# Southwest <br> Transportation Planning Region 

January 2008

Southwest Regional Planning Commission
Colorado Department of Transportation

URS Corporation
9960 Federal Drive

## 2035 Regional Transportation Plan

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## Appendix A Public Involvement

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- Regional Transportation Forum Notes


## Appendix B Environmental

- Species of Concern
- List of Resource Plans (web links)
- Environmental Forum Map
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## Acknowledgements

This document has been prepared using federal funding from the United States Department of Transportation. The United States Department of Transportation assumes no responsibility for its contents or use thereof.

Preparation of this document was supported by the Colorado Department of Transportation, Division of Transportation Development, Regional Planning Commission, citizens, and assisted by URS Corporation and LSC Transportation Consultants, Inc.

We would also like to acknowledge members of the public that contributed to the development of this plan.

URS Project Number 21711630

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## EXECUTIVE SUMMARY

The 2035 Southwest Regional Transportation Plan is the result of a comprehensive process to examine priorities established in the previous 2030 Plan and then to validate or modify those priorities as appropriate. To do so, planners solicited public input through a succession of activities and met regularly with the regional planning commission to develop this update. The plan serves to guide regional transportation improvement decisions at a multimodal corridor level.

The Southwest Transportation Planning Region (TPR) is composed of Archuleta, La Plata, Montezuma, San Juan and Dolores counties and includes the Southern Ute Indian Tribe and the Ute Mountain Ute Indian Tribe.

The Southern Ute Transportation Plan was updated January 2006. and is incorporated by reference with this Southwest 2035 Regional Transportation Plan.

In 2008, the TPR will be home to approximately 99,850 people. The area offers opportunities for outdoor recreation with rafting, skiing, fishing and hunting, limited stakes gambling, and tourist attractions. The entire region is being impacted by energy development, the second home market, tourism, and overall growth.

Major components of the process included:

- Key Issues and Emerging Trends - Through the Regional Transportation Forum and other input opportunities, planners identified what evolving socioeconomic and transportation factors affect transportation decision-making.
- Vision Plan - includes a set of visions, goals, and strategies for each corridor, including the costs to make the desired improvements.
- Constrained Plan - identifies available funding and matches resources with high priorities for the entire planning period from 2008-2035.
- Midterm Implementation Strategies - selects strategies that require attention during the first 10 years of the planning period.

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## Key Issues and Emerging Trends

The planning process identified a series of key issues and emerging trends that influenced the direction of the plan. These were the basis of discussion at public meetings and for the regional planning commission. While there are many details, the primary issues for the region can be summarized as follows:

- Safety issues, including vehicle/wildlife crashes - throughout the Transportation Planning Region (TPR)
- Congestion in regional corridors - especially on US 160 and US 550 in and around Durango, due to economic development and tourism
- Deterioration of highway infrastructure - throughout the TPR due to increasing traffic volumes, including trucks
- Coal Bed Methane (CBM) development - in La Plata and Archuleta Counties has led to increased truck traffic and the potential for safety conflicts
- Public transportation - should be given more consideration as an economically and environmentally viable alternative
- Bicycle and pedestrian transportation - should be given more consideration as an economically and environmentally viable alternative

The plan addresses these and other needs through the Vision Plan (total needs), the Constrained Plan (improvements for which resources are projected to be available through 2035), and the Midterm Implementation Strategy (those highest priorities which require attention during the first 10 years of the plan).

## Vision Plan

The Regional Planning Commission (RPC) examined all the available background data, matched unmet needs with the regional vision, values and goals, and developed a vision for each corridor that is consistent with the needs and desires of the residents.

The plan addresses these and other needs through the Vision Plan, summarized below. All dollar amounts in this plan are expressed in 2008 dollars.

Table ES-1 2035 Vision Plan Summary

| Vision Plan Costs |  |
| :---: | :---: |
| Highway Corridors | \$2.361 B |
| Transit | \$0.108B |
| Aviation | \$0.179 B |
| Total | \$2.648 B |

## Constrained Plan

The TPR will be allocated about $\$ 201.5$ million in available funds for the period 2008-2035, including $\$ 25.1$ million in Regional Priority Program funds from CDOT Region 5. Since the TPR's vision plan for the region identifies needs which significantly exceed the level of available funding, the Regional Planning Commission reviewed options and priorities for funding, assigning program amounts for each corridor and mode as summarized in the table below.

Table ES-2 2035 Constrained Plan Summary

| Corridor | 2035 Constrained Plan Summary |  |
| :--- | :--- | ---: |
|  | Description | $\mathbf{( \$ 0 0 0 )}$ |
| TPR | Region 5 Intersection Improvements | $\$ 7,535$ |
| TPR | Region 5 Shoulder Improvements | $\$ 2,512$ |
| TPR | Region 5 Engineering Studies \& Environmental <br> Compliance | $\$ 1,256$ |
| US160 | NM State Line to Archuleta/Mineral County Line | $\$ 9,544$ |
| SH 172 | NM State Line to US 160 | $\$ 1,256$ |
| US 491 A | NM State Line to North of US 160 intersection in <br> Cortez | $\$ 753$ |
| US 550 | NM State Line to San Juan/Ouray County Line | $\$ 2,260$ |
| TPR | Community Based Transit | $\$ 94,904$ |
| TPR | Five Airports | $\$ 81,500$ |
| Total |  | $\$ 201,520$ |

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## Midterm Implementation Strategy Corridors

The identification of Midterm Implementation Strategy Corridors directs currently available funds toward a set of improvements determined to be most critical. The TPR selected four corridors for priority implementation, including a set of key strategies from the respective corridor visions. These offer the most benefits to moving people, goods and services throughout the region and should form the basis for project selection and programming over the midterm or the next ten years.

Table ES-3 Midterm Implementation Strategy Corridors

| Corridor | Major Issues | Selected Strategies |
| :--- | :--- | :--- |
| Intersections Improvement <br> Pool | Congestion <br> Safety | Intersection improvements |
| US 160 at CR 222/223 | Population growth <br> Commuting traffic <br> Safety | Trucks <br> Safety <br> Population growth <br> Commuting <br> Weather incidents |
| US 160, west of Pagosa <br> Springs; | Increasing and unacceptable <br> levels of vehicle crashes, <br> including, but not limited to, wildlife <br> collisions, rockfall, and run-off-the-- <br> road crashes | Widening/capacity improvements <br> Wildlife fencing/underpasses |
| US 550 New Mexico Stats <br> Line north (fencing and <br> wildlife underpasses) | Safety |  |
| US 491 | Deterioration of highway <br> infrastructure <br> Safety | Resurfacing <br> Auxiliary lanes |
| SH 172 | Congestion <br> Quality of life | Durango Transit Center <br> Bike path |
| Modal choice | Quangenents |  |

Transportation Planning Region

## SOUTHWEST TRANSPORTATION PLANNING REGION

## Introduction

This plan contains an analysis of the transportation, socioeconomic, and environmental systems of the Southwest Transportation Planning Region (TPR). This data helps form the technical background for long range transportation system improvements. The 2035 Plan is an update to the 2030 Plan completed in 2004. The update is intended to respond to key trends and emerging issues, as well as the evolving financial picture. As an update, many of the previous plan's key components and priorities remain in place.

## The Regional Planning Commission

The Southwest Regional Planning Commission (RPC) has been established by memorandum of agreement to include a representative from each county, incorporated municipality and Indian Tribe within the Transportation Planning Region. The Southern Ute Indian Tribe and the Ute Mountain Ute Indian Tribe each seat a member on the RPC.

The RPC has the responsibility to carry out the regional planning process and adopt the plan. Table 1 lists the Southwest Planning Commission members.

Table 1: Southwest Regional Planning Commission

| Member Name | Title | Organization |
| ---: | ---: | ---: |
| DeWayne Findley | Chair | Montezuma County |
| Jack Nickerson | Public Works <br> Manager | City of Cortez |
| Jack Rogers | Interim City <br> Manager | City of Durango |
| Ernest Williams | Commissioner | Dolores County |
| Robert Moomaw | Commissioner | Archuleta County |
| Wally White | Commissioner | La Plata County |
| Ernest Kuhlman | Commissioner | San Juan County |
| Balty Quintana | Town Manager | Town of Ignacio |
| Tom Yennerell | Town Manager | Town of Mancos |
| Mark Garcia | Town Manager | Town of Pagosa Springs |
| Justin Clifton | Town Manager | Town of Bayfield |
| Wendy Mimiaga | Town Trustee | Town of Dolores |
| Arlen Bock | Town Trustee | Town of Dove Creek |
| Rodney Class-Erickson | Tribal Planner | Southern Ute Tribe |
| Charles Root Jr. | Transportation | Ulanner |

## Southern Ute Transportation Plan Update

The Southern Ute Transportation Plan was updated January 2006 and is incorporated by reference with this Southwest 2035 Regional Transportation Plan.

## Project Area

Map 1 shows the Southwest TPR planning area. It includes the municipalities within Dolores, San Juan, Montezuma, La Plata, and Archuleta counties and several larger towns or cities: Durango, Pagosa Springs, Cortez, Dove Creek and Silverton. The TPR also includes the Ute Mountain Ute and the Southern Ute Indian Reservations. Major regional highways include US 160 and US 550, as well as several other state highways.


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## The Planning Process

Long range transportation planning is a critical element in the transportation development process. This is the first step in integrating citizen goals into a comprehensive plan, protecting and enhancing community values, and gaining access to available or potential funding. The plan is based on a number of steps, all designed as a thoughtful and efficient method to relate the wishes of the citizens to effective transportation programs and projects, within a realistic financial picture.
Figure 1 provides a diagram depicting the planning process that has been followed in developing the Southwest 2035 Regional Transit Plan. The planning process began with a review of the mission statement and goals as established in the 2030 RTP. Representatives of the communities in the region and the general public were asked to help identify recent trends in the region that affect the transportation system and the long range needs of the region. Overviews of the existing transportation system, socioeconomics, the environment, and projected growth in the region were completed based on information provided in the CDOT planning dataset.
The inventory and initial public input were used to update the corridor visions which were established in the 2030 RTP. Each of the 14 multimodal corridors in the TPR has a vision, goals, and specific strategies to achieve the vision and goals. Since this is corridor-based plan, the corridors have been divided into high, medium, and low priority. The corridor visions and the prioritized corridors comprise the vision plan for the region. A fiscally constrained plan was then developed by assigning the estimated available funding to the corridors and to the improvement pools. Lastly, a midterm implementation strategy was developed to identify what can be done to address difficult tradeoffs that are necessary to manage the transportation system over the next ten years, given the limited funds and increasing costs.

Figure 1: Planning Process


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## PUBLIC INVOLVEMENT

The public involvement process for the 2035 plan update was geared to gather information about emerging issues that have risen since the completion of the 2030 plan and that might influence a reprioritization of goals. Two major opportunities for this input were held early in the process. The Pre-Forum meeting was held to provide an opportunity for the regional planning commission, other community leaders, transportation professionals and the public to discuss the state of transportation in the region and identify key problems and issues that should be addressed in the plan. The second event, the Regional Transportation Forum, was then held to discuss those issues in more detail and begin providing input on how the transportation problems could be best addressed. Finally, a public meeting was held in Fall 2007 to present this draft plan and receive comments.

## Pre-Forum Meeting

The Pre-Forum Meeting was held in Durango on August 10, 2006. The following issues were brought to the attention of the RPC and are listed below:

- Rapid increase in population in both Archuleta and La Plata Counties is having effects on the transportation system (access issues, safety, congestion)
- Environmental impacts from transportation
- Development of coalbed methane (CBM)
- North-South corridor within TPR limits - congestion
- Roads that are not suited for multiple uses (lack of bike lanes)
- Limited roadway alternatives - geography challenge
- Affordable transportation for low income/elderly
- County development effects on City streets
- Safety
- Potential new casino off SH 172
- Natural gas (Dolores County)
- Animal - vehicle collisions (Durango to Bayfield)
- Environmental impacts from transportation
- Population growth
- Health care
- $2^{\text {nd }}$ homes / affordable housing
- Telecommunication
- Wildfire
- Tourism


## Regional Transportation Forum

The Regional Transportation Forum was held in Durango on October 4, 2006 to provide a significant point of public input to the 2035 plan update. It was attended by 35 people. The primary purpose of the meeting was to review the 2030 priorities; discuss emerging regional issues and trends; determine the audience's preferences regarding future priorities and issues; and discuss funding issues, needs, and solutions. The forum was approximately 3 hours in length. The meeting featured a presentation about the planning process in general; the need for
the update; background on the 2030 Plan; costs of transportation and general funding expectations. An innovative audience polling technique was used to electronically solicit preferences and opinions. In addition, an interactive exercise allowed meeting participants to "spend" a set allocation of funds on their preferences. Topics presented at the meeting included:

- Changes in population/employment
- Driving forces in the local/regional economy
- Transportation system issues (maintenance of the existing system, systems connectivity, congestion, safety, long term needs)
- Commuting patterns
- Major traffic generators
- Natural resources development
- Recreation/tourism industry
- Integration of the various transportation modes (auto, public transit, aviation, and rail) into an effective system
- Funding for transportation

The primary issues discussed at the meeting are briefly summarized below. A complete summary report is provided in Appendix A.

- Safety issues, including vehicle/wildlife crashes
- Congestion in regional corridors
- Deterioration of highway infrastructure
- Coal bed methane gas development
- Population growth

- Fuel prices
- The link between land use and transportation needs a much stronger emphasis - local agencies need to: 1) evaluate the impacts to the transportation system before approving developments; and 2) require developers to pay for transportation improvements needed as a result of their developments.
- Would like to see more Value Engineering - engineering standards could change for certain areas - for example the width of standard shoulders could be decreased in certain places to help in the reduction of cost for specific projects
- Population growth
- Developing alternative fuels
- Tourism from surrounding states (New Mexico / Texas)
- Long distance commuting
- Need education and outreach to communities on transportation issues/effects
- More affordable housing
- More interconnecting transit service within communities and more public transportation regionally
- State highway is also a Main Street in Bayfield and Durango (congestion, safety issues)
- How do we move our people/goods? The status quo is not acceptable
- How do we strengthen our revenue stream?


## Prioritization Meeting

The Prioritization Meeting was held in Durango on March 15, 2007. The primary purpose of this meeting was to examine recommended changes to Corridor Visions and the 2035 Vision Plan (primary components of Technical Report 2 - Visions and Priorities) as a result of analysis of key issues and emerging trends throughout the region. The RPC examined the recommendations of the 2030 Regional Transportation Plan (RTP), Pre-Forum Meeting Notes, Technical Report 1 - Regional Systems, and Technical Report 2 mentioned above to update transportation improvement priorities and identify additional needs. The meeting resulted in a prioritized list of corridors with corresponding funding amounts. The Corridor Visions and 2035 Vision Plan, as amended, appear later in this document.

## Draft Plan Review

The Draft 2035 Plan was released in July, 2007, incorporating as appropriate all input from the public and decisions by the RPC. After a period of review, the draft plan was presented at a public meeting in Durango on November 8, 2007. The meeting was held jointly with CDOT to also review the draft Statewide Plan at that time. This approach was useful so that attendees could see the regional plan in context with other regions and the state as a whole. Comments received at that meeting have been incorporated as appropriate in the final plan prior to its adoption by the RPC in January 2008.

Key issues identified at this meeting included:

- Bicycle and pedestrian transportation is an economically and environmentally desirable part of the transportation picture. Constructing and maintaining (sweeping) highway shoulders is one way to provide this option.

- Given this region's location in the Four Corners Area, and the exchange of traffic among the states for employment, tourism, and other commerce, a greater effort should be made to plan jointly with surrounding states.
- The accelerating development along US 160 west of Pagosa Springs presents a significant challenge in terms of intersection design, safety, and access control.


## REGIONAL VISION, GOALS \& STRATEGIES

## Background

This section provided the opportunity for the RPC to identify issues that will help in the development of Regional Vision, Goals, and Strategies. Ultimately, the Regional Vision, Goals and Strategies developed through public and RPC processes were used in developing evaluation criteria for use in the transportation alternatives development phase of the plan. The Vision provides the basis to compare projects for consistency with the final adopted 2035 plan.

The Regional Vision, Goals and Strategies are the guiding principles that will ultimately translate into priority projects on the ground. This is a living document that the RPC will refer to as it chooses priority highway corridors and associated projects within each corridor.

The RPC and a small working group reviewed the Regional Vision, Goals, and Strategies from the 2030 Plan and discussed revisions to reflect the current state of the Region and the best way support the regional quality of life. Each plan item was compared to the TPR’s Vision, Goals, and Strategies for consistency. This ensured that final planning components support the originally conceived ideas of how best to support the regional quality of life.

CDOT's guidance in developing this portion of the plan requests that the TPR begin with the Department's Mission as a foundation:

The mission of the Colorado Department of Transportation is to provide the best multimodal transportation system for Colorado that most effectively moves people, goods, and information.
CDOT also offers the following vision as part of its guidance:
To create an integrated transportation system that focuses on moving people and goods, develops linkages among transportation choices, and provides modal choices to enhance the quality of life and environment of the citizens of Colorado.

## 2035 Vision for Transportation Services in the Southwest Region

The Southwest Transportation Planning Region envisions a region that will:
"Maintain the rural character, quality of life, and environment desired by its residents and visitors by providing for a balanced transportation system that accommodates the movements of residents, tourists, and goods throughout the region through the use of telecommunications, expanded air and multimodal travel, and an enhanced higbway system."

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## 2035 Goals and Strategies

Goal 1: A safe region-wide transportation system
Strategy 1a: Increase safety considerations by addressing CDOT's 2006 Strategic Plan for Improving Roadway Safety (SPIRS) and associated performance measures (including, but not limited to, aging drivers, animal-vehicle collisions, safe route to schools, and rock fall).
Strategy 1b: Widen shoulders of appropriate roadways and develop bike trails along appropriate roadways to allow for the safe passage of both vehicles and bicycles.

Goal 2: Maintain a functional transportation infrastructure system that responds to the needs of a growing community

Strategy 2a: Develop interregional corridor partnerships to cooperate on key growth areas and the quality of transportation systems.
Strategy 2b: Recognize the importance of State Highways 160, 550, 172, and 491 as major transportation corridors, as well as the importance of adjacent feeder routes in project prioritization.

Strategy 2c. Maximize flexibility in the design of transportation projects to accommodate changing functional uses and community needs for transportation facilities.

Strategy 2d: Develop flexible project prioritization system and timetable for implementation.
Strategy 2e. Recognize the importance of telecommunications in the regional plan.
Strategy 2f: Recognize the importance of the transportation system to the economic viability of the Region.

Strategy 2g: Encourage the inclusion of transit-friendly options at the development review level.

Goal 3: Provide multimodal options for the region
Strategy 3a: Maximize choices and options through the development of Transportation Development Management (TDM) and other incentives that reduce passenger vehicles at peak hours.

Strategy 3b: Encourage transit oriented and multimodal development through project collaboration between entities.

Strategy 3c. Conduct public education and outreach as well as incentives to encourage transit.

Strategy 3d: Promote an increased number of flights and destinations for air passenger travel.

Strategy 3e: Consider future rail service for commerce, tourism, and economic development as efforts evolve.

Strategy 3f: Encourage economic development by connecting population centers to business centers.

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Strategy 3g: Encourage trail development between communities of Durango and Bayfield, and Cortez, Dolores and Mancos.

Strategy 3i: Upgrade and maintain major/primary routes and alternate modes of travel to accommodate tourism/scenic byways/trails.

Goal 4: Streets and Highways that protect natural and cultural resources and highlight scenic beauty.

Strategy 4a: Encourage Context Sensitive Solutions, or highways that fit into the natural landscape and are environmentally sensitive and appealing.

Strategy 4b: Encourage highway design and maintenance practices that are consistent with the functional and environmental needs of the communities through which the highways pass to include transit-friendly features.

Strategy 4c: Consider wildlife and loss of habitat, air quality, water quality, and effects of oil and gas infrastructure, on highway projects.

Strategy 4d: Use renewable resources when reasonable and cost-effective.
Goal 5: Enhanced inter-jurisdictional communications with local, state and federal agencies.
Strategy 5a: Consider the effects of federal and state regulations and policies on the region.

Strategy 5b: Work with city and county planners to integrate transportation planning, public transit planning, and land-use planning.

Goal 6: A Transportation system that maximizes total funding for the Region.
Strategy 6a: Develop realistic plans based on the ability to fund new projects and to maintain and improve the functionality of the existing transportation system in accordance with our vision.

Strategy 6b: Seek innovative partnerships and funding opportunities.
Strategy 6c: Work to establish community partnerships to supplement transportation funding.

Strategy 6e: Ensure highway rights-of-way owners properly maintain their highways to allow for the continued functional nature, and that their infrastructure needs are fairly paid for by communities, developers, or business entities.

Strategy 6e: Maximize funding for environmental mitigation.

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## ACCOMPLISHMENTS

## US 160, Farmington Hill to one mile east of Bayfield

This Region 5 Strategic $7^{\text {th }}$ Pot corridor saw significant improvements over the last several years. In addition to Strategic Project Program funds, the corridor was the recipient of federal earmarks in the amount of $\$ 6.8$ million.

- The US 160 Final Environmental Impact Statement (FEIS) was published in May of 2006, and a public hearing was held on the FEIS in June of 2006. A Record of Decision (ROD) was issued on November 7, 2006. The selected alternative in the ROD would four-lane US 160 from the intersection of US 160/US 550 (Farmington Hill) to east of Bayfield, generally along the existing alignment with shifts in alignment in some areas to avoid impacts to resources. The intersections of US 160/US 550 at Farmington Hill, Three Springs Boulevard, and US 160/SH 172 would all be constructed as interchanges, with other intersections upgraded to meet standards.
- Approximately $\$ 26$ million, including $\$ 21$ million of SB-1 funds, has been programmed for a modified design-build project at Farmington Hill, east and west of the US 550/US 160 junction. This project will include a fourth westbound lane through the intersection and partial construction of the new US 550/US 160 interchange. This partial interchange will include two structure ramps. The designbuild project will be advertised in the summer of 2007 with construction anticipated to start in the spring of 2008.


