

**Meeting Agenda of the  
TRANSPORTATION ADVISORY COMMISSION**

**September 3, 2015**

**8:30 a.m.**

**H.R. Conference Room, 301 W. "B" Street**

Agenda items marked with \* indicate additional materials are included in the packet.

1. *Call Meeting to Order*
2. *Introductions and Public Comments (non-agenda items only).*
3. *Approval of Minutes\**  
August 6, 2015 Meeting  
July 9, 2014 Meeting  
**Action Requested: Approve/Disapprove/Modify**
4. *CDOT Region II TIP/STIP Policy Agenda Item(s) \**  
There are no Policy TIP Amendment Notifications for September
5. *CDOT Region II TIP/STIP Administration Agenda Item(s) \**  
CDOT Region II has Notification of Four (4) Administrative Amendments of Roll Forward Project Funding to the PACOG Transportation Improvement Program (TIP) and Statewide Transportation Improvement Program (STIP) in the MPO/TPR area. Additional Information is Available in the Attached Letter and Spreadsheet.

**Notification: No Action Required**

Project Name: SH 96 Signal Project  
STIP Number: SR26644.058  
Project Location and Description: **Signal Replacement**  
Federal Program Funds: **\$ 675,000**  
State Matching Funds: **\$ 75,000**  
Local Matching Funds: **\$**  
Other Project Funds: **\$**  
**TOTAL PROJECT FUND AMENDMENT: \$750,000**

This project is being moved from fiscal year 2016 to fiscal year 2019 to be included in SH 96 paving project

Project Name: SH 45 at Hollywood Signal Project  
STIP Number: SR26644.059  
Project Location and Description: **Signal Replacement**  
Federal Program Funds: **\$ 405,000**  
State Matching Funds: **\$ 45,000**  
Local Matching Funds: **\$**  
Other Project Funds: **\$**  
**TOTAL PROJECT FUND AMENDMENT: \$450,000**

This project is being moved from fiscal year 2017 to fiscal year 2018 to be included in SH 45

paving project

Project Name: SH 45 Signal Project

STIP Number: SR26644.060

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Federal Program Funds: **\$ 405,000**

State Matching Funds: **\$ 45,000**

Local Matching Funds: **\$**

Other Project Funds: **\$**

**TOTAL PROJECT FUND AMENDMENT: \$450,000**

This project is being moved from fiscal year 2017 to fiscal year 2018 to be included in SH 45 paving project

Project Name: FTA 5310 Capital Awards for Calendar Year 2015

STIP Number: SST6727

Project Location and Description: **Bus Replacement**

Federal Program Funds: **\$ 308,000**

State Matching Funds: **\$**

Local Matching Funds: **\$ 77,000**

Other Project Funds: **\$**

**TOTAL PROJECT FUND AMENDMENT: \$385,000**

Awarded in January 2015

6. *Proposed RTA Projects – Role of TAC/CAC\**
7. *2040 Long Range Transportation Plan Update\**
8. *West Pueblo Connector – RFP – 11<sup>th</sup> to Downtown\**
9. *Staff Reports:*
  - *Pueblo Transit Operation Study*
  - *Pueblo County Safe Routes to Schools Planning*
10. *Adjourn At Or Before 10:30 AM*

**Minutes of the  
TRANSPORTATION ADVISORY COMMITTEE  
August 6, 2015  
8:30 a.m.**

**Community Room of the Pueblo Municipal Justice Center, 200 S. Main St.**

**1. *Call Meeting to Order***

Chairman: Scott Hobson

Time of Call: 8:37 am

MPO Members Present: Scott Hobson, Reyna Quintana

TAC Members Present: Alf Randall, Dan Centa, Don Bruestle, Wendy Pettit, Michael Cuppy, Pepper Whittlef, Jeff Woeber

CAC Members Present: Kristen Castor, Salvatore Piscitelli

Others Present:

**2. *Introductions and Public Comments (non-agenda items only).***

*Sal Piscitelli said variable message signs are needed prior to the construction area on I25 to avoid accidents and severe backups and delays. Wendy Pettit said she will talk to CDOT to insure proper measures are taken.*

*Scott Hobson mentioned that there was a question at the PACOG meeting last month regarding wheelchair access on the Bustang. He informed that there are 2 wheelchair spots available.*

**3. *Approval of Minutes of the regular meeting held on 7/9/15***

*Minutes have been emailed and will be included for approval at the September meeting.*

Motion to Approve:

Second:

Unanimous

**4. *CDOT Region II TIP/STIP Regular Agenda Item(s)***

*There were no Policy Notifications for August.*

**5. *CDOT Region II TIP/STIP Administrative Notification***

*There were no Administrative Notifications for August.*

*Scott Hobson mentioned that the hope is to start doing STIP amendments only a few times a year. He also said that an administrative amendment needs to be made to move projects from last year's TIP to the current TIP that have not yet been completed. This would pair those projects with other CDOT projects. He stated that Wendy Pettit would send out a report of the projects in the PACOG area to the TAC and Friends of TAC.*

*Kristin Castor asked about the status on the Transportation Funds bill. Scott replied that the House proposed a six year bill and the Senate came up with a completely different bill. Because they were so different, nothing has been passed at this point and they are still trying to figure out what they are going to do.*

**6. Comments on Chapter 2, 3 and 8 of LRTP**

*Reyna informed that the consultants were given the comments from the last meeting and are working on the suggested changes. They are re-doing the confusing graphic in chapter 2 as well as the chart that corresponds to that graphic. Wendy Pettit asked if the updates will be sent out or placed on the website to be reviewed. Scott answered that the changes will be sent out as well as posted.*

*Scott let everybody know about the LRTP Public meetings which were held to date. The first was held at the Rawlings Library with a small turnout and the second was held at the Transit Center with a much larger crowd. There were many comments at the Transit Center with the largest comment being in regards to providing longer service hours during the week and also service on Sundays.*

*Any further comments on Chapters 2, 3 and 8 should be sent to Scott or Reyna.*

**7. Revised List of Projects and Roads for LRTP \***

*Reyna described the process of breaking down the vision plan into developer driven and fiscally constrained project lists. She informed that project costs had been changed from the last meeting due to high lineal foot costs associated with the projects. In addition I25 and US 50 projects were added to the vision plan spreadsheet because we need to show reasonable completion of both projects in the LRTP. Determination of adding the I25 and US 50 projects was from CDOT's SB228 list compared to our ten year CIP. Projects on the SB228 list that were missing from the ten year CIP were added to the vision plan.*

*Alf Randall inquired of the purpose of the fiscally constrained list and what projects are on the list. Scott replied that we identified funding sources from CDOT and that the fiscally constrained list has projects which can be funded through available CDOT funds. Alf identified 3 major projects that need to be removed from the fiscally constrained list. Scott replied that we will review the projects and funding sources and make appropriate changes. He stated that projects which are on the fiscally constrained list would be in the current TIP or CIP.*

**8. PowerPoint Presentation of Model With Fiscally Constrained Project Changes \***

*Scott went through the slides provided in the packet. Discussed 2040 "No Build" Conditions slide which shows what the system would look like in the future with no changes. The model takes into account projected population estimations as well as trips to and from major business areas. Traffic volume will increase if no major changes are made. Scott also showed a comparison of the 2040 Vision plan conditions map versus the 2040 Fiscally Constrained plan conditions map.*

**9. Public Outreach for the Public Transportation Plan**

*A meeting is scheduled for August 11 in Colorado City. Future meetings are being held on August 17 in Pueblo West and August 26 in Blende.*

**10. 2016 – 2017 UPWP \***

*Scott distributed a draft copy and discussed his work on the 2016-2017 UPWP he highlighted items that will be handled differently. Scott researched 6 MPO's of similar size to PACOG and compared UPWP's to modify PACOG's UPWP.*

*Scott went through the summary page for the new UPWP and discussed items which we will continue to work on that were not completed in the current UPWP. In addition he commented on areas of emphasis and items that will be reduced or deferred in the new UPWP. He then pointed out the main highlights for the new UPWP. The first on page 9 and merges the traffic count and crash data items into one funding account. The second was on page 11 to continue efforts of Travel Demand forecasting. Next on page 12 were the transit and West Pueblo studies and on page 13 CDOT is initiating work on a US 50 economic benefit study. This study would show the benefits of safety and capacity improvements from the Kansas border to the 258 Intersection. It would help the*

*sustainability of the eastern plains towns and our MPO would put approximately \$20,000 into the study. Discussion commenced on the economic benefit study and whether or not funds should be applied. It was decided that it would be best to leave this as an item in the UPWP and apply funds towards it.*

*Scott said his intention is to program funds to each section. He also mentioned adding a few more items to include an item for assisting Transit as well as helping with pavement management and bridge conditions. Dan Centa inquired as to what this would like. Scott replied that we would simply take the data from other entities, keep track and compile it into one data source and try to map it. He stated that he feels the MPO has value in putting all data into one system. Wendy Pettit mentioned that this could help in getting an RTA and suggested adding a work element for the RTA to the UPWP.*

*Scott stated that the final draft of the 2016 - 2017 UPWP will be going to the PACOG Board on August 27 with the dollar amounts applied to each item.*

**11. *Items from TAC members or scheduling of future agenda items.***

*There were no items*

**12. *Adjournment***

Chairman Scott Hobson adjourned the meeting at 10:05 am



**Minutes of the  
TRANSPORTATION ADVISORY COMMITTEE  
July 9, 2014  
8:30 a.m.**

**Community Room of the Pueblo Municipal Justice Center, 200 S. Main St.**

**Agenda Items Marked With \* Indicate Additional Materials Were Included In Packet**

**1. *Call Meeting to Order***

Chairman: Scott Hobson

Time of Call: 8:46 am

MPO Members Present: Reyna Quintana, Scott Hobson

TAC Members Present: Alf Randall, Dan Centa, Don Bruestle, Wendy Pettit

CAC Members Present: Kristen Castor, Salvatore Piscitelli, Joan Armstrong, Michael Snow

Others Present:

**2. *Introductions and Public Comments (non-agenda items only).***

*No introductions. Scott mentioned the fact that the Police Community Room is not available for the September meeting. The conference room in the old council chambers on B Street which is now the HR office is being looked into for the September meeting.*

**3. *Approval of Minutes of the regular meeting held on June 4, 2015\****

*Alf Randall noticed that items number 4 & 5 on the June minutes stated there were no Policy or Administrative Notifications for September. A correction was made as there were no Policy or Administrative Notifications for June.*

Motion to Approve: *Joan Armstrong*

Second: *Salvatore Piscitelli*

*Unanimous*

**4. *CDOT Region II TIP/STIP Regular Agenda Item(s)***

*There were no Policy Notifications for July.*

**5. *CDOT Region II TIP/STIP Administrative Notification***

*There were no Administrative Notifications for July*

**6. *Comments on Chapter 1, 5, and 10 of the Long Range Transportation Plan***

*Scott discussed Chapters 1, 5 and 10 and how we have been completing reviews of these chapters. He stated that he would send comments made to the TAC. He also said that once all chapters are complete, we will compile a whole document to be reviewed.*

*No further comments on these 3 chapters by the TAC.*

**7. *Review of Chapters 2, 3, and 8 of the Long Range Transportation Plan\****

*Dan Centa asked the TAC to look at table 2.1. He asked if there is a comparison to see if Pueblo is at, above or below other cities when it comes to modes of travel. Scott answered that we should be able to pull data for other front range cities and run a comparison. The group recommended looking at all modes including transit to see how we compare. Salvatore Piscitelli mentioned the article in the paper*

*regarding shutting down some of the bus routes for maintenance. He wanted to know why we would do that. Dan Centa answered that this all due to a grant several years back. For the purchase of several new buses at one time. Now all those buses are breaking down and need to be maintained. Scott mentioned that we will be adding the capital replacement plan for the buses to chapter 2.*

*Dan Centa pointed out the graphic on page 4 of chapter 2. The graphic seems to show the wrong impression as it looks like we are getting a large influx of people from Canon City while in reality the majority of people are heading north. He suggested revising the graphic to show 4 directions because people are very visual and we want the graphic to be easy to read. Don Bruestle had a question regarding the last sentence on page 4 which states "...92% of Pueblo West residents work outside the city." He wondered if the word "city" is in reference to Pueblo West because Pueblo West is not a city. Scott stated this is something we need to look into. And that we may need to break down the numbers from the graphic into percentages in each direction. Table 2.2 on page 4 brought confusion to the ratio of residents to workers. Scott replied that we do need more clarification on the residents vs. workers categories and we may need to talk to Don Vest about the numbers.*

*Dan Centa made a general comment regarding all the graphics and that they need to be clearer and are currently very blurry. Scott mentioned that there is a template for maps to be redone.*

*Wendy Pettit wanted to review the graphic on page 8. She stated the numbers need to be referenced to what they are. Scott asked if we even want this graphic in the plan and the TAC replied that it is valid but the numbers need to be referenced on a list.*

*In reference to page 11 of chapter 2 Dan Centa asked how we all of sudden jumped to CDOT without including city and county information for pavement condition. He stated we need to include all three entities. Alf Randall wondered where the information came from and what it is being used for. He gave an example that SH47 is currently under construction yet table 2.3 on said page shows this particular highway have 100% of high to moderate drivability class. In addition SH233 was overlaid last year yet the table shows it having 0% of high to moderate drivability class. Scott replied that the data came directly from CDOT. He suggested possible using a Pie Chart for the pavement condition for each of the three entities. Alf Randall said he was uncomfortable putting that much attention to pavement condition because it implies that it is the only way projects are prioritized when so much more goes in to it than that. There needs to be an overall discussion on all that gets measured to show what all goes into prioritizing projects. Dan Centa suggested maybe a series of Pie Charts to compare 4 different categories (congestion, accidents, bridge conditions and pavement conditions) for all three entities. He also suggested moving this section as it seems out of place in the chapter.*

*Dan Centa reviewed page 22 of chapter 2 and asked if the number of ramps installed is representing just the city of Pueblo ramps installed. Then asked about the ramps installed via developer projects, CDOT projects and county projects. Reyna informed the TAC that she was the one to obtain the ramp data and it is just for the City of Pueblo. The city Public Works department does not have data on other types of projects. Wendy Pettit said that Ajin from CDOT might know how many curb ramps from CDOT projects have been installed. Michael Snow mentioned that the data regarding ramps is missing 2008 information. Scott suggested writing some text in the chapter stating that there are multiple ways the ramps are chosen to be replaced but that this list is only representative of city projects. There are other entities that install ramps throughout the city.*

*Dan Centa mentioned the sentence on page 27 within chapter 2 that says "In 2009, several bike racks were installed throughout the downtown area by the Pueblo Downtown Association with more racks planned to be added by the Urban Renewal Authority in 2011." He found it odd that it is now 2015 and the sentence is referring to plans for 2011, he feels this needs to be re-worded.*

*Dan Centa, in reference to page 29 in chapter 2 had a question regarding the accuracy of the data on the number of jobs and total wages for the airport. The data was from the 2003 study by the CDOT Aeronautics Division and is outdated. A more recent study from the CDOT Aeronautics Division should be obtained to provide more accurate data.*

*Within chapter 3 a general comment was made by Alf Randall regarding the maps not showing the urbanized area which is shown in the legend. Scott mentioned that in addition, the city boundary makes the maps hard to read. Michael Snow asked if the graphics will be clearer in the final document. Reyna replied the graphics will be clearer and many are being used as place holders.*

*Alf Randall stated that he has major issues with chapter 8. Page 7, table 8.5 seems to show some private projects within the state and federal funded project section which creates an inaccurate dollar amount. Reyna confirmed that essentially what needs to be done is for some of the projects from table 8.5 to be moved to table 8.6. One other concern from table 8.5 that Alf brought to the TACs attention was that Joe Martinez is shown as being separate from the West Pueblo Connector, but he thought we were not separating the two. Wendy suggested meeting with Maureen from HDR and Ajin from CDOT to discuss these projects. Scott stated we were having a meeting next week with CDOT and HDR and will include Wendy in the meeting request.*

*Michael Snow mentioned that on page 4 of chapter 8 the text implies that CIP projects are committed. However CIP projects are not committed until they become a project in the TIP. Wendy suggested stating that there are CIP and STIP projects and every year projects move to the TIP where they become committed.*

*Scott mentioned we will be having several public meetings for the Long Range Transportation Plan. The first will be at Rawlings Library the week of July 27<sup>th</sup>.*

**8. Revised List of Projects and Roads for the Long Range Transportation Plan\***

*Postponed until the next meeting*

**9. PowerPoint Presentation of Model with Fiscally Constrained Project Changed\***

*Postponed until the next meeting*

**10. Staff Reports**

**-Proposed Staffing Update**

- **Transportation Planning Technician**

*Scott stated that we are getting the go ahead for the Technician position from Council.*

- **Transportation Program Manager**

*Scott said he has the description for the manger position but will be discussing this with the PACOG Board before the city will put the job description out for the public.*

**11. Items from TAC members or scheduling of future agenda items**

*The new Transportation bill has gone through the Senate. It proposes adding funds of 10 to 15 percent from metropolitan planning. It also recommended and 80% reduction for Tiger Grants.*

**Adjournment**

Chairman Scott Hobson adjourned the meeting at 10:34 a.m.





Region 2 Planning  
905 N Erie Ave  
Pueblo CO 81001-2915

August 21, 2015

To: PACOG  
211 E. D Street.  
Pueblo, Colorado 81003  
(719) 553-2244 FAX (719) 549-2359

**CDOT Region II request(s) for PACOG MPO/TPR TIP amendment(s)  
FY 2012-2017 Transportation Improvement Program**

**Administrative notification of Roll Forward Project Funding or TIP/STIP Policy amendment(s) in the MPO and TPR area(s) -no TAC or Board action required.**

**Administrative Action:**

Project Name: Sh 96 Signal Project  
STIP Number: SR26644.058  
Project Location and Description: **Signal replacement.**  
Federal Program Funds: \$ 675,000  
State Matching Funds: \$ 75,000  
Local Matching Funds: \$  
Other Project Funds: \$  
**TOTAL PROJECT FUND AMENDMENT: \$750,000**

This project is being moved from fiscal year 2016 to fiscal year 2019 to be include in SH 96 paving project

Project Name: Sh 45 at Hollywood Signal Project  
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**COLORADO**  
Department of Transportation  
Region 2

Region 2 Planning  
905 N Erie Ave  
Pueblo CO 81001-2915

Project Name: FTA 5310 Capital Awards for Calendar year 2015

STIP Number: SST6727

Project Location and Description: **Bus replacement**

Federal Program Funds: **\$ 308,000**

State Matching Funds: **\$**

Local Matching Funds: **\$ 77,000**

Other Project Funds: **\$**

**TOTAL PROJECT FUND AMENDMENT: \$385,000**

Awarded in January 2015.

Please let me know if you have any additional questions about the proposed Administrative Notifications.

Sincerely,

Wendy Pettit  
CDOT Region 2 Planning

Cc:

Julia Spiker (OFMB)  
Matt Jagow (R2 Traffic)  
Karen Rowe (R2 RTD)  
Jason Ahrens (R2 BO)  
Michael Snow (DTD)





**Pueblo Area Council of Governments**  
Metropolitan Planning Organization (MPO)  
Transportation Planning Region (TPR)



**Urban Transportation Planning Division**  
[www.PACOG.net](http://www.PACOG.net)

## **MEMORANDUM**

**TO:** Chairman and Members of the PACOG Board  
Members of the TAC Committee

**FROM:** Scott Hobson, PACOG MPO Manager

**DATE:** July 23, 2015

**RE:** PACOG MPO Schedule for Adoption of the 2016-2017 Urban Planning Work Program

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The current Urban Planning Work Program (UPWP) approved by FHWA and CDOT for the PACOG Metropolitan Planning Organization (MPO) will end on September 30, 2015. The new UPWP for federal fiscal years 2016-2017 is in the process of being completed for the PACOG Board approval at the August 20, 2015 board meeting.

The contents and tasks within the new UPWP will be incorporated as the Scope of Work in the Consolidated Planning Grant contract for 2016-2017 between PACOG and the Colorado Department of Transportation. The transportation planning staff is working with staff from CDOT and FHWA to make sure the work tasks in the UPWP include the necessary transportation planning products required by statute and regulation in carrying out the transportation planning process.

A draft of the FY2016-FY2017 UPWP will be reviewed at the August 6, 2015 Transportation Advisory/Technical Advisory Committee meeting. The new UPWP will be presented to the PACOG Board at the August 20, 2015 meeting for approval. CDOT and FWHA are required to approve the new UPWP plans by September 30, 2015.





1

OVERVIEW

## 1.0 Overview

### 1.1 Introduction

The regulatory purpose of the Pueblo Area Council of Government (PACOG) 2040 REGIONAL TRANSPORTATION PLAN (RTP) is to update the previous 2035 Regional Transportation Plan using guidance from the recently released federal legislation Moving Ahead for Progress in the 21st Century (MAP-21)<sup>1</sup>. To begin the process of long range planning, a transportation vision for the region is developed, addressing a set of goals framed by the Moving Ahead for Progress in the 21st Century Act (MAP-21) legislation and enhanced and localized by the MPO. A long range plan is the only comprehensive effort by an MPO that addresses a 20-25 year extent, a fact that makes it valuable as a roadmap to the region. Much of this value comes from the knowledge that residents and decision makers in the region have regarding mobility needs. They are also well aware that as federal requirements evolve the region must evolve with them; hence the care taken to address the new requirements set by MAP-21.

The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 posed a major change to transportation planning and policy by presenting an intermodal approach to highway and transit funding with collaborative planning requirements, giving significant additional powers to metropolitan planning organizations. It expired in 1997. It was preceded by the Surface Transportation and Uniform Relocation Assistance Act of 1987 and followed by the Transportation Equity Act for the 21st Century (TEA-21,1998), the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU, 2005), and the Moving Ahead for Progress in the 21st Century Act (MAP-21, 2012). MAP-21 is the first U.S. transportation bill legislation that asks states and MPOs to develop specific performance based planning measures for use with their regional goals and objectives.

The Pueblo Area Council of Governments (PACOG) region encompasses all of Pueblo County as shown in **Figure 1.1**.

**Figure 1.1: PACOG Planning Area**



The planning area contains the population centers of Pueblo, Pueblo West, Colorado City, Beulah Valley, Avondale, Boone and other. The City of Pueblo dominates the MPO with a population totaling over 160,000 people. Located at the confluence of the Arkansas River and Fountain Creek, it has been an important crossroads for transportation and trading for more than 150 years, making it the economic hub of southeastern Colorado. Pueblo is also an important city in Colorado's Front Range Urban Corridor. The Historic Arkansas River Project (HARP) is a notable river walk in the Union Avenue Historic Commercial District of Pueblo. Over the last twenty years, the population of the region has increased and its economy has become more diverse. Interstate-25 and U.S. Highway 50 are the key connections to other Colorado cities and to the nation.

As the federally designated Metropolitan Planning Organization (MPO) for the metropolitan area, the Pueblo Area Council of Governments (PACOG) is responsible for developing and maintaining both a long range regional transportation plan and a supporting short-range implementation program, the Transportation Implementation Plan (TIP), as a condition of eligibility for federal transportation funding. PACOG has taken up the MAP-21 challenge to develop both goals and performance based measures and has made it the cornerstone of the PACOG *2040 REGIONAL TRANSPORTATION PLAN*.

## 1.2 MAP-21 Guidelines

The RTP for an MPO must include all transportation projects that use federal funds or those that could significantly alter transportation within the designated metropolitan area. The function of the RTP is not regulatory; rather, the plan is developed by the community and its decision makers to determine the best use of public funds. Visions and goals for transportation within a region are set forth and then prepared for implementation using a set of strategies.

As noted above, long range transportation planning is the sole step in the regional decision-making process in which the transportation system as a whole is analyzed

and evaluated comprehensively. When a carefully crafted long range plan is prepared, the region has a cohesive starting point for regional coordination. The best plans also lay the groundwork for decision makers to grasp the broader social, economic, and environmental implications of their transportation and land use decisions.

To understand the structure of a Regional Transportation Plan, it is important to understand the federal context in which it operates. MAP-21 legislation provides this context. This section will include a discussion of the MAP-21 Federal Guidelines and PACOG in a MAP-21 Context.

### 1.2.1 MAP-21 Federal Guidelines

The Regional Transportation Plan (RTP) and the Transportation Improvement Plan (TIP) for the Pueblo Area Council of Governments are developed using the goals and planning factors contained in MAP-21.

### MAP-21 Regional Transportation Factors

MAP-21 requires that eight factors be reflected in metropolitan planning processes. The process should:

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
2. Increase the safety of the transportation system for motorized and non-motorized users.
3. Increase the security of the transportation system for motorized and non-motorized users.
4. Increase the accessibility and mobility of people and freight.
5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.
6. Enhance the integration and connectivity of the transportation system, across and between modes for people and freight.

7. Promote efficient system management and operation.
8. Emphasize the preservation of the existing transportation system.

MAP-21 is also linked to the Clean Air Act Amendments (CAAA) of 1990. The CAAA recast the planning function to confirm that transportation planning will help, not hinder, the region in meeting federal air quality standards. It encourages reduced auto emissions and fewer trips by single-occupant vehicles, and it promotes the use of alternative transportation modes, including transit and bicycles, as a viable part of the transportation system. Making receipt of all federal funding dependent on a region's ability to meet air quality standards reinforces the linkage between transportation planning and federal air quality standards.

Requirements within MAP-21 are similarly linked to the 1964 Civil Rights Act. Title VI of the 1964 Civil Rights Act (42 U.S.C. 2000d-1) states that "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance". Title VI bars intentional discrimination as well as disparate impact discrimination (i.e., a neutral policy or practice that has a disparate impact on protected groups). In order to address Title VI for federally funded projects, including transportation infrastructure improvements, Presidential Executive Order 12898 (1994) directs each federal agency to make environmental justice part of its mission. To implement this executive order, USDOT directs its funding recipients to address the following fundamental environmental justice principles:

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

One important addition to the RTP process is the launch by MAP-21 of a performance-based approach to transportation planning. In this round of long range planning, the development of goals includes setting concrete improvement targets for each area of planning. In the future, regional investments in the Transportation Improvement Program will be tied to state and regional performance targets in key areas of safety, condition, mobility, congestion, freight, and asset management. The process of performance management is evolving as performance data becomes available and guidance on federal regulations is issued. This 2040 LRP will likely be updated to accommodate changes in federal and state performance measures and targets. In the long run, performance-based planning will lead to more transparent decision-making, more efficient investments, and will help move toward the region's vision for the future.

It should be noted that MAP-21 applies performance-based measurement solely at the programmatic, rather than at the project, level and does not generally link performance measures and targets to funding decisions. The law's emphasis on transparency and accountability is commendable, and MAP-21 should be viewed as a first step toward a larger performance-based funding system.

PACOG has begun the of performance management process by:

- Setting metrics for performance the LRP transportation goals, where applicable.
- Establishing a "baseline" year, such as 2015, upon which comparative metrics from future years will be measured.

### MAP-21 Regional Transportation Plan Goals

MAP-21 lays out seven planning categories for goal setting, consistent with previous legislation. PACOG staff added an eighth category, multimodal transportation. These goals can be described as follows:

1. **Safety:** To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
2. **Infrastructure Condition:** To maintain the highway infrastructure asset system in a state of good repair.

3. Congestion Reduction: To achieve a significant reduction in congestion on the National Highway System.
4. System Reliability: To improve the efficiency of the surface transportation system.
5. Freight Movement and Economic Vitality: To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
6. Environmental Sustainability: To enhance the performance of the transportation system while protecting and enhancing the natural environment.
7. Reduced Project Delivery Delays: To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.
8. Multimodal Transportation: To invest in a wide range of non-motorized travel options, connectivity, and an emphasis on public health.

Using these eight categories, PACOG developed concrete goals and performance measures consistent with the latest MAP-21 focus on metrics and localized to the region. These eight goals are presented in this section of the report. They also form the framework of the 2040 RTP.

**MAP-21 Regional Transportation Plan Emphasis Areas**

MAP-21 also cites three planning emphasis areas which require integration in the PACOG LRP process. The planning emphasis areas echo the factors and goals cited by MAP-21:

- A transition to Performance Based Planning and Programming.
- A process of investigating additional collaborative activities to satisfy the Models of Regional Planning Cooperation MAP-21 guidance.

- Reference to the Ladders of Opportunity effort of MAP-21.

In the following sections of this chapter, this guidance from MAP-21 for MPOs will be referenced and expanded. The guidance provided a framework for the PACOG planning process and served as an outline for the generation of PACOG-specific RTP goals.

**1.2.2 MAP-21 and the PACOG MPO**

PACOG is the MPO (Federal designation under Title 23 USC 134) and Transportation Planning Region (TPR), a state designation under Title 43 CRS Part 11) for the Pueblo County region. Overall transportation policy, plan adoption, and program approval are the responsibility of the elected officials of the PACOG Board. They are also responsible for implementing the metropolitan transportation planning process.

Under the terms of an annual delegation agreement with the City of Pueblo and the Pueblo Area Council of Governments, employees assigned to the Urban Transportation Planning Division (UTPD) function as the professional staff for the regional transportation planning functions of the PACOG MPO/TPR. The cost of the UTPD operation is supported entirely by a Consolidated Planning Grant consisting of 82.79% federal funds and 17.21% local matching funds. Funding is provided by FHWA to Colorado Department of Transportation (CDOT) which distributes the funds to the MPO. Through a collaborative process, distribution was come up with that is fair and equitable to all MPOs through the state based on population shares from the most recent U.S. Census – currently from the year 2010.

The requirement for metropolitan planning is established under the requirements of Title 23 United States Code, Section 134. To carry out the transportation planning process required by this section, an MPO shall be designated for each urbanized area with a population of more than 50,000 individuals by agreement between the Governor and units of general purpose local government that together represent at least 75 percent of the affected population (including the central city or cities as defined by the Bureau of the Census).

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Transportation planning is a process which is used to balance the interrelated areas of mobility, accessibility, land use, socioeconomic, and ecological conditions to improve the quality of life for the residing area citizens. In order to anticipate and respond to the ever changing transportation needs of people and goods moving throughout the region, the process is a coordinated effort between federal, state and local governments, as well as private transportation providers.

The Pueblo area transportation system plays an important role in the local economy and community. It provides citizens access to basic services, allows individuals to travel into and out of the region and serves as a means to boost the local economy. Without continued investment in transportation, the Pueblo area would no longer be able to sustain its residents and workers. This 2040 plan will look at all of these transportation issues as well as continue to develop a safe and efficient multimodal transportation system for all who travel within the region.

### 1.2.3 PACOG's Role in the Regional Transportation Plan Process

#### Introduction to the Regional Transportation Plan at PACOG

The federally mandated *Metropolitan Transportation Plan* refers to the official multimodal transportation plan addressing a no less than 20-year planning horizon that is developed, adopted, and updated by the MPO through the metropolitan transportation planning process. This document serves as the official transportation plan for both the State of Colorado and for the Federal Government.

The Pueblo Area Regional Transportation Plan is a 25+-year plan for the development of transportation programs and projects within the Pueblo Area. The Plan identifies the *Existing Conditions* for each of the transportation modes and identifies the need for and location of future facilities. The *Preferred Plan* sets out a strategy to meet the transportation goals of the region between 2010 and 2034 while the *Fiscally Constrained Plan* applies financial constraints to that same strategy. The LRTP also includes the Coordinated Public Transit – Human Services Transportation Plan, prepared as a locally

developed, coordinated public transit-human services transportation plan to assure Pueblo's eligibility for projects funded through three programs introduced as part of the Moving Ahead for Progress in the 21st Century (MAP-21): Urbanized Area Formula (Section 5307), Enhanced Mobility of Seniors and Individuals with Disabilities (Section 5310) and the Rural Area Formula Grants (Section 5311).

The LRTP is developed by the Pueblo Area Council of Governments (PACOG) in cooperation with the jurisdictions and agencies responsible for development and maintenance of the transportation system. These jurisdictions and agencies include:

- The City of Pueblo
- Pueblo County
- Pueblo West Metropolitan District
- The Pueblo Memorial Airport
- Colorado Department of Transportation (CDOT), Region 2
- CDOT Division of Transportation Development
- CDOT Office of Financial Management and Budget

The plan process, scope, initial results and assumptions are developed in collaboration with City and County staff and are reviewed by the PACOG Transportation Advisory Commission (TAC), which is comprised of the Transportation Technical Committee (TTC) and the Citizens Advisory Committee (CAC).

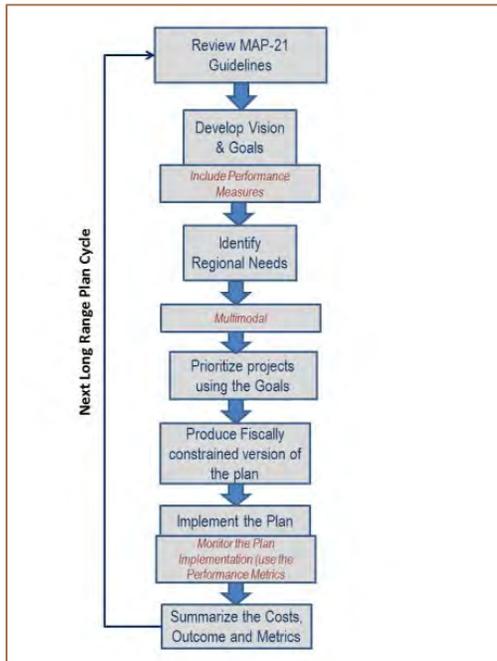
#### Regional Transportation Plan Process

The Long Range Planning process is cyclical in nature and occurs every five years. At each five-year juncture, a revised future scenario year is established, and an updated set of vision and goals are sought for the region. This visioning involves citizens, public agency staff, decision makers, private industry leaders and others. The many viewpoints ensure that the transportation needs of all the residents of a region will be considered.

The LRP process must logically look first to the most recent federal legislation related to MPO RTPs. The vision elements are framed by the current federal guidelines, in this case MAP-21 and use the three emphasis areas as well as the

planning factors and goals provided by the federal legislation. Figure 1 shows the general process flow of the PACOG 2040 RTP. This sequence also generally forms the outline of this RTP document.

**Figure 1.2: PACOG Regional Transportation Planning Process**



The steps shown in Figure 1.2 can also be shown as a listed sequence of activities, with a feedback loop, that occurs during each 5-year long range planning cycle.

1. Review federal guidelines in the form of MAP-21 requirements.
2. Establish the PACOG regional vision and goals in the 2040 RTP goal-setting task. Include here for the first time performance measures for each goal.
3. Identify the regional needs and priorities for all transportation modes.
4. Prioritize projects referencing the PACOG TIP using the goals.
5. Produce the fiscally constrained version of the plan.
6. Implementation: Build or repair transportation infrastructure.
7. Continuously monitor the results of the improvements in (6) using all the relevant performance measures.

8. Summarize the project costs, outcome, and performance metrics and start the cycle again.

In the next section, we will discuss work done by the Pueblo Area Council of Governments to expand upon the eight RTP planning goals, establish the performance measures attached to each, and set the targeted years for attainment of each metric.

### 1.3 PACOG 2040 Regional Transportation Plan Goals

The eight 2040 RTP goals are presented in this section. They are also summarized in Table 1.1. The outline form of this section of the report conforms to Table 1, providing consistency for the reader between the two ways of looking at these important planning categories, with their goals and metrics.

#### 1.3.1 Planning Category #1: Safety

The overall goal of the safety category is to reduce fatalities, injuries and property damage across all modes of transportation. PACOG recommends the following targets.

- A. Decrease the fatal crash rate by 50%.
  - a. 2015: Establish the 2015 baseline.
  - b. 2020: Decrease the fatal crash rate by 13%.
  - c. 2030: Decrease the fatal crash rate by 25%.
  - d. 2040: Decrease the fatal crash rate by 50%.
- B. Decrease the “serious” injury crash rate by 25%.
  - a. 2015: Establish the 2015 Baseline.
  - b. 2020: decrease the serious injury rate by 6%.
  - c. 2030: decrease the serious injury rate by 13%.
  - d. 2040: decrease the serious injury rate by 25%.
- C. Decrease the injury crash rate by 25%.
  - a. 2015: Establish the 2015 Baseline
  - b. 2020: decrease the serious injury rate by 6%.

#### Goal #1: Safety

*Improve safety by providing a multi-modal transportation system that focuses on the reduction of the frequency and severity of crashes*

## Goal #2: Infrastructure Condition

- *Improve and sustain the surface conditions of the State highway system*
- *Maintain Bridges*
- *Maintain Transit and Non-Motorized*
- *Maintain Passenger Rail*

- c. 2030: decrease the serious injury rate by 13%.
    - d. 2040: decrease the serious injury rate by 25%.
  - D. Decrease the PDO (Property Damage Only) rate of crashes by 25%.
    - a. 2015: Establish the 2015 Baseline.
    - b. 2020: decrease the injury rate by 6%.
    - c. 2030: decrease the injury rate by 13%.
    - d. 2040: decrease the injury rate by 25%.
  - E. Decrease the frequency and severity of public transit related crashes by 10%.
    - a. 2015: Establish the 2015 Baseline.
    - b. 2020: decrease public transit crashes by 3%.
    - c. 2030: decrease public transit crashes by 5%.
    - d. 2040: decrease public transit crashes by 10%.
  - F. Decrease the frequency and severity of pedestrian related accidents by 75%.
    - a. 2015: Establish the 2015 Baseline.
    - b. 2020: decrease pedestrian accidents by 19%.
    - c. 2030: decrease pedestrian accidents by 38%.
    - d. 2040: decrease pedestrian accidents by 75%.
  - G. Eliminate railroad crossing related crashes by 75%.
    - a. 2015: Establish the 2015 Baseline.
    - b. 2020: decrease railroad crossing crashes by 19%.
    - c. 2030: decrease railroad crossing crashes by 38%.
    - d. 2040: decrease railroad crossing crashes by 75%.

PACOG also envisions enhancement of the overall safety of the transportation system by implementing engineering, education, and enforcement strategies to reduce traffic-related injuries and fatalities.

## 1.3.2 Planning Category #2: Infrastructure Condition

### Highways

Highways are the backbone of the transportation system and their good conditions drives travel, freight and the economy of the region. Identical drivability life targets are set for interstates, NHS roadways and state highways.

- A. Achieve 80% High/Moderate Drivability Life for the Interstate Highway System based on condition standards and treatments set for traffic volume categories.
  - a. 2015: Establish the 2015 Baseline for High/Moderate Drivability on Interstates.
  - b. 2020: achieve 20%.
  - c. 2030: achieve 40%.
  - d. 2040: achieve 80%.
- B. Achieve 80% High/Moderate Drivability Life for the National Highway System based on condition standards and treatments set for traffic volume categories.
  - a. 2015: Establish the 2015 Baseline for High/Moderate Drivability on NHS
  - b. 2020: achieve 20%.
  - c. 2030: achieve 40%.
  - d. 2040: achieve 80%.
- C. Achieve 80% High/Moderate Drivability Life for the State Highway System based on condition standards and treatments set for traffic volume categories.
  - a. 2015: Establish the 2015 Baseline for High/Moderate Drivability on State Highways.
  - b. 2020: achieve 20%.
  - c. 2030: achieve 40%.
  - d. 2040: achieve 80%.

## Bridges

Similarly, the good condition of bridges is a key to good transportation in the region. In priority, (1) Interstate, (2) NHS and U.S. State highways, and (3) all other State highways, the MPO will work to:

- D. Improve the sufficiency rating of interstate, NHS, and U.S. State highway bridges to a range of 75 to 100. The following targets are set:
  - a. 2015: Establish the 2015 Baseline.
  - b. 2020: get the desired rating for 25% of deficient bridges.
  - c. 2030: get the desired rating for 50% of deficient bridges.
  - d. 2040: get the desired rating for 100% of deficient bridges.
- E. Improve the sufficiency rating of all other State highway bridges to a range of 75 to 100.
  - a. 2015: Establish the 2015 Baseline.
  - b. 2020: get the desired rating for 25% of deficient bridges.
  - c. 2030: get the desired rating for 50% of deficient bridges.
  - d. 2040: get the desired rating for 100% of deficient bridges.
- F. Bring all functionally obsolete bridge structures at grade or grade separated interchanges, ramps, and acceleration and deceleration lanes to current AASHTO standards.
  - a. 2015: Establish the 2015 Baseline.
  - b. 2020: get the desired rating for 12% of deficient bridges.
  - c. 2030: get the desired rating for 65% of deficient bridges.
  - d. 2040: get the desired rating for 100% of deficient bridges.
- G. Maintain the condition of all transit related infrastructure (i.e. dedicated bus lanes and stops, shelters, maintenance facilities, fueling stations, transit center facilities, and other transit holdings). PACOG will begin this process by focusing on the transit fleet vehicle conditions.
  - a. 2015: Establish the 2015 Baseline.
  - b. 2020: maintain the percentage of vehicles in the transit fleet to no less than 65% in fair, good, or excellent conditions (FTA definitions).
  - c. 2030: maintain the percentage of vehicles in the transit fleet to no less than 65% in fair, good, or excellent conditions (FTA definitions).
  - d. 2040: maintain the percentage of vehicles in the transit fleet to no less than 70% in fair, good, or excellent conditions (FTA definitions).
- H. Maintain the condition of all bike/pedestrian trail related infrastructure (i.e. surface condition, signage, safety improvements, and other). The overall goal is to expand and improve the connectivity of the regional system wide trail system. PACOG will focus on trail usage by working to measure the use of trails and other bicycle/pedestrian facilities. in this manner:
  - a. 2015: Establish the 2015 Baseline.
  - b. 2020: Increase trail use by at least an average of 1.5% over a five-year period beginning in 2015.
  - c. 2030: Increase trail use by at least an average of 1.5% over a ten-year period beginning in 2020.
  - d. 2040: Increase trail use by at least an average of 1.5% over a ten-year period beginning in 2030.

## Passenger Rail

Finally, the region has made a significant commitment to passenger rail service over the years. PACOG will:

- I. Continue to work with CDOT Division of Transit & Rail (DRT) and policy office to sustain passenger rail service to southeastern Colorado including a

## Transit and Non-Motorized

Transit and non-motorized infrastructure also play important parts in regional transportation connectivity and the health of the multi-modal framework. PACOG will work to:

### Goal #3: Congestion Relief

- *Bring all interstate, NHS, U.S. and other state highways up to current AASHTO standards that improve the flow of motor vehicles and transit*
- *Relieve existing heavy congestion on U.S. highways, NHS highways by implementing alternative transportation corridors (i.e. Bypass facilities)*

potential passenger rail stop in Pueblo. PACOG will continue to seek other sources of funding to improve and maintain the existing Burlington Northern Santa Fe (BNSF) rail lines throughout Southeastern Colorado. This goal is to be met using a focus on partnership.

2015 and forward: PACOG will establish and/or continue participation in statewide, regional and private rail passenger advocacy groups. Wherever possible, maintain a log of events and outcomes from these meetings.

#### 1.3.3 Planning Category #3: Congestion Relief

The overall goal of the congestion relief category is to improve traffic flow on roadways in the PACOG region. The following specific metrics and targets will serve as targets of success.

#### Achieve AASHTO Infrastructure Standards

- Upgrade all functionally obsolete interchanges, acceleration/deceleration lanes, inadequate ramp lengths, inadequate shoulders, and other. Focus on highway facilities by working to:
  - Establish the 2015 Baseline by identifying the AASHTO deficient locations.
  - 2020: get the desired rating for 12% of deficient locations.
  - 2030: get the desired rating for 65% of deficient locations.
  - 2040: get the desired rating for 100% of deficient locations.

#### Address Congestion

- Focus on Roadway Congestion by establishing a Volume-to-Capacity (V/C) baseline target for the PM peak.
- On Interstate, NHS, U.S. highways and other state highways: LOS C- (through traffic LOS D at grade and grade separated/interchanges).
  - 2015: Establish a Volume-to-Capacity (V/C) Baseline Target; suggested is

number of lane miles over V/C = 0.90 during the one hour PM peak.

- 2020: get the desired rating for 12% of the congested locations.
  - 2030: get the desired rating for 65% of the congested locations.
  - 2040: get the desired rating for 100% of the congested locations.
- The congestion mitigation will have six steps and a set of tactics to reach them:
    - Build or expand alternate bypass state highway facilities to LOS C with through traffic at LOS D on at grade and grade separated interchanges, to reduce congestion on existing heavily congested corridors.
    - Reduce travel time on existing heavily congested corridors by 25%.
    - As identified in the U.S. 50W Planning and Environmental Linkages (PEL) Study, build grade separated interchanges and add when corridor levels of service reach LOS D.
    - As identified in studies related to I-25 in Pueblo Freeway, build grade separated interchanges and add additional travel lanes when corridor levels of service reach D.
    - Bring all New Pueblo Freeway functionally obsolete bridge structures at grade or grade separated interchanges, ramps, and acceleration and deceleration lanes to current AASHTO standards.
    - Initiate steps that will reduce on-road mobile source emissions per capita by various means including:
      - Facilitating the creation of Compressed Natural Gas (CNG) fueling stations and private and public use of Natural Gas Vehicles (NGVs) and electric vehicles.
      - As feasible, converting public transit buses and shuttles to alternative fuel vehicles (i.e. CNG, Liquefied Natural Gas

(LNG), electric and other future emission reduction fuels).

- Building strategically located park and ride facilities to reduce out of town commuter trips to work by single occupancy vehicles (SOV).
- Continuing to encourage (public education and reduce public transit travel times, transfers, etc.) the use of public transit as an alternate to SOV trips.
- Implementing Transportation System Management (TSM) measures such as intersection improvements, ramp metering, etc., to improve the flow of motor vehicles and transit.
- Deploying additional Intelligent Transportation Systems (ITS) measures to improve public awareness (accident and construction delays, major event parking and transit alternatives, weather and other safety messages) and alert motorists of traffic conditions to improve the flow of motor vehicles and transit.
- Expanding and improving the regional on and off-system bicycle routes to facilitate an increase of 3% of work, school and other trip purpose connectivity in a safe and efficient manner.
- Encouraging public and private sector incentives for public transit, carpooling, telecommuting, bicycling, walk to work/school and park n' ride utilization;
- Continuing support of the statewide efforts of the Interregional Connectivity System for Front Range transit and high speed passenger rail service. Identify the gaps and connections (convenient and accessible transfer points). Preserve existing passenger rail service in Southern

Colorado through Pueblo County.

