; reduce traffic congestion; provide managed access for existing and future development; and improve multimodal mobility of people, goods, and services. The improvements should be resilient, accommodate developing technologies, and strive to complement adjacent community context."

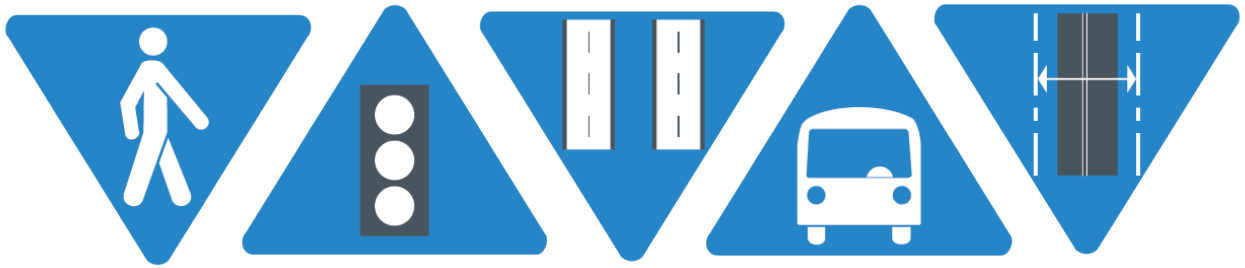
Needs

Safety Management

- *Vehicular*
- *Bicycle*
- *Pedestrian*

Mobility Management

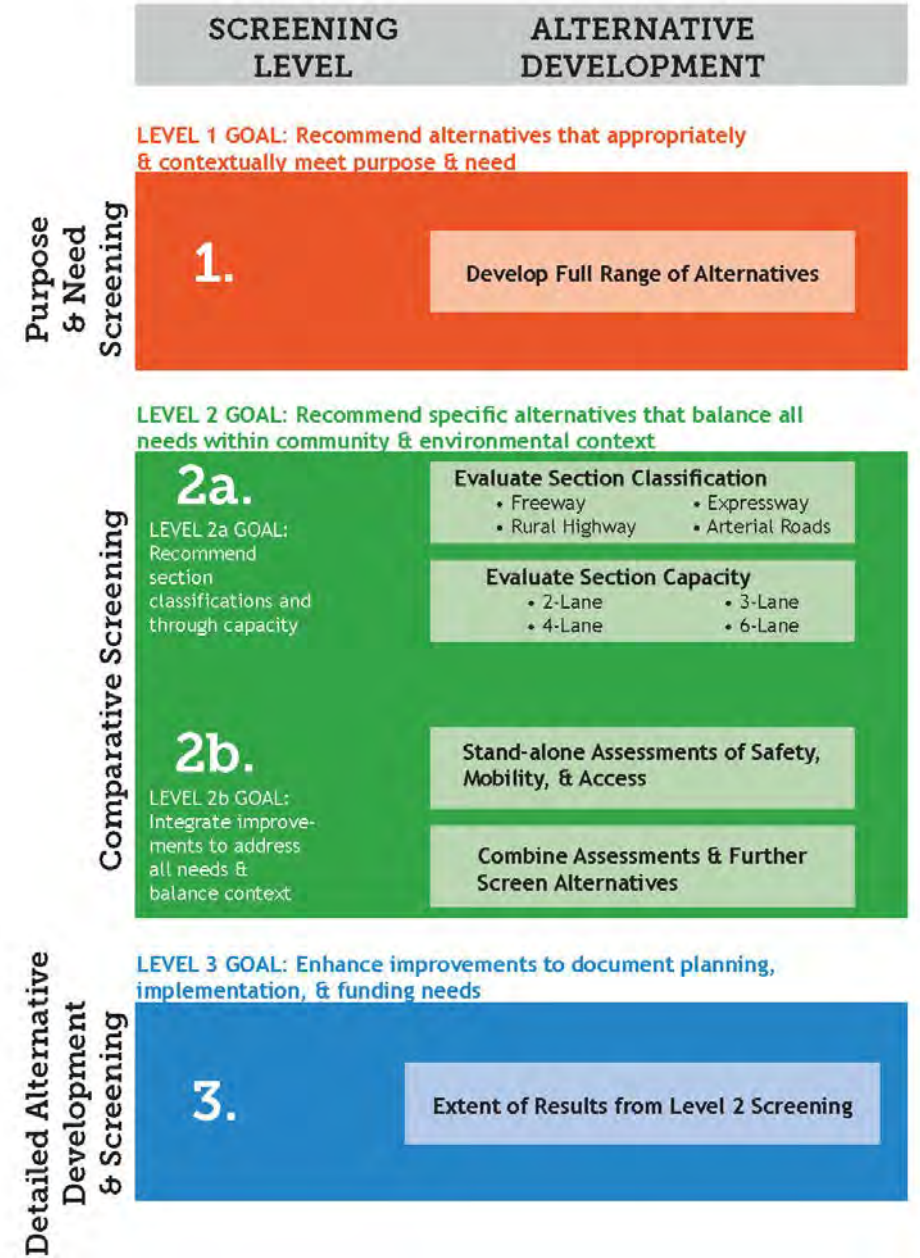
- *Vehicular*
- *Bicycle*
- *Pedestrian*
- *Transit*



Access Management

Alternative Development & Screening

- Development and screening process that initially considers Purpose and Need
- Moves towards more detailed information on Purpose and Need, as well as other criteria, such as community context and environmental resources
- Results in a corridor vision with projects and areas for right-of way preservation



SH 66 Planning and Environmental Linkages Study

Seeking TAC Feedback

Any Land Development Updates?

- Land development changes or new proposals that may affect SH 66

3.1.3 2040 No Action Conditions

Fiscally Constrained 2040 DRCOG Travel Model

The DRCOG travel demand model was used to forecast future traffic volumes along the corridor assuming a future fiscally constrained transportation network, which is considered the 2040 No Action future alternative. This section summarizes what the No Action alternative is and identifies those improvements that would have an impact on the study area.

Key Information

WHO?	Governments and agencies	As described in **Section 2.2**, DRCOG is the metropolitan planning organization (MPO) for the study area. As such, DRCOG is responsible for the Denver region's travel demand model called FOCUS. Committed future transportation projects from the following local, regional, and state governments/agencies are included in the 2040 No Action travel demand model: • CDOT • RTD • Boulder County • Weld County • Town of Firestone • City of Longmont • Town of Lyons • Town of Mead
WHEN?	Base year and No Action year	**Base Year:** 2015 **No Action (Forecast) Year:** 2040
WHAT?	No Action alternative	The No Action alternative assumes no improvements would be made to the corridor and the surrounding transportation network, except those already committed by a government or an agency or those with identified funds for construction, meaning the No Action transportation network is fiscally constrained. **Table 3.9** provides information on fiscally constrained projects implemented in the 2040 No Action travel demand model that might have an impact on the study area. Fiscally constrained projects include road widening (including SH 66 to four lanes from Hover Street to US 287), managed lanes (on I-25), and transit projects that will be constructed regardless of improvements identified by the SH 66 PEL. The No Action alternative assists the study in determining transportation needs along the corridor if no new improvements beyond those in the fiscally constrained plan are implemented and serves as a base against which to compare the impacts of suggested alternatives.
WHERE?	Locations of No Action improvements	**Table 3.9** identifies the locations and extents of each fiscally constrained improvement on or near the corridor.
HOW?	Implementation and purpose	Before the FOCUS regional travel demand model was executed, minor road network changes were implemented to better reflect existing road network elements such as accesses to/from TAZs to the road network, lane corrections, and connectivity corrections. Accesses to/from some TAZs adjacent to the corridor with significant land use growth were slightly altered in the 2040 model to reflect changes in how vehicles might access those zones. No additional road network changes, other than the corrections described previously in the 2015 model, were made in the 2040 model and all fiscally constrained projects were represented. As described in **Section 2.2**, growth from the FOCUS model of traffic volumes between 2015 and 2040 is applied to existing traffic counts along the corridor using a process developed by the National Cooperative Highway Research Program's (NCHRP) Report 765 to develop 2040 forecasted daily traffic volumes on segments and peak hour turning movements at intersections. The results and impacts of this process are presented in the following sections.

Table 3.9 2040 No Action Fiscally Constrained Projects Impacting the Corridor

Facility	To/From	Location	Improvement
Roadway Projects			
SH 66	Hover Street to US 287	Longmont	Widen to 4 lanes
I-25	SH 66 to WCR 38	North I-25	New managed lane, each direction
17th Avenue	Alpine Street to Ute Creek Drive	Longmont	Widen to 4 lanes
East County Line Road	9th Avenue to SH 66	Longmont	Widen to 4 lanes
Nelson Road	75th Street to Affolter Drive	Longmont	Widen to 4 lanes
Pace Street	5th Avenue to SH 66	Longmont	Widen to 4 lanes
Transit Projects			
SH 119	Foothills Parkway to US 287	Boulder / Longmont	New BRT route
Parking	SH 66 & US 287	Longmont	Relocated Park-n-Ride (150 spots)
Station / Parking	SH 119 & US 287	Longmont	New BRT station (439 spots)

LAND USE SENSITIVITY

Over the course of this PEL study, approved land use changes may occur along the study corridor that have not been captured as part of the fiscally constrained FOCUS travel demand model. Those changes could affect the distribution of jobs and households, which ultimately could influence travel patterns and daily traffic volumes. To analyze land use changes not in the base FOCUS model, a sensitivity exercise can be completed to compare results between the FOCUS travel demand model and the sensitivity travel demand model.

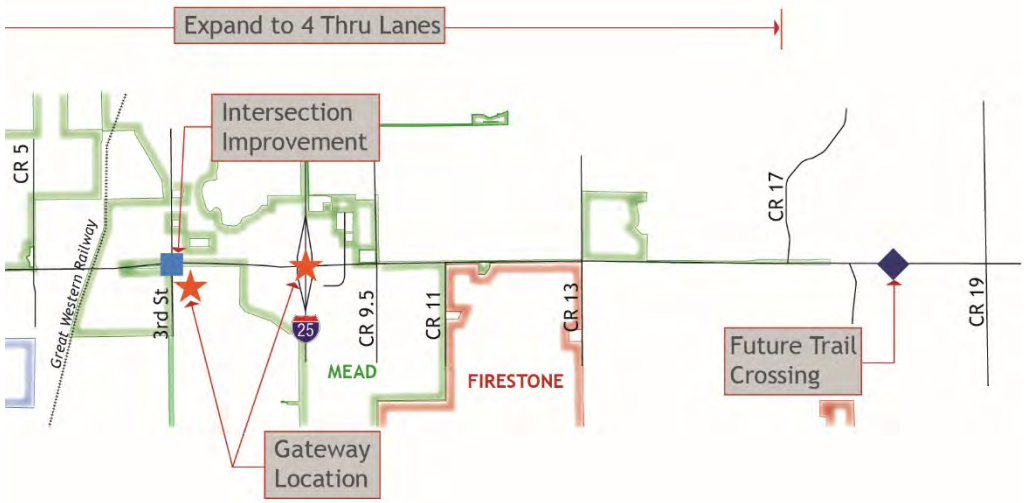
As of spring 2017, the base FOCUS model did not account for updated land uses reflected in the Town of Lyons' *Primary Planning Area Master Plan* (2016) or the City of Longmont's *Envision Longmont* Comprehensive Plan (2015). As a result, a sensitivity scenario was established to reflect approved land uses and their influence on jobs, households, and travel demand. This initial sensitivity scenario added nearly 1,800 households and 2,300 jobs in the Lyons and Longmont areas and shifted where and what type of growth would occur in Longmont.

In comparing the FOCUS model with the sensitivity model, results show an increase in daily traffic on the study corridor between 5 percent and 17 percent. The largest increases resulted between Lyons and 95th Street and between East County Line Road and I-25. Daily traffic on some portions of the study corridor remained equal or decreased slightly.

These observations will be used to compare the effectiveness of alternatives. If an alternative capacity is on the verge of being exceeded, these observations will be used to factor the fiscally constrained 2040 traffic projections during the alternatives screening phase of this PEL study. Similar sensitivity exercises can be completed if other approved land use changes arise as the PEL study progresses.

Any Transportation Project Updates?

- Transportation projects or new proposals that may affect SH 66
- Information will be compiled for update to SH 66 Coalition



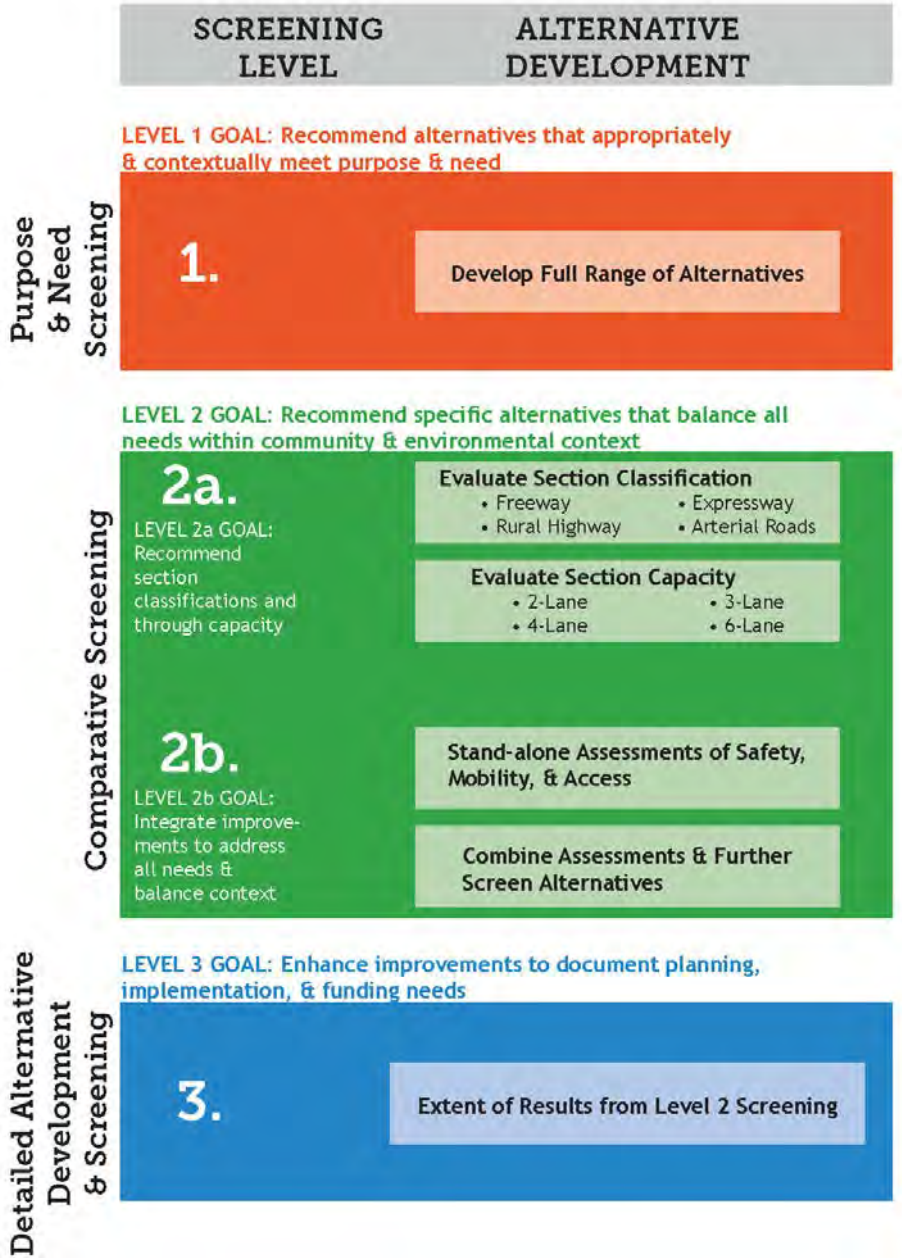
Any changes to TAC and EC Members?

SH 66 Planning and Environmental Linkages Study

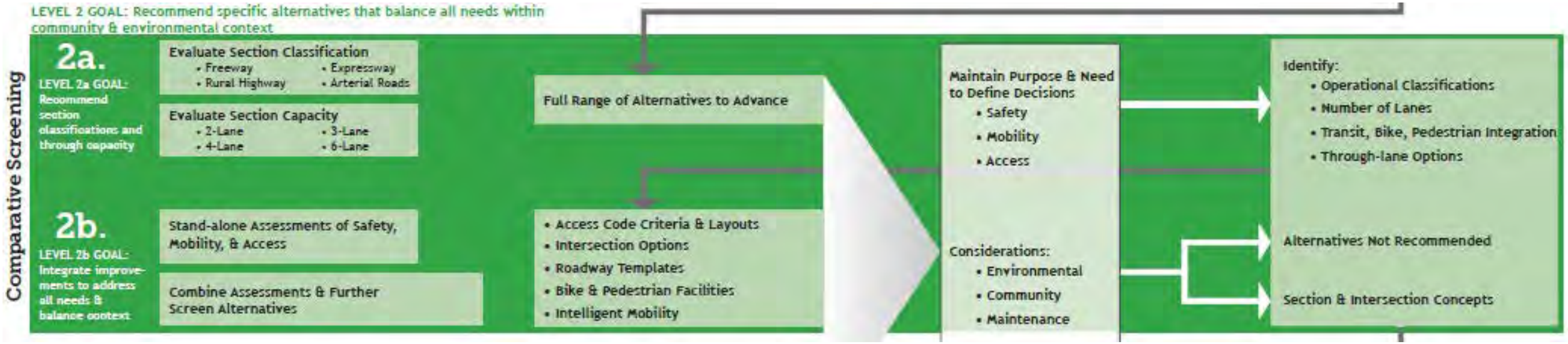
Alternative Development & Screening

- Completed Level 1 Screening
  - 36 unique alternatives evaluated
  - Three alternatives “Eliminated Through Planning Horizon” (2040)
    - *Commuter Rail*
    - *Light Rail*
    - *Separate Transit Guideway*
  - One alternative “Eliminated”
    - *Realign SH 66 to the South (West of I-25)*

- Completed Level 2a Screening
  - Presented preliminary results at the last TAC Meeting
  - Final Level 2a Screening today



Level 2a Screening – Comparative Screening

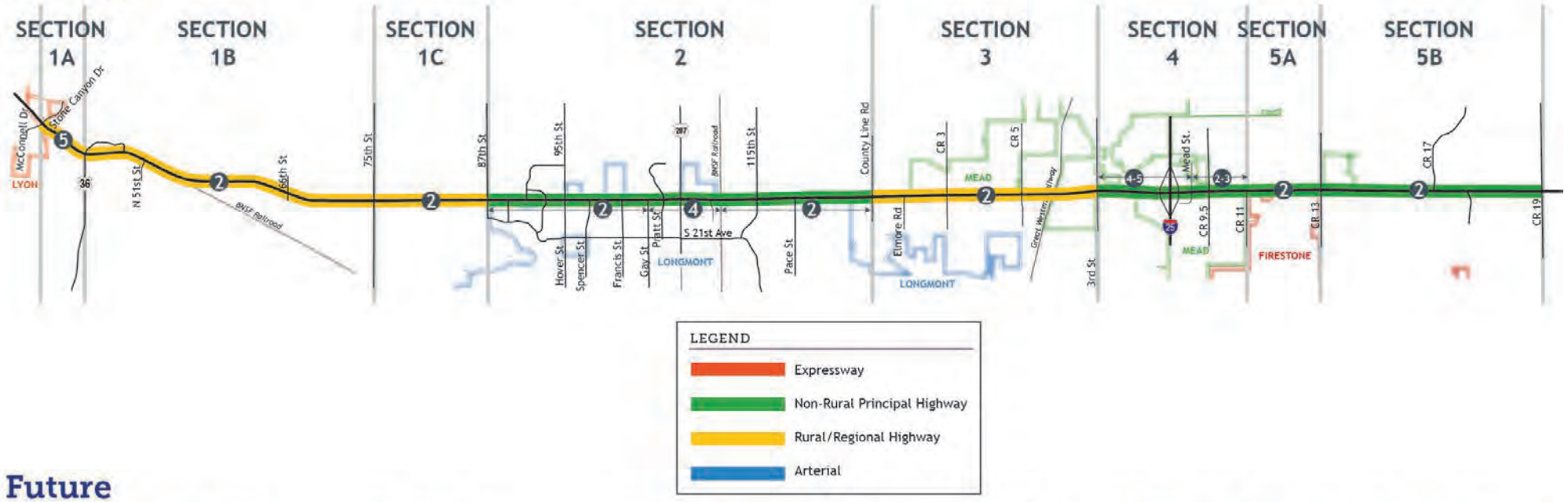


Level 2a Only

- ***GOAL – Recommend Section Classification and Through Capacity***
- Evaluated alternatives against
  - Safety—Vehicular, Pedestrian, Bicycle
  - Mobility—Vehicular, Pedestrian, Bicycle, Transit
  - Access
  - Community Context
  - Environmental Considerations

Level 2a Screening Results

Existing



Future

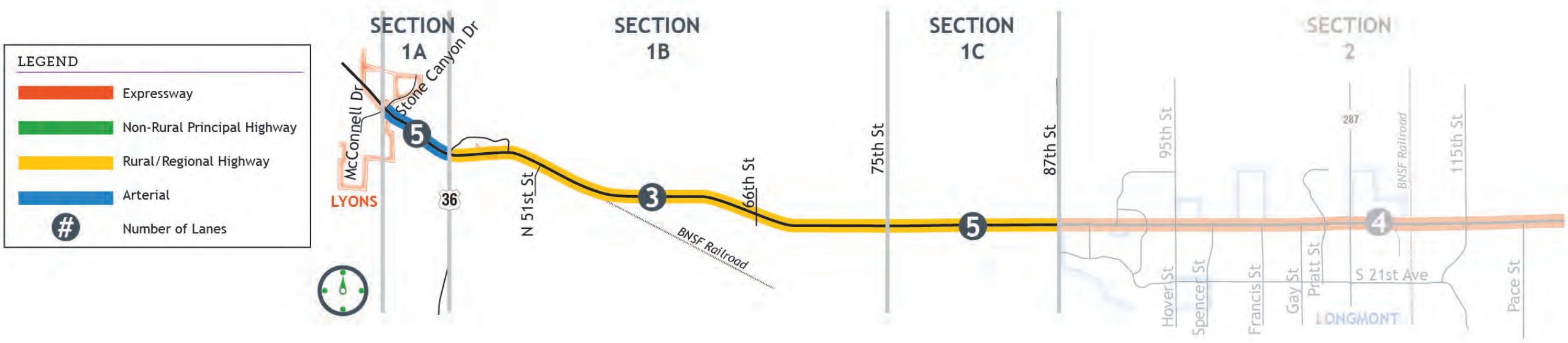
Level 2a Screening—Detailed Table

Section	Alternative	Safety			Mobility							Access	Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
		Vehicle	Bicycle	Pedestrian	Vehicle					Bicycle	Pedestrian						
		Does the alternative result in lower than average crash rates for like-facilities (1.15 rural, 1.5 urban)?	Does the alternative reduce the potential for bicycle / vehicle crashes?	Does the alternative create opportunities for safer pedestrian connections?	Does the alternative provide sufficient capacity to handle travel demand in 2040?		Does the alternative achieve future travel time objectives? (Goal TTI = 1.25)		Does the alternative enhance and / or allow current and planned transit service?	Does the alternative provide increased alternatives for bicycle mobility?	Does the alternative create enhanced pedestrian connectivity along and across SH 66?	Does the alternative allow for strategic access consolidation?	Does the alternative match the surrounding community context?	Does the alternative minimize community impacts?	Does the alternative avoid substantial impacts to natural environment and cultural resources?		
					AM	PM	AM (EB/WB)	PM (EB/WB)									
1A - McConnell Dr. – US 36	No Action (Regional Highway) - 4 lanes	No	No: Even with bike lanes, the speed limit and number of lanes create a high-stress environment.	No: High speed and infrequent safe crossings via signals or other treatments.	0.32	0.38	1.25 / 1.18	1.43 / 1.17	Maybe: Allows but does not provide enhanced services in the future with limited pedestrian and stop facilities.	No: Infrequent safe crossings via signals or other treatments in an area with existing and planned development.	No: Infrequent safe crossings via signals or other treatments in an area with existing and planned development.	Maybe	Yes	Yes	Yes	Not Recommended	
	Standard Expressway (R-A or R-B) - 4 lanes	Maybe: With grade separations and no driveway access	Maybe: High speed creates a high-stress environment, but crossings are safer with grade separations and fewer accesses to cross.	Maybe: High speed creates a high-stress environment, but crossings are safer with grade separations.	0.22	0.26	1.30 / 1.23	1.44 / 1.19	Maybe: If add some type of bike/ped crossing and transit facilities.	Maybe: With grade separation, but reduces with less frequent crossings.	Maybe: With grade separation, but reduces with less frequent crossings.	No	No	Maybe	Maybe: Changing travel capacity and/or access spacing could affect the St. Vrain floodplain/ floodway, potential wetlands, Preble's meadow jumping mouse (PMJM) and bald eagle habitat, adjacent parks, proposed trails, utilities, noise sensitive areas, hazardous material sites, visual resources, and historic (canals and a structure) or potentially historic sites. Resource impacts could be avoided, minimized, or mitigated to avoid substantial impact.	Not Recommended	Need to enhance the intersection at US 36 to accommodate faster traffic and longer queues for EB AM.

Level 2a Screening—Summary Table

Section	Alternative	Summary of Results	Justification	Additional Comments
1A - McConnell Dr. — US 36	No Action (Regional Highway) - 4 lanes	Not Recommended	Carried forward for a baseline comparison, even though it does not improve safety or bicycle/pedestrian mobility.	
	Standard Expressway (R-A or R-B) - 4 lanes	Not Recommended	Despite improving vehicular mobility and potentially improving safety, not recommended because it does not allow for strategic access consolidation or fit the community context.	Need to enhance the intersection at US 36 to accommodate faster traffic and longer queues for eastbound AM.
	Enhanced Arterial (NR-A) - 5 lanes	Not Recommended	Not recommended because sufficient improvements can be made to mobility and safety, while having a smaller cross-section that better matches the community context.	The delay is longer EB in the PM approaching US 36. Recommend enhancements to the US 36 intersection.
	Enhanced Arterial (NR-A) - 4 lanes	***Carried Forward***	***Carried forward because it best balances the mobility needs, safety, while reducing community impacts because of a smaller cross-section.***	
	Arterial Roadway (NR-B) - 4 lanes	Not Recommended	Not recommended because it does not improve safety as well as other alternatives.	
	Main Street (NR-C) - 5 lanes	Not Recommended	Not recommended because of lower mobility and access management because the number of accesses in this stretch leads to a lower capacity.	

Section 1A


LEGEND
Expressway
Non-Rural Principal Highway
Rural/Regional Highway
Arterial
Number of Lanes
SECTION 1A
SECTION 1B
SECTION 1C
SECTION 2
McConnell Dr
Stone Canyon Dr
LYONS
36
N 51st St
66th St
75th St
87th St
95th St
BNSF Railroad
287
115th St
Hover St
Spencer St
Francis St
Gay St
Pratt St
S 21st Ave
LONGMONT
Pace St

Section 1A—Existing (5-Lane Regional Highway)

Section 1A - existing roadway conditions

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connecting & enhancing communities

Section 1A—Proposed (5-Lane Arterial)

Section 1A - Proposed roadway conditions

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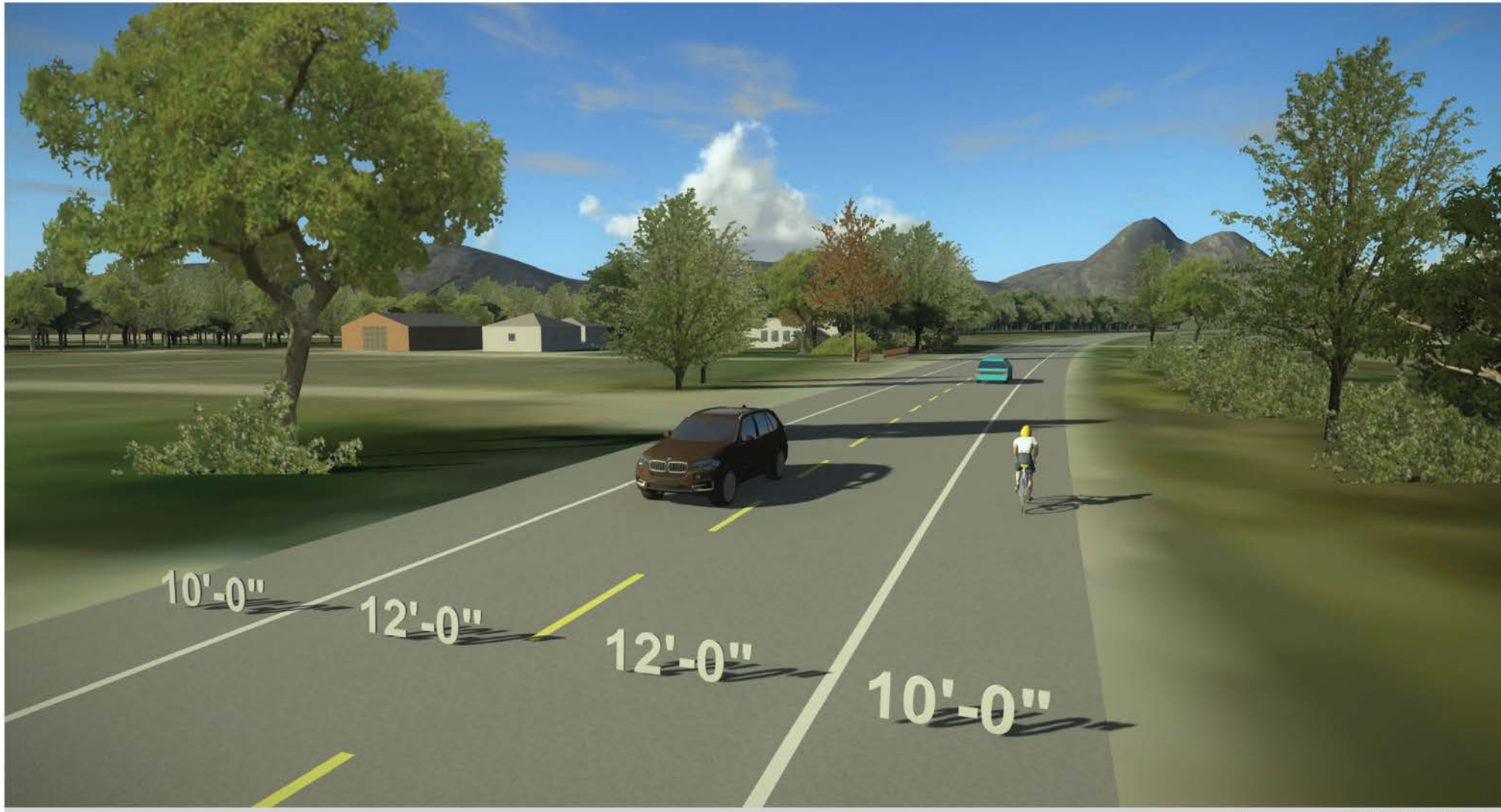
Section 1B


LEGEND
Expressway
Non-Rural Principal Highway
Rural/Regional Highway
Arterial
Number of Lanes
SECTION 1A
SECTION 1B
SECTION 1C
SECTION 2
McConnell Dr
Stone Canyon Dr
LYONS
36
N 51st St
66th St
75th St
87th St
95th St
115th St
287
BNSF Railroad
Hover St
Spencer St
Francis St
Gay St
Pratt St
S 21st Ave
LONGMONT
Pace St

Section 1B—Existing (2-Lane Regional Highway)



Section 1B - existing roadway conditions

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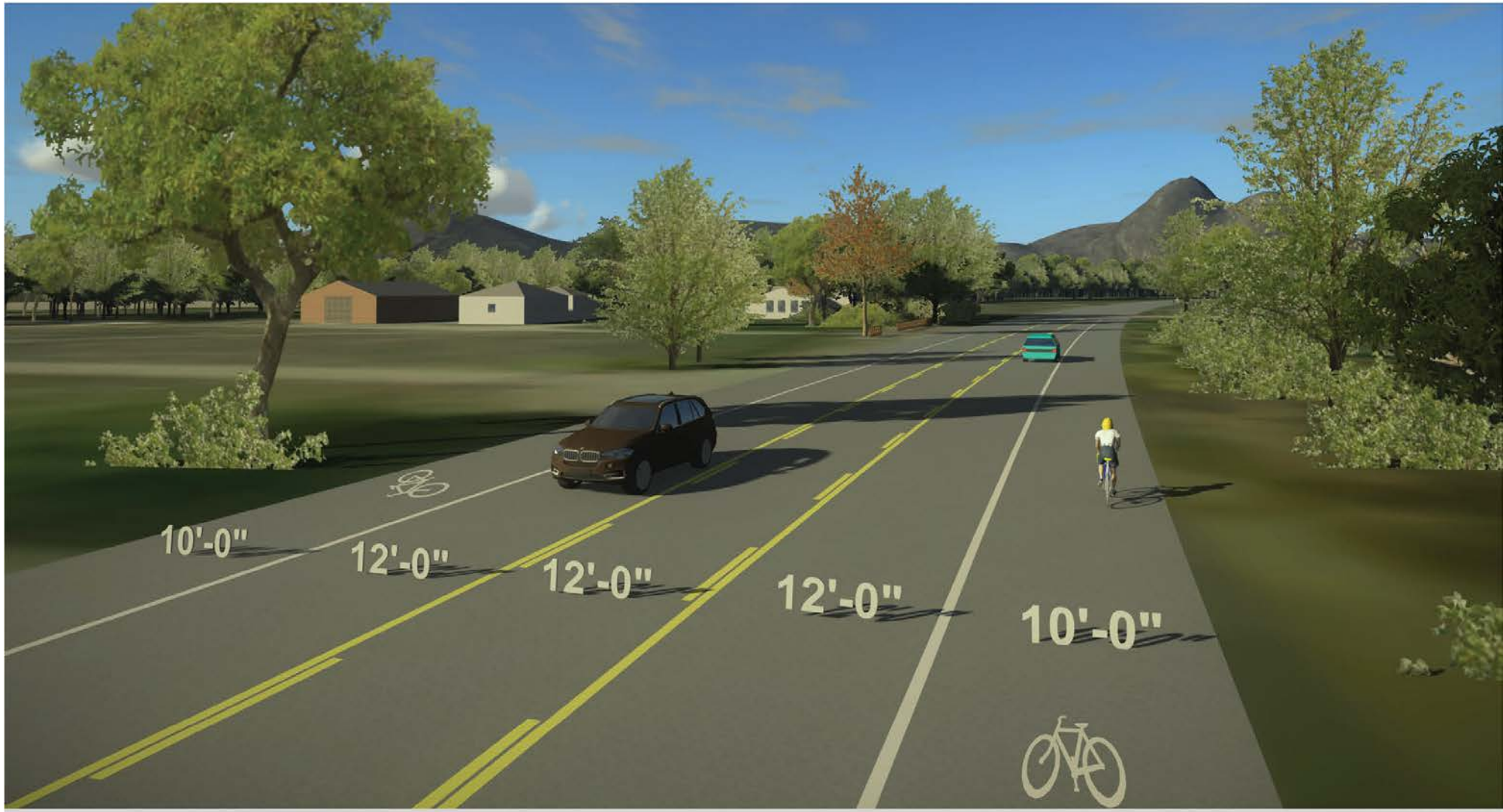
connecting & enhancing communities

Section 1B—Proposed (2-Lane + Turn Lane Regional Highway)



Section 1B - Proposed roadway conditions

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connecting & enhancing communities

Section 1C


LEGEND
Expressway
Non-Rural Principal Highway
Rural/Regional Highway
Arterial
Number of Lanes
SECTION 1A
SECTION 1B
SECTION 1C
SECTION 2
McConnell Dr
Stone Canyon Dr
LYONS
36
N 51st St
66th St
75th St
87th St
95th St
115th St
BNSF Railroad
287
Hover St
Spencer St
Francis St
Gay St
Pratt St
S 21st Ave
LONGMONT
Pace St

Section 1C—Existing (2-Lane Regional Highway)

Section 1C - existing roadway conditions

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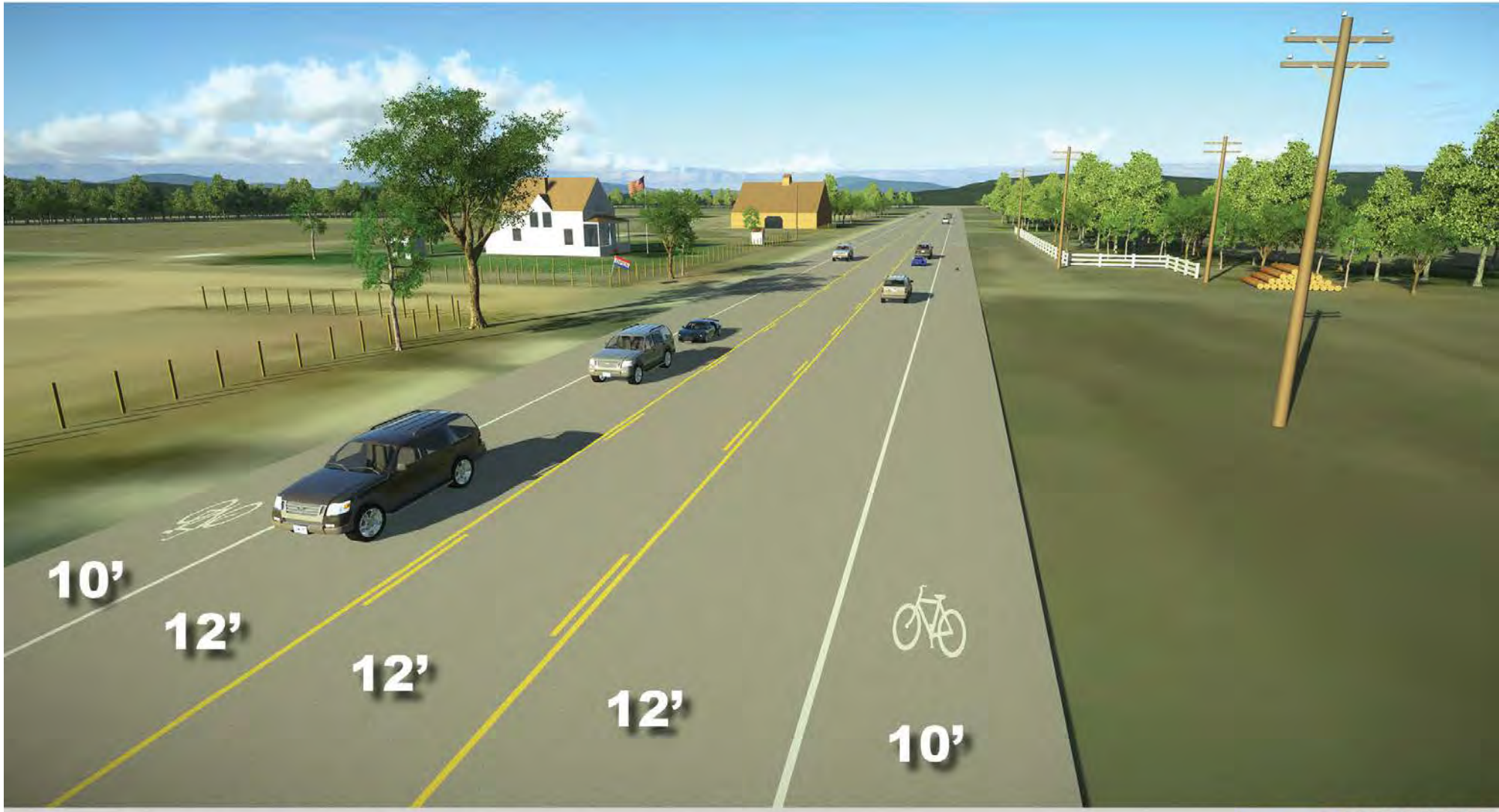
Section 1C—Proposed (2-Lane + Turn Lane Regional Highway)



Section 1C - Proposed roadway conditions

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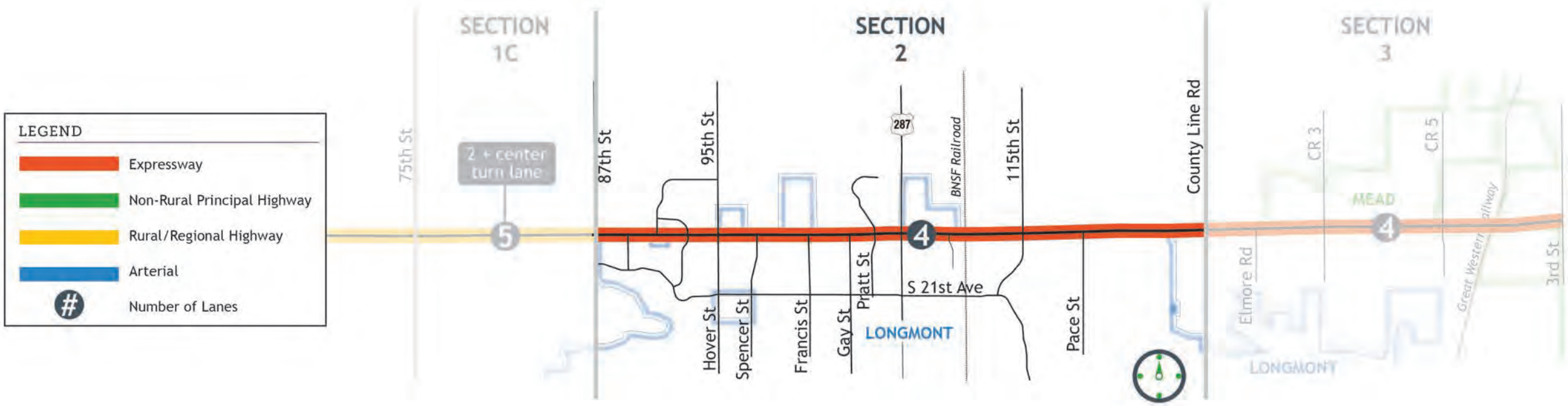
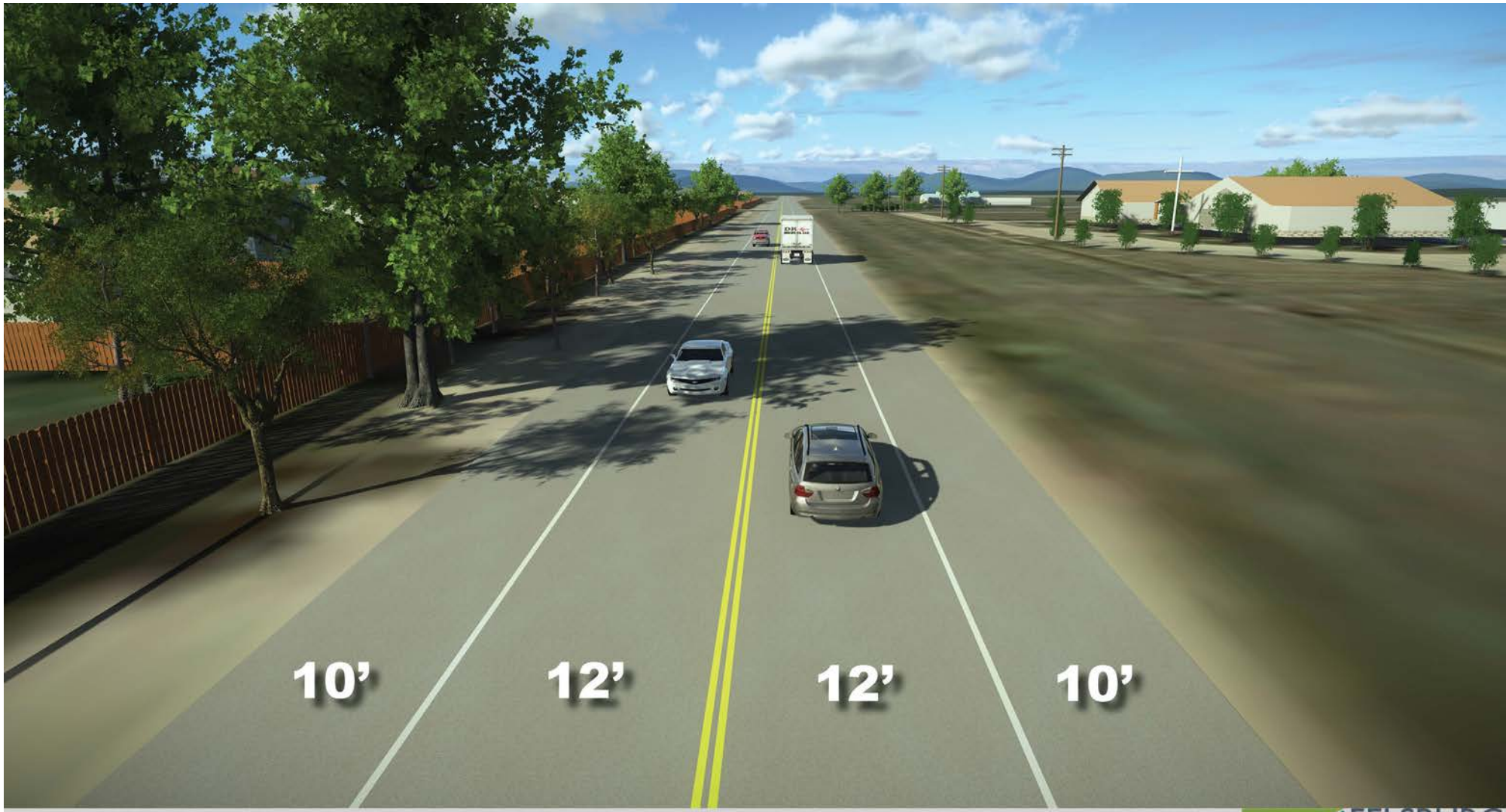
Section 2


LEGEND
Expressway
Non-Rural Principal Highway
Rural/Regional Highway
Arterial
Number of Lanes
SECTION 1C
SECTION 2
SECTION 3
75th St
2 + center turn lane
87th St
95th St
287
BNSF Railroad
115th St
County Line Rd
CR 3
CR 5
MEAD
Great Western Railway
3rd St
Elmore Rd
Hover St
Spencer St
Francis St
Gay St
Pratt St
S 21st Ave
LONGMONT
Pace St
LONGMONT

Section 2—Existing (2/4-Lane Principal Highway)



Section 2 - existing roadway conditions

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Section 2—Proposed (4-Lane Expressway)

Section 2 - Proposed roadway conditions

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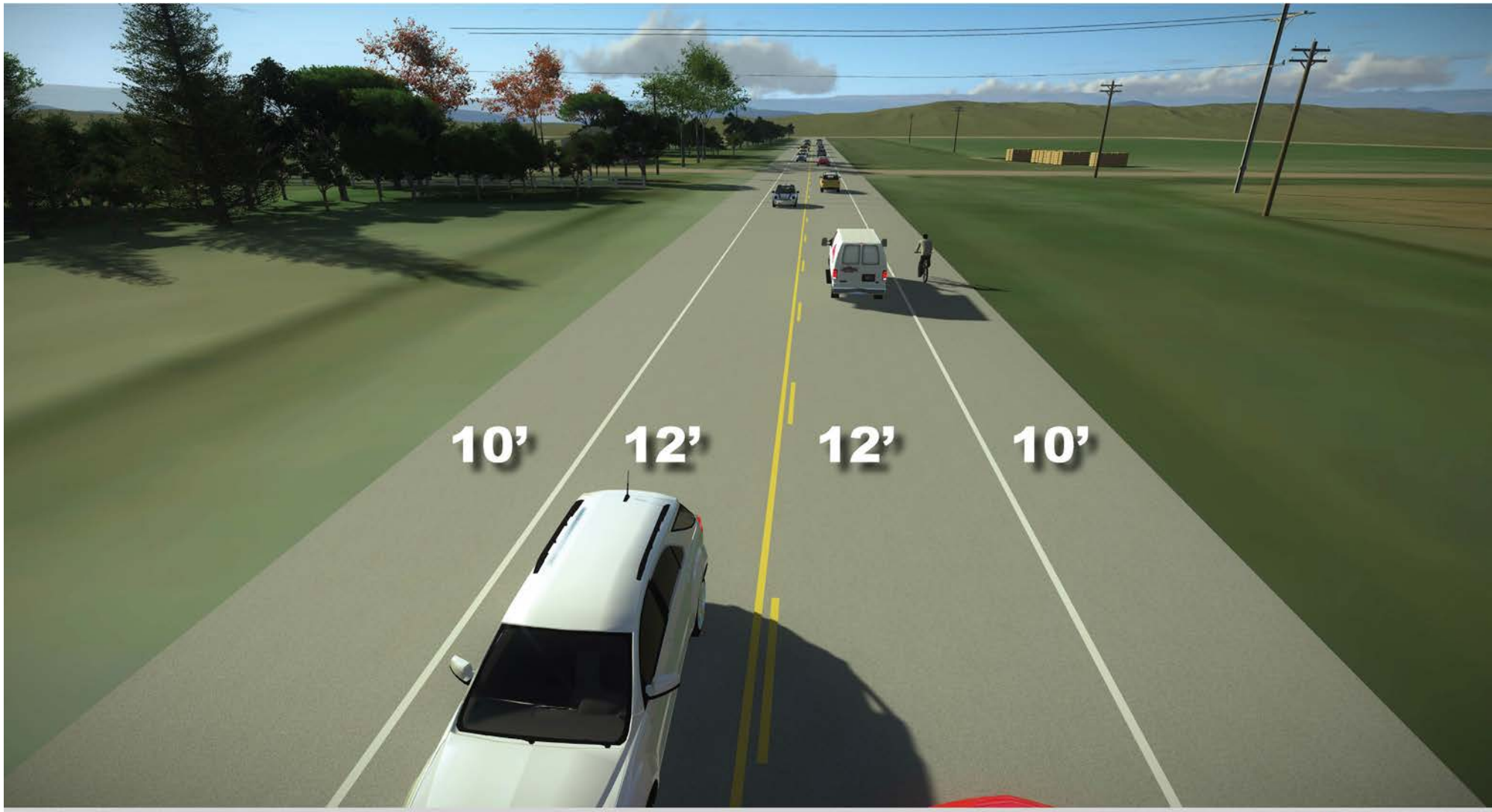
Section 3


LEGEND
Expressway
Non-Rural Principal Highway
Rural/Regional Highway
Arterial
Number of Lanes
SECTION 2
SECTION 3
SECTION 4
87th St
95th St
287
BNSF Railroad
115th St
County Line Rd
CR 3
CR 5
MEAD
Great Western Railway
Mead St.
CR 9.5
CR 11
Hover St
Spencer St
Francis St
Gay St
Pratt St
S 21st Ave
LONGMONT
Pace St
Elmore Rd
3rd St
LONGMONT
MEAD

Section 3—Existing (2-Lane Regional Highway)



Section 3 - existing roadway conditions

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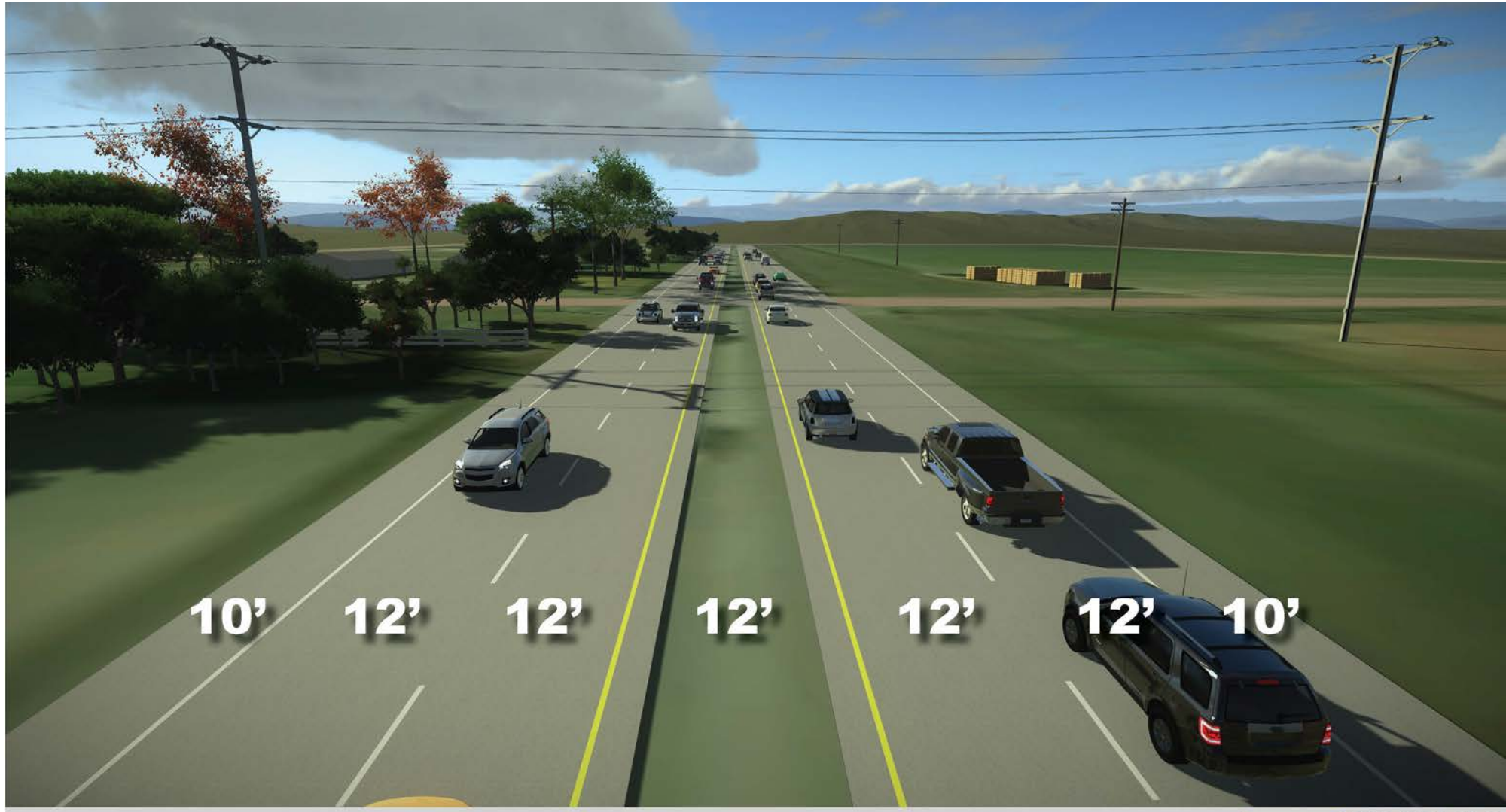
Section 3—Proposed (4-Lane Expressway)



Section 3 - Proposed roadway conditions

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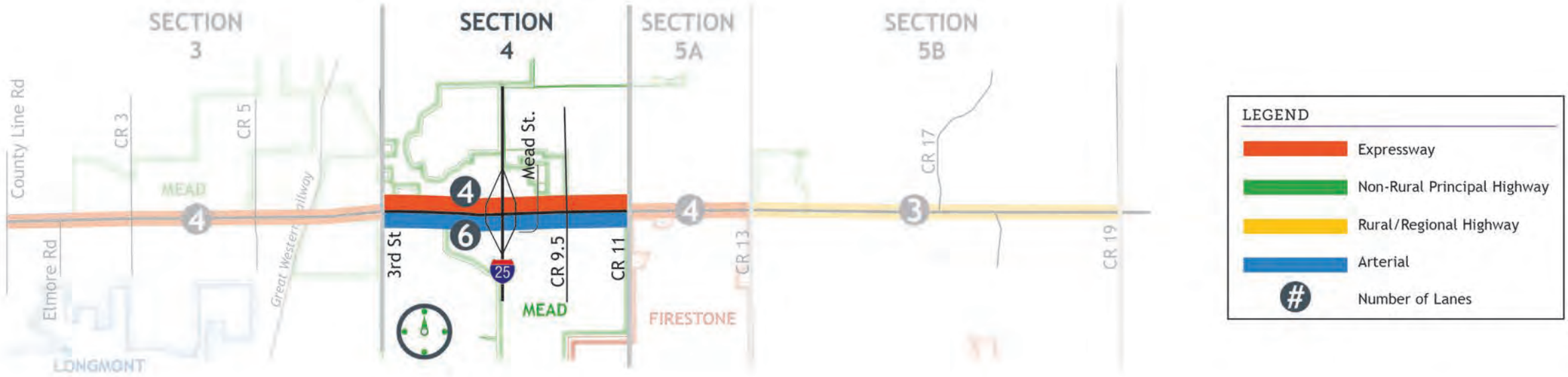
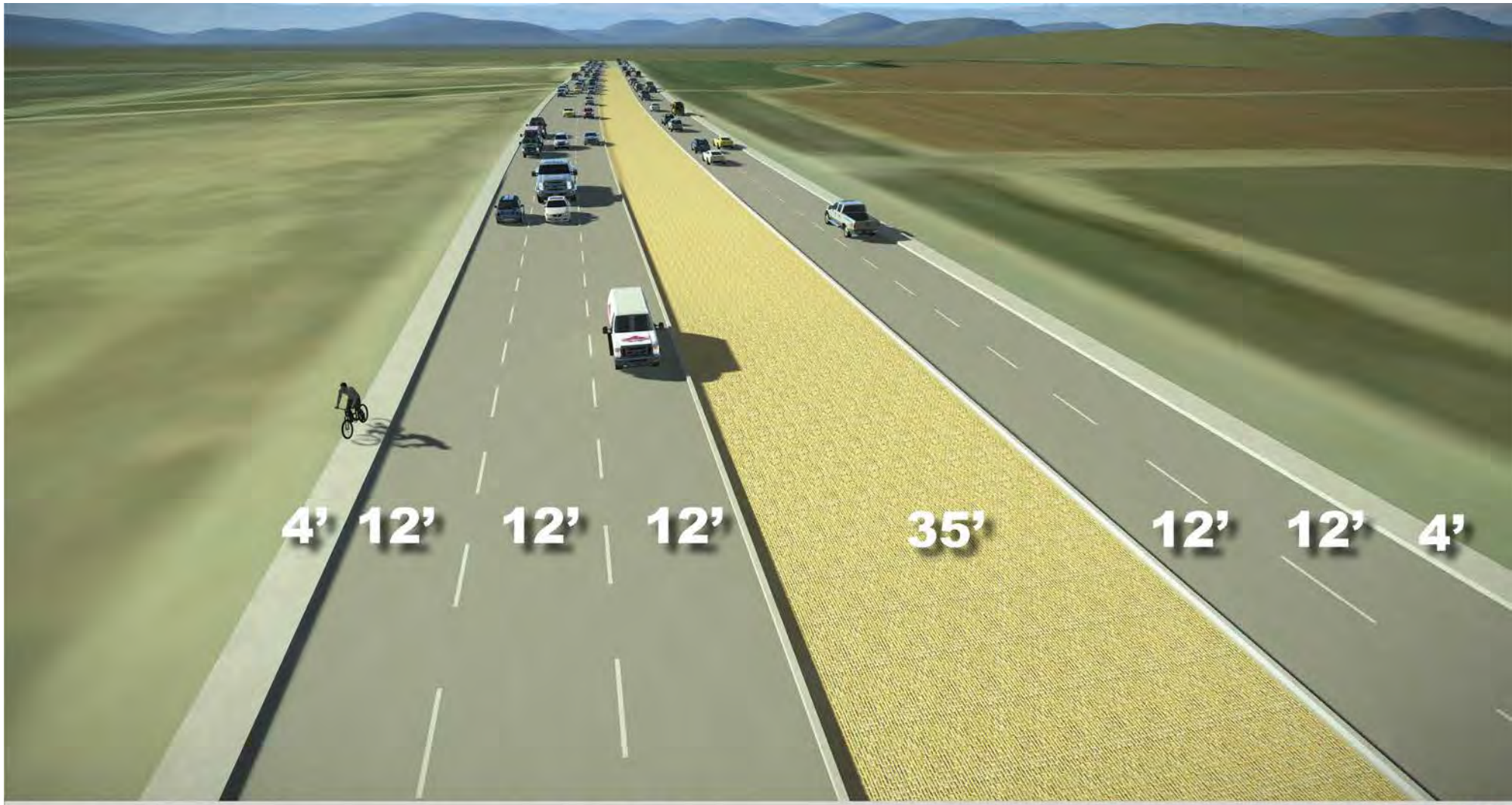
Section 4


SECTION 3
SECTION 4
SECTION 5A
SECTION 5B
County Line Rd
CR 3
CR 5
MEAD
Great Western Railway
Elmore Rd
LONGMONT
3rd St
Mead St.
CR 9.5
CR 11
MEAD
FIRESTONE
CR 13
CR 17
CR 19
LEGEND
Expressway
Non-Rural Principal Highway
Rural/Regional Highway
Arterial
Number of Lanes

Section 4—Existing (2/4-Lane Principal Highway)



Section 4 - existing roadway conditions

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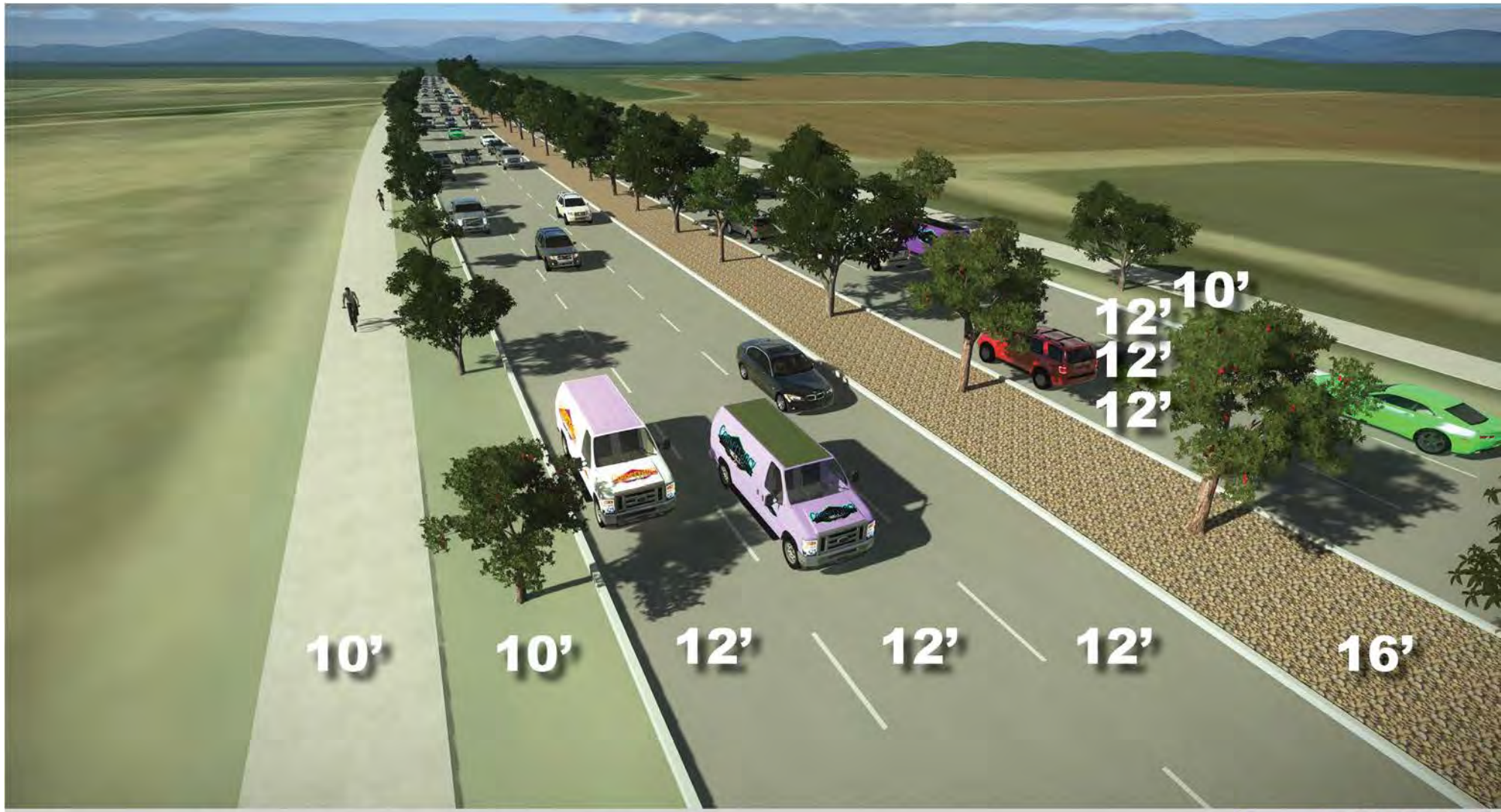
Section 4—Proposed (6-Lane Arterial)



Section 4 - Proposed roadway conditions

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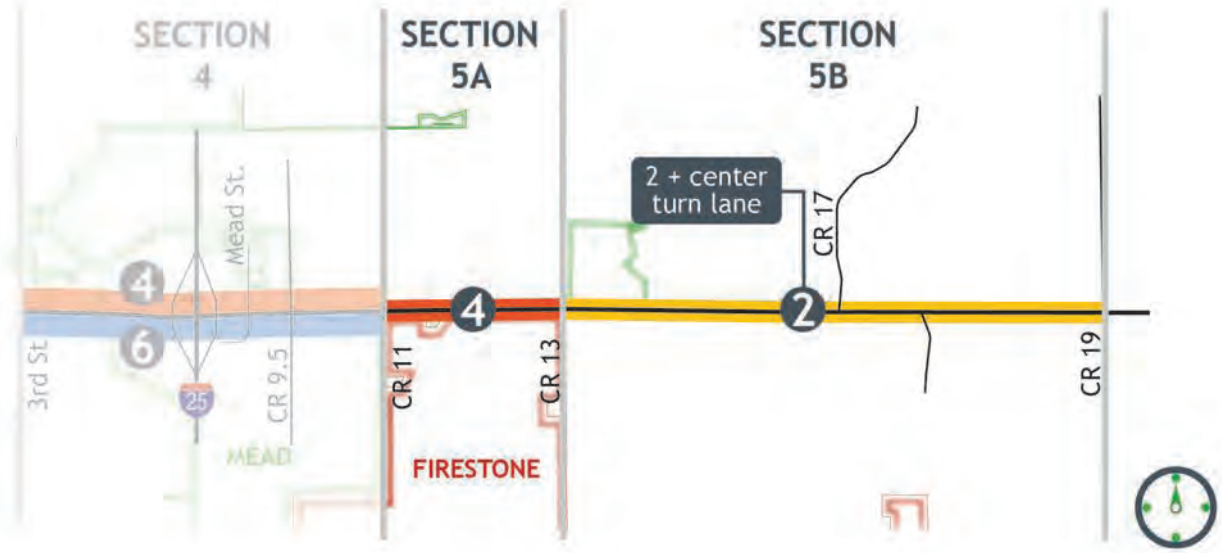
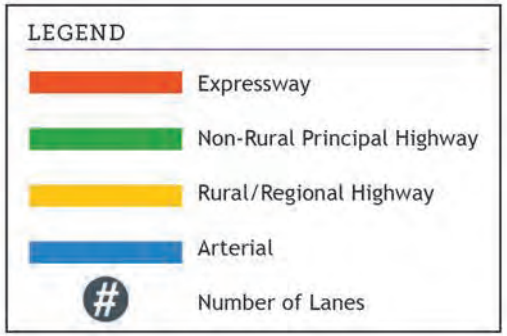
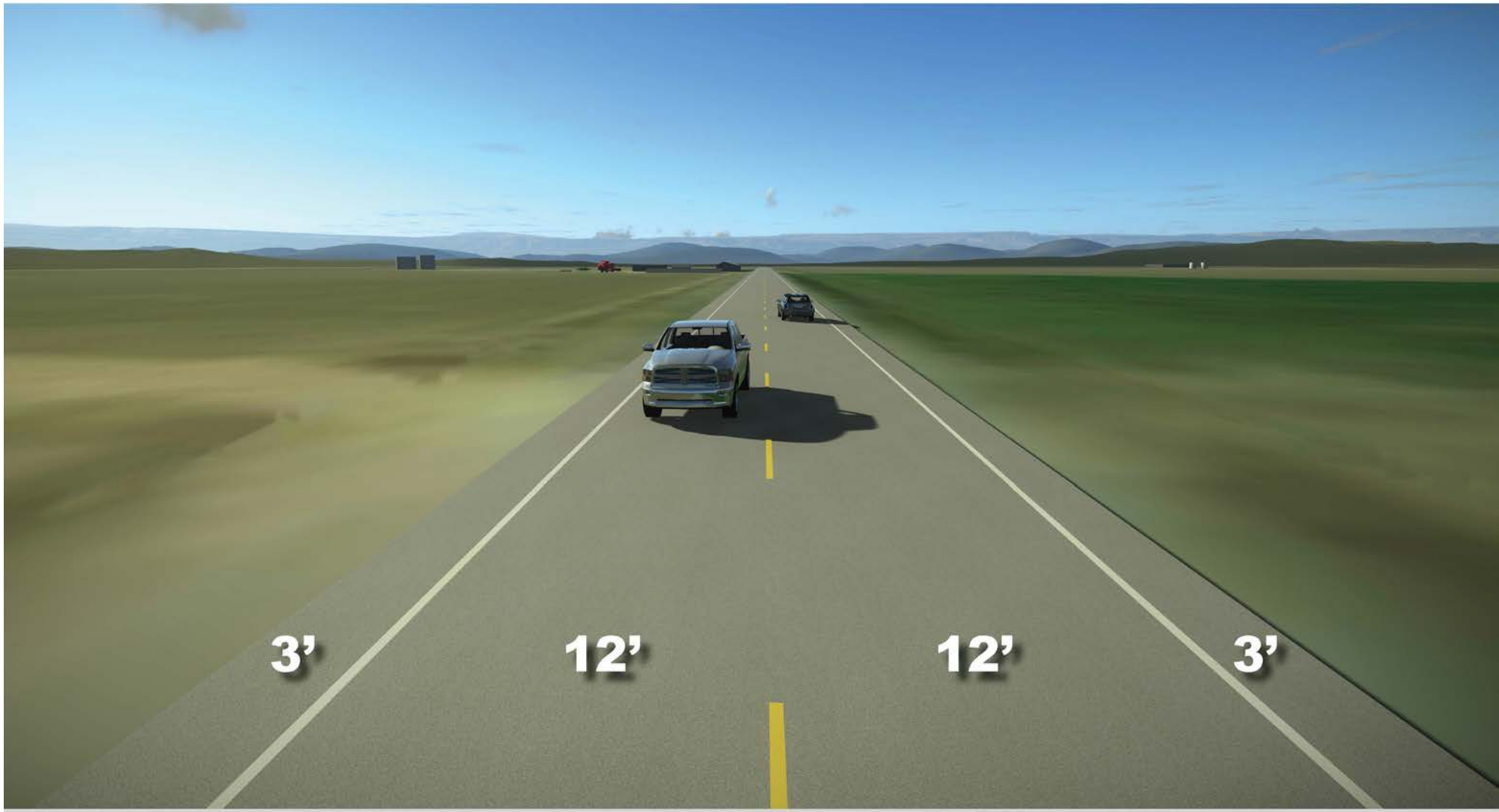
Section 5A


SECTION 4
SECTION 5A
SECTION 5B
2 + center turn lane
Mead St.
CR 17
4
6
25
3rd St
CR 9.5
MEAD
CR 11
CR 13
FIRESTONE
CR 19
4
2


LEGEND
Expressway
Non-Rural Principal Highway
Rural/Regional Highway
Arterial
#
Number of Lanes

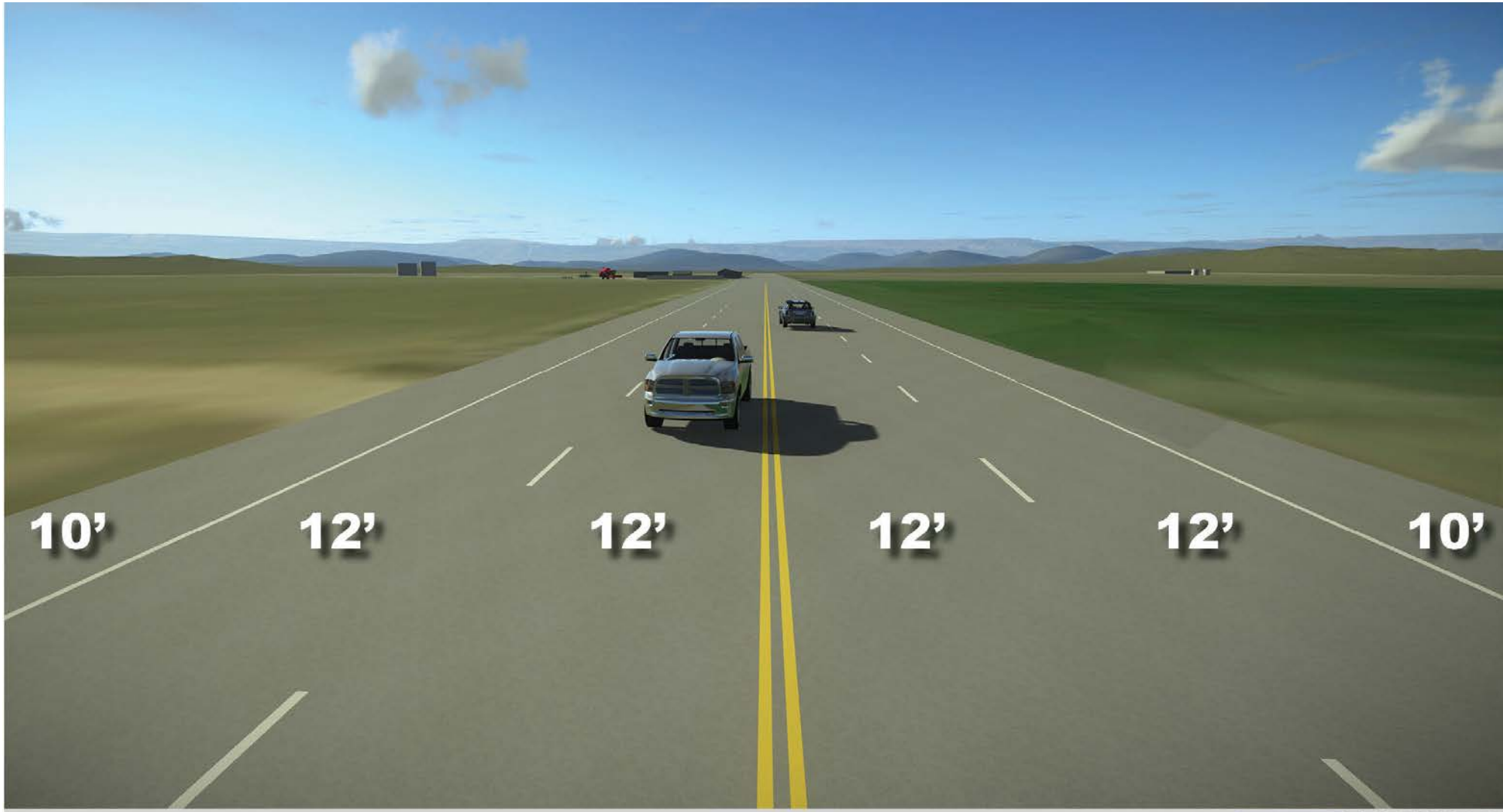
Section 5A—Existing (2-Lane Regional Highway)



Section 5A - existing roadway conditions

FELSBURG HOLT & ULLEVIG
connecting & enhancing communities

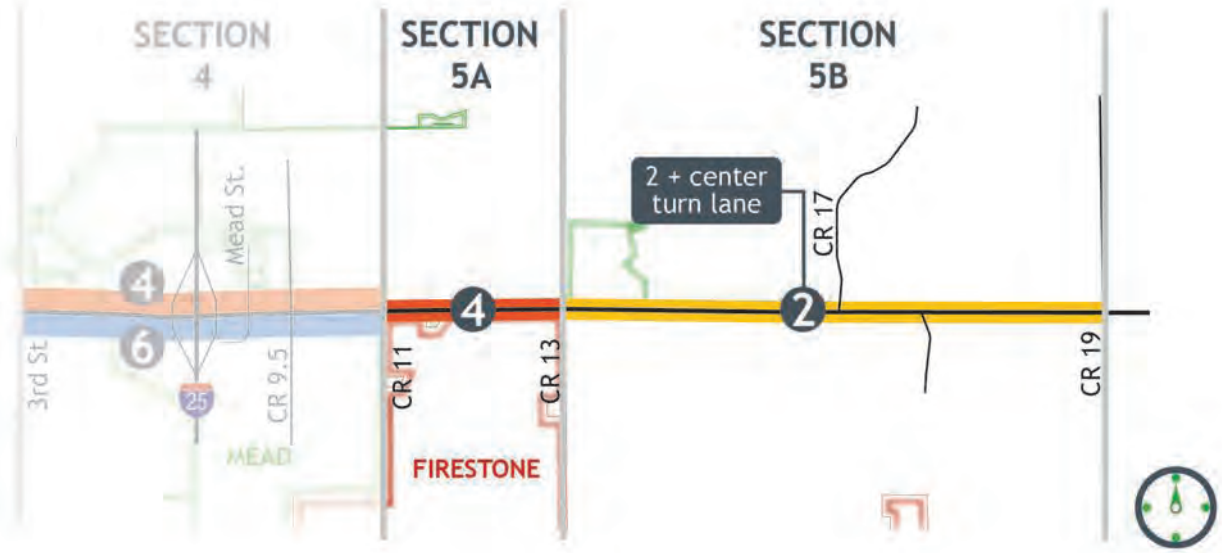
Section 5A—Proposed (4-Lane Expressway)

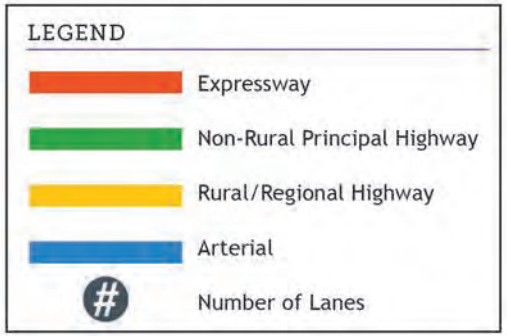


Section 5A - Proposed roadway conditions

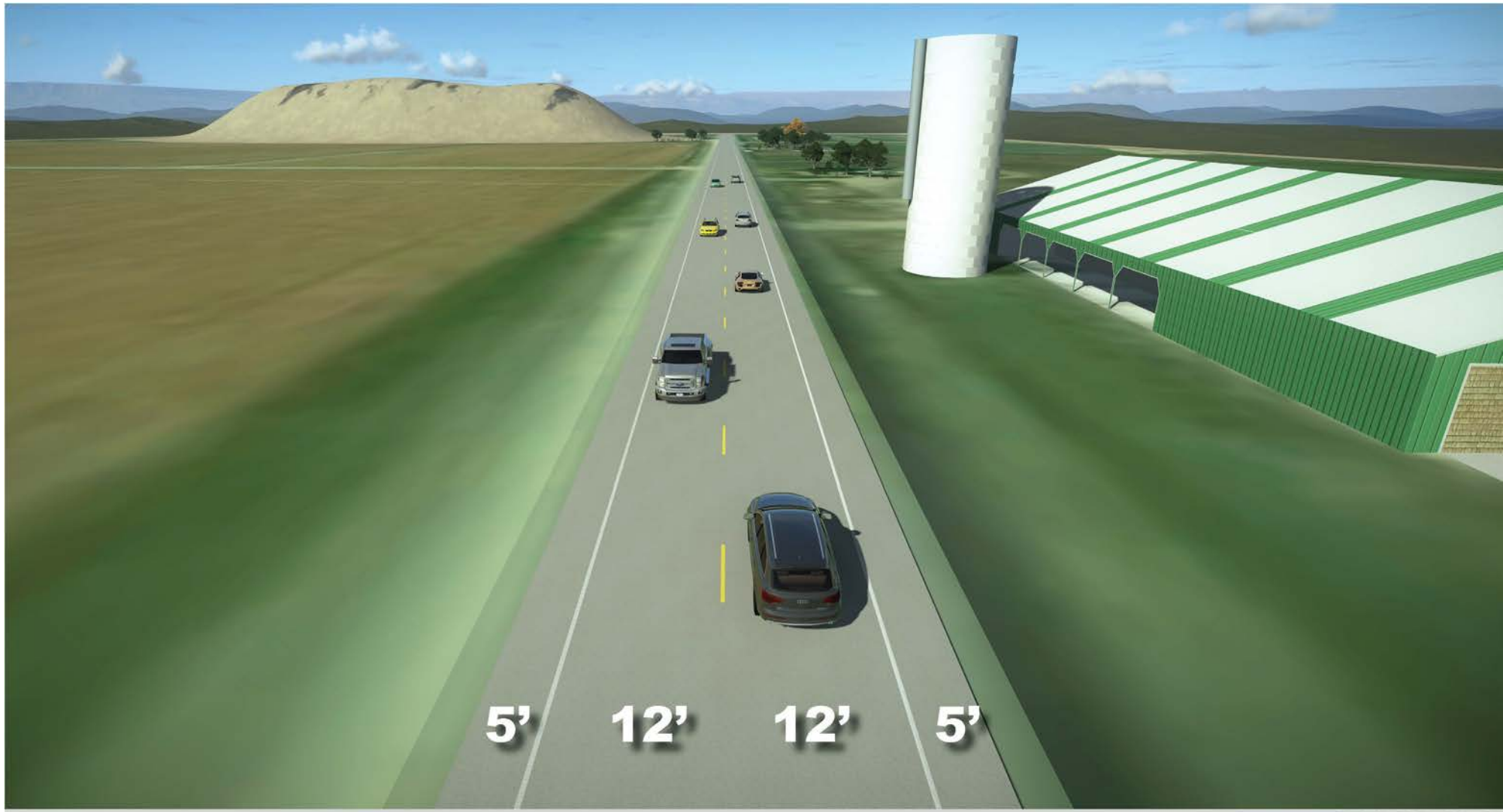
FELSBURG HOLT & ULLEVIG
connecting & enhancing communities

Section 5B


SECTION 4
SECTION 5A
SECTION 5B
2 + center turn lane
Mead St.
CR 17
3rd St
CR 9.5
CR 11
CR 13
CR 19
MEAD
FIRESTONE


LEGEND
Expressway
Non-Rural Principal Highway
Rural/Regional Highway
Arterial
Number of Lanes

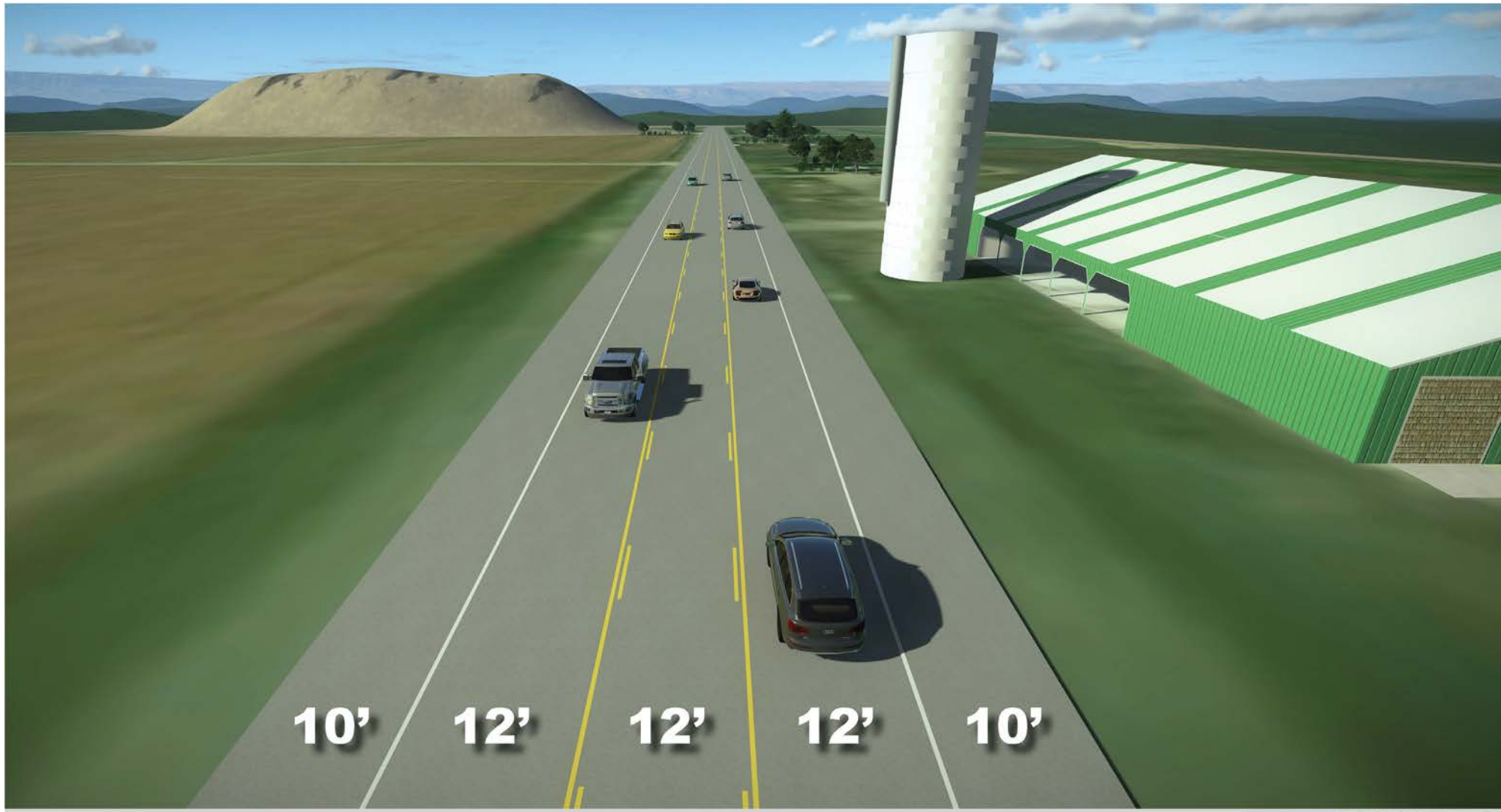
Section 5B—Existing (2-Lane Regional Highway)



Section 5B - existing roadway conditions

FELSBURG HOLT & ULLEVIG
connecting & enhancing communities

Section 5B—Proposed (3-Lane Regional Highway)



Section 5B - Proposed roadway conditions

FELSBURG HOLT & ULLEVIG
connecting & enhancing communities

Level 2B Alternative Development and Screening

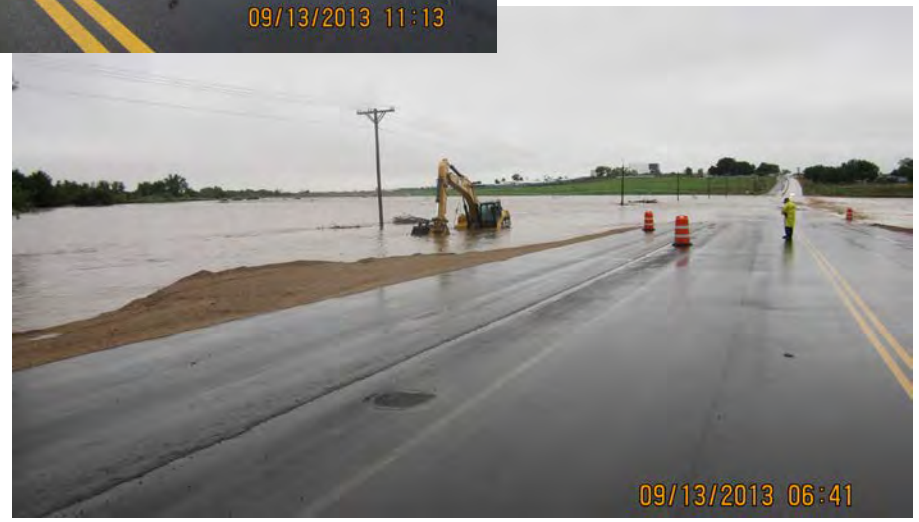
- Focused on Alternative Development first; then screening
- Consider System Level Alternatives
- Consider Intersection level improvements
  - CAP-X Evaluation
- Evaluation effectiveness
- Screen based on:
  - Ability to meet Purpose and Need
    - Safety
    - Mobility
    - Access
  - Consider Goals:
    - Community Context
    - Natural & Built Environment
    - Risk & Resiliancy

SH 66 Planning and Environmental Linkages Study

Risk and Resiliency Updates

Risk and Resiliency Assessment: SH 66 PEL

- Threats
  - Flood
  - Rail proximity
  - Fire and debris flow
- Assets to consider
  - Culverts
  - Bridges
  - Roadway prism
- Outcomes
  - Criticality and owner/user costs
  - Information to inform planning decisions regarding resilient solutions



Risk and Resiliency Overview and Anticipated Next Steps

- Direction from FHWA:
  - Not included as a project Need
  - Included as a Goal—similar to Environmental and Community Context Factors

- Direction from CDOT:
  - Ensure statewide consistency
  - Identify appropriate level of detail for a planning study
  - Provide meaningful analysis for decision making

- Anticipated Next Steps
  - CDOT and FHWA are coordinating to determine an approach
  - Risk assessment is anticipated
  - Resilient design considerations would be deferred to project development phase

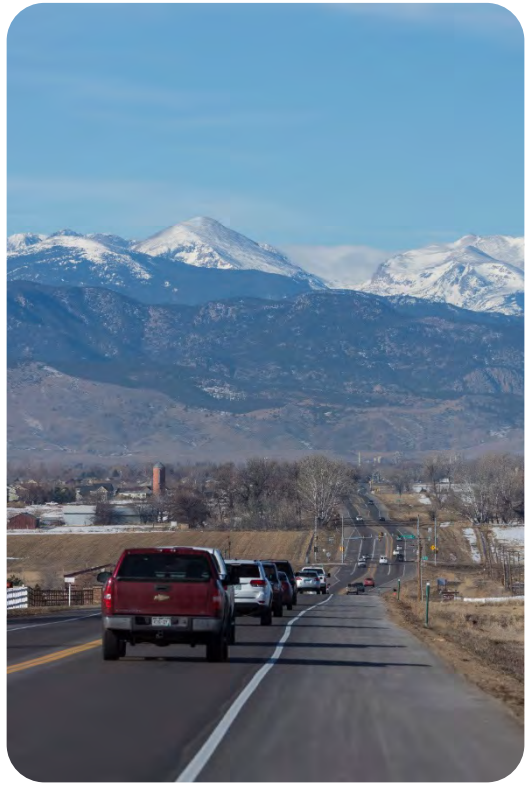
SH 66 Planning and Environmental Linkages Study

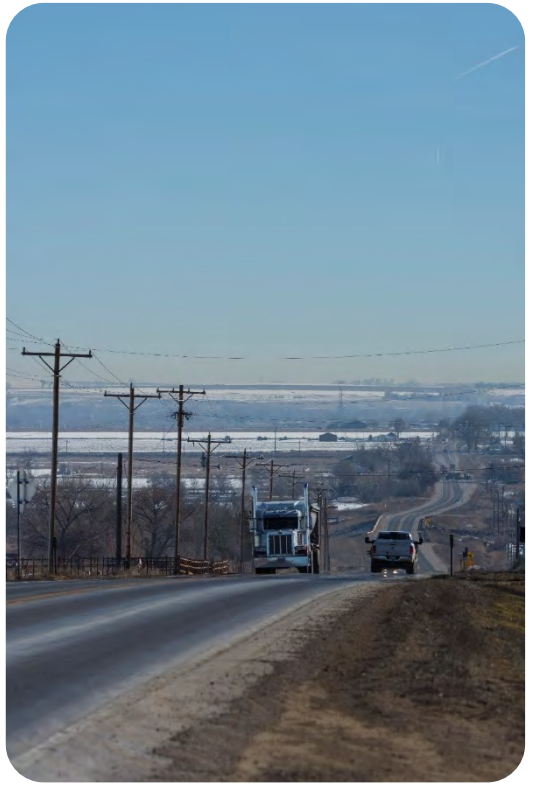
Schedule / Next Steps

Upcoming TAC / EC Schedule

Session	Date	Topics
TAC #5	Early March	Alts Screening Level 2a – Section/operational classifications and capacity
TAC #6	Mid-/late-April	Alts Screening Level 2B – Access, mobility, and safety assessments and section concepts
EC #2	Mid-May	Alts Screening Level 2B – Final Recommendations
TAC #7	Mid-June	Intersection/interchange screening
EC # 3	Mid-July	Recommendations and ACP
TAC #8	Early August	Prioritization and ACP
EC # 4	Early September	Prioritization and ACP
TAC #9	Mid-October	Draft PEL Study Report and ACP
TAC #10	Mid-November	Final PEL Study Report and ACP
EC #5	Mid-December	Final PEL Study and ACP

SH 66 Planning and Environmental Linkages Study





Thank You!

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SH 66 Planning and Environmental Linkages Study

Update to the SH 66 PEL TAC and EC

August 2, 2018

PEL Study Status and Progress

Alternatives Development and Screening

- The project team has worked with FHWA and stakeholders to define the screening process, which includes these primary steps:
  - Level 1 includes a full range of high-level alternatives related to roadway functional classification, roadway capacity, intersection modifications and improvements, roadway alignment, transit service, bicycle and pedestrian facilities, and supporting system alternatives. **Level 1 screening is complete.**
  - Level 2A recommends operational classifications and capacity by roadway section. **Level 2A screening is complete.**
  - Level 2B will include access, mobility, and safety assessments and concepts by section. This level focuses on the corridor/system level first then the intersections. **Level 2B is underway. Project team workshops are scheduled for August. The draft results will be presented at the September TAC meeting.**
  - Level 3 will include section/intersection/interchange configuration screening. **Level 3 evaluation is anticipated Winter/Spring 2019.**

Risk and Resiliency

- At the direction of CDOT Region 4 leadership and with support from the TAC, the project team, FHWA, and Region 4 staff have developed a process for incorporating risk and resiliency into the PEL study.
- The risk and resiliency assessment will provide CDOT and local agencies with information needed to make informed decisions about developing infrastructure that can better withstand extreme weather events and natural hazards, such as flooding.
- The initial discussions regarding risk and resiliency focused on physical threats such as flooding, avalanche, rock fall, etc, and their potential impact on assets such as bridges, pavement, guardrail, etc.
- In addition to physical threats, the project team has worked in coordination with the US 34 PEL team, FHWA, and CDOT HQ, to determine an approach that considers operational threats to ensuring future mobility.
- The goal of the process is to proactively promote balancing trip reliability and strategic access (economic principles), community health and quality of life (social principles), and natural and cultural resource considerations (environmental principles).
- CDOT will work with local agency staff and elected officials to identify how CDOT and the local agencies can collaborate to maintain trip reliability and foster community health in the context of mobility. **The memo which details the proposed approach and the opportunities within Region 4 to achieve operational sustainability will be distributed prior to the Risk and Resiliency Workshop (see below).**

Risk and Resiliency Workshop

- **The project team would like to schedule a workshop with the TAC members to review all of the information related to risk and resiliency to-date.**

- **Proposed workshop date and time: Thursday, August 23, from 10 a.m. to 11:30 a.m.**

Public Involvement

Public Comments

- The project website is still active but receiving minimal comments at this time.
- If you receive additional feedback from your residents, please let a project team member know, and we will work with you to provide an appropriate response.

Technical Advisory Committee

- The next meeting will be held in September 2018, after the Risk and Resiliency Workshop and after the Level 2B screening is complete.
- If your community would like to host the next meeting, please contact Kelly Leadbetter.

Executive Committee

- If the EC member representing your community has changed, please contact Kelly Leadbetter so the project team can proactively transition EC representation prior to the next meeting.
- The next EC Meeting is targeted for October 2018, after the TAC meeting. Level 1, 2A, and 2B, as well as risk and resiliency, will be discussed at this meeting.

SH 66 Planning and Environmental Linkages Study

Technical Advisory Committee (TAC) Risk & Resiliency Workshop

Date and Time: Thursday, August 23, 2018 | 10 a.m. to 11:30 a.m.
Longmont Development Services Center | 385 Kimbark Street, Longmont, CO 80501

Resiliency is the ability of communities to rebound, positively adapt to, or thrive amidst changing conditions or challenges – including disaster and climate change – and maintain quality of life, healthy growth, durable systems, and conservation of resources for present and future generations.

Agenda

Introductions

Background

- Corridor context
- History and overview
- Resiliency for CDOT

Opportunities along SH 66

- Partnerships
- Long-term system operations

Physical Threats

- Risks
- Assets
- Proposed evaluation approach and example
- Application in PEL

Operational Threats

- Step 1: Risk
- Step 2: Vulnerability
- Step 3: Collaboration
- Application in PEL

Next Steps and Schedule

SH 66 Planning and Environmental Linkages Study

Technical Advisory Committee (TAC) Risk & Resiliency Workshop

Date and Time: Thursday, August 23, 2018 | 10 a.m. to 11:30 a.m.
Longmont Development Services Center | 385 Kimbark Street, Longmont, CO 80501

Meeting Summary

Introductions

- Meeting attendees provided self introductions. A sign in sheet is attached.
- Update: Everett Bacon is now with Weld County and will be attending the TAC meetings as a representative for the County.

Background

- Corridor context
  - The corridor is approximately 20 miles long and extends from McConnell Street in Lyons to Weld County Road (WCR) 19.
  - SH 66 from WCR 19 to US 85 is not included in the PEL as it is not in the DRCOG boundary.
- History and overview
  - In September 2013, SH 66 was inundating with flooding, resulting in infrastructure damage and the evacuation routes being impeded.
- Resiliency for CDOT
  - The Colorado Resiliency Working Group has defined resiliency as, "the ability of communities to rebound, positively adapt to, or thrive amidst changing conditions or challenges – including disaster and climate change – and maintain quality of life, healthy growth, durable systems, and conservation of resources for present and future generations".
  - CDOT recently completed the I-70 Corridor Risk and Resiliency Pilot Report, which is a more detailed and quantitative infrastructure assessment. This report was used as a baseline for developing a qualitative planning level process to be used in Region 4 PEL studies, including the SH 66 PEL.
  - Based on collaboration with FHWA and the Colorado Department of Local Affairs, resiliency will be considered a goal in the PEL. This ensures the appropriate level of detail for planning while still providing meaningful analysis for decision-making.

Opportunities along SH 66

- Partnerships
  - A resilient roadway is in the best interest of CDOT and local agencies.
  - CDOT is committed to providing a resilient transportation system that ensures trip reliability while accommodating communities. Local agencies are committed to the long-term success of their communities, which includes the transportation system.
  - This process is an opportunity to proactively balance economics, society, and environment.
  - The recently established SH 66 Coalition is a great starting point for collaboration and where many of the risk and resiliency discussions can take place. Discussions could include:

  - Route redundancy for evacuation
  - Vulnerabilities to trip reliability
  - Future local alternate routes
  - Potential physical and operational improvements
- Long-term system operations – CDOT has a goal of maintaining state highway mobility into 2040 based on MPO growth projections using level of service and/or travel time index goals.

Physical Threats

- Process overview
  - Over the past year, CDOT Region 4 and the SH 66 and US 34 PEL Teams haves collaborated with FHWA and CDOT's Environmental Programs Branch to develop a process for assessing the risk of physical threats and potential resiliency recommendations.
  - Through this collaboration, the SH 66 and US 34 PEL Teams are implementing a consistent risk and resiliency (R&R) process in each respective PEL Study. Recommendations from the PEL R&R assessments will be carried forward to project delivery for potential consideration and implementation as funds become available.
- Threats and Assets
  - The assessment incorporates natural hazards and also other "physical" threats that could impact the highway (e.g., visibility, railroad proximity, etc.).
  - Potential threats and assets are noted on page 17 of the enclosed presentation file.
  - For CDOT, utilities are considered a threat because CDOT does not own or operate the utilities, but the utilities may be in CDOT right of way and could potentially affect highway operations (e.g., if a water main line breaks beneath the highway and temporary road closure becomes necessary).
- Proposed evaluation approach and example
  - The process will incorporate use of quantitative data, but the overall reporting will be qualitative in nature. We will include the back-up data as an appendix to the documentation. A sample matrix is shown on page 19 of the enclosed presentation file.
    - Map ID will correspond with an associated map (see slide 18 of the enclosed presentation file for a sample.
    - Assets in threat areas will be derived from best available data sources (such as research/documentation completed for the SH 66 PEL Corridor Conditions Report, CDOT OTIS data sets, and local community data sets).
    - Infrastructure cost estimates will be derived using CDOT cost tools and project records.
    - User costs (the cost of travel delay) will be calculated using a CDOT tool.
    - Potential consequences and vulnerability will be made based on professional judgements pertaining to the threats and assets.
    - Risk will be calculated based on a quantification of consequence, vulnerability, and threat.
    - Route criticality was mapped already as a statewide effort in the I-70 Pilot Project.

    - A summary and recommendation for resiliency will be made based on findings of the assessment. The recommendations will incorporate social, economic, and environmental benefits.

- Next Steps
    - The project team is working with CDOT on contract updates and will begin the R&R assessment in the near future.
    - The project team has the threat areas identified and will be accounting for them in the Level 2b alternatives screening and documentation as a goal.
    - Once the R&R assessment is complete, we will prioritize the resiliency improvements independently. The R&R prioritization will be considered in the broader PEL Study prioritization process.

Operational Threats

- Process overview
    - Over the past half year, the SH 66 and US 34 PEL Teams have collaborated with CDOT Region 4, FHWA, and CDOT EPB to develop a process for assessing the risk of operational threats in Region 4.
    - Through this collaboration, the SH 66 and US 34 PEL Teams are implementing a consistent operational threats assessment in each respective PEL Study that reflects the context of each corridor.
- Step 1: Risk – Operational Sensitivity
    - The team will assess operational sensitivity on a macro or corridor-wide level to define areas where highway operations may be more sensitive to unanticipated changes.
    - This approach focuses on the resulting sensitivity and will help focus efforts to brainstorm solutions on high risk areas in the transportation system to adjust/react to increases in traffic volumes beyond expected conditions (i.e., MPO projections).
    - More information about the detailed assessment steps and a sample graphic are included on slides 23 and 24 of the enclosed presentation file.
- Step 2: Vulnerability – Operational Threats
    - The team will complete a more detailed threat analysis for the most sensitive and/or high-risk intersections.
    - We will identify locations of vulnerability based on potential discrepancies between existing and proposed land uses, as well as population and employment densities resulting in higher than anticipated traffic volumes.
    - More information about the detailed assessment steps are included on slides 25 and 26 of the enclosed presentation file.
- Step 3: Collaboration – Operational Resiliency
    - If an intersection is projected to be over capacity, CDOT anticipates that operational impacts could result that would affect trip reliability and decrease mobility. As warranted, additional collaboration, discussion, and resiliency measures may occur with local agencies, and action may be taken to address the matters.
    - This step could include workshops to discuss potential solutions, alternate route options, and potential funding sources/cost-sharing opportunities.
    - This assessment will be completed once the PEL recommendations have been developed. Findings will be integrated in the cumulative effects section of the PEL, and the analysis

will inform development of the SH 66 Access Control Plan. Revisions to the analysis will occur periodically to identify potential new developments and to account for MPO updates.

Next Steps and Schedule

- The project team will advance the physical threats risk and resiliency assessment in near term. The operational R&R assessment will be completed after overall PEL recommendations have been developed.
- The next TAC Meeting is scheduled for Thursday, October 18, from 10 a.m. to 12 p.m. and will be held at the Southwest Weld County Services Center.
  - Level 2b draft results will be discussed.

SH 66 Planning and Environmental Linkages Study

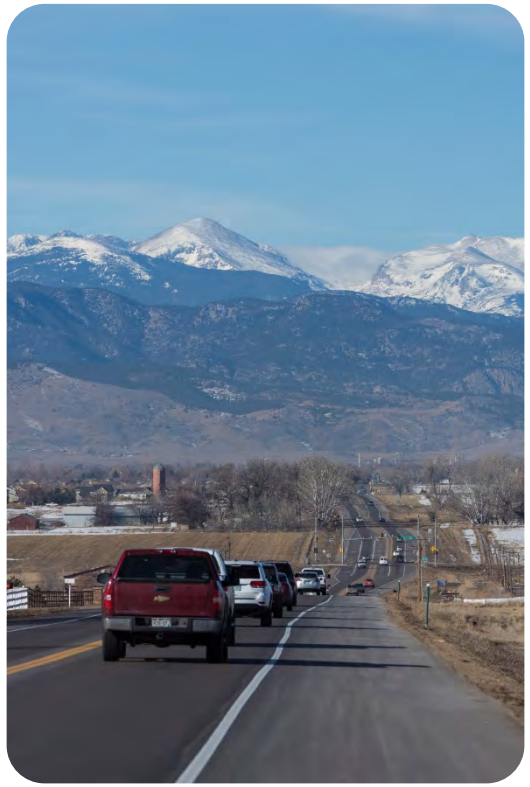
TECHNICAL ADVISORY COMMITTEE (TAC) RISK & RESILIENCY WORKSHOP

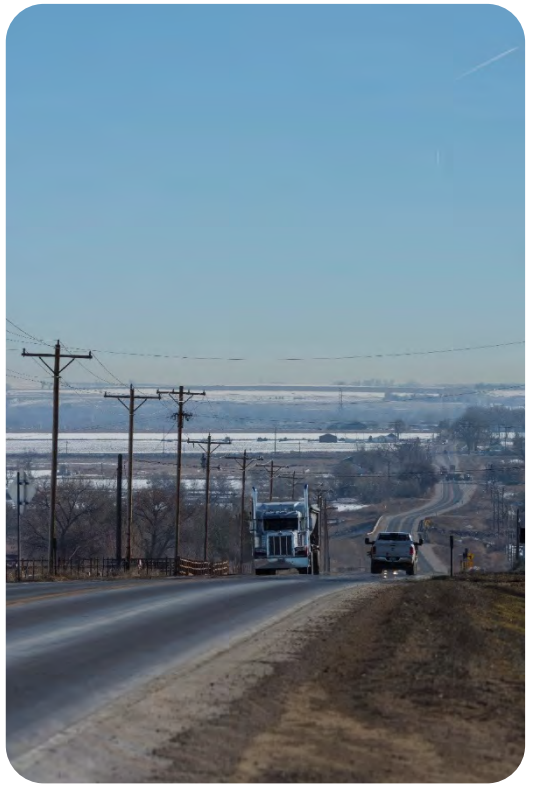
Date and Time: Thursday, August 23, 2018 | 10 a.m. to 11:30 a.m.
Location: Longmont Development Services Center | 385 Kimbark Street, Longmont, CO 80501

Sign In

Name	Agency	Email
EVERETT BACON	WELD CO	ebacon@weldgov.com
KELLY LEADBETTER	FHU	kelly.leadbetter@fhueng.com
Joe Kubala	Town of Lyons	jKubala@TownofLyons.com
ABRA GEISSLER	CDOT	abra.geissler@state.co.us
PHIL GREENWALD	CITY OF LONGMONT	PHIL.GREENWALD@Longmontcolorado.gov
JAMES ZUFALL	CDOT	James.d.Zufall@state.co.us
Alex Pulley	FHU	alex.pulley@fhueng.com
Jodie Snyder	FHU	jodie.snyder@fhueng.com
Anna Ericson	Atkins	anna.ericson@atkinsglobal.com

SH 66 Planning and Environmental Linkages Study





August 23, 2018

Technical Advisory Committee

Risk and Resiliency Workshop

Today's Meeting

- Introductions
- Corridor context and resiliency background
- Resiliency focus for CDOT and Region 4
- SH 66 opportunities
  - Partnerships
  - Long-term system operations
- Physical threats
- Operational threats
- Next steps and schedule

SH 66 Planning and Environmental Linkages Study

Introductions


CDOT
CO
COLORADO
Department of
Transportation


U.S. Department of Transportation
Federal Highway
Administration


drcog
DENVER REGIONAL COUNCIL OF GOVERNMENTS


A COMMUNITY IN MOTION
FIRESTONE
Colorado


CITY OF LONGMONT
COLORADO


Boulder
County


Town of
MEAD
Colorado


RTD


1861
WELD
COUNTY


LYONS
COLORADO

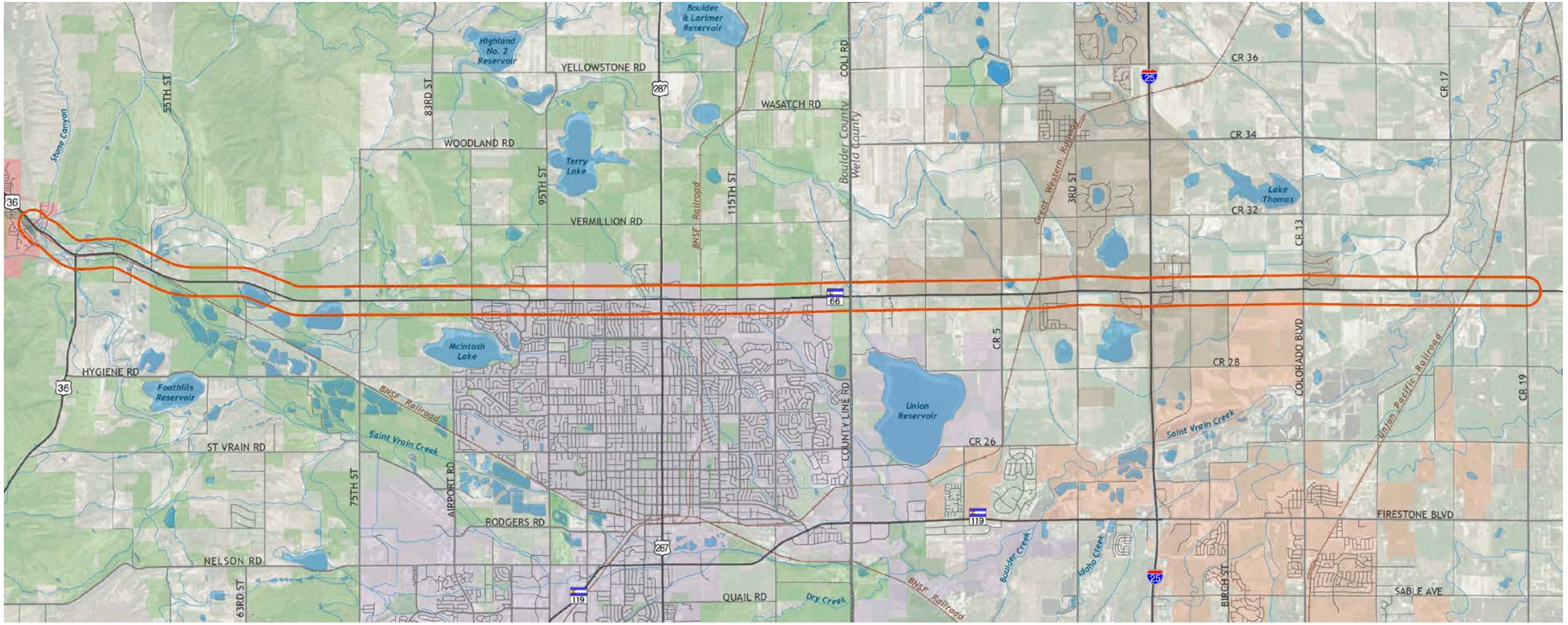

FELSBURG
HOLT &
ULLEVIG
connecting & enhancing communities

SH 66 Planning and Environmental Linkages Study

Background

Study Area and Context

- McConnell Street in Lyons to Weld County Road 19 (~20 miles)



September 2013 Flooding along SH 66

- Highway inundation
- Infrastructure damage
- Evacuation route impeded

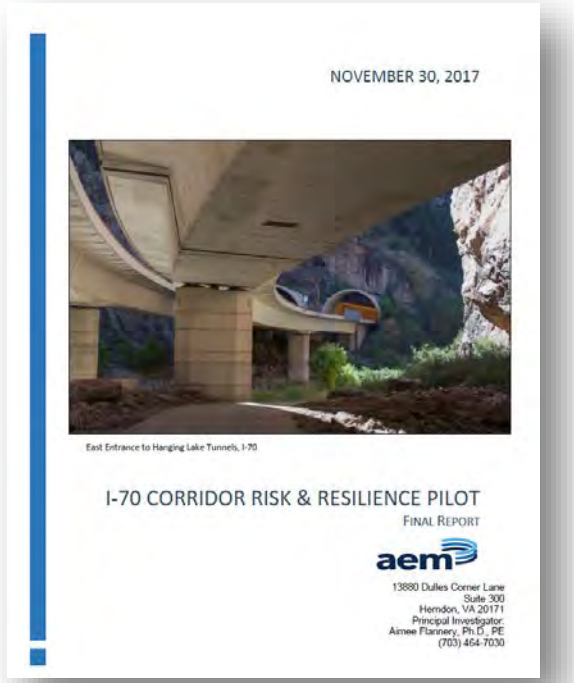
Statewide Resiliency

Resiliency is the ability of communities to rebound, positively adapt to, or thrive amidst changing conditions or challenges – including disaster and climate change – and maintain quality of life, healthy growth, durable systems, and conservation of resources for present and future generations.

– Colorado Resiliency Working Group

- FHWA/CDOT/DOLA Collaboration:
  - Include as a PEL goal
  - Ensure flexible process for statewide consistency
  - Ensure appropriate level of detail for planning
  - Provide meaningful analysis for decision making

- Sample CDOT efforts
  - I-70 Pilot Project
  - Region 4 PEL Studies



Region 4 Direction

- Inform decision-making regarding potential risks from physical and operational threats
- Collaborate to identify potential solutions and cost-sharing
- Incorporate resiliency recommendations into project delivery
- Position for the possibility of resiliency funding sources

SH 66 Planning and Environmental Linkages Study

Opportunities along SH 66

Partnerships with Local Agencies

- Inter-related missions
  - Local agencies are driven to ensure the long-term success of their communities, including transportation
  - CDOT is driven to provide a resilient transportation system that ensures trip reliability while accommodating communities

- Proactive opportunities to balance
  - **Economics** - trip reliability and strategic access
  - **Society** - community health and quality of life
  - **Environment** - natural and cultural resource considerations

Agency Collaboration

- Utilize the R&R planning tools that have been developed to foster partnerships between local agencies, developers, and CDOT

- Potential discussion points
  - Physical threats to assets and consequences
  - Route redundancy for evacuation
  - Vulnerabilities to trip reliability
  - Future local alternate routes
  - Potential physical and operational improvements

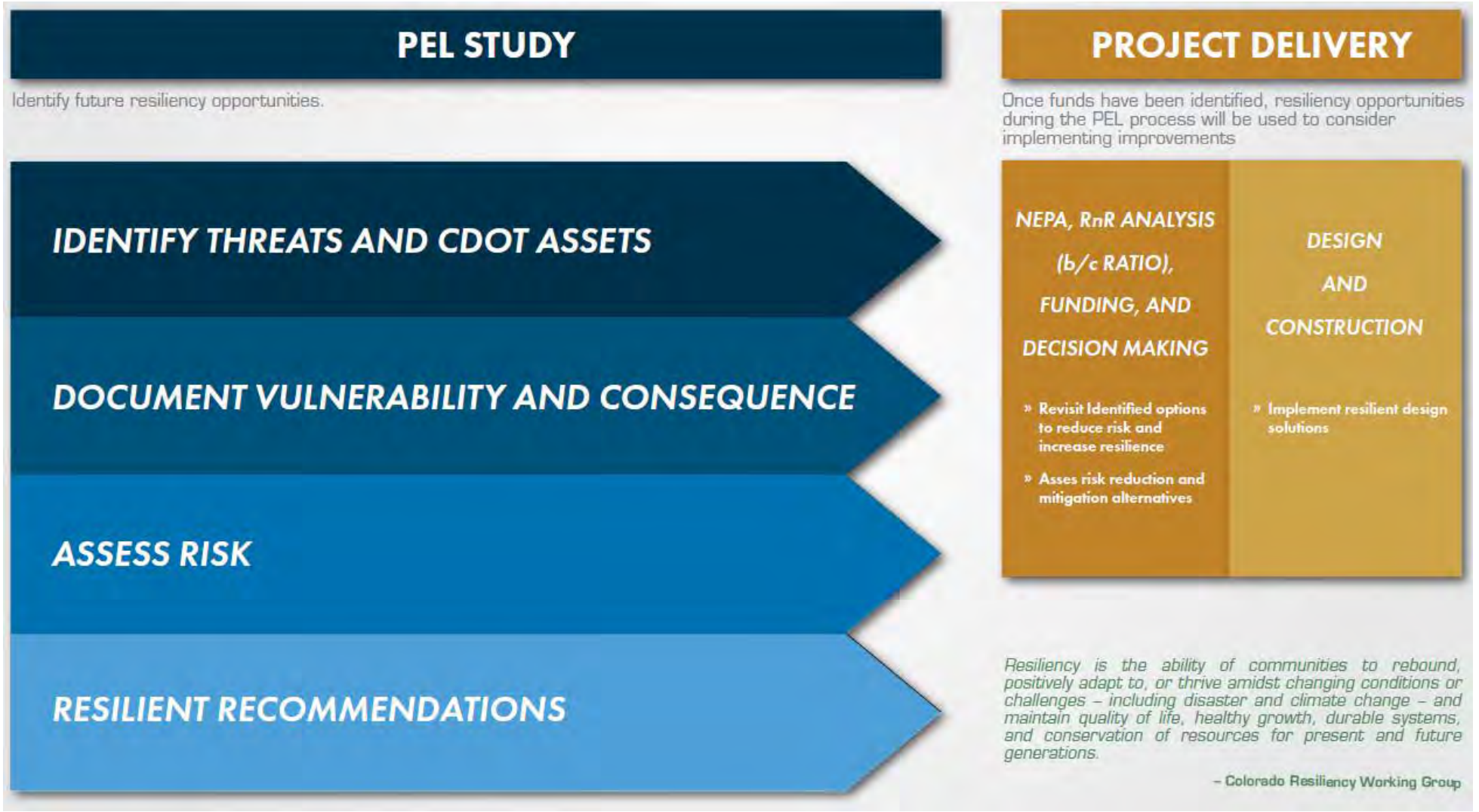
TAC Input

How is your agency thinking about risk and resiliency?

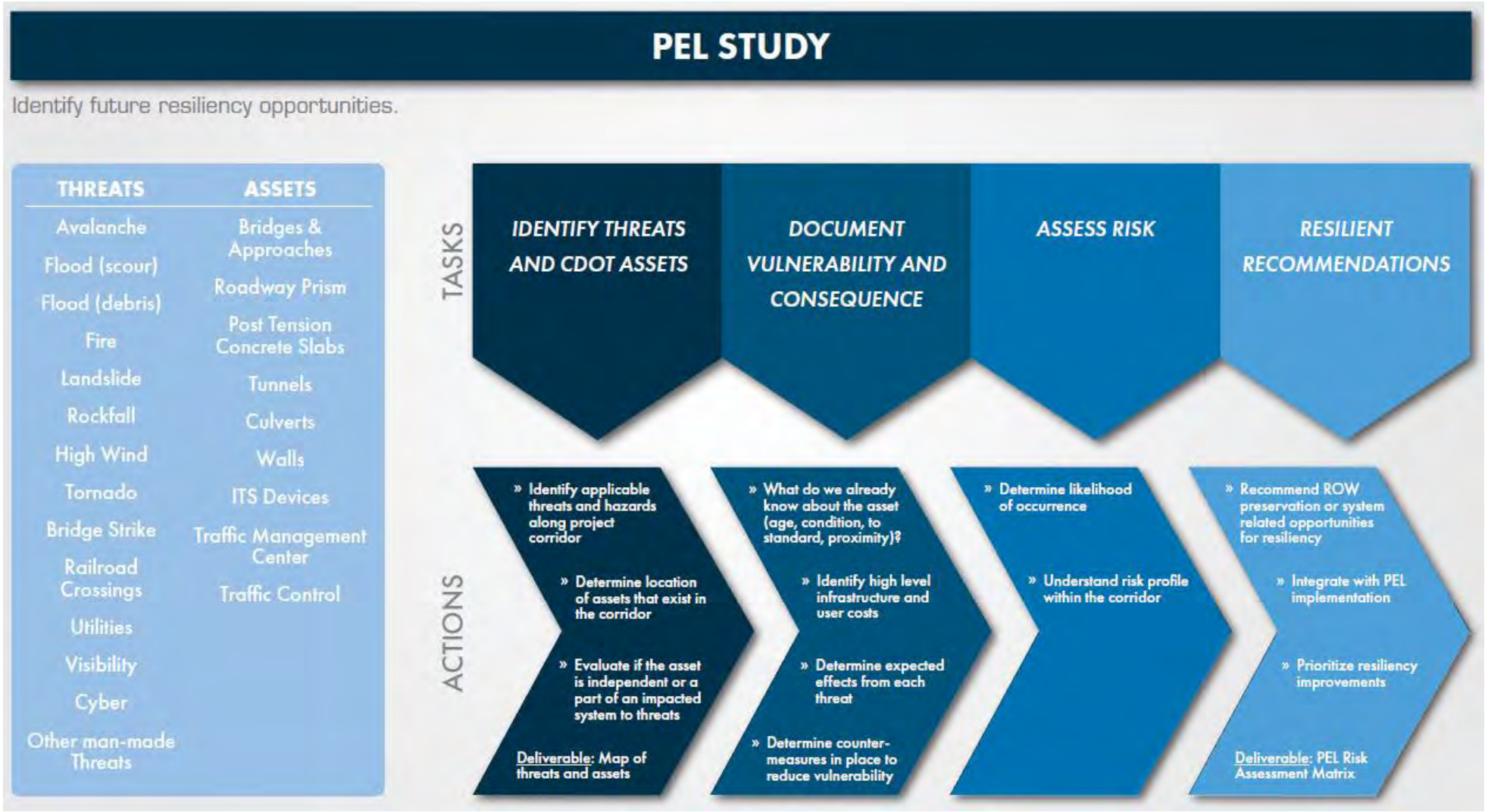
SH 66 Planning and Environmental Linkages Study

Physical Threats

Overview


PEL STUDY
Identify future resiliency opportunities.
IDENTIFY THREATS AND CDOT ASSETS
DOCUMENT VULNERABILITY AND CONSEQUENCE
ASSESS RISK
RESILIENT RECOMMENDATIONS
PROJECT DELIVERY
Once funds have been identified, resiliency opportunities during the PEL process will be used to consider implementing improvements
NEPA, RnR ANALYSIS (b/c RATIO), FUNDING, AND DECISION MAKING
» Revisit Identified options to reduce risk and increase resilience
» Asses risk reduction and mitigation alternatives
DESIGN AND CONSTRUCTION
» Implement resilient design solutions
Resiliency is the ability of communities to rebound, positively adapt to, or thrive amidst changing conditions or challenges – including disaster and climate change – and maintain quality of life, healthy growth, durable systems, and conservation of resources for present and future generations.
– Colorado Resiliency Working Group

Overview


PEL STUDY
Identify future resiliency opportunities.
THREATS
Avalanche
Flood (scour)
Flood (debris)
Fire
Landslide
Rockfall
High Wind
Tornado
Bridge Strike
Railroad Crossings
Utilities
Visibility
Cyber
Other man-made Threats
ASSETS
Bridges & Approaches
Roadway Prism
Post Tension Concrete Slabs
Tunnels
Culverts
Walls
ITS Devices
Traffic Management Center
Traffic Control
TASKS
IDENTIFY THREATS AND CDOT ASSETS
DOCUMENT VULNERABILITY AND CONSEQUENCE
ASSESS RISK
RESILIENT RECOMMENDATIONS
ACTIONS
» Identify applicable threats and hazards along project corridor
» Determine location of assets that exist in the corridor
» Evaluate if the asset is independent or a part of an impacted system to threats
Deliverable: Map of threats and assets
» What do we already know about the asset (age, condition, to standard, proximity)?
» Identify high level infrastructure and user costs
» Determine expected effects from each threat
» Determine counter-measures in place to reduce vulnerability
» Determine likelihood of occurrence
» Understand risk profile within the corridor
» Recommend ROW preservation or system related opportunities for resiliency
» Integrate with PEL implementation
» Prioritize resiliency improvements
Deliverable: PEL Risk Assessment Matrix

SH 66 Potential Threats Areas and Assets

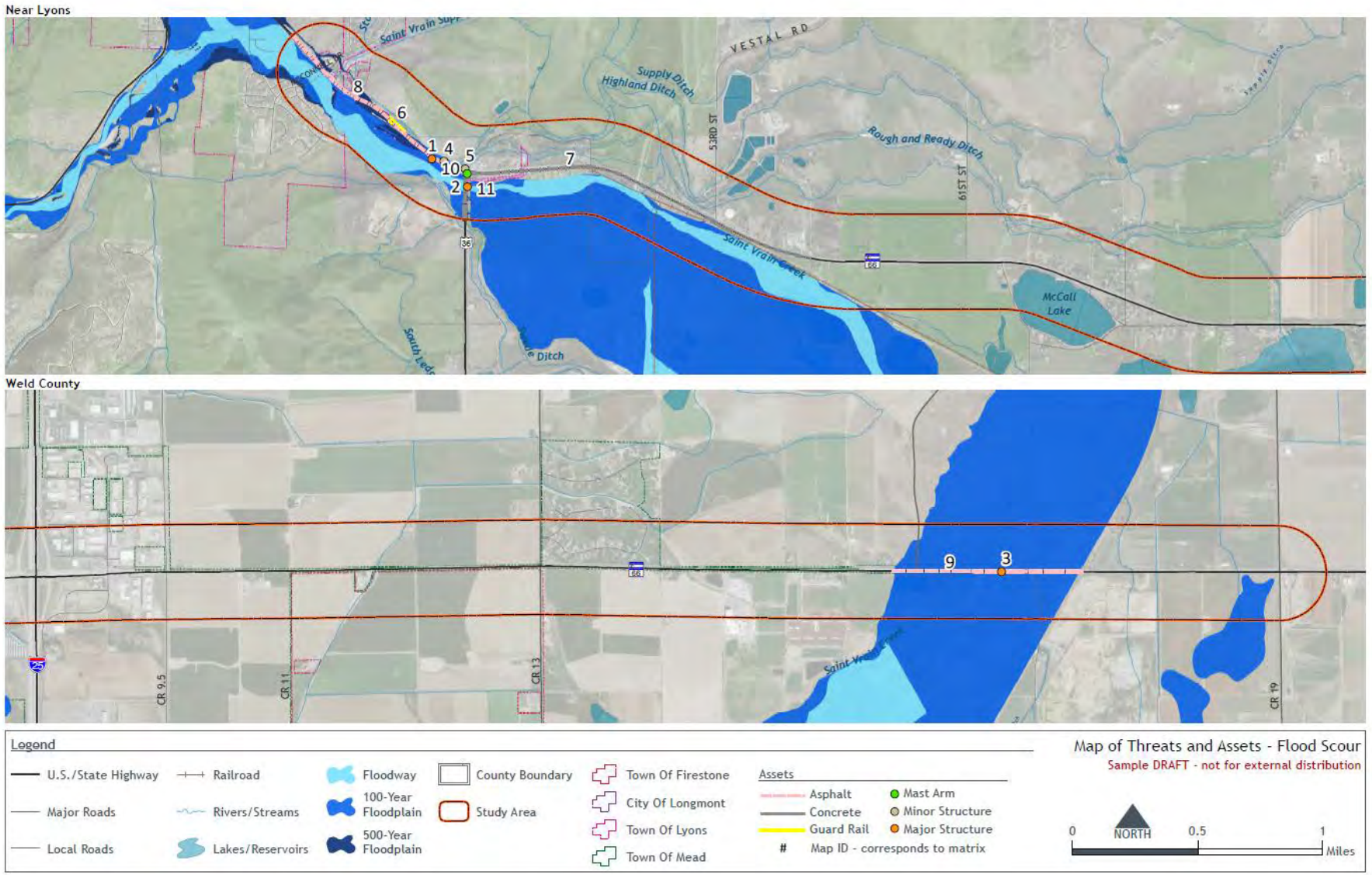
Threat areas along SH 66

- Flood scour (near floodplains)
- Avalanche/debris flow/landslide/rockfall (western limits of study area)
- Fire (corridor wide)
- High wind/Tornado (corridor wide)
- Bridge strike (at bridge locations)
- Railroad threats (at railroad crossings and near parallel facilities)
- Utility threats (corridor wide)
- Visibility (corridor wide)
- Cyber attack on CDOT infrastructure (corridor wide)
- Hazardous materials threats (corridor wide)

Assets along SH 66

- Bridges
- Roadway prism (pavement type, guardrail, slopes)
- Sidewalks and trails
- Culverts and ditches
- Walls
- ITS devices
- Traffic control devices

Sample Qualitative Assessment



Sample Qualitative Assessment

		Consequences					Prioritization		
Map ID	**Assets in Threat Area**	**Infrastructure Costs** Cost to CDOT to replace asset	**User Costs** Time and resources spent on out-of-direction travel	**Potential Consequences:** Effects expected to incur from each threat, based on vulnerability	**Vulnerability:** Conditional probability that the consequences estimated will be realized given that the threat has occurred	**Risk =** Consequence x Vulnerability x Threat	**Route Criticality** Measure of importance of asset to system and CDOT mission	**Summary**	**Resilient Recommendations** (includes Social, Economic, and Environmental Benefits)
Flood Scour Operational Threat									
Major structures									
1	D-15-XX (bridge)	High	High	Financial loss, fatalities, serious injuries, lost wages	New structure, post 2013 flood, well maintained	Moderate	High	Moderate priority for future improvements in terms of flood scour*risk*	**Size bridge to pass >100-year flood.** Allows for road to stay open to effectively transport people, goods, and services; creates movement corridors for wildlife and stable, reliable travel route
2	D-15-XX (bridge)	High	High		New structure, post 2013 flood, well maintained	Moderate	High	Moderate priority for future improvements in terms of flood scour*risk*	**Size bridge to pass >100-year flood.** Allows for road to stay open to effectively transport people, goods, and services; creates movement corridors for wildlife and stable, reliable travel route
3	D-17-XX (bridge)	High	Moderate		Old structure, repairs made post 2013 flood	High	Moderate	**Higher priority for future improvements in terms of flood scour*risk***	**Size bridge to pass >100-year flood.** Allows for road to stay open to effectively transport people, goods, and services; creates movement corridors for wildlife and stable, reliable travel route
Minor structures									
					New structure, post 2013			Lower priority for future	

What comes next?

- Accounting for physical threats in the Level 2b alternatives screening as a goal
- Evaluating and documenting physical threats
- Making resiliency recommendations for assets
- Prioritizing potential resiliency improvements

SH 66 Planning and Environmental Linkages Study

Operational Threats

Process Overview

Goal: Maintain state highway mobility into 2040 based on MPO growth projections using established LOS and/or TTI goals

Operational Resiliency Approach

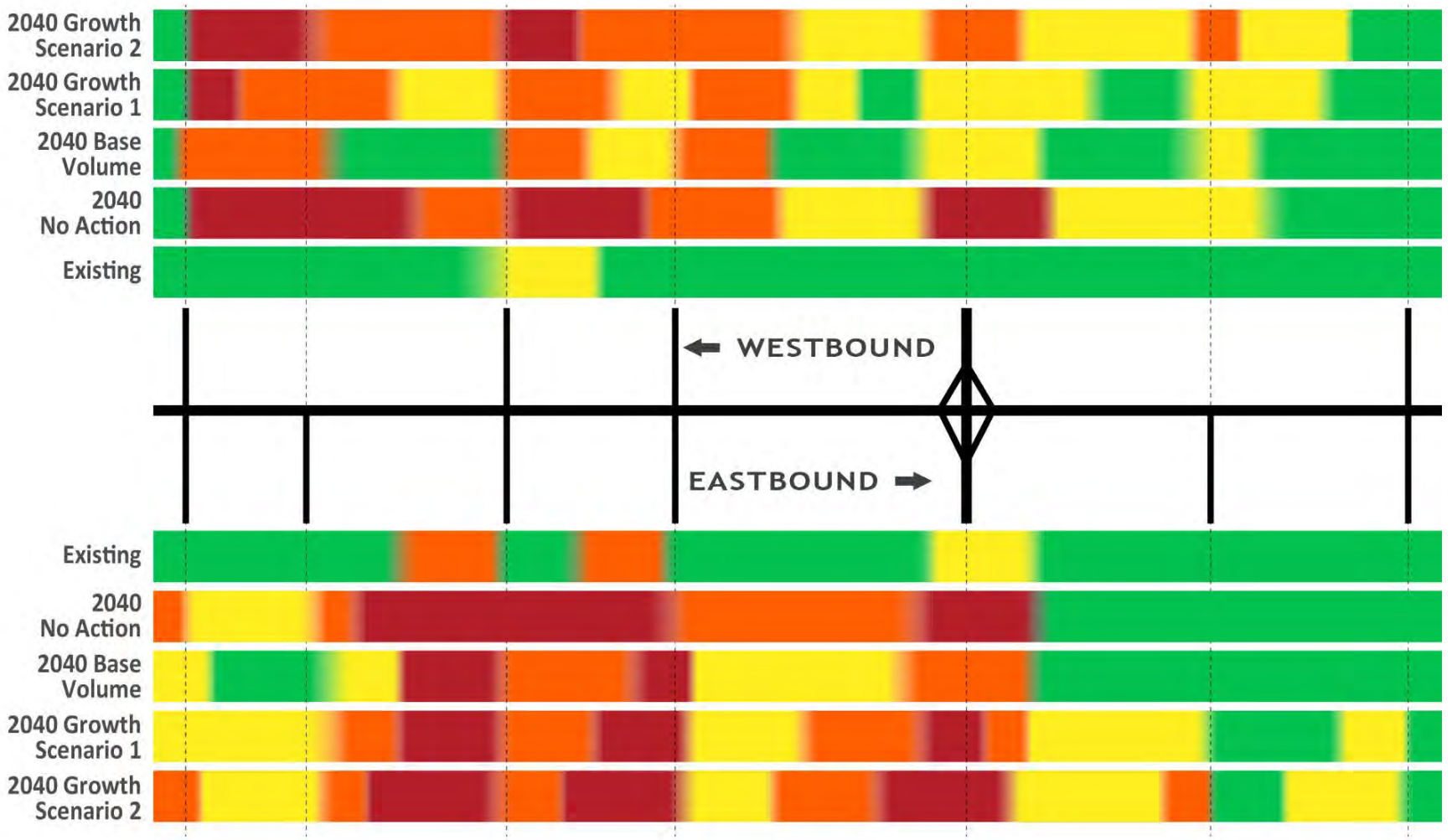
Step 1: Operational Sensitivity (Risk)

Objective: Use macro-scale analysis to define areas where highway operations may be more vulnerable to unanticipated traffic increases

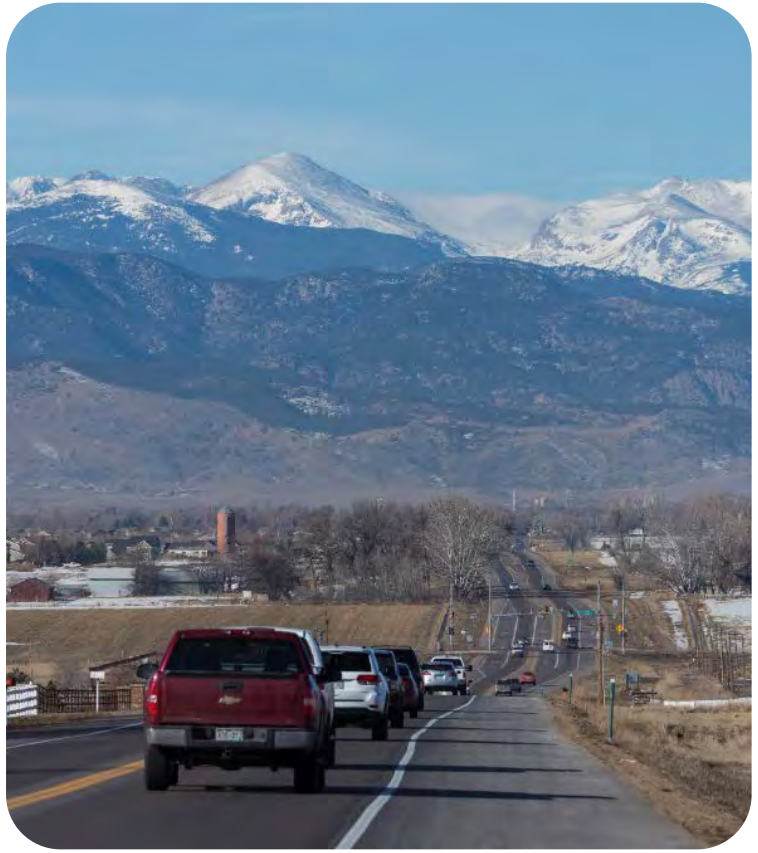
Analysis for corridor and intersections:

- Develop sensitivity heat map
- Evaluate TTI
- Consider sensitivity
  - Existing Conditions
  - 2040 No Action
  - 2040 Recommended Alternative
  - Growth Scenarios

Step 1: Sample Assessment



Operational Resiliency Approach



Step 2: Operational Threats (Vulnerability)

Objective: Identify locations of risk based on potential discrepancies between existing and proposed land use

Analysis for sensitive intersections:

- Calculate ICU
- Review local plans and map local land use data to consider existing and future TAZ population and employment densities
- Determine where population and employment densities could result in higher than anticipated traffic volumes

Step 2: Sample Assessment

Operational Resiliency Approach

Step 3: Operational Resiliency

Objective: Collaborate with local agencies to address locations where trip reliability may be affected and mobility could be reduced

Proposed process for vulnerable intersections:

- Conduct workshop with local agencies
- Evaluate potential solutions, implementable ideas to maintain baseline LOS
- Discuss alternate route options to lessen the burden on the state highway
- Discuss funding sources and cost-sharing

What comes next?

- Completing the assessment after PEL recommendations have been developed
- Integrating findings in PEL cumulative effects section
- Using analysis to inform the ACP
- Revising analysis periodically to identify potential new developments and to account for MPO updates

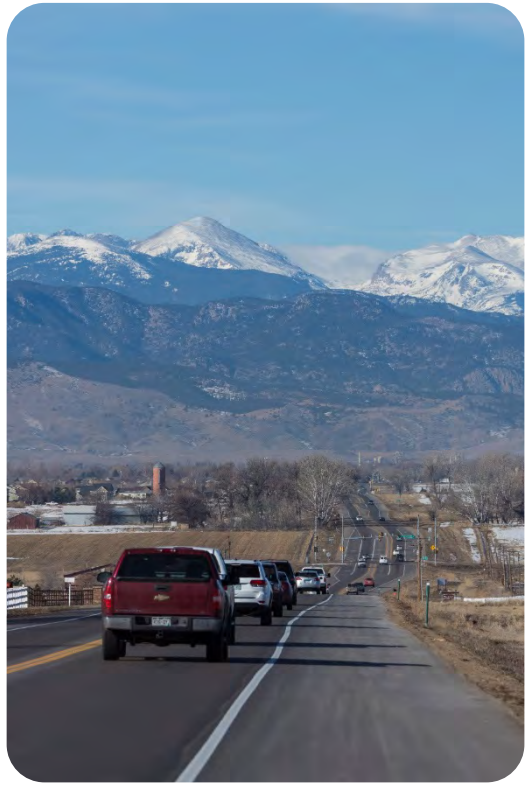
SH 66 Planning and Environmental Linkages Study

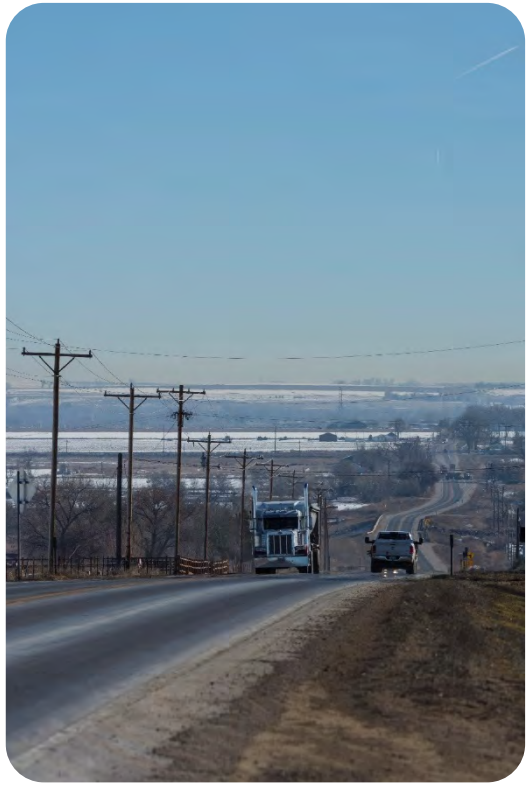
Next Steps and Schedule

TAC Input

What are your thoughts on these processes?

SH 66 Planning and Environmental Linkages Study





Thank You!

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SH 66 Planning and Environmental Linkages Study

Technical Advisory Committee (TAC) Meeting #6

Date and Time: October 18, 2018 | 10 a.m. to 12 p.m.
Southwest Weld County Services Center | 4209 County Rd 24 1/2, Longmont, CO 80504

Agenda

Introductions

Alternatives Development and Screening

Review of Level 2a findings and refinements

Level 2b alternatives analysis overview

Level 2b analysis and preliminary findings

- Alternatives development
    - Access road with advisory shoulders
    - Intersection operational options
    - Bicycle/pedestrian facilities
    - Goals – R&R, Environmental Considerations, and Community Context
- Alternatives screening
    - Option summary table
    - Screening matrix next steps

Level 2b small group discussions

- **Section 1**: McConnell Drive to 87th Street
- **Section 2**: 87th Street to County Line Road
- **Section 3** and **Section 4**: County Line Road to WCR 11
- **Section 5**: WCR 11 to WCR 19

Level 2b group discussion report out

Upcoming Next Steps

SH 66 Planning and Environmental Linkages Study

Technical Advisory Committee (TAC) Meeting #6

Date and Time: October 18, 2018 | 10 a.m. to 12 p.m.
Southwest Weld County Services Center | 4209 County Rd 24 1/2, Longmont, CO 80504

Meeting Summary

Introductions

Meeting attendees provided self-introductions. A sign-in sheet is attached.

Alternatives Development and Screening

The primary purpose of this TAC meeting is to review the alternatives development and screening approach for Level 2b.

Review of Level 2a findings and refinements

Level 2a defined the operational classifications of each section of the corridor, which includes the number of lanes and level of access control. Attendees reviewed the existing and recommended operational classifications for each section (see slide 5 in the meeting materials packet).

Level 2a is finalized and was informed by the data and discussions with the local communities.

The following table summarizes the recommendations from Level 2a:

Section	Existing	Recommended
1A (Lyons)	5-lane regional highway	4-lane arterial with a raised median
1B (Unincorporated Boulder County)	2-lane regional highway	2-lane regional highway with a center turn lane
1C (Unincorporated Boulder County)	2-lane regional highway	2-lane regional highway with a center turn lane
2 (Longmont)	2/4-lane principal highway	4-lane expressway with a raised median
3 (Mead)	2-lane regional highway	4-lane expressway with a grassy median
4 (Mead, I-25)	2-to-5-lane principal highway	6-lane arterial with a raised median
5a (Firestone, Weld County)	2-lane principal highway	4-lane expressway with a raised median
5b (Weld County)	2-lane regional highway	2-lane regional highway with a center turn lane

Slides 6-29 in the meeting materials includes maps and renderings of the existing and recommended roadway classifications.

Level 2b alternatives analysis overview

In the Level 2b process, the project team examined the intersection configurations as well as the bicycle, pedestrian, and transit facilities. Level 2b develops multiple alternatives for each intersection along the corridor with consideration of how the intersection alternatives would positively or

negatively contribute to the local area and the entire corridor. The 2040 DRCOG model was used to project future traffic volumes. This holistic approach considers system functionality, system resiliency, multimodal travel, and benefit/tradeoffs for the entire system.

Each alternative is screened based on fourteen different criteria (related to safety, mobility, access, risk and resiliency, community context and environmental considerations). The alternatives are evaluated based on their ability to achieve the purpose, need, and goals of the project. The Level 2b evaluation criteria document is included in the meeting materials packet. A sample of how the evaluation criteria are being applied in the Level 2b screening process is illustrated on slides 48 and 49 in the meeting materials.

Access Road with Advisory Shoulders and Sidepaths

One alternative being further developed and screened to consolidate private access points while accommodating bicyclists and pedestrians, is an access road with advisory shoulders coupled with sidepaths. This facility would be located in the western part of the corridor, from Highland Drive to N 66th Street. The access road would serve the existing residential properties on the north side of the highway, channelizing their access to the highway to existing intersections. The access road includes advisory shoulders for walking and biking. Where vehicles do not need to be accommodated, a sidepath is proposed to link between access road sections. Sidepath sections are incorporated in strategic locations to reduce the continuity of the access roads to keep traffic volumes and speeds low, making the access road more attractive for bicycle and pedestrian activity of all user abilities.

Local communities have been anticipating the regional trail to be on the south side of SH 66 but have been having difficulty with the right-of-way along the railroad. This access road with advisory shoulders may be a regional solution to providing a facility for walking and biking.

Slides 32-37 in the meeting materials include renderings and maps of the proposed facility.

Intersection Operations

Slides 52-57 show the initial alternatives developed for intersections along the corridor. Not every single access is addressed; the major access points are. In some cases, private drives are grouped together for evaluation. The alternatives development and screening includes “no action” for all locations.

Depending on the roadway classification, the following intersection types are being considered: grade-separations (at US 287), full movement, ¾ intersection, right-in/right-out, channelized-T, access closures, consolidation of driveways, and railroad grade separations. Future parallel roads that strategically support the corridor are also identified on these maps.

The corridor experiences the most traffic and regional travel near US 287 and Hover Street, and therefore, this area received the most initial focus and evaluation. County Line Road will be the next area of the corridor for more detailed evaluation.

Overview maps of the developed alternatives are also included in the packet of meeting materials.

Bicycle and Pedestrian Facilities

Slide 42 provides a map of bicycle and pedestrian facilities along, and connecting to, the SH 66 corridor that exist today or are planned by municipalities and counties. Planned sidepaths in Longmont and Mead currently do not have a defined location in terms of the side of SH 66 they should be built, but are displayed on the south side for conversational purposes.

Slides 43 and 44 provide maps with potential alternatives to improve the bicycle and pedestrian network of the corridor. Both maps contain a faded copy of the existing plus planned network to help illustrate the improvement in connectivity by the alternatives. The alternatives aim to create fully

connected on-street and off-street networks to accommodate users of all abilities by addressing gaps in the existing plus planned facilities, while also upgrading existing facilities to improve safety.

The potential alternatives shown on Slide 43 can be viewed as the base level of alternatives to address gaps and safety concerns. Slide 44 builds upon these base alternatives by replacing wide shoulders with potential separated bike lanes in strategic locations where classifications and number of lanes from Level 2a, plus future development, may warrant upgraded bicycle facilities to improve safety for even the most able of users.

Consideration of Project Goals

Through the Level 2b alts development and screening process, the project team has taken into account how each alternative relates in the context of environmental resources, community visions, and risk and resiliency. Examples include:

- Modifying alternatives to avoid key environmental resources
- Accommodating community visions/plans in developing alternatives
- Considering if an alternative encroaches into a threat area or enhances resiliency of the corridor

Upcoming Next Steps

The next step for the project team is to incorporate TAC feedback into Level 2b development, analysis, and documentation. Due to lower attendance at this meeting, this will require follow up conversations with local agencies. The project team will then update and finalize Level 2b materials.

The level 2b findings and the overview of the Level 3 process will be discussed at the next TAC meeting in early December.

