

November 18, 2004

Southwest Regional Planning Commission

By:

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# THE SOUTHWEST TRANSPORTATION PLANNING REGION

## INTRODUCTION

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The Southwest 2030 Regional Transportation Plan "the Plan" has been prepared as part of the Colorado Department of Transportation's (CDOT) Regional and Statewide Transportation Planning Process. The Southwest Transportation Planning Region (TPR) is one of 15 TPRs comprising the entire State of Colorado. The Southwest TPR consists of Archuleta, Dolores, La Plata, Montezuma, and San Juan Counties as well as the Ute Mountain Ute and Southern Ute Tribes. The entire TPR is within CDOT Region 5.

The Plan considers all modes of transportation. The Planning process has been instrumental in developing not only long range plans, but dialogue between representatives of the TPR, local officials, the public, and CDOT. The plan addresses the planning period from 2005 - 2030. Its purpose is to develop an understanding of the long-term transportation needs of the region and to identify priorities for funding. This has not been a simple task. The needs are diverse and extensive, while available funding is generally understood as inadequate. Therefore, tough choices have necessarily been made regarding the level of improvements that might be reasonably expected, and on what facilities.

It is the belief of the Southwest Regional Planning Commission that this plan best represents the needs of the TPR within the context of stringent fiscal constraints. The Plan also takes a new approach for the TPR in that, rather than a simple project-based plan that attempts to identify specific improvements at specific locations, it develops a corridor-based approach. The Plan identifies multi-modal corridors that may contain a highway, transit providers and service areas, airports, railroads, and bicycle pedestrian facilities. These modes move the region's people, goods and services and are critical to its economic well being and the general quality of life, not only for this region, but also for the state as a whole.

The plan is also unique in that two previously distinct planning processes have been brought together for the first time. Until now, a Regional Transportation Plan formed the basis for (primarily) state highway funding, while the separate Transit Development Program (TDP) was used to establish short- and mid-term needs for public transportation providers. The current planning process dispenses with the TDP in favor of the new Transit Element (TE), containing both short- and long-term public transportation needs. The TE process, while focused on transit needs, is an integral component of the 2030 transportation plan. While published under separate cover, key sections of the TE have been summarized and incorporated in this document. It can be located on the CDOT website WWW.dot.state.co.us/StateWidePlanning/PlanningStudies.

The following map shows the Southwest TPR planning area.

#### Exhibit 1: Study Area Map



# THE TRANSPORTATION PLANNING PROCESS

The regional transportation plan is based on a combination of the TPR's vision and values and CDOT's stated policies, goals, and investment strategies. The plans are seen to incorporate the statewide transportation vision as expressed by CDOT. Together with statewide programs such as surface treatment, safety programs and the bridge rehabilitation and replacement program, the entire state's needs are encompassed within the Statewide Transportation Plan. In other words, the Statewide Transportation Plan is the summation of needs at the regional and statewide levels.





## **Consistency with State and Federal Requirements**

This plan is offered in response to state and federal requirements to have in place a current long-range transportation plan. The planning process will be based primarily on TEA-21, Title 43 Colorado Revised Statutes, *Colorado's Statewide and Regional Transportation Planning Process Rules and Regulations*, the *Regional Planning Guidebook*, and the *Transit Element Guidelines*.

Other potential sources of guidance include the *Colorado Statewide Planning Public Involvement Guidelines*, Environmental Justice guidance issued by CDOT and the FHWA, CDOT's *Corridor Optimization Guidelines*, the *State of Colorado Access Code*, Federal guidance on *Limited English Proficiency*, and other appropriate documents.

This plan meets all regulatory and statutory requirements with respect to public involvement and review, subject matter covered, projected timeline, and other items as required.

## FHWA Participation

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.

# THE REGIONAL PLANNING COMMISSION

The Southwest Regional Planning Commission (RPC) has been established by memorandum of agreement to include a representative from each county and each incorporated municipality within the TPR. The RPC has the responsibility to carry out the regional planning process and adopt the plan. The RPC met regularly throughout 2003 and 2004 to oversee the plan.

