

ADVANCED GUIDEWAY SYSTEM (AGS) FEASIBILITY STUDY

CHAPTER 8 STAKEHOLDER INVOLVEMENT

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8.1 Introduction

The Federal Highway Administration (FHWA) defines Context Sensitive Solutions as: *a collaborative, interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic and environmental resources, while maintaining safety and mobility. Context Sensitive Solutions is an approach that considers the total context within which a transportation improvement project will exist. Context Sensitive Solutions principles include the employment of early, continuous and meaningful involvement of the public and all stakeholders throughout the project development process.*

During the I-70 Mountain Corridor Programmatic Environmental Impact Statement (PEIS), CDOT developed a Context Sensitive Solutions (CSS) process to be used on all projects within the I-70 Mountain Corridor. As used by CDOT, CSS is an approach based on the idea that transportation projects should consider the total “context” of their existence – not just the study’s physical boundaries. Further, the I-70 Mountain CSS is built on a commitment to collaborative decision making that is: principle-based, outcome-driven, and multidisciplinary. The AGS Study Team extensively used the six-step I-70 Mountain Corridor CSS process in conducting the *AGS Feasibility Study* (Study). The AGS Study Team partnered with mountain corridor communities and stakeholders, using the I-70 Mountain Corridor CSS process to ensure that the direction of the Study was in line with the expectations of the stakeholders and met the requirements of the Final PEIS and *Record of Decision* (ROD).

The AGS Study Team engaged stakeholders throughout development of the Study.

8.2 AGS Project Leadership Team (PLT)

As required by the I-70 Mountain Corridor CSS process, CDOT formed a Project Leadership Team (AGS PLT) prior to initiation of the Study. The AGS PLT ensured that the I-70 Mountain Corridor CSS process was followed and that conclusions from the Study were developed in an open, collaborative process.

8.2.1 AGS PLT Membership

The AGS PLT was comprised of representatives of key stakeholder agencies and organizations along the I-70 Mountain Corridor. During the course of the study, some AGS PLT members were replaced, due to a variety of reasons, by others within their agency or organization. The following organizations were represented on the PLT.

- CDOT Office of Policy & Government Relations
- Club 20
- City and County of Denver
- Clear Creek County
- COPIRG
- CDOT Region 1
- Clear Creek Watershed Foundation
- Summit County
- Colorado Environmental Coalition
- Towns of Frisco, Georgetown, and Idaho Springs
- Denver Regional Council of Governments (DRCOG)
- I-70 Coalition
- Denver Metro Chamber of Commerce
- CDOT Division of Transit & Rail
- AZTEC-TYPSA
- CDOT Region 3
- Eagle County
- FHWA
- Jefferson County

8.2.2 AGS PLT Roles

The AGS PLT's primary roles were to:

Lead the Project – The AGS PLT helped identify relevant materials for the Study—such as the CSS Guidance, Final PEIS, other environmental documents, and local plans. The AGS PLT discussed the surrounding context, established project goals, and identified the actions and decisions needed to reach those goals. These elements were documented in the Context Statement for the project. In addition, the AGS PLT assisted in developing the Request for Proposals (RFP) for the Study and joined the consultant selection team. The AGS PLT also assisted in staffing Technical Committees formed to work with the AGS Study Team on a variety of technical issues.

Champion CSS – The AGS PLT ensured that the CSS Guidance, the Context Statement, the Core Values, and the 6-Step Process were integrated into the Study process. The AGS PLT had the primary responsibility for ensuring that Step 1: Define Desired Outcomes and Actions and Step 2: Endorsing the Process was determined with participation from all stakeholders. They also reviewed and endorsed the required CSS documentation, such as the Study Work Plan and associated Study Schedule, the Stakeholder Involvement Plan, and the Public Information Plan.

Enable Decision-Making – The AGS PLT approved the project-specific decision-making process for the Study. This process detailed the interaction between teams, the Stakeholder Involvement Plan, and the Public Information Plan. The AGS PLT was responsible for keeping the Study on track with each of these plans.

8.2.3 AGS PLT Meetings

A total of 18 PLT meetings were held, including 2 prior to the selection of the AGS consulting team, and 16 with the AGS Study team. Table 8-1 summarizes the meetings, the dates they were held, and the main subjects covered. Meeting agendas, presentations and

meeting notes can be found at the AGS Study website:

<http://www.coloradodot.info/projects/AGSstudy/project-leadership-team-plt.html>.