SH 66 Planning and Environmental Linkages Study

TECHNICAL ADVISORY COMMITTEE MEETING #6

Date and Time: October 18, 2018 | 10 a.m. to 12 p.m.
Southwest Weld County Services Center | 4209 County Rd 24 1/2, Longmont, CO 80504

Sign In

Name	Agency	Email
Shea Suski	FHU	shea.suski@fhueng.com
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Jodie Snyder	FHU	jodie.snyder@fhueng.com
Joe Kubala	Town of Lyons	jkubala@townoflyons.com
Everett Baton	Weld County	
Anna Ericson	Atkins	anna.ericson@atkinsglobal.com
DAVID SPRAGUE	ATKINS	DAVID.SPRAGUE@ATKINSGLOBAL.COM
Alex Pulley	FHU	alex.pulley@fhueng.com
KELLY LEADBETTER	FHU	kelly.leadbetter@fhueng.com
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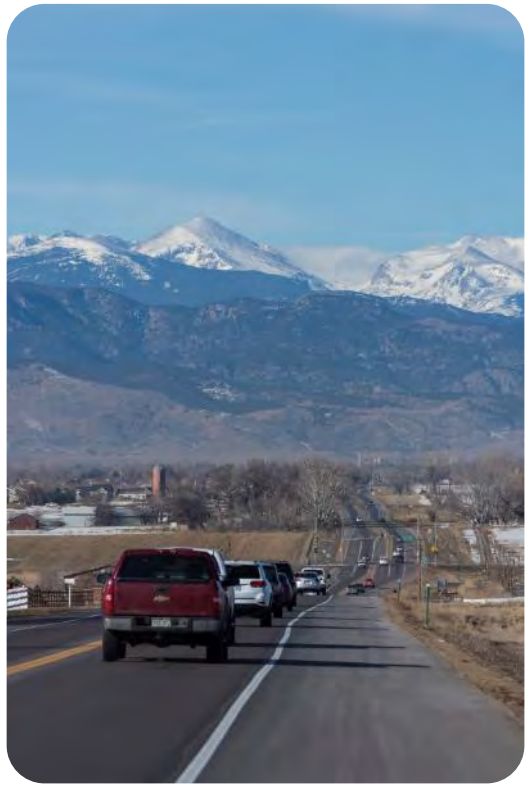
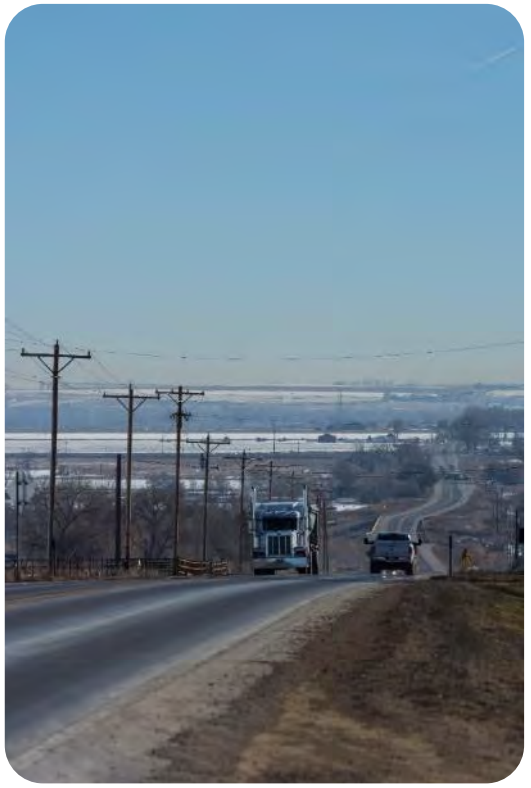
SH 66 Planning and Environmental Linkages Study





Technical Advisory Committee (TAC) #6

Today's Meeting

- Introductions
- Alternatives Development and Screening
  - Review of Level 2a results
  - Level 2b overview
  - Level 2b alternatives development
  - Level 2b alternatives screening
  - Small group discussions by section
  - Report back
- Upcoming Next Steps

SH 66 Planning and Environmental Linkages Study

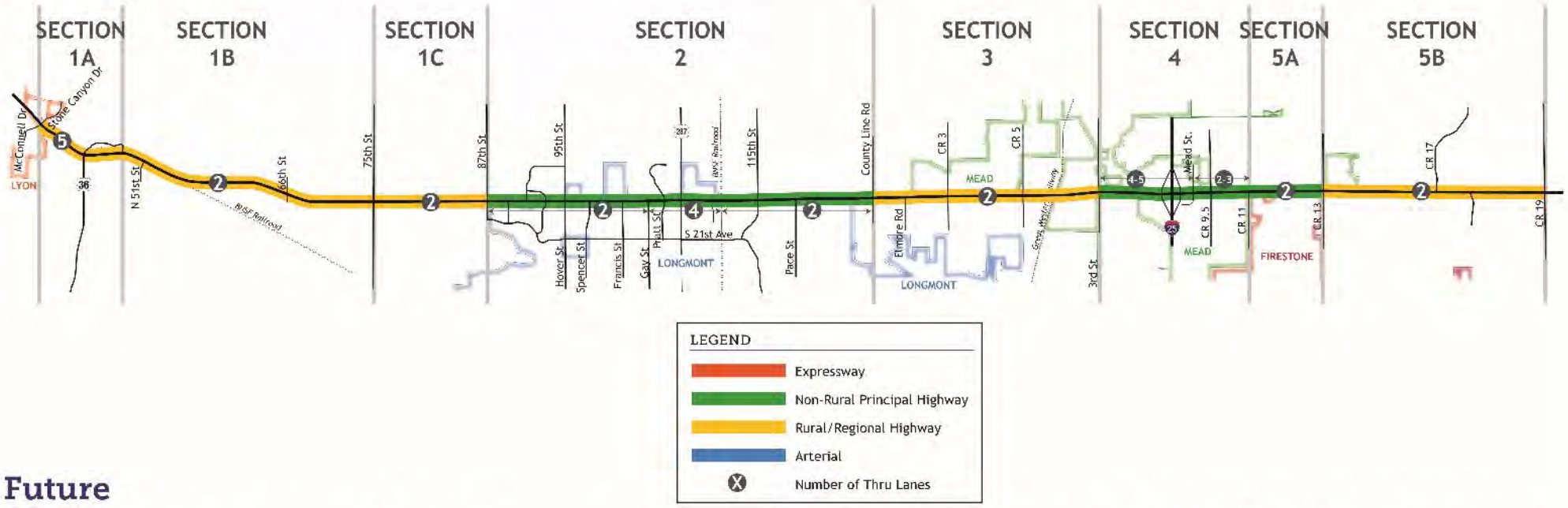
Alternative Development and Screening

Alternatives Analysis Recap

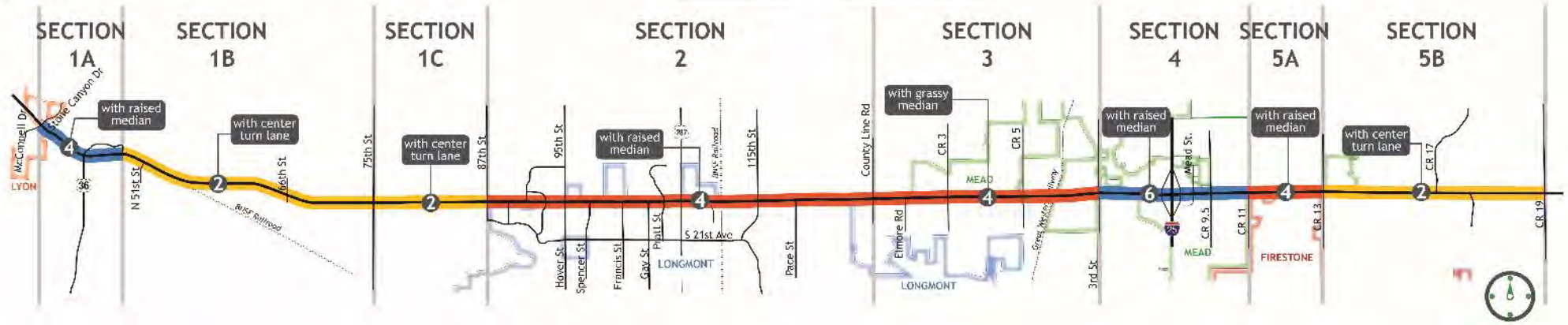
SCREENING LEVEL	ALTERNATIVE DEVELOPMENT
Purpose & Need Screening	LEVEL 1 GOAL: Recommend alternatives that appropriately & contextually meet purpose & need
1.	Develop Full Range of Alternatives
Comparative Screening	LEVEL 2 GOAL: Recommend specific alternatives that balance all needs within community & environmental context
2a. LEVEL 2a GOAL: Recommend section classifications and through capacity	Evaluate Section Classification: • Freeway • Expressway • Rural Highway • Arterial Roads Evaluate Section Capacity: • 2-Lane • 3-Lane • 4-Lane • 6-Lane
2b. LEVEL 2b GOAL: Integrate improvements to address all needs & balance context	Stand-alone Assessments of Safety, Mobility, & Access Combine Assessments & Further Screen Alternatives
Detailed Alternative Development & Screening	LEVEL 3 GOAL: Enhance improvements to document planning, implementation, & funding needs
3.	Extent of Results from Level 2 Screening

Level 2a Findings Review

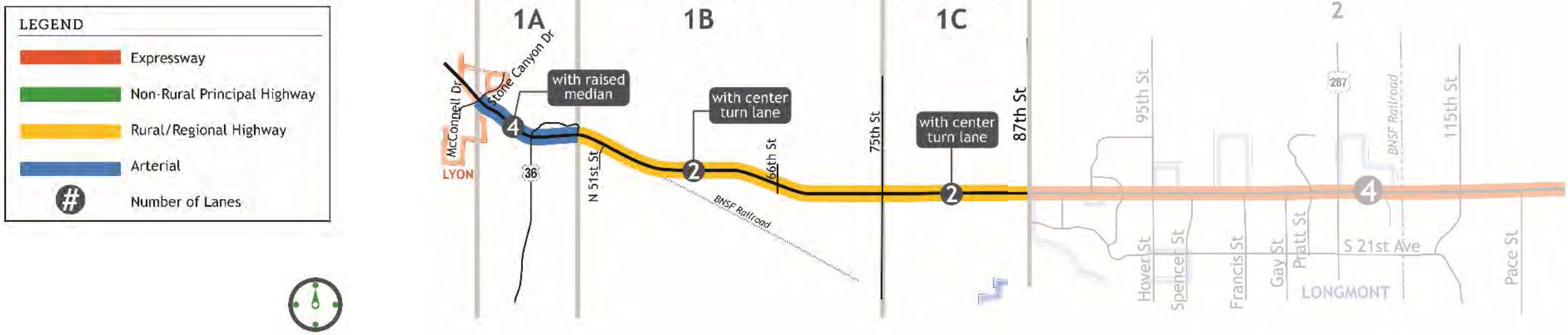
Existing



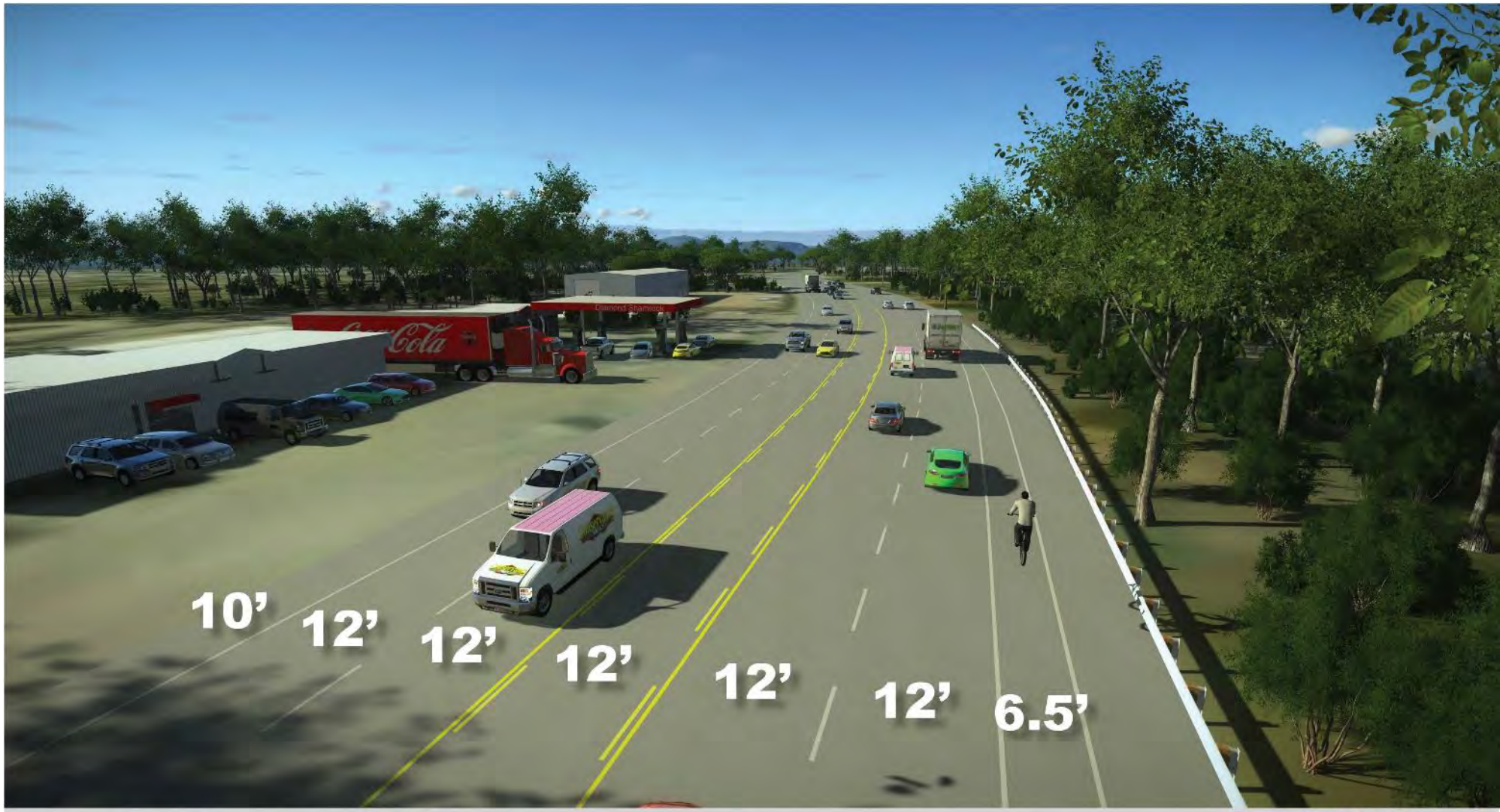
Future



Section 1A


LEGEND
Expressway
Non-Rural Principal Highway
Rural/Regional Highway
Arterial
Number of Lanes
SECTION 1A
SECTION 1B
SECTION 1C
SECTION 2
McConnell Dr
Stone Canyon Dr
LYON
with raised median
with center turn lane
with center turn lane
N 51st St
66th St
75th St
87th St
BNSF Railroad
95th St
Hover St
Spencer St
Francis St
Gay St
Pratt St
287
S 21st Ave
BNSF Railroad
115th St
Pace St
LONGMONT
36
4
2
2
4

Section 1A—Existing (5-Lane Regional Highway)



Section 1A - existing roadway conditions

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connecting & enhancing communities

Section 1A—Proposed (4-Lane Arterial + Raised Median)

Section 1A - Proposed roadway conditions

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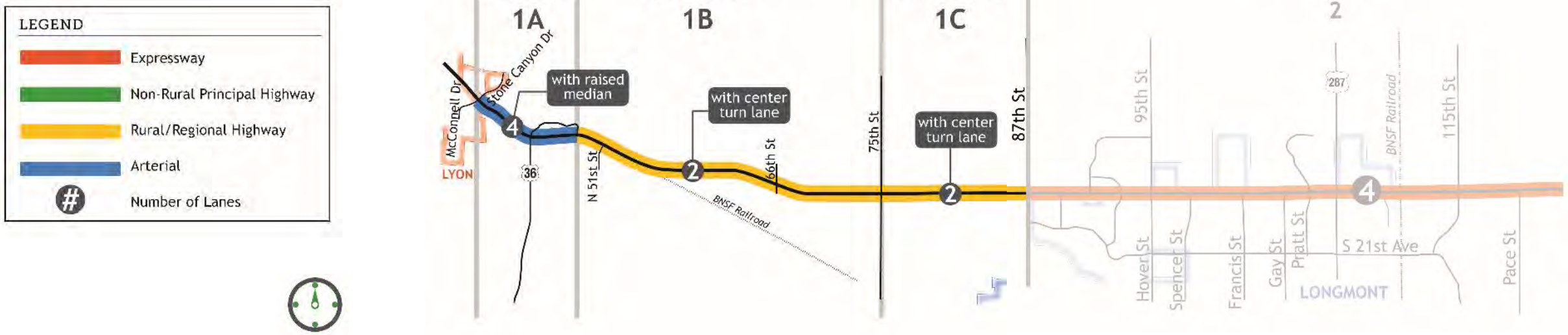
connecting & enhancing communities

Section 1B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Expressway
Non-Rural Principal Highway
Rural/Regional Highway
Arterial
Number of Lanes
SECTION 1A
SECTION 1B
SECTION 1C
SECTION 2
McConnell Dr
Stone Canyon Dr
LYON
with raised median
with center turn lane
with center turn lane
N 51st St
66th St
75th St
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95th St
BNSF Railroad
115th St
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Francis St
Gay St
Pratt St
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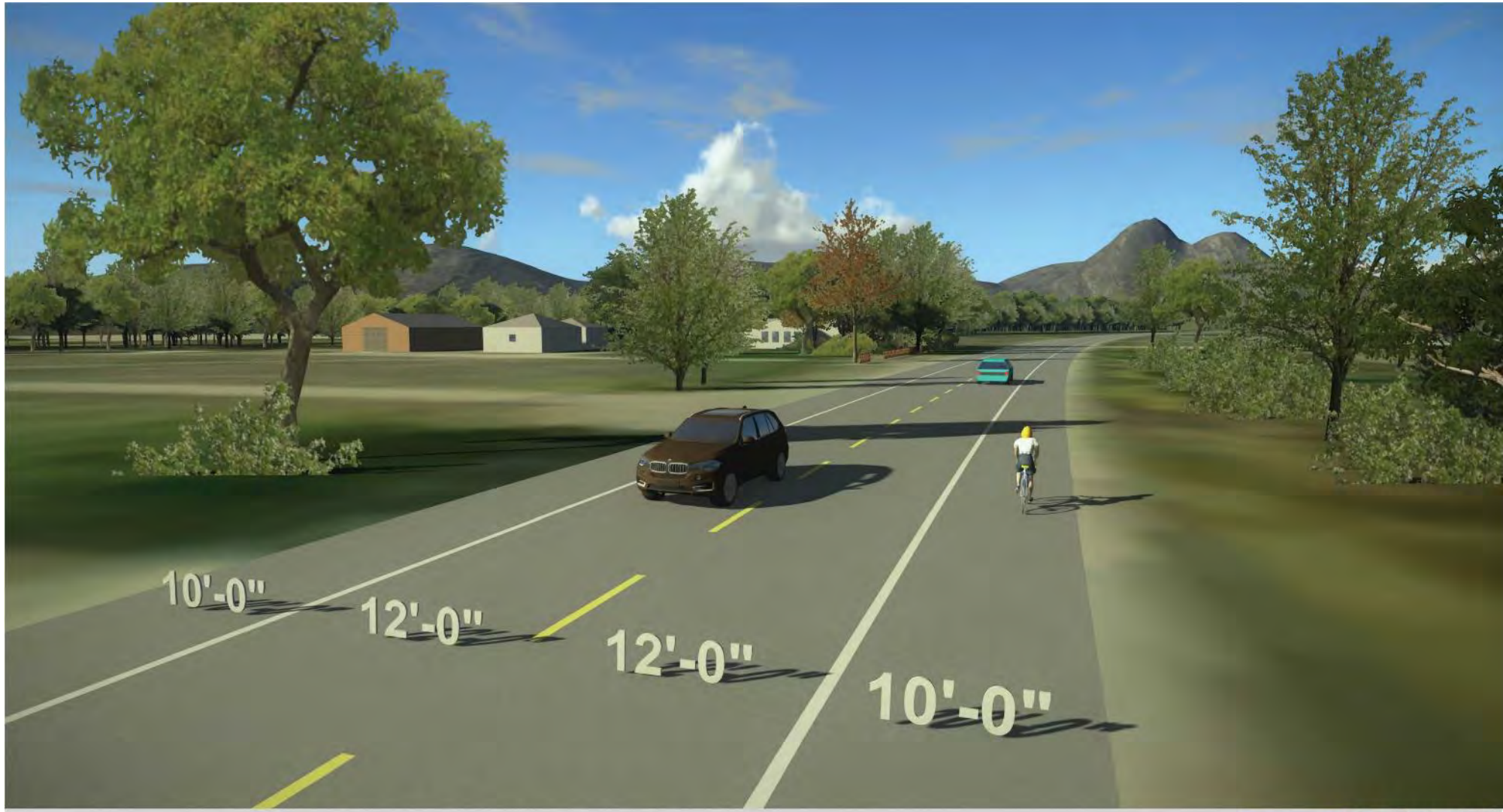
Section 1B—Existing (2-Lane Regional Highway)



Section 1B - existing roadway conditions

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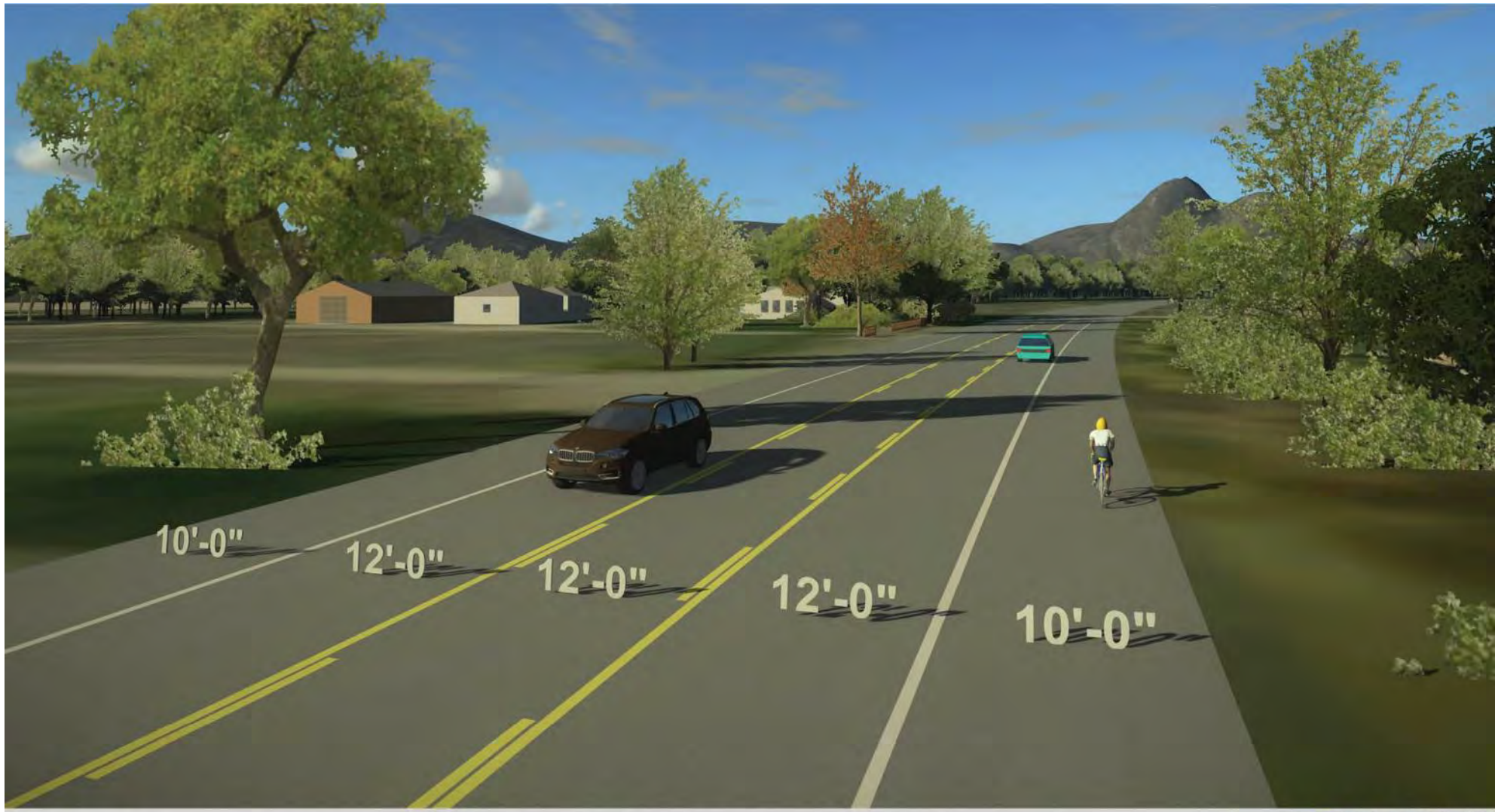
connecting & enhancing communities

Section 1B—Proposed (2-Lane Regional Highway + Turn Lane)



Section 1B - Proposed roadway conditions

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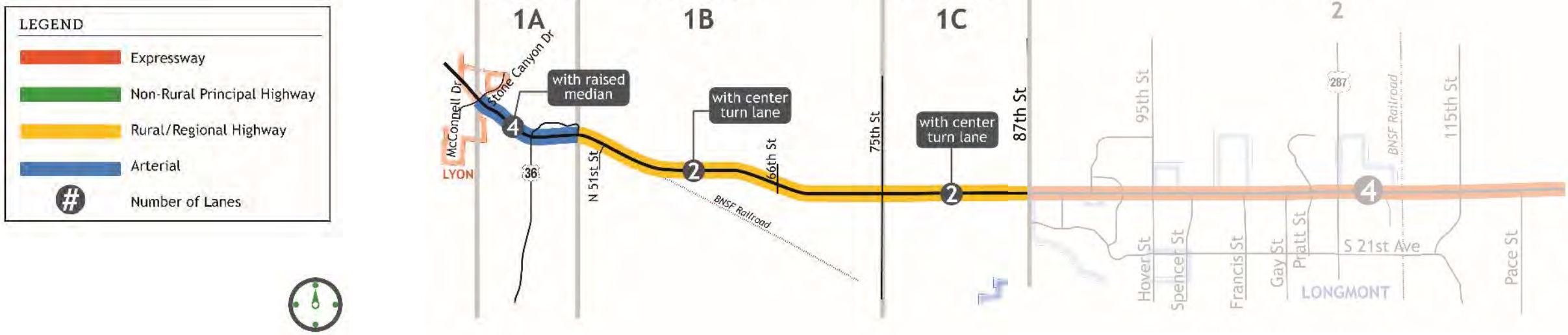
Section 1C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Expressway
Non-Rural Principal Highway
Rural/Regional Highway
Arterial
Number of Lanes
SECTION 1A
SECTION 1B
SECTION 1C
SECTION 2
McConnell Dr
Stone Canyon Dr
LYON
with raised median
with center turn lane
with center turn lane
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Hover St
Spencer St
Francis St
Gay St
Pratt St
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S 21st Ave
BNSF Railroad
115th St
Pace St
LONGMONT
36
4
2
2
4

Section 1C—Existing (2-Lane Regional Highway)

Section 1C - existing roadway conditions

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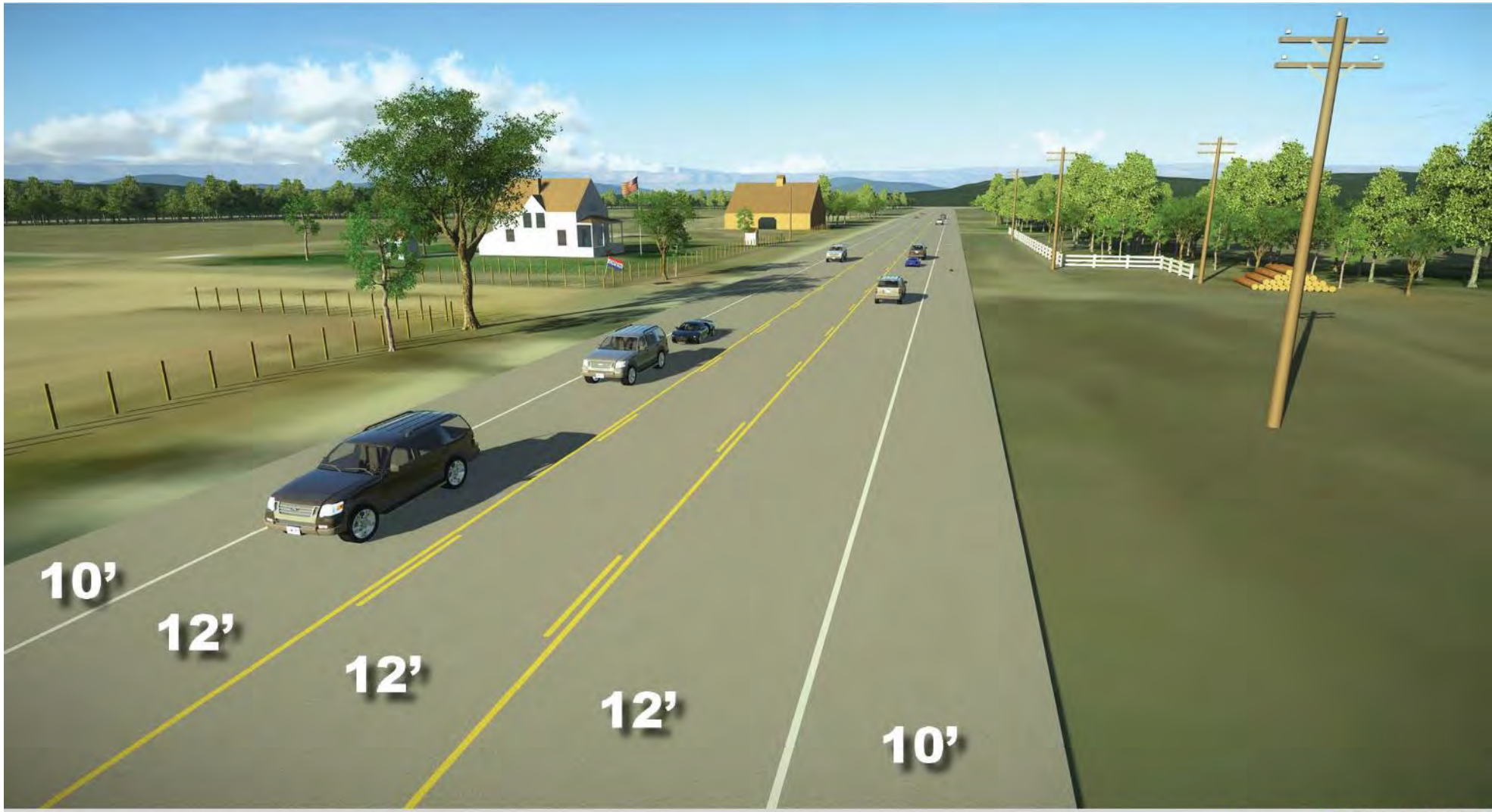
Section 1C—Proposed (2-Lane Regional Highway + Turn Lane)



Section 1C - Proposed roadway conditions

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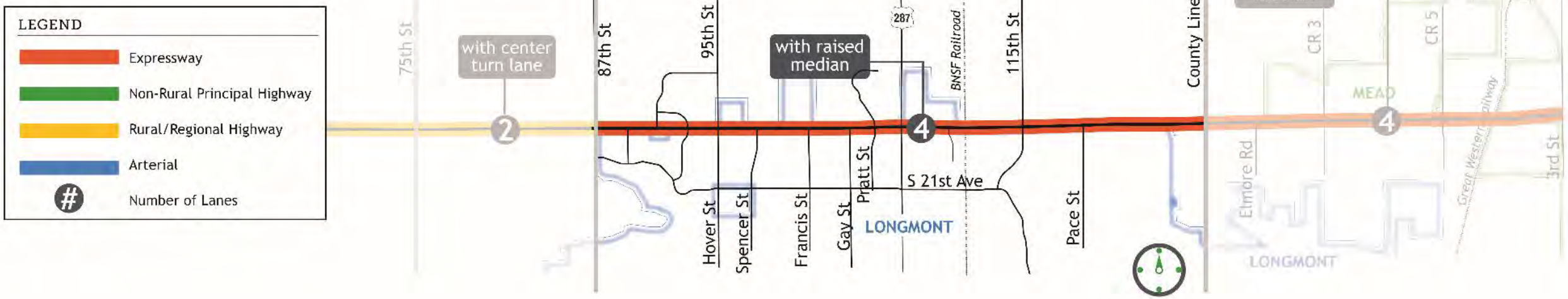
connecting & enhancing communities

Section 2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Expressway
Non-Rural Principal Highway
Rural/Regional Highway
Arterial
Number of Lanes
SECTION 1C
SECTION 2
SECTION 3
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with center turn lane
87th St
95th St
with raised median
287
BNSF Railroad
115th St
County Line Rd
with grassy median
CR 3
CR 5
MEAD
Hover St
Spencer St
Francis St
Gay St
Pratt St
S 21st Ave
LONGMONT
Pace St
Elmore Rd
LONGMONT
3rd St

Section 2—Existing (2/4-Lane Principal Highway)

Section 2 - existing roadway conditions

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Section 2—Proposed (4-Lane Expressway + Raised Median)

Section 2 - Proposed roadway conditions

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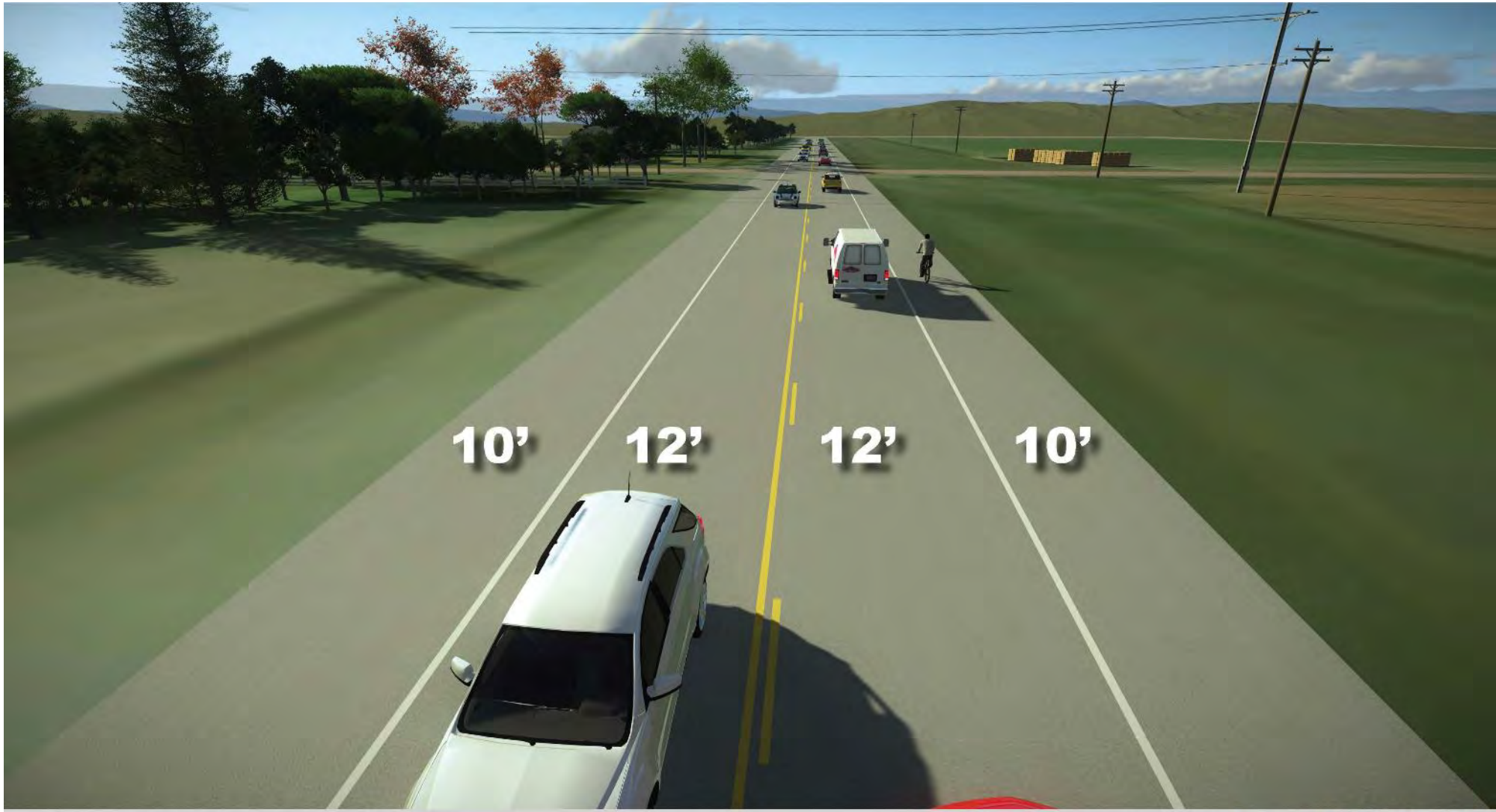
Section 3


LEGEND
Expressway
Non-Rural Principal Highway
Rural/Regional Highway
Arterial
Number of Lanes
SECTION 2
SECTION 3
SECTION 4
with raised median
with grassy median
with raised median
87th St
95th St
115th St
BNSF Railroad
287
Hover St
Spencer St
Francis St
Gay St
Pratt St
S 21st Ave
LONGMONT
Pace St
County Line Rd
CR 3
CR 5
MEAD
Elmore Rd
Great Western Railway
3rd St
LONGMONT
Mead St.
CR 9.5
CR 11
MEAD
25
4
4
6

Section 3—Existing (2-Lane Regional Highway)



Section 3 - existing roadway conditions

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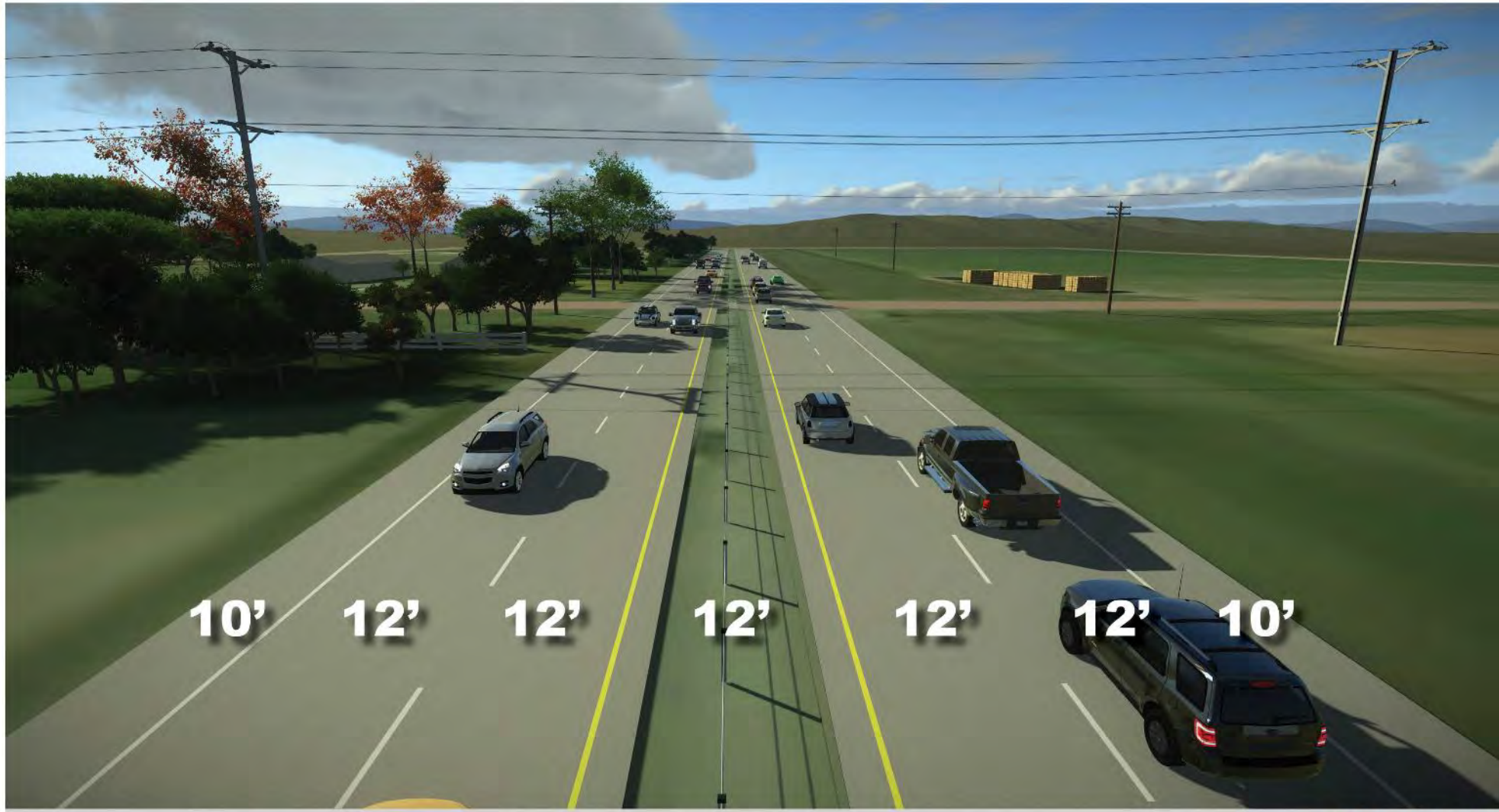
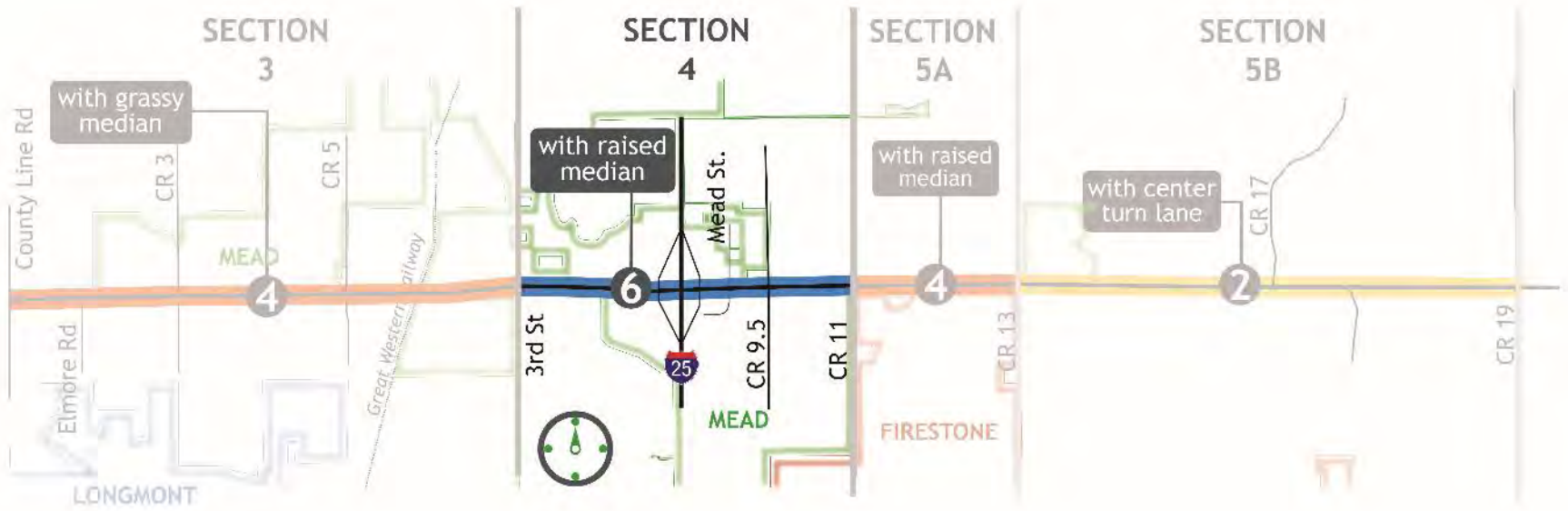
Section 3—Proposed (4-Lane Expressway + Grassy Median)

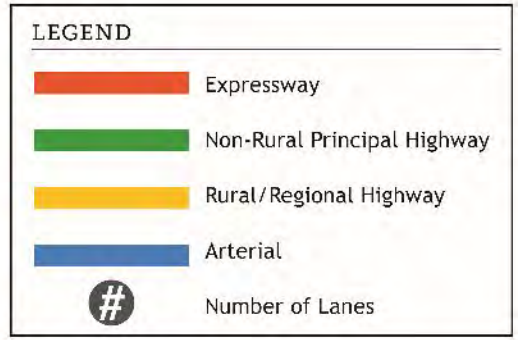


Section 3 - Proposed roadway conditions

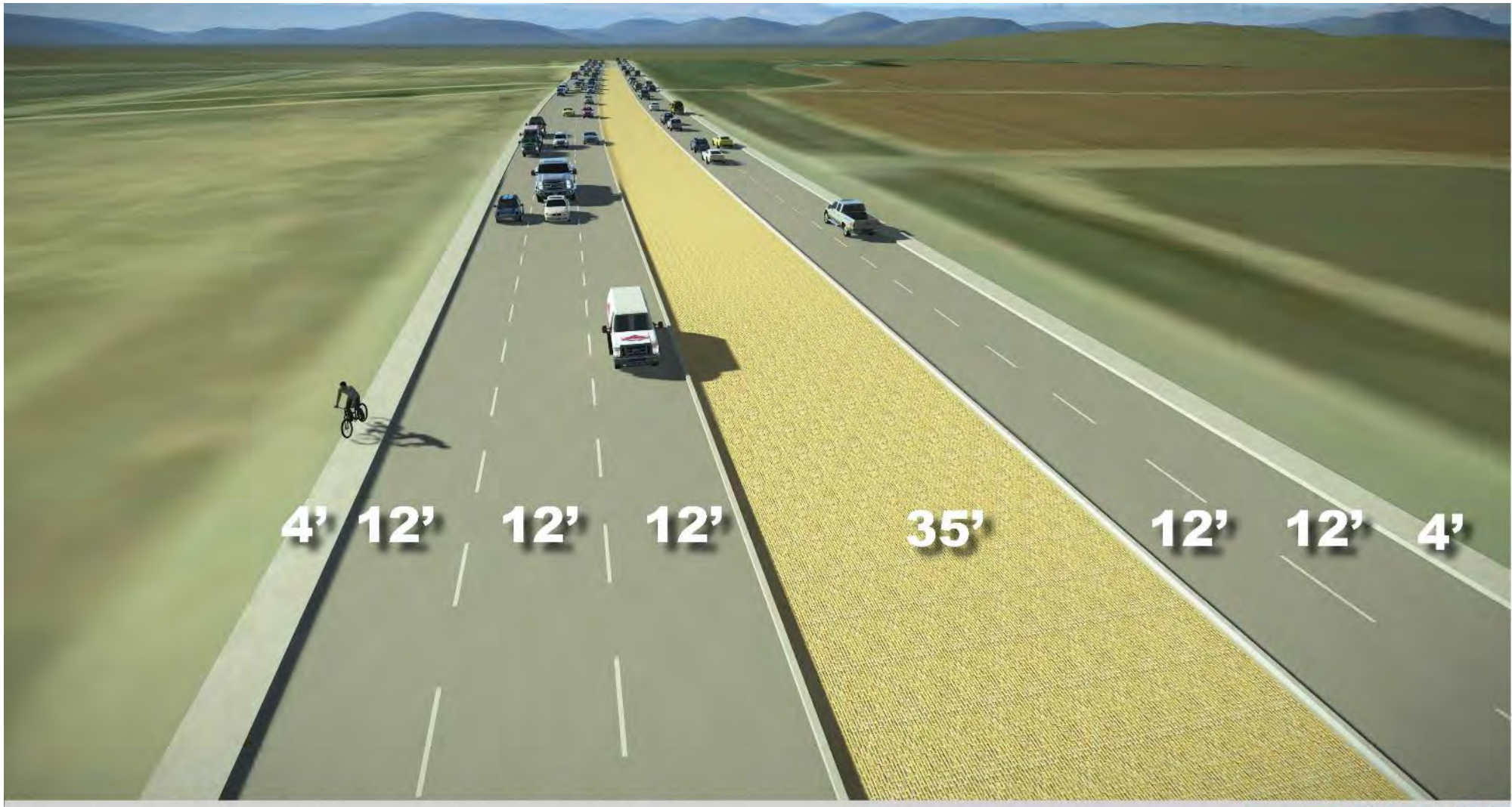
FELSBURG HOLT & ULLEVIG
connecting & enhancing communities

Section 4


SECTION 3
SECTION 4
SECTION 5A
SECTION 5B
with grassy median
with raised median
with raised median
with center turn lane
County Line Rd
CR 3
CR 5
MEAD
Great Western Railway
Elmore Rd
LONGMONT
3rd St
Mead St.
CR 9.5
CR 11
25
MEAD
FIRESTONE
CR 13
CR 17
CR 19
4
6
4
2


LEGEND
Expressway
Non-Rural Principal Highway
Rural/Regional Highway
Arterial
#
Number of Lanes

Section 4—Existing (2 to 5-Lane Principal Highway)



Section 4 - existing roadway conditions

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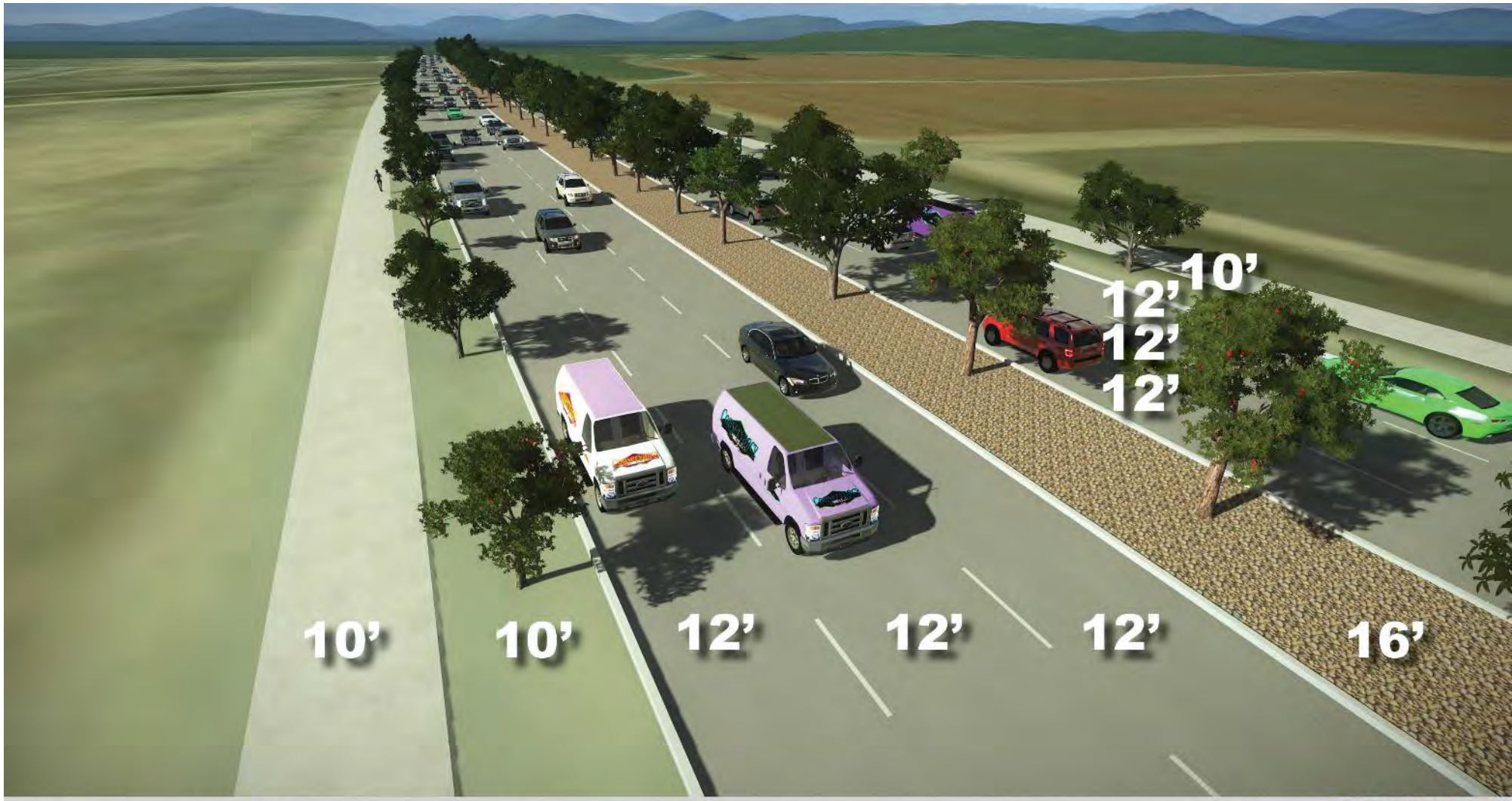
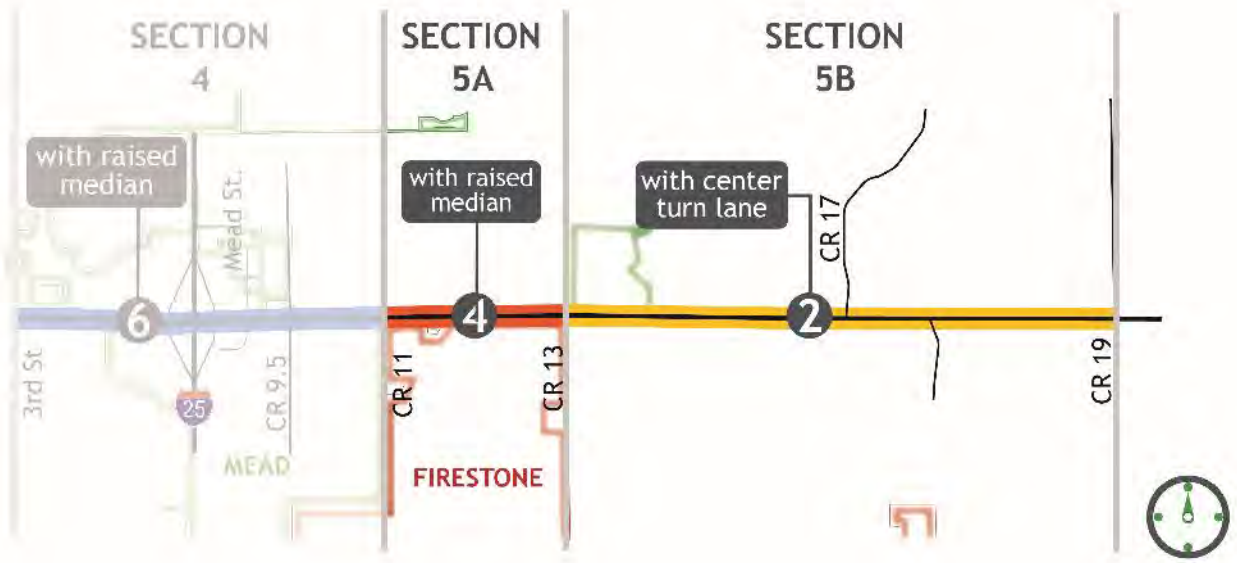
Section 4—Proposed (6-Lane Arterial + Raised Median)

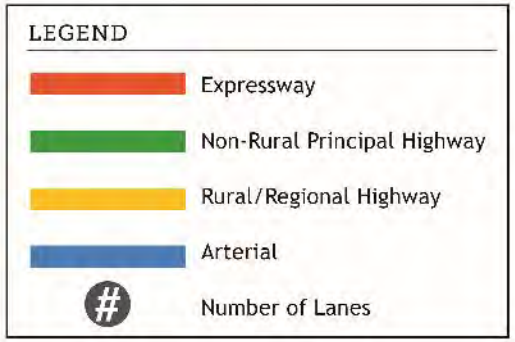


Section 4 - Proposed roadway conditions

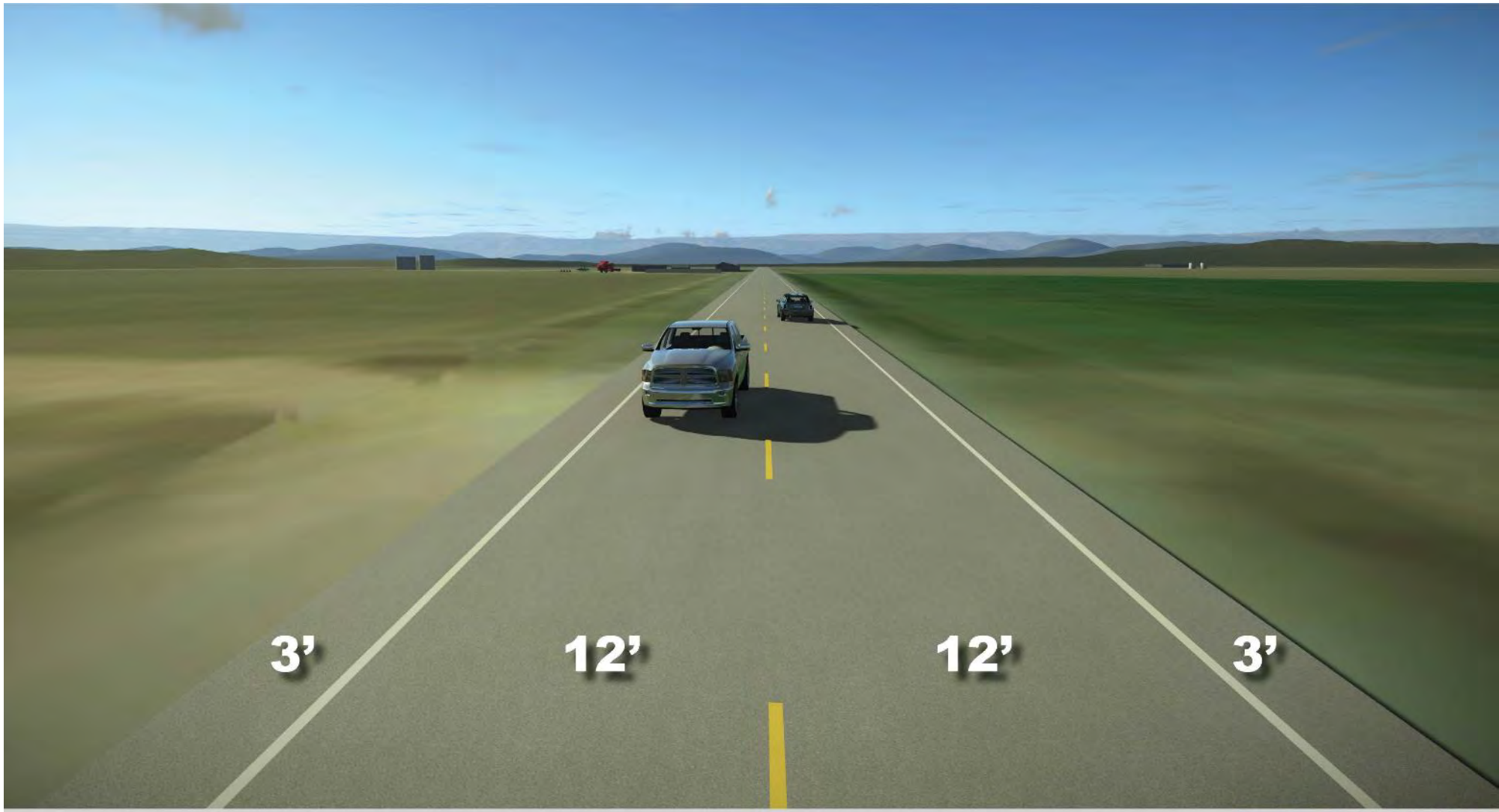
FELSBURG HOLT & ULLEVIG
connecting & enhancing communities

Section 5A


SECTION 4
SECTION 5A
SECTION 5B
with raised median
with raised median
with center turn lane
Mead St.
CR 17
6
4
2
3rd St
25
CR 9.5
CR 11
CR 13
CR 19
MEAD
FIRESTONE


LEGEND
Expressway
Non-Rural Principal Highway
Rural/Regional Highway
Arterial
#
Number of Lanes

Section 5A—Existing (2-Lane Principal Highway)



Section 5A - existing roadway conditions

FELSBURG HOLT & ULLEVIG
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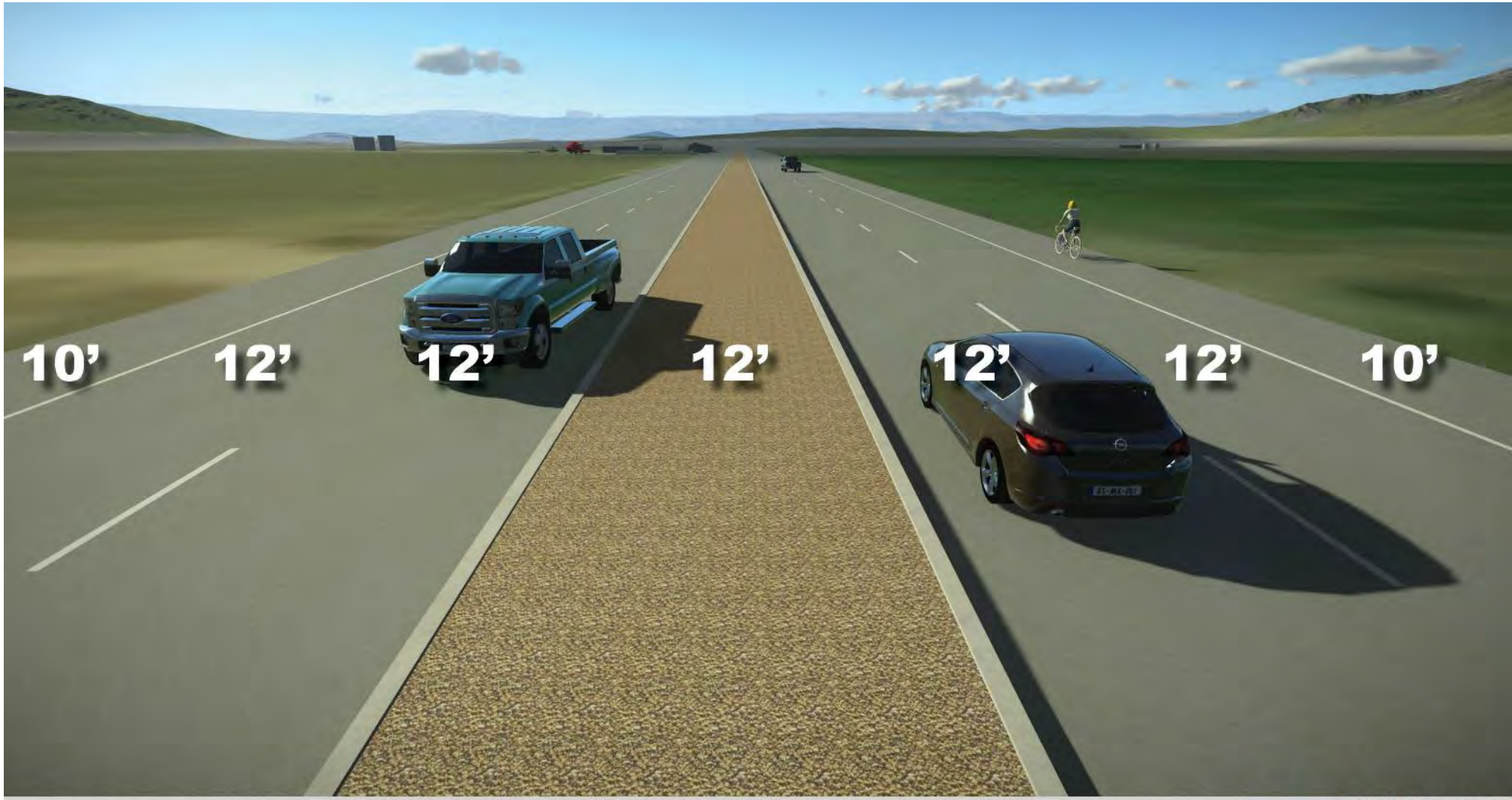
Section 5A—Proposed (4-Lane Expressway + Raised Median)



Section 5A - Proposed roadway conditions

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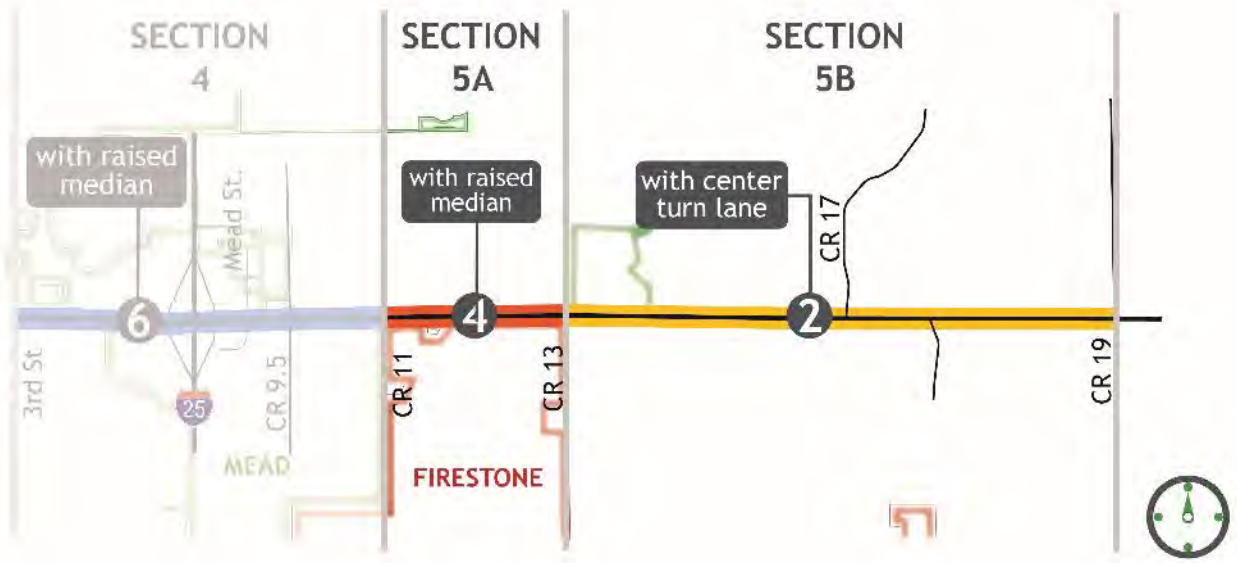
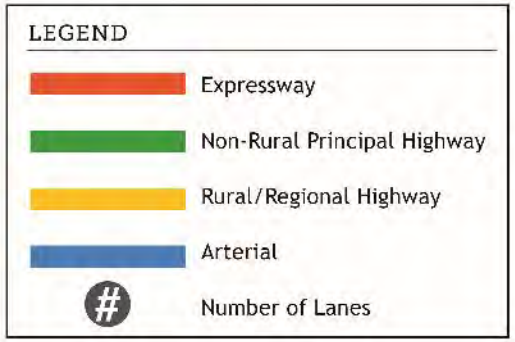
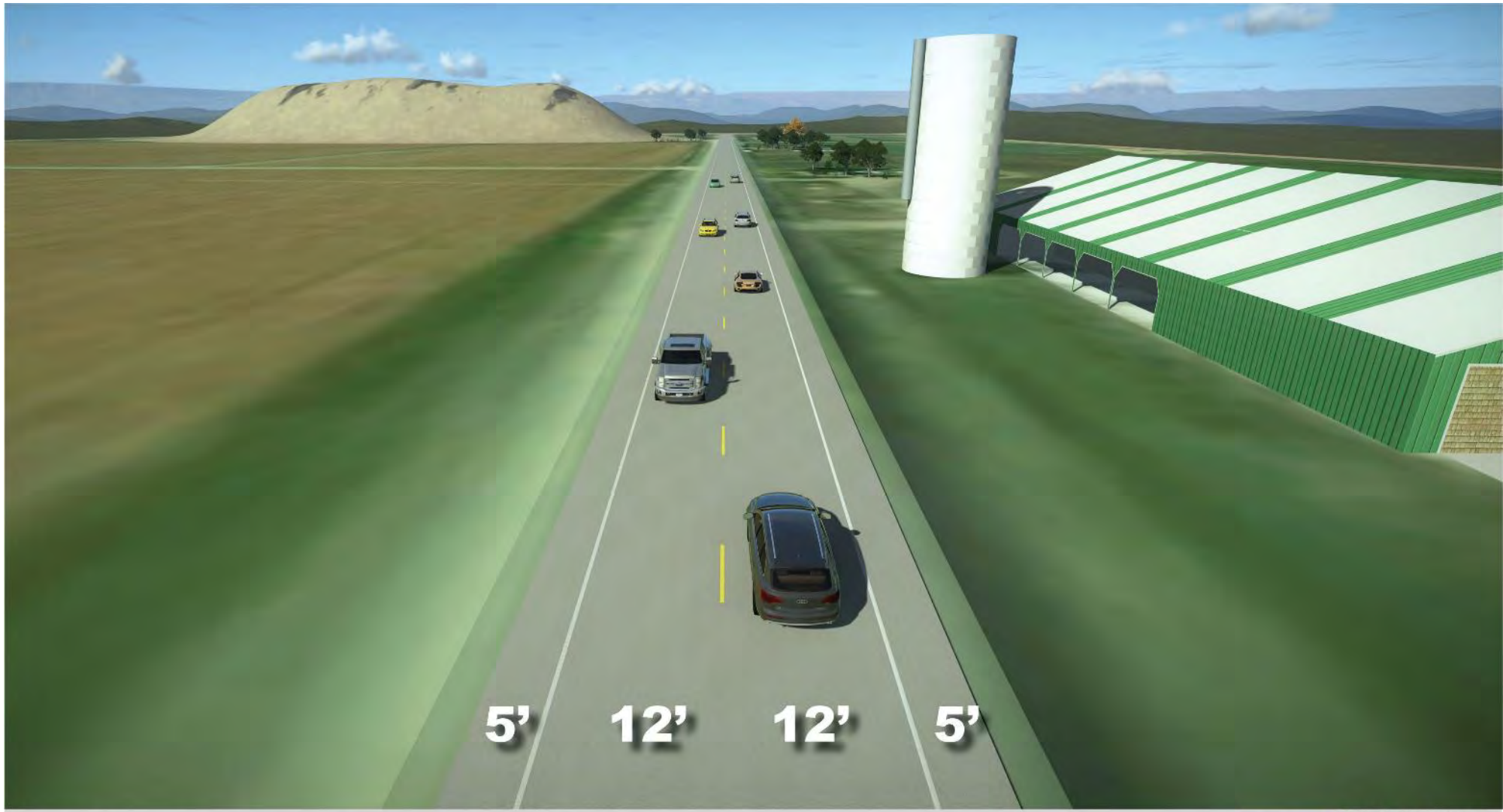
Section 5B


SECTION 4
SECTION 5A
SECTION 5B
with raised median
with raised median
with center turn lane
Mead St.
CR 17
6
4
2
3rd St
25
CR 9.5
CR 11
CR 13
CR 19
MEAD
FIRESTONE


LEGEND
Expressway
Non-Rural Principal Highway
Rural/Regional Highway
Arterial
#
Number of Lanes

Section 5B—Existing (2-Lane Regional Highway)



Section 5B - existing roadway conditions

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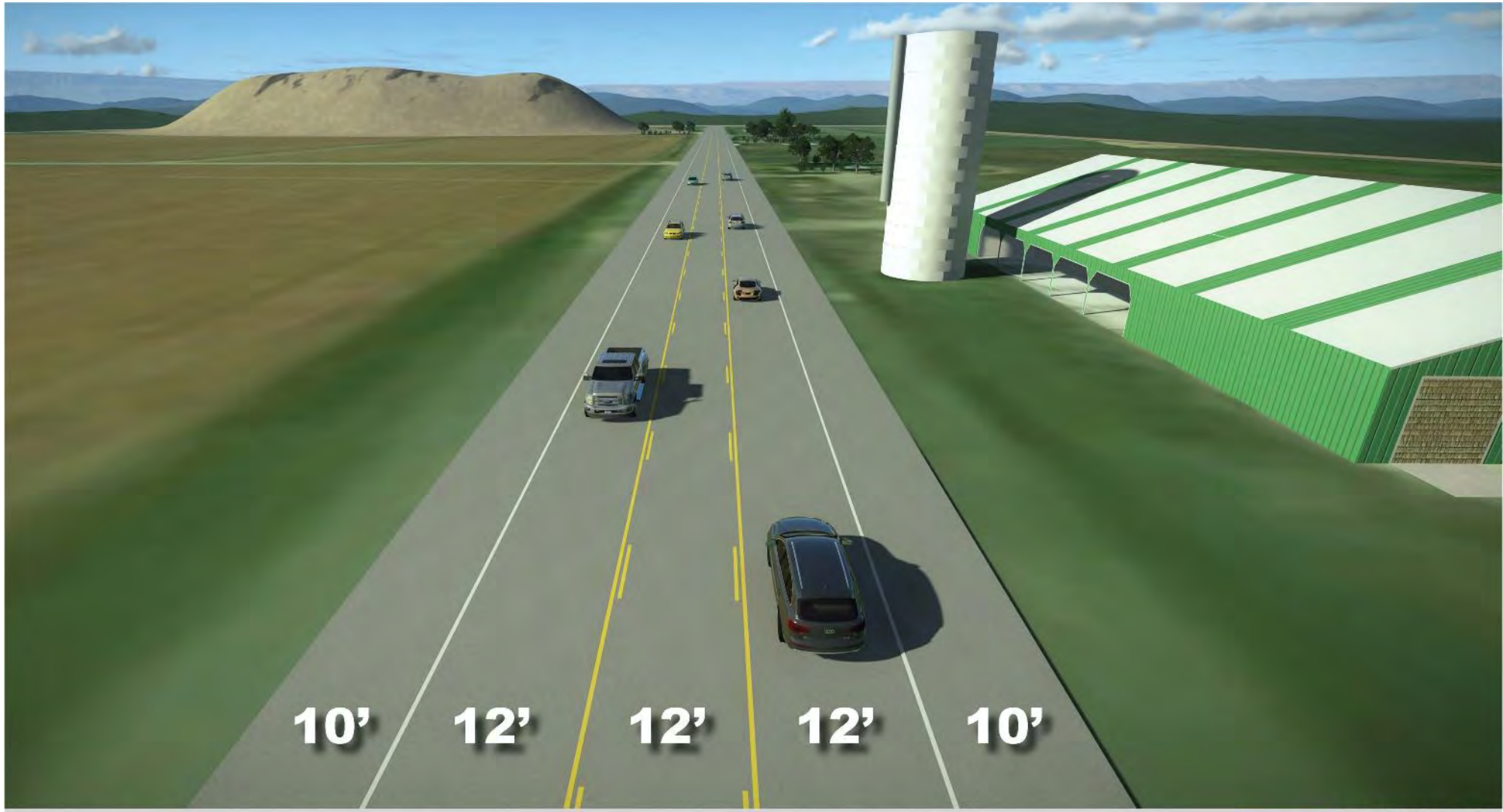
Section 5B—Proposed (2-Lane Regional Highway + Turn Lane)



Section 5B - Proposed roadway conditions

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connecting & enhancing communities

Level 2b Alternatives Development Overview

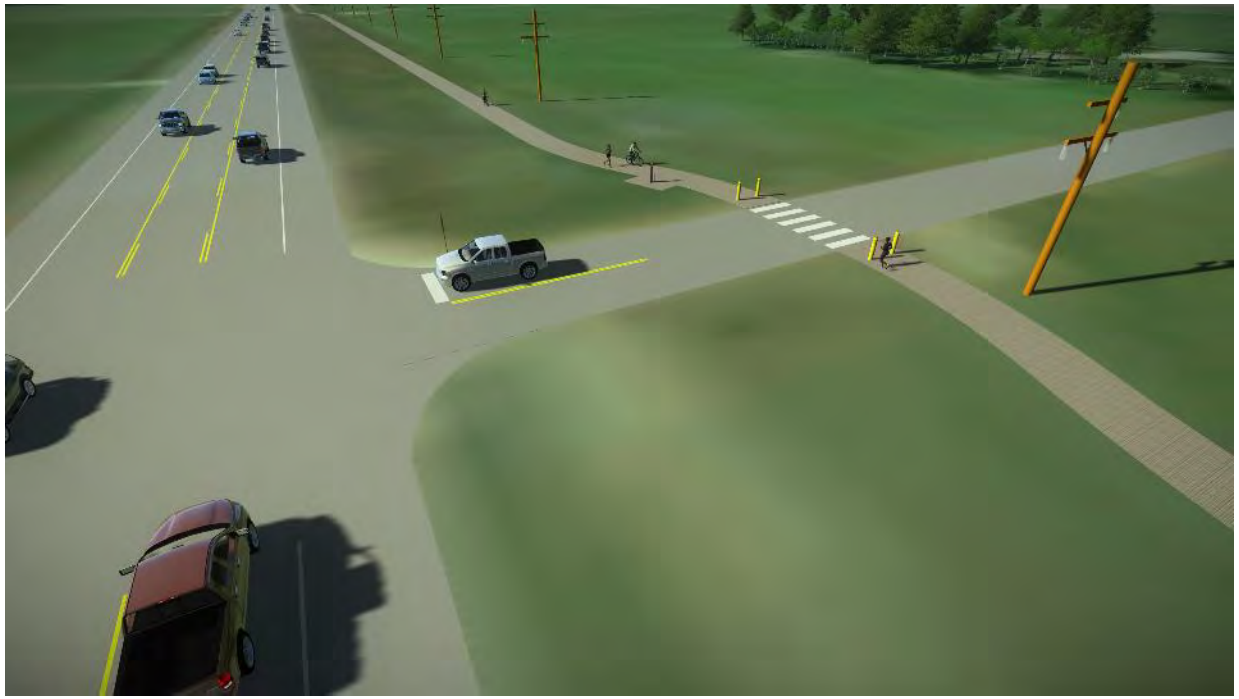
- Holistic Transportation System Approach
  - Functionality
  - Resiliency
  - Multi-modal focus
  - Corridor-wide benefits/trade-offs
- Evaluation Criteria
- Level 2b Collaboration and Workshops
  - Known issues
  - Needs
  - Goals

Access Road with Advisory Shoulders

- Known challenges:
  - Safety concerns with left turns on and off highway
  - Multiple, unrestricted access points

- Level 2b alternatives considered:
  - Western limits, north of SH 66
  - Between Highland Drive and N 66th St
  - Potential options
    - Access road with advisory shoulders in localized areas
    - Connect facility with multi-use trail between access road sections

Access Road with Advisory Shoulders Options



Access Road with Advisory Shoulders Options

Slide 34

Project	ACCESS ROAD CONCEPTUAL PLANS		PRELIMINARY	Sheet Revisions	10/12/2018 Print Date:
SH 66			No Revisions:	Init. / Comments / Date:	SH66 ABL_Sheet 1.dgn File Name:
PEL	Structure Numbers	CLW Designer:	Revised:		Vert. Scale: NTS / 1:200 Horiz. Scale:
1 Sheet Number	1 OF 4 Subset Sheets:	CLW Detailer:	Void:		Unit Leader Initials / Unit Information

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Slide 35

Project	ACCESS ROAD CONCEPTUAL PLANS			PRELIMINARY
SH 66				No Revisions:
PEL	.	Structure Numbers	CLW Designer:	Revised:
	.		CLW Detailer:	
2 Sheet Number	2 OF 4 Subset Sheets:		Sheet Subset:	Void:

Sheet Revisions		
Init.	Comments	Date:

	10/12/2018 Print Date:
	SH66 ABL_Sheet 2.dgn File Name:
Vert. Scale: NTS	1:200 Horiz. Scale:
Unit Leader Initials	Unit Information

Slide 36

Project	ACCESS ROAD CONCEPTUAL PLANS			PRELIMINARY
SH 66				No Revisions:
PEL	.	Structure Numbers	CLW Designer:	Revised:
	.		CLW Detailer:	
3 Sheet Number	3 OF 4 Subset Sheets:		Sheet Subset:	Void:

Sheet Revisions		
Init.	Comments	Date:

	10/12/2018 Print Date:
	SH66 ADL_Sheet 3.dgn File Name:
Vert. Scale: NTS	1:200 Horiz. Scale:
Unit Leader Initials	Unit Information

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Slide 37

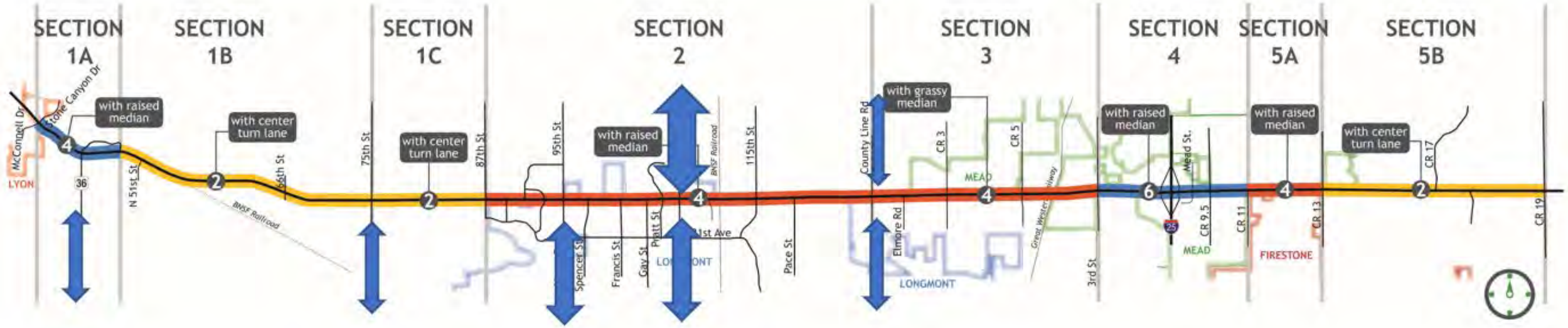

PVT. DRIVE
N 63RD ST
SH 66
N 66TH ST
LEGEND
PROPOSED FUTURE ROADWAY FOOTPRINT
PROPOSED ACCESS ROAD WITH ADVISORY SHOULDERS
PROPOSED BIKE AND PEDESTRIAN PATH
0'
50'
200'
400'
Project
SH 66
PEL
4 Sheet Number
ACCESS ROAD CONCEPTUAL PLANS
Structure Numbers
CLW Designer:
CLW Detailer:
4 OF 4 Subset Sheets:
Sheet Subset:
PRELIMINARY
No Revisions:
Revised:
Void:
Sheet Revisions
Init.
Comments
Date:
10/12/2018 Print Date:
SH66 ABL_Sheet 4.dgn File Name:
Vert. Scale: NTS
1:200 Horiz. Scale:
Unit Leader Initials
Unit Information

Intersection Operations

- Known challenges:
  - Highly congested intersections
  - Mobility concerns along mainline SH 66

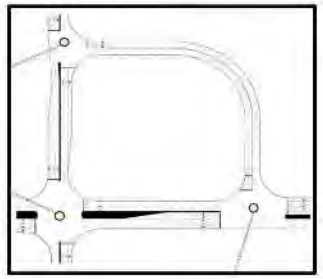
- Level 2b alternatives considered:
  - At grade and grade separated intersection options
  - SH 66 and Hover
  - SH 66 and US 287

Future Regional North-South Travel Routes

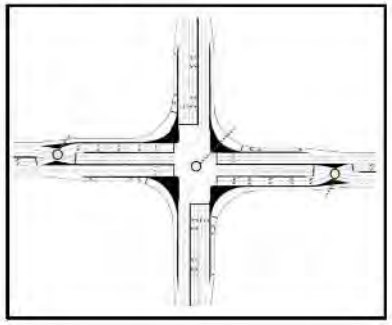


Intersection Operation Options

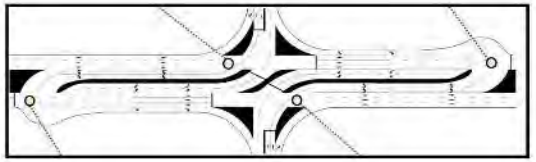
Quadrant Road (NE):



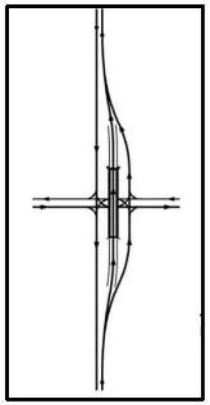
Partial Displaced Left Turn



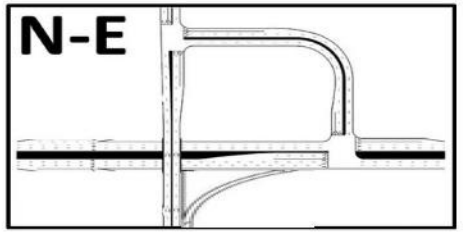
Restricted Crossing U-Turn:



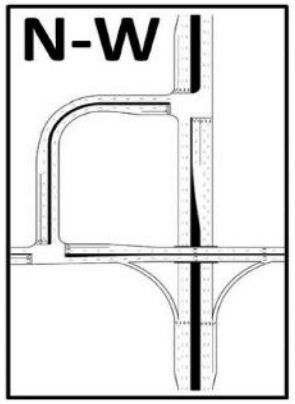
Grade-Separate one movement:



Hover Single Loop:



287 Single Loop:



	Intersection/Interchange type	SH 66 and Hover Rd AM Peak Operations	SH 66 and Hover Rd PM Peak Operations	SH 66 and US 287 AM Peak Operations	SH 66 and US 287 PM Peak Operations
At-Grade	Traditional (Add Capacity Improvements such as Auxiliary Lanes)	🔴	🔴	🔴	🔴
	Capacity Improvements and Re-Route Traffic via 95th St and Vermillion (Assume improved to 4 lanes)	🟡	🔴	🔴	🔴
	Quadrant Road -- Northeast Quadrant	🟡	🟡	🟡	🔴
	Quadrant Road -- Northwest Quadrant	not feasible at this location		🟡	🟡
	Partial Dispaced Left Turn (E-W)	🟢 *	🟢 *	🟡	🔴
	Restricted Crossing U-Turn Intersection (E-W)	🟡 *	🟢 *	not feasible at this location	
Grade-Separated	Re-Route Traffic to 95th St and Vermillion (Assume Vermillion is improved to 4 lanes) and Grade-separate one movement	🟡	🟡	🟡	🟡
	Grade-Separated Quadrant Road or Single Loop (N-E Quadrant for Hover, N-W Quadrant for 287)	🟢 *	🟢 *	🟢	🟡
	Traditional or Compressed Diamond Interchange (E-W uninterrupted flow)	🟢	🟢	🟢	🔴
	Partial Cloverleaf (E-W uninterrupted flow)	🟢	🟢	🟢	🟢
	Single Point Urban Interchange (E-W uninterrupted flow)	🟢	🟢	🟢	🔴
	Reversible lane from Hover to 287 (would require flyover tie-ins)	🟡	🟡	🟡	🟡

* Assumed dedicated NB to EB bypass lane

Legend:

🟢 Likely feasible operationally

🟡 May be nearing Capacity; Feasiblity may be dependent on design but worth investigating further

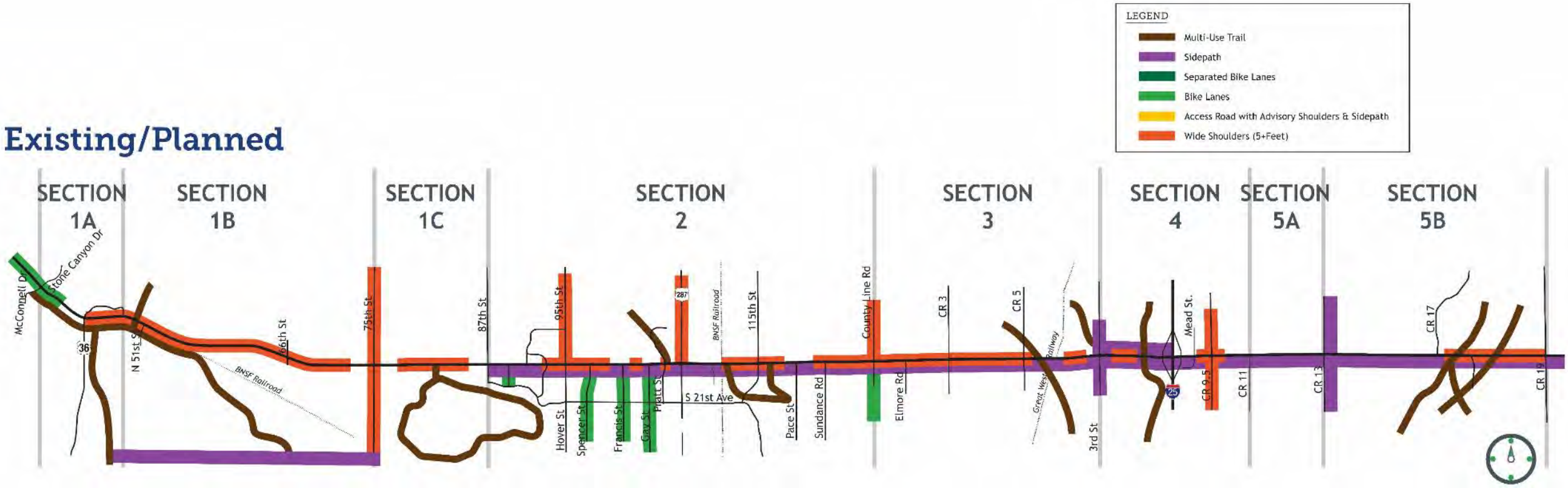
🔴 Over capacity; May operate acceptably with modifications

Bicycle and Pedestrian Facilities

- Known challenges:
  - Safety concerns for bicyclists and pedestrians
  - Incomplete connectivity through corridor
  - High levels of traffic stress

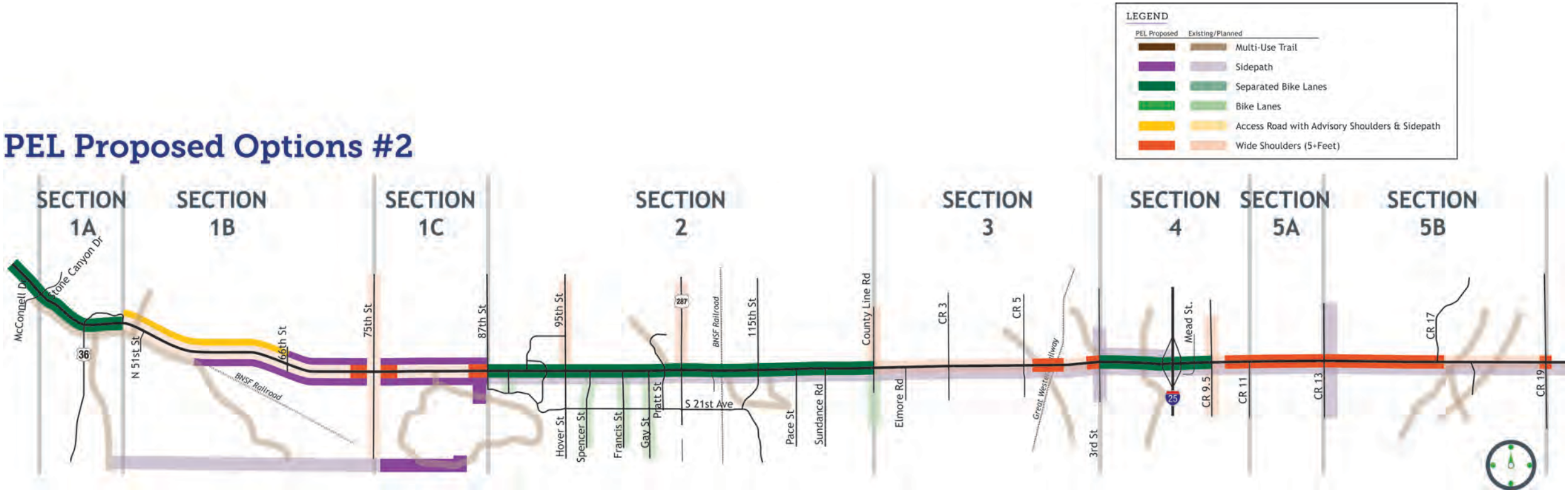
- Level 2b alternatives considered:
  - Side paths
  - Advisory shoulders
  - Separated bike lanes
  - Multi-use shoulders

Bicycle and Pedestrian Facilities



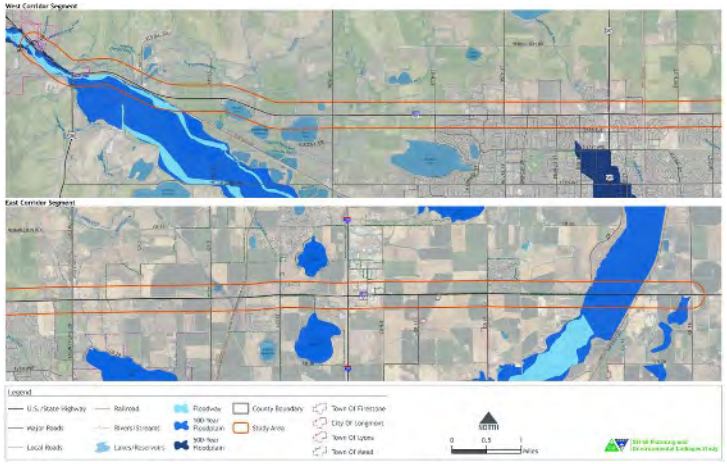
Bicycle and Pedestrian Facilities

Bicycle and Pedestrian Facilities



Consideration of Project Goals

Risk and Resiliency | Community Context | Environmental Considerations



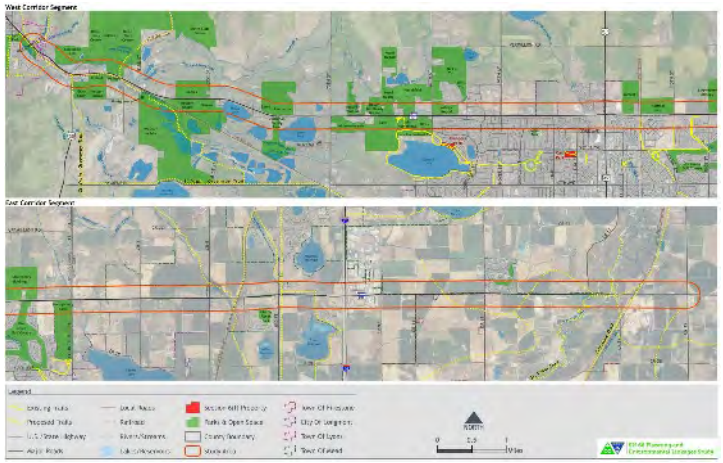


Figure 2.1 Community Visions for Future SH 66 Improvements

Alternatives Screening Overview

- Goal: Advance alternatives and options that most effectively address the defined transportation needs and that balance the PEL study's goals

Safety				Mobility				Access	Risk & Resiliency		Community Context		Environmental Considerations
Vehicle		Bicycle	Pedestrian	Vehicle		Bicycle	Pedestrian						
Does the alternative result in lower than average crash rates for like-corridors or intersections?	*Does the alternative allow for safer stop access and traffic re-entry by transit vehicles?*	*Does the alternative facilitate a safer bicycling environment?*	*Does the alternative facilitate a safer pedestrian environment?*	*Does the intersection type provide sufficient capacity to handle traffic demand in 2040?* AM	*Does the intersection type provide sufficient capacity to handle traffic demand in 2040?* PM	*Does the alternative enhance and/or allow current and planned transit service?*	*Does the alternative enhance bicycle mobility and connectivity along and across SH 66?*	*Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?*	*Does the intersection type allow for adequate access to be provided to adjacent properties?*	*Does the alternative avoid encroachment into identified threat areas?*	*Does the alternative facilitate emergency evacuation/ access potential?*	*Does the alternative match the surrounding community context?*	*Does the alternative minimize community impacts?*	*Does the alternative avoid substantial impacts to natural environmental and cultural resources?*

Summary Table for Level 2b Screening

SH 66 PEL Level 2b Screening

Community	Existing Roadway Classification	Future Roadway Classification	PEL Section	Intersection	Known Problems	Previous Planning	Roadway/Intersection Options	Bike/Ped/Transit Options - On Street	Bike/Ped/Transit Options - Off Street
Lyons	Rural/Regional Highway	Arterial -- 4 lanes + raised median	1A	McConnell Drive	Pedestrian; Access to the East on South side		Option 1 - No Action Option 2 - No changes to intersection Option 3 - Consolidate access to the east	Option 1 - No Action (existing bike lanes) Option 2 - Carry Existing Bike Lanes to US 36 Option 3 - Separated Bike Lanes	Option 1 - No Action Option 2 - Add Pedestrian Sidewalk Pads at Bus Stops
				Nolan Road	Access		Option 1 - No Action Option 2 - RI/RO		
				US 36	Access; Pedestrian (connection to trail); check Lyons sensitivity); could be transit need		Option 1 - No Action Option 2 - Keep signalized and assess intersection type based on future development; consolidate access to the east; Bike lane designation thru intersection; consider ROW preservation for future transit		
				Highland Drive	Mobility, depending on Lyons development; bicycle; pedestrian		Option 1 - No Action Option 2 - Full movement; channelized T or signalized if future development occurs Option 3 - Advisory shoulder to west of Highland Drive	Option 1 - No Action Option 2 - Widen Shoulders to 5+ Feet (where not currently) Option 3 - Traditional Bike Lanes Option 4 - Separated Bike Lanes	No Action
Boulder County		Rural/Regional Highway -- 2 lanes + center turn lane	1B	N 51st Street	Access; safety		Option 1 - No Action Option 2 - No Action; Close during re-development Option 3 - Close north leg and make offset 'T'		
				N 53rd Street	Access; safety; Bike/Ped	Assumes Bicycle grade-separation from south to north	Option 1 - No Action Option 2 - Channelized T (unsignalized) and access to Advisory Shoulder facility		Option 1 - No Action Option 2 - Access Road with Advisory Shoulders+ Sidepath Concept on north side
				Forest Service Access Rd	Access; safety		Option 1 - No Action Option 2 - RI/RO and access to Advisory Shoulder facility Option 3 - Full Movement		
				(Private Drives)	Bicycle; Access; Safety		Option 1 - No Action Option 2 - Advisory Shoulder facility on north side. (would require county participation with construction and maintenance)		
				Between Forest Service Access Rd And 61st St			Option 1 - No Action Option 2 - Advisory shoulder or separated bike path, with no vehicles		
				N 61st Street	n/a		Option 1 - No Action Option 2 - No Action; connects to Advisory Shoulder		
				N 63rd Street	access;		Option 1 - No Action Option 2 - 3/4 movement Option 3 - RI/RO Option 4 - Off set 'T' with 61st (signalized or channelized)?		
							Option 1 - No Action Option 2 - Advisory Shoulder facility on north side. (would require county participation with		

Sample Screening Matrix – Roadway

SH 66 Planning and Environmental Linkages Study

SH 66 PEL Level 2b Screening – Roadway

Section ID	Intersection	Alternative	Safety				Mobility					Access	Risk & Resiliency		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian								
			Does the alternative result in lower than average crash rates for like-corridors or intersections? FHU (Colleen/ Chris)	Does the alternative allow for safer stop access and traffic re-entry by transit vehicles? FHU (Shea / Emma)	Does the alternative facilitate a safer bicycling environment? FHU (Shea)	Does the alternative facilitate a safer pedestrian environment? FHU (Shea)	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? AM Atkins (Anna / Dave)	Does the intersection type provide sufficient capacity to handle traffic demand in 2040? PM Atkins (Anna / Dave)	Does the alternative enhance and/or allow current and planned transit service? FHU (Shea/ Emma)	Does the alternative enhance bicycle mobility and connectivity along and across SH 66? FHU (Shea)	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66? FHU (Shea)	Does the intersection type allow for adequate access to be provided to adjacent properties? Atkins (Anna/ Dave)	Does the alternative avoid encroachment into identified threat areas? FHU (Kate/ Jodie)	Does the alternative facilitate emergency evacuation/ac cess potential? FHU (Kate/ Jodie)	Does the alternative match the surrounding community context? FHU (Kelly)	Does the alternative minimize community impacts? FHU (Kelly)	Does the alternative avoid substantial impacts to natural environmental and cultural resources? FHU (Kate/ Jodie)		
1A - McConnell Dr. – US 36	McConnell Drive	Option 1 - No Action	7 Crashes				64.7	54.7				No change over existing	No change from existing. Near the floodplain/ floodway and the avalanche/ debris/rock-fall/ landslide areas. The area could be subject to other corridor-wide threats relating to high wind, tornado, fire, utility failure, low visibility, cyber-attack on CDOT infrastruc-ture, or hazardous material incidents.	No change from existing			Yes – no change from existing		
		Option 2 - No changes to intersection	Little impact to safety	Yes, would improve condition for transit vehicles accessing bus stop at gas station	Yes, defining points of access decreases areas of potential conflict with vehicles and could	Yes, defining points of access decreases areas of potential conflict with vehicles	64.7	54.7	Yes, less conflict points with vehicles could lead to minor improve-ment in travel time	No impact on connectivity, but may encourage more riders with better definition of where	Maybe, as defining access would better define pedestrian areas and crossings	No change over existing	Higher risk with alternative in floodplain/ floodway and near the avalanche/ debris/rock-fall/landslide area. The area could be	Moderately enhances evacuation options			Moderate impacts could involve St. Vrain floodplain/ floodway, potential wetlands, Preble's meadow jumping mouse (PMJM) and bald eagle habitat,		Greater improvement in pedestrian environment if done with curb and gutter with addition of sidewalk.

Sample Screening Matrix – Bike/Ped/Transit

SH 66 Planning and Environmental Linkages Study

SH 66 PEL Level 2b Screening – Bicycle, Pedestrian, and Transit

Section ID	Sub-Section	Alternative	Safety				Mobility				Access	Risk		Community Context		Environmental Considerations	Summary of Results	Justification/ Additional Comments
			Vehicle		Bicycle	Pedestrian	Vehicle			Bicycle	Pedestrian							
			Does the alternative result in lower than average crash rates for like-corridors or intersections? FHU (Colleen/Chris)	Does the alternative allow for safer stop access and traffic re-entry by transit vehicles? FHU (Shea / Emma)	Does the alternative facilitate a safer bicycling environment? FHU (Shea)	Does the alternative facilitate a safer pedestrian environment? FHU (Shea)	Does the alternative allow for sufficient capacity to handle traffic demand in 2040? AM Atkins (Anna / Dave)	Does the alternative allow for sufficient capacity to handle traffic demand in 2040? PM Atkins (Anna / Dave)	Does the alternative enhance and/or allow current and planned transit service? FHU (Shea/Emma)	Does the alternative enhance bicycle mobility and connectivity along and across SH 66? FHU (Shea)	Does the alternative enhance pedestrian mobility and connectivity along and across SH 66? FHU (Shea)	Does the intersection type allow for adequate access to be provided to adjacent properties? Atkins (Anna/ Dave)	Does the alternative avoid encroachment into identified threat areas? FHU (Kate/Jodie)	Does the alternative facilitate emergency evacuation/ access potential? FHU (Kate/Jodie)	Does the alternative match the surrounding community context? FHU (Kelly)	Does the alternative minimize community impacts? FHU (Kelly)	Does the alternative avoid substantial impacts to natural environmental and cultural resources? FHU (Kate/Jodie)		
1A - McConnell Dr. – Highland Dr.	McConnell Dr. - US 36 (On-Street)	Option 1 - No Action (existing bike lanes)																
		Option 2 - Carry Existing Bike Lanes to US 36																
		Option 3 - Separated Bike Lanes																
	McConnell Dr. - US 36 (Off-Street)	Option 1 - No Action																
		Option 2 - Add Pedestrian Sidewalk Pads at Bus Stops																
	US 36 - Highland Dr. (On-Street)	Option 1 - No Action																
		Option 2 - Widen Shoulders to 5+ Feet (where not currently)																
		Option 3 - Traditional Bike Lanes																
		Option 4 - Separated Bike Lanes																

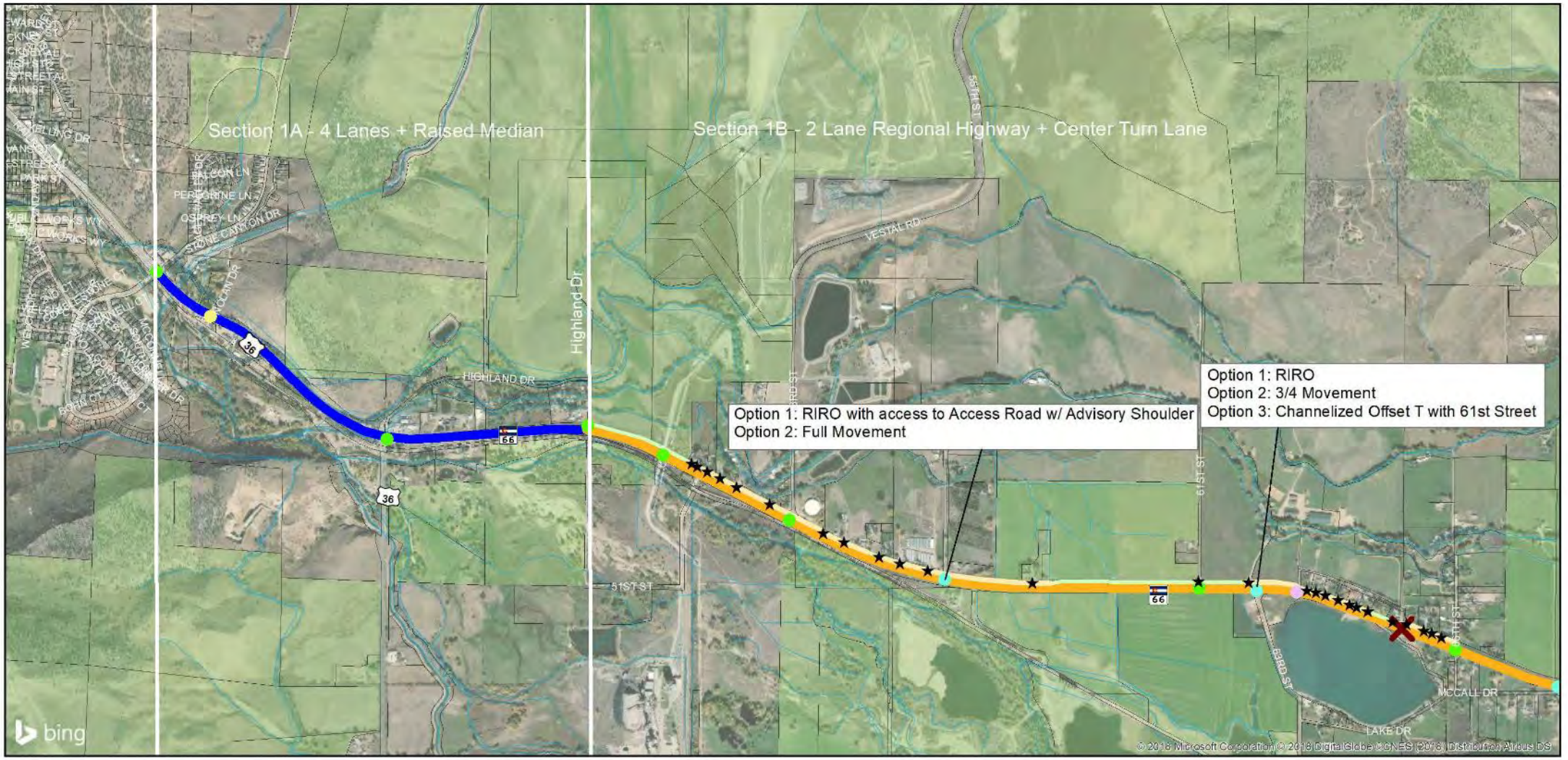
SH 66 Planning and Environmental Linkages Study

Small Group Discussions by Section

SH 66 Planning and Environmental Linkages Study

Small Group Report Back

Slide 52



Legend

- Rivers/Streams
- Parks/Open Space or Conservation Easement
- Parcel Boundary/ ROW Boundary
- Municipal Boundary
- Full Movement
- 3/4 Intersection
- Right-In/Right-Out
- Close Access
- Multiple Options
- Consolidate Driveways
- Railroad Grade Separation
- Arterial
- Expressway
- Rural/Regional Highway
- Proposed Future Roads
- 10' Bike and Pedestrian Path
- 16' Access Road with Advisory Shoulder

SH66 PEL - Level 2b Alternative Development
Map Sheet 1 of 6

N

0 500 1,000 Feet

SH 66 Planning and Environmental Linkages Study

Slide 53

Legend

- Rivers/Streams
- Parks/Open Space or Conservation Easement
- Parcel Boundary/ ROW Boundary
- Municipal Boundary
- Full Movement
- 3/4 Intersection
- Right-In/Right-Out
- Close Access
- Multiple Options
- Consolidate Driveways
- Railroad Grade Separation
- Arterial
- Expressway
- Rural/Regional Highway
- Proposed Future Roads
- 10' Bike and Pedestrian Path
- 16' Access Road with Advisory Shoulder

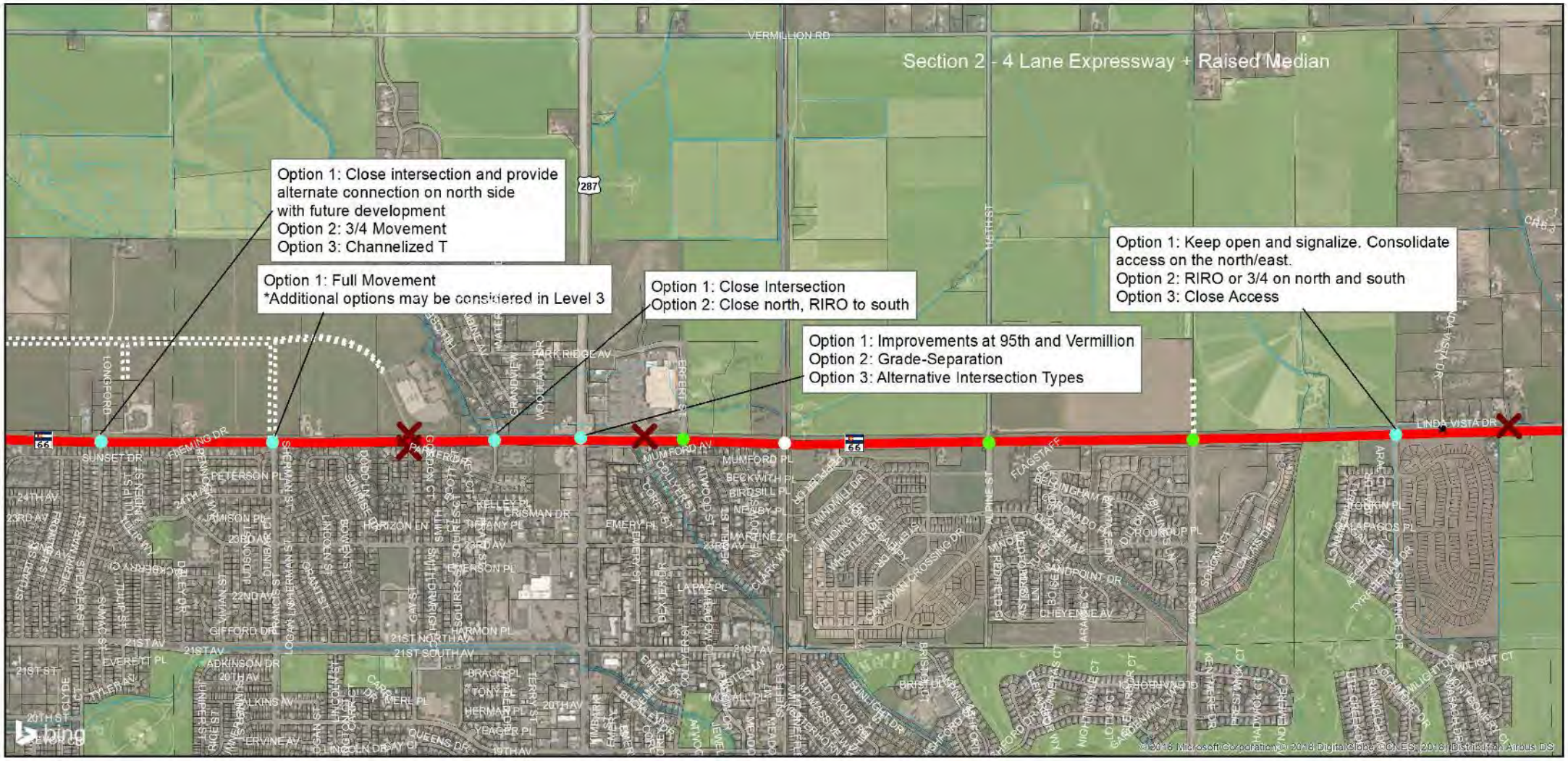
SH66 PEL - Level 2b Alternative Development
Map Sheet 2 of 6

N

0 500 1,000 Feet

SH 66 Planning and Environmental Linkages Study

Slide 54



Legend

- Rivers/Streams
- Parks/Open Space or Conservation Easement
- Parcel Boundary/ ROW Boundary
- Municipal Boundary
- Full Movement
- 3/4 Intersection
- Right-In/Right-Out
- Close Access
- Multiple Options
- Consolidate Driveways
- Railroad Grade Separation
- Arterial
- Expressway
- Rural/Regional Highway
- Proposed Future Roads
- 10' Bike and Pedestrian Path
- 16' Access Road with Advisory Shoulder

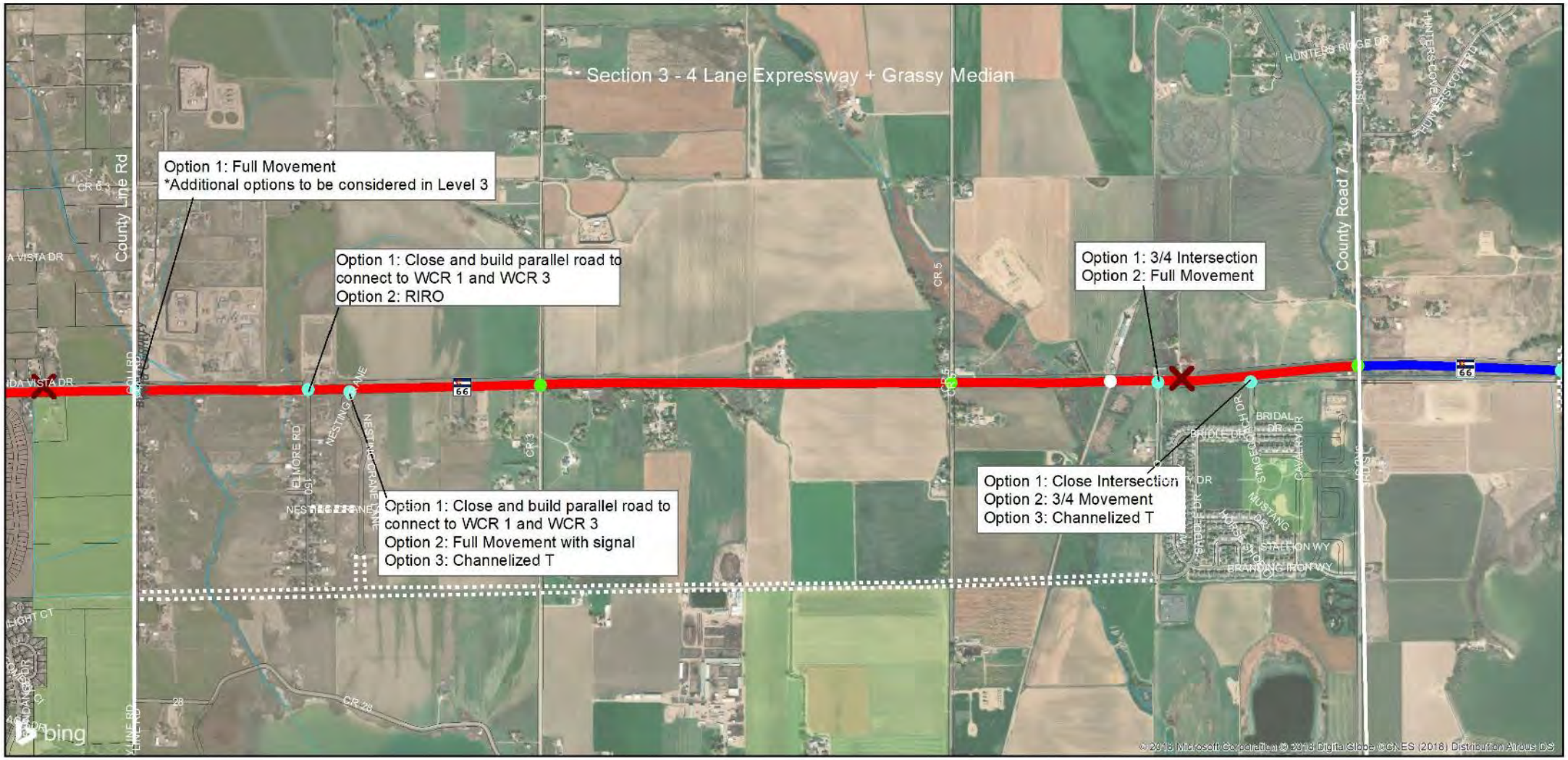
SH66 PEL - Level 2b Alternative Development
Map Sheet 3 of 6

N

0 500 1,000 Feet

SH 66 Planning and Environmental Linkages Study

Slide 55



Legend

- Rivers/Streams
- Parks/Open Space or Conservation Easement
- Parcel Boundary/ ROW Boundary
- Municipal Boundary
- Full Movement
- 3/4 Intersection
- Right-In/Right-Out
- Close Access
- Multiple Options
- Consolidate Driveways
- Railroad Grade Separation
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- Expressway
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SH66 PEL - Level 2b Alternative Development
Map Sheet 4 of 6

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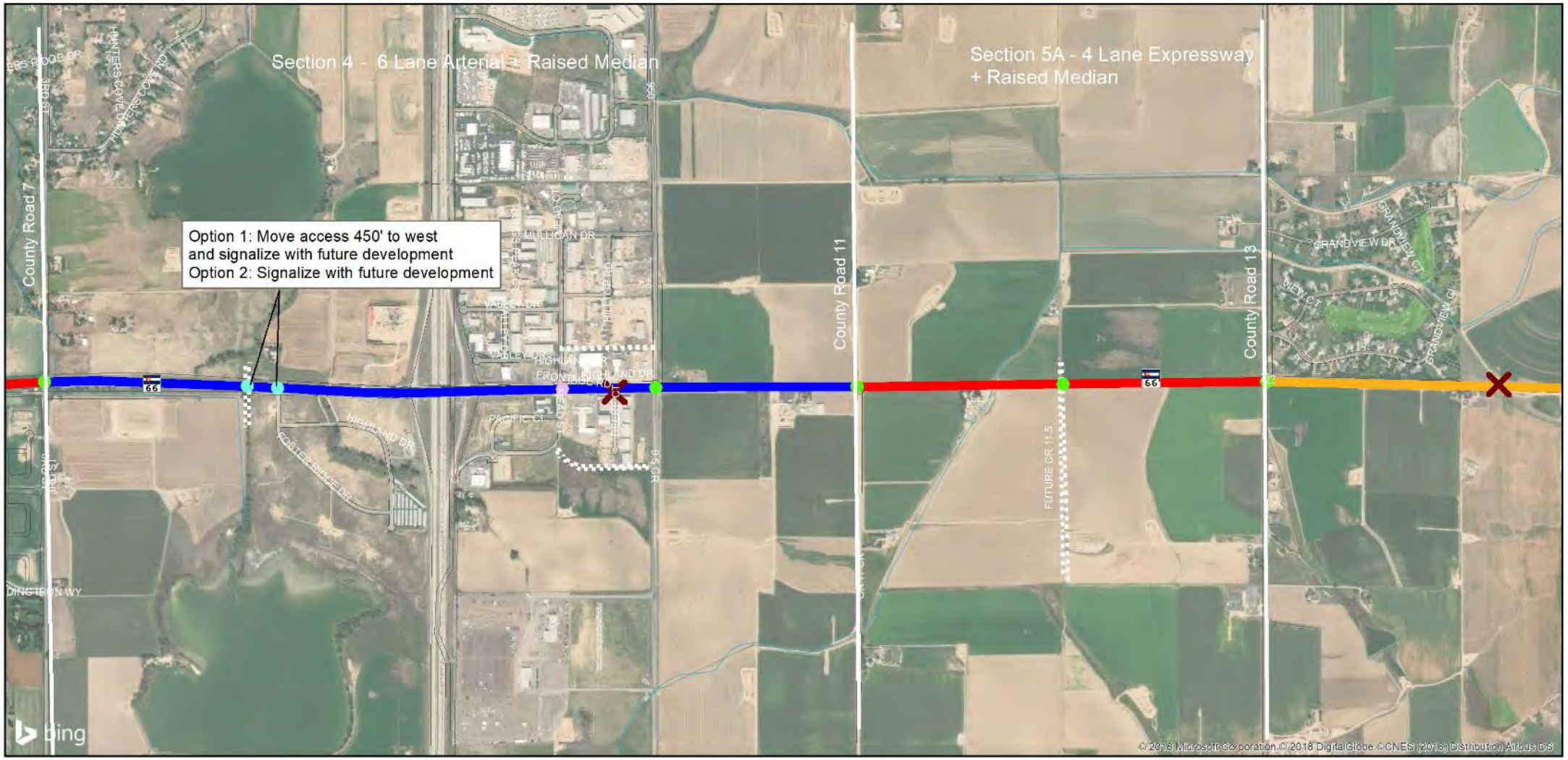
SH 66 Planning and Environmental Linkages Study

Slide 56



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SH66 PEL - Level 2b Alternative Development
Map Sheet 5 of 6

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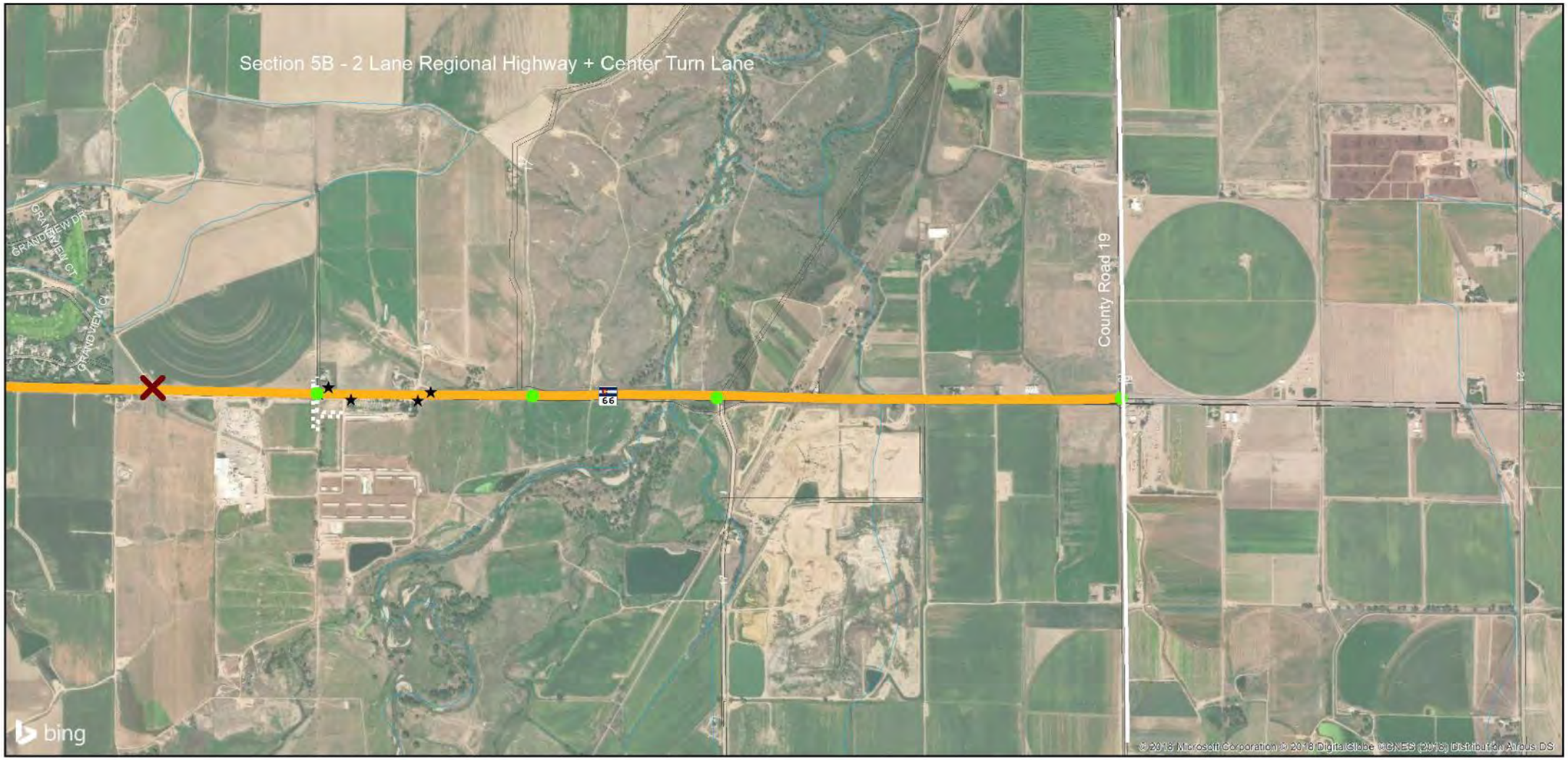
SH 66 Planning and Environmental Linkages Study

Slide 57



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SH66 PEL - Level 2b Alternative Development
Map Sheet 6 of 6

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SH 66 Planning and Environmental Linkages Study

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SH 66 Planning and Environmental Linkages Study

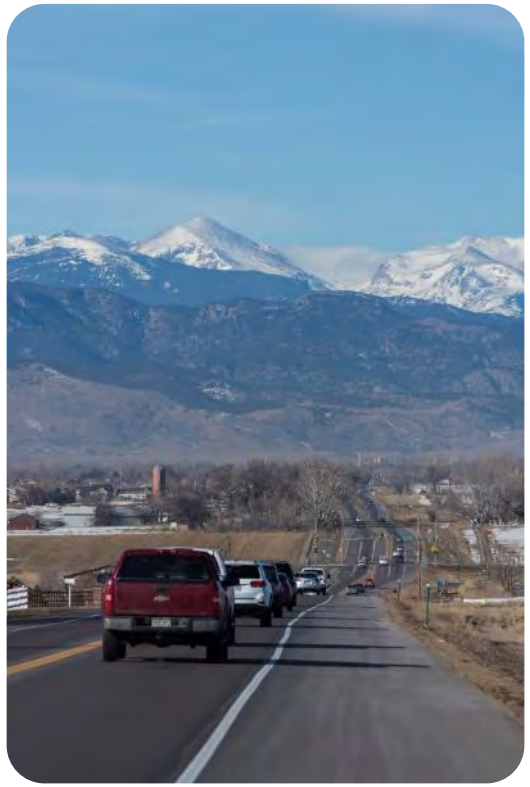
Upcoming Next Steps

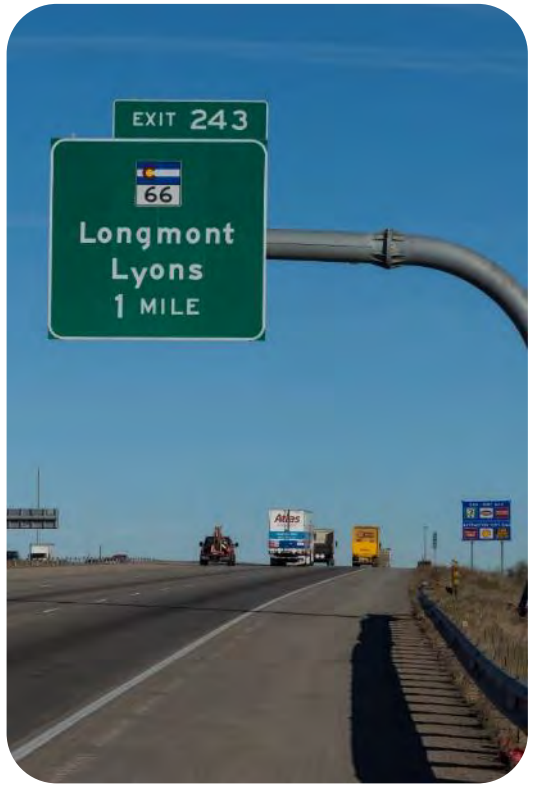
Next Steps

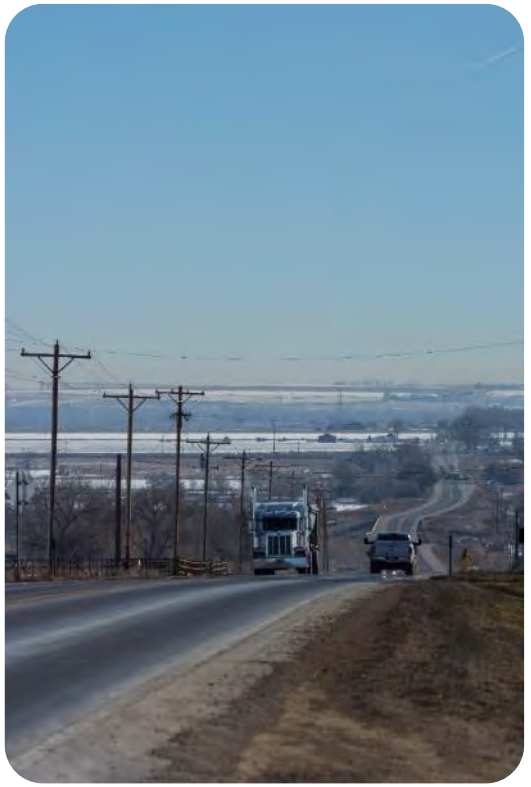
- October - November:
  - Incorporate TAC feedback into Level 2b findings/documentation
  - Update and finalize Level 2b, tables, maps, and deliverables

- Late November:
  - Next TAC meeting
  - Present Level 2b findings and introduce Level 3 process and ACP next steps

SH 66 Planning and Environmental Linkages Study





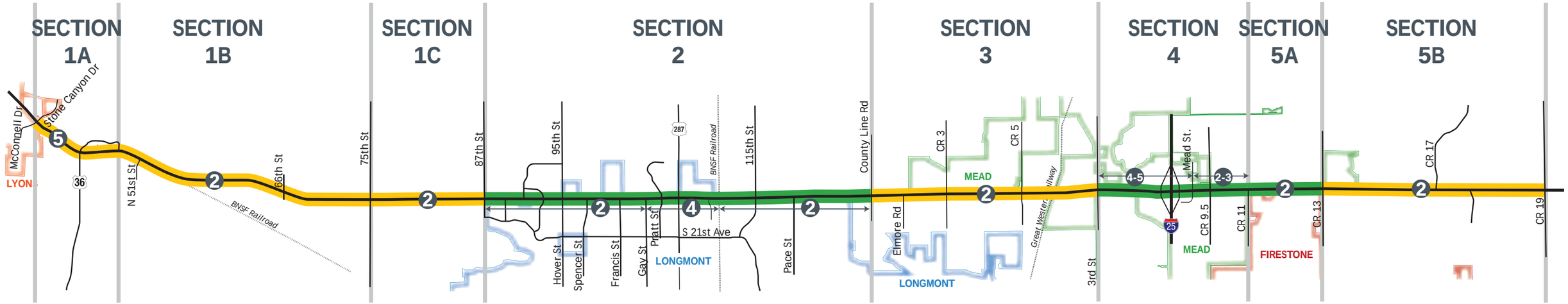


Thank You!

SH 66 Planning and Environmental Linkages Study

Level 2a Screening Operational Classification

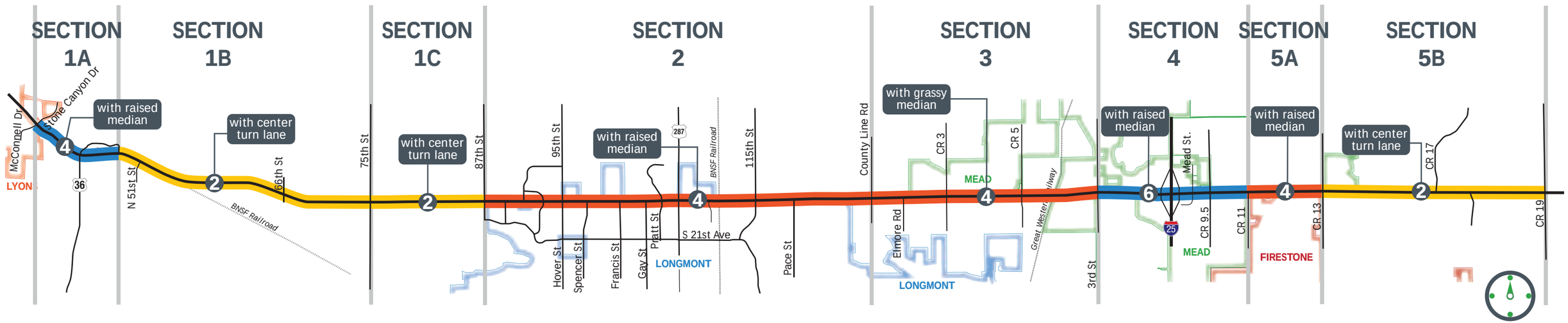
Existing



LEGEND

- Expressway
- Non-Rural Principal Highway
- Rural/Regional Highway
- Arterial
- (X) Number of Thru Lanes

Future



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1.0 Level 2B Evaluation

The following evaluation criteria were developed to compare how well each highway interchange/intersection, segment, and alternative option in Level 2B screening meets the Purpose and Need and goals of the project. The performance measures are a mix of qualitative and quantitative assessments and are based on the criteria and the data available at this stage of development.

Table 1. Level 2B Evaluation Criteria and Performance Measures

Category	Criteria	Performance Measure(s)
Safety	Ability to address unsafe physical or operational conditions for vehicles along corridors or at intersections	Lower than average crash rate: - 1.15 rural; 1.5 urban for corridors - LOSS I or II for intersections Or when LOSS is unavailable Crash rate < 0.15 crashes/million entering vehicles
	Ability to address unsafe conditions for transit operations	Separation of transit vehicles from other modes Stop safety
	Facilitates safer bicycling environment	Separation from other modes Frequency and quality of crossings Bicyclist perception of comfort/safety Suitability given speeds/traffic volumes
	Facilitate safer pedestrian environment	Separation from other modes Frequency and quality of crossings Pedestrian perception of comfort/safety Suitability given speeds/traffic volumes
Mobility	Intersection capacity related to 2040 traffic demand	Intersection Capacity Utilization: Green: ICU < 73% (Corresponding to LOS A, B, or C) Yellow: ICU between 73% and 91% (LOS D or E) Red: ICU > 91% (LOS F or worse)
	Enhanced transit service opportunities	Compatibility with adjacent land use Institutional barriers (i.e., RTD boundary) Route efficiency Stop availability and/or access for pedestrians and bicyclists Transit network connectivity Populations served

Category	Criteria	Performance Measure(s)
	Enhanced bicycle mobility and connectivity opportunities	Compatibility with adjacent land use Network connectivity and consistency Attracts more users (lower LTS)
	Enhanced pedestrian mobility and connectivity opportunities	Compatibility with adjacent land use Network connectivity and consistency Attracts more users (increased comfort and aesthetic) ADA accommodation
Access	Strategic access consolidation	Allow for adequate access to adjacent properties: Green = no change in access or less than a mile of out of direction travel required Yellow = 0.5 – 1.0 miles total out of direction travel required for some movements Red = >1.0 mile total out of direction travel required for some movements
Risk	Ability to address physical threats	Minimize encroachment into risk areas
	Facilitate emergency evacuation	Potential to enhance emergency evacuation options
Community Context	Design and operational context related to local community surroundings	Design and operational context related to local community surroundings
	Impacts on existing community	Impacts on existing community
Environmental Considerations	Impacts on environmental and cultural resources within the built and natural environment	Potential to avoid or minimize impacts to environmental and cultural resources within the built and natural environment

The color ratings shown with the performance measures in the following screening matrices are used as a visual indication of the comparative characteristics of a criterion between options. The colors are not used as an indication of a decision (i.e., an option with many "red" ratings was not automatically rendered unreasonable). The colors are a general indication of the following:

- Green = Comparatively beneficial and/or minor impacts
- Yellow = Comparatively neutral benefits and/or moderate impacts
- Red = Comparatively negative and/or major impacts

The color ratings for each criterion used in the sections are defined below.

1.1 Safety

1.1.1 Ability to address unsafe conditions for vehicles

- Green = Potential for substantial crash reduction
- Yellow = Little to no change to crash reduction expected

- Red = Increased potential for vehicular crashes

1.1.2 Ability to address unsafe conditions for transit operations

- Green = Potential for substantial separation from other modes and/or improvement in ability to make safe stops (if warranted)
- Yellow = Little to no change to separation from other modes and/or improvement in ability to make safe stops (if warranted)
- Red = Increased potential for interactions with other modes and/or unsafe stop conditions (if warranted)

1.1.3 Facilitates safer bicycle environment

- Green = Potential for substantial separation from other modes and/or reduction of LTS
- Yellow = Little separation from other modes and/or change in LTS, or no change is acceptable given current or planned bicycle conditions
- Red = No change or increase in interactions with other modes and/or LTS, or no change is unacceptable given current or planned bicycle conditions

1.1.4 Facilitates safer pedestrian environment

- Green = Potential for substantial separation from other modes and/or increased comfort
- Yellow = Little separation from other modes and/or change in comfort, or no change is acceptable given current or planned pedestrian conditions
- Red = No change or increase in interactions with other modes and/or reduction in comfort, or no change is unacceptable given current or planned pedestrian conditions

1.2 Mobility

1.2.1 2040 intersection capacity related to travel demand

- Green = volume / capacity ratio between 0.6 and 0.85
- Yellow = volume / capacity ratio between 0.85 and 0.95
- Red = volume / capacity ratio less than 0.6 or greater than 0.95

1.2.2 Enhanced transit service opportunities

- Green = Substantial improvement in transit access and service opportunities
- Yellow = Minor to moderate improvements in transit access and service opportunities, or no change is acceptable given location's transit needs
- Red = Negative impact to transit access and service opportunities, or no change is unacceptable given location's transit needs

1.2.3 Enhanced bicycle mobility/connectivity opportunities

- Green = Substantial improvement in bicycle connectivity and mobility
- Yellow = Minor to moderate improvement in bicycle connectivity and mobility, or no change is acceptable given current or planned bicycle conditions
- Red = Negative impact to bicycle connectivity and mobility, or no change is unacceptable given current or planned bicycle conditions

1.2.4 Enhanced pedestrian mobility/connectivity opportunities

- Green = Substantial improvement in pedestrian connectivity and mobility
- Yellow = Minor to moderate improvement in pedestrian connectivity and mobility, or no change is acceptable given current or planned pedestrian conditions
- Red = Negative impact to pedestrian connectivity and mobility, or no change is unacceptable given current or planned pedestrian conditions

1.3 Access

1.3.1 Strategic access consolidation

- Green = Achieves access goals by providing adequate opportunity
- Yellow = Some access restriction may result at or near intersection
- Red = Selection of this type would have significant impact to access

1.4 Risk

1.4.1 Ability to address physical threats

- Green = Substantially avoids encroaching on risk areas
- Yellow = Moderately avoids encroaching on risk areas
- Red = Does not avoid encroaching on risk areas

1.4.2 Ability to facilitate emergency evacuation

- Green = Substantially enhances evacuation options
- Yellow = Moderately enhances evacuation options
- Red = Does not enhance evacuation options

1.5 Community Context

1.5.1 Design and operational context

- Green = Very consistent with surrounding design and operational context
- Yellow = Moderately consistent with surrounding design and operational context
- Red = Inconsistent with surrounding design and operational context

1.5.2 Impacts on existing community

- Green = Little to no impacts on existing community and properties
- Yellow = Moderate number of properties in the community impacted
- Red = Many or majority of surrounding community and properties impacted

1.6 Environmental Considerations

1.6.1 Environmental and cultural resource impacts

- Green = Minor to no impacts to surrounding natural and cultural environment
- Yellow = Moderate impacts to surrounding natural and cultural environment
- Red = Major impacts to surrounding built or natural and cultural environment

2.0 Evaluation Summary of Results

The evaluation matrix summarizes the recommendation for each option as follows:

- Carried Forward – Option will be evaluated further as part of corridor alternative with further definition and conceptual design
- Not Recommended – Option will not be evaluated further in this study due to comparatively negligible benefits and higher impacts than other options
- Eliminated – Option does not meet the Purpose and Need established with this study, or the option is unreasonable due to impacts and/or infeasibility

Level 2B Screening Questions

Safety

Vehicle

- Does the alternative result in lower than average crash rates for like-corridors or intersections?
- Does the alternative allow for safer stop access and traffic re-entry by transit vehicles?

Bicycle

- Does the alternative facilitate a safer bicycling environment?

Pedestrian

- Does the alternative facilitate a safer pedestrian environment?

Mobility

Vehicle

- Does the intersection type provide sufficient capacity to handle traffic demand in 2040? (AM/PM)
- Does the alternative enhance and/or allow current and planned transit service?

Bicycle

- Does the alternative enhance bicycle mobility and connectivity along and across SH 66?

Pedestrian

- Does the alternative enhance pedestrian mobility and connectivity along and across SH 66?

Access

- Does the intersection type provide adequate access to adjacent properties?

Risk and Resiliency

- Does the alternative avoid encroachment into identified threat areas?
- Does the alternative facilitate emergency evacuation/access potential?

Community Context

- Does the alternative match the surrounding community context?
- Does the alternative minimize community impacts?

Environmental Considerations

- Does the alternative avoid substantial impacts to natural environmental and cultural resources?

Project	ACCESS ROAD CONCEPTUAL PLANS			PRELIMINARY	Sheet Revisions			10/12/2018 Print Date:
SH 66				No Revisions:	Init.	Comments	Date:	SH66 ABL_Sheet 1.dgn File Name:
PEL	.	Structure Numbers	CLW Designer:	Revised:				Vert. Scale: NTS 1:200 Horiz. Scale:
1 Sheet Number	.		CLW Detailer:	Void:				Unit Leader Initials Unit Information
	1 OF 4 Subset Sheets:		Sheet Subset:					

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SH 66				No Revisions:		Init.	Comments	Date:
PEL	.	Structure Numbers	CLW Designer:	Revised:				
	.		CLW Detailer:					
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10/12/2018 Print Date:
SH66 ABL_Sheet 2.dgn File Name:
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Unit Leader Initials Unit Information

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SH 66					No Revisions:
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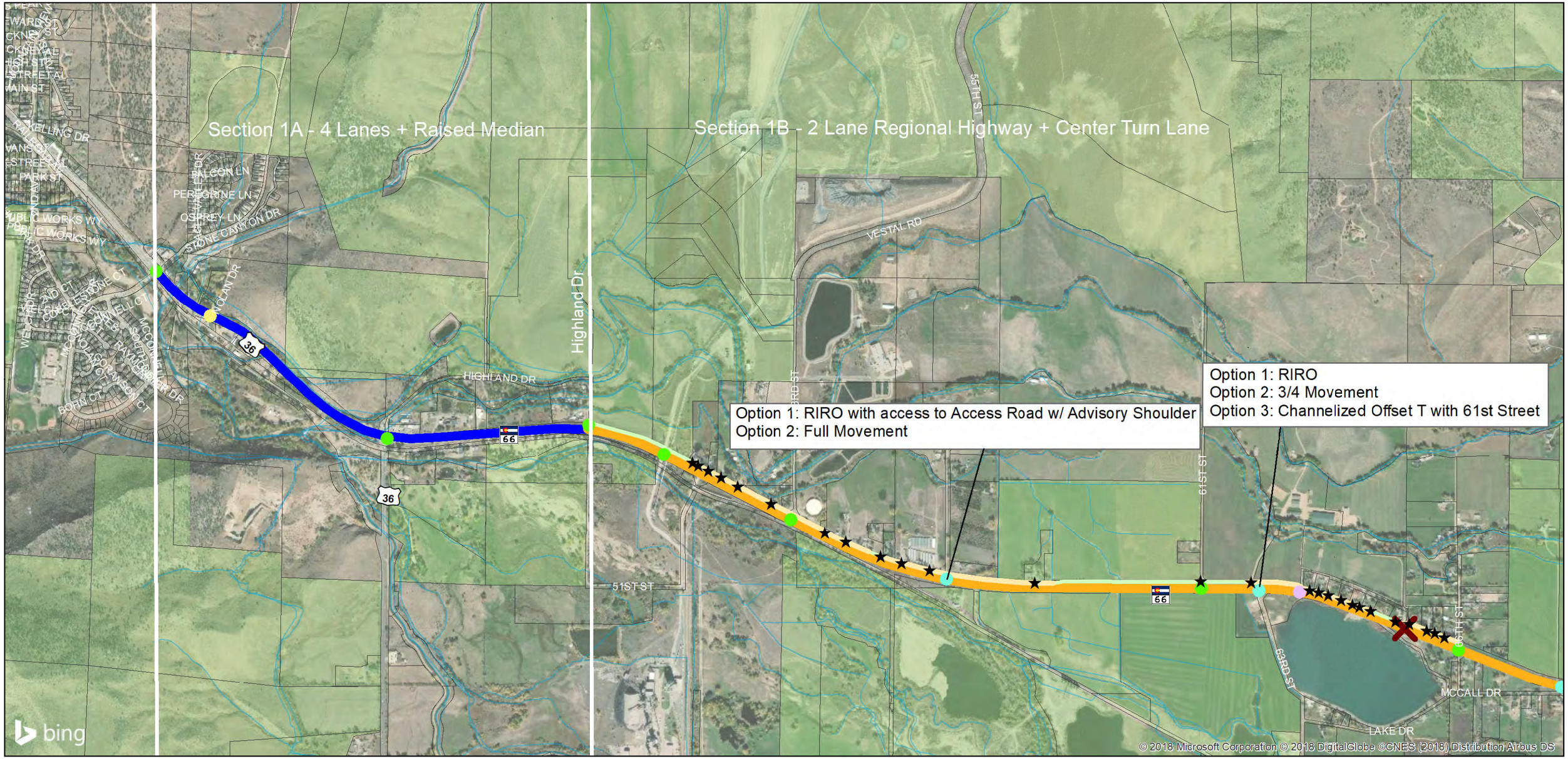

Legend

- Rivers/Streams
- Parks/Open Space or Conservation Easement
- Parcel Boundary/ ROW Boundary
- Municipal Boundary
- Full Movement
- 3/4 Intersection
- Right-In/Right-Out
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- 10' Bike and Pedestrian Path
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SH66 PEL - Level 2b Alternative Development

Map Sheet 1 of 6

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SH 66 Planning and Environmental Linkages Study

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Section 1B - 2 Lane Regional Highway
+ Center Turn Lane

Section 1C - 2 Lane Regional Highway
+ Center Turn Lane

Section 2 - 4 Lane Expressway + Raised Median

Option to improve 95th St and Vermillion Rd to 4 lanes

Option 1: Improvements at 95th & Vermillion
Option 2: Grade-Separation
Option 3: Alternative Intersection Types

Option 1: Two EB lanes near intersection
Option 2: Capacity Improvements
*Additional options may be considered in Level 3

Option 1: RIRO
Option 2: 3/4 Movement
Option 3: Channelized T

Option 1: Close Intersection
Option 2: RIRO

Option 1: Consolidate access on north and south to one RIRO
Option 2: Consolidate access on north and south to one full movement

VERMILLION RD
95TH ST
N 75th St
TABLE MOUNTAIN RD
N 87th St
Airport Rd
ANHAWA AVE
ANHAWA ST
ALJAN AV
SHERMANDI AV
FLEETWOOD AV
JOTIPA DR
LONGFORD
SUNSET DR
WILLOW CT
BOWLINE PL
LAKEPARK WY
SPINNAKER DR
SPINNAKER PL
CORMORAN PL
SANDPIPER PL
MADISON AV
ALMERIA WY
CONCORD WY
HORIZON PY
SANDDOLLAR CT
MARINER LN
MARINER DR
CAPTAIN KIDD CT
MARLIN DR
SAILFISH DR
BREAKWATER DR
HARVARD CT
HARVARD ST
LAKEPARK DR
LAKEPARK CT
WESTLAKE CT
PHEASANT DR
CONDOR DR
GOLDFINCH CT
WESTBROOK DR
WESTBROOK CT
BEECH CT
CYPRESS ST
HOOVER ST
STEELE ST
KAY ST
SHERIDAN ST
SPENCER ST
FRONTIER ST
SUMAC ST
TULIP ST
HACKBERRY CT
24TH AV
23RD AV
22ND AV
21ST AV
21ST ST
20TH ST
TREVOR CR
EVERETT
TYLER AV
OLYDE CT
KINGSLEY DR
ROZENA DR
CASH RD
66

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Legend

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SH66 PEL - Level 2b Alternative Development
Map Sheet 2 of 6

SH 66 Planning and Environmental Linkages Study

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Section 2 - 4 Lane Expressway + Raised Median

Option 1: Close intersection and provide alternate connection on north side with future development
Option 2: 3/4 Movement
Option 3: Channelized T

Option 1: Full Movement
*Additional options may be considered in Level 3

Option 1: Close Intersection
Option 2: Close north, RIRO to south

Option 1: Improvements at 95th and Vermillion
Option 2: Grade-Separation
Option 3: Alternative Intersection Types

Option 1: Keep open and signalize. Consolidate access on the north/east.
Option 2: RIRO or 3/4 on north and south
Option 3: Close Access

Legend

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SH66 PEL - Level 2b Alternative Development
Map Sheet 3 of 6

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SH 66 Planning and Environmental Linkages Study

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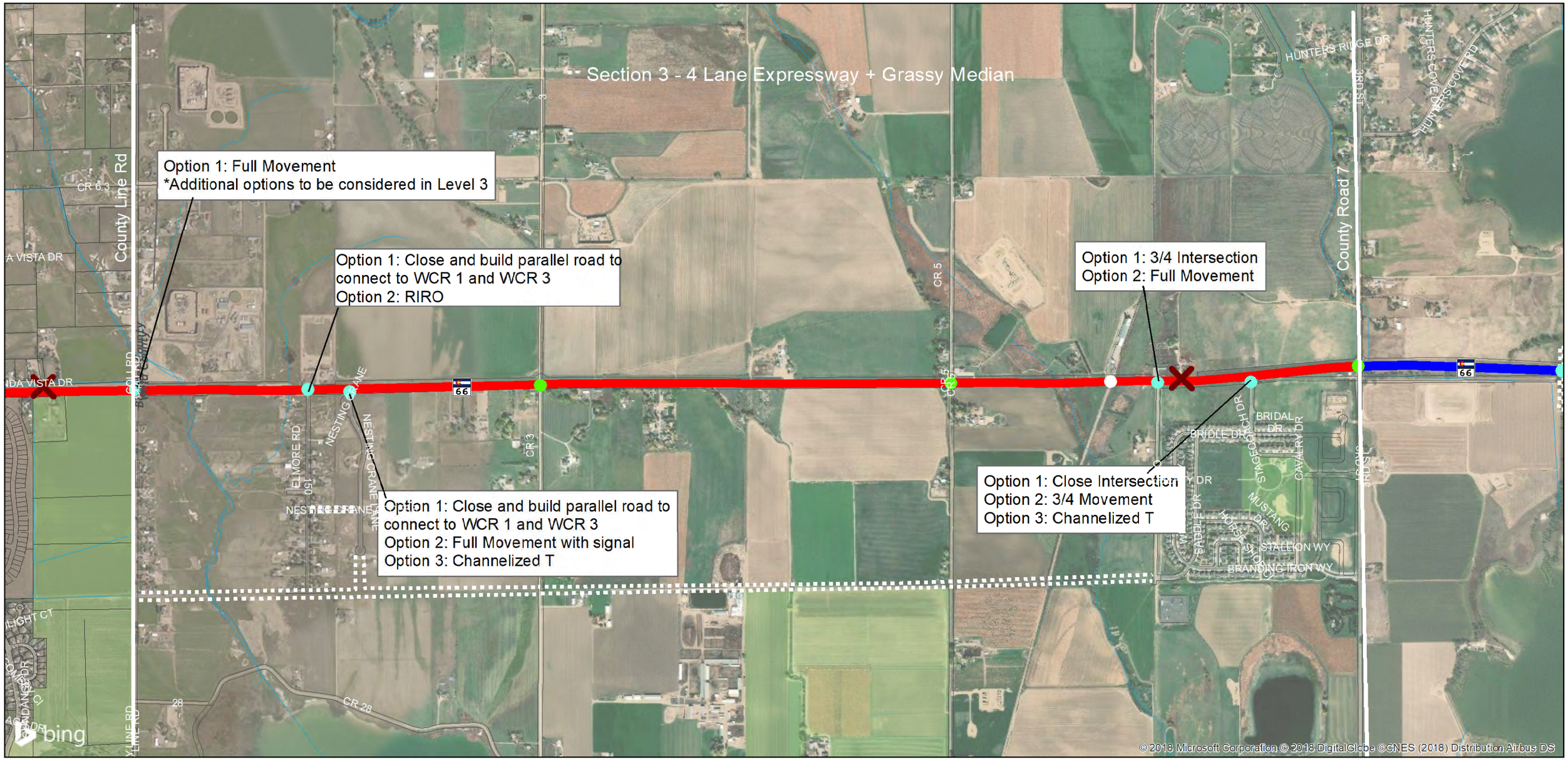

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Map Sheet 4 of 6

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SH 66 Planning and Environmental Linkages Study

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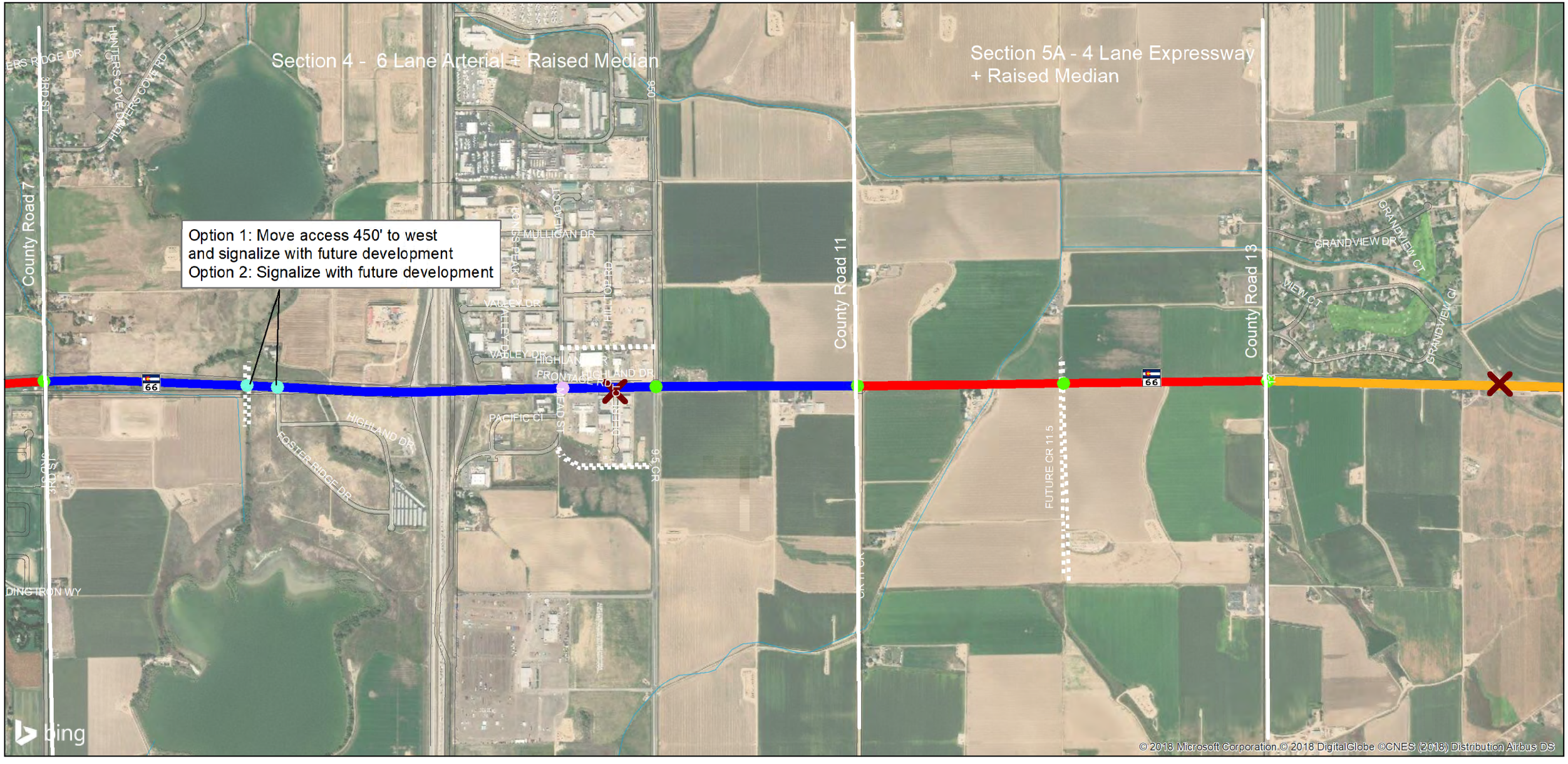

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SH66 PEL - Level 2b Alternative Development
Map Sheet 5 of 6

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Feet

SH 66 Planning and Environmental Linkages Study

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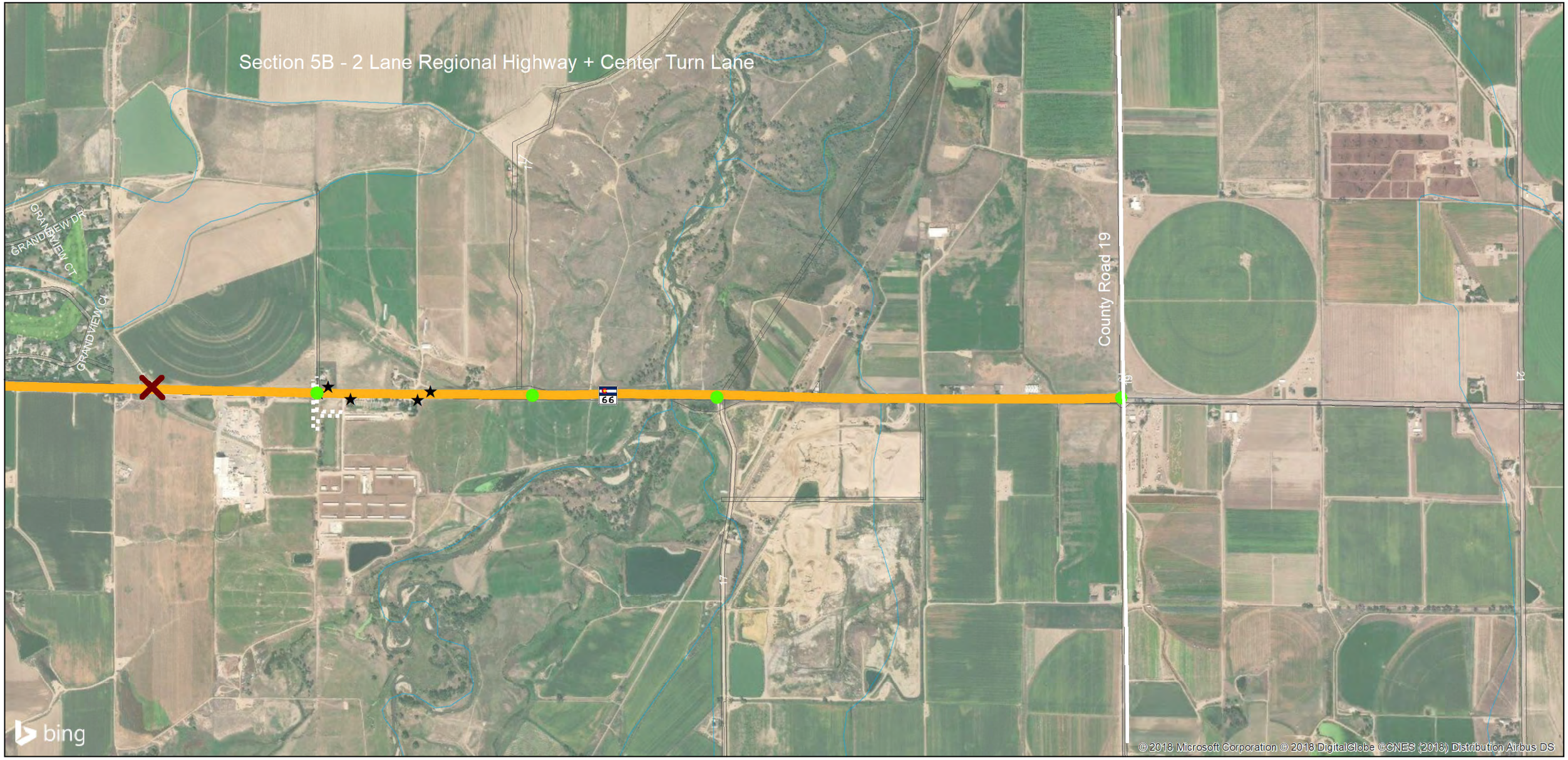

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SH66 PEL - Level 2b Alternative Development
Map Sheet 6 of 6

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SH 66 Planning and Environmental Linkages Study

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SH 66 Planning and Environmental Linkages Study

Executive Committee Meeting # 1

Date and Time: July 24, 2017 | 1:30 p.m. to 3:30 p.m.
Longmont Development Services Center | 385 Kimbark St, Longmont, CO 80501 | Twin Sisters Room

Agenda

Introductions

Visioning Workshop

- Meeting Summary
- Goals and Objectives for Future Improvements

Existing and Future Corridor Conditions

- Planning Context
- Transportation Context
- Environmental Context

Public Input

- Public Meeting Feedback
- On-going Public Outreach

Purpose and Need

Alternatives Development and Screening

- Level 1 – Purpose and Need Screening
- Level 2 – Comparative Screening
- Level 3 – Detailed Alternative Development and Screening

Next Steps and Timeframes

SH 66 Planning and Environmental Linkages Study

Executive Committee Meeting # 1

Date and Time: July 24, 2017 | 1:30 p.m. to 3:30 p.m.
Longmont Development Services Center | 385 Kimbark St, Longmont, CO 80501 | Twin Sisters Room

Meeting Summary

Introductions

Representatives from the Executive Committee (EC) introduced themselves and stated their organizational roles.

- Colorado Department of Transportation (CDOT) – Johnny Olson (Region 4 Transportation Director), Abra Geissler (Region 4 Resident Engineer), Jim Eussen (Region 4 Planning and Environmental Manager), James Zufall (SH 66 PEL Project Manager)
- Regional Transportation District (RTD) – Nataly Handlos (Lead Service Planner/Scheduler)
- City of Longmont – Jeff Moore (City Council) and Phil Greenwald (Transportation Planner)
- Town of Mead – Erika Rasmussen (Town Engineer)
- Weld County – Sean Conway (County Commissioner) and Jim Flesher (Transportation Planner)
- Felsburg Holt & Ullevig (FHU) – Alex Pulley (Project Manager) and Jodie Snyder (Environmental Lead)
- Atkins – Annette Marquez (Traffic and Operations)

Visioning Workshop

Alex Pulley summarized feedback from the Visioning Workshop, which was held April 4th at the Town of Mead. The purpose of the workshop was to gather technical advisors and elected officials from each local agency to cast a vision and common purpose for the project and the corridor.

Attendees were divided into four working sessions:

- Operations and mobility
- Bicycle, pedestrian, and transit
- Access management and safety
- Other (gateway, environmental resources, tourism, etc.)

Each group spent approximately 15 minutes discussing the following questions:

- What are the greatest challenges today?
- What are the greatest opportunities in the future?
- In an ideal world, what will SH 66 look like?

The following are highlights from the discussions for each topic.

- Operations and mobility

- SH 66 is becoming a major east-west facility
- There is a need for strategic widening to four lanes in certain locations
- High truck traffic impacts SH 66 east of I-25
- Poor traffic signal timing creates congestion along the corridor

- Bicycle, pedestrian, and transit
  - SH 66 is feels unsafe for bicyclists and pedestrians
  - Safe crossings are requested, either grade-separated or at the intersections
  - Strategic mobility hubs should be evaluated throughout the corridor
- Access management and safety
  - Access challenges between I-25 and WCR 9.5
  - Roundabout could be considered to improve intersections
  - Strategic management of accesses is needed to improve the corridor
- Other (gateway, environmental resources, tourism, etc.)
  - The rural character is valued along the corridor
  - The project is an opportunity to focus on the resiliency of our infrastructure (and think about extreme events like flooding)
  - SH 66 is a gateway into many communities

The information shared at the Visioning Workshop has informed development of the SH 66 PEL Purpose and Need and goals and objectives for future improvements.

Existing and Future Corridor Conditions

The Corridor Conditions Report (CCR) was developed using data gathered from CDOT, DRCOG, field reconnaissance, and other various municipalities and agencies.

The report includes a condensed but detailed format with tables, bullets, and graphics. The report includes three sections:

- Planning Context:
  - Community efforts – FHU and Atkins reviewed and incorporated all comprehensive plans and DRCOG 2040 modeling, as they relate to SH 66. A summary map was developed to highlight planned improvements based on community visions.
  - DRCOG land use and travel demand model - The DRCOG FOCUS travel demand model considers future land use plans in identifying household and employment projections. That land use data is then used to develop trips and identify the distribution of trips. This data is the basis of projections we considered in the Transportation Context section. Overviews of projected household growth and employment growth were discussed. The Study Team has worked with the TAC to include adjustments to the distributions of employment and households.
    - The new UC Health campus near Longmont and Mead Business Park are included in the projections.
    - Some other considerations shared by the EC:
      - Smucker's is developing a new facility at WCR 1, just north of SH 119

- Aurora Dairy in Weld County is planning an expansion
- Bearfoot Lakes Mixed Use Development, south of SH 66 in Firestone, will include 7,000 households

- Transportation Context:
  - Physical roadway – Atkins developed a detailed mapbook that identifies turn lane locations and lengths, access points, shoulders/widths, and medians widths.
  - Traffic Operations – Atkins also developed detailed graphics to show operational characteristics currently (based on 2015 data) and in the future (projecting to 2040 data).
  - Traffic Safety – FHU evaluated five years of crash data. Overall, SH 66 has a crash rate that is over double the statewide average. **[Action Item:** To aid in decision making, FHU will provide Johnny Olson with the LOSS values for the various sections of SH 66 and will add that information to the Purpose and Need documentation.**]**
  - Bicycle – FHU evaluated shoulder widths, existing and planned trails and lanes, and Levels of Traffic Stress. The corridor generally has a high Level of Traffic Stress.
  - Pedestrian – FHU evaluated pedestrian destinations and sidewalk locations. **[Action Item:** FHU will incorporate St. Vrain School District bus stops into the pedestrian section. UPDATE: Jodie Snyder contacted St. Vrain School District on 8/8/17 to provide background and request information.**]**
  - Transit – FHU evaluated service and routes in the corridor. SH 66 west of County Line Road is located within the RTD service boundary. Nataly Handlos noted that this corridor is not currently a heavily used transit corridor, but it could be in the future. Consider space accommodations in the footprints where transit infrastructure may be needed.
- Environmental Context:
  - The CCR documents floodplains, wetlands, wildlife, parks/recreation/open space, utilities, traffic noise, hazardous materials, environmental justice, visual consistency, historic resources, air quality, farmlands, and archaeological and paleontological resources.
  - **[Action Item:** To aid in decision making, FHU will contact Heather Paddock to add more information about risk and resiliency to the CCR.**]**
  - Jeff Moore noted his concern about the Terry Lake drainage issues and whether they will be considered in this PEL study. The PEL Study Team will consider this matter further in upcoming phases of the PEL study as an engineering consideration.
  - The evaluation considered resources that have important regulatory drivers and specifically resources that could influence decision making at this planning level of study. Sample resource maps were highlighted in the presentation.

Icons have been introduced for each resource or issue addressed in the CCR, which will continue to be carried forward throughout the PEL as the resource or issue is documented.

The TAC has had an opportunity to review and provide comments on the CCR. Once finalized, the CCR will be loaded to the SH 66 PEL Study website and will be used as a basis for the alternatives development and screening process.

Public Input

Approximately 50 attendees participated in 2 public open houses in late April 2017.

- The team received 30 comment forms. Major topics of concern included: the need for turn lanes, safety, excessive speed limit, widening/right of way concerns.
- Also heard concerns regarding the proposed Martin Marietta mining development.
    - Site is located east of US 36, west of Hygiene Road, and south of SH 66, near CEMEX.
    - Development is not approved at this time and therefore, will not include the land use in this PEL study.
    - CDOT does not have jurisdiction over land uses but will work closely with Boulder County to understand the impacts should the development be approved.

Website activity is ongoing:

- Collected 17 comments through the website so far
- Major themes of comments include: left turns, cut-through traffic, safety concerns, key intersections, adjacent land developments, transit, bike, and ped facilities, congestion, speed limit, truck traffic, environmental (open space/traffic noise).
- Individual responses are being provided by e-mail to every comment received through the project website.

On-going Public Outreach is underway:

- Team is continuing to collect comments from the website. Please feel free to direct members of your community to the PEL Study webpage (https://www.codot.gov/library/studies/co-66-pel) for comment submittal.
- Team has posted Public Meeting materials on study website (https://www.codot.gov/library/studies/co-66-pel/public-participation) and will post upcoming PEL deliverables, including the Corridor Conditions Report and Purpose and Need.
- Team is working with local agencies on messaging regarding unapproved developments.
- Team will provide information to support TAC / EC members at community functions.

Purpose and Need

Developing purpose and need is one of the biggest benefits of the PEL process. It really sets the foundation for alternatives development and screening and for future NEPA considerations.

The purpose is the overall foundation statement for evaluating potential improvements, and the needs identify transportation issues to address in potential improvements. Developing the Purpose and Need is a collaborative effort with input from all stakeholders.

Needs identified for SH 66 PEL include managing safety, mobility, and access. All travel modes are considered within each need, as appropriate. Presentation materials from today summarize many of the key issues associated with these needs.

This Purpose and Need statement has been developed in collaboration with FHWA and using input from communities, stakeholders, and the public. The TAC reviewed the Purpose and Need in June, 2017 and had an opportunity to provide comments and feedback.

Also building on stakeholder and public input, goals and objectives were developed that can be considered for future improvements along the corridor. These goals and objectives are not transportation specific needs. Goals include: maintaining community context, enhancing each community's exposure along the corridor, protecting and accommodating natural resources, and protecting and enhancing SH 66 as an evacuation route.

Johnny Olson requested that the Purpose statement be more succinct and that it reference multi-modal considerations and intelligent mobility/developing technologies. He wants to frame the needs around access, mobility, and safety management instead of calling them problems. **[Action Item:** FHU will incorporate Johnny Olson's mark-ups to the Purpose and Need and reroute the revised Purpose and Need to the TAC for review.**]**

Alternatives Development and Screening

The process diagram presented summarizes our customized alternative development and screening approach for SH 66. The detailed process is included in the handout. The diagram highlights four screening levels whereby the input is "filtered" through Evaluation Criteria to generate an outcome.

The tentative screening levels include:

- Level 1 – Purpose and Need screening – Evaluate full range of alternatives
- Level 2 – Comparative screening – Evaluate Section/operational classifications and capacity; assess safety, mobility, and access; and combine assessments to develop concepts
- Level 3 – Detailed alternative development and screening – Estimate maximum footprint of potential future improvements

Level 2 will be the most dynamic portion of the development and screening process.

Next Steps and Timeframes

Our anticipated schedule includes:

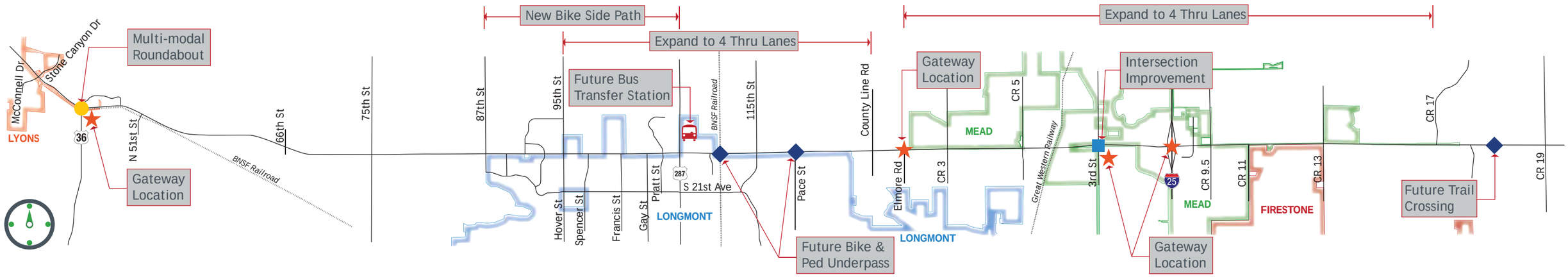
- July through December 2017 – Alternatives Development and Screening
- January 2018 – Public Meetings Round 2
- January through March 2018 – Recommendations, Prioritization, and ACP
- April through June 2018 – PEL Study Report and ACP

Our team plans to report back to the EC again in December, 2017 to summarize the outcomes of the alternative development and screening process and then again in February, March, and June of 2018 to discuss recommendations, prioritization, the Access Control Plan, and the Final PEL Report.

In the meantime, TAC members are the conduit to the EC members. The PEL Study Team asks that TAC members keep EC members informed and up to date. **[Action Item:** The TAC members will continue to update the EC members about the study, as appropriate.**]**

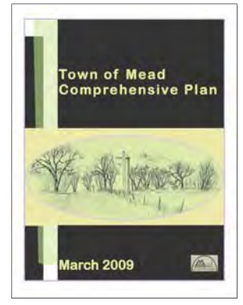
SH 66 Planning and Environmental Linkages Study

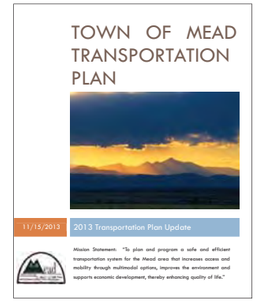
Planning Context & SH 66 Community Values

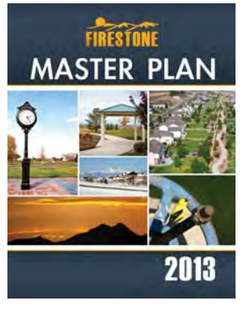


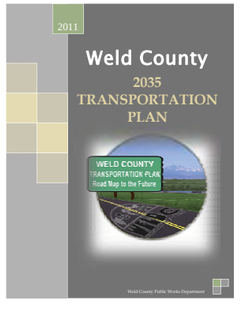
Existing Plans Reviewed in the Context of SH 66 PEL

Town of Lyons Primary Planning Area Master Plan (2016)
Town of Lyons Comprehensive Plan (2010)
City of Longmont Envision Longmont (2015)
Town of Mead Comprehensive Plan (2009)
Town of Mead Transportation Plan (2013)
Carbon Valley Transit Service Feasibility Study (2011)
Firestone Master Plan (2013)
Boulder County Transportation Master Plan (2011)
Boulder County Mountain Town Transit Feasibility Study (2011)
Weld County Transportation Plan (2011)
DRCOG Metro Vision Plan (2017)
CDOT North I-25 Environmental Impact Statement (2011)
Saint Vrain Trail Master Plan (2004)









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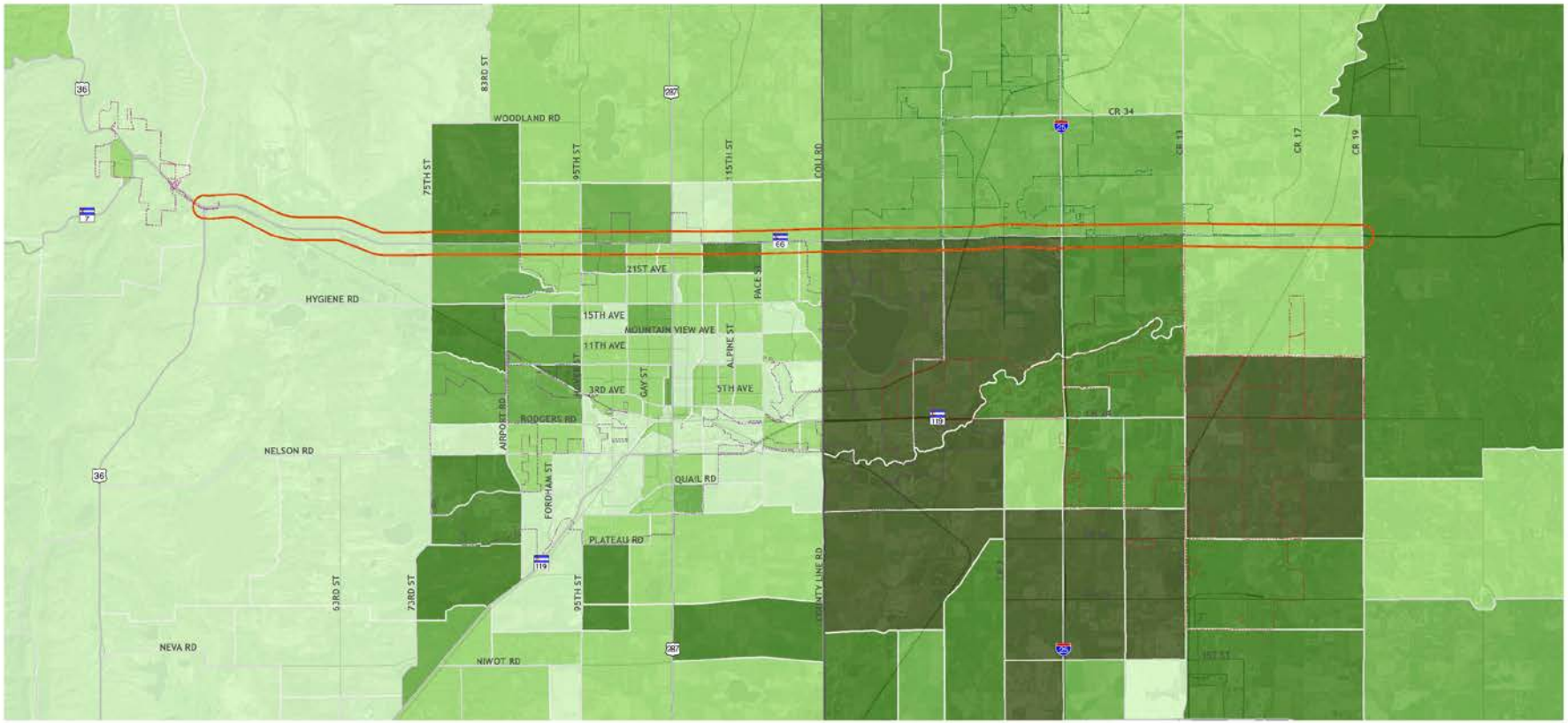
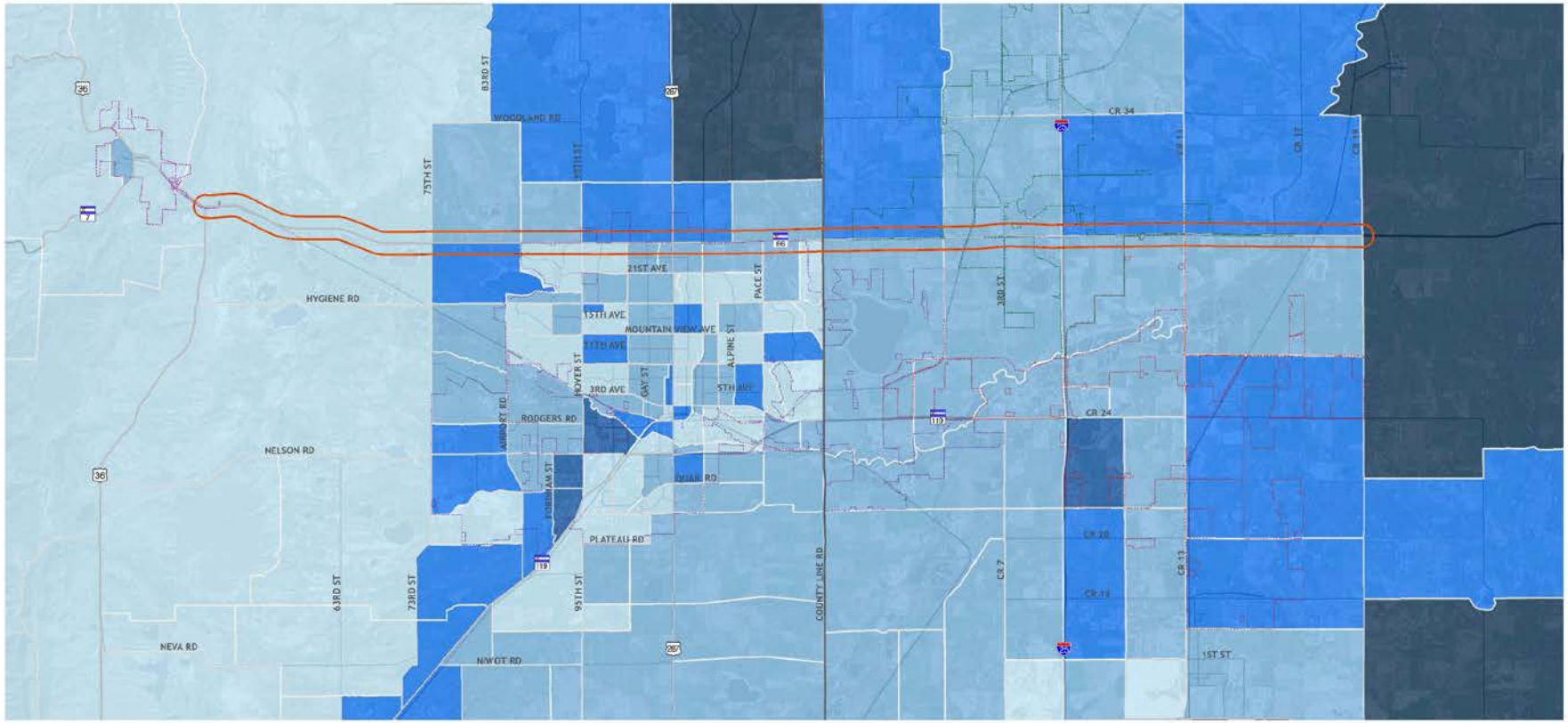
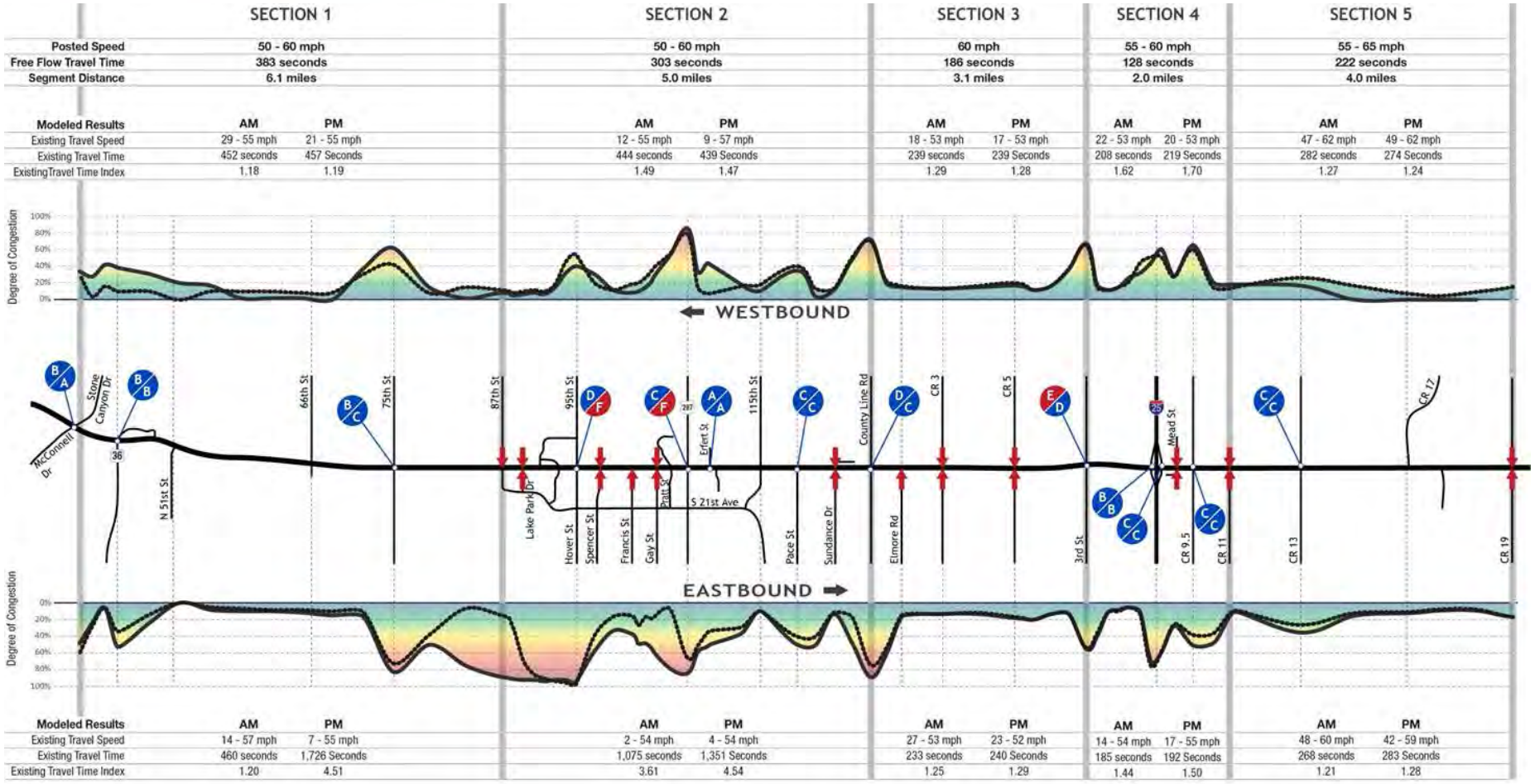
Household Growth: 2015 to 2040



Employment Growth: 2015 to 2040



Existing Operations



LEGEND

Degree of Congestion = (Posted Speed - Modeled Speed) / Posted Speed X 100%

AM
PM

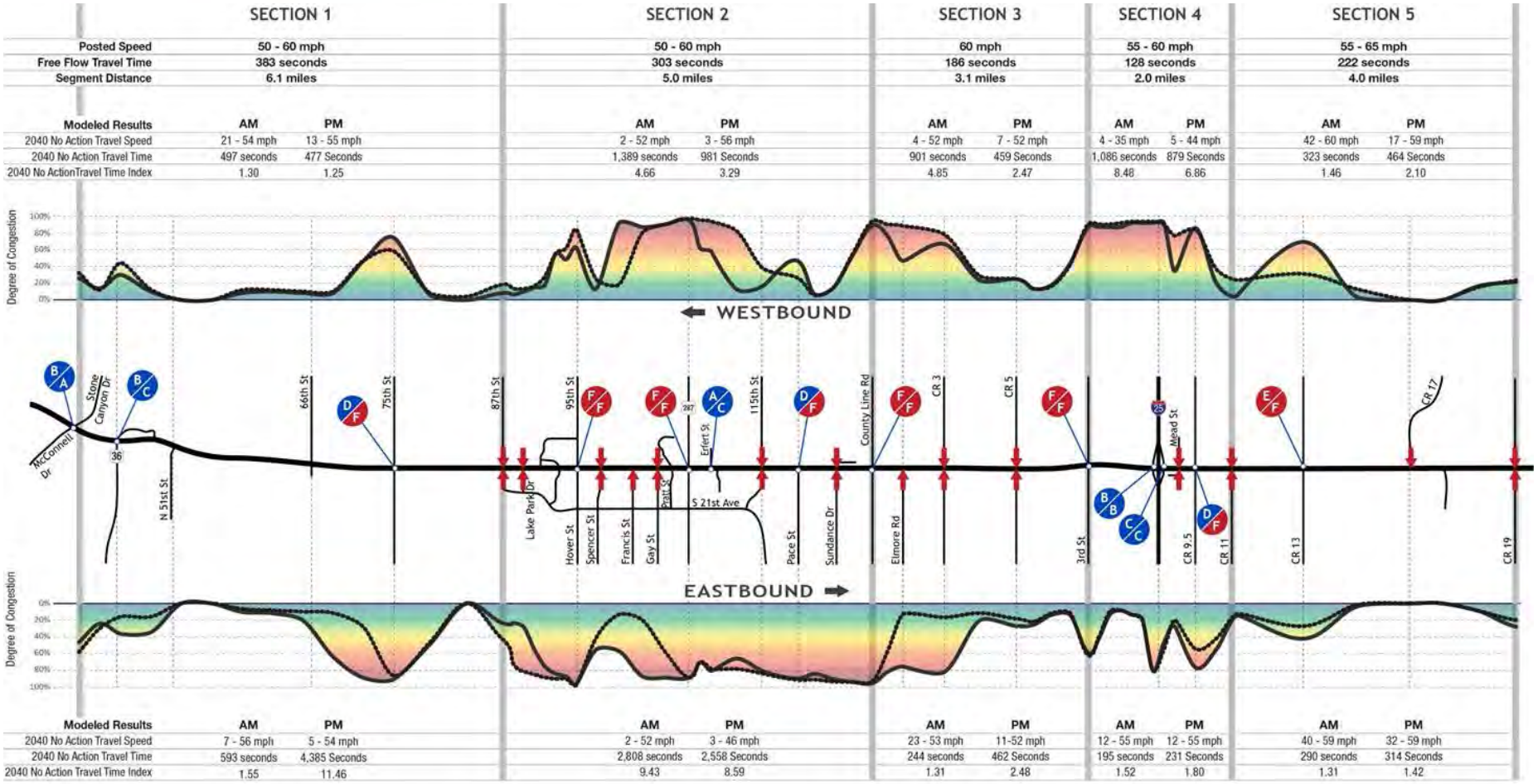
= AM/PM Signalized Intersection LOS

= Stop Controlled approach with LOS of E or F

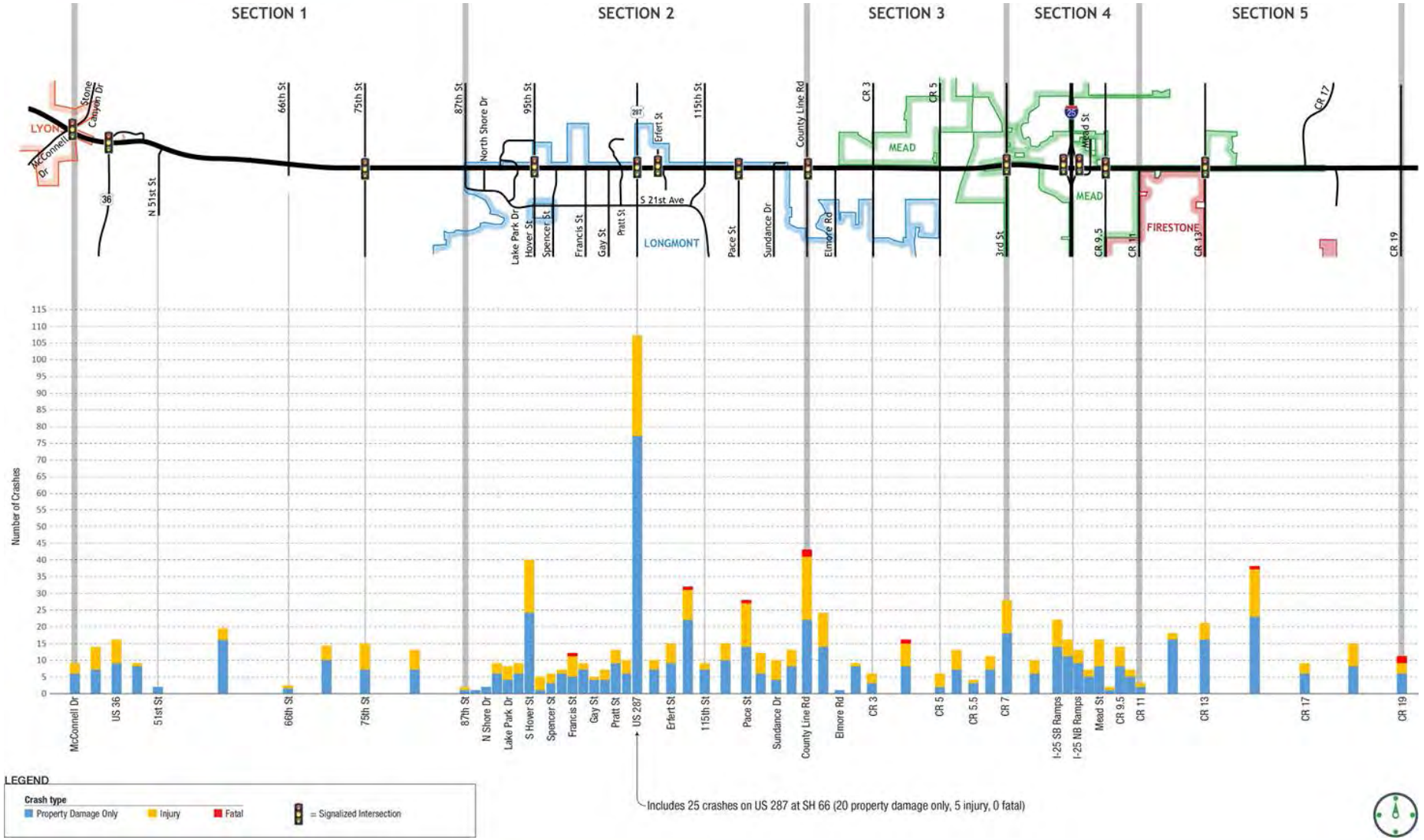
Overall Free Flow Travel Time	1,222 seconds
Total Distance	20.2 miles

Overall Modeled Results	Eastbound AM	Eastbound PM	Westbound AM	Westbound PM
Existing Travel Speed	2 - 60 mph	4 - 59 mph	12 - 62 mph	9 - 62 mph
Existing Travel Time	2,222 seconds	3,791 seconds	1,625 seconds	1,627 seconds
Travel Time Index	1.83	3.12	1.34	1.34

Future Operations



Safety


SECTION 1
SECTION 2
SECTION 3
SECTION 4
SECTION 5
LYON
MEAD
LONGMONT
FIRESTONE
Number of Crashes
McConnell Dr
US 36
51st St
66th St
75th St
87th St
N Shore Dr
Lake Park Dr
S Hover St
Spencer St
Francis St
Gay St
Pratt St
US 287
Erfert St
115th St
Pace St
Sundance Dr
County Line Rd
Elmore Rd
CR 3
CR 5
CR 5.5
CR 7
I-25 SB Ramps
I-25 NB Ramps
Mead St
CR 9.5
CR 11
CR 13
CR 17
CR 19
Includes 25 crashes on US 287 at SH 66 (20 property damage only, 5 injury, 0 fatal)
LEGEND
Crash type
Property Damage Only
Injury
Fatal
= Signalized Intersection

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SH 66 Planning and Environmental Linkages Study

ALTERNATIVES DEVELOPMENT and SCREENING PROCESS

SCREENING LEVEL	ALTERNATIVE DEVELOPMENT	INPUTS/MEASURES	EVALUATION CRITERIA/ SCREENING	OUTCOMES

Purpose & Need Screening

LEVEL 1 GOAL: Recommend alternatives that appropriately & contextually meet purpose & need

1.