## US 550, New Mexico state line to Durango

- US 550 is a Strategic Project.
- The US 550 Environmental Assessment (EA) was completed in July of 2005 with a Finding of No Significant Impact (FONSI) issued in December of 2005. The documents cover the environmental impacts and mitigation for four-laning US 550 from approximately Mileposts 1.0 to 15.4. The roadway would generally follow the existing highway alignment, with alignment shifts east and west as needed to improve the highway geometry and reduce impacts to the environment and existing development. Each travel direction would be a paved section of two 12 -foot travel lanes, a four-foot minimum inside shoulder, and a ten-foot outside shoulder.
- A $\$ 14.8$ million project, including an FY 2008 federal earmark of $\$ 13.26$ million, will construct two new bridges and two additional lanes on US 550, between Mileposts 0.5 and 2.75 , to accommodate anticipated future four-laning of the highway. Construction is expected to begin in March of 2008, with completion in October of 2008.

US 160/US 491 Passing Lanes

- The corridor between the New Mexico state line and Cortez is a two-lane highway with slow-moving traffic due to a large proportion of tourists, recreational vehicles, farm equipment, and heavy trucks.

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- To facilitate traffic flow and improve safety, CDOT is designing a project to construct a northbound passing lane between between M.P. 21.5 and 22.9 and to overlay the highway between M.P. 21.5 and 26.0.
- The estimated cost of the work is approximately $\$ 5$ million. Advertisement for construction bids is scheduled for January of 2008, with construction following in the spring of 2008. Construction is anticipated to be complete in the summer of 2008.


## US 160, Aztec Creek - East

- CDOT Region 5 was allotted $\$ 8.01$ million of FY 2007 House Bill 02-1310 funds for reconstruction of a highway section that was rated as having zero years of remaining service life. Region 5 engineers with input from the Transportation Planning Regions selected US 160 from Mileposts 7.3 to 13 for total reconstruction, including two, 12-foot-wide lanes and eight-foot-wide shoulders. A hill at Milepost 10 that currently causes shading and icing on the highway may be reduced in size.
- Advertisement for construction bids is scheduled for December of 2007, with construction following in the spring of 2008. Construction is anticipated to be complete in the summer of 2008.


## US 550 Rockfall Mitigation Projects

- Molas Pass Rockfall Mitigation, Phase II, from Mileposts 58.18 to 58.42. The work included removal of overhanging knobs, rock scaling, spot rock reinforcement, and rock mesh. The project was completed in August of 2006 at a cost of $\$ 646,000$, eight percent under budget.
- Coalbank Pass Rockfall Mitigation, from Mileposts 58.1 to 58.5. The scope of work includes trim blasting, rock scaling, spot rock reinforcement, and rock mesh. Construction is anticipated for fall of 2007 . The budget for is $\$ 850,000$.


## Other Projects

- US 160 Federal Funding. US 160, from Farmington Hill to one mile east of Bayfield, was allocated $\$ 6.8$ million in Federal funds for projects in the corridor.
- US 160 Environmental Document. The US 160 Final Environmental Impact Statement (FEIS) was published in May 2006 and a public hearing was held on the FEIS in June 2006. A Record of Decision (ROD) was issued on November 7, 2006. The selected alternative in the ROD would four-lane US 160 from the intersection of US 160/US 550 (Farmington Hill) to east of Bayfield, generally along the existing alignment with shifts in alignment in some areas to avoid impacts to resources. The intersections of US 160/US 550 at Farmington Hill, Three Springs Boulevard, and US 160/SH 172 would all be constructed as interchanges, with other intersections upgraded to meet standards.
- US 550/US 160 Junction. Approximately $\$ 26$ million, including $\$ 21$ million of SB-1 funds, has been programmed for a modified design-build project at Farmington Hill, east and west of the US 550/US 160 junction. This project will include a fourth westbound lane through the intersection and partial construction of the new US

550/US 160 interchange, including two structure ramps. The design-build project will be advertised in the summer of 2007 with construction anticipated to start in the spring of 2008.

- US 550 Environmental Document. The US 550 Environmental Assessment (EA) was completed in July 2005 with a Finding of No Significant Impact (FONSI) issued in December 2005. The documents address the environmental impacts and mitigation for four-laning US 550 from approximately Mileposts 1.0 to 15.4. The roadway would generally follow the existing highway alignment, with alignment shifts east and west as needed to improve the highway geometry and reduce impacts to the environment and existing development. Each travel direction would be a paved section of two 12 -foot travel lanes, a four-foot minimum inside shoulder, and a tenfoot outside shoulder.
- US 550 Federal Funds. A $\$ 14.8$ million project, including an FY 2008 Federal earmark of $\$ 13.26$ million, will construct two new bridges and two additional lanes on US 550, between Mileposts 0.5 and 2.75, to accommodate anticipated future fourlaning of the highway. Construction is expected to begin in March 2008 and end in October 2008.

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## TRANSPORTATION SYSTEM INVENTORY

## Introduction

This section provides an overview of the existing transportation system including highway system, public transportation, bicycle, pedestrian, rail, and aviation systems. Each mode has been examined along with its infrastructure, level of service, capacity, operating, and safety characteristics to identify existing conditions. Not only will this "picture" of the existing systems broaden our knowledge of what types of transportation serve the TPR, it also provides the base of information necessary to determine future transportation investments by allowing for the identification of deficiencies within each system.

The approach to collecting data on the existing transportation system relied to a significant degree on the Transportation Planning Data Set as developed by the Colorado Department of Transportation (CDOT). The dataset contains complete information as collected by CDOT on the highway characteristics and traffic data as well as modal components of the state's transportation system. Information from the dataset has been mapped and displayed using the ArcView/GIS program where appropriate.

## System Inventory

The following sections utilize the best, most current data available as provided by CDOT. Most highway information is for the year 2005, the most recent data available. However, URS consultants worked closely with CDOT staff to update the 2005 dataset to reflect the most current data. The following sections describe the region's highway system with the following information:

- National Highway System
- Functional Classification and Mileage
- Scenic Byways
- Traffic Volumes
- Surface Condition
- Bridges
- Accident Locations
- Paved Highway Shoulders
- Commercial Truck Traffic
- Hazardous Materials Routes
- Airports
- Rails
- Bicycle/Pedestrian Facilities
- Transit

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## Highway and Local Road System

National Highway System
The National Highway System (NHS) was first created in the Intermodal Surface Transportation Efficiency Act (ISTEA) in 1991. The NHS is a system of principal arterials that are considered significant components of a nationwide network linking major ports to commercial and industrial centers, connecting major metropolitan areas, providing access to major recreational areas, connecting major intermodal facilities, and designating a sub-component of strategic defense highways. The system contains all interstate highways plus other major highways and totals about 161,000 miles nationwide. Colorado has about 3,356 miles on the NHS with about 240 miles in the Southwest TPR on US 550, US 491, and US 160. See map 2 for the NHS.

## Functional Classification

The classification of the highway system, as defined by CDOT, is divided between rural and urban areas. The functional classification system is based on the grouping of streets and highways into classes, according to the character of the service they are intended to provide. The road classes are further divided into Arterials, Collectors, and Local:

- Arterial - a major highway primarily for through traffic usually on a continuous route. The classification is divided into Interstate, Freeways and Expressways, Principal Arterials, and Minor Arterials.
- Collector - streets whose primary purpose is to serve the internal traffic movement within an area. The classification is divided into Major and Minor Collector (Rural), and Collector (Urban).
- Local - streets whose primary purpose is feeding higher order systems (Collector \& Arterial), or providing direct access with little or no through traffic.

Map 3 shows the State Highways (SH) functional classification.

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## State Highways

Table 2 shows mileages and percent of total state highways for each functional classification within the TPR. Of just under 500 miles, approximately $50 \%$ are Rural Principal Arterial, 24\% Rural Major Collector, and 19\% Rural Minor Arterial.

Table 2: State Highway Functional Classification

|  | Highway Classification | Percentage of Total | Miles |
| :---: | :---: | :---: | :---: |
| Rural | Interstate | 0.0\% | 0 |
|  | Other Principal Arterial | 50.0\% | 249 |
|  | Minor Arterial | 18.9\% | 94 |
|  | Major Collector | 23.9\% | 119 |
|  | Minor Collector | 0.0\% | 0 |
|  | Local | 0.0\% | 0 |
| Urban | Freeway | 0.0\% | 0 |
|  | Other Principal Arterial | 6.5\% | 32 |
|  | Minor Arterial | 0.5\% | 3 |
|  | Collector | 0.2\% | 1 |
|  | Local | 0.0\% | 0 |
| Total |  | 100.0\% | 498 |

Source: CDOT

## Local Roadways

Table 3 shows mileages and percent of total local roadways for each functional classification within the TPR. Of just under 3,000 miles, approximately $72 \%$ are Rural Local, $15 \%$ are Rural Minor Collector, and 7\% are Rural Major Collector.

Table 3: Local Roadway Functional Classification

| Rural | Classification | Percentage of Total | Miles |
| :--- | ---: | ---: | ---: |
|  | Interstate and Freeway | $0.0 \%$ | 0 |
|  | Other Principal Arterial | $0.0 \%$ | 0 |
|  | Minor Arterial | $0.2 \%$ | 6 |
|  | Major Collector | $6.9 \%$ | 204 |
|  | Minor Collector | $14.9 \%$ | 443 |
|  | Local | $71.8 \%$ | 2,131 |
|  | Interstate and Freeway | $0.0 \%$ | 0 |
|  | Other Principal Arterial | $0.1 \%$ | 3 |
|  | Minor Arterial | $1.4 \%$ | 41 |
|  | Collector | $0.9 \%$ | 28 |
|  | Local | $3.7 \%$ | 110 |
|  |  | Total | $100.0 \%$ |

Source: CDOT

## Scenic Byways

The Colorado Scenic and Historic Byways program is a statewide partnership intended to provide recreational, educational, and economic benefits to Coloradoans and visitors. This system of outstanding touring routes offers the traveler interpretation and identification of key points of interest and services while providing for the protection of significant resources.

Scenic and Historic Byways are nominated by local partnership groups and designated by the Colorado Scenic and Historic Byways Commission for their exceptional scenic, historic, cultural, recreational, and natural features. (From the Official Site of Colorado's Scenic and Historic Byways)

## http://www.coloradobyways.org/Main.cfm)

The Scenic Byways in the region include:

- San Juan Skyway (US 550 north of Silverton south to Durango, and US 160 from Durango to the west [state line]).
- Trail of the Ancients (SH 145 north of Rico down to Cortez, segments of US 491 [previously US 666])
- Alpine Loop (portions of SR 110) and other roadway segments are designated as Scenic Byways of the SWTPR.

Map 4 shows the location of these scenic byways.
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## Average Annual Daily Traffic (2005 \& 2035)

Traffic volumes on state highways were generated using CDOT data for 2005, the most recent available. The data is based on a mix of permanent traffic counters, temporary (mobile) traffic counters, and a model comparing known values to similar roadways across the state. The Average Annual Daily Traffic (AADT) is a commonly used measure that provides the total number of vehicles on a highway throughout the year divided by 365. This method helps "smooth" peaks and valleys in the traffic profile that may be seasonal (recreation or agriculture) or special event triggered.
The 2035 AADT projections show increases in traffic especially in and around popular centers. Map 5 shows AADT for 2005 and map 6 shows AADT for 2035. See Table 4 for the growth in lane miles over 10,001+ AADT from 2005 to 2035.

Table 4: Miles of Road with 10,001+ AADT

| Year | Miles of Road with 10,001+ <br> AADT |  |
| ---: | ---: | ---: |
| 2005 |  | 29.1 |
| 2035 |  | 119.8 |

## Volume to Capacity Ratio (2005 \& 2035)

The Volume to Capacity Ratio, commonly referred to as V/C (V over C), is another commonly used measure of traffic congestion. It provides information about congestion on the facility, rather than the raw number of vehicles. For instance, 5,000 vehicles per day on a narrow, twolane road with no shoulders is much more congested than 5,000 vehicles per day on a 4 -lane interstate facility. In maps 7 (2005 data) \& 8 (2035 data), the volume (AADT) is compared with the capacity of the facility to obtain a ratio between 0.0 (no congestion) and 1.00 (gridlock). CDOT's congestion relief program makes some funds available for improvements on corridors that exceed the 0.85 threshold. CDOT uses 0.85 or above to define congestion.
The 2035 V/C ratios show that congestion on the US 160 and US 550 corridors will become more noticeable as congestion spreads from the regional centers - Durango and Pagosa Springs.

The 2035 V/C ratio does not reflect potential capacity improvements on the corridor, but is based on current roadway capacity.

Table 5: Volume to Capacity Ratio (2005)

| V/C Ratio <br> $\mathbf{2 0 3 5}$ | Total <br> Miles | Out of total <br> Number of <br> Miles | \% of Total <br> Mileage |
| ---: | ---: | ---: | ---: |
| $0.00-0.59$ | 454.8 | 496.1 | $91.7 \%$ |
| $0.60-0.84$ | 13.2 | 496.1 | $2.6 \%$ |
| $>0.85$ | 28.1 | 496.1 | $5.7 \%$ |

Source: CDOT

Table 6: Volume to Capacity Ratio (2035)

| V/C Ratio <br> $\mathbf{2 0 3 5}$ | Total <br> Miles | Out of total <br> Number of <br> Miles | \% of Total <br> Mileage |
| ---: | ---: | ---: | ---: |
| $0.00-0.59$ | 368.4 | 496.1 | $74.2 \%$ |
| $0.60-0.84$ | 79.3 | 496.1 | $16.0 \%$ |
| $>0.85$ | 48.5 | 496.1 | $9.8 \%$ |

Source: CDOT



Highway Surface Condition (2005)
CDOT rates the condition of highway surfaces with its Pavement Management System, providing a range of years of Remaining Service Life (RSL) of the pavement for the highway segment. The RSL calculation is based on roughness, cracking, patching, rutting and other indicators of smoothness and structure. The Colorado Transportation Commission has set a goal of maintaining the state's highway system, overall, with a minimum of $60 \%$ rated Good and Fair. Resurfacing projects are not normally chosen as part of the long-range plan, but are scheduled by CDOT according to the output of the Pavement Management System. Figure 2 reflects the miles and percentage of the system of state highways in the TPR that are in Good/Fair/Poor condition based on Remaining Service Life. A good surface condition corresponds to a remaining surface life of 11 years or more. A fair surface condition corresponds to a remaining surface life of 6 to 10 years, while a poor evaluation represents a remaining surface life of less than 6 years.

Figure 2: Roadway Surface Conditions (2005)


Source: CDOT 2005 Dataset

Overall, the number of Good and Fair roadway miles specific to this TPR is $84 \%$ which represents a total of 420 miles, this is over the CDOT goal of $60 \%$. Map 9 depicts the roadway conditions within the TPR.


## Bridge Condition

Each bridge on the state highway system is given a Bridge Sufficiency Rating (BSR) by CDOT's Bridge Management System relevant to its structural (aging or other engineering deficits) or functional (usually width limitations) integrity. The bridges are ranked from 0-100. Bridges with a sufficiency rating of less than 80 and are either Structurally Deficient (SD) or Functionally Obsolete (FO) are eligible for funding. More specifically, bridges with ratings between 51 and 80 are eligible for rehabilitation and those rated below 50 are eligible for replacement. Bridge repair and replacement projects are not a normal part of the long range planning process, but are chosen by CDOT on the basis of sufficiency rating, funding availability, and proximity to other highway projects. When highways are upgraded or have other major work performed, CDOT also upgrades the associated bridges to current standards as a matter of policy.
Map 10 depicts the location of eligible bridges located within the TPR.

Table 7: Bridge Conditions

| Bridge <br> ID | Route | Intersecting Feature | Mile Post | Sufficiency <br> Rating | Deficiency <br> Type |
| ---: | ---: | :---: | ---: | ---: | ---: |
| P-09-X | 84 A | Coyote Creek | 11 | 63 | SD |
| O-04-K | 140 A | La Plata River | 20 | 74 | FO |
| P-04-A | 140 A | La Plata River | 16 | 68 | FO |
| O-05-T | 160 A | Lightner Creek | 83 | 58 | FO |
| O-08-A | 160 A | San Juan River | 144 | 73 | FO |
| P-05-B | 160 A | Florida River | 94 | 64 | FO |
| O-02-I | 160 A | McElmo Creek | 36 | 64 | FO |
| O-03-E | 160 A | Mancos River | 57 | 79 | FO |
| P-06-G | 160 E | Los Pinos River | 1 | 57 | FO |
| P-06-H | 160 E | Los Pinos River | 1 | 62 | FO |
| M-06-K | $550 B$ | Mineral Creek | 70 | 48 | FO |
| O-05-AU | $550 B$ | Roadway, Game Underpass | 36 | 80 | FO |
| O-05-H | $550 B$ | Hermosa Creek | 32 | 79 | FO |

Source: CDOT Select Bridge List

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## Fatal Crash Rate by Corridor

Current funding levels used in the 2030 Plan resulted in an estimated performance level of an average fatal crash rate of 1.47 per 100 million vehicle-miles of travel (VMT). Comparing a corridor's rate against the average crash rate could be an indicator of the relative safety of the corridor, and this measure compensates for high volume highways. Therefore - from a planning perspective - a relatively high crash rate will help identify areas that should be given further analysis. However, many factors play into actual decisions on where to make safety improvements, such as cost-benefit analysis, type of crash, and crashes caused by driver behavior, etc. Vehicle crashes may have any combination of three causes: driver error (driving too fast for conditions), vehicle failure (loss of brakes), or highway design (poor sight distance). With this in mind, not all crashes can be prevented by highway improvements. Table 8 shows the 2005 VMT data, the number of crashes in each corridor for the 1999-2003 time period, and the calculated five-year average fatal crash ratio for each corridor.

Table 8: Fatal Crash Rates by Corridor

| Corridor Name | Beginning <br> Mile Post | End Mile <br> Post | Daily VMT <br> (2005) | Total Fatal <br> Crashes | Fatal Crash Rate <br> (per 100 MMVMT) |
| ---: | ---: | ---: | ---: | ---: | ---: |
| SH 151 | 0.000 | 33.96 | 43,118 | 6 | 7.64 |
| SH 41 | 0.000 | 9.505 | 7,789 | 1 | 7.14 |
| SH 140 | 0.000 | 23.435 | 44,219 | 5 | 6.21 |
| SH 172 | 0.000 | 24.499 | 102,150 | 6 | 3.22 |
| US 491 B | 26.371 | 69.602 | 166,984 | 7 | 2.23 |
| US 160 | 0.000 | 155.051 | $1,164,037$ | 44 | 2.07 |
| US 550 | 0.000 | 80.179 | 413,995 | 11 | 1.46 |
| SH 84 | 0.000 | 27.924 | 45,711 | 1 | 1.20 |
| SH 184 | 0.000 | 26.599 | 53,389 | 1 | 1.03 |
| SH 145 | 0.000 | 59.451 | 161,267 | 2 | 0.68 |
| SH 110 | 0.000 | 0.097 | 392 | 0 | 0 |
| SH 141 | 0.000 | 7.349 | 4,172 | 0 | 0 |
| SH 3 | 0.000 | 2.444 | 19,363 | 0 | 0 |
| US 491 A | 0.000 | 6.422 | 21,129 | 0 | 0 |
| Source: CDOT |  |  |  |  | 0 |

## Paved Highway Shoulders

Paved shoulders play an important part in improving safety conditions for private vehicles and trucks. In addition, many cyclists enjoy riding on the region's highways, often utilizing paved shoulders when they are present. These trips are made safer and more convenient for cyclists and motorists alike when a substantial paved shoulder is available for riding. Map 11 shows state highways that lack a minimum 4 foot paved shoulder perceived to provide the minimum margin of safety. It is the policy of CDOT to incorporate shoulder improvements to enhance safety for the motoring public and bicyclists along state highways whenever an upgrade of the roadways and structures is being implemented and is technically feasible and economically reasonable. See Map 11 for highway shoulders.

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## Commercial Truck AADT

Trucks carry almost all the region's goods and are critical to its economic vitality. Heavy truck traffic also provides a challenge in terms of safety (especially on narrow mountain roads), congestion, noise and impacts to the service life of roadway surfaces.

Maps 12 and 13 provide a comparison of growth in Commercial Truck Average Annual Daily Traffic (AADT) from 2005 to 2035. The truck volumes have been normalized by the number of lanes to compensate for greater capacity on four or six lane facilities. The map shows the number of trucks per lane per day.

## Hazardous Material Routes

Four major routes in the region are designated as hazardous materials routes. These hazardous materials routes are: US 160, US 550 (south of Durango), SH 491, and SH 141. Transporters of all hazardous materials listed in Table 1 of the Colorado Code of Regulations (CCR), Part 172 and must adhere to these designated routes if the quantities being transported are over certain regulated amounts or in certain types of containers. Exceptions may be granted under some conditions. Information permits, and complete regulations are available for the Colorado State Patrol at http://csp.state.co.us/HazMat.htm. Map 14 depicts the designated hazardous material routes.

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## Airport Operations

Aviation facilities within the region are limited to three general aviation service facilities and two commercial service facilities. The airports contribute to the region's mobility and access to services as well as helping to support economic activity.

General aviation services include fixed base operators, flight instruction, fueling, aircraft repair and maintenance, air taxi/charter, corporate flight, airport maintenance and administration, etc. There is no public transit service available to either airport, however private service is available.
Commercial aviation facilities provide for the bulk of business and passenger activity. Together general and commercial activities enhance and support the regions economy. Commercial service at the Durango airport is available to Denver, Salt Lake City, and Phoenix, Cortez is served by a route to Denver.

Table 9 describes the region's airport's facilities and operations.