- E. Focus on Mobile Source Pollution Abatement where applicable with the following goals:
  - a. 2020: Retain national air quality health standards and reduce regional transportation-related greenhouse gas (GHG) and air pollutant emissions by 6% compared to 2010 levels.
  - b. 2030: by 33%.
  - c. 2040: by 50%.

### 1.3.4 Planning Category #4: Freight Movement & Economic Vitality

The overall goal of the freight movement and vitality category is to ensure safe and effective movement of freight commodities into, out of and through the PACOG region. The following specific metrics and targets are established.

#### Freight Infrastructure

- A. Reduce the number and severity of truck/freight related crashes by 75% on the New Pueblo Freeway (NAFTA corridor – designated national freight movement corridor) interstate system.
  - a. 2015: Establish the 2015 Baseline.
  - b. 2020: decrease the number and severity of truck/freight related crashes by 9% on the New Pueblo Freeway (NAFTA corridor – designated national freight movement corridor) interstate system.
  - c. 2030: decrease by 49%.
  - d. 2040: decrease by 75%.
- B. Reduce the number and severity of truck/freight related crashes by 75% on U.S. highways and other NHS highways. Improve all functionally obsolete interchanges, acceleration/deceleration lanes, inadequate ramp lengths, and inadequate shoulders to AASHTO standards for the safe and efficient movements of freight through Pueblo County's interstate system. Sustain and improve a regional roadway system that

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#### Goal #4: Freight Movement and Economic Vitality

- *Provide a safe and efficient interstate and NHS, and other State highway system for the movement of freight*
  - *Encourage corridor preservation and expansion efforts for both passenger and freight rail, and railroads*
  - *Provide a transportation system that encourages new business, economic development and industry expansion that is integrated with future land use plans and policies*
-

provides local, regional and statewide efficient access and connectivity for the movement of freight and people.

- a. 2015: Establish the 2015 Baseline.
- b. 2020: decrease the number and severity of truck/freight related crashes by 9%.
- c. 2030: decrease by 49%.
- d. 2040: decrease by 75%.

### Corridor Preservation

- C. Continue efforts with CDOT, USDOT, FTA and Congress to integrate regional passenger and freight rail service into the statewide passenger rail service plans and vision.

Focus on partnership: 2015 and forward: Establish and/or continue participation in statewide, regional and private rail advocacy groups. Maintain a "log" of events and outcomes from these meetings.

### Economic Development

- D. Improve the integration, accessibility and connectivity of the regional transportation system across and between modes for the movement of freight and people. The transportation system should be planned, maintained, and constructed in a manner that supports access to jobs for workers; access to shopping and services; and the safe and efficient movement of goods to, from, and within the region. It should support retail, medical, education, manufacturing, energy industry, recreation, and other important economic sectors.
  - a. 2015: Establish the 2015 Baseline for transit ridership.
  - b. 2020: increase transit ridership by at least an average of 1.5% over a five-year period beginning in 2015.
  - c. 2030: Increase transit ridership by at least an average of 1.5% over a ten-year period beginning in 2020.
  - d. 2040: Increase transit ridership and by at least an average of 1.7% over a ten-year period beginning in 2030.

### 1.3.5 Planning Category #5: System Reliability

The overall goal of the system reliability is to optimize the roadway system and minimize congestion. The specific metrics and targets for system reliability are tied back into those cited in Goal #3 – Congestion Relief.

#### Maintain/Improve Reliability

Reduce minutes of delay on congested corridor segments on interstate, NHS and other state highways by working to:

- a. Maintain and expand the Pueblo region's transit system.
- b. Reduce traffic congestion by implementing TSM measures to improve passenger carrying capacity of the regional.
- c. Increase capacity on congested segments (add additional lanes) on Interstate; NHS; and other State highways.
- d. Increase intersection capacity through the addition of turn lanes, queuing storage lengths, signal improvements, and grade separated interchanges as identified in the US-50 PEL and at failing intersections.
- e. Reduce the projected Single Occupancy Vehicle (SOV) trips between 2015 – 2040 by 5% through implementing strategically located park and ride facilities and encouraging the increased use of transit and carpooling.
- f. Deploy Intelligent Transportation Systems such as vehicle flow treatments and national real-time system information programs, and transit monitoring system to improve the effectiveness and efficiency of the transportation system.
- g. Implement transportation projects such as acceleration/deceleration lanes, intersection improvements, and ramp metering, and that improves the flow of motor vehicles and transit.

- h. Develop alternate routes that expand system capacity and expand system redundancy for the I-25 and US 50 corridors.
- i. Increase the number of wayfinder signs to assist motorists, bicyclists and pedestrians.
- j. Improve non-motorized system accessibility and connectivity within Pueblo and regionally with Pueblo West.
- k. Identify additional crossing locations of the Arkansas River and Fountain Creek to improve mobility for all transportation modes.

**1.3.6 Goal #6: Environmental Sustainability**

The overall goal of the environmental sustainability category in the PACOG RTP is to address a wide range of specific topics related to the environment. The topics in this section cover reducing fossil fuel use, addressing special needs travelers, enhancing historical preservation, protecting endangered species, and encouraging water sustainability.

**Emissions**

The goal is to reduce fossil fuel per capita use in the region with the goal of having a 50% reduction from 2015 levels of annual metric tons per capita between 2015 and 2040. The specifics of this goal are addressed under “Mobile Source Pollution Abatement” in Section 1.3.3.

**Special Needs Travelers**

All citizens of the region have a right to access to transportation infrastructure. PACOG will work to:

- A. Incorporate social, concerns into the planning, design, construction, maintenance, and operation of the Pueblo regional multimodal transportation system. Identify the pros and cons of Environmental Justice (EJ) issues of projects. Have participation from identified (low income, minority populations, and other) that documents the benefits and burdens of projects. At risk populations

include Census blocks with higher percentages of minorities, persons with disabilities and low income households. The goals by year are stated below:

- a. 2015: Establish the 2015 Baseline.
  - b. 2020: Increase investment benefits to areas identified as having a higher level of at risk populations by 10% over 2010 levels.
  - c. 2030: Increase investment by 20%.
  - d. 2040: Increase investment by 30%.
- B. The three remaining components of Planning Category 6 – Environmental Sustainability, will use the approach of Focusing on Partnership to move toward these important goals. In 2015 and forward PACOG will establish and/or continue participation in statewide, regional and private advocacy groups related to historical preservation, environmental stewardship, and water sustainability. The MPO will work to maintain a log of events and outcomes from these meetings.

**Historical Preservation**

Within the transportation realm, full effort will be made to incorporate historic preservation needs. PACOG will complete plans and designs that minimize or eliminate impacts to culturally and/or historically significant sites; when feasible, incorporate methods that celebrate and educate the public value of culturally and/or historically significant areas that are preserved and protected in project areas. PACOG will implement context sensitive design solutions that incorporate the community’s heritage and architectural legacy.

**Endangered Species**

With regard to endangered species, PACOG will develop design alternatives that prioritize natural, cultural, and historical resources impacts by working to follow the CDOT Environmental Stewardship Guide, design projects to avoid significant areas and sites and, if unavoidable, minimize impacts to significant areas and sites, and provide equal value of litigation for unavoidable impacts to significant areas and sites.

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**Goal #6: Environmental Sustainability**

- *Reduce fossil fuel consumption and reduce greenhouse gas and other emissions.*
  - *Improve and support transportation system improvements that address needs for citizens with disabilities, low incomes, and other special needs residents in the region.*
  - *Reduce transportation-related adverse impacts to communities, neighborhoods, natural environments, and areas identified for cultural and/or historical preservation.*
  - *Protect and/or avoid areas containing critical habitat for threatened and endangered species, and wildlife travel corridors.*
  - *Minimize the amount of stormwater runoff and transportation-associated pollutants that enter the region’s streams.*
-

### Goal #7: Reduce Project Delivery Delays

*Accelerate the timeframe for the completion of projects*

### Goal #8: Support Multi-Modal Transportation

- *Increase the Bicycling and Walking activity in Pueblo County for people all ages*
- *Improve the quality of life through an increase in attractive multi modal facilities accessible for pedestrians and cyclists and improve connectivity*
- *Increase non-motorized transportation usage in Pueblo by integrating multimodal improvements as part of upgrades to the existing roadway system*
- *Maximize transportation investments with bike and pedestrian enhancements*
- *Increase public & governmental support for bicycling in Pueblo*
- *Improve Public Health with alternative forms of transportation*

## Water Sustainability

Finally, the area of water sustainability has never been more important in the region and the state. PACOG will design future transportation projects to meet the stormwater standards and Best Management Practices (BMPs) in effect at the time of project construction.

### 1.3.7 Planning Category #7: Reduce Project Delivery Delays

The overall goal of this category in the PACOG region is add value by working to accelerate the timeframe of project delivery in the region. Three strategies will be implemented:

- A. Improve timing to streamline approval processes, including reviews, contracts, and general clearances.
- B. When possible do not require design and construction funding and having separate consultants for design/construction to be split up.
- C. Utilize Design/Build and Every Day Counts concepts to identify and deploy innovation aimed at shortening project delivery, enhancing the safety, and protecting the environment. These concepts include: - Shortened project delivery - flexibilities and coordination in Right of Way and the accommodation and relocation of utilities.

Incremental targets are:

- A. 2015: Establish the 2015 Baseline.
- B. 2020: decrease delivery time for projects on average of 3%.
- C. 2030: decrease by 5%.
- D. 2040: decrease by 10%.

### 1.3.8 Planning Category #8: Support Multi-Modal Transportation

The overall goal of this category, which was identified and developed by a local decision making process is to enhance all aspects of multi-modal travel in the region. One key addition to the RTP is the focus on collecting observed use of bicycle and hiking/walking facilities in the region.

## Trips

- A. Improve multi-modal corridor bicycling and pedestrian conditions. Create and expand permanent data collection and counting procedures to monitor usage. Complete number counts a minimum of two times every five years. Establish a pilot program for a school in Pueblo to increase the number of students walking or bicycling to school. Increase the number of participants within Pueblo County in the National Bicycle Challenge and Bike to Work Events.
  - a. Bicycle/Pedestrian Count Program 2015: Establish the 2015 Baseline - in this case it is a rolling scheme for bicycle/pedestrian (bike/ped) counts.
  - b. 2020: Complete two bicycle/ped count efforts between 2015 and 2020.
  - c. 2030: Complete four bicycle/ped count efforts between 2020 and 2030.
  - d. 2040: Complete four bicycle/ped count efforts between 2030 and 2040.

## Infrastructure

- B. Provide improved bike & pedestrian friendly connections to existing multi-modal facilities and destinations. Measure progress by counting facilities being built and compare annually: (1) Blocks of new or repaired sidewalks; (2) Miles of new multimodal trails; (3) Miles of striped bicycle lanes on the street; - Miles of streets with sharrows (shared lane bicycle marking); (4) Number of pedestrian countdown signals and crosswalks improved or added; and (5) Number of new accesses to existing or new facilities:
  - a. Bicycle/Pedestrian Infrastructure Program 2015: Establish the 2015 Baseline - in this case it is the existing conditions.
  - b. 2020: increase all bike/ped amenities by an average of 4% over 2015 levels.
  - c. 2030: increase all bike/ped amenities by an average of 8% over 2015 levels.
  - d. 2040: increase all bike/ped amenities by an average of 15% over 2015 levels.



**Integration**

This goal will be achieved by working to incorporate ‘Complete Streets’ concepts on City and County transportation projects.

**Maximization**

Maximization of the transportation infrastructure and systems will be an ongoing focus of PACOG with the goal to connect systems during specific projects, to reduce motor vehicle traffic by incorporating safe alternative methods of travel into all feasible projects, and to enhance multimodal, efficiency and transit options where feasible.

**Support**

PACOG will work to enhance membership in national organizations that promote bicycling and to continue to submit and improve ranking for Pueblo as a “Bicycle Friendly City”. The MPO will also promote bicycling for both residents and tourists through local bicycling events, proclamations and resolutions from PACOG and other entities.

**Public Health**

Public health goals such as reducing obesity within the overall population by providing more bicycle and pedestrian opportunities will continue. PACOG will partner with public health agencies on initiatives to promote walking and bicycling.

- 9. Chapter 9 – Congestion Management Process
- 10. Chapter 10 – Freight and Commodity Flows
- 11. Chapter 11 – Financial Plan
- 12. Chapter 12 – Implementation Plan
- Appendix A – Strategic Action Plan
- Appendix B – Public Involvement
- Appendix C – Demographic Forecasts
- Appendix D – Coordinated Human Service Transportation Plan
- Appendix E – Constrained Public Transit Plan

**1.4 Organization of this Document**

There are twelve chapters and five appendices in the PACOG RTP report.

- 1. Chapter 1 – Overview
- 2. Chapter 2 –Existing Transportation System
- 3. Chapter 3 – Socioeconomic Profile
- 4. Chapter 4 – Environmental Profile
- 5. Chapter 5 – Transportation Safety and Security
- 6. Chapter 6 – Travel Demand Analysis
- 7. Chapter 7 – Vision Plan
- 8. Chapter 8 – Fiscally Constrained Plan



**MAP-21 and Goals and Performance Measures for MPO Plans**

|               | <b>Safety</b>   | <b>Infrastructure Condition</b>   | <b>Congestion Reduction</b>  | <b>Freight Movement and Economic Vitality</b>  | <b>System Reliability</b>  | <b>Environmental Sustainability</b>   | <b>Reduce Project Delivery Delays</b>  | <b>Multi-Modal Transportation</b>   |
|---------------|---|---|--|--|--|---|--|---|
| PACOG 4-28-14 | <p><i>Goal: Improve safety by providing a multi-modal transportation system that focuses on the reduction of the frequency and severity of crashes.</i></p> <ul style="list-style-type: none"> <li>• Reduce the fatal crash rate by 50%.</li> <li>• Decrease the “serious” injury crash rate by 25%.</li> <li>• Decrease the injury crash rate by 25%.</li> <li>• Decrease the PDO rate of crashes by 25%.</li> <li>• Decrease the frequency and severity of public transit related crashes by 10%.</li> <li>• Decrease the frequency and severity of pedestrian related accidents by 75%.</li> <li>• Eliminate railroad crossing related crashes by 75%.</li> <li>• Enhance the overall safety of the transportation system by implementing engineering, education, and enforcement strategies to reduce traffic-related injuries and fatalities.</li> </ul> | <p><i>Goal: Improve and sustain the surface conditions of the State highway system.</i></p> <ul style="list-style-type: none"> <li>• Achieve 80% High/Moderate Drivability Life for the Interstate Highway System based on condition standards and treatments set for traffic volume categories.</li> <li>• Achieve 80% High/Moderate Drivability Life for the National Highway System based on condition standards and treatments set for traffic volume categories.</li> <li>• Achieve 80% High/Moderate Drivability Life for the State Highway System based on condition standards and treatments set for traffic volume categories.</li> </ul> <p><i>Goal: Maintain Bridges</i></p> <ul style="list-style-type: none"> <li>• In priority, (1) Interstate, (2) NHS and U.S. State highways, and (3) all other State highways:             <ul style="list-style-type: none"> <li>- Improve the SR rating of interstate, NHS, and U.S. State highway bridges to a range of 75 to 100</li> <li>- Improve the SD rating of all other</li> </ul> </li> </ul> | <p><i>Goal: Bring all interstate, NHS, U.S. and other state highways up to current AASHTO standards that improve the flow of motor vehicles and transit.</i></p> <ul style="list-style-type: none"> <li>• Upgrade all functionally obsolete interchanges, accel/decel lanes, inadequate ramp lengths, inadequate shoulders, etc.</li> <li>• Interstate, NHS, U.S. highways and other state highways: LOS C- (through traffic LOS D at grade and grade separated/interchanges)</li> </ul> <p><i>Goal: Relieve existing heavy congestion on U.S. highways, NHS highways by implementing alternative transportation corridors (i.e. Bypass facilities.)</i></p> <ul style="list-style-type: none"> <li>• Build or expand alternate bypass state highway facilities to LOS C- (through traffic D on at grade and grade separated interchanges) to reduce congestion on existing heavily congested corridors.</li> <li>• To reduce travel time on existing heavily congested corridors by 25%.</li> <li>• As identified in the U.S. 50W PEL Study - build grade separated interchanges and add</li> </ul> | <p><i>Goal: Provide a safe and efficient interstate and NHS, and other State highway system for the movement of freight.</i></p> <ul style="list-style-type: none"> <li>• Reduce the number and severity of truck/freight related crashes by 75% on the New Pueblo Freeway (NAFTA corridor – designated national freight movement corridor) interstate system</li> <li>• Reduce the number and severity of truck/freight related crashes by 75% on U.S. highways and other NHS highways</li> <li>• Improve all functionally obsolete interchanges, accel/decel lanes, inadequate ramp lengths, inadequate shoulders to AASHTO standards for the safe and efficient movements of freight through Pueblo County’s interstate system</li> <li>• Sustain and improve a regional roadway system that provides local, regional and statewide efficient access and connectivity for the movement of freight and people</li> </ul> <p><i>Goal: Encourage corridor preservation and expansion efforts for both passenger and freight rail, and railroads.</i></p> | <p><i>Goal: Provide transportation facilities that optimize system performance and safety, and preserves and enhances the present and future mobility needs of the Pueblo Region</i></p> <ul style="list-style-type: none"> <li>• Reduce minutes of delay on congested corridor segments on interstate, NHS and other state highways by:             <ul style="list-style-type: none"> <li>- Maintain and expand the Pueblo region’s transit system</li> <li>- Reduce traffic congestion by implementing TSM measures to improve passenger carrying capacity of the regional transportation network</li> <li>- Increase capacity on congested segments (add additional lanes) on 1) Interstate; 2) NHS; 3) Other State highways</li> <li>- Increase intersection capacity through the addition of turn lanes, queuing storage lengths, signal improvements, and grade separated interchanges as identified in the US-50 PEL and at failing intersections</li> </ul> </li> <li>• Reduce the projected SOV trips between 2015 – 2040 by 5% through implementing strategically located park and ride facilities and encouraging the increased use of transit and car pooling</li> <li>• Deploy intelligent Transportation Systems</li> </ul> | <p><i>Goal: Reduce fossil fuel consumption and reduce greenhouse gas and other emissions.</i></p> <ul style="list-style-type: none"> <li>• Have a 50% reduction from 2005 levels of annual metric tons per capita between 2015 and 2040.</li> </ul> <p><i>Goal: Improve and support transportation system improvements that address needs for citizens with disabilities, low incomes, and other special needs residents in the region.</i></p> <ul style="list-style-type: none"> <li>• Incorporate social, economic, and environmental concerns into the planning, design, construction, maintenance, and operation of the Pueblo regional multimodal transportation system.</li> <li>• Identify the pros and cons of environmental justice issues of projects.             <ul style="list-style-type: none"> <li>- Have participation from identified (low income, minority populations, etc.) that documents benefits and burdens of projects.</li> </ul> </li> </ul> <p><i>Goal: Reduce transportation-related adverse impacts to communities, neighborhoods, natural environments, and areas identified for cultural</i></p> | <p><i>Goal: Accelerate the timeframe for the completion of projects.</i></p> <ul style="list-style-type: none"> <li>• Improve timing to streamline approval processes, including reviews, contracts, and general clearances</li> <li>• When possible do not require design and construction funding and having separate consultants for design/construction to be split up</li> <li>• Utilize Design/Build and Every Day Counts concepts to identify and deploy innovation aimed at shortening project delivery, enhancing the safety, and protecting the environment. These concepts include:             <ul style="list-style-type: none"> <li>- Shortened project delivery</li> <li>- Flexibilities and coordination in Right of Way</li> <li>- Accommodation and relocation of utilities</li> </ul> </li> </ul> | <p><i>Goal: Increase the Bicycling and Walking activity in Pueblo County for people all ages.</i></p> <ul style="list-style-type: none"> <li>• Improve multi-modal corridor bicycling and pedestrian conditions</li> <li>• Create and expand permanent data collection and counting procedures to monitor usage.</li> <li>• Complete number counts a minimum of two times every five years</li> <li>• Establish a pilot program for a school in Pueblo to increase the number of students walking or bicycling to school</li> <li>• Increase the number of participants within Pueblo County in the National Bicycle Challenge and Bike to Work Events</li> </ul> <p><i>Goal: Improve the quality of life through an increase in attractive multi modal facilities accessible for pedestrians and cyclist and improve connectivity.</i></p> <ul style="list-style-type: none"> <li>• Provide improved bike &amp; pedestrian friendly connections to existing multi-modal facilities and destinations.</li> <li>• Measure progress by counting facilities being built and compare</li> </ul> |

**MAP-21 and Goals and Performance Measures for MPO Plans**

|  | <i>Safety</i> | <i>Infrastructure Condition</i>  | <i>Congestion Reduction</i>  | <i>Freight Movement and Economic Vitality</i>  | <i>System Reliability</i>   | <i>Environmental Sustainability</i>   | <i>Reduce Project Delivery Delays</i> | <i>Multi-Modal Transportation</i>   |
|--|---------------|--|--|--|---|---|---------------------------------------|---|
|  |               | <p>State highway bridges to a range of 75 to 100</p> <ul style="list-style-type: none"> <li>- Bring all functionally obsolete bridge structures at grade or grade separated, interchanges, ramps, and accel and decel lanes to current AASHTO standards.</li> </ul> <p>Transit:</p> <ul style="list-style-type: none"> <li>- Maintain the condition of all transit related infrastructure. (i.e. dedicated bus lanes and stops, shelters, maintenance facilities, fueling stations, transit center facilities, etc.)</li> <li>- Maintain the condition of all bike/pedestrian trail related infrastructure. (i.e. surface condition, signage, safety improvements, etc.)</li> <li>- Expand and improve the connectivity of the regional system wide trail system.</li> </ul> <p>Passenger Rail:</p> <ul style="list-style-type: none"> <li>- Continue to work with CDOT DRT and policy office to sustain passenger rail service to southeastern Colorado including a potential passenger rail stop in Pueblo.</li> </ul> | <p>additional travel lanes when corridor levels of service reach D-.</p> <ul style="list-style-type: none"> <li>• As identified in the I-25 New Pueblo Freeway EIS <ul style="list-style-type: none"> <li>- build grade separated interchanges and add additional travel lanes when corridor levels of service reach D-.</li> </ul> </li> <li>• Bring all New Pueblo Freeway functionally obsolete bridge structures at grade or grade separated, interchanges, ramps, and accel and decel lanes to current AASHTO standards.</li> <li>• Initiate steps that will reduce on-road mobile source emissions per capita by: <ul style="list-style-type: none"> <li>- Facilitating the creation of CNG fueling stations and private and public use of NGVs and electric vehicles</li> <li>- As feasible, convert public transit buses and shuttles to alternative fuel vehicles (i.e. CNG, LNG, electric and other future emission reduction fuels)</li> <li>- Build strategically located park and ride facilities to reduce out of town commuter trips to work by single</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• Continue efforts with CDOT, USDOT, FTA and Congress to integrate regional passenger and freight rail service into the statewide passenger rail service plans and vision</li> </ul> <p><i>Goal: Provide a transportation system that encourages new business, economic development and industry expansion that is integrated with future land use plans and policies</i></p> <ul style="list-style-type: none"> <li>• Improve the integration, accessibility and connectivity of the regional transportation system across and between modes for the movement of freight and people</li> <li>• The transportation system should be planned, maintained, and constructed in a manner that supports access to jobs for workers; access to shopping and services; and the safe and efficient movements of goods to, from, and within the region. It should support retail, medical, education, manufacturing, energy industry, recreation, and other important economic sectors.</li> </ul> | <p>such as vehicle flow treatments and national real-time system information programs, and transit monitoring system to improve the effectiveness and efficiency of the transportation system</p> <ul style="list-style-type: none"> <li>• Implement transportation projects such as accel/decel lanes, intersection improvements, and ramp metering, and that improves the flow of motor vehicles and transit</li> <li>• Develop alternate routes that expand system capacity and expand system redundancy for the I-25 and US 50 corridors.</li> <li>• Increase the number of Wayfinder signs to assist both motorists, bicyclists and pedestrians</li> <li>• Improve non-motorized system accessibility and connectivity within Pueblo and regionally with Pueblo West</li> <li>• Identify additional crossing locations of the Arkansas River and Fountain Creek to improve mobility for all transportation modes.</li> </ul> | <p><i>and/or historical preservation</i></p> <ul style="list-style-type: none"> <li>• Complete plans and designs that minimize or eliminate impacts to culturally and/or historically significant sites.</li> <li>• When feasible, incorporate methods that celebrate and educate the public value of culturally and/or historically significant areas that are preserved and protected in project areas.</li> <li>• Implement context sensitive design solutions that incorporates the community's heritage and architectural legacy.</li> </ul> <p><i>Goal: Protect and/or avoid areas containing critical habitat for threatened and endangered species, and wildlife travel corridors.</i></p> <ul style="list-style-type: none"> <li>• Follow the CDOT Environmental Stewardship Guide.</li> <li>• Develop design alternatives that prioritize natural, cultural, and historical resources impacts: <ol style="list-style-type: none"> <li>1) Design projects to avoid significant areas and sites.</li> <li>2) If unavoidable, minimize impacts to significant areas and</li> </ol> </li> </ul> |                                       | <p>annually:</p> <ul style="list-style-type: none"> <li>- Blocks of new or repaired sidewalks;</li> <li>- Miles of new multimodal trails;</li> <li>- Miles of striped bicycle lanes on the street;</li> <li>- Miles of streets with sharrows;</li> <li>- # of pedestrian countdown signals and crosswalks improved or added.</li> <li>- # of new accesses</li> </ul> <p>Goal: Increase non motorized transportation usage in Pueblo by integrating multimodal improvements as part of upgrades to the existing roadway system.</p> <ul style="list-style-type: none"> <li>• Incorporate 'complete street' concepts on City and county transportation projects.</li> </ul> <p><i>Goal: Maximize transportation investments with bike and pedestrian enhancements</i></p> <ul style="list-style-type: none"> <li>• Complete or connect systems during specific projects</li> <li>• Reduce motor vehicle traffic by incorporating safe alternative methods of travel into all feasible projects</li> <li>• Enhance multimodal; efficiency and transit options where feasible.</li> </ul> |

**MAP-21 and Goals and Performance Measures for MPO Plans**

|  | <i>Safety</i> | <i>Infrastructure Condition</i>  | <i>Congestion Reduction</i>  | <i>Freight Movement and Economic Vitality</i> | <i>System Reliability</i> | <i>Environmental Sustainability</i>   | <i>Reduce Project Delivery Delays</i> | <i>Multi-Modal Transportation</i>  |
|--|---------------|--|--|---|---------------------------|---|---------------------------------------|--|
|  |               | <ul style="list-style-type: none"> <li>- Seek other sources of funding to improve and maintain the existing BNSF rail lines throughout Southeastern Colorado.</li> </ul> | <ul style="list-style-type: none"> <li>- occupancy vehicles (SOV)</li> <li>- Continue to encourage (public education and reduce public transit travel times, transfers, etc.) the use of public transit as an alternate to SOV trips</li> <li>- Implement TSM measures such as intersection improvements, ramp metering, etc.) to improve the flow of motor vehicles and transit.</li> <li>- Deploy additional ITS measures to improve public awareness (accident and construction delays, major event parking and transit alternatives, weather and other safety messages) and alert motorists of traffic conditions to improve the flow of motor vehicles and transit</li> <li>- Expand and improve the regional on and off-system bicycle routes to facilitate an increase of 3% of work, school and other trip purpose connectivity in a safe and efficient</li> </ul> |   |                           | <p>sites.</p> <p>3) Provide equal value of mitigation for unavoidable impacts to significant areas and sites.</p> <p><i>Goal: Minimize the amount of stormwater runoff and transportation-associated pollutants that enter the region's streams</i></p> <ul style="list-style-type: none"> <li>• Design future transportation projects to meet the stormwater standards and best management practices in affect at the time of project construction.</li> </ul> |                                       | <p><i>Goal: Increase public &amp; governmental support for bicycling in Pueblo by:</i></p> <ul style="list-style-type: none"> <li>• Membership in national organizations that promote bicycling</li> <li>• Continue to submit and improve ranking as a "Bicycle Friendly City"</li> <li>• Promote bicycling for both residents and tourists through local bicycling events, proclamations and resolutions from PACOG and other entities</li> </ul> <p><i>Goal: Improve Public Health with alternative forms of transportation.</i></p> <ul style="list-style-type: none"> <li>• Reduce obesity within the overall population by providing more bike &amp; pedestrian opportunities.</li> <li>• Partner with public health agencies on initiatives to promote people walking and biking.</li> </ul> |

**MAP-21 and Goals and Performance Measures for MPO Plans**

|  | <i>Safety</i> | <i>Infrastructure Condition</i> | <i>Congestion Reduction</i>  | <i>Freight Movement and Economic Vitality</i> | <i>System Reliability</i> | <i>Environmental Sustainability</i> | <i>Reduce Project Delivery Delays</i> | <i>Multi-Modal Transportation</i> |
|--|---------------|---------------------------------|--|---|---------------------------|-------------------------------------|---------------------------------------|-----------------------------------|
|  |               |                                 | manner<br>- Encourage public and private sector incentives for public transit, carpooling, telecommuting, bicycling, walk to work/school and park n’ ride utilization<br>- Continue support of the statewide efforts of the Interregional Connectivity System for Front Range transit and high speed passenger rail service. Identify the gaps and connections (convenient and accessible transfer points). Preserve existing passenger rail service in Southern Colorado through Pueblo County. |   |                           |                                     |                                       |                                   |

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## Chapter 2 Existing Conditions

### 2.1 Roadway Element

Pueblo’s roadway system consists of over 2,400 miles of public roadways, of which approximately 420 miles are “major roadways” – those classified as a Minor Arterial or above. These major roadways serve to transport people and goods to and from destinations around the region as quickly and safely as possible. Roadways continue to be the dominant transportation system in Pueblo, as they have since the 1940s, when automobiles and motorized buses took over from walking and rail as the dominant form of transportation nationwide.

#### 2.1.1 Use of Roadways

The dominance of the auto for work trips in the region is shown by reviewing five years of data from the American Community Survey (ACS)<sup>1</sup>. The ACS is an ongoing annual national household and travel database that provides states and communities the information they need to plan investments and services. One important value of the ACS is that it supplements the U.S Census long form providing small-area information annually on a rolling basis instead of once a decade. The Census Place-to-Place work flows and means of transportation data used for this section of the Regional Transportation Plan (RTP) are based on the 5-year (2009-2013) ACS, the most recent available and the time frame that conforms to the RTP time line. The place-to-place data contain total work flows both into and out of each Census Place.

The ACS 5-year estimates confirm the continued use of automobiles as the favored mode of transportation for Pueblo area workers. Mode use by workers is an important indicator, since much of the transportation system is designed for peak-hour use, when the work force is on their way to or returning from work.

#### Commute Mode Share

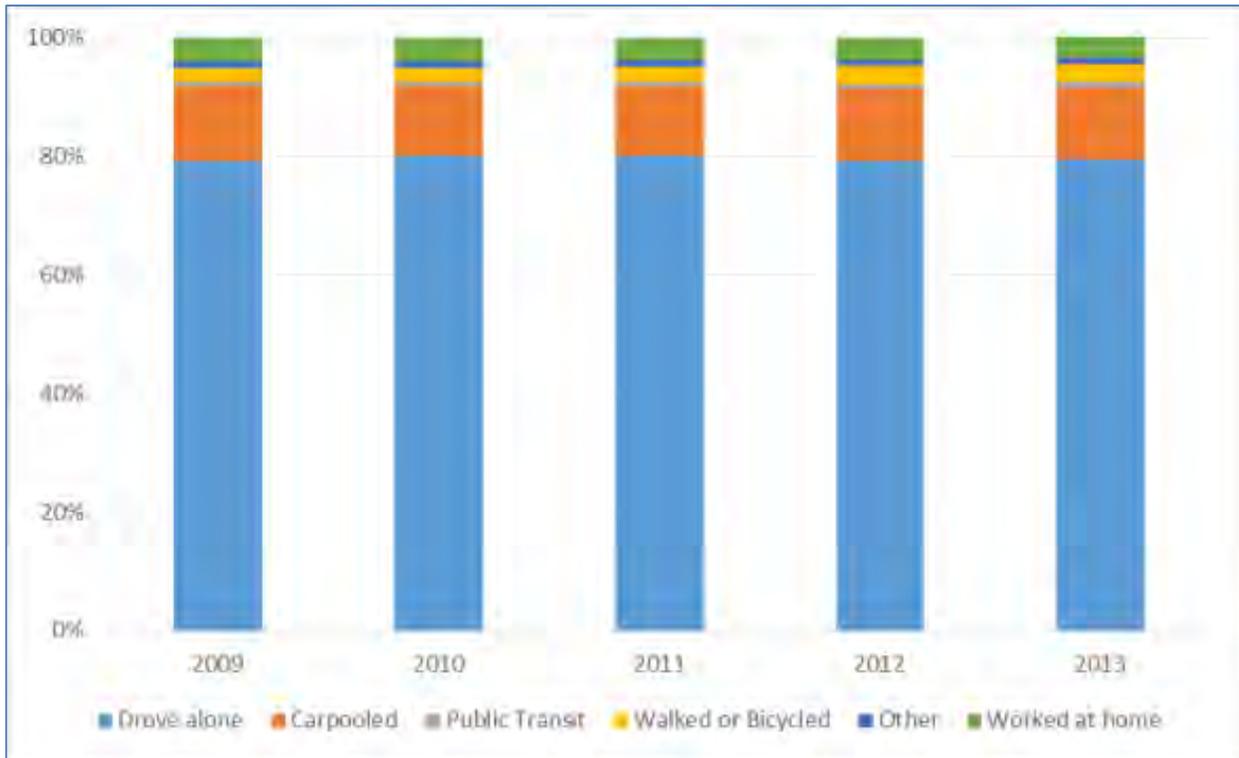
Table 2.1 and Figure 2.1 show that in Pueblo County, driving alone is the dominant mode of travel to work, registering around 80% of total work trips between 2009 and 2013, according to ACS estimates. Carpooling accounts for about 12% of commute trips, while telecommuting, non-motorized modes, and public transit account for the remaining 8%. These commute mode shares have remained stable over the latest 5 years of ACS 5-year estimates.

**Table 2.1: American Community Survey 5-year Commute Mode Share**

|                    | <b>2009</b> | <b>2010</b> | <b>2011</b> | <b>2012</b> | <b>2013</b> |
|--------------------|-------------|-------------|-------------|-------------|-------------|
| Drove alone        | 79.3%       | 80.2%       | 80.1%       | 79.3%       | 79.4%       |
| Carpooled          | 12.7%       | 11.8%       | 11.8%       | 12.2%       | 12.3%       |
| Public Transit     | 0.5%        | 0.6%        | 0.6%        | 0.7%        | 0.9%        |
| Walked or Bicycled | 2.3%        | 2.4%        | 2.7%        | 3.1%        | 3.0%        |
| Other              | 1.3%        | 1.1%        | 1.1%        | 1.1%        | 1.1%        |
| Worked at home     | 3.8%        | 3.8%        | 3.7%        | 3.6%        | 3.4%        |

<sup>1</sup> American Community Survey (ACS), accessed 2015  
[http://www.census.gov/acs/www/about\\_the\\_survey/american\\_community\\_survey](http://www.census.gov/acs/www/about_the_survey/american_community_survey)

**Figure 2.1: American Community Survey Commute Mode Share**



This dominant use of automobiles for work travel is reflected in the large amount of local peak-hour traffic on the state highway system in Pueblo.

It is also useful to consider the average commuting travel times in the region. The most recent ACS information on average trip times, which includes all modes of travel, for the work commute show Pueblo County at 20.4 minutes, all Colorado at 24.5 minutes and all the United States at 25.5 minutes<sup>2</sup>.

### **Commuter Direction / Balance**

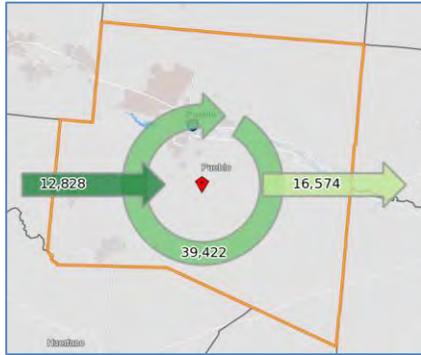
The U.S. Department of Commerce with the U.S. Census Bureau maintains a number of data programs related to employment statistics. The online data and informational site known as Longitudinal Employer-Household Dynamics (LODES)<sup>3</sup> makes available several data products that may be used to research and characterize workforce dynamics for specific groups such as a county or a Census Place. The LODES website also provides a geographic crosswalk allowing the county-to-county as well as place-to-place information in Pueblo County to be summarized. Figure 2.2 shows the county level picture with respect to commuting. As shown by the circular green arrow, most workers in the county (39,422) both live and work within the county. The two straight green arrows show all work trips coming into Pueblo County (12,828) from any direction and leaving the county in any direction (16,574). Note that while the arrows are placed at the west and east borders of the county, the work trips are flowing from *all points*

<sup>2</sup> <http://www.census.gov/quickfacts/table/LFE305213/00,08,08101>, accessed 2015.

<sup>3</sup> <http://lehd.ces.census.gov/data/>, accessed 2015.

**outside** the county. As an example, some of the 12,828 work trips come to the county from Colorado Springs and others from the smaller communities outside of Pueblo County in every direction. Figure 2.2 communicates that Pueblo County residents by and large live and work within the county but that the county attracts workers from outside the county and sends some residents to work locations outside Pueblo County.

**Figure 2.2: Commuter Flow Patterns in Pueblo County**



Source: LODES, <http://lehd.ces.census.gov/data/> accessed 2015

Table 2.2 presents this daily inflow and outflow of workers for Pueblo County as a whole, as well as for major cities and census-designated places within the county. Looking at Table 2.2, Pueblo West contains 3,066 workers. 69% come from outside Pueblo West and 31% both live and work in Pueblo West. Looking at Pueblo West from the resident standpoint, 92% of Pueblo West residents work outside the city. Table 2.2 shows that Pueblo County is dominated by the city of Pueblo with respect to the number of residents and workers. However, a number of other municipalities interact with Pueblo to give and receive workers as needed by the industry strata in the region.

**Table 2.2: Commute Patterns in Pueblo County, 2011**

| Profile              |               |               | Commute In    |              | Commute Out   |                | Commute Within   |              |
|----------------------|---------------|---------------|---------------|--------------|---------------|----------------|------------------|--------------|
| City or Place        | Residents     | Workers       | Commuting In  | % of Workers | Commuting Out | % of Residents | Commuting Within | % of Workers |
| Pueblo               | 36,817        | 41,106        | 19,218        | 47%          | 14,929        | 41%            | 21,888           | 53%          |
| Pueblo West          | 11,153        | 3,066         | 2,130         | 69%          | 10,217        | 92%            | 936              | 31%          |
| Blende               | 301           | 778           | 760           | 98%          | 283           | 94%            | 18               | 2%           |
| Colorado City        | 506           | 224           | 159           | 71%          | 441           | 87%            | 65               | 29%          |
| Boone                | 228           | 57            | 57            | 100%         | 228           | 100%           | 0                | 0%           |
| Beulah Valley        | 166           | 50            | 49            | 98%          | 165           | 99%            | 1                | 2%           |
| Salt Creek           | 243           | 36            | 36            | 100%         | 243           | 100%           | 0                | 0%           |
| Rye                  | 64            | 34            | 34            | 100%         | 64            | 100%           | 0                | 0%           |
| Avondale             | 282           | 14            | 14            | 100%         | 282           | 100%           | 0                | 0%           |
| Vineland             | 88            | 13            | 13            | 100%         | 88            | 100%           | 0                | 0%           |
| <b>Pueblo County</b> | <b>55,996</b> | <b>52,250</b> | <b>12,828</b> | <b>25%</b>   | <b>16,574</b> | <b>30%</b>     | <b>39,422</b>    | <b>75%</b>   |

The significance of reviewing workers flows is that, in general work trips generate about 1 in 5 of all person trips made in a region and thus account for a significant portion of daily traffic congestion. Work trips are typically made in the peak periods requiring attention to the peak hour performance of major highway facilities.

### 2.1.2 Functional Classifications of Roadways

Roadways are organized around the Federal Highway Administration (FHWA) functional classification with five key categories:

- **Freeways:** Freeways are high-capacity roadways that accommodate high speed, long-distance travel through the metro area. Access is strictly controlled, and limited to Major Arterials connected by grade-separated interchanges at a minimum spacing set by the Colorado Department of Transportation (CDOT) and the FHWA.
- **Expressways:** Expressways accommodate high speed, long distance travel to and through the surrounding area. Access to adjacent land uses is limited. Full movement intersections are at-grade and signalized or grade-separated interchanges.
- **Principal Arterials:** Principal Arterials provide a high level of mobility and favor that mobility over access to adjacent land uses. They provide access between lower classification streets (minor arterials and collectors) and higher classification streets (expressways and freeways).
- **Minor Arterials:** Minor arterial streets balance mobility of through traffic with access to adjacent land uses. Travel speeds and capacity are lower than for Principal Arterials. Separate turn lanes, especially continuous left turn lanes, may be used to permit access to land uses on both sides of the street.
- **Collectors:** Collectors are roadways that collect traffic from nearby local streets. Neighborhood collectors remain in the neighborhood and are residential in character. Mixed-use collectors form the edge of neighborhoods and have a wider right of way to allow for future turn lanes or additional width in the future. Residential homes are typically not allowed to face mixed-use collectors. Business collectors serve commercial development and may be in industrial areas, mixed use neighborhoods, or regional commercial shopping areas. Access is provided to many businesses and speeds are lower than on arterial roadways.

These five classifications serve as a means of understanding the existing highway system in the region and are also used as a framework in the Pueblo Area Council of Governments (PACOG) travel demand model. They are shown in Figure 2.3.

**Figure 2.3: Roadways by Functional Classification**

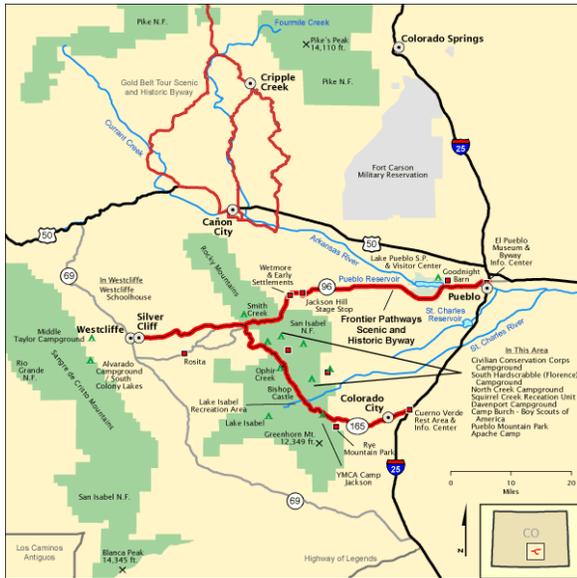


The two major roadways bisecting Pueblo County, Interstate 25 and US Highway 50, almost exclusively carry the trans-regional traffic through Pueblo. These two roads form the framework of the State Highway network through Pueblo that comprises 250 miles of the 420 miles of major roads. Other significant state highways that traverse the region include SH96 and SH78. SH45 runs the majority of the way through the urban section of Pueblo, carrying traffic from the south interchange with I-25 to US50A. SH10 also cuts through the southern portion of Pueblo County, but is not generally utilized by Pueblo traffic; rather it is a connection between La Junta and Walsenburg.

### 2.1.3 Scenic Byways

Within Pueblo County and the PACOG Metropolitan Planning Organization (MPO)/Transportation Planning Region (TPR) boundary there is a single designated FHWA Scenic Byway as shown in Figure 2.4. This is the Frontier Pathways National Scenic & Historic Byway, which has its headquarters and Information Center at the El Pueblo History Museum.

**Figure 2.4: Scenic Byway**



This Byway is significant because it provides access to the San Isabel National Forest and Lake Isabel. It was in this area that the first auto-based recreation facilities within the U.S. Forest Service were created in 1919. It was Arthur Carhart, the first “recreational engineer” in the Forest Service, whose ideas included establishing the first developed campground in the National Forest system at Squirrel Creek. The Frontier Pathways Scenic and Historic Byway emphasizes history, nature, and recreation throughout its span. Stories of 19th Century pioneers are scattered across the region and tell of survival and success.

The traveler can learn about several cultures and their relationships with each other at El Pueblo Museum through bright murals, interesting artifacts, and enthralling tales of the colorful history of Native Americans, Mexicans, and the early settlers.

The Byway hosts distinctive exhibits and lands found nowhere else. Bishop’s Castle is one such display. Comprised of over two million acres, the Pike and San Isabel National Forests showcase nature in alluring combinations. The majestic Sangre de Cristo Mountains tower with 22 peaks reaching at least 13,000 feet; they extend for 50 miles, easily seen from a number of points along the byway. Lake Isabel offers adventure year-round; and Lake Pueblo State Park provides over 7,000 acres of outdoor excitement. Within the Pueblo MPO, the Byway includes the historic Pueblo Loop Tour, which visits numerous neighborhoods and historic landmarks within Pueblo.

### **2.1.4 Commercial Vehicle Routes**

The City and County of Pueblo do not designate truck routes as roadways specifically designed and designated primarily for truck traffic. The commercial vehicle routes are primarily the state highways in and out of the City of Pueblo, coupled with the principal arterials in Pueblo West and those that encircle the City. In addition, parts of Overton Road, the DOT Road to the Transportation Test Center, and 36th Lane south from U.S. Highway 50C serve as commercial corridors.

Primary locations served by commercial truck traffic include the Airport Industrial Park (AIP) with the Target Distribution facility being the largest. Additional truck traffic through the AIP is servicing the Pueblo Chemical Agent-Destruction Pilot Plant at the northern portion of the Pueblo Chemical Depot although in early 2015 the United States began destroying its largest remaining stockpile of chemical-laden artillery shells and neutralizing 2,600 tons of aging mustard agent.