Develop Full Range of Alternatives

- **Public, Agency, & Stakeholder Perspectives**
- **Range of Alternatives**
  - Roadway: Current Alignment? Alternate Alignment?
  - Transit: Light Rail? Bus Rapid?
  - Intelligent Mobility
  - Bicycle & Pedestrian Facilities

Meets Purpose & Need? (Screening)

- **Safety**
- **Mobility**
- **Access**

→ **Alternatives Eliminated or Not Recommend that do not Meet Purpose & Need**

→ **Full Range of Alternatives to Advance**

Comparative Screening

LEVEL 2 GOAL: Recommend specific alternatives that balance all needs within community & environmental context

2a.

LEVEL 2a GOAL: Recommend section classifications and through capacity

Evaluate Section Classification
- Freeway
- Expressway
- Rural Highway
- Arterial Roads

Evaluate Section Capacity
- 2-Lane
- 3-Lane
- 4-Lane
- 6-Lane

2b.

LEVEL 2b GOAL: Integrate improvements to address all needs & balance context

Stand-alone Assessments of Safety, Mobility, & Access

Combine Assessments & Further Screen Alternatives

Full Range of Alternatives to Advance

- **Access Code Criteria & Layouts**
- **Intersection Options**
- **Roadway Templates**
- **Bike & Pedestrian Facilities**
- **Intelligent Mobility**

Maintain Purpose & Need to Define Decisions
- **Safety**
- **Mobility**
- **Access**

Considerations:
- **Environmental**
- **Community**
- **Maintenance**

→ **Identify:**
- **Operational Classifications**
- **Number of Lanes**
- **Transit, Bike, Pedestrian Integration**
- **Through-lane Options**

→ **Alternatives Not Recommended**

→ **Section & Intersection Concepts**

Detailed Alternative Development & Screening

LEVEL 3 GOAL: Enhance improvements to document planning, implementation, & funding needs

3.

Extent of Results from Level 2 Screening

Section & Intersection Concepts

FHWA & CDOT Standards CAP-X Tool

→ **Estimated Maximum Footprint of Potential Future Improvements**

Conceptual Layouts & Recommendations

→ **Prioritization (based on needs)**

→ **PEL Study Recommendations**

→ **Access Control Plan**

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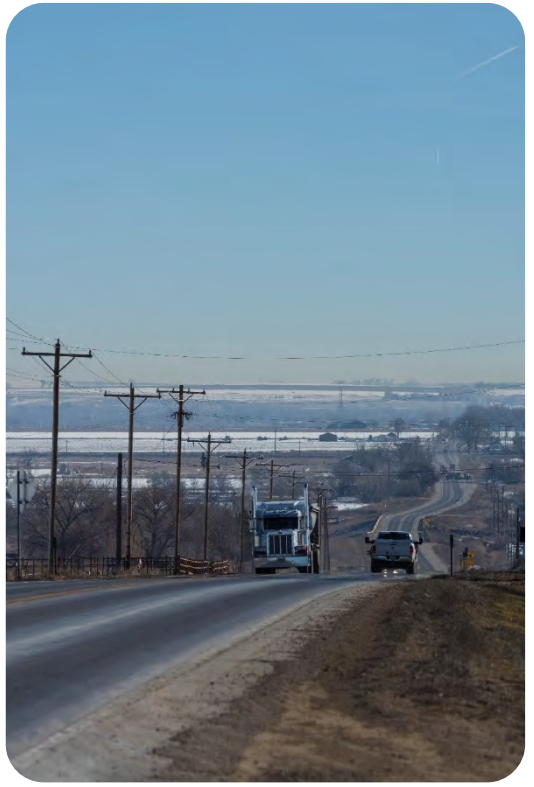
SH 66 Planning and Environmental Linkages Study



July 24, 2017

Executive Committee (EC) #1

Today's Meeting

- Introductions
- Visioning Workshop
- Existing and Future Corridor Conditions
- Public Input
- Purpose and Need
- Alternative Development & Screening
- Next Steps and Timeframes

SH 66 Planning and Environmental Linkages Study

Introductions

Participating Agencies

SH 66 Planning and Environmental Linkages Study

Visioning Workshop Summary

Visioning Workshop Summary (Small Groups)

- Operations and mobility 
- Bicycle, pedestrian, and transit 
- Access management and safety 
- Other 

Questions discussed:

- *What are the biggest issues today?*
- *How will these change in the future?*
- *In an ideal world, what would SH 66 look like?*

Operations and Mobility

- Need to consider the impacts of multiple accesses and traffic signals upon mobility
- SH 66 is becoming a major east-west facility
- How to blend mobility and gateway concepts
- There is a need for four lanes on SH 66 in certain locations, such as from US 287 to Hover St
- There is a need to get traffic to the Diagonal Highway (SH 119) quicker
- Sight distance issues just west of WCR 17
- SH 66 is a high-speed corridor and the speed limit needs to be considered and potentially adjusted for a mix of modes
- Desire for smart signals
- Need to consider the higher truck traffic east of I-25
- Consider all options for intersections, such as grade-separation and roundabouts
- Poor traffic signal timing creates congestion along the corridor

Bicycle, Pedestrian, & Transit

- The corridor is currently dangerous for cyclists and pedestrians
- Larger shoulder and multi-use paths are needed
- The cleanliness of the shoulders is a challenge
- There is a growing need for bicycle facilities along the east side of the corridor
- Safely crossing SH 66 is a challenge for bicyclists and pedestrians
- Sidewalks are needed within the communities but potentially not needed in the rural areas, if regional multi-use trails are available
- Safe crossings at intersections, or grade-separated, are needed for active transportation uses
- In order for transit service to work, it would need to be reliable
- Strategic mobility hubs should be evaluated throughout the corridor such as at SH 66 and US 287 in Longmont

Access Management & Safety

- The intersection of WCR 7 and SH 66: high speed environment and high school students crossing the highway—creates an unsafe condition
- Bicycle safety is a major concern along the corridor; specifically at the US 36 and SH 66 intersection and between US 36 and Lyons
- Need for more grade-separated pedestrian and bicycling access for safe crossings of SH 66; a future regional trail underpass is planned on the former UPRR rail line near Firestone
- Access challenges between I-25 and WCR 9.5
- Consider the future needs of transit such as accel/decel/stopping areas for buses
- There is a desire to consolidate access along the corridor
- Roundabouts could be considered to improve intersections
- Extreme fog poses a safety concern

Community Values, Environmental Resources, Other

- Rural character is valued on the east and west side
- Proactive maintenance of floodplains and steams is needed
- Focus on resiliency of infrastructure
- SH 66 as an evacuation route
- Consider wildlife crossings and warnings
- Gateway features that represent the individual communities are desired by many communities
- New development east of I-25 (in Firestone) is changing the character of that area
- Truck traffic along the corridor is a result of industries, such as the oil and gas

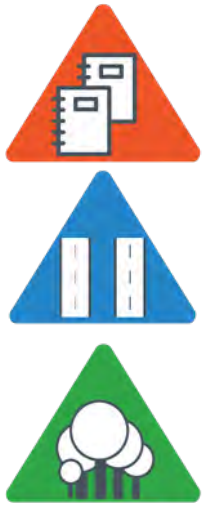
SH 66 Planning and Environmental Linkages Study

Existing and Future Corridor Conditions

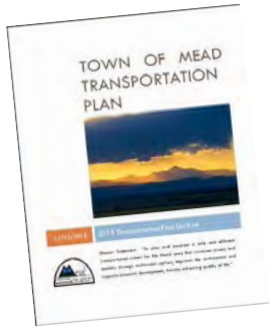
Corridor Conditions Report

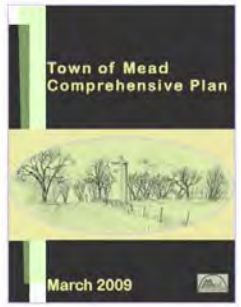
- New format is easy to read and reference

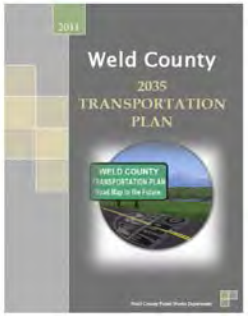
- Separated into categories:
  - Planning Context
  - Transportation Context
  - Environmental Context



Planning Context

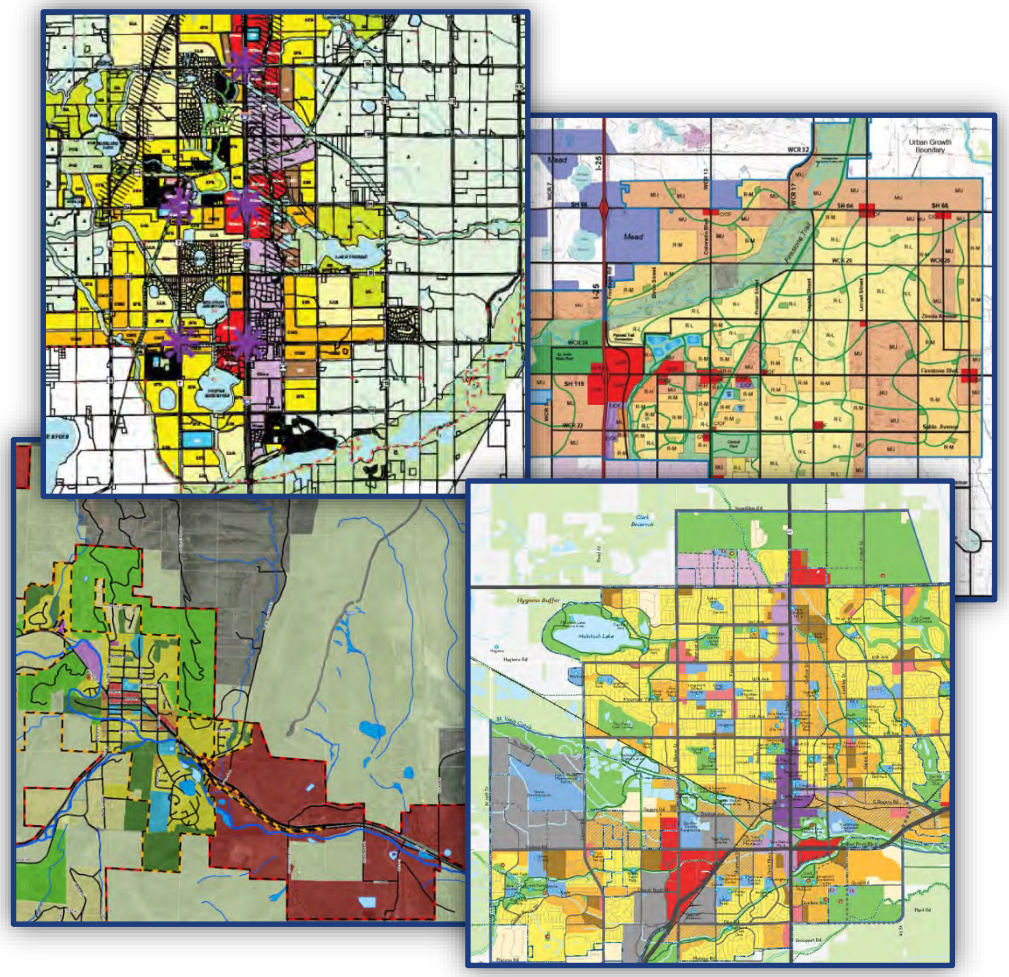






Planning Context

- FOCUS Model
- Base year: 2015
- Forecast year: 2040



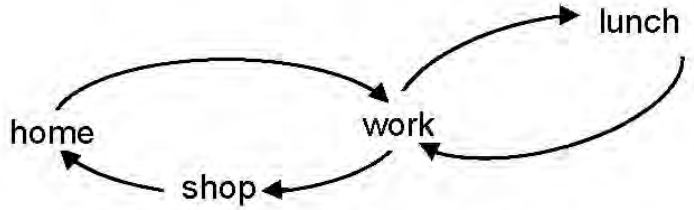
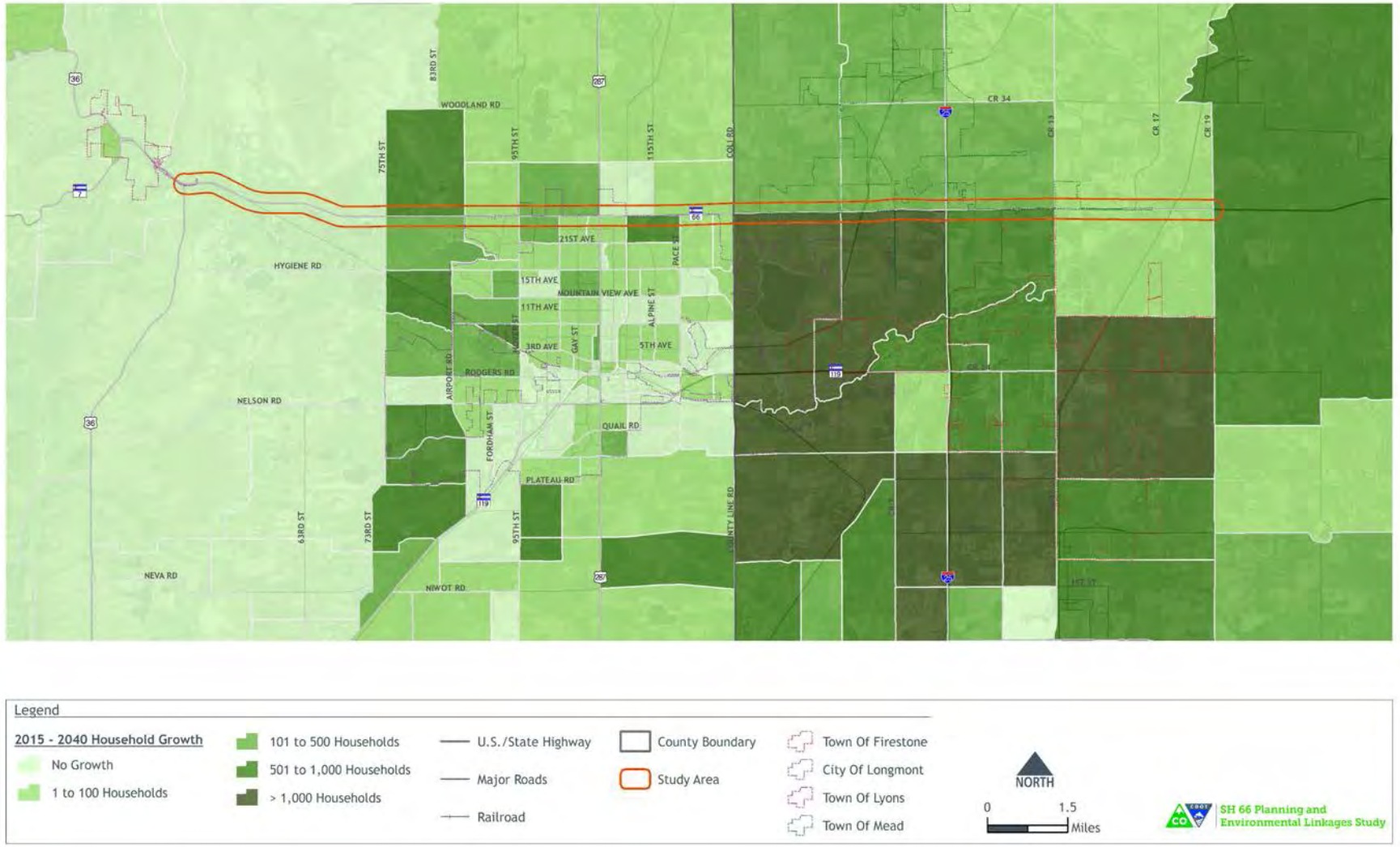


Figure 3.9. *Home-based tour with a work-based subtour.*

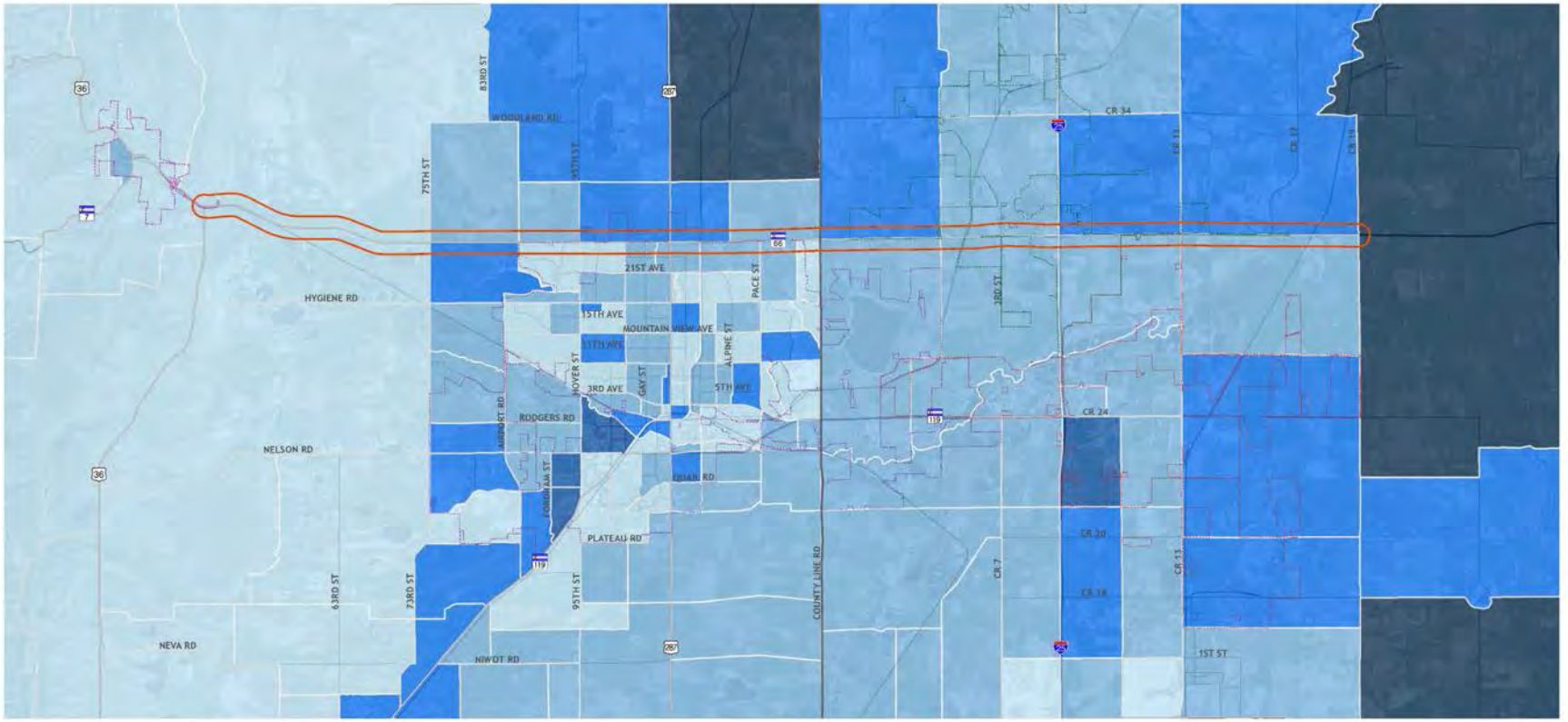
Land Use in the Travel Demand Model

Household Growth: 2015 to 2040



Land Use in the Travel Demand Model

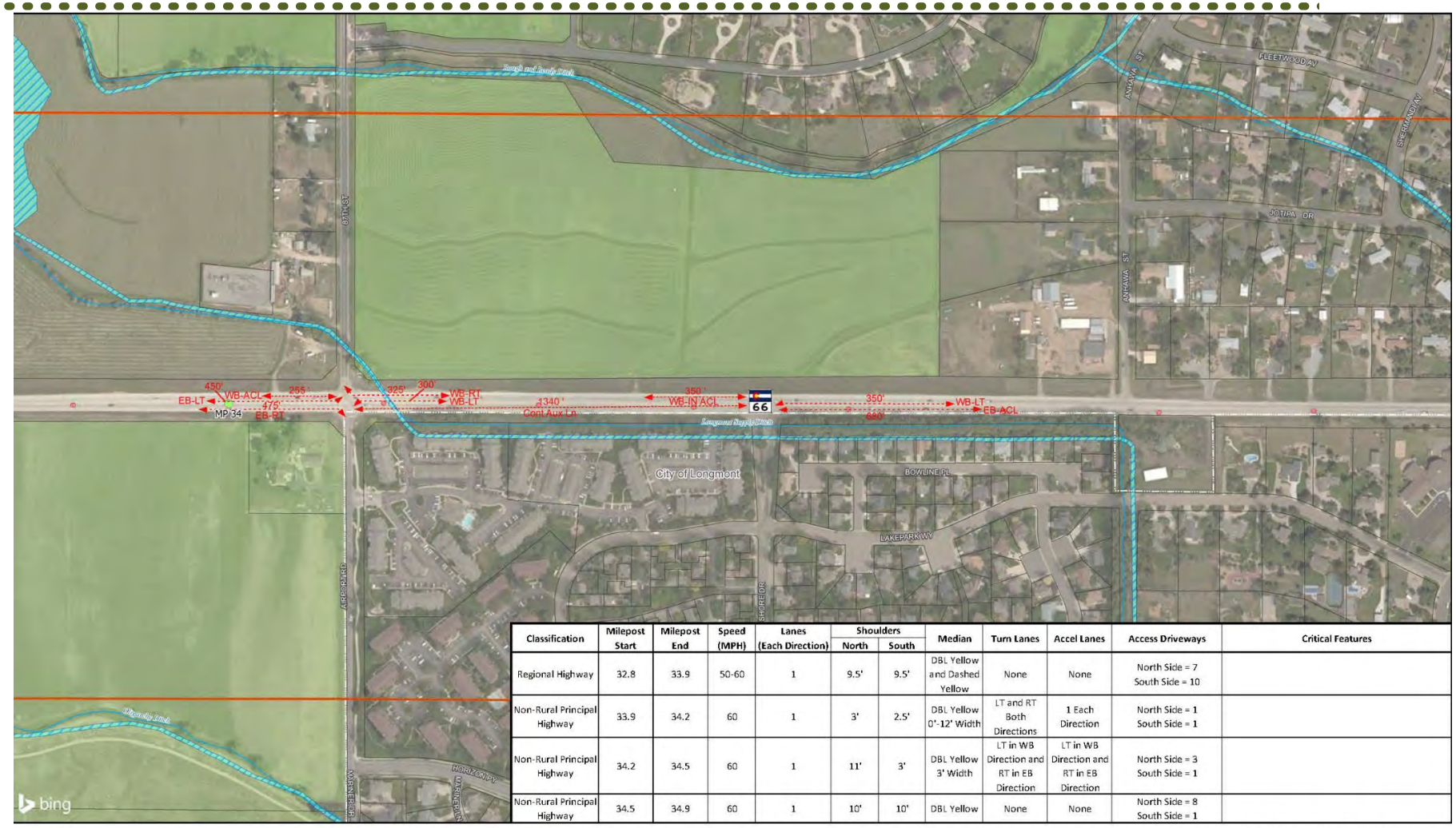
Employment Growth: 2015 to 2040



Transportation Context

Physical Characteristics

- Turn lanes/lengths
- Access Points
- Shoulders/Widths
- Medians/Widths



Classification	Milepost Start	Milepost End	Speed (MPH)	Lanes (Each Direction)	Shoulders North	Shoulders South	Median	Turn Lanes	Accel Lanes	Access Driveways	Critical Features
Regional Highway	32.8	33.9	50-60	1	9.5'	9.5'	DBL Yellow and Dashed Yellow	None	None	North Side = 7 South Side = 10	
Non-Rural Principal Highway	33.9	34.2	60	1	3'	2.5'	DBL Yellow 0'-12' Width	LT and RT Both Directions	1 Each Direction	North Side = 1 South Side = 1	
Non-Rural Principal Highway	34.2	34.5	60	1	11'	3'	DBL Yellow 3' Width	LT in WB Direction and RT in EB Direction	LT in WB Direction and RT in EB Direction	North Side = 3 South Side = 1	
Non-Rural Principal Highway	34.5	34.9	60	1	10'	10'	DBL Yellow	None	None	North Side = 8 South Side = 1	

Legend

Rivers/Streams
Lakes/Reservoirs
NWI Wetlands
Floodway
100-Year Floodplain
Parks/Open Space
Parcel Boundary/ ROW Boundary
Municipal Boundary
Study Area
Mile Points
1/10 Mile Points

N
0 300 600 Feet

SH66 PEL - Roadway Field Map
Map Sheet 8

SH 66 Planning and Environmental Linkages Study

Transportation Context—*CURRENT*

Daily Volumes

- <15,000 East of I-25 & West of Hover
- 23,000—22,000 From I-25 to Hover

Trucks

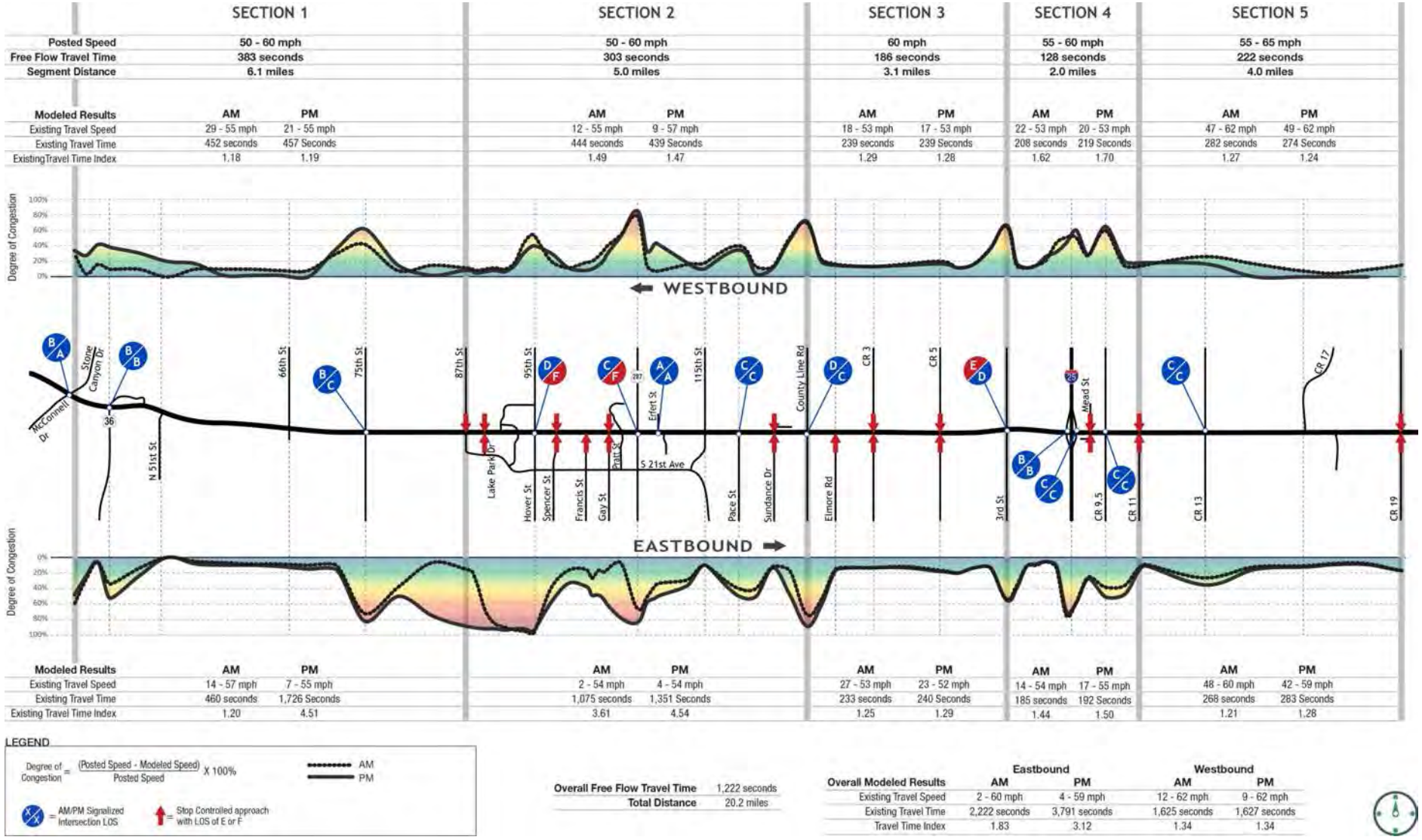
- 2—3% west of I-25
- 8—10% east of I-25

Operations

- 15 intersections LOS E/F

Congestion

- 3—16% High Degree of Congestion



Transportation Context—*FUTURE*

Daily Volumes

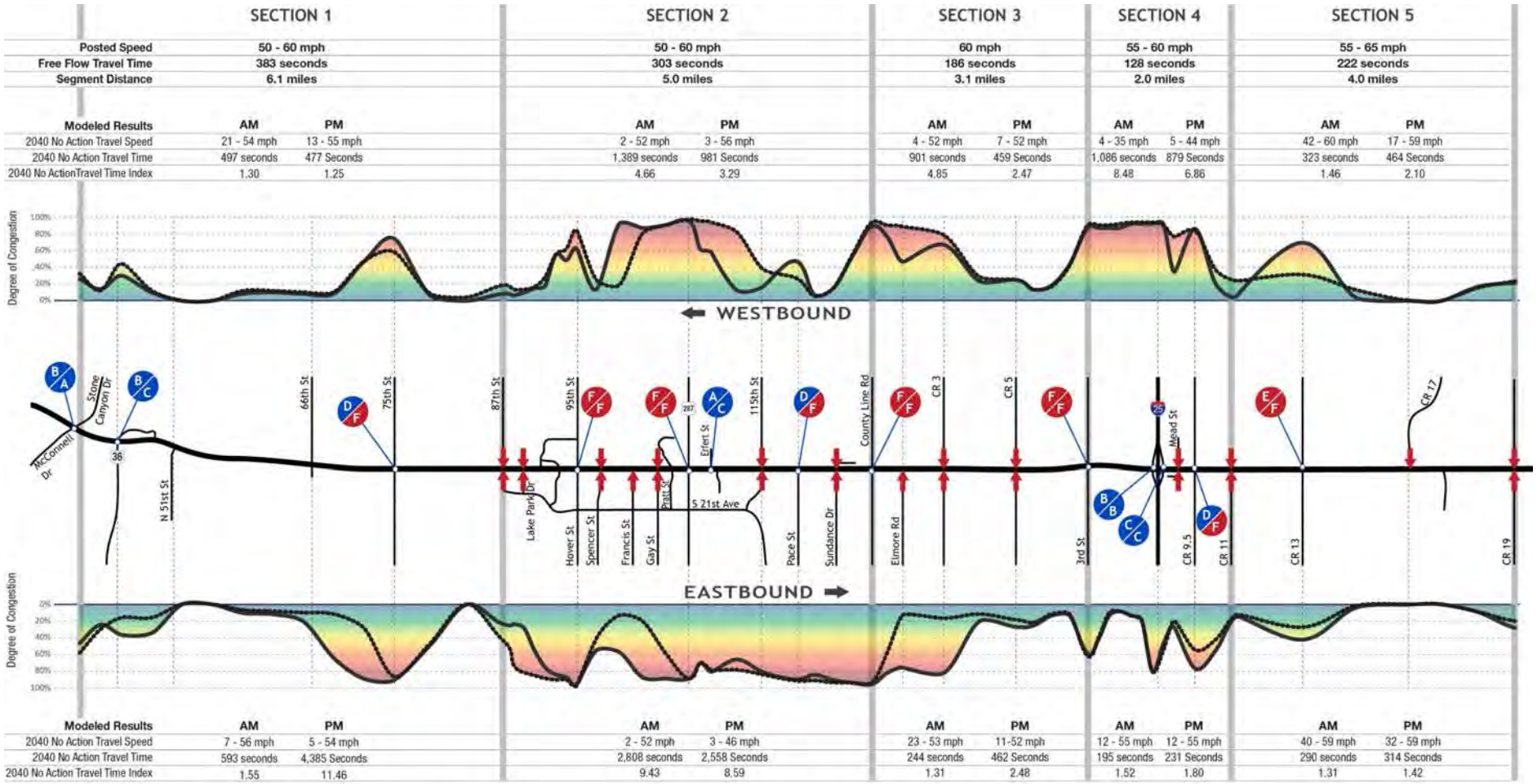
- 26—50% increase (15,000—36,000)

Operations

- 22 intersections LOS E/F (50% increase)

Congestion

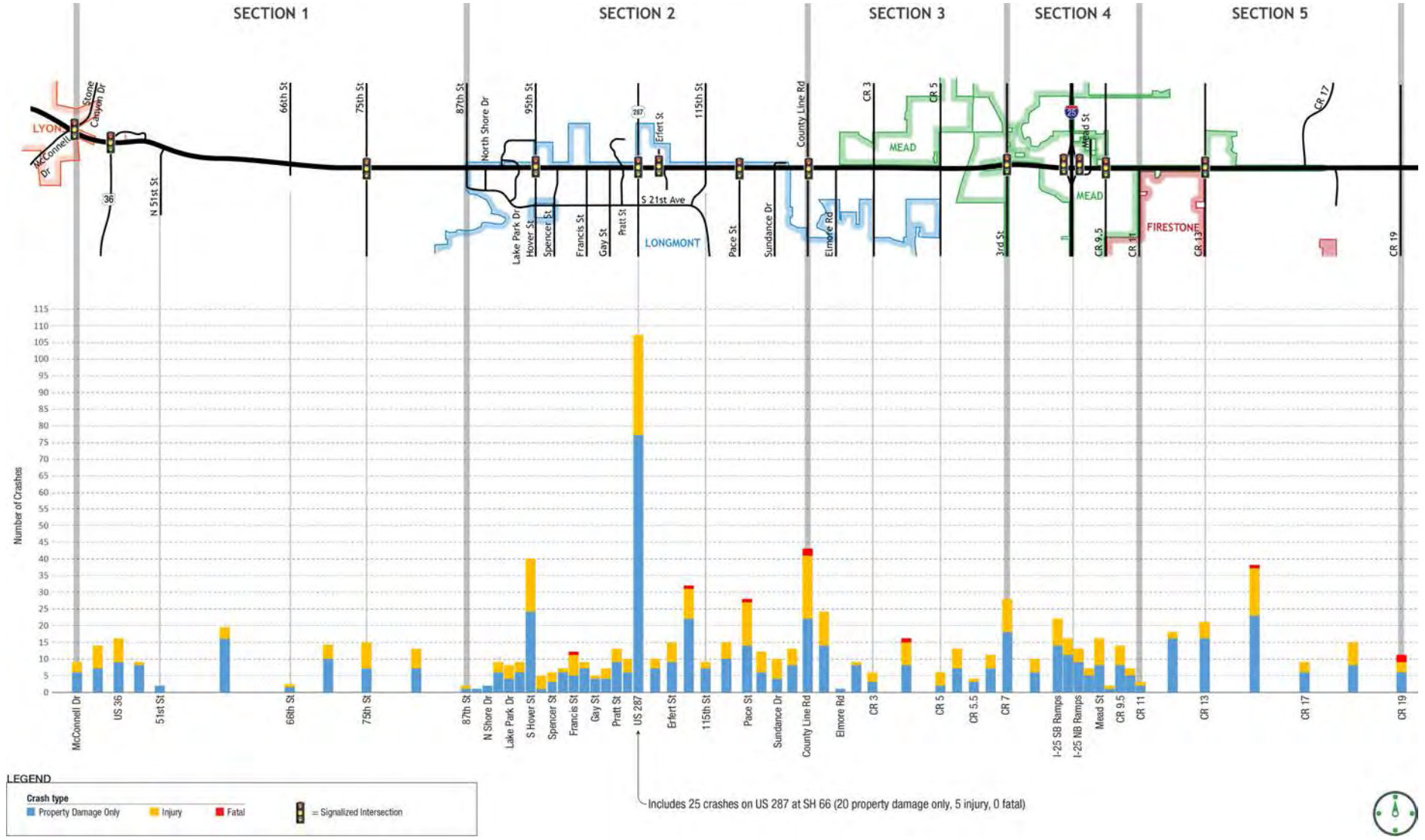
- 21—32% High Degree of Congestion



Transportation Context—Safety

Safety Characteristics

- Evaluated 5 Years of Crash Data (903 crashes)
- <1% Involved Non-motorized
- 1% (9) involved fatalities
- 65% at intersections / driveways
- 50% in Section 2
- 45% rear ends



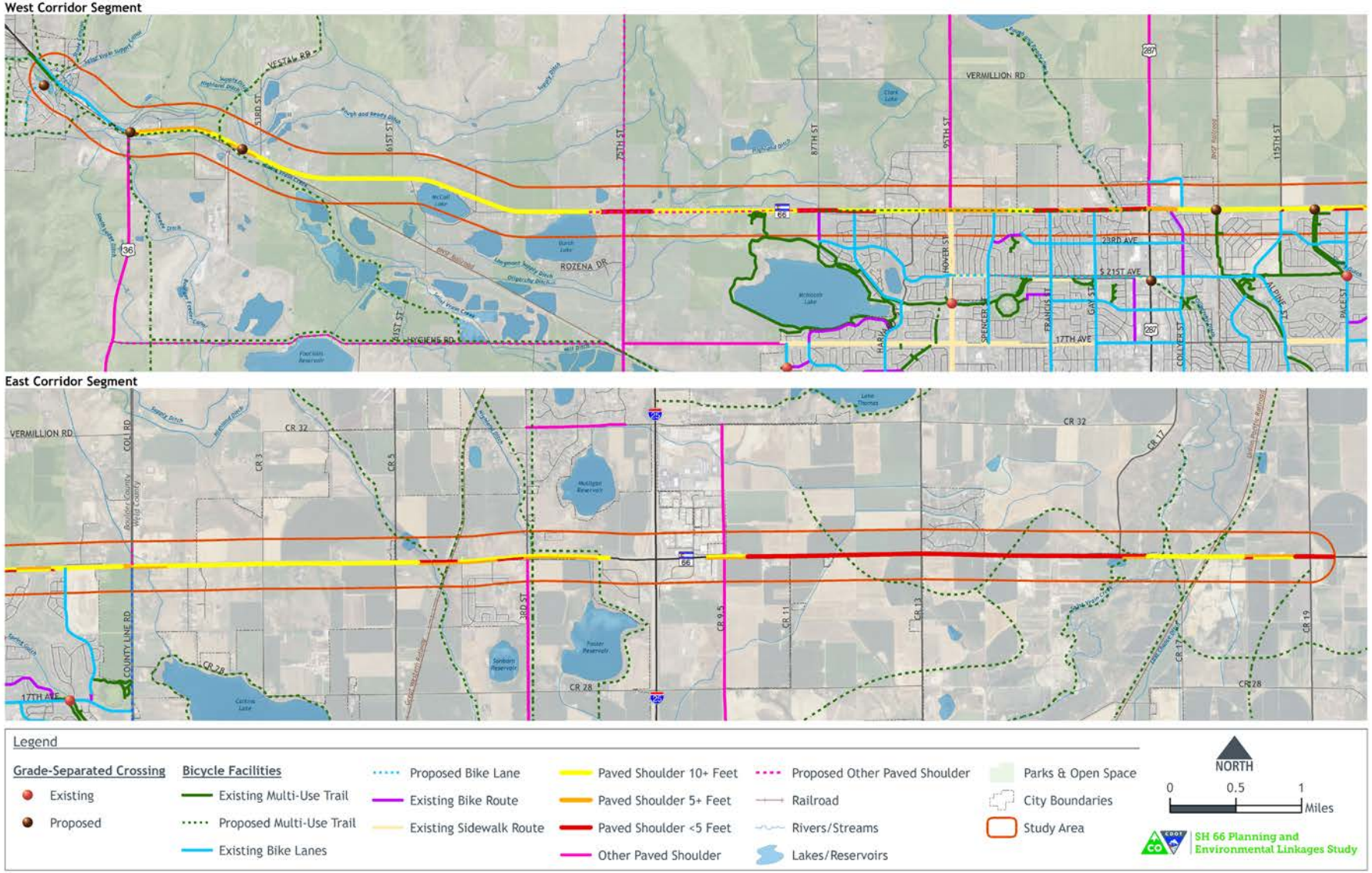
Transportation Context

Bicycle Characteristics

- Evaluated Shoulder Widths
- Existing / Planned Trails / Lanes
- Level of Traffic Stress

West Corridor Segment

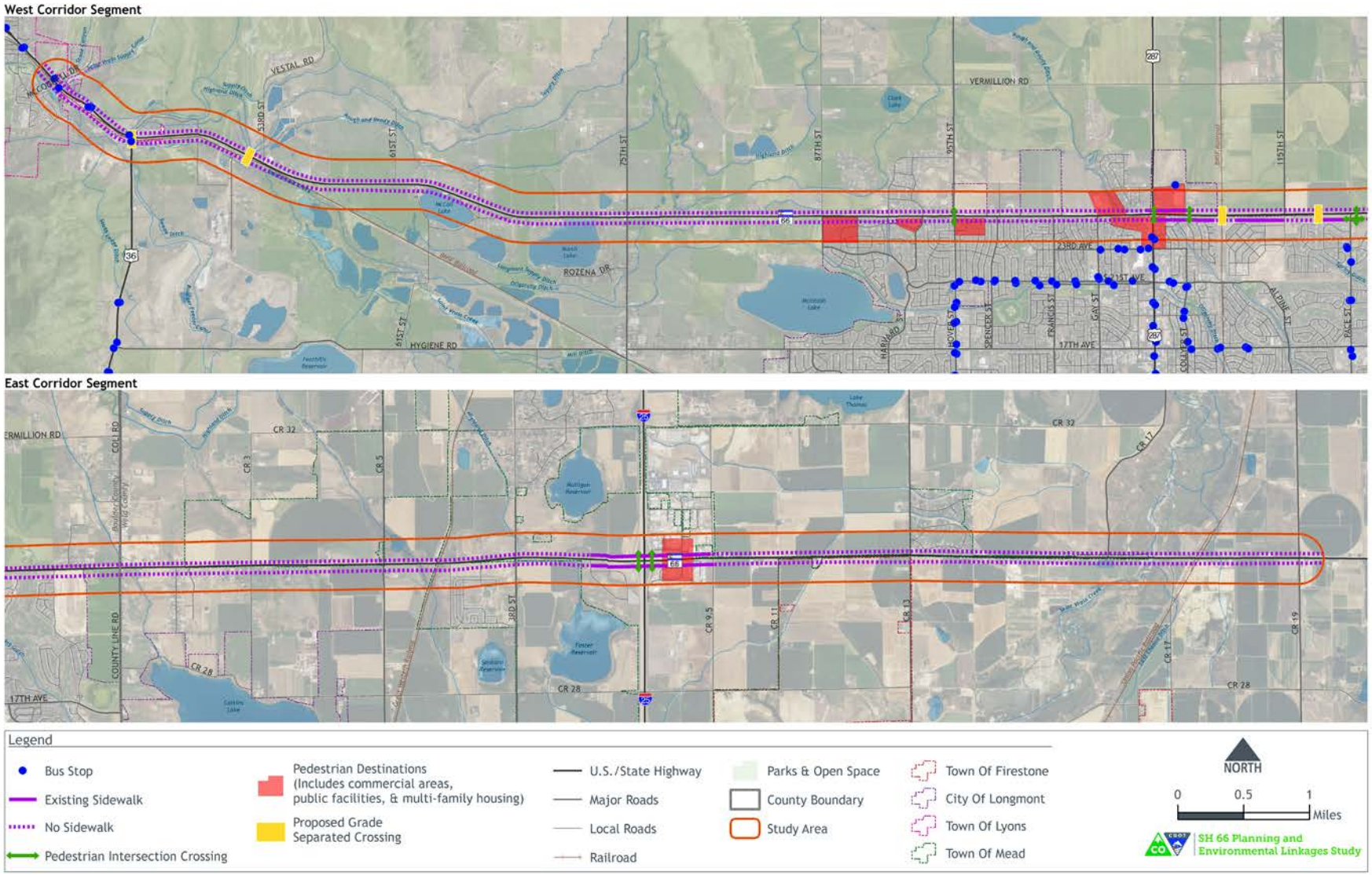
East Corridor Segment



Transportation Context

Pedestrian Characteristics

- Identified Pedestrian Destinations
- Existing Sidewalks

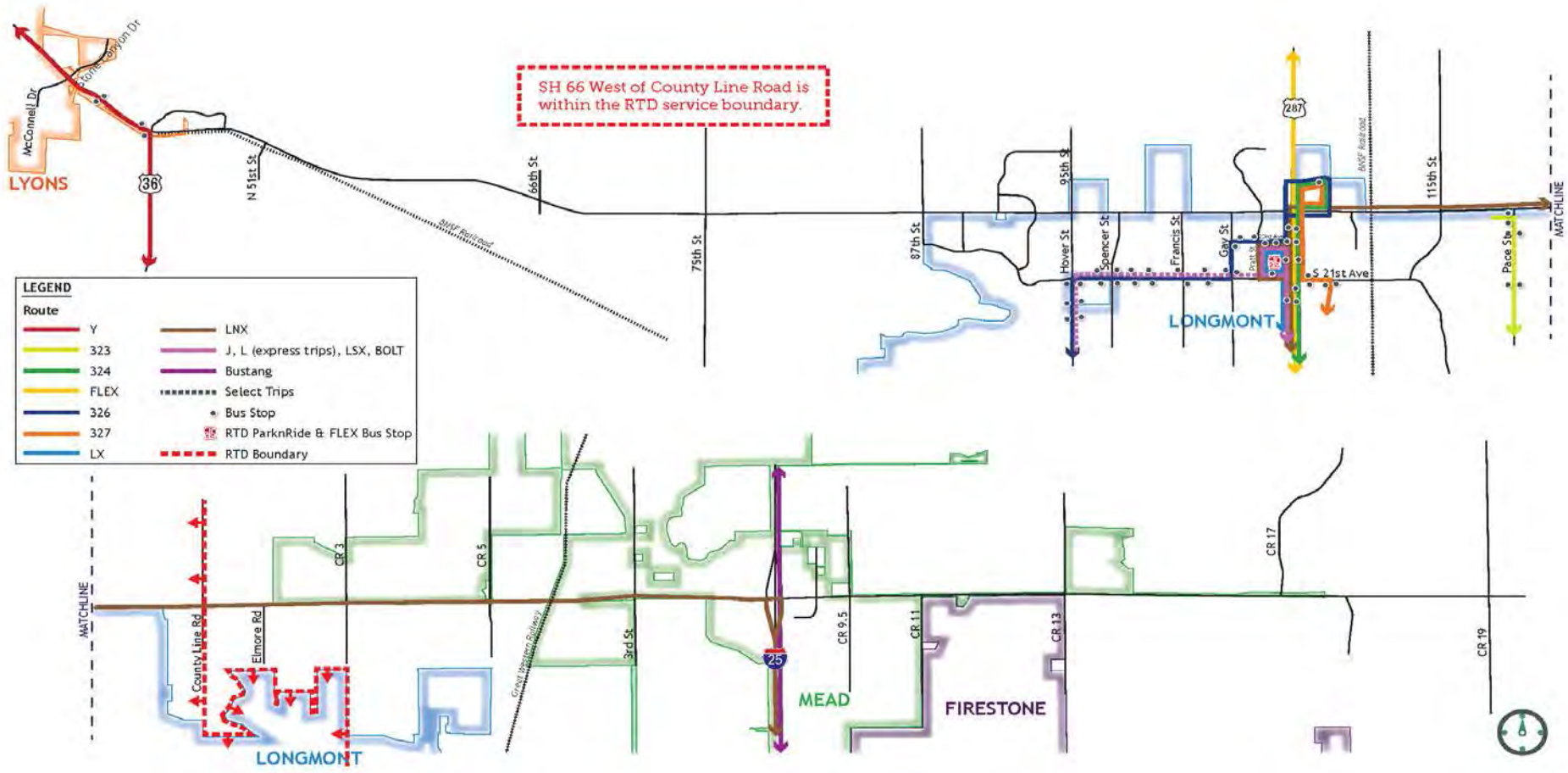


Transportation Context

Transit Characteristics

- Identified Pedestrian Destinations

- Existing Sidewalks



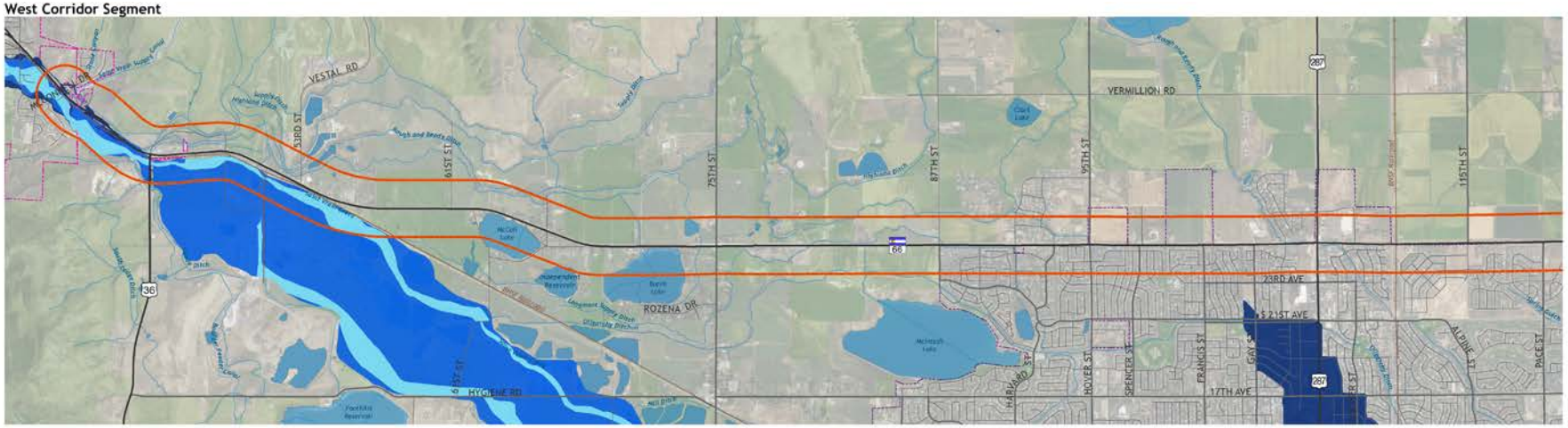
Environmental Context

Environmental Characteristics

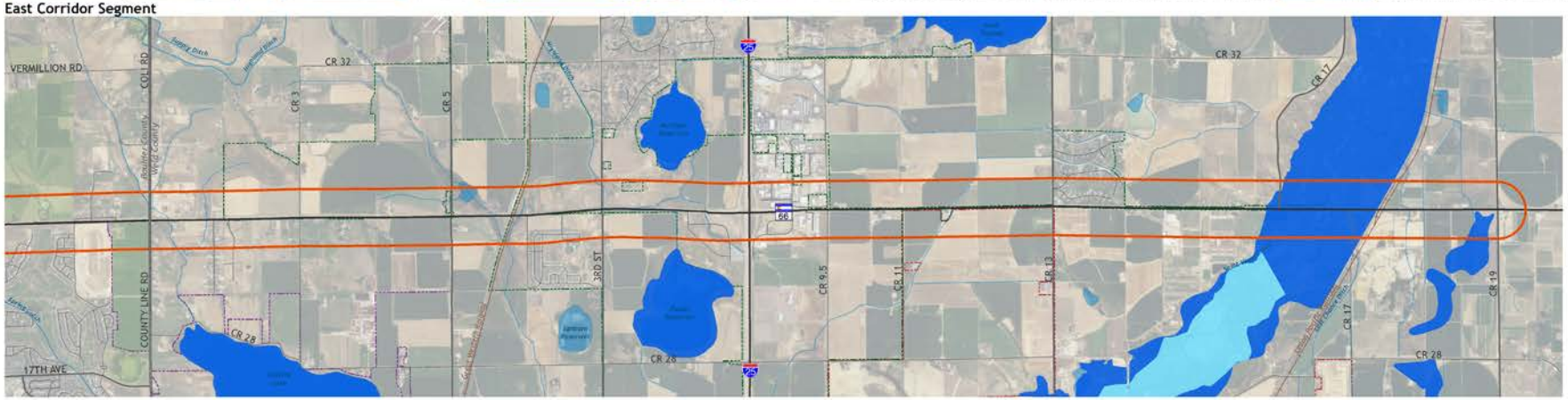
- 10 Resources Documented
  - Floodplains / Floodways
  - Wetlands
  - Threatened and Endangered Species
  - Parks, Trails, Open Space
  - Utilities
  - Traffic Noise
  - Hazardous Materials
  - Visual
  - Historic Resources

Environmental Context—Floodplains

West Corridor Segment



East Corridor Segment



Legend

- U.S./State Highway
- Major Roads
- Local Roads
- Railroad
- Rivers/Streams
- Lakes/Reservoirs
- Floodway
- 100-Year Floodplain
- 500-Year Floodplain
- County Boundary
- Study Area
- Town Of Firestone
- City Of Longmont
- Town Of Lyons
- Town Of Mead

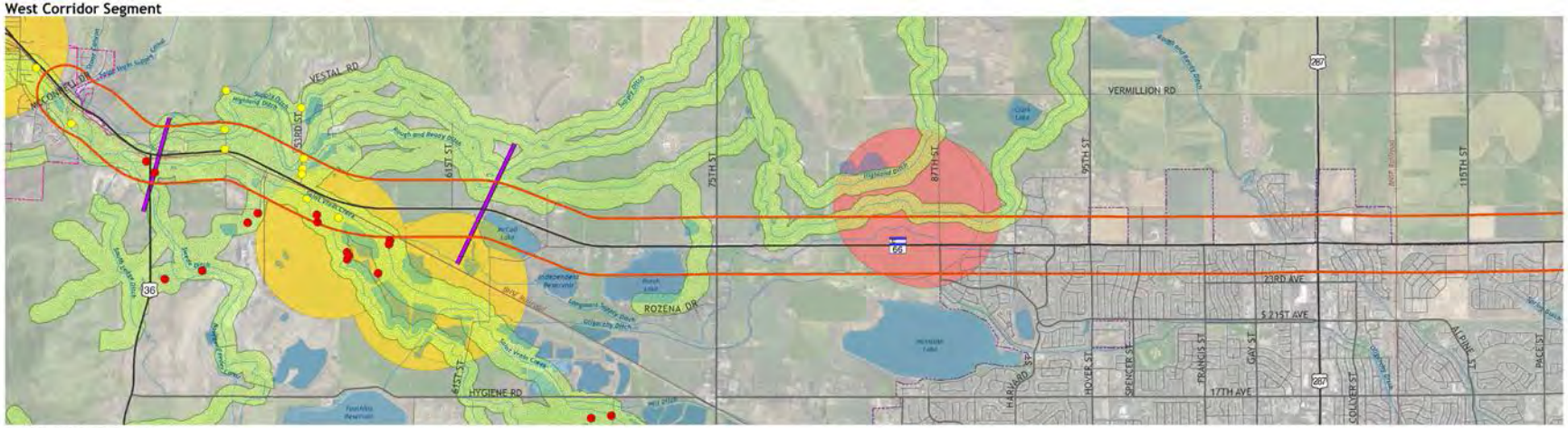
NORTH

0 0.5 1 Miles

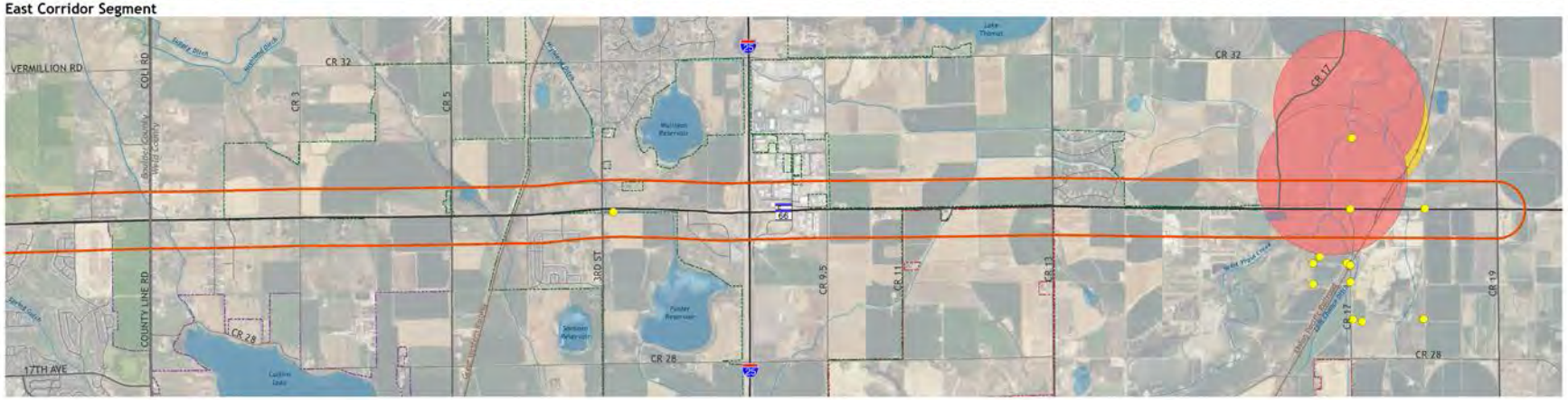
SH 66 Planning and Environmental Linkages Study

Environmental Context—Threatened & Endangered Species

West Corridor Segment



East Corridor Segment



Legend

Preble's Trapping
- Trapped - Found
- Trapped - Not Found

- Overland Habitat Connector
- Active Bald Eagle Nest Site
- Undetermined/Unknown Bald Eagle Nest Site
- Preble's Meadow Jumping Mouse Habitat
- U.S./State Highway
- Major Roads
- Railroad
- Rivers/Streams
- Lakes/Reservoirs
- Parks & Open Space
- County Boundary
- Study Area
- Town Of Firestone
- City Of Longmont
- Town Of Lyons
- Town Of Mead

NORTH

0 0.5 1 Miles

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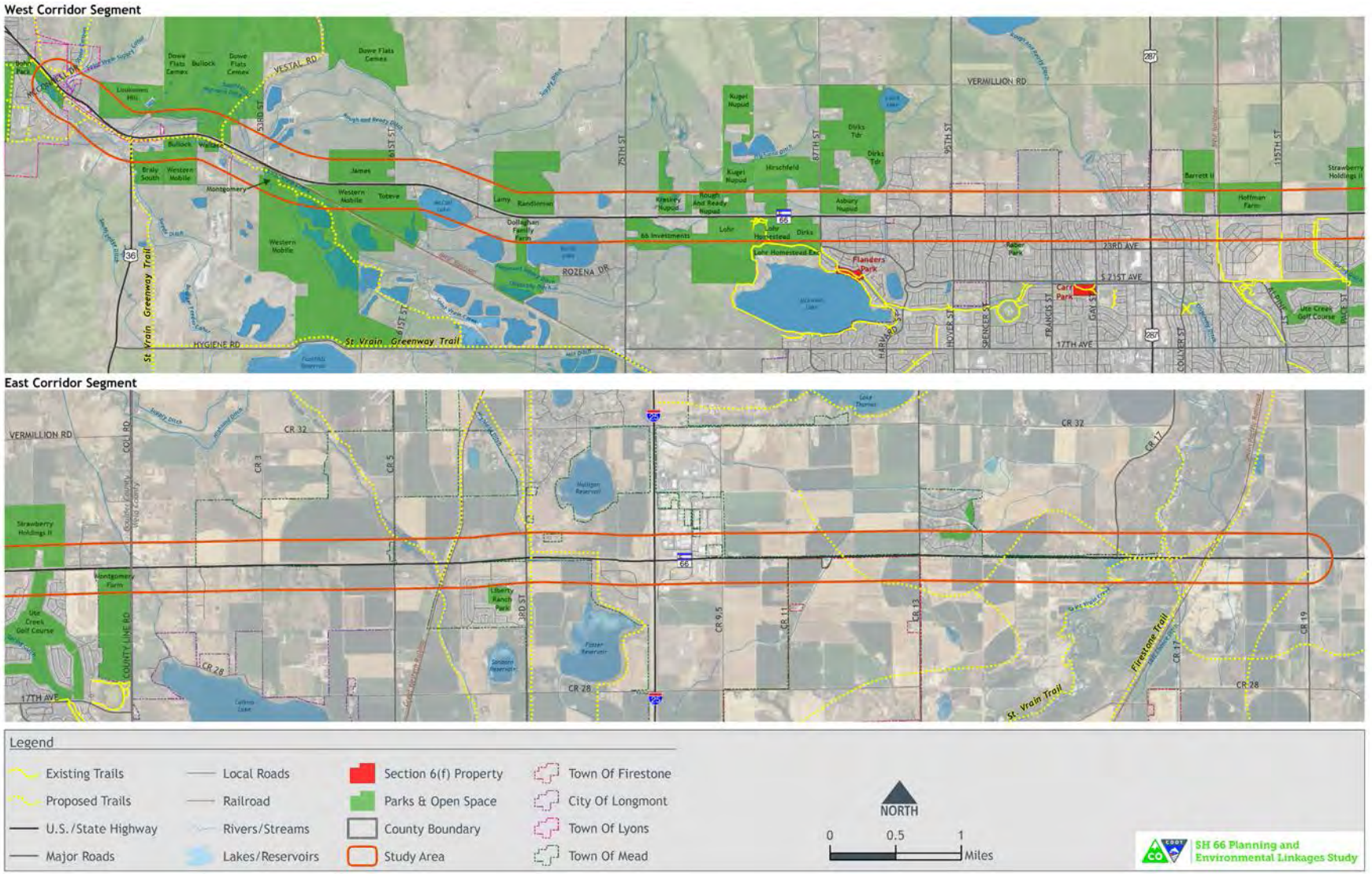
Environmental Context—Parks, Trails, Open Space

Current and Future Mapping

West Corridor Segment

East Corridor Segment



SH 66 Planning and Environmental Linkages Study

Public Input

Public Meeting Feedback

- ~50 attendees, 2 meetings, 30 comment forms
  - left turns
  - traffic noise
  - excessive speed limit
  - widening/right of way concerns
- Concern regarding Martin / Marietta development
- Individual responses provided, if email available

Additional Comments—Website

- Collected 16 comments through website
  - Left turns
  - Cut-through traffic
  - Safety concerns
  - Key intersections
  - Adjacent land developments
  - Transit, bike, and ped facilitates
  - Congestion
  - Speed limit
  - Truck traffic
  - Environmental (open space/noise)
- Individual responses provided

On-going Public Outreach

- Continuing to collect comments on website
- Providing updates and materials on website
- Project Team providing information to support TAC / EC members
- Messaging from local agencies regarding unapproved developments

SH 66 Planning and Environmental Linkages Study

Purpose and Need

Purpose

Basis for Alternative Development and Screening

Purpose

"The purpose of transportation improvements along the SH 66 corridor is to improve safety, reduce existing and future traffic congestion, provide efficient access for existing and future development, and improve mobility and connectivity for people, goods, and services that match the context of the adjacent communities."

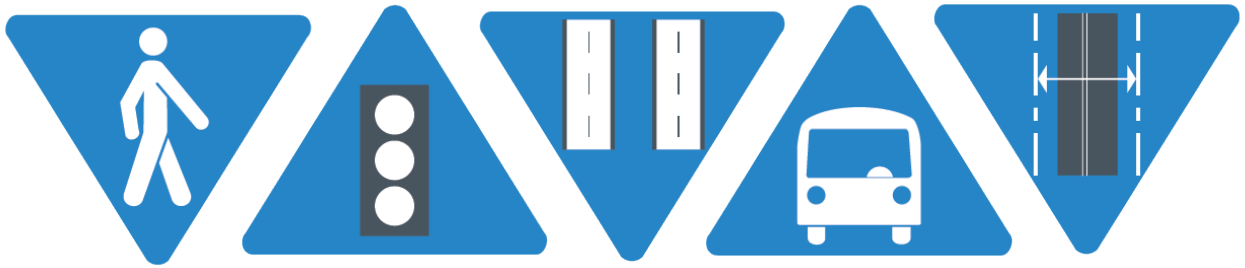
Needs

Safety Management

- *Vehicular*
- *Bicycle*
- *Pedestrian*

Mobility Management

- *Vehicular*
- *Bicycle*
- *Pedestrian*
- *Transit*



Access Management

Goals and Objectives

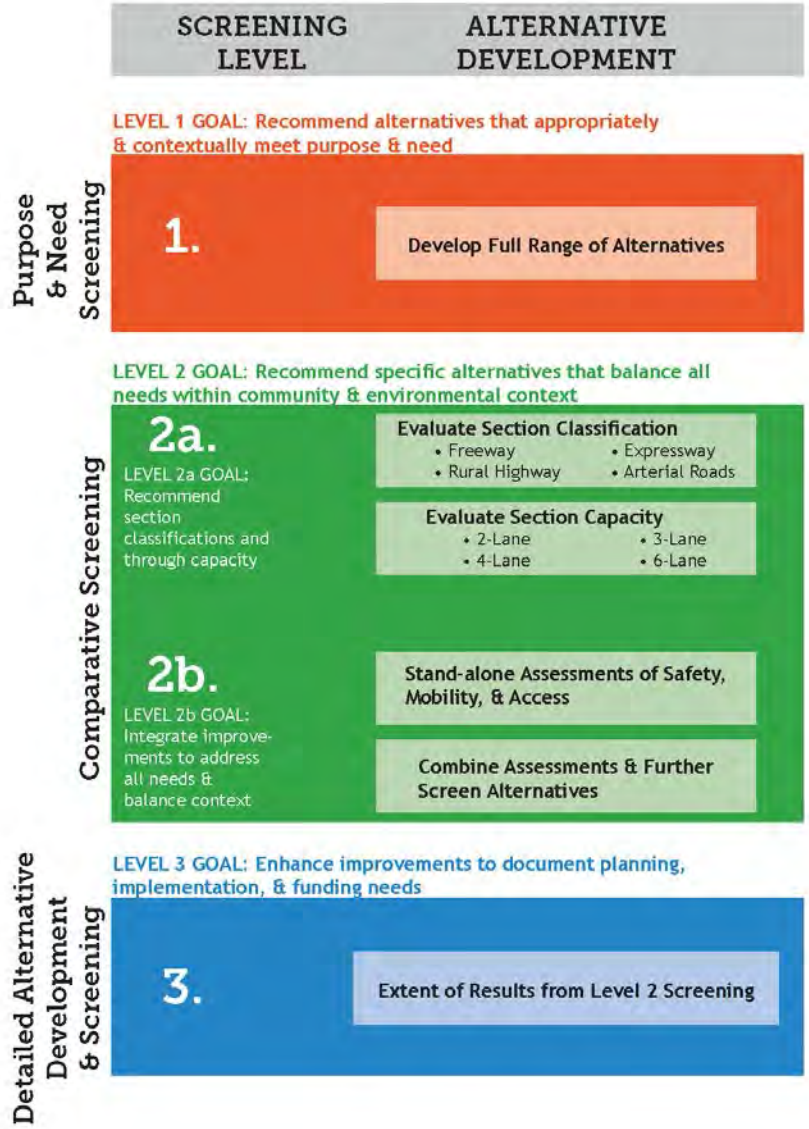
- Reflects community context
- Not transportation specific needs
- Based upon feedback from Visioning Workshop

Goals	Objectives
Maintain the community context of the corridor.	The rural character surrounding the roadway is a valued resource on the east and west ends of the corridor and should be maintained, as appropriate.
	Future improvements should accommodate a variety of vehicle types and travelers (e.g., recreational and industrial).
Enhance each community's exposure along the corridor.	Gateway features representing individual communities are desired by many communities and should be incorporated into transportation improvements.
Protect and accommodate natural resources along the corridor.	Many stakeholders would like future improvements along the corridor to protect and proactively maintain floodplains and streams.
	Improvements should incorporate resilient infrastructure.
	Many stakeholders would like improvements to incorporate wildlife crossings and warnings in areas that have high wildlife-vehicle collisions and sensitive habitat.
Protect and enhance SH 66 as an evacuation route.	Communities would like improvements to accommodate SH 66 as an emergency evacuation route.

SH 66 Planning and Environmental Linkages Study

Alternative Development & Screening

Alternative Development & Screening



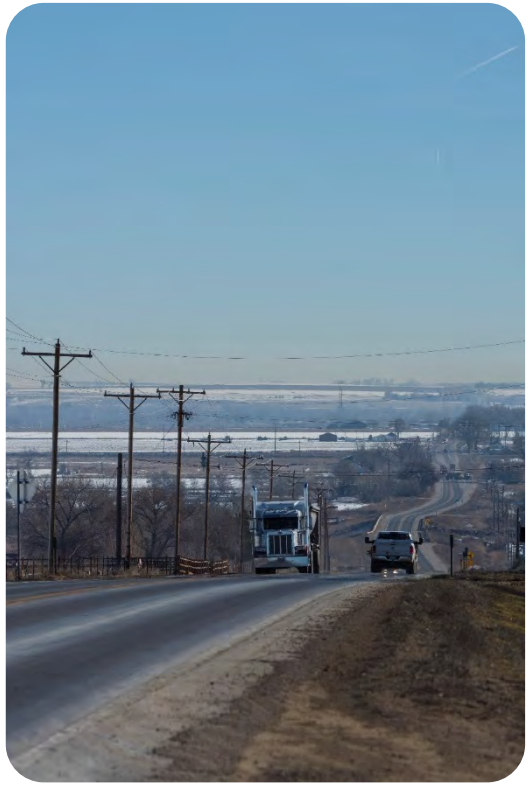
SH 66 Planning and Environmental Linkages Study

Next Steps and Timeframes

Next Steps and Timeframes

Session	Date	Topics
EC #1	**TODAY**	**Purpose & Need, Corridor Conditions, Alternatives Process**
TAC #4	Late July	Alts Screening Level 1 – Purpose & Need Screening
TAC #5	Mid-October	Alts Screening Level 2 – Comparative Screening
TAC #6	Early December	Alts Screening Level 3 – Detailed Alternative Development & Screening
EC #2	**Mid December**	**Alternatives screening summary and outcomes**
TAC #7	Mid January 2018	Recommendations and ACP
EC #3	**Early February**	**Recommendations and ACP**
TAC # 8	Early March	Prioritization and ACP
EC #4	**Mid March**	**Prioritization and ACP**
TAC #9	Mid April	Draft PEL Study Report and ACP
TAC #10	Late May	Final PEL Study Report and ACP
EC #5	**Mid June 2018**	**Final PEL Study and ACP**

SH 66 Planning and Environmental Linkages Study



Thank You!

SH 66 Planning and Environmental Linkages Study

SH 66 Coalition Meeting/Executive Committee Meeting # 2

Date and Time: Friday, December 14, 2018 | 7:30 a.m.

Introductions

Alternatives Development and Screening Level 1 and 2a

- Recap of recommendations

Level 2b

- Review of Section 1 (Lyons and Boulder County)
  - US 36
  - Access road with advisory shoulders
  - Reversible center lane concept
- Review of Section 2 (Longmont)
  - Hover Street
  - US 287
- Review of Section 3 (Mead)
  - Railroad crossing and WCR 5.5
- Review of Section 4 (Mead and Weld County)
  - WCR 9.5
- Review of Section 5 (Firestone and Weld County)
  - WCR 13

Level 3

Schedule and Next Steps

- Upcoming stakeholder involvement
- Risk and resiliency evaluations
- Access control plan
- Public outreach
- PEL study report

SH 66 Planning and Environmental Linkages Study

SH 66 Coalition Meeting

Date and Time: Friday, December 14, 2018 | 7:30 a.m.

Introductions

- EC Members provided self-introductions.
- A sign in sheet is included with this meeting summary.
- This Coalition Meeting is the final meeting with Commissioner Cozad's involvement. Her term as a Weld County Commissioner concludes in January.
- Colleen Whitlow was elected as Mead's Mayor.
- Commissioner Gardner from Boulder County was unavailable to attend but engaged with George and Phil prior to the meeting.

Alternatives Development and Screening

Level 2a Recap

- Level 2a alternatives development and screening included operational classifications and capacity (number of lanes). Recommendations were reviewed through the TAC and are included in the meeting materials (see the Level 2a Screening Operational Classification map).
- These classification and capacity recommendations were used as a framework for addressing how to handle intersections along the corridor.

Level 2b

- Level 2b alternatives (i.e., options) were:
    - evaluated according to the Level 2b Evaluation Criteria (included with the meeting materials)
    - documented in the robust and color coded Level 2b screening matrices (one for roadway and one for bike/ped/transit)
    - summarized in an overview table (called Level 2b Screening Summary) and in maps:
        - intersection options (see the Level 2b alternatives development and screening 7-page mapbook)
        - bike/pedestrian/transit options (see the Level 2b carried forward options map)
- According to FHWA's PEL guidelines, the team made recommendations using this language:
    - Eliminated – not used in Level 2; only used during the Level 1 process for evaluating the full range of alternatives relative to the purpose and need and planning horizon
    - Not recommended – allows the alternative to come back into discussion during NEPA and project development but is not recommended at the current time
    - Carried forward – is recommended for further consideration in Level 3
- Key discussion points and feedback:
    - Review of Section 1 (Lyons and Boulder County)

- US 36 – CDOT plans to keep this intersection signalized and will assess intersection type based on future development. Business access in the area will be consolidated to the east. Right of way preservation will be considered for future transit expansion.
- Access road with advisory shoulders – This facility would serve a dual/shared purpose of providing local access for residents north of SH 66 and provide shoulders to accommodate bicycles and pedestrians. The local access facility would only occur in select locations to facilitate access consolidations that are low speed and low volume and not traffic seeking an alternative route to SH 66. Boulder County could connect the access segments to trail segments to make the facility contiguous along SH 66. The access road with advisory shoulders could connect into other local and regional trail facilities.

  EC members generally support this concept and had operational questions. The team is evaluating operational and engineering feasibility further in Level 3. Boulder County and Longmont support this concept. Weld County stakeholders have no objection. The advisory shoulder analysis currently ends at 66th St. Boulder County noted there could be opportunities for this type of facility east of 66th to 75th St. A sidepath also could allow cyclists or pedestrians to continue traveling further eastward.
- Reversible center lane concept – The team is considering this concept from US 36 to 87th Street. High volumes of traffic flow westward from US 287 (about double the volume) than travel going in the eastbound direction during the morning rush hour and vice versa during the evening rush hour. Reversible lane could facilitate flexibility in mobility, safety, resiliency. The 75th Street area requires consideration for how the reversible lane would work through the intersection.

  Boulder County confirmed that not much growth is anticipated in Hygiene. Traffic volumes likely are from pass-through motorists coming from Weld or Larimer Counties. 75th Street is also currently and projected to be a heavy intersection for bike and ped crossings. In addition to on-street crossings at this intersection, the PEL Team is considering this intersection location for the transition of off-street bikes and pedestrians traveling along SH 66 from north to south of the highway.

o Review of Section 2 (Longmont)

- With heavy movements along Hover, SH 66, and US 287, we gathered input on a potential reroute using Vermillion. Commissioner Gardner and Longmont were not interested, so this option was not recommended.
- Through Section 2, we generally focused on closing some accesses and routing them to more major intersections. Longmont raised a concern that some of the closures create a single point of access into subdivisions, which does not work with emergency access and puts too much stress on the local road network. Longmont has a requirement to have two access points for each development, which could impact some of the closure recommendations and yield more right

in/right out options. We also are considering some type of reversible center lane from US 287 to Hover to help with heavy traffic volumes.

- The team is considering a grade separation at US 287. Longmont is interested in this option and in collaborating with CDOT on how to partner for this improvement. A lot of ROW is acquired already. The PEL team is looking at what extent of ROW is needed. FHWA is recommending that the PEL identify the footprint that would need to be accommodate the maximum extent of options carried forward.
- Access to the transit station (north of Walmart) will not be precluded and will be considered further in Level 3.
- From the public meeting, residents from the south were concerned about getting access to the north, primarily at the US 287 intersection. Railroad grade separation concept is being considered, with the highway overpassing the railroad, which would facilitate a grade-separated bike/ped crossing.
- Adaptive signals are planned on Hover from Nelson northward, which would incentivize use of Hover from SH 66.

o Review of Section 3 (Mead)

- For the eastern limits of Longmont, we heard public feedback and concerns about safety.
- Recommendations generally include local access roads to the south from neighborhoods with access to and from the highway at more major intersections.
- WCR 5.5, the railroad crossing, and Stage Coach are all being considered further in Level 3. Under a concept to grade separate the railroad, WCR 5.5 could be grade separated also and could taper back down toward Stage Coach Drive. That concept would allow north-south movements from one neighborhood to the next. Mead does not prefer the grade separated concept. Further consideration will occur in the next phase of alternatives development and screening.

o Review of Section 4 (Mead and Weld County)

- WCR 9.5 is slated to receive capacity improvements.
- Other major intersection access points would be signalized if warranted. Some access closures with re-routes to the major intersections are anticipated.
- Barefoot Lakes development would include access to the intersection at the location planned by the developer.

o Review of Section 5 (Firestone and Weld County)

- CAP-X analysis was completed to determine roundabout feasibility for the roundabout locations considered in Level 2B.
- Weld County is interested in further evaluation of roundabouts along SH 66. CDOT explained the concepts were not carried forward in terms of driver expectancy and a greater concern for shut down with truck accidents. Weld County has an interest in single or multi-lane roundabouts. Commissioner Cozad

noted political will seems to be changing and more elected officials are embracing roundabouts. The more roundabouts are included in transportation plans, the more people will get used to them.

- Based on EC input, the team will add a roundabout option at WCR 11, 11.5, and WCR 13 and provide analysis.
- In general, the recommendations for major intersections align with the section lines. Near the dairy, a lot of severe accidents have occurred. Center turn lane and access consolidation can help improve safety in this section.

o Bike/ped/transit – There is a lot planned along the corridor already, which is illustrated in the maps.

- We tried to plan for both user types, more advanced and more recreational.
- Western edge of Section 1A includes keeping bike lanes as options and working with Lyons to consider partnership opportunities for more robust bike lane facilities such as separated bike lanes. Boulder County noted that the intersection with US 36 is a challenge for bikes/peds, which will be evaluated in Level 3.
- Boulder County likes the idea of the access road with advisory shoulders. Boulder County suggested continuing the access road until near 75th Street, and to consider an underpass just ahead of (west of) the intersection given current and anticipated crossings at this location. These types of considerations will be made in Level 3.
- **[Action Item: Shea Suski** will double check on any changes to the bike/ped plans including if the Barefoot Lakes development contains any bike/ped facilities and will focus attention at those high volume intersections.**]** Planned facilities to cross SH 66 in Mead were noted as a safety concern to any potential roundabouts on SH 66 in Mead.

Level 3

- Level 3 alternatives development and screening will occur in early 2019.
- The focus will be to develop a comprehensive plan for integrating roadway, access, and bike/ped/transit components.

Schedule and Next Steps

- Upcoming stakeholder involvement – A time in mid-January was discussed for final Level 2b comments. EC members requested additional time for review and inquired whether PEL teams could provide tailored updates to various local boards and commissions, especially given leadership transitions following recent elections.
- **[Update:** CDOT will hold one additional Level 2b meeting for TAC, EC, and other council/board/commission members to provide an overview of Level 2b analysis and to discuss comments or questions. CDOT intends to have a single meeting to maintain the collective discussion about a corridor vision with all stakeholders and in consideration of available budget.**]**

- **[Action Item: EC members** will provide information by January 4, 2019 to Jodie Snyder (Jodie.Snyder@fhueng.com or 720-200-8913) on when elected officials and council/board/commission members are settled in their positions and ready for engagement.**]**
- **[Action Item: The PEL Team** will coordinate schedules to identify a time of day and date (target in late January 2019) that would work for a stakeholder meeting.**]**
- The PEL will inform the ACP. The schedule for Level 3 and the ACP generally will parallel one another. The PEL is expected to wrap up mid-year in 2019, with the ACP following closely behind by a few months.
- Risk and resiliency evaluations will occur in 2019 for both physical and operational threats.

SH 66 Planning and Environmental Linkages Study

EXECUTIVE COMMITTEE MEETING

Date and Time: December 14, 2018 | 7:30 am to 9 a.m.
Southwest Weld County Services Building

Sign In

First Name	Last Name	Agency	Email
Julie	Cozad	Weld County	jcozad@weldgov.com (Cancel Jan. 31st)
Erika	Rasmussen	Town of Mead	erasmussen@townofmead.org
Colleen	Whitlow	Town of Mead	cwhitlow@townofmead.org
Everett	Bacon	Weld County	
Anna	Ericson	Atkins	anna.ericson@atkinsglobal.com
Elizabeth [redacted]	Relford	Weld Co	erelford@weldgov.com
Alex	Pulley	FHU	alex.pulley@fhueng.com
James Zufelt	Zufelt	CDOT	James.d.Zufelt@State.co.us

SH 66 Planning and Environmental Linkages Study

EXECUTIVE COMMITTEE MEETING

Date and Time: December 14, 2018 | 7:30 am to 9 a.m.
Southwest Weld County Services Building

Sign In

First Name	Last Name	Agency	Email
KEITH	SHEAFFER	CDOT	keith.sheaffer@state.co.us
JIM	GUSSON	CDOT	james.gusson@state.co.us
George	Heath	Firestone	geheath20@AOL.com
PHIL	GREENWALD	Longmont	PHIL.GREENWALD@Longmontcolorado.gov
TYLER	STAMEY	Longmont	tyler.stamey@longmontcolorado.gov
Greg Tye	Gesste.	Boulder County	GTYE@BOULDERCOUNTY.ORG
DAVID	SPRAGUE	ATKINS	DAVID.SPRAGUE@ATKINSGLOBAL.COM
Jodie	Snyder	FHU	jodie.snyder@fhueng.com

SH 66 Planning and Environmental Linkages Study

EXECUTIVE COMMITTEE MEETING

Date and Time: December 14, 2018 | 7:30 am to 9 a.m.
Southwest Weld County Services Building

Sign In

First Name	Last Name	Agency	Email
Abra	Glissler	CDOT	abra.glissler@state.co.us
Shea	Suski	FHU	shea.suski@fhueng.com
KELLY	LEADBETTER	FHU	kelly.leadbetter@fhueng.com

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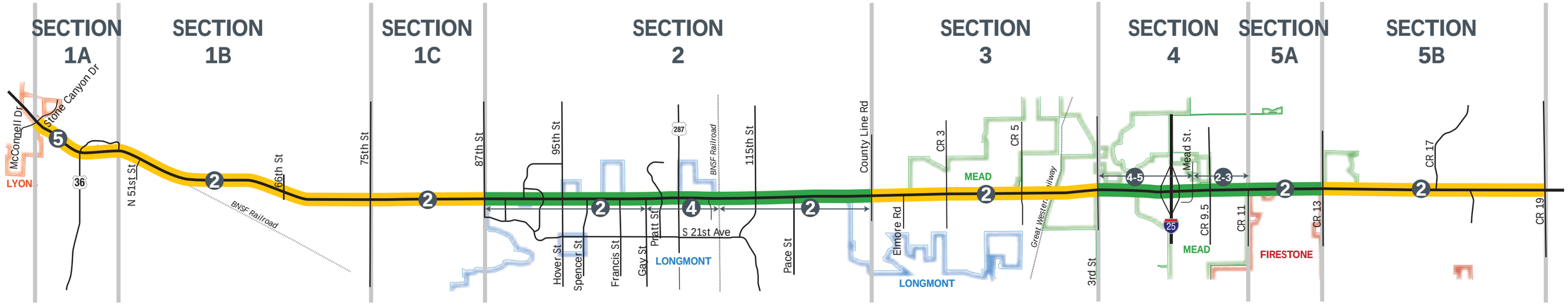
Level 2a Screening Operational Classification

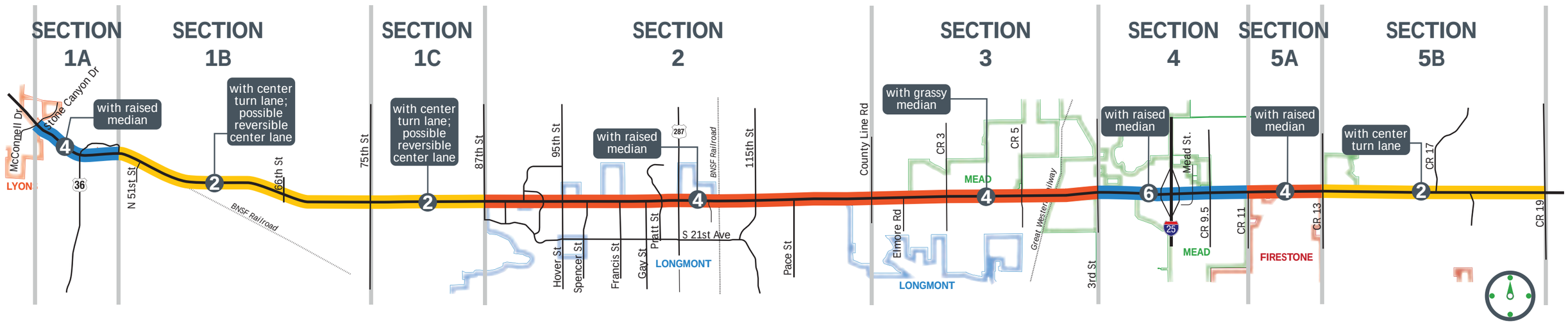
Existing



LEGEND

- Expressway
- Non-Rural Principal Highway
- Rural/Regional Highway
- Arterial
- (X) Number of Thru Lanes

Future



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SH 66 Planning and Environmental Linkages Study

Level 2B Alternatives Development and Screening

[Map 1 of 7]

SECTION 1A

SECTION 1B

Nolan Road
Option 1 - No Action
Option 2 - RI/RO

Highland Drive
Option 1 - No Action
Option 2 - Signalize intersection, if warranted,when future development occurs
Option 3 - Channelized T

McConnell Dr
Option 1 - No Action
Option 2 - No changes to intersection
Option 3 - Consolidate access to the east

US 36
Option 1 - No Action
Option 2 - Keep signalized and assess intersection type based on future development; consolidate access to the east; consider ROW preservation for future transit/expansion
Option 3 - Roundabout

N. 51st Street
Option 1 - No Action
Option 2 - Close north leg and make offset 'T' with Highland Drive
Option 3 - Close, if future redevelopment of the site occurs

Private Drives
Option 1 - No Action
Option 2 - Consolidated driveways with Access Road with Advisory Shoulder facility on north side of highway

N. 53rd Street
Option 1 - No Action
Option 2 - *Channelized T (unsignalized) and connection to Access Road with Advisory Shoulder facility*

Forest Service Access Road
Option 1 - No Action
Option 2 - Full Movement and access to Advisory Shoulder facility
Option 3 - RI/RO and access to Advisory Shoulder facility

Private Drives
Option 1 - No Action
Option 2 - Consolidated driveways with access to Access Road with Advisory Shoulder facility on north side of highway

Private Drives
Option 1 - No Action
Option 2 - Consolidated driveways with connection to Access Road with Advisory Shoulder facility on north side of highway

N 61st Street
Option 1 - No Action; connects to Access Road with Advisory Shoulder
Option 2 - Full Movement and connect to Access Road with Advisory Shoulder

Private Drives
Option 1 - No Action
Option 2 - Access Road with Advisory Shoulder or separated sidepath with no vehicles

N 63rd Street
Option 1 - No action
Option 2 - Offset 'T' with 61st
Option 3 - 3/4 movement
Option 4 - Closed

with raised median

with center turn lane; possible reversible center lane

Stone Canyon Dr
McConnell Dr
Highland Dr
Highland Dr
53rd St
51st St
61st St
63rd St
LYONS
BOULDER COUNTY
36
4
2

LEGEND
- Expressway
- Rural/Regional Highway
- Arterial
- X # of Lanes
- Proposed Future Roads
- *Option X -* Recommended Option

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SH 66 Planning and Environmental Linkages Study

Level 2B Alternatives Development and Screening

[Map 2 of 7]

SECTION 1B

SECTION 1C

SECTION 2

BOULDER COUNTY

Private Drives (cont.)
Option 1 - No Action
Option 2 - Consolidated driveways with connection to Access Road with Advisory Shoulder facility on north side of highway

N. 66th Street
Option 1 - No Action
Option 2 - Full movement; signalized intersection, if warranted, with closure of 63rd St. and/or when future development occurs

McCall Drive
Option 1 - No Action
Option 2 - RI/RO
Option 3 - Close, with possible right out

with center turn lane; possible reversible center lane

N 66th St

N 75th St

N.75th Street
Option 1 - No Action
Option 2 - Provide two EB through lanes
Option 3 - Capacity improvements
Additional options may be considered in Level 3 based on TAC input/vision for this location

Table Mountain Rd

Unnammed Rd

Table Mountain Road
Option 1 - No Action
Option 2 - RI/RO with possible connection to Unnamed Rd on north side

N 87th St

Unnamed Road
Option 1 - No Action
Option 2 - Consolidate access on north and south to one full movement
Option 3 - Consolidate access on north and south to one RI/RO

N. 87th Street
Option 1 - No Action
Option 2 - Intersection capacity improvements

Airport Rd

Horizon

Rozena Dr

2

LEGEND
- Expressway
- Rural/Regional Highway
- Arterial
- X # of Lanes
- Proposed Future Roads
- *Option X -* Recommended Option

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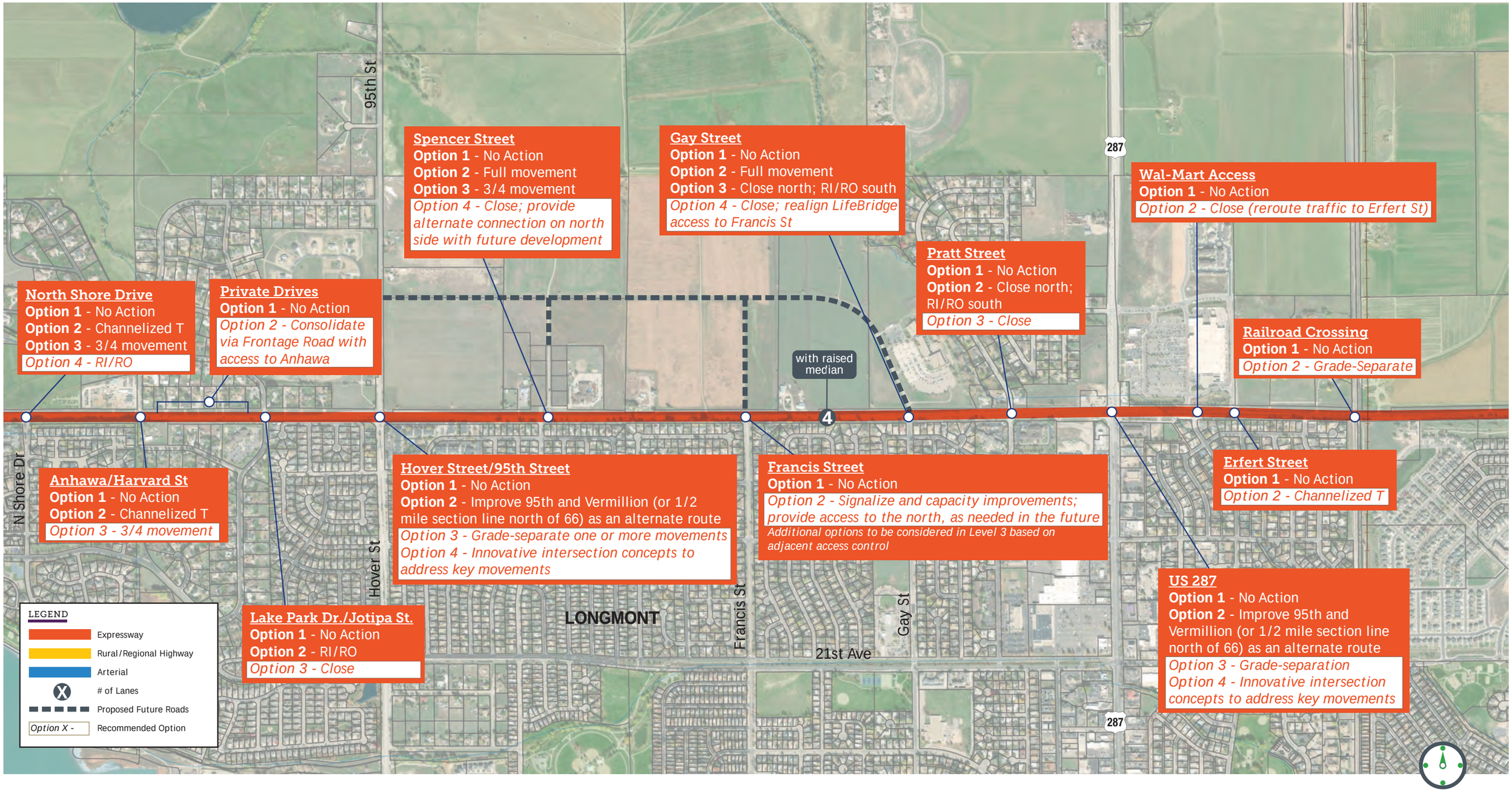
SH 66 Planning and Environmental Linkages Study

Level 2B Alternatives Development and Screening

[Map 3 of 7]

SECTION 2



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SH 66 Planning and Environmental Linkages Study

Level 2B Alternatives Development and Screening

[Map 4 of 7]

SECTION 2

SECTION 3

BOULDER COUNTY

WELD COUNTY

115th St

Alpine St

Pace St

Sundance Dr

County Line Rd

WCR 3

4

with raised median

N. 115th Street/Alpine Street
Option 1 - No Action
Option 2 - Signalize and capacity improvements

Sundance Drive
Option 1 - No Action
Option 2 - Signalize and consolidate accesses on the north
Option 3 - 3/4 movement for north and south and consolidate accesses the north
Option 4 - RI/RO for north and south; consolidate accesses on the north
Option 5 - Close

Pace Street
Option 1 - No Action
Option 2 - Add capacity improvements and potential 4-legged; sidewalk connection to grade-separation

Elmore Road
Option 1 - No Action
Option 2 - RI/RO and build parallel road to connect to WCR 1 and WCR 3
Option 3 - Close and build parallel road to connect to WCR 1 and WCR 3

Nesting Crane Lane
Option 1 - No Action
Option 2 - Signalize; full movement
Option 3 - Channelized T
Option 4 - Close and build parallel road to connect to WCR 1 and WCR 3

County Line Road
Option 1 - No Action
Option 2 - Capacity improvements (assumed WCR 1 would be 4 lanes)
Additional options to be considered in level 3 based on adjacent access control

WCR 3
Option 1 - No Action
Option 2 - Full Movement, Signalize, if warranted
Option 3 - Roundabout

LEGEND
- Expressway
- Rural/Regional Highway
- Arterial
- X — # of Lanes
- Proposed Future Roads
- *Option X -* — Recommended Option

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SH 66 Planning and Environmental Linkages Study

Level 2B Alternatives Development and Screening

[Map 5 of 7]

SECTION 3

SECTION 4

MEAD

WCR 7

WCR 5
Option 1 - No Action
Option 2 - Full Movement, signalize if warranted
Option 3 - Roundabout

Railroad Crossing
Option 1 - No Action
Option 2 - Grade-separate

Stage Coach Drive
Option 1 - No Action
Option 2 - Channelized T
Option 3 - 3/4 movement
Option 4 - Close
Option 5 - Grade-separate right out

Foster Ridge Road
Option 1 - No Action
Option 2 - Move access 450' to west and signalize, if warranted,as needed for future development
Option 3 - Signalize, if warranted,as needed for future development

Mead Street
Option 1 - No Action
Option 2 - 3/4 movement north and south side with connections to WCR 9.5
Option 3 - RI/RO on both sides with U-turn option at WCR 9.5 to go west

I-25 NB Ramps
Option 1 - No Action

I-25 SB Ramps
Option 1 - No Action

Deere Court
Option 1 - No Action
Option 2 - RI/RO
Option 3 - Close and provide access to WCR 9.5 and Mead St on south end of property

4

with grassy median

WCR 5

WCR 5½
Option 1 - No Action
Option 2 - Full movement, Signalize
Option 3 - 3/4 movement north and south
Option 4 - Grade-separate

3rd St

6

with raised median

WCR 7/3rd Street
Option 1 - No Action
Option 2 - Signalize

Foster Ridge Dr

25

25

LEGEND

- Expressway
- Rural/Regional Highway
- Arterial
- (X) # of Lanes
- Proposed Future Roads
- *Option X -* Recommended Option

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SH 66 Planning and Environmental Linkages Study

Level 2B Alternatives Development and Screening

[Map 6 of 7]

SECTION 4

SECTION 5A

SECTION 5B

WELD COUNTY

FIRESTONE

WCR 11

WCR 13

WCR 9.5
Option 1 - No Action
Option 2 - Grade-separation
Option 3 - Capacity improvements

with raised median

6

WCR 11
Option 1 - No Action
Option 2 - Full movement; signalize if warranted when future development occurs
Option 3 - Roundabout

WCR 11.5
Option 1 - No Action
Option 2 - Signalize, if warranted, when future development occurs
Option 3 - Roundabout

4

with raised median

WCR 13/Colorado Blvd
Option 1 - No Action
Option 2 - Grade-separation
Option 3 - Keep Signalized; add auxiliary lanes, as needed

North Service Road
Option 1 - No Action
Option 2 - Close with development and provide access via future WCR 15

2

with center turn lane

J-Bar-B Road
Option 1 - No Action
Option 2 - Move 365' west to section line (WCR 15), full movement access with accel/decel lanes

WCR 17-North Side
Option 1 - No Action
Option 2 - Signalize, if warranted; capacity improvements
Option 3 - Roundabout
Option 4 - Channelized T

LEGEND

- Expressway
- Rural/Regional Highway
- Arterial
- (X) # of Lanes
- Proposed Future Roads
- *Option X -* Recommended Option

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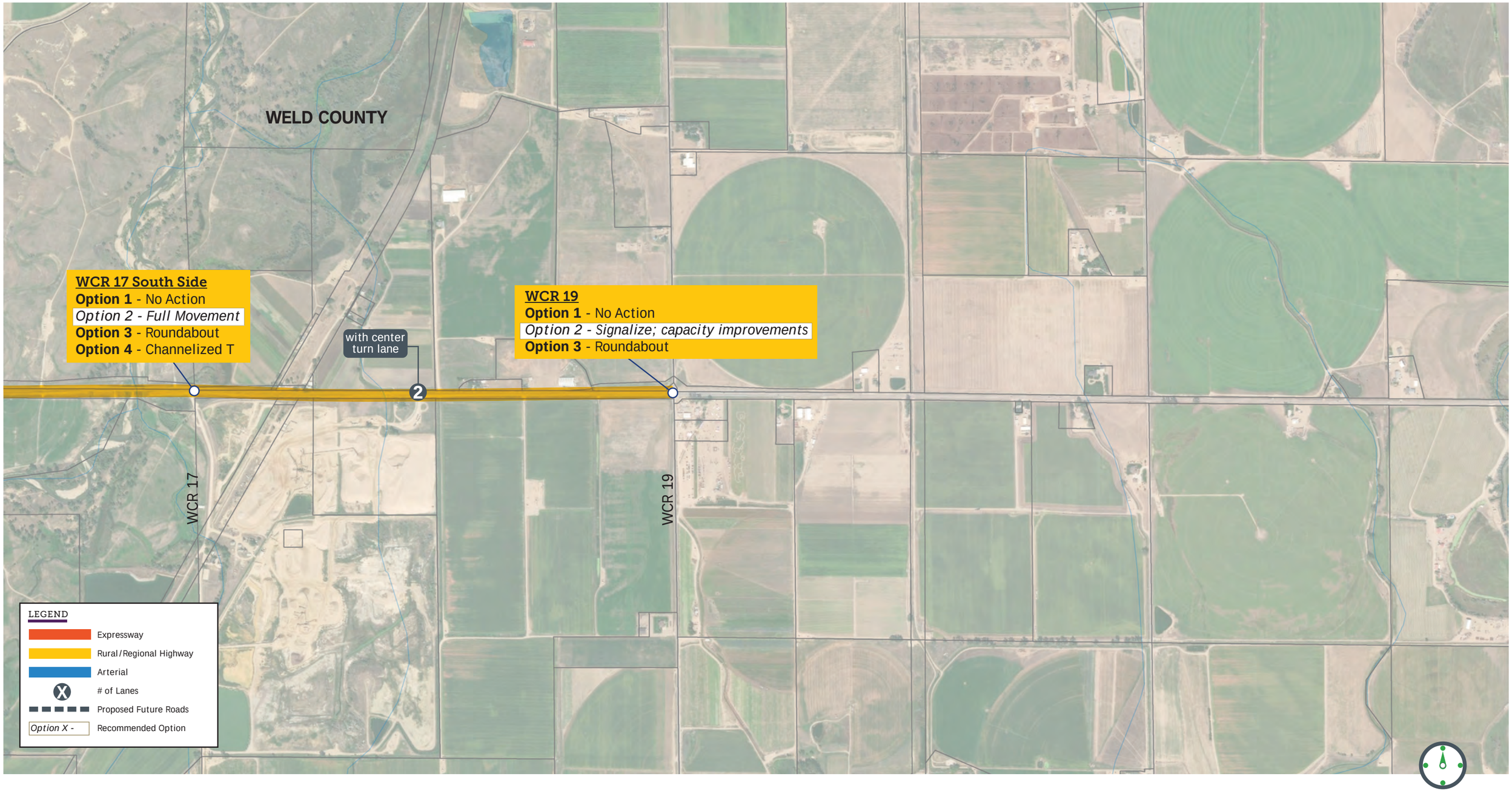
SH 66 Planning and Environmental Linkages Study

Level 2B Alternatives Development and Screening

[Map 7 of 7]

SECTION 5B



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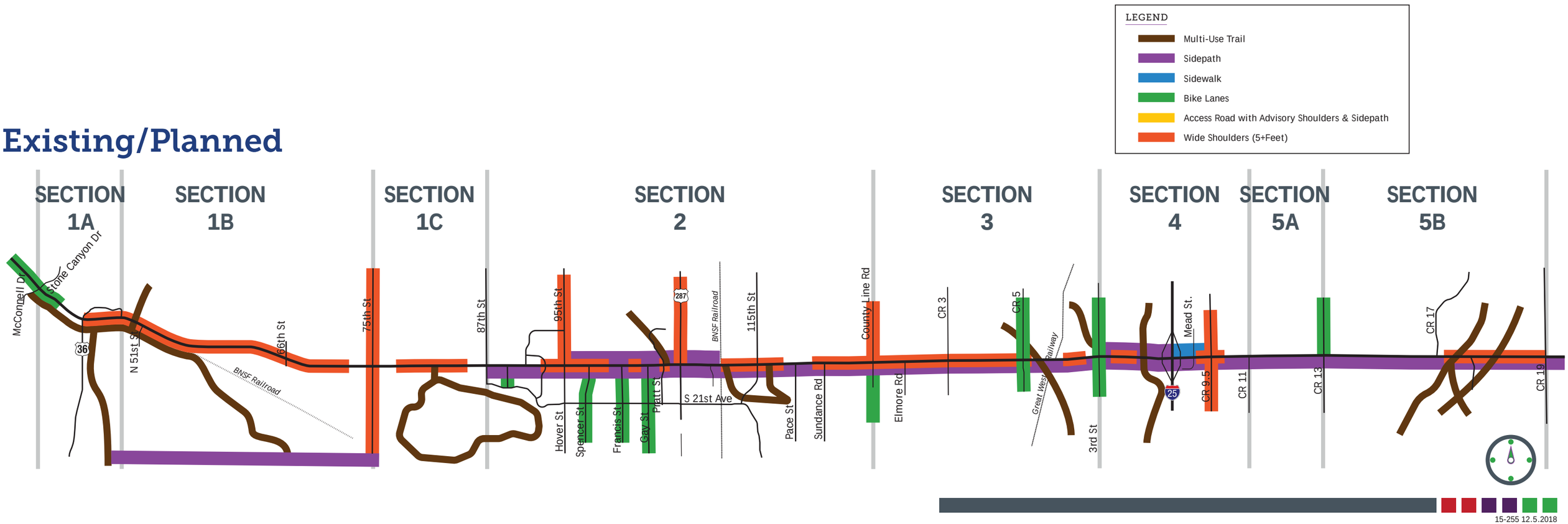
SH 66 Planning and Environmental Linkages Study

Existing/Planned Bicycle/Pedestrian/Transit Facilities

Existing/Planned



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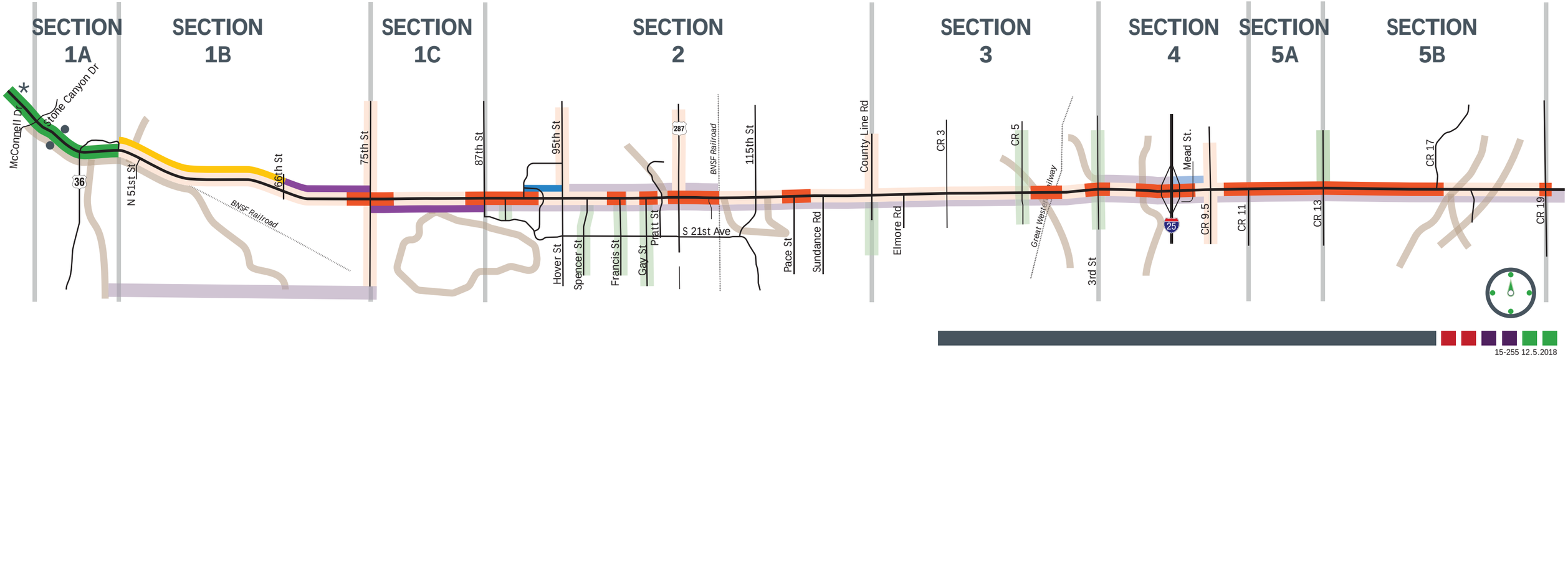
SH 66 Planning and Environmental Linkages Study

PEL Bicycle/Pedestrian/Transit Facilities Carried Forward

PEL Level 2B Carried Forward Options



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SH 66 PEL Level 2b Screening

Community	Existing Roadway Classification	Recommended Roadway Classification	PEL Section	Intersection	Known Problems	Previous Planning	Roadway/Intersection Options and Recommendations	Roadway/Intersection Justification and Additional Comments	Bike/Ped/Transit Options and Recommendations - On Street	Bike/Ped/Transit Justification and Additional Comments - On Street	Bike/Ped/Transit Options and Recommendations - Off Street	Bike/Ped/Transit Justification and Additional Comments - Off Street
Lyons	Rural/Regional Highway	Arterial (4 lanes with a raised median)	1A	McConnell Drive	Pedestrian access to the east on south side		Option 1 - No action *Option 2 - No changes to intersection* *Option 3 - Consolidate access to the east*	Defines access points and increases safety	Option 1 - No action (existing bike lanes) ***Option 2 - Carry existing bike lanes to US 36 (Short Term)*** *Option 3 - Buffered bike lanes (Short Term)* ***Option 4 - Separated bike lanes (Long Term)***	Separated bike lanes are preferred given volumes and speeds, but require additional study and coordination with Lyons regarding maintenance, so is carried forward as a long term option. Traditional and buffered bike lanes are carried forward as short term options, with buffered preferred for additional safety, but only if right-of-way is available and maintenance concerns can be resolved. Traffic volumes and speeds exceed the recommended thresholds for these facilities, thus the long term preference for separated bike lanes.	Planned - Multi-Use Trail along south side Option 1 - No action plus planned ***Option 2 - Add pedestrian sidewalk pads at bus stops***	Improve transit stop experience for riders. Consider a pedestrian crossing and/or sidewalk connections to nearby intersection(s) in Level 3.
				Nolan Road	Access		Option 1 - No action *Option 2 - RI/RO*	Increases safety, accommodates bike/peds; full movement access obtained via Stone Canyon				
				US 36	Access; pedestrian (connection to trail); could be transit need	Community gateway location; multimodal roundabout	Option 1 - No action *Option 2 - Keep signalized and assess intersection type based on future development; consolidate access to the east; consider ROW preservation for future transit/expansion* Option 3 - Roundabout	Best accommodates bikes/peds while improving mobility; allows for best solution to be identified in conjunction with future development				
				Highland Drive	Mobility, depending on Lyons development; bicycle and pedestrian safety and access		Option 1 - No action *Option 2 - Signalize intersection, if warranted, when future development occurs* Option 3 - Channelized T	Increases mobility; best accommodation of all movements including bikes/ped	Option 1 - No action Option 2 - Widen shoulders to 5+ Feet (where not currently) *Option 3 - Traditional bike lanes* *Option 4 - Buffered bike lanes* *Option 5 - Separated bike lanes*		Planned - Multi-use trail along south side *Option 1 - No action plus planned*	Planned multi-use trail sufficient for off-street users. Ensure sidewalk/sidepath is built with any new development on north side.
Boulder County		Rural/Regional Highway (2 lanes with a center turn lane, as needed)	1B	N 51st Street	Access; safety		Option 1 - No action Option 2 - Close north leg and make offset 'T' with Highland Drive *Option 3 - Close, if future redevelopment of the site occurs*	Increases safety and mobility by decreasing access to the highway	Option 1 - No action *Option 2 - Widen shoulders to 5+ Feet (where not currently)* Option 3 - Separated bike lanes	Traffic volumes and speeds warrant separated bike lanes; however, planned and proposed off-street facilities will best serve less advanced users, while advanced users likely will prefer being on-street. Continuous wide shoulders carried forward for this reason, as well as being most cost effective solution from a capital and maintenance standpoint and also serves pull-off needs for vehicles. Signage and intersection improvements will be considered in Level 3 to improve safety.	Planned - Multi-use trail along south side Option 1 - No action plus planned *Option 2 - Access road with advisory shoulders and sidepath concept on north side* Option 3 - Sidepath along north side	Addresses needs for all modes while providing a low-volume and low-speed facility intermixed with sidepaths for less advanced users. Planned multi-use trail along the south side provides additional regional connectivity.
				Private Drives	Access; safety		Option 1 - No action *Option 2 - Consolidated driveways with connection to Access Road with Advisory Shoulder facility on north side of highway*	Increases safety and mobility by decreasing access to the highway; provides facility for local traffic and bicycles and pedestrians				
				N 53rd Street	Access; safety; bike/pedestrian access	Assumes bicycle grade-separation from south to north	Option 1 - No action *Option 2 - Channelized T (unsignalized) and connection to Advisory Shoulder facility*	Increases safety; maintains mobility and defines access				
				Private Drives	Access; safety		Option 1 - No action *Option 2 - Consolidated driveways with connection to Access Road with Advisory Shoulder facility on north side of highway*	Increases safety and mobility by decreasing access to the highway; provides facility for local traffic and bicycles and pedestrians				
				Forest Service Access Road	Access; safety		Option 1 - No action *Option 2 - Full Movement and access to Advisory Shoulder Facility* Option 3 - RI/RO and access to Advisory Shoulder facility	Maintains highway access and is needed to accommodate adjacent travel movements and local access				
				Between Forest Service Access Road And 61st Street			Option 1 - No action *Option 2 - Access Road with Advisory shoulder or separated sidepath with no vehicles*	Increases safety and mobility by decreasing access to the highway; provides facility for local traffic and bicycles and pedestrians				
				N 61st Street			Option 1 - No action; connects to Access Road with Advisory Shoulder *Option 2 - Full movement with connection to Access Road with Advisory Shoulder*	Maintains highway access and is needed to accommodate adjacent travel movements and local access				
				N 63rd Street	Access		Option 1 - No action Option 2 - Offset 'T' with 61st Option 3 - 3/4 movement *Option 4 - Close*	Increases mobility and increases safety; alternative access provided at a signalized intersection	Option 1 - No action *Option 2 - Widen shoulders to 5+ Feet (where not currently)* Option 3 - Separated bike lanes		Option 1 - No action *Option 2 - Access road with advisory shoulders and sidepath concept on north side* Option 3 - Sidepath along north side Option 4 - Sidepath along south side	Addresses needs for all modes while providing a low-volume and low-speed facility intermixed with sidepaths for less advanced users. Provides an off-street (off SH 66) facility for less advanced users where no facilities are currently planned.
				(Private Drives)	Access; safety; bicycle		Option 1 - No action *Option 2 - Consolidated driveways with access to Access Road with Advisory Shoulder facility on north side of highway*	Increases safety and mobility by decreasing access to the highway; provides facility for local traffic and bicycles and pedestrians				
				N 66th Street	Access; safety		Option 1 - No action *Option 2 - Full movement; signalize intersection, if warranted, with closure of 63rd St and/or when future development occurs*	Supports closure of N 63rd St; provides safer access to highway				
				McCall Drive	Access		Option 1 - No action Option 2 - RI/RO *Option 3 - Close, with possible right out*	Near-term disruption, but in the long-term it increases mobility and safety; access still provide at N 66th St			Option 1 - No action *Option 2 - Sidepath along north side* Option 3 - Sidepath along south side	Provides connectivity between shared street option to the west and planned sidepaths to the east, filling a gap. North side preferred given shared street option is along the north side and obstacles exist on the south side. Level 3 will explore making 75th Street a mulitmodal intersection to facility crossing of sidepath.
				N 75th Street	Bicycle (crossing of SH 66 and turns west)		Option 1 - No action *Option 2 - provide two EB through lanes* Option 3 - Capacity improvements *Additional options may be considered in Level 3 based on TAC input/vision for this location*	Increases mobility and may increase safety				
			1C	Unnamed Rd 0.25 miles west of Table Mountain Road	Access		Option 1 - No action *Option 2 - Consolidate access on north and south to one full movement* Option 3 - Consolidate access on north and south to one RI/RO	Access consolidation increases mobility and safety; near-term disruption, but supports the context in the long-term			Option 1 - No action Option 2 - Sidepath along north side *Option 3 - Sidepath along south side* Option 4 - Sidepath extension of planned sidepath along Hygiene Road from 75th Street to trail around McIntosh Lake, and sidepath along Airport Road from McIntosh Lake to SH 66	Provides connectivity between shared street option to the west and planned sidepaths to the east, filling a gap. South side preferred given plans for a sidepath along the south side starting at 87th Street that continue east along the corridor. Level 3 will explore making 75th Street a mulitmodal intersection to facility crossing of sidepath.
				Table Mountain Road	Access		Option 1 - No action *Option 2 - RI/RO with possible connection to Unnamed Rd on north side*	Increases mobility and safety by restricting turning movements; near-term disruption, but supports the context in the long-term				
				N 87th Street	Mobility	New bike side path (Longmont)	Option 1 - No action *Option 2 - Intersection capacity improvements*	Addresses safety, mobility, and access needs				
				N Shore Drive	Access	New bike side path (Longmont)	Option 1 - No action Option 2 - Channelized T Option 3 - 3/4 movement *Option 4 - RI/RO*	Increases mobility and safety by restricting turning movements; near-term disruption, but supports the context in the long-term			Planned - Sidepath (likely along south side) *Option 1 - No action plus planned*	Planned multi-use trail sufficient for off-street users. Ensure any development on the north side provides off-street facility as well.
				Anhawa Avenue/Harvard Street	Access; safety	New bike side path (Longmont)	Option 1 - No action Option 2 - Channelized T *Option 3 - 3/4 movement*	Eliminating left out will improve safety				
				(Private Drives)	Access; safety	New bike side path (Longmont)	Option 1 - No action *Option 2 - Consolidate via Frontage Road with access to Anhawa*	Increases safety and mobility by decreasing access to the highway				
				Lake Park Drive/Jotipa Street	Access; safety; pedestrian	New bike side path (Longmont)	Option 1 - No action Option 2 - RI/RO *Option 3 - Close*	Eliminates conflict with turning vehicles; increases safety			Planned - Sidepath (likely along south side)	Planned multi-use trail sufficient for off-street users along the south side, but some homes in the

Community	Existing Roadway Classification	Recommended Roadway Classification	PEL Section	Intersection	Known Problems	Previous Planning	Roadway/Intersection Options and Recommendations	Roadway/Intersection Justification and Additional Comments	Bike/Ped/Transit Options and Recommendations - On Street	Bike/Ped/Transit Justification and Additional Comments - On Street	Bike/Ped/Transit Options and Recommendations - Off Street	Bike/Ped/Transit Justification and Additional Comments - Off Street
Longmont	Non-Rural Principal Highway	Expressway (4 lanes with a raised median)	2	Hover Street/95th Street	Bicycle; mobility; safety	New bike side path (Longmont)	Option 1 - No action Option 2 - Improve 95th and Vermillion (or 1/2 mile section line north of 66) as an alternate route *Option 3 - Grade-separate one or more movements* *Option 4 - Innovative intersection concepts to address key movements*	Limits potential conflict with other turning vehicles and increases safety; concepts will focus on maintaining mobility	Option 1 - No action *Option 2 - Widen shoulders to 5+ Feet (where not currently)* Option 3 - Separated bike lanes	Traffic volumes and speeds warrant separated bike lanes; however, planned and proposed off-street facilities will best serve less advanced users, while advanced users likely will prefer being on-street. Continuous wide shoulders carried forward for this reason, as well as being most cost effective solution from a capital and maintenance standpoint and also serves pull-off needs for vehicles. Signage and intersection improvements will be considered in Level 3 to improve safety.	Option 1 - No action plus planned *Option 2 - Sidewalk on north side*	development on the north side have no pedestrian connection to 95th Street.
				Spencer Street	Mobility; access	New bike side path (Longmont)	Option 1 - No action Option 2 - Full movement Option 3 - 3/4 movement *Option 4 - Close; provide alternate connection on north side with future development*	Increases mobility and safety by restricting turning movements; near-term disruption, but supports the expressway context in the long-term				
				Francis Street	Mobility; access	New bike side path (Longmont)	Option 1 - No action *Option 2 - Signalize and capacity improvements; provide access to the north, as needed in the future* *Additional Options to be considered in Level 3 based on adjacent access control*	Supports expressway context; may improve safety				
				Gay Street	Mobility; access; pedestrian	New bike side path (Longmont)	Option 1 - No action Option 2 - Full movement Option 3 - Close north; RI/RO south *Option 4 - Close; realign Life Bridge access to Francis St*	Increases mobility and safety by restricting turning movements; near-term disruption, but supports the expressway context in the long-term				
				Pratt Street	Mobility; access	New bike side path (Longmont)	Option 1 - No action Option 2 - Close north; RI/RO to south *Option 3 - Close*	Increases mobility and safety by restricting turning movements; near-term disruption, but supports the expressway context in the long-term			Planned - Sidepath on both sides *Option 1 - No action plus planned*	Planned multi-use trails on both sides sufficient for off-street users.
				US 287	Mobility; safety; pedestrian; transit access	New bike side path (Longmont); future bus transfer station (northeast quadrant)	Option 1 - No action Option 2 - Improve 95th and Vermillion (or 1/2 mile section line north of 66) as an alternate route *Option 3 - Grade-separation* *Option 4 - Innovative intersection concepts to address key movements*	Limits potential conflict with other turning vehicles and increases safety; concepts will focus on maintaining mobility				
				Wal-Mart Access	Access		Option 1 - No action *Option 2 - Close (reroute traffic to Erfert St)*	Eliminates conflict with turning vehicles; increases safety; alternate access provided at signals				
				Erfert Street			Option 1 - No action *Option 2 - Channelized T*	Channelization of movements improves safety and decreases conflicting movements				
				(Railroad Crossing)	Bicycle; transit	Future bike and pedestrian underpass	Option 1 - No action *Option 2 - Grade-separate*	Increases mobility and safety				
				N 115th Street/Alpine Street	Mobility; pedestrian		Option 1 - No action *Option 2 - Signalize and capacity improvements*	Limits potential conflict with other turning vehicles; could improve safety				
				Pace Street	Mobility; pedestrian; bicycle	Future bike and pedestrian underpass (between 115th and Pace)	Option 1 - No action *Option 2 - Add capacity improvements and potential 4-legged; sidewalk connection to grade-separation*	Would reduce conflicts with other vehicles and improve ability of future transit to make a safe stop; could improve safety				
				Sundance Drive	Access		Option 1 - No action *Option 2 - Signalize and consolidate accesses on the north* Option 3 - 3/4 movement for north and south and consolidate accesses on the north Option 4 - RI/RO for north and south; consolidate accesses on the north Option 5 - Close	Consolidating accesses improves safety; would limit potential conflict with other turning vehicles				
				County Line Road	Mobility; pedestrian		Option 1 - No action *Option 2 - Capacity improvements (assumed WCR 1 would be 4 lanes)* *Additional options to be considered in Level 3 based on adjacent access control*	Reduce conflicts with other vehicles; potential improvement to safety				
Mead	Rural/Regional Highway	Expressway (4 lanes with a grassy median)	3	Elmore Road	Access	Community gateway location	Option 1 - No action *Option 2 - RI/RO and build parallel road to connect to WCR 1 and WCR 3* Option 3 - Close and build parallel road to connect to WCR 1 and WCR 3	Increases mobility and safety by restricting turning movements; near-term disruption, but supports the context in the long-term	Option 1 - No action *Option 2 - Widen shoulders to 5+ feet (where not currently)* Option 3 - Separated bike lanes	Traffic volumes and speeds warrant separated bike lanes; however, planned and proposed off-street facilities will best serve less advanced users, while advanced users likely will prefer being on-street. Continuous wide shoulders carried forward for this reason, as well as being most cost effective solution from a capital and maintenance standpoint and also serves pull-off needs for vehicles. Signage and intersection improvements will be considered in Level 3 to improve safety.	Planned - Sidepath (likely along south side) *Option 1 - No action plus planned*	Planned multi-use trail sufficient for off-street users. Ensure any development on the north side provides off-street facility as well.
				Nesting Crane Lane	Access		Option 1 - No action Option 2 - Signalize; full movement Option 3 - Channelized T *Option 4 - Close and build parallel road to connect to WCR 1 and WCR 3*	Increases mobility and safety by restricting turning movements; near-term disruption, but supports the expressway context in the long-term; alternative parallel road access provided south of highway				
				WCR 3	Mobility		Option 1 - No action *Option 2 - Signalize, if warranted, and capacity improvements* Option 3 - Roundabout	Supports expressway context and surrounding access limitations; may improve safety				
				WCR 5	Mobility		Option 1 - No action *Option 2 - Signalize, if warranted, and capacity improvements* Option 3 - Roundabout	Supports expressway context and surrounding access limitations; may improve safety				
				(Railroad Crossing)	Bicycle	Assumes bicycle and pedestrian grade-separation	Option 1 - No action *Option 2 - Grade-separate*	Increases mobility and safety				
				WCR 5 1/2	Access		Option 1 - No action *Option 2 - Full movement, signalize* *Option 3 - 3/4 movement north and south* *Option 4 - Grade-separate*	Further evaluation will occur in Level 3 to accommodate the grade separation at the railroad crossing				
				Stage Coach Drive	Access		Option 1 - No action *Option 2 - Channelized T* *Option 3 - 3/4 movement* *Option 4 - Close* *Option 5 - Grade-separated right out*	Further evaluation will occur in Level 3 to accommodate the grade separation at the railroad crossing				
				WCR 7/3rd Street	Mobility; bicycle	Community gateway location; assumes bicycle and pedestrian grade-separation; intersection improvements	Option 1 - No action *Option 2 - Signalize*	Supports expressway context and surrounding access limitations; may improve safety				

Community	Existing Roadway Classification	Recommended Roadway Classification	PEL Section	Intersection	Known Problems	Previous Planning	Roadway/Intersection Options and Recommendations	Roadway/Intersection Justification and Additional Comments	Bike/Ped/Transit Options and Recommendations - On Street	Bike/Ped/Transit Justification and Additional Comments - On Street	Bike/Ped/Transit Options and Recommendations - Off Street	Bike/Ped/Transit Justification and Additional Comments - Off Street
	Non-Rural Principal Highway	Arterial (6 lanes with a raised median)	4	Foster Ridge Drive	Access; bicycle	Assumes bicycle and pedestrian grade-separation	Option 1 - No action **Option 2 - Move access 450' to west and signalize, as needed for future development** Option 3 - Signalize, as needed for future development	Supports arterial context and provides better intersection spacing to improve safety	Option 1 - No action *Option 2 - Widen shoulders to 5+ feet (where not currently)* Option 3 - Separated bike lanes	Traffic volumes and speeds warrant separated bike lanes; however, planned and proposed off-street facilities will best serve less advanced users, while advanced users likely will prefer being on-street. Continuous wide shoulders carried forward for this reason, as well as being most cost effective solution from a capital and maintenance standpoint and also serves pull-off needs for vehicles. Signage and intersection improvements will be considered in Level 3 to improve safety.	Planned - Sidepath on both sides *Option 1 - No action plus planned*	Planned multi-use trails on both sides sufficient for off-street users.
				I-25 SB Ramps	Transit (park-n-ride)	Community gateway location	*Option 1 - No action*				Planned - Sidepath (likely along south side) *Option 1 - No action plus planned*	Planned multi-use trail sufficient for off-street users. Ensure any development on the north side provides off-street facility as well.
				I-25 NB Ramps		Community gateway location	*Option 1 - No action*					
				Mead Street	Access		Option 1 - No action *Option 2 - 3/4 movement north and south side with connections to WCR 9 ½* Option 3 - RI/RO on both sides with U-turn option at WCR 9.5 to go west	Improves safety; reduces conflict with higher-risk turning movements of other vehicles				
				Deere Court	Access		Option 1 - No action Option 2 - RI/RO *Option 3 - Close and provide access to WCR 9 1/2 and Mead St on south end of property*	Increases mobility and safety by restricting turning movements; near-term disruption, but supports the arterial context in the long-term				
				WCR 9 1/2	Mobility		Option 1 - No action Option 2 - Grade-separation *Option 3 - Capacity Improvements*	Limits potential conflict with other turning vehicles; could improve safety				
				WCR 11	Mobility		Option 1 - No action *Option 2 - Full movement; signalize, if warranted, when future development occurs* Option 3 - Roundabout	Supports expressway context; may improve safety as development occurs and traffic volumes increase				
		Expressway (4 lanes with raised median)	5A	WCR 11 1/2	Access		Option 1 - No action *Option 2 - Signalize, if warranted, when future development occurs* Option 3 - Roundabout	Supports expressway context; provides controlled/defined access for Barefoot Lakes development				
				WCR 13/Colorado Boulevard	Mobility; bike/ped		Option 1 - No action Option 2 - Grade-separation *Option 3 - Keep signalized; add auxiliary lanes, as needed*	Supports expressway context and longer-term vision for WCR 13 to be a major N/S corridor				
Weld County	Rural/Regional Highway	Rural/Regional Highway (2 lanes with a center turn lane)	5B	N Service Road	Access		Option 1 - No action *Option 2 - Close with development and provide access via future WCR 15*	Supports rural/regional highway access spacing and context; improves safety by removing uncontrolled turning movements	Option 1 - No action *Option 2 - Widen shoulders to 5+ feet (where not currently)* Option 3 - Separated bike lanes	Traffic volumes and speeds warrant separated bike lanes; however, planned and proposed off-street facilities will best serve less advanced users, while advanced users likely will prefer being on-street. Continuous wide shoulders carried forward for this reason, as well as being most cost effective solution from a capital and maintenance standpoint and also serves pull-off needs for vehicles. Signage and intersection improvements will be considered in Level 3 to improve safety.		
				J-Bar-B Road	Safety		Option 1 - No action ***Option 2 - Move 365' west to section line (WCR 15), full** movement access with accel/decel lanes*	Provides better intersection spacing and defined access point to improve safety				
				WCR 17 North side	Mobility		Option 1 - No action *Option 2 - Signalize, if warranted; capacity improvements* Option 3 - Roundabout Option 4 - Channelized T	Supports rural/regional highway access spacing and context; provides controlled/defined access				
				WCR 17 South Side	Bicycle	Assumes bicycle and pedestrian grade-separation	Option 1 - No action *Option 2 - Full movement* Option 3 - Roundabout Option 4 - Channelized T	Supports rural/regional highway access spacing and context; maintains mobility				
				WCR 19	Mobility		Option 1 - No action *Option 2 - Signalize; capacity improvements* Option 3 - Roundabout	Supports rural/regional highway access spacing and context; provides controlled/defined access				

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SH 66 Planning and Environmental Linkages Study

SH 66 TAC and EC Electronic Update

January 2018

PEL Updates

Alternatives Development and Screening

- The project team has worked with FHWA and stakeholders to define the screening process, which includes these primary steps:
  - Level 1 includes a full range of high-level alternatives related to roadway functional classification, roadway capacity, intersection modifications and improvements, roadway alignment, transit service, bicycle and pedestrian facilities, and supporting system alternatives
  - Level 2A recommends operational classifications and capacity by roadway section
  - Level 2B will include access, mobility, and safety assessments and concepts by section
  - Level 3 will include section/intersection/interchange configuration screening
- Level 1 and draft Level 2A were reviewed and discussed at the TAC meeting in September. The evaluation spreadsheets for Level 1 is attached.
- The project team received community specific feedback on Level 1 and draft Level 2a from many local agencies and has developed a response for each comment. These responses are provided with this electronic update.
- The project team will be working on the Level 2b alternative development and screening in early 2018. The draft results of Level 2b will be presented at the next TAC meeting.

Risk and Resiliency

- The project team, FHWA, and Region 4 staff, in conjunction with the TAC, determined that risk and resiliency should be incorporated into the project.
- The risk and resiliency assessment will provide CDOT and local agencies information needed to make informed decisions about developing infrastructure that can better withstand extreme weather events and natural hazards, such as flooding.
- The project team, in coordination with the US 34 PEL project team, met with FHWA to discuss the best approach for incorporating risk and resiliency into the planning process. FHWA recommends that risk and resiliency be a project goal, not a part of the project's purpose and need.
- The project team also met with CDOT Region 4 leadership and FHWA staff early in January to determine next steps. Attendees of this meeting agreed that the risk and resiliency analysis will need to be balanced where the level of detail is appropriate for planning decisions and PELs, yet it offers enough perspective to provide a meaningful assessment of risk and resiliency.

Public Involvement

- Public Comments
  - The project team received multiple comments from the public on the purpose and need and the corridor conditions report. The project team sent individual responses to each of the commenters.

SH 66 Planning and Environmental Linkages Study

SH 66 Coalition Meeting

Date and Time: August 25, 2017 | 7:30 a.m.

PEL Updates

Corridor Conditions Report

- The project team is continuing to address coordination needs pertaining to:
  - St. Vrain School District routes and stops
  - Flood risk and resiliency
- The report will be made available on the project website once finalized.

Purpose and Need

- Johnny Olson and CDOT's EPB provided comments which have been incorporated.
- A revised version will be distributed to the TAC for review.

Alternatives Development and Screening

- CDOT has worked with FHWA and stakeholders to define the process.
  - Level 1 includes a full range of high-level alternatives
  - Level 2 includes sectional and operational classifications and capacity
  - Level 3 include access, mobility, and safety assessments and section concepts
  - Level 4 includes section/intersection/interchange configuration screening
- The alternatives development and screening flow chart diagram will be added to project website.
- Level 1 screening is nearly complete.
- Level 2A
  - The project team has an internal work session scheduled to evaluate Level 2A screening criteria and alternatives.
  - This level in the alternatives evaluation process includes assessing operational classifications and capacity of the sections of SH 66.
- Level 1 and level 2A will be reviewed and discussed at the next TAC Meeting.

Public Involvement

- Technical Advisory Committee
  - The initial date and time selected for the next TAC meeting conflicted with the Rail-Volution conference.
  - The new date and time for the TAC Meeting is tentatively scheduled for Thursday, September 21, from 1 p.m. to 3 p.m.
  - An updated meeting appointment will be sent once the location is confirmed.
- Executive Committee
  - Meeting notes from the EC Meeting held on Monday, August 24th, were distributed for review. Please contact Jodie Snyder with any additional comments or concerns.

Other

- Risk and Resiliency
  - The project team is reviewing FHWA's report, Synthesis of Approaches for Addressing Resilience in Project Development, which incorporates lessons learned and innovations from recent FHWA studies to help transportation agencies address resilience at the project level.
  - The project team is in the process of discussing how we can approach risk and infrastructure needs in the PEL at a level that informs decision making.

SH 66 Planning and Environmental Linkages Study

SH 66 Coalition Meeting

Date and Time: September 19, 2017 | 7:30 a.m.

PEL Updates

Corridor Conditions Report

- The report is available on the project website. Please spread the word and direct your community to the website!

Risk and Resiliency

- The project team has determined that risk and resiliency should be incorporated into the project. Risk and resiliency will be added as a project need and considered through the alternatives development and screening process.
- The risk and resiliency assessment will provide CDOT the information needed to make informed decisions and develop infrastructure that can better withstand extreme weather events and natural hazards such as flooding.

Purpose and Need

- A revised version will be distributed to the TAC for review once risk and resiliency has been incorporated.
- The current version of the purpose and need is available on the project website. A revised version will be uploaded once risk and resiliency is incorporated. Again, please spread the word and point your community to the website and these documents!

Alternatives Development and Screening

- As a reminder, the project team has worked with FHWA and stakeholders to define the screening process, which includes three primary steps:
  - Level 1 includes a full range of high-level alternatives
  - Level 2A includes sectional and operational classifications and capacity
  - Level 2B include access, mobility, and safety assessments and section concepts
  - Level 3 includes section/intersection/interchange configuration screening
- Level 1 and level 2A were reviewed and discussed at yesterday's TAC Meeting.
- The project team will be working on the Level 2B alternative development and screening through the end of the year.

Public Involvement

- Technical Advisory Committee
  - Meeting notes are being developed to summarize the discussion from yesterday's TAC Meeting. These notes will be distributed for review early next week.
- Executive Committee
  - The next EC Meeting is tentatively scheduled for the beginning of the year (January 2018). Level 1, 2A, and 2B will be discussed at this meeting.
  - In the meantime, EC members are encouraged to check-in with their TAC representatives for any project updates.

SH 66 Planning and Environmental Linkages Study

SH 66 Coalition Meeting

Date and Time: Friday, October 27, 2017 | 7:30 a.m.

PEL Updates

Purpose and Need

- The current version of the purpose and need is available on the project website. A revised version will be uploaded once risk and resiliency is incorporated. Please spread the word and point your community to the website and these documents!

Risk and Resiliency

- The project team and Region 4 staff have determined that risk and resiliency should be incorporated into the project. Risk and resiliency will be added as a project need and considered through the alternatives development and screening process.
- The risk and resiliency assessment will provide CDOT the information needed to make informed decisions and develop infrastructure that can better withstand extreme weather events and natural hazards such as flooding.
- **The project team, in coordination with the US 34 PEL project team, is planning to meet with FHWA to discuss the best approach for incorporating risk and resiliency into the process. The outcomes from this meeting will inform the next steps moving forward.**

Alternatives Development and Screening

- As a reminder, the project team has worked with FHWA and stakeholders to define the screening process, which includes these primary steps:
  - Level 1 includes a full range of high-level alternatives
  - Level 2A includes sectional and operational classifications and capacity
  - Level 2B will include access, mobility, and safety assessments and section concepts
  - Level 3 will include section/intersection/interchange configuration screening
- Level 1 and level 2A were reviewed and discussed at the most recent TAC meeting. Please coordinate with your TAC representative for the draft recommendations.
- **The project team would like each local agency to review and provide community specific feedback on the level 2A draft results.**
- The project team will be working on the Level 2B alternative development and screening through the end of the year.

Public Involvement

- Technical Advisory Committee
  - The next meeting has not been scheduled. Once the project team meets with FHWA on the risk and resiliency component, the project team will send out a TAC meeting invitation.
- Executive Committee
  - **The next EC Meeting is targeted for the beginning of the year (January 2018). Level 1, 2A, and 2B will be discussed at this meeting.**
  - In the meantime, EC members are encouraged to check-in with their TAC representatives for any project updates.

SH 66 Planning and Environmental Linkages Study

SH 66 Coalition Meeting

Date and Time: Friday, December 8, 2017 | 7:30 a.m.

PEL Updates

Risk and Resiliency

- The project team and Region 4 staff have determined that risk and resiliency should be incorporated into the project.
- The risk and resiliency assessment will provide CDOT the information needed to make informed decisions and develop infrastructure that can better withstand extreme weather events and natural hazards such as flooding.
- **The project team, in coordination with the US 34 PEL project team, met with FHWA to discuss the best approach for incorporating risk and resiliency into the planning process. FHWA recommended that risk and resiliency be a project goal, not a part of the project's purpose and need.**

Alternatives Development and Screening

- As a reminder, the project team has worked with FHWA and stakeholders to define the screening process, which includes these primary steps:
  - Level 1 includes a full range of high-level alternatives
  - Level 2A includes sectional and operational classifications and capacity
  - Level 2B will include access, mobility, and safety assessments and section concepts
  - Level 3 will include section/intersection/interchange configuration screening
- Level 1 and level 2A were reviewed and discussed at the TAC meeting in September.
- **The project team has received community specific feedback on level 1 and level 2a from many local agencies and has developed a response for each comment. These responses will be provided to each local agency.**
- **If your local agency has not yet provided comments, please review level 1 and level 2a and let the project team know your thoughts.**
- The project team will be working on the Level 2B alternative development and screening through the end of the year and into early January.

Public Involvement

- Public Comments
  - The project team received multiple comments from the public on the purpose and need and the corridor conditions report. The project team sent individual responses to each of the comments.
- Technical Advisory Committee
  - **An electronic project update will be sent prior to the holidays.**
  - **The next in person meeting will be held sometime in late January.**
- Executive Committee
  - **The next EC Meeting is targeted for the beginning of the year (January 2018). Level 1, 2A, and 2B will be discussed at this meeting.**

SH 66 Planning and Environmental Linkages Study

SH 66 Coalition Meeting

Date and Time: Friday, March 23, 2018 | 7:30 a.m.

PEL Updates

CDOT Ransomware Attack

- James to provide any update on the recent ransomware attack.

Public Involvement

- Technical Advisory Committee
  - The most recent meeting was held March 8, 2018, in Longmont.
  - Meeting notes and materials have been distributed to the TAC for review. Please connect with your community's TAC member for more information.
  - The TAC was asked to provide comments on screening by March 30.
- Executive Committee
  - The next EC Meeting is now targeted for May 2018, after the next TAC meeting. Level 1, 2A, and 2B will be discussed at this meeting.

Alternatives Development and Screening

- Level 2a screening documentation was presented at the March 8 TAC Meeting. The project team is still welcoming comments from the TAC until March 30.
- Efforts for the Level 2b alternatives development and screening will begin ramping up in the next month. The project team anticipates completing Level 2B screening in May and completing Level 3 screening in the Summer. Level 2b will focus on the corridor/system level first then consider the intersection level.
- The team anticipates beginning ACP efforts during Summer 2018 and wrapping up the ACP and PEL study report and recommendations by the end of 2018.

Risk and Resiliency

- The SH 66 PEL Team is working closely with CDOT Region 4, CDOT HQ, FHWA, and the US 34 PEL Team to identify an approach for incorporating Risk and Resiliency into this study.
- In terms of culverts, bridges, and roadway prism, the study will consider the following threats:
  - Floods
  - Rail proximity
  - Fire and debris flows
- FHWA supports including risk as a project goal but not as a transportation need. Risk will be incorporated in the study similarly as environmental and community context factors.

SH 66 Planning and Environmental Linkages Study

SH 66 Coalition Meeting

Date and Time: Friday, April 27, 2018 | 7:30 a.m.

PEL Updates

Alternatives Development and Screening

- Level 2a screening documentation was presented at the March 8 TAC Meeting and has been finalized by the project team.
- Efforts for the Level 2b alternatives development and screening will begin ramping up in the next month. The project team anticipates sharing Level 2B screening with the TAC in June and completing Level 3 screening later in the Summer. Level 2b will focus on the corridor/system level first then consider the intersection level.
- The team anticipates beginning ACP efforts during late Summer 2018 and wrapping up the ACP and PEL study report and recommendations by the end of 2018.

Public Involvement

- Technical Advisory Committee
  - The next TAC Meeting will be scheduled after the project team's Level 2b workshops. Exact date is TBD.
- Executive Committee
  - The next EC Meeting is now targeted for mid-Summer 2018, after the next TAC meeting. Level 1, 2A, and 2B will be discussed at this meeting.

Risk and Resiliency

- The SH 66 PEL Team is working closely with CDOT Region 4, CDOT HQ, FHWA, and the US 34 PEL Team to establish an approach for incorporating risk and resiliency into this study.
- Physical threats (such as flooding and railroad proximity) are being considered.
- The risk and resiliency discussion has been expanded and may also include potential risks to the corridor associated with an increase in accelerated/unanticipated development. The project teams are in the early stages of this discussion but anticipate engaging the Coalition in the process. More details to come.

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SH 66 Planning and Environmental Linkages Study

May 25, 2018

SH 66 Coalition Update

Today's Meeting

- Introductions
- Corridor Conditions Report Summary
- Purpose and Need

SH 66 Planning and Environmental Linkages Study

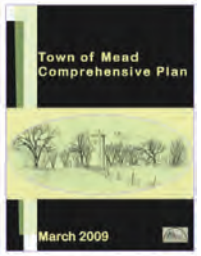
Corridor Conditions Report

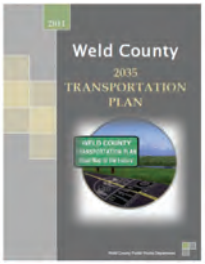
Corridor Conditions Report

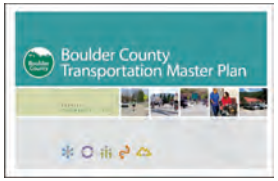
- New format is easy to read and reference

- Separated into categories:
  - Planning Context
  - Transportation Context
  - Environmental Context

Planning Context







2.0 Planning Context

This section includes information from communities about their individual plans for the SH 66 corridor. It also includes an overview of land use considerations. This information provides useful context for developing a SH 66 vision and assessing potential future improvements along the corridor.

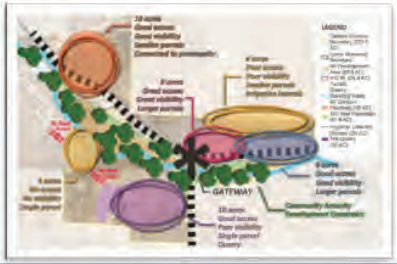
2.1 Review of Existing Planning Efforts

Consideration of existing plans is important because many previous efforts have been completed related to SH 66. A review of existing plans provides a baseline for improvement recommendations. Figure 2.1 at the end of this section includes an overview graphic summarizing community visions for future SH 66 improvements.

Town of Lyons

Lyons Primary Planning Area Master Plan

WHEN?	Plan completed	2016
SOURCE?	Full plan availability	http://www.townoflyons.com/441/Lyons-Primary-Planning-Area-Master-Plan
WHY?	Purpose of plan	▸ Establishes a vision for growth and development within the Planning Area that is acceptable to both Lyons and Boulder County. ▸ Identifies the type and location of desired improvements.
WHAT?	Context	▸ The Eastern Corridor Subarea is the primary subarea adjacent to the SH 66 PEL corridor. ▸ The Subarea vision involves becoming a commercial and employment-anchored gateway that serves locals and visitors and enhances and protects natural amenities. ▸ SH 66 is identified as the town's primary transportation corridor, and the Eastern Corridor Subarea serves as a town and regional gateway. ▸ The Subarea currently includes 45 properties, with 56 developable acres.
NEXT STEPS?	Vision pertaining to SH 66	▸ Become a gateway business district along SH 66 and a gateway neighborhood immediately behind the gateway business district. The gateway business district includes commercial/office, lodging/RV resort, small lot residential, and mixed industrial/office uses. The gateway neighborhood includes small lot/cottage homes, accessory dwelling units, and artisan live/work uses. ▸ US 36/SH 66 and the SH 66 frontage were identified as the most viable opportunity for commercial and employment development in the Planning Area. A US 36/SH 66 roundabout concept is identified.

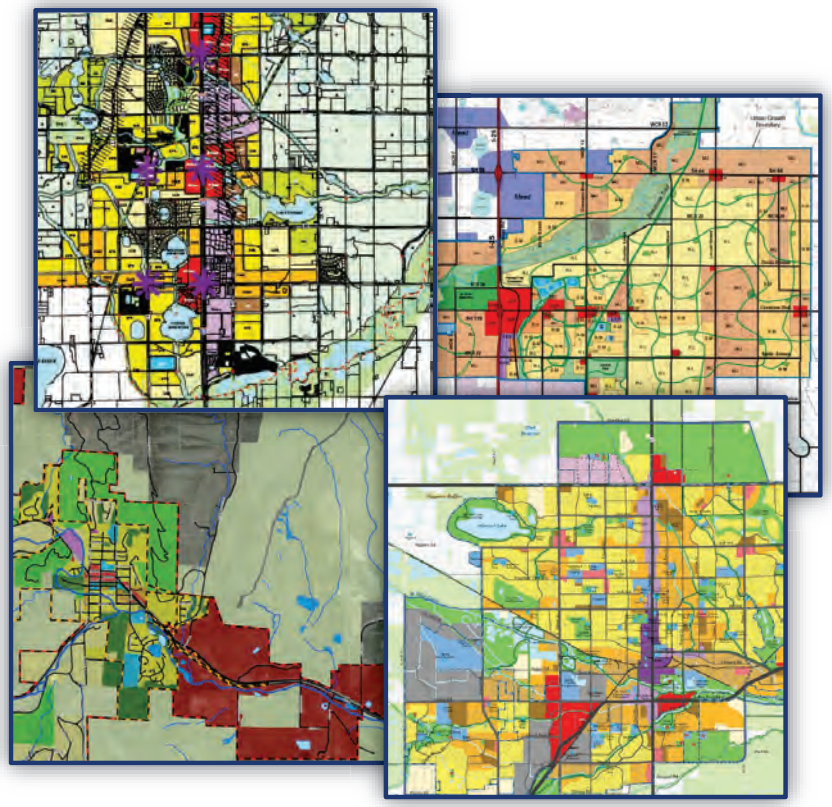


Lyons Comprehensive Plan

WHEN?	Plan completed	2010
SOURCE?	Full plan availability	http://www.townoflyons.com/195/Town-Comprehensive-Plan
WHY?	Purpose of plan	▸ Provides the framework for decisions affecting the Town's physical, social, and economic realm. ▸ Provides a foundation for policy direction, land use decisions, and public investments. ▸ Develops an integrated mobility system that is safe and easily accessible to all travelers.
WHAT?	Context	Transportation strategies include: ▸ Work with CDOT to establish a safe, attractive, interconnected trail system that enables people, especially school children, to travel safely to schools, parks, downtown and other neighborhoods. ▸ Work with the Regional Transportation District (RTD) and Boulder County to expand and publicize transit options in Lyons. For example, investigate the feasibility of expanding the Y Service to Boulder and transit to Longmont. ▸ Work with Boulder County, CDOT, and the Denver Regional Council of Governments (DRCOG) to identify joint funding opportunities to address Lyons' multimodal transportation needs. ▸ Update Lyons' land use regulations as necessary to promote walking and biking.
NEXT STEPS?	Vision pertaining to SH 66	A subtle gateway is identified at US 36/SH 66. A subtle gateway helps transition visitors into the community core using cohesive landscaping along rights-of-way, welcome signs, small sculptures, etc. An iconic gateway is located along SH 66 just east of the intersection with US 36. An iconic gateway welcome visitors in a visually stimulating and appealing way such as major sculptures, murals, physical gateways, etc.