## Airports

Map 15 shows the locations of the two commercial service airports in the TPR in Cortez and south of Durango, along with the three general aviation airports in Dove Creek, Durango, and Pagosa Springs.

Table 9: Southwest Regional Airport Operations

| Airport | Dove Creek <br> Airport | Stevens Field | Durango-La <br> Plata County <br> Airport | Animas <br> Airpark | Cortez <br> Municipal <br> Airport |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Airport Attribute | Dove Creek | Pagosa <br> Springs | Durango | Durango | Cortez |
| FAA <br> Classification | N/A | General <br> Aviation | Primary Service | N/A | Commercial <br> Service |
| Functional Level | Minor | Major | Major | Intermediate | Major |
| Annual <br> Enplanements | N/A | N/A | 101,400 | N/A | 9,300 |
| Based Aircraft | 5 | 49 | 67 | 48 | 31 |
| Annual <br> Operations | 500 | 16,650 | 34,060 | 9,110 | 13,240 |
| \# of Runways | 1 | 1 | $1 / 19$ | $2 / 20$ | $1 / 19$ |
| Runway ID | $1 / 19$ | 8,100 | 9,201 | 5,010 | 1 |
| Length in Feet | 4,200 | 100 | 150 | 50 | $3 / 21$ |
| Width in Feet | 50 | Asphalt | Asphalt | Asphalt | Asphalt |
| Surface Type | Dirt | MIRL | HIRL | MIRL | MIRL |
| Lights | None | Yes | Yes | Non-standard | Yes |
| Approach Lights | No | Lights: HIRL - High Intensity Runway Lights, MIRL - Medium Intensity Runway Lights |  |  |  |

Source: Colorado Aviation System Plan 2005
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## Rail Transportation

The only passenger rail service in the region is on the Durango and Silverton Narrow Gauge Railroad, a historic railway providing visitors the opportunity to experience a piece of the Old West. The railroad has been in continuous operation for 125 years and offers year round service, including many special excursion trains. The 45 mile line carries about 200,000 passengers each year. Map 16 shows the rail locations.

## Freight Rail Service

No freight rail service is available in the Southwest TPR.

## Rail Abandonment's

No known rail abandonments are in process.


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## Designated Bike Routes

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

Many cyclists enjoy riding on the region's highways. These trips are made safer and more convenient for cyclists and motorists alike when a substantial paved shoulder is available for riding. Map 11 shows state highways with paved shoulders wider than four feet, the minimum perceived safety margin.
It is the policy of CDOT to incorporate the necessary shoulder improvements to enhance safety for both the motoring and non-motoring public along state highways whenever an upgrade of the roadways and structures is being implemented and is technically feasible and economically reasonable.

In addition to the opportunities afforded bicyclists on the state highway system, there is an extensive existing trail system that links open spaces and provides safe access to schools, shopping facilities and recreational areas. The primary challenge for communities is to develop plans and funding options to enhance, extend and connect these systems to create a seamless non-motorized system. In addition to significant local contributions, funding from the Transportation Enhancements Program has been and is expected to continue to be a major source of funding for non-motorized trail projects.

Bicycle facilities include on-street facilities such as bike lanes, bike routes, low-volume roads and roads with shoulders and off-street facilities such as paths, bridges, overpasses and underpasses. Plans should include a mix of all these facilities, and may include state highways, county and local roads.

## Transit System

This section reviews the existing transit systems, facilities, and services; analyzes the transit service gaps; and estimates the overall transit demand within the Southwest TPR. This information will be used in the development of transit strategies to meet the demand and service gaps for transit-dependent and general public populations.

## Transit Providers Overview

Increasing pressures of growth experienced throughout the region by both the permanent and seasonal population has resulted in a lack of affordable housing and longer commute distances. Public transportation systems thus represent an important element for access and mobility in the region. The Southwest TPR is currently served by seven primary transit "providers." These agencies represent both public transit agencies and agencies that provide some type of transportation service to meet the needs of the seniors. The following section provides information on each of the agencies that returned updated information. Information regarding operating and capital costs, revenues, and ridership was provided by most of the primary agencies. Map 17 illustrates the areas served by these agencies.

## Transit Provider Profiles

The following section provides a one-page profile of each major transit service provider within the Southwest TPR. The profile includes service and operating characteristics, agency information, funding types, ridership trends, and performance measures.


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## Archuleta County Mountain Express

Mountain Express, operated by Archuleta County, began service in July 1999 from a Job Access and Reverse Commute grant program. The grant provided funds to purchase a new small bus and operate fixedroute public transit service in the Pagosa Springs area. The new fixed-route service supplements the Senior Transportation Program, which provides demandresponse service.


Mountain Express operates Monday to Saturday from 6:00 a.m. to 6:30 p.m. The route serves downtown Pagosa Springs, uptown Fairfield area (including the Pagosa Lakes core area), Aspen Springs, and Turkey Springs along US Highway 160. The one-way route is 30 miles and has 21 scheduled stops that are served eight times throughout the day.

The Highway 160 corridor is the primary location for employment in the community. The fixedroute service serves the training center, employment services, education center, childcare providers, schools, shopping centers, and lodging facilities. The route provides a connection between the two hubs on US 160-the Fairfield area and the Pagosa Springs downtown areathat is approximately five miles between the two areas.
As of July $2^{\text {nd }}, 2007$ due to a countywide layoff Archuleta County Mountain Express has drastically scaled back their service days and hours to approximately three runs per day. Service area and bus stops have not changed. The agency new operating cost estimate for 2008 is $\$ 103,362$. With the new changes, the agency estimated providing 7,000 one-way trips with approximately 24,960 vehicle miles and 1,300 vehicle hours.

## Agency Information

Type of Agency: Government Agency
Type of Service: Fixed-route
Funding Type: FTA 5311, Job Access Reverse Commute (JARC) funds, Colorado Works Program, Medicaid, fares, in-kind support, county and local general funds, and other grant funds.
Eligibility: General public; however, the agency primarily provides transportation for low-income persons.

## Operating Characteristics

Size of Fleet: 3 body-on-chassis vehicles


Annual Operating Budget: $\$ 232,935$
Annual Passenger-Trips: 13,883
Operating Days and Hours: Monday- Saturday from 6:00 am to 6:30 pm
Performance Measures
Cost per Service Hour: \$53.10
Cost per Passenger-Trip: $\$ 16.78$

Passenger-Trips per Service Hour: 3.17
Ridership Trend*: See graph @ right
Contact for Schedules and Information
George Barter
Phone: 970-731-3060
E-mail: gbarter@archuletacounty.org

* Note: Ridership includes Archuleta County Senior Services up to 2004.

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## Archuleta County Senior Services

The Archuleta County Senior Services offers the following transportation services to residents:

- Local "Senior Bus" providing demandresponse service in Pagosa Springs for seniors and persons with disabilities for medical, shopping, and nutrition trips.
- Long distance "shopping trips" to Durango and Farmington, New Mexico.

- "Medical Shuttle" to Durango.
- "Meal-on-Wheels" transportation in the Pagosa Springs area.

The agency uses a 2004 18-passenger bus which has wheelchair accessibility for its demandresponse service which operates from 9:00 a.m. to 4:00 p.m. weekdays, except Thursdays when the vehicle is used for long distance shopping trips or for other special events. The agency has one full-time driver and three volunteer drivers.

## Agency Information

Type of Agency: Government Agency
Type of Service: Demand-response
Funding Type: FTA 5310, Title III B funds, United Way grant, and other grants Eligibility: Agency provides transportation services to seniors ( 60 years and older) and persons with disabilities.

## Operating Characteristics

Size of Fleet: 1 body-on-chassis vehicle
Annual Operating Budget: $\$ 37,224$
Annual Passenger-Trips: 6,570
Operating Days and Hours: Four days a week, from 9:30 am to 4:00 pm

## Performance Measures

Cost per Service Hour: $\$ 33.21$
Cost per Passenger-Trip: $\$ 5.67$
Passenger-Trips per Service Hour: 5.9
Ridership Trend: See graph @ right
Contact for Schedules and Information
Musetta Wollenweber
451 Hot Springs Blvd.
Pagosa Springs, CO 81147
Phone: 970-264-2167


E-mail: mwollenweber@archuletacounty.org

## Durango Transit (T)

The City of Durango currently operates the Loop, the Trolley, and the Opportunity Bus.
The Loop operates six fixed routes, including the night routes. There are five routes operating in the winter, and three routes operating in the summer. Service is provided to the neighborhoods in Crestview, South Durango, north and south businesses and shopping areas, Fort Lewis College, Durango Tech Center, and Highway 160 West.


The Trolley operates on Main Avenue from downtown to the Iron Horse Inn and Days Inn. This service is operated year-round and has a fare of $\$ 0.50$ for each one-way trip. Though much of the summer use is by visitors to the community, local residents use the service throughout the year.

The Opportunity Bus is a demand-response, door-to-door service for the Durango urban area. The Opportunity Bus provides service to origin/destination points up to 10 miles outside of the city limits.
The service area includes the City of Durango and La Plata County within 10 driving miles outside city limits. With prior arrangements, residents can be picked up off the scheduled routes.

## Agency Information

Type of Agency: Government Agency
Type of Service: Fixed-route, paratransit, and route-deviation
Funding Type: FTA 5309 and 5311, local and county general funds, Medicaid, advertising, fares, donations, parking ticket fund, Fort Lewis College, lodging tax, and other grants
Eligibility: Agency provides transportation services to the general public.

## Operating Characteristics

Size of Fleet: 14 vehicles
Annual Operating Budget: \$1,196,232
Annual Passenger-Trips: 296,269
Operating Days and Hours: Seven days a week, from 7:00 am to 11:00 pm (summer)
Six days a week, from 6:00 am to 11:00 pm (fall)

## Performance Measures

Cost per Service Hour: \$44.02
Cost per Passenger-Trip: $\$ 4.04$
Passenger-Trips per Service Hour: 10.9
Ridership Trend: See graph @ right

## Contact for Schedules and Information

Ann Capela
949 East 2nd Avenue, Durango, CO 81301
Phone: 970-375-4949
E-mail: capelaak@ci.durango.co.us


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Dolores County Senior Services
The Dolores County Senior Services provides demandresponsive transportation for seniors in the Dolores County area in the communities of Dove Creek and Cahone. Transportation services are provided to the Cahone Recreation Hall and the Senior Center for congregate meals, and for other purposes such as medical appointments, visiting nursing homes, and for recreational purposes.

The agency has three part-time drivers. This agency has three vehicles in its fleet ranging from 5 to 12-passenger capacity. One of the three vehicles has wheelchair accessibility with two
 tie-downs. The agency coordinates whenever possible with Montezuma Senior Services for passengers taking long trips between the two areas.

## Agency Information

Type of Agency: Government Agency
Type of Service: Demand-response
Funding Type: Title IIIB funds, in-kind support, and other grants
Eligibility: Agency provides transportation services to seniors (60 years and older) and persons with disabilities.

## Operating Characteristics

Size of Fleet: 1 body-on-chassis and 2 vans
Annual Operating Budget: $\$ 16,930$
Annual Passenger-Trips: 3,022
Operating Days and Hours: Five days a week, from 9:00 am to 5:00 pm

## Performance Measures

Cost per Service Hour: $\$ 37.87$
Cost per Passenger-Trip: $\$ 5.60$
Passenger-Trips per Service Hour: 6.76
Ridership Trend: See graph @ right
Contact for Schedules and Information
Nita Purkat
P.O. Box 164, Cahone, CO 81320.

Phone: 970-562-4626
E-mail: dcsenior@fone.net

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## Montezuma Senior Services

Montezuma Senior Services, based out of Cortez, provides on-call, door-to-door, demand-responsive transportation to the general public, seniors, and persons with disabilities within Montezuma County. The agency provides transportation in Dolores and Mancos on Mondays, Wednesdays, and Fridays. Residents of these areas are encouraged to plan trips to Cortez on these scheduled days of service. The primary service for these communities is transporting seniors to meal sites in the communities. This agency also takes clients as far as Towaoc.


Service in Cortez is demand-response and for all nonemergency trip purposes. Service is available to the general public, seniors, and persons with disabilities from 8:30 a.m. to $4: 30$ p.m., Monday through Friday. The agency has seven vehicles in its fleet ranging from 7-to 13-passenger capacity. Three of the seven vehicles have wheelchair accessibility with two tie-downs.

## Agency Information

Type of Agency: Government Agency
Type of Service: Paratransit (door-to-door)
Funding Type: FTA 5310 and 5311, Title IIIB funds, Colorado Service Block Grant, Vista Grande nursing home, TANF funds, Ute Mountain Ute Tribe, local general funds, in-kind support and other grants
Eligibility: Agency provides transportation services to seniors (60 years and older).

## Operating Characteristics

Size of Fleet: 3 body-on-chassis vehicles +4 vans
Annual Operating Budget: $\$ 97,060$
Annual Passenger-Trips: 6,754
Operating Days and Hours: Monday-Friday from 8:30 am to 4:30 pm

## Performance Measures

Cost per Service Hour: \$31.29
Cost per Passenger-Trip: $\$ 14.37$
Passenger-Trips per Service Hour: 2.2
Ridership Trend: See graph @ right
Contact for Schedules and Information
Mary Holaday
107 North Chestnut, Cortez, CO 81321
Phone: 970-565-4166


E-mail: mholaday@co.montezuma.co.us

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## Southern Ute Community Action Programs

Southern Ute Community Action Programs (SUCAP) is a private nonprofit organization governed by an independent board of directors on the Southern Ute Indian Reservation. The agency provides fixed-route service with route deviations, plus demand-responsive service within two local service areas (Bayfield and Ignacio). Road Runner Transit service is curb-to-curb and provided for the general public.
Road Runner Transit's service area includes the east side of La Plata County, with two routes carrying passengers from Ignacio and Bayfield. Funding was recently awarded for an additional route connecting the Forest Lakes subdivision to Bayfield and the route to Durango, then continuing south to Ignacio. A future route has been proposed connecting Farmington and Aztec, NM, with jobs generated at Southern Ute Tribal government and associated enterprises. The 24 -mile Ignacio fixed-route is along State Highway 172 and US Highway 160 to Durango; the Southwest Horizons Ranch affordable housing project is a frequent route deviation.

The Forest-Lakes-Bayfield route will start in January, 2008 and run one commuter trip in the morning, returning in the evening.

## Agency Information

Type of Agency: Private Nonprofit, designated transit authority of the Southern Ute Indian Tribe, operating under authority of an Intergovernmental Agreement between the Southern Ute Indian Tribe, two counties and three municipalities.
Type of Service: Fixed-route, demand-response, route-deviation, and curb-to-curb transportation services Funding Type: FTA 5311, local and county general funds, tribal funds, and advertising.
Eligibility: Agency provides transportation services to the general public.

## Operating Characteristics

Size of Fleet: 4 body-on-chassis and 1 van
Annual Operating Budget: $\$ 333,475$ (provisional 2008 budget)
Annual Passenger-Trips: 10,014
Operating Days and Hours: Five days per week, from 6:00 am to 6:20 pm (Monday-Friday) and from 11:00 am to 3:45 pm (Saturday)

## Performance Measures

Cost per Service Hour: \$63.49
Cost per Passenger-Trip: $\$ 12.57$
Passenger-Trips per Service Hour: 5.05
Ridership Trend: See graph @ right
Contact for Schedules and Information
Peter Tregillus
285 Lakin, Ignacio, CO 81137
Phone: 970-563-4545
E-mail: ptregillus@sucap.org

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## La Plata County Senior Services

La Plata County Senior Services, based out of the Durango/La Plata Senior Center in Durango, provides on-call door-to-door demand-response transportation services to seniors and persons with disabilities. Service is provided throughout La Plata County, including Bayfield, Ignacio, Vallecito, Allison, Marvel, Red Mesa, Hesperus, Hermosa, and other unincorporated areas of the County outside of the City of Durango and outside the Southern Ute Tribal lands. The service is available from 8:30 a.m. to 5:00 p.m., Monday through Friday. The primary service is transporting seniors for medical appointments and to meal sites in the community.

## Agency Information

Type of Agency: Government Agency


Type of Service: Demand-response (door-to-door transportation)
Funding Type: Title III B funds, United Way grant, and other grants
Eligibility: Agency provides transportation services to seniors (60 years and older) and persons with disabilities.

## Operating Characteristics

Size of Fleet: 14 -passenger vehicle +2 minivans
Annual Operating Budget: \$90,922
Annual Passenger-Trips: 2,454
Operating Days and Hours: Five days a week, from 8:30 a.m. to 5:00 p.m.

## Performance Measures

Cost per Service Hour: Not Available
Cost per Passenger-Trip: $\$ 23.71$
Passenger-Trips per Service Hour:
Not Available
Ridership Trend: See Graph @ right

## Contact for Schedules and Information

Sheila Casey
2424 Main Avenue, Durango, CO 81301


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E-mail: CASEYSJ@co.laplata.co.us

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## Other Providers

Some of the other providers in the area are listed below. Due to lack of information provided by these agencies, some of the information is based on the 2030 Transit Element.

## Ute Mountain Ute Tribe Transportation

Ute Mountain Ute Tribe Transit Service is managed by the Planning Office, which provides four scheduled routes from Towaoc to Cortez, five days a week. The service is provided for the general public, seniors, persons with disabilities and the developmentally disabled. In 2002, the Ute Mountain Ute Tribe provided approximately 4,530 annual one-way trips involving approximately 47,000 vehicle miles and 2,000 vehicle hours.

## Mountain Ute Casino Shuttle

The Ute Mountain Ute Casino Shuttle serves a dual purpose of transporting area visitors to and from the Casino and other tribal enterprises. The second service it provides is transportation for the Tribal Casino employees, from both Towaoc and Cortez, making it a 24 -hour service in conjunction with the Ute Mountain Ute Tribe Transit System. The Casino Shuttle is seasonal, and the number of employees fluctuates with the seasons.

The Ute Mountain Ute Casino Shuttle was conceived and developed by a Ute tribal member to provide shuttle service from the nearby Town of Cortez to the Casino. The Casino Shuttle is free for passengers and is paid for solely by the Ute Mountain Ute Casino. The Ute Mountain Ute Casino operates the Casino Shuttle and also the Casino Trolley, which is door-to-door transportation from the parking lot to the Casino. The Casino Shuttle requires one-hour advance reservations. The Casino Shuttle also provides free service to bingo in Shiprock, New Mexico on Mondays and Tuesdays.

## Ute Mountain Ute Head Start

The Ute Mountain Ute Head Start Program operates out of Towaoc for low-income families on the Reservation. The Head Start Program provides transportation service for children ages three to five years old. Transportation is also provided off the Reservation, primarily to Cortez.

## Ute Mountain Ute Senior Citizens Program

The Ute Mountain Senior Citizens Program operates service daily to Cortez in the morning and travels to Cortez each afternoon by request. Senior citizens living on the Reservation call into the office to make reservations. Transportation is also available to Durango and Farmington by request.

## Ute Mountain Ute Tribe Department of Social Services

The Department of Social Services (DSS) for the Ute Mountain Ute Tribe operates from Towaoc for low-income and at-risk families. DSS provides transportation both on and off the Reservation, primarily for children's activities and for treatment. Annual operating costs are funded 100 percent from the Bureau of Indian Affairs (BIA).

## Ute Mountain Ute Tribe Johnson O'Malley (JOM) Program

The Ute Tribe JOM Program provides kindergarten transportation and to after-school activities. The children are picked up at their homes and are taken to school in Cortez. The children are then taken home in the afternoon or taken to after-school activities.

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## Durango Mountain Resort

Durango Mountain Resort (DMR) also provides free public transportation within the resort area. The shuttle, called the North County Shuttle, runs daily from 8:00 a.m. to 6:00 p.m between Tamarron, Purgatory and Cascade Village. Passengers need to call the Tamarron front desk to schedule a pick-up. DMR also provides on-call demand-response service to Durango, Durango Airport, Silverton, Mesa Verde, Ouray and other destinations. The trips vary in price depending on the destination and the number of passengers.

Durango Mountain Resort also provides bus transportation between Silverton and DMR for their employees who reside in Silverton. As DMR grows and expands its operations in the future, it is committed to building employee housing in Silverton.

## Community Connections

Community Connections is a nonprofit agency providing demand-responsive transportation to individuals with developmental disabilities primarily in and around the communities of Durango and Cortez, where the agency's corporate and satellite offices are located. Trips are also provided to Dove Creek, Bayfield, Pagosa Springs, and Silverton. In addition to providing transportation, the agency also pays their staff 0.48 cents a mile to drive their own personal vehicle to transport clients. The agency has approximately 60 employee-owned personal vehicles that are used as needed to transport clients. The agency service area includes the counties of La Plata, Montezuma, Archuleta, Dolores and San Juan. Transportation is provided seven days a week. Hours of service vary depending on the needs of the clients but are from approximately 7:00 a.m. to 8:00 p.m. The agency has one vehicle, a 1995 Dodge Caravan in poor condition with 170,145 miles on it. It seats six passengers, has a wheelchair tiedown, and is an accessible vehicle. The agency provided approximately 65 one-way annual trips in 2006 with an annual operating cost of $\$ 93,200$. Revenue sources are primarily through comprehensive contracts which are approximately $\$ 61,000$. The agency hopes to work with other agencies such as the senior centers, adaptive sports, or Special Olympics to help provide transportation that is not available.

## San Juan Basin Area Agency on Aging (SJAAA)

The San Juan Basin Agency on Aging provides limited transportation services for seniors in the counties of San Juan, La Plata, Montezuma, Dolores and Archuleta on an as-needed basis for grocery shopping, medical services, and social events.

## American Red Cross

The American Red Cross sponsors a volunteer transportation program for cancer patients in Archuleta County. The program began in 1999 and provides transportation for cancer patients needing therapy in Durango, Colorado and Farmington and Albuquerque, New Mexico.

