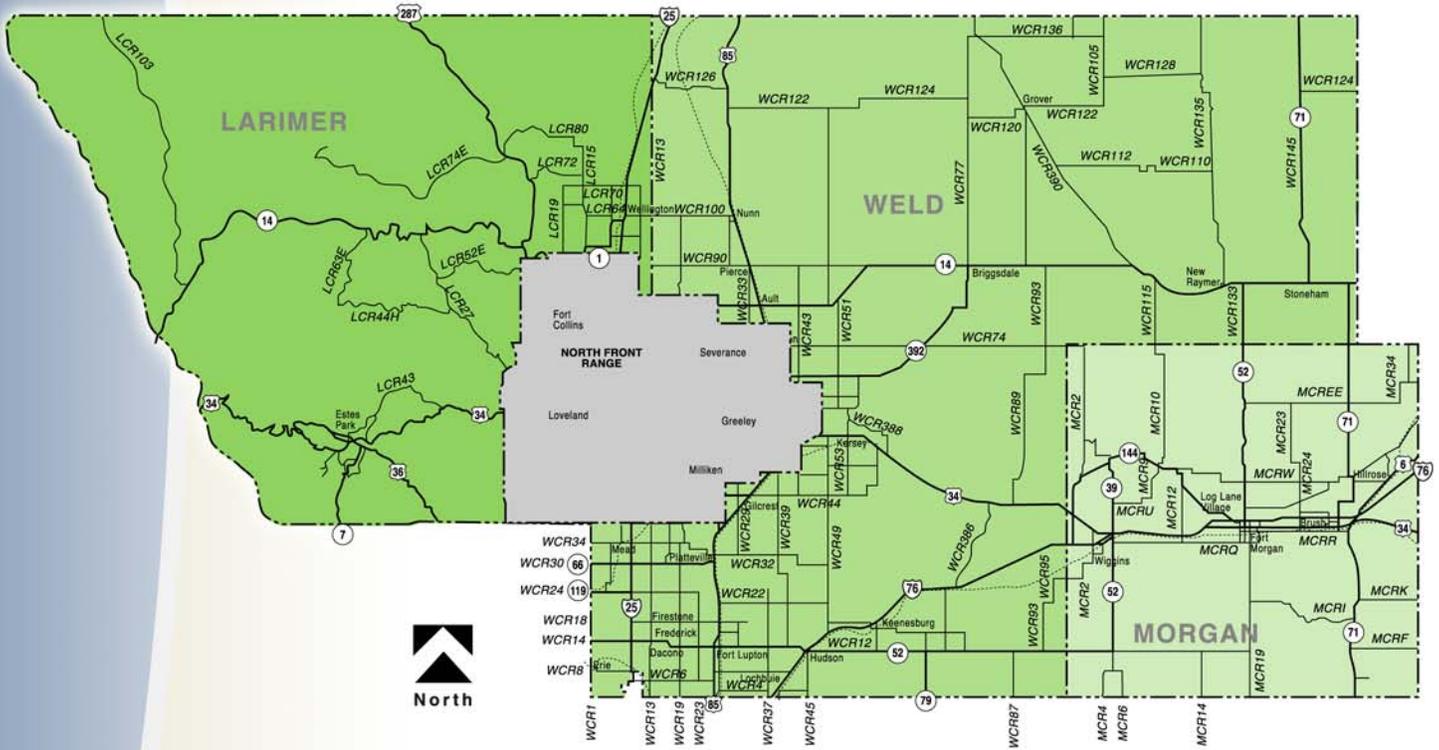


# Upper Front Range 2035 Regional Transportation Plan



January 2008



# UPPER FRONT RANGE 2035 REGIONAL TRANSPORTATION PLAN

*Prepared for:*

**Upper Front Range Regional Planning Commission**

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

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## LIST OF ACRONYMS

AADT	Average Annual Daily Traffic
BLM	Bureau of Land Management
BR	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
CIP	Capital Improvement Program
COG	Council of Governments
COLT	City of Loveland Transit
CR	Congestion Relief
CWA	Clean Water Act
dBa	Decibels
DOLA	Department of Local Affairs
DOW	Division of Wildlife
DRCOG	Denver Regional Council of Governments
EC	Executive Committee
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
FTA	Federal Transit Authority
IRC	Internal Revenue Code
ITS	Intelligent Transportation Systems
MBTA	Migratory Bird Treaty Act
MPO	Metropolitan Planning Organization
NAC	Noise Abatement Criteria
NECALG	Northeastern Colorado Association of Local Governments
NEPA	National Environmental Policy Act
NFR	North Front Range
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
RTA	Regional Transportation Authority
RTP	Regional Transportation Plan
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users
SGPI	Shortgrass Prairie Initiative



## Upper Front Range 2035 Regional Transportation Plan

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 <sup>st</sup> Century
TDM	Transportation Demand Management
TPR	Transportation Planning Region
UFR	Upper Front Range
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



## EXECUTIVE SUMMARY

### Planning Process

The Upper Front Range (UFR) planning area is one of the fifteen Transportation Planning Regions (TPR) in the state. It is located in north-central Colorado, and is comprised of Larimer, Morgan, and Weld Counties, excluding the urbanized areas in Larimer and Weld Counties which comprise the North Front Range (NFR) Metropolitan Planning Organization (MPO). With the Colorado Department of Transportation (CDOT) developing the 2035 Statewide Transportation Plan, the UFR Regional Planning Commission (RPC) 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 2035 RTP represents a significant departure from previous RTPs; the 2035 RTP is a corridor-based plan, rather than a project-based plan.

The planning process began with a review of the mission statement and goals as established in the 2030 RTP. Representatives of the communities in the region and the general public were asked to help identify recent trends 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 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 20 multi-modal corridors in the UFR (as shown on **Figure ES-1**) has a vision, goals, and specific strategies to achieve the vision and goals.

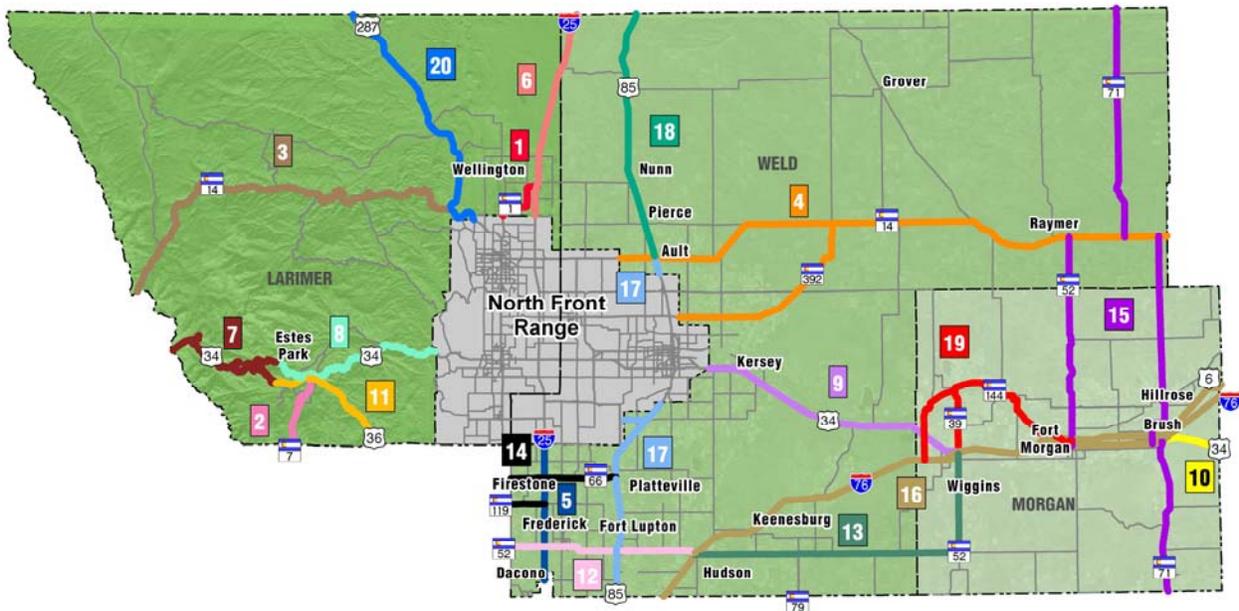


Figure ES-1. Upper Front Range Transportation Corridors



## Upper Front Range 2035 Regional Transportation Plan

### Vision Plan

The RPC 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 \$2.4 billion. All dollar amounts in this plan are expressed in constant 2008 dollars.

**Table ES-1. Vision Plan Costs**

Transportation Mode	Cost (millions)
Highway	\$2,218.63
Transit	\$88.50
Aviation	\$67.46
<b>Total</b>	<b>\$2,374.59</b>

### Fiscally Constrained Plan

An estimated \$115.4 million in funding will be available to the Upper Front Range 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 RPC reviewed options and priorities for funding and assigning program amounts for each improvement pool, corridor priority level, and transportation mode, as summarized in **Table ES-2**.

**Table ES-2. Fiscally Constrained Plan Summary**

Priority	Description	Allocation (millions)
Improvement Pools	Intersection Improvement Pool	\$8.79
	Bridge Rehabilitation Pool	\$5.32
	Traffic/Safety Management Pool	\$4.39
	Six-year Scoping Pool	\$0.28
High	I-25 Front Range	\$19.78
	US 34 Big Thompson	
	SH 66	
	I-76, Denver East	
	US 85 Urban	
Medium	SH 7 Mountain	\$4.94 <sup>1</sup>
	SH 14 Mountain	
	SH 14 Plains	
	I-25 North	
	US 34 Plains	
	US 34 Northeastern Plains	
	US 36 Mountain	
	SH 52 Western	
	SH 71 Northeastern Plains	
	US 85 Rural	
	US 287 Rural	
Low	SH 1	\$0.00
	US 34 RMNP/Mountain	
	SH 52 Middle	
	SH 144 Plains	
Transit (Community Based)		\$53.91
Aviation (Five Airports)		\$18.00
<b>Total</b>		<b>\$115.41</b>

<sup>1</sup> Funding allocated to Medium Priority Corridors can be used for either Medium or High Priority Corridors



## 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 UFR selected the five High Priority Corridors for 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 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
- ▶ Consolidate and limit access points and develop access management plans
- ▶ Construct intersection improvements such as auxiliary lanes and traffic signals
- ▶ Implement and promote TDM such as carpooling, vanpooling, telecommuting and flexible work hours
- ▶ Improve ITS incident response, traveler information and traffic management





## INTRODUCTION

### Planning Area

The Colorado Department of Transportation (CDOT) has established a statewide process for developing a long-range Statewide Transportation Plan. The state has been divided into 15 Transportation Planning Regions (TPRs) based on geographic similarities, common transportation corridors and socio-economic cohesiveness. Every five years, the Upper Front Range is required to prepare a Regional Transportation Plan (RTP) based on the region’s needs and priorities.

The Upper Front Range (UFR) planning area, as shown on **Figure 1**, is one of the fifteen TPRs in the state. It is located in north-central Colorado, and is comprised of Larimer, Morgan, and Weld Counties, excluding the urbanized areas in Larimer and Weld Counties which comprise the North Front Range (NFR) Metropolitan Planning Organization (MPO).

The UFR region represents a wide variety of conditions. The southern portion of the study area is heavily influenced by growth in the Denver area and is transitioning from rural to suburban. The northern area of the region is primarily rural. The eastern portion of the region remains predominately agricultural. The western section of the region is mountainous, and is significantly affected by tourism.

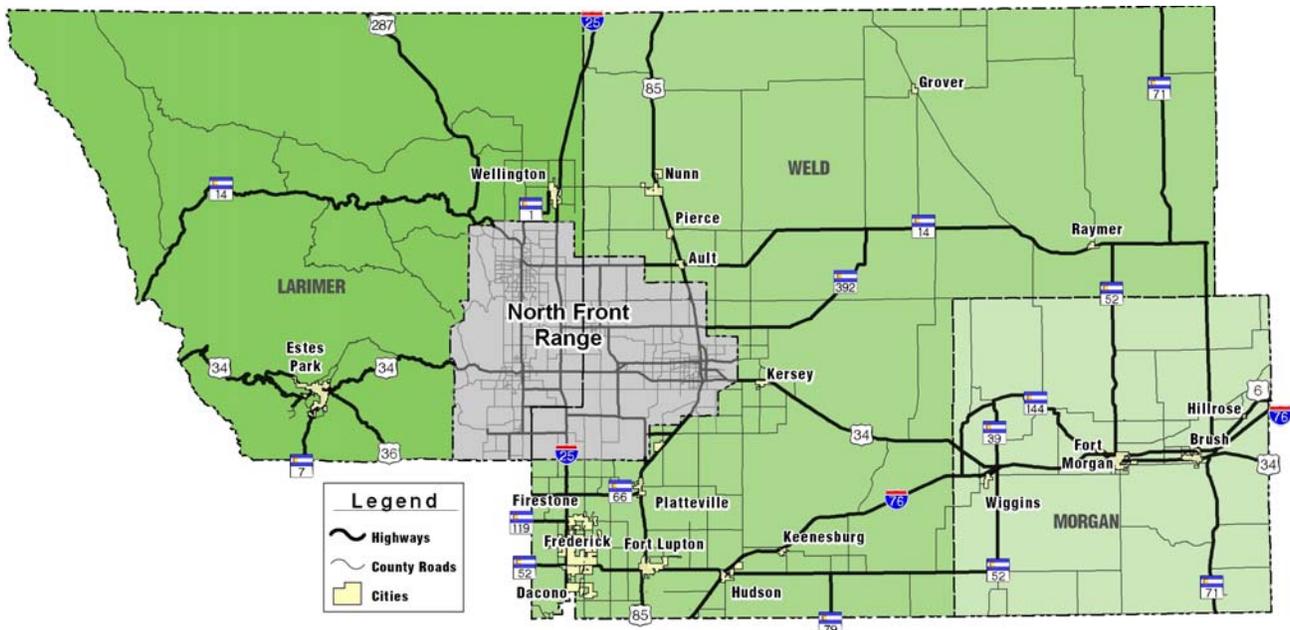


Figure 1. Upper Front Range Planning Area



## Regional Planning Commission

The UFR region includes the predominately rural areas of Larimer and Weld Counties, and all of Morgan County; many small to moderately sized communities are included in the planning area. The UFR Regional Planning Commission (RPC) was established to facilitate the regional planning process. Representatives from each of the three counties and the 25 communities listed in **Table 1** constitute the RPC.

**Table 1. Upper Front Range Regional Planning Commission**

<b>Municipality/County</b>	<b>Member Name</b>	<b>Title</b>
Town of Ault	Brad Bayne	Mayor
Town of Brush	Dan Scalise	Mayor
City of Dacono	Wade Carlson	Mayor
Town of Erie	Andrew Moore	Mayor
Town of Estes Park	John Baudek	Mayor
Town of Firestone	Mike Simone	Mayor
City of Fort Lupton	Shannon Crespin	Mayor
City of Fort Morgan	Jack Darnell	Mayor
Town of Frederick	Eric Doering	Mayor
Town of Gilcrest	Menda Warne	Mayor
Town of Grover	Mathew Ososky	Mayor
Town of Hillrose	Jamie Miles	Mayor
Town of Hudson	Neal Pontius	Mayor
Town of Keenesburg	Mark Gray	Mayor
Town of Kersey	Gilbert Marin	Mayor
Larimer County	Glenn Gibson	Commissioner
Town of Lochbuie	William Norris	Mayor
Town of Log Lane Village	Donna Wright	Mayor
City of Longmont	Julia Pirnack	Mayor
Town of Mead	Richard Macomber	Mayor
Morgan County	Andy Anderson	Commissioner
Town of New Raymer	Cary Lambert	Mayor
Town of Nunn	Duane Bayne	Mayor
Town of Pierce	Craig Cleveland	Mayor
Town of Platteville	Steve Shafer	Mayor
Weld County	Robert Masden	Commissioner
Town of Wellington	Larry Lorentzen	Town Administrator
Town of Wiggins	Ron Uhrick	Mayor

The 2035 planning process was conducted under the direction of an Executive Committee (EC), comprised of a County Commissioner from each of the three counties and the CDOT Region 4 Transportation Director. The EC directed the technical tasks necessary to complete the plan, reviewed the work performed by the consulting team, and made recommendations to the RPC.



### Project Background

In 1994, the UFR RPC completed the first Upper Front Range Regional Transportation Plan (for the year 2015). Subsequently, the regional plan was updated, expanding the time horizon to the year 2020, and then most recently to the year 2030. With CDOT currently preparing to develop the 2035 Statewide Transportation Plan, the UFR RPC has undertaken this current effort to revisit, update and refine the 2030 RTP, expanding the time horizon to the year 2035. The 2035 RTP represents a significant departure from previous RTPs; the 2035 RTP is a corridor-based plan, rather than a project-based plan.

While this plan addresses the year 2035 needs as currently envisioned, the RPC has adopted the following policy statement in order to ensure that this plan be updated on a regular basis to reflect the ever-changing needs of the region:

*“Recognizing the need for the transportation planning process to be dynamic, the Upper Front Range Regional Planning Commission commits to a complete update of the Regional Transportation Plan at least once every five years and will also establish a process through which the RTP can be amended on an annual basis. Furthermore, the Regional Planning Commission recommends that the Colorado Department of Transportation implement a process whereby the Statewide Transportation Plan can also be amended annually.”*

### Planning Process

**Figure 2** provides a diagram depicting the planning process that has been followed in developing the Upper Front Range 2035 RTP. The planning process began with a review of the mission statement and goals 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 20 multi-modal corridors in the UFR has a vision, goals, and specific strategies to achieve the vision and goals. Since this is a corridor-based plan, a corridor prioritization process was developed to divide the 20 corridors 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 corridor priority levels 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.

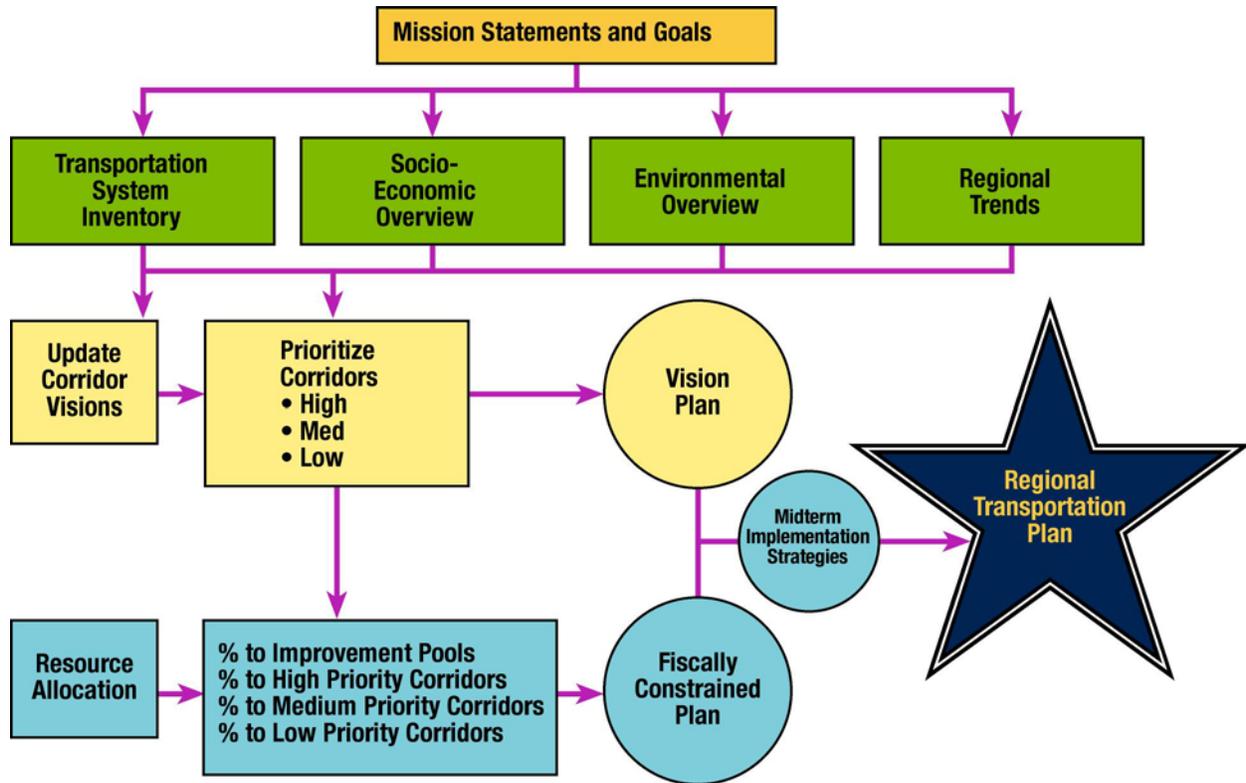


Figure 2. Plan Development Process

## Mission Statement and Goals

Although the UFR TPR is envisioned to remain largely rural in the future, it is anticipated that its importance in the context of the entire Front Range of Colorado will continue to grow. Development pressures from the Denver metropolitan area and the North Front Range urbanized areas are expected to continue to expand into the reaches of the UFR. Also, the region will maintain its position as a primary “gateway” to Rocky Mountain National Park and the recreation areas in the mountains. Thus, the transportation demands on the region will continue to increase. With this in mind, the Regional Planning Commission has adopted the following mission statement for the UFR 2035 Regional Transportation Plan.

### Mission Statement:

“To provide a multi-modal transportation system that maximizes public input, fosters cooperation, and best meets the transportation needs of the Upper Front Range.”



## Upper Front Range 2035 Regional Transportation Plan

The UFR RPC has established the following set of goals to guide the Regional Transportation Plan.

- ▶ To provide a multi-modal transportation system for the safe and efficient movement of persons, goods, and information.
- ▶ To engage the public throughout the development of the transportation plan and its implementation.
- ▶ To foster cooperation and to reduce institutional barriers between all entities involved in providing transportation to the region.
- ▶ To coordinate with the transportation plans of other entities within the region (including Rocky Mountain National Park) and with those of adjacent communities, Transportation Planning Regions, and states.
- ▶ To pursue adequate maintenance of and to preserve the functional integrity of the existing transportation system.
- ▶ To identify existing and projected deficiencies in the transportation system, including rights-of-way, and to establish methods to improve these deficiencies.
- ▶ To identify and efficiently utilize potential sources of funds for transportation projects, take advantage of flexible funding, encourage enhanced funding by communicating the needs to decision makers, and encourage public/private partnerships.
- ▶ To acknowledge the interrelationship of transportation with existing and future land uses and to integrate transportation and land use planning.
- ▶ To enhance the environment through the transportation system.
- ▶ To ensure that the transportation needs of tourism, agriculture, industry, and economic development are met, while protecting and improving the high quality of life in the region.
- ▶ To provide enhanced access to Denver International Airport and to recognize the impacts of DIA and the E-470 corridor on the region.





## PUBLIC PARTICIPATION

The public plays an important role in any planning process, as the 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, and, 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 November 2004 and that might influence the priorities of the region. Public input was solicited at two key points in the regional planning process. The first major opportunity for this input was provided early in the process at the Regional Transportation Forum. A public open house is scheduled for Fall 2007 to present this draft plan and receive comments. Executive Committee and Regional Planning Commission meetings were held throughout the process to guide in the development of the plan. 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 the Executive Committee 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 18, 2006.

### Regional Transportation Forum

The Regional Transportation Forum, which was open to the general public, was held in Greeley on September 28, 2006. It was attended by 27 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 "spend" a set number of "TransBucks" funds on the types of improvements and corridors that they felt were most in need.

### Prioritization Meetings

Two prioritization meetings were held in the Upper Front Range; the initial meeting was with the Executive Committee, and the second meeting was with the Regional Planning Commission. The Executive Committee meeting was held on March 29, 2007. The purpose of this meeting was to examine recommended changes to Corridor Visions, and to present and solicit input on the corridor prioritization process, the Vision Plan priorities, and the resource allocation. Recommendations from the Executive Committee were then presented to the Regional Planning Commission on April 19, 2007. The RPC reviewed the recommendations and suggested modifications, which have been incorporated in this document.



## **Draft Plan Review**

The Draft 2035 Plan was released in July 2007, incorporating as appropriate all input from the public and decisions by the RPC. The draft plan was presented to the RPC on July 26, 2007. After a period of review, the draft plan was presented at a public meeting on November 8, 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 RPC on December 13, 2007.



## ACCOMPLISHMENTS

Several major projects have been completed or are underway in the Upper Front Range since 2004. CDOT Region 4 continues to invest all available transportation dollars in improvements that make a difference. The following is a partial list of significant accomplishments in the TPR.

### I-25 North Corridor

The I-25 North Corridor is a Region 4 Strategic (7th Pot) Corridor that connects northern Colorado with the Denver metropolitan area. The corridor crosses the UFR, NFR, and the Denver Regional Council of Governments (DRCOG) regions, including Weld, Larimer, and Broomfield Counties. The following bullets describe the progress that has been made or is underway along this corridor.

- ▶ Recently completed a \$76M construction project from SH 7 to SH 52. This project added a lane in each direction (major widening), replaced aging bridges and roadway and reconstructed two interchanges.
- ▶ One project currently under construction is the major widening from SH 52 to SH 119, a \$44M construction package. This project utilized \$14M in SAFETEA-LU earmarks in addition to the SB-01 funds.
- ▶ Another project has recently opened bids, a \$62M construction project from SH 119 to SH 66, major widening plus the reconstruction of the SH 66 Interchange. The Region coordinated with Weld County to remove three miles of frontage road along this stretch, replacing it with a county road half-mile to the east.
- ▶ The Region is in the draft phase of an EIS on the I-25 corridor. As one of the state's largest EIS studies, the North I-25 EIS study area spans seven counties and more than 30 communities. In order to include consideration of multimodal transportation alternatives, the study area extends from US 287 in the west to US 85 in the east.

### I-76 Corridor

The I-76 Corridor is a high priority corridor for the UFR as well as the Eastern TPR. 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 Upper Front Range 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 Upper Front Range 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 the 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 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.

