Pikes Peak Area Council of Governments
Communities Working Together

MOVING FORWARD
2035 REGIONAL TRANSPORTATION PLAN

Pikes Peak Area Council of Governments

Moving Forward 2035 Regional Transportation Plan

February 2008

Pikes Peak Area
Council of Governments
Communities Working Together

MOVING FORWARD

2035 REGIONAL TRANSPORTATION PLAN

TABLE OF CONTENTS

TABLE OF CONTENTS

Appendices

List of Tables

List of Figures

GLOSSARY

COMMONLY USED TRANSPORTATION TERMS AND ABBREVIATIONS

AADT	Annual Average Daily Traffic
AASHTO	American Association of State Highway & Transportation Officials
ACOE	Army Corps of Engineers
ADA	Americans with Disabilities Act of 1991
APCD	Colorado Air Pollution Control Division
AQCC	Colorado Air Quality Control Commission
AQTC	PPACG's Air Quality Technical Committee
ATAC	Aviation Technical Advisory Committee
AVL	Automatic Vehicle Location
BMP	Best Management Practices
BTS	Bureau of Transportation Statistics
CAAA	Clean Air Act Amendment of 1990
CAC	PPACG's Community Advisory Committee
CBD	Central Business District (a land use type used in modeling)
CDOT	Colorado Department of Transportation
CDPHE	Colorado Department of Public Health and Environment
CFL	Central Federal Lands
CFR	Code of Federal Regulations
CIAC	Colorado Information Analysis Center
CMAQ	Congestion Mitigation and Air Quality Improvement
CMP	Congestion Management Program
CNHP	Colorado Natural Heritage Program
CO	Carbon monoxide
CONO	Council of Neighbors and Organizations
CSDOT	Colorado Springs Department of Transportation
CSP	Colorado State Parks
CTAB	Citizen's Transportation Advisory Board
CTPP	Census Transportation Planning Package
DBE	Disadvantaged Business Enterprise
DSS	Decision Support System
EDC	Economic Development Council
EMME/2	A Travel Demand Model (for forecasting traffic)
EPA	United States Environmental Protection Agency
FAA	Federal Aviation Administration

FHWA	Federal Highway Administration
FMCSA	Federal Motor Carrier Safety Administrations
FMVECP	Federal Motor Vehicle Emission Control Program
FR	Federal Register
FRA	Federal Railroad Association
FTA	Federal Transit Administration
FY	Fiscal Year
GIS	Geographic Information System
GPS	Global Positioning System
HAC	Highway Advisory Commission
HBA	Housing and Building Association
HERS_ST	Highway Economic Resource System for States
HRRR	High Risk Rural Roads
HOT	High Occupancy Toll
HOV	High Occupancy Vehicle
HPMS	Highway Performance Monitoring System
HSIP	Highway Safety Improvement Program
HUFT	Highway Users Tax Fund
I/M	Vehicle Inspection and Maintenance Program
IRI	International Roughness Index
ISTEA	Intermodal Surface Transportation Efficiency Act (1991)
ITS	Intelligent Transportation System
LOS	Level of Service
LRP	Long-Range Plan
LRT	Light Rail Transit
MACC	Multi-Agency Coordination Center
MCA	Multi-Criteria Analysis
MOBILE 6	EPA Approved Model for Forecasting Pollutant Emissions
MPA	Metropolitan Planning Area
MPO	Metropolitan Planning Organization
MSA	Metropolitan Statistical Area
NAAQS	National Ambient Air Quality Standard
NEPA	National Environmental Protection Act
NHS	National Highway System
NIMS	National Incident Management System
NMP	Non-Motorized Transportation Plan
NPIAS	National Plan of Integrated Airport Systems
OBD	Outlying business district, a land use type used in modeling
PCA	Potential Conservation Areas
PEL	Planning and Environment Linkages
PMR-4	Planning and Management Region 4
PPACG	Pikes Peak Area Council of Governments
PPRTA	Pikes Peak Regional Transportation Authority
PPWP	Public Participation Working Group
RAC	Regional Advisory Council
RMRA	Rocky Mountain Rail Authority
RNA	Research Natural Areas
ROW	Right-of-Way
RTA	Rural Transportation Authority

RTDP	Rural Transit Development Plan
RTP	Regional Transportation Plan
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SHPO	State Historic Preservation Office
SIP	State Implementation Plan (for air pollutants)
SOV	Single Occupant Vehicle
SPR	Statewide Planning and Research
SRP	Short-Range Plan
STAC	Colorado's State Transportation Advisory Committee
STAS	PPACG's Specialized Transportation Advisory Subcommittee
STIC	Small Transit Intensive Cities
STIP	Statewide Transportation Improvement Program
STP	Surface Transportation Program
TAC	PPACG'S Transportation Advisory Committee
TAZ	Transportation Analysis Zones
TCD	Traffic Control Device
TCM	Transportation Control Measure
TDM	Transportation Demand Management
TDP	Transportation Development Plan
TEA-21	Transportation Equity Act for the 21st Century (1998, replaced ISTEA)
TES	PPACG's Transportation Enhancement Subcommittee
TCSP	Transportation and Community and System Preservation Pilot
TIGER	U.S. Census Bureau's Topologically Integrated Geographic Encoding and Referencing computer file
TIP	Transportation Improvement Program
TISC	Trucking Issues Subcommittee
TOC	Transportation Operations Center
TMA	Transportation Management Area (an MPO with over 200,000 in population)
TRANPLAN	A Travel Demand Model (for forecasting traffic)
TRB	Transportation Research Board
TRE	The Resource Exchange
TSMO	Transportation System Management & Operations
UPWP	Unified Planning Work Program
USDOT	United States Department of Transportation
USFS	United States Federal Service
USFWS	United States Fish and Wildlife Service
VHT	Vehicle Hours Traveled
VISUM	A Travel Demand Model (for forecasting traffic)
VMS	Variable Message Sign
VMT	Vehicle Miles Traveled
WQMC	Water Quality Management Committee

This Page Left Intentionally Blank

MOVING FORWARD THE 2035 REGIONAL TRANSPORTATION PLAN – EXECUTIVE SUMMARY

The *MOVING FORWARD 2035 Regional Transportation Plan* proposes a multi-modal system of transportation infrastructure and services for the Pikes Peak Region through year 2035. The Plan describes the form and functions of the multi-modal regional transportation system. The infrastructure projects and policies that were chosen were deemed the best alternative to meet the regions transportation needs within the funds available. The Plan addresses federal requirements and examines current and future regional needs, while maintaining flexibility to meet changing socio-economic, land-use, travel, and demographic conditions. The financial resources available within current law are described, along with potential sources of additional funds. The Plan also describes the Pikes Peak Region's approach to coordinating planning and defines regional transportation impact mitigation and monitoring challenges and opportunities.

REGIONAL TRANSPORTATION PLAN REQUIREMENTS AND PROCESS

Requirements for transportation planning within metropolitan areas are contained within three major pieces of federal legislation: SAFETEA-LU (the current Federal transportation legislation), the Clean Air Act of 1990, and the Civil Rights Act of 1964. Under direction of the Board of Directors, PPACG staff, the Transportation Advisory Committee (TAC), the Community Advisory Committee (CAC), and the Air Quality Technical Committee advise the Board regarding transportation and air quality planning efforts in the region.

Analysis by PPACG indicates that there is a current backlog of needed maintenance and improvements in the Pikes Peak Region totaling approximately $2 billion. This backlog is the equivalent of over 5 years of total federal allocation to the state of Colorado. The planned expenditure of funds for transportation within *MOVING FORWARD* between 2008 and 2035 is approximately $7 billion. At the end of this period the backlog of needed maintenance and improvements is forecast to be approximately $5 billion.

TABLE E-1: AVAILABLE AND *NEEDED* FUNDING IN MILLIONS

	Total	Traffic Operations	Road Operations / Maintenance	New Construction	Transit	Bike / Pedestrian
Available	$7,300	$178	$2,240	$4,017	$800	$65
Needed	*$12,800*	*$600*	*$4,000*	*$5,000*	*$2,800*	*$400*

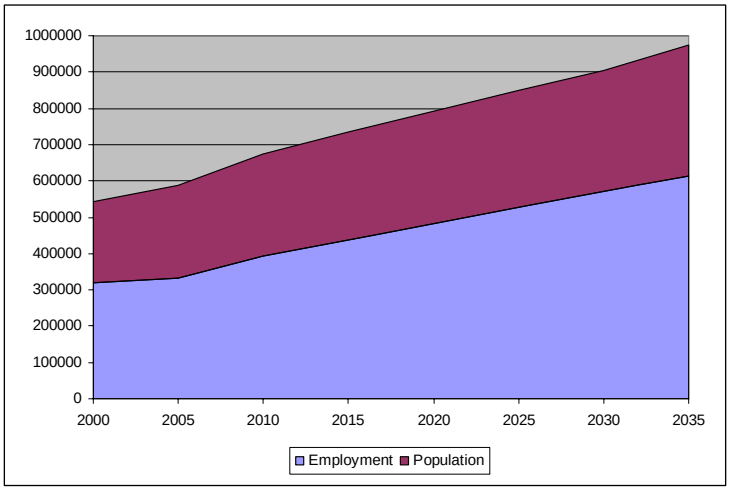
ISSUES AND TRENDS

The first step in transportation planning is to establish the set of conditions to be reacted to. This includes forecasting population and employment growth on the urban fringe and at redeveloping infill sites; inventorying sites of historical or environmental significance and key wildlife corridors; and identifying opportunities for site-sensitive improvements such as bus rapid transit, commuter rail, and multi-use trails. It also means tracking rising maintenance and construction costs, safety and security issues, and realistically available funding.

Small Area Forecasts

The State Demographer's forecasts for the Pikes Peak Region show that the regional population will grow 60% by 2035. This is a dramatic increase, equivalent to adding another present-day City of Colorado Springs to the region. Employment rises even faster, reflecting the national trend of metropolitan areas becoming employment centers.

FIGURE E-1: FUTURE POPULATION AND EMPLOYMENT IN THE PIKES PEAK REGION



Source: Colorado State Demographer

FEDERAL REQUIREMENTS FOR TRANSPORTATION PLANS

SAFETEA-LU, signed into law by President Bush August 10, 2005, includes requirements to efficiently use and preserve the existing transportation infrastructure, acknowledge the synergistic relationship between all modes of transportation, and it mandates the inclusion of private citizens and stakeholders in the planning process, and considering how transportation impacts the environment. Another key mandate is that the long-range transportation plan must be financially constrained; meaning the transportation projects and strategies identified can be paid for with funds that reasonably expected to be available.

The Clean Air Act Amendments (CAAA) of 1990 requires that transportation planning help and not hinders the region in meeting federal air quality standards. Receipt of federal funding is contingent upon a region's ability to meet air quality standards. The CAAA specifically encourages regions to reduce auto emissions and trips made by single-occupant vehicles; it promotes the use of alternative transportation modes, including transit and bicycles, as a viable part of the transportation system.

Title VI of the 1964 Civil Rights Act (42 U.S.C. 2000d-1) states that "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Presidential Executive Order 12898 reinforces the U. S. Department of Transportation (DOT) to direct its funding based on the following principles:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

The demand for transportation services is directly related to the demographic, economic, and geographic characteristics of an area and typically rises in proportion to increases in population, employment, and improved economic conditions. As an urban area expands, the numbers and lengths of individual trips increase unless land-use densities and mixed use developments increase at an equal or greater rate. Figures E-2 and E-3 depict the forecast distribution of population and employment between 2005 and 2035.

FIGURE E-2: POPULATION DISTRIBUTION
BLACK IS 2005 RED IS GROWTH TO 2035

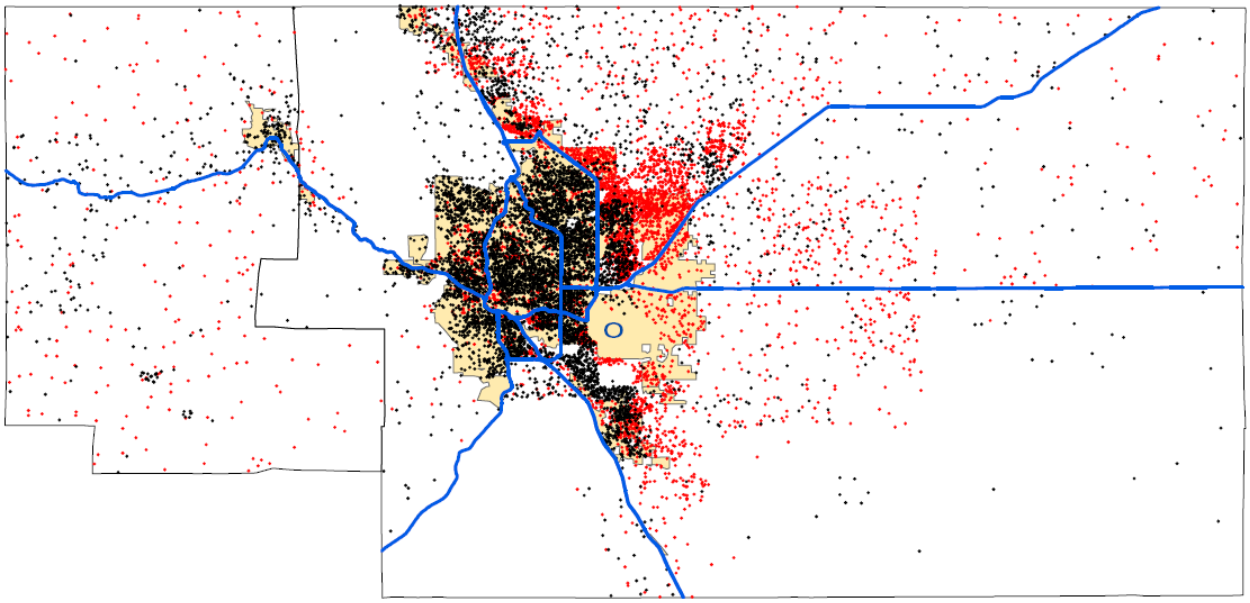
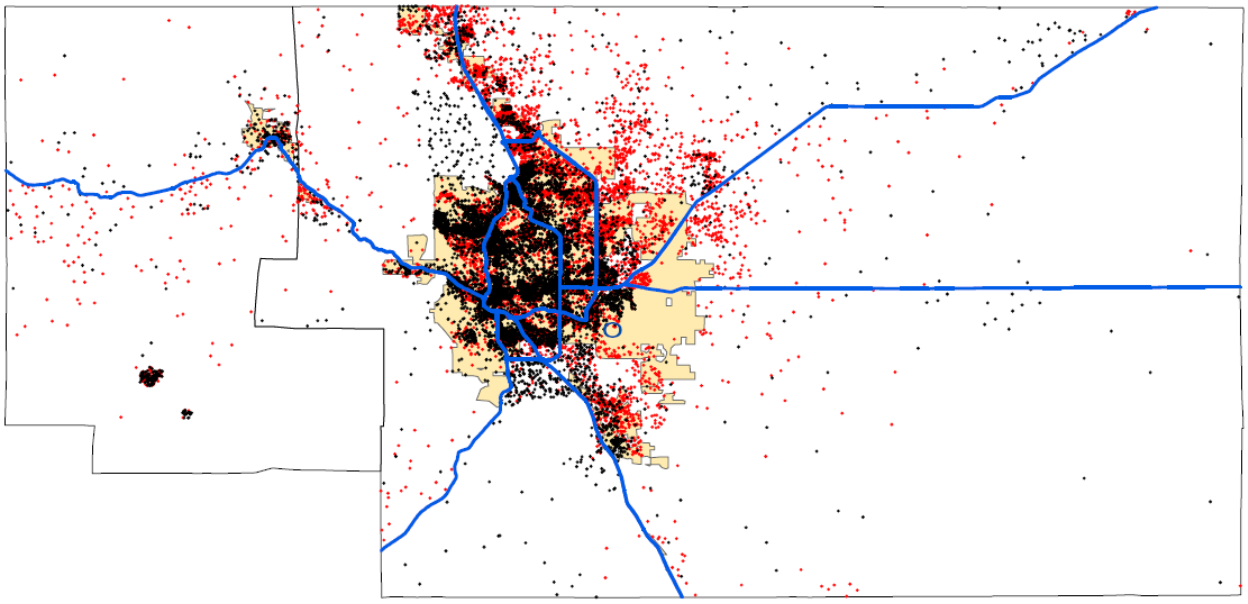


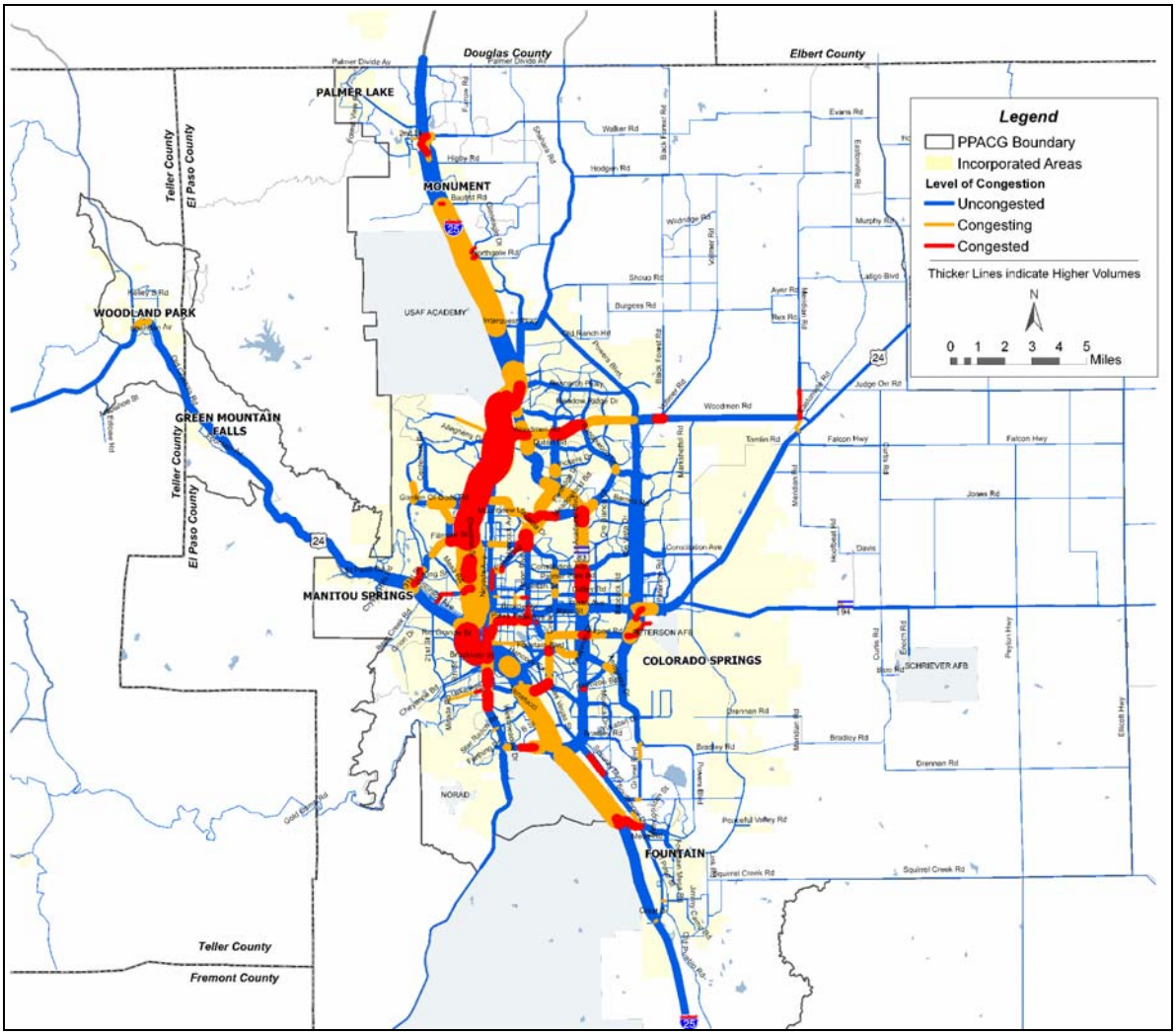
FIGURE E-3: EMPLOYMENT DISTRIBUTION
BLACK IS 2005 RED IS GROWTH TO 2035



Congestion

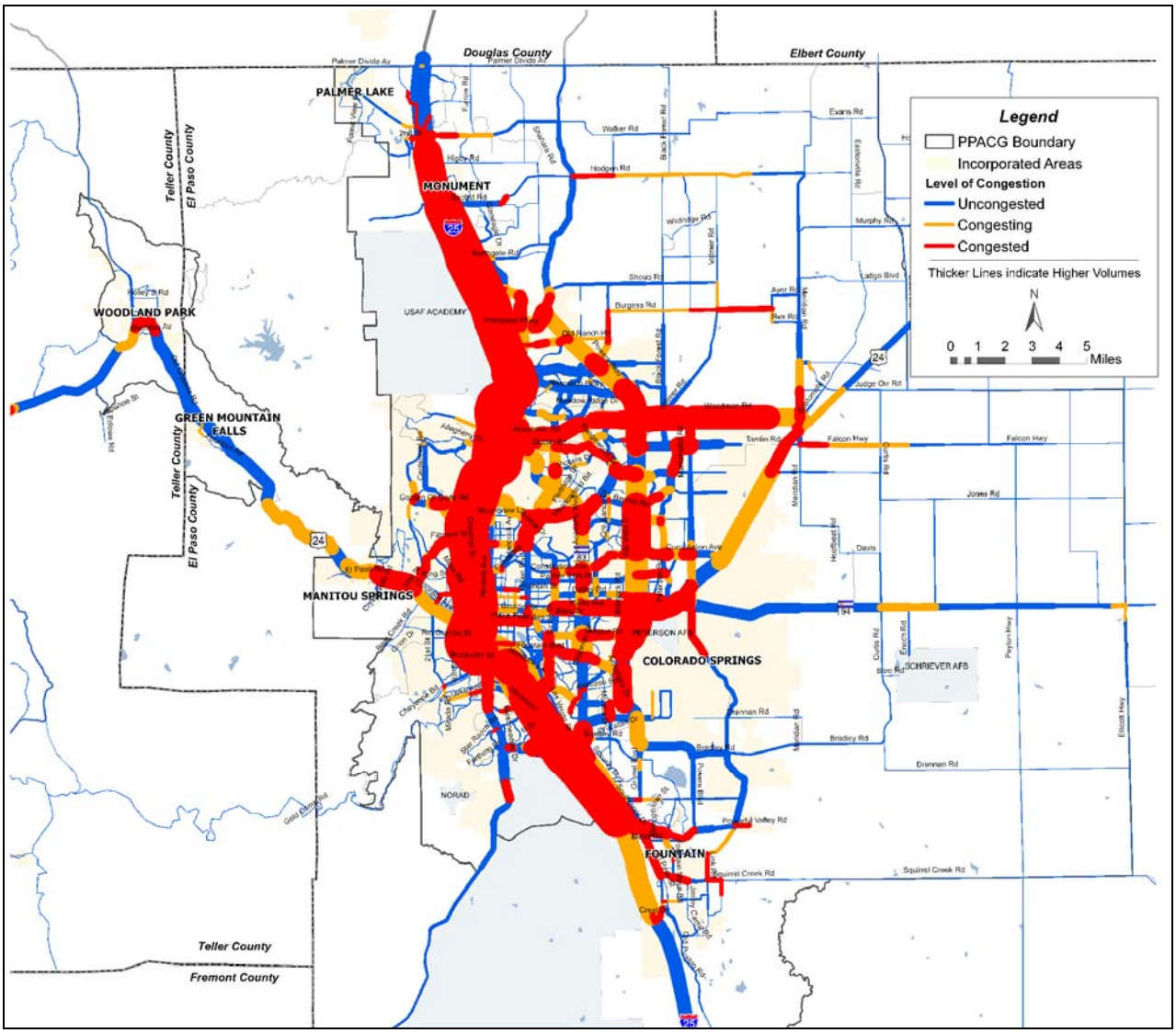
Congestion is a relative rather than an absolute condition, and a uniform measurement cannot be used for all facilities and cities. Most perceived congestion is caused by intersections and not by the roadway itself. In the Pikes Peak Region roadway congestion is defined by a volume to capacity (V/C) ratio of 0.85 or greater. This corresponds to a level of service (LOS) D for all regional roadways. Levels of service are graded similar to school grades, 'A' is very good, 'C' is average, and 'F' is failing. In order to best depict the effect growth will have on travel in the Pikes Peak region Figures E-4 and E-5 show levels of roadway congestion in 2005 and congestion in 2035 assuming that only the Pikes Peak RTA projects and COSMIX are completed. Figures E-6 and E-7 show congested intersections in 2005 and 2035.

FIGURE E-4: 2005 LEVELS AND LOCATIONS OF ROADWAY CONGESTION



Regional growth in traffic volumes often means that even small disruptions can have a significant ripple effect on transportation system performance. There is also an increasing recognition of the congestion caused by road construction, weather conditions, special events, and crashes/emergency situations. It is estimated that about half of regional traffic congestion is caused by temporary disruptions that take away part of the roadway from use ("non-recurring" congestion) as opposed to regular "rush hour" traffic.

FIGURE E-5: BASE CASE SCENARIO - CONGESTION IN 2035 ASSUMING ONLY PPRTA PROJECTS AND COSMIX TO 2015 ARE COMPLETED



Congestion for signalized intersections is measured in terms of both driver frustration and increased travel time. The delay experienced by the motorist is caused by a number of factors that relate to the split of green time between directions, the length of green time, the progression of green lights between intersections, the design of the intersection, traffic volumes and crashes. Delay is the difference between the time actually experienced and the time that travel would take without congestion from signals or other vehicles. Once the threshold of congestion is met the intersection will be evaluated to determine the appropriate types of improvements that might be implemented and the potential impacts of those options. Careful consideration of the likely impacts of potential improvements on pedestrians, cyclists, and the adjacent land uses, prior to completion of a final design will ensure that mobility and accessibility goals for all modes of transportation are included in the final decision.

FIGURE E-6: 2005 CONGESTED INTERSECTIONS

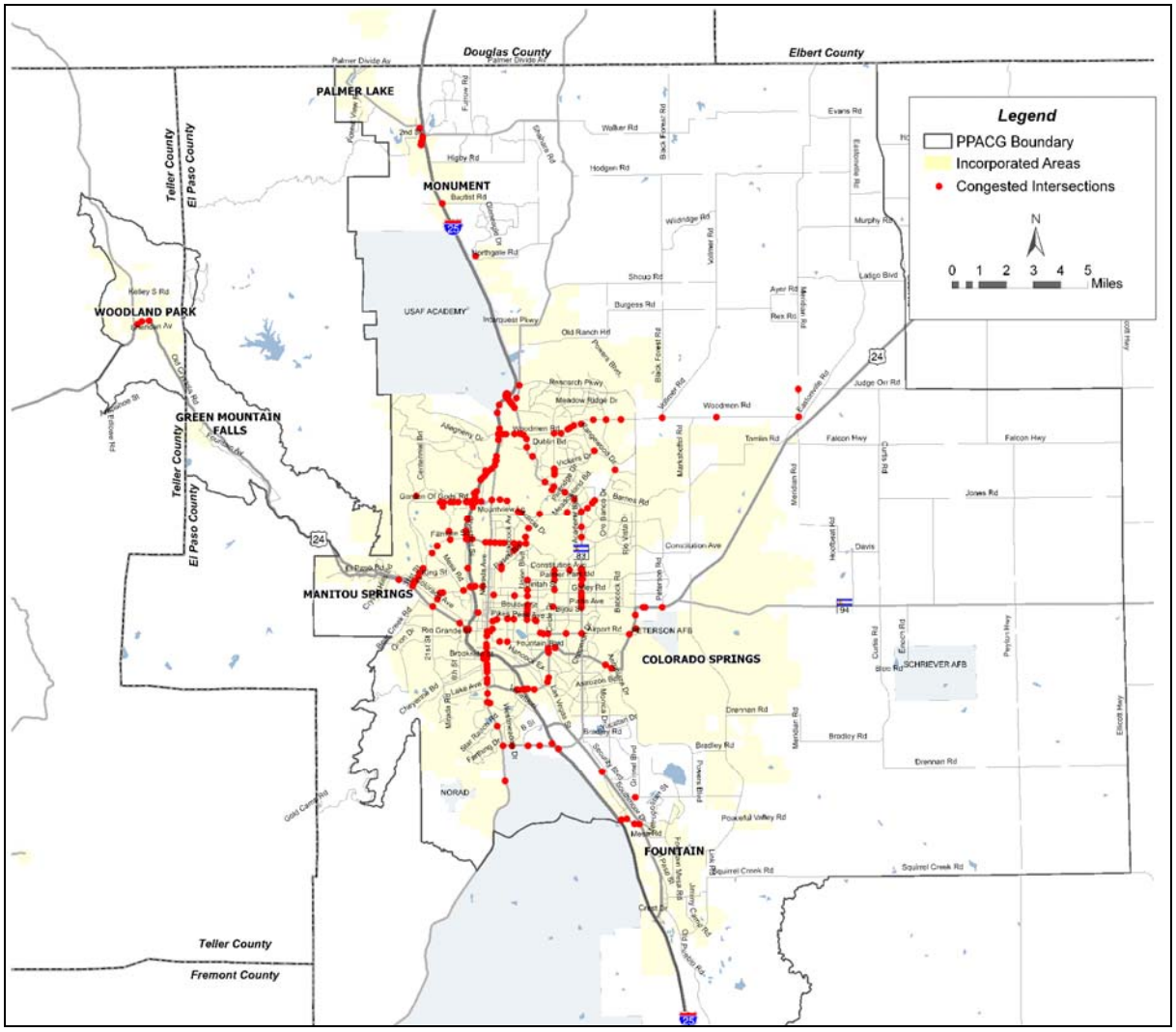
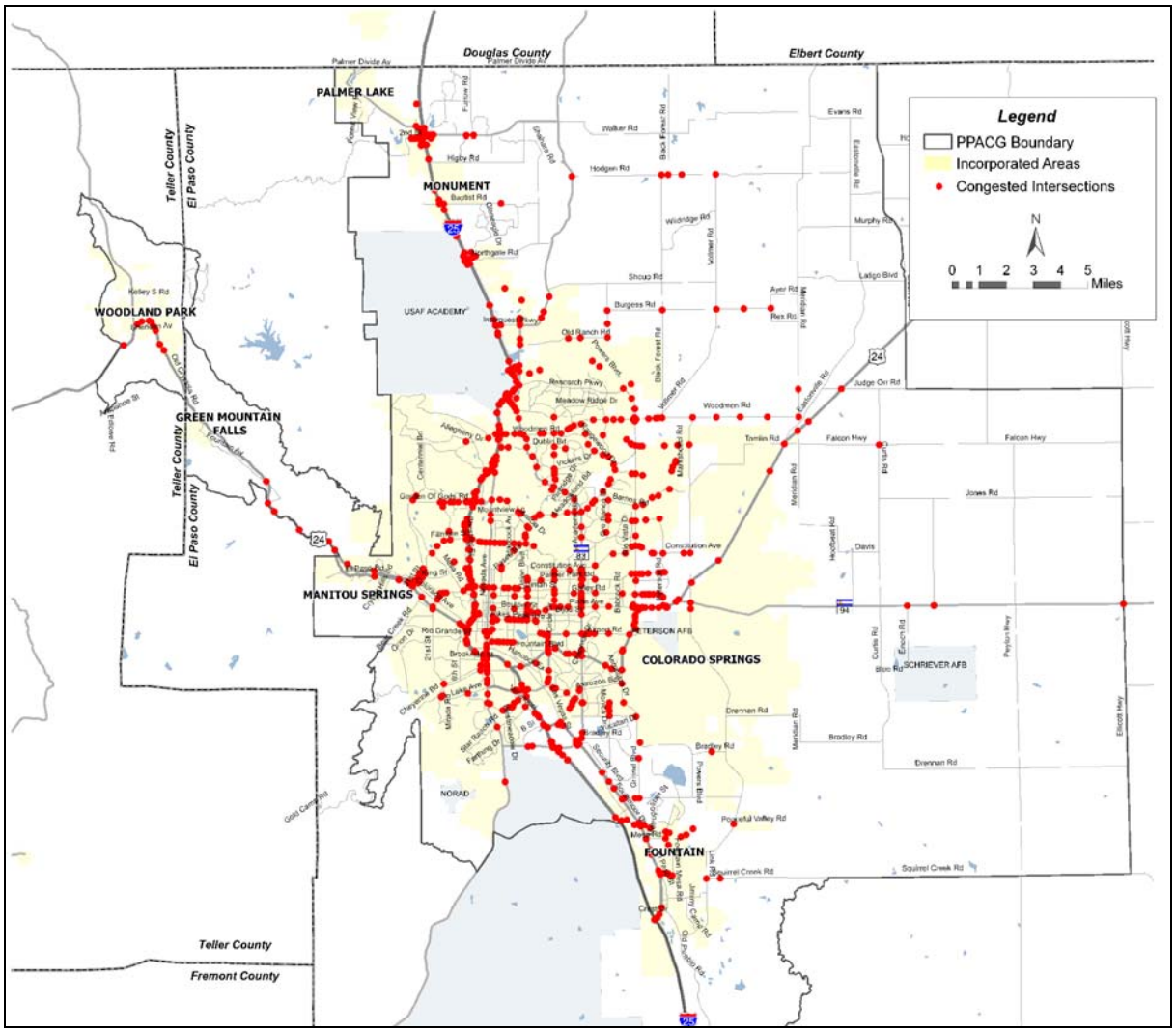


FIGURE E-7: 2035 CONGESTED INTERSECTIONS



Roadway and Bridge Maintenance

Adequately maintaining the transportation system is a major challenge for the Pikes Peak Region, the state of Colorado and the entire country. Many metropolitan areas have neglected their maintenance responsibilities in lieu of policies favoring expansion. Preservation of the existing system is fiscally responsible, and publicly desired. Over 75% of comments received during the *MOVING FORWARD* planning process stated that maintenance should receive a higher rate of investment and priority. Table E-2, shown below, lists roadway pavement conditions for regional roads. Regional roads are classified as collector, arterial, or freeway/expressway. They do not include local streets.

TABLE E-2: 2007 PAVEMENT CONDITIONS FOR REGIONAL ROADS

Roadway Classification	Good	Fair	Poor
Collectors	19%	54%	27%
Minor Arterials	39%	49%	12%
Principal Arterials	43%	47%	10%
Freeways & Expressways	67%	24%	8%
Roadway Jurisdiction	**Good**	**Fair**	**Poor**
El Paso County	46%	46%	8%
City of COS	25%	58%	18%
CDOT	70%	27%	3%
City of Manitou Springs	1%	25%	74%
Town of Monument	24%	51%	26%
City of Fountain	31%	44%	22%

Road and bridge infrastructure deteriorate at known predictable rates, taking into account materials, craftsmanship, weather conditions, traffic type and volume, along with several other factors. Preventive maintenance, if institutionalized, can extend the deterioration point, pushing off major rehabilitation / reconstruction for a decade or more. Past fiscal conditions did not allow for fully funded preventive maintenance levels, though passage of the Pikes Peak Rural Transportation Authority has corrected this to some degree in the region. A map of pavement conditions is found in the plan document on page 51 and a map of bridges by condition is on page 57 of the Plan document. As shown in Figure E-8 on the following page, more frequent maintenance activities cost less in the long term (dashed lines) and yield overall better average pavement conditions (solid lines).