Southwest Regional Planning Commission			
Member Name	Title	Organization	
Jose Quintana	Town Manager	Town of Ignacio	
Bob Goffinett	Weenimuche Construction Manager	Ute Mt Ute Tribe	
Robert Ledger	City Manager	City of Durango	
Dave Erickson	Town Manager	Town of Silverton	
Frank Joswick	Chairperson	La Plata County Commissioners	
Alden Ecker	Commissioner	Archuleta County Commissioners	
Irvin Frazier	Town Supervisor	Town of Dove Creek	
Ernest Kulham	Commissioner	San Juan County Commissioners	
Hal Shepherd	Town Representative	City of Cortez	
Brett Boyer	Town Manager	Town of Bayfield	
Ashton Harrison	Town Manager	Town of Rico	
Tom Glover	Town Manager	Town of Mancos	
Wendy Mimiaga	Town Representative	Town of Delores	
Mike Jones	Tribal Planner	Southern Ute Indian Tribe	
Dewayne Findley	Commissioner	Montezuma County Commissioners	
Mark Garcia	Town Administrator	Town of Pagosa Springs	

#### Table 1: Regional Planning Commission Members

# TRANSIT ADVISORY COMMITTEE

The Transit Advisory Committee (TAC) was established to provide technical guidance during the development of the Transit Element. The TAC also met regularly throughout 2003 and 2004 to oversee transit planning. Representatives included transit provider staff, local citizens, and local policy-makers within the SWTPR. The Transit Element was approved by the Southwest RPC on May 6, 2003.

# **II PUBLIC PARTICIPATION**

The public involvement process provides for communication among all interested parties through public meetings, newsletters, and project updates. It is *the* essential element in facilitating cooperation and consensus building. This planning process sought to involve all interested parties at key points in the process including visioning, identification of issues, and drafting of the plan.

The consultant team developed a comprehensive mailing list of local agencies, interest groups, modal representatives and citizens with an interest in the plan. A series of five meetings open to the public, as recommended by CDOT in the recent update to the *Guidelines for the Public Involvement in Statewide Transportation Planning and Programming*, were held to obtain public input on visioning for the TPR.

The public involvement plan considered the needs of those persons or groups that may be considered traditionally under-served or that could potentially be impacted by future transportation decisions. All meetings were held in locations accessible to those with disabilities. Provisions were made to translate meeting notices and documents as needed, but no requests were received.

CDOT has developed recommendations for its **environmental justice** initiative that give specific guidance on its three fundamental principles:

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

These **environmental justice** principles and other guidance on implementing the **Federal Title VI** elements with respect to income, race, ethnicity, gender, age and disability have been central parts of the planning process. Individuals falling into the above categories were identified by their county of residence in the Plan and the TE. A more detailed breakdown of the above population groups by census tract or block group would occur during project development.

# **DOLA OUTREACH PROGRAM**

Ed Morlan, Executive Director of the Southwest Transportation Planning Region, with assistance from the Department of Local Affairs and CDOT, held Community Input meetings in each community in the TPR with fewer than 5,000 residents. URS provided supporting information and documentation for this outreach program. The presentation included an opportunity to view information about the planning process, data about the transportation system, and to identify specific issues or ideas about transportation in the surrounding area. The meetings were widely regarded as successful and informative. Residents of the smaller communities were appreciative of the chance to air their concerns and have them included in the long-range plan. A total of ten DOLA meetings took place throughout the Southwest TPR. Comments received at the meetings are provided below.

Meetings were held at the following times and places indicated in Table 2.

#### Table 2: DOLA Meeting Locations and Dates

DOLA Outreach Meetings			
Location	Date	Time	
San Juan County Courthouse	October 8, 2003	10:00 am	
Mancos Town Hall	October 8, 2003	6:30 pm	
Silverton Town Hall	October 13, 2003	7:30 pm	
Dolores County Courthouse	October 20, 2003	2:00 pm	
Bayfield, Town Hall	October 21, 2003	6:30 pm	
Southern Ute Tribe Headquarters	October 22, 2003	9:00 am	
Rico Town Hall	October 22, 2003	8:00 pm	
Dolores Town Hall	November 10, 2003	7:00 pm	
Pagosa Springs Town Hall	November 14, 2003	12:00 pm	
Ignacio Town Hall	December 9, 2003	7:05 pm	

## **DOLA Meeting Comments**

Comments received have been incorporated in this report in two ways: recommendations were included, if appropriate, in the representative projects portion of the corridor visions; for concerns considered short-term and not appropriate for this long-range plan, comments were forwarded directly to CDOT for possible attention.

**San Juan County** – Recommended four lanes for US 550 from the state line to Durango; important to Silverton.

**Town of Silverton** – Maintenance questions and discussion of road closure procedures on Hwy 550 for rockfall mitigation project. Questions were raised regarding resurfacing of SH110A and SH110B.

**Dolores County Courthouse** – Renaming of US 666 to US 491 was discussed. Local traffic intersection discussion occurred and questions were raised.