Table 8-1: AGS PLT Meeting Summary

Meeting Number	Meeting Date	Meeting Location	Subjects of Meeting
Pre-Project	6/9/2011	Frisco	Project Leadership Team, Review of Proposed Scope, Technical Advisory Teams, Schedule
Pre-Project	9/15/2011	Silverthorne	Request for Consultant Proposal, Changes to PLT, Review of PLT Commitments, Review AGS Scope of Work
1	4/11/2012	Silverthorne	PLT Roles, Responsibilities and Ground Rules, Project Overview, Critical Success Factors, Project Draft Context Statement Discussion, Project Core Values Discussion, AGS/ICS/Co-Development Project Coordination
2	5/9/2012	Frisco	Review and Endorse Context Statement, Review and Endorse Core Values, Review and Endorse Critical Success Factors, Review and Endorse Desired Outcomes and Actions, Review and Endorse Chartering Agreement, AGS/ICS/Co-Development Project Coordination
3	6/13/2012	Idaho Springs	Review and Endorse Project Work Plan & Stakeholder Involvement Plan, Review Draft System Performance and Operational Criteria, AGS/ICS/Co-Development Project Coordination
4	7/18/2012	Idaho Springs	Debrief from High Speed Rail Conference Attendees, Review Land Use & Station Criteria, Review Industry Comments on Draft System Performance and Operational Criteria, Feasibility Discussion, AGS/ICS/Co-Development Project Coordination
5	8/8/2012	Frisco	Feasibility Discussion, Review Revised Project Process, Review Changes to Draft System Performance & Operational Criteria, Update on Land Use & Station Criteria, Presentation on Local Transit System Planning, AGS/ICS/Co-Development Project Coordination
6	9/12/2012	Golden	Update on Request for Statement of Technology Information (RFSOTI), Update on Technology Forum, Update on Land Use & Station Criteria, AGS/ICS/Co-Development Project Coordination
7	11/14/2012	Eagle	Consultant Team's Review of Statements of Technology Information (SOTI), Selection of Technology Providers to Participate in Technology Forum, Planning for Technology Forum, Update on Land Use & Station Criteria Meetings, AGS/ICS/Co-Development Project Coordination
8	2/13/2013	Frisco	Technology Forum Recap & Next Steps, Update on County Land-Use Meetings, Key Themes/Issues in Developing Alignments, Funding & Financial Task Force Update, AGS/ICS/Co-Development Project Coordination
9	3/14/2013	Idaho Springs	Discussion of Preliminary Alignments, Update on Station/Land Use Meetings, Presentation on Maglev Performance, Funding/Finance Workgroup Update, AGS/ICS/Co-Development Project Coordination
10	4/10/2013	Golden	Preliminary Modeling Review, Operating Scenarios, RFSOTI. Development and Report out from Workgroup/Technical Meeting, Land Use/Station Meeting Summary & Conclusions, AGS/ICS/Co-Development Project Coordination
11	6/11/2013	Silverthorne	Presentation of Capital Cost Estimates, Operation and Maintenance Cost Estimating Process/Progress,

Table 8-1: AGS PLT Meeting Summary

Meeting Number	Meeting Date	Meeting Location	Subjects of Meeting
			Presentation of Ridership Estimates, RFSOTI Update, AGS/ICS/Co-Development Project Coordination, Steps Leading to Project Conclusion
12	7/17/2013	Denver	Ridership Modeling, Statement of Financial Information (SOFI) Preliminary Information, Cost Estimate Update, AGS/ICS/Co-Development Project Coordination
13	8/14/2013	Avon	AGS Study Findings To Date/PLT Roles & Responsibilities, Statements of Financial Interest - Detailed Review, PLT Input: Leading the Study & Enabling Decisions, Next Steps
14	9/11/2013	Idaho Springs	Summary of August Meeting / Approve Meeting Minutes, Ridership Refinements & Minimum Operable Segment (MOS) Ridership Analysis, Funding / Financial Determination, Next Steps
15	11/1/2013	Webinar	Ridership Context and Reasonableness. Summarize Third Round of County Meetings. Discussion of Study Finalization.
16	1/24/2014	Idaho Springs	Review of AGS Draft Report

8.3 CSS Documents

In the first PLT meetings, the AGS PLT was tasked with developing a number of CSS documents. They included:

- Context Statement
- Core Values
- Critical Success Factors
- Desired Outcomes and Actions
- Chartering Agreement

8.3.1 Context Statement

According to the CSS website, a *context statement seeks to capture in words the special qualities and attributes that define a place as unique. A context statement should capture in words that which was true fifty years ago and that which must be considered during the development of improvements in order to sustain truth in those same words for fifty years to come.*

The AGS PLT developed and endorsed the following Context Statement:

The I-70 Mountain Corridor is a magnificent scenic place. Human elements are woven through breathtaking natural features and ecosystems. The integration of these diverse elements has occurred over the course of time.