Planning Context

- FOCUS Model
- Base year: 2015
- Forecast year: 2040



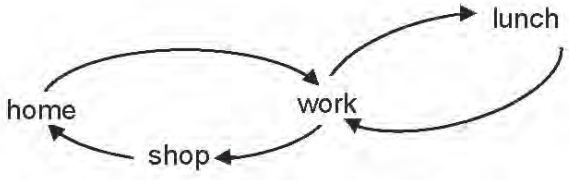
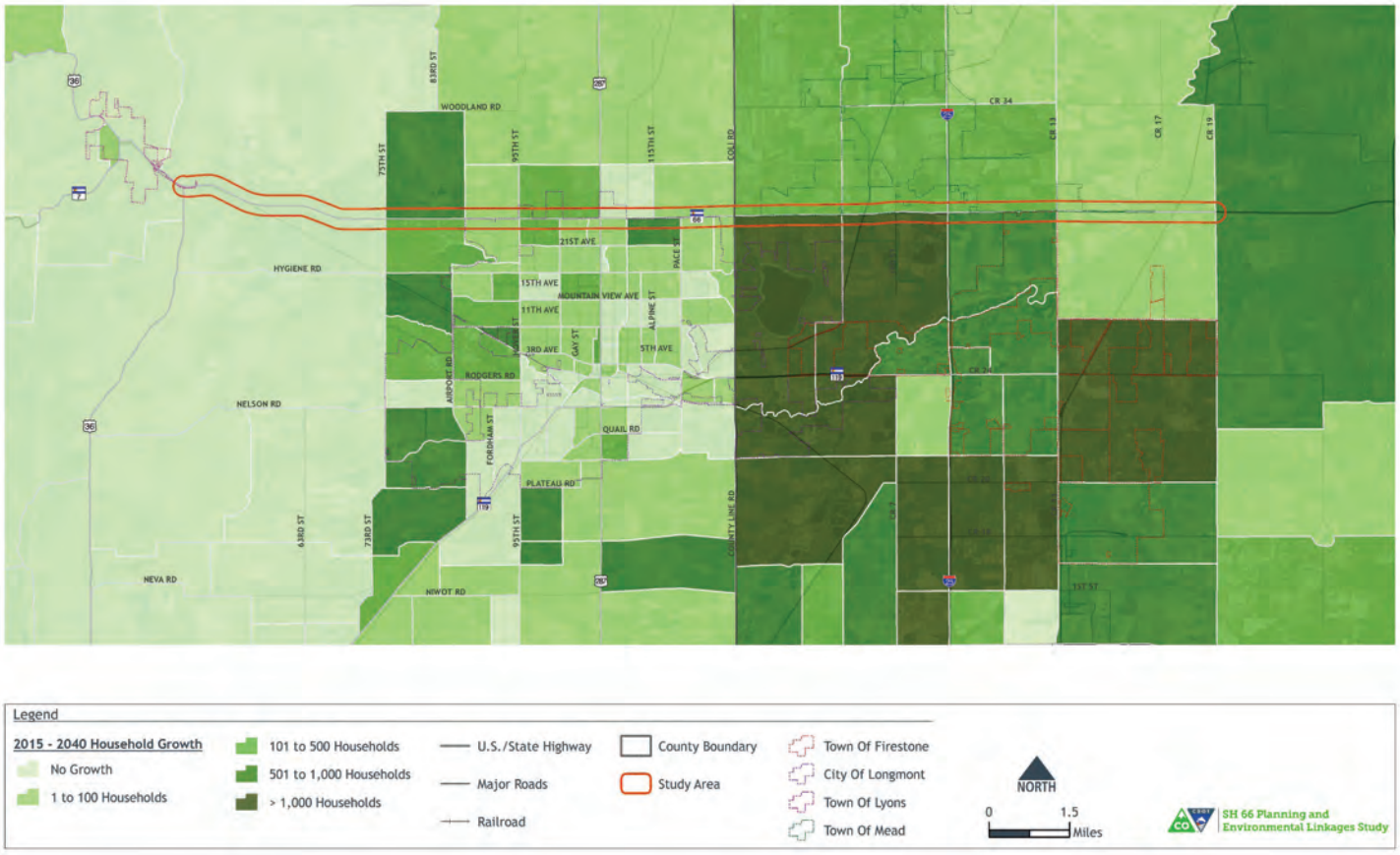


Figure 3.9. *Home-based tour with a work-based subtour.*

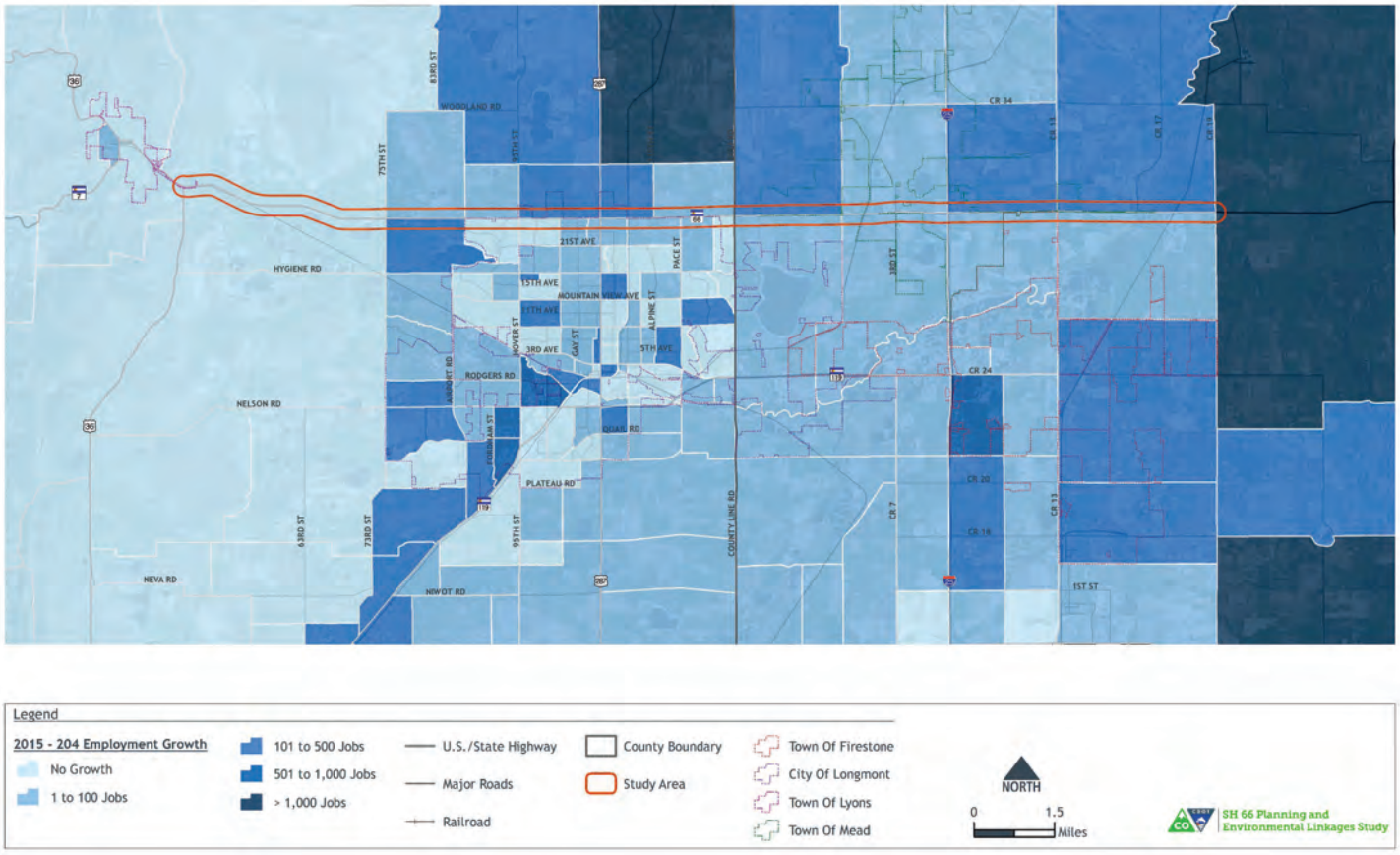
Land Use in the Travel Demand Model

Household Growth: 2015 to 2040



Land Use in the Travel Demand Model

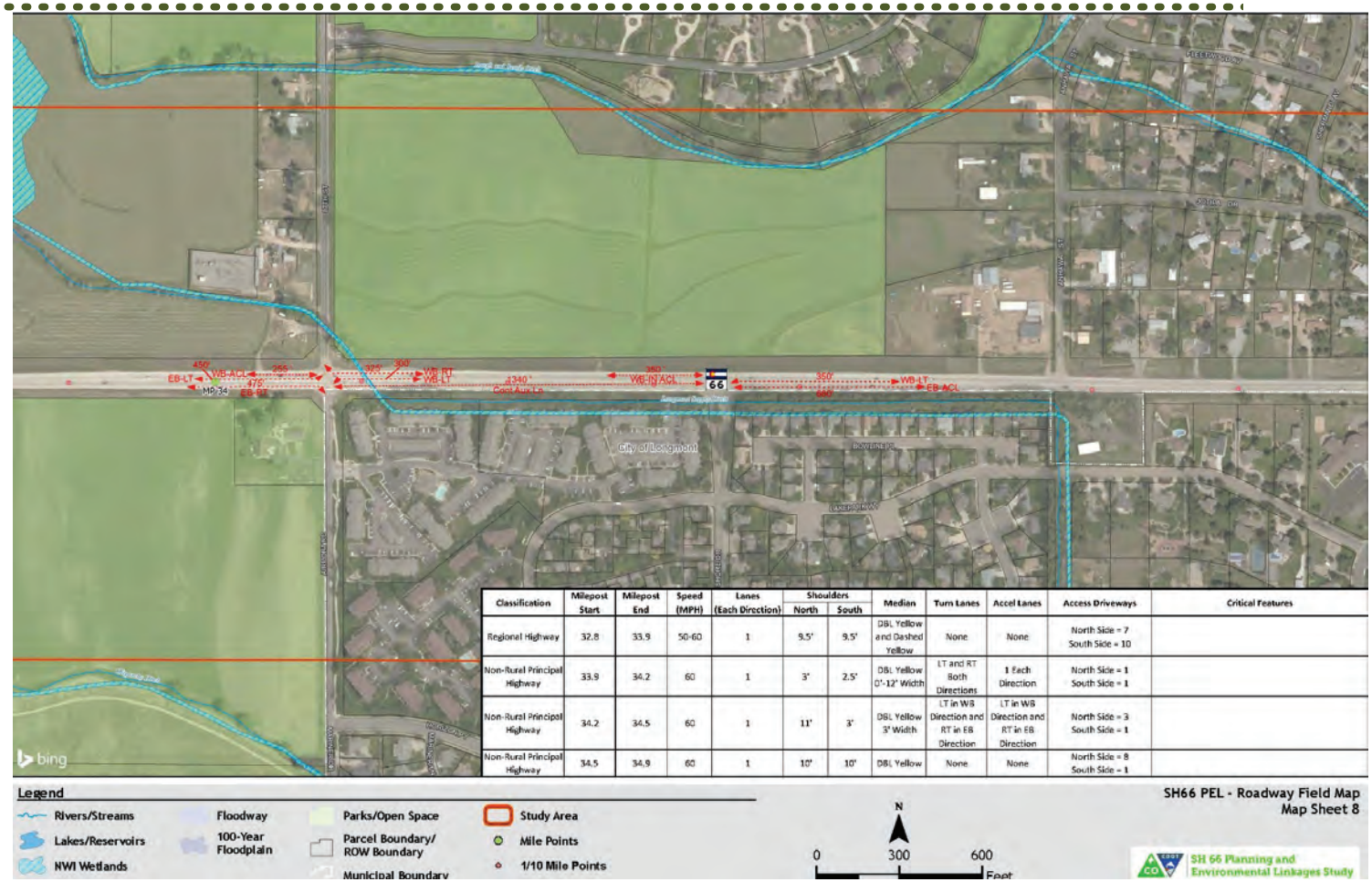
Employment Growth: 2015 to 2040



Transportation Context

Physical Characteristics

- Turn lanes/lengths
- Access Points
- Shoulders/Widths
- Medians/Widths



Classification	Milepost Start	Milepost End	Speed (MPH)	Lanes (Each Direction)	Shoulders North	Shoulders South	Median	Turn Lanes	Accel Lanes	Access Driveways	Critical Features
Regional Highway	32.8	33.9	50-60	1	9.5'	9.5'	DBL Yellow and Dashed Yellow	None	None	North Side = 7 South Side = 10	
Non-Rural Principal Highway	33.9	34.2	60	1	3'	2.5'	DBL Yellow 0'-12' Width	LT and RT Both Directions	1 Each Direction	North Side = 1 South Side = 1	
Non-Rural Principal Highway	34.2	34.5	60	1	11'	3'	DBL Yellow 3' Width	LT in WB Direction and RT in EB Direction	LT in WB Direction and RT in EB Direction	North Side = 3 South Side = 1	
Non-Rural Principal Highway	34.5	34.9	60	1	10'	10'	DBL Yellow	None	None	North Side = 8 South Side = 1	

Transportation Context—*CURRENT*

Daily Volumes

- <15,000 East of I-25 & West of Hover
- 23,000—22,000 From I-25 to Hover

Trucks

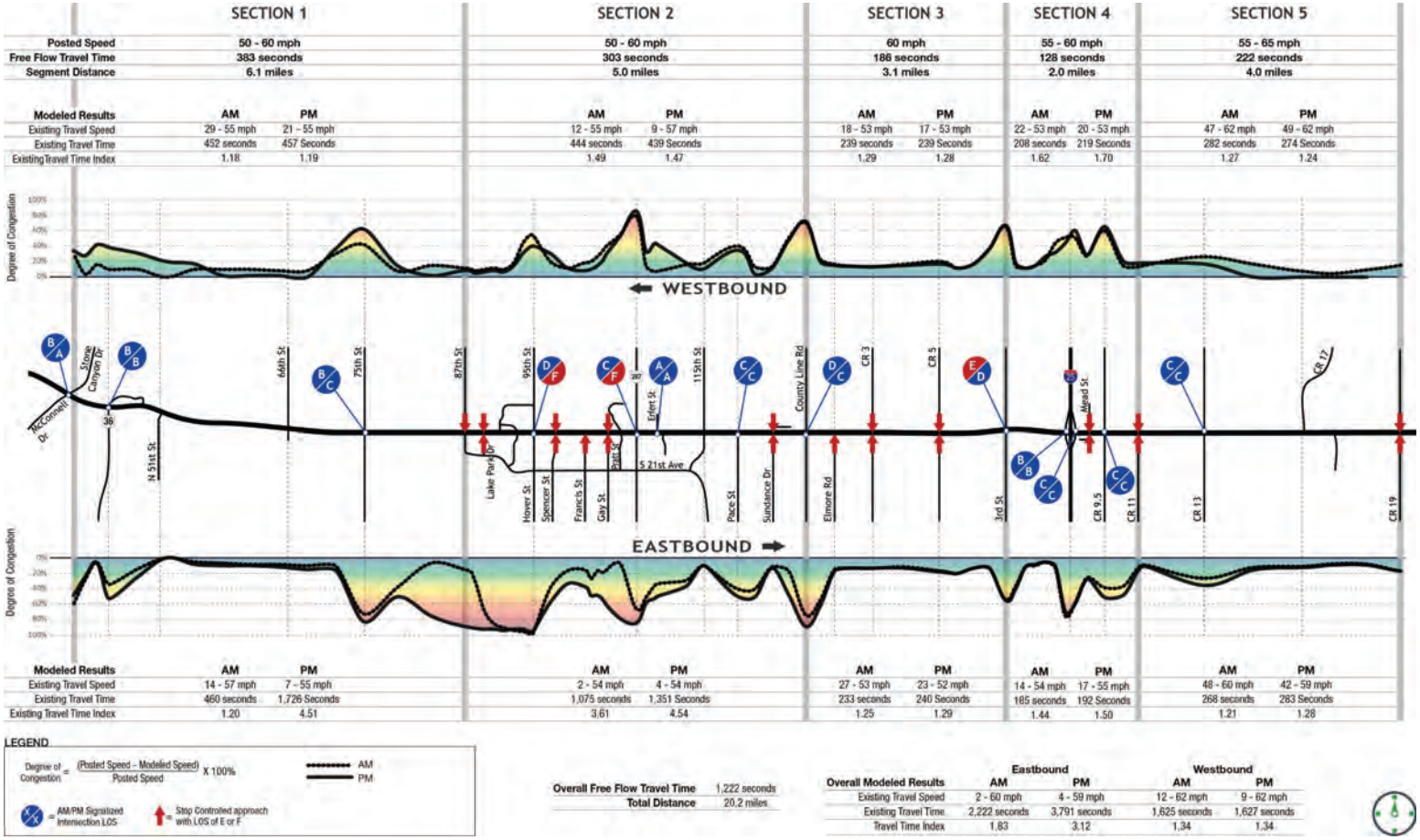
- 2—3% west of I-25
- 8—10% east of I-25

Operations

- 15 intersections LOS E/F

Congestion

- 3—16% High Degree of Congestion



Transportation Context—*FUTURE*

Daily Volumes

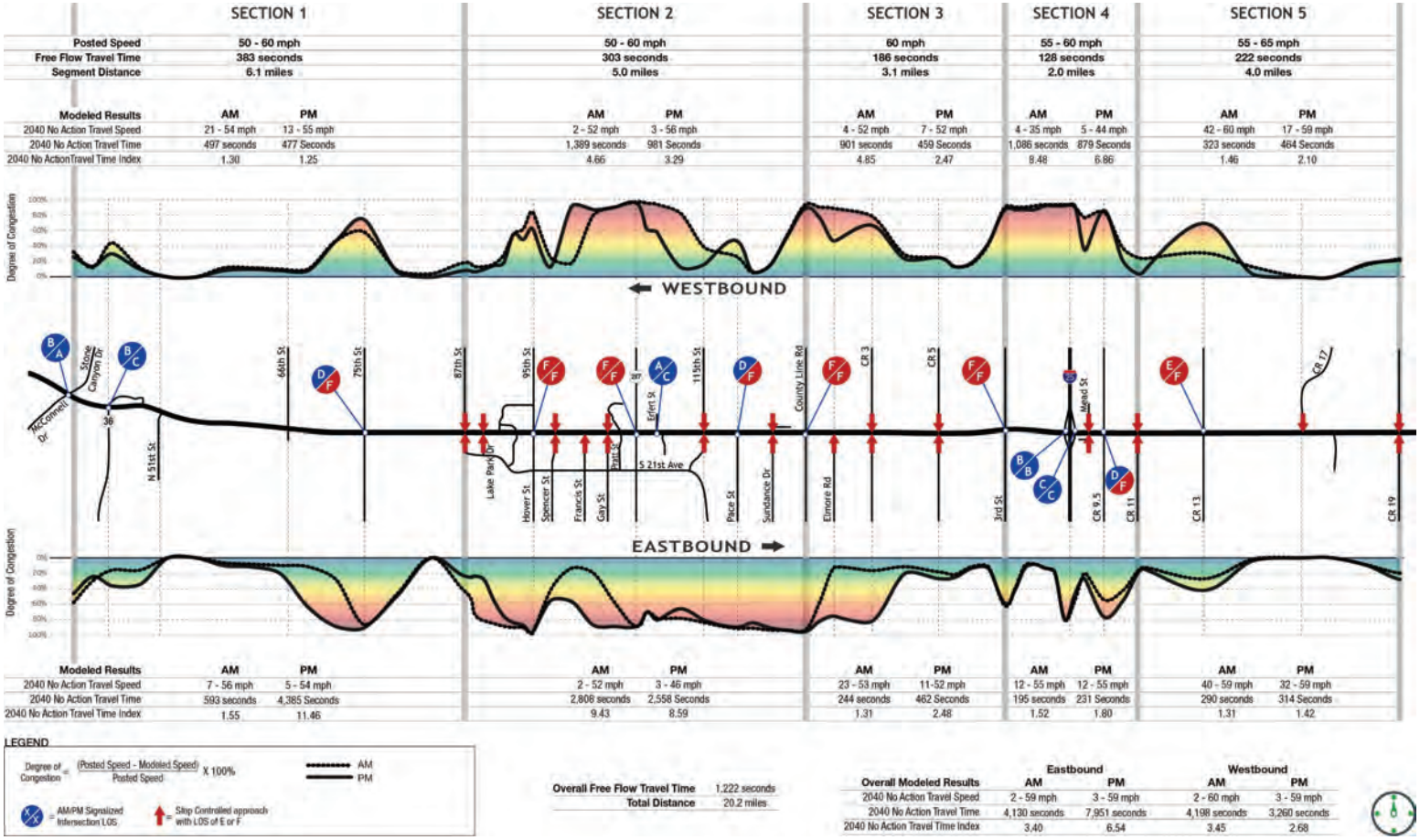
- 26—50% increase (15,000—36,000)

Operations

- 22 intersections LOS E/F (50% increase)

Congestion

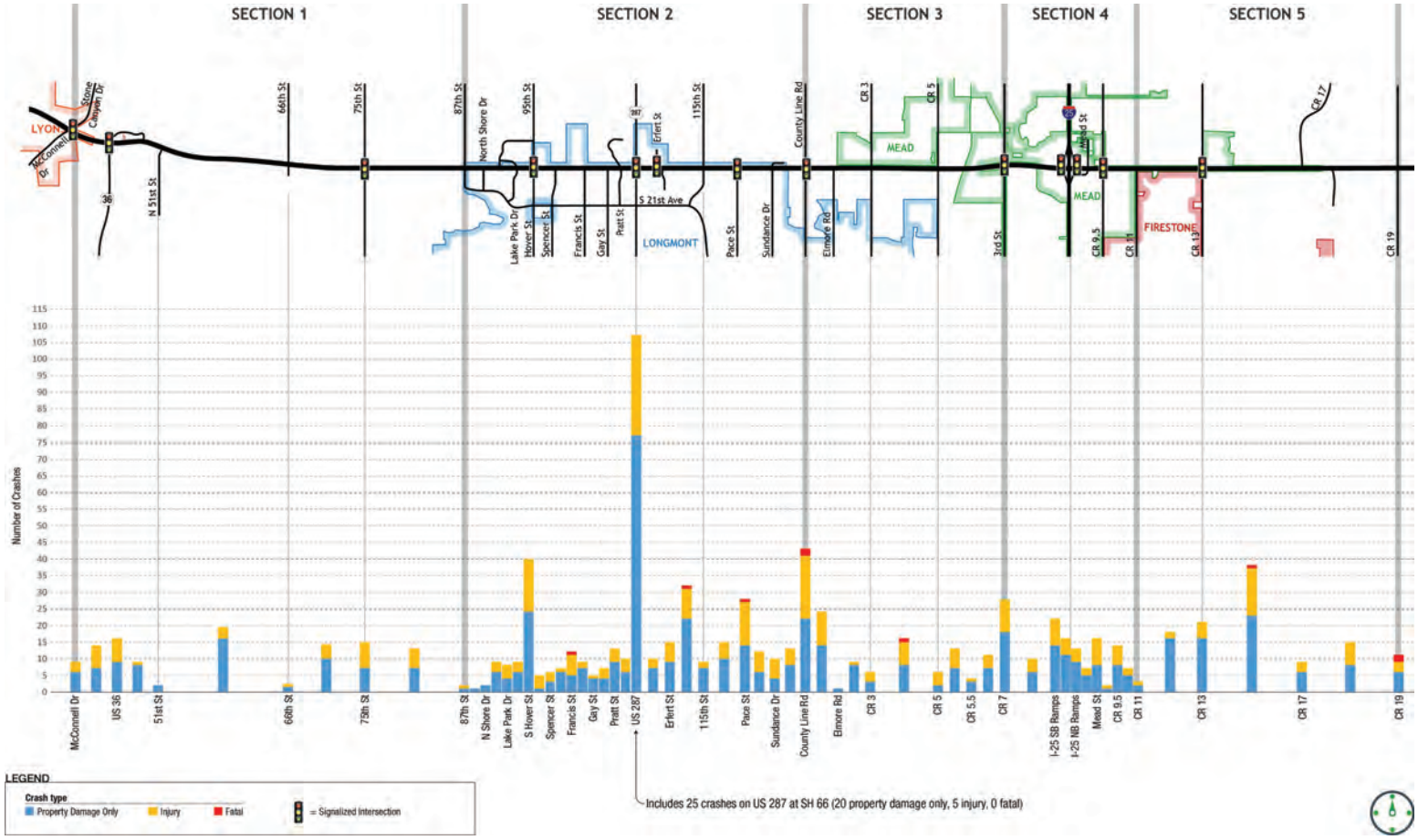
- 21—32% High Degree of Congestion



Transportation Context—Safety

Safety Characteristics

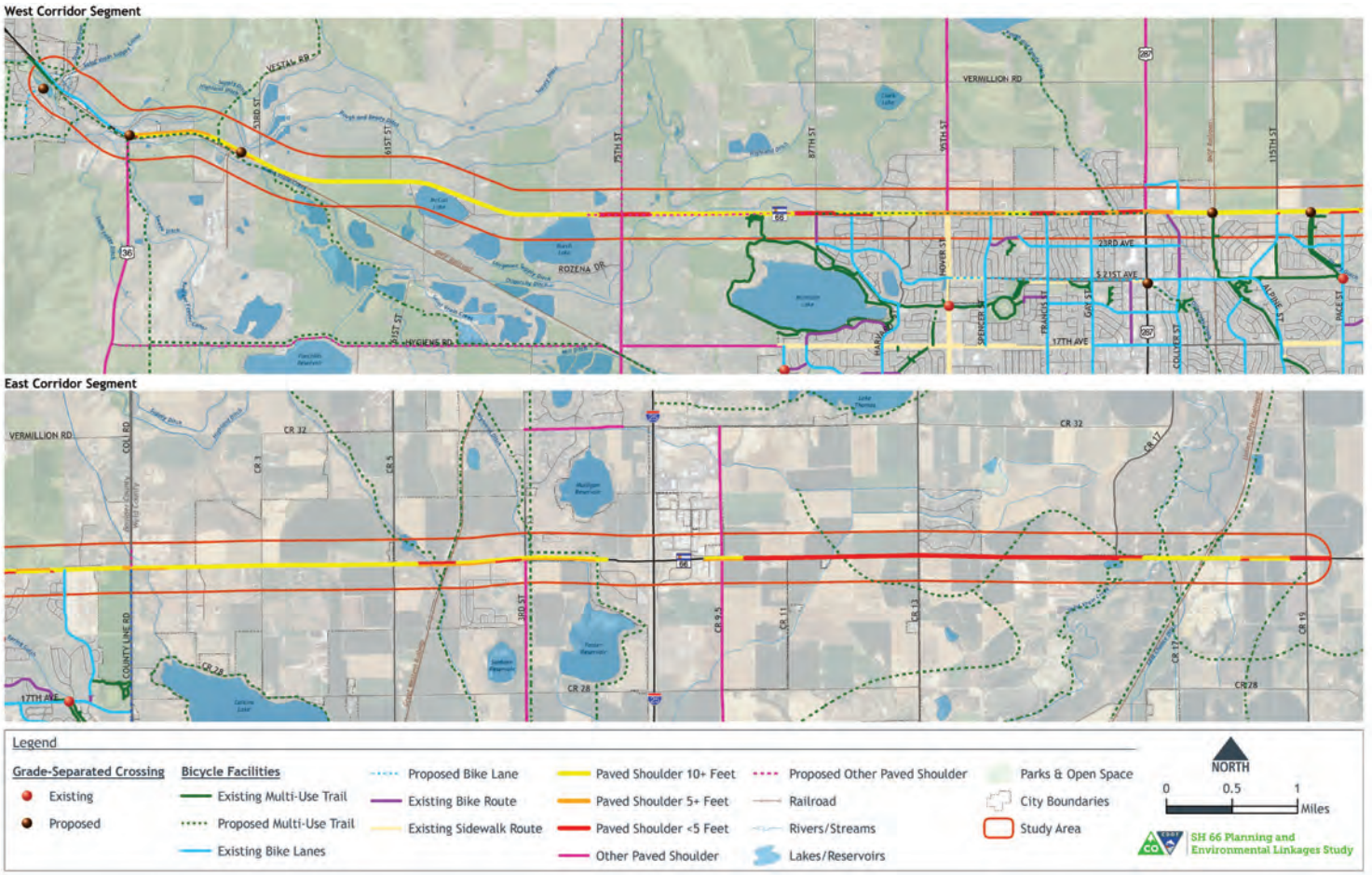
- Evaluated 5 Years of Crash Data (903 crashes)
- <1% Involved Non-motorized
- 1% (9) involved fatalities
- 65% at intersections / driveways
- 50% in Section 2
- 45% rear ends



Transportation Context

Bicycle Characteristics

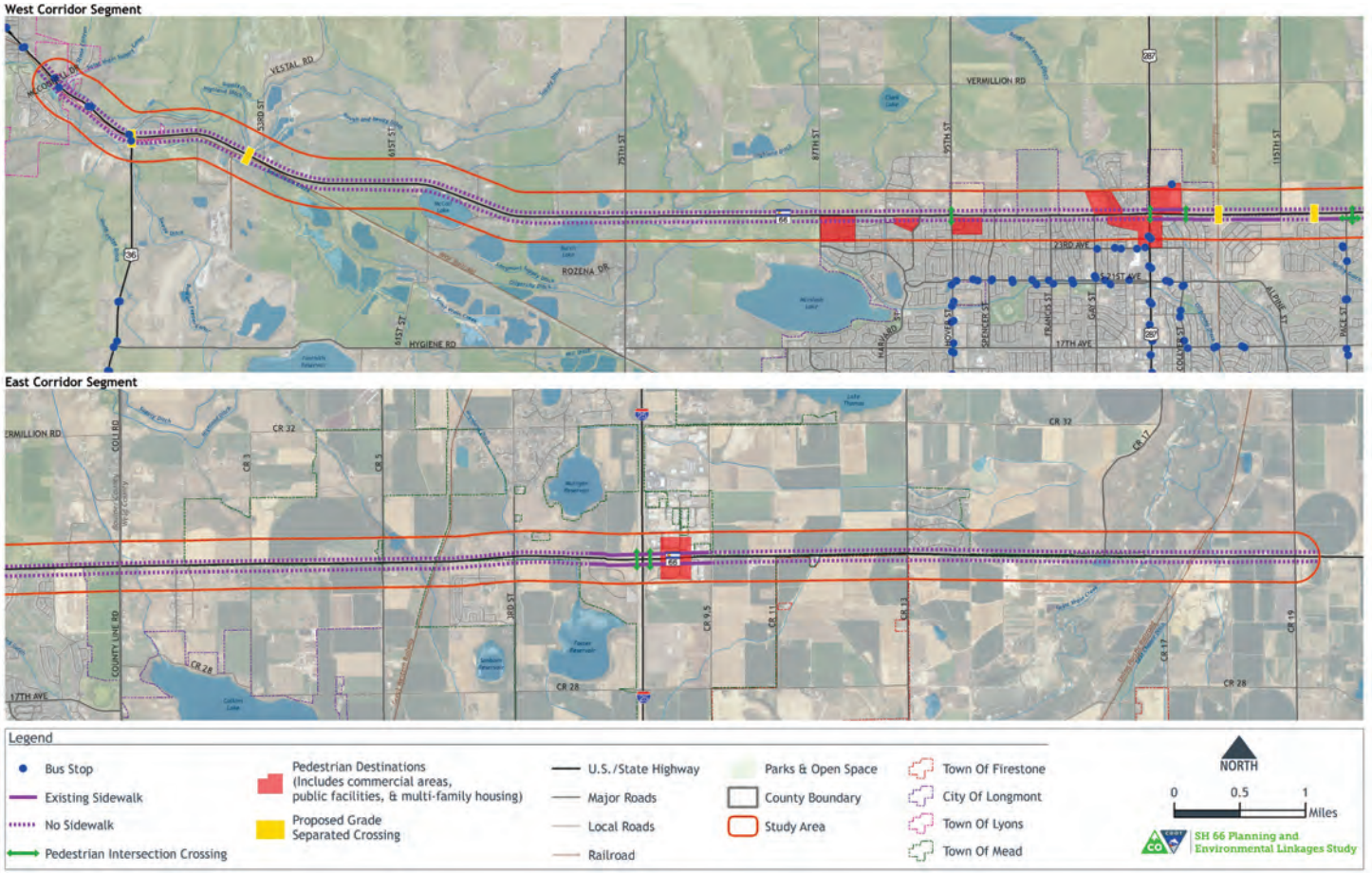
- Evaluated Shoulder Widths
- Existing / Planned Trails / Lanes
- Level of Traffic Stress



Transportation Context

Pedestrian Characteristics

- Identified Pedestrian Destinations
- Existing Sidewalks

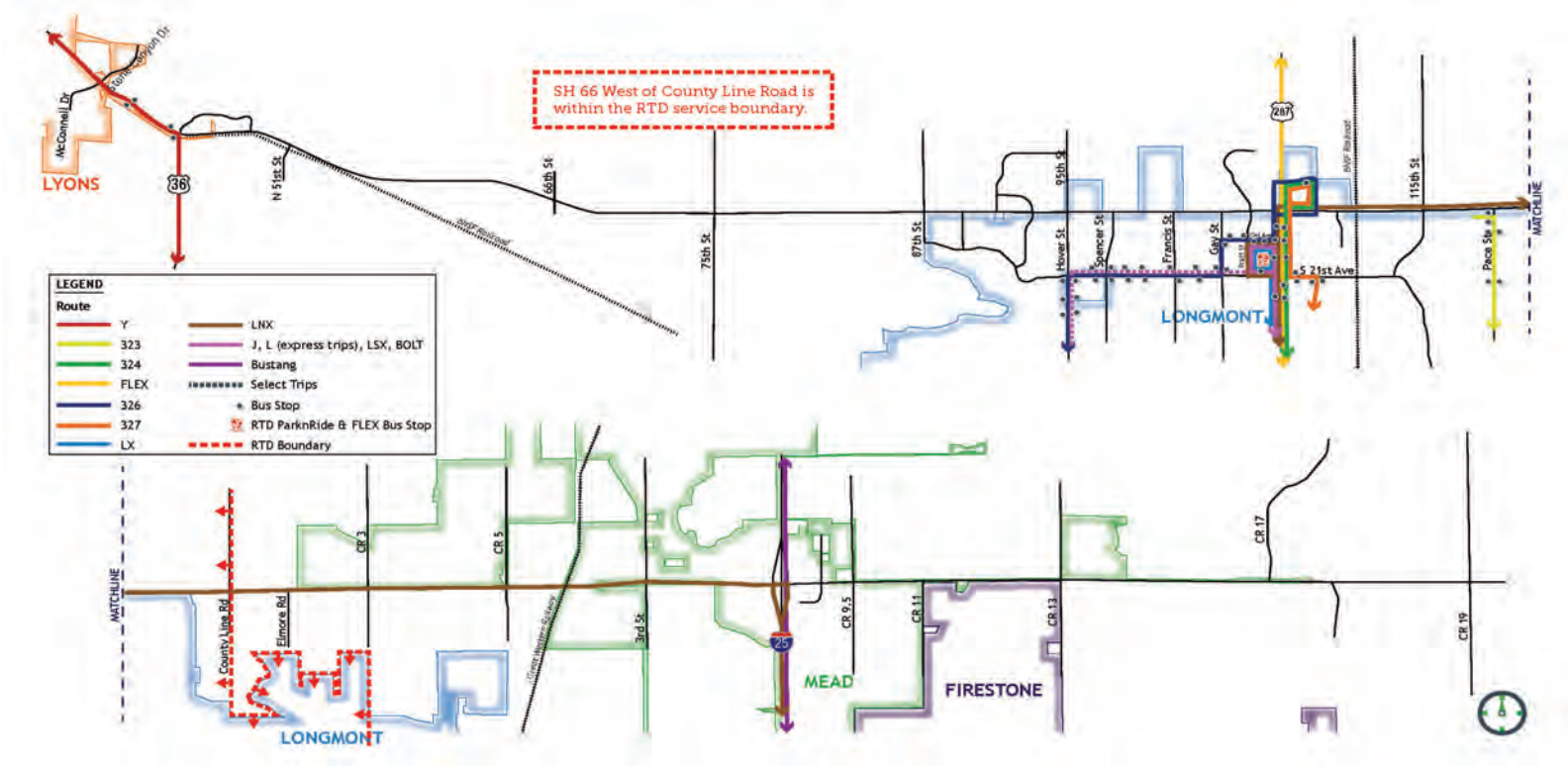


Transportation Context

Transit Characteristics

- Identified Pedestrian Destinations

- Existing Sidewalks



Environmental Context

Environmental Characteristics

- 10 Resources Documented
  - Floodplains / Floodways
  - Wetlands
  - Threatened and Endangered Species
  - Parks, Trails, Open Space
  - Utilities
  - Traffic Noise
  - Hazardous Materials
  - Visual
  - Historic Resources

4.6 Traffic Noise

Consideration of traffic noise along this corridor is important because many properties exist that have noise-sensitive activities. Noise is generally defined as unwanted or excessive sound. FHWA established a regulation, and both FHWA and CDOT have established related guidelines for evaluating noise levels, potential impacts, and potential abatement measures.

Next Steps for Implementation

WHO? Potential agency and stakeholder involvement

- FHWA
- CDOT
- Local Agencies
- Local property owners and tenants

WHAT? Resource findings

Noise analyses must be performed on Type I projects if noise-sensitive receptors are present within the project study zone. Type I projects include increasing the number of through traffic lanes or significantly changing the horizontal or vertical alignment of an existing highway.

Table 4.6 summarizes existing noise-sensitive areas in the PEL study area.

WHERE? Resource locations

Figure 4.6 highlights noise sensitive areas within the 1,000-foot PEL study area, which is more expansive than the noise study zone would be during subsequent NEPA evaluations. During NEPA analysis, the minimal noise study zone would include a 500-foot study zone in all directions from the proposed edge of travelled lanes throughout the extent of the project. For noise evaluations, the study zone may be expanded if warranted.

WHEN? Critical schedule considerations

Noise evaluations should be performed once:

- proposed alignments for project alternatives have been identified
- traffic projections are available

WHY? Regulatory setting and general context

23 CFR Part 772: Procedures for Abatement of Highway Traffic Noise and Construction Noise identifies the federal highway noise standards that must be followed in evaluating and abating highway traffic noise pertaining to FHWA projects. This regulation required states to prepare and adopt state-specific guidelines.

CDOT Noise Analysis and Abatement Guidelines provide the Colorado procedural and technical requirements for evaluating highway project traffic noise and considering noise mitigation alternatives where noise impacts are identified. The goal of these guidelines is to develop highway projects in a compatible relationship with noise-sensitive land uses.

HOW? NEPA pre-scoping considerations

Noise evaluation is conducted for Type I projects to determine if traffic noise would have an impact on any receptors (e.g., homes, schools, parks, offices; either existing or permitted for development). "Impact" is defined as meeting or exceeding Noise Abatement Criteria or an increase in noise of at least 10 decibels. Receptors are typically identified as exterior areas of frequent human use at individual properties.

The evaluation includes identifying land uses and receptors, measuring and modeling existing traffic noise levels, modeling future traffic noise levels, determining future traffic noise impacts, and (if needed) identifying/evaluating abatement measures. For CDOT to recommend noise abatement, the mitigation must be shown to be feasible and reasonable.

NEXT STEPS? Funding, design, construction, and mitigation implications

A traffic noise impact and abatement analysis will be conducted for NEPA. If noise abatement appears likely, the Benefited Receptor Preferences Survey can be solicited after the Final Office Review but during the NEPA process (for projects anticipated to meet Categorical Exclusion criteria) or during final design for Environmental Assessment or Environmental Impact Statements. If a simple majority of benefitting receptors favors abatement, then the project becomes committed to constructing and funding the abatement measure(s). Noise walls may cost about $2 million per mile. The likelihood for abatement to be feasible and reasonable increases with a higher density of impacted receptors.

Table 4.6 CDOT Noise Abatement Criteria and Noise-Sensitive Areas

Location	Noise-Sensitive Area Summaries	Potential Noise Impact and Abatement Areas
Land Use Category B – 66 dBA Exterior ($L_{eq(h)}$)		
Residential		
Unincorporated Boulder County and Lyons	Rural homes on large parcels (some agricultural), along with medium-density neighborhoods, dispersed along the corridor.	Near McCall Lake and Burch Lake, south of SH 66 in Boulder County.
Longmont	Residential neighborhoods are a predominant land use along the SH 66 Corridor in Longmont.	Between North 87th Street and Sundance Drive, especially south of SH 66.
Weld County, Mead, and Firestone	Rural homes on large parcels (some agricultural), along with medium-density neighborhoods.	Near Elmore Road and just east of Colorado Boulevard in Mead.
Land Use Category C – 66 dBA Exterior ($L_{eq(h)}$)		
Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreational areas, Section 4(f) sites, schools, television studios, trails, and trail crossings		
Unincorporated Boulder County and Lyons	Institutional facilities, places of worship, Section 4(f) sites, recreational areas, and picnic areas dispersed throughout the study area.	Near McCall Lake and Burch Lake, south of SH 66 in Boulder County.
Longmont	Places of worship and an animal hospital located along the corridor.	Between North 87th Street and Sundance Drive.
Weld County, Mead, and Firestone	Within Mead, a golf course just east of Colorado Boulevard.	The golf course.
Land Use Category E – 71 dBA Exterior ($L_{eq(h)}$)		
Hotels, motels, time-share resorts, vacation rental properties, offices, restaurants/bars, and other developed lands, properties or activities not included in Categories A-D or F.		
Unincorporated Boulder County, Lyons, Longmont, Weld County, Mead, and Firestone	Category E resources are generally isolated or scattered along the corridor.	Concentrated in multi-business commercial areas.

Notes:

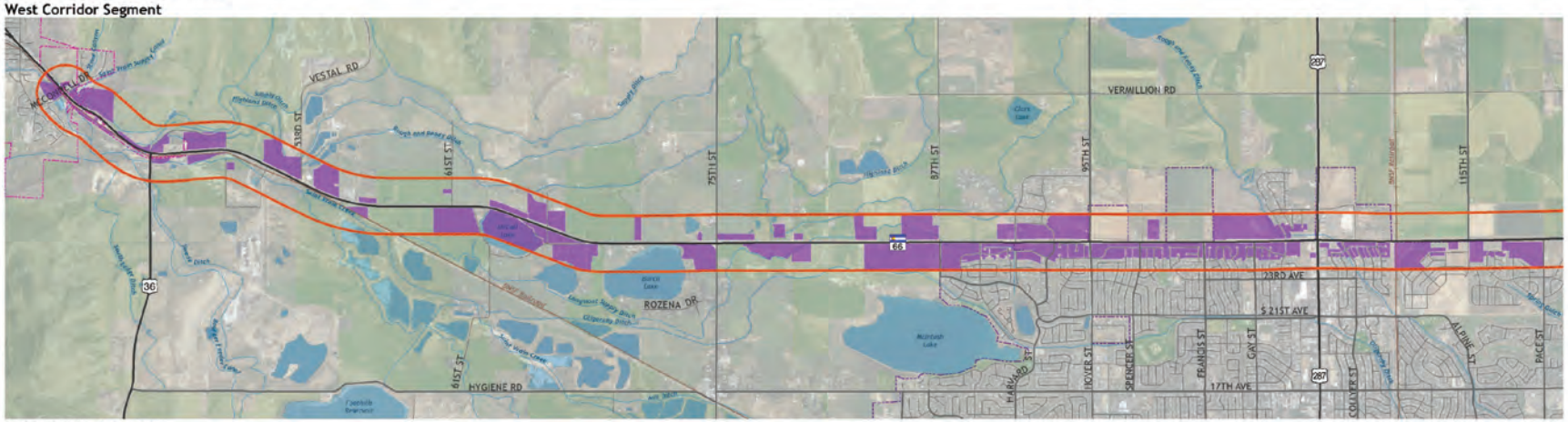
The following land use categories are excluded from this table: A (serene lands), D (interior public spaces), F (agricultural and industrial lands), and G (lands not permitted for development).

dBA = A-weighted decibels

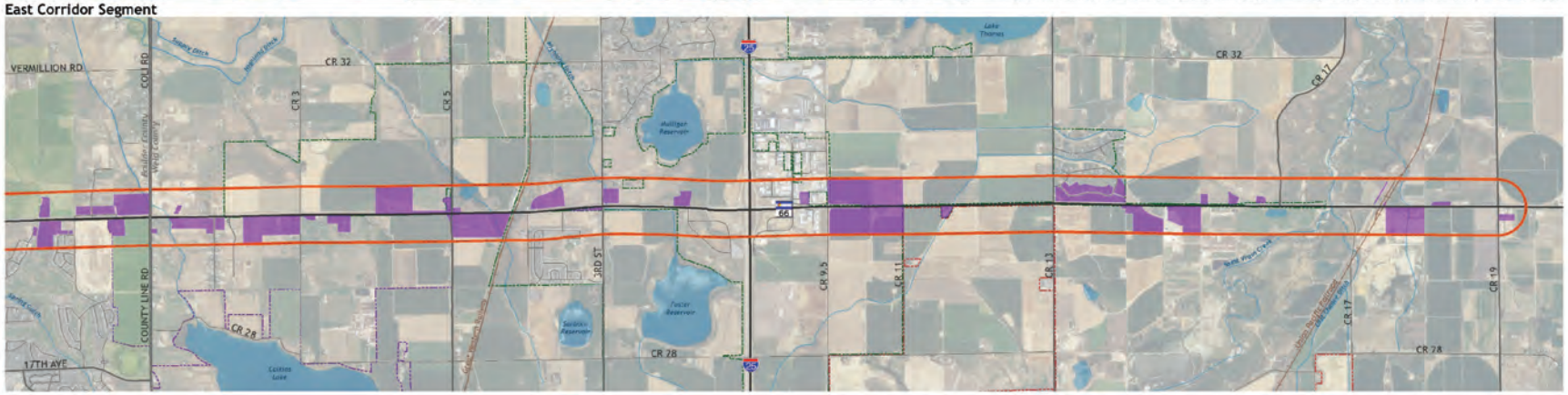
$L_{eq(h)}$ = one-hour equivalent sound level

Figure 4.6 Noise Sensitive Areas

West Corridor Segment



East Corridor Segment



Legend

- Noise Sensitive Areas
- U.S./State Highway
- Major Roads
- Local Roads
- Railroad
- Rivers/Streams
- Lakes/Reservoirs
- Parks & Open Space
- County Boundary
- Study Area
- Town Of Firestone
- City Of Longmont
- Town Of Lyons
- Town Of Mead

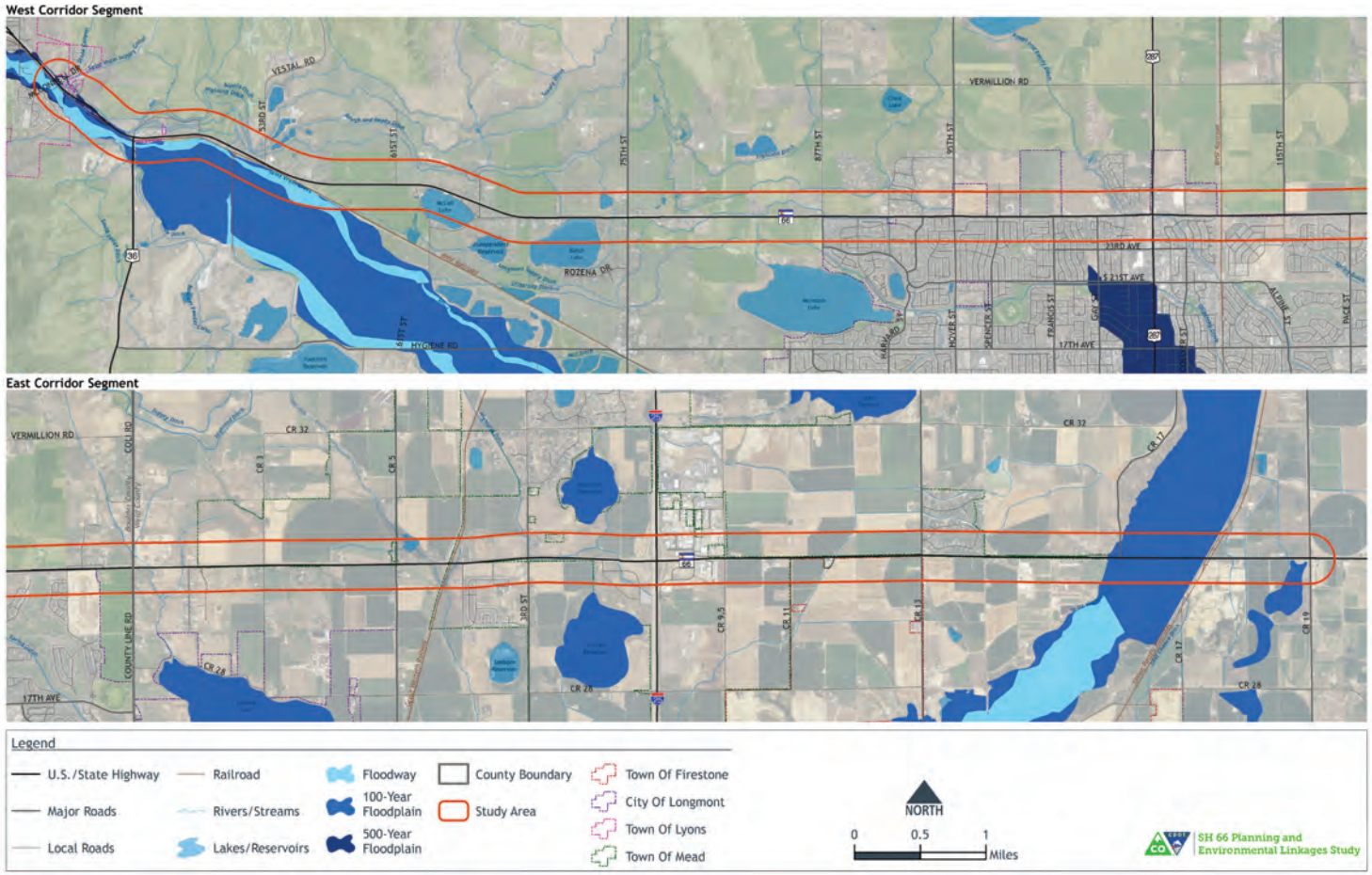
Note: The Study Area in this map represents the 1,000-foot PEL study area.

NORTH

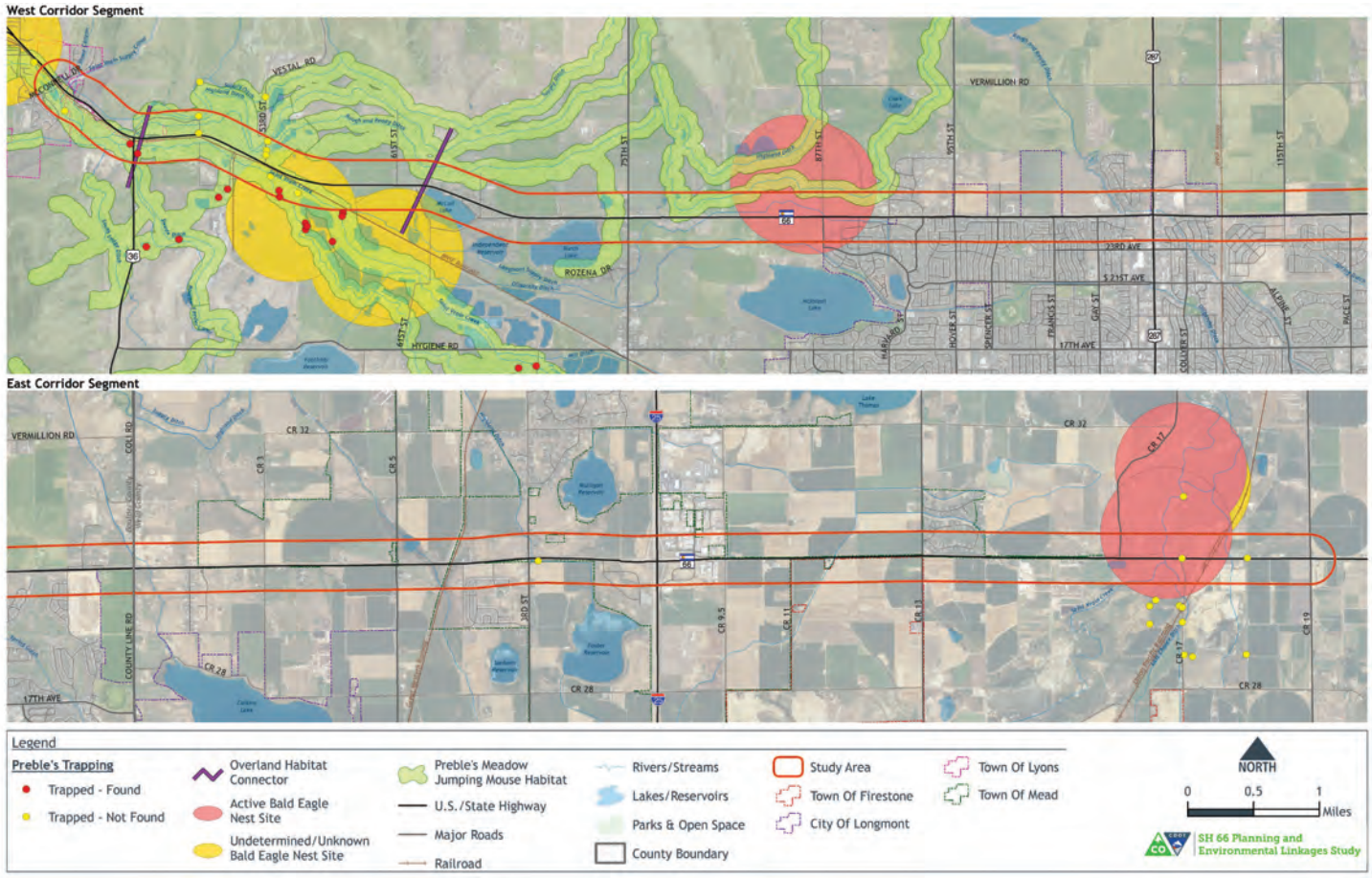
0 0.5 1 Miles

SH 66 Planning and Environmental Linkages Study

Environmental Context—Floodplains

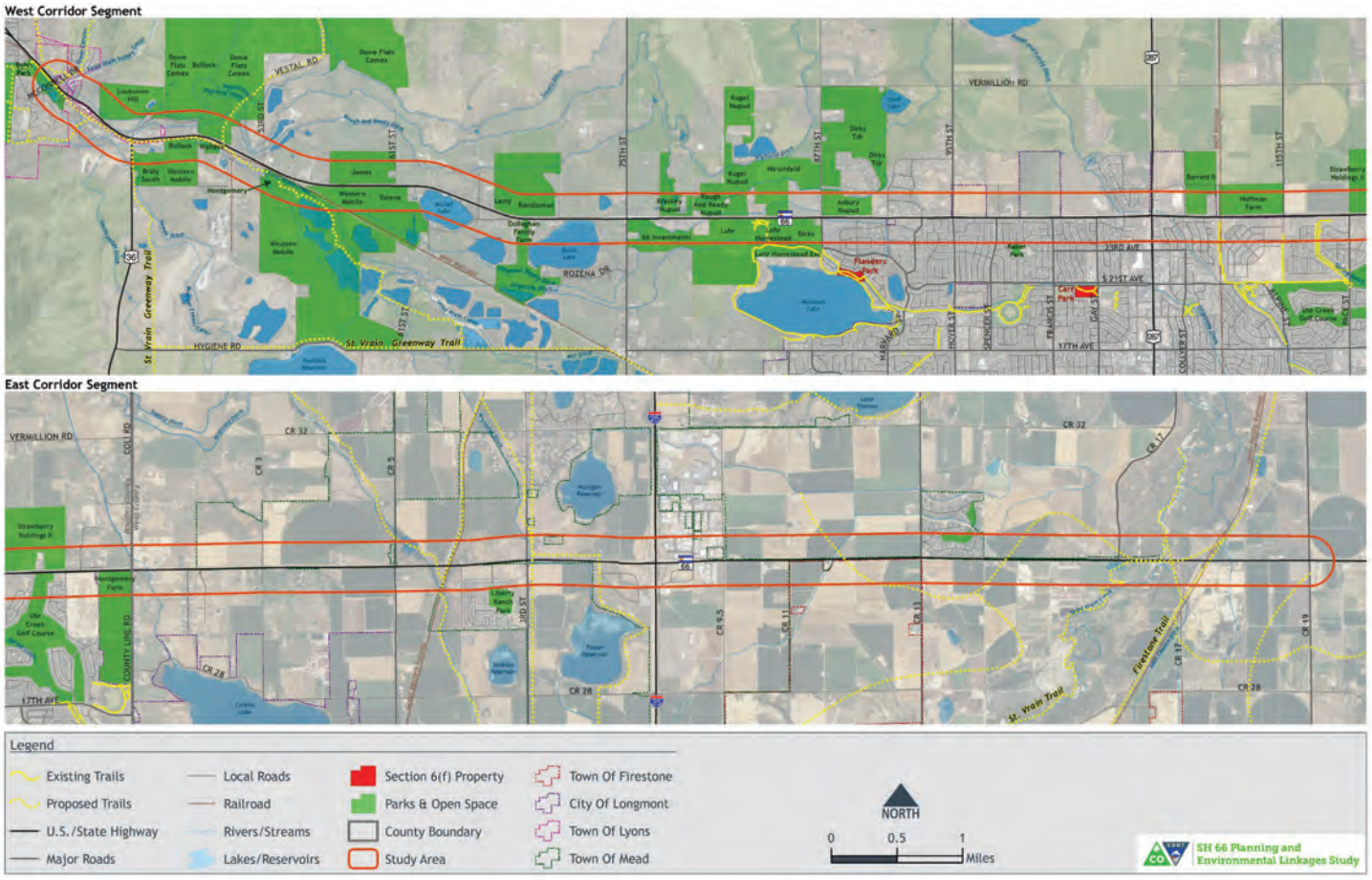


Environmental Context—Threatened & Endangered Species



Environmental Context—Parks, Trails, Open Space

Current and Future Mapping



SH 66 Planning and Environmental Linkages Study

Purpose and Need

Purpose

Basis for Alternative Development and Screening

Purpose

"SH 66 transportation improvements are to increase safety; reduce traffic congestion; provide managed access for existing and future development; and improve multimodal mobility of people, goods, and services. The improvements should be resilient, accommodate developing technologies, and strive to complement adjacent community context."

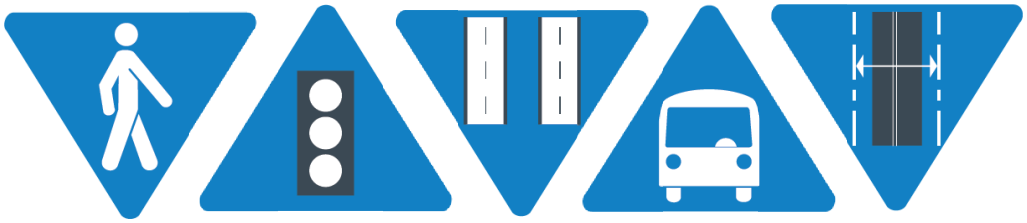
Needs

Safety Management

- *Vehicular*
- *Bicycle*
- *Pedestrian*

Mobility Management

- *Vehicular*
- *Bicycle*
- *Pedestrian*
- *Transit*



Access Management

Risk and Resiliency

Progress:

- FHWA, CDOT Region 4, and CDOT HQ collaboration
- PEL Study Goal (but NOT a need)
- Developing statewide PEL process consistent with other CDOT R&R efforts for physical threats and induced operational threats

Proposed next steps:

- Physical threats
  Examples: flooding, debris flows, bridge strikes
  - Qualitative risk assessment, prioritization, and resilient recommendations
  - Consider in alternatives development & screening process as a study goal

- Operational threats
  Induced traffic related to unplanned land use development
  - Sensitivity analysis and mapping of SH 66 vulnerability
  - Consider in PEL study cumulative impact assessment

SH 66 Planning and Environmental Linkages Study

Thank You!

SH 66 Planning and Environmental Linkages Study

Update to the SH 66 Coalition

July 2018

PEL Study Status and Progress

Alternatives Development and Screening

- The project team has worked with FHWA and stakeholders to define the screening process, which includes these primary steps:
  - Level 1 includes a full range of high-level alternatives related to roadway functional classification, roadway capacity, intersection modifications and improvements, roadway alignment, transit service, bicycle and pedestrian facilities, and supporting system alternatives. **STATUS:** Level 1 screening is complete.
  - Level 2A recommends operational classifications and capacity by roadway section. **STATUS:** Level 2A screening is complete.
  - Level 2B will include access, mobility, and safety assessments and concepts by section. This level focuses on the corridor/system level first then the intersections. **Level 2B is underway. STATUS:** Project team workshops are scheduled for August. The draft results will be presented at the September TAC meeting.
  - Level 3 will include section/intersection/interchange configuration screening. **STATUS:** Level 3 evaluation is anticipated Winter/Spring 2019.

Risk and Resiliency

- At the direction of CDOT Region 4 leadership and with support from the TAC, the project team, FHWA, and Region 4 staff have developed a process for incorporating risk and resiliency into the PEL study.
- The risk and resiliency assessment will provide CDOT and local agencies with information needed to make informed decisions about developing infrastructure that can better withstand extreme weather events and natural hazards, such as flooding.
- The initial discussions regarding risk and resiliency focused on physical threats such as flooding, avalanche, rock fall, etc, and their potential impact on assets such as bridges, pavement, guardrail, etc.
- In addition to physical threats, the project team has worked in coordination with the US 34 PEL team, FHWA, and CDOT HQ, to determine an approach that considers operational threats to ensuring future mobility.
- The goal of the process is to proactively promote balancing trip reliability and strategic access (economic principles), community health and quality of life (social principles), and natural and cultural resource considerations (environmental principles).
- CDOT will work with local agency staff and elected officials to identify how CDOT and the local agencies can collaborate to maintain trip reliability and foster community health in the context of mobility. A risk and resiliency workshop will be scheduled with TAC members.

Stakeholder and Public Involvement

Public Outreach

- The project website is still active but receiving minimal comments at this time.

- A project update will be emailed in August to public stakeholders who provided their email address for study correspondence.

Technical Advisory Committee and Executive Committee

- The next TAC meeting will be held in September 2018, after the Risk and Resiliency Workshop and after the Level 2B screening is complete.
- The next EC Meeting is targeted for October 2018, after the TAC meeting. Level 1, 2A, and 2B, as well as risk and resiliency, will be discussed at this meeting.

SH 66 Planning and Environmental Linkages Study

SH 66 Coalition Meeting

Date and Time: Friday, February 22, 2019 | 7:30 a.m.
Southwest Weld County Service Building

Introductions

Coalition Members present included:

- Phil Greenwald—Longmont
- Tyler Stamey—Longmont
- Joe Kubla—Lyons
- Erika Rasmussen—Mead
- George Heath—Firestone
- Scott James—Weld County Commissioner
- Elizabeth Relford—Weld County
- Colleen Whitlow—Mead
- Alex Pulley—FHU

PEL Update

Alex provided an update of the status of the PEL with regard to the new development information that is primarily affecting the eastern portion of the study area. He discussed the current work to incorporate this information and how it could affect the Level 2b Screening.

He also discussed that Johnny Olson has taken the job of Deputy Executive Director and CDOT has not identified the next Regional Transportation Director (RTD) at this time. Currently, Johnny is serving as the 'interim' RTD until the next RTD is identified. CDOT is expecting to fill the Region 4 RTD by the end of March. It was agreed that the March 1st Meeting scheduled with Johnny, Commissioner James, and Mayor Whitlow should be rescheduled until the new RTD is named.

Community Updates

Longmont

- Longmont and Weld County are working on a plan for County Line Road
    - Longmont sees CLR as an arterial and Weld County sees CLR as a collector because Boulder County does not accept the Weld County's 140-foot arterial cross-section.
    - Longmont is swapping property with Boulder County Open Space property on the SW corner of SH 66 and CLR.
    - Longmont is planning for a high use park for this area.
    - The PEL should consider that this intersection may need to be larger than initially considered.
- Longmont is applying for TIP funds for widening shoulders on CLR from 17th to SH 66
- There was a public open house with RTD and there was quite a bit of discussion around the park-N-Ride north of SH 66 on 287
- Longmont is advancing a Quiet Zone at the tracks and SH 66.

- Longmont has applied for TIP funds for design on SH 66 from Hover to Main

Lyons

- Their utility extensions along SH 66 east past US 36 are out to bid; development to occur shortly after
- Their Trail project scored highly for TIP funds and goes from McConnell to US 36, but does not go under US 36.
- Seven of the nine acres that were purchased from Longmont are going up for sale and could end up commercial.

Mead

- Sorrento Development is moving dirt near WCR 5.
- They are seeing a lot of development interest south of SH 66 (west of I-25) and north of SH 66 (east of I-25).
- The developer at WCR 11.5 seems to have agreed to being annexed into the Town.
- The Town has submitted a Pedestrian Underpass at WCR 7 and SH 66, with a connection to St. Vrain Greenway.

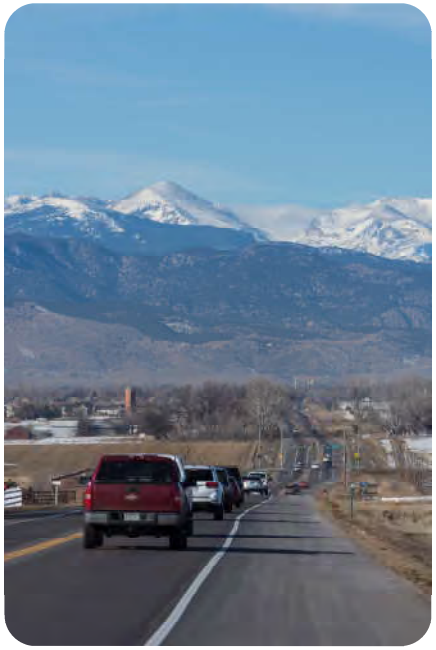
Firestone

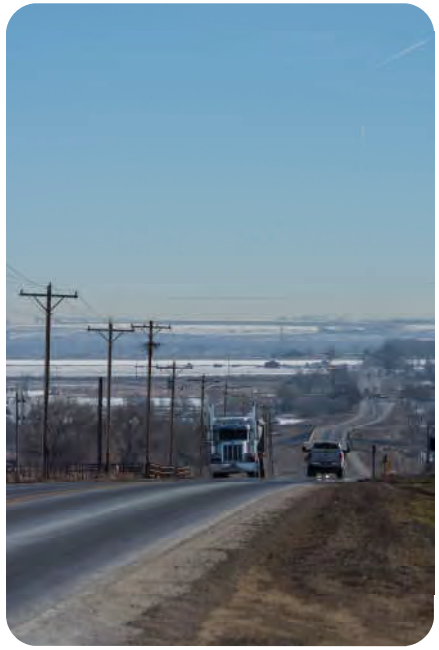
- There is a proposal to take 300-400 acres and turn it into another rental trailer park.
- It has been met with significant opposition.

Weld County

- The Commission has decided to opt out of DRCOG because they do not want to allow DRCOG to have approval status over the County.
- They are encouraging the communities to continue to submit applications for funding, and they will support their efforts.
- The County is revamping Chapter 23 of their zoning code.

SH 66 Planning and Environmental Linkages Study





Introduction to Access Control

Presentation to SH 66 Coalition

March 22, 2019

What is an Access Control Plan?

- Blend of the agencies' vision for the corridor, the PEL recommendations, and meets requirements of the State Highway Access Code
- Determines how to provide property owners reasonable access to the highway
- Identifies improvements to the local transportation network to support vehicle movement and property access
- Determines where accesses will ultimately be located to better assist in the development/redevelopment process

Why develop an Access Control Plan on SH 66?

- SH 66 has approximately 370 existing access points (driveways and intersections) from Lyons (McConnell Dr) to WCR 19
- A reduction in the number of accesses improves safety for all modes of transportation, reduces driveway clutter, and improves traffic flow
- Provide CDOT and agencies with a document to assist future development with the site planning process and to streamline access permitting
- To support the functional classification recommendations being developed in the PEL
- The ACP will provide the corridor with a framework for future development that accommodates regional, intra-city, and inter-city travel needs

What an Access Control Plan Does

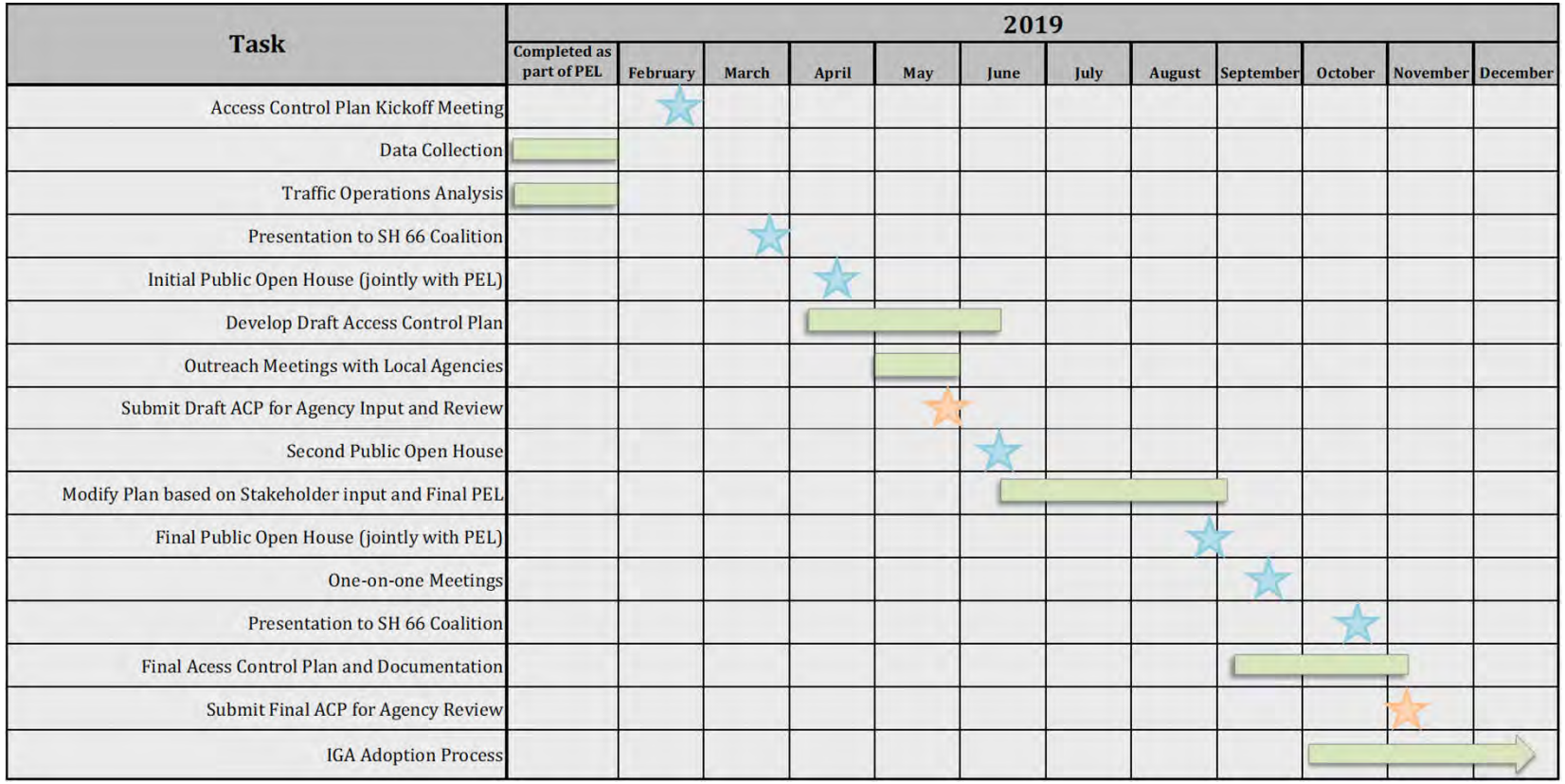
- Optimizes the number and location of access points on the corridor
- Recommends where accesses may be consolidated, relocated, or restricted
- Identifies the type of allowed traffic movements and traffic control at each access point
- Identifies conditions for when access changes will occur
  - In some instances an interim access condition may be identified
- Ensures legal access to all properties
- Blends the corridor vision established as part of the PEL study with a legally binding document for access on the corridor

What an Access Control Plan Does NOT Do

- Determine the number of future lanes on the corridor
- Design the future roadway layout
- Identify funding for improvements
- Require immediate changes to properties
- “Take away access”

- **The ACP is a long-term planning document that will be implemented over time, primarily as development and redevelopment occur**

Preliminary SH 66 ACP Schedule



Steps to Adopt/Implement an Access Control Plan

- Study, propose, and accept final Access Control Plan configuration based on agency and public input
- Prepare an Intergovernmental Agreement (IGA) between the local agencies (Boulder County, Town of Lyons, City of Longmont, Weld County, Town of Mead, Town of Firestone) and CDOT
- Specify the process for modifying the ACP in the IGA
- Adopt ACP through signing of the IGA
- Provide a summary to the Colorado Transportation Commission and obtain approval from CDOT Chief Engineer
- Continued coordination between CDOT and agencies to ensure proper implementation of the plan

Key Points to Remember about ACP Implementation

- The plan represents a long-range vision for the highway and surrounding roadways
- There are currently no planned projects or identified funding for improvements to SH 66 that would significantly change existing access
- Implementation will occur over time based on:
  - Traffic and/or safety needs
  - Available funding
  - As part of the development and redevelopment process

Appendix F-3: Stakeholder Interviews

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SH 66 Planning and Environmental Linkages Study

Stakeholder Interview Themes

Gateway

SH 66 is a primary gateway to, and through, multiple communities along the corridor.

- Longmont | *Northern gateway through town, specifically at the SH 66 and US 287 intersection*
- Lyons | *Primary gateway to/from the Front Range; considering installing a gateway feature along or across SH 66*
- Mead | *Mead would like a greater gateway presence and experience along the corridor*

Connector

SH 66 functions as a primary connecting route for many stakeholders.

- Boulder County | *SH 66 connects Boulder County communities to each other and to I-25*
- CDOT | *SH 66 connects other US and state highways*
- Longmont | *SH 66 is a great east/west connection to the mountains and to I-25*
- Lyons | *SH 66 is Lyons' primary connector to the Front Range, I-25, and the airport*
- Weld County | *SH 66 is a primary east/west route connecting I-25 and US 85*

Alternate, Reliever Route

As SH 119, US 36, US 287, and other regional routes become more congested, SH 66 has been used as a reliever or alternate route.

- Boulder County | *Boulder County sees many commuters using SH 66 as an alternate to other already congested routes*
- CDOT | *CDOT's seeing the impact of congestion on other routes; while US 34 is closed, SH 66 is the primary way to access Estes Park*
- Longmont | *Longmont residents use SH 66 to avoid other routes*

Transit

Transit was previously routed along SH 66. Transit improvements may be needed across SH 66 at US 287 for regional BRT.

- Longmont | *SH 66 at US 287 is an important crossing for TransFort and RTD*
- Lyons | *Lyons provides eco-passes to residents and would like to see greater transit infrastructure to support residents and tourism (such as a parking/carpool lot downtown)*
- Mead | *With Mead's close proximity to I-25, a new connection to the regional Bustang service was discussed*
- RTD | *RTD will be studying the feasibility of BRT on SH 119, likely crossing SH 66 at US 287*

Cycling and Recreation

SH 66 currently sees many commuting and recreational cyclists. Multiple stakeholders discussed the need for improvements along and across the highway.

- Boulder County | *Boulder County would like the wide shoulders maintained since it is a critical corridor for cycling in the County*
- CDOT | *CDOT acknowledges the use and importance of SH 66 in the overall cycling network, particularly on the west side of the corridor*
- Longmont | *Longmont would like cycling improvements prioritized and a separated bike path considered as option*
- Lyons | *Lyons would like to see a continuous, regional connection from Lyons to Longmont with an underpass of US 36 parallel to SH 66*
- Mead | *SH 66 is a significant barrier for crossing between the high school and downtown*
- Weld County | *No desire for cycling infrastructure*

Access to Rocky Mountain National Park and Tourism

SH 66 is a primary connection to Rocky Mountain National Park and Estes Park that is being more heavily used.

- Boulder County | *SH 66 is a primary connection from Boulder County to Rocky Mountain National Park*
- CDOT | *CDOT has noticed more congestion on SH 66, particularly as other routes have been under construction or closed*
- Longmont | *Weekend traffic through Longmont is significant*
- Lyons | *Lyons experiences standstill tourism traffic in their downtown*
- Mead | *Mead would like to capitalize on all of the tourism traffic between I-25 and Rocky Mountain National Park*

New Development, Economic Opportunities

SH 66, particularly in the municipal boundaries, is starting to experience new commercial and residential development adjacent to the corridor.

- Boulder County | *Development will not occur outside of municipal area; IGAs with the local communities are in place to define where growth can take place*
- CDOT | *New developments are becoming realities which will impact access and congestion*
- DRCOG | *New model will include updated land use projections*
- Longmont | *Development planned for the north side of SH 66 (between Hover Street and US 287)*
- Lyons | *New development (as identified in the recent master plan) is planned for the north side of SH 66 at US 36*

- Mead | *Mead envisions new development adjacent to SH 66 (comprehensive plan is currently being updated)*

Utility Corridor

Major utilities are located in the right-of-way along SH 66.

- CDOT | *CDOT is aware of the role that SH 66 plays in connecting utilities*
- Longmont | *Longmont explained the drainage issues which start north of SH 66 and the need for a larger box culvert under SH 66*
- Mead | *A historic ditch is located at 3rd Street/WCR 7*

Access Control Plan

An Access Control Plan is an anticipated and important outcome for many agencies.

- Boulder County | *Coming to an agreement*
- CDOT | *A plan that communicates long-term vision and interim improvements to achieve that vision for the corridor*
- Longmont | *Defines access and works well for agencies because it is a codified agreement*
- Weld County | *An access control plan is an opportunity to address some of the existing challenging accesses*


ACCESS TO ROCKY MOUNTAIN NATIONAL PARK
GATEWAY
REGIONAL
EMERGING URBAN
TOURISM
RECREATION
SCENIC
NEW DENSITY
CONNECTOR
ACCESS
FREIGHT
RURAL
COMMUTER ROUTE
CONGESTION
DANGEROUS
IMPORTANT GATEWAY
UTILITY CORRIDOR
SHARED VALUES
CYCLING
RELIEVER
FIRST LINK
MULTI-FACETED
FAST
ALTERNATE ROUTE
CRITICAL LINK

SH 66 Planning and Environmental Linkages Study

Stakeholder Interview Summary

Stakeholder: Boulder County

Date and Time: Tuesday, December 13, 2016 | 12:30 p.m. to 2 p.m.

Location: Boulder County Transportation Planning Department | 2525 13th Street, Boulder, CO 80304

Attendees

See attached sign-in sheet.

Summary

Boulder County's focus is on limiting impacts, defining access control, and supporting all modes. They would like the plan to acknowledge all uses of the corridor and identify improvements (both along and across SH 66) for all modes. To the extent that we can use our infrastructure to move people more efficiently, they are open to new technologies. Boulder County requested that the western boundary of the study be changed to SH 7.

Questions

What words would you use to describe SH 66 today?

- Recreation
- Cycling
- Access to Rocky Mountain National Park
- Critical link
- Commuter route

How would you categorize the role of SH 66 in your community?

- Commuting route for those going into/out of Boulder
- Recreational access to RMNP and the mountains
- Everything changes at US 287 (to the east is MORE used)

What are your top concerns regarding travel on SH 66?

- Several of the residential accesses are on a huge curve with limited sight distance (western portion of the corridor)
- Sensitivity to county open space and impacts from widening
- Difficult west bound left turn at 53rd Street into open space (Rabbit Mountain)
- Concerns about the ditches and railroad resources

What immediate and future transportation needs should be addressed through this study?

- 75th Street and 95th Street, SH 287 and US 36 are the more major commuting routes to/from Boulder (north/south). SH119, SH52, Lookout Road, Isabelle/Valmont Road, SH7. Increased in-commuting from Southern Weld/Larimer County to Longmont/Boulder.

Are there specific alternatives, options or solutions that should be considered or studied? Why?

- No urban development in County area
- Focus on bicycle safety components on county roads and at intersections
- Trail Crossings - Planned St. Vrain trail from Weld County into Lyons (trail corridor after gravel operations)
  - 53rd Street or 51st Street are possible crossings for this trail

What evaluation criteria would you use to compare alternatives?

- Moving people, not cars, as the measure of success

What do you think the priority projects should be?

- Improvements that support recreation
  - Transportation plan identifies recreation as a large component of the system
  - SH 66 is a critical corridor for cycling, both along the road and crossing
- First, maintain shoulders that are there now; keep those shoulders through intersections too
- Bike crossings of SH 66
- Those that address safety, not those that focus on capacity
- Extend/connect shoulders/bike/ped facilities into Lyons

What are the most important outcomes of the PEL study?

- Coming to agreement on an access control plan
- A plan that successfully balances the needs of facility users and communities
- Accommodate different uses of the corridor

What plans or studies have been done in or around your community that pertain to SH 66?

- No county roads are slated for any new lanes; perhaps just shoulders

Do you have any recent data, such as traffic counts, that might be useful in the study?

- As SH 119 is more congested, people are taking SH 66 to US 36 instead (consider this movement in the modeling)
- Look at counts before 2013 for 83rd Street (bridge out over the Little Thompson)
- Yes, Boulder County will send traffic counts for their stations
- St. Vrain Greenway Plan
- Transportation Master Plan (2011)
- RTD and DRCOG BRT on the diagonal (SH 119)

What role do you think technology and innovation, such as connected and autonomous vehicles, will play in mobility and safety along SH 66? How do you think the PEL should address technology and innovation?

- SH 66 is not necessarily a priority for technology
- To the extent that we can use our infrastructure to move people more efficiently, sure they're open to technologies

Other notes

- Boulder County would like to request that the western boundary be extended to SH 7
  - Alex will follow up with CDOT and confirm the western boundary
  - If not, we're missing one of the most difficult sections of the corridor
  - While US 36 is an easy endpoint, we may need to consider extending to the west, particularly for the access control
- Boulder County has IGAs with Lyons and Longmont for where they can grow
- Lyons is conducting masterplan, including area to the east of US 36
- Events like the bike races and Ironman impact the travel and emergency response
- Bus service on SH 66 previously did not hold because the corridor is between destinations, not a destination on the corridor

SH 66 Planning and Environmental Linkages Study

BOULDER COUNTY STAKEHOLDER INTERVIEW

Tuesday, December 13, 2016 | 12:30 p.m. to 2:00 p.m.
Boulder County Offices | 2525 13th Street, Boulder, Colorado 80304

Sign In

First Name	Last Name	Agency	Email
Jim	Swope	Boco Trans	tswope@bouldercounty.org
George	Gastl	"	BCEERSRE@bouldercounty.org
Nicole	Wobus	Boco Land Use	nwobus@bouldercounty.org
Alex	Pulley	FHU	alex.pulley@fhueng.com
Jim	Hanson	Atkins	jim.hanson@atkinsglobal.com
Kelly	Leadbetter	FHU	kelly.leadbetter@fhueng.com
Dave	Sprague	Atkins	david.sprague@atkinsglobal.com

SH 66 Planning and Environmental Linkages Study

Stakeholder Interview Summary

Stakeholder: Colorado Department of Transportation (CDOT) Region 4

Date and Time: Tuesday, December 13, 2016 | 10 a.m. to 11:30 a.m.

Location: CDOT Region 4 Boulder Residency, 1050 Lee Hill Rd. Boulder, Colorado 80302

Attendees

See attached sign-in sheet.

Summary

SH 66 is currently a reliever route to many other state highways in the region. SH 66 is not quite failing today but improvements will be needed in the near-term in response to development and changing seasonal travel patterns. These near-term improvements could consider new technologies.

Questions

What words would you use to describe SH 66 today?

- Multi-faceted
- New density
- Emerging urban
- Congestion
- Reliever
- Alternate route

How would you categorize the role of SH 66 in your community?

- CDOT sees US 287 and County Line as the more major east/west dividing lines than I-25
- Emerging urbanism/suburbanism in Longmont and Mead compared to the agro-businesses in the eastern corridor (Weld County)
- East of I-25 is 'quiet' today; but west of County Line Road is the emerging urban area
- Right now SH 66 is a reliever to other routes (US 34 and SH 119)

What are your top concerns regarding travel on SH 66?

- Changing in turning movements onto and off the highway; need for more gaps in traffic
- Development possibilities are becoming a reality (new multi-family housing near Wal-Mart)
- SH 119 closure (started about a year ago) project pushes more traffic onto SH 66; corridor experiencing more congestion as a result
  - Bridge replacement on US 287 also happening; not as much influence as SH 119 or US 34
- WCR 7, US 287 intersections

What immediate and future transportation needs should be addressed through this study?

- SH 66 is currently influenced by construction congestion from construction on other corridors
- Johnstown is freely expanding to the south, may impact the corridor
- How to address the new development in Longmont

Are there specific alternatives, options or solutions that should be considered or studied? Why?

- Rumor has it that RTD is maxed out on maintenance space; Karen heard that US 287 may be a possibility
- Idea of flex space… for a second lane, bikes, pedestrians, autonomous cars

What evaluation criteria would you use to compare alternatives?

- Multimodal (Karen suggested the bike lanes are more palatable on the west end and there is no desire for bike lanes on the east end; but a wide shoulder for 'safety' also allows for bike lanes)
- Safety and maximizing investment dollars
  - Turn lanes, accel/decel lanes; shows immediate value of the study

What do you think the priority projects should be?

- Role of developers for the WCR 7 and SH 66 intersection; can they pipe the ditch?
- Gloria has had conversations with developers in all four corners of WCR 7

What are the most important outcomes of the PEL study?

- Small municipality (Mead) wants safety or capacity improvements for their development; opportunity to educate the local municipalities on how CDOT should work with to the locals
- Roadway template
- Segmented template approach (consideration to community values and urban design)
- Desired ROW lines (as a .kmz file)
- Interim improvement guidance
- A plan that efficiently communicates the locals wants and needs and CDOT's wants and needs
- Having a menu of possibilities of current technologies

What plans or studies have been done in or around your community that pertain to SH 66?

- Look into the Longmont Comprehensive Plan
- Some intersections on SH 66 have already been identified for adaptive signal improvements

Do you have any recent data, such as traffic counts, that might be useful in the study?

- Look at the counts on US 34, US 287 from 2013

What role do you think technology and innovation, such as connected and autonomous vehicles, will play in mobility and safety along SH 66? How do you think the PEL should address technology and innovation?

- Some intersections on SH 66 have already been identified for adaptive improvements

- RoadX has talked to DTD; a few PELs are addressing technology as a part of the alternatives evaluation process
- Plan for a certain level of uncertainty and unknown; risk based assessment for improvements
- Could SH 66 be a pilot project for freight movement technologies between US 85 and I-25?
- Boulder County is very supportive of innovative technologies and will buy in to projects
- Weld County may embrace technologies for freight (between US 85 and I-25) and autonomous trucks
- Screen technology concepts separately; suite of technology concepts to apply to alternatives
- Stay in touch with TSMOP for guidance
- Some intersections on SH 66 have already been identified for adaptive improvements

Other notes

- 66 was resurfaced a year ago
- No consistency in travel conditions over the last five years because of flooding, construction, development, and changes in land use
- SH 66 is not failing today; functioning 'okay' today

SH 66 Planning and Environmental Linkages Study

CDOT STAKEHOLDER INTERVIEW

Tuesday, December 13, 2016 | 10 a.m. to 11:30 a.m.
Region 4 Boulder Residency | 1050 Lee Hill Drive, Boulder, CO 80302

Sign In

First Name	Last Name	Agency	Email
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Jim	Gussen	CDOT R4	james.gussen@state.co.us
Karen	Schneiders	CDOT R4	Karen.Schneiders@state.co.us
James	Zufall	CDOT R4	James.d.Zufall@State.co.us
Tim	Bilobran	CDOT R4	Timothy.Bilobran@state.co.us
Alex	Pulley	FHU	alex.pulley@fhueng.com
Jim	Hanson	Atkins	jim.hanson@atkinsglobal.com

SH 66 Planning and
Environmental Linkages Study

First Name	Last Name	Agency	Email
KELLY	LEADBETTER	FHU	Kelly.leadbetter@fhueng.com

SH 66 Planning and Environmental Linkages Study

Stakeholder Interview Summary

Stakeholder: Denver Regional Council of Governments (DRCOG)
Date and Time: December 8, 2016 | 11 a.m. to noon
Location: Conference Call

Attendees

- Steve Cook, DRCOG
- Jacob Riger, DRCOG
- Dave Sprague, Atkins
- Jim Hanson, Atkins
- Kelly Leadbetter, FHU
- Chris Fasching, FHU
- Alex Pulley, FHU

Summary

DRCOG's FOCUS 2.0 model will be out in the next couple of weeks. DRCOG's primary concerns are the project process (use of the model, public involvement) and the outcomes (project's relation to the TIP and STIP). They would like to remain involved but will defer to the local agencies to develop the project's goals and objectives.

Notes

- FOCUS 2.0, DRCOG's model, should be available in the next two weeks
- 2010 is the observed base year for the model
- The model underwent major calibration and is a big improvement upon the previous model
- SH 66 is on the edge of DRCOG's model; special attention may be needed at the external inputs
- DRCOG confirmed that Mead and Lyons are both member agencies
- DRCOG uses UrbanSim, an econometric model, to forecast future land uses
- These forecasts stay within the control total from the state demographer for population and employment
- These control totals are restricted at the county level and sub-county level
- DRCOG anticipates being involved in three main ways:
  - Providing the model and land use data
  - Partnering with the project to help outreach to the public
  - Overseeing the relationship between the project and the TIP/STIP
- DRCOG will take a backseat at the beginning of the project to allow the local agencies to develop the goals and objectives
- DRCOG is most concerned about the process (use of the model, public involvement) and the outcomes (relation to the TIP and STIP)
- Jacob Riger and Steven Cook should be invited to every TAC and public meeting

- FHWA has requested that DRCOG stay actively involved with the model useage and application throughout these types of studies
- MetroVision provides an overview and oversight and should help inform the visioning workshop
- DRCOG noted that on SH 66, the AM/PM peak periods may not be the worst traffic, but rather the seasonal traffic may be the highest
- The greatest outcome is for the locals and the region (CDOT) to be on the same page, with a cohesive vision for the transportation system
- DRCOG does not model autonomous vehicles because there is no guidance on what/how to model. DRCOG encouraged the project team to be nimble and not preclude any ideas on how to incorporate technologies into the PEL process, however, they deferred to CDOT to provide this guidance.

SH 66 Planning and Environmental Linkages Study

Stakeholder Interview Summary

Stakeholder: City of Longmont

Date and Time: Thursday, December 15, 2016 | 1:00 p.m. to 2:15 p.m.

Location: City of Longmont Offices | 350 Kimbark Street, Longmont, CO, 80501

Attendees

See attached sign-in sheet.

Summary

Longmont has a clear vision of which improvements they would like to see, as they recently completed their comprehensive plan. Bicycle, pedestrian, and transit improvements are a priority to the City. New development is planned for north of SH 66 which may change demands upon SH 66. Any improvements should consider the impacts to floodplains and waterways.

Questions

What words would you use to describe SH 66 today?

- Regional
- Connector
- First link
- Important gateway
- Tourism
- Recreation

How would you categorize the role of SH 66 in your community?

- Great east/west connection on the north side of town
- Connection to RMNP

What are your top concerns regarding travel on SH 66?

- Concerns about being cut off from I-25 when flows overtop SH 66
  - The City has some plans for detention north of SH 66 but no place to release downstream of SH 66
- Have received complaints about truck traffic and volume on SH 66 west of Hover
- Weekend traffic to RMNP
- Connection to I-25 sees significant use on the weekday

What immediate and future transportation needs should be addressed through this study?

- Would like to see an extension of capacity along SH 66 at US 287
- Missing shoulder on Francis Street approaching SH 66

- People travel from US 287 to SH 66 to Hover Street to get to SH 119 (use SH 66 from Main Street to Hover Street)
  - By taking the 'Hover bypass' you miss the 25 MPH section and two railroad crossings

Are there specific alternatives, options or solutions that should be considered or studied? Why?

- Development planned between Hover Street and US 287 on the north side of SH 66
  - Six lane section through there to support that development is not likely needed
  - Make sure traffic can flow through there; limit stops
- Consider a separated bike path
- From Main Street to Hover Street any expansion would need to be to the north; and perhaps a separated side path on the south side
- A balanced solution to incorporate transit
- Box culvert or some structure under SH 66 for the flows; in conjunction with a pedestrian underpass (between Pace and Sundance)
- Bike/pedestrian connections to the planned park at County Line Road (SWQ)
- Protect Union Reservoir as a potential future water supply
- Capacity improvements for commuter route between Main Street and I-25

What evaluation criteria would you use to compare alternatives?

- Safety is a priority

What do you think the priority projects should be?

- Shoulders need to be maintained (function well now)
- Maintain efficient transportation link from Main Street to I-25, primarily for cars

What are the most important outcomes of the PEL study?

- An access control plan
  - An ACP that defines access can work well for all agencies because it provides the agreements
- Transit agency coordination (RTD, CDOT, and TransFort)

What plans or studies have been done in or around your community that pertain to SH 66?

- Envision Longmont, recent comprehensive plan
- Spring Gulch Trail Plan; portions are built now, portions will be built in 2017
  - Link from Spring Gulch to St. Vrain along SH 66

Do you have any recent data, such as traffic counts, that might be useful in the study?

- Erin from their planning office would be the contact to provide hydrology data

What role do you think technology and innovation, such as connected and autonomous vehicles, will play in mobility and safety along SH 66? How do you think the PEL should address technology and innovation?

- Yes, the City is open to adaptive signals (but let's not have too many signals)
  - Controlling access and maintain signal spacing is important
- New technology should be addressed but is not as a critical component to the City

Other notes

- Longmont feels there was funding that was supposed to be allocated to Longmont but was diverted to flood response projects
- Transfort's Flex goes through Longmont too; so coordinate Transfort and RTD

SH 66 Planning and Environmental Linkages Study

LONGMONT STAKEHOLDER INTERVIEW

Thursday, December 15, 2016 | 1:00 p.m. to 2:15 p.m.
City of Longmont | 350 Kimbark Street, Longmont, CO, 80501

Sign In

First Name	Last Name	Agency	Email
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Phil	Greenwald	Longmont	phil.greenwald@longmontcolorado.gov – Hydraulics
Tom	Street	Longmont	tom.street@...
Dick	Wolfrum	Longmont	Nick.Wolfrum@longmontcolorado.gov
Jim	Hanson	Atkins	jim.hanson@atkinsglobal.com
KELLY	LEADBETTER	FHU	kelly.leadbetter@fhueng.com
ALEX	PULLEY	FHU	alex.pulley@fhueng.com

SH 66 Planning and Environmental Linkages Study

Stakeholder Interview Summary

Stakeholder: Town of Lyons

Date and Time: Thursday, December 15, 2016 | 10:15 a.m. to 11:45 a.m.

Location: Lyons Town Hall | 432 5th Ave, Lyons, CO 80540

Attendees

See attached sign-in sheet.

Summary

SH 66 is the primary gateway into Lyons. The Town would like to capitalize on this function and welcome visitors to their community. New development and affordable housing on the north side of SH 66 and US 36 will influence the corridor. The Town emphasized the need for bicycle, pedestrian, and transit facilities, specifically a connection between Lyons and Longmont.

Questions

What words would you use to describe SH 66 today?

- Connector
- Rural
- Gateway
- Tourism
- Utility corridor
- Enjoyable, scenic

How would you categorize the role of SH 66 in your community?

- Connector to Longmont (services), I-25, airport

What are your top concerns regarding travel on SH 66?

- Weekend travel patterns differ from weekday
  - 5 outdoor wedding venues are located in Lyons but no lodging so tour buses come in and out from Boulder
- Stopping at the railroad east of US 287 is a challenge
- Seasonal tourism traffic; very congested in the summer

What immediate and future transportation needs should be addressed through this study?

- Lyons has funding for a path from McConnell to US 36
  - There is more ROW on the east side of US 36 for this trail but no funding yet
- An underpass under US 36 parallel to SH 66 for bicycles and pedestrians
- Small road diet/restriping on the north side of SH 66 after McConnell

Are there specific alternatives, options or solutions that should be considered or studied? Why?

- A parking/carpool lot downtown to serve RMNP and Estes Park

What evaluation criteria would you use to compare alternatives?

- Safety

What do you think the priority projects should be?

- A bicycle and pedestrian route connecting Lyons and Longmont
- Completing the work on SH 66 between US 36 and into Lyons
- Gateway feature into Lyons

What are the most important outcomes of the PEL study?

- Improvements that address safety
- Bicycle, pedestrians off-street network

What plans or studies have been done in or around your community that pertain to SH 66?

- Primary Planning Area Master Plan

Do you have any recent data, such as traffic counts, that might be useful in the study?

What role do you think technology and innovation, such as connected and autonomous vehicles, will play in mobility and safety along SH 66? How do you think the PEL should address technology and innovation?

- Planning for more EV charging stations
- Generally open to new technologies

Other notes

- Lyons has a lack of affordable housing in town and have plans for a new development on the north side of SH 66 near US 36
- Aging population is currently served by Via out of Boulder
  - Average population is 41.5 years old
- Lyons funds a community-wide RTD eco-pass
- 40 percent of school population commutes into Lyons for school (unnecessary SOV trips)

SH 66 Planning and Environmental Linkages Study

LYONS STAKEHOLDER INTERVIEW

Thursday, December 15, 2016 | 10:15 a.m. to 11:45 a.m.
Lyons Town Hall | 432 5th Ave, Lyons, CO 80540

Sign In

First Name	Last Name	Agency	Email
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KELLY	LEADBETTER	FHU	Kelly.leadbetter@fhueng.com

SH 66 Planning and Environmental Linkages Study

Stakeholder Interview Summary

Stakeholder: Town of Mead

Date and Time: Wednesday, December 14, 2016 | 12:45 p.m. to 2:15 p.m.

Location: Mead Town Hall | 441 3rd Street, Mead, CO 80542

Attendees

See attached sign-in sheet.

Summary

Mead is poised for significant growth and development near and along the SH 66 corridor. SH 66 is the gateway into their community and they would like to create a greater sense of place along the corridor. Linking their community by all modes is very important. This could include a grade-separated crossing for bicycles and pedestrians.

Questions

What words would you use to describe SH 66 today?

- Gateway
- Dangerous
- Fast
- Shared values

How would you categorize the role of SH 66 in your community?

- Gateway, entrance
- Commercial corridor

What are your top concerns regarding travel on SH 66?

- Amount of access points
- Amount of truck traffic is high
- Fog and sight distance can be an issue (between WCR 13 and WCR 17)
- Turning onto side streets is dangerous

What immediate and future transportation needs should be addressed through this study?

- Speed limit
- WCR 13 and WCR 17
- Mead Street and access to high school
- Some sort of grade-separated crossing is needed at 3rd Street (WCR 7)
- Commercial opportunities that can be easily accessed and create an experience
- Transition into recreational uses begins at Mead (and heads West)

- Would be remiss to not consider transit
- Place recognition

Are there specific alternatives, options or solutions that should be considered or studied? Why?

- Place-making as an alternative
- Creating a sense of place and the tradeoffs with mobility (capturing traffic)
- Bicycles and pedestrians needs to be able to safely cross SH 66
- Separated bicycle and pedestrian facilities
- Long-term vision for transit

What evaluation criteria would you use to compare alternatives?

- Place-making and urban design
- Multimodal options

What do you think the priority projects should be?

- Grade separated crossing to link schools (high school south of SH 66 on 3rd Street/WCR 7)
- Improvements that address safety

What are the most important outcomes of the PEL study?

- Perhaps a coalition
- Summary sheets, similar to the US 85 PEL
- Marketing opportunities and visibility
- Improvements that address safety

What plans or studies have been done in or around your community that pertain to SH 66?

- Comprehensive plan will be updated in 2017
- Consider the North I-25 EIS ROD recommendations

Do you have any recent data, such as traffic counts, that might be useful in the study?

- Recommend looking at Strava bike data

What role do you think technology and innovation, such as connected and autonomous vehicles, will play in mobility and safety along SH 66? How do you think the PEL should address technology and innovation?

- Open to new technologies

Other notes

- Consider the needs of the aging population

SH 66 Planning and Environmental Linkages Study

MEAD STAKEHOLDER INTERVIEW

Wednesday, December 14, 2016 | 12:45 p.m. to 2:15 p.m.
Mead Town Hall | 441 3rd Street, Mead, CO 80542

Sign In

First Name	Last Name	Agency	Email
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ALEX	PULLEY	FHU	alex.pulley@fhueng.com
KELLY	LEADBETTER	FHU	kelly.leadbetter@fhueng.com

SH 66 Planning and
Environmental Linkages Study

First Name	Last Name	Agency	Email
Helen	Mischbrook		Hmischbrook@townofsw
JENNIFER	VECCHI		Jennifer@Vecchiassociates.com
KEN	CLIFFORD	JVA, INC.	kclifford@jvajva.com

SH 66 Planning and Environmental Linkages Study

Stakeholder Interview Summary

Stakeholder: RTD

Date and Time: Wednesday, December 14, 2016 | 10:15 a.m. to 11:30 a.m.

Location: RTD Offices | 1600 Blake Street

Attendees

See attached sign-in sheet.

Summary

RTD would like to ensure that the street layout allows for transit, bicycles and pedestrians (space for shelters, sidewalk connections to shelters). RTD's focus in this area in the near-term is the BRT route on SH 119 which will likely terminate just north of US 287. The intersection improvements of US 287 and SH 66 will be important.

Questions

What words would you use to describe SH 66 today?

How would you categorize the role of SH 66 in your community?

What are your top concerns regarding travel on SH 66?

- Future crossing of BRT at US 287

What immediate and future transportation needs should be addressed through this study?

- Lyons has a huge potential to grow (and support Boulder) for those who work in Boulder
- Don't foresee something like BRT between Lyons and Longmont (even in 20 years)

Are there specific alternatives, options or solutions that should be considered or studied? Why?

- Need to ensure street layout allows for transit, bicycles and pedestrians
- Ensure basics are in place for these modes, like space for shelters
  - New stops are required to be ADA accessible (sidewalk connection)
- Make sure the utilities are in place just east and west on SH 66 to support transit

What evaluation criteria would you use to compare alternatives?

What do you think the priority projects should be?

- Park-n-ride in Lyons exists and remains as a terminal
- Longmont made an agreement with Wal-Mart for a parcel just north of SH 66 and 287 and build a park-n-ride (hope by 2018, but 2019 is more realistic)
  - Would function as a north end terminal, for SH 119 BRT, too
- The intersection of US 287 and SH 66. The challenge is that SH 119 is like a freeway and Boulder and Longmont are 'city' streets.

- Queue jumps? Bus lane? Transit signal priority? Prefer far side; may not need a southbound stop
- RTD recommended looking at designs from the SH 7 BRT study

What are the most important outcomes of the PEL study?

- Street layouts that identify improvements for transit, bicycles and pedestrians

What plans or studies have been done in or around your community that pertain to SH 66?

- None; however, look at SH 7 BRT study for guidance on how to incorporate transit

Do you have any recent data, such as traffic counts, that might be useful in the study?

- O/D from 2013 and 2014 for PnRs
- On-board and overall survey from 2014
- Kelly will follow up and ask for this data

What role do you think technology and innovation, such as connected and autonomous vehicles, will play in mobility and safety along SH 66? How do you think the PEL should address technology and innovation?

- RTD would like a reference to technologies and how they influence transit to be included
- Anything we can put in writing and show how it works related to transit, will be helpful
- Whatever we come up with needs to be compatible and enticing for those in the auto to consider switching to transit

Other notes

- Current service Y (Boulder County is buying out a few rides during the day; runs in the morning and the evening)
- YL route between Lyons and Longmont used to run (paid for by Boulder County); but no major origins or destinations
- If travel time is competitive, the bus ridership really grows into greater results
- The growth in Longmont can be challenging for transit oriented development
- Longmont currently buys out of fares

SH 66 Planning and Environmental Linkages Study

RTD STAKEHOLDER INTERVIEW

Wednesday, December 14, 2016 | 10:15 a.m. to 11:45 a.m.
Conference Room B, RTD | 1600 Blake Street, Denver, CO 80202

Sign In

First Name	Last Name	Agency	Email
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Alex	Pulley	FHU	alex.pulley@fhueng.com
CHRIS	QUINN	RTD	chris.quinne RTD-Denver.com
Shea	Suski	FHU	shea.suski@fhueng.com

SH 66 Planning and Environmental Linkages Study

Stakeholder Interview Summary

Stakeholder: Weld County

Date and Time: Wednesday, December 14, 2016 | 3:00 p.m. to 4:30 p.m.

Location: Weld County Public Works | 1111 H. Street, Greeley, CO 80631

Attendees

Jim Hanson (Atkins), Alex Pulley (FHU), Kelly Leadbetter (FHU), and Jim Flesher

Summary

Weld County's use of SH 66 is primarily for freight connections to I-25. Weld County has little to no desire for bicycle, pedestrians, or transit improvements. There are some access points close to intersections that may be a concern. The County is open to new technologies but does not prioritize them or lead the way.

Questions

What words would you use to describe SH 66 today?

- Connector
- Freight
- Access

How would you categorize the role of SH 66 in your community?

- SH 66 is the primary connection between Platteville and I-25
- Not really considered a major road in the County
- Freight is the primary user of this corridor (in Weld County)

What are your top concerns regarding travel on SH 66?

- Jim noted that based on an aerial, there are some accesses close to intersections that may be a concern

What immediate and future transportation needs should be addressed through this study?

- Weld County will be applying for improvements at WCR 21 and SH 66 (turn lanes) through CDOT
- Avoid signals, if possible

Are there specific alternatives, options or solutions that should be considered or studied? Why?

- The regional trail system proposed along the Platte River and the need for possible regional trail connections
- Weld County will consider multi-purpose shoulders but that's the extent of their multimodal facilities; Weld County would not object to any facility that CDOT built and maintained
- Transit? Also not a priority to Weld County

What evaluation criteria would you use to compare alternatives?

What do you think the priority projects should be?

What are the most important outcomes of the PEL study?

- Identify and guidance for safety improvements such as accel/decel lanes
- An ACP is an important outcome, especially near intersections with County roads

What plans or studies have been done in or around your community that pertain to SH 66?

- No recent plans or studies, to Jim's knowledge
- Is there any planned development along this corridor? Jim doesn't know, but doubts that there is any planned or upcoming; Jim thought Firestone town limits extends

Do you have any recent data, such as traffic counts, that might be useful in the study?

What role do you think technology and innovation, such as connected and autonomous vehicles, will play in mobility and safety along SH 66? How do you think the PEL should address technology and innovation?

- Open to adaptive signals, if it even applies (not a lot of signals in the eastern portion)
- Weld County is not planning for any innovation, according to Jim
- Don't preclude any technologies, but they're not on the forefront of the innovation
- The County considered Bluetooth counters on the WCR 49 project but it didn't happen

Other notes

- Jim asked, "If CDOT has an access code, why do we need to establish an ACP?"

SH 66 Planning and Environmental Linkages Study

Stakeholder Interview Summary

Stakeholder: Town of Firestone

Date and Time: Thursday, February 9, 2017 | 3:30 p.m. to 4:30 p.m.

Location: Firestone Community Development Services Office

Attendees

David Lindsay, Town of Firestone
Alex Pulley, Felsburg Holt and Ullevig
Kelly Leadbetter, Felsburg Holt and Ullevig
Neal Goffinet, Felsburg Holt and Ullevig

Summary

SH 66 is the northern border for the Town of Firestone. The highway currently serves heavy industries and commuters traveling to/from Firestone and somewhere else. The Town emphasized the need for capacity improvements and limiting access to allow for higher speed travel.

Questions

What words would you use to describe SH 66 today?

- Major corridor (east/west)
- Connection to I-25 (oil and gas, sand and gravel)
- Future
- Commerce corridor
- Alternate route

How would you categorize the role of SH 66 in your community?

- Northern border
- Currently servicing the oil and gas industry (will likely be commercial in the future)
- Access to the beet dump on Colorado Blvd/WCR 13 and the gravel operation at WCR 19
- SH 66 is used for commuters traveling to somewhere else (Fort Collins, Greeley, Denver)

What are your top concerns regarding travel on SH 66?

- Turn lanes on and off of SH 66 at Colorado Blvd/WCR 13 (there are currently only left-turn pockets from SH 66 to Colorado Blvd/WCR 13)
- Amount of truck traffic east of I-25

What immediate and future transportation needs should be addressed through this study?

- Access to future commercial properties just east of I-25
- Maintaining higher speed limits and higher capacity with limited access

Are there specific alternatives, options or solutions that should be considered or studied? Why?

- Design the roadway intersections to have greater turning radii and stop bars that are further back from the intersection to allow larger trucks to move through the intersections
- A roadway with greater pavement depth for larger trucks (sand and gravel, oil and gas)

What evaluation criteria would you use to compare alternatives?

- Not discussed.

What do you think the priority projects should be?

- The State should focus on projects that support/enhance vehicular traffic, not bike and pedestrian (the local communities should provide the active transportation infrastructure)
- Intersection improvements at SH 66 and Colorado Blvd/WCR 13 (This is a major north/south connector that will eventually connect to US 34 and SH 7)

What are the most important outcomes of the PEL study?

- Improvements that allow for higher speed travel and restrict access
- An access control plan

What plans or studies have been done in or around your community that pertain to SH 66?

- See the Carbon Valley Transit Service Feasibility Study (FHU completed the study in 2011)
- Barefoot Lakes development plan

Do you have any recent data that might be useful in the study?

- David will send the land use and town boundaries
- Dave will review DRCOG's data in the Land Use Explorer and provide feedback

What role do you think technology and innovation, such as connected and autonomous vehicles, will play in mobility and safety along SH 66? How do you think the PEL should address technology and innovation?

- So much is still unknown
- Technology has great potential for operations and travel efficiencies (such as corridor management and adaptive signals at intersections)

Other notes

- Firestone's growth is currently slowed/limited by lack of water and sewer infrastructure
- David will identify the Board of Trustees representative to serve on the Executive Committee

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Appendix F-4: Visioning Workshop

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SH 66 Planning and Environmental Linkages Study

Visioning Workshop

Date and Time: Tuesday, April 4, 2017 | 3 p.m. to 5 p.m.
Location: Town of Mead | 441 3rd Street, Mead, Colorado 80542

Workshop Purpose

The purpose of the workshop is to gather technical advisors and elected officials from each local agency to cast a vision and common purpose for the project and the corridor

Agenda

Welcome and Introductions

- Workshop purpose
- Review of agenda

Project Overview

- Study area
- Schedule
- Project team
- Roles and responsibilities
- Charter

Data Collection Efforts

- Land use
- Transportation system
- Environmental resources

Summary of Stakeholder Interviews

Small Group Sessions

- Operations and mobility
- Bicycle, pedestrian, and transit
- Access management and safety
- Other

Report Out

Next Steps

SH 66 Planning and Environmental Linkages Study

VISIONING WORKSHOP

April 4, 2017 | 3 p.m. to 5 p.m.
Town of Mead | 441 3rd Street, Mead, Colorado 80542

Sign In

First Name	Last Name	Agency	Email
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JIM FLESHER		WELD CO PW	JFLESHER@WELDGOV.COM
BRIAN ~~DOBLING~~	DOBLING	FHWA	brian.dobling@dot.gov

SH 66 Planning and Environmental Linkages Study

VISIONING WORKSHOP

April 4, 2017 | 3 p.m. to 5 p.m.
Town of Mead | 441 3rd Street, Mead, Colorado 80542

Sign In

First Name	Last Name	Agency	Email
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Tim Bilobran	Bilobran	CDOT	timothy.Bilobran@state.
Matt Manley	MANLEY	LYONS	MManley@townoflyons.com

SH 66 Planning and Environmental Linkages Study

VISIONING WORKSHOP

April 4, 2017 | 3 p.m. to 5 p.m.
Town of Mead | 441 3rd Street, Mead, Colorado 80542

Sign In

First Name	Last Name	Agency	Email
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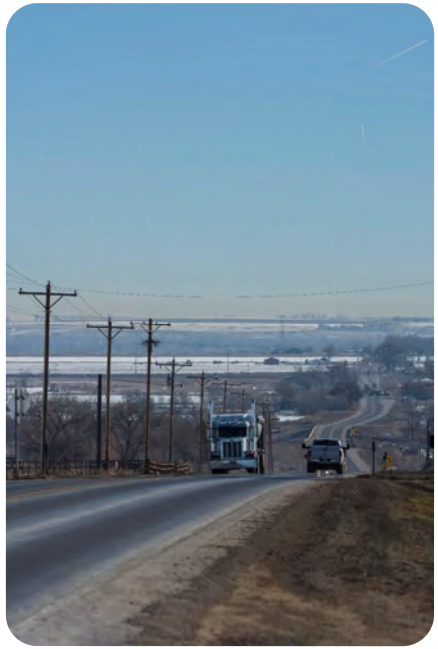
SH 66 Planning and Environmental Linkages Study



Visioning Workshop

April 4, 2017

Today's Workshop

- Welcome and Introductions
- Project Overview
- Data Collection Efforts
- Summary of Stakeholder Interviews
- **Small Group Sessions**
- **Report Out**
- Next Steps

Visioning Workshop Goal

The purpose of the workshop is to gather technical advisors and elected officials from each local agency to cast a vision and common purpose for the project and corridor

SH 66 Planning and Environmental Linkages Study

Project Overview

Project Background

What is a PEL?

PEL represents an approach to transportation decision-making that considers environmental, community, and economic goals early in the planning stage and carry them through project development, design, and construction.

Benefits of a PEL

A PEL Study can lead to a seamless decision-making process that:

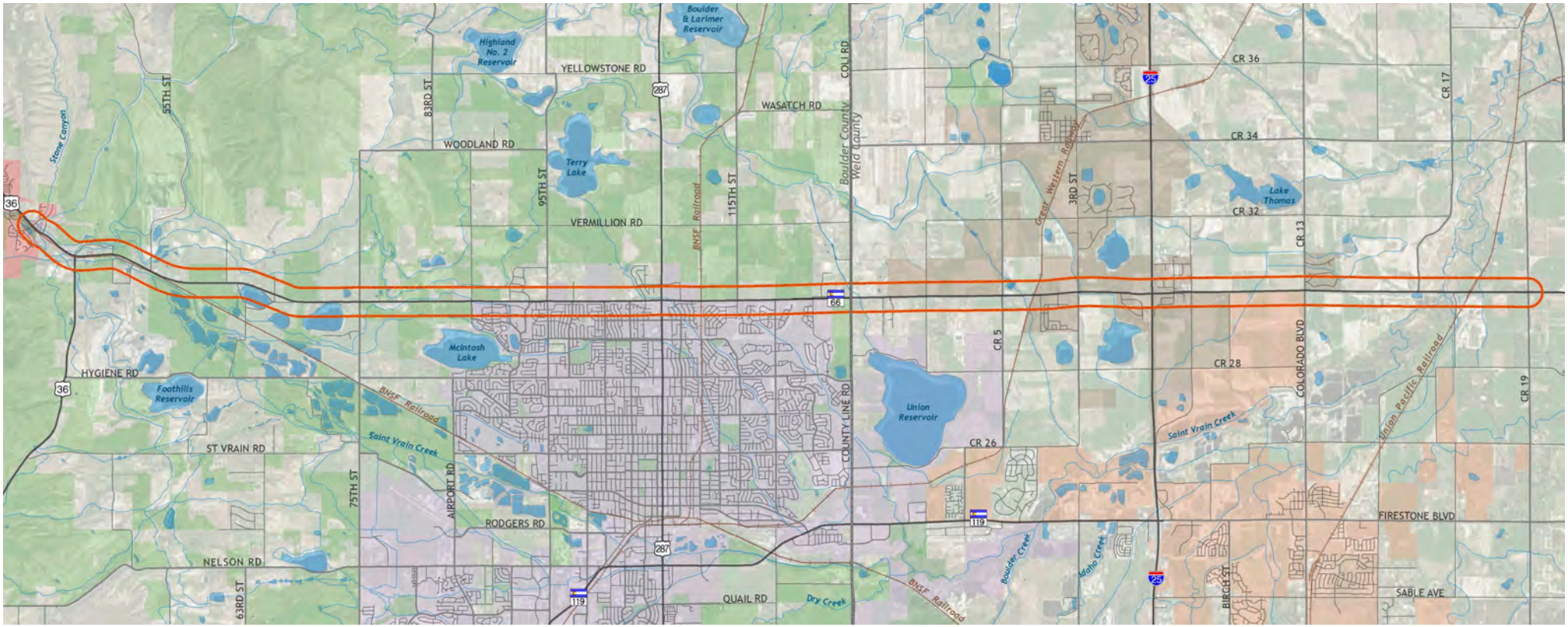
- Minimizes duplication of effort,
- Promotes efficient and cost-effective solutions and environmental stewardship, and
- Reduces delays in project implementation.

SH 66 PEL Goal to Understand:

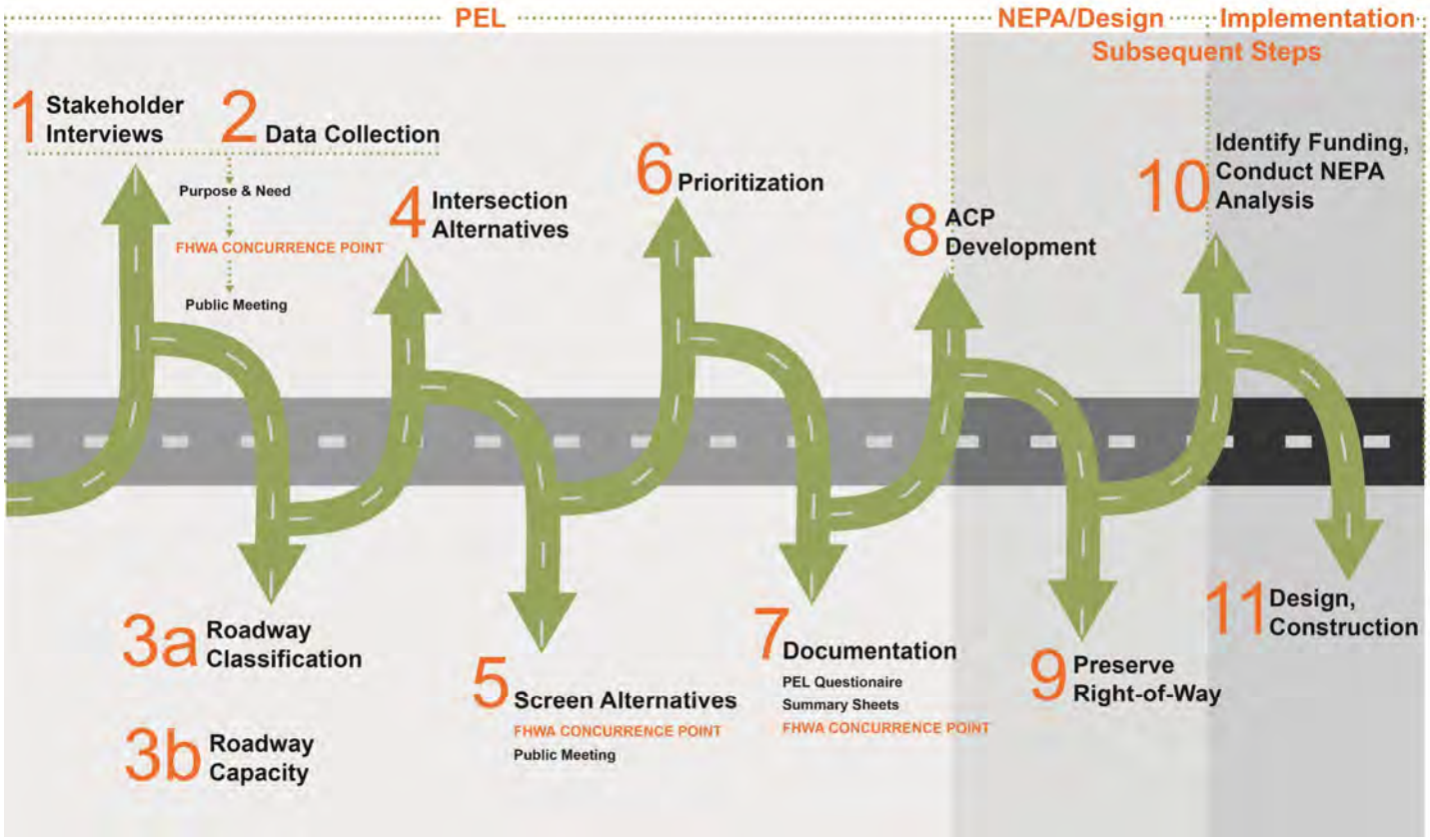
- communities along the corridor;
- how the transportation system currently functions;
- how the system affects communities; and
- how the system/corridor can be improved now and in the future.

Study Area

- McConnell Street in Lyons to Weld County Road 19 (~20 miles)



PEL Study Process



Project Schedule

Approximately 18-month schedule

- Corridor Conditions Report (end of April review by the TAC)
- **Visioning Workshop (Today)**
- Purpose and Need Statement Development (mid-May)
- Public Meetings (April 25th and 26th & end of 2017)
- Alternatives Development and Screening (end of 2017 / early 2018)
- Prioritization (early 2018)
- Documentation of the PEL (mid-2018)
- Development of an Access Control Plan (mid-2018)

SH 66 Planning and Environmental Linkages Study

Data Collection Efforts

Data Collection

Land Use

- Transportation Plans
- DRCOG Land Use Model
- Input from Stakeholders

Transportation System

- Existing information
- Field Data Collection
- Crash Reports

Environmental Resources

- Existing information
- Field Data Collection
- Stakeholder Input

Study Considerations

Current Conditions

- Traffic Conditions
- Physical Roadway Conditions
- Safety Information
- Bicycle / Transit / Pedestrian Usage
- Environmental Resources

Future Conditions (2040)

- Comprehensive Plans
- Traffic Conditions
- Physical Roadway Conditions
- Safety Information
- Bicycle / Transit / Pedestrian Usage
- Environmental Resources

SH 66 Planning and Environmental Linkages Study

Roles and Responsibilities

Stakeholder Advisory

Two main groups to assist in the project guidance, each with a different charge:

- Technical Advisory Committee (TAC)
- Executive Committee (EC)

Technical Advisory Committee (TAC)

- Comprised of one staff member from community, county, or organization
- The TAC will guide the PEL study process and serve as a sounding board for the technical aspects of the project
- All project analyses, evaluations, and recommendations will be vetted through the TAC before being presented to the public and elected officials and before being posted on the project website
- The TAC will meet approximately monthly with the PMT to provide technical input
- TAC members will serve as the primary point of communication and provider of information to their communities or organizations

Executive Committee (EC)

- Comprised of one elected official from each community and county along the corridor
- The EC provide policy-level guidance on the study process and EC members will represent the interests of their communities
- This group will meet at key milestones and decision points in the project (approximately once per quarter) when the project team needs the input and support of the elected officials to proceed
- EC meetings will be held in the evenings and rotate locations along the corridor
- EC members will be kept up to speed on the project progress and information by their TAC member

Stakeholder Charter

- Develop a charter that establishes the framework for participants to work together during the SH 66 PEL
- Describes the roles and responsibilities
- Discusses importance of membership and attendance
- Identifies Operating Guidelines
- Decision Making Process
- Signed by all stakeholders
- Will be drafted and distributed for review and signatures

SH 66 Planning and Environmental Linkages Study

Summary of Stakeholder Interviews

Participating Agencies

DENVER REGIONAL COUNCIL OF GOVERNMENTS

COLORADO
Department of
Transportation

CITY OF LONGMONT COLORADO

Boulder County

Town of
MEAD Colorado

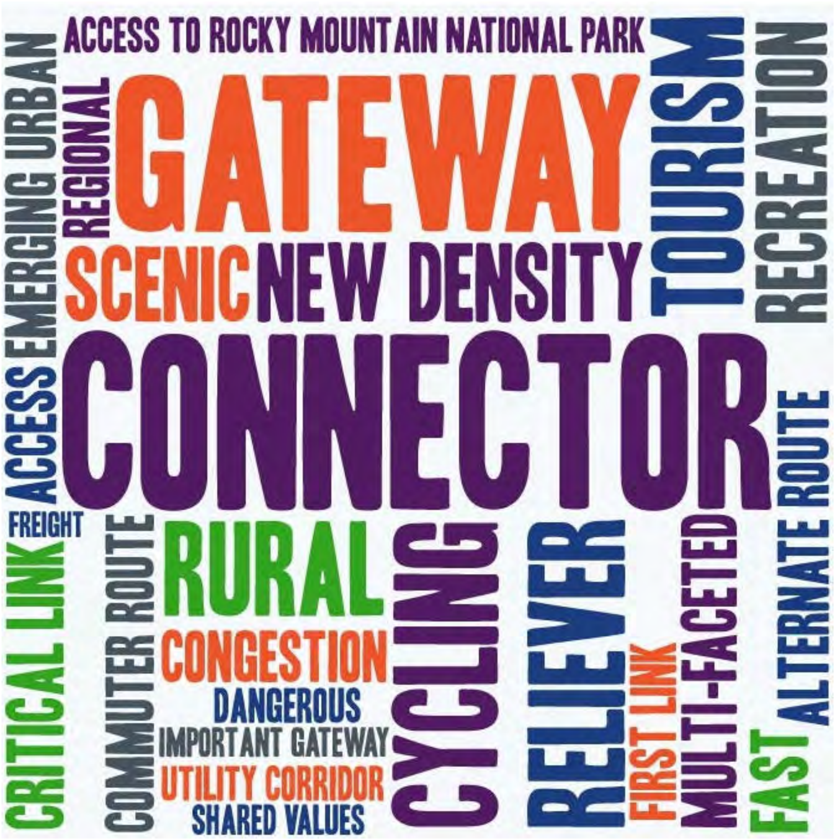
RTD

1861 WELD COUNTY

LYONS COLORADO

A COMMUNITY IN
FIRESTON
Colorado

Summaries


ACCESS TO ROCKY MOUNTAIN NATIONAL PARK
EMERGING URBAN
REGIONAL
GATEWAY
TOURISM
RECREATION
SCENIC
NEW DENSITY
ACCESS
CONNECTOR
FREIGHT
CRITICAL LINK
COMMUTER ROUTE
RURAL
CONGESTION
DANGEROUS
IMPORTANT GATEWAY
UTILITY CORRIDOR
SHARED VALUES
CYCLING
RELIEVER
FIRST LINK
MULTI-FACETED
FAST
ALTERNATE ROUTE


design
opportunities
accel/decel
Vrain
facilities
major
population
eastern
onto
Bus
Plan
adaptive
work
built
consider
route
new
City
open
west
path
high
school
today
crossing
traffic
improvements
safety
counts
needs
need
Look
BRT
transit
bicycles
Street
technologies
lane
lanes
east
link
bike
corridor
possible
section
Small
stations
Yes
lines
crossings
now
road
I-25
side
north
plans
capacity
influence
plan
space
access
trail
travel
support
urban
Hover
data
wants
years
roads
along
pedestrians
study
just
incorporate
portions
place
connection
railroad
intersections
Main
shoulders
construction
control
Karen
locals
regional

Major Themes

- **Gateway** | SH 66 is a primary gateway to, and through, multiple communities along the corridor
- **Connector** | SH 66 functions as a primary connecting route for many stakeholders
- **Alternate, Reliever Route** | As SH 119, US 36, US 287, and other regional routes become more congested, SH 66 has been used as a reliever or alternate route
- **Transit |** Transit was previously routed along SH 66. Transit improvements may be needed across SH 66 at US 287 for regional BRT
- **Cycling and Recreation |** SH 66 currently sees many commuting and recreational cyclists. Multiple stakeholders discussed the need for improvements along and across the highway

Major Themes

- **Access to Rocky Mountain National Park and Tourism** | SH 66 is a primary connection to Rocky Mountain National Park and Estes Park that is being more heavily used
- **New Development, Economic Opportunities** | SH 66, particularly in the municipal boundaries, is starting to experience new commercial and residential development adjacent to the corridor
- **Utility Corridor** | Major utilities are located in the right-of-way along SH 66
- **Access Control Plan |** An Access Control Plan is an anticipated and important outcome for many agencies

SH 66 Planning and Environmental Linkages Study

Small Group Sessions

Small Group Sessions

- Operations and mobility (Jim, Dave)

- Bicycle, pedestrian, and transit (Emma, Kelly)

- Access management and safety (Chris, Drew)

- Other (Jodie, Annette)

Questions to Discuss:

- *What are the biggest issues today?*
- *How will these change in the future?*
- *In an ideal world, what would SH 66 look like?*

Small Group Sessions

Questions to Discuss

- *What are the biggest issues today?*
- *How will these change in the future?*
- *In an ideal world, what would SH 66 look like?*

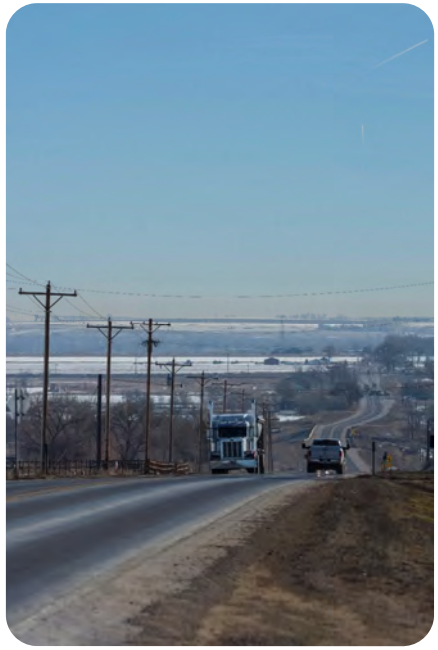
SH 66 Planning and Environmental Linkages Study

Report Out

Next Steps

- Purpose and Need Development
- TAC Meeting
  - 2040 Traffic Conditions
  - Draft Purpose and Need Statement
- Public Meetings
  - Information from the Corridor Conditions Report
  - Draft Purpose and Need Statement
  - Assistance to advertise
- Website: https://www.codot.gov/library/studies/co-66-pel

SH 66 Planning and Environmental Linkages Study



Thank You!

April 4, 2017

SH 66 Planning and Environmental Linkages Study

Visioning Workshop

Date and Time: April 4, 2017 | 3 p.m. to 5 p.m.
Location: Town of Mead | 441 3rd Street, Mead, Colorado 80542

Meeting Summary

The following is a summary of the presentation and discussion from the Visioning Workshop for the SH 66 Planning and Environmental Linkages (PEL) Study. The purpose of the workshop was to gather technical advisors and elected officials from each local agency to cast a vision and common purpose for the project and the corridor.

Introductions and Presentation

Alex Pulley (FHU) welcomed the attendees and thanked the Town of Mead for hosting the meeting. He initiated a round of introductions from all attendees. A sign-in sheet is attached.

Alex provided an overview presentation which included the workshop's agenda, the project study area, the project schedule, the project team, the structure of the project, and a discussion of a project charter. The presentation slides are attached.

The presentation included an update on the exiting data collection efforts including land use, the transportation system, and environmental resources. All of this information will be summarized in the Corridor Conditions Report. The draft report will be distributed to the TAC for review later in April.

Stakeholder Interviews Summary

Kelly Leadbetter (FHU) provided a summary of the stakeholder interviews. She presented word clouds to represent the most frequently used themes and words that the project team heard in the interviews. The bigger the word on the word cloud, the more times that word or theme was used (see presentation).

Major themes that were discovered from asking how stakeholders would describe SH 66 today included:

- Gateway
- Connector
- Cycling
- Recreational uses
- Rural characteristics
- Tourism

This information was used to establish the discussion topics for each visioning workshop table.

Small Group Sessions

Attendees were divided into four working sessions. Each group spent approximately 15 minutes discussing the following topics:

- Operations and mobility
- Bicycle, pedestrian, and transit
- Access management and safety
- Other (gateway, environmental resources, tourism, etc.)

Each 15 minute discussion focused on three main questions:

- What are the greatest challenges today?
- What are the greatest opportunities in the future?
- In an ideal world, what will SH 66 look like?

The following are highlights from the discussions for each topic.

Operations and Mobility

- Need to consider the impacts of multiple accesses and traffic signals upon mobility
- SH 66 is becoming a major east-west facility
- Need to consider that the goals of the corridor—east and west of I-25 are different
- How to blend mobility and gateway concepts
- There is a need for four lanes on SH 66 in certain locations, such as from US 287 to Hover St
- Need to consider adding turn lanes and capacity at certain intersections
- There is a need to get traffic to the Diagonal Highway (SH 119) quicker
- Site distance issues just west of WCR 17 is insufficient
- SH 66 is a high-speed corridor and the speed limit needs to be considered and potentially adjusted for a mix of modes
- Need to consider the higher truck traffic east of I-25 that serves oil & gas and sand & gravel operations
- Consider all options for intersections, such as grade-separation and roundabouts
- Traffic signals and poor timing create congestion along the corridor; need to consider coordinated/smart signals

Bicycle, Pedestrian, and Transit

- The corridor is currently dangerous for cyclists and pedestrians
- Larger shoulder and multi-use paths are needed for bicycle and pedestrian accommodation

- Strategic mobility hubs should be evaluated throughout the corridor such as at SH 66 and US 287 in Longmont
- The cleanliness of the shoulders is a challenge for cyclists
- There is a growing need for bicycle facilities along the east side of the corridor
- Firestone is building a bike path along the old UPRR railroad land along the St. Vrain River
- Safely crossing SH 66 is a challenge for bicyclists and pedestrians
- Sidewalks are needed within the communities but potentially not needed in the rural areas, if regional multi-use trails are available
- Safe crossings at intersections, or grade-separated, are needed for active transportation uses
- In order for transit service to work, it would need to be reliable, perhaps with a bus-only lane

Access Management and Safety

- The intersection of WCR 7 and SH 66: high speed environment and high school students crossing the highway—creates an unsafe condition
- Bicycle safety is a major concern along the corridor; specifically at the US 36 and SH 66 intersection and between US 36 and Lyons
- Need for more grade-separated pedestrian and bicycling access for safe crossings of SH 66; a future regional trail underpass is planned on the former UPRR rail line
- Access challenges between I-25 and WCR 9.5
- Consider the future needs of transit such as accel/decel/stopping areas for buses
- There is a desire to strategically and safely consolidate access along the corridor
- Roundabouts could be considered to improve intersections
- Extreme fog poses a safety concern between WCR 17 and I-25

Community Values, Environmental Resources, and Other Considerations

- Consider wildlife crossings or warnings
- Seek balance between parks/rural character and developed/urban character
- Rural character is valued on the east and west side, with heavy focus on recreation and wildlife in western portions and oil and gas production in eastern portions; agricultural uses are scattered throughout the corridor
- Proactive maintenance of floodplains and streams is needed with a focus on resiliency of infrastructure and SH 66 as an evacuation route
- Aesthetic consistency along the corridor is desired, with individual gateway features to represent each community
- Include underpasses and overpasses to give neighborhoods continuity north and south of the corridor
- Consider an IGA that addresses topics such as maintenance needs, enforcement, billboards, signage, consistent highway name
- New development east of I-25 (in Firestone) is changing the character of the corridor
- Truck traffic along the corridor is a result of industries, such as the oil and gas
- Should the highway be branded or named to create an identity?

Appendix G. Public Involvement Summary

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Appendix G-1: April 2017 Open Houses

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SH 66 Planning and Environmental Linkages Study

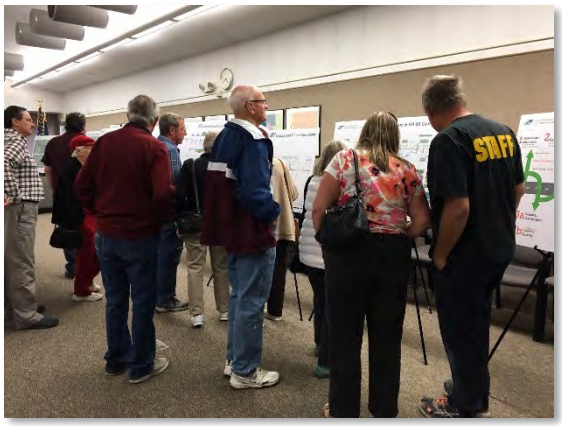
Summary of April 2017 Public Meetings

Meeting Details

Two public open house meetings were held in April 2017 for the SH 66 PEL:

- Tuesday, April 25th | 4:30 p.m. to 7:30 p.m.
  Weld County Southwest Services Building
  4209 County Rd 24 1/2, Longmont, CO 80504
- Wednesday, April 26th | 4:30 p.m. to 7:30 p.m.
  Longs Peak Middle School
  1500 14th Avenue, Longmont, CO 80501

Approximately 50 members from the public attended. Sign in sheets from each public meeting are attached to this summary.

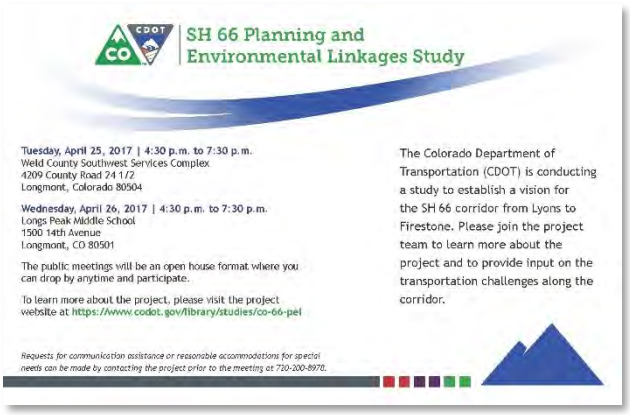


Meeting Purposes

The purposes of the meeting included:

- Informing the public of the purpose of a PEL, the project's schedule and expectations
- Presenting existing condition information and receiving feedback from the public
- Presenting the project's purpose and need and receiving feedback from the public

Advertisement


SH 66 Planning and Environmental Linkages Study

Tuesday, April 25, 2017 | 4:30 p.m. to 7:30 p.m.
Weld County Southwest Services Complex
4209 County Road 24 1/2
Longmont, Colorado 80504

Wednesday, April 26, 2017 | 4:30 p.m. to 7:30 p.m.
Longs Peak Middle School
1500 14th Avenue
Longmont, CO 80501

The public meetings will be an open house format where you can drop by anytime and participate.

To learn more about the project, please visit the project website at https://www.codot.gov/library/studies/co-66-pel

The Colorado Department of Transportation (CDOT) is conducting a study to establish a vision for the SH 66 corridor from Lyons to Firestone. Please join the project team to learn more about the project and to provide input on the transportation challenges along the corridor.

Requests for communication assistance or reasonable accommodations for special needs can be made by contacting the project prior to the meeting at 720-200-8970.

The public meetings were advertised via CDOT's website, a CDOT press release, and distributed via email to the Technical Advisory Committee (TAC) and Executive Committee (EC). The TAC was encouraged to promote the meeting through their community's communications. The meeting details were included in Longmont's Monday's City Line, in the Times-Call, in "This Week in Longmont - April 21, 2017", and on Longmont's Facebook and Twitter accounts.

Meeting Approach

The public meetings were open house format where the public could drop by anytime to discuss the study with the project team, learn about current corridor conditions and provide input on the transportation problems and potential solutions. The same information was provided at both meetings.

The public meetings included the following areas:

- Sign In and Welcome
- PEL Overview
- Purpose and Need
- Transportation Inventory and Analysis
- Environmental Inventory and Analysis
- Base maps for comments
- Comment forms and questionnaires

The meeting boards and digital displays are attached.

Overview of Public Comments

Input from the public was obtained through 1) discussions with the project team, 2) written notes on the community boards, and 3) questionnaires/comment sheets.

The input received from the public during the open house meetings and online through the SH 66 PEL webpage on CDOT's website ranges widely from general commentary related to the problems along the corridor to location-specific problems. Many members of the public have provided ideas on transportation improvements to consider through the PEL process including both spot improvements (e.g., intersection improvements, turn lane additions) and visionary changes for the entire corridor.

Questionnaire Results

Questionnaires were completed by 31 attendees. The results are summarized by question below.

Q1a: What three words would you use to describe SH 66 today?

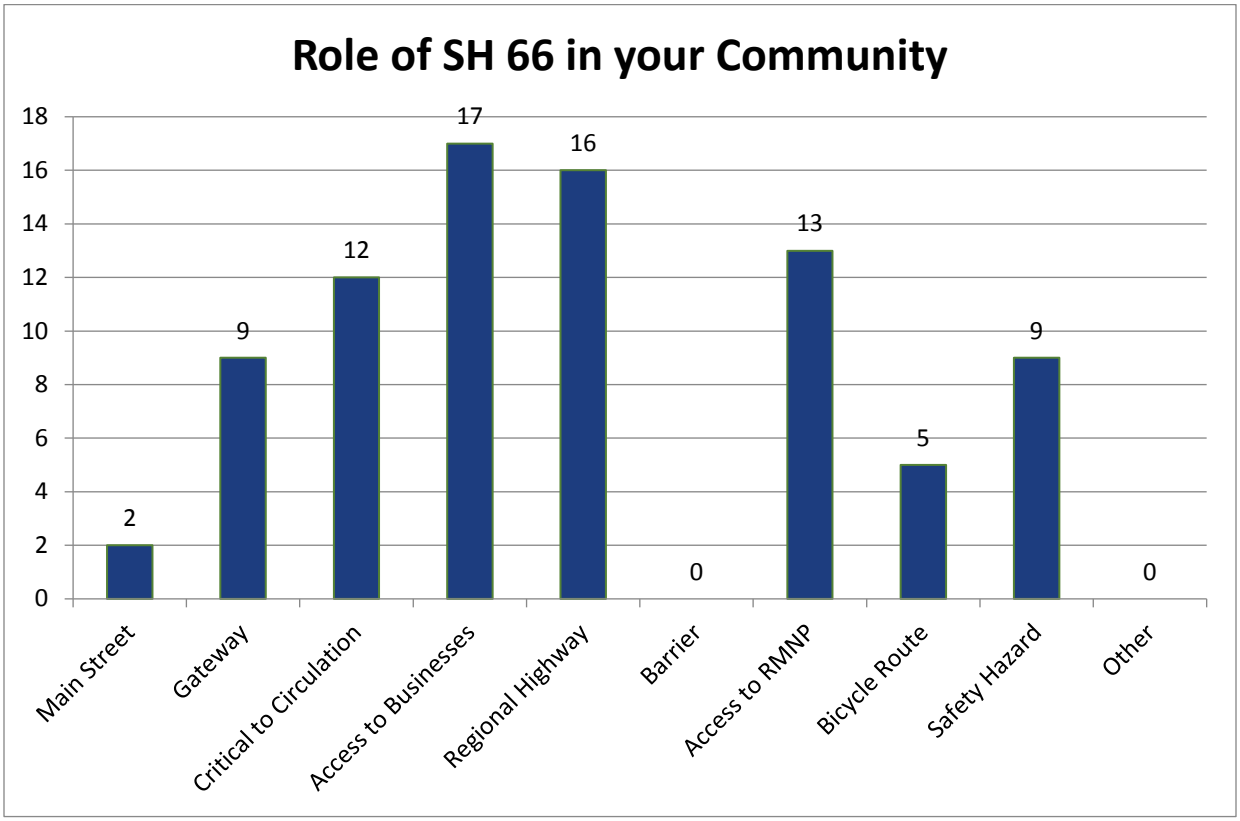
The following word cloud summarizes the most frequently used words. The graphic scales the size of the word relative to how frequently the word was mentioned in the comments.

Q1b: Please describe why you chose those words.

Highlighted responses:

- Due to high rate of speed and volume it is dangerous trying to make left or right turns.
- A wall is needed to protect the residences/people from the noisy/unsafe things that happen on SH 66. The wall is needed from Hover to Pratt for the homes that back up to SH 66.
- The road is not always congested but when it is, it is unmanageable.
- Too difficult to get off SH 66 where there are no lights or turn lanes.
- SH 66 is a critical regional corridor, but seems to be in need of having its ability to carry traffic volume improved.

Q2: How would you categorize the role of SH 66 through your community? (Select the three that you think are the most fitting.)



Q3: What are your top concerns regarding travel on SH 66? (Rank the order with 1 being your highest concern and 6 being your lowest concern)

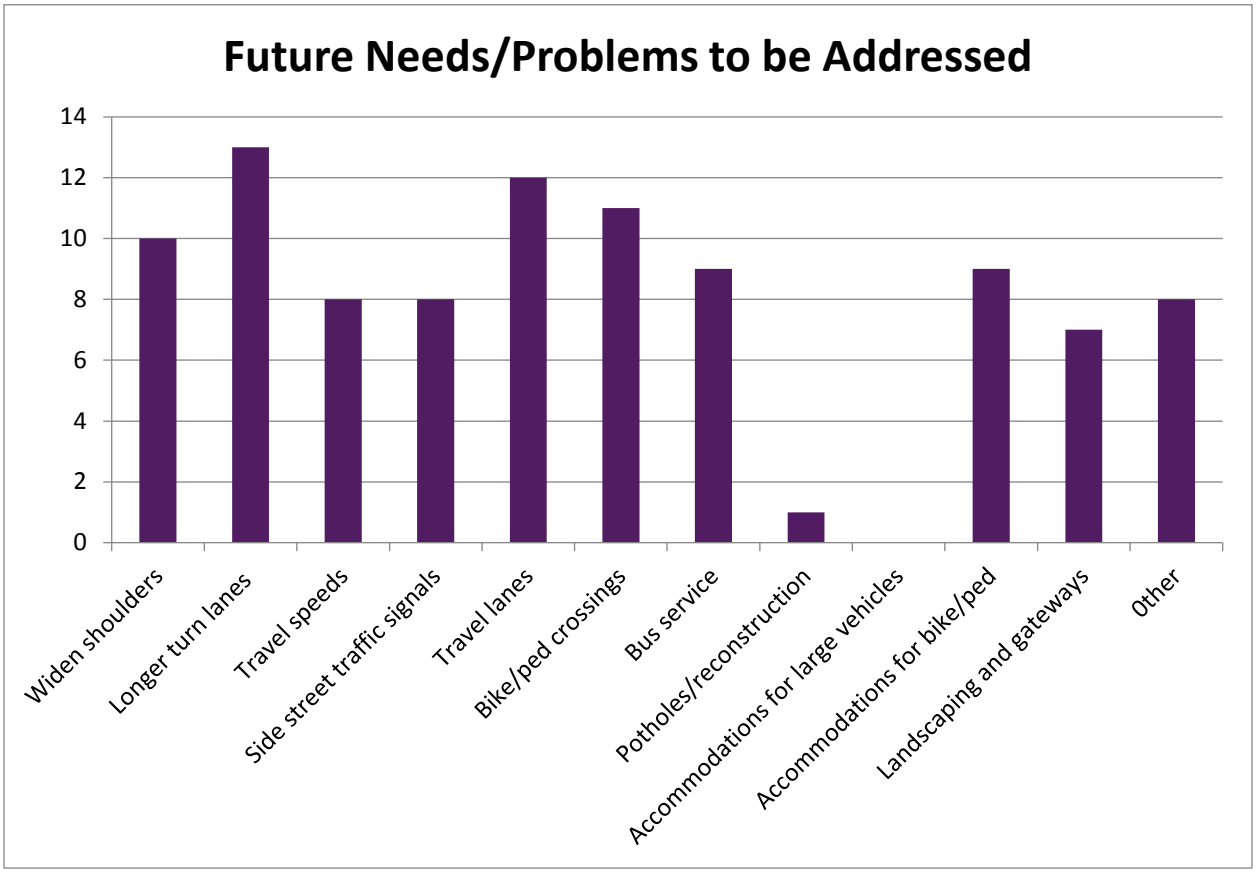
Top concerns, averaged:

1. Difficult or dangerous to get onto and off of SH 66
2. Safety
3. Too much traffic

4. High speeds
5. Dangerous for cyclist and pedestrians
6. Too many traffic signals

Q4. What immediate and future transportation needs/problems should be addressed through this study? (Check all that apply.)

Attendees emphasized the need for more/long turn lanes and accommodating bicycles and pedestrians with crossings. Attendees also emphasized the need to improve travel times with travel lanes.



Q5. What specific alternatives, options, or solutions should to be considered/studied and why?

Highlighted responses:

- Center turn lane for subdivisions.
- Traffic concerns need to cover all areas of rural, city, bicycle and pedestrian traffic equally and with equal options for access along the entire route.
- Slower speed between I-25 and US 287.
- Continue study all the way to US 85.
- The large population increase in CO has been a double-edged sword; adding lanes might worsen conditions faster as developers build along the corridor. I do not envy the challenges ahead for you!

- Removing multiple private accesses to SH 66.
- Medians may be helpful for keeping left turn lanes more obvious.
- Do not use 66 as a corridor for businesses, only residents, farms, bicycles and pedestrians.
- I feel for the ranchettes and large acreage residences (esp. north of SH 66 near Lyons). Can the "exit" lanes coexist with the bike/ped lanes? Can they be extra wide in these areas?
- As a gateway to Longmont, landscaping at intersection of Pace and SH 66 could be improved. Particularly as this intersection builds out in the future.
- Sound barrier walls for homes that back up to 66.
- Incentives for bus riders/carpools.

Q6. Please describe where you live/work/travel most frequently on the SH 66 corridor?

Highlighted responses:

- Between 287 and I-25.
- Longmont.
- In and out to Hwy 66 from Elmore Road; need center turn lane there.
- I live west of Hover/66th and the traffic can be brutal on the corridor, specifically on the weekends during the summer.
- Between I-25 and Lyons.
- Live at Gay and SH 66. Back up to SH 66 the traffic noise is unbearable.
- I live close to US 287 and SH 66 and going east after work is a joke for congestion and safety from irritated drivers.

Q7. Please provide any other comments.

- Continue PEL study to Platteville to connect to US 85 PEL.
- My bedroom is 30 feet from the cars on SH 66, I feel lucky every day I wake up and a car or truck has not come through my house!
- Widening SH 66 will bring pollution, more traffic, accidents, noise, and lower property values. We need to stop paving roads and keep what we have. Limit growth and keep the air clean. SH 66 is actually a very scenic drive. If you make it 4 lanes you will lose the ambiance that identifies this area as Longmont. Growth needs to be limited!
- The notification-publicity of this project to the affected communities was very limited. I found out by accident. Put in newspaper? Utility bills?
- Long range, SH 66 must be widened in addition to other things mentioned. Your study is a good start, you have done a great job with your display. Thank you!
- If possible, see if CDOT and the City of Longmont can work together to improve Longmont's greenway/bicycle circulation system where possible.

A spreadsheet of all of the responses will be provided to the project's Technical Advisory Committee (TAC) for review.

Welcome
to the
SH 66
Planning and Environmental Linkages Study
Public Meeting
APRIL 25 & 26, 2017

Thank you for attending! We are pleased you are here to hear more about the SH 66 Corridor! We are eager to hear your ideas to help shape the future vision for the corridor!
How to get the most out of this meeting:

- View the displays and talk with our project team members to learn more and share your ideas
- Participate in the interactive activities
- Fill out a project comment card and drop it in the box

COLORADO
Department of Transportation

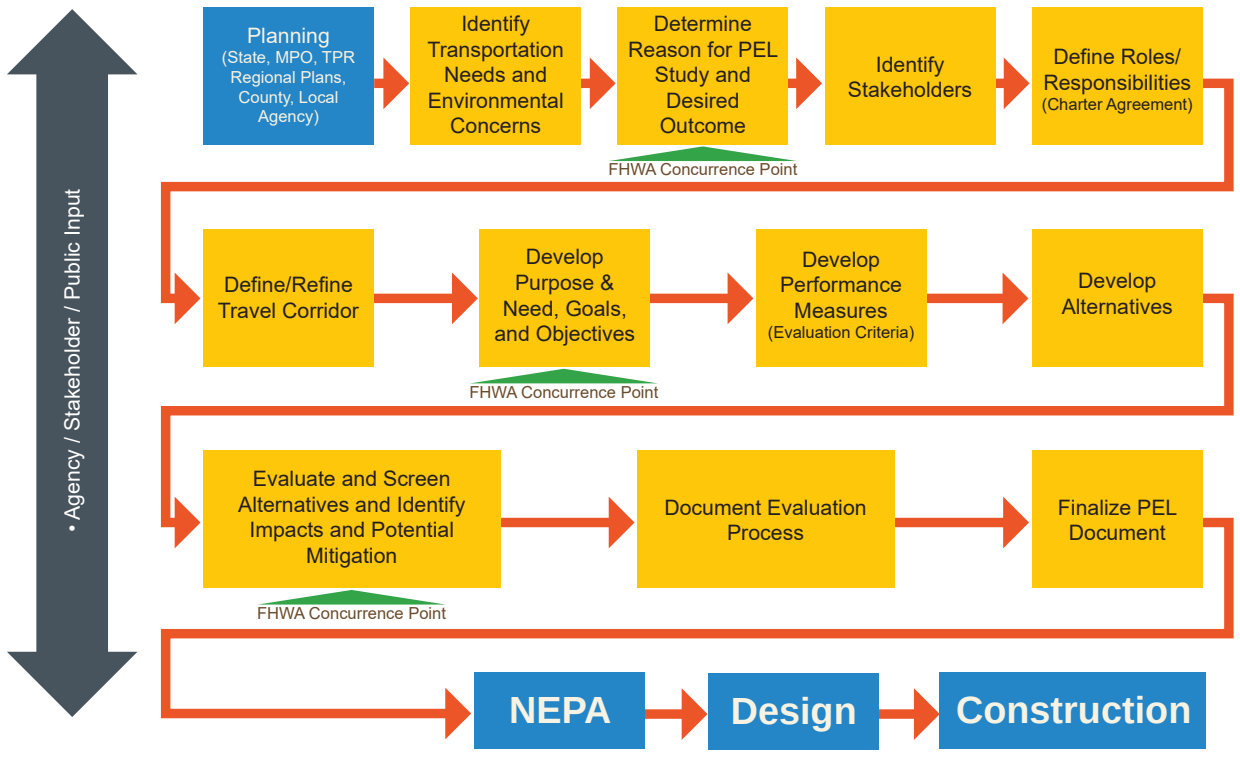
SH 66 Planning and Environmental Linkages Study

What is a PEL?

A Planning and Environmental Linkages (PEL) study is an approach to transportation decision-making that considers community, environmental and economic goals early in the planning stage and carry them through project development, design, and construction.

A PEL Study:

- Identifies transportation issues and environmental concerns
- Defines a clear purpose and need
- Results in useful information that can be carried forward into the National Environmental Policy Act (NEPA) process



Project Purpose and Need

The SH 66 PEL will identify existing conditions, anticipated problem areas, safety, and operational needs to determine the short-term and long-term transportation priorities.

Purpose The purpose of transportation improvements along the SH 66 corridor is to improve safety, reduce existing and future traffic congestion, provide efficient access for existing and future development, and improve mobility and connectivity for all transportation modes that match the context of the adjacent communities.

Needs

SAFETY PROBLEM The corridor has experienced a number of safety concerns.

VEHICULAR Several intersection and mainline locations along the SH 66 corridor have a high number of crashes, when compared to other similar roadways.

BICYCLE Areas along the corridor have experienced bicycle safety concerns, from recorded incidents, physical characteristics, and cross-street connections.

PEDESTRIAN There are a number of pedestrian destinations in the corridor, which do not have sidewalks connecting them and can cause unsafe pedestrian movements.

MOBILITY PROBLEM The movement of people, goods, and services along the corridor has resulted in a number of mobility problems that can be rooted in various transportation modes.

VEHICULAR Traffic congestion, inadequate intersections that fail to accommodate users' needs, highway design, and unreliable travel times substantially impact the ability of people to move across and along the corridor.

BICYCLE A majority of the SH 66 corridor is a heavily utilized for bicycles (recreational, commuter, and events). There are many areas of the corridor that have insufficient shoulders that can accommodate bicycles or non-advanced riders.

PEDESTRIAN There are a number of pedestrian destinations in the corridor, many of which do not have sidewalks between the destinations.

TRANSIT Transit service in the corridor is primarily focused on north-south connections and not local east-west service. There is currently a non-continuous connection of transit service providers in the corridor.

ACCESS PROBLEM The current number, locations, and design of public roadway accesses have contributed to traffic operational and safety deficiencies along the corridor. There are individual private driveways, business accesses directly onto SH 66, and inconsistent access spacing, which leads to mobility and safety problems.

15-255 04.25.2017

SH 66 Planning and Environmental Linkages Study

Process Flowchart

PEL

NEPA/Design

Implementation

Subsequent Steps

1 Stakeholder Interviews

Visioning Workshop
Sections/Constraints/Goals

2 Data Collection

Current Demand
Future Demand (information from stakeholders & visioning)

Purpose & Need

FHWA CONCURRENCE POINT

Public Meeting *TODAY

3a Roadway Classification

3b Roadway Capacity

JULY 2017

4 Intersection Alternatives

5 Screen Alternatives

WINTER 2017

Choose alternatives that best fit the current and future transportation system, current surrounding land use and future land use context

Evaluate environmental impacts/constraints

FHWA CONCURRENCE POINT

Public Meeting

6 Prioritization

EARLY 2018

7 Documentation

MID 2018

PEL Questionaire
Summary Sheets

FHWA CONCURRENCE POINT

8 ACP Development

MID 2018

9 Preserve Right-of-Way

10 Identify Funding, Conduct NEPA Analysis

11 Design, Construction

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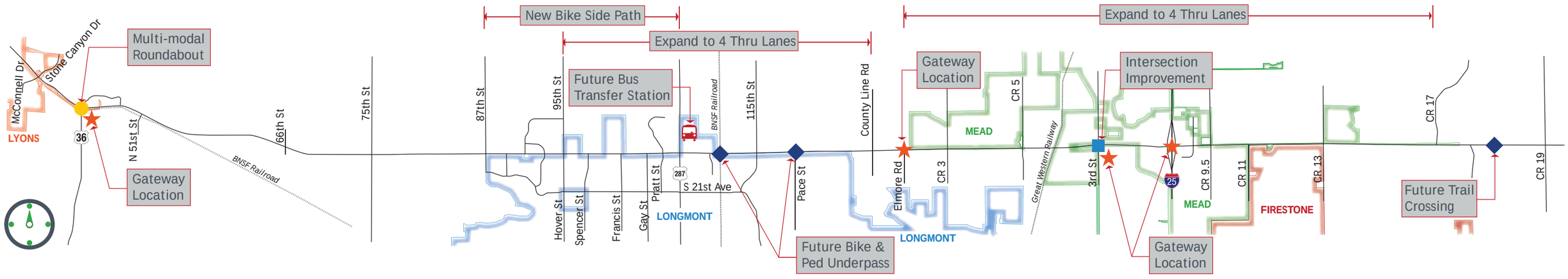
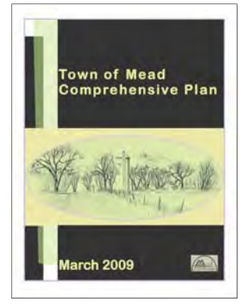
SH 66 Planning and Environmental Linkages Study

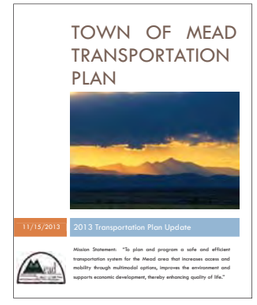
Planning Context & SH 66 Community Values

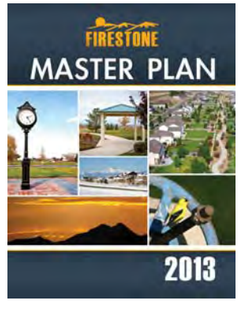


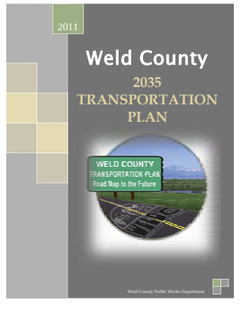
Existing Plans Reviewed in the Context of SH 66 PEL

Town of Lyons Primary Planning Area Master Plan (2016)
Town of Lyons Comprehensive Plan (2010)
City of Longmont Envision Longmont (2015)
Town of Mead Comprehensive Plan (2009)
Town of Mead Transportation Plan (2013)
Carbon Valley Transit Service Feasibility Study (2011)
Firestone Master Plan (2013)
Boulder County Transportation Master Plan (2011)
Boulder County Mountain Town Transit Feasibility Study (2011)
Weld County Transportation Plan (2011)
DRCOG Metro Vision Plan (2017)
CDOT North I-25 Environmental Impact Statement (2011)
Saint Vrain Trail Master Plan (2004)



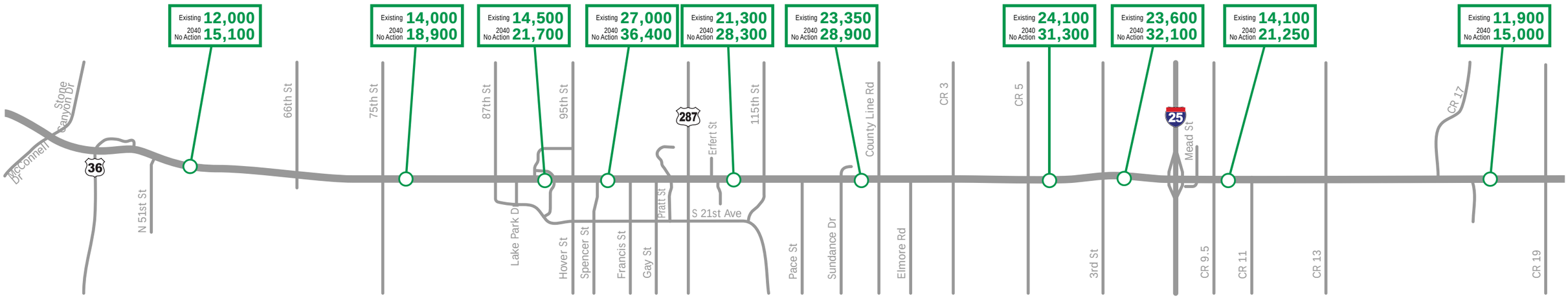






Existing and Future Operations

AVERAGE DAILY TRAFFIC
Both Directions of Travel

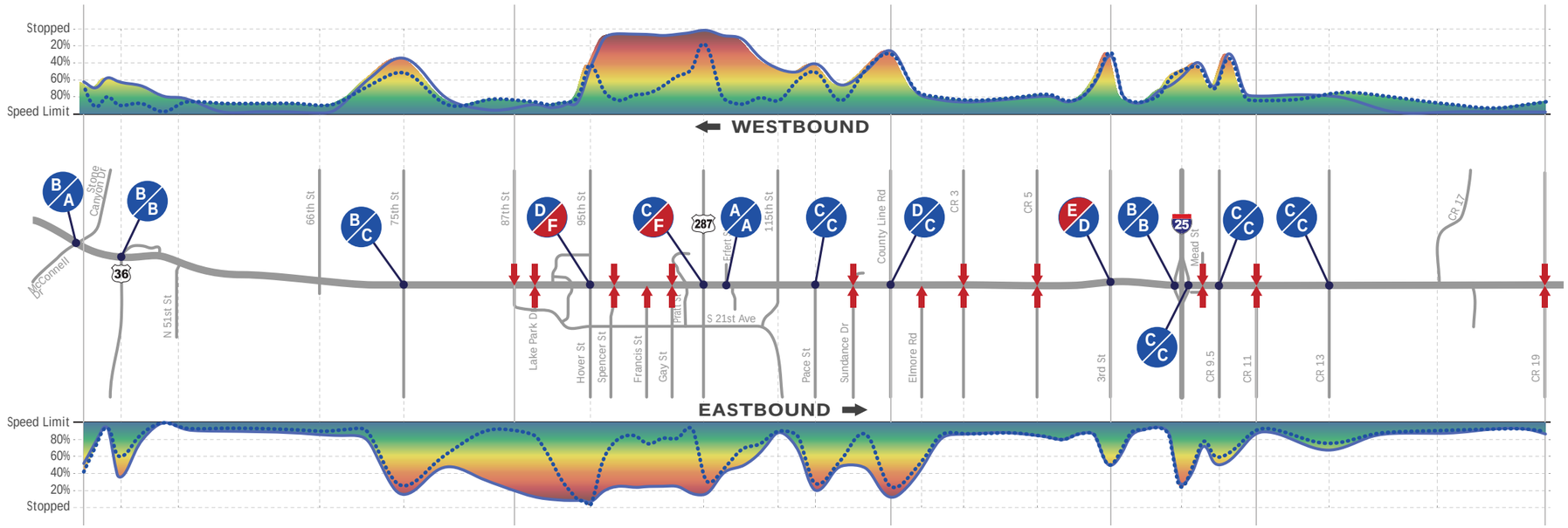


15-255 04.25.2017

SH 66 Planning and Environmental Linkages Study

Existing and Future Operations

LEVEL OF SERVICE
Existing



LEGEND

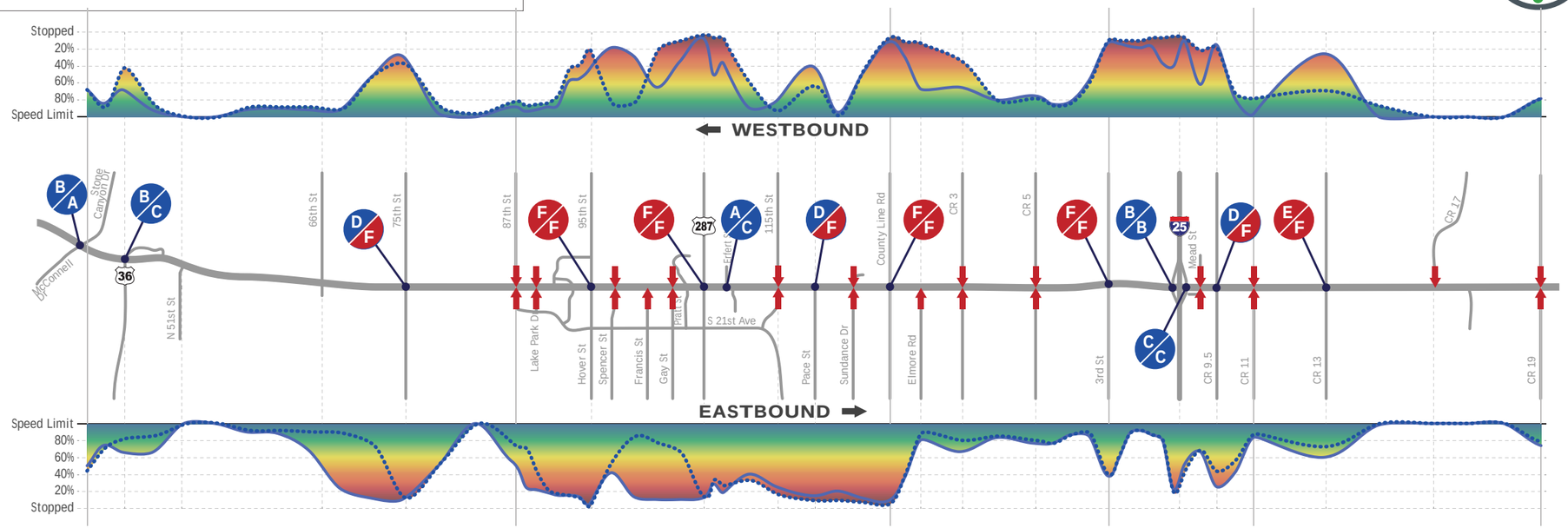
X/X = AM/PM Signalized Intersection LOS

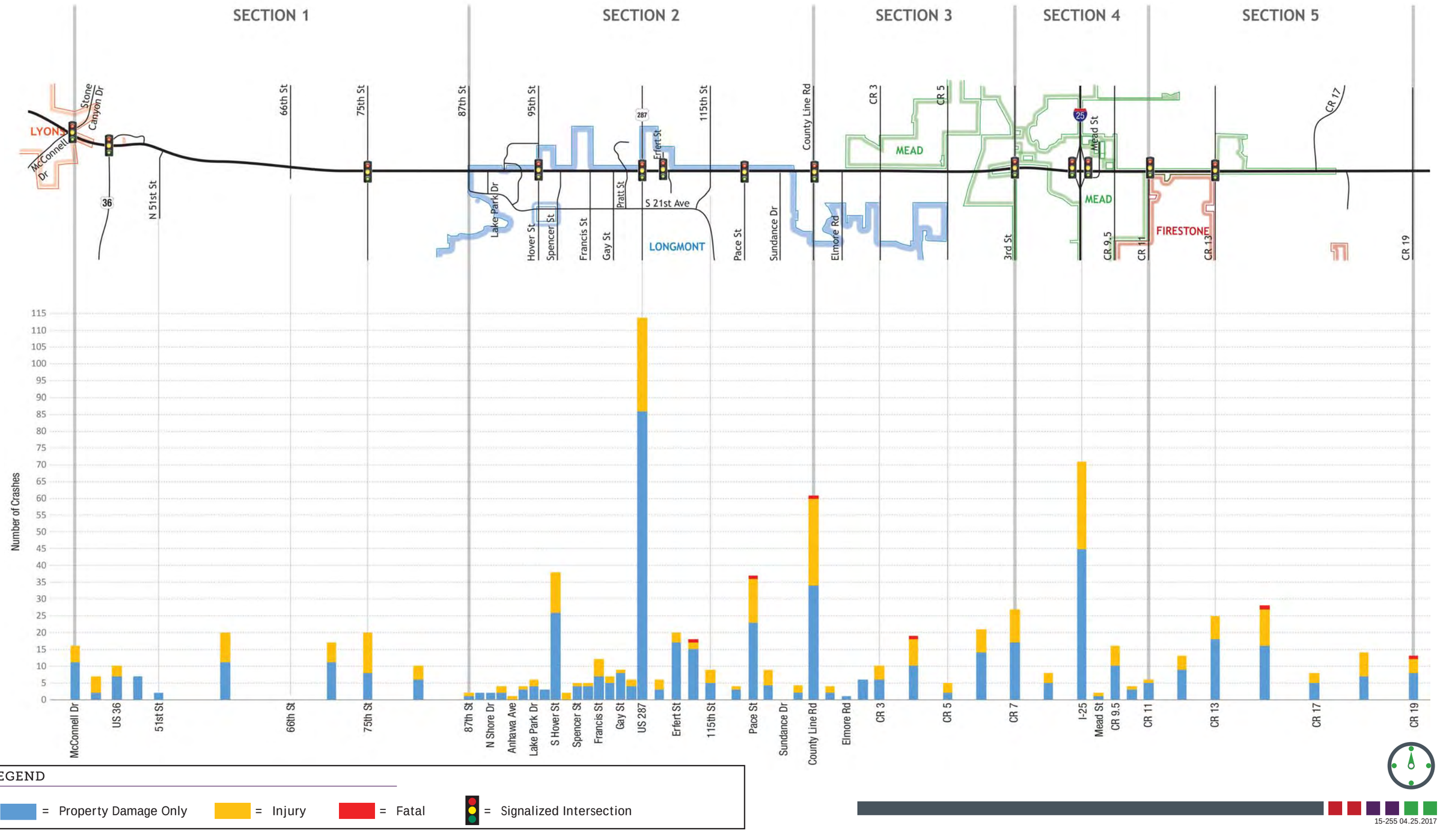
= Stop Controlled approach with LOS of E or F

AM Peak Hour

PM Peak Hour

LEVEL OF SERVICE
2040 No Action





LEGEND

= Property Damage Only = Injury = Fatal = Signalized Intersection

SH 66 Planning and Environmental Linkages Study

Existing Transit

SH 66 West of County Line Road is within the RTD service boundary.