Truck traffic also originates from the Evraz Rocky Mountain Steel Mill on the south side of the City of Pueblo, with traffic primarily loading directly onto the Interstate Highway at Indiana Ave. Additional truck traffic is found serving the other industrial areas including those along Dillon Dr./Platteville Ave. in the northwest portion of the community, the industrial areas surrounding the rail yards in the central Pueblo area, and the industrial parks scattered around the City of Pueblo.

One significant issue that has been discussed in the last few years is the lack of redundant roadways to serve commercial traffic if an incident occurs on Interstate 25. This condition exists throughout the MPO area.

### 2.1.5 Hazardous Materials Routes

The Chief of the Colorado State Patrol is authorized by the provisions of §42-20-108 (1) and (2) and §§42-20- 403, 504 and 508 C.R.S., to promulgate rules and regulations for the permitting, routing, and safe transportation of hazardous and nuclear materials by motor vehicle within the State of Colorado, both in interstate and intrastate transportation. Pursuant to §42-20-108.5, C.R.S., the Chief is authorized to adopt rules and regulations that exempt agricultural products from the hazardous materials rules. The locations of the Hazardous Materials Routes in Pueblo County are shown in Figure 2.5.

Department of Public Safety Division of State Patrol rules and regulations concerning the permitting, routing & transportation of hazardous and nuclear materials and the intrastate transportation of agricultural products in the State of Colorado can be found on the State Patrol website<sup>4</sup>:

**Figure 2.5: Hazardous Materials Routes in Pueblo County**



<sup>4</sup> Hazardous Materials Routes, accessed 2015, <http://csp.state.co.us/downloads/hmtrpFINAL.pdf>

### 2.1.6 Nuclear Materials Route

The transportation of nuclear materials by motor vehicle must comply with the provisions established by federal law and regulations from 49 CFR 107, 171, 172, 173, 177, 178, 180, 387, and 397. These are also enforced by the State Patrol pursuant to §42-20-108, C.R.S. The locations of the Nuclear Materials Routes in Pueblo County are shown in Figure 2.6.

The State Patrol provided additional information noting that the regulations do not apply to “wastes from mining, milling, smelting, or similar processing of ores and mineral-bearing material”.

**Figure 2.6 Nuclear Materials Routes in Pueblo County**



### 2.1.7 Pavement & Bridge Condition

Establishing a set of baseline existing conditions for highway involves considering all eight of the RTP goals presented in Section 1: (1) safety, (2) infrastructure condition, (3) congestion reduction, (4) system reliability, (5) freight movement and economic vitality, (6) environmental sustainability, (7) reduced project delivery delays, and (8) multimodal transportation. The MPO determined that focusing on the supply side of roadway transportation – the road network – was the most efficient way to reach the RTP goals. If roads and bridges are in proper condition, safety, infrastructure condition, system reliability, and freight movement/vitality will be attainable goals. For this reason, two comprehensive reporting measures were applied to all CDOT, and selected city and county infrastructure in Pueblo County: pavement condition and bridge condition. The most current statistics, drawn from 2014 condition reports, were provided to PACOG from the online database, CDOT’s Online Transportation Information System (OTIS)<sup>5</sup>. City and county data were provided by local engineers. Working closely with this data, it is possible to begin the measurement needed for the RTP goals. In keeping with a focus on the importance of maintaining the higher functional classification roads first, facility roads as stated in Section 1 Introduction to the PACOG RTP Planning Goals Category #2 - Infrastructure Condition, Roads and Bridges, the CDOT on-system condition databases were the primary focus of this condition report. It is anticipated that an effort to collect pavement and bridge condition data at city and county locations will be a continued goal of the MPO.

#### 2.1.7.1 Colorado DOT Online Transportation Information System (OTIS)

<sup>5</sup> Colorado DOT Online Transportation Information System (OTIS)<http://dtdapps.coloradodot.info/Otis/>

The Colorado DOT provides comprehensive traffic and road condition data to PACOG via the Online Transportation Information System (OTIS). Information is provided on current and projected traffic volumes, state highway attributes, summary roadway statistics, road and bridge conditions and geographic data. Current year, historical and trend data (forecasted traffic) are also provided.

**2.1.7.2 Pavement Condition**

At the state level, CDOT has goals with respect to pavement conditions. The metric used is Primary Drivability Life Class (PDLC). PDLC is a classification of the pavement condition and acceptable driving condition based on an assessment of smoothness, pavement distress, and safety. Classifications are High, Moderate, and Low and are established by CDOT Division of Transportation Development (DTD).<sup>6</sup> In the FY 2014-15 CDOT Performance Plan Update<sup>7</sup>, CDOT states the goal of achieving an 80% high/moderate Drivability Life for all state highway system pavement. CDOT further notes that this goal will be revisited after federal guidance is issued. CDOT expects this goal will take several years to reach, as state highway system pavement condition is expected to deteriorate, due to funding shortfalls, over the next five years. Fiscally constrained estimates are for state highway pavement to fall to 74% high/moderate Drivability Life for FY14 and 60% for FY16.

Table 2.3 summarizes the state highways within the Pueblo MPO along with their total centerline miles of pavement and pavement condition. Most of the roadways individually achieve an 80% or higher percentage of miles in the high + moderate PDLC. Those roadways with PDLC values less than 80% represent segments that require investment. Note that Table 2.3 reflects a snapshot of conditions during 2014 and may not capture construction upgrades that were completed during late 2014 and 2015.

**Table 2.3: State Highway Centerline Miles and Conditions in Pueblo County**

| Highway       | Miles of Centerline | Primary Drivability Life Class (Miles of Centerline) |          |       | High / Moderate % of Total |
|---------------|---------------------|--|----------|-------|----------------------------|
|               |                     | High   | Moderate | Low   |                            |
| Interstate 25 | 47.63               | 15.12  | 27.32    | 5.18  | 89%                        |
| US50A         | 18.42               | 0.00   | 8.11     | 10.32 | 44%                        |
| US50B         | 33.31               | 26.63  | 4.03     | 2.65  | 92%                        |
| US50C         | 17.07               | 9.49   | 4.12     | 3.46  | 80%                        |
| SH45          | 8.94                | 2.00   | 1.38     | 5.55  | 38%                        |
| SH47          | 4.60                | 1.13   | 3.47     | 0.00  | 100%                       |
| SH78          | 32.89               | 10.65  | 6.53     | 15.72 | 52%                        |
| SH96A         | 29.64               | 11.01  | 13.65    | 4.98  | 83%                        |
| SH96B         | 18.81               | 0.00   | 13.88    | 4.93  | 74%                        |
| SH165         | 18.26               | 12.79  | 5.46     | 0.00  | 100%                       |
| SH209         | 1.51                | 0.00   | 1.51     | 0.00  | 100%                       |
| SH227         | 1.86                | 0.00   | 1.81     | 0.05  | 97%                        |
| SH231         | 2.02                | 1.98   | 0.00     | 0.04  | 98%                        |

<sup>6</sup> Primary Drivability Life Class, CDOT, 2014 <http://dtdapps.coloradodot.info/otis/catalog/CondOn/priDLClass>

<sup>7</sup> FY 2014-15 CDOT Performance Plan Update 1, July 2014, <https://www.codot.gov/library/AnnualReports/fy-2014-2015-cdot-performance-plan-update-1>

|               |               |              |               |              |            |
|---------------|---------------|--------------|---------------|--------------|------------|
| SH233         | 2.09          | 0.00         | 0.00          | 2.09         | 0%         |
| SH10          | 14.73         | 0.00         | 10.42         | 4.31         | 71%        |
| <b>Totals</b> | <b>251.75</b> | <b>90.80</b> | <b>101.67</b> | <b>59.29</b> | <b>76%</b> |
|               |               | 36%          | 40%           | 24%          |            |

Table 2.3 shows that in Pueblo County, 36% of the centerline miles fall into the “High” category, 40% in the “Moderate” category and 24% in the “Low” category of Primary Drivability Life Class. The total of high/moderate drivability life is thus 76%, close to the 80% value identified as a target by DOT across the state.

**Figure 2.7 Pueblo State Highways by Primary Drivability Life Class**

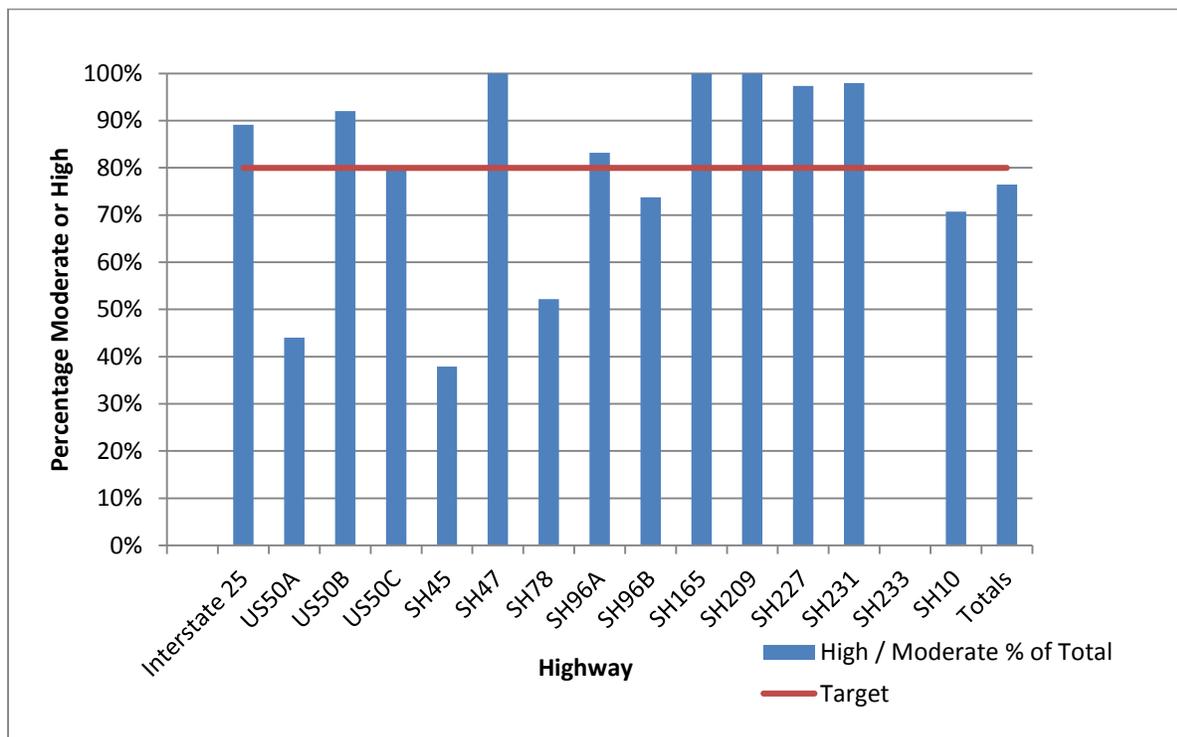


Figure 2.7 shows the fifteen state highways cited in Table 2.3 as well as the total. Nine of the state roads in the county, including I-25, are at or above the desired 80% threshold. Chief among those that rate below 50% in the drivability index are parts of the 18 miles of US50A, the nine miles of SH45, and the two miles of SH 233.

### 2.1.7.3 Bridge Condition for On-System Structures

At the state level, CDOT has the goal of maintaining the percent of the state highway total bridge-deck area that is not structurally deficient at or above 90%. All bridge condition values on state highways in Pueblo County were tabulated using CDOT’s infrastructure database<sup>8</sup>. Quality checks were conducted that removed all culverts, ramps and adjacent routes, as well as roads under bridges from the data. Table 2.4 shows the total bridges in the county by highway name with the number of bridges that fall

<sup>8</sup> <http://dtdapps.coloradodot.info/otis/HighwayData>, Structures, accessed 2015.

under one of three classifications: “Poor”, “Fair” and “Good”. The category “Poor” is considered structurally deficient. Table 2.4 shows that 5% of the bridges in the county are structurally deficient and that 95%, higher than the CDOT target of 90%, are in fair or good condition.

**Table 2.4: Bridge Conditions for CDOT Facilities in Pueblo County**

| State Highway     | Poor      | Fair       | Good       | Total       |
|-------------------|-----------|------------|------------|-------------|
| Interstate 25     | 4         | 16         | 24         | 44          |
| US50A             | 0         | 2          | 3          | 5           |
| US50B             | 0         | 0          | 11         | 11          |
| US50C             | 1         | 1          | 4          | 6           |
| 45A               | 0         | 0          | 4          | 4           |
| 47A               | 0         | 1          | 6          | 7           |
| 78A               | 0         | 0          | 2          | 2           |
| 96A               | 0         | 1          | 13         | 14          |
| 165A              | 0         | 1          | 1          | 2           |
| 209A              | 0         | 0          | 2          | 2           |
| 227A              | 0         | 0          | 1          | 1           |
| 231A              | 0         | 1          | 0          | 1           |
| 233A              | 0         | 0          | 2          | 2           |
| 10A               | 0         | 0          | 8          | 8           |
| Total             | 5         | 23         | 81         | 109         |
| <i>% of Total</i> | <i>5%</i> | <i>21%</i> | <i>74%</i> | <i>100%</i> |

The five bridges in “Poor” condition are identified as:

- 025A with a rating of 46.8% at milepost 95.901 with the unique ID of L-18-W – SB.
- 025A with a rating of 26.6% at milepost 95.901 with the unique ID of L-18-M – NB.
- 025A with a rating of 36.9% at milepost 97.862 with the unique ID of K-18-CL – SB.
- 025A with a rating of 38.0% at milepost 97.862 with the unique ID of K-18-CK – NB.
- 050C with a rating of 47.2% at milepost 1.136 with the unique ID of K-18-R - US 50 BUS EB.

**2.1.7.4 Bridge Condition City/County Structures**

After obtaining on-system bridge condition from the CDOT OTIS data base, off-system bridge information was requested. MPO staff included these bridges projects as part of project cost estimates for the draft Vision Plan and Fiscally Constrained Plan networks. Table 2.5 lists the off-system bridges and sufficiency ratings. It is anticipated that this list will be expanded prior to the next RTP cycle.

**Table 2.5: Bridge Conditions in Pueblo County**

| Structure Number | Location   | Sufficiency Rating | Estimated Project Cost |
|------------------|--|--------------------|------------------------|
| PUEUNIN-0.0-COR  | Union Ave. Bridge over the Arkansas River          | 49.3 (Poor)        | \$ 14,000,000          |
| PUEHAR-0.1-FRNT  | Mel Harmon Drive Bridge over Mall Dr. and Railroad | 76.1 (Fair)        | \$ 10,000,000          |

|                 |   |             |              |
|-----------------|---|-------------|--------------|
| PUEJKSN-0.0-ADM | Jackson Street Bridge over Bessemer Ditch | 75.2 (Good) | \$ 2,000,000 |
|-----------------|---|-------------|--------------|

A final note here will address project prioritization. Pavement and bridge condition measurements and remediation are a logical starting point to serve the mobility goals set in the RTP. The Pueblo region depends largely on the automobile mode for transportation. If roads and bridges are in proper condition with the PACOG region, four distinct goals from the accepted RTP planning categories, with their focused goals and metrics, will be addressed:

- Safety,
- Infrastructure condition,
- System reliability, and
- Freight movement and vitality.

## 2.2 Transit Element

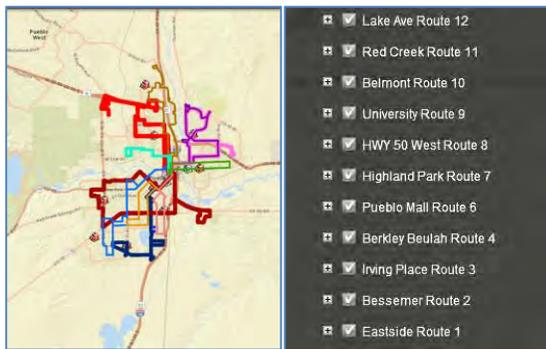
Transit of all categories form a key segment of transportation existing conditions in Pueblo. These resources include the Pueblo Transit bus system, the Citi-lift Program (Americans with Disabilities or ADA Services) and a range of long distance express bus and existing and potential rail services in or near the region.

### 2.2.1 City of Pueblo Bus System

A key resource in the PACOG region is the transit system. Pueblo Transit operates under the City of Pueblo with a mission to provide safe, reliable, and timely transit service to the public in a courteous and professional manner as cost effectively as possible. Figure 2.8 shows the fixed route bus transit system with the routes highlighted. Table 2.6 shows the eleven current routes, their hours of operation and frequency.

- All buses operate Monday through Friday for generally a 12-hour period, serving both peaks, AM and PM.
- Saturday service is available for all bus services.
- General frequency is 60 minutes with about half of the routes providing 30 minute frequency during the weekdays.
- No Sunday bus service is provided.

**Figure 2.8: Pueblo Transit System**



Source: <http://www.pueblo.us/files/GIS/BusMap/> accessed 2015.

**Table 2.6: Pueblo Transit System Route Profiles**

| Route                      | Hours of Operation |                    | Frequency (in minutes of headway) |          |
|----------------------------|--------------------|--------------------|-----------------------------------|----------|
|                            | M-F                | Saturday           | M-F (peak hour)                   | Saturday |
| Route 1 - Eastside         | 6:30 AM to 6:30 PM | 8:30 AM to 6:30 PM | 30                                | 60       |
| Route 2 - Bessemer         | 6:30 AM to 6:00 PM | 9:00 AM to 6:00 PM | 30                                | 60       |
| Route 3 - Irving Place     | 6:30 AM to 6:30 PM | 8:30 AM to 6:30 PM | 30                                | 60       |
| Route 4 - Berkley / Beulah | 6:30 AM to 6:00 PM | 9:00 AM to 6:00 PM | 60                                | 60       |
| Route 6 - Pueblo Mall      | 6:30 AM to 6:30 PM | 8:30 AM to 6:30 PM | 30                                | 30       |
| Route 7 - Highland Park    | 6:30 AM to 6:30 PM | 8:30 AM to 6:30 PM | 30                                | 60       |
| Route 8 - Highway 50 West  | 6:00 AM to 6:00 PM | 8:00 AM to 6:00 PM | 60                                | 60       |
| Route 9 - University       | 6:30 AM to 6:30 PM | 8:30 AM to 6:30 PM | 60                                | 60       |
| Route 10 - Belmont         | 6:00 AM to 6:00 PM | 8:00 AM to 6:00 PM | 60                                | 60       |
| Route 11 - Red Creek Ride  | 6:00 AM to 6:00 PM | 8:00 AM to 6:00 PM | 60                                | 60       |
| Route 12 - Lake Avenue     | 6:30 AM to 6:30 PM | 8:30 AM to 6:30 PM | 60                                | 60       |

<http://www.pueblo.us/492/Bus-Schedules> accessed 2015.

Ridership measured in annual boardings has increased in recent years. Table 2.7 shows 2013 and 2014 boardings on the City of Pueblo bus transit system. Boardings increased from about 982,000 to 996,000, an increase of 1.5% over a one-year period.

**Table 2.7: Pueblo Transit System Ridership 2013 and 2014**

| Route                      | 2013   | 2014   |
|----------------------------|--------|--------|
| Route 1 - Eastside         | 78,319 | 88,212 |
| Route 2 - Bessemer         | 66,926 | 46,698 |
| Route 3 - Irving Place     | 63,789 | 71,736 |
| Route 4 - Berkley / Beulah | 34,338 | 34,251 |

|                           |                |                |
|---------------------------|----------------|----------------|
| Route 6 - Pueblo Mall     | 147,702        | 145,793        |
| Route 7 - Highland Park   | 154,305        | 152,720        |
| Route 8 - Highway 50 West | 75,426         | 79,299         |
| Route 9 - University      | 93,212         | 104,532        |
| Route 10 - Belmont        | 80,876         | 86,059         |
| Route 11 - Red Creek Ride | 75,064         | 77,123         |
| Route 12 - Lake Avenue    | 111,872        | 109,930        |
| <b>Totals:</b>            | <b>981,829</b> | <b>996,353</b> |

The fleet of the City of Pueblo transit system is 100% lift-equipped or low-floor with wheelchair ramp. Table 2.8 shows the vehicle descriptions including the vehicle year, make, model, ramp/lift type and number of vehicles in each class.

**Table 2.8: Pueblo Transit Fixed Route Fleet Roster: 2014**

| Year | Make   | Model      | Ramps / Lifts                  | Total Vehicles |
|------|--------|------------|--------------------------------|----------------|
| 2010 | GILLIG | Low Floor  | Low-floor with wheelchair ramp | 8              |
| 2006 | TMC    | MILLENNIUM | lift-equipped                  | 2              |
| 2009 | NABI   | OPUS       | Low-floor with wheelchair ramp | 2              |
| 2007 | NABI   | OPUS       | Low-floor with wheelchair ramp | 1              |
| 2002 | RTS    | NOVA       | lift-equipped                  | 3              |
| 2001 | GILLIG | PHANTOM    | lift-equipped                  | 4              |
| 2003 | GILLIG | PHANTOM    | lift-equipped                  | 1              |
| 2004 | GILLIG | PHANTOM    | lift-equipped                  | 1              |
| 2002 | CHANCE | OPUS       | Low-floor with wheelchair ramp | 1              |

Bus fares on the system are sold as single use, daily pass, adult 35-day pass, and 22-rise pass. Elderly, disabled and student rates are also made available by the transit provider. Table 2.9 shows the rate structure. Bus fare payment can also be made online.

**Table 2.9: Pueblo Transit System Fares 2015**

| Type                | Single Use | Unlimited 35 Day | 22 Ride Pass |
|---------------------|------------|------------------|--------------|
| Adult               | \$ 1.25    | \$ 44.00         | \$ 21.00     |
| Elderly or Disabled | \$ 0.60    | \$ 25.00         | \$ 11.00     |
| Student             | \$ 1.00    | \$ 34.50         | \$ 16.00     |

<http://www.pueblo.us/490/Bus-Fares>, accessed 2015

The Pueblo Transit Center is located at 123 Court Street, Pueblo CO 81001 with hours from 7:30 AM to 3:30 AM. All eleven City of Pueblo bus routes stop at the Pueblo Transit Center. The Transit Center is also served by Greyhound Bus Lines, under the Texas, New Mexico and Oklahoma (TNM&O) banner,

which offers six departures daily to Colorado Springs and Denver, among other destinations, and by a number of private shuttles serving southeastern Colorado, New Mexico and the airports to the north.



### **2.2.2 Citi-Lift Program (ADA Services)**

Citi-Lift is a complementary Americans with Disabilities Act (ADA) para-transit service provided for individuals who, because of their disability, are unable to use the fixed route bus service. This does not include disabilities that only make the use of accessible transit service difficult or inconvenient.

Citi-Lift provides comparable service to the regular fixed route in terms of shared rides, origin-to-destination service, service area, and hours and days of service. All rides are \$2.20 per one-way trip. The cost of rides may be subject to change.

Citi-Lift operates during the same days and hours as the regular fixed route bus service. In general this span of service is Weekdays: 6:00 A.M. to 6:30 P.M.; Saturday: 6:00 A.M. to 6:30 P.M. and Sunday and Holidays: Services not available. The service area includes the Pueblo City limits and corridors that are within a  $\frac{3}{4}$  mile of the fixed bus route.

### **2.2.3 Amtrak Service**

Currently there is no passenger rail service in Pueblo County. Amtrak operates two long-distance trains through Colorado as shown in Figure 2.9:

- The Southwest Chief (daily Chicago-Kansas City-La Junta-Trinidad-Albuquerque-Los Angeles)
- The California Zephyr (daily Chicago-Denver-Emeryville/Bay Area)

The Southwest Chief has a station at La Junta, CO, about 60 miles east of Pueblo, allowing access and egress to rail in a convenient fashion. The California Zephyr is connected to Pueblo via the TNM&O bus system which shuttles passengers from its trains in Union Station in Denver to Pueblo.

**Figure 2.9 Amtrak Passenger Rail Service near Pueblo in 2015**



Source: Amtrak, 2011

The present route of the Southwest Chief may be altered if sufficient capital funding is not found to modernize the line. The existing route, which stretches from Chicago to Los Angeles, is in jeopardy of being moved out of Colorado completely, where it runs from Lamar to La Junta and then down to Trinidad, due to expenses associated with upgrading and replacing the track. A possible alternate route could bring Amtrak service into Pueblo. A second alternative is to move the route out of Colorado completely. Amtrak has been working with the states and communities that would be affected and continuously shares issues and information.

A newly released (2015) study by the Federal Railroad Administration (FRA) brings additional passenger rail investment to Colorado. The Federal Railroad Administration in June of 2015 completed the Southwest Multi-State Rail Planning Study<sup>9</sup>. It includes a schematic that links Colorado with routes in Arizona, California, Nevada, New Mexico and Utah. Other states to the west may be willing to join Colorado in an attempt to expand Amtrak passenger rail service, according to the federal study. The report stresses the future importance of rail in connecting mid-sized cities to larger metropolises and an anticipated rise in Amtrak ridership by 2050.

Opportunity for north-south passenger rail service is also desired to serve the major person travel movements in the state between Fort Collins and Pueblo. This type of service through the Pueblo Area is most likely to gain momentum through collaboration with Front Range partners.

The presence of the Front Range Express (FREX) bus service between Fountain, Colorado Springs, and Monument north to the Denver Metro area demonstrates that a strong north-south market exists. Informal discussions suggest that some Pueblo citizens might like to see the FREX commuter service expanded into the Pueblo area, but at current FREX operating costs and deficits, it does not appear to be financially feasible at this time.

<sup>9</sup> Southwest Multi-State Rail Planning Study Summary Report, FRA, 2015.

The newly launched (July 2015) Bustang Interregional Express Bus service run by the Colorado Department of Transportation is connecting commuters to and from Denver along the busy I-25 and I-70 corridors. Service extends from Fort Collins on the north to Colorado Springs on the south with a west line linking West Glenwood with Denver. Service extensions to Pueblo are a possibility with this service.

#### **2.2.4 Rocky Mountain Rail Authority and High Speed Rail Corridor**

During 2008-2009 the Rocky Mountain Rail Authority (RMRA) was formed by Inter-Governmental Agreements between Colorado cities, town, counties and transportation districts. Both the City of Pueblo and Pueblo County are members and have seats on the RMRA Board of Directors. RMRA contracted with CDOT to analyze a High Speed Corridor alternative as part of a larger Passenger Rail Feasibility study. The study concluded with recommended rail corridors and a standing committee to provide follow-on support.<sup>10</sup>

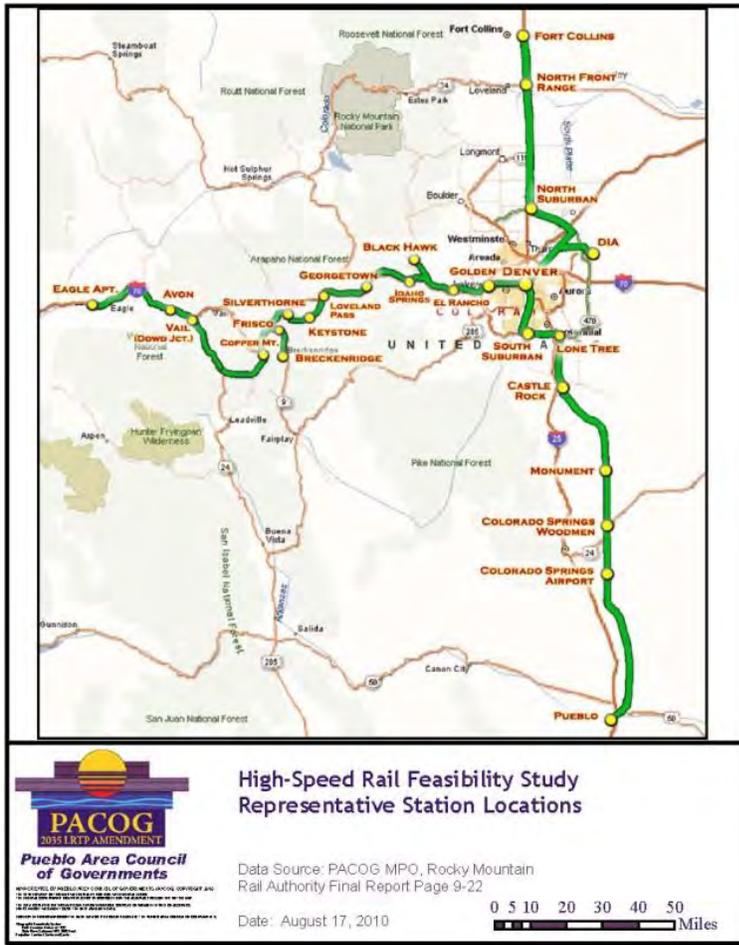
RMRA was awarded \$1.2 million in strategic transit funds to conduct a Passenger Rail Feasibility Study on the I-25 and I-70 West corridors from the Wyoming state line to the New Mexico state line, and on the I-70 West corridor from Denver International Airport (DIA) to the Utah border, respectively. The Colorado study was coordinated with similar studies in the states of New Mexico and Wyoming. The feasibility study was also coordinated with the CDOT *Rail Relocation Implementation Study* of moving interstate coal shipments and other goods through freight trains from the existing tracks in the I-25 Corridor onto new tracks on the Eastern Plains. If implemented, the relocation might permit passenger service to operate on the existing tracks or the use of the right-of-way to construct separate tracks for passenger trains. Figure 2.10 shows the proposed alignments.

During this period CDOT also conducted a study to identify governance structure options for developing, planning, financing, and operating a regional or statewide passenger rail authority in Colorado and into other states. The study included a legal review and analysis of existing Colorado law and, for some options, which laws would require amendment or development of new legislation. The Pueblo area is represented on the Advisory Committee for the governance study.

#### **Figure 2.10 Possible Routes for a Front Range Commuter Rail**

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<sup>10</sup> [http://rockymountainrail.org/documents/RMRA\\_Fact\\_Sheet.pdf](http://rockymountainrail.org/documents/RMRA_Fact_Sheet.pdf)



## 2.2.5 Light Rail / Trolley

Public transit has existed in the City of Pueblo since 1878, with a horse-drawn streetcar system connecting downtown to the Union Depot area. According to the Colorado Cultural Resource Survey of Pueblo's North Side Neighborhood, in 1890, Frank Julian Sprague contracted with the Richmond, Virginia, Union Passenger Railway to design and build an electrically powered public transportation system serving the entire city. The result was the first successful electrified streetcar system in the United States. Within a few years, cities across the country installed extensive electric streetcar systems to transport more passengers at higher speeds and with less pollution than horse-drawn or steam-powered conveyances. The trolley system in Pueblo existed until 1947 and much of the City of Pueblo had developed around the trolley lines.

While the Pueblo area today is likely too small to consider the development of a modern light rail system, continued changes in the cost of gasoline are stimulating public discussion of local transit needs in the Pueblo community. Corridor preservation for future transit development will become increasingly important as the Pueblo urbanized area continues to expand.

The City of Pueblo in cooperation with Pueblo Transit has been a consistent advocate of a downtown trolley (wheel based). The planning committee has developed many options all of which have value in serving two key markets.

- Tourists visiting Pueblo – a potential trolley route with 10 to 15 minute headways would serve HARP, El Pueblo Museum, convention center and the commercial areas of downtown (Main Street / Union Avenue).
- Residents and employers of Pueblo – a potential trolley route with 30 minute headways would link three existing neighborhoods and 10 of the 25 largest employers in Pueblo. This route also links these generators to the commercial amenities in downtown Pueblo.

## **2.3 Non-Motorized Element**

### **2.3.1 Introduction**

Non-motorized transportation (also known as active transportation or human powered transportation) includes walking and bicycling, and variants such as small-wheeled transport (skates, skateboards, push scooters and hand carts) and wheelchair travel. These modes provide both recreation (they are an end in themselves) and transportation (they provide access to goods and activities), although users may consider a particular trip to serve both objectives. For example, some people will choose to walk or bicycle rather than drive because they enjoy the activity, although it takes longer.

In the context of the PACOG RTP, two non-motorized modes will be presented:

- Walking
- Bicycling.

The Pueblo area has a relatively mild climate and gentle topography that make travel by non-motorized modes an enjoyable experience for participants throughout most of the year. During the past twenty years, the City of Pueblo, Pueblo County, and other local and state agencies have continued to construct and improve sidewalks, trails and a wide range of bicycle and walking facilities. Further enhancements to the non-motorized transportation system will play an ever-increasing role in accommodating the non-motorized travel needs of Pueblo residents and visitors to the area.

In order for bicycling and walking to become comfortable and convenient transportation options, these modes must be fully integrated into everyday decisions: such as where new schools will be located, how residential communities will be designed, and how each roadway will be built, among many other decisions. It is far more cost effective to provide for bicycle and pedestrian mobility from the start, rather than to retrofit later.

A previous Pueblo Comprehensive Plan (2002), as well as the adopted PACOG 2035 Long Range Transportation Plan (2008) clearly foresaw the need to identify key facilities to establish a framework for a citywide network of sidewalks, trails and recreational amenities linking major activity centers, parks, and other features of Pueblo. Safe and convenient non-motorized travel provides many benefits, including reduced traffic congestion, user savings, road and parking facility savings, economic

development, a better environment, and health benefits to the community by encouraging regular physical activity.

The ultimate goal of a transportation system is to provide access to goods, services and activities. In general, the more transportation options available, the better the access. Nonmotorized modes are important transport choices, for trips made entirely by walking or cycling, and to support public transport. In urban areas, walking and cycling are often the fastest and most efficient way to perform short trips. A built environment that is hostile to non-motorized transport reduces everybody’s travel choices. The result of this “automobile dependency” is increased traffic congestion, higher road, and parking facility costs, increased consumer costs, and greater environmental degradation. Adequate pedestrian and cycling conditions are essential to guarantee everybody a minimal level of mobility (“basic mobility”).

Non-motorized travel can contribute to the local economy by supporting tourism and quality development by providing suitable pedestrian and cycling facilities to tourist attractions. This can be accomplished by creating trail connections to specific tourist attractions and by providing public transit access to these trails and other tourist attractions. Pedestrian-friendly conditions improve the commercial and cultural vibrancy of communities. Increased pedestrian traffic helps create a safer and more pleasant environment. Once visitors arrive in a community they often explore it by walking, cycling and skating. Some trail networks are themselves destination tourist attractions, bringing hundreds or thousands of visitors, and thousands or millions of dollars annually to the community.

### 2.3.2 Walk Mode

The City of Pueblo builds, maintains and improves pedestrian facilities to achieve full compliance with the ADA. The City’s sidewalk program is the central feature of the pedestrian effort. A key component of the sidewalk program is the curb-ramp installation program which installs up to 400 curb ramps a year to address the needs of the disabled community and others. At present, the Public Works Department reports that there is a back-log of requests for curb ramps by disabled citizens. Funding for the program has come largely from Community Development Block Grant (CDBG) funds and requests for curb ramps are included in neighborhood requests for annual selection of CDBG projects. Table 2.10 shows the linear feet of sidewalk installed from 2009 to 2013. Table 2-11 shows the number of curb ramps installed from 1993 to 2013.

**Table 2.10 City of Pueblo Sidewalk Installation 2009-2013**

| Year | New Sidewalks in Existing Areas |
|------|---------------------------------|
| 2009 | 56,597 S.F.                     |
| 2010 | 26,612 S.F.                     |
| 2011 | 109,440 S.F.                    |
| 2012 | 57,178 S.F.                     |
| 2013 | 34,683 S.F.                     |

Source: City of Pueblo, 2015

**Table 2.11 City of Pueblo Curb Ramp Installation 1993 – 2013**

| <b>Year</b> | <b># Ramps Installed</b> |
|-------------|--------------------------|
| 1993        | 37                       |
| 1994        | 37                       |
| 1995        | 22                       |
| 1996        | 26                       |
| 1997        | 27                       |
| 1998        | 47                       |
| 1999        | 62                       |
| 2000        | 54                       |
| 2001        | 50                       |
| 2002        | 110                      |
| 2003        | 49                       |
| 2004        | 57                       |
| 2005        | 122                      |
| 2006        | 272                      |
| 2007        | 75                       |
| 2009        | 250                      |
| 2010        | 132                      |
| 2011        | 405                      |
| 2012        | 308                      |
| 2013        | 88                       |

**Source: City of Pueblo, 2015**



As awareness grows within the community on the value and pleasure of the walking mode of travel, further emphasis on pedestrian infrastructure and safety will grow. The 2040 RTP reflects this interest and commitment with a concerted effort to Support Multi-Modal Transportation (Goal #8). This goal includes efforts to collect observed trail use, improve the school routes for students, and support infrastructure improvements related to the walk mode.

### **2.3.3 Bicycle Mode**

The Pueblo Region completed its first Bikeway System Plan in 1979. The plan was updated in 1990 and again in 1999 when supplemental efforts for the St. Charles Mesa, Pueblo West and Pueblo County were incorporated. Since the 1999 update the City of Pueblo has made a strong effort to expand and promote multiple forms of non-motorized transportation and to incorporate the planning efforts into the 2030, 2035 and currently the 2040 Long Range Transportation Plans. In order to provide a bikeway system that attracts both resident and visitor bicyclists and enhances opportunities for bicycling in Pueblo, the City has pursued development of a comprehensive bikeway network that provides a high level of service and seamless travel for the bicyclist. Over the past several years there have been significant strides in expanding and improving this bicycle network.

Bike facilities, both on and off-street, can be categorized as follows:

- **Bike Lane** – a portion of the roadway designated for bicyclist use.
- **Bike Route** – a specially designated shared roadway that is preferred for bicycle travel for certain recreational or transportation purposes.

- **Bikeway** – a generic term for any road, street, path, or way which in some manner is specifically designated for bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are to be shared with other transportation modes.
- **Multi-Use Trail (path)** – a concrete or asphalt path physically separated from motor vehicle traffic, except at road crossings. It accommodates a variety of users (including bicyclists and pedestrians) for both recreation and transportation purposes.
- **Local Service Bikeway** – a local circulation routes for bicyclists, any neighborhood street not classified as a primary Route.
- **Primary Route** – Generally an on-street route.

Each of these components plays a part in the overall regional planning for cycling in Pueblo. The ideal development plan also references the general principals identified for continued development of the bikeway network which include:

- Connecting bicyclists to desired destinations such as employment centers, commercial districts, transit stations and bus routes, institutions, and recreational destinations.
- Providing the most direct and convenient routes possible.
- Providing an alternative route for less experienced bicyclists.
- Filling in existing gaps in the bikeway network.
- Targeting locations with the potential for implementation in the next ten years.
- Leading a bicyclist to safe street crossings.
- Accommodating bicyclists and pedestrians on any new or improved bridges.

Note also that many bicycle facilities are designed to serve both cyclists and pedestrians.

The publication of the first *Pueblo Bicycle and Trails Maps* in 2010, which was made available both online and as a paper version, encourages community input into the City's bikeway system. The map, shown in Figure 2.11, categorizes the bike routes using the same nomenclature as one would see associated with downhill skiing. Green was established as the color designating suitability for all riders, blue for intermediate riders and black for experienced riders. The assignments were based on roadway character, adjacent land use, roadway width, traffic volume and traffic speed. The map also emphasizes safety, providing bicyclists with information on riding in traffic, left turn options, trail courtesy, hand signals, advice on riding in darkness, communication techniques, and theft prevention, as well as several other tips.

Figure 2.11: Pueblo Bicycle and Trails Map



<http://www.pueblo.us/DocumentCenter/Home/View/669>

### 2.3.4 Non-Motorized Outreach

An important facet of encouraging non-motorized travel is advocacy. The City of Pueblo and PACOG, as well as other advocates of non-motorized travel in the region, have come together in a variety of ways to promote walk and bicycle modes.

## Organizations and Group Action

The Pueblo Transportation, Planning, and Parks Departments work together with citizen groups, such as Pueblo Active Community Environments (PACE) and the City / County Health Department to plan and develop bike improvements for the community. PACE is a grass-roots community group that plays a significant role in regional bicycle planning. The group recognizes that bikeways provide enormous benefits to both the cycling and non-cycling public. Bikeways attract more bicyclists, resulting in cleaner air, less noise pollution, and overall quality of life benefits. Bikeways also use public dollars efficiently by reducing road maintenance costs and enhancing economic development.

## Social Media

PACE also actively supports a Facebook account [www.facebook.com/PuebloPACE](http://www.facebook.com/PuebloPACE) and a website, [www.activepueblo.net](http://www.activepueblo.net), to promote events through a community calendar, to give ideas on where to bike, to provide electronic access to the bike maps, to promote Safe Routes to School programs and to provide tips and videos on bicycle safety.



## Special Events

Special events are an important means of encouraging bicycling and increasing ridership locally for youth and adults alike. Through participation in a local, citizen run organization, PACE, the City actively supports special events. Various events are planned each year with a specific goal of attracting new bicyclists; celebrating the local infrastructure and focusing on safe bicycling practices. A number of events have been initiated to promote various bicycling, walking and active living events throughout the community for fun, fitness and transportation including:

- Bike to Work days
- Downtown Bike Tour with police escort on bike to work day
- Bike Commuter Cup Challenge
- Bike / Walk to School Day
- National Trails Day

- Costume cruiser rides
- Arkansas Point Mountain Bike race
- Angelo's Criterion de Pueblo Bike Race
- Dog Track Road Rides
- Red Gate Mountain Bike Rides
- Transportation Technology Center Road Rides
- Minnequa Lake Mountain Bike Rides

PACE volunteers also collaborate each year and work with officials and students at Colorado State University-Pueblo to help create a more bicycle-friendly and active campus and to create a more seamless non-motorized transportation system between the city and the university campus.

### **Bicycle Parking**

Another factor that may encourage more cycling is improving the availability of adequate bicycle parking. While there are some downtown locations and employers that provide bike racks, overall bike parking is limited in Pueblo. In 2009, the City adopted an ordinance through the Pueblo Municipal Code requiring new construction or renovations that provide over 40 vehicle parking spaces must also provide bicycle parking. In 2009, several bike racks were installed throughout the downtown area by the Pueblo Downtown Association with more racks planned to be added by the Urban Renewal Authority in 2011. PACE has produced a brochure on tips for selecting and installing bike racks for theft prevention and improved utilization. The PACE website encourages businesses to install bike racks, sponsor a bike rack elsewhere and lists local vendors that will build bike racks. A partnership has also been developed with the local community college welding students to build low cost, high quality bike racks for schools and local businesses.

### **Economic Benefits**

Various communities in Colorado have captured the economic benefits of bicycling in their community. Now more than ever, Pueblo is poised to reap the economic benefits of promoting bicycling within the community. Infrastructure, sporting events, recreational biking, bicycling facilities, and a desired way of life lead to a greater promotion and understanding of how the bicycle can complement our City's economic considerations. Pueblo has a unique opportunity to enhance the bicycle culture and appeal to its residents, future residents, employers, and visitors.

At the national long-distance bicycle level, Pueblo lies along three national bike routes with numerous long distance cyclists passing through Pueblo on their coast-to-coast rides. Pueblo's collaboration with the business community in fostering a more bicycle-friendly atmosphere for these visitors is a work in progress. The goal is to encourage bicyclists to spend an extra day in Pueblo, utilizing hotels, shops and dining to discover the rich historical, architectural and recreational aspects of the city. National programs offering discounts could be implemented by local businesses to display their support for cycling and welcome these visitors.

Pueblo is actively promoted by the Pueblo Economic Development Corporation (PEDCO)<sup>11</sup> as a city in which to relocate or start a business. Many employers and their employees want to live and work in a place where a bicycling culture is prevalent, where it is possible to bike to work, the store, the library, and to school. There is a growing population of Americans who want to live in a community where they have transportation alternatives with which to enjoy local amenities and services. Pueblo lends itself to this type of bicycle culture and promotes a vibrant lifestyle for both employers and employees. The City continues to embrace and support the local bicycle culture and use it as a tool to attract employers, business, and visitors. The bicycle friendly nature of Pueblo will complement other quality-of-life characteristics such as natural beauty, open space, and recreation.

### **Summary**

In summary, the non-motorized modes of walking and bicycling are key components of the PACOG 2040 RTP. Investment in facility expansion such as trails can readily serve both of these non-motorized modes. Continued investment in this important means of mobility is of great importance to the region. Recommendations to further develop interest in bicycle and non-motorized travel include:

- Disseminate current and appropriate bicycling information to and from local enforcement agencies.
- Evaluate bicycle-vehicle crashes for any infrastructure improvements or targeted community education campaigns needed.
- Continue to work closely with local enforcement agencies to create innovative, pro-active education campaigns including enforcement that fosters the safety of bicyclists, pedestrians, and motorists.
- Continue to encourage and coordinate official trainings for local enforcement agencies to ensure all City personnel are knowledgeable of current local, regional, and national bicycle policies and ordinances.
- Review and potentially update enforcement techniques for handling special events such as critical masses and other protests to further bridge the communication gap between bicyclists and local enforcement agencies.
- Promote a constructive process to determine what types of behavior require enforcement agency involvement.
- Continue to support and encourage infrastructure development, bicycle sporting events, recreational biking, and bicycle facilities. This does not necessarily mean financial assistance, but is intended to encompass support through coordination efforts, promotion, and education.

## **2.4 Aviation**

The Pueblo Memorial Airport (Airport Code: PUB) is one of seventeen Commercial Service airports in Colorado and is the only airport in Pueblo County. It occupies 2,308 acres of land for aeronautical purposes. The airport is owned and operated by the City of Pueblo and offers aviation services through

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<sup>11</sup> <http://www.pedco.org/home.aspx>, accessed 2015.

private companies who lease space from the airport. Some of these aviation services are flight training, commercial flights, hangar facilities, aircraft repair, fueling facilities and a space for a potential restaurant or related facility. In addition to the airport property, the adjacent AIP consists of approximately 1,476 acres divided into 75 parcels. The City originally held the land for the park and sells or leases parcels to prospective businesses. The industrial park is actively marketed by PEDCO.

The airport serves air carriers, air taxis, general aviation and military aircraft. It is used for general aviation and by one airline, subsidized by the Essential Air Service program. Federal Aviation Administration (FAA) records say the airport had 4,345 passenger boardings (enplanements) in calendar year 2008, 5,192 in 2009 and 11,641 in 2010. The FAA's National Plan of Integrated Airport Systems for 2011–2015 called it a non-primary commercial service airport based on enplanements in 2008/2009 (between 2,500 and 10,000 per year).