This corridor is a recreational and heritage tourism destination for the world and a unique place to live. It is a route of national, regional and local economic importance as both an interstate highway and an intercommunity connection.

Corridor communities are active participants in transportation considerations. A historic collaborative agreement exists for solutions in the I-70 Mountain Corridor.

The I-70 Mountain Corridor has unique engineering, operational, and aesthetic challenges, including:

- *Challenging horizontal and vertical curvature of highway and steep and lengthy grades*
- *Sensitive environmental and cultural areas*
- *Areas of potential geotechnical challenges such as rock slides, mines, faults, etc.*
- *Weather conditions unique to high mountain elevations, including periods of severe winter conditions and potential avalanches*
- *Substantial congestion variation, both weekly and seasonally*
- *Significant variation in trip purposes and party sizes; ranging from individual work trips to recreational activity trips made by families and groups*
- *Large volumes of freight transport*
- *Connecting to and through existing communities*

8.3.2 Core Values

According to the CSS website, a Core Value describes something of significant importance to stakeholders—something they respect and will work to protect and preserve. Core Values must be honored and understood. Decisions and choices made along the I-70 Mountain Corridor should be influenced by and support the Core Values.

The AGS PLT developed and endorsed the following Core Values:

- ***Sustainability*** is an overarching value that creates solutions for today without diminishing resources for future generations. Industry solutions proposed for the AGS should endeavor to generate long-term benefits to economic strength, scenic character, community vitality, ecosystem integrity, and both energy conservation and production.
- ***Openness, honesty, collaboration and transparency*** are critically important to the credibility and ultimate endorsement of the AGS Feasibility Study's process and results.
- ***Safety*** for passengers, motorists and the public must be built into the AGS.
- A ***healthy environment*** requires taking responsibility to preserve, restore and enhance community, cultural and natural resources.
- The corridor's broad ***historic context*** is foundational to its identity. As industry develops proposed AGS solutions for the corridor, it should always respect and protect what the past has contributed to the sense of place.
- The individuality of ***communities*** must be respected in a manner that promotes their livability. The character of the corridor is realized in the differences and commonalities of its communities.

- **Mobility and accessibility** must address local, regional and national travel by providing reliability, efficiency and interconnectivity between systems and communities.
- **Aesthetics** of a successful AGS system should be inspired by the surroundings and incorporate the context of place. The system should protect viewsheds and scenic character while exhibiting timeless design that continues the corridor's legacy.
- The AGS System will serve as a **global model** for innovation and excellence.

8.3.3 Critical Success Factors

According to the CSS website, "Critical Success Factors should reflect the objectives of the team in terms of project success. They should include those things that indicate success for the project and for the PLT."

The AGS PLT developed and endorsed the Following Critical Success Factors:

- *Assess the economic, environmental, technological and financial feasibility of an AGS.*
- *Investigate all pertinent AGS technologies that meet the criteria.*
- *Receive responsive proposals.*
- *PLT members understand and build on past work and accomplishments.*
- *Insuring close coordination and collaboration with ICS and Co-development project.*
- *Insure that Context Sensitive Solution is included in all aspects of the PLT process.*
- *Insuring the PLT continues to support and champion the study process.*
- *Insuring the process is consistent with Collaborative Effort criteria.*
- *Keeping local governments and representatives informed on project, sooner rather than later.*
- *Insuring the I-70 Coalition Technical Committee is properly and effectively engaged.*
- *Insure a successful public outreach program.*

8.3.4 Desired Outcomes and Actions

Although not technically a part of the CSS process, the AGS PLT developed the following Desired Outcomes and Actions:

- *Identify technologies that can meet the system performance & operational criteria.*
- *Complete AGS Feasibility Study and gain consensus on questions of feasibility, cost, ridership, land use and governance.*
- *Identify technological & financial feasibility of AGS in relationship to I-70 Mountain Corridor Record of Decision.*
- *Consistent and close coordination between AGS, ICS and Co-Development, including but not limited to a transfer-free connection to Denver International Airport.*
- *Endorsement from the local, state and federal levels for conclusions of the study document.*