**Town of Bayfield** – US 160 between Durango and Bayfield, particularly in the Grandview Area, bridge work on 160E is a problem and the guardrails impede the pedestrian pathway.

Southern Ute Tribe – Questions raised about the Grandview project and right-of-way along US 550.

**Town of Rico** – Bike and pedestrian facilities are being installed along the river in Rico. Expressed the need for carpooling and transit between Rico and Telluride. Speed limit through town of Rico is too high. The change in the snow removal policy on state highway through town.

**Dolores Town Hall** – It was mentioned that bicycle and recreational travel is increasing along the SH 145 corridor, and that shoulders need widening to accommodate this traffic.

**Pagosa Springs** – Concerns were raised that left turn lanes are needed at US160/8<sup>th</sup> Street, US160/10<sup>th</sup> Street, and US160/Great West Avenue. A recommendation to include improving wildlife crossings in the planning process surfaced.

**Town of Ignacio** – Discussion of enhancement project with town and tribe. Attendees expressed appreciation for intersection improvements to SH172/SH151 junction.

#### **Response to Significant Issues**

All above comments have been addressed in the representative projects portion of the corridor visions.

## **PUBLIC MEETINGS**

Public meetings were held at key stages of Plan development at the following places and times within the SWTPR:

#### **Table 3: Public Meeting Times and Locations**

Public Meeting Times and Locations			
Location	Date	Time	
La Plata County Building, Anasazi Room, 1060 E. 2 <sup>nd</sup> Avenue, Durango, CO	Sept. 8, 2003	9:30 am – 11:30 pm	
Archuleta County Courthouse, 449 San Juan Street, Pagosa Springs, CO	Sept. 9, 2003	1:30 pm – 3:30 pm	
Montezuma County Courthouse, 109 West Main, Rm 301, Cortez, CO	Sept. 15, 2003	10:00 am – 12:00 pm	
Dolores County Courthouse, 409 North Main, Dover Creek, CO	Sept. 15, 2003	2:00 pm – 4:00 pm	
Silverton Town Hall, 1360 Green Street, Silverton, CO	Sept. 15, 2003	7:00 pm – 9:00 pm	
Ute Mountain Ute Tribal Complex, Towaoc Cx	Feb, 5, 2004	9:00 pm10:30 am	
La Plata County Fairgrounds (for Archuleta, La Plata and San Juan Counties and the Southern Ute Indian Tribe) Durango, CO	March 10, 2004	4:00 pm – 7:00 pm	
Cortez City Hall (for Dolores and Montezuma Counties and Ute Mountain Ute Tribe) Cortez, CO	March 11, 2004	4:00 pm – 7:00 pm	
CDOT Maintenance Facility, Durango, Durango, CO	Sept. 9, 2004	5:00 pm 7:00 pm	
Ute Mountain Ute Tribal Complex, Towaoc, CO	Oct. 21, 2004	5:00 pm 7:00 pm	

## **Overview of Public Meetings**

In September 2003, the Southwest Regional Planning Commission held the first round of public meetings to introduce the regional transportation planning process to the public. At these meetings, the public was given the opportunity to participate in the planning process as well as voice their concerns on specific transportation issues. Typical concerns focused on highway construction, particularly the US 160, US 491 and US 550 corridors, the adequacy of aviation and transit services within the region, and concern over limited transportation dollars. The second round of meetings were held in mid-March 2004 to present the Preferred Transportation Plan to the public for comment. At these meetings the public was given the opportunity to bring forward any additional transportation projects for consideration. The Preferred Transportation Plan includes all transportation projects identified in the development of the Southwest Transportation Planning Regions regional transportation plan. The third public meeting was held in early

September 2004 was a joint meeting with CDOT and the Southwest Regional Planning Commission for the purpose of presenting the Draft 2005-2030 Colorado Transportation Plan and Draft 2005-2030 Southwest Regional Transportation Plan to the public for review and comment. In addition the opportunity for additional public meetings was extended to the Southern Ute and Ute Mountain Ute Tribes. In early February and late October of 2004, public meetings were held at the Ute Mountain Ute Tribal Complex in Towaoc. The first meeting explained the transportation planning process used to develop the regional Plan, the second was a joint CDOT and Southwest Regional Planning Commission meeting to review the findings of the state and regional transportation plans.

# III REGIONAL VISION, GOALS & STRATEGIES

This task 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, RPC, and TAC 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 2030 plan.

The consultant team led the RPC in a series of exercises to help reach consensus on the Regional Vision, Goals, and Strategies and how best to implement them in support of regional quality of life. CDOT's *Regional Planning Guidebook* offers a series of questions to assist in the completion of this task.