## Church Services

Sacred Heart of Mary Catholic Church operates one school-bus-type vehicle for a variety of parish activities. They also have a jeep that brings churchgoers from the Pine Ridge Extended Care Center to church on Sundays. St. Jude's Catholic Church and Marvel United Methodist Church also provide transportation for members.

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## Durango Transportation Inc.

Durango Transportation, Inc. operates a broad range of transportation services, which are listed below. The primary location for services is La Plata County, specifically the City of Durango.

- Transporting passengers between all points in La Plata County
- Taxi service between La Plata County Airport and all points within a 100 -mile radius of Durango
- Call-and-demand limousine and charter service for passengers between La Plata County Airport and all points within a 100 -mile radius of Durango. Service to the northern areas of Montrose, Delta, Mesa, and Gunnison are limited to and from the Montrose County Airport.
- Sightseeing service within a 100 -mile radius of Durango. Service must begin and end at the same point and is restricted on unpaved roads or jeep trails.
- Taxi, charter, and on-demand limousine service for passengers from San Juan County and Archuleta County to all points in Colorado. Service cannot originate from the Front Range counties.
- Durango Transportation provides airport shuttle, taxi service, limousine, charter buses/vans, or sightseeing service between Pagosa Springs and Durango.


## Pagosa Taxi

Pagosa Taxi is a taxi service operated in the Pagosa Springs area.

## Pine Ridge Extended Care Center

The Pine Ridge Center provides transportation for residents of the facility in Pagosa Springs. The Center provides on-demand service using one wheelchair-accessible bus.

## Regional Rideshare Program

Rideshare connects people in the Southwest Region who are interested in sharing rides to travel to similar destinations. Rideshare is sponsored by Southwest Colorado Access Network, La Plata County, San Juan Resource Conservation and Development Council, KDVR Radio at Fort Lewis College, and Region 9 Economic Development District. The program began with a grant from the Governor's Office of Energy Conservation.

The Rideshare network identifies similar commuters willing to share transportation to and from work, school, and other activities. The major goal of Rideshare is to provide a transportation alternative to people in La Plata, San Juan, Archuleta, Montezuma, and Dolores Counties.

The main access to Rideshare is through its website: www.freerideshare.org
The website provides a user guide to complete a commuter profile form. Once submitted, entries are processed and potential ride matches are connected by e-mail address. It is then the option of these riders to provide personal information. If no matches are found immediately, entries are kept for 60 days.

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## San Juan Backcountry

San Juan Backcountry currently holds a PUC license to provide seasonal public transportation service from Silverton to Tammaron, to Ouray, to all locations lying between Tammaron and Ouray, and to all locations lying within San Juan County. San Juan Backcountry has a current need to acquire additional transportation facilities, including a "miniature school bus" unit to better accommodate the public transportation needs of their clientele. They are interested in expanding their service area in the future to include Durango and Montrose. San Juan Backcountry recognizes that their current tariff rates are viewed by the public as being "high"even though such rates are, at the minimum, necessary to maintain the business-and, as such, their tariff rates are a hindrance to increased public use, especially for low- and moderate-income persons.

## School Districts

All of the school districts in the Southwest Region provide transportation for a portion of student enrollment. Each district operates a variety of vehicles (mostly school buses) to transport students to school, special school events, and occasional field trips.
The Pagosa School District, which includes all of Archuleta County, operates 16 routes daily during the school year using 25 vehicles. One bus is wheelchair accessible.

## Silverton Outdoor Learning and Recreation Center

The Silverton Outdoor Learning and Recreation Center (SOLRC) provides a free shuttle service for their clients from Silverton and the vicinity to the Silverton Mountain Ski Area on a yearround basis. SOLRC is interested in expanding and modifying its transportation services in the future to include public transportation to other destinations within San Juan County.

## Wilderness Journeys, Inc.

Wilderness Journeys, Inc. operates several transportation services based in the Pagosa Springs area. The main portion of their transportation business is sightseeing tours and transportation associated with rafting. They also provide scheduled transportation to the Wolf Creek Ski Area in winter months. Taxi service is also provided to and from the Durango/La Plata County Airport on demand.

## Intercity Services

In addition to the transit service providers in the region discussed previously, TNM\&O/Greyhound Bus Lines provides for intercity transit needs to Texas, New Mexico, and Oklahoma.

## Intercity Bus Service

Greyhound Bus lines/TNM\&O provides services from Grand Junction through Durango to Albuquerque. The service operates daily connecting Durango north to Grand Junction and south to Albuquerque. Buses leave Durango daily at 11:40 a.m. for Grand Junction and 5:25 p.m. to Albuquerque, along U.S. Highway 550.

A few additional service providers and issues exist, they are:

- Lodging properties that offer shuttles for visitors include Mountain Shadows, Hampton Inn, Valley Inn, and Durango Mountain Resort.

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- The Four Corners Health Care Center also provides limited transportation to clients.
- Several private taxi companies also provide transportation in the Southwest TPR.
- On November 14, 2006, the first coordination meeting among providers and human service agencies was held in Durango, Colorado. Some of the intercity bus needs identified at that meeting were as follows:
- Need for a regional bus service in the Durango-Bayfield-Pagosa Springs-Alamosa corridor.
- Transit need for employment based trips to Aztec, New Mexico.


## Intermodal Facilities

The Southwest TPR has several opportunities for multimodal and intermodal travel. Tourists may arrive by plane at the two commercial airports-Durango/La Plata County Airport and the Cortez Municipal Airport. Flights arrive daily from Durango, Grand Junction, Albuquerque and Phoenix with limited service from Denver and Dallas-Fort Worth. Another option is for tourists to fly into Albuquerque and drive north on US Highway 550 to Durango and the other tourist attractions in the area. Freight goods arrive and are distributed throughout the region by truck. Intermodal facilities exist in Durango, Ignacio and Cortez.

## Transfer Point/Proposed Transit Center

Presently there is a transfer point at the Albertson's parking lot for transfers between Durango Transit and the Roadrunner Transit. The City of Durango is in the process of developing a transit center that will act as a hub for transportation services between Durango Transit, Roadrunner Transit, Durango Mountain Resort Ski Shuttles and the intercity bus service. The proposed transit center will be located on the southeast corner on Camino del Rio between 7th and 8th streets in downtown Durango. The proposed facility will include passenger waiting areas, restrooms, bicycle storage and passenger information services. In 2006, the City of Durango received $\$ 5.1$ million through Senate Bill 1 funding for building the Durango Transit Center.

Intermodal facilities include passenger terminals and intercity/local transit links. Map 18 shows the intermodal connections within the region for airports, and bus stations.


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## Transit Needs Analysis

## Methodology

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

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

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

The TCRP analysis procedure considers transit demand in two major categories: "Program demand," which is generated by transit ridership to and from specific social service programs, and "Non-program demand," which is generated by the other mobility needs of the elderly, disabled, and low-income population. Examples of non-program trips may include shopping, employment, and medical trips.
The methodology for forecasting "program demand" transit trips in-volves two factors: 1) determining the number of participants in each program, and 2) applying a trip rate per participant using TCRP demand meth-odology. The program demand data for the Southwest TPR were estimated based on the methodology presented in TCRP Report 3. The available program data include the following programs: Developmentally Disabled, Head Start, job training, mental health services, sheltered work, nursing homes, and Senior Nutrition.
As with any other product or service, the "non-program demand" for transit services is a function of the level of supply provided. In order to use the TCRP methodology to identify a feasible maximum demand, it is necessary to assume a high supply level measured in vehiclemiles per square mile per year. The high supply level is the upper-bound "density" of similar
rural services provided in the United States. The assessment of demand for the rural areas, therefore, could be considered to be the maximum potential ridership if a high level of rural service were made available throughout the rural area. The TCRP methodology is based on the perma-nent popula-tion. Therefore, the TCRP methodology is a good demand analysis tech-nique to use for the study area. A maximum level of service for the cities of study area would be to serve every portion of the region with four round-trips (eight one-way trips) daily Monday through Friday. This equates to approximately 2,400 vehicle-miles of transit service per square mile per year.

Feedback from the local transit providers and the residents within the community also plays a critical role in the planning process. The forum meetings and the transit provider information received helped identify the qualitative needs for this process.
Resort Demand - Transit need for the resort areas was updated from the Transit Needs and Benefits Study (TNBS) done for the entire state in 1999. LSC updated these transit need estimates based on the transit ridership growth rate. The TNBS methodology was based on the actual number of enplanements and rental lodging units.

## Regional Transit Needs Summary

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

While this section does not specifically detail these populations' needs, they are inclusive of the methods used in this section. The various methods for estimating current need are summarized in the following section. It should be noted that these techniques give a picture of the needs in the region based upon available demographic data.
Table 10 provides a summary of the Southwest TPR's transit need using the Mobility Gap, TCRP Model, and estimates of resort demand. Based on the information presented in this chapter, a reasonable level of need can be estimated for the area. Transit need using these methods estimates the approximate need as:

- Approximately 7.3 million annual one-way passenger-trips for the Southwest Region.
- 96 percent of the need is not being met.

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

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Table 10: Summary of Need Estimation Techniques

| Methodology | Estimated Annual <br> Need |
| ---: | ---: |
| Mobility Gap | $1,012,000$ |
| Rural Need Assessment | 720,000 |
| Resort Areas 1 | $5,733,941$ |
| Total Annual Need | $7,309,000$ |
| Annual Trips Provided | 318,000 |
| Need Met (\%) | $4 \%$ |
| Unmet Need (\%) | $96 \%$ |

## Transit Trends

Figure 3 presents the regional transit trends in ridership for the Region. As shown, from the available data, ridership has increased since 2001. A peak ridership was observed in 2005 and is estimated at nearly 339,000 annual one-way trips. Currently, there is an estimated 2006 ridership of 322,000 annual one-way trips.

Figure 3: Southwest Region Ridership Trends (2001-2006)


## Needs Identified by Agencies and Public

This section will address the qualitative needs of this area based on information we received through the forums and transportation provider information.
Information from the Regional Transportation Forum, held in Durango, discussed a variety of needs throughout the region. A series of questions associated with specific issues was asked of the participants. The following provides a summary of those issues, needs, and question responses:

- Need better transit connections within communities and more public transportation regionally.
- Need to establish intercity bus service from Cortez to Pagosa Springs.

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- There is a lack of regional intercity bus service for the Region as a whole.
- Local public transportation (bus/van service) serves seniors and disabled well, but service hours need to be extended.
- Increases in commuting into Pagosa Springs and the Durango/Grandview area due to rapid growth in Archuleta and La Plata County, respectively should be addressed by looking at additional transit service. More reliable and frequent public transportation would change people's behavior toward using public transportation.
- Public transportation opportunities should be looked at to support the growing tourism and second-home market throughout the Southwest Region.
- Residents use commercial airports occasionally. It is more cost-effective to drive to Albuquerque and catch a flight to other Colorado and non-Colorado destinations.
- The effect of growth in second homes and associated real estate prices has caused a lack of affordable housing and longer commute distances.
- Transportation to accommodate seasonal tourism should focus on local arterials and regional highways, followed by public transportation.
- Alternative modes such as pedestrian, bicycle and transit were given a "high" priority for addressing transportation demand, due to high fuel costs and the number of people who are unable to drive for a variety of reasons.
Other needs identified as part of the Coordinated Human Services Plan (CHSP) were as follows:
- The Durango Intermodal Facility/ Transit Center was identified as a facility need. An amount of $\$ 5.1$ million was recently passed by the state Senate Bill 1 which was approved by the Colorado Transportation Commission to go towards building the transit center.
- Need for new vehicles and replacement of vehicles.
- Need for better land use planning in coordination with transit services.
- Lack of affordable housing has pushed people into rural areas increasing the need for transit services to those areas.
- Need for service from Cortez to Durango along US Highway 160.
- Need for employment related transportation services.
- There is need for centralized dispatching. One step toward achieving it would be a single website.
- Creating a Rural Transit Authority (RTA) in Durango.
- Need for seniors and persons with disabilities to work with public transit providers.

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## Transit Service Gaps

This section presents a brief analysis of the service gaps and identified service duplication for the Southwest Region. As mentioned previously, the Southwest Region has several providers that primarily serve the general public with some that serve the elderly and disabled population. The identified gaps and duplication of services will be used in identifying service improvements for the area.

## Identified Service Gaps

Gaps in service for this area relate to both the availability of funding and the lack of additional services and providers. While there are seven main providers in the region, each one primarily serves the local community or a certain segment of the local population with very little regional service. Gaps in service are geographic in nature as well as related to various market segments and service hours of operation. Identified service gaps include the following:

## Geographic Service Gaps

There are few areas throughout the Southwest Region which do not receive any type of public transportation services, but most areas lack regional services to communities for services. These include the areas of:

- Regional service on State Highway 160 from Pagosa Springs to Durango, other than that provided by a private taxi service (Durango Transportation).
- Regional service from Cortez to Durango or Farmington for doctors' appointments.
- Regional service on US Highway 491 from Dove Creek and Cahone to Durango.
- No public transit service in Silverton.
- Some rural areas like the Town of Rico receive no services.
- Regional service from Farmington and Aztec, NM to jobs in Ignacio and Durango.
- No transit service to Durango airport except private taxi service.


## Service Type Gaps

The largest gap in this area is a lack of any general public transit service in Dolores County and the San Juan County area, and services for low-income individuals living in the rural areas to access employment and other services. As mentioned, while limited services are provided for seniors within Dolores and San Juan Counties, service for the general public within these two counties and other communities is non-existent. Service is limited in terms of the following service types:

- No transit services for the general public in the Dolores County (pop. 1,884) area other than that provided by the Dolores Senior Services in Dove Creek and Cahone.
- No existing transit for general public in the San Juan County (pop. 587) area other than limited transportation services provided by the San Juan Basin Area on Aging.
- Rural seniors in remote areas need more transportation for a variety of purposes.

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- Limited service area, frequency, and hours of service are provided.
- Limited or no weekend services outside of Durango
- Trips are needed not only for seniors, but other segments, such as the low-income population for access to employment.


## Identified Service Duplication

There are few service duplications due to the service type and clients. One area of potential service duplication is the fact that Archuleta County Senior Services and Archuleta County Mountain Express overlap services within Pagosa Springs. Additional coordination between these two agencies could be explored. While the type of service and the clients are different, there is a potential for some duplication in the services provided.

There are trips provided by Montezuma to Towaoc by request, and a reverse commute from Towaoc to Cortez by Ute Tribe Ute Transportation. Though this is not a service duplication, opportunities exist for coordination of services.

While Pine Ridge Extended Care Center provides client-based transportation in the Pagosa Springs area, there may be some overlap in service areas which allow for human service coordination opportunities.

## General Strategies To Eliminate Gaps

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

## Appropriate Service and Geographic Gap Strategies

The general service gaps to meet the needs of the Southwest TPR include the following:

- Regular scheduled regional service from Pagosa Springs to Durango; Dove Creek and Cortez to Durango for the general public.
- Service for medical trips from Cortez to Farmington, New Mexico or Durango, Colorado for doctors' appointments.
- Increase service area, service hours, and frequency of existing transit services in the major communities that have experienced growth in the area.
- Provide weekend service.
- Use economical vehicles for long-distance trips.
- Develop car/vanpool programs, thereby providing more commuting choices.
- Dolores Senior Services could become a general public provider and offer demandresponse service to current service area residents. This agency may be eligible for FTA 5311 funds if transportation services are open to general public.
- Require additional vehicles to reach more rural areas to connect public housing with employment and other services.
- Require additional vans to meet the paratransit needs in Durango.

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- Build the Durango Transit Center which will act as a transportation hub providing connectivity with various transportation services such as Durango T, Road Runner Transit, Durango Mountain Resort, and the Greyhound intercity bus service which in turn will increase the public profile for transit services.
- Regional service from Farmington and Aztec, NM to jobs in Ignacio and Durango.
- Likely to require the use of additional staff:
- Drivers
- Dispatch
- Administration support


## General Strategies To Eliminate Duplication

As stated, there is very little duplication of services in the Southwest Region. Many of the agencies/organizations which provide their own transportation are restricted due to agency policy or funding, such as Archuleta County Senior Services and private extended care centers providing specific transportation to their clients/residents. The real issue is a lack of or a gap in regional transportation services, not a duplication of service. However, there may be general coordination strategies which could ultimately improve services in the area. The following discussion represents appropriate strategies which could be done within the Southwest Region.

## Coordinating Council

Similar to a coalition, a coordinating council is made up of myriad agencies and partners with a common goal of coordinating transportation resources. This group differs from a coalition in the fact that it is primarily made up of agencies which have a need for service and other groups (such as local municipalities) specifically formed to accomplish a strategic goal (such as to implement a new service). The coordinating council acts similar to a Transportation Advisory Committee in either a local or regional area.

## Benefits

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


## Implementation Steps

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

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## Coalitions

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

## Benefits

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


## Implementation Steps

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


## Vehicle Sharing

This level of coordination requires that agencies own and operate vehicles. Memoranda of understanding or joint agreements are needed for this element to work properly. Agencies that operate vehicles are able to share those vehicles with other agencies in a variety of circumstances, such as when one agency has a vehicle mechanical breakdown, when vehicles aren't in use by one agency, or when capacity for a specific trip is not available.

## Benefits

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

Implementation Steps

- Each agency needs to identify their individual vehicle schedules and when their vehicles could be shared.

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


## Provide Vehicles

This strategy involves an agency providing a used vehicle, either one that is being replaced or retired, to another agency. This can be done either through a transfer of title, donation for a small price (in the case of a retired vehicle), or sale to a local agency in desperate need of a replacement vehicle.

## Benefits

- Reduction in the capital outlay for the agency that obtains the used vehicle.
- Reduction in the need to retire older vehicles in the fleet.
- Allow human service transportation providers to obtain vehicles that they would otherwise not be able to purchase due to the cost of a new vehicle and the level of federal capital funding they are able to receive.


## Implementation Steps

- Agencies in the region need to meet to determine the procedures for transferring a vehicle from one agency to another, as well as the level of overall need for vehicles.
- Agencies that receive federally-funded vehicles need to review their fleet and determine which vehicles can be transferred to other agencies.
- Agencies that wish to receive vehicles will need to review their fleet needs.
- Timing: 3 to 6 years.


## Centralized Functions (Reservations, Scheduling, Dispatch)

A single office would oversee the dispatching of vehicles and the scheduling of reservations for all of the participating transportation entities in order to provide transportation service within a geographic area.

## Benefits

- Reduction in the duplication of administrative costs, based on an economy of scale.
- Increase in the marketability of the region's transit service.
- Allows for improved fleet coordination.


## Implementation Steps

- Agencies need to meet in order to determine which agency will house the coordination effort.
- Identify each agency's level of funding to cover the cost of the dispatching service.

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- Intergovernmental agreement needs to be created detailing the responsibility of each agency.
- Timing: 3 to 6 years.


## Joint Grant Applications

This is where transit providers in the region agree that they will submit a single grant to the state and/or FTA for transit funding for their capital and operational needs. Likely this would be done for the local specialized providers such as the Council on Aging (COAs) in the region.

## Benefits

- Reduction in the amount of time that each agency needs to spend in developing a grant on their own.
- Allows for possible increase in local match funds for state and FTA transit funding.
- Agencies are able to use each other's knowledge in developing a grant.


## Implementation Steps

- Agencies need to review their needs and create a list of capital and operational requirements.
- Agencies need to itemize their lists and determine a priority of needs.
- Grant needs to be developed based on the priority lists.
- Grant needs to be approved by each of the agency's boards/councils, along with approval of the local match.
- Interagency agreement needs to be approved to allow the grants to be passed through a single agency.
- Submit one final grant.


## Local Service Priorities

The following section details the short- and long-term service needs for the Southwest TPR.

## Short-Term

- Archuleta County Senior Services is planning to hire a driver; the cost is estimated at $\$ 835,000$ in the 2035 planning horizon.
- Dolores County Senior Services is planning to expand services in 2010 from Dove Creek to Durango at an estimated 2035 cost of $\$ 454,000$ which includes administration costs, driver costs, and operating costs. The agency also needs a new wheelchair accessible minivan at a cost of $\$ 47,000$ in 2010.
- Durango Transit is planning to increase fixed-route service in 2010 at an estimated 2035 cost of $\$ 11.2$ million
- Durango Transit is planning to build a transit center which will cost approximately $\$ 12$ million in 2008.
- Durango Transit ( $T$ ) is planning to purchase three new small buses and two vans which are wheelchair accessible, at a total cost of $\$ 1$ million. This cost estimate includes new vehicles and vehicle replacement in the 2035 planning horizon.
- SUCAP is planning to increase service frequency for the Ignacio-Durango and BayfieldDurango routes at a 2035 estimated cost of 2.2 million. New services include developing a fixed route service from the Forest Lakes subdivision to Bayfield to Ignacio at a 2035 operating cost of approximately $\$ 628,000$ and an escorted transit program targeting frail elderly and disabled persons from Ignacio to Durango for medical and shopping related trips at an estimated 2035 cost of $\$ 965,000$. SUCAP also plans to increase their driver's compensation at an estimated 2035 cost of $\$ 500,000$.
- In order to meet the increasing demand for seniors and persons with disabilities and to expand existing services for the elderly and disabled adults throughout La Plata County, the La Plata County Senior Services needs to replace their existing van and needs a new van and a small bus. The 2035 cost for new vehicles and replacement vehicles are estimated at approximately 660,000
- Community Connections would like to replace their minbus and needs a new minbus at an estimated 2035 cost of $\$ 400,000$. This cost estimate includes new vehicles and vehicle replacement in the 2035 planning horizon


## Long-Term

- Archuleta County Mountain Express is planning to expand service from Pagosa Springs to Durango at a cost of $\$ 5.2$ million by 2035. This amount includes hiring a full-time driver and converting a part-time position to a full-time position.
- Other regional projects included in the 2035 long-term are as follows:
- Silverton to Durango Mountain Resort-Employee Transportation
- Durango to Farmington Service
- Dolores to Cortez
- Wolf Creek Ski Area Service
- Airport Service
- Carpool Matching Program
- Coordination Service with Head Start
- Increase Regional Transit Marketing

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## Coordination Potential and Priorities

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

- A coordination council was discussed by the attendees. This meeting would be the first step in forming a coordinated system within the region. At this point, a prudent approach to providing coordinated services is to further develop the details of how a coordination council would function in the region
- Regional connection a priority, especially for employment
- Sharing vehicles, storage, and maintenance
- Consolidating transit services into one entity
- Increase frequency of service
- Medical-related trips to hospitals in Durango
- Transportation within communities such as within the Montezuma area.
- One-call center that can dispatch trips

Table 11 presents the cost to eliminate the service and geographic gaps by agency type.
Table 11: Transit Gap Elimination

| Agency Type | Total 2035 Cost |
| :---: | ---: |
| Human Services | $\$ 11,558,201$ |
| Transit Agency | $\$ 7,566,782$ |
| Regional / Rail | $\$ 11,845,484$ |
| Total | $\$ 30,970,467$ |

Source: LSC \& CDOT, 2007

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## Geographic Service Gaps

As shown in Map 18, there are some geographical gaps in transit services within the Southwest Region TPR. The major transit service gap is between the communities of Pagosa Springs and Durango. The other service gap is the lack of general public transit service in Dolores and San Juan County. Map 18 presents the region's major communities being served, but limited regional connectivity between communities currently exists.