8.3.5 Chartering Agreement

The AGS PLT developed and endorsed a Chartering Agreement, which can be found on the AGS Study webpage (<http://www.coloradodot.info/projects/AGSstudy/study-materials.html>). The Chartering Agreement included the following sections:

1. *Purpose of the AGS Feasibility Study Project Leadership Team*
2. *Established Vision and Goals for the AGS Feasibility Study*
3. *Membership and Attendance*
4. *Roles and Responsibilities*
5. *Team Performance Assessment*
6. *Discussions and Deliberations*
7. *E-mail Communication*
8. *Schedule and Milestones*
9. *Meeting Summaries*
10. *Public Coordination*
11. *Communication with Other Organizations, Individuals, and the Media*
12. *Constituent Communication*
13. *Measuring the Success of the AGS Feasibility Study Project*

8.4 Technical Committees

8.4.1 I-70 Coalition Technical Committee

Because the AGS PLT was not intended to provide technical evaluation and consultation related to the AGS, the I-70 Coalition's Technical Committee was used in that capacity. The Technical Committee was comprised of representatives of CDOT and counties and cities along the I-70 Mountain Corridor. The following organizations were represented on the Technical Committee:

- Eagle County
- Summit Stage
- Summit County
- Town of Breckenridge
- Town of Dillon
- Town of Empire
- Town of Silverthorne
- Town of Vail
- Garfield County
- Clear Creek County
- U.S. Forest Service
- CDOT

AGS PLT members routinely attended Technical Committee meetings. A total of nine Technical Committee Meetings were held. Table 8-2 summarizes the meetings, the dates they were held and the main subjects covered.

Table 8-2: Technical Committee Meetings

Meeting Number	Meeting Date	Meeting Location	Subjects of Meeting
1	6/11/12	Idaho Springs	System Performance & Operational Criteria
2	6/14/12	Idaho Springs	System Performance & Operational Criteria
3	7/11/12	Idaho Springs	Station Sizing
4	9/12/12	Golden	RFSOTI Scoring & Technical Forum
5	10/24/12	Idaho Springs	Alignment
6	11/19/12	Web Survey	Stated Preference Survey Review for Modeling
7	12/4/12	Idaho Springs	Technology Forum Questions
8	3/11/13	Frisco	Station Locations
9	3/20/13	Webinar / Conference Call	Ridership Modeling Approach & Methods

8.4.2 Funding and Financing Work Group

A Funding and Financing Work Group was formed specifically to discuss options on how to fund and finance the AGS. The Funding and Financing Work Group included representatives from the following organizations:

- ArLand Land Use Economics
- CDOT
- Jacobs
- The PFM Group
- Colorado Ski Country USA
- I-70 Coalition
- Summit County
- CH2M Hill
- Nossaman
- AZTEC-TYPSA
- Clear Creek County
- High Performance Transportation Enterprise (HPTE)

Table 8-3 summarizes the three meetings of the Funding and Financing Work Group.

Table 8-3: Funding and Financing Work Group Meetings

Meeting Number	Meeting Date	Meeting Location	Subjects of Meeting
1	1/29/13	CDOT Headquarters	Discuss Revenue Source Data, Framing of Revenue Needs, Financial Feasibility Definition, & Next Steps
2	2/28/13	CDOT Headquarters	Discuss Work Group Recommendations, Request for Statements of Financial Information (RFSOFI), Financial Feasibility Definition, Scope/Role of PLT, Federal Funding, Scope and Timing of Vote for Revenue Sources & Evaluation of Funding Options
3	4/8/13	CDOT Headquarters	Discuss AGS Funding Scenarios & AGS RFSOFI

8.5 Public Meetings

The scope of the Study did not include public meetings specifically. All AGS PLT meetings were open to the public except the meeting on November 14, 2012, that was closed to the public because of discussions of confidential information related to the Statements of Technical Information (SOTI). In general, there were between 5 and 15 members of the public at each AGS PLT meeting.