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 multi modal 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.

## 2030 VISION FOR TRANSPORTATION SERVICES IN THE SOUTHWEST REGION

The Southwest Transportation Planning Region envisions a region that will

Ensure that the quality of life desired by its residents and visitors is maintained 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 travel, and an enhanced highway system".

#### Goal 1 A <u>safe region-wide</u> transportation system

**<u>Strategy 1a</u>**: Increase safety considerations.

- **Strategy 1b:** Ensure highway rights-of-way owners properly maintain their highways to allow for the continued functional nature and needs of the community as related to current use of the highway.
- **Strategy 1c:** 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 A transportation system that meets capacity needs

- **Strategy 2a:** Develop interregional corridor partnerships to cooperate on key growth areas and the quality of transportation systems.
- **Strategy 2b:** Recognize the importance of Highways 160, 550, 491 as major transportation corridors, as well as the importance of adjacent feeder routes.
- **Strategy 2c:** Ensure that economic lifelines and transportation links are balanced and accessible to all.
- **<u>Strategy 2d:</u>** Develop flexible project prioritization system and timetable.
- **Strategy 2e:** Balance regional and statewide highway design and maintenance with local needs.
- **Strategy 2f:** Maximize flexibility in the design of transportation projects to accommodate changing functional uses and community needs for transportation facilities.

#### Goal 3 Streets and highways that are a beautiful sight to all

- Goal 4 Multi-modal options
- **<u>Strategy 4a:</u>** Encourage transit oriented and multi-modal development.

#### Goal 5 Enhanced telecommunications

**<u>Strategy 5a:</u>** Emphasize the importance of telecommunications in the regional plan.

#### Goal 6 Enhanced air service

**<u>Strategy 6a:</u>** Encourage an increased number of flights for air passenger travel.

#### Goal 7 Enhanced rail service for commerce and tourism

- Goal 8 Enhanced communications with state and federal government agencies.
- **Strategy 8a:** Consider the effects of federal and state regulations and policies on the region.

#### Goal 9 A trail system connecting population centers to business centers

# Goal 10 Effective (upgraded and maintained) access along primary routes to visitor destinations for employees and tourists

<u>Strategy 10a:</u> Upgrade and maintain major/primary routes to accommodate tourism/scenic byways/trails.

# Goal 11 A transportation system that addresses natural resources, geographical situations and environmental factors

**Strategy 11a:** Encourage highway design and maintenance practices that are consistent with the functional and environmental needs of the communities through which the highways pass.

#### Goal 12 A transportation system that maximizes total funding for the region

- **<u>Strategy 12a:</u>** Maximize funding for the region
- **Strategy 12b:** Develop realistic plans based on the ability to fund new projects and to maintain the existing transportation system.
- **Strategy 12c:** Secure funding to upgrade highways when there is agreement between governments to convey highway ownership and such

# **IV TRANSPORTATION SYSTEM INVENTORY**

This chapter provides a comprehensive 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 etc. to identify existing conditions. Not only will this "picture" of the existing systems broaden our knowledge of what types of systems 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 is dependent, to a significant degree, on the Transportation Planning Data Set as developed by 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 have been mapped and displayed using the ArcView/GIS program.

*Note on Transit*: A complete inventory of transit operators and their services was undertaken during the transit element **process** and is fully integrated with the RTP. This document contains summary information about local transit systems; for complete information about public transportation, please see the *Transit Element* published separately.

# HIGHWAY SYSTEM

The following section utilizes the best, most current data available as provided by CDOT. Most highway information is for the year 2001, the most recent available. The section describes the region's highway system with the following information:

- Project Area
- National Highway System
- Scenic Byways
- Functional Classification and Mileage
- Traffic Volumes
- Surface Condition
- Bridges
- Accident Locations
- Commercial Truck Traffic
- Hazardous Materials Routes

## Project Area

The project area encompasses Archuleta, Dolores, La Plata, Montezuma, and San Juan Counties and the Southern Ute and Ute Mountain Ute Tribal Lands. The major north/south route in the region is US 550 and the major east/west route is US 160.

#### Exhibit 3: Project Area Map



# National Highway System

The National Highway System (NHS) was first proposed in Intermodal Surface Transportation Efficiency Act in 1991 and was adopted by Congress. 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. Nearly 240 miles of the 507 miles of state highway within the TPR are identified as being on the NHS.