The following corridors in the region currently do not have any regional public transportation services:

- Regional service on State Highway 160 from Pagosa Springs to Durango, other than that provided by a private taxi service (Durango transportation)
- Regional service on State Highway 160 from Cortez and Mesa Verde to Durango or to Farmington for doctor's appointment
- Regional service along State Highway 160 from Cortez to Pagosa Springs
- Regional service on State Highway 491 from Dove Creek and Cahone to Durango
- Some rural portions like the Town of Rico receive no services
- No public transit service in Silverton
- Regional bus service in the Durango-Bayfield-Pagosa Springs-Alamosa corridor
- Employment based transit service to Aztec in New Mexico


## Service Type Gaps

The largest gap in this area is a lack of any general public transit service in Dolores County and San Juan County area, and services for low-income individuals living in the rural areas to access employment and other services. As mentioned, while limited services are provided for seniors within the Dolores and San Juan counties, service for general public within these two counties and other communities is non-existent. Service is limited in terms of the following service types:

- No transit services for general public in the Dolores County area other than that provided by the Dolores Senior Services in Dove Creek and Cahone.
- No existing transit for general public in the San Juan County area other than limited transportation services provided by the San Juan Basin Area on Aging.
- Rural seniors in remote areas need more transportation for a variety of needs.
- Limited service area, frequency and hours of service are provided.
- No weekend services.
- Trips are not only needed for seniors, but other segments such as the low-income population for access to employment.

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## SOCIOECONOMIC PROFILE

The plan compiles socioeconomic projections for 2035 for the TPR based on U.S. Census projections and Colorado Department of Local Affairs projections. Since population is integrally related to travel demand, reviewing current demographic information in relation to projected future growth will give a broad indication of future travel demand potential within the TPR.

## Population

Population in the region is anticipated to grow from about 87,000 in 2005 to 163,000 in 2035 reflecting a $87 \%$ total growth. The fastest growing counties in descending order are Archuleta (206.0\%), La Plata ( $93.8 \%$ ), Montezuma ( $78.0 \%$ ), Dolores ( $56.4 \%$ ) and San Juan ( $22.2 \%$ ). Figure 4 helps visualize the relative growth by county across the region.

Table 12: Population Estimates and Forecasts

| County | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 2 0}$ | $\mathbf{2 0 2 5}$ | $\mathbf{2 0 3 0}$ | $\mathbf{2 0 3 5}$ |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Archuleta | 10,028 | 11,888 | 14,289 | 16,812 | 19,718 | 23,037 | 26,956 | 30,686 |
| Dolores | 1,844 | 1,884 | 2,060 | 2,221 | 2,381 | 2,553 | 2,724 | 2,884 |
| La Plata | 44,566 | 47,980 | 54,815 | 61,794 | 68,589 | 75,027 | 80,943 | 86,351 |
| Montezuma | 23,864 | 25,344 | 28,071 | 31,116 | 34,221 | 37,279 | 40,092 | 42,479 |
| San Juan | 558 | 587 | 615 | 635 | 661 | 668 | 669 | 682 |
| Regional Total | 80,860 | 87,683 | 99,850 | 112,578 | 125,570 | 138,564 | 151,384 | 163,082 |

Source: Colorado Demography Section

Table 13: Average Annual Growth Rate

| County | Total \% Change from 2000-2035 | Average Annual \% Change from 2000-2035 |
| :---: | ---: | ---: |
| Archuleta | $206.0 \%$ | $3.2 \%$ |
| Dolores | $56.4 \%$ | $1.3 \%$ |
| La Plata | $93.8 \%$ | $1.9 \%$ |
| Montezuma | $78.0 \%$ | $1.7 \%$ |
| San Juan | $22.2 \%$ | $0.6 \%$ |
| Regional Total | $101.7 \%$ | $2.0 \%$ |

Source: Colorado Demography Section

Table 14: Household Characteristics, 2000 Census

| County | Total HH | Avg. Size | \% Individuals $<\mathbf{1 8}$ | \% <br> Individuals <br> $>65$ | \% Disabled <br> Individuals |
| :---: | ---: | ---: | ---: | ---: | ---: |
| Archuleta | 3,980 | 2.47 | $33.8 \%$ | $20.8 \%$ | 20.9 |
| Dolores | 785 | 2.35 | $27.1 \%$ | $28.7 \%$ | $22.1 \%$ |
| La Plata | 17,342 | 2.43 | $31.6 \%$ | $16.9 \%$ | $13.4 \%$ |
| Montezuma | 9,201 | 2.54 | $36.5 \%$ | $24.6 \%$ | $19.1 \%$ |
| San Juan | 269 | 2.06 | $25.3 \%$ | $11.2 \%$ | $12.0 \%$ |
| Total | 31,577 | 2.46 | $33.1 \%$ | $19.8 \%$ | $17.5 \%$ |

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Figure 4: Population Estimates and Forecasts


Source: Department of Local Affair

## Employment

Table 15 shows 2000 and 2035 Labor Force, and estimated total jobs, key indicators of the use of the transportation system.

Table 15: Jobs and Labor Force by County 2000-2035

|  | Total |  |  | Labor Force |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| County | 2000 | $\mathbf{2 0 3 5}$ | Total \% <br> Change | Average <br> Annual \% <br> Change | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 3 5}$ | Total \% <br> Change | Average <br> Annual $\%$ <br> Change |
| Archuleta | 4,968 | 11,737 | $136.3 \%$ | $2.5 \%$ | 5,128 | 17,033 | $232.2 \%$ | $3.5 \%$ |
| Dolores | 817 | 1,289 | $57.8 \%$ | $1.3 \%$ | 850 | 1,424 | $67.5 \%$ | $1.5 \%$ |
| La Plata | 28,048 | 58,561 | $108.8 \%$ | $2.1 \%$ | 26,605 | 50,082 | $88.2 \%$ | $1.8 \%$ |
| Montezuma | 12,445 | 19,881 | $59.8 \%$ | $1.3 \%$ | 11,231 | 21,365 | $90.2 \%$ | $1.9 \%$ |
| San Juan | 342 | 721 | $110.8 \%$ | $2.1 \%$ | 337 | 362 | $7.4 \%$ | $0.2 \%$ |
| Region Total | 46,620 | 92,189 | $97.7 \%$ | $2.0 \%$ | 44,151 | 90,266 | $104.4 \%$ | $2.1 \%$ |
| Colorado Total | $2,678,975$ | $4,602,121$ | $71.8 \%$ | $1.6 \%$ | $2,384,269$ | $4,276,155$ | $79.3 \%$ | $1.7 \%$ |

[^0]
## Place of Work

In $2000,90.5 \%$ of workers lived and worked in the same county, compared to $67 \%$ for the state as a whole. However, 1,906 workers did travel to a different county for their job, presumably commuting on the region's highways. See Table 16.

Table 16: Place of Work By County 2000

| County | Workers 16 <br> and Over | Worked in <br> County of <br> Residence | \% Worked in <br> County of <br> Residence | Worked <br> Outside <br> County of <br> Residence | Worked <br> Outside <br> State of <br> Residence |
| :---: | ---: | ---: | ---: | ---: | ---: |
| Archuleta | 4,465 | 3,999 | $89.6 \%$ | 314 | 152 |
| Dolores | 794 | 450 | $56.7 \%$ | 287 | 57 |
| La Plata | 22,481 | 21,214 | $94.4 \%$ | 391 | 876 |
| Montezuma | 10,371 | 8,868 | $85.5 \%$ | 853 | 650 |
| San Juan | 292 | 219 | $75.0 \%$ | 61 | 12 |
| Region Total | 38,403 | 34,750 | $90.5 \%$ | 1,906 | 1,747 |
| Colorado Total | $2,191,626$ | $1,468,010$ | $67.0 \%$ | 702,583 | 21,033 |

Source: US Census

## Means of Transport to Work

Table 17 provides more information about how people travel to work. Approximately $70 \%$ drove alone in their car to work, compared to $75 \%$ statewide in 2000. Carpooling is the next most common means of transportation to work, with approximately $15 \%$ riding in a multiple occupant vehicle. Public transportation provides only a minimal amount of work trips representing less than one percent of the work trips in the region.

[^1]| Means of Transport | Archuleta |  | Dolores |  | La Plata |  | Montezuma |  | San Juan |  | Region |  | Colorado |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | $\% \text { of }$ Total | Number | \% of Total | Number | \% of Total | Number | \% of Total | Number | \% of Total | Number | $\begin{aligned} & \% \text { of } \\ & \text { Total } \end{aligned}$ | Number | $\begin{aligned} & \text { \% of } \\ & \text { Total } \end{aligned}$ |
| Drove | 3,153 | 70.6\% | 546 | 68.8\% | 15,615 | 69.5\% | 7,566 | 73.0\% | 145 | 49.7\% | 27,025 | 70.4\% | 1,646,454 | 75.1\% |
| Carpooled | 689 | 15.4\% | 128 | 16.1\% | 3,052 | 13.6\% | 1,742 | 16.8\% | 42 | 14.4\% | 5,653 | 14.7\% | 268,168 | 12.2\% |
| Public Transp. | 5 | 0.1\% | 0 | 0.0\% | 223 | 1.0\% | 34 | 0.3\% | 0 | 0.0\% | 262 | 0.7\% | 69,515 | 3.2\% |
| Motorcycle | 0 | 0.0\% | 0 | 0.0\% | 13 | 0.1\% | 27 | 0.3\% | 0 | 0.0\% | 40 | 0.1\% | 2,582 | 0.1\% |
| Bicycle | 6 | 0.1\% | 3 | 0.4\% | 359 | 1.6\% | 56 | 0.5\% | 5 | 1.7\% | 429 | 1.1\% | 16,905 | 0.8\% |
| Walked | 170 | 3.8\% | 56 | 7.1\% | 1,175 | 5.2\% | 365 | 3.5\% | 63 | 21.6\% | 1,829 | 4.8\% | 65,668 | 3.0\% |
| Other means | 66 | 1.5\% | 7 | 0.9\% | 162 | 1.7\% | 95 | 0.9\% | 0 | 0.0\% | 330 | 0.9\% | 14,202 | 0.6\% |
| Worked at home | 376 | 8.4\% | 54 | 6.8\% | 1,882 | 8.4\% | 486 | 4.7\% | 37 | 12.7\% | 2,835 | 7.4\% | 108,132 | 4.9\% |
| Total | 4,465 | 100\% | 794 | 100\% | 22,481 | 101\% | 10,371 | 100\% | 292 | 100\% | 38,403 | 100\% | 2,191,626 | 100\% |

## Low Income Areas

Map 19 shows the percentage of the population with household income below the Censusdefined poverty level. About $13.2 \%$ of the region falls below this level, significantly more than the statewide average of $9.3 \%$. For more information about how the Census defines poverty, see http://www.census.gov/hhes/poverty/povdef.html

## Minority Status

The two reservations within the TPR, Ute Mountain Ute and the Southern Ute reservations, contribute to a relatively large proportion of American Indians living in the region. Persons reporting American Indian ancestry were $7.8 \%$ of the total population, with only $1.9 \%$ statewide. The Hispanic/Latino population of the region is significantly less ( $9.6 \%$ ) than the state average of $17.1 \%$. The Black/African American population is very small. Other minority groups represent about $5.0 \%$ of the total population for the region. Map 20 shows the percentage of minority populations by Census tract.



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## ENVIRONMENTAL OVERVIEW

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

As an effort to avoid and minimize environmental impacts from transportation system improvements, CDOT is required to comply with the provisions of the National Environmental Policy Act (NEPA). NEPA is typically introduced at the earliest stage practicable and should identify areas where both natural and human environmental resources might be compromised as a result of a project. To further the importance of environmental issues, the Southwest TPR has created specific values towards preserving the quality of the natural environment.

Although the regional planning process does not require a complete or specific inventory of all potential environmental resources within the corridor, identifying general environmental concerns within the region will provide valuable information for project planners and designers. The information contained in this report will serve as the basis for a more in depth analysis, typically NEPA, as part of the project planning process. There are two components to this analysis:

- Identifying general resources within the region that have the potential to be impacted by projects, and
- Identifying agencies with responsibilities for resources within the region; examples may include, the US Forest Service (USFS), the US Bureau of Land Management (BLM), the Colorado Division of Wildlife (DOW), the State Historical Preservation Office (SHPO), or the local Parks Department.
The information that follows identifies general environmental issues within the region. The fact that an issue is not identified in this review should not be taken to mean that the issue might not be of concern along a corridor. This section focuses on issues that are easily identifiable and/or which are commonly overlooked. The purpose is to encourage the planning process to identify issues that can be addressed proactively so that the environmental concerns can be mitigated or incorporated into a project in a manner that supports the values of the citizens and communities the TPR serves.


## Threatened or Endangered Species and Species of State Concern

In Colorado, there are 30 species of fish, birds, mammals and plants on the federal list of threatened or endangered species. The U.S. Fish and Wildlife Service (USFWS) identified another 10 as candidate species. In addition to the federally listed species, there are 16 additional species listed by the state as threatened or endangered and another 44 listed as State species of concern (CDOW, May 2004). Impacts can result from destruction of habitat, animal mortality (including from vehicle-wildlife collisions), fragmentation of habitat, or changes in species behavior such as altering foraging or denning patterns.

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To comply with the Federal Endangered Species Act, CDOT evaluates all possible adverse impacts and takes all necessary measures to avoid harming proposed, candidate and listed species before construction and maintenance activities begin. Impacts that are studied and determined to be unavoidable are minimized through highway design and construction techniques. Appropriate compensation is utilized after all reasonable avoidance and minimization techniques have been exhausted.

Senate Bill 40 (SB40) was created primarily for the protection of fishing waters, but it does acknowledge the need to protect and preserve the fish and wildlife resources associated with streams, banks and riparian areas in Colorado. This is accomplished through erosion control, water contaminate control, discharge conditions, construction procedures, vegetation manipulation and noxious weed control. These measures, when properly used, can ensure that Colorado waters remain conducive to healthy and stable fish and wildlife populations which depend on the streams of Colorado.

See Appendix B - Environmental for lists of species potentially affected by each corridor.

## Wildlife Linkages

To identify and prioritize these vital linkages in Colorado, the Colorado Department of Transportation (CDOT) used funds from an FHWA streamlining grant to launch a collaborative scientific effort called Linking Colorado's Landscapes. The CDOT asked the Southern Rockies Ecosystem Project (SREP), a non-profit conservation organization in Denver, to spearhead the effort and recommend mitigation measures. The SREP was uniquely positioned to lead the project because of its comprehensive database of wildlife and migration patterns in the Southern Rockies, and the organization could expand on CDOT's earlier work in identifying 13 key wildlife-crossing areas in the I-70 transportation corridor.

First, SREP held a series of interagency workshops in which participating environmental experts analyzed the effects of habitat fragmentation and restricted wildlife movement in Colorado. They identified and evaluated 176 wildlife linkages across the state, assigning "high priority" status to 23 linkages recognized as more important for both wildlife and safety. Of these prioritized linkages, 12 were identified for further study. These were located on stretches of seven highways, including U.S. 550 and U.S. 160 in the Southwest TPR.
Workshop participants used a "landscape approach" which considered land use and other regional factors. They were aided by technology--habitat connectivity models developed by Colorado State University for deer, elk, bobcat, black bear, Canada lynx, and mountain lion.

Next, SREP staff visited and inventoried the linkages at points where they were bisected by highways. At the same time, Colorado State researchers developed geographic information system computer models of the landscapes important for wildlife movement.

The collected information was then combined with animal-vehicle collision statistics, traffic densities, land ownership, zoning, and other transportation-planning information, to enable the final recommendations phase. Together, SREP, CDOT, the Colorado Division of Wildlife, The Nature Conservancy, and the U.S. Forest Service, identified site-specific recommendations for immediate and future use. Some of these recommendations have been proposed as corridor

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strategies for the Southwest 2035 Regional Transportation Plan. See the Corridor Visions chapter for more information. For more information, see http://www.fhwa.dot.gov/ENVIRONMENT/ecosystems/.

## Air Quality

The Colorado Air Quality Control Commission, a division of the Colorado Department of Health and Environment (CDPHE), is responsible for developing and adopting a regulatory program to protect and improve air quality in Colorado. Typically, the commission is involved in the maintenance of the regulations through modification and revision. Much of the air quality management program currently is in place and has been adopted over time. New programs occasionally are considered by the commission. The commission oversees the implementation of the air quality programs. The commission is responsible for hearing appeals of the Air Pollution Control Division's implementation of the programs through permit terms and conditions and enforcement actions. Colorado's air quality management program regulates air pollutant emissions from stationary industrial sources, cars and light duty trucks, burning practices, street sanding and sweeping activities, and the use of prescribed fire. The air quality program also is focused on visibility, odor and transportation planning impacts to future air quality.
The Colorado Air Quality Control Commission distributed a "Report to the Public 2005-2006" addressing air quality issues and attainment designations in the state of Colorado. When discussing air quality in Colorado, the Air Quality Control Commission separates the state into six regions to more clearly address each region's air quality conditions and activities. The Southwest TPR falls within the Western Slope air quality region. Within the Southwest TPR, pollutants originate primarily from motor vehicle emissions, woodburning, street sanding operations, particulate matter (PM)10 emissions from unpaved roads, and construction activities.

During the 1970s and 1980s, the U.S. Environmental Protection Agency (EPA) designated many Colorado cities and towns as nonattainment areas because the areas violated nationwide air quality standards, including Pagosa Springs for $\mathrm{PM}_{10}$. By the mid-1990s, all these areas started coming into compliance with the various standards and were redesignated. Pagosa Springs reached attainment/maintenance status for $\mathrm{PM}_{10}$ in 2001.
These redesignations are made possible by cleaner air, and through development and implementation of air quality management plans known as State Implementation Plans (SIPs). These plans describe the nature of the air quality problems and the probable causes. The plans show projections of future pollutant levels and identify strategies to reduce these pollutants to acceptable levels.

Air quality concerns in this region are primarily from the impacts of a recent surge in energy development. In the 1990s, air quality concerns primarily were related to woodstoves, unpaved roads and street sanding. These "area" sources were addressed in many Western Slope communities and are no longer as significant as the impacts from energy development, including direct emissions, support service impacts and associated growth. Controlled and uncontrolled burns are a significant source of air pollution in this region.

Many communities in the West Slope Region have taken aggressive action to control residential burning emissions by adopting either mandatory or voluntary control measures during winter

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seasons. Increased awareness of visibility impacts and fine particle levels spurred the installation of new air monitoring equipment to gauge those impacts. The region also has a number of local agencies that conduct air quality control programs.
The Congestion, Mitigation, and Air Quality (CMAQ) program, jointly administered by the FHWA and the Federal Transit Administration (FTA), was reauthorized in 2005 under the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). The CMAQ program is one source of funds for transportation control measures employed for the purposes of reducing congestion and improving air quality. In a successful effort to control $\mathrm{PM}_{10}$ emissions, Pagosa Springs has utilized CMAQ funding for paving and sweeping, and is now in compliance with emissions standards.

In order to comply with the Clean Air Act (CAA), the State of Colorado adopted the following standards/regulations that relate to transportation projects, which in turn apply to the Southwest TPR:

- Ambient Air Quality Standards Regulation - This regulation established ambient air quality standards for the state and dictates monitoring procedures and data handling protocols. It also identified non-attainment areas in the state, which have historically violated federal and state air quality standards.
- State Implementation Plan Specific Regulations - This regulation defines specific requirements concerning air quality control strategies and contingency measures for nonattainment areas in the state.
- Transportation Conformity, Reg. No. 10 - This regulation defines the criteria the Colorado Air Quality Control Commission uses to evaluate the consistency between state air quality standards/objectives, and transportation planning and major construction activities across the state, as defined in the state implementation plans.
- Street Sanding \& Sweeping, Reg. No. 16 - This regulation sets specific standards for street sanding and sweeping practices.


## Pagosa Springs

Pagosa Springs was formerly a non attainment area for $\mathrm{PM}_{10}$, but is now in compliance, largely due to on-going paving and street seeping programs made possible through the CMAQ program. This "maintenance mode" should ensure continued compliance.