8.5.1 *Interregional Connectivity Study* Public Meetings

The CDOT *Interregional Connectivity Study* (ICS) was underway at the same time as the *AGS Feasibility Study* and was tasked with examining high-speed rail options for the Front Range from Fort Collins to Pueblo. The AGS Study Team collaborated closely with the ICS Team, and members of the AGS PLT attended ICS PLT meetings. The ICS had a series of public meetings. Although those meetings were focused on the ICS, AGS Study progress was discussed. The ICS public meetings were held as follows:

- July 16, 2012, Colorado Springs
- July 17, 2012, Pueblo
- July 18, 2012, Windsor
- July 19, 2012, Golden
- May 29, 2013, Colorado Springs
- May 30, 2013, Pueblo
- June 5, 2013, Windsor
- June 6, 2013, Denver
- June 11, 2013, Silverthorne
- November 4, 2013 Windsor
- November 19, 2013 Golden
- November 20, 2013 Colorado Springs
- November 21, 2013 Pueblo

Meeting materials for the ICS public meetings can be found at the ICS webpage:

<http://www.coloradodot.info/projects/ICS>.

8.6 County Land Use/Station Meetings

Prior studies conducted for the I-70 Mountain Corridor had identified station locations. The Rocky Mountain Rail Authority's *High Speed Rail Feasibility Study*¹ concluded that 14 stations should be provided between Golden and Eagle County Regional Airport. Similarly, the I-70 Coalition *Land Use Planning Study for Rail Transit Alignment Throughout the I-70 Corridor*² identified station options in numerous locations from Golden to Glenwood Springs.

Based on input from the AGS PLT and Technical Committee, the AGS Study Team began discussions with Jefferson, Clear Creek, Summit, and Eagle Counties to facilitate the

¹ RMRA HSR Feasibility Study http://rockymountainrail.org/RMRA_Final_Report.html

² I-70 Coalition Transit and Land Use <http://www.i70solutions.org/docs>

narrowing of the number of station site options, and the planning of stations within the mountain communities.

Each County Land Use/Station Working Group held three meetings during the course of the Study. The first time was to provide an overview of the Study and gather input on potential station locations and County interests. The second meeting was to review station elements, operational characteristics, and sizing parameters; and to review evaluation criteria for station sites. The third meeting was held to review technology, alignment, and ridership cumulative findings; and to obtain final County input on station sites.

The following meetings were held:

- September 10, 2012 – Summit County Meeting #1
- October 12, 2012 – Jefferson County Meeting #1
- October 24, 2012 – Clear Creek County Meeting #1
- October 30, 2012 – Eagle County Meeting #1
- March 11, 2013 – Summit County Meeting #2
- March 12, 2013 – Jefferson County Meeting #2
- March 14, 2013 – Clear Creek County Meeting #2
- March 25, 2013 – Eagle County Meeting #2
- November 12, 2013 – Summit County Meeting #3
- November 12, 2013 – Eagle County Meeting #3
- November 13, 2013 – Jefferson County Meeting #3
- November 18, 2013 – Clear Creek County Meeting #3

8.6.1 County Meeting #1

The AGS Study Team met with the County Working Groups and reviewed recent I-70 Mountain Corridor transportation studies and outcomes, as well as the AGS Study purpose, scope, and planned timeline. Additionally, the AGS Study Team shared information about the concurrent ICS that was examining high-speed rail options for the Front Range from Fort Collins to Pueblo.

The AGS Study Team reviewed parameters for station development with each County. Stations in a high-speed transit system are typically spaced 30 to 40 miles apart and are designed to accommodate regional travel. Station spacing that is too tight does not allow the high-speed transit vehicles to accelerate and hold a high speed for any appreciable distance before having to decelerate to pull into the next station. Fewer stations mean higher speeds and faster travel times, which in turn means higher ridership numbers. The AGS Study Team recommended that the number of stations for the 120-mile-long segment be limited to approximately six: one station in Jefferson County, one station in Clear Creek County, two in Summit County, and two in Eagle County including one at the Eagle County Regional Airport.

Based on the Final PEIS and ROD, the key system performance and operational criteria for feasible technologies for the AGS include the ability to meet the travel demand needs in the I-70 Mountain Corridor, also known as the design capacity. Transit must have the capacity to serve 25 percent of the trip demand, which equates to a minimum of 4,900 AGS passengers per hour, peak direction in 2035, during peak travel times (defined as summer Sundays, which represents the highest average traffic volumes).

These requirements resulted in discussion of stations with a bigger operating capacity, and potentially larger footprint than was originally contemplated. While station elements and configuration depend on technology type and architectural design, some basic requirements are considered station building blocks and were reviewed with each County.