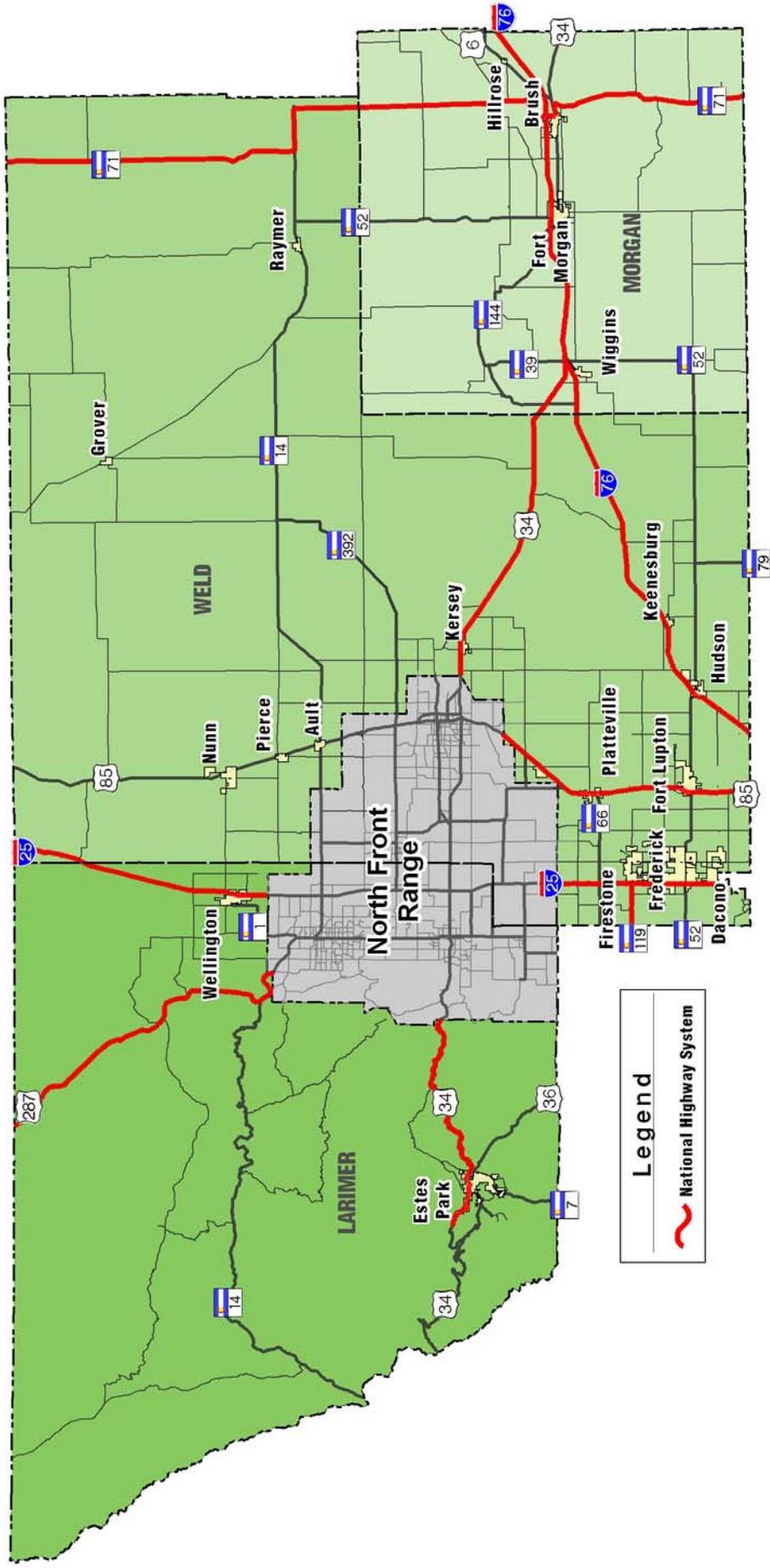
### Roadway Network

#### 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, 314 miles of the National Highway System are included in the Upper Front Range, 116 miles of which are interstate highways (I-25 and I-76). **Figure 3** identifies those roadways in the region which are included on the NHS. The sections of roadway in the Upper Front Range included on the NHS are:

- ▶ I-25 throughout the region
- ▶ I-76 throughout the region
- ▶ US 287 in northern Larimer County
- ▶ US 34 Estes Park to I-76
- ▶ US 85 in southwest Weld County
- ▶ SH 119 west of I-25
- ▶ SH 71 throughout the region

# 2035 Upper Front Range Regional Transportation Plan



Source: CDOT 2035 Transportation Planning Dataset



Figure 3  
National Highway System



## 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, likewise, 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 Upper Front Range. As shown, I-25 is the primary north-south interstate highway, and I-76 is the primary east-west interstate highway through the region. Primary arterial roadways in the region include US 287 north of Fort Collins, US 34 throughout the region, US 85 south of Greeley, US 36 in Larimer County, SH 119 west of I-25 and SH 71 throughout the eastern portion of 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 a number of routes into the Denver metro area and the North Front Range MPO, and eastern Colorado is accessible via several alternative routes. However, to the west only two state highways provide access across the mountains. SH 14 continues west of Larimer County into Jackson County and provides access to Walden and to US 40. US 34 travels through Rocky Mountain National Park (Trail Ridge Road) and into Grand County, providing access to Grand Lake and Granby. Trail Ridge Road is closed in the winter. SH 14 and US 34 are two of the six major passes in Colorado that provide access over the continental divide.





**Table 2** presents a summary of the roadway centerline miles on the state highway system in the Upper Front Range according to their functional classification. As shown, there is a total of 115 miles on the interstate highway system in the region and 517 miles of arterial roadways on the state highway system. The total state highway mileage in the region is approximately 741 miles.

**Table 2. State Highway Centerline Miles**

Functional Classification	UFR Total
Interstate	115
Freeway	5
Principal Arterial	253
Minor Arterial	264
Collector	104
<b>Total</b>	<b>741</b>

Source: CDOT Transportation Planning Database

**Table 3** provides a functional classification summary of the local roads within the Upper Front Range TPR that are not designated as state highways. There are nearly 6,200 miles of local roads in the Upper Front Range; approximately eight times the mileage of the state highway system in the region.

**Table 3. Local Street Centerline Miles**

Functional Classification	UFR Total
Freeway	1
Principal Arterial	4
Minor Arterial	116
Collector	1,451
Local	4,623
<b>Total</b>	<b>6,195</b>

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. Four of these byways have been designated in the Upper Front Range. The Cache La Poudre – North Park Byway runs between Fort Collins and Walden through the Poudre Canyon and over Cameron Pass on SH 14 in Larimer County. The Peak-to-Peak Highway begins in Estes Park on SH 7 in Larimer County and continues through Boulder and Gilpin Counties to Black Hawk via SH 72 and SH 119. The Pawnee Pioneer Trails travels through the Pawnee National Grasslands and the Pawnee Buttes in northern Weld and Morgan Counties. Trail Ridge Road (US 34) and Beaver Meadows Road (US 36) within the Rocky Mountain National Park are on the state's scenic byways system as well as being nationally recognized as an "All-American Road." **Figure 5** depicts the locations of the scenic and historic byways in the Upper Front Range.

### AVERAGE ANNUAL DAILY TRAFFIC (2005 & 2035)

**Figure 6** illustrates the existing (2005) daily traffic volumes on the major roadways in the Upper Front Range. It should be noted that these volumes represent the annual average daily traffic (AADT) volumes. Because the volumes are an annual average, they do not account for the occurrence of high seasonal or hourly peak demands. Some areas within the Upper Front Range experience high volumes of tourists which create a seasonal peak, particularly in the mountainous portion of the region.

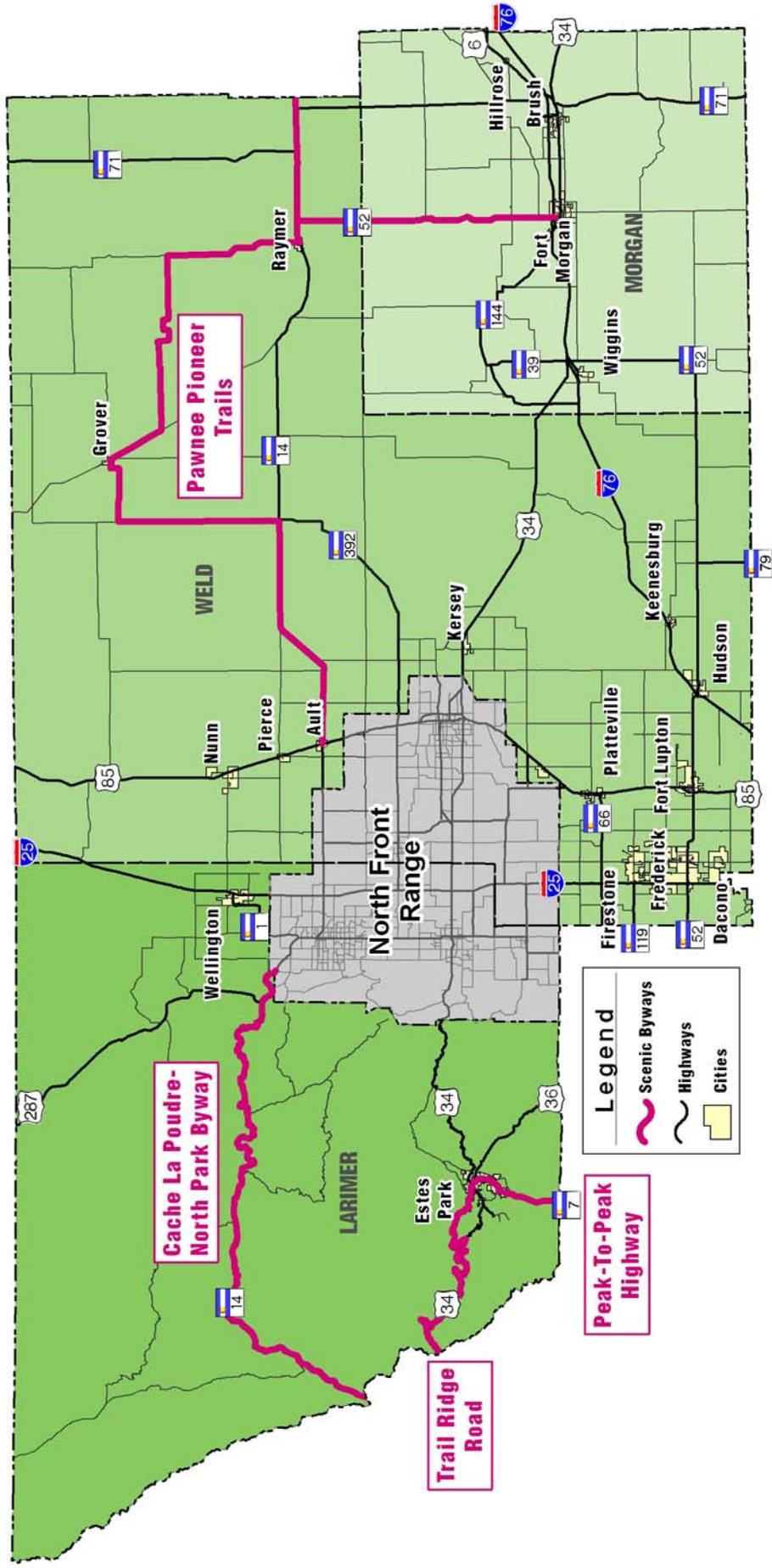
Year 2035 travel projections in the Upper Front Range TPR were provided by CDOT's Transportation Planning data set. **Figure 7** depicts the projected annual average daily traffic volumes on the state highways in the region. These are annualized ADTs based on CDOT's growth factors and do not account 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-25, I-76 and US 85 corridors and in southwest Weld County. Traffic volumes on I-25 through the southern section of the region are projected to increase by approximately 65 percent by the year 2035. Other roadways which are projected to see significant increases in traffic volumes include: US 34 in Weld and Larimer Counties, US 36 in Larimer County, SH 66, US 287 and SH 52.

### 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.

# 2035 Upper Front Range Regional Transportation Plan



Source: CDOT 2035 Transportation Planning Dataset

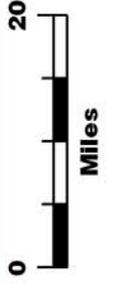
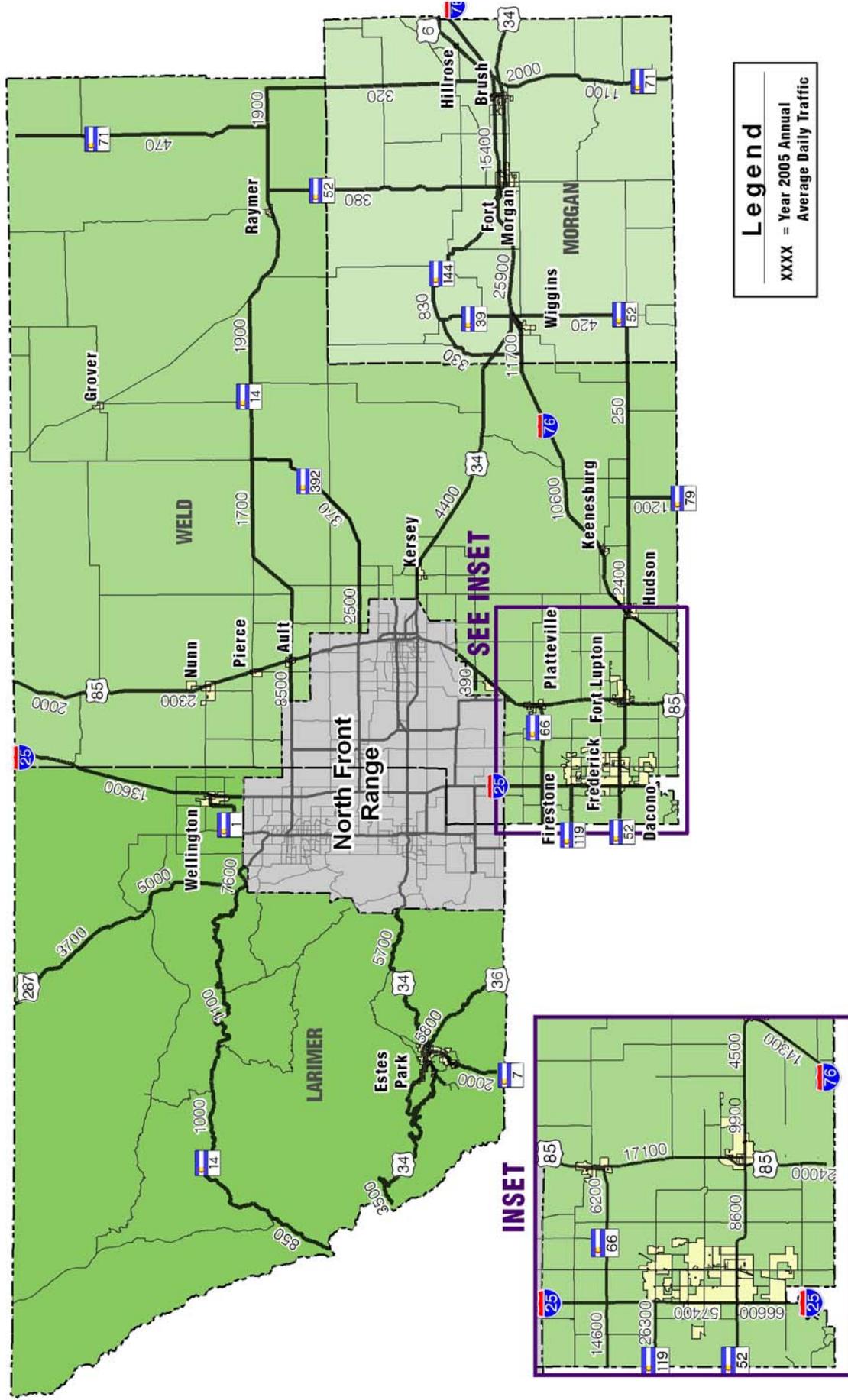


Figure 5

## Scenic Byways



# 2035 Upper Front Range Regional Transportation Plan



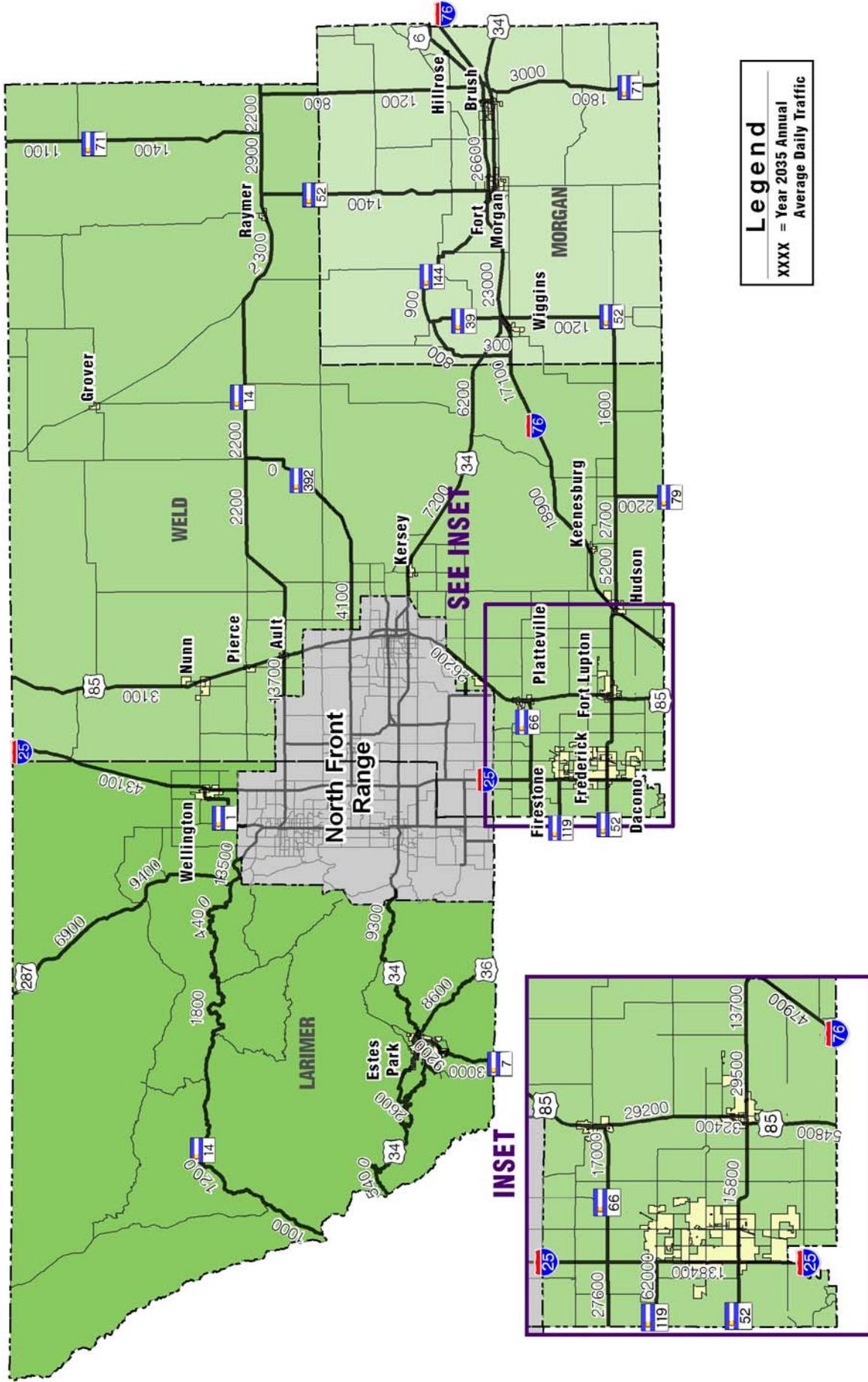
Source: CDOT 2035 Transportation Planning Dataset



Figure 6  
Existing Average Annual Daily Traffic



# 2035 Upper Front Range Regional Transportation Plan



Source: CDOT 2035 Transportation Planning Dataset



Figure 7

## Projected 2035 Average Annual Daily Traffic

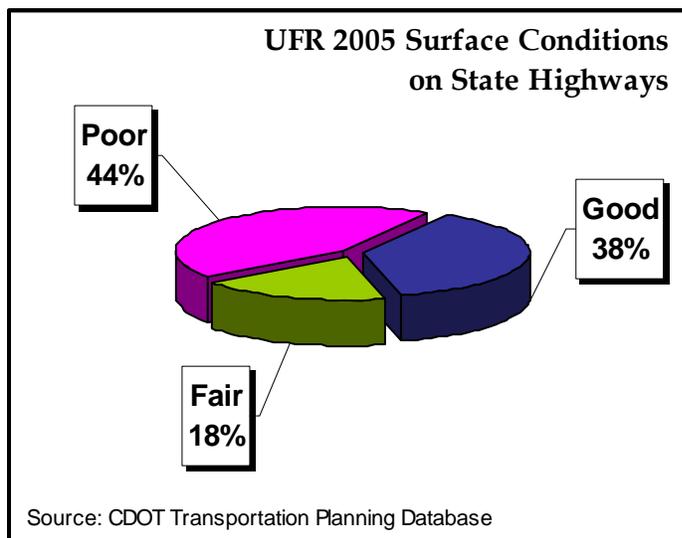


**Figure 8** shows the existing volume to capacity ratios on the state highway system in the Upper Front Range. A v/c ratio of 0.85 is commonly acknowledged as the lower limit of severe congestion. CDOT's Congestion Relief program makes some funds available for congestion related improvements on corridors that exceed the 0.85 threshold. Currently, there are only a few road segments in the region with v/c ratios at or above 0.85; the majority of these are in southwest Weld County. Also, a large segment of US 34 near Estes Park currently has a v/c ratio at or above 0.85.

**Figure 9** shows the projected 2035 volume to capacity ratios for the Upper Front Range region. The patterns in the existing condition are intensified in the 2035 projections; growth in Southwest Weld County area pushes more road segments into the 0.85 or higher range. In general, US 85 from the south Weld County line to the North Front Range boundary is anticipated to surpass the 0.85 v/c ratio. Routes to Estes Park will also experience more congestion; US 36 from the south Larimer County boundary into Estes Park and US 34 from Loveland to Estes Park will surpass the 0.85 threshold.

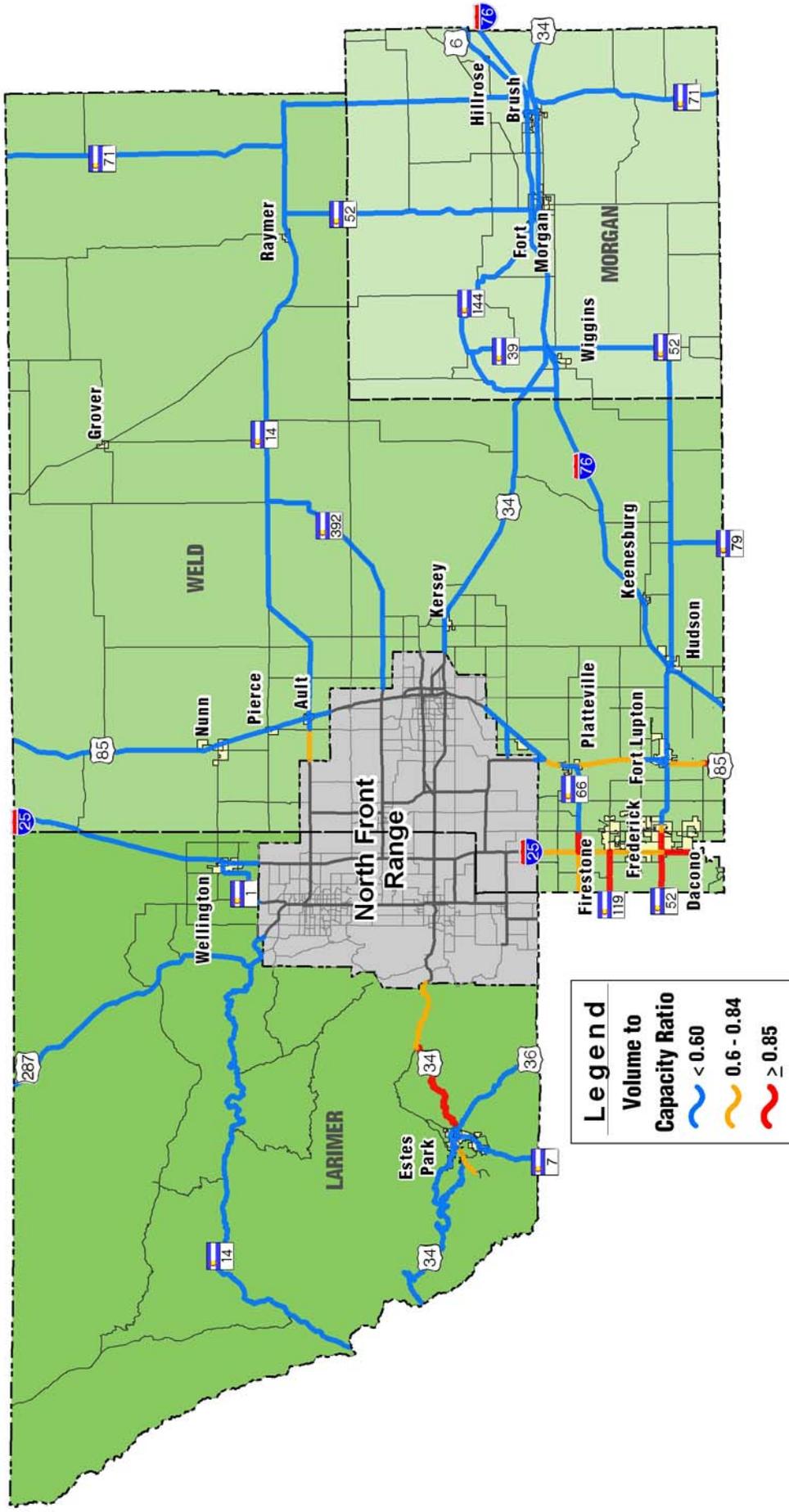
### SURFACE CONDITION

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 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, 38% of the state highway centerline-miles in the UFR are in good condition, 18% are in fair condition, and 44% are in poor condition. CDOT's goal is to maintain 60% of the state's roadways in good or fair condition. With 56% of the roadways in good or fair condition, the Upper Front Range roadway system falls slightly short of this goal today.