Bridges are another critical element of the transportation system that requires constant upkeep and maintenance. The Pikes Peak region currently has 457 bridges to maintain. The State maintains 209 or 46% of those bridges; the rest are the responsibility of local governments.

- Bridges in poor condition do not meet all safety and geometry standards and require reactive maintenance to ensure their safe service. Thirty (30) or 7% of the bridges in the region are in poor condition. All of these are local responsibility.

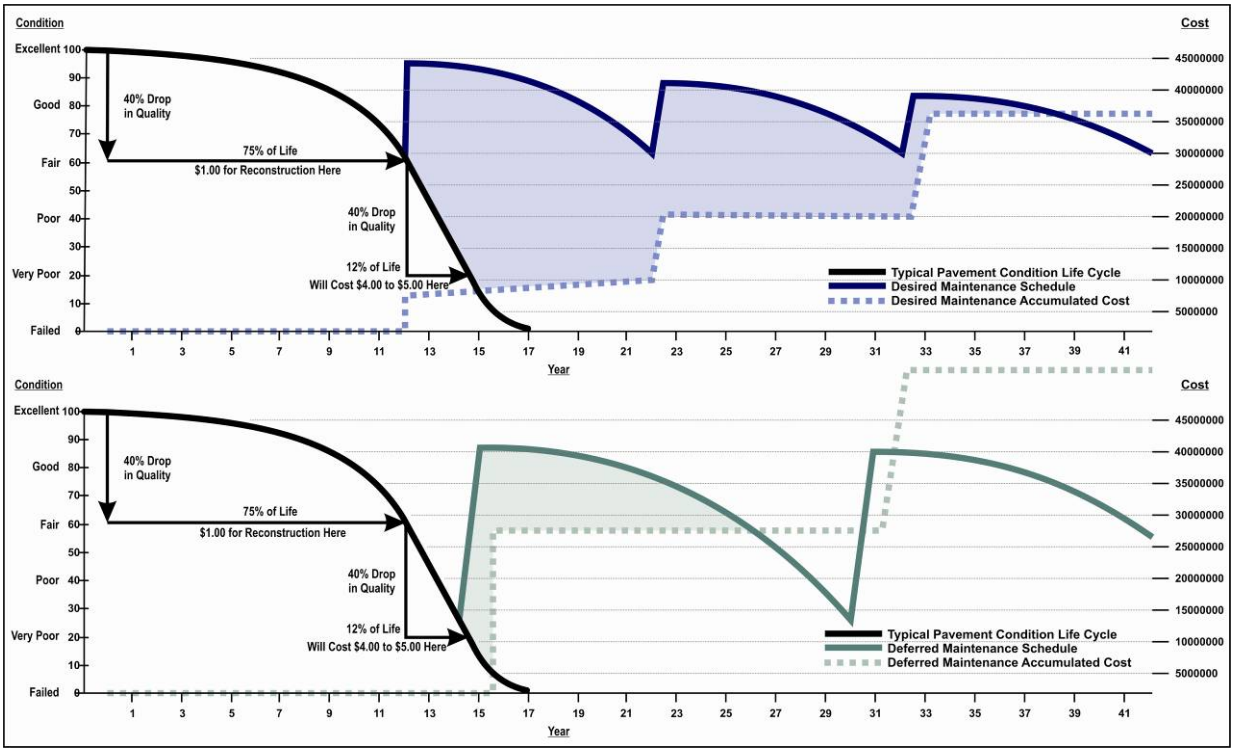
- Bridges in fair condition marginally satisfy safety and geometry standards and are currently in need of rehabilitation. Eighteen (18) or 4% of the bridges in the Pikes Peak region are in Fair condition.

- Bridges in good condition typically adequately meet all safety and geometry standards and typically only require standard preventative maintenance. Four hundred and nine (409) of the bridges in the Pikes Peak Region are classified in Good condition.

TRANSPORTATION SYSTEMS

Although the regional system is discussed below by mode, the principle of this Plan is to enhance integration of the modes into a coherent system to safely and efficiently meet the region's diverse needs.

FIGURE E-8: PREFERRED VS DEFERRED PAVEMENT MAINTENANCE LIFE-CYCLE



Roadway

The roadway network is composed of "classes" of roadways that form a hierarchy of facilities for moving people and goods. The following graphics illustrate the distribution of each of these classes of roadways and indicates the classes' role in moving traffic.

Freeways and Expressways are designed to facilitate fast travel between regions or across the region. Generally, they are designed to handle high volumes of traffic at a high rate of speed. In order to maintain safety at these higher volumes and speeds, access to interstates and freeways are limited. Freeways, such as I-25, are 4% of the Colorado Springs metropolitan area roadway system and carry 43% of the daily vehicle miles of travel in the region.

Arterials are designed for travel within a region or city and link business districts, major activity centers, and outlying suburban residential areas. Arterials serve trip of moderate length at lower speeds than interstates or freeways. Like interstates and freeways, arterials trade-off property accessibility for increased mobility and safety. Arterials account for about 14% of the regional roadway system and carry about 43% of the regional vehicle miles of travel.

Collectors are designed to connect neighborhoods to one another or connect local roads to arterials by collecting traffic from local subdivision areas and channel it into the arterial system. These streets provide both property access and traffic circulations within residential neighborhoods. Collectors account for about 14% of the regional roadway system and carry about 5% of the daily vehicle miles of travel.

Local Roads are the streets most people live on. They are typified by many residential driveways, on-street parking is generally permitted, and the posted speed limits rarely exceed 25 MPH. These streets provide a very high level of property access, but are poor routes for fast, long-distance travel. Indeed, through traffic is deliberately discouraged on local roads. Local roads account for about 68% of the regional roadway system and carry about 9% of the daily vehicle miles of travel.

Public Transportation

A very high proportion of public comments received during the *MOVING FORWARD* process indicated a desire for more and more frequent transit service throughout the Pikes Peak region. Mountain Metropolitan Transit, the region's fixed-route bus system operator, includes 90 buses operating on 25 local routes, and 10 Sunday routes. The weekday routes operate from approximately 6 a.m. to 7 p.m. The Saturday routes operate from 6:40 a.m. to 7:00 p.m. There are 9 night routes that operate until approximately 10 p.m. The most frequent routes operate every 35 minutes with most routes have between 60 and 70 minutes between buses. An updated transit plan is attached as Appendix G. Local, express, and downtown shuttle service provided approximately 3.4 million trips in 2007.

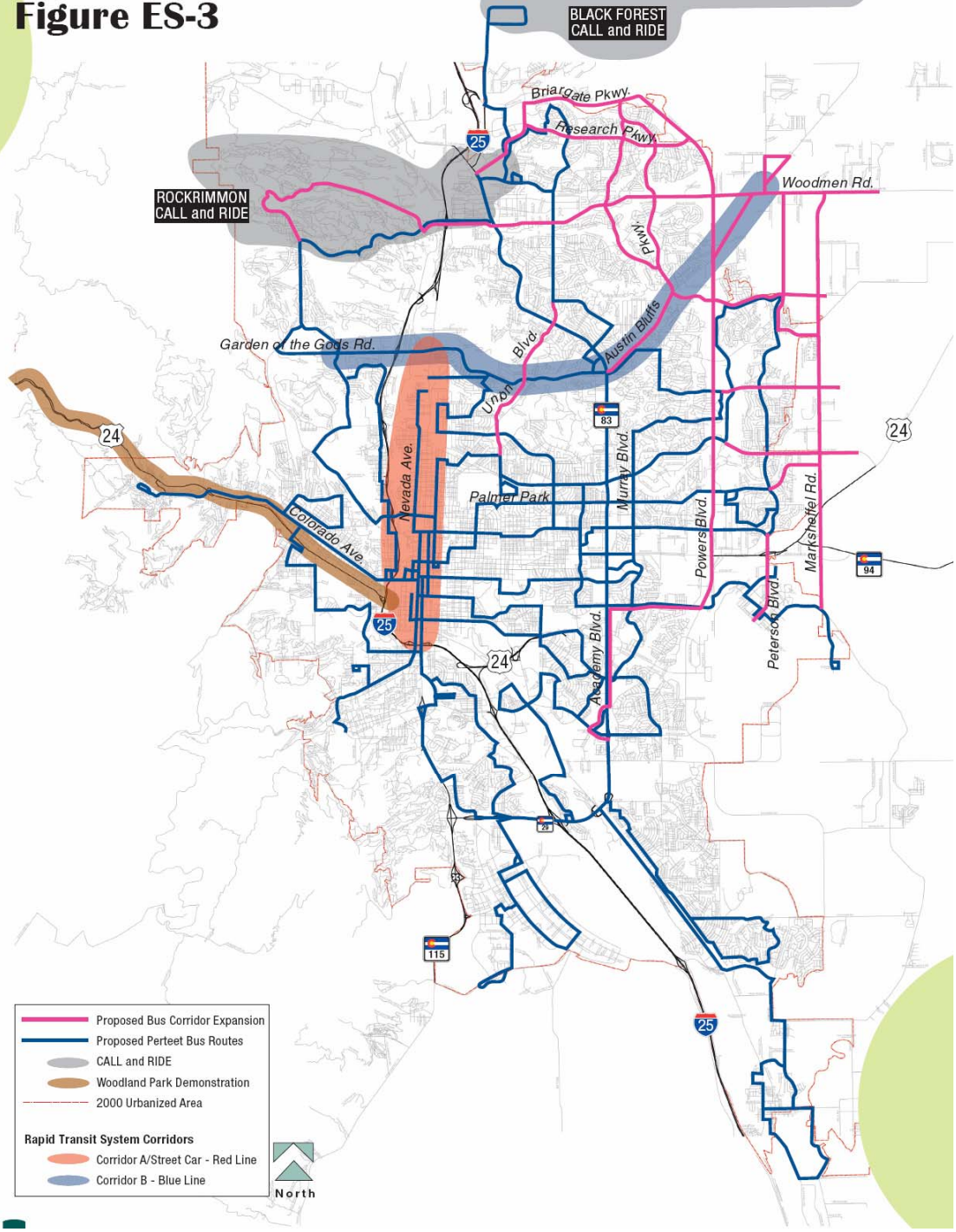
Federal law requires preparation of a coordinated plan for human service transit. This Plan must seek input from public, private, and non-profit transit providers and participation by the public. Human services transportation, also referred to as "specialized transportation services" is defined as those services that provide transportation for persons with disabilities, elderly persons, low-

income job seekers and newly-hired individuals, and other persons who may qualify for such services. PPACG completed this plan in 2007; it is attached as Appendix E.

2035 Draft Mountain Metropolitan Transit Plan

2035 Fiscally Constrained Plan

Figure ES-3



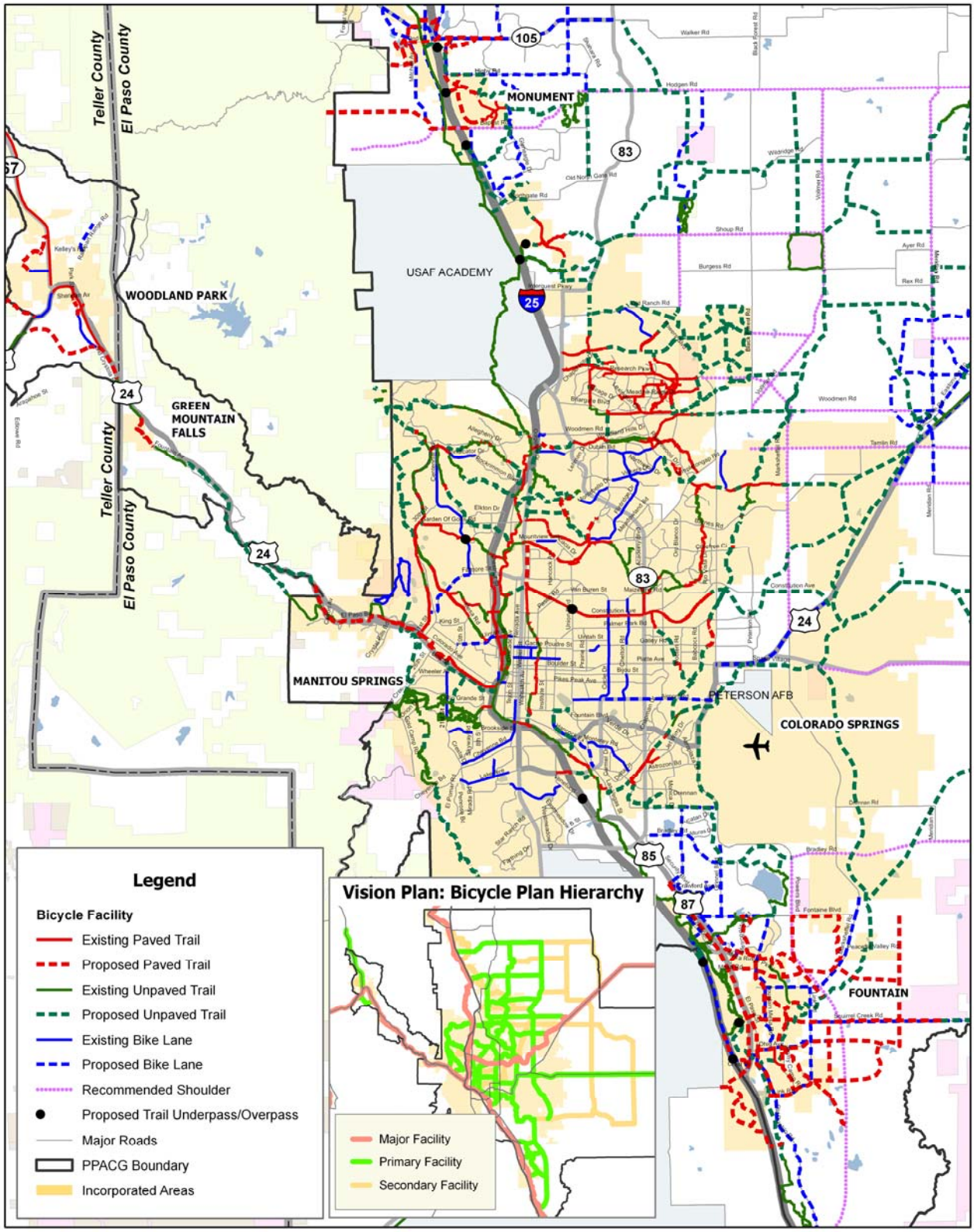
Non-Motorized Transportation Facilities

In 2007, PPACG performed a major update to the Regional Non-Motorized Transportation Plan. This update is attached as Appendix F to the plan document. Originally drafted in 1994, the Non-Motorized Plan provides a comprehensive approach to identifying bicycle and pedestrian needs, reviewing improvements, and prioritizing implementation strategies and viable funding sources by jurisdiction. The Non-Motorized Plan primarily looked for opportunities to connect and integrate existing facilities. In many cases the precise alignments will be determined during the implementation process. As a result of surveys and mapping efforts associated with the Non-Motorized Plan, a few initial comments can be made about the existing bicycle facilities as a system:

1) Most existing trails and lanes begin and end erratically and have missing links and/or difficult, unsafe crossings at major arterials.
2) Many of the trails have obstacles, such as terrain or railroad crossings.
3) Many of the facilities are in need of repair and basic maintenance such as sweeping.
4) Bike lanes are often depositories for snow, making them unavailable to bicyclists during winter conditions.

The bicycle network for the PPACG area is a disconnected assortment of off-road trails and on-road lanes. Major improvements are needed to provide a connected regional system. The projects currently planned by local entities total $400 million while the high priority projects that are affordable within the 28-year plan total $63 million (see Figure E-9).

FIGURE E-9: EXISTING AND PLANNED BICYCLE FACILITIES



RECOMMENDED 2035 TRANSPORTATION PLAN

Public Process

Arriving at the preferred alternative involved an extensive public participation process, which included a number of techniques to encourage citizen input at all levels of interest and involvement. Each step, summarized below, included outreach and public participation techniques to obtain a comprehensive assessment of the region's long-term transportation needs and desires. Detailed summaries of the individual methods are discussed below and can be found on PPACG's website.

Community leader interviews were conducted to learn about local issues, community characteristics, community contacts, and ideas to encourage public participation in developing *MOVING FORWARD* the *2035 Regional Transportation Plan*.

An on-line transportation survey queried website visitors about travel behavior, transportation priorities, willingness to use alternative travel modes, and demographic characteristics. Over 400 people completed a portion of the survey and over 150 completed the entire survey.

Over 1,300 people participated in PPACG's traveling booth that met the public at farmer's markets, community events and festivals. The *MOVING FORWARD* traveling booth presented information on the transportation planning process to over 900 people that were previously unaware of the process. It engaged participants in a meaningful and convenient way, including a survey and activities that participants could complete in just a few minutes of their time.

Eight traditional open house style meetings were held across the Pikes Peak Region featuring open and informal discussion sessions. PPACG staff and representatives of the Colorado Department of Transportation and Mountain Metropolitan Transit presented information and answered questions on transportation conditions, future population and employment distribution, and coordinated planning.

A Speaker's Bureau and associated presentations were created to attend citizen's organizations, business groups, and transportation interest groups. The Colorado Springs Housing and Building Association (HBA), the Council of Neighbors and Organizations (CONO), and the Economic Development Council (EDC) asked PPACG to present for them.

PPACG hosted a Regional Transportation Roundtable to bring the region together to plan the future transportation system. More than 150 people at 19 tables participated in two sessions to create future transportation plans for the region. Care was taken to have no more than one person who lived in a zip code at each table. Each session began with background information on regional needs followed by a small group exercise (5 to 10 people per table). Each table purchased specific projects to create a future transportation system within available resources.

Focus groups were used to obtain perspectives from participants who were statistically representative of the community's demographic composition based on age, race, income, and geography. These groups allowed PPACG to ask questions about the region's transportation system in an interactive format, which provided more nuanced information about people's thoughts and opinions than traditional surveys. Participants for the focus group were selected by a third party research center.

Alternatives Comparison Approach

An alternatives comparison approach was used to identify and compare the tradeoffs among the scenarios and to focus on desired outcomes. Six initial alternative networks, based on public comments and previous planning efforts, were developed and analyzed. These were compared against a based case composed of all projects that will be completed by year 2015.

BASE CASE SCENARIO - 2015 EXISTING SYSTEM PLUS COMMITTED PROJECTS - The adopted 2035 Forecast of population and employment was used to prepare a forecast of travel patterns on a network consisting of existing facilities and those that will be completed by 2015. The 2015 Existing + Committed System network served as the base for comparison of the remaining alternatives.

1) **2030 REGIONAL TRANSPORTATION PLAN PROJECTS** – This alternative is composed of all of the projects in the 2030 long-range plan.

2) **ALL INTERCHANGES** – This alternative was prepared to conduct a sensitivity analysis to test impacts of upgrading existing facilities with grade-separated interchanges.

3) **REDUCING ENVIRONMENTAL IMPACTS** – This was intended to be the environmentally least damaging alternative. It concentrated primarily on transit improvements, ITS (intelligent transportation systems), and limited roadway improvements.

4) **STRATEGIC CORRIDORS SYSTEM** – Emphasized the regionally significant roadway projects and improving transit on regionally significant corridors.

5) **BALANCING INVESTMENTS SYSTEM** – Emphasized improved transit coverage and frequency; express bus and bus rapid transit and lower impact roadway improvements.

6) **DISPERSED PROJECTS** – This project alternative was composed of proposed projects that meet or reduce a mobility need and/or are included in local entity transportation plans but were not in a previous alternative.

Each of these six alternatives possessed a set of characteristics that exemplified certain ideas revealed as desirable during the public involvement process, however, six alternatives proved too many to analyze deeply. The number was reduced to three main alternatives that could be examined in depth, so the preferred alternative could be chosen from among them with a fuller knowledge of the implications of each.

The three refined alternatives were chosen from the original six during a facilitated meeting of both the Community Advisory Committee and the Transportation Advisory Committee. This workshop focused on creating alternatives that best represent the spirit of the nine adopted planning principles. The most beneficial characteristics of the three alternatives not chosen for refinement were adapted into the final three, as appropriate. The three refined alternatives were also fiscally-constrained, that is, they did not include investments for which the needed finances were not reasonably expected. The three refined alternatives were:

1) **STRATEGIC CORRIDORS SYSTEM** – Emphasized the regionally significant roadway infrastructure projects such as completing Powers Blvd. (SH-21) as a freeway with extensions north and south; widening I-25 and US-24, east and west; central Colorado Springs east-west improvements; and some improved transit on regionally significant corridors.

2) **BALANCING INVESTMENTS SYSTEM** – Balanced road infrastructure improvements with transit improvements and operational improvements of roads. Included limited increases in coverage and frequency of transit and some express bus. There are improvements to US-24, east and west; extending Briargate Parkway to Meridian, extending Powers north and south and adding interchanges; central Colorado Springs east-west improvements; widening Woodmen Road.; and improving Proby Expressway.

3) **REDUCING ENVIRONMENTAL IMPACTS** - Concentrated primarily on maintaining the existing infrastructure while adding new bus routes and enhancing existing routes. It includes bus rapid transit along I-25 between US-24 and Woodmen Road. This alternative relies heavily on operational / ITS (intelligent transportation systems) improvements while limiting roadway infrastructure expansion. The roadway expansion included is: completing Powers extensions north and south and adding an interchange at Powers and US-24, widening US 24 from Garret Rd to Elbert Rd.

Alternatives Evaluation Criteria

The three alternatives above were evaluated in 10 categories and seventeen indicators that were developed using public input. Each of these categories received a weighting of importance relative to the other 9 categories using keypad polling and pair-wise comparison separately at the focus groups and the CAC and TAC. The indicators received a proportion of this weighting during a joint meeting of the CAC and TAC. The 10 categories and the 17 indicators and their weights are shown in Table E-3 below. A higher number indicates a proportionally more highly prioritized indicator or category.

TABLE E-3: EVALUATION CATEGORY'S INDICATORS AND WEIGHTS

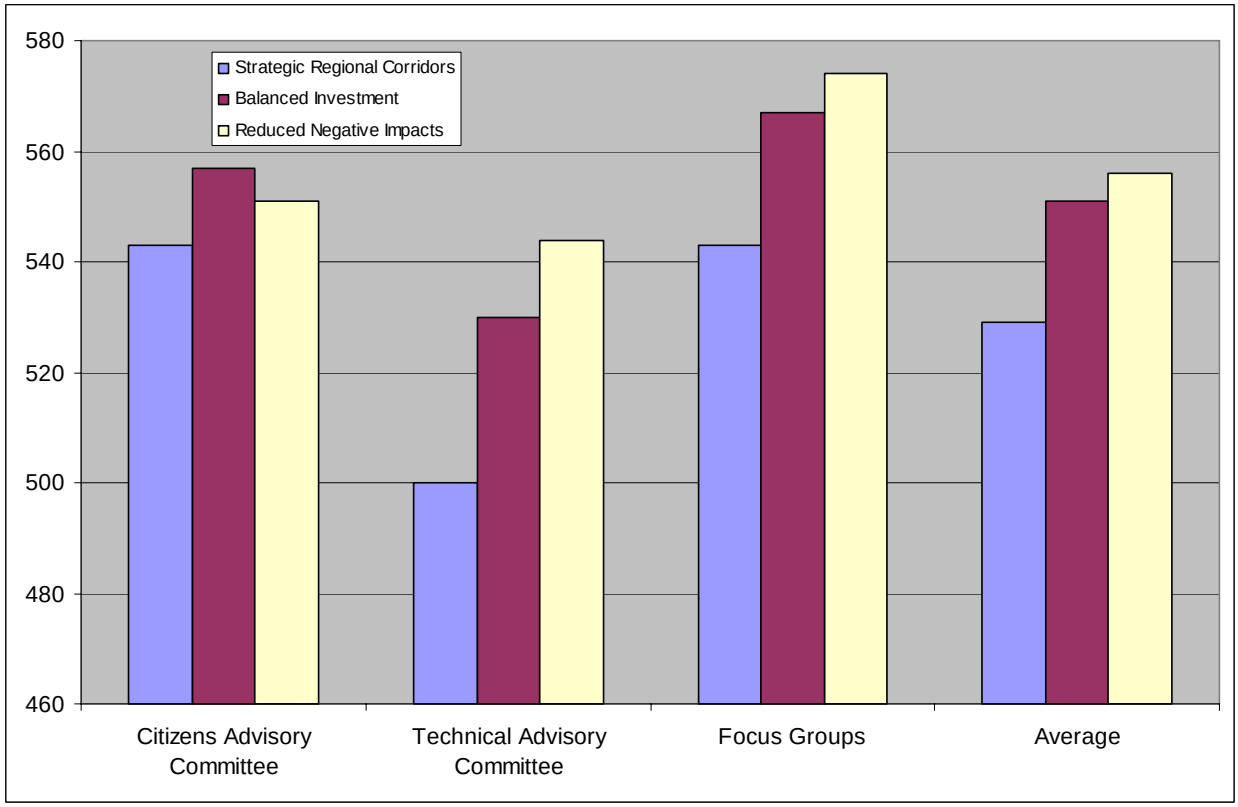
Category	Weight		Indicator
Pavement Condition	81	73	Person trip miles traveled on good, fair, and poor pavement conditions
		8	Bicycle trail and lane surface condition and completion of missing links
Safe Bridges	68	68	CDOT Bridge Condition Index
Efficient Intersections	92	55	Trips per hour entering the intersection
		37	Intelligent Transportation System (ITS) Improvements
Timely Travel	79	40	Region wide congestion (VMT/VHT)
		39	Average Travel Time Per Trip
Travel Choices	69	28	Number of people/jobs within 1/4 mile of transit route or non-motorized facility
		41	Cost Per Trip
Safe Travel	88	53	Automobile Crash Rate (Fatality, Injury and Property Damage)
		35	Non-Motorized Crash Rate (Fatality and Injury)
Reduced Social Impacts	54	54	Impacts to adjacent neighborhoods and historic/cultural areas
Reduced Natural Impacts	39	39	Impacts to adjacent natural areas
Reduced Pollution	41	20	Fuel Consumption Reduction
		21	Emission Reduction
Effective Freight Movement	40	20	Average Travel Time Per Trip
		20	Cost Per Ton Per Mile

In order to determine the sensitivity of the weighting system, each of the alternatives was scored with the individual weightings (Focus Groups, CAC, TAC) in addition to the average weighting. These scores are shown below (Figure E-10). The Reduced Negative Impacts was the slight favorite in three out of four scorings. However, this alternative is predicated upon local governments changing their land-uses to increase population and employment densities to those required for effective transit and to obtain New Starts funding from the FTA. It was decided that at this time this is a fatal flaw.

Fiscally-Constrained Recommended Transportation Plan

The recommended individual improvements that were selected for inclusion in the fiscally-constrained *MOVING FORWARD* Plan were determined based on discussions with the public at the transportation summit, with member jurisdiction staff, and during the discussions of the advantages and disadvantages of each alternative during a joint advisory committee session. All alternatives were very close in score. After thorough discussion of the initial results, both advisory committees agreed that the regional perspective was best addressed by the Balanced Investments System and made that recommendation to the PPACG Board of Directors. The recommended system plan is presented in Figure E-11 on the following page. The 2035 congestion levels with the Fiscally-constrained Recommended Transportation Plan improvements are presweetened in Figure E-12.

FIGURE E-10: ALTERNATIVE SCORES USING THE INDIVIDUAL AND AVERAGE WEIGHTING SYSTEMS



The recommended system plan focuses on improving strategic corridors while also improving transit coverage and frequency with fixed guideway transit routes on major corridors. I-25 widening continues north of North Academy Blvd; US-24 is widened from I-25 west to the Manitou Springs exit and from Woodmen Rd east past Falcon. The Woodland Park Bypass is constructed and Central Powers Blvd. is completed as a freeway. In addition, SH-94 and SH 115 are improved. This alternative also includes policies to dedicate approximately $1 million/year to operational improvements and to completion of the high priority non-motorized project list. This alternative is more effective with, and some transit funding is predicated on, changing local land-use to increase density along fixed guideway transit routes. North Powers (SH-21) is completed using local/private funds, potentially as a toll road.

FIGURE E-11: PLANNED CONSTRAINED ROAD SYSTEM

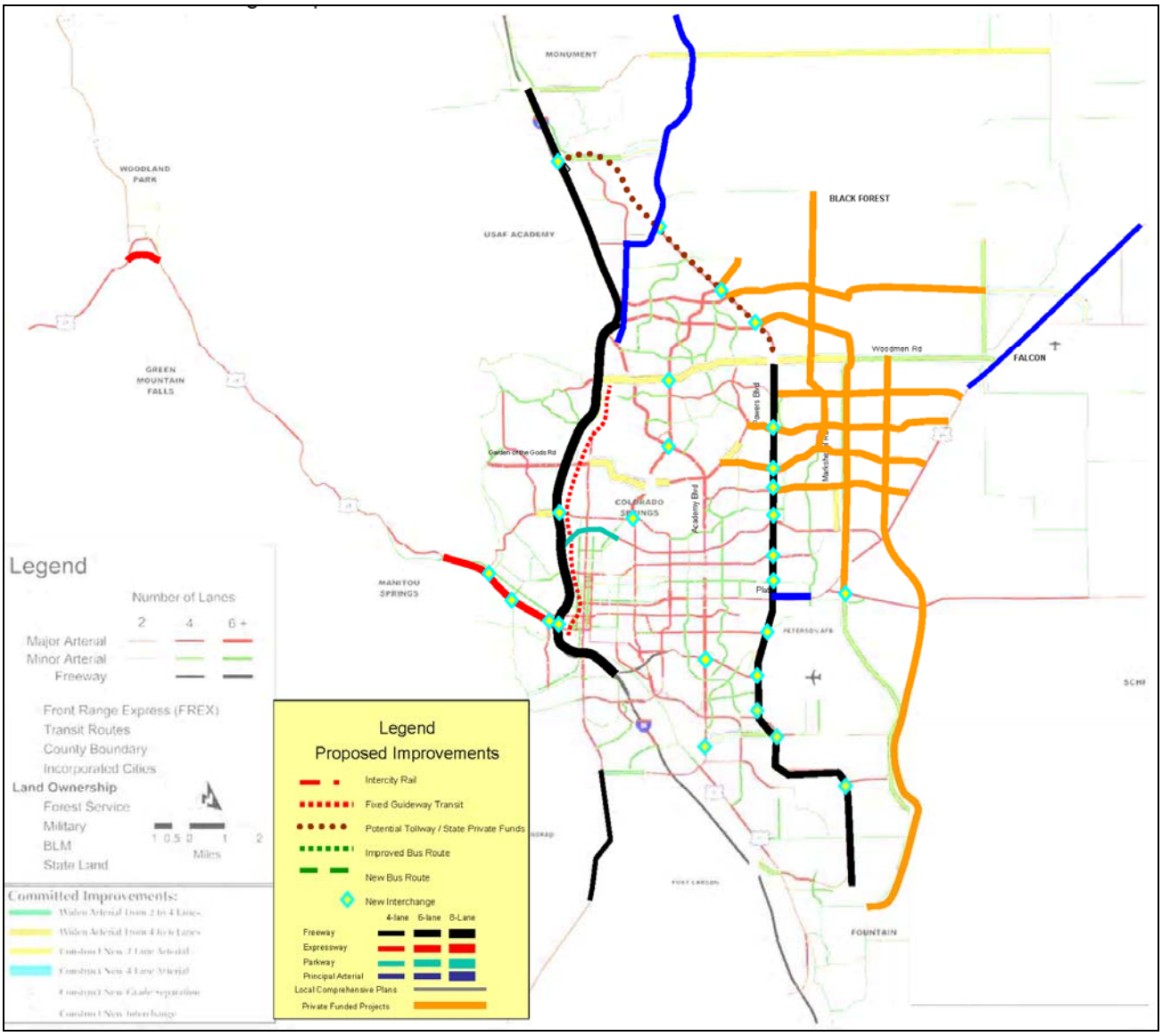
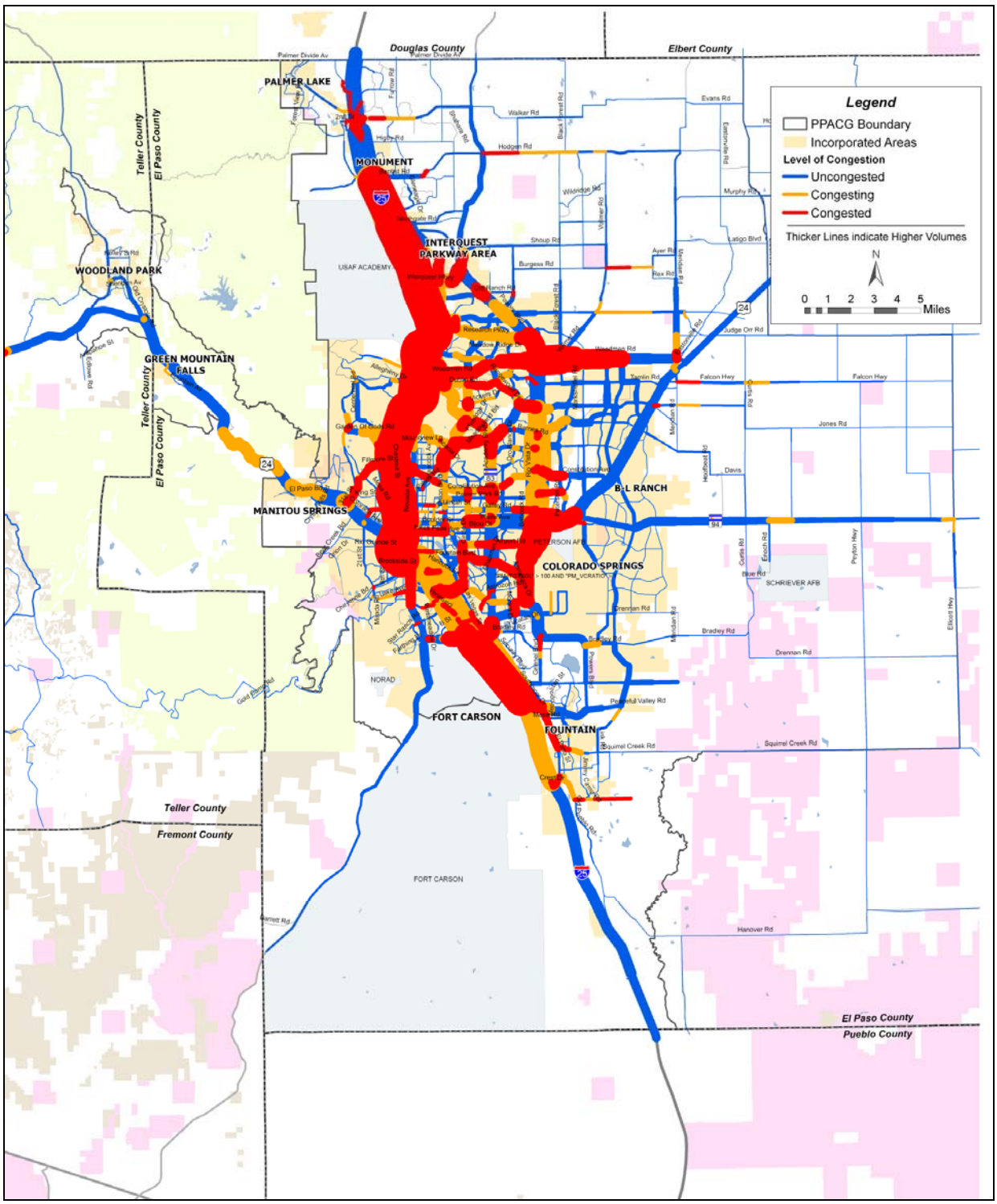


FIGURE E-12: CONGESTION IN 2035 WITH FISCALLY-CONSTRAINED RECOMMENDED TRANSPORTATION PLAN IMPROVEMENTS



This Page Left Intentionally Blank

CHAPTER 1: INTRODUCTION

RELEVANCE (WHY IS THIS PLAN NECESSARY?)