## Durango At Risk Area

The CDOT Office of Environmental Services identified communities "at risk" for poor air quality in draft documents dated April 1998. The basis for the identifications is the 1996-97 Air Quality Control Commission Report to the public, CDOT traffic data, and the observations of CDOT regional personnel. Specific criteria were used to identify communities "at risk" for poor air quality. The criteria include a combination of:

- Monitored elevated particulate matter $\mathrm{PM}_{10}$ levels
- Recent significant growth in winter VMT
- A location with similar meteorology to an area that has experienced elevated $\mathrm{PM}_{10}$ levels

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- Local concern over air quality

While the identified areas do not currently violate federal air quality standards, CDOT wants to ensure that sensible steps are taken to prevent unacceptable air pollution. Durango has been identified to be "at risk" for becoming a non-attainment area because of high VMT growth and elevated $\mathrm{PM}_{10}$ values.

Despite the current status that does not exceed federal standards, the impacts of proposed transportation projects in Durango should be considered. For more specific details on Colorado Air Quality Regulations see www.cdphe.state.co.us/regulate.asp.

## Water Quality

There are four major river basins within Colorado. They are: Colorado, Missouri, Rio Grande, and the Arkansas. Within these basins are numerous creeks, tributaries, and ditches; as well as lakes, floodplains, and wetlands. Multiple tributaries of the Colorado are present in the Southwest TPR, including the Animas, San Juan, Florida, Los Pinos and Piedra Rivers. The Water Pollution Control Act of 1972, later amended to include the Clean Water Act (CWA), protects the waters of the TPR. This Act promulgated the National Pollution Discharge Elimination System (NPDES) and created water discharge standards which include maintaining the chemical, physical and biological integrity of the nation's waters. Protection of these waters is done through regulatory review and permits. A list of potential environmental permits is listed below.

A detailed discussion on impacts to water quality and wetlands is located in Appendix B.

## Noise

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

Noise abatement guidelines also state that noise abatement should be considered when the noise levels "substantially exceed the existing noise levels." This criterion is defined as increases in the $\mathrm{L}(\mathrm{eq})$ of 10.0 dBA or more above existing noise levels.

As existing higher-speed transportation facilities are widened or new facilities are constructed noise becomes a greater issue. Noise can also be an issue for lower-speed facilities where steep grades or a high percentage of trucks exist. As a result of potential impacts, all projects involving federal funding will require a noise analysis be completed.

## Historical/Archaeological Sites

Both the Colorado State Register of Historic Places and the National Register of Historic Properties (NRHP) list sites and/or communities of historic/archaeological significance. Any transportation project identified for this region would require field surveys to determine which resources have cultural/archaeological significance and/or potential eligibility for listing on the NRHP. The Colorado Office of Archaeology and Historic Preservation tracks sites that are considered significant and are on the NRHP. For more information on these properties see

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http:www.coloradohistory-oahp.org/programareas/register/1503/cty.htm

## Hazardous Materials

The potential to find hazardous materials during the construction of a transportation facility always exists. Hazardous materials are regulated under several programs, including the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). Until specific transportation corridors and/or improvement projects are identified, no specific data collection at hazardous material sites is recommended at this time. Certain land uses frequently result in a higher potential for location of hazardous waste or materials. Examples of land uses often associated with hazardous materials include industrial and commercial activities such as existing and former mining sites; active and capped oil and gas drilling operations and pipelines; agricultural areas using chemical fertilizers, insecticides, and pesticides; and railroad crossings where there have been accidental cargo spills. Active, closed and abandoned landfill sites are also potential problem areas for transportation facility construction as are gasoline stations that potentially have leaking underground storage tanks.
See Appendix B for corridors potentially affected by hazardous materials.

## Environmental Permits

The following list of permits is meant to provide information needed to comply with basic environmental permitting requirements for construction activities. It is impossible to be allinclusive and addressing every situation. These are just some of the more common permits associated with construction activities.

- County/State Air Permit (for construction activities, grading, clearing, grubbing)
- County/State Demolition Permit (these permits may also require a utility disconnect permit from your local utility department)
- Source Air Permit (APEN) (concrete batch plant, haul road, fuel storage tank)
- Sandblasting Permit
- Construction Dewatering Permit
- Sand \& Gravel Permits (Certificate of Designation)
- Construction Stormwater Permit
- Compliance with a Municipality Separate Storm Sewer System (MS4) Permit
- US Army Corps of Engineers 404 Permit (wetlands and waters of the state impacts)
- Floodplain Permit
- Wildlife Surveys (Preble’s Meadow Jumping Mouse Survey, Migratory Bird Survey)


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## CDOT Statewide Environmental Forum

The CDOT Statewide Environmental Forum was held March 14, 2007. This was a first time event intended to improve relations and develop understanding at the planning level of resource/regulatory agency responsibilities and concerns. It provided an opportunity for one-on-one conversations between resource and regulatory agencies and local transportation planning officials. It was intended to foster an atmosphere of cooperation and provide an opportunity for cooperative identification of potential conflicts and opportunities at the regional level and provide the opportunity for resource and regulatory agency needs and concerns to be identified at the earliest planning stages.

Subject matter experts from 16 Federal and State agencies and organizations identified environmental issues and concerns for each TPR. A summary of the issues, arranged by resource agency follows in Table 18.

See Appendix B for map of environmental concerns discussed at the forum.

Table 18: Summary of Environmental Issues and Concerns

| Statewide Environmental Forum March 9, 2007 Southwest |  |
| :---: | :---: |
| Resource/Regulatory Agency | Information/lssues/Concerns |
| EPA | Smart Growth technical assistance is available and in the past EPA has provided grants. For more information see http://www.epa.gov/smartgrowth/sg_implementation.htm |
| CDOT Municipal Separate Storm Sewer System (MS4) Discharge Permit Program | The storm water regulations have the greatest impact on the City of Durango; however, Durango's standards are more stringent than the rest of the state. |
| CDPHE - Solid Waste | Beginning July 1, 2007, landfills can no longer accept whole tires, industrial oils or automotive batteries. <br> Most oil and batteries are already recycled or sold on secondary markets. To address the tire issue, shredding is a popular approach. A tire shredding co-op run out of Alamosa makes the tire fragments available for leech layers for landfills, consolidated roads, or for sale to recycling outfits. |
| CDPHE - Water Quality | There are no major issues in the Southwest TPR at present. Durango, as an urbanized area, is required to maintain an MS4 permit for storm water discharge; however, the city currently maintains higher discharge standards then are required under state law. |
| CDPHE - Air Quality | PM10 is the primary issue for the Southwest. <br> Pagosa Springs is currently in non-attainment/maintenance and Durango is monitored for compliance. <br> Those who have concerns about air quality should try to document with photographs and write a letter to request monitoring. <br> Rural areas in non-attainment/maintenance currently receive $\$ 200 \mathrm{~K}$ in Federal Congestion Mitigation Air Quality funds annually for paving dirt roads and other dust reduction efforts. |
| DOW | DOW is monitoring the impacts of oil, gas, and mining development on wildlife in Southwest TPR. <br> DOW is working with CDOT on the wildlife highway crossing initiative. |

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|  | Statewide Environmental Forum March 9, 2007 Southwest |
| :---: | :---: |
| Resource/Regulatory Agency | Information/Issues/Concerns |
| SHPO | Approximately $\$ 15$ million is available annually through the State Historic Fund to support local projects that preserve the historic nature of a community. More information is available at http://www.coloradohistory-oahp.org/programareas/shf/shfindex.htm |
| USFWS | Migratory birds present the most significant issues for the Southwest TPR. Nests cannot be disturbed after eggs have been laid, so good planning of construction projects is required. |
| United States Army Corps of Engineers (USACOE) | Jurisdiction may be expanded in coming years to include ephemeral and intermittent water sources that serve as tributaries to navigable waters which could affect streams throughout the Southwest TPR. <br> USACOE is increasing its work with oil, gas and mining companies to ensure compliance with federal wetland protection laws. |
| Federal Highway Administrations Central Federal Lands (CFL) and Colorado Trout Unlimited | River restoration efforts are organized by local chapters and include road construction mitigation and spillage response. <br> The Five Rivers chapter serves the Southwest region and can be found online at http://www.fiveriverstu.org/. |
| The Nature Conservancy | No issues identified. |
| CDOT Wildlife Program | Significant mitigation activity is occurring in the Southwest TPR on both US. 160 and US. 550. <br> The reconstruction of four large animal crossings for US 160 and up to ten for US 550. |
| CDOT Environmental Programs Branch | No issues identified. |
| Colorado State Parks (CSP) | The Durango area has among the best trail systems in the state. Completing the Bayfield to Durango trail is the next effort. <br> The Pagosa Snowmobile Club recently received a grant to support the purchase of a trail groomer. <br> More information is available from http://parks.state.co.us/Trails/Grants/ |
| FHWA | No issues identified. |
| USFS | The US Forest Service is willing to turn over Forest Service roads to counties. Change in road ownership is negotiated on an annual basis and include agreements about the maintenance and operation of the roads. |

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## CORRIDOR VISIONS

The 2035 Long Range Transportation Plan builds on the "corridor-based" plan originally developed for the 2030 plan. The Corridor Visions effectively forecast the long term needs of each corridor, rather than focusing on specific intersections, safety issues or capacity issues from point to point.

## Corridor Vision Purpose

- Integrates community values with multimodal transportation needs
- Provides a corridor approach for a transportation system framework
- Addresses the environmental concerns of community members
- Strengthens partnerships to cooperatively develop a multimodal system
- Provides administrative and financial flexibility in the Regional and Statewide Plans
- Links investment decisions to transportation needs
- Promotes consistency and connectivity through a system-wide approach
- Creates a transportation vision for Colorado and surrounding states


## Corridor Vision Process

This part of the plan examines what the final build-out needs might be, given population growth, traffic growth, truck movements, and other operational characteristics of the facility. Then, an effort was made to focus improvements on the midterm, or next 10 years. The Midterm Implementation Strategy will be examined later in this plan. These steps will help guide investment decisions throughout the planning period:

1. Identify corridor segments with common operating characteristics and future needs
2. Develop a Corridor Vision for each corridor segment
3. Develop Goals for each corridor segment
4. Develop Strategies to achieve the Goals for each corridor segment
5. Assign a primary investment category

## Corridor Visions

This section contains a description of each corridor in the region. There are several parts to the corridor vision, including a description of the function, its Primary Investment Category, Priority (as assigned by the RPC), and a list of goals (types of needed improvements) and strategies (specific actions to be taken). Table 19 shows the corridors with their beginning and ending milepost and primary investment category.

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Table 19: Corridor Segments

| Corridor <br> Name | Corridor <br> Number | Description <br> (from/to) |  | Within TPR <br> Primary <br> Investment <br> Category |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
| SH 3 | PSW7001 | US 160 to 8 ${ }^{\text {th }}$ Street in Durango | 0.000 | 1.270 | Safety |
| SH 41 | PSW7002 | Utah State Line to US 160 | 0.000 | 9.500 | Safety |
| SH 84 | PSW7003 | NM State Line to Pagosa Springs | 0.000 | 27.920 | Safety |
| SH 110 | PSW7004 | US 550 to on/off ramp in <br> Silverton | 0.000 | 0.140 | System <br> Quality |
| SH 140 | PSW7005 | NM State Line to Hesperus | 0.000 | 23.430 | Mobility |
| SH 141 | PSW7006 | West of Dove Creek to <br> Montrose/Mesa County Line | 0.000 | 7.349 | System <br> Quality |
| SH 145 | PSW7007 | East of Cortez to Dolores/San <br> Miguel County Line | 0.000 | 59.450 | System <br> Quality |
| SH 151 | PSW7008 | US 160 to Ignacio | 0.000 | 33.960 | Safety |
| US 160 | PSW7009 | NM State Line to <br> Archuleta/Mineral County Line | 0.000 | 155.090 | Mobility |
| SH 172 | PSW7010 | NM State Line to US 160 | 0.000 | 24.490 | Safety |
| SH 184 | PSW7011 | Mancos to US 491 | 0.000 | 7.990 | System <br> Quality |
| US 491 A | PSW7012 | NM State Line to North of US <br> 160 intersection in Cortez | 0.000 | 6.422 | Safety <br> US 491 B PSW7013 |
| Cortez to Utah State Line | 26.371 | 69.602 | System <br> Quality |  |  |
| US 550 | PSW7014 | NM State Line to San <br> Juan/Ouray County Line | 0.000 | 80.523 | Mobility |

CORRIDOR: SH 3 (PSW7001)
Description: US 160 to 8th Street in Durango. Beginning. Mile Post 0, Ending Mile Post 1.27
The Vision for the SH 3, Jct. US 160 to 8th Street in Durango corridor is primarily to maintain system quality as well as to improve safety and to increase mobility. This corridor no longer functions as a state highway and serves as a local connection from US 160 to south Durango. The route provides an alternate route for US 550, which runs parallel to SH 3. Future travel modes include passenger vehicle and local transit service.

Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to increase. However, traffic volumes are not expected to increase to the point of requiring capacity improvements. The communities along the corridor value system preservation. They depend on commercial activity for economic activity in the area. Commercial and residential development is expected to increase. Users of this corridor want to support the movement of local access through the corridor and recognizing the environmental, economic and social needs of the surrounding area.

## Primary Investment Category: Safety

Priority:
Low

## Goals

- Support commuter travel
- Maintain or improve pavement to optimal condition
- Maintain responsible water quality procedures
- Coordinate transportation and land use decisions


## Strategies

- Provide local transit service as justified by demand
- Consolidate and limit access and develop access management plans
- Improve rockfall mitigation
- Add surface treatment/overlays

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CORRIDOR: SH 41 (PSW7002)
Description: Utah Border to Intersection with US 160. Beginning Mile Post 0, Ending Mile Post 9.5
The Vision for the SH 41 corridor is primarily to maintain system quality as well as to improve safety and to increase mobility. This corridor is located within Ute Mountain Ute tribal lands and provides local access, as well as connections to Utah. The transportation system in the area primarily serves commuter traffic between Towaoc, Colorado and White Mesa, Utah, as well as tourists traveling to/from the Canyonlands, Monument Valley, Natural Bridges National Monument, and the north end of Lake Powell. The Ute Mountain Ute Tribe uses some carpools for commuting and envisions using vans for transit in the future.

Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to increase. Although passenger and truck freight traffic volumes are predicted to approximately double by 2035, the volumes are not predicted to be at the point requiring capacity improvements. Future travel modes include passenger vehicles, bicycles, and transit. The communities along the corridor value system preservation. They depend on tourism for economic activity in the area. Users of this corridor want to preserve the rural character of the area while supporting the movement of tourists in and through the corridor and recognizing the environmental, economic and social needs of the surrounding area.

## Primary Investment Category: Safety

Priority: Low

## Goals

- Provide for tourist-friendly travel
- Eliminate shoulder deficiencies
- Maintain or improve pavement to optimal condition
- Reduce fatalities, injuries and property damage crash rate
- Improve transit options


## Strategies

- Provide transit service
- Post informational signs
- Improve shoulders
- Add surface treatment/overlays

CORRIDOR: SH 84 (PSW7003)
Description: New Mexico state line to Pagosa Springs, Beginning Mile Post 0 Ending Mile Post 27.92
The Vision for the SH 84 corridor is primarily to maintain system quality as well as to improve safety and to increase mobility. This corridor provides commuter access, and makes north-south connections within the eastern portion of the Southwest TPR. Future travel modes include passenger vehicle and freight. The transportation system in the area primarily serves destinations outside the corridor.

Based on historic and projected population and employment levels, passenger and freight traffic volumes are expected to increase. Although passenger and truck freight traffic volumes are predicted to increase, the volumes are not predicted to be at the level requiring capacity improvements. The communities along the corridor value safety and system preservation. They depend on tourism for economic activity in the area. Users of this corridor want to preserve the rural and mountain character of the area while supporting the movement of tourists and commuters in and through the corridor and recognizing the environmental, economic and social needs of the surrounding area.

## Primary Investment Category: Safety

Priority:
Medium

## Goals

- Support recreation travel
- Improve access to public lands
- Eliminate shoulder deficiencies
- Maintain or improve pavement to optimal condition
- Reduce the occurrence of animal/vehicle collisions in identified wildlife corridors


## Strategies

- Add passing lanes
- Construct auxiliary lanes
- Add signage at accesses to public lands, as needed
- Add/improve shoulders
- Replace deficient bridges
- Improve hot spots
- Add surface treatment/overlays
- Add wildlife/vehicle collision reduction measures, such as wildlife fencing, underpasses, overpasses, elevated highways or equally effective methods of mitigation to enhance safety

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CORRIDOR: SH 110 (PSW7004)
Description: US 550 On/Off Ramp to Silverton Beginning Mile Post 0 Ending Mile Post 0.14
The Vision for the SH 110, US 550 to on/off ramp to Silverton corridor is primarily to maintain system quality as well as to improve safety and to increase mobility. This corridor provides local access, as well as connections for tourists to the town of Silverton, the Alpine Loop, and ski areas. Future travel modes include passenger vehicle. The transportation system in the area serves destinations within and outside the corridor.

Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to increase. Although passenger and truck freight traffic volumes are predicted to increase by 2035, the volumes are not predicted to be at the level requiring capacity improvements. The communities along the corridor value system preservation. They depend on tourism for economic activity in the area. Users of this corridor want to preserve the rural and mountain character of the area while supporting the movement of tourists and local access in and through the corridor and recognizing the environmental, economic and social needs of the surrounding area.

Primary Investment Category: System Quality
Priority: Low
Goals

- Eliminate shoulder deficiencies
- Maintain or improve pavement to optimal condition


## Strategies

- Add/improve shoulders
- Add surface treatment/overlays

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CORRIDOR: SH 140 (PSW7005)
Description: North/South Roadway from New Mexico State Line to West of Durango at Hesperus Beginning Mile Post 0 Ending Mile Post 23.43

The Vision for the SH 140 corridor is primarily to maintain system quality as well as to improve safety and to increase mobility. This corridor serves as a multimodal local facility, provides local access, and makes north-south connections from New Mexico to the west of Durango area. Portions of this corridor are located within Southern Ute and Ute Mountain Ute tribal lands. Future travel modes include passenger vehicle, commuter transit service, and truck freight. The transportation system in the area primarily serves towns, cities, and destinations within the corridor.

Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to increase. Although passenger and truck freight traffic volumes are predicted to increase by 2035, the volumes are not predicted to be at the level requiring capacity improvements. Recreation traffic is expected to increase when the Animas/La Plata reservoir is filled. The communities along the corridor value connections to other areas, safety, and system preservation. They depend on tourism for economic activity in the area. Users of this corridor want to preserve the rural and mountain character of the area while supporting the movement of tourists, commuters, and freight in and through the corridor while recognizing the environmental, economic and social needs of the surrounding area.

## Primary Investment Category: Mobility

Priority: Medium

## Goals

- Provide for recreation travel
- Provide for commuter travel
- Reduce fatalities, injuries and property damage crash rate
- Eliminate shoulder deficiencies
- Preserve the existing transportation system


## Strategies

- Improve geometrics
- Investigate need for commuter transit service or vanpools)
- Add passing lanes, as needed
- Provide auxiliary lanes at intersections, as needed
- Add shoulders
- Improve hot spots
- Add surface treatment/overlays

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CORRIDOR: SH 141 (PSW7006)
Description: West of Dove Creek and North to the Southern Boundary of the Gunnison Valley TPR (at the San Miguel County line) Beginning Mile Post 0 Ending Mile Post 7.349

The Vision for the SH 141 corridor is primarily to maintain safety as well as to improve system quality and to increase mobility. This corridor serves as a multimodal local facility, provides local access, and makes north-south connections within the northwest of Dove Creek to southern Gunnison Valley Transportation Planning Region area. Future travel modes include passenger vehicle. The transportation system in the area serves towns, cities, and destinations within the corridor, as well as north-south connections for travelers along the central-western perimeter of the state.

Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to increase. Although passenger and truck freight traffic volumes are predicted to approximately double by 2035, the volumes are not predicted to be at the level requiring capacity improvements. The highway is located within BLM lands, and vehicles commonly pull off the road in undesignated areas along the switchbacks into Disappointment Valley, causing a potentially unsafe situation and leaving trash. The communities along the corridor value connections to other areas, safety, and system preservation. They depend on tourism for economic activity in the area. Users of this corridor want to preserve the rural character of the area while supporting the movement of tourists in and through the corridor and recognizing the environmental, economic and social needs of the surrounding area.

Primary Investment Category: System Quality
Priority: Medium

## Goals

- Provide for tourist-friendly travel
- Reduce fatalities, injuries and property damage crash rate
- Eliminate shoulder deficiencies
- Preserve the existing transportation system
- Maintain or improve pavement to optimal condition


## Strategies

- Improve geometrics
- Add pull-outs
- Add signage regarding historical information
- Promote environmental responsibility
- Improve hot spots
- Add surface treatment/overlays
- Add wildlife/vehicle collision reduction measures, such as wildlife fencing, underpasses, overpasses, elevated highways or equally effective methods of mitigation to enhance safety

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CORRIDOR: SH 145 (PSW7007)
Description: State Highway from East of Cortez to the Dolores/San Miguel County Line Beginning Mile Post 0 Ending Mile Post 59.45

The Vision for the SH 145 corridor is primarily to maintain safety as well as to improve system quality and to increase mobility. This corridor serves as a multimodal local facility, connects to places outside the region, and makes north-south connections within the mountainous area northeast of Cortez to the southern boundary of the Gunnison Valley TPR area. The highway is part of the San Juan Skyway, which has also been designated an All-American Road. Cortez to Dolores is part of the Trail of the Ancients. Future travel modes include passenger vehicle, commuter transit service, and bicycles. The transportation system in the area serves destinations both inside and outside of the corridor. Bicycling and other forms of recreation are increasing. Trails are an important component of the Town of Rico's regional master plan.

Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to increase. The communities along the corridor value connections to other areas, safety, and system preservation. They depend on tourism for economic activity in the area. Users of this corridor want to preserve the rural and mountain character of the area while supporting the movement of tourists and commuters in and through the corridor and recognizing the environmental, economic and social needs of the surrounding area.