# 2035 Upper Front Range Regional Transportation Plan



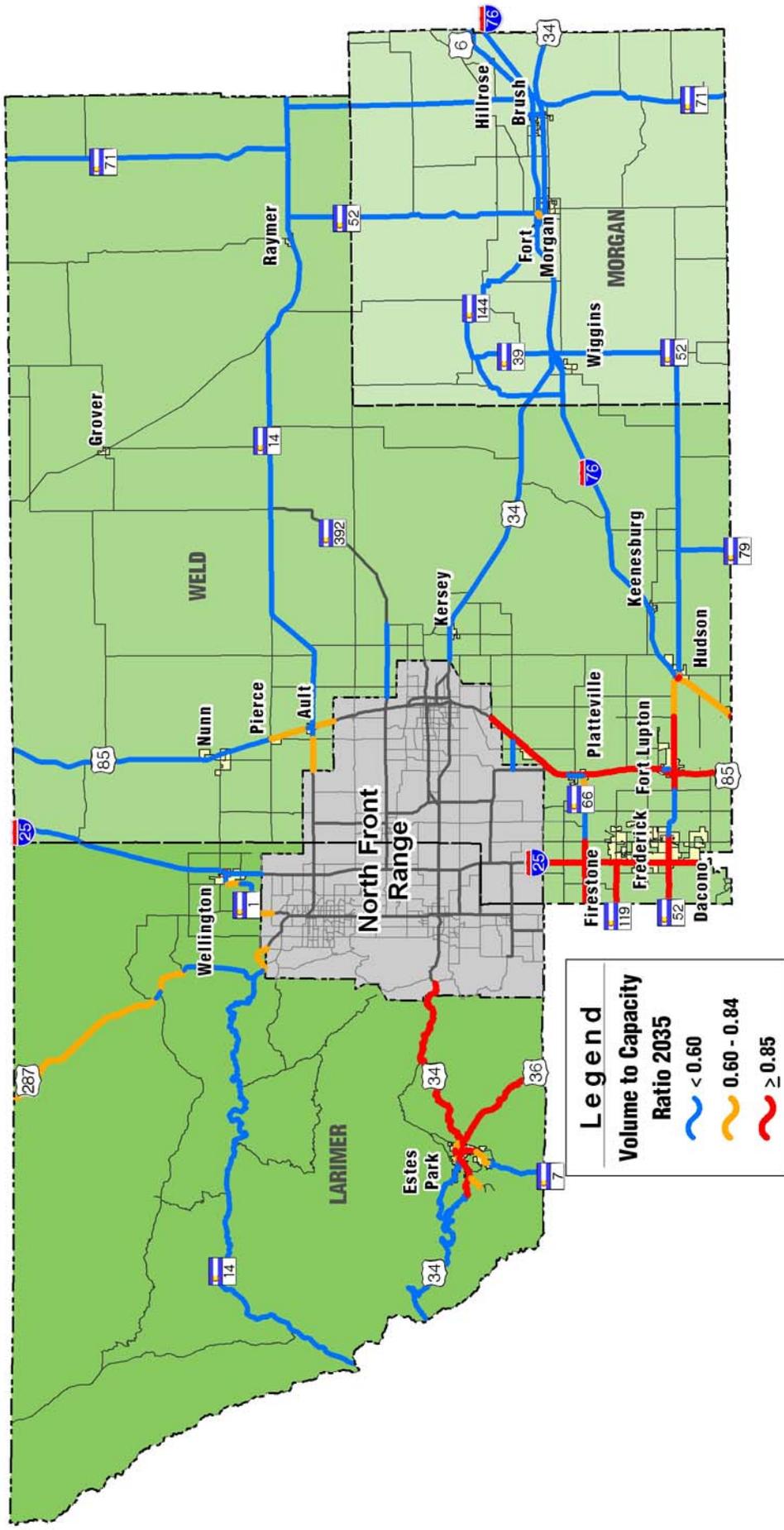
Source: CDOT 2035 Transportation Planning Dataset



Figure 8  
**Existing Volume to Capacity Ratios**



# 2035 Upper Front Range Regional Transportation Plan



Source: CDOT 2035 Transportation Planning Dataset

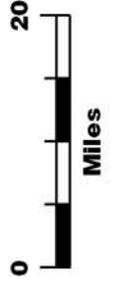
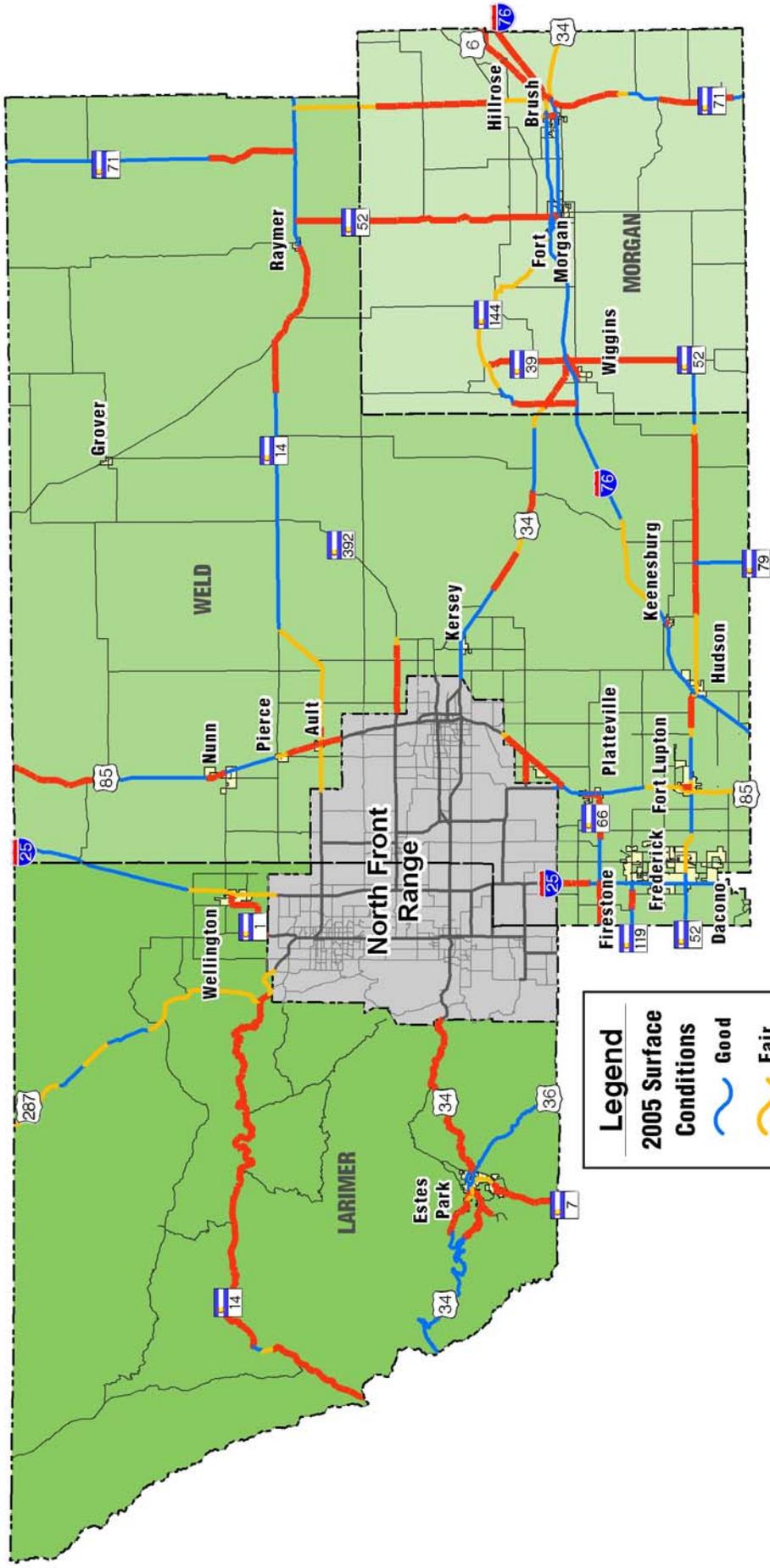


Figure 9  
**Projected 2035 Volume to Capacity Ratios**

# 2035 Upper Front Range Regional Transportation Plan



Source: CDOT 2035 Transportation Planning Dataset



Figure 10  
**Surface Conditions**



**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 replacement 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 18 bridges in the Upper Front Range that are eligible for rehabilitation or replacement funding. These bridges are shown on **Figure 11** and are described in **Table 4**.

**Table 4. Bridges Eligible for Rehabilitation or Replacement Funding**

<b>Structure ID</b>	<b>Highway</b>	<b>Location</b>	<b>BSR</b>	<b>Integrity</b>
<b>Larimer County</b>				
C-15-AI	US 34	Big Thompson River	41	Structurally Deficient
C-15-M	US 34	Devils Gulch	64	Functionally Obsolete
<b>Morgan County</b>				
C-21-E	I-76 EB	SH 144	61	Functionally Obsolete
C-21-H	SH 52	Wildcat Creek	50	Structurally Deficient
C-21-I	I-76 WB	SH 52	65	Functionally Obsolete
C-21-M	I-76 EB	SH 52	66	Functionally Obsolete
C-22-A	I-76 WB	County Road 24	67	Functionally Obsolete
C-22-AU	SH 71	I-76	68	Functionally Obsolete
C-22-BG	I-76 EB	US 34	63	Functionally Obsolete
C-22-E	I-76 EB	County Road 24	65	Functionally Obsolete
D-20-AC	US 6	I-76	70	Functionally Obsolete
D-20-AH	SH 39	I-76	74	Functionally Obsolete
<b>Weld County</b>				
B-17-C	US 85	UPRR	67	Structurally Deficient
D-16-K	SH 119 EB	St. Vrain Creek	58	Structurally Deficient
D-17-AK	SH 66	St. Vrain Creek	50	Functionally Obsolete
D-17-BU	SH 52	Little Dry Creek	71	Functionally Obsolete
D-19-O	I-76 WB	Lost Creek	64	Functionally Obsolete
D-19-P	I-76 EB	Lost Creek	65	Functionally Obsolete

Source: CDOT 2035 Transportation Planning Dataset





## CRASH HISTORY

Current funding levels used in the 2035 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 fatal 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	State Highways	Daily VMT (2005)	Total Fatal Crashes (1999 – 2003)	Fatal Crash Rate (Fatal Crashes per 100,000,000 VMT)
1: SH 1	SH 1	33,600	0	0
2: SH 7 Mountain Section	SH 7	39,800	0	0
3: SH 14 Mountain Section	SH 14	61,500	4	3.56
4: SH 14 Plains Section	SH 14, SH 392	193,100	10	2.84
5: I-25 Front Range	I-25	1,115,600	22	1.08
6: I-25 North Section	I-25	538,800	8	0.81
7: US 34 RMNP/Mountain	US 34, US 36	91,600	0	0
8: US 34 Big Thompson	US 34	136,000	1	0.40
9: US 34 Plains Section	US 34	136,400	12	4.82
10: US 34 Northeastern Plains	US 34	21,000	2	5.21
11: US 36 Mountain Section	US 36	110,100	3	1.49
12: SH 52 Western Section	SH 52	228,800	7	1.68
13: SH 52 Middle Section	SH 52	56,300	0	0
14: SH 66	SH 66, SH 119	259,000	13	2.75
15: SH 71 Northeastern Plains	SH 52, SH 71	100,800	3	1.63
16: I-76 Denver East	I-76, US 6	1,054,800	28	1.45
17: US 85 Urban Section	US 85, SH 256	538,400	20	2.04
18: US 85 Rural Section	US 85	75,400	8	5.81
19: SH 144 Plains Section	SH 144, SH 39	25,900	3	6.35
20: US 287 North Rural	US 287	127,900	9	3.86

Source: CDOT 2035 Transportation Planning Dataset



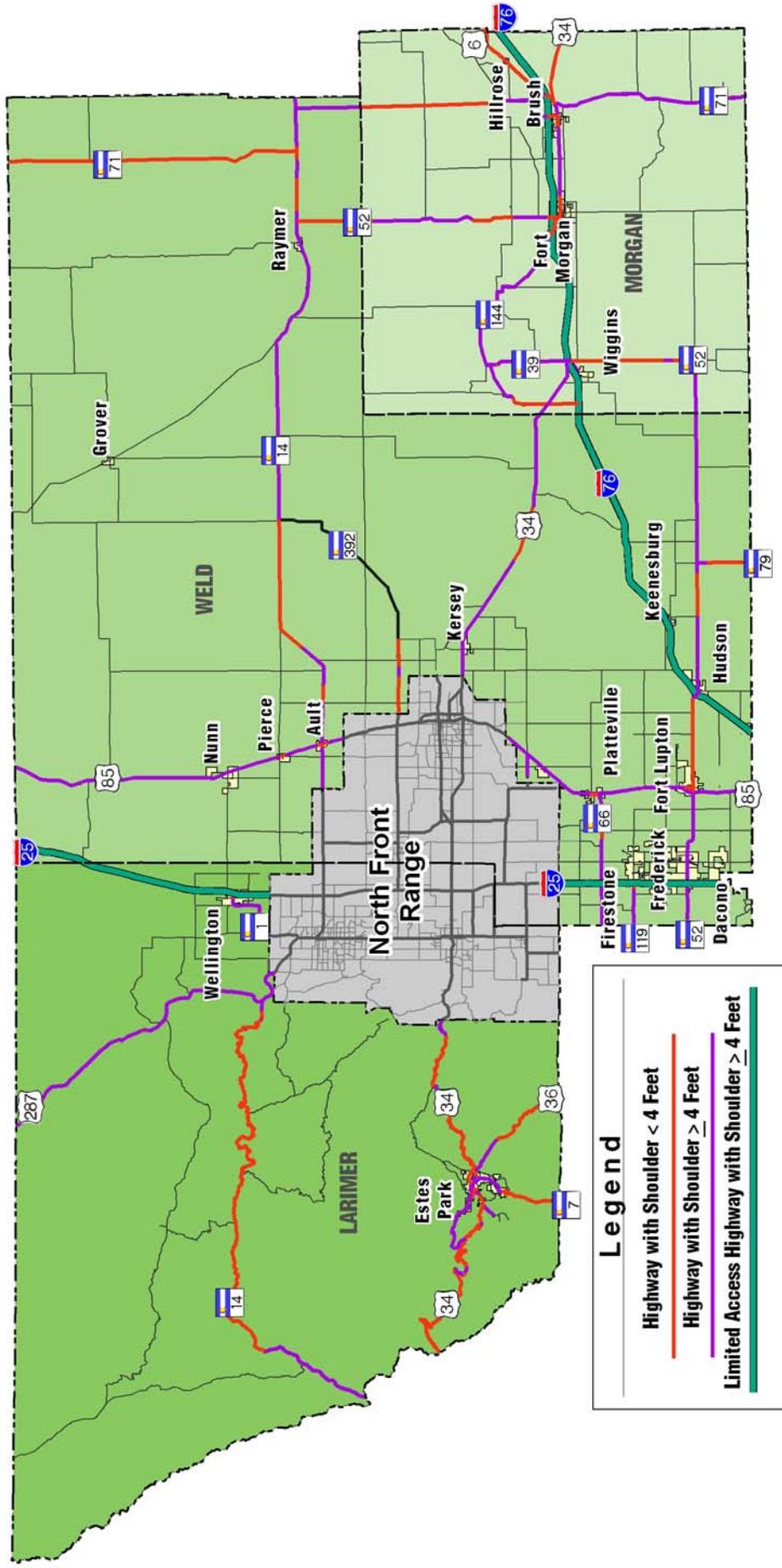
### HIGHWAY SHOULDERS

Paved shoulders play an important part in improving safety conditions. 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. As one might expect, I-25 and I-76 currently carry the heaviest volume of truck traffic in the region. In the future, I-25, I-76, US 85, US 34, and US 287 are expected to experience considerable increases in truck volumes.

# 2035 Upper Front Range Regional Transportation Plan

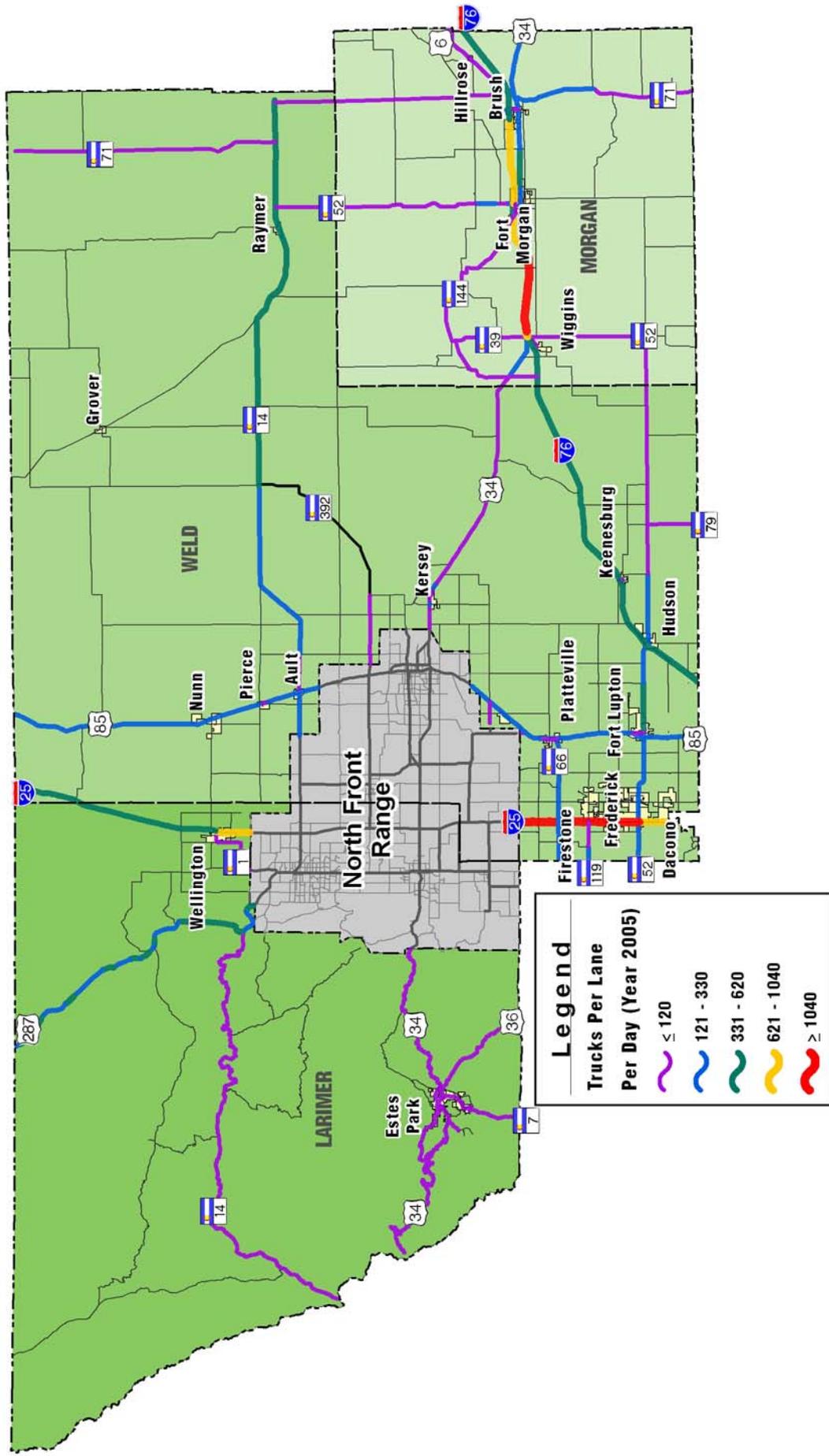


Source: CDOT 2035 Transportation Planning Dataset



Figure 12  
**Highway Shoulders**

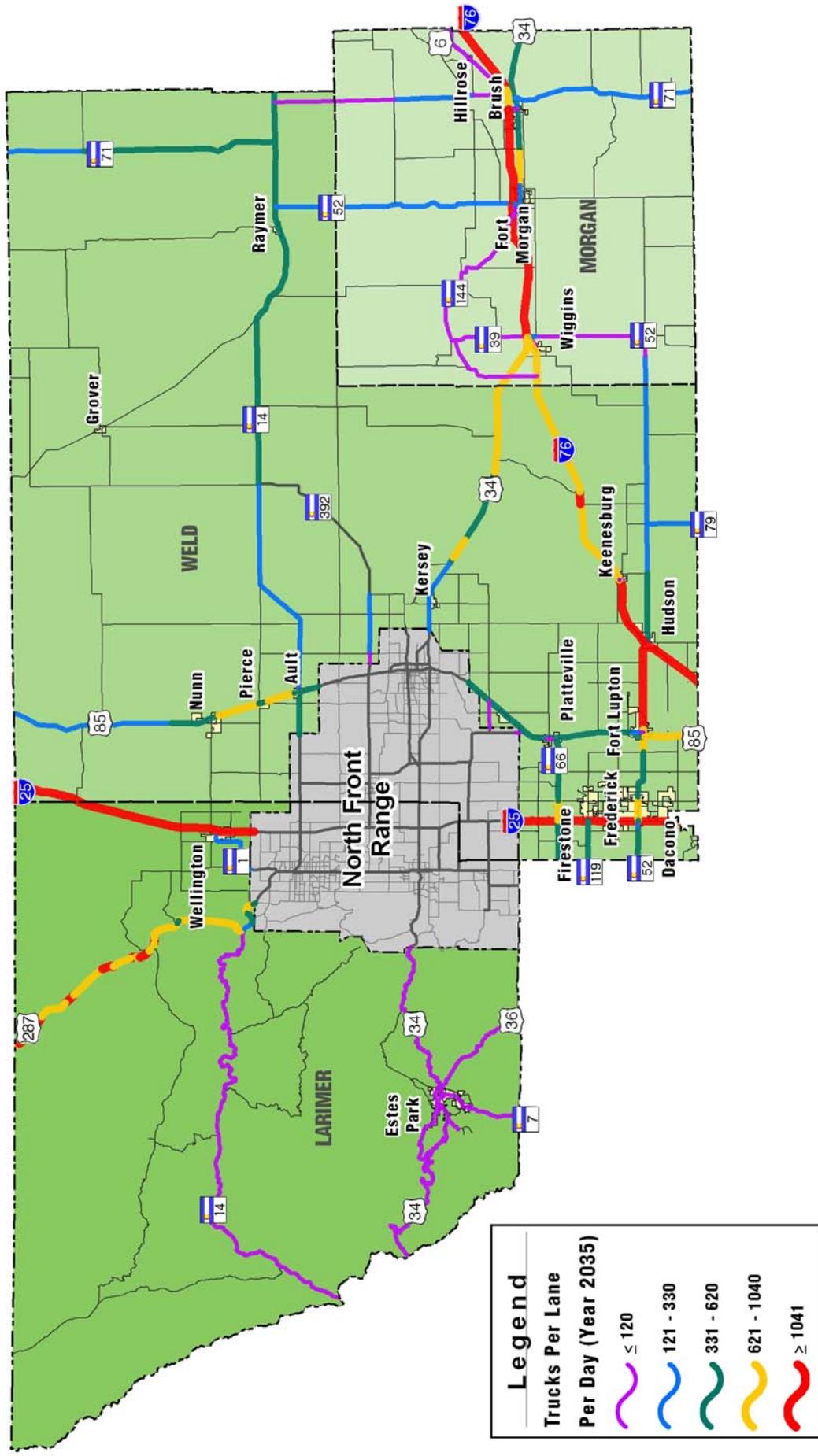
# 2035 Upper Front Range Regional Transportation Plan



Source: CDOT 2035 Transportation Planning Dataset



# 2035 Upper Front Range Regional Transportation Plan



Source: CDOT 2035 Transportation Planning Dataset

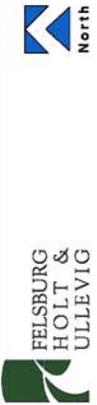


Figure 14

## Projected 2035 Truck Traffic



## Rail System

There are two Class I Railroads and one Local Railroad operating in the Upper Front Range. The three railroads in the Upper Front Range are described below and the rail lines are depicted on **Figure 15**.

- ▶ **Union Pacific Railroad (UP):** The Union Pacific is a Class I Railroad which has several rail lines in the Upper Front Range. The north-south line runs from the southern border of the region through the North Front Range MPO and up to the Wyoming state line, generally following the US 85 corridor. The majority of the east-west line of the Union Pacific through the region has been abandoned. However, the line does continue to run from south of Milliken to Kersey.
- ▶ **Burlington Northern & Santa Fe Railway (BNSF):** The Burlington Northern & Santa Fe is also a Class I railroad and has two primary rail lines that run through the Upper Front Range. There is an east-west line which runs generally along the I-76 corridor from the region's southern boundary to Brush, where it splits into two lines. The other line runs north and south through Colorado from Wyoming to Texas.
- ▶ **Great Western Railway Company (GW):** The Great Western is a Local Railroad which has three rail lines in the Upper Front Range. They operate freight services between Longmont and Loveland and from Eaton to a connection east of Loveland. GW also operates a branch line from Milliken to Welty, in the North Front Range MPO.

## Bicycle Facilities

Non-motorized access to recreational areas, historic sites, public lands, and the communities within the Upper Front Range are important to the region's quality of life. The region's highways, local roads, and trails network are the primary systems for 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 depicted previously on **Figure 12**, are preferable for cyclists. Although other bicycle facilities exist in the Upper Front Range region, 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

There are five operating airports within the Upper Front Range TPR. Three of these provide general aviation service to the public, although they do not provide commercial service. The other two airports also provide general aviation service, but are privately owned and operated airports. The five airports are shown on **Figure 16** and are described in more detail below.

**Brush Municipal Airport** is a public airport located off SH 71, three miles south of the City of Brush, in eastern Morgan County. The airport provides general aviation service with one asphalt runway, approximately 4,300 feet in length. The airport operates an average of 22 flights per week.

**Erie Municipal Airport** is a public airport located five miles east of the City of Erie, with access from SH 7. This general aviation airport has one runway with dimensions of 4,700 by 60 feet. The airport operates an average of 197 flights per day.

**Fort Morgan Municipal Airport** is a public airport located five miles north of the City of Fort Morgan with access off SH 52. One concrete and two turf runways, with lengths 5,050, 2,300, and 4,500 feet respectively, are provided at the airport. The airport operates an average of 160 flights per week.

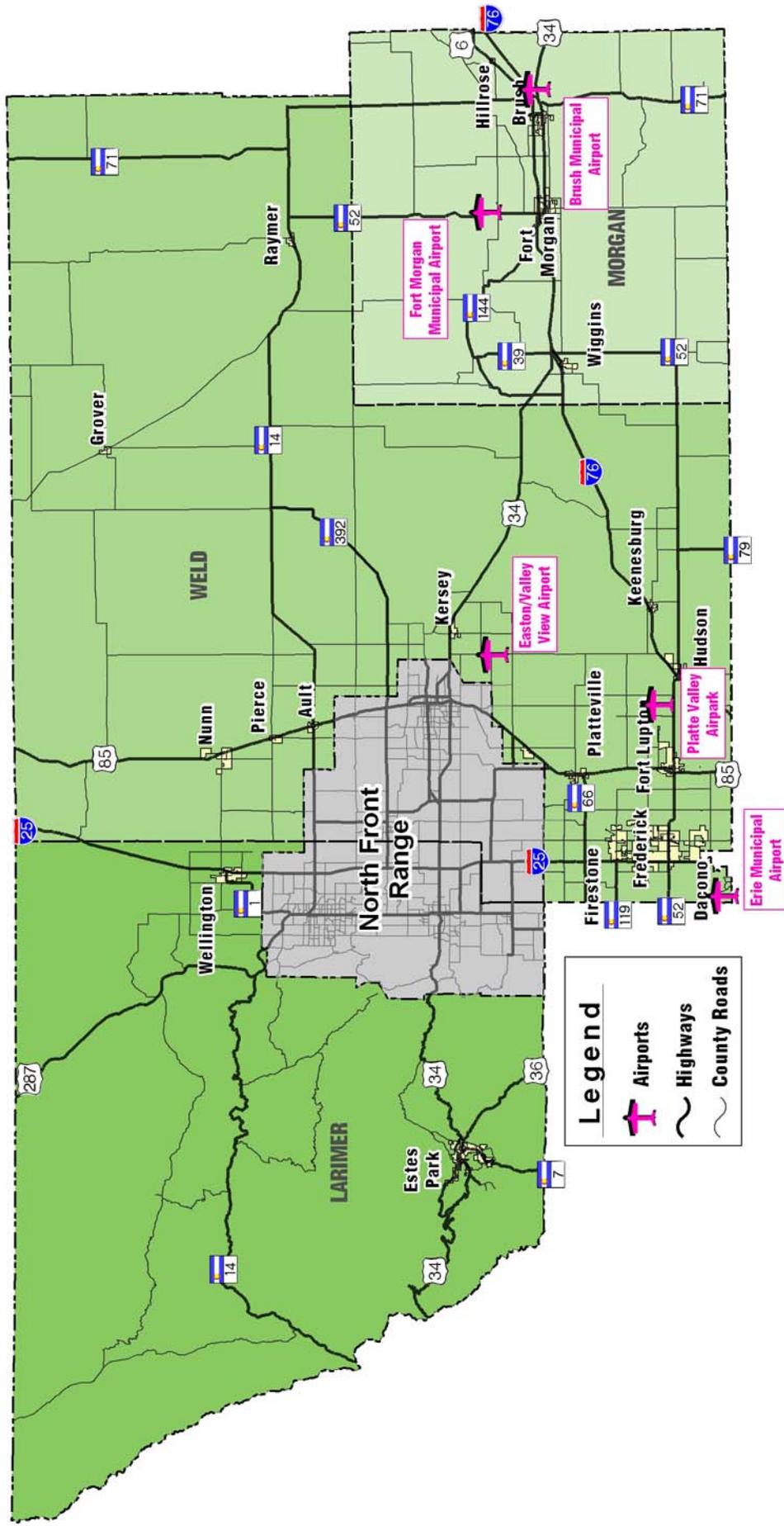
**Platte Valley Airpark** is a private airport that is open to the public and is located three miles north of the City of Hudson, with access off of WCR 52. The airport has one asphalt runway (4100 feet) and one turf runway (2500 feet). The airport operates an average of 79 flights per week.