A long-range transportation plan is required to comply with federal and state laws and regulations for regional and statewide transportation planning. Transportation planning within metropolitan areas is defined by three major pieces of federal legislation: SAFETEA-LU[1], the current enactment of Federal transportation legislation, the Clean Act of 1990, and the Civil Rights Act of 1964. The current transportation plan, the *2030 Regional Transportation Plan* and its air quality conformity finding expired in November 2007. The Federal Highway Administration and the Federal Transit Administration granted PPACG an extension for final approval of the transportation plan until March 18, 2008. All transportation projects that use federal funds, or those that could significantly alter transportation within the designated metropolitan area, must be included in the plan. Although the long-range transportation plan is required for continuation of federal funding, its function is not regulatory; rather, it is to develop a strategy for the best use of public funds in meeting the goals of the community.

ISTEA and TEA-21, which preceded SAFETEA-LU, recognized the economic and cultural diversity of metropolitan areas emphasized the efficient use and preservation of existing transportation infrastructure, the synergistic relationship between all modes of transportation, the inclusion of private citizens and stakeholders in the planning process, and be financially constrained; meaning the transportation projects and strategies identified are backed by clearly specified federal, state, local, or private funding. They specified that long range transportation plans must plan for at least 20 years beyond its effective date of conformity issued by the Federal Highway and Federal Transit Administration, and use the latest available estimates and assumptions for population, land use, travel, employment, congestion, and economic activity (23 CFR 450.322). The transportation plan must be reviewed and updated every few years depending on air quality conformity status; and the MPO must demonstrate that the transportation activities included in the plan are consistent with the air quality goals established in the State Implementation Plan (40 CFR Part 93).

SAFETEA-LU, signed into law by President Bush August 10, 2005, reaffirmed all that ISTEA and TEA-21 set out to accomplish and added several other dimensions; strengthening environmental and planning linkages, encouraging better coordination and consultation with

[1] **S**afe, **A**ccountable, **F**lexible, **E**fficient **T**ransportation **E**quity **A**ct-A **L**egacy for **U**sers – Enacted in 2005

affected parties and other planning agencies, and adding detail to public participation requirements. It also shifts the evaluation of transportation systems from how well the system is physically operating to how well it is meeting the needs of its users in terms of moving people and goods, not vehicles. SAFETEA-LU requires that the following eight factors be reflected in metropolitan planning processes:

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
- Increase the safety of the transportation system;
- Increase the security of the transportation system;
- Increase accessibility and mobility of people and freight;
- Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- Promote efficient system management and operation; and
- Emphasize the preservation of the existing transportation system.

SAFETEA-LU is linked to the Clean Air Act Amendments (CAAA) of 1990. The CAAA recast the planning function to confirm that transportation planning will help and not hinder the region in meeting federal air quality standards. It encourages reduced auto emissions and fewer trips by single-occupant vehicles, and it promotes the use of alternative transportation modes, including transit and bicycles, as a viable part of the transportation system. Making receipt of all federal funding dependent on a region's ability to meet air quality standards reinforces the linkage between transportation planning and federal air quality standards.

Title VI of the 1964 Civil Rights Act (42 U.S.C. 2000d-1) states that ``No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Title VI bars intentional discrimination as well as disparate impact discrimination (i.e., a neutral policy or practice that has a disparate impact on protected groups).

Presidential Executive Order 12898 (1994) directed each Federal agency to make Environmental Justice part of its mission. To implement this executive order, the U. S. Department of Transportation (DOT) directs its funding recipients to address the following fundamental environmental justice principles:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations;

- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process; and

- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

The *MOVING FORWARD 2035 Regional Transportation Plan* addresses new planning requirements of SAFETEA-LU. The Plan examines current regional conditions, takes into account updated socio-economic projections and changing growth patterns, and describes the financial resources available through current law and how well those resources will meet transportation system needs in the Pikes Peak Region through 2035. The form and functions of the multi-modal regional transportation system are described, the Pikes Peak Region's approach to coordinating planning concerns is presented, and the proposed fiscally-constrained multi-modal system is listed. Mitigation and monitoring challenges and opportunities are defined; and projects that illustrate how the region would tackle unmet needs are listed. In its entirety, the *MOVING FORWARD 2035 Regional Transportation Plan* responds to the requirements for its composition and preparation process, and demonstrates conformity with applicable laws and regulations.

PLAN PURPOSE

The objective of long-range transportation planning is to provide a strategic framework for the development, operation, and management of the transportation system within the larger context of an area's social, economic, mobility, and environmental goals. Plans prepared within this framework must be flexible enough to adapt to changing economic and technological conditions and forward thinking enough to maximize return on investment, all while minimizing negative impacts.

Transportation planning itself is a process for balancing the links between mobility, accessibility, land-use, and socio-economic and ecological conditions to improve the quality of life for area citizens. This process is a coordinated effort between federal, state, and local governments and private transportation providers to continuously anticipate and respond to the comprehensive transportation needs of people and goods moving throughout the region. The *MOVING FORWARD 2035 Regional Transportation Plan* documents this process and presents the system improvements for all modes of transportation for the Colorado Springs metropolitan planning area through 2035.

The Pikes Peak Region's transportation system provides a vital service to the community in providing its citizens access to basic services, fostering economic activity, and enabling access to and from areas outside the region. The Pikes Peak Region is home to a number of military facilities; therefore, its transportation system serves a crucial role in national security. The *MOVING FORWARD* transportation plan and process considers all these transportation needs and charts a course to develop a safe and efficient multi-modal transportation system for all those who travel in the region.

The Pikes Peak Area Council of Governments (PPACG), as the federally designated Metropolitan Planning Organization (MPO) for the Colorado Springs Urban Area, derives its authority from Title 23, United Stated Code 134. Formed in 1967 under the Colorado laws regarding regional planning[2] and inter-governmental contracting[3], PPACG is not a unit of local government. Rather, it is an organization of local governments whose purpose is to identify regional problems and opportunities, develop solutions, and make recommendations on region-wide strategies to deal with those issues. PPACG's Board of Directors, composed of 19 members from participating local and county governments, governs the MPO. The term "Pikes Peak Region" is used to refer the Metropolitan Planning Area (MPA) for the Colorado Springs Urbanized Area. Figure 1-1 is a map of the Pikes Peak metropolitan boundaries and local jurisdictions.

MOVING FORWARD is the term the Pikes Peak Area Council of Governments (PPACG) uses to identify the Region's ongoing transportation planning process. The term is meant to communicate more than the process and its products, it is meant to challenge, inspire, and motivate its participants and to serve as a catalyst to engage the regional community in addressing its transportation needs. This concept is expressed in the Vision the Pikes Peak Region has adopted for its transportation system:

> *"Create a pre-eminent multi-modal transportation system that meets regional mobility and accessibility expectations as essential elements of the Pikes Peak Area's quality of life."*

The *MOVING FORWARD 2035 Regional Transportation Plan* describes the multi-modal transportation system components designed to facilitate mobility of people and goods throughout the region. The plan also identifies how the transportation system as recommended therein assures maintenance of national ambient air quality standards (NAAQS)[4] and meets the mobility needs of persons with disabilities. The *MOVING FORWARD 2035 Regional Transportation Plan* is fiscally-constrained and identifies funding sources that are reasonably anticipated to be available to implement the transportation improvements for the period of time it addresses, which is 2005 to 2035.

Chapter 2, *MOVING FORWARD* Planning Framework discusses the public process in-depth. PPACG's committee structure provides continuing opportunities for involvement of and consultation with representatives of agencies involved in planning concerns relative to transportation in the Pikes Peak Region. A committee made up of citizens, the Community Advisory Committee, is the lead committee for ongoing input and review of public participation activities and input. PPACG's committee meetings are open to the public and each agenda sets aside time for public comment on any matter and for public comment on each item before any action is taken. Figure 1-2 illustrates the PPACG advisory committee structure.

---

2 CRS 30-28-105.
3 CRS 29-1-203.
4 Clean Air Act, as Amended, 1990, Title 1.

FIGURE 1-1: THE PIKES PEAK METROPOLITAN PLANNING AREA

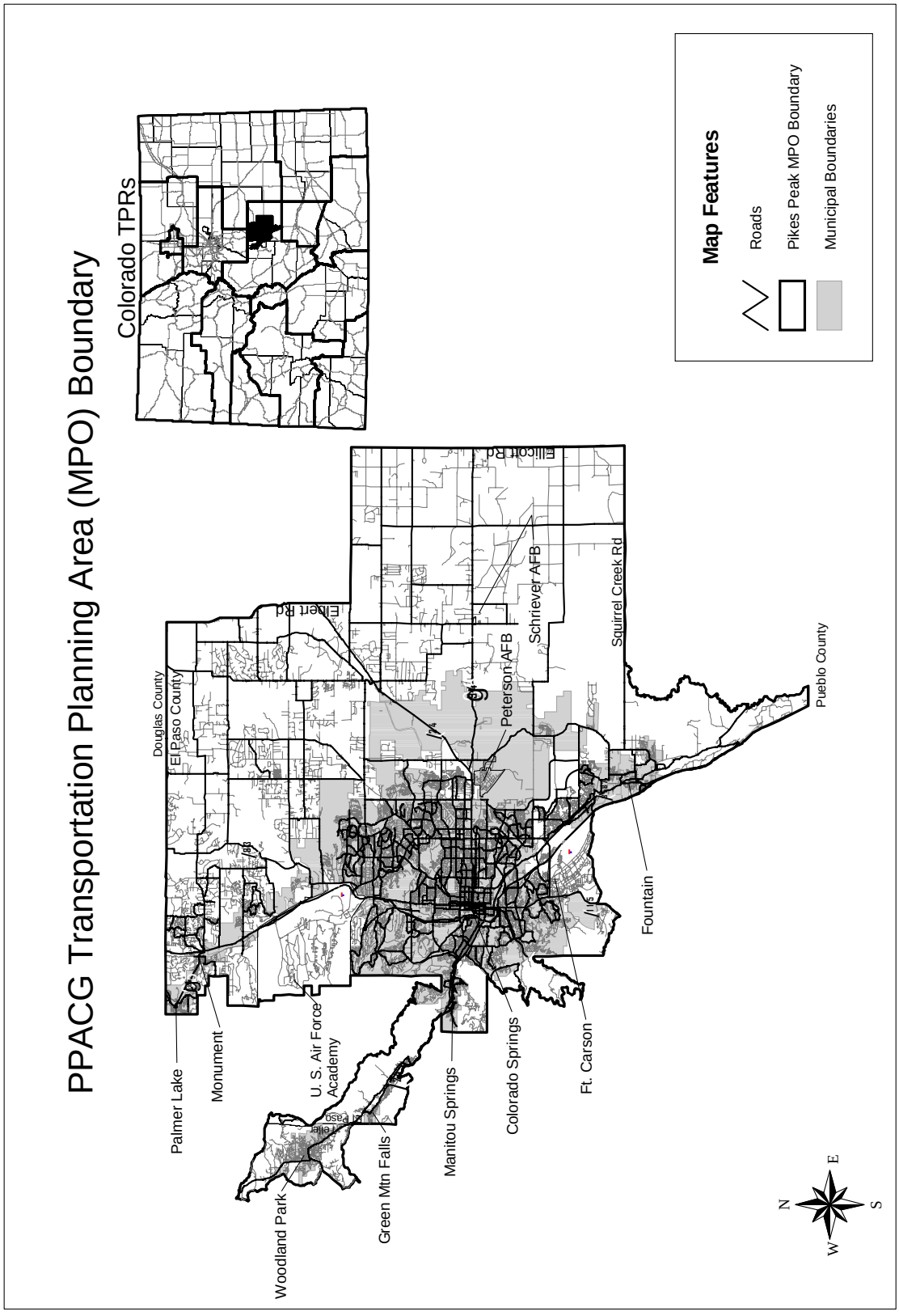
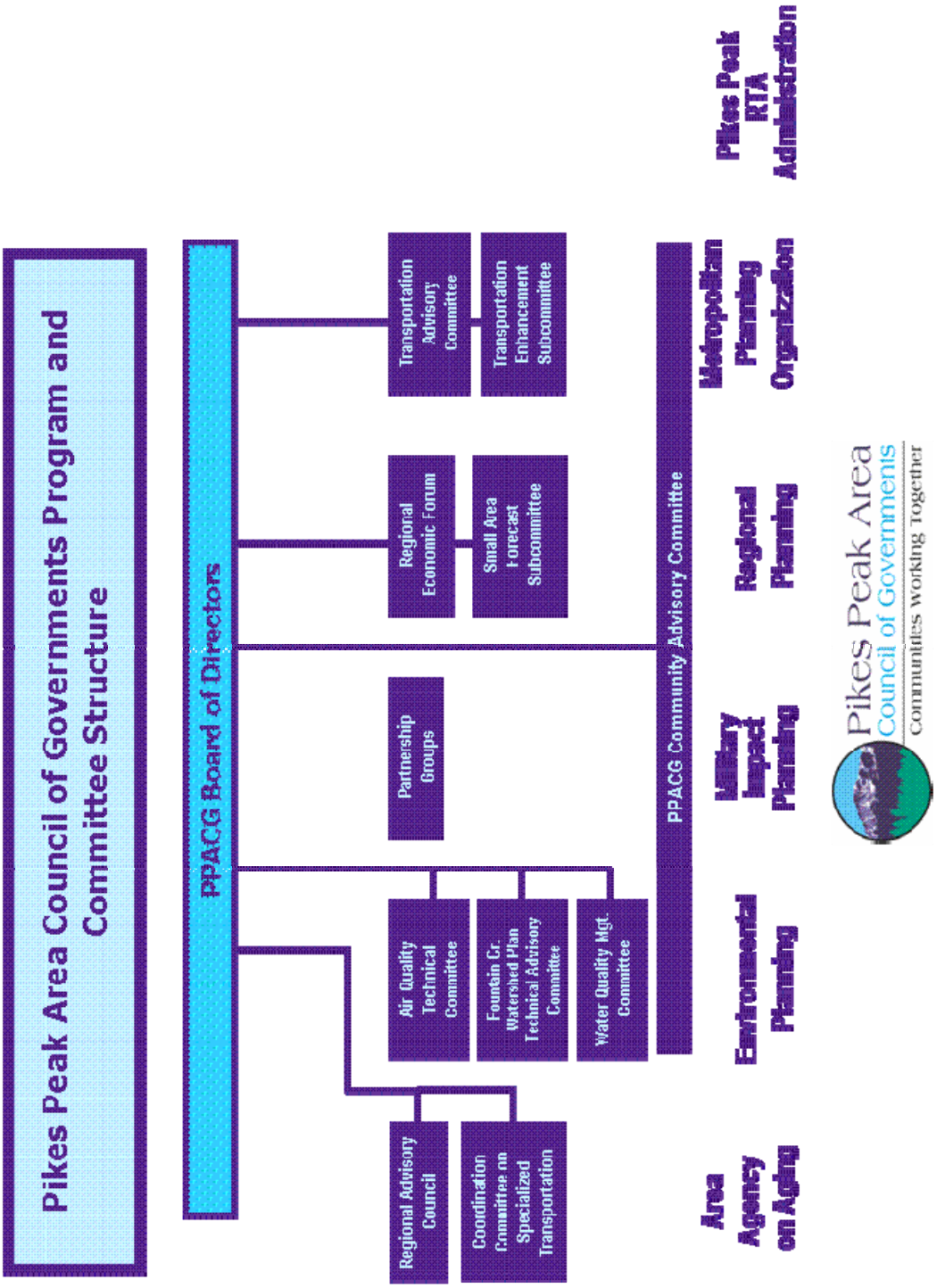


FIGURE 1-2: PPACG ADVISORY COMMITTEE STRUCTURE



PLAN SCOPE

The *MOVING FORWARD* 2035 *Regional Transportation Plan* communicates the components of plan development and presents a conceptual schedule for implementing transportation system improvements within the metropolitan planning area in the next 27 years. Chapter 2 identifies the region's vision, mission, principles, and goals for its transportation system; and it describes the process for completing the multi-modal evaluation of the projects proposed for inclusion in the plan. Chapter 4, the financial plan, demonstrates the availability of resources to implement the recommendations of the plan. The fiscally-constrained plan is presented in Chapter 12, and the evaluation process to determine its compliance with United States Department of Transportation and Environmental Protection Agency joint transportation conformity rule[5] is detailed in Appendix A.

DOCUMENT ORGANIZATION

The Pikes Peak Area Council of Governments' *MOVING FORWARD 2035 Regional Transportation Plan* is an update to the current long-range transportation plan, *2030 Regional Transportation Plan*, which was adopted in October 2004. *MOVING FORWARD* is composed of three volumes:

1) *MOVING FORWARD 2035 Plan Executive Summary*;
2) *MOVING FORWARD 2035 Regional Transportation Plan* containing thirteen chapters; and
3) *MOVING FORWARD 2035 Plan Appendices*. These thirteen appendices provide supporting documentation.

NEXT STEPS

In transportation planning endeavors, there are steps that get out of sync or take more time than planned, provide unexpected challenges or results, raise new concerns or opportunities, or fail to meet expectations in one or more areas. All participants observe things that could have been handled more effectively and perhaps, more expeditiously, but the immediate concerns may be the next committee or public meeting, providing products on time, or responding to questions from participants. Capturing these observations and "mining" this information can provide a valuable resource for improving the planning process. The best time to do this is while the thoughts are still fresh in the minds of participants.

When the *MOVING FORWARD 2035 Regional Transportation Plan* has been finalized, an evaluation process will be conducted with PPACG's advisory committee members and other participants to discuss how well expectations were met, what techniques were the most successful or not, and what would we like to see implemented in the next plan update process. This evaluation process will help to determine our progress in obtaining PPACG's public participation objectives what adjustments are needed to better facilitate a participatory transportation planning process.

[5] "Criteria and Procedures for Determining Conformity to State or Federal Implementation Plans of Transportation Plans, Programs, and Projects Funded or Approved Under Title 23 USC or the Federal Transit Act."

A key part of many *MOVING FORWARD* participation activities was requesting participants to evaluate those activities and the information presented. Evaluation forms collected at open house public meetings, the Regional Transportation Roundtable, and focus groups will be used to assemble an initial set of data and participant observations to present to advisory committees and other interested parties. The Community Advisory Committee, as the lead committee for participation planning, will be asked to lead this discussion among members of other committees, PPACG staff, and other interested participants. The findings from these discussions can be used as a resource for future updates to PPACG's *Regional Transportation Planning Public Involvement Procedures*.

CHAPTER 2: PLANNING PROCESS, PUBLIC INVOLVEMENT, AND AGENCY COORDINATION

The *MOVING FORWARD* process enhanced collaboration and achieved consent by using dynamic, interactive methods to develop regional goals for resources that impact or are impacted by transportation systems and services. The outcome was a proactive and transparent process that sought out participants and evaluated, prioritized, and communicated the desired, needed, and affordable investments in transportation systems and services through 2035.

INTRODUCTION

The *MOVING FORWARD* Plan formally documents the comprehensive, coordinated, and continuing transportation planning process. Most of the planning framework components discussed below are similar to those used during prior plan making and will, therefore, be familiar. In large part, these components mirror steps that could be expected to occur in any quality planning process. A successful outcome of *MOVING FORWARD* was increasing trust among the decision-makers, the public and technical partners from the various agencies. This chapter of the Plan describes the following:

- Federal Requirements - for the planning process, including public participation process;
- The Planning Methodology;
- Step-by-Step Process - "snapshot" of the planning process and how stakeholder input was obtained and how that input helped shape the planning framework components;
- Plan Review and Adoption; and
- Agency Coordination and Consultation.

FEDERAL REQUIREMENTS

Federal requirements place several demands on the regional transportation planning process. Those demands are summarized and stated in federal regulations as factors to be addressed by the transportation planning process:

1) Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
2) Increase the safety of the transportation system;

3) Increase the security of the transportation system;
4) Increase accessibility and mobility of people and freight;
5) Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
6) Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
7) Promote efficient system management and operation; and
8) Emphasize the preservation of the existing transportation system.

A SAFETEA-LU[6] compliant transportation planning process will achieve at least these two new outcomes:

1) Facilitating a more cost- and time-effective NEPA[7] process for individual projects by developing regional social, economic, and ecological implications that would result from implementing regional transportation plan alternatives, and

2) Informing planners, decision makers and the public on how the regional transportation plan and other planning efforts (land-use, conservation, economic development, etc.) can work together and where they conflict.

SAFETEA-LU requires Metropolitan Planning Organizations (MPO) to develop and utilize a participation plan that provides reasonable opportunities for interested parties to comment on the Metropolitan Transportation Plan and Metropolitan Transportation Improvement Program (TIP). Further, this participation plan must be developed "in consultation with all interested parties," and the public must have input on the participation plan. The participation plan must describe "explicit procedures, strategies, and desired outcomes" for elements of the participation program.

PPACG recognizes and emphasizes the importance of community involvement in all of its planning efforts and maintains public involvement procedures that are used to guide public participation in its regional transportation planning and programming processes. PPACG adopted the latest update to the *Regional Transportation Planning Process Public Involvement Procedures* in October 2005, and that document serves as PPACG's participation plan to address new SAFETEA-LU public participation and consultation requirements. The *MOVING FORWARD* process was committed to ensuring the region's transportation system stakeholders had a voice in shaping its transportation system. Through the use of multiple outreach techniques, citizens were empowered to get involved at every stage of the Plan development process.

[6] The **S**afe, **A**ccountable, **F**lexible, and **E**fficient **T**ransportation **E**quity **A**ct: A **L**egacy for **U**sers (SAFETEA-LU), which governs United States federal surface transportation spending through 2010, was signed into law by President George W. Bush in Montgomery, Illinois on August 10, 2005.

[7] **N**ational **E**nvironmental **P**olicy **A**ct (NEPA), as amended (42 U.S.C. 4321, et seq.) is a United States environmental law that was signed into law on January 1, 1970 by U.S. President Richard Nixon.

Planning Methodology

The PPACG transportation team refined the transportation planning framework to increase both the customer orientation of the plan and the transparency of the process. The principle outcome was a collaborative effort that united the regional community in identifying transportation system needs, issues, and impacts. This input was used to develop alternatives, determine how to analyze potential benefits and impacts, and assemble the preferred future transportation system for inclusion in the regional transportation plan and, ultimately, the transportation improvement program. Procedures were undertaken to ensure the transportation planning framework is:

- **LEGITIMATE:** The process must actively reach out and be accessible to all potentially affected interests.

- **RIGOROUS:** The process should not allow those who voice their concerns most loudly, most often, or most articulately to wield disproportionate influence. Instead, the impacts and alternatives must be evaluated using scientific standards for data and analysis so that competing claims are assessed fairly.

- **TIMELY:** The complexity of decision-making can lead to very lengthy deliberative processes. There is a need to expedite decision-making, though not at the expense of public legitimacy.

Key aspects of the planning framework included the evaluation methodology, data collection and analysis, addressing uncertainty in planning and public participation. These are discussed below.

Evaluation Methodology

MOVING FORWARD used a modified Multi-Criteria Analysis (MCA) approach, adapted to its unique organizational structure, to facilitate the decision-making process. MCA is a widely used decision-making tool developed for complex multi-criteria problems that include both qualitative and quantitative information in the decision-making process. It is based upon soliciting and synthesizing data and input from both technical staff and stakeholders to arrive at a collective set of weighted criteria based upon plan goals. The ability to separate the decision elements and communicate both how the decision-making process evolved and its result makes MCA ideally suited to transportation decision-making. In many situations, the ability to communicate and document how the decisions were reached is as important as the decisions themselves. Specific strengths of MCA in transportation project assessment are:

- Educating the public and participants of the importance of each goal and associated criterion to their interests.
- Assessing the relative importance of individual goals and criteria in order to select a set deemed most significant to the group.
- Aggregating all the evaluations to arrive at a group decision.

The *MOVING FORWARD* process adapted the MCA approach to build upon the strengths of PPACG's organizational structure. PPACG's standing advisory committees on transportation planning efforts, the Community Advisory Committee (CAC) and the Transportation Advisory Committee (TAC), were called upon to provide in-depth input into the process to develop alternatives, evaluate impacts, and select the best options for implementation. The Public Participation Working Group (PPWP), composed of citizens and representatives of various planning committees in the Pikes Peak Region, provided additional perspective. Members of the CAC, TAC, and PPWP met jointly in workshop sessions to aid PPACG staff in conducting critical tasks in the alternatives analysis process.

Systematically documenting the process, the information used, and the results of each step is critical to conducting transparent public involvement and enabling the information and decisions made during long range planning can be carried into the NEPA process. Proper documentation of both the technical and decision-making processes is the mechanism that ensures that this information is useful and useable in ensuing planning processes, and particularly environmental impact assessments.

Data Collection and Analysis

To support the decision-making process and to more clearly articulate the impacts of the investment decisions, the planning process requires increased collection and evaluation of transportation, social, economic, and ecological conditions prior to, during, and after implementation of the plan. The information collected supports the baseline to facilitate the on-going selection of the projects utilizing both the objectives developed during the planning process and issues discovered during project evaluation. Providing the linkages between regional planning and the conduct of NEPA studies is a key objective to streamline the environmental review process.

Uncertainty in Planning

Decision-makers need useful information about potential impacts and trade-offs between alternatives in order to make the best decision possible. Because of the potential of negative consequences that can result from transportation investments, many people expect assurance that transportation decisions were based on complete and accurate information. The complexity of the land development process, travel decision dynamics, rapidly changing forms of industry, a swiftly shifting population structure, changing lifestyles, increasing motor vehicle fuel costs, and alteration in the value of time mean that even with a perfect set of transportation forecasting models, uncertainty will exist.

Likewise, other social, economic, and political information unrelated to transportation, but that impacts transportation decision-making, is rarely complete. As a result, transportation policy-makers cannot wait until they are totally certain of the trade-offs between biological, ecological, and social impacts of a decision before a decision must be made. A good technical process will include uncertainty and adopt a precautionary approach to decision making, while still enabling

consideration of the broader and more complex issues and interactions such as land-use and environmental (social, economic, and ecological) protection. This process must be well-documented in order for the information to be carried from long-range planning into the individual project development processes, as directed by SAFETEA-LU.

Total certainty, even if achievable, is not necessary. Even when more detailed and certain information becomes available, it may not lead to better decisions because all decisions involve choosing between a range of positives and negatives, and which way the decision goes depends on the relative importance given to each trade-off by each decision-maker. A change in an absolute amount of impact may not change a decision when weighted against other factors.

Analysis of the sensitivity of a decision to each information piece should be undertaken when time and resources permit. If this is done early in the transportation process it can help the public and decision-makers understand trade-offs and lead to better regional decisions. An example is acknowledging that the travel demand model forecasts daily volumes to plus or minus 10%. Peak hour traffic forecasts, which are used for many planning purposes, can and when measured, regularly do, vary more than this amount. Some of the limitations of standard transportation forecasting models are reduced by using integrated models such as TELUM©, CommunityViz©, and Vista©, which the PPACG transportation team utilized.

An additional consideration is that no decision is ever objectively "right" and so will always be subjective and thus "contestable."

Public Participation

Formulation of the *MOVING FORWARD 2035 Regional Transportation Plan* involved its own extensive public participation process, which included a number of techniques to encourage citizen input at all levels of interest and involvement. Each step in the planning process included outreach and public participation techniques to align the final recommendations in the *MOVING FORWARD 2035 Regional Transportation Plan* with the region's goals and values. Through this public process, a comprehensive assessment of the region's long-term transportation needs was made. In developing the transportation plan, the MPO received input from:

1) Citizens;
2) Affected economic development, land development, and conservation planning agencies;
3) Representatives of public transportation;
4) Providers of freight transportation services;
5) Private providers of transportation;
6) Representatives of users of public transportation;
7) Representatives of users of pedestrian walkways and bicycle transportation facilities;
8) Representatives of the disabled; and
9) Other interested parties.

When the term "decision-making" is used in planning, it is generally thought to mean the final approval of a policy or plan. However, the PPACG Public Involvement Procedures (Appendix C) provides emphasis on obtaining public input into the information as it is developed and provided to decision-makers. This ensures that the public has the opportunity to remain in step with the plan development process. In the regional transportation planning context, this would include socio-economic forecasting decisions, project cost information, future funding level assumptions, or other information required to support the analytical work involved in plan development.

To obtain input to the design of the public participation program, approximately 20 community leader interviews were conducted early in the process to learn about local issues, community characteristics, community contacts, and ideas to encourage public participation. In addition, the Public Participation Working Group was formed to facilitate two-way communication with key transportation stakeholders in the region for the *Moving Forward* process. Participants in the Public Participation Working Group were recruited from advisory committees, commissions, and boards who have interest in transportation planning in the Pikes Peak Region. This group was very helpful in reviewing materials, methodology, and strategy and assisted PPACG in "getting the word out" about public participation activities.

Under direction of the Board of Directors, the staff of PPACG, with assistance from the Transportation Advisory Committee (TAC), the Community Advisory Committee (CAC), and the Air Quality Technical Committee, advises the Board regarding transportation and air quality planning efforts in the region. PPACG routinely publishes all committee agendas and meeting materials as part of its regular public information process.

TRANSPORTATION ADVISORY AND COMMUNITY ADVISORY COMMITTEES

The Community Advisory Committee (CAC)

City of Colorado Springs
City of Colorado Springs
City of Fountain
City of Manitou Springs
El Paso County
El Paso County
Teller County
Town of Monument
Citizen-At-Large
Citizen-At-Large
PPACG
Citizen-At-Large
Council of Neighborhood Org.
City of Colorado Springs
City of Fountain
City of Manitou Springs
City of Woodland Park
El Paso County
League of Women Voters
Town of Green Mountain Falls
Town of Palmer Lake
Citizen-At-Large
Citizen-At-Large
Citizen-At-Large
Colorado Springs Chamber

The Transportation Advisory Committee (TAC)

City of Colorado Springs
City of Fountain
City of Woodland Park
Colorado DOT Region 2
El Paso County
Town of Green Mountain Falls
Town of Palmer Lake
Colorado Air Quality Control
Federal Highway Admin
Fort Carson Army Base
Mountain Metro Transit
City of Colorado Springs
City of Manitou Springs
Colorado DOT HQ
El Paso County
Teller County
Town of Monument
PPACG
Colorado Springs Utilities
Federal Transit Admin
Peterson Air Force Base
US Air Force Academy

STEP-BY-STEP PROCESS

The following section provides a step-by-step "snapshot" of the planning process. For each step, background information is presented, followed by a description of relevant planning work, technical analysis and public participation conducted for Moving Forward plan. The results of each step are also noted. Note that several steps proceeded in sequence or in tandem as the planning process progressed.

Step 1: Establish the Foundation for Decision Making

Background

The first step in a planning process is to develop a vision that provides an overarching statement of the desired outcomes. A vision should be lofty, compelling, and inspiring to the participants. Defining the transportation system that a region desires to implement is a complicated process bringing together diverse interests, perspectives, and needs to consider an endless combination of challenges, options, and impacts. For a regional transportation plan to succeed, the process to develop it must seek the varied perspectives of all the system users, be perceived as "fair," and strive to articulate the desires of the regional community.

PPACG's visioning process laid the groundwork for preparation of the 2035 Regional Transportation Plan and articulates what the region collectively desires to achieve through the transportation planning effort. The Vision, Mission, and Principles are components of a strategic process that establish the foundation and bases to focus data gathering efforts, shape alternatives to be considered, and select the best options for future implementation.

- **The Vision** "paints" a picture of the desired future regional transportation system. The *MOVING FORWARD* Vision is responsive to the needs of the region's citizens, encompasses the varied plans of the jurisdictions within the region, and challenges participants to develop a system that addresses the region's quality of life.

- **The Mission** provides guidance on how those involved in this planning effort will move forward to achieve the desired outcomes.

- **The Principles** are standards that describe the integrated multi-modal transportation system we are striving to achieve and provide an overview of the factors that must be addressed in the plan. The Principles establish the framework in which objectives are defined to reach those standards and measurements calculated to gauge how well various proposals succeed in meeting those standards

Process

Key PPACG advisory committees (the Community Advisory Committee (CAC); the Transportation Advisory Committee (TAC) and two subcommittees, the Specialized Transportation Advisory Subcommittee and the Transportation Enhancement Subcommittee)

helped develop an initial draft for public comment. The committees considered a number of elements including: Board direction, Federal planning factors, the transportation-related vision and goals of local governments, previous planning efforts, and public input. The initial draft was completed at a joint workshop of the Community Advisory Committee and the Transportation Advisory Committee in June 2006 and released by the PPACG Board of Directors for citizen input in July 2006.

PPACG initiated the *MOVING FORWARD* 2035 Regional Transportation Plan development process through a series of public meetings designed to obtain citizen reaction and input on the draft *MOVING FORWARD* Vision, Mission, and Principles. Six public meetings held around the region in September 2007, each set in a different community to allow the opportunity for citizens to provide input on the draft Vision, Mission and Principles. The Colorado Department of Transportation and respective local entity staffs assisted PPACG Transportation Planning staff in providing information to participants. Participants were encouraged to inform PPACG transportation planners of respective local and regional transportation concerns. In order to increase public awareness of the process and increase comments on the vision, mission and principles the PPACG Transportation Team participated in the Council of Neighbors and Organizations (CONO) Forum.

Results

The products of Step 1, the Vision, Mission, and Principles, were adopted by PPACG's Board of Directors in December 2006 to serve as the basis for preparing the 2035 Regional Transportation Plan elements. In addition, the public participation process was refined based on input from the community interviews and discussions with the Public Participation Working Group.

VISION, MISSION AND PRINCIPALS

Vision:

Create a pre-eminent multi-modal transportation system that meets regional mobility and accessibility expectations as essential elements of the Pikes Peak Area's quality of life.

Mission:

Plan multi-modal transportation facilities and services that efficiently move people and goods and support economic vitality while sustaining and improving the quality of life in the Pikes Peak Region.

Principles:

1) Preserve the function of the existing transportation system.
2) Provide efficient transportation for people and goods.
3) Develop a multi-modal transportation system that provides access to employment, services, military installations, and other destinations.
4) Fully integrate connections within and between modes for people and for freight.
5) Increase the safety of motorized and non-motorized travel.
6) Increase the security of the multi-modal transportation system.
7) Support the economic vitality of the Pikes Peak Area.
8) Improve mobility of people and goods.
9) Protect and enhance the environment by implementing transportation solutions that are sensitive to natural and human contexts.

Step 2: Gather Baseline Conditions

Background

Effective evaluations require reliable information describing the current transportation, social, economic, and ecological environments. Baseline information plays an important role in informing planners, decision makers and the public about the nature and scale of current issues. It also provides an essential reference point against which to predict and monitor the outcomes of different transportation investments. However, gathering baseline information can be time-consuming and expensive, particularly if field monitoring is necessary to acquire new data.

Process

The PPACG transportation team strived to obtain data assembled through the feasibility and/or environmental studies of various projects around the region. Based on an on-going appraisal of data availability and quality, as outlined in Chapter 12, Mitigation and Monitoring, future activities are needed to collect new or additional data for the evaluation process. This will be based on evolving knowledge of investment types and locations and the likelihood of impact occurrence. This effort will be guided by previous studies and local knowledge to identify data deficiencies and needs.