#### Exhibit 4: National Highway Systems Map



# 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 in Colorado affords 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 - <a href="http://www.coloradobyways.org/Main.cfm">http://www.coloradobyways.org/Main.cfm</a>)

The major Scenic Byways in the region include US 550 north of Silverton south to Durango, and US 160 from Durango to the west (state line). Also, SH 145 north of Rico down to Cortez, segments of US 491 (previously US 666), SH 41, and other roadway segments are designated as Scenic Byways of the SWTPR.

#### Exhibit 5: Scenic Byways Map



## Functional Classification

The classification of the highway system, as defined by FHWA, and is divided between rural and urban areas. The functional classification system is based on the grouping of streets and highways into classes, or systems, according to the character of the service they are intended to provide. The road classes are used for urban and rural systems:

- 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.

#### Exhibit 6: Functional Classification Map



#### STATE HIGHWAYS

The following table shows mileages and percent of total state highways for each functional classification within the TPR. Of just over 500 miles, approximately 50.6% are Principal Arterial Rural, 23.8% Major Collector Rural, and 18.7% Minor Arterial Rural.

	Table 4:	State	Highway	Functional	Classification
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State Highway Functional Classification					
Highway Classification % of Total Miles					
Freeway Urban	0.0%	0			
Other Principal Arterial Urban	4.7%	24			
Collector Urban	0.0%	0			
Minor Arterial Urban	0.5%	2			
Interstate Rural	0.0%	0			
Other Principal Arterial Rural	50.6%	256			
Minor Arterial Rural	18.7%	95			
Major Collector Rural	23.8%	120			
Minor Collector Rural	1.7%	9			
Total	100.0%	507			

Source: CDOT

#### LOCAL ROADS

The following table shows mileages and percent of total local roadways for each functional classification within the TPR. Local roadways are under the jurisdiction of a county or municipality. Of just under 3,700 miles, approximately 76.8% are Local Rural.

#### Table 5: Local Road Functional Classification

Local Road Functional Classification		
Road Classification	Miles	% of Total
Principal Arterial Rural	0	0.0%
Minor Arterial Rural	0	0.0%
Major Collector Rural	247	6.7%
Minor Collector Rural	474	12.8%
Local Rural	2,840	76.8%
Highway Urban	0	0.0%
Principal Arterial Urban	3	0.1%
Minor Arterial Urban	20	0.5%
Major Collector Urban	25	0.7%
Local Urban	90	2.4%
Total	3,698	100%

Source: CDOT

# Traffic Volumes

Traffic volumes on state highways were generated using CDOT data for 2001, 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.

#### Exhibit 7: Average Annual Daily Traffic 2001 Map



# Volume to Capacity Ratio

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, two-lane road with no shoulders are much more congested than 5,000 vehicles per day on a 4-lane interstate facility. In the following map, the Volume (AADT) is compared with the capacity of the facility to obtain a ratio between 0 (no congestion) and 100 (gridlock). Congestion starts to become a noticeable problem in rural areas when the V/C ratio reaches .60. In urban areas, .85 is more commonly acknowledged as the lower limit of severe congestion.

#### Exhibit 8: Volume to Capacity Ratio 2001 Map



# Surface Condition

CDOT rates the condition of highway surfaces with its Pavement Management System, providing a range of years of remaining service life of the pavement of the highway segment. Depending 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 or 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. The following exhibit reflects the miles of state highways in the TPR that are in good/fair/poor condition based on Remaining Service Life. CDOT has recently developed a new methodology for determining good, fair a poor condition it is expected that the new method will be used in the next regional transportation update.



#### Exhibit 9: Highway Miles by Surface Condition
### HIGHWAY SURFACE CONDITION

CDOT has reallocated significant funding from construction programs to the surface treatment program to attempt to meet its number one goal of maintaining the existing system at an acceptable level. In 2001 nearly 60% of the regions state roadway were in poor condition. In contrast, slightly over 40% were in good/fair condition. The following table breaks down the roadway surface condition by county.

Southwest TPR Highway Surface Condition												
		N	liles per Condit	ion	Perc	entage per Con	dition					
County	Miles	Good	Fair	Poor	Good	Fair	Poor					
Archuleta	94	33	30	31	35.2%	31.8%	33.0%					
Dolores	44	15	4	25	35.0%	8.2%	56.8%					
La Plata	158	33	8	117	21.0%	4.9%	74.2%					
Montezuma	171	47	9	115	27.4%	5.3%	67.2%					
San Juan	40	0	30	9	0.6%	76.1%	23.4%					
Total	507	129	81	297	25.4%	15.9%	58.7%					

### Table 6: Highway Surface Condition

Source: CDOT 2001

### SURFACE CONDITION

The following map shows the distribution of Good, Fair and Poor highway segments in 2001. Recent repaving projects may have changed to picture somewhat, but as some segments are being repaved, others reach the end of service life.