**Easton-Valley View Airpark** is a privately-owned airport that is open to the public and is located three miles southeast from the City of Greeley, with access off of US 85. The airport has two gravel runways with lengths of 4000 feet and 2150 feet. The airport operates an average of 56 flights per week.

Additionally, there are two airports within the North Front Range MPO that service the Upper Front Range. These are the Greeley/Weld County Airport located east of Greeley and the Fort Collins/Loveland Municipal Airport located between Fort Collins and Loveland, west of I-25.

**Table 6** provides a summary of the airport operations for the five airports located within the Upper Front Range.

# 2035 Upper Front Range Regional Transportation Plan



**Legend**

-  Airports
-  Highways
-  County Roads

Source: CDOT 2035 Transportation Planning Dataset



Figure 16  
**Airports**



**Upper Front Range  
2035 Regional Transportation Plan**

**Table 6. Airport Operations**

	Morgan County			Weld County		
	Brush Municipal Airport	Fort Morgan Municipal Airport	Erie Municipal Airport	Platte Valley Airpark	Easton-Valley View Airpark	
<b>Airport Attribute</b>	Brush	Fort Morgan	Erie	Hudson	Greeley	
<b>Functional Level</b>	Minor	Intermediate	Intermediate	Minor	Minor	
<b>FAA Classification</b>	N/A	General Aviation	Reliever	N/A	N/A	
<b>Annual Enplanements</b>	N/A	N/A	N/A	N/A	N/A	
<b>Based Aircraft</b>	11	24	227	26	12	
<b>Annual Operations</b>	1,120	6,570	71,860	4,200	2,910	
<b>Runway Orientation</b>	7/25	14/32	15/33	9/27	8/26	14/32
<b>Length in Feet</b>	4,300	5,219	4,700	2,500	4,000	2,150
<b>Width in Feet</b>	60	60	60	90	25	20
<b>Surface Type</b>	Asphalt	Concrete	Concrete	Turf/Gravel	Turf/Dirt	Turf/Dirt
<b># of Runways<sup>1</sup></b>	1	3	2	2	2	2
	LIRL	LIRL, REIL, PAPI	MIRL, REIL, PAPI	None	None	None
<b>Approach Lights</b>	Non-Standard	Yes	Yes	No	No	No

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

<sup>1</sup> Lights: LIRL – Low Intensity Runway Lights, REIL – Runway End Identification Lights, PAPI – Precision Approach Path Indicator, MIRL – Medium Intensity Runway Lights



## Transit System

This chapter reviews the existing transit systems, facilities, and services; analyzes the transit service gaps; and estimates the overall transit demand within the Upper Front Range TPR. This information has been used in the development of transit strategies to meet the demand and service gaps for the transit-dependent population and the general public. The Local Transit Plans are provided in **Appendix B**.

### TRANSIT PROVIDERS OVERVIEW

With the lack of access to employment, medical facilities, and shopping for the aging and low-income populations, public transportation systems represent an important element for access and mobility in the region. The Upper Front Range TPR is currently served by several transit “providers.” These agencies provide some type of transportation service to meet client needs. Currently, the Upper Front Range agencies are conducting an independent transit study. This report includes information on Larimer and Weld County services and County Express, which provides service in Morgan County. Additional information will be developed through the independent study. **Figure 17** illustrates the areas served by these agencies.

This section provides profiles of each major transit service provider within the Upper Front Range TPR. The profile includes service and operating characteristics, agency information, funding types, ridership trends, and performance measures.

### LARIMER COUNTY

Several rural transit services are available in rural Larimer County. These include:

- ▶ Larimer County Rural Transit Services
- ▶ South County Services served by City of Loveland Transit (COLT)
- ▶ Estes Park Service served by Special Transit in Boulder

#### Larimer County Rural Transit Services

Larimer County, through the Department of Health and Human Services, contracts with other providers to operate limited rural general public transportation. Through this program, support is given to Berthoud and Loveland to offset their costs for transporting both the general public and older adults. A contract with Fort Collins Dial-A-Ride also provides limited service to rural areas outside of Fort Collins, including Wellington and LaPorte. 2005 significant Dial-A-Ride statistics for the rural north part of the county include:

- ▶ 546 rural rides
- ▶ 503 rural ambulatory
- ▶ 26 rural non-ambulatory
- ▶ 115 rural disabled riders over 60
- ▶ 358 rural disabled riders under 60
- ▶ 52 rural non-disabled over 60





## Upper Front Range 2035 Regional Transportation Plan

### **South County Services**

The City of Loveland Transit (COLT) provides South Larimer County Service to rural residents Monday through Friday. The service has many elderly and disabled persons using the service for medical and personal trips. One vehicle is operated for the South County Service.

### **Estes Park Service**

Special Transit, based out of Boulder, currently provides transit service three days per week in Estes Park. The Estes Park service expanded to four days per week in 2002 with operations from 8:00 a.m. to 5:00 p.m. Service is available in the Estes Valley for shopping, medical appointments, Senior Center visits, etc. Service is also provided into the Boulder Valley and/or Loveland/Fort Collins as needed to access services unavailable in Estes Park.

### **Contact for Schedules and Information**

Larimer County is the point agency for transit service provided within Larimer County. Richard Guest, 1525 Blue Spruce Drive, Fort Collins CO 80524

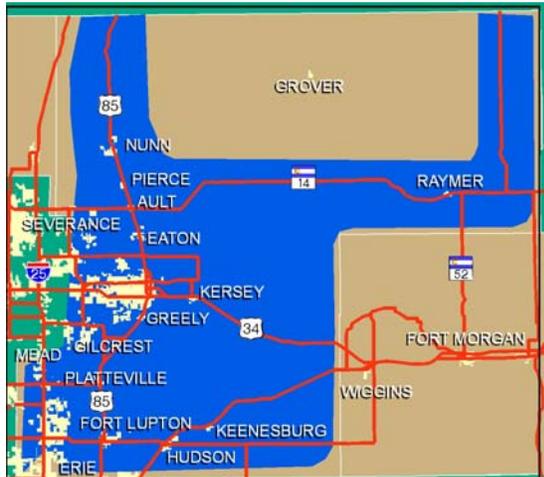
E-mail: [rguest@larimer.org](mailto:rguest@larimer.org)



# Upper Front Range 2035 Regional Transportation Plan

## WELD COUNTY

The agency provides fixed route, modified fixed route and door-to-door demand responsive transportation services to seniors, persons with disabilities, low-income individuals for medical services, human services, and group activities. Medicaid and non-emergent transportation is brokered. The service area includes Weld County and surrounding communities



### Agency Information

<i>Type of Agency:</i>	Government Agency
<i>Type of Service:</i>	Fixed Route and door-to-door service
<i>Funding Type:</i>	Funding sources include FTA 5310 funds; in-kind support; Federal OAA, Title III funds; and other grant funds.
<i>Eligibility:</i>	Agency provides transportation services for seniors and individuals with disabilities

### Operating Characteristics

<i>Size of Fleet:</i>	42 vehicles
<i>Annual Operating Budget:</i>	\$661,809 (2000)
<i>Annual Passenger-Trips:</i>	108,495 (2000)
<i>Operating Days and Hours:</i>	Times Vary

### Performance Measures

<i>Cost per Service Hour:</i>	N/A
<i>Cost per Passenger-Trip:</i>	\$6.09
<i>Passenger-Trips per Service Hour:</i>	N/A
<i>Service Hour:</i>	
<i>Ridership Trend:</i>	N/A

### Contact for Schedules and Information

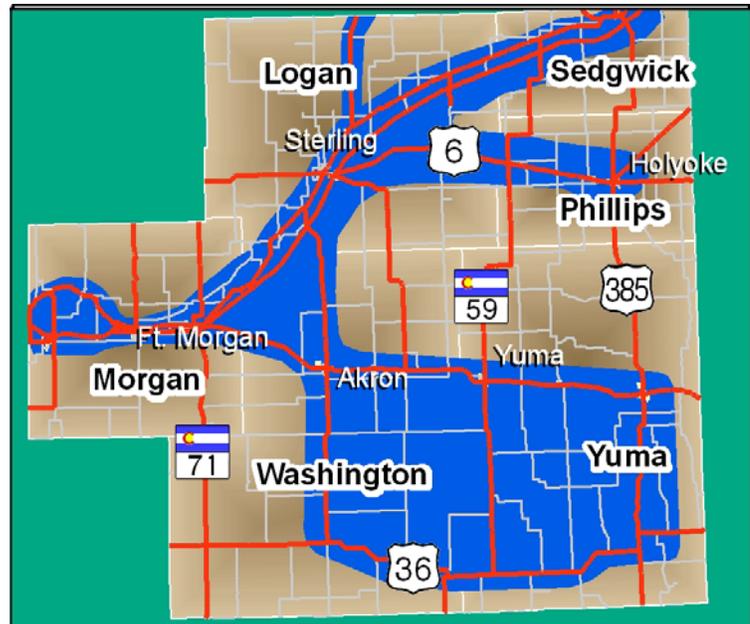
Patsy Drewer, P.O. Box 1805, 933 North 11<sup>th</sup> Ave, Greeley CO 80632  
E-mail: [pdrewer@co.weld.co.us](mailto:pdrewer@co.weld.co.us)



## NECALG - COUNTY EXPRESS

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

NECALG operates County Express, a demand responsive, curbside-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, a 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



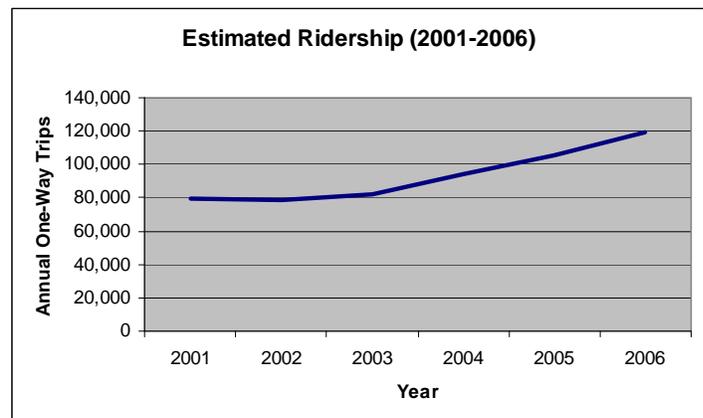
## Upper Front Range 2035 Regional Transportation Plan

### 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



## OTHER TRANSIT SERVICES

### Wellington Senior Center/Town of Wellington

The Wellington Senior Center has provided limited service to seniors in Wellington for several years. The Center provides daily rides to and from the center for those living in the general area for the Monday, Wednesday, and Friday noon lunches. Twice per month, trips are provided into Fort Collins for shopping and medical appointments. The driver also home-delivers seven to ten lunches on each of the three days the Senior Center is open. The Senior Center, with the support of the Town of Wellington, plans to expand their service to make it available to the general public. This is based on identifying additional funding. Only a limited expansion (ten percent per year) is planned in order to accommodate growth. It is recognized that more service is likely needed.

### Rocky Mountain National Park

Rocky Mountain National Park operates a fixed-route shuttle bus service that runs along the Bear Lake Road corridor in the summer months. It generally begins operation in mid-June. During peak periods, this service operates seven days a week through the weekend following Labor Day. After that, the shuttle bus service operates only on Fridays, Saturdays and Sundays through Columbus Day. The shuttle bus service does not operate in the winter months. There is no charge for the service.

The Rocky Mountain National Park service is funded from a different source of federal funds than the Federal Transit Administration (FTA) and so does not routinely participate in the same planning as FTA-funded systems. However, the system is an important publicly funded one, and integration between the Park Service operation and community or regional services will become more important in the future.

### Envision

Envision provides transportation services to individuals with developmental disabilities in Weld County. Envision currently has 30 to 40 part time drivers operating 28 vehicles seven days a week from 7:00am to 6:00pm. The funding for this service is provided through developmental disabilities grants, which restricts the types of transportation services provided.



## Upper Front Range 2035 Regional Transportation Plan

### **Foothills-Gateway**

Foothills-Gateway, as a non-profit 501(c)(3) corporation, provides a broad range of services to approximately 250 Larimer County individuals with developmental disabilities, utilizing 58 vehicles. Their services are funded through federal Medicaid funds, state matching funds, and a mill levy passed by Larimer County voters. Peak hours for transporting are between 7:30 to 9:30am and 2:30 to 4:30pm Monday through Friday. There are no weekend or holiday transit services through Foothills-Gateway except for infrequent special programs. For their clients who work on the weekends, Shamrock Taxi provides the transportation. The majority (95 percent) of riders live within Fort Collins and Loveland. Other clients needing transportation live in Glen Haven, La Porte, Red Feather, Wellington, and Berthoud. Foothills-Gateway also contracts with seven additional agencies to provide transportation including: ALTRA, Carmel, Community Advantage, Good Shepherd, MOSAIC, REM, and Spectrum.



### 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 Greyhound Bus Lines, as well as some private providers such as Dashabout Shuttle.

The VanGo program, operated by NFR MPO/SmartTrips, was established in 1996 to provide daily commuter vanpool service to residents in the North Front Range. There are 28 vehicles that take residents to work locations within and outside the NFR region. The program saves approximately 4,100,000 vehicle-miles traveled (VMT), thereby reducing congestion, air pollution, and energy consumption.

#### **Intercity Bus Service**

In addition to the transit service providers discussed previously, Texas, New Mexico, and Oklahoma (TNM&O/Greyhound Bus Lines) provides intercity transit needs. There is one bus to Denver and one bus to Cheyenne, Wyoming. The Burlington Trailways and Black Hills Arrow Bus Service provide intercity bus service along the I-76 corridor from Denver to Omaha, Nebraska. The Powder River Bus Service provides bus service from Casper, Wyoming to Denver for connections to the California Zephyr Amtrak service. The first bus leaves Casper at 10:45 a.m. and arrives in Denver at 6:30 p.m., with the return trip arrive in Casper at 3:40 a.m. The second bus leaves Casper at 10:30 p.m. and arrives in Denver at 6:00 a.m., with the return trip arriving in Casper at 5:30 p.m.

#### **Amtrak Service**

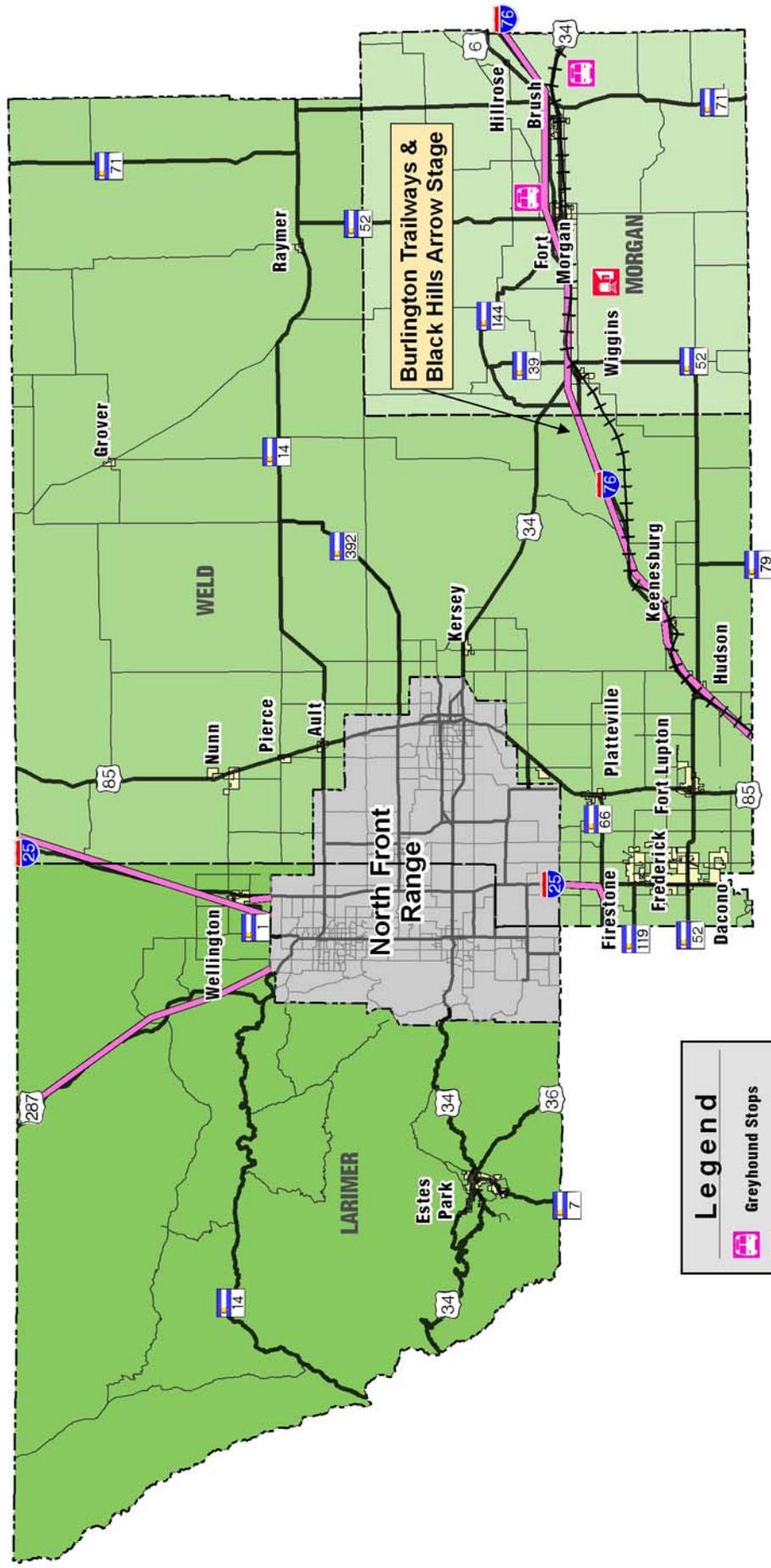
Local Amtrak service is provided between Fort Morgan and Denver. Service is provided once per day in each direction in Fort Morgan. The westbound train leaves at 5:05 a.m. daily arriving in Denver at 7:15 a.m., and the eastbound train leaves Fort Morgan at 8:40 p.m. arriving in McCook, Nebraska at 11:59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

### INTERMODAL FACILITIES

The Upper Front Range TPR has several opportunities for multimodal and intermodal travel. Residents of the region may use a combination of private automobiles, transit/ regional bus, pedestrian, and bicycle modes. Freight goods arrive by train and truck and are distributed throughout the region by truck.

Intermodal facilities include truck transfer facilities and intercity/local transit links. **Figure 18** shows the bus stations that serve as intermodal facilities for the region.

# 2035 Upper Front Range Regional Transportation Plan



**Legend**

- Greyhound Stops
- Amtrak Stations
- Amtrak Route
- Greyhound Bus Route

Source: CDOT 2035 Transportation Planning Dataset

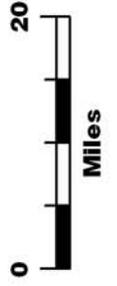


Figure 18  
**Intermodal Facilities**



### NEEDS ANALYSIS

#### Methodology

This section presents an analysis of the need for transit services in the Upper Front Range region based on 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 Upper Front Range 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.

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 Upper Front Range 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 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 forum meetings 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.

**Table 7** provides a summary of the Upper Front Range 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 1.7 million one-way passenger-trips in the Upper Front Range; 93% of this need is not currently being met.

**Table 7. Estimated Transit Needs**

<b>Methodology</b>	<b>Estimated Annual Need</b>
Mobility Gap	962,000
Rural Need Assessment	946,000
<b>Total Annual Need</b>	<b>1,711,000</b>
<i>Annual Trips Provided</i>	116,073
Need Met (%)	7%
Unmet Need (%)	93%

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

Source: LSC, 2006.

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. The results are not surprising or unrealistic based on similar areas. 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.

### **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 Greeley included a discussion of the transit needs in the region. A series of questions associated with specific issues was asked of the participants. The following provides a summary of those issues, needs, and question responses not only from the forum, but also those needs identified by the individual agencies/providers:

- ▶ The western portion of Larimer County
- ▶ The eastern portions of Weld County
- ▶ Regional links between rural and urban throughout the region and to Denver
- ▶ Need for improved coordination between transportation planning and land use development
- ▶ Limited hours and days of service provided by existing providers in the rural areas, with no evening or weekend service
- ▶ Rural seniors in remote areas need more transportation for a variety of needs
- ▶ Trips are not only needed for seniors, but other segments such as the low-income population and children
- ▶ Increase need for regional links to Fort Collins, Loveland, and Greeley for medical trips
- ▶ The lack of general public service in the both Larimer and Weld Counties
- ▶ Need to continue the development of the Front Range Commuter Rail feasibility study
- ▶ Create intercity bus service
- ▶ Increase public transportation for low-income households for employment purposes in both Larimer and Weld Counties
- ▶ Increase the access and mobility for those individuals who need trips for medical facilities and shopping
- ▶ Increase the funding levels for transit services in the region
- ▶ Replace the existing vehicles
- ▶ Obtain additional FTA 5311 funding for transit operations
- ▶ Need service in southwestern Weld County in the communities of Frederick, Firestone, and Dacono



## DEFINING GAPS AND DUPLICATION

This section presents a brief analysis of the service gaps and identified service duplication for the Upper Front Range TPR. As mentioned previously, there are many agencies and programs providing transportation service for the elderly and disabled individuals. These identified gaps and duplication of services will be used in identifying service improvements 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. Gaps in transportation service are geographic in nature, as well as lack of service to various market segments. Identified service gaps include the following.

Geographic Service Gaps: There are many areas throughout the rural portions of the Upper Front Range TPR which do not receive any type of transportation services. These areas include:

- ▶ The western portion of Larimer County.
- ▶ The eastern portions of Weld County.
- ▶ Regional links between rural and urban areas.
- ▶ Need for improved coordination between transportation planning and land use development.

Service Type Gaps: The largest gap is a lack of any general public transit provider in areas of the region. The identified service gaps are as follows:

- ▶ Limited hours and days of service provided by existing providers in the rural areas, with no evening or weekend service.
- ▶ 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 and children.
- ▶ Increased need for regional links to Fort Collins, Loveland, and Greeley for medical trips.
- ▶ The limited amount of general public service in both Larimer and Weld Counties.
- ▶ Need to continue the study and development of the Rocky Mountain Rail Authority Feasibility Study.

### Identified Service Duplication

There are few service duplications due to the limited supply of transportation providers. There is limited duplication of service in the urban areas, but in rural Larimer and Weld Counties there is little to no duplication of agency services. There are no duplications in regard to agencies which receive federal or state funding.



## GENERAL STRATEGIES TO ELIMINATE GAPS

As mentioned, there are geographic gaps in existing services as well as gaps in types of services.

### Appropriate Service and Geographic Gap Strategies

Below are a few strategies that can mitigate the transit service gap in the region. A more detailed list of strategies will be developed through the other two planning processes that Larimer County and the North Front Range MPO are conducting at this time. The general service gap strategies to meet the needs in the Upper Front Range Region include the following:

- ▶ Expansion of service to the western portion of the region by operating a demand-response system for the communities of Estes Park and Red Feathers Lake.
- ▶ Expand service to the southwest portion of Weld County either with demand response or a check point route service depending on demand and funding availability.
- ▶ Increase the level of service in the morning hours for the Larimer County area of the region.
- ▶ Link transit trips to centers of employment and medical providers throughout the region.
- ▶ Increase regional service to and from the urban areas of the North Front Range.
- ▶ Obtaining additional local and FTA funding in order to implement the expanded services.
- ▶ Use minivans to supply the expanded service to the rural areas of the region.

## GENERAL STRATEGIES TO ELIMINATE DUPLICATION

As stated, there is very little duplication of services in the region. Many of the agencies/organizations which provide their own transportation are restricted due to agency policy or funding, such as private nursing homes providing specific transportation to paying clients. The real issue is a lack or gap in transportation, not a duplication of service.

## COORDINATION STRATEGIES FOR FURTHER DISCUSSION

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 region. These strategies will be refined once the other planning process mentioned above is completed. More detailed coordination planning is included in the Larimer County Coordination Study.

### 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.



### Benefits:

- ▶ Allows for greater input from the key transportation agencies in the region.
- ▶ Allow 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.

### 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 (councils have been formed for both Larimer and Weld Counties during the development of this RTP).
- ▶ 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.

### **Joint Planning with Marketing and Decision Making**

This level of coordination involves agencies working cooperatively with other similar agencies or a local provider in order to take care of the needs of their clients and become involved in the local planning and marketing of services. For example, several local human service agencies may meet with local transit planners in an area to develop operation plans and marketing which attempt to meet the needs of the agencies' clients.

### Benefits:

- ▶ Reduction in the need for expensive planning documents for each transit agency.
- ▶ Allows for more complex coordination in capital development and operational functions.
- ▶ Reduction in the duplication of service among the coordinating agencies.

### Implementation Steps:

- ▶ Coordinating agencies meet with regional transit and transportation planners to develop a scope of work for the planning process.
- ▶ The scope of work should identify the goals and objectives.
- ▶ A timeline should be developed for the completion of the planning document.
- ▶ The planning and marketing documents should develop recommendations for making decisions on the operation of service, capital, funding, coordination process, and administration functions.



### **On-Call Center**

This is a shared informational telephone line that provides potential users with the most convenient access to information on all transportation services in the area or region.

#### Benefits:

- ▶ Reduction in the administrative costs for the participating agencies.
- ▶ First step to centralized dispatching.
- ▶ Users only need to call one number in order to obtain all the transit information they need, thereby improving customer service.

#### Implementation Steps:

- ▶ Agencies need to meet in order to determine which agency will house the call center, how the call center will be funded, and what information will be provided to the customer.
- ▶ Set up the telephone line and purchase the needed communication equipment.
- ▶ Develop a marketing brochure that details the purpose of the call center, hours of service, and telephone number.

### **Contracts for Service**

Contracts for service are created 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 transportation provider. The contract revenue can then be used as local match for the local public transportation provider, using the same drivers and vehicles as used previously. Many times the drivers are also Head Start aides or teachers.

#### Benefits:

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

#### Implementation Steps:

- ▶ Agencies should meet and identify the needs and capacity of the contract parties.
- ▶ Develop a contract that details the responsibility of each party.
- ▶ Timing: 3 to 6 years or longer.



### **Consolidated Transportation Program**

A consolidated transportation program occurs when all transit services are provided by a single agency. This includes the vehicles, facilities, administration functions, maintenance, and operations.

#### Benefits:

- ▶ Creation of an economy of scale, thereby reducing the cost per passenger, administrative costs, and operational costs.
- ▶ Increase in the level of local match funding available to obtain federal funding through contract services provided to other agencies in the region.
- ▶ Reduction in the duplication of services and facilities.

#### Implementation Steps:

- ▶ Intergovernmental agreement needs to be created detailing the level of service that will be provided by the single agency for the level of funding detailed in the contract.
- ▶ Each agency's council and/or board would need to approve the intergovernmental agreement.
- ▶ Create a new board for the consolidated agency that would be made up of the participating agencies and would oversee the service.
- ▶ Transfer all vehicles and facilities to the consolidated agency.
- ▶ Timing: 3 to 6 years or longer.

### **LOCAL SERVICE PRIORITIES**

The following are the service improvement potentials and priorities for the Upper Front Range TPR.

#### **Short Term (1 to 5 Years)**

- ▶ Increase rural service in Larimer County in Windsor, Estes Park, and Berthoud by increasing revenue-hours for a total 2035 estimated cost of \$24.4 million.

#### **Long Term**

- ▶ Peak service for regional links to Fort Collins and Greeley for medical and employment trips for an estimated 2035 cost of \$3.1 million.
- ▶ Improve links to Denver on a multiday basis for an estimated 2035 cost of \$3.3 million.



### COORDINATION POTENTIAL AND PRIORITIES

There was limited discussion on coordination potential and priorities. The strategies that were discussed by the group:

- ▶ Coordination Council (no cost).
- ▶ Contract Transit Services (no cost).
- ▶ Center dispatching (cost of \$500,000 to \$1,000,000).
- ▶ Additional coordination on marketing of the transit services in the region (no cost).
- ▶ Development of contract services between local human service programs (no cost).

**Table 8** presents the cost to eliminate the service and geographic gaps by agency type.

**Table 8. Transit Gap Elimination**

<b>Agency Type</b>	<b>Services</b>
Human Services	\$24,400,800
Transit Agency	\$0
Regional/Rail	\$7,976,300
<b>Total</b>	<b>\$32,377,100</b>

*Source: LSC & CDOT, 2007*



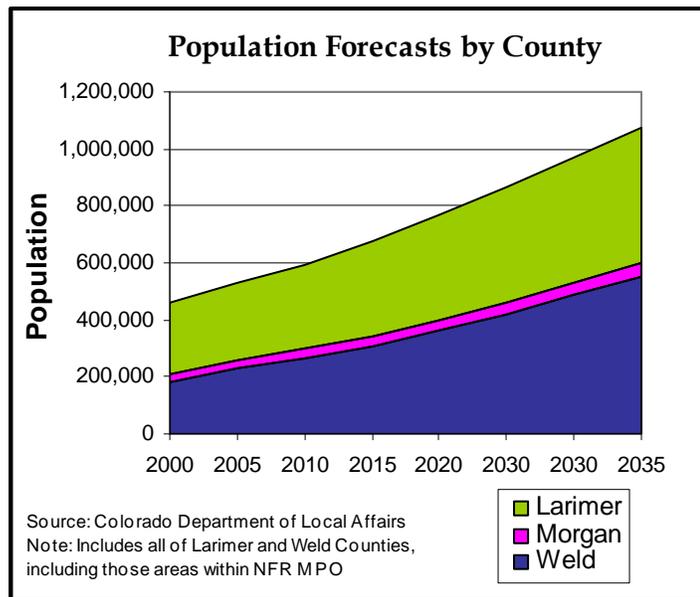


## SOCIOECONOMIC PROFILE

Population and employment growth projections are tools used to understand what the travel demand might be in the Upper Front Range 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 counties of Larimer and Weld, including those areas in the North Front Range MPO. As shown in **Table 9**, the three-county area is projected to grow in population at a rate of approximately 2.4 percent per year between 2000 and 2035. Weld County is projected to grow at the highest rate (3.2 percent per year), while Larimer and Morgan Counties are projected to grow at approximately 1.8 and 1.9 percent per year, respectively. The total population of the three-county area is projected to be nearly 1.1 million persons in 2035. This projection implies that the population of the three-county area would more than double over the 35 year time horizon.



**Table 9. Population Estimates and Forecasts by County**

County <sup>1</sup>	2000 Population <sup>2</sup>	2035 Population Forecast <sup>3</sup>	Annual Growth Rate
Larimer	253,131	473,223	1.8%
Morgan	27,262	52,171	1.9%
Weld	183,560	551,288	3.2%
<b>Total</b>	<b>463,953</b>	<b>1,076,682</b>	<b>2.4%</b>

<sup>1</sup> Includes the entire counties of Larimer and Weld, including those areas within the North Front Range MPO

<sup>2</sup> Source: 2000 Census

<sup>3</sup> Source: Colorado Department of Local Affairs



## Upper Front Range 2035 Regional Transportation Plan

The CDOT Transportation Planning Database contains population estimates for the Upper Front Range TPR separately from the three-county data. As shown in **Table 10**, the Upper Front Range region is forecast to grow at 3.2% per year, higher than the annual growth rate for the three county total.

**Table 10. Population Estimates and Forecasts for Upper Front Range TPR**

TPR	2000 Population	2035 Forecasted Population	Annual Growth Rate
UFR	114,600	344,200	3.2%

Source: CDOT Transportation Planning Database

## Household Characteristics

**Table 11** illustrates household characteristics for the Upper Front Range area. As shown, there are 169,950 family households in the three-county region. Approximately 37% of households have children under the age of 18 and approximately 18% of households have individuals over the age of 65. Fifteen percent of individuals in the three counties have disabilities.

**Table 11. Household Characteristics**

County <sup>1</sup>	Total HH	Average HH Size	% of HH with Individuals < 18	% of HH with Individuals > 65	% of Individuals with Disability
<b>Larimer</b>	97,164	2.52	33%	17%	13%
<b>Morgan</b>	9,539	2.8	42%	25%	17%
<b>Weld</b>	63,247	2.78	41%	18%	18%
<b>Total</b>	<b>169,950</b>	<b>2.64</b>	<b>37%</b>	<b>18%</b>	<b>15%</b>

<sup>1</sup> Includes the entire counties of Larimer and Weld, including those areas within the North Front Range MPO

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 three counties in the Upper Front Range (including those areas of Larimer and Weld Counties in the NFR MPO). As shown in **Table 12**, the labor force demand is projected to grow at a rate of 2.8 percent per year, with the highest annual growth rate in Weld County (3.6 percent per year).

**Table 12. Employment Forecasts**

County <sup>1</sup>	2000 Employees <sup>2</sup>	2035 Forecasted Labor Force Demand <sup>3</sup>	Annual Growth Rate
Larimer	136,903	281,472	2.1%
Morgan	11,888	26,265	2.3%
Weld	87,626	304,212	3.6%
<b>Total</b>	<b>236,417</b>	<b>611,949</b>	<b>2.8%</b>

<sup>1</sup> Includes the entire counties of Larimer and Weld, including those areas within the North Front Range MPO

<sup>2</sup> Source: 2000 Census

<sup>3</sup> Source: Center for Business and Economic Forecasting

## Place of Work

In 2000, 78 percent of workers in the three-county region lived and worked in the same county. Of the three counties, Weld County has the highest rate of residents working in other counties (approximately one-third of the workforce). This reflects Weld County's high residential growth rate and reliance on jobs outside of the county. **Table 13** shows the place of work by county.

**Table 13. 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
Larimer	134,615	113,409	84.2%	19,691	1,515
Morgan	11,693	10,441	89.3%	1,168	84
Weld	86,210	57,777	67.0%	27,880	553
<b>Region Total</b>	<b>232,518</b>	<b>181,627</b>	<b>78.1%</b>	<b>48,739</b>	<b>2,152</b>

Source: 2000 Census

Note: Includes the entire counties of Larimer and Weld, including those areas within the North Front Range MPO



## Means of Transportation to Work

**Table 14** provides more information about how people travel to work. Approximately 78 percent of commuters in the three-county area drove alone in their car to work, which is slightly higher than the statewide average. Carpooling is the second most common means of transportation to work at nearly 12 percent. Public transportation accounts for a minimal number of work trips in this region. The average travel time to work in each of the three counties is less than the statewide average.

**Table 14. 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
Larimer	134,615	77.4%	11.0%	0.9%	2.7%	3.0%	5.1%	21.4
Morgan	11,693	76.6%	14.9%	0.1%	3.3%	1.4%	3.8%	18.5
Weld	86,210	78.5%	12.7%	0.4%	2.9%	1.3%	4.2%	23.7
Region	232,518	77.8%	11.8%	0.6%	2.8%	2.3%	4.7%	22.1
Colorado	2,191,626	75.1%	12.2%	3.2%	3.0%	1.5%	4.8%	24.3

Source: 2000 Census

Note: Includes the entire counties of Larimer and Weld, including those areas within the North Front Range MPO

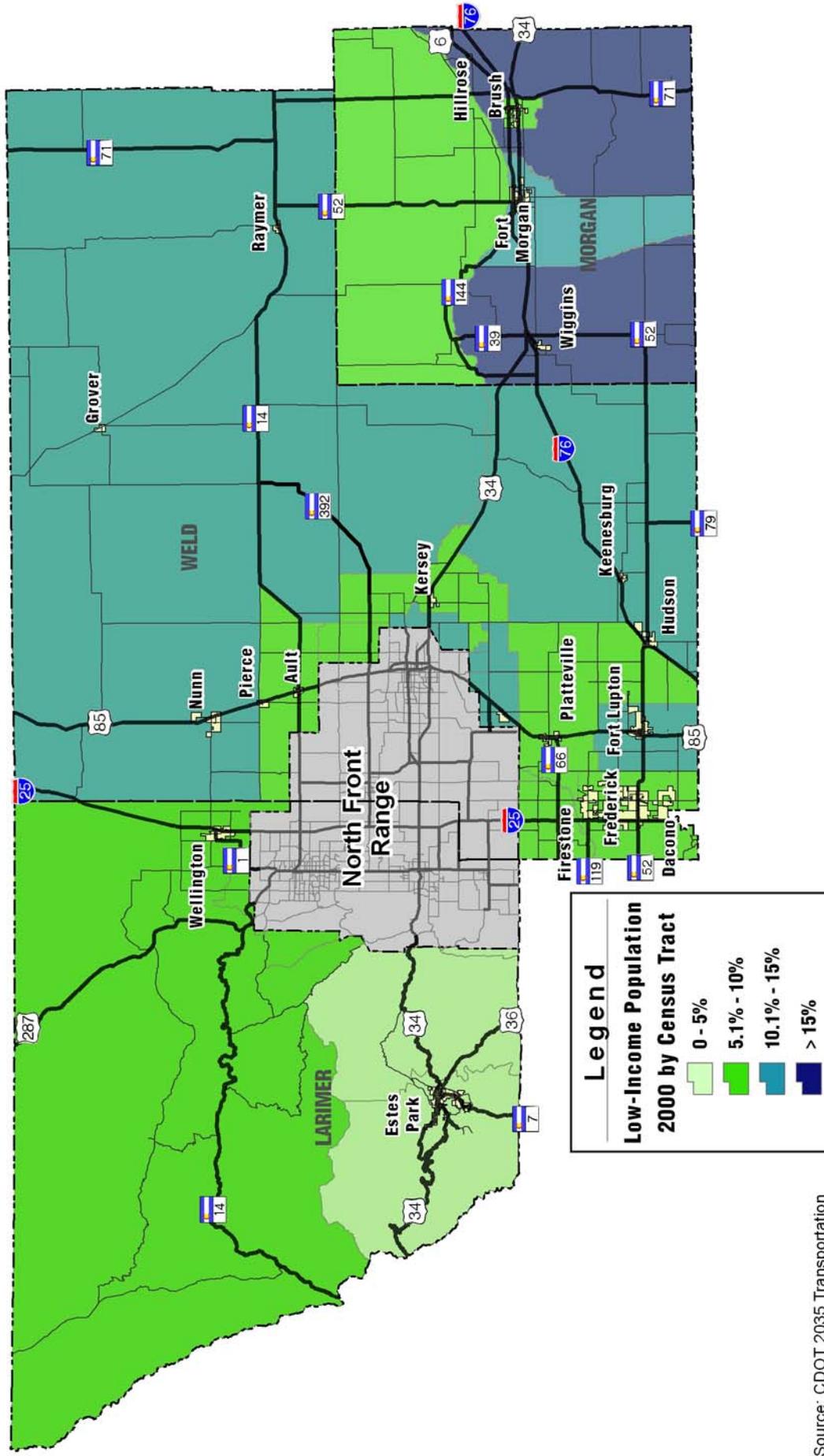
## Low-Income Areas

Low-income populations are identified as households that are in the lower 50<sup>th</sup> percentile 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 19** shows the location and density of populations by census tract that are below the federal poverty level in the Upper Front Range. For the three county area (Larimer, Morgan, and Weld), about 10.4 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 Upper Front Range TPR is higher than the statewide average of 17.1 percent, at 20.5 percent. **Figure 20** shows the minority population by census tract.

# 2035 Upper Front Range Regional Transportation Plan



Source: CDOT 2035 Transportation Planning Dataset

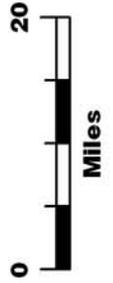
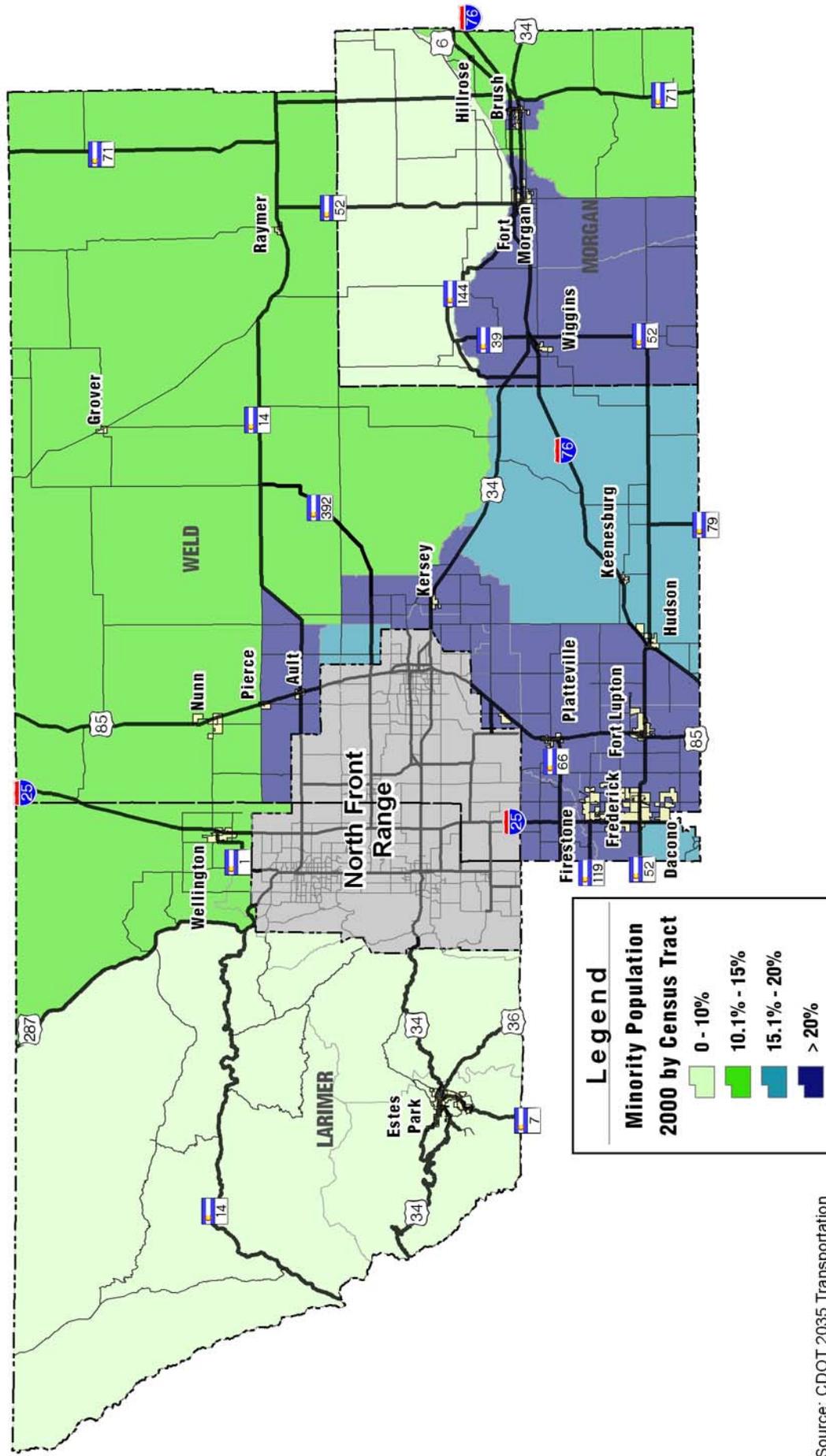


Figure 19  
**Low-Income Population**

# 2035 Upper Front Range Regional Transportation Plan



Source: CDOT 2035 Transportation Planning Dataset

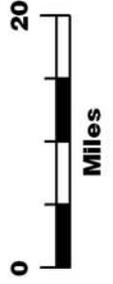


Figure 20

## Minority Population



## 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 Forest Service, the State Historical Preservation Office, 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.



### Wildlife

General wildlife habitat is an important resource in the Upper Front Range. There are a number of regulations and laws that protect general wildlife species and their habitat. **Figure 21** provides an indication of the locations of protected and/or important wildlife habitat in the Upper Front Range. The primary habitats in the Upper Front Range are the native shortgrass prairie and major waterways. Important wildlife linkage corridors are also identified on **Figure 21**. Linkages in the north are for mountain lion and pronghorn, and the linkage in the west is for wolverine. The linkages in the eastern portion of the region are for black-tailed prairie dogs, mountain plover, pronghorn, and swift fox.

### AGENCIES

The U.S. Fish and Wildlife Service (USFWS), USDA Forest Service (USFS), 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 shortgrass prairie habitat and created a proactive mitigation strategy by participating in the Shortgrass Prairie Initiative (SGPI). The SGPI includes the Nature Conservancy, USFWS, and other federal agencies and protects up to 50,000 acres of the shortgrass prairie in eastern Colorado. This allows for CDOT projects that impact shortgrass 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.

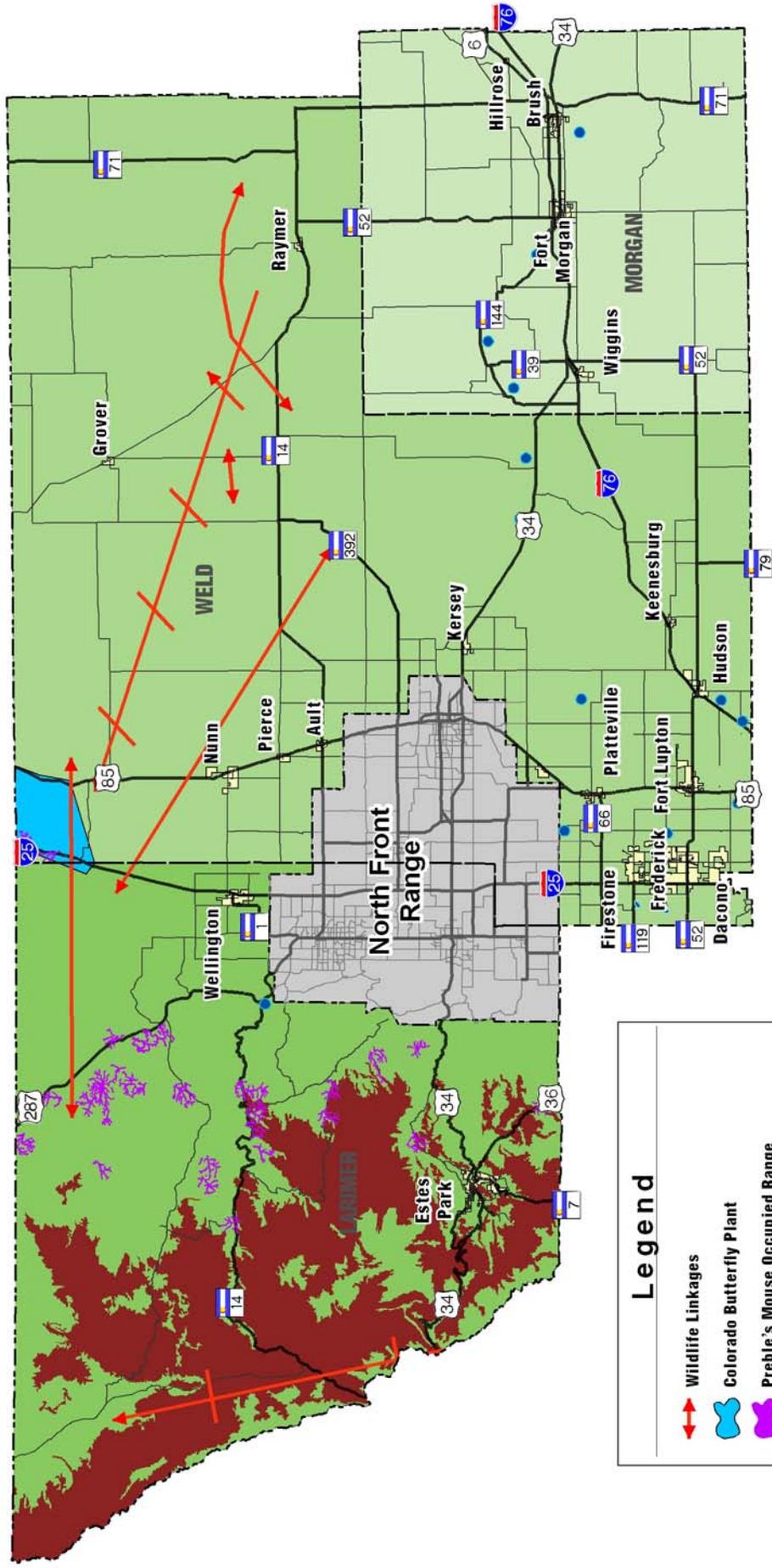
Certification from the DOW must be obtained for actions with adverse impacts to streams or its bank or tributaries. Certification is provided by the DOW which includes appropriate measures to eliminate or diminish adverse effects to such streams or their banks or tributaries.

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 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 13 threatened and or endangered species (ten animals and three plants) in the Upper Front Range TPR. Projects in the Upper Front Range TPR need to determine if their 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 15** presents the list of federally threatened or endangered species with potential habitat in the Upper Front Range TPR.

# 2035 Upper Front Range Regional Transportation Plan



**Legend**

- Wildlife Linkages
- Colorado Butterfly Plant
- Preble's Mouse Occupied Range
- Bald Eagle Active Nests & Communal Roosts
- Lynx Potential Habitat

Source: SREP Wildlife Linkage data, CDOW NDIS data.



Figure 21  
**Wildlife**



**Table 15. Federally Threatened or Endangered Species with Potential Habitat in Upper Front Range**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Listing Status</b>
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Threatened
Black-footed Ferret	<i>Mustela nigripes</i>	Endangered
Canada Lynx	<i>Lynx canadensis</i>	Threatened
Colorado Butterfly Plant	<i>Gaura neomexicana ssp. coloradensis</i>	Threatened
Greenback Cutthroat Trout	<i>Oncorhynchus clarki stomias</i>	Threatened
Interior Least Tern	<i>Sternula antillarum</i>	Endangered
Mexican Spotted Owl	<i>Strix occidentalis</i>	Threatened
North Park Phacelia	<i>Phacelia formosula</i>	Endangered
Pallid Sturgeon <sup>1</sup>	<i>Scaphirhynchus albus</i>	Endangered
Piping Plover <sup>1</sup>	<i>Charadrius melodus</i>	Threatened
Preble's Meadow Jumping Mouse <sup>2</sup>	<i>Zapus hudsonius preblei</i>	Threatened
Ute Ladies'-tresses	<i>Spiranthes diluvialis</i>	Threatened
Whooping Crane <sup>1</sup>	<i>Grus americana</i>	Endangered

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

<sup>2</sup> 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 USFS should also be contacted if a project goes through or is adjacent to USFS lands because they maintain a list of threatened or endangered species known to utilize USFS land. They also have a list of species that are considered sensitive by the USFS. USFS lands generally occur in the western portion of the Upper Front Range TPR and in the Pawnee National Grasslands.

The Bureau of Land Management (BLM), similarly to the USFS also maintains a list of sensitive species known to utilize land owned and/or maintained by the BLM. Small pieces of BLM lands occur in the extreme northwestern portion of the Upper Front Range TPR.



The DOW 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.

### 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. As **Figure 22** shows, portions of Weld and Larimer Counties are part of the 8-hour ozone non-attainment area. The area officially became an ozone non-attainment area on November 20, 2007, when the Early Action Compact lapsed because the fourth highest average ozone readings for 2005 – 2007 exceeded the Federal standard. The Upper Front Range, North Front Range MPO, and the Denver Regional Council of Governments are currently working together to determine responsibility for meeting the requirements of the 8-hour ozone standards for the Upper Front Range. Fort Collins and Greeley (both in the North Front Range MPO) are maintenance areas for carbon monoxide.

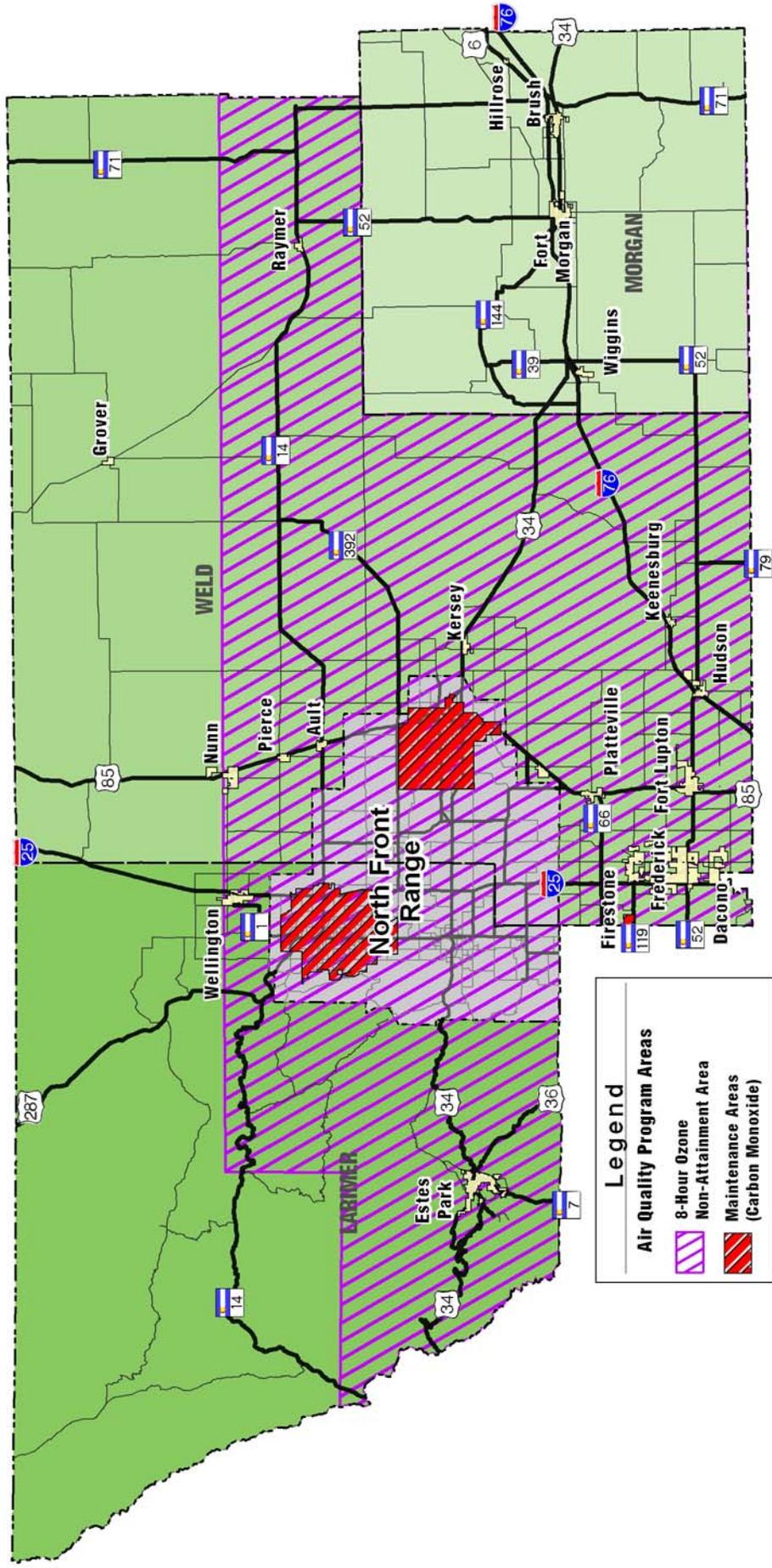
### Water Quality

The two major watersheds in the Upper Front Range TPR are the South Platte Watershed, which eventually drains into the Missouri River, and the upper portions of the Colorado River Watershed. Within the watersheds, there are numerous creeks, tributaries, and ditches, as well as lakes, floodplains, and wetlands. **Figure 23** shows the major water features in the Upper Front Range 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 (USEPA) 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.

# 2035 Upper Front Range Regional Transportation Plan

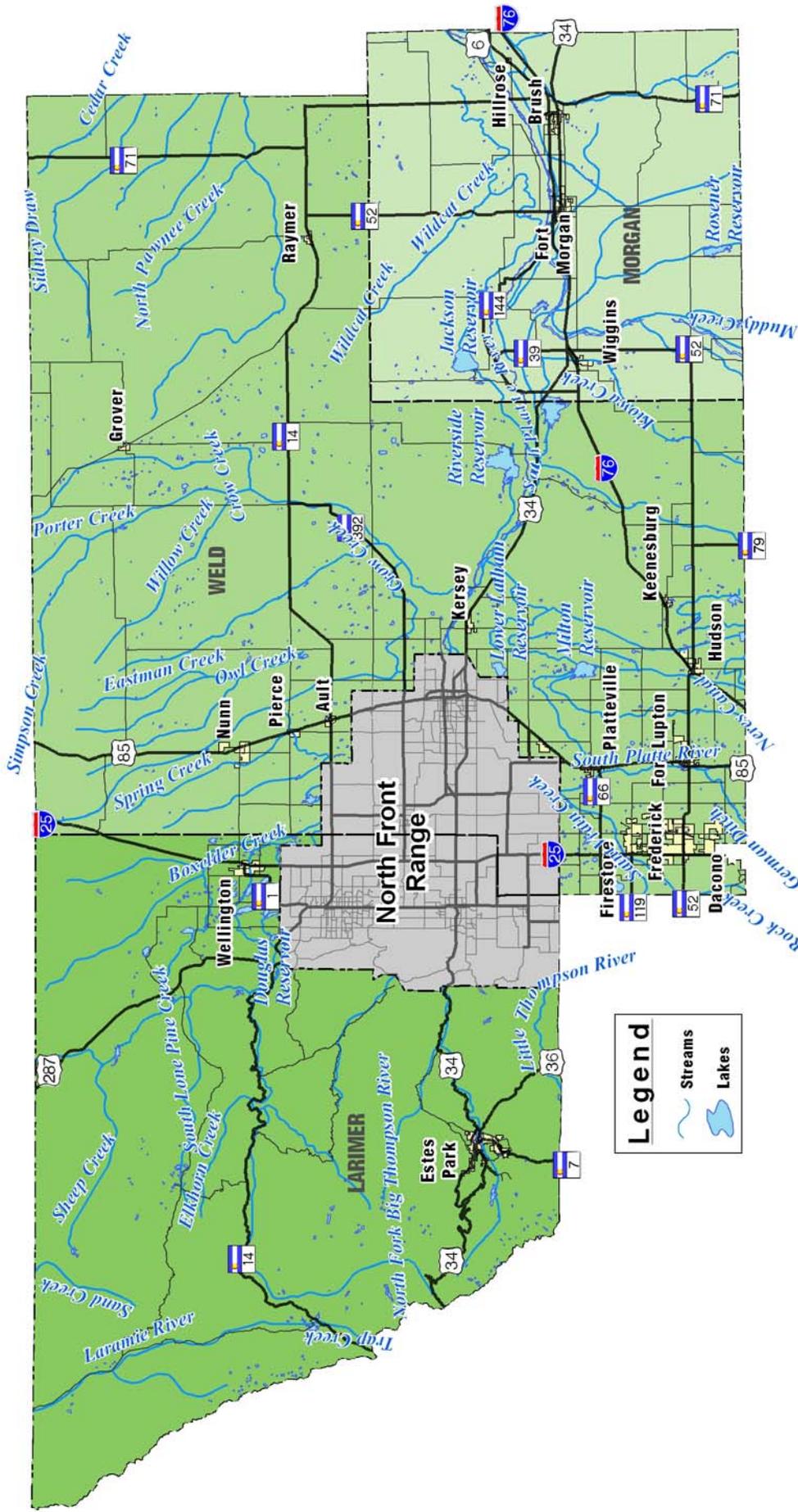


Source: CDOT 2035 Transportation Planning Dataset



Figure 22  
**Air Quality**

# 2035 Upper Front Range Regional Transportation Plan



Source: CDOT 2035 Transportation Planning Dataset



### PERMITS

Although many of the cities and towns within the Upper Front Range 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 acre or more, a Colorado Discharge Permit System (CDPS) is required for construction activities.
- ▶ Dewatering permit if dewatering will occur during construction.

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 Upper Front Range 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 USEPA 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.

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

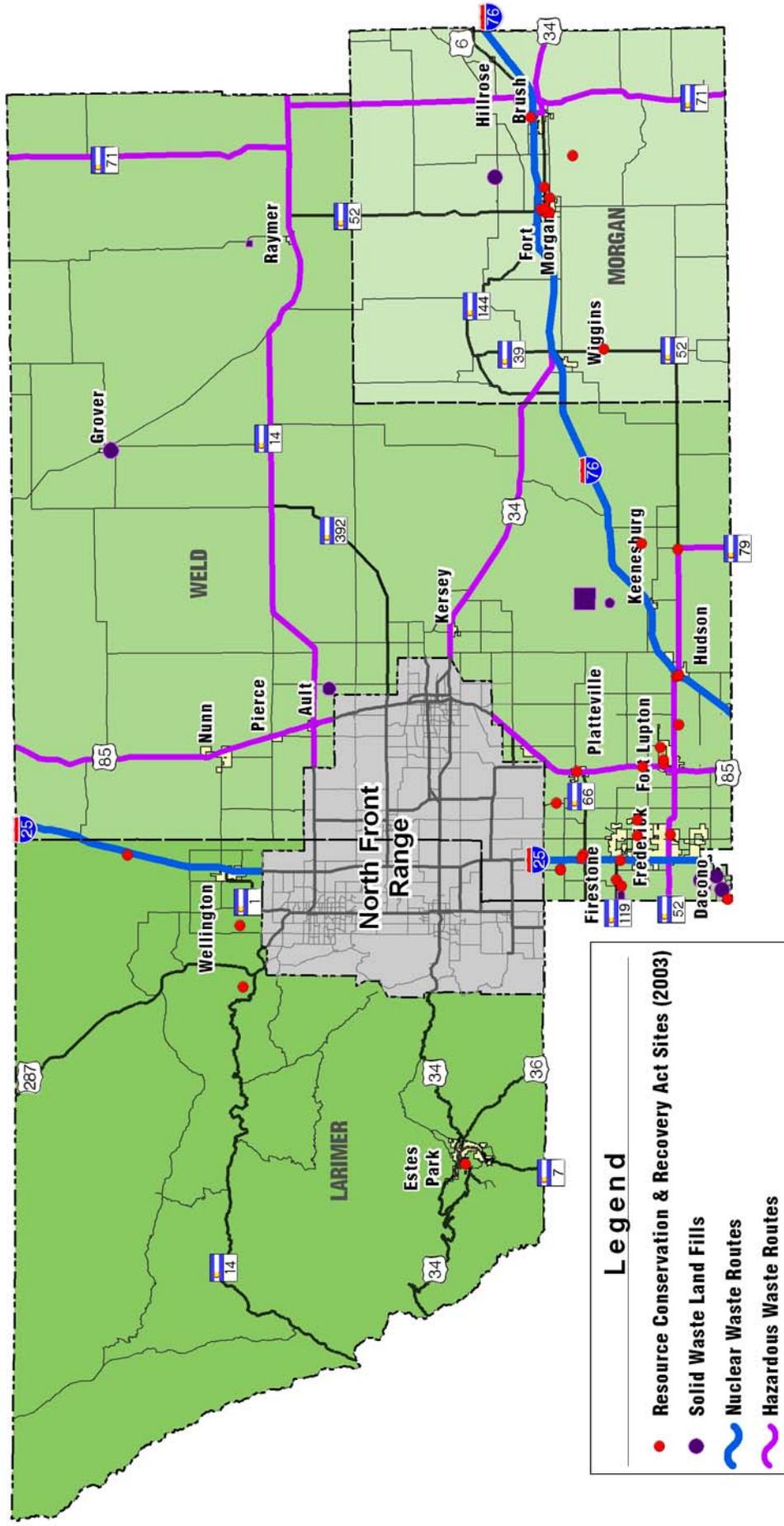
If noise impacts exceed the FHWA criteria, mitigation is evaluated based on its feasibility and reasonableness. Common noise mitigation techniques include walls and earthen berms between the traffic and receptor to reduce the traffic noise.

## 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 within the Upper Front Range; however, there are multiple RCRA sites in the Upper Front Range 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 RCRA sites and landfills in the Upper Front Range, and also shows the designated nuclear and hazardous waste routes in the region. The majority of the RCRA sites occur in the southern and western portions of the region, while the landfills are scattered across the eastern portion.

# 2035 Upper Front Range Regional Transportation Plan



Source: CDOT 2035 Transportation Planning Dataset, CDPHE data.



Figure 24  
**Hazardous Materials**



### 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

### 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 Upper Front Range TPR contains 1.3 million acres of public lands, including National Forest/Grasslands, National Park, Bureau of Land Management, and State lands (State Parks, State Wildlife Areas, and State Habitat Areas). The publicly owned lands are shown on **Figure 25**.

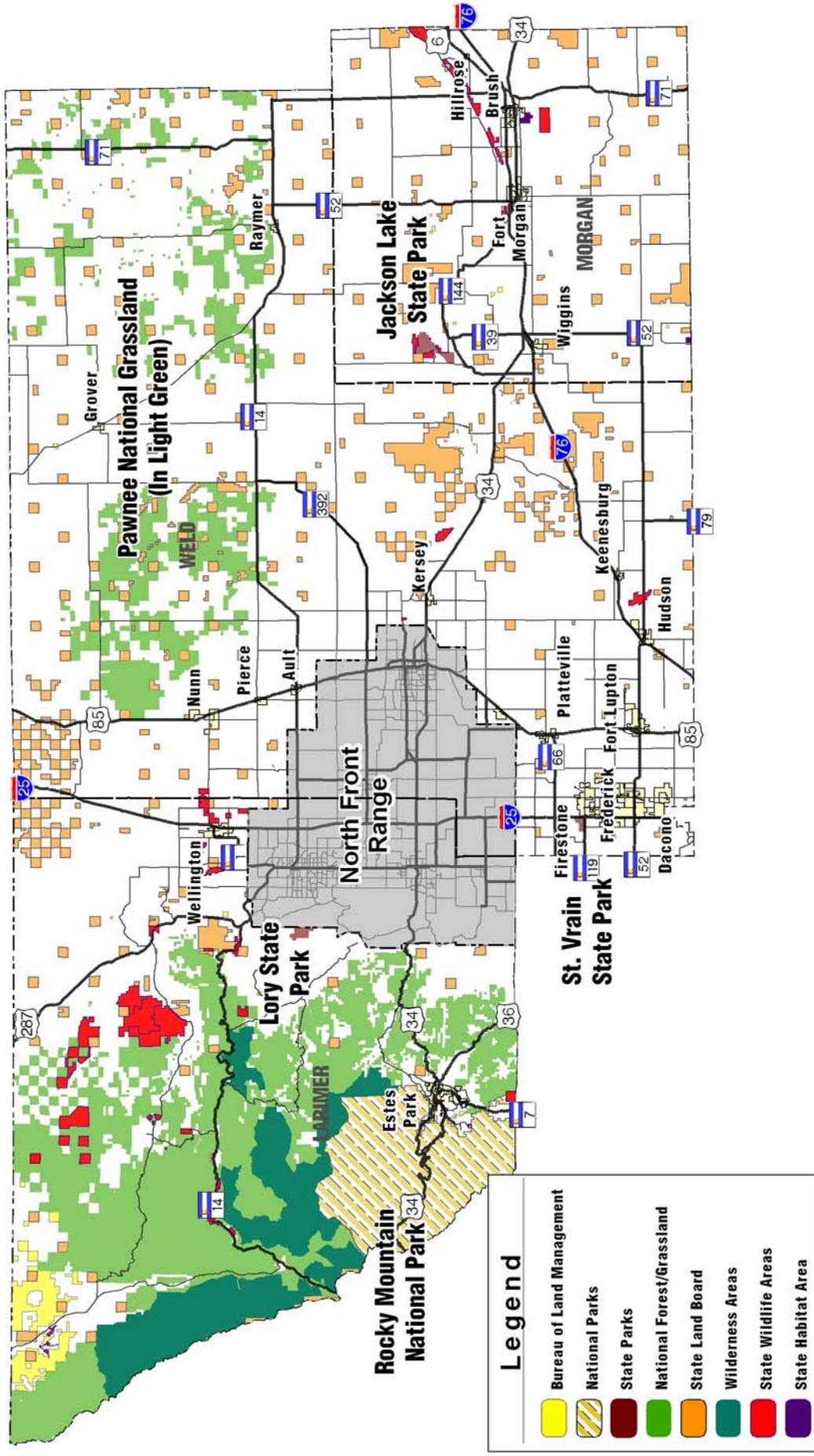
Public lands typically have a park and recreational component that the public utilizes. These resources are important to the citizens of Colorado because they provide the opportunity for physical and mental relaxation and can also provide focus points for community activities and events. Potential impacts 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 western portion of the Upper Front Range TPR are the Rocky Mountain National Park and the Arapahoe National Forest. The eastern portion of the region contains the Pawnee National Grasslands, State Parks (Jackson Lake, Lory, and St. Vrain), State Habitat Areas (Bollinger, Musgrave, and Thunder Mountain) and 33 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 (official with jurisdiction). The public agency can be the USFS, BLM, State of Colorado, or any local municipality.

# 2035 Upper Front Range Regional Transportation Plan



Source: CDOT 2035 Transportation Planning Dataset, CDOW NDIS data.



Figure 25  
**Public Lands**



## 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.

## 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 Upper Front Range TPR there are a substantial number of sites, too many to display on a 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.

## MITIGATION

For construction projects, an on-the-ground survey to identify, record, and evaluate cultural resources for eligibility for inclusion on the National Register of Historic Places must be conducted. When significant sites are identified within a proposed project area, an interdisciplinary team determines how best to avoid the localities or minimize adverse effects during construction.



## 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 Upper Front Range, arranged by resource agency, is provided in **Table 16**. See **Appendix C** for a map of environmental concerns discussed at the forum.

**Table 16. Summary of Environmental Issues and Concerns**

<b>Resource/Regulatory Agency</b>	<b>Information/Issues/Concerns</b>
Environmental Protection Agency (EPA)	<ul style="list-style-type: none"> <li>• Weld County is a significant contributor of new precursors of ozone into the Denver basin.</li> <li>• Rocky Mountain National Park is showing evidence of nitrogen deposition from cars and volatile organic compounds from oil and gas operations.</li> <li>• Land use patterns that make it possible for people to reduce their vehicle miles traveled is one possibility to address both issues.</li> <li>• The EPA has some “smart-growth” planning money available that could help local entities deal with growth.</li> <li>• A regional transportation authority could generate revenues that could be used for transit.</li> <li>• Weld County and the rest of the UFR create thinly scattered populations that are difficult to serve with transit.</li> </ul>
CDOT MS4 Discharge Permit Program	<ul style="list-style-type: none"> <li>• In constructing roads along streams, sponsoring agencies must be careful about maintaining a buffer zone to keep road spills from getting into the water.</li> <li>• If the tri-towns (Dacono, Frederick, and Firestone) become part of DRCOG, they will need to obtain an MS4 permit to allow discharges.</li> </ul>
CDPHE – Solid Waste	<ul style="list-style-type: none"> <li>• The permits outline certain routes for the trucks and the destinations of the solid waste.</li> <li>• CDPHE has been working on a plan to have beetle-kill pines shredded.</li> <li>• If the plan is implemented, more trucks could be traveling through and leaving loads in the counties in UFR.</li> </ul>



**Table 16. Summary of Environmental Issues and Concerns (Continued)**

<b>Resource/Regulatory Agency</b>	<b>Information/Issues/Concerns</b>
CDPHE – Water Quality	<ul style="list-style-type: none"> <li>• The Big Dry Creek Coalition is trying to work together with many different entities to address the E-coli problem in the creek.</li> <li>• Use of magnesium chloride as a substitute for sand can cause nutrient deposition in rivers and reservoirs.</li> <li>• Additives that get in the magnesium chloride create a problem.</li> <li>• CDOT is able to test the quality of its magnesium chloride before application.</li> <li>• Counties probably need to test the magnesium chloride themselves or contract to have it done to avoid contaminating bodies of water with road runoff.</li> </ul>
CDPHE – Air Quality	<ul style="list-style-type: none"> <li>• More stringent ozone standards are likely to be in place by June 2007.</li> <li>• The stricter standards could ensure that the Denver basin, and Weld and Larimer counties will be a non-attainment area for ozone by the end of the summer.</li> <li>• Stricter oil and gas controls are likely coming that will affect the oil and gas industry in Weld County particularly.</li> </ul>
Division of Wildlife (DOW)	<ul style="list-style-type: none"> <li>• Wind energy farms are a concern because of their effect on migrating birds and have to be sited in such a way that birds that rely on updrafts along ridges will not be killed by the blades.</li> <li>• South Platte River Recovery Corridor is part of an interstate agreement to deliver 16,000 acre-feet of water to Nebraska annually from the river. This agreement is an attempt to protect three bird species and one fish species.</li> <li>• Another issue is to help the recovery of a state-listed fish species.</li> <li>• There is concern about habitat for the plain sharp tail grouse.</li> <li>• Black-tailed prairie dogs are also tracked, largely because the prairie dog colonies provide homes for burrowing owls and piping plover.</li> </ul>
State Historic Preservation Office (SHPO)	<ul style="list-style-type: none"> <li>• CDOT has a program to have outside entities “adopt” historic bridges.</li> <li>• US Highway 34 crosses some historic irrigation ditches that may need to be mitigated during road projects.</li> <li>• The Bureau of Reclamation has a preservation plan for certain identified irrigation ditches that should be consulted before work begins on US 34 road improvements.</li> <li>• Several miles of US 287 north of Fort Collins might need to be realigned if the Northern Colorado Water Conservancy District builds a reservoir in the vicinity.</li> </ul>
United States Fish and Wildlife Service (USFWS)	<ul style="list-style-type: none"> <li>• Road construction through the short grass prairies needs to be done without disturbing ground-dwelling birds, such as burrowing owls.</li> <li>• Federal law prohibits knocking down nests during nesting season of all migratory birds except sparrows, starlings, and pigeons; abiding by this law requires transportation projects to have carefully planned phases to avoid nesting season.</li> </ul>
United States Army Corps of Engineers (USACE)	<ul style="list-style-type: none"> <li>• Due to a lawsuit, the Army Corps of Engineers and EPA both determine jurisdiction over dry drainages.</li> </ul>





## 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 was 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.

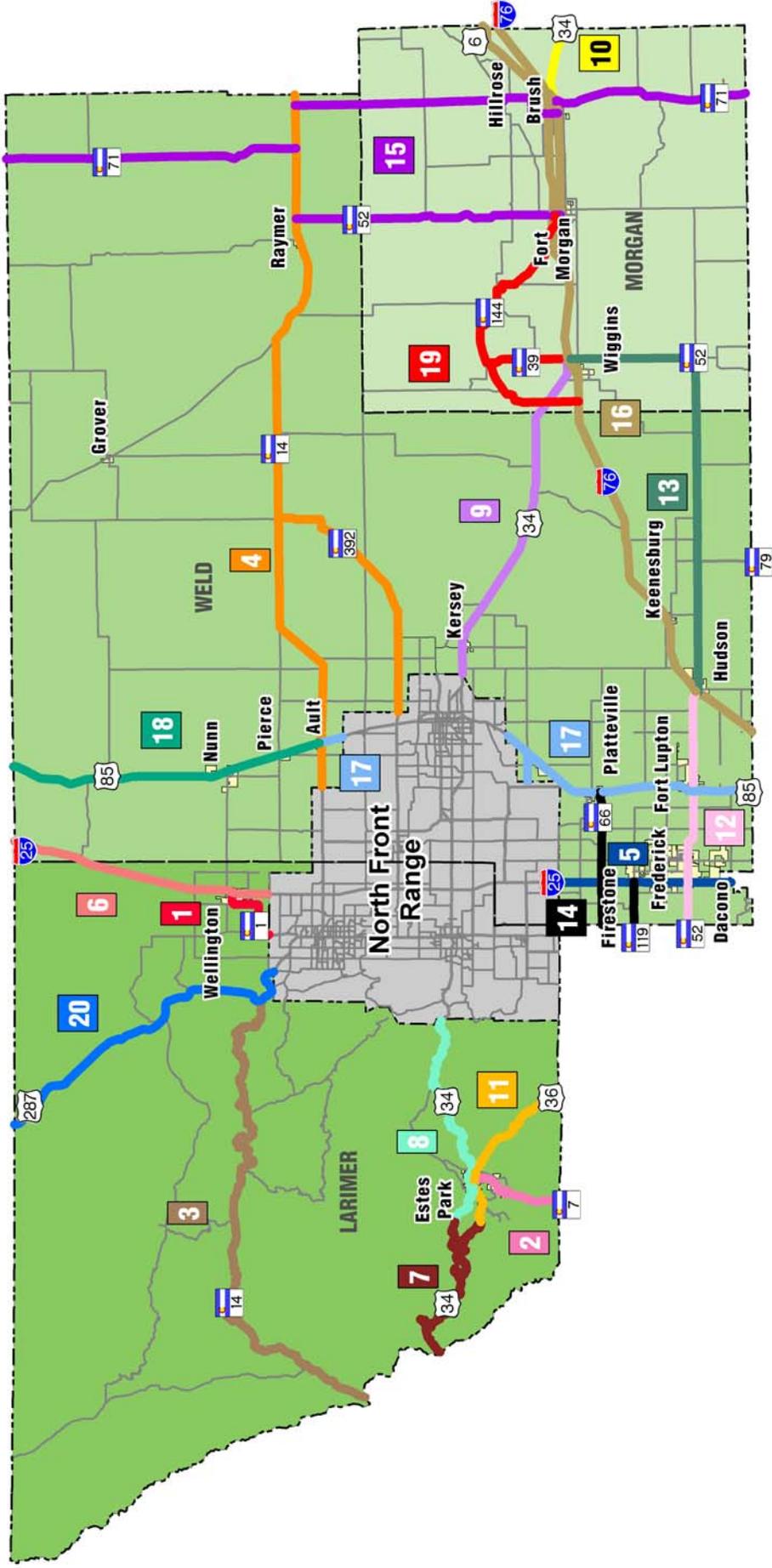
The purposes of corridor visioning are to:

- ▶ 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 Upper Front Range have been grouped into 20 corridors, many of which extend beyond the UFR boundary. The corridor visions herein focus on the portion of the corridors within the UFR. **Figure 26** provides a map of the corridors in the region, which are defined below.

1. **SH 1** – from SH 287 in Fort Collins to I-25 in Wellington
2. **SH 7 Mountain Section** – from Estes Park to Lyons, includes SH 7 through Allenspark
3. **SH 14 Mountain Section** – from Walden to US 287 (Ted's Place) north of Fort Collins
4. **SH 14 Plains Section** – from I-25 (Fort Collins) to I-76 (Sterling), including SH 392 from US 85 in Lucerne to SH 14 in Briggsdale

# 2035 Upper Front Range Regional Transportation Plan



Source: CDOT 2035 Transportation Planning Dataset



Figure 26  
**Upper Front Range  
 Transportation Corridors**



## Upper Front Range 2035 Regional Transportation Plan

5. **I-25 Front Range** – from US 36 in Denver to SH 14 in Fort Collins, including parallel arterial roadways and parallel passenger rail service
6. **I-25 North Section** – from SH 14 in Fort Collins to the Wyoming state line
7. **US 34 RMNP/Mountain Section** – from Granby through RMNP, including US 36 from US 34 to eastern RMNP boundary
8. **US 34 Big Thompson Section** – from RMNP east entrance to the west side of Loveland, includes US 34A (US 34 Bypass, Wonderview Avenue) and US 34C (US 34 Business, Elkhorn Avenue) through Estes Park
9. **US 34 Plains Section** – from the US 85 bypass east of Greeley to I-76 (Wiggins)
10. **US 34 Northeastern Plains Section** – from SH 71 in Brush to the Nebraska state line
11. **US 36 Mountain Section** – from US 34 in Estes Park to SH 7 on the north side of Boulder, including US 36A (Moraine Avenue) from US 34 Business to the RMNP east entrance
12. **SH 52 Western Section** – from SH 119 (The Diagonal) to I-76 in Hudson
13. **SH 52 Middle Section** – from I-76 in Hudson to US 34 in Wiggins
14. **SH 66** – from US 36 in Lyons to US 85 in Platteville, including the east-west section of SH 119 from US 287 in Longmont to I-25 in Del Camino
15. **SH 71 Northeastern Plains Section** – from I-70 in Limon to the Nebraska state line, including the north-south section of SH 52 from I-76 in Fort Morgan to SH 14
16. **I-76, Denver East** – from US 85 in Commerce City to the Nebraska state line, including I-76, the Keenesburg Spur, SH 6I through Wiggins, SH 6J from Brush to Sterling, SH 11 from Julesburg to the state line (in the Eastern TPR), and SH 34B from Fort Morgan to Brush
17. **US 85 Urban Section** – from I-76 to SH 14 in Ault, including the US 85 business routes through Brighton, Fort Lupton, Platteville and Greeley, and SH 256 from SH 60 to US 85 in Peckham
18. **US 85 Rural Section** – from SH 14 in Ault to the Wyoming state line
19. **SH 144 Plains Section** – from I-76 west of Wiggins to I-76 in Fort Morgan and SH 39 from I-76 to SH 144
20. **US 287 North Rural Section** – from SH 14, Ted’s Place to the Wyoming state line

### Corridor Visions

Corridor Visions, Goals, and Strategies for each of the 20 corridors in the Upper Front Range 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.



## CORRIDOR #1: SH 1 (PUF7001)

**State Highway:** 001A

**Beginning Mile Post:** 0.00

**Ending Mile Post:** 9.96

SH 1 from SH 287 in Ft Collins to I-25 in Wellington

### Vision

The vision for the SH 1 corridor is primarily to improve safety as well as to increase mobility and to maintain system quality. This corridor serves as a local facility, provides commuter access, and makes north-south connections within the Wellington/north Fort Collins area. Future travel modes expected in this corridor include passenger vehicle, bus service, bicycle and pedestrian facilities. Transportation Demand Management (telecommuting, vanpooling, and carpooling) would likely be effective in this corridor. The transportation system in the area primarily serves towns, cities, and destinations within the corridor. Based on historic and projected population and employment levels, passenger traffic volumes are expected to increase, while freight volume will likely remain constant. The communities along the corridor value transportation choices, connections to other areas, and safety. The area served by this corridor is primarily residential, serving as a bedroom community to Fort Collins. Users of this corridor want to preserve the rural residential character of the area and support the movement of commuters along the corridor while recognizing the environmental, economic, and social needs of the surrounding area.

**Primary Investment Category:** Safety

**Priority:** Low

### Goals

- Support commuter travel and expand transit usage
- Provide for bicycle/pedestrian travel
- Increase Transportation Demand Management
- Reduce fatalities, injuries and property damage crash rate
- Maintain or improve pavement to optimal condition

### Strategies

- Promote carpooling and vanpooling
- Improve Geometrics
- Construct Intersection/Interchange improvements
- Add/improve shoulders
- Improve hot spots
- Study and change speed limits
- Add surface treatment/overlays
- Construct auxiliary lanes (passing, turn, accel/decel)
- Promote Travel Demand Management



## CORRIDOR #2: SH 7 MOUNTAIN SECTION (PUF7002)

**State Highway:** 007A      **Beginning Mile Post:** 0.00      **Ending Mile Post:** 32.99

SH 7 from Estes Park to Lyons, including SH 7E through Allenspark

### Vision

The vision for the SH 7 Mountain Section corridor is primarily to maintain system quality as well as to improve safety. This corridor serves as a local facility, provides a scenic route, connects to places outside the region, and makes north-south connections along the Peak-to-Peak Scenic Byway through southern Larimer County. This corridor is expected to be primarily comprised of passenger vehicles in the future. The transportation system in the area 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 only slightly. The communities along the corridor value connections to other areas, access to adjoining National Forest land, safety, and system preservation. They depend primarily on tourism for economic activity in the area. Users of this corridor want to preserve the mountain character of the area and support the movement of tourists through the corridor while recognizing the environmental, economic, and social needs of the surrounding area.

**Primary Investment Category:** System Quality

**Priority:** Medium

### Goals

- Provide for tourist-friendly travel and improve access to public lands
- Provide information to traveling public
- Reduce fatalities, injuries and property damage crash rate
- Maintain or improve pavement to optimal condition
- Promote environmentally responsible transportation improvements

### Strategies

- Add and maintain roadway pullouts for breakdowns, buses and slow vehicles
- Improve ITS Incident response, Traveler Information (including the use of variable message signs) and Traffic Management
- Add passing and turn lanes
- Add Guardrails
- Improve hotspots
- Improve Rock fall mitigation
- Improve wildlife crossings
- Add Surface treatment/overlays
- Promote environmental responsibility
- Construct wider shoulders where feasible



### **CORRIDOR #3: SH 14 MOUNTAIN SECTION (PUF7003)**

**State Highway:** 014B      **Beginning Mile Post:** 64.81      **Ending Mile Post:** 121.68

SH 14 from Walden to US 287 (Ted's Place) north of Ft Collins

#### **Vision**

The Northwest TPR and the Upper Front Range TPR agree that the primary investment category for the SH 14 Mountain Section corridor is safety west of the Jackson/Larimer county line and system quality east of the line. This corridor serves as a local facility, connects to places outside the region, and makes east-west connections within the Poudre Canyon area. The Cache La Poudre – North Park Byway is a state designated scenic byway which extends between Fort Collins and Walden along this corridor. Cameron Pass is one of the six major passes in Colorado that provide access over the continental divide. This corridor is expected to be primarily comprised of passenger vehicles in the future. 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 only slightly. The communities along the corridor value connections to other areas, access to adjoining National Forest land, safety, and system preservation and depend primarily on tourism for economic activity in the area. Users of this corridor want to preserve the mountain character of the area while supporting the movement of tourists in and through the corridor, recognizing the environmental, economic and social needs of the surrounding area.

**Primary Investment Category:** System Quality

**Priority:** Medium

#### **Goals**

- Support recreation travel
- Improve access to public lands
- Reduce fatalities, injuries and property damage crash rate
- Preserve the existing transportation system
- Promote environmentally responsible transportation improvements

#### **Strategies**

- Add and maintain roadway pullouts for breakdowns, buses and slow vehicles
- Provide demand-responsive transit
- Improve visibility/sight lines
- Add Guardrails
- Improve hotspots
- Improve Rock fall mitigation
- Improve wildlife crossings
- Promote environmental responsibility
- Construct auxiliary lanes (passing, turn, accel/decel)
- Construct wider shoulders where feasible



## CORRIDOR #4: SH 14 PLAINS SECTION (PUF7004)

**State Highway:** 014C      **Beginning Mile Post:** 139.00      **Ending Mile Post:** 216.83

SH 14 from I-25 (Ft Collins) to I-76 (Sterling), including SH 392B from US 85 in Lucerne to SH 14 in Briggsdale

### Vision

The Eastern TPR and the UFR TPR agree that the primary investment category for the SH 14 Plains Section is system quality to the west of SH 71 and mobility to the east of SH 71. The Pawnee Pioneer Trails Scenic/Historic Byway extends along portions of this corridor. This corridor serves as a local facility, connects to places outside the region, and makes east-west connections within the northern Weld County area. Future travel modes include passenger vehicle 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 slightly, while freight traffic volumes are expected to increase significantly. The communities along the corridor value access to Pawnee National Grasslands, connections to other areas and system preservation. They depend primarily on agriculture for economic activity in the area. Users of this corridor want to preserve the agricultural character of the area and support the movement of freight and farm-to-market products in and through the corridor while recognizing the environmental, economic, and social needs of the surrounding area.

**Primary Investment Category:** System Quality

**Priority:** Medium

### 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

### Strategies

- Add Accel/decel lanes
- Add turn lanes
- Add roadway pullouts for breakdowns, buses and slow vehicles
- Flatten slopes
- Add/improve shoulders
- Improve hot spots
- Install rumble strips in high accident locations
- Add drainage improvements



## CORRIDOR #5: I-25 FRONT RANGE (PUF7005)

**State Highway:** 025A      **Beginning Mile Post:** 217.01      **Ending Mile Post:** 247.22

I-25 from US 36 in Denver to SH 14 in Ft Collins, includes parallel arterial roadways

### Vision

The vision for the I-25 Front Range corridor is primarily to increase mobility as well as to improve safety and to maintain system quality. This corridor includes I-25, an interstate facility on the National Highway System, and parallel arterial roads. This section of I-25 is one of CDOT's 7<sup>th</sup> Pot Strategic Corridors. A future transit connection to the Denver metropolitan area is also envisioned in this corridor. This north-south corridor serves as a multi-modal facility through the southeast Larimer County/southwest Weld County area, connecting to places outside the region (including the Denver metropolitan area and the North Front Range MPO) while providing for local and commuter access along the corridor. Future travel modes to be accommodated in the corridor will likely include passenger vehicle, bus service, bus rapid transit, truck freight, bicycle and pedestrian facilities (off of mainline I-25) and aviation (Erie Municipal Airport). Transportation Demand Management (telecommuting, vanpooling, and carpooling) would likely be effective in this corridor. Sections of this corridor currently experience congestion, especially during the peak hours of the day. Based on historic and projected population and employment levels, both passenger and 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, system preservation, and intermodal connections. They depend on manufacturing, high-tech industries, agriculture, commercial activity, retail and residential development, and oil and gas for economic activity in the area. The area surrounding this corridor is transitioning from rural to suburban and the corridor needs to support the movement of commuters, freight, farm-to-market products, tourists, and hazardous materials, and provide for long distance travel in and through the corridor. Any improvements should recognize the environmental, economic, and social needs of the surrounding area and should be consistent with the *North I-25 Environmental Impact Statement*.

**Primary Investment Category:** Mobility

**Priority:** High

### Goals

- Increase travel reliability and improve traffic flow in order to support commuter travel, accommodate growth in freight transport and maintain statewide transportation connections
- Support economic development while maintaining environmental responsibility and coordinating transportation and land use decisions
- Reduce dependency on single occupancy vehicles by enhancing transit, TDM, and bicycle/pedestrian options
- Provide information to the traveling public and promote education to improve safe driving behavior
- Reduce fatalities, injuries and property damage crash rate
- Maintain or improve pavement to optimal condition
- Deliver projects on time (7<sup>th</sup> Pot)
- Ensure airport facility meets existing and projected demands

(continued)



### Strategies

- Preserve right of way and construct additional lanes (general purpose and/or HOV/toll lanes) and improve and maintain the system of local roads connecting the north-south roadways in the corridor
- Improve mobility by constructing intersection and interchange improvements, such as traffic signals, auxiliary lanes, medians, and new interchanges
- Expand transit service, coverage and frequencies, provide improved transit amenities (such as park and ride facilities and transit stations) and intermodal connections, and market transit services and provide incentives
- Implement appropriate TDM mechanisms such as carpooling, vanpooling, telecommuting, and flexible work hours
- Promote ITS strategies, such as variable message signs, incident response, traveler information and traffic management
- Maintain and improve the existing infrastructure through enhancements such as surface treatment, bridge repairs or replacements, improved striping paint, sign replacements, improved landscaping, additional rest areas and truck parking areas, noise barriers, and drainage improvements
- Improve the safety of the corridor by improving hotspots
- Perform and implement studies (including the North I-25 EIS) that focus on enhancing mobility, such as corridor optimization, access management plans and rail and tolling studies and promote environmentally responsible improvements
- Meet airport facility objectives in Airport System Plan



## CORRIDOR #6: I-25 NORTH SECTION (PUF7006)

**State Highway:** 025A      **Beginning Mile Post:** 269.37      **Ending Mile Post:** 289.88

I-25 from SH 14 in Fort Collins to the Wyoming state line

### Vision

The vision for the I-25 North Section corridor is primarily to maintain system quality as well as to improve safety. I-25 is an interstate facility on the National Highway System. This corridor connects to places outside the region, and also provides north-south connections within the Fort Collins to Cheyenne area. It is part of the national trade network. Future travel modes to be planned for in the corridor include passenger vehicle and truck freight. Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to increase. The communities along the corridor value connections to other areas, safety, and system preservation. They primarily depend on agriculture for economic activity in the area. This corridor needs to support the movement of tourists and freight, and provide for long distance travel through the corridor. Any improvements to the corridor should recognize the environmental, economic, and social needs of the surrounding area and should be consistent with the *North I-25 Environmental Impact Statement*.

**Primary Investment Category:** System Quality

**Priority:** Medium

### Goals

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

### Strategies

- Add and maintain accel/decel lanes
- Promote use and maintenance of variable message signs
- Improve ITS incident response, traveler information and traffic management
- Construct separated bike facilities



## CORRIDOR #7: US 34 RMNP/MOUNTAIN SECTION (PUF7007)

**State Highway:** 034A      **Beginning Mile Post:** 0.00      **Ending Mile Post:** 57.85

US 34 from Granby through Rocky Mountain National Park, includes SH 36A through RMNP

### Vision

The vision for the US 34 RMNP/Mountain Section corridor is primarily to maintain system quality as well as to improve safety and to increase mobility. This corridor, which is commonly referred to as Trail Ridge Road, is designated as an All American Road and provides one of Colorado's six major mountain passes across the Continental Divide. Trail Ridge Road is closed in the winter. This corridor serves as a local facility, providing local access and making east-west connections within the Rocky Mountain National Park area. Future travel modes include passenger vehicle, bus service, bicyclists and pedestrians. The transportation system in the area primarily serves destinations within the corridor. Based on historic and projected population and employment levels, the travel demand along this corridor is expected to grow moderately. This growth will likely need to be accommodated through the use of alternative modes such as bus service. The communities along the corridor value transportation choices and system preservation, and they depend primarily on tourism for economic activity in the area. Users of this corridor want to preserve the mountain character of the area while supporting the movement of tourists in and through the corridor and recognizing the environmental, economic and social needs of the surrounding area.

**Primary Investment Category:** System Quality

**Priority:** Low

### Goals

- Provide for tourist-friendly travel
- Expand transit usage
- Provide information to traveling public
- Promote education to improve safe driving behavior
- Preserve the existing transportation system

### Strategies

- Add roadway pullouts for breakdowns, buses and slow vehicles
- Post informational signs
- Provide and expand transit bus service
- Promote environmentally responsible transportation improvements
- Construct wider shoulders where feasible
- Implement Park Service Long-range Plans



## CORRIDOR #8: US 34 BIG THOMPSON (PUF7008)

**State Highway:** 034A      **Beginning Mile Post:** 57.85      **Ending Mile Post:** 88.00

US 34 from Rocky Mountain National Park east entrance to the west side of Loveland, including US 34A (US 34 Bypass, Wonderview Avenue) and US 34C (US 34 Business, Elkhorn Avenue) through Estes Park

### Vision

The vision for the US 34 Big Thompson corridor is primarily to increase mobility as well as to improve safety and to maintain system quality. This corridor serves as a multi-modal National Highway System facility, connects to places outside the region, and makes east-west connections through the Big Thompson River Canyon and the Estes Valley. Future travel modes include passenger vehicle, bus service, truck freight, bicycle and pedestrian facilities. Transportation Demand Management (telecommuting and carpooling) would likely be effective in this corridor. The transportation system in the area serves towns, cities, and destinations within the corridor as well as destinations outside of the corridor. This corridor currently experiences congestion, especially during the peak-tourism summer months. Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to increase. The Estes Park community values high levels of mobility, transportation choices, connections to other areas, access to adjoining National Forest land, safety, and system preservation. They depend primarily on tourism for economic activity in the area. Users of this corridor want to preserve the mountain character of the area while supporting the movement of tourists and commuters in and through the corridor while recognizing the environmental, economic and social needs of the surrounding area.

**Primary Investment Category:** Mobility

**Priority:** High

### Goals

- Reduce traffic congestion and improve traffic flow through the use of Travel Demand Management
- Provide for tourist-friendly travel
- Reduce fatalities, injuries and property damage crash rate
- Maintain or improve pavement to optimal condition
- Promote environmentally responsible transportation improvements

### Strategies

- Add roadway pullouts for breakdowns, buses and slow vehicles
- Expand transit
- Promote carpooling and vanpooling
- Improve ITS Incident response, Traveler Information and Traffic Management
- Improve Rock fall mitigation
- Improve hotspots
- Maintain infrastructure by adding surface treatment/overlays and repairing/replacing bridges
- Promote environmental responsibility
- Construct auxiliary lanes (passing, turn, accel/decel)
- Construct wider shoulders where feasible



## CORRIDOR #9: US 34 PLAINS (PUF7009)

**State Highway:** 034A      **Beginning Mile Post:** 113.07      **Ending Mile Post:** 149.63

US 34 from the US 85 bypass east of Greeley to I-76 in Wiggins

### Vision

The vision for the US 34 Plains corridor is primarily to improve safety as well as to maintain system quality and to increase mobility. This corridor serves as a National Highway System facility, connects to places outside the region, and makes east-west connections within the central Weld County and western Morgan County area. Future travel modes will likely include passenger vehicle, transit, truck freight and aviation (Easton/Valley View Airport). Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to grow moderately. The communities along the corridor value connections to other areas, safety, and system preservation. They depend on agriculture and oil and gas for economic activity in the area. Users of this corridor want to preserve the agricultural character of the area and support the movement of freight and farm-to-market products in and through the corridor while recognizing the environmental, economic and social needs of the surrounding area.

**Primary Investment Category:** Safety

**Priority:** Medium

### Goals

- Maintain statewide transportation connections
- Accommodate freight transport
- Reduce fatalities, injuries and property damage crash rate
- Preserve the existing transportation system
- Ensure airport facility meets existing and projected demands

### Strategies

- Add turn lanes
- Replace old signs
- Improve Geometrics (flatten slopes and curves, improve visibility/sight lines)
- Construct Intersection/Interchange improvements
- Add passing lanes
- Improve hot spots
- Add Surface treatment/overlays
- Bridge repairs/replacement
- Reconstruct roadways
- Meet airport facility objectives in Airport System Plan
- Provide and expand transit service



## CORRIDOR #10: US 34 NORTHEASTERN PLAINS (PUF7010)

**State Highway:** 034B      **Beginning Mile Post:** 173.57      **Ending Mile Post:** 259.51

US 34 from SH 71 in Brush to the Nebraska state line

### Vision

The vision for the US 34 Northeastern Plains corridor is primarily to maintain system quality as well as to improve safety. This corridor serves as a local facility, connects to places outside the region, and makes east-west connections within the eastern Morgan County area. Future travel modes expected in this corridor include passenger vehicle, passenger and freight on rail, transit truck freight and aviation (Brush Municipal Airport). 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 grow moderately. The communities along the corridor value connections to other areas, safety, and system preservation, and they depend primarily on agriculture for economic activity. Users of this corridor want to preserve the agricultural character of the area, support the movement of freight and farm-to-market products in and through the corridor while recognizing the environmental, economic and social needs of the surrounding area.

**Primary Investment Category:** System Quality

**Priority:** Medium

### Goals

- Accommodate growth in freight transport
- Reduce fatalities, injuries and property damage crash rate
- Preserve the existing transportation system
- Ensure airport facility meets existing and projected demands

### Strategies

- Improve Geometrics and flatten slopes
- Construct Intersection/Interchange improvements
- Add roadway pullouts for breakdowns, buses and slow vehicles
- Improve hot spots
- Add Surface treatment/overlays or Reconstruction of roadways
- Promote environmental responsibility
- Add drainage improvements
- Meet airport facility objectives in Airport System Plan
- Construct wider shoulders where feasible
- Construct auxiliary lanes (passing, turn, accel/decel)
- Provide and expand transit service





## CORRIDOR #12: SH 52 WESTERN SECTION (PUF7012)

**State Highway:** 052A      **Beginning Mile Post:** 0.00      **Ending Mile Post:** 29.27

SH 52 from SH 119 (The Diagonal) to I-76 in Hudson

### Vision

The vision for the SH 52 Western Section corridor is primarily to increase mobility as well as to improve safety and to maintain system quality. This corridor serves as a local facility, providing local access and making east-west connections within the southwest Weld County area. Future travel modes will primarily consist of passenger vehicle, truck freight and aviation (Platte Valley Airpark); Transportation Demand Management (telecommuting and carpooling) would likely be effective in this corridor. The transportation system in the area serves towns, cities, and destinations within the corridor as well as destinations outside of the corridor. Sections of this corridor currently experience congestion, especially during the peak hours of the day. Based on historic and projected population and employment levels, both passenger and 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, high-tech, commercial activity, oil and gas, and residential development for economic activity in the area. The area surrounding this corridor is transitioning from rural to urban, and the users of this corridor want to support the movement of commuters and freight in and through the corridor while recognizing the environmental, economic and social needs of the surrounding area.

**Primary Investment Category:**    Mobility

**Priority:**                                    Medium

### Goals

- Reduce traffic congestion and improve traffic flow and accommodate growth in freight transport
- Coordinate transportation and land use decisions
- Increase Transportation Demand Management (carpool, vanpool, telecommute, etc.)
- Reduce fatalities, injuries and property damage crash rate
- Ensure airport facility meets existing and projected demands

### Strategies

- Preserve right of way for and add and maintain general purpose lanes
- Add and maintain Accel/decel lanes and turn lanes
- Consolidate and limit access points and develop access management plans
- Expand transit and provide inter-modal connections
- Promote carpooling, vanpooling, telecommuting and flexible work hours
- Improve ITS Incident response, Traveler Information and Traffic Management including the use of variable message signs
- Improve Geometrics
- Construct bicycle/pedestrian overpasses
- Maintain infrastructure by adding surface treatment/overlays and repairing/replacing bridges
- Meet airport facility objectives in Airport System Plan



### **CORRIDOR #13: SH 52 MIDDLE SECTION (PUF7013)**

**State Highway:** 052A      **Beginning Mile Post:** 29.27      **Ending Mile Post:** 72.58

SH 52 from I-76 in Hudson to US 34 in Wiggins

#### **Vision**

The vision for the SH 52 Middle Section corridor is primarily to maintain system quality as well as to improve safety. This corridor serves as a local facility, providing local access and making east-west connections within the southeast Weld County and southwest Morgan County area. Passenger vehicles and truck freight will likely be the predominant travel modes in the future. The transportation system in the area primarily serves towns, cities, and destinations within the corridor. Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to grow moderately. The communities along the corridor value connections to other areas, safety, and system preservation. They depend on agriculture and oil and gas for economic activity in the area. Users of this corridor want to preserve the agricultural character of the area, support the movement of freight and farm-to-market products in and through the corridor while recognizing the environmental, economic and social needs of the surrounding area.

**Primary Investment Category:** System Quality

**Priority:** Low

#### **Goals**

- Accommodate freight transport
- Reduce fatalities, injuries and property damage crash rate
- Preserve the existing transportation system

#### **Strategies**

- Add turn lanes
- Improve Geometrics
- Construct Intersection/Interchange improvements
- Add passing lanes
- Add/improve shoulders
- Improve hot spots
- Add Surface treatment/overlays
- Promote environmental responsibility
- Reconstruct roadway



## CORRIDOR #14: SH 66 (PUF7014)

**State Highway:** 066B      **Beginning Mile Post:** 28.69      **Ending Mile Post:** 51.39

SH 66 from US 39 in Lyons to US 85 in Platteville, includes the east-west section of SH 119C from US 287 in Longmont to I-25 at Del Camino

### Vision

The vision for the SH 66 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, providing local access and making east-west connections within the southwest Weld County area. SH 119 is part of the National Highway System. Future travel modes expected in this corridor include passenger vehicle, truck freight and transit; Transportation Demand Management (telecommuting and carpooling) would likely be effective in this corridor. The transportation system in the area serves towns, cities, and destinations within the corridor as well as destinations outside of the corridor. Sections of this corridor currently experience congestion, especially during the peak hours of the day. Based on historic and projected population and employment levels, passenger traffic volumes are expected to increase significantly and freight traffic is expected to increase moderately. The communities along the corridor value high levels of mobility, transportation choices, connections to other areas, access to St. Vrain State Park, safety, and system preservation. They depend on manufacturing, high-tech, and commercial activity for economic activity in the area. The area surrounding this corridor is transitioning from rural to urban, and the users of this corridor want to support the movement of commuters and freight in and through the corridor while recognizing the environmental, economic and social needs of the surrounding area.

**Primary Investment Category:** Mobility

**Priority:** High

### Goals

- Reduce traffic congestion and improve traffic flow and accommodate growth in freight transport
- Coordinate transportation and land use decisions
- Expand transit usage
- Increase Transportation Demand Management (carpool, vanpool, telecommute, etc.)
- Reduce fatalities, injuries and property damage crash rate

### Strategies

- Preserve right of way for and add and maintain general purpose lanes
- Consolidate and limit access points and develop access management plans
- Expand transit and provide inter-modal connections
- Promote carpooling, vanpooling, telecommuting and flexible work hours
- Improve ITS Incident response, Traveler Information (including variable message signs) and Traffic Management
- Add/improve shoulders
- Address safety by improving geometrics, improving hotspots, and improving railroad crossing devices
- Maintain the system by adding surface treatment/overlays or reconstruct roadways and repairing or replacing bridges
- Promote corridor and/or rail studies that encourage environmentally responsible improvements
- Construct intersection/interchange improvements including constructing auxiliary lanes (passing, turn, accel/decel)



## CORRIDOR #15: SH 71 NORTHEASTERN PLAINS (PUF7015)

**State Highway:** 071D,E,F    **Beginning Mile Post:** 102.00    **Ending Mile Post:** 232.82

SH 71 from I-70 in Limon to the Nebraska state line includes the north-south section of SH 52 from I-76 in Fort Morgan to SH 14

### Vision

The vision for the SH 71 Northeastern Plains corridor is primarily to increase mobility as well as to maintain system quality and to increase safety. This corridor includes SH 71, which is on the National Highway System, and a portion of SH 52, which is designated as a local highway. The Pawnee Pioneer Trails Scenic/Historic Byway extends along the SH 52 portion of the corridor. Together, they comprise a corridor that connects to places outside the region, and provides north-south continuity throughout eastern Morgan and Weld Counties. Future travel modes include passenger vehicle, truck freight and aviation (Fort Morgan Municipal Airport). 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 remain relatively constant. Due to the federal designation as a "high priority corridor" (Heartland Expressway), freight volumes are expected to increase significantly. The communities along the corridor value connections to other areas, access to adjoining National Grassland, safety and system preservation. They depend primarily on agriculture and some commercial activity for economic activity in the area. Users of this corridor want to preserve the agricultural character of the area, support the movement of freight in and through the corridor, and provide a connection between the City of Fort Morgan and the Fort Morgan Municipal Airport (via SH 52) while recognizing the environmental, economic and social needs of the surrounding area.

**Primary Investment Category:**    Mobility

**Priority:**    Medium

### Goals

- Increase travel reliability and improve mobility
- Maintain statewide transportation connections and provide improved freight linkages
- 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 pullouts for breakdowns, buses and slow vehicles
- Obtain right of way for and construct a Super 2 cross-section, retain potential for ultimate expansion to four lanes
- Provide demand-responsive transit
- Replace old signs
- Improve Geometrics (flatten slopes and curves, improve visibility/sight lines)
- Construct intersection improvements including auxiliary lanes (passing, turn, accel/decel)
- Add/improve shoulders
- Improve hot spots
- Maintain infrastructure by adding surface treatment/overlays, replacing or repairing bridges, and adding drainage improvements
- Meet airport facility objectives in Airport System Plan



## CORRIDOR #16: I-76 DENVER EAST (PUF7016)

**State Highway:** 076A      **Beginning Mile Post:** 12.50      **Ending Mile Post:** 183.99

I-76 from US 85 in Commerce City to the Nebraska state line, includes I-76B, the Keenesburg Spur; SH 6I through Wiggins, SH 6J from Brush to Sterling; SH 11 from Julesburg to the state line (in the Eastern TPR); and SH 34B from Ft Morgan to Brush

### Vision

The vision for the I-76, Denver East corridor is primarily to maintain system quality as well as to improve safety and to increase mobility. This corridor includes I-76, an interstate facility on the National Highway System, and parts of US 6, US 34, SH 11 and SH 138. The BNSF Railroad runs parallel to I-76 through the corridor and provides both freight and passenger rail movement. This corridor serves as a multi-modal interstate facility connecting to places outside the region while providing for local access to the towns along the corridor, and providing east-west connections within the southeast Weld County and central Morgan County area. Future travel modes expected in this corridor include passenger vehicle, bus service, passenger rail, truck freight, and rail freight. The transportation system in the area 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. The communities along the corridor value connections to other areas, safety, and system preservation. They depend on agriculture and oil and gas for economic activity. This corridor needs to support the movement of freight throughout the corridor and commuters in the southern portion of the corridor, while providing for long distance travel and recognizing the environmental, economic and social needs of the surrounding area.

**Primary Investment Category:** System Quality

**Priority:** High

### Goals

- Maintain statewide transportation connections
- Accommodate growth in freight transport
- Reduce fatalities, injuries and property damage crash rate
- Eliminate design deficiencies
- Maintain or improve pavement to optimal condition

### Strategies

- Construct, improve and maintain the system of local roads
- Provide inter-modal connections and expand transit bus and rail services
- Replace old signs and use improved striping paint / beads
- Improve Geometrics (flatten slopes and curves, improve visibility/sight lines)
- Construct interchange improvements
- Improve safety by adding guardrails and improving hot spots
- Maintain infrastructure by adding surface treatment/overlays, reconstructing the roadway and repairing/replacing bridges
- Promote environmental responsibility
- Add drainage improvements
- Promote corridor and rail studies



## CORRIDOR #17: US 85 URBAN (PUF7017)

**State Highway:** 085C      **Beginning Mile Post:** 227.00      **Ending Mile Post:** 279.84

US 85 from I-76 to SH 14 in Ault, includes SH 85 D, E, F, G and H, the business routes through Brighton, Ft Lupton, Platteville and Greeley, and SH 256A from SH 60 to US 85 in Peckham.

### Vision

The vision for the US 85 Urban 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, provides local access, and provides north-south connections within the central Weld County area. The Union Pacific Railroad runs parallel to US 85 through the corridor. Future travel modes expected in this corridor include passenger vehicle, bus service, passenger rail, truck freight, and rail freight; Transportation Demand Management (telecommuting and carpooling) would likely be effective in this corridor. The transportation system in the area 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 significantly. Sections of this corridor are expected to experience congestion in the future. The communities along the corridor value high levels of mobility, transportation choices, connections to other areas, safety, and system preservation. They depend on manufacturing, agriculture, commercial activity, residential development, and oil and gas for economic activity in the area. The area surrounding this corridor is experiencing significant growth and is transitioning from an agricultural area to a more urban area, and depends on the transportation system for economic development and diversification. Users of this corridor want to support the movement of commuters, freight, and farm-to-market products in and through the corridor while recognizing the environmental, economic and social needs of the surrounding area. Improvements to this corridor should be consistent with the *US 85 Access Control Plan*.

**Primary Investment Category:** Mobility

**Priority:** High

### Goals

- Reduce traffic congestion, accommodate growth in freight transport and improve traffic flow
- Coordinate transportation and land use decisions
- Increase Transportation Demand Management (carpool, vanpool, telecommute, etc.)
- Reduce fatalities, injuries and property damage crash rate
- Preserve the existing transportation system while implementing recommendations from the *US 85 Access Control Plan*

### Strategies

- Preserve right of way for and add and maintain general purpose lanes
- Add and maintain new Interchanges/Intersections
- Expand and market transit in order to fill the transit gap in this portion of the region and construct and maintain park and ride facilities
- Construct and maintain park and ride facilities
- Promote carpooling, vanpooling, telecommuting and flexible work hours
- Improve ITS Incident response, Traveler Information and Traffic Management
- Improve Geometrics

(continued)



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- Improve safety by adding Guardrails (cable rail) and improving railroad crossing devices
- Maintain infrastructure by adding surface treatments/overlays, repairing/replacing bridges
- Promote corridor and rail studies and implement recommendations from *US 85 Access Control Plan*



### **CORRIDOR #18: US 85 RURAL (PUF7018)**

**State Highway:** 085L      **Beginning Mile Post:** 279.84      **Ending Mile Post:** 309.54

US 85 from SH 14 in Ault to Cheyenne, Wyoming

#### **Vision**

The vision for the US 85 Rural corridor is primarily to improve safety as well as to maintain system quality and to increase mobility. This corridor serves as a local facility, connects to places outside the region, and makes north-south connections within the northern Weld County area. The Union Pacific Railroad runs parallel to US 85 through the corridor. Future travel modes expected in this corridor include passenger vehicle, truck freight, rail freight, and potentially passenger rail. The transportation system in the area 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 grow moderately. The communities along the corridor value connections to other areas, safety, and system preservation. They depend on manufacturing, agriculture, and commercial activity for economic activity in the area. Users of this corridor want to preserve the agricultural character of the area, support the movement of freight and farm-to-market products in and through the corridor while recognizing the environmental, economic and social needs of the surrounding area.

**Primary Investment Category:** Safety

**Priority:** Medium

#### **Goals**

- Accommodate freight transport
- Reduce fatalities, injuries and property damage crash rate
- Preserve the existing transportation system

#### **Strategies**

- Improve geometrics
- Construct intersection/interchange improvements
- Flatten Slopes
- Add/improve shoulders
- Add guardrails
- Improve hot spots
- Install rumble strips in high accident locations
- Bridge repair/replacement
- Construct auxiliary lanes (passing, turn, accel/decel)



## CORRIDOR #19: SH 144 PLAINS (PUF7019)

**State Highway:** 144A      **Beginning Mile Post:** 0.00      **Ending Mile Post:** 28.79

SH 144 from I-76 west of Wiggins to SH 52 in Fort Morgan and SH 39 from I-76 to SH 144

### Vision

The vision for the SH 144 Plains corridor is primarily to maintain system quality as well as to improve safety. This corridor serves as a local facility, providing local access and making east-west connections within the west-central Morgan County area. This corridor is expected to be primarily comprised of passenger vehicles and truck freight in the future. The transportation system in the area primarily serves towns, cities, and destinations within the corridor. Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected remain relatively constant. The communities along the corridor value access to Jackson Lake State Park, connections to other areas, safety, and system preservation. They depend primarily on agriculture for economic activity in the area. Users of this corridor want to preserve the agricultural character of the area and support the movement of farm-to-market products in and through the corridor while recognizing the environmental, economic and social needs of the surrounding area.

**Primary Investment Category:** System Quality

**Priority:** Low

### Goals

- Reduce fatalities, injuries and property damage crash rate
- Preserve the existing transportation system

### Strategies

- Use improved striping paint / beads
- Replace old signs
- Improve Geometrics
- Add passing lanes
- Add turn lanes
- Add/improve shoulders
- Improve hot spots
- Add Surface treatment/overlays
- Bridge repairs/replacement
- Promote environmental responsibility



## **CORRIDOR #20: US 287 NORTH RURAL (PUF7020)**

**State Highway:** 287C      **Beginning Mile Post:** 355.85      **Ending Mile Post:** 385.00

US 287 from SH 14 (Ted's Place) to Laramie, Wyoming

### **Vision**

The vision for the US 287 North Rural corridor is primarily to improve safety as well as to maintain system quality. This corridor is on the National Highway System, connects to places outside the region, and makes north-south connections within the Fort Collins to Laramie area. This corridor is expected to be primarily comprised of passenger vehicles and truck freight in the future. Based on historic and projected population and employment levels, passenger traffic volumes are expected to remain relatively constant while freight volume will increase. The communities along the corridor value connections to other areas and safety. Users of this corridor want to preserve the rural character of the area, support the movement of freight and tourists in and through the corridor while recognizing the environmental, economic and social needs of the surrounding area.

**Primary Investment Category:** Safety

**Priority:** Medium

### **Goals**

- Maintain statewide transportation connections
- Support recreation travel
- Accommodate growth in freight transport
- Reduce fatalities, injuries and property damage crash rate
- Maintain or improve pavement to optimal condition

### **Strategies**

- Add and maintain accel/decel lanes
- Add turn lanes
- Provide demand-responsive transit
- Add passing lanes
- Flatten Slopes
- Add/improve shoulders
- Improve hot spots
- Install rumble strips in high accident locations
- Improve wildlife crossings
- Promote environmental responsibility



## Corridor Prioritization Process

A project prioritization process for the UFR TPR was originally developed in 1994 as a part of the first RTP. Although the process has been refined in each successive regional planning process, the original intent and structure have largely been maintained. However, the 2035 RTP represents a significant departure from previous RTPs; the 2035 RTP is a corridor-based plan, rather than a project-based plan. This plan includes a series of corridors which have been identified as High, Medium, or Low priority. The estimated available resources have been allocated to the corridor priority levels rather than to specific projects, allowing flexibility in allocating monies as they become available. Under this corridor-based plan approach, the prioritization of projects will occur at the Statewide Transportation Improvement Program (STIP) level, rather than within the RTP. The following sections provide documentation of the methodology used to prioritize the 20 corridors in the Upper Front Range TPR.

### EVALUATION CRITERIA

A series of five evaluation criteria have been established to evaluate and prioritize the Upper Front Range corridors.

- ▶ **Mobility** – Each corridor has been evaluated based on the current and projected volume to capacity ratio, level of truck traffic volume, and the corridor’s interregional or interstate significance.
- ▶ **Safety** – Each corridor has been evaluated based on its fatal crash rate in comparison to the statewide average, its level of substandard shoulders, and its potential for crash reduction with signalization or transportation system management measures.
- ▶ **System Quality** – Each corridor has been evaluated based on the percent of roadway with poor surface condition and the number of deficient bridges that are eligible for federal replacement funding.
- ▶ **Environmental** – Each corridor has been evaluated based on the level of possible impacts to the social and built environment and the natural environment.
- ▶ **Economic Impact** – Each corridor has been evaluated based on its use as a tourist or recreational route and its importance to the regional economy.

### CORRIDOR SCORING

The evaluation criteria and scoring guidelines have been developed to compare each corridor against other corridors within the UFR TPR. Because scoring is for the corridor as a whole, it has 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 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.



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**Appendix D** includes the scoring guidelines which provide a reference for the Low, Medium, and High ratings for each of the five evaluation criteria. The source of the data is also provided.

Because the five evaluation criteria do not carry equal importance in the prioritization of the corridors, a weight has been applied to each criterion. **Table 17** summarizes the weights assigned to the five evaluation criteria.

**Table 17. Evaluation Criteria Weighting**

Evaluation Criteria	Weight
Mobility	25
Safety	25
System Quality	25
Environmental	10
Economic Impact	15
<b>Total</b>	<b>100</b>

For each corridor, these weights have been 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 corridor scores are provided in **Appendix D**. 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 prioritized corridors are shown in **Table 18**.

**Table 18. Prioritized Corridors**

High Priority	Medium Priority	Low Priority
Corridor 5: I-25 Front Range	Corridor 2: SH 7 Mountain	Corridor 1: SH 1
Corridor 8: US 34 Big Thompson	Corridor 3: SH 14 Mountain	Corridor 7: US 34 RMNP
Corridor 14: SH 66	Corridor 4: SH 14 Plains	Corridor 13: SH 52 Middle
Corridor 16: I-76	Corridor 6: I-25 North	Corridor 19: SH 144 Plains
Corridor 17: US 85 Urban	Corridor 9: US 34 Plains	
	Corridor 10: US 34 Northeastern	
	Corridor 11: US 36 Mountain	
	Corridor 12: SH 52 Western	
	Corridor 15: SH 71	
	Corridor 18: US 85 Rural	
	Corridor 20: US 287 Rural	





## 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 19** lists the 20 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, four "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 19**, as improvements that are funded through these pools are a part of the overall vision cost for the individual corridors.

**Intersection Improvement Pool** – There are many intersections along the state highways in the Upper Front Range 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 can compete for funding through this pool.

**Bridge Rehabilitation Pool** – This pool is meant to address deteriorating state highway bridges that will not be receiving funding from CDOT Region 4's "Bridge on System" (BR) program. In some cases, these are small structures which are too short to be eligible for BR 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 can compete for funding through this pool.



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**Table 19. Vision Plan Priorities**

Corridor	Description	2008 Dollars (in millions)			Primary Investment Category	Priority
		Highway	Transit	Aviation		
Region	Local Transit Service		\$88.50		Mobility	High
Region	Intersection Improvement Pool				M/S/SQ	High
Region	Bridge Rehabilitation Pool				System Quality	High
Region	Traffic/Safety Management Pool				Safety	High
Region	Six-year Scoping Pool				Program Delivery	High
5	I-25 Front Range	\$131.60		\$8.55	Mobility	High
8	US 34 Big Thompson	\$52.14			Mobility	High
14	SH 66	\$96.70			Mobility	High
16	I-76, Denver East	\$641.73			System Quality	High
17	US 85 Urban	\$276.60			Mobility	High
2	SH 7 Mountain	\$7.49			System Quality	Medium
3	SH 14 Mountain	\$58.35			System Quality	Medium
4	SH 14 Plains	\$77.30			System Quality	Medium
6	I-25 North	\$138.44			System Quality	Medium
9	US 34 Plains	\$46.43		\$0.42	Safety	Medium
10	US 34 Northeastern Plains	\$11.34		\$10.61	System Quality	Medium
11	US 36 Mountain	\$12.33			Mobility	Medium
12	SH 52 Western	\$106.29		\$0.67	Mobility	Medium
15	SH 71 Northeastern Plains	\$294.30		\$47.21	Mobility	Medium
18	US 85 Rural	\$36.99			Safety	Medium
20	US 287 Rural	\$20.01			Safety	Medium
1	SH 1	\$3.16			Safety	Low
7	US 34 RMNP/Mountain	\$94.78			System Quality	Low
13	SH 52 Middle	\$62.12			System Quality	Low
19	SH 144 Plains	\$50.53			System Quality	Low
Subtotal		\$2,218.63	\$88.50	\$67.46		
<b>TOTAL</b>		<b>\$2,374.59</b>				



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**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

**Six-year Scoping Pool** – The purpose of this pool is to provide CDOT the ability to reasonably investigate the details of a future project before that project is included in the STIP so that a realistic cost estimate is available for budgeting purposes.

The total Vision Plan cost from 2008 to 2035 is estimated to be about \$2.37 billion, including approximately \$88.5 million in transit costs and \$67.5 million in aviation costs.

### Transit Plan

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

The Upper Front Range is a challenging environment for public transportation due to the distinct rural nature of the area and the scattered pattern of 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.

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.

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 Financially-Constrained Plan because of the lack of additional funding. Potential sources of additional funding include higher fares,



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public/private partnerships, additional local government funding, and formation of Rural Transportation Authorities.

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, 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.

Larimer County is developing a coordination plan; information from that plan will be incorporated into the RTP planning process when it is complete.

### **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 Federal Transit Administration administers formula and discretionary funding programs that are applicable to the Upper Front Range. 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. At this time only 5310 and 5311 funding have been established. New Freedom and JARC funding was assumed to be allocated to the North Front Range plan.

#### **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 organized by the Colorado Association of Transit Agencies (CASTA).

#### **5310 Elderly and Persons with Disabilities Capital Funds**

This program is administered by the Colorado Department of Transportation 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



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staff indicate that CDOT's apportionment for Fiscal Year 2008 is approximately \$1.6 million. For the Upper Front Range region, the amount of 5310 is \$164,000 in 2008 and over the planning horizon, a total of \$5.1 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 Federal Transit Administration (FTA) is charged with distributing federal funding for "purposes of mass transportation."

The program is administered by the Colorado Department of Transportation. 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 the Department of Transportation 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 Upper Front Range region for Fiscal Year 2008 is \$631,000. The amount of 5311 funding over the planning horizon (2008-2035) is estimated at \$20 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 Bill 1 be set aside for transit-related capital purposes. The Colorado Transportation Commission utilized a 10% for Transit Task Force to define the project criteria and selection process. Funds under this legislation are available in 2007.



## 2035 TRANSIT VISION

Each provider in the Upper Front Range 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 \$88.5 million dollars as presented in **Table 20**. This total includes operational and capital costs.

**Table 20. Transit Vision Plan**

<b>Operating</b>	<b>Amount</b>
Continue Existing Operations	\$44,076,947
New Service/Expand Service	\$32,377,100
Subtotal	\$76,454,047
<b>Capital</b>	
New/Replace Vehicles	\$9,388,234
Facilities/Equipment	\$2,654,267
Subtotal	\$12,042,502
<b>Grand Total</b>	<b>\$88,496,548</b>

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.



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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.



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**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 groups to meet and discuss the future of the airport. CDOT-Aeronautics 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 21** provides the Vision Plan cost estimates for the needed improvements at the five airports in the Upper Front Range over the time period from 2008 to 2035. The total vision cost for aviation in the region is approximately \$67.5 million.

**Table 21. Aviation Vision Plan**

<b>Airport</b>	<b>Vision Cost</b>
Brush Municipal	\$10,612,000
Erie Municipal	\$8,548,000
Fort Morgan Municipal	\$47,207,000
Platte Valley Airpark (Hudson)	\$674,000
Easton-Valley View (Greeley)	\$422,000
<b>Total</b>	<b>\$67,463,000</b>

### 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 Upper Front Range RPC supports the relocation of Class 1 rail operations to eastern Colorado.



## FISCALLY CONSTRAINED PLAN

Current estimates of funding availability (2035 Resource Allocation) anticipate that CDOT will not 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 cost 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) and Congestion Relief funding sources, which are designed specifically to engage local partners in the decision-making process for priorities among major projects. While RPP funds can be used for any projects on the state highway system, the Congestion Relief funds are limited to those projects that can measurably relieve congestion on state highways with an existing volume to capacity ratio greater than or equal to 0.85. The Upper Front Range is expected to receive an estimated \$40.2M of RPP funds and \$3.74M of Congestion Relief funds between the years 2008 and 2035, for a total of \$43.94M.

Although the focus of this Fiscally Constrained Plan is RPP and Congestion Relief funding, it is important to note that CDOT has various programs that fund transportation improvements including Strategic Projects, System Quality (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 and Congestion Relief funding sources. CDOT continues to fund a wide range of transportation improvements throughout the state, and throughout the TPR, in addition to those that are funded through RPP and Congestion Relief.

The CDOT program funds (including RPP and Congestion Relief) are allocated to the six CDOT Engineering Regions. The Upper Front Range is one of four TPRs in CDOT Region 4. In addition to the UFR, Region 4 includes the North Front Range MPO and portions of the Eastern TPR and Denver Regional

Council of Governments (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 22** shows CDOT Region 4's control totals for the various investment programs for 2008 through 2035.

**Table 22. 2008 - 2035 Resource Allocation**

Program	Region 4 Funding (in millions)
Strategic Projects	\$875.2
System Quality	\$1,390.8
Mobility (includes Congestion Relief)	\$332.6
Safety	\$386.4
Program Delivery	\$149.5
Regional Priority Program	\$101.8
Earmarks FY2008 and FY2009	\$5.8
<b>Total</b>	<b>\$3,242.2</b>



## 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) and Congestion Relief (CR), which are currently available funding sources, and 2) Unprogrammed Strategic Projects (SP), which represents future funds that may be available when the current Strategic Projects Program is complete. The RPC has determined the percentage allocation of funding to the improvement pools, transit, and the corridors, as shown in **Table 23**.

Of the \$43.94M in RPP and Congestion Relief funds, 1% has been allocated to transit, and a total of 42.7% has been allocated to the four improvement pools. Forty-five percent has been allocated to the high priority corridors. The remaining 11.3% has been allocated to the medium priority corridors, although this portion could also be used for high priority corridors. The Unprogrammed Strategic Project funding has been allocated to the high priority corridors as a placeholder until the next set of strategic projects has been established. 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. As described in the transit fiscally constrained plan, an estimated \$53.47M is expected from transit funding sources. With 1% of the available RPP funding allocated to transit (\$0.44M), the total available funding for transit is estimated at \$53.91M in **Table 23**.



**Upper Front Range  
2035 Regional Transportation Plan**

**Table 23. Fiscally Constrained Plan**

Priority	Corridor	Description	RPP and CR %	SP %	2035 Constrained Total (millions)		
					Highway	Transit	Aviation
High (Pools)	Region	Local Transit Service	1%		\$53.91 <sup>1</sup>		\$53.91
	Region	Intersection Improvement Pool	20%				\$8.79
	Region	Bridge Rehabilitation Pool	12.1%				\$5.32
	Region	Traffic/Safety Management Pool	10%				\$4.39
	Region	Six-year Scoping Pool	0.6%				\$0.28
High	5	I-25 Front Range	45.0%	100%	\$19.78	\$6.00	\$25.78
	8	US 34 Big Thompson					
	14	SH 66					
	16	I-76, Denver East					
Medium	17	US 85 Urban					
	2	SH 7 Mountain	11.3% <sup>2</sup>		\$4.94 <sup>2</sup>		\$16.94
	3	SH 14 Mountain					
	4	SH 14 Plains					
	6	I-25 North					
	9	US 34 Plains					
	10	US 34 Northeastern Plains					
	11	US 36 Mountain				\$0.50	
	12	SH 52 Western					
	15	SH 71 Northeastern Plains				\$11.50	
Low	18	US 85 Rural					
	20	US 287 Rural					
	1	SH 1					\$0
	7	US 34 RMNP/Mountain					
<b>Total</b>	13	SH 52 Middle					
	19	SH 144 Plains					
<b>Total</b>			<b>100%</b>	<b>100%</b>	<b>\$43.50</b>	<b>\$53.91</b>	<b>\$115.41</b>

<sup>1</sup> Transit Funding includes \$0.44M in RPP and \$53.47M in other transit funding

<sup>2</sup> Funding allocated to Medium Priority Corridors can be used for either Medium or High Priority Corridors



## Transit

The Long-Range Fiscally-Constrained Transit Plan is presented in **Table 24**. The Fiscally-Constrained Plan presents the long-range 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. Additionally, the local funding amounts have been held constant. The constrained operating plan has an estimated cost of approximately \$44.1 million, with a capital cost of approximately \$9.4 million. Total constrained FTA funding is approximately \$9.7 million. The remainder of the cost will be from local funding. This amount is estimated at \$43.76 million.

**Table 24. Fiscally Constrained Transit Plan**

Operating	Amount
Existing Operational Costs	\$44,076,947
New Services	\$0
Regional Service	\$0
<b>Subtotal</b>	<b>\$44,076,947</b>
Capital	
Replacement Vehicles	\$9,388,234
Facilities/Equipment	\$0
<b>Subtotal</b>	<b>\$9,388,234</b>
<b>Grand Total</b>	<b>\$53,465,181</b>
Other Local Funding	\$29,899,481
Local Match Funding	\$13,860,510
FTA Grants	\$9,705,190
<b>Total Funding</b>	<b>\$53,465,181</b>

*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 dollars other than entitlement and any money the state might grant. The forecasts were derived from any projects in their six year CIP, any major projects anticipated outside the six year CIP, as well as looking at historic funding levels at each 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. As shown in **Table 25**, an estimated \$18 million will be available for the Upper Front Range airports from 2008 to 2035. By no means do these constrained costs guarantee that each airport will receive this amount through 2035.

**Table 25. Fiscally Constrained Aviation Plan**

Airport	Constrained Cost
Brush Municipal	\$500,000
Erie Municipal	\$6,000,000
Fort Morgan Municipal	\$11,500,000
<b>Total</b>	<b>\$18,000,000</b>



## 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 RPC feels 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 UFR’s Midterm Implementation Strategy consists of select strategies from the corridor visions of the five High Priority Corridors. These strategies should be the focus of transportation investments over the next ten years.

### Strategies to Increase Transportation Revenue

The RPC 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 RPC adopts the following Midterm Implementation Strategy Policies:

- ▶ The RPC encourages local governments (counties and municipalities) and state and federal land management agencies to work directly with CDOT to develop local comprehensive plans (including transportation 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.
- ▶ The RPC supports local initiatives to create Special Improvement Districts and Regional Transportation Authorities (RTA) to contribute local funds to transportation projects on state facilities. Projects supported by such initiatives shall receive priority treatment in the planning and programming process.
- ▶ The RPC supports state initiatives to increase state and federal funding for transportation.
- ▶ The RPC supports the pursuit of non-traditional federal funding sources for transportation.
- ▶ The RPC supports continued use of Energy Impact Funds for transportation improvements to facilities affected by energy development.



## High Priority Corridor Strategies

The Upper Front Range RPC has established three pools (intersection improvement pool, bridge rehabilitation pool, and traffic/safety management pool) in order to address immediate, typically low-cost needs in the region regardless of the corridor on which the need exists. With approximately 42% of the available funding allocated to these pools, these pools serve as a strategy to implement the immediate needs of the region.

The UFR RPC has established five corridors as High Priority Corridors: I-25 Front Range, US 34 Big Thompson, SH 66, I-76, and US 85 Urban. The TPR's midterm implementation 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
- ▶ Consolidate and limit access points and develop access management plans
- ▶ Construct intersection improvements such as auxiliary lanes and traffic signals
- ▶ Implement and promote TDM such as carpooling, vanpooling, telecommuting and flexible work hours
- ▶ Improve ITS incident response, traveler information and traffic management

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 #5: I-25 FRONT RANGE**

- ▶ Implement and promote appropriate TDM mechanisms such as carpooling, vanpooling, telecommuting, and flexible work hours
- ▶ Promote ITS strategies, such as variable message signs, incident response, traveler information and traffic management
- ▶ Improve mobility by constructing interchange and intersection improvements, such as traffic signals and auxiliary lanes at ramp terminal intersections
- ▶ Improve and maintain the system of local roads parallel to I-25
- ▶ Ensure consistency with *North I-25 EIS*



### **CORRIDOR #8: US 34 BIG THOMPSON**

- ▶ Add roadway pullouts for breakdowns, buses and slow vehicles
- ▶ Improve ITS incident response, traveler information and traffic management
- ▶ Maintain infrastructure by adding surface treatments/overlays and repairing/replacing bridges
- ▶ Construct auxiliary lanes (passing turn, accel/decel)

### **CORRIDOR #14: SH 66**

- ▶ Consolidate and limit access points and develop access management plans
- ▶ Improve ITS incident response, traveler information (including variable message signs) and traffic management
- ▶ Improve safety by improving geometrics, improving hotspots and improving railroad crossing devices
- ▶ Maintain infrastructure by adding surface treatments/overlays and repairing or replacing bridges
- ▶ Construct intersection improvements including constructing auxiliary lanes (passing, turn, accel/decel)

### **CORRIDOR #16: I-76**

- ▶ Improve geometrics (flatten slopes and curves, improve visibility/sight lines)
- ▶ Construct interchange improvements
- ▶ Improve safety by adding guardrails and improving hot spots
- ▶ Maintain infrastructure by adding surface treatments/overlays, reconstructing the roadway, and repairing or replacing bridges

### **CORRIDOR #17: US 85 URBAN**

- ▶ Implement recommendations from *US 85 Access Control Plan*
- ▶ Add and maintain new interchanges and improve existing intersections
- ▶ Promote carpooling, vanpooling, telecommuting and flexible work hours
- ▶ Improve ITS incident response, traveler information and traffic management
- ▶ Add guardrails (cable rail)
- ▶ Maintain infrastructure by adding surface treatments/overlays and repairing or replacing bridges





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