Platform length was determined to be as much as 1,000 – 1,300 feet long to accommodate a 9-car consist with a capacity of 900 riders every 10 minutes during peak times (900 passengers per consist x 6 consists/hour = 5,400 capacity) or a 13-car consist with a capacity of 1,300 riders every 15 minutes during peak times (1,300 passengers per consist x 4 consists/hour = 5,200 capacity). At-grade, structured, or below-grade parking facilities should be large enough to accommodate regional travel demand to each station because the geography from



Typical Station Site Plan

which the station will draw passengers will be significant. Regional highway facility access and local roadway and traffic circulation are critical to increasing travel demand to a site and integrating that site into a community. The integration of transit service at the station can be a determining factor especially if it is to be sized to accommodate regional demand to and from the station, or if resort destination transit for visitors and employees is required, as with most of the corridor station locations. Bicycle and pedestrian facilities to and within the site enable strong multimodal mobility within the community. Finally, the potential for the integration of development with the parking facilities was addressed as a way of modifying site development to fit each community.

County representatives provided suggestions on a range of potential station locations within their county that were carried forward for consideration in alignment development.

8.6.2 County Meeting #2

The AGS Study Team discussed with the County representatives how the choice in AGS technology and alignment through the corridor was being examined and would ultimately affect station locations. County representatives expressed concern about the acreage requirements for potential AGS stations, so the AGS Study Team reviewed these key factors related to individual station sizing: the anticipated level of ridership activity at the station, the role the station plays in the system as either a destination or collector station and the associated parking needs, the operational needs of the secondary transit system and the technology chosen for that system, and the desired level of development surrounding the station site. There are many architectural styles and design factors that can influence the footprint and massing of a station; therefore, the AGS Study Team created renderings of two example stations to illustrate sizing and probable acreage needs depending on location and role of station.

The first example assumed a ten-acre station site with most of the AGS, transit system, and parking facilities occupying roughly six acres, depending on design; the surrounding acreage offers room for supporting development based on local interest. This example assumes a four-story, one-acre parking structure with approximately 600 spaces (150 spaces per deck acre) and transit services modest enough to be integrated below the elevated platform and in line with the passenger plaza and drop-off area. This example is best suited for lower demand locations.



10-acre Station Site

The second example illustrates a 20-acre or larger site, with the AGS, transit system, and parking facilities occupying approximately 10 to 12 acres. In this example, a 6-story, 2-acre parking structure supporting roughly 1,500 spaces meets sizing requirements for higher-demand parking locations. In this example, transit bus operations or other technology connections are assumed to have higher ridership demand and warrant a separate facility on site. Surrounding development is significantly bigger in scale, density, and use level.



20-acre or Larger Station Site

In addition to the basic elements and sizing parameters associated with station location decision-making, a number of guiding principles were discussed to further the conversation and guide station site decision-making at a local level. A station location should:

- Optimize use by all segments of the population, including residents, employees and visitors.
- Support the potential for compact and infill development and limit demand on natural resources in the I-70 Mountain Corridor.
- Leverage existing infrastructure investment.
- Maximize connectivity between the AGS and transit, bicycle, and pedestrian facilities within the community and to/from key destinations.
- Minimize the parking footprint by integrating and potentially sharing parking supply with supporting development where possible.

The AGS Study Team reviewed the developing alternative alignments by technology type and the assumptions about station sites associated with each alignment. Lastly, station

evaluation criteria were discussed and County representatives were asked to provide input for each potential station location in their county based on the following criteria:

- Land availability/developability.
- Local and regional transportation access/capacity.
- Infrastructure capacity.
- Compatibility with local plans.
- Compatibility with mountain/community/historic character.
- Population served: local, visitor, employee.

8.6.3 County Meeting #3

The AGS Study Team held the third and final round of County Working Group meetings to review the Study findings on technology, alignment, and ridership; and to refine station site within each County based on the combination of technical findings and input on the evaluation criteria from County representatives. The AGS Study Team reviewed the alternative alignments for high-speed rail and maglev, along with the cost and ridership associated with each. The Hybrid Maglev Alignment was shown to provide the best performance in relation to cost with travel speeds between 120 and 150 mph, reduced tunnel requirements, and a cost of roughly \$13.4 billion. Because the alignment provides direct service to the resort communities of Keystone, Breckenridge, and Copper Mountain within Summit County, it subsequently generates stronger ridership for the system than does high-speed rail.