Primary Investment Category: System Quality
Priority: Low

## Goals

- Increase travel reliability and improve mobility
- Support recreation travel, and enhance the traveling experience
- Eliminate shoulder deficiencies
- Support commuter travel
- Reduce the occurrence of animal/vehicle collisions in identified wildlife corridors


## Strategies

- Add passing/climbing lanes
- Provide commuter transit service to Telluride
- Add/improve shoulders
- Add pullouts and provide signage directing slow-moving vehicles to pull over
- Provide auxiliary lanes and signs at access points to public lands, as feasible
- Retain natural and cultural resources and viewsheds
- Improve intersections in urban areas
- Improve hot spots
- Consolidate accesses, where feasible
- Add wildlife/vehicle collision reduction measures, such as wildlife fencing, underpasses, overpasses, elevated highways or equally effective methods of mitigation to enhance safety

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CORRIDOR: SH 151 (PSW7008)
Description: From Ignacio to US 160 West of Pagosa Springs Beginning Mile Post 0 Ending Mile Post 33.96

The Vision for the SH 151 corridor is primarily to improve safety as well as to maintain system quality and increase mobility. This corridor is partially located within tribal lands, provides local access and makes east-west connections from Ignacio to U.S. 160, west of Pagosa Springs. Future travel modes include passenger vehicle and truck freight. The transportation system in the area primarily serves towns and destinations within the corridor.

Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to increase. Although passenger and truck freight traffic volumes are predicted to increase by 2035 , the volumes are not predicted to be at the level requiring capacity improvements. The communities along the corridor value safety and system preservation. They depend on tourism for economic activity in the area. Users of this corridor want to preserve the rural character of the area while supporting the movement of tourists in and through the corridor and recognizing the environmental, economic and social needs of the surrounding area. The corridor is affected significantly by coalbed methane (CBM) gas exploration and production.

## Primary Investment Category: Safety <br> Priority: Low

## Goals

- Reduce fatalities, injuries and property damage crash rate
- Preserve the existing transportation system
- Plan for increased oil and gas production impacts to the road system
- Recognize and plan for the potential impact of tribal projects (casinos, roadside businesses) to the road system
- Reduce the occurrence of animal/vehicle collisions in identified wildlife corridors


## Strategies

- Enhance transit service
- Provide auxiliary lanes and signs at access points to public lands, as feasible
- Provide rest areas
- Improve geometrics
- Improve visibility/sight lines
- Add/improve shoulders
- Improve hot spots
- Add wildlife/vehicle collision reduction measures, such as wildlife fencing, underpasses, overpasses, elevated highways or equally effective methods of mitigation to enhance safety
- Add surface treatment/overlays
- Encourage partnerships between CDOT and affected communities and tribes for studies, projects, access management plans, etc

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CORRIDOR: U.S. 160 (PSW7009)
Description: Four Corners to the Archuleta/Mineral County Line, MP 0.0 to MP 155.09
The Vision for the U.S. 160 corridor is primarily to increase mobility as well as to improve safety and to maintain system quality. Portions of the highway are located within Southern Ute and Ute Mountain Ute tribal lands. Portions of highway are within the San Juan Skyway, also designated as an All American Road, and Trail of the Ancients Scenic and Historic Byway. This corridor serves as a multimodal National Highway System facility and serves as the major east-west route through southern Colorado. This segment of the corridor serves destinations both within and outside the region, and makes connections from the Four Corners to the western boundary of Mineral County. It impacts the heart of several towns/cities and provides access to Mesa Verde National Park. Future travel modes include passenger vehicle, local, regional and interregional bus service, truck freight, bicycle and pedestrian facilities, and aviation. The transportation system in the area primarily serves towns, cities, and destinations within the corridor as well as destinations outside of the corridor. Segments of the US 160 corridor may be a candidate for a future strategic project.

Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to increase. The communities along the corridor value high levels of mobility, transportation choices, and connections to other areas, safety, and system preservation. They depend on tourism, agriculture, and commercial activity for economic activity in the area. Users of this corridor want to preserve the rural, mountain, and agricultural character of the area while supporting the movement of tourists and commuters in and through the corridor and recognizing the environmental, economic and social needs of the surrounding area. The corridor is affected significantly by coalbed methane (CBM) gas exploration and production.
Primary Investment Category: Mobility
Priority: High
Goals

- Increase travel reliability and improve mobility (across all modes)
- Plan for increased oil and gas production impacts to the road system
- Recognize and plan for the potential impact of tribal and other local projects to the road system
- Increase transit ridership through increased efficiency, effectiveness, frequency and convenience
- Promote environmentally responsible transportation improvement


## Strategies

- Encourage partnerships between CDOT and affected communities for studies, projects, access management plans, etc.
- General safety improvements
- Provide and expand transit bus and rail services
- Provide intermodal connections
- Coordinate service among transit providers
- Improve ITS incident response, traveler information and traffic management
- Construct intersection/interchange improvements
- Construct auxiliary lane (passing, turn, accel/decel)
- Add wildlife/vehicle collision reduction measures, such as wildlife fencing, underpasses, overpasses, elevated highways or equally effective methods of mitigation to enhance safety
- Promote environmental responsibility

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CORRIDOR: SH 172 (PSW7010)
Description: New Mexico Line North to US 160 Beginning Mile Post 0 Ending Mile Post 24.9
The Vision for the SH 172 corridor is primarily to maintain system quality as well as to improve safety and to increase mobility. This corridor is partially-located within the Southern Ute Indian Reservation and provides local access within the southern La Plata County area. Future travel modes include passenger vehicle, transit, and aviation (Durango-La Plata County Airport). The transportation system in the area primarily serves destinations within the corridor. The corridor provides the primary access to Ignacio and the Southern Ute Tribal Headquarters, the site of a large new casino and hotel, expected to attract large numbers of visitors.

Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to increase. The communities along the corridor value safety and system preservation. They depend on tourism for economic activity in the area. Users of this corridor want to preserve the rural character of the area while supporting the movement of tourists in and through the corridor while recognizing the environmental, economic and social needs of the surrounding area. The corridor is affected significantly by coalbed methane (CBM) gas exploration and production.

Primary Investment Category: Safety
Priority: High
Goals

- Reduce fatalities, injuries and property damage crash rate
- Preserve the existing transportation system
- Provide for tourist-friendly travel
- Provide for safe pedestrian travel across the highway
- Ensure airport facilities are maintained in a safe operating condition and are adequate to meet existing and projected demands


## Strategies

- Enhance transit service (local and regional)
- Improve geometrics
- Construct intersection improvements
- Add/improve shoulders
- Add auxiliary lanes
- Improve hot spots
- Add surface treatment/overlays
- Encourage partnerships between CDOT and affected communities, New Mexico and tribes for studies, projects, access management plans, etc (new)
- Meet facility objectives for the airport as identified in the Colorado Airport System Plan
- Add wildlife/vehicle collision reduction measures, such as wildlife fencing, underpasses, overpasses, elevated highways or equally effective methods of mitigation to enhance safety

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CORRIDOR: SH 184 (PSW7011)
Description: State Highway Connecting Mancos to Dolores and SH 491 (SH 666) (formerly US 666) Beginning Mile Post 0 Ending Mile Post 7.99

The Vision for the SH 184 corridor is primarily to maintain system quality as well as to improve safety and to increase mobility. A portion of the highway is within the Trail of the Ancients Scenic and Historic Byway. This corridor provides local and tourist access and makes east-west connections within the rural Montezuma County area. The highway also provides access to public lands. Future travel modes include passenger vehicle, however, locally elected officials have seen an increase in bicycle travel and expect this trend to continue. The transportation system in the area serves towns, cities, and destinations within and outside the corridor.

Based on historic and projected population and employment levels, passenger traffic volumes are expected to increase. Dolores town officials have seen an increase in bicycle traffic and expect this trend to continue. The communities along the corridor value connections to other areas, safety, and system preservation. They depend on tourism for economic activity in the area. Users of this corridor want to preserve the rural character of the area while supporting the movement of tourists and commuters in and through the corridor and recognizing the environmental, economic and social needs of the surrounding area.

| Primary Investment Category: | System Quality |
| :--- | :--- |
| Priority: | Low |

## Goals

- Support recreation travel
- Improve access to public lands
- Preserve the existing transportation system
- Eliminate shoulder deficiencies
- Reduce the occurrence of animal/vehicle collisions in identified wildlife corridors


## Strategies

- Assess intersection configurations and signage of access points to public lands
- Provide auxiliary lanes
- Improve signage
- Improve geometrics
- Add/improve shoulders
- Provide passing lanes, where feasible
- Improve hot spots
- Add surface treatment/overlays
- Add wildlife/vehicle collision reduction measures, such as wildlife fencing, underpasses, overpasses, elevated highways or equally effective methods of mitigation to enhance safety

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CORRIDOR: U.S. 491A (PSW7012)
Description: New Mexico State Line to Jct. US 160, Milepost 0.0 to 6.4
The Vision for the US 491A, New Mexico state line to Jct. US 160 corridor is primarily to increase mobility as well as to improve safety and to maintain system quality. This corridor serves as a multimodal National Highway System facility, connects to places outside the region, and makes north-south connections within the major route through southwest Colorado, within the Ute Mountain Ute reservation area. It is designated a hazardous materials route and serves as a major truck route from Albuquerque to Salt Lake City. Future travel modes include passenger vehicle, bus transit, and truck freight. The transportation system in the area primarily serves towns, cities, and destinations within the corridor as well as destinations outside of the corridor. The corridor is affected significantly by coalbed methane (CBM) gas exploration and production. Segments of the US 491 corridor were identified as candidate projects in the CDOT 2003 Strategic Investment Program.

Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to increase. Increased recreation traffic is expected at McPhee Reservoir and the Canyons of the Ancients, designated a national monument in the year 2000. The communities along the corridor value high levels of mobility, connections to other areas, safety, system preservation, and access to tribal lands. They depend on tourism for economic activity in the area. Users of this corridor want to preserve the rural character of the area while supporting the movement of tourists and freight in and through the corridor and recognizing the environmental, economic and social needs of the surrounding area.

## Primary Investment Category: Safety <br> Priority: <br> High

## Goals

- Reduce traffic congestion and improve traffic flow
- Provide for tourist-friendly travel
- General safety improvements
- Plan for increased oil and gas production impacts to the road system
- Support economic development and maintain traffic operations


## Strategies

- Add/improve shoulders
- Add passing lanes, as feasible
- Add accel/decel lanes
- Add turn lanes
- Provide transit service
- Improve ITS Traveler Information, Traffic Management, and Incident Mgmt
- Add guardrails
- Add drainage improvements
- General safety improvements
- Retain natural and cultural resources and viewsheds

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CORRIDOR: U.S. 491B (PSW7013)
Description: Cortez to Utah State Line Beginning Mile Post 26.371 Ending Mile Post 69.602
The Vision for the U.S. 491B corridor is primarily to maintain system quality as well as to improve safety and to increase mobility. The highway is located within the Ute Mountain Ute Reservation and provides access to tribal lands. This corridor serves as a multimodal National Highway System facility, connects to places outside the region, and makes north-south connections within the Southwest Transportation Planning Region area. It is designated a hazardous waste route and serves as a major truck route from Albuquerque to Salt Lake City. Future travel modes include passenger vehicle, truck freight, rail freight and aviation (Dove Creek Airport). The transportation system in the area serves towns, cities, and destinations within the corridor as well as destinations outside of the corridor.

Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to increase. Increased recreation traffic is expected at McPhee Reservoir and the Canyons of the Ancients, designated a national monument in the year 2000. New Mexico plans to fourlane the highway to the Colorado state line.

The communities along the corridor value connections to other areas, safety, and system preservation. They depend on tourism, agriculture, and commercial activity for economic activity in the area. Users of this corridor want to preserve the rural and agricultural character of the area while supporting the movement of tourists, commuters, freight, and farm-to-market products in and through the corridor and recognizing the environmental, economic and social needs of the surrounding area.

Primary Investment Category: System Quality
Priority: Medium

## Goals

- Accommodate growth in freight transport
- Reduce fatalities, injuries and property damage crash rate
- Maintain or improve pavement to optimal condition
- Promote environmentally sensitive transportation improvements
- Ensure airport facilities are maintained in a safe operating condition and are adequate to meet existing and projected demands


## Strategies

- Add passing lanes where feasible
- Eliminate shoulder deficiencies
- Improve hot spots
- Add accel/decel lanes
- Add turn lanes
- Retain natural and cultural resources and viewsheds
- Meet facility objectives for the airport as identified in the Colorado Airport System Plan
- Add wildlife/vehicle collision reduction measures, such as wildlife fencing, underpasses, overpasses, elevated highways or equally effective methods of mitigation to enhance safety

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CORRIDOR: U.S. 550 (PSW7014)
Description: New Mexico State Line to San Juan/Ouray County Line; Beginning Mile Post 0.0 Ending Mile Post 80.523

The Vision for the U.S. 550 corridor is primarily to increase mobility as well as to improve safety and to maintain system quality. The southern portion of the highway is located within the Southern Ute Reservation and provides access to tribal lands. The highway is part of the San Juan Skyway, which was one of the first six routes designated as an All-American Road. This corridor serves as a multimodal National Highway System facility, connects to places within and outside the region, and is the major route providing north-south connections within the Southwest Colorado area. It provides access to public lands. Future travel modes include passenger vehicle, local, regional and interregional bus transit, and truck freight. The transportation system in the area serves towns, cities, and destinations within the corridor as well as destinations outside of the corridor. Segments of the U S 550 corridor were identified as candidate projects in the CDOT 2003 Strategic Investment Program and may be a candidate for a future Strategic Projects Program.

Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to increase. The 2002 average annual daily traffic (AADT) ranged from 1,947 to 32,883 on different segments of the corridor, including 74 to 356 combination trucks, and the projected AADT for 2030 is 2,792 (at Silverton) to 50,377 (north of $14^{\text {th }}$ Street in Durango), including 107 to 669 combination trucks. The communities along the corridor value connections to other areas, safety, and system preservation. They depend on tourism and commercial activity for economic activity in the area. The corridor is affected significantly by coalbed methane (CBM) gas exploration and production. Users of this corridor want to preserve the rural and mountain character of the area while supporting the movement of tourists, commuters, and freight in and through the corridor and recognizing the environmental, economic and social needs of the surrounding area.

## Primary Investment Category: Mobility <br> Priority: High

## Goals

- Increase travel reliability and improve mobility
- Provide for tourist-friendly travel
- Coordinate transportation and land use decisions
- Support economic development and maintain environment
- Improve transit options


## Strategies

- Provide passing/climbing lanes, as feasible
- Improve/add intersections/interchanges, as feasible
- Retain natural and cultural resources and viewsheds
- Improve ITS traveler information, traffic management and incident management
- Encourage partnerships between CDOT and affected communities for studies, projects, access management plans, etc.
- Provide and expand transit bus services
- Provide for safe bicycle and pedestrian travel within towns
- Provide park ' $n$ ' rides, as feasible, and lighting in towns)
- Add wildlife/vehicle collision reduction measures, such as wildlife fencing, underpasses, overpasses, elevated highways or equally effective methods of mitigation to enhance safety
- Provide pullouts, as feasible, as well as signage directing slow-moving vehicles to pull over
- General safety improvements

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## VISION PLAN

For the purposes of this plan, the RPC examined all the available background data, matched unmet needs with the regional vision, values and goals, and determined the ultimate needs on each corridor segment that are consistent with the needs and desires of the community. With this in mind, the RPC assigned a primary investment category to each segment. This does not in any way imply that other types of projects may not be needed on any given corridor. For instance, if Safety was determined to be the primary investment category, the most pressing need may be for Safety type projects - passing lanes, straightening, signage, intersection improvements, etc. But, there may also be spot locations in the corridor that need to be addressed from a congestion or capacity standpoint, the main focus of the Mobility category. Likewise, if a segment has been selected primarily for System Quality improvements, there may also be a need for spot Safety or Mobility improvements. The goal has been to identify the primary set of needs given the corridor's place in the regional system prioritization.

## Multimodal Plan

This multimodal transportation plan addresses roadway, transit, aviation, rail, non-motorized transportation and travel demand management strategies. Table 20 lists all corridors in the region, the total cost of needed improvements, the primary investment category, the priority as assigned by the regional planning commission, and the percentage of funding from two different programs. A percentage of RPP funds has been assigned to the corridor. The column entitled Unprogrammed Strategic Projects \% represents future funds that may be available when the current Strategic Projects Program is complete.

Where transit costs can be attributed to an individual corridor, for instance intercity bus, those cost estimates have been included with the corridor. A separate category has been added, Community Based Transit, for those transit programs that are area based and cannot be assigned to a single corridor. Likewise, aviation costs have been assigned to a specific corridor based on the proximity of each airport to the highway corridor.

## Total Cost

Total costs are based on updated costs from the 2030 plan. The original (2030) cost was updated by subtracting expenditures for completed projects since the completion of the last plan in 2004, including FY 2006-2008, then factoring in the significant inflation in construction costs over the last three years. An enormous jump in costs has been identified, approximately $33 \%$, due to increasing pavement, steel and transportation costs. This has caused a significant scale back of expectations for transportation improvements in the near term.
The total Vision Plan cost from 2008 to 2035 is estimated to be about $\$ 2.6$ billion, including some $\$ 108$ million in transit costs and $\$ 178$ million in aviation costs.
Table 20: 2035 Vision Plan Priorities
2035 Vision Plan Priorities

| 2035 Vision Plan Priorities |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Corridor | Description | $\begin{aligned} & \text { Total Cost } \\ & 2008 \text { Dollars } \\ & (\$ 000)^{*} \end{aligned}$ |  |  | 2035 |  |  |  |
|  |  |  |  |  | Primary Investment Category | Priority | \% RPP | Unprogrammed Strategic Projects |
|  |  | Highway | Transit | Aviation |  |  |  |  |
| TPR | Region 5 Intersection Improvements | - |  |  | M/S/SQ | High | 30\% |  |
| TPR | Region 5 Shoulder Improvements | - |  |  | SQ | High | 10\% |  |
| TPR | Region 5 Engineering Studies \& Environmental Compliance | - |  |  | SQ | High | 5\% |  |
| TPR | Community Based Transit |  | \$108,032 |  | Mobility | High |  |  |
| SH 3 | US 160 to $8^{\text {th }}$ Street in Durango | \$26,600 |  |  | Safety | Low |  |  |
| SH 41 | Utah State Line to US 160 | \$28,063 |  |  | Safety | Low |  |  |
| SH 84 | NM State Line to Pagosa Springs | \$107,605 |  |  | Safety | Medium |  |  |
| SH 110 | US 550 to on/off ramp in Silverton | \$4,788 |  |  | System Quality | Low |  |  |
| SH 140 | NM State Line to Hesperus | \$43,091 |  |  | Mobility | Medium |  |  |
| SH 141 | West of Dove Creek to Montrose/Mesa County Line | \$21,347 |  |  | System Quality | Medium |  |  |
| SH 145 | East of Cortez to Dolores/San Miguel County Line | \$92,768 |  |  | System Quality | Low |  |  |
| SH 151 | US 160 to Ignacio | \$22,359 |  |  | Safety | Medium |  |  |
| US 160 | NM State Line to Archuleta/Mineral County Line | \$983,510 |  | \$76,926 | Mobility | High | 38\% | 50\% |
| SH 172 | NM State Line to US 160 | \$6,717 |  | \$101,508 | Safety | High | 5\% |  |
| SH 184 | Mancos to US 491 | \$71,820 |  |  | System Quality | Low |  |  |
| US 491 A | NM State Line to North of US 160 intersection in Cortez | \$279,480 |  |  | Safety | High | 3\% |  |
| US 491 B | Cortez to Utah State Line | \$159,068 |  | \$430 | System Quality | Medium |  |  |
| US 550 | NM State Line to San Juan/Ouray County Line | \$514,180 |  |  | Mobility | High | 9\% | 50\% |
|  | Sub-Total | \$2,361,396 | \$108,032 | \$178,864 |  |  | 100\% | 100\% |
|  | TOTAL | \$2,648,292 |  |  |  |  |  |  |  |

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## Transit Vision Plan

This section presents the Long-Range 2035 Transit Plan for the Regional Transportation Plan. The Long-Range Transit Plan includes an analysis of unmet needs, gaps in the service areas, regional transit needs, and a funding plan.
The Southwest is a challenging environment for public transportation due to the distinct rural nature of the area and scattered development in most parts of the region. Funding and land-use development patterns are constraints to transit growth in the region. One constraint is due to transit operations being dependent on federal transit funds and the lack of dedicated local funding in the study area. A second constraint is the low residential density within the region, combined with scattered work destinations, which limit the ability of traditional transit service to efficiently serve an increasing number of people. Transit services present opportunities for travelers and commuters to use alternate forms of ground transportation rather than personal vehicles.

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

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

This Plan looked at how people currently use the existing transit services, those who use the service, and what keeps others from doing so. There are many reasons why people choose their automobiles over transit services. Many of the future transit services would operate longer hours, run more frequently, and extend service areas. That option is expensive, particularly in the early years as ridership builds. However, a fast, frequent, and reliable transit system would attract all market segments to the service. There is no sugarcoating the fact that transit services cannot come close to paying for themselves. Almost all services across the nation are subsidized through the Federal Transit Administration, state funding sources, and grants. The ability to leverage these federal funds becomes a difficult challenge as this match, in most cases, must be a locally derived cash match. While there have been increasing sources of federal operating and capital funding in recent years, the ability to raise the local match in many of Colorado's rural areas is difficult at best.

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## Future Transit Funding

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

## 5309 Discretionary Funds

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

Approximately 10 percent of the funds are set aside for rehabilitation or replacement of buses and equipment, and the construction of bus transit facilities. It should be noted that in recent years the transit agencies in Colorado have submitted requests for projects through a statewide coalition-CASTA. The LSC Team encourages the transit agencies in the Southwest Region to join the CASTA coalition.

## 5310 Elderly and Persons with Disabilities Capital Funds

This program is administered by the Colorado Department of Transportation and provides funds to private, nonprofit agencies that transport elderly and disabled persons. The funds are available on a discretionary basis to support 80 percent of capital costs such as vehicles, wheelchair lifts, two-way radios, and other equipment. Preliminary estimates by FTA regional staff indicate that CDOT's apportionment for Fiscal Year 2008 is approximately $\$ 1.6$ million. For the Southwest Region, the amount of 5310 is $\$ 75,000$ in Fiscal Year 2008 and over the planning horizon (2008-2035), is estimated at $\$ 2.3$ million.

## 5311 Capital and Operating Funds

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

The program is administered by the Colorado Department of Transportation. The funds are available to public and private transportation providers in the state on a competitive, discretionary basis to support up to 80 percent of the net administrative costs and up to 50 percent of the net operating deficit. Use of this funding requires the agency to maintain certain records in compliance with federal and state requirements. A portion of the funds are apportioned directly to rural counties based upon population levels. The remaining funds are distributed by the Department of Transportation on a discretionary basis, based on system performance and merit of the grant application, and are typically used for capital purposes. The

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estimated funding for the Southwest Region in 5311 funding for Fiscal Year 2008 is $\$ 1.3$ million. The amount of 5311 funding over the planning horizon (2008-2035) is estimated at $\$ 43$ million.

## Additional Federal Transit Administration Funding Programs

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

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


## State Funding Sources

The Colorado Legislature passed legislation that provides state funding for public transportation under House Bill 1310. House Bill 1310 requires that 10 percent of funds raised under Senate Bill 1 be set aside for transit-related purposes. Funds under this legislation are available in 2007. The City of Durango received $\$ 5.1$ million of this Senate Bill 1 funding for building the Durango Transit Center.

## 2035 Transit Vision

Each provider in the Southwest Region was asked to submit operational and capital projects for the next 27 years to address long-range transit needs. The plan incorporates goals and strategies to address the gaps in service and support the corridor visions throughout the region. The Vision Plan is based on unrestricted funding for the transit providers. The submitted projects include costs to maintain the existing system and also projects that would enhance the current transit services. All of the projects are eligible for transit funding. For more information on the projects, the Local Transit Plan and Human Services Transportation Plan

Table 21: Transit Vision Plan

| Transit Vision Plan (\$000) |  |
| :---: | ---: |
| Existing Operational Costs | $\$ 53,953$ |
| New Service/Expand Service | $\$ 28,568$ |
| Subtotal | $\$ 82,521$ |
| Capital Costs |  |
| New/Replace Vehicles | $\$ 4,734$ |
| Facilities/Equipment | $\$ 20,776$ |
| Subtotal | $\$ 25,511$ |
| Grand Total | $\$ 108,032$ |

Source: LSC \& CDOT, 2007.

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The transit projects for the region for the next 27 years have an estimated cost of approximately $\$ 108$ million dollars as presented in Table 21. This total includes operational and capital costs.

## Aviation Vision Plan

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

Six Year Capital Improvement Program: Every airport in the State of Colorado that receives either Federal Aviation Administration (FAA) or Colorado Division of Aeronautics grant funds must develop and maintain a current six-year capital improvement program (CIP) list (see attached sample). That list contains major capital projects that the airport anticipates could take place over the six-year planning period. The CIP will show the year the project is anticipated to occur and further identifies anticipated funding sources that will be used to accomplish the project. Those funding sources may include local, FAA and Aeronautics Division funds.
CDOT - Aeronautics and FAA staff work very closely with those airports that anticipate funding eligible projects with grant funds from the FAA. Since the FAA and CDOT Aeronautics are concerned with the Statewide system of airports, it is very important that individual airport projects be properly planned and timed to fit within the anticipated annual Federal funding allocation.

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

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

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

The NPIAS comprises all commercial service airports, all reliever airports and selected general aviation airports. The plan draws selectively from local, regional and State planning studies.

The State of Colorado is served by a system of 77 public-use airports. These 77 airports are divided into two general categories, commercial service and general aviation. The Statewide Airport Inventory and Implementation Plan was designed to assist in developing a Colorado Airport System that best meets the needs of Colorado's residents, economy and visitors. The study was designed to provide the Division of Aeronautics with information that enables them

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to identify projects that are most beneficial to the system, helping to direct limited funding to those airports and those projects that are of the highest priority to Colorado's airport system.
The report accomplished several things including the assignment of each airport to one of three functional levels of importance: Major, Intermediate or Minor. Once each airport was assigned a functional level, a series of benchmarks related to system performance measures were identified. These benchmarks were used to assess the adequacy of the existing system by determining its current ability to comply with or meet each of the benchmarks.

Airport Survey Information: As a part of the CDOT 2035 Statewide Transportation Update process, a combination of written and verbal correspondences as well as actual site visits occurred requesting updated CIP information. The CIP list includes those projects that are anticipated to occur throughout the CDOT 2035 planning period. Letters were mailed out to each airport manager or representative that explained the CDOT plan update process. Included with each letter was a Capital Improvement Project Worksheet whereby airports could list their anticipated projects through the year 2035. Follow-up telephone calls as well as several additional site visits were conducted by Aeronautics Division staff to assist airports in gathering this information.

Most airports responded to this information request. Some of the smaller airports with limited or no staff were unable to respond.

Joint Planning Conferences: One of the methods utilized by the CDOT-Aeronautics Division to assist in the development of Airport Capital Improvement Programs is to conduct what is known as Joint Planning Conference (JPC). A JPC is a process whereby an airport invites tenants, users, elected officials, local citizens, special interests groups, and all other related groups to meet and discuss the future of the airport. CDOT-Aeronautic and FAA staff attend these meetings. The JPC allows an opportunity for all of the aviation community to contribute into the planning process of the airport. Many good ideas and suggestions are generated as a result of these meetings.

Table 22: Aviation Vision Plan

| Airport | Total (\$000) |
| :--- | ---: |
| Dove Creek Airport (Dove Creek) | $\$ 430$ |
| Stevens Field (Pagosa Springs) | $\$ 30,250$ |
| Durango/La Plata County (Durango) | $\$ 101,508$ |
| Animas Airpark (Durango) | $\$ 2,106$ |
| Cortez Municipal (Cortez) | $\$ 44,571$ |
|  | Total |

Source: CDOT Aeronautics, 2007

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## FISCALLY CONSTRAINED PLAN

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

## Resource Allocation

CDOT allocates funds to various programs, including Strategic Projects, System Quality (Preservation of the Existing System), Mobility, Safety, and Program Delivery as well as other Earmarks, Statewide Programs, and the Regional Priority Program (RPP). These program funds are allocated directly to CDOT Engineering Region 5. The Fiscally Constrained Plan focuses on the RPP designed specifically to engage local partners in the decision-making process for priorities among major projects. It is important to note that the size of other programs far exceeds the RPP. CDOT continues to develop a wide range transportation improvements throughout the state, and throughout the TPR, in addition to the RPP.

Total program funds are responsible for everything from major projects of statewide significance (Strategic Projects) to resurfacing to maintenance to bridge repair and bicycle/pedestrian programs. Uncertainty in future federal funds available from the Transportation Trust Fund may change the projections in Table 23.

Table 23: Fiscal Year 2008-2035 CDOT 2035 Planning Control Totals

| Program | Region $5(\$ 000)$ |
| :--- | ---: |
| Strategic Projects | $\$ 214,500$ |
| System Quality | $\$ 864,000$ |
| Mobility | $\$ 236,700$ |
| Safety | $\$ 360,500$ |
| Program Delivery | $\$ 177,600$ |
| Regional Priority Program | $\$ 59,200$ |
| Earmarks FY2008 \& FY2009 | $\$ 0$ |
| Total | $\$ 1,912,500$ |

Source: CDOT December 14, 2006

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## Regional Priority Program Funding

This plan deals primarily with funds from CDOT's Regional Priority Program (RPP) as allocated to each of six CDOT Regions. The Southwest TPR is located in CDOT Region 5. The allocation of RPP funds to CDOT Region 5 was $\$ 59.2$ million for the period 2008-2035 for distribution to the region's TPRs. The TPR will be allocated about $\$ 25.1$ million in RPP funds for the period 20082035. The TPR's vision plan for the region identifies about $\$ 2.6$ billion worth of desired highway, transit and aviation projects, which significantly exceeds the level of available funding. Being aware of the substantial funding shortfall, if additional funds are to be made available in the future, it may be possible to draw from the high priority corridor list from the vision plan without completing a full, and time consuming, plan update.

The Regional Planning Commission met on March 15, 2007 to review options and priorities for RPP funding. Table 24 lists the total constrained amounts for priority highway corridors, transit and aviation.

## Multimodal Constrained Plan

The multimodal fiscally constrained plan allocates funds reasonably expected to be available to the priorities established in the Vision Plan. A total of $\$ 25.1$ million from CDOT Region 5 is anticipated to be available during the planning period for the RPP program. Other funds for Safety, Traffic Operations, Bridge replacement, Resurfacing and other programs are also expected to be available, but are allocated by CDOT based on performance, infrastructure life expectancy and other factors.

The 2035 Constrained Plan total including highway, transit, and aviation improvements is $\$ 201.5$ million.

## Strategic Projects Program

The Strategic Projects Program (SPP) allocates Colorado General Funds to a set of specific projects around the State. The program began in 1997 with 28 high profile major corridor improvements commonly known as the " $7^{\text {th }}$ Pot" and is funded through an annual allocation through Senate Bill 97-1. The elements that qualify a project for high priority status are based on the project's regional or statewide significance, cost and return on investment of the project in addressing on-going needs of safety, system quality and mobility. These projects are large in scope and consist of multiple phases to complete.

All projects in the current program are projected to be complete by 2017. Past Projects in the Southwest TPR have included the US 550 corridor, US 160 on Wolf Creek Pass, and US 160 from SH 3 to Florida River. If funding is available in this program after 2017, the TPR recommends application of future SPP funds $50 \%$ to US 160 and $50 \%$ to US 550 .

| Southwest |  | 2035 Regional Transportation Plan |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Table 24: Constrained Plan |  |  |  |  |  |  |  |
| Corridor | Description | Primary Investment Category | Region RPP \% | $\begin{aligned} & \text { SP } \\ & \% \end{aligned}$ | 2035 Constrained Total (\$000) |  |  |
|  |  |  |  |  | Highway | Transit | Aviation |
| TPR | Region 5 Intersection Improvements | M/S/SQ | 30\% | - | \$7,535 |  |  |
| TPR | Region 5 Shoulder Improvements | System Quality | 10\% | - | \$2,512 |  |  |
| TPR | Region 5 Engineering Studies \& Environmental Compliance | System Quality | 5\% | - | \$1,256 |  |  |
| US 160 | NM State Line to Archuleta/Mineral County Line | Mobility | 38\% | 50\% | \$9,544 |  |  |
| SH 172 | NM State Line to US 160 | Safety | 5\% | - | \$1,256 |  |  |
| US 491 A | NM State Line to North of US 160 intersection in Cortez | Safety | 3\% | - | \$753 |  |  |
| US 550 | NM State Line to San Juan/Ouray County Line | Mobility | 9\% | 50\% | \$2,260 |  |  |
| TPR | Community Based Transit | Mobility | Transit | - | - | \$94,904 |  |
| TPR | Five airports | $\begin{aligned} & \text { System } \\ & \text { Quality } \end{aligned}$ | Aviation |  |  |  | \$81,500 |
| Subtotal |  |  |  |  | \$25,116 | \$94,904 | \$81,500 |
| Total |  |  |  |  | \$201,520 |  |  |

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## Transit Constrained Plan

The Long-Range Fiscally-Constrained Plan is presented in Table 25. The Fiscally-Constrained Plan presents the long-range transit projected funding for FTA and CDOT programs. This is anticipated funding which may be used to support services. It should be noted that this total constrained amount is only an estimate of funding. As funds are appropriated in future federal transportation bills, these amounts will likely fluctuate. Capital requests are anticipated for future vehicle requests for the 5310 and 5311 providers over the course of the 2035 Planning Horizon. Additionally, the local funding amounts have been held constant. The constrained operating plan has an estimated cost of approximately $\$ 78$ million, with a capital cost of approximately $\$ 16.6$ million. Due to the increase in estimated FTA and state funding for this region, an estimated $\$ 12.5$ million in new and expanded service and $\$ 11.8$ million in new regional service will be required. Total constrained FTA funding is approximately $\$ 68$ million. Approximately $\$ 26.9$ million in local funding will be required over the next 27 years.

Table 25: Transit Constrained Plan

| Program | Amount (\$000) |
| :---: | :---: |
| Operating Costs |  |
| Existing Operational Costs | \$53,953 |
| New/Expanded Service | \$12,490 |
| Regional Service | \$11,845 |
| Subtotal | \$78,289 |
| Capital Costs |  |
| Replacement Vehicles | \$4,735 |
| Facilities | \$11,881 |
| Subtotal | \$16,616 |
| Total Costs | \$94,904 |
|  |  |
| Funding Sources |  |
| Other Local Funding | \$0 |
| Local Match Funding | \$26,881 |
| FTA | \$68,023 |
| Total Funding | \$94,904 |

Source: LSC \& CDOT, 2007

## Aviation Constrained Plan

The constrained costs were developed for the airports in Colorado using very general assumptions and forecasts. Airports that receive entitlement money fell under the assumption that they will continue to receive entitlements through 2035 at the current level. In addition to the entitlements, forecasts were used to determine how much discretionary money an airport would receive. The discretionary money is all FAA dollars other than entitlement and any money the state might grant. The forecasts were derived from any projects in their 6 year CIP, any major projects anticipated outside the 6 year CIP, as well as looking at historic funding levels at that airport to help predict the possible level of funding over the next 28 years. Any contributions to the airport from the local communities were not included in these constrained costs. By no means do these constrained costs guarantee that each airport will receive this amount through 2035.

Table 26: Aviation Constrained Plan

| Airport | Total (\$000) |
| :--- | ---: |
| Dove Creek Airport (Dove Creek) | - |
| Stevens Field (Pagosa Springs) | $\$ 15,000$ |
| Durango/La Plata County (Durango) | $\$ 52,000$ |
| Animas Airpark (Durango) | $\$ 500$ |
| Cortez Municipal (Cortez) | $\$ 14,000$ |
|  | Total |

Source: CDOT Aeronautics, 2007

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## MIDTERM IMPLEMENTATION STRATEGY

The final step in the prioritization process was to identify a Midterm Implementation Strategy for the TPR. This step is an outcome of the 2030 Plan Debriefing Session at which many participants expressed the need for an intermediate strategy that is something less than the full long range outlook. In short, "Where should we focus our efforts?" The purpose of the Midterm Implementation Strategy is to identify what can be done to address difficult tradeoffs that are necessary to manage the transportation system over the next 10 years, knowing there are limited funds and increasing costs.
The Midterm Implementation Strategy has three parts. The Southwest TPR chose to base the Midterm Implementation Strategy on a series of critical regional issues that affect transportation. Part 2 is a priority statement that specifies which issues should be addressed first and, specifically, what corridors and projects should be implemented to address those issues. Finally, the regional planning commission identified a set of Strategies to Address Declining State and Federal Transportation Revenues to help set the agenda to identify expanded resources.

## Regional Issues

The Southwest TPR Midterm Implementation Strategy was chosen to address the many pressing issues that affect transportation:

- The Coalbed Methane (CBM) gas industry requires large numbers of heavy vehicles on public roads during exploration, production and maintenance phases
- Population and employment growth affects all aspects of the region
- Recreation/tourism bring many visitors to the region seeking access to public lands
- Growth in second home construction and occupancy has a major effect on the regional economy, driving up local real estate prices
- High real estate prices force many local workers to dispersed residential development relative to employment centers
- Environmental impacts from transportation in the form of particulates, Carbon Monoxide, noise, vehicle-animal crashes, water quality, and dependence on fossil fuels are undesirable in this sensitive region
- Residents have expressed a strong desire to establish and fund modal choices, such as local and regional public transportation, better bicycle/pedestrian facilities, Travel Demand Management (TDM) programs, and Intelligent Transportation Systems (ITS)
- Recognition that the mountainous terrain prevalent throughout the region contributes to high roadway construction prices and the knowledge that congestion and other transportation issues will not be solved by roadway improvements alone
- Several regional highways function as Main Street in the community with associated congestion, safety and environmental impacts
- Truck traffic is growing substantially on several regional corridors
- The region has expressed a desire to expand coordinated comprehensive planning efforts, especially with regard to the link between land use and transportation
- Safety issues, including, but not limited to, wildlife collisions, rockfall, and run-off-theroad crashes
- Failing infrastructure/deterioration of roads

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## Midterm Implementation Priority Statement

The second part of the Midterm Implementation Strategy directs currently available, and limited, funds toward a set of improvements determined through this planning process to be most critical. These strategies should be the focus of transportation investments over the midterm or the next ten years.
These offer the most benefits to moving people, goods and services throughout the region and should form the basis for project selection and programming. Funds should be utilized from appropriate CDOT programs including regional priority, system quality and safety programs as available.

While investments should also continue to be made on other corridors in the TPR, this group of highest priorities will help insure the interregional connectivity that is crucial to maintain regional and statewide economies and access to mobility.

The regional issues described above are evident in the following transportation impacts. CDOT should seek to program projects that specifically address these needs:

- Regional Pools - The Regional Planning Commission seeks to maximize the CDOT Regional Priority Program funds through the use of three major investment pools: intersections, shoulders and design. These programs are a high priority both for the TPR and Region 5 and have been allocated $45 \%$ of the available RPP funds. The intersection pool invests in intersection improvements based on a combination of safety analysis and county priorities. The shoulder pool leverages resurfacing dollars to fund the construction of shoulders when resurfacing activities are undertaken. The design pool prepares the Region to quickly advance construction projects when funds become available. Specific projects are chosen by the Region in consultation with the TPR and local governments.
- Issue: Increasing and unacceptable levels of vehicle crashes, including, but not limited to, wildlife collisions, rockfall, and run-off-the-road crashes.

Strategies: Intersection Improvements Pool; US 160 at CR 222/223; US 160, west of Pagosa Springs; US 550 New Mexico State Line north (fencing and wildlife underpasses).

- Issue: Congestion in regional corridors.

Strategies: US 491 passing lane; US 550, New Mexico State Line north (widening).

- Issue: Deterioration of highway infrastructure.

Strategy: SH 172 resurfacing and auxiliary lanes.

- Issue: Lack of modal choices including local and regional public transportation.

Strategies: Durango Transit Center; bike path along US 160, east of Durango; shoulders added to resurfacing projects to accommodate bicyclists.

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## Strategies to Address Declining State and Federal Transportation Revenues

The Regional Planning Commission (RPC) recognizes that CDOT investment in capital improvements using existing resources must necessarily be minimal over the midterm due to accelerating costs and declining revenues. Current funding projections indicate an inability to simply build out of transportation problems through highway development alone. To help offset costs, the RPC adopts the following Midterm Implementation Strategy Policies:
In general, the TPR felt that the funding status quo will not be sufficient to adequately address transportation needs in either the short or long term. The Strategies to Increase Transportation Revenue address the need to either increase existing revenue streams or seek additional funding mechanisms.

- The RPC supports state initiatives to modify provisions of the Energy Impact Fund, the state Severance Tax, and/or the federal Mineral Leasing Act to increase revenues available for transportation improvements for facilities affected by energy development. Any modifications should require that additional revenues are dedicated to transportation improvements in the areas affected by the energy development.
- The RPC encourages local governments - counties and municipalities - and state and federal land management agencies to work directly with CDOT to develop local comprehensive plans that minimize the effects of growth and development on state operated transportation infrastructure.
- Access Management Plans should be completed for corridors or portions of corridors where residential or commercial development is anticipated that may degrade existing level of service.
- The RPC supports local initiatives to create Special Improvement Districts and Rural Transportation Authorities to contribute local funds to transportation projects on state facilities. Projects supported by such initiatives will receive consideration in the priority planning and programming process.
- The RPC supports state initiatives to increase state and federal funding for transportation, including adjustments to the gas tax or sales tax.

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## ASSESSMENT OF IMPACTS OF PLAN IMPLEMENTATION

The impacts from implementation of this plan are mixed. The currently acute shortage of transportation funding will continue to provide challenges for the TPR. The constrained plan will allocate funds to the TPR's most critical needs as identified in the Midterm Implementation Strategy; the Regional Pools will use $45 \%$ of the available RPP in combination with other safety, operational, resurfacing and engineering/environmental funds to address specific problems based on engineering, safety and other criteria. In addition, some funds will be available to address major mobility and safety issues on major regional and interregional corridors like US 160, US 550, US 491 and SH 172. Overall, the Midterm Implementation Strategies will direct funding at the most critical areas so as to provide the best possible system, within funding constraints.

Reasonably expected transit funding will keep the existing transit providers operating at existing levels, with little opportunity for expansion of services beyond the current clientele. Fixed route transit and improved intercity bus or rail may be needed in the future, if not sooner, but funding availability will make implementation difficult in the near term.
The TPR has clearly placed a priority on developing transportation improvements in an environmentally sensitive way. This can be accomplished through both mitigation of impacts and seeking alternative modal options that may be less damaging to air quality, water quality, scenic assets and other quality of life issues. The TPR is also dedicated to making transportation available to those traditionally underserved by private automobiles.
Outside of these areas, the TPR will expect to see little additional major construction work in the near term due to the long list of competing needs and the perceived under funding of transportation. While CDOT will continue to address safety, bridge and resurfacing needs on many of the region's highways, other major work will have to wait for the funding scenario to improve.

As a result, congestion will continue to deteriorate in spot locations on US 550 and US 160 throughout the TPR. Many of the region's highways will continue to operate without adequate shoulders providing challenges to the trucking industry and cyclists as well as leaving some safety concerns unaddressed. Surface conditions are expected to deteriorate over time.


[^0]:    Source: CDOT

[^1]:    Table 17: Means of Transport to Work for Workers 16 and Over by County, 2000