Results

The primary products of Step 2 are two chapters of the plan that present in-depth information on the decision-relevant conditions in the Pikes Peak Region: Chapter 11, Regional Setting, and Chapter 3, Future Regional Development. Data from baseline studies were also used as appropriate in developing information to present in the public participation process.

Step 3: Develop Transportation Goals and Decision-Relevant Performance Measures of Effectiveness

Background

A widely acknowledged principle of good planning is that it is guided by clear goals that define the desired outcome of plan implementation. The term “goal-oriented decision making” is sometimes used to refer to this principle. Setting clear, measurable goals requires the participation of many stakeholders fulfilling their roles as technical experts, policy analysts, and decision makers. Most importantly, it requires the involvement of all citizens who have a stake in the transportation system as users, investors, and those whose quality of life will be impacted by the decisions made.

Process

Using the adopted Principles as the foundation, the goals for the 2035 Regional Transportation Plan were developed with awareness of legal requirements and the transportation, social, economic, and ecological goals, policies, and plans of agencies that can impact or be impacted by transportation investments. The goals and performance measures are presented in Figure 2-1. Stakeholders identified key issues and expressed desired transportation-related outcomes from regional transportation system investment in four categories: safety, maintenance, operations, and expansion.

PPACG's process to develop goals and performance measures was responsive to the SAFETEA-LU Planning and Environmental Linkages Program which directs:

> *. . . An integrated approach to transportation decision-making that takes into account environmental, community, and economic goals throughout the project life cycle, from the planning stage through development, design, construction, and maintenance.*

TRAVELING BOOTH

An on-line transportation survey queried website visitors about travel behavior, transportation priorities, willingness to use alternative travel modes, and demographic characteristics. Over 400 people completed a portion of the survey and over 150 completed the entire survey.

Over 1,300 people participated in PPACG's traveling booth that met the public at farmer's markets, community events and festivals. The *MOVING FORWARD* traveling booth presented information on the transportation planning process to over 900 people that were previously unaware of the process. It engaged participants in a meaningful and convenient way, including a survey and activities that participants could complete in just a few minutes of their time.

To obtain input to the goals, PPACG implemented a variety of public involvement techniques to encourage widespread participation in the *MOVING FORWARD* process. PPACG's purpose in encouraging public participation is to promote transparency and accountability, along with establishing a solid foundation for subsequent stages of alternatives development and refinement. Opportunities for input included an interactive booth display at 13 events around the region, an online survey posted on PPACG's website, Speakers Bureau presentations and PPACG's advisory committee meetings. The specific techniques are more fully discussed in Appendix D, Public Participation and Public Comments.

FIGURE 2-1: GOALS AND PERFORMANCE MEASURES

ADOPTED GOALS

- Improve upon the existing ratio of person trip miles traveled on good, fair, and poor pavement condition.
- Improve surface condition of existing non-motorized facilities.
- Increase trip per hour through at-grade intersections to fully utilize current infrastructure.
- Maintain all bridges at good or fair levels.
- Transit Plan, to be developed by the City of Colorado Springs, will include transit-relevant maintenance goal(s) and performance measures
- Reduce total cost per person trip or per ton of freight.
- Improve travel time index in the region.
- Improve number and frequency of travel options available in the Pikes Peak Region.
- Increase non-motorized options and facilities available in the Pikes Peak Region.
- Promote connectivity within and/or between modes.
- Reduce the fatal crash rate.
- Reduce the injury crash rate.
- Increase vehicle seat belt usage.
- Reduce alcohol-related fatal crashes.
- Reduce percentage of fatal and injury crashes for non-motorized travel.
- Minimize infrastructure and organizational barriers that hinder the timely response to and/or from emergency services during and after a natural or human caused disaster.
- Provide the transportation infrastructure and services that foster regional economic activities in the primary and tourism industries.
- Reduce total congested vehicle miles/hours of travel (VMT/VHT) in the region.
- Reduce per person congested vehicle miles/hours of travel in the region.
- Improve connections within and between truck, rail, and air freight modes.
- Decrease per-person travel times through highway, intersection, and bridge improvements.
- Optimize the function of existing facilities through Intelligent Transportation Systems (ITS) and surface condition improvements.
- Reduce transportation fuel consumption by 20% (per President's Executive Order 13423) through 2015 and maintain or reduce that amount through 2035.
- Reduce regional greenhouse gas emissions from transportation sources by 30% (per President's Executive Order 13423) by 2015 and maintain or reduce that amount through 2035.
- Reduce transportation-related impacts to the natural environment.
- Reduce transportation-related adverse impacts to neighborhoods and areas identified for cultural and/or historical preservation.
- Reduce fuel consumption and greenhouse gases
- Reduce transportation-related impacts on the natural environment
- Reduce transportation-related impacts on neighborhoods and cultural and historic resources.

Results

The product of Step 3 was the framework for goal and performance measures analysis and evaluation.

Step 4: Define Analysis Parameters

Background

A growing regional and national desire is to ensure transportation "fits in" within the surrounding natural and human contexts. In order to accomplish this as part of the decision-making process it is necessary to identify the regional issues, problems, and opportunities that make up the regional context early in the planning process. These contexts encompass transportation-related social, economic, and ecological values, issues, and the role of non-transportation agencies in the transportation planning process. Important constraints to these analyses are the time, resources, and data available, as these will impact on the choice of methods and the level of detail of analysis.

Another role the context definition process was to provide additional opportunities for public participation. At this stage the public and other planning agencies identified key issues and information needs that they hope or are concerned will be changed by transportation investments. Providing a proactive and open process also promoted transparency and accountability. Coordination with other planning agencies also revealed additional considerations that are not now considered during the long-range transportation planning process but will benefit by inclusion in the long-range transportation planning process.

Process

PPACG employed a straightforward methodology in assembling and refining the set of issues, problems and opportunities that were to progress through the analysis steps for the *MOVING FORWARD* long-range transportation plan development:

1) A list of transportation needs and concerns was compiled from information provided by the community at public participation activities, including the *MOVING FORWARD* online survey, traveling booth, Speakers Bureau and open houses, from technical analysis to identify system deficiencies, and from local jurisdictions professional staff. Perspective was gained from the data compiled through public outreach efforts and surveys.

2) PPACG hosted the Regional Transportation Roundtable to bring the region together to plan the future transportation system. Following a background presentation on travel patterns and trends, more than 150 people worked in 19 randomly selected groups to create future transportation proposals. Participants were asked to map a two-tiered regional transportation system for 2035. The first tier was based on a conservative

fiscally-constrained financial forecast and the second tier was based on a more robust financial forecast.

The 19 Roundtable proposals were all included initially, and none were excluded or pre-judged as to their relevance, value, or validity. This helped to identify the depth and breadth of community concerns and ideas. Through a series of working sessions involving Community Advisory Committee, Transportation Advisory Committee, Public Participation Working Group members, and PPACG Staff, these proposals were organized into unconstrained alternatives.

3) PPACG's Community Advisory Committee, Transportation Advisory Committee, and Board of Directors were asked to review and comment on the initial unconstrained alternatives to provide guidance for subsequent series of refinements. This guidance helped the PPACG Transportation team identify information and issues that played a significant role analyzing needs, composing and refining alternatives, and, ultimately in decision-making.

Results

The principle product of Step 4 was a list of unconstrained needs that progressed to alternatives formulation.

Step 5: Forecast Future Conditions

Background

PPACG has completely renovated its regional modeling system over the past three years to include:

- An entirely new transportation demand model based in the (VISUM software platform. This model is used to forecast travel patterns and demand levels;
- An integrated, iterative socio-economic forecasting tool, the Transportation Economic Land-Use Model (TELUM). This software forecasts population and employment patterns iteratively with traffic forecasting;
- A conservation planning tool, VISTA. This software is a conservation planning and ecological impact add-on to ArcGIS. It is being used to help develop the required mitigation planning; and
- A development analysis tool in CommunityVIZ. This software can analyze the forces (e.g., health, transportation, economic, environmental, land use, etc.) that affect growth and compare various future development alternatives to educate stakeholders about growth trends and trade-offs, enabling them to offer feedback that can be incorporated

into on-going land-use and transportation planning. CommunityVIZ and TELUM can work parallel process for forecasting growth locations.

Process

Using this updated toolset the PPACG transportation team developed information to help inform technical staff, decision-makers, and the public on the investment alternatives. The analytical limitations of the various models were acknowledged and the measures of effectiveness and evaluation criteria were completed to help translate the vision and goals of the region into a meaningful decision-support system. PPACG intends to mature its scenario planning capability to lend its value to all aspects of the transportation planning process.

> *The point is not so much to have one scenario that gets it right, as to have a set of scenarios that illuminate the major forces driving the system, their interrelationships and the critical uncertainties.* Peter Wack *(1985)*

Results

The product of Step 5 is an adopted future condition with several other scenarios to test sensitivity of transportation needs to the socio-economic forecast.

Step 6: Create Transportation Investment Scenarios

Background

Borrowing from the field of economics, in times of uncertainty, the successful company (region) will focus on enhancing its resilience and adaptability. Increasing the transportation system's resilience means focusing on maintaining its ability to function in the face of unexpected disruptions, such as the collapse of an interstate bridge. Increasing its adaptability means improving the ability of the transportation system to react after unexpected structural changes, such as $5-per-gallon gasoline.

An alternatives comparison approach is useful to identify and compare the tradeoffs among scenarios and focus on desired outcomes in regards to mobility, safety, accessibility, social equity, economic development, fiscal responsibility, environmental quality and community quality of life. The *MOVING FORWARD* framework was designed to alert decision-makers to potential strengths, weaknesses, opportunities, and challenges from difference transportation system investments.

Process

Facilitated advisory committee workshops were conducted to consolidate the 19 transportation proposals from the Roundtable and other public comments into a finite set of alternatives for comparison and comment. Integrating input from PPACG's advisory committee meetings and

public process with input from agency consultation, the PPACG transportation team initiated limited scenario-based planning to minimize uncertainty by determining common transportation needs irrespective of the future locations of households and employment. The aim of using scenarios is to introduce plausible possibilities that overcome natural human tendencies to:

- Give more weight to recent events,
- Deny evidence that does not support our views,
- Overestimate the probability of desirable events,
- Disregard futures that are hard for us to imagine,
- Underestimate uncertainties,
- Overestimate our ability to influence events beyond our control, and
- Be overconfident about our own judgments.

A scenario comparison approach was used to identify and compare the tradeoffs while specifically focusing on desired outcomes. Six initial alternative transportation (roadway, transit and non-motorized) networks were developed and analyzed using data from the Roundtables and other public comments. These then provided the basis for the CAC and TAC to create three multi-modal scenarios to compare against a based case composed of all projects that will be completed by year 2015.

a) **2015 EXISTING SYSTEM PLUS COMMITTED PROJECTS** - The adopted 2035 Forecast of population and employment was used to prepare a forecast of travel patterns on a network consisting of existing facilities and those that will be completed by 2015. The 2015 Existing + Committed System network served as the base for comparison of the remaining alternatives.

1. **2030 REGIONAL TRANSPORTATION PLAN PROJECTS** – This alternative is composed of all of the projects in the 2030 long-range plan.

2. **ALL INTERCHANGES** – This alternative was prepared to conduct a sensitivity analysis to test impacts of upgrading existing facilities with grade-separated interchanges.

3. **REDUCING ENVIRONMENTAL IMPACTS** – This was intended to be the environmentally least damaging alternative. It concentrated primarily on transit improvements, ITS (intelligent transportation systems), and limited roadway improvements.

4. **STRATEGIC CORRIDORS SYSTEM** – This alternative emphasized the regionally significant roadway projects while improving transit on regionally significant corridors.

5. **BALANCING INVESTMENTS SYSTEM** – This alternative emphasized improved transit coverage and frequency; implementation of express bus and bus rapid transit operations while constructing roadways that had less negative impacts.

6. **DISPERSED PROJECTS** – This alternative was composed of projects that meet or reduce a mobility need and/or are included in local entity transportation plans but were not in a previous alternative.

Each of these six alternatives possessed a set of characteristics that exemplified certain ideas revealed as desirable during the public involvement process. However, six alternatives proved too many to analyze deeply. The number was reduced to three main alternatives that could be examined in depth, so the preferred alternative could be chosen from among them with a fuller knowledge of the implications of each.

The three refined alternatives were chosen from the original six during a facilitated meeting of both the Community Advisory Committee and the Transportation Advisory Committee. This workshop focused on creating alternatives that best represent the spirit of the nine adopted planning principles. The most beneficial characteristics of the three alternatives not chosen for refinement were adapted into the final three, as appropriate. The three refined alternatives were also fiscally-constrained, that is, they did not include investments for which the needed finances were not reasonably expected. The three refined alternatives were:

1) **STRATEGIC CORRIDORS SYSTEM** – Emphasized the regionally significant roadway infrastructure projects such as completing Powers Blvd. (SH-21) as a freeway with extensions north and south; widening I-25 and US-24, east and west; central Colorado Springs east-west improvements; and some improved transit on regionally significant corridors.

2) **BALANCING INVESTMENTS SYSTEM** – Balanced road infrastructure improvements with transit improvements and operational improvements of roads. Included limited increases in coverage and frequency of transit and some express bus. There are improvements to US-24, east and west; extending Briargate Parkway to Meridian, extending Powers north and south and adding interchanges; central Colorado Springs east-west improvements; widening Woodmen Road.; and improving Proby Expressway.

3) **REDUCING ENVIRONMENTAL IMPACTS** - Concentrated primarily on maintaining the existing infrastructure while adding new bus routes and enhancing existing routes. It includes bus rapid transit along I-25 between US-24 and Woodmen Road. This alternative relies heavily on operational / ITS (intelligent transportation systems) improvements while limiting roadway infrastructure expansion. The roadway expansion included is: completing Powers extensions north and south and adding an interchange at Powers and US-24, widening US 24 from Garret Rd to Elbert Rd.

The three refined vision alternatives were presented at the December 11, 2007 open house for public comments.

Results

The products of Step 6 were three alternative visions for further evaluation and refinement.

Step 7: Evaluate and Refine Alternatives

Background

The *MOVING FORWARD* 2035 Regional Transportation Plan used a customized Multi-Criteria Analysis (MCA) process to aid evaluation of alternatives. MCA is a decision-making tool developed for complex multi-criteria problems that include several classes or categories of both qualitative and quantitative information in the decision-making process. MCA is based upon obtaining input from both experts and stakeholders. These inputs are solicited and synthesized to arrive at a collective decision, or choice, regarding the selection and use of a weighted set of criteria based upon adopted goals and performance measures. PPACG tailored and integrated components of MCA into its extensive committee and public involvement procedures, further enhancing the open decision-making process.

Process

This step focused on developing weighted criteria for evaluating alternatives. The criteria, which were based on the plan goals, were weighted based on input from focus groups and the PPACG committees. On December 4 and 5, 2007, three focus groups composed of randomly selected participants who were representative of the region as a whole based on ethnicity, income, age and geography were conducted. The purpose of the focus groups was to understand participant perspectives on the relevant importance of the *MOVING FORWARD* criteria, one to another (pair-wise comparison). The focus group participants were each asked to fill out a questionnaire designed to obtain demographic data and gain an understanding of their values and concerns. Participants then were polled electronically to compare the relative importance of transportation criteria based on the adopted goals. Following the focus groups, the same weighting exercise was conducted with the CAC and TAC committees of PPACG.

Results

The products of Step 7 were weighted criteria for alternatives evaluation. These can be found on Page 102.

Step 8: Create a Fiscally-Constrained Version of Each Vision Alternative

From each of the three refined vision alternatives, a fiscally-constrained subset of improvements was derived. At a workshop with the PPACG committees, PPACG reviewed funds available for different types of projects and facilitated a process where committee members began the process of creating three fiscally-constrained alternatives based on the themes identified for the vision alternatives: strategic corridors, balanced investment and reducing environmental impacts. The individual improvements that were selected for inclusion in each fiscally-constrained alternative were determined based on discussions of the advantages and disadvantages of each project during the joint session, communicating with local and state jurisdictions, and reviewing public comments.

The next step was to evaluate the fiscally-constrained alternatives based on criteria developed based on the adopted goals for the plan. At a joint working session of the CAC and TAC on January 9, staff presented an initial evaluation of how well each alternative met each criterion. This information was used by the committees to develop performance weights for the three alternatives. The performance weights were then multiplied by the importance weights derived from the focus groups and advisory committee weighting exercises to evaluate the three alternatives. Each group's input and resulting score is shown in Figure 2-2. Based on the initial application of weights, the alternatives ranked in order were:

1) Reduced Environmental Impacts System
2) Balanced Investment System
3) Strategic Corridors System

All three were very close in score. Although the Reduced Environmental Impacts system had a slightly higher score than Balanced Investment, its viability was based on a requirement that local entities change their adopted land-use plan to increase density along rapid transit corridors. After thorough discussion of the initial results, both committees agreed that the regional perspective was best addressed by the Balanced Investments System and made that recommendation to the PPACG Board of Directors (Figure 2-2).

The Board released the list of projects in the Balanced Investment System for public comment on January 9, 2008 and the following evening, PPACG hosted a public open house to inform the community of the selection and obtain public comments.

Results

The products of Step 8 were a recommended set of weights for the performance evaluation criteria and a recommended fiscally-constrained alternative based on those scores and weights. See Figure 2-2.

Step 9: Identify Methods to Minimize and Mitigate Undesirable Impacts

Background

PPACG transportation planning Principle 9 states that the transportation solutions that are selected should be sensitive to the natural and human contexts. SAFETEA-LU requires a transportation plan to discuss mitigation measures that protect, enhance, and restore social, economic, and ecological functions that are the unavoidable result of transportation projects (23 CFR 450:322).

FIGURE 2-2: FOCUS GROUP AND ADVISORY COMMITTEE WEIGHTS

Category	WEIGHTS				SCORES USING Avg. Weights		
	Focus Group	CAC	TAC	Avg.	E.L.D.	Balanced	Strategic
Pavement Condition	81	81	56	73	50	62	70
Safe Bridges	73	70	61	68	57	63	68
Efficient Intersections	99	100	76	92	74	84	87
Timely Travel	80	78	78	79	64	69	78
Travel Choices	48	58	100	69	68	60	47
Safe Travel	100	81	83	88	88	72	53
Reduced Social Impacts	51	57	53	54	54	45	38
Reduced Natural Impacts	40	36	40	39	39	29	23
Reduced Pollution	56	31	34	41	40	33	25
Effective Freight Movement	32	54	34	40	23	34	40

Process

PPACG developed the plan chapter on Mitigation and Monitoring to identify ways to reduce potential impacts and eliminate fatally flawed projects. The elements involved in include avoiding the impact altogether by finding a parallel route that does not have the impacts, and minimizing the impacts by doing more with what is currently present. In a developed area the act of avoiding impacts becomes an exercise in trading off between impact types or severity. ***Creating solutions that are sensitive to their contexts takes on a greater importance. Further refinement of this process is necessary for all projects included in this plan. This includes developing a better understanding of the regional contexts and what are regionally desired and legally required outcomes.***

Results

The product of Step 9 is the plan for mitigation and monitoring described in Chapter 12.

Step 10: On-Going Monitoring and/or Adaptive Management of the *Moving Forward 2035 Regional Transportation Plan*

Background

Adaptive planning requires that policies, programs, plans and projects integrate monitoring techniques to systematically assess whether a strategy or plan is delivering its desired outcomes. It also assists in the early identification of unintended environmental impacts and provides information to update and fill gaps in baseline data necessary to inform future strategy development. Appraisal techniques themselves must be evaluated and their effectiveness in predicting the outcomes of particular decisions put to the test. In this way, the quality and utility of investments can be improved.

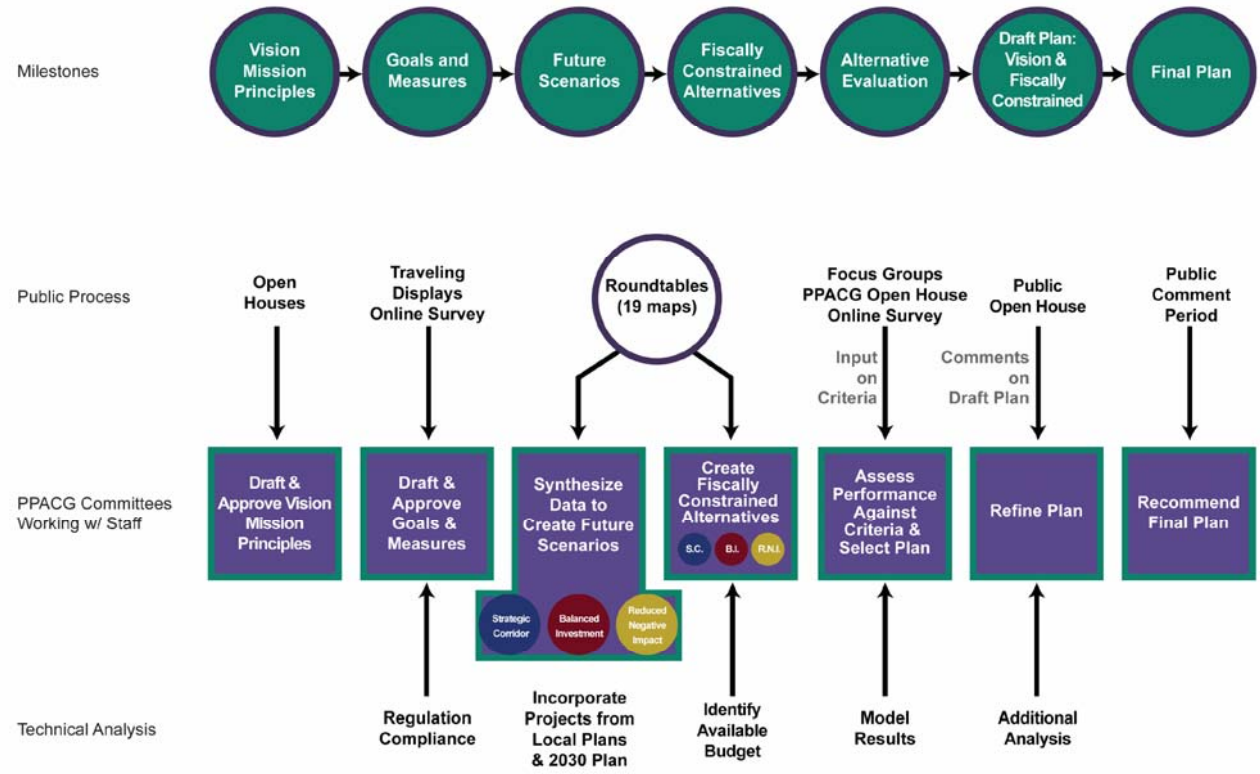
Process

The public will have input into Step 10 as part of a continuing, coordinated and comprehensive planning program. There will also be opportunity for adaptation during project implementation.

PLAN DEVELOPMENT, REVIEW, AND ADOPTION PROCESS

Development of the *MOVING FORWARD 2035 Regional Transportation Plan* followed the process depicted in Figure 2-3. The PPACG Board of Directors released the document for a 30-day public comment period during a special Executive Committee meeting February 4, 2008. On February 19, PPACG hosted an open house for public comment on the draft plan. During the 30-day public review period, advisory committee agendas included an opportunity for public comment on the plan and comments received were distributed to the committees. The PPACG Board of Directors gave their final approval and adopted the *MOVING FORWARD 2035 Regional Transportation Plan* in its entirety on March 12, 2008.

FIGURE 2-3: *MOVING FORWARD* 2035 REGIONAL TRANSPORTATION PLAN DEVELOPMENT PROCESS



AGENCY CONSULTATION AND COORDINATION

The Pikes Area Council of Governments (PPACG) is a voluntary organization of municipal and county governments that provides a forum for local officials to identify regional opportunities and challenges, develop solutions, and make recommendations on area-wide strategies. The PPACG is the lead agency for transportation planning, air quality planning, water quality planning, demographic and economic forecasting, services for seniors, and military impact planning. In this role, the PPACG strives to improve coordination and communication between planning efforts and improve decision-making by integrating the information and efforts of multiple agencies, disciplines and activities. PPACG's mission in bringing these efforts together is to aid decision-making and speed implementation of projects by providing information that quantifies future impact. The direct, indirect, and/or cumulative effects of various agencies' plans and projects can be assessed to highlight conflicts and connect them to avoidance, preservation, and mitigation priorities. This assessment process sets the stage for the next planning step, the environmental assessment process required by NEPA. This section of this chapter describes the consultation and coordination effort conducted as part of the development of the *Moving Forward* Plan.

Federal Requirement

Each MPO shall consult with State and local agencies responsible for natural resources, environmental protection, conservation, historic preservation, and land use management concerning the development of the long-range transportation plan. Consultation shall involve, as appropriate, a comparison of transportation plans with State conservation plans or maps and a comparison of the transportation plan against inventories of natural or historic resources.

A part of the consultation process, the long range plan shall include a discussion of types of potential environmental mitigation activities and areas to carry out these activities that may have the greatest potential to restore and maintain the environmental functions affected by the plan. (23 CFR Part 450.322(f)(7)).

These activities shall be developed in consultation with Federal, State and tribal wildlife, land management, resource agencies and regulatory agencies. (23 CFR Part 450.322(g)).

Federal Objectives

The FHWA's Planning and Environment Linkages (PEL) initiative presents and promotes an approach to transportation decision-making that considers economic, community and environmental goals early in the planning stage and carries them through project development, design, and construction. This approach encourages internal and external communication and coordination throughout the decision-making process—between transportation staff responsible for planning and project development, between transportation agencies and resource agencies, and between agencies and the public. It also enables agencies to take a broader, interregional perspective instead of one that looks only at individual projects.

PPACG Processes

PPACG incorporated economic and land development planning throughout the transportation planning process beginning at the earliest stage; during socio-economic forecasting as part of the regional modeling system. Coordination with each entity occurred through the committee structure defined below, and during working meetings necessitated by the forecasting process as described in Chapter 3, Future Regional Development. TELUM utilizes local municipality land-use plans to determine transportation needs.

Environmental Impacts

The resource impact information identified in the regional setting chapter summarizes general issues related to potential direct, indirect, or cumulative impacts of transportation investments within the region. The fact that an issue is not identified does not mean that the issue is not one of concern. This is the first attempt at identifying these at the regional long range plan level. The

purpose of this effort is to encourage regional use of a coordinated adaptive planning process to identify issues that can be addressed proactively and concerns that can be mitigated or incorporated into projects in a manner that reinforces other planning efforts in the region.

Specifics regarding types and locations of mitigation is identified in Chapter 12, Mitigation and Monitoring.

Key Partners

The PPACG Board of Directors is primarily comprised of city and county elected officials of general purpose local governments in the Colorado Springs Urbanized Area. Statewide air quality and transportation planning concerns are represented by an appointed member respectively of the each the Air Quality Control Commission and the Colorado Transportation Commission. Other important concerns represented on the Board of Directors include regional transit issues and military affairs.

The PPACG formal standing committee structure brings many other planning entities and issues into the process to coordinate regional planning issues. Key committees engaged in the PPACG transportation planning process are described below. Appendix D provides a complete list of the representation and current membership of each advisory committee and the PPACG Board of Directors.

The Transportation Advisory Committee (TAC)

The TAC is closely involved in every step of the transportation planning process, providing technical expertise and input with no less than monthly meetings and special meetings at key steps in the process. Membership on the TAC includes planning and/or engineering and department of public works staff of local governmental entities, including the transit operator, the state of Colorado, military bases, and FTA and FHWA.

The Regional Economic Forum (REF)

The REF involvement is primarily centered on ensuring that the transportation planning process includes adequate consideration of the land-use and economic development plans of entities throughout the region. Membership on the REF includes representatives of economic development, utilities, business, and tourism interests in the Pikes Peak Region.

The Community Advisory Committee (CAC)

The Community Advisory Committee (CAC) provides the means for citizens of the Pikes Region to have an ongoing role in planning activities undertaken by the Pikes Peak Area Council of Governments. In particular, the CAC is charged with providing ongoing input into public involvement methods to ensure that the public voice is “heard” in preparing transportation plans and programs. CAC is the lead committee for maintaining PPACG’s Regional Transportation Public Involvement Procedures.

The CAC membership includes citizens appointed by PPACG member jurisdictions, representatives of designated community organizations, and six citizen-at-large memberships appointed by the PPACG Board of Directors.

The Air Quality Technical Committee (AQTC)

The AQTC provides advice on current and emerging issues, goals, plans, and programs affecting the air quality of the Pikes Peak region. Membership on the AQTC includes PPACG urban area member jurisdictions, state of Colorado Air Pollution Control Division and the Department of Transportation, utilities, and military bases.

The Specialized Transportation Advisory Subcommittee (STAS)

The Specialized Transportation Advisory Subcommittee provides input and recommendations on matters related to the provision and coordination of human services transportation in the Pikes Peak Region. The Human Services Transportation Coordination Plan, approved by the PPACG Board of Directors in June 2007, recommended that the STAS become a full, standing committee of PPACG and serve as the coordinating council for human services transportation in the Pikes Peak Region. During the latter half of 2007, the STAS prepared bylaws and revised its membership to transition to the Coordinating Committee on Specialized Transportation. That process is expected to be completed in early 2008. Membership on the STAS includes entities involved in planning, advocating, or delivering transportation services to persons with disabilities, elderly persons, and low-income job seekers.

Public Participation Working Group
A Public Participation Working Group was also formed to facilitate two-way communication with key transportation stakeholders in the region. The Working Group's responsibilities were to assist in the development of public involvement methods and products that were designed to:

- Facilitate public outreach and communication;
- Obtain representative viewpoints of the region's citizens;
- Provide factual information on transportation planning topics; and
- Generate interest in the 2008 through 2035 Regional Transportation Plan development process.

The Public Participation Working Group was composed of representatives from existing agency and community transportation organizations such as PPACG's advisory committees, Colorado Springs Citizens Transportation Advisory Board and El Paso County's Highway Advisory Commission. Participants in the Working Group were recruited from the following advisory committees, commissions, and boards who have interest in transportation planning:

- PPACG Advisory Committees;
    - Community Advisory Committee (CAC)
    - Transportation Advisory Committee (TAC)
    - Transportation Enhancement Subcommittee (TES)
    - Specialized Transportation Advisory Subcommittee (STAS)
    - Air Quality Technical Committee (AQTC)
    - PPAAA Regional Advisory Council (RAC)
- City of Colorado Springs Citizen's Transportation Advisory Board (CTAB); and
- El Paso County's Highway Advisory Commission (HAC).

PPACG also has monthly meetings to coordinate transportation planning and programming activities with CDOT, Mountain Metro Transit, and the Federal Highway Administration.

Land Development and the Transportation System

The availability of road, rail, air, and other transport services and infrastructure help determine the location and distribution of development. Correspondingly, the location, density and site design of development has a significant influence on travel demand, the efficiency of public transport services and options for mobility. Coordinating development and transport planning can ensure that transportation corridors and their surroundings are planned, designed, developed and managed as integrated facilities for more than one transportation mode, if appropriate. The closest relationship between development and transportation is access management. This relationship is discussed in Chapter 8, Transportation System Management and Operations.

Using collaborative adaptive planning processes it is possible to:

- Support economic, social, sustainability and environmental objectives for the region;
- Increase the profitability of a development;
- Improve the amenity of an area;
- Promote regional economic efficiency;
- Support the use of public transport and promote cycling and walking;
- Ensure that the transport network provides transport and access for all, including those with mobility difficulties and the transport disadvantaged;
- Deliver more efficient, safe and effective freight movement and minimize community and infrastructure impacts of freight movement;
- Encourage development in areas where adequate infrastructure exists or can be provided efficiently; and
- Minimize social and equity issues of transport infrastructure provision and maximize investment.

Economic Development and the Transportation System

The iterative considerations between regional transportation and regional economic growth and efficiency involve:

- Identifying and preserving transportation corridor options for the future provision of road, rail or other transportation infrastructure.
- Planning transport networks in a flexible manner in order to accommodate new, expanding and changing industries within the Pikes Peak Region.
- Maximizing funding opportunities to meet future demands, particularly by industry, on transport networks, especially roads.
- Ensuring the long-term viability of transport links to strategic regional infrastructure.

Planning and Environmental Linkages

There are two primary efforts that PPACG used to link the long range transportation planning effort with environmental concerns. The first effort was led by CDOT; the second was led by PPACG using a contract with the Colorado Natural Heritage Program funded through the FHWA.

CDOT hosted an Environmental Forum on March 14, 2007. This event was intended to improve relations and aid planning understanding at the regional level between resource/regulatory agencies and transportation planners. The one-on-one discussion format fostered an atmosphere of cooperation and provided an opportunity for collaborative identification of potential conflicts and opportunities for resource and regulatory agency needs and concerns to be identified at the earliest planning stages. Subject matter experts from 16 Federal and State agencies and organizations identified environmental issues and concerns for all regional transportation planning agencies. A summary of the issues, arranged by resource agency is in Table 2-1 below.

TABLE 2-1: SUMMARY OF ENVIRONMENTAL ISSUES AND CONCERNS

Resource Agency	Issues/Concerns
Environmental Protection Agency (EPA)	• The Regional Cumulative effects analysis should be updated. NEPA documents are too long; and the process could be streamlined. • NEPA documents must be “bullet proof” to avoid potential litigation which is now rampant.

Resource Agency	Issues/Concerns
Transportation (CDOT) Municipal Separate Storm Sewer System (MS4) Discharge Permit Program	• Best Management Practices outside of the Municipal Separate Storm Sewer • System (MS4) program areas are usually part of the NEPA process. • Colorado Springs is in an MS4 Area (>20K persons per sq. mi.) as determined by the EPA. • Some communities are creating storm water utilities (e.g., Colorado Springs,). • Colorado Springs now has a Storm-water Enterprise that should be coordinated with transportation since curb and gutters are the first line of management of runoff.
Colorado Department of Public Health and Environment (CDPHE) - Solid Waste	• Laying asphalt and the cleaning of spray nozzles on trucks may contaminate the soil.
CDPHE - Water Quality	• MS4 only covers U.S. Census designated urbanized areas. • CDOT voluntarily implements MS4 statewide. • MS4 process covers permanent water quality installation and continued function of features or practices. • "Total Maximum Daily Load" (TMDL) program is where CDPHE manages sediment from various projects. • Fountain Creek currently violates both the standard for Selenium and the standard for *e coli*. Turbidity is also a problem.
CDPHE - Air Quality	• Colorado Springs is a maintenance area for Carbon Monoxide. • The Ozone (O3) issue is caused by vehicular emissions but oil and gas development is also a concern factor.
Division of Wildlife (DOW)	• Dead animals by the road are a public hazard and aesthetic issue. • Wildlife crossings must be site specific and underpasses (box culverts) tend to be more cost efficient than overpasses as well as useful to ranchers. • DOW requests avoidance of native trout and prairie dog colonies. • CDOT should take the lead role in contacting DOW before starting highway projects to mitigate wildlife conflicts.
State Historic Preservation Office (SHPO)	• Sec. 106 states that cultural resources must be eligible for, or formally listed on, the National Register of Historic Resources. • Examples of historic resources include objects, structures, sites, buildings, historic districts and traditional cultural properties. • Manitou Springs is a National Historical Landmark. •
United States Fish and Wildlife Service (USFWS)	• Legally protected species present in the region include: the Prebles Meadow Jumping Mouse and the Burrowing Owl. • Migratory birds are often a factor in bridge replacement projects. • Threatened & Endangered issues should be handled early in the NEPA process to avoid delays in the process.
United States Army Corps of Engineers (USACOE)	• Fountain Creek is listed for e-coli and selenium. • The region should work with partners to consider all possible "green" options, prior to requesting a permit.