Summit County

Summit County priority station sites were identified as Keystone, Breckenridge and Copper Mountain based primarily on the Study's technical alignment findings. County representatives agreed that these station sites offer the greatest possibility of diverting traffic from I-70 and to AGS, and are generally supported. The implementation of AGS and land use development around these station locations is consistent with local land use plans. Total acreage available for development at the three locations combined is approximately 20 acres. Local access to and from the stations would rely heavily on an expanded secondary transit system that would carry residents, employees, and visitors between the stations and numerous destinations in Summit County.

The Town of Breckenridge retains an interest in locating the station at the base of the gondola within town, rather than at the alternative location along SH 9 and Coyne Valley Road.



The Towns of Silverthorne and Frisco would prefer station locations within their communities, and note the following criteria evaluation in support of these locations: ease of regional vehicular access from the highway and local roadway network to the sites; the general compatibility of station operations and land development with current local plans for these locations; the jurisdictional support of redevelopment, intensification of land uses, and mix of uses at the sites; and the acreage availability to size station operations to support a significant secondary transit system at either location.

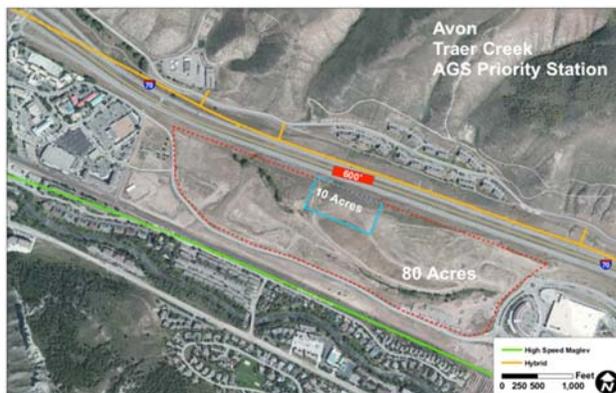


Silverthorne, in particular, offers up to 62 acres of land surrounding the interchange that could potentially support mixed-use commercial, office, or residential development. Frisco's site is roughly 35 acres. Summit County attendees requested that Silverthorne and Frisco both be noted for further consideration in later studies, as alignment decisions are finalized.

Eagle County

The Hybrid Maglev Alignment through Eagle County generally follows I-70, making the Town of Vail and Eagle County Regional Airport priority stations that support alignment and ridership. The stations meet the criteria of strong local and regional transportation access; sufficient infrastructure capacity; compatibility with local area plans and land use development opportunities (or existing development patterns); and access to local, visitor, and employee populations. Vail requests that the station be positioned over the I-70 right-of-way and that the existing Vail transit center site be configured as the AGS station. Eagle County Regional Airport remains concerned about whether AGS would ultimately reduce flight demand into the regional airport, but is supportive of a multimodal connection that offers air passengers arriving in Eagle a high-speed service to area resorts.

Avon expressed interest in a third station location along the line at Traer Creek, located adjacent to I-70. This site meets the evaluation criteria and offers significant development potential with over 70 acres of land to be accessible from the highway and local roadway network. Attendees at the Eagle County Working Group voiced concern over the realities of implementation, but are looking forward to continued progress of the AGS for the I-70 Mountain Corridor.



Jefferson County

The priority station site for Jefferson County lies at I-70 and 6th Avenue and was referred to as the Golden West Suburban station. This location is suitable for AGS alignment requirements and Denver metropolitan high-speed rail alignments being studied under the ICS. The site provides over 80 acres of land for potential future redevelopment opportunities and offers the most direct connection to the RTD West Line light rail station at the Jefferson County Administration Building. County Working Group members felt the link with the existing light rail system was critical to the location and configuration of the I-70/C-470 Station. This station is anticipated to have significant regional ridership and require substantial parking and vehicular access, in addition to transit and light rail connectivity. Working Group members recognized that current vehicular access to the site is limited to US 40 and will likely require infrastructure improvements to function adequately with anticipated ridership demand at this station. The location is compatible with local planning efforts for the County and Golden; has sufficient infrastructure capacity; and is well situated to serve local, visitor, and employee populations on the west side of the Denver metropolitan area. Working Group members voiced support for moving AGS plans forward so that land use planning efforts could be identified for funding. Generally, support for the system, alignment, and station location was high from the Jefferson County Working Group.



Clear Creek County

Clear Creek County identified numerous station locations early in the planning process, including several in Idaho Springs; the communities of Downieville, Lawson, and Dumont; Empire Junction; Georgetown; and Loveland ski area. Through the evaluation process, the County settled on three primary locations to retain for further design decisions—Idaho Springs, Empire Junction and Georgetown— and will ultimately select one of the three for design.

The potential Idaho Springs priority station is assumed to straddle the highway at I-70 and Water Street. The placement of the station over the highway right-of-way opens up the school district property to the south of the highway for redevelopment and the high school football field to the north of the highway. Development on both sides of the highway would



help to minimize the barrier currently created by I-70 and increase station-related development acreage to 15 plus acres. Station operations and higher-density, mixed-use development is generally consistent with local and Clear Creek County plans for the community, and increased infrastructure capacity is thought to be available within Idaho Springs. Vehicular access to the sites is available through the local roadway network and the I-70 interchange. Current transit operations between Idaho Springs and Gilpin County offer a link to the gaming community. Future transit service to Empire Junction, Winter Park and Grand County, and Georgetown would follow the direction of travel for passengers coming from the Denver metropolitan area or Denver International Airport.

The Empire Junction priority station location was considered by the County Working Group to provide the most convenient transit connections to Winter Park and Grand County. The Empire Junction site is accessible by car and transit from the I-70/C-470 interchange. The

site, while capable of accommodating the station footprint, does not have the same development potential as the other Clear Creek County options. Infrastructure capacity is minimal and would need to be extended to the site to support development. Future development at the site would compete with the station itself and the acreage devoted to recreational uses. Based on current County land use

plans, high-density, mixed-use development supportive of an AGS station would be integrated with recreational uses and limited in terms of acreage.

The Georgetown priority station is positioned on roughly 14 acres along I-70 adjacent to Georgetown Lake. The site is accessible from the local roadway network and the I-70 interchange. When traveling to and from Denver, out-of-direction transit connections would be required from this station back to Empire Junction, Idaho Springs, or other communities within Clear Creek County. Approximately eight acres would be available for development surrounding the station; and current plans support a higher-density, mixed-use development pattern at this location. Infrastructure capacity is available in Georgetown.



8.6.4 Potential Station Development

At the final round of County Working Group meetings, the AGS Study Team discussed the opportunity for development and investment surrounding the stations and touched on the role that development and related tax revenues might play in offsetting the cost of future stations. The AGS Study Team estimated the value of station-related land development associated with a Hybrid Maglev Alignment based on:

- An estimate of acreage around each priority station location.
- A developable building area of 65 percent associated with that acreage (i.e., 35 percent reduction for non-building uses like roads, etc.).
- A Floor Area Ratio (FAR) of 3 (i.e., 3-to 5-story building heights depending on land reserved for landscaping, etc.).
- A square footage value of \$180/square foot, based on a representative value of multiple Denver-area properties (I-70 Mountain Corridor properties may differ in value; the Eagle County Vail station assumes development densities already in place surrounding station).

Table 8-4 illustrates that roughly 97 acres or \$2.3 billion in future development value may be possible along the AGS alignment.

Table 8-4: Potential Station Development

Station Location	Potential Development Acreage	Developable Area (65%)	Value (FAR 3) (\$180/SF)
Jefferson County: I-70 & 6th Avenue	50 acres	32.5 acres	4.2 million sq. ft. \$764 million
Clear Creek County: Idaho Springs – Georgetown -Empire Junction	10 acres	6.5 acres	849,420 sq. ft. \$153 million
Summit County: Keystone	8 acres	5.2 acres	679,536 sq. ft. \$122 million
Summit County: Breckenridge	8 acres	5.2 acres	679,536 sq. ft. \$122 million
Summit County: Copper Mountain	4 acres	2.6 acres	339,768 sq. ft. \$61 million
Eagle County: Vail	0 acres	N/A	N/A
Eagle County: Avon Traer Creek	30 acres	19.5 acres	2.5 million sq. ft. \$458 million
Eagle County: Eagle County Regional Airport	40 acres	26 acres	3.4 million sq. ft. \$611 million
Total	150 acres	97.5 acres	\$2.3 billion

8.7 Conclusion

Throughout development of the Study, the AGS Study Team used the CSS process to involve stakeholders. Additionally, the I-70 Coalition Technical Committee helped make technical decisions, and a Funding and Finance Workgroup was convened to explore possible funding and financing strategies.

To begin the process of determining possible AGS station sites, the AGS Study Team conducted three meetings with each of the four counties along the I-70 Mountain Corridor. Through these meetings, potential station locations were identified.