LYONS

36

McConnell Dr

Stone Canyon Dr

N 51st St

BNSF Railroad

66th St

75th St

87th St

95th St

Hover St

Spencer St

Francis St

Gay St

Pratt St

23rd Ave

S 21st Ave

287

LONGMONT

BNSF Railroad

115th St

Pace St

MATCHLINE

LEGEND

Route

- Y
- 323
- 324
- FLEX
- 326
- 327
- LX
- LNX
- J, L (express trips), LSX, BOLT
- Bustang
- Select Trips
- Bus Stop
- RTD ParknRide & FLEX Bus Stop
- RTD Boundary

MATCHLINE

County Line Rd

Elmore Rd

CR 3

CR 5

Great Western Railway

3rd St

25

MEAD

CR 9.5

CR 11

FIRESTONE

CR 13

CR 17

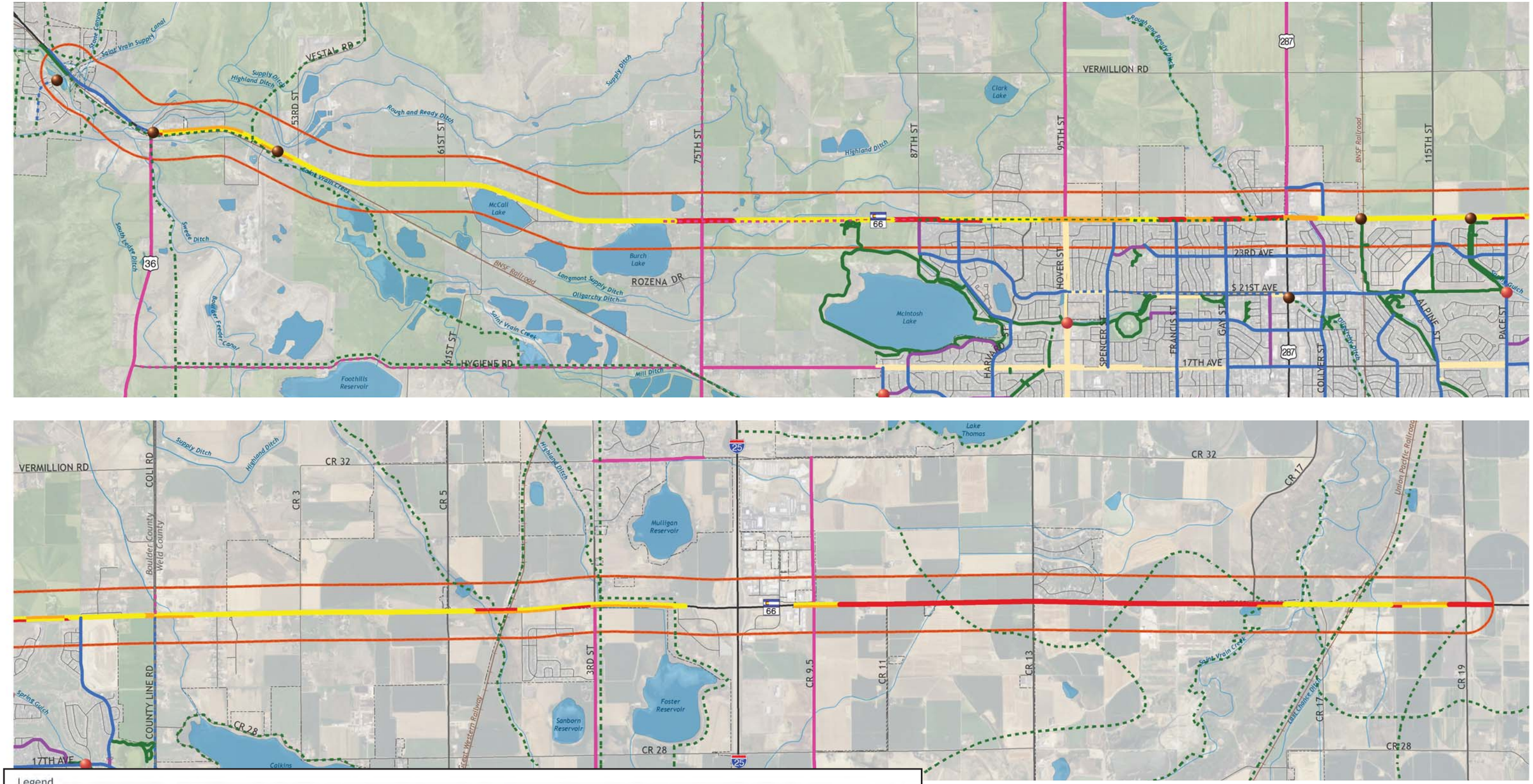
CR 19

LONGMONT

15-255 04.25.2017

SH 66 Planning and Environmental Linkages Study

Existing and Planned Bike Network



Legend

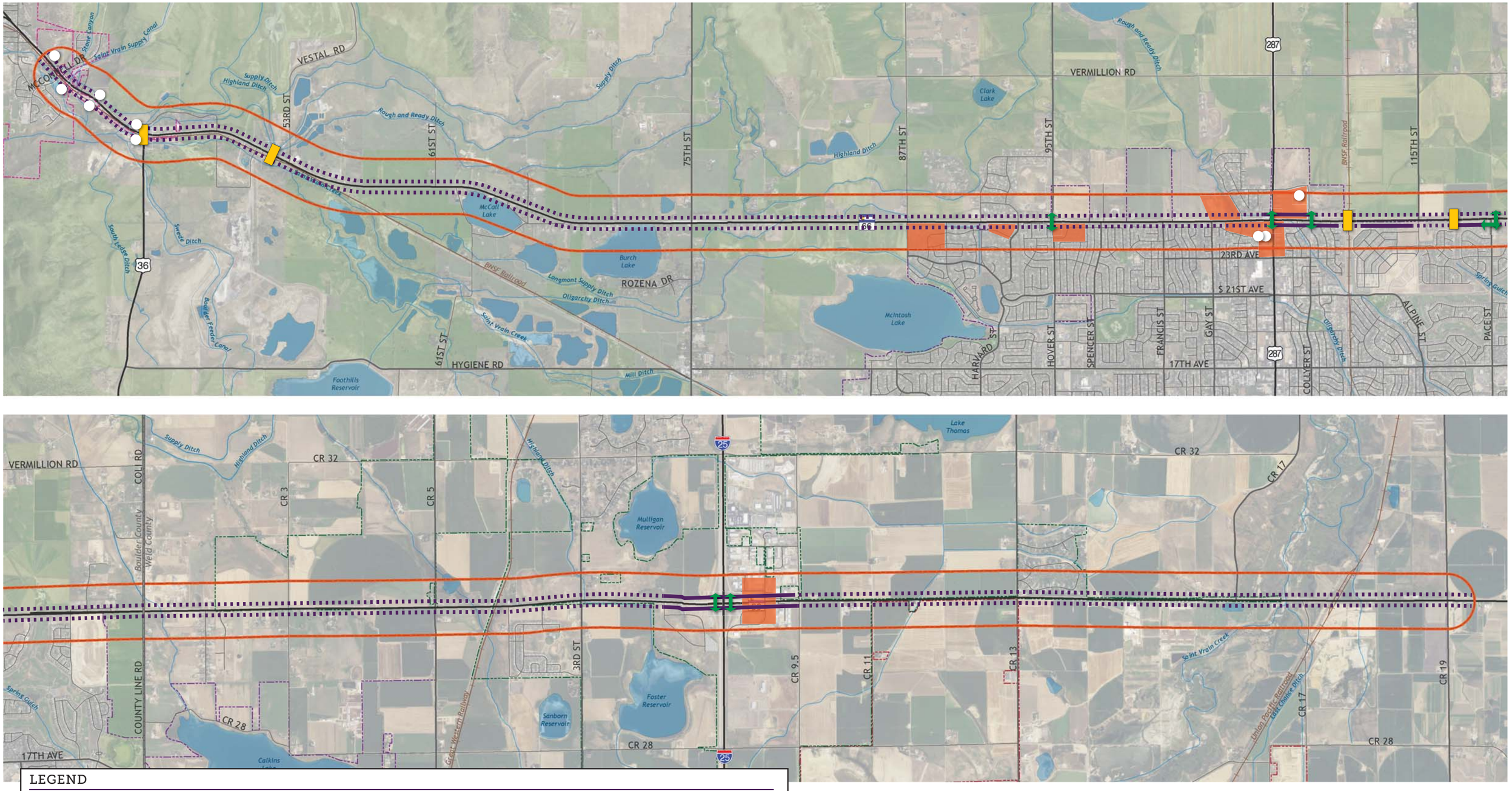
Grade-Separated Crossing
- Existing
- Proposed

Bicycle Facilities
- Existing Multi-Use Trail
- Proposed Multi-Use Trail
- Existing Bike Lanes
- Proposed Bike Lane
- Existing Bike Route
- Existing Sidewalk Route
- Paved Shoulder 10+ Feet
- Paved Shoulder 5+ Feet
- Paved Shoulder <5 Feet
- Other Paved Shoulder
- Railroad
- Rivers/Streams
- Lakes/Reservoirs
- Parks & Open Space
- City Boundaries
- Study Area

15-255 04.25.2017

SH 66 Planning and Environmental Linkages Study

Pedestrian Facilities



LEGEND

- = No Sidewalk
- = Existing Sidewalk
- = Proposed Grade Separated Crossing
- = Bus Stop
- = Pedestrian Intersection Crossing
- = Pedestrian Destinations (includes commercial areas, public facilities, & multifamily housing)

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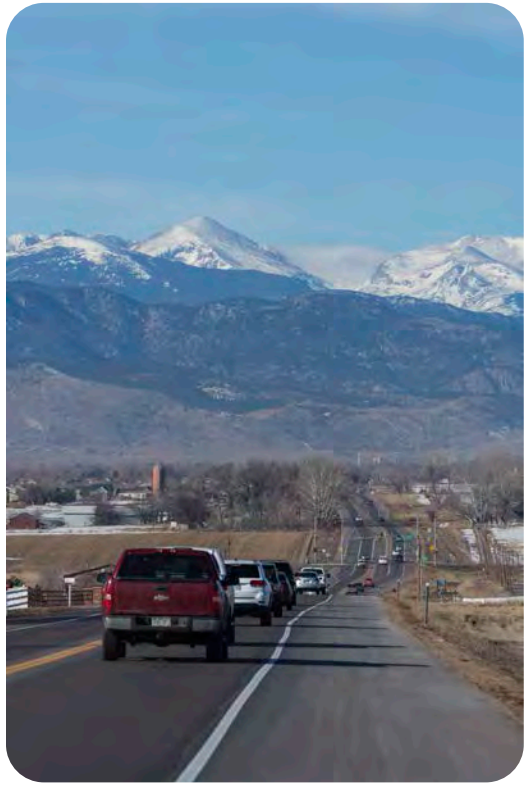
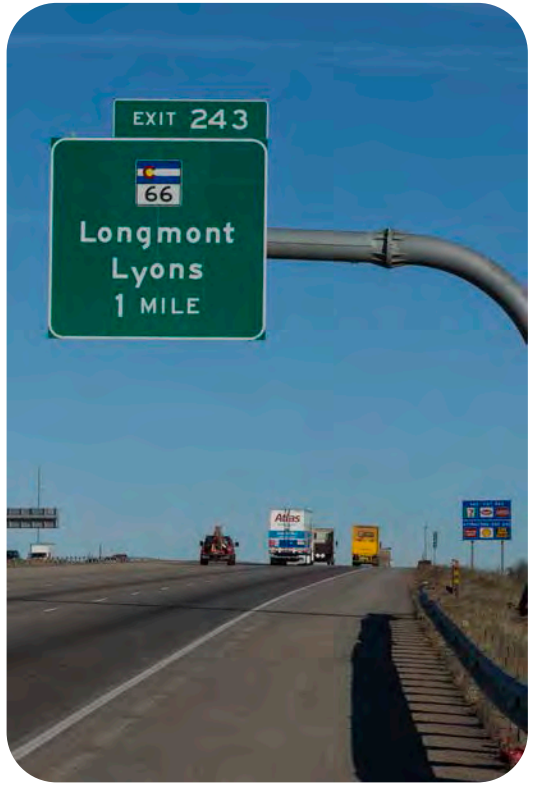
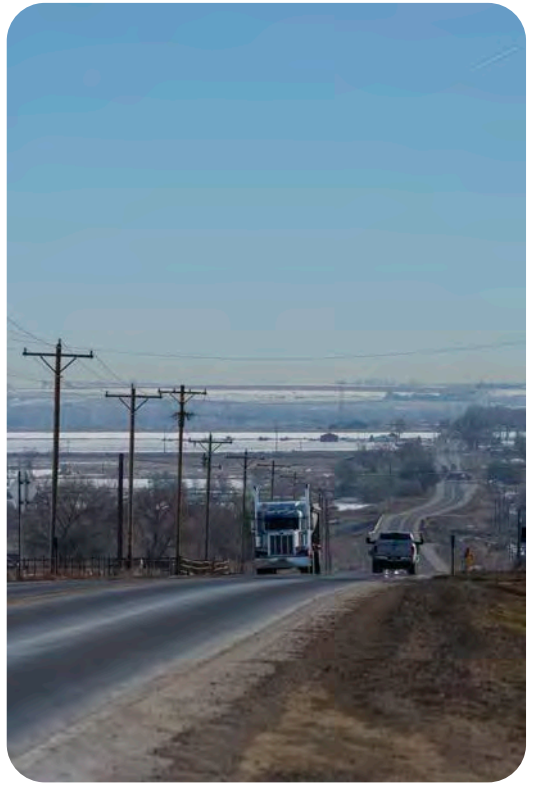
SH 66 Planning and Environmental Linkages Study



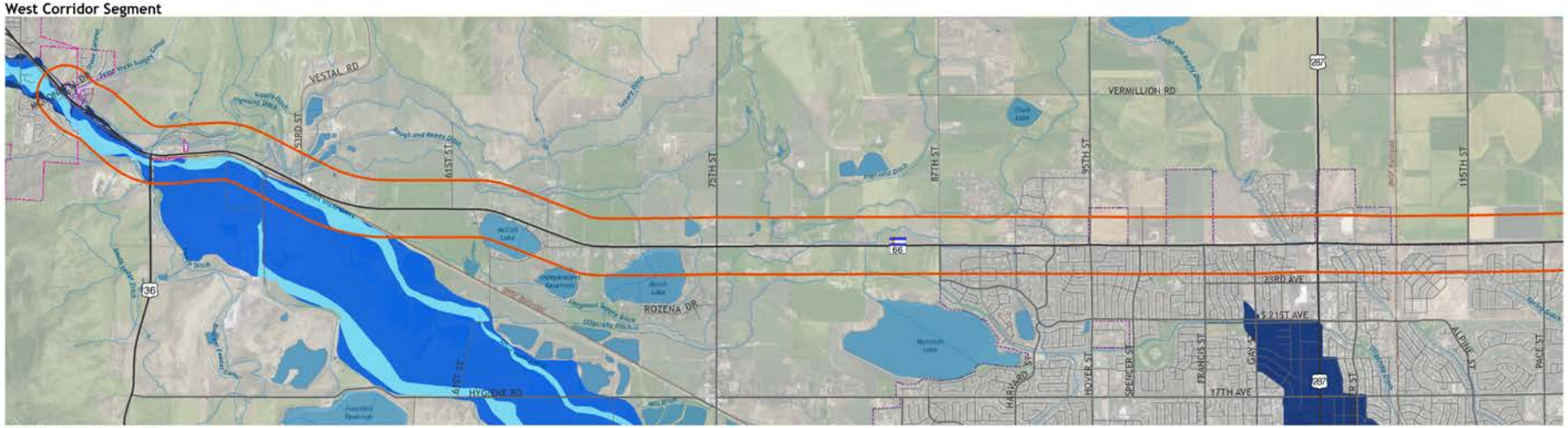




Environmental Resources and Other Context

Existing Floodplains and Floodways

West Corridor Segment



East Corridor Segment

Legend

- U.S./State Highway
- Major Roads
- Local Roads
- Railroad
- Rivers/Streams
- Lakes/Reservoirs
- Floodway
- 100-Year Floodplain
- 500-Year Floodplain
- County Boundary
- Study Area
- Town Of Firestone
- City Of Longmont
- Town Of Lyons
- Town Of Mead

NORTH

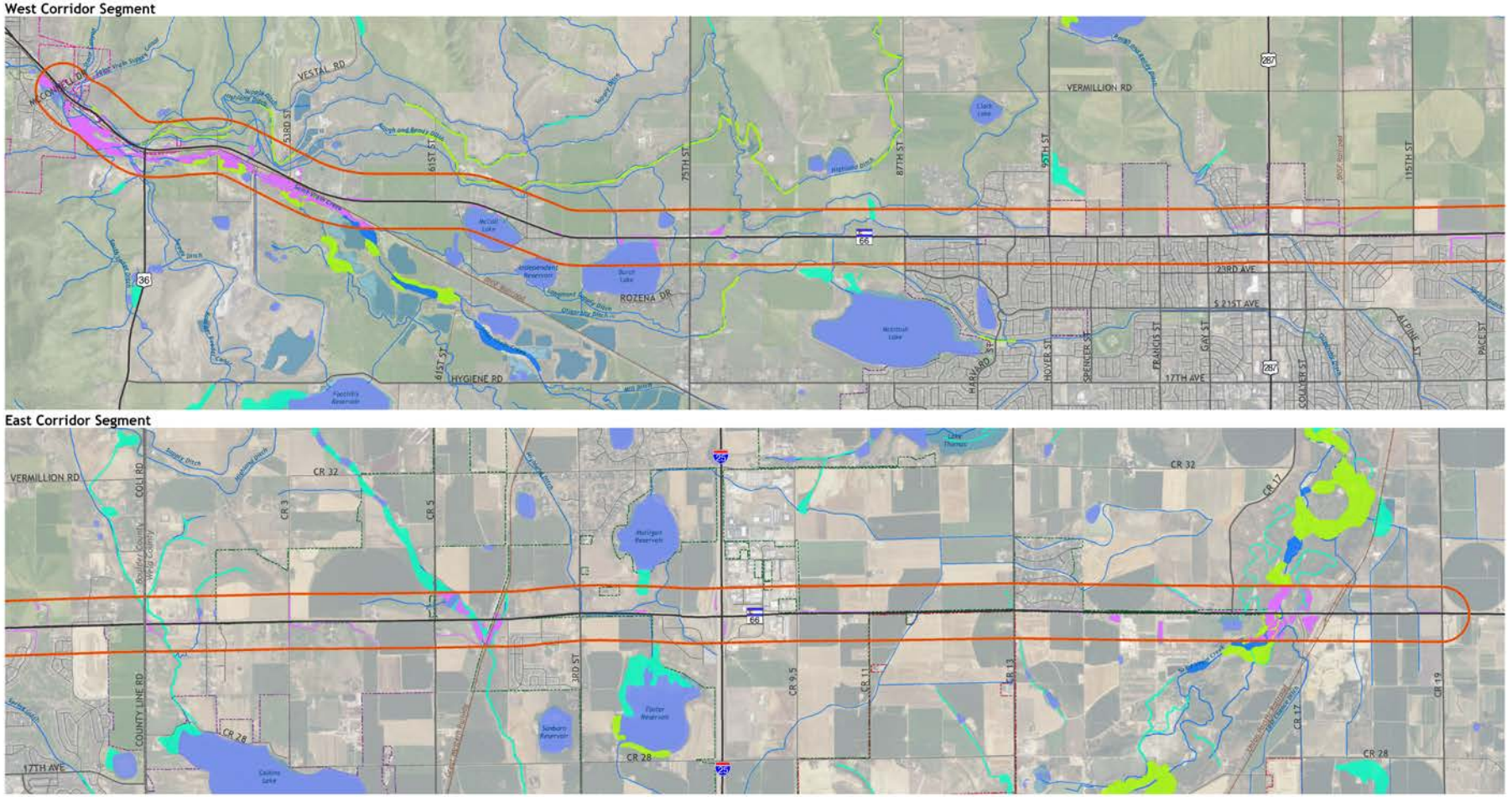
0 0.5 1 Miles

SH 66 Planning and Environmental Linkages Study

Existing Wetlands and Waters of the US

West Corridor Segment

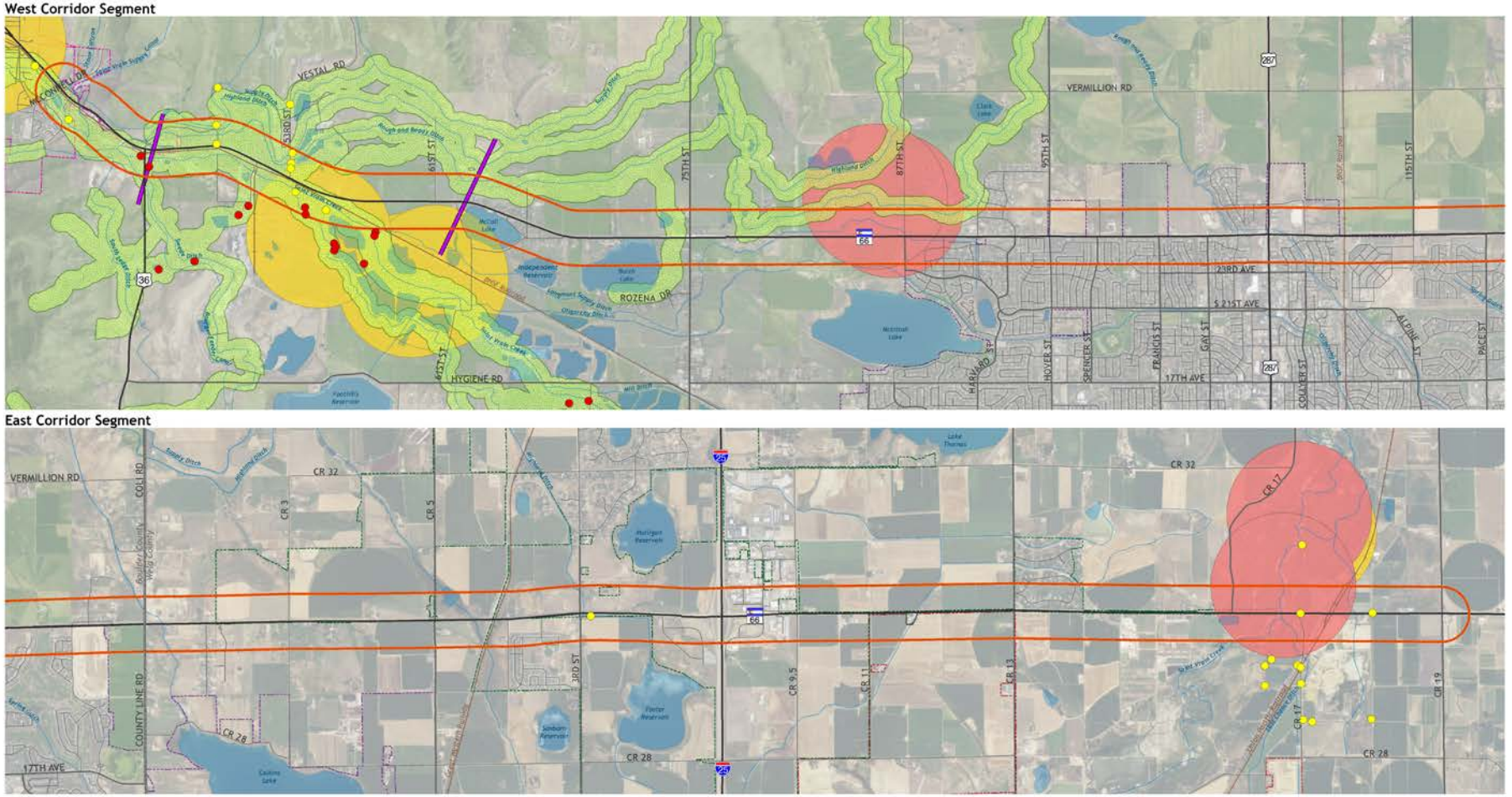
East Corridor Segment



Existing Wildlife Resources

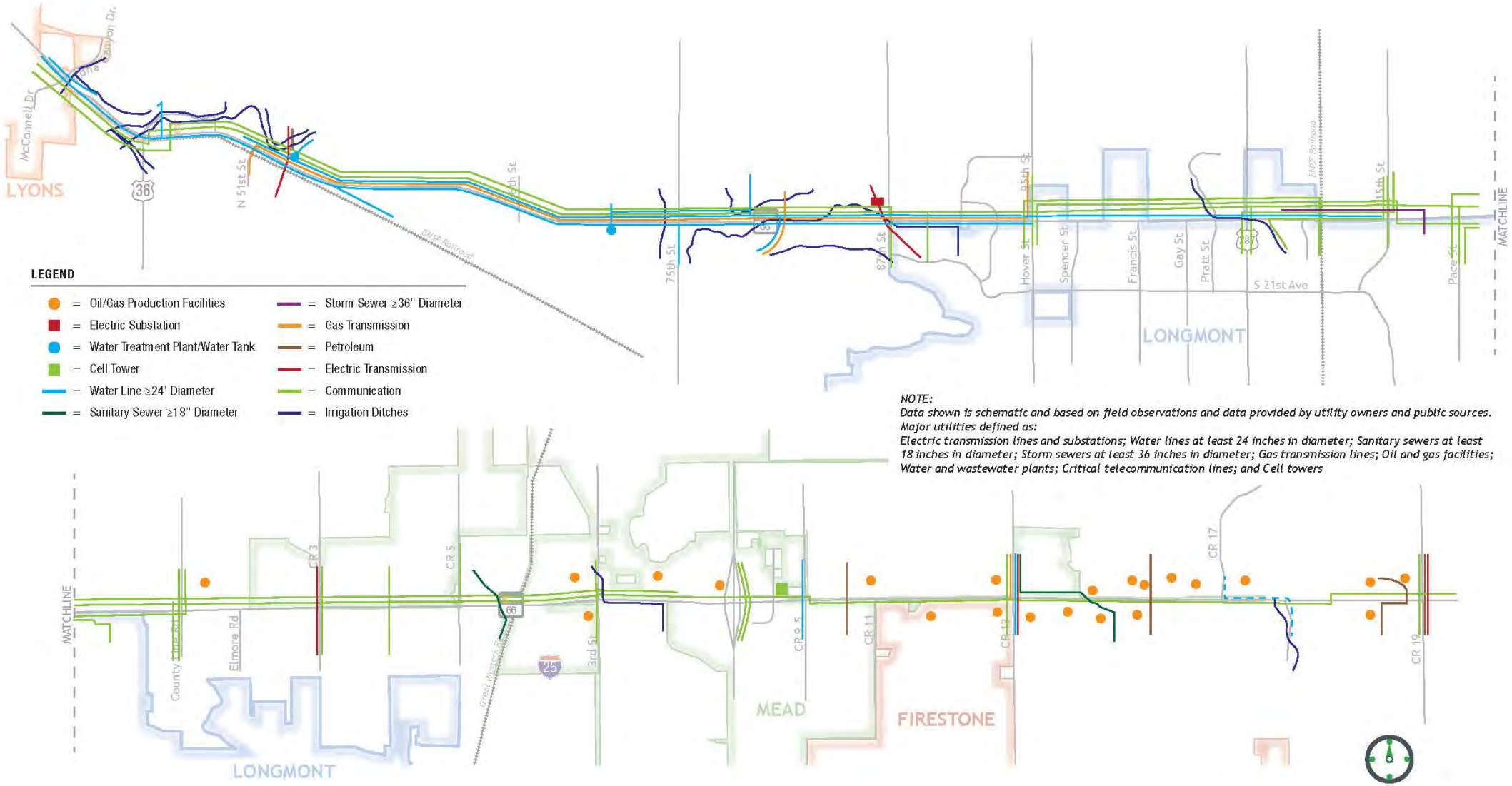
West Corridor Segment

East Corridor Segment



SH 66 Planning and Environmental Linkages Study

Existing Major Utilities

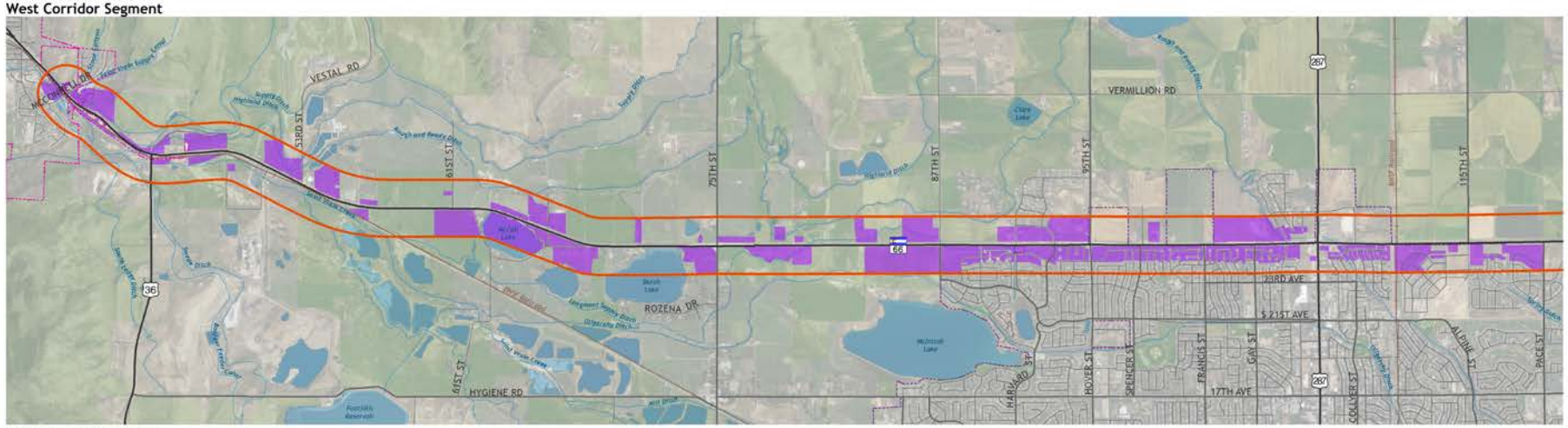


NOTE:
Data shown is schematic and based on field observations and data provided by utility owners and public sources.
Major utilities defined as:
Electric transmission lines and substations; Water lines at least 24 inches in diameter; Sanitary sewers at least 18 inches in diameter; Storm sewers at least 36 inches in diameter; Gas transmission lines; Oil and gas facilities; Water and wastewater plants; Critical telecommunication lines; and Cell towers

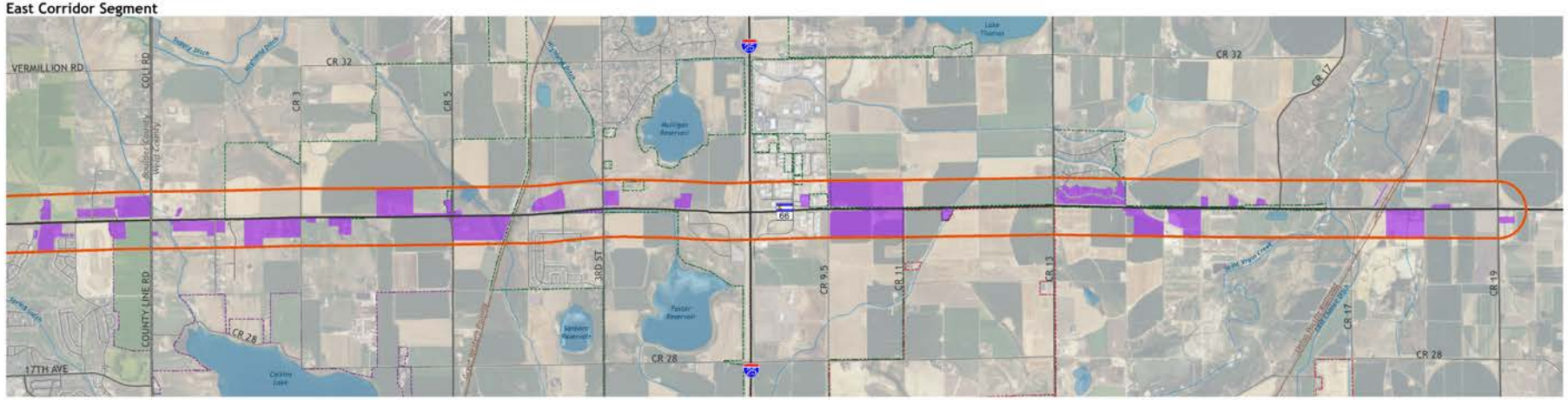
SH 66 Planning and Environmental Linkages Study

Traffic Noise Sensitive Areas

West Corridor Segment



East Corridor Segment



Legend

- Noise Sensitive Areas
- U.S./State Highway
- Major Roads
- Local Roads
- Railroad
- Rivers/Streams
- Lakes/Reservoirs
- Parks & Open Space
- County Boundary
- Study Area
- Town Of Firestone
- City Of Longmont
- Town Of Lyons
- Town Of Mead

NORTH

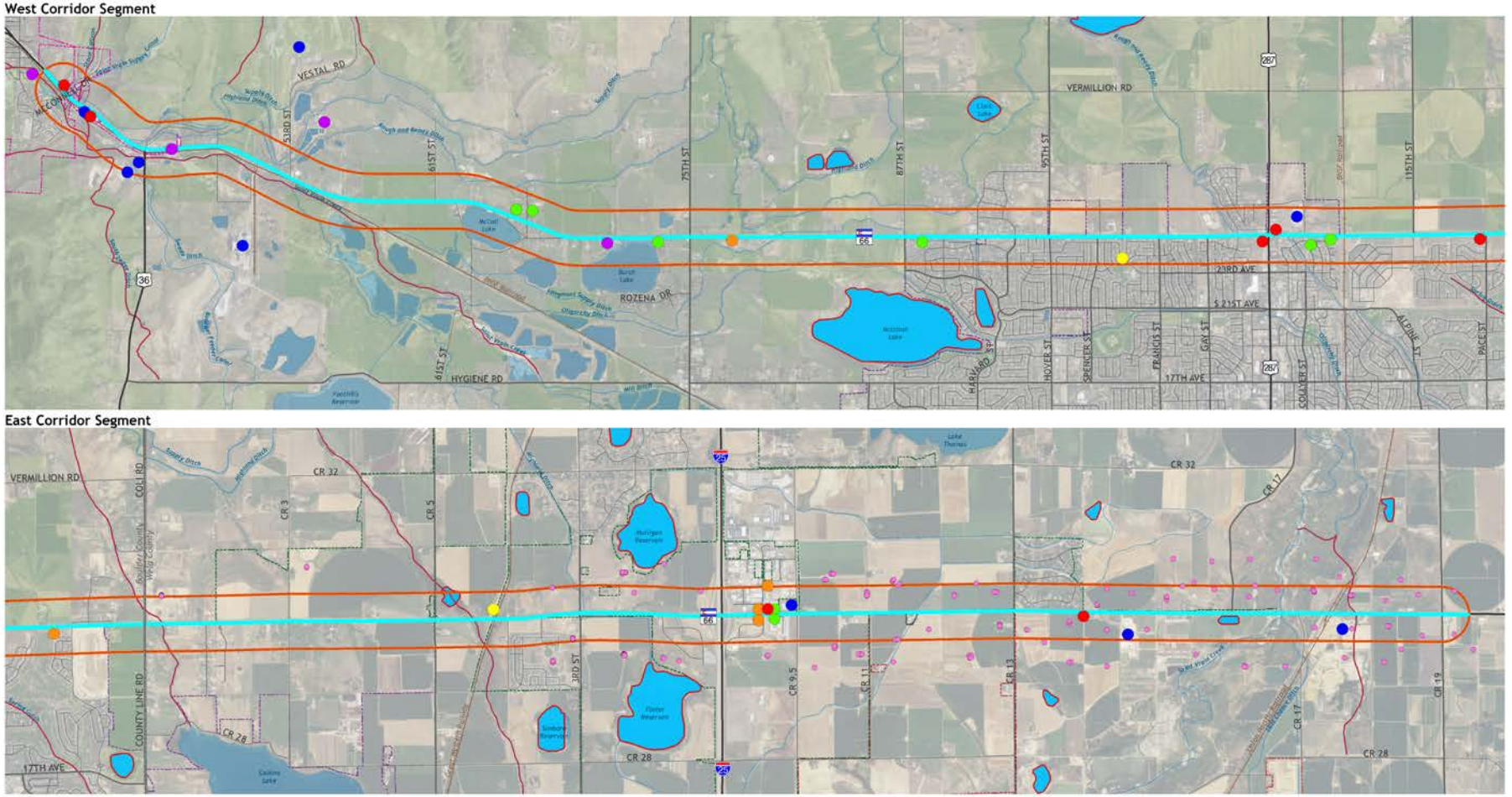
0 0.5 1 Miles

SH 66 Planning and Environmental Linkages Study

Hazardous Material Concerns

West Corridor Segment

East Corridor Segment



Legend

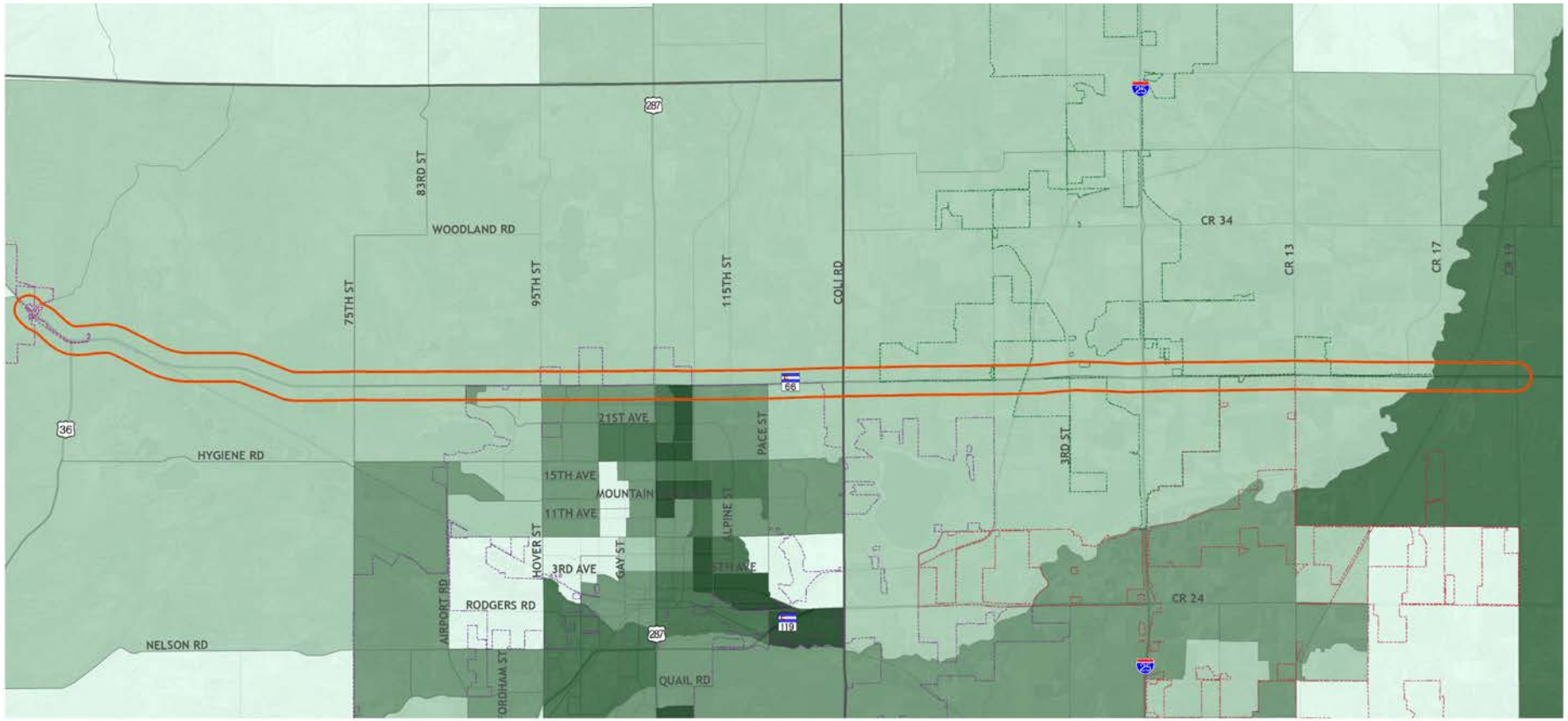
- Historic Auto
- Industrial Site
- LUST Site
- Registered AST/UST Site
- SEMS (Superfund Site)
- Water Treatment Facility
- Oil & Gas Well
- Power Line
- 303(d) Rivers/Streams
- 303(d) Waterbody
- U.S./State Highway
- Major Roads
- Local Roads
- Railroad
- Rivers/Streams
- Lakes/Reservoirs
- Parks & Open Space
- County Boundary
- Study Area
- Town Of Firestone
- City Of Longmont
- Town Of Lyons
- Town Of Mead

NORTH

0 0.5 1 Miles

SH 66 Planning and Environmental Linkages Study

Minority Population Percentage



Legend

Percent Minority Population

- 0% - 10% Minority Population
- 11% - 20% Minority Population
- 21% - 40% Minority Population
- 41% - 60% Minority Population
- Greater Than 60% Minority Population
- U.S./State Highway
- Major Roads
- Railroad
- County Boundary
- Study Area
- Town Of Firestone
- City Of Longmont
- Town Of Lyons
- Town Of Mead

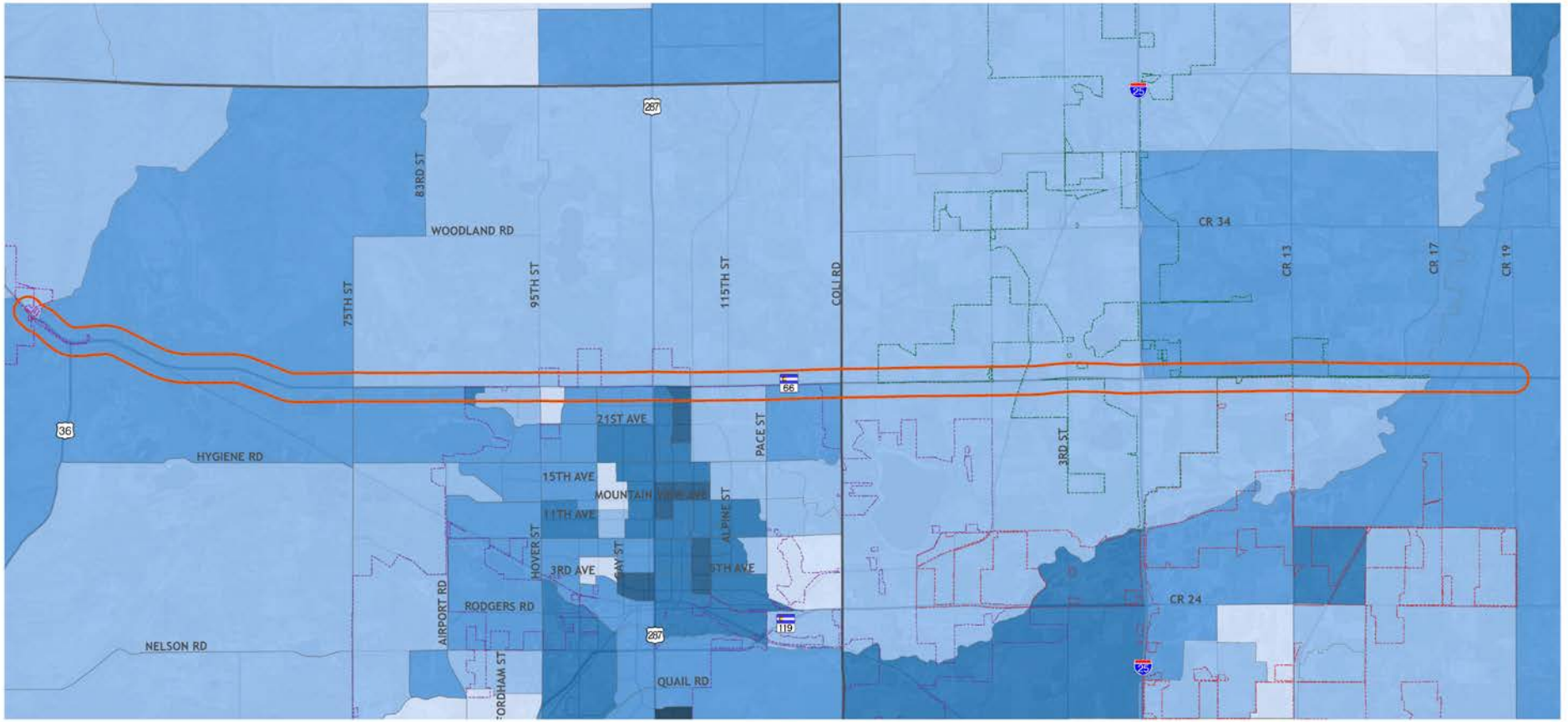
NORTH

0 1.5 Miles

SH 66 Planning and Environmental Linkages Study

SH 66 Planning and Environmental Linkages Study

Low-Income Population Percentage



Legend

Percent Low Income

- 0% - 10% Low Income
- 11% -20% Low Income
- 21% -40% Low Income
- 41% - 60% Low Income
- 61% - 80% Low Income
- Greater Than 80% Low Income

- U.S./State Highway
- Major Roads
- Railroad
- County Boundary
- Study Area
- Town Of Firestone
- City Of Longmont
- Town Of Lyons
- Town Of Mead

NORTH

0 1.5 Miles

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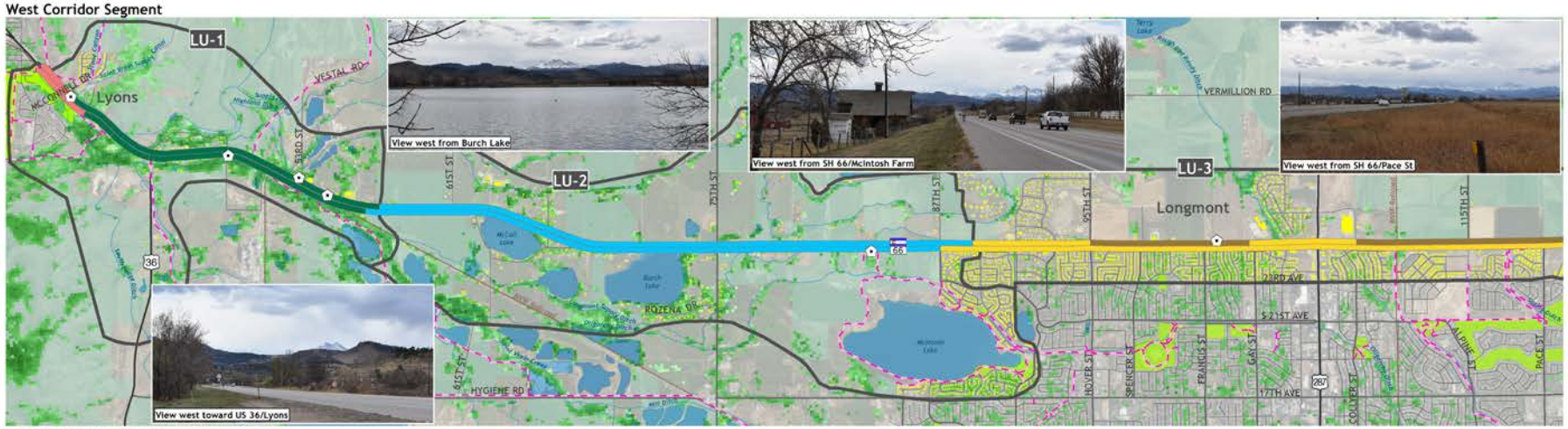
Visual Resources

West Corridor Segment



East Corridor Segment

Legend

- Historic Sites
- Residential Buildings
- Trails
- Open Space
- Parks

SH66 Landscape Character Types

- Commercial/Interchange
- Lyons - Gateway
- Rural Agrarian Viewshed
- Rural Residential
- Rural Tree Lined Pastures/Lakes
- St Vrain Corridor - Gateway
- St Vrain Corridor Bridge
- Urban Residential/Landscape Edge
- Area of Visual Effect/ Landscape Units (LU-#)
- Tree Canopy

NORTH

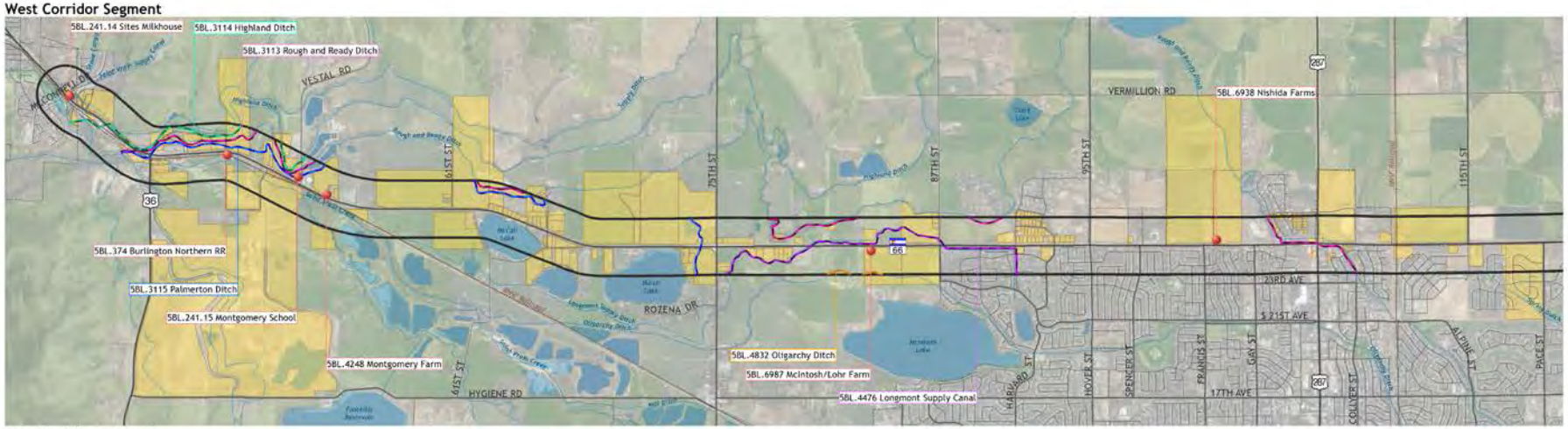
0 0.5 1 Mile

SH 66 Planning and Environmental Linkages Study

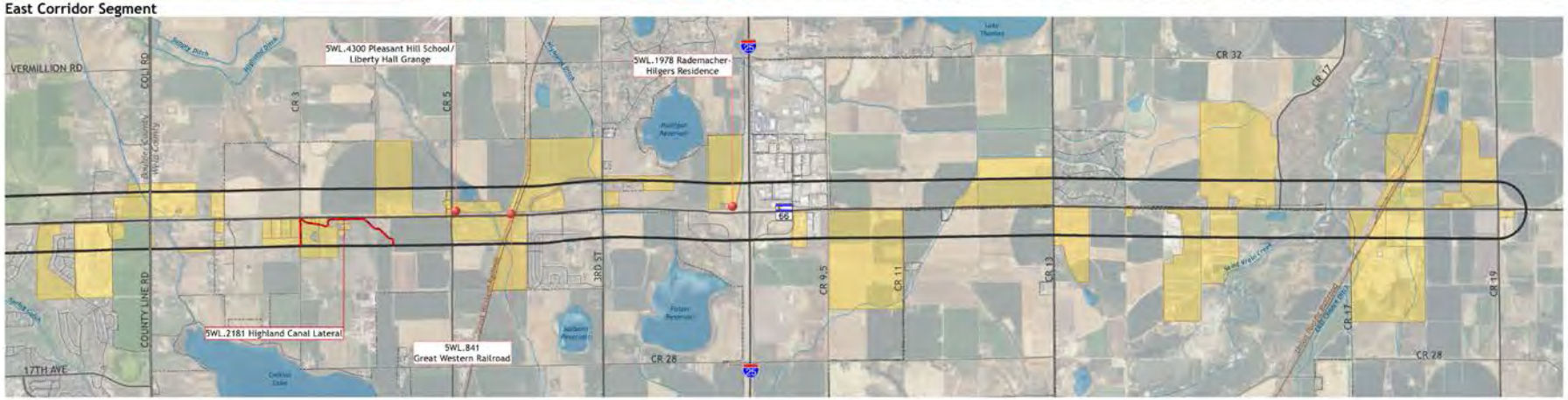
SH 66 Planning and Environmental Linkages Study

Existing and Potential Historic Resources

West Corridor Segment



East Corridor Segment



Legend

Historic Ditches
- Highland Canal Lateral
- Highland Ditch
- Longmont Supply Ditch
- Oligarchy Ditch
- Palmerton Ditch
- Rough and Ready Ditch
- Historic Site
- Railroad
- Rivers/Streams
- Lakes/Reservoirs
- Property Exceeds 45 Years Of Age
- Parks & Open Space
- City Boundaries
- County Boundary
- Study Area

NORTH

0 0.5 1 Miles

SH 66 Planning and Environmental Linkages Study

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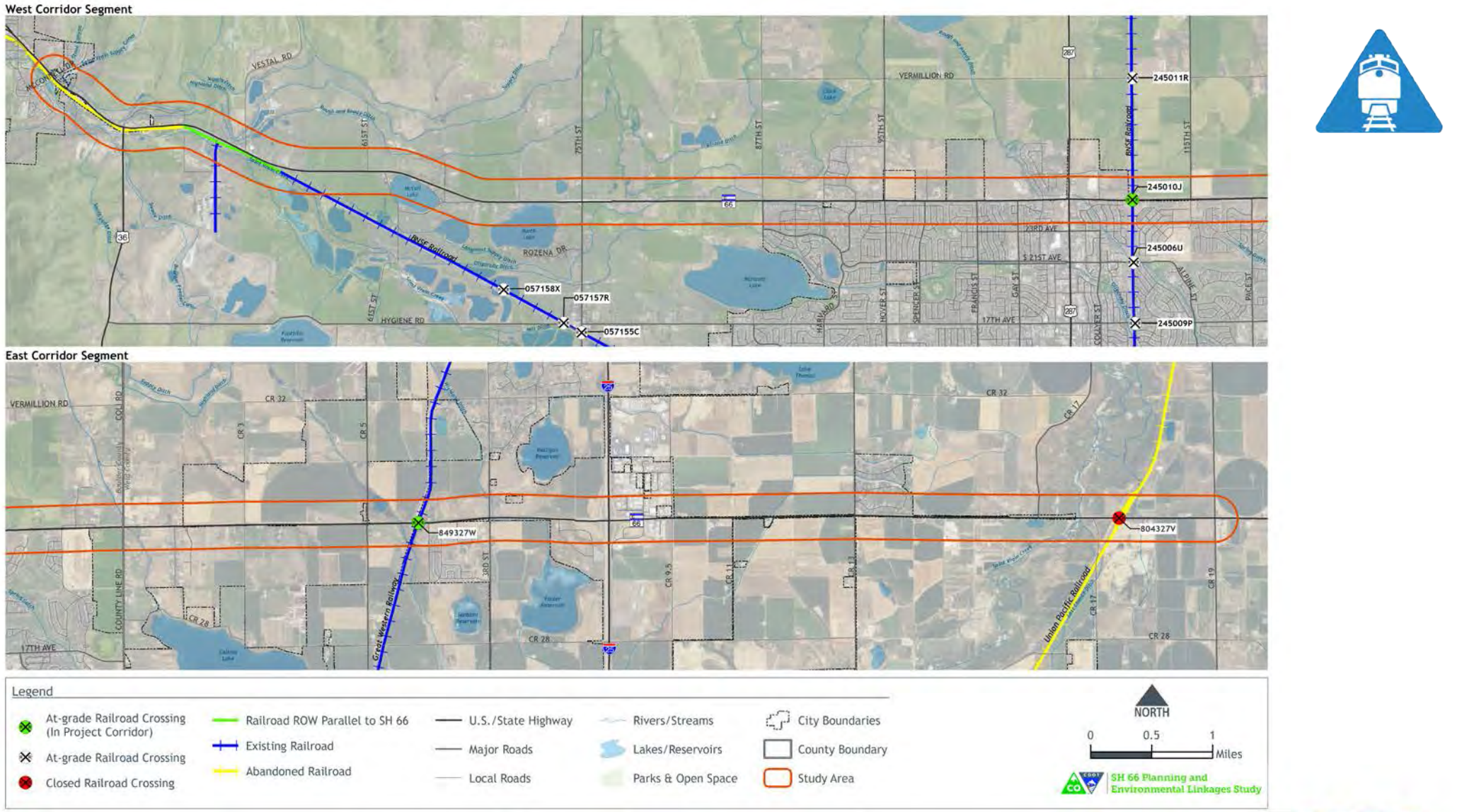
Railroads


West Corridor Segment
VESTAL RD
VERMILLION RD
ROZENA DR
HYGIENE RD
245011R
245010J
245006U
245009P
057158X
057157R
057155C
IRVSE Railroad
East Corridor Segment
VERMILLION RD
CR 32
CR 17
COUNTY LINE RD
CR 28
17TH AVE
849327W
804327V
Great Western Railway
Union Pacific Railroad
Legend
At-grade Railroad Crossing (In Project Corridor)
At-grade Railroad Crossing
Closed Railroad Crossing
Railroad ROW Parallel to SH 66
Existing Railroad
Abandoned Railroad
U.S./State Highway
Major Roads
Local Roads
Rivers/Streams
Lakes/Reservoirs
Parks & Open Space
City Boundaries
County Boundary
Study Area
NORTH
0
0.5
1
Miles
SH 66 Planning and Environmental Linkages Study

SH 66 Planning and Environmental Linkages Study

PUBLIC MEETING

Date and Time: April 25, 2017 | 4:30 p.m. to 7:30 p.m.
Location: Weld County Southwest Complex | 4209 Weld County Rd 24 1/2, Longmont, CO 80504

Sign In

First Name	Last Name	Community	Email
Rob	Birt	Longmont	robbirt@robbirt.com
Bob	Newman	Longmont	
Michelle	Jordan	Longmont	mmmichelleb@yahoo.com
Steven	Jordan	Longmont	
Cheryl	Paxson	Longmont	paxknits@aol.com
Dick	Kellogg	Mead	
Phil	Greenwald	Longmont	
Carol	Coburn	Longmont	amtngirl@gmail.com

SH 66 Planning and Environmental Linkages Study

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Sign In

First Name	Last Name	Community	Email
Arlo/Sherene F	Boda	Mead	asboda@gmail.com
Chuck	Woods	Longmont	chdewoe gmail.com
Drew	Peterson	Fire Stone	DrewP63@MSN.com
Jim	FLESHER	WELD COUNTY	JFLESHER@WELDGOV.COM
Jerd	Ayres	Weld County	
Chuck + Betty	Bailey	Seamone Heights Weld Co	
Pat	Bitt	Longmont	
Jason & Debbie Ellinger	Ellinger	Longmont	drossey@englandlogistics.com

SH 66 Planning and Environmental Linkages Study

PUBLIC MEETING

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Sign In

First Name	Last Name	Community	Email
Joe	Kubala	Lyons	jKubala@TownofLyons.com
Karen	Schneiders	CDOT	Karen.Schneiders@State.co.us
Abra	Geissler	CDOT	abra.geissler@State.co.us
Tim	Bilobran	CDOT	timothy.bilobran@state.co.us
James	Zufall	"	James.zufall@State.co.us
Julie	Cozad	Weld County	jcozad@weldgov.com

SH 66 Planning and Environmental Linkages Study

PUBLIC MEETING

Date and Time: April 26, 2017 | 4:30 p.m. to 7:30 p.m.
Location: Longs Peak Middle School | 1500 14th Avenue, Longmont, CO 80501

Sign In

First Name	Last Name	Community	Email
ROBERT	ZELLER	VPV	bobzell@hotmail.com
Dawn	Adams	Town of Mead	dadams@townofmead.org
Al	Nickels	VPV Longmont	alnick@aol.com
Julie	Rugh	Longmont	bsktpals@gmail.com
Dean	Ness	Longmont	dcn63g@gmail.com
Charlene	Hersee	urincorp Boulder Co	newfymommy@msn.com
Tim	Biloban	CDOT	
Michael	Ryman	Longmont/mead	rymanmichael@yahoo.com

SH 66 Planning and Environmental Linkages Study

PUBLIC MEETING

Date and Time: April 26, 2017 | 4:30 p.m. to 7:30 p.m.
Location: Longs Peak Middle School | 1500 14th Avenue, Longmont, CO 80501

Sign In

First Name	Last Name	Community	Email
Bill+Ann	Roadarmel	Villas	wjroadarmel@gmail.com airoadarmel@gmail.com
BRIAN	DOBLING	FHWA	brian.dobling@dot.gov
Lois	Ingram Brandt	West Berthoud	
CAROL Jim	DePRIEST	N 66TH St	Carol_deprest@hotmail.com
Micah	Zogorski	City of Longmont	micah.zogorski@longmontcolorado.gov
Linda	Goertz	1 block off Hwy 66	goertzl@comcast.com
Gerald	Kissinger	Pleasant Valley HOA	gerald.kissinger@state.co.us
Gerald+Brenda	Everett	66TH + Hover	brendaeverett12@msn.com

SH 66 Planning and Environmental Linkages Study

PUBLIC MEETING

Date and Time: April 26, 2017 | 4:30 p.m. to 7:30 p.m.
Location: Longs Peak Middle School | 1500 14th Avenue, Longmont, CO 80501

Sign In

First Name	Last Name	Community	Email
Joe	Root	Longmont	carpetguyjoe@gmail.com
Chris	Comstock	Longmont	ccomstock@comcast.net
Janell	Flagg	Longmont	Flagjmg@gmail.com
Laura	Hochman	Anhawa/ Longmont	laurah225@hotmail.com
MARK	VENZKE	ANHAWA LONGMONT	PLANMAN2002@YAHOO.COM
Judy	Lubow	Longmont	judy123@indra.com
Lou	Dobbs	Lyons	whitedoveform@gmail

SH 66 Planning and Environmental Linkages Study

PUBLIC MEETING

Date and Time: April 26, 2017 | 4:30 p.m. to 7:30 p.m.
Location: Longs Peak Middle School | 1500 14th Avenue, Longmont, CO 80501

Sign In

First Name	Last Name	Community	Email
NANCY	ROOT	LONGMONT, CO.	SNOWBIRDS3157@MSN.COM
BELINDA	MARQUINA	LONGMONT, CO	BELINDAMARQUINA@YAHOO.COM
KELLI	PARSONS	LONGMONT, CO	KELLIPD69@YAHOO.COM
TRENT	HEMBREE	LONGMONT, CO	TKHEMBREE@GMAIL.COM
BRIAN	JOHNSTON	LONGMONT	504JBILLS@GMAIL.COM
ANDY	LUTSCH	LONGMONT	LUTSCHSTUFF@GMAIL.COM

FOR RELEASE: APRIL 18, 2017

Public Invited to Participate in SH 66 Planning and Environmental Linkages (PEL) Meetings

BOULDER AND WELD COUNTY, COLORADO – The Colorado Department of Transportation (CDOT) will host two public meetings for the State Highway 66 Planning and Environmental Linkages (PEL) Study. The study will establish a vision for the SH 66 corridor from Lyons to Firestone (between McConnell Dr/Stone Canyon Dr and Weld County Road 19).

Two public meetings will be held in April, each providing the same content.

Tuesday, April 25, 2017
4:30 p.m. to 7:30 p.m.
Weld County Southwest Services Complex
4209 County Road 24 1/2
Longmont, Colorado 80504

Wednesday, April 26, 2017
4:30 p.m. to 7:30 p.m.
Longs Peak Middle School
1500 14th Avenue
Longmont, CO 80501

The public meetings will be an open house format where participants can stop by at any time to learn about the study, the corridor's existing conditions, and to provide input on the study.

To learn more about the project, please visit the project website at
https://www.codot.gov/library/studies/co-66-pel

SH 66 Planning and Environmental Linkages Study

Tuesday, April 25, 2017 | 4:30 p.m. to 7:30 p.m.
Weld County Southwest Services Complex
4209 County Road 24 1/2
Longmont, Colorado 80504

Wednesday, April 26, 2017 | 4:30 p.m. to 7:30 p.m.
Longs Peak Middle School
1500 14th Avenue
Longmont, CO 80501

The public meetings will be an open house format where you can drop by anytime and participate.

To learn more about the project, please visit the project website at **https://www.codot.gov/library/studies/co-66-pel**

The Colorado Department of Transportation (CDOT) is conducting a study to establish a vision for the SH 66 corridor from Lyons to Firestone. Please join the project team to learn more about the project and to provide input on the transportation challenges along the corridor.

Requests for communication assistance or reasonable accommodations for special needs can be made by contacting the project prior to the meeting at 720-200-8978.

SH 66 Planning and Environmental Linkages Study

QUESTIONNAIRE AND COMMENT FORM

April 2017 Public Meetings

If you would like to stay involved in the SH 66 PEL planning process, please provide your contact information below.

Name: _____ **Email:** _____

Q1. What three words would you use to describe SH 66 today?

1._____

2._____

3._____

Please describe why you chose those words.

Comments/Description: _____

_____

_____

Q2. How would you categorize the role of SH 66 through your community? (Select the three that you think are most fitting.)

- ☐ Main Street
- ☐ Gateway
- ☐ Critical to our community's circulation
- ☐ Access to businesses/residences
- ☐ Regional highway
- ☐ Barrier within the community
- ☐ Access to Rocky Mountain National Park
- ☐ Bicycle rote
- ☐ Safety hazard to community
- ☐ Other: _____

Q3. What are your top concerns regarding travel on SH 66? (Rank the order with 1 being your highest concern and 6 being your lowest concern.)

___ Safety

___ Too much traffic

___ Too many traffic signals

___ High speeds

___ Difficult or dangerous to get onto and off SH 66

___ Dangerous for cyclists and pedestrians

[Continued on back]

Q4. What immediate and future transportation needs/problems should be addressed through this study? (Check all that apply.)

- ☐ Improve safety by widening the shoulders
- ☐ Improve safety by providing more/longer turn lanes
- ☐ Improve safety by adjusting travel speeds through towns
- ☐ Improve access from side streets by adding traffic signals
- ☐ Improve travel times by adding more travel lanes
- ☐ Improve crossings for bicyclists and pedestrians
- ☐ Provide more travel options by adding bus service
- ☐ Improve the condition of the road by fixing potholes/reconstruction
- ☐ Provide better accommodation for large vehicles
- ☐ Provide better accommodation for bicycles and pedestrians
- ☐ Improve the aesthetics by adding landscaping and gateway features
- ☐ Other _____

Q5. What specific alternatives, options, or solutions should to be considered/studied and why?

_____

_____

_____

Q6. Please describe where you live/work/travel most frequently on the SH 66 corridor?

_____

_____

_____

Please provide any other comments.

_____

_____

_____

_____

_____

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Name	E-mail	Q1a: What three words would you use to describe SH 66 today?	Q1b: Please describe why you chose those words.	Q2: How would you categorize the role of SH 66 through your community?	Q3: What are your top concerns regarding travel on SH 66? (1 = highest concern, 6 = lowest concern)	Q4: What immediate and future transportation needs/problems should be addressed through this study? (Check all that apply.)	Q5: What specific alternatives, options, or solutions should to be considered/studied and why?	Q6: Please describe where you live/work/travel most frequently on the SH 66 corridor?	Please provide any other comments.
Chuck and Betty Bailey		Nightmare Busy Dangerous	We live on Elmore Road. Entering or exiting on Highway 66 is totally impossible most of the time	Gateway Critical to our community's circulation Access to businesses/residences Safety hazard to community	4 Safety 2 Too much traffic 5 Too many traffic signals 3 High speeds 1 Difficult or dangerous to get onto and off SH 66 6 Dangerous for cyclists and pedestrians	Improve safety by providing more/longer turn lanes Improve travel times by adding more travel lanes	Center Turning Lanes	From Elmore Road to Longmont	
Steven Jordan		Busy		Regional highway Access to Rocky Mountain National Park Safety hazard to community	2 Safety 3 Too much traffic 5 Too many traffic signals 6 High speeds 1 Difficult or dangerous to get onto and off SH 66 4 Dangerous for cyclists and pedestrians	Improve safety by providing more/longer turn lanes Other : center turn lane	Center turn lane for subdivision	Elmore Road/Home/to Longmont	
Jean Aynes		Dangerous Speed		Critical to our community's circulation Access to Rocky Mountain National Park Safety hazard to community	5 Safety 3 Too much traffic 6 Too many traffic signals 2 High speeds 1 Difficult or dangerous to get onto and off SH 66 4 Dangerous for cyclists and pedestrians	Improve safety by providing more/longer turn lanes Improve access from side streets by adding traffic signals Improve travel times by adding more travel lanes			
Rob Birt		Informative A beginning hate	Its nice to see the expensive research and that it is going to take place and create solutions, however, I have concerns that by the time it is implemented it will be an inadequate solution	Access to businesses/residences Regional highway Access to Rocky Mountain National Park	1 Safety ___ Too much traffic ___ Too many traffic signals ___ High speeds 2 Difficult or dangerous to get onto and off SH 66 3 Dangerous for cyclists and pedestrians	Improve safety by widening the shoulders Improve safety by providing more/longer turn lanes Improve travel times by adding more travel lanes Improve crossings for bicyclists and pedestrians Provide more travel options by adding bus service Provide better accommodation for bicycles and pedestrians Improve the aesthetics by adding landscaping and gateway features Other Improve Safety with larger/Legible signs	Traffic concerns need to cover all areas of rural, city, bicycle and pedestrian traffic equally and with equal options for access along the entire route	between 287 and I-25	
n/a		Busy Tough Commute		Main Street Gateway Critical to our community's circulation Access to businesses/residences Regional highway Barrier within the community Access to Rocky Mountain National Park Bicycle route Safety hazard to community Other: _____	___ Safety ___ Too much traffic ___ Too many traffic signals ___ High speeds ___ Difficult or dangerous to get onto and off SH 66 ___ Dangerous for cyclists and pedestrians	Improve safety by widening the shoulders Improve safety by providing more/longer turn lanes Improve safety by adjusting travel speeds through towns Improve access from side streets by adding traffic signals Improve travel times by adding more travel lanes Improve crossings for bicyclists and pedestrians Provide more travel options by adding bus service Improve the condition of the road by fixing potholes/reconstruction Provide better accommodation for large vehicles Provide better accommodation for bicycles and pedestrians Improve the aesthetics by adding landscaping and gateway features Other _____			
michelle Jordan		busy dangerous vital	with 119 and 34 being under construction, traffic exploded on hwy 66. we live on the corner of elmore and 66 and help accident victims at least twice a year.	Critical to our community's circulation Access to businesses/residences Regional highway	2 Safety 3 Too much traffic 6 Too many traffic signals 4 High speeds 1 Difficult or dangerous to get onto and off SH 66 5 Dangerous for cyclists and pedestrians	Improve safety by providing more/longer turn lanes Improve safety by adjusting travel speeds through towns Provide better accommodation for bicycles and pedestrians Other: center turn lanes for neighborhoods	Encourage traffic to return to the 119 major artery. Add center turn lanes for neighborhods such as El more Road. Slower speed between i-25 and 287	We live on elmore Road and work/shop in Longmont. Would like a way to safely enter and exit SH 66	We are not interested in this small regional highway into a 4 lane monstrosity. Just need some additional room to enter/exit from neighborhoods

Name	E-mail	Q1a: What three words would you use to describe SH 66 today?	Q1b: Please describe why you chose those words.	Q2: How would you categorize the role of SH 66 through your community?	Q3: What are your top concerns regarding travel on SH 66? (1 = highest concern, 6 = lowest concern)	Q4: What immediate and future transportation needs/problems should be addressed through this study? (Check all that apply.)	Q5: What specific alternatives, options, or solutions should to be considered/studied and why?	Q6: Please describe where you live/work/travel most frequently on the SH 66 corridor?	Please provide any other comments.
Bob Newman		Dangerous	Due to high rate of speed and volume it is dangerous trying to make left or right turns	Gateway Access to businesses/residences Access to Rocky Mountain National Park	3 Safety 4 Too much traffic 6 Too many traffic signals 2 High speeds 1 Difficult or dangerous to get onto and off SH 66 5 Dangerous for cyclists and pedestrians	Improve safety by providing more/longer turn lanes Improve safety by adjusting travel speeds through towns Improve access from side streets by adding traffic signals			
Cheryl Paxson		needs help now	because it is dangerous in certain areas (2-lane areas)	Access to businesses/residences Access to Rocky Mountain National Park Bicycle route Safety hazard to community	5 Safety 4 Too much traffic 6 Too many traffic signals 3 High speeds 1 Difficult or dangerous to get onto and off SH 66 2 Dangerous for cyclists and pedestrians	Improve safety by widening the shoulders Improve safety by providing more/longer turn lanes Improve safety by adjusting travel speeds through towns	center turn lane at elmore road	elmore road - in and out to Hwy 66 - need center turn lane	
Julie Cozad		Congested in areas beautiful views safety concerns	I drive it all of the time	Critical to our community's circulation Regional highway	1 Safety 2 Too much traffic 5 Too many traffic signals 6 High speeds 4 Difficult or dangerous to get onto and off SH 66 3 Dangerous for cyclists and pedestrians	Improve safety by widening the shoulders Improve safety by providing more/longer turn lanes Improve travel times by adding more travel lanes Improve crossings for bicyclists and pedestrians Improve the condition of the road by fixing potholes/reconstruction	Option: Continue study all the way to US 85	I live in Milliken and work for Weld County, My District (as a commissioner) includes Hwy 66 and I travel on it all of the time.	Continue PEL study to Platteville to connect to US 85 PEL
Boda		demolishing (demolition) course dangerous too narrow at Rd 9.5 + E	the #of accidents, no shoulders, volume of traffic, speed of traffic	Gateway Access to businesses/residences Regional highway	2 Safety 1 Too much traffic ___ Too many traffic signals 3 High speeds 2 Difficult or dangerous to get onto and off SH 66 100% Dangerous for cyclists and pedestrians	Improve safety by widening the shoulders Improve safety by providing more/longer turn lanes Improve safety by adjusting travel speeds through towns Improve the condition of the road by fixing potholes/reconstruction	4 lanes Slower speed limits	live between RD 9.5 and 13	Hwy 66 east of I-25 is prone to accidents, something needs to happen. Unsafe to travel
Joe Root	carpetguyjoe@gmail.com	Nosey Busy Nosey (for backyards that back up to Hwy 66)	A wall is needed to protect the residences/people from the noisy/unsafe things that happen on Hwy 66. The wall is needed from Hover to Pratt for the homes that back up to HWY 66	Access to businesses/residences Safety hazard to community	4 Safety 1 Too much traffic 6 Too many traffic signals 2 High speeds 3 Difficult or dangerous to get onto and off SH 66 5 Dangerous for cyclists and pedestrians	Other Build a noise and safety wall		Hwy 66 and Gay St. Stop light is needed	My bedroom is 30 feet from the cars on hwy 66, I feel lucky everyday I wake up and a car or truck has not come through my house!
Trent Hembree	tkhembree@gmail.com	congested loud odd	the road is not always congested but when it is, it is unmanageable. I live directly on 66 (house backs up to it) and it can be very loud. The Highway has good attributes, pretty views and ugly at times. It has never felt like an actual highway. Its is odd. this is both good and bad.	Gateway Access to businesses/residences Access to Rocky Mountain National Park	5 Safety 1 Too much traffic 2 Too many traffic signals 4 High speeds 3 Difficult or dangerous to get onto and off SH 66 6 Dangerous for cyclists and pedestrians	Improve safety by adjusting travel speeds through towns Other : add turn lanes at specific problem locations	the large population increase in CO has been a double edged sword everywhere, adding lanes might worsen conditions faster as developers build along the corridor, I do not envy the challenges ahead for you!	I live west of Hover/66th and the traffic can be brutal on the corridor, specifically on the weekends during the summer.	best of luck!
		too small congested at certain times	also the opposite is a problem - too many people driving 10-30 below the posted speed limit (particuluarly west of 287 to Lyons)	Critical to our community's circulation Access to Rocky Mountain National Park Safety hazard to community	1 Safety 2 Too much traffic 5 Too many traffic signals 3 High speeds 6 Difficult or dangerous to get onto and off SH 66 4 Dangerous for cyclists and pedestrians	Improve safety by providing more/longer turn lanes Improve travel times by adding more travel lanes Other Improve safety/Improve travel times by removing roadway accesses	removing multiple private accesses to SH 66	75th to 287	

Name	E-mail	Q1a: What three words would you use to describe SH 66 today?	Q1b: Please describe why you chose those words.	Q2: How would you categorize the role of SH 66 through your community?	Q3: What are your top concerns regarding travel on SH 66? (1 = highest concern, 6 = lowest concern)	Q4: What immediate and future transportation needs/problems should be addressed through this study? (Check all that apply.)	Q5: What specific alternatives, options, or solutions should to be considered/studied and why?	Q6: Please describe where you live/work/travel most frequently on the SH 66 corridor?	Please provide any other comments.
Janelle Flaig	flaigjmq@gmail.com	too much misdirected lighting at intersections too much speeding distractions	would like to encourage better use of lighting at intersections- you do not need to illuminate houses a block away	Gateway Regional highway Access to Rocky Mountain National Park	3 Safety 5 Too much traffic 6 Too many traffic signals 1 High speeds 4 Difficult or dangerous to get onto and off SH 66 5 Dangerous for cyclists and pedestrians 2 Lighting	Improve safety by widening the shoulders Improve access from side streets by adding traffic signals Improve the aesthetics by adding landscaping and gateway features Other: lighting SB better directed away from residences	Medians may be helpful for keeping left turn lanes more obvious	Between I-25 and Lyons	Would be willing to serve on any committee to review plans. How about a parkway between county line road and to eh west of hygiene road- would tend to slow traffic. Widen shoulders for farm machinery.
Ann Roadarmel	alroadarmel@gmail.com	too fast heavy traffic too many accidents at Pace & 66	Do not widen 66- too many properties along side of 66- my sloution is to lower the speed limit. Have police monitor 66 and give out tickets to to lower the speed. This is one way to cut down on people speeding on 66	Access to businesses/residences Bicycle route Safety hazard to community	X Safety ___ Too much traffic ___ Too many traffic signals X High speeds ___ Difficult or dangerous to get onto and off SH 66 X Dangerous for cyclists and pedestrians	Improve safety by adjusting travel speeds through towns Improve access from side streets by adding traffic signals Provide better accommodation for bicycles and pedestrians Improve the aesthetics by adding landscaping and gateway features	do not use 66 as a corridor for businesses, only residents, farms, bicycles and pedestrians	corner of 66th and Pace	widening 66th will bring pollution, more traffic, accidents, noise, and lower property values. We need to stop paving roads and keep what we have. Limit growthand keep the air clean. 66 is actually a very scenic drive- if you make it 4 lanes you will lose the ambiance that identifies this area as Longmont. Growth needs to be limited!
Michael Ryman	rymanmichael@yahoo.com	too noisy too busy accident prone	I live at the intersection of County Road 5	Gateway Access to businesses/residences Regional highway	X Safety X Too much traffic X Too many traffic signals ___ High speeds X Difficult or dangerous to get onto and off SH 66 ___ Dangerous for cyclists and pedestrians	Improve safety by providing more/longer turn lanes	Need more center turn lanes to turn across traffic	county road 5 and 66	
Andy Lutsch		Narrow Backed-up (esp W of 95th) Over-shared	used to work in Estes, used to teach in Lyons. Spent many extra hours on 66	Critical to our community's circulation Regional highway Access to Rocky Mountain National Park	2 Safety 1 Too much traffic 6 Too many traffic signals 5 High speeds 3 Difficult or dangerous to get onto and off SH 66 4 Dangerous for cyclists and pedestrians	Improve safety by widening the shoulders Improve safety by adjusting travel speeds through towns Improve travel times by adding more travel lanes Improve crossings for bicyclists and pedestrians Provide more travel options by adding bus service Provide better accommodation for bicycles and pedestrians	I feel for the ranchettes and large acreage residences(esp north of 66 near lyons). Can the "exit" lanes coexist with the bike/ped lanes? Can they be extra wide in these areas?	287/Main to 95TH/Hover as Downtown Bypass (esp coming from Boulder, Loveland, Fort Collins) Travels to Lyons and Estes on mini-vacations	I'd prefer more clarity on the foam boards regarding present vs. planned data. I wish I'd heard about this sooner (received email this morning). Thanks for doing this!
Gerald and Brenda Everett		unsafe crowded inconvenient	multiple accidents near us, cant get out of our driveway or across the highway, have to take circuitous routes to avoid traffic	Critical to our community's circulation Access to businesses/residences Safety hazard to community	3 Safety 4 Too much traffic 6 Too many traffic signals 2 High speeds 1 Difficult or dangerous to get onto and off SH 66 5 Dangerous for cyclists and pedestrians	Improve safety by widening the shoulders Improve safety by providing more/longer turn lanes Improve safety by adjusting travel speeds through towns Improve access from side streets by adding traffic signals Improve crossings for bicyclists and pedestrians	Left and right turn lanes for residential areas, lower speed limit from 75th to County Line (50) and even lower main to hover. (40-45)	we live on 66 near Hover, We drive the highway every day, everywhere, especially pace to 75th	We have had property damage+ 2 fatal accidents at our home, we and friends have been hit leaving or entering our home, we can hear traffic noise (esp motorcycles, sub-woofers+track air brakes) inside our home and must have white noise to sleep. We have lived there since 1993

Name	E-mail	Q1a: What three words would you use to describe SH 66 today?	Q1b: Please describe why you chose those words.	Q2: How would you categorize the role of SH 66 through your community?	Q3: What are your top concerns regarding travel on SH 66? (1 = highest concern, 6 = lowest concern)	Q4: What immediate and future transportation needs/problems should be addressed through this study? (Check all that apply.)	Q5: What specific alternatives, options, or solutions should to be considered/studied and why?	Q6: Please describe where you live/work/travel most frequently on the SH 66 corridor?	Please provide any other comments.
Chris Comstock		Dangerous Slow	with 60 mph alonf corridor from 287 to county line road access onto road from lateral roads w/o traffic control device is dangerous. Crashes occur frequently due to high speed.	Gateway Critical to our community's circulation Regional highway	2 Safety 3 Too much traffic ___ Too many traffic signals 1 High speeds ___ Difficult or dangerous to get onto and off SH 66 ___ Dangerous for cyclists and pedestrians	Improve safety by widening the shoulders Improve safety by adjusting travel speeds through towns Provide better accommodation for bicycles and pedestrians Improve the aesthetics by adding landscaping and gateway features	As a gateway to Longmont landscaping at intersection of Pace and 66 could be improved. Particularly as this intersection builds out in the future	Residence is located on north end of Pace on 66. Villas at Pleasa values	
Nancy Root		dangerous noisy congested	I live there, I back up to 66. Catn even use my back yard. Noise and ___.	Critical to our community's circulation Access to Rocky Mountain National Park Safety hazard to community Other: _____	2 Safety 1 Too much traffic ___ Too many traffic signals ___ High speeds 3 Difficult or dangerous to get onto and off SH 66 ___ Dangerous for cyclists and pedestrians	Improve access from side streets by adding traffic signals Improve crossings for bicyclists and pedestrians Improve the aesthetics by adding landscaping and gateway features	sound barrier walls for homes that back up to 66 Stop light at Gay and 66 for church	Live at Gay and 66. Back up to 66 the traffic noise is unbearable	
		conjested speed limits too high turn lanes lacking	too difficult to get off 66 where there are no lights or turn lanes	Access to businesses/residences Regional highway Access to Rocky Mountain National Park	1 Safety 5 Too much traffic 6 Too many traffic signals 2 High speeds 3 Difficult or dangerous to get onto and off SH 66 4 Dangerous for cyclists and pedestrians	Improve safety by providing more/longer turn lanes Improve safety by adjusting travel speeds through towns Improve access from side streets by adding traffic signals Improve travel times by adding more travel lanes		Longmont to I-25 via Pace St	long range, 66 must be widended in addition to other things mentioned. Your study is a good start, you have done a great job with your display. Thank you!
Tim and Charlene Hersee		busy beautiful sometimes dangerous	the rush hours are very congested, otherwise it is very beautiful, almost a scenic highway. The danger seems to be (after 30 years of watching it) from impatient, careless drivers	Gateway Access to businesses/residences Regional highway	4 Safety 2 Too much traffic 5 Too many traffic signals 3 High speeds 1 Difficult or dangerous to get onto and off SH 66 6 Dangerous for cyclists and pedestrians	Improve safety by providing more/longer turn lanes Improve access from side streets by adding traffic signals Improve the aesthetics by adding landscaping and gateway features Other: provide noise walls for existing homes	Right turn lane into subdivision as opposed to using shoulder of highway. Merge/Acceleration lanes to get out of subdivisions as opposed to pulling right out intohighway with folks coming at 60 mph	66 between I-25 and Hover and 287 for north/south travel	
Lyman Higgins		at times not adequate to carry traffic volume critical regional	sh 66 is a critical regioanl corridor, but seems to be in need of having its ability to carry traffic volume improved	Critical to our community's circulation Access to businesses/residences Regional highway	1 Safety 4 Too much traffic 5 Too many traffic signals 6 High speeds 2 Difficult or dangerous to get onto and off SH 66 3 Dangerous for cyclists and pedestrians	Improve safety by providing more/longer turn lanes Improve travel times by adding more travel lanes Improve crossings for bicyclists and pedestrians Provide more travel options by adding bus service Provide better accommodation for bicycles and pedestrians Improve the aesthetics by adding landscaping and gateway features Other: add bicycle underpasses when possible to minimize bike/traffic conflicts	adding additional lanes in both directions	I live in Longmont near pace and 66 intersection. I use 66 to go east to i-25 and west to main street/287 and to Hover.	If possible, see if CDOT and the City of Longmont can work together to improve Longmont's greenway/bicycle circulationsystem where possible.
Carol DePriest		increasingly congested Lyons to I-25 Main E- W throughfare	obvious with increase in traffic over the last few years. May take 3-5 mintues to get off our street to 66. main road from I-25 to lyons and Estes	Gateway Critical to our community's circulation Access to businesses/residences Regional highway Access to Rocky Mountain National Park	1 Safety 3 Too much traffic 6 Too many traffic signals 4 High speeds 2 Difficult or dangerous to get onto and off SH 66 5 Dangerous for cyclists and pedestrians	Improve access from side streets by adding traffic signals Improve crossings for bicyclists and pedestrians Provide more travel options by adding bus service Improve the aesthetics by adding landscaping and gateway features		live off of 75th and Lyons north side of 66	The notification-publicity of this project to the affected communities was very limited. I found out by accident. Put in newspapaer? Utility bills? Lack of awaremess by more affected = lack of input and also resentment
Francine Brandt		busy dangerous a project	need to focus on one item now	Access to businesses/residences Access to Rocky Mountain National Park Bicycle route	___ Safety 3 Too much traffic ___ Too many traffic signals 2 High speeds ___ Difficult or dangerous to get onto and off SH 66 1 Dangerous for cyclists and pedestrians	Improve safety by widening the shoulders Improve travel times by adding more travel lanes Improve crossings for bicyclists and pedestrians	widening roadway, not busing	North of Hijine daily to longmont and frequent to Lyons	

Name	E-mail	Q1a: What three words would you use to describe SH 66 today?	Q1b: Please describe why you chose those words.	Q2: How would you categorize the role of SH 66 through your community?	Q3: What are your top concerns regarding travel on SH 66? (1 = highest concern, 6 = lowest concern)	Q4: What immediate and future transportation needs/problems should be addressed through this study? (Check all that apply.)	Q5: What specific alternatives, options, or solutions should to be considered/studied and why?	Q6: Please describe where you live/work/travel most frequently on the SH 66 corridor?	Please provide any other comments.
Belinda Marquina		crowded high speeds	crowded because traffic is conjested. High speeds because speed limits are too high for so much traffic	Critical to our community's circulation Regional highway Bicycle route	4 Safety 5 Too much traffic 6 Too many traffic signals 2 High speeds 1 Difficult or dangerous to get onto and off SH 66 3 Dangerous for cyclists and pedestrians	Improve safety by adjusting travel speeds through towns Improve access from side streets by adding traffic signals Improve crossings for bicyclists and pedestrians Provide more travel options by adding bus service Provide better accommodation for bicycles and pedestrians		live off 66 west of Hover. Hard to get out on highway from neighborhood.	
Laura Hochman		busy	lots of cars	Regional highway Access to Rocky Mountain National Park Bicycle route	1 Safety 3 Too much traffic 4 Too many traffic signals 6 High speeds 2 Difficult or dangerous to get onto and off SH 66 5 Dangerous for cyclists and pedestrians	Improve safety by widening the shoulders Improve safety by providing more/longer turn lanes Provide more travel options by adding bus service	Incentives for bus riders/carpools encouraging car and bicycle safety	live just north of hwy 66 and cross it every day. Many people use Anhawa as a short-cut but drive faster than 25+we don't have sidewalks in our neighborhood	
Kellie Parsons		busy confusing speed limits annoying	speed limits need tobe more clearly posted- avg speed is 40-50 mph when posted speed is 60 mph.	Critical to our community's circulation Access to businesses/residences Access to Rocky Mountain National Park	___ Safety 3 Too much traffic ___ Too many traffic signals ___ High speeds 1 Difficult or dangerous to get onto and off SH 66 2 Dangerous for cyclists and pedestrians	Improve safety by providing more/longer turn lanes Improve access from side streets by adding traffic signals Improve crossings for bicyclists and pedestrians Provide better accommodation for bicycles and pedestrians		Anhawa subdivision neighborhood. Travel to work west along hwy 66. Hygiene intersection is very concerning- I witness daily infractions and near wrecks	we need a safer way to exit anhawa neighborhood via anhawa and jofipa. We drive around to 95TH So we can have a turn signal. No turn lane in or out of these intersections. Very risky to turn in or out.
Dean Ness		busy effective mixed use	with 119 open again, 66 has returned to a busy but workaable SH. Rush hour gets pretty tight and does require some re-routing to get onto it.	Main StreetAccess to businesses/residences Regional highway	1 Safety 2 Too much traffic 6 Too many traffic signals 5 High speeds 3 Difficult or dangerous to get onto and off SH 66 4 Dangerous for cyclists and pedestrians	Improve safety by widening the shoulders Improve safety by providing more/longer turn lanes Improve travel times by adding more travel lanes Other: access via turn lanes and on/off lanes. Not lights.	east bound approach to county road (1) Beofre the top of the hill should have an intersection ahead sign/light. EB traffic seems to have the most skid marksto the light. The light seems to be a surprise to many. West bound turning left into Elmore Road is a litte nervous even at non-rush hour. There are numerous such exits for people along 66, left turn lanes would be a big help. I understand for a small number of people.	Elmore Road. Left to WB 66 for most activities	Thanks for the opportunity for input and be a part.
Julie Pugh		Congested unsafe aged	There are sections between 287 and Lyons where speed makes it hard to turn left when theres no light from 287 to I-25 going east, its congested AM and PM with work that makes accidents from people who get pissed at the stop and go traffic on a road that's 60 mph	Main Street Gateway Regional highway	1 Safety 2 Too much traffic 5 Too many traffic signals 6 High speeds 4 Difficult or dangerous to get onto and off SH 66 3 Dangerous for cyclists and pedestrians	Improve safety by widening the shoulders Improve safety by providing more/longer turn lanes Improve travel times by adding more travel lanes Improve crossings for bicyclists and pedestrians Provide more travel options by adding bus service Provide better accommodation for bicycles and pedestrians	Bus route from Walmart on weekends that that just got taken away from 23rd ave King Soopers. Underpass for the peds at walmart. Widen shoulders and lanes from 287 - I-25 going east to make safer	I live close to 287 and 66 and going east after work is a joke for congestion and safety from irritated drivers	You need to get the word out better about this type of survey. I got it from a library newsletter of weekly events. However, its not even on the City Calendar. Something should go out in the utility bill notifying the city of a potential project this big. Get it in the senior centersand groups of the community so people can pass the word.

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Appendix G-2: April 2019 Open Houses

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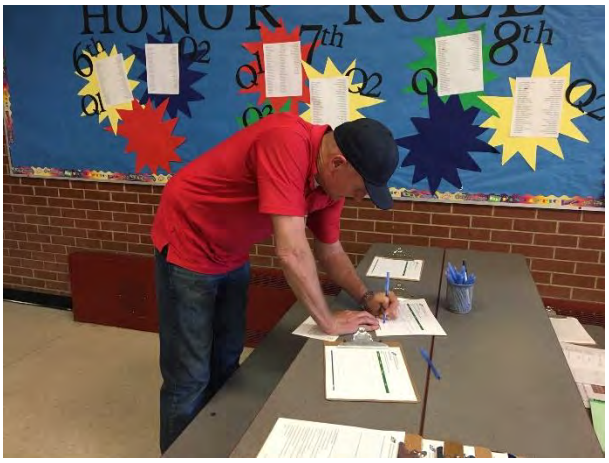
SH 66 Planning and Environmental Linkages Study

Summary of April 2019 SH 66 PEL Public Meetings

Meeting Details

Building on the public involvement that began in 2017 with two public open house meetings, two additional open house meetings were held in April 2019 for the SH 66 PEL study:



- Tuesday, April 16th | 4:30 p.m. to 7:30 p.m.
  Weld County Southwest Service Building
  4209 County Rd 24 1/2, Longmont, CO 80504

- Thursday, April 18th | 4:30 p.m. to 7:30 p.m.
  Longs Peak Middle School
  1500 14th Avenue, Longmont, CO 80501

Approximately 110 members from the public attended. Sign in sheets from each public meeting are attached to this summary as Appendix A.

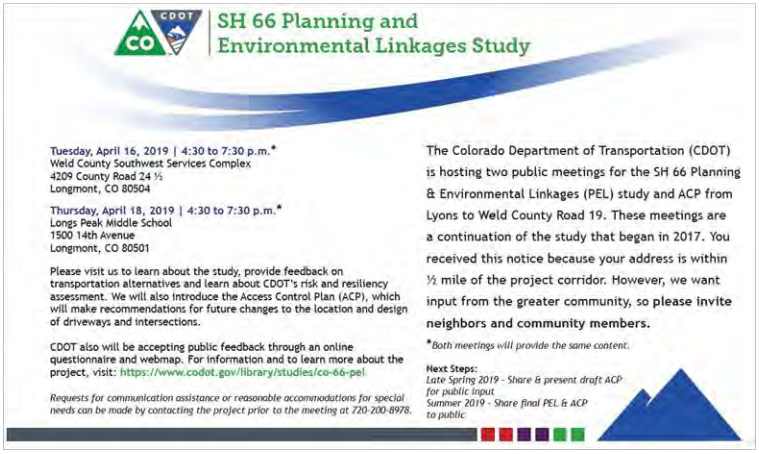
Meeting Purposes

The purposes of the meeting included:

- Providing the public with project background information including purpose, timeline updates, and key milestones
- Presenting the transportation alternatives and request feedback
- Providing information about CDOT's risk and resiliency assessment
- Introducing the Access Control Plan (ACP) and seek initial feedback

Advertisement

The public meetings were advertised via CDOT's website, a CDOT press release, a postcard mailed to residents with ½ mile of the planning corridor, an announcement on CDOT's social media accounts, (Facebook and Twitter) and distributed via email to the Technical Advisory Committee (TAC) and Executive Committee (EC). The TAC was encouraged to promote the meeting through their community's communications. The project team also sent a public meeting flyer to the Town/City Council contact and the Chamber of Commerce for each community located along the planning corridor. As a result, the meeting details were included in "This Week in Longmont – April 12, 2019," in Lyon's "LYCO Newsworthy" Newsletter on April 4, 2019. and on Weld County's Facebook page.



Meeting Approach

The public meetings were open house format where the public could drop by anytime to learn about the study's current schedule, the corridor's alternatives related to safety, mobility, access, and provide feedback about those alternatives. Information about CDOT's new risk and resiliency process was provided. The Access Control Plan was also introduced. Attendees could provide public feedback during each open house using a hard-copy comment form or later via an online questionnaire and webmap, both formats contained matching questions. The same content was provided at both meetings and comments were accepted for two weeks following the last open house; the comment period ended on May 2, 2019.

The public meetings included the following areas:

- Welcome and Sign In
- PEL overview, process graphic and Purpose and Need
- Access Control Plan overview, goals and process graphic
- Level 2a Screening Operational Classification
- Existing and Proposed illustrations for each section
- Bike and Pedestrian Alternatives
- Alternatives development and screening roll plots
- Risk and Resilience Information
- Comment forms

Viewing roll plots at 4/18/19 meeting

The meeting boards and displays are attached as Appendix B.

Overview of Public Comments

Input from the public was obtained through 1) discussions with the project team, 2) comment forms completed during each open house, and 3) via the online questionnaire and webmap.

The input received from the public during the open house meetings and online through the SH 66 PEL webpage on CDOT's website ranges from general commentary related to the problems along the corridor to site-specific concerns about how an alternative would impact them directly. Although comments varied widely, a few themes emerged including the need to address safety, concerns about increased noise and a lack of support for the use of roundabouts.

Questionnaire Results

Questionnaires were completed by 70 people attending the open house meeting or online. The results are summarized below.

Q1: Which Level 2b recommendations do you support? Please list up to three.

Responses to this question varied widely and common themes are hard to detect. However, members of the public who commented generally support widening SH66 and adding dedicated turn lanes. There is a level of support for additional signals, however there is an equal amount of concern that traffic signals will slow traffic and thus they prefer roundabout.

Q2: Do any Level 2b recommendations concern you? If so, please explain.

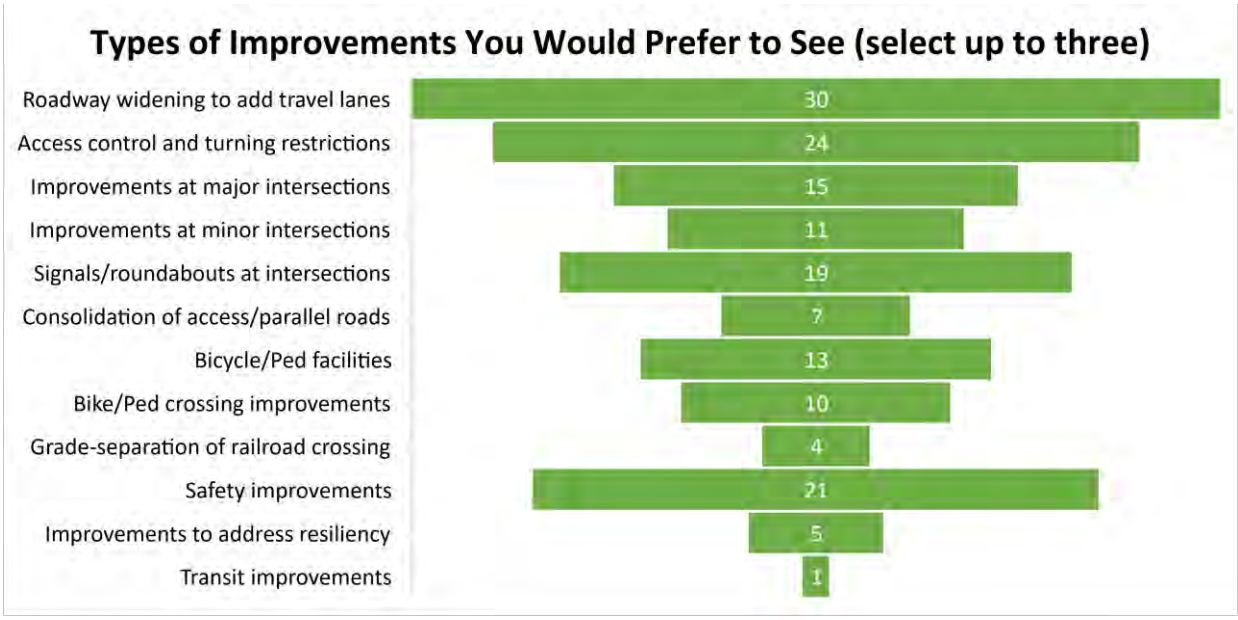
Highlighted responses:

- Due to the high speeds on SH 66, there is not support for the use of roundabouts.
- Community members are concerned that if SH 66 is expanded to 4-lanes, the noise levels will be even worse than they currently are. A noise wall is needed for many of the residential areas along the road corridor.
- There is concern about how the ACP will impact their personal access to SH 66 either from a neighborhood or single-family driveway.

Q3: Which types of improvements would you prefer to see completed first on the corridor? Please identify up to three.

- **Roadway widening to add travel lanes**
- **Access control and turning restrictions**
- **Intersection improvements at major intersections (such as US 36, US 287, and WCR 13)**
- **Intersection improvements at minor intersections (such as Airport Road, County Line Road, and WCR 9.5)**
- **Signals and/or roundabouts at intersections**
- **Consolidation of local accesses and adding the parallel access roads**
- **Bicycle and pedestrian facilities (such as the advisory shoulders, safety shoulders, or grade-separated crossings)**
- **Bicycle and pedestrian crossing improvements at intersections**
- **Grade-separation of railroad crossings**
- **Safety improvements (such as medians or medians barriers)**
- **Improvements to address the resiliency of the corridor (such as parallel routes or infrastructure upgrades)**
- **Transit improvements**
- **Other:**

Commenters emphasized the need to widen the road to add travel lanes, to control access and restrict turning and include safety improvements in the final plan.



Q4: What are your thoughts about access to and from the SH 66 corridor?

- The overall theme of safety is clearly expressed in the comments. Commentators feel that safety should be a priority when making any future improvements to SH 66. Most note that making a left-hand turn onto SH 66 or from SH 66 is challenging at all hours, but almost impossible during rush hour. Most feel that dedicated turn lanes will help solve this problem; there is also tentative support for the use of a contraflow lane.
- Speed was also mentioned often as a contributing factor to safety. Although most felt it would be appropriate to lower the speed limit, others felt that increasing the speed limit would help traffic move more smoothly along SH 66 resulting in fewer accidents.

Q5: Do you have any additional questions that need to be answered by CDOT? If so, what? Please include your contact information, if so.

Additional questions generally relate to next steps and funds to implement the recommendations. These questions were answered when attendees submitted the comment forms.

- When will the public input process begin for the ACP?
- Will a noise study be done to determine where noise barriers will be constructed?
- When was the last speed study done?

Q6-Q8: Commentators were also asked to provide their contact information and to identify if they live or work within one mile of SH 66. If so, they were asked to provide to nearest SH 66 intersection.

- All but two people who responded to this question live or work within one mile of SH 66.
- The most common intersections with SH66 are WCR 13 (Colorado Blvd), Elmore Road, Hover and CR 17.

The questionnaire is included in Appendix C. A spreadsheet of all responses will be provided to the project's Technical Advisory Committee (TAC) for review.

Welcome

to the

SH 66

Planning and Environmental Linkages Study and Access Control Plan

Public Meeting

APRIL 16 & 18, 2019

Thank you for attending! We are pleased you are here to hear more about the SH 66 Corridor! We are eager to hear your ideas to help shape the future vision for the corridor!

How to get the most out of this meeting:

- View the displays and talk with our project team members to learn more and share your ideas
- Participate in the interactive activities
- Fill out a project comment card and drop it in the box

COLORADO
Department of Transportation

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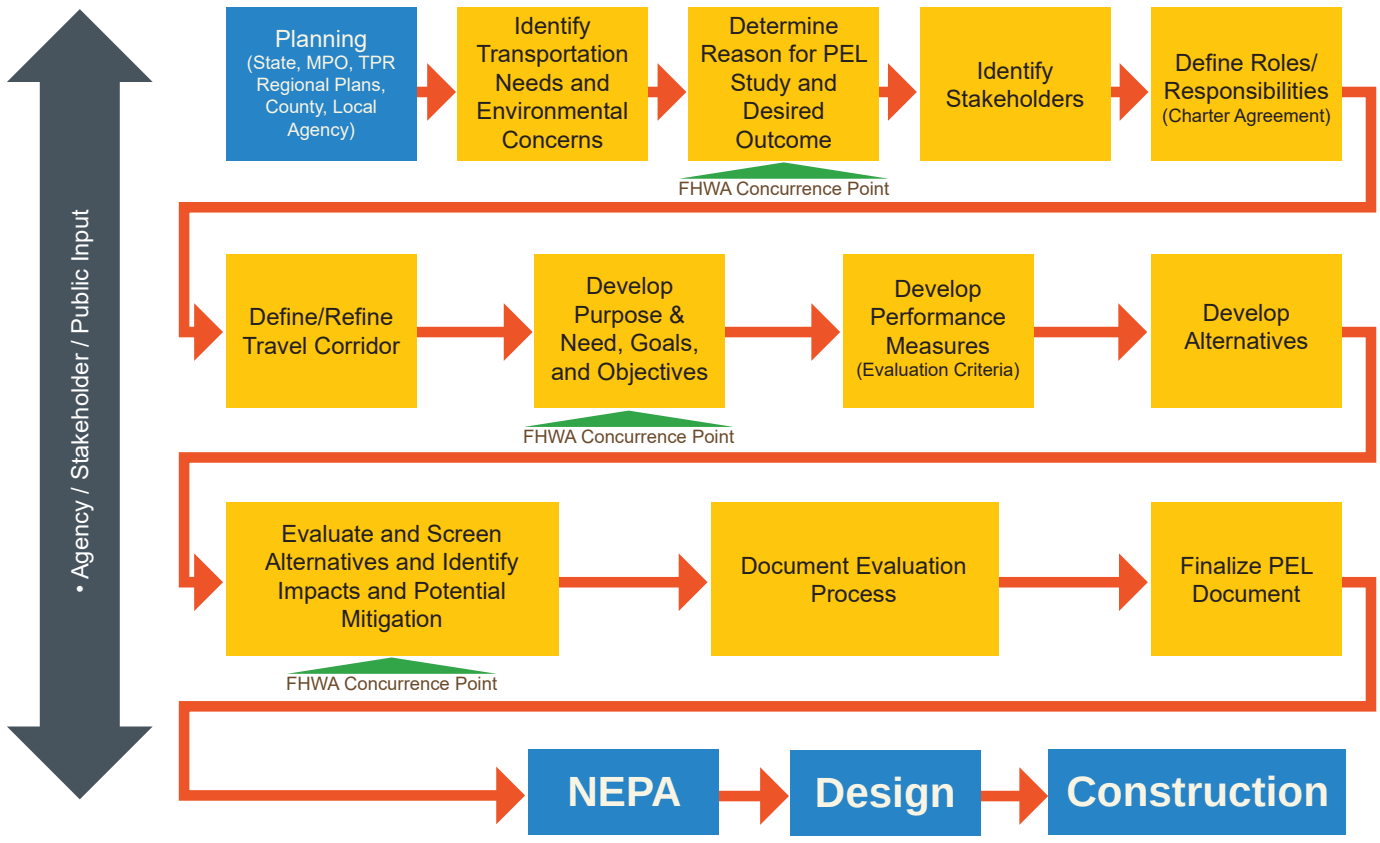
SH 66 Planning and Environmental Linkages Study

What is a PEL?

A Planning and Environmental Linkages (PEL) study is an approach to transportation decision-making that considers community, environmental and economic goals early in the planning stage and carry them through project development, design, and construction.

A PEL Study:

- Identifies transportation issues and environmental concerns
- Defines a clear purpose and need
- Results in useful information that can be carried forward into the National Environmental Policy Act (NEPA) process



Project Purpose and Need

The SH 66 PEL will identify existing conditions, anticipated problem areas, safety, and operational needs to determine the short-term and long-term transportation priorities.

Purpose The purpose of transportation improvements along the SH 66 corridor is to increase safety; reduce traffic; provide managed access for existing and future development; and improve multimodal mobility of people, goods, and services. The improvements should be resilient, accommodate developing technologies, and strive to complement adjacent community context.

Needs

SAFETY PROBLEM

The corridor has experienced a number of safety concerns.

VEHICULAR Several intersection and mainline locations along the SH 66 corridor have a high number of crashes, when compared to other similar roadways.

BICYCLE Areas along the corridor have experienced bicycle safety concerns, from recorded incidents, physical characteristics, and cross-street connections.

PEDESTRIAN There are a number of pedestrian destinations in the corridor, which do not have sidewalks connecting them and can cause unsafe pedestrian movements.

MOBILITY PROBLEM

The movement of people, goods, and services along the corridor has resulted in a number of mobility problems that can be rooted in various transportation modes.

VEHICULAR Traffic congestion, inadequate intersections that fail to accommodate users' needs, highway design, and unreliable travel times substantially impact the ability of people to move across and along the corridor.

BICYCLE A majority of the SH 66 corridor is a heavily utilized for bicycles (recreational, commuter, and events). There are many areas of the corridor that have insufficient shoulders that can accommodate bicycles or non-advanced riders.

PEDESTRIAN There are a number of pedestrian destinations in the corridor, many of which do not have sidewalks between the destinations.

TRANSIT Transit service in the corridor is primarily focused on north-south connections and not local east-west service. There is currently a non-continuous connection of transit service providers in the corridor.

ACCESS PROBLEM

The current number, locations, and design of public roadway accesses have contributed to traffic operational and safety deficiencies along the corridor. There are individual private driveways, business accesses directly onto SH 66, and inconsistent access spacing, which leads to mobility and safety problems.

SH 66 Planning and Environmental Linkages Study

Process Flowchart

PEL

NEPA/Design

Implementation

Subsequent Steps

1 Stakeholder Interviews
Visioning Workshop
Sections/Constraints/Goals

2 Data Collection
Current Demand
Future Demand (information from stakeholders & visioning)

Purpose & Need

FHWA CONCURRENCE POINT

Public Meeting

3a Roadway Classification

3b Roadway Capacity
JULY 2017

4 Intersection Alternatives

We are Here

5 Screen Alternatives
EARLY SPRING 2019

Choose alternatives that best fit the current and future transportation system, current surrounding land use and future land use context

Evaluate environmental impacts/constraints

FHWA CONCURRENCE POINT

Public Meeting

6 ACP Development
Public Meeting

LATE SPRING 2019

7 Prioritization & Documentation & Draft ACP
SUMMER 2019

PEL Questionaire
Summary Sheets

FHWA CONCURRENCE POINT

8 PEL Recommendations, Final ACP
Public Meeting

LATE SUMMER 2019

9 Preserve Right-of-Way

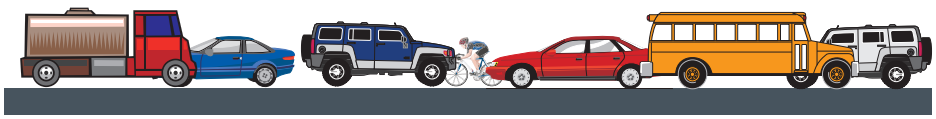
10 Identify Funding, Conduct NEPA Analysis

11 Design, Construction

SH 66 Planning and
Environmental Linkages Study

What Is an Access Control Plan?

- Any intersection or driveway along a roadway is called an access point. At access points there is a potential for a conflict to occur between the different modes of transportation (vehicle, pedestrian, and bicycle). Vehicles turning into and out of access points can cause other vehicles to slow down, resulting in delay and congestion.
- An Access Control Plan:
  - Determines what access points will be allowed
  - Establishes where accesses will be located
  - Determines what kind of traffic movements will be allowed at each access
  - Identifies alternative access routes and circulation as necessary
  - Ensures each abutting property has reasonable access
  - Is a long-range vision for the corridor
- There are no planned projects or identified funding that would change existing access.
- Implementation of the SH 66 Access Control Plan will occur in phases or incrementally over time based on:
  - The development and redevelopment process
  - Available funding
  - Traffic needs
  - Safety needs
- The Access Control Plan will **not** determine the future number of lanes or design features of SH 66



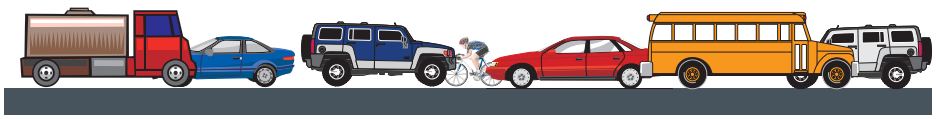
Overview

What are the goals of this Access Control Plan?

- Blend the corridor vision from the PEL with the requirements of the CDOT State Highway Access Code
- Identify improvements to the local transportation network that promote safety and provide appropriate level of access to properties adjacent to the highway
- Assist future development and redevelopment along SH 66 by identifying the locations and type of access
- To provide efficient movement of traffic and other modes of transportation within the area

Why does SH 66 need an Access Control Plan?

- SH 66 has approximately 370 existing access points (driveways and intersections) within the study area limits from Lyons (McConnell Dr) to WCR 19, which is an average of nearly 19 accesses per mile
- Controlling the number of access points on SH 66:
  - Reduces conflict points where a crash may occur on the highway. This is applicable not only for vehicles, but also for pedestrians and bicycles having to cross multiple driveways on the corridor.
  - Creates fewer locations for vehicles to brake or turn onto or off the highway resulting in more efficient travel for through traffic.
  - Makes the corridor more visually appealing to drivers and visitors by reducing the number of driveways
  - Improves highway safety and efficiency for all modes of transportation



Access Control Plan Process

- Develop Draft ACP based on PEL recommendations, input from local agencies, and CDOT
- Present Draft ACP to public at Open House
- Revise ACP Recommendations based on public input and final PEL recommendations
- Present Final ACP to public at Open House

Accept the final plan

Specify how elements of the plan can be changed in the future if neccessary

Prepare, sign, and adopt an Intergovernmental Agreement between Town of Lyons, City of Longmont, Town of Mead, Town of Firestone, Boulder County, Weld County, and CDOT

Report outcomes to the Colorado Transportation Commission and get approval from the CDOT Chief Engineer so the plan becomes law

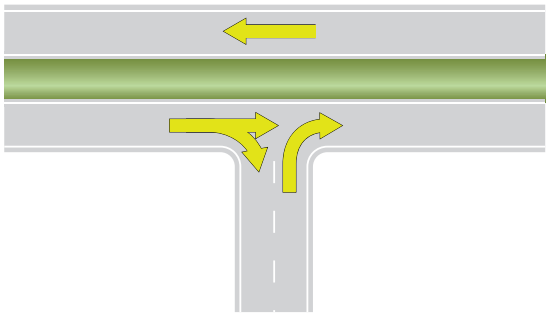
Continuing coordination between Town of Lyons, City of Longmont, Town of Mead, Town of Firestone, Boulder County, Weld County, and CDOT to ensure proper implementation of the plan in the future

SH 66 Planning and Environmental Linkages Study

Types of Accesses

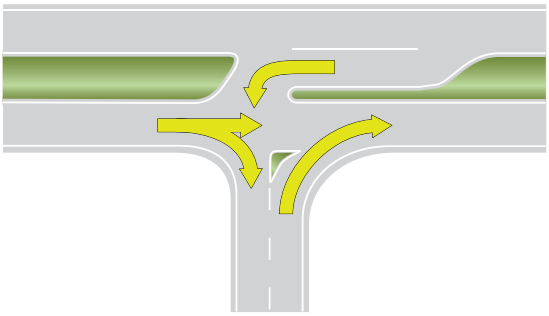
Right-in, Right-out

- Only right turns are allowed
- Traffic median prevents left turns and straight movements - these movements must be completed at another intersection.



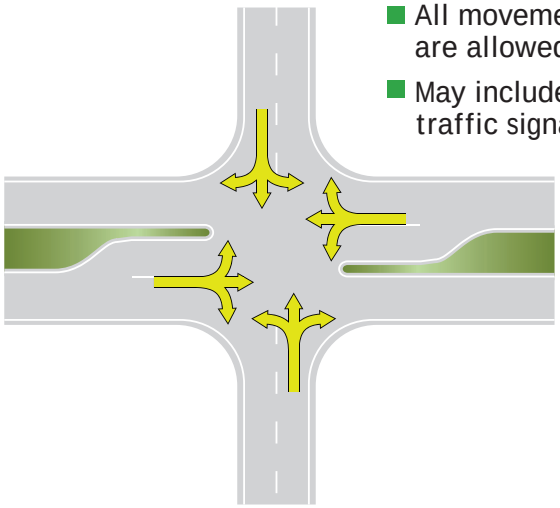
3/4 Movement

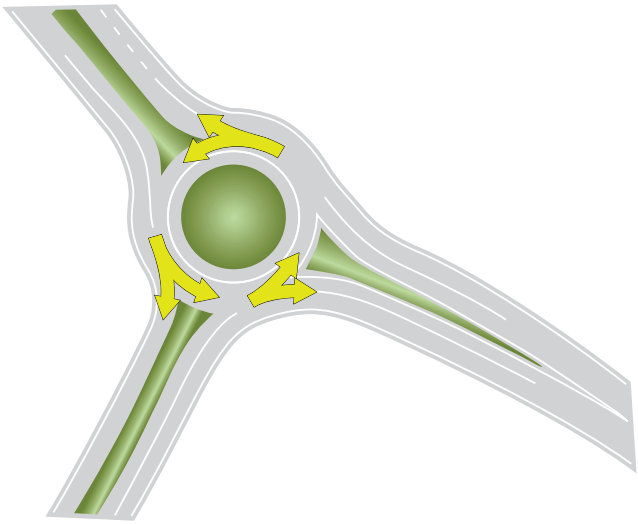
- Right-in, right-out, and left-in are allowed
- Traffic median prevents left-out and straight movements - these movements must be completed at another intersection.

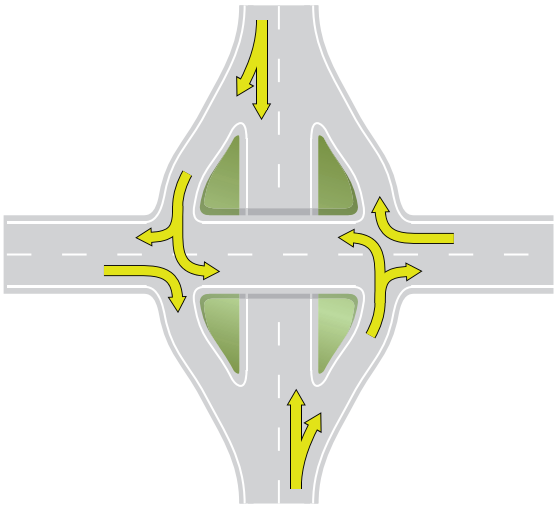


Full Movement/Roundabout

- All movements in all directions are allowed
- May include the need for a traffic signal





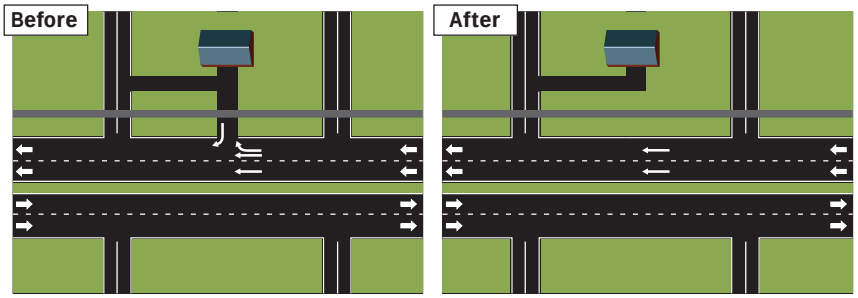


Grade-Separated

- All movements in all directions are allowed
- Some movements will occur at-grade and may require a traffic signal
- May require the need to close nearby access

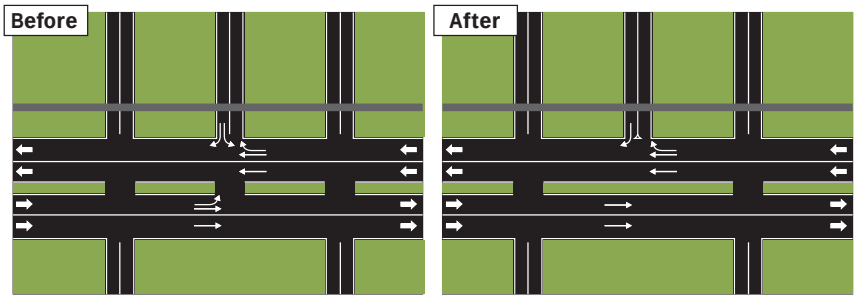
SH 66 Planning and Environmental Linkages Study

Types of Accesses



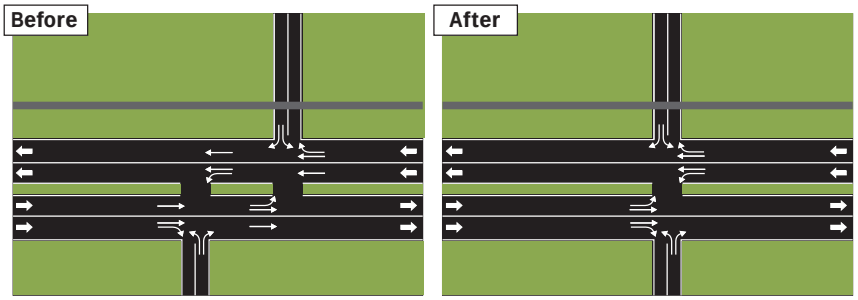
Access Elimination

- Access to local properties through secondary roads
- Consolidate number of access locations where vehicles may enter or exit the highway
- Reduce the number of conflict points



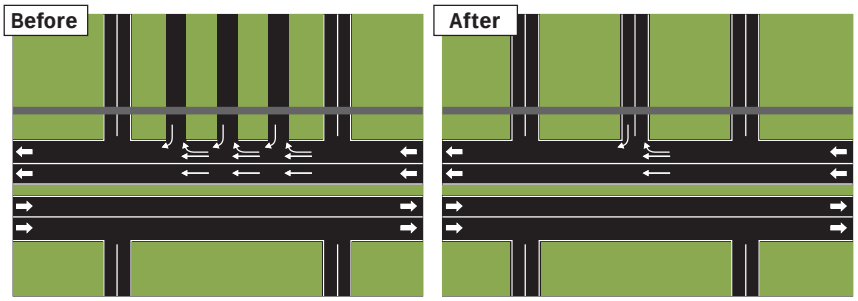
Access Conversion with Median Treatment

- Restrict some or all turning movements
- Reduce the number of conflicts between left turning vehicles and through vehicles on the highway



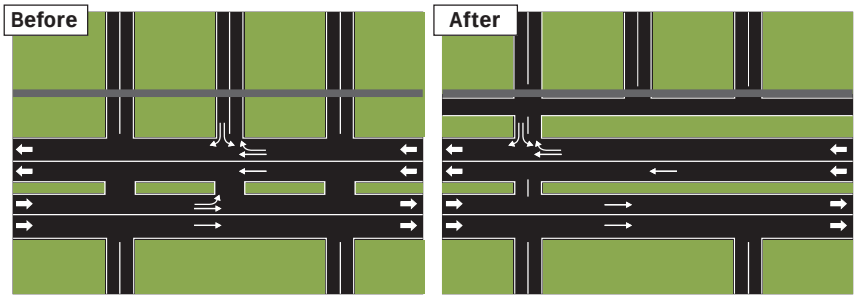
Access Relocation

- Align opposite approaches
- Create a more familiar intersection design



Access Consolidation

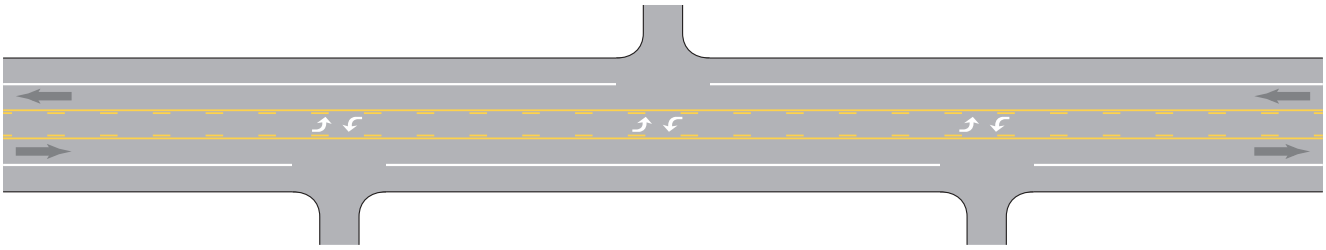
- Consolidate adjacent access points into one location
- The number of conflict points are reduced



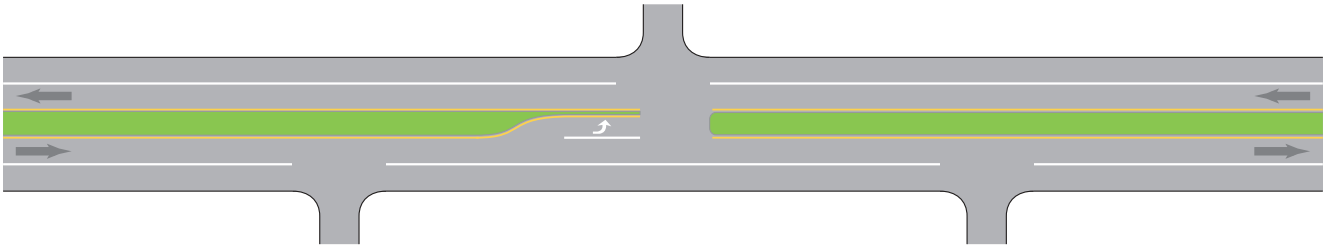
Parallel Access Route

- Provide access to properties via a new access road (such as a frontage road)
- Reduces the number of access points along the highway

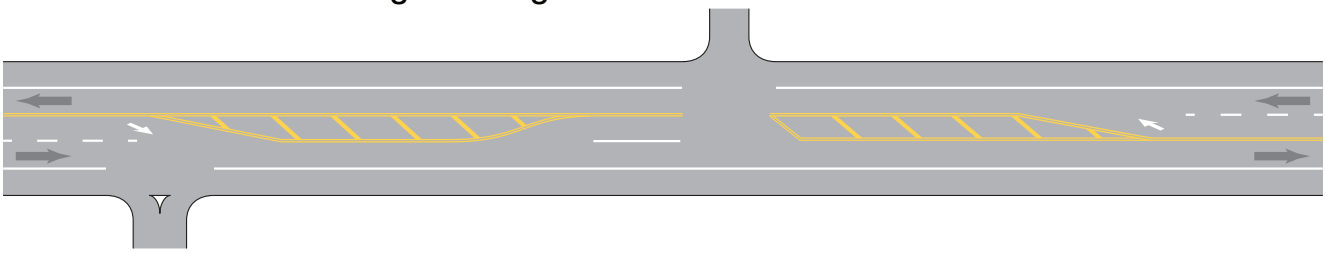
OPTION 1: Continuous Two-Way Left Turn Lane



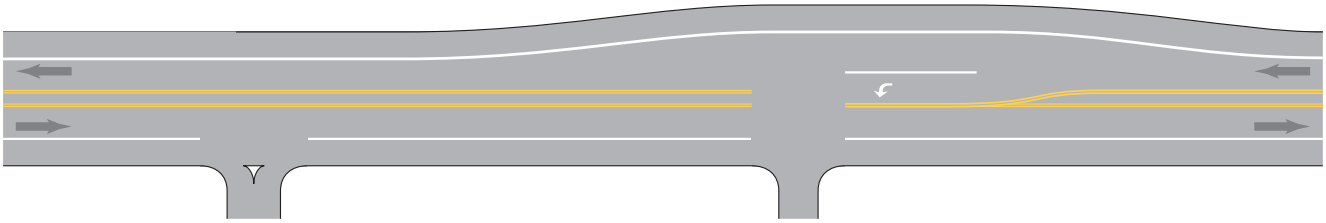
OPTION 2: Raised Center Median or Grassy Median



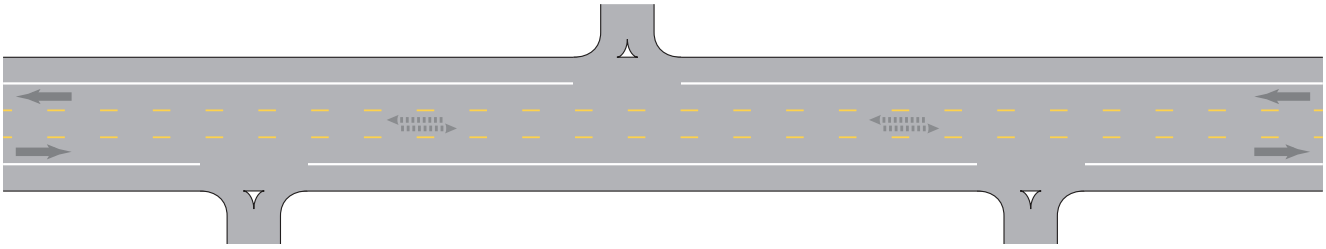
OPTION 3: Alternating Passing Lanes



OPTION 4: Widened Double Yellow Center Line



OPTION 5: Reversible Lane



SH 66 Planning and Environmental Linkages Study

Alternatives Development and Screening Process

SCREENING LEVEL	ALTERNATIVE DEVELOPMENT	INPUTS/MEASURES	EVALUATION CRITERIA/ SCREENING	OUTCOMES

Purpose & Need Screening

LEVEL 1 GOAL: Recommend alternatives that appropriately & contextually meet purpose & need

1.

Develop Full Range of Alternatives

- **Public, Agency, & Stakeholder Perspectives**
- **Range of Alternatives**
  - Roadway: Current Alignment? Alternate Alignment?
  - Transit: Light Rail? Bus Rapid?
  - Intelligent Mobility
  - Bicycle & Pedestrian Facilities

Meets Purpose & Need? (Screening)

- **Safety**
- **Mobility**
- **Access**

→ **Alternatives Eliminated or Not Recommend that do not Meet Purpose & Need**

→ **Full Range of Alternatives to Advance**

Comparative Screening

LEVEL 2 GOAL: Recommend specific alternatives that balance all needs within community & environmental context

2a.

LEVEL 2a GOAL: Recommend section classifications and through capacity

Evaluate Section Classification
- Freeway
- Expressway
- Rural Highway
- Arterial Roads

Evaluate Section Capacity
- 2-Lane
- 3-Lane
- 4-Lane
- 6-Lane

2b.

LEVEL 2b GOAL: Integrate improvements to address all needs & balance context

Stand-alone Assessments of Safety, Mobility, & Access

Combine Assessments & Further Screen Alternatives

Full Range of Alternatives to Advance

- **Access Code Criteria & Layouts**
- **Intersection Options**
- **Roadway Templates**
- **Bike & Pedestrian Facilities**
- **Intelligent Mobility**

Maintain Purpose & Need to Define Decisions
- **Safety**
- **Mobility**
- **Access**

Considerations:
- **Environmental**
- **Community**
- **Risk**

→ **Identify:**
- **Operational Classifications**
- **Number of Lanes**
- **Transit, Bike, Pedestrian Integration**
- **Through-lane Options**

→ **Alternatives Not Recommended**

→ **Section & Intersection Concepts**

Detailed Alternative Development & Screening

LEVEL 3 GOAL: Enhance improvements to document planning, implementation, & funding needs

3.

Extent of Results from Level 2 Screening

Section & Intersection Concepts

FHWA & CDOT Standards CAP-X Tool

→ **Estimated Maximum Footprint of Potential Future Improvements**

Access Control Plan

Conceptual Layouts & Recommendations

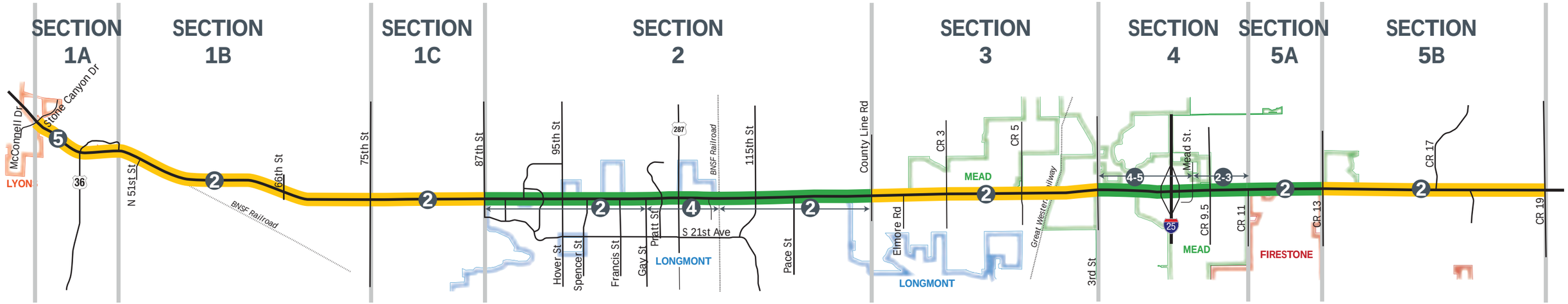
→ **Prioritization** (based on needs)

→ **PEL Study Recommendations**

SH 66 Planning and Environmental Linkages Study

Level 2a Screening Operational Classification

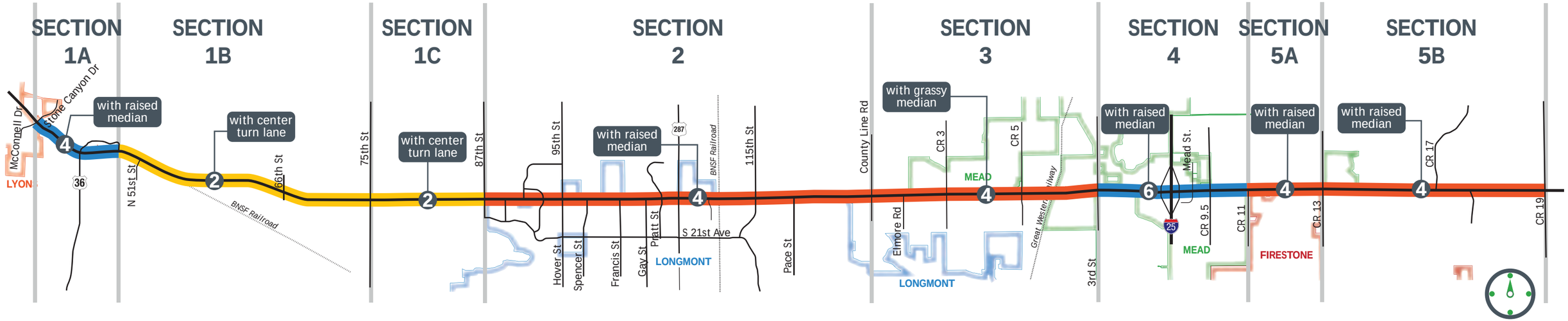
Existing



LEGEND

- Expressway
- Non-Rural Principal Highway
- Rural/Regional Highway
- Arterial
- (X) Number of Thru Lanes

Future



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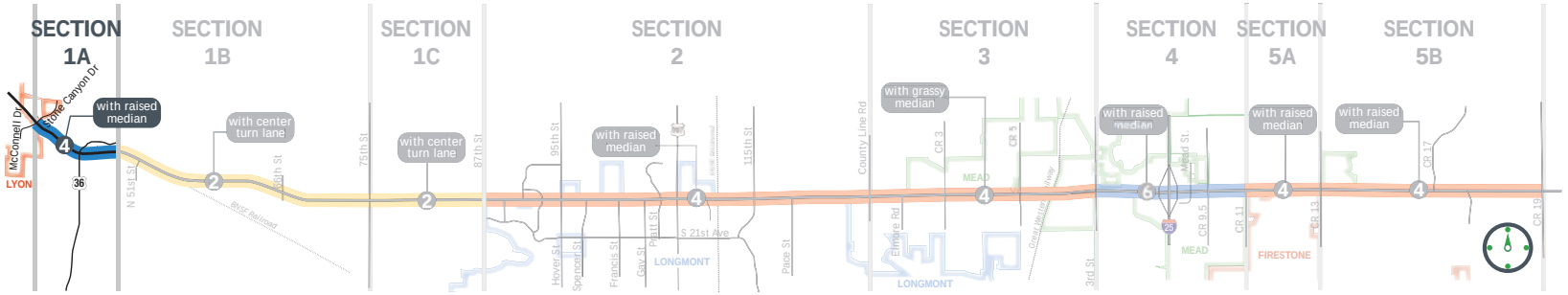
Section 1A Renderings

Section 1A Existing

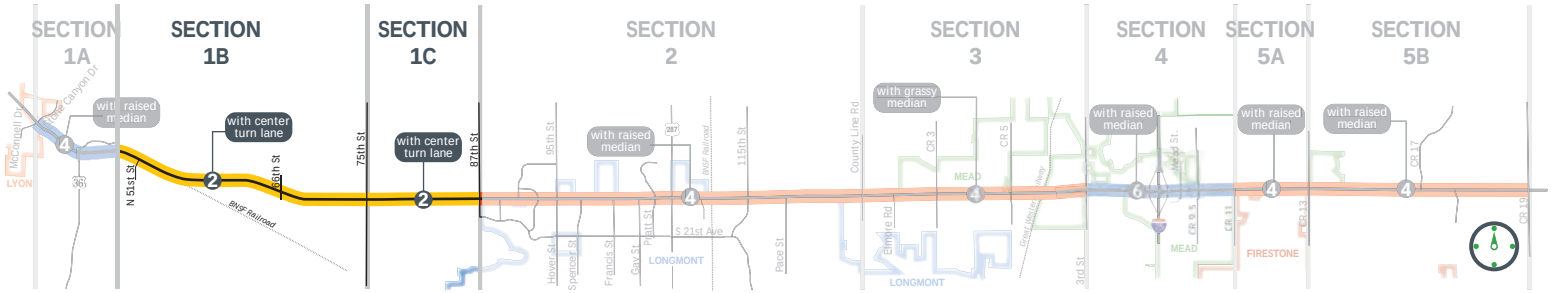
Section 1A Proposed: Raised median with a dedicated left turn lane.



Section 1B & 1C Renderings

Section 1B Existing

Section 1B Proposed: Center turn lane and an access road with advisory shoulders



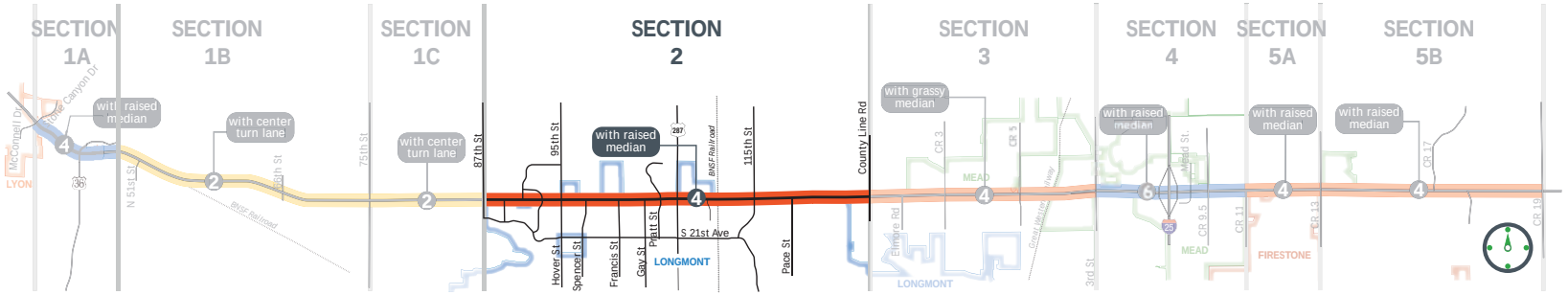
Section 1C Existing

Section 1C Proposed: Center turn lane and wider shoulders

Section 2 Renderings

Section 2 Existing

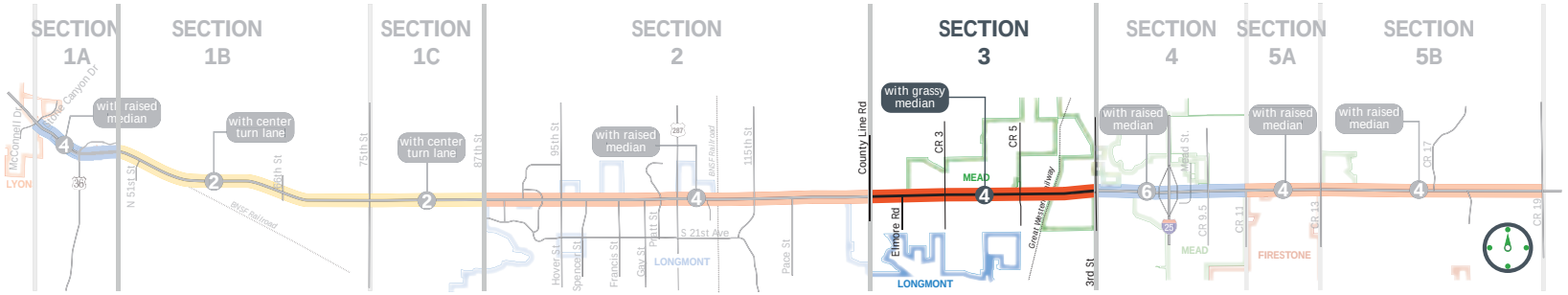
Section 2 Proposed: Raised median with wider shoulders and a side path



Section 3 Renderings

Section 3 Existing

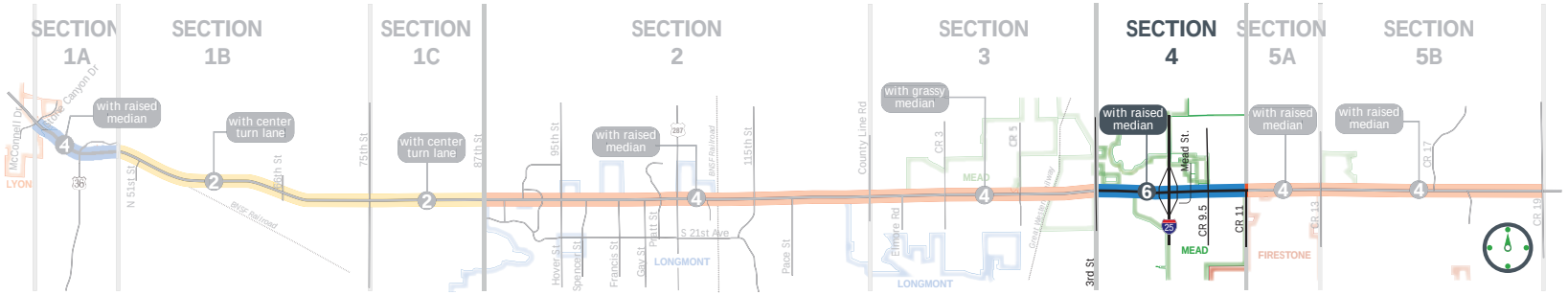
Section 3 Proposed: Grassy median with cable delineator



Section 4 Renderings

Section 4 Existing

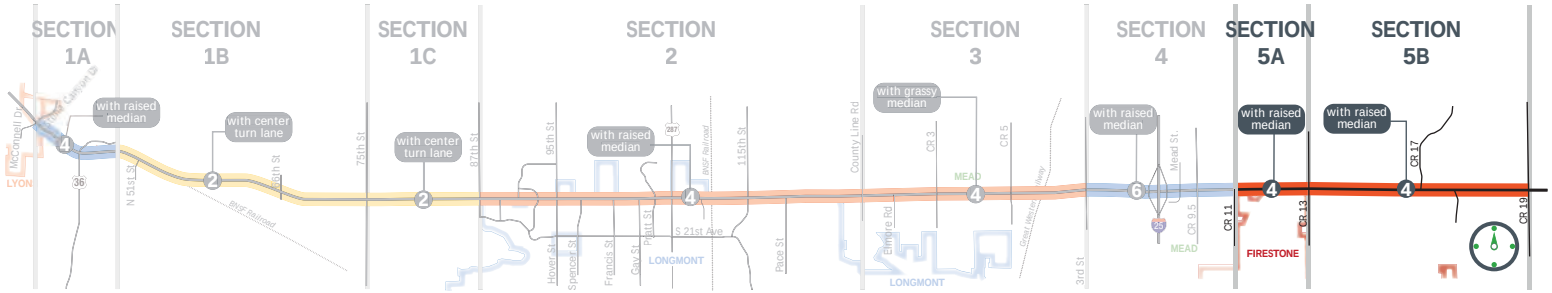
Section 4 Proposed: Raised median with a sidepath



Section 5A & 5B Renderings

Section 5A Existing

Section 5A Proposed: Raised median with a sidepath

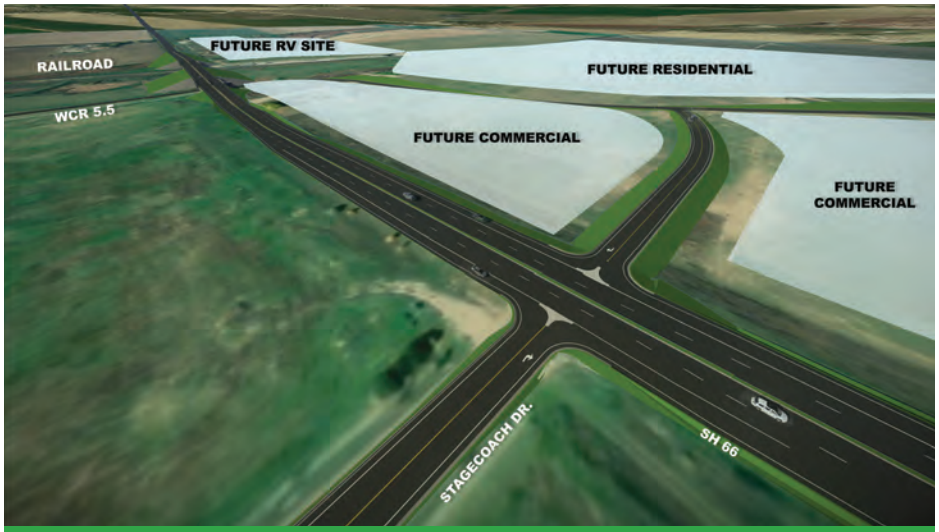


Section 5B Existing

Section 5B Proposed: Raised median with a sidepath

WCR 5.5 & Stagecoach Dr Future Development

This option is intended to allow for the grade-separation of the railroad crossing, while still allowing for local circulation and access to SH 66.



View looking Northwest

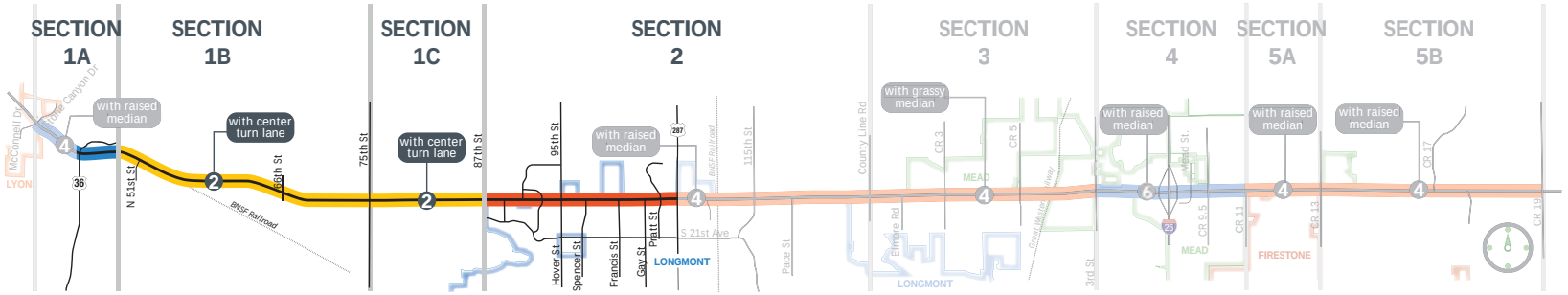
View looking North

View looking Northwest

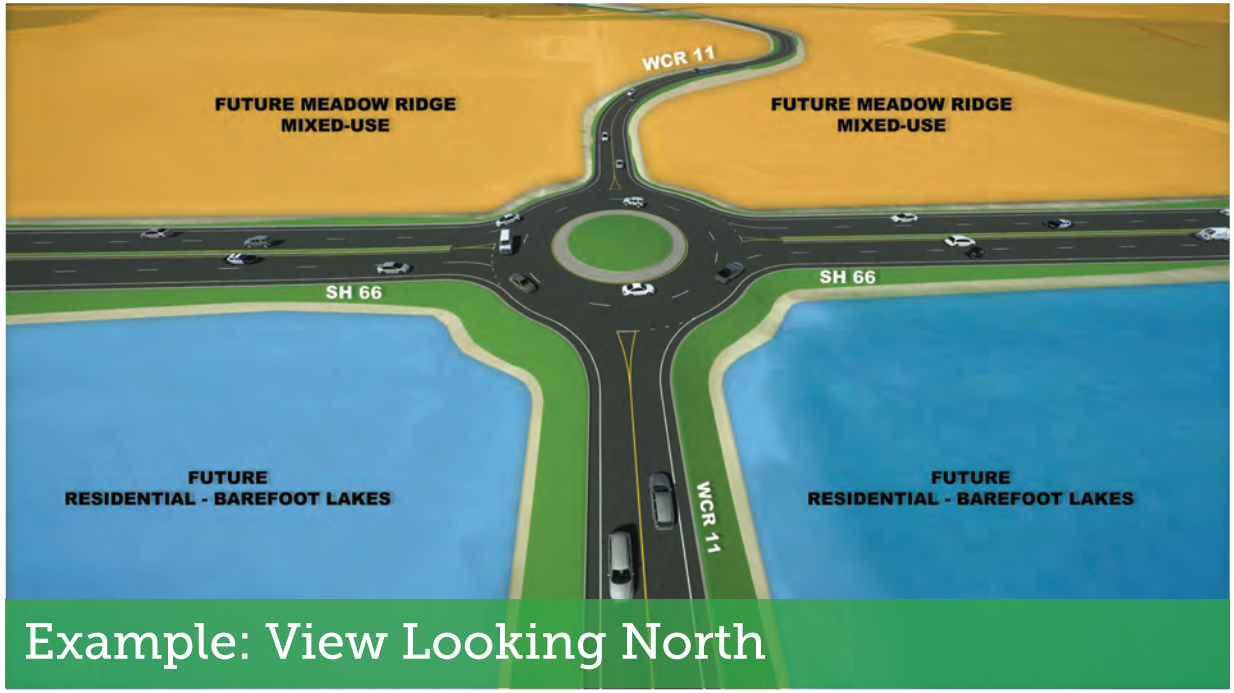
Reversible Lanes (Contraflow) Renderings

Contraflow Afternoon

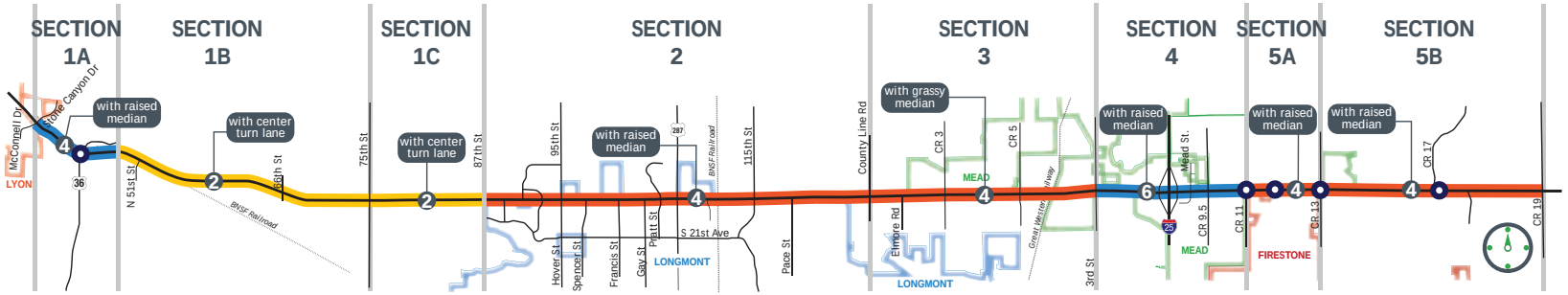
Contraflow Morning



Roundabouts



Example: View Looking North



= Intersections with roundabout potential

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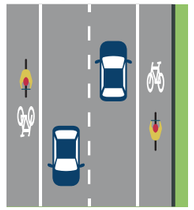
SH 66 Planning and Environmental Linkages Study

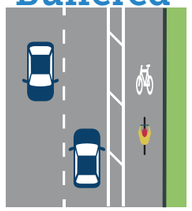
PEL Bicycle/Pedestrian/Transit Facilities Carried Forward

Bike Lanes

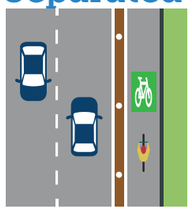
Traditional



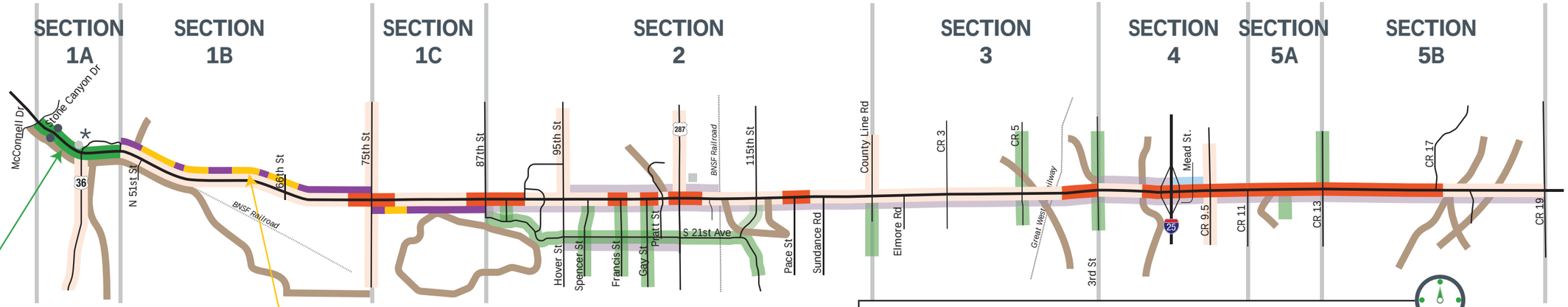
Buffered



Separated



PEL Level 2B Carried Forward Options



Section 1B Proposed: Center turn lane and an access road with advisory shoulders

LEGEND

PEL Proposed	Existing/Planned	
		Multi-Use Trail
		Sidepath
		Sidewalk
		Bike Lanes
		Access Road with Advisory Shoulders
		Wide Shoulders (5+Feet)

- Bus Stop Improvements
- Existing Bus Stops
- Transit Station

* Includes traditional bike lanes and buffered bike lanes as short-term options and separated bike lanes as the long-term option from McConnell Dr. to Highland Dr.

Multi-Use Trail vs Sidepath vs Sidewalk:

All of these facilities can accommodate pedestrians and bicycles, so what's the difference?

- A Multi-Use Trail is usually a wide facility (10+ feet) that may not associate with a roadway, but can run along one as part of a regional trail system, and can be paved or unpaved.
- Like a trail, a Sidepath is also a wide facility (10+ feet). However, it runs detached along a roadway for its entirety and is paved.
- Like a sidepath, a Sidewalk runs along a roadway; however, is not as wide, typically measuring 5 feet in width. It can be detached or attached to the roadway.

Next Steps:

- **Your input on Level 2B**
- **Level 3** – bike/pedestrian/transit improvements at intersections
- **Give us a head start:** What improvements are needed at which intersections?

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SH 66 Planning and Environmental Linkages Study

Incorporating Risk and Resiliency into the PEL Process

PEL STUDY

Identify future resiliency opportunities.

THREATS

- Bridge Scour from Floods
- Debris Flow
- Fires
- Landslides
- Rockfalls
- High Winds
- Tornados
- Bridge Strikes
- Railroads
- Utilities
- Visibility
- Cyber
- Hazardous Materials

ASSETS

- Bridges
- Roadway Prism
- Sidewalks & Trails
- Culverts & Roadside Ditches
- Walls
- ITS Devices
- Traffic Control Devices

IDENTIFY THREATS and CDOT ASSETS

- Identify applicable threats and hazards along project corridor.
- Determine location of assets that exist in the corridor.
- Evaluate if the asset is independent or a part of an impacted system to threats.

DELIVERABLE:
Map of Threats and Assets

DOCUMENT VULNERABILITY and CONSEQUENCE

- What do we already know about the asset (age, condition, to standard, proximity)?
- Identify high level infrastructure and user costs.
- Determine expected effects from each threat.
- Determine countermeasures in place to reduce vulnerability.

ASSESS RISK

- Determine likelihood of occurrence.
- Understand risk profile in the corridor.

RESILIENT RECOMMENDA-TIONS

- Recommend ROW preservation of system related opportunities for resiliency.
- Integrate with PEL implementation.
- Prioritize resiliency improvements.

DELIVERABLE:
PEL Risk Assessment Matrix

> Resiliency is the ability of communities to rebound, positively adapt to, or thrive amidst changing conditions or challenges - including disaster and climate change - and maintain quality of life, healthy growth, durable systems, and conservation of resources for present and future generations.
>
> - Colorado Resiliency Working Group -

Once funds have been identified, resiliency opportunities during the PEL process will be used to consider implementing improvements.

PROJECT DELIVERY

NEPA, RnR ANALYSIS (b/c ratio), FUNDING, and DECISION MAKING

- Revisit identified options to reduce risk and increase resilience
- Assess risk reduction and mitigation alternatives

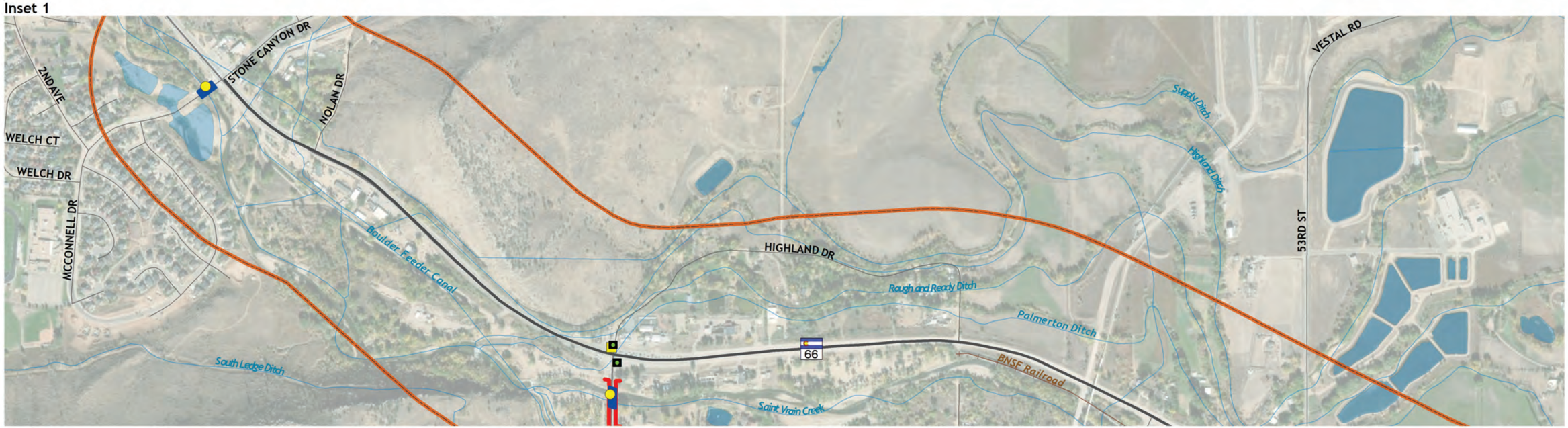
DESIGN and CONSTRUCTION

- Implement resilient design solutions

SH 66 Planning and Environmental Linkages Study

Operational Resiliency - Bridge Strikes

Inset 1



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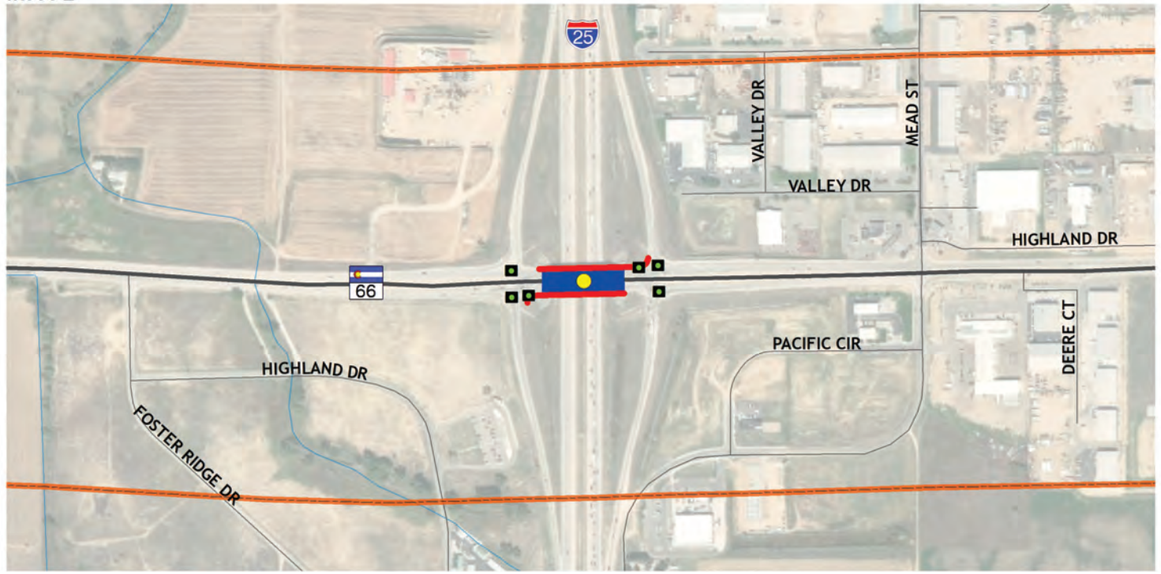

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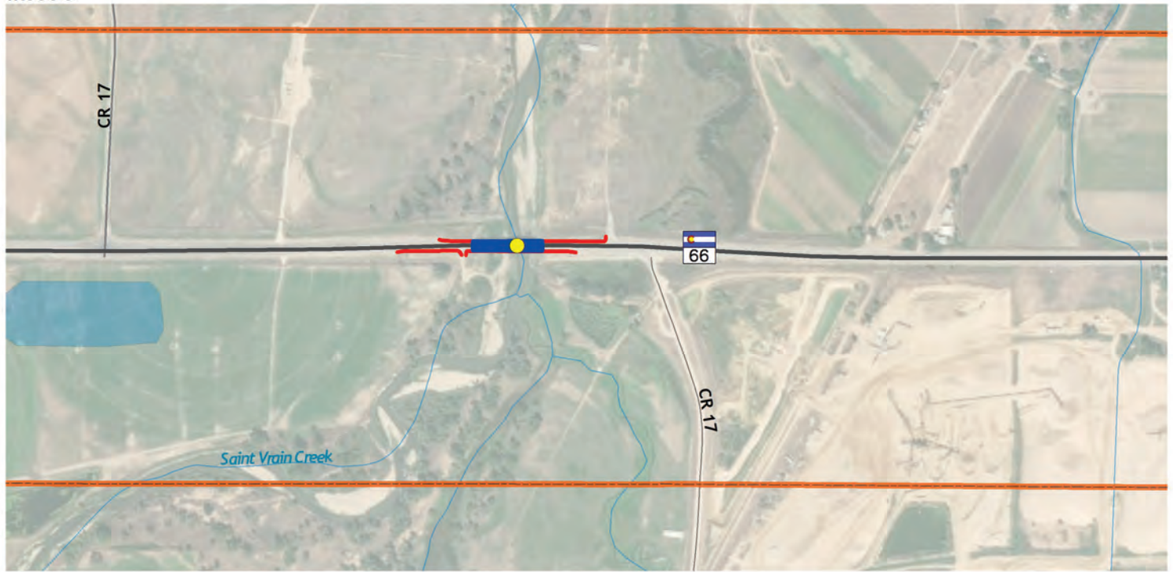


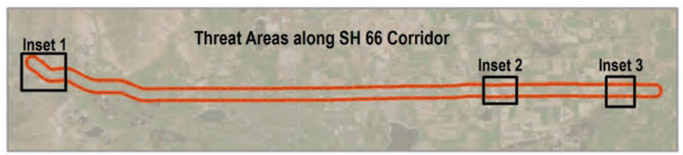
Legend

CDOT Assets
- Bridge
- Culvert
- Traffic Signal

- Guardrail
- SH 66 Corridor (Asphalt)

Potential Threat
- Bridge Strike Zone

- Railroad
- Study Area



SH 66 Planning and Environmental Linkages Study

Level 2B Alternatives Development and Screening

[Map 1 of 7]

SECTION 1A

SECTION 1B

Nolan Road
Option 1 - No Action
Option 2 - Right In/ Right Out

Highland Drive
Option 1 - No Action
Option 2 - Signalize intersection, if warranted,when future development occurs
Option 3 - Channelized T

McConnell Dr
Option 1 - No Action
Option 2 - No changes to intersection
Option 3 - Consolidate access to the east

US 36
Option 1 - No Action
Option 2 - Keep signalized and assess intersection type based on future development; consolidate access to the east; consider ROW preservation for future transit/expansion
Option 3 - Roundabout

Access to North Side of SH 66 (Highland Dr to 66th St)
Option 1 - No Action
Option 2 - Consolidated driveways with Access Road with Advisory Shoulder facility. Provide access to SH 66 via partial or full movement access at:
- *53rd Street*
- *Forest Service Access Rd*
- *61st Street*
- *66th Street*

N. 63rd Street
Option 1 - No action
Option 2 - Offset 'T' with 61st
Option 3 - 3/4 movement
Option 4 - Closed

Stone Canyon Dr
McConnell Dr
Highland Dr
Highland Dr
LYONS
BOULDER COUNTY
53rd St
Forest Service Access Rd
61st St
63rd St
51st St
36
4
2

LEGEND
- Expressway
- Rural/Regional Highway
- Arterial
- X = Number of Thru Lanes
- WCR = Weld County Road
- Future Connection
- 16' Access Raod with Advisory Shoulder
- 10' Bike and Pedestrian Path
- Frontage Road
- Xxx - Xxx PEL Proposed Options

15-255 4.16.2019

SH 66 Planning and Environmental Linkages Study

Level 2B Alternatives Development and Screening

[Map 2 of 7]

SECTION 1B

SECTION 1C

SECTION 2

BOULDER COUNTY

N. 66th Street
Option 1 - No Action
Option 2 - Full movement; signalized intersection, if warranted, with closure of 63rd St. and/or when future development occurs

McCall Drive
Option 1 - No Action
Option 2 - Right in/Right Out
Option 3 - Right out only
Option 4 - Close

N.75th Street
Option 1 - No Action
Option 2 - Provide two EB through lanes
Option 3 - Capacity improvements

Table Mountain Road
Option 1 - No Action
Option 2 - Right In/Right Out with possible connection to Unnamed Rd to north

Unnamed Road
Option 1 - No Action
Option 2 - Consolidate access on south to one full movement via Access Road with Advisory Shoulder facility on south side of SH 66
Option 3 - Consolidate access on north and south to one Right In/Right Out

N. 87th Street
Option 1 - No Action
Option 2 - Signalize and capacity improvements

N 66th St

N 75th St

Table Mountain Rd

Unnammed Rd

N 87th St

Airport Rd

Horizon

Rozena Dr

2

2

4

LEGEND

- Expressway
- Rural/Regional Highway
- Arterial
- X = Number of Thru Lanes
- WCR = Weld County Road
- Future Connection
- 16' Access Raod with Advisory Shoulder
- 10' Bike and Pedestrian Path
- Frontage Road
- Xxx - Xxx PEL Proposed Options

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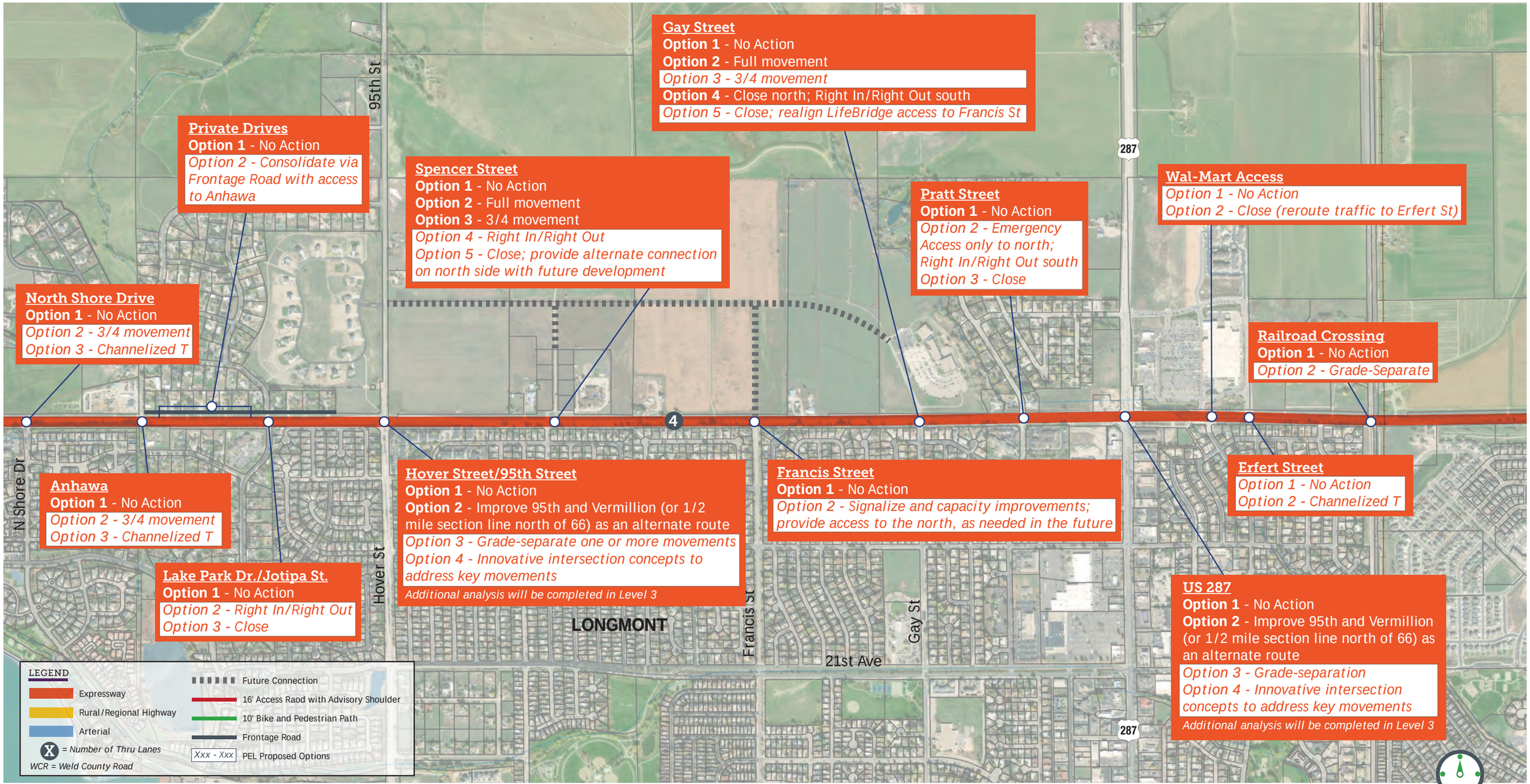
SH 66 Planning and Environmental Linkages Study

Level 2B Alternatives Development and Screening

[Map 3 of 7]

SECTION 2



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SH 66 Planning and Environmental Linkages Study

Level 2B Alternatives Development and Screening

[Map 4 of 7]

SECTION 2

SECTION 3

BOULDER COUNTY

WELD COUNTY

115th St

Alpine St

Pace St

Sundance Dr

County Line Rd

WCR 3

4

N. 115th Street/Alpine Street
Option 1 - No Action
Option 2 - Signalize and capacity improvements

Sundance Drive
Option 1 - No Action
Option 2 - Signalize and consolidate accesses on the north
Option 3 - 3/4 movement for north and south and consolidate accesses the north
Option 4 - Right In/Right Out for north and south; consolidate accesses on the north

Elmore Road
Option 1 - No Action
Option 2 - Right In/Right Out and build parallel road to connect to WCR 1 and WCR 3
Option 3 - Close and build parallel road to connect to WCR 1 and WCR 3

Nesting Crane Lane
Option 1 - No Action
Option 2 - Signalize; full movement
Option 3 - Channelized T
Option 4 - Close and build parallel road to connect to WCR 1 and WCR 3

Pace Street
Option 1 - No Action
Option 2 - Capacity improvements

County Line Road
Option 1 - No Action
Option 2 - Capacity improvements (assumed WCR 1 would be 4 lanes)
Option 3 - Alternative Intersection Design (Additional analysis to be completed in Level 3)

WCR 3
Option 1 - No Action
Option 2 - Signalize when warranted and Capacity Improvements
Option 3 - Roundabout

LEGEND

- Expressway
- Rural/Regional Highway
- Arterial
- X = Number of Thru Lanes
- WCR = Weld County Road
- Future Connection
- 16' Access Raod with Advisory Shoulder
- 10' Bike and Pedestrian Path
- Frontage Road
- Xxx - Xxx PEL Proposed Options

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SH 66 Planning and Environmental Linkages Study

Level 2B Alternatives Development and Screening

[Map 5 of 7]

SECTION 3

SECTION 4

MEAD

WCR 7

3rd St

WCR 5

Foster Ridge Dr

WCR 5
Option 1 - No Action
Option 2 - Signalize when warranted and capacity improvements
Option 3 - Roundabout

Railroad Crossing
Option 1 - No Action
Option 2 - Grade-separate

Stage Coach Drive
Option 1 - No Action
Option 2 - 3/4 movement
Option 3 - Right In/Right Out
Option 4 - Close

WCR 5.5
Option 1 - No Action
Option 2 - Full movement, Signalize
Option 3 - Grade-separate with no direct access to SH 66 if Railroad is grade-separated

Foster Ridge Road
Option 1 - No Action
Option 2 - Signalize, when warranted with future development

WCR 7/3rd Street
Option 1 - No Action
Option 2 - *Signalize when warranted and Capacity Improvements*

Mead Street
Option 1 - No Action
Option 2 - 3/4 movement north and south side with connections to WCR 9.5
Option 3 - Right In/Right Out on both sides with U-turn option at WCR 9.5 to go west

I-25 NB Ramps
Option 1 - No Action

I-25 SB Ramps
Option 1 - No Action

Deere Court
Option 1 - No Action
Option 2 - Right In/Right Out
Option 3 - Close and provide access to WCR 9.5 or Mead St on south end of cul-de-sac

LEGEND

- Expressway
- Rural/Regional Highway
- Arterial
- X = *Number of Thru Lanes*
- *WCR = Weld County Road*
- Future Connection
- 16' Access Raod with Advisory Shoulder
- 10' Bike and Pedestrian Path
- Frontage Road
- Xxx - Xxx PEL Proposed Options

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SH 66 Planning and Environmental Linkages Study

Level 2B Alternatives Development and Screening

[Map 6 of 7]

SECTION 4 | SECTION 5A | SECTION 5B

WELD COUNTY

FIRESTONE

WCR 11 | WCR 13

WCR 9.5
Option 1 - No Action
Option 2 - Grade-separation
Option 3 - Capacity improvements
Option 4 - Roundabout
Option 5 - Alternative Intersection Design (additional Analysis to be completeed in Level 3)

WCR 11
Option 1 - No Action
Option 2 - Signalize when warranted with future development
Option 3 - Roundabout

WCR 11.5
Option 1 - No Action
Option 2 - Signalize when warranted with future development
Option 3 - Roundabout

WCR 13/Colorado Blvd
Option 1 - No Action
Option 2 - Grade-separation
Option 3 - Add capacity improvements
Option 4 - Roundabout

Future WCR 15
Option 1 - No Action
Option 2 - Move J-Bar-B-Road west to section line (WCR 15), full movement access and signalize if warranted with future development
Option 3 - Roundabout

WCR 17-North Side
Option 1 - No Action
Option 2 - Signalize if warranted; capacity improvements
Option 3 - Roundabout
Option 4 - Channelized T

6 | 4 | 4

LEGEND

- Expressway
- Rural/Regional Highway
- Arterial
- X = Number of Thru Lanes
- WCR = Weld County Road
- Future Connection
- 16' Access Raod with Advisory Shoulder
- 10' Bike and Pedestrian Path
- Frontage Road
- Xxx - Xxx PEL Proposed Options

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SH 66 Planning and Environmental Linkages Study

Level 2B Alternatives Development and Screening

[Map 7 of 7]

SECTION 5B

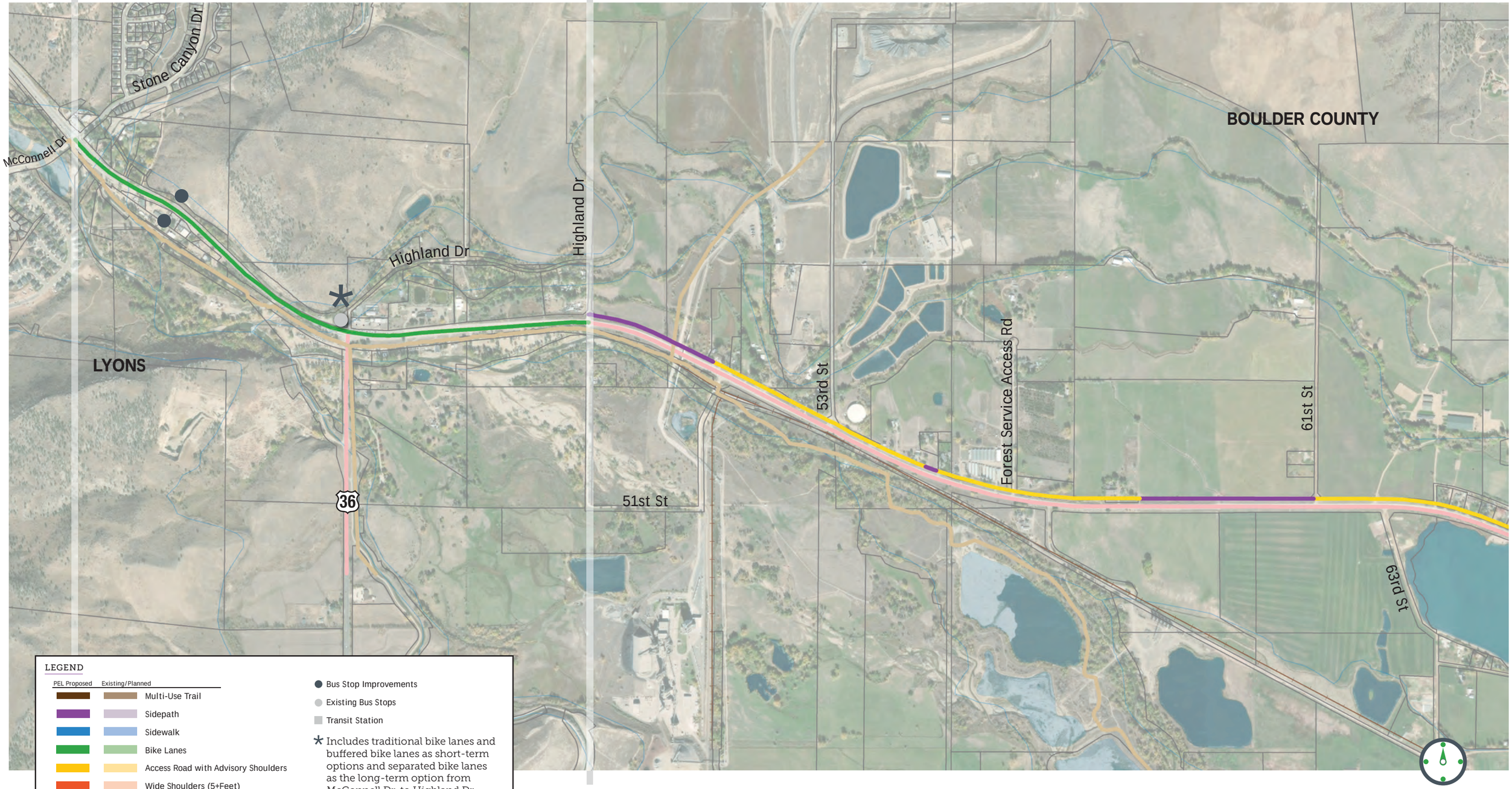
15-255 4.8.2019

SH 66 Planning and Environmental Linkages Study

Level 2B Bicycle/Pedestrian/Transit Alternatives Carried Forward [Map 1 of 7]

SECTION 1A

SECTION 1B



LEGEND

PEL Proposed	Existing/Planned	
		Multi-Use Trail
		Sidepath
		Sidewalk
		Bike Lanes
		Access Road with Advisory Shoulders
		Wide Shoulders (5+Feet)

- Bus Stop Improvements
- Existing Bus Stops
- Transit Station

* Includes traditional bike lanes and buffered bike lanes as short-term options and separated bike lanes as the long-term option from McConnell Dr. to Highland Dr.

Locations depicted are for illustrative purposes only.

