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This document serves the Federal Requirements for the
Congestion Management Process for the
North Front Range Metropolitan Planning Organization

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INTRODUCTION

Federal requirements state that regions with more than 200,000 people, known as Transportation Management Areas (TMAs), must maintain a Congestion Management Process (CMP) and use it to make informed transportation planning decisions. The Federal Highway Administration (FHWA) defines a CMP as a "systematic transparent process for managing congestion that provides information on transportation system performance and on alternative strategies for alleviating congestion and enhancing mobility." The purpose of the CMP is to define congested corridors in the region, develop strategies to mitigate the congestion, and provide a way to monitor the effectiveness of the strategies. The CMP is also intended to use performance measures to direct funding toward projects and strategies that are most effective for addressing congestion. This document serves the Federal reporting requirements for the Congestion Management Process for the North Front Range Metropolitan Planning Organization (NFRMPO).

The NFRMPO completed an update to the region's Congestion Management Process which was adopted by the Planning Council in September 2010. One key change in the CMP is an increased focus on data collection to measure and monitor the transportation system's performance rather than relying heavily on the regional travel demand model for performance measures. In addition to meeting the Federal CMP reporting requirements, the NFRMPO has a desire to use this Transportation System Performance report as a mechanism to provide regional benchmarking to inform transportation investment decisions and to paint a clear picture of the region's transportation system and needs. This report serves to document the system-wide performance measures related to congestion; it is the region's first Transportation System Performance report and sets a benchmark for future annual reports.

Purpose of Annual Transportation System Performance Report

This 2010 Transportation System Performance report has been structured to focus on reporting the system-wide and project-level data collection and performance measures outlined in the 2010 NFRMPO CMP. Since this is the initial year of data collection, in many cases this report serves only as a baseline for the system-wide performance measures. *In subsequent years, the Transportation System Performance report will document and analyze the trends for each of the performance measures.* Where historical and comparable data were available, this report provides a comparison of system performance over time.

As recommended in the 2010 NFRMPO CMP, in the 2010/2011 Call for Projects (for Surface Transportation Program Metropolitan (STP-Metro), Transportation Enhancement, and Congestion Mitigation and Air Quality Improvement Program (CMAQ) funding), project applicants were required to commit to completing before and after data collection. *Although these data are not yet available, the project-level data and performance measures will be included in future Transportation System Performance reports.*

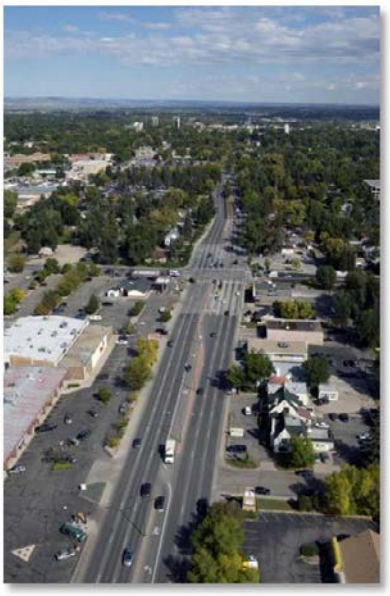
It is important not only to document the system-wide and project-level performance measures, but also to evaluate the trends in the performance measures over time to identify and analyze the factors affecting congestion-related performance measures. This Transportation System Performance report is intended to benefit the region by:

- Providing measurements of how the region's towns, cities, and counties are doing in terms of managing congestion on an annual basis;
- Guiding project accountability by requiring before and after data collection for all projects funded through the MPO;
- Providing tools and data to inform decisions on how to spend available transportation funding;
- Providing a basis for pursuing additional transportation funding by "painting" a clear picture of the region's transportation needs; and
- Providing supporting data to the Chambers of Commerce and Economic Development Corporations responsible for "selling" the region's transportation system as beneficial for prospective businesses and future economic investment.

Structure of Congestion Management Process

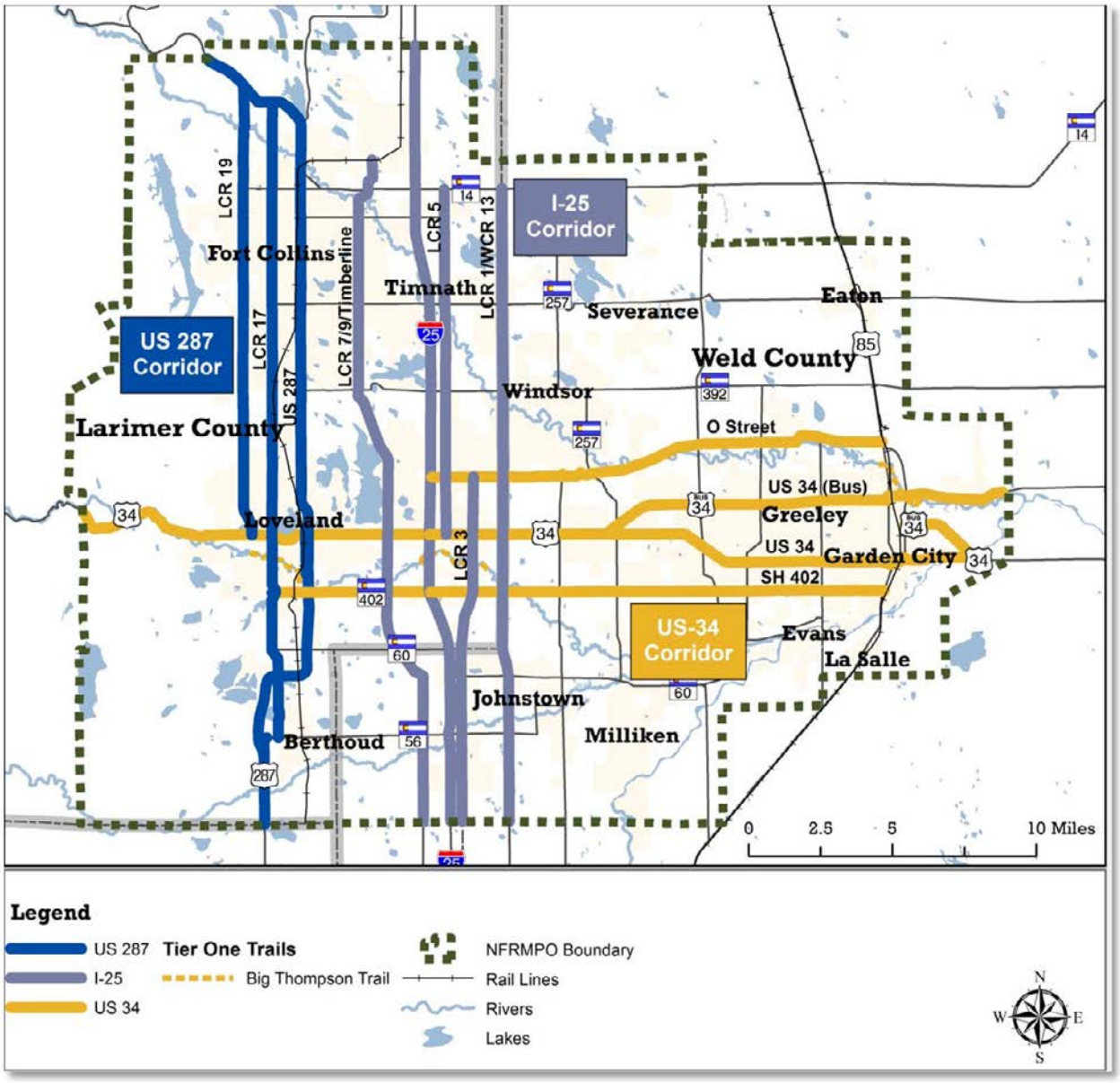
During the development of the 2035 Regional Transportation Plan (RTP) and CMP in 2007, the Technical Advisory Committee (TAC) and NFRMPO Planning Council identified Tier One of the Regionally Significant Corridors (RSCs) to be the focus of the Congestion Management Process in the North Front Range. Therefore the data collected for this Transportation System Performance report is heavily focused on the Tier One corridors, which include I-25, US 287, and US 34 and their parallel facilities, as shown on **Figure 1**.

The structure of the MPO's Congestion Management Process is depicted on **Figure 2**. The green boxes represent elements of the CMP that establish the state of the region's congestion and what is important to the region in terms of managing or mitigating the congestion.



US 287 near Prospect Road in Fort Collins.

Figure 1. Tier One Corridors

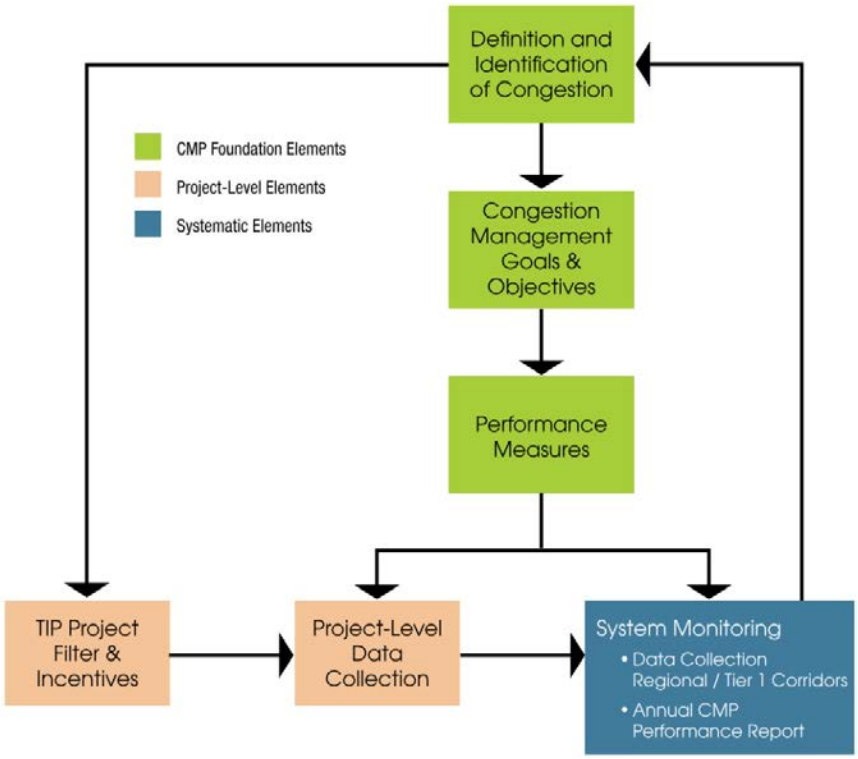


US 34 east of I-25 looking west.

I-25 crossing the Cache la Poudre River.

The beige boxes represent project-level components of the CMP; the CMP serves as both a filter and an incentive in selecting projects for the Transportation Improvement Program (TIP), and all projects that receive funding through the MPO are required to collect before and after data. Finally, the blue colored box represents the systemic component of the CMP; regional and corridor-level data are to be collected on an annual basis to compare the state of the region in terms of congestion levels on a year to year basis. Both the system monitoring and the project-level data collection are documented and analyzed in this Transportation System Performance report.

Figure 2. CMP Structure



DATA COLLECTION

The data collected for this Transportation System Performance Report are primarily centered on the Tier One corridors since they are the focus of the CMP; however, some of the performance measures pertain to the region as a whole, in which case region-wide data have been collected. Much of the data needed to compile this report is regularly collected by the Colorado Department of Transportation (CDOT), the NFRMPO, the cities and counties, and the transit providers in the region. To supplement the available data, the MPO conducted travel time surveys and had automobile occupancy counts recorded along the three Tier One corridors. Summaries of the data collected and used in this document are provided in the Appendices.