Pueblo Memorial Airport plays an important role in the community, both as a transportation hub and as a center of economic activity. A study by the CDOT Aeronautics Division in 2003 assessed the local economic impact of airports to their communities. According to the study, the AIP was directly responsible for 727 jobs with total wages of \$19,103,000. The total annual economic activity attributed to the airport, which includes direct, indirect, and induced impacts, totaled \$45,683,000. CDOT estimates that the airport brings 1,682 visitors and \$486,704 in visitor spending annually to the Pueblo area.

## **2.5 Summary**

The Pueblo region contains all aspects of an excellent transportation system. The roadway element provides the key means of transportation with a full complement of interstate (I-25), U.S. Highway 50, and state highways. This section provided an overview of Pueblo County roadways, scenic byways, commercial vehicle routes, hazardous materials routes, and nuclear materials routes. A tabulation of condition ratings for on-system and off-system road pavement and bridges in the region was also provided. On the transit side the region supports a city bus system, the Citi-Lift program (ADA services), and long distance bus service with links to nationwide Amtrak service. On the non-motorized side, the Pueblo region has invested heavily in all aspects of non-motorized infrastructure including sidewalk repair and replacement, as well as construction of curb ramps designed to ADA standards. Trails and related facilities that serve both walk and bicycle mode have also been the focus of continued non-motorized investment in the region. Social media and concerted public involvement are an important and ongoing aspect of non-motorized efforts in the region. The Pueblo Memorial Airport is the final transportation asset discussed in this section of the RTP.

## Chapter 3 Socioeconomic Profile

### 3.1 Regional Profile

Pueblo’s existing transportation system includes roadways, railroads, bicycle and pedestrian trails, the Pueblo Memorial Airport, and several public and private transit services. Together, these facilities support an integrated transportation system that serves both area residents, visitors and those passing through the region.

This section of the Long Range Transportation Plan provides a snapshot of regional demographics and of the existing transportation systems.

#### 3.1.1 Population

In 2010, the Pueblo County population count was 159,063 people, with 67 percent of those living within the City of Pueblo. Growth fluctuated in the 1980s and early nineties as a major shift in employment occurred. From 1990-2013, population in Pueblo County has grown by 31 percent. This occurred despite the recession which took place in 2007-2009. Pueblo County’s estimated 2013 population stood at 161,258 residents.

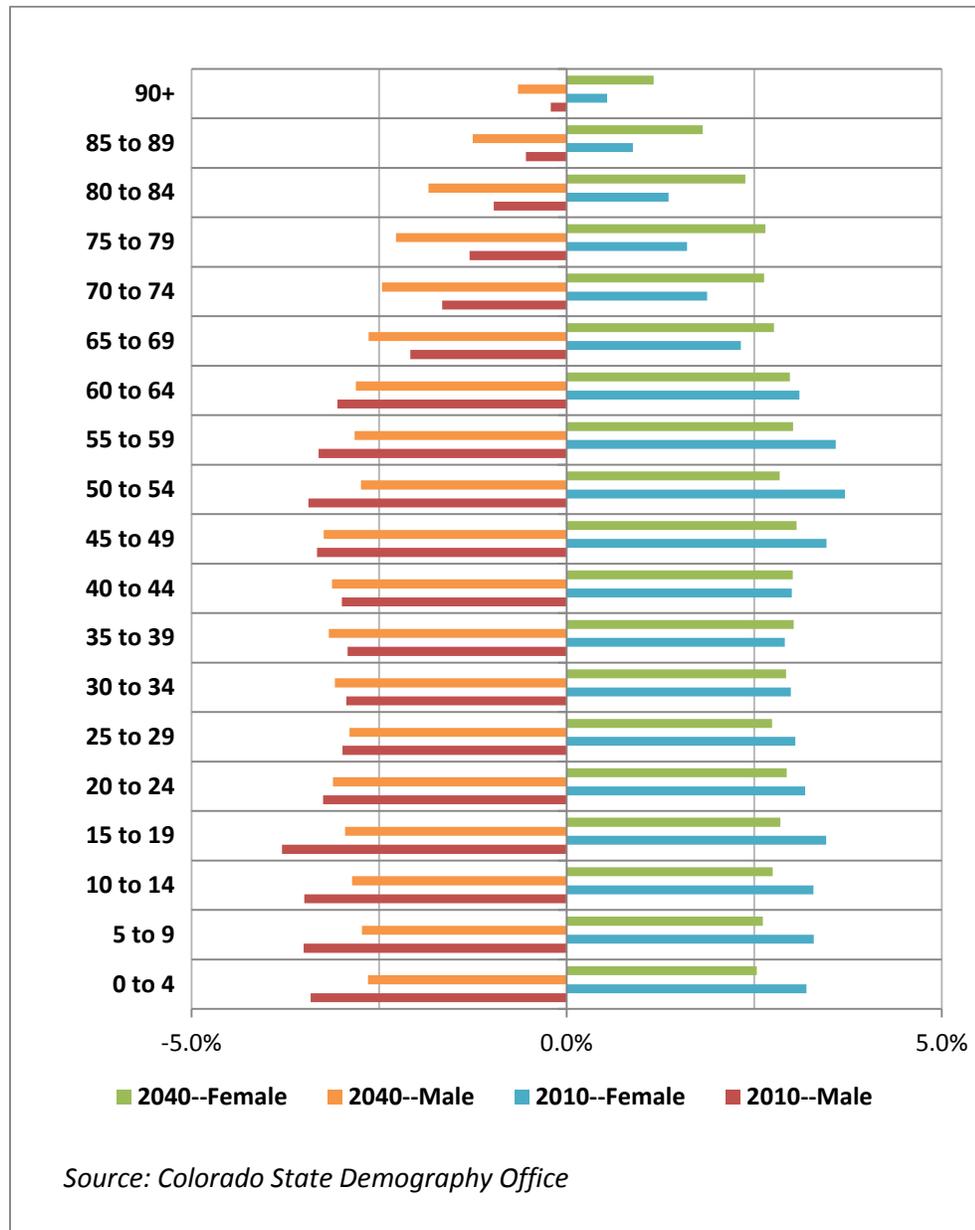
Table 3.1 shows historic and future population growth trends. By 2040, the County population is projected to increase to approximately 228,300 people with about 60 percent living within the City of Pueblo. The population projections for 2020-2040, depicted in Table 3.1 are, on average, 6.6 percent higher than the forecasts developed by the Colorado State Demography Office. It is assumed that over time, Pueblo will become increasingly integrated into the economy of El Paso County, thereby accounting for the increased growth.

**Table 3.1: Pueblo Area Population Trends 1970 – 2040**

| Metric/Location       | Measured |         |         |         |         | Projected |         |         |
|-----------------------|----------|---------|---------|---------|---------|-----------|---------|---------|
|                       | 1970     | 1980    | 1990    | 2000    | 2010    | 2020      | 2030    | 2040    |
| <b>Population</b>     |          |         |         |         |         |           |         |         |
| City of Pueblo        | 97,774   | 101,686 | 98,640  | 102,121 | 106,595 | 110,761   | 128,664 | 136,241 |
| Pueblo County         | 118,238  | 125,972 | 123,051 | 141,472 | 159,063 | 180,321   | 206,306 | 228,300 |
| Percent in City       | 83%      | 81%     | 80%     | 72%     | 67%     | 65%       | 62%     | 60%     |
| <b>Rate of Growth</b> |          |         |         |         |         |           |         |         |
| City of Pueblo        |          | 4.0%    | -3.0%   | 3.5%    | 4.4%    | 3.9%      | 16.2%   | 5.9%    |
| Pueblo County         |          | 6.5%    | -2.3%   | 15.0%   | 12.4%   | 13.4%     | 14.4%   | 10.7%   |

Pueblo’s population can be expected to see some fundamental changes in its age composition in the next thirty years. The chart below illustrates the changes as the “Baby Boom” generation joins the ranks of the elderly.

**Figure 3.1: Pueblo County Age Distribution**



Over the thirty year period of 2010-2040, the population under age 20 is expected to decrease from 27.4 percent to 21.9 percent. Conversely, those age 65 and above are expected to increase from 15.3 to 24.5 percent of the population, so that by 2040, almost one in four persons will be this age. The working age population, classically defined as being those age 20 to 65, is slated to shrink from 57.2 to 53.5 percent of total population. Median age, the interval where one-half of the population is older than this value, and one-half younger, is expected to increase from 38.7 years in 2010 to 43.5 years by 2040.

The racial and ethnic composition of Pueblo’s population has undergone significant changes in the past three decades. This is particularly the case with the City of Pueblo, which has experienced a substantial growth in its Hispanic population. The following table depicts these changes.

**Table 3.2: Population by Race and Hispanic Origin**

| NON-HISPANIC ORIGIN                | CITY OF PUEBLO |                |                | PUEBLO COUNTY  |                |                |
|------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
|                                    | 1990           | 2000           | 2010           | 1990           | 2000           | 2010           |
| White                              | 56,451         | 52,202         | 48,195         | 75,382         | 82,266         | 86,054         |
| Black                              | 1,932          | 2,199          | 2,221          | 2,029          | 2,421          | 2,646          |
| Amer. Ind., Alaska Native          | 484            | 622            | 682            | 614            | 950            | 985            |
| Asian                              | 504            | 623            | 792            | 605            | 866            | 1,123          |
| Native Hawaiian, Pacific Islander* |                | 39             | 79             |                | 59             | 111            |
| Other, incl 2 or More Races        | 300            | 1,370          | 1,528          | 331            | 1,200          | 2,333          |
| <b>HISPANIC OR LATINO</b>          | <b>38,969</b>  | <b>45,066</b>  | <b>53,098</b>  | <b>44,090</b>  | <b>53,710</b>  | <b>65,811</b>  |
| <b>TOTAL</b>                       | <b>98,640</b>  | <b>102,121</b> | <b>106,595</b> | <b>123,051</b> | <b>141,472</b> | <b>159,063</b> |
| <b>PERCENT OF TOTAL</b>            |                |                |                |                |                |                |
| NON-HISPANIC ORIGIN                | 1990           | 2000           | 2010           | 1990           | 2000           | 2010           |
| White                              | 57.2%          | 51.1%          | 45.2%          | 61.3%          | 58.2%          | 54.1%          |
| Black                              | 2.0%           | 2.2%           | 2.1%           | 1.6%           | 1.7%           | 1.7%           |
| Amer. Ind., Alaska Native          | 0.5%           | 0.6%           | 0.6%           | 0.5%           | 0.7%           | 0.6%           |
| Asian                              | 0.5%           | 0.6%           | 0.7%           | 0.5%           | 0.6%           | 0.7%           |
| Native Hawaiian, Pacific Islander* | 0.0%           | 0.0%           | 0.1%           | 0.0%           | 0.0%           | 0.1%           |
| Other, incl. 2 or More Races       | 0.3%           | 1.3%           | 1.4%           | 0.3%           | 0.8%           | 1.5%           |
| <b>HISPANIC</b>                    | <b>39.5%</b>   | <b>44.1%</b>   | <b>49.8%</b>   | <b>35.8%</b>   | <b>38.0%</b>   | <b>41.4%</b>   |
| <b>TOTAL POP.</b>                  | <b>100.0%</b>  | <b>100.0%</b>  | <b>99.9%</b>   | <b>100.0%</b>  | <b>100.0%</b>  | <b>100.0%</b>  |

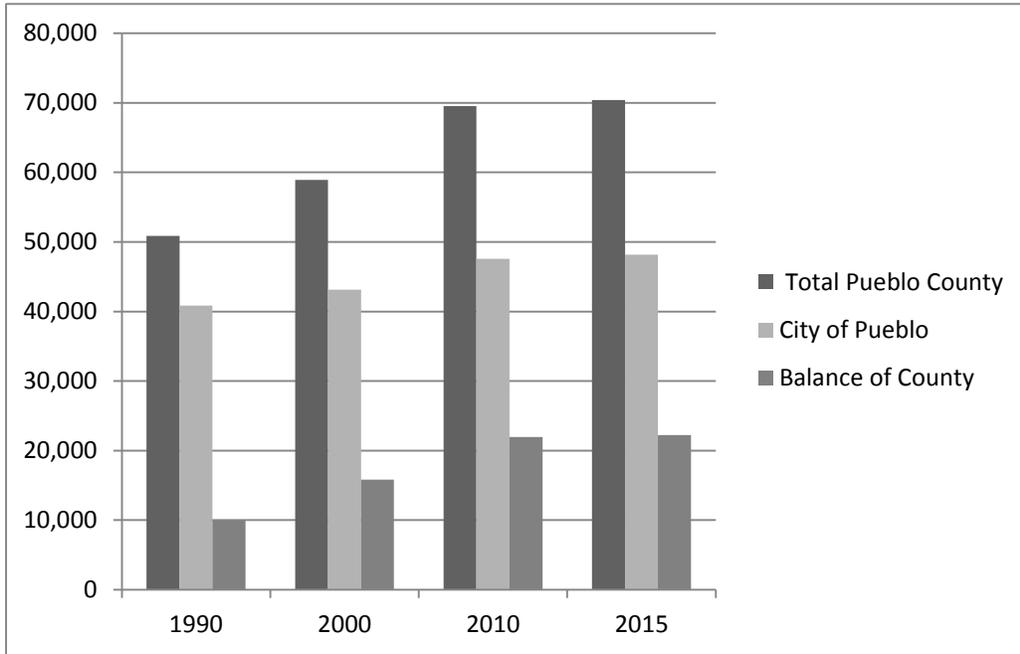
\*NOTE: In 1990, Pacific Islander included with Asian category

SOURCE: U.S. Bureau of the Census

### 3.1.2 Housing

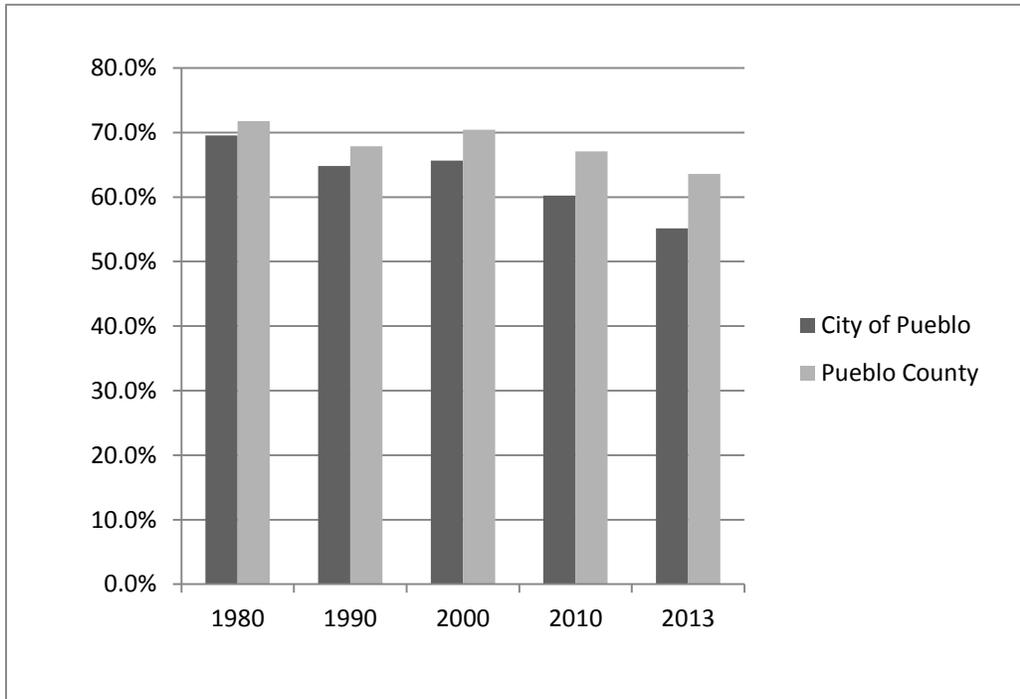
As was the case with communities nationwide, housing development in Pueblo slowed from 2007-2013. Prior to this, housing growth was steady, increasing slightly faster than population due to shrinking household size. At the beginning of 2015, Pueblo County had an estimated housing unit inventory of more than 70,000 units; representing a 38 percent rate of growth relative to the 1990 statistic. The City of Pueblo currently has 68 percent of the housing stock.

**Figure 3.2: Housing Growth Trends**



Source:

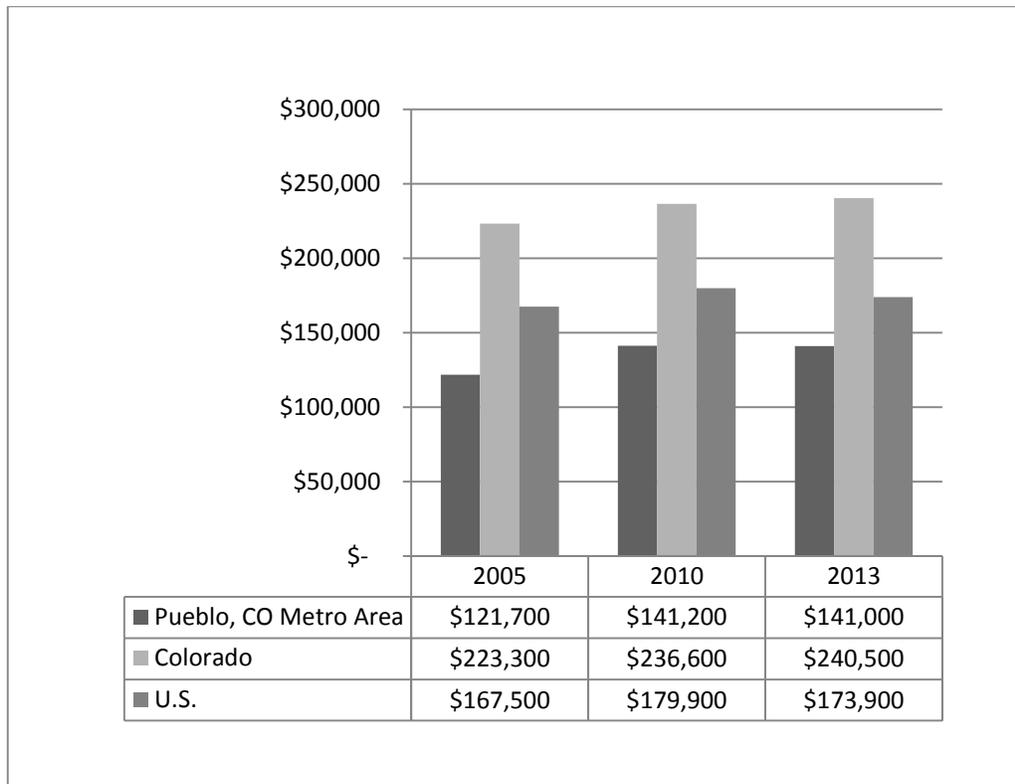
**Figure 3.3: Home Ownership**



Source: U.S. Bureau of the Census, Decennial census; American Community Survey, 2013, 1-yr. estimate

Historically, Pueblo was, and continues to be, a community that is defined by its neighborhoods. An indication of the degree of cohesiveness within the community is the high rate of homeownership, as shown in Figure 3.4 below. This has changed in recent years as the general trend of owner-occupied housing has shown a decline, particularly within the City of Pueblo.

**Figure 3.4: Median Home Value**



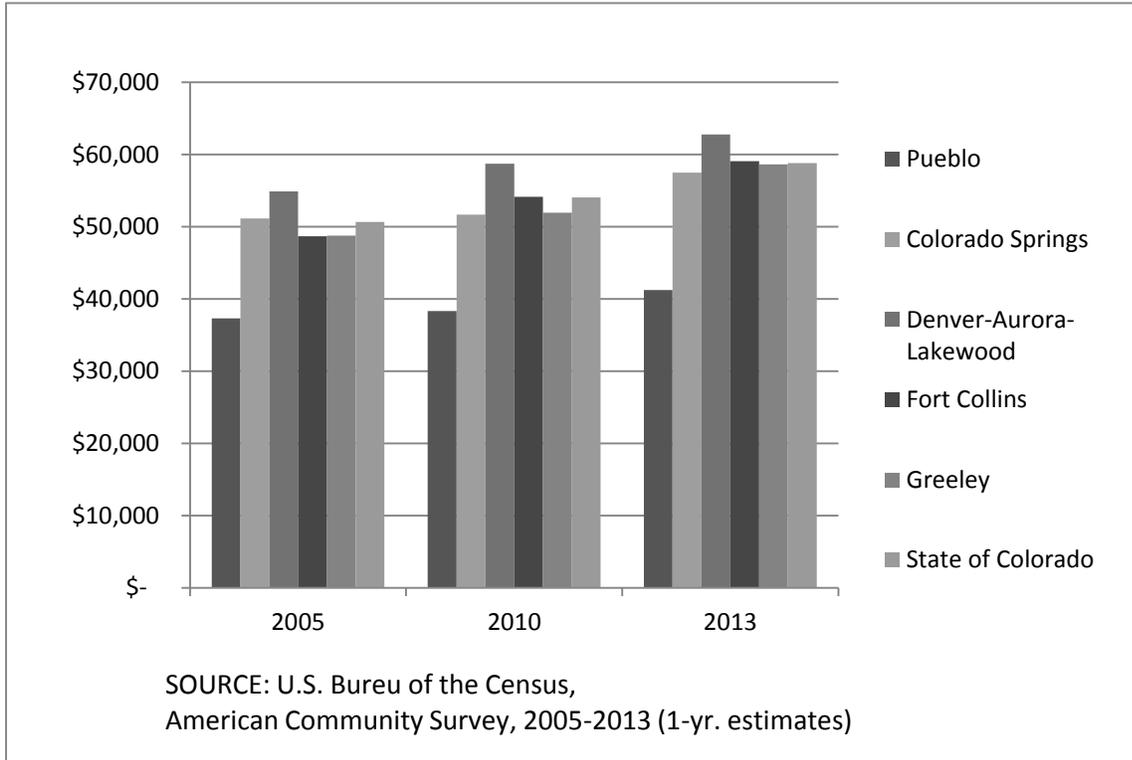
*Source: U.S. Bureau of the Census, American Community Survey*

In rounded figures, median home value for the Pueblo metropolitan area is currently about 60 percent of the State of Colorado value, and 80 percent of the corresponding U.S. statistic. From 2010 to 2013, median home value in Pueblo showed no growth; at least based on Census Bureau data. A brief glance at recent statistics of the median price of sold homes shows a 19% gain in Pueblo during the 2011-2014 period. This rate essentially matches the State of Colorado growth rate of 20% for the period.

### **3.1.3 Income**

Trends show the median income for Pueblo is increasing, but it remains low compared to other metropolitan areas. The 2013 median household income in Pueblo was \$41,218 compared to Colorado's \$58,823, and the US value of \$52,250.

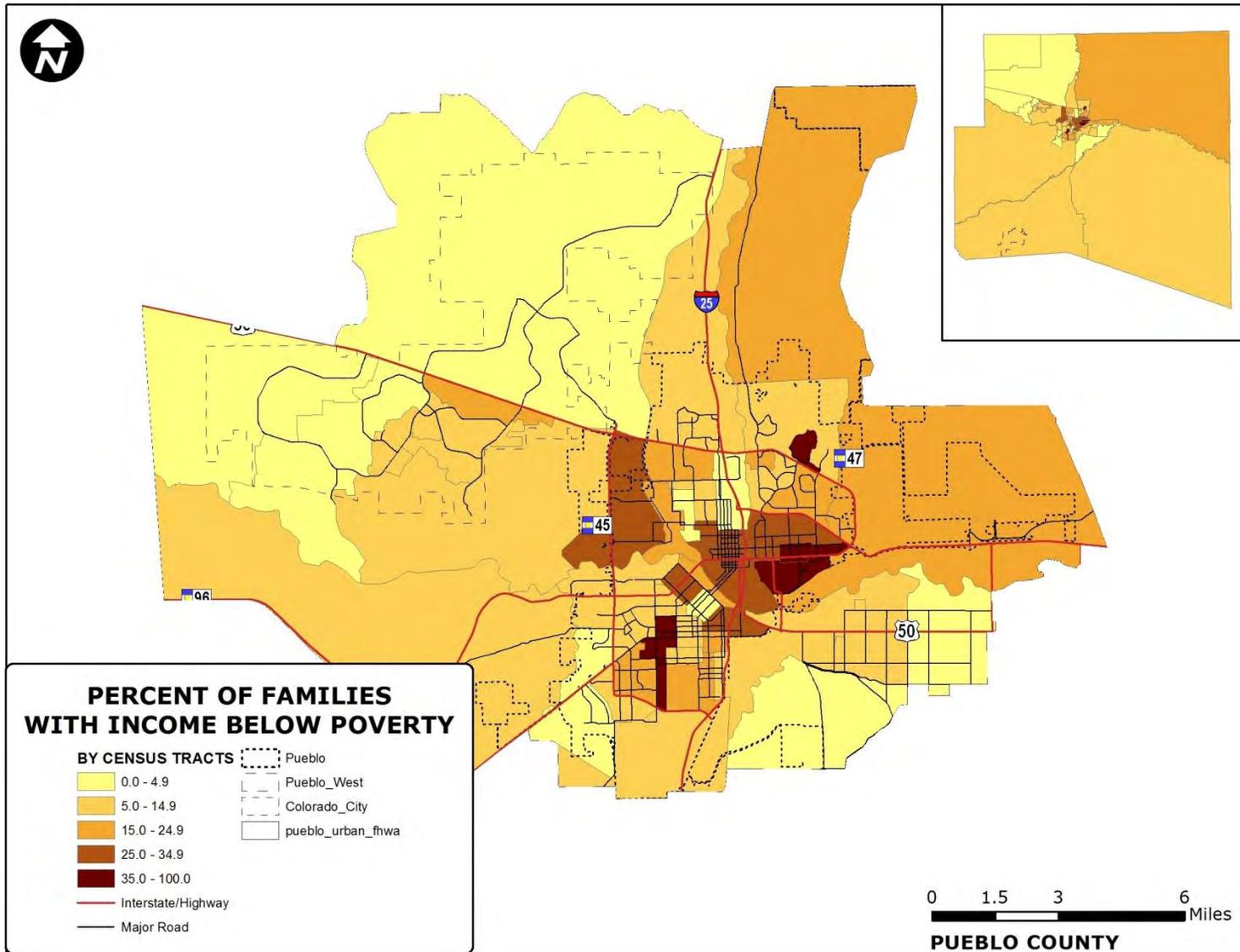
**Figure 3.5: Median Household Income of Select Colorado Metro Areas**



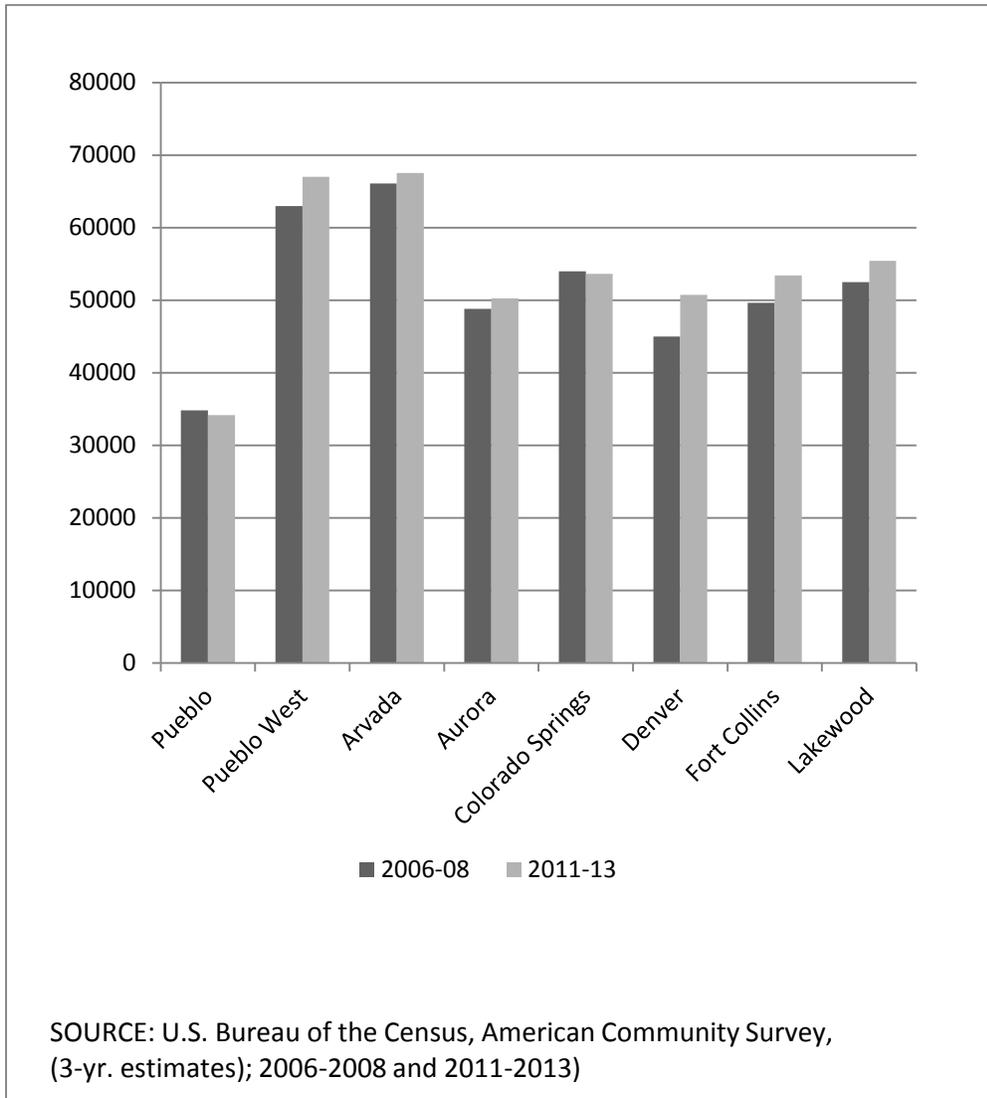
On the basis of American Community Survey statistics compiled for 2009-2013, over 13 percent of Pueblo County’s population lived in families with incomes below the poverty level as measured by the federal government’s official poverty definitions. On average, areas within the City of Pueblo have higher concentrations of poverty. Over 17 percent of families citywide are living at or below the poverty line. This compares to 8.8 percent Statewide

The Pueblo metro area is economically diverse. While many areas are impacted by high levels of poverty, others, as for example, Pueblo West, are economically relatively affluent. The following map and graph illustrates this.

Figure 3.6: Families below Poverty Level



**Figure 3.7: Median Household Income of Colorado Front-Range Cities**

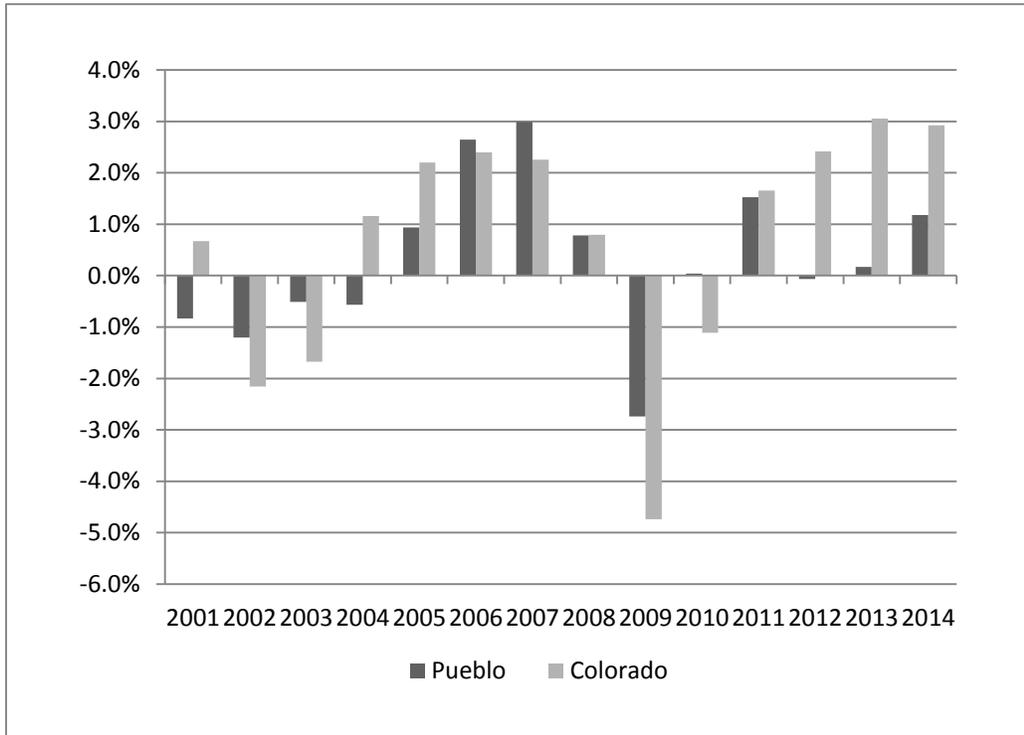


**The reader should bear in mind that the above graph represents current dollar values, not constant dollars that have been adjusted for inflationary growth.**

### **3.1.4 Employment**

The following chart, Figure 3.8, depicts job growth for the Pueblo metropolitan area and State of Colorado. The impacts of the recession of 2007-2009 are immediately apparent. Economic recovery commenced in 2010. Subsequent job growth reveals that while the Colorado economy has made good progress in overcoming the effects of the recession, Pueblo's economy has lagged in its rate of growth in jobs.

**Figure 3.8: Job Growth (Percent Increase Over Prior Year)**



*Note: 2014 preliminary data, subject to revision;*

*Source: U.S. Bureau of Labor Statistics*

Between 2000 and 2010 an increased percentage of the workforce travelled to neighboring counties for employment. In 2006-2010, approximately 89 percent of the 64,000 workers living in Pueblo County worked in the County. Approximately 6,900 commuted outside the county each day to work. The majority of these commuters work at jobs in El Paso County and Fremont County.

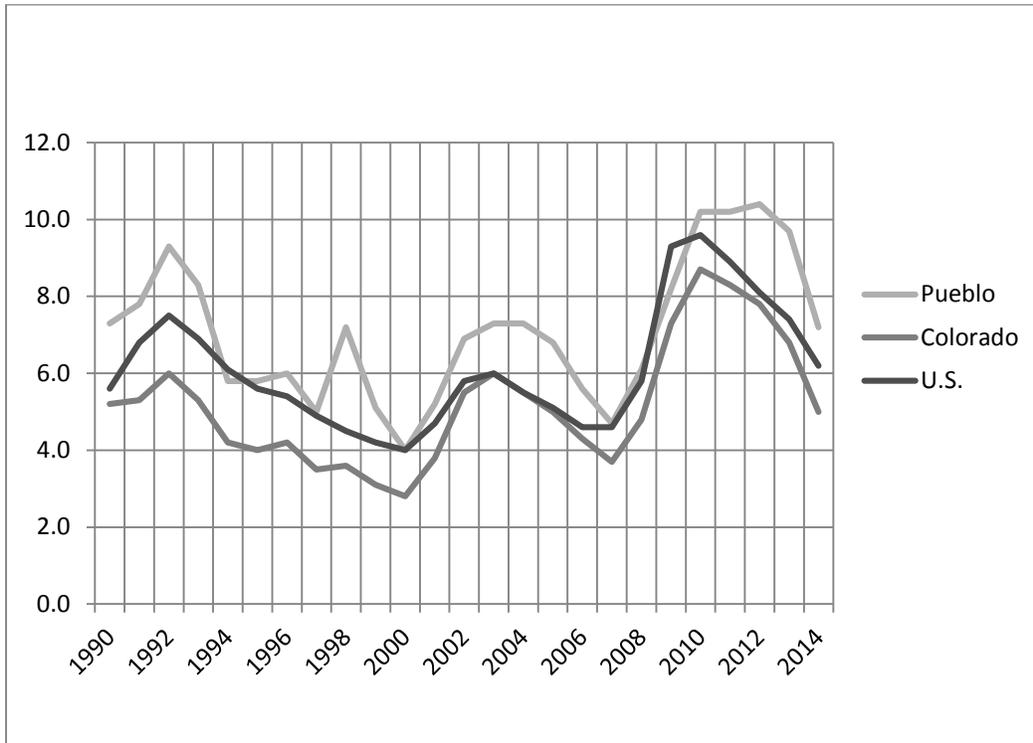
**Table 3.3: Place of Work for Pueblo Residents (2000 and 2010)**

| County                        | 2000          |              | 2006-2010     |               |
|-------------------------------|---------------|--------------|---------------|---------------|
|                               | Count         | %            | Count         | %             |
| <b>Pueblo County</b>          | <b>52,721</b> | <b>91.1%</b> | <b>57,390</b> | <b>89.3%</b>  |
| El Paso County                | 3,137         | 5.4%         | 3,355         | 5.2%          |
| Fremont County                | 1,129         | 2.0%         | 1,445         | 2.2%          |
| Otero County                  | 290           | 0.5%         | 120           | 0.2%          |
| Crowley County                | 216           | 0.4%         | 215           | 0.3%          |
| Denver County                 | 250           | 0.4%         | 315           | 0.5%          |
| Huerfano County               | 130           | 0.2%         | 240           | 0.4%          |
| All other counties            | 835           | 1.4%         | 1,182         | 1.8%          |
| <b>Sub-Total Other County</b> | <b>5,987</b>  | <b>10.2%</b> | <b>6,872</b>  | <b>10.7 %</b> |
| <b>Total</b>                  | <b>58,708</b> |              | <b>64,262</b> |               |

Source: U.S. Census. American Community Survey 2006-2010.

The following graph, Figure 3.10, shows the recent trend in the rate of unemployment for Pueblo, the State of Colorado, and the United States. Even a cursory perusal of it reveals the impact the recent recession has had on the level of unemployment. Examining the data from 1990 forward seems to reveal a cyclical trend in the rate of unemployment of approximately seven years duration. Since 2012, Pueblo's annual unemployment rate has dropped from 10.4 percent to 7.2 percent. The rate of unemployment, however, is nonetheless significantly higher than either the State of Colorado or the U.S. rates. It appears that the recovery of Pueblo's economy has lagged somewhat behind that of Colorado and the country as a whole. Nationally and statewide, the reduction in the level of unemployment commenced in 2010. For Pueblo, the process appears to not have materialized until 2012.

**Figure 3.9: Comparative Unemployment Rate Trends**



*Source: U.S. Bureau of Labor Statistics; Note: 2014 data is preliminary*

### **3.1.5 The Communities of Pueblo County**

As briefly alluded to, the Pueblo MPO shows a great deal of diversity in its demographic makeup. Its “communities” consist of three incorporated places (the City of Pueblo, Town of Boone, and Town of Rye), two metropolitan districts (Pueblo West and Colorado City), and a variety of residentially developed areas which are generally known to long-time residents, but have no legally mandated boundaries. This last group is particularly interesting. Local residents know where they are located, more or less, but any attempt to define their boundaries precisely is likely to vary based upon whom one is speaking with about them. For purposes of this analysis, eleven are identified, and demographics are readily available for them from the Bureau of the Census. The following map shows them, but the long-time resident might look in vain to find Baxter, North Avondale, Lombard Village, or West Park, though they are known by many.

**Figure 3.10: Pueblo County Communities Summary Demographics**

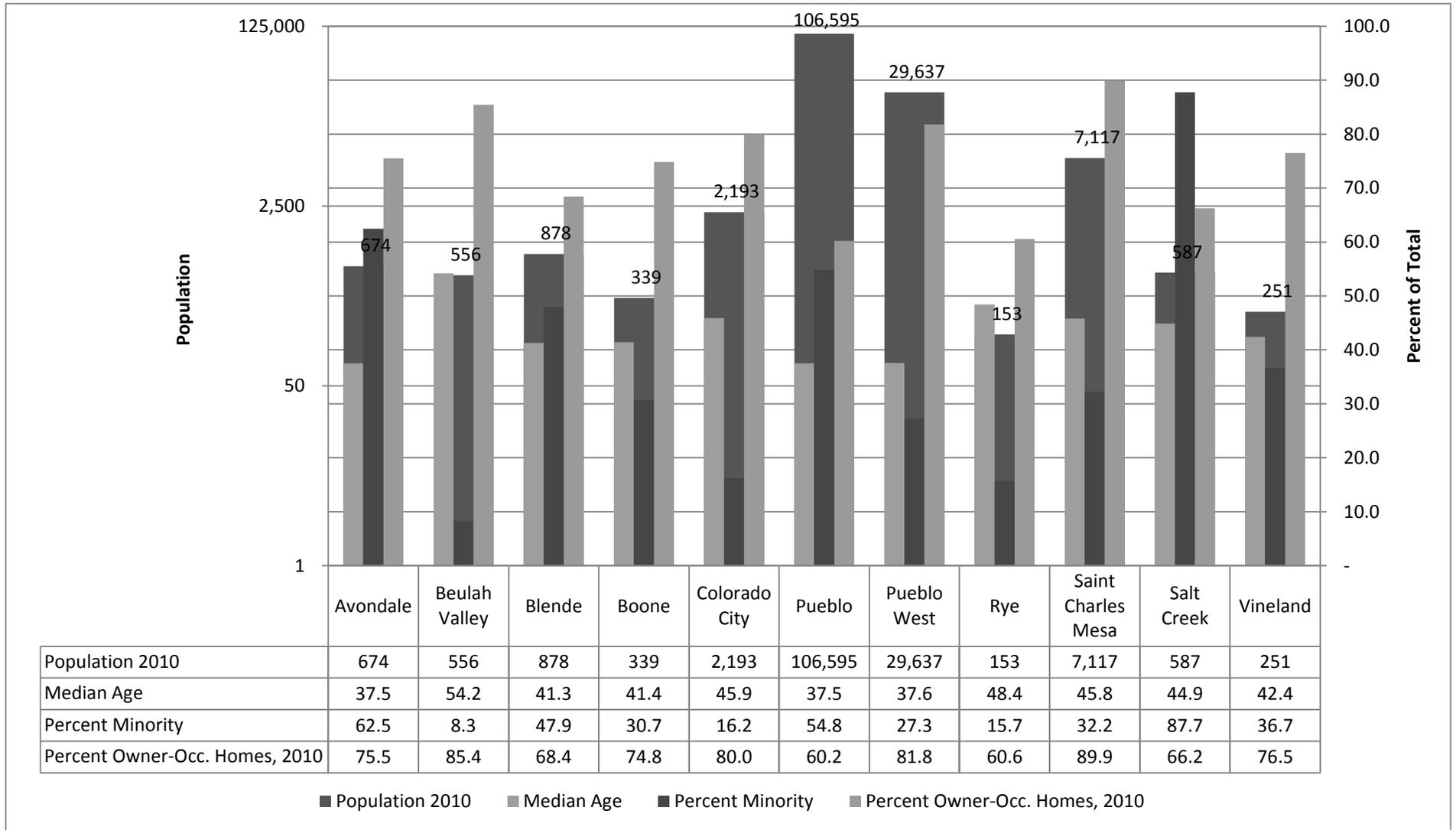
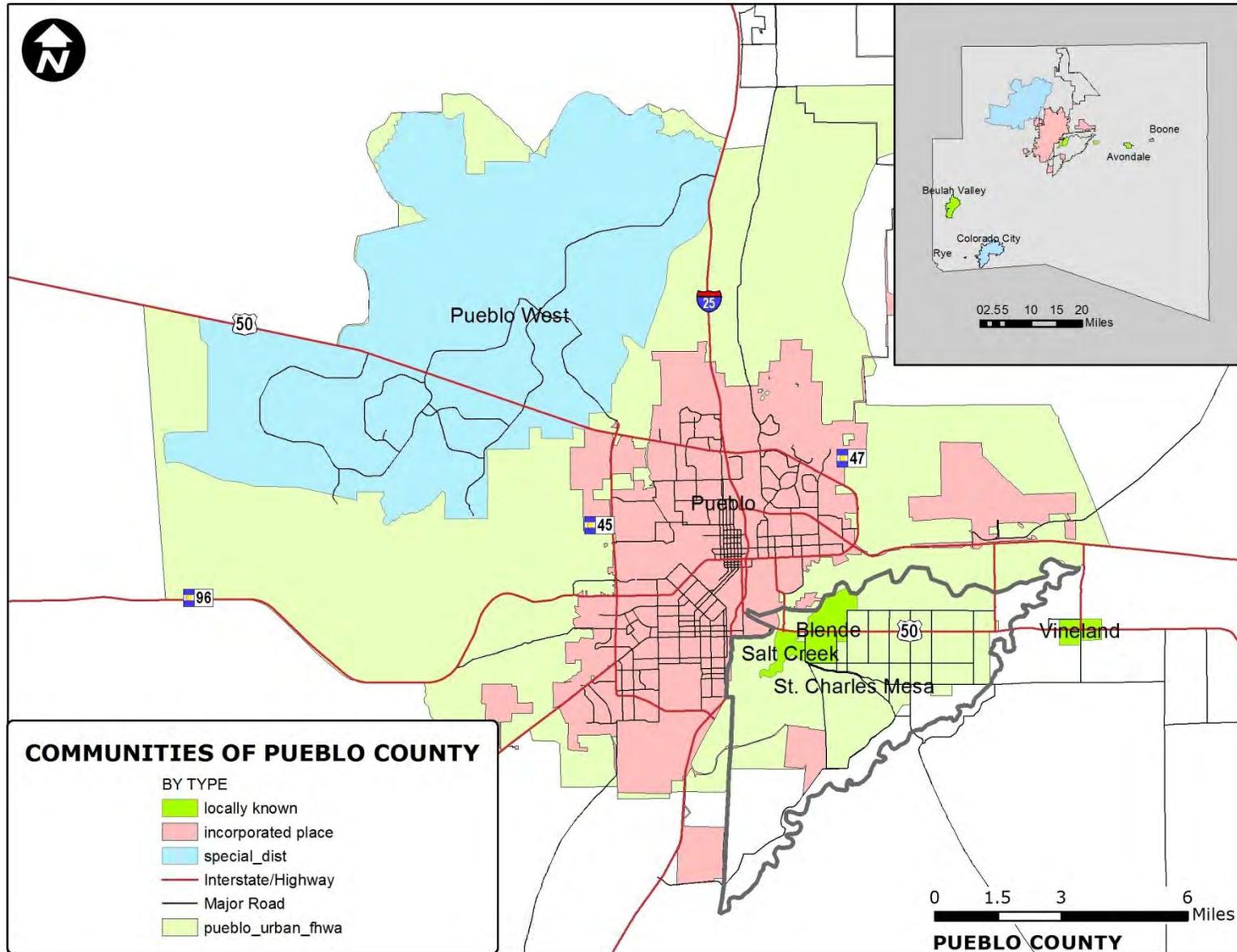


Figure 3.11: Communities in Pueblo County



### **3.1.6 Density of Population and Employment**

Figures 3.13 and 3.14 show the density of population and employment in the Pueblo Urbanized Area, and Pueblo County, respectively. Densities in Pueblo are relatively low in most areas. However, some of the older developed areas, and regional commercial centers, such as the Pueblo Mall have higher densities due to either employment centers or denser housing development.