15-255 4.16.2019

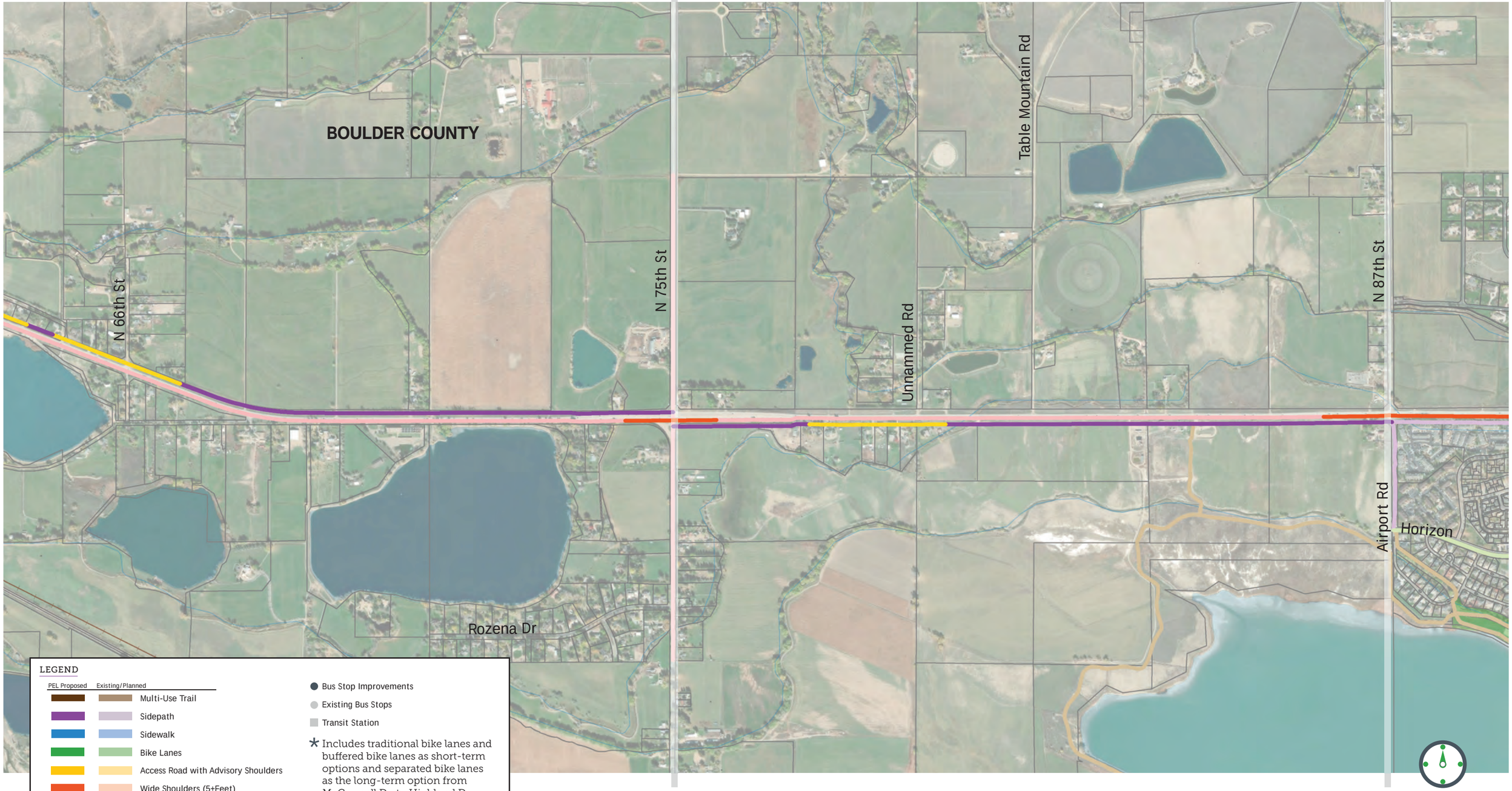
SH 66 Planning and Environmental Linkages Study

Level 2B Bicycle/Pedestrian/Transit Alternatives Carried Forward [Map 2 of 7]

SECTION 1B

SECTION 1C

SECTION 2



LEGEND

PEL Proposed	Existing/Planned	
		Multi-Use Trail
		Sidepath
		Sidewalk
		Bike Lanes
		Access Road with Advisory Shoulders
		Wide Shoulders (5+Feet)

- Bus Stop Improvements
- Existing Bus Stops
- Transit Station

* Includes traditional bike lanes and buffered bike lanes as short-term options and separated bike lanes as the long-term option from McConnell Dr. to Highland Dr.

Locations depicted are for illustrative purposes only.

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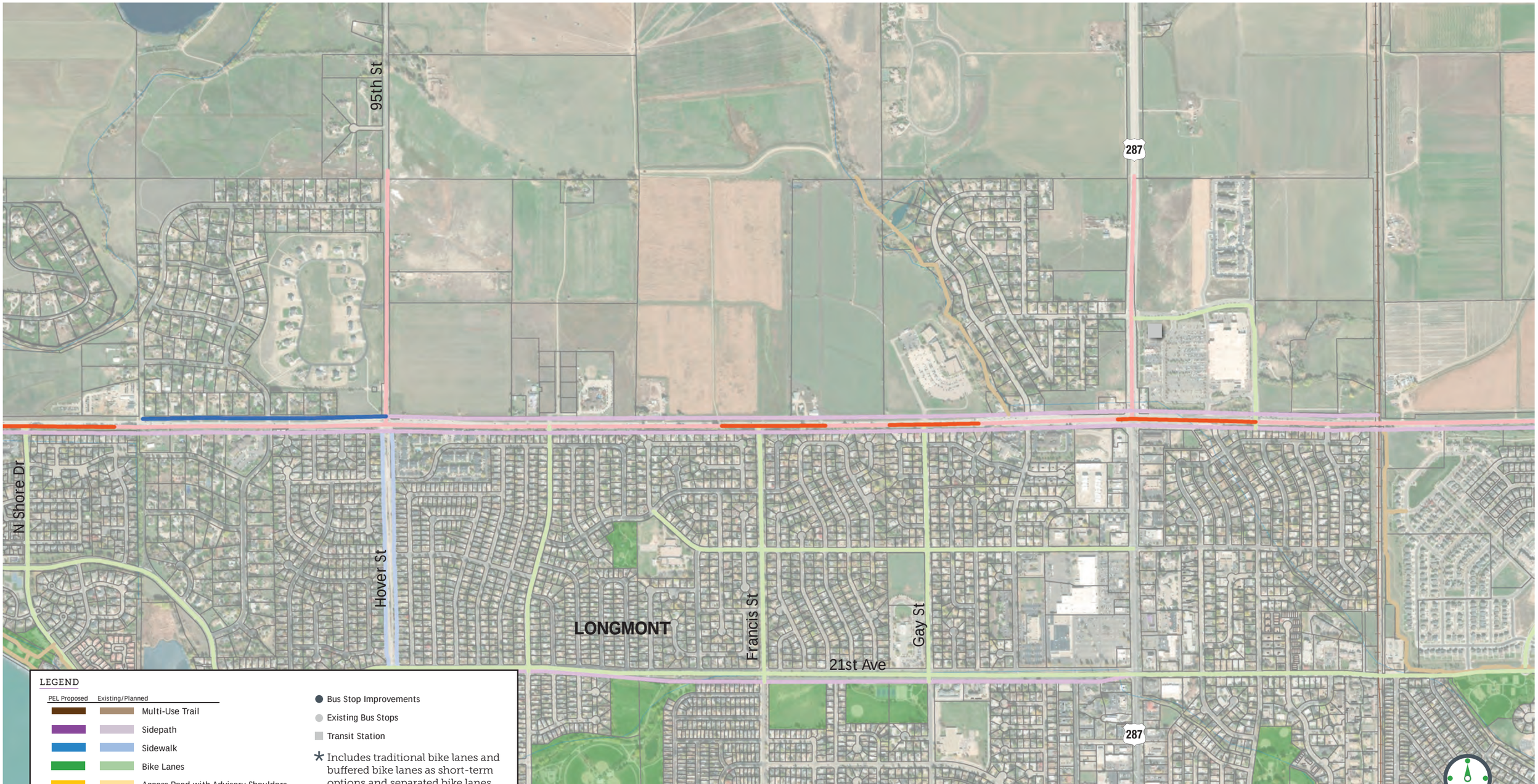
SH 66 Planning and Environmental Linkages Study

Level 2B Bicycle/Pedestrian/Transit Alternatives Carried Forward [Map 3 of 7]

SECTION 2



LEGEND

PEL Proposed	Existing/Planned	
		Multi-Use Trail
		Sidepath
		Sidewalk
		Bike Lanes
		Access Road with Advisory Shoulders
		Wide Shoulders (5+Feet)

- Bus Stop Improvements
- Existing Bus Stops
- Transit Station

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SH 66 Planning and Environmental Linkages Study

Level 2B Bicycle/Pedestrian/Transit Alternatives Carried Forward [Map 4 of 7]

SECTION 2

SECTION 3

BOULDER COUNTY

WELD COUNTY

115th St

Alpine St

Pace St

Sundance Dr

County Line Rd

WCR 3

LEGEND

PEL Proposed	Existing/Planned	
		Multi-Use Trail
		Sidepath
		Sidewalk
		Bike Lanes
		Access Road with Advisory Shoulders
		Wide Shoulders (5+Feet)

- Bus Stop Improvements
- Existing Bus Stops
- Transit Station

* Includes traditional bike lanes and buffered bike lanes as short-term options and separated bike lanes as the long-term option from McConnell Dr. to Highland Dr.

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SH 66 Planning and Environmental Linkages Study

Level 2B Bicycle/Pedestrian/Transit Alternatives Carried Forward [Map 5 of 7]

SECTION 3

SECTION 4

MEAD

WCR 7

WCR 5

3rd St

Foster Ridge Dr.

25

25

LEGEND

PEL Proposed	Existing/Planned	
		Multi-Use Trail
		Sidepath
		Sidewalk
		Bike Lanes
		Access Road with Advisory Shoulders
		Wide Shoulders (5+Feet)

- Bus Stop Improvements
- Existing Bus Stops
- Transit Station

* Includes traditional bike lanes and buffered bike lanes as short-term options and separated bike lanes as the long-term option from McConnell Dr. to Highland Dr.

Locations depicted are for illustrative purposes only.

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SH 66 Planning and Environmental Linkages Study

Level 2B Bicycle/Pedestrian/Transit Alternatives Carried Forward [Map 6 of 7]

SECTION 4 | SECTION 5A | SECTION 5B

WELD COUNTY

FIRESTONE

WCR 11

WCR 13

LEGEND

PEL Proposed	Existing/Planned	
		Multi-Use Trail
		Sidepath
		Sidewalk
		Bike Lanes
		Access Road with Advisory Shoulders
		Wide Shoulders (5+Feet)

- Bus Stop Improvements
- Existing Bus Stops
- Transit Station

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Locations depicted are for illustrative purposes only.

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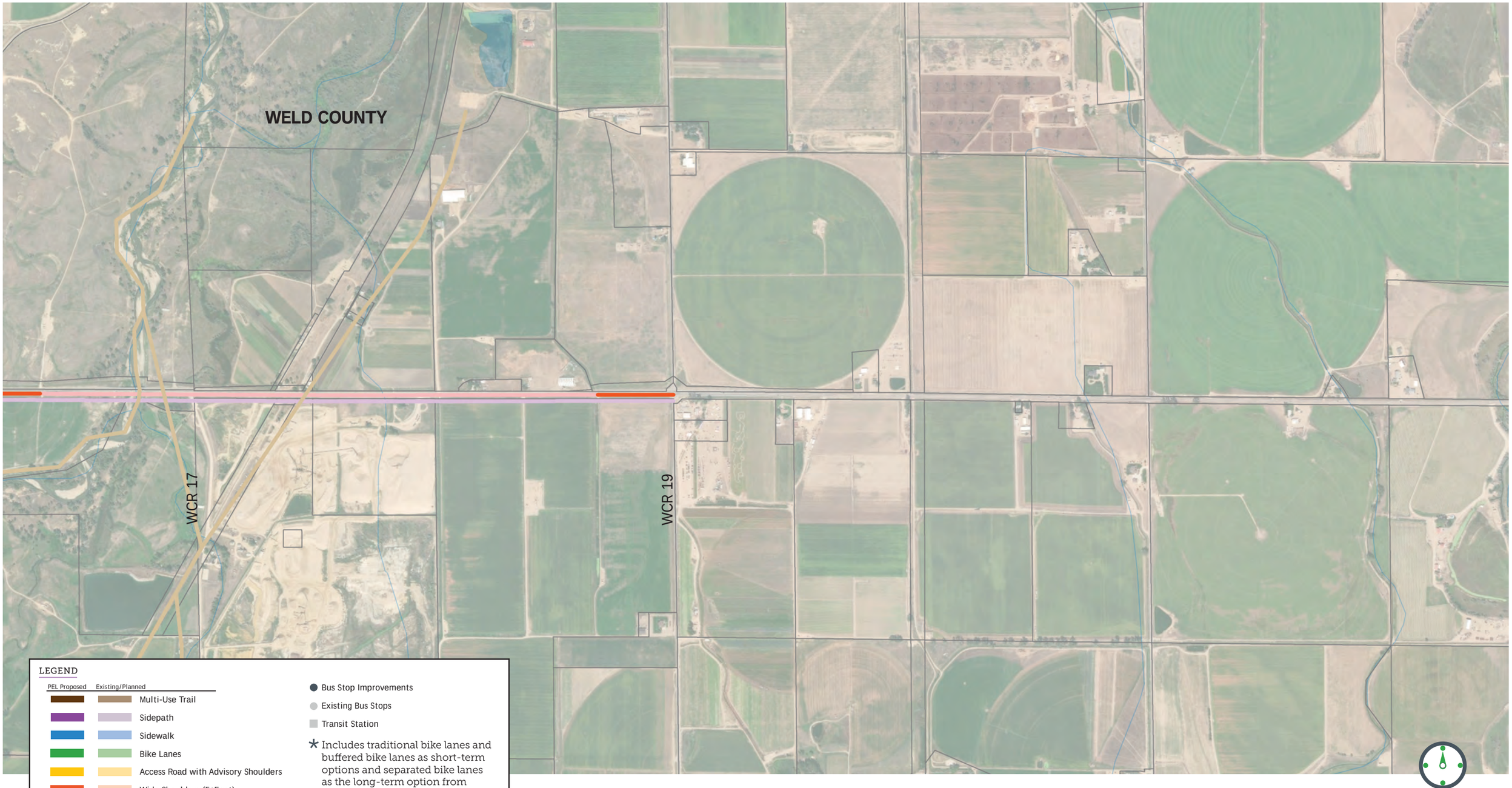
SH 66 Planning and Environmental Linkages Study

Level 2B Bicycle/Pedestrian/Transit Alternatives Carried Forward [Map 7 of 7]

SECTION 5B



LEGEND

PEL Proposed	Existing/Planned	
		Multi-Use Trail
		Sidepath
		Sidewalk
		Bike Lanes
		Access Road with Advisory Shoulders
		Wide Shoulders (5+Feet)

- Bus Stop Improvements
- Existing Bus Stops
- Transit Station

* Includes traditional bike lanes and buffered bike lanes as short-term options and separated bike lanes as the long-term option from McConnell Dr. to Highland Dr.

Locations depicted are for illustrative purposes only.

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SH 66 Planning and Environmental Linkages Study

PUBLIC MEETING

Date and Time: April 16, 2019| 4:30 p.m. to 7:30 p.m.
Location: SW Weld County Service Center | 4209 County Road 24 ½ , Longmont, CO 80504

Sign In

First Name	Last Name	Community	Email
Paula	Mehle	Town of Firestone	pmehle@firestoneco.gov
Gregory	Domenico	PLATTEVILLE	domenicofarms@msn.com
Scott	James	Johnstown	sjames@weldgov.com
Bob	Newman	Longmont	R.P.Newman@msn.com
Ritchie/Linda	Pyeatt	Platteville	REPyeatt@aol.com
Steven Michelle Jordan	Jordan	Longmont	mmmichelleb@yahoo.com

SH 66 Planning and Environmental Linkages Study

PUBLIC MEETING

Date and Time: April 16, 2019| 4:30 p.m. to 7:30 p.m.
Location: SW Weld County Service Center | 4209 County Road 24 ½ , Longmont, CO 80504

Sign In

First Name	Last Name	Community	Email
Anitra + Jim	Schlieker	Grand View Estates Mead	ams206@msn.com
~~Bob Olsen~~	Olsen	Grand View Estates Mead	
Duane Dem.	Demes	Grand View Estates Mead	
STEVE	DANAHAY	ELMORE RD	
Jim	SLEDSOE	MEAD	CSAB221@MSN.COM
Arlo Sherre	Boda	Mead	asboda@gmail.com
Helen	Michelbrink	Mead	
Colleen	Whitlow	Mead	cwhitlow@townofmead.org

SH 66 Planning and Environmental Linkages Study

PUBLIC MEETING

Date and Time: April 16, 2019| 4:30 p.m. to 7:30 p.m.
Location: SW Weld County Service Center | 4209 County Road 24 ½ , Longmont, CO 80504

Sign In

First Name	Last Name	Community	Email
DoLores + Norman	Cook	Longmont	NCDCSATX @SBCGLOBAL.NET
Dale	McCall	Longmont	dale.mccall46@gmail.com
Donna & Paul	Malek	MEAD	dlmalek@yahoo.com
Bill & Kathy	Amen	Longmont	amenx5@gmail.com
Pete & Rosalie	Salazar	MEAD	p1942salazar@aol.com
Chuck & Betty	Bailey	Elmore Rd	
Chris	Metterbrunk	Colorado Parks & wildlife	Chris.Metterbrunk@state.co.us
Karen	Sekich	Mead	KSek.ch@aol.com

SH 66 Planning and Environmental Linkages Study

PUBLIC MEETING

Date and Time: April 16, 2019| 4:30 p.m. to 7:30 p.m.
Location: SW Weld County Service Center | 4209 County Road 24 ½ , Longmont, CO 80504

Sign In

First Name	Last Name	Community	Email
Dick	Kellogg	Grand View	
Stud Cathy	Barnes	CR3	
Veronica Silbaugh	Silbaugh	I-25 & Mead St.	VSilbaugh@aol.com
Maureen	Sturel	Elmore Rd Hwy 66	
Mary Rose Cullen	Cullen	Seahorse Heights Elmore Road	
Jason & Debbie Ellinger	Ellinger	CR 3	Jaselling@aol.com debbierossey2@gmail.com
Joe & Carol Hanlon	Hanlon	CR 1	
Julie	Pasillas	Firestone	jpasillas@firestoneco.gov

SH 66 Planning and Environmental Linkages Study

PUBLIC MEETING

Date and Time: April 16, 2019| 4:30 p.m. to 7:30 p.m.
Location: SW Weld County Service Center | 4209 County Road 24 ½ , Longmont, CO 80504

Sign In

First Name	Last Name	Community	Email
Amy	Hicley	GRAND VIEW ESTATES	amyhicley7@gmail.com
Jeff	Temple	JUB Engineers	jTemple@jub.com
Gerry	West	Business Analyst	gerry-westeyAhoo.com
Chris	West	Longmont - Lyons	Chris.james.west@gmail.com
ABRA	Geissler	CDOT	abra.geisslere state.co.us
Carol	Cobuen	CR3	amtngirl@gmail.com
BOB	CHANSLER	MEAD CR7	bobchensler@yahoo.com
JANELL	FLAIG	SGM	Flaigjm@gmail.com

SH 66 Planning and Environmental Linkages Study

PUBLIC MEETING

Date and Time: April 16, 2019| 4:30 p.m. to 7:30 p.m.
Location: SW Weld County Service Center | 4209 County Road 24 ½ , Longmont, CO 80504

Sign In

First Name	Last Name	Community	Email
Don	Rosenbrock	Mead	drosenbrock@msn.com
Jean	Bratcher	mead	jeanbratcher@hotmail.com

SH 66 Planning and Environmental Linkages Study

PUBLIC MEETING

Date and Time: April 18, 2019| 4:30 p.m. to 7:30 p.m.
Location: Longs Peak Middle School | 1500 14th Avenue, Longmont, CO 80501

Sign In

First Name	Last Name	Community	Email
Ryan	Kragerud	Longmont 66 + Francis	rjkragerud@gmail.co
Trent	Hembree	Longmont	tkhembree@gmail.com
Emily	Hodges	Longmont	
Amber	Hodges	Longmont	amber.hodges@gmail.com
Scott	Brecheisen	Mead	Scottbrecheisen@outlook.com
Heidi	Hostetter	Longmont	hhostetter@faustson.com
Julie	Boyle	Lyons	juliedonnowhat-wire.com

SH 66 Planning and Environmental Linkages Study

PUBLIC MEETING

Date and Time: April 18, 2019| 4:30 p.m. to 7:30 p.m.
Location: Longs Peak Middle School | 1500 14th Avenue, Longmont, CO 80501

Sign In

First Name	Last Name	Community	Email
MARK	McCullick	Hygiene	MARK.McCULLICK@gmail.com
GRAHAM	NEW	LONGMONT	newgr4h4m@gmail.com
[illegible]	[illegible]	Longmont	ScottABow@AOL.com

SH 66 Planning and Environmental Linkages Study

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Sign In

First Name	Last Name	Community	Email
Don	Lutter	Lyons	Don@Lutter.com
LEIGH	WILLIAMS		LEIGHWILLIAMSJR@GMAIL.COM
Sel	GOLDSTEIN		SelGold@YAHOO.com
PHIL	GOERNER	LONGMONT	pgoerner@hotmail.com
PHIL	GREENWALD	Longmont	on file
Linda	Cochran	Longmont	goertzl@comcast.com
Jeff	Kloster	Longmont	jeffkrisklos@gmail.com

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PUBLIC MEETING

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Sign In

First Name	Last Name	Community	Email
Brett	Cook	Elmore Rd	Brettacook@yahoo.com
Kayann	Short	Hwy 66	kshort@greenspeedisp.net
Rene	Doubleday	Hwy 66	rene@thinkgenerator.com
WAYNE	BAUMANN	Hwy 66	WNBAUMANN@JUNO.COM
Carolyn	Clark	Hwy 66	carolynclark22@hotmail.com
Michael	Clark	"	papaclark1@gmail.com
Marge	BRICKMAN	Hwy 66	margorybrickman@gmail.com
Marcia	Hibberd	Hwy 66	hibberdtigers@msn.com

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Sign In

First Name	Last Name	Community	Email
Claudia	Imbriani		
JOE	Imbriani		Joe Imbriani SR@MSN.Com
BOB	BAWN		REBAWN@AOL.Com
JEFF	CUSTER		JCBREWS@AOL.com
Annie	Zaino		ajzaino@gmail.com
James + Tracey	Schneider		ts9194@gmail.com
Chris	Butler		butlerchris45@gmail.com
Lorrie	Groth		lorrie groth@gmail.com

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Sign In

First Name	Last Name	Community	Email
Nancy	Hall	Arkansa	hall.n@icloud.com
Ricque	Johnson	PBS	RICQUEJOHNSON@GMAIL.COM
James	Manzanares	Village Cooperative	peenpas311@gmail.com
Judith	Moss	The Shores	anextrahand1@comcast.net
Robin	Todd-Lee	Northlake	rstl@juno.com
Chuck	Woods	Longmont	chdewo@gmail.com
BARRY	SPATH	LONGMONT	SPTHBND@GMAIL.COM
Joe & Kim	Knight	Longmont	joe@niwotauction.com

SH 66 Planning and Environmental Linkages Study

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Sign In

First Name	Last Name	Community	Email
Kathleen	Cassidy	McCall Lake	∅
Chris	West	McCall lake	chris.james.west@gmail.com
RICHARD	CARGILL	HYGIENE.	RCARGILL@AOL.COM
ANDY	LUTSCH	LONGMONT	lutschstuff@gMail.com
Tom	Charles	Longmont	tomgcharles@gmail.com
Gerry + Brenda	Everett	Anhawa	brendeverett12@msn.com
JUSTIN	STOEBER	LONGMONT/PRAIRIE VILLAGE	justin.stoeber@aecom.com
MARK	VENZIE	ANHAWA	PLANMAN2002@YAHOO.COM

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Sign In

First Name	Last Name	Community	Email
ROBERT	MILLER	LONGMONT	DRMILLR@GMAIL.COM
BOB	LOOSER	~~LO~~ NORTH SHORE	BOBLOOSER@GMAIL.COM
MICHELLE	LOOSER	11	~~bob~~ looserm@GMAIL.COM
Tim & Charlene [redacted]	Hersee	Longmont	newfymommy@msn.com
RACHEL	KATZ	Chance Acres Longmont	rachel@MindBodyPhysicalTherapy.com
Sharon	Perdue	W Longmont	ShazPerdue@gmail.com
Casey	Hembree	Longmont	Caseyhembree914@gmail.com
TYLER	STAMEY	Longmont	tyler.stamey@longmontcolorado.gov

FOR RELEASE: APRIL 16, 2017

Public Invited to Participate in CO 66 Planning and Environmental Linkages (PEL) Meetings

The Colorado Department of Transportation (CDOT) is hosting two public meetings for the CO 66 PEL study and Access Control Plan from Lyons to Weld County Road 19. These meetings are a continuation of the study that began in 2017.

Two public meetings will be held in April, each providing the same content.

Tuesday, April 16, 2019
4:30 p.m. to 7:30 p.m.
Weld County Southwest Services Complex
4209 County Road 24½
Longmont, CO 80504

Thursday, April 18, 2019
4:30 p.m. to 7:30 p.m.
Longs Peak Middle School
1500 14th Avenue
Longmont, CO 80501

The public meetings will be an open house format where participants can stop by at any time to learn about the study's current schedule, the corridor's retained alternatives related to safety, mobility, and access, and provide feedback about those alternatives. Please visit us to learn about CDOT's risk and resiliency assessment. We will also introduce the Access Control Plan, which will make recommendations for future changes to the location and design of driveways and intersections.

Next Steps

- May 2019 – CDOT will provide a public meeting summary on this webpage.
- Late Spring 2019 – CDOT will host public meeting to share draft ACP for public input.
- Summer 2019 – CDOT will host public meeting to present PEL recommendations and final ACP.

CDOT also will be accepting public feedback through an online questionnaire and webmap. To provide feedback online and learn more about the project, please visit the project website at https://www.codot.gov/library/studies/co-66-pel

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SH 66 Planning and Environmental Linkages Study

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4209 County Road 24 ½
Longmont, CO 80504

Thursday, April 18, 2019 | 4:30 to 7:30 p.m.*
Longs Peak Middle School
1500 14th Avenue
Longmont, CO 80501

Please visit us to learn about the study, provide feedback on transportation alternatives and learn about CDOT's risk and resiliency assessment. We will also introduce the Access Control Plan (ACP), which will make recommendations for future changes to the location and design of driveways and intersections.

CDOT also will be accepting public feedback through an online questionnaire and webmap. For information and to learn more about the project, visit: **https://www.codot.gov/library/studies/co-66-pel**

Requests for communication assistance or reasonable accommodations for special needs can be made by contacting the project prior to the meeting at 720-200-8978.

The Colorado Department of Transportation (CDOT) is hosting two public meetings for the SH 66 Planning & Environmental Linkages (PEL) study and ACP from Lyons to Weld County Road 19. These meetings are a continuation of the study that began in 2017. You received this notice because your address is within ½ mile of the project corridor. However, we want input from the greater community, so **please invite neighbors and community members.**

**Both meetings will provide the same content.*

Next Steps:
Late Spring 2019 - Share & present draft ACP for public input
Summer 2019 - Share final PEL & ACP to public

SH 66 Planning and Environmental Linkages Study

Colorado Department of Transportation
1420 2nd Street
Greeley, CO 80631

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Here's a few messages from the I-25 South Gap project team. Pass them on to your friends and family. Thank you for driving safely!

12 5 Shares

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Colorado Department of Transportation
April 12 at 10:54 AM ·

You're invited to the public meeting for the CO 66 Planning and Environmental Linkages study where you can learn about the project; provide valuable input.

April 16, 4:30 – 7:30 pm, Open House
Weld County Southwest Services Complex
4209 County Road 24½... See More

SURVEYMONKEY.COM
SH 66 PEL Level 2b Recommendations Survey
Take this survey powered by surveymonkey.com. Create your ow

Bj Deherrera-Bra
Donald Russo

2 2 Comments

Like Comment Share

Most Relevant ▾

Write a comment...

Donald Russo STOP SANDING the roads!!!!! I've had to buy 12 windshields over the past 5 years and my wife and I are just normal drivers. And talking to friends, we are not alone. You are costing residents MILLIONS or dollars, not to mention lost time and use of the vehicle during repairs. FIX THIS Debacle!!!

Like · Reply · 2d

1 Reply

Hello-

The State Highway (SH) 66 Planning and Environmental Linkages (PEL) team would like your input!

The Colorado Department of Transportation (CDOT) is hosting two public meetings for the SH 66 PEL study and Access Control Plan from Lyons to Weld County Road 19. These meetings are a continuation of the study that began in 2017.

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Please reply to this email or contact James Zufall (jamesd.zufall@state.co.us) with any comments or questions on these materials.

We look forward to your input!

Recipients

laurah225@hotmail.com; arp.ryan@gmail.com; jcc.evans@gmail.com; eileen@gtbusa.com; pennysvance@gmail.com; sarah_hightower2002@yahoo.com; stacyfcody@yahoo.com; shazperdue@gmail.com; fivepeasinapod5@yahoo.com; avpchandu@hotmail.com; laura_pf10@hotmail.com; babrotherton@msn.com; pgand3@gmail.com; kshort@greenspeedisp.net; joyfulheron@icloud.com; lisarollomsp@gmail.com; robbirt@robbirt.com; mmmichelleb@yahoo.com; paxknits@aol.com; amtngirl@gmail.com; asboda@gmail.com; chdewo@gmail.com; drossey@englandlogistics.com; bobzell@hotmail.com; alncik@aol.com; bsktpal5@gmail.com; dcn03g@gmail.com; newfymommy@msn.com; rymanmichael@yahoo.com; wsroadarmel@gmail.com; alroadarmel@gmail.com; carol_depriest@hotmail.com; micah.zogorski@longmontcolorado.gov; gerald.kissinger@state.co.us; brendaeverett12@msn.com; carpetguyjoe@gmail.com; crcomstock@comcast.net; flaigjmq@gmail.com; laurah225@hotmail.com; planman2002@yahoo.com; judy123@indra.com; whitedovefarm@gmail.com; snowbirds3137@msn.com; belindamarquina@yahoo.com; kellipd69@yahoo.com; tkhembree@gmail.com; 504jbills@gmail.com; lutschstuff@gmail.com; hiviewacres@outlook.com; ghostlightmater@yahoo.com;

krsmith1@gmail.com; jvahlenkamp@timescall.com; thecharkeys@gmail.com; erose@indra.com; kelleher_mary@svvsd.org; mlh208@msn.com

Facebook – April 12, 2019, April 15, 2019, and April 16, 2019

You're invited to the public meeting for the CO 66 PEL study where you can learn about the project & provide valuable input.

April 16, 4:30 – 7:30 pm, Open House
Weld County Southwest Services Complex
4209 County Road 24½
Longmont, CO 80504

You can also submit comments through May 2 to:

https://www.surveymonkey.com/r/CDOTSH66PEL

Facebook – April 18, 2019

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April 18, 4:30 – 7:30 pm, Open House
Longs Peak Middle School
1500 14th Avenue
Longmont, CO 80501

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April 16, 4:30 – 7:30 pm, Open House
Weld County SW Svcs Cmplx
4209 CR 24½
Longmont, CO

You can also submit comments through May 2 to:

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Twitter – April 18, 2019

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1500 14th Ave
Longmont, CO

You can also submit comments through May 2 to:

https://www.surveymonkey.com/r/CDOTSH66PEL

This Week in Longmont - April 12, 2019

Post Date: 04/12/2019 8:21 AM

Would You Like to Serve Your Community?

Residents are invited to serve as official advisors to Longmont City Council on several boards and commissions. Committee members research and discuss local issues and offer recommendations to City Council. To apply, you must be a registered voter of Longmont for at least one year prior to being appointed, and you must reside inside Longmont city limits. To see vacancies and apply, visit bit.ly/longmontapp. The application deadline is 5 pm on Friday, April 26.

Show Your Support for Local Programming

It's time to reimagine what Public Access TV can and will look like. Longmont City Council wants to hear about what you watch now, what local information is important, and how you access content. Visit Engage.LongmontColorado.gov to take a five-minute survey, add your ideas, and "like" ideas submitted by others. For more information, email Sandi.Seader@LongmontColorado.gov or call 303-651-8634.

Nature St. Vrain Environmental Open House

The Education Foundation for the St. Vrain Valley, St. Vrain Valley Schools, Boulder County Parks & Open Space, and the City of Longmont invite you to the Nature St. Vrain open house from 5 to 8 pm on Friday, April 12, at the St. Vrain Innovation Center, 33 Quail Road. Celebrate the contributions of K-12 students to citizen science projects and enjoy a presentation at 6:45 pm by renowned Colorado photographer John Fielder. You also can learn about the Sandstone Ranch Visitors & Learning Center volunteer program. For details, visit EFSVV.org.

Learn About the Highway 66 Planning & Environmental Linkages Study

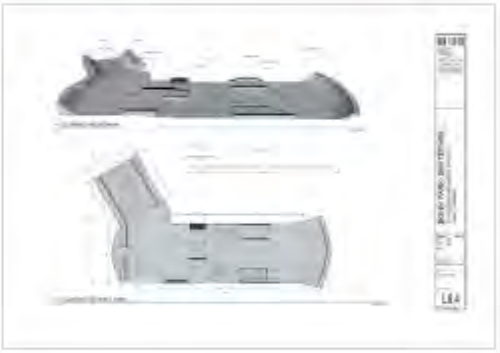
CDOT will host two public meetings where the community can learn about and provide feedback on its study of transportation needs along State Highway 66 from Lyons to WCR 19 and the Access Control Plan that will make recommendations for changes to the location and design of driveways and intersections. The meetings will be from 4:30 to 7:30 pm on Tuesday, April 16, at the Weld County Southwest Services Complex at 4209 CR 24½ and from 4:30 to 7:30 pm on Thursday, April 18, at Longs Peak Middle School, 1500 14th Avenue in Longmont. To learn more and to submit feedback online visit codot.gov/library/studies/co-66-pel.

Posted on: April 4, 2019

Park Projects, Discount Dog Days, Town Hall Forum, SH-66 Planning, & more

April 3, 2019 Newsletter

Click Here to Read Full Newsletter>>



Next ⇒
Weed Mitigation Services, Purge the Spurge, Rec Programs, Events, & more

CDOT SH-66 Planning & Environmental Linkages Study

Tuesday, April 16 and Thursday, April 18

The Colorado Department of Transportation is conducting a Planning and Environmental Linkages (PEL) study of the Colorado Highway 66 corridor, from McConnell Drive in Lyons to Weld County Road 19. The study team will identify the needs along CO 66 and develop a strategic, long-term vision for the corridor. PEL is an approach to transportation decision-making that considers environmental, community, and economic goals, and potential impacts early in the planning process to inform the subsequent project development, design, and construction phases.

Two public meetings will be held in April, each providing the same content.

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Please feel free to contact James Zufall (jamesd.zufall@state.co.us) with any comments or questions on these materials.

We look forward to your input!

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For information visit: https://www.codot.gov/library/studies/co-66-pel
Please feel free to contact James Zufall (jamesd.zufall@state.co.us) with any comments or questions on these materials.

We look forward to your input!

1 2 Shares

Like Comment Share

See All

SH 66 Planning and Environmental Linkages Study

Level 2b Recommendations Survey

Which Level 2b recommendations do you **support**? Please list up to three.

Do any Level 2b recommendations **concern** you? If so, please explain.

Which **type of improvements** would you prefer to see completed first on the corridor? Please identify up to **three**.

- ☐ Roadway widening to add travel lanes
- ☐ Access control and turning restrictions
- ☐ Intersection improvements at major intersections (such as US 36, US 287, and WCR 13)
- ☐ Intersection improvements at minor intersections (such as Airport Road, County Line Road, and WCR 9.5)
- ☐ Signals and/or roundabouts at intersections
- ☐ Consolidation of local accesses and adding the parallel access roads
- ☐ Bicycle and pedestrian facilities (such as the advisory shoulders, safety shoulders, or grade-separated crossings)
- ☐ Bicycle and pedestrian crossing improvements at intersections
- ☐ Grade-separation of railroad crossings
- ☐ Safety improvements (such as medians or medians barriers)
- ☐ Improvements to address the resiliency of the corridor (such as parallel routes or infrastructure upgrades)
- ☐ Transit improvements
- ☐ Other: _____

See reverse side for more questions

SH 66 Planning and Environmental Linkages Study

Level 2b Recommendations Survey

What are your thoughts about access to and from the SH 66 corridor?

Do you have any additional questions that need to be answered by CDOT? If so, what?
Please include your contact information, if so.

Name: _____

Email Address: _____

Phone Number: _____

Do you live or work within one mile of SH 66? **YES** **NO**

What is the nearest SH 66 intersection to your home or work? _____

Thank you for providing feedback!

Which Level 2b recommendations do you support? Please list up to three.	Do any Level 2b recommendations concern you? If so, please explain.	Which type of improvements would you prefer to see completed first on the corridor? Please identify up to three.													What are your thoughts about access to and from the SH 66 corridor?	Do you have any additional questions that need to be answered by CDOT? If so, what? Please include your contact information, if so.	Name	Email	Phone Number	Do you live or work within one mile of SH 66?	What is the nearest SH 66 intersection to your home or work?	Takeaway
		Roadway widening to add travel lanes	Access control and turning restrictions	Intersection improvements at major intersections (such as US 36, US 287, and WCR 13)	Intersection improvements at minor intersections (such as Airport Road, County Line Road, and WCR 9.5)	Signals and/or roundabouts at intersections	Consolidation of local accesses and adding the parallel access roads	Bicycle and pedestrian facilities (such as the advisory shoulders, safety shoulders, or grade-separated crossings)	Bicycle and pedestrian crossing improvements at intersections	Grade-separation of railroad crossings	Safety improvements (such as medians or medians barriers)	Improvements to address the resiliency of the corridor (such as parallel routes or infrastructure upgrades)	Transit improvements	Other:								
Access control should be part of local development process	Roundabouts - tough for hi volume	1	1				1								Need access control plans to start ASAP - nearly out of control already Speed and noise control already a problem and Longmont not enforcing		Bob Bawn	rabawn@aol.com	303-682-2577	Y	Gay Street	Need an ACP now, already an issue
Section 2 proposed = yes Section 3 proposed = yes WCR 5 Option 2 signals		1	1		1									WCR 5	I would like to see a sign 'right turn only during rush hour' on WCR 5 and 66. Cheap, fast, easy.		Scott Brecheisen	scott.brecheisen@outlook.com		N	WCR 5	Support "right turn only" during rush hour
Continuous two-way left turn lanes where needed	NO cable delineators - no need to make it feel like an interstate Would prefer 2 lanes w/ continuous 2-way left turn lane or 4-lane w/ continuous 2-way left turn lane Need wide shoulder along entire highway (for bikes - otherwise, bikes can use an entire lane)													Continuous 2-way left turn lanes where needed, specifically Section 3	Believe that a continuous 2-way left turn lane should be done (i.e. HWY 287)		Brett Cook	brettacook@yahoo.com	303-588-7049	Y	Elmore	Does not want it to feel like an interstate. Supports continous left turn lane only lane
It all looks good		1												Sound barriers for residences on north of 66 in Boulder County	Looks good.	Sound barriers, supplement costs	Chris Butler	butlerchris45@gmail.com		Y	Jotipa Drive	Support sound barriers
	1. Section 2 private drive between Hover/95th to 87th, by pushing the private drives over to Anhawa will cause cars to back up on Anhawa causing people to feel pushed to get onto HWY 66 eastbound and cause more accidents 2. Contraflow- NO! I do not want to risk someone going the wrong way and causing a head-on accident 3. No cable delineator - kills motorcycle drivers! 4. no raised median - they are never taken care of and weeds infest them 5. no roundabouts in section 1a	1			1										Reduce the speed of 66 between 115th street thru 87th street. This section will be within the city of Longmont soon and should not be an "expressway". Remains an arterial and is used as such.					Y	Anhawa	Does not support most of the proposed actions, only support widening of road and lowering speed limit within city limits
2 Raised median with wider shoulders 4 widened double yellow centerline	5 Reversible lane 1 continuous 2-way left turn lane 3 alternate passing lanes		1			1					1	1			For the most part dangerous. Consider safety first.	Timing: plan agreements, funding and source, financial impacts (tax?)	Joe Imbriani	joeimbrianisr@msn.com	303-503-2357	Y	Hover (95th)	Consider safety first
The bike and pedestrian path - especially between 75th and Hover is a good idea	I am concerned about having 4 lanes between 287 and 87th (Airport). Noise levels will increase. Also a traffic light will be necessary at 87th. Please do NOT use roundabouts anywhere.		1					1	1						The "speed up" lane from N Shore Drive going west on 66 works well - more of these. More left turn lanes.					Y	N Shore Drive and Lake Park Drive	Support bike & ped path. Concerned about noise and use of roundabouts
Changing HWY 66 to 4 lane is a great idea.	Access to SH 66 on Sec. 3 at Elmore and Nesting Crane turning left to 66 + turning left from 66 to Elmore heading west		1								1				Section 3 Elmore and HWY 66 concerns if your going to block our access left onto 66. We would have to go several miles down to turn + go back to Longmont		Tracey + James Schneider	ts9194@gmail.com	720-494-7722	Y	County Line	Supports creating 4 lanes. Concerned about access from Elmore road.
	Taking away driveway access Access roads through private property				1	1								Signals not roundabouts		When is the access meeting?	Ricque Johnson	ricquejohnson@gmail.com	303-589-2623	Y	CR 3	Requires a response
Raised center median/grassy median Wider double yellow center lane	Excess speed concerns me!		1	1			1	1	1		1			Noise level	Too many accidents! We moved into a beautiful neighborhood 5 years ago and safety of Hover and 66 has deteriorated since moving there. The traffic should slow down especially on Hover Road. It's a residential neighborhood!	Will the improvements be close to our houses? Make 66 closer? Can a wall be built to project the subdivisions from speeding cars and help with noise?	Caudia Aubrioui	cabinzoya@msn.com	303-503-9273	Y	Hover	Concerned about speed, safety and noise levels
2b does not direction affect our access		1			1	1								Signals not roundabouts	Definitely need safer access Those homes closest to McCall Lake have raised septic systems next the highway already; will definitely be a problem	The plan seems to be pretty thorough - we can't all agree and not every one will be happy		marjorybrickman@gmail.com	303-776-7216	Y	SH 66 and 66th Street	Supports signals and not roundabouts. Concerned about septic systems near McCall Lake
McCall Drive option 2 right-in, right-out	N 66th Street option 2 signal; concerned about extra noise and pollution; would be ok if light was controlled to only stop SH 66 if side street car or left turning car was present; light would normally rest in green state for highway	1					1					1					Christopher West	chris.james.west@gmail.com	303-918-8463	Y	N 66th Street	Supports right-in, right-out at McCall Drive
							1		1			1				When was the last speed study done?	Mark Venzke	planman2002@yahoo.com		Y	Anhawa	Supports concolidating access and bike/ped infrastructure
Looks very good on paper	Only County Line being so low				1					1	1				Very poor from CLR and 119th	Will County Line Road be to grade with 66? Both south and north bound lanes.	C Woods	chdewo@gmail.com	303-772-6429	Y		Supports improvements at minor intersections
Option 2 Signalize and capacity improvements N 115th St and Alpine St Option 2 capacity improvements Pace Street Option 2 Signalize and consolidate accesses on the north	N 115th/Alpine Option 1 No Action	1				1			1					Would love the 16' road with advisory should with 10' bike and pedestrian path	Hard to get onto unless signals are available during rush hour		James Manzauaves	peenpa5311@gmail.com	303-590-5443	Y	Alpine/Glen Arbor	Supports options outlined in 2
Section 5A - support roundabouts. No signals! WCR 5.5 and Stagecoach - underpass! Best option. Right-in, right-out only 2nd choice. Protect/preserve right-of-way for future need	Very concerned about any new signals		1			1				1					Limit access!		Gary Hodges	gary.hodges@gmail.com		Y	Hover and Francis	Wants to limit access and is concerned about additional signals, supports roundabouts
We are between WCR 3 and Nesting Crane and like Option 4, then Option 2, then Option 3.	Don't want to lose access (existing) to SH 66	1					1								Make 4 lane with turning lanes		Joe Knight	joe@niwotauction.com	303-589-4119	Y	WCR 1	Don't want to loose existing access at Nesting Crane
Section 1B - center turn lane with advisory shoulder - great! Section 2- proposed 'raised median' with wider shoulder - good Section 2- grassy median with cable delineator - better	Raised median - please use raised median WITH cable center (to prevent cross over)		1					1			1					More bicycle paths, prefer separated vs. traditional lanes				Y	87th Street	Desire to see cable barriers in the medians to prevent cross over

Which Level 2b recommendations do you support? Please list up to three.	Do any Level 2b recommendations concern you? If so, please explain.	Which type of improvements would you prefer to see completed first on the corridor? Please identify up to three.													What are your thoughts about access to and from the SH 66 corridor?	Do you have any additional questions that need to be answered by CDOT? If so, what? Please include your contact information, if so.	Name	Email	Phone Number	Do you live or work within one mile of SH 66?	What is the nearest SH 66 intersection to your home or work?	Takeaway
		Roadway widening to add travel lanes	Access control and turning restrictions	Intersection improvements at major intersections (such as US 36, US 287, and WCR 13)	Intersection improvements at minor intersections (such as Airport Road, County Line Road, and WCR 9.5)	Signals and/or roundabouts at intersections	Consolidation of local accesses and adding the parallel access roads	Bicycle and pedestrian facilities (such as the advisory shoulders, safety shoulders, or grade-separated crossings)	Bicycle and pedestrian crossing improvements at intersections	Grade-separation of railroad crossings	Safety improvements (such as medians or medians barriers)	Improvements to address the resiliency of the corridor (such as parallel routes or infrastructure upgrades)	Transit improvements	Other:								
Whatever cuts down the noise! Please and thank you.			1	1							1		1		Turn lanes on Hover into neighborhoods on east side. As all the traffic merges into right lanes on Hover to get onto SH 66 (going east) I'm going to get rear-ended by this traffic as I slow down to turn right onto 22nd Avenue even though I give more than sufficient turn signal		Linda Cochran	goertzl@comcast.net	303-775-2332	Y	Between Hover and Spencer	Consider turn lane **approaches** to SH 66
	Section 1b - access on to SH 66 from our driveway, 6311 Ute Highway														We like 1C proposed 1B proposed would be OK Don't like options 2,3,5,4; we like option 1					Y	North 63rd	Concerned about access onto SH66
Roundabouts…	The sound barriers not shown yet														It's meh.	We believe that the coming climate crisis requires us to reduce vehicle usage. Also Colorado is a place people will keep coming to. Mass transit is the solution. Light rail or trains can keep the flow going and provide a greener solution. Let's look for the bigger ideas for the problems ahead.	Trent and Casey Hembree	tkhembree@gmail.com		Y	N Shore Drive/Lake Park Drive/Jotipa Street	Concerns about climate change and would like to see transit as the solution
See final comments	See final comments														See comments	Put a hub in Zone 4. Co-create a transportation plan with RTD. NOCO is growing 2x as fast as rest of state. Mass transit must be addressed. Light rail @ 66 going N/S also to Estes. Tourism budget needs to be considered also.	Heidi Hostetter	hhostetter@fauston.com	303-517-6541			I'm assuming a 'hub' means transit hub…
My main use is between 287 and I-25 weekdays and Hover and Lyons on weekends… Contraflow lanes Advisory shoulders	More signalizing - concern is overall slowing of movement and increased idling of vehicles adding exhaust to the air.	1	1					1												Y	Francis	Supports contraflow lane
N 66th Street no action	Yes - lower the speed limit, keep road expansion not further west than 287. Brighten up the lines in the road from 287 west, make it a slow, rural and scenic corridor.														In Section 1B as the road veers N around a neighborhood E of McCall Lake there should be better L turn access. I once moved over and then was in the oncoming lane and had everyone honking at me. Confused by the road width.		Rachel Katz	mindbodyphysicaltherapy@gmail.com		N	Hygiene and 66	Concerned about getting onto SH 66 from McCall Lake
Section 5A- I support roundabouts, especially at WCR 13 Grade separation for railroad at WCR 5.5 and Stagecoach, this would help flow since buses would no longer need to stop Preserve right of way for future need	I don't support commercial development at WCR 5.5 and Stagecoach	1				1					1			Please no more lights; roundabouts	The two lane roads make it difficult when you're commuting and get stuck behind a semi or slow driver or when you're behind someone trying to turn left. I commute from 119 and CR 1 in Longmont on 66 then 85 to Greeley (~45 min). The fewer the light and the more lanes, the better.					Y	CR 1	Support roundabouts, grade seperation and preservation of needed right-of-way
Can't speak to WCR end of project. N 63rd = 3/4 (In general, I like the 3/4 almost universally). Not crazy about the channelized T's (seem too dependent on one-way flow (and 66 is bimodal by time of day). Grade sep seems drastic but Hover and 287 might require drastic solution!	Consol. Access depends on the kindness of local residents (and their guests). Hoping for extensive signage for motorists and others. Consol. Access seems to require a large footprint - can you encroach that far in Montgomery Farm? What about maintenance/ plowing for the access road - whose responsible?	1						1	1						As much as I long for the bike/ped improvements and the minor intersection, it seems more logical to widen the roads and improve the major intersections first so the increased flow has somewhere to go.	Truly impressed by the scope(s) of this project(s) some fantastic and imaginative proposals presented! (Glad you got Weld County on board didn't the improvements stop faaar to the west last spring?)	Andy Lutsch	lutschstuff@gmail.com	303-651-6748	No	Hover/287 (most common)	Start with improvments at major intersections, then move to minor intersections and bike/ped improvments.
Section 2 renderings through Longmont are OK, but include sound walls.	6 Lanes on SH 66 - not great I don't believe CDOT will take NHD residents' comments into consideration. Your handling of the I-70 Ditch speaks to CDOT's respect for NHD's especially blue collar, working class NHDs. North Longmont is a fragile area of the city - CDOT's actions can either support or destroy these neighborhoods.		1				1							Access control - speed reduction; sound walls - Traffic and noise will only increase, mitigate impacts with lower speeds, asphalt and/or overlay, etc., install sound walls	Right and right outs at Spencer, Francis, Gay or close Spencer Ultimately noise mitigation is the biggest issue for the corridor. I don't care if folks are stuck, congested, etc.						Decrease speed and include sound walls
I really like the intention to keep the road (west of Longmont) 2 lanes and turning where needed. Turn lanes will be safer than what we have now and limiting road growth is much better for my property value. It's a nice rural highway - doesn't need to be a transit corridor. Keep it 2 lane where possible!	I live at 6333 Ute Hwy. It looks like you are planning to put an access road in front of the house. We already have one behind the house. Can you use that instead? Obviously, I am also concerned about how this will affect my property value and noise/privacy. Having an active voice in the design phases in my sector to ensure the neighborhood is consulted, is very important to me.		1	1										Safety studies for speed limit, etc. - too many fatalities!!	I think increasing options for common access points (instead of individual driveways) is a good idea, but please take advantage of existing infrastructure and get local buying. Strong preference for Option 4 in Section 1B! I really don't like any of the other options.	Both representatives I talked to were very helpful, thank you!				Yes	63rd	Strong preference for Option 4 in Section 1B
I like the idea of a signal light on SH 66 @ Sundance, but not if that means the other two entrances to Linda Vista Estates would have to be closed. Can I have my cake and eat it too?	I realize it's inevitable SH 66 will be expanded to four lanes adjacent to my neighborhood (Linda Vista Estates). I would hope that part of that project would be a fence or wall to mitigate the added traffic noise caused by increased volume and most likely a concrete road surface.		1		1	1									I live in the Linda Vista Estates neighborhood and accessing Hwy 66 can be problematic. Acceleration lanes for both EB and WB turns off of Linda Vista would be helpful. If not that, a traffic signal at Sundance would solve the problems of access.					Yes	Linda Vista (Sundance and WCR 1 are also used daily).	Use acceleration and deceliration lanes
N 66 St No Action McCall No Action None. The environmental impact of widening the road so more trucks from Martin Marietta and the extended lease of Cemex is too great. Global warming is an ISSUE NOW, not later. It's time to change Hwy 66 via patrol cars for speed. That's it. Widening roads only encourages more traffic, not more safety.	Yes, N 66 St Access Road with shoulder. McCall close and 63rd close. Yes, the road has huge shoulders already - plenty of room for cyclists to be way more than 3' from drivers. A frontage road on Section 1B, for the limited number of residents is absurd. Section 1B is a RURAL HWY, NOT a super highway.													Reduce the speed limit. Have police monitor traffic and hand out tickets. This will greatly improve traffic safety.	I have no problem whatsoever accessing to and from Hwy 66. I live on Hwy 66. I patiently wait for an opening into traffic and then proceed. I never rush out into the flow of traffic to cause a slow down. I just wait. It is never too long. All crashes I have witnessed - 3 - have been due to driver negligence - asleep at wheel, texting, and spacing out. Widening the road is NO FIX.	Widening the road will make the road less visually appealing to the planet. What part of encouraging more driving is going to be an environmental benefit? How many bicyclists are going to be riding a major highway? Lung cancer can you say it?	Katheleen Cassidy		720-609-5069	Yes	66th Street	Concerned about the enviromental impact to widening road and global warming. No action is needed
1C & 1B	Concern with the red section 2: how it goes to 4 lanes by residential areas. Noise level going up along with property easement issues.		1		1										We utilize Hover to 66 every day. My concern is adding another 2 lanes and the impact on all of us who live right off of Hwy 66.		Jeff and Kris Kloster	jeffkrisklos@gmail.com	303-827-4014	Yes	Hover	Supports 1B & 1C, do not want four lanes near residental areas

Which Level 2b recommendations do you support? Please list up to three.	Do any Level 2b recommendations concern you? If so, please explain.	Which type of improvements would you prefer to see completed first on the corridor? Please identify up to three.													What are your thoughts about access to and from the SH 66 corridor?	Do you have any additional questions that need to be answered by CDOT? If so, what? Please include your contact information, if so.	Name	Email	Phone Number	Do you live or work within one mile of SH 66?	What is the nearest SH 66 intersection to your home or work?	Takeaway
		Roadway widening to add travel lanes	Access control and turning restrictions	Intersection improvements at major intersections (such as US 36, US 287, and WCR 13)	Intersection improvements at minor intersections (such as Airport Road, County Line Road, and WCR 9.5)	Signals and/or roundabouts at intersections	Consolidation of local accesses and adding the parallel access roads	Bicycle and pedestrian facilities (such as the advisory shoulders, safety shoulders, or grade-separated crossings)	Bicycle and pedestrian crossing improvements at intersections	Grade-separation of railroad crossings	Safety improvements (such as medians or medians barriers)	Improvements to address the resiliency of the corridor (such as parallel routes or infrastructure upgrades)	Transit improvements	Other:								
4 lanes dividers	Speed limit "expressway"? How do Anhawa and 66 residents enter highway to go east from north side?					1		1						Lower speeds	We live on the highway - it is already treacherous due to speeds.		Gerald and Brenda Everett	brendaeverett12@msn.com	303-746-0834	Yes	Hover and 66	Supports 4 lanes, dividers and lowering the speed limit
Bikeway along both sides of 66 and 1A and 1B - at least but not right along the highway. A barrier of some type is needed because cars drive like maniacs on 66 and large trucks speed. Continuous turning lane in Section 1B with left turn lane for Cemex trucks taking left into plant - and raised median east of that.	From 36 to Lyons, the speed limit needs to be lowered. 50 mph is too fast with so many people coming on and off the highway and the light at McConnell is hard to see going west from 66 because of the curb.			1				1			1			Intersection improvements - make left turn light operate at 36/66 Bicycle/pedestrian facilities - but not directly along the highway	We live in Section1B - 5169 Ute Hwy and we are heavily impacted by noise and dust from the Cemex plant. We do not want more truck traffic from a proposed gravel mine or from a Cemex extension of mining. Lower the speed limit on 66 going west beginning at the 36 intersection. This section from the light until town has too much on and off traffic to be safe at 50 mph. -	***Please come to our farm at 5169 Ute Hwy to talk about the proposed access road or the north side of the highway. I hate to think of losing our driveway and access to the hwy unless I was sure safety and accessibility were improved.	Kayann Short	kshort@greenspeedisp.net	303-823-0975	Yes	We live on 66. 53rd (Rabbit Mt)	Add bike lanes on both sides and provided barriers for safety. Lower the speed limit
Continued text: We do not support cars driving on the north side of 66 in 1B - bikes and pedestrians only - unless a light is placed at 53rd (Rabbit Mt turn) so that cars aren't backed up there trying to get on the																						n/a tied to previous comment
Sorry - 4 Highland Dr. - #1 No Action Anhawa - #3 Channelized T - only because what is there now is ridiculous Jotipa - #1 No Action Hover - #1 No Action	McCall - #4 Close - Use it. Anhawa - #1 No Action, #2, 3, 4 - will drive more traffic through neighborhood to Jotipa exit or to 95th St Lake Park Dr/Jotipa - #2, 3 - both would be very negative for peds and bicyclists AND will reroute traffic through neighborhood Hover - #3 Grade separated, #4 Unspecified, #2 Reroute traffic north - hard to comment on unspecified, except that anything that increases avg. speed of traffic will be bad for residents nearby.					1		1	1					Object to roadway widening and add travel lanes - Only left turn and right turn lanes OK. Roundabouts at intersections. NO on parallel access roads. Simple RR repair for bikes instead of grade separation of railroad crossings. PLEASE use asphalt to reduce noise. Cover concrete with asphalt if necessary	1. It is residential. Residential should never have 50+ mph speed limits. People need to drive more slowly and gas-efficiently. Anything that slows traffic is a GOOD thing. 2. It makes no sense to reroute traffic through neighborhoods and add miles driven when patience and slower driving habits can address the safety issues. 3. Nowhere does it make sense to make a ped or biker cross a lane to reach a signal button/control sitting on an island (e.g., Hover northbound).		N. Hall		303-485-8737	Yes	95th, Hover, Anhawa & Jotipa	Many specific comments
															CONTINUED: 4. 75th. Whatever you do, keep in mind the heavy bicycle use WB 66 to SB 75th. The hill east of this intersection makes it difficult and dangerous for bikers to cross from shoulder to left-turn lane. Traffic on 66 (WB) needs to be slowed down BEFORE the hill. 5. Any proposed bike paths/multiuse paths need to be paved else road bikers won't use them. 6. Your assumptions about truck traffic on 66 are probably going to be invalidated if the quarry near Lyons gets approved from Boulder County. Are you working hand-in-hand with BOCO?							n/a tied to previous comment
															CONTINUED: 7. I use Jotipa/Lake Park several times/day - bike & run. A lot of traffic for the church. I imagine if all that church traffic is rerouted due to closure or limited access to 66, many residents will be very unhappy. It will have a negative impact on property values. I live in Anhawa. My property value went down due to negative impacts of quality of life as soon as the Hover/66 interchange was finished a few years back.							n/a tied to previous comment
															CONTINUED: The volume of traffic increased significantly and suddenly the noise increased significantly due to use of concrete surface with NO noise-deadening (asphalt cover). Why route all that Boulder-bound commuter traffic to 66/Hover? Why not route it around Longmont instead of through it? This seems like we are now applying band aids to self-inflicted wounds at unnecessary expense. I would like to see more interagency cooperation to avoid more of this kind of planning. It is possible - post-2013 flood cooperation proved it.							n/a tied to previous comment
No action at Elmore Road	Closing Elmore Rod and building a parallel rd					1								Double stripe from County Line to Road 7			Robert Newman	R_P_Newman@msn.com	303-772-6256	Yes	Elmore Rd	Concerned about what happens near Elmore Road
WCR 7 & 3rd street need signal with turn lanes and arrows Mead street needs signal and turn lanes to access all businesses					1			1		1					Volume is increasing rapidly - need turn lanes and widening					Yes	WCR 7	Due to increasing traffic turn lanes and widening are needed
															No round-a-bouts on Highway at Highway Speeds							Do not support the use of round-a-bouts

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		Roadway widening to add travel lanes	Access control and turning restrictions	Intersection improvements at major intersections (such as US 36, US 287, and WCR 13)	Intersection improvements at minor intersections (such as Airport Road, County Line Road, and WCR 9.5)	Signals and/or roundabouts at intersections	Consolidation of local accesses and adding the parallel access roads	Bicycle and pedestrian facilities (such as the advisory shoulders, safety shoulders, or grade-separated crossings)	Bicycle and pedestrian crossing improvements at intersections	Grade-separation of railroad crossings	Safety improvements (such as medians or medians barriers)	Improvements to address the resiliency of the corridor (such as parallel routes or infrastructure upgrades)	Transit improvements	Other:							
	Intersection with WCR 7 needs work: add turn lanes, ditch and guardrail issues, prepare for more traffic on WCR 7 to Mead	1		1							1										Concerned about the intersection of SH 66 and WCR7
	Rd 7 needs to be expanded, driving west on 66 to Rd 7 there are vehicles that pass drivers going west in the left turn lane that could easily cause a horrific accident	1	1																		Concerned about safety at the intersection of SH 66 and WCR 7
Support more turn lanes and wide shoulders	Main concern would be until these changes are implemented in each section, we would like to see the speed limit reduced. Would give people more time to react - even if it was 5mph lower limit		1								1								Yes	75th and 66	Concerned about safety until these improvements are made
		1		1		1					1						nanlon93@hotmail.com	303-776-9046	Yes	WCR1	Improvements at major intersections to improve safety
														We need shoulders, reduced speeds, between 11 & 13 - too much traffic		Sherre Boda		720-352-9510	Yes	11 Road	Concerned about safety due to increased traffic
				1				1			1				This may not be part of the PEL study, but SH 66 and CR 13 issues need to be addressed sooner than later				Yes	WCR 13	Concerned about safety at the intersection of SH 66 and WCR 13
Turn lane at CR 3		1	1												Need better access from Rd 3				Yes	CR 3	Access from WCR 3
Alternative access to Elmore Rd (ie Access via South end of Elmore Rd)	Converting section 3 to expressway - already too much noise		1					1	1					Reduce speeds Section 3 now	Safety needs to be improved at Elmore Road now				Yes	Elmore Rd	Safety and noise along section 3, specifically Elmore Rd
County Road 3 & 66 needs turning lanes (left turns) traffic goes onto the shoulder to pass always causing accidents both west bound & east bound. Maybe a center turn lane? If nothing else police patrol between County Rd 7 & County, Rd 1 would help the problem			1								1						Debbie Ellinger	debbierossey2@gmail.com	970-302-7451	Yes	66 & County Rd 3	Concerned about people passing on shoulders and causing accidents
5A, 5B WCR 13/Colorado Blvd - capacity improvements (also safety improvements) WCR 7/3rd St - capacity improvements	the danger of roundabouts added to Hwy 66 with trucks going 70 mph, increase of noise in homes from 4 to 6 lane Hwy			1	1	1					1			Reduce speed limits on 66 east of I-25	There is not enough safety and speed control in Mead and Firestone areas. An increase of lanes and intersections will create further complications, hazards, and noise issues for homes near and right next to highway	Are they considering noise level to communities adjacent to highway? This project will increase noise and vibration to local homes	Amy Hickey	amyhickey7@gmail.com	303-596-2977	Yes	Colorado Blvd at Hwy 66	Concerned about how proposed actions will impact adjacent homes (noise)
Additional lands and landscaped medians from Weld County Road through to Hover Road Reclassify the roadway adjacent to residential development	All of them concern me because you (CDOT) are only intent on moving traffic east and west on Hwy 66 and simply have decided without actual context of adjacent neighborhoods	1							1		1			I am underwhelmed by your effort	Lowered speeds - parkway status - accommodate ped & bicycle traffic, center lanes for turning or landscaped. Also much lower height lighting - like Denver's hockey pucks! At intersections!!		Jane Flallg	flallgjmq@gmail.com	720-232-7352	Yes	Pace Street	Would like to see landscaped medians to help slow traffic. Provide for bike and ped access
Section 4, Section 5A, Section 5B		1	1	1											Needs to become 4 lanes, improvement to existing intersections. Or section 5A at 66 & Colorado Blvd to consider roundabouts vs improved signal intersections is concerning to the growing area		Julie Pasillas	jpasillas@firestoneco.gov	303-531-6258	Yes	Hwy 66 & Colorado Blvd	Concerned about roundabouts and signal intersections on the growing area
prefer signals over roundabouts as roundabouts are taken out when traffic counts exceed capacity & replaced with signals. Too major of truck/personal care route	WCR 13- opt 2 doesn't indicate need to obtain prop for future ramps. No options id signal improvements/upgrades	1		1		1									important corridor for region, 1 of only very few point crossings over S. Platte River connecting 85 & I-25	Like to be included on tech mtgs ACP mtg/events	Paula Lehle	pmehle@firestoneco.gov	303-531-6265	Yes	CR 13	Does not support the use of roundabouts. They are only a temporary solution until signals are used
		1				1								Farm Tractors	I have 2 driveway, no other way onto Hwy	Slow the speed limit to 55 mph, same as Hwy 52 from I-25 to Hwy 287	Greg Domenico	domenicofarms@msn.com	970-785-6331	Yes	CR 17 and CR 19	Wants lower speed limits and concerned about how he will access SH 66
	Roundabouts on a high speed, heavy volume road could lead to many accidents																				Does not support roundabouts
Elmore Rd should have an exit at the base of the road not a nesting crane		1				1									Dangerous		Maureen Stuvel	marueen_stuvel@msn.com		Yes	Elmore Rd	Concerned about Elmore Road intersection
Safety concerns, improved intersection options at 66 & WCR 13	Widening off Hwy 66 - whether the land will be taken from north or southside - our subdivision is on the south where there are fewer houses. It is mostly farm land		1			1								Noise barrier wall along Grand View Estate Section	Hwy 66 traffic has continued to increase during the 22 years we've lived in our house bringing more noise, accidents & pollution. We would like to see slower speed limits, noise limit enforcement and perhaps a noise barrier wall					Yes	County Road 13	Concerned about impact to adjacent property owners and safety due to increased traffic over the years.
Elmore Road property, Option 2 - with parallel road on the south side of Sh 66 - right next to SH 66	Do not support Elmore Rd owners to have to go south then west to Cty Road	1					1														Concerned about intersection with Elmore Road
WCR 17 - Option 2 due to truck traffic	No on option 3 especially with heavy semi traffic			1		1									Takes us a long time to exit our driveway					Yes	County Road 17 & 66	Supports option 2, mostly focused on truck traffic
Option 2 Alpine & SH 66, Pace & SH 66, no roundabouts		1	1						1		1						Norman Cook	ncdcsatx@sbcglobal.net	210-494-8414	Yes	Alpine	Supports option 2, does not support roundabouts
Easier access from Elmore rd to highway 66, safer access from Elmore rd to highway 66, NO JAKE BRAKES from either direction coming downhill to CO rd 1	All of them do	1									1			No Jake Brakes	From Elmore rd to SH 66 it is terrible. To turn on to Elmore rd coming from the east is suicidal.	How do we stop the use of Jake Brakes? How can access to SH 66 from Elmore rd. going west be improved?	Dennis S. Heil	DHeil88@aol.com	303-521-1760	Yes	Elmore Rd	Concerned about noise, specifically the use of jake brakes Concerned about access from Elmore Rd
Living at WCR 13 and 66 I would only support widening the roadway and or adding turn lanes only.	Do not waste money on bike lanes, public transportation or pedestrian access/crossings. This is a highway designed for Autos and truck traffic. Stop wasting money trying to make it something that is is not and will not be needed with our tax payer money!!!!	1													Widen the road and add turning lanes and or make it 4 lanes with turn lanes and acceleration lanes. This seems the most effective way to improve this corridor.	Widen the road and add turning lanes and or make it 4 lanes with turn lanes and acceleration lanes. This seems the most effective way to improve this corridor.	Vern Knorr	vernk.knorr@msn.com	303-589-6373	Yes	Weld County Rd 13 & Hwy 66	Supports widening the lanes and having 4 lanes. Does not support bike/ped/transit infrastrcutre

Which Level 2b recommendations do you support? Please list up to three.	Do any Level 2b recommendations concern you? If so, please explain.	Which type of improvements would you prefer to see completed first on the corridor? Please identify up to three.												What are your thoughts about access to and from the SH 66 corridor?	Do you have any additional questions that need to be answered by CDOT? If so, what? Please include your contact information, if so.	Name	Email	Phone Number	Do you live or work within one mile of SH 66?	What is the nearest SH 66 intersection to your home or work?	Takeaway
		Roadway widening to add travel lanes	Access control and turning restrictions	Intersection improvements at major intersections (such as US 36, US 287, and WCR 13)	Intersection improvements at minor intersections (such as Airport Road, County Line Road, and WCR 9.5)	Signals and/or roundabouts at intersections	Consolidation of local accesses and adding the parallel access roads	Bicycle and pedestrian facilities (such as the advisory shoulders, safety shoulders, or grade-separated crossings)	Bicycle and pedestrian crossing improvements at intersections	Grade-separation of railroad crossings	Safety improvements (such as medians or medians barriers)	Improvements to address the resiliency of the corridor (such as parallel routes or infrastructure upgrades)	Transit improvements	Other:							
I support a bike and pedestrian trail along the north side of 66. We live in the 1B area and would welcome that kind of trail; however, see our further concerns below. We also support a median all along 66.	Yes, we are concerned about the proposed access road in 1B. We live at 5169 Ute Hwy. First, we don't like to lose our own driveway unless we can be sure that taking a left elsewhere onto 66 will be safer. If we have to take a left at 53rd instead, we want to be sure a new light is placed there. Otherwise, we might have to wait behind several cars to take a left and it wouldn't be any safer than a left from our own driveway. Second, Cemex trucks are always a problem for us because of their speed and related jake brake noise. We wonder whether having a light at 53rd will help slow them down between 53rd and the plant entrance, which would be good, but if trucks are going so fast that they run that light or push cars in front of them to run that light (which happens elsewhere on 66 with those trucks), that would be more dangerous than							1			1			left hand turning lights at all intersections and lower approaching speeds with better signage that lights are ahead.	I support more channeling of business access onto frontage/access roads with left lights onto 66. I don't necessarily support limiting residential access because of the limited number of cars involved.	I support more channeling of business access onto frontage/access roads with left lights onto 66. I don't necessarily support limiting residential access because of the limited number of cars involved.	Kayann Short	kshort@greenspeedisp.net	303-823-0975	Yes	We live right on 66 halfway between the Cemex tube and 53rd.	Do not support limiting residental access and recommends channeling business access with the use of frontage roads and lights
	CONTINUED: situation. Last, we believe an access road for four driveways that have generally minimal action is an awful lot of resources to spend for a small amount of benefit. The real place that needs access limits is past the 36/66 junction, especially by the hardware store and gas station. Super dangerous there. One more thing to add is that we need the left turning light at 36/66 when a car is heading west and then south to Bldr to be operational all day, every day, and into the evening. With all the traffic coming from the mountain areas and Lyons, I've been stuck at 10 AM on a weekday when the light doesn't work. Also, cars heading east go so fast when trying to make that light, they can appear suddenly. Really, the speed limit after the 36/66 junction should be 40 all the way to town.																			n/a tied to previous comment
for the near misses caused by frustrated truckers forced to go out WCR 5 by Mead, having to wait 20 min to turn left any time of day, and the fact that the Lodge there is going to gate their driveway and make it worse) WCR 7 improvements - anything to make that safer - are you aware the west bound left turn signal kicks in randomly when there are no turning cars waiting, giving the east bound left turning cars the idea that both sides are turning red, only to find the approaching cars are not slowing down and if you try to make the left on yellow, you are going to get creamed - probably how a number of accidents happen) Any and all roundabouts	Anything that encourages bikes on shoulders that are not wide enough or designated bike lanes	1			1	1								There is virtually nowhere between I-25 and WCR 1 that a left turn onto Hwy 66 can be performed safely, and right turn into a u turn somewhere is not really available as an alternative either.					Yes	WCR 7	Concerned about safety, specifically turning left onto HWY 66
		1						1		1				Access from Hover St North to SH 66 East is dangerous, with the merge into speeding traffic.					Yes	Hover St	Concerned about merging from Hover onto HWY 66 and getting up to speed
Widening the road, dedicated bike lanes	Roundabouts and frontage roads. These are confusing and terrifying at the speeds necessary for 66 to be an effective corridor	1							1			1			SH 66 is a main artery for traffic from the community to significant work sites. Access is necessary	This will not be an easy fix. Careful consideration must be made as these necessary upgrades can and will cause significant impacts to commuter traffic	Elizabeth Berg	lizabeth.anne1213@gmail.com		Yes	Division St, Platteville	Support widening and bike lanes, do not support roundabouts
				1							1				That no matter what public input is, the DEVELOPERS get what they want.					No	287	Support intersection improvements and actions that improve safety
		1				1					1				I think access is fine, but I do think neighborhood cross-sections should have lights. SH 66 & CR 5.5 there is a hill to the east. Even at night with headlights, it's hard to see oncoming traffic and/or judge the speed. This community has many new/young drivers and it would be a shame to see something happen to them, or anyone for that matter. It's a white knuckle turn and punch the gas intersection (turning west), which is even worse in the winter.		Suzi Steigerwald	mom2dem@hotmail.com	720-495-5834	Yes	CR 5.5	Believes access is fine, but major intersections should have lights
	66 in fine, we don't need to encourage more people to use it.													No improvments	It's fine					Yes	66 and 13	No actions are needed
			1	1	1																Supports improvements at major and minor intersections
county line road option 2 county road 7 option 2 county road 5 option 1				1							1	1			limit signalized intersections improvements to alternate routes					Yes	County Road 5	Support Option 2 for County Line and CR 7, Option 1 for CR 5

Which Level 2b recommendations do you support? Please list up to three.	Do any Level 2b recommendations concern you? If so, please explain.	Which type of improvements would you prefer to see completed first on the corridor? Please identify up to three.													What are your thoughts about access to and from the SH 66 corridor?	Do you have any additional questions that need to be answered by CDOT? If so, what? Please include your contact information, if so.	Name	Email	Phone Number	Do you live or work within one mile of SH 66?	What is the nearest SH 66 intersection to your home or work?	Takeaway
		Roadway widening to add travel lanes	Access control and turning restrictions	Intersection improvements at major intersections (such as US 36, US 287, and WCR 13)	Intersection improvements at minor intersections (such as Airport Road, County Line Road, and WCR 9.5)	Signals and/or roundabouts at intersections	Consolidation of local accesses and adding the parallel access roads	Bicycle and pedestrian facilities (such as the advisory shoulders, safety shoulders, or grade-separated crossings)	Bicycle and pedestrian crossing improvements at intersections	Grade-separation of railroad crossings	Safety improvements (such as medians or medians barriers)	Improvements to address the resiliency of the corridor (such as parallel routes or infrastructure upgrades)	Transit improvements	Other:							
I am not aware of the recommendations, however the portion of SH66 between Main St. (287) and Hover (95) needs to be first on the "fix" list. It already has an "F". Start with more 65 MPH speed limit signage! Slow drivers are a major problem!	I don't know exactly what they are.	1												MORE 65 MPH SIGNAGE! Slow drivers are a MAJOR source of traffic congestion and other issues related to slow drivers. JUST ADD A FEW SIGNS TO START OFF WITH. Signs with flashing lights would be superb. Folks forget this is a state highway and not a city road.	Access is poor where the highway is only two lanes. But this could be alleviated with widening of the lanes, which is mandatory.	Is there any way to work out some kind of different arrangement with the church on SH66 just west of Main St.? Every Sunday, traffic gets backed-up when people come and go to the church, and the police actually stop the traffic as if this is a country road. I think working out a different entrance/exit plan for the church would be prudent. With all of the additional traffic along this section of the SH66 corridor, this is a problem. Thank you.	Judith Overbey Moss	anextrahand1@comcast.net	303-774-7817	Yes	North Shore Drive	Is concerned about slow drivers, they are a major cause of backup. Also concerned about church traffic entering and exiting the road
	Roundabouts and closing currents roads that have access already to HWY 66 would be detrimental to ALL businesses currently at those intersections.	1	1	1											If you close access to Mead Street you are destroying business that have been their for 30 + years. There are other was to improve these areas without closing streets. I will fight very hard to insure this does NOT happen!	Veronica Silbaugh	vsilbaugh@aol.com	970-539-8435	Yes	Mead Street	Does not want any access points closed, specifically due to the impact of long-time busineeses
		30	**24**	**15**	**11**	**19**	**7**	**13**	**10**	**4**	**21**	**5**	**1**	**0**							

Appendix G-3: September 2019 Open Houses

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SH 66 Planning and Environmental Linkages Study

Summary of September 2019 SH 66 PEL Public Meetings

Meeting Details

Since the kickoff of the SH 66 Planning and Environmental Linkages Study (PEL) in 2017, a total of six open house meetings have been held to seek community feedback and input. The most recent round of open house meetings occurred in September 2019:

- Wednesday, September 25th
  4:30 p.m. to 7:30 p.m.
  Weld County Southwest Service Building
  4209 County Rd 24 1/2, Longmont, CO 80504

- Thursday, September 26th
  4:30 p.m. to 7:30 p.m.
  Longs Peak Middle School
  1500 14th Avenue, Longmont, CO 80501

Approximately 60 members from the public attended. Sign in sheets from each public meeting are attached to this summary as Attachment A.

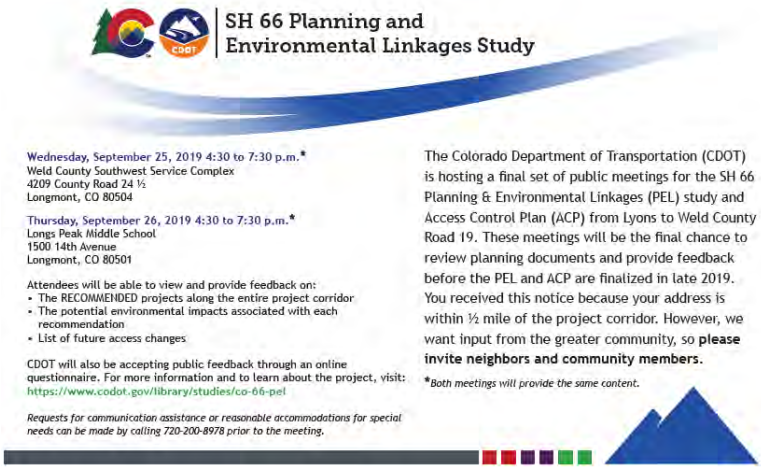
Meeting Purposes

The purposes of the meeting included:

- Providing the public an opportunity to comment on the recommended projects along the entire project corridor,
- Review the potential environmental impacts associated with each recommendation, and
- See a list of future access changes.

Advertisement

The public meetings were advertised via CDOT's website, a CDOT press release, a postcard mailed to residents with ½ mile of the planning corridor, an announcement on CDOT's social media accounts, (Facebook and Twitter) and distributed via email to the Technical Advisory Committee (TAC) and Executive Committee (EC). The TAC was encouraged to promote the meeting through their community's communications. The project team also sent a public meeting flyer to the Town/City Council contact and the Chamber of Commerce for each community located along the planning corridor.


SH 66 Planning and Environmental Linkages Study

Wednesday, September 25, 2019 4:30 to 7:30 p.m.*
Weld County Southwest Service Complex
4209 County Road 24 ½
Longmont, CO 80504

Thursday, September 26, 2019 4:30 to 7:30 p.m.*
Longs Peak Middle School
1500 14th Avenue
Longmont, CO 80501

Attendees will be able to view and provide feedback on:
- The RECOMMENDED projects along the entire project corridor
- The potential environmental impacts associated with each recommendation
- List of future access changes

CDOT will also be accepting public feedback through an online questionnaire. For more information and to learn about the project, visit: https://www.codot.gov/library/studies/co-66-pel

Requests for communication assistance or reasonable accommodations for special needs can be made by calling 720-200-8978 prior to the meeting.

The Colorado Department of Transportation (CDOT) is hosting a final set of public meetings for the SH 66 Planning & Environmental Linkages (PEL) study and Access Control Plan (ACP) from Lyons to Weld County Road 19. These meetings will be the final chance to review planning documents and provide feedback before the PEL and ACP are finalized in late 2019. You received this notice because your address is within ½ mile of the project corridor. However, we want input from the greater community, so **please invite neighbors and community members.**

**Both meetings will provide the same content.*

Meeting Approach

The public meetings were open house format where the public could drop by anytime to learn about the PEL recommendations and associated potential environmental impacts along the entire planning corridor. A list of future access changes was also presented. Attendees could provide public feedback during each open house using a hard-copy comment form or later via an online questionnaire contained matching questions. The same content was provided at both meetings and comments were accepted for over three weeks following the last open house; the comment period ended on October 20, 2019.

The meeting boards and displays are attached as Attachment B.

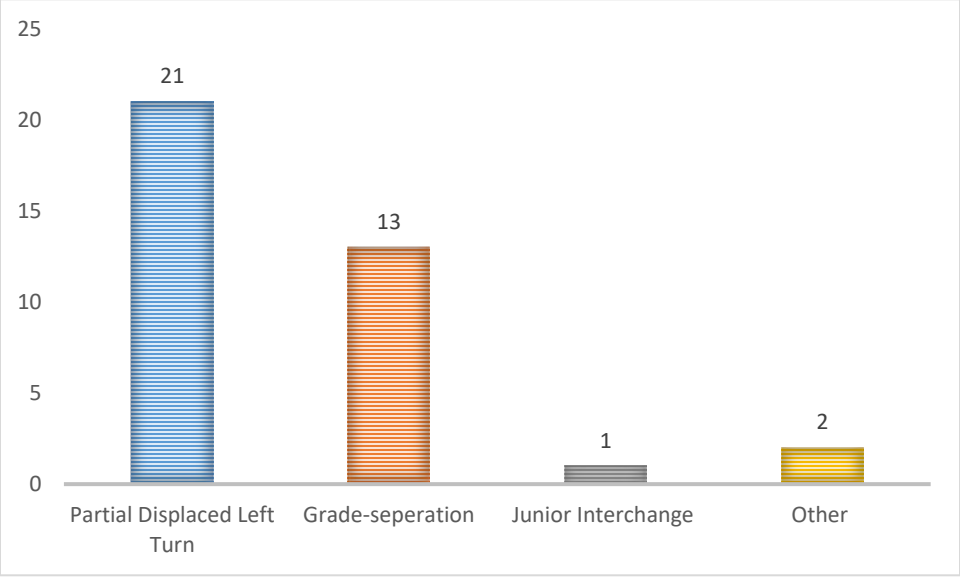
Overview Questionnaire Results

Questionnaires were completed by 50 people attending the open house meetings or online. To assist in completing the questionnaire, a definitions sheet was supplied to each attendee, and was embedded in the online version, that had a graphic explaining of each intersection/interchange option. A sample questionnaire and definitions sheet are included in Attachment C; a spreadsheet of all responses provided in Attachment D. The results are summarized below.

Questionnaire Instructions: For questions 1-5, please check the box next to the option that you most prefer for the following intersections along SH 66 (intersections are listed west to east as they appear on the planning corridor):

Q1: SH 66 and Hover Street/ 95th Street

- ☐ Partial Displaced Left Turn (for westbound to southbound left)
- ☐ Grade-separation, such as Echelon, Single-Point Urban Interchange, or Diamond Interchange
- ☐ Junior Interchange in the Northeast quadrant
- ☐ Other:

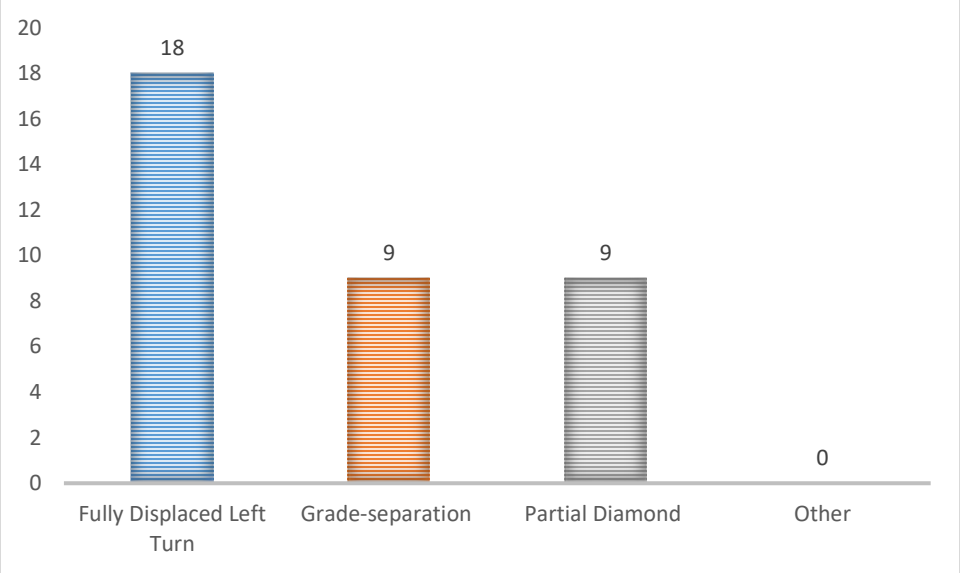


Two questionnaire respondents provided other comments, these include:

- Providing for longer lights
- Since the 4-way stop has been in place, this intersection is working fine and there has been a reduction of accidents

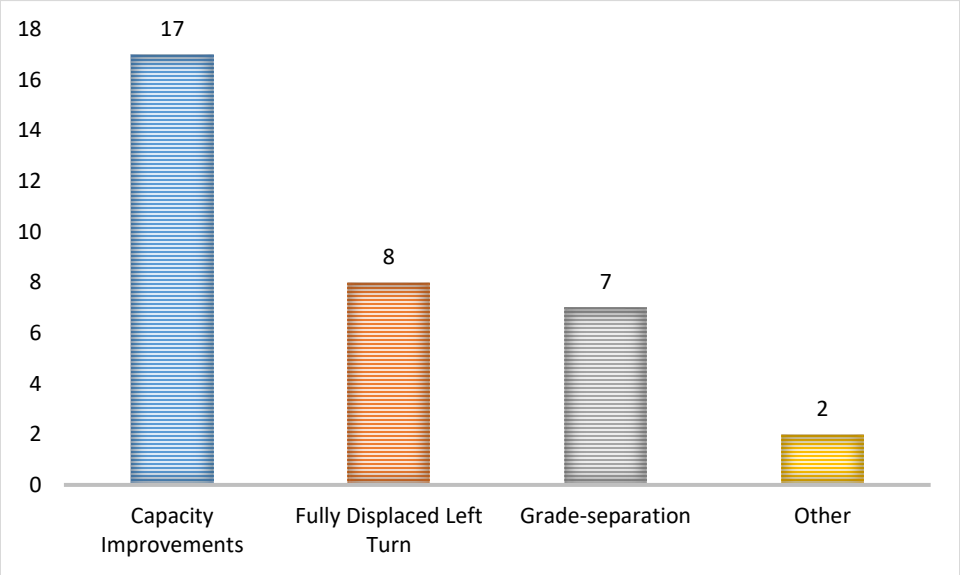
Q2: SH 66 and US Hwy 287

- ☐ Fully Displaced Left Turn
- ☐ Grade-separation, such as Echelon, Single-Point Urban Interchange, or Diamond Interchange
- ☐ Partial Diamond Interchange
- ☐ Other:



Q3: SH 66 and County Line Road

- ☐ Capacity improvements to add turn lanes and acceleration lanes
- ☐ Fully Displaced Left Turn
- ☐ Grade-separation, such as Echelon, Single-Point Urban Interchange, or Diamond Interchange
- ☐ Other:

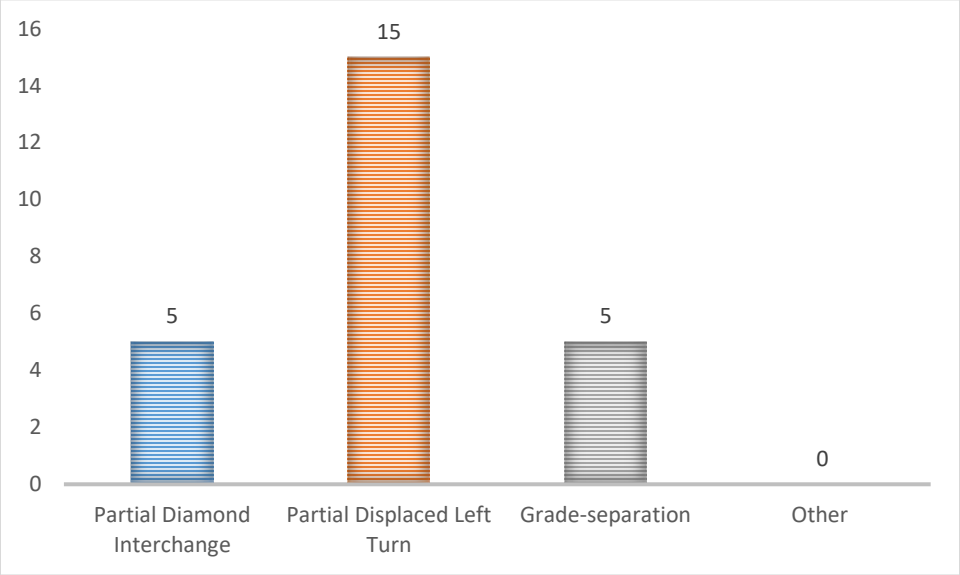


Two questionnaire respondents provided other comments, these include:

- This intersection needs additional lanes
- This intersection seems to be working fine as it is today

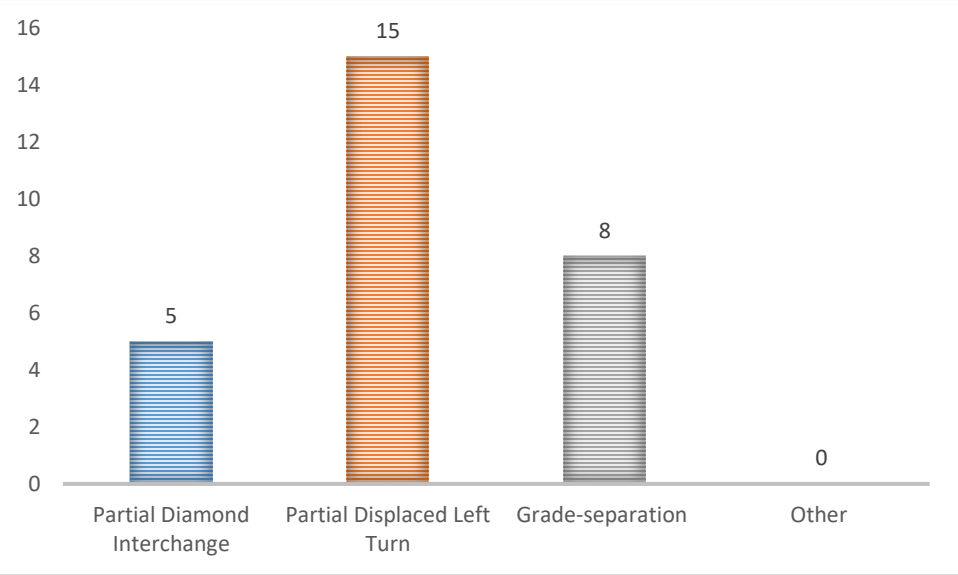
Q4: SH 66 and WCR 9.5

- ☐ Partial Diamond Interchange
- ☐ Partial Displaced Left Turn (for westbound and eastbound left turns)
- ☐ Grade-separation, such as Echelon, Single-Point Urban Interchange, or Diamond Interchange
- ☐ Other:



Q5: SH 66 and WCR 13 / Colorado Boulevard

- ☐ Partial Diamond Interchange
- ☐ Partial Displaced Left Turn (for westbound and eastbound left turns)
- ☐ Grade-separation, such as Echelon, Single-Point Urban Interchange, or Diamond Interchange
- ☐ Other:



Q6: Please provide any additional feedback on the PEL Recommended cross-sections, intersection configurations, and identified improvements:

Of the 50 completed questionnaires, 20 people provided additional input. The following is a list of common themes from that feedback:

- Noise along the corridor continues to be a major concern of residents along the corridor. A suggestion to ban Jake breaks was made, along with the request by many residents for noise studies to be completed. Generally, the concern of increased noise was raised by residents where an alternative included adding stop lights and/or adding lanes.
- Most respondents support increasing SH 66 from two to four lanes of traffic along the entire planning corridor.
- Although a couple respondents support closing McCall Drive, most do not support the suggested closure of McCall Drive. Also, those who want McCall Drive to remain open, do not support installing a traffic light at 66th Street.
- The use of traffic lights along the planning corridor is generally supported especially where development is planned.
- A few respondents suggested that installing traffic lights would lower air quality and called for air quality studies to be conducted.
- A couple respondents suggested that the speed limit be lowered.

Q7: From the list below, please place an "X" in the box to identify the transportation need you feel should be the priority for each section along the project corridor.

Access: The appropriate number of access points to allow ease of access to SH 66 while balancing efficient and safe mobility (examples: consolidate access, raised medians, restrict movements)

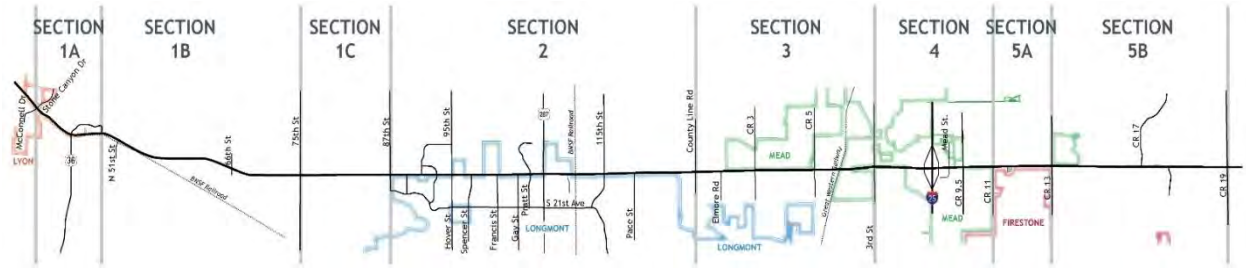
Bicycle/Pedestrian: Provide infrastructure to support bicycle and pedestrian use along SH 66 (examples: bike lanes, side paths, wide shoulders)

Mobility: Complete projects that increase the ease and efficiency of moving people, goods, and services along the corridor (examples: additional thru lanes, intersection configuration, intersection capacity)

Safety: Safety of vehicles, bicycles, and pedestrians along the SH 66 corridor (examples: additional turn lanes, signalization)

	Access	Bicycle/Pedestrian	Mobility	Safety
Section 1A	6	4	5	15
Section 1B	8	3	6	15
Section 1C	6	2	9	11
Section 2	9	4	10	13
Section 3	9	4	11	17
Section 4	16	1	7	16
Section 5A	5	1	5	16
Section 5B	5	0	5	16

Green Cells = The transportation need, by section, identified as the highest priority



Welcome

to the

SH 66

Planning and Environmental Linkages Study and Access Control Plan

Public Meeting

SEPTEMBER 25 & 26, 2019

Thank you for attending! We are pleased you are here to hear more about the SH 66 Corridor! We are eager to share with you the future vision for the corridor!

How to get the most out of this meeting:

- View the displays and talk with our project team members to learn more and share your ideas
- Participate in the interactive activities
- Fill out a project comment card and drop it in the box

COLORADO

Department of Transportation

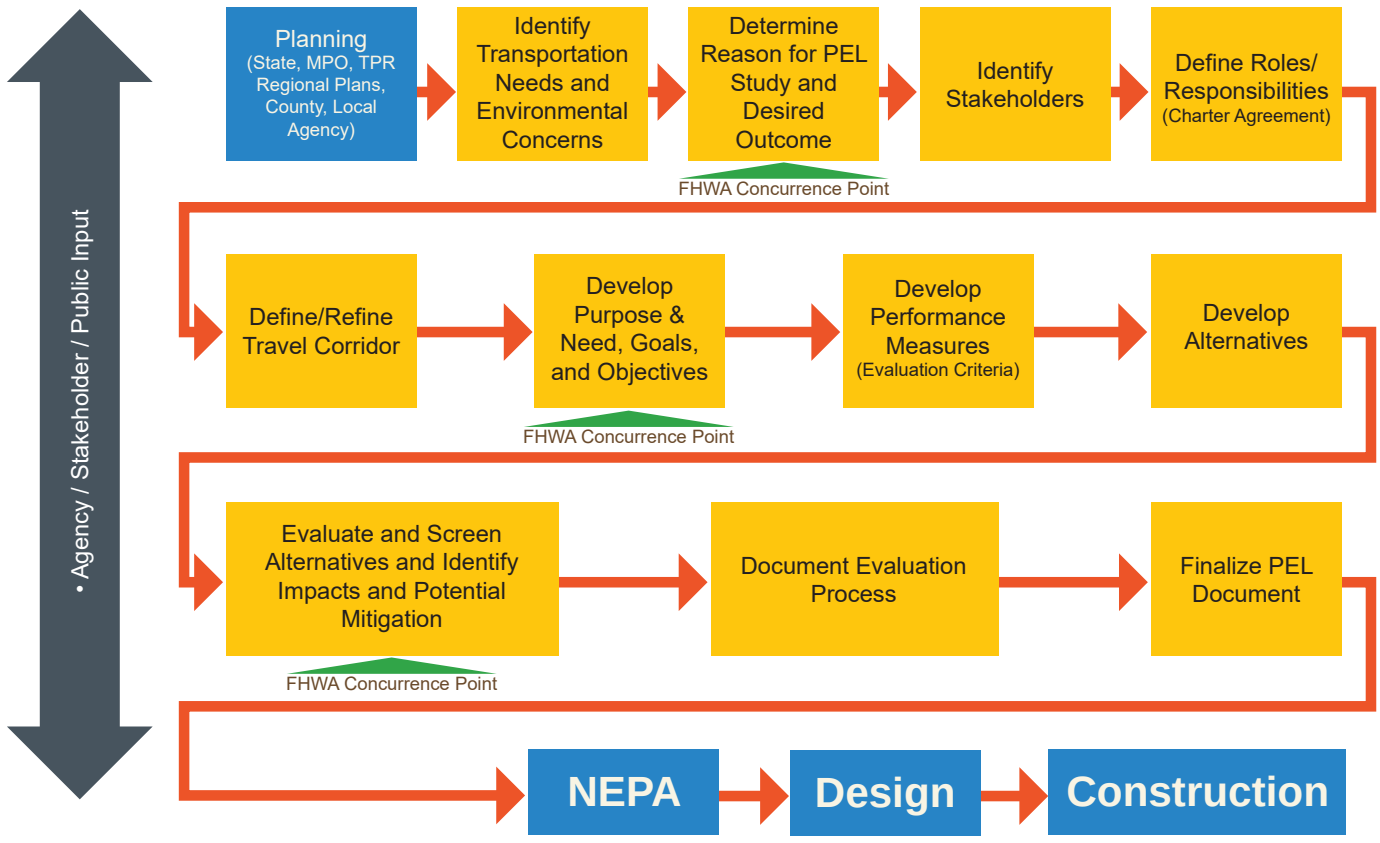
SH 66 Planning and Environmental Linkages Study

What is a PEL?

A Planning and Environmental Linkages (PEL) study is an approach to transportation decision-making that considers community, environmental and economic goals early in the planning stage and carry them through project development, design, and construction.

A PEL Study:

- Identifies transportation issues and environmental concerns
- Defines a clear purpose and need
- Results in useful information that can be carried forward into the National Environmental Policy Act (NEPA) process



Project Purpose and Need

The SH 66 PEL will identify existing conditions, anticipated problem areas, safety, and operational needs to determine the short-term and long-term transportation priorities.

Purpose The purpose of transportation improvements along the SH 66 corridor is to increase safety; reduce traffic; provide managed access for existing and future development; and improve multimodal mobility of people, goods, and services. The improvements should be resilient, accommodate developing technologies, and strive to complement adjacent community context.

Needs

SAFETY PROBLEM

The corridor has experienced a number of safety concerns.

VEHICULAR Several intersection and mainline locations along the SH 66 corridor have a high number of crashes, when compared to other similar roadways.

BICYCLE Areas along the corridor have experienced bicycle safety concerns, from recorded incidents, physical characteristics, and cross-street connections.

PEDESTRIAN There are a number of pedestrian destinations in the corridor, which do not have sidewalks connecting them and can cause unsafe pedestrian movements.

MOBILITY PROBLEM

The movement of people, goods, and services along the corridor has resulted in a number of mobility problems that can be rooted in various transportation modes.

VEHICULAR Traffic congestion, inadequate intersections that fail to accommodate users' needs, highway design, and unreliable travel times substantially impact the ability of people to move across and along the corridor.

BICYCLE A majority of the SH 66 corridor is a heavily utilized for bicycles (recreational, commuter, and events). There are many areas of the corridor that have insufficient shoulders that can accommodate bicycles or non-advanced riders.

PEDESTRIAN There are a number of pedestrian destinations in the corridor, many of which do not have sidewalks between the destinations.

TRANSIT Transit service in the corridor is primarily focused on north-south connections and not local east-west service. There is currently a non-continuous connection of transit service providers in the corridor.

ACCESS PROBLEM

The current number, locations, and design of public roadway accesses have contributed to traffic operational and safety deficiencies along the corridor. There are individual private driveways, business accesses directly onto SH 66, and inconsistent access spacing, which leads to mobility and safety problems.

SH 66 Planning and Environmental Linkages Study

Process Flowchart

PEL

NEPA/Design

Implementation

Subsequent Steps

1 Stakeholder Interviews
Visioning Workshop
Sections/Constraints/Goals

2 Data Collection
Current Demand
Future Demand (information from stakeholders & visioning)

Purpose & Need

FHWA CONCURRENCE POINT

Public Meeting

3a Roadway Classification

3b Roadway Capacity
JULY 2017

4 Intersection Alternatives

5 Screen Alternatives
EARLY SPRING 2019
Choose alternatives that best fit the current and future transportation system, current surrounding land use and future land use context
Evaluate environmental impacts/constraints
FHWA CONCURRENCE POINT
Public Meeting

6 ACP Development
Public Meeting
LATE SPRING 2019

7 Prioritization & Documentation & Draft ACP
SUMMER 2019
PEL Questionaire
Summary Sheets
FHWA CONCURRENCE POINT

8 PEL Recommendations, Final ACP
Public Meeting
LATE SUMMER 2019

We are Here

9 Preserve Right-of-Way

10 Identify Funding, Conduct NEPA Analysis

11 Design, Construction

15-255 09.18.2019

SH 66 Planning and Environmental Linkages Study

Alternatives Development and Screening Process

SCREENING LEVEL	ALTERNATIVE DEVELOPMENT	INPUTS/MEASURES	EVALUATION CRITERIA/ SCREENING	OUTCOMES

Purpose & Need Screening

LEVEL 1 GOAL: Recommend alternatives that appropriately & contextually meet purpose & need

1.

Develop Full Range of Alternatives

- **Public, Agency, & Stakeholder Perspectives**
- **Range of Alternatives**
  - Roadway
  - Transit
  - Intelligent Mobility
  - Bicycle & Pedestrian Facilities

Meets Purpose & Need? (Screening)

- **Safety**
- **Mobility**
- **Access**

→ **Alternatives Eliminated that do not Meet Purpose & Need**

→ **Full Range of Alternatives to Advance**

Comparative Screening

LEVEL 2 GOAL: Recommend section-wide alternatives that balance all needs within the corridor context

2.

Evaluate Section Classification

- Expressway
- Rural Highway
- Non-Rural Highway
- Arterial

Evaluate Section Capacity

- 2-Lane
- 4-Lane
- 3-Lane
- 5-Lane
- 6-Lane

- **Public, Agency, & Stakeholder Perspectives**
- **Full Range of Alternatives to Advance**

Maintain Purpose & Need to Define Decisions

- **Safety**
- **Mobility**
- **Access**

→ **Future Operational Classifications of Highway Sections**

→ **Number of Future Through Lanes in Highway Sections**

Detailed Alternative Development & Screening

LEVEL 3 GOAL: Integrate improvements to address all needs and balance context

3.

Evaluate Intersection Options

Evaluate Bicycle, Pedestrian, and Transit Facilities Along Highway Sections and at Intersections

Full Range of Alternatives to Advance

- **Public, Agency, & Stakeholder Perspectives**
- **CAP-X Intersection Options**
- **Bike & Pedestrian Facilities**
- **Transit Facilities**
- **Access Code Criteria & Layouts**
- **Intelligent Mobility**

Consider Context

- **Environmental**
- **Community**
- **Risk**

→ **Potential Intersections Options**

→ **Potential Bicycle, Pedestrian, and Transit Options**

→ **Draft Access Control Plan**

→ **Final Access Control Plan**

→ **Estimated Maximum Footprint of Potential Future Improvements**

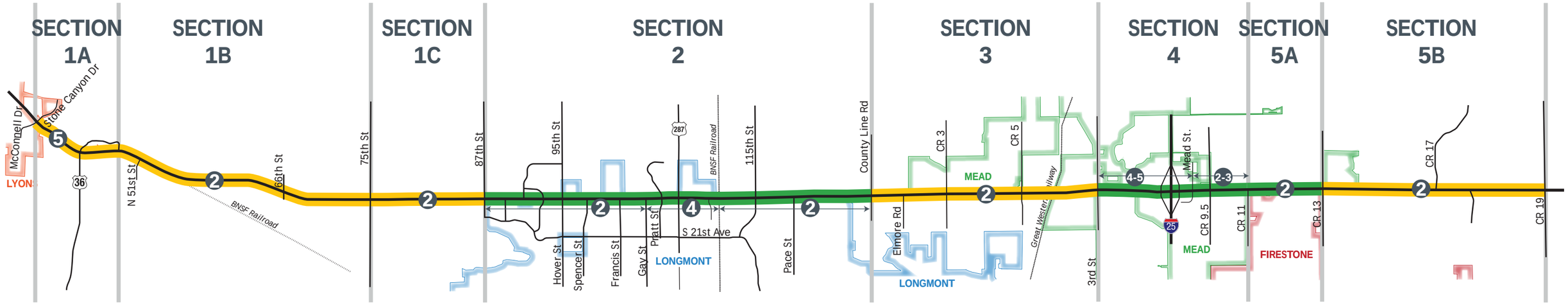
→ **Prioritization** (based on needs)

→ **PEL Study Recommendations**

SH 66 Planning and Environmental Linkages Study

Level 2 Screening Operational Classification

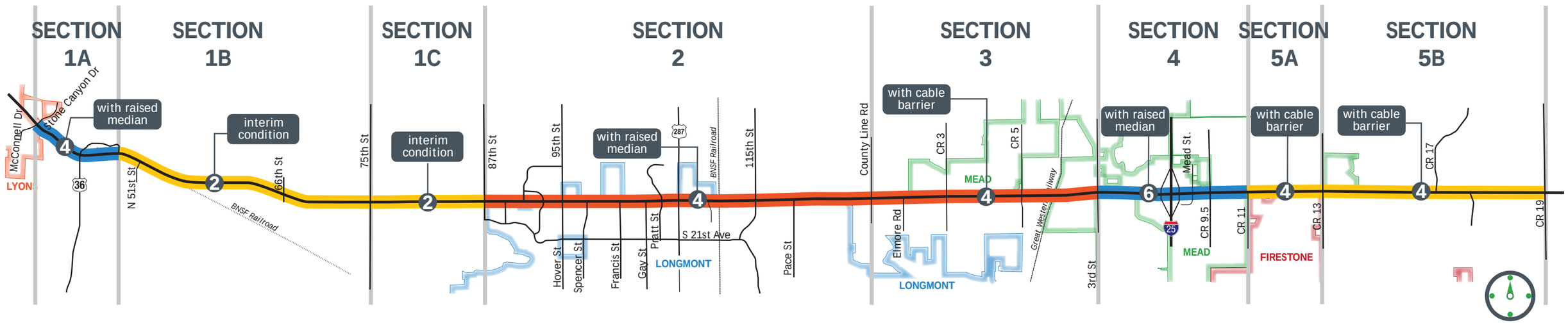
Existing



LEGEND

- Expressway
- Non-Rural Principal Highway
- Rural/Regional Highway
- Arterial
- (X) Number of Thru Lanes

Future



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SH 66 Planning and Environmental Linkages Study

Existing Conditions & Level 2 Screening Corridor Visualizations

Section 1A

Existing | Proposed

Center left turn lane

Raised median with left turn lanes and bike lanes

Section 1B

Existing | Interim

No median separation or left turn lanes

Two through lanes and access road with advisory shoulders; with turn lanes at intersections

Section 1C

Existing | Interim

No median separation or left turn lanes

Two through lanes, wide shoulders, and side path; with turn lanes at intersections

Section 2

Existing | Proposed

No median separation or left turn lanes

Raised median with side path

Section 3

Existing | Proposed

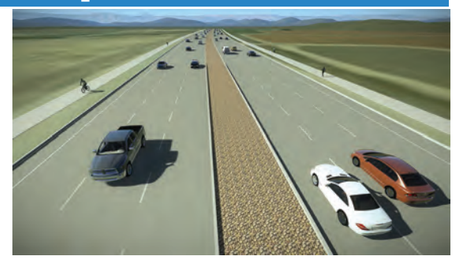
No median separation or left turn lanes

Cable barrier/grassy median with side path

Section 4

Existing | Proposed

Striped median separation



Raised medians with side paths

Section 5A

Existing | Proposed

No median separation or left turn lanes

Cable barrier/grassy median with side path

Section 5B

Existing | Proposed

No median separation or left turn lanes

Cable barrier/grassy median with side path

SH 66 Planning and Environmental Linkages Study

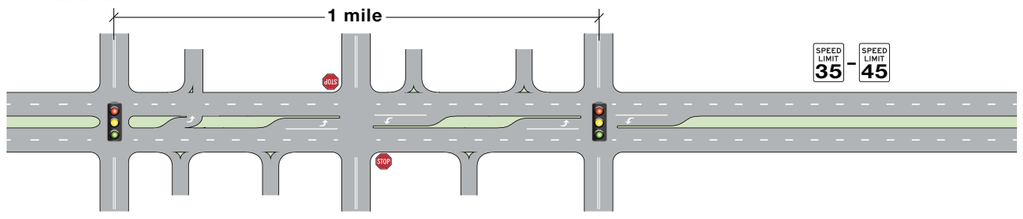
Section 1: McConnell Drive to 87th Street

Overview & Recommendations

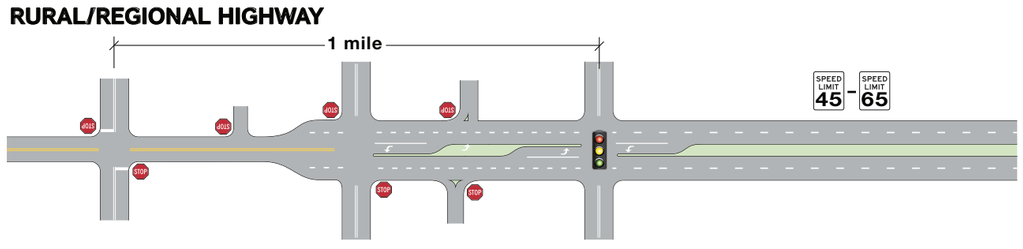
- ☐ **Local agencies:** Town of Lyons and Unincorporated Boulder County
- ☐ **Known transportation problems:** Vehicular access, mobility, and safety; bicycle and pedestrian connections and safety, bicycle crossings
- ☐ **Existing roadway classification and lineage:** Rural/Regional Highway with two to five lanes
- ☐ **Recommended roadway classification:**
  - Arterial roadway from McConnell Drive to Highland Drive (Section 1A)
  - Rural/Regional Highway from Highland Drive through 75th Street (Section 1B) and 75th Street through 87th Street (Section 1C)
- ☐ **Total recommended cross section width:** 101 feet to 138 feet
- ☐ **Total right of way preservation acreage:** 99.6 acres
- ☐ **Recommended cross sections include:**
  - Interim improvements include turn lanes at intersections
  - Four travel lanes (two 12-foot lanes in each direction) across all of Section 1 in the ultimate condition
  - A 16-foot wide median (raised with curb and gutter in Section 1A and grassy with cable barrier in Sections 1B and 1C)
  - Curb and gutter and bike lanes along SH 66 in Section 1A
  - Either a 10-foot bike and pedestrian path or a 16-foot access road with advisory shoulders along SH 66 in Section 1B and 1C
  - A five-foot offset to clear zone (a clear zone is an unobstructed, traversable roadside area that allows a driver to stop safely or regain control of a vehicle that has left the roadway) in areas that are not curb & gutter

Roadway Classification

ARTERIAL



RURAL/REGIONAL HIGHWAY



	DESCRIPTION	ACCESS SPACING
ARTERIAL	Moderate to low travel speeds and traffic volumes with moderate access	1/2 mile for full movement intersections, with possible 3/4 movement at quarter miles, and RIRO access for each parcel (should share access if possible)
RURAL/REGIONAL HIGHWAY	Moderate to high speeds with moderate to low traffic volumes	1/2 mile + for full movement intersections with public roadways, maximum of one access per parcel (depending on other roadways that could preclude access) with shared access preferable

Local Agency Planning Efforts

Lyons vision for:

- Business district along SH 66
- US 36/SH 66 roundabout
- Gateway features at US 36/SH 66 and east of US 36 along SH 66

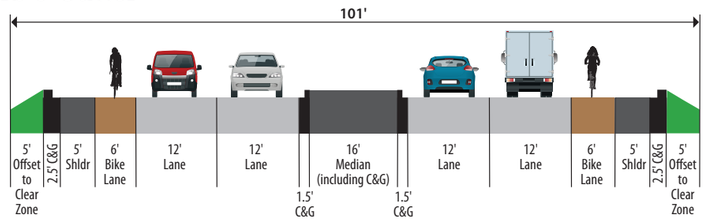
Boulder County vision for:

- Improve bus service and stops, park and ride capacity, and local transit connections; add queue jump lanes
- Incorporate bikeable shoulders and key grade separated crossings
- Enhance intersections to improve safety and convenience for all modes and to reduce congestion

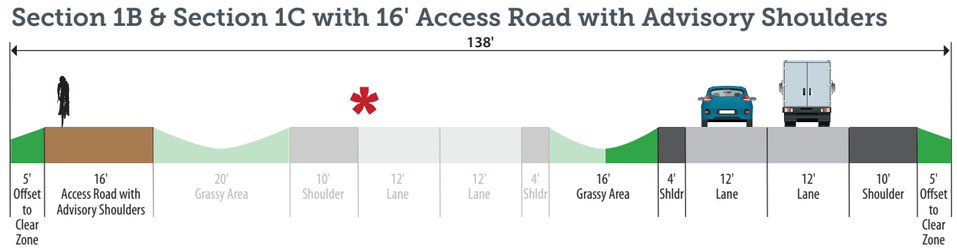
For more information, please view the SH 66 PEL Corridor Conditions Report (Appendix C).

Recommended Cross Sections (facing east)

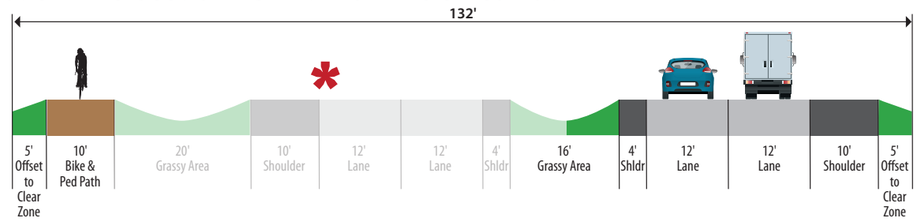
Section 1A with Curb & Gutter



Section 1B & Section 1C with 16' Access Road with Advisory Shoulders

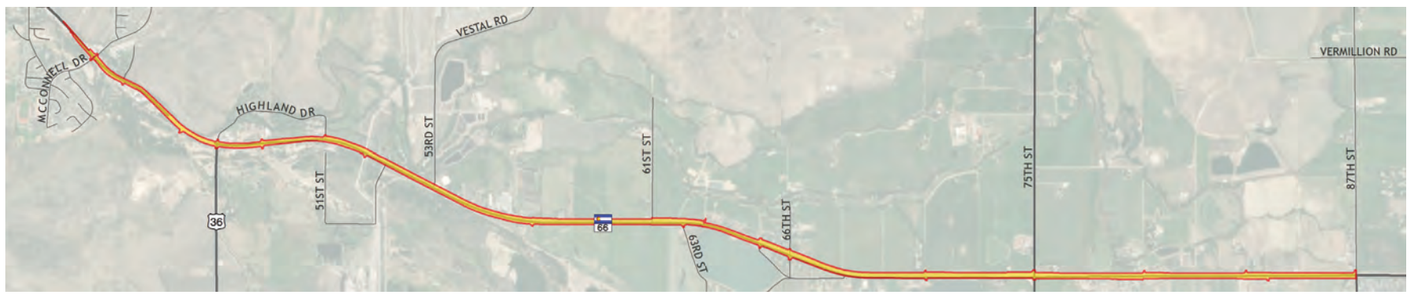


Section 1B & Section 1C with 10' Bike & Ped Path



✱ *Right-of-way preservation for potential multi-modal and safety transportation improvements*

Recommended Right-of-Way Preservation Footprint



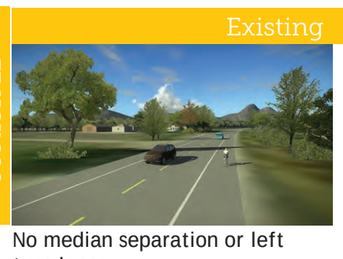
Existing & Proposed Visualizations (facing west)

Section 1A — Existing | Proposed

Center left turn lane

Raised median with left turn lanes and bike lanes

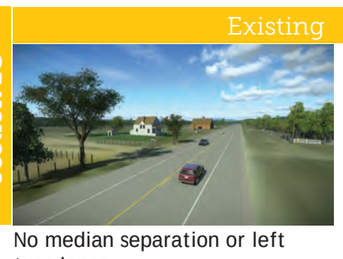
Section 1B — Existing | Interim



No median separation or left turn lanes

Two through lanes and access road with advisory shoulders; with turn lanes at intersections

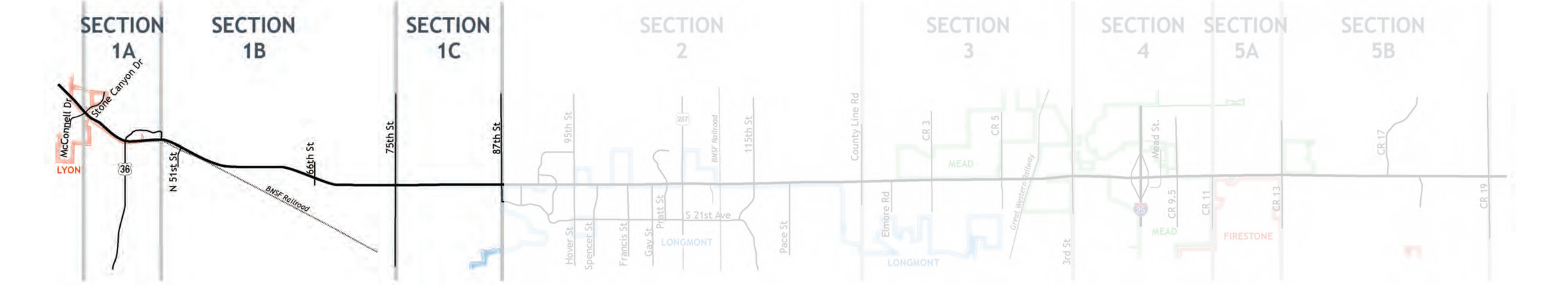
Section 1C — Existing | Interim



No median separation or left turn lanes

Two through lanes, wide shoulders, and side path; with turn lanes at intersections

Improvements



Near-Term 0-10 years

SECTION	LOCATION ON SH 66 (intersection or section)	RECOMMENDED IMPROVEMENT
1A	McConnell Drive to Highland Drive East	Install raised median and restrict and/or consolidate accesses. Install rumble strips and/or bike lanes.
1A	US 36	Construct grade-separated underpass for bicycle and pedestrians.
1B	Section-wide	Install rumble strips.
1B	Section-wide	Install access road with advisory shoulders, add right and left turn lanes at those accesses; and install sidepath.
1B	75th Street	Re-assess signal timing. Install bicycle and pedestrian grade-separated crossing.
1C	Section-wide	Install rumble strips. Install access road with advisory shoulders, add right and left turn lanes at those accesses; and install sidepath.

Mid-Term 5-15 years

SECTION	LOCATION ON SH 66 (intersection or section)	RECOMMENDED IMPROVEMENT
1B	Section-wide	Construct missing Sections of access road with advisory shoulders, and/or bike/ped only connections. Include shoulder widening. Work with local agencies to construct trail along BNSF.
1C	Section-wide	Construct missing Sections of access road with advisory shoulders, and/or bike/ped only connections. Include shoulder widening.

Long-Term 10-20 years

SECTION	LOCATION ON SH 66 (intersection or section)	RECOMMENDED IMPROVEMENT
1A	Section-wide	Work with local agencies to install trail along SH 66.
1B	53rd Street	Install bicycle and pedestrian grade-separated crossing.

Beyond Horizon Year +20 years

SECTION	LOCATION ON SH 66 (intersection or section)	RECOMMENDED IMPROVEMENT
1B	Section-wide	Increase capacity of highway from 2 to 4 lanes.
1C	Section-wide	Increase capacity of highway from 2 to 4 lanes.

15-255 09.23.2019

SH 66 Planning and Environmental Linkages Study

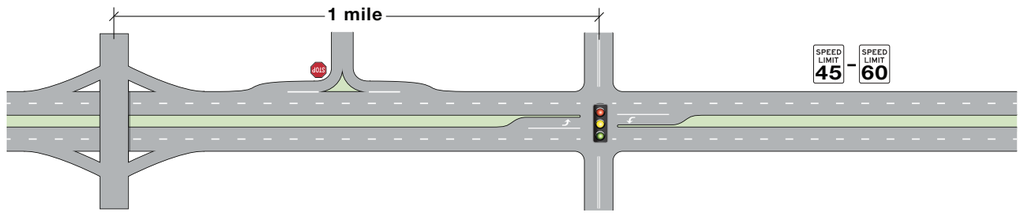
Section 2: 87th Street to County Line Road

Overview & Recommendations

- ☐ **Local agencies:** City of Longmont and Unincorporated Boulder County
- ☐ **Known transportation problems:** Vehicular access, mobility, and safety; bicycle and pedestrian mobility and safety; transit access
- ☐ **Existing roadway classification and lineage:** Non-rural principal highway with two to four lanes
- ☐ **Recommended roadway classification:** Expressway
- ☐ **Total recommended cross section width:** 109 feet to 145 feet
- ☐ **Total right of way preservation acreage:** 82.8 acres
- ☐ **Recommended cross sections include:**
  - •Four travel lanes (two 12-foot lanes in each direction)
  - •A 16-foot wide median (raised with curb and gutter)
  - •Five-foot outside shoulders
  - •A 10-foot bike and pedestrian path on one or both sides of the road
  - •A 16-foot frontage road along SH 66 in select locations
  - •A five-foot offset to clear zone (a clear zone is an unobstructed, traversable roadside area that allows a driver to stop safely or regain control of a vehicle that has left the roadway)
  - •Addition of turn lanes at intersections

Roadway Classification

EXPRESSWAY



DESCRIPTION	ACCESS SPACING
Moderately high speeds and traffic volumes with limited access, multiple lanes in each direction and separated directional travel	1 mile + for full movement, with possible RIRO at half mile

Local Agency Planning Efforts

Longmont vision for:

- Side path from 87th Street to County Line Road
- Two underpasses at SH 66/US 287 and SH 66/Pace Street
- Tie bike lanes into north-south routes along SH 66
- SH 66/US 287 Park-n-Ride
- Active participation with CDOT for multi-modal plan

Boulder County vision for:

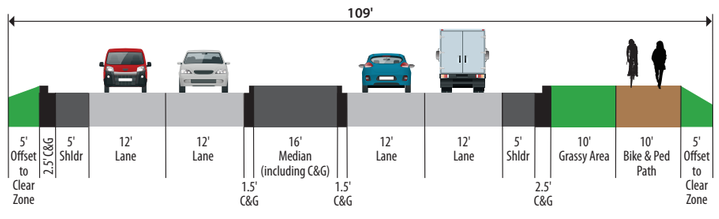
- Improve bus service and stops, park and ride capacity, and local transit connections; add queue jump lanes
- Incorporate bikeable shoulders and key grade separated crossings
- Enhance intersections to improve safety and convenience for all modes and to reduce congestion

For more information, please view the SH 66 PEL Corridor Conditions Report (Appendix C).

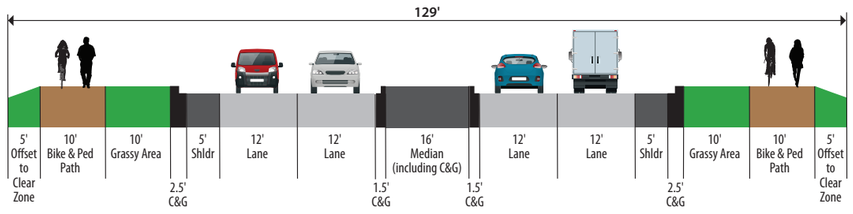
Recommended Right-of-Way Preservation Footprint

Recommended Cross Sections (facing east)

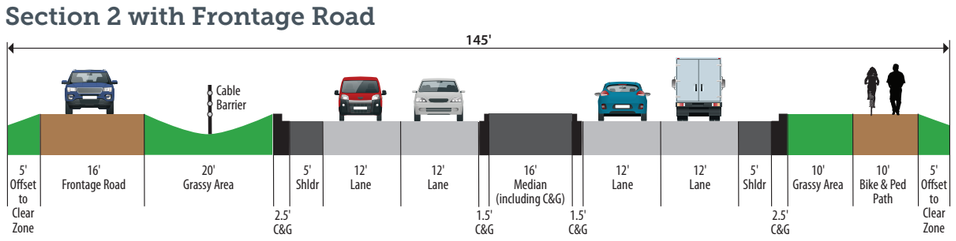
Section 2 with Curb & Gutter and 10' Bike & Ped Path



Section 2 with Curb & Gutter and 10' Bike & Ped Path on North & South



Section 2 with Frontage Road



Existing & Proposed Visualizations (facing west)

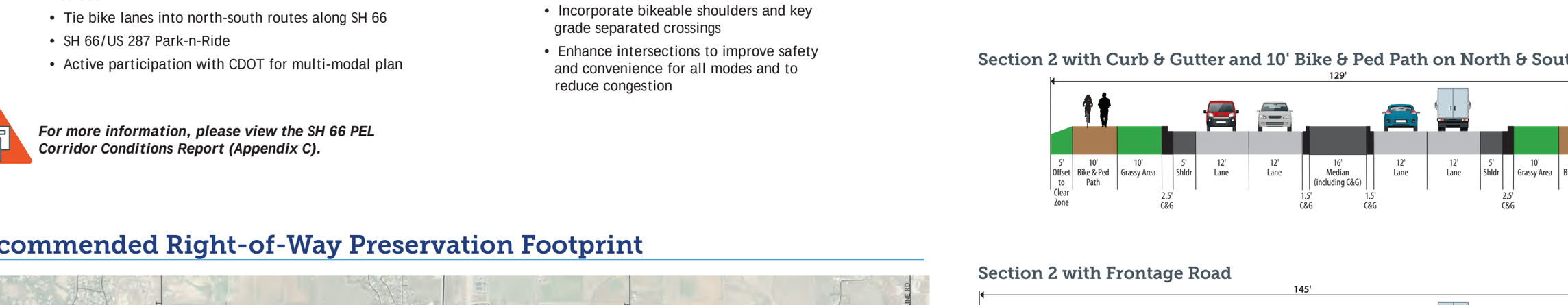
Section 2

Existing | Proposed

No median separation or left turn lanes

Raised median with side path

Improvements



Near-Term 0-10 years

SECTION	LOCATION ON SH 66 (intersection or section)	RECOMMENDED IMPROVEMENT
2	Section-wide	Restrict left turns out where identified in the ACP. Install sidepath on the south side of SH 66. Monitor and/or perform a warrant analysis at intersections where signals are planned in the ACP (Airport Road, Francis St, Alpine St, Sundance Dr).
2	Hover St/95th Street	Add auxiliary lanes and capacity.
2	SH 66 from Hover St to US 287	Expand SH 66 to four lanes plus auxiliary lanes between Hover/95th St and US 287 Install median and implement access control where there are high delays and/or high crash rates on side streets.
2	US 287	Improve intersection; recommend carrying forward displaced left turn or other alternative intersection option.
2	Alpine Street to County Line Rd	Improve SH 66 from 2 to 4 lanes, add a median, and install auxiliary lanes at intersections between Alpine St and County Line Road.

Mid-Term 5-15 years

SECTION	LOCATION ON SH 66 (intersection or section)	RECOMMENDED IMPROVEMENT
2	Section-wide	Monitor and restrict left turns out where identified in the ACP and a documented safety need is shown. Include shoulder widening. Install sidepath on the north side of SH 66. Monitor and/or perform a warrant analysis at intersections where signals are identified as allowed in the ACP (Airport Road, Francis St, Alpine St, Sundance Dr).
2	Erfert St to Alpine St	Grade-separate SH 66 over railroad, improve the highway from 2 to 4 lanes, add a median, and install turn lanes where warranted at intersections.

Long-Term 10-20 years

SECTION	LOCATION ON SH 66 (intersection or section)	RECOMMENDED IMPROVEMENT
2	Section-wide	Monitor and restrict left turns out where identified in the ACP and a documented safety need is shown. Monitor and/or perform a warrant analysis at intersections where signals are identified as allowed in the ACP (Airport Road, Francis St, Alpine St, Sundance Dr).
2	87th Street to 95th Street	Improve the highway from 2 to 4 lanes, add a median, and install turn lanes where warranted at intersections.
2	BNSF and Pace	Install bicycle and pedestrian grade-separated crossing lanes where warranted at intersections.
2	BNSF and Pace	Install bicycle and pedestrian grade-separated crossing.

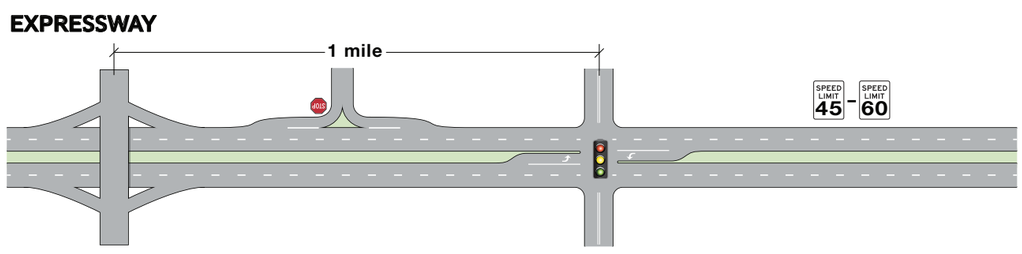
SH 66 Planning and Environmental Linkages Study

Section 3: County Line Road to 3rd Street (WCR 7)

Overview & Recommendations

- ☐ **Local agencies:** City of Longmont, Town of Mead, and Unincorporated Weld County
- ☐ **Known transportation problems:** Vehicular access, mobility, and safety; bicycle connections and safety
- ☐ **Existing roadway classification and lineage:** Rural/regional highway with two lanes
- ☐ **Recommended roadway classification:** Expressway
- ☐ **Total recommended cross section width:** 122 feet
- ☐ **Total right of way preservation acreage:** 45.3 acres
- ☐ **Recommended cross section includes:**
  - Four travel lanes (two 12-foot lanes in each direction)
  - A 16-foot wide grassy median with cable barrier
  - A 10-foot bike and pedestrian path along SH 66
  - 10-foot shoulders
  - A five-foot offset to clear zone (a clear zone is an unobstructed, traversable roadside area that allows a driver to stop safely or regain control of a vehicle that has left the roadway)
  - Addition of turn lanes at intersections

Roadway Classification



DESCRIPTION

Moderately high speeds and traffic volumes with limited access, multiple lanes in each direction and separated directional travel

ACCESS SPACING

1 mile + for full movement, with possible RIRO at half mile

Local Agency Planning Efforts

Longmont vision for:

- Side path from 87th Street to County Line Road
- Two underpasses at SH 66/US 287 and SH 66/Pace Street
- Tie bike lanes into north-south routes along SH 66
- SH 66/US 287 Park-n-Ride
- Active participation with CDOT for multi-modal plan

Mead vision for:

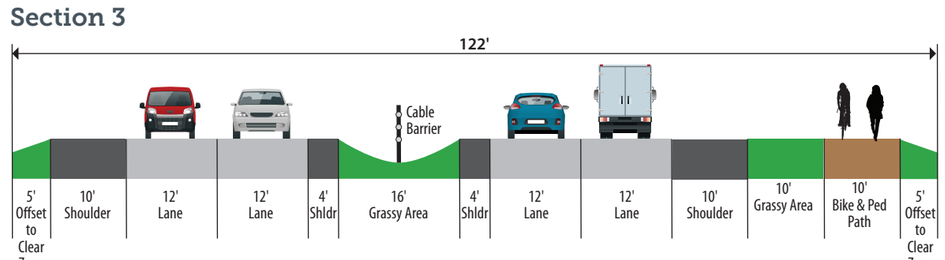
- Gateways at I-25/SH 66, SH 66/WCR 1, and SH 66/WCR 7 (3rd Street)
- SH 66/3rd Street intersection improvements and signalization
- Widen SH 66
- Proposed trail

Weld County vision for:

- Trail connections
- Access control
- Intersection improvement partnership SH 66/WCR 7 (3rd Street)

Recommended Cross Section (facing east)

Section 3



For more information, please view the SH 66 PEL Corridor Conditions Report (Appendix C).

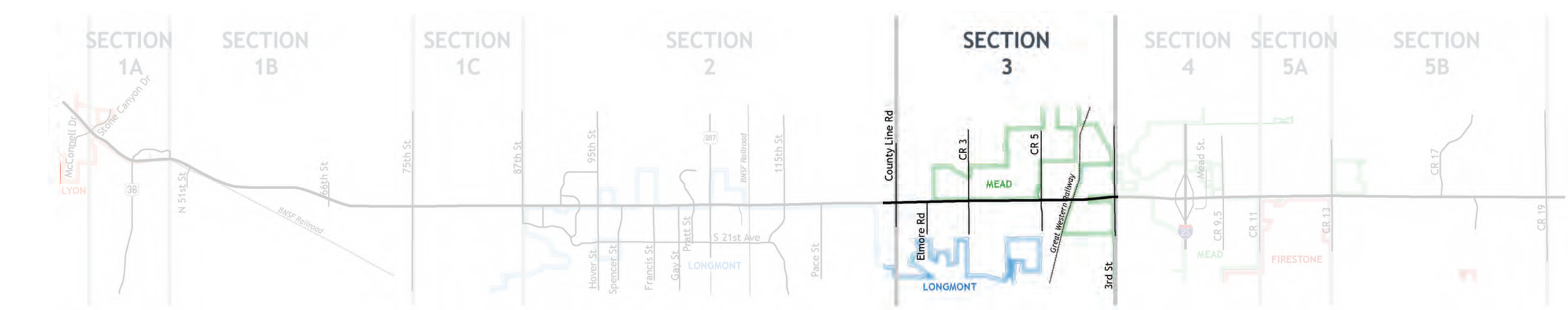
Recommended Right-of-Way Preservation Footprint

Existing & Proposed Visualizations (facing west)

Section 3

Existing	Proposed
	
No median separation or left turn lanes	Cable barrier/grassy median with side path

Improvements



Near-Term 0-10 years

SECTION	LOCATION ON SH 66 (intersection or section)	RECOMMENDED IMPROVEMENT
3	Section-wide	Install rumble strips along corridor; add auxiliary lanes where warranted at intersections.
3	Section-wide	Restrict left turns out where identified in the ACP and a documented safety need is shown. Monitor and/or perform a warrant analysis where signals are planned in the ACP (WCR 3, WCR 5, WCR 5.5 (interim condition only)).

Mid-Term 5-15 years

SECTION	LOCATION ON SH 66 (intersection or section)	RECOMMENDED IMPROVEMENT
3	Section-wide	Monitor and restrict left turns out where identified in the ACP and a documented safety need is shown. Include shoulder widening. Install sidepath. Monitor and/or perform a warrant analysis where signals are identified as allowed in the ACP (WCR 3, WCR 5, WCR 5.5 (interim condition only)).
3	County Line Road to WCR 7	Improve the highway from 2 to 4 lanes, add a median, and install turn lanes where warranted at intersections.

Long-Term 10-20 years

SECTION	LOCATION ON SH 66 (intersection or section)	RECOMMENDED IMPROVEMENT
3	WCR 5	Install bicycle and pedestrian grade-separated crossing east of WCR 5.
3	Section-wide	Monitor and restrict left turns out where identified in the ACP and a documented safety need is shown. Monitor and/or perform a warrant analysis where signals are identified as allowed in the ACP (WCR 3, WCR 5, WCR 5.5 (interim condition only)).

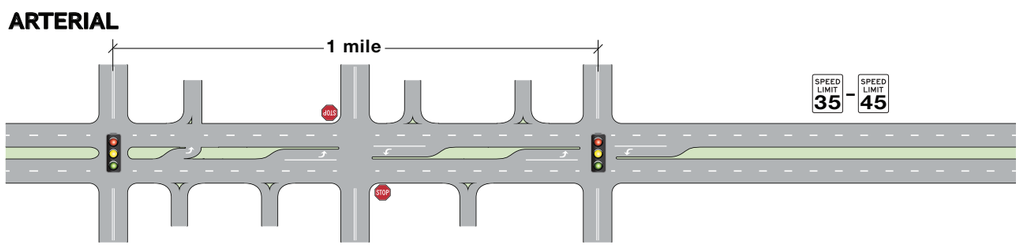
SH 66 Planning and Environmental Linkages Study

Section 4: 3rd Street (WCR 7) to Weld County Road 11

Overview & Recommendations

- ☐ **Local agencies:** Town of Mead and Unincorporated Weld County
- ☐ **Known transportation problems:** Access, mobility, and safety concerns for vehicles, bicycles, pedestrians, and transit
- ☐ **Existing roadway classification and lineage:** Non-rural Principal Highway with two to three lanes east of I-25; four to five lanes west of I-25
- ☐ **Recommended roadway classification:** Arterial roadway
- ☐ **Total recommended cross section width:** 133 feet to 143 feet
- ☐ **Total right of way preservation acreage:** 45.2 acres
- ☐ **Recommended cross sections include:**
  - Six travels lanes (three 12-foot lanes in each direction) and five-foot outside shoulders
  - A raised 16-foot wide median
  - Curb and gutter along SH 66
  - A 10-foot bike and pedestrian path along SH 66 setback 5 feet from SH 66 on both sides of SH 66 at select locations
  - A 5-foot offset to clear zone (a clear zone is an unobstructed, traversable roadside area that allows a driver to stop safely or regain control of a vehicle that has left the roadway)
  - Addition of turn lanes at intersections

Roadway Classification



DESCRIPTION	ACCESS SPACING
Moderate to low travel speeds and traffic volumes with moderate access	1/2 mile for full movement intersections, with possible 3/4 movement at quarter miles, and RIRO access for each parcel (should share access if possible)

Local Agency Planning Efforts

Mead vision for:

- Gateways at I-25/SH 66, and SH 66/WCR 7 (3rd Street)
- SH 66/3rd Street intersection improvements and signalization
- Widen SH 66
- Proposed trail connections

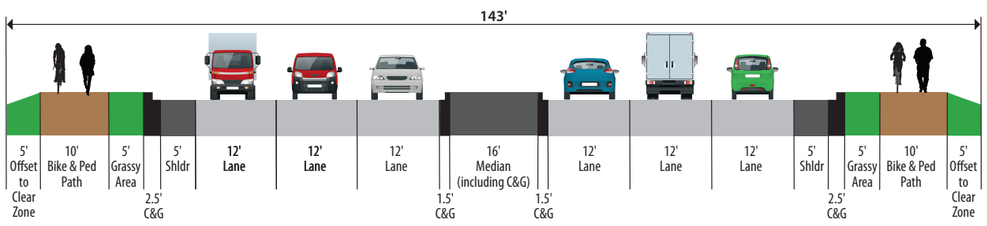
Weld County vision for:

- Trail connections
- Access control
- Intersection improvement partnership at SH 66/WCR 7 (3rd Street)

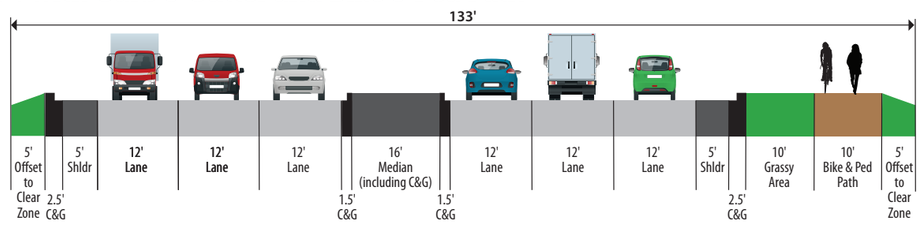
For more information, please view the SH 66 PEL Corridor Conditions Report (Appendix C).

Recommended Cross Sections (facing east)

Section 4 with Curb & Gutter and Bike & Ped Path on North & South



Section 4 with Curb & Gutter and Bike & Ped Path



Recommended Right-of-Way Preservation Footprint

Existing & Proposed Visualizations (facing west)

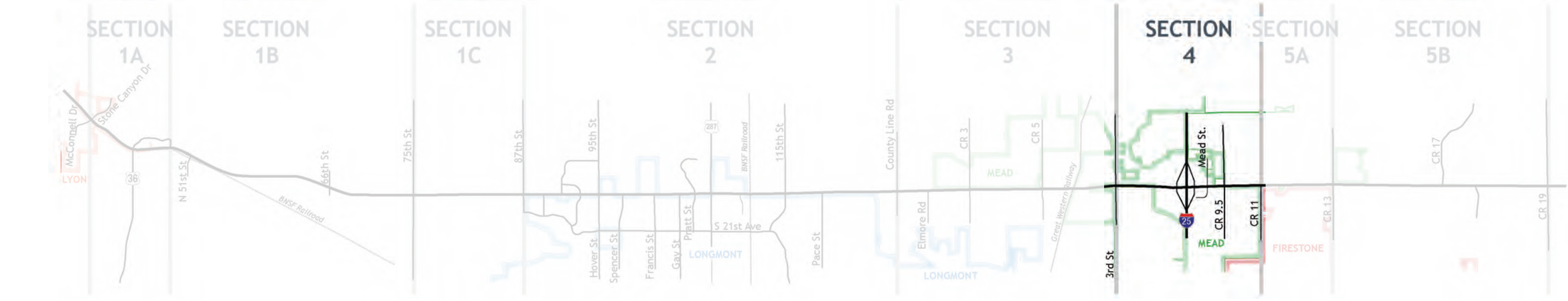
Section 4

Existing | Proposed

Striped median separation

Raised medians with side paths

Improvements



Near-Term 0-10 years

SECTION	LOCATION ON SH 66 (intersection or section)	RECOMMENDED IMPROVEMENT
4	Section-wide	Install sidepath on north side of SH 66.
4	WCR 7	Add auxiliary lanes and capacity on SH 66 and/or CR 7 (design currently underway by CDOT/nearby developers).
4	Mead Street	Restrict left turns out if a documented safety need is shown.

Mid-Term 5-15 years

SECTION	LOCATION ON SH 66 (intersection or section)	RECOMMENDED IMPROVEMENT
4	Section-wide	Include shoulder widening.
4	Gap Section between WCR 7 and Foster Ridge Dr	Improve the highway from 2 to 4 lanes, add a median, and install turn lanes where warranted at intersections. Signalize Foster Ridge Dr when warranted.
4	WCR 9.5 to WCR 11	Improve the highway from 2 to 4 lanes, add a median, and install turn lanes where warranted at intersections.
4	Mead Street	Monitor intersection operations and restrict left turns out if a documented safety need is shown.
4	WCR 9.5	Add turn lanes and capacity to intersection

Long-Term 10-20 years

SECTION	LOCATION ON SH 66 (intersection or section)	RECOMMENDED IMPROVEMENT
4	Section-wide	Improve the highway from 4 to 6 lanes between WCR 7 and WCR 9.5. Install sidepath on south side of SH 66. Install bicycle and pedestrian grade-separate crossing east of WCR 7.
4	WCR 9.5	Grade-separate intersection; recommend carrying forward split intersection/partial interchange or other alternative intersection option.

SH 66 Planning and Environmental Linkages Study

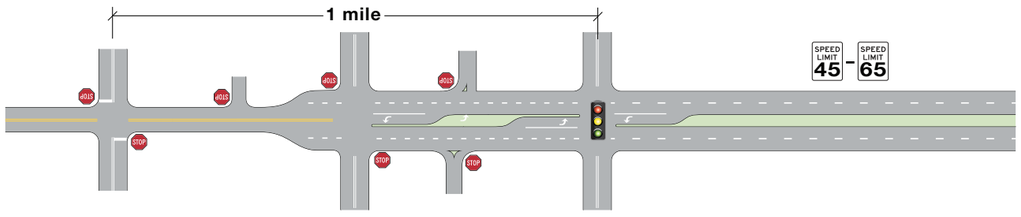
Section 5: Weld County Road 11 to Weld County Road 19

Overview & Recommendations

- ☐ **Local agencies:** Town of Mead and Unincorporated Weld County
- ☐ **Known transportation problems:** Vehicular access, mobility, and safety; bicycle and pedestrian mobility and safety
- ☐ **Existing roadway classification and lineage:** Non-rural Principal Highway and Rural/Regional Highway with two lanes
- ☐ **Recommended roadway classification:** Rural/Regional Highway
- ☐ **Total recommended cross section width:** 122 feet
- ☐ **Total right of way preservation acreage:** 67.9 acres
- ☐ **Recommended cross section includes:**
  - Four travel lanes (two 12-foot lanes in each direction)
  - A 16-foot wide grassy median with cable barrier
  - A 10-foot bike and pedestrian path along SH 66
  - 10-foot shoulders
  - A five-foot offset to clear zone (a clear zone is an unobstructed, traversable roadside area that allows a driver to stop safely or regain control of a vehicle that has left the roadway)
  - Addition of turn lanes at intersections

Roadway Classification

RURAL/REGIONAL HIGHWAY



DESCRIPTION
Moderate to high speeds with moderate to low traffic volumes

ACCESS SPACING
1/2 mile + for full movement intersections with public roadways, maximum of one access per parcel (depending on other roadways that could preclude access) with shared access preferable

Local Agency Planning Efforts

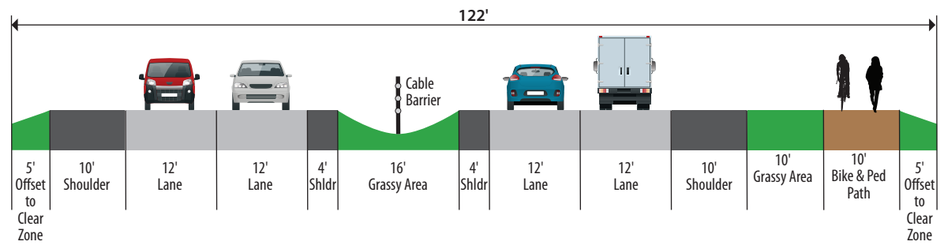
Mead vision for:
- Widen SH 66
- Proposed trail connections

Weld County vision for:
- Trail connections
- Access control
- Intersection improvement partnerships at SH 66/ WCR 13

For more information, please view the SH 66 PEL Corridor Conditions Report (Appendix C).

Recommended Cross Section (facing east)

Section 5

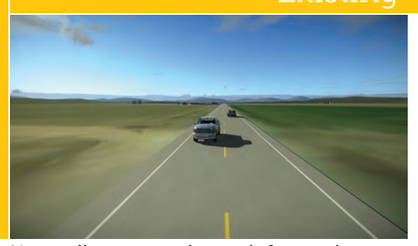


Recommended Right-of-Way Preservation Footprint

Existing & Proposed Visualizations (facing west)

Section 5A

Existing | Proposed


No median separation or left turn lanes


Cable barrier/grassy median with side path

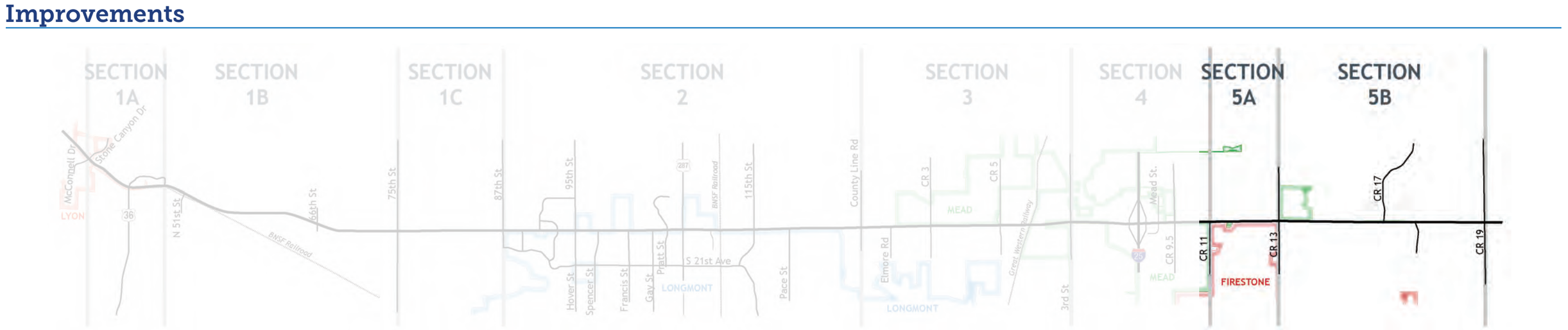
Section 5B

Existing | Proposed


No median separation or left turn lanes


Cable barrier/grassy median with side path

Improvements



Near-Term 0-10 years

SECTION	LOCATION ON SH 66 (intersection or section)	RECOMMENDED IMPROVEMENT
5A	Section-wide	Monitor and/or perform a warrant analysis at intersections where signals are planned in the ACP (WCR 11, WCR 11.5 when constructed).
5A	Section-wide	Install rumble strips and widen shoulders.
5B	Section-wide	Install rumble strips and widen shoulders.
5B	WCR 13	Install eastbound and westbound right turn lane.

Mid-Term 5-15 years

SECTION	LOCATION ON SH 66 (intersection or section)	RECOMMENDED IMPROVEMENT
5A	Section-wide	Monitor and/or perform a warrant analysis at intersections where signals are identified as allowed in the ACP (WCR 11, WCR 11.5 when constructed)
5A	WCR 11 to WCR 13	Improve the highway from 2 to 4 lanes, add a median, and install turn lanes where warranted at intersections.
5B	Section-wide	Monitor and/or perform a warrant analysis at intersections where signals are identified as allowed in the ACP (WCR 11, WCR 19, WCR 11.5 when constructed). Install sidepath on south side of SH 66.

Long-Term 10-20 years

SECTION	LOCATION ON SH 66 (intersection or section)	RECOMMENDED IMPROVEMENT
5A	Section-wide	Monitor and/or perform a warrant analysis at intersections where signals are identified as allowed in the ACP (WCR 11, WCR 11.5 when constructed). Install sidepath on south side of SH 66.
5B	Section-wide	Monitor and/or perform a warrant analysis at intersections where signals are identified as allowed in the ACP (WCR 11, WCR 19, WCR 11.5 when constructed). Install sidepath on south side of SH 66.

Beyond Horizon Year +20 years

SECTION	LOCATION ON SH 66 (intersection or section)	RECOMMENDED IMPROVEMENT
5	Section-wide	Increase capacity of highway from 2 to 4 lanes.
5	WCR 13	Grade-separate intersection.

SH 66 Planning and Environmental Linkages Study

Incorporating Risk & Resiliency into the PEL Process

Identify future resiliency opportunities.

PEL STUDY

THREATS

LOCATION SPECIFIC:
- Bridge Scour from Floods
- Debris Flows
- Landslides/ Rockfalls
- Bridge Strikes
- Railroad Proximity

CORRIDOR WIDE:
- Fires
- Tornadoes/ High Winds
- Utility Ruptures
- Visibility
- Cyber
- Hazardous Materials

CDOT ASSETS
- Bridges
- Roadway Prism
- Sidewalks & Trails
- Culverts & Roadside Ditches
- Walls
- ITS Devices
- Traffic Control Devices

IDENTIFY THREATS and CDOT ASSETS

- Identify applicable threats and hazards along project corridor.
- Determine location of assets that exist in the corridor.
- Determine the threat area based on probable limits of where the threat would occur.

DELIVERABLE: Map of Threats and Assets

DOCUMENT VULNERABILITY and CONSEQUENCE

- What do we already know about the asset (age, condition, to standard, proximity)?
- Identify high level infrastructure and user costs.
- Determine expected effects from each threat.
- Determine countermeasures in place to reduce vulnerability.

ASSESS RISK

- Determine likelihood of occurrence.
- Understand risk profile in the corridor.

RESILIENT RECOMMENDA-TIONS

- Recommend resiliency measures to consider during project planning and that inform right-of-way preservation.
- Integrate with PEL implementation.
- Prioritize resiliency improvements.

DELIVERABLE: PEL Risk Assessment Matrix

> Resiliency is the ability of communities to rebound, positively adapt to, or thrive amidst changing conditions or challenges - including disaster and climate change - and maintain quality of life, healthy growth, durable systems, and conservation of resources for present and future generations.
>
> - Colorado Resiliency Working Group -

Once funds have been identified, resiliency opportunities during the PEL process will be used to consider implementing improvements.

PROJECT DELIVERY

NEPA, RnR ANALYSIS (b/c ratio), FUNDING, and DECISION MAKING
- Revisit identified options to reduce risk and increase resilience
- Assess risk reduction and mitigation alternatives

DESIGN and CONSTRUCTION
- Implement resilient design solutions

Inset 1

Inset 2

Inset 3

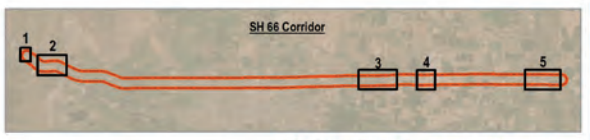
Inset 4

Inset 5

Legend

CDOT Asset Type	CDOT Asset Type	Number of Threats		
Bridge	Guardrail	1 Threat	3 Threats	SH 66 Corridor
Culvert		2 Threats	4 Threats	Railroad
Traffic Signal				Study Area

NORTH



SH 66 Planning and Environmental Linkages Study

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SH 66 Planning and Environmental Linkages Study

PUBLIC MEETING

Date and Time: Sept 25, 2019| 4:30 p.m. to 7:30 p.m.
Location: SW Weld County Service Center | 4209 County Road 24 ½ , Longmont, CO 80504

Sign In

First Name	Last Name	Community	Email
Carol	Coburn		amtngirl@gmail.com
Anne	Fleming		[illegible]
Kent & Colleen	Peppler		kent.peppler.kp@gmail.com
Karin	MacDonell		
MIKE LINDA	ECKSTINE		MLECKSTINE@USA.NET
Michelle Steven ~~Jordan~~	Joodan		MMMichelleb@yahoo.com
Steve	Rulon	Longmont	steverulon@yahoo.com
STEVE	DANANAY	LONGMT	

SH 66 Planning and Environmental Linkages Study

PUBLIC MEETING

Date and Time: Sept 25, 2019| 4:30 p.m. to 7:30 p.m.
Location: SW Weld County Service Center | 4209 County Road 24 ½ , Longmont, CO 80504

Sign In

First Name	Last Name	Community	Email
Doug	Bond	MEAD LONGMONT	dkkmbond@aol.com
Kelly	Olson	Longmont	kellyjolson@yahoo.com
Greg	Seymour	Weld Cnty	
Alisa	Pene	Firestone	tapene@yahoo.com
Jeff	Temple	Longmont	JTemple@JUB.com
Randy	Olander	MEAD	r_nolander@msn.com
Victoria	Simonsen	Lyons	vsimonsen@townoflyons.com
Colleen	Whitlow	MEAD	cwhitlow@townofmead.com

SH 66 Planning and Environmental Linkages Study

PUBLIC MEETING

Date and Time: Sept 26, 2019| 4:30 p.m. to 7:30 p.m.
Location: Longs Peak Middle School | 1500 14th Avenue, Longmont, CO 80501

Sign In

First Name	Last Name	Community	Email
Liz	Brunson	Willis Heights	lizgrady01@comcast.net
Bob & Nancy	Beattie	Longmont	rgbeatt@Gmail.com
Jim + Elyn	Lytton	Longmont	jnlytton@comcast.net.
BRAD	JONES	FREDERICK	bjones@varracompanies.com
O J	Pratt	Longmont	ojpratt@pacificauction.com
Mary Gary	Jarrett DuChateau	Longmont McCall Lake	mary Jarrett Gary DuChateau
JOHN BARTH	BARTH	McCall Lake	barthlawoffice@gmail.com
Sandy	Stewart	Longmont	praynwalk@aol.com

SH 66 Planning and Environmental Linkages Study

PUBLIC MEETING

Date and Time: Sept 26, 2019| 4:30 p.m. to 7:30 p.m.
Location: Longs Peak Middle School | 1500 14th Avenue, Longmont, CO 80501

Sign In

First Name	Last Name	Community	Email
Martha	Sullivan		
Michael	McDonald		michaelmcdonald1@yahoo.com
Stacy	DeWitt		stacy.dewitt@state.co.us
Eve	Lacey	Westlake manors, 5th filing	elaceye@gmail.com
Mark	Klein		mark.klein5@gmail.com
Tom	Symms		tsymms@hotmail.com
Scott	McCarey	Boulder County	
Gilles	Palmarini	McCall Dr.	gogilles6@yahoo.com
Karen	Palmarini	McCall Dr.	karenbere@yahoo.fr

SH 66 Planning and Environmental Linkages Study

PUBLIC MEETING

Date and Time: Sept 26, 2019| 4:30 p.m. to 7:30 p.m.
Location: Longs Peak Middle School | 1500 14th Avenue, Longmont, CO 80501

Sign In

First Name	Last Name	Community	Email
Gary	Borcher	Longmont	garyborcher@yahoo.com
Debby	Precht	Longmont Pepper Addition	precht_debby@svvsd.org
Ken	Riedel	Longmont	riedelke@HOTMAIL.COM
RACHEL	VON RIVENBURGH	LONGMONT	vonrivenburgh@YAHOO.COM
Tim	Hersee	Boulder County	timhersee@msn.com
Beth	Brotherton	The Shores	babrotherton@msn.com
Chris	Love	McCall Lake	mclfc@live.com
Jeff	Kloster	Longmont	jeffkrisklose~~@comcast~~gmail.com

SH 66 Planning and Environmental Linkages Study

PUBLIC MEETING

Date and Time: Sept 26, 2019| 4:30 p.m. to 7:30 p.m.
Location: Longs Peak Middle School | 1500 14th Avenue, Longmont, CO 80501

Sign In

First Name	Last Name	Community	Email
Rosann	Fryberger	Willis Hts	sandy.fry@comcast.net
Joseph	Fryberger	Willis Hts	
Barry	Spath	24 & Francis	
ALLEN	ROYER	WILLIS HEIGHTS	
Angie	Nielsen	23rd + Squires	
Elyn	Lytton	Longmont	
Bonnie	Stephens	rural Longmont	bonniestephens60@gmail
TRUDIE	WEBSTER	MCCALL LAKE	

SH 66 Planning and Environmental Linkages Study

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Date and Time: Sept 26, 2019| 4:30 p.m. to 7:30 p.m.
Location: Longs Peak Middle School | 1500 14th Avenue, Longmont, CO 80501

Sign In

First Name	Last Name	Community	Email
Clint	Arnett	West Lake	diane
Diane	Arnett	West Lake	dianearnett@gmail.com
DENNIS	PRECHT	PEPPLER ADDT. LONGMONT	precht_dennis@svvsd.org
Rich	Christy	Longmont	rich978@mac.com
Bill	BROTHERTON	Longmont	
Melissa	Lowe	Longmont	lowemelissa8@gmail.com
Robert	Hallman	Longmont	rrhallman@gmail.com
Sharon	Wherry	Longmont	ladysswe@yahoo.com

SH 66 Planning and Environmental Linkages Study

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Date and Time: Sept 26, 2019| 4:30 p.m. to 7:30 p.m.
Location: Longs Peak Middle School | 1500 14th Avenue, Longmont, CO 80501

Sign In

First Name	Last Name	Community	Email
Steve	de Haas	Lake Park Way	Sdehaas81@gmail.com

SH 66 Planning and Environmental Linkages Study

The Colorado Department of Transportation (CDOT) is hosting a final set of public meetings for the SH 66 Planning & Environmental Linkages (PEL) study and Access Control Plan (ACP) from Lyons to Weld County Road 19. These meetings will be the final chance to review planning documents and provide feedback before the PEL and ACP are finalized in late 2019.

Attendees will be able to view and provide feedback on:

- The PEL recommendations along the entire project corridor
- The potential environmental impacts associated with each recommendation
- List of future access changes

Wednesday, September 25, 2019 4:30 to 7:30 p.m.
Weld County Southwest Service Complex
4209 County Road 24 ½
Longmont, CO 80504

Thursday, September 26, 2019 4:30 to 7:30 p.m.
Longs Peak Middle School
1500 14th Avenue
Longmont, CO 80501

These meetings will be an open house format where participants can stop by at any time; both meetings will present the same content. If you are unable to attend a meeting, CDOT will also be accepting public feedback through an online questionnaire that can be found on the project's website at https://www.codot.gov/library/studies/co-66-pel.

We look forward to your input!

FOR RELEASE: SEMPTEMBER 5, 2019

Public Invited to Participate in CO 66 Planning and Environmental Linkages (PEL) Meetings

The Colorado Department of Transportation (CDOT) is hosting a final set of public meetings for the SH 66 Planning & Environmental Linkages (PEL) study and Access Control Plan (ACP) from Lyons to Weld County Road 19. These meetings will be the final chance to review planning documents and provide feedback before the PEL and ACP are finalized in late 2019.

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Weld County Southwest Service Complex
4209 County Road 24 ½
Longmont, CO 80504

Thursday, September 26, 2019 4:30 to 7:30 p.m.
Longs Peak Middle School
1500 14th Avenue
Longmont, CO 80501

The public meetings will be an open house format where participants can stop by at any time to view project materials and provide feedback on the PEL recommendations, understand the potential environmental impacts associated with each recommendation and view a list of future access changes.

If you are unable to attend the meetings, CDOT will also be accepting public feedback through an online questionnaire. To provide feedback and learn more about the project, visit: https://www.codot.gov/library/studies/co-66-pel.

SH 66 Planning and Environmental Linkages Study

Wednesday, September 25, 2019 4:30 to 7:30 p.m.*
Weld County Southwest Service Complex
4209 County Road 24 ½
Longmont, CO 80504

Thursday, September 26, 2019 4:30 to 7:30 p.m.*
Longs Peak Middle School
1500 14th Avenue
Longmont, CO 80501

Attendees will be able to view and provide feedback on:

- The RECOMMENDED projects along the entire project corridor
- The potential environmental impacts associated with each recommendation
- List of future access changes

CDOT will also be accepting public feedback through an online questionnaire. For more information and to learn about the project, visit: **https://www.codot.gov/library/studies/co-66-pel**

Requests for communication assistance or reasonable accommodations for special needs can be made by calling 720-200-8978 prior to the meeting.

The Colorado Department of Transportation (CDOT) is hosting a final set of public meetings for the SH 66 Planning & Environmental Linkages (PEL) study and Access Control Plan (ACP) from Lyons to Weld County Road 19. These meetings will be the final chance to review planning documents and provide feedback before the PEL and ACP are finalized in late 2019. You received this notice because your address is within ½ mile of the project corridor. However, we want input from the greater community, so **please invite neighbors and community members.**

**Both meetings will provide the same content.*

SH 66 Planning and Environmental Linkages Study

Colorado Department of Transportation
1420 2nd Street
Greeley, CO 80631

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Permit #4033
Denver, CO

SH 66 Planning and Environmental Linkages Study

Please check the box next to the option that you most prefer for the following intersections along SH 66 (intersections are listed west to east as they appear on the planning corridor):

1) SH 66 and Hover Street/ 95th Street

- ☐ Partial Displaced Left Turn (for westbound to southbound left)
- ☐ Grade-separation, such as Echelon, Single-Point Urban Interchange, or Diamond Interchange
- ☐ Junior Interchange in the Northeast quadrant
- ☐ Other:

2) SH 66 and US Hwy 287

- ☐ Fully Displaced Left Turn
- ☐ Grade-separation, such as Echelon, Single-Point Urban Interchange, or Diamond Interchange
- ☐ Partial Diamond Interchange
- ☐ Other:

3) SH 66 and County Line Road

- ☐ Capacity improvements to add turn lanes and acceleration lanes
- ☐ Fully Displaced Left Turn
- ☐ Grade-separation, such as Echelon, Single-Point Urban Interchange, or Diamond Interchange
- ☐ Other:

4) SH 66 and WCR 9.5

- ☐ Partial Diamond Interchange
- ☐ Partial Displaced Left Turn (for westbound and eastbound left turns)
- ☐ Grade-separation, such as Echelon, Single-Point Urban Interchange, or Diamond Interchange
- ☐ Other:

5) SH 66 and WCR 13 / Colorado Boulevard

- ☐ Partial Diamond Interchange
- ☐ Partial Displaced Left Turn (for westbound and eastbound left turns)
- ☐ Grade-separation, such as Echelon, Single-Point Urban Interchange, or Diamond Interchange
- ☐ Other:

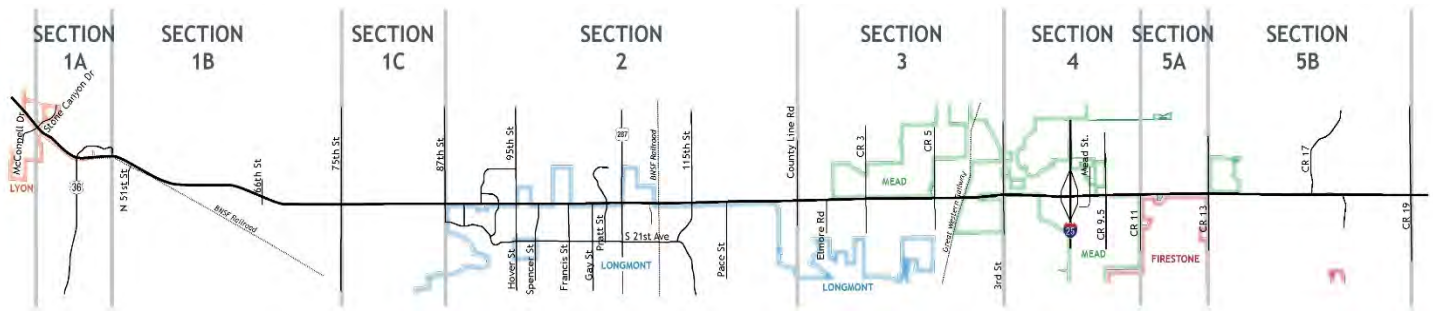
6. Please provide any additional feedback on the PEL Recommended cross-sections, intersection configurations, and identified improvements:

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

7. From the list below, please place an "X" in the box to identify the transportation need you feel should be the priority for each section along the project corridor.