Travel Time Surveys

Travel time surveys were completed for the Tier One corridors. The travel time runs were completed only for the primary facility (i.e., I-25, US 287, and US 34) and not for the parallel routes. The surveys were completed during March through May 2011, by NFRMPO staff during the morning, noon, and afternoon peak periods. The survey involved driving the length of each facility within the MPO boundary in each direction and recording the travel time between major intersections along the corridor, using the "floating car" methodology in which the test vehicle passes as many vehicles as pass the test vehicle. In addition to recording travel time along each segment, any intersection-related delays (stopped delays) were recorded, including information about the delay length and location. The data collection included four runs in each direction for each facility during the morning and afternoon peak periods and two or three runs in each direction for each facility during the noon peak period. The results of the runs for each time period were then averaged to determine an average delay along each corridor during each study period. If a traffic crash or adverse weather occurred, the travel time run was not used.

A stopwatch was used to record the travel time between major intersections along each corridor.

Automobile Occupancy Counts

Automobile occupancy counts were recorded at two locations on each of the three primary facilities of the Tier One corridors to understand the level of carpooling over time. Each travel lane was video recorded, and the number of persons per vehicle was counted. The counts were recorded during the morning, noon, and afternoon peak periods at the following locations:

- I-25 south of US 34
- I-25 south of SH 14
- US 34 between US 287 and I-25
- US 34 between US 34 Business and US 85

Video recordings of highway locations were used to count the number of passengers in each passing cars.

- US 287 south of US 34
- US 287 south of SH 14

SYSTEM PERFORMANCE MEASURES

The 2010 NFRMP CMP outlines a series of performance measures related to recurring and non-recurring congestion to be used to assess the extent of congestion, changes in levels of congestion over time, and to evaluate the effectiveness of congestion reduction and mobility enhancement strategies. The performance measures have been divided into five categories:

- Roadway
- Transportation Demand Management
- Transit
- Bicycle and Pedestrian
- Land Use

Access to alternative travel modes – like transit and bicycling – can help to offset roadway congestion.

Because this is the NFRMPO's first Transportation System Performance report based on a systematic data collection and compilation effort, in many cases the performance measures in the following sections provide only one year of data. *In subsequent Transportation System Performance reports, the measures will be compared over time to understand trends in the transportation system.*

Roadway

The roadway-based performance measures rely heavily on the daily traffic counts that CDOT maintains in their count database.

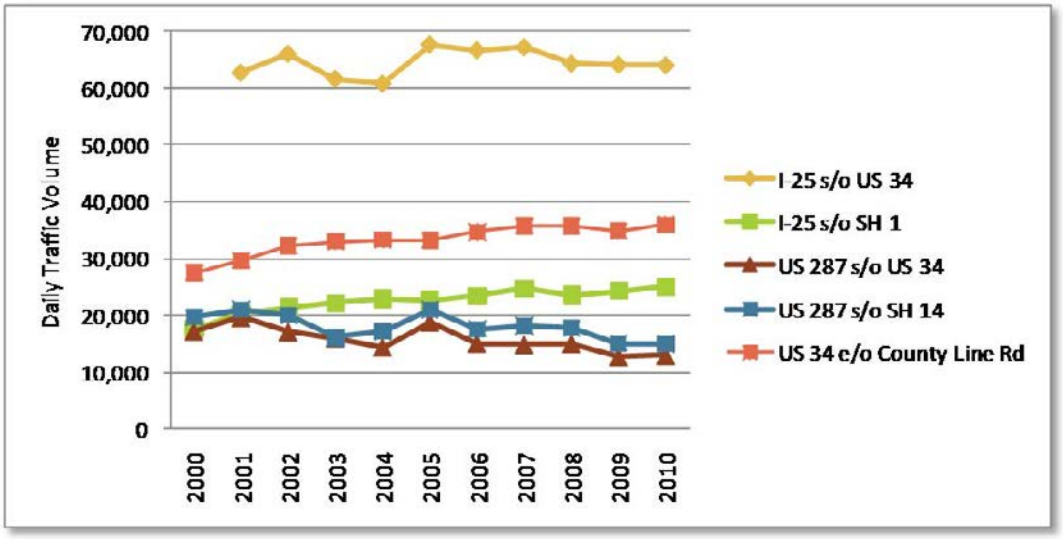
Traffic Volumes

The daily traffic volumes on the primary facility of the three Tier One corridors over the past decade are shown on **Figure 3**. From this graph, several observations can be made:

- I-25 south of US 34 carries nearly three times the volume of traffic as I-25 north of Fort Collins (south of SH 1)
- While the traffic on I-25 south of US 34 has fluctuated over the last decade, the 2010 traffic is only two percent higher than the traffic in 2001.
- Of the five count locations, I-25 south of SH 1 has experienced the greatest percentage increase in traffic (over 40 percent in 10 years).
- Traffic volumes on US 34 east of County Line Road (in Weld County) have steadily increased over the last decade (over 30 percent in 10 years).
- Traffic volumes at the two count locations on US 287 (south of US 34 in Loveland and south of SH 14 in Fort Collins) have fluctuated, with an overall decrease of

nearly 25 percent in 10 years. The US 287 counts demonstrate a distinct peak in 2005.

Figure 3. Historical Daily Traffic Volumes



Source: CDOT traffic volume database

Travel Time

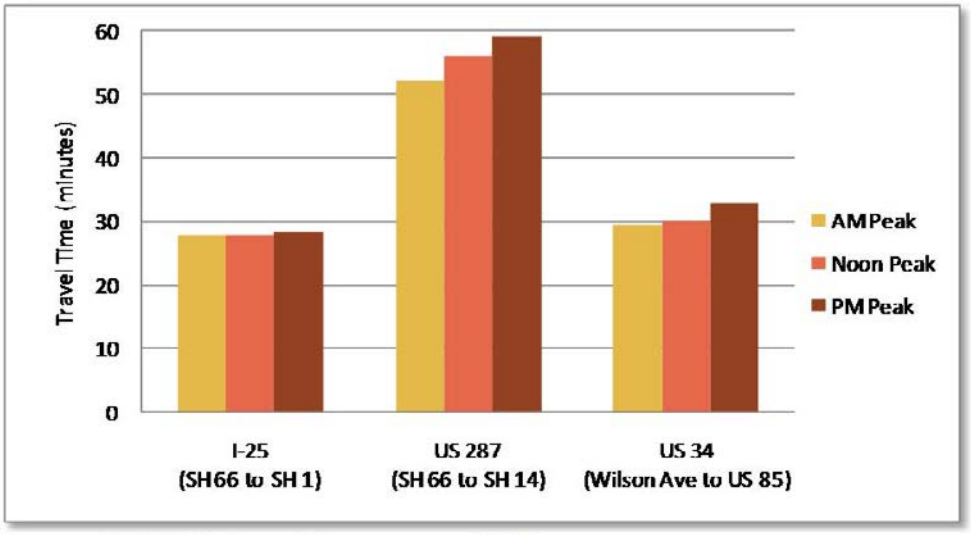
Travel time studies were conducted along the three primary facilities of the Tier One corridors, as described in the Data Collection section of this report. As illustrated on **Figure 4**, the average travel time along I-25 from SH 66 on the south end of the MPO to SH 1 on the north end of the MPO was measured to be approximately 28 minutes during all three peak periods of the day. These results show the travel times on I-25 to be consistent (and therefore predictable) during normal conditions.

The US 287 travel time survey results show more variability in the travel times between the different times of the day. While the average travel time from SH 66 to SH 14 on US 287 is approximately 52 minutes during the AM peak period, the average travel time during the PM peak period is approximately 59 minutes.

The travel time along the US 34 corridor from Wilson Avenue in Loveland to US 85 via the US 34 Bypass is approximately 30 minutes during the AM and noon peak periods, and approximately 33 minutes during the PM peak periods.

Eastbound US 34 approaching Greeley.

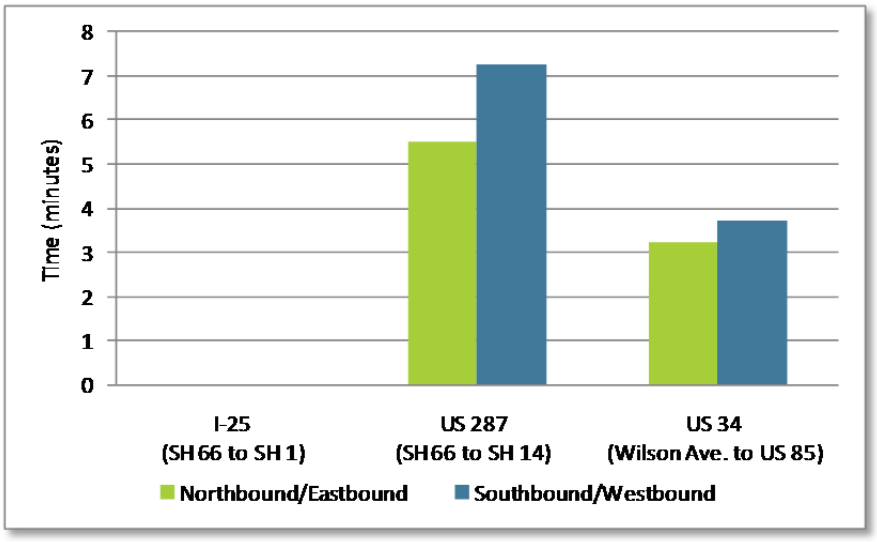
Figure 4. Average Travel Time



Source: NFRMPO travel time surveys, 2011

As a part of the travel time surveys completed in the spring of 2011, stopped delay was recorded. Stopped delay typically occurs at the approach to a signalized intersection or in severe congestion along a freeway; it represents the amount of time a driver can expect to be stopped in his vehicle while traveling the length of the corridor. As shown on **Figure 5**, no stopped delay was recorded on I-25. The stopped delay along US 287 was higher in the southbound direction, and the stopped delay was slightly higher in the westbound direction on US 34.

Figure 5. Average Total Stopped Delay



Source: NFRMPO travel time surveys, 2011

Using the travel time data, the actual speeds along the various segments of the three corridors (I-25, US 287 and US 34) were compared to the posted speed limits. **Figure 6** provides a comparison of the actual travel speeds with the posted speeds by direction of travel during the AM peak period. Along I-25, actual speeds in the morning tend to be within five mph of the posted speed. There are a few segments in the Fort Collins area where the actual speeds are notably slower than the posted speed. The majority of the US 287 corridor north of Berthoud through Loveland and Fort Collins has travel speeds that are between five and 15 mph slower than the posted speed. Along the US 34 corridor, actual speeds are generally within five mph of the posted speeds, with the exception of the segment just west of I-25 and segments through Greeley.