#### Exhibit 10: Surface Condition Map



# State Highway Bridges

Each bridge on the state highway system is given a Bridge Sufficiency Rating 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 less than .80 and more than 20 feet in length are eligible for rehabilitation funding. Bridges with a sufficiency rating of less than 50 feet and 20 feet in length are eligible for replacement funding. Those bridges are plotted on the following map. 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. The data presented here concerning bridges is for information only about the region's system and not intended as part of the major scope of the plan.



### Exhibit 11: Functionally Obsolete / Structurally Deficient Bridge Map

# Accident Locations

Two sources of information about highway safety and accident locations were examined for this report. CDOT provided a segment-by-segment analysis for the planning process, which showed a crash rate, an injury rate, and a fatality rate on each section of highway. This data provided information for the prioritization of corridors and about the type of work that should be done in the Alternatives Analysis chapter of this report. In addition, year 2001 crash data has been plotted in the following map to provide an overview, for one year, of the distribution and concentration of crashes in the region.

## Exhibit 12: Accident Locations Map



# Freight

The two following maps, Exhibits 13 and 14 provide a picture of the level of commercial truck use on regional highways. The first, Commercial Truck AADT, shows the actual volume of commercial trucks on highways. The heaviest used highways, defined as those with more than 150 trucks per day, include US 160 across the entire region, US 550 north of Durango and down to the south and US 491 throughout the region. The second, Commercial Truck Percent Total AADT, shows the percentage of trucks relative to the total traffic stream. A percentage of greater than 10% indicates that a corridor more than likely plays a role in the movement of commerce within the TPR. This map shows the highest percentage of trucks occurs along US 491 north of Cortez heading northwest to the Utah state line. US 160, US 550, SH 84, SH 140, SH145, and SH 151 minimally meet the 10% percentage level. All the other roadways carry 10% or less truck traffic.

### Exhibit 13: Commercial Truck Average Annual Daily Traffic – 2001 Map





### Exhibit 14: Commercial Trucks Percent Total AADT – 2001 Map

#### FREIGHT ANALYSIS FRAMEWORK

Additional information was acquired from existing federal and local databases as appropriate. For instance, a new federal database reporting model, the *Freight Analysis Framework*, is available to assist us in understanding commercial vehicle movements in relationship to inter-regional and interstate travel on the state highway system.

"Understanding future freight activity is important for matching infrastructure supply to demand and for assessing potential investment and operational strategies. To help decision makers identify areas in need of capacity improvements, the U.S. Department of Transportation developed the Freight Analysis Framework (FAF), a comprehensive national data and analysis tool, including county-to-county freight flows for the truck, rail, water, and air modes. FAF also forecasts freight activity in 2010 and 2020 for each of these modes. Information about the methodology used in developing FAF is available on the Office of Freight Management and Operations' website www.ops.fhwa.dot.gov/freight.

The U.S. freight transportation network moves a high volume of goods each year. Over 15 billion tons of goods, worth over \$9 trillion, were moved in 1998. The movement of bulk goods, such as grains, coal, and ores, still comprises a large share of the tonnage moved on the U.S. freight network. However, lighter and more valuable goods, such as computers and office equipment, now make up an increasing proportion of what is moved. FAF estimates that trucks carried about 71 percent of the total tonnage and 80 percent of the total value of U.S. shipments in 1998. By 2020, the U.S. transportation system is expected to handle about 23 billion tons of cargo valued at nearly \$30 trillion.

The following map shows the relative flows of commercial truck traffic on a national basis that either originates or terminates in Colorado. In the TPR, US 160 and US 550 stand out in this macro-level view.



### Exhibit 15: Map Freight Flows to, from, and Within Colorado by Truck: 1998 (tons)

# Hazardous Materials Routes

US 160, US 550 south of Durango, and US 491 (previously US 666) have been identified by the Colorado State Patrol as Hazardous Materials Routes. Transporters of all hazardous materials in Table 1 in the Colorado Code of Regulations, Part 172 must adhere to these routes. Transporters of hazardous materials must adhere to the 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 <a href="http://csp.state.co.us/HazMat.htm">http://csp.state.co.us/HazMat.htm</a>.

### Exhibit 16: Hazardous Materials Routes Map



# TRANSIT SYSTEM

This section discusses transportation providers within the Southwest Region. The information includes public, private, and nonprofit transportation providers.

A Transportation Provider Survey was sent to all providers in the region. Table 7 below provides a brief summary of the transit agencies. Detailed information for the transit agencies is shown in the 2030 Transit Element.