Access: The appropriate number of access points to allow ease of access to SH 66 while balancing efficient and safe mobility (examples: consolidate access, raised medians, restrict movements)
Bicycle/Pedestrian: Provide infrastructure to support bicycle and pedestrian use along SH 66 (examples: bike lanes, side paths, wide shoulders)
Mobility: Complete projects that increase the ease and efficiency of moving people, goods, and services along the corridor (examples: additional thru lanes, intersection configuration, intersection capacity)
Safety: Safety of vehicles, bicycles, and pedestrians along the SH 66 corridor (examples: additional turn lanes, signalization)

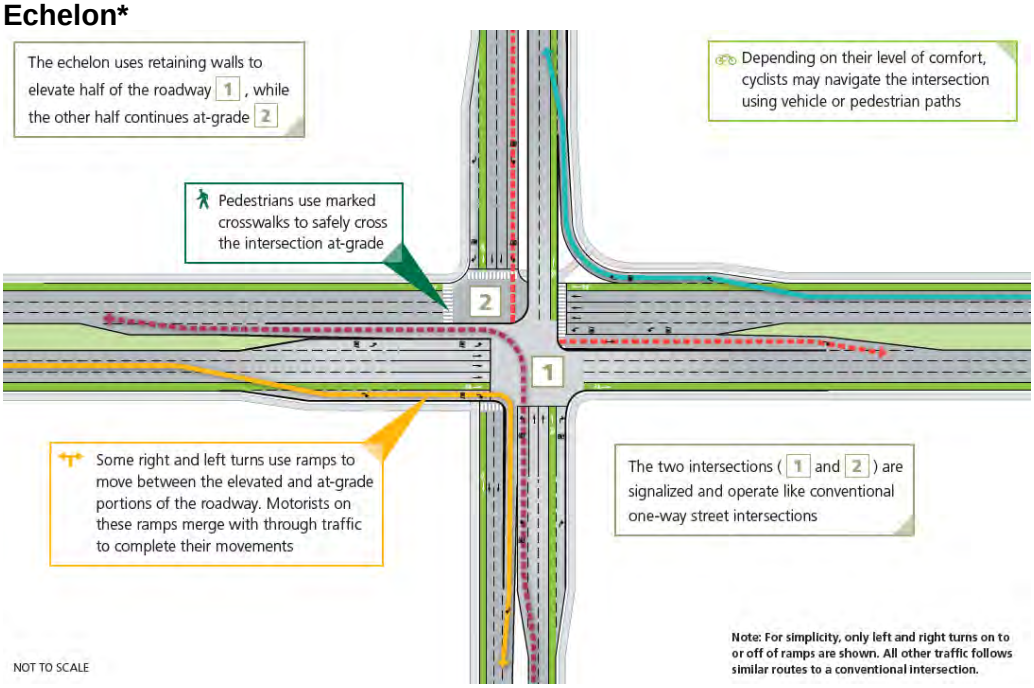
	Access	Bicycle/Pedestrian	Mobility	Safety
Section 1A				
Section 1B				
Section 1C				
Section 2				
Section 3				
Section 4				
Section 5A				
Section 5B				



8. Please provide your zip code: _____

Intersections and Interchanges Definition Sheet

Echelon*



Single-Point Urban Interchange*

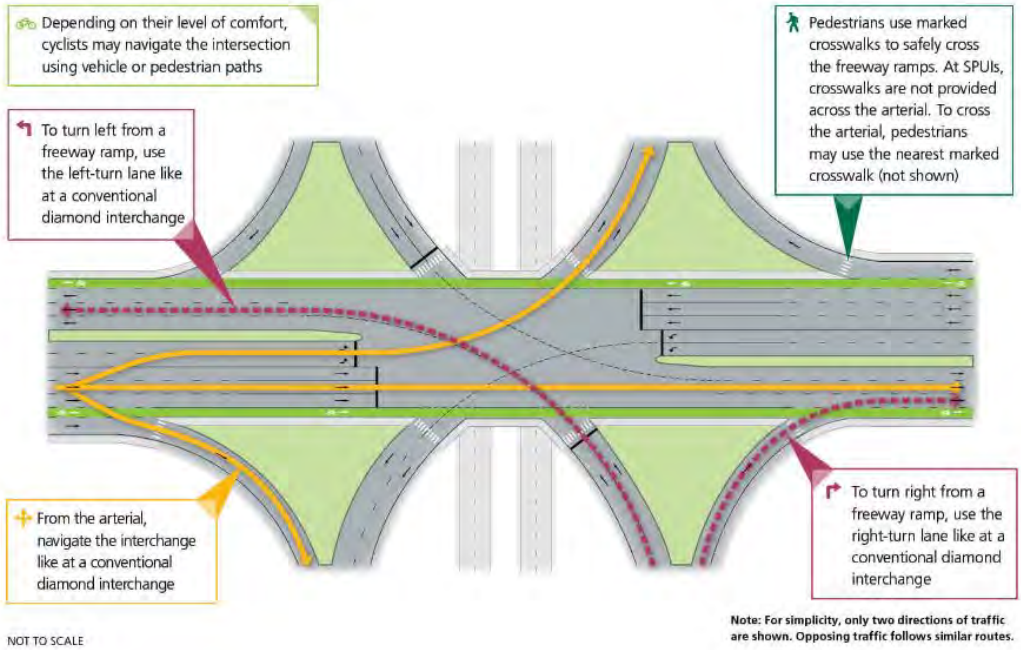
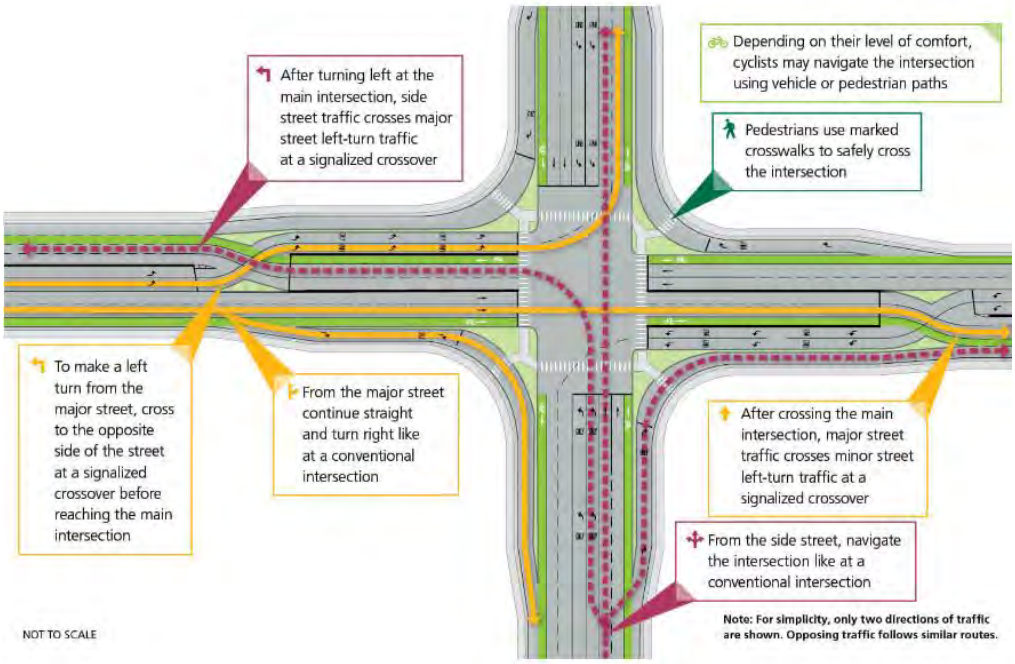


*Image produced by the Virginia Department of Transportation
https://www.virginiadot.org/innovativeintersections/default.asp

Displaced Left Turn*



Partial Diamond Interchange

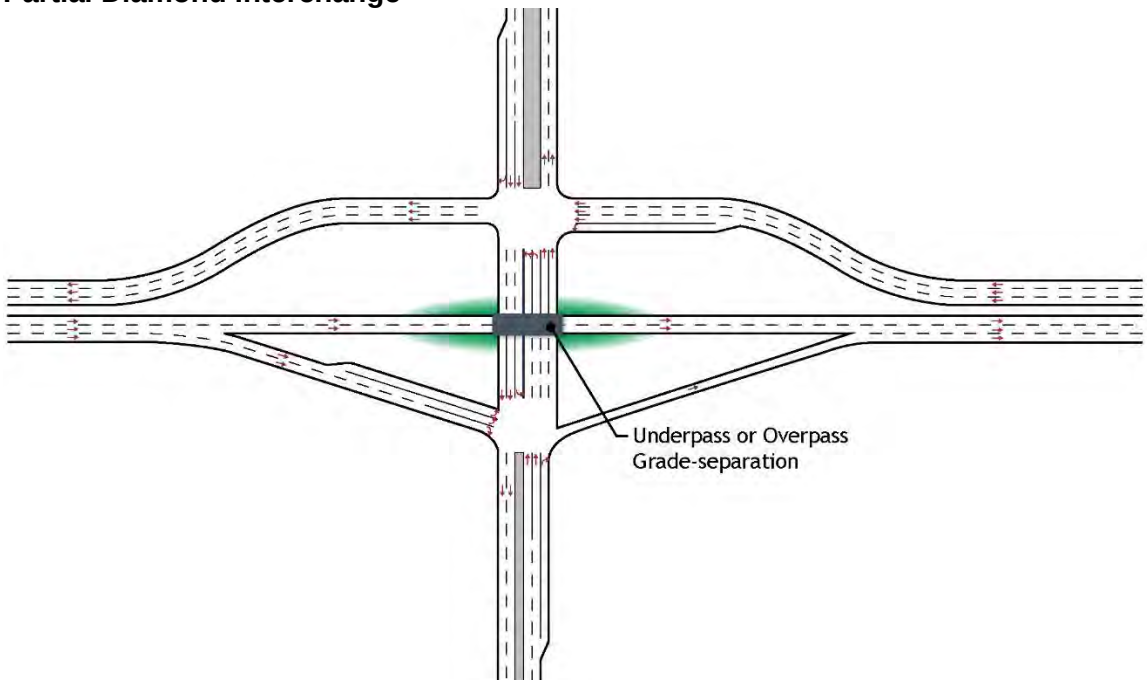


*Image produced by the Virginia Department of Transportation
https://www.virginiadot.org/innovativeintersections/default.asp

SH 66 Level 3 Public Comment Survey Results

	Hover St/ 95th				US Hwy 287				County Line Road				WCR 9.5				WCR 13/ Colorado Blvd					Section 1A				Section 1B				Section 1C				Section 2				Section 3				Section 4				Section 5A				Section 5B				
Total Line	Partial Displacement	Grade separation	Junior Interchange	Other	Full Displacement	Grade Separated	Partial Diamond	Other	Capacity Improvements	Fully Displaced Left Turn	Grade Separation	Other	Partial Diamond	Partial Displaced Left Turn	Grade Separation	Other	Partial Diamond	Partial Displaced Left Turn	Grade Separation	Other	**Additional Feedback**	Access	Bicycle /Ped	Mobility	Safety	Access	Bicycle/ Ped	Mobility	Safety	Access	Bicycle/ Ped	Mobility	Safety	Access	Bicycle/ Ped	Mobility	Safety	Access	Bicycle /Ped	Mobility	Safety	Access	Bicycle /Ped	Mobility	Safety	Access	Bicycle/ Ped	Mobility	Safety	Access	Bicycle/ Ped	Mobility	Safety	Zip Code
	1					1			1						1				1		Immediate hinge priority make turn lanes for subdivisions that access Hwy 66 as the only access . i.e. Elmore Rod. Ban Jake brakes the length of the study area				1				1				1			1					1				1				1				1	80504
																					Need Stop Lights at WCR 3 & 5. Need left & right turn lanes. Need to widen Hwy 66 from I-25 to WCR1																	1	1	1	1													80504
	1						1		1	1											County Rd 3 is the only intersection between I-25 & Hwy 287 without a turn lane. Maybe it could be considered before the major (41n.) improvement																																	
		1					1					this one may be okay as is		1				1			I am so happy that this conversation and PEL study is happening. I love that you are looking at closing a lot of access points on 66. The 3 big ones for is making the area at the Shell Station in Lyons safe (section 1A), closing McCall (1B) drive access on 66, and a signal at 66 and Francis (section2). Also County Rd 7 in Mead, that intersection is a pinch point. I hope you get funding for this! Good luck and thanks for trying to make this highway safer!				1				1				1			1				1				1					1				1	80503
	1				1				1					1				1			Signal at CR5 due to increased housing development north of 66				1				1				1				1				1				1				1				1	80504
	1				1				1					1				1				1	1	1		1		1		1		1		1	1	1		1		1		1		1		1		1		1		1		80504
					1				1										1		As an employee and member of Grace Evangelical Free Church on Lake Park Drive, I would so appreciate a left turn lane from Hwy 66 onto Lark Park Drive for safety reasons			1				1				1				1	1			1				1	1			1	1			1		80504
						1					1				1																						1				1				1									80504
																			1																																			
	1				1				1				1				1				I am commenting on the intersection of Hwy 66 and McCall Drive. I oppose closing access to Hwy 66 from McCall Drive. I live on the south shore of McCall Lake. I access Hwy 66 from McCall Drive on a daily basis. Despite this fact, I did not receive mailing or personal notice of DOT's proposed action to put a stop light at the intersection of Hwy 66 and North 66th Street and close access to Hwy 66 from McCall Drive. DOT should restart the public notice process because many people affected the proposal were not personally notified, such as myself. Also, DOT needs to do noise studies, traffic studies and air pollution studies associated with a stoplight at Hwy 66 and North 66th Street. Noise will be generated by heavy truck traffic braking and accelerating at the light. Additionally, additional air pollution will be generated by the idling and accelerating at the stop light. Further, North 66th Street south of Hwy 66 cannot accommodated many cars waiting for the stop light to change. There is no right hand turn lane at this intersection and therefore if one car is taking a left (heading west onto Hwy 66) from North 66th Street it will block all traffic heading east. If more than 7 or 8 cars are waiting at the stop light it will block traffic on McCall Drive. Therefore, if you choose to put a light at North 66th Street, please keep access open to Hwy 66 from McCall Drive.	1																																80503
	1					1				1				1				1						1				1				1				1					1				1				1				1	80504
				Regular																																																		
	1				1					1				1				1							1				1					1				1				1							1				1	80504
				66 & 287 working well since they instituted 4 way (one at a time going froth) much reduction of accidents								more lanes									Would like to see all of 66 four lane with divided medians like 119 east of Longmont from County Line to I25. I would hope to see very limited access to westside of 287 approaching 66 continue. Could be widened 66 (and entry to Longmont signage) on north side of 66 west of 287. rush hour traffic is more demanding than returning east mountain traffic if highway 34 is also open.																																	80504
		1				1																											1				1																	
			1				1		1				1						1						1			1				1		1						1				1	1			1				1		80501
																					I am commenting about the stretch of Hwy 66 between Hwy 36 and N 75th Street. Reduce speed to 45 mph. No stop light at N 66th St. Do not block access from McCall Drive to Hwy 66. If you do stop light at N 66 Street you need to do noise study, air pollution study and traffic study. Please put me on your mailing list																																	80503
																					Between 75th st & Hwy 36 we need turn off lanes not a stop light at 66th and Hwy 66. We do not need east entry of McCall dr blocked off																																	80503
																					For safety purpose we'd propose for section 1B 66th a lane to the left to ease the drive to our neighborhood residence, to get auxiliary lane. Not a traffic light. Place a turning lane on 63rd or 66th. No cul-de-sac at end of McCall Drive, the access is needed for major safety - emergency situation.					1	1		1																									
	1				1				1						1				1		Our neighborhood need sound, safety and environmental mitigation. Existing fence HOA of 25 yrs will no be appropriate.	1	1		1	1	1		1	1	1		1	1	1	1	1	1	1	1	1	11	1	1	1	1	1	1	1	1			1	80503
	1																																																					
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		1			1						1			1				1				1				1				1				1		1		1				1				1				1				
	1				1				1									1																1		1	1			1	1			1										
		1					1		1					1			1																																	1			1	80516
	1				1				1												We live on the corner (SE) of Lake Park Way &66& we are concerned about the intersection noise level.																																	80503
	1				1					1				1				1							1				1				1				1				1				1				1				1	80503
		1				1			1				1						1																			1	1	1	1													80504
		1					1				1				1				1																			1	1	1	1													80504
	1						1			1											Instead of a signal (which would add noise from trucks decelerating and accelerating, plus more air pollution), install left-turn lanes on both sides of the intersection. Add a left-turn lane onto McCall Drive for Sh 66 traffic coming from the east.																																	80503
	1						1			1				1				1			Left turn lane westbound on Hwy 66 at McCall Drive. Left Turn lanes at 66th st and Hwy 66. No traffic light at 66th St. It would slow down traffic too much and cause even worse congestion and noise.			1					1			1				1				1					1				1			1		80503
	1				1					1				1				1																																				
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Total	21	13	1		18	9	9		18	8	7		5	15	5		5	15	8			6	4	5	15	8	3	6	15	6	2	9	11	9	4	10	13	9	4	11	17	16	1	7	16	5	1	5	16	5	0	5	16	

SH 66 Level 3 Public Comment Survey Results

Hover St/ 95th				US Hwy 287				County Line Road				WCR 9.5				WCR 13/ Colorado Blvd				Additional Feedback	Section 1A				Section 1B				Section 1C				Section 2				Section 3				Section 4				Section 5A				Section 5B				Zip Code
Total Line	Partial Displacement	Grade separation	Junior Interchange	Other	Full Displacement	Grade Separated	Partial Diamond	Other	Capacity Improvements	Fully Displaced Left Turn	Grade Separation	Other	Partial Diamond	Partial Displaced Left Turn	Grade Separation	Other	Partial Diamond	Partial Displaced Left Turn	Grade Separation	Other		Access	Bicycle /Ped	Mobility	Safety	Access	Bicycle/ Ped	Mobility	Safety	Access	Bicycle/ Ped	Mobility	Safety	Access	Bicycle/ Ped	Mobility	Safety	Access	Bicycle /Ped	Mobility	Safety	Access	Bicycle /Ped	Mobility	Safety	Access	Bicycle/ Ped	Mobility	Safety	Access	Bicycle/ Ped	Mobility	Safety	
	1					1			1						1				1		Immediate hinge priority make turn lanes for subdivisions that access Hwy 66 as the only access . i.e. Elmore Rod. Ban Jake brakes the length of the study area				1				1				1				1				1				1				1				1				80504
																					Need Stop Lights at WCR 3 & 5. Need left & right turn lanes. Need to widen Hwy 66 from I-25 to WCR1																				1	1	1	1												80504
	1						1		1	1											County Rd 3 is the only intersection between I-25 & Hwy 287 without a turn lane. Maybe it could be considered before the major (41n.) improvement																																					
		1				1						this one may be okay as is		1				1			I am so happy that this conversation and PEL study is happening. I love that you are looking at closing a lot of access points on 66. The 3 big ones for is making the area at the Shell Station in Lyons safe (section 1A), closing McCall (1B) drive access on 66, and a signal at 66 and Francis (section2). Also County Rd 7 in Mead, that intersection is a pinch point. I hope you get funding for this! Good luck and thanks for trying to make this				1				1											1	80503
1				1				1				1				1				Signal at CR5 due to increased housing development north of 66				1				1							1							1							1	80504
1				1				1				1				1					1	1	1		1			1	1				1			1				1				1							80504
				1				1										1		As an employee and member of Grace Evangelical Free Church on Lake Park Drive, I would so appreciate a left turn lane from Hwy 66 onto Lark Park Drive for safety reasons			1				1				1	1				1				1							1				80504
						1					1			1																			1							1								80504
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1					1				1				1				1				I am commenting on the intersection of Hwy 66 and McCall Drive. I oppose closing access to Hwy 66 from McCall Drive. I live on the south shore of McCall Lake. I access Hwy 66 from McCall Drive on a daily basis. Despite this fact, I did not receive mailing or personal notice of DOT's proposed action to put a stop light at the intersection of Hwy 66 and North 66th Street and close access to Hwy 66 from McCall Drive. DOT should restart the public notice process because many people affected the proposal were not personally notified, such as myself. Also, DOT needs to do noise studies, traffic studies and air pollution studies associated with a stoplight at Hwy 66 and North 66th Street. Noise will be generated by heavy truck traffic braking and accelerating at the light. Additionally, additional air pollution will be generated by the idling and accelerating at the stop light. Further, North 66th Street south of Hwy 66 cannot accommodated many cars waiting for the stop light to change. There is no right hand turn lane at this intersection and therefore if one car is taking a left (heading west onto Hwy 66) from North 66th Street it will block all traffic heading east. If more than 7 or 8 cars are waiting at the stop light it will block traffic on McCall Drive. Therefore, if you choose to put a light at North 66th Street, please keep access open to Hwy 66 from McCall Drive.	1																		80503
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				66 & 287 working well since they instituted 4 way (one at a time going froth) much reduction of accidents								more lanes									Would like to see all of 66 four lane with divided medians like 119 east of Longmont from County Line to 125. I would hope to see very limited access to westside of 287 approaching 66 continue. Could be widened 66 (and entry to Longmont signage) on north side of 66 west of 287. rush hour traffic is more demanding than returning east mountain traffic if highway 34 is also open.																																										80504
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			1				1		1				1						1					1				1								1													80501
																					I am commenting about the stretch of Hwy 66 between Hwy 36 and N 75th Street. Reduce speed to 45 mph. No stop light at N 66th St. Do not block access from McCall Drive to Hwy 66. If you do stop light at N 66 Street you need to do noise study, air pollution study and traffic study. Please put me on your mailing list																																										80503
																					Between 75th st & Hwy 36 we need turn off lanes not a stop light at 66th and Hwy 66. We do not need east entry of McCall dr blocked off																																									80503
																					For safety purpose we'd propose for section 1B 66th a lane to the left to ease the drive to our neighborhood residence, to get auxiliary lane. Not a traffic light. Place a turning lane on 63rd or 66th. No cul-de-sac at end of McCall Drive, the access is needed for major safety - emergency situation.							1	1			1																														
	1					1				1				1					1		Our neighborhood need sound, safety and environmental mitigation. Existing fence HOA of 25 yrs will no be appropriate.	1	1		1	1	1		1	1	1			1	1		1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	11	1	1	1	1	1	1	1	1				1	80503
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Appendix G-4: Public Comment Tracking

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Date	First Name	Last Name	Email	Comment	Notes	Response	Sent
4/21/2017	Laura	Hochman	laurah225@hotmail.com	As a resident of the Anhawa neighborhood, I would be very wary of increasing volume on Hwy 66. I already drive completely around my neighborhood to avoid taking a left on Hwy 66. Furthermore, although they are public roads, it is very disruptive to our neighborhood when commuters cut through our area (usually going over the speed limit of 25 and we don't have sidewalks) to avoid the light at 95th.	LEFT TURNS CUT THROUGH TRAFFIC TRAFFIC LIGHT AT 95TH	Hello Laura, Thank you for taking time to provide feedback to the project team. We appreciate your insights. Perspectives from you and others in your community are being integrated into this evaluation. The SH 66 Planning and Environmental Linkages (PEL) Study will identify the areas of greatest need along the corridor, such as intersections where turn lanes are needed and opportunities for traffic signal operations improvements. The next step in the study is to identify possible solutions to address the areas of greatest need. Please check back to the SH 66 PEL website as the study progresses. https://www.codot.gov/library/studies/co-66-pel	✔
4/21/2017	Ryan	Arp	arp.ryan@gmail.com	Hello, I live in Liberty Ranch off Highway 66 and County Roads 5 and 7. The issues I encounter on Highway 66 mostly have to deal with the single lane nature of the highway where people would drive well below the speed limits so it doesn't make it a viable/enjoyable commuter route. Sometimes it's trucks and other times is regular individuals that think 25 or 40MPH is appropriate. The other issue is people exiting the highway that would come to a complete stop in traffic lanes instead of using the extremely large shoulder to pull off, slow down, and then turn. Another part related to the single lane nature is that there isn't a dedicated center lane for making left turns. Because of the high volume of traffic one direction generally comes to a stop while someone is attempting to make a left turn while there's a train of traffic in the oncoming direction. The most diabolical intersection on this path is at county line between Weld and Boulder counties. The traffic lights seem to change erratically which catch people off guard and regularly result in rear end collisions. Another aspect is that when you're heading eastbound you approach a blind crest where there's usually traffic backed up due to this neurotic light and you can't see the traffic light to anticipate anything and then more rear end collisions happen. Just make the approach yourself and you can see how dangerous it is as well as all the skid marks. The other problem is that County Road 7 in Weld is a very high traffic intersection in the morning and the afternoon but there isn't a dedicated turn lane in the north/south direction so traffic is generally horribly backed up every day. The same thing happens after you cross 287 heading West into Lyons. Overall I'm pretty interested to see what happens here. Thanks, Ryan.	POOR OPS. DUE TO ONE LANE LEFT TURNS REAR END COLLISONS NO DECEL LANES NO TURN LANES SIGHT DISTANCE AT COUNTY LINE ROAD INTERSECTION HIGH VOLUMES AT WCR 7 AND NO TURN LANES	Hello Ryan, Thank you for taking time to provide feedback to the project team. We appreciate your insights. Perspectives from you and others in your community are being integrated into this evaluation. The SH 66 Planning and Environmental Linkages (PEL) Study will identify the areas of greatest need along the corridor, such as intersections where turn lanes are needed and opportunities for traffic signal operations improvements. The next step in the study is to identify possible solutions to address the areas of greatest need. Please check back to the SH 66 PEL website as the study progresses. https://www.codot.gov/library/studies/co-66-pel	✔
4/22/2017	Jenny	Evans	Jcc.Evans@gmail.com	I would like to see a safe bike trail along highway 66, between Longmont and Lyons.	BIKE TRAIL BETWEEN LONGMONT AND LYONS	Hello Jenny, Thank you for taking time to provide feedback to the project team. We appreciate your insights. Perspectives from you and others in your community are being integrated into this evaluation. The SH 66 Planning and Environmental Linkages (PEL) Study will identify the areas of greatest need along the corridor, including bicycle and pedestrian improvements. The next step in the study is to identify possible solutions to address the areas of greatest need, including possible solutions to increase bicycle and pedestrian connectivity. Please check back to the SH 66 PEL website as the study progresses. https://www.codot.gov/library/studies/co-66-pel	✔

Date	First Name	Last Name	Email	Comment	Notes	Response	Sent
4/22/2017	Eileen	Yelverton	eileen@gtbusa.com	As a Lyons citizen, we are excited to gain a mixed use development on the east corridor (west of Highland Drive) for commercial, light industrial and residential. We MUST have a pedestrian/bicycle/golf cart corridor to access it from Lyons and enable it to become part of Lyons in a dynamic way rather than a dead zone reached only by car. The section just west of the 66 and Hwy 36 intersection continues to be one of the most dangerous sections in Boulder County. We realize this is a narrow corridor with several irrigation ditches running parallel to the road but This is a crucial link to the only real option to making Lyons a much more sustainable town. Thanks for your consideration and work on this vital issue. Eileen Yelverton	NEW DEVELOPMENT IN LYONS BIKE/PED PATH IN LYONS FROM DOWNTOWN TO NEW DEVELOPMENT	Hello Eileen, Thank you for taking time to provide feedback to the project team. We appreciate your insights. Perspectives from you and others in your community are being integrated into this evaluation. The SH 66 Planning and Environmental Linkages (PEL) Study will identify the areas of greatest need along the corridor, including bicycle and pedestrian improvements. The next step in the study is to identify possible solutions to address the areas of greatest need, including possible solutions to increase bicycle and pedestrian connectivity. Please check back to the SH 66 PEL website as the study progresses. https://www.codot.gov/library/studies/co-66-pel	✔
4/27/2017	Penny	Vance	pennysvance@gmail.com	The turn lane at Hwy 66 going South onto Pace is scary! There was just that fatal accident at it today. I hate the flashing yellow light!! I grew up knowing a green arrow was safe for you to turn. The yellow flashing confuses me sometimes and I cannot be the only one!!! The yellow flashing lights were a horrible idea! On another note, I wanted to thank the department that clears the snow and ice every winter. I travel to Greeley at 6 am and home at 7:30 pm. I would not have made it to work or home so many times if it had not been for the roads being cleared. Having the roads in the best condition possible,allows me to have a job I love...taking care of infants in the Intensive Care Unit...and allows me to come home safely to my family.	TURN LANES TRAFFIC OPERATIONS	Hello Penny, Thank you for taking time to provide feedback to the project team. We appreciate your insights. Perspectives from you and others in your community are being integrated into this evaluation. The SH 66 Planning and Environmental Linkages (PEL) Study will identify the areas of greatest need along the corridor, such as intersections where turn lanes are needed and opportunities for traffic signal operations improvements. The next step in the study is to identify possible solutions to address the areas of greatest need. Please check back to the SH 66 PEL website as the study progresses. https://www.codot.gov/library/studies/co-66-pel	✔
4/28/2017	Sarah	Hightower	arah_hightower2002@yahoo.com	Hwy 66 is outdated. I commute to Erie every day from Liberty Ranch in Mead. On my way home I exit I-25 at Hwy 66 and often sit in congestion for up to 4 cycles of the light at CR 7 and 66, dealing with people who do not understand how to merge. Frustrations run high as the wide bridge turns to the two-lane road. It's not a pleasant way to finish the day. Between sitting forever and trying to use the signal to turn West on 66 from my subdivision, I deal with anxiousness any time I need to go west into North Longmont. The frequent accidents along 66 are both frustrating and sad. There aren't many options for detours when an accident occurs, thus backing up traffic even more. My concerns don't even touch the RMNP/Estes traffic that occurs regularly without the added detours of Hwy 34 and last year's Hwy 119. Our area has grown too much to keep Hwy 66 at two lanes without center lanes and shoulders.	CONGESTION TWO LANE SECTION TURN LANES SHOULDERS	Hello Sarah, Thank you for taking time to provide feedback to the project team. We appreciate your insights. Perspectives from you and others in your community are being integrated into this evaluation. The SH 66 Planning and Environmental Linkages (PEL) Study will identify the areas of greatest need along the corridor, such as intersections where turn lanes are needed and opportunities for traffic signal operations improvements. The next step in the study is to identify possible solutions to address the areas of greatest need. Please check back to the SH 66 PEL website as the study progresses. https://www.codot.gov/library/studies/co-66-pel	✔

Date	First Name	Last Name	Email	Comment	Notes	Response	Sent
4/28/2017	Stacy	Farman	stacyfcody@yahoo.com	I am commenting about the Proposed Gravel Mining Docket #SU-98-18. As a resident I am deeply concerned about this operation and I am thankful that this article was in the Redstone Review. I am alarmed that I knew nothing about this before but sadly I am not surprised. Often the residents are the last to know about these industrial operations that impact us every day but are only a business to the operators. Every time I drive or bike down this route I feel like we are so lucky to have an open space that few others in the Front Range still have. I cannot image another blight taking away the beauty of our valley.	MAINTAIN OPEN SPACE	Hello Stacy, Thank you for taking time to provide feedback to the SH 66 Planning and Environmental Linkages (PEL) Study team. Land use decisions, such as the concerns you have noted, are made at the local level. CDOT is working with local partners, such as Boulder County and the Town of Lyons, to evaluate SH 66 travel conditions and address the areas of greatest transportation need in the context of community, environmental, and transportation considerations. For more information, please visit the SH 66 PEL website: https://www.codot.gov/library/studies/co-66-pel	✔
4/27/2017	Sharon	Perdue	shazperdue@gmail.com	Hi there! I understand that there are ideas being pulled together for hwy 66 out towards Lyons. Not only do I live on the highway but my business is also off the highway. I am very interested in the discussion and wish you all had made an effort to let those of us who are directly impacted by this know about the meeting that was held and the data being collected. I have been here since 2003 and I can tell you it has become a nightmare. There are two simple problem - first drivers are not paying attention at alland the huge increase in large speeding semi trucks using their jig brakes needs to stop. I wish Cdot would put signs out or something advising drivers to pay attention as people turn left and right in the middle of the highway. It is ridiculous what you see in your rear view mirrors these days. There are two things that could be done and should be done immediately for the safety of everyone on this highway - the speed limit is way too high - reduce the speed limit. Second get the bikers off this highway!!!!! Motorists use the shoulders as passing lanes all the time. If they look up at the last minute and almost hit you because you are stopped and turning they swerve onto the shoulder - if a biker is there they will be dead. This is just common sense. The area I am talking about is between 75th street and Lyons. If you wish for more thoughts I have them. I guarantee you the long term residents on this highway could solve alot of the issues if you would listen to them and heed their advice. The increase in accidents is horrible. Sincerely, Sharon Perdue 6914 ute hwy	TRUCK TRAFFIC NEED FOR TURN LANES SPEED LIMIT BIKERS SAFETY CRASHES	Hello Sharon, Thank you for taking time to provide feedback to the project team. We appreciate your insights. Perspectives from you and others in your community are being integrated into this evaluation. The SH 66 Planning and Environmental Linkages (PEL) Study will identify the areas of greatest need along the corridor, such as where speed limit adjustments may be needed. The study also addresses the needs of bicycle and pedestrian facilities. The next step in the study is to identify possible solutions to address the areas of greatest need. Please check back to the SH 66 PEL website as the study progresses. https://www.codot.gov/library/studies/co-66-pel	✔
4/28/2017	Kristen	Perigo	fivepeasinapod5@yahoo.com	Highway 66 is extremely busy and overcrowded with cars. I feel a 4 lane highway would help with traffic flow and accident mitigation. It is very hard to enter the highway from a road that doesn't have a light. We try to avoid this road because we feel it is unsafe and we live right on it.	INCREASE AND TRAFFIC UNABLE TO TURN UNSAFE	Hello Kristen, Thank you for taking time to provide feedback to the project team. We appreciate your insights. Perspectives from you and others in your community are being integrated into this evaluation. The SH 66 Planning and Environmental Linkages (PEL) Study will identify the areas of greatest need along the corridor, such as locations where additional travel lanes, turn lanes, and/or traffic signals are needed. The next step in the study is to identify possible solutions to address the areas of greatest need. Please check back to the SH 66 PEL website as the study progresses. https://www.codot.gov/library/studies/co-66-pel	✔

Date	First Name	Last Name	Email	Comment	Notes	Response	Sent
4/28/2017	Purnachand	Avula	avpchandu@hotmail.com	We moved to Liberty Ranch community in 2008. The traffic has increased and lot since we moved in and it is getting worse day by day. Some times it is taking 4-5 minutes to merge on to CO-66 and the accidents have also increased. It is really concerning my family and our community a lot. My humble request is to take this as an high priority issue expand CO-66 and have a stop signal at CR 51/2 for Liberty ranch residents.	INCREASE AND TRAFFIC UNABLE TO TURN UNSAFE	Hello Purnachand, Thank you for taking time to provide feedback to the project team. We appreciate your insights. Perspectives from you and others in your community are being integrated into this evaluation. The SH 66 Planning and Environmental Linkages (PEL) Study will identify the areas of greatest need along the corridor, such as locations where additional travel lanes, turn lanes, and/or traffic control devices are needed. The next step in the study is to identify possible solutions to address the areas of greatest need. Please check back to the SH 66 PEL website as the study progresses. https://www.codot.gov/library/studies/co-66-pel	✔
4/29/2017	Laura	Telfer	Laura_pf10@hotmail.com	I worry every time I drive 66 that someone is going to rear end me going 60 mph when I have to stop and wait for someone to make a left hand turn from the highway. There should be a middle turning lane and at least bigger shoulders or acceleration lanes to eliminate this risk. The traffic light at County Rd 7 should be checked. It seems to give a green arrow at odd times and numerous accidents occur there.	TURN LANES TRAFFIC OPERATIONS SHOULDERS	Hello Laura, Thank you for taking time to provide feedback to the project team. We appreciate your insights. Perspectives from you and others in your community are being integrated into this evaluation. The SH 66 Planning and Environmental Linkages (PEL) Study will identify the areas of greatest need along the corridor, such as intersections where turn lanes are needed and opportunities for traffic signal operations improvements. The next step in the study is to identify possible solutions to address the areas of greatest need. Please check back to the SH 66 PEL website as the study progresses. https://www.codot.gov/library/studies/co-66-pel	✔
4/30/2017	Beth	Brotherton	babrotherton@msn.com	We live close to Highway 66 and would like to know what the plans are. Unfortunately I was out of town when the 4/26 meeting took place and did not get the notification email before I left on 4/20 so was not aware of the project or meeting.Is there a website where we can find out what is going on? Also I have voiced my concerns previously with the state regarding safety issues with this road. The current speed limit is way too high where the road passes through high density housing beginning at Airport Road to HIghway 287 through Longmont. I feel it can be dangerous to get on or off the highway in this section and have asked that the speed be reduced.	SAFETY SPEED LIMIT UNABLE TO TURN	Hello Beth, Thank you for taking time to provide feedback to the project team. We appreciate your insights. Perspectives from you and others in your community are being integrated into this evaluation. The SH 66 Planning and Environmental Linkages (PEL) Study will identify the areas of greatest need along the corridor, such as intersections where turn lanes are needed and opportunities for speed limit adjustments. The next step in the study is to identify possible solutions to address the areas of greatest need. Please check back to the SH 66 PEL website as the study progresses. https://www.codot.gov/library/studies/co-66-pel	✔

Date	First Name	Last Name	Email	Comment	Notes	Response	Sent
5/1/2017	Pam	Stone	pgand3@gmail.com	Please, please, please lower the speed limit between 36/66 and the McConnell light in Lyons. We've seen many people flying through the red light at 50mph, or slamming on their brakes and nearly causing an accident. I'm terrified my kids are going to be in the crosswalk and get hit by a car. The transition from highway to small-town is entirely too sudden. I'm also concerned about the number of accidents between Lyons and Longmont. There is enough traffic moving at high speeds that it seems some sort of median to prevent cross-overs into oncoming traffic is warranted. Finally, there is a stretch of the highway just West of the Lifebridge church that gets extremely slippery with the slightest bit of snow. It ices over before any other stretch. I've witnessed one major accident there and many, many near-misses. What is it about that patch that makes it get so icy? Is there any way to change it? Thank you!	SPEED LIMIT CRASHES SLIPPERY CONDITIONS	Hello Pam, Thank you for taking time to provide feedback to the project team. We appreciate your insights. Perspectives from you and others in your community are being integrated into this evaluation. The SH 66 Planning and Environmental Linkages (PEL) Study will identify the areas of greatest need along the corridor, such as unsafe intersections where turn lanes are needed and opportunities for speed limit adjustments. The next step in the study is to identify possible solutions to address the areas of greatest need. Please check back to the SH 66 PEL website as the study progresses. https://www.codot.gov/library/studies/co-66-pel Regarding your final inquiry, CDOT Maintenance will investigate that section of highway you referenced to better understand those conditions.	✔
5/1/2017	Kayann	Short	kshort@greenspeedisp.net	My farm is located at 5169 Ute Highway. In the 26 years I have lived here, I have witnessed the terrible growth of traffic along this corridor and I am concerned that increasing traffic is causing more--and worse--accidents. This morning as I traveled east to Longmont, I came upon an accident with a truck down in the ditch. I have yet to find out what caused this accident and I hope no one was seriously injured. On Easter, a young man died just past our farm when his motorcycle collided with a van. Every time I walk out to my mailbox, I wait for traffic to pass before I get my mail because people drive very poorly on this highway. They speed, they swerve, and they drive outside the lanes. The increased traffic from the closing of highway 34 gives us a sense of how bad traffic will become as more people move to the Front Range and use highway 66 to get to the mountains. Already, it often takes 10 minutes to take a left out of my driveway in Saturday or Sunday vacation traffic. However, I do not favor adding another lane to the highway because that will only encourage more traffic and increase dangerous driving. I especially oppose allowing more semi-truck traffic, such as is proposed by a possible mining operation near the Cemex plant. We need LESS truck traffic on highway 66, not more. Please do not expand our highway or allow more industrial travel upon it. Instead, consider shuttle service to the mountains in the summer. Thank you, Dr. Kayann Short	CRASHES INCREASE IN TRAFFIC UNABLE TO TURN DANGEROUS TRUCK TRAFFIC TRANSIT SERVICE	Hello Dr. Short, Thank you for taking time to provide feedback to the project team. We appreciate your insights. Perspectives from you and others in your community are being integrated into this evaluation. The SH 66 Planning and Environmental Linkages (PEL) Study will identify the areas of greatest need along the corridor, such as intersections where turn lanes are needed and opportunities for transit service. The next step in the study is to identify possible solutions to address the areas of greatest need. Please check back to the SH 66 PEL website as the study progresses. https://www.codot.gov/library/studies/co-66-pel	✔
5/9/2017	Lisa	Rollo	lisarollomsp@gmail.com	This proposal of sending up to 240 trucks a day/week/month is absolutely the most devastating idea, not only is digging a giant mine in a corridor of protected wildlife and an idiotic idea and bad for everyone and everything....but huge trucks careening down 66 is One Big Disaster waiting to happen. Come on, this is a Huge Mistake all around. Just because we have to deal with Cemex and their history of fines and pollution...does Not Mean we will tolerate this new venture!!!	MAINTAIN OPEN SPACE TRUCK TRAFFIC	Hello Lisa, Thank you for taking time to provide feedback to the SH 66 Planning and Environmental Linkages (PEL) Study team. Land use decisions, such as the concerns you have noted, are made at the local level. CDOT is working with local partners, such as Boulder County and the Town of Lyons, to evaluate SH 66 travel conditions and address the areas of greatest transportation need in the context of community, environmental, and transportation considerations. For more information, please visit the SH 66 PEL website: https://www.codot.gov/library/studies/co-66-pel	✔

Date	First Name	Last Name	Email	Comment	Notes	Response	Sent
5/30/2017	Janell	Flaig	Flaigjmq@gmail.com	I attended one of the open house public meetings, but have not heard of any additional meetings. I am concerned about the future discussions and would not like to have a solution that would tend to make Hwy 66 a by-pass on the north side of Longmont. For safety and pedestrian/bicycle access I would prefer a 35/40 mph or lower speed for safety, in general a parkway type road. Such a lower speed parkway could combine short walls and evergreen type landscaping for sight and sound issue mitigation. Higher walls would tend to encourage graffiti vandalism. And lower speeds would be better for encouraging commercial development. As 119 and access to RMNP improves west of Loveland, perhaps there will be less pressure on Hwy 66.	SAFETY BICYCLE AND PEDESTRIAN SLOWER SPEEDS	Hello Janell, Thank you for taking time to provide feedback to the project team. We appreciate your insights. Perspectives from you and others in your community are being integrated into this evaluation. The SH 66 Planning and Environmental Linkages (PEL) Study will identify the areas of greatest need along the corridor, such as where speed limit adjustments may be needed and improvements for cyclists and pedestrians. The next step in the study is to identify possible solutions to address the areas of greatest need. Please check back to the SH 66 PEL website as the study progresses. https://www.codot.gov/library/studies/co-66-pel	✔
6/23/2017	Bob	Perletz	rlperletz@gmail.com	Hi James, I am concerned about the level of noise resulting from the increase level of traffic on CO 66. The existing residences on the north side of CO 66 and west of County Road 66 (east of Lyons and the Martin Marietta cement plant)are significantly impacted by the existing noise levels. Traffic noise has increased so traffic noise is apparent inside of homes. Recently additional land was planned for development that will result in additional 200 trucks per day on CO 66. How does the CO Planning Study address this critical issue? Is there any part of the study that will address this specific issue? Thanks for your feed back Bob Perletz	NOISE INCREASE LEVEL OF TRAFFIC	Hello Bob, Thanks for your email to the SH 66 PEL team. At this planning level of study, the SH 66 PEL includes an assessment of noise sensitive areas along the corridor. Detailed noise analysis, including evaluations and siting of noise barriers, occurs once construction funding is available for a project and the project is undergoing environmental review and final design. While this PEL will not specifically recommend placement of noise abatement measures, traffic noise considerations will be made throughout the alternatives development process. As future improvements occur along SH 66, CDOT will abide by Federal procedures for traffic noise evaluations and abatement (23 CFR Part 772). In addition, CDOT follows the process outlined in CDOT's Noise Analysis and	✔

Date	Name	Email	Comment	Response
11/2/2017	Shirley Hoffman	(Phone call directly to Kelly)	Summary of phone call: Shirley informed me of a number of issues and challenges of living in Boulder County. She is concerned that Boulder County, CDOT, and other agencies are not coordinating like they should be. She is also concerned that there are agencies that need to be contacted that haven't been. Specifically, she would like the first responders to be contacted (Lyons and Hygiene Fire Protection Districts) because she feels they have the best pulse on the highway operations. I asked that she respond to my email (the announcement from yesterday) and provide the best contact information for these special districts.	No response needed.
11/2/2017	Chuck Woods	chdewo@gmail.com	Is there a document in this file? If so I can't seem to download it.	No response needed. Kelly responded on 11/02/2017 with a direct link to the project website. No further correspondence as of 11/17/2017.
11/2/2017	Lisa Rollo	lisarollomsp@gmail.com	Dear Mr. Zufall, My name is Lisa Rollo, I live at 12995 N.66th street, Longmont Co. I have been dealing with Highway 66 everyday for the last 8 years and watched the traffic grow, the accident numbers grow, and now I'm learning about the potential Martin Marietta Gravel Mine, that would place up to 240 gravel trucks a day on Highway 66. If there was ever a time for CDOT to make a stand for safety, and the environment of the St Vrain Valley that Highway 66 resides in....it is now. I looked at the future plans that CDOT has for Highway 66, with all the considerations towards safety and bike lanes, and environmental considerations, how could that happen with 240 gravel trucks barreling by. Please Mr. Zufell, our community needs another voice of reason, I can only imagine what 240 gravel trucks a day could do to a highway...compromising the safety for All of us, and All living things that encounter that area. Please visit our community website at SOSVV.WORDPRESS.COM and help us reject the upcoming permit SU-96-18 for Martin Marietta, and force them to reapply to 2017 standards. Sincerely, Lisa Rollo	Response sent: Hello Lisa, Thank you for taking time to provide feedback to the SH 66 Planning and Environmental Linkages (PEL) Study team. Land use decisions, such as the concerns you have noted, are made at the local level. CDOT is working with local partners, such as Boulder County and the Town of Lyons, to evaluate SH 66 travel conditions and address the areas of greatest transportation need in the context of community, environmental, and transportation considerations. For more information, please visit the SH 66 PEL website: https://www.codot.gov/library/studies/co-66-pel
11/5/2017	Beth Brotherton	babrotherton@msn.com	Thank you for sending me the website link. The study seems to be quite thorough. The only issue that I did not see addressed is the noise. Previously I had been told that a sound engineer would be engaged in the study. As the number of vehicles using the highway has increased so has the noise level. I live in Section 2 on the south side of the highway and there are times when the traffic is so loud that we cannot sit out on our patio. Is the noise issue going to be addressed as well? Thank you, Beth Brotherton	Response sent: Hello Beth, Thanks for your email to the SH 66 PEL team. At this planning level of study, the SH 66 PEL includes an assessment of noise sensitive areas along the corridor. That section can be found in the Corridor Conditions Report, Section 4.6. Detailed noise analysis, including evaluations and siting of noise barriers, occurs once construction funding is available for a project and the project is undergoing environmental review and final design. While this PEL will not specifically recommend placement of noise abatement measures, traffic noise considerations will be made throughout the alternatives development process. As future improvements occur along SH 66, CDOT will abide by Federal procedures for traffic noise evaluations and abatement (23 CFR Part 772). In addition, CDOT follows the process outlined in CDOT's Noise Analysis and Abatement Guidelines. I hope this information helps. Please let the project team know if you have any additional questions.
11/10/2017	Janell Flaig	flaigjmq@gmail.com	I read through the PEL update document and appreciate this opportunity to contribute comments. The process indicates need for increased safety, good access, and context driven improvements for all users along Hwy 66. I focused mostly on the area identified as Section 2 as this portion is north Longmont. Perhaps the roadway could better serve Longmont and those driving through in a parkway configuration. Two lanes of traffic in each direction, with left turn lanes and dedicated right turn lanes at major intersections. Detached pedestrian walks of at least 8 feet in width could accommodate pedestrian and non-commuter bicyclists. A tree lawn with a low wall configuration along with lower speeds in the corridor between Hover and just west of the County Line Road would contribute to less noise for those living along the highway. Lower speeds would be safer for those driving and otherwise using the roadway. With fewer collisions there would be less traffic holdups. This would be the right time to accumulate the right of way needed on the north side or on the south sides based on existing development. State Hwy 36 through Boulder is at 35 mph. State Highway 66 speeds of 35 mph, with a parkway configuration could actually be attractive to economic development along the Longmont part of the corridor. Although there are many who think a tall wall along the south side of the highway would solve the issues, such a wall would also limit the views of the mountains for many who live in that area. Janell Flaig	Response sent: Hello Janell, Thanks for your email to the SH 66 PEL team, and thank you for taking time to review the project materials. Our team appreciates your feedback and will consider this input as the alternatives development process continues. In that process, we are evaluating roadway elements such as travel lanes, auxiliary lanes (left and right turn lanes), and pedestrian and bicycle facilities. The evaluation process also considers posted speed limits and adjacent land uses. Detailed noise analysis, including evaluations and siting of noise barriers, occurs once construction funding is available for a project and the project is undergoing environmental review and final design. While this PEL will not specifically recommend placement of noise abatement measures, traffic noise considerations will be made throughout the alternatives development process. Please let the project team know if you have any additional questions.
11/16/2017	Jackson	Ghostlightmater@yahoo.com	Hi I would like to sign up for project updates and study updates regarding the CO 66 Planning & Environmental Linkages Study Project Sent from ghostlightmater@yahoo.com	Response sent: Hello Jackson, Thank you for your email. The SH 66 Planning and Environmental Linkages (PEL) project team has added you to the project's distribution list. The project's Purpose and Need as well as the project's Corridor Conditions Report are now available for review on the project website, https://www.codot.gov/library/studies/co-66-pel Please let us know if you have any comments or concerns on these materials.

Date	Name	Email	Comment	Response	Sent
2/20/2018	Kelly Mahoney	krsmith1@gmail.com	People travel at extremely fast speeds (70+ mph) west of 75th St along Hwy 66. It would help reduce crashes if there were police patrols along that stretch. It would also help to put up radar signs and people would be notified what their speed is. Anyway to reduce speeding would be helpful is making Hwy 66 a safer road to drive.	Hello Kelly, Thank you for taking time to provide feedback to the project team. The SH 66 Planning and Environmental Linkages (PEL) Study includes an assessment of safety and travel speeds along the corridor. This information can be found in the Corridor Conditions Report (Section 3.1, Appendix A, and Appendix B). Here is a link to the Corridor Conditions Report: https://www.codot.gov/library/studies/co-66-pel/corridor-conditions-report. The SH 66 PEL Study identifies the areas of greatest need along the corridor related to safety, access, and mobility, and includes safety as a project need. The next step in the study is to identify possible solutions to address the areas of greatest need. Please check back to the SH 66 PEL website as the study progresses, https://www.codot.gov/library/studies/co-66-pel.	Yes
3/19/2018	John Vahlenkamp, Managing editor from Longmont Times-Call	jvahlenkamp@timescall.com	Mr. Zufall, I handle a Q&A column for readers of the Longmont Times-Call. I have answered questions before about Colo. 66, and our newspaper has written news stories about accidents and congestion on that highway. Recently I received the following question from a reader. *I believe this has been addressed before, but I would like to know the latest and greatest regarding the widening of Highway 66 from Main St out to I-25.* I know that CDOT is currently conducting a study of Colo. 66, and that the PEL study results are expected this spring. Is it still too early to tell whether widening the highway to four lanes is even a possibility? What can you share regarding what you are learning with this study? Thanks for any information you can provide. There's a great deal of interest in our community about what will be done about 66.	The Colorado Department of Transportation (CDOT) is currently conducting a Planning and Environmental Linkages (PEL) study of State Highway (SH) 66 between McConnell Drive in the Town of Lyons and Weld County Road 19 (WCR 19) in unincorporated Weld County. CDOT is conducting this long-term, visionary study to understand existing conditions, to identify anticipated problem areas, and to develop/evaluate multimodal improvement recommendations to reduce congestion, improve operations, and enhance safety. The study is considering the strategic widening of SH 66 from US 36 in Lyons to WCR 19 (east of the I-25 interchange). More information will be presented at upcoming public meetings which are anticipated for mid-summer 2018. For more information, please visit the project's website, https://www.codot.gov/library/studies/co-66-pel.	Yes
7/25/2018	Todd Charley	thecharkeys@gmail.com	We life off of US 66 and US 287 (Prarie Village) and on Friday the 13, there was a wheel that came off of a truck and went into their house and destroying the window in their home. There home butts up to US 66, granted there is a green between them. They would like to get a better fence up. They would like to know what the future development for CO 66 and find out if there has been any considerations for a fence, noise wall that will also act as a fence or anything that will assit with this not happening again.	From Abra to Todd… Hi Todd, It was a pleasure talking with you on the phone and I'm sorry you're having to go through this ordeal; I admire your pursuit to protect your family. Like we discussed on the phone, the best chance of CDOT putting up a structurally sufficient wall that could possibly stop a car or flying object would be a noise wall when capacity of SH 66 is added. CDOT has Noise wall guidelines that talk about the analysis process and justifications. Please find links to the following websites that will help answer questions and provide info: Noise Info (Specifically the Noise Analysis and Abatement Guidelines) - https://www.codot.gov/programs/environmental/noise The other thing of interest to you is the PEL study that is currently in progress. This study identifies current and future conditions/developments to identify future transportation vision and projects along SH 66. You are able to submit feedback on this page as well. I will reach out to the team and have them add your email to the outreach list. The website info is: https://www.codot.gov/library/studies/co-66-pel Additionally, I reached out to our traffic operations guy and have inquired about cameras along SH 66, I will let you know when I hear back. Thanks so much and feel free to contact me directly with any future questions.	Yes
2/12/2019	Ellen Rosenberg	erose@indra.com	Kelly Leadbetter suggested I email you about my concerns about the increasingly dangerous traffic intersection at the corner of Hwy 66 and N. 53rd St between Lyons and Longmont. For 27 years I've lived on N. 53rd St (Rabbit Mountain Rd) very near this corner. Do you know who (with the Highway 66 work committee, County, at CDOT) I would contact about proposing turn lanes at this intersection? Is one already in the works? It's increasingly dangerous every year: so many people driving 60+MPH when you are trying to turn onto 53rd St; drivers often using the shoulder "lane" either for turning or passing the car that is turning; bicycles are plentiful in the shoulder lanes; etc etc! I think the intersection is most dangerous when driving East because the Hwy goes from 2 lanes to one right BEFORE the 53rd St turn...very poor planning, IMHO. Any help or contacts appreciated.	From James: FYI, I spoke to Ms. Rosenberg this morning and described the study and our path moving forward. I asked that if she had any more questions or concerns she not hesitate to reach back out. She seemed satisfied with the conversation.	Yes

Date	Name	Email	Comment	Response	Sent
3/30/2019	Mollie Kelleher	kelleher_mary@svvsd.org	As a regular user of CO 66, I support the report recommendations to: a. Widen Hwy 66 between Hover and County Line Rd. (As a former planner, I've been visualizing that one for a while.) b. Increasing access to and frequency of public transportation - especially light rail. (Wish we could move up the time table on the latter!) c. Underpasses near Pace & 287 to accommodate bicyclists and pedestrians. d. Extending Airport Rd to 66 providing it causes minimal disturbance of wildlife habitat near McIntosh Lake. e. Although not mentioned in the Longmont/BOCO plan, some beautification and gateway features would make the 66 more pleasant as well as contribute to traffic calming near the major intersections at Hover, 287, Pace and County Line (where a state patrol cadet was killed by a speeding motorist).	Thank you for taking time to provide feedback to the project team; I will add your email to the outreach list so you receive periodic project updates. The SH 66 Planning and Environmental Linkages (PEL) Study identifies the areas of greatest need along the corridor related to safety, access, mobility, and includes safety as a project need. This information can be found in the Corridor Conditions Report (Section 3.1, Appendix A, and Appendix B) at the following link (https://www.codot.gov/library/studies/co-66-pel/corridor-conditions-report). The next step in the study is to identify possible solutions to address the areas of greatest need. Please check the SH 66 PEL website as the study progresses (you are able to submit feedback on this page as well), https://www.codot.gov/library/studies/co-66-pel. I will reach out to the team and have them add your email to the outreach list. The project team will be hosting two public meetings (both meetings will provide the same content) on April 16 and April 18, 2019 from 4:30 to 7:30 at the Weld County Southwest Services Complex and Longs Peak Middle School, respectively. These meetings are a continuation of the study that began in 2017 which will give you an update on the project's progress including CDOT's risk and resiliency assessment and the Access Control Plan (ACP). The ACP will make recommendations for future changes to the location and design of driveways and intersections.	Yes
3/31/2019	Mike Heiser	mlh208@msn.com	The noise has gotten so unbearable with the increased traffic. Our fence along 66 no longer helps during any time of the day. The large trucks are left to continue the use of their engine brakes 20 feet from our house. Cemex is the worst offender. All of their trucks have loud exhaust systems and with the engine brakes are especially offensive. For crap sakes they are 8 miles out of the mountains. Why are there no signs excluding their use? Since you have chosen to remake the highway with concrete the tire noise rises with speed. Why is it 60 miles per hour when our fence is literally only 10 feet from the road lanes?	Thank you for taking time to provide feedback to the project team; I will add your email to the outreach list so you will receive periodic project updates. The SH 66 Planning and Environmental Linkages (PEL) Study includes an assessment of safety and travel speeds along the corridor a related to safety, access, mobility, and includes safety as a project need. This information can be found in the Corridor Conditions Report (Section 3.1, Appendix A, and Appendix B) at the following link (https://www.codot.gov/library/studies/co-66-pel/corridor-conditions-report). The next step in the study is to identify possible solutions to address the areas of greatest need. CDOT uses the Noise Analysis and Abatement Guidelines, found at https://www.codot.gov/programs/environmental/noise, to determine the presence or absence of a noise wall in specific locations. This document outlines the analysis process and justifications. The project team will be hosting two public meetings (both meetings will provide the same content) on April 16 and April 18, 2019 from 4:30 to 7:30 at the Weld County Southwest Services Complex and Longs Peak Middle School, respectively. These meetings are a continuation of the study that began in 2017 which will give you an update on the project's progress including CDOT's risk and resiliency assessment and the Access Control Plan (ACP). The ACP will make recommendations for future changes to the location and design of driveways and intersections. Please check the SH 66 PEL website as the study progresses for more information, https://www.codot.gov/library/studies/co-66-pel.	Yes
4/5/2019	Barb Haaland-Michaels	mlh208@msn.com	I've received a postcard about the public meetings on the Environmental Linkages Study for the SH 66 corridor from Lyons to I-25. I found the study very thorough but find no proposals on how to proceed in the planning. I would like to make public comments without having to go to the meeting since I've read and looked at your charts & graphs. Are you accepting public comment online? If so, will you point me to the link for it. Perhaps you'll have this posted at the meeting or following the meeting. I am strongly in favor of any proposal adding to the safety and continued flow of traffic without more traffic lights and without lower speed limits. I would like to see a parkway similar to US 287 from Longmont to Berthoud with expanded turn lanes and feeder roads without more traffic lights. I have many reasons for this but am sure you are not wanting to hear them in this email. Please direct me to how to express my concerns & suggestions for future construction options. Thanks so much. Barb	Hello Barb, Thank you for taking the time to reach out. Yes, the project team is accepting public comments online and would appreciate your feedback. The content from the public meetings is now available online and can be viewed here: https://www.codot.gov/library/studies/co-66-pel/public-participation. To provide feedback, please use the following survey link: https://www.surveymonkey.com/r/CDOTSH66PEL. To provide additional comments go to the public participation tab and click the blue text box that says "access the questionnaire and map". We look forward to hearing your specific comments!	Yes
4/8/2019	Sharon Perdue	shazperdue@gmail.com	I am curious if you could point me in the direction of who I should talk to regarding CEMEX authorized daily trips? I am curious what it is and the parameters around it. Thank you! Sharon Perdue 6914 Ute Hwy	Those trips are permitted by Boulder County. I believe the contact I have has retired, so I would recommend contacting their main transportation number at 303-441-3900.	Yes

Date	Name	Email	Comment	Response	Sent
4/8/2019	Ann Roadarmel	alroadarmel@gmail.com	I am already concerned about the many accidents and fatalities on 66 and Pace, I do not like coming home and seeing the medics taking an IV out of a man and covering him with a blanket. It seems that the traffic light does not prevent accidents as people seem to believe it is already a through road. Also, I am interested in how the traffic noise will be abated. Already on the south side of 66 there are people running off the road towards the ditch when the weather is snowy and the road is slippery, 66 is an old farm road and I am not sure how you will make the road safer and quieter, by widening the road. Back east there are many widened roads with stop lights at various intervals for cross traffic, which means slowing down traffic, however driving at 65/70 and having to slow down to 50/55 or 45/50 in a timely manner does not always prevent someone from making that transition without rear ending someone. I know I have driven the back roads of Wisconsin and Minnesota and they are crazy making. And you want to widen 66. Since traffic is already a nightmare on 66, at night it will make traffic on 66 a double nightmare for people. It is like what speed do we need to be driving now and when do we make the changes. Will there be lighting along 66? Will there be sound barriers along the residential areas? Will 66 become a limited access road and allow minimal egress off and on? Are you going to build interchanges? Will 66 look like I-25 with its North & South median barriers? I just can not see any thought put into widening 66. You are going to squeeze 4 lanes of highway making it into a high speed highway. Have you figured out how to prevent head on crashes? or people running off the road to prevent an accident or wanting to turn off into their driveway and getting rear-ended. I could go on and on, but I think you get my drift. I did not grow up in Longmont or Colorado and I have driven some excellent roads and some pretty badly designed roads in other states and countries, however if you want to design an excellent road go drive on the German Autobahn. They do have speed limits! Ann Roadarmel	Hello Ann, Thank you for taking time to provide feedback to the project team; I will add your email to the outreach list so you will receive periodic project updates. Part of the SH 66 Planning and Environmental Linkages (PEL) Study includes an assessment of safety and travel speeds along the corridor. This information can be found in the Corridor Conditions Report (Section 3.1, Appendix A, and Appendix B) at the following link (https://www.codot.gov/library/studies/co-66-pel/corridor-conditions-report). The ultimate goal of a PEL study is to identify transportation deficiencies and needs and develop a series of conceptual ideas and alternatives to address those needs. The project team has developed a set of alternatives to address the deficiencies and is currently seeking public comments on the conceptual ideas developed. This information was presented at the recent public meetings held in April 2019 and can be found on the project website: https://www.codot.gov/library/studies/co-66-pel. To provide additional comments go to the public participation tab and click the blue text box that says "access the questionnaire and map". The section at SH 66 and Pace is currently planning to be widened to 4 lanes. Additionally, during the design phase of the project, a noise analysis will be conducted to determine the need and feasibilty of traffic noise abatement. We look forward to hearing your specific comments!	Yes
4/9/2019	Kayann Short	kshort@greenspeedisp.net	Dear Mr Zufall, I received your notice about the 66 corridor meeting and hope to attend. In the meantime, I am wondering why the left turning light is not always operational at the intersection of 36 and 66 for those turning left onto 36 going south. I live east of that junction and have to take a left to head to Boulder. Often that turning arrow is not presented and I have to wait for lots of cars to pass and try to get through at the very end before the light turns red, which is quite dangerous. Even if it seems no cars are coming, the curve in the road to the west of the light and the high speed of cars trying to get through the light means an oncoming car can suddenly appear. I am glad we have a turning light there but it would make more sense for it to be operational at all times. Certainly, it should be operational from early morning until evening and on the weekend when 66 gets so much tourist traffic. Traffic starts around 5:30 on Hwy 66 and it seems traffic is getting heavier along the corridor. An accident occurred at that intersection about a week ago and I wouldn't be surprised if the lack of turning light was a cause. Thank you for considering this request. Kayann	Hello Kayann, Thank you for taking the time to provide this feedback. I will look into the timing of the signal at this intersection and take follow-up actions, as warranted.	Yes
4/13/2019	Anna Milner	annamil12@gmail.com	I really wish that CDOT could prioritize the creation of underpasses/overpasses on 66 when undertaking any future improvements. https://conservationcorridor.org/corridors-in-conservation/man-made-corridors/ I've seen so many dead animals on 66 over the years. I get that some situations are inevitable, but it just seems like this would be an easy way to decrease those instances. The idea is catching on globally. If it is a funding issue, could we get the word out? I think people would be in great support of it. Thanks!	Hello Anna, Thank you for taking the time to provide feedback to the project team. Although recommending the use of wildlife crossing is outside the scope of the SH 66 PEL study, Colorado Parks and Wildlife (CPW) is an active participant in this planning effort. Historically they have integrated the data and results of a PEL study into their management of wildlife in the area. The project team will ensure that the CPW representatives receives your comment. Thank you!	Yes
4/15/2019	Name not provided	email not provided (ph nmber: 763.234.5754)	Hi, James, I am interested in the County Road or the Colorado 66 Planning and Environmental Linkages study. I am astonished, however, that the map that was provided for people you know to consider and for you guys to consider for impact and what needs to be done is years old. Does not include the through streets that it now suffers from. So if you could please update that ASAP. 115th Street links directly to Alpine Street in northeast Longmont. That is east of 287 west of Pace and has been that way for quite a long time. There is major development going there all over that area and a huge hot button issue for Longmont as far as traffic concerns allow. So you really need to get that info updated so that you can make some good decisions. Thanks much. Bye Bye.	Thank you for expressing your concern. I have reviewed the base maps that we are using for the planning process and they show Alpine Street connecting to 115th Street. I am unsure which map you are referencing. The City of Longmont staff are active participants in this planning effort and keep our team up to date on development going on in Longmont. We agree that it is important use the most current data available for each Planning and Environmental Linkages study to ensure the best end product.	Left Voicemail

Date	Name	Email	Comment	Response	Sent
4/16/2019	Caleb Roberts	caleb@calebroberts.com	Hi, I've been looking over this document and have few comments. I'm haven't finished reading yet but can't get any further yet but here's what I have so far: There seems to be some gap in understanding the changes underway in the "Eastern Corridor" planning area of Lyons. You need to take into consideration the active re-development of this area, the ongoing annexation of properties, and the long-term planning policies that are long established in our town's comprehensive plan and IGA with Boulder County. Some of your maps indicate that 4689 Ute Hwy is in the town of Lyons. They do not indicate that 4651, 4652 have also been annexed into the town of Lyons. This is about 7 acres fronting CO66, north and south sides, all annexed into Lyons, now subdivided and majority sold to a developer. On the north most, newly divided parcel, Town of Lyons has 2 new municipal buildings under construction. The developer has plans for mixed-use development and there will be new residential development here. Numerous other adjacent property owners have actively considered annexation for opportunities to sell for redevelopment. Gwen (Gwen's Greenhouse) recently retired and her propertied will certainly become something else in the near future. There is a MJ store at the US36 intersection. Traffic to these properties is already increasing significantly and will soon be much greater. I'm one of the owners of the property at 4689 Ute Hwy. Grace Design is a small business with about 20 employees . Many of us live in Lyons and some bicycle to work. Since the Town of Lyons is now using the driveway into the new public works facility, the access from eastbound CO66 into our driveway is much more dangerous. There needs to be proper turn lanes to access these properties. And once the development of the rest of that property begins, there will continue to be much more traffic there. There is a significant mistake in Figure 3.6. The section of CO66 between McConnell and US36 has blue line to indicate existing bike lanes. This is not accurate. Part of that area has existing bike lanes but they disappear just east	Hello Caleb, Thank you for taking the time to provide feedback. The Town of Lyons staff are active participants in this planning effort and keep the project team updated on development happening in Lyons, specifically east of US 36. The ultimate goal of a PEL study is to identify transportation deficiencies and needs and develop a series of conceptual ideas and alternatives to address those needs. The project team has developed a set of alternatives to address the deficiencies and is currently seeking public comments on the conceptual ideas developed. This includes the future access consolidation in this area. This information was presented at the recent public meetings held in April 2019 and can be found on the project website: https://www.codot.gov/library/studies/co-66-pel. We agree that it is important to improve the multimodal environment in Lyons which is why we propose adding designated facilities to the corridor. Please take a look at the proposed improvements and let us know if you have any additional comments.	yes
4/19/2019	Frank Daugherty	fcdtools65@hotmail.com	Looks like more money being spent to facilitate the bicyclist, again. Much like the last go round where they widened 66 from Longmont to Lyons. Hwy 66 is not a pedestrian road until you get to Lyons where 36 joins in, so using that as an arguing point doesn't wash. The bicyclist grievances should only be considered when they start picking up some of the cost to build and maintain the road and abide with the rules of the road. Its a bad idea to have bicyclist of all abilities riding next to a road where the legal speed limit is 60 mph. one mistake, one swerve by a cyclist and they are dead. The car driver has no chance to respond and will be considered possibly at fault. The cyclist riding in groups, training, should not be allowed. Again one mistake and the whole group could be in danger. Very few cyclists use 66 from 287 to Hover Road, a few come onto it there, but the majority of riders come down 36 from Boulder to ride through Lyons up 36 to who knows where. Some go up the old Blue Mountain Road where they are a definite hazard, no bicycle lane at all, some go on to Apple Valley Road, no bicycle lane there either, others go on up to Pinewood and Estes again, again no bicycle lane. There is something wrong here when a minority group can command such importance. I understand the need for a better way to handle the increasing auto and truck traffic on 66 but stating it is needed for pedestrian and bicycle traffic----?? Just doesn't wash.	Hello Frank, Thank you for taking the time to provide feedback. The goals of a PEL study are to identify transportation deficiencies (including bicycle and pedestrian facilities) and future needs and to develop conceptual ideas and alternatives to address those needs. The project team has developed a set of alternatives that address the deficiencies and is currently seeking public comments. As you can tell from this information, a bicycle and pedestrian facility that seperates bikes and cars is currently envisioned connecting Lyons and Longmont. This information was presented at the recent public meetings held in April 2019 and can be found on the project website: https://www.codot.gov/library/studies/co-66-pel. Please take a look at the proposed improvements and let us know if you have any additional comments. CDOT's missions is to provide the best multi-modal transportation system for Colorado that most effectively and safely moves people, goods, and information regardless of mode. Creating designated space for bicyclists (such as sidepaths) along SH 66 creates a safer environment for motor vehicles as well as bicyclists.	Yes
4/20/2019	Katie Roche	k.roche@att.net	I live off CO 66 and Hover Road and have also commuted to work on CO 66 for most of my career. The road is well maintained and the most recent improvements really helped. But passing lanes both east and west bound need to be added because of the types of traffic that use the highway every day and the monthly additions of more and more cars. The hardened "road warriors" know to keep their speeds up; the "Sunday driver" types sometimes can't even break 40 mph which causes mass backups and frustrations. And then there is the truck traffic which also slows things down especially with the oil and gas development in Weld County. Please consider passing lanes - it's time to give drivers some relief on CO 66.	Hello Katie, Thank you for taking the time to provide feedback to our project team. The goals of a PEL study are to identify transportation deficiencies and future needs and to develop conceptual ideas and alternatives to address those needs. The project team has developed a set of alternatives that address the deficiencies, such as a lack of passing lanes, and is currently seeking public comments. This information was presented at the recent public meetings held in April 2019 and can be found on the project website: https://www.codot.gov/library/studies/co-66-pel. As you will see in the materials, the PEL proposes adding lanes to the majority of the SH 66 corridor. Please take a look at the proposed improvements and let us know if you have any additional comments.	Yes

Date	Name	Email	Comment	Response	Sent
4/21/2019	David Boryszewski	davidboryszewski@gmail.com	Hi, Mr Zufall, I am just reading in the Longmont Times Call about changes to the zoning area back in September affecting the SH 66 Planning and Environmental Linkages Study sorry I missed the meeting I thought it was 05-18-19 Sir there are way too many cars on the road already why was that not widened 10 years ago I was on HWY 66 almost involved in 2 accidents in one day almost in ditch with first one on the access a ride bus I do not drive epileptic but when transported expect to be safe 2 weeks ago bumper to bumper from Hover road to I-25 but a huge amount of development at the end of Hover Road and 66 is now planned not sure why that was even approved and I am sure that is not up to you but should we not have had the Highway study before the approval of all that new development there are already way too many cars on every major street in Longmont now I am not sure but I think that roadway situation is up to the city just wondered if you could e-mail me the results of the meeting I am not sure how that turned out but yes I live about 2 blocks from planned possible road widening which again I personally think should be done before development is even started in that area but was already approved in September 2018 Sir,please use your own judgement with the E-Mail if a short summary is available just send that there was nothing in the paper about how that turned out. Thank you Dave Rockindave_1@juno.com	Thank you for taking the time to provide feedback for our project team, Dave. The goals of a PEL study are to identify transportation deficiencies and future needs and to develop conceptual ideas and alternatives to address those needs. The project team has developed a set of alternatives that address the deficiencies; here is the information that was presented at the recent public meetings held in April 2019: https://www.codot.gov/library/studies/co-66-pel. As you will see in the materials, the PEL proposes adding lanes to the majority of the SH 66 corridor in response to the increase in traffic along the highway and development occurring adjacent to the corridor. We are working to identify projects that can be prioritized to receive funding, which will be included in the final PEL document. These projects are intended to provide a safer transportation system. Please take a look at the proposed improvements and let us know if you have any additional comments.	Yes
4/24/2019	Jean Pazour	jeanpazour@earthlink.net	Dear Mr. Zufall, Thank you so much for sending information on the PEL for SH 66. I read a good part of the PEL info. It was well-done, easy to understand, and interesting. I presume this was presented at the meeting I missed. I am happy that CDOT is hoping to mitigate some of the problems that come with increased usage of SH66. On a personal note, I rode my bicycle from my home on Anhawa Ave in section 2 to my job at Longmont United Hospital daily. SH66 was the most dangerous part of the ride for several reasons. First, I had to cross the highway, which was OK at 5:30 am. It was terrifying coming home. I avoided the intersection of 95th St, because so many drivers who want to turn right onto 95th street to go south did not see me as a bicyclist also trying to turn south. These same drivers didn't see me if I tried to cross from the sidewalk with the light coming home. I was almost hit several times. There was really no way to get away from those cars turning right. I found a secret route along a closed road (grass is growing on it) across but a little east from Anhawa. That road through Lake Park took me to the Oligarchy ditch trail. I could go under 95th on that trail and south to the hospital on neighborhood roads less-traveled. Coming home around rush hour was another story. I literally got off my bike and walked it across SH 66 near that secret grassy road. It was really scary and hard to find a big enough break in the traffic. I retired 8 years ago. I can't imagine trying to cross SH66 on foot with my bike during rush hour now. The Pumpkin Ranch at SH66 and Anhawa is a traffic nightmare in the fall. Lifebridge Christian Church down on SH66 and Gay is dangerous on Sundays, even with CHP or BC Sheriffs directing traffic. Westbound traffic can be stopped almost back to Highway 287. There are times when we can't access SH 66 to go east from Anhawa due to high traffic volume both ways. We have had to turn around, backtrack on Anhawa to 95th, and access SH66 that way. It may interest you to know that I wrote to Dwight Browers in the 80s begging for a light at SH 66 and 95th St. SH66/95th St. had only a stop sign on 95th. He listened, a light was added, and I wrote him a thank you note. He wrote me a thank you for my thank you! Thank you. This is what I would have told you at the meeting.	Hello Jean, Thank you for taking the time to provide feedback to our project team; I appreciate the historical perspective of the traffic signal at SH 66 and 95th Street! The meeting materials from the recent public meetings are now available on the project website: https://www.codot.gov/library/studies/co-66-pel. As you can tell from this information, a bicycle and pedestrian facility that seperates bikes and cars is currently envisioned connecting Lyons and Longmont. Please take a look at the proposed improvements and let us know if you have any additional comments.	Yes
6/13/2019	Michelle Jordan	mmmichelleb@yahoo.com	Some of what you have planned makes sense and some does not. There are several communities that have direct access on to Hwy 66 now and have had for a very long time. Your new plan takes away that access because the road is too busy but then you are creating new access for the Barefoot Lakes new development which will result in 3 accesses within 1 mile. Your answer to that is a round about on a highway. This seems ridiculous to me. You are taking away historic access then creating a highway nightmare for a development that isn't even there yet. Why not require them to build an on ramp to accommodate their development rather than slowing the whole highway with round-abouts? How is a round-about going to accommodate a combine or other large agricultural machinery? We live on Elmore Road, a dead-end street. We like it being a dead end street. Longmont has a plan to expand Union Reservoir and move CR 28 north which could then tie into Elmore Road. Your plan had options which included making Elmore a through street to this modified CR 28. Thus would be the WORST idea. Already people trying to avoid the light at Countyline Road race down our street. Since it is a dead end each one only does it once and we still have it happen multiple times a week. If you make it a through street it will be a racetrack to avoid the light. One option was to then close Elmore Access to 66 and have access only through CR 26. This would be the best option if CR 28 is going to access Elmore Road. We like our sleepy little neighborhood and our property values would depreciate significantly if you make it a through street.	Hello Michelle, Thank you for taking the time to provide feedback on the SH 66 PEL. Your feedback will be included when conducting analysis of the alternatives to develop a recommended future vision for SH 66. With regard to Elmore Road, your suggestion of closing the access onto SH 66 and having the connection to the south is moving forward. We have heard similar suggestions and concerns from your neighbors. We are hoping that this solution will be adventagous for both your community and SH 66. If you would like to receive additional information about access along SH 66 there will be an upcoming Access Control Plan open house on Thursday, July 25, 2019 from 4:30 to 7:00 p.m. at the Longmont Senior Center, Room D & E 910 Longs Peak Ave Longmont, CO 80501 The format will be open-house, so you can stop by at any point during that time. Thank you for taking the time to provide us with valuable feedback.	yes

Date	Name	Email	Comment	Response	Sent
	cont		All this sounded like it is not in the near future. In the near future, i.e. within the next 5 to 10 years, I would like to see Hwy 66 widened by one lane and use it for a center island that could be used for left turns off and onto Hwy 66. That would decrease congestion and improve safety and give the biggest bang for the highway improvement buck. It would also not be wasted as it would be used in the long term plan also. One last comment. Your maps at the meeting had a bike trail going on the south side of Hwy 66. The map you had at the meeting had that trail going right over our underground house. When I pointed that out, your engineers were quick to explain that this was only conceptual and not to be concerned. Well we all know how a conceptual map in 2019 becomes the long established plan in 2030 or 2040 so please, correct the map and let me sleep well at night. I will be looking for that correction before the next meeting.:) Thank you for taking our comments into review. Michelle Jordan		
7/21/2019	Bill Brotherton	bill_brotherton@msn.com	Noise reduction on 66 west of Hover and south of 66 is our primary concern. Thanks.	Hello Bill, Thank you for taking the time to provide feedback on the SH 66 PEL. Your feedback will be included when conducting analysis of the alternatives to develop a recommended future vision for SH 66. CDOT has Noise wall guidelines that talk about the analysis process and justifications. Please find links to the following websites that will help answer questions and provide info: Noise Info (Specifically the Noise Analysis and Abatement Guidelines) - https://www.codot.gov/programs/environmental/noise Also, there will be an upcoming SH66 Access Control Plan open house on Thursday, July 25, 2019 from 4:30 to 7:00 p.m. at the Longmont Senior Center, Room D & E 910 Longs Peak Ave Longmont, CO 80501 The format will be open-house, so you can stop by at any point during that time.	yes
7/22/2019	Kayann Short	kshort@greenspeedisp.net	Dear Mr. McFarland and Mr. Zufall—I live on highway 66 east of the 36 traffic light. Even though I live close to Lyons, I limit driving there, especially on the weekends when tourists are on the road. My 81-year-old neighbor, whose family helped build that town, says he rarely goes to Lyons now because of the traffic. I find it sad that someone who contributed to Lyons becoming the great town it is, no longer feels safe driving there. Following another bad accident on highway 66 near Lyons last weekend, I'm writing to ask that the speed limit between the light at the intersection of 36 and 66 and the next light at Stone Canyon/McConnell Drive by the U-Pump-It gas station be lowered to 40. Currently the speed limit is 50 between those lights. With many businesses along the road and curves that obstruct views as drivers approach those lights in either direction, 50 MPH is too high a speed for safety. Part of the problem is young drivers who come to Lyons and the Rocky Mountains for recreational purposes. They often drive much over the speed limit of 50 and also fail to reduce speed as they approach traffic lights. A lower speed limit would help mitigate this problem. I know that plans are underway for frontage roads and reduced access points along that part of 66, but, for now, lowering the speed limit to 40 is an easy step that will help save lives and aggravation. I invite you to drive that stretch yourselves, especially on a Saturday afternoon, and you'll understand the unsafe conditions town members and tourists currently endure.	Hello Kayann, Thank you for taking the time to provide feedback on the SH 66 PEL. Your information and viewpoint will be included when conducting analysis of the alternatives to develop a recommended future vision for SH 66. I will forward your concern onto the appropriate CDOT staff member. The theme of adjusting speed limits (both up and down) is something we have heard from many people along the corridor. I've also provided a link to CDOT's Establishing Realistic Speed Limits that might help you understand how speed limits are set. https://www.codot.gov/library/Brochures/Establishing_Realistic_Speed_Limits_Brochure.pdf/view	Yes
7/17/2019	Mary Ruth	janeruthlongmont@gmail.com	I live along the Hwy 66 corridor near Hover and 66. My major concern is the unrelenting noise pollution from 66. My husband and I can no longer sleep in any bedroom facing 66 because of the noise when we have our windows open in the summer (we do not have air conditioning). When I work outside in the garden I have to wear ear plugs because of the moise There are also quite a few accidents at the light by Hover and 66. The 60 MPH speed limit is much too high for this area. I feel that the speed limit should be closer to 40 MPH. this would help mitigate accidents at the light and also reduce noise pollution.	Hello Mary Ruth, Thank you for taking the time to provide feedback on the SH 66 PEL. Your information and viewpoint will be included when conducting analysis of the alternatives to develop a recommended future vision for SH 66. I will forward your concern onto the appropriate CDOT staff member. The theme of adjusting speed limits (both up and down) is something we have heard from many people along the corridor. I've provided a link to CDOT's Establishing Realistic Speed Limits that might help you understand how speed limits are set. https://www.codot.gov/library/Brochures/Establishing_Realistic_Speed_Limits_Brochure.pdf/view Also, CDOT has Noise wall guidelines that talk about the analysis process and justifications. I've also provided that link to help answer questions and provide info: Noise Info (Specifically the Noise Analysis and Abatement Guidelines) - https://www.codot.gov/programs/environmental/noise	yes

Date	Name	Email	Comment	Response	Sent
7/28/2019	Hugh Tanner	birdtanner@comcast.net	Need left turn lane into Willis heights on Hillcrest for eastbound traffic. Otherwise residents will have to go through the very unsafe intersection of 287 & 66, and make another unsafe left turn at 287 & Parkridge (unsafe because of the slight curve in 287 - can't see oncoming traffic behind cars waiting to turn left into Walmart. Also, the plan seems like overkill. What about just adding left turn lanes all along hwy 66. This should solve most of the problem.	Hello Hugh, Thank you for taking the time to provide feedback for our project team. The goals of a PEL study are to identify transportation deficiencies and future needs and to develop conceptual ideas and alternatives to address those needs. As such, the project team develops a set of alternatives that address the identified deficiencies. Many of the alternatives will not be recommended, but it is necessary to complete these alternatives to ensure we have completed a thorough analysis. The project team will look into the possibility of a turn lane into Willis Heights at Hillcrest.	yes
	Matt Rooney	matt@farmbearcreek.com	Thanks again for talking tonight. It helped. Would you mind summarizing the plan for the corridor for the East part of the Town of Lyons. I want to make sure I understand it and can explain to my partners and neighbors. Also, if you ould please send data regarding that area- accidents, car traffic etc. And why a speed reduction would not solve the safety problem. The reduced speeds certainly do provide safe and effective passage through town. And we are .5miles from the 25mph sign and another .5miles from the intersection with rt 36 going South. So there is room for the reduced speeds and the traffic would slow down for the speed limits, just as they do currently in town. At least that is my understanding / thinking.	Hello Matt - I am glad you found the conversation at the ACP meeting helpful. I've attached a couple documents that help summarize the plan for entire planning corridor, including the east part of the Town of Lyons. In the following link will take you to the Corridor Conditions Report. You will find the completed safety analysis in the report appendices starting on pg. 29. In regards to your inquiry regarding the speeds on the corridor, the 25 mph posted speed limit through Lyons is to accommodate the pedestrians and cyclists crossing and alongside the highway. The 25 mph speed limit is typically only appropriate within core business districts where there are high volumes of pedestrians and cyclists. Speed limits are also tied to the 85th percentile speeds and what drivers feel comfortable driving. So that 25 mph speed is only appropriate within the limits of where the drivers feel they need to be more vigilant and drive more slowly. CDOT has posted the segment east of the 25 mph speed as 40 mph, which serves as a step-down transition speed between the 25 mph downtown speed and the 50 mph rural speed. This transition area is needed so that traffic can slow (or speed up in the opposite direction) at a more gradual speed as the road becomes more urbanized, but outside of that transition area, the traffic speeds are set based on what most drivers are comfortable driving at.	yes
9/7/2019	Amy Rusterholz	amycbuckler@gmail.com	Thank you for this thoughtful study. I look forward to improvements in safety. My sincere hope is that the current trees and drainage canals in section 2 along 66 in Longmont will be preserved as they currently exist.	Hello Amy – Thank you for your comment. Your hope to preserve the current trees and drainage canals in Section 2 has been forwarded to the project team.	yes
9/9/2019	Susan and Felix	20flyinghorses@msn.com	Don't know where your going to improve Hwy. 66 there is no room for more lanes.	Hello Susan and Felix - Thank you for your comment. There will be two upcoming open-house meetings that will address your concern. During these open-house meetings (the same information will be presented at both) the project team will present the project footprint and visualizations to identify how the recommendations will be accommodated. If you are unable to attend an open-house, this information will also be posted on the project website at: https://www.codot.gov/library/studies/co-66-pel. The SH 66 PEL is expected to be finalized in Fall of 2019. Wednesday, September 25, 2019 4:30 to 7:30 p.m. Weld County Southwest Service Complex 4209 County Road 24 ½ Longmont, CO 80504 Thursday, September 26, 2019 4:30 to 7:30 p.m. Longs Peak Middle School 1500 14th Avenue Longmont, CO 80501	yes
9/18/2019	David Hirt	papahirt@yahoo.com	Hello, I have been driving Hwy. 66 between Longmont and Lyons, and occassionall east to I-25 for over 20 years now, as well as down North 75th Street, so I think I have a good history and perspective on the highway, its increased use, and what works well and could use some attention. I hope you will consider my feedback in the remaining part of the planning process, as I am unable to make the public meetings and open houses. After looking at multiple documents, I think the Level 2 Alternatives analysis is where I can most focus my comments. Before I get to that detail, however, I would say in general I think that traffic flows well throughout the Lyons to 287 intersection, despite a huge increase in vehicles. The only issue I have is back ups in Lyons during summer weekends, that at times can extend nearly to Hwy. 36. However even this seems to be moving better the last year or two, maybe because of the traffic light at McConnell? The only other minor gripe is the slow drivers on Hwy. 66, going 42 to 45mph in a 60 zone. In general I support increasing the highway to 4 lanes from Hover St. to I-25. I can't comment east of I-25. I would like to see the highway remain 2 lanes from Hover west to Lyons, to more match the rural character of that area.	Thank you Dave for taking the time to provide input based on your history of driving the corridor and reviewing the planning documents; I will ensure that the project team receives your comments. In the Level 2B Alternatives Development and Screen maps, which is where I assume you are asking about the colors, the options identified by a white box were identified to move forward into Level 3 analysis. The next round of public meetings will show a refined list of options and additional analysis. I understand that you will not be able to attend the open-house meetings, however the information presented at the upcoming meetings will be posted to the project website. I would like to encourage you to review the updated information and complete the questionnaire that will be handed out at the meetings. To do this, please visit https://www.codot.gov/library/studies/co-66-pel. The questionnaire will be post during the week of Sept 23rd, most likely towards the middle of the week.	yes

Date	Name	Email	Comment	Response	Sent
	cont		I am not clear on what the different colors mean for each of the options on the alternatives. Are the white ones preferred? Starting from the west, I would not like to see a roundabout at Hwy 36 and 66. I am not sure you can point me to a round about that sees this level of traffic - literally millions of vehicle trips a year. My experience with roundabouts is that the street with the majority of traffic tends to dominate the circle, not yielding to others in the lesser used entrances. At this intersection, with a lot of traffic coming from 3 directions, including a lot of semi trucks, rv's and fifth wheels, I think it would lead to a bit of chaos, especially if that roundabout had two lanes, which it would likely need for those turning south onto 36 for instance heading westbound on 66. The one strange item currently here is that traffic heading east and turning south onto Hwy 36 must yield to other traffic. What this leads to is traffic heading east at 55 mph, must stop to let a vehicle turn left from a dead stop across the intersection. Most of the time we don't, which can lead to incidents. I think the yield should be for when the light is green for traffic coming out of Highland Drive, or when the left turn light on eastbound 66 is green arrow. When the light is green for eastbound traffic, I don't think we should have to yield for someone waiting to turn left. I'm sure this all sounds confusing. A picture, or a drive there, is worth a 1000 words. Definitely a high need for bicycle shoulders between Hwy. 36 intersection west, until they reappear.		
	cont		Highland Drive - no action. While there may be some minor development of this area, likely it would be more aesthetic in nature, and not result in an increase of traffic due to County zoning and nearly all of it nearby is protected County Open Space. I have never had an issue with folks turning into driveways. The wide shoulder allows cars to move over with minimal interference to traffic, other than slight slowing down. So I don't think action is required on those items. North 75th. I have a lot of experience at this intersection, at least in the direction of travel I do for commuting, plus driving daily during work. The biggest issue here, and which I don't see addressed in the alternatives, is that during the evening commute, the vast majority of traffic heads north on 75th, and turns right, heading east on 66. What this site needs is a longer right turn lane. As it is now, if 2 or 3 cars, are stopped to go straight, there is no room for what could be dozens of cars trying to turn east to get past them. This backs up the traffic until the light turns green. Airport road and 66 - no action, or perhaps a middle lane for cars turning left out of either side of hwy. Traffic is fairly minimal here. I don't feel strongly about other parts further east, other than widening it to four lanes between 287 and I-25. One more thing, get rid of the flashing left turn lane light at Pace St. heading east. There will never be development here, it is all County owned Open Space, with no development potential. Thanks for your time and opportunity to comment.		
9/17/2019	Ben Rodman	brodman@townoflyons.com	Post script: I note also that the bicycle network figure 3.6 has an error: Highway 36/66 from their juncture to McConnell absolutely does not have an existing bike lane… to the contrary it lacks a paved shoulder in many spots and has several choke points where the fog line is inches from the edge of the pavement. Hopefully this is an artifact of the map and isn't reflected in CDOT data.	Thanks Ben for noting this error. I have forwarded your comment to the appropriate person on the project team so he can research this and take action as needed.	yes
9/17/2019	Ben Rodman	brodman@townoflyons.com	I note that the survey for people unable to attend the input meetings is not available and wanted to bring to your attention. https://www.codot.gov/library/studies/co-66-pel	Ben – Thank you for your email. We are currently working on developing the survey and expect that is will go live Sept 26th, the day of the first open-house meeting. The information presented at the open house meetings will also be posted so those who are unable to attend can benefit from the information prior to completing the survey. Please check back at this time.	yes
9/24/2019	Jim Lytoon	jnlytton@comcast.net	We live at 2425 Willow Lane in Longmont. Our side yard abuts 66 and Willow Lane leading into our cul du sac is shielded by a fence that runs over 1000 feet abutting 66 as well. This fence has been maintained by a HOA for about 25 years and its primary purpose is to reduce road noise and provide privacy for the Westlake Manors neighborhood. It is our deep concern that a 4 or more lane Hwy. 66 will require elimination or reduced efficiency of our barrier and potentially reduce our property values. We are beginning discussions in the neighborhood and early sentiment is that should this project go forward that the fence be replaced by a state maintained 8 to 10 foot wall. This would significantly reduce the increased traffic noise and provide more safety and privacy to our community. The wall should run along Hwy 66 from Hover to Lake Park Drive. Please help us by advising us of the necessary means to elevate this as a priority.	Hello Jim, Thank you for taking the time to provide feedback on the SH 66 PEL. I appreciate the history of the fence that the HOA has maintained to help address noise concerns from SH 66. I have provided a link to the CDOT Noise Wall guidelines so that you have more information about how the decision to construct, or not construct, a noise wall is made. Noise Info (Specifically the Noise Analysis and Abatement Guidelines) - https://www.codot.gov/programs/environmental/noise	yes
9/24/2019	Christopher Grebe	cvongrebe@gmail.com	As accesses are being looked at, traffic types must be called into question. Bicycle traffic is a hazard throughout the county, but on highways it should be prohibited. This will have real safety and make the highway more visually appealing.	Hello Christopher - Thank you for taking the time to provide feedback on the SH 66 PEL. Bicycle and pedestrian use and safety along SH 66 is a component of the PEL. During the planning process, current conditions for bicycles have been identified and the team has worked to identify areas where infrastructure can be improved to increase safety and how this infrastructure is integrated with the overall road profile. However, this plan does not create bicycle policy for counties. I've also included a link to CDOT's bicycle and pedestrian program if you are interested in finding out more about this program. https://www.codot.gov/programs/bikeped	yes

Date	Name	Email	Comment	Response	Sent
9/25/2019	Jennifer Colangeli	junipergardening@yahoo.com	As a resident on the north side of 66 I am all too aware of congestion. Depending on the time of day, it is very difficult to pull onto 66, however, if the proposed solution is to add lanes to 66 it would then become close to impossible to both pull onto or cross 66. The other issue would be the noise effect this would have on our neighborhood. We are two streets removed and can hear the traffic during the high times. The increase more lanes will cause would not only impact our lives but would also have a property value impact as well. My daughter and I ride bikes to school every morning and in order to get to school we must cross over 66 to lake park. Needless to say, we wait most mornings for an opening and many of those openings tend to be risky. There is no underpass any where along 66 in our zone and the scary intersection at 66 and Hover sees more accidents than any where along 66. Not to mention there is no sidewalk along 66 to 95th that we are able to use to access. Congestion is definitely an issue at several times throughout the day, however widening the road will only bring along more devastating issues for those of us who live on the north side of 66. There really needs to be an underpass at some point along zone 2 for residents who commute. Trying to cross 66 with only 2 lanes is risky enough..... with more than 2 lanes it would be impossible. Thank you for your time reading my feedback and feel free to call with questions. I do hope that the residents who reside along the north side of 66 are considered in this planning process.	Hello Jennifer – Thank you for taking the time to comment and express your concerns. In regards to your concern of widening SH 66 , when a road is widened a number of improvements would also be made to improve the safety of that stretch. These could include the addition of turn lanes or restricted movements. Also, a number of bicycle and pedestrian facilities are also planned. The attached graphic shows where and the type of bike/ped improvement that is being considered.	yes
9/26/2019	Michael McDonald	michaelmcdonald1@yahoo.com	Dear Ladies and Gentlemen, First off this is just my opinion. I am only going to address the part of highway 66 near our current residence which is on the south side of McCall Lake near N. 63rd street to McCall Dr where it enters onto highway 66. We have heard numerous accidents and many resulting in death, which I know you are aware of. When driving on this road it becomes quit apparent as to why. At certain times of the day the line of cars seems to be over a mile long. There are a few main factors involved that I see; 1) When a car stops and attempts to turn left across the traffic. The vehicles behind the turning car illegally goes around it on the right shoulder where bicycle riding occurs, blind to the fact that bicycle are there. The car speed can be at 60mph or higher while making this maneuver. The vehicles following close behind, if not paying attention, have a tendency to rear end the car waiting to turn. Signs stating, passing on the right is illegal, may help. There is an abundance of bicycle riders and races on the roads in this area. An easy solution would be no left turns when heading West on highway 66 until a left turn lane at N. 63rd St was installed where cars can wait without being rear ended. There is plenty of land at this intersection. This would allow cars to cross highway 66 without a traffic signal to disrupt the flow of traffic in this area. It would continue to allow larger vehicles using 63rd to be able access the area without being caught in tight corners.	Hello Michael - Thank you for taking the time to comment and provide some of your observations. Increasing the safety along the project corridor is certainly a goal of the PEL and Access Control Plan; I will forward your feedback to the project team for consideration. Adding turn lanes, restricting movements (right turn in and right turn out only) and the addition of acceleration and deceleration lanes are all options that are being explored to increase safety and improve the efficient of traffic flow. I've provided a link to CDOT's Establishing Realistic Speed Limits that might help you understand how speed limits are set. https://www.codot.gov/library/Brochures/Establishing_Realistic_Speed_Limits_Brochure.pdf/view Also, thank you for sharing the story of your personal experience; it is always hard to hear about traffic related deaths.	yes
cont			2) Cars passing when someone is going slower, or when they are in a hurry. Near us, over the years, we have heard the death collisions of head-on accidents for just that reason. Here is just one example. While we were turning right, or east onto highway 66 from McCall Dr there was a car passing westbound on highway 66 in our lane, coming head on at us. It pulled back into its lane after it had entered a west bound no passing zone. The yellow line was on its side. We veered off onto the right shoulder to avoid the speeding head on. What that driver didn't know is that an accident had already occurred around the gentle curve and in a short distance a fire truck was in the middle of the road that he couldn't see! The whole road should be marked as no passing zone. 3) The speed of the highway is the other issue. As you are aware when a driver comes off of a fast highway there is a tendency to drive at a higher speed on the next road. At a distance from my location the freeway has an off ramp onto highway 66 and the higher speed starts there. By the time divers are past the intersections of town, the speed increases again along highway 66. It is not 60mph as posted but 70mph and up at times. It seems as if 10-15mph faster is acceptable when it is not. I would propose to lower the speed limit to 40mph in this accident prone area so when drivers are speeding they would not be exceeding the current speed limit of 60mph. If head on accidents occurs at 40mph the driver and passengers have a better chance of survival. My parents, along with my aunt and uncle were killed at 42 mph wearing seat belts according to the Washington State patrol. Please do your best to Save a Life!		
9/26/2019	Gilles Palarini	gogilles@yahoo.com	Re; project at Hwy 66 and 66th St, I am a resident on McCall Dr. and have heard about a proposition to add a traffic light at 66th St and Hwy 66 and also to close off McCall at Hwy 66, my comments are to the later I am in favor to the traffic light I am not and for several reasons, first due to stopping traffic a regular pattern during the day, thus the noise level would increase with each start of large trucks and others loud heavy vehicle which subsequently would increase their consumption of gas or others and therefore increase pollutants into the atmosphere, second, that having a traffic light there will drastically increase the flow of traffic on 66th St going south, thus at front of several of my neighbors where we had virtually no traffic prior and third I am concerned about increased traffic leading to pavement and if was to happen would certainly increase developments in our back yard, I have seen it happen before. Okay so what to do, I propose instead adding a turning lane if coming from Longmont, going west, a turning lane at McCall going west, thus making a left turn, and if coming from Lyons, having a left turning lane at 66th, this way you have 2 separate left turning lane at different point and hopefully it will slow down traffic which should be at 50MPH at this intersection, period! Thank you.		Yes

Date	Name	Email	Comment	Response	Sent
9/29/2019	Robert Touchberry	rtouchjr@gmail.com	CO66 needed to be 4-lane years ago due to RMNP and indian peaks traffic as well as the growing longmont area. I support your plan.	Hello Robert - Thank you for taking the time to provide feedback on the SH 66 PEL. Although your support for 4-lanes to RMNP and Indian Peaks Wilderness is beyond the scope of this plan, your support for 4-lanes has been noted.	yes
9/29/2019	Matt Muir	matt@c4community.org	My name is Matt and I work for https://www.c4community.org/. C4C is in agreement with Boulder County's Transportation Department regarding the SH 66 project. Specifically, widening SH 66 to four lanes between Longmont and US 36 is not warranted. Secondly, the bicycle path/frontage road combination proposed for the north side of the highway does not extend sufficiently to the east or west to really be usable, rather, its extents should be signalized intersections so that EB cyclists can safely access it at either end. The former poses a structural detriment to Boulder County's TMP. Consequently, not only is widening not indicated, instead it is contraindicated.	Hello Matt - Thank you for taking the time to provide your feedback. I have attached a document that shows all the current, existing and proposed bicycle and pedestrian infrastructure. We feel that the proposed items create a complete bike path that also increases the safety within the planning corridor. Regarding the sidening of SH 66 between the area in question, the project team is continuing discussions with Boulder County Transportation to ensure we have a common vision.	yes

Appendix H. Access Control Plan Documentation

The ACP documentation and associated appendices are available on CDOT's SH 66 website: https://www.codot.gov/library/studies/co-66-pel

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Appendix I. Right of Way Preservation Recommendations

This appendix includes a detailed mapbook showing right of way preservation recommendations.

A ZIP file package of digital files (DWG, KML, and GIS) is available for communities, developers, and stakeholders to view the ROW preservation footprint interactively.

Please download this package from CDOT's SH 66 website: https://www.codot.gov/library/studies/co-66-pel

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Legend

- Mile Points
- 1/10 Mile Points
- Proposed Footprint
- Parcel Boundary/ROW Boundary
- Parks/Open Space
- Municipal Boundary
- County Boundary

N

0 300 600 Feet

SH66 PEL - Roadway Field Map
Map Sheet 1

SH 66 Planning and Environmental Linkages Study

Legend

- Mile Points
- 1/10 Mile Points
- Proposed Footprint
- Parcel Boundary/ROW Boundary
- Parks/Open Space
- Municipal Boundary
- County Boundary

N

0 300 600 Feet

SH66 PEL - Roadway Field Map
Map Sheet 2

SH 66 Planning and Environmental Linkages Study

Legend

- Mile Points
- 1/10 Mile Points
- Proposed Footprint
- Parcel Boundary/ROW Boundary
- Parks/Open Space
- Municipal Boundary
- County Boundary

N

0 300 600 Feet

SH66 PEL - Roadway Field Map
Map Sheet 3

SH 66 Planning and Environmental Linkages Study

JAMES
OPEN SPACE

61ST ST

UTE HWY

66

MP 31

WESTERN MOBILE
OPEN SPACE

TOTEVE
OPEN SPACE

63RD ST

WESTERN MOBILE
OPEN SPACE

Legend

- Mile Points
- 1/10 Mile Points
- Proposed Footprint
- Parcel Boundary/ROW Boundary
- Parks/Open Space
- Municipal Boundary
- County Boundary

N

0 300 600 Feet

SH66 PEL - Roadway Field Map
Map Sheet 4

SH 66 Planning and Environmental Linkages Study

Legend

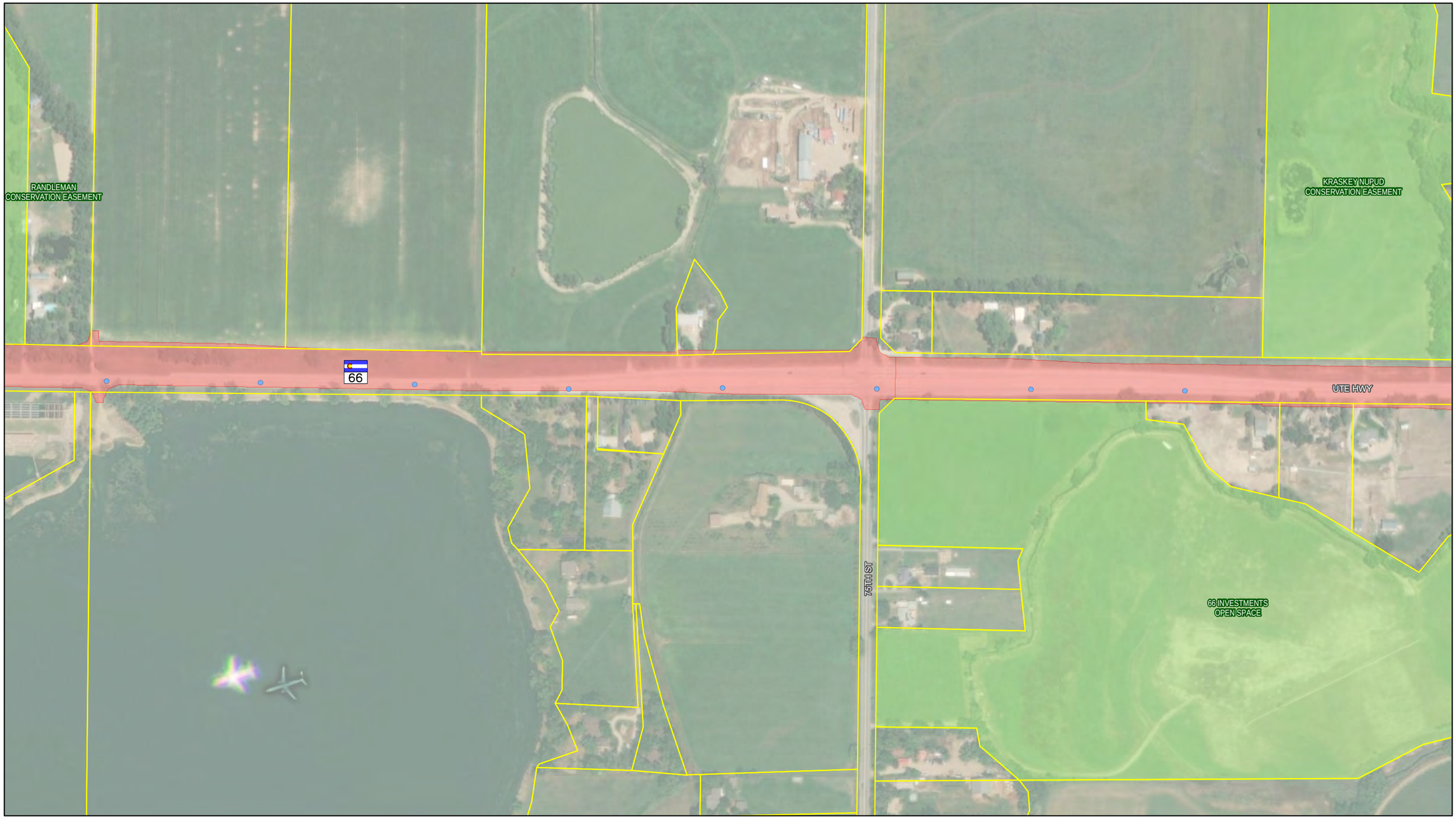
- Mile Points
- 1/10 Mile Points
- Proposed Footprint
- Parcel Boundary/ROW Boundary
- Parks/Open Space
- Municipal Boundary
- County Boundary

N

0 300 600 Feet

SH66 PEL - Roadway Field Map
Map Sheet 5

SH 66 Planning and Environmental Linkages Study



Legend

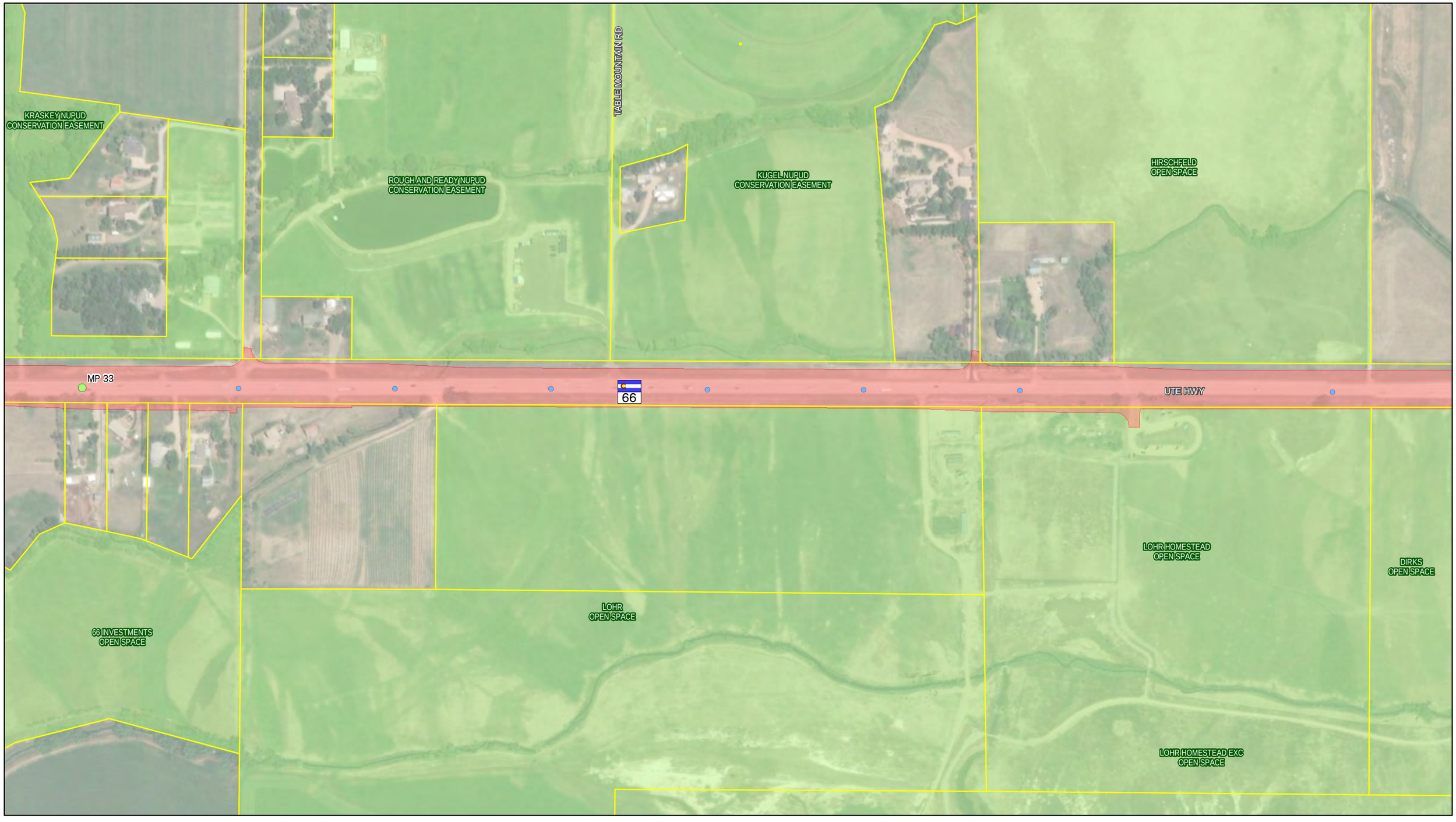
- Mile Points
- 1/10 Mile Points
- Proposed Footprint
- Parcel Boundary/ROW Boundary
- Parks/Open Space
- Municipal Boundary
- County Boundary

N

0 300 600 Feet

SH66 PEL - Roadway Field Map
Map Sheet 6

SH 66 Planning and Environmental Linkages Study



Legend

- Mile Points
- 1/10 Mile Points
- Proposed Footprint
- Parcel Boundary/ROW Boundary
- Parks/Open Space
- Municipal Boundary
- County Boundary

N

0 300 600 Feet

SH66 PEL - Roadway Field Map
Map Sheet 7

SH 66 Planning and Environmental Linkages Study

Legend

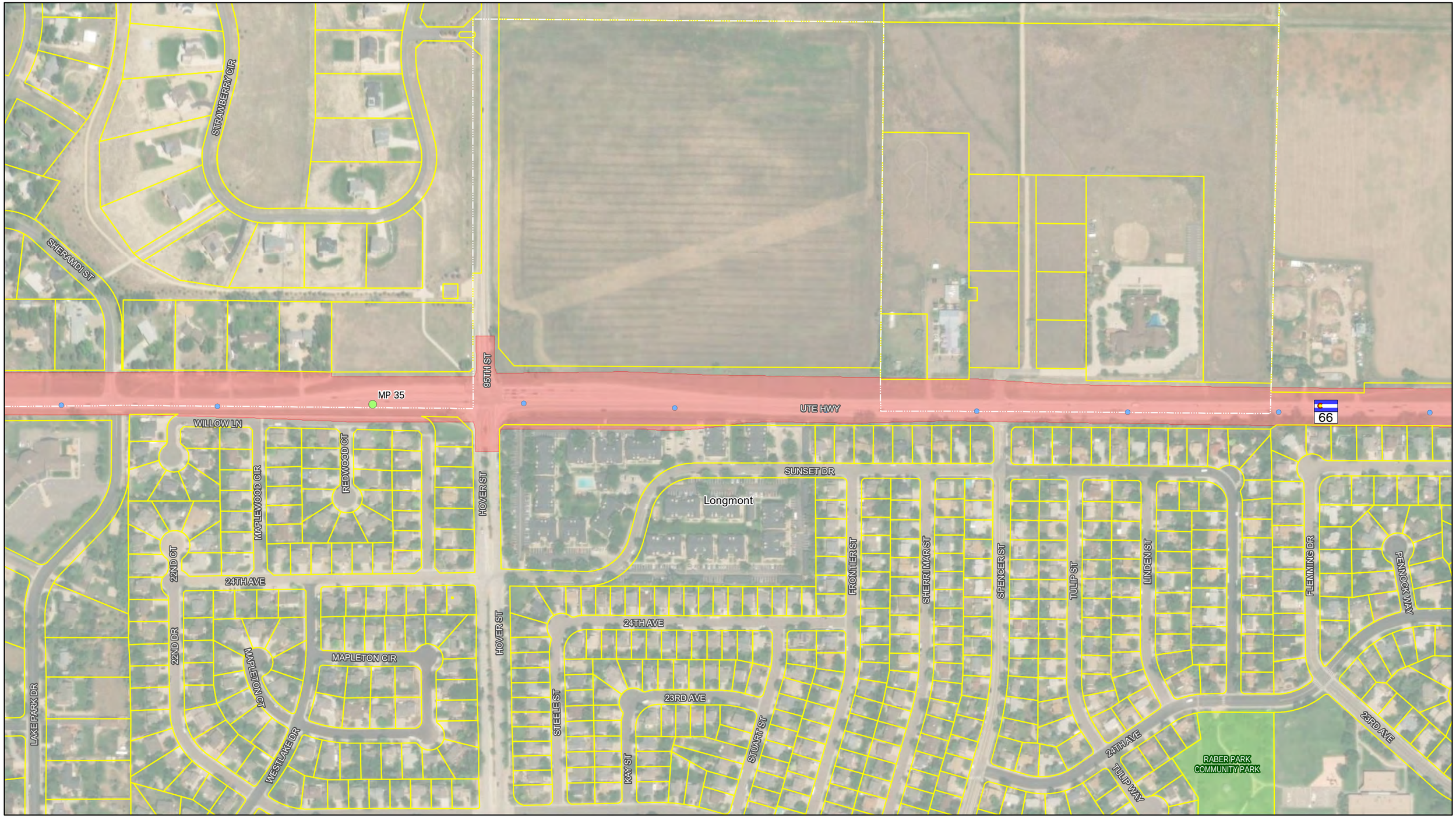
- Mile Points
- 1/10 Mile Points
- Proposed Footprint
- Parcel Boundary/ROW Boundary
- Parks/Open Space
- Municipal Boundary
- County Boundary

N

0 300 600 Feet

SH66 PEL - Roadway Field Map
Map Sheet 8

SH 66 Planning and Environmental Linkages Study



Legend

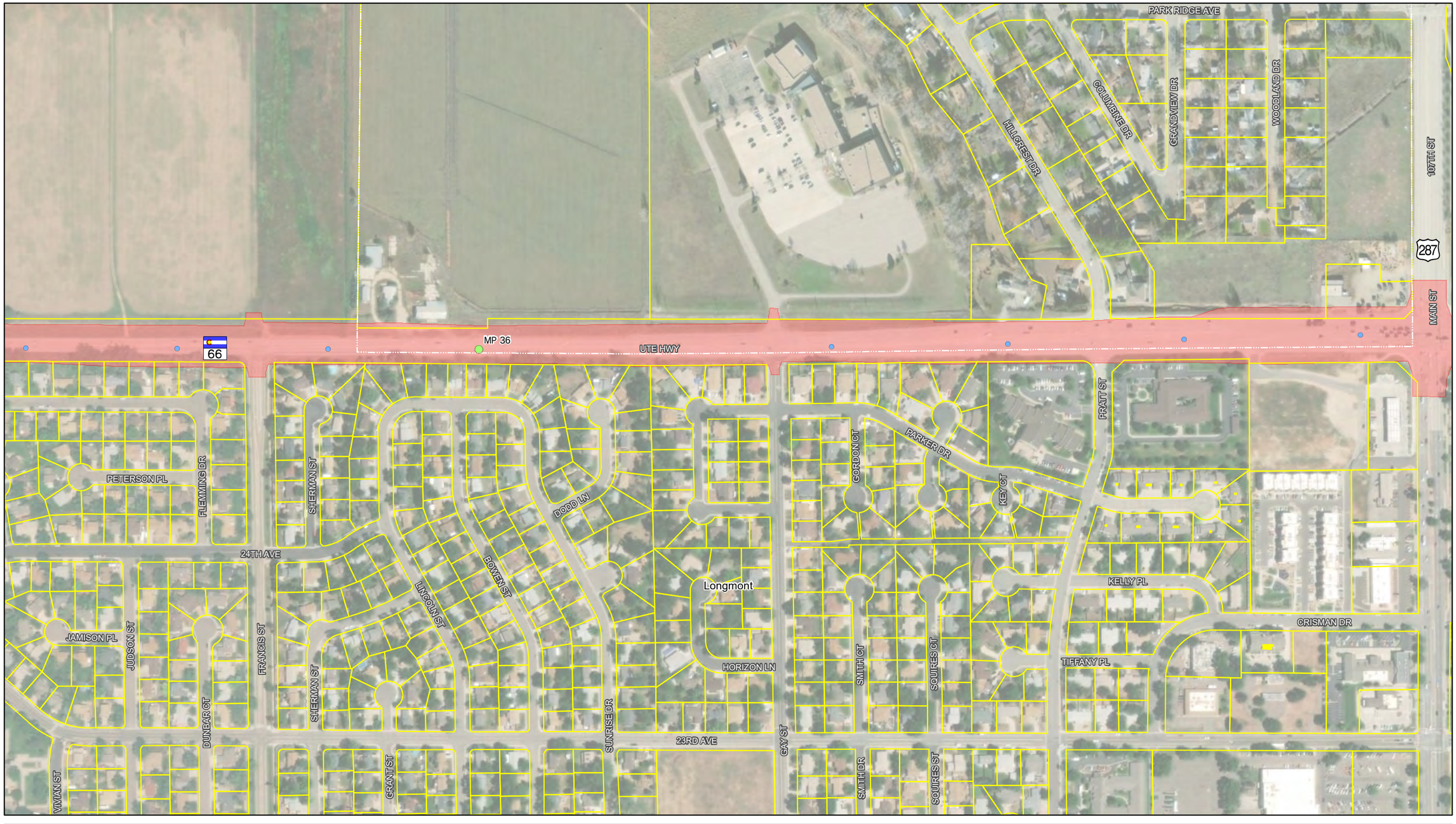
- Mile Points
- 1/10 Mile Points
- Proposed Footprint
- Parcel Boundary/ROW Boundary
- Parks/Open Space
- Municipal Boundary
- County Boundary

N

0 300 600 Feet

SH66 PEL - Roadway Field Map
Map Sheet 9

SH 66 Planning and Environmental Linkages Study



Legend

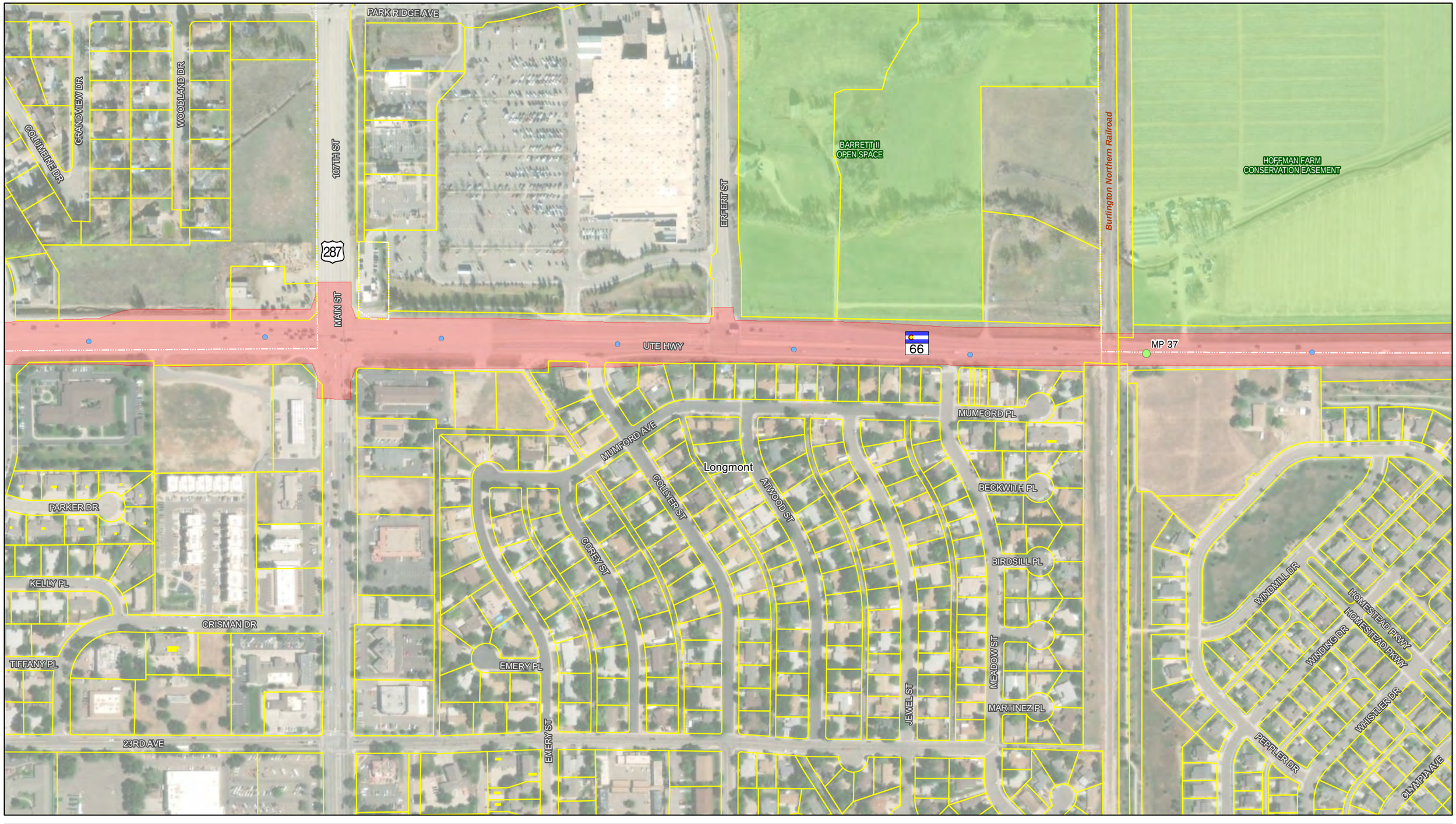
- Mile Points
- 1/10 Mile Points
- Proposed Footprint
- Parcel Boundary/ROW Boundary
- Parks/Open Space
- Municipal Boundary
- County Boundary

N

0 300 600 Feet

SH66 PEL - Roadway Field Map
Map Sheet 10

SH 66 Planning and Environmental Linkages Study



Legend

- Mile Points
- 1/10 Mile Points
- Proposed Footprint
- Parcel Boundary/ROW Boundary
- Parks/Open Space
- Municipal Boundary
- County Boundary

N

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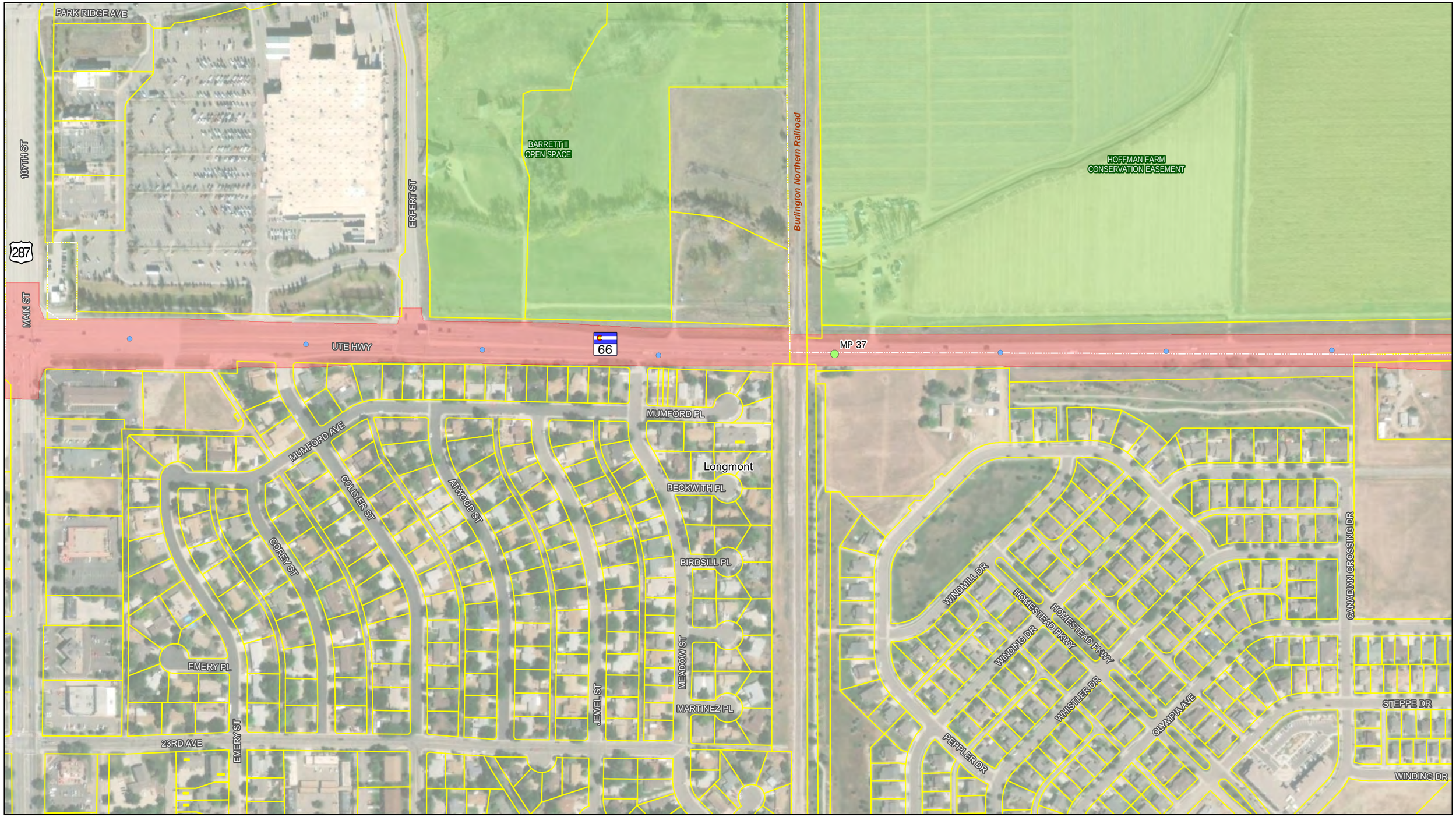
SH66 PEL - Roadway Field Map
Map Sheet 10a

SH 66 Planning and Environmental Linkages Study



Legend

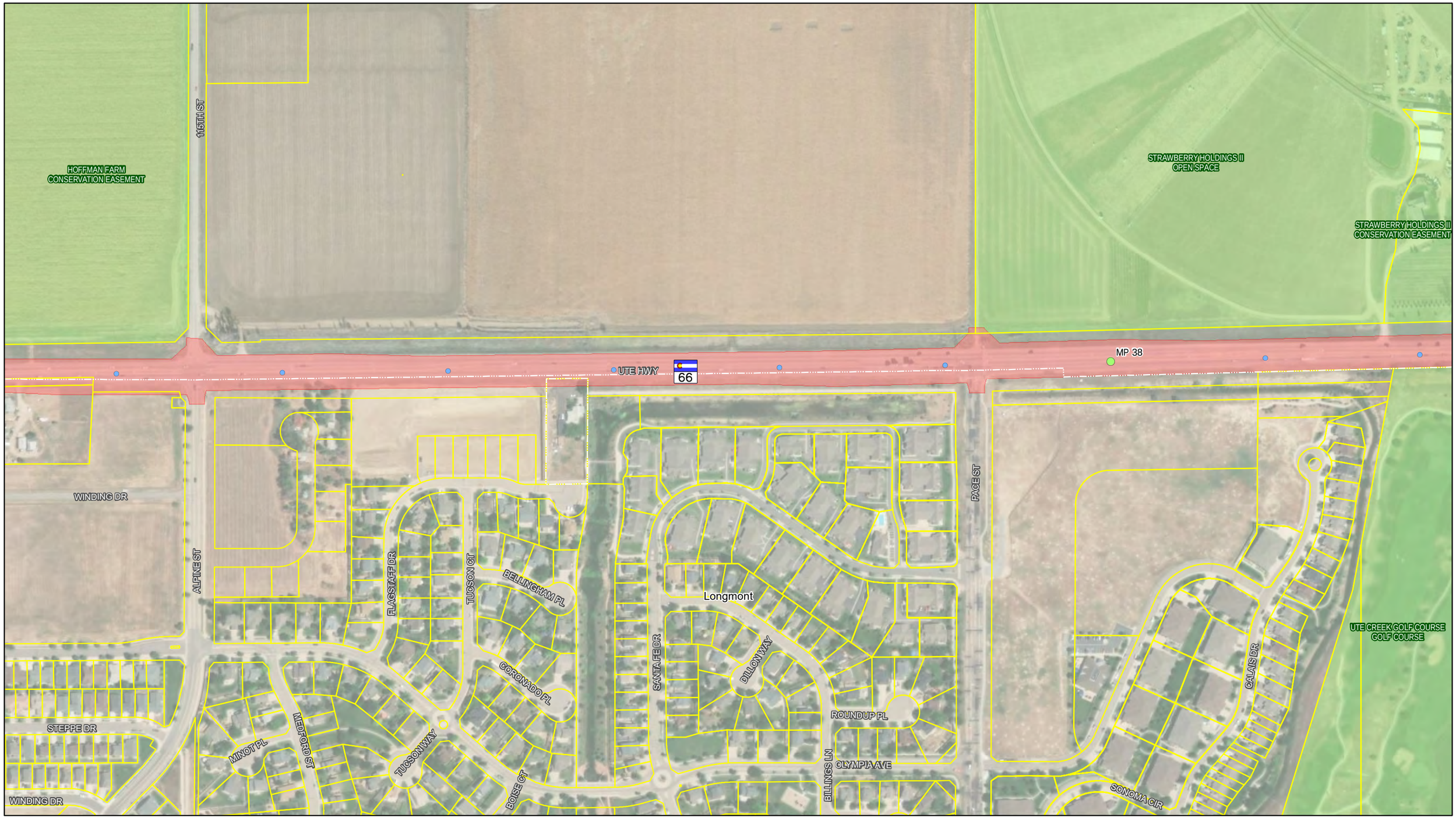
- Mile Points
- 1/10 Mile Points
- Proposed Footprint
- Parcel Boundary/ROW Boundary
- Parks/Open Space
- Municipal Boundary
- County Boundary

N

0 300 600 Feet

SH66 PEL - Roadway Field Map
Map Sheet 11

SH 66 Planning and Environmental Linkages Study



Legend

- Mile Points
- 1/10 Mile Points
- Proposed Footprint
- Parcel Boundary/ROW Boundary
- Parks/Open Space
- Municipal Boundary
- County Boundary

N

0 300 600 Feet

SH66 PEL - Roadway Field Map
Map Sheet 12

SH 66 Planning and Environmental Linkages Study

STRAWBERRY HOLDINGS II OPEN SPACE

STRAWBERRY HOLDINGS II CONSERVATION EASEMENT

LINDA VISTA DR

ROCK LN

UTE HWY

66

Boulder County

Weld County

66

MP 39

SUNDANCE DR

RAVENSWOOD CT

TYRRHENIAN DR

TYRRHENIAN CIR

UTE CREEK GOLF COURSE GOLF COURSE

ARAL DR

Longmont

PROVENANCE ST

SPOTSWOOD ST

TONKIN PL

CALILEE LN

CALAPAGOS PL

MONTGOMERY FARM CONSERVATION EASEMENT

MONTGOMERY FARM OPEN SPACE

EAST COUNTY LINE RD

Legend

- Mile Points
- 1/10 Mile Points
- Proposed Footprint
- Parcel Boundary/ROW Boundary
- Parks/Open Space
- Municipal Boundary
- County Boundary

N

0 300 600 Feet

SH66 PEL - Roadway Field Map

Map Sheet 13

SH 66 Planning and Environmental Linkages Study

Legend

- Mile Points
- 1/10 Mile Points
- Proposed Footprint
- Parcel Boundary/ROW Boundary
- Parks/Open Space
- Municipal Boundary
- County Boundary

N

0 300 600 Feet

SH66 PEL - Roadway Field Map
Map Sheet 14

SH 66 Planning and Environmental Linkages Study

Legend

- Mile Points
- 1/10 Mile Points
- Proposed Footprint
- Parcel Boundary/ROW Boundary
- Parks/Open Space
- Municipal Boundary
- County Boundary

N

0 300 600 Feet

SH66 PEL - Roadway Field Map
Map Sheet 15

SH 66 Planning and Environmental Linkages Study

Legend

- Mile Points
- 1/10 Mile Points
- Proposed Footprint
- Parcel Boundary/ROW Boundary
- Parks/Open Space
- Municipal Boundary
- County Boundary

N

0 300 600 Feet

SH66 PEL - Roadway Field Map
Map Sheet 16

SH 66 Planning and Environmental Linkages Study

Legend

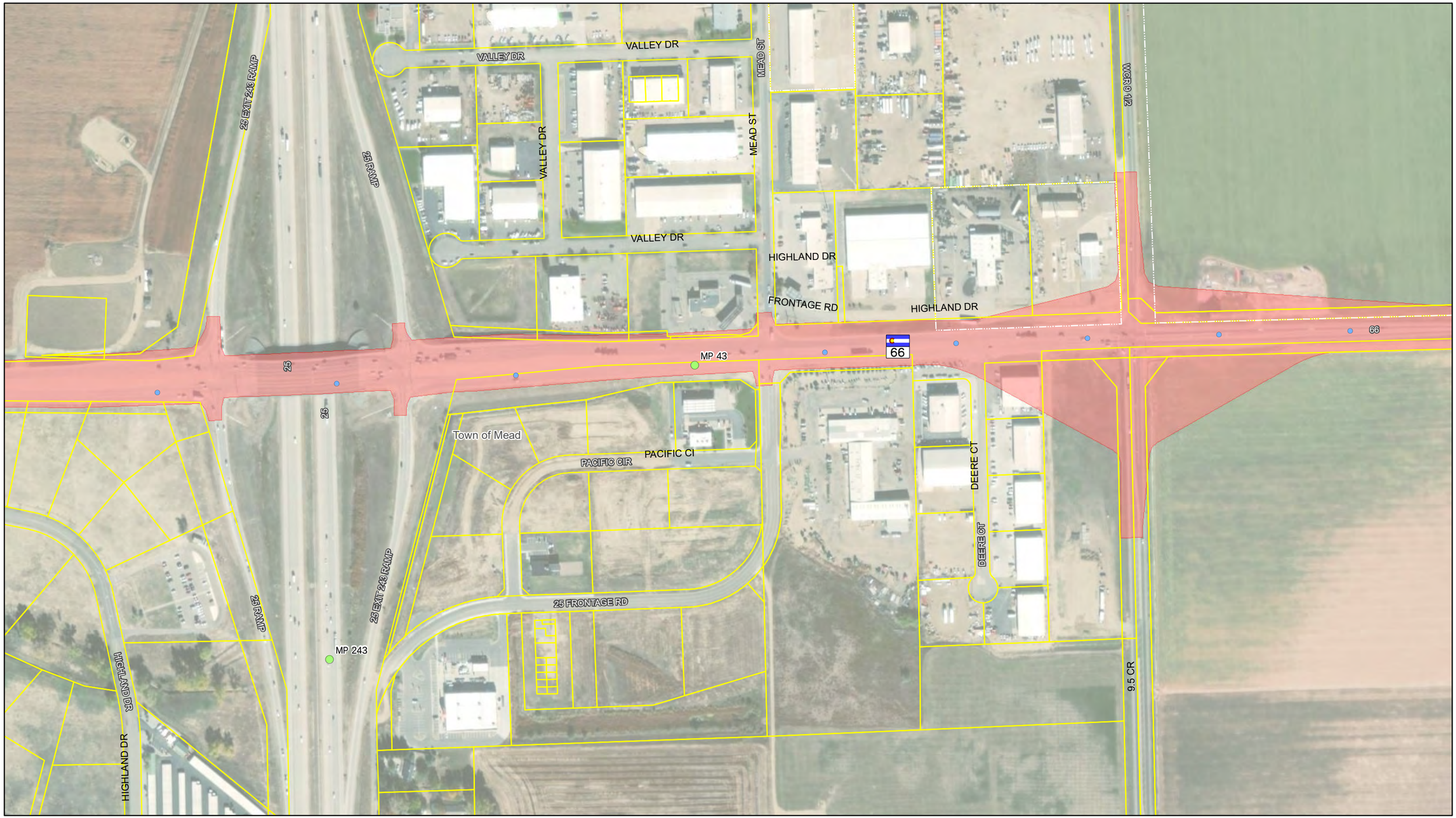
- Mile Points
- 1/10 Mile Points
- Proposed Footprint
- Parcel Boundary/ROW Boundary
- Parks/Open Space
- Municipal Boundary
- County Boundary

N

0 300 600 Feet

SH66 PEL - Roadway Field Map
Map Sheet 17

SH 66 Planning and Environmental Linkages Study



Legend

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- 1/10 Mile Points
- Proposed Footprint
- Parcel Boundary/ROW Boundary
- Parks/Open Space
- Municipal Boundary
- County Boundary

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SH66 PEL - Roadway Field Map
Map Sheet 18

SH 66 Planning and Environmental Linkages Study

Legend

- Mile Points
- 1/10 Mile Points
- Proposed Footprint
- Parcel Boundary/ROW Boundary
- Parks/Open Space
- Municipal Boundary
- County Boundary

N

0 300 600 Feet

SH66 PEL - Roadway Field Map
Map Sheet 19

SH 66 Planning and Environmental Linkages Study

Legend

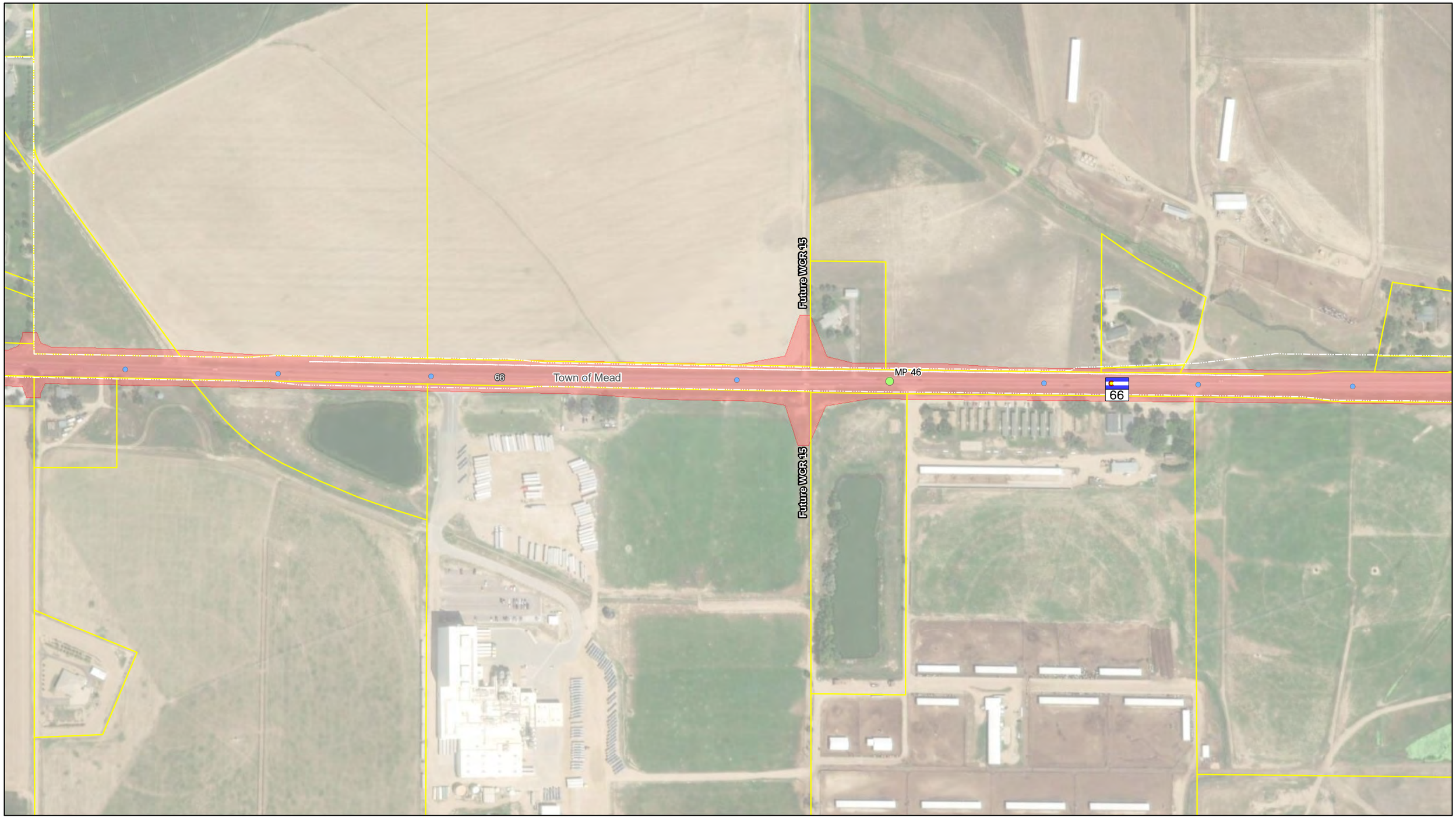
- Mile Points
- 1/10 Mile Points
- Proposed Footprint
- Parcel Boundary/ROW Boundary
- Parks/Open Space
- Municipal Boundary
- County Boundary

N

0 300 600 Feet

SH66 PEL - Roadway Field Map
Map Sheet 20

SH 66 Planning and Environmental Linkages Study



Legend

- Mile Points
- 1/10 Mile Points
- Proposed Footprint
- Parcel Boundary/ROW Boundary
- Parks/Open Space
- Municipal Boundary
- County Boundary

N

0 300 600 Feet

SH66 PEL - Roadway Field Map
Map Sheet 21

SH 66 Planning and Environmental Linkages Study

Legend

- Mile Points
- 1/10 Mile Points
- Proposed Footprint
- Parcel Boundary/ROW Boundary
- Parks/Open Space
- Municipal Boundary
- County Boundary

N

0 300 600 Feet

SH66 PEL - Roadway Field Map
Map Sheet 22

SH 66 Planning and Environmental Linkages Study

Legend

- Mile Points
- 1/10 Mile Points
- Proposed Footprint
- Parcel Boundary/ROW Boundary
- Parks/Open Space
- Municipal Boundary
- County Boundary

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SH66 PEL - Roadway Field Map
Map Sheet 23

SH 66 Planning and Environmental Linkages Study

Appendix J. Utilities Documentation

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GOODBEE & ASSOCIATES, INC.

MEMORANDUM

To: Jodie Snyder, FHU
From: Elissa Roselyn, Utility Task Manager
Date: 10/8/2019
RE: Major Utility Memo
SH-66 PEL Study

The purpose of this memorandum is to: 1) to document the utility investigation conducted for the SH-66 PEL Study, and 2) to provide recommendations for future utility coordination efforts to be undertaken as alternatives are selected and design proceeds.

1. Major Utility Investigation

The assessment conducted by Goodbee & Associates focused on utilities that are critical for service distribution or could be costly and/or complicated to relocate. These included:

- Electric Transmission Lines and substations;
- Irrigation Ditches;
- Water lines at least 24 inches in diameter;
- Sanitary sewers at least 18 inches in diameter;
- Storm sewers at least 36 inches in diameter;
- Gas transmission lines;
- Oil and gas facilities;
- Water and wastewater treatment plants;
- Critical communication lines; and
- Cell towers.

Information was obtained from utility owners, public domain data sources, and field observations in 2017 for the Corridor Conditions Report. In 2019, an attempt was made to determine any changes in existing utilities by checking these sources of information a second time for the PEL Report; no changes were identified. It should be noted that except for surface utilities which could be confirmed by visual observation in the field, most utility data obtained for underground utilities represents a general location.

In accordance with FHWA direction, a footprint that encompassed all feasible alternatives was established. The major utilities listed in the Corridor Conditions Report were compared with the footprint, and major utilities within the footprint were identified. Given the non-specific nature of the utility information obtained, underground utilities in public right-of-way along SH-66 were assumed to be in the footprint.

Table 1 lists major utilities within the footprint and **Figure 1** depicts the general location of these facilities. Utility companies with major utilities within the footprint include: AT&T, CDOT ITS/Zayo, CenturyLink (CL), City of Longmont, Comcast, DCP Midstream, Highland ditch, Level 3, Little Thompson Water District, Longmont Power and Communication (LPC), Longmont Supply Ditch, Magellan Midstream, MCI, Palmerton Consolidated Ditch, Platte River Power Authority (PRPA), Rough and Ready Ditch, Sinclair Pipeline, St. Vrain Sanitation District, St. Vrain Supply Channel, Tri-State Generation and Transmission, United Private Networks, United Power, Western Area Power Administration, Xcel Energy.

Additional utility companies were identified in the UNCC (Utility Notification Center of Colorado) CO 811 database search of the project footprint. Coordination with these utility companies provided the following results and resulted in the following:

- Utility records were provided, but no utilities (major or non-major) were located in the project footprint: St. Vrain Valley School District, TOP Operating, Town of Mead
- Utility records were provided, No major utilities were identified in the project footprint. Non-major utilities (i.e. smaller diameter lines and distribution lines) are present in the footprint: K2 Communications, The Villas at Pleasant Valley HOA, CDOT traffic/electric, Long's Peak Water, Poudre Valley REA
- No data was received from: Black Hills Energy, Town of Lyons, Lyons Communications

2. Recommendations for Next Steps

Goodbee & Associates recommends that further utility investigations be undertaken as alternatives are selected and designed. In particular:

- Re-run UNCC search for project footprint. Updated utility information should be obtained from utility owners, field observations, and other sources of information. This includes utility easement documentation. **Table 2** lists utility owner contact information at the time of this study.
- All utilities, not just major utilities, should be taken into account.
- It is assumed that this will be a subsurface utility engineering required project per C.R.S. 9-1.5. At the appropriate phase of design, Colorado 811 should be notified and Quality Level C, B, and A investigations should be completed to provide a risk based depiction of utilities that may be affected by the proposed project. These ASCE 38 investigations should include:
    - Surface utilities should be surveyed to obtain Quality Level C information.
    - Quality Level B designation to confirm the horizontal utility locations.
    - Quality Level A test holes should be completed where there is a potential conflict with a new gravity feed system or where confirmation of the vertical location is necessary to inform the design.
    - A sealed SUE plan deliverable will be required to document existing utilities in the project area.
- The design team should meet with utility owners to discuss utility impacts, relocation strategies, and evaluate design options to avoid impacts. Relocation cost responsibility and timing should also be discussed.
- Utility relocation plans showing existing utilities and proposed relocations should be developed at the FOR and AD levels.
- A Utility Specification should be developed to ensure that the scope, timing and responsible party for each utility work item is taken into consideration.
- CDOT's utility clearance process should be followed to ensure that all utility work is addressed. This includes the preparation and execution of utility agreements.

3. Attachments

- Table 1: Major Utilities within the project footprint
- Figure 1: Map of Major Utilities within the project footprint
- Table 2: Utility Contact List

SH 66 PEL STUDY

TABLE 1: MAJOR UTILITIES IDENTIFIED WITHIN PROJECT FOOTPRINT

Map ID	Section 1	Section 2	Section 3	Section 4	Section 5	Utility Company	Type	MP start	MP end	Description
W3	x					City of Longmont	water	28.0	28.4	24" raw water line north shoulder of SH-66; flows into Highland Ditch
C20	x					Unite Private Networks	communication	28.0	28.7	Overhead fiber south shoulder of SH-66 from Lyons to 53rd St.; With LPC between 53rd St. to Airport Rd.
W2	x					City of Longmont	water	28.0	32.1	24"-48" raw water line south shoulder of SH-66; crosses SH-66 near Water Filtration Plant
C3	x	x	x	x	x	CenturyLink	communication	28.0	38.9	Overhead and buried on north and/or south shoulder of SH-66; size/type unknown to WCR 19
D1	x					St. Vrain Supply Canal	ditch	28.15		Buried crossing east of Stone Canyon Dr.; owned by NCWCD
D4	x					Palmerton Consolidated Ditch	ditch	28.5	29.8	Open channel north of SH-66 between US-36 and 53rd St.; crosses SH-66 at US36; headgate at St. Vrain southwest of US-36/SH-66
D3	x					Highland Ditch	ditch	28.55		Buried crossing west of SH-66/US36
D5	x					Rough and Ready Ditch	ditch	28.6		North of SH-66 between US-36 and 53rd St.; crosses SH-66 west of SH-66/US36; St. Vrain Creek headgate southwest of SH-66/US-36
W5	x					City of Longmont	water	28.8	29.2	27" pipe north shoulder of SH-66 east from old Water Treatment Plant
W4	x					City of Longmont	water	28.8		30" raw water line crosses SH-66 near old Water Treatment Plant
W20	x					City of Longmont	water	29.5	29.8	27" pipe north shoulder of SH-66 west from 53rd St.
G1	x	x				Xcel Energy	gas	29.5	35.1	6" steel north shoulder of SH-66 between 51st St. and Hover Rd.; crosses SH-66 east of 51st St.
W18	x					City of Longmont	water	29.8	32.1	54" pipe north shoulder of SH-66
C13	x					Longmont Power and Communication	communication	29.8	34.1	Buried fiber north shoulder of SH-66 between 53rd St. and Airport Rd., crosses at Airport Rd.
E1	x					Tri-State Generation and Transmission	electric	29.8		Overhead 115kV transmission line crossing SH-66 on west side of 53rd St.
W9	x					City of Longmont	water	32.1	33.1	36" and 48" pipes north shoulder of SH-66
W10	x	x				City of Longmont	water	32.3	35.1	36" pipe south shoulder of SH-66
C24	x	x				Comcast	communication	32.5	36.3	Overhead fiber/cable north shoulder of SH-66 between 75th St. and Pratt. Buried crossings at North Shore, Lakepark, Hover, Francis, and Pratt. Overhead crossing at 75th St. On LPC poles.
D6	x					Palmerton Consolidated Ditch	ditch	32.5		Buried crossing west of 75th St.
W11	x					City of Longmont	water	32.6		36" pipe running south from SH-66 in 75th St.
W12	x	x				City of Longmont	water	33.1	37.4	36"-48" pipe north shoulder of SH-66
W13	x					City of Longmont	water	33.1		48" pipe running north from SH-66 west of Table Mountain Road
D8	x					Longmont Supply Ditch	ditch	33.2	33.6	Open channel along north side of SH-66 near Table Mountain Rd; crosses SH-66 west of Table Mountain Rd.
W14	x					City of Longmont	water	33.3		36" pipe crossing SH-66 near Table Mountain Road
G2	x					Xcel Energy	gas	33.3		16" steel crossing SH-66 west of Table Mountain
E2	x					Western Area Power Administration	electric	33.9	34.3	Overhead 115kV transmission line crossing SH-66 W of 87th-Airport Rd
D9		x				Longmont Supply Ditch	ditch	34.1	34.55	Open channel along south side of SH-66 between Airport Rd. and Harvard St.; crosses SH-66 at Airport Rd.
C4		x				CenturyLink	communication	34.3		Buried crossing on east side of North Shore Dr.
C1		x				AT&T	communication	35	38.9	Buried fiber in north shoulder 95th-115th, south shoulder 115th - County Line, crossings at Hover and County Line
C14		x				Longmont Power and Communication	communication	35.1	37	Buried/overhead fiber north/south shoulder of SH-66 between Hover and BNSF, crosses near Pratt, US-287 and BNSF.
C5		x				CenturyLink	communication	35.1		Buried crossing on west side Hover Rd.
D10		x				Rough and Ready Ditch	ditch	36.3	36.7	Open channel north of SH-66 between Pratt and US-287; crosses US-287 diagonally to southeast then open channel south of SH-66 to west of Collyer
C19		x				MCI	communication	36.5	37.4	Buried fiber along SH-66 between US287 and 115th St.; probably in shoulder north or south of SH-66; crosses SH-66 at US-287 or 115th St.
C6		x				CenturyLink	communication	36.5		Buried crossing on east side of US-287
C25		x				Comcast	communication	36.6	36.9	Buried fiber/cable south shoulder of SH-66 between Collyer and BNSF tracks
C18		x				Level 3/MCI/Zayo/Windstream	communication	36.6	37.4	Buried fiber duct runing north shoulder of SH-66 between west of Erfert St. and 115th St; crosses SH-66 west of Erfert St.
ST1		x				City of Longmont	storm sewer	36.7	37.7	54"-84" pipe north side SH-66; crossing SH-66 between Alpine and Pace
C7		x				CenturyLink	communication	37.4		Buried crossing on west side 115th St.
C15		x				Longmont Power and Communication	communication	37.9	38.3	Buried fiber south shoulder of SH-66 between Pace and west of Sundance
C26		x				Comcast	communication	37.9	38.9	Buried fiber/cable south shoulder of SH-66 between Pace and County Line Rd., crosses at County Line Rd.
C21		x	x			Unite Private Networks	communication	37.9	41.9	Buried/overhead fiber between Pace St. and WCR-7; crosses SH-66 west of Sundance Dr.; south shoulder of SH-66 west of crossing and north shoulder of SH-66 east of crossing; crosses SH-66 at WCR-7.
C8		x				CenturyLink	communication	37.9		Buried crossing on west side of Pace St.
C17			x			Level 3 Communications	communication	38.9	40.9	Buried/overhead fiber north shoulder of SH-66 between County Line Rd. and WCR-5; crosses SH-66 at County Line Rd. With Unite in part.
C9			x			CenturyLink	communication	38.9		Buried crossing on east side of County Line Rd.
C22			x			Platte River Power Authority	communication	39.9		Buried fiber east side of WCR-3 along alignment of electric transmission line

SH 66 PEL STUDY

TABLE 1: MAJOR UTILITIES IDENTIFIED WITHIN PROJECT FOOTPRINT

Map ID	Section 1	Section 2	Section 3	Section 4	Section 5	Utility Company	Type	MP start	MP end	Description
E4			x			Platte River Power Authority	electric	39.9		Overhead 115kV/230kV transmission line crossing SH-66 on the east side of WCR-3
E5			x			Platte River Power Authority	electric	40.3		Buried 115kV and 230kV electric transmission lines in 4 ft x 4 ft concrete encasement approx 8 ft deep crossing SH-66 between WCR-3 and WCR-5
S1			x			St. Vrain Sanitation District	sanitary sewer	41.25		21" sanitary crossing SH-66 on east side of drainage west of Great Western RR tracks
D11				x		Highland Ditch/Upper Highland Ditch	ditch	41.9	42.3	Buried crossing at WCR-7 and then open channel along south side of SH-66 for approx 2400 ft
C2				x		CDOT ITS/Zayo	communication	42.7	42.8	Buried fiber duct on east side of NB I-25 off ramp/on ramp; may be with CenturyLink
C10				x		CenturyLink	communication	42.8		Buried fiber on east side of NB I-25 off ramp/on ramp; may be with CDOT ITS and Zayo
W17				x		Little Thompson Water District	water	43.3		24" water line in WCR-9.5
P24				x		Magellan Midstream	petroleum/natural gas	43.65		8" pipeline crosses SH-66 between WCR-9.5 and WCR-11
S2					x	St. Vrain Sanitation District	sanitary sewer	44.9	45.5	18" sanitary north shoulder of SH-66 running 3000 ft east from WCR-13; crosses SH-66 3000 east of WCR-13
W1					x	Central Weld County Water District	water	44.9		36" pipe in WCR-13
C11					x	CenturyLink	communication	44.9		Buried crossing on west side WCR-13
E6					x	United Power	electric	44.9		Overhead 69kV transmission line crossing SH-66 on the east side WCR-13
G3					x	Xcel Energy	gas	44.9		2" steel north of SH-66 in WCR-13
P26					x	Sinclair Pipeline	petroleum/natural gas	46.0		6" and 10" pipelines crossing east of WCR-15; valve station approx 75 ft south of SH-66
C12					x	CenturyLink	communication	47.9		Buried crossing on west side WCR-19
P22					x	DCP Midstream	petroleum/natural gas	47.9		4" pipeline crossing SH-66 in WCR-19
E7					x	United Power	electric	47.9		Overhead 69kV transmission line crossing SH-66 on the east side WCR-19

Notes:

Major utilities defined as: electric transmission lines and substations; irrigation ditches; water lines at least 24 inches in diameter; sanitary sewers at least 18 inches in diameter; storm sewers at least 36 inches in diameter; gas transmission lines; oil and gas facilities; water and wastewater treatment plants; critical communications lines; and cell towers.

Based on best available information from utility owners, public domain data, and field observations.

No utilities in project footprint: St. Vrain Valley School District, TOP Operating, Town of Mead

No major utilities in project footprint: K2 Communications, The Villas at Pleasant Valley HOA, CDOT traffic/electric, Long's Peak Water, Poudre Valley REA

No data received from: Black Hills Energy, Town of Lyons, Lyons Communications

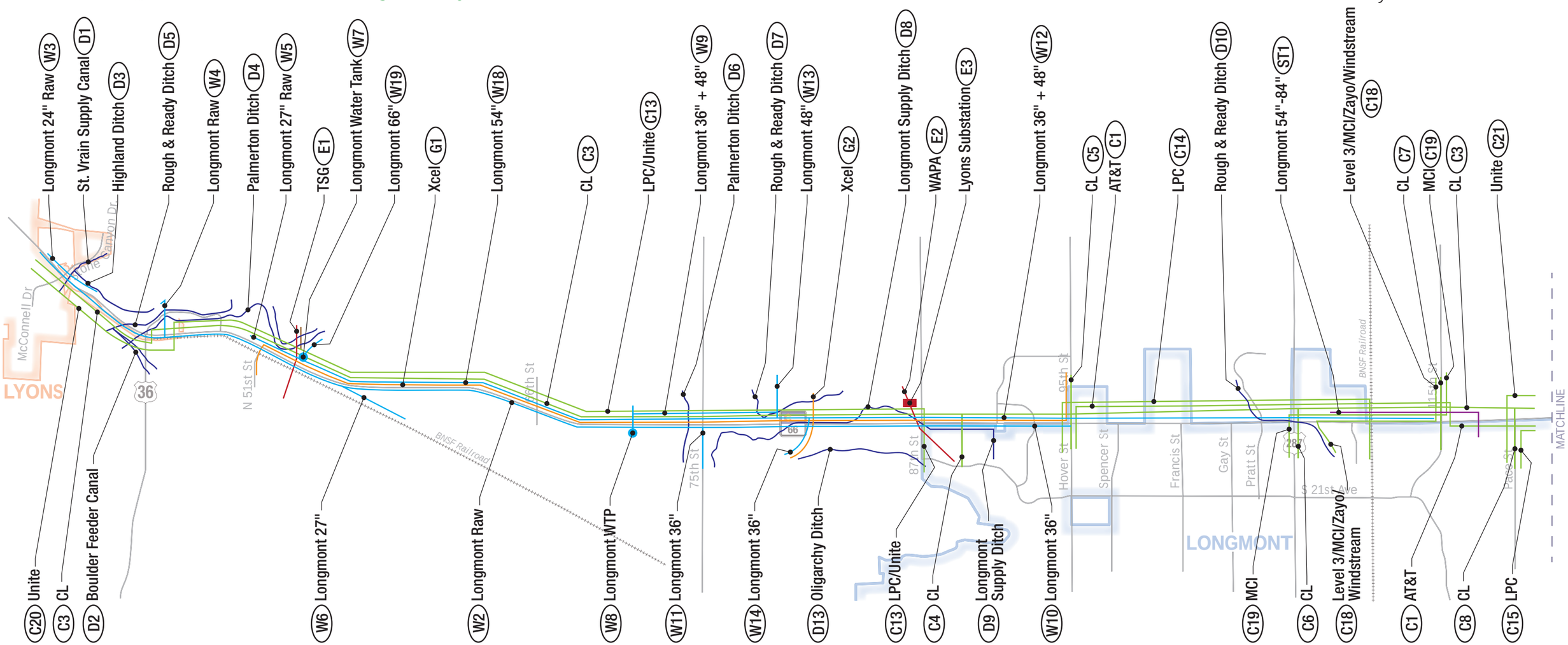
Section 1 - Stone Canyon Drive up to 87th St.
Section 2 - 87th St. up to County Line Rd.
Section 3 - County Line Rd. up to WCR-7
Section 4 - WCR-7 up to WCR-13
Section 5 - WCR 13 to WCR-19

Abbreviations (also used in Figure 1)

BNSF	Burlington Northern Santa Fe
CDOT ITS	Colorado Department of Transportation intelligent traffic systems
CL	CenturyLink
COT	City of Thornton
CWC	Central Weld County Water District
ELT	Electric Transmission
LPC	Longmont Power & Communications
NCWCD	Northern Colorado Water Conservancy District
OH	Overhead
PPRA	Platte River Power Authority
SH	State Highway
SVSD	St. Vrain Sanitation District
TSG	Tri-State Generation and Transmission
UG	Underground

SH 66 Planning and Environmental Linkages Study

Major Utilities



NOTE:
Data shown is schematic and based on field observations and data provided by utility owners and public sources.
Major utilities defined as:
Electric transmission lines and substations; Water lines at least 24 inches in diameter; Sanitary sewers at least 18 inches in diameter; Storm sewers at least 36 inches in diameter; Gas transmission lines; Oil and gas facilities; Water and wastewater plants; Critical telecommunication lines; and Cell towers

LEGEND

- = Oil/Gas Production Facilities
- = Electric Substation
- = Water Treatment Plant/Water Tank
- = Cell Tower
- = Water Line ≥24' Diameter
- = Sanitary Sewer ≥18" Diameter
- = Storm Sewer ≥36" Diameter
- = Gas Transmission
- = Petroleum/Natural Gas
- = Electric Transmission
- = Communication
- = Irrigation Ditches

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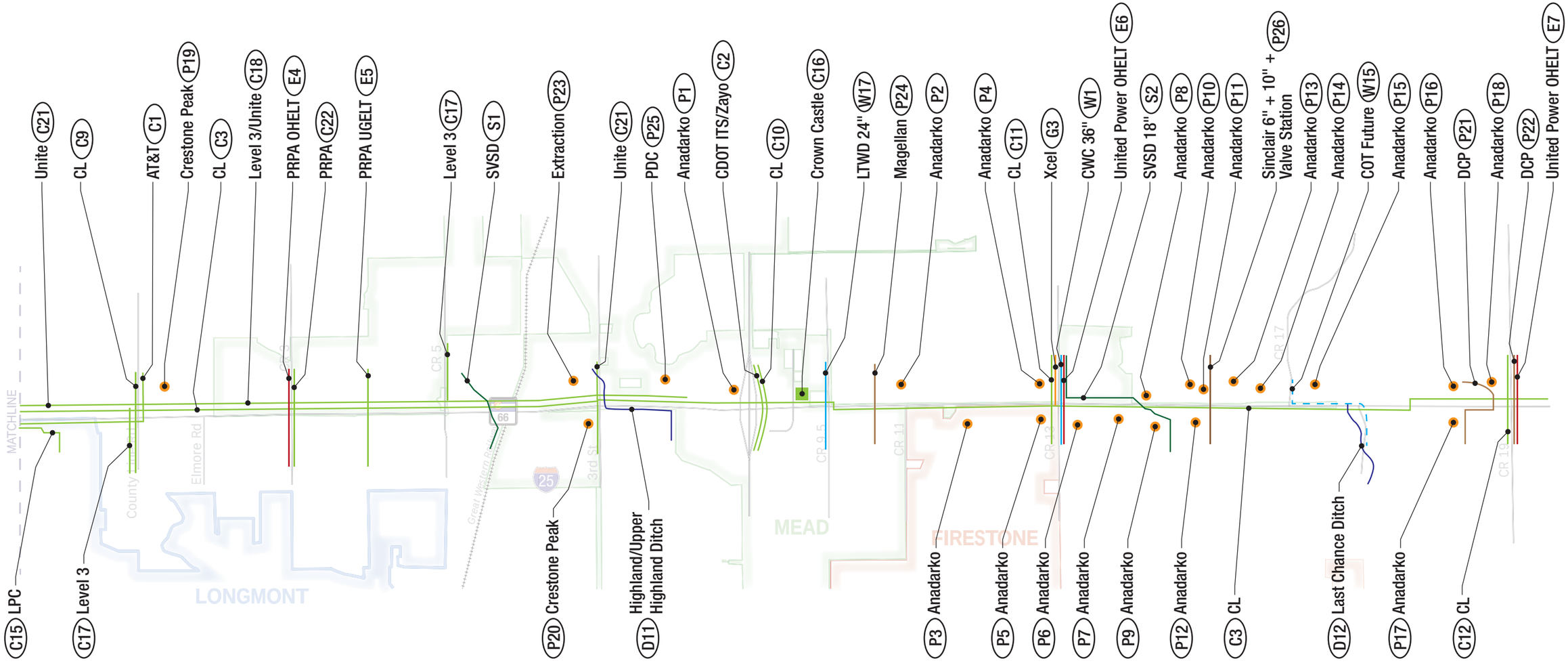
Major Utilities



NOTE:
Data shown is schematic and based on field observations and data provided by utility owners and public sources.
Major utilities defined as:
Electric transmission lines and substations; Water lines at least 24 inches in diameter; Sanitary sewers at least 18 inches in diameter; Storm sewers at least 36 inches in diameter; Gas transmission lines; Oil and gas facilities; Water and wastewater plants; Critical telecommunication lines; and Cell towers

LEGEND

- = Oil/Gas Production Facilities
- = Electric Substation
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- = Water Line ≥24' Diameter
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- = Storm Sewer ≥36" Diameter
- = Gas Transmission
- = Petroleum/Natural Gas
- = Electric Transmission
- = Communication
- = Irrigation Ditches

15-255 08.16.2017

TABLE 2: SH66 PEL UTILITY CONTACT LIST

Utility Company	Contact Person(s)	Telephone	Email
AT&T Local	Kelly Fails	720-746-8489	kf6543@att.com
Black Hills Energy	Regina Whitten Mark Arnold	720-210-1300 720-899-6967	
CDOT ITS	Michael Lopez	303.512.5817	michael.lopez@state.co.us
CDOT ITS	Jill Scott	303-512-5805	jill.scott@state.co.us
Central Weld County Water District	Cory Mesloh	970-352-1284	cory@cwcwd.com
CenturyLink	Carson Ortega	970-518-7515	carson.ortega@centurylink.com
City of Longmont (water/sanitary)	Jon Robb	303-651-8367	Jon.Robb@longmontcolorado.gov
Comcast	Bill Blair	720-490-3891	Bill_Blair@cable.comcast.com
Crestone Peak Resources	AJ Buffington	303-774-3933 office 970-739-5874 cell	adam.buffington@crestonepr.com
Crown Castle	TBD		
DCP Midstream	Lew Hagenlock	970-378-6351	ldhagenlock@dcpmidstream.com
Extraction Oil & Gas	Blaine Thingelstad	720-974-2016	bthingelstad@extractionog.com
Highland Ditch			highlandditch@aol.com
Kerr-McGee Anadarko	Brett Cavanaugh	970-219-9343	Brett_Cavanaugh@oxy.com
Last Chance Ditch	Bob Krugmire	303-658-2181	bkrugmir@cityofwestminster.us
Level 3 Communications/CenturyLink	Tom Longan	(303) 482-9822	thomas.longan@centuryLink.com
Little Thompson Water District	Amber Kauffman	970-532-2096	akauffman@ltwd.com
Longmont Power and Communication	Bruce Kelly	303-774-4461	Bruce.Kelly@longmontcolorado.gov
Longmont Supply Ditch	Kevin Boden	303-774-4516	
Long's Peak Water District	Gary Allen	303-776-3847	gary@lpwd.org
Lyons Communications LLC		303-823-5656	lyonstv@gmail.com
Magellan Midstream	Scott Metzger	303-929-8205	richard.metzger@magellanlp.com
MCI Verizon	David McAllister	801-301-0937	david.mcallister@verizon.com
Northern Water (St Vrain Supply Canal, Boulder Feeder Canal)	Scott Bartling		sbartling@northernwater.org
Oligarchy Ditch	Nelson Tipton	303-651-8376	nelson.tipton@longmontcolorado.gov
Paetec/Windstream	Vic Koth	Office: 720-529-7654 Mobile:720-347-7845	Victor.Koth@windstream.com
Palmerton Consolidated Ditch		303-651-1644	
PDC Energy	Brian DeRose	720-616-4365	bderose@srcenergy.com
Platte River Power Authority	Mark Curtis	970-229-5250	CurtisM@prpa.org
Poudre Valley Rural Electric Association	Matt Organ	(970) 282-6436	morgan@pvrea.com
Rough and Ready Ditch	Phillip Willis	303-776-6660	
Sinclair Pipeline	Ryan May	307-277-5090	rmay@sinclairoil.com
St. Vrain Sanitation District	Jason Crooks	303-776-9570	jason@stsan.com
TDS Telecom (formerly K2 Communications)	Bill Shaw	435-879-5220	william.shaw@tdstelecom.com
Town of Lyons		303-823-6622	VictoriaS@townoflyons.com
Town of Mead	Helen Migchelbrink	970-535-4477	hmigchelbrink@townofmead.org
Tri-State Generation & Transmission	Joe Gallik	303-254-3032	jgallik@tristategt.org
Unite Private Networks	Terri King	720-324-9703	terri.king@upnfiber.com
United Power	Randy Rule	303-637-1206	rrule@unitedpower.com
Western Area Power Administration	Roy Gearhardt	970-461-7333	rgearhar@wapa.gov
Xcel Energy - Electric & Gas	Pat Kreager	970-225-7840	Pat.Kreager@xcelenergy.com
Zayo	Steven Ward	720-828-8463	steven.ward@zayo.com
Zayo	James Black	719-216-8508	jamesr.black@zayo.com

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Appendix K. Physical Threats Risk and Resiliency Assessment

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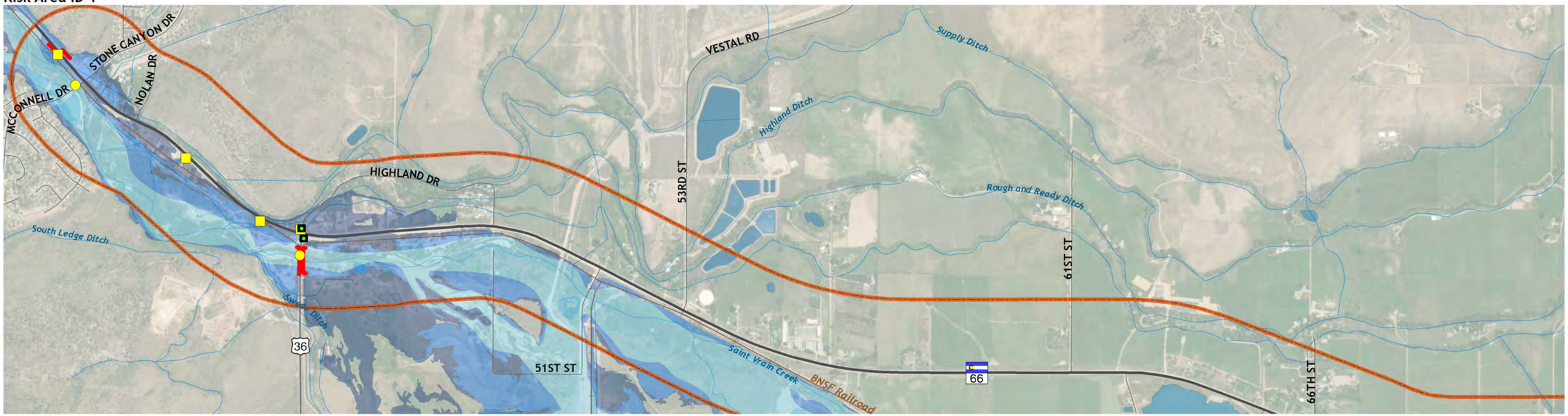
Risk Area ID 1



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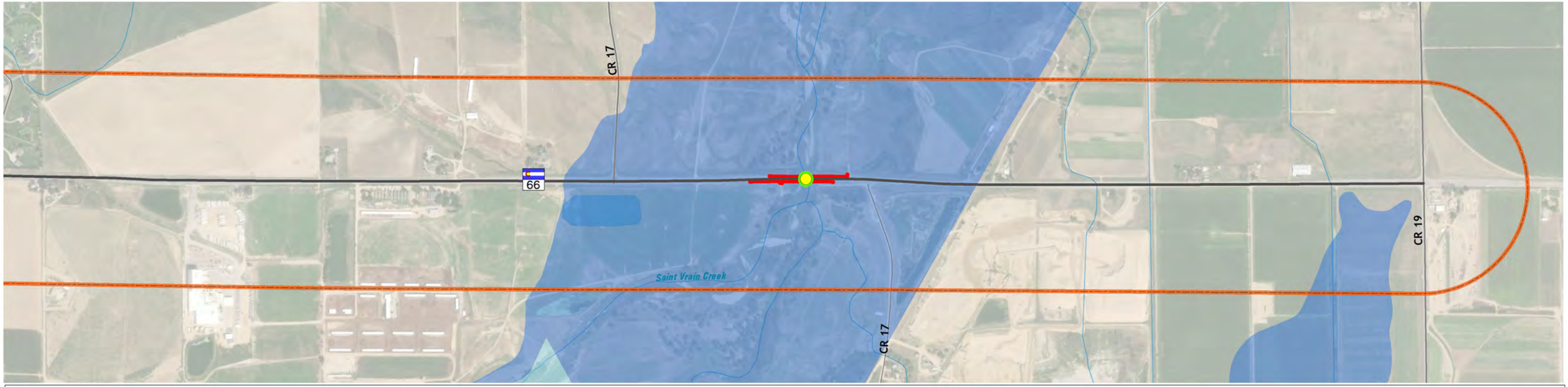


Legend

CDOT Assets

- Bridge
- Culvert
- Traffic Signal

- Guardrail
- SH 66 Corridor (Asphalt)

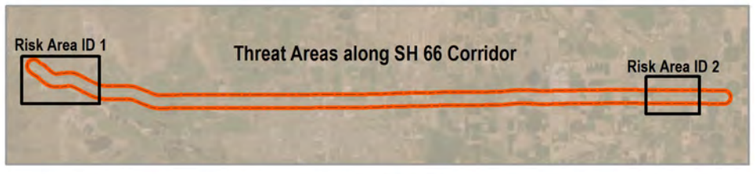
Potential Threat

- Critical Flood Scour Location

- Floodway
- 100-Year Floodplain
- 500-Year Floodplain

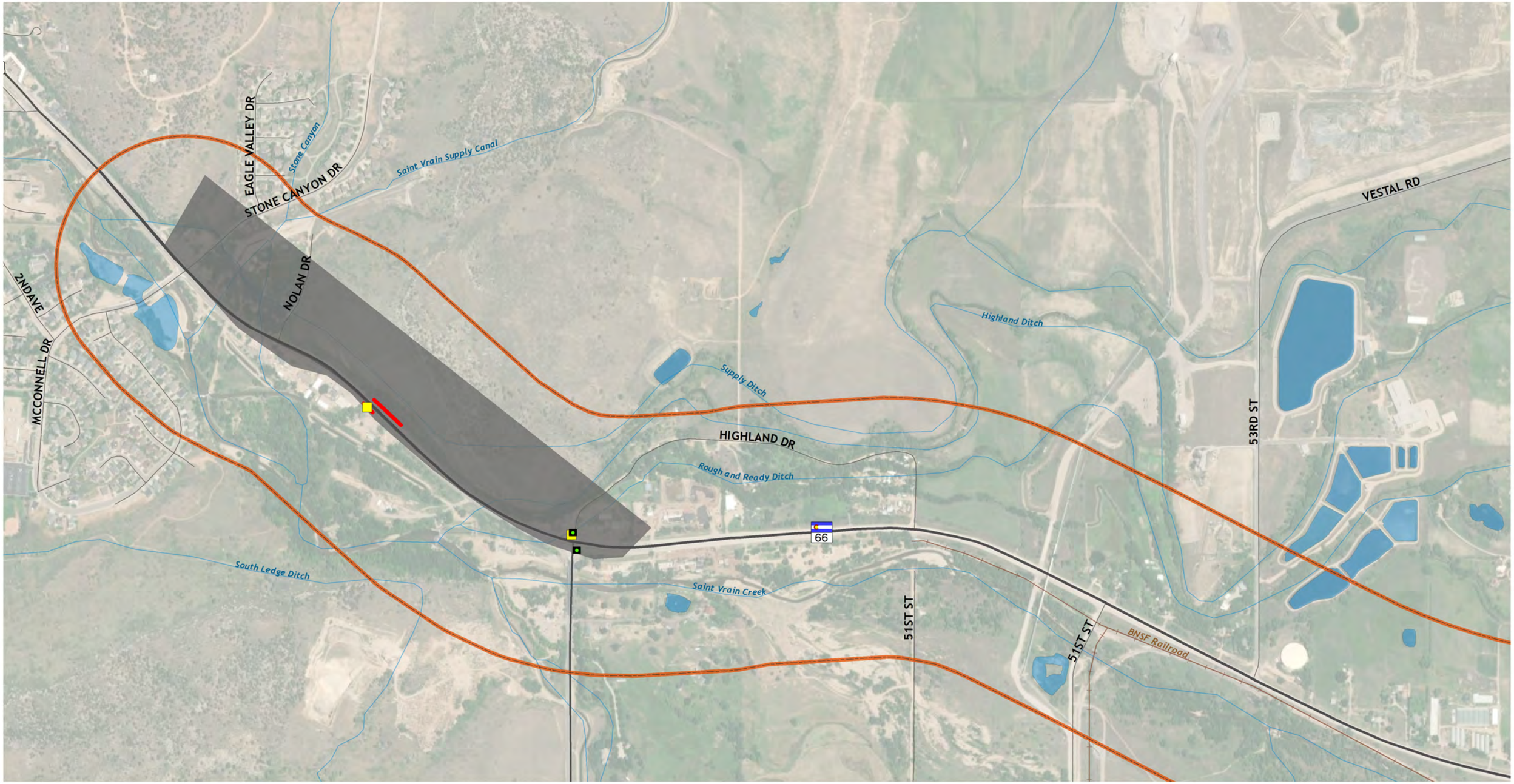
- Railroad
- Study Area

NORTH



SH 66 Planning and Environmental Linkages Study

Risk Area ID 3

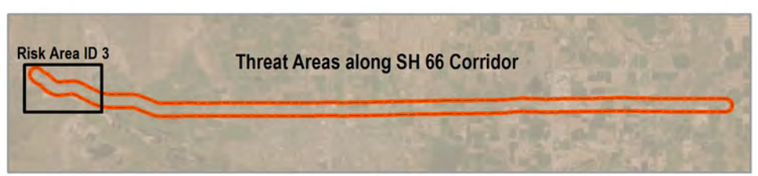


Legend

CDOT Assets
- Culvert
- Traffic Signal
- Guardrail
- SH 66 Corridor (Asphalt)

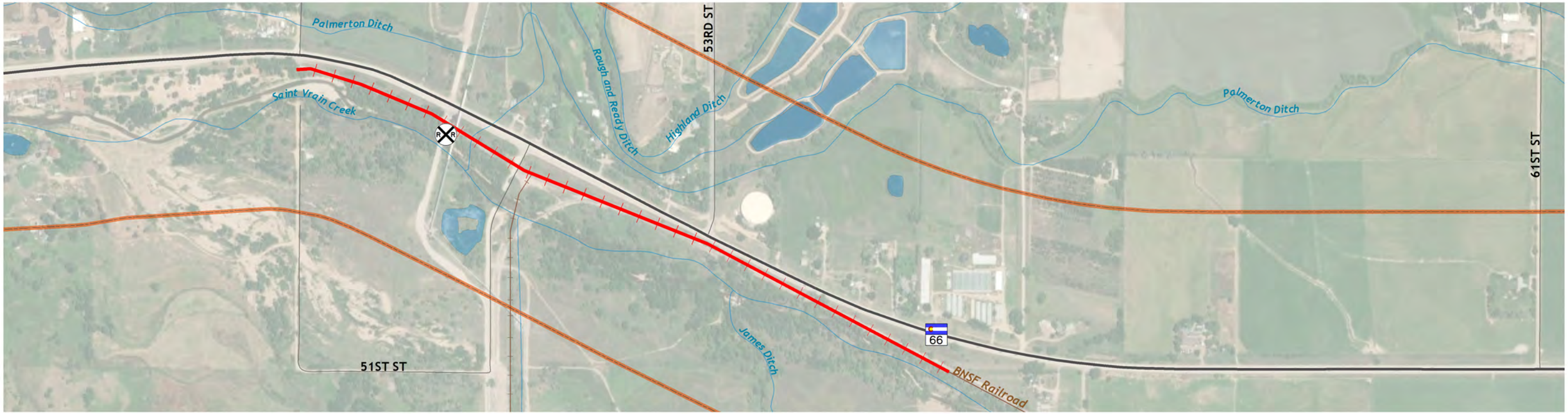
Potential Threat
- Avalanche/Debris Flow Landslide/Rockfall Zone
- Railroad
- Study Area

NORTH



SH 66 Planning and Environmental Linkages Study

Risk Area ID 4



Risk Area ID 5

Risk Area ID 6

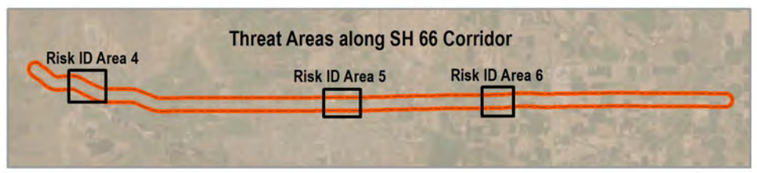
Legend

CDOT Assets
- Traffic Signal
- SH 66 Corridor (Asphalt)

Potential Threat
- At-grade Railroad Crossing
- Railroad

- Railroad
- Study Area

NORTH



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Risk Area ID 7

Legend

CDOT Assets

SH 66 Corridor (Ashphalt)

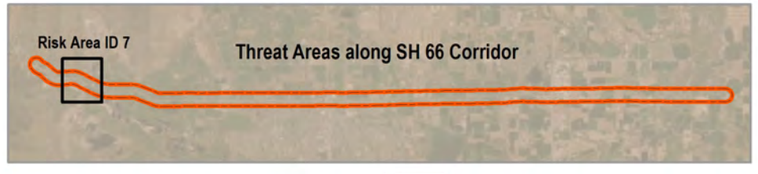
Potential Threat

Overhead Pipe

Railroad

Study Area

NORTH

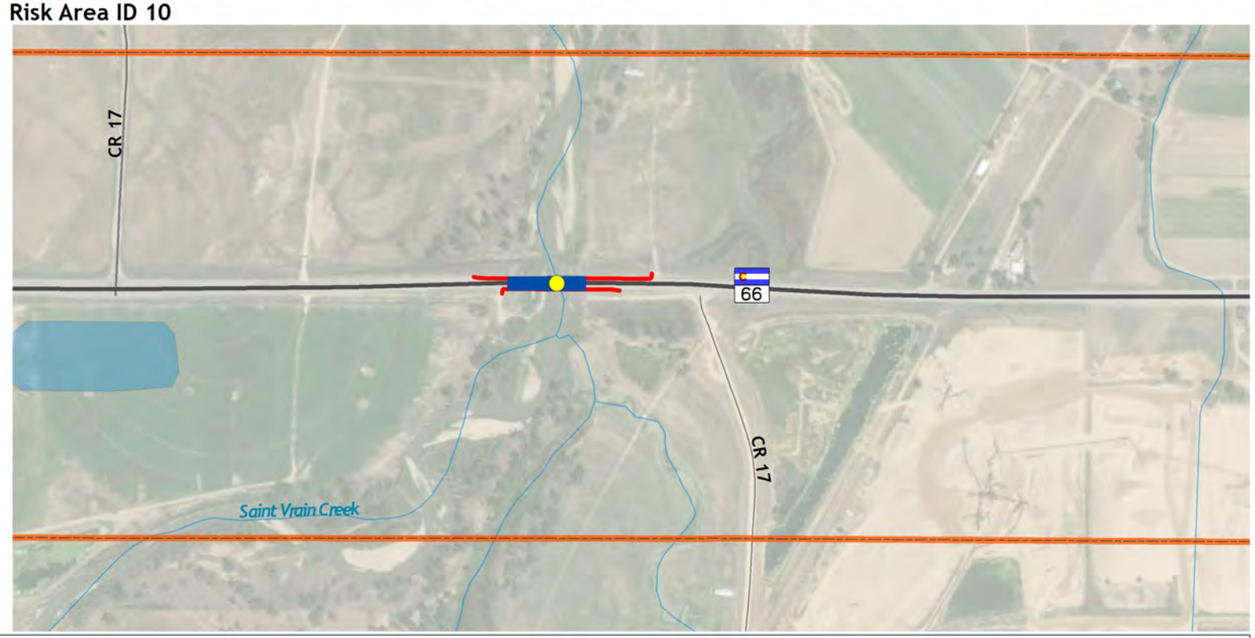


SH 66 Planning and Environmental Linkages Study

Risk Area ID 8

Risk Area ID 9

Risk Area ID 10



Legend

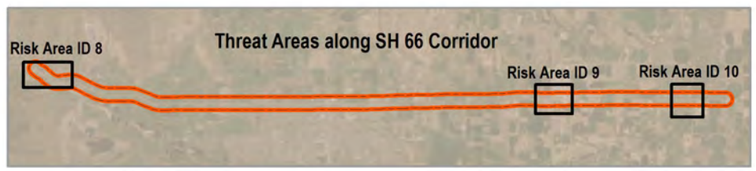
CDOT Assets
- Bridge
- Traffic Signal

- Guardrail
- SH 66 Corridor (Asphalt)

Potential Threat
- Bridge Strike Zone

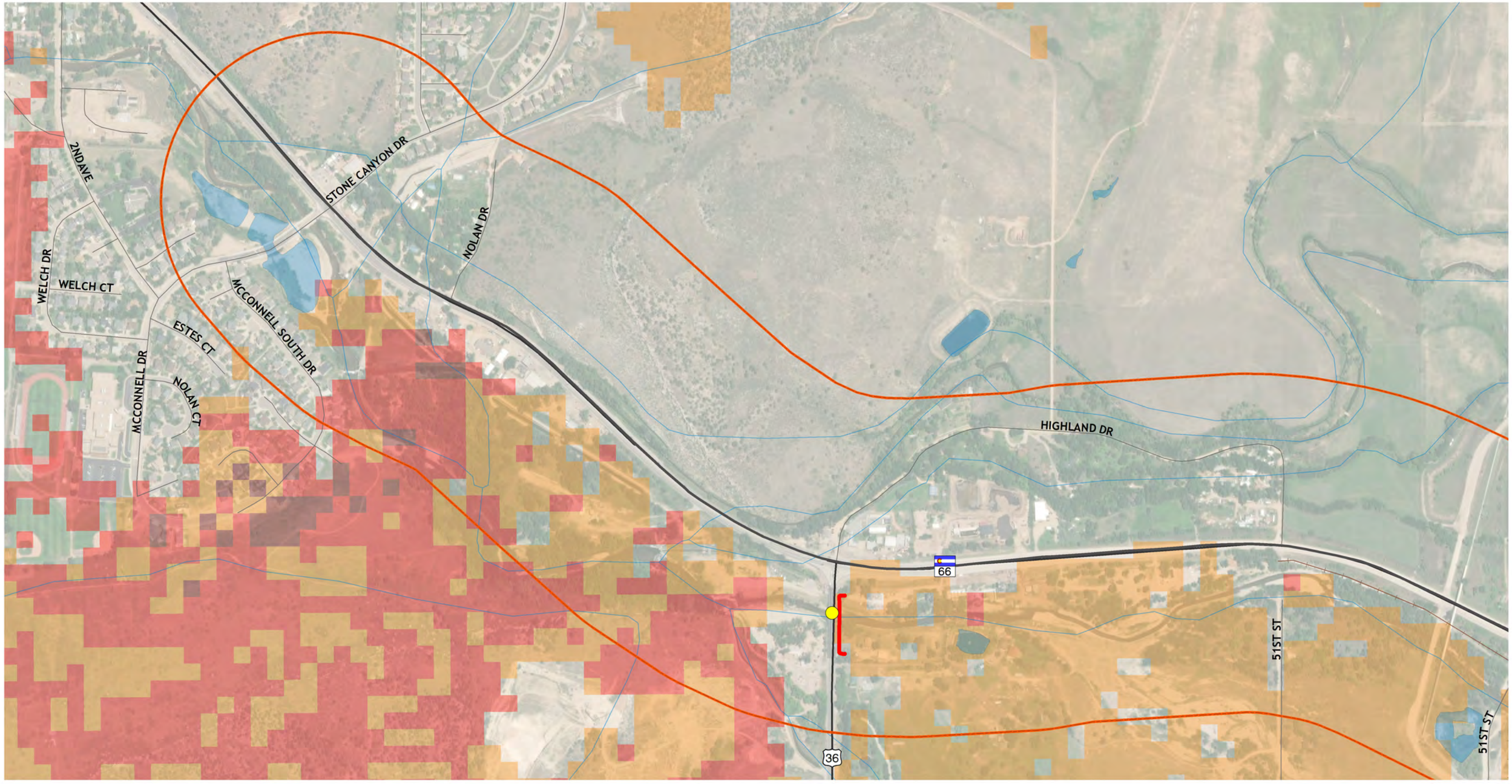
- Railroad
- Study Area

NORTH



SH 66 Planning and Environmental Linkages Study

Risk Area ID 11



Legend

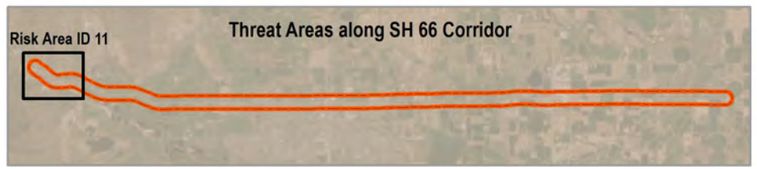
CDOT Assets

- Bridge
- Guardrail
- SH 66 Corridor (Asphalt)

Potential Threat

- Moderate Wildfire Risk
- High Wildfire Risk
- Highest Wildfire Risk
- Railroad
- Study Area

NORTH



SH 66 Planning and Environmental Linkages Study

PEL Risk Assessment Matrix - SH 66 PEL

	Infrastructure Costs	User Costs
low	0-$499,999	0-$99,999
moderate	$500,000-$999,999	$100,000-$199,999
high	$1,000,000+	$200,000+

Risk Area ID	Threat	MP	Assets in Risk Area	Description of Asset	Consequences		Vulnerability (conditional probability that the consequences estimated will be realized given that the threat has occurred)	Risk (consequence x Vulnerability x Threat)	Prioritization		Resilient Recommendations (includes social, economic, and environmental benefits)	Infrastructure Costs	User Costs
					Infrastructure Costs (cost to CDOT to replace asset)	User Costs (time and resources spent on out-of-direction travel)			Criticality (additional value to risk based on criticality maps)	Prioritization (priority based on risk and incorporating criticality)			
1	Flood Plains	-	Bridge LYMCCON-W.02-36	450' by 62' over St. Vrain Creek on McConnell Dr	High	Moderate	Moderate: > 1% Annual probability of loss	High	Moderate	Moderate	Ensure structures D-15-I, D-15-BE and D-15-BF, are built to withstand a 100 year flood event. Ensure culvert 036B021690BR is appropriately sized for a 100 year flood event and is kept free from debris. Establish redundant routes to offer additional evacuation potential. Establish signage to disseminate information in the event of a hazard	$ 15,467,000	$ 294,800
		21.8	Bridge D-15-I	121' by 49' CBGC over St Vrain Creek	High		Moderate: CBGC, Sufficiency Rating: 95.7 > 1% Annual probability of loss	High	Moderate				
		21.0	Culvert D-15-BE	22' CBC Supply Ditch	Low		Moderate: Twin CBC, Sufficiency Rating: 70 > 1% Annual probability of loss	Moderate	Moderate				
		21.4	Culvert D-15-BF	38' CBC at Highland Canal	Moderate		Low: Triple CBC, Sufficiency Rating: 85 > 1% Annual probability of loss	Moderate	Moderate				
		21.7	Culvert 036B021690BR	Culvert at Rough and Ready Ditch	Low		Moderate: Culvert, Sufficiency Rating: 66.8 > 1% Annual probability of loss	Moderate	Moderate				
		21.0	Guardrail at D-15-BE	195' of Type 3 Guardrail	Low		Moderate: Vulnerability dependent on structure D-15-BE	Moderate	Moderate				
		21.0	Guardrail at D-15-BE	120' of Type 3 Guardrail	Low		Moderate: Vulnerability dependent on structure D-15-BE	Moderate	Moderate				
		21.4	Guardrail at D-15-BF	60' of Type 3 Guardrail	Low		Low: Vulnerability dependent on structure D-15-BF	Low	Moderate				
		21.4	Guardrail at D-15-BF	290' of Type 3 Guardrail	Low		Low: Vulnerability dependent on structure D-15-BF	Low	Moderate				
		21.8	Guardrail at D-15-I	220' of Type 3 Guardrail	Low		Moderate: Vulnerability dependent on structure D-15-I	Moderate	Moderate				
		21.8	Guardrail at D-15-I	180' of Type 3 Guardrail	Low		Moderate: Vulnerability dependent on structure D-15-I	Moderate	Moderate				
		21.8	Traffic Signal 036B021770D	Signal at N Foothills Hwy	Low		Low: > 1% Annual probability of loss	Low	Moderate				
		21-22	Roadway Segment	890' of 86' wide Asphalt Roadway	Moderate		Moderate: > 1% Annual probability of loss	Moderate	Moderate				
		21-22	Roadway Segment	180' of 62' wide Asphalt Roadway	Low		Low: > 1% Annual probability of loss	Low	Moderate				
2	Flood Plains	46.8	Bridge D-17-FK (D-17-AK)	376' by 40' CSG over St Vrain Creek	High	Low	Moderate: CPGC, Sufficiency Rating: 97 > 1% Annual probability of loss	High	High	High	Ensure structure D-17-FK (D-17-AK), is built to withstand a 100 year flood event. Establish redundant routes to offer additional evacuation potential. Establish signage to disseminate information in the event of a hazard	$ 4,037,000	$ 42,900
		46.8	Guardrail at D-17-FK (D-17-AK)	450' of Type 3 Guardrail	Low		Moderate: Vulnerability dependent on structure D-17-FK (D-17-AK)	Moderate	High				
		46.8	Guardrail at D-17-FK (D-17-AK)	450' of Type 3 Guardrail	Low		Moderate: Vulnerability dependent on structure D-17-FK (D-17-AK)	Moderate	High				
		46-47	Roadway Segment	3900' of 46' wide Asphalt Roadway	High		Moderate: > 1% Annual probability of loss	High	High				
		21.4	Culvert D-15-BF	38' CBC Highland Canal	Moderate		Moderate: Would likely sustain some damage but would not require full replacement	Moderate	Moderate				
		21.7	Culvert 036B021690BR	Culvert at Rough and Ready Ditch	Low		Moderate: Would likely sustain some damage but would not require full replacement	Low	Moderate				
		21.8	Culvert 036B021760BR	Culvert under Highland Drive	Low		Moderate: Would likely sustain some damage but would not require full replacement	Low	Moderate		Regularly inspect to ensure slope stability and mitigate potential rock fall. Establish redundant		

PEL Risk Assessment Matrix - SH 66 PEL

	Infrastructure Costs	User Costs
low	0-$499,999	0-$99,999
moderate	$500,000-$999,999	$100,000-$199,999
high	$1,000,000+	$200,000+

Risk Area ID	Threat	MP	Assets in Risk Area	Description of Asset	Consequences		Vulnerability (conditional probability that the consequences estimated will be realized given that the threat has occurred)	Risk (consequence x Vulnerability x Threat)	Prioritization		Resilient Recommendations (includes social, economic, and environmental benefits)	Infrastructure Costs	User Costs
					Infrastructure Costs (cost to CDOT to replace asset)	**User Costs** (time and resources spent on out-of-direction travel)			**Criticality** (additional value to risk based on criticality maps)	**Prioritization** (priority based on risk and incorporating criticality)			
3	Debris Flow	21.4	Guardrail at D-15-BF	60' of Type 3 Guardrail	Low	Moderate	Low: Vulnerability dependent on structure D-15-BF	Low	Moderate	Moderate	~~Mitigate potential rock fall. Establish redundant~~ routes to offer additional evacuation potential. Establish signage to disseminate information in the event of a hazard	$ 6,139,000	$ 273,500
		21.4	Guardrail at D-15-BF	290' of Type 3 Guardrail	Low		Low: Vulnerability dependent on structure D-15-BF	Low	Moderate				
		21.8	Traffic Signal 036B021770B	Signal at N Foothills Hwy	Low		Moderate: Fully in debris flow zone	Low	Moderate				
		21.8	Traffic Signal 036B021770D	Signal at N Foothills Hwy	Low		Moderate: Fully in debris flow zone	Low	Moderate				
		20.0-20.8	Roadway Segment	4450' of 66' wide Asphalt Roadway	High		Low: Towards southern edge of debris flow zone	Moderate	Moderate				
4	At-grade Railroad Crossing	29.3-30.1	Roadway Segment	4400' of 56' wide Asphalt Roadway	High	Low	Low: Vulnerablility dependent upon railway maintenance and operations	Moderate	Moderate	Moderate	Coordinate with railway owners to ensure regular inspection and maintenance of tracks	$ 2,960,000	$ 60,800
5	At-grade Railroad Crossing	37.0	Guardrail at Rail Crossing	200' of Type 3 Guardrail	Low	Low	Low: Vulnerablility dependent upon railway maintenance and operations	Low	Moderate	Low	Coordinate with railway owners to ensure regular inspection and maintenance of tracks	$ 57,000	$ 37,800
		37.0	Roadway Segment	100' of 46' wide Asphalt Roadway	Low		Low: Vulnerablility dependent upon railway maintenance and operations	Low	Moderate				
6	At-grade Railroad Crossing	41.3	Guardrail at Rail Crossing	200' of Type 3 Guardrail	Low	Low	Low: Vulnerablility dependent upon railway maintenance and operations	Low	High	Moderate	Coordinate with railway owners to ensure regular inspection and maintenance of tracks	$ 203,000	$ 37,800
		41.3	Traffic Signal 066B041300C	Rail Crossing Signal near CR5	Low		Low: Vulnerablility dependent upon railway maintenance and operations	Low	High	Moderate			
		41.3	Traffic Signal 066B041300A	Rail Crossing Signal near CR5	Low		Low: Vulnerablility dependent upon railway maintenance and operations	Low	High	Moderate			
		41.3	Roadway Segment	100' of 46' wide Asphalt Roadway	Low		Low: Vulnerablility dependent upon railway maintenance and operations	Low	High	Moderate			
7	Overhead Pipe	29.5	Roadway Segment	10' of 68' wide Asphalt Roadway	Low	Low	Low: Vulnerablility dependent upon utility maintenance	Low	Moderate	Moderate	Coordinate with owners to ensure regular inspection and maintenance of overhead pipe	$ 9,000	$ 60,800
8	Bridge Strike Zone	-	Bridge LYMCCON-W.02-36	450' by 62' over St. Vrain Creek on McConnell Dr	High	Moderate	Moderate: Vulnerability dependent on vehicular loads and adherence to warning signs-moderate volume, no cross traffic	Moderate	Moderate	Moderate	Ensure proper signage, permitting and or escort services, if necessary, for roadway use by oversized loads	$ 11,831,000	$ 294,800
		21.8	Bridge D-15-I	121' by 49' CBGC over St Vrain Creek	High		Moderate: CBGC, Sufficiency Rating: 95.7	Moderate	Moderate				
		21.8	Guardrail at D-15-I	220' of Type 3 Guardrail	Low		Moderate: Vulnerability dependent on structure D-15-I	Moderate	Moderate				
		21.8	Guardrail at D-15-I	180' of Type 3 Guardrail	Low		Moderate: Vulnerability dependent on structure D-15-I	Moderate	Moderate				
		42.7	Bridge D-17-EP	490' by 120' CBGP over I-25	High		Moderate: CBGP, Sufficiency Rating: 96.9 Vulnerability dependent on vehicular loads and adherence to warning signs-high volume	High	High				

PEL Risk Assessment Matrix - SH 66 PEL

	Infrastructure Costs	User Costs
low	0-$499,999	0-$99,999
moderate	$500,000-$999,999	$100,000-$199,999
high	$1,000,000+	$200,000+

Risk Area ID	Threat	MP	Assets in Risk Area	Description of Asset	Consequences		Vulnerability (conditional probability that the consequences estimated will be realized given that the threat has occurred)	Risk (consequence x Vulnerability x Threat)	Prioritization		Resilient Recommendations (includes social, economic, and environmental benefits)	Infrastructure Costs	User Costs
					Infrastructure Costs (cost to CDOT to replace asset)	User Costs (time and resources spent on out-of-direction travel)			Criticality (additional value to risk based on criticality maps)	Prioritization (priority based on risk and incorporating criticality)			
9	Bridge Strike Zone	42.7	Guardrail at D-17-EP	190' of Type 3 Guardrail	Low	Low	Moderate: Vulnerability dependent on structure D-17-EP	Moderate	High	High	Ensure proper signage, permitting and or escort services, if necessary, for roadway use by oversized loads	$ 2,348,000	$ 91,600
		42.7	Guardrail at D-17-EP	150' of Type 3 Guardrail	Low		Moderate: Vulnerability dependent on structure D-17-EP	Moderate	High				
		42.7	Traffic Signal 066B042695B	Signal at SH 66/I-25	Low		Low: Vulnerablility dependent upon severity of strike	Low	High				
		42.7	Traffic Signal 025A243149C	Signal at SH 66/I-26	Low		Low: Vulnerablility dependent upon severity of strike	Low	High				
10	Bridge Strike Zone	46.8	Bridge D-17-FK (D-17-AK)	376' by 40' CSG over St Vrain Creek	High	Low	Low: Vulnerability dependent on vehicular loads and adherence to warning signs-moderate volume, no cross traffic	Moderate	High	High	Ensure proper signage, permitting and or escort services, if necessary, for roadway use by oversized loads	$ 1,880,000	$ 42,900
		46.8	Guardrail at D-17-FK (D-17-AK)	450' of Type 3 Guardrail	Low		Moderate: Vulnerability dependent on structure D-17-FK (D-17-AK)	Moderate	High				
		46.8	Guardrail at D-17-FK (D-17-AK)	450' of Type 3 Guardrail	Low		Moderate: Vulnerability dependent on structure D-17-FK (D-17-AK)	Moderate	High				
11	Wildfire Risk	21.8	Bridge D-15-I	121' by 49' CBGC over St Vrain Creek	High	Moderate	Moderate: CBGC, Sufficiency Rating: 95.7	Moderate	Moderate	Moderate	Establish redundant routes to offer additional evacuation potential. Establish signage to disseminate information in the event of a hazard	$ 2,629,000	$ 273,500
		21.8	Guardrail at D-15-I	220' of Type 3 Guardrail	Low		Moderate: Vulnerability dependent on structure D-15-I	Moderate	Moderate				
		21.8	Guardrail at D-15-I	180' of Type 3 Guardrail	Low		Moderate: Vulnerability dependent on structure D-15-I	Moderate	Moderate				
		28.8-28.9	Roadway Segment	300' of 86' wide Asphalt Roadway	Low		Moderate: Roadway at edge of moderate wildfire risk area	Moderate	Moderate				
		29.3-29.4	Roadway Segment	300' of 46' wide Asphalt Roadway	Low		Moderate: Roadway at edge of moderate wildfire risk area	Moderate	Moderate				
		29.4	Roadway Segment	100' of 46' wide Asphalt Roadway	Low		Moderate: Roadway at edge of moderate wildfire risk area	Moderate	Moderate				

Assumptions:

100' of guardrail at each side of the roadway will need to be replaced due to damage from railroad threats
50' of guardrail at each side of the roadway will need to be replaced due to damage from utility failure threats
10' width of pavement to be replaced due to utility failure threat
100' width of pavement to be replaced due to railroad threat
All associated components of bridge to be paid for as one bridge lump sum, including bridge rail; guardrail before and after bridge to be paid separately
Culverts: assumed no earthwork; no roadwork; if no available data from CDOT, assumed to be single cell CBC

	Infrastructure Costs	User Costs
min =	**$ 9,000**	**$ 37,800**
max =	**$ 15,467,000**	**$ 294,800**
med =	**$ 2,629,000**	**$ 60,800**
avg =	**$ 4,323,636**	**$ 137,382**

EXECUTIVE COST ESTIMATE SUMMARY SHEET

PROJECT PROFILE

Model Version 1 Rev 09
Last Update: **12-Mar-18**

Project Name	**SH-66 PEL Risk Assessment**
Project Number	**001**
Sub-Account Number	**XXXXX**
Project Description	**Risk Area ID# 1-Floodplain**
Project Work Type	**OTHER**
Estimator:	**M.A.S.**
Date:	7/30/2019

PROJECT LOCATION & CHARACTERISTICS

Route:	066B	**Begin MP:**	28.7	**End MP:**	51.4	**Length:**	22.7
CDOT Region:	4	**FIPS City:**	NONE	**FIPS County:**	Weld Co		
		FIPS City:	00000	**FIPS County:**	123		
Segment Mid-point	**RefPt** 40.040	**Latitude:**	40.2039	**Longitude:**	-105.0348		GOOGLE MAP LINK
Functional Classification:	Principal Arterial - Oth	**Urban-Rural Class:**	1 Rural			**Terrain:**	2
AADT:	19,000	**Truck ADT:**	270	**Tier Class:**	Tier 2	**Primary Surface:**	1 Asphalt

Design Maturity:	0 - Conceptual	**NEPA Action:**	Cat/Ex	**NEPA Status:**	Not Started
Project Delivery Method:	Design-Bid-Build	**Construction Start (MMM-YY)**	Jun-19	**Construction Duration (mo)**	36.0

REGION'S ESTIMATE

PROJECT CONSTRUCTION COSTS:

A MAJOR CONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION	QTY	UNIT	AVG. UNIT COST	COST
A-01	Earthwork	9,744	CY	$16.6	$162,000
A-02	Pavement & Bases	3,248	SY	$70.2	$228,000
A-03_repl	Bridge Replacements	33,829	DECK AREA (SF)	$129.0	$4,365,000
A-03_repa	Bridge Repairs	0	DECK AREA (SF)	$0.0	$0
A-03_wall	Walls	0	SF	$0.0	$0
A-03_culv	Major Culverts	180	LF	$4,900.0	$882,000
A-03_misc	Miscellaneous Structures	0	LS	$0.0	$0
A-04	Traffic / ITS	N/A	N/A	N/A	$54,000
A-05	Other Major Items	N/A	N/A	N/A	$29,000
		SUBTOTAL (A)			$5,720,000

B MINOR CONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION		UNIT	AVG. UNIT COST	COST
B-01	Removals/Resets (201, 202, 210)		% OF A	9.58%	$547,976
B-02	Environmental		% OF A	8.36%	$478,192
B-03	Structural		% OF A	1.42%	$81,224
B-04	Drainage/Utilities		% OF A	1.00%	$57,200
B-05	Roadway Appurtenances		% OF A	0.81%	$46,332
B-06	Mobilization (620, 625, 626)		% OF A	25.59%	$1,463,748
B-07	Construction Traffic Control / Detour		% OF A	35.23%	$2,015,156
B-08	Lighting & Electrical (613)		% OF A	0.00%	$0
B-09	Permanent Signing and Striping (614A & 627)		% OF A	1.90%	$108,680
B-10	Traffic Signalization & ITS (614B & 614C)		% OF A	0.00%	$0
B-11	Miscellaneous		% OF A	0.36%	$20,415
		SUBTOTAL (B)	% OF A	84.25%	$4,819,000
	CONTRUCTION BID ITEMS (A + B)	**CBI**	**% OF A**	**184.25%**	**$10,539,000**

68.1% of Base Cost

C FORCE ACCOUNTS & TSM&O

PCP Cat	ITEM DESCRIPTION		UNIT	AVG. UNIT COST	COST
C-01	F/A - General		% OF CBI	6.00%	$632,340
C-02	F/A - Minor Contract Revisions (MCR's)		% OF CBI	3.00%	$316,170
C-03	F/A - Project Communications		% OF CBI	0.19%	$20,059
C-04	TSM&O Traffic & Operations		% OF CBI	0.00%	$0
		SUBTOTAL (C)	% OF CBI	9.19%	$969,000
	CONSTRUCTION ITEMS (A + B + C)	**CI**	**% OF A**	**201.19%**	**$11,508,000**

74.4% of Base Cost

D CONSTRUCTION ENGINEERING & INDIRECTS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
D-01	Construction Engineering	% OF CI	10.95%	$1,260,126
D-02	Construction Indirects	% OF CI	9.50%	$1,093,260
	SUBTOTAL (D)	% OF CI	20.45%	$2,353,000
	PROJECT CONSTRUCTION BUDGET (A + B + C + D)			**$13,861,000**

89.6% of Base Cost

PROJECT PRECONSTRUCTION COSTS:

E PRECONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
E-01	Right-of-Way [Phase R]	% OF CI	0.00%	$0
E-02	Utilities + Railroad Work [Phase U]	% OF CI	0.00%	$0
E-03	Design & Engineering [Phase D]	% OF CI	12.00%	$1,380,960
E-03.1	Subsurface Utility Engineering (SUE) Budget	% OF CI	0.75%	$86,310
E-03.2	Transportation Systems Management & Operation (TSM&O) Budget	% OF CI	0.00%	$0
E-04	Environmental (NEPA) [Phase E]	% OF CI	0.00%	$0
E-05	Miscellaneous [Phase M]	% OF CI	0.00%	$0
	SUBTOTAL (E)	% OF CI	12.75%	$1,467,000

F PRECONSTRUCTION INDIRECTS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
F-01	Preconstruction Indirects	% OF E	9.50%	$139,365
	SUBTOTAL (F)	% OF E	9.48%	$139,000
	PROJECT PRECONSTRUCTION BUDGET (E + F)			**$1,606,000**

10.4% of Base Cost

PROJECT BASE COST ESTIMATE (CONSTRUCTION + PRECONSTRUCTION) **$15,467,000**

100.0% of Base Cost

RISK RESERVE

PROBABILISTIC COST ESTIMATE RISK RESERVE DATE: **7/30/2019**

RISK RESERVE **#NAME?** OF BASE COST **#NAME?**

TOTAL PROJECT COST **#NAME?** **#NAME?** of Base Cost

ESCALATION

Construction Start	Jun-19	**Escalation from Estimate Date:**	Jul-19
Duration (mo)	36.0	**to Construction Mid-Point Date:**	Nov-20

ESCALATION **3.7%** OF BASE COST **#NAME?**

ESCALATED PROJECT COST **#NAME?** **#NAME?** of Base Cost

NOTES: ***If clarifications are needed, please provide notes per section as needed below.***

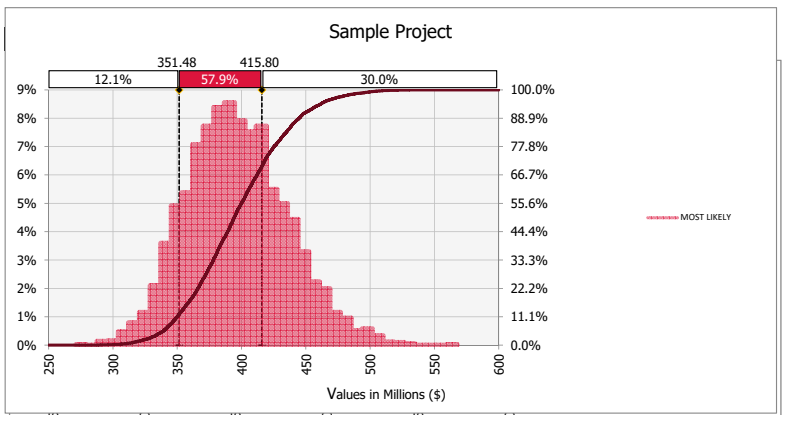
SECTION A: Major Construction Items

SECTION B: Minor Construction Items

SECTION C: Force Accounts & TSM&O

SECTION D: CE & Indirects

SECTION E&F: Preconstruction Items & Indirects



EXECUTIVE COST ESTIMATE SUMMARY SHEET

PROJECT PROFILE

Model Version 1 Rev 09
Last Update: **12-Mar-18**

Project Name	**SH-66 PEL Risk Assessment**
Project Number	**001**
Sub-Account Number	**XXXXX**
Project Description	**Risk Area ID# 2-Floodplain**
Project Work Type	**OTHER**
Estimator:	**M.A.S.**
Date:	7/30/2019

PROJECT LOCATION & CHARACTERISTICS

Route:	066B	**Begin MP:**	28.7	**End MP:**	51.4	**Length:**	22.7
CDOT Region:	4	**FIPS City:**	NONE	**FIPS County:**	Weld Co		
		FIPS City:	00000	**FIPS County:**	123		
Segment Mid-point	**RefPt** 40.040	**Latitude:**	40.2039	**Longitude:**	-105.0348		GOOGLE MAP LINK
Functional Classification:	Principal Arterial - Oth	**Urban-Rural Class:**	1 Rural			**Terrain:**	2
AADT:	19,000	**Truck ADT:**	270	**Tier Class:**	Tier 2	**Primary Surface:**	1 Asphalt

Design Maturity:	0 - Conceptual	**NEPA Action:**	Cat/Ex	**NEPA Status:**	Not Started
Project Delivery Method:	Design-Bid-Build	**Construction Start (MMM-YY)**	Jun-19	**Construction Duration (mo)**	36.0

REGION'S ESTIMATE

PROJECT CONSTRUCTION COSTS:

A MAJOR CONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION	QTY	UNIT	AVG. UNIT COST	COST
A-01	Earthwork	19,933	CY	$16.7	$332,000
A-02	Pavement & Bases	6,644	SY	$70.1	$466,000
A-03_repl	Bridge Replacements	5,208	DECK AREA (SF)	$129.0	$672,000
A-03_repa	Bridge Repairs	0	DECK AREA (SF)	$0.0	$0
A-03_wall	Walls	0	SF	$0.0	$0
A-03_culv	Major Culverts	0	LF	$0.0	$0
A-03_misc	Miscellaneous Structures	0	LS	$0.0	$0
A-04	Traffic / ITS	N/A	N/A	N/A	$0
A-05	Other Major Items	N/A	N/A	N/A	$24,000
		SUBTOTAL (A)			$1,494,000

B MINOR CONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION		UNIT	AVG. UNIT COST	COST
B-01	Removals/Resets (201, 202, 210)		% OF A	9.58%	$143,125
B-02	Environmental		% OF A	8.36%	$124,898
B-03	Structural		% OF A	1.42%	$21,215
B-04	Drainage/Utilities		% OF A	1.00%	$14,940
B-05	Roadway Appurtenances		% OF A	0.81%	$12,101
B-06	Mobilization (620, 625, 626)		% OF A	25.59%	$382,315
B-07	Construction Traffic Control / Detour		% OF A	35.23%	$526,336
B-08	Lighting & Electrical (613)		% OF A	0.00%	$0
B-09	Permanent Signing and Striping (614A & 627)		% OF A	1.90%	$28,386
B-10	Traffic Signalization & ITS (614B & 614C)		% OF A	0.00%	$0
B-11	Miscellaneous		% OF A	0.36%	$5,332
		SUBTOTAL (B)	% OF A	84.25%	$1,259,000
	CONTRUCTION BID ITEMS (A + B)	**CBI**	**% OF A**	**184.27%**	**$2,753,000**

68.2% of Base Cost

C FORCE ACCOUNTS & TSM&O

PCP Cat	ITEM DESCRIPTION		UNIT	AVG. UNIT COST	COST
C-01	F/A - General		% OF CBI	6.00%	$165,180
C-02	F/A - Minor Contract Revisions (MCR's)		% OF CBI	3.00%	$82,590
C-03	F/A - Project Communications		% OF CBI	0.12%	$3,403
C-04	TSM&O Traffic & Operations		% OF CBI	0.00%	$0
		SUBTOTAL (C)	% OF CBI	9.12%	$251,000
	CONSTRUCTION ITEMS (A + B + C)	**CI**	**% OF A**	**201.07%**	**$3,004,000**

74.4% of Base Cost

D CONSTRUCTION ENGINEERING & INDIRECTS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
D-01	Construction Engineering	% OF CI	10.95%	$328,938
D-02	Construction Indirects	% OF CI	9.50%	$285,380
	SUBTOTAL (D)	% OF CI	20.44%	$614,000
	PROJECT CONSTRUCTION BUDGET (A + B + C + D)			**$3,618,000**

89.6% of Base Cost

PROJECT PRECONSTRUCTION COSTS:

E PRECONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
E-01	Right-of-Way [Phase R]	% OF CI	0.00%	$0
E-02	Utilities + Railroad Work [Phase U]	% OF CI	0.00%	$0
E-03	Design & Engineering [Phase D]	% OF CI	12.00%	$360,480
E-03.1	Subsurface Utility Engineering (SUE) Budget	% OF CI	0.75%	$22,530
E-03.2	Transportation Systems Management & Operation (TSM&O) Budget	% OF CI	0.00%	$0
E-04	Environmental (NEPA) [Phase E]	% OF CI	0.00%	$0
E-05	Miscellaneous [Phase M]	% OF CI	0.00%	$0
	SUBTOTAL (E)	% OF CI	12.75%	$383,000

F PRECONSTRUCTION INDIRECTS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
F-01	Preconstruction Indirects	% OF E	9.50%	$36,385
	SUBTOTAL (F)	% OF E	9.40%	$36,000
	PROJECT PRECONSTRUCTION BUDGET (E + F)			**$419,000**

10.4% of Base Cost

PROJECT BASE COST ESTIMATE (CONSTRUCTION + PRECONSTRUCTION) **$4,037,000**

100.0% of Base Cost

RISK RESERVE

PROBABILISTIC COST ESTIMATE RISK RESERVE DATE: **7/30/2019**

RISK RESERVE **#NAME?** OF BASE COST **#NAME?**

TOTAL PROJECT COST **#NAME?**

#NAME? of Base Cost

ESCALATION

Construction Start	Jun-19	**Escalation from Estimate Date:**	Jul-19
Duration (mo)	36.0	**to Construction Mid-Point Date:**	Nov-20

ESCALATION **3.7%** OF BASE COST **#NAME?**

ESCALATED PROJECT COST **#NAME?**

#NAME? of Base Cost

NOTES: ***If clarifications are needed, please provide notes per section as needed below.***

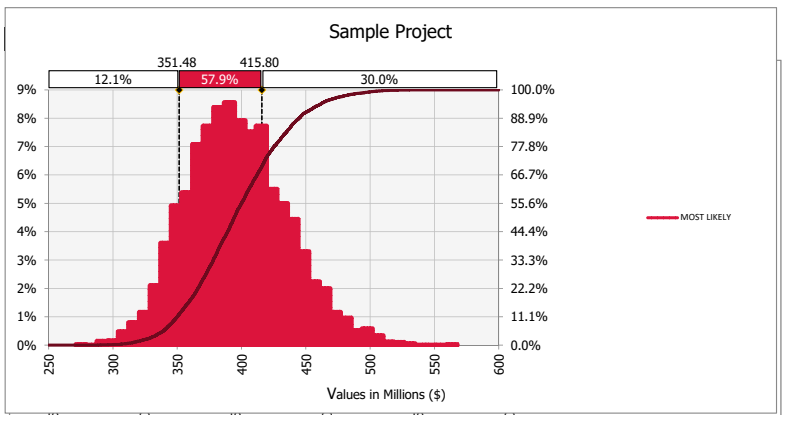
SECTION A: Major Construction Items

SECTION B: Minor Construction Items

SECTION C: Force Accounts & TSM&O

SECTION D: CE & Indirects

SECTION E&F: Preconstruction Items & Indirects



EXECUTIVE COST ESTIMATE SUMMARY SHEET

PROJECT PROFILE

Model Version 1 Rev 09
Last Update: **12-Mar-18**

Project Name	**SH-66 PEL Risk Assessment**
Project Number	**001**
Sub-Account Number	**XXXXX**
Project Description	**Risk Area ID# 3-Debris Flow**
Project Work Type	**OTHER**
Estimator:	**M.A.S.**
Date:	7/30/2019

PROJECT LOCATION & CHARACTERISTICS

Route:	066B	**Begin MP:**	28.7	**End MP:**	51.4	**Length:**	22.7
CDOT Region:	4	**FIPS City:**	NONE	**FIPS County:**	Weld Co		
		FIPS City:	00000	**FIPS County:**	123		
Segment Mid-point	**RefPt** 40.040	**Latitude:**	40.2039	**Longitude:**	-105.0348		GOOGLE MAP LINK
Functional Classification:	Principal Arterial - Oth	**Urban-Rural Class:**	1 Rural			**Terrain:**	2
AADT:	19,000	**Truck ADT:**	270	**Tier Class:**	Tier 2	**Primary Surface:**	1 Asphalt

Design Maturity:	0 - Conceptual	**NEPA Action:**	Cat/Ex	**NEPA Status:**	Not Started
Project Delivery Method:	Design-Bid-Build	**Construction Start (MMM-YY)**	Jun-19	**Construction Duration (mo)**	36.0

REGION'S ESTIMATE

PROJECT CONSTRUCTION COSTS:

A MAJOR CONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION	QTY	UNIT	AVG. UNIT COST	COST
A-01	Earthwork	32,633	CY	$16.6	$543,000
A-02	Pavement & Bases	10,878	SY	$70.1	$763,000
A-03_repl	Bridge Replacements	0	DECK AREA (SF)	$0.0	$0
A-03_repa	Bridge Repairs	0	DECK AREA (SF)	$0.0	$0
A-03_wall	Walls	0	SF	$0.0	$0
A-03_culv	Major Culverts	218	LF	$4,142.2	$903,000
A-03_misc	Miscellaneous Structures	0	LS	$0.0	$0
A-04	Traffic / ITS	N/A	N/A	N/A	$54,000
A-05	Other Major Items	N/A	N/A	N/A	$9,000
		SUBTOTAL (A)			$2,272,000

B MINOR CONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION		UNIT	AVG. UNIT COST	COST
B-01	Removals/Resets (201, 202, 210)		% OF A	9.58%	$217,658
B-02	Environmental		% OF A	8.36%	$189,939
B-03	Structural		% OF A	1.42%	$32,262
B-04	Drainage/Utilities		% OF A	1.00%	$22,720
B-05	Roadway Appurtenances		% OF A	0.81%	$18,403
B-06	Mobilization (620, 625, 626)		% OF A	25.59%	$581,405
B-07	Construction Traffic Control / Detour		% OF A	35.23%	$800,426
B-08	Lighting & Electrical (613)		% OF A	0.00%	$0
B-09	Permanent Signing and Striping (614A & 627)		% OF A	1.90%	$43,168
B-10	Traffic Signalization & ITS (614B & 614C)		% OF A	0.00%	$0
B-11	Miscellaneous		% OF A	0.36%	$8,109
		SUBTOTAL (B)	% OF A	84.25%	$1,914,000
	CONTRUCTION BID ITEMS (A + B)	**CBI**	**% OF A**	**184.24%**	**$4,186,000**

68.2% of Base Cost

C FORCE ACCOUNTS & TSM&O

PCP Cat	ITEM DESCRIPTION		UNIT	AVG. UNIT COST	COST
C-01	F/A - General		% OF CBI	6.00%	$251,160
C-02	F/A - Minor Contract Revisions (MCR's)		% OF CBI	3.00%	$125,580
C-03	F/A - Project Communications		% OF CBI	0.14%	$5,688
C-04	TSM&O Traffic & Operations		% OF CBI	0.00%	$0
		SUBTOTAL (C)	% OF CBI	9.13%	$382,000
	CONSTRUCTION ITEMS (A + B + C)	**CI**	**% OF A**	**201.06%**	**$4,568,000**

74.4% of Base Cost

D CONSTRUCTION ENGINEERING & INDIRECTS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
D-01	Construction Engineering	% OF CI	10.95%	$500,196
D-02	Construction Indirects	% OF CI	9.50%	$433,960
	SUBTOTAL (D)	% OF CI	20.45%	$934,000
	PROJECT CONSTRUCTION BUDGET (A + B + C + D)			**$5,502,000**

89.6% of Base Cost

PROJECT PRECONSTRUCTION COSTS:

E PRECONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
E-01	Right-of-Way [Phase R]	% OF CI	0.00%	$0
E-02	Utilities + Railroad Work [Phase U]	% OF CI	0.00%	$0
E-03	Design & Engineering [Phase D]	% OF CI	12.00%	$548,160
E-03.1	Subsurface Utility Engineering (SUE) Budget	% OF CI	0.75%	$34,260
E-03.2	Transportation Systems Management & Operation (TSM&O) Budget	% OF CI	0.00%	$0
E-04	Environmental (NEPA) [Phase E]	% OF CI	0.00%	$0
E-05	Miscellaneous [Phase M]	% OF CI	0.00%	$0
	SUBTOTAL (E)	% OF CI	12.74%	$582,000

F PRECONSTRUCTION INDIRECTS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
F-01	Preconstruction Indirects	% OF E	9.50%	$55,290
	SUBTOTAL (F)	% OF E	9.45%	$55,000
	PROJECT PRECONSTRUCTION BUDGET (E + F)			**$637,000**

10.4% of Base Cost

PROJECT BASE COST ESTIMATE (CONSTRUCTION + PRECONSTRUCTION) **$6,139,000**

100.0% of Base Cost

RISK RESERVE

PROBABILISTIC COST ESTIMATE RISK RESERVE DATE: **7/30/2019**

RISK RESERVE #NAME? OF BASE COST **#NAME?**

TOTAL PROJECT COST **#NAME?**

#NAME? of Base Cost

ESCALATION

Construction Start	Jun-19	**Escalation from Estimate Date:**	Jul-19
Duration (mo)	36.0	**to Construction Mid-Point Date:**	Nov-20

ESCALATION 3.7% OF BASE COST **#NAME?**

ESCALATED PROJECT COST **#NAME?**

#NAME? of Base Cost

NOTES: ***If clarifications are needed, please provide notes per section as needed below.***

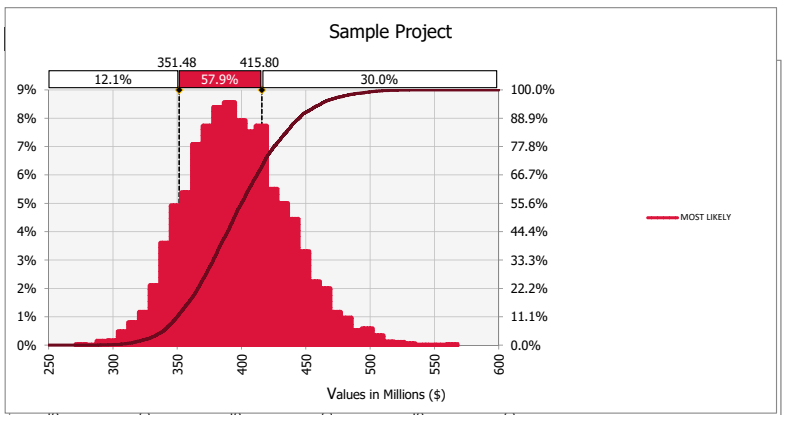
SECTION A: Major Construction Items

SECTION B: Minor Construction Items

SECTION C: Force Accounts & TSM&O

SECTION D: CE & Indirects

SECTION E&F: Preconstruction Items & Indirects



EXECUTIVE COST ESTIMATE SUMMARY SHEET

PROJECT PROFILE

Model Version 1 Rev 09
Last Update: **12-Mar-18**

Project Name	**SH-66 PEL Risk Assessment**
Project Number	**001**
Sub-Account Number	**XXXXX**
Project Description	**Risk Area ID# 4-At Grade Crossing**
Project Work Type	**OTHER**
Estimator:	**M.A.S.**
Date:	7/31/2019

PROJECT LOCATION & CHARACTERISTICS

Route:	066B	**Begin MP:**	28.7	**End MP:**	51.4	**Length:**	22.7
CDOT Region:	4	**FIPS City:**	NONE	**FIPS County:**	Weld Co		
		FIPS City:	00000	**FIPS County:**	123		
Segment Mid-point	**RefPt** 40.040	**Latitude:**	40.2039	**Longitude:**	-105.0348		GOOGLE MAP LINK
Functional Classification:	Principal Arterial - Oth	**Urban-Rural Class:**	1 Rural			**Terrain:**	2
AADT:	19,000	**Truck ADT:**	270	**Tier Class:**	Tier 2	**Primary Surface:**	1 Asphalt

Design Maturity:	0 - Conceptual	**NEPA Action:**	Cat/Ex	**NEPA Status:**	Not Started
Project Delivery Method:	Design-Bid-Build	**Construction Start (MMM-YY)**	Jun-19	**Construction Duration (mo)**	36.0

REGION'S ESTIMATE

PROJECT CONSTRUCTION COSTS:

A MAJOR CONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION	QTY	UNIT	AVG. UNIT COST	COST
A-01	Earthwork	27,378	CY	$16.6	$455,000
A-02	Pavement & Bases	9,126	SY	$70.1	$640,000
A-03_repl	Bridge Replacements	0	DECK AREA (SF)	$0.0	$0
A-03_repa	Bridge Repairs	0	DECK AREA (SF)	$0.0	$0
A-03_wall	Walls	0	SF	$0.0	$0
A-03_culv	Major Culverts	0	LF	$0.0	$0
A-03_misc	Miscellaneous Structures	0	LS	$0.0	$0
A-04	Traffic / ITS	N/A	N/A	N/A	$0
A-05	Other Major Items	N/A	N/A	N/A	$0
		SUBTOTAL (A)			$1,095,000

B MINOR CONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION		UNIT	AVG. UNIT COST	COST
B-01	Removals/Resets (201, 202, 210)		% OF A	9.58%	$104,901
B-02	Environmental		% OF A	8.36%	$91,542
B-03	Structural		% OF A	1.42%	$15,549
B-04	Drainage/Utilities		% OF A	1.00%	$10,950
B-05	Roadway Appurtenances		% OF A	0.81%	$8,870
B-06	Mobilization (620, 625, 626)		% OF A	25.59%	$280,211
B-07	Construction Traffic Control / Detour		% OF A	35.23%	$385,769
B-08	Lighting & Electrical (613)		% OF A	0.00%	$0
B-09	Permanent Signing and Striping (614A & 627)		% OF A	1.90%	$20,805
B-10	Traffic Signalization & ITS (614B & 614C)		% OF A	0.00%	$0
B-11	Miscellaneous		% OF A	0.36%	$3,908
		SUBTOTAL (B)	% OF A	84.25%	$923,000
	CONTRUCTION BID ITEMS (A + B)	**CBI**	**% OF A**	**184.29%**	**$2,018,000**

68.2% of Base Cost

C FORCE ACCOUNTS & TSM&O

PCP Cat	ITEM DESCRIPTION		UNIT	AVG. UNIT COST	COST
C-01	F/A - General		% OF CBI	6.00%	$121,080
C-02	F/A - Minor Contract Revisions (MCR's)		% OF CBI	3.00%	$60,540
C-03	F/A - Project Communications		% OF CBI	0.12%	$2,367
C-04	TSM&O Traffic & Operations		% OF CBI	0.00%	$0
		SUBTOTAL (C)	% OF CBI	9.12%	$184,000
	CONSTRUCTION ITEMS (A + B + C)	**CI**	**% OF A**	**201.10%**	**$2,202,000**

74.4% of Base Cost

D CONSTRUCTION ENGINEERING & INDIRECTS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
D-01	Construction Engineering	% OF CI	10.95%	$241,119
D-02	Construction Indirects	% OF CI	9.50%	$209,190
	SUBTOTAL (D)	% OF CI	20.44%	$450,000
	PROJECT CONSTRUCTION BUDGET (A + B + C + D)			**$2,652,000**

89.6% of Base Cost

PROJECT PRECONSTRUCTION COSTS:

E PRECONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
E-01	Right-of-Way [Phase R]	% OF CI	0.00%	$0
E-02	Utilities + Railroad Work [Phase U]	% OF CI	0.00%	$0
E-03	Design & Engineering [Phase D]	% OF CI	12.00%	$264,240
E-03.1	Subsurface Utility Engineering (SUE) Budget	% OF CI	0.75%	$16,515
E-03.2	Transportation Systems Management & Operation (TSM&O) Budget	% OF CI	0.00%	$0
E-04	Environmental (NEPA) [Phase E]	% OF CI	0.00%	$0
E-05	Miscellaneous [Phase M]	% OF CI	0.00%	$0
	SUBTOTAL (E)	% OF CI	12.76%	$281,000

F PRECONSTRUCTION INDIRECTS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
F-01	Preconstruction Indirects	% OF E	9.50%	$26,695
	SUBTOTAL (F)	% OF E	9.61%	$27,000
	PROJECT PRECONSTRUCTION BUDGET (E + F)			**$308,000**

10.4% of Base Cost

PROJECT BASE COST ESTIMATE (CONSTRUCTION + PRECONSTRUCTION) **$2,960,000**

100.0% of Base Cost

RISK RESERVE

PROBABILISTIC COST ESTIMATE RISK RESERVE DATE: **7/31/2019**

RISK RESERVE	**#NAME?** OF BASE COST	**#NAME?**
TOTAL PROJECT COST		**#NAME?**

#NAME? of Base Cost

ESCALATION

Construction Start	Jun-19	**Escalation from Estimate Date:**	Jul-19
Duration (mo)	36.0	**to Construction Mid-Point Date:**	Nov-20

ESCALATION	**3.7%** OF BASE COST	**#NAME?**
ESCALATED PROJECT COST		**#NAME?**

#NAME? of Base Cost

NOTES: ***If clarifications are needed, please provide notes per section as needed below.***

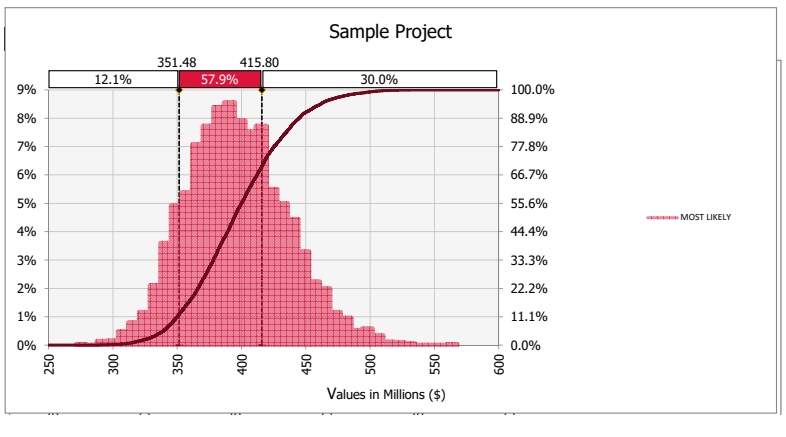
SECTION A: Major Construction Items

SECTION B: Minor Construction Items

SECTION C: Force Accounts & TSM&O

SECTION D: CE & Indirects

SECTION E&F: Preconstruction Items & Indirects



EXECUTIVE COST ESTIMATE SUMMARY SHEET

PROJECT PROFILE

Model Version 1 Rev 09
Last Update: **12-Mar-18**

Project Name	**SH-66 PEL Risk Assessment**
Project Number	**001**
Sub-Account Number	**XXXXX**
Project Description	**Risk Area ID# 5-At Grade Crossing**
Project Work Type	**OTHER**
Estimator:	**M.A.S.**
Date:	7/31/2019

PROJECT LOCATION & CHARACTERISTICS

Route:	066B	**Begin MP:**	28.7	**End MP:**	51.4	**Length:**	22.7
CDOT Region:	4	**FIPS City:**	NONE	**FIPS County:**	Weld Co		
		FIPS City:	00000	**FIPS County:**	123		
Segment Mid-point	**RefPt** 40.040	**Latitude:**	40.2039	**Longitude:**	-105.0348		GOOGLE MAP LINK
Functional Classification:	Principal Arterial - Oth	**Urban-Rural Class:**	1 Rural			**Terrain:**	2
AADT:	19,000	**Truck ADT:**	270	**Tier Class:**	Tier 2	**Primary Surface:**	1 Asphalt

Design Maturity:	0 - Conceptual	**NEPA Action:**	Cat/Ex	**NEPA Status:**	Not Started
Project Delivery Method:	Design-Bid-Build	**Construction Start (MMM-YY)**	Jun-19	**Construction Duration (mo)**	36.0

REGION'S ESTIMATE

PROJECT CONSTRUCTION COSTS:

A MAJOR CONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION	QTY	UNIT	AVG. UNIT COST	COST
A-01	Earthwork	511	CY	$17.6	$9,000
A-02	Pavement & Bases	170	SY	$70.6	$12,000
A-03_repl	Bridge Replacements	0	DECK AREA (SF)	$0.0	$0
A-03_repa	Bridge Repairs	0	DECK AREA (SF)	$0.0	$0
A-03_wall	Walls	0	SF	$0.0	$0
A-03_culv	Major Culverts	0	LF	$0.0	$0
A-03_misc	Miscellaneous Structures	0	LS	$0.0	$0
A-04	Traffic / ITS	N/A	N/A	N/A	$0
A-05	Other Major Items	N/A	N/A	N/A	$0
		SUBTOTAL (A)			$21,000

B MINOR CONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION		UNIT	AVG. UNIT COST	COST
B-01	Removals/Resets (201, 202, 210)		% OF A	9.58%	$2,012
B-02	Environmental		% OF A	8.36%	$1,756
B-03	Structural		% OF A	1.42%	$298
B-04	Drainage/Utilities		% OF A	1.00%	$210
B-05	Roadway Appurtenances		% OF A	0.81%	$170
B-06	Mobilization (620, 625, 626)		% OF A	25.59%	$5,374
B-07	Construction Traffic Control / Detour		% OF A	35.23%	$7,398
B-08	Lighting & Electrical (613)		% OF A	0.00%	$0
B-09	Permanent Signing and Striping (614A & 627)		% OF A	1.90%	$399
B-10	Traffic Signalization & ITS (614B & 614C)		% OF A	0.00%	$0
B-11	Miscellaneous		% OF A	0.36%	$75
		SUBTOTAL (B)	% OF A	84.25%	$18,000
	CONTRUCTION BID ITEMS (A + B)	**CBI**	**% OF A**	**185.71%**	**$39,000**

68.4% of Base Cost

C FORCE ACCOUNTS & TSM&O

PCP Cat	ITEM DESCRIPTION		UNIT	AVG. UNIT COST	COST
C-01	F/A - General		% OF CBI	6.00%	$2,340
C-02	F/A - Minor Contract Revisions (MCR's)		% OF CBI	3.00%	$1,170
C-03	F/A - Project Communications		% OF CBI	0.10%	$39
C-04	TSM&O Traffic & Operations		% OF CBI	0.00%	$0
		SUBTOTAL (C)	% OF CBI	10.26%	$4,000
	CONSTRUCTION ITEMS (A + B + C)	**CI**	**% OF A**	**204.76%**	**$43,000**

75.4% of Base Cost

D CONSTRUCTION ENGINEERING & INDIRECTS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
D-01	Construction Engineering	% OF CI	10.95%	$4,709
D-02	Construction Indirects	% OF CI	9.50%	$4,085
	SUBTOTAL (D)	% OF CI	20.93%	$9,000
	PROJECT CONSTRUCTION BUDGET (A + B + C + D)			**$52,000**

91.2% of Base Cost

PROJECT PRECONSTRUCTION COSTS:

E PRECONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
E-01	Right-of-Way [Phase R]	% OF CI	0.00%	$0
E-02	Utilities + Railroad Work [Phase U]	% OF CI	0.00%	$0
E-03	Design & Engineering [Phase D]	% OF CI	12.00%	$5,160
E-03.1	Subsurface Utility Engineering (SUE) Budget	% OF CI	0.75%	$323
E-03.2	Transportation Systems Management & Operation (TSM&O) Budget	% OF CI	0.00%	$0
E-04	Environmental (NEPA) [Phase E]	% OF CI	0.00%	$0
E-05	Miscellaneous [Phase M]	% OF CI	0.00%	$0
	SUBTOTAL (E)	% OF CI	11.63%	$5,000

F PRECONSTRUCTION INDIRECTS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
F-01	Preconstruction Indirects	% OF E	9.50%	$475
	SUBTOTAL (F)	% OF E	0.00%	$0
	PROJECT PRECONSTRUCTION BUDGET (E + F)			**$5,000**

8.8% of Base Cost

PROJECT BASE COST ESTIMATE (CONSTRUCTION + PRECONSTRUCTION) **$57,000**

100.0% of Base Cost

RISK RESERVE

PROBABILISTIC COST ESTIMATE RISK RESERVE DATE: **7/31/2019**

RISK RESERVE #NAME? OF BASE COST **#NAME?**

TOTAL PROJECT COST **#NAME?**

#NAME? of Base Cost

ESCALATION

Construction Start	Jun-19	**Escalation from Estimate Date:**	Jul-19
Duration (mo)	36.0	**to Construction Mid-Point Date:**	Nov-20

ESCALATION 3.7% OF BASE COST **#NAME?**

ESCALATED PROJECT COST **#NAME?**

#NAME? of Base Cost

NOTES: ***If clarifications are needed, please provide notes per section as needed below.***

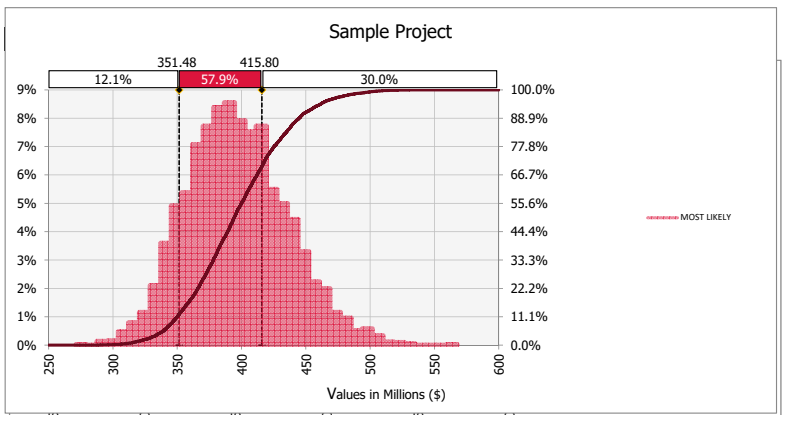
SECTION A: Major Construction Items

SECTION B: Minor Construction Items

SECTION C: Force Accounts & TSM&O

SECTION D: CE & Indirects

SECTION E&F: Preconstruction Items & Indirects



EXECUTIVE COST ESTIMATE SUMMARY SHEET

PROJECT PROFILE

Model Version 1 Rev 09
Last Update: **12-Mar-18**

Project Name	**SH-66 PEL Risk Assessment**
Project Number	**001**
Sub-Account Number	**XXXXX**
Project Description	**Risk Area ID# 6-At Grade Crossing**
Project Work Type	**OTHER**
Estimator:	**M.A.S.**
Date:	7/31/2019

PROJECT LOCATION & CHARACTERISTICS

Route:	066B	**Begin MP:**	28.7	**End MP:**	51.4	**Length:**	22.7
CDOT Region:	4	**FIPS City:**	NONE	**FIPS County:**	Weld Co		
		FIPS City:	00000	**FIPS County:**	123		
Segment Mid-point	**RefPt** 40.040	**Latitude:**	40.2039	**Longitude:**	-105.0348		GOOGLE MAP LINK
Functional Classification:	Principal Arterial - Oth	**Urban-Rural Class:**	1 Rural			**Terrain:**	2
AADT:	19,000	**Truck ADT:**	270	**Tier Class:**	Tier 2	**Primary Surface:**	1 Asphalt

Design Maturity:	0 - Conceptual	**NEPA Action:**	Cat/Ex	**NEPA Status:**	Not Started
Project Delivery Method:	Design-Bid-Build	**Construction Start (MMM-YY)**	Jun-19	**Construction Duration (mo)**	36.0

REGION'S ESTIMATE

PROJECT CONSTRUCTION COSTS:

A MAJOR CONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION	QTY	UNIT	AVG. UNIT COST	COST
A-01	Earthwork	511	CY	$17.6	$9,000
A-02	Pavement & Bases	170	SY	$70.6	$12,000
A-03_repl	Bridge Replacements	0	DECK AREA (SF)	$0.0	$0
A-03_repa	Bridge Repairs	0	DECK AREA (SF)	$0.0	$0
A-03_wall	Walls	0	SF	$0.0	$0
A-03_culv	Major Culverts	0	LF	$0.0	$0
A-03_misc	Miscellaneous Structures	0	LS	$0.0	$0
A-04	Traffic / ITS	N/A	N/A	N/A	$54,000
A-05	Other Major Items	N/A	N/A	N/A	$0
			SUBTOTAL (A)		$75,000

B MINOR CONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION		UNIT	AVG. UNIT COST	COST
B-01	Removals/Resets (201, 202, 210)		% OF A	9.58%	$7,185
B-02	Environmental		% OF A	8.36%	$6,270
B-03	Structural		% OF A	1.42%	$1,065
B-04	Drainage/Utilities		% OF A	1.00%	$750
B-05	Roadway Appurtenances		% OF A	0.81%	$608
B-06	Mobilization (620, 625, 626)		% OF A	25.59%	$19,193
B-07	Construction Traffic Control / Detour		% OF A	35.23%	$26,423
B-08	Lighting & Electrical (613)		% OF A	0.00%	$0
B-09	Permanent Signing and Striping (614A & 627)		% OF A	1.90%	$1,425
B-10	Traffic Signalization & ITS (614B & 614C)		% OF A	0.00%	$0
B-11	Miscellaneous		% OF A	0.36%	$268
		SUBTOTAL (B)	% OF A	84.25%	$63,000
	CONTRUCTION BID ITEMS (A + B)	**CBI**	**% OF A**	**184.00%**	**$138,000**

68.0% of Base Cost

C FORCE ACCOUNTS & TSM&O

PCP Cat	ITEM DESCRIPTION		UNIT	AVG. UNIT COST	COST
C-01	F/A - General		% OF CBI	6.00%	$8,280
C-02	F/A - Minor Contract Revisions (MCR's)		% OF CBI	3.00%	$4,140
C-03	F/A - Project Communications		% OF CBI	0.10%	$140
C-04	TSM&O Traffic & Operations		% OF CBI	0.00%	$0
		SUBTOTAL (C)	% OF CBI	9.42%	$13,000
	CONSTRUCTION ITEMS (A + B + C)	**CI**	**% OF A**	**201.33%**	**$151,000**

74.4% of Base Cost

D CONSTRUCTION ENGINEERING & INDIRECTS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
D-01	Construction Engineering	% OF CI	10.95%	$16,535
D-02	Construction Indirects	% OF CI	9.50%	$14,345
	SUBTOTAL (D)	% OF CI	20.53%	$31,000
	PROJECT CONSTRUCTION BUDGET (A + B + C + D)			**$182,000**

89.7% of Base Cost

PROJECT PRECONSTRUCTION COSTS:

E PRECONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
E-01	Right-of-Way [Phase R]	% OF CI	0.00%	$0
E-02	Utilities + Railroad Work [Phase U]	% OF CI	0.00%	$0
E-03	Design & Engineering [Phase D]	% OF CI	12.00%	$18,120
E-03.1	Subsurface Utility Engineering (SUE) Budget	% OF CI	0.75%	$1,133
E-03.2	Transportation Systems Management & Operation (TSM&O) Budget	% OF CI	0.00%	$0
E-04	Environmental (NEPA) [Phase E]	% OF CI	0.00%	$0
E-05	Miscellaneous [Phase M]	% OF CI	0.00%	$0
	SUBTOTAL (E)	% OF CI	12.58%	$19,000

F PRECONSTRUCTION INDIRECTS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
F-01	Preconstruction Indirects	% OF E	9.50%	$1,805
	SUBTOTAL (F)	% OF E	10.53%	$2,000
	PROJECT PRECONSTRUCTION BUDGET (E + F)			**$21,000**

10.3% of Base Cost

PROJECT BASE COST ESTIMATE (CONSTRUCTION + PRECONSTRUCTION) **$203,000**

100.0% of Base Cost

RISK RESERVE

PROBABILISTIC COST ESTIMATE RISK RESERVE DATE: **7/31/2019**

RISK RESERVE #NAME? OF BASE COST **#NAME?**

TOTAL PROJECT COST **#NAME?**

#NAME? of Base Cost

ESCALATION

Construction Start	Jun-19	**Escalation from Estimate Date:**	Jul-19
Duration (mo)	36.0	**to Construction Mid-Point Date:**	Nov-20

ESCALATION 3.7% OF BASE COST **#NAME?**

ESCALATED PROJECT COST **#NAME?**

#NAME? of Base Cost

NOTES: ***If clarifications are needed, please provide notes per section as needed below.***

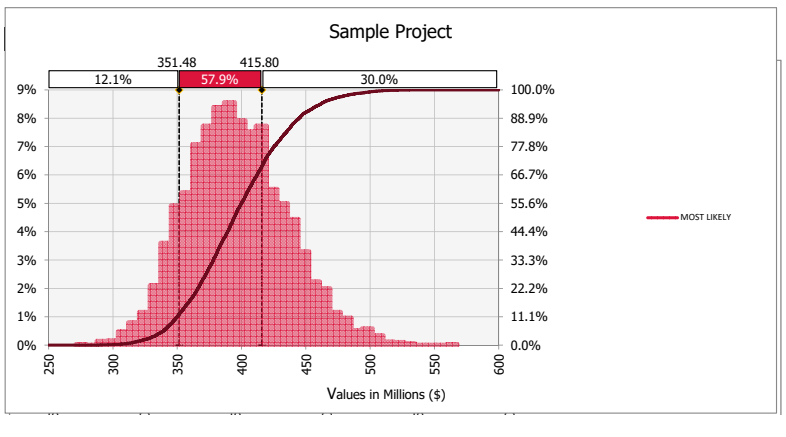
SECTION A: Major Construction Items

SECTION B: Minor Construction Items

SECTION C: Force Accounts & TSM&O

SECTION D: CE & Indirects

SECTION E&F: Preconstruction Items & Indirects



EXECUTIVE COST ESTIMATE SUMMARY SHEET

PROJECT PROFILE

Model Version 1 Rev 09
Last Update: **12-Mar-18**

Project Name	**SH-66 PEL Risk Assessment**
Project Number	**001**
Sub-Account Number	**XXXXX**
Project Description	**Risk Area ID# 7-Overhead Pipe**
Project Work Type	**OTHER**
Estimator:	**M.A.S.**
Date:	7/31/2019

PROJECT LOCATION & CHARACTERISTICS

Route:	066B	**Begin MP:**	28.7	**End MP:**	51.4	**Length:**	22.7
CDOT Region:	4	**FIPS City:**	NONE	**FIPS County:**	Weld Co		
		FIPS City:	00000	**FIPS County:**	123		
Segment Mid-point	**RefPt** 40.040	**Latitude:**	40.2039	**Longitude:**	-105.0348		GOOGLE MAP LINK
Functional Classification:	Principal Arterial - Oth	**Urban-Rural Class:**	1 Rural			**Terrain:**	2
AADT:	19,000	**Truck ADT:**	270	**Tier Class:**	Tier 2	**Primary Surface:**	1 Asphalt

Design Maturity:	0 - Conceptual	**NEPA Action:**	Cat/Ex	**NEPA Status:**	Not Started
Project Delivery Method:	Design-Bid-Build	**Construction Start (MMM-YY)**	Jun-19	**Construction Duration (mo)**	36.0

REGION'S ESTIMATE

PROJECT CONSTRUCTION COSTS:

A MAJOR CONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION	QTY	UNIT	AVG. UNIT COST	COST
A-01	Earthwork	76	CY	$13.2	$1,000
A-02	Pavement & Bases	25	SY	$80.0	$2,000
A-03_repl	Bridge Replacements	0	DECK AREA (SF)	$0.0	$0
A-03_repa	Bridge Repairs	0	DECK AREA (SF)	$0.0	$0
A-03_wall	Walls	0	SF	$0.0	$0
A-03_culv	Major Culverts	0	LF	$0.0	$0
A-03_misc	Miscellaneous Structures	0	LS	$0.0	$0
A-04	Traffic / ITS	N/A	N/A	N/A	$0
A-05	Other Major Items	N/A	N/A	N/A	$0
		SUBTOTAL (A)			$3,000

B MINOR CONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION		UNIT	AVG. UNIT COST	COST
B-01	Removals/Resets (201, 202, 210)		% OF A	9.58%	$287
B-02	Environmental		% OF A	8.36%	$251
B-03	Structural		% OF A	1.42%	$43
B-04	Drainage/Utilities		% OF A	1.00%	$30
B-05	Roadway Appurtenances		% OF A	0.81%	$24
B-06	Mobilization (620, 625, 626)		% OF A	25.59%	$768
B-07	Construction Traffic Control / Detour		% OF A	35.23%	$1,057
B-08	Lighting & Electrical (613)		% OF A	0.00%	$0
B-09	Permanent Signing and Striping (614A & 627)		% OF A	1.90%	$57
B-10	Traffic Signalization & ITS (614B & 614C)		% OF A	0.00%	$0
B-11	Miscellaneous		% OF A	0.36%	$11
		SUBTOTAL (B)	% OF A	84.25%	$3,000
	CONTRUCTION BID ITEMS (A + B)	**CBI**	**% OF A**	**200.00%**	**$6,000**

66.7% of Base Cost

C FORCE ACCOUNTS & TSM&O

PCP Cat	ITEM DESCRIPTION		UNIT	AVG. UNIT COST	COST
C-01	F/A - General		% OF CBI	6.00%	$360
C-02	F/A - Minor Contract Revisions (MCR's)		% OF CBI	3.00%	$180
C-03	F/A - Project Communications		% OF CBI	0.10%	$6
C-04	TSM&O Traffic & Operations		% OF CBI	0.00%	$0
		SUBTOTAL (C)	% OF CBI	16.67%	$1,000
	CONSTRUCTION ITEMS (A + B + C)	**CI**	**% OF A**	**233.33%**	**$7,000**

77.8% of Base Cost

D CONSTRUCTION ENGINEERING & INDIRECTS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
D-01	Construction Engineering	% OF CI	10.95%	$767
D-02	Construction Indirects	% OF CI	9.50%	$665
	SUBTOTAL (D)	% OF CI	14.29%	$1,000
	PROJECT CONSTRUCTION BUDGET (A + B + C + D)			**$8,000**

88.9% of Base Cost

PROJECT PRECONSTRUCTION COSTS:

E PRECONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
E-01	Right-of-Way [Phase R]	% OF CI	0.00%	$0
E-02	Utilities + Railroad Work [Phase U]	% OF CI	0.00%	$0
E-03	Design & Engineering [Phase D]	% OF CI	12.00%	$840
E-03.1	Subsurface Utility Engineering (SUE) Budget	% OF CI	0.75%	$53
E-03.2	Transportation Systems Management & Operation (TSM&O) Budget	% OF CI	0.00%	$0
E-04	Environmental (NEPA) [Phase E]	% OF CI	0.00%	$0
E-05	Miscellaneous [Phase M]	% OF CI	0.00%	$0
	SUBTOTAL (E)	% OF CI	14.29%	$1,000

F PRECONSTRUCTION INDIRECTS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
F-01	Preconstruction Indirects	% OF E	9.50%	$95
	SUBTOTAL (F)	% OF E	0.00%	$0
	PROJECT PRECONSTRUCTION BUDGET (E + F)			**$1,000**

11.1% of Base Cost

PROJECT BASE COST ESTIMATE (CONSTRUCTION + PRECONSTRUCTION) **$9,000**

100.0% of Base Cost

RISK RESERVE

PROBABILISTIC COST ESTIMATE RISK RESERVE DATE: **7/31/2019**

RISK RESERVE **#NAME?** OF BASE COST **#NAME?**

TOTAL PROJECT COST **#NAME?** **#NAME?** of Base Cost

ESCALATION

Construction Start	Jun-19	**Escalation from Estimate Date:**	Jul-19
Duration (mo)	36.0	**to Construction Mid-Point Date:**	Nov-20

ESCALATION **3.7%** OF BASE COST **#NAME?**

ESCALATED PROJECT COST **#NAME?** **#NAME?** of Base Cost

NOTES: ***If clarifications are needed, please provide notes per section as needed below.***

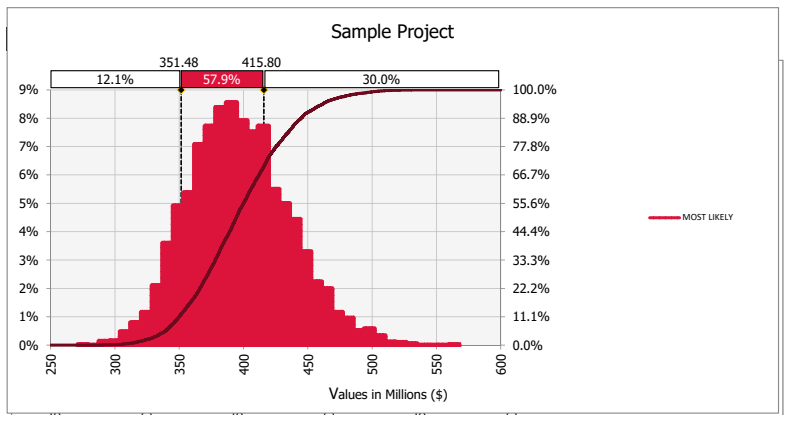
SECTION A: Major Construction Items

SECTION B: Minor Construction Items

SECTION C: Force Accounts & TSM&O

SECTION D: CE & Indirects

SECTION E&F: Preconstruction Items & Indirects



EXECUTIVE COST ESTIMATE SUMMARY SHEET

PROJECT PROFILE

Model Version 1 Rev 09
Last Update: **12-Mar-18**

Project Name	**SH-66 PEL Risk Assessment**
Project Number	**001**
Sub-Account Number	**XXXXX**
Project Description	**Risk Area ID# 8-Bridge Strike**
Project Work Type	**OTHER**
Estimator:	**M.A.S.**
Date:	7/31/2019

PROJECT LOCATION & CHARACTERISTICS

Route:	066B	**Begin MP:**	28.7	**End MP:**	51.4	**Length:**	22.7
CDOT Region:	4	**FIPS City:**	NONE	**FIPS County:**	Weld Co		
		FIPS City:	00000	**FIPS County:**	123		
Segment Mid-point	**RefPt** 40.040	**Latitude:**	40.2039	**Longitude:**	-105.0348		GOOGLE MAP LINK
Functional Classification:	Principal Arterial - Oth	**Urban-Rural Class:**	1 Rural			**Terrain:**	2
AADT:	19,000	**Truck ADT:**	270	**Tier Class:**	Tier 2	**Primary Surface:**	1 Asphalt

Design Maturity:	0 - Conceptual	**NEPA Action:**	Cat/Ex	**NEPA Status:**	Not Started
Project Delivery Method:	Design-Bid-Build	**Construction Start (MMM-YY)**	Jun-19	**Construction Duration (mo)**	36.0

REGION'S ESTIMATE

PROJECT CONSTRUCTION COSTS:

A MAJOR CONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION	QTY	UNIT	AVG. UNIT COST	COST
A-01	Earthwork	0	CY	$0.0	$0
A-02	Pavement & Bases	N/A	SY	N/A	$0
A-03_repl	Bridge Replacements	33,829	DECK AREA (SF)	$129.0	$4,365,000
A-03_repa	Bridge Repairs	0	DECK AREA (SF)	$0.0	$0
A-03_wall	Walls	0	SF	$0.0	$0
A-03_culv	Major Culverts	0	LF	$0.0	$0
A-03_misc	Miscellaneous Structures	0	LS	$0.0	$0
A-04	Traffic / ITS	N/A	N/A	N/A	$0
A-05	Other Major Items	N/A	N/A	N/A	$11,000
			SUBTOTAL (A)		$4,376,000

B MINOR CONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION		UNIT	AVG. UNIT COST	COST
B-01	Removals/Resets (201, 202, 210)		% OF A	9.58%	$419,221
B-02	Environmental		% OF A	8.36%	$365,834
B-03	Structural		% OF A	1.42%	$62,139
B-04	Drainage/Utilities		% OF A	1.00%	$43,760
B-05	Roadway Appurtenances		% OF A	0.81%	$35,446
B-06	Mobilization (620, 625, 626)		% OF A	25.59%	$1,119,818
B-07	Construction Traffic Control / Detour		% OF A	35.23%	$1,541,665
B-08	Lighting & Electrical (613)		% OF A	0.00%	$0
B-09	Permanent Signing and Striping (614A & 627)		% OF A	1.90%	$83,144
B-10	Traffic Signalization & ITS (614B & 614C)		% OF A	0.00%	$0
B-11	Miscellaneous		% OF A	0.36%	$15,618
		SUBTOTAL (B)	% OF A	84.25%	$3,687,000
	CONTRUCTION BID ITEMS (A + B)	**CBI**	**% OF A**	**184.26%**	**$8,063,000**

68.2% of Base Cost

C FORCE ACCOUNTS & TSM&O

PCP Cat	ITEM DESCRIPTION		UNIT	AVG. UNIT COST	COST
C-01	F/A - General		% OF CBI	6.00%	$483,780
C-02	F/A - Minor Contract Revisions (MCR's)		% OF CBI	3.00%	$241,890
C-03	F/A - Project Communications		% OF CBI	0.17%	$13,635
C-04	TSM&O Traffic & Operations		% OF CBI	0.00%	$0
		SUBTOTAL (C)	% OF CBI	9.17%	$739,000
	CONSTRUCTION ITEMS (A + B + C)	**CI**	**% OF A**	**201.14%**	**$8,802,000**

74.4% of Base Cost

D CONSTRUCTION ENGINEERING & INDIRECTS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
D-01	Construction Engineering	% OF CI	10.95%	$963,819
D-02	Construction Indirects	% OF CI	9.50%	$836,190
	SUBTOTAL (D)	% OF CI	20.45%	$1,800,000
	PROJECT CONSTRUCTION BUDGET (A + B + C + D)			**$10,602,000**

89.6% of Base Cost

PROJECT PRECONSTRUCTION COSTS:

E PRECONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
E-01	Right-of-Way [Phase R]	% OF CI	0.00%	$0
E-02	Utilities + Railroad Work [Phase U]	% OF CI	0.00%	$0
E-03	Design & Engineering [Phase D]	% OF CI	12.00%	$1,056,240
E-03.1	Subsurface Utility Engineering (SUE) Budget	% OF CI	0.75%	$66,015
E-03.2	Transportation Systems Management & Operation (TSM&O) Budget	% OF CI	0.00%	$0
E-04	Environmental (NEPA) [Phase E]	% OF CI	0.00%	$0
E-05	Miscellaneous [Phase M]	% OF CI	0.00%	$0
	SUBTOTAL (E)	% OF CI	12.75%	$1,122,000

F PRECONSTRUCTION INDIRECTS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
F-01	Preconstruction Indirects	% OF E	9.50%	$106,590
	SUBTOTAL (F)	% OF E	9.54%	$107,000
	PROJECT PRECONSTRUCTION BUDGET (E + F)			**$1,229,000**

10.4% of Base Cost

PROJECT BASE COST ESTIMATE (CONSTRUCTION + PRECONSTRUCTION) **$11,831,000**

100.0% of Base Cost

RISK RESERVE

PROBABILISTIC COST ESTIMATE RISK RESERVE DATE: **7/31/2019**

RISK RESERVE #NAME? OF BASE COST **#NAME?**

TOTAL PROJECT COST **#NAME?**

#NAME? of Base Cost

ESCALATION

Construction Start	Jun-19	**Escalation from Estimate Date:**	Jul-19
Duration (mo)	36.0	**to Construction Mid-Point Date:**	Nov-20

ESCALATION 3.7% OF BASE COST **#NAME?**

ESCALATED PROJECT COST **#NAME?**

#NAME? of Base Cost

NOTES: ***If clarifications are needed, please provide notes per section as needed below.***

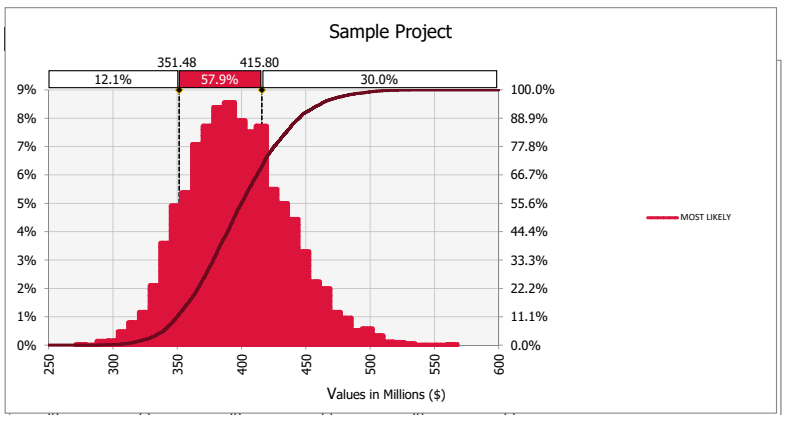
SECTION A: Major Construction Items

SECTION B: Minor Construction Items

SECTION C: Force Accounts & TSM&O

SECTION D: CE & Indirects

SECTION E&F: Preconstruction Items & Indirects



EXECUTIVE COST ESTIMATE SUMMARY SHEET

PROJECT PROFILE

Model Version 1 Rev 09
Last Update: **12-Mar-18**

Project Name	**SH-66 PEL Risk Assessment**
Project Number	**001**
Sub-Account Number	**XXXXX**
Project Description	**Risk Area ID# 9-Bridge Strike**
Project Work Type	**OTHER**
Estimator:	**M.A.S.**
Date:	7/31/2019

PROJECT LOCATION & CHARACTERISTICS

Route:	066B	**Begin MP:**	28.7	**End MP:**	51.4	**Length:**	22.7
CDOT Region:	4	**FIPS City:**	NONE	**FIPS County:**	Weld Co		
		FIPS City:	00000	**FIPS County:**	123		
Segment Mid-point	**RefPt** 40.040	**Latitude:**	40.2039	**Longitude:**	-105.0348		GOOGLE MAP LINK
Functional Classification:	Principal Arterial - Oth	**Urban-Rural Class:**	1 Rural			**Terrain:**	2
AADT:	19,000	**Truck ADT:**	270	**Tier Class:**	Tier 2	**Primary Surface:**	1 Asphalt

Design Maturity:	0 - Conceptual	**NEPA Action:**	Cat/Ex	**NEPA Status:**	Not Started
Project Delivery Method:	Design-Bid-Build	**Construction Start (MMM-YY)**	Jun-19	**Construction Duration (mo)**	36.0

REGION'S ESTIMATE

PROJECT CONSTRUCTION COSTS:

A MAJOR CONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION	QTY	UNIT	AVG. UNIT COST	COST
A-01	Earthwork	0	CY	$0.0	$0
A-02	Pavement & Bases	N/A	SY	N/A	$0
A-03_repl	Bridge Replacements	6,244	DECK AREA (SF)	$129.1	$806,000
A-03_repa	Bridge Repairs	0	DECK AREA (SF)	$0.0	$0
A-03_wall	Walls	0	SF	$0.0	$0
A-03_culv	Major Culverts	0	LF	$0.0	$0
A-03_misc	Miscellaneous Structures	0	LS	$0.0	$0
A-04	Traffic / ITS	N/A	N/A	N/A	$54,000
A-05	Other Major Items	N/A	N/A	N/A	$9,000
		SUBTOTAL (A)			$869,000

B MINOR CONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION		UNIT	AVG. UNIT COST	COST
B-01	Removals/Resets (201, 202, 210)		% OF A	9.58%	$83,250
B-02	Environmental		% OF A	8.36%	$72,648
B-03	Structural		% OF A	1.42%	$12,340
B-04	Drainage/Utilities		% OF A	1.00%	$8,690
B-05	Roadway Appurtenances		% OF A	0.81%	$7,039
B-06	Mobilization (620, 625, 626)		% OF A	25.59%	$222,377
B-07	Construction Traffic Control / Detour		% OF A	35.23%	$306,149
B-08	Lighting & Electrical (613)		% OF A	0.00%	$0
B-09	Permanent Signing and Striping (614A & 627)		% OF A	1.90%	$16,511
B-10	Traffic Signalization & ITS (614B & 614C)		% OF A	0.00%	$0
B-11	Miscellaneous		% OF A	0.36%	$3,101
		SUBTOTAL (B)	% OF A	84.25%	$732,000
	CONTRUCTION BID ITEMS (A + B)	**CBI**	**% OF A**	**184.23%**	**$1,601,000**

68.2% of Base Cost

C FORCE ACCOUNTS & TSM&O

PCP Cat	ITEM DESCRIPTION		UNIT	AVG. UNIT COST	COST
C-01	F/A - General		% OF CBI	6.00%	$96,060
C-02	F/A - Minor Contract Revisions (MCR's)		% OF CBI	3.00%	$48,030
C-03	F/A - Project Communications		% OF CBI	0.11%	$1,821
C-04	TSM&O Traffic & Operations		% OF CBI	0.00%	$0
		SUBTOTAL (C)	% OF CBI	9.12%	$146,000
	CONSTRUCTION ITEMS (A + B + C)	**CI**	**% OF A**	**201.04%**	**$1,747,000**

74.4% of Base Cost

D CONSTRUCTION ENGINEERING & INDIRECTS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
D-01	Construction Engineering	% OF CI	10.95%	$191,297
D-02	Construction Indirects	% OF CI	9.50%	$165,965
	SUBTOTAL (D)	% OF CI	20.44%	$357,000
	PROJECT CONSTRUCTION BUDGET (A + B + C + D)			**$2,104,000**

89.6% of Base Cost

PROJECT PRECONSTRUCTION COSTS:

E PRECONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
E-01	Right-of-Way [Phase R]	% OF CI	0.00%	$0
E-02	Utilities + Railroad Work [Phase U]	% OF CI	0.00%	$0
E-03	Design & Engineering [Phase D]	% OF CI	12.00%	$209,640
E-03.1	Subsurface Utility Engineering (SUE) Budget	% OF CI	0.75%	$13,103
E-03.2	Transportation Systems Management & Operation (TSM&O) Budget	% OF CI	0.00%	$0
E-04	Environmental (NEPA) [Phase E]	% OF CI	0.00%	$0
E-05	Miscellaneous [Phase M]	% OF CI	0.00%	$0
	SUBTOTAL (E)	% OF CI	12.76%	$223,000

F PRECONSTRUCTION INDIRECTS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
F-01	Preconstruction Indirects	% OF E	9.50%	$21,185
	SUBTOTAL (F)	% OF E	9.42%	$21,000
	PROJECT PRECONSTRUCTION BUDGET (E + F)			**$244,000**

10.4% of Base Cost

PROJECT BASE COST ESTIMATE (CONSTRUCTION + PRECONSTRUCTION) **$2,348,000**

100.0% of Base Cost

RISK RESERVE

PROBABILISTIC COST ESTIMATE RISK RESERVE DATE: **7/31/2019**

RISK RESERVE	**#NAME?** OF BASE COST	**#NAME?**
TOTAL PROJECT COST		**#NAME?**

#NAME? of Base Cost

ESCALATION

Construction Start	Jun-19	**Escalation from Estimate Date:**	Jul-19	**ESCALATION**	**3.7%** OF BASE COST
Duration (mo)	36.0	**to Construction Mid-Point Date:**	Nov-20	**ESCALATED PROJECT COST**	**#NAME?**

#NAME? of Base Cost

NOTES: ***If clarifications are needed, please provide notes per section as needed below.***

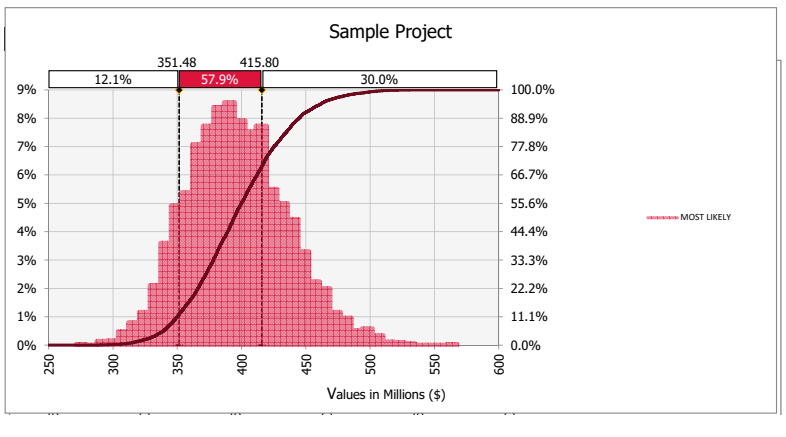
SECTION A: Major Construction Items

SECTION B: Minor Construction Items

SECTION C: Force Accounts & TSM&O

SECTION D: CE & Indirects

SECTION E&F: Preconstruction Items & Indirects



EXECUTIVE COST ESTIMATE SUMMARY SHEET

PROJECT PROFILE

Model Version 1 Rev 09
Last Update: **12-Mar-18**

Project Name	**SH-66 PEL Risk Assessment**
Project Number	**001**
Sub-Account Number	**XXXXX**
Project Description	**Risk Area ID# 10-Bridge Strike**
Project Work Type	**OTHER**
Estimator:	**M.A.S.**
Date:	7/31/2019

PROJECT LOCATION & CHARACTERISTICS

Route:	066B	**Begin MP:**	28.7	**End MP:**	51.4	**Length:**	22.7
CDOT Region:	4	**FIPS City:**	NONE	**FIPS County:**	Weld Co		
		FIPS City:	00000	**FIPS County:**	123		
Segment Mid-point	**RefPt** 40.040	**Latitude:**	40.2039	**Longitude:**	-105.0348		GOOGLE MAP LINK
Functional Classification:	Principal Arterial - Oth	**Urban-Rural Class:**	1 Rural			**Terrain:**	2
AADT:	19,000	**Truck ADT:**	270	**Tier Class:**	Tier 2	**Primary Surface:**	1 Asphalt

Design Maturity:	0 - Conceptual	**NEPA Action:**	Cat/Ex	**NEPA Status:**	Not Started
Project Delivery Method:	Design-Bid-Build	**Construction Start (MMM-YY)**	Jun-19	**Construction Duration (mo)**	36.0

REGION'S ESTIMATE

PROJECT CONSTRUCTION COSTS:

A MAJOR CONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION	QTY	UNIT	AVG. UNIT COST	COST
A-01	Earthwork	0	CY	$0.0	$0
A-02	Pavement & Bases	N/A	SY	N/A	$0
A-03_repl	Bridge Replacements	5,208	DECK AREA (SF)	$129.0	$672,000
A-03_repa	Bridge Repairs	0	DECK AREA (SF)	$0.0	$0
A-03_wall	Walls	0	SF	$0.0	$0
A-03_culv	Major Culverts	0	LF	$0.0	$0
A-03_misc	Miscellaneous Structures	0	LS	$0.0	$0
A-04	Traffic / ITS	N/A	N/A	N/A	$0
A-05	Other Major Items	N/A	N/A	N/A	$24,000
		SUBTOTAL (A)			$696,000

B MINOR CONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION		UNIT	AVG. UNIT COST	COST
B-01	Removals/Resets (201, 202, 210)		% OF A	9.58%	$66,677
B-02	Environmental		% OF A	8.36%	$58,186
B-03	Structural		% OF A	1.42%	$9,883
B-04	Drainage/Utilities		% OF A	1.00%	$6,960
B-05	Roadway Appurtenances		% OF A	0.81%	$5,638
B-06	Mobilization (620, 625, 626)		% OF A	25.59%	$178,106
B-07	Construction Traffic Control / Detour		% OF A	35.23%	$245,201
B-08	Lighting & Electrical (613)		% OF A	0.00%	$0
B-09	Permanent Signing and Striping (614A & 627)		% OF A	1.90%	$13,224
B-10	Traffic Signalization & ITS (614B & 614C)		% OF A	0.00%	$0
B-11	Miscellaneous		% OF A	0.36%	$2,484
		SUBTOTAL (B)	% OF A	84.25%	$586,000
	CONTRUCTION BID ITEMS (A + B)	**CBI**	**% OF A**	**184.20%**	**$1,282,000**

68.2% of Base Cost

C FORCE ACCOUNTS & TSM&O

PCP Cat	ITEM DESCRIPTION		UNIT	AVG. UNIT COST	COST
C-01	F/A - General		% OF CBI	6.00%	$76,920
C-02	F/A - Minor Contract Revisions (MCR's)		% OF CBI	3.00%	$38,460
C-03	F/A - Project Communications		% OF CBI	0.11%	$1,423
C-04	TSM&O Traffic & Operations		% OF CBI	0.00%	$0
		SUBTOTAL (C)	% OF CBI	9.13%	$117,000
	CONSTRUCTION ITEMS (A + B + C)	**CI**	**% OF A**	**201.01%**	**$1,399,000**

74.4% of Base Cost

D CONSTRUCTION ENGINEERING & INDIRECTS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
D-01	Construction Engineering	% OF CI	10.95%	$153,191
D-02	Construction Indirects	% OF CI	9.50%	$132,905
	SUBTOTAL (D)	% OF CI	20.44%	$286,000
	PROJECT CONSTRUCTION BUDGET (A + B + C + D)			**$1,685,000**

89.6% of Base Cost

PROJECT PRECONSTRUCTION COSTS:

E PRECONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
E-01	Right-of-Way [Phase R]	% OF CI	0.00%	$0
E-02	Utilities + Railroad Work [Phase U]	% OF CI	0.00%	$0
E-03	Design & Engineering [Phase D]	% OF CI	12.00%	$167,880
E-03.1	Subsurface Utility Engineering (SUE) Budget	% OF CI	0.75%	$10,493
E-03.2	Transportation Systems Management & Operation (TSM&O) Budget	% OF CI	0.00%	$0
E-04	Environmental (NEPA) [Phase E]	% OF CI	0.00%	$0
E-05	Miscellaneous [Phase M]	% OF CI	0.00%	$0
	SUBTOTAL (E)	% OF CI	12.72%	$178,000

F PRECONSTRUCTION INDIRECTS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
F-01	Preconstruction Indirects	% OF E	9.50%	$16,910
	SUBTOTAL (F)	% OF E	9.55%	$17,000
	PROJECT PRECONSTRUCTION BUDGET (E + F)			**$195,000**

10.4% of Base Cost

PROJECT BASE COST ESTIMATE (CONSTRUCTION + PRECONSTRUCTION) **$1,880,000**

100.0% of Base Cost

RISK RESERVE

PROBABILISTIC COST ESTIMATE RISK RESERVE DATE: **7/31/2019**

RISK RESERVE #NAME? OF BASE COST **#NAME?**

TOTAL PROJECT COST **#NAME?** **#NAME?** of Base Cost

ESCALATION

Construction Start	Jun-19	**Escalation from Estimate Date:**	Jul-19
Duration (mo)	36.0	**to Construction Mid-Point Date:**	Nov-20

ESCALATION 3.7% OF BASE COST **#NAME?**

ESCALATED PROJECT COST **#NAME?** **#NAME?** of Base Cost

NOTES: ***If clarifications are needed, please provide notes per section as needed below.***

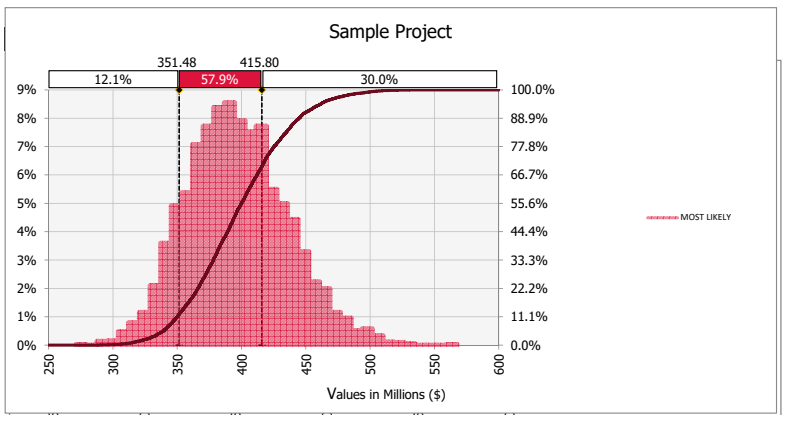
SECTION A: Major Construction Items

SECTION B: Minor Construction Items

SECTION C: Force Accounts & TSM&O

SECTION D: CE & Indirects

SECTION E&F: Preconstruction Items & Indirects



EXECUTIVE COST ESTIMATE SUMMARY SHEET

PROJECT PROFILE

Model Version 1 Rev 09
Last Update: **12-Mar-18**

Project Name	**SH-66 PEL Risk Assessment**
Project Number	**001**
Sub-Account Number	**XXXXX**
Project Description	**Risk Area ID# 11-Wildfire**
Project Work Type	**OTHER**
Estimator:	**M.A.S.**
Date:	7/31/2019

PROJECT LOCATION & CHARACTERISTICS

Route:	066B	**Begin MP:**	28.7	**End MP:**	51.4	**Length:**	22.7
CDOT Region:	4	**FIPS City:**	NONE	**FIPS County:**	Weld Co		
		FIPS City:	00000	**FIPS County:**	123		
Segment Mid-point	**RefPt** 40.040	**Latitude:**	40.2039	**Longitude:**	-105.0348		GOOGLE MAP LINK
Functional Classification:	Principal Arterial - Oth	**Urban-Rural Class:**	1 Rural			**Terrain:**	2
AADT:	19,000	**Truck ADT:**	270	**Tier Class:**	Tier 2	**Primary Surface:**	1 Asphalt

Design Maturity:	0 - Conceptual	**NEPA Action:**	Cat/Ex	**NEPA Status:**	Not Started
Project Delivery Method:	Design-Bid-Build	**Construction Start (MMM-YY)**	Jun-19	**Construction Duration (mo)**	36.0

REGION'S ESTIMATE

PROJECT CONSTRUCTION COSTS:

A MAJOR CONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION	QTY	UNIT	AVG. UNIT COST	COST
A-01	Earthwork	4,911	CY	$16.7	$82,000
A-02	Pavement & Bases	1,637	SY	$70.3	$115,000
A-03_repl	Bridge Replacements	5,929	DECK AREA (SF)	$129.0	$765,000
A-03_repa	Bridge Repairs	0	DECK AREA (SF)	$0.0	$0
A-03_wall	Walls	0	SF	$0.0	$0
A-03_culv	Major Culverts	0	LF	$0.0	$0
A-03_misc	Miscellaneous Structures	0	LS	$0.0	$0
A-04	Traffic / ITS	N/A	N/A	N/A	$0
A-05	Other Major Items	N/A	N/A	N/A	$11,000
		SUBTOTAL (A)			$973,000

B MINOR CONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION		UNIT	AVG. UNIT COST	COST
B-01	Removals/Resets (201, 202, 210)		% OF A	9.58%	$93,213
B-02	Environmental		% OF A	8.36%	$81,343
B-03	Structural		% OF A	1.42%	$13,817
B-04	Drainage/Utilities		% OF A	1.00%	$9,730
B-05	Roadway Appurtenances		% OF A	0.81%	$7,881
B-06	Mobilization (620, 625, 626)		% OF A	25.59%	$248,991
B-07	Construction Traffic Control / Detour		% OF A	35.23%	$342,788
B-08	Lighting & Electrical (613)		% OF A	0.00%	$0
B-09	Permanent Signing and Striping (614A & 627)		% OF A	1.90%	$18,487
B-10	Traffic Signalization & ITS (614B & 614C)		% OF A	0.00%	$0
B-11	Miscellaneous		% OF A	0.36%	$3,473
		SUBTOTAL (B)	% OF A	84.25%	$820,000
	CONTRUCTION BID ITEMS (A + B)	**CBI**	**% OF A**	**184.28%**	**$1,793,000**

68.2% of Base Cost

C FORCE ACCOUNTS & TSM&O

PCP Cat	ITEM DESCRIPTION		UNIT	AVG. UNIT COST	COST
C-01	F/A - General		% OF CBI	6.00%	$107,580
C-02	F/A - Minor Contract Revisions (MCR's)		% OF CBI	3.00%	$53,790
C-03	F/A - Project Communications		% OF CBI	0.12%	$2,069
C-04	TSM&O Traffic & Operations		% OF CBI	0.00%	$0
		SUBTOTAL (C)	% OF CBI	9.09%	$163,000
	CONSTRUCTION ITEMS (A + B + C)	**CI**	**% OF A**	**201.03%**	**$1,956,000**

74.4% of Base Cost

D CONSTRUCTION ENGINEERING & INDIRECTS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
D-01	Construction Engineering	% OF CI	10.95%	$214,182
D-02	Construction Indirects	% OF CI	9.50%	$185,820
	SUBTOTAL (D)	% OF CI	20.45%	$400,000
	PROJECT CONSTRUCTION BUDGET (A + B + C + D)			**$2,356,000**

89.6% of Base Cost

PROJECT PRECONSTRUCTION COSTS:

E PRECONSTRUCTION ITEMS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
E-01	Right-of-Way [Phase R]	% OF CI	0.00%	$0
E-02	Utilities + Railroad Work [Phase U]	% OF CI	0.00%	$0
E-03	Design & Engineering [Phase D]	% OF CI	12.00%	$234,720
E-03.1	Subsurface Utility Engineering (SUE) Budget	% OF CI	0.75%	$14,670
E-03.2	Transportation Systems Management & Operation (TSM&O) Budget	% OF CI	0.00%	$0
E-04	Environmental (NEPA) [Phase E]	% OF CI	0.00%	$0
E-05	Miscellaneous [Phase M]	% OF CI	0.00%	$0
	SUBTOTAL (E)	% OF CI	12.73%	$249,000

F PRECONSTRUCTION INDIRECTS

PCP Cat	ITEM DESCRIPTION	UNIT	COST %	COST
F-01	Preconstruction Indirects	% OF E	9.50%	$23,655
	SUBTOTAL (F)	% OF E	9.64%	$24,000
	PROJECT PRECONSTRUCTION BUDGET (E + F)			**$273,000**

10.4% of Base Cost

PROJECT BASE COST ESTIMATE (CONSTRUCTION + PRECONSTRUCTION) **$2,629,000**

100.0% of Base Cost

RISK RESERVE

PROBABILISTIC COST ESTIMATE RISK RESERVE DATE: **7/31/2019**

RISK RESERVE #NAME? OF BASE COST **#NAME?**

TOTAL PROJECT COST **#NAME?**

#NAME? of Base Cost

ESCALATION

Construction Start	Jun-19	**Escalation from Estimate Date:**	Jul-19
Duration (mo)	36.0	**to Construction Mid-Point Date:**	Nov-20

ESCALATION 3.7% OF BASE COST **#NAME?**

ESCALATED PROJECT COST **#NAME?**

#NAME? of Base Cost

NOTES: ***If clarifications are needed, please provide notes per section as needed below.***

SECTION A: Major Construction Items

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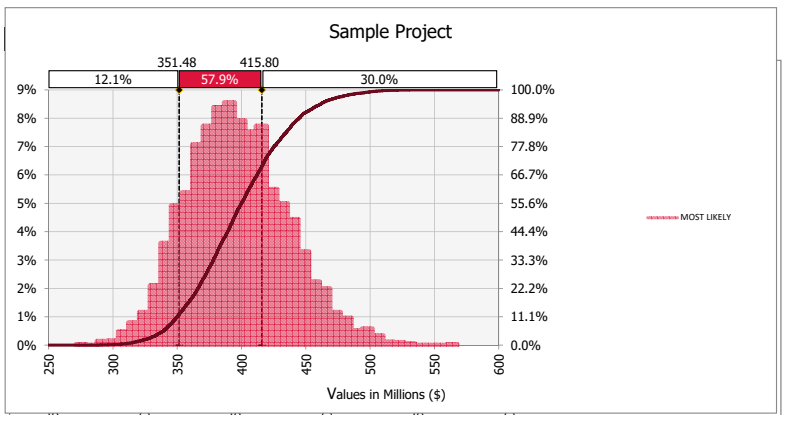
SECTION D: CE & Indirects

SECTION E&F: Preconstruction Items & Indirects



ROAD USER COST CALCULATIONS

Subaccount: | Project Name: SH-66 PEL Risk Area 1-Floodplain | Highway No.: 066B

Construction Year ADT: 17000 | % Trucks: 2.8

NON-CONSTRUCTION CONDITIONS

Posted Speed = 50 | Length = 2 Miles

Travel Time = Mileage ÷ (Posted Speed ÷ 60 min/hr) = **2.40** **Minutes**

CONSTRUCTION CONDITIONS

Total Construction Length including Detours: 68 Miles

*Length		Construction Speed MPH		**Travel Time**
15	Mi ÷	40	**x 60 =**	**22.50**
22	Mi ÷	45	**x 60 =**	**29.33**
31	Mi ÷	55	**x 60 =**	**33.82**
	Mi ÷		**x 60 =**	**0.00**
	Mi ÷		**x 60 =**	**0.00**

*Segment Length Total: 68 **Total Travel Time =** **85.65** **Minutes**

*Segment mileage should add up to Total Construction Length.

TRAVEL TIME COSTS:

Delay Cost Factors:

Passenger Cars: 12.16 $ / veh-hr of delay

Multi-Unit Trucks: 24.18 $ / veh-hr of delay

	[%]		[ADT]		[COST FACT]		Daily Cost per Minute of Delay
Passenger Car Component:	0.972	X	17000	X	12.16	÷ 60 min/hr =	**$3,348.86**
Truck Component:	0.028	X	17000	X	24.18	÷ 60 min/hr =	**$191.83**

Total Daily Cost per Minute of Delay = $3,540.69

ROAD USER COSTS

Construction Delay = Construction Travel Time - Non-Construction Travel Time = **83.25** Minutes

Total Resultant Delay Costs = **83.25** **X** **$3,541** **=** **$294,768** **per day**

USE 294,800

ROAD USER COST CALCULATIONS

Subaccount: | Project Name: SH-66 PEL Risk Area 2-Floodplain | Highway No.: 066B

Construction Year ADT: 11000 | % Trucks: 8.6

NON-CONSTRUCTION CONDITIONS

Posted Speed = 65 | Length = 9 Miles

Travel Time = Mileage ÷ (Posted Speed ÷ 60 min/hr) = **8.31** **Minutes**

CONSTRUCTION CONDITIONS

Total Construction Length including Detours: 26 Miles

*Length		Construction Speed MPH			Travel Time
18	Mi ÷	55		x 60 =	19.64
8	Mi ÷	75		x 60 =	6.40
	Mi ÷			x 60 =	0.00
	Mi ÷			x 60 =	0.00
	Mi ÷			x 60 =	0.00

*Segment Length Total: 26 **Total Travel Time = 26.04 Minutes**

*Segment mileage should add up to Total Construction Length.

TRAVEL TIME COSTS:

Delay Cost Factors:

Passenger Cars: 12.16 $ / veh-hr of delay

Multi-Unit Trucks: 24.18 $ / veh-hr of delay

	[%]		[ADT]		[COST FACT]			Daily Cost per Minute of Delay
Passenger Car Component:	0.914	X	11000	X	12.16	÷	60 min/hr =	**$2,037.61**
Truck Component:	0.086	X	11000	X	24.18	÷	60 min/hr =	**$381.24**

Total Daily Cost per Minute of Delay = $2,418.85

ROAD USER COSTS

Construction Delay = Construction Travel Time - Non-Construction Travel Time = **17.73** Minutes

Total Resultant Delay Costs = 17.73 X $2,419 = $42,883 per day

USE 42,900

ROAD USER COST CALCULATIONS

Subaccount: | Project Name: SH-66 PEL Risk Area 3-Debris Flow | Highway No.: 066B

Construction Year ADT: 17000 | % Trucks: 2.8

NON-CONSTRUCTION CONDITIONS

Posted Speed = 50 | Length = 10 Miles

Travel Time = Mileage ÷ (Posted Speed ÷ 60 min/hr) = **12.00** **Minutes**

CONSTRUCTION CONDITIONS

Total Construction Length including Detours: 69 Miles

*Length		Construction Speed MPH			Travel Time
4	Mi ÷	35	x 60 =		**6.86**
15	Mi ÷	40	x 60 =		**22.50**
22	Mi ÷	45	x 60 =		**29.33**
28	Mi ÷	55	x 60 =		**30.55**
	Mi ÷		x 60 =		**0.00**

*Segment Length Total: 69 **Total Travel Time =** **89.24** **Minutes**

*Segment mileage should add up to Total Construction Length.

TRAVEL TIME COSTS:

Delay Cost Factors:

Passenger Cars: 12.16 $ / veh-hr of delay

Multi-Unit Trucks: 24.18 $ / veh-hr of delay

	[%]		[ADT]		[COST FACT]		Daily Cost per Minute of Delay
Passenger Car Component:	0.972	X	17000	X	12.16	÷ 60 min/hr =	**$3,348.86**
Truck Component:	0.028	X	17000	X	24.18	÷ 60 min/hr =	**$191.83**

Total Daily Cost per Minute of Delay = $3,540.69

ROAD USER COSTS

Construction Delay = Construction Travel Time - Non-Construction Travel Time = **77.24** Minutes

Total Resultant Delay Costs = **77.24** **X** **$3,541** **=** **$273,469** **per day**

USE 273,500

ROAD USER COST CALCULATIONS

Subaccount: | Project Name: SH-66 PEL Risk Area 4-At Grade Xing | Highway No.: 066B

Construction Year ADT: 11000 | % Trucks: 4.4

NON-CONSTRUCTION CONDITIONS

Posted Speed = 60 | Length = 8 Miles

Travel Time = Mileage ÷ (Posted Speed ÷ 60 min/hr) = **8.00** **Minutes**

CONSTRUCTION CONDITIONS

Total Construction Length including Detours: 29 Miles

*Length		Construction Speed MPH		Travel Time
4	Mi ÷	35	x 60 =	6.86
25	Mi ÷	55	x 60 =	27.27
	Mi ÷		x 60 =	0.00
	Mi ÷		x 60 =	0.00
	Mi ÷		x 60 =	0.00

*Segment Length Total: 29 **Total Travel Time =** **34.13** **Minutes**

*Segment mileage should add up to Total Construction Length.

TRAVEL TIME COSTS:

Delay Cost Factors:

Passenger Cars: 12.16 $ / veh-hr of delay

Multi-Unit Trucks: 24.18 $ / veh-hr of delay

	[%]		[ADT]		[COST FACT]		Daily Cost per Minute of Delay
Passenger Car Component:	0.956	X	11000	X	12.16	÷ 60 min/hr =	**$2,131.24**
Truck Component:	0.044	X	11000	X	24.18	÷ 60 min/hr =	**$195.05**

Total Daily Cost per Minute of Delay = $2,326.29

ROAD USER COSTS

Construction Delay = Construction Travel Time - Non-Construction Travel Time = **26.13** Minutes

Total Resultant Delay Costs = **26.13** **X** **$2,326** **=** **$60,786** **per day**

USE 60,800

ROAD USER COST CALCULATIONS

Subaccount: | Project Name: I-66 PEL Risk Area 5-At Grade Crossing | Highway No.: 066B

Construction Year ADT: 20000 | % Trucks: 4.7

NON-CONSTRUCTION CONDITIONS

Posted Speed = 60 | Length = 8 Miles

Travel Time = Mileage ÷ (Posted Speed ÷ 60 min/hr) = **8.00** **Minutes**

CONSTRUCTION CONDITIONS

Total Construction Length including Detours: 26 Miles

*Length		Construction Speed MPH			Travel Time
4	Mi ÷	35	x 60 =		6.86
7	Mi ÷	55	x 60 =		7.64
3	Mi ÷	75	x 60 =		2.40
	Mi ÷		x 60 =		0.00
	Mi ÷		x 60 =		0.00

*Segment Length Total: 14 **Total Travel Time = 16.89 Minutes**

*Segment mileage should add up to Total Construction Length.

TRAVEL TIME COSTS:

Delay Cost Factors:

Passenger Cars: 12.16 $ / veh-hr of delay

Multi-Unit Trucks: 24.18 $ / veh-hr of delay

	[%]		[ADT]		[COST FACT]		Daily Cost per Minute of Delay
Passenger Car Component:	0.953	X	20000	X	12.16	÷ 60 min/hr =	**$3,862.83**
Truck Component:	0.047	X	20000	X	24.18	÷ 60 min/hr =	**$378.82**

Total Daily Cost per Minute of Delay = $4,241.65

ROAD USER COSTS

Construction Delay = Construction Travel Time - Non-Construction Travel Time = **8.89** Minutes

Total Resultant Delay Costs = 8.89 X $4,242 = $37,723 per day

USE 37,800

ROAD USER COST CALCULATIONS

Subaccount: | Project Name: I-66 PEL Risk Area 6-At Grade Crossing | Highway No.: 066B

Construction Year ADT: 20000 | % Trucks: 4.7

NON-CONSTRUCTION CONDITIONS

Posted Speed = 60 | Length = 8 Miles

Travel Time = Mileage ÷ (Posted Speed ÷ 60 min/hr) = **8.00** **Minutes**

CONSTRUCTION CONDITIONS

Total Construction Length including Detours: 14 Miles

*Length		Construction Speed MPH			Travel Time
4	Mi ÷	35	x 60 =		6.86
7	Mi ÷	55	x 60 =		7.64
3	Mi ÷	75	x 60 =		2.40
	Mi ÷		x 60 =		0.00
	Mi ÷		x 60 =		0.00

*Segment Length Total: 14 **Total Travel Time = 16.89 Minutes**

*Segment mileage should add up to Total Construction Length.

TRAVEL TIME COSTS:

Delay Cost Factors:

Passenger Cars: 12.16 $ / veh-hr of delay

Multi-Unit Trucks: 24.18 $ / veh-hr of delay

	[%]		[ADT]		[COST FACT]		Daily Cost per Minute of Delay
Passenger Car Component:	0.953	X	20000	X	12.16	÷ 60 min/hr =	**$3,862.83**
Truck Component:	0.047	X	20000	X	24.18	÷ 60 min/hr =	**$378.82**

Total Daily Cost per Minute of Delay = $4,241.65

ROAD USER COSTS

Construction Delay = Construction Travel Time - Non-Construction Travel Time = **8.89** Minutes

Total Resultant Delay Costs = 8.89 X $4,242 = $37,723 per day

USE 37,800

ROAD USER COST CALCULATIONS

Subaccount: | Project Name: SH-66 PEL Risk Area 7-Overhead Pipe | Highway No.: 066B

Construction Year ADT: 11000 | % Trucks: 4.4

NON-CONSTRUCTION CONDITIONS

Posted Speed = 60 | Length = 8 Miles

Travel Time = Mileage ÷ (Posted Speed ÷ 60 min/hr) = **8.00** **Minutes**

CONSTRUCTION CONDITIONS

Total Construction Length including Detours: 29 Miles

*Length		Construction Speed MPH			Travel Time
4	Mi ÷	35		x 60 =	6.86
25	Mi ÷	55		x 60 =	27.27
	Mi ÷			x 60 =	0.00
	Mi ÷			x 60 =	0.00
	Mi ÷			x 60 =	0.00

*Segment Length Total: 29 **Total Travel Time = 34.13 Minutes**

*Segment mileage should add up to Total Construction Length.

TRAVEL TIME COSTS:

Delay Cost Factors:

Passenger Cars: 12.16 $ / veh-hr of delay

Multi-Unit Trucks: 24.18 $ / veh-hr of delay

	[%]		[ADT]		[COST FACT]			Daily Cost per Minute of Delay
Passenger Car Component:	0.956	X	11000	X	12.16	÷	60 min/hr =	**$2,131.24**
Truck Component:	0.044	X	11000	X	24.18	÷	60 min/hr =	**$195.05**

Total Daily Cost per Minute of Delay = $2,326.29

ROAD USER COSTS

Construction Delay = Construction Travel Time - Non-Construction Travel Time = **26.13** Minutes

Total Resultant Delay Costs = 26.13 X $2,326 = $60,786 per day

USE 60,800

ROAD USER COST CALCULATIONS

Subaccount: | Project Name: SH-66 PEL Risk Area 1-Floodplain | Highway No.: 066B

Construction Year ADT: 17000 | % Trucks: 2.8

NON-CONSTRUCTION CONDITIONS

Posted Speed = 50 | Length = 2 Miles

Travel Time = Mileage ÷ (Posted Speed ÷ 60 min/hr) = **2.40** **Minutes**

CONSTRUCTION CONDITIONS

Total Construction Length including Detours: 68 Miles

*Length		Construction Speed MPH		**Travel Time**
15	Mi ÷	40	**x 60 =**	**22.50**
22	Mi ÷	45	**x 60 =**	**29.33**
31	Mi ÷	55	**x 60 =**	**33.82**
	Mi ÷		**x 60 =**	**0.00**
	Mi ÷		**x 60 =**	**0.00**

*Segment Length Total: 68 **Total Travel Time =** **85.65** **Minutes**

*Segment mileage should add up to Total Construction Length.

TRAVEL TIME COSTS:

Delay Cost Factors:

Passenger Cars: 12.16 $ / veh-hr of delay

Multi-Unit Trucks: 24.18 $ / veh-hr of delay

	[%]		[ADT]		[COST FACT]			Daily Cost per Minute of Delay
Passenger Car Component:	0.972	**X**	17000	**X**	12.16	÷	60 min/hr =	**$3,348.86**
Truck Component:	0.028	**X**	17000	**X**	24.18	÷	60 min/hr =	**$191.83**

Total Daily Cost per Minute of Delay = $3,540.69

ROAD USER COSTS

Construction Delay = Construction Travel Time - Non-Construction Travel Time = **83.25** Minutes

Total Resultant Delay Costs = **83.25** **X** **$3,541** **=** **$294,768** **per day**

USE 294,800

ROAD USER COST CALCULATIONS

Subaccount: | Project Name: SH-66 PEL Risk Area 9-Bridge Strike | Highway No.: 066B

Construction Year ADT: 20000 | % Trucks: 4.7

NON-CONSTRUCTION CONDITIONS

Posted Speed = 55 | Length = 15 Miles

Travel Time = Mileage ÷ (Posted Speed ÷ 60 min/hr) = **16.36** **Minutes**

CONSTRUCTION CONDITIONS

Total Construction Length including Detours: 33 Miles

*Length		Construction Speed MPH		Travel Time
8	Mi ÷	45	x 60 =	10.67
25	Mi ÷	55	x 60 =	27.27
	Mi ÷		x 60 =	0.00
	Mi ÷		x 60 =	0.00
	Mi ÷		x 60 =	0.00

*Segment Length Total: 33 **Total Travel Time =** **37.94** **Minutes**

*Segment mileage should add up to Total Construction Length.

TRAVEL TIME COSTS:

Delay Cost Factors:

Passenger Cars: 12.16 $ / veh-hr of delay

Multi-Unit Trucks: 24.18 $ / veh-hr of delay

	[%]		[ADT]		[COST FACT]		Daily Cost per Minute of Delay
Passenger Car Component:	0.953	X	20000	X	12.16	÷ 60 min/hr =	**$3,862.83**
Truck Component:	0.047	X	20000	X	24.18	÷ 60 min/hr =	**$378.82**

Total Daily Cost per Minute of Delay = $4,241.65

ROAD USER COSTS

Construction Delay = Construction Travel Time - Non-Construction Travel Time = **21.58** Minutes

Total Resultant Delay Costs = **21.58** **X** **$4,242** **=** **$91,517** **per day**

USE 91,600

ROAD USER COST CALCULATIONS

Subaccount: | Project Name: SH-66 PEL Risk Area 2-Floodplain | Highway No.: 066B

Construction Year ADT: 11000 | % Trucks: 8.6

NON-CONSTRUCTION CONDITIONS

Posted Speed = 65 | Length = 9 Miles

Travel Time = Mileage ÷ (Posted Speed ÷ 60 min/hr) = **8.31** **Minutes**

CONSTRUCTION CONDITIONS

Total Construction Length including Detours: 26 Miles

*Length		Construction Speed MPH			Travel Time
18	Mi ÷	55		x 60 =	19.64
8	Mi ÷	75		x 60 =	6.40
	Mi ÷			x 60 =	0.00
	Mi ÷			x 60 =	0.00
	Mi ÷			x 60 =	0.00

*Segment Length Total: 26 **Total Travel Time = 26.04 Minutes**

*Segment mileage should add up to Total Construction Length.

TRAVEL TIME COSTS:

Delay Cost Factors:

Passenger Cars: 12.16 $ / veh-hr of delay

Multi-Unit Trucks: 24.18 $ / veh-hr of delay

	[%]		[ADT]		[COST FACT]			Daily Cost per Minute of Delay
Passenger Car Component:	0.914	X	11000	X	12.16	÷	60 min/hr =	**$2,037.61**
Truck Component:	0.086	X	11000	X	24.18	÷	60 min/hr =	**$381.24**

Total Daily Cost per Minute of Delay = $2,418.85

ROAD USER COSTS

Construction Delay = Construction Travel Time - Non-Construction Travel Time = **17.73** Minutes

Total Resultant Delay Costs = 17.73 X $2,419 = $42,883 per day

USE 42,900

ROAD USER COST CALCULATIONS

Subaccount: | Project Name: SH-66 PEL Risk Area 11-Wildfire | Highway No.: 066B

Construction Year ADT: 17000 | % Trucks: 2.8

NON-CONSTRUCTION CONDITIONS

Posted Speed = 50 | Length = 10 Miles

Travel Time = Mileage ÷ (Posted Speed ÷ 60 min/hr) = **12.00** **Minutes**

CONSTRUCTION CONDITIONS

Total Construction Length including Detours: 69 Miles

*Length		Construction Speed MPH		Travel Time
4	Mi ÷	35	x 60 =	**6.86**
15	Mi ÷	40	x 60 =	**22.50**
22	Mi ÷	45	x 60 =	**29.33**
28	Mi ÷	55	x 60 =	**30.55**
	Mi ÷		x 60 =	**0.00**

*Segment Length Total: 69 **Total Travel Time =** **89.24** **Minutes**

*Segment mileage should add up to Total Construction Length.

TRAVEL TIME COSTS:

Delay Cost Factors:

Passenger Cars: 12.16 $ / veh-hr of delay

Multi-Unit Trucks: 24.18 $ / veh-hr of delay

	[%]		[ADT]		[COST FACT]		Daily Cost per Minute of Delay
Passenger Car Component:	0.972	X	17000	X	12.16	÷ 60 min/hr =	**$3,348.86**
Truck Component:	0.028	X	17000	X	24.18	÷ 60 min/hr =	**$191.83**

Total Daily Cost per Minute of Delay = $3,540.69

ROAD USER COSTS

Construction Delay = Construction Travel Time - Non-Construction Travel Time = **77.24** Minutes

Total Resultant Delay Costs = **77.24** **X** **$3,541** **=** **$273,469** **per day**

USE 273,500

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Appendix L. Preliminary Opinion of Potential Costs

Disclaimer: This preliminary opinion of potential costs is based on a planning level evaluation. These potential costs may serve as a placeholder for funding but have not been developed based on engineered plans. This preliminary opinion of potential costs should not be programmed for future transportation improvements until further engineering analysis is completed for the improvement(s). These ranges are based on 2019 dollars and do not include potential right of way, environmental, utility, topography, and stakeholder considerations. Potential costs were developed through a high level consideration of major cost elements only.

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PRELIMINARY OPINION OF POTENTIAL COSTS

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SH 66 - Section 1

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST	LOW/HIGH RANGE	
SH 66 - Section 1 - Near Term							
1A	**Raised Median / Widening / C&G**						
	Median Cover Material	SF	76,200	$ 15	$ 1,143,000		
	Curb & Gutter Type 2 (Section IB or median)	LF	12,700	$ 35	$ 444,500		
	Bike lane, shoulder (11 ft of pavement)	Ton	2,183	$ 175	$ 382,016		
	Curb & Gutter Type 2 (Section IIB or outside edges)	LF	8,960	$ 35	$ 313,600		
	Widening to 4 lanes (approx. 2 x 12')	Ton	1,191	$ 175	$ 208,373		
				Subtotal	**$ 2,491,489**		
	Contingency (assumes: 5% Erosion Control, 5% Drainage, 4% Mobilization, 2% Surveying, 5% Traffic Control, 0% Utilities, 8% Design, 10% Construction Management)			**39%**	$ 971,680.61	$ 622,872	$ 1,619,468
				Total	**$ 3,463,169**	**$ 3,114,361**	**$ 4,110,956**
1A	**Grade Sep. Ped. - 10'x10' Box Culvert (@ US 36)**	LF	180.00	$ 2,500	$ 450,000		
				Subtotal	**$ 450,000**		
	Contingency (assumes: 2% Erosion Control, 0% Drainage, 2% Mobilization, 1% Surveying, 5% Traffic Control, 1% Utilities, 8% Design, 10% Construction Management)			**29%**	$ 130,500	$ 90,000	$ 292,500
				Total	**$ 580,500**	**$ 540,000**	**$ 742,500**
1B	**Rumble Strips**	LF	37,000	$ 2	$ 74,000		
				Subtotal	**$ 74,000**		
	Contingency (assumes: 0% Erosion Control, 0% Drainage, 1% Mobilization, 1% Surveying, 2% Traffic Control, 0% Utilities, 1% Design, 1% Construction Management)			**6%**	$ 4,440		
				Total	**$ 78,440**		**<$100,000**
1B	**West of 75th Street - shoulder widening**						
	Widen Shoulders (Assumed 10 ft of new pavement, both	Ton	404	$ 175	$ 70,744		
				Subtotal	**$ 70,744**		
	Contingency (assumes: 5% Erosion Control, 2% Drainage, 3% Mobilization, 2% Surveying, 3% Traffic Control, 1% Utilities, 5% Design, 6% Construction Management)			**27%**	$ 19,101	$ 10,612	$ 42,446
				Total	**$ 89,845**	**$ 81,355**	**$ 113,190**
1B	**16 ft Access Road w/Advisory Shoulder**	Ton	6,453	$ 175	$ 1,129,328		
	Right/Left Turn Lanes (Aux. lanes @ 53rd, ACP Access #389, 70, 78, 81, 97, 98, 116, 117) (Aux Lanes = Right/Left Decel plus RT Accel)	Ton	14,844	$ 175	$ 2,597,711		
				Subtotal	**$ 3,727,038**		
	Contingency (assumes: 5% Erosion Control, 2% Drainage, 4% Mobilization, 4% Surveying, 5% Traffic Control, 1% Utilities, 8% Design, 10% Construction Management)			**39%**	$ 1,453,545	$ 931,760	$ 2,422,575
				Total	**$ 5,180,583**	**$ 4,658,798**	**$ 6,149,613**
1C	**Grade Sep. Ped. - 10'x10' Box Culvert (W of 75th)**	LF	180.00	$ 2,500	$ 450,000		
				Subtotal	**$ 450,000**		
	Contingency (assumes: 2% Erosion Control, 0% Drainage, 2% Mobilization, 1% Surveying, 5% Traffic Control, 1% Utilities, 8% Design, 10% Construction Management)			**29%**	$ 130,500	$ 90,000	$ 292,500
				Total	**$ 580,500**	**$ 540,000**	**$ 742,500**
1C	**Rumble Strips**	LF	15,700	$ 2	$ 31,400		
				Subtotal	**$ 31,400**		
	Contingency (assumes: 0% Erosion Control, 0% Drainage, 1% Mobilization, 1% Surveying, 2% Traffic Control, 0% Utilities, 1% Design, 1% Construction Management)			**6%**	$ 1,884		
				Total	**$ 33,284**		**<$100,000**
1C	**East of 75th Street and West of 87th - shoulder widening**						
	Widen Shoulders (Assumed 10 ft of new pavement, both	Ton	1,047	$ 175	$ 183,291		
				Subtotal	**$ 183,291**		
	Contingency (assumes: 5% Erosion Control, 2% Drainage, 3% Mobilization, 2% Surveying, 3% Traffic Control, 1% Utilities, 5% Design, 6% Construction Management)			**27%**	$ 49,488	$ 27,494	$ 109,974
				Total	**$ 232,779**	**$ 210,784**	**$ 293,265**
1C	**16 ft Access Road w/Advisory Shoulder**	Ton	1,000	$ 175	$ 174,930		
	Right/Left Turn Lanes (Aux. lanes @ 145, 146, 155) (Aux Lanes = Right/Left Decel plus RT Accel)	Ton	4,948	$ 175	$ 865,904		
				Subtotal	**$ 1,040,834**		
	Contingency (assumes: 5% Erosion Control, 2% Drainage, 4% Mobilization, 4% Surveying, 5% Traffic Control, 1% Utilities, 8% Design, 10% Construction Management)			**39%**	$ 405,925	$ 260,208	$ 676,542
				Total	**$ 1,446,759**	**$ 1,301,042**	**$ 1,717,375**
SH 66 - Section 1 - Mid Term							
1B	**10 ft Bike/Pedestrian Path**	Ton	2,418	$ 175	$ 423,176		
				Subtotal	**$ 423,176**		
	Contingency (assumes: 5% Erosion Control, 2% Drainage, 3% Mobilization, 3% Surveying, 1% Traffic Control, 1% Utilities, 6% Design, 8% Construction Management)			**29%**	$ 122,721	$ 84,635	$ 253,906
				Total	**$ 545,897**	**$ 507,812**	**$ 677,082**
1B	**Signals as Warranted**	EA	3	$ 350,000	$ 1,050,000		
				Subtotal	**$ 1,050,000**		
	Contingency (assumes: 0% Erosion Control, 0% Drainage, 0% Mobilization, 0% Surveying, 0% Traffic Control, 0% Utilities, 0% Design, 0% Construction Management (no contingency on signals))			**0%**	$ -	***Per Intersection***	
				Total	**$ 1,050,000**	**$ 350,000**	**$ 400,000**
1C	**10 ft Bike/Pedestrian Path**	Ton	2,251	$ 175	$ 393,914		
	Signals (none)						
				Subtotal	**$ 393,914**		
	Contingency (assumes: 5% Erosion Control, 2% Drainage, 3% Mobilization, 2% Surveying, 3% Traffic Control, 1% Utilities, 5% Design, 6% Construction Management)			**27%**	$ 106,357	$ 78,783	$ 236,348
				Total	**$ 500,271**	**$ 472,697**	**$ 630,263**
SH 66 - Section 1 - Long Term							
1B	**Grade Sep. Ped. - 10'x10' Box Culvert (E of 53rd)**	LF	180.00	$ 2,500	$ 450,000		
				Subtotal	**$ 450,000**		
	Contingency (assumes: 2% Erosion Control, 0% Drainage, 2% Mobilization, 1% Surveying, 5% Traffic Control, 1% Utilities, 8% Design, 10% Construction Management)			**29%**	$ 130,500	$ 90,000	$ 292,500
				Total	**$ 580,500**	**$ 540,000**	**$ 742,500**

PRELIMINARY OPINION OF POTENTIAL COSTS

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SH 66 - Section 2

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST	LOW/HIGH RANGE	
SH 66 - Section 2 - Near Term							
2	**Signals as Warranted**	EA	2	$ 350,000	$ 700,000		
				Subtotal	**$ 700,000**		
	Contingency (assumes: 0% Erosion Control, 0% Drainage, 0% Mobilization, 0% Surveying, 0% Traffic Control, 0% Utilities, 0% Design, 0% Construction Management (no contingency on signals))			**0%**	$ -	***Per Intersection***	
				Total	**$ 700,000**	**$ 350,000**	**$ 400,000**
2	**East of 87th - shoulder widening**						
	Widen Shoulders (Assumed 10 ft of new pavement, both sides)	Ton	1,158	$ 175	$ 202,584		
				Subtotal	**$ 202,584**		
	Contingency (assumes: 5% Erosion Control, 2% Drainage, 3% Mobilization, 2% Surveying, 3% Traffic Control, 1% Utilities, 5% Design, 6% Construction Management)			**27%**	$ 54,698	$ 30,388	$ 121,551
				Total	**$ 257,282**	**$ 232,972**	**$ 324,135**
2	**87th/Airport to 95th/Hover**						
	10 ft Bike/Pedestrian path	Ton	1,940	$ 175	$ 339,570		
	16 ft Frontage Road (Anhawa to Hover)	Ton	1,235	$ 175	$ 216,090		
				Subtotal	**$ 555,660**		
	Contingency (assumes: 5% Erosion Control, 2% Drainage, 4% Mobilization, 4% Surveying, 5% Traffic Control, 1% Utilities, 8% Design, 10% Construction Management)			**39%**	$ 216,707	$ 138,915	$ 361,179
				Total	**$ 772,367**	**$ 694,575**	**$ 916,839**
2	**95th/Hover to Erfert**						
	4 lanes (reconstruct)(approx. 4 x 12' w/5' shldr)	Ton	19,823	$ 175	$ 3,469,016		
	Median Cover Material	SF	111,600	$ 15	$ 1,674,000		
	Curb & Gutter Type 2 (Section IB or median)	LF	18,600	$ 35	$ 651,000		
	Curb & Gutter Type 2 (Section IIB or outside edges)	LF	18,600	$ 35	$ 651,000		
	10 ft Bike/Pedestrian path (N & S)	Ton	6,836	$ 175	$ 1,196,213		
				Subtotal	**$ 7,641,229**		
	Contingency (assumes: 5% Erosion Control, 5% Drainage, 4% Mobilization, 2% Surveying, 5% Traffic Control, 0% Utilities, 8% Design, 10% Construction Management)			**39%**	$ 2,980,079	$ 1,910,307	$ 4,966,799
				Total	**$ 10,621,308**	**$ 9,551,536**	**$ 12,608,027**
2	**Displaced Left - US 287 & SH 66**						
	6 lanes (reconstruct)(approx. 6 x 12')(2 left, 2 thru each direction, 1 accel & 1 decel)	Ton	11,642	$ 175	$ 2,037,420		
	Median Cover Material	SF	42,000	$ 15	$ 630,000		
	Curb & Gutter Type 2 (Section IB or median)	LF	7,000	$ 35	$ 245,000		
	Curb & Gutter Type 2 (Section IIB or outside edges)	LF	6,600	$ 35	$ 231,000		
	Signals (I main and 2 minor)	EA	3	$ -	$ 1,000,000		
				Subtotal	**$ 4,143,420**		
	Contingency (assumes: 5% Erosion Control, 5% Drainage, 4% Mobilization, 5% Surveying, 5% Traffic Control, 5% Utilities, 8% Design, 10% Construction Management)			**47%**	$ 1,947,407	$ 1,243,026	$ 2,900,394
				Total	**$ 6,090,827**	**$ 5,386,446**	**$ 7,043,814**
2	**Erfert to Alpine**						
	10 ft Bike/Pedestrian path (S edge)	Ton	2,940	$ 175	$ 514,500		
				Subtotal	**$ 514,500**		
	Contingency (assumes: 5% Erosion Control, 2% Drainage, 3% Mobilization, 3% Surveying, 1% Traffic Control, 1% Utilities, 6% Design, 8% Construction Management)			**29%**	$ 149,205	$ 102,900	$ 308,700
				Total	**$ 663,705**	**$ 617,400**	**$ 823,200**
2	**Alpine to County Line**						
	4 lanes (reconstruct)(approx. 4 x 12' w/5' shldr)	Ton	16,839	$ 175	$ 2,946,799		
	Median Cover Material	SF	94,800	$ 15	$ 1,422,000		
	Curb & Gutter Type 2 (Section IB or median)	LF	15,800	$ 35	$ 553,000		
	Curb & Gutter Type 2 (Section IIB or outside edges)	LF	15,800	$ 35	$ 553,000		
	10 ft Bike/Pedestrian path (S only)	Ton	2,903	$ 175	$ 508,069		
				Subtotal	**$ 5,982,868**		
	Contingency (assumes: 5% Erosion Control, 5% Drainage, 4% Mobilization, 2% Surveying, 5% Traffic Control, 0% Utilities, 8% Design, 10% Construction Management)			**39%**	$ 2,333,318	$ 1,495,717	$ 3,888,864
				Total	**$ 8,316,186**	**$ 7,478,584**	**$ 9,871,731**
SH 66 - Section 2 - Mid Term							
2	**Signals as Warranted**	LF	2	$ 350,000	$ 700,000		
				Subtotal	**$ 700,000**		
	Contingency (assumes: 0% Erosion Control, 0% Drainage, 0% Mobilization, 0% Surveying, 0% Traffic Control, 0% Utilities, 0% Design, 0% Construction Management (no contingency on signals))			**0%**	$ -	***Per Intersection***	
				Total	**$ 700,000**	**$ 350,000**	**$ 400,000**
2	**Erfert to Alpine**						
	4 lanes (reconstruct)(approx. 4 x 12' w/5' shldr)	Ton	8,526	$ 175	$ 1,492,050		
	Median Cover Material	SF	48,000	$ 15	$ 720,000		
	Curb & Gutter Type 2 (Section IB or median)	LF	8,000	$ 35	$ 280,000		
	Curb & Gutter Type 2 (Section IIB or outside edges)	LF	8,000	$ 35	$ 280,000		
	Bridge (assume 150 ft long)	SF	12,750	$ 300	$ 3,825,000		
				Subtotal	**$ 6,597,050**		
	Contingency (assumes: 5% Erosion Control, 5% Drainage, 4% Mobilization, 2% Surveying, 5% Traffic Control, 0% Utilities, 8% Design, 10% Construction Management)			**39%**	$ 2,572,850	$ 1,649,263	$ 4,288,083
				Total	**$ 9,169,900**	**$ 8,246,313**	**$ 10,885,133**
SH 66 - Section 2 - Long Term							
2	**Signals as Warranted**	EA	1	$ 350,000	$ 350,000		
				Subtotal	**$ 350,000**		
	Contingency (assumes: 0% Erosion Control, 0% Drainage, 0% Mobilization, 0% Surveying, 0% Traffic Control, 0% Utilities, 0% Design, 0% Construction Management (no contingency on signals))			**0%**	$ -	***Per Intersection***	
				Total	**$ 350,000**	**$ 350,000**	**$ 400,000**
2	**87th/Airport to 95th/Hover**						
	4 lanes (reconstruct)(approx. 4 x 12' w/5' shldr)	Ton	11,254	$ 175	$ 1,969,506		
	Median Cover Material	SF	63,360	$ 15	$ 950,400		
	Curb & Gutter Type 2 (Section IB or median)	LF	10,560	$ 35	$ 369,600		
	Curb & Gutter Type 2 (Section IIB or outside edges)	LF	10,560	$ 35	$ 369,600		
				Subtotal	**$ 3,659,106**		
	Contingency (assumes: 5% Erosion Control, 5% Drainage, 4% Mobilization, 2% Surveying, 5% Traffic Control, 0% Utilities, 8% Design, 10% Construction Management)			**39%**	$ 1,427,051	$ 914,777	$ 2,378,419
				Total	**$ 5,086,157**	**$ 4,573,883**	**$ 6,037,525**
2	**95th/Hover St and SH 66**						
	6 lanes (full reconstruct)(approx. 6 x 12')(2 left, 2 thru each direction, 1 accel & 1 decel)	Ton	5,821	$ 175	$ 1,018,710		
	Median Cover Material	SF	21,000	$ 15	$ 315,000		
	Curb & Gutter Type 2 (Section IB or median)	LF	3,500	$ 35	$ 122,500		
	Curb & Gutter Type 2 (Section IIB or outside edges)	LF	3,300	$ 35	$ 115,500		
	Signals (I main and 2 minor)	EA	2	$ -	$ 750,000		
				Subtotal	**$ 2,321,710**		
	Contingency (assumes: 5% Erosion Control, 7% Drainage, 4% Mobilization, 5% Surveying, 7% Traffic Control, 4% Utilities, 8% Design, 10% Construction Management)			**50%**	$ 1,160,855	$ 464,342	$ 1,625,197
				Total	**$ 3,482,565**	**$ 2,786,052**	**$ 3,946,907**
2	**Grade Sep. Ped. - 10'x10' Box Culvert (at Pace Street)**	LF	240.00	$ 2,500	$ 600,000		
				Subtotal	**$ 600,000**		
	Contingency (assumes: 2% Erosion Control, 0% Drainage, 2% Mobilization, 1% Surveying, 5% Traffic Control, 1% Utilities, 8% Design, 10% Construction Management)			**29%**	$ 174,000	$ 120,000	$ 360,000
				Total	**$ 774,000**	**$ 720,000**	**$ 960,000**

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SH 66 - Section 3

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST	LOW/HIGH RANGE	
SH 66 - Section 3 - Near Term							
3	**Rumble Strips**	LF	31,600	$ 2	$ 63,200		
				Subtotal	**$ 63,200**		
	Contingency (assumes: 0% Erosion Control, 0% Drainage, 1% Mobilization, 1% Surveying, 2% Traffic Control, 0% Utilities, 1% Design, 1% Construction Management)			**6%**	$ 3,792		
				Total	**$ 66,992**		**<$100,000**
3	**Right/Left Turn Lanes (Aux. lanes @ Nesting Crane, WCR 3,WCR 5, WCR 5.5)**	Ton	13,195	$ 175	$ 2,309,076		
				Subtotal	**$ 2,376,068**		
	Contingency (assumes: 5% Erosion Control, 2% Drainage, 4% Mobilization, 4% Surveying, 5% Traffic Control, 1% Utilities, 8% Design, 10% Construction Management)			**39%**	$ 926,667	$ 594,017	$ 1,544,444
				Total	**$ 3,302,735**	**$ 2,970,085**	**$ 3,920,512**
3	**Signals as Warranted**	EA	1	$ 350,000	$ 350,000		
				Subtotal	**$ 350,000**		
	Contingency (assumes: 0% Erosion Control, 0% Drainage, 0% Mobilization, 0% Surveying, 0% Traffic Control, 0% Utilities, 0% Design, 0% Construction Management (no contingency on signals))			**0%**	$ -	***Per Intersection***	
				Total	**$ 350,000**	**$ 350,000**	**$ 400,000**
SH 66 - Section 3 - Mid Term							
3	**County Line to WCR 7 (section-wide)**						
	4 lanes (reconstruct)(approx. 4 x 12' w/10' shldr)	Ton	44,129	$ 175	$ 7,722,645		
	Cable Rail	LF	15,800	$ 30	$ 474,000		
	10 ft Bike/Pedestrian path (S only)	Ton	5,807	$ 175	$ 1,016,138		
	Bridge (assume 150 ft long)	SF	12,750	$ 300	$ 3,825,000		
				Subtotal	**$ 13,037,783**		
	Contingency (assumes: 5% Erosion Control, 5% Drainage, 4% Mobilization, 2% Surveying, 5% Traffic Control, 0% Utilities, 8% Design, 10% Construction Management)			**39%**	$ 5,084,735	$ 3,259,446	$ 8,474,559
				Total	**$ 18,122,518**	**$ 16,297,228**	**$ 21,512,341**
3	**Signals as Warranted**	EA	1	$ 350,000	$ 350,000		
				Subtotal	**$ 350,000**		
	Contingency (assumes: 0% Erosion Control, 0% Drainage, 0% Mobilization, 0% Surveying, 0% Traffic Control, 0% Utilities, 0% Design, 0% Construction Management (no contingency on signals))			**0%**	$ -	***Per Intersection***	
				Total	**$ 350,000**	**$ 350,000**	**$ 400,000**
SH 66 - Section 3 - Long Term							
3	**Grade Sep. Ped. - 10'x10' Box Culvert (East of WCR 5)**	LF	240.00	$ 2,500	$ 600,000		
				Subtotal	**$ 600,000**		
	Contingency (assumes: 2% Erosion Control, 0% Drainage, 2% Mobilization, 1% Surveying, 5% Traffic Control, 1% Utilities, 8% Design, 10% Construction Management)			**29%**	$ 174,000	$ 120,000	$ 360,000
				Total	**$ 774,000**	**$ 720,000**	**$ 960,000**
3	**Signals as Warranted**	EA	1	$ 350,000	$ 350,000		
				Subtotal	**$ 350,000**		
	Contingency (assumes: 0% Erosion Control, 0% Drainage, 0% Mobilization, 0% Surveying, 0% Traffic Control, 0% Utilities, 0% Design, 0% Construction Management (no contingency on signals))			**0%**	$ -	***Per Intersection***	
				Total	**$ 350,000**	**$ 350,000**	**$ 400,000**

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SH 66 - Section 4

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST	LOW/HIGH RANGE	
SH 66 - Section 4 - Near Term							
4	10 ft Bike/Pedestrian path (N side - WCR 7 to WCR 9.5)	Ton	2,918	$ 175	$ 510,641		
				Subtotal	**$ 510,641**		
	Contingency (assumes: 5% Erosion Control, 2% Drainage, 3% Mobilization, 2% Surveying, 3% Traffic Control, 1% Utilities, 5% Design, 6% Construction Management)			**27%**	$ 137,873	$ 102,128	$ 306,385
				Total	**$ 648,514**	**$ 612,770**	**$ 817,026**
SH 66 - Section 4 - Mid Term							
4	**WCR 7 to Foster Ridge Dr**						
	4 lanes (reconstruct)(approx. 4 x 12', median, w/5' shldr)	Ton	6,395	$ 175	$ 1,119,038		
	Median Cover Material	SF	36,000	$ 15	$ 540,000		
	Curb & Gutter Type 2 (Section IB or median)	LF	6,000	$ 35	$ 210,000		
				Subtotal	**$ 1,869,038**		
	Contingency (assumes: 5% Erosion Control, 5% Drainage, 4% Mobilization, 2% Surveying, 5% Traffic Control, 0% Utilities, 8% Design, 10% Construction Management)			**39%**	$ 728,925	$ 467,259	$ 1,214,874
				Total	**$ 2,597,962**	**$ 2,336,297**	**$ 3,083,912**
4	**Signals as Warranted**	EA	1	$ 350,000	$ 350,000		
				Subtotal	**$ 350,000**		
	Contingency (assumes: 0% Erosion Control, 0% Drainage, 0% Mobilization, 0% Surveying, 0% Traffic Control, 0% Utilities, 0% Design, 0% Construction Management)			**0%**	$ -	***Per Intersection***	
				Total	**$ 350,000**	**$ 350,000**	**$ 400,000**
4	**WCR 9.5 to WCR 11**						
	4 lanes (reconstruct)(approx. 4 x 12', median, w/5' shldr)	Ton	5,648	$ 175	$ 988,483		
	Median Cover Material	SF	31,800	$ 15	$ 477,000		
	Curb & Gutter Type 2 (Section IB or median)	LF	5,300	$ 35	$ 185,500		
	Curb & Gutter Type 2 (Section IIB or outside edges)	LF	5,300	$ 35	$ 185,500		
	10 ft Bike/Pedestrian path (S only)	Ton	974	$ 175	$ 170,428		
				Subtotal	**$ 2,006,911**		
	Contingency (assumes: 5% Erosion Control, 5% Drainage, 4% Mobilization, 2% Surveying, 5% Traffic Control, 0% Utilities, 8% Design, 10% Construction Management)			**39%**	$ 782,695	$ 501,728	$ 1,304,492
				Total	**$ 2,789,607**	**$ 2,508,639**	**$ 3,311,404**
4	**Right/Left Turn Lanes (Aux. lanes @ WCR 9.5)**	Ton	1,649	$ 175	$ 288,635		
				Subtotal	**$ 288,635**		
	Contingency (assumes: 5% Erosion Control, 2% Drainage, 4% Mobilization, 4% Surveying, 5% Traffic Control, 1% Utilities, 8% Design, 10% Construction Management)			**39%**	$ 112,567	$ 72,159	$ 187,612
				Total	**$ 401,202**	**$ 360,793**	**$ 476,247**
SH 66 - Section 4 - Long Term							
4	**WCR 7 to WCR 11 (section-wide)**						
	2 lanes (approx. 2 x 12')	Ton	6,968	$ 175	$ 1,219,365		
	Curb & Gutter Type 2 (Section IIB or outside edges)	LF	15,800	$ 35	$ 553,000		
				Subtotal	**$ 1,772,365**		
	Contingency (assumes: 5% Erosion Control, 2% Drainage, 4% Mobilization, 4% Surveying, 5% Traffic Control, 1% Utilities, 8% Design, 10% Construction Management)			**39%**	$ 691,222	$ 443,091	$ 1,152,037
				Total	**$ 2,463,587**	**$ 2,215,456**	**$ 2,924,402**
4	Grade Sep. Ped. - 10'x10' Box Culvert (under SH 66 E of WCR 7)	LF	180.00	$ 2,500	$ 450,000		
				Subtotal	**$ 450,000**		
	Contingency (assumes: 2% Erosion Control, 0% Drainage, 2% Mobilization, 1% Surveying, 5% Traffic Control, 1% Utilities, 8% Design, 10% Construction Management)			**29%**	$ 130,500	$ 90,000	$ 270,000
				Total	**$ 580,500**	**$ 540,000**	**$ 720,000**
4	**WCR 9.5/SH 66**						
	Bridge (assume 150 ft long) (WCR 9.5/SH 66)	SF	16,350	$ 250	$ 4,087,500		
	4 ramps (8 inch conc.)	SY	17,778	$ 200	$ 3,555,556		
	Signals (1 @ each ramp pairing)	EA	3	$ 350,000	$ 1,050,000		
				Subtotal (signals not included)	**$ 7,643,056**		
	Contingency (assumes: 5% Erosion Control, 2% Drainage, 4% Mobilization, 4% Surveying, 5% Traffic Control, 1% Utilities, 8% Design, 10% Construction Management)(Contingency not applied to Signals)			**39%**	$ 2,980,792	$ 1,910,764	$ 4,967,986
				Total	**$ 11,673,847**	**$ 9,553,819**	**$ 12,611,042**

PRELIMINARY OPINION OF POTENTIAL COSTS

Disclaimer: This preliminary opinion of potential costs is based on a planning level evaluation. These potential costs may serve as a placeholder for funding but have not been developed based on engineered plans. This preliminary opinion of potential costs should not be programmed for future transportation improvements until further engineering analysis is completed for the improvement(s). These ranges are based on 2019 dollars and do not include potential right of way, environmental, utility, topography, and stakeholder considerations. Potential costs were developed through a high level consideration of major cost elements only.

SH 66 - Section 5

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST	LOW/HIGH RANGE	
SH 66 - Section 5 - Near Term							
5A	**Signals as Warranted**	EA	1	$ 350,000	$ 350,000		
				Subtotal	**$ 350,000**		
	Contingency (assumes: 0% Erosion Control, 0% Drainage, 0% Mobilization, 0% Surveying, 0% Traffic Control, 0% Utilities, 0% Design, 0% Construction Management (no contingency on signals))			**0%**	$ -	***Per Intersection***	
				Total	**$ 350,000**	**$ 350,000**	**$ 400,000**
5	**Rumble Strips (WCR 11 to WCR 19)**	LF	41,700	$ 2	$ 83,400		
				Subtotal	**$ 83,400**		
	Contingency (assumes: 0% Erosion Control, 0% Drainage, 1% Mobilization, 1% Surveying, 2% Traffic Control, 0% Utilities, 1% Design, 1% Construction Management)			**6%**	$ 5,004		
				Total	**$ 88,404**		**<$100,000**
5B	**WCR 13 to WCR 19**						
	Widen Shoulders (Assumed 6 ft of new pavement, both sides)	Ton	6,880	$ 175	$ 1,203,930		
				Subtotal	**$ 1,203,930**		
	Contingency (assumes: 5% Erosion Control, 2% Drainage, 3% Mobilization, 2% Surveying, 3% Traffic Control, 1% Utilities, 5% Design, 6% Construction Management)			**27%**	$ 325,061	$ 180,590	$ 722,358
				Total	**$ 1,528,991**	**$ 1,384,520**	**$ 1,926,288**
5B	**Right/Left Turn Lanes (Aux. lanes @ WCR 13)**	Ton	3,299	$ 175	$ 577,269		
				Subtotal	**$ 577,269**		
	Contingency (assumes: 5% Erosion Control, 2% Drainage, 4% Mobilization, 4% Surveying, 5% Traffic Control, 1% Utilities, 8% Design, 10% Construction Management)			**39%**	$ 225,135	$ 144,317	$ 375,225
				Total	**$ 802,404**	**$ 721,586**	**$ 952,494**
SH 66 - Section 5 - Mid Term							
5A	**Signals as Warranted**	EA	1	$ 350,000	$ 350,000		
				Subtotal	**$ 350,000**		
	Contingency (assumes: 0% Erosion Control, 0% Drainage, 0% Mobilization, 0% Surveying, 0%			**0%**	$ -	***Per Intersection***	
				Total	**$ 350,000**	**$ 350,000**	**$ 400,000**
5A	**WCR 11 to WCR 13**						
	4 lanes (reconstruct)(approx. 4 x 12' w/10' shldr)	Ton	14,663	$ 175	$ 2,566,069		
	Cable Rail	LF	5,250	$ 30	$ 157,500		
	10 ft Bike/Pedestrian path (S only)	Ton	1,929	$ 175	$ 337,641		
				Subtotal	**$ 3,061,209**		
	Contingency (assumes: 5% Erosion Control, 5% Drainage, 4% Mobilization, 2% Surveying, 5% Traffic Control, 0% Utilities, 8% Design, 10% Construction Management)			**39%**	$ 1,193,872	$ 765,302	$ 1,989,786
				Total	**$ 4,255,081**	**$ 3,826,512**	**$ 5,050,995**
5B	**Signals as Warranted**	EA	2	$ 350,000	$ 700,000		
				Subtotal	**$ 700,000**		
	Contingency (assumes: 0% Erosion Control, 0% Drainage, 0% Mobilization, 0% Surveying, 0% Traffic Control, 0% Utilities, 0% Design, 0% Construction Management (no contingency on signals))			**0%**	$ -	***Per Intersection***	
				Total	**$ 700,000**	**$ 350,000**	**$ 400,000**
SH 66 - Section 5 - Long Term							
5A	**Signals as Warranted**	EA	1	$ 350,000	$ 350,000		
				Subtotal	**$ 350,000**		
	Contingency (assumes: 0% Erosion Control, 0% Drainage, 0% Mobilization, 0% Surveying, 0% Traffic Control, 0% Utilities, 0% Design, 0% Construction Management (no contingency on signals))			**0%**	$ -	***Per Intersection***	
				Total	**$ 350,000**	**$ 350,000**	**$ 400,000**
5B	**Signals as Warranted**	EA	2	$ 350,000	$ 700,000		
				Subtotal	**$ 700,000**		
	Contingency (assumes: 0% Erosion Control, 0% Drainage, 0% Mobilization, 0% Surveying, 0% Traffic Control, 0% Utilities, 0% Design, 0% Construction Management (no contingency on signals))			**0%**	$ -	***Per Intersection***	
				Total	**$ 700,000**	**$ 350,000**	**$ 400,000**
5B	**Grade Sep. Ped. - 10'x10' Box Culvert (E of WCR 17N)**	LF	180.00	$ 2,500	$ 450,000		
				Subtotal	**$ 450,000**		
	Contingency (assumes: 2% Erosion Control, 0% Drainage, 2% Mobilization, 1% Surveying, 5%			**29%**	$ 130,500	$ 90,000	$ 270,000
				Total	**$ 580,500**	**$ 540,000**	**$ 720,000**
5B	**10 ft Bike/Pedestrian path (S only) from CR 13 to CR 19 (section-wide)**	Ton	7,662	$ 175	$ 1,340,916		
				Subtotal	**$ 1,340,916**		
	Contingency (assumes: 5% Erosion Control, 2% Drainage, 3% Mobilization, 2% Surveying, 3%			**27%**	$ 362,047	$ 335,229	$ 871,595
				Total	**$ 1,702,963**	**$ 1,676,145**	**$ 2,212,511**