Figure 6. AM Peak Period Travel Speeds

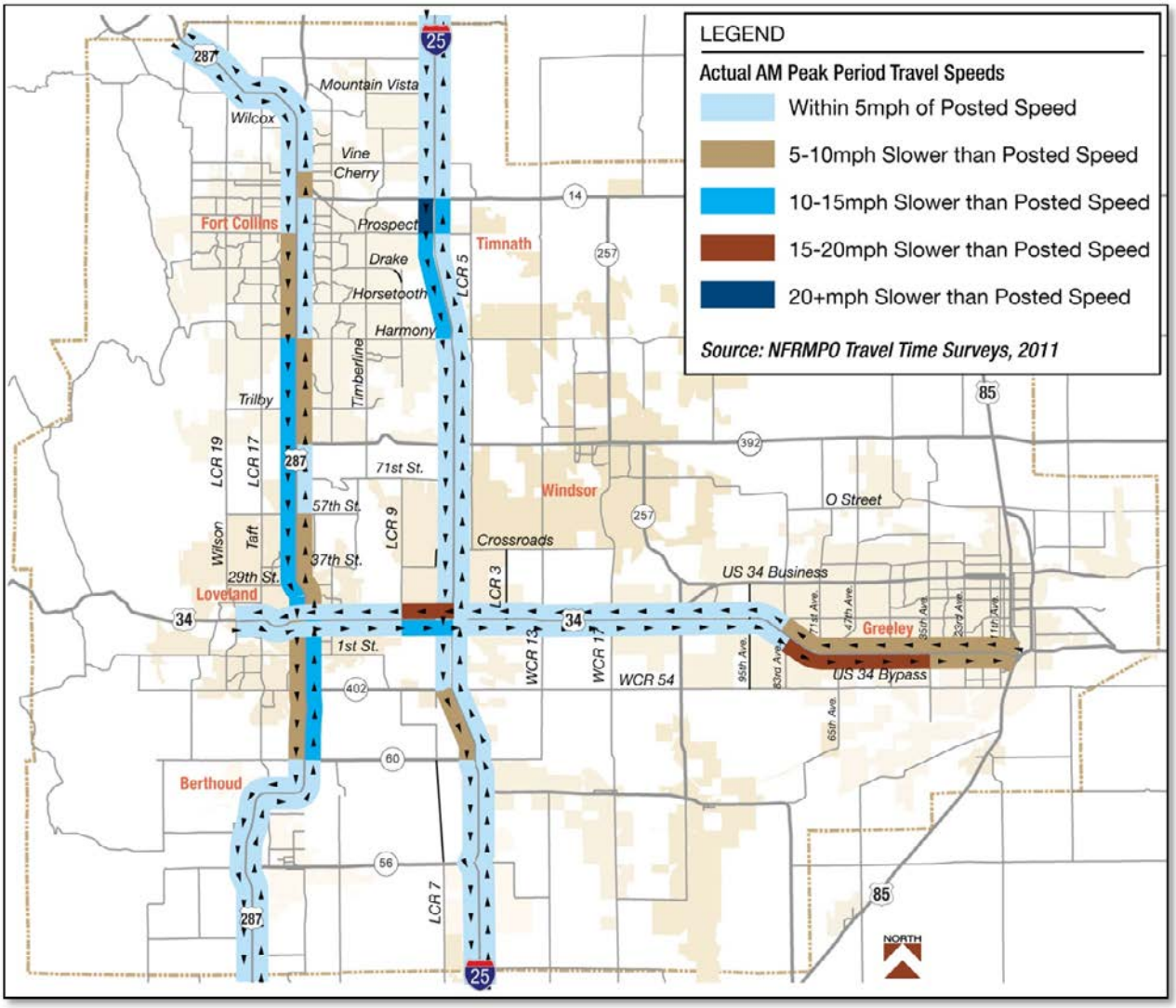
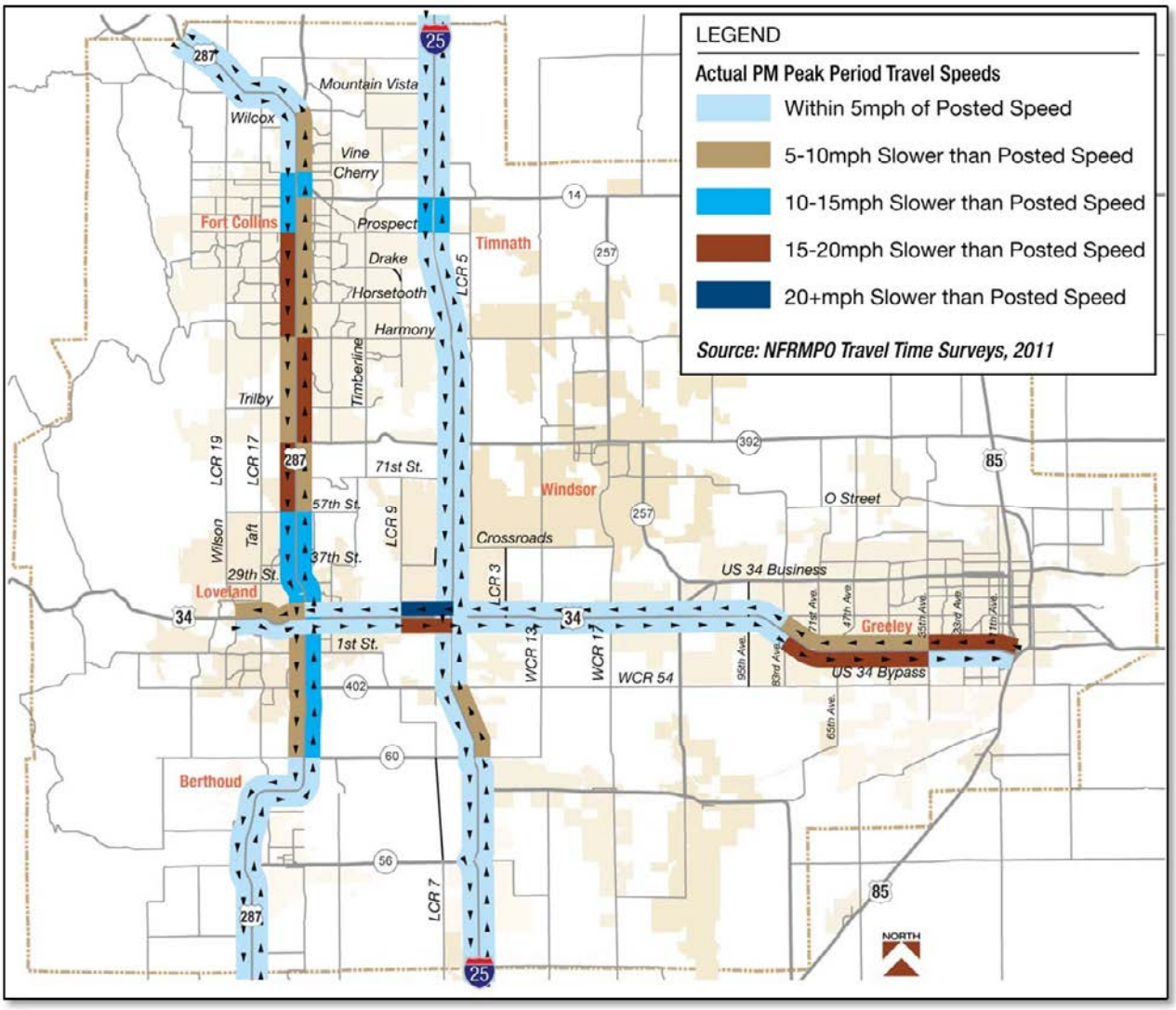


Figure 7 provides a comparison of the actual speeds during the PM peak periods with the posted speeds. The segments along the three corridors that operate slower than the posted speeds tend to be the same as during the AM peak period; however, the speeds are generally slower during the PM peak period.

Figure 7. PM Peak Period Travel Speeds



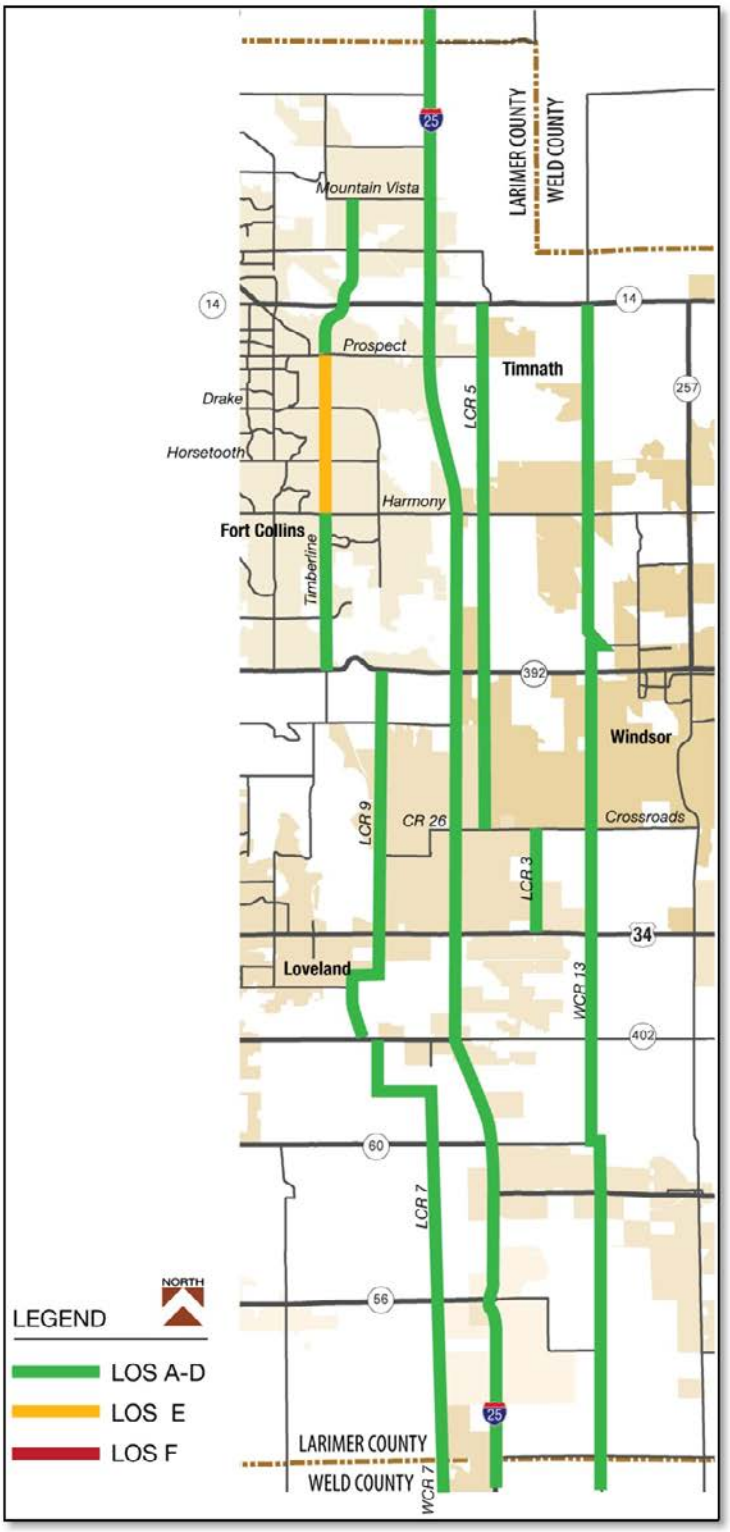
Levels of Service

A system wide measure which is a good indicator of the impacts of growth on transportation is level of service (LOS), a qualitative measure which describes operating conditions, or traffic flow rates. LOS A represents a free flow condition, and LOS F represents a breakdown of traffic flow with excessive congestion and delay. Existing daily levels of service have been calculated on all Tier One corridors based on the daily traffic volumes and planning level roadway capacities. Congestion, as defined in the Congestion Management Process, is LOS E or F, with E nearing capacity and F over capacity.

Southbound I-25 approaching the SH 392 interchange in Windsor.