Figure 3.12: Population Density (2010 Population per Acre)

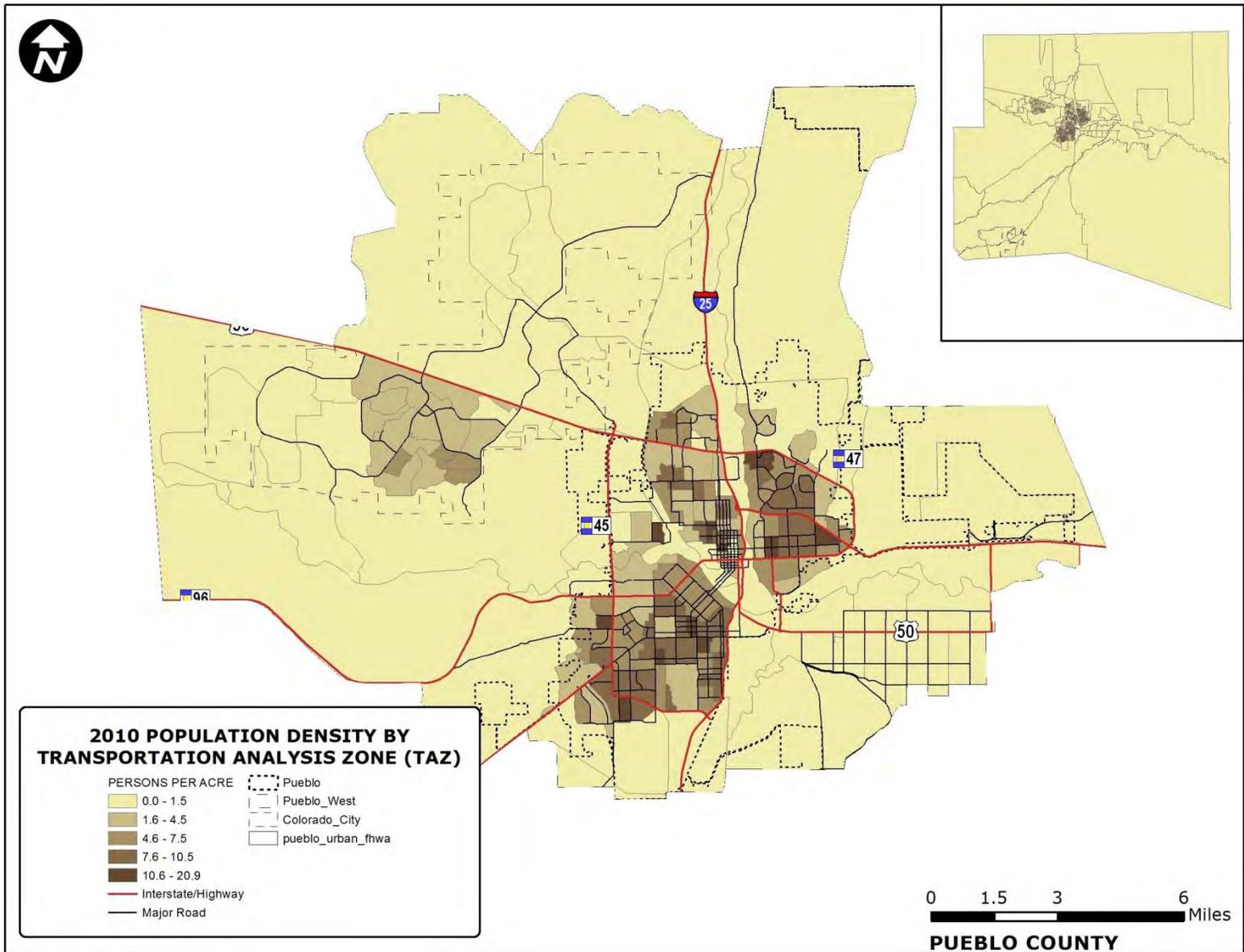


Figure 3.13: Population Density (2040 Population per Acre)

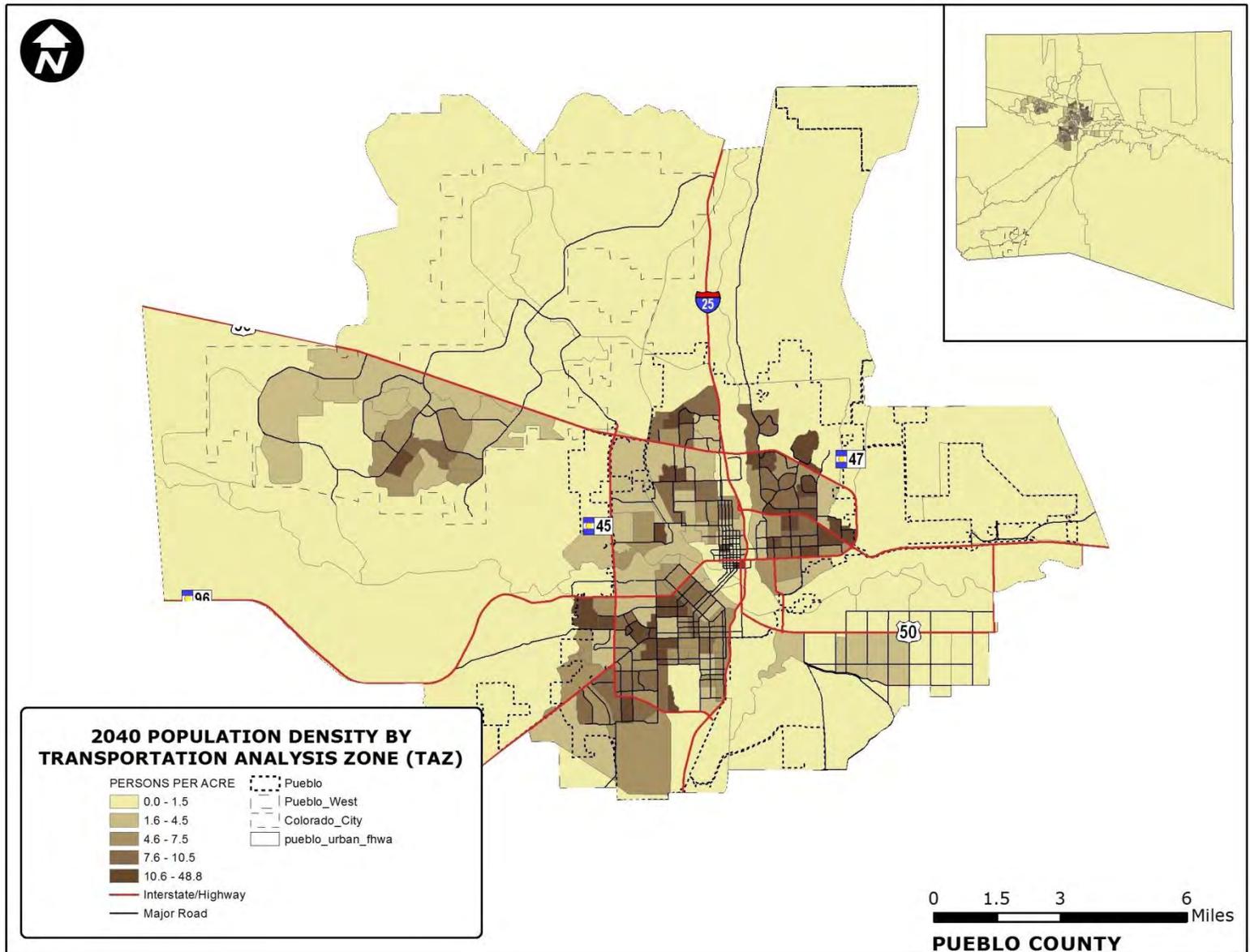


Figure 3.14: Employees per Acre, 2010

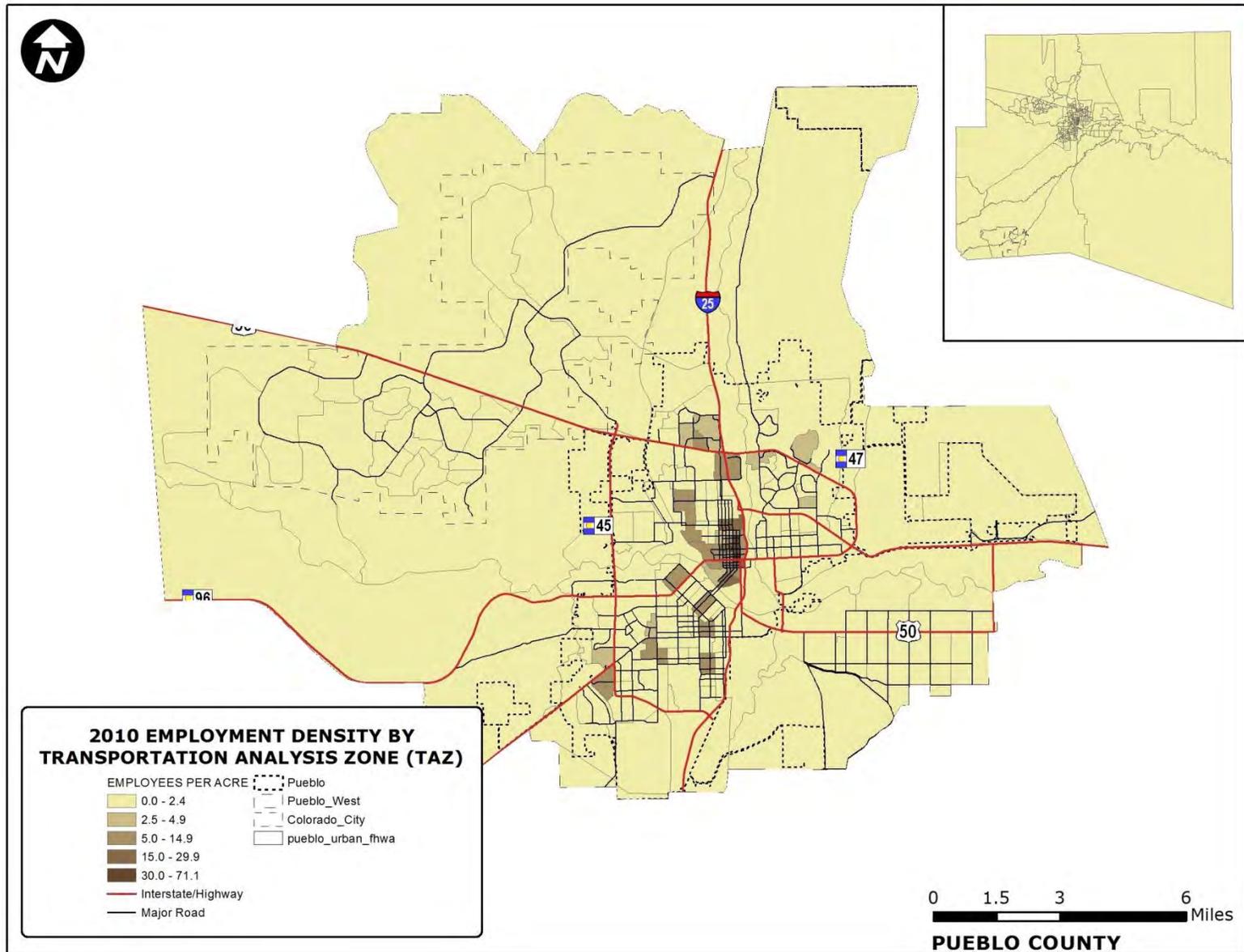
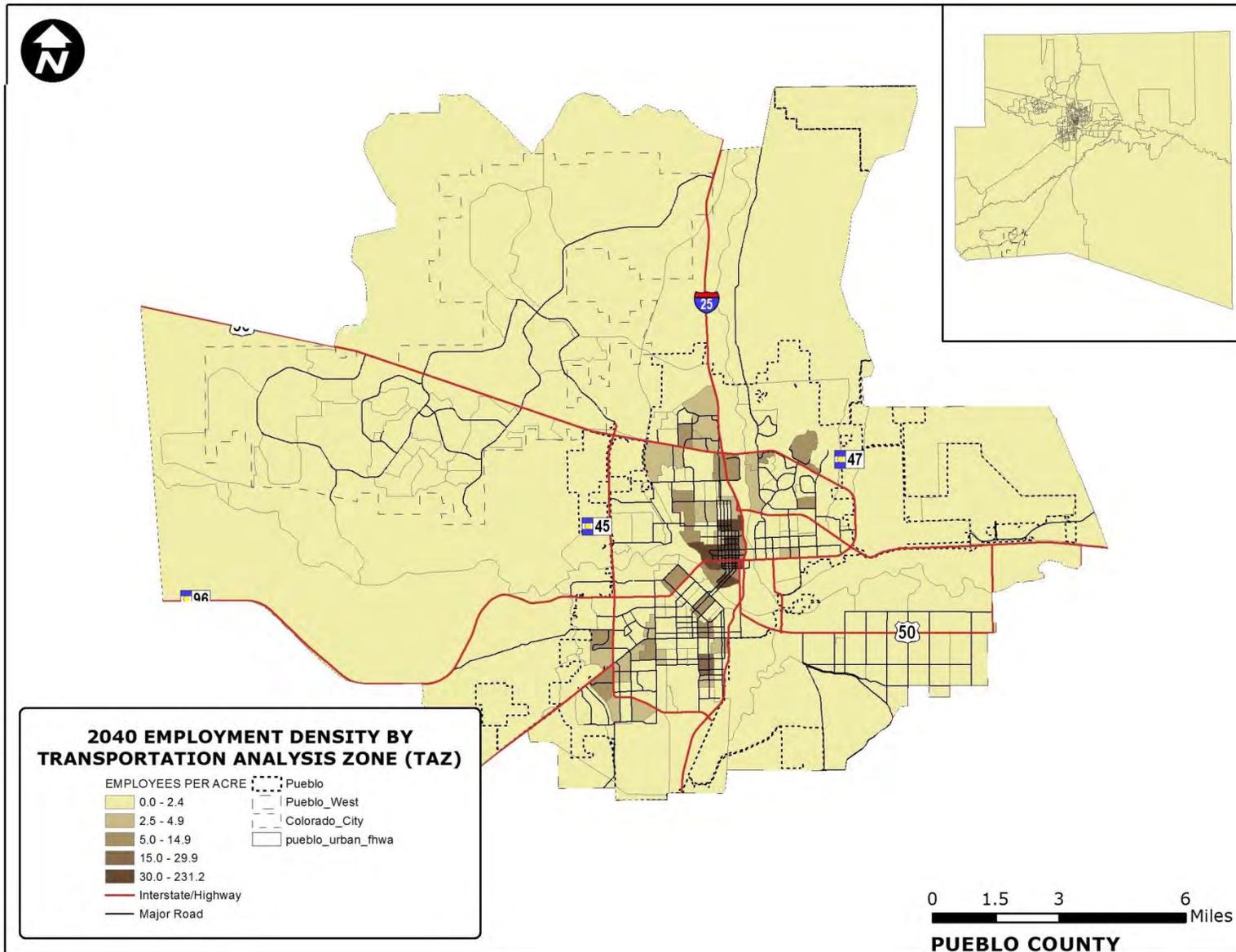


Figure 3.15: Employees per Acre, 2040



## **3.2 Environmental Justice**

On February 11, 1994, President Clinton issued Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." This Order elaborates upon and expands the provisions of the Civil Rights Act of 1994 by mandating that Federally-funded projects must be aware of the issues affecting minority and low-income populations. As a recipient of Federal funding, the Pueblo MPO is required to abide by the provisions of the legislation. Under Executive Order 12898, each Federal agency is required to develop a program which implements its provisions. The Federal agency which is most directly involved with the functioning of the Pueblo MPO is the Federal Highways Administration (FHWA).

The intent of the analysis presented in this section is to identify concentrations of low-income and minority populations in Pueblo that are most readily at risk of being overlooked in the process of developing and implementing transportation-related projects. Four major components are evaluated: low-income, minority, the disabled population, and the population with no vehicle available. The first two are specifically mandated by the Order; the third and fourth, though not specifically mentioned, represents a demographic segment that historically has been overlooked in the transportation planning process. These four variables are identified on the basis of data aggregated by census block groups.

### **3.2.1 Low-Income Population**

Estimates of the low and moderate income population are published by the U.S. Department of Housing and Urban Development (HUD) for evaluating the eligibility of local jurisdictions to receive community development block-grant (CDBG) funding. The U.S. Bureau of the Census is responsible for the compilation of the data for HUD. The 2006-2010 American Community Survey (ACS) provides the basis for the tabulation. The source of the data is the following website:

<https://www.hudexchange.info/manage-a-program/acs-low-mod-summary-data/>

An area is considered entitled to receive CDBG funding if more than 51 percent of its residents fall within the low or moderate income household category. The following map depicts these block groups.

### **3.2.2 Minority Status**

Data are readily available from the U. S. Bureau of the Census which facilitates identifying the concentrations of minority groups. For purposes of this report, "minority" is defined as follows:

- American Indian and Alaskan Native – a person having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition.
- Asian or Pacific Islander (including Native Hawaiian) – a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands.
- Black/African American – a person having origins in any of the black racial groups of Africa, or
- Hispanic/Latino – a person or Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.

### **3.2.3 Disabled Population and Households with No Vehicle**

As noted previously, these two population components, while not specifically addressed in the Executive Order, have historically been placed at a disadvantage with regard to their fair access to transportation facilities. As will hopefully become apparent if the user examines the subsequent maps, there is, in many cases a high correlation between these population segments regarding their geographic distribution. Census block groups having a high minority concentration frequently also have a high proportion of low income households. Disabled population concentrations frequently reflect high numbers of persons without access to a vehicle. Data which can be portrayed in a format which can be mapped are readily available from the Census Bureau's American Community Survey. The subsequent maps present this information.

The final map of the series shows block groups which fall within the following criteria:

- Low-moderate income  $\geq$  51 percent;
- Minority population  $\geq$  50 percent;
- Disabled population  $\geq$  20 percent;
- Households with no vehicles  $\geq$  10 percent

The census block groups that meet these criteria are also listed on this map.

Figure 3.16: Low-Moderate Income Block Groups

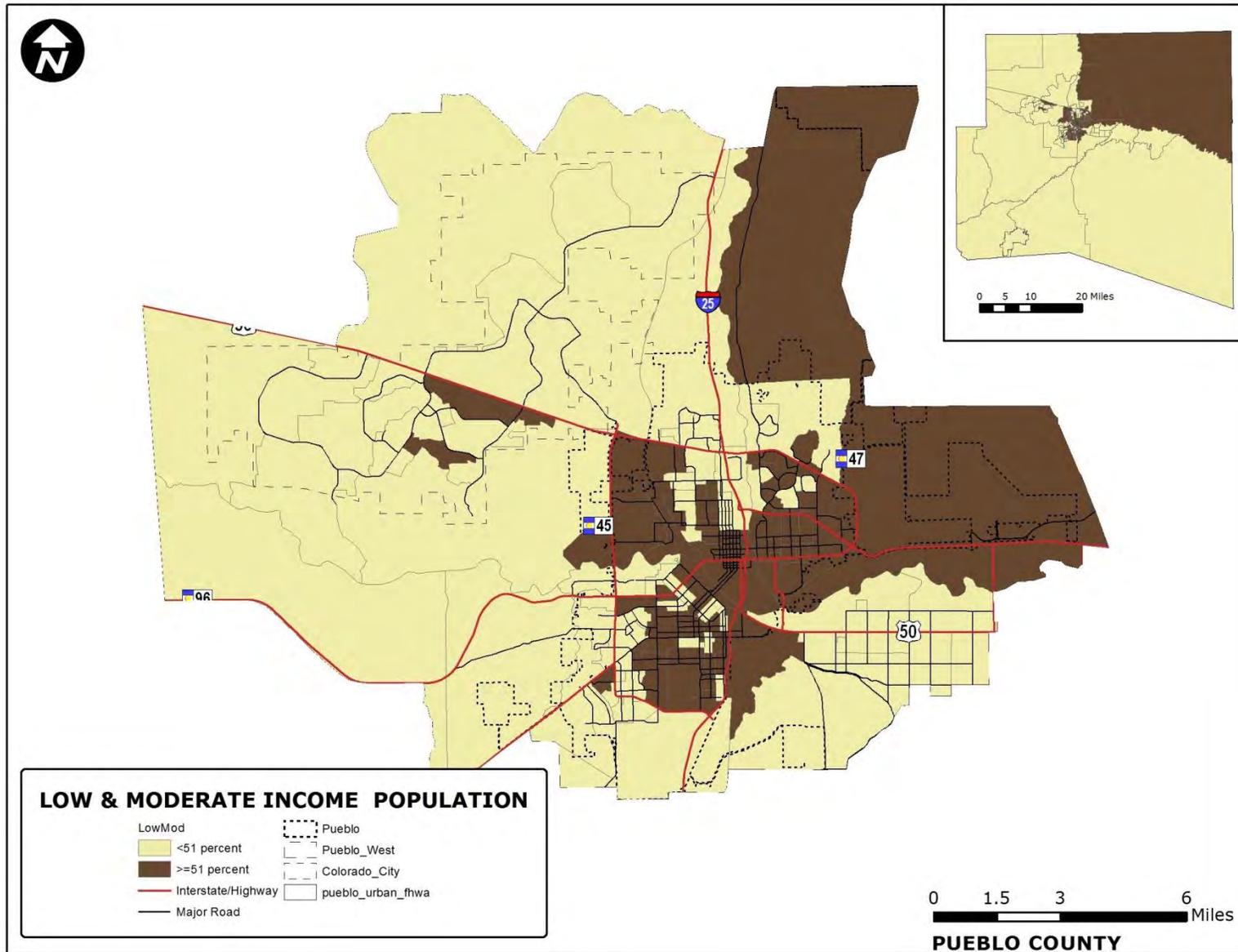


Figure 3.17: Minority Population Block Groups

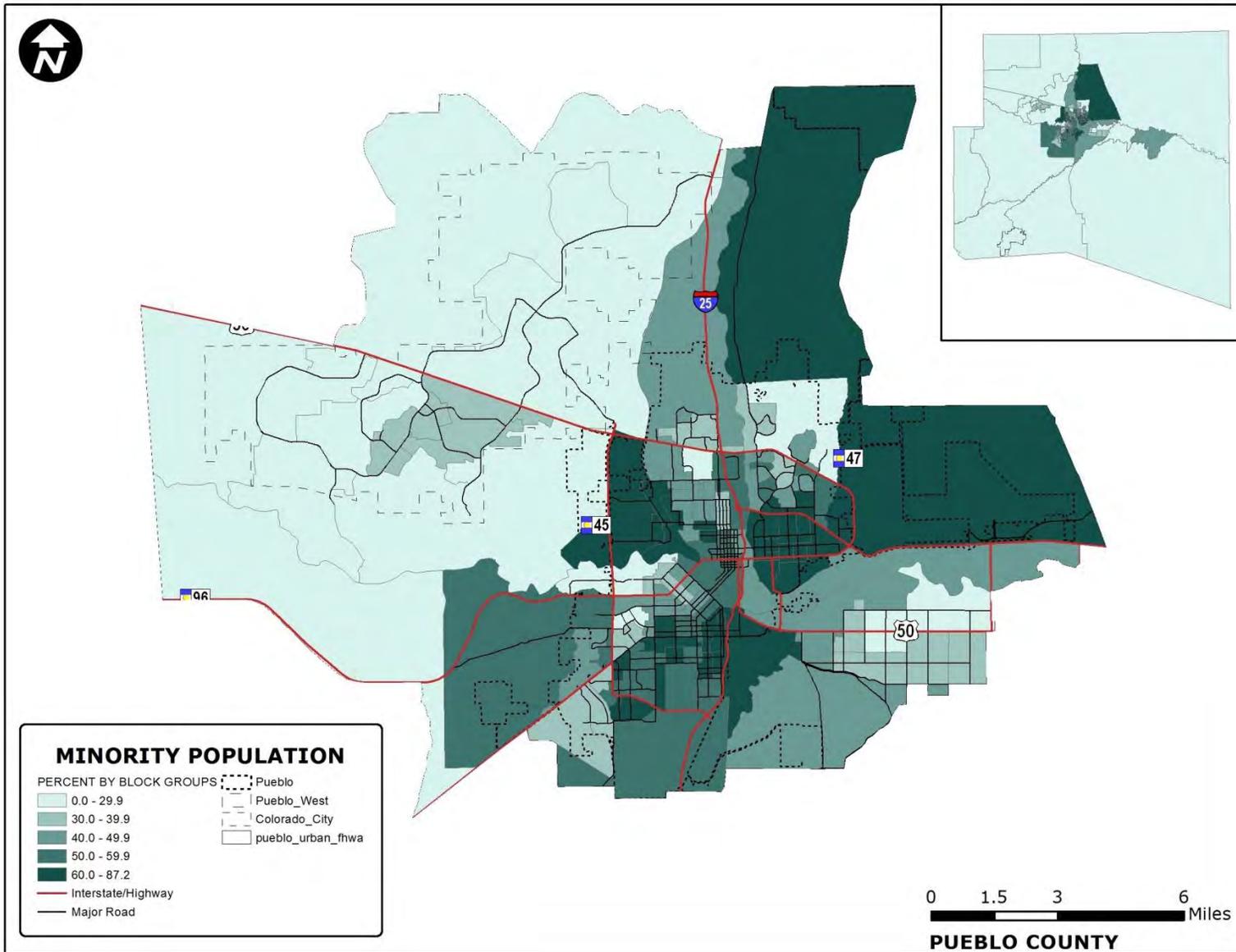


Figure 3.18: Percent Disabled Aged 16-64 Years by Block Groups

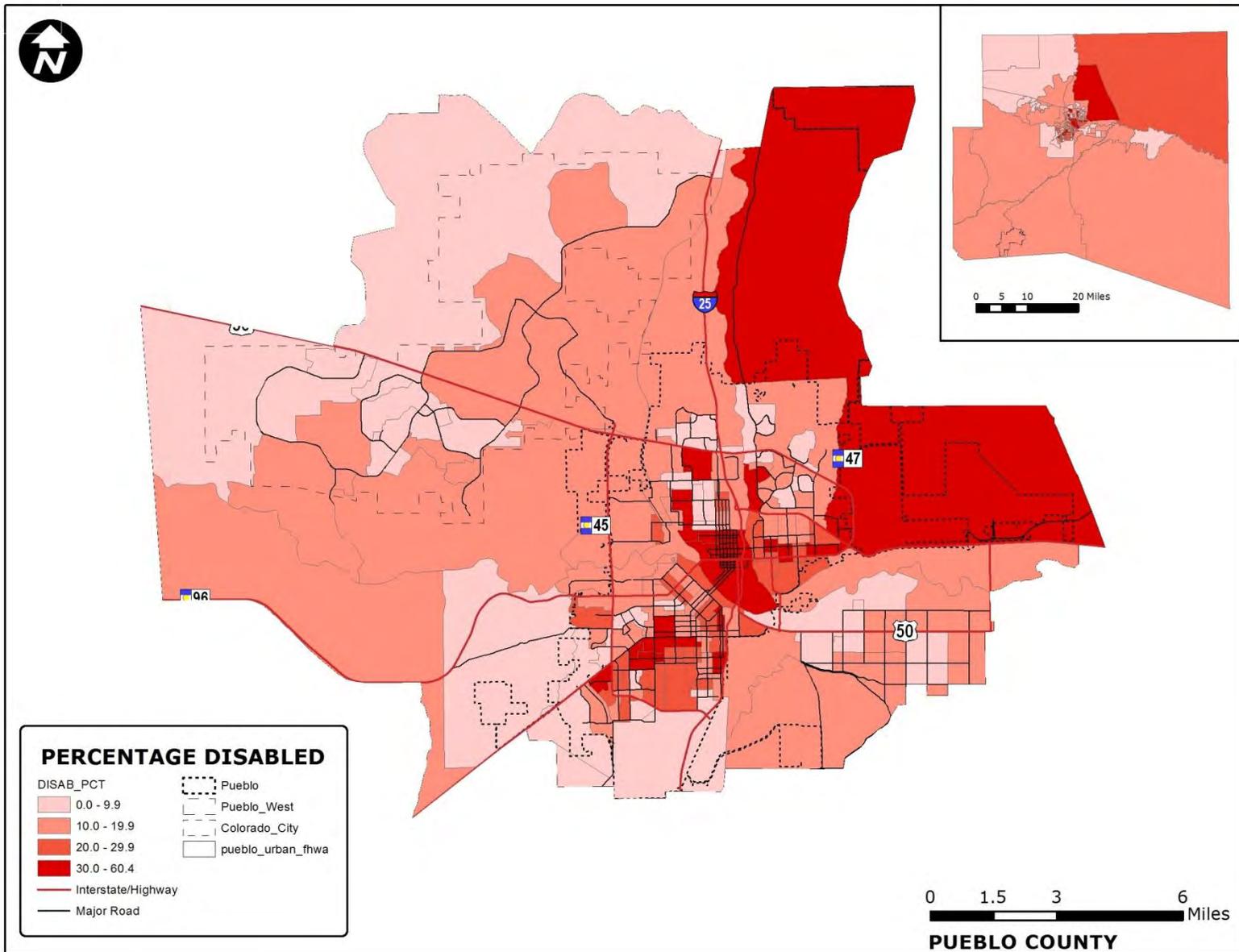


Figure 3.19: Percent with No Vehicle Available by Block Groups

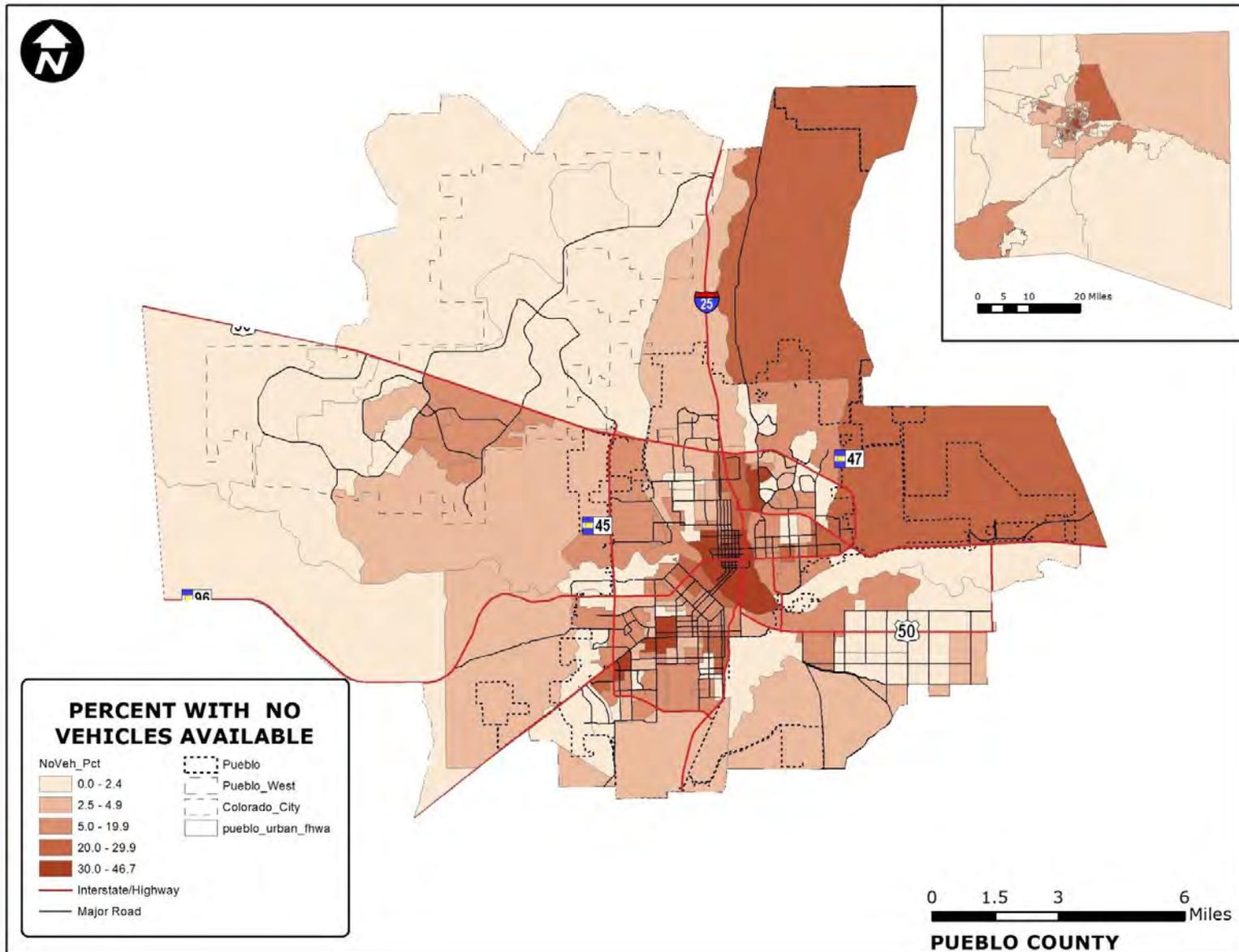
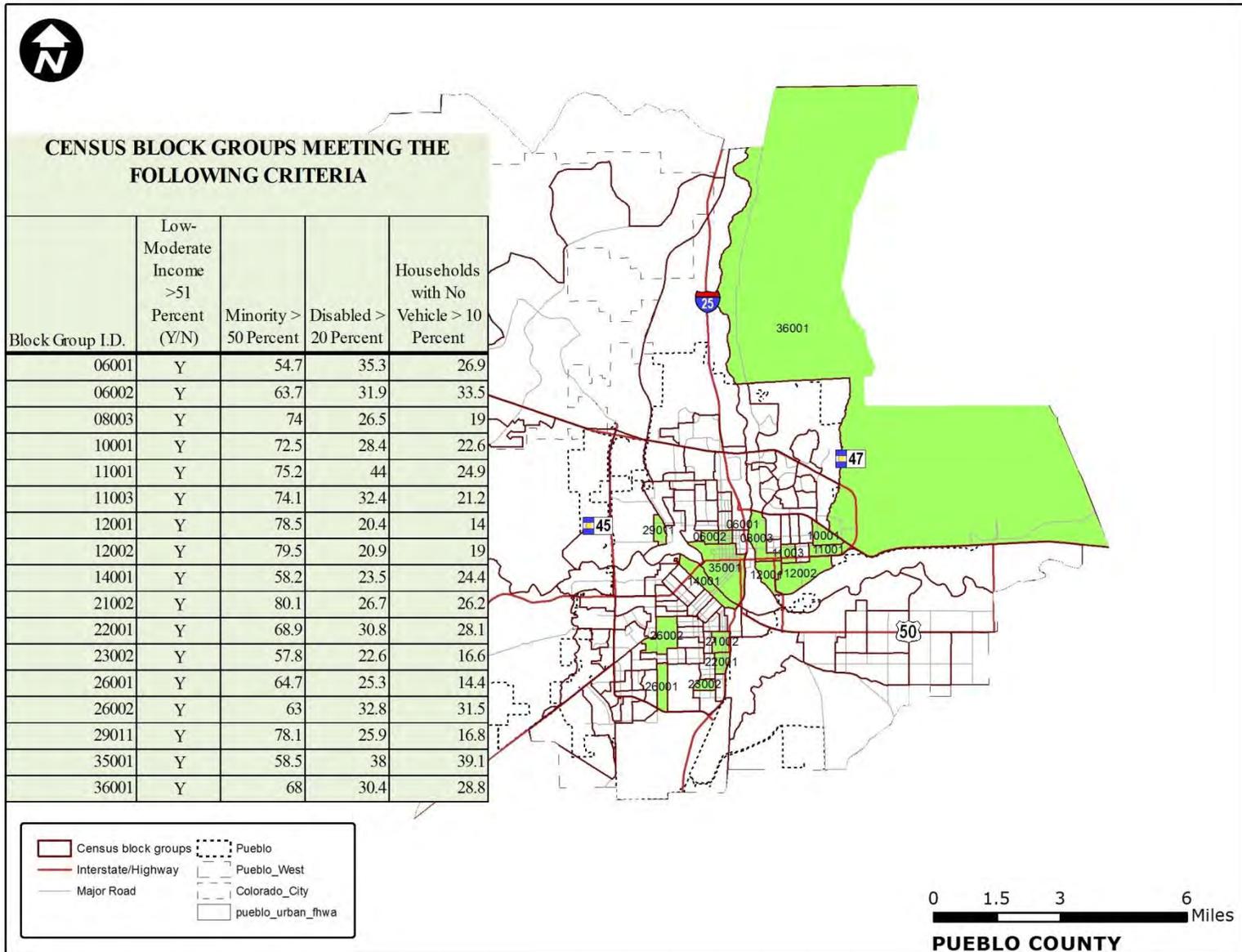


Figure 3.20 Census Block Groups Meeting EJ Criteria (See Below)





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# 1 Safety & Security in the Context of the Long Range Plan

## 1.1 Introduction

In this section both safety and security in the context of the PACOG Long Range Transportation Plan will be discussed.

- Safety can be defined as relative freedom from danger, risk, or threat of harm, injury, or loss to personnel and/or property, whether caused deliberately or by accident. In the context of highway transportation it is typically assessed using crash data to tabulate where safety issues likely exist and condition reporting which identifies infrastructure needs.
- Security can be defined as the state of being free from danger or threat in a given geographic area – a nation, state, county, region or city. This definition can be expanded to include focused preparation for coordinated response to potential threats or disasters, whether natural or caused by humans.

The maintenance and operation of a safe and secure transportation system is of utmost importance to all regions, beginning with the primary focus of the protection of human life. Almost 500 fatalities occurred on Colorado roadways in 2014. Preventing these fatalities is a first priority in Colorado as it is in every state. Investments that maintain or move the system closer to a “state of good repair”, as highlighted in the Existing Conditions (Section 2) make the system safe for all users. Available funds should be allocated first to maintaining the transportation system at a safe and adequate level before other projects involving modernization, enhancements, or major capital projects are considered. Similarly, increased attention to the wide range of transportation security issues in the Pueblo planning area is an important part of long range planning. Roads, bridges, rail and airport facilities can profit from a “hardening” of the layer that protects them from harm.

## 1.2 Outline of this Section

Two related topics will be addressed in this section: transportation safety and transportation security. Each will be presented in a similar format: discussion and analysis at the (1) MAP-21 or federal level, (2) Colorado state level and (3) from the viewpoint of the Pueblo Area Council of Governments.

# 2 Safety

## 2.1 Introduction

Highway safety is a critical element of transportation planning and policy. Reducing highway-related fatalities and injuries improves the overall quality of life for all Colorado residents, workers, and visitors. Deaths and injuries resulting from traffic crashes have serious public health, quality of life, and economic consequences. A safer transportation system will not only reduce the tragic human costs from the loss of lives or life altering injuries, it reduces significant economic losses. The economic costs of highway crashes include medical, insurance, emergency service, legal, lost wages, and personal property damage. Improving traffic safety is not only the right thing to do; it is also the smart thing to do.

The PACOG goals with respect to transportation safety include working to:

- Preserve the existing transportation systems to ensure safe, convenient, and efficient transportation.
- Maintain the performance of the Colorado state transportation system at a high level to ensure the safety of all users, including transportation operators, passengers, shippers, bicyclists and pedestrians.
- Continue to improve system safety by instituting and supporting safety programs to lower the number of fatalities and life-altering injuries.
- Promote the identification of specific emphasis areas to improve transportation safety through a statewide evaluation of safety problems and multi-stakeholder input.
- Continue to develop comprehensive, coordinated, and communicative safety strategies that focus on engineering, education, enforcement, and emergency medical services for all emphasis areas.
- Promote the development of improved and new transportation system design, engineering, and operating technologies to increase system safety.
- Promote safe and convenient travel facilities for vulnerable users.
- Provide a continuing program of public information and education to promote safety awareness and implementation of safety practices.
- Cooperate with other agencies to ensure prompt response to crashes on the transportation system and timely resolution of environmental and other problems, such as hazardous waste sites, encountered when improving transportation facilities.

## 2.2 Federal Guidance

The Moving Ahead for Progress in the 21st Century Act (MAP-21) transportation bill was enacted in 2012. The safety related planning requirements are addressed largely to state Departments of Transportation. MAP-21 retains the Highway Safety Improvement Program (HSIP) as one of the core efforts intended to reduce injuries and fatalities on all public roads, pathways and trails. MAP-21 provides a new emphasis on enhanced data collection and performance. The combination of the renewed HSIP program and the new emphasis on data lays the framework for more effective spending of safety dollars on projects that make roads safer for all users.

The work conducted by PACOG will thus fold into safety investment and strategies at the state level led by the Colorado DOT. The means by which the state supports national safety goals, such as maintaining road performance, improving the system safety, and providing better education and outreach, are echoed by PACOG. As an example, improving system safety on I-25 along its entire extent is important to the nation, the state of Colorado and PACOG.

## 2.3 Safety Statistics in Colorado

The state of Colorado maintains comprehensive records on fatalities by transportation mode in Colorado. **Table 5-1** shows this information providing five travel modes: driver, passenger, motorcycle, pedestrian and bicycle. **Table 5-2** shows this information in percentage form. And finally, **Figure 5-1** shows it in graphic form. In the five year interval of 2009-2013, Colorado fatalities related to the five

transportation modes have remained generally static. Auto driver leads the categories with around 50% of the total share. Auto passengers and motorcycle mode are each about 20% of the total. 10% of transportation related fatalities in the state are of pedestrians with bicycle contributing about 2-3%.

**Table 5-1: Fatalities by Transportation Mode in Colorado 2009-2013**

| Year | Person Type |           |            |            |         |
|------|-------------|-----------|------------|------------|---------|
|      | Driver      | Passenger | Motorcycle | Pedestrian | Bicycle |
| 2009 | 234         | 82        | 88         | 51         | 10      |
| 2010 | 222         | 98        | 82         | 40         | 8       |
| 2011 | 228         | 86        | 78         | 47         | 8       |
| 2012 | 213         | 91        | 79         | 78         | 13      |
| 2013 | 235         | 95        | 87         | 52         | 12      |

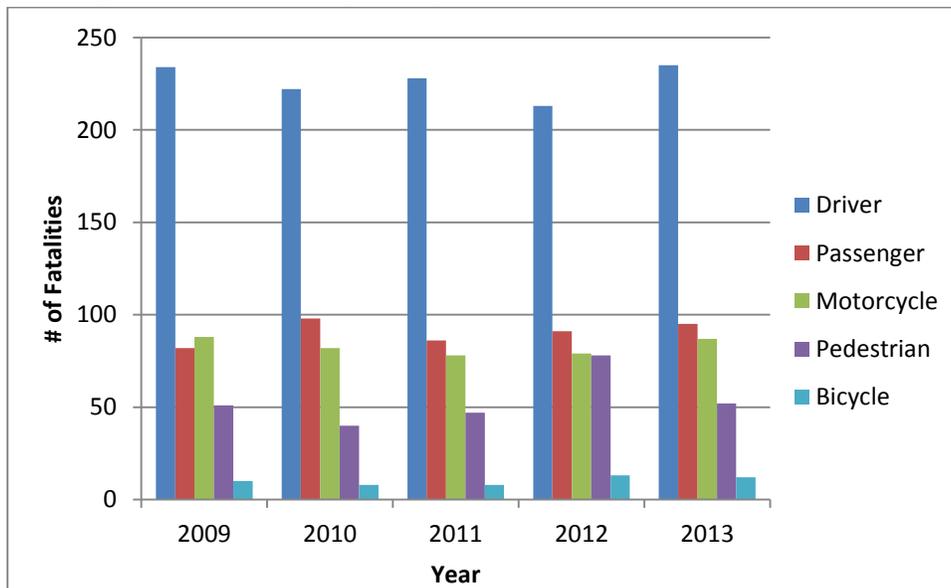
Source: CDOT

**Table 5-2: Percentage of Fatalities by Transportation Mode in Colorado 2009-2013**

| Year | Person Type |           |            |            |         | Total |
|------|-------------|-----------|------------|------------|---------|-------|
|      | Driver      | Passenger | Motorcycle | Pedestrian | Bicycle |       |
| 2009 | 50%         | 18%       | 19%        | 11%        | 2%      | 100%  |
| 2010 | 49%         | 22%       | 18%        | 9%         | 2%      | 100%  |
| 2011 | 51%         | 19%       | 17%        | 11%        | 2%      | 100%  |
| 2012 | 45%         | 19%       | 17%        | 16%        | 3%      | 100%  |
| 2013 | 49%         | 20%       | 18%        | 11%        | 2%      | 100%  |

Source: CDOT

**Figure 5-1: Fatalities by Transportation Mode in Colorado 2009-2013**



Source: CDOT

## 2.4 Safety Statistics in the Pueblo Region

Safety in Pueblo County is presented using the 2009-2013 county level crash data with emphasis on four ways of analyzing the data:

- Type of crash.
- Roadway functional classification of the crash.
- Intersection related component of the crash.
- Time of day of the crash.

### 2.4.1 Type of Crash

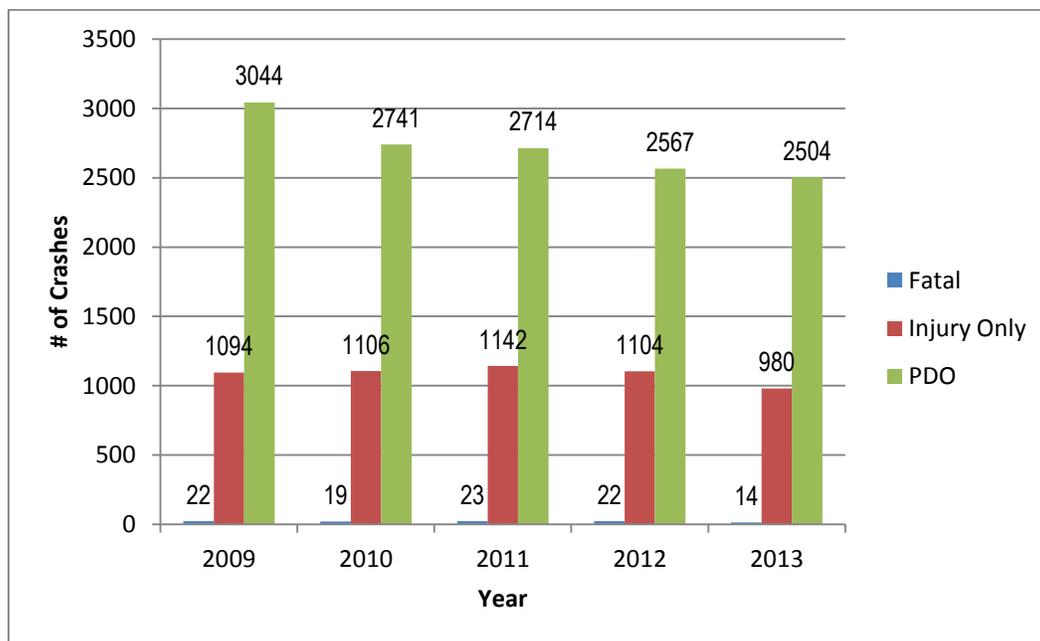
The Colorado Department of Transportation provided comprehensive data on the number and type of vehicle accidents in the county for the five year interval of 2009 to 2013. These were provided for Pueblo County and shown in **Table 5-3**. During the five year interval, fatal crashes in the county ranged from 14 to 23 annually. Crashes with injuries ranged from 980 to 1,142 per year during the same period. Crashes with Property Damage Only (PDO) ranged from 2,504 to 3,044 per year. **Figure 5-2** shows the same data in visual format. All categories of crashes experienced a general decline during the five year span. Property damage only crashes were the most likely to occur, followed by those with injuries and lastly those crashes that had fatalities.

**Table 5-3: Accidents by Type in Pueblo County 2009-2013**

| Accident Type | 2009 | 2010 | 2011 | 2012 | 2013 |
|---------------|------|------|------|------|------|
| FATAL         | 22   | 19   | 23   | 22   | 14   |
| INJURY        | 1094 | 1106 | 1142 | 1104 | 980  |
| PDO           | 3044 | 2741 | 2714 | 2567 | 2504 |

Source: CDOT

**Figure 5-2: Accidents by Type in Pueblo County 2009-2013**



Source: CDOT

Alcohol or drugs are often correlated with fatal crashes. **Table 5-4** shows the number of fatal crashes for each recent year, the number of fatalities resulting, and the total fatalities where alcohol and/or drugs were a factor. Between 23% and 42% of crashes with fatalities in Pueblo County between 2009 and 2013 involved alcohol and/or drugs.

**Table 5-4: Alcohol/Drugs Indicator in Fatal Crashes 2009-2013 in Pueblo County**

| Year | Fatal Crashes | Deaths | Alcohol or Drugs Involved | % Alcohol or Drug Related |
|------|---------------|--------|---------------------------|---------------------------|
| 2009 | 22            | 22     | 5                         | 23%                       |
| 2010 | 19            | 20     | 6                         | 30%                       |
| 2011 | 23            | 24     | 10                        | 42%                       |
| 2012 | 22            | 25     | 7                         | 28%                       |
| 2013 | 14            | 15     | 6                         | 40%                       |

Source: CDOT

#### 2.4.2 Roadway Functional Classification of the Crash

The crash data provided to PACOG allowed tabulation of the locational types where crashes occurred during the five year interval 2009-2013. These five years are summarized in **Table 5-5** and **Table 5-6**. **Table 5-5** provides the totals for years 2009-2013. **Table 5-6** presents the same information using the percentages of crash occurrence by roadway functional classification.

**Table 5-5: Locational Indicator of Crashes by Severity 2009-2013 in Pueblo County**

| Type of Roadway | Location of Crash (Total 2009-2013) |              |               |
|-----------------|-------------------------------------|--------------|---------------|
|                 | Fatal                               | Injury Only  | PDO           |
| Interstate      | 24                                  | 658          | 1,604         |
| State Highway   | 41                                  | 1,977        | 4,104         |
| City Street     | 19                                  | 2,526        | 7,176         |
| County Road     | 15                                  | 247          | 640           |
| Frontage Road   | 1                                   | 18           | 46            |
| <b>Total</b>    | <b>100</b>                          | <b>5,426</b> | <b>13,570</b> |

Source: CDOT

**Table 5-6: Percentage of Locational Indicator of Crashes by Severity 2009-2013 in Pueblo County**

| Type of Roadway | Location of Crash (Total 2009-2013) |             |             |
|-----------------|-------------------------------------|-------------|-------------|
|                 | Fatal                               | Injury Only | PDO         |
| Interstate      | 24%                                 | 12%         | 12%         |
| State Highway   | 41%                                 | 36%         | 30%         |
| City Street     | 19%                                 | 47%         | 53%         |
| County Road     | 15%                                 | 5%          | 5%          |
| Frontage Road   | 1%                                  | 0%          | 0%          |
| <b>Total</b>    | <b>100%</b>                         | <b>100%</b> | <b>100%</b> |

Source: CDOT

**Table 5-5** echoes the findings shown in earlier tables: property damage crashes are the most prevalent, followed by those with injuries and lastly those with fatalities. Looking at the data in percentage format using the total of five years of data (**Table 5-6**) allows additional information to emerge.

- State highways are the most likely locations (41%) for fatal crashes to occur, followed by interstates (24%). City and county roads follow with 19% and 15% respectively.
- For injury-only crashes, almost half (47%) occur on city streets. State highways follow with 36% and interstates with 12% of the total.
- Property Damage Only (PDO) crashes are also most likely to occur on city streets (53%), again with state highways (30%) and interstates (12%) following.

The locational information of crashes shows overall that fatalities have occurred most often on higher classification / higher speed roadway facilities.

### 2.4.3 Intersection Related Component of the Crash

Similar crash data tabulation can be conducted to determine if the crash occurred at an intersection or a non-intersection location. Again all five years were tabulated for this summary and shown in percentage format below.

**Table 5-7: Road Type (Intersection) in Crashes 2009-2013 in Pueblo County**

| Road Type                               | Severity of Crash |             |             |
|---|-------------------|-------------|-------------|
|   | Fatal             | Injury      | PDO         |
| At Intersection or Intersection Related | 32%               | 57%         | 45%         |
| Non-Intersection                        | 65%               | 36%         | 45%         |
| At Driveway Access                      | 1%                | 5%          | 7%          |
| Ramp                                    | 1%                | 2%          | 2%          |
| All Other                               | 1%                | 1%          | 1%          |
| <b>Total</b>                            | <b>100%</b>       | <b>100%</b> | <b>100%</b> |

Looking at this table and using the total of five years of data (**Table 5-7**) allows the contribution of the intersection to emerge in crash events. In this table, the category “All Other” includes “In Alley”, “Parking Lot”, “Roundabout” and “Unknown”.

- Intersections contribute to the occurrence of fatal crashes in 32% of instances over the last five years. These events are far more likely (65%) to occur in non-intersection locations.
- The reverse is true for crashes with injuries where 57% of these occurrences are related to intersections.
- Property Damage Only (PDO) events are split between intersection and non-intersection locations (45% each). Driveway access is a major contributor to the balance of the road type present when PDO crashes take place.

In summary, fatal crashes are twice as likely to occur on the travel lane (non-intersection) than at or near an intersection. Crashes with injuries only are more likely to take place at an intersection though

the travel lane still contributes strongly to the total. And PDO crashes are equally spread at intersection and non-intersection locations with driveway access playing a significant role.

#### 2.4.4 Time of Day of Crashes by Severity

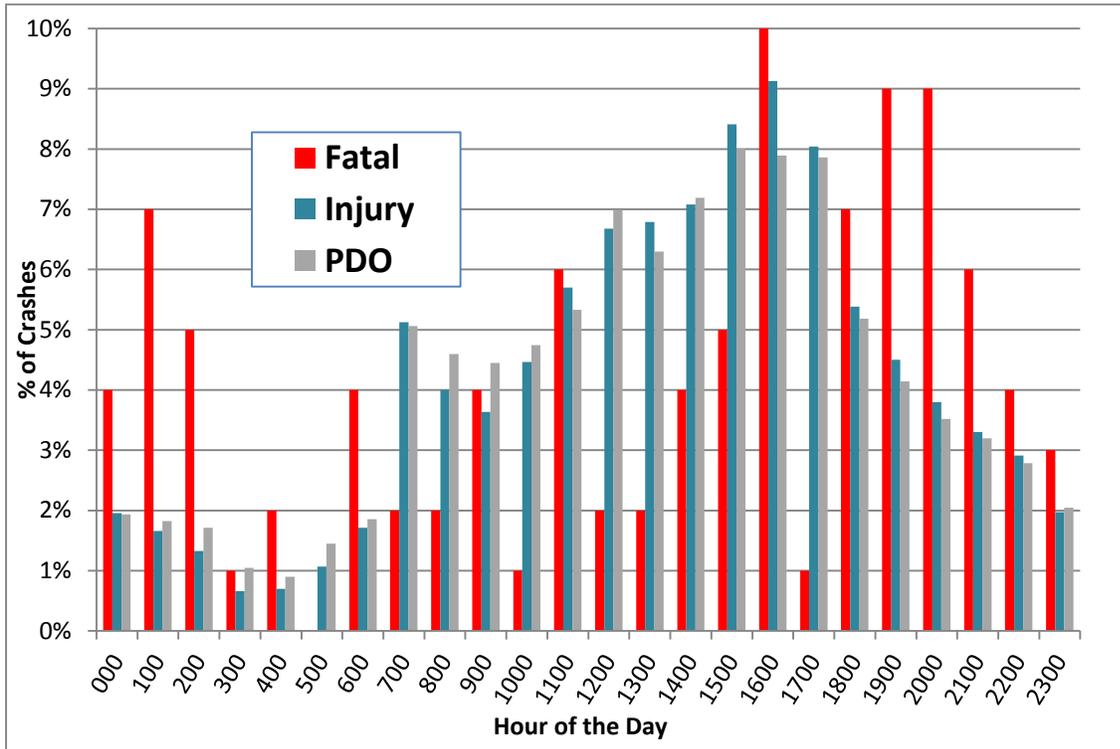
An overview can be conducted on the data to understand the time of day during which crashes occurred in Pueblo County. Again all five years were tabulated for this summary and presented in both percentage and graphic form below. **Table 5-8** divides the crashes into 24 categories, each representing the hour in a 24-hour day during which the crash occurred and then sorts for the severity of the crash. Each hour category contains all crashes that occurred during any part of that hour.

**Table 5-8: Time of Day of Crashes 2009-2013 in Pueblo County**

| Hour | Severity |        |     |
|------|----------|--------|-----|
|      | Fatal    | Injury | PDO |
| 0000 | 4%       | 2%     | 2%  |
| 0100 | 7%       | 2%     | 2%  |
| 0200 | 5%       | 1%     | 2%  |
| 0300 | 1%       | 1%     | 1%  |
| 0400 | 2%       | 1%     | 1%  |
| 0500 | 0%       | 1%     | 1%  |
| 0600 | 4%       | 2%     | 2%  |
| 0700 | 2%       | 5%     | 5%  |
| 0800 | 2%       | 4%     | 5%  |
| 0900 | 4%       | 4%     | 4%  |
| 1000 | 1%       | 4%     | 5%  |
| 1100 | 6%       | 6%     | 5%  |
| 1200 | 2%       | 7%     | 7%  |
| 1300 | 2%       | 7%     | 6%  |
| 1400 | 4%       | 7%     | 7%  |
| 1500 | 5%       | 8%     | 8%  |
| 1600 | 10%      | 9%     | 8%  |
| 1700 | 1%       | 8%     | 8%  |
| 1800 | 7%       | 5%     | 5%  |
| 1900 | 9%       | 4%     | 4%  |
| 2000 | 9%       | 4%     | 4%  |
| 2100 | 6%       | 3%     | 3%  |
| 2200 | 4%       | 3%     | 3%  |
| 2300 | 3%       | 2%     | 2%  |

**Table 5-6** and **Figure 5-3** communicate the same findings. Crashes with fatal outcomes are most likely to occur during one of two time intervals: (1) in the early morning hours (midnight to 3 am) or (2) during the late afternoon and evening. Injury or PDO events, however, occur between 7 am and 6 pm with a peak during the hour starting at 4 pm.

**Figure 5-3: Time of Day of Crashes 2009-2013 in Pueblo County**



## 2.5 Summary

Crash data provided by CDOT for Pueblo County frames safety existing conditions as well as the information on which potential areas to address. All types of crashes, fatal, injury and PDO, have been diminishing in number between 2009 and 2013 in the county which is good news for PACOG. Drugs and/or alcohol are a factor in between 23% and 42% of fatal crashes in the county pointing to the need for education and/or punishment aimed at reducing this type of activity. Crashes take place at both intersection and non-intersection locations fairly equally, but fatal crashes are associated with higher speed facilities pointing to a need to focus on any known locations on I-25 and US 50 for investment in safety to save lives. And finally, the time of day of crashes provides some guidance on where to invest. The PM peak is a problem area for all three categories of crashes. It is possible that a renewed focus on intersection safety, improved signal timing, and education on both common courtesy and acknowledging fatigue at the end of the working day could address the temporal aspect of crashes in the county.

## 3 Security

Since September 11, 2001, there has been growing awareness of the need for emergency preparedness and attention to Homeland Security issues. Title 23 in the Code of Federal Regulations, in Section 450.322(f), states: “The metropolitan transportation plan should include appropriate emergency relief and disaster preparedness plans and strategies and policies that support homeland security as appropriate and safeguard the personal security of all motorized and non-motorized

users.” The context of transportation security as a planning factor is also linked to the U.S. Department of Homeland Security and the 2006 implementation of the National Incident Management System (NIMS)<sup>1</sup>. The NIMS was issued in 2004 to provide a comprehensive and consistent national approach to all-hazard incident management at all jurisdictional levels and across functional disciplines. Full compliance with the NIMS certification process was required by September 2006. Beginning in 2007, NIMS compliance is a condition for jurisdictions to receive federal preparedness funding assistance.

From a transportation planning perspective, security is an emerging area of concern, and each MPO will have different security priorities. A first cut tabulation of what the transportation plan should reflect with respect to security includes:

- Defining the role of the MPO and public transportation operators in promoting security, which may in part be defined elsewhere in state or local legislation related to emergency management responsibilities.
- Identification of critical facilities and transportation system elements and the risk to assets such as highways, transit systems, or rail lines critical to national defense or economic security, and infrastructure intricately related to potential high-value security targets.
- Identification of appropriate security goals and strategies.
- Reflection of projects and strategies that will increase the security of transportation system users in the Long-Range Transportation Plan (LRTP) and the Transportation Improvement Program (TIP).

PACOG understands that the focus of the multi-jurisdiction security planning efforts is to minimize the direct or indirect disruptions caused either by natural or human actions. These disruptions can occur in any season of the year and cover a limited or a wide-ranging area in the Pueblo MPO region. Examples of the types of events are:

- Natural events – Tornado, blizzard, flood or wildfire.
- Human -caused events – Hazardous material incident, power outage, act of terrorism, civil disturbance.

The events that requires a security response have in common that they are unexpected, that lives are in jeopardy and that emergency personal may not be available due to a high demand for their services.

### **3.1 Security Goals – National**

The U.S. Department of Transportation has adopted a conceptual level security, preparedness and response goal as part of its strategic plan. This goal is to “balance transportation security requirements with the safety, mobility and economic needs of the nation and be prepared to respond to emergencies that affect the viability of the transportation sector”.

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<sup>1</sup> <https://www.fema.gov/national-incident-management-system>

The main federal objectives for security are:

- Developing/obtaining expert transportation sector intelligence.
- Building preparedness for emergencies affecting the transportation sector.
- Planning for effective response to emergencies affecting the transportation sector.

PACOG is addressing security issues by cataloging available emergency management resources and documenting actions that the area has already undertaken, at both the state level and local levels.

## **3.2 Security Goals – State of Colorado**

### **3.2.1 State of Colorado Emergency Operations Plan**

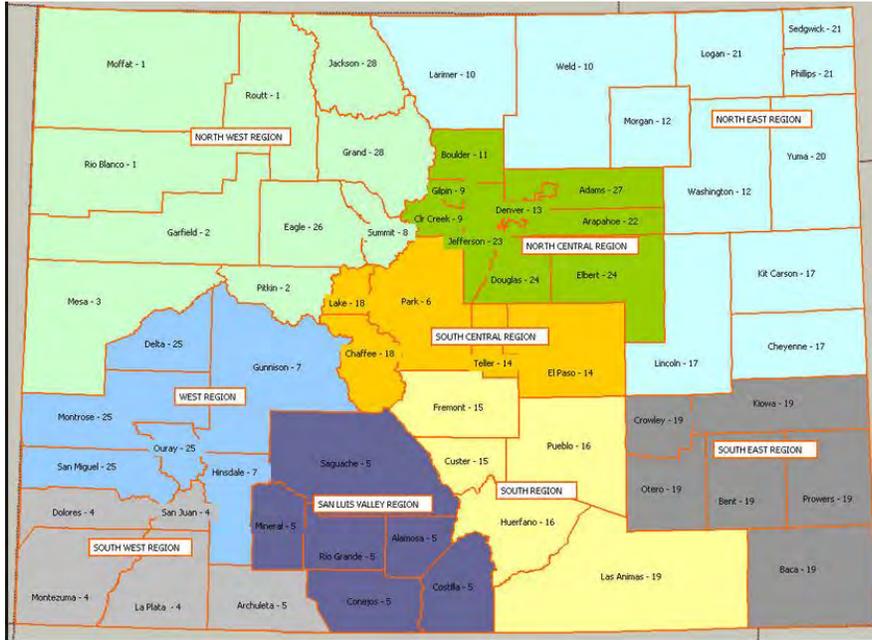
The purpose of the State of Colorado Emergency Operations Plan (SEOP) is to identify the roles, responsibilities, and actions of state government in disasters. Emergency operations plans address the ability to direct, control, coordinate, and manage emergency operations. Each level of government should respond to an incident using its available resources, to include the use of mutual aid, and may request assistance from the next higher level of government, if required. When local government capabilities are overtaxed, state government has resources and expertise available to provide emergency or disaster assistance. The state will modify normal operations and redirect resources to assist and support local governments in saving lives, relieving human suffering, sustaining survivors, protecting property, and reestablishing essential services. Federal government resources and expertise can be mobilized to augment emergency or disaster efforts beyond the capabilities of state government.

The SEOP identifies fifteen Emergency Support Functions (ESFs) that list the types of assistance activities that local government may need regardless of the nature of the disaster or emergency. CDOT emergency support activities include:

1. Processing and coordinating requests for state, local, and civil transportation support as directed under the SEOP.
2. Reporting damage to transportation infrastructure as a result of the incident.
3. Coordinating alternate transportation services.
4. Coordinating the restoration and recovery of the transportation infrastructure.
5. Coordinating and supporting prevention, preparedness, and mitigation among transportation infrastructure stakeholders at the state and local levels.

The Colorado Division of Emergency Management (CDEM) provides financial and technical support to local governments throughout the state with both out-stationed and in-house staff. Pueblo is in the South Region of this Division as shown in **Figure 5-4**.

**Figure 5-4: Pueblo within the Homeland Security Region System**



### 3.2.2 State of Colorado Homeland Security Strategy

The State of Colorado Homeland Security Strategy was prepared by the Colorado Department of Local Affairs with extensive cooperation and input from the Governor’s Office, the Colorado Department of Public Safety, the state’s county emergency managers, the regional Homeland Security coordinators, and the Center for the Study and Prevention of Violence at the University of Colorado-Boulder.

Colorado’s Homeland Security Strategy provides a framework for enhancing the state’s ability to prevent, respond to, and recover from an act of terrorism. The plan furnishes state and local officials with the means to develop interlocking and mutually supporting emergency preparedness programs. The plan focuses on preparedness for acts of terrorism and addresses disaster planning that is supplemented by local strategic and operations plans. This coordinated effort by federal, state, and local governments identified needed resources, developed strategies, and created partnerships throughout the public and private sector that serve as a foundation for homeland security efforts now and in the future.

### 3.2.3 State Homeland Security/Emergency Management

Colorado's Multi-Agency Coordination Center (MACC) offers the ability for state, federal, and local agencies to come together in a central location to coordinate the response to emergencies and disasters throughout the state. The MACC is a state-of-the-art center developed specifically to help Colorado respond to any type of disaster or emergency it may face in today's world. The center is housed with South Metro Fire and Rescue in Centennial, Colorado. The Colorado Information Analysis Center (CIAC) was added to the center with the disaster prevention focus and strong links to federal and local agencies. The MACC is linked to the CDOT's Transportation Operations Center which provides highway

surveillance camera displays to monitor state roadways and weather throughout Colorado. The center also provides general intelligence on all transportation systems including railroads and airports. The Operations Center has command and control over all state road systems, bridges, and underpasses, provides avalanche analysis and control, and acts as the command and control center in the event of an emergency.

#### **3.2.4 Colorado Department of Transportation**

The Colorado Department of Transportation's (CDOT) role in emergency management consists primarily of safeguarding and maintaining the state transportation system in the affected area and facilitating and coordinating evacuation routes that utilize the state transportation system. CDOT maintenance staff comprises the primary responders for both damage to CDOT infrastructure and assistance to others, but staff from other areas may be utilized as needed.

#### **3.2.5 Colorado State Patrol**

The Colorado Information Analysis (CIAC) is designed to be a cross-jurisdictional partnership between local, state, and federal agencies, including private sector participation when appropriate. This center provides one central point in Colorado for the collection, analysis, and timely dissemination of terrorism-related information. Information is distributed from the CIAC in the form of daily reports, special reports, and bulletins to numerous agencies representing a multitude of disciplines.

### **3.3 PACOG's Role in Security & Emergency Management**

MPOs also have a role in security and emergency management efforts. This role varies based upon the political and institutional context of the region. Clearly, emergency management, public safety, and transportation operating agencies have the primary responsibility for responding to disasters. However, outside of the immediate urgency of response, there are opportunities to support coordinated responses to potential incidents and to assist in developing strategies for how to handle demands on the transportation system, before or after an incident, in which the MPO can play an important role. As a facilitator of collaboration, the MPO can assist in multiple ways. The MPO can serve as a forum for cooperative decision making, or as an advocate for funding of regional transportation strategies. At the technical level, the MPO can provide transportation network-based technical analyses to assess both the impacts of and needs related to security and emergency management efforts.

The Public Works Departments of the City of Pueblo and of Pueblo County are important partners in the PACOG security planning process. They are also the stewards, with CDOT, of the key portions of the existing roadway network as noted in the existing conditions section. Note that in this particular section of the RTP, safety and security are blended in how they deliver value to the residents of the PACOG region. Specific roles and responsibilities of the regional leadership include:

- Inspection of bridges, roads, signs, lighting, airports, and sidewalks for damage.
- Coordination and repair of damaged transportation structures, including roads, traffic control systems, and signage.
- Maintaining rights-of-way for emergency vehicles.

- Assisting in traffic management during incidents.
- Helping secure geographic areas with roadblocks or other physical measures.
- Establishing short-term and long-term detours and signage.
- Removing debris and cleaning streets and roadways.
- Setting priorities for restoration of transportation systems.

### **3.4 PACOG's Policy Goals for Security**

The current 2040 PACOG Regional Transportation Plan formalizes the security goal of the MPO by citing it specifically:

*To increase the security of the transportation system by implementing secure transportation improvements and securing existing transportation facilities.*

The intent of this goal is to move towards providing enhanced transportation system and personal security for both residents of and visitors to the region. This goal would include securing high-value targets through measures including access control, monitoring/surveillance, standoffs, and “hardened” construction. The measures utilized would vary based on the threats posed (e.g., earthquake, hurricane, wildfire, or terrorist attack). Personal security measures would include emergency call phones, improved lighting and surveillance. It is anticipated that performance measures would be identified in more detail as security goals nationwide are better defined. They may include the percentage of identified high-value targets secured, the percentage of identified redundant evacuation routes implemented, or the percentage of identified transportation facilities secured for the traveling public.

The first step in the security realm is the cataloging of PACOG transportation assets. It is anticipated that a baseline year can then be set in the near future and that all transportation assets will be subjected to a deadline for a full security audit.

### **3.5 Key PACOG Transportation Assets**

Key transportation system assets in the PACOG Planning Area include:

- Interstate Highway System.
- National Highway System Routes (NHS).
- Strategic Highway Network Routes (STRAHNET) –The STRAHNET is the road system deemed necessary for emergency mobilization and peacetime movement of heavy armor, fuel, ammunition, repair parts, food, and other commodities to support U.S. military operations of the five installations in the region.
- Transit System – The transit system is particularly important relative to its potential contribution to the evacuation of areas.
- Pueblo Memorial Airport.
- The BNSF and UP Rail Line Corridors.

Most of these facilities are linear in nature, and while risks exist across these networks due to a potential incident, there is built-in redundancy from the supporting network of state, county, and city roadways that can serve, if necessary, as alternative routes for the movement of vehicles in the case of an incident. However, there are elements of these networks, such as key bridges, that if damaged would have a more significant effect on the operation of the system.

Using guidelines developed in the report, *National Needs Assessment for Ensuring Infrastructure Security (SAIC/Parsons Brinkerhoff, October 2002)*, an assessment to identify potentially important bridge facilities should be carried out. The key criteria for this analysis include:

- Casualty risk.
- Economic disruption.
- Military support.
- Emergency relief.

Agencies primarily responsible for major highway security in the Pueblo planning area include the Colorado State Patrol and local law enforcement. Effective coordination and communication among these agencies is crucial during emergency situations. Security is provided through the following techniques: routine road patrols, maintaining the traffic management/operations center, flight patrols, and crash and criminal investigations.

## **3.6 Freight Security**

### **3.6.1 Truck Freight Security**

The Colorado State Patrol and the county sheriff are primarily responsible for providing security on the Pueblo region's truck freight network which generally implies the interstate and U.S. Highway system. Truck freight security initiatives include:

- Mandatory roadside freight check-points.
- State permitting for haulers.
- Commercial vehicle requirements.
- Restricted travel times.
- Specific restrictions for hazardous material haulers.
- Background checks.
- Carrier safety ratings and assessments.
- Preferred hazardous material routing.
- Safety audits and surveys.
- A security training program.

The Transportation Security Administration (TSA) has been working closely with a number of chemical shippers to develop a series of baseline security standards for both Toxic Inhalation Hazard and hazardous chemicals of concern. Those standards will address specific areas such as vehicle tracking, vehicle attendance, vehicle alarm systems, truck cab access controls, locking fifth wheel on tank trailers, and security route and stop areas.

### **3.6.2 Rail Security**

In the United States, a large percentage of hazardous material is transported over rail. The rail lines through the Pueblo region are potential routes for many types of hazardous material from chemicals to radioactive waste.

Freight rail does not offer terrorists the high densities of passenger targets, but it does provide terrorists with some opportunities that passenger rail does not afford. In particular, freight rail is used to transport hazardous materials and dangerous cargoes. An estimated 40% of inter-city freight transport occurs by rail, including half of the nation's hazardous materials.

In the aftermath of the September 11, 2001 terrorism events, the leadership of the freight rail industry generated more than 100 action items, a multi-stage alert system, and around-the-clock communications with homeland security and national defense officials. These action items were based on the results of a strategic review of the transportation of hazardous materials; the security of the industry's information infrastructure, freight rail operations, and infrastructure; and military needs relating to the rail network. The critical action items included the need to:

- Integrate protective housings, valves, and fittings into hazardous transport infrastructure to prevent tampering and facilitate emergency response.
- Increase surveillance of freight equipment through training of staff on observation and installation of video surveillance equipment. Improve operations by monitoring for signal tampering, requiring crews and dispatchers to verify communications for train movements and dispatches, and locking locomotive doors to prevent hijackings.
- Secure the information infrastructure that terrorists could use to enhance attacks or cause systemic shutdowns. Collaborate with the Department of Defense to ensure the viability of STRACNET (Strategic Rail Corridor Network)-designated rail lines that are capable of meeting unique DOD requirements, such as the ability to handle heavy, high, or wide loads.

It is not clear how much should be spent on rail security relative to security at other potential targets. The rail corridor that travels through the Pueblo region is heavily used and suffers from a lack of alternative routes. Attacks on critical freight nodes or functions could, therefore, create substantial bottlenecks and throughput pressures. The freight rail system is in the hands of the private sector; the BNSF and UP have comprehensive security programs in place at this time. A collaborative effort between the railroads and PACOG might be valuable.

### **3.6.3 Aviation Security**

The Pueblo Memorial Airport (IATA: PUB, ICAO: KPUB, FAA LID: PUB) is a public airport six miles east of Pueblo, in Pueblo County, Colorado. It is used for general aviation and by one airline, subsidized by the Essential Air Service program. Federal Aviation Administration records say the airport had 4,345 passenger boardings (enplanements) in calendar year 2008, 5,192 in 2009 and 11,641 in 2010. The FAA's National Plan of Integrated Airport Systems for 2011–2015 called it a non-primary commercial service airport based on enplanements in 2008/2009 (between 2,500 and 10,000 per year). It is used for commercial passenger flights, charter, military, business, and passenger service by based and visiting aircraft, recreational and general aviation flight, and flight training. Security measures installed at the

Pueblo Memorial Airport include monitored surveillance of airport property by airport security, video surveillance cameras, fenced grounds, and luggage and passenger screening by TSA personnel.

### **3.7 Recommended Future Activities for PACOG**

The Pueblo MPO has identified a small set of tasks to better integrate security into the Long Range Plan. The MPO understands that much of the response framework is in place and that MPO value to offer the ability to coordinate activities and to prepare technical analysis to support resource allocation. It is anticipated that the efforts listed below will be addressed on an ongoing basis.

1. Begin the process to identify state and local agency efforts and/or private sector efforts to enhance security planning for the PACOG transportation system.
2. Work to provide safe and secure facilities and transportation infrastructure for residents, visitors, and commerce in the PACOG planning area through efforts to reduce injuries, fatalities, and property damage for all modes of transportation, and to minimize security risks at airports, rest areas, and public transportation facilities and on roadways and bikeways.
3. Start the process of:
  - Completing a risk and vulnerability assessment of transportation assets.
  - Assisting in the identification of key evacuation routes from activity areas in Pueblo.
  - Preparing demographic profile information and a geographic inventory of transportation-disadvantaged populations that may need assistance during a disaster to evacuate.



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## Chapter 10 Freight and Commodity Flows

### 10.1 Freight in the Context of the Long Range Plan

The movement of freight is a key component of a functioning transportation system. Efficient movement of all modes of freight within and through the Metropolitan Planning Organization (MPO) region supports and attracts industry, agriculture, international trade, retail and terminal operators. The state Department of Transportation (DOT) and the MPO are responsible for making sure that freight movement is considered in the transportation planning process. Federal legislation calls for the statewide and metropolitan planning processes to include reasonable opportunity for the public and interested parties to participate in the development of plans and programs. Many state DOTs and MPOs have systematically incorporated freight movement issues into their planning activities, for example by:

- Defining those elements of a metropolitan area's transportation system that are critical for efficient movement of freight.
- Identifying ways to measure system performance in terms of freight movement.
- Developing freight-oriented data collection and modeling to identify problems and potential solutions.
- Creating freight movement advisory committees to identify important bottlenecks in the freight network.

The Pueblo Area Council of Governments (PACOG) is addressing the important requirement of freight planning with this section of the Long Range Plan. The intent of this freight section is to provide an overview of the freight facilities on the ground for highway, rail and air as well as commodity flows by type for 2010 and 2040. Freight needs will be listed as well.

#### 10.1.1 Federal Guidance

The Moving Ahead for Progress in the 21st Century Act (MAP-21) was enacted in 2012. The freight related planning requirements are addressed to the state DOTs. The overall goal was to focus attention at the national level on the freight network and support investment in freight-related surface transportation projects. Specifically, it required the U.S. Secretary of Transportation to encourage each state to develop a comprehensive State Freight Plan and establish a State Freight Advisory Committee. While freight plans and freight advisory committees are not required by MAP-21, many states and MPOs are in the process of establishing or updating freight plans since projects listed on a State Freight Plan are eligible for a higher percentage of Federal matching funds. The four elements that MAP-21 requires of State Freight Plans are the targeted elements of this report and progress towards them will be noted in the summary section. These elements are:

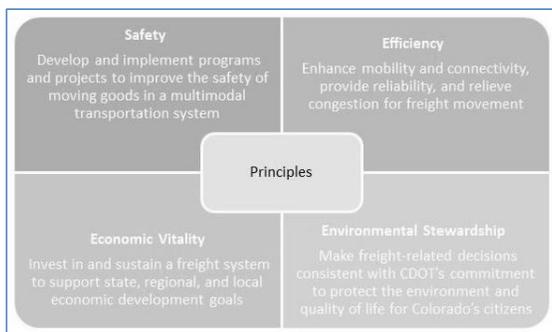
- Describe how the State Freight Plan supports national freight goals
- Describe freight policies, strategies, performance measures
- Describe freight trends, needs and issues
- Inventory bottlenecks and develop freight improvement strategies

The work conducted by PACOG will thus fold into work at the state level led for the Colorado DOT. Many of the means by which the state supports national freight goals – such as improving the state of good repair, reducing congestion, and growing the economy by means of the freight system are echoed by Pueblo County. As an example, keeping I-25 in a state of good repair is important to the nation, the state and Pueblo County.

### 10.1.2 Colorado Department of Transportation (CDOT) Goals for Freight Planning

CDOT established a Freight Advisory Council in 2002 and for several years conducted important activities with stakeholders in every sector of the freight industry. In April 2015 the Colorado Statewide Transportation Plan<sup>1</sup> was released. The freight portion of this statewide plan will be released later in the year. The Transportation Plan and its freight component mark a renewed interest by the state reformulating the statewide Freight Advisory Council.

Figure 10.1: Colorado DOT Freight Planning Principles



Source: Colorado State Freight Roadmap, 2009

### 10.1.3 PACOG Goals for Freight Planning

Freight transportation has grown over time with U.S. population growth and increased economic activity. The U.S. population grew by 26 percent between 1990 and 2012, reaching 313.9 million in 2012. Population growth in the western states was more significant, 39 percent over that same period. The U.S. economy, measured by Gross Domestic Product (GDP), increased by 70 percent in real terms (inflation adjusted). In the western states, GDP increased by 80 percent. This population and economic growth has implications on the freight transportation system, and understanding the demographic and economic trends is critical when considering long term transportation infrastructure investment priorities.

The Long Range Transportation Plan (LRTP) for PACOG has six stated goals with respect to freight:

<sup>1</sup> <http://coloradotransportationmatters.com/statewide-transportation-plan/>, 2015

1. Improving the contribution of the freight transportation system to economic efficiency, productivity, and competitiveness.
2. Reducing congestion on the freight transportation system.
3. Improving the safety, security, and resilience of the freight transportation systems.
4. Improving the state of good repair of the freight transportation system.
5. Using advanced technology, performance management, innovation, competition, and accountability in operating and maintaining the freight transportation system.
6. Reducing adverse environmental and community impacts of the freight transportation system.

Cost-effective freight movement is an important element of economic competitiveness, particularly as domestic and global trade continues to expand. In fact, increased competition in today's global economy rewards those regions that actively plan for and pursue efficient freight transportation systems.

#### **10.1.4 Outline of the Section**

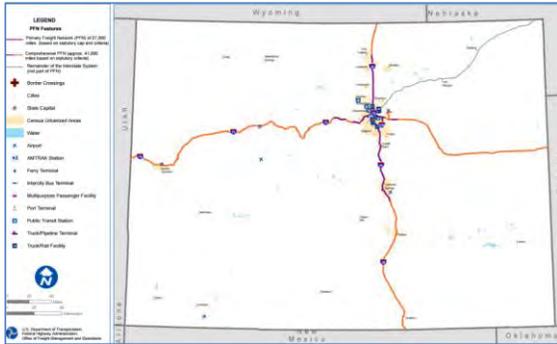
This section is organized to provide a freight modal profile of Pueblo County, an overview of commodity flows for the base and future years at the national, state and Pueblo MPO level, a look at freight safety, and a summary. It highlights freight flow trends in the State of Colorado and the PACOG MPO region.

### **10.2 Freight Modal Profile**

#### **10.2.1 State Profile**

In 2010, more than 60 million tons of freight and \$99 billion in freight value moved into or out of Colorado. By 2040, tonnage is expected to nearly double, and value is anticipated to triple. As is the case nationally, most freight in Colorado is shipped by truck. Based on Transearch data for the state, 89 percent of all tonnage shipped in Colorado is moved by truck and 96 percent of all freight value is moved by this mode. The relative dominance of trucking as the preferred mode for freight transport is not expected to change in the next 30 years. Colorado's primary freight network is presented in the figure below. This figure was prepared by the Federal Highway Administration (FHWA) and shows the state's airports, railroads, roadways, and other facilities. Note that much of the connectivity for freight is located in the Denver area. In a statewide context it is I- 25 that links Pueblo to the state and the nation.

**Figure 10.2: Primary Freight Network in Colorado**



Source: [http://www.ops.fhwa.dot.gov/freight/infrastructure/pfn/state\\_maps/co\\_colorado.pdf](http://www.ops.fhwa.dot.gov/freight/infrastructure/pfn/state_maps/co_colorado.pdf)

While trucking is the dominant mode for transporting freight in both the state and Pikes Peak Area Council of Governments (PPACG) region, other modes support the freight transportation network. The following sections discuss these alternative modes. Rail accounts for a very small percentage of overall freight traveling into and out of Pueblo County, but Burlington-Northern-Santa-Fe (BNSF) and Union Pacific (UP) operate in the county. These and other railroads in Colorado are shown in the figure below.

**Figure 10.3: Rail Line Ownership in Colorado**



### 10.2.2 Existing Conditions – Truck Freight in Pueblo County

Moving from the state to the Pueblo area, Major freight routes in the Pueblo area include the entire I-25 corridor within Pueblo County and the US50 Corridor. Figure 2.8 below illustrates the state highway routes in and through Pueblo County. The primary north-south freight route is I-25, while the primary east-west route is US Hwy 50. The I-25 Corridor is of special national significance as it is part of the “El Camino” trade route between Canada and Mexico, as identified in the North American Free Trade Agreement (NAFTA). Additionally, the area has access, via US 50, to the “Ports-to-Plains” Corridor (generally US 287) that runs through Eastern Colorado to Denver from Laredo, Texas. These two designated truck routes need to be accommodated in long-range plans for the entire Southern Colorado community.

**Figure 10.4: Primary Freight Routes in Pueblo County**



**Observed Truck Traffic**

To better understand truck usage of roadways in Pueblo County, CDOT Online Traffic Information System (OTIS) 2013 observed data<sup>2</sup> was collected for Average Annual Daily Traffic (AADT), Single Unit and Multi Unit trucks. For this assessment, three roadways were reviewed: I-25, U.S. Highway 50 and State Highway 78. There is a clear urban/rural dividing line with urban roadways carrying higher traffic but with lower truck percentages, and rural roadways carrying lower traffic with higher truck percentages.

**I-25**

In Pueblo County, I-25 is the sole interstate; it runs north-south for about 50 miles across Pueblo County. The highest truck volumes, both single and multi-unit, are found just north of the U.S. 50 interchange. The percentage of trucks ranges from 6-7% of all vehicles in the urban areas to 14% or more in the more rural areas.

**Table X.X: I-25 2013 Truck Traffic in Pueblo County**

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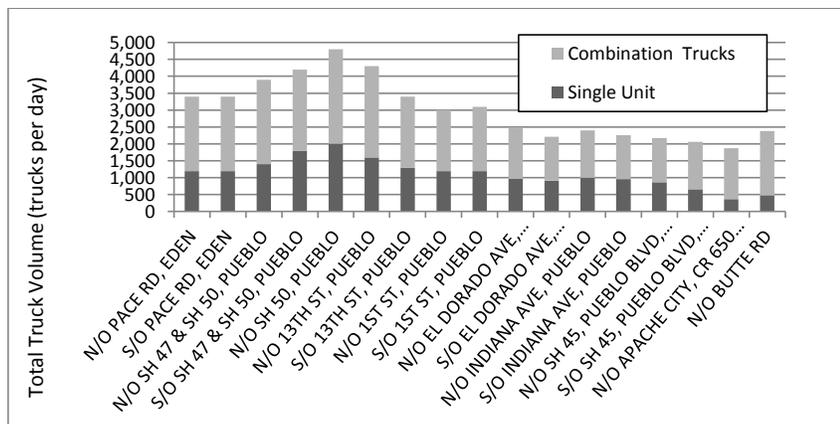
| Description               | AADT   | Year | Single Unit | Combination Trucks | % Trucks |
|---------------------------|--------|------|-------------|--------------------|----------|
| N/O PACE RD, EDEN         | 29,000 | 2013 | 1,200       | 2,200              | 12%      |
| S/O PACE RD, EDEN         | 33,000 | 2013 | 1,200       | 2,200              | 10%      |
| N/O SH 47 & SH 50, PUEBLO | 37,000 | 2013 | 1,400       | 2,500              | 11%      |
| S/O SH 47 & SH 50, PUEBLO | 51,000 | 2013 | 1,800       | 2,400              | 8%       |
| N/O SH 50, PUEBLO         | 72,000 | 2013 | 2,000       | 2,800              | 7%       |
| N/O 13TH ST, PUEBLO       | 70,000 | 2013 | 1,600       | 2,700              | 6%       |
| S/O 13TH ST, PUEBLO       | 58,000 | 2013 | 1,300       | 2,100              | 6%       |
| N/O 1ST ST, PUEBLO        | 48,000 | 2013 | 1,200       | 1,800              | 6%       |
| S/O 1ST ST, PUEBLO        | 49,000 | 2013 | 1,200       | 1,900              | 6%       |
| N/O EL DORADO AVE, PUEBLO | 44,000 | 2013 | 970         | 1,500              | 6%       |

<sup>2</sup> <http://dtdapps.coloradodot.info/Otis/>, accessed 2015.

|                                  |        |      |       |       |     |
|----------------------------------|--------|------|-------|-------|-----|
| S/O EL DORADO AVE, PUEBLO        | 38,000 | 2013 | 910   | 1,300 | 6%  |
| N/O INDIANA AVE, PUEBLO          | 37,000 | 2013 | 1,000 | 1,400 | 6%  |
| S/O INDIANA AVE, PUEBLO          | 29,000 | 2013 | 960   | 1,300 | 8%  |
| N/O SH 45, PUEBLO BLVD, PUEBLO   | 29,000 | 2013 | 870   | 1,300 | 7%  |
| S/O SH 45, PUEBLO BLVD, PUEBLO   | 15,000 | 2013 | 660   | 1,400 | 14% |
| N/O APACHE CITY, CR 650 & CR 110 | 10,000 | 2013 | 370   | 1,500 | 19% |
| N/O BUTTE RD                     | 13,000 | 2013 | 480   | 1,900 | 18% |

Source: Colorado Department of Transportation, <http://dtdapps.coloradodot.info/Otis/TrafficData>, accessed 2015.

Figure 10.5: I-25 Truck Traffic in Pueblo County – 2013 ADT Volumes



### U.S. Highway 50

In Pueblo County, U.S. Highway 50 is the second most important truck route. It runs east-west for about 50 miles across Pueblo County. The highest truck volumes, both single and multi-unit, are found just north of the U.S. 50 interchange. The percentage of trucks ranges from 6-7% of all vehicles in the urban areas to 14% or more in the more rural areas.