	Public Provider Summary – SWTPR									
Agency	Type of Service	Days of Operation	Hours of Operation	Service Area	# of Veh	Annual One- Way Trips	Fare for service	Veh hours	Veh Miles	Annual Budget
Archuleta County	Fixed- Route & Demand- Response	Mon-Fri	6:00 am to 7:00 pm	Archuleta County	4	16,127	Variable	7,333	82,870	\$ 95,055
Durango Lift	Fixed- Route & Demand- Response	Mon - Sat	6:30 am to 6:45 pm; some evening	Durango	14	217,865	\$0.50 - \$2.00	26,374	344,533	\$686,248
Montezuma Sr. Services	Demand- Response	Mon-Fri	8:30 am to 4:30 pm	Montezuma County	5	7,073	N/A	3,395	36,301	\$115,177
SUCAP	Fixed- Route & Demand- Response	Mon-Fri	8:30 am to 4:30 pm	Southern Ute Reservation	2	5,043	N/A	3,042	40,533	\$ 22,000
Ute Mountain Ute Tribe	Fixed- Route & Demand- Response	Mon-Fri	8:00 am to 4:30 pm	Ute Mountain Reservation	1	4,530	N/A	2,000	47,000	\$ 22,000
Regional Totals	·					250,638		42,144	551,237	

### Table 7: Public Provider Summary - SWTPR

# Transit Providers

## Archuleta County Social Services

Archuleta County Social Services contracts with Mountain Express to provide transportation to social service clients. The agency does provide some trips by personal vehicles, when Mountain Express is not available. This occurs approximately two times per week. Employees are reimbursed per mile when personal cars are used. Social services provides transportation to low-income individuals, youth, and Medicaid participants. Medicaid transportation is also provided by Mountain Express. A Colorado Works Jobs Access grant provides \$60,000 funding to Mountain Express for transit service annually. Archuleta County Social Services is pleased with the current transportation arrangements and will continue to coordinate services.

# Archuleta County Transportation - Mountain Express

### GENERAL PUBLIC SERVICE

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 fixed-route public transit service in the Pagosa Springs area. The new fixed-route service supplemented the Senior Transportation Program, which provided demand-response service. Mountain Express operates weekdays from 6:00 a.m. to 7:50 p.m. The route serves Pagosa Springs and the US 160 corridor west to Turkey Springs, via Fairfield and Aspen Springs. The one-way route is 30 miles, which costs each passenger \$0.50. The schedule has 21 scheduled stops, which are served eight times throughout the day. The fixed-route 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 area, which is approximately five miles between the two areas. The fixed-route service provides 9,787 annual trips for residents, 58,640 annual vehicle-miles, and 3,709 annual revenue-hours.

### SENIOR PROGRAM TRANSPORTATION

The Senior Program provides several transportation services to residents:

- Local "Senior Bus" demand-response service in Pagosa Springs for seniors and persons with disabilities for medical, shopping, and nutrition trips. (78 percent of total trips)
- Long distance "Shopping Trips" to Durango and Farmington, New Mexico. (20 percent of total trips)
- "Medical Shuttle" to Durango. (2 percent of total trips)
- "Meal-on-Wheels" transportation in the Pagosa Springs area.

Demand-responsive Senior Bus operates from 9:00 a.m. to 4:00 p.m. weekdays, except Thursdays when the vehicle is used for long distance shopping trips. The Senior Program "Medical Shuttle" provides approximately 520 annual trips, with 10,312 annual vehicle-miles and 1,456 annual vehicle-hours. An additional 164 in-kind hours are used for the "Medical Shuttle." Using an average wage of \$7.00, the in-kind hours for volunteers saves the county approximately \$1,150 annually just for the "Medical Shuttle" program.

The Senior Bus program provides 7,117 annual trips, with 12,670 annual vehicle miles and 1,458 annual vehicle-hours. An additional 505 in-kind hours are provided by volunteers for the Senior Bus program. The in-kind hours for the Senior Bus program save the county approximately \$3,550 annually.

#### CONTRACT SERVICE FOR SOCIAL SERVICES PROGRAM

An additional transportation service provided by Archuleta County is for the Department of Social Services within the county. The service is demand-response and available to approved clients from the department. The clients from the Social Services Department do not pay the drivers, but are billed directly as part of the Social Services programs. One of the primary programs through the agency is *The Training Advantage* through the Colorado Workforce program. Approximately 3,919 annual trips are recorded strictly for this program. The total 2002 annual budget for fixed route service is \$71,581 and is \$23,474 for demand-response services.