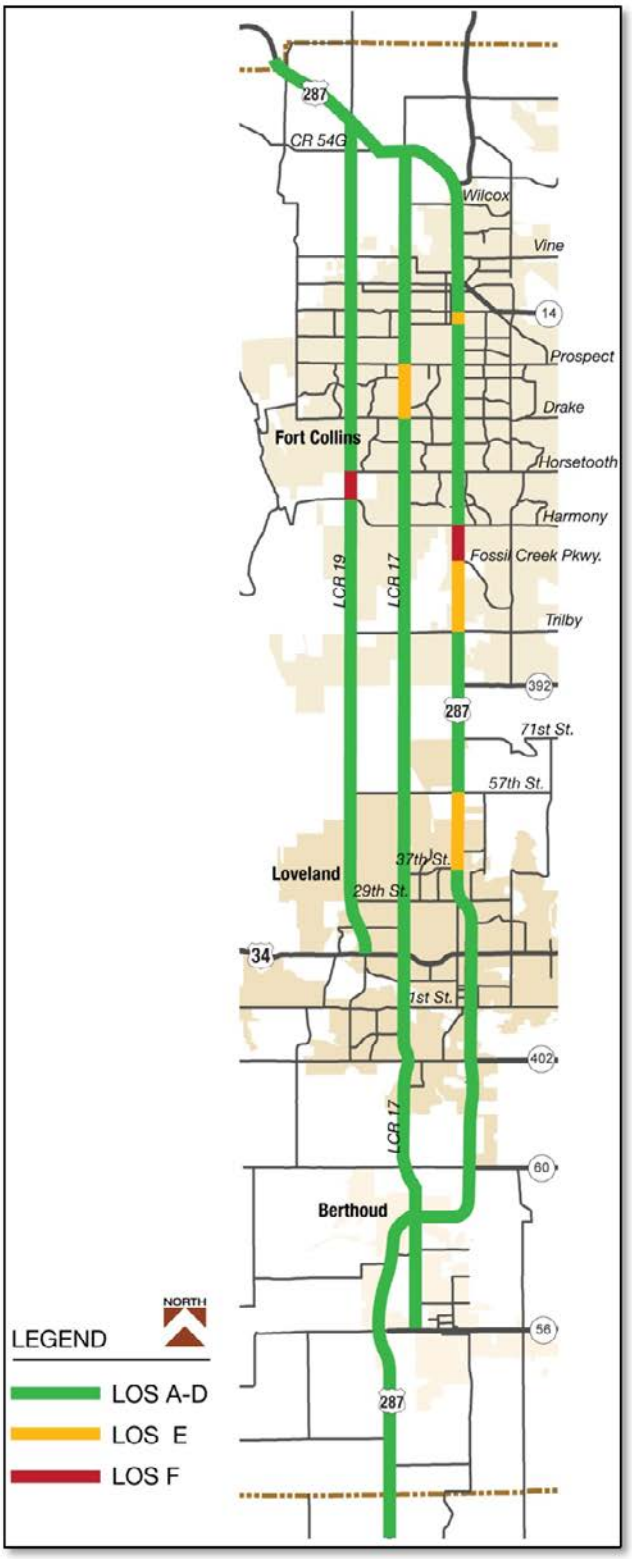
This LOS analysis is based on 2010 daily traffic volumes and does not explicitly account for intersection operations or peak period delays. However, it does provide a straightforward means of comparing the daily volumes on various segments of the Tier One corridors to the capacities of those facilities, and will serve as a comparison of the daily LOS over time. The LOS ranges on the I-25, US 287, and US 34 corridors are depicted on **Figures 8, 9, and 10**, respectively.

Figure 8. I-25 Corridor Levels of Service (Daily)



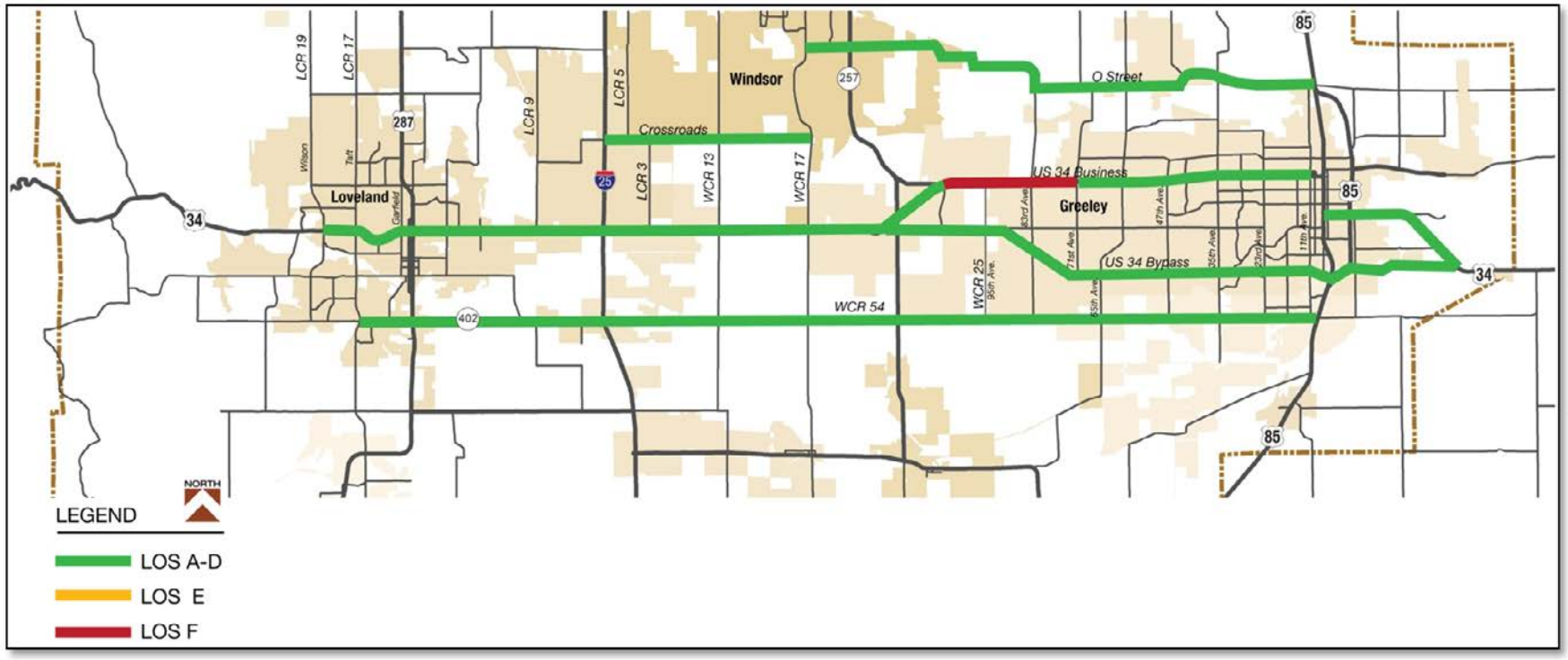
Source: CDOT traffic volume database (2010), planning level capacities

Figure 9. US 287 Corridor Levels of Service (Daily)



Source: CDOT traffic volume database (2010), planning level capacities

Figure 10. US 34 Corridor Levels of Service (Daily)



Source: CDOT traffic volume database (2010), planning level capacities

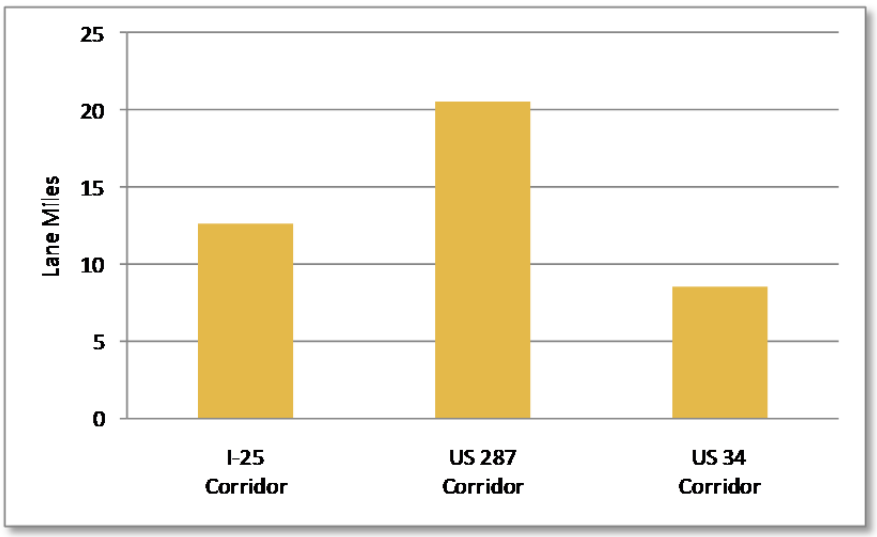
Lane Miles of Congestion

The number of congested roadway lane miles (LOS E or F) on a daily basis for each of the three Tier One corridors is shown on **Figure 11**. The congested lane miles correspond to the yellow (LOS E) and red (LOS F) segments depicted on **Figures 8 through 10**.

Peak Hour congestion on US 34 Business through

The lane miles of congestion are based on daily traffic volumes and planning-level capacities and do not explicitly account for intersection operations or peak period delays. The measure provides a straightforward means of comparing the congestion along the corridors (and over time) at a planning level.

Figure 11. Lane Miles of Congestion (LOS E or F)



Source: CDOT traffic volume database (2010), planning level capacities

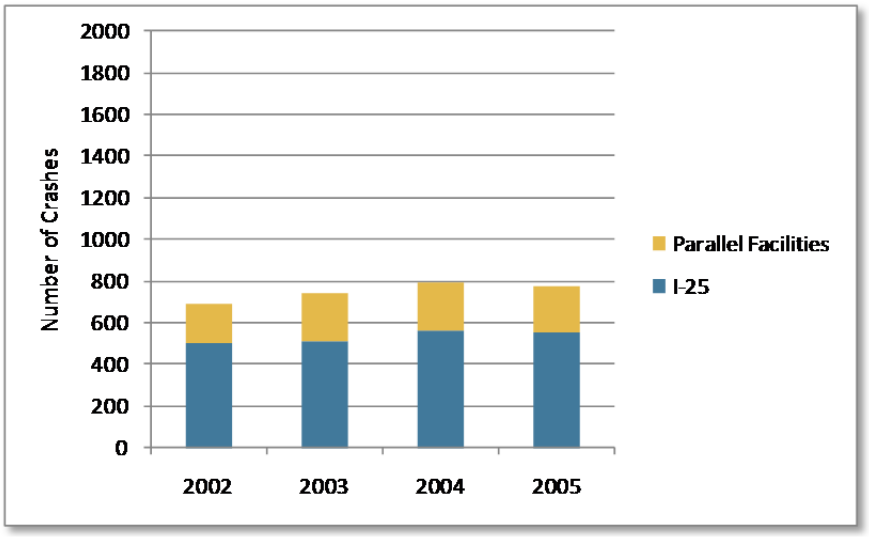
Number of Crashes

The number of crashes is a surrogate measure for non-recurring congestion; crashes along a corridor result in unexpected delays and unreliable travel times. Crash data for the Tier One corridors, including the parallel facilities, were obtained from CDOT's crash database. Although data as recent as 2009 are available for the state highway system, the off-system crash database lags behind, and the most recent full year of data available is 2005. According to CDOT, the data post processing for off-highway system crashes typically lags three to four years behind the state highway system crash database. **Figures 12, 13, and 14** show the annual number of crashes (as a surrogate for frequency of non-recurring congestion) on the I-25, US 287, and US 34 corridors,

respectively for the time period from 2002 through 2005. The three graphs each use the same scale on the vertical axis to provide a visual comparison between the three corridors.

Crashes on I-25 within the MPO boundary have increased approximately 10 percent over the four year time period, with a slightly higher rate of increase (15 percent) on the parallel facilities.

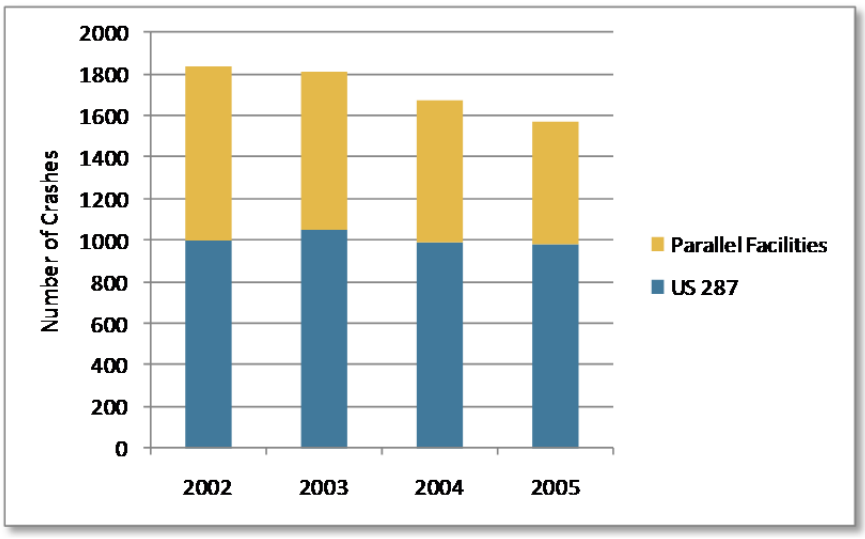
Figure 12. I-25 Corridor Crashes



Source: CDOT crash database

The number of crashes on US 287 remained consistent over the four year time period; however, the number of crashes on the parallel facilities (LCR 17 and LCR 19) decreased substantially, 30 percent over four years.

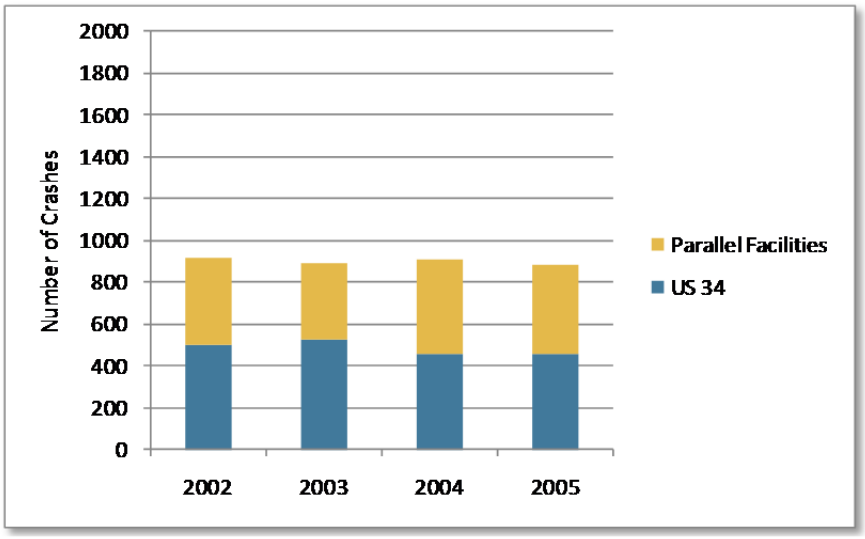
Figure 13. US 287 Corridor Crashes



Source: CDOT crash database

The number of crashes on US 34 and its parallel facilities remained relatively consistent from year to year over the four year period.

Figure 14. US 34 Corridor Crashes



Source: CDOT crash database

Transportation Demand Management

Transportation Demand Management (TDM) includes actions that improve the efficiency of the transportation system by altering the demand (e.g., traveler behavior) rather than increasing the supply (e.g., roadway capacity). The NFRMPO, the MPO's member governments, and employers based in the region offer various TDM programs aimed at reducing single occupancy vehicle trips, encouraging off-peak travel, and reducing trip time or length. Ultimately, TDM programs can reduce congestion on the transportation system. *Future CMP Annual Transportation System Performance Reports will include TDM Employer survey results.*

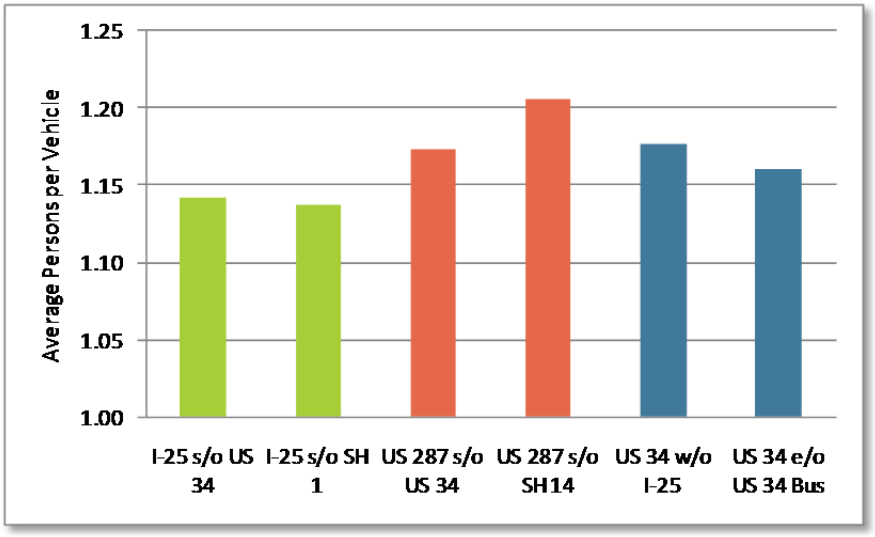
Ridesharing

As described in the Data Collection section, automobile occupancy counts were recorded at two locations along the three primary facilities of the Tier One corridors. The average number of persons per vehicle at each location is shown in **Figure 15**. These numbers represent an average occupancy during the AM, noon, and PM peak periods. At the count locations on I-25, nearly 88 percent of the vehicles were single occupancy vehicles (SOV), with 12 percent of the vehicles having one or more passengers. The SOV rate was approximately 84 percent at the US 287 count locations and 85 percent at the US 34 count locations.

Vehicles parked at the park-and-ride lot at I-25 and SH 402 in Loveland.

The *2010 Front Range Travel Counts: NFRMPO Household Survey* reports a region-wide ratio of SOV to shared ride trips (by automobile) to be approximately 3:1 for all trips. This ratio indicates a higher rate of ridesharing than the occupancy counts on the Tier One corridors, likely because people tend to travel together (i.e., share a ride) at a higher rate during off-peak times for non-commuting trip purposes.

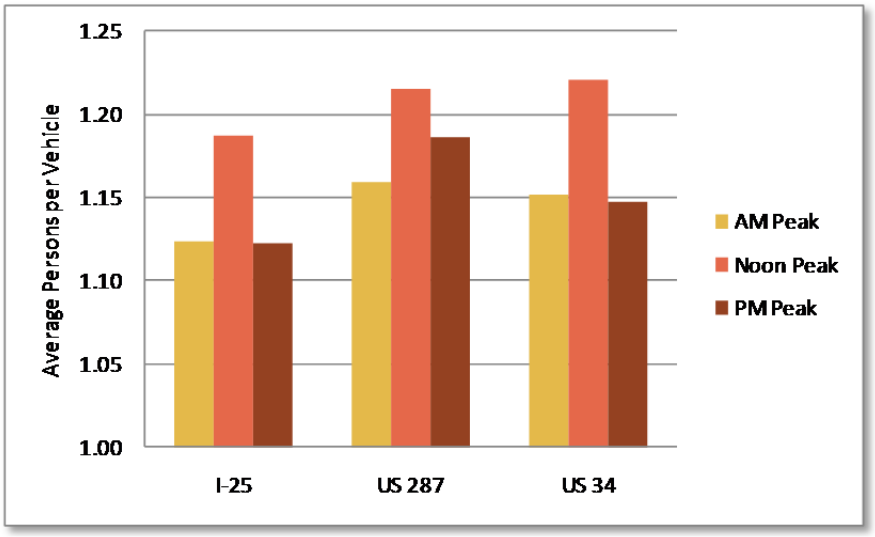
Figure 15. Average Auto Occupancy during Peak Periods



Source: Automobile Occupancy Counts, 2011

Figure 16 shows the automobile occupancy count results by time of day. As would be expected, the noon peak has a higher occupancy rate than the AM and PM peak periods.

Figure 16. Average Auto Occupancy by Time of Day

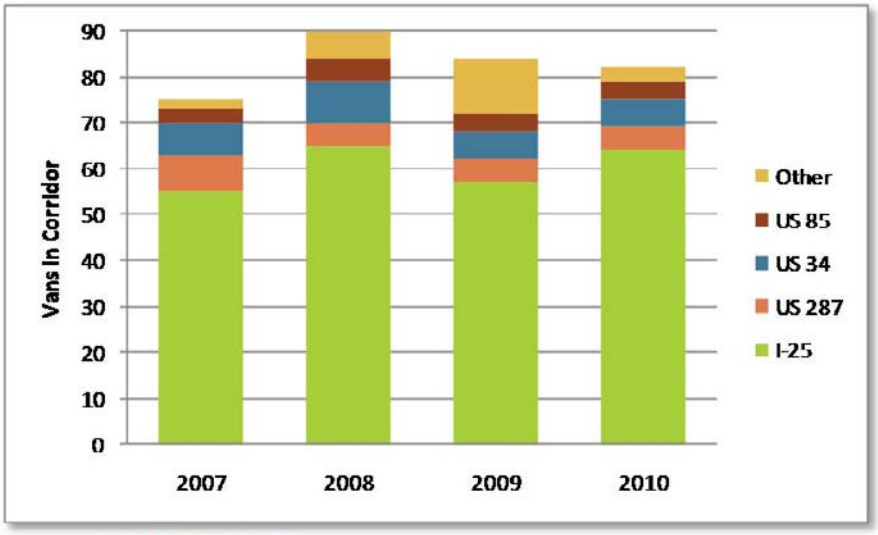


Source: Automobile Occupancy Counts, 2011

Vanpool Ridership

One of the NFRMPO's TDM programs is the VanGo™ vanpooling program, which includes over 80 vans that travel to various destinations within the region and between the NFRMPO and Denver region. At the end of 2010, there were 435 riders participating in the VanGo™ program, resulting in an estimated savings of over a million vehicle-miles of travel per month. As shown on **Figure 17**, the I-25 corridor carries the highest number of VanGo™ vans. The number of vans in the program has steadily increased since the program's inception in 2004, with a notable peak in 2008.

Figure 17. VanGo™ Routes

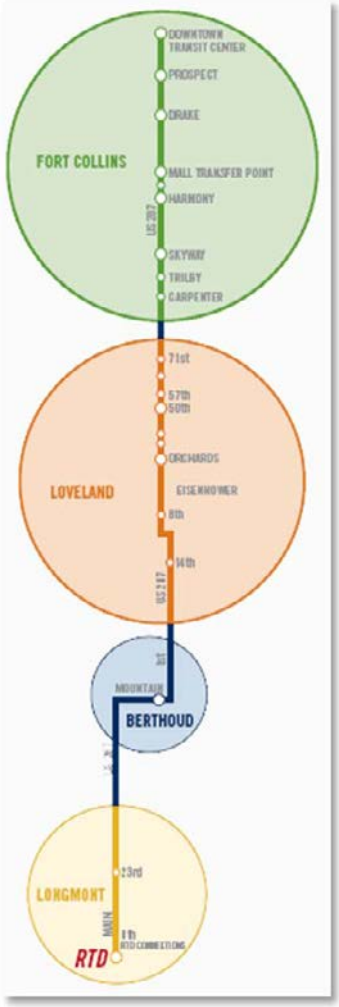


Source: NFRMPO VanGo program

Transit

There are currently three transit providers that operate publically-funded, fixed-route service in the NFR region. Transfort, the largest of the three transit providers, is operated by the City of Fort Collins. Greeley-Evans Transit (GET) is operated by the City of Greeley, and City of Loveland Transit (COLT) is operated by Loveland's Public Works Department. Additionally, there are two demand-responsive services in the region: Berthoud Area Transportation Services (BATS) and Senior Alternatives in Transportation (SAINT).

Transit riders boarding a COLT bus in Loveland.

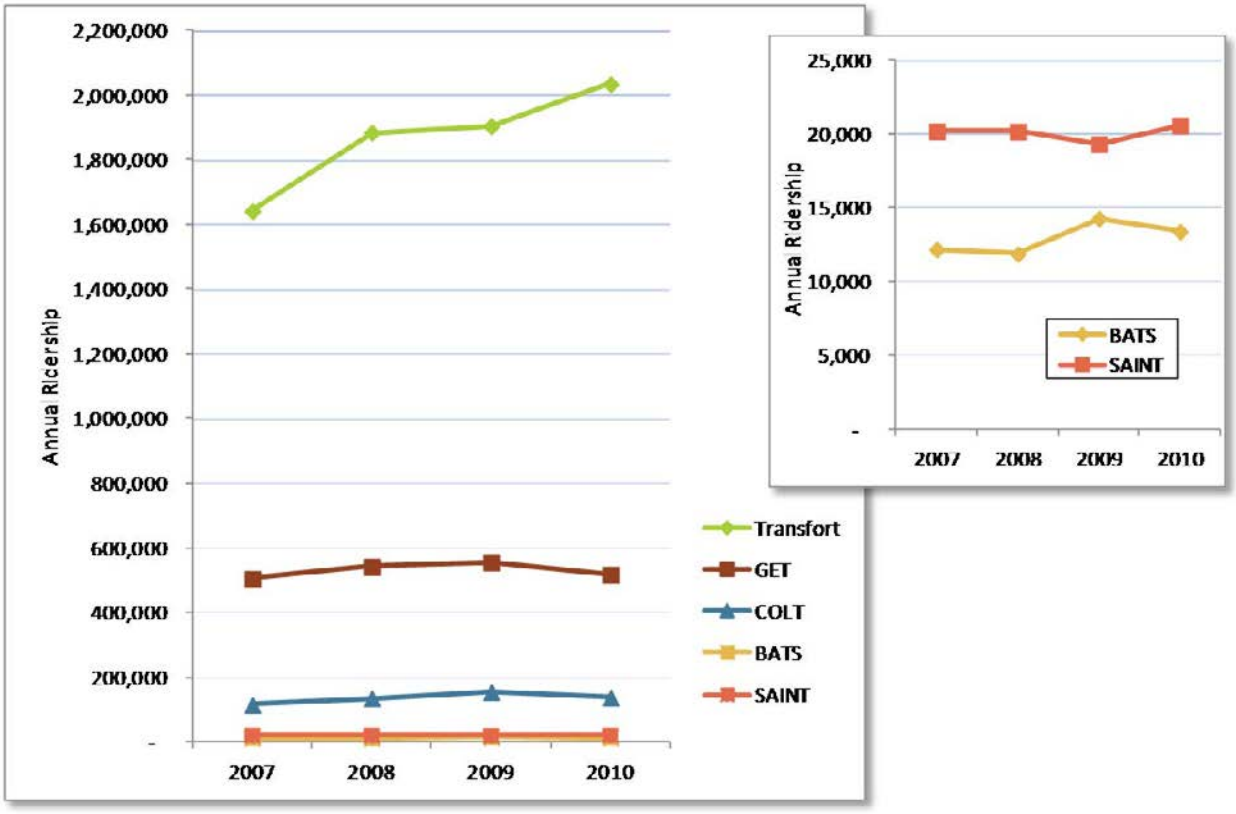


FLEX regional bus service connects northern Colorado to RTD service in the Denver area (source: FLEX website).

Transit Ridership

The number of passengers on a transit system over the course of a year is a common performance measure used to assess the productivity of a transit service. The annual ridership over the past four years for the three fixed-route transit services and the two demand responsive services in the region is provided on **Figure 18**. Between 2007 and 2009, the three fixed-route systems each experienced a steady growth in ridership. The GET and COLT systems both experienced a slight drop-off in 2010, while Transfort continued to grow in ridership in 2010. Approximately 2/3 of the ridership growth that Transfort experienced in 2010 was a result of the initiation of FLEX regional service which is operated by Transfort and extends between Fort Collins and Longmont by way of Loveland and Berthoud. BATS has maintained ridership in the range of 12,000 – 14,000 per year during this time period, and SAINT serves approximately 20,000 riders per year.

Figure 18. Annual Transit Ridership

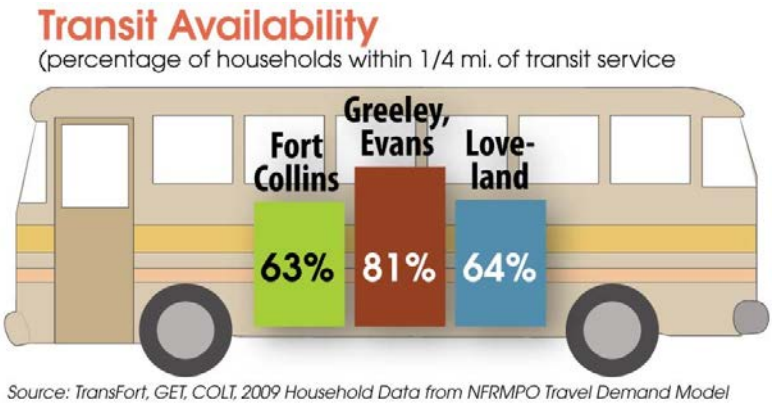


Source: Transfort, GET, COLT, BATS, SAINT

Access to Transit

A quarter of a mile is the typical distance a person is willing to walk to get to transit service. Using the NFRMPO's base year 2009 travel demand model land use data, it is estimated that 48 percent of the MPO's population and 61 percent of the MPO's jobs are within a quarter mile of the region's three fixed-route transit services (including the FLEX regional route operated by Transfort). **Figure 19** provides the transit availability by community, with the coverage representing the percent of households within ¼ mile of transit service. Greeley-Evans transit has the highest coverage with 81%, followed by Loveland and Fort Collins with 64% and 63%, respectively.

Figure 19. Access to Transit by Community



Source: TransFort, GET, COLT, 2009 Household Data from NFRMPO Travel Demand Model

Likewise, twelve percent of the MPO's population is within a three mile radius of the region's park and rides, all of which are located along the I-25 corridor. Three miles is the typical catchment area for park and ride facilities. Although these park and ride facilities are currently used only for carpooling, they may become stops for regional transit service in the future.

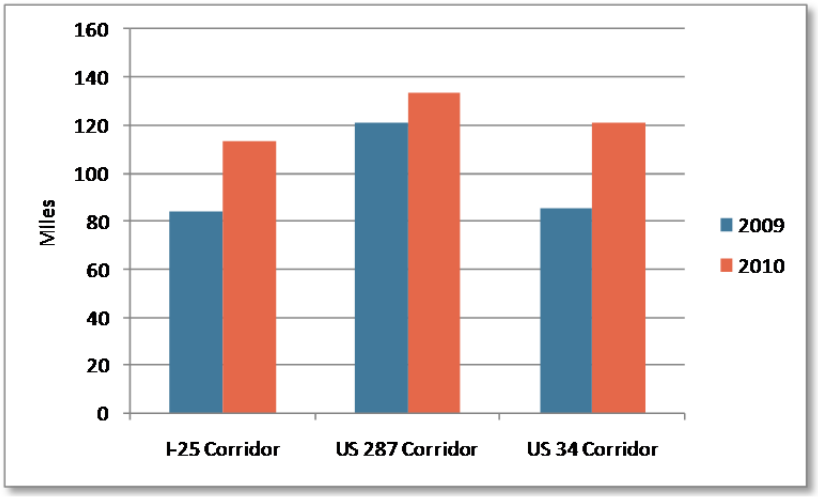
Bicycle and Pedestrian

Bicycle and Pedestrian Facilities

A pedestrian crossing US 287 in Fort Collins.

The availability of bicycle and pedestrian facilities provides an indication of the extent to which travelers are encouraged to choose an alternative mode of travel within the Tier One Corridors. Bicycle facilities maps from each of the member agencies were overlaid on the Tier One corridor maps, and the miles of bicycle facilities within ¼ mile of the Tier One corridors (including parallel roadway facilities) are shown in **Figure 20**. Bicycle facilities include multi-use paths, bike lanes, and designated bike routes. Combined, there has been a 25 percent increase in bicycle facility miles along the Tier One corridors from 2009 to 2010. This significant increase is a result of a combination of new multi-use path construction and designation of bike routes or bike lanes through signing and striping. *Region-wide data on pedestrian facilities are not available at this time.*

Figure 20. Miles of Bicycle Facilities with ¼ Mile Buffer of Tier One Corridors



Source: NFRMPO Bicycle Facilities GIS database

Bicycle and Pedestrian Volumes

CDOT has recently initiated a statewide bicycle and pedestrian count program, in which the NFRMPO will participate. The locations of the bicycle and pedestrian counts in the region are to be determined, and count data will be summarized in subsequent CMP Annual Transportation System Performance Reports. The NFRMPO will identify an optimal bicycle and pedestrian count location map in the NFRMPO Regional Bike Plan in 2012.

Land Use

Land use patterns and densities play a significant role in the demands on the transportation system. For this Transportation System Performance Report, two performance measures are used to measure (and compare over time) the efficiency of the region's land use as is relates to the demand for travel.

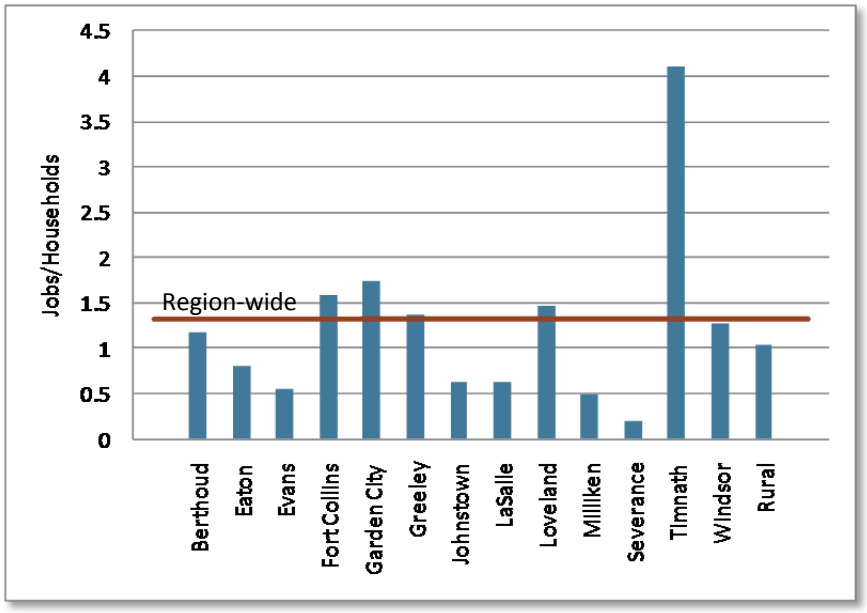
Jobs/Housing Balance

The availability of different land uses within a community or subarea can affect the way people travel. A balance of jobs and housing reduces the need for long distance (out of town or out of region) travel and ultimately can contribute to reduced levels of congestion. A general target standard for a jobs/housing ratio is 1.5, which implies a balance based on an average number of workers per household of approximately 1.5. (Source: *Jobs Housing Balance*, APA Planning Advisory Service Report Number 516, November 2003)

Figure 21 displays the ratio of jobs to households for each of the 13 municipalities in the NFRMPO; the rural category represents those areas which are unincorporated. The employment and household data are from the 2009 base year model. Region-wide, the jobs/housing ratio is estimated to be 1.33. The three major cities (Fort Collins,

Greeley and Loveland) have higher average jobs/housing ratios, which are generally in line with the target standard of 1.5. Most of the smaller communities have significantly fewer job opportunities in comparison to the number of households. There are two notable exceptions shown in Figure 21: Timnath and Garden City both have jobs/housing ratios which are higher than the region-wide average. Timnath's over 4:1 ratio is a result of the recent substantial commercial development near I-25 and Harmony Road. Region-wide, the average distance for work-related trips is 8.5 miles (source: *2010 Front Range Travel Counts: NFRMPO Household Survey*).

Figure 21. Jobs/Housing Ratios

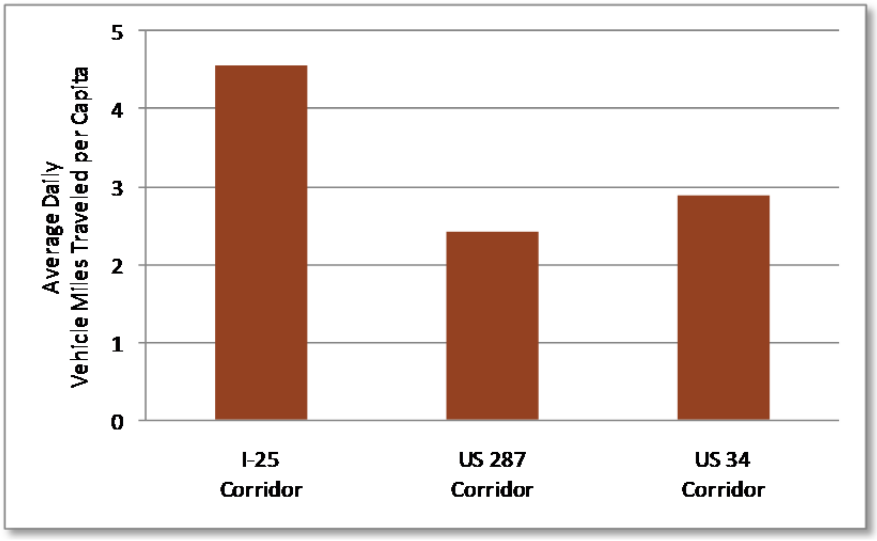


Source: NFRMPO travel demand model, base year 2009

VMT per Capita

On average, a person living in the NFRMPO travels approximately 4.5 miles on the I-25 corridor, 2.4 miles on the US 287 corridor, and 2.9 miles on the US 34 corridor on a daily basis. These numbers, as shown on **Figure 22**, are calculated by dividing the total vehicle-miles of travel (VMT) on each Tier One corridor (including the parallel facilities) by the region's 2009 population.

Figure 22. Average Daily Vehicle-Miles Traveled per Capita



Source: CDOT traffic volume database (2010), 2009 population from NFRMPO travel demand model

PROGRAMMED AND IMPLEMENTED PROJECTS

CMP Role in Project Selection

The NFRMPO's CMP serves an important role in the selection of projects for the Transportation Improvement Program (TIP). Federal regulations specify that all reasonable congestion management strategies must be evaluated and deemed ineffective or infeasible prior to considering a roadway capacity increase as a congestion management approach. Since the MPO's CMP is focused on the Tier One corridors, this requirement only applies to projects on the I-25, US 287, and US 34 corridors.

In support of the CMP, all projects (regardless of the corridor Tier) vying for federal or state funding through the NFRMPO must:

- Identify the primary objective(s) of the project
- Identify performance measures to assess how well the project meets its intended objective(s)
- Commit to before and after data collection in support of the stated performance measures.

These requirements were implemented in the FY12-15 call for projects. No data are currently available for the projects selected for funding. *In future Transportation System Performance reports, the project-level data collection and performance measures will be documented in this section.*

Programmed Projects

The projects listed in **Table 1** have been selected by the NFRMPO Planning Council for FY12-15 funding. All projects listed have met CMP conformity based on the requirements documented in the *2010 NFRMPO Congestion Management Process*. The parameters of the CMP as approved by the NFRMPO Planning Council are outlined in the 2035 Regional Transportation Plan Update.

Table 1. Programmed Projects for FY12-15

Project Title	Sponsor	Funding Awarded	Regionally Significant Corridor	CMP Strategy[1]
Tier One Corridor Projects				
Larimer CR 30 & LCR 11	Larimer County	STP-Metro	I-25	Geometric improvements
Larimer 17 (Shields): Vine to Willox	Larimer County	STP-Metro	US 287	Geometric improvements
US 287 (College): Conifer to Willox	Fort Collins	STP-Metro Enhancement	US 287	Access control
Shields St & Vine Dr (Ft Collins)	Fort Collins	STP-Metro	US 287	Geometric improvements
Poudre River Trailhead at Larimer 17	Larimer County	Enhancement	US 287	Bike/ped amenities
Transfort CNG Buses (Fort Collins)	Fort Collins	CMAQ	US 287 (and others)	Transit fleet
Ft Collins Traffic Signal Sys Software	Fort Collins	CMAQ	US 287 (and others)	Coordinated signal system
FLEX Operations (Year 3)	Loveland	CMAQ	US 287	Transit service expansion
FLEX New Sunday Service	Loveland	CMAQ	US 287	Transit service expansion
US 34 (10th St): 35th to 23rd (Greeley)	Greeley	STP-Metro	US 34	Access Control
Madison Tr at Greeley-Loveland Canal	Loveland	Enhancement	US 34	Bike/ped network
Greeley Fiber Optic Communication	Greeley	CMAQ	US 34 (and others)	Coordinated signal system
Tier Two and Three Corridor Projects				
US 85 Access Cntrl at 37th St (Evans)	Evans	STP-Metro	US 85	Access control
US 85 Access Cntrl at 31st St (Evans)	Evans	STP-Metro	US 85	Access control
SH 14 (Mulberry St) Ped Br Reloc	Fort Collins	Enhancement	SH 14	Bike/ped network
Sheep Draw Tr: C St & 59th (Greeley)	Greeley	Enhancement	Two Rivers Parkway	Bike/ped network
Non-Corridor Specific Projects				
Weld Natural Gas Equipment & Vehicles	Weld County	CMAQ	N/A	Transit and other fleet

[1] *The parameters of the CMP as approved by the NFRMPO Planning Council are outlined in the 2035 Regional Transportation Plan Update*

Implemented Projects

Many important transportation improvement projects which affect the transportation system's performance were implemented in 2010. The projects listed below have been completed in 2010 within the NFRMPO.

The I-25/US 34 interchange was recently reconstructed

- I-25 at US 34 interchange improvements – project removed two cloverleaf off/on ramps and improved the interchange.
- I-25 at Crossroads Boulevard – constructed roundabouts on Crossroads Boulevard
- I-25 pavement replacement south of Harmony Road to SH 14
- US 85 Bypass pavement and bridge decking replacement, 5th Street to O Street in Greeley
- SH 392 box culvert repair west of WCR 35
- Installed traffic signal at intersection of SH 257 and Garden Drive in Windsor
- Replaced a signal pole at SH 257 and Eastman Park Drive
- Installed traffic signal at intersection of SH 392 and CR 31
- Installed new delineators on SH 392
- FLEX regional transit service was initiated

EXTERNAL INFLUENCES

There are many factors that affect the way people travel in the North Front Range region. The following sections present historical trends in several factors that affect travel behavior and the ability of the region to address congestion. The NFRMPO has no influence over these external influences.

Gas Prices

The cost of travel plays a significant role in the behavior of the traveling public. When gas prices rise, people are much more willing to use alternative transportation modes such as transit, carpooling/vanpooling or bicycling/walking. Average gas prices in Colorado over the last four years are presented in **Figure 23**.

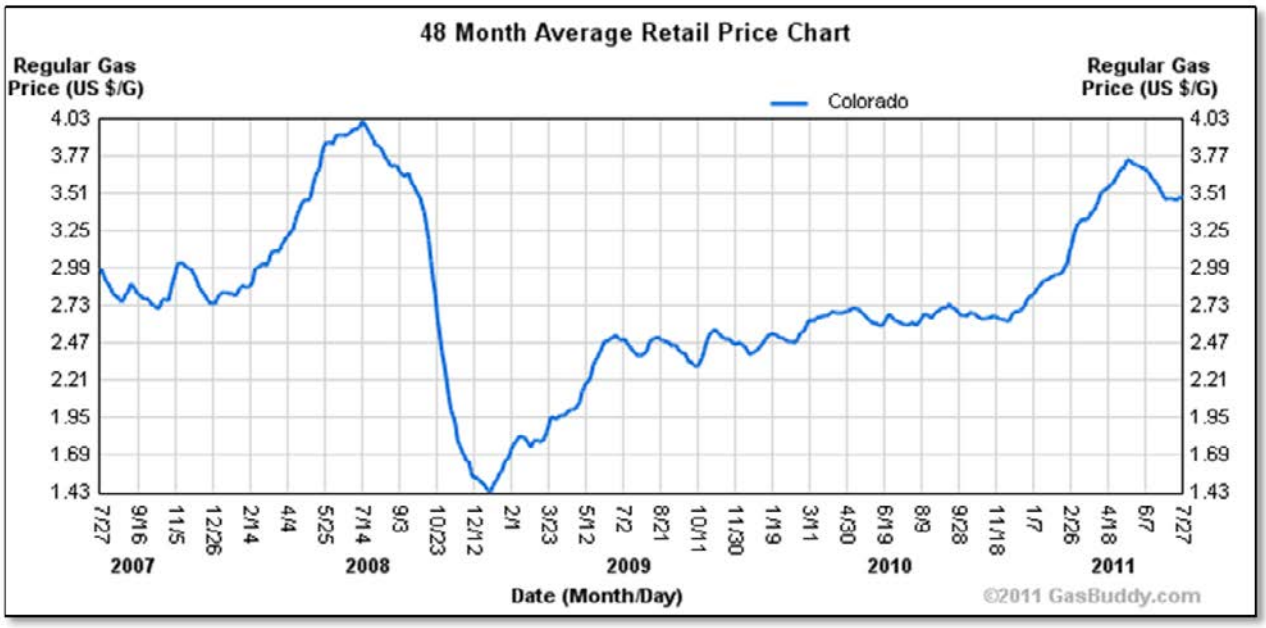


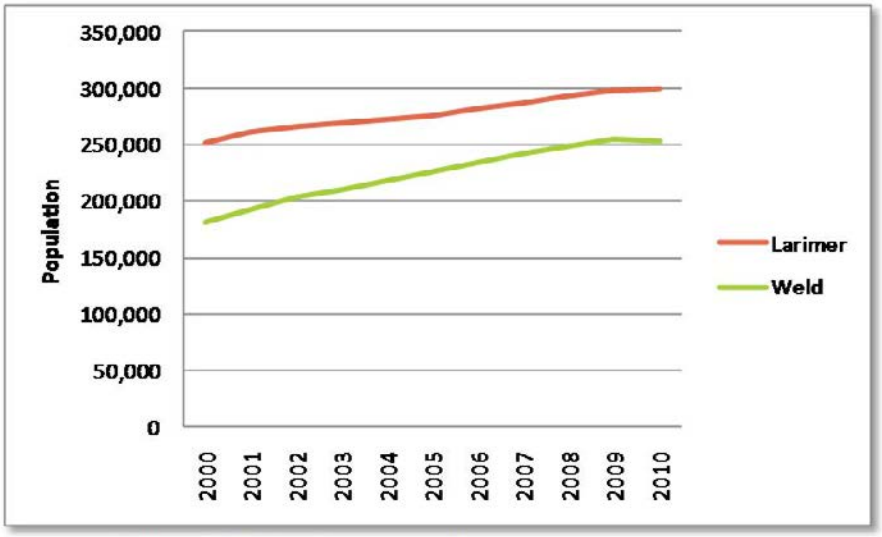
Figure 23. 4-Year Historical Gas Prices in Colorado

Source: GasBuddy.com

Population and Unemployment Rate

The population in Larimer and Weld Counties has steadily increased over the last decade. Larimer County has experienced a 19 percent increase, while Weld County's population has increased by nearly 40 percent. The Larimer County and Weld County population totals (including portions of the counties outside of the NFRMPO) over the last decade are presented in **Figure 24**.

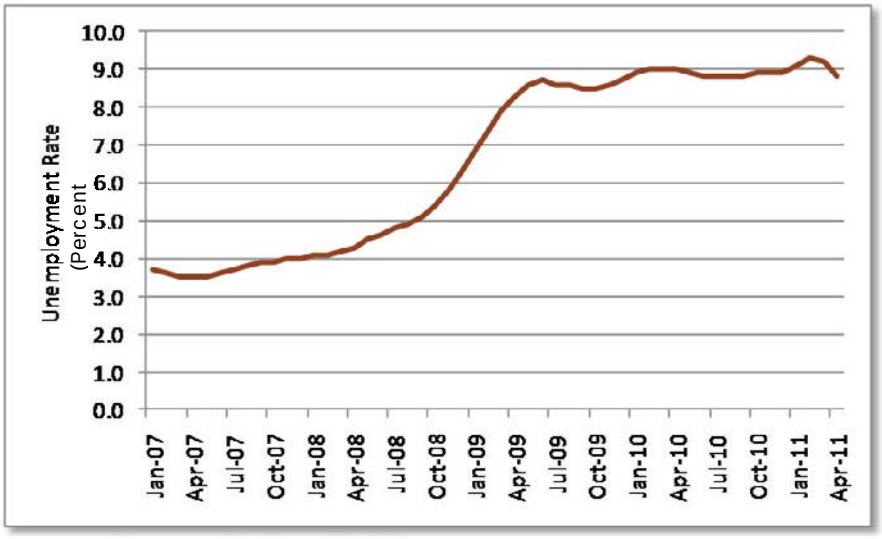
Figure 24. Population Growth



Source: Colorado State Demographer

The unemployment rate in Colorado has more than doubled in the last four years. The unemployment rate in 2007 and early 2008 was in the range of four percent; after the decline in the economy in late 2008, the unemployment rate quickly climbed to the eight and a half to nine percent range, where it has remained over the last two years. Unemployment rates in Colorado over the last four years are presented in **Figure 25**.

Figure 25. Colorado Unemployment Rates (2007 – April 2011)

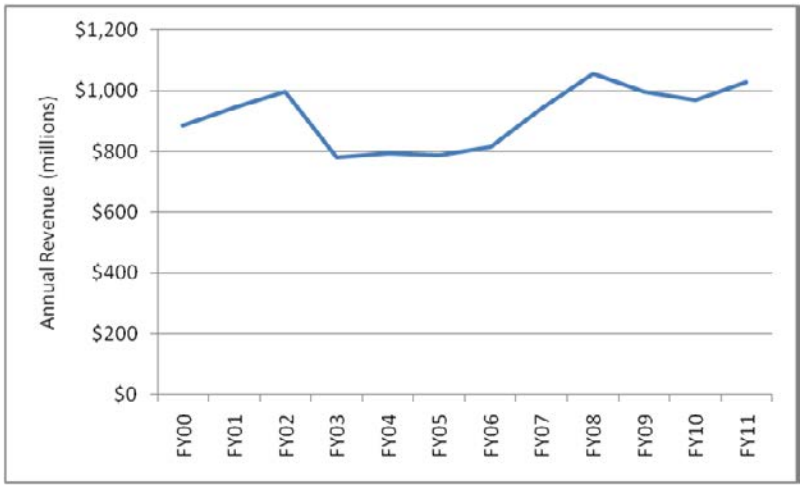


Source: Bureau of Labor Statistics

Transportation Funding and Gas Tax

The lack of adequate funding to address transportation needs is a concern not only in the NFRMPO, but throughout Colorado and the rest of the country. CDOT's total annual revenues over the time period from 2000 through 2011 are shown on **Figure 26**. According to the *Colorado Department of Transportation Budget for Fiscal Year 2011-2012, t*he state of Colorado relies heavily on the motor fuel tax as the main source of transportation related revenue. In addition to the motor fuel tax, CDOT funding sources include motor vehicle registrations and other fees, the Funding Advancement for Surface Transportation and Economic Recovery (FASTER), the Colorado General Assembly General Fund, Gaming Funds, and Capital Construction Funds. In general, the *CDOT Budget* concludes that "transportation revenues have in the past decade demonstrated significant volatility due to fluctuations in receipt from these funding sources," and "have not kept pace with inflationary increases experienced by the construction sector of the economy which have averaged about 6% per year over the past decade."

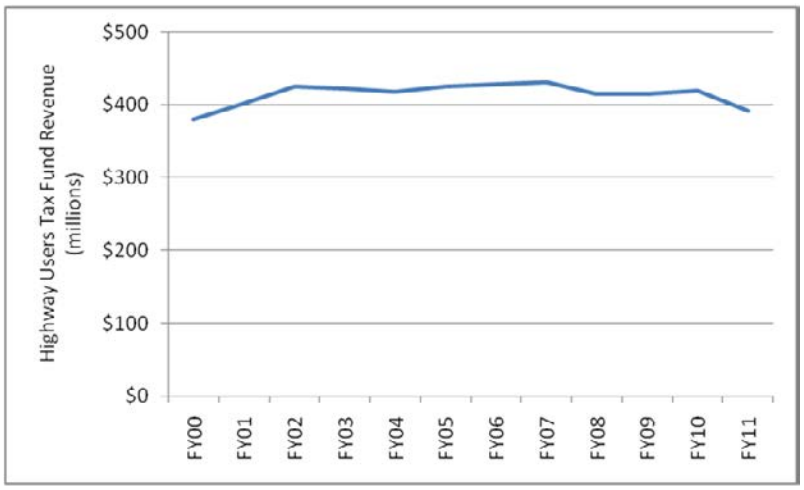
Figure 26. CDOT Annual Revenue



Source: CDOT Budget Allocation Summaries, 2000 – 2011

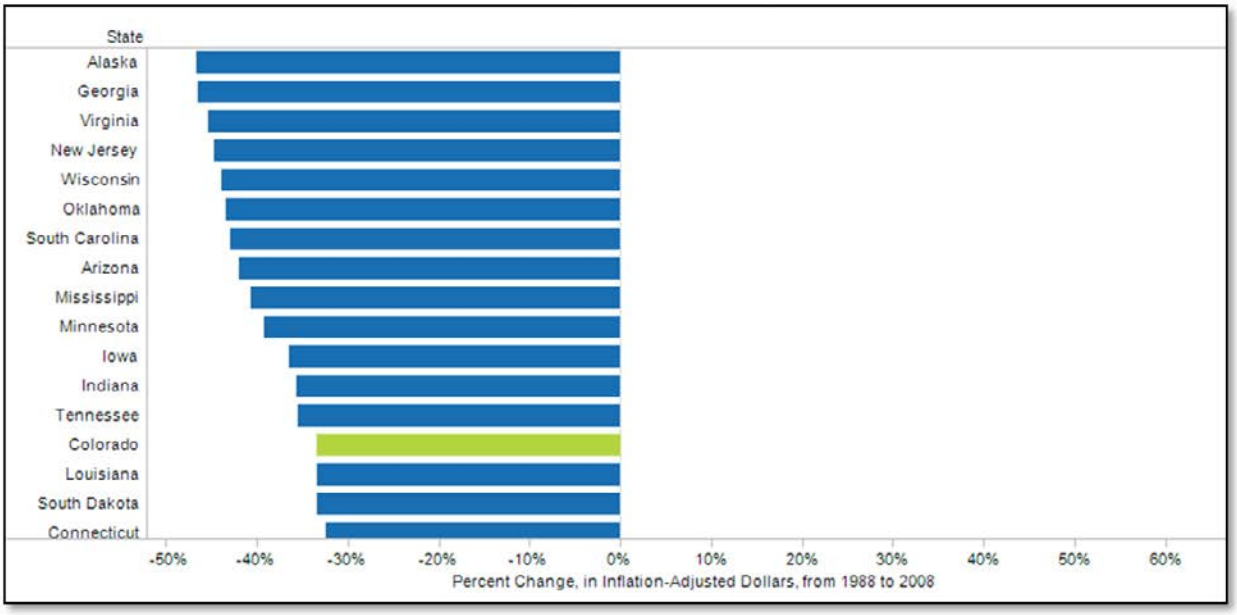
The motor fuel tax is a significant portion of the statewide transportation budget, see **Figure 27**, representing approximately 40-50 percent of the overall budget. The motor fuel tax is a fixed per-gallon excise tax, meaning that the revenue collected depends on the number of gallons sold not on the sales price. The motor fuel tax does not include any factor which reflects inflation and therefore the gas tax has remained constant since the early 1990's when the gas tax was last increased. The chart depicted on **Figure 28** shows that in Colorado, motor fuel taxes collected in 2008 were worth 33 percent less than in 1988, when accounting for inflation.

Figure 27. CDOT Highway Users Tax Fund Revenue



Source: CDOT Budget Allocation Summaries, 2000 – 2011

Figure 28. Percent Change in State Motor Fuel Taxes on Gasoline

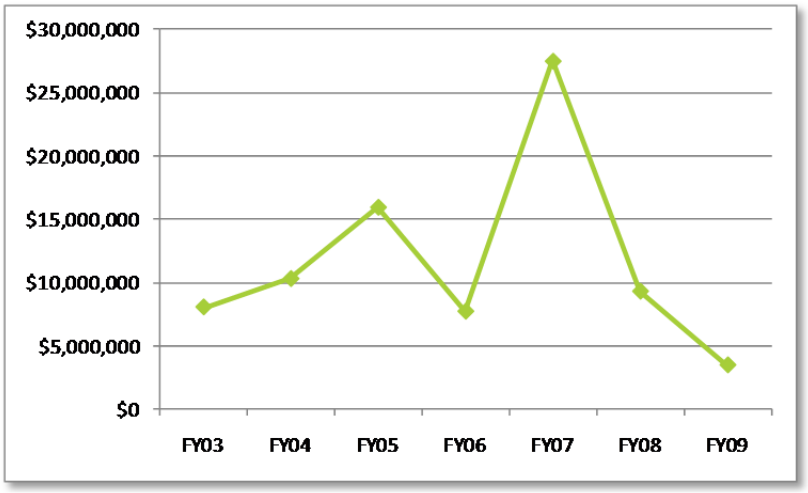


Source: Gas tax rates down in most states over time, Remapping Debate, November 10, 2010 http://www.remappingdebate.org/map-data-tool/gas-tax-rates-down-most-states-over-time

Additionally, despite past increases in vehicle miles traveled, the increasing fuel efficiency of motor vehicles and alternatively fueled vehicles have led to a decline in the rate of growth of motor fuel tax collections. The recent spike in fuel prices has resulted in a national trend of decreased vehicle miles traveled and a trend for consumers to purchase even more fuel efficient vehicles. As a result, the motor fuel excise tax has become an even less reliable source for sustained transportation funding than in the past, despite its continued importance as a source of funding for CDOT.

Figure 29 provides a summary of the federal and state funding (including Regional Priorities Program, STP-Metro, CMAQ, Transportation Enhancement) that has been distributed to the NFRMPO member governments for transportation improvement projects through the MPO. The large spike in FY07 was a result of Regional Priorities Program funding for the US 34 Business project through Greeley. A downward trend in funding is noticeable subsequent to FY07.

Figure 29. Federal and State Funding Distributed through NFRMPO



Source: NFRMPO Investment Flyers (total for all communities)

APPENDIX