Table 10.2: U.S. Highway 50 2013 Truck Traffic in Pueblo County

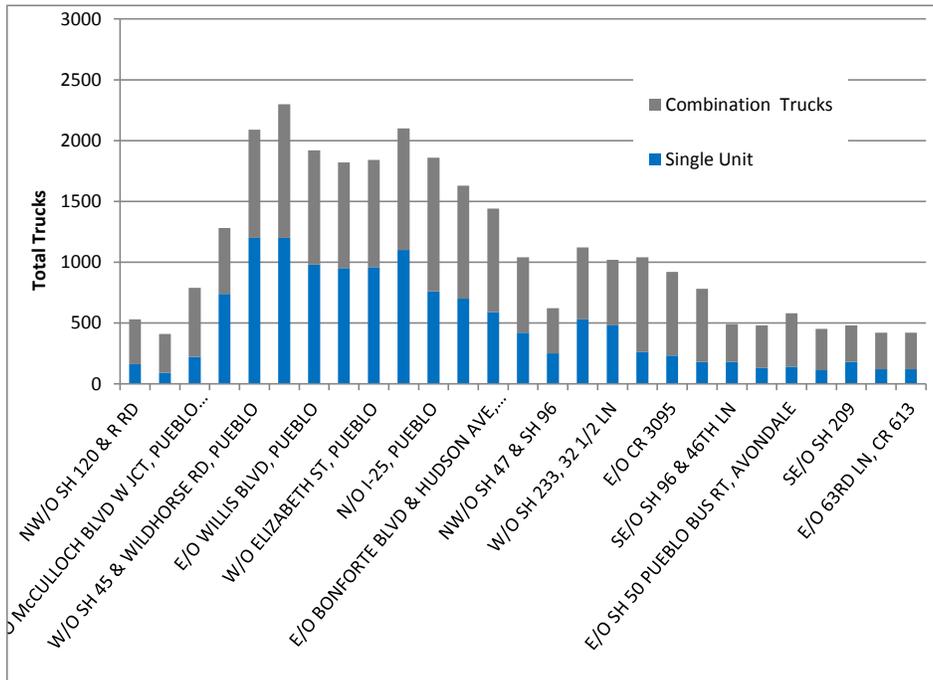
| Description                           | AADT   | Year | Single Unit | Combination Trucks | % Trucks |
|---------------------------------------|--------|------|-------------|--------------------|----------|
| NW/O SH 120 & R RD                    | 8,600  | 2013 | 160         | 370                | 6%       |
| W/O SWALLOWS RD, CR 103, PUEBLO WEST  | 8,200  | 2013 | 90          | 320                | 5%       |
| W/O McCULLOCH BLVD W JCT, PUEBLO WEST | 13,000 | 2013 | 220         | 570                | 6%       |
| W/O PURCELL BLVD, PUEBLO WEST         | 20,000 | 2013 | 740         | 540                | 6%       |
| W/O SH 45 & WILDHORSE RD, PUEBLO      | 33,000 | 2013 | 1,200       | 890                | 6%       |
| E/O SH 45 & WILDHORSE RD, PUEBLO      | 48,000 | 2013 | 1,200       | 1,100              | 5%       |
| E/O WILLIS BLVD, PUEBLO               | 41,000 | 2013 | 980         | 940                | 5%       |
| E/O BALTIMORE AVE, PUEBLO             | 38,000 | 2013 | 950         | 870                | 5%       |
| W/O ELIZABETH ST, PUEBLO              | 40,000 | 2013 | 960         | 880                | 5%       |

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|  |        |      |       |       |     |
|--|--------|------|-------|-------|-----|
| E/O ELIZABETH ST, PUEBLO               | 46,000 | 2013 | 1,100 | 1,000 | 5%  |
| N/O I-25, PUEBLO                       | 33,000 | 2013 | 760   | 1,100 | 6%  |
| E/O I-25 S JCT, PUEBLO                 | 29,000 | 2013 | 700   | 930   | 6%  |
| E/O BONFORTE BLVD & HUDSON AVE, PUEBLO | 16,000 | 2013 | 590   | 850   | 9%  |
| E/O NORWOOD AVE, PUEBLO                | 11,000 | 2013 | 420   | 620   | 9%  |
| NW/O SH 47 & SH 96                     | 7,000  | 2013 | 250   | 370   | 9%  |
| SE/O SH 47 & SH 96                     | 14,000 | 2013 | 530   | 590   | 8%  |
| W/O SH 233, 32 1/2 LN                  | 11,000 | 2013 | 480   | 540   | 9%  |
| E/O SH 233, 32 1/2 LN                  | 11,000 | 2013 | 260   | 780   | 9%  |
| E/O CR 3095                            | 9,200  | 2013 | 230   | 690   | 10% |
| E/O SH 231, 36TH LN, DIVINE            | 6,400  | 2013 | 180   | 600   | 12% |
| SE/O SH 96 & 46TH LN                   | 4,300  | 2013 | 180   | 310   | 11% |
| NW/O SH 50 PUEBLO BUS RT, AVONDALE     | 3,900  | 2013 | 130   | 350   | 12% |
| E/O SH 50 PUEBLO BUS RT, AVONDALE      | 4,900  | 2013 | 140   | 440   | 12% |
| E/O ASBURY LN, CR 39                   | 4,300  | 2013 | 110   | 340   | 10% |
| SE/O SH 209                            | 3,800  | 2013 | 180   | 300   | 13% |
| SE/O 57TH LN, CR 702                   | 3,800  | 2013 | 120   | 300   | 11% |
| E/O 63RD LN, CR 613                    | 3,400  | 2013 | 120   | 300   | 12% |

Source: Colorado Department of Transportation, <http://dtdapps.coloradodot.info/Otis/TrafficData>, accessed 2015.

Figure 10.6: U.S. Highway 50 2013 Truck Traffic in Pueblo County



The state highways in Pueblo County are important to truck freight as well. State Highways 45, 47, 78, 96 and 165 carry a smaller volume of trucks, typically 100-200 per day than do I-25 or U.S. Highway 50. These state roads serve as connectors for commodities to move in and out of the smaller settlements in the county.

### **10.2.3 Existing Conditions – Rail Freight in Pueblo County**

Freight railroads represent an important industry that is critical to the economic health and competitiveness of the Pueblo region. The current rail lines in operation in Pueblo County are the BNSF, UP, Colorado & Wyoming (C&W) Railway, and the Victoria & Southern (V&S) Railway, Inc. The four freight railroads fall into one of four categories:

- Class I railroads - Line haul freight railroads with 2009 operating revenue of \$378.8 million or more.
- Class II (Regional railroads) - Operate at least 350 miles of track and/or have revenue of between \$40 million and the Class I threshold. Regional railroads that qualify using the 350 miles operated criterion must have minimum revenue of \$20 million.
- Class III (Short Line or Local railroads) - Line haul railroads that do not qualify as a Class I or Class II railroad. Most of these railroads have less than 100 miles of track.
- Class IV (Switching and Terminal railroads) - Provide switching and/or terminal services. Rather than point-to-point transportation, they usually perform pick-up and delivery services within a special area or funnel traffic between other railroads.

#### **Class I Railroads**

The two Class I railroads in Pueblo County, the BNSF and the UP, operate over 95 percent of the miles of track and carry the majority of freight in the County. They both provide service that runs north-south and east-west in Colorado, although only the UP owns trackage across the Continental Divide. In a number of cases, these railroads provide trackage rights to each other to support their services by jointly operating trains over a single line owned and maintained by one of them. The line that carries the greatest amount of freight is the consolidated mainline, which runs along the Front Range between Denver and Pueblo. Portions of this line are owned by BNSF and UP, but they both operate on it for the length of the line.

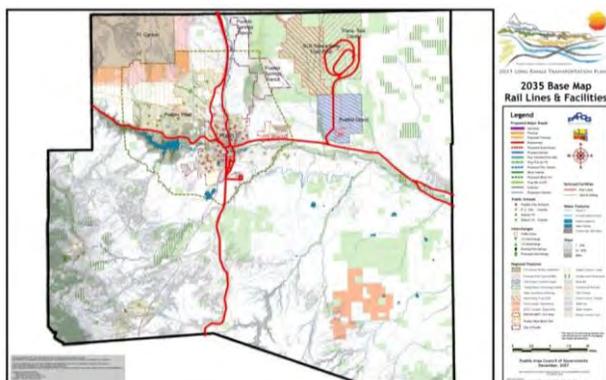
#### **Switching & Terminal Railroads**

The V&S Railway was a Short Line railroad that operated in Pueblo County. In recent years this railroad filed for abandonment and is no longer in operation in Pueblo County. The C&W Railway Company is located in Pueblo (Minnequa), Colorado and in 2015 operates a five mile long switching line. The C&W has 100 employees that service several companies in the Minnequa Industrial area including Evraz Rocky Mountain Steel Mills, Xcel Energy, Nortrak, Progress Rail Services and interchanges with both the UP and BNSF Railroads.

### Intermodal/Transload Facilities

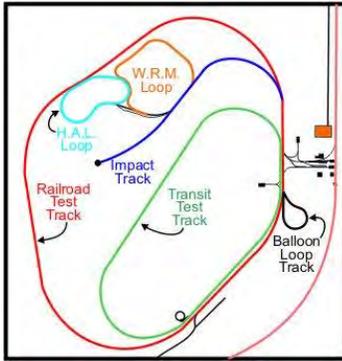
Colorado's freight railroads use intermodal facilities that transfer freight in an intermodal container or highway trailer without handling any of the freight itself when changing modes. This involves the use of trailer on flatcar and container on flatcar equipment. A newer trend is the use of well cars that have a container-sized depression in the middle of the car, allowing for two containers to be stacked in a double-stack configuration. Double-stack containers also require additional vertical clearance. In Colorado, not all rail lines and structures are currently double-stack capable. Since transfer between modes requires handling of commodities, transload facilities are designed to minimize handling. These methods of transport reduce cargo handling, damages, and losses, and allow freight to be transported faster. There are two intermodal/transload facilities currently operating in Colorado. They are owned and operated by the BNSF and the UP and are located in the Denver Metropolitan Area. At present there are no intermodal (direct freight transfer) facilities in Pueblo, but there are a number of areas where rail loading and unloading facilities exist and are provided with rail service.

Figure 10.7: Rail Lines and Facilities



Of note is the Transportation Technology Center, Inc. (TTCI) which is located in northeast Pueblo County. The Center is an internationally recognized facility offering a wide range of unique capabilities for research, development, testing, consulting, and training for railway-related technologies. The site, 21 miles northeast of Pueblo, Colorado, is owned by the United States Department of Transportation (USDOT), and is operated and maintained by TTCI, under a care, custody, and control contract with the Federal Railroad Administration (FRA) and Association of American Railroads (AAR).

Figure 10.8: Transportation Technology Center Trackage



### 10.2.4 Existing Conditions Air

The Pueblo Memorial Airport (PUB) is located at 31201 Bryan Circle, Pueblo, CO 81001 about six miles east of downtown Pueblo. It features:

- 24 hour fire station; airport rescue firefighting on site, Index B capabilities
- Airport facilities - Including terminal, restaurant, and rental car services
- Federal Aviation Administration (FAA) air traffic control tower - Terminal Radar Approach Control (TRACAB)
- National Weather Service - on site with Next-Generation Radar (NEXRAD) and Automated Surface Observing Systems (ASOS)
- Navigational aids including VOR, Instrumental Landing System (ILS), Non-Directional Beacon (NDB), and Global Positioning System (GPS) Instrument Approaches
- Runways - Three runways with longest 10,496 feet
- Two Fixed Based Operators (FBOs), Flight School, and Self-Serve 100LL fuel station.

Currently, the Pueblo Airport is served by United Airlines via SkyWest with two flights daily to Denver on weekdays and one daily on weekends. Air-based freight movement in and out of Pueblo is a very small proportion of total freight. USDOT Bureau of Transportation Statistics (BTS) provides records for Air Carrier statistics (T-100 data)<sup>3</sup> for the Pueblo Airport. Both mail and freight use the air cargo facilities at the Pueblo Airport with the use load showing variation over the past five years. Freight plus mail ranged from zero

### 10.3 Commodity Flows by Freight Mode

The FHWA's Freight Analysis Framework (FAF) estimates region-to-region tons and value by all modes for shipments in 1997, 2002, and 2007, provides provisional estimates for the most recent year (2012),

<sup>3</sup> <http://www.transtats.bts.gov/>

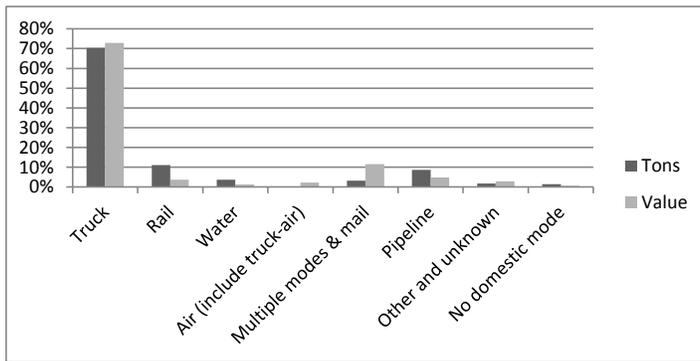
and forecasts through 2040. FAF offers data for six modes: truck, rail, water, air, intermodal, pipeline and unknown.

### 10.3.1 National Freight Commodity Flows

In 2012, the nation’s transportation system moved a daily average of about 54 million tons of freight valued at \$48 million. In 2015, freight tons increased to 55 million and value to \$54 million. The value of freight moved is expected to increase faster than the weight, rising from \$980 per ton in 2015 to \$1,377 per ton in 2040 when controlling for inflation.

The vast majority of freight in the U.S. is transported by truck, approximately 70 percent regardless of whether the share of total freight is based on weight or value

**Figure 10.9: National Mode Share, based on Weight and Value (2015)**



Source: FHWA FAF 2012

**Table X.X: National Mode Share, by Weight and Value (2015)**

| Freight Mode            | 2015              |             |                   |             |
|-------------------------|-------------------|-------------|-------------------|-------------|
|                         | Tons (000s)       | %           | Value (000,000s)  | %           |
| Truck                   | 13,811,783        | 70%         | 12,653,347        | 73%         |
| Rail                    | 2,175,957         | 11%         | 622,728           | 4%          |
| Water                   | 715,143           | 4%          | 224,385           | 1%          |
| Air (include truck-air) | 5,576             | 0%          | 390,322           | 2%          |
| Multiple modes & mail   | 635,477           | 3%          | 1,996,986         | 12%         |
| Pipeline                | 1,716,322         | 9%          | 839,116           | 5%          |
| Other and unknown       | 601,900           | 3%          | 624,695           | 4%          |
| <b>Total</b>            | <b>19,662,158</b> | <b>100%</b> | <b>17,351,580</b> | <b>100%</b> |

Source: FHWA FAF 2012

### 10.3.2 State of Colorado Freight Commodity Flows

#### All Colorado for 2015 and 2040

Freight tonnage in the State of Colorado is also primarily moved by truck. When based on value of freight shipments, the State of Colorado is consistent with the nation. However, a larger share of freight tonnage in Colorado (23%) is shipped by rail in 2015, as compared to the U.S. (11%).

According to the FAF, approximately 353 million tons of freight valued at \$291 billion shipped to, from and within Colorado via the various modes of transportation in 2015. Tonnage is projected to increase 52 percent between 2012 and 2040 and value by 160 percent. The greatest growth is expected to be in air transport and multiple modes. Extremely modest growth is anticipated for rail and pipeline in the state. Multiple modes and mail, as well as air (including truck-air), is expected to increase significantly. The following table shows the Colorado shipments by weight and value estimated for 2015 and projected for 2040, by mode.

**Table 10.1: Colorado Freight Modal Shipment by Weight (Thousands Tons) and by Value (2007 \$Millions)**

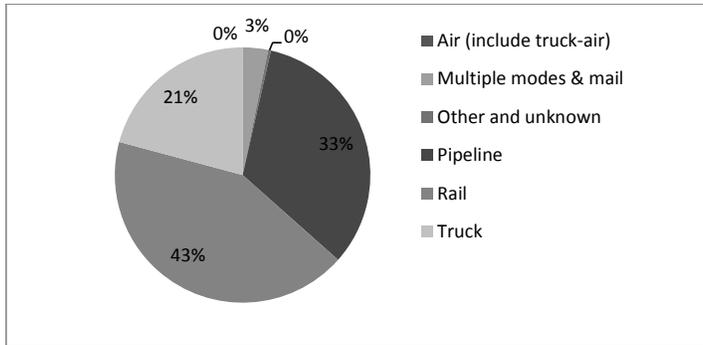
| Freight Mode   | 2015           |       |                   |     | 2040 Projections |     |                   |     | Growth Tons | Growth Value |
|----------------|----------------|-------|-------------------|-----|------------------|-----|-------------------|-----|-------------|--------------|
|                | Tons (000s)    | %     | Value (000,000s)  | %   | Tons             | %   | Value             | %   | %           |              |
| Truck          | 206,910        | 59%   | \$ 203,070        | 70% | 364,690          | 68% | \$ 485,641        | 64% | 76%         | 139%         |
| Rail           | 81,878         | 23%   | \$ 9,183          | 3%  | 87,299           | 16% | \$ 17,275         | 2%  | 7%          | 88%          |
| Pipeline       | 51,669         | 15%   | \$ 20,021         | 7%  | 55,381           | 10% | \$ 21,019         | 3%  | 7%          | 5%           |
| Other          | 2,244          | 1%    | \$ 4,463          | 2%  | 3,855            | 1%  | \$ 12,115         | 2%  | 72%         | 171%         |
| Multiple modes | 10,460         | 3%    | \$ 48,418         | 17% | 26,001           | 5%  | \$ 201,409        | 27% | 149%        | 316%         |
| Air            | 47             | 0.01% | \$ 6,345          | 2%  | 131              | 0%  | \$ 21,889         | 3%  | 175%        | 245%         |
| <b>Total</b>   | <b>353,207</b> |       | <b>\$ 291,501</b> |     | <b>537,357</b>   |     | <b>\$ 759,348</b> |     | <b>52%</b>  | <b>160%</b>  |

The overall freight picture differs slightly in Colorado when the direction of freight transport is considered. For example, trucking is less significant for freight originating in the state than it is for freight destined for Colorado. The following describes freight patterns for the state when direction is considered.

#### Inbound and Outbound Freight Transportation by Mode

Based on tonnage, 43 percent of freight originating in Colorado is shipped by rail. Pipeline accounts for 33 percent of total tonnage transported out of Colorado and truck transport another 21 percent.

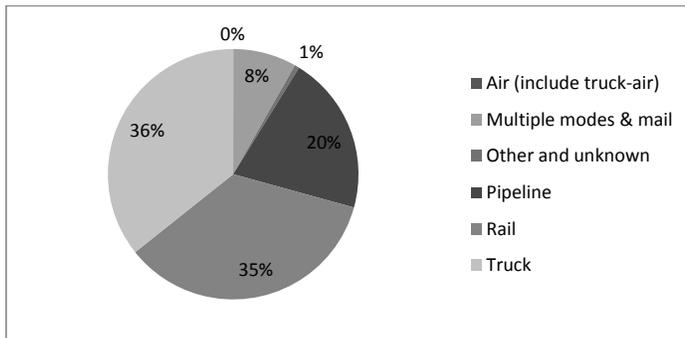
**Figure 10.10: Mode Share for Freight Originating in Colorado, based on Weight (2012)**



Source: FHWA FAF 2012

Coming into the state, the shares by mode are different. Thirty-six percent of all freight destined for Colorado arrives by truck, another 36 percent by rail. Pipeline accounts for 20 percent of all freight by weight.

**Figure 10.11: Mode Share for Freight Destined for Colorado, based on Weight (2012)**

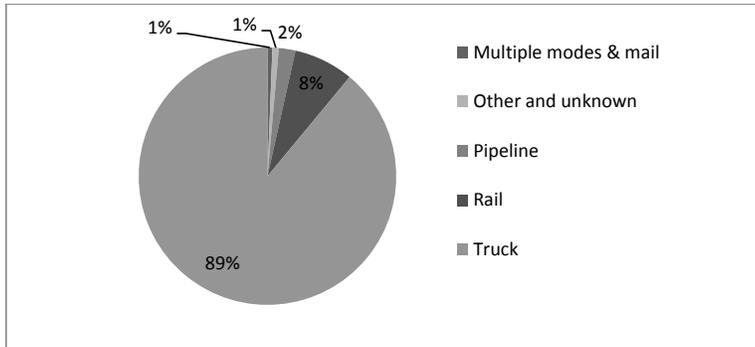


Source: FHWA FAF 2012

### Freight Transportation within Colorado

Intrastate freight, or freight that both originates and is destined for Colorado, accounts for nearly 180 million tons and \$116 billion in value. Most of this is transported by truck, roughly 90 percent regardless of whether based on weight or value.

**Figure 10.12: Mode Share for Freight Traveling within Colorado, based on Weight (2012)**

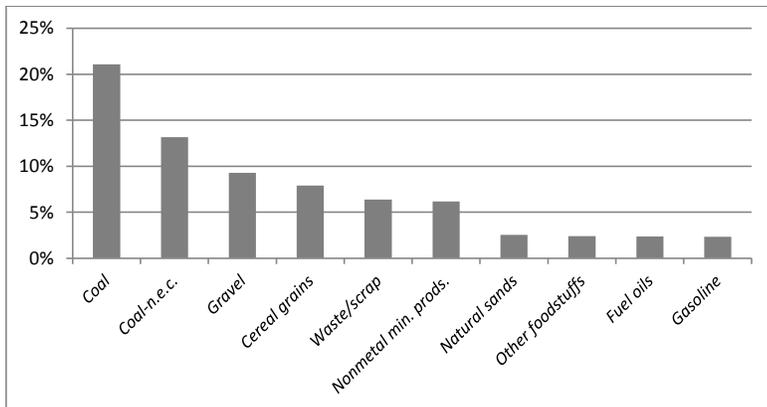


Source: FHWA FAF 2012

### Top Commodities Statewide

Based on the 2012 provisional FAF data, and ranked by weight, the top ten commodities shipped into, out of or within Colorado are presented in the figure below. Coal ranks highest, representing 21 percent of all Colorado freight tonnage transported. Regardless of direction, more coal is shipped into or out of Colorado than any other commodity. Within Colorado, gravel, waste/scrap, and cereal grains represent the most tonnage shipped.

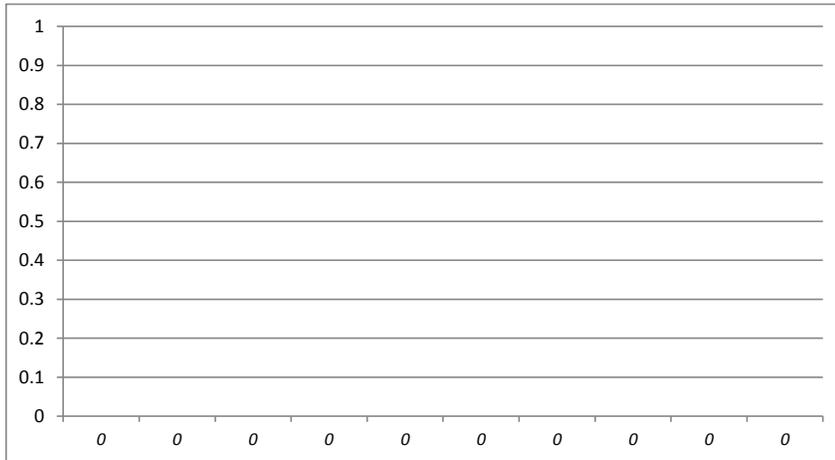
Figure 10.13: Top 10 Commodities Shipped into, out of or within Colorado, Based on Weight (2012)



Source: FHWA FAF 2012

When ranked by value, no single commodity dominates. Machinery is ranked highest, representing 11 percent of all value, but the remaining commodities account for eight percent or less each. Based on value, machinery represents the most significant share of freight transported from a Colorado origin to a Colorado destination.

**Figure 10.14: Top 10 Commodities Shipped into, out of or within Colorado, Based on Value (2012)**



Source: FHWA FAF 2012

### 10.3.3 Pueblo County Trends

While the FHWA FAF data provides good trend information at the national and state level, a more detailed database was sought to look more closely at Pueblo County. CDOT provided to the project a Transearch commodity flow summary for 2010, 2025 and 2040. Transearch is a product of IHS, Inc. and provides data for U.S. freight flows over a 30 year span by origin, destination, commodity and transportation mode.

The Transearch data was obtained and processed by CDOT and provided to PACOG staff for analysis. It has been prepared as follows:

- Years 2010 and 2040 are presented, conforming to the scenario years in the PACOG Travel Demand Model.
- Top commodities by weight and by values are tabulated.
- Tables are separated by entering or leaving Pueblo County.

#### Commodities Exported from Pueblo County

Add narrative

**Table 10.2: Top Commodities from Pueblo County (Tons) by Weight**

| Commodity                          | 2010             | %   | 2040             | %   |
|------------------------------------|------------------|-----|------------------|-----|
| Warehouse & Distribution Center    | 612,344          | 19% | 1,464,971        | 20% |
| Cut Stone or Stone Products        | 332,499          | 10% | 584,158          | 8%  |
| Primary Iron or Steel Products     | 293,732          | 9%  | 340,385          | 5%  |
| Petroleum Refining Products        | 286,198          | 9%  | 872,716          | 12% |
| Misc. Industrial Organic Chemicals | 201,284          | 6%  | 156,739          | 2%  |
| Gravel or Sand                     | 142,733          | 4%  | 1,150,383        | 15% |
| Broken Stone or Rip Rap            | 142,122          | 4%  | 709,295          | 10% |
| Other Commodities                  | 1,188,270        | 37% | 2,166,866        | 29% |
| <b>Total Tonnage</b>               | <b>3,199,182</b> |     | <b>7,445,513</b> |     |

Source: Transearch, 2014

**Table 10.3: Top Commodities from Pueblo County by Value**

| Commodity                          | 2010                    | %   | 2040                    | %   |
|------------------------------------|-------------------------|-----|-------------------------|-----|
| Warehouse & Distribution Center    | \$ 649,914,706          | 21% | \$ 1,554,855,206        | 30% |
| Primary Iron or Steel Products     | \$ 375,054,429          | 12% | \$ 364,328,134          | 7%  |
| Petroleum Refining Products        | \$ 261,454,476          | 9%  | \$ 797,263,299          | 15% |
| Rail Intermodal Drayage to Ramp    | \$ 205,534,304          | 7%  | \$ 192,232,304          | 4%  |
| Misc. Industrial Organic Chemicals | \$ 199,768,193          | 7%  | \$ 166,578,420          | 3%  |
| Misc. Food Preparations, Nec       | \$ 163,125,557          | 5%  | \$ 346,610,124          | 7%  |
| Steel Wire, Nails or Spikes        | \$ 163,064,955          | 5%  | \$ 212,132,917          | 4%  |
| Food Prod Machinery                | \$ 98,585,372           | 3%  | \$ 193,774,969          | 4%  |
| Other Commodities                  | \$ 922,378,385          | 30% | \$ 1,423,273,736        | 27% |
| <b>Total Value</b>                 | <b>\$ 3,038,880,377</b> |     | <b>\$ 5,251,049,108</b> |     |

Source: Transearch, 2014

**Table 10.4: Freight Mode Used from Pueblo County**

| Mode Split              | 2010 Tonnage     | 2010 Value              | 2040 Tonnage     | 2040 Value              |
|-------------------------|------------------|-------------------------|------------------|-------------------------|
| Air                     | 6                | \$ 27,114               | 3                | \$ 16,371               |
| Other                   | 27               | \$ 126,846              | 166              | \$ 798,553              |
| Rail                    | 53,188           | \$ 44,429,720           | 198,809          | \$ 171,440,805          |
| Truck                   | 3,145,961        | \$ 2,994,296,697        | 7,246,535        | \$ 5,078,793,379        |
| <b>Totals</b>           | <b>3,199,182</b> | <b>\$ 3,038,880,377</b> | <b>7,445,514</b> | <b>\$ 5,251,049,108</b> |
| <b>Truck Percentage</b> | <b>98%</b>       | <b>99%</b>              | <b>97%</b>       | <b>97%</b>              |

Source: Transearch, 2014

In 2010, products originating in Pueblo County are dominated by warehouse and distribution center movements, both by weight (20% of total) and by value (30% of total). The Transearch database does not carry commodity-level information on every shipment that passes out of a warehouse or distribution center. In any case, many of these are mixed loads. While this category is not commodity specific, it is an important one in understanding county exports since the general flow of trade from the county requires a central loading and transfer facility. Looking first at goods by weight in 2010, raw

materials such as stone, steel, petroleum refining products, chemicals, gravel and sand are the major products exported after warehouse movements. In 2010 by value, these raw materials are in part replaced with manufactured goods such as food preparations, wire, nails, spikes and machinery. Whether by weight or value, 98-99% of the goods are exported using truck mode. In 2040, the patterns change somewhat with warehouse and distribution center gaining market share whether tabulated by weight or value.

Information is available from Transearch on the destination of the goods exported from Pueblo County.

- If goods are leaving Pueblo County but staying in Colorado, they are most likely heading to Denver (21%), Adams (15%) or Boulder (10%) County.
- If goods are leaving Pueblo County and bound to a state outside Colorado, they are most likely heading to Albuquerque NM (16%), Casper WY (13%), or Wichita KS (10%)

### Commodities Imported into Pueblo County

**Table 10.5: Top Commodities to Pueblo County (Tons) by Weight**

| Commodity                       | 2010             | %   | 2040             | %   |
|---------------------------------|------------------|-----|------------------|-----|
| Gravel or Sand                  | 1,020,155        | 22% | 646,769          | 12% |
| Broken Stone or Riprap          | 799,443          | 17% | 519,562          | 10% |
| Grain                           | 558,107          | 12% | 855,551          | 16% |
| Warehouse & Distribution Center | 374,584          | 8%  | 761,196          | 14% |
| Cash Grains, NEC                | 267,815          | 6%  | 360,252          | 7%  |
| Ready-mix Concrete, Wet         | 149,931          | 3%  | 241,285          | 4%  |
| Other Commodities               | 1,488,972        | 32% | 2,048,834        | 38% |
| <b>Total Tonnage</b>            | <b>4,659,007</b> |     | <b>5,433,449</b> |     |

Source: Transearch, 2014

**Table 10.6: Top Commodities to Pueblo County by Value**

| Commodity                          | 2010                    | %   | 2040                    | %   |
|------------------------------------|-------------------------|-----|-------------------------|-----|
| Warehouse & Distribution Center    | \$ 397,566,462          | 13% | \$ 807,899,469          | 15% |
| Primary Iron or Steel Products     | \$ 158,416,258          | 5%  | \$ 93,816,408           | 2%  |
| Cash Grains, NEC                   | \$ 146,089,413          | 5%  | \$ 196,512,375          | 4%  |
| Petroleum Refining Products        | \$ 135,252,857          | 5%  | \$ 115,469,614          | 2%  |
| Misc. Industrial Organic Chemicals | \$ 84,727,293           | 3%  | \$ 129,737,773          | 2%  |
| Grain                              | \$ 73,323,727           | 2%  | \$ 112,391,769          | 2%  |
| Drugs                              | \$ 70,181,502           | 2%  | \$ 253,659,059          | 5%  |
| Electronic Data Proc Equipment     | \$ 46,099,730           | 2%  | \$ 156,237,783          | 3%  |
| Solid State Semiconducts           | \$ 18,434,655           | 1%  | \$ 534,585,169          | 10% |
| Other Commodities                  | \$ 1,850,149,573        | 62% | \$ 3,022,789,887        | 56% |
| <b>Total Value</b>                 | <b>\$ 2,980,241,469</b> |     | <b>\$ 5,423,099,305</b> |     |

Source: Transearch, 2014

**Table 10.7: Freight Mode Used to Pueblo County**

| Mode Split              | 2010 Tonnage     | 2010 Value              | 2040 Tonnage     | 2040 Value              |
|-------------------------|------------------|-------------------------|------------------|-------------------------|
| Other                   | -                | \$ -                    | 0                | \$ 15,914               |
| Air                     | 6                | \$ 27,114               | 14               | \$ 64,066               |
| Rail                    | 33,919           | \$ 30,423,516           | 69,222           | \$ 62,479,281           |
| Truck                   | 4,625,082        | \$ 2,949,790,839        | 5,364,213        | \$ 5,360,540,045        |
| <b>Totals</b>           | <b>4,659,007</b> | <b>\$ 2,980,241,469</b> | <b>5,433,449</b> | <b>\$ 5,423,099,305</b> |
| <b>Truck Percentage</b> | <b>99%</b>       | <b>99%</b>              | <b>99%</b>       | <b>99%</b>              |

Source: Transearch, 2014

In 2010, products destined for Pueblo County sorted by weight are dominated by raw materials such as gravel or sand (22%), stone (17%), and grain (12%). By weight, 8% of entering goods are linked with warehouse and distribution center movements. If the value of the goods is used for sorting, warehouse and distribution center dominate (13%). Note that the percentage of “Other Commodities” is a very high 62% on incoming goods by value, a result that shows that a wide variety of commodity types is needed to serve both employment and household needs.

Whether by weight or value, 99% of the goods are imported using truck mode. In 2040, the patterns change somewhat with warehouse and distribution center gaining market share whether tabulated by weight or value.

Information is available from Transearch on the origin of the goods imported into Pueblo County.

- If goods are entering Pueblo County but originating in Colorado, they are most likely coming in from Adams (22%), Boulder (19%) or Denver (10%) County.
- If goods are entering Pueblo County but originating outside of Colorado, they are most likely coming in from Los Angeles CA (14%), Wichita KS (12%) or Dallas TX (6%).

About 2% of all goods moved (by value) start and end in the county.

## 10.4 Freight Needs

### 10.4.1 Freight Needs - Truck

Past surveys of shipping companies identify improvements to I-25 as the major freight need within the region. Adequate access to the Central Business District (CDB) off of I-25 and access to the Airport Industrial Park (AIP) were identified as well. The second access to the AIP through the western William White Blvd extension will significantly improve the freight access to the area. Work on this access began as part of the Defense Access Road project in 2007.

### 10.4.2 Freight Needs - Rail

No specific needs for the additional railroad freight facilities have been identified. The City of Pueblo has made improvements at the AIP to accommodate rail access to a facility very close to the airport. The improved access to rail at the AIP could prove beneficial since this area has multi-modal access via

roads, rail, and aircraft. Some sections of the rail lines in the AIP are weight limited and will need to be upgraded to support business entities that may want to relocate to the AIP.

TTCI will continue to emphasize and expand their facility. Planning for improved access to this facility will continue to be included in this and future long run transportation plans.

As part of the potential relocation of the mainline freight rail lines further east of Pueblo County, there may be opportunities for the redevelopment of the existing rail yards. Within Pueblo, and as part of the CDOT Study, consideration must be given to relocating freight rail traffic from the existing UP tracks adjacent to I-25 to joint tracks or operations using the BNSF route in western Pueblo. If rail facilities are relocated and the existing rail yards redeveloped, encouraging a transit-oriented design would improve the viability of a commuter rail service running along the Front Range of Colorado from Wyoming through the major Front Range urbanized areas including Pueblo to New Mexico.

### **10.4.3 Rail Corridor Preservation**

In June 2000 the Colorado Transportation Commission approved a Rail Corridor Preservation Policy containing planning concepts that have continuing value for Pueblo County. The policy states:

- Preserving rail corridors for future use may save money, since the cost to preserve a corridor for future transportation purposes is often far less than having to purchase an equivalent corridor in the future.
- Rail transportation may be needed in certain corridors to supplement the highway system and to provide adequate mobility and travel capacity.
- Rail transportation can be a cost-effective and environmentally preferable mode of transportation in certain situations.
- Preserving existing freight rail service by preventing a railroad from being abandoned can reduce the maintenance costs on state highways, since the transportation of displaced rail freight by trucks will increase deterioration of the state highway system.
- Freight rail service can serve as a lifeline to the economic health of a community when there are no other modes that adequately and economically serve the needs of the community.

The Rail Corridor Preservation Policy also identified the following criteria to be used to prioritize corridors for funding:

- Magnitude of negative impacts upon adjacent highways.
- Immediacy of the possible abandonment of the rail line.
- Immediacy of possible encroachment on an existing rail corridor that may jeopardize the implementation of passenger rail service in the corridor.
- Estimated cost to acquire the rail corridor.
- Opportunity for public-private partnerships.

Subsequently, in November 2000, CDOT identified a list of State Significant Rail Corridors, which was adopted by the Transportation Commission as part of the Statewide Transportation Plan. The criteria

used to identify these state corridors included existing and potential future demand for passenger and freight services and local/regional support for the preservation of the corridor.

### **10.5 Summary**

The freight network in Pueblo County is composed of I-25, US 50 and several key state highways for truck. For rail, the UP, BNSF and C&W switching railroad serve the county. Air service for freight is provided by the Pueblo Airport (PUB). Using both FHWA FAF data and 2014 Transearch data, flows for truck, rail and air were tabulated for the state and/or county. Key long range plan tactics are to focus on concepts cited in the state freight plan: safety, efficiency, economic vitality and environmental stewardship.





## REQUEST FOR PROPOSAL COVER SHEET & SIGNATURE PAGE

**Date:** September 2, 2015

**Project Number:** 15-\_\_\_\_\_

**Project Name:** West Pueblo Connector - Downtown Corridor Analysis  
(Project No. and Name must be shown on outside of submittal package and on any email correspondence)

**Submit Sealed Proposals to:** City of Pueblo  
Purchasing Department  
230 S. Mechanic Street  
Pueblo, CO 81003  
719-553-2350

**Purchasing Contact:** Naomi Hedden, CPPO  
Director of Purchasing  
purchasing@pueblo.us  
www.pueblo.us/purchasing

**PRE-PROPOSAL MEETING:** There will be a Pre-Proposal meeting with PACOG Transportation Planning staff at 2:00 p.m. on September 16, 2015. The meeting will begin at the City Planning & Community Development Department office located at 211 E. "D" Street, Pueblo, CO 81003 (this is not a mandatory meeting).

**RFP Submission Deadline:** September 30, 2015 at 2:00 PM (MT)  
Note: Late submittals will **not** be accepted.  
Purchasing Office hours are 7:00 AM to 4:00 PM.  
Proposers are responsible to ensure timely receipt within that time.

**Project Manager:** Scott Hobson, MPO Manager  
shobson@pueblo.us  
211 E. "D" Street  
Pueblo, CO. 81003  
719-553-2790

**Number of Copies To be submitted:** Six (6) hard copies: One unbound and untabbed copy, **five (5)** bound and tabbed copies, **and** a copy in electronic format are required.

### Purpose of Request for Proposal

The City of Pueblo, via a sub-delegation agreement with the Pueblo Area Council of Governments (PACOG), is soliciting proposals for planning, engineering, design and consultant services related to the roadway extension and future bridge alignment of the West Pueblo Connector Project for that portion connecting from north of W. 11th Street into downtown in the Midtown area. Final alignment plans must identify practical alternatives for extending the West Pueblo Connector over the railroad trackage in downtown Pueblo and linkages connecting to the downtown roadway network, especially including, but not limited to, connections to W. 8th Street.

It is imperative that the design identifies necessary right-of-way acquisition, estimated costs of viable alternatives, potential impacts to residential areas immediately adjacent to proposed alignments, and opportunities for co-location of utilities in the proposed roadway alignment.

The estimated budget for the consultant services of this project is \$120,000.

Please be advised that electronic submissions (i.e. fax, emails, etc.) will not be accepted as a sealed proposal. Proposers are urged to read the attached solicitation documents thoroughly before submitting a proposal.

The City of Pueblo (City) reserves the right to reject any and all proposals for any or all items covered in the Request for Proposal, to waive informalities or defects in proposals or to accept any submittal as it shall deem to be in the best interest of the City. The procurement of these services shall be contingent upon appropriation of the necessary funds, and only after final approval and execution of an Agreement.

**Disclaimer**

The City of Pueblo (City) provides all non-construction solicitations for interested parties to download free of charge via the Rocky Mountain E-Purchasing System (RMEPS) and on the City’s website, [www.pueblo.us/purchasing](http://www.pueblo.us/purchasing). Consultants can also choose to register with RMEPS to get notifications automatically emailed to them for a nominal annual fee. Additionally, interested parties may visit the Purchasing Office during normal working hours and request hardcopies of any current solicitation at the same cost allowed for CORA requests. **If the Proposer cannot verify that the RFP documents were obtained from either of these two websites or our office, we cannot guarantee the validity of the document and their proposal may be rejected.**

Please confirm how your document was obtained:

Downloaded from RMEPS \_\_\_\_ or City Purchasing Website \_\_\_\_ ; Hardcopy or email from Purchasing Office \_\_\_\_

The undersigned, having carefully read and considered the Request for Proposal (RFP) for the above referenced project, does hereby offer to provide such goods and services on behalf of the City in the manner described and subject to the terms and conditions set forth in the attached RFP. All Services will be provided at the rates set forth in submitted proposal or as negotiated by all involved parties.

Proposer acknowledges that the company is qualified to provide these types of Services. At any time during the selection and award process, the City may request information substantiating the indicated requirements. Failure to provide this information may result in a Consultant’s proposal being declared non-responsive.

Proposer acknowledges and accepts that all components of and responses to this RFP will be included and become a part of the final agreement by reference.

The undersigned further states that this Proposal is made in good faith and that the prices offered were independently developed and are not founded on, or in consequence of, any collusion, agreement or understanding between themselves or any other interested party.

By signing below, Proposer certifies that he/she is an officer or duly authorized agent of the Proposer’s firm with full power and authority to submit binding offers for the goods or services as specified.

**MANDATORY – RETURN BOTH PAGES WITH YOUR RESPONSE. UNSIGNED PROPOSALS WILL BE CONSIDERED NON-RESPONSIVE AND REJECTED. RESPONDER MUST ATTACH A CERTIFICATE OF GOOD STANDING FROM THE STATE WHEREIN RESPONDER WAS ORGANIZED.**

\_\_\_\_\_  
Authorized Signature (required)

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
Title

\_\_\_\_\_  
City, State, Zip

\_\_\_\_\_  
Colorado (Sales) Tax License Number

\_\_\_\_\_  
Office Phone Number

\_\_\_\_\_  
Federal Employer Identification Number

\_\_\_\_\_  
Cell Phone Number

\_\_\_\_\_  
Company Email Address

\_\_\_\_\_  
Fax Number

For clarification of this Proposal contact:  
(If different from above)

\_\_\_\_\_  
Contact Name

\_\_\_\_\_  
Email Address

\_\_\_\_\_  
Phone Number

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## **SECTION 1. ADMINISTRATIVE REQUIREMENTS & INFORMATION**

### **1.1 Bid Information, Requests for Clarification, and Addenda**

All bid solicitation documents are posted on the City's Purchasing Department website and on Rocky Mountain E-Purchasing System. Any changes or revisions to our published solicitation documents will be through written addendum posted on both of these websites. It is entirely the Proposer's responsibility to check the City Purchasing website ([www.pueblo.us/purchasing](http://www.pueblo.us/purchasing)) for any Addenda that may be available in the event that any emailed notifications of addenda were not received.

It is also the Proposer's responsibility to make email, written or fax inquiries concerning this solicitation to obtain clarification of requirements; however, inquiries made by electronic mail are preferred. All inquires must be made to the Purchasing Contact (with a "cc" to the Project Managers) listed on the first page of the RFP at least seven (7) days prior to the date of submittal openings and must indicate the Project Number on the subject line.

### **1.2 Allegation of Misunderstanding**

Proposers shall inform themselves of the conditions of the project site and the requirements of the project's scope of work before submitting their proposal. No allowances shall be made by reason of any matter or thing concerning which they might not have been fully informed prior to the bidding. No Proposer will be heard after the opening of proposals to assert that there was any misunderstanding as to the nature of the operation expected in this solicitation. If a pre-bid meeting is held, Proposers should make every effort to attend. If the pre-bid meeting is mandatory and the Proposer cannot attend, it is imperative that someone else attend as a representative of the company, otherwise their bid will not be accepted at the time of bid opening.

### **1.3 Omissions**

Should the City omit anything from the RFP which is necessary for a clear understanding of the work, or should it appear that various instructions are in conflict, the Proposer submitting the Proposal shall secure clarification from the Project Manager or Purchasing Contact at least three (3) business days prior to the time of the opening date given above.

### **1.4 Written Agreement**

The selected firm shall be required to enter into an agreement with the City; in substantially the same form attached hereto as the City's Agreement (see "Sample Agreement" – Exhibit A). The firm will be required to comply with all applicable Federal and State Standards, orders and regulations. Proposers must identify in their responsive submittal any provisions of the contract form that they request be modified, together with the proposed modification language. Signature on the RFP Response Cover Sheet & Signature Page shall serve as an acknowledgement that the proposer is willing to enter into the referenced agreement with the City of Pueblo if their Proposal is accepted.

### **1.5 Colorado PERA Questionnaire**

The Proposer shall fill out the questionnaire attached as Exhibit B and submit the completed form to the City as part of the bid whether PERA applies to them or not. In accordance with this PERA form, and if this applies to the Proposer, the Proposer shall reimburse the City for the full amount of any employee contribution required to be paid by the City of Pueblo to the Public Employees' Retirement Association ("PERA") for salary or other compensation paid to a PERA retiree performing contracted services for the City under this Agreement.

### **1.6 State-Imposed Mandates Prohibiting Illegal Aliens From Performing Work**

By signing the Request for Proposal Cover Sheet and Signature Page, the Proposer acknowledges that they have read **Section 11** of the attached sample agreement (labeled the same as the above referenced title) and agrees that they are in compliance with these provisions.

### **1.7 Rejection of Proposal**

No Proposal shall be accepted from, or contract awarded to, any person, company or corporation that is in arrears to the City, upon debt or contract or that is a defaulter, as surety or otherwise, upon any obligation to the City, or that may be deemed irresponsible or unreliable by the City. Proposers may be required to submit satisfactory evidence that they have the necessary financial resources and experience to perform and complete the work outlined in this RFP. The City reserves the right to request any additional information as needed to make a sound evaluation decision.

### **1.8 Proposal Ownership/Confidentiality**

All Proposals, including inquiries, correspondence, attachments, supplementary materials, addenda, etc. shall become the property of the City and will not be returned to the Proposer. The Proposer must state specifically what elements of the proposal are to be considered confidential or proprietary and must state the statutory basis for the request under the Public (open) Records Act. (Section 24-72-201 et seq., C.R.S.). Confidential or Proprietary information must be readily identified, marked and separated from the rest of the proposal. Co-mingling of confidential or proprietary and other information is not acceptable. Neither a proposal, in its entirety, nor proposal price information will be considered confidential and proprietary. Any information that will be included in any resulting contract cannot be considered confidential. Ref. Section 24-72-201 et. seq., C.R.S., as amended, Public (open) Records Act.

### **1.9 Debarment**

By submitting this Proposal, the Proposer certifies that neither the company nor its principals is presently debarred, suspended, in the process of debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal, state or local government agency.

### **1.10 Equal Opportunity**

In accordance with §1.8 of the Pueblo Municipal Code (entire Code included by reference), all contractors shall meet and comply with the following provisions which shall be contained in all municipal contracts:

**1.10.1** The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, ancestry, disability, age or national origin. The contractor will take affirmative action in all areas of employment to ensure that applicants for employment are employed, and that employees are treated during employment, without regard to race, color, religion, sex, sexual orientation, ancestry, disability, age or national origin. *Areas of employment* shall mean and include, but shall not be limited to, the following: initial employment, upgrading, demotion, transfer, recruitment, recruitment advertising, layoffs, terminations, rates of pay, terms of compensation and selection for training, including apprenticeship. The contractor will post in conspicuous places, available to employees and applicants for employment, notices to be provided by the City setting forth the provisions of this nondiscrimination and equal employment opportunity paragraph. Failure to subscribe to and accept the nondiscrimination and equal employment requirements of this Chapter shall render a bidder ineligible for a municipal contract award and ineligible to participate in the work for which a municipal contract award is made. (§§1.8.3 and 1.8.4 of the PMC; Ord. No. 4479, 5-22-78)

**1.10.2** It is the policy of the City to provide equal opportunity in employment without regard to race, color, religion, sex, sexual orientation, ancestry, disability, age or national origin. It is hereby deemed and declared to be for the public welfare and in the best interests of the City to require bidders and contractors furnishing and providing work, services, supplies and materials to the City under municipal contracts not to discriminate in the hiring and promoting of employees in order to further equal employment

opportunities for members of minority groups and women. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, ancestry, disability, age or national origin. (§1.8.3 of the PMC; Ord. No. 4479, 5-22-78; Ord. No. 8453 §2, 2-27-12)

**1.10.3 Federal requirements govern.** Whenever the provisions and requirements of this Chapter, or of the bidding specifications, conflict in any way or to any degree with the nondiscrimination and equal employment opportunity requirements of the United States and any such contract under consideration is funded in whole or in part by the United States or is otherwise subject to requirements having the force of law of the United States, such requirements of the United States shall govern and control. (Ord. No. 4479, 5-22-78)

### **1.11 Statement of Noncommitment**

All costs related to the preparation of the proposals and any related activities are the sole responsibility of the Proposer. The City assumes no liability for any costs incurred by Proposers throughout the entire selection process or should the project be cancelled. Issuance of this RFP does not commit the City of Pueblo to award a contract. The City of Pueblo reserves the right to reject any or all proposals and to readvertise should the need arise. All proposals will become property of the City.

### **1.12 Preparation of Proposals**

The proposal MUST be signed by the Proposer as an officer of the company legally authorized to bind the company contractually. Signature must appear on the RFP Cover Sheet and Signature Page of this solicitation, signed in ink, preferably blue. Signature on this referenced form shall serve as acknowledgment that the Proposer is willing to enter into an agreement with the City of Pueblo and be governed by the Terms and Conditions set forth within this solicitation if their Proposal is accepted. Proposer acknowledges and accepts that all components of and responses to this RFP will be included and become a part of the final agreement.

Failure to read the RFP and these instructions will be at the Proposer's own risk. The person signing the Proposals must initial all corrections in ink. Corrections and/or modifications received after the specified bid closing time will not be accepted.

When approximate quantities or dollar amounts are stated, the City reserves the right to increase or decrease the quantity and/or amount as best fits its needs. No service shall be performed or become due unless a Written Agreement or Purchase Order shall first have been issued by the City's Purchasing Department.

### **1.13 Insurance and Indemnity.**

By signing the Request for Proposal Cover Sheet and Signature Page, the Proposer acknowledges that they have read **Section 7.2** of the attached sample agreement (labeled the same as the above referenced title) and agrees that they are in compliance, or will be upon award of contract, with these provisions.

## SECTION 2. EVALUATION, SELECTION OF SUCCESSFUL PROPOSAL AND CONTRACT AWARD

The City reserves the right to make an award on receipt of initial proposals. Proposers are encouraged to submit their most favorable proposal at the time established for receipt of proposals.

Proposals will be opened at the City's Purchasing Office then presented to the appointed selection committee for evaluation. Selection will be determined by the apparent capability of Proposer to meet all the requirements that best meet the needs of the City. The decision of the City's selection committee shall be final and conclusive. Award will be by means of a written Notice of Award to the selected Proposer.

The City shall evaluate and select Proposals to provide the required services based on the completed proposal responses. The City shall be the sole judge in determining how the evaluation process shall be conducted and what vendor shall be considered for award as deemed to be in the best interest of the City. The Evaluation Committee will make their final selections based on the submittals that receive a score of 75 percent or higher.

The City may conduct such investigations, as the City considers necessary to assist in the evaluation of any proposal to establish the responsibility, qualifications and financial ability of any potential Consultant to perform the services specified under this RFP within the prescribed time.

The evaluation criteria noted below are the criteria to be used for evaluation of this RFP. Based on the evaluation process, a rank ordered list of responsive Consultants shall be established. The Consultants shall be rank ordered with the first ranked Consultant being considered the most responsive and the second ranked Consultant being considered the second most responsive. This process shall be continued until all Consultants have been rank ordered.

**Evaluation Criteria:** The City of Pueblo shall evaluate proposals based upon an overall best value determination with the criteria listed below in relative order of importance:

- |                                |     |
|--------------------------------|-----|
| • Statement of Qualifications  | 30% |
| • Project Approach             | 20% |
| • Fee Schedule/Cost of Service | 30% |
| • Time Frame                   | 20% |

Interviews - Submittals will be reviewed and the committee will select a preliminary list of firms whose submissions appear to satisfy the requirements of this request. Preliminary listed firms will be notified of their selection and may be invited to personally interview, which will be scheduled as soon as possible after sufficient review of each submittal. Invited companies' key staff, including the proposed project manager must be in attendance at the interview.

Waiver and Release - By submitting a Prequalification Statement, the Consultant authorizes the City to obtain information concerning Consultant's performance on other projects it has completed during the prior ten (10) years, including those identified in the submission and those not so identified, of which the City may become aware. By submitting its Prequalification statement, the Consultant and sub-consultants also waives and releases all claims against owners, architects, and engineers, and their agents and representatives, relating to or arising from the furnishing of such information to the City concerning the Consultant's performance on prior projects. In order to effectuate the intent of this clause, each Consultant may be required by City to execute information release authorization forms, which specifically release all information providers from all claims that arise from or relate to the information provided.

The City shall then determine whether the vendor's proposal, with the highest ranking, can be accepted as is without negotiations. In the event the City determines that negotiation of the Consultant's proposal is necessary, the Consultant shall be notified and the negotiation process will begin. Should the City be unable to negotiate an acceptable service agreement with the highest ranked Consultant then the process described in this paragraph will begin with the second highest ranked Consultant. This process shall continue until a satisfactory service

agreement is negotiated or until all negotiations with qualified ranked Consultants is exhausted. The City shall be the sole judge in determining when negotiations are to be concluded.

### **SECTION 3. OBJECTIVE, SCOPE OF SERVICE, AND MANDATORY REQUIREMENTS**

#### **3.1 Objective**

The City of Pueblo, via a sub-delegation agreement with the Pueblo Area Council of Governments (PACOG), is soliciting proposals for planning, engineering, design and consultant services related to the roadway extension and future bridge alignment of the West Pueblo Connector Project for that portion connecting from north of W. 11th Street into downtown in the Midtown area. Final alignment plans must identify practical alternatives for extending the West Pueblo Connector over the railroad trackage in downtown Pueblo and linkages connecting to the downtown roadway network, especially including, but not limited to, connections to W. 8th Street.

It is imperative that the design identifies necessary right-of-way acquisition, estimated costs of viable alternatives, potential impacts to residential areas immediately adjacent to proposed alignments, and opportunities for co-location of utilities in the proposed roadway alignment. Additionally, any design and operational issues related to the railroad yard crossing should be fully described and factored into the design and evaluation of alternatives.

The estimated budget for the consultant services of this project is \$120,000.

#### **3.2 Scope of Service:**

The selected firm and their respective sub-consultants will be required to provide all professional services with respect to the planning, alignment and preliminary design of the West Pueblo Connector - Downtown Corridor consisting of, but not limited to the following:

**3.2.1** Existing Transportation Conditions Report – Documentation of existing issues and constraints related to traffic operations and geometrics, including summary of existing roadway characteristics (lanes, access, etc.), traffic operations, substandard features (sight distance, shoulders, sidewalks, etc.) if any, and traffic safety.

**3.2.2** Property Ownership Report – Plan sheets with property lines and ownership information (as available from the Pueblo County Assessor) shown on an aerial background as information for potential property impacts.

**3.2.3** Draft and Final Environmental Scan Report – Documentation of existing environmental resources in the study area with identification of critical environmental issues and next steps for environmental analysis in future NEPA processes.

**3.2.4** Purpose and Need Statement – Written statement of the purpose and need developed for the project.

**3.2.5** Draft and Final Alternatives Report – Documentation of the development, screening, and analysis process, including evaluation criteria, decision matrices, and concerns, requirements, and estimated costs for the recommended alternative(s).

**3.2.6** Traffic Analysis Report – Report of travel forecasting for the project (assumptions, methods, and results) and traffic operations for the recommended alternative(s). This report must include existing and projected daily trips for the recommended alternative(s) and peak vehicle trip data for the AM and PM conditions.

**3.2.7** Draft and Final Planning and Environmental Linkage Report – Technical summary of the engineering and environmental considerations, assumptions, analysis methodologies, and graphic displays of the recommended alternative(s). Report to include FHWA PEL Questionnaire.

**3.2.8** Project cost, source of revenue and financing report.

**3.2.9** Public outreach documentation.

## **SECTION 4. PROPOSAL FORMAT AND REQUIRED RESPONSES**

The information set forth in the paragraphs below must be included with all proposals. **Make sure to provide six (6) copies of the complete Proposal, (one unbound and untabbed)**, as specified below, as well as one copy in electronic format. Responses shall be considered technical offers of what firms propose to provide and shall be incorporated in the contract award as deemed appropriate by the City. Please attach your responses to these items to the RFP Cover Sheet and Signature Page. Failure of firms to respond to any of the following technical submittal requirements may be grounds for considering a proposal non-responsive.

This is a qualification and cost based procurement process. Proposals will only be considered from firms that have documented experience of similar municipal or regional projects and qualified personnel who are capable of providing the required services.

### **4.1 RFP Cover Sheet**

The RFP Cover Sheet and Signature Page must be completed and returned with the Proposer's proposal. Failure to return the signed Cover Sheet is grounds for the City to reject a proposal.

### **4.2 Table of Contents**

The Table of Contents must indicate the material included in the proposal by section and page number. A proposal's table of contents should mirror this section of the City's Request for Proposal and must include all the items set forth in this section of the Request for Proposal.

**4.3 Letter of Transmittal** A letter of transmittal must be submitted with a Proposer's submittal. The letter must include:

- A statement of the Proposer's understanding of the goals of this project and the service required by the Request for Proposal listed in the Scope of Services.
- The names of the persons who are authorized to make representations on behalf of the Proposer (include their titles, addresses, fax number, e-mail addresses and telephone numbers).
- A statement that the individual who signs the transmittal letter is authorized to contractually bind the Proposer to contract with the City of Pueblo.

**4.4 Disclosures.** If applicable, disclose any professional or personal financial interest, which could be a possible conflict of interest in providing products and services to the City. If not applicable, please make a brief statement indicated that.

**4.5 Statement of Qualification and Project Approach.** Proposer's qualifications and intended approach to the project are a major portion of the evaluation process. Proposers are encouraged to submit their most favorable proposal and as much detail deemed necessary for the City to determine the qualifications of the consultant team.

#### **4.5.1 Statement of Qualification:**

4.5.1.1 The primary firm's name, address, phone and contact person. Basic firm information, including the year the prime consultant's firm was formed.

4.5.1.2 Identify the prime consultant and all sub-consultants, including their roles and responsibilities in the project.

4.5.1.3 Identify the key individuals from each of the firms who will be the key contacts for this project. Describe their professional qualifications, availability for this project, and experience on similar projects (similar in size and scope). Only individuals who will actually work on this project should be identified.

4.5.1.4 Describe similar (in size and scope) or recent (within the last five years) projects for which the prime consultant is responsible that demonstrate the firm's capability to meet schedule deadlines without delays, cost escalations or overruns and vendor claims. Submit references including the name current telephone number, and email for all clients and projects listed as a reference.

4.5.1.5 Firms must be familiar with the public process and coordinate with the City, key community groups, and the Advisory Group in facilitating surveys, interviews and public meetings. Please provide the names and locations of at least three (3) locations and projects at which the proposer has conducted similar services and had similar requirements. Provide the names and contact information of specific individuals who we may contact for reference.

4.5.1.6 If your company does business within the City of Pueblo, please provide a copy of your business license. If not currently licensed to do business within the City, the awarded firm will be required to apply for a business license upon award.

#### **4.5.2 Project Approach**

Provide information pertaining to how your firm intends on managing the project. Provide a brief statement of the Consultant's understanding of the goals of this project and the services required of the Consultant. Indicate a sound understanding of the adherence to the proposed timeframe, and demonstrate a clear methodology of approach to the completion of the project once final evaluation and update has been accepted by the City of Pueblo.

**4.6 Fee Schedule** - Submit a fixed fee schedule for providing the said services and reports detailed in Section 3.2 above. The fee shall include all expenses incurred by the firm. The Fee schedule shall be in a written format and itemized to address the specific work products detailed in Section 3.2 above.

**4.7 Time Frame** - The proposal shall include the number of days that is needed for the firm to complete all design phases. It is anticipated that the selected firm will have up to 180 days to complete the project, although proposals shall include a timeline that identifies the duration of each task included within the scope of services. The timeframe could be adjusted in the agreement (with any changes agreed upon by both parties). The time frame shall be broken down in the same Phase categories listed above.

STANDARD FORM OF  
AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES

THIS AGREEMENT made and entered this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ by and between the City of Pueblo, a Municipal Corporation (hereinafter "Owner") and \_\_\_\_\_, a professional engineering firm (hereinafter "Engineer") for Engineer to render certain professional engineering and related services for Owner in connection with \_\_\_\_\_, hereinafter referred to as the "Project." In consideration of the mutual covenants hereinafter set forth, the parties agree as follows:

SECTION 1. GENERAL.

1.1 Engineer shall satisfactorily perform professional engineering services for all phases of Project indicated below by mark placed in the appropriate box or boxes:

- Study and Report Phase
- Preliminary Design (Schematic) Phase
- Final Design Phase
- Construction Documents & Bidding Phase
- Construction Management

**Upon completion of any phase, Engineer shall not proceed with work on the next phase, if any, until authorized in writing by Owner to proceed therewith.**

Such services shall include all usual and customary professional engineering services and the furnishing (directly or through its professional consultants) of customary and usual civil, structural, mechanical, electrical engineering, environmental, and planning services. Engineer shall also provide any landscape engineering, surveying and geotechnical services incident to its work on the Project.

1.2 In performing the professional services, Engineer shall complete the work items described generally in Appendix A – Scope of Services and the items identified in Section 2 of this Agreement which are applicable to each phase for which Engineer is to render professional services.

1.3 Professional engineering services (whether furnished directly or through a professional consultant subcontract) shall be performed under the direction and supervision of a registered engineer in good standing and duly licensed to practice in the State of Colorado. Reproductions of final drawings for construction produced under this Agreement shall be the same as at least one record set which shall be furnished to Owner and which shall be signed by and bear the seal of such registered engineer.

1.4 Surveying work included within or reasonably contemplated by this Agreement shall be performed under the direction and supervision of a registered Professional Land Surveyor in good standing and duly licensed to practice in the State of Colorado. All plats and surveys produced under this Agreement shall be signed by and bear the seal of said Professional Land Surveyor.

1.5 Any architect services provided under this Agreement shall be performed under the direction and supervision of an architect licensed to practice architecture in the state of Colorado.

SECTION 2. ENGINEERING SERVICES.

2.1 Study and Report Phase. If Engineer is to provide professional services with respect to the Project during the Study and Report Phase, Engineer shall:

- (a) Consult with Owner to determine his requirements for the Project and review available data.
- (b) Advise Owner as to the necessity of his providing or obtaining from others data or services of the types described in paragraph 2.2(c), and assist Owner in obtaining any such services.
- (c) Provide special analyses of Owner's needs, planning surveys, site evaluations and comparative studies of prospective sites and solutions.
- (d) Identify and analyze requirements of governmental authorities and regulatory agencies involved in approval or permitting any aspect of Project.
- (e) Provide general economic analysis of Owner's requirements applicable to various alternatives.
- (f) Prepare a Report with appropriate exhibits indicating clearly the considerations involved and the alternative solutions available to Owner, and setting forth Engineer's findings and recommendations with opinions of probable costs.
- (g) Furnish six (6) copies of the Report and present and review it in person with Owner.

2.2 Preliminary Design (Schematic) Phase. If Engineer is to provide professional services with respect to the Project during the Preliminary Design Phase, Engineer shall:

- (a) Consult with Owner and determine the general design concept and Project requirements based upon information furnished by Owner as well as any study Report on the Project.
- (b) Prepare and submit to Owner preliminary design documents consisting of final design criteria, preliminary drawings, an outline of specifications, and written descriptions of all significant features of Project.
- (c) Prepare and submit to Owner a requirements checklist of any subsurface investigation, additional data, permits, or other information and requirements which is anticipated will be necessary for the design or construction of Project.
- (d) Provide written disclosure to Owner of significant design assumptions and design risks and advantages/disadvantages inherent in or presented by design alternatives, and make recommendations to Owner based thereon.
- (e) Prepare and submit to Owner a preliminary cost estimate for the Project including construction cost, contingencies, professional compensation, consultant fees, costs of land and rights of way, compensation for damages and finance costs, if any.
- (f) Engineer shall furnish Six (6) copies of each above referenced submittal document to Owner for Owner's use, and shall review same in person with Owner.

2.3 Final Design Phase. If Engineer is to provide professional services with respect to the Project during the Final Design Phase, Engineer shall:

- (a) After consultation with the Owner, receipt of Owner's selection of any design options and review of the Preliminary Design Documents, if any, prepare and submit to Owner final Drawings showing the scope,

extent and character of the work to be performed by contractors, and Specifications describing such work and the requirement therefor. Such plans and Specifications shall comply with all applicable building codes and requirements of regulatory agencies having any approval authority. Final design, including Drawings and Specifications, shall also comply with ADA Accessibility Guidelines (ADAAG) Manual developed by the U. S. Architectural and Transportation Barriers Board (1998) or ADA Standards for Accessible Design published at 28 C.F.R. Part 36, Appendix A, whichever is applicable. Engineer **shall include an attest statement on each record drawing sheet of final plan drawings that certifies compliance with either the ADAAG Manual or 28 CFR ' 36 Standards.**

(b) Make reasonable revisions to the Drawings and Specifications requested by Owner, informing the Owner of any change in probable construction costs as a result of such revisions.

(c) Provide technical criteria, written descriptions and design data for Owner's use, and disclose any significant risks and advantages/disadvantages inherent in or presented by design choices.

(d) Based upon Engineer's best professional judgment, prepare and submit to Owner a current detailed cost estimate for the Project including construction cost, contingencies, professional compensation, consultant fees, land and right of way costs, damages and finance costs, if any.

(e) Engineer shall furnish Six (6) copies of each above referenced submittal document to Owner for Owner's use, and shall review same in person with Owner.

2.4 Construction Documents & Bidding Phase. If Engineer is to provide professional services with respect to the Project during the Construction Documents & Bidding Phase, Engineer shall:

(a) Prepare and submit to Owner draft forms of contract agreement, general and special conditions, bid forms invitations to bid, information for bidders, forms of warranty and including any special requirements imposed upon such contracts by any federal or other funding source and by any regulatory agency. In preparing such draft forms, Engineer shall consider and incorporate, to the extent both advisable and feasible, owner's standard forms of agreement, warranty, payment and performance bonds, general conditions and selected specifications.

(b) After review and comment by Owner, prepare and submit all deliverables identified in Appendix A to this Agreement, final forms of contract agreement, general and special conditions, Drawings, specifications, bid forms, invitations to bid, information for bidders, and forms of warranty, together with any Addenda which may be required or appropriate to correct errors, clarify Drawings or Specifications or advise of changes. Electronic copies of these final bid documents shall be furnished to Owner. Unless otherwise specified in Appendix A, a copy of all contract documents and drawings shall also be submitted to Owner in Microsoft Word and AutoCADD (2006 or later version) format on electronic media.

(c) Make recommendations to Owner concerning the need for prequalification of equipment, vendors or bidders, and, if requested by Owner, incorporate prequalification requirements in final bid and construction contract documents.

(d) Attend a pre-bid conference with bidders to discuss Project requirements and receive requests for clarification, if any, to be answered by Engineer in writing to all plan holders.

(e) Consult with and make recommendations to Owner concerning: acceptability of bidders, subcontractors, suppliers, materials, equipment, suitability of proposed "or equals", amount of bids and any other matter involved in consideration and review of bids and bidders upon which Owner may reasonably request Engineer's advice.

2.5 Construction Phase. If Engineer is to provide professional services with respect to the Project during the Construction Phase, after award by the Owner of a general contract or contracts for construction of the Project, Engineer shall:

- (a) Perform all duties and functions to be performed by Engineer under the terms of the construction contract.
- (b) Visit the Project site, perform observations as to the progress and quality of the work and advise the Owner as to same. The frequency and level of observation shall be commensurate with the nature of the work and size of the Project, except that any specific provisions set forth in Appendix A - Scope of Services concerning the level of observation shall determine Engineer's obligation concerning level of observation.
- (c) Make determinations as to whether the work is proceeding in accordance and compliance with the construction contract documents.
- (d) Promptly advise the Owner in writing of any omissions, substitutions, defects or deficiencies noted in the work of any contractor, subcontractor, supplier or vendor on the Project.
- (e) Reject any work on the Project that does not conform to the contract documents.
- (f) On request of the Owner, the construction contractor or any subcontractor on the Project, issue written interpretations as to the Drawings and Specifications and requirements of the construction work.
- (g) Review shop drawings, samples, product data and other submittals of the contractor for conformance with the design concept of Project and compliance with the Drawings, Specifications and all other contract documents, and indicate to Contractor and Owner with respect thereto, any exceptions noted, or modification or resubmittals required.
- (h) Review all applications of Contractor for payment and in connection with same, issue certificates for payment to the Owner for such amounts as are properly payable under the terms of the construction contract. Each such certificate shall constitute Engineer's representation to Owner that he has inspected the Project and that to the best of his knowledge, the work for which payment has been sought has been completed by Contractor in accordance with the Drawings, Specifications and other contract documents.
- (i) Subject to written concurrence by Owner, promptly render a written recommendation to Owner concerning all proposed substitutions of material and equipment.
- (j) Draft, for Owner's consideration, and offer recommendations upon, all proposed change orders and contract modifications.
- (k) On application for final payment by the Contractor, make a final inspection of the Project, assembling and delivering to the Owner any written guaranties, instructions manuals, as-built drawings, diagrams and charts required by the contract documents, and issuing a certificate of final completion of the Project.
- (l) The Engineer shall, if so provided in the construction contract, be the interpreter of the construction documents and arbiter of claims and disputes thereunder. Upon written request of the Owner or Contractor, the Engineer shall promptly make written interpretations of the contract documents and render written decisions on all claims, disputes and other matters relating to the execution or progress of the work on the Project. The interpretations and decisions of the Engineer shall be final and binding on the Contractor and Owner, unless the Director of Public Works of the Owner shall, within seven calendar days after receipt of the Engineer's interpretation or decision, file his written objections thereto with the Architect and Contractor.

2.6 Additional Responsibilities. This paragraph applies to all phases of Engineer's work.

(a) Engineer shall be responsible for the professional quality, technical accuracy, timely completion and coordination of all of Engineer's work, including that performed by Engineer's consultants, and including designs, Drawings, Specifications, reports and other services, irrespective of Owner's approval or acquiescence in same. Engineer shall, without additional compensation, correct or revise any errors, omissions or other deficiencies in his work.

(b) Engineer shall be responsible, in accordance with applicable law, to Owner for all loss or damage to Owner caused by Engineer's negligent act or omission, except that Engineer hereby irrevocably waives and excuses Owner and its attorneys from compliance with any requirement to obtain a certificate of review as a condition precedent to commencement of an action, including any such requirements set forth in Section 13-20-602, C.R.S. or similar statute.

(c) Engineer's professional responsibility shall comply with the standard of care applicable to the type of engineering and architectural services provided, commensurate with the size, scope and nature of the Project.

(d) Engineer shall be completely responsible for the safety of Engineer's employees in the execution of work under this Agreement, shall provide all necessary safety equipment for said employees, and shall hold harmless and indemnify and defend Owner from any and all claims, suits, loss or injury to Engineer's employees.

(e) Engineer acknowledges that, due to the nature of engineering and related professional services and the impact of same on the Project, the Owner has a substantial interest in the personnel and consultants to whom Engineer assigns principal responsibility for services performed under this Agreement. Consequently, Engineer represents that Engineer has selected and intends to employ or assign the key personnel and consultants identified in Appendix C - "Identification of Personnel, Subcontractors and Task Responsibility", attached hereto for the Project assignments and areas of responsibility stated therein. Within 10 days of execution of this Agreement, Owner shall have the right to object in writing to employment on the Project of any such key person, consultant or assignment of principal responsibility, in which case Engineer will employ alternate personnel for such function or reassign such responsibility to another to whom Owner has no reasonable objection. Thereafter, Engineer shall not assign or reassign Project work to any person to whom Owner has reasonable objection.

Within 5 days of execution of this Agreement, Engineer shall designate in writing a Project representative who shall have complete authority to bind Engineer, and to whom Owner should address communications.

(f) Promptly after execution of this Agreement and upon receipt of authorization from Owner to proceed, Engineer shall submit to Owner for approval a schedule showing the order in which Engineer proposes to accomplish his work, with dates on which he will commence and complete each major work item. The schedule shall provide for performance of the work in a timely manner so as to not delay Owner's time table for achievement of interim tasks and final completion of Project work, provided however, the Engineer will not be responsible for delays beyond his control.

(g) Before undertaking any work which Engineer considers beyond or in addition to the scope of work and services which Engineer has contractually agreed to perform under the terms of this Agreement, Engineer shall advise Owner in writing (i) that Engineer considers the work beyond the scope of this Agreement, (ii) the reasons the Engineer believes the out of scope or additional work should be performed, and (iii) a reasonable estimate of the cost of such work. Engineer shall not proceed with such out of scope or additional work until authorized in writing by Owner. The compensation for such authorized work shall be negotiated, but in the event the parties fail to negotiate or are unable to agree as to compensation, then Engineer shall be compensated for his direct costs and professional time at the rates set forth in Appendix B - "Fee Schedule".

2.7 Requirements Where Federal Assistance Provided. [Select one]  
 [THIS SECTION RESERVED - NOT APPLICABLE TO THIS CONTRACT]

or

[ (a) Engineer understands that Owner will be funding the Project in part or in whole by a grant or loan from \_\_\_\_\_ (the "Federal Agency"). Engineer agrees it is subject to and shall comply with all applicable grant or loan conditions and the regulations of the Federal Agency which apply to the work under this Agreement, whether referenced in Appendix A or not. All applicable loan or grant conditions and regulations of the Federal Agency and regulations are incorporated into this Agreement by reference.]

or

[insert specific language required by the federal agency or state entity as required]

### SECTION 3. OWNER'S RESPONSIBILITIES

3.1 Owner shall:

(a) Designate a representative to whom all communications from Engineer shall be directed and who shall have limited administrative authority on behalf of Owner to receive and transmit information and make decisions with respect to Project. Said representative shall not, however, have authority to bind Owner as to matters of legislative or fiscal policy.

(b) Advise Engineer of Owner's Project requirements including: objective, project criteria, use and performance requirements, special considerations, physical limitations, financial constraints, and required construction contract provisions and standards.

(c) Provide Engineer with available information pertinent to the Project including any previous reports, studies or data possessed by Owner which relates to design or construction of the Project.

(d) Assist in arranging for Engineer to have access to enter private and public property as required for Engineer to perform his services.

(e) Examine all studies, reports, sketches, Drawings, Specifications, proposals and other documents presented by Engineer, and render written decisions pertaining thereto within a reasonable time. The Owner's approval of Drawings, design, Specifications, reports and incidental engineering work or materials furnished hereunder shall not in any way relieve the Engineer of responsibility for the professional adequacy of his work. The Owner's review, approval or acceptance of, or payment for, any of the services shall not be construed to operate as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement.

(f) Upon advice of the necessity to do so from Engineer, obtain required approvals and permits for the Project. The Engineer shall provide all supportive documents and exhibits necessary for obtaining said approvals and permits.

(g) Notify Engineer whenever Owner becomes aware of any substantial development or occurrence which materially affects the scope or timing of Engineer's services.

(h) Owner shall perform its obligations and render decisions within a reasonable time under the presented circumstances. However, given the nature of Owner's internal organization and requirements, a period of 14 days shall be presumed reasonable for any decision not involving policy decision or significant financial impact. A period of 45 days shall be presumed reasonable for Owner to act with respect to any matter involving policy or significant financial impact.

### SECTION 4. TIME FOR PERFORMANCE.

Engineer's obligation to render services shall continue for such period of time as may reasonably be required for completion of the work contemplated in Appendix A - Scope of Services and Section 1 of this Agreement.

#### SECTION 5. PAYMENT.

5.1 Owner will pay to Engineer as full compensation for all services required to be performed by Engineer under this Agreement, except for services for additional work or work beyond the scope of this Agreement, an amount not to exceed \$ \_\_\_\_\_ in the aggregate, and not to exceed those maximum amounts set forth in Appendix B - "Fee Schedule" and computed in accordance with this Section. In the event compensation for services is set forth in Exhibit B as to each phase of work indicated in Section 1.1 of this Agreement, the maximum amount of compensation for any phase shall not exceed the amount specified in Appendix B for such phase

5.2 Engineer shall submit periodic, but not more frequently than monthly, applications for payment, aggregating to not more than the maximum amount, for actual professional services rendered and reimbursable expenses incurred. Such applications shall be submitted with appropriate documentation that such services have been performed and expenses incurred. Thereafter, Owner shall pay Engineer for the amount of the application within 40 days of the date of billing, provided that sufficient documentation has been furnished, and further provided that Owner will not be required to pay more than 90% of the maximum amount unless the Engineer's services on the Project phases for which this Agreement is applicable have been completed to Owner's reasonable satisfaction and all required Engineer submittals have been provided.

5.3 The rates of compensation for service and for reimbursable expenses to be used with periodic and final payment applications shall be those set forth in Appendix B - "Fee Schedule."

5.4 No separate or additional payment shall be made for profit, overhead, local telephone expenses, lodging, routine photocopying, computer time, secretarial or clerical time or similar expenses unless otherwise provided and listed in Appendix B - "Fee Schedule."

5.5 No compensation shall be paid to Engineer for services required and expenditures incurred in correcting Engineer's mistakes or negligence.

5.6 Compensation for authorized work beyond the scope of this Agreement shall be governed by Paragraph 2.6(g).

#### SECTION 6. TERMINATION.

6.1 The Owner reserves the right to terminate this Agreement and Engineer's performance hereunder, at any time upon written notice, either for cause or for convenience. Upon such termination, Engineer shall cease all work and stop incurring expenses, and shall promptly deliver to the Owner all data, Drawings, Specifications, reports, estimates, calculations, summaries and all other information, and materials as Engineer may have accumulated in performing this Agreement, together with all finished work and work in progress.

6.2 Upon termination of this Agreement for events or reasons not the fault of Engineer, Engineer shall be paid at the rates specified in Appendix B - "Fee Schedule" for all services rendered and reasonable costs incurred to date of termination; together with any reasonable costs incurred within 10 days of termination provided such latter costs could not be avoided or were incurred in mitigating loss or expenses to Owner or Engineer. In no event shall payment to Engineer upon termination exceed the maximum compensation provided for complete performance in paragraph 5.1 and Appendix B.

6.3 In the event termination of this Agreement or Engineer's services is for breach of this Agreement by Engineer, or for other fault of Engineer including but not limited to any failure to timely proceed with work, or to pay its employees and consultants, or to perform services with that level of care and skill ordinarily exercised by professional Engineers specializing in the design of \_\_\_\_\_ or to perform work in a manner deemed unsatisfactory by Owner's Director of Public Works, then in that event, Engineer's entire right to compensation shall be limited to the reasonable value of completed work to the Owner as determined by Owner's Director of Public Works for services satisfactorily performed and reimbursable expenses reasonably incurred, prior to date of termination.

6.4 Engineer's professional responsibility for his completed work and services shall survive any termination.

## SECTION 7. GENERAL PROVISIONS.

7.1 (a) Ownership of Documents. All designs, Drawings, Specifications, technical data, and other documents or instruments procured or produced by the Engineer in the performance of this Agreement shall be the sole property of the Owner and the Owner is vested with all rights therein of whatever kind and however created, whether created by common law, statutory law, or by equity. The Engineer agrees that the Owner shall have access at all reasonable times to inspect and make copies of all notes, designs, drawings, specifications, and all other technical data pertaining to the work to be performed under this Agreement. In the event Owner uses the designs, Drawings or Specifications provided hereunder for another project independent from Project, without adaptation by Engineer, Owner shall hold harmless and indemnify Engineer from all loss, claims, injury and judgments arising from the use of such designs, Drawings or Specifications for such other project.

(b) Advertising. Unless specifically approved in advance in writing by Owner, Engineer shall not include representations of the Project in any advertising or promotional materials, except for accurate statements contained in resumes or curriculum vitae of Engineer's employees. If Engineer wishes to include representations in advertising or promotional materials, it shall submit a draft of same and printer's proof of the proposed advertising or promotional materials to the Owner for prior review and shall not publish or distribute same unless written approval of the materials is first obtained.

### 7.2 Insurance and Indemnity.

(a) Engineer agrees that he has procured and will maintain during the term of this Agreement, such insurance as will protect him from claims under workers' compensation, claims for damages because of bodily injury including personal injury, sickness or disease or death of any of his employees or of any person other than his employees, and from claims or damages because of injury to or destruction of property including loss of use resulting therefrom; and such insurance will provide for coverage in such amounts as set forth in subparagraph (b).

(b) The minimum insurance coverage which Engineer shall obtain and keep in force is as follows:

(i) Workers' Compensation Insurance complying with statutory requirements in Colorado and in any other state or states where the work is performed.

(ii) Comprehensive General and Automobile Liability Insurance with limits not less than One Million Dollars (\$1,000,000.00) per person and occurrence for personal injury, including but not limited to death and bodily injury, One Million Dollars (\$1,000,000.00) per occurrence for property damage, and One Million and No/100 Dollars (\$1,000,000.00) for excess umbrella liability.

(iii) Professional Liability Insurance in amounts and form acceptable to Owner, and with a deductible not exceeding \$15,000.00.

(c) Engineer agrees to hold harmless, defend and indemnify Owner from and against any liability to third parties, arising out of negligent acts, errors or omissions of Engineer, his employees, subcontractors and consultants.

7.3 Notices. Any and all notices or other communications required or permitted by this Agreement or by law to be served on or given to either the Owner or the Engineer by the other party shall be in writing and shall be deemed duly served and given when personally delivered to the party to whom it is directed, or in lieu of such personal service when deposited in the United States mail, first-class postage prepaid, addressed to the City of Pueblo, Attention: Steven Meier, Planning Department, 211 E. "D" Street, Pueblo, Colorado, or to the Engineer at \_\_\_\_\_ . Either party may change his address for the purpose of this paragraph by giving written notice of such change to the other party in the manner provided in this paragraph.

7.4 Entire Agreement. This instrument contains the entire agreement between the Owner and the Engineer respecting the Project, and any other written or oral agreement or representation respecting the Project or the duties of either the Owner or the Engineer in relation thereto not expressly set forth in this instrument is null and void. In the event of any conflict between any provision of this Agreement and a provision of any Appendix or attachment to this Agreement, the provision in this Agreement shall control and supersede the conflicting provision in the Appendix or attachment. Any inconsistent resolution provision in any attachment to this Agreement shall be void.

7.5 Successors and Assigns. This Agreement shall be binding on the parties hereto and on their partners, heirs, executors, administrators, successors, and assigns; provided, however, that neither this Agreement, nor any part thereof, nor any moneys due or to become due hereunder to the Engineer may be assigned by him without the written consent of the Owner.

7.6 Amendments. No amendment to this Agreement shall be made nor be enforceable unless made by written Amendment signed by an authorized representative of Engineer and by Owner's Director of Public Works.

7.7 Choice of Law. This Agreement shall be governed and interpreted in accordance with the laws of the State of Colorado.

7.8 Equal Employment Opportunity. In connection with the performance of this Agreement, Engineer shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, disability or age. Engineer shall endeavor to insure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, national origin, disability or age.

7.9 Severability. If any provision of this Agreement, except for Section 2.6, is determined to be directly contrary to and prohibited by law or the requirements of any federal grant or other Project funding source, then such provision shall be deemed void and the remainder of the Agreement enforced. However, it is the intent of the parties that Section 2.6 of this Agreement not be severable, and that if any provision of said section be determined to be contrary to law or the terms of any federal grant, then this entire Agreement shall be void.

7.10 Appropriations. Subject to execution of this Agreement by the Director of Finance certifying that a balance of appropriation exists and funds are available, the amount of money appropriated for this Agreement is equal to or in excess of the maximum compensation payable hereunder; provided, however, that if construction is phased and subject to annual appropriation, funds only in the amount of initial appropriation are available and Engineer shall confirm availability of funds before proceeding with work exceeding initial and subsequent annual appropriations.

7.11 Additional Requirements on Federally Funded Contracts. If any of the work to be performed by Engineer under this Agreement is funded in whole or in part with federal funds, then this Agreement shall be construed to include all applicable terms required by the federal assistance agreement and integrated federal

regulations. By executing this Agreement, Engineer agrees to be bound by all such mandatory federal requirements, irrespective of Engineer's actual knowledge or lack of knowledge of such requirements prior to execution of this Agreement.

7.12 Access to Property Not Under Owner's Control. Engineer acknowledges that the Project may require access to property not under the control of Owner at the time of execution of this Agreement. Engineer and Engineer's employees and consultants shall, at Engineer's expense, obtain all additional necessary approvals and clearances required for access to such property. Owner shall assist Engineer in obtaining access to such property at reasonable times but make no warranty or representation whatsoever regarding access to such property. Engineer understands and agrees that entry to properties not under Owner's control may require Engineer to comply with the terms of separate access agreements to be negotiated hereafter with owners of such property.

#### SECTION 8. DISPUTES.

8.1 Any dispute or disagreement between Engineer and Owner arising from or relating to this Agreement or Engineer's services or right to payment hereunder shall be determined and decided by the Owner's Director of Public Works whose written decision shall be final and binding unless judicial review is sought in a Colorado Court of competent jurisdiction pursuant to Rule 106, C.R.C.P.

8.2 Pending resolution of any dispute or disagreement, or judicial review, Engineer shall proceed diligently with performance of his work under this Agreement.

#### SECTION 9. APPENDICES.

- 9.1 The following Appendices are attached to and made a part of this Agreement:
- Appendix A - "Scope of Services" consisting of \_\_\_\_\_ pages.
  - Appendix B - "Fee Schedule" consisting of \_\_\_ pages.
  - Appendix C - "Identification of Personnel, Subcontractors and Task Responsibility."

#### SECTION 10. ACCESSIBILITY.

The Americans with Disabilities Act (ADA) provides that it is a violation of the ADA to design and construct a facility for first occupancy later than January 26, 1993, that does not meet the accessibility and usability requirements of the ADA except where an entity can demonstrate that it is structurally impractical to meet such requirements. The Engineer therefore, will use his or her best reasonable professional efforts to implement applicable ADA requirements and other federal, state and local laws, rules codes, ordinances and regulations as they apply to the Project.

#### SECTION 11 – STATE-IMPOSED MANDATES PROHIBITING ILLEGAL ALIENS FROM PERFORMING WORK

(a) At or prior to the time for execution of this Agreement, Engineer shall submit to the Purchasing Agent of the City its certification that it does not knowingly employ or contract with an illegal alien who will perform work under this Agreement and that the Engineer will participate in either the "E-Verify Program" created in Public Law 208, 104<sup>th</sup> Congress, as amended and expanded in Public Law 156, 108<sup>th</sup> Congress, as amended, that is administered by the United States Department of Homeland Security or the "Department Program" established pursuant to section 8-17.5-102(5)(c), C.R.S. that is administered by the Colorado Department of Labor and Employment in order to confirm the employment eligibility of all employees who are newly hired for employment to perform work under this Agreement.

- (b) Engineer shall not:
- (i) Knowingly employ or contract with an illegal alien to perform work under this contract;

(ii) Enter into a contract with a sub-consultant that fails to certify to Engineer that the sub-consultant shall not knowingly employ or contract with an illegal alien to perform work under this contract.

(c) The following state-imposed requirements apply to this contract:

(i) The Engineer shall have confirmed or attempted to confirm the employment eligibility of all of its employees who are newly hired for employment to perform work under this Agreement through participation in either the E-Verify Program or the Department Program.

(ii) The Engineer is prohibited from using the E-Verify Program or Department Program procedures to undertake pre-employment screening of job applicants while this Agreement is being performed.

(iii) If the Engineer obtains actual knowledge that a sub-consultant performing work under this Agreement knowingly employs or contracts with an illegal alien to perform work under this Agreement, the Engineer shall be required to:

A. Notify the sub-consultant and the Purchasing Agent of the City within three (3) days that the Engineer has actual knowledge that the sub-consultant is employing or contracting with an illegal alien; and

B. Terminate the subcontract with the sub-consultant if within three (3) days of receiving the notice required pursuant to subparagraph (c)(III)A. above the sub-consultant does not stop employing or contracting with the illegal alien; except that the Engineer shall not terminate the contract with the sub-consultant if, during such three (3) days, the sub-consultant provides information to establish that the sub-consultant has not knowingly employed or contracted with an illegal alien.

(iv) The Engineer is required to comply with any reasonable request by the Colorado Department of Labor and Employment (hereinafter referred to as "CDLE") made in the course of an investigation that CDLE is undertaking pursuant to its authority under §8-17.5-102(5), C.R.S.

(d) Violation of this Section by the Engineer shall constitute a breach of contract and grounds for termination. In the event of such termination, the Engineer shall be liable for Owner's actual and consequential damages.

(e) Nothing in this Section shall be construed as requiring the Engineer to violate any terms of participation in the E-Verify Program.

(f) Violation of this Section 11 by the Engineer shall constitute a breach of contract and grounds for termination. In the event of such termination, the Engineer shall be liable for Owner's actual and consequential damages.

(g) As used in this Section 11, the term "sub-consultant" shall mean any sub-consultant or subcontractor of Engineer rendering services with the scope of this Agreement.

#### SECTION 12. PERA LIABILITY

The Contractor shall reimburse the City for the full amount of any employer contribution required to be paid by the City of Pueblo to the Public Employees' Retirement Association ("PERA") for salary or other compensation paid to a PERA retiree performing contracted services for the City under this Agreement. The Contractor shall fill out the questionnaire attached as Exhibit \_\_\_ and submit the completed form to City as part of the signed Agreement.

#### SECTION 13. Reserved

IN WITNESS WHEREOF the parties hereto have made and executed this Agreement as of the day and year first above written.

CITY OF PUEBLO,  
A MUNICIPAL CORPORATION

ENGINEER

By: \_\_\_\_\_ Name: \_\_\_\_\_  
 President of the City Council By: \_\_\_\_\_

Attest: \_\_\_\_\_ Title: \_\_\_\_\_  
 City Clerk

SAMPLE  
AGREEMENT

[ S E A L ]

BALANCE OF APPROPRIATION EXISTS FOR THIS  
CONTRACT AND FUNDS ARE AVAILABLE.

\_\_\_\_\_  
Director of Finance

APPROVED AS TO FORM:

\_\_\_\_\_  
City Attorney

**COLORADO PUBLIC EMPLOYEES RETIREMENT ASSOCIATION  
SUPPLEMENTAL QUESTIONNAIRE TO BE ANSWERED BY  
ANY BUSINESS PERFORMING SERVICES FOR THE CITY OF PUEBLO**

Pursuant to section 24-51-1101(2), C.R.S., salary or other compensation from the employment, engagement, retention or other use of a person receiving retirement benefits (Retiree) through the Colorado Public Employees Retirement Association (PERA) in an individual capacity or of any entity owned or operated by a PERA Retiree or an affiliated party by the City of Pueblo to perform any service as an employee, contract employee, consultant, independent contractor, or through other arrangements, is subject to employer contributions to PERA by the City of Pueblo. Therefore, as a condition of contracting for services with the City of Pueblo, this document must be completed, signed and returned to the City of Pueblo:

(a) Are you, or do you employ or engage in any capacity, including an independent contractor, a PERA Retiree who will perform any services for the City of Pueblo? Yes \_\_\_\_, No \_\_\_\_. (Must sign below whether you answer "yes" or "no".)

(b) If you answered "yes" to (a) above, please answer the following question: Are you 1) an individual, 2) sole proprietor or partnership, or 3) a business or company owned or operated by a PERA Retiree or an affiliated party? Yes \_\_\_\_, No \_\_\_\_. (If you answered "yes" please state which of the above listed entities (1, 2, or 3) best describes your business: \_\_\_\_\_.

(c) If you answered "yes" to both (a) and (b), please provide the name, address and social security number of each such PERA Retiree.

|                        |                        |
|------------------------|------------------------|
| _____                  | _____                  |
| Name                   | Name                   |
| _____                  | _____                  |
| Address                | Address                |
| _____                  | _____                  |
| Social Security Number | Social Security Number |

(If more than two, please attach a supplemental list)

If you answered "yes" to both (a) and (b), you agree to reimburse the City of Pueblo for any employer contribution required to be paid by the City of Pueblo to PERA for salary or other compensation paid to you as a PERA Retiree or paid to any employee or independent contractor of yours who is a PERA Retiree performing services for the City of Pueblo. You further authorize the City of Pueblo to deduct and withhold all such contributions from any moneys due or payable to you by the City of Pueblo under any current or future contract or other arrangement for services between you and the City of Pueblo.

**Failure to accurately complete, sign and return this document to the City of Pueblo may result in your being denied the privilege of doing business with the City of Pueblo.**

Signed \_\_\_\_\_, 20\_\_\_\_.

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

For purposes of responding to question (b) above, an "affiliated party" includes (1) any person who is the named beneficiary or cobeneficiary on the PERA account of the PERA Retiree; (2) any person who is a relative of the PERA Retiree by blood or adoption to and including parents, siblings, half-siblings, children, and grandchildren; (3) any person who is a relative of the PERA Retiree by marriage to and including spouse, spouse's parents, stepparents, stepchildren, stepsiblings, and spouse's siblings; and (4) any person or entity with whom the PERA Retiree has an agreement to share or otherwise profit from the performance of services for the City of Pueblo by the PERA Retiree other than the PERA Retiree's regular salary or compensation.



The area outlined in red depicts the general corridor for analysis. The yellow dashed line illustrates one potential roadway alignment for the Downton Connection.