Resource Agency	Issues/Concerns
Federal Highway Administrations Central Federal Lands (CFL) and Colorado Trout Unlimited	• Highway projects disturb the natural curvature of river basins. Auto accident drivers should be held liable for waterway impacts. Fishing in Colorado is a billion dollar industry.
The Nature Conservancy	• The Nature Conservancy promotes Eco-Regional Assessments to conserve representative biodiversity within the Southern Rocky Mountains • Follow-up: the Nature Conservancy can provide DVDs to CDOT to show migration areas.
CDOT Wildlife Program	• CDOT's Shortgrass Prairie Initiative has 24,400 acres of land to mitigate statewide Mitigation impacts will last for 20 years or until they reach 58,000 acres of impact. Only 250 Lynx left in the entire state and generally stay above 8,000 feet. CDOT recommends constructing over/underpass only on major roadway/highway construction projects and using guardrails to mitigate wildlife accidents.
Colorado State Parks (CSP)	• Current Projects include the Ring the Peak Trail which is in progress. Colorado Front Range Trail along Fountain Creek may impact I-25. Both the Colorado Front Range Trail Master Plan and Implementation Plan outline the proposed trail from Monument to Fountain. CSP supports non-motorized vehicles in the right-of-way along highways and the accommodation of bike lanes wherever possible. CSP wants CDOT to become an active partner in creating recreational trails and non-motorized uses in highway ROW, and accommodate bike lanes wherever feasible.
Federal Highway Administration (FHWA)	• Looking at a broader scope of environmental issues and not just NEPA-related criteria help address flaws between planning and NEPA. • Need to encourage locals to consider land use issues and their transportation impacts up front in the NEPA process. • Colorado is designated as a focus state for the new "Planning and Environmental Linkages" program to fund projects that join together the planning process and the environment. • Pueblo and Pikes Peak Area COG/MPO in coordination with the USACOE have received FHWA funds for the Fountain Creek Watershed study. • Outcome from the Fountain Creek Watershed study will be incorporated into their 2035 plans.
(USFS)	• New federal travel regulations designate roads, trails and areas for motorized use in USFS lands. • The regulations prohibit off-road (cross country) motorized use outside of designated areas in Forest Service lands. • Follow-up: USFS would like access to CFR's 2035 Plan Technical reports.

For the second, the Colorado Natural Heritage Program (CNHP) implemented NatureServe Vista and performed analyses that identified key critical conservation, mitigation, and avoidance sites within El Paso County. This effort included coordinating with the Peak to Prairie project and the Central Shortgrass Prairie EcoRegional Assessment for data and previously prioritized conservation areas. NatureServe Vista is a decision support system (DSS) that integrates conservation information with land use patterns and policies. Fully implemented it provides tools to help manage natural resources and enables users to create, evaluate, implement, and monitor land use and resource management plans that operate within the existing economic, social, and political context to achieve conservation goals.

This Page Left Intentionally Blank

CHAPTER 3: FUTURE REGIONAL DEVELOPMENT

INTRODUCTION

The demand for transportation services is directly related to the demographic, economic, and geographic characteristics of an urban area. The total demand for transportation typically rises in proportion to increases in population, employment, and improved economic conditions. As an urban area expands, the numbers and lengths of individual trips increase unless land-use densities and mixed use developments increase at an equal or greater rate. Expanding population, employment, and urban area size, along with improved economic conditions, result in an increased need for transportation facilities and services. These include freight, roadway, transit, bicycle, and pedestrian facilities, along with other strategies intended to increase the efficient use of existing facilities.

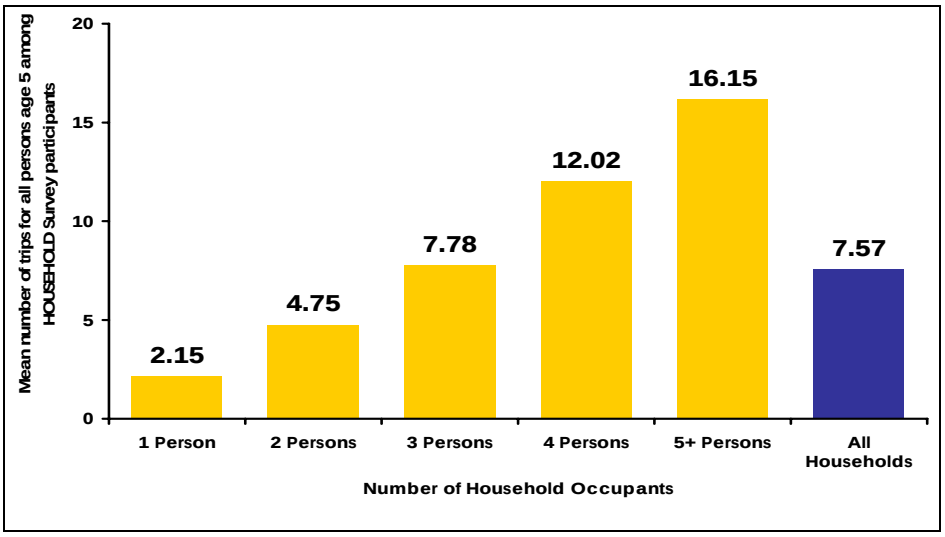
Social travel patterns are equally as important in determining travel characteristics. Changes in socio-economic factors, such as the increase in women in the workforce and higher vehicle ownership by teens translate directly into changes in travel demand in a metropolitan area. According to the PPACG's 2002 household travel survey, family-related trips, such as day care and school, account for 30% of trips residents make. Differences in trip making based on household size and household income are provided in Figure 3-1 and Figure 3-2.

The regional travel demand forecasting model relies on the PPACG household travel survey data to provide inputs and calibrate the mathematical equations that represent decisions people make related to travel. These decisions are affected by such factors as:

- Household income;
- Distance;
- Available modes--transit, auto, or walk;
- Family characteristics--number of workers, number of children, and age;
- Trip purpose--school, work, or recreation.

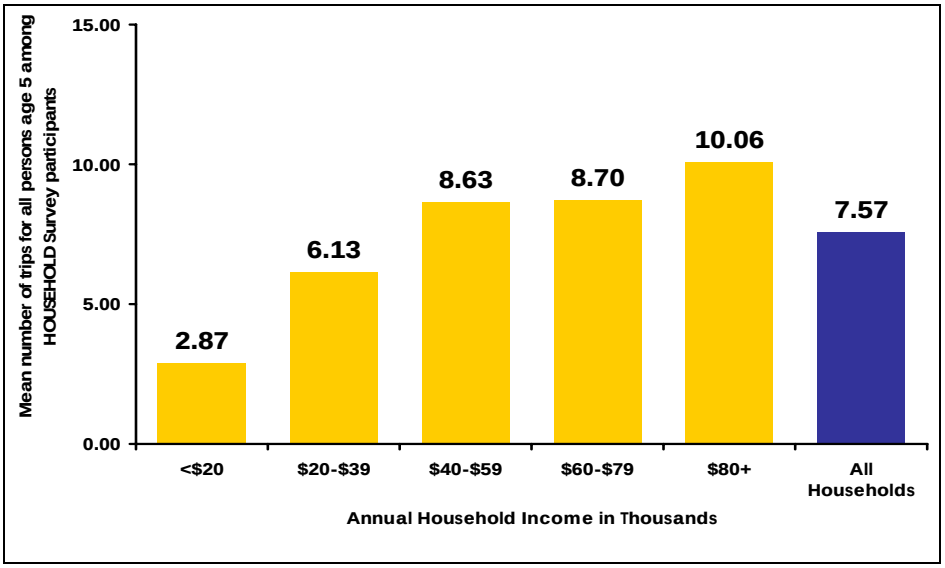
The model provides estimates of the number of trips that will be made based on these characteristics as well as on future population and employment growth.

FIGURE 3-1: HOW HOUSEHOLD SIZE AFFECTS THE NUMBER OF TRIPS COMPLETED PER DAY BY HOUSEHOLDS IN THE COLORADO SPRINGS AREA



Source: 2002 PPACG Regional Travel Survey

FIGURE 3-2: HOW HOUSEHOLD INCOME AFFECTS THE NUMBER OF TRIPS COMPLETED PER DAY BY HOUSEHOLDS IN THE COLORADO SPRINGS AREA



Source: 2002 PPACG Regional Travel Survey

PPACG 2035 SMALL AREA FORECAST

In order to project future transportation needs and to confirm that the *2035 Regional Transportation Plan* is consistent with anticipated growth patterns, PPACG staff analyzed regional projections of population and employment and allocated them into small sub-areas of the region, referred to as transportation analysis zones, or TAZs. The product of this effort is the *Small Area Forecast for 2005–2035*. The *Small Area Forecast* was developed and reviewed in 2006 and 2007, and was approved for use in the development of the *2035 Regional Transportation Plan* by the PPACG Board of Directors in July 2007. *The Small Area Forecast* estimates continued to be reviewed and commented upon during the remaining development of the *2035 Regional Transportation Plan*. Detailed information can be found in Appendix F.

The regional population and employment totals were developed by the Colorado State Demographer and adopted by PPACG's Board of Directors. PPACG used a model developed by the Federal Highways Administration called TELUM to disaggregate the regional totals into the 599 traffic analysis zones in the PPACG transportation planning area. The housing and population projections were conducted within two constraints. First, the inputs needed to conform to the transportation analysis zones (TAZ) of the transportation demand model. Second, the forecast attempted to capture the housing location preferences that the citizens of the community have demonstrated and are expected to continue in the future. More information and TAZ specific information can be found in Appendix F.

The *Small Area Forecast* serves three purposes. First, the forecast is used extensively by Pikes Peak Area Council of Governments (PPACG) and its member entities as reliable estimates of housing, jobs, population, school enrollment, income and military presence. It is an essential input to transportation modeling that is used to forecast needs and evaluate effectiveness of proposed transportation system projects. Second, the data are valuable to local governments to aid in planning for their communities. Third, a large number of local businesses and others in the private sector use these data for marketing and other strategic purposes.

Historic and forecast metropolitan area populations are presented in Figure 3-3. Historic and forecast metropolitan area employment is provided in Figure 3-4. Existing and forecast metropolitan area population and employment spatial distributions are presented as Figures 3-5 through 3-8.

FIGURE 3-3: HISTORIC AND FORECAST POPULATION FOR EL PASO AND TELLER COUNTIES

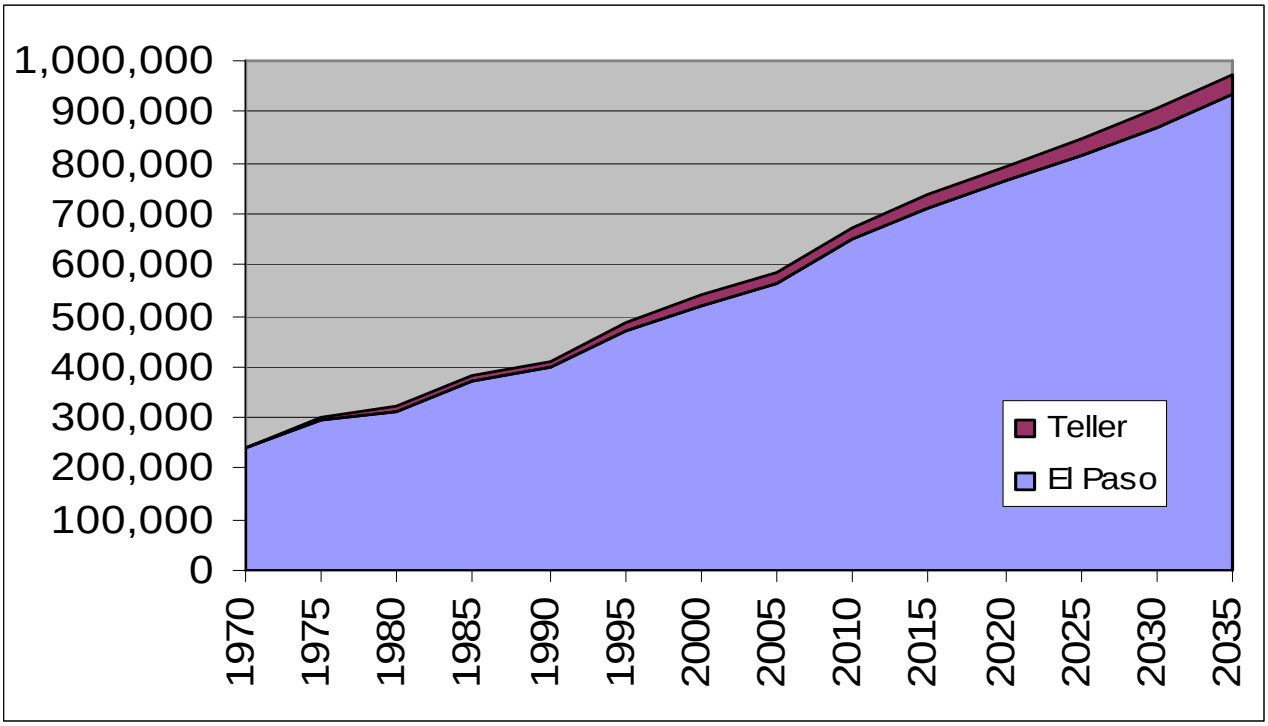


FIGURE 3-4: HISTORIC AND FORECAST EMPLOYMENT FOR EL PASO AND TELLER COUNTIES

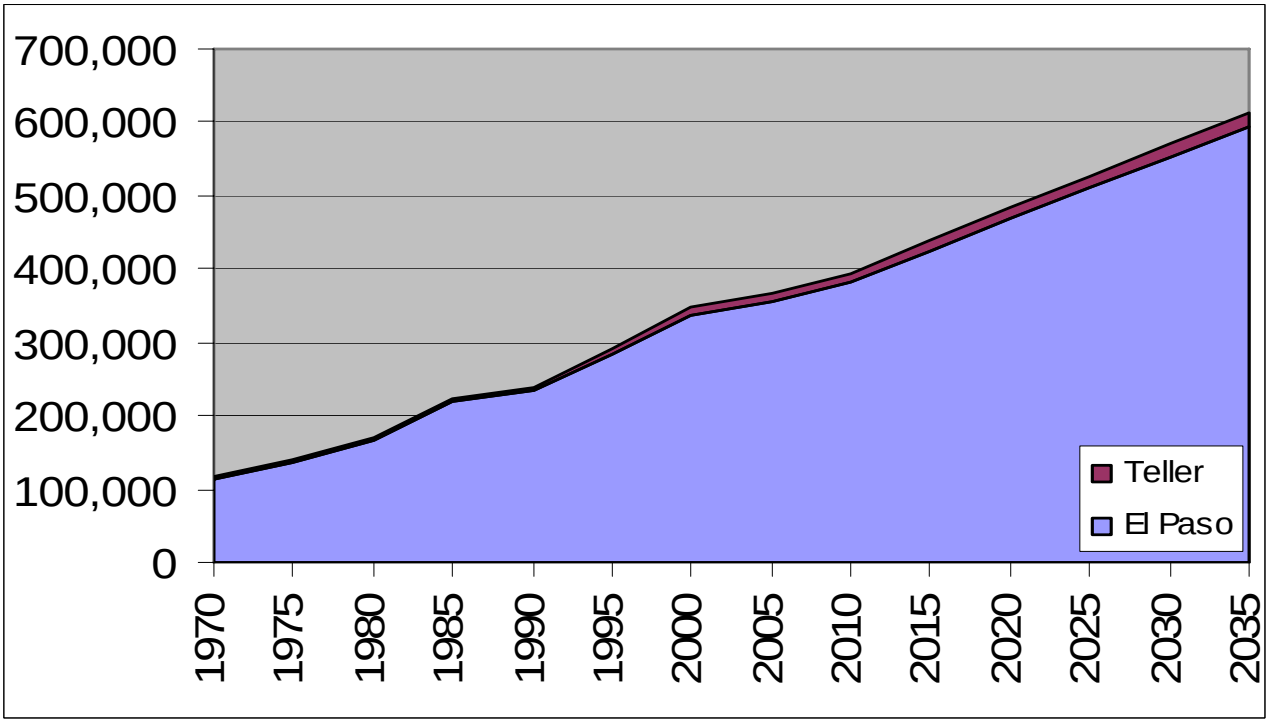


FIGURE 3-5: HOUSEHOLDS PER ACRE IN 2005

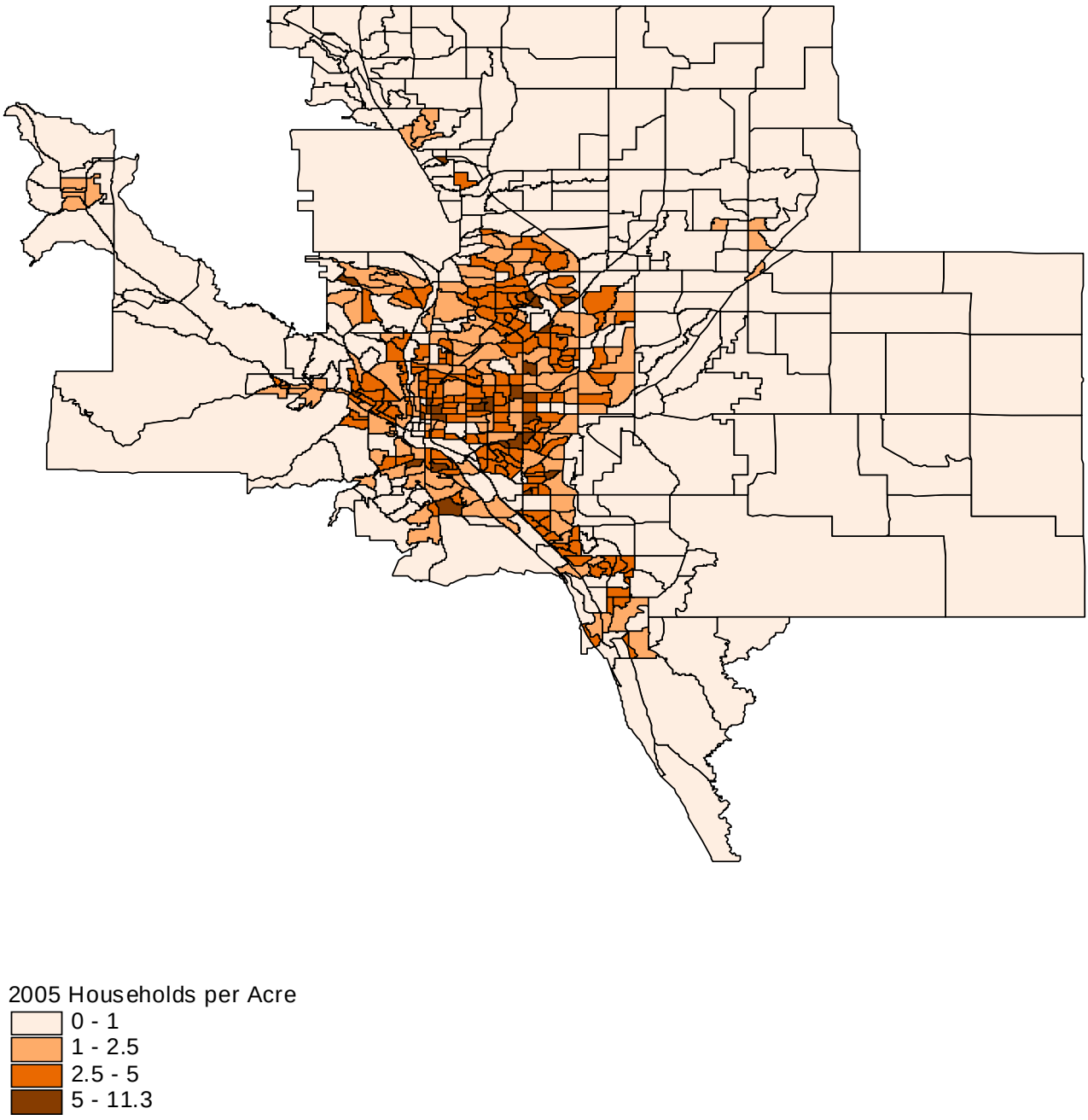


FIGURE 3-6: HOUSEHOLDS PER ACRE IN 2035

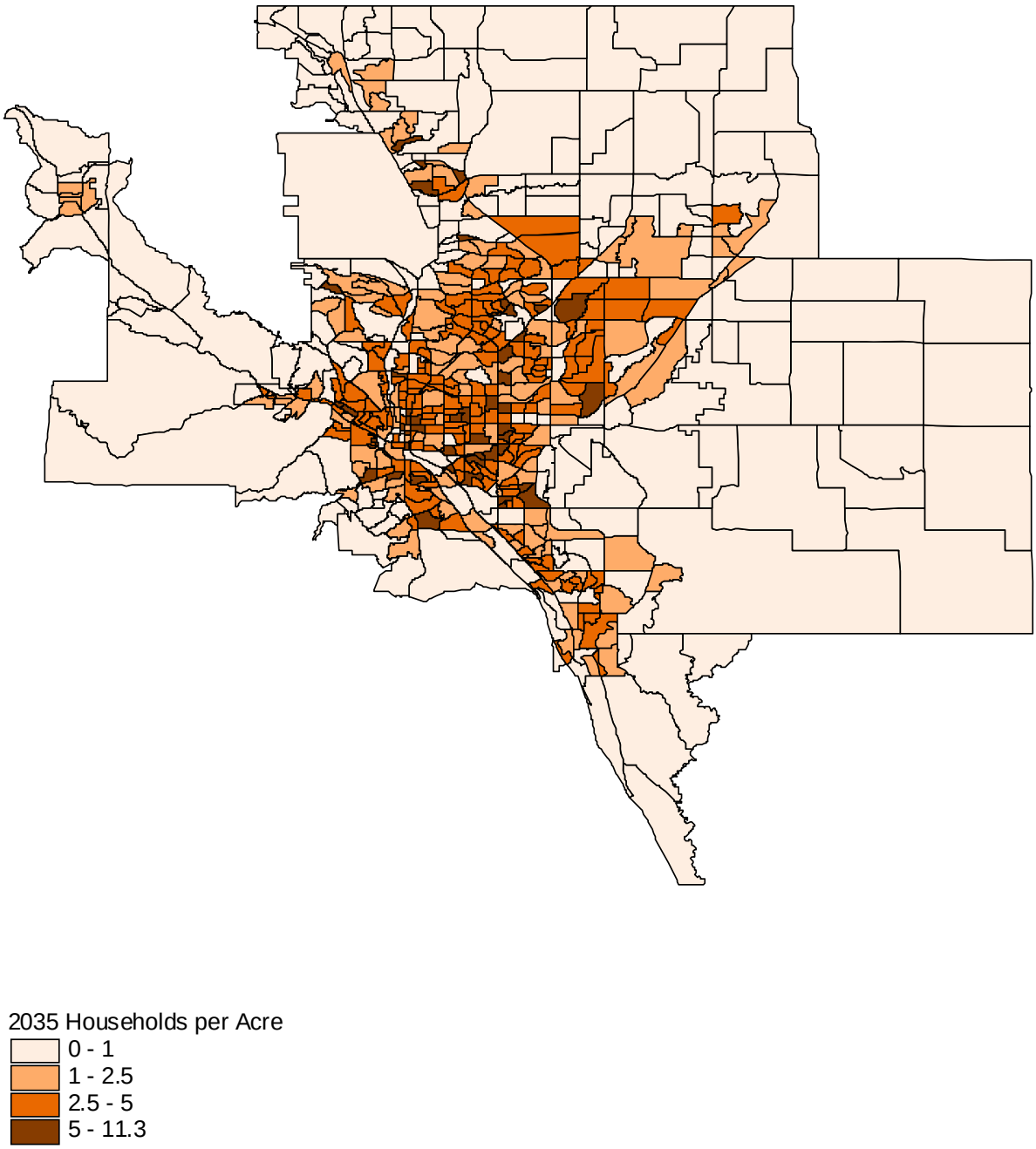


FIGURE 3-7: EMPLOYMENT PER ACRE IN 2005

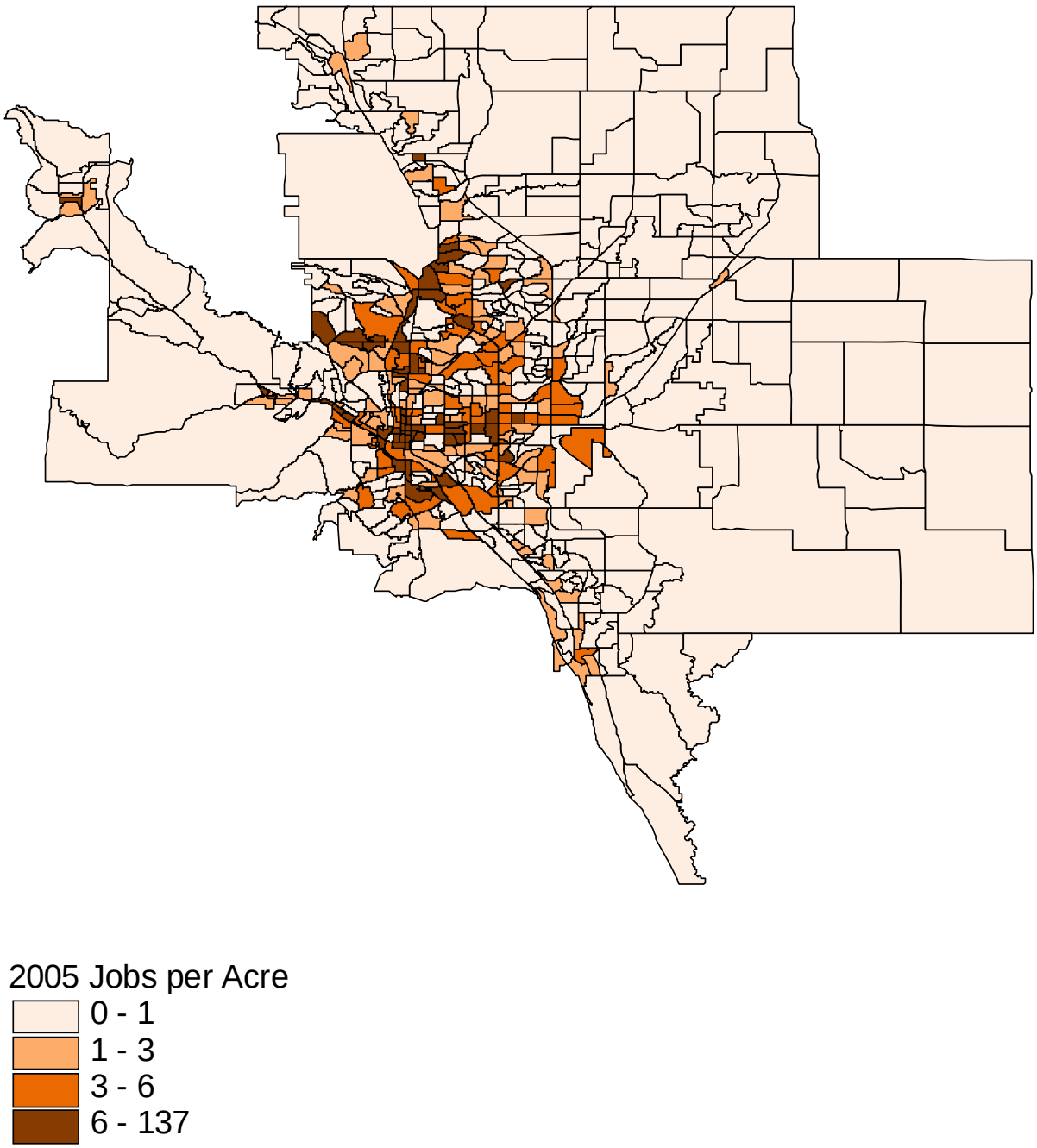
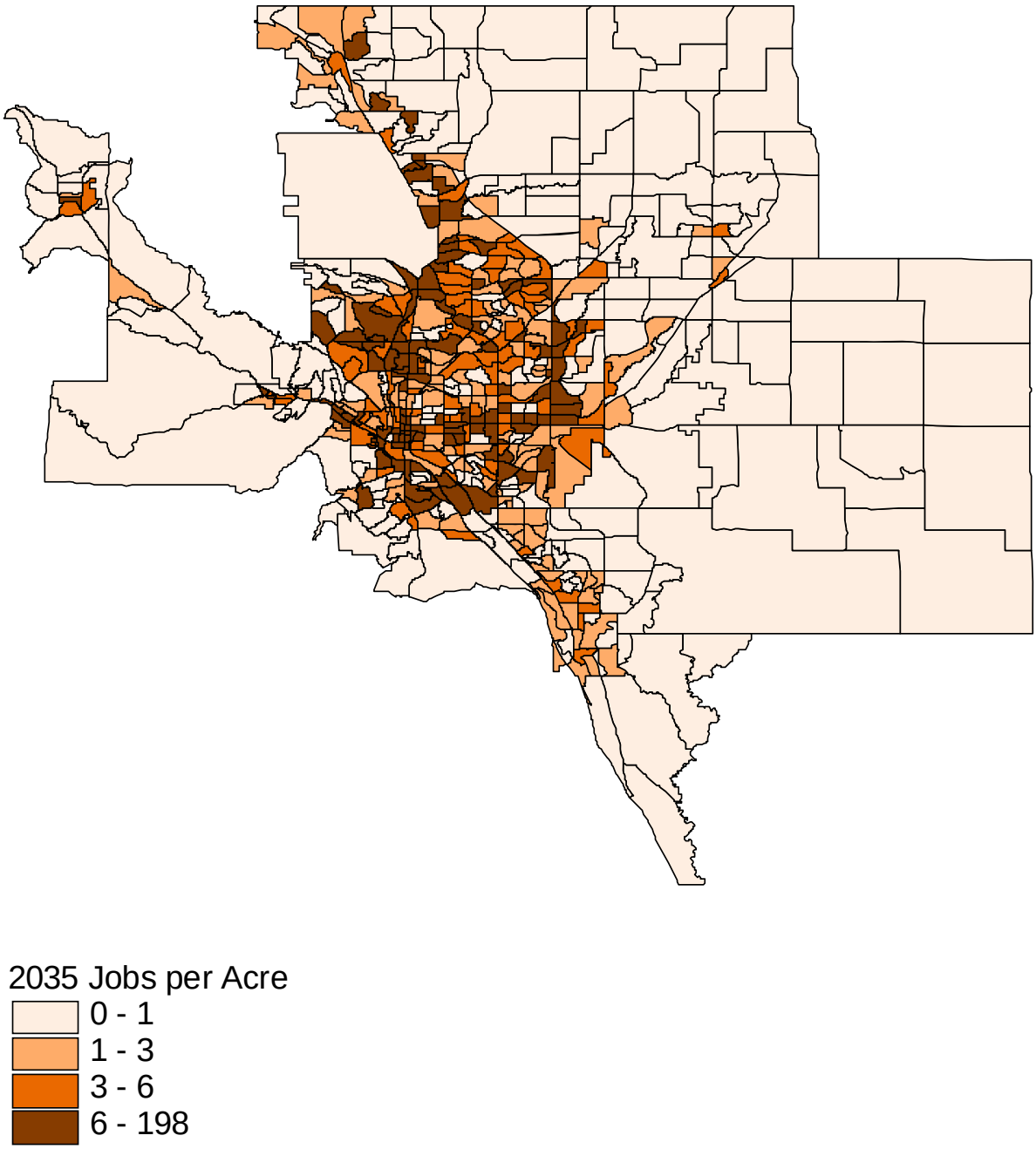


FIGURE 3-8: EMPLOYMENT PER ACRE IN 2035



PPACG 2002 HOUSEHOLD TRAVEL SURVEY

PPACG conducted a travel survey during the autumn of 2002. This survey was composed of two parts, a household travel survey and an on-board transit survey. There were 1,816 responses to the household survey and 403 responses to the transit survey.

The information was used to help calibrate the regional travel demand model and to address the need for enhancing, expanding, and developing new transportation facilities in the region. The survey also aided analysis of alternative transportation solutions for the major modes of transportation: roads; transit services; bicycle and pedestrian facilities; park-and-ride facilities; freight movement; and transportation system management strategies such as signalization, intelligent transportation systems (ITS), ridesharing, and travel demand management. The travel survey also provided the basis for analyzing the environmental and social impacts of transportation projects.

Key findings of the travel survey include numerical breakdowns of trips made to various destinations, how residents travel to their destinations, and vehicles per household. On a typical weekday, residents of the Colorado Springs area complete nearly 1.5 million trips to destinations in the region. The estimated number of trips that residents make to the region's most frequented destinations is provided in Table 3-1 below.

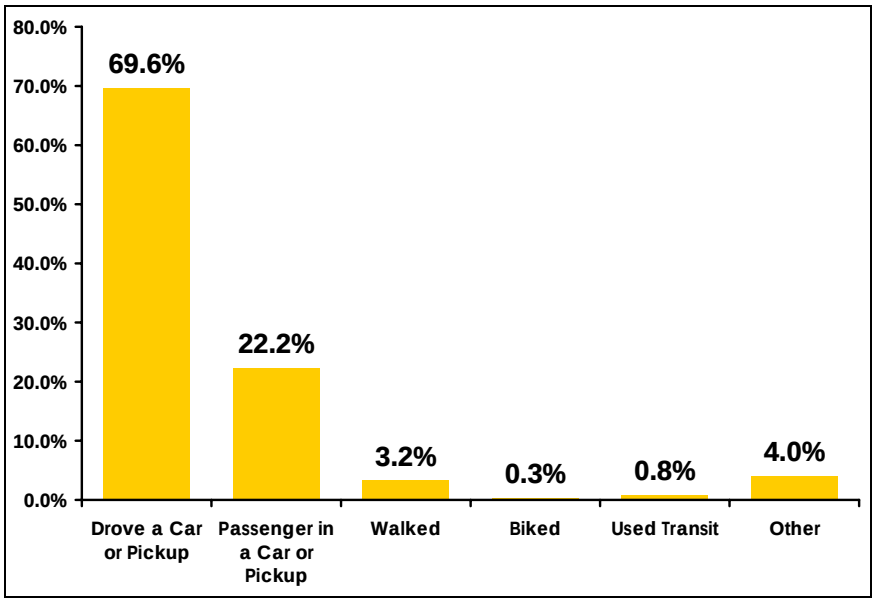
TABLE 3-1: ESTIMATED NUMBER OF TRIPS RESIDENTS MAKE TO THE REGIONS' MOST FREQUENTED DESTINATIONS

Type of Trip	Trips per Day*	Percentage
Trips to/from home and a school/daycare	303,000	30%
Trips to/from home and work	218,500	22%
Trips to/from home and shopping areas	199,500	20%
Work related trips during the workday	93,200	9%
Trips to another person's home	74,300	7%
Trips to/from home and a recreation place	59,500	6%
Trips to a hospital or doctor's office	39,300	4%
Trips to a religious place	23,300	2%

** Estimated trips based on 2000 Census of 192,409 households.*

The nearly 1.5 million trips are predominately made in a private car or pickup as is illustrated in Figure 3-9.

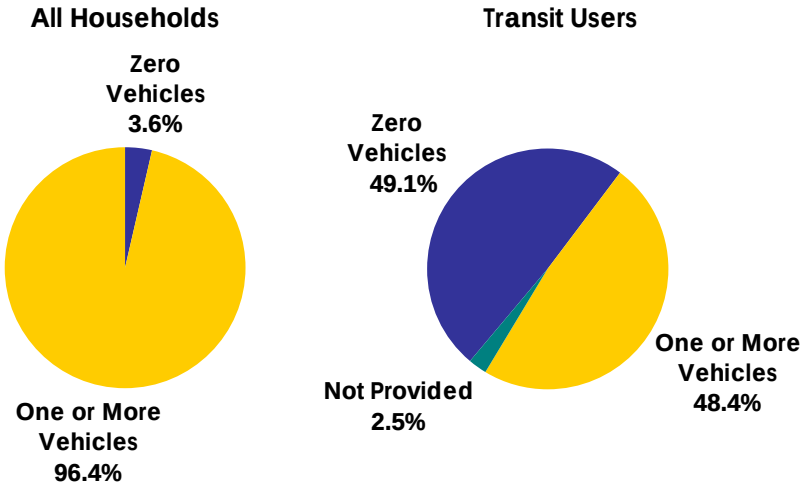
FIGURE 3-9: HOW RESIDENTS TRAVEL TO THEIR DESTINATION



Source: 2002 PPACG Regional Travel Survey

While the majority of trips are being made in a car or truck, those who travel via transit are substantially less likely to have an available vehicle in their household (see Figure 3-10) and thus are much more likely to be dependent on transit for their travel needs.

FIGURE 3-10: VEHICLES PER HOUSEHOLD



Source: 2002 PPACG Regional Travel Survey

TRANSPORTATION AND LAND DEVELOPMENT

Land-use development and transportation planning are inextricably linked. The relationship between transit or bicycle/pedestrian travel and the structure of development is not now emphasized in municipal plans or regional policy statements. At present, the low-density development patterns in the Pikes Peak region require the use of a vehicle for all of life's normal daily activities. Developments that are designed solely for automobile circulation exclude buses and other modes of travel from easy and efficient access. Furthermore, areas that develop without providing connections to adjacent developments or neighborhoods increase regional vehicle usage.

Current patterns and new developments in the Pikes Peak region do not have sufficient density to support effective transit service. They are removed from existing activity centers, are highly auto-dependent, and utilize the curvilinear street pattern that makes it both physically and financially difficult to provide even basic transit services. Compounding this is that areas lacking transit service often make future transit use less attractive by neglecting sidewalks, bus shelters, and other amenities.

Developments that take transit operations into account during design and construction encourage more transit use and make transit operations more efficient. Combining compatible land-uses and increasing densities not only complements and supports efficient transit, it also results in an overall reduction in automobile reliance. Encouraging higher densities along transit corridors requires a qualitative and functional framework for determining transit-appropriate development.

Encouraging more compact development and re-development along transit corridors is an important step in achieving the public's stated goal of better transit services in the region. The type and form of residential development along transit corridors are key factors in development potential and transit usage. In order to ensure that the transit system will capture enough riders, prospective users must be able to live close by, preferably within a half a mile. The only way to achieve this is with higher densities than those now found in the Pikes Peak region. This change in development will not only benefit those living near the transit station by offering them a convenient lifestyle, it will also benefit other neighborhoods by lowering traffic congestion and air pollution and making more efficient use of infrastructure, which helps tax dollars achieve more.

Pursuing a future development 'scenario' that increases density for improved transit requires that municipal and regional governments are willing and able to pursue development policies that capitalize on the value brought about by fixed transit infrastructure.

This Page Left Intentionally Blank

CHAPTER 4: REGIONAL TRANSPORTATION SYSTEM NEEDS

Although the transportation facilities are discussed separately by mode, the overriding goal of this plan is maintaining and enhancing the integration of the various modes into a preeminent system to meet the region's diverse mobility needs.

FEDERAL REQUIREMENT

"Sec. 450.306 (a) The metropolitan transportation planning process shall be continuous, cooperative, and comprehensive, and provide for consideration and implementation of projects, strategies, and services that…(8) Emphasize the preservation of the existing transportation system."

"(f) The metropolitan transportation plan shall, at a minimum, include:… Assessment of capital investment and other strategies to preserve the existing and projected future metropolitan transportation infrastructure."

FEDERAL OBJECTIVES

Transportation investment planning should consider all of the costs that are incurred as a result of investment decisions. Transportation investments must provide service for many years. The ability of a transportation asset to provide service over time is predicated on its being appropriately maintained. Thus the initial investment decision should consider not only the initial activities that construct a public good, but also all future activities that will be required to keep that investment available to the public. Those future activities are part of the alternative as much as the initial action; without periodic maintenance and rehabilitation, the investment will not provide continued use to the public.

PUBLIC INPUT

The importance of maintaining existing transportation infrastructure was a continuing theme of public comments received throughout the *Moving Forward* planning process. During October 2007, roundtable participants formulated transportation investment strategies for 20-year programs to be funded alternatively by $1.5 billion and $2.0 billion. Roundtable participants

were told that an additional $250 million per year would be required to maintain the transportation system at current levels, while an additional $750 million would be required to fully fund long range maintenance needs.

In the first round of the exercise, with $1.5 billion available, an average of $554 million was allocated to funding maintenance needs by the roundtable teams; in the second round, with $2.0 billion available to fund transportation investments, an average of $298 million was allocated to funding maintenance. In both cases roundtable teams overwhelmingly opted in favor of providing increased funding (in the first round more than twice current funding levels) for maintenance.

During the three focus group sessions, participants selected to accurately represent the regional population were asked to determine the relative importance, as well as the relative performance of ten factors associated with effective transportation systems:

- Pavement Conditions – Effective Maintenance of Roads and Paths
- Safe Bridges – Effective Bridge Maintenance
- Efficient Intersections – Good Movement of Vehicles Through Intersections
- Timely Travel – Minimal Delays, Efficient Connections
- Safe Travel – Minimal Crash Rates for Motorized and Non-Motorized Travel
- Reduced Impact on Neighborhoods and Cultural and Historic Resources
- Reduced Impact on Natural Areas
- Reduced Fuel and Emissions
- Effective Freight Movement – Efficient Trucking of Goods

Focus group participants ranked the importance of pavement conditions as the second most important factor to effective transportation, and currently the third poorest performer. That maintenance of existing transportation facilities is viewed by residents of the Pikes Peak Region as highly important to achieving the goal of providing a high quality transportation system confirms a similar affirmation made by of the voters of the Pikes Peak Region by approving PPRTA set-asides for system maintenance and operations.

ROADWAY SYSTEM

There are two ways to view a regional roadway system, by jurisdiction and by functional classification. Jurisdiction is who ‘owns’ the road, that is they pay for construction and maintenance of the facilities. Functional classification is the grouping of roads into classes according to the type of services that they provide. The distinct and occasionally conflicting services roads perform are accommodating the movement of people and goods or providing access to property. The better roads perform one function the worse they perform the other. The relationship between mobility and property access is shown in Figure 4-1. The functional classes are shown and described in Figures 4-2 and 4-3.

FIGURE 4-1: RELATION BETWEEN MOBILITY AND PROPERTY ACCESS

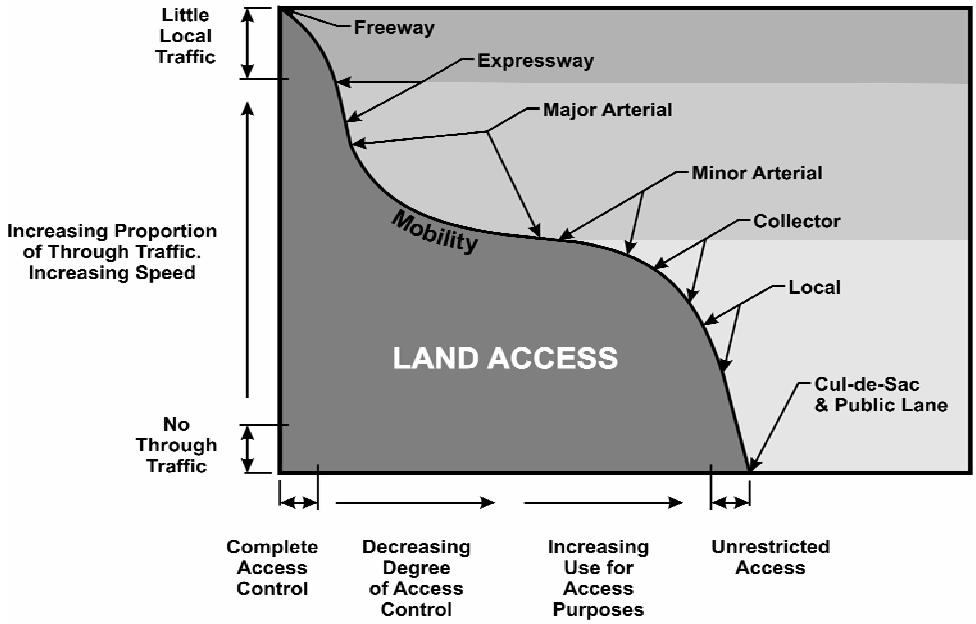
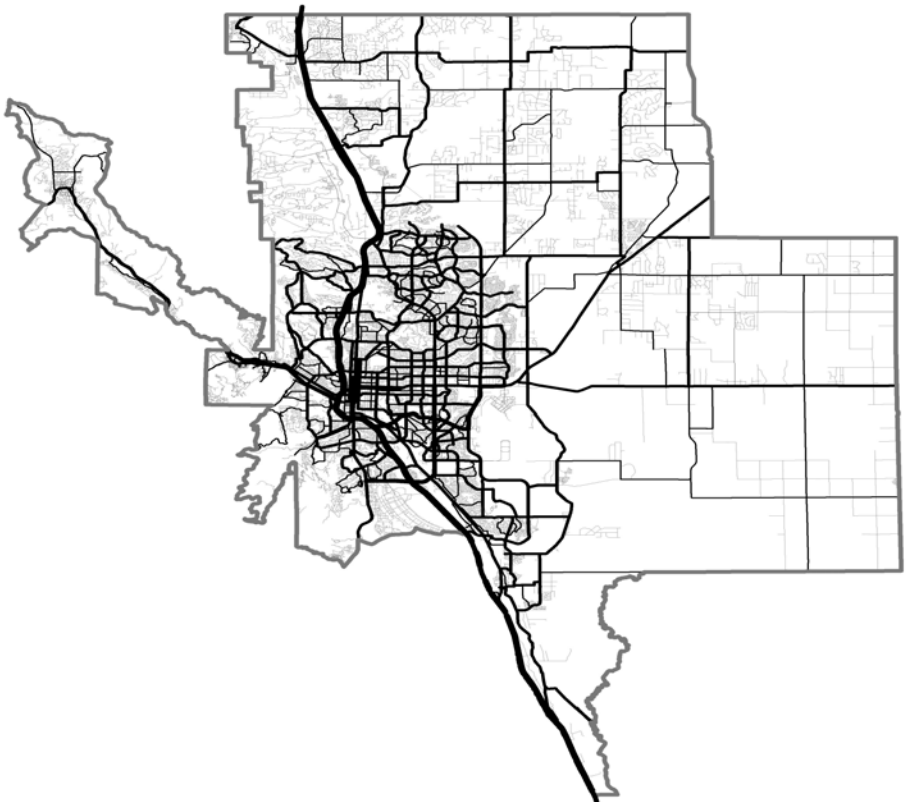
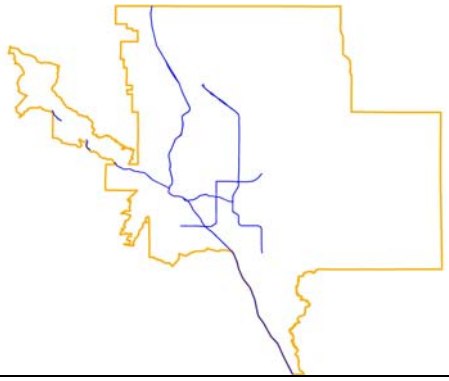


FIGURE 4-2: ROADWAY FUNCTIONAL CLASS

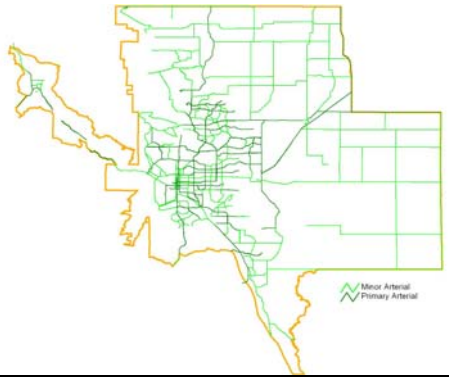


See the following page for Roadway Network details.

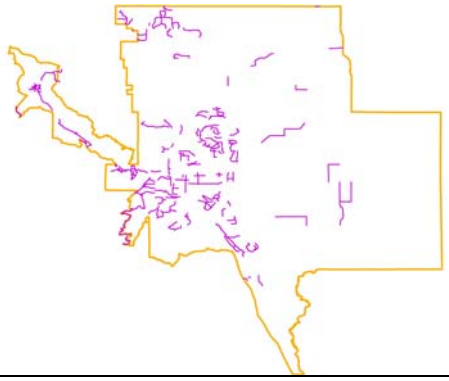
FIGURE 4-3: FUNCTIONAL CLASS DEFINITIONS



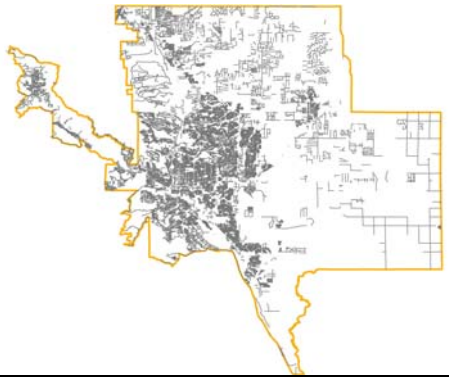
Freeways and Expressways are designed to facilitate fast travel between regions or across the region. They are designed to handle high volumes of traffic at a high rate of speed. In order to maintain safety at these higher volumes and speeds, access to interstates and freeways are limited. Freeways, such as I-25, are 4% of the Colorado Springs metropolitan area roadway system and carry 43% of the daily vehicle miles of travel in the region. The pavement condition of this classification is 67% good, 4% fair, and 8% poor.



Arterials are designed for travel within a region or city and link business districts, major activity centers, and outlying suburban residential areas. Arterials serve trip of moderate length at lower speeds than interstates or freeways. Like interstates and freeways, arterials trade-off property accessibility for increased mobility and safety. Arterials account for about 14% of the regional roadway system and carry about 43% of the regional vehicle miles of travel. The pavement condition of this classification is 67% good, 4% fair, and 8% poor.



Collectors are designed to connect neighborhoods to one another or connect local roads to arterials by collecting traffic from local subdivision areas and channel it into the arterial system. These streets provide both property access and traffic circulations within residential neighborhoods. Collectors account for about 14% of the regional roadway system and carry about 5% of the daily vehicle miles of travel. The pavement condition of this classification is 19% good, 54% fair, and 27% poor.



Local Roads are the streets most people live on. They are typified by many residential driveways, on-street parking is generally permitted, and the posted speed limits rarely exceed 25 MPH. These streets provide a very high level of property access, but are poor routes for fast, long-distance travel. Indeed, through traffic is deliberately discouraged on local roads. Local roads account for about 68% of the regional roadway system and carry about 9% of the daily vehicle miles of travel. The pavement condition of this classification was not collected.

Roadway Congestion

Roadway improvements account for approximately 70% of the fiscally-constrained projects. Chapter 8, Transportation System Management and Operations (TSMO) contains detailed information regarding the federally mandated Congestion Management Procedures (CMP) and regional approaches and definitions of congestion.

FIGURE 4-4: 2005 ROADWAY CONGESTION LEVELS

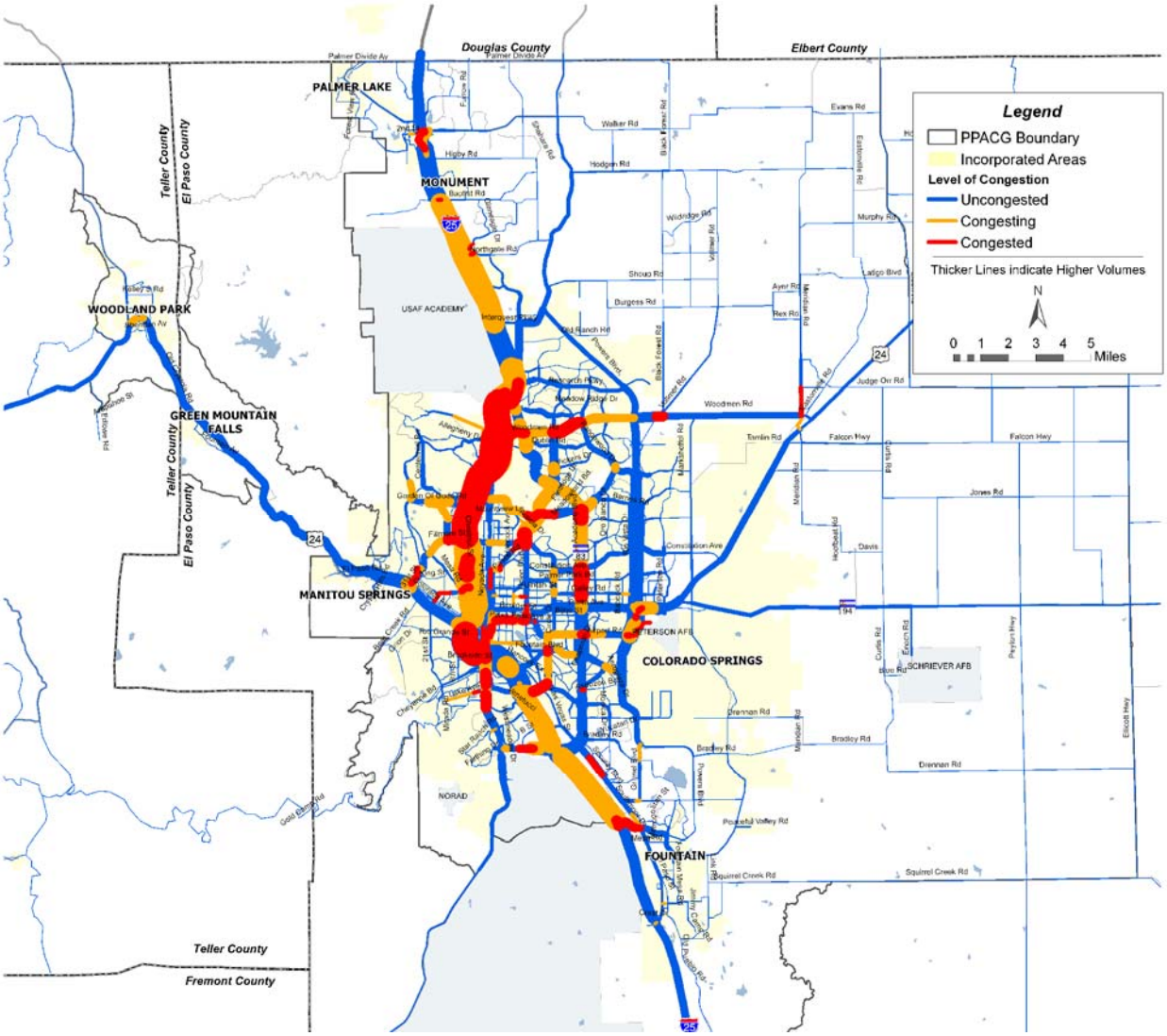
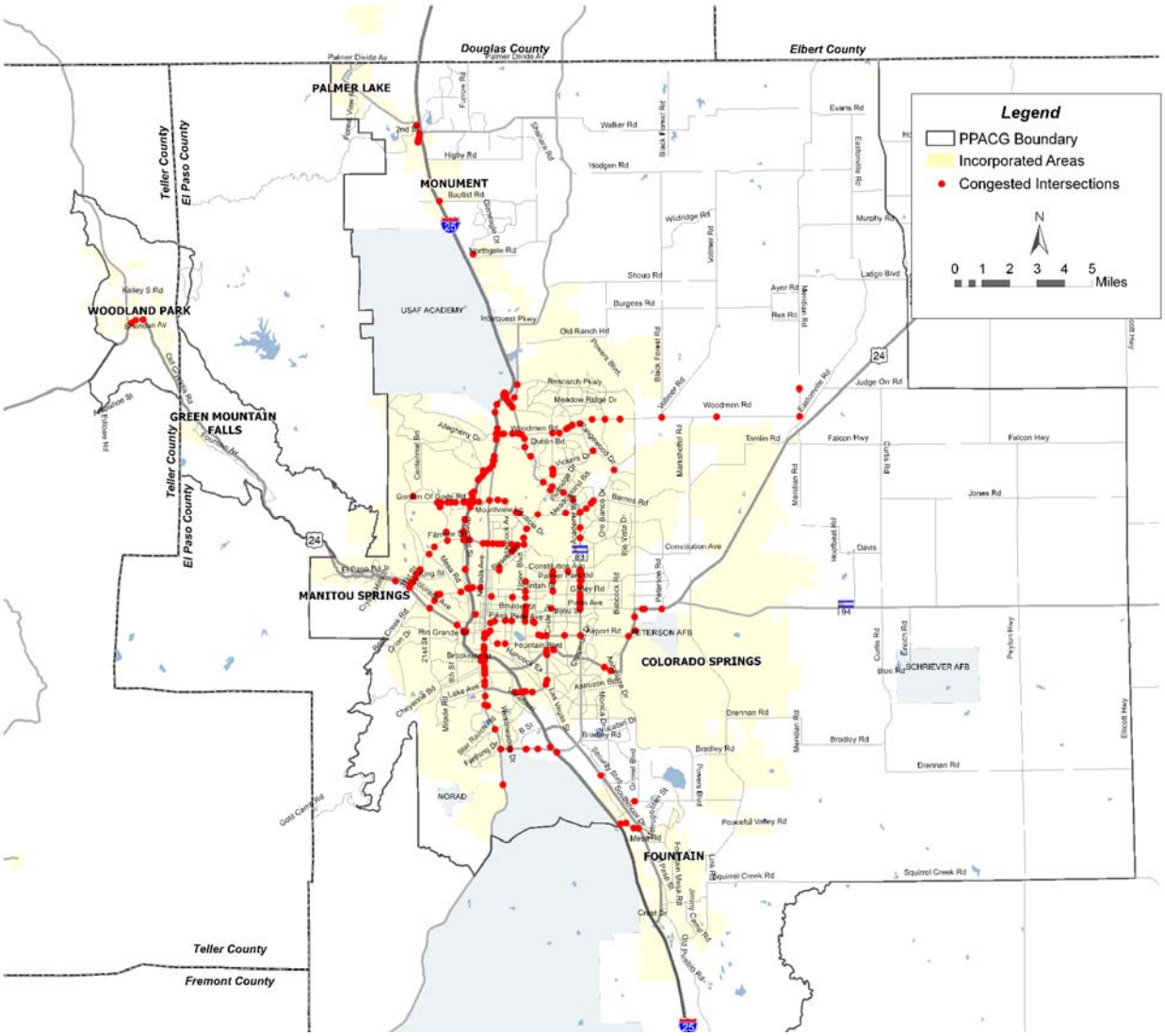


FIGURE 4-5: 2005 CONGESTED INTERSECTION LOCATIONS



Road Maintenance

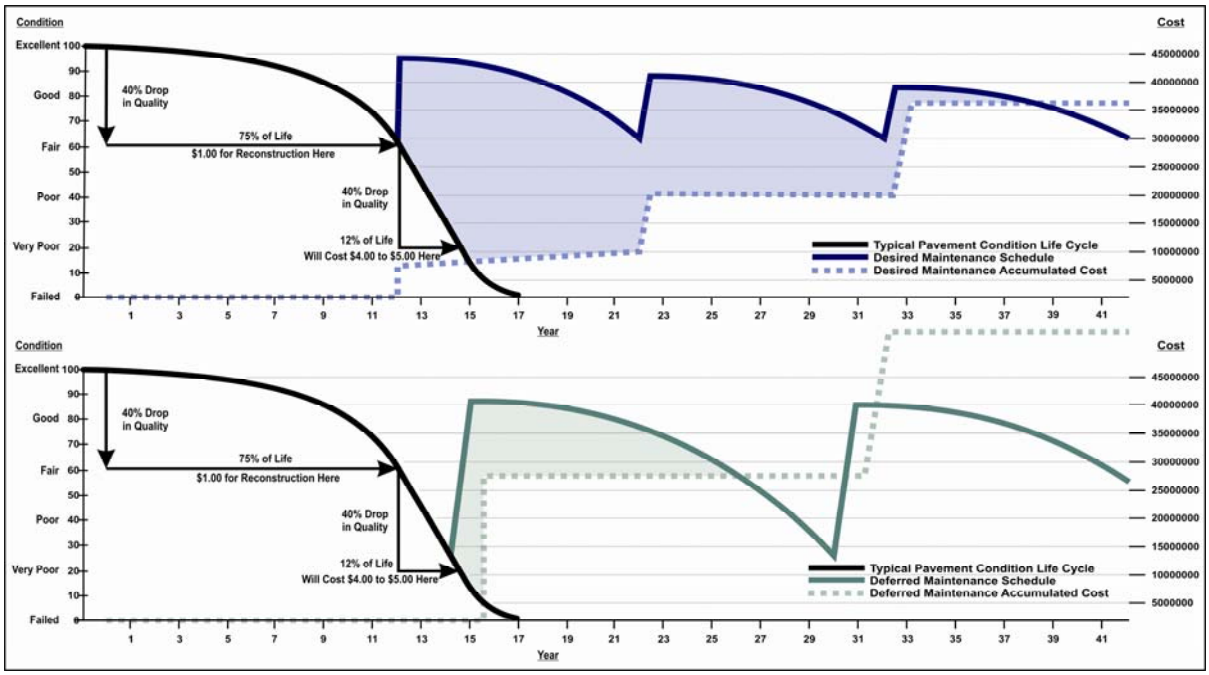
Road and Bridge infrastructure deteriorate at known predictable rates, taking into account materials, craftsmanship, weather conditions, traffic type and volume, along with several other factors. Preventive maintenance, if institutionalized, can extend the life of the infrastructure, pushing off major rehabilitation / reconstruction for a decade or more. Just as private cars deteriorate under heavy wear and tear and many miles of service, so do transit vehicles and assets. However, the condition of transit assets has a much greater influence over the success of the transit system than the condition of the roads do on vehicular traffic. Compounding the issue is that vehicular deterioration, both public and private, is increased when the roads themselves are in poor condition.

The cost of neglecting maintenance is not limited to simply repairing roads and vehicles. Poorly maintained transportation systems cost the local economy by deterring private investment, creating unsafe conditions for travelers, adding unnecessary delays due to mechanical failure, and potential limitations for emergency vehicle services. The condition and aesthetic quality of the Region's infrastructure is a reflection of regional values and community pride. Continuing to keep preservation of the transportation system as the top priority can mitigate these undesirable consequences of poor maintenance.

Adequately maintaining the transportation system is a major challenge for the Pikes Peak Region, the state of Colorado and the entire country. Many metropolitan areas have neglected their maintenance responsibilities in lieu of policies heavily favoring expansion. With increasing demand for construction materials around the globe, and energy costs continuing to rise, the high rate of construction cost increases will persist in coming years. The maintenance investment levels identified in *MOVING FORWARD* increases maintenance funding over current levels to maintain the condition of the region's pavement, bridge and transit assets over the term of the plan. The current condition of the transportation system provided a basis for developing investment targets to accomplish that goal. The condition of these assets is summarized below.

Aside from prevailing public perceptions, neglecting the preservation needs of the Pikes Peak region is not a rational policy choice; deferring maintenance due to fiscal pressure would necessitate spending substantially more on transportation investments in the future. As shown in the figure below, the worse the condition of a roadway surface, the exponentially greater the cost to repair it.

FIGURE 4-6: PREFERRED VS DEFERRED PAVEMENT MAINTENANCE LIFE-CYCLE



Pavement Conditions

Part of the preservation and maintenance needs assessment for PPACG included developing roadway system data in a format consistent with the Highway Performance Monitoring System (HPMS) for analysis in the Highway Economic Requirements System (HERS-ST) asset management software made available by the Federal Highway Administration (FHWA).

Actual International Roughness Index (IRI) for all roadway segments within the PPACG planning area was collected and incorporated into a single geo-database for analysis of existing and future system conditions, preservation needs and improvement costs. This inventory, along with other data gathering, makes it possible for PPACG to forecast both the amount and cost of future preservation needs. It also makes it possible to forecast resulting conditions with different investment levels.

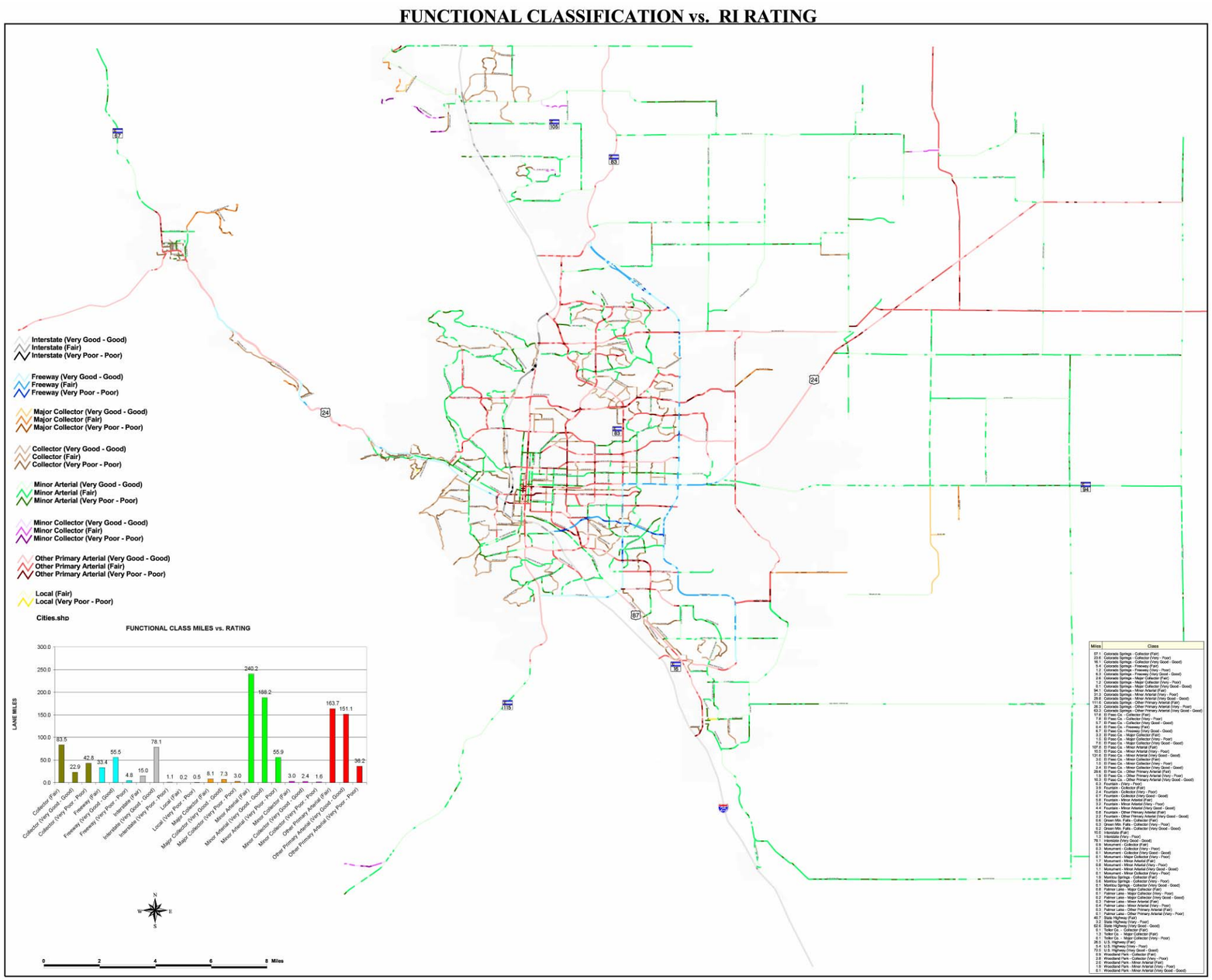
Figure 4-7 below shows the pavement condition of all regional roads. Pavement conditions data was gathered in June and September of 2007. Conditions are categorized as very good, good (no visible signs of deterioration), fair (moderate deterioration) poor (severe deterioration) and very poor.

TABLE 4-1: THE 2007 CONDITION OF ROADWAY PAVEMENTS

	Good	Fair	Poor
Regional Vehicle Miles of Travel	55%	38%	7%
By Classification			
Collectors	19%	54%	27%
Minor Arterials	39%	49%	12%
Principal Arterials	43%	47%	10%
Interstate/Freeway	67%	24%	8%
By Jurisdiction			
El Paso County	46%	46%	8%
City of COS	25%	58%	18%
CDOT	70%	27%	3%
City of Manitou Springs	1%	25%	74%
Town of Monument	24%	51%	26%
City of Fountain	31%	44%	22%

Regionally, 55% of vehicle miles of travel are carried by roadways with pavement condition of very good/good. Another 38% of regional VMT is carried by roadways with a pavement condition of fair, and only 7% of regional VMT is carried on roadways with poor or very poor pavement condition. This distribution results from the prioritization of high-level facilities within the region to receive limited maintenance funding resources.

FIGURE 4-7: PAVEMENT CONDITIONS MAP



This Page Left Intentionally Blank

It follows that regional pavement condition varies by roadway classification, with 67% of high-level functional classification roadways (interstate/freeway) in good/very good condition, and only 19% of the Region's collector roadways in good/very good condition. Pavement condition policies for the State highways focus on improving the condition of Interstates first, since that portion of the system supports a majority of regional travel (VMT), such that interstate/freeway maintenance investment provides the most benefit per dollar invested for travelers.

Because of past investment practices, pavements on the state-maintained highways in the Region are in reasonably sound condition, with approximately 46% of the pavement rated as good/very good, 46% fair, and only 8% in poor/very poor condition. Similarly, in the City of Colorado Springs where investment has historically focused on maintenance, 83% of its roads are in good or fair condition, and only 18% are in poor condition.

Although the conditions do vary along the roadway system, most drivers are currently minimally impacted by poor pavement conditions. Even with the great strides made towards improving roadway surface conditions, the demand for investment in this focus area is still high as evidenced by public comment from the roundtable and focus group sessions. Highway preservation needs are a moving target that requires constant attention. As improvements are made in one portion of the system, another area is falling into disrepair.

The maintenance of local roadways is a priority not necessarily because they support large amounts of travel, but they are important to connecting neighborhoods, attracting local business, and making the overall traveling experience better. Sometimes maintaining local roads is an even greater challenge than maintaining state highways and Interstates because they often include sidewalks and other amenities that accommodate foot traffic, a necessity for providing mobility and accessibility to local businesses and services and to the transit system. Nonetheless, there is a need to track conditions to understand the level of investment, and to measure performance over time. Future highway preservation investments should continue placing emphasis on further improving conditions of major arterials as well as minor arterials, collectors and other local roads while maintaining the overall integrity of the highway system.

Bridge Conditions

Bridges are another critical element of the transportation system that requires constant upkeep and maintenance. The Pikes Peak region currently has 457 bridges to maintain. The State maintains 209 or 46% of those bridges; the rest are the responsibility of local governments. Overall, approximately 11% (49 of 457) of the bridges, carrying 92,000 vehicles per day are deficient (either structurally deficient or functionally obsolete). Structural deficiencies are characterized by deteriorated conditions of significant bridge elements and reduced load-carrying capacity. Functional obsolescence is a function of the geometrics of the bridge not meeting current design standards. **Neither type of deficiency necessarily indicates that a bridge is unsafe.**

To be categorized as poor, a bridge must have a sufficiency rating of less than fifty, and be either structurally deficient or functionally obsolete. The sufficiency rating is a numerical rating for bridges that takes into account structural adequacy and functionality and is based on a 100 point

scale where 100 is a perfect rating. The criteria for determining the sufficiency rating, structural deficiency, and functional obsolescence is established by the Federal Highway Administration and used by all state Departments of Transportation.

- A bridge is structurally deficient when the structural condition or weight-bearing capacity of the bridge is less than fully adequate. Elements of the bridge need to be monitored and may also need maintenance, rehabilitation, or replacement. Monitoring of the bridges condition is accomplished by maintenance patrols. Structurally deficient bridges may have load restrictions to ensure their safe use.

- A bridge is functionally obsolete when its size or geometric clearances are less than fully adequate. Bridges that do not have adequate lane widths, shoulder widths, or vertical clearances to serve current traffic demands are categorized as functionally obsolete. Bridges used for water crossings that have inadequate openings for floodwaters are also categorized as functionally obsolete.

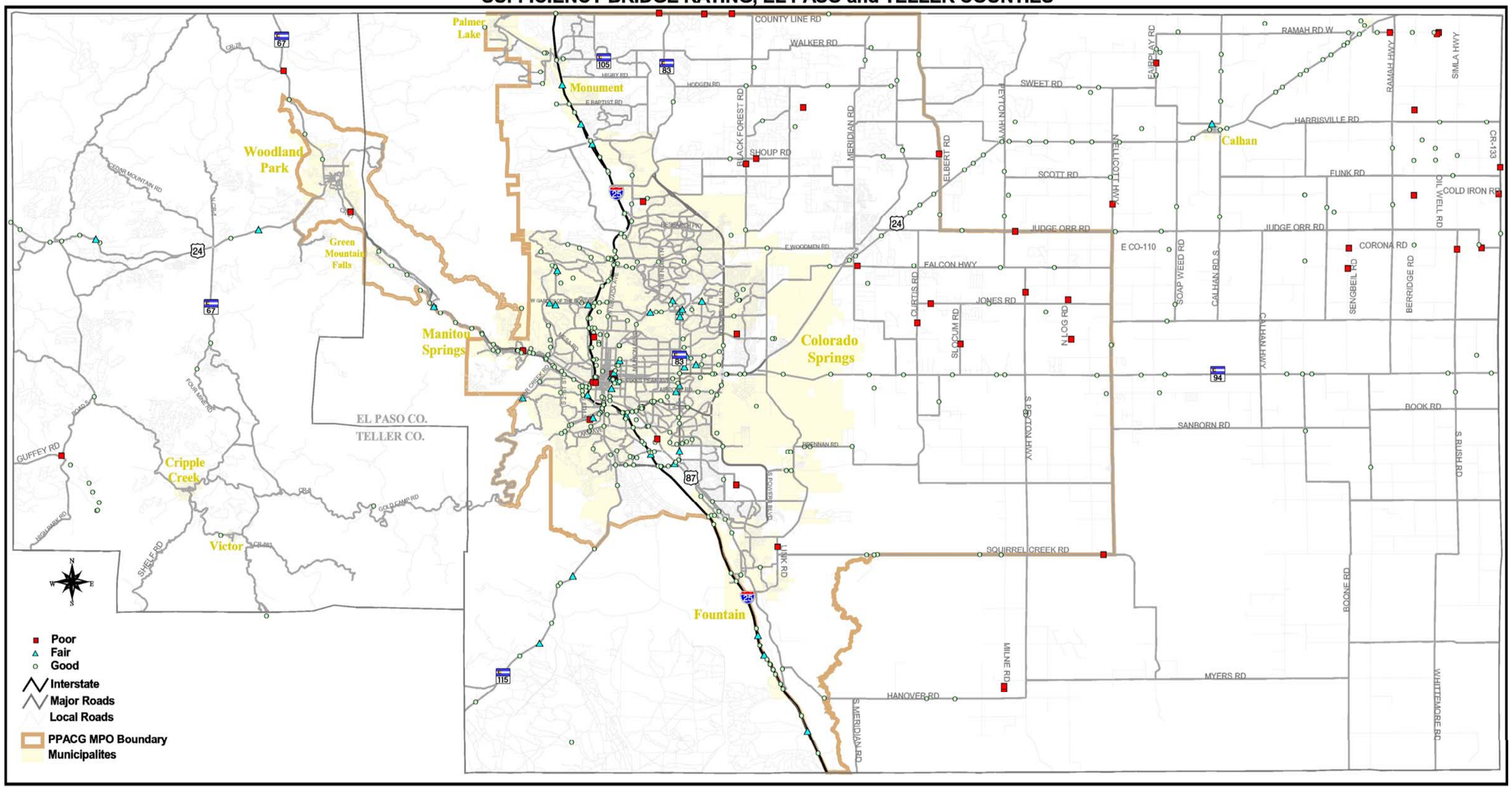
Bridges in Poor condition do not meet all safety and geometry standards and require reactive maintenance to ensure their safe service. Thirty (30) or 7% of the bridges in the region are in Poor condition. For the purpose of determining bridge-funding needs it is assumed that bridges in poor condition have exceeded their economically viable service life and require replacement.

Bridges in Fair condition marginally satisfy safety and geometry standards and require preventative maintenance or rehabilitation. Eighteen (18) or 4% of the bridges in the Pikes Peak region are in Fair condition.

Bridges in Good condition typically adequately meet all safety and geometry standards and typically only require preventative maintenance. Four hundred and nine (409) of the bridges in the Pikes Peak Region are classified in Good condition.

Similar to pavement conditions, data shows the region's dedication to preservation has begun to improve the condition of both state and locally maintained bridges. Nineteen percent (19%) of locally maintained bridges is deficient compared with 0% of State-maintained bridges. Preservation of the local system is a particular challenge in today's fiscal environment, in which all local governments in the Pikes Peak region are faced with extremely tight budgets, an aging system, and growing investment needs. A compounding factor is that older areas are experiencing a loss in tax base as development moves further away from the central core of the Region. A limited amount of Federal funds are made available through the Transportation Improvement Program. Local governments must compete against one another on a statewide basis for the relatively small amount of funds. Given the great level of investment needs throughout local communities in the region, competition for the funding is intense.

FIGURE 4-8: LOCATION AND CONDITION OF BRIDGES IN THE PIKES PEAK REGION



This Page Left Intentionally Blank

PAST ACTIONS AND FUTURE DIRECTIONS

With the passage of the Pikes Peak Rural Transportation Authority (PPRTA) the voters of the Pikes Peak Region demonstrated an understanding that a high-quality transportation system is essential to maintaining the social and economic vitality of the Region. At the same time, by dedicating 45% of the PPRTA one cent sales tax to road maintenance and 10% to transit maintenance and operations, the importance of maintaining the existing transportation system to developing and preserving a high quality transportation system was also recognized.

Since the PPRTA became operational, the Region has made strides in maintaining the condition of the existing system relative to what would have occurred in its absence. It has taken steady investment and an unwavering commitment to make such improvements. With increasingly scarce funding, and rising costs for steel and energy, it is more important than ever to continue the focus on improving the system through preventative maintenance, rehabilitation, and reconstruction of the existing system as a means to get the most out of our past and current infrastructure investments.

The public comments received during the *MOVING FORWARD* public process indicated a desire to emphasize preservation needs in the programming of state and federal funds, encouraging CDOT to commit more funding to road and bridge rehabilitation, and using preservation as the top priority in the selection of local projects using sub-allocated Surface Transportation Program funds.

Preserving the system now and in the future will require continuing the region's dedication to this goal. Regional collaboration will be critical, particularly as the needs arise to undertake major reconstruction efforts. Major reconstruction projects will require significant coordination and costly mitigation to mitigate impacts for travelers. With the Cosmix Project, CDOT undertook upgrade and reconstruction of I-25 between Cimmaron/US-24 and North Academy Boulevard (formerly SH 85), which is the main artery through the heart of the Pikes Peak Region. This I-25 reconstruction project is the largest reconstruction project, in both scope and cost, in Colorado Springs history. As for the Denver TRex Project before it, a design-build approach was implemented. Additional projects are underway, supported by the PPRTA to upgrade other primary regional corridors including; Woodmen Road, Powers Boulevard, Drennan Road/Proby Parkway and Austin Bluffs Parkway. Many of the lessons learned through the implementation of the Cosmix/I-25 reconstruction project, as the first completed project, will set precedent for future projects of similar size that will inevitably arise as the system ages over time.

For the 2008-2013 TIP PPACG has programmed $346.4 million in federal, state, and local funds for road, bridge, and transit preservation needs, representing 46.2 % of the total program. Nearly 31% or $2.2 billion of the investments identified in the 27-year *MOVING FORWARD* Plan are dedicated to maintenance, rehabilitation, and reconstruction of existing highways, bridges, and transit assets. Maintaining a progressive approach to management of the Region's transportation system is critical to continue improving their condition. Deferring this responsibility due to the increasingly tight fiscal environment is not a feasible option.

Preservation of the existing system is fiscally responsible, and will remain the basic tenet of the transportation planning and programming process now, and in years to come.

Public Transportation System

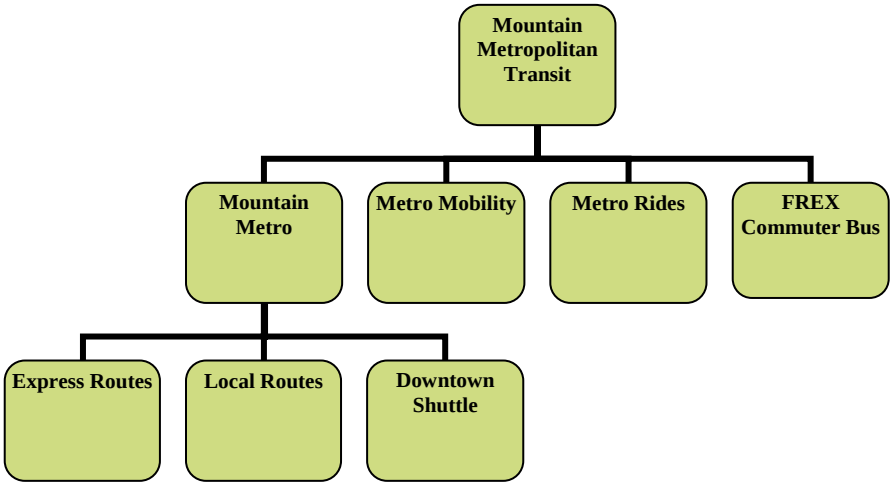
Existing Public Transportation Services and Providers

Mountain Metropolitan Transit is the primary fixed-route transit provider in the region. It is operated as a division of the City of Colorado Springs, Public Works Department. A majority of its funding comes from the City of Colorado Springs' annual budget, the Pikes Peak Rural Transportation Authority, and the Federal Transit Administration. In addition, four human services providers also offer demand-response transportation in the region for riders with special needs.

Mountain Metropolitan Transit Services

The current bus system, previously known as Springs Transit, was originally established in 1976 and funded by the City of Colorado Springs and contracts with other jurisdictions. In 2005, with the passage of the Pikes Peak Rural Transportation Authority, the new Mountain Metropolitan Transit system was inaugurated. The dedicated sales tax revenues allowed the system to expand services. The City of Colorado Springs remains the operator and lead planning entity for the contracted transit services.

Mountain Metropolitan Transit includes both local and express fixed-routes throughout the urbanized area, serving the City of Colorado Springs, Manitou Springs, Fountain, Falcon, Widefield, and Security. Additionally, Mountain Metropolitan Transit operates the 'Front Range Express' (FREX), 'Metro Mobility', and 'Metro Rides' services.



Mountain Metro Services (Local, Express, Downtown Shuttle)

There are 27 local fixed-routes, plus the 'Downtown Shuttle' and additional express routes. Twenty-five local routes operate Monday through Friday from approximately 6:00 a.m. to 6:30 p.m. All but two routes operate on Saturday. Nine routes operate evening service until approximately 10:30 p.m., with a similar limited structure of ten routes operating on Sunday from approximately 7:00 a.m. to 6:00 p.m. Local fixed-route service frequencies vary, with major routes operating every 35 minutes in the peak period and every 70 minutes mid-day. The busiest routes operate every 35 minutes all day while those with lower ridership operate 70-minute frequencies all day. Sunday and evening service generally operates every 60 minutes. Figure 4-9 on the following page illustrates the local fixed-route service.

Mountain Metropolitan Transit operates 10 separate express, regional, school, and peak hour routes. These services primarily operate in peak hours on weekdays, carry passengers in a single direction, and the average trip lengths are generally longer. Figure 4-10 on the following pages shows the limited routes for express and school services operated by Mountain Metro. The Downtown Shuttle operates on a much higher frequency with peak service during the mid-day hours Monday-Saturday. The current Mountain Metro fleet consists of 90 fixed-route local, downtown shuttle, and express vehicles. Local, express, and downtown shuttle services provided nearly 3.4 million one-way trips in 2007.

Metro Mobility

Paratransit service began in 1993 as Springs Mobility, and is currently operated as Metro Mobility after the passage of the PPRTA. The service is contracted out by the City of Colorado Springs Transit Services Division and operates as a demand-response service for those individuals with mobility needs that prevent them from using the fixed-route system, meeting all requirements of the Americans with Disabilities Act. Paratransit services are provided during the same days and hours as Mountain Metro fixed-route service, seven days a week with various hours. The service is provided along a 1.5 mile corridor (3/4-mile on each side) around all regularly scheduled fixed-route service. Customers of Metro Mobility are required to be certified as ADA paratransit eligible in order to receive this curb-to-curb service. Metro Mobility has 44 vehicles in its fleet and provided over 150,000 one-way trips in 2007.

Metro Rides

Since 1979, Metro Rides (formerly Ridefinders) has been helping residents and businesses in the Colorado Springs area save time and money through the following services: carpool matching, commuter vanpools, school pools for families, telecommuting, bicycle and pedestrian commuting resources, and outreach to area employers.

The goal of the program is to reduce congestion and pollution in the Colorado Springs region by encouraging more people to use alternate forms of transportation, instead of driving single occupancy vehicles. The service is available to residents and employers in the Colorado Springs area and the program receives approximately 5,000 calls annually. A database of approximately 1,500 clients is continually maintained. Over 1,000 carpool matches were made during 2007. The vanpool program fleet consists of 18 vans.

FIGURE 4-9: LOCAL FIXED-ROUTE ROUTE SERVICE MAP (WEEKDAY DAYTIME HOURS)

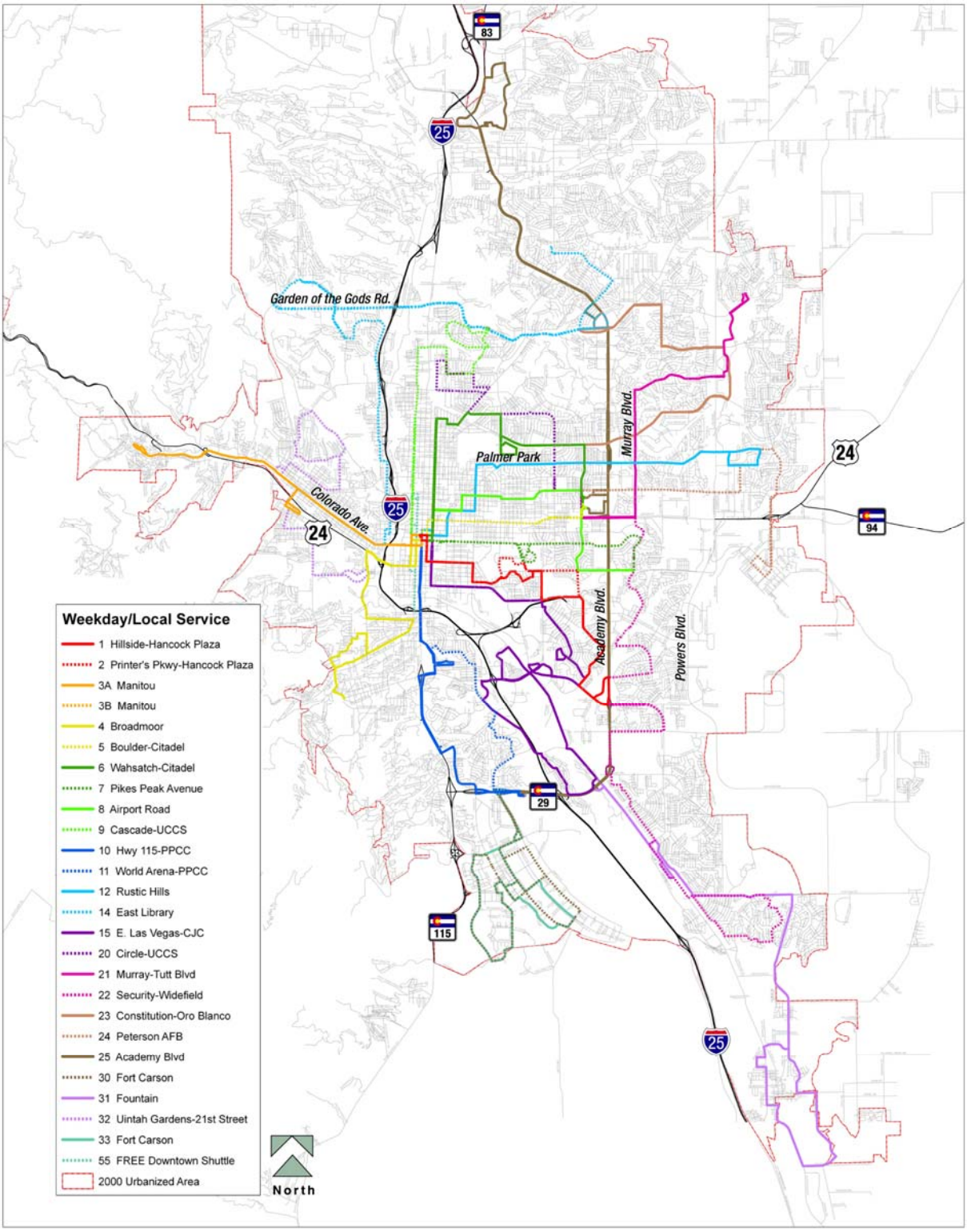
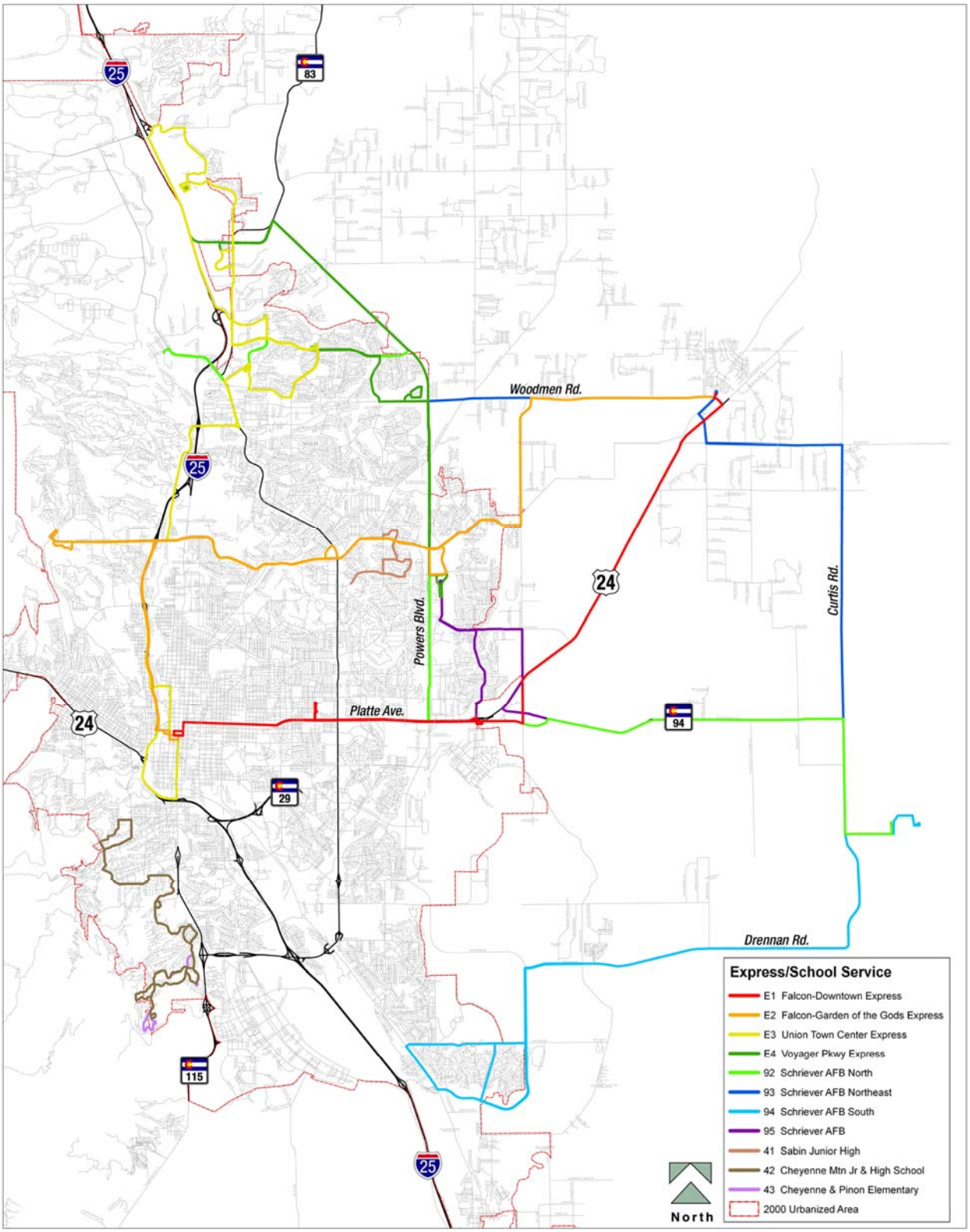


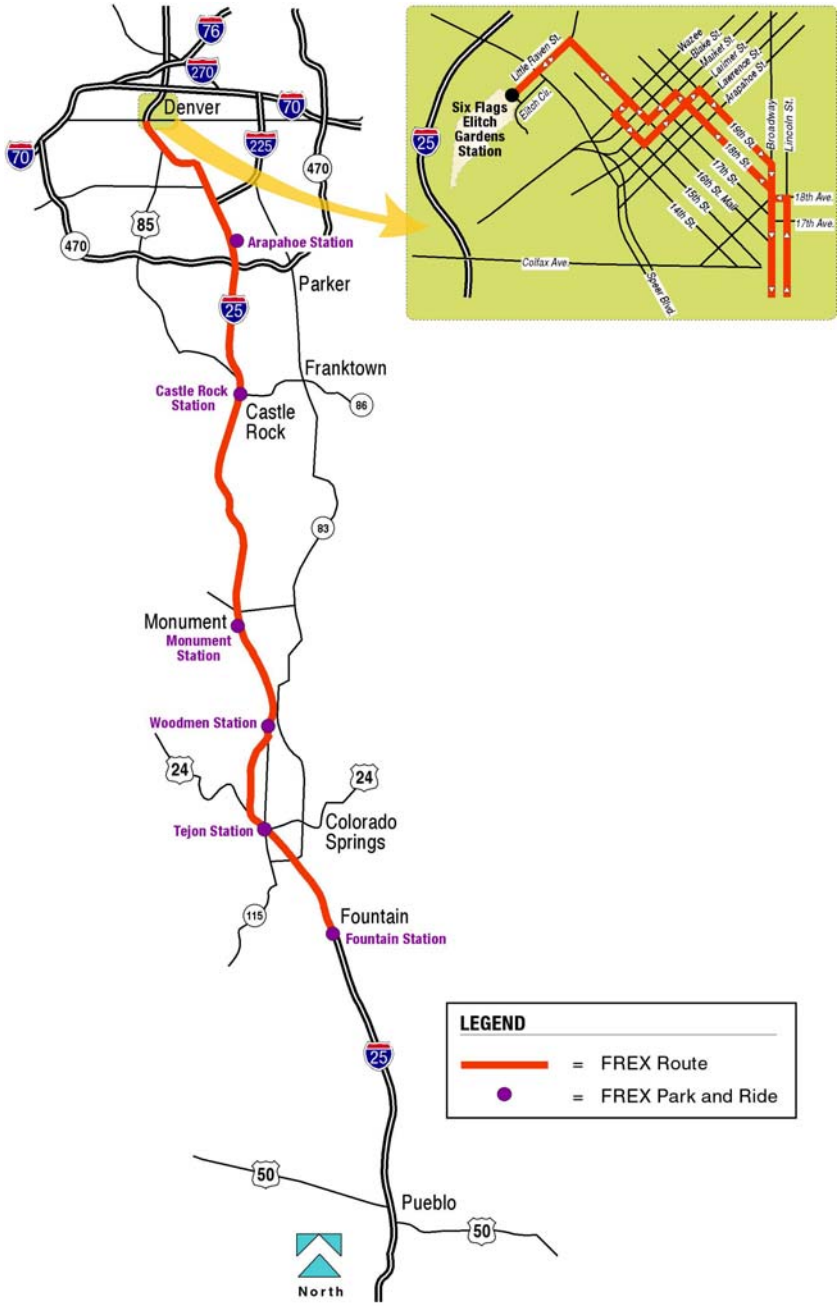
FIGURE 4-10: EXPRESS/SCHOOL ROUTE MAP



FREX

Mountain Metropolitan Transit operates the 'Front Range Express' (FREX) commuter bus service. FREX began in 2004 and operates weekdays with approximately 20 northbound and 20 southbound trips between Colorado Springs and Downtown Denver. Other agency funding is also received to support this service. There are 19 FREX buses in the fleet total. FREX provided over 136,000 one-way trips in 2007.

FIGURE 4-11: FREX ROUTE MAP



Specialized Transportation Providers

A strength of the Pikes Peak region is the unique services that additional specialized transportation service agencies provide to riders with special needs in the area. A person who needs specialized transportation service in the area has at least one way of traveling. There are four primary providers of specialized transportation services in the region, in addition to Metro Mobility. These include Silver Key Senior Services, Pikes Peak Partnership (Amblicab), The Resource Exchange, and Fountain Valley Senior Services. Each of these agencies serves a particular niche important to the overall transportation network.

Silver Key Senior Services

Silver Key Senior Services is a non-profit agency that provides services for senior citizens in the Colorado Springs area. Silver Key provides door-to-door and door-through-door services, based upon client needs. Drivers will also help passengers by carrying groceries and other parcels. Services are available Monday through Friday, 8:30 a.m. to 11:00 a.m., and 12:30 p.m. to 4:00 p.m. No fares are charged for Silver Key services, although a $3.00 donation is suggested. Silver Key has an active volunteer program, with around 12 volunteer drivers and 1-2 volunteer schedulers. There are also six paid drivers and one paid scheduler.

Silver Key serves El Paso County excluding the following areas: south of the Colorado Springs City Limit, the portion of the City of Colorado Springs east of Powers, north of Drennan, and south of Highway 24. These outlying areas are served by Fountain Valley Senior Services. The boundaries are agreed upon by the two agencies but they will support each other and are flexible if need be. Silver Key does not serve Monument or Palmer Lake. These neighboring local entities opted out of the 2004 PPRTA sales tax initiative, and therefore, do not receive service.

Amblicab

Pikes Peak Partnership/Disability Services Inc. is a non-profit agency that receives financial support from the City of Colorado Springs and PPRTA to operate the Amblicab service. Amblicab provides curb-to-curb, door-to-door, and door-through-door service on weekdays from 7:30 a.m. to 5:00 p.m. for individuals with disabilities. Drivers are authorized to go into houses or buildings and assist passengers with entering and exiting homes and the service vehicles. Amblicab provides service to clients living outside of the Metro Mobility service area and to clients that require door-to-door and door-through-door service. Amblicab does not restrict trip purposes.

The Resource Exchange

The Resource Exchange (TRE) provides services to persons with developmental disabilities, to help them live independently. An important component of independent living is the ability to get to and from work and other activities, so transportation is an important component of this mission. Whenever possible, TRE helps clients by purchasing service from local providers, such as the City of Colorado Springs and Amblicab. However, in some cases these services do not meet the needs of their clients, and TRE operates additional service for these clients.

Customers of TRE are encouraged to be self-sufficient, using public transportation when possible. TRE purchases Mountain Metro and Metro Mobility passes for those individuals that are able to ride the fixed-route service or are eligible for the paratransit service.

TRE serves El Paso, Park, and Teller Counties, although transportation is only provided in El Paso County. Some areas, such as Highway 94, Falcon, Black Forest, and Peyton, are not served by Metro Mobility. Individuals are picked up at home and many trips are to activity centers throughout the area.

Fountain Valley Senior Services

Fountain Valley Senior Services provides a variety of social service programs (including transportation services) to seniors over the age of sixty that are located in southeastern El Paso County. The transportation services provided by Fountain Valley Senior Services are based on the requirements of the Older Americans Act. Fountain Valley Senior Services coordinates with Mountain Metro to provide linked trip service from southeastern El Paso County to the Colorado Springs metro area. Transportation services are available for disabled adults as well.

Service can be curb-to-curb, door-to-door, or door-through-door as required by the client. This entity is also planning on extending services towards Falcon to meet needs in that area.

Additional details on these providers, along with fleet rosters, can be found in the *"Human Services Transportation Coordination Study"* prepared by Pikes Peak Area Council of Governments in 2007 for the region. A variety of other smaller providers are also identified.

NON-MOTORIZED TRANSPORTATION

It is generally accepted that walking and bicycling, as opposed to driving a personal vehicle, promote physical health and lower stress, reduce harmful emissions, and save money and energy. Walking and cycling reduce obesity, and significantly, child obesity, which is targeted by federal transportation programs such as Safe Routes to School. Non-motorized facilities increase the mobility of people with disabilities, young people not yet old enough to drive, and senior citizens who no longer drive. Safe, convenient bicycle and pedestrian facilities also foster vibrant communities and attractive neighborhoods.

Non-Motorized Transportation Programs

Federal transportation programs increasingly stress the importance of non-motorized transportation for all of the above reasons. There is also non-motorized transportation programs developed by the State of Colorado and by the Pikes Peak Area Council of Governments.

CDOT developed its Colorado Guide for the Development of Local and Regional Bicycle and Pedestrian Plans, which states:

> *"The State of Colorado recognizes the benefits of walking and bicycling and highly recommends their use for commuting to work, errands, and recreation. Bicycling and walking provide many benefits such as improved health, less stress, and reductions in air pollution, traffic congestion and energy consumption. In addition, walking is free, bicycles are affordable and inexpensive to maintain…."*

The Guide also draws attention to the link between lack of opportunities for non-motorized transportation and a distinctive rise in obesity in America. It suggests that non-motorized transportation become an integral part of community design in order to effectively combat this alarming trend.

> *"It has been shown that poor community design, where the transportation infrastructure makes it difficult to walk or bicycle promotes physical inactivity, which in turn increases the incidence of overweight Americans (up from 47% in 1976 to 61% in 1999). The federal government is calling on planning and health professionals, elected officials, and citizens to partner to create active community environments by creating opportunities to safely walk and bicycle.*
>
> *To achieve these goals, all roadways should be designed and constructed under the assumption that bicyclists and pedestrians will use them. Bicycles and pedestrians should be considered in all phases of transportation planning, roadway design, engineering, new construction, reconstruction, capacity improvements and transit projects."*

Finally, the Guide reminds us that facilities are only one of several elements essential to building a successful bicycle and pedestrian transportation system. Safety education and training, encouraging walking and bicycling, and law enforcement are also critical.

CDOT provides non-monetary support for improving non-motorized transportation with a variety of programs. It holds events around the state in June to promote Bike to Work Month, and especially Bike to Work Day, each year. It has also initiated an add campaign called "Share the Road" that promotes tolerance of all modes of transportation on Colorado roadways. "Walk to School Colorado" is another campaign that promotes children walking to school instead of being driven by their parents, and provides resources such as a walkability checklist, brochures, and posters. Non-motorized facility design and engineering support is also provided.

PPACG

As part of the overall long-rage planning effort, PPACG has performed a major update to the Regional Non-Motorized Transportation Plan (NMP), drafted originally in 1994. This chapter will comprise key elements of the NMP.

The NMP provides a comprehensive approach to identifying bicycle and pedestrian needs, reviewing improvements, and prioritizing implementation strategies and viable funding sources by jurisdiction. The Plan looked for opportunities to connect and integrate existing facilities, though precise alignments may be determined during the implementation process.

Existing Conditions

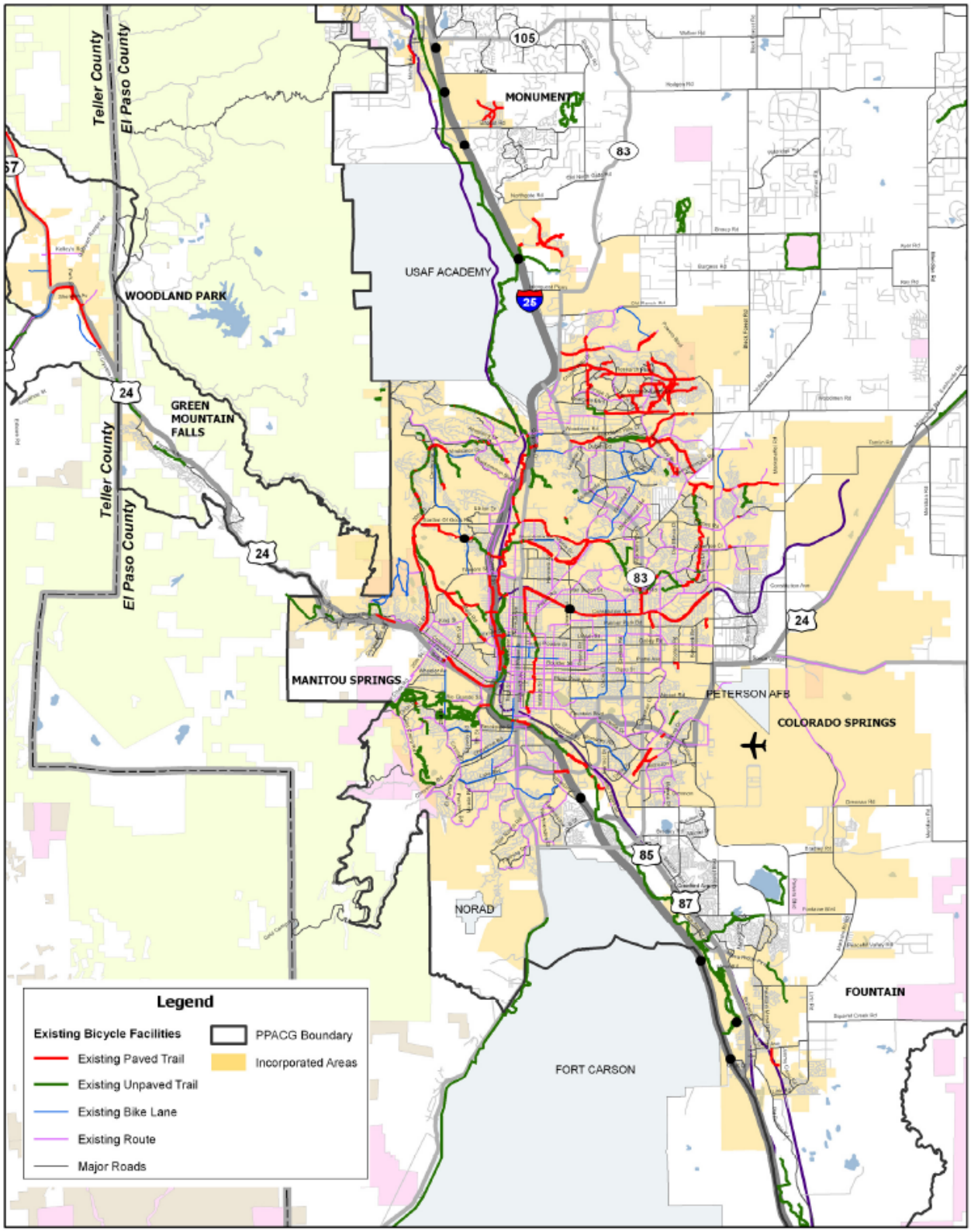
Before considering which projects should be most strongly considered for funding, a review of existing conditions was deemed appropriate. This involved reviewing existing non-motorized transportation facilities and safety, and more briefly, the needs schools and military installations (Figure 4-12). A few up-front comments can be made about the existing non-motorized facilities as a system:

1) The network of bicycle trails and lanes are very limited in serving as a system of facilities to accommodate regional bicycle travel within the PPACG area.
2) Many existing trails have missing links and/or difficult, unsafe crossings at major arterials.
3) Trails and lanes begin and end erratically.
4) Many of the trails have obstacles, such as terrain or railroad crossings.
5) Many of the facilities are in need of repair and basic maintenance such as sweeping.
6) Bike lanes are often depositories for snow, making them unavailable to bicyclists during winter conditions.

In short, the bicycle network in the Pikes Peak Area does not function as a system. Major improvements are needed to provide reliable connections between one area of the region and another.

In review of safety conditions, it is evident that bicycle crashes occur throughout the region. Many of these bicycle crashes occur in areas that lack bicycle facilities. Crashes that occur along bicycle trails and lanes are typically resulting from poor street crossings. Locations of high pedestrian crashes are at locations with high pedestrian utilization, such as the Colorado Springs downtown area or Manitou Springs.

FIGURE 4-12: EXISTING FACILITIES



INTERMODAL TRANSPORTATION PLANNING (FREIGHT, AIR, AND RAIL)

The economic success of a region to a large degree depends on its connections to the rest of the world and its ability to facilitate the movement of people and goods across and within its boundaries. Increased competition in today's global economy rewards those regions that actively plan for and pursue seamless transportation systems, which depend on efficient connections between all modes of travel. Transportation facilities and service levels are important elements that companies consider when locating to anew area because of the cost savings and increased economic competitiveness these regions provide.

The Colorado Springs area fulfills a role as an important link in the regional, statewide, and national transportation system. At the local level, intermodal planning activities and ongoing improvements that address freight and other needs will help to maintain the region's economy and competitiveness.

Intermodal is the concept that binds the modes together so that people and freight movements can be made in the most efficient manner possible. Beyond the basic travel needs of Colorado Springs area residents, there are additional travel considerations for moving freight on rail and truck and for personal inter-regional travel via bus, rail, and plane.

Air, rail, truck, and inter-city bus industries are essential components in the local economy and play a fundamental role in the Pikes Peak area transportation system. The Moving Forward 2035 Regional Transportation Plan's modal system plans represent a comprehensive effort to build a multi-modal transportation system, but additional efforts are necessary to maintain the economic competitiveness and attractiveness of the region. Since many of these planning elements involve private sector entities, it is desirable to involve them in the planning process.

Freight Movement

The transportation of freight in the Colorado Springs metropolitan area is primarily through commercial vehicles, or trucks. A commercial vehicle is defined as any vehicle with a gross vehicle weight of over 10,000 pounds and used primarily for transporting freight. Virtually every type and quantity of freight is moved by commercial vehicles. On average, every product in Colorado travels five to seven times in a truck during its manufacturing and distribution cycle. Certain sectors of Colorado's economy, including agriculture, oil and gas production and manufacturing, depend heavily on commercial vehicles for interstate and intrastate movement. With this reliance on commercial vehicles, it is essential that the region provide an adequate highway system to ensure efficient transport of goods.

Trucks account for approximately 11% to 12% of the daily inter-regional traffic. They carry more than five million tons of goods between Denver and Colorado Springs each year, typically handling more valuable, time-sensitive cargo than that carried by rail. Inter-regional truck freight demand is expected to increase at a rate proportional to that of the overall traffic flow.

Within the City of Colorado Springs, truck traffic is limited to those truck routes adopted by the City of Colorado Springs City Council with recommendations from its Truck Route Advisory Committee. El Paso County does not specifically designate truck routes; rather, the County allows truck traffic on all roadways within the County except those roads that have weight-restricted bridges. Other governmental agencies in the Colorado Springs metropolitan area typically follow this policy. Figure 4-13 illustrates the truck routes in the Colorado Springs metropolitan area.

In Colorado truck traffic is expected to grow significantly over the next 20 years. Currently, highways and then rail carry the greatest tons, with 142 million tons by road and 51 millions by train. Table 4-2 Shows anticipated freight shipments to, from and within Colorado in 1998, 2010, and 2020.

TABLE 4-2: FREIGHT SHIPMENTS

	Tons (millions)			Value (billions $)		
	1998	**2010**	**2020**	**1998**	**2010**	**2020**
By Mode						
Air	<1	1	2	33	84	147
Highway	142	208	257	90	178	296
Rail	51	67	76	9	17	26
By Destination						
Domestic	190	270	327	127	268	447
International	4	6	8	5	11	22
State Total	**194**	**276**	**335**	**132**	**279**	**469**

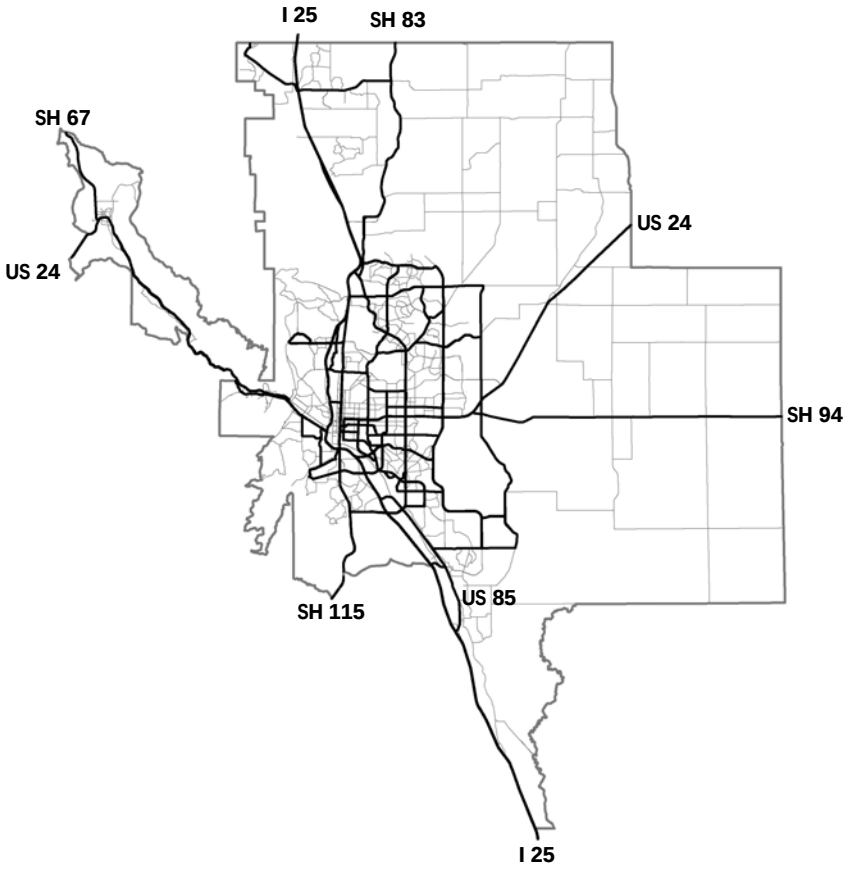
Source: 2030 Statewide Transportation Plan Freight Technical Report, CDOT February 2005

As described above, the City of Colorado Springs has identified specific truck routes throughout the City. The adequacy of the Truck Route Network is monitored on a regular basis by the City's Trucking Issues Subcommittee (TISC). The TISC has been meeting since September 2005 to discuss possible changes to the City's Truck Route Network and truck operations regulations. The TISC is reviewing 41 road segments that fall into two categories:

1. Road segments that are classified as freeways, expressways or principal arterials but are not currently designated as truck routes (21 roadways).

2. Road segments that are currently designated as truck routes, but are classified as a minor arterial or below (20 roadways).

FIGURE 4-13: TRUCK ROUTES



The TISC is developing its preliminary findings/recommendations and has presented them to CTAB and City Council. Based on input from the Council, the TISC is refining its preliminary findings/recommendations and will report back to Council before setting public meetings to get citizen input.

Freight Improvements

Operations

The key operational improvement for truck freight movement is maintaining or improving the capacity and operations of the key truck routes within the Pikes Peak region. Improvements could include capacity improvements that address gaps in the existing roadway system and/or eliminating bottlenecks through congestion management improvements such as intelligent transportation systems (ITS), national real-time system information programs.

Aviation

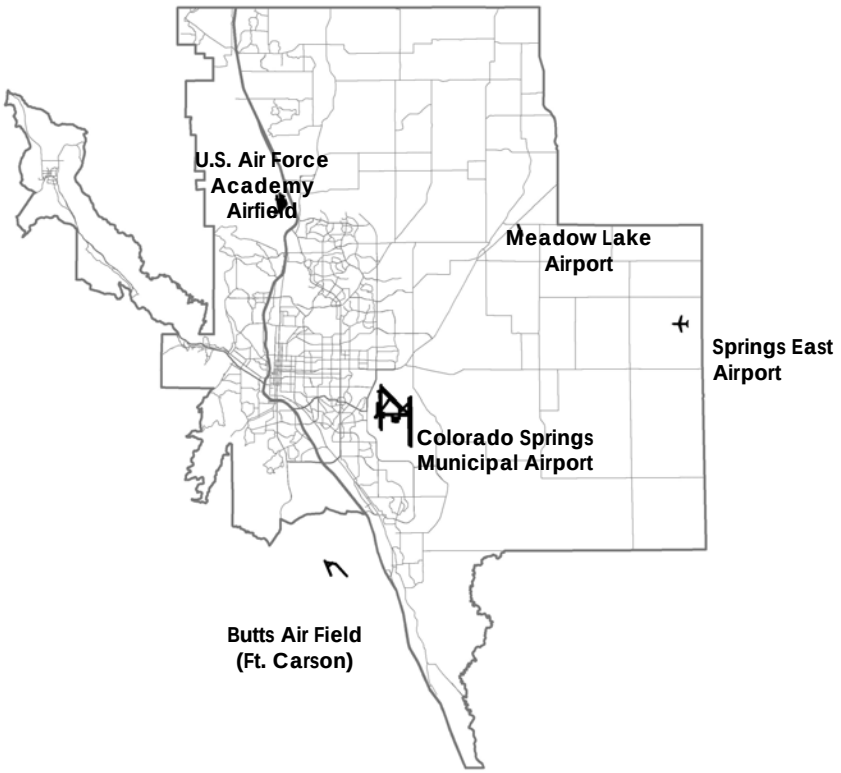
The Colorado Springs Metropolitan Area is served by three general aviation and/or public use airports: Colorado Springs Municipal Airport, Meadow Lake Airport, and Springs East Airport. Three military use airports are also located within the region. These military airports include:

- United States Air Force Academy (USAFA) Air Field
- USAFA Training Field East of Ellicott
- Ft. Carson – Butts Air Field
- Peterson Air Force Base
- Schriever Air Force Base

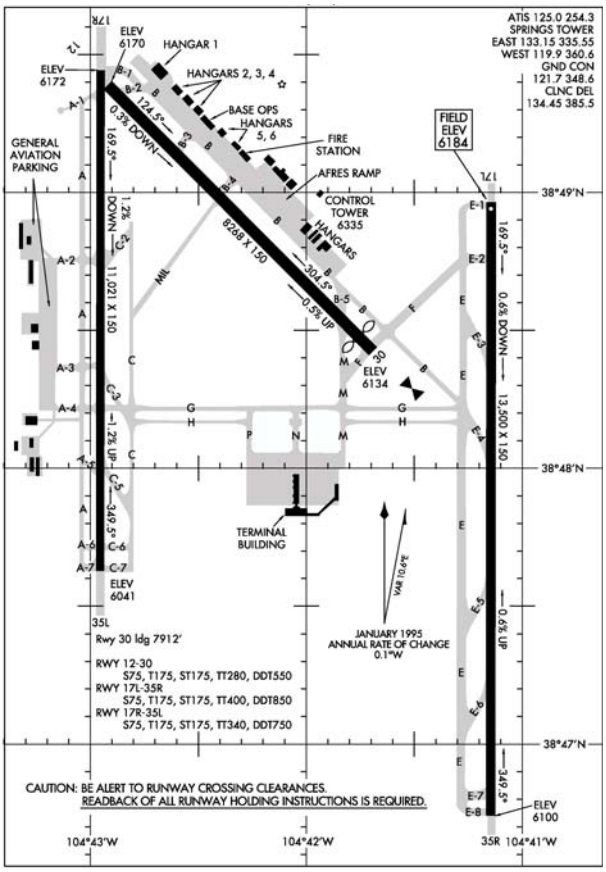
These airports are not open to the public, but are important to note due to the traffic they generate and the airspace they control. With the exception of the USAFA training field east of Ellicott, the locations of the three general aviation airport and two military airports are illustrated in Figure 4-14.

Following are descriptions of the three general aviation and/or public use airports in the Colorado Springs metropolitan area; Colorado Springs Municipal Airport, Meadow Lake Airport, and Springs East Airport.

FIGURE 4-14: AIRPORTS



Colorado Springs Municipal Airport



The Colorado Springs Municipal Airport is owned and operated by the City of Colorado Springs as a unit of the City's Colorado Springs Companies Group. The FAA's National Plan of Integrated Airport Systems (NPIAS) classifies the Colorado Springs Airport as a primary commercial service airport.

The Colorado Springs Airport is located in the southeast portion of the City of Colorado Springs, with its boundaries extending into El Paso County. Its elevation is 6,183 feet above sea level. The airport operates three runways: two north-south runways and one crosswind runway. A 12-gate terminal building, expandable to 20 gates, was completed in 1994.

There are nine major and national commercial airlines which currently serve Colorado Springs region. These include:

- Allegiant Air
- American Airlines
- Continental Airlines
- Delta Air Lines
- Northwest Airlines
- United Airlines
- US Airways/American West

In addition to the major and national carriers, there are five regional and commuter airlines which serve the Colorado Spring Municipal Airport, these include:

- American Eagle
- ExpressJet Airlines (Continental Express)
- Comair (Delta Connection)
- Mesa Air Group (America West Express, Mesa Airlines and United Express)
- Sky West Airlines (Delta Connection, and United Express)

There are on average 49 average daily commercial departures per day and more than 2 million passengers pass through the Colorado Springs Airport (COS) each year. Enplaned passengers per major/national airlines is 69, and for regional/commuter airlines at 39.

There are also three air cargo services based at Colorado Springs Municipal Airport: Airborne Express, Federal Express and Key Lime Air.

COS is conveniently located near I-25 and is within easy driving distances to various Colorado cities and tourist attractions.

Uncongested air and ground space, short taxi time, and a low weather-related closure/cancellation rate are why COS consistently ranks among the lowest in delays of all U.S. airports.

Drennan Road serves vehicular access to the airport. Regional access is via I-25, Martin Luther King Expressway (US 24 Bypass) and Powers Boulevard, the latter of which intersects Drennan Road. Improved access (from Powers Boulevard and/or Drennan Road) is being explored through an Environmental Assessment by the City of Colorado Springs.

Colorado Springs Municipal Airport Operations

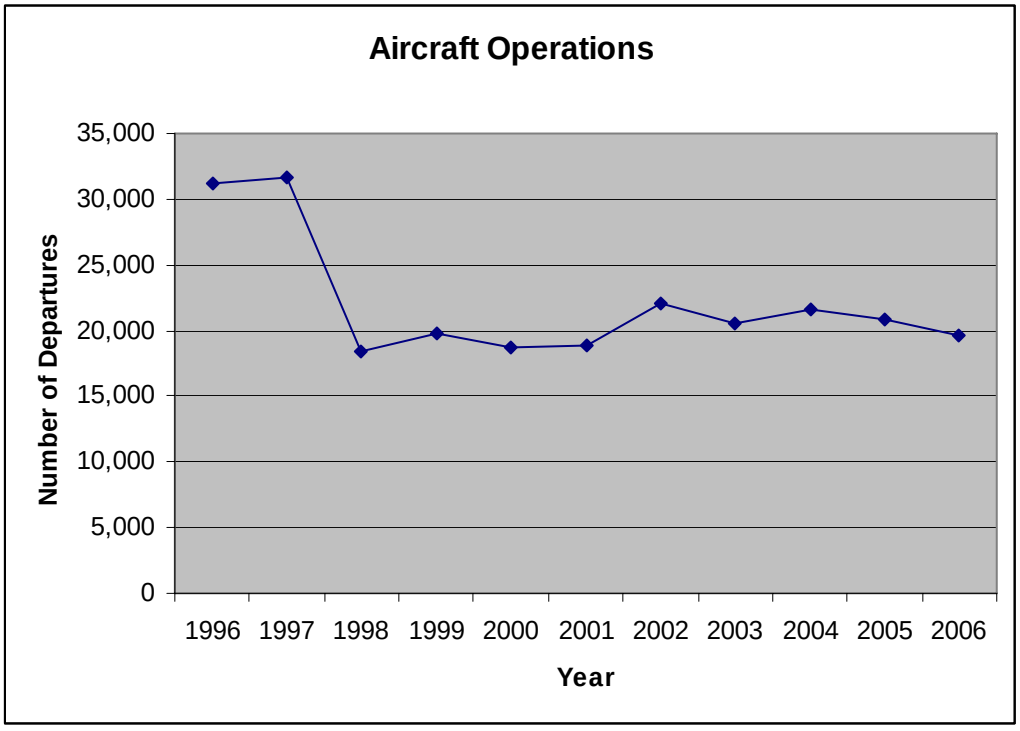
The Colorado Springs Airport Planning Program Advisory Committee was formed in 1996 for the purpose of providing support for the development of the Airport Master Plan, which was completed in 1999. As part of that effort, a review and analysis of current and historic aviation activities was performed. From that effort, aviation activity forecasts were developed by activity type. A summary of 1996 historical and 2017 forecast operations is presented in Table 4-3.

TABLE 4-3: COLORADO SPRINGS MUNICIPAL AIRPORT ANNUAL OPERATIONS

Activity	1996	2017
Air Carrier	67,293	166,000
Air Cargo	3,016	3,600
Military	30,228	46,200
General Aviation	127,063	169,200

According to Colorado Springs Municipal Airport management records aircraft operations declined sharply in 1997. At this time, Western Pacific Airlines, the largest commercial service airline at that time, moved its hub to Denver International Airport. Since 1997, aircraft operations have held relatively steady. Figure 4-15 shows the change in aircraft operations between 1996 and 2006.

FIGURE 4-15: AIRCRAFT OPERATIONS FROM 1996 TO 2006



The number of enplaned passengers, aircraft operations, landed weight and freight and mail for the years 2004 to 2006 as reported in the Colorado Springs Municipal Airport Annual Report is presented in Table 4-4.

TABLE 4-4: COLORADO SPRINGS MUNICIPAL AIRPORT OPERATIONS (2004-2006)

Activity	2004	2005	2006
Enplaned Passengers	1,034,747	1,030,833	1,017,016
Aircraft Operations	174,909	165,911	140,958
Landed Weight (in thousands)	1,563,735	1,525,778	1,417,293
Freight and Mail (tons)	18,236	16,725	16,303

Operating expenses increased from $13,216,784 in 2005 to $21,542,0219 in 2006. These costs are primarily due to an increase in personnel costs and equipment purchases. Although the airport experienced a slight decrease in passenger traffic, operating revenues increased from $13,216,784 in 2005 to $13,804,532 in 2006 due primarily through terminal concessions and public parking revenues. The completion of the public parking lot reconfiguration allowed for an increase in short term parking utilization. In addition, the airport raised its long term and valet parking fees. Landing fees decreased by $513,513 due to a reduction in the number of landings

Airport Maintenance

The Colorado Springs Airport has received approximately $36 million in grants from the Federal Aviation Administration airport improvement program for planning, design and operational/maintenance improvements.

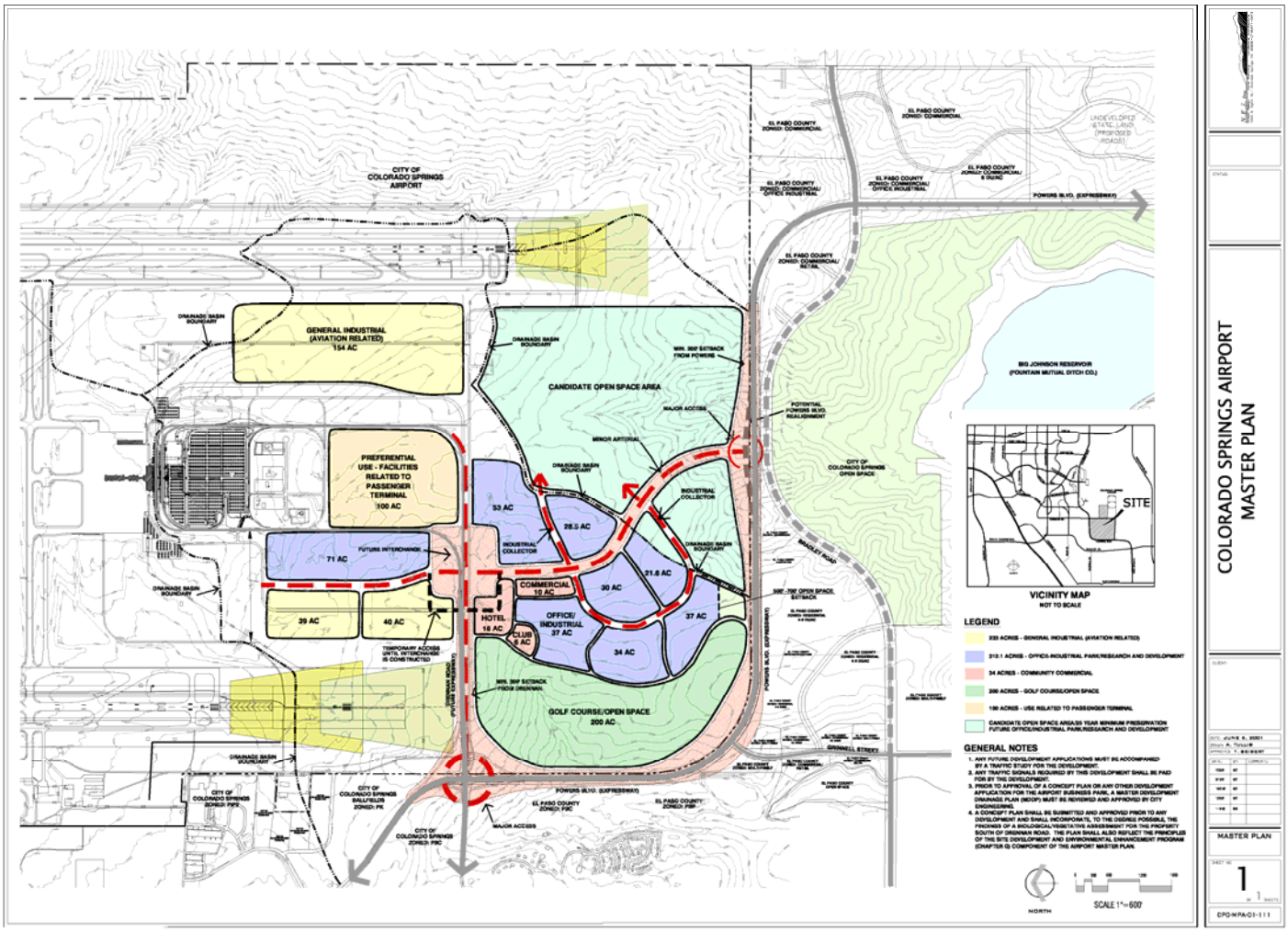
This includes a $12 million grant that will be used for rehabilitation of one of the airport's three runways. The problem with the runway is a chemical reaction that has been taking place called alkali-silica reactivity that occurs between Portland cement concrete and certain types of aggregates. It causes a gel-like substance to secrete and ultimately causes the structure to fail. The project was approved because the runway is deteriorating and the airport is important to the national system.

Colorado Springs Municipal Airport Expansion

The Colorado Springs Municipal Airport Master Plan includes the Colorado Springs Airport Business Park which will encompass approximately 1,500 acres south of the Airport. It includes development of 450 acres of mixed commercial/industrial use, an aviation/military facility (100 acres), an 18-hole golf course, and approximately 475 acres of open space. A map of the Colorado Springs Municipal Airport Master Plan is presented in Figure 4-16. The Business Park is currently under construction and is expected to be constructed over the next 25 years in response to market demand. In addition, Frontier Airlines recently announced that the carrier's new heavy-maintenance facility would be constructed at the airport. The 100,000 square foot facility is expected to be completed in 2009.

Construction has begun on the expansion of the Colorado Springs Airport Business Park. The Business Park would generate additional traffic trips in the vicinity of the airport and potentially increase aircraft operations at the airport itself.

FIGURE 4-16: COLORADO SPRINGS MUNICIPAL AIRPORT MASTER PLAN



Traffic analyses conducted as part of the Environmental Assessment for the Business Park estimates that approximately 90,400 trips are expected to be generated by the Business Park at full build out. In addition to the traffic the Business Park is projected to generate, the internal Business Park roads will need to accommodate terminal and adjacent development traffic. An estimated 109,500 daily trips, including Business Park, terminal and adjacent development traffic would be accommodated by local roadways. According to the Traffic Impact Analysis Report (CH2M Hill 2005), all of the intersections within the Business Park operate at or better than the desired LOS for peak hour operations.

FHWA and CDOT are currently conducting an Environmental Assessment of the proposal to upgrade Powers Boulevard to a controlled-access freeway. Other improvements to the adjacent roadway network are planned independent of the Business Park, including upgrading Fountain Boulevard and constructing a new Drennan Road expressway with an interchange at Hancock Expressway.

Meadow Lake Airport

Meadow Lake Airport is located 3.5 miles east of Colorado Springs' city limits near the intersection of US 24 and Judge Orr Road. The Federal Aviation Administration has designated this privately owned facility as a reliever to the Colorado Springs Municipal Airport. Its average number of annual operations is 55,135.

Since 1990, Meadow Lake Airport has under-gone a number of improvements to its facilities: lengthening, widening and paving of Runway 15/33, reconstruction and extension of its parallel taxiway system, and installation of medium intensity runways. Meadow Lake has three runways in operation. They are described in Table 4-5.

TABLE 4-5: MEADOW LAKE AIRPORT RUNWAYS

Runway	Length	Surface
15/33	6,000	Asphalt
8/26	2,084	Turf
N/S	1,800	Turf/Turf

A master plan has been completed for Meadow Lake Airport that would include an 800-acre expansion of the airport and the adjacent Meadow Lake Industrial Park. At build-out, the expanded Meadow Lake Airport will provide for a new east-west runway and the existing runway will be extended from 6,000 feet to 8,300 feet.

Airport expansion plans include improvements to the existing roadway system including construction of two new access roads and realignment of Judge Orr Road to the north and east of its present alignment to intersect with US 24 to correct safety deficiencies.

Springs East Airport

Springs East Airport is located on Ellicott Road between US-24 and SH-94. It has 8,760 annual operations. The facility has two runways described as follows:

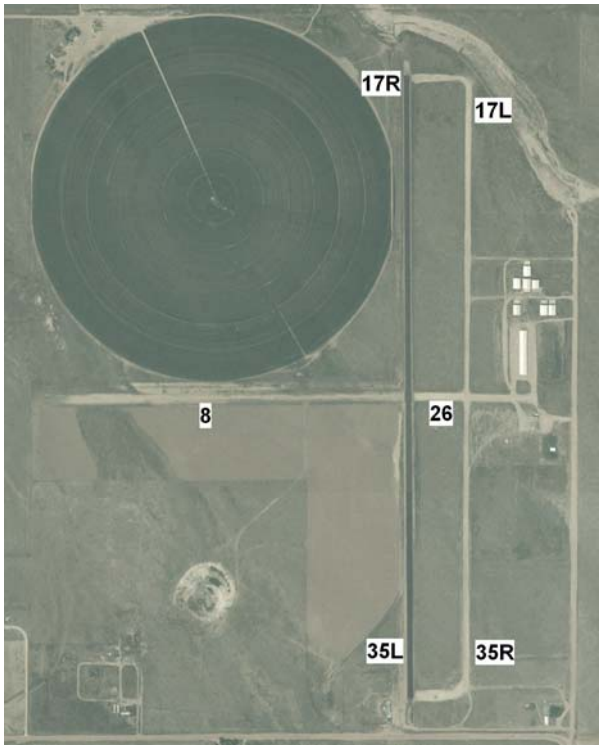


TABLE 4-6: SPRINGS EAST AIRPORT RUNWAYS

Runway	Length	Surface
17/35	5,000	Asphalt
8/26	3,440	Gravel

Aviation Improvements

From information obtained from the FAA, passenger enplanements in Colorado have increased steadily (a passenger enplanement is one passenger boarding a commercial aircraft). In 1996, there were 18,471,845 passenger enplanements. In 2005, the enplanement totals rose by 23% to 22,814,837. Not only does the statewide aviation system play a key role in the transportation network, it also generates billions of dollars in economic benefits, including thousands of jobs.

Master planning efforts have been undertaken to expand and improve both the Colorado Springs Municipal Airport and Meadow Lake Airport to accommodate passenger and cargo air traffic. These plans would provide increased aircraft capacity at these two airports, as well as increased industrial/commercial development in the vicinity of the airport.

Rail

Two class one railroads operate in the Colorado Springs area: Burlington Northern and Union Pacific Railroads. A class one railroad is defined as a railroad with annual gross operating revenues of $50 million or more.

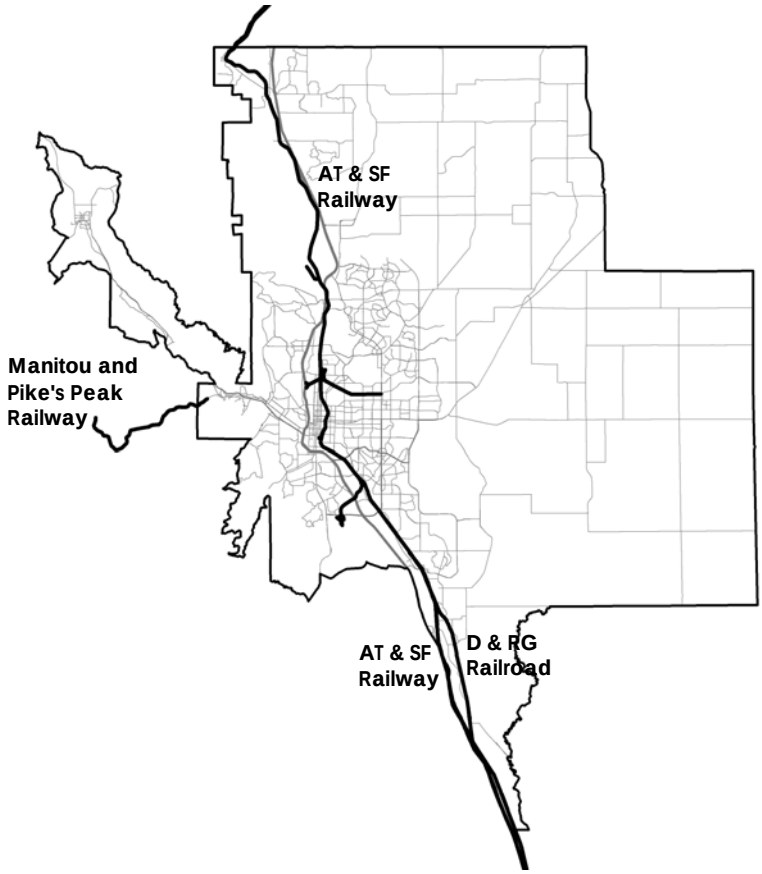
A total of 170 rail crossings exist within the metropolitan planning area. The majority of these crossings are located along the class one rail lines. The remaining crossings are located along classification yards and spurs to the main lines. Table 4-7 summarizes the number of rail crossing facilities classified as grade-separated and at-grade as well as subcategorized as public and private. Grade-separated facilities are categorized as crossing under or over the rail line.

TABLE 4-7: RAIL CROSSING INVENTORY

Type of Rail Crossing	Crossing	Percent
Grade-Separated		
Public – Underpass of Rail	29	18%
Public – Overpass of Rail	21	12%
Subtotal:	50	30%
At-Grade		
Public	76	44%
Private	44	26%
Subtotal:	**120**	**70%**
Total	**170**	**100%**

The existing rail system for the Colorado Springs metropolitan area is illustrated in Figure 4-17. Within the Colorado Springs metropolitan area, two tracks enter El Paso County on its northern boundary and continue to the Town of Palmer Lake where they connect as the Joint Line. The Joint Line is a single track shared by both railroads that continues through Colorado Springs and Security/Widefield.

FIGURE 4-17: RAIL NETWORK



The track then separates into two single lines near the City of Fountain. Several spur lines are located within the Colorado Springs metropolitan area, these include:

- Service to the Martin Drake and Birdsall Power Plants;
- Service to Fort Carson; and
- Service to Garden of the Gods Road industrial area near Chestnut Street.

Within the region, the addition of rail crossings is very unlikely over the 25 year planning horizon. The increasing roadway traffic and potential at-grade conflicts would likely prevent the railroad company from receiving approval of additional crossings. Due to the increased safety issues with at-grade crossings, the railroads and communities with at-grade crossings have been exploring the possibility of constructing grade-separated interchanges.

Based on the evaluation criteria used, these options were not selected for further consideration as part of the subsequent I-25 Environmental Assessment.

Rail Improvements

The Colorado Department of Transportation (CDOT) and the two class one railroads operating in Colorado, the Burlington Northern Santa Fe Railway Company and the Union Pacific Railroad, have been holding discussions regarding the possible re-location of rail infrastructure east of El Paso County and away from the Front Range. These preliminary efforts between CDOT and the railroads have been known either as the "Colorado Railroad Partnership Project" or as "Colorado's Safety and Mobility Partnership Project." This study is intended to be preliminary in nature and broad in terms of detail, since it may be an initial phase of what may become a more comprehensive analysis of the infrastructure. The specific impacts to rail operations in the Colorado Springs Metropolitan Area have not been finalized. Any actions resulting from these discussions will be incorporated into future long-range plan updates.

Rocky Mountain Rail Corridor

Another rail proposal is from the Rocky Mountain Rail Authority (RMRA), an organization formed by Inter-Governmental Agreements between Colorado cities, town, counties and transportation districts. They are requesting Congress to designate the 11th High Speed Corridor parallel to I-25 as the Rocky Mountain Corridor that will serve the nearly seven million citizens of Wyoming, Colorado and New Mexico. The Corridor will serve the citizens with over 1000 miles of passenger rail track from Casper to Albuquerque and Denver International Airport to Colorado ski areas and mountain communities.

This Page Left Intentionally Blank