# City of Durango

The City of Durango currently operates The Lift, The Trolley, and The Opportunity Bus. The service area includes the City of Durango and up to 10 driving miles outside the city limits. With prior arrangements, residents can be picked up off the scheduled routes.

### THE LIFT - FIXED-ROUTE SERVICE

The Lift operates six days a week, Monday through Saturday, approximately 12 hours a day. Hours of operation are from 6:30 a.m. to 6:45 p.m. Monday through Friday, and from 9:30 a.m. to 6:45 p.m. on Saturdays. In addition, there are two evening services offered during the fall and winter terms at Fort Lewis College. One route operates from 6:45 to 10:45 p.m., and the other route is a late evening service for Friday and Saturday nights only, from midnight to 2:30 a.m. Six fixed routes are operated by The Lift, including the night routes. Four routes operate Monday through Saturday. 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. Approximately 217,865 one-way passenger-trips were provided on The Lift in 2001. Passengers under age 60 account for approximately 72 percent of the total ridership. It can be assumed the Fort Lewis College students are a majority of these riders. The Fort Lewis College semester activity fee pays for student fares.

## THE OPPORTUNITY BUS

The Opportunity Bus is a demand-response, door-to-door service for the Durango urban area that began service in 1981. Prior to that date, Club Esfuerzo, a senior citizen's group, provided service for senior and disabled passengers. The Opportunity Bus provides service to origin/destination points up to 10 miles outside of the city limits. The general one-way fare for The Opportunity Bus service within the city limits is \$2.00. Passengers must be qualifying persons with disabilities as outlined in the Americans with Disabilities Act or a minimum age of 60. A total of 10,327 one-way passenger-trips were provided in 2001.

## TROLLEY

In 1993, Durango began seasonal operation of the trolley service on Main Avenue from downtown to the Iron Horse Inn and Days Inn. In 1996, the trolley service extended to free year-round service, which increased ridership significantly. The current year-round 2004 service has a fare of \$0.50 for each one-way trip. Much of the summer use is by visitors to the community, but local residents use the service throughout the year. The total annual budget for the Durango Lift is estimated at \$656,237

# Montezuma Senior Services

Montezuma Senior Services, based in Cortez, provides transportation 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. Service in Cortez is demand-response and for all non-emergency trip purposes. Service is available from 8:30 a.m. to 4:30 p.m., Monday through Friday. The agency has two full-time employees and six part-time employees. All drivers are required to be CDL-certified. Four vehicles are in operation on an average day, with peak service from 10:00 a.m. to 3:00 p.m.

# San Juan Area Agency on Aging (SJAAA)

The San Juan Area Agency on Aging (SJAAA) provides transportation for seniors to Durango and Montrose, and locations lying between, on an as-needed basis for grocery shopping, medical services, and social events. SJAAA is interested in expanding its services and service area in the future, as the need arises, to include Farmington and Grand Junction.

# Southern Ute Community Action Program (SUCAP) - Ignacio Roadrunner

The Southern Ute Indian Reservation traverses southern La Plata and Montezuma Counties. Southern Ute Community Action Program (SUCAP) is a private nonprofit organization governed by a Board of Directors on the Reservation. The agency provides passenger transportation services for several programs, such as Head Start, Senior Services program, and the Peaceful Spirit Alcohol Recovery Center, and to the general public.

The service area for the Ignacio Roadrunner is between Ignacio and Durango, including the Southern Ute Reservation south of Ignacio. The fixed-route service is along Highway 172 to US 160 to Durango. The route is 22 miles each way. The fixed-route service operates Monday through Friday, three times per day. The route within Ignacio also extends to within five miles of the city limits. The agency has two full-time drivers and two part-time drivers. The drivers are required to be CDL-certified. One vehicle is in operation on an average day, with peak service from 9:30 a.m. to 2:00 p.m. SUCAP provides transportation primarily for non-elderly residents. In summary the agency provided 5,043 annual one-way trips, with approximately 40,533 vehicle miles. Annual vehicle-hours were 3,042.

# Ute Mountain Ute Tribe Transportation

Public transit service on the Ute Mountain Ute Reservation is available for the general public, elderly persons, persons with disabilities, and the developmentally disabled. The Ute Mountain Ute Tribe transit service, managed by the Planning Office, operates five days per week from 8:00 a.m. to 4:30 p.m. The Ute transit system has four scheduled routes from Towaoc to Cortez each day. The departure times are 8:15 a.m., 9:30 a.m., 1:15 p.m., and 3:30 p.m. The bus driver drops the passengers at any location within the Town of Cortez. People without vