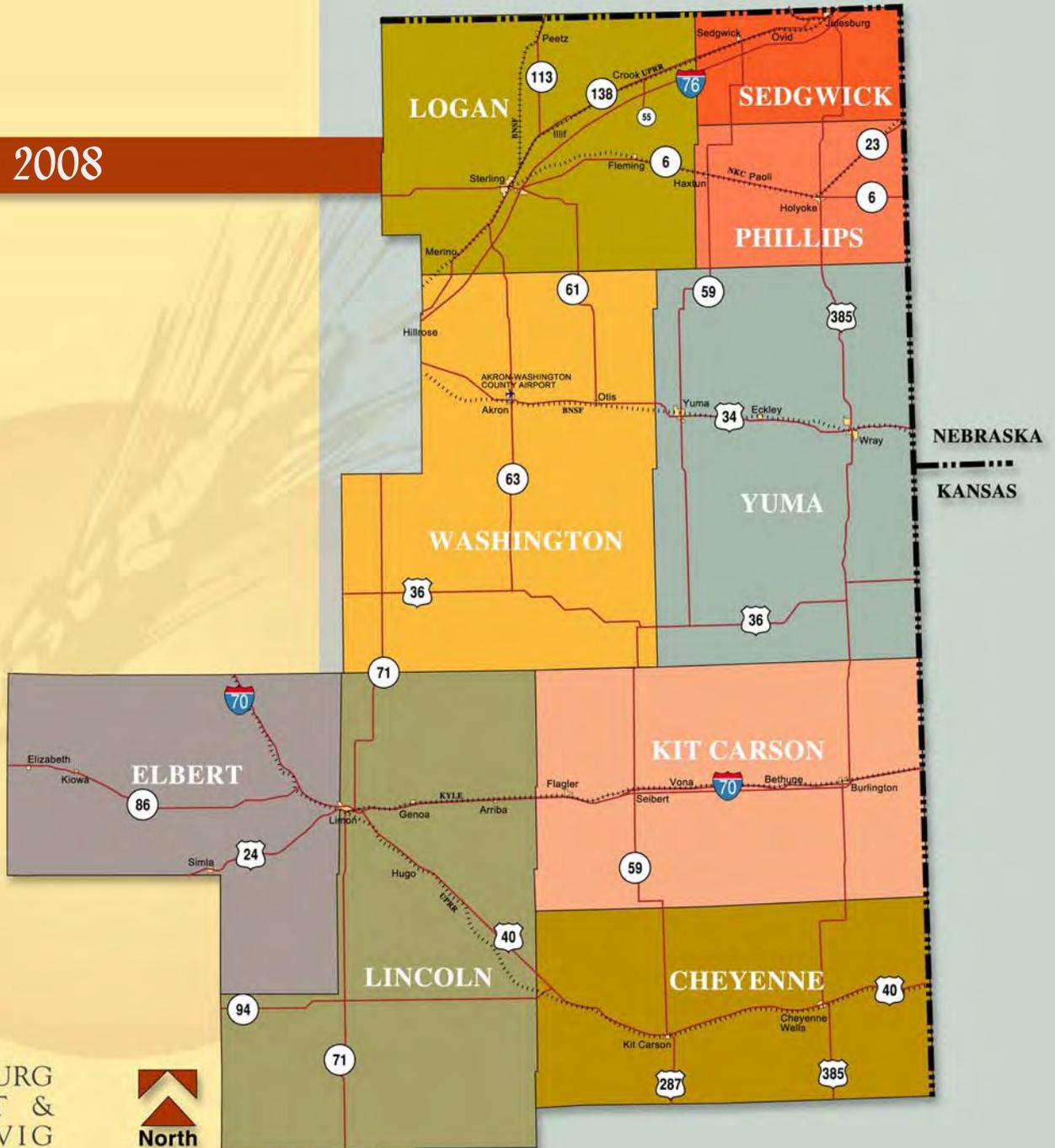




Eastern TPR 2035 Regional Transportation Plan

January 2008



EASTERN TPR 2035 REGIONAL TRANSPORTATION PLAN

Prepared for:

Eastern Transportation Planning Region

**Colorado Department of Transportation (CDOT)
Division of Transportation Development (DTD)**

Prepared by:

Felsburg Holt & Ullevig
6300 South Syracuse Way, Suite 600
Centennial, CO 80111
303/721-1440

In association with:

**URS Corporation
LSC Transportation Consultants, Inc.**



TABLE OF CONTENTS

	<u>Page</u>
List of Acronyms	i
Executive Summary	iii
Introduction	1
Project Background	1
Planning Area	1
TPR Representatives	3
Planning Process	4
Vision, Goals, and Strategies	5
Public Participation	12
Pre-Forum Meeting	12
Regional Transportation Forum	12
Prioritization Meeting	12
Draft Plan Review	13
Accomplishments	14
CDOT Region 1	14
CDOT Region 4	16
Transportation System Inventory	17
Roadway Network	17
Rail System	37
Bicycle Facilities	37
Aviation System	37
Transit System	42
Socioeconomic Profile	62
Population	62
Household Characteristics	63
Employment	63
Place of Work	64
Means of Transportation to Work	65
Low-Income Areas	65
Minority Status	65
Environmental Overview	68
Wildlife	69
Threatened or Endangered Species	69
Air Quality	72
Water Quality	72
Wetlands	74
Noise	74
Hazardous Materials	75
Public Lands	77
Historical and Archaeological Sites	79
CDOT Environmental Forum	79



**Eastern TPR
2035 Regional Transportation Plan**

TABLE OF CONTENTS (Continued)

	<u>Page</u>
Corridor Visions and Prioritization -----	81
Corridor Vision Process -----	81
Corridor Visions-----	81
Corridor Prioritization Process -----	106
Vision Plan -----	108
Multimodal Plan-----	108
Transit Plan-----	110
Aviation Plan -----	113
Rail Plan -----	115
Fiscally Constrained Plan -----	116
2035 Resource Allocation-----	116
Multimodal Constrained Plan-----	117
Transit -----	120
Aviation -----	120
Midterm Implementation Strategy -----	121
Strategies to Increase Transportation Revenue-----	121
High Priority Corridor Strategies-----	121

LIST OF APPENDICES

- APPENDIX A PUBLIC PARTICIPATION
 - APPENDIX B Local Transit Plans
 - APPENDIX C ENVIRONMENTAL
-



Eastern TPR 2035 Regional Transportation Plan

LIST OF FIGURES

	<u>Page</u>
Figure 1. Planning Area -----	2
Figure 2. Plan Development Process -----	4
Figure 3. National Highway System -----	18
Figure 4. Highway Functional Classification -----	20
Figure 5. Scenic Byways -----	22
Figure 6. Existing Average Annual Daily Traffic -----	24
Figure 7. Projected 2035 Average Annual Daily Traffic -----	25
Figure 8. Existing Volume to Capacity Ratios -----	26
Figure 9. Projected 2035 Volume to Capacity Ratios -----	27
Figure 10. Surface Conditions -----	29
Figure 11. Bridge Conditions -----	30
Figure 12. Highway Shoulders -----	34
Figure 13. Existing Truck Traffic -----	35
Figure 14. Projected 2035 Truck Traffic -----	36
Figure 15. Railroads -----	38
Figure 16. Airports -----	39
Figure 17. Transit Service Areas -----	43
Figure 18. Intermodal Facilities -----	49
Figure 19. Transit Ridership -----	51
Figure 20. Low Income Population -----	66
Figure 21. Minority Population -----	67
Figure 22. Wildlife -----	70
Figure 23. Water -----	73
Figure 24. Hazardous Materials -----	76
Figure 25. Public Lands -----	78
Figure 26. Eastern TPR Corridors -----	82



Eastern TPR 2035 Regional Transportation Plan

LIST OF TABLES

	<u>Page</u>
Table 1. Eastern TPR Representatives -----	3
Table 2. State Highway Centerline Miles -----	21
Table 3. Local Street Centerline Miles -----	21
Table 4. Bridges Eligible for Rehabilitation or Replacement Funding -----	31
Table 5. Fatal Crash Rates by Corridor -----	32
Table 6. Airport Operations - Part 1 -----	40
Table 7. Estimated Transit Needs -----	51
Table 8. Transit Gap Elimination -----	61
Table 9. Population Estimates and Forecasts by County -----	62
Table 10. Household Characteristics -----	63
Table 11. Employment Forecasts -----	64
Table 12. Place of Work by County -----	64
Table 13. Means of Transportation to Work -----	65
Table 14. Federally Threatened or Endangered Species with Potential Habitat in the Eastern TPR -----	71
Table 15. Summary of Environmental Issues and Concerns -----	80
Table 16. Evaluation Criteria Weighting -----	107
Table 17. Ranked and Prioritized Corridors -----	107
Table 18. Vision Plan Priorities -----	109
Table 19. Transit Vision Plan -----	113
Table 20. Aviation Vision Plan -----	115
Table 21. 2035 Resource Allocation -----	117
Table 22. Fiscally Constrained Plan -----	119
Table 23. Fiscally Constrained Transit Plan -----	120
Table 24. Fiscally Constrained Aviation Plan -----	120



Eastern TPR 2035 Regional Transportation Plan

LIST OF ACRONYMS

AADT	Average Annual Daily Traffic
BNSF	Burlington Northern & Santa Fe Railway Co.
BRS	Bridge on System funding
BSR	Bridge Sufficiency Rating
CASTA	Colorado Association of Transit Agencies
CDOT	Colorado Department of Transportation
CDPHE	Colorado Department of Public Health and Environment
CDPS	Colorado Discharge Permit System
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CFL	Central Federal Lands
CIP	Capital Improvement Program
COG	Council of Governments
CWA	Clean Water Act
dBa	Decibels
DIA	Denver International Airport
DOLA	Department of Local Affairs
DOW	Division of Wildlife
DRCOG	Denver Regional Council of Governments
ECCOG	East Central Council of Local Governments
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
IGA	Intergovernmental Agreement
IRC	Internal Revenue Code
ISTEA	Intermodal Surface Transportation Efficiency Act
ITS	Intelligent Transportation Systems
MBTA	Migratory Bird Treaty Act
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization
NAC	Noise Abatement Criteria
NAFTA	North American Free Trade Act
NECALG	Northeast Colorado Association of Local Governments
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NHS	National Highway System
NHTS	National Household Travel Survey
NPDES	National Pollution Discharge Elimination System
NPIAS	National Plan of Integrated Airport Systems
RCRA	Resource Conservation and Recovery Act
RPC	Regional Planning Commission
RPP	Regional Priority Program
RSVP	Retired and Senior Volunteer Programs
RTA	Regional Transportation Authority
RTP	Regional Transportation Plan



Eastern TPR 2035 Regional Transportation Plan

SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users
SGPI	Shortgrass Prairie Initiative
SHPO	State Historic Preservation Office
SP	Strategic Projects
STIP	Statewide Transportation Improvement Program
TCRP	Transit Cooperative Research Program
TEA-21	Transportation Equity Act for the 21 st Century
TPR	Transportation Planning Region
TSM	Transportation Systems Management
UP	Union Pacific Railroad
USACE	U.S. Army Corps of Engineers
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
V/C	Volume to Capacity [Ratio]
VMT	Vehicle Miles of Travel



Eastern TPR 2035 Regional Transportation Plan

EXECUTIVE SUMMARY

Planning Process

The Eastern Transportation Planning Region (TPR) planning area is one of the fifteen TPRs in the state. It is located in northeast Colorado, and is comprised of Cheyenne, Elbert, Kit Carson, Lincoln, Logan, Phillips, Sedgwick, Washington, and Yuma Counties. With the Colorado Department of Transportation (CDOT) developing the 2035 Statewide Transportation Plan, the Eastern TPR has undertaken this current effort to revisit, update and refine the 2030 Regional Transportation Plan (RTP), expanding the time horizon to the year 2035.

The planning process began with a review of the visions, goals, and objectives as established in the 2030 RTP. Representatives of the communities in the region and the general public were asked to help identify recent trends in the region that affect the transportation system and the long-range needs of the region. Overviews of the existing transportation system, socioeconomics, the environment, and projected growth in the region were completed based on information provided in the CDOT planning dataset.

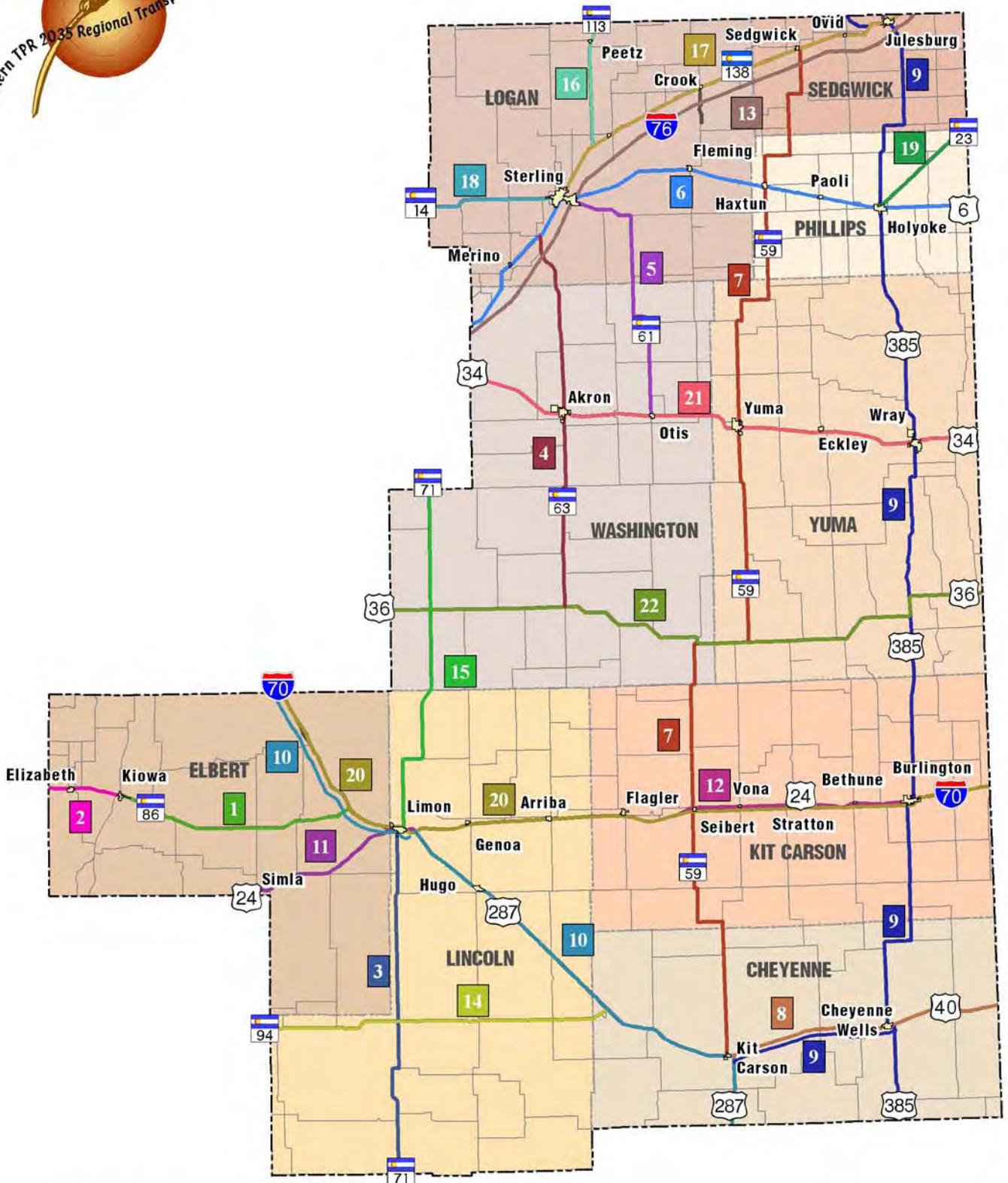
The inventory and initial public input were used to update the corridor visions which were established in the 2030 RTP. Each of the 22 multi-modal corridors in the Eastern TPR (as shown on **Figure ES-1**) has a vision, goals, and specific strategies to achieve the vision and goals.

Vision Plan

The TPR Representatives examined all of the available background data, matched unmet needs with the region's Mission Statement and Goals, and developed a vision for each corridor that is consistent with the needs and desires of the residents. The Vision Plan costs by transportation mode are provided in **Table ES-1**. Over the 28-year planning horizon, there is an estimated total need of over \$2.75 billion. All dollar amounts in this plan are expressed in constant 2008 dollars.

Table ES-1. Vision Plan Costs

Transportation Mode	Cost (millions)
Highway	\$2,502.1
Transit	\$ 89.8
Aviation	\$ 158.9
Total	\$2,750.8



Source: CDOT 2035 Transportation Planning Dataset



Figure ES-1
**Eastern TPR
 Transportation Corridors**



Eastern TPR 2035 Regional Transportation Plan

Fiscally Constrained Plan

An estimated \$191 million in funding will be available to the Eastern TPR for the time period of 2008 through 2035. Since the TPR's Vision Plan identifies needs which significantly exceed the level of available funding, the Regional Planning Commission (RPC) reviewed options and priorities for funding and assigning program amounts for each improvement pool, corridor, and transportation mode, as summarized in **Table ES-2**.

Table ES-2. Fiscally Constrained Plan Summary

Rank	Description	Cost (millions)
Pools	Shoulder Improvement Pool	\$0
	R4 Intersection Improvement Pool	\$1.145
	R4 Bridge Rehabilitation Pool	\$2.290
	R4 Traffic/Safety Management Pool	\$2.290
	R1 Operational Improvement Pool	\$3.080
	R1 Generic Projects Pool	\$3.100
1	I-76 Northeast Colorado (Corridor 13)	\$7.101
2	I-70 Plains (Corridor 20)	\$6.000
3	US 385 High Plains Highway (Corridor 9)	\$9.360
4	US 287 Ports to Plains (Corridor 10)	\$0
5	SH 71 Heartland Expressway (Corridor 15)	\$4.970
6	US 34 Eastern Plains (Corridor 21)	\$2.749
7	SH 86 Urban (Corridor 2)	\$3.000
8	US 24 Colo. Springs to Limon (Corridor 11)	\$0
Transit (Community Based)		\$74.266
Aviation (Five Airports)		\$72.000
Total		\$191.351



Eastern TPR 2035 Regional Transportation Plan

Midterm Implementation Strategy

Midterm Implementation Strategies are used to identify what can be done to address difficult tradeoffs that are necessary to manage the transportation system over the next ten years, knowing there are limited funds and increasing costs. The Eastern TPR selected the eight High Priority Corridors for priority implementation, including a set of key strategies from the respective corridor vision. These strategies should be the focus of transportation investments over the next ten years. In general, the following strategies have been identified as the top priorities for the region. These strategies tend to be lower-cost improvements which are attainable in the short term and would provide significant benefit.

- ▶ Maintain infrastructure by adding surface treatments/overlays and rehabilitating/replacing bridges
- ▶ Implement improvements at high hazard locations to lower crash rates
- ▶ Implement recommendations from corridor studies
- ▶ Add/improve shoulders
- ▶ Consolidate and limit access points and develop access management plans
- ▶ Construct intersection improvements



Eastern TPR 2035 Regional Transportation Plan

INTRODUCTION

Project Background

In 1991, State and Federal legislation was adopted that dramatically changed transportation planning in Colorado. The first was the passage of state legislation by the Colorado General Assembly that transformed the Colorado Department of Highways into the Colorado Department of Transportation (CDOT). CDOT's Mission became: *"Provide the best multi-modal transportation system for Colorado that most effectively moves people, goods and information."* This legislation also established a (grass roots) process for defining transportation needs and required the development of a comprehensive long-range Statewide Transportation Plan based on 15 Regional Transportation Plans (RTPs) developed by locally elected officials representing the counties and municipalities in the 15 Transportation Planning Regions (TPRs) of Colorado.

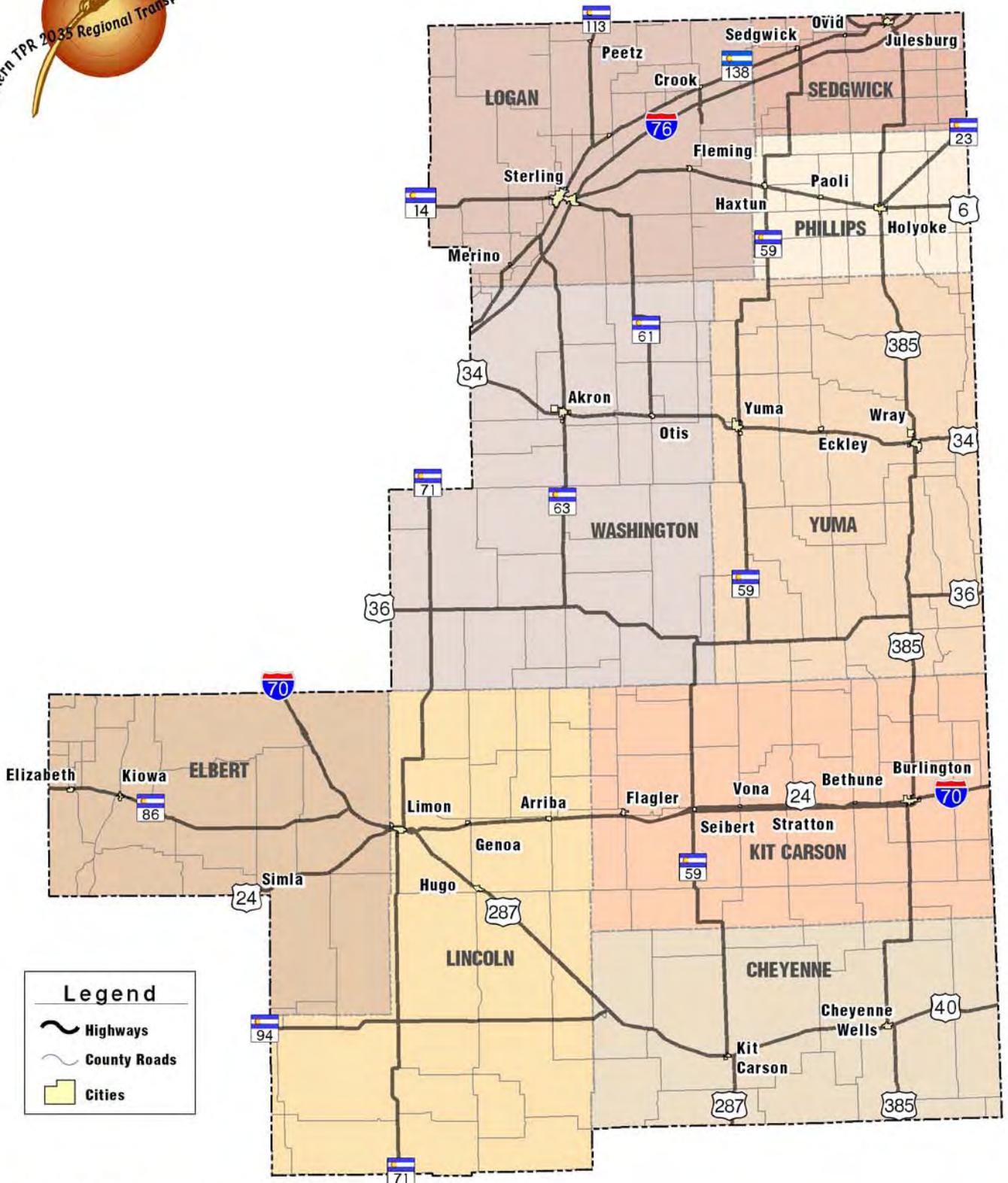
The second piece of legislation was the enactment by Congress of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 that similarly required the states to produce Statewide Transportation Plans and a Statewide Transportation Improvement Program. Colorado now uses a long-range Transportation Plan and a six-year Statewide Transportation Improvement Program (STIP). In December 1994, the Eastern TPR, the other nine rural TPRs, and the Metropolitan Planning Organizations (MPOs) completed their 1995 to 2015 Regional Transportation Plans. In January 1996, the Transportation Commission approved Colorado's first comprehensive long-range transportation planning document, entitled *Colorado's 20 Year Transportation Plan*. This document addressed transportation projects and issues covering the years 1995 to 2015.

The Eastern RTP was subsequently updated in 1999 to the year 2020 and most recently in 2004 for the year 2030. This 2035 RTP serves as an update to the 2030 plan, and is part of a statewide effort to update all 15 RTPs in the state in preparation for the development of the long-range statewide plan. The regional plan forms the basis for local input into the statewide plan. This regional plan is consistent with the requirements associated with the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), passed by Congress in August 2005.

Planning Area

The Eastern TPR planning area, as shown on **Figure 1**, is located in northeast Colorado, and is comprised of Cheyenne, Elbert, Kit Carson, Lincoln, Logan, Phillips, Sedgwick, Washington, and Yuma Counties.

The counties and communities making up the Eastern TPR comprise a very unique portion of the state of Colorado. This area of the state has an economy largely based in agriculture, which requires the need to transport significant amounts of commodities to and from farms within the region. Also, this area serves as a "bridge" between points to the east and Colorado's rapidly growing Front Range. While the predominance of this movement of people and goods is east to west, the north to south movement of goods created by the North American Free Trade Agreement (NAFTA) has created the opportunity to develop "High Priority Corridors" for the movement of freight. Two such federally designated corridors pass through the Eastern TPR: the *Ports to Plains Corridor* (US 287) between Laredo, Texas and Denver, and the *Heartland*



Legend

- Highways
- County Roads
- Cities

Source: CDOT 2035 Transportation Planning Dataset



Eastern TPR 2035 Regional Transportation Plan

Expressway (SH 71) between Rapid City, South Dakota and Denver. Within the Eastern TPR, the designated Ports to Plains route is along US 287. The designated Heartland Expressway route is along SH 71. The *Eastern Colorado Mobility Study* (April 2002) also identified the US 385/US 40 corridor from Kit Carson to Julesburg – designated as the *High Plains Highway* – as the primary Colorado corridor connecting the federally designated Ports to Plains and Heartland Expressway Corridors.

This region of the state also benefits from significant oil and gas production, renewable energy production (such as ethanol and biodiesel production and wind generation), the movement of freight in and out (as well as through the state) and a significant amount of local commerce. The “bridge” role, identified above, also serves tourists with destinations in Colorado’s Front Range cities, the Rocky Mountains, and points west.

Eastern Colorado could begin to change between now and the year 2035. There will be more out-migration from the state’s larger cities as residents of Colorado’s rapidly growing Front Range communities seek a more rural lifestyle. Also, the state’s efforts to diversify economic development activities beyond the Front Range are expected to produce additional jobs in eastern Colorado communities. Finally, there may be a re-focusing of freight transportation hubs east of the Front Range that will potentially provide economic development-related growth in eastern Colorado.

TPR Representatives

The Eastern TPR includes nine counties in eastern and northeastern Colorado: Cheyenne, Elbert, Kit Carson, Lincoln, Logan, Phillips, Sedgwick, Washington, and Yuma Counties. Many small sized communities are included in the planning area. Since the Eastern TPR includes two councils of governments, the East Central Council of Local Governments (ECCOG) and the Northeast Colorado Association of Local Governments (NECALG), no Regional Planning Commission (RPC) was formed. **Table 1** provides a list of the counties and municipalities that participate in regional planning for the Eastern TPR.

Table 1. Eastern TPR Representatives

ECCOG		NECALG	
County	Municipalities	County	Municipalities
Cheyenne County	Town of Cheyenne Wells	Logan County	Town of Crook
	Town of Kit Carson		Town of Fleming
Elbert County	Town of Elizabeth		Town of Merino
	Town of Kiowa		Town of Peetz
	Town of Simla		City of Sterling
Kit Carson County	Town of Bethune		Phillips County
	City of Burlington	City of Holyoke	
	Town of Flagler	Town of Paoli	
	Town of Seibert	Sedgwick County	Town of Julesburg
Town of Stratton	Town of Ovid		
Town of Vona	Town of Sedgwick		
Lincoln County	Town of Arriba	Washington County	Town of Akron
	Town of Genoa		Town of Otis
	Town of Hugo	Yuma County	Town of Eckley
	Town of Limon		City of Wray
			City of Yuma



Eastern TPR 2035 Regional Transportation Plan

Planning Process

Long-range transportation planning is a critical element in the transportation development process. This is the first step in integrating citizen goals into a comprehensive plan, protecting and enhancing community values, and gaining access to available or potential funding. The plan is based on a number of steps, all designed as a thoughtful and efficient method to relate the wishes of the citizens to effective transportation programs and projects within a realistic financial picture.

Figure 2 provides a diagram depicting the planning process that has been followed in developing the Eastern 2035 RTP. The planning process began with a review of the regional vision, goals, and strategies as established in the 2030 RTP. Representatives of the communities in the region and the general public were asked to help identify recent trends in the region that affect the transportation system and the long-range needs of the region. Overviews of the existing transportation system, socioeconomics, the environment, and projected growth in the region were completed based on information provided in the CDOT planning dataset.

The inventory and initial public input were used to update the corridor visions which were established in the 2030 RTP. Each of the 22 multi-modal corridors in the Eastern TPR has a vision, goals, and specific strategies to achieve the vision and goals. Since this is a corridor-based plan, the corridors have been divided into high, medium, and low priority. The corridor visions and the prioritized corridors comprise the Vision Plan for the region. A Fiscally Constrained Plan was then developed by assigning the estimated available funding to the corridors and to the improvement pools. Lastly, a midterm implementation strategy was developed to identify what can be done to address difficult tradeoffs that are necessary to manage the transportation system over the next ten years, given the limited funds and increasing costs.

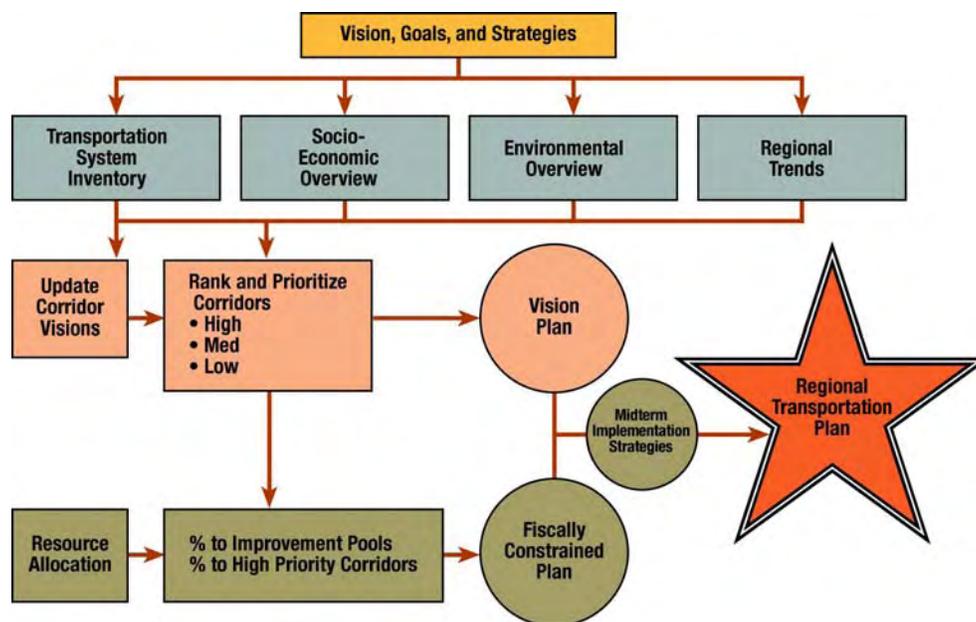


Figure 2. Plan Development Process



Eastern TPR 2035 Regional Transportation Plan

Vision, Goals, and Strategies

The Eastern TPR has created the following Vision to guide the development of the 2035 RTP Update.

Vision:

“Enhance the unique character and quality of life found in northeast and east central Colorado by maintaining and improving the region’s transportation network essential to dynamic local and regional economies, based on agriculture, oil and gas production, domestic and international trade, recreation, and tourism.”

The Eastern TPR has formulated the following multi-modal goals and objectives in support of the 2035 RTP Update Vision to guide the Regional Transportation Plan:

AVIATION

Goal: Enhance airfreight and passenger service for the region.

Objectives:

- ▶ Ensure that facilities for air ambulance services exist at strategically located airports and medical facilities in the region
- ▶ Ensure that coordination exists between Denver International Airport (DIA) and local air services
- ▶ Link air transportation improvements to regional economic development
- ▶ Take advantage of existing local air facilities within the region and build them into regional facilities where possible. Include such assets to the region as local airports and flight schools at local educational institutions
- ▶ Link general aviation and commercial airport services to the DIA

Aviation Related Issues:

- ▶ Air ambulance service to the region
- ▶ Lack of passenger and freight service to the region’s airports
- ▶ Under-utilization of Washington County Regional Airport and all other airports in the TPR
- ▶ Lack of linkages between local and regional economic development and airport facilities
- ▶ Lack of linkages to Colorado Springs, Centennial, and more importantly the Front Range



Eastern TPR 2035 Regional Transportation Plan

- ▶ Future impacts from more DIA traffic
- ▶ Emergency Management – Homeland Security
- ▶ Helicopter capacity for medical uses
- ▶ Medical specialists fly into towns to provide medical care – mostly daily trips

BICYCLE/PEDESTRIAN

Goal: Provide highway facilities that can safely accommodate bike events, training, and recreational riding in the region.

Objectives

- ▶ Widen State Highway shoulders to enhance safety on the region's State Highways
- ▶ Use CDOT Enhancement Funds to enhance or extend existing trails

Bicycle/Pedestrian Related Issues:

- ▶ Need shoulders to reduce bicycle accident potential
- ▶ Roadway/vehicle safety is the region's first priority
- ▶ Want shoulders versus paths
- ▶ Inconsistent rumble strip installation within the region
- ▶ Pedestrian and safety issues in Elizabeth

TRANSIT

Goal: Provide transit service for the transit-dependent population within the region.

Objectives:

- ▶ Coordinate services between public and private sector providers to avoid duplication of service
- ▶ Identify new possible sources for increased transit funding
- ▶ Increase local government and public awareness of transit services
- ▶ Investigate the need for service to major regional employers
- ▶ Evaluate the need for future fixed route transit service in Elbert County



Eastern TPR 2035 Regional Transportation Plan

Transit Related Issues:

- ▶ Aging population within the region
- ▶ Inadequate transit service to airports
- ▶ Marketing of transit programs and services
- ▶ Coordination of local/regional transit services
- ▶ Improved transit service for the transit dependent
- ▶ Education and marketing regarding transit services
- ▶ Need for transit service to regional airports
- ▶ Lack of funding for improved transit service
- ▶ Increasing traffic congestion in Elbert County

RAIL

Goal: Preserve rail service and facilities to prevent economic loss to the region.

Objectives:

- ▶ Support and enhance public policy to preserve abandoned railroad right-of-way corridors for future transportation, communication, recreation, and utilities corridors
- ▶ Stop further rail service and right-of-way abandonment
- ▶ Promote the re-establishment of passenger rail service and Amtrak stops (e.g., Wray) in the TPR
- ▶ Investigate rail subsidies and incentives for short line railroads, such as those established by the State of Kansas
- ▶ Support the relocation of Class 1 rail operations to eastern Colorado
- ▶ Improve rail crossing safety throughout eastern Colorado

Rail Related Issues:

- ▶ Impacts of future Amtrak service, especially to the California Zephyr
- ▶ Lack of state funding support for short line railroad programs
- ▶ Possible relocation of Class 1 railroad lines within the region
- ▶ Relocation of freight hubs and inter-modal facilities
- ▶ Rail crossing safety



Eastern TPR 2035 Regional Transportation Plan

- ▶ Future rail line and right-of-way abandonment

HIGHWAYS

Goal: Enhance interstates and state highways for farm-to-market movement of goods, ensuring proper routing for hazardous materials and oversized vehicles.

Objectives:

- ▶ Promote the financing of the region's interstate needs with Transportation Commission Strategic Funds
- ▶ Invest in eastern Colorado to accommodate future freight issues
- ▶ Implement strategies to improve passenger mobility throughout the Eastern TPR
- ▶ Maintain and enhance current north/south and east/west truck routes in the Eastern TPR
- ▶ Improve the pavement and bridge condition of state highways in the Eastern TPR
- ▶ Advocate for more timely mowing of state highway rights-of-way
- ▶ Advocate for increased weight limits on the interstate highway system
- ▶ Eliminate Enhancement funds as a set aside program
- ▶ Continue support for State Patrol funding
- ▶ Advocate for enhanced education and awareness of freight needs and its value to the economy

Highway Related Issues:

- ▶ Physical condition of the State Highway System
- ▶ Funding for highway improvements
- ▶ Adequate north/south and east/west travel routes
- ▶ Enhancing farm to market routes
- ▶ Ability to promote businesses given the existence of sign restrictions and highways running through towns

Truck Related Issues:

- ▶ Future impacts of increased freight movement
- ▶ Ability to fund Ports to Plains and Heartland Expressway Federal High Priority Freight Corridors
- ▶ Inconsistent weight limits between interstates and highways



Eastern TPR 2035 Regional Transportation Plan

SAFETY

Goal: Implement strategies to improve safety for all modes of transportation.

Objectives:

- ▶ Widen highway shoulders along major truck routes
- ▶ Provide adequate highway shoulders to separate bike traffic from other vehicle traffic
- ▶ Support enhanced funding for inadequate bridges
- ▶ Support enhanced funding for painting/stripping and removal of trees and shrubs
- ▶ Use variable message signs during harvest season to promote roadway safety
- ▶ Advocate for rest areas along state highways
- ▶ Improve rail-crossing safety
- ▶ Maintain or improve the safety of any hazardous materials routes
- ▶ Support CDOT in advocating for the state hazardous materials program

Possible Safety Related Issues:

- ▶ Inadequate shoulders
- ▶ Bridges too narrow to handle wide loads
- ▶ Inadequate maintenance; striping, mowing, snow removal
- ▶ Improve design and safety of state highways
- ▶ Roadway safety during harvest season
- ▶ Rail crossing safety
- ▶ Safety of existing hazardous truck routes
- ▶ Continuation of State Patrol and Hazardous Materials programs

FINANCING

Goal: Continue to seek increased funding for improving highway, air, rail, and transit systems and services.

Objectives:

- ▶ Support the research for increased funding



Eastern TPR 2035 Regional Transportation Plan

- ▶ Support bicycle surcharges and licensing for funding multi-modal transportation
- ▶ Support tolling for new capacity improvements
- ▶ Support legislation to form Regional Transportation Authorities
- ▶ Advocate for resource allocation that accounts for the percentage of truck traffic
- ▶ Support a CDOT resource allocation process based on number of lane-miles rather than total population
- ▶ Support the use of public or private initiatives to finance larger, complex projects

Possible Financing Related Issues:

- ▶ Transportation funding in Colorado for all modes
- ▶ Possible revisions to CDOT's Resource Allocation process
- ▶ Education on innovative financing

ENVIRONMENTAL

Goal: Develop cost-effective strategies to address environmental issues.

Objectives:

- ▶ Support the continued use of wetland banking
- ▶ Support alternative fuel usage where applicable

Possible Environmental Related Issues:

- ▶ Support the use of alternative fuel
- ▶ Cost effectiveness of mitigation, avoidance

REGION STRATEGIES

To meet these goals, the RTP provides the following strategies:

- ▶ Create and fund cooperative transportation partnerships among the counties, cities and towns of the region
- ▶ Ensure that economic lifelines (transportation links) are balanced and accessible to all
- ▶ Develop interregional corridor partnerships to cooperate on key growth areas and the quality of transportation systems
- ▶ Increase safety considerations



Eastern TPR 2035 Regional Transportation Plan

- ▶ Improve highway safety and maintenance
 - Provide effective (upgraded and maintained) accesses along the primary routes
 - Upgrade and maintain major/primary routes
- ▶ Widen appropriate roadways to allow for the safe passage of both vehicles and bicycles
- ▶ Develop realistic plans based on the ability to fund new projects and maintain the existing transportation system
- ▶ Develop a flexible prioritization system and timetable
- ▶ Maximize funding for the region
- ▶ Consider the effects of federal and state regulations and policies on the region
- ▶ Develop local partnerships that target transportation enhancements



Eastern TPR 2035 Regional Transportation Plan

PUBLIC PARTICIPATION

The public plays an important role in any planning process, as citizens will be impacted by the improvements and/or changes made in the region. The purpose of encouraging public participation is three-fold: to provide information to the public, to obtain input and feedback from the public, and to build consensus. The interests represented by both the public and the governmental agencies within the planning region are often quite diverse, therefore, everyone must be given an opportunity to participate in the planning process.

The public participation process for the 2035 plan update was geared toward gathering information on emerging issues and trends that have arisen since the completion of the 2030 plan in December 2004 and that might influence the priorities of the region. Public input was solicited at key points in the regional planning process. The first major opportunity for public input was provided early in the process at the Regional Transportation Forum. A public open house was held in October 2007 to present this draft plan and to receive comments. Meeting minutes and sign in sheets from all meetings throughout the process are included in **Appendix A**.

Pre-Forum Meeting

A Pre-Forum meeting was held to provide an opportunity for community leaders and transportation professionals to discuss the state of transportation in the region and to identify key problems and issues that should be addressed in the plan. This meeting was held on July 17, 2006 in Burlington, Colorado.

Regional Transportation Forum

The Regional Transportation Forum, which was open to the general public, was held in Akron, Colorado on September 11, 2006. It was attended by approximately 40 people. The primary purpose of the meeting was to review the 2030 priorities; discuss emerging regional issues and trends; determine the audience's preferences regarding future priorities; and discuss funding issues, needs, and solutions. The forum featured a presentation about the planning process, background information on the 2030 plan, costs of transportation improvements, and general funding expectations. An innovative audience polling technique was used to electronically solicit preferences and opinions. In addition, an interactive exercise allowed meeting participants to hypothetically "spend" a set number of "TransBucks" funds on the types of improvements and corridors that they felt were most in need.

Prioritization Meeting

The prioritization meeting was held in Holyoke, Colorado on April 23, 2007. The purpose of this meeting was to examine recommended changes to Corridor Visions, and to present and solicit input on the Vision Plan priorities, and the resource allocation. The TPR representatives reviewed the recommendations and suggested modifications, which have since been incorporated into this document.



Eastern TPR 2035 Regional Transportation Plan

Draft Plan Review

The Draft 2035 Plan was released in July 2007, incorporating as appropriate all input from the public and decisions by the TPR representatives. The draft plan was presented to the TPR representatives on August 13, 2007. After a period of review, the draft plan was presented at a public meeting on October 29, 2007. The meeting was held jointly with CDOT to enable review of the draft Statewide Plan at that time. This approach was useful so that attendees could see the regional plan in context with other regions and the state as a whole. Comments received at that meeting have been incorporated as appropriate in the final plan prior to its adoption by the TPR Representatives on December 3, 2007.



Eastern TPR 2035 Regional Transportation Plan

ACCOMPLISHMENTS

Several major projects have been completed or are underway in the Eastern TPR since 2004. CDOT Regions 1 and 4 continue to invest all available transportation dollars in improvements that make an immediate impact to the transportation infrastructure. The following is a partial list of significant accomplishments in the TPR.

CDOT Region 1

I-70 EAST CORRIDOR

Interstate 70 is the eastern gateway to Colorado and provides the first image to Colorado for motorists heading west. Interstate 70 is a critical link to goods, services, tourism and economic viability nationally, statewide, and in the local economies. The I-70 East Corridor passes through Elbert, Lincoln, and Kit Carson Counties in the Eastern TPR. The following highlights describe the progress that has been made or is underway as of this writing along the corridor.

- ▶ Concrete reconstruction and structure rehabilitations have been completed along 40 plus miles of this interstate corridor since 1996 at a cost of approximately \$80 million.
- ▶ Bituminous surface treatments along the corridor have been completed over 30 miles of length at a cost of approximately \$12 million in the last decade.
- ▶ One project of note in the corridor which is currently under design is a concrete reconstruction project in the Burlington area that will also replace two I-70 mainline structures at the Rose Avenue interchange with construction anticipated to begin in spring of 2008 at a cost of approximately \$14 million.

US 40/US 287 CORRIDOR

The US 40/US 287 is a Strategic (7th Pot) Corridor that extends through Cheyenne and Lincoln Counties in the Eastern TPR. The corridor is a part of the *Ports-to-Plains Corridor* running from border of Mexico all the way north through Texas, Oklahoma, Colorado, Wyoming, and Montana, to the Canadian border. The following highlights describe the progress that has been made or is underway as of this writing along the corridor.

- ▶ Region 1 has spent over \$100M since it became a strategic corridor in 1996. To date, approximately half of the original scope has been budgeted and built.
- ▶ The “Big Vision”: The Ports-to-Plains Corridor is an international (Mexico through the U.S. to Canada) freight corridor for moving goods and services. Certain segments of the corridor carry up to 65% truck traffic, while only 9-11% is the norm in this part of the state (and, by comparison, 15-18% is considered “high” within the Denver Metro area).
- ▶ One project of note in the corridor currently under construction is the Kit Carson Bridge in Cheyenne County near the Town of Kit Carson, where Region 1 has taken extra steps for environmental mitigation, as well as recognition of historic (4f) properties.



Eastern TPR 2035 Regional Transportation Plan

- ▶ CDOT Region 1 is also addressing safety issues at the intersection where US 287 splits from US 40 (i.e., where US 287 continues south and US 40 goes east). The intersection geometry has been improved in order for vehicles to make the left turn more safely, especially during snow and ice conditions. Additionally, the operations and safety have been enhanced by flattening the superelevation.
- ▶ A 30-mile section remains for construction (from Hugo to the east). This section will be constructed as a “Super 2,” meaning a two-lane highway with 8-foot paved shoulders, with right-of-way preservation for an ultimate four lane section.

US 40 AND US 385 CORRIDORS

This is a portion of the 220 mile long *High Plains Highway Corridor* beginning at Kit Carson and proceeding east to Cheyenne Wells along US 40 and then north on US 385 to I-80 in Nebraska. The following highlights describe the progress that has been made or is underway along this corridor.

- ▶ A Corridor Development and Management Plan was completed in 2007 to identify and prioritize project improvements and estimate costs for this corridor. This project involved public interaction and coordination with local governmental entities including the counties and various cities located within CDOT Regions 1 and 4, as well as the Nebraska Department of Roads. Project evaluation criteria included safety, freight mobility, economic development, community objectives and travel time. In addition to the final list of project improvements, opportunities for partnership between CDOT and local entities were identified to accomplish improvements along the corridor. A major component of the projects identified is roadway widening.
- ▶ Completed improvements since 2001 along this corridor within Region 1 have included 35 miles of major resurfacing, bridge repairs and other upgrades at a cost of over \$15 million.
- ▶ A current project under construction is the major asphalt resurfacing project along five miles of US 385 north of Burlington, to be completed at a cost of \$3 million.

SH 71 CORRIDOR

SH 71 north of Limon is the designated connector route between the *Ports-to Plains Highway* and the *Heartland Express* in Nebraska. The total length of this corridor in Lincoln County and Region 1 is 75 miles. The following highlights describe the progress that has been made or is underway along this corridor.

- ▶ One project of note in the corridor which is currently under construction will replace two timber structures at Middle and South Rush Creeks south of Limon at a cost of \$6 million.
- ▶ Recent improvements in the last five years have included the bituminous resurfacing of over 12 miles of the roadway north and south of Limon at a cost of \$4 million, as well as a bridge replacement with concrete paving over Big Sandy Creek at a cost of \$5 million.



Eastern TPR 2035 Regional Transportation Plan

CDOT Region 4

I-76 CORRIDOR

The I-76 Corridor is a high priority corridor for the Eastern TPR as well as the Upper Front Range. It connects northeastern Colorado and I-80 with the Denver metropolitan area. I-76 crosses the UFR, Eastern TPR, and DRCOG regions, including Adams, Weld, Morgan, Washington, Logan, and Sedgwick Counties. The following bullets describe the progress that has been made or is underway along this corridor.

- ▶ Recently completed two phases of construction from Ft. Morgan to Brush, a combined \$27M in construction with 75% of the funds coming via HB-1310 or the Governor's transportation allocation. The projects flattened a curve that was a high hazard location, reconstructed failing concrete and bridge structures, improved safety by flattening slopes and extending box culverts.
- ▶ A current project is Phase I of concrete reconstruction of the eastbound lanes from the Nebraska state line west, with Phase II slated for construction this fall. The two projects reconstruct a total of 15.3 miles of the eastbound lanes. The projects utilize \$21M in HB-1310 and \$9M in SAFTEA-LU and Appropriations Earmarks.



TRANSPORTATION SYSTEM INVENTORY

An inventory of the various elements which comprise the existing transportation system in the Eastern TPR has been conducted. The purposes of this inventory are to understand the existing transportation network and to facilitate identifying the region's needs. Because the Eastern TPR is principally a rural region, the roadway system is the primary element of the transportation network. However, in addition to the highway system, the inventory of the existing system also includes public transportation, bicycle, pedestrian, rail, and aviation systems. Each mode has been examined along with its infrastructure, level of service, capacity, operating, and safety characteristics, in order to identify existing conditions.

The approach to collecting data on the existing transportation system relied to a significant degree on CDOT's Transportation Planning Data Set. The dataset contains complete information as collected by CDOT on the highway characteristics and traffic data as well as modal components of the state's transportation system. The following sections utilize the best, most current data available as provided by CDOT. Most information is for the year 2005.

Roadway Network

NATIONAL HIGHWAY SYSTEM

The National Highway System (NHS) was established by the Intermodal Surface Transportation Efficiency Act of 1991. The purpose of the NHS is to focus federal resources on roadways which provide interstate travel, connect with other modes of transportation, facilitate international commerce, and are important to the national defense. Currently, 325 miles of the National Highway System are included in the Eastern TPR, 204 miles of which are interstate highways (I-70 and I-76). **Figure 3** identifies those roadways in the region which are included on the NHS. The sections of roadway in the Eastern TPR included on the NHS are:

- ▶ I-70 throughout the region
- ▶ I-76 throughout the region
- ▶ US 287 from Limon to Kit Carson and south
- ▶ US 24 from Simla to Limon
- ▶ SH 71 from Limon to the north



Eastern TPR 2035 Regional Transportation Plan

FUNCTIONAL CLASSIFICATION

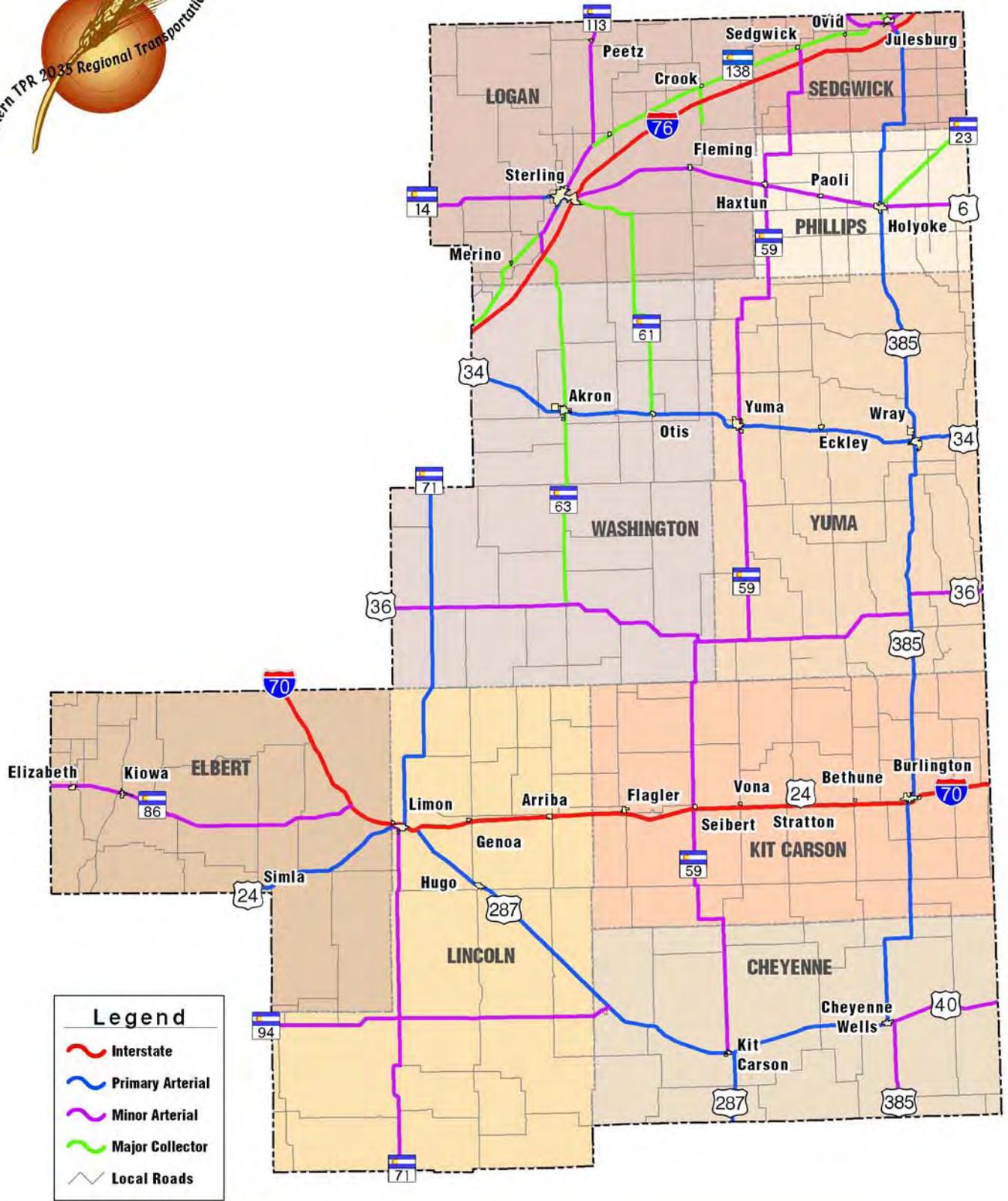
The functional classification of a roadway defines its ability to provide mobility and access to its users. In general, as mobility increases, access decreases and, in turn, as access increases, mobility decreases. The roadway functional types are more thoroughly described in order of their ability to provide mobility, as follows:

- ▶ **Interstate:** Interstate facilities, also referred to as freeways, primarily serve long distance travel between major communities. Freeways provide the greatest mobility, with strictly controlled access allowed only at interchanges.
- ▶ **Principal Arterial:** Principal arterials carry longer-distance major traffic flows between important activity centers. The primary difference between freeways and principal arterials is access; freeways have fully controlled accesses with no at-grade intersections, while principal arterials may include at-grade intersections.
- ▶ **Minor Arterial:** Minor arterials augment the principal arterial system. These roadways place a higher emphasis on access, instead of mobility, distributing travel to smaller destinations with moderate trip lengths.
- ▶ **Collector:** Collector roads link local streets with the arterial street system. Both mobility and access take similar precedence on collector roadways.
- ▶ **Local Roads:** The primary function of local roads is to provide access to adjacent land uses, in both urban and rural areas.

Figure 4 depicts the functional classifications of the state highways in the Eastern TPR. As shown, I-70 and I-76 are the primary east-west interstate highways through the region. Other principal arterial roadways in the region include US 385, US 34, US 24, US 287, and SH 71 throughout the region.

As shown on **Figure 4**, a number of the primary highways in the region provide regional connectivity into adjacent transportation planning regions. There are several routes that provide connectivity to the Denver and Colorado Springs metropolitan areas, as well as the Upper Front Range, Central Front Range, and Southeast TPRs. The major routes also provide access into western Kansas and Nebraska.

There are three highway routes within the Eastern TPR which have been designated as a focus for improvements to enhance mobility for trade and to promote economic development. The Ports to Plains corridor is a federally designated “High Priority Corridor” which connects Denver to Laredo, Texas. The Ports to Plains corridor runs along I-70 and US 287 through the Eastern TPR. The Heartland Expressway is also a federally designated “High Priority Corridor” and provides a connection between Denver and Rapid City, South Dakota, via Scottsbluff, Nebraska. The Heartland Expressway extends along SH 71 between Scottsbluff and Limon, providing a connection through the Eastern TPR to the Ports to Plains corridor. The US 385 corridor has a state designation as a “Corridor Connector” from Julesburg to Cheyenne Wells, connecting to the Ports to Plains Corridor in Kit Carson via US 40.



Legend	
	Interstate
	Primary Arterial
	Minor Arterial
	Major Collector
	Local Roads

Source: CDOT 2035 Transportation Planning Dataset



Eastern TPR 2035 Regional Transportation Plan

Table 2 presents a summary of the roadway centerline miles on the state highway system in the Eastern TPR according to their functional classification. Centerline miles is the total length of all highways in the state, region, county, or planning area, measured along the “centerline” of each highway. One mile of highway counts as one centerline mile no matter how many lanes the highway has, and no matter whether it is divided or not. As shown, there is a total of 203 miles on the interstate highway system in the region and 988 miles of arterial roadways on the state highway system. The total state highway mileage in the region is approximately 1,415 miles.

Table 2. State Highway Centerline Miles

Functional Classification	Eastern TPR Total (Miles)
Interstate	203
Principal Arterial	423
Minor Arterial	565
Collector	222
Local	2
Total	1,415

Source: CDOT Transportation Planning Database

Table 3 provides a functional classification summary of the local roads within the Eastern TPR that are not designated as state highways. There are nearly 14,400 miles of local roads in the region; approximately ten times the mileage of the state highway system in the region.

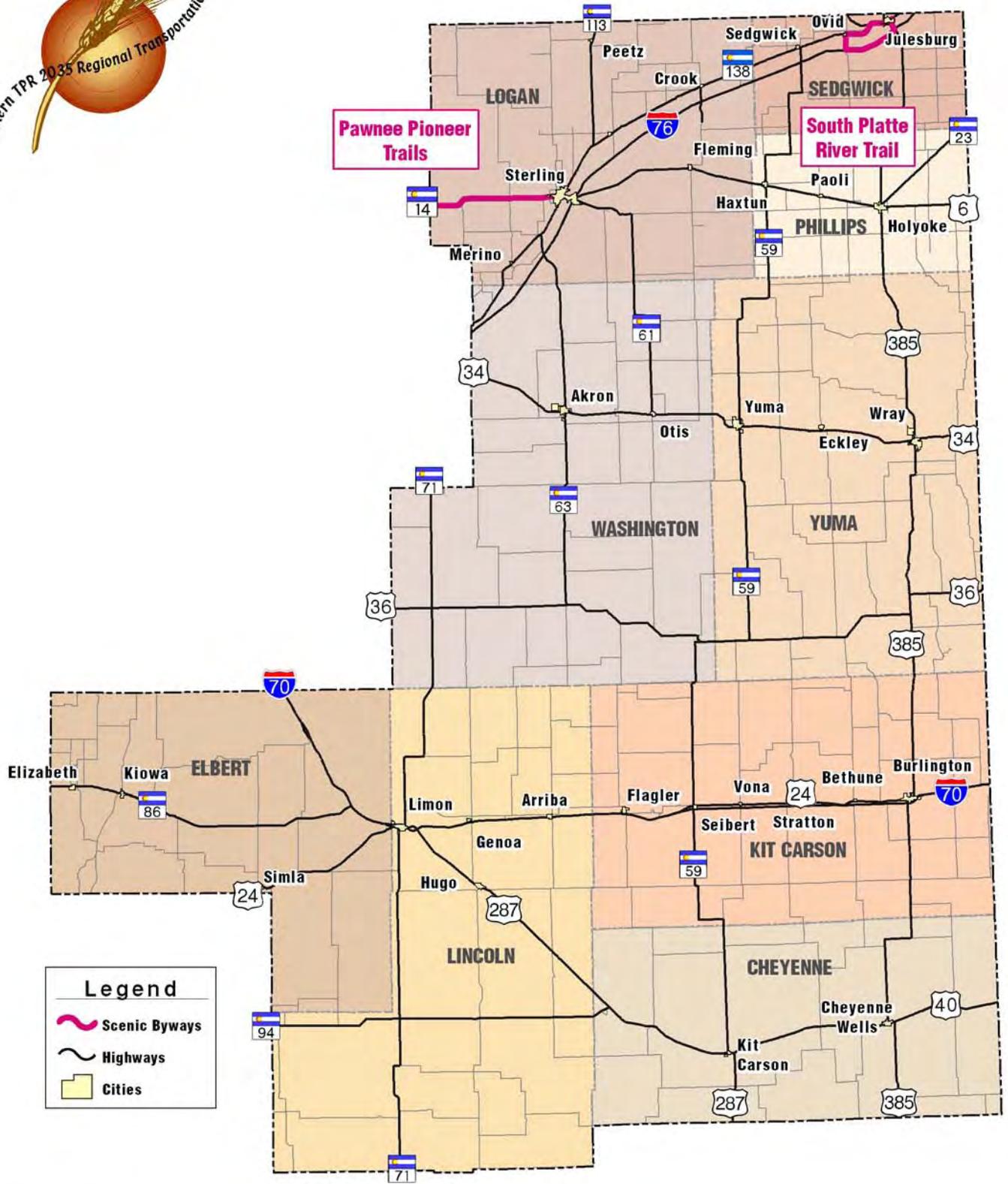
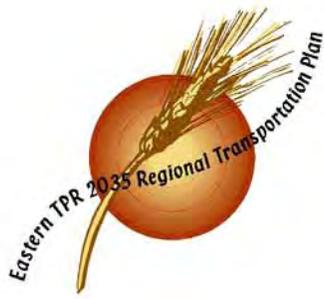
Table 3. Local Street Centerline Miles

Functional Classification	Eastern TPR Total
Arterial	9
Collector	2,887
Local	11,482
Total	14,378

Source: CDOT Transportation Planning Database

SCENIC BYWAYS

The Colorado Scenic and Historic Byway Commission has identified roadway corridors throughout the state which have exceptional scenic, historic, ecologic, and cultural significance. Two of these byways have been designated in the Eastern TPR. The South Platte River Trail is the shortest of the byways in Colorado. It makes a small loop from Julesburg to Ovid. The Pawnee Pioneer Trails travels through the Pawnee National Grasslands and the Pawnee Buttes in northern Weld and Morgan Counties and continues into Logan County. **Figure 5** depicts the locations of the scenic and historic byways in the Eastern TPR.



Legend

-  Scenic Byways
-  Highways
-  Cities

Source: CDOT 2035 Transportation Planning Dataset



Figure 5
Scenic Byways



Eastern TPR 2035 Regional Transportation Plan

AVERAGE ANNUAL DAILY TRAFFIC (2005 & 2035)

Figure 6 illustrates the existing (2005) annual average daily traffic (AADT) volumes on the state highways in the Eastern TPR. AADT is defined as the total volume of traffic on a highway segment of one year, divided by the number of days in the year. Because the volumes are an annual average, they do not account for the occurrence of seasonal or hourly peak demands that may result from tourism or agriculture.

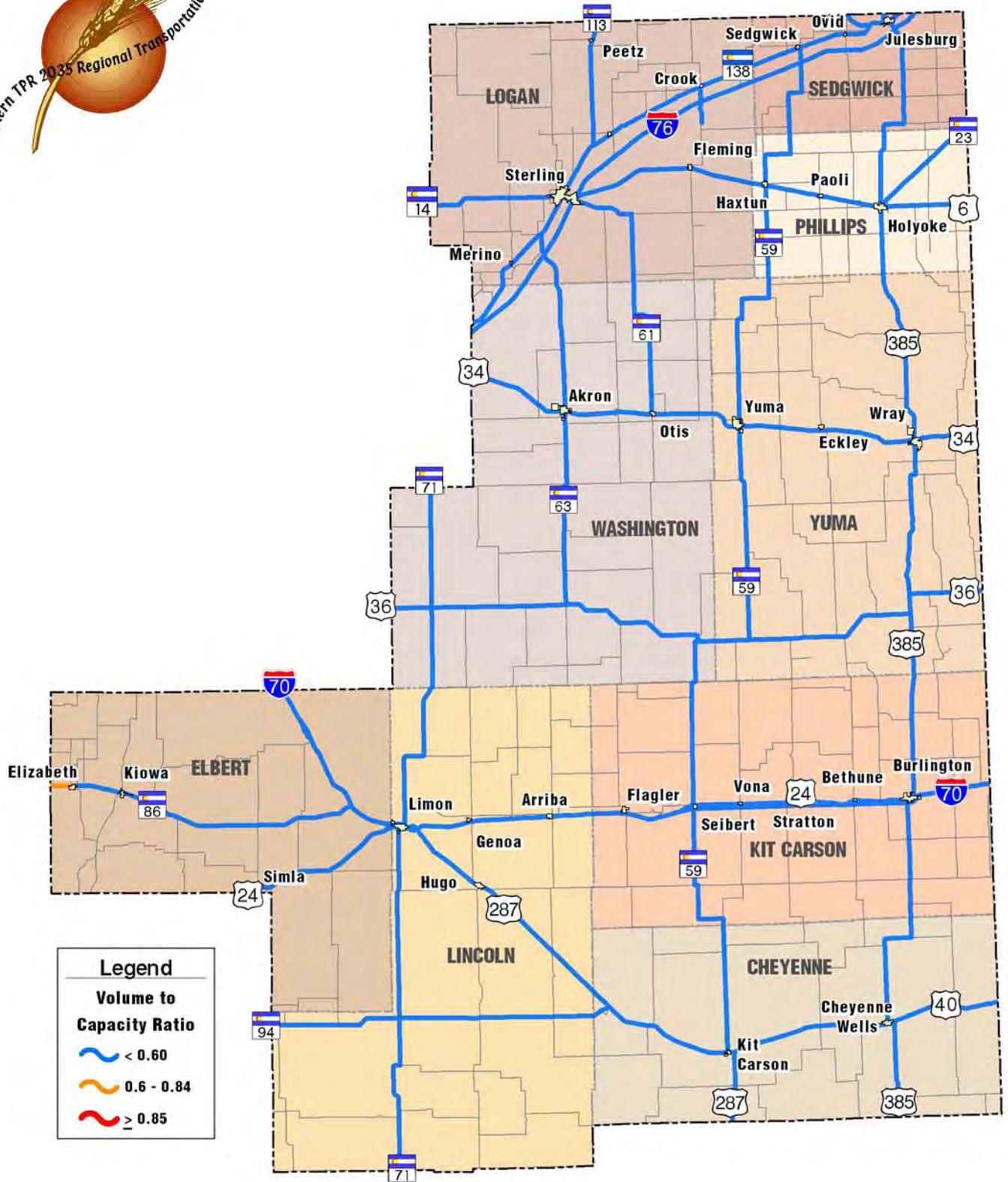
Year 2035 travel projections in the Eastern TPR were provided by CDOT's Transportation Planning data set. **Figure 7** depicts the projected AADT volumes on the state highways in the region. These are AADTs based on CDOT's growth factors and do not account for system changes or other factors. They are intended for corridor to corridor comparison for long-range planning rather than for design. Other planning studies with project-specific traffic projections should be consulted for additional information when planning at the project level.

The highest growth is projected to occur in the I-70, SH 86, and SH 71 corridors and in western Elbert County. Traffic volumes on SH 86 in western Elbert County are expected to more than double by 2035.

VOLUME TO CAPACITY RATIOS (2005 & 2035)

The volume to capacity ratio (v/c) is one measure that is used to define operational characteristics of a roadway. This is the daily traffic volume on a given roadway divided by the daily capacity of that roadway. These ratios are used to describe congestion on roadway segments. This planning level measure does not take into account delay at signalized intersections and is only based upon total daily traffic volumes with no consideration to peak hour spikes in traffic.

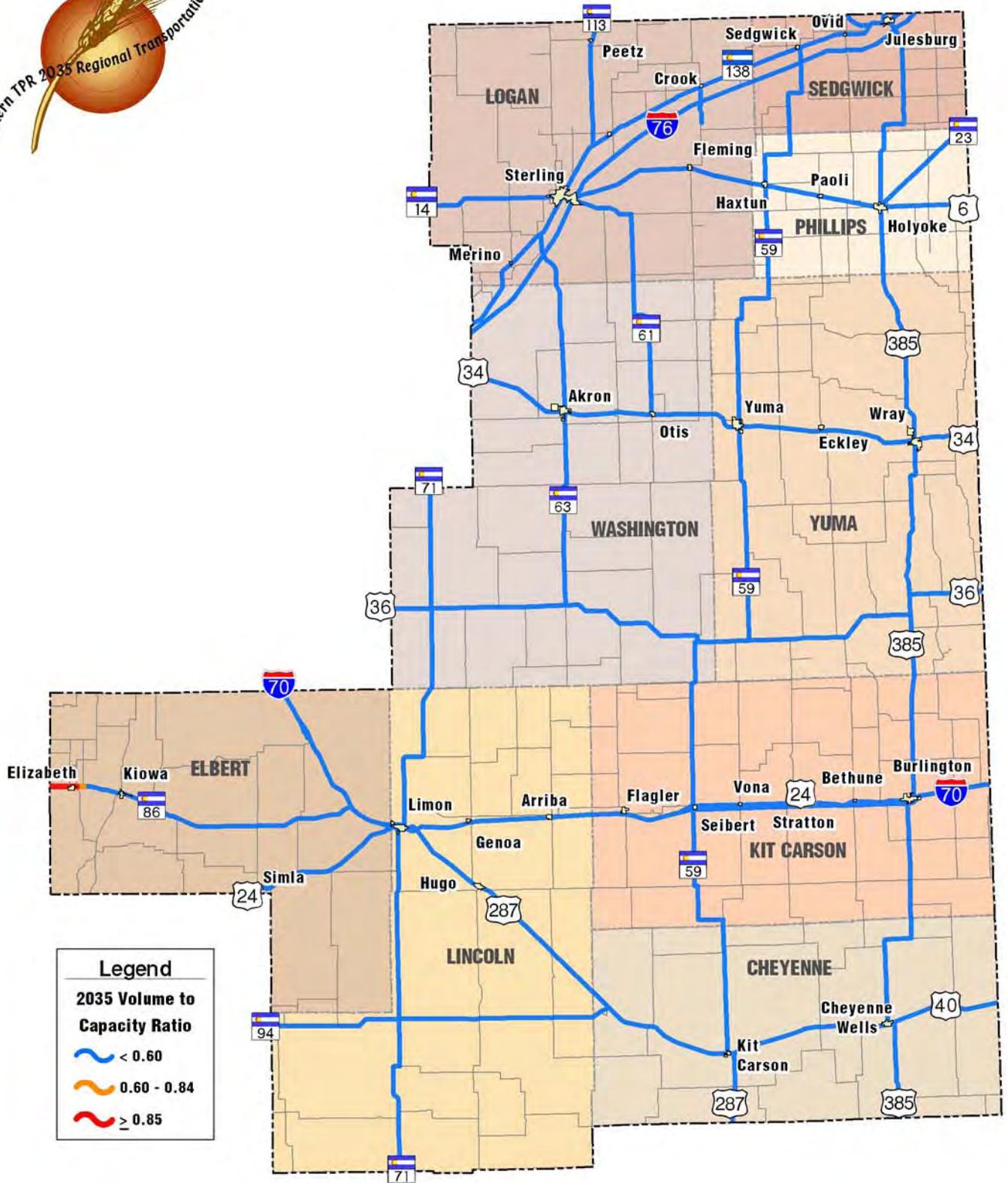
Figure 8 shows the existing volume to capacity ratios on the State Highway system in the Eastern TPR. A v/c ratio of 0.85 is commonly acknowledged as the lower limit of severe congestion. CDOT's Congestion Relief program makes some funds available for congestion related improvements on corridors that exceed the 0.85 threshold. Currently, there are no road segments in the region with v/c ratios at or above 0.85. A small section of SH 86 west of Elizabeth is currently the only segment of roadway in the region that has a v/c ratio between 0.6 and 0.84. **Figure 9** shows the projected 2035 volume to capacity ratios for the Eastern TPR. In 2035, the growth in western Elbert County will push a segment of SH 86 between Franktown and Elizabeth past the 0.85 threshold. All other highways in the Eastern TPR are anticipated to remain below 0.60.



Source: CDOT 2035 Transportation Planning Dataset



Figure 8
Existing Volume to Capacity Ratios



Source: CDOT 2035 Transportation Planning Dataset



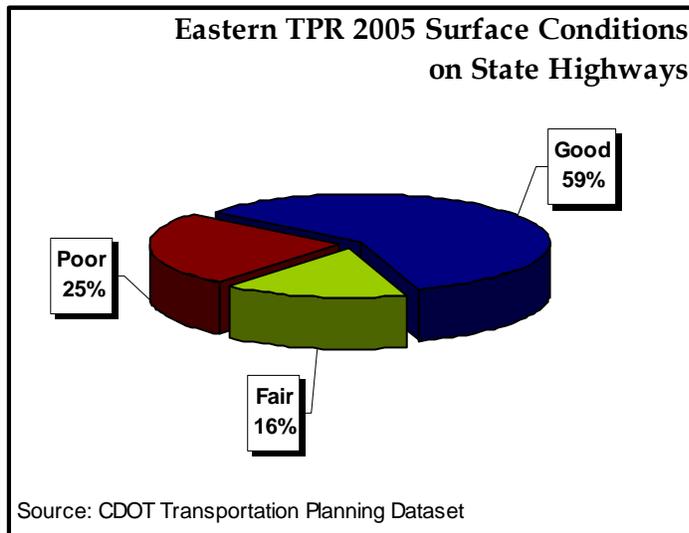
Figure 9
Projected 2035 Volume to Capacity Ratios



Eastern TPR 2035 Regional Transportation Plan

SURFACE CONDITION

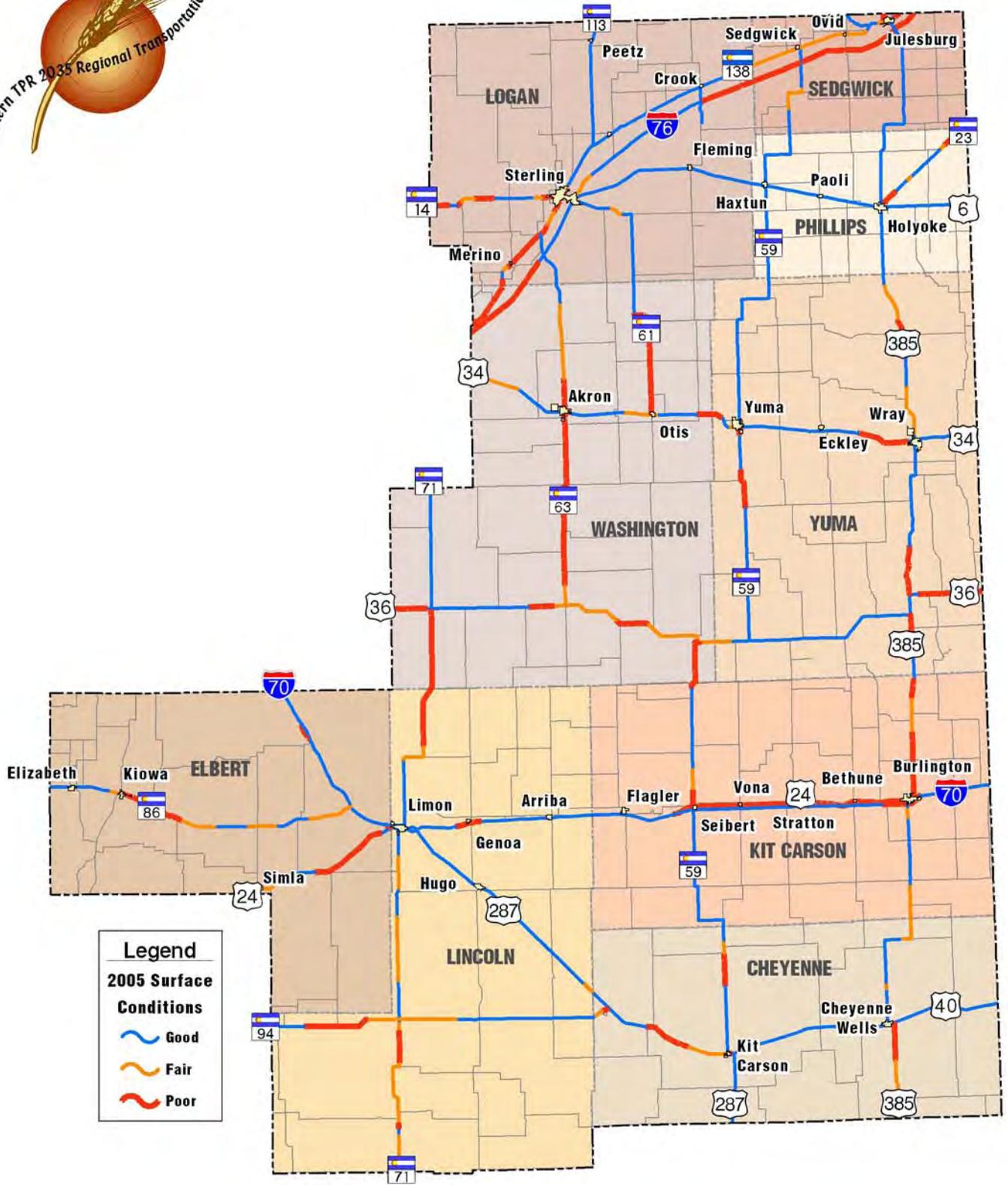
On a yearly basis, CDOT monitors the condition of the roadways on the state highway system throughout the state. The segments of roadway are given a rating of *Good*, *Fair*, or *Poor* based on the roughness and rutting of the roadway as well as the amount of cracking and patching.



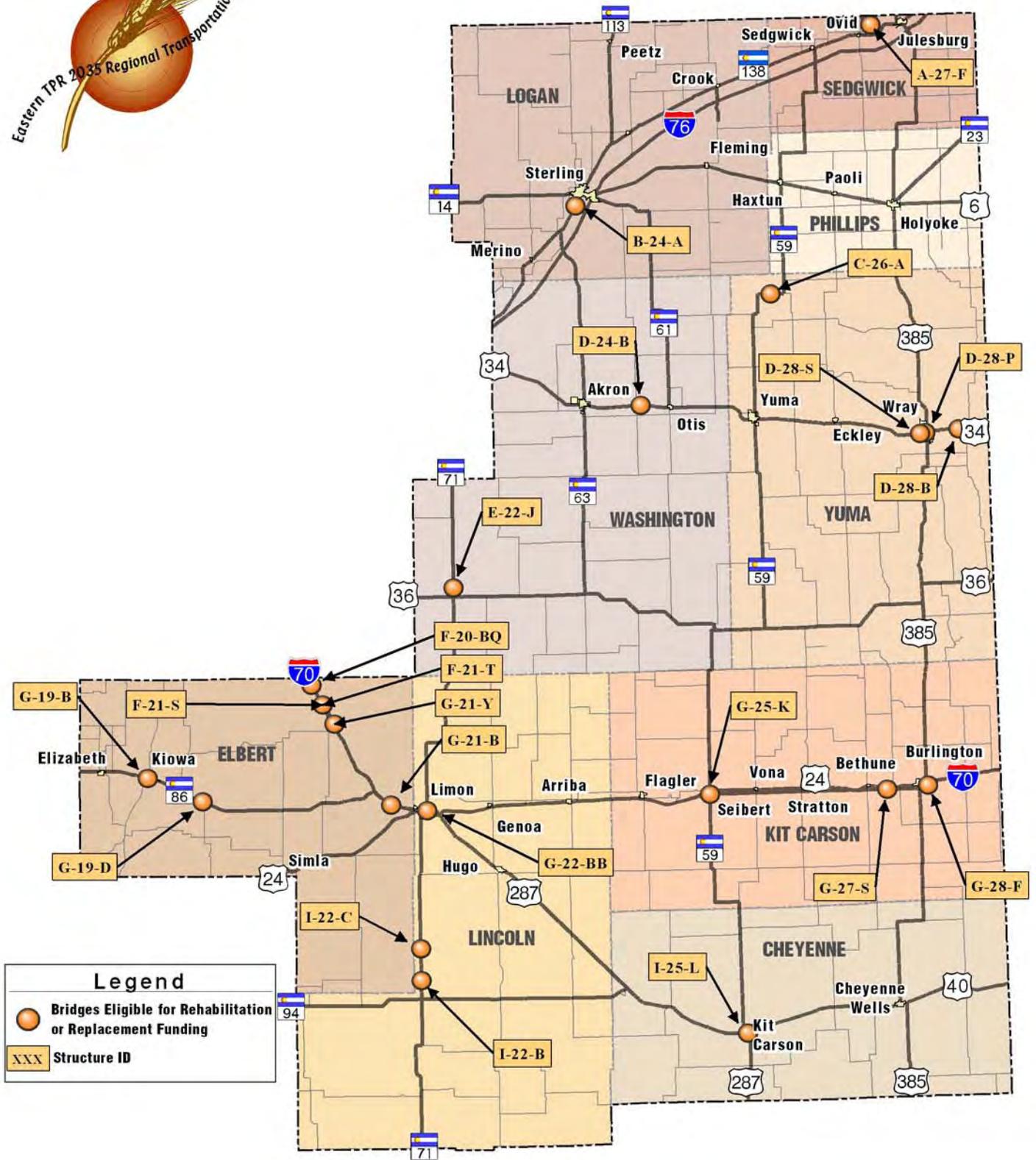
A good surface condition corresponds to a remaining service life of 11 years or more, a fair surface condition corresponds to a remaining service life between 6 and 10 years, and a poor surface condition equates to a remaining service life less than six years. **Figure 10** shows the distribution of *Good*, *Fair*, and *Poor* highway segments in 2005. Overall, 59% of the state highway centerline-miles in the Eastern TPR are in good condition, 16% are in fair condition, and 25% are in poor condition. CDOT's goal is to maintain 60% of the state's roadways in good or fair condition. With 75% of the roadways in good or fair condition, the Eastern TPR exceeds this goal today.

BRIDGE CONDITION

Each bridge on the state highway system is given a Bridge Sufficiency Rating (BSR) by CDOT's Bridge Management System relevant to its structural (i.e., aging or other engineering deficits) or functional (i.e., usually width limitations) integrity. The bridges are rated from 0-100. Bridges with a sufficiency rating of less than 80 and are either Structurally Deficient or Functionally Obsolete are eligible for funding. More specifically, bridges with ratings between 51 and 80 are eligible for rehabilitation and those rated below 50 are eligible for replacement. Bridge repair and replacement projects are not a normal part of the long-range planning process, but are chosen by CDOT on the basis of sufficiency rating, funding availability, and proximity to other highway projects. When highways are upgraded or have other major work performed, CDOT also upgrades the associated bridges to current standards as a matter of policy. There are 22 bridges in the Eastern TPR that are eligible for rehabilitation or replacement funding. These bridges are shown on **Figure 11** and are described in **Table 4**.



Source: CDOT 2035 Transportation Planning Dataset



Legend

- Bridges Eligible for Rehabilitation or Replacement Funding
- Structure ID

Source: CDOT 2035 Transportation Planning Dataset



Eastern TPR 2035 Regional Transportation Plan

Table 4. Bridges Eligible for Rehabilitation or Replacement Funding

Structure ID	Highway	Location	BSR	Integrity
<i>Cheyenne County</i>				
I-25-L	US 40	UPRR	14	Structurally Deficient
<i>Elbert County</i>				
F-20-BQ	I-70 WB	County Road 190	79	Structurally Deficient
F-21-S	I-70 WB	County Road 178	79	Structurally Deficient
F-21-T	I-70 EB	County Road 178	63	Structurally Deficient
G-19-B	SH 86	Kiowa Creek	64	Functionally Obsolete
G-19-D	SH 86	West Bijou Creek	77	Structurally Deficient
G-21-B	I-70 Frontage Rd	Draw	49	Structurally Deficient
G-21-Y	I-70 Business	I-70 Mainline	60	Structurally Deficient
<i>Kit Carson County</i>				
G-25-K	SH 59	I-70	75	Structurally Deficient
G-27-S	CR 43	I-70	77	Functionally Obsolete
G-28-F	I-70 WB	I-70 Business	79	Structurally Deficient
<i>Lincoln County</i>				
G-22-BB	SH 71	I-70	71	Structurally Deficient
I-22-B	SH 71	South Rush Creek	62	Structurally Deficient
I-22-C	SH 71	Middle Rush Creek	47	Structurally Deficient
<i>Logan County</i>				
B-24-A	US 6 NB	Sterling Canal No. 1	70	Structurally Deficient
<i>Sedgwick County</i>				
A-27-F	US 385	Peterson Canal	66	Structurally Deficient
<i>Washington County</i>				
D-24-B	US 34	Surveyor Creek	66	Functionally Obsolete
E-22-J	SH 71	Plum Bush Creek	70	Functionally Obsolete
<i>Yuma County</i>				
C-26-A	SH 59	Coyote Creek	54	Structurally Deficient
D-28-B	US 34	Republican River	66	Structurally Deficient
D-28-P	US 34	Republican River	69	Structurally Deficient
D-28-S	US 34	Republican River	65	Structurally Deficient

Source: CDOT 2035 Transportation Planning Dataset



Eastern TPR 2035 Regional Transportation Plan

CRASH HISTORY

Current funding levels used in the 2035 Statewide Plan resulted in an estimated performance level of an average fatal crash rate of 1.47 per 100 million vehicle-miles of travel (VMT). Comparing a corridor's rate against the average crash rate could be an indicator of the relative safety of the corridor and this measure compensates for high volume highways. Therefore – from a planning perspective – a relatively high crash rate will help identify areas that should be given further analysis. However, many factors play into actual decisions on where to make safety improvements, such as cost-benefit analysis, type of crash, and crashes caused by driver behavior, etc. Vehicle crashes may have any combination of three causes: driver error (e.g., driving too fast for conditions), vehicle failure (e.g., loss of brakes), or highway design (e.g., poor sight distance). With this in mind, not all crashes can be prevented by highway improvements. **Table 5** shows the 2005 VMT data, the number of crashes in each corridor for the 1999-2003 time period, and the calculated five-year average fatal crash rate. The fatal crash rates are provided by corridor, as described in the Corridor Visions and Prioritization chapter of this report.

Table 5. Fatal Crash Rates by Corridor

Corridor	Daily VMT (2005)	Total Fatal Crashes (1999 – 2003)	Fatal Crash Rate (Fatal Crashes per 100,000,000 VMT)
1: SH 86 Rural Section	36,900	4	5.94
2: SH 86 Urban Section	75,200	1	0.73
3: SH 71 Southern Section	37,600	2	2.92
4: SH 63	41,500	2	2.64
5: SH 61	30,100	2	3.64
6: US 6 Eastern Plains	171,000	3	0.96
7: SH 59	77,000	4	2.85
8: US 40 Kit Carson to Kansas	32,300	0	0
9: US 385 High Plains Highway	194,000	6	1.69
10: US 287 Ports to Plains	539,400	17	1.73
11: US 24 Elbert County Line to Limon	95,800	4	2.29
12: US 24 Siebert to Burlington	25,900	0	0
13: I-76 Northeast Colorado	723,600	10	0.76
14: SH 94	30,300	1	1.81
15: SH 71 Heartland Expressway	55,800	3	2.95
16: SH 113	16,800	3	9.79
17: SH 138	63,500	4	3.45
18: SH 14 Plains	56,400	3	2.91
19: SH 23	9,100	1	6.01
20: I-70 Plains	1,235,500	23	1.02
21: US 34 Eastern Plains	232,900	4	0.94
22: US 36 Eastern Plains	68,100	2	1.61

Source: CDOT 2035 Transportation Planning Dataset



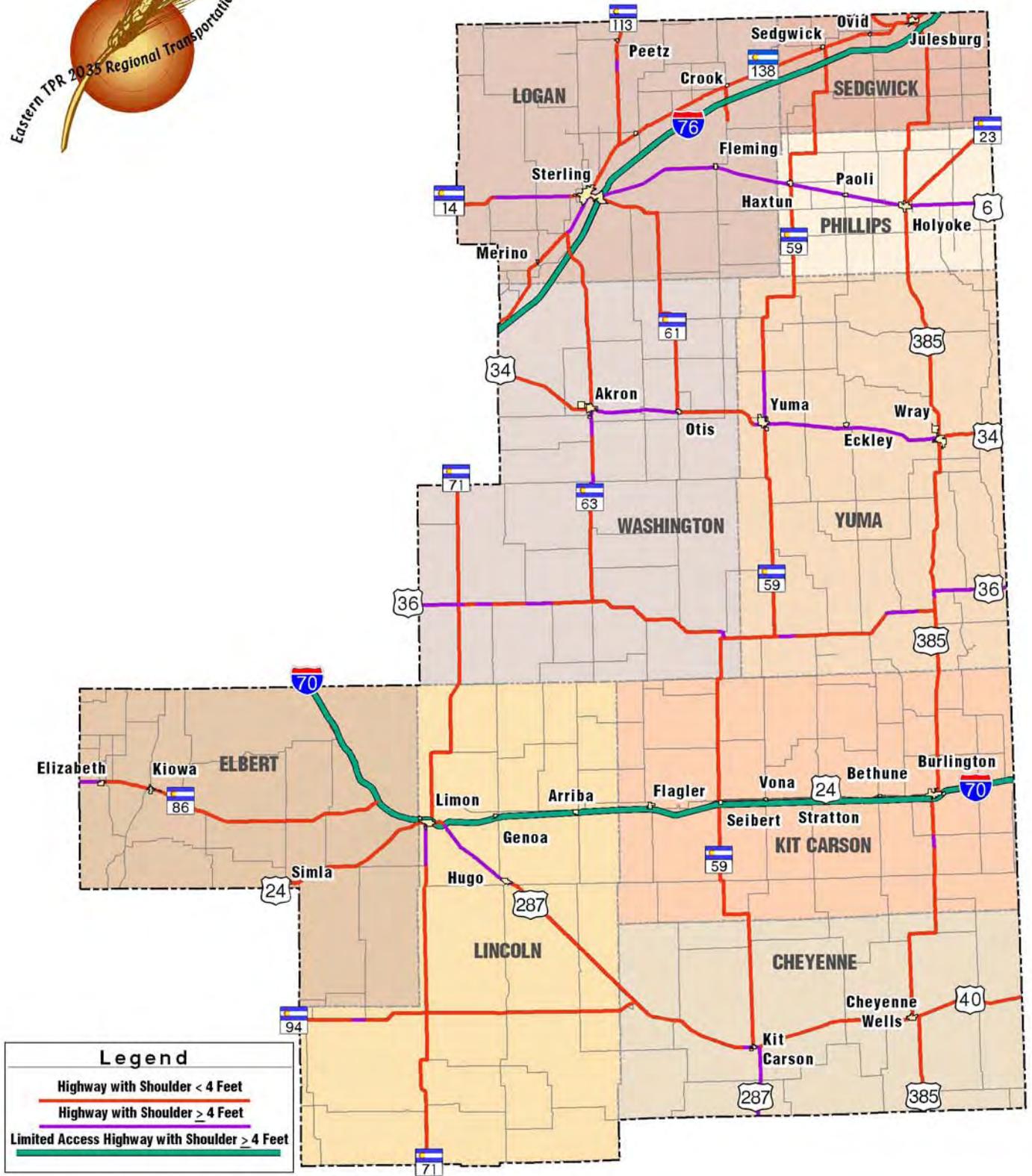
Eastern TPR 2035 Regional Transportation Plan

HIGHWAY SHOULDERS

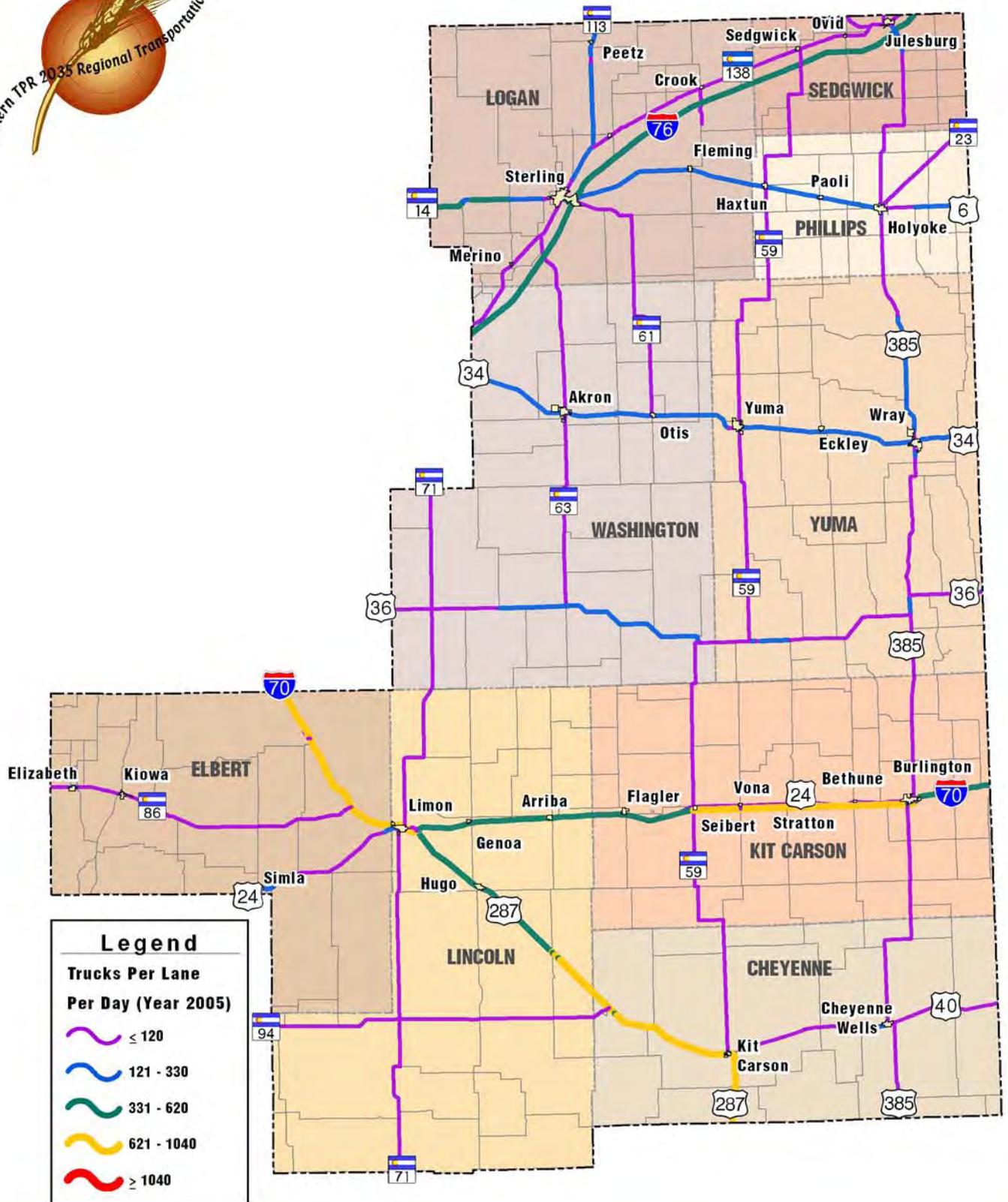
Paved shoulders play an important part in improving safety conditions. The state highway facilities in the Eastern TPR carry a significant level of truck traffic. Shoulders provide a safe refuge for trucks to pull over without disrupting the flow and safety of other traffic using a roadway. Shoulders also allow wide-load and farm vehicles to use roadway facilities without blocking both directions of travel. In addition, many cyclists enjoy riding on the region's highways, often utilizing paved shoulders where they exist. Thus, trips are made safer and more convenient for cyclists and motorists alike when a substantial paved shoulder is available. **Figure 12** depicts the state highways which have either a paved shoulder width of less than four feet, or unpaved shoulders. It is CDOT's policy to incorporate the necessary shoulders to enhance safety for the motoring public and bicyclists along state highways whenever an upgrade of the roadways and structures is being implemented and it is technically feasible and economically reasonable to do so.

COMMERCIAL TRUCK TRAFFIC

Figures 13 and 14 provide a comparison of growth in Commercial Truck Average Annual Daily Traffic (AADT) from 2005 to 2035. The truck volumes have been normalized by the number of lanes to compensate for greater capacity on four or six lane facilities. The maps show the number of trucks per lane per day.



Source: CDOT 2035 Transportation Planning Dataset



Source: CDOT 2035 Transportation Planning Dataset

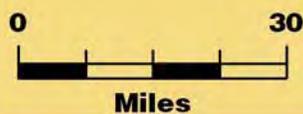
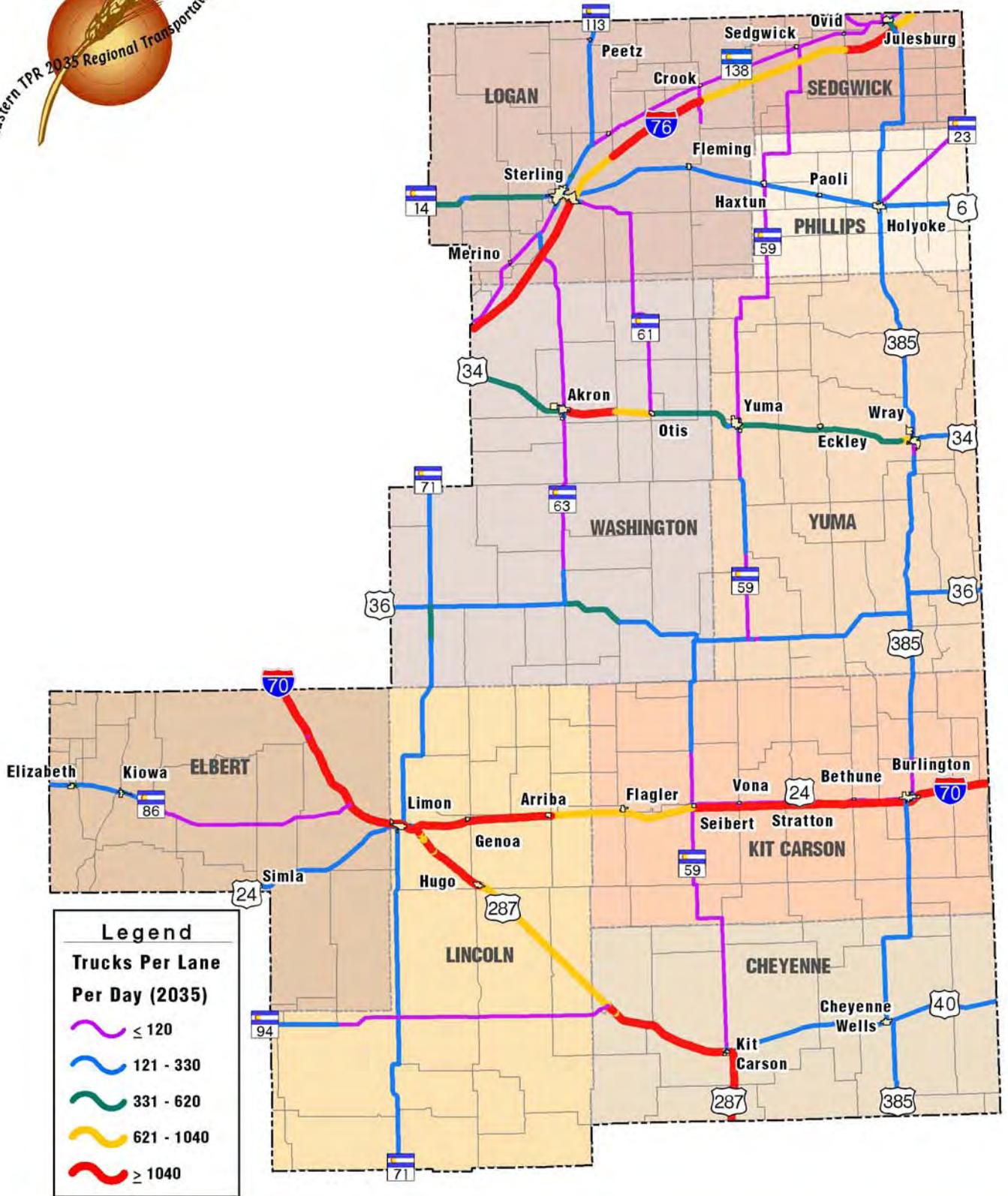


Figure 13

Existing Truck Traffic



Source: CDOT 2035 Transportation Planning Dataset

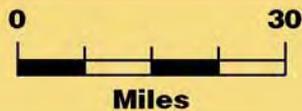


Figure 14
**Projected 2035
 Truck Traffic**



Eastern TPR 2035 Regional Transportation Plan

Rail System

The Eastern TPR's rail lines, including those used by Amtrak, are shown in **Figure 15**. There are two Class I Railroads and two Class III Railroads operating in the Eastern TPR. The Eastern TPR is served by several railroads including the Burlington Northern & Santa Fe Railway Co. (BNSF) and the Union Pacific Railroad (UP). The National Railroad Passenger Corporation (Amtrak) provides service over the rail lines of the BNSF with a station in Fort Morgan connecting to Denver and Chicago.

Bicycle Facilities

Non-motorized access to recreational areas, historic sites, public lands, and the communities within the Eastern TPR are important to the region's quality of life. The region's highways, local roads, and trails network are the primary systems of non-motorized travel.

CDOT has identified the state highways throughout the state which serve as bicycle corridors. The state highways which have a shoulder width greater than four feet, as previously depicted on **Figure 12**, are preferable for cyclists. Although other bicycle facilities exist in the Eastern TPR, because of funding restrictions, this document focuses on those facilities on the state highway system.

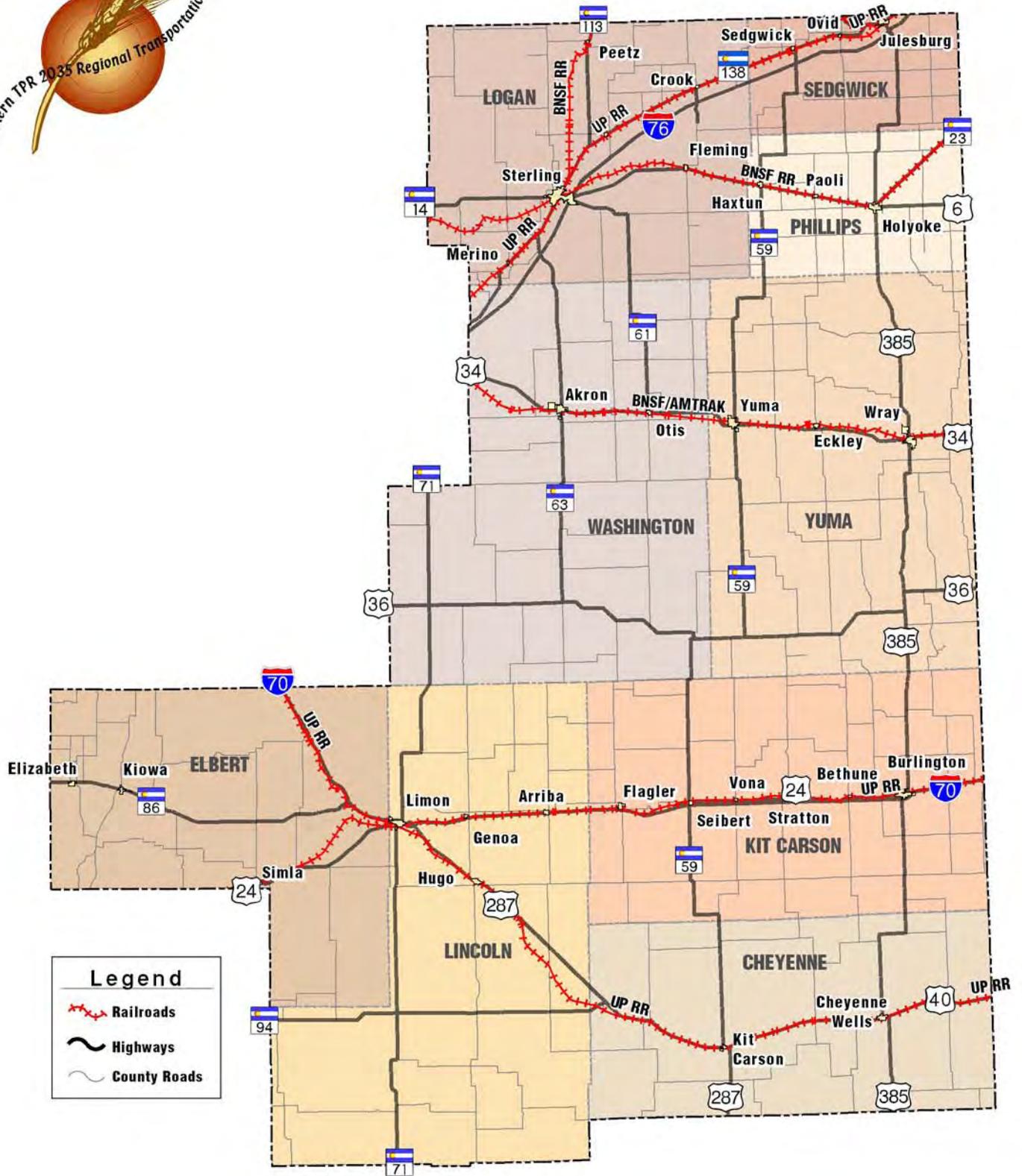
It is the policy of CDOT to incorporate any necessary shoulder improvements to enhance safety for both the motorists and cyclists along state highways when an upgrade of roadways or structures is being implemented and it is technically feasible and economically reasonable.

Aviation System

Ten airports serve a key transportation role in the Eastern TPR. The operations of these airports are provided in **Table 6**. Important to the Eastern Transportation Planning Region is an airport's ability to meet the following criteria:

- ▶ Convenient air travel to major population centers in Colorado
- ▶ Passenger and freight service at a modest cost to the shipper, consumer or traveler
- ▶ Emergency connections/air ambulance service to Front Range medical facilities

Figure 16 shows the location of the airports in the Eastern TPR.



Source: CDOT 2035 Transportation Planning Dataset

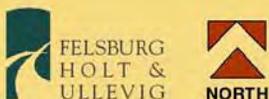
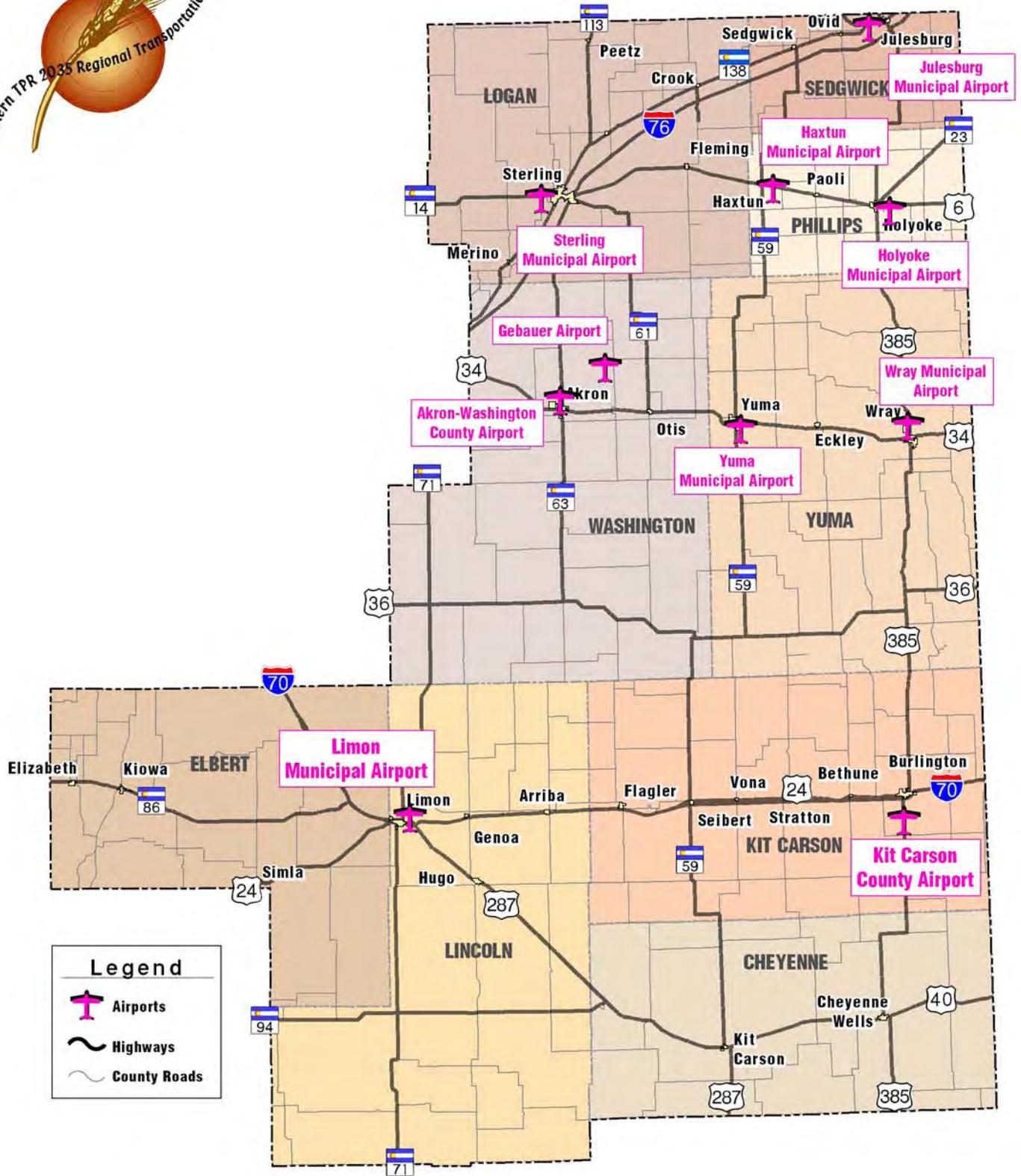


Figure 15
Railroads



Legend

- Airports
- Highways
- County Roads

Source: CDOT 2035 Transportation Planning Dataset



Eastern TPR 2035 Regional Transportation Plan

Table 6. Airport Operations - Part 1

	Kit Carson	Lincoln	Logan		Phillips		
	Kit Carson County Airport (Burlington)	Limon Municipal Airport	Sterling Municipal Airport		Holyoke Municipal Airport	Haxtun Municipal Airport	
Functional Level	Major	Intermediate	Intermediate		Intermediate	Minor	
FAA Classification	General Aviation	General Aviation	General Aviation		General Aviation	NA	
Annual Enplanements	N/A	N/A	N/A		N/A	N/A	
Based Aircraft	23	14	48		15	1	
Annual Operations	7,310	4,500	3,190		6,530	250	
Runway Orientation	15/33	16/34	15/33	3/21	14/32	8/26	17/35
Length in Feet	5,201	4,700	4,730	2,500	5,000	3,860	1,650
Width in Feet	75	60	75	40	75	40	30
Surface Type	Concrete	Concrete	Concrete	Turf/Dirt	Asphalt	Asphalt	Turf/Dirt
# of Runways	1	1	2	2	1	2	2
Lights	MIRL, PAPI	MIRL, PAPI	MIRL, PAPI	None	MIRL, PAPI, REIL	LIRL	None
Approach Lights	Yes	Yes	Yes	No	Yes	Non-Standard	No

Source: Colorado Aviation System Plan 2005, Wilbur Smith Associates, Inc., 2005

Lights: MIRL – Medium Intensity Runway Lights, LIRL – Low Intensity Runway Lights, PAPI – Precision Approach Path Indicator, REIL – Runway End Identification Lights



Eastern TPR 2035 Regional Transportation Plan

Table 6. Airport Operations - Part 2

	Sedgwick	Washington		Yuma			
	Julesburg Municipal Airport	Colorado Plains Regional Airport (Akron)	Gebauer Airport (Akron)		Yuma Municipal Airport		Wray Municipal Airport
Functional Level	Minor	Major	Minor		Intermediate		Intermediate
FAA Classification	NA	General Aviation	NA		General Aviation		General Aviation
Annual Enplanements	N/A	N/A	N/A		N/A		N/A
Based Aircraft	0	14	0		12		31
Annual Operations	250	16,740	20		4,320		14,600
Runway Orientation	13/31	11/29	8/26	11/29	16/34	12/30	17/35
Length in Feet	3,700	7,000	3,000	2,150	4,200	2,900	5,400
Width in Feet	60	100	70	70	75	40	75
Surface Type	Asphalt	Asphalt	Gravel	Gravel	Concrete	Gravel/Dirt	Asphalt
# of Runways	1	1	2	2	2	2	1
Lights	MIRL	MIRL, PAPI, REIL	None	None	MIRL, PAPI, REIL	None	MIRL, PAPI
Approach Lights	No	Yes	No	No	Yes	No	Yes

Source: Colorado Aviation System Plan 2005, Wilbur Smith Associates, Inc., 2005

Lights: MIRL – Medium Intensity Runway Lights, LIRL – Low Intensity Runway Lights, PAPI – Precision Approach Path Indicator, REIL – Runway End Identification Lights



Eastern TPR 2035 Regional Transportation Plan

Transit System

TRANSIT PROVIDERS OVERVIEW

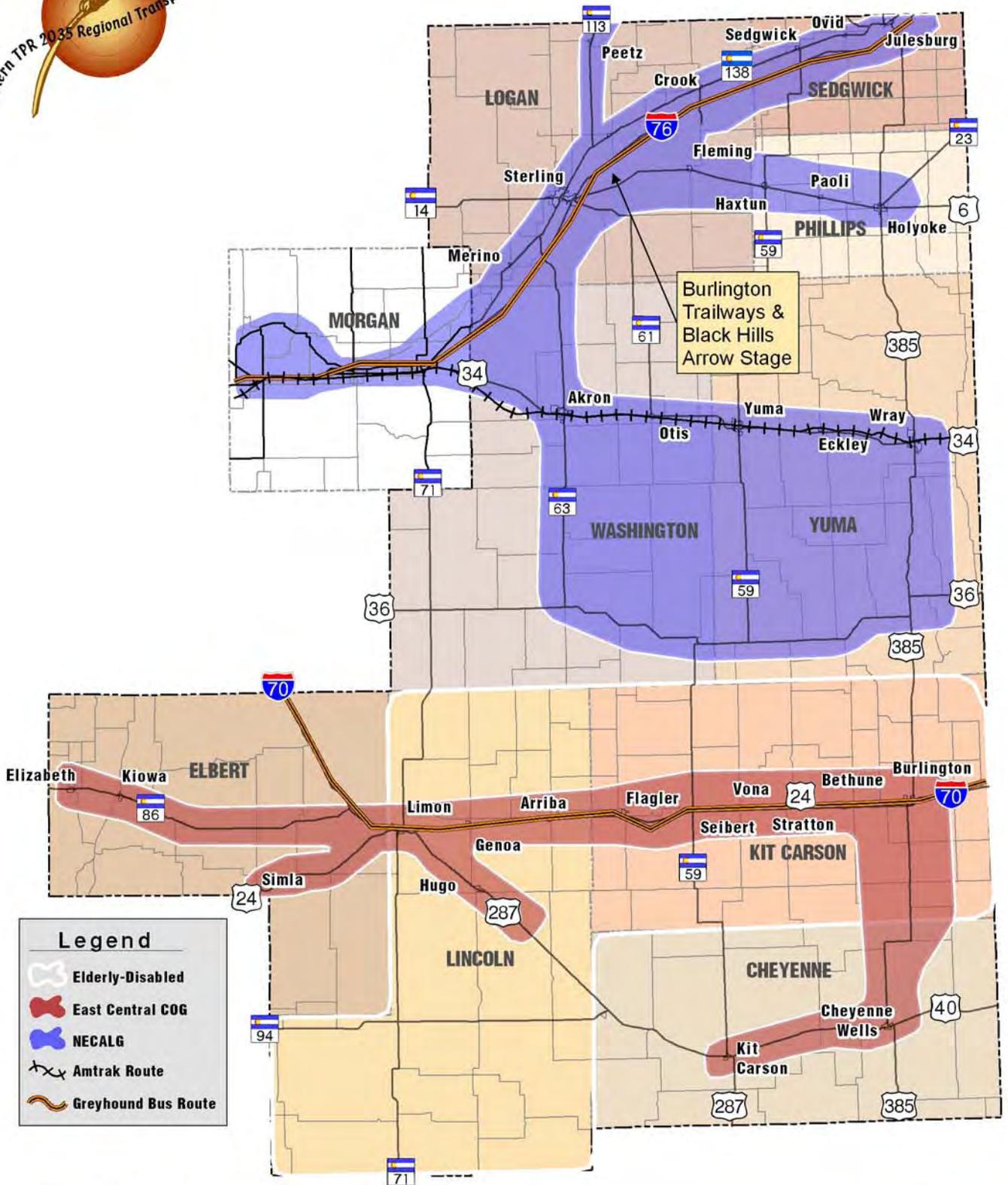
The Eastern TPR is currently served by two primary transit providers. Not all providers in the area are referenced due to the lack of information provided by these agencies; however, the primary agencies did provide updated information concerning operating and capital costs, revenues, and ridership. The two main providers of transportation for the region include:

- ▶ East Central Council of Local Governments (ECCOG)
- ▶ Northeastern Colorado Association of Local Governments (NECALG)

Figure 17 illustrates the areas served by these agencies. The Local Transit Plans are provided in **Appendix B**.

TRANSIT PROVIDER PROFILES

This section provides one-page profiles of each major transit service provider within the Eastern TPR. The profile includes service and operating characteristics, agency information, funding types, ridership trends, and performance measures. Basic information is included for the two providers; however, multiple services are provided by each agency throughout the region in several locales.



Source: LSC Transportation Consultants, Inc.



Eastern TPR 2035 Regional Transportation Plan

NECALG – County Express

The Northeastern Colorado Association of Local Governments is a voluntary association of county and municipal governments primarily servicing the areas of Logan, Morgan, Philips, Sedgwick, Washington and Yuma Counties.

NECALG operates County Express, a demand responsive, curb-to-curb, public transportation for residents in a 9,600 square mile service area, providing travel to jobs, health and medical services, social functions and services, and recreational and educational functions. Non-emergency medical transportation is provided to Greeley, Fort Collins, Denver, and other medical facilities along Colorado's Front Range.

NECALG also operates Prairie Express, route-deviation service Monday through Friday within the Sterling area. Buses operate on a scheduled fixed-route, but are able to deviate from the route to accommodate demand-response trips.

Agency Information

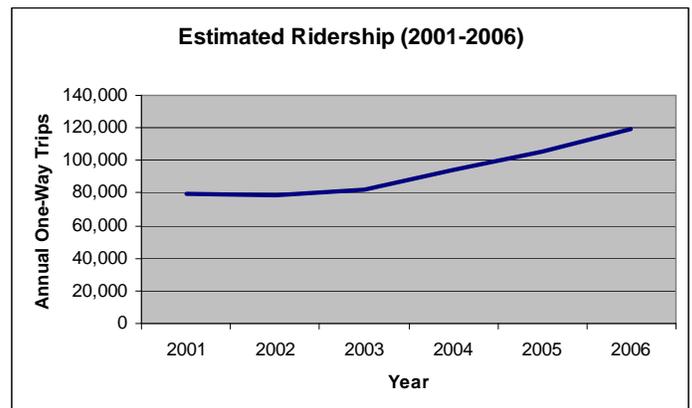
<i>Type of Agency:</i>	Council of Governments (COG)
<i>Type of Service:</i>	Demand-Response/Deviated Fixed-Route service in Sterling
<i>Funding Type:</i>	FTA 5311 and 5310, Title III, fares and local general funds.
<i>Eligibility:</i>	Agency provides demand-responsive and subscription transportation services to local seniors, persons with disabilities, and general public. Also provides deviated fixed-route service in the Sterling Area.

Operating Characteristics (2005)

<i>Size of Fleet:</i>	54
<i>Annual Operating Budget:</i>	\$1,171,835
<i>Annual Passenger-Trips:</i>	105,131
<i>Operating Days and Hours:</i>	Various depending on geographic region

Performance Measures

<i>Cost per Service Hour:</i>	\$25.95
<i>Cost per Passenger-Trip:</i>	\$11.15
<i>Passenger-Trips per Service Hour:</i>	2.3



Contact for Schedules and Information

Larry Worth/ Darlene Thorndyke
231 Main Street, #211, Fort Morgan, CO 80701
Phone: 970-867-9409
Email: dthorndyke@necalg.com



Eastern TPR 2035 Regional Transportation Plan

ECCOG – Outback Express

The East Central Council of Local Governments (ECCOG) is a voluntary association of county and municipal governments in Cheyenne, Elbert, Kit Carson, and Lincoln counties. A multi-purpose organization, ECCOG promotes economic development, is the designated area agency on aging for this planning and service area, provides regional technical assistance to local governments, and coordinates a regional public transit system, known as the Outback Express.

The coordinated public transit system known as Outback Express includes several transit operations. The primary service, Outback Express, is operated under the direct control of ECCOG. Other localized services offered include service in the City of Burlington, Town of Limon, and Dynamic Dimensions, Inc. in Burlington. Memorandums of Understanding (MOUs) establish the relationship among these local transit service providers.

The Outback Express is a scheduled demand responsive system offering service to older adults, persons with disabilities, and the general public in the sparsely populated but large geographic area including Cheyenne, Elbert, Kit Carson and Lincoln counties. All vehicles are white with blue stripes and are clearly marked with ECCOG's regional logo and the words "Public Transportation."

Agency Information

<i>Type of Agency:</i>	Council of Governments (COG)
<i>Type of Service:</i>	Demand-Response
<i>Funding Type:</i>	FTA 5311 and 5310, Title III, fares and local general funds.
<i>Eligibility:</i>	Agency provides demand-responsive and subscription transportation services to local seniors, persons with disabilities, and general public.

Operating Characteristics

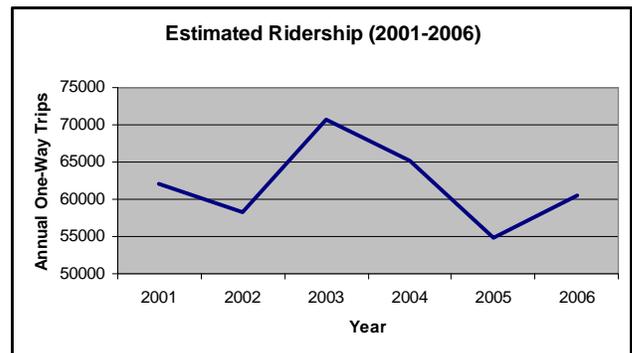
<i>Size of Fleet:</i>	19 total, 7 vans and 12 standard body-on-chassis
<i>Annual Operating Budget:</i>	\$248,000
<i>Annual Passenger-Trips:</i>	61,000
<i>Operating Days and Hours:</i>	Various depending on geographic region

Performance Measures

<i>Cost per Service Hour:</i>	\$38.75
<i>Cost per Passenger-Trip:</i>	\$4.07
<i>Passenger-Trips per Service Hour:</i>	9.5
<i>Ridership Trend:</i>	

Contact for Schedules and Information

Terry Baylie/Debbly Conrads
128 Colorado Avenue, P.O. Box 28
Stratton, CO 80836
Phone: 719-348-5562
Email: baylie@prairiedevelopment.com





Eastern TPR 2035 Regional Transportation Plan

OTHER PROVIDERS

There are very few additional “providers” in the area that offer services. Due to lack of information provided by these agencies, some of the information is based on the 2030 Transit Element.

Retired and Senior Volunteer Programs

This service operates in Lincoln and Kit Carson counties with occasional trips driven by volunteer drivers. The Retired and Senior Volunteer Program (RSVP) provides worthwhile volunteer opportunities to persons 55 years and older in the Kit Carson/Lincoln County area. The drivers for the transportation service provide mobility to other seniors.

All riders must be members of the RSVP program. There are no regular hours of operation. Trips are scheduled for planned RSVP activities. Transportation is primarily limited to nursing homes, senior centers, and meetings. However, occasional trips are provided for social visits with friends and relatives and for recreational activities such as cultural and athletic events. Public ridership is not available.

The RSVP often uses the Stratton and Burlington-based Outback Express vehicles on a temporary basis. Service is also being impacted by the difficulty in finding volunteers who are willing and able to provide driving services.

Cheyenne Manor Nursing Care Center

Located in Cheyenne Wells, a wheelchair-accessible vehicle provides service on a restricted demand-response basis to its residents seven days per week. Driving responsibility rotates among social services and activities staff. Most trips are for medical appointments and often require transportation to Pueblo or Colorado Springs and most trips are made between 10:00 a.m. and 4:00 p.m. Unfortunately, concerns about insurance and limited staffing create a barrier to providing more service.

Grace Manor Care Center

Located in Burlington, Grace Manor specializes in long-term care of elderly residents. As part of the services offered to residents, one vehicle provides limited transportation to medical appointments and for recreational purposes, generally Monday through Friday during the day. Trips are arranged on an as-needed basis and only within the Burlington city limits.

Prairie View Care Center

Located in Limon, one vehicle provides service limited to transportation for residents to medical appointments. While the majority of trips are within Limon, some trips are made to Denver or Colorado Springs. These are round trips with the staff person driving the vehicle and then waiting for the residents during their appointments.



Eastern TPR 2035 Regional Transportation Plan

Limon Child Development Center

This Head Start center serves children ages three to five. Participants are from Lincoln County and the portion of Elbert County in the Limon School District. Origins for trips include Arriba, Hugo, Genoa, the area south of Limon, and the Town of Limon. Two vehicles are in use and provide transportation from 8:00 a.m. to 4:30 p.m., Monday through Friday. Funding is provided by a federal grant through the Head Start Program for low-income families.

As the number of participants in the Head Start program grows, there may be a need to expand the service to south Lincoln County. Hiring trained drivers, including part-time substitute drivers, is a problem for this service.

Several local assisted living facilities and nursing homes provide transportation to their residents. These services are often augmented with special trips by the ECCOG services.

INTERCITY SERVICES

In addition to the transit service providers in the region, there is both passenger rail and intercity bus service in the region. Intercity services consist of Amtrak and intercity bus services, as well as some private providers such as the Dashabout Shuttle.

Intercity Bus Service

Greyhound Bus Lines, through Burlington Trailways and Black Hills Arrow Stage connections, provides daily service to the Eastern region along the I-76 corridor with stops in Sterling. A departure for Denver is scheduled for 8:20 p.m. and takes just over one hour to reach the Denver RTD Market Station; a limited stop terminal. Two other trips depart at 3:40 a.m. and 5:00 p.m. and travel to the Denver Amtrak station. Cost for a one-way ticket is approximately \$30.50, an increase of \$7.50 since 2004. Several private companies also provide intercity shuttle transportation within the Eastern TPR.

Additionally, Greyhound Lines services the I-70 Corridor with stops in Limon. The Burlington Greyhound stop on I-70 has been eliminated; however, there is an expressed need to have that stop replaced. Service departs Denver at 11:00 a.m. and arrives in Limon at 12:20 p.m. Service continues east at 12:30 p.m. Service departs Limon at 9:15 a.m. and arrives in Denver at 10:40 a.m.

Amtrak Service

Local Amtrak service is provided between Fort Morgan in Morgan County (west of the Eastern TPR) and Denver. Service is provided once per day in each direction in Fort Morgan. The westbound train leaves at 5:05 a.m. daily arriving in Denver at 7:15 a.m., and the eastbound train leaves Fort Morgan at 8:40 p.m. arriving in McCook, Nebraska at 11:59 p.m. One-way service to Denver is approximately \$14.00.



Eastern TPR 2035 Regional Transportation Plan

INTERMODAL FACILITIES

The Eastern TPR has only a few opportunities for intermodal travel. Given the limited amount of general public transportation that is available, the only intermodal facilities are those that may have transit service connections to the Greyhound Bus station in Sterling or the Amtrak station in Fort Morgan. The intermodal facilities are shown on **Figure 18**.

NEEDS ANALYSIS

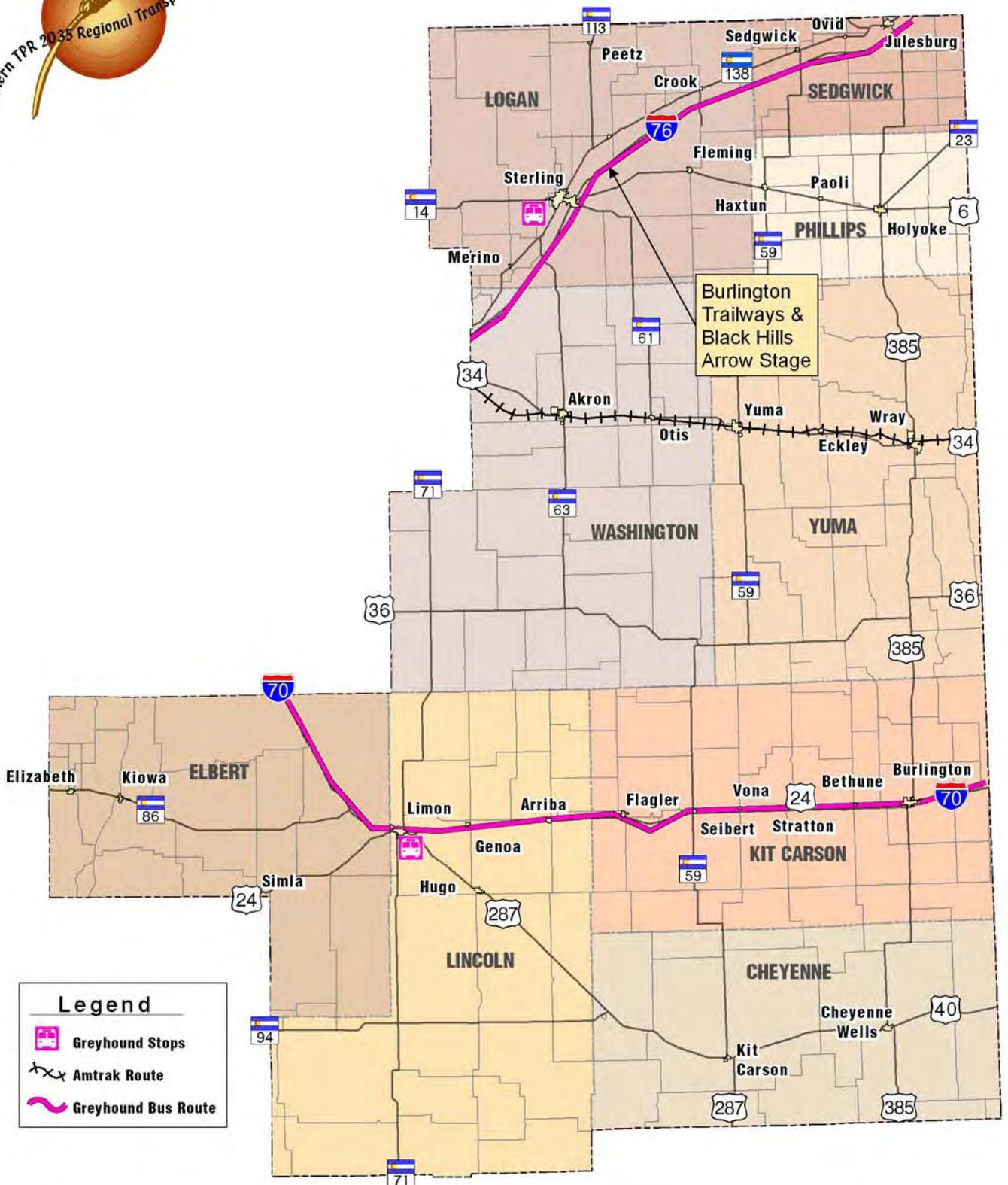
Methodology

This section presents an analysis of the need for transit services in the Eastern TPR based upon standard estimation techniques using demographic data and trends, and needs identified by agencies. The transit need identified in this chapter will be utilized throughout the study process. Two methods are used to estimate the maximum transit trip need in the Eastern TPR, as described below.

Mobility Gap – The mobility gap methodology developed by LSC Transportation Consultants, Inc. identifies the amount of service required in order to provide equal mobility to persons in households without a vehicle as for those in households with a vehicle. The estimates for generating trip rates are based on the 2001 National Household Travel Survey (NHTS) data and Census STF3 files for households headed by persons 15-64 or 65 and over in households with zero or one or more vehicles. After determining the trip rates for households with and without vehicles, the difference between the rates is defined as the mobility gap. The mobility gap trip rates range from 1.42 for age 15-64 households and 1.93 for age 65 or older households. By using these data, the percent of mobility gap filled was calculated.

Rural Transit Demand Methodology – An important source of information and the most recent research regarding the demand for transit services in rural areas and for the elderly or disabled population is the Transit Cooperative Research Program (TCRP) Project A-3: Rural Transit Demand Estimation Techniques. This study, completed by SG Associates, Inc. and LSC Transportation Consultants, Inc., represents the first substantial research into the demand for transit service in rural areas and small communities since the early 1980s. The TCRP study presents a series of formulas relating the number of participants in various types of programs in 185 transit agencies across the United States. The TCRP analytical technique uses a logit model approach to the estimation of transit demand, similar to that commonly used in urban transportation models. The model incorporates an exponential equation that relates the service quantity and the area demographics. Details of the formulas used in this process are presented in **Appendix B**.

The TCRP analysis procedure considers transit demand in two major categories: “*Program demand*,” which is generated by transit ridership to and from specific social service programs, and “*Non-program demand*,” which is generated by the other mobility needs of the elderly, disabled, and low-income population. Examples of non-program trips may include shopping, employment, and medical trips.



Source: CDOT 2035 Transportation Planning Dataset



Eastern TPR 2035 Regional Transportation Plan

The methodology for forecasting “program demand” transit trips involves two factors: 1) determining the number of participants in each program, and 2) applying a trip rate per participant using TCRP demand methodology. The program demand data for the Eastern TPR were estimated based on the methodology presented in TCRP Report 3. The available program data include the following programs: Developmentally Disabled, Head Start, job training, mental health services, sheltered work, nursing homes, and Senior Nutrition.

As with any other product or service, the “non-program demand” for transit services is a function of the level of supply provided. In order to use the TCRP methodology to identify a feasible maximum demand, it is necessary to assume a high supply level measured in vehicle-miles per square mile per year. The high supply level is the upper-bound “density” of similar rural services provided in the United States. The assessment of demand for the rural areas, therefore, could be considered to be the maximum potential ridership if a high level of rural service were made available throughout the rural area. The TCRP methodology is based on the permanent population. Therefore, the TCRP methodology is a good demand analysis technique to use for the study area. A maximum level of service for the cities of a study area would be to serve every portion of the region with four round-trips (eight one-way trips) daily Monday through Friday. This equates to approximately 2,400 vehicle-miles of transit service per square mile per year.

Feedback from the local transit providers and the residents within the community also plays a critical role in the planning process. The Regional Transportation Forum and the transit provider information received helped identify the qualitative needs for this process.

Regional Transit Needs Summary

Various transit demand estimation techniques were used to determine overall transit need and future transit need. Transit needs are based upon quantitative methods which were detailed in the Transit Needs Estimation Memorandum submitted to CDOT. Additionally, the estimation techniques are further defined in the Local Human Service Transportation Coordination Plans developed as part of the overall 2035 Update. Please refer to those documents for greater detail on the methods for estimating needs. Additionally, the Local Plans contain background information on the transit-dependent population including low-income, disabled, and elderly persons.

While this section does not specifically detail these populations’ needs, they are inclusive of the methods used in this section. The various methods for estimating current need are summarized in the following section. It should be noted that these techniques give a picture of the needs in the region based upon available demographic data.



Eastern TPR 2035 Regional Transportation Plan

Table 7 provides a summary of the Eastern TPR's transit need using the Mobility Gap and TCRP Model. Based on the information presented in this chapter, a reasonable level of need can be estimated for the area. Using these methodologies, there is an annual transit need of approximately 1.3 million one-way passenger-trips in the Eastern TPR; 87% of this need is not currently being met.

This is not to say that transportation providers are not doing everything in their power to provide the highest levels of service possible. However, given the constraints of funding and other extraneous factors, it is impossible to meet all the need that could possibly exist in any area. This section has presented estimates of transit need based upon quantitative methodologies. As stated, no area can meet 100 percent of the transit need, however, every attempt should be made to meet as much of the demand as possible, in both a cost-effective and efficient manner.

TRANSIT TRENDS

Figure 19 presents the regional transit trends in ridership for the region. As shown by the latest available data, ridership has increased significantly since 2001. A peak ridership is observed in 2006 and is estimated at nearly 180,000 annual one-way trips. Several providers, such as Dashabout Shuttle and others, were unable to be contacted or identified by other local agencies and organizations.

Figure 19. Transit Ridership

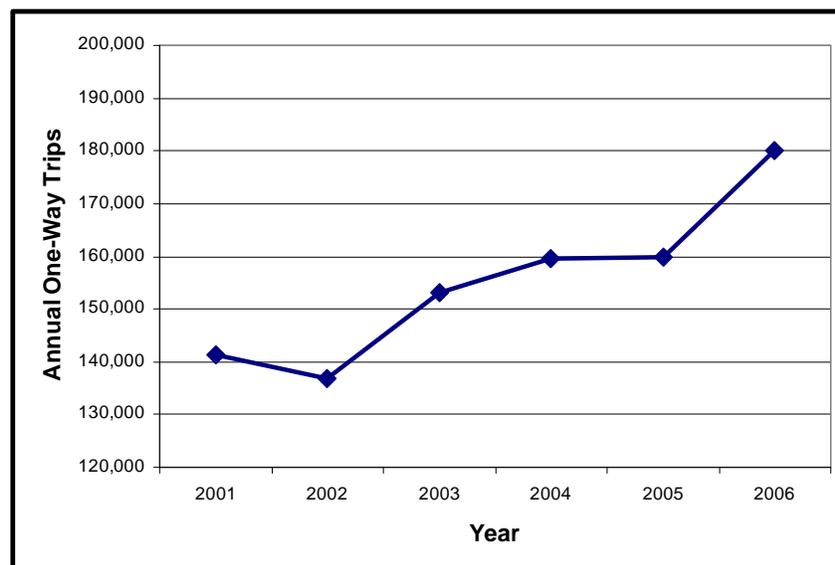


Table 7. Estimated Transit Needs

Methodology	Estimated Annual Need
Mobility Gap	757,000
Rural Need Assessment	734,000
Total Annual Need	1,355,000
<i>Annual Trips Provided</i>	181,000
Need Met (%)	13%
Unmet Need (%)	87%

Note 1: Estimates updated from the Transit Needs and Benefits Study (TNBS), 1999
Source: LSC, 2006.



Eastern TPR 2035 Regional Transportation Plan

NEEDS IDENTIFIED BY AGENCIES AND PUBLIC

This section addresses the qualitative needs of this area based on information received through the Regional Transportation Forum and from transit service providers.

The Regional Transportation Forum, held in Akron, Colorado, included very minimal discussion related to public or transit related needs in the region. In the short term, the focus of filling the service gaps was centered on keeping service at its current levels. The second focus gleaned from the Forum was that local transit options for the general public be investigated. Regional service (e.g., to Denver, Colorado Springs, and Fort Collins) was not as much an issue as was service for elderly and disabled passengers. The highest percentage of the audience (34 percent) felt that existing service is adequate at providing for the service needs.

DEFINING TRANSIT GAPS AND DUPLICATION

This section presents a brief analysis of the service gaps and identified service duplication for the nine-county area in the Eastern TPR. As mentioned previously, there are several transportation services for the elderly and disabled populations in the area; however, there are gaps and limited duplication in service. These identified gaps and duplications of services will be used in identifying service improvements and coordination for the area.

Identified Service Gaps

Gaps in service for this area relate to both the availability of funding and the lack of additional services and providers. Gaps in service are geographic in nature as well as lack of service to various market segments. However, the geographic gaps are more apparent than service type gaps in the region.

Geographic Service Gaps: There are regional gaps in transit services within the Eastern TPR. There are two main general public providers that provide service in the major population centers in the region, on the majority of corridors, and in the towns and small cities along those corridors. Many of the rural areas currently have specialized services; however, it is impossible to reach all areas with the limited resources and particularly with the sparse population in many portions of the region. The largest gap in service is on State Highway 71 between Brush and Limon; however, this corridor is very sparsely populated with only two small communities between these two larger areas. There is also a lack of service on US Highway 34 in the Yuma/Wray area.

Service Type Gaps: The largest gap in this area is a lack of rural general public transit services in the area which includes vehicles, drivers, and frequency of services. Service is limited in terms of the following service types:

- ▶ There is a lack of consistent commuter services
- ▶ The rural area is so large that it is difficult to cover the entire area consistently
- ▶ Weekend service is absent



Eastern TPR 2035 Regional Transportation Plan

- ▶ Many “providers” and vehicles, but little in the way of coordinating services for those in need
- ▶ There is a need for evening hours
- ▶ Many of the providers do not provide all-day service. They typically have scheduled trip times or 24-hour advance reservation requests
- ▶ Rural seniors in remote areas need more transportation for a variety of needs
- ▶ Trips are needed not only for seniors, but other segments such as the low-income population for access to employment
- ▶ A large intercity gap exists between communities to access healthcare and services

Identified Service Duplication

There are few service duplications due not only to the specific type of transportation providers, but mainly due to a general lack of services. Identified service duplication is evident by the fact that there are “providers” which may serve much the same geographic area as does County Express and Outback Express. However, coordination of services does occur, and it is unlikely that either will become the sole provider of services in the region. The Eastern Colorado Council of Governments (ECCOG) is currently providing service through a coordinated system throughout their service area. There are no duplications in regard to agencies which receive federal or state funding. Any overlap in service type and geographic area is isolated to the instances where there may be limited transportation provided by an agency other than County Express or Outback Express. The rural area’s largest problem is a lack of services in the smaller communities as well as the intercity connections to the larger communities which serve as the main activity centers for shopping, medical, and other human services.

GENERAL STRATEGIES TO ELIMINATE GAPS

As mentioned, there are relatively few geographic or service type duplications evident in the existing service area. There are a few areas which do not currently receive any services. For the most part, gaps identified include regional services to employment sites, and needed coordination between all agencies.

Appropriate Service and Geographic Gap Strategies

The general strategies which may meet the service gap needs of the Eastern TPR include the following:

- ▶ Regular scheduled service in Fort Morgan
- ▶ Expand service areas of County Express and Outback Express to cover greater portions of the rural area of the TPR
- ▶ More efficient use of existing vehicles. Vehicles should be used to the fullest extent possible, while a strategic capital replacement plan is put into place for all the local providers



Eastern TPR 2035 Regional Transportation Plan

- ▶ Service to include the US 34 corridor
- ▶ Increased commuter services between communities—particularly Sterling, Brush, Fort Morgan, Burlington, and Limon
- ▶ Park-and-ride lots should be considered to support commuter services
- ▶ Coordination of scheduled trips from the Eastern TPR to the Front Range area including the Denver metro area, Colorado Springs, and Greeley. Trips could be coordinated along the I-70, I-76, US 34, and US 36 corridors. Scheduled trips could be done in coordination with the local human service agencies along these corridors for medical needs and shopping
- ▶ Expansion of service hours in the evening; after 5:00 p.m. for some areas
- ▶ Expansion of services on weekends, although this is a lower priority of implementation

GENERAL STRATEGIES TO ELIMINATE DUPLICATION OR IMPROVE SERVICES DELIVERY

As stated, there is very little duplication of services in the Eastern TPR. Currently, the providers and organizations (such as ECCOG) coordinate service very effectively in the southern portion of the region. This coordination limits the amount of duplication in services as well as directs resources to the most appropriate areas. However, there may be general coordination strategies which could ultimately improve services in the area. The following discussion represents appropriate strategies which could be done within the Eastern TPR.

Coordinating Council

Similar to a coalition, a coordinating council is made up of myriad agencies and partners with a common goal of coordinating transportation resources. This group differs from a coalition in the fact that it is primarily made up of agencies which have a need for service and other groups (such as local municipalities) specifically formed to accomplish a strategic goal (such as to implement a new service). The coordinating council acts similar to a Transportation Advisory Committee in either a local or regional area. This would be something which could be done within the local areas of NECALG and ECCOG; however, the alternative would be to form an Eastern Regional Coordinating Council.

Benefits:

- ▶ Allows for greater input from the key transportation agencies in the region.
- ▶ Allows the members to share information and knowledge on a one-on-one basis.
- ▶ Provides greater opportunity to identify possible coordination actions.
- ▶ Increase in the integration of transit planning within the region.



Eastern TPR 2035 Regional Transportation Plan

Implementation Steps:

- ▶ Agencies interested in being members of the council need to meet and develop by-laws for the council.
- ▶ Council members need to elect a Chair and Vice-Chair.
- ▶ Council members need to develop a mission statement, vision, goals, and objectives.
- ▶ Council members need to set a date for the monthly or quarterly meeting.
- ▶ Timing: 1 to 3 years.

Coalitions

A coalition is a group of agencies and organizations that are committed to coordinate transportation and have access to funding. The coalition should include local stakeholders, providers, decision-makers, business leaders, Councils of Government, users, and others as appropriate. The coalition could be either an informal or formal group which is recognized by the decision-makers, and which has some standing within the community. Coalitions can be established for a specific purpose (such as to obtain specific funding) or for broad-based purposes (such as to educate local communities about transportation needs).

Benefits:

- ▶ Development of a broad base of support for the improvement of transit services in the region.
- ▶ The coalition is able to speak with the community and regional decision-makers, thereby increasing local support for local funding.

Implementation Steps:

- ▶ Identify individuals in the region that are interested in improving transit's level of service and have the time and skills to develop a true grassroots coalition.
- ▶ Set up a meeting of these individuals in order to present the needs and issues that face the agencies.
- ▶ Agencies need to work with the coalition in order provide base information and data on the existing and future needs of transit across the region.
- ▶ Timing: 1 to 3 years.

Vehicle Sharing

This level of coordination requires that agencies own and operate vehicles. Memoranda of Understanding or Joint Agreements are needed for this element to work properly. Agencies that operate vehicles are able to share those vehicles with other agencies in a variety of circumstances, such as when one agency has a vehicle mechanical breakdown, when vehicles are not in use by one agency, or when capacity for a specific trip is not available. Many of the agencies may have vehicles which they could donate to one of the larger providers.



Eastern TPR 2035 Regional Transportation Plan

Benefits:

- ▶ Reduction in the overall local capital outlay.
- ▶ These funds can be shifted to cover operational costs or to increase the level of service.
- ▶ These funds can also be used for capital funding for facilities, equipment, and other capital assets.

Implementation Steps:

- ▶ Each agency needs to identify their individual vehicle schedules and when their vehicles could be shared.
- ▶ Vehicle schedules listing the time the individual vehicles are available need to be created and distributed among the agencies.
- ▶ A system of tracking the vehicles that are being shared needs to be developed in order to track miles, hours, and maintenance of the vehicle.
- ▶ Timing: 3 to 6 years.

Joint Procurement of Vehicles, Insurance, Maintenance, Fuel, Hardware, Software

Joint procurement, or bulk purchases, is a cost-effective approach to increase purchasing power. Joint maintenance and fuel purchase is being more widely used across the country, especially given the rising costs of parts and fuel. Shared maintenance can be done quite easily between agencies in a given locale. Many times, human service providers and other local providers contract out maintenance to a local vendor. While there may be very few qualified maintenance professionals, it may allow a competitive process between agencies to do fleet maintenance between multiple agencies. Insurance pooling is likely the most difficult joint procurement possibility. Each provider should investigate purchasing fuel through the counties' bulk fuel program. Some of this is being done now; however, it should be a program which is expanded throughout the region.

Benefits:

- ▶ Reduction in individual agency capital outlay.
- ▶ Economy of scale in purchasing fuel and hardware, thereby reducing the overall operational cost per agency.
- ▶ With a decrease in capital and maintenance costs, an agency may be able to shift funding from maintenance and capital to service hours, thereby increasing the level of service or operations of the transit system within the region.



Eastern TPR 2035 Regional Transportation Plan

Implementation Steps:

- ▶ Agencies need to meet in order to develop a basic understanding of how the procurement process will work.
- ▶ Intergovernmental agreements (IGAs) will need to be developed and agreed upon.

Shared Vehicle Storage and Maintenance Facilities

Agencies share indoor storage space and, if available, maintenance facilities. Shared storage, especially if and when vehicles are stored outside, can aid in reducing engine wear during cold weather startup. Obviously, if a provider is conducting its own maintenance on vehicles, they can likely share maintenance costs with another local provider.

Benefits:

- ▶ Reduction in maintenance costs, resulting in additional funds available for operations.
- ▶ Reduction in lost time due to vehicles not starting in cold weather, thereby improving the overall performance of the transit service.
- ▶ Sharing a facility or building a facility together increases the amount of local match, thereby increasing the level of Federal Transit Administration (FTA) funding to the region.
- ▶ Reduction in competition for FTA Sections 5309 and 5311 capital funding in the region.

Implementation Steps:

- ▶ Agencies need to meet in order to identify the best existing facility among the coordinated agencies or the best location for a shared facility.
- ▶ Facility should be centrally located in order to reduce the possible deadhead time.
- ▶ Design the amount of space that each agency will get in the facility, based on funding participation for the facility.
- ▶ Develop a grant to purchase or upgrade the facility.

Joint Training Programs

Joint training programs between agencies—in everything from preventative maintenance to safe wheelchair tie-down procedures—can lead to more highly skilled employees. Joint training can lead to reduced training costs with agencies that each have a specialized trainer who can be responsible for one or more disciplines. For example: one agency could provide passenger assistance training, and one agency could specialize in preventative maintenance training, etc. Agencies can also purchase special training from reputable organizations/ companies and allow other agencies' employees to attend. Costs are shared between the agencies.



Eastern TPR 2035 Regional Transportation Plan

Benefits:

- ▶ Reduction in each agency's training budget.
- ▶ Increase in the opportunity for drivers and staff to learn from each other.

Implementation Steps:

- ▶ Identify the training needs of each agency's staff.
- ▶ Identify the training courses that meet the greatest need.
- ▶ Identify the agency or organization/company that could provide the needed training.
- ▶ Identify the state and federal grants that could assist in paying for the training.

Sharing Expertise

Similar to sharing training resources, agencies can share their expertise in such things as grant writing skills, computer skills, and general assistance in operations of transportation services (such as tips for dispatching or accounting procedures). Sharing expertise may be something as general as a list of personnel across the region who have some expertise in a particular field which may benefit another agency. A "yellow pages" of the subject matter expert made available to each agency may be helpful in operating transportation service.

Benefits:

- ▶ Reduction in the need for costly training sessions for drivers and staff, thereby decreasing lost production time.
- ▶ Knowledge is passed on to other staff members and agencies, thereby increasing the efficiencies of the region's transit providers.

Implementation Steps:

- ▶ Identify the information, field of work, and expertise needed to operate an effective transit service.
- ▶ Identify the individual in each agency that has expertise in each field of work.
- ▶ Develop a yellow pages or contacts list of the individuals in each agency that have expertise in certain fields of knowledge.

Contract Services

This involves contracting with another human service agency or a public provider to provide needed trips. This can be done occasionally on an as-needed basis or as part of scheduled service. One example is a local Head Start contracting for service with a local public provider. This contract revenue can then be used as local match for the local public provider, using the same drivers and vehicles as used previously. Many times the drivers are also Head Start aids or teachers.



Eastern TPR 2035 Regional Transportation Plan

Benefits:

- ▶ Increase in the amount of local match that can be used to pull additional state and federal funding for transit services into the region.
- ▶ Reduction in the duplication of services in the region, thereby creating an economy of scale and improving the overall transit performance level.

Implementation Steps:

- ▶ Agencies need to meet and identify the needs and capacity of the contract parties.
- ▶ Develop a contract that details the responsibility of each party.
- ▶ Timing: 1 to 3 years.

Regional Transportation Authority (RTA)

A Regional Transportation Authority should be investigated for the area. An RTA requires voter approval according to Colorado statute. An RTA is authorized to levy taxes to support transportation initiatives, including highway, road, transit, and others.

Benefits:

- ▶ Allows for greater input from the key transportation agencies in the area.
- ▶ Provides for a sustainable source of funding.
- ▶ Provides greater opportunity to identify possible coordination actions.
- ▶ Increase in the integration of transit planning within the region.
- ▶ Increases service levels and geographic area.

Implementation Steps:

- ▶ Voter approval is required, so a ballot initiative must be implemented which incorporates numerous activities.
- ▶ Timing: 3 to 6 years.

REGIONAL SERVICE PRIORTIES AND NEEDS

The following section details the short- and long-term service needs for the area:

Short-Term

- ▶ City of Burlington needs to replace one bus and purchase computer equipment at a cost of approximately \$62,500.
- ▶ City of Burlington wants to expand service to 10:00 p.m. at an estimated cost of \$10,000 annually and continue service at a cost of \$20,000 annually.



Eastern TPR 2035 Regional Transportation Plan

- ▶ Dynamic Dimensions indicated a bus replacement need at an estimated cost of \$50,000. Additional needs include office equipment. Operational costs to sustain current levels are anticipated to cost an additional \$20,000 annually.
- ▶ Outback Express indicated a need to replace six vehicles at \$50,000 each and additional office equipment at \$5,000. Additional staffing could occur in 2013 or in the long term. Two new vehicles are required for service expansion, estimated at 600 hours of service annually.
- ▶ The Town of Limon indicated a need for one bus replacement at \$50,000; office equipment at \$2,500; operation costs at \$3,000 annually; and expansion of service to five days per week.
- ▶ The Lincoln-Kit Carson County RSVP indicated a short-term need for a nine-passenger van estimated at a cost of approximately \$25,000. Additionally, four vans are needed immediately in 2007.
- ▶ NECALG's short-term needs are for the replacement of five vehicles per year at a total cost of \$2.0 million (from 2008-2013) with estimates for additional vehicles in the long term.

Long-Term

- ▶ City of Burlington indicated a need to expand service on weekends and after hours at an annual cost of \$50,000. There is also a need for bus replacement at a cost of \$50,000.
- ▶ Dynamic Dimensions indicated a bus replacement need of two units at an estimated cost of \$50,000 each. Service expansion to cover weekends and after normal business hours was estimated at \$50,000 annually.
- ▶ Outback Express indicated a need for expanded service, 13 replacement vehicles at \$50,000 each, and the addition of staff.
- ▶ Town of Limon indicated a need to expand service to include weekends and after normal business hours and one vehicle replacement at \$50,000.
- ▶ The Lincoln-Kit Carson County RSVP indicated a long-term need would be for vehicle replacement of current vehicles (likely five vehicles).
- ▶ NECALG has implemented a capital plan which calls for the replacement of all vehicles in the fleet. There is also a need for a new maintenance facility.

There was discussion on coordination potential; however, at this time no priorities for implementation were discussed. Several strategies were discussed by the group:

Coordination Council: A coordination council would represent a step toward achieving a coordinated system within the service area. At this point, a prudent approach to providing coordinated services is to further develop the details of how a coordination council would function in the region. This council could be formed two different ways. First, the overall Regional Council would be made up of the two larger service areas of NECALG and ECCOG. Separate from this



Eastern TPR 2035 Regional Transportation Plan

Regional Council would be two smaller councils in each of these service areas. NECALG and ECCOG would each have their own separate councils.

Joint maintenance and fuel program: The joint maintenance and fuel programs are one way of utilizing resources in a cost-efficient manner. Many counties currently have bulk fuel purchase agreements with local vendors. Agreements within each county would need to be reached so that human service agencies and the local public providers are able to purchase fuel at a discount. The maintenance side of this program becomes more difficult to implement. Several options may exist for this program to be implemented. First, contracts with the local counties to include fleet maintenance may be possible. Given the number of vehicles available, this is not likely to overwhelm a county maintenance shop. Second, contracts with local school districts are a plausible option. Finally, bulk contracts with local vendors may work; however, again, given the locales of vehicles, it may not be prudent to drive a long distance every time preventative maintenance is needed. Likely, a local vendor could provide the service at acceptable rates.

Joint call center: The two distinct service areas may not allow a joint call center to be effectively implemented. However, this is something which could be investigated by the separate service providers in their respective areas.

Table 8 presents the cost to eliminate the service and geographic gaps by agency type by presenting the additional services to be provided. This is an estimate of new services to be provided by agencies, and does not represent a cost to fill all gaps, but those which have been discussed by agencies.

Table 8. Transit Gap Elimination

Agency Type	Total 2035 Cost
Human Services	\$0
Transit Agency	\$6,931,106
Regional/Rail	\$0
Total	\$6,931,106

Source: LSC & CDOT, 2007



SOCIOECONOMIC PROFILE

Population and employment growth projections are tools used to understand what the travel demand might be in the Eastern TPR over the next 30 years. Forecasts prepared by the Demography Section of the Colorado Department of Local Affairs (DOLA) and the Center for Business and Economic Forecasting served as the primary sources of information for growth projections.

Population

The State Demographer has published population projections by county through the year 2035. The data provided by the State Demographer include the projected population for the entire region by county. As shown in **Table 9**, the Eastern TPR is projected to grow in population at a rate of approximately 1.7 percent per year between 2000 and 2035. Elbert County is projected to grow at the highest rate (3.4 percent per year), while Cheyenne County is expected to see very little growth. The total population of the Eastern TPR is projected to be nearly 145,000 persons in 2035. This projection implies that the population of the TPR would almost double over the 35 year time horizon.

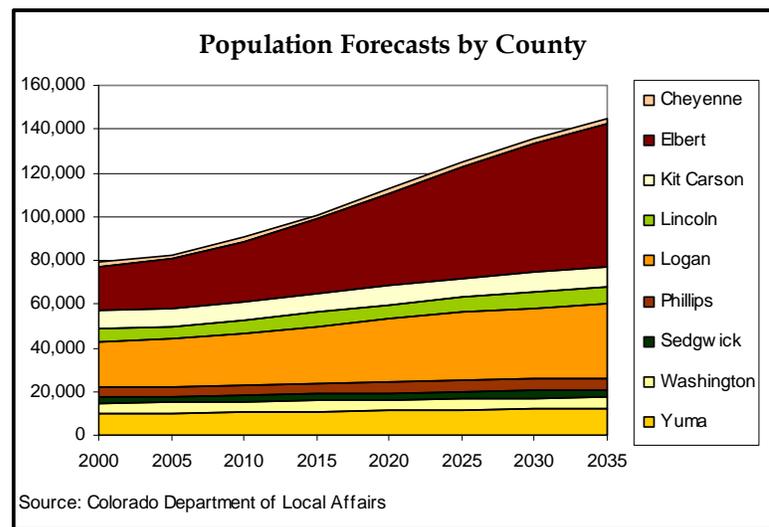


Table 9. Population Estimates and Forecasts by County

County	2000 Population ¹	2035 Population Forecast ²	Annual Growth Rate
Cheyenne	2,229	2,262	<0.1%
Elbert	20,189	65,339	3.4%
Kit Carson	8,013	9,311	0.4%
Lincoln	6,167	7,556	0.6%
Logan	20,869	34,226	1.4%
Phillips	4,483	5,279	0.5%
Sedgwick	2,747	3,260	0.5%
Washington	4,923	5,302	0.2%
Yuma	9,855	12,021	0.6%
Total	79,475	144,556	1.7%

¹ Source: 2000 Census

² Source: Colorado Demography Section



Eastern TPR 2035 Regional Transportation Plan

Household Characteristics

Table 10 illustrates household characteristics for the Eastern TPR. As shown, there are nearly 29,000 family households in the nine-county region. Approximately 37% of households have children under the age of 18; approximately 25% of households have individuals over the age of 65. Seventeen percent of the individuals in the region have disabilities.

Table 10. Household Characteristics

County	Total Households	Average Household Size	% of HH with Individuals < 18	% of HH with Individuals > 65	% of Individuals with Disability
Cheyenne	880	2.5	35%	28%	16%
Elbert	6,670	2.93	45%	13%	12%
Kit Carson	2,990	2.5	36%	28%	18%
Lincoln	2,058	2.44	36%	28%	19%
Logan	7,551	2.45	34%	27%	19%
Phillips	1,781	2.47	35%	31%	17%
Sedgwick	1,165	2.31	28%	34%	20%
Washington	1,989	2.46	33%	30%	19%
Yuma	3,800	2.55	36%	29%	19%
Total	28,884	2.58	37%	25%	17%

Source: 2000 Census

Employment

The Center for Business and Economic Forecasting has projected future labor force demand by county through the year 2035 for the counties in the Eastern TPR. Overall, the labor force demand is projected to grow at a rate of 2.1 percent per year, with the highest annual growth rate in Elbert County (3.8 percent per year). **Table 11** shows the employment forecasts by county.



Eastern TPR 2035 Regional Transportation Plan

Table 11. Employment Forecasts

County	2000 Employees ¹	2035 Forecasted Labor Force Demand ²	Annual Growth Rate
Cheyenne	1,054	1,146	0.2%
Elbert	10,777	39,793	3.8%
Kit Carson	3,665	4,251	0.4%
Lincoln	2,476	3,839	1.3%
Logan	9,393	16,757	1.7%
Phillips	1,981	2,576	0.8%
Sedgwick	1,321	1,665	0.7%
Washington	2,361	2,796	0.5%
Yuma	4,803	6,418	0.8%
Total	37,831	79,241	2.1%

¹ Source: 2000 Census

² Source: Center for Business and Economic Forecasting

Place of Work

In 2000, 72 percent of workers in the Eastern TPR lived and worked in the same county. Only 28 percent of the workers from Elbert County actually work in Elbert County. This reflects the county's reliance on jobs outside of the community, primarily into Douglas and Arapahoe Counties. **Table 12** shows the place of work by county.

Table 12. Place of Work by County

County	Workers 16 and Over	Worked in County of Residence	% Worked in County of Residence	Worked Outside County of Residence	Worked Outside State of Residence
Cheyenne	1,041	918	88.2%	123	24
Elbert	10,580	3,006	28.4%	7,574	130
Kit Carson	3,626	3,388	93.4%	238	41
Lincoln	2,453	2,202	89.8%	251	16
Logan	9,209	8,361	90.8%	848	209
Phillips	1,954	1,734	88.7%	220	9
Sedgwick	1,307	1,056	80.8%	251	103
Washington	2,321	1,704	73.4%	617	18
Yuma	4,715	4,419	93.7%	296	45
Region Total	37,206	26,788	72.0%	10,418	595

Source: 2000 Census



Means of Transportation to Work

Table 13 provides more information about how people travel to work. About 74 percent of commuters drove alone in their car to work. This is right in line with the statewide average. Carpooling is the second most common means of transportation to work, nearly 13 percent. Public transportation accounts for a minimal number of work trips in this region. Average commute times range from 13 minutes in Cheyenne County to over 40 minutes in Elbert County.

Table 13. Means of Transportation to Work

County	Workers 16 and Over	% Drove Alone	% Carpooled	% Public Transportation	% Walked	% Other Means	% Worked at Home	Mean Travel Time to Work
Cheyenne	1,041	69.3%	11.3%	0.0%	6.2%	0.8%	12.4%	13.5
Elbert	10,580	76.2%	12.8%	1.1%	2.1%	0.9%	6.8%	41.1
Kit Carson	3,626	72.0%	12.4%	0.4%	6.3%	0.9%	8.1%	14.6
Lincoln	2,453	69.4%	12.2%	0.0%	6.6%	1.6%	10.1%	19.2
Logan	9,209	76.0%	13.5%	0.0%	3.9%	1.0%	5.6%	15.2
Phillips	1,954	70.7%	12.4%	0.0%	5.5%	0.6%	10.7%	15.3
Sedgwick	1,307	68.0%	12.9%	0.2%	7.1%	1.4%	10.4%	15.7
Washington	2,321	63.1%	11.2%	0.1%	9.3%	0.9%	15.4%	21
Yuma	4,715	74.8%	10.9%	0.0%	2.6%	0.5%	11.2%	15.4
Region	37,206	73.5%	12.5%	0.4%	4.2%	0.9%	8.4%	23.1
Colorado	2,191,626	75.1%	12.2%	3.2%	3.0%	1.5%	4.8%	24.3

Source: 2000 Census

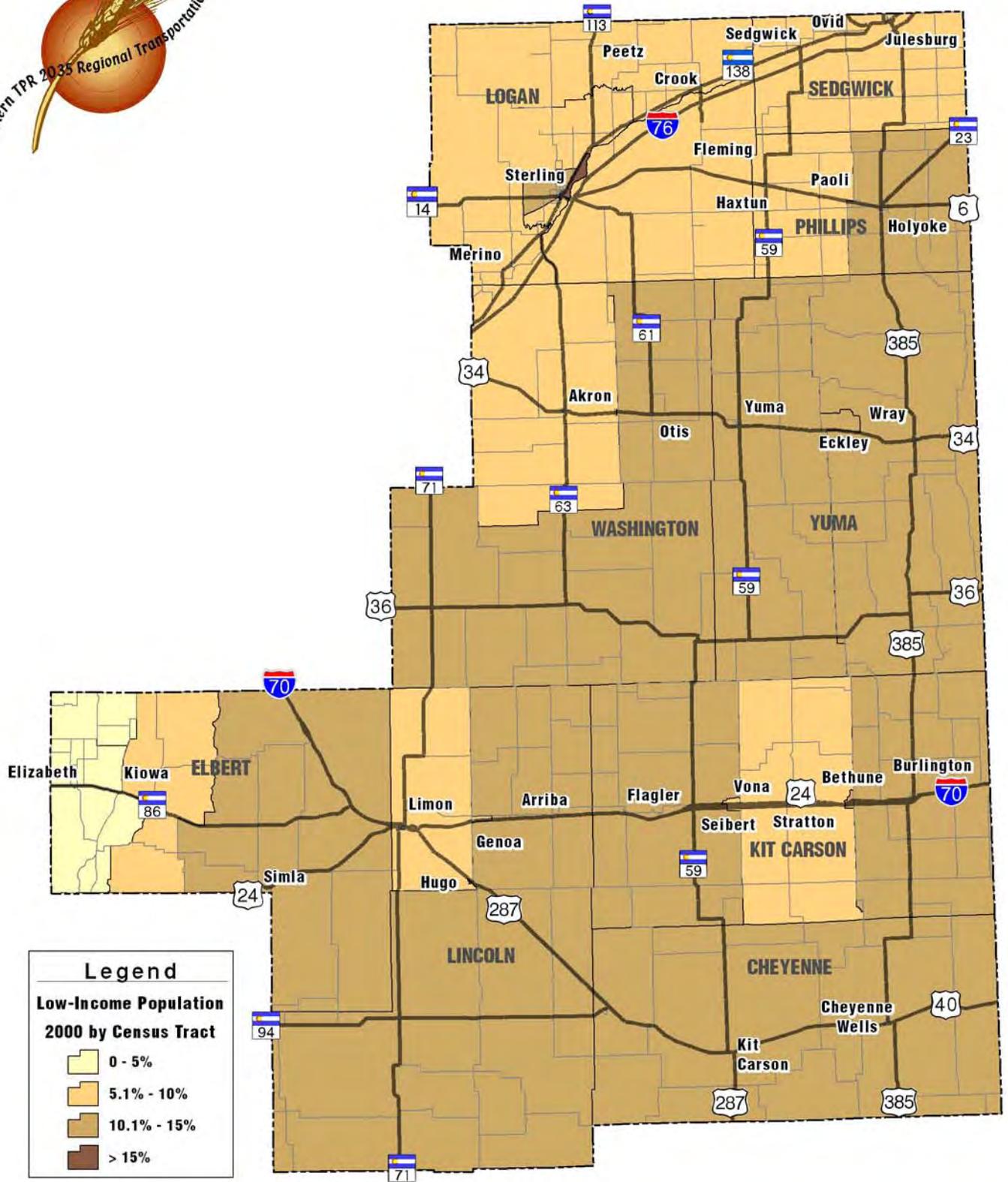
Low-Income Areas

Low-income populations are identified as households that are in the lower 50 percent of the county median household income. This identification of low-income areas is typically completed during the National Environmental Policy Act (NEPA) process. However, for this report, potential low-income areas are identified by using the 2000 Census information, identifying areas with median household incomes less than the federal poverty level of \$17,000 for a family of four.

Figure 20 shows the location and density of populations by census tract that are below the federal poverty level in the Eastern TPR. For the nine-county area, about 9.4 percent of the population is below the defined poverty level based on year 2000 Census data. The statewide average is 9.3 percent of the population below the poverty level.

Minority Status

Minority status as defined for the purposes of this report is all residents who are not White/Non-Hispanic. The minority population for the Eastern TPR is lower than the statewide average of 17.1 percent, at 12.3 percent. **Figure 21** shows the minority population by census tract.

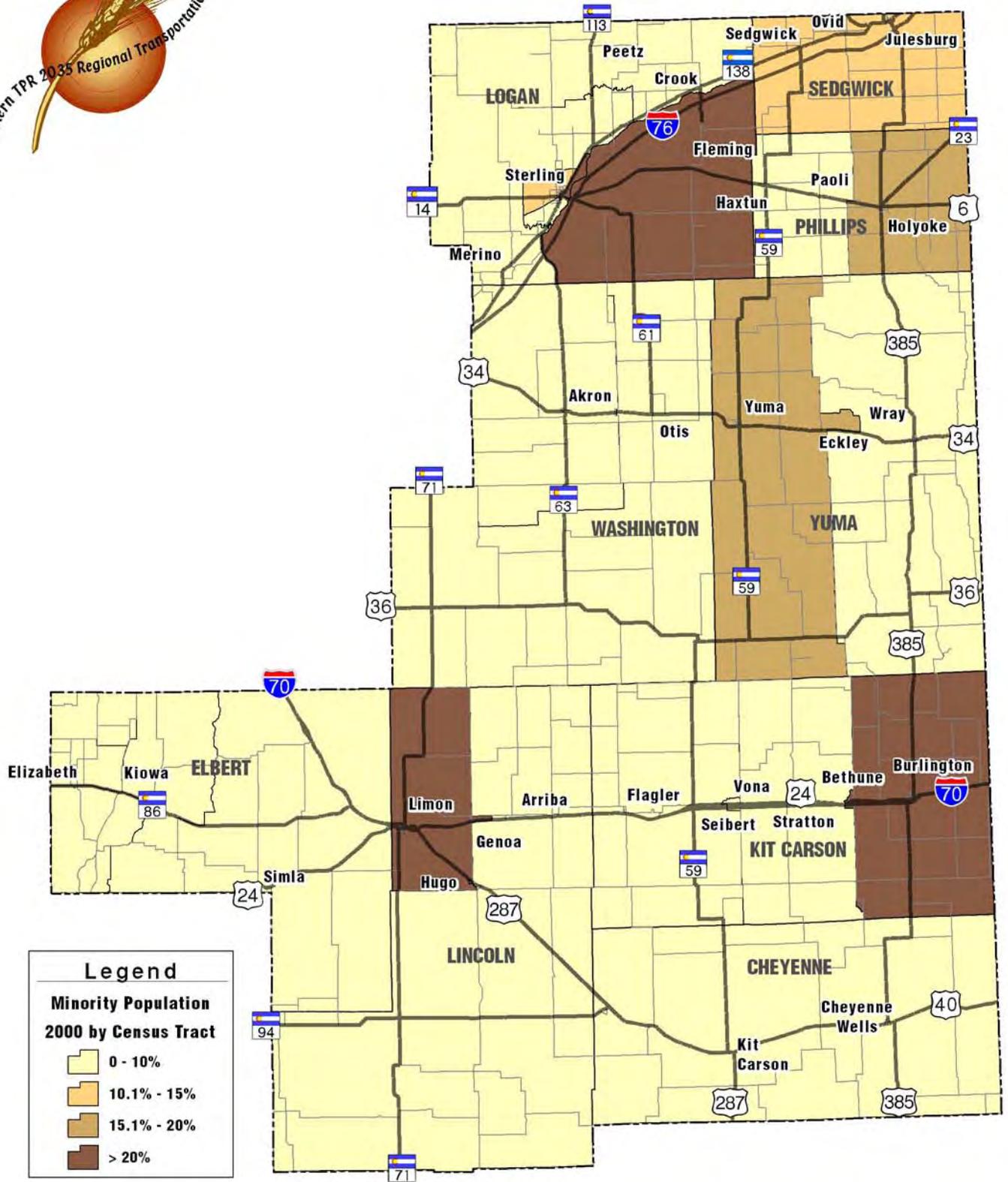


Source: CDOT 2035 Transportation Planning Dataset



Figure 20

Low-Income Population



Source: CDOT 2035 Transportation Planning Dataset

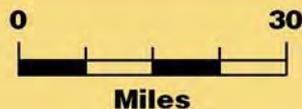


Figure 21

Minority Population



Eastern TPR 2035 Regional Transportation Plan

ENVIRONMENTAL OVERVIEW

Environmental factors not only include natural resources such as wildlife, threatened or endangered species, air quality, and water quality, but also the human environment. The human environment includes noise, hazardous waste sites, public and recreational areas, historic, and cultural sites. CDOT's environmental ethic states, "CDOT will support and enhance efforts to protect the environment and the quality of life for all of Colorado's citizens in the pursuit of the best transportation systems and services possible."

As an effort to help protect the environment from potential impacts created by transportation system improvements, CDOT is required to have all projects that involve federal funds be subject to a NEPA analysis and review. NEPA is introduced at the earliest practical stage and compares alternatives based on their ability to meet the purpose and need of the project and by their impacts to the natural and human environment.

In 2005, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) was passed, and, among other requirements, it mandates that environmental mitigation be incorporated into the transportation planning process. This document attempts to identify major environmental resources within the TPR. Although the regional planning process does not require a complete or specific inventory of all potential environmental resources within a corridor, identifying general environmental concerns within the region provides valuable information for project planners and designers. The information contained in this report serves as a basis for a more in depth analysis, typically a NEPA process. There are three components to the analysis in this section:

- ▶ General identification of resources within the region that have the potential to be impacted by projects.
- ▶ Identification of agencies with responsibilities for resources within the region, where appropriate; examples may include the US Fish and Wildlife Service (USFWS), the State Historical Preservation Office (SHPO), or the local parks department.
- ▶ Identification of possible mitigation strategies for potential environmental impacts.

The information that follows identifies general environmental issues within the region. The fact that an issue is not identified in this overview should not be taken to mean that the issue might not be of concern along a corridor. This section focuses on issues that are easily identifiable and/or issues that can be addressed proactively so that the environmental concerns can be mitigated or incorporated into a project in a manner that supports the values of the citizens and communities in the region. **Appendix C** provides additional environmental data and resources.



Eastern TPR 2035 Regional Transportation Plan

Wildlife

General wildlife habitat is an important resource in the Eastern TPR. There are a number of regulations and laws that protect general wildlife species and their habitat. **Figure 22** provides an indication of the locations of protected and/or important wildlife habitat in the Eastern TPR. The primary habitats in the Eastern TPR are the native short-grass prairie and major waterways. Important wildlife linkage corridors are also identified on **Figure 22**. Linkages in the TPR from north to south are for pronghorn/deer, greater prairie chicken (three linkages in the middle portion), and the linkage in the south is for pronghorn.

AGENCIES

The U.S. Fish and Wildlife Service (USFWS) and the Colorado Division of Wildlife (DOW) maintain lists of native species, important habitat, and designated wildlife areas.

MITIGATION

CDOT has recognized the importance of the short-grass prairie habitat and created a proactive mitigation strategy by participating in the Short-grass Prairie Initiative (SGPI). The SGPI includes the Nature Conservancy, USFWS, and other federal agencies and protects up to 50,000 acres of the short-grass prairie in eastern Colorado. This allows for CDOT projects that impact short-grass prairie to offset the project impacts against the areas that have been created through the SGPI.

The Department of Natural Resources is responsible for protecting and preserving the state's fish and wildlife resources from actions of any state agency, or funded by a state agency, which may obstruct, damage, diminish, destroy, change, modify, or vary the natural existing shape and form of any stream or its bank or tributaries.

Certification from the DOW must be obtained for actions with adverse impacts to streams or its bank or tributaries. Certification is provided by the DOW which includes appropriate measures to eliminate or diminish adverse effects to such streams or their banks or tributaries.

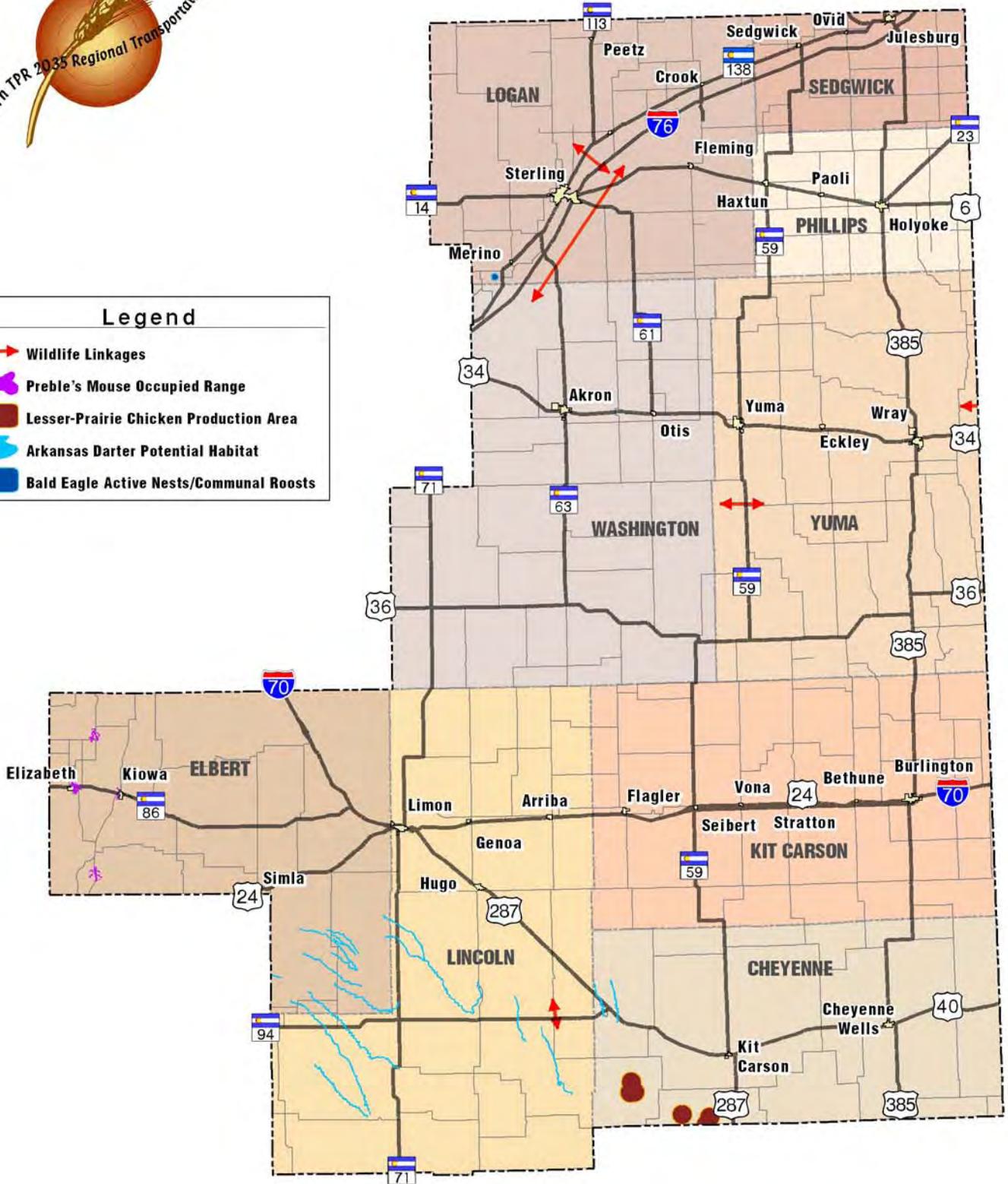
The Migratory Bird Treaty Act (MBTA) is a federal law that protects migratory birds, nests, and eggs. This protection is extended to all birds except the rock dove (pigeon), English sparrow, and European starling, which are considered exotics.

Threatened or Endangered Species

The Endangered Species Act of 1973 (ESA) provides for the protection of threatened or endangered plants and animals and the habitats in which they are found. Currently the USFWS has listed nine federally threatened, endangered, or candidate species (five birds, two mammals, and two fish) in the Eastern TPR. Projects occurring in the Eastern TPR need to determine if the project will impact any of these species and/or their habitat. This can be conducted through consultations with both federal and state agencies that have the responsibility to ensure the successful recovery of these species. **Table 14** presents the list of federally threatened or endangered species with potential habitat in the Eastern TPR.

Legend

-  Wildlife Linkages
-  Preble's Mouse Occupied Range
-  Lesser-Prairie Chicken Production Area
-  Arkansas Darter Potential Habitat
-  Bald Eagle Active Nests/Communal Roosts



Source: SREP Wildlife Linkage data, CDOW NDIS data.



Eastern TPR 2035 Regional Transportation Plan

Table 14. Federally Threatened or Endangered Species with Potential Habitat in the Eastern TPR

Common Name	Scientific Name	Listing Status
Arkansas Darter	<i>Etheostoma cragini</i>	Candidate
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Threatened
Black-footed Ferret	<i>Mustela nigripes</i>	Endangered
Interior Least Tern	<i>Sternula antillarum</i>	Endangered
Lesser Prairie Chicken	<i>Tympanuchus pallidicinctus</i>	Candidate
Pallid Sturgeon ¹	<i>Scaphirhynchus albus</i>	Endangered
Piping Plover ¹	<i>Charadrius melodus</i>	Threatened
Preble's Meadow Jumping Mouse ²	<i>Zapus hudsonius preblei</i>	Threatened
Whooping Crane ¹	<i>Grus americana</i>	Endangered

¹ Water depletions in the South Platte River may affect the species and/or critical habitat in downstream reaches in other states.

² There is designated critical habitat for the species within the county.

AGENCIES

The USFWS administers the ESA and maintains the federal list of threatened or endangered species. If a project has the potential to affect any of these species, a formal consultation called a "Section 7 Consultation" process with the USFWS must be conducted. Section 7 of the Endangered Species Act directs all Federal agencies to use their existing authorities to conserve threatened or endangered species and, in consultation with the Service, to ensure that their actions do not jeopardize listed species or destroy or adversely modify critical habitat. Section 7 applies to management of Federal lands as well as other Federal actions that may affect listed species, such as Federal approval of private activities through the issuance of Federal permits, licenses, or other actions.

The Colorado State Parks should also be contacted if a project goes through or is adjacent to state park lands (e.g., State Parks, State Wildlife Areas, State Habitat Areas, and State Land Board) to determine if they have a list of threatened or endangered species known to utilize state park land. The state maintained lands generally occur in the northern and eastern portion of the Eastern TPR.

The CDOW collects data for many large species, such as the bald eagle, elk, deer, etc. They also maintain the list of State Threatened or Endangered species, as well as Species of Special Concern.



Eastern TPR 2035 Regional Transportation Plan

MITIGATION

Primary mitigation techniques used to offset impacts to threatened or endangered species is determined through the Section 7 consultation process with the USFWS. Additionally, the previously mentioned SGPI provided protection of habitat for the threatened or endangered species piping plover, burrowing owl, black-tailed prairie dog, and swift fox.

Air Quality

Motor vehicle emissions are a significant contributor to many of the air pollution problems experienced in Colorado. Federal transportation planning/air quality regulations are an important factor guiding transportation decision-making in areas that have violated federal air quality standards. Areas that violated federal air quality standards (non-attainment areas) must develop plans to attain and maintain air quality standards. There are no non-attainment or maintenance areas in the Eastern TPR.

Water Quality

The two major watersheds in the Eastern TPR are: 1) the South Platte Watershed in the northern portion of the TPR, which eventually drains into the Missouri River, and 2) portions of the Arkansas River Watershed, in the southern area of the TPR. Within these watersheds, there are numerous creeks, tributaries, and ditches, as well as lakes, floodplains, and wetlands.

Figure 23 shows the major water features in the Eastern TPR. The Federal Clean Water Act (CWA) protects the waters of the region and state. This Act promulgated the National Pollution Discharge Elimination System (NPDES) and created water discharge standards which include maintaining the chemical, physical, and biological integrity of the nation's waters. Protection of water quality is completed through regulatory review and permits issued for discharge into waters of the U.S. or the state.

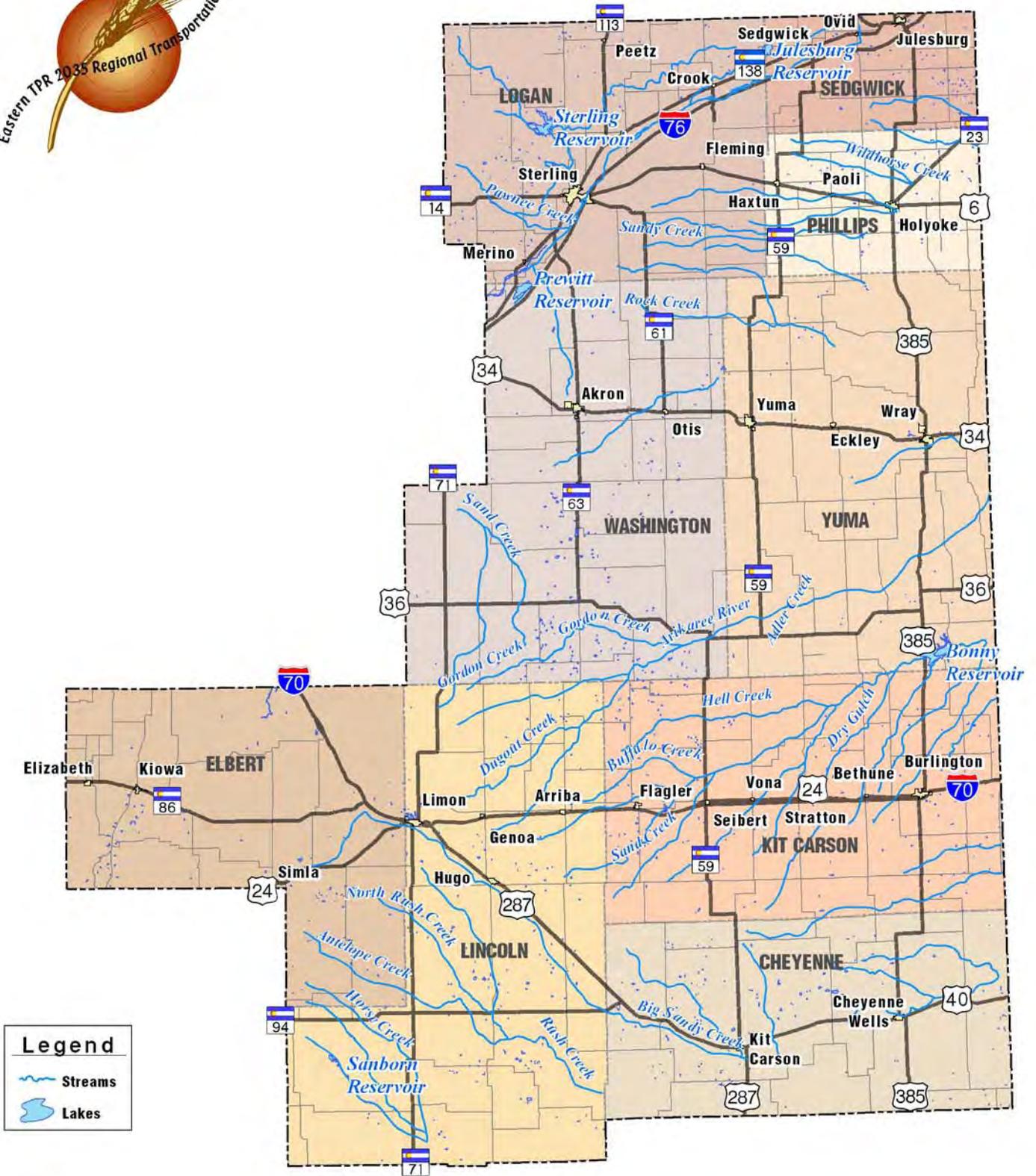
AGENCIES

The U.S. Environmental Protection Agency (EPA) administers the CWA across the nation, but have given the Colorado Department of Health and Environment (CDPHE) the authority to administer the CWA in Colorado. Therefore, any water quality permits required for projects must be obtained through the CDPHE.

PERMITS

Although many of the cities and towns within the Eastern TPR are not large enough to require a municipal separate storm sewer permit, there are other permits that may apply to transportation projects, including:

- ▶ If a project disturbs one or more acre, a Colorado Discharge Permit System (CDPS) is required for construction activities.
- ▶ Obtaining dewatering permit if dewatering will occur during construction.



Legend

- Streams
- Lakes

Source: CDOT 2035 Transportation Planning Dataset



Eastern TPR 2035 Regional Transportation Plan

It should be noted some projects that occur near highly sensitive water bodies, such as drinking water sources or impaired streams can be required to implement best management practices to ensure that degradation of the water body does not occur.

Wetlands

Wetlands are areas that are inundated or saturated by surface or groundwater at a frequency or duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions. In Colorado and the Eastern TPR, wetlands are often found along streams, in areas where the local water tables rise to the land surface and in isolated areas where rain ponds for an extended period of time. Wetlands are extremely important and increasingly rare natural resources in the U.S. Impacts to wetlands are covered under Section 404 of the CWA.

AGENCIES

The EPA administers the CWA; however, authority is the responsibility of the U.S. Army Corps of Engineers (USACE). Section 404 of the CWA establishes a program to regulate the discharge of dredged or fill material into waters of the United States, including wetlands. It requires a permit before dredged or fill material may be discharged into waters of the United States.

MITIGATION

Impacted wetlands are required to be mitigated on at least a 1:1 basis. For example, if five acres of wetlands are impacted, then five acres of wetlands must be replaced. The replacement wetlands are typically created as close to the impacted wetland and perform the same ecological and societal functions as the impacted wetland. Wetland banks are becoming more prevalent and are available to purchase credits to replace impacted wetlands, if they are both in the same watershed.

Noise

The Federal Highway Administration (FHWA) Noise Abatement Criteria (NAC) define noise levels (66 decibels (dBA)) which, if approached or exceeded, require noise abatement consideration. FHWA requires all states to define at which value a predicted noise level approaches the NAC, thus resulting in a noise impact. CDOT has defined “approach” as 1 dBA less than the FHWA NAC for use in identifying traffic noise impacts in traffic noise analyses.

Noise abatement guidelines also state that noise abatement should be considered when the noise levels “substantially exceed the existing noise levels.” This criterion is defined as an increase of 10.0 dBA or more above existing noise levels.



Eastern TPR 2035 Regional Transportation Plan

As existing higher-speed transportation facilities are widened or new facilities are constructed, noise becomes a greater issue. Noise can also be an issue for lower-speed facilities where steep grades or a high percentage of trucks exist. All projects receiving federal funding must be evaluated by FHWA criteria to determine if a noise study is warranted.

AGENCIES

The FHWA is responsible for implementing its guidelines regarding noise abatement. When a project has the potential to impact receivers from vehicle noise, a noise analysis is conducted.

MITIGATION

If noise impacts exceed the FHWA criteria, mitigation is evaluated based on its feasibility and reasonableness. Common noise mitigation techniques include walls and earthen berms between the traffic and receptor to reduce the traffic noise.

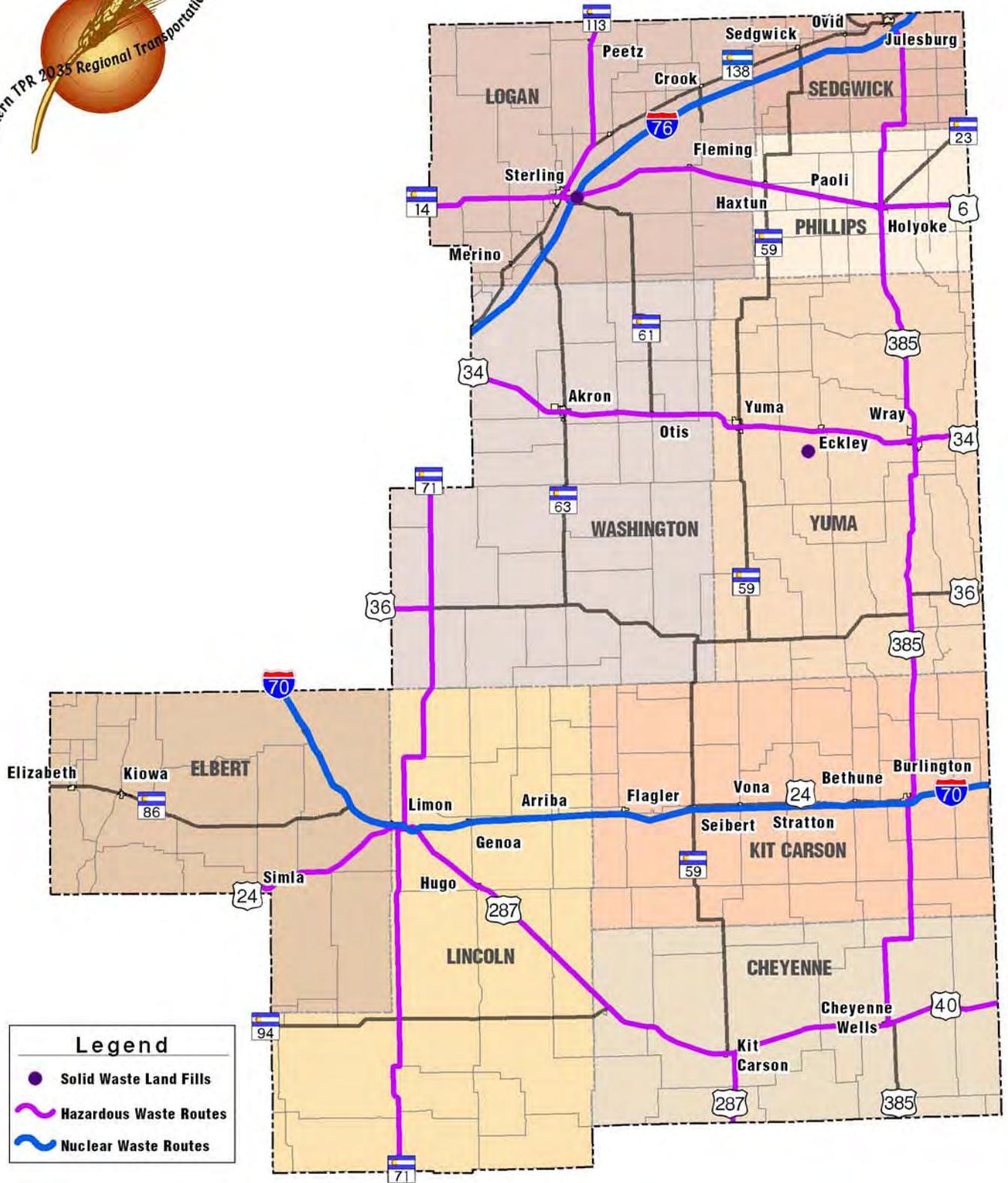
Hazardous Materials

Because roadways are adjacent to many different land use types, the potential to find hazardous materials during the construction of a transportation facility can be high. Hazardous materials are regulated under several laws, including: the Resource Conservation and Recovery Act (RCRA) and Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). There are no federally listed superfund sites or RCRA sites within the Eastern TPR (see **Figure 24**). Certain land uses frequently result in a higher potential for location of hazardous waste or materials. Examples of land uses often associated with hazardous materials include industrial and commercial activities such as existing and former mining sites; active and capped oil and gas drilling operations and pipelines; agricultural areas using chemical fertilizers, insecticides, and pesticides; and railroad crossings where there have been accidental cargo spills. Active, closed, and abandoned landfill sites are also potential problem areas for transportation facility construction, as are gasoline stations that potentially have leaking underground storage tanks.

Figure 24 identifies the landfills in the Eastern TPR, and also shows the designated nuclear and hazardous waste routes in the region. There are two major solid waste landfills in the Eastern TPR, the Yuma County Solid Waste Landfill and the Logan County Solid Waste Landfill. Smaller landfills may be scattered across the region, but are not identified with the readily available data used for this report.

AGENCIES

Access to information regarding existing hazardous waste sites is obtained through private searchable databases during the NEPA or design phases of projects. The CDPHE is the primary agency to be consulted if a project has the potential to encounter hazardous materials during construction



Source: CDOT 2035 Transportation Planning Dataset

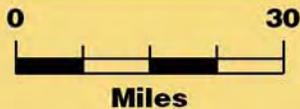


Figure 24

Hazardous Materials



Eastern TPR 2035 Regional Transportation Plan

MITIGATION

Typical mitigation/remediation strategies associated with common hazardous materials encountered during construction are to remove the contaminated soil from the site and dispose of the materials appropriately or stabilize contamination on-site where possible. Depending upon the type of contamination, disposal can include solid waste landfills, hazardous waste landfills, or on-site treatment. The mitigation will also include a site-specific health and safety plan for construction workers that specifies how potentially hazardous materials will be handled.

Public Lands

The Eastern TPR contains approximately 698,200 acres (1,091 square miles) of public lands, including State Parks, State Wildlife Areas, State Habitat Areas, and State Land Board Lands. The publicly owned lands are shown on **Figure 25**.

Public lands typically have a park and recreational component that the public utilizes. These resources are important to the citizens of Colorado because they provide the opportunity for physical and mental relaxation and can also provide focus points for community activities and events. Potential impacts to this type of use trigger an FHWA analysis to ensure that these resources are maintained and continue to provide these resources to the community.

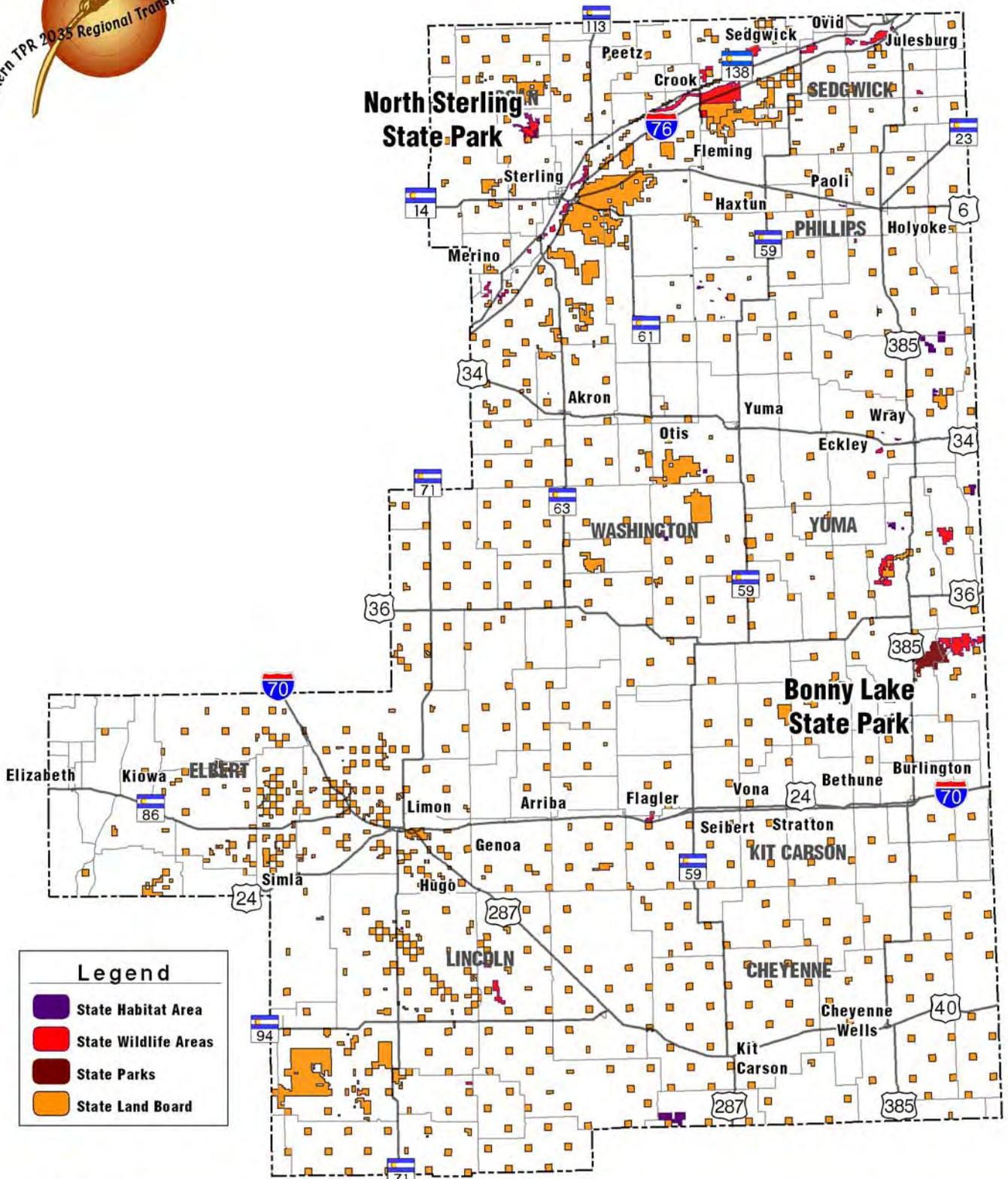
The major public lands in the Eastern TPR are the two State Parks (Bonny Lake and North Sterling), 12 different State Habitat Areas, and 26 different State Wildlife Areas.

AGENCIES

When projects are located in the vicinity of parks and recreational resources, CDOT works closely with the public agency or official with primary responsibility for the park or recreational resource (i.e., official with jurisdiction). The public agency can be the State of Colorado, or any local municipality.

MITIGATION

When working with the public agency, CDOT strives to identify mitigation that will at least replace any features or attributes of the park or recreational resource that are impacted by the project. In many instances CDOT and the official with jurisdiction can identify opportunities to enhance the park or recreational resource features and attributes. Additionally, during construction, to the extent practical, access to parks and recreational resources should be maintained, and detours for bike and pedestrian paths should be provided.



Source: CDOT 2035 Transportation Planning Dataset, CDOW NDIS.



Eastern TPR 2035 Regional Transportation Plan

Historical and Archaeological Sites

Section 106 of the National Historic Preservation Act (NHPA) sets forth the process that federal agencies and their designated representatives must follow when planning undertakings that have the potential to affect significant historic and prehistoric properties. Typical historic resources include buildings, residential neighborhoods, commercial districts, agricultural complexes, bridges, canals, ditches, reservoirs, and railroad lines. Less obvious resources can include: structure foundations, trails, sidewalks, and landscapes. Archaeological sites include: surface scatters of chipped stone, ground stone or ceramic artifacts, architectural (e.g., pit houses), and non-architectural features (e.g., fire hearth remains) or any area exhibiting evidence of intact subsurface materials. Within the Eastern TPR there are a substantial number of sites, but too many to display on a single map. More information on properties that are already on the National Register of Historic Properties is available on the Colorado Historical Society's website.

AGENCIES

More than 40 Native American tribes have an historic interest in various parts of Colorado. The NHPA mandates that the FHWA and CDOT consult with Native American Tribes during the planning of federal-aid transportation projects both on and off Indian Reservations.

The State Historic Preservation Office (SHPO) must be consulted to determine if sites that have not been recorded in the National Register of Historic Places are eligible for inclusion on the list. They are also required to be consulted to determine the lack of or the severity of impacts resulting from a project.

CDOT Environmental Forum

The CDOT Environmental Forum was held on March 9, 2007. This was a first-time event intended to improve relations and develop understanding at the planning level of resource/regulatory agency responsibilities and concerns. It provided an opportunity for one-on-one conversations between resource and regulatory agencies and local transportation planning officials. It was intended to foster an atmosphere of cooperation and provide an opportunity for cooperative identification of potential conflicts and opportunities at the regional level, and to provide the opportunity 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 each TPR. A summary of the issues in the Eastern TPR, arranged by resource agency, is provided in **Table 15**. See **Appendix C** for a map of environmental concerns discussed at the forum.



Eastern TPR 2035 Regional Transportation Plan

Table 15. Summary of Environmental Issues and Concerns

Resource/Regulatory Agency	Information/Issues/Concerns
CDPHE – Air Quality	<ul style="list-style-type: none"> • Multi-county Health Department has contracts with Colorado Department of Health and Environment (CDPHE). • Ethanol & biodiesel plants are permitted for emissions. • CDPHE is concerned about PM10 issues. • Commercial feed lots are monitored by CDPHE.
Division of Wildlife (DOW)	<ul style="list-style-type: none"> • South Platte River is a recovery area for endangered fish. • Streams need to be traversable and have spring-fed pool. • Culverts create permanent barriers for small fish.
CDPHE – Solid Waste	<ul style="list-style-type: none"> • CDPHE is looking into agriculture partners to turn solid wastes into compost fertilizer. • Some agriculture waste is regulated by US Department of Agriculture. • Better communication is necessary between CDOT and power line developers to avoid potential ROW conflicts during highway expansion.
CDPHE – Water Quality	<ul style="list-style-type: none"> • There are no Municipal Separate Storm sewer system (MS4) drainage permits in Eastern TPR, but CDOT does not follow requirements when disturbance is less than 1 acre.
Central Federal Lands (CFL) and Federal Highway Administration (FHWA)	<ul style="list-style-type: none"> • Ethanol plant development creates truck traffic. • Increase in rail traffic will impact highway system at rail crossings at points along US 6 into Sterling from Nebraska. • Signals in Sterling at the new Walgreen’s intersection do not stay “green” long enough for large trucks.
State Historic Preservation Office (SHPO)	<ul style="list-style-type: none"> • No significant issues were discussed.
United States Fish and Wildlife Service (USFWS)	<ul style="list-style-type: none"> • Road construction through the short grass prairies needs to be done without disturbing ground-dwelling birds, such as burrowing owls.
CDOT MS4 Discharge Permit Program	<ul style="list-style-type: none"> • No significant issues were discussed.
CDOT Wildlife Program	<ul style="list-style-type: none"> • Prairie dogs are present in the region and serve as a source of food for bald eagles.
CDOT Environmental Programs Branch	<ul style="list-style-type: none"> • No significant issues were discussed. •
U.S. Forest Service (USFS)	<ul style="list-style-type: none"> • Water rights on South Platte may be of concern.
United States Army Corps of Engineers (USACE)	<ul style="list-style-type: none"> • A Supreme Court decisions on wetlands connected to "navigable waters" may affect the regulatory powers of USACE.



CORRIDOR VISIONS AND PRIORITIZATION

Corridor Vision Process

Corridor visioning seeks to develop visions, goals, and strategies for statewide corridors. CDOT has defined corridors as a transportation system that includes all modes and facilities within a defined geographic area, having both a length and a width. The Corridor Vision provides a general description of the corridor's investment needs, future travel modes, geographic and social environment, and the values of the communities served by the corridor. The Corridor Goals begin to define the primary objectives of the corridor, and the Strategies provide more specific guidance on potential means to achieve the visions and goals of the corridor.

A primary investment category (Mobility, Safety or System Quality) has been assigned to each corridor. This does not imply that other types of projects are not needed on a given corridor. For instance, if Safety were determined to be the primary investment category, the most pressing need may be for Safety type projects. But there may also be spot locations in the corridor where congestion or capacity (the main focus of the Mobility investment category) need to be addressed. Likewise, if a corridor's primary investment category has been identified as System Quality, there may also be a need for spot Safety or Mobility improvements. The purpose of identifying the primary investment category is to categorize the primary set of needs, given the corridor's place in the regional system prioritization.

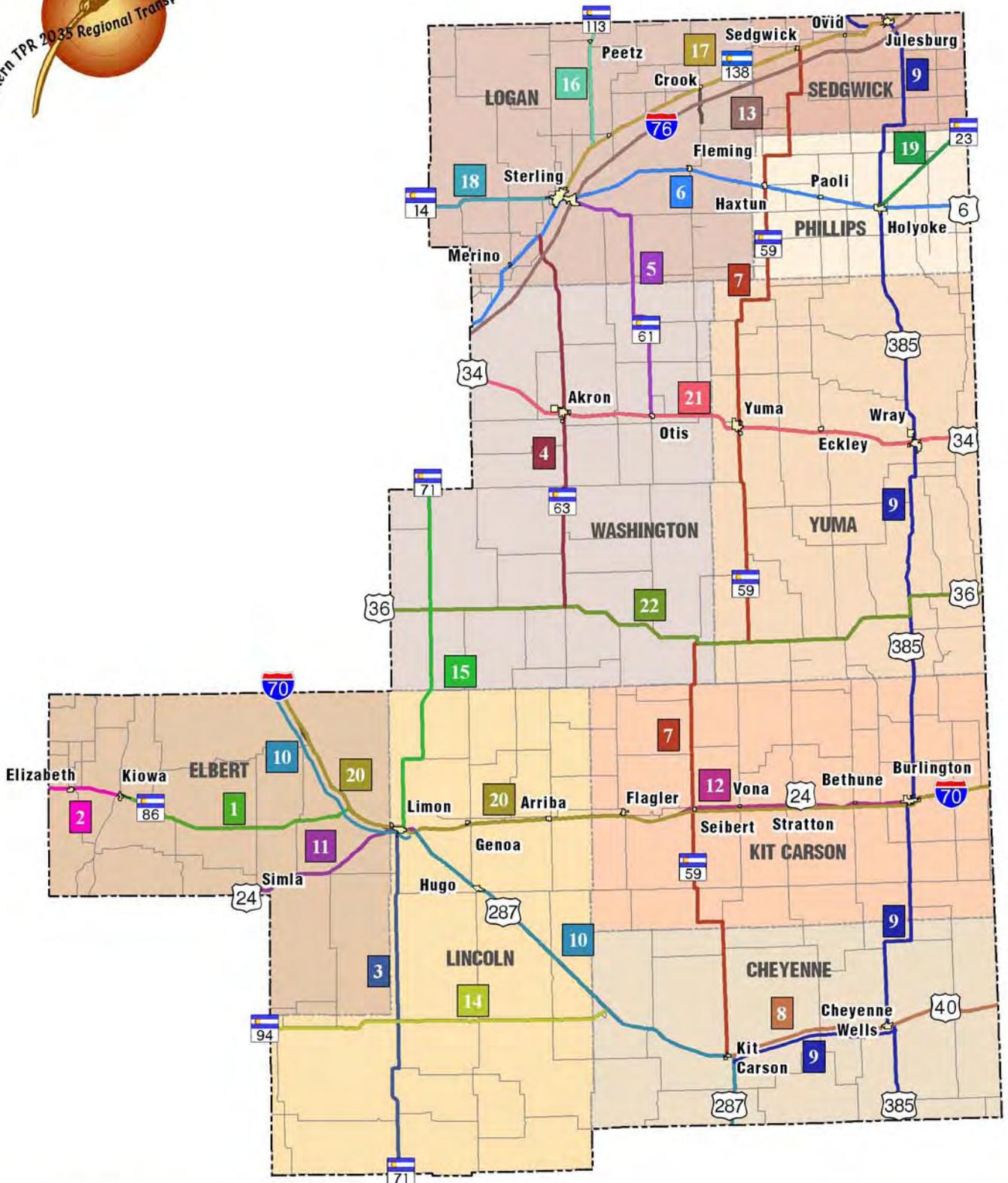
The purposes of corridor visioning are to:

- ▶ Integrate community values with multi-modal transportation needs
- ▶ Provide a corridor approach for a transportation system framework
- ▶ Strengthen partnerships to cooperatively develop a multi-modal system
- ▶ Provide administrative and financial flexibility in the Regional and Statewide Plans
- ▶ Link investment decisions to transportation needs
- ▶ Promote consistency and connectivity through a system-wide approach
- ▶ Create a transportation vision for Colorado and surrounding states

The state highways in the Eastern TPR have been grouped into 22 corridors, many of which extend beyond the Eastern TPR boundary. The corridor visions herein focus on the portion of the corridors within the Eastern TPR. **Figure 26** provides a map of the corridors in the region.

Corridor Visions

Corridor Visions, Goals, and Strategies for each of the 22 corridors in the Eastern TPR were developed as a part of the 2030 RTP. The corridor visions have been updated for this 2035 RTP to reflect changes in the region and are provided on the following pages. In most cases, the number of Goals for each corridor is limited to five, while the number of Strategies is limited to ten. The corridor priority level is also included within each corridor vision; the corridor prioritization process is described in detail in the next section of this chapter.



Source: CDOT 2035 Transportation Planning Dataset



Figure 26
**Eastern TPR
 Transportation Corridors**



Eastern TPR 2035 Regional Transportation Plan

CORRIDOR #1: SH 86 RURAL SECTION (PEA7001)

State Highway: 086A

Beginning Mile Post: 23.33

Ending Mile Post: 58.99

SH 86 from the Town of Kiowa east to I-70

Vision

The vision for the SH 86 Rural Section corridor is primarily to improve safety as well as to improve system quality and to increase mobility. This corridor serves as local facility, connects to places outside the region, and makes east-west connections east to I-70 in Eastern Colorado. Travel modes now and in the future include passenger vehicle, truck freight, and local public transit. The transportation system in the area primarily serves destinations outside of the corridor. Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to increase by moderate levels. The communities along the corridor value connections to other areas, safety, and system preservation. They depend on agriculture for economic activity in the area. Users of this corridor want to preserve the rural and transitioning character of the area while supporting the movement of tourists, freight, commuters and farm-to-market products in and through the corridor.

Primary Investment Category: Safety

Priority: Medium (Rank 10)

Goals

- Increase travel reliability and improve mobility
- Support economic development and maintain environment
- Reduce fatalities, injuries and property damage crash rate
- Eliminate shoulder deficiencies
- Maintain or improve pavement to optimal condition

Strategies

- Add and maintain roadway bypass (through Kiowa)
- Construct, improve and maintain the system of local roads
- Improve geometrics (flatten slopes, flatten curves, improve visibility/sight lines)
- Add/improve shoulders
- Add guardrails
- Add surface treatment/overlays
- Bridge repairs/replacement
- Implement SH 83/SH 86 Corridor Optimization Plan recommendations
- Construct auxiliary lanes (passing, turn, accel/decel)



Eastern TPR 2035 Regional Transportation Plan

CORRIDOR #2: SH 86 URBAN SECTION (PEA7002)

State Highway: 086A

Beginning Mile Post: 0.56

Ending Mile Post: 23.33

SH 86 from I-25 in Castle Rock to the Town of Kiowa

Vision

The vision for the SH 86 Urban Section corridor is primarily to increase mobility as well as to improve safety and to maintain system quality. This corridor serves as a multi-modal local facility, connects to places outside the region, serves as a Main Street and makes east-west connections within the South Metro Denver area. This portion of the corridor is transitioning from a rural to urban land use pattern. Travel modes now and in the future include passenger vehicle, local public transit service, truck freight, and Transportation Demand Management (telecommuting and carpooling). The transportation system in the area primarily serves towns, cities, and destinations within the corridor as well as destinations outside of the corridor. Based on the urbanization of western Elbert County, passenger traffic volumes are expected to increase significantly, and the corridor is expected to experience congestion in the future. Freight traffic volumes are expected to increase by moderate levels. Overall, these traffic increases will cause significant capacity issues. The communities along the corridor value high levels of mobility, transportation choices, connection to other areas, safety, and system preservation. They depend on agriculture, local commerce and commercial activity for economic activity in the area and want to create a diverse economic base for future job creation. Users of this corridor want to preserve the rural, agricultural, and transitioning residential development character of the area while supporting the movement of tourists, commuters, and agriculture in and through the corridor.

Primary Investment Category: Mobility

Priority: High (Rank 7)

Goals

- Increase travel reliability, improve mobility, and support commuter travel
- Support economic development and maintain environment
- Accommodate increasing freight traffic
- Reduce fatalities, injuries and property damage crash rate
- Maintain or improve pavement to optimal condition

Strategies

- Preserve right of way for and add travel lanes
- Construct, improve, maintain system of local roads
- Consolidate and limit access points and develop access management plans
- Provide and expand transit service
- Improve geometrics (flatten slopes, flatten curves, improve visibility/sight lines)
- Construct intersection improvements and construct auxiliary lanes (passing, turn, accel/decel)
- Add/improve shoulders
- Add guardrails
- Maintain infrastructure by adding surface treatment/overlays and repairing/replacing bridges
- Implement *SH 83/SH 86 Corridor Optimization Plan* recommendations



Eastern TPR 2035 Regional Transportation Plan

CORRIDOR #3: SH 71 SOUTHERN SECTION (PEA7003)

State Highway: 071C **Beginning Mile Post:** 16.15 **Ending Mile Post:** 100.99

SH 71 from US 50 at Rocky Ford to I-70 in Limon

Vision

The vision for the SH 71 Southern Section corridor is primarily to maintain system quality as well as to improve safety and increase mobility. This corridor serves as a multi-modal local facility, connects to places outside the region, and makes north-south connections within the Arkansas Valley area. Travel modes now and in the future include passenger vehicle, local public transit and truck freight. The transportation system in the area primarily serves towns and destinations within the corridor as well as destinations outside of the corridor. Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to increase by significant levels. The communities along the corridor value safety and system preservation. They depend on agriculture, grain storage and commercial activity for economic activity in the area. Users of this corridor want to preserve the rural and agricultural character of the area while supporting the movement of freight, farm-to-market products, and connections to the state prison in Limon in and through the corridor.

Primary Investment Category: System Quality

Priority: Low (Rank 15)

Goals

- Maintain statewide transportation connections
- Reduce fatalities, injuries and property damage crash rate
- Eliminate shoulder deficiencies
- Preserve the existing transportation system
- Rehabilitate/replace deficient bridges

Strategies

- Construct, improve and maintain the system of local roads
- Improve geometrics (flatten slopes, flatten curves, improve visibility/sight lines)
- Add/improve shoulders
- Add guardrails
- Add Surface treatment/overlays
- Bridge repairs/replacement
- Add drainage improvements
- Reconstruction of roadway
- Construct auxiliary lanes (passing, turn, accel/decel)



Eastern TPR 2035 Regional Transportation Plan

CORRIDOR #4: SH 63 (PEA7004)

State Highway: 063A

Beginning Mile Post: 0.00

Ending Mile Post: 56.41

SH 63 from Anton (US 36) north to Atwood (US 6)

Vision

The vision for the SH 63 corridor is primarily to maintain system quality as well as to improve safety and provide mobility. This corridor serves as a multi-modal local facility and makes north-south connections within the central Washington and southeastern Logan counties area. Travel modes now and in the future include passenger vehicle, truck freight, and local public transit. The transportation system in the area primarily serves towns and destinations within the corridor. Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to increase by significant levels. The communities along the corridor value connections to other areas, safety, and system preservation. They depend on agriculture, local commerce and commercial activity for economic activity in the area. Users of this corridor want to preserve the rural and agricultural character of the area while supporting the movement of freight and farm-to-market products in and through the corridor.

Primary Investment Category: System Quality

Priority: Low (Rank 17)

Goals

- Maintain statewide transportation connections
- Reduce fatalities, injuries and property damage crash rate
- Eliminate shoulder deficiencies
- Maintain or improve pavement to optimal condition

Strategies

- Add and maintain roadway pullouts for breakdowns, buses and slow vehicles
- Improve geometrics
- Flatten slopes
- Add/improve shoulders
- Add surface treatment/overlays
- Add drainage improvements



Eastern TPR 2035 Regional Transportation Plan

CORRIDOR #5: SH 61 (PEA7005)

State Highway: 061A **Beginning Mile Post:** 0.00 **Ending Mile Post:** 40.99

SH 61 from Otis (US 34) north to Sterling (I-76)

Vision

The vision for the SH 61 corridor is primarily to maintain system quality as well as to improve safety and provide mobility. This corridor serves as a multi-modal local facility, connects to places within the region, and makes north-south connections within the northeastern Washington and southeastern Logan counties area. There is a desire to extend the state highway designation from US 34 south to US 36. Travel modes now and in the future include passenger vehicle, truck freight, and local public transit. The transportation system in the area primarily serves destinations inside the corridor. Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to increase by moderate levels. The communities along the corridor value connections to other areas, safety, and system preservation. They depend on agriculture, the state prison near Sterling and local commerce for economic activity in the area. Users of this corridor want to preserve the rural and agricultural character of the area while supporting the movement of freight and farm-to-market products in and through the corridor.

Primary Investment Category: System Quality

Priority: Low (Rank 18)

Goals

- Provide and maintain statewide transportation connections
- Support economic development and maintain environment
- Reduce fatalities, injuries and property damage crash rate
- Eliminate shoulder deficiencies
- Maintain or improve pavement to optimal condition

Objectives

- Add and maintain roadway pullouts for breakdowns, buses and slow vehicles
- Improve geometrics
- Flatten slopes
- Add/improve shoulders
- Add surface treatment/overlays
- Add drainage improvements
- Construct new segment between US 34 and US 36 and designate as State Highway



Eastern TPR 2035 Regional Transportation Plan

CORRIDOR #6: US 6 EASTERN PLAINS (PEA7006)

State Highway: 006J

Beginning Mile Post: 371.69

Ending Mile Post: 467.28

US 6 from I-76 in Brush north of I-76 to Sterling then east to Nebraska

Vision

The vision for the US 6 Plains corridor is primarily to maintain system quality as well as to improve safety. This corridor serves as a multi-modal local facility, connects to places outside the region, serves as a Main Street, and makes east-west connections within the Northeast Colorado to Nebraska area. Travel modes now and in the future include passenger vehicle, rail freight, truck freight, local public transit, oil and gas production and aviation (Holyoke Municipal Airport and Haxtun Municipal Airport). The transportation system in the area primarily serves destinations outside and inside of the corridor. Based on historic and projected population and employment levels, passenger and truck traffic volumes are expected to increase by moderate levels. Recreational reservoir traffic is a key element of the western portion of the corridor. The communities along the corridor value connections to other areas, safety, and system preservation. They depend on agriculture, local commerce, commercial activity and grain storage for economic activity in the area. Users of this corridor want to preserve the rural and agricultural character of the area while supporting the movement of tourists, farm-to-market products, and recreational users in and through the corridor.

Primary Investment Category: System Quality

Priority: Medium (Rank 9)

Goals

- Provide and maintain statewide transportation connections
- Accommodate growth in freight transport
- Eliminate shoulder deficiencies
- Maintain or improve pavement to optimal condition
- Ensure airport facilities meet existing and projected demands

Strategies

- Add turn lanes
- Improve geometrics
- Flatten slopes
- Add drainage improvements
- Reconstruction roadways
- Add signage
- Study and change speed limits
- Bridge repairs/replacement
- Meet airport facility objectives in Airport System Plan
- Construct grade separated railroad crossing



Eastern TPR 2035 Regional Transportation Plan

CORRIDOR #7: SH 59 (PEA7007)

State Highway: 059A,B **Beginning Mile Post:** 0.00 **Ending Mile Post:** 173.3

SH 59 from US 40 in Kit Carson to Cope (US 36) and then Joes to SH 138 in Sedgwick

Vision

The Vision for the SH 59 corridor is primarily to maintain system quality as well as to improve safety and provide mobility. This corridor serves as a multi-modal local facility, acts as Main Street, and makes north-south connections within central Cheyenne County to western Sedgwick County area. There is a desire to extend the state highway designation from SH 138 north to I-80 in Nebraska. Travel modes now and in the future include passenger vehicle, truck freight, aviation (Yuma Municipal Airport), local public transit, and oil and gas production. The transportation system in the area primarily serves towns and destinations within the corridor as well as destinations outside of the corridor. Based on historic and projected population and employment levels, passenger traffic and freight volumes on this type of facility should increase by moderate levels. The communities along the corridor value connections to other areas, safety, and system preservation. They depend on agriculture, local commerce, grain storage and commercial activity for economic activity in the area. Users of this corridor want to preserve the rural and agricultural character of the area while supporting the movement of freight and farm-to-market products in and through the corridor.

Primary Investment Category: System Quality

Priority: Medium (Rank 11)

Goals

- Reduce fatalities, injuries and property damage crash rate
- Eliminate shoulder deficiencies
- Preserve the existing transportation system
- Maintain or improve pavement to optimal condition
- Ensure airport facility meets existing and projected demands

Strategies

- Construct, improve and maintain the system of local roads
- Improve geometrics (flatten slopes, flatten curves, improve visibility/sightlines)
- Add/improve shoulders
- Add guardrails
- Add surface treatment/overlays
- Bridge repairs/replacement
- Add drainage improvements
- Construct auxiliary lanes (pass, turn, accel/decel)
- Meet airport facility objectives in Airport System Plan
- Designate new segment north to I-80 as State Highway



Eastern TPR 2035 Regional Transportation Plan

CORRIDOR #8: US 40 (PEA7008)

State Highway: 040H **Beginning Mile Post:** 446.05 **Ending Mile Post:** 486.86

US 40 from the Town of Kit Carson east to Kansas

Vision

The vision for the US 40 corridor is primarily to maintain system quality as well as to improve safety and to increase mobility. This corridor serves as a multi-modal facility, connects to places outside the region, and makes east-west connections within the area from Kit Carson to Kansas. The corridor also serves wide-load truck traffic. Travel modes now and in the future include passenger vehicle, rail freight, truck freight, oil and gas production, and local public transit. The transportation system in the area primarily serves towns, cities, and destinations within the corridor as well as destinations outside of the corridor. Based on historic and projected population and employment levels, passenger and truck traffic volumes are expected to increase by significant levels. The communities along the corridor value connections to other areas, safety, and system preservation. They depend on agriculture, grain storage, local commerce and commercial activity for economic activity in the area. Users of this corridor want to preserve the rural and agricultural character of the area while supporting the movement of freight and farm-to-market products in and through the corridor.

Primary Investment Category: System Quality

Priority: Low (Rank 19)

Goals

- Maintain statewide transportation connections
- Accommodate growth in freight transport
- Reduce fatalities, injuries and property damage crash rate
- Eliminate shoulder deficiencies
- Preserve the existing transportation system

Strategies

- Add and maintain accel/decel lanes
- Construct, improve and maintain the system of local roads
- Add turn lanes
- Flatten slopes
- Add/improve shoulders
- Add guardrails
- Add surface treatment/overlays
- Bridge repairs/replacement



Eastern TPR 2035 Regional Transportation Plan

CORRIDOR #9: US 385 HIGH PLAINS HIGHWAY (PEA7009)

State Highway: 385B,C,D,E **Beginning Mile Post:** 95.05 **Ending Mile Post:** 317.63

US 385 from Cheyenne Wells north to the Nebraska border and US 40 from Kit Carson to Cheyenne Wells (see Corridor #8) is the High Plains Highway. Corridor also includes US 385 from US 50 in Granada to Cheyenne Wells which is not part of the High Plains designation.

Vision

The vision for the US 385 High Plains Highway, except for the segment from Grenada to Cheyenne Wells, is primarily to improve mobility. The primary investment category for the segment from Granada to Cheyenne Wells is safety. This corridor serves as a multi-modal regional facility, connects to places outside the region, serves as both the Main Street and state-designated hazardous waste route, and makes north-south connections within the eastern plains of Colorado from Oklahoma to Nebraska. Travel modes now and in the future include passenger vehicle, local public transit, aviation (Kit Carson County Airport, Julesburg Municipal Airport, and Wray Municipal Airport), oil and gas production, and truck freight. The transportation system in the area serves both destinations within and outside of the corridor. Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to increase by moderate levels. Recreational reservoir traffic (destined for Bonny Lake State Park) and oversized loads are key elements of the corridor. The communities along the corridor value safety, high levels of mobility, transportation choices, connections to other areas, system preservation, and economic development. They depend on tourism, agriculture, grain storage, oil and gas production, and renewable energy (such as ethanol and biodiesel production and wind generation), and local commerce, all of which are expected to grow, contributing to the increase in freight traffic. The on-going Eastern Plains Transmission Project, which proposes further development of utility-scale wind farms, has increased freight traffic and oversized loads significantly along the corridor. Users of this corridor want to preserve the rural and agricultural character of the area while supporting the movement of tourists, commuters, freight, farm-to-market products and recreational users in and through the corridor.

Primary Investment Category: Mobility

Priority: High (Rank 3)

Goals

- Increase travel reliability and improve mobility in order to support economic development, accommodate growth in freight transport, and maintain statewide transportation connections
- Reduce fatalities, injuries and property damage crash rate
- Eliminate shoulder deficiencies
- Maintain or improve pavement to optimal condition
- Maintain airport facilities in good condition and increase air service availability

Strategies

- Construct, improve and maintain system of local roads, and add roadway bypasses
- Obtain right of way for and construct a Super 2 cross-section, with ultimate expansion to four lanes
- Consolidate and limit access points and develop access management plan
- Expand air service and develop airport master plans, meet airport facility objectives in Airport System Plan
- Provide inter-modal connections

(continued)



Eastern TPR 2035 Regional Transportation Plan

- Improve safety through geometric improvements (flatten slopes, flatten curves, improve visibility/sight lines) and adding guardrails
- Construct intersection improvements and auxiliary lanes (passing, turn, accel/decel lanes)
- Add/improve shoulders
- Maintain infrastructure by adding surface treatments/overlays, completing bridge repairs/replacements, making drainage improvements, and reconstructing the roadway
- Implement recommendations from *High Plains Corridor Development and Management Plan* and Secure Strategic Investment Program funding



Eastern TPR 2035 Regional Transportation Plan

CORRIDOR #10: US 287 PORTS TO PLAINS (PEA7010)

State Highway: 040H **Beginning Mile Post:** 386.00 **Ending Mile Post:** 446.00

US 287 from Oklahoma north to US 40 in Kit Carson. US 287 joins US 40 as a dual designation for the next 60 miles to I-70 in Limon. In Limon, US 287 joins I-70 as a dual designation west towards Denver.

Vision

The vision for the US 287 Port to Plains corridor is primarily to increase mobility, as well as to maintain system quality and to improve safety. This entire corridor is a portion of the National Ports to Plains Corridor connecting Denver and Laredo, Texas and is part of CDOT's Strategic Investment Program (7th Pot). This corridor serves as a multi-modal National Highway System facility, connects to places outside the region, and makes north-south connections south into Oklahoma. Travel modes now and in the future include passenger vehicle, rail freight, local public transit, and truck freight. The transportation system in the area primarily serves destinations inside and outside of the corridor. Based on historic and projected population and employment levels, passenger traffic volumes and freight traffic volumes are expected to increase significantly. The significant increase in freight traffic on US 287 / US 40 can be attributed to the highway's designation as the Ports to Plains Freight Corridor. The communities along the corridor value connections to other areas, safety, and system preservation. They depend on agriculture, tourism travel, grain storage and freight/commercial activity for economic activity in the area. Users of this corridor want to preserve the rural and agricultural character of the area while supporting the movement of freight, tourists and farm-to-market products in and through the corridor.

Primary Investment Category: Mobility

Priority: High (Rank 4)

Goals

- Maintain statewide transportation connections
- Preserve the existing transportation system
- Provide information to traveling public
- Reduce fatalities, injuries and property damage crash rate
- Support economic development and accommodate growth in freight transport

Strategies

- Add and maintain general purpose lanes and new interchanges/intersections
- Construct/improve/maintain system of local roads and add roadway bypasses
- Add rail sidings and guardrails
- Improve ITS incident response, travel information and traffic management including promoting the use of variable message signs
- Improve geometrics (flatten slopes, flatten curves, improve visibility/sight lines)
- Improve intersections and construct auxiliary lanes (passing, turn, accel/decel lanes)
- Add/improve shoulders
- Maintain infrastructure by completing 7th Pot concrete reconstruction and constructing bridge repairs/replacement, including overpasses
- Add rest areas and truck parking areas
- Implement recommendations from *Ports to Plains Corridor Development and Management Plan* and Secure Strategic Investment Program funding



Eastern TPR 2035 Regional Transportation Plan

CORRIDOR #11: US 24 ELBERT COUNTY LINE TO LIMON (PEA7011)

State Highway: 024G **Beginning Mile Post:** 311.07 **Ending Mile Post:** 380.46

US 24 from Elbert County Line northeast to I-70 in Limon

Vision

The vision for the US 24, Colorado Springs to Limon corridor is primarily to increase mobility as well as to improve safety and to maintain system quality. This corridor is on the National Highway System and serves as a multi-modal regional facility, provides commuter access, acts as a Main Street and makes east-west connections within the NE El Paso, SE Elbert, and Lincoln Counties. The western portion of the corridor is transitioning from a rural to urban land use pattern. Significant facilities located in the Colorado Springs area affect transportation in the corridor, including the Colorado Springs Airport, the various military installations and numerous tourist attractions. Travel modes now and in the future include passenger vehicle, local public transit, rail freight, truck freight, and Transportation Demand Management (telecommuting and carpooling). The transportation system in the area primarily serves towns, cities, and destinations within the corridor as well as destinations outside of the corridor. Based on historic and projected population and employment levels, passenger and freight traffic volumes are expected to increase by moderate levels. The communities along the corridor value high levels of mobility, transportation choices, safety, and system preservation. They depend on tourist travel, commercial activity, grain storage and local commerce for economic activity in the area. Users of this corridor want to preserve the rural, agricultural, and transitioning character of the area while supporting the movement of commuters, tourists, and local traffic in and through the corridor.

Primary Investment Category: Mobility

Priority: High (Rank 8)

Goals

- Increase travel reliability and improve mobility to support commuter travel
- Reduce fatalities, injuries and property damage crash rate
- Maintain or improve pavement to optimal condition
- Support economic development and maintain environment
- Accommodate increasing freight traffic

Strategies

- Obtain right of way for and construct a Super 2 cross-section, with ultimate expansion to four lanes
- Construct, improve and maintain the system of local roads
- Consolidate and limit access points and develop access management plans
- Provide and expand transit service
- Improve geometrics (flatten slopes, flatten curves, improve visibility/sight lines)
- Improve intersections and construct auxiliary lanes (passing, turn, accel/decel lanes)
- Add/improve shoulders
- Add surface treatments/overlays
- Bridge repairs/replacement
- Study corridor



Eastern TPR 2035 Regional Transportation Plan

CORRIDOR #12: US 24 SIEBERT TO BURLINGTON (PEA7012)

State Highway: 024B,C,D **Beginning Mile Post:** 419.31 **Ending Mile Post:** 457.29

US 24 from I-70 in Seibert east to Burlington

Vision

The vision for the US 24, Siebert to Burlington corridor is primarily to maintain system quality as well as to improve safety. This corridor serves as a multi-modal local facility including local bicycle traffic, acts as Main Street, serves as a parallel facility to the interstate facility for local traffic and makes east-west connections within the central Kit Carson County area. Travel modes now and in the future include passenger vehicle, truck freight, local public transit, and rail freight. The transportation system in the area primarily serves towns and destinations within and outside the corridor. Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to increase by moderate levels. The communities along the corridor value safety and system preservation. They depend on agriculture, I-70 tourism, grain storage and local commerce for economic activity in the area. Users of this corridor want to preserve the rural and agricultural character of the area while supporting the movement of farm-to-market products and local traffic in and through the corridor.

Primary Investment Category: System Quality

Priority: Medium (Rank 14)

Goals

- Support economic development and maintain environment
- Reduce fatalities, injuries and property damage crash rate
- Provide for safe movement of bicycles and pedestrians
- Eliminate shoulder deficiencies
- Preserve the existing transportation system

Strategies

- Improve geometrics, accel/decel lanes
- Add passing lanes
- Add turn lanes
- Add guardrails
- Add drainage improvements
- Improve visibility/sight lines
- Flatten curves, flatten slopes
- Add/improve shoulders
- Add surface treatment/overlays
- Bridge repairs/replacement



Eastern TPR 2035 Regional Transportation Plan

CORRIDOR #13: I-76 NORTHEAST COLORADO (PEA7013)

State Highway: 076A **Beginning Mile Post:** 12.5 **Ending Mile Post:** 183.99

I-76 from US 85 in Commerce City northeast to Nebraska

Vision

The vision for the I-76, Northeast Colorado corridor is primarily to maintain system quality as well as to improve safety and to increase mobility. This corridor is on the National Highway System and serves as a multi-modal Interstate facility, connects to places outside the region, serves as an important freight connection to Chicago and areas east, and makes east-west connections within the northeast Colorado area. I-76 from Denver to Brush is part of the Heartland Express designation in Colorado. The South Platte River Trail Scenic Byway runs along a portion of this corridor. The western portion of the corridor is transitioning from a rural to urban land use pattern. Travel modes now and in the future include passenger vehicle, local public transit, intercity bus service (Burlington Trailways and Black Hills Arrow Stage), passenger rail, truck freight, and rail freight. The transportation system in the area primarily serves towns, cities, and destinations within the corridor as well as destinations outside of the corridor. Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to increase by significant levels. The communities along the corridor value high levels of mobility, transportation choices, connections to other areas, safety, and system preservation. They depend on manufacturing, tourism, high-tech, agriculture, commercial activity, and the state prison at Sterling for economic activity in the area. Users of this corridor want to preserve the rural, agricultural and transitioning residential development character while supporting the movement of tourists, urban commuters, freight, farm-to-market products, recreational users, long distance travel and connections to the state prison in Sterling in and along the corridor.

Primary Investment Category: System Quality

Priority: High (Rank 1)

Goals

- Maintain statewide transportation connections
- Support economic development and accommodate growth in freight transport
- Provide tourist-friendly travel
- Provide information to traveling public
- Maintain or improve pavement to optimal condition

Strategies

- Improve ITS incident response, traveler information and traffic management
- Flatten slopes
- Add signage
- Construct interchange improvements
- Add surface treatment/overlays
- Add drainage improvements
- Reconstruction roadways
- Secure Strategic Investment Program funding



Eastern TPR 2035 Regional Transportation Plan

CORRIDOR #14: SH 94 (PEA7014)

State Highway: 094A

Beginning Mile Post: 0.00

Ending Mile Post: 85.99

SH 94 from the east side of Colorado Springs to US 40/US 287

Vision

The vision for the SH 94 corridor is primarily to maintain system quality as well as to improve safety and to increase mobility. This corridor serves as a multi-modal local facility, connects to places outside the region, and makes east-west connections within the urban edge of Colorado Springs area. The western portion of the corridor is transitioning from a rural to urban land use pattern. Significant facilities located in the Colorado Springs area affect transportation in the corridor, including the Colorado Springs Airport, the various military installations and numerous tourist attractions. Travel modes now and in the future include passenger vehicle, truck freight and local public transit. The transportation system in the area primarily serves destinations outside of the corridor. Based on historic and projected population and employment levels, passenger traffic volumes are expected to increase by significant levels. The communities along the corridor value connections to other areas, safety, and system preservation. They depend on tourist travel and agriculture for economic activity in the area. Users of this corridor want to preserve the rural and agricultural character of the transitioning area while supporting the movement of tourists, commuters, freight, and farm-to-market products.

Primary Investment Category: System Quality

Priority: Low (Rank 20)

Goals

- Increase travel reliability and improve mobility
- Coordinate transportation and land use decisions and support economic development and maintain environment
- Reduce fatalities, injuries and property damage crash rate
- Eliminate shoulder deficiencies
- Maintain or improve pavement to optimal condition

Strategies

- Add passing lanes, turn lanes
- Preserve right of way
- Construct, improve and maintain the system of local roads
- Consolidate and limit access points and develop access management plan
- Add signage
- Improve geometrics (flatten slopes, flatten curves, improve visibility/sight lines)
- Add/improve shoulders
- Add guardrails
- Study and change speed limits
- Maintain infrastructure by adding surface treatment/overlays and bridge repairs/replacement



Eastern TPR 2035 Regional Transportation Plan

CORRIDOR #15: SH 71 HEARTLAND EXPRESSWAY (PEA7015)

State Highway: 071D,E,F **Beginning Mile Post:** 102.02 **Ending Mile Post:** 232.82

SH 71 from I-70, Limon north to Nebraska State Line

Vision

The vision for the SH 71 Heartland Express corridor is primarily to improve mobility, as well as to maintain system quality and safety. This corridor serves as a multi-modal National Highway System facility, provides local access, and makes north-south connections to the Ports to Plains Corridor. SH 71 from Limon to the Nebraska State Line has been designated a “high priority corridor” as part of the Heartland Expressway route in Colorado. Travel modes now and in the future include passenger vehicle, truck freight, rail freight, and local public transit. The transportation system in the area primarily serves towns, and destinations within the corridor as well as destinations outside of the corridor. Based on historic and projected population and employment levels, both passenger traffic volumes are expected to increase by moderate levels. However, due to the designation of SH 71 as the Heartland Express Corridor, freight traffic volumes are expected to increase significantly. The communities along the corridor value high levels of mobility, transportation choices, connections to other areas, safety, and system preservation. They depend on manufacturing, tourist travel, agriculture, commercial activity and the state prison in Limon for economic activity in the area. Users of this corridor want to preserve the rural and agricultural character of the area while supporting the movement of tourists, freight, and farm-to-market products in and through the corridor.

Primary Investment Category: Mobility

Priority: High (Rank 5)

Goals

- Maintain statewide transportation connections
- Support economic development and maintain environment
- Provide for tourist-friendly travel
- Accommodate growth in freight transport and provide improved freight linkages
- Increase travel reliability and improve mobility through safety improvements

Strategies

- Obtain right of way for and construct a Super 2 cross-section, with ultimate expansion to four lanes
- Construct/improve/maintain system of local roads
- Consolidate and limit access points, develop access management plans
- Improve geometrics (flatten slopes, flatten curves, improve visibility/sight lines)
- Add/improve shoulders
- Add guardrails
- Maintain infrastructure by adding surface treatment/overlays, constructing bridge repairs/replacement, adding drainage improvements and reconstructing the roadway
- Construct auxiliary lanes (passing, turn, accel/decel lanes)
- Secure Strategic Investment Program funding



Eastern TPR 2035 Regional Transportation Plan

CORRIDOR #16: SH 113 (PEA7016)

State Highway: 113A

Beginning Mile Post: 0.00

Ending Mile Post: 18.83

SH 113 between SH 138 near Sterling and I-80 in Sidney, Nebraska

Vision

The vision for the SH 113 corridor is to maintain system quality as well as to improve safety and to increase mobility. This corridor serves as a multi-modal local facility, connects to places outside the region, and makes north-south connections within the Northeast Colorado Plains and connections to Nebraska. Travel modes now and in the future include passenger vehicle, truck and rail freight, and local public transit. The transportation system in the area primarily serves destinations outside of the corridor. Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to increase by moderate levels. Tourist traffic to the Cabela's retail store in Nebraska is a key element of the traffic along this corridor. The communities along the corridor value connections to other areas, safety, and system preservation. They depend on tourist traffic, agriculture, grain storage and local commerce for economic activity in the area. Users of this corridor want to preserve the rural and agricultural character of the area while supporting the movement of tourists and farm-to-market products in and through the corridor.

Primary Investment Category: Safety

Priority: Low (Rank 16)

Goals

- Reduce fatalities, injuries and property damage crash rate
- Eliminate shoulder deficiencies
- Improve signing/striping
- Maintain or improve pavement to optimal condition
- Rehabilitate/replace deficient bridges

Strategies

- Improve geometrics
- Add/improve shoulders
- Install rumble strips in high accident areas
- Add turn lanes
- Flatten slopes
- Add surface treatment/overlays
- Bridge repairs/replacement
- Add drainage improvements



Eastern TPR 2035 Regional Transportation Plan

CORRIDOR #17: SH 138 (PEA7017)

State Highway: 138A **Beginning Mile Post:** 0.00 **Ending Mile Post:** 59.82

SH 138 from SH 6 in Sterling northeast to I-80 in Nebraska

Vision

The vision for the SH 138 corridor is primarily to improve safety as well as to maintain system quality and to increase mobility. This corridor serves as a multi-modal local facility, serves as a Main Street, provides local access, serves as a parallel facility to the interstate for local traffic and makes east-west connections within the Northeast Colorado and Nebraska area. Travel modes now and in the future include passenger vehicle, local public transit, rail freight, and truck freight. The transportation system in the area primarily serves towns, cities, and destinations within and outside the corridor. Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to increase by moderate levels. Recreational users and seasonal agriculture traffic is an important element of this corridor. The communities along the corridor value system preservation. They depend on agriculture, local commerce, and I-76 tourism for economic activity in the area. Users of this corridor want to preserve the rural character of the area while supporting the movement of tourism and farm-to-market products in and through the corridor.

Primary Investment Category: Safety

Priority: Medium (Rank 13)

Goals

- Increase travel reliability through safety improvements
- Support economic development and maintain environment
- Eliminate shoulder deficiencies
- Maintain or improve pavement to optimal condition
- Rehabilitate/replace deficient bridges

Strategies

- Improve geometrics
- Improve intersections
- Add/improve shoulder
- Flatten slopes
- Add surface treatment/overlays
- Add drainage improvements
- Study corridors
- Construct grade separated railroad crossing



Eastern TPR 2035 Regional Transportation Plan

CORRIDOR #18: SH 14 PLAINS (PEA7018)

State Highway: 014C

Beginning Mile Post: 216.83

Ending Mile Post: 236.92

SH 14 from I-25 in Fort Collins east to I-76 in Sterling.

Vision

The vision for the SH 14 Plains corridor is primarily to increase mobility, as well as maintain system quality and to improve safety. The primary Investment category is System Quality west of the SH 14 intersection with SH 71, and Mobility east of that intersection. Sections of the corridor between the towns of Sterling, Fort Morgan, Grover, and Ault are designated as the Pawnee Pioneer Trails Scenic Byway. This corridor serves as a multi-modal local facility, acts as Main Street, connects to places outside the region, and makes east-west connections from NE Colorado to the Fort Collins/Front Range area. Travel modes now and in the future include passenger vehicle, local public transit, aviation (Sterling Municipal Airport), rail freight, and truck freight. The transportation system in the area primarily serves destinations outside of the corridor. Based on historic and projected population and employment levels, passenger traffic volumes are expected to increase by moderate levels. Recreational user traffic is an important element of this corridor. The communities along the corridor value connections to other areas and system preservation. They depend on agriculture, local commerce and commercial activity for economic activity in the area. Users of this corridor want to preserve the rural, agricultural, and transitioning residential development character of the area while supporting the movement of tourists, commuters, freight and farm-to-market products in and through the corridor.

Primary Investment Category: Mobility

Priority: Medium (Rank 11)

Goals

- Maintain statewide transportation connections
- Accommodate growth in freight transport
- Reduce fatalities, injuries and property damage crash rate
- Maintain or improve pavement to optimal condition
- Ensure airport facility meets existing and projected demands

Strategies

- Add and maintain roadway bypasses (through Sterling)
- Corridor study addressing potential bypass
- Develop and implement access control measures
- Improve geometrics (flatten slopes, flatten curves)
- Improve intersections
- Add/improve shoulders
- Add surface treatment/overlays
- Add drainage improvements
- Reconstruction roadways
- Meet airport facility objectives in Airport System Plan



Eastern TPR 2035 Regional Transportation Plan

CORRIDOR #19: SH 23 (PEA7019)

State Highway: 023A

Beginning Mile Post: 0.00

Ending Mile Post: 17.83

SH 23 from Holyoke east to Nebraska

Vision

The vision for the SH 23 corridor is primarily to maintain system quality as well as to improve safety. This corridor serves as a multi-modal local facility, provides local access, and makes east-west connections within the Northeast Plains of Colorado to Nebraska area. Travel modes now and in the future include passenger vehicle, local public transit, rail freight and truck freight. The transportation system in the area primarily serves towns and destinations within and outside the corridor. Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to increase by moderate levels. The communities along the corridor value system preservation. They depend on agriculture, grain storage, tourism and local commerce for economic activity in the area. Users of this corridor want to preserve the agricultural character of the area while supporting the movement of tourists, farm-to-market products in and through the corridor.

Primary Investment Category: System Quality

Priority: Low (Rank 22)

Goals

- Reduce fatalities, injuries and property damage crash rate
- Maintain or improve pavement to optimal condition
- Preserve the existing transportation system
- Maintain statewide transportation connections

Strategies

- Improve geometrics
- Flatten slopes
- Add/improve shoulders
- Add surface treatment/overlay
- Bridge repairs/replacement
- Add drainage improvements



Eastern TPR 2035 Regional Transportation Plan

CORRIDOR #20: I-70 PLAINS (PEA7020)

State Highway: 070A **Beginning Mile Post:** 289.18 **Ending Mile Post:** 449.51

I-70 from E-470 in Denver east to Kansas.

Vision

The vision for the I-70 Plains corridor is primarily to maintain system quality as well as to improve safety and to increase mobility. This corridor is on the National Highway System and serves as a multi-modal Interstate facility, connects to the Front Range and places outside the region, and makes east-west connections within the Eastern Colorado Plains to points west in Colorado and east of Colorado. The Ports to Plains route connecting Denver to Laredo, Texas utilizes I-70 between Denver and Limon (see Corridor #10). Travel modes now and in the future include passenger vehicle, intercity bus service (Greyhound), local public transit service, intercity bus service, truck freight, rail freight, and aviation (Limon Municipal Airport within the Eastern TPR). Significant facilities affecting transportation in the corridor are Denver International Airport, Front Range Airport, the military armory in Watkins, the proposed TransPort intermodal facility and connections with E-470. The transportation system in the area primarily serves towns, cities, and destinations within the corridor as well as destinations outside of the corridor. Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to increase by significant levels. The communities along the corridor value high levels of mobility, transportation choices, connections to other areas, safety, and system preservation. They depend on tourist travel, agriculture, commercial activity, freight distribution, and residential development for economic activity in the area. Users of this corridor want to preserve the rural, agricultural and the transitioning residential area while supporting the movement of tourists, commuters, freight, military, and farm-to-market products in and through the corridor.

Primary Investment Category: System Quality

Priority: High (Rank 2)

Goals

- Maintain statewide transportation connections
- Support commuter travel and provide for tourist-friendly travel
- Accommodate growth in freight transport via roadway and rail
- Maintain or improve pavement to optimal condition
- Maintain airport facilities in good condition

Strategies

- Add rail sidings
- Create ITS traveler information, traffic management and incident management including the use of variable message signs
- Improve geometrics
- Construct intersection/interchange improvements
- Bridge repairs/replacement
- Add truck-parking areas and rest areas
- Reconstruct roadways
- Meet airport facility objectives in Airport System Plan



Eastern TPR 2035 Regional Transportation Plan

CORRIDOR #21: US 34 EASTERN PLAINS (PEA7021)

State Highway: 034B **Beginning Mile Post:** 180.57 **Ending Mile Post:** 259.51

US 34 from SH 71 in Brush east to Nebraska

Vision

The vision for the US 34 Eastern Plains corridor is primarily to maintain system quality as well as to improve safety and to increase mobility. This corridor serves as a multi-modal facility, acts as Main Street, and makes east-west connections within the Northeast Colorado area. Future travel modes now and in the future include passenger vehicle, passenger rail (Amtrak), public transit, aviation (Colorado Plains Regional Airport and Gebauer Airport), truck freight, and rail freight. The transportation system in the area primarily serves towns, cities, and destinations within the corridor as well as destinations outside of the corridor. Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to increase by moderate levels. The communities along the corridor value high levels of mobility and safety. They depend on agriculture, grain storage, tourism, local commerce, tourists, oil and gas production, ethanol production, and commercial activity for economic activity in the area. Users of this corridor want to preserve the rural and agricultural character of the area while supporting the movement of freight, tourists and farm-to-market products in and through the corridor.

Primary Investment Category: System Quality

Priority: High (Rank 6)

Goals

- Maintain statewide transportation connections and accommodate growth in freight transport
- Increase air travel availability
- Reduce fatalities, injuries and property damage crash rate
- Eliminate shoulder deficiencies
- Maintain or improve pavement to optimal condition

Strategies

- Add intersection improvements and turn lanes
- Consolidate and limit access points and develop access management plans
- Improve geometrics and flatten slopes
- Add/improve shoulders
- Add surface treatment/overlays
- Bridge repairs/replacement
- Add drainage improvements
- Reconstruction roadways
- Meet airport facility objectives in Airport System Plan
- Provide and expand transit service



Eastern TPR 2035 Regional Transportation Plan

CORRIDOR #22: US 36 EASTERN PLAINS (PEA7022)

State Highway: 036D **Beginning Mile Post:** 101.00 **Ending Mile Post:** 224.71

US 36 from I-70 in Byers east to Kansas

Vision

The vision for the US 36 Eastern Plains corridor is primarily to maintain system quality as well as to improve safety. This corridor serves as a multi-modal facility, acts as Main Street, and makes east-west connections within the Northeast Colorado area. Future travel modes now and in the future include passenger vehicle, local public transit, and truck freight. The transportation system in the area primarily serves towns and destinations within the corridor as well as destinations outside of the corridor. Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to increase by significant levels. Seasonal agriculture traffic is an important element of this corridor. The communities along the corridor value high levels of system preservation and safety. They depend on agriculture, grain storage, local commerce, and commercial activity for economic activity in the area. Users of this corridor want to preserve the rural and agricultural character of the area while supporting the movement of freight and farm-to-market products in and through the corridor.

Primary Investment Category: System Quality

Priority: Low (Rank 21)

Goals

- Maintain or improve pavement to optimal condition
- Eliminate shoulder deficiencies
- Accommodate growth in freight transport
- Reduce fatalities, injuries and property damage crash rates

Strategies

- Construct auxiliary lanes (passing, turn, accel/decel lanes)
- Improve geometrics
- Improve visibility/sight lines
- Flatten slopes
- Add/improve shoulders
- Add guardrails
- Add surface treatment/overlays
- Bridge repairs/replacement



Eastern TPR 2035 Regional Transportation Plan

Corridor Prioritization Process

A corridor prioritization process for the Eastern TPR was developed as part of the 2030 RTP. The 22 corridors in the region were ranked from 1 to 22 based on five evaluation criteria. For consistency with statewide planning, the 22 corridors have been further prioritized into High, Medium, and Low priority for this 2035 plan. The following sections provide documentation of the methodology used to rank and prioritize the 22 corridors in the Eastern TPR.

EVALUATION CRITERIA

As a part of the 2030 RTP, five evaluation criteria were established to prioritize the 22 corridors. The corridors were scored based on how well they met the selected evaluation criteria, each of which relates to goals established for the Eastern RTP. These evaluation criteria have been maintained for this 2035 RTP update. The evaluation criteria and their definitions are listed below.

- ▶ **Mobility** - The corridor is evaluated based on current and projected Average Annual Daily Traffic Volumes (AADT), the levels of truck traffic within the corridor and the corridor's utilization as a significant interregional or interstate corridor.
- ▶ **Safety** – The corridor is evaluated based on the accident rates within the corridor being compared to statewide accident rates; comparing shoulder widths, curves, and intersections to design standards; and, an evaluation of whether signalization or other Transportation Systems Management tools (TSM), including lighting and revised speed limits, would be expected to reduce crashes.
- ▶ **System Quality** – The corridor is evaluated on amount of roadway with poor surface condition; the amount of transportation infrastructure that fails to function effectively; and, the corridor's contribution to system continuity (i.e., that it does not have gaps or incomplete sections).
- ▶ **Ability to Implement/Public Support** – The corridor is evaluated on the amount of public support shown for corridor improvements; the current Corridor contains projects that are committed or planned; and, the Corridor contains projects that do not impact environmentally sensitive areas.
- ▶ **Economic Impact** – The corridor is evaluated on its use by tourists or as a recreational route; use as a high volume interstate or interregional facility; and, its critical importance to the regional economy.

CORRIDOR SCORING

The evaluation criteria and scoring methodology that were developed as part of the 2030 RTP were intended to compare each corridor against other corridors within the Eastern TPR. Because scoring is for the corridor as a whole, it was been divided into subjective levels of High, Medium, and Low. A rating of High (or a score of "3") indicates that the corridor, as it relates to the particular evaluation criterion, is of the highest importance to the region, is in poor condition and has the greatest need for improvement, or has the fewest barriers to implementing



Eastern TPR 2035 Regional Transportation Plan

improvements. A rating of Medium (or “2”) indicates that the corridor is of moderate importance to the region, is in moderate condition, or has a moderate level of barriers to implementing improvements. A rating of Low (or “1”) indicates that the corridor is of relatively low importance to the region, is in relatively good condition and has the least need for improvement, or has significant barriers which could hinder the implementation of improvements.

Because the five evaluation criteria do not carry equal importance in the prioritization of the corridors, a weight was applied to each criterion. **Table 16** summarizes the weights assigned to the five evaluation criteria.

For each corridor, these weights were applied to the score (ranging from 1 to 3) for each evaluation criterion. Each corridor has a potential total score that ranges from 100 to 300. The scores were used to establish the High, Medium, and Low priority corridors for the region. The division of corridors between the three priority levels was based on the logical breakpoints in the total scores. The ranked and prioritized corridors are shown in **Table 17**. The corridor identification numbers, which correspond to the map on **Figure 26**, are listed in parentheses.

Table 16. Evaluation Criteria Weighting

Evaluation Criteria	Weight
Mobility	25
Safety	20
System Quality	25
Ability to Implement/Public Support	15
Economic Impact	15
Total	100

Table 17. Ranked and Prioritized Corridors

High Priority	Medium Priority	Low Priority
1) I-76 Northeast Colorado (13)	9) US 6 Eastern Plains (6)	15) SH 71 Southern Section (3)
2) I-70 Plains (20)	10) SH 86 Rural Section (1)	16) SH 113 (16)
3) US 385 High Plains Highway (9)	11) SH 59 (7)	17) SH 63 (4)
4) US 287 Ports to Plains (10)	11) SH 14 Plains (18)	18) SH 61 (5)
5) SH 71 Heartland Expressway (15)	13) SH 138 (17)	19) US 40 Kit Carson to Kansas (8)
6) US 34 Eastern Plains (21)	14) US 24 Siebert to Burlington (12)	20) SH 94 (14)
7) SH 86 Urban (2)		21) US 36 Eastern Plains (22)
8) US 24 Colo. Springs to Limon (11)		22) SH 23 (19)



Eastern TPR 2035 Regional Transportation Plan

VISION PLAN

The corridor visions presented in the previous chapter and the prioritization thereof comprise the 2035 Vision Plan element of the Regional Transportation Plan. The Multimodal Plan addresses the overall Vision Plan for the region encompassing all modes of travel. The Transit and Aviation Plans provide more detailed information on the vision for those travel modes.

Multimodal Plan

This multimodal transportation plan addresses roadway, transit, aviation, rail, non-motorized transportation and travel demand management strategies. **Table 18** lists the 22 corridors in the region, the total estimated cost of needed improvements, the primary investment category, and the corridor's priority level. Transit has been listed as a separate line item because the transit programs in the region are area based and cannot be assigned to a single corridor. Aviation costs have been assigned to a specific corridor based on the proximity of each airport to the highway corridor.

In addition to the individual corridors, several CDOT funding "pools" have been established to maximize the flexibility of funding improvements in the region and to address immediate, typically low-cost needs in the region regardless of the corridor on which the need exists. The four pools are described below. Costs for the improvement pools are not provided in **Table 18**, as improvements that are funded through these pools are a part of the overall vision cost for the individual corridors. Aside from the Shoulder Improvement Pool, the remaining pools are specific to the CDOT Engineering Region (Region 1 or Region 4) from which the funding originates.

Shoulder Improvement Pool – Many of the state highways in the Eastern TPR have substandard shoulders, resulting in unsafe and inefficient travel. The purpose of this pool is to allow for funding of shoulder widening in conjunction with surface treatment projects along highways that may not necessarily fall on a high priority corridor. Any section of state highway in Region 4 could compete for funding through this pool.

Region 4 Intersection Improvement Pool – There are many intersections along the state highways in the Eastern TPR that are in need of improvement. These intersections may need auxiliary lanes for capacity and/or safety reasons and signalization if signal warrants are met. The purpose of this pool is to allow for funding of much needed intersection improvements that may not necessarily fall on a high priority corridor. Any intersection on a state highway in Region 4 can compete for funding through this pool.

Region 4 Bridge Rehabilitation Pool – This pool is meant to address deteriorating state highway bridges that will not be receiving funding from CDOT's "Bridge on System" (BRS) program. In some cases, these are small structures which are too short to be eligible for BRS funding; these might be replaced with culverts rather than bridges if they cannot be rehabilitated in some way. There are other cases where a larger structure's condition is not rated low enough to qualify for BR funding but repairs or rehabilitation can postpone costly major repairs or replacement. The repairs and rehabilitation to be funded from this pool are to be those that are not covered by CDOT's normal Maintenance budget. Any bridge on the state highway system in Region 4 can compete for funding through this pool.



**Eastern TPR
2035 Regional Transportation Plan**

Table 18. Vision Plan Priorities

Rank	Description	Total Cost 2008 Dollars (in millions)			Primary Investment Category	Priority
		Highway	Transit	Aviation		
Region	Local Transit Service		\$89.78		Mobility	High
Region	Shoulder Improvement Pool				M/S/SQ	High
Region	R4 Intersection Improvement Pool				M/S/SQ	High
Region	R4 Bridge Rehabilitation Pool				System Quality	High
Region	R4 Traffic/Safety Management Pool				Safety	High
Region	R1 Operational Improvement Pool				M/S/SQ	High
Region	R1 Generic Projects Pool				M/S/SQ	High
1	I-76 Northeast Colorado (Corridor 13)	\$453.85			System Quality	High
2	I-70 Plains (Corridor 20)	\$216.37		\$12.09	System Quality	High
3	US 385 High Plains Highway (Corridor 9)	\$453.92		\$24.32	Mobility	High
4	US 287 Ports to Plains (Corridor 10)	\$85.77			Mobility	High
5	SH 71 Heartland Expressway (Corridor 15)	\$116.76			Mobility	High
6	US 34 Eastern Plains (Corridor 21)	\$76.33		\$22.18	System Quality	High
7	SH 86 Urban (Corridor 2)	\$122.60			Mobility	High
8	US 24 Elbert County Line to Limon (Corridor 11)	\$58.19			Mobility	High
9	US 6 Eastern Plains (Corridor 6)	\$42.58		\$21.15	System Quality	Medium
10	SH 86 Rural Section (Corridor 1)	\$54.96			Safety	Medium
11	SH 59 (Corridor 7)	\$246.12		\$40.15	System Quality	Medium
11	SH 14 Plains (Corridor 18)	\$24.15		\$38.97	Mobility	Medium
13	SH 138 (Corridor 17)	\$90.03			Safety	Medium
14	US 24 Siebert to Burlington (Corridor 12)	\$39.37			System Quality	Medium
15	SH 71 Southern Section (Corridor 3)	\$57.70			System Quality	Low
16	SH 113 (Corridor 16)	\$17.47			System Quality	Low
17	SH 63 (Corridor 4)	\$63.23			System Quality	Low
18	SH 61 (Corridor 5)	\$55.89			System Quality	Low
19	US 40 Kit Carson to Kansas (Corridor 8)	\$32.03			System Quality	Low
20	SH 94 (Corridor 14)	\$90.91			System Quality	Low
21	US 36 Eastern Plains (Corridor 22)	\$82.14			System Quality	Low
22	SH 23 (Corridor 19)	\$21.78			System Quality	Low
Subtotal		\$2,502.15	\$89.78	\$158.86		
TOTAL			\$2,750.79			



Eastern TPR 2035 Regional Transportation Plan

Region 4 Traffic/Safety Management Pool – This pool of funds will be used to study, design and/or construct traffic and safety related improvements to the state highway system. The highway system improvements are expected to include, but not necessarily be limited to:

- ▶ Upgrading or replacing existing traffic signals
- ▶ Installing new or improved roadway signs
- ▶ Applying high-durability stripes to delineate lanes on the roadway pavement
- ▶ Making relatively minor modifications to roadways and intersections to improve safety, sometimes in conjunction with CDOT's ongoing Surface Treatment Program

Any project along a state highway in Region 4 could compete for funding through this pool.

Region 1 Operational Improvements Pool – This pool of funds will be used to implement operational improvements to the state highway system. This pool could be used for, but is not limited to, safety improvements and Transportation Systems Management (TSM) projects. Any project along a state highway in Region 1 could compete for funding through this pool.

Region 1 Generic Projects Pool – This is a flexible pool of funding that will allow Region 1 to respond to immediate and pressing needs. Projects funded through this pool could include, but are not limited to, shoulder widening, sediment control, and intersection improvements. Any project along a state highway in Region 1 could compete for funding through this pool.

The total Vision Plan cost from 2008 to 2035 is estimated to be about \$2.75 billion, including approximately \$90 million in transit costs and \$159 million in aviation costs.

Transit Plan

This section presents the Long-Range 2035 Transit Plan for the RTP. The Long-Range Transit Plan includes an analysis of unmet needs, gaps in the service areas, regional transit needs, and a funding plan.

The Eastern TPR is a challenging environment for public transportation due to the distinct rural nature of the area and scattered development. Funding and land-use development patterns are constraints to transit growth in the region. One constraint is due to transit operations being dependent on federal transit funds and the lack of dedicated local funding in the study area. A second constraint is the low residential density within the region, combined with scattered work destinations, which limit the ability of traditional transit service to efficiently serve an increasing number of people. Transit services present opportunities for travelers and commuters to use alternate forms of ground transportation rather than personal vehicles. Many of the regional trips are centered on connections to the larger urban areas of Denver and Colorado Springs, and other smaller communities.

The existing transportation providers were presented earlier in this document, along with the transit demand for the region. Unmet need has several definitions. This plan introduces two different definitions of unmet need. The first unmet needs analysis is quantitative while the second unmet needs analysis is from public feedback from the public forums, human services transportation coordination meetings, and other local meetings.



Eastern TPR 2035 Regional Transportation Plan

The unmet needs are identified as gaps in service. These gaps include areas which are unserved, lack of connections between local service areas, corridors without service, unserved population groups, and times of day or days of the week which are not served. This plan includes strategies to eliminate many of the gaps in transit service in the region, but funding is not available to implement most of those strategies. Many of the strategies are incorporated into the Vision Plan for the region, but are not included in the Fiscally Constrained Plan because of the lack of additional funding. Potential sources of additional funding include higher fares, public/private partnerships, additional local government funding, additional applications for federal funds, and formation of Regional Transportation Authorities (RTA).

This Plan looked at how people currently use the existing transit services, who uses the services, and what keeps others from doing so. There are many reasons why people choose their automobiles over the transit service. Many of the future transit services would operate longer hours, run more frequently, and extend service areas. That is expensive, particularly in the early years as ridership builds. However, a fast, frequent, and reliable transit system would attract all market segments to the service. Transit services cannot come close to paying for themselves; almost all services across the nation are subsidized from the Federal Transit Administration (FTA), state funding sources, and grants. The ability to leverage these federal funds becomes a difficult challenge as this match, in most cases, must be a locally derived cash match. While there have been increasing sources of federal operating and capital funding in recent years, the ability to raise the local match in many of Colorado's rural areas is difficult at best.

FUTURE FUNDING

Funding for transit services within the region will come from federal and local (public and private) sources. SAFETEA-LU is the current legislation guiding the federal transit program. Under SAFETEA-LU the FTA administers formula and discretionary funding programs that are applicable to the Eastern TPR. House Bill 1 resulted in state funding for transit. The following text provides a short description of other existing funding sources which are the primary source of operating and capital funds for Colorado's rural regions.

5309 Discretionary Funds

Established by the Federal Transportation Act of 1964 and amended by the Surface Transportation Assistance Act of 1978, the Intermodal Surface Transportation Efficiency Act of 1991, and SAFETEA-LU, this program provides capital funding assistance to any size community. The program is administered by the FTA. The funds are available to public transportation providers in the state on a competitive discretionary basis, providing up to 80 percent of capital costs. Competition for these funds is fierce, and generally requires lobbying in Washington, DC and receiving a congressional earmark.

Approximately 10 percent of the funds are set aside for rehabilitation or replacement of buses and equipment, and the construction of bus transit facilities. It should be noted that in recent years the transit agencies in Colorado have submitted requests for projects through a statewide coalition—Colorado Association of Transit Agencies (CASTA).



Eastern TPR 2035 Regional Transportation Plan

5310 Elderly and Persons with Disabilities Capital Funds

This program is administered by CDOT and provides funds to private, nonprofit agencies that transport elderly and disabled persons. The funds are available on a discretionary basis to support 80 percent of capital costs such as vehicles, wheelchair lifts, two-way radios, and other equipment. Preliminary estimates by FTA regional staff indicate that CDOT's apportionment for Fiscal Year 2008 is approximately \$1.6 million. For the Eastern TPR, the amount of 5310 is \$180,000 in 2008 and over the planning horizon (2008–2035), a total of \$5.7 million.

5311 Capital and Operating Funds

Established by the Federal Transportation Act of 1964 and amended by the Surface Transportation Assistance Act of 1978, the Intermodal Surface Transportation Efficiency Act of 1991, and SAFETEA-LU, this program provides funding assistance to communities with a population of less than 50,000. The FTA is charged with distributing federal funding for "purposes of mass transportation."

The program is administered by CDOT. The funds are available to public and private transportation providers in the state on a competitive, discretionary basis to support up to 80 percent of the net administrative costs and up to 50 percent of the net operating deficit. Use of this funding requires the agency to maintain certain records in compliance with federal and state requirements. A portion of the funds are apportioned directly to rural counties based upon population levels. The remaining funds are distributed by CDOT on a discretionary basis based on system performance and merit of the grant application, and are typically used for capital purposes. The estimated 5311 funding for the Eastern TPR for Fiscal Year 2008 is \$681,000. The amount of 5311 funding over the planning horizon (2008–2035) is estimated at \$21.7 million.

Additional Federal Transit Administration Funding Programs

There are additional federal funding programs for a variety of programs. The following represent myriad funding programs and a short description of each:

- ▶ 5313 State Planning and Research Programs with 50 percent being available to states to conduct their own research. The dollars for state research are allocated based on each state's respective funding allotment in other parts of the Mass Transportation Chapter of the US Code.
- ▶ 5319 Bicycle Facilities are to provide access for bicycles to mass transportation facilities or to provide shelters and parking facilities for bicycles in or around mass transportation facilities. Installation of equipment for transporting bicycles on mass transportation vehicles is a capital project under Sections 5307, 5309, and 5311. A grant under 5319 is for 90 percent of the cost of the project, with some exceptions.
- ▶ Transit Benefit Program is a provision in the Internal Revenue Code (IRC) that permits an employer to pay for an employee's cost to travel to work in other than a single-occupancy vehicle. The program is designed to improve air quality, reduce traffic congestion, and conserve energy by encouraging employees to commute by means other than single-occupancy motor vehicles.

State Funding Sources

The Colorado Legislature passed legislation that provides state funding for public transportation under House Bill 1310. House Bill 1310 requires that 10 percent of funds raised under Senate



Eastern TPR 2035 Regional Transportation Plan

Bill 1 be set aside for transit-related purposes. Funds under this legislation are available in 2007.

2035 TRANSIT VISION

Each provider in the Eastern study area was asked to submit operational and capital projects for the next 28 years to address long-range transit needs. The plan incorporates goals and strategies to address the gaps in service and support the corridor visions throughout the region. The Vision Plan is based on *unrestricted funding* for the transit providers. The submitted projects include costs to maintain the existing system and also projects that would enhance the current transit services. All of the projects are eligible for transit funding. For more information on the projects, the Local Transit Plans (**Appendix B**) and the Human Services Transportation Plan provide the details on this long-range plan.

The transit projects for the region for the next 28 years have an estimated cost of approximately \$90 million dollars as presented in **Table 19**. This total includes operational and capital costs.

Table 19. Transit Vision Plan

Operating	Amount
Continue Existing Operations	\$52,089,179
New Service/Expand Service	\$11,794,526
Subtotal	\$63,883,705
Capital	
New/Replace Vehicles	\$23,877,620
Facilities/Equipment	\$2,016,500
Subtotal	\$25,894,120
Grand Total	\$89,777,825

Source: LSC & CDOT, 2007

Aviation Plan

The preferred list of airport projects and their associated cost estimates were developed utilizing several sources of information:

Six Year Capital Improvement Program (CIP): Every airport in the state of Colorado that receives either Federal Aviation Administration (FAA) or Colorado Division of Aeronautics grant funds must develop and maintain a current six-year CIP list. That list contains major capital projects that the airport anticipates could take place over the six-year planning period. The CIP will show the year the project is anticipated to occur and further identifies anticipated funding sources that will be used to accomplish the project. Those funding sources may include local, FAA and Aeronautics Division funds.

CDOT Aeronautics and FAA staff work very closely with those airports that anticipate funding eligible projects with grant funds from the FAA. Since the FAA and CDOT Aeronautics are concerned with the statewide system of airports, it is very important that individual airport projects be properly planned and time to fit within the anticipated annual federal funding allocation.



Eastern TPR 2035 Regional Transportation Plan

FAA and CDOT Aeronautics staffs meet on a regular basis to evaluate the federal CIP program and make any adjustments as may be required. Therefore, projects shown on the individual airport CIP that identify FAA as a source of funding for the project have already been coordinated with FAA and CDOT Aeronautics for programming purposes.

The costs of the projects are estimates and are typically provided to airports through either their own staff, consulting firms, engineering firms, planning documents, FAA, CDOT-Aeronautics or other similar sources.

National Plan of Integrated Airport Systems (NPIAS): The NPIAS identifies more than 3,000 airports nationwide that are significant to the national air transportation system and thus are eligible to receive Federal grants under the Airport Improvement Program (AIP). The projects listed in this document include those that have been identified in the near term and have been programmed into individual airport CIP's as well as long term projects that have only been identified as a need but not programmed into the Federal grant process. The plan also includes cost estimates for the proposed future projects. The projects included in the NPIAS are intended to bring these airports up to current design standards and add capacity to congested airports. The NPIAS comprises all commercial service airports, all reliever airports and selected general aviation airports. The plan draws selectively from local, regional and State planning studies.

The State of Colorado is served by a system of 75 public-use airports. These 75 airports are divided into two general categories, commercial service and general aviation. The Statewide Airport Inventory and Implementation Plan was designed to assist in developing a Colorado Airport System that best meets the needs of Colorado's residents, economy and visitors. The study was designed to provide the Division of Aeronautics with information that enables them to identify projects that are most beneficial to the system, helping to direct limited funding to those airports and those projects that are of the highest priority to Colorado's airport system.

The report accomplished several things, including the assignment of each airport to one of three functional levels of importance: Major, Intermediate, or Minor. Once each airport was assigned a functional level, a series of benchmarks related to system performance measures were identified. These benchmarks were used to assess the adequacy of the existing system by determining its current ability to comply with or meet each of the benchmarks.

Airport Survey Information: As a part of the CDOT 2035 Statewide Transportation Plan Update process, a combination of written and verbal correspondences as well as actual site visits occurred requesting updated CIP information. The CIP list includes those projects that are anticipated to occur throughout the CDOT 2035 planning period. Letters were mailed out to each airport manager or representative that explained the CDOT plan update process. Included with each letter was a Capital Improvement Project Worksheet whereby airports could list their anticipated projects through the year 2035. Follow-up telephone calls as well as several additional site visits were conducted by Aeronautics Division staff to assist airports in gathering this information. Most airports responded to this information request. Some of the smaller airports with limited or no staff were not able to respond.

Joint Planning Conferences: One of the methods utilized by the CDOT-Aeronautics Division to assist in the development of Airport Capital Improvement Programs is to conduct what is known as a Joint Planning Conference (JPC). A JPC is a process whereby an airport invites tenants, users, elected officials, local citizens, special interests groups, and all other related



Eastern TPR 2035 Regional Transportation Plan

groups to meet and discuss the future of the airport. CDOT-Aeronautic and FAA staff attend these meetings. The JPC allows an opportunity for all of the aviation community to contribute to the planning process of the airport. Many good ideas and suggestions are generated as a result of these meetings.

Table 20 provides the Vision Plan cost estimates for the needed improvements at the ten airports in the Eastern TPR over the time period from 2008 to 2035. Each airport's associated corridor is also provided. The total vision cost for aviation in the region is approximately \$159 million.

Table 20. Aviation Vision Plan

Airport	Corridor	Vision Cost
Kit Carson County (Burlington)	9	\$13,401,000
Limon Municipal	20	\$12,086,000
Sterling Municipal	18	\$38,972,000
Holyoke Municipal	6	\$11,662,000
Haxtun Municipal	6	\$9,488,000
Julesburg Municipal	9	\$1,895,000
Colorado Plains Regional (Akron)	21	\$21,968,000
Gebauer (Akron)	21	\$210,000
Yuma Municipal	7	\$40,148,000
Wray Municipal	9	\$9,027,000
Total		\$158,857,000

Rail Plan

The Colorado Department of Transportation, the Burlington Northern Santa Fe Railway Company (BNSF) and the Union Pacific Railroad Company (UP) are currently studying the potential relocation of through-freight train traffic east of Colorado's Front Range urban corridor. The first phase of the study, the *Public Benefits and Cost Study*, was completed in May 2005. The next phase of the study, which is currently underway, includes defining alignment options, investigating funding sources and developing a financing plan. The Eastern TPR supports the relocation of Class 1 rail operations to eastern Colorado and the preservation of short-line railroads in the region.



Eastern TPR 2035 Regional Transportation Plan

FISCALLY CONSTRAINED PLAN

Current estimates of funding availability (2035 Resource Allocation) anticipate that CDOT will not be able to achieve a single performance goal after 2010. Colorado's transportation investments are at risk of serious deterioration as a combination of issues has come together requiring that the State identify new ways to fund transportation needs. Revenues are sluggish at both Federal and State levels and not able to keep up with dramatic construction and maintenance cost increases. The future of federal transportation funding is also uncertain. In addition, growth in the use of the system has outpaced growth in system capacity. A combination of strategies will be required to address the shortfall, including optimizing system expenditures and seeking additional revenue options.

2035 Resource Allocation

The Fiscally Constrained Plan focuses on the Regional Priority Program (RPP) funding source, which is designed specifically to engage local partners in the decision-making process for priorities among major projects. RPP funds can be used for any projects on the state highway system. The Eastern TPR is expected to receive an estimated \$45.1M of RPP funds between the years 2008 and 2035.

Although the focus of this Fiscally Constrained Plan is RPP funding, it is important to note that CDOT has various other programs that fund transportation improvements including Strategic Projects, System Quality (i.e., preservation of the existing system), Mobility, Safety, and Program Delivery as well as other Earmarks and Statewide Programs. The size of the other programs far exceeds that of the RPP funding. CDOT continues to fund a wide range of transportation improvements throughout the state and TPR, in addition to those that are funded through RPP.

The CDOT program funds (including RPP) are allocated to the six CDOT Engineering Regions. The Eastern TPR falls in two CDOT Engineering Regions: Region 1 and Region 4. In addition to the Eastern TPR, Region 1 includes portions of the Central Front Range TPR, the Intermountain TPR, and the Denver Regional Council of Governments (DRCOG). Region 4 also includes the North Front Range MPO, the Upper Front Range TPR and portions of DRCOG. Total program funds are responsible for everything from major projects of statewide significance (Strategic Projects) to resurfacing to maintenance to bridge repair and bicycle/pedestrian programs. **Table 21** shows CDOT Region 1 and Region 4 control totals for the various investment programs for 2008 through 2035. Resource allocation is the process by which revenue estimates are used to distribute expected funding by CDOT investment category and program. This resource allocation aligns dollars with the five CDOT investment categories of Safety, System Quality, Mobility, Strategic Projects, and Program Delivery. Resource allocation is then geographically distributed to the six CDOT Engineering Regions. These geographical distributions are called "control totals."



Eastern TPR 2035 Regional Transportation Plan

Table 21. 2008 – 2035 Resource Allocation

Program	Region 1 Funding (in millions)	Region 4 Funding (in millions)
Strategic Projects	\$1,509.1	\$875.2
System Quality	\$1,165.9	\$1,390.8
Mobility (includes Congestion Relief)	\$578.4	\$332.6
Safety	\$435.9	\$386.4
Program Delivery	\$173.1	\$149.5
Regional Priority Program	\$97.8	\$101.8
Earmarks FY2008 and FY2009	\$0.4	\$5.8
Total	\$3,960.7	\$3,242.2

Multimodal Constrained Plan

The multimodal Fiscally Constrained Plan allocates funds expected to be available to the priorities established in the Vision Plan. The future funding has been grouped in two categories: 1) Regional Priority Program (RPP), which is a currently available funding source, and 2) Unprogrammed Strategic Projects (SP), which represents future funds that may be available when the current Strategic Projects Program is complete. The TPR representatives have determined the percentage allocation of funding to the improvement pools and the corridors, as shown in **Table 22**. The aviation and transit Fiscally Constrained Plans are included in the table, and a more detailed description of these plans is included in the next sections of this report.

The Eastern TPR is anticipated to receive approximately \$45.1 million in RPP funding for the time period from 2008 through 2035. The Eastern TPR is split between two CDOT Engineering Regions: Region 1 and Region 4. The following is a description of the methodology used in each region to reach the Fiscally Constrained Plan. This plan includes a Shoulder Improvement Pool, which the TPR representatives feel is very important to the region. However, given the limited available funding, no RPP dollars have been allocated to the Shoulder Improvement Pool.

CDOT REGION 1 RPP ALLOCATION

An estimated \$22.18 million in RPP funding is available to the Eastern TPR through Region 1. Approximately 28% of the Region 1 RPP funds (\$6.18 million) have been allocated to the two Region 1 improvement pools, as shown in **Table 22**. The remaining \$16 million of RPP funding has been allocated between four of the High Priority Corridors (I-70 Plains, US 385 High Plains Highway, SH 71 Heartland Expressway, and SH 86 Urban). No RPP dollars have been allocated to the US 287 Ports to Plains corridor because it receives Strategic Projects (known as “7th Pot”) funding.

CDOT REGION 4 RPP ALLOCATION

An estimated \$22.905 million in RPP funding is available to the Eastern TPR through Region 4. At the TPR representatives’ direction, 25% of this funding has been allocated to three of the improvement pools (5% to the Intersection Improvement Pool, 10% to the Bridge Rehabilitation Pool, and 10% to the Traffic/Safety Management Pool). The remaining 75% of Region 4 RPP



Eastern TPR 2035 Regional Transportation Plan

funding has been allocated to four of the High Priority Corridors (I-76 Northeast, US 385 High Plains Highway, SH 71 Heartland Expressway, and US 34 Eastern Plains).

UNPROGRAMMED STRATEGIC PROJECT FUNDING

The Unprogrammed Strategic Project funding has been allocated equally to four of the High Priority Corridors (I-76 Northeast, US 385 High Plains Highway, US 287 Ports to Plains, and SH 71 Heartland Expressway) as a placeholder until the next set of strategic projects has been established.



**Eastern TPR
2035 Regional Transportation Plan**

Table 22. Fiscally Constrained Plan

Priority	Description	RPP (in millions)				SP %	2035 Constrained Total (in millions)			
		Region 1		Region 4			Highway	Transit	Aviation	Total
		%	\$	%	\$					
Local	Transit Service	-	-	-	-		\$74.266		\$74.266	
High (Pools)	Shoulder Improvement Pool	0%	\$0.00	0%	\$0.000	\$0.000			\$0	
	R4 Intersection Improvement Pool	-	-	5%	\$1.145	\$1.145			\$1.145	
	R4 Bridge Rehabilitation Pool	-	-	10%	\$2.290	\$2.290			\$2.290	
	R4 Traffic/Safety Management Pool	-	-	10%	\$2.290	\$2.290			\$2.290	
High	R1 Operational Improvement Pool	13.9%	\$3.08	-	-	\$3.080			\$3.080	
	R1 Generic Projects Pool	14.0%	\$3.10	-	-	\$3.100			\$3.100	
	1) I-76 Northeast Colorado (13)	-	-	31%	\$7.101	\$7.101			\$7.101	
	2) I-70 Plains (20)	27.1%	\$6.00	-	-	\$6.000		\$8.0	\$14.000	
	3) US 385 High Plains Highway (9)	20.5%	\$4.55	21%	\$4.810	\$9.360		\$17.5	\$26.860	
	4) US 287 Ports to Plains (10)	0%	\$0.00	-	-	\$0.000			\$0	
	5) SH 71 Heartland Expressway (15)	11%	\$2.45	11%	\$2.520	\$4.970			\$4.970	
	6) US 34 Eastern Plains (21)	-	-	12%	\$2.749	\$2.749		\$11.5	\$14.249	
	7) SH 86 Urban (2)	13.5%	\$3.00	-	-	\$3.000			\$3.000	
	8) US 24 Elbert County to Limon (11)	0%	\$0.00	-	-	\$0.000			\$0	
Medium	9) US 6 Eastern Plains (6)							\$8.5	\$8.500	
	10) SH 86 Rural Section (1)								\$0	
	11) SH 59 (7)							\$11.5	\$11.500	
	11) SH 14 Plains (18)							\$15.0	\$15.000	
Low	13) SH 138 (17)								\$0	
	14) US 24 Siebert to Burlington (12)								\$0	
	15) SH 71 Southern Section (3)								\$0	
	16) SH 113 (16)								\$0	
	17) SH 63 (4)								\$0	
	18) SH 61 (5)								\$0	
	19) US 40 Kit Carson to Kansas (8)								\$0	
	20) SH 94 (14)								\$0	
	21) US 36 Eastern Plains (22)								\$0	
	22) SH 23 (19)								\$0	
	Total		100%	\$22.18	100%	\$22.905	\$45.085	\$74.266	\$72.0	\$191.351



Eastern TPR 2035 Regional Transportation Plan

Transit

The Long-Range Fiscally Constrained Transit Plan is presented in **Table 23**. The Fiscally Constrained Plan presents the long-range transit projected funding for FTA and CDOT programs. This is anticipated funding which may be used to support services. It should be noted that this total constrained amount is only an estimate of funding. As funds are appropriated in future Federal Transportation Bills, these amounts will likely fluctuate. Capital requests are anticipated for future vehicle requests for the 5310 and 5311 providers over the course of the 2035 planning horizon. The constrained operating plan has an estimated cost of approximately \$52 million, with a capital cost of approximately \$22 million. Total constrained FTA funding is approximately \$31.6 million. The remainder of funding will be generated from local funding and is estimated at \$42.7 million. The constrained plan includes the identified capital replacement of a number of regional providers. The existing public providers cost is approximately \$10.4 million in vehicle replacement with the additional \$9.8 million from other providers throughout the region who identified vehicle replacement needs.

Table 23. Fiscally Constrained Transit Plan

Operating	Amount
Existing Operational Costs	\$52,089,179
Subtotal	\$52,089,179
Capital	
Replacement Public Provider Vehicles	\$10,380,000
Regional Vehicle Replacement	\$9,780,000
Facilities/Equipment	\$2,016,500
Subtotal	\$22,176,500
Grand Total	\$74,265,679
Local Funding	\$27,700,442
Local Match Funding	\$15,013,466
FTA Grants	\$31,551,770
Total Funding	\$74,265,679

Source: LSC & CDOT, 2007

Aviation

The constrained costs for aviation were developed for the airports in Colorado using very general assumptions and forecasts. Airports that receive entitlement money fell under the assumption that they will continue to receive entitlements through 2035 at the current level. In addition to the entitlements, forecasts were used to determine how much discretionary money an airport would receive. The discretionary money is all FAA

Table 24. Fiscally Constrained Aviation Plan

Airport	Corridor	Amount
Kit Carson County (Burlington)	9	\$10,000,000
Limon Municipal	20	\$8,000,000
Sterling Municipal	18	\$15,000,000
Holyoke Municipal	6	\$8,000,000
Haxtun Municipal	6	\$500,000
Julesburg Municipal	9	\$500,000
Colorado Plains Regional (Akron)	21	\$11,500,000
Gebauer (Akron)	21	\$0
Yuma Municipal	7	\$11,500,000
Wray Municipal	9	\$7,000,000
Total		\$72,000,000

dollars other than entitlement and any money the state might grant. The forecasts were derived from any projects in their five year CIP, any major projects anticipated outside the five year CIP, as well as looking at historic funding levels at that airport to help predict the possible level of funding over the next 28 years. Any contributions to the airport from the local communities were not included in these constrained costs. By no means do these constrained costs shown in **Table 24** guarantee that each airport will receive this amount through 2035.



Eastern TPR 2035 Regional Transportation Plan

MIDTERM IMPLEMENTATION STRATEGY

The final step in the prioritization process was to identify a Midterm Implementation Strategy for the TPR. This step is an outcome of the 2030 Debriefing Session at which many participants expressed the need for some intermediate strategy that is something less than the full long-range outlook. In short, “Where should we focus our efforts in the near future?” The purpose of the Midterm Implementation Strategy is to identify what can be done to address difficult tradeoffs that are necessary to manage the transportation system over the next ten years, knowing there are limited funds and increasing costs.

The Midterm Implementation Strategy has two parts. In general, the TPR representatives feel that the funding status quo will not be sufficient to adequately address transportation needs in either the short or long term. The Strategies to Increase Transportation Revenue address the need to either increase existing revenue streams or seek additional funding mechanisms.

The second part of the Midterm Implementation Strategy, High Priority Corridor Strategies, directs currently available and limited funds toward a set of improvements determined through this planning process to be most critical. The Eastern TPR’s Midterm Implementation Strategy consists of select strategies from the corridor visions of the eight High Priority Corridors. These strategies should be the focus of transportation investments over the next ten years.

Strategies to Increase Transportation Revenue

The Eastern TPR recognizes that CDOT investment in capital improvements using existing resources must necessarily be minimal over the midterm due to accelerating costs and declining revenues. To help offset costs, the Eastern TPR adopts the following Midterm Implementation Strategy Policies:

- ▶ Encourage local governments (counties and municipalities) and state and federal land management agencies to work directly with CDOT to develop local comprehensive plans that minimize the effects of growth and development on state operated transportation infrastructure.
- ▶ Complete Access Management Plans to preserve capacity and enhance safety on corridors or portions of corridors where significant residential or commercial development is anticipated.
- ▶ Support state initiatives to increase state and federal funding for transportation.
- ▶ Encourage joint planning between the state, counties, and municipalities to expedite the implementation of transportation projects.

High Priority Corridor Strategies

The Eastern TPR has established several improvement pools in order to address immediate, typically low-cost needs in the region regardless of the corridor on which the need exists. These pools serve as a strategy to implement the immediate needs of the region.



Eastern TPR 2035 Regional Transportation Plan

The Eastern TPR has established eight corridors as High Priority Corridors: SH 86 Urban Section, US 385 High Plains Highway, US 287 Ports to Plains, US 24 Elbert County Line to Limon, I-76 Northeast Colorado, SH 71 Heartland Expressway, I-70 Plains, and US 34 Eastern Plains. The TPR's midterm investment strategy consists of a series of corridor strategies included within the corridor visions. In general, the following strategies have been identified as the top priority for the region. These strategies tend to be lower-cost improvements which are attainable in the short term and would provide significant benefit.

- ▶ Maintain infrastructure by adding surface treatments/overlays and rehabilitating/replacing bridges
- ▶ Implement improvements at high hazard locations to lower crash rates
- ▶ Implement recommendations from corridor studies
- ▶ Add/improve shoulders
- ▶ Consolidate and limit access points and develop access management plans
- ▶ Construct intersection improvements

For each of the High Priority Corridors, the top strategies for midterm implementation have been identified. Many of these strategies are consistent with the overall midterm implementation strategies; however, since each corridor is unique, the specific strategies for each High Priority Corridor have been identified. These strategies should serve as a guide for selecting and implementing projects over the next ten years.

CORRIDOR #13: I-76 NORTHEAST COLORADO

- ▶ Secure Strategic Investment Program funding
- ▶ Construct interchange improvements
- ▶ Improve ITS incident response, traveler information and traffic management

CORRIDOR #20: I-70 PLAINS

- ▶ Secure Strategic Investment Program funding
- ▶ Improve ITS incident response, traveler information (including variable message signs) and traffic management
- ▶ Construct interchange improvements
- ▶ Add truck parking areas and rest areas



Eastern TPR 2035 Regional Transportation Plan

CORRIDOR #9: US 385 HIGH PLAINS HIGHWAY

- ▶ Secure Strategic Investment Program funding
- ▶ Implement recommendations from *High Plains Highway Corridor Development and Management Plan*
- ▶ Add/improve shoulders
- ▶ Construct intersection improvements and auxiliary lanes (passing, turn, accel/decel)

CORRIDOR #10: US 287 PORTS TO PLAINS

- ▶ Implement recommendations from *Ports to Plains Corridor Development and Management Plan*
- ▶ Complete 7th Pot concrete reconstruction
- ▶ Improve ITS incident response, traveler information (including variable message signs) and traffic management
- ▶ Improve intersections and construct auxiliary lanes (passing, turn, accel/decel)
- ▶ Add/improve shoulders

CORRIDOR #15: SH 71 HEARTLAND EXPRESSWAY

- ▶ Secure Strategic Investment Program funding
- ▶ Construct auxiliary lanes (passing, turn, accel/decel lanes)
- ▶ Consolidate and limit access points and develop access management plans
- ▶ Add/improve shoulders

CORRIDOR #21: US 34 EASTERN PLAINS

- ▶ Consolidate and limit access points and develop access management plans
- ▶ Add intersection improvements and turn lanes
- ▶ Add/improve shoulders

CORRIDOR #2: SH 86 URBAN SECTION

- ▶ Implement *SH 83/SH 86 Corridor Optimization Plan* recommendations
- ▶ Construct, improve, and maintain system of local roads
- ▶ Consolidate and limit access points and develop access management plans

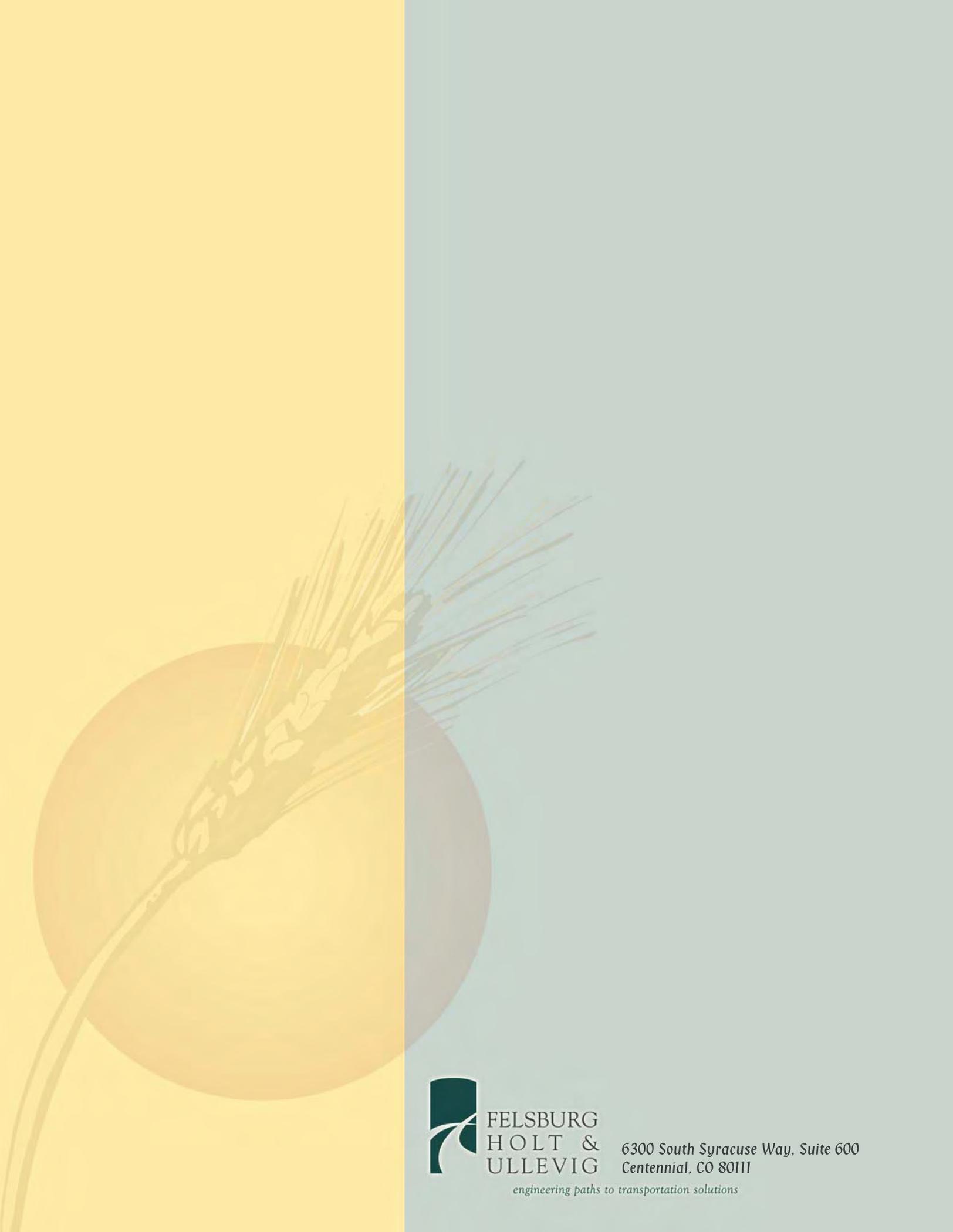


Eastern TPR 2035 Regional Transportation Plan

- ▶ Construct intersection improvements and construct auxiliary lanes (passing, turn, accel/decel)

CORRIDOR #11: US 24 ELBERT COUNTY LINE TO LIMON

- ▶ Complete a corridor study
- ▶ Preserve right of way for future widening
- ▶ Improve intersections and construct auxiliary lanes (passing, turn, accel/decel)
- ▶ Consolidate and limit access points and develop access management plans



FELSBURG
HOLT &
ULLEVIG

6300 South Syracuse Way, Suite 600
Centennial, CO 80111

engineering paths to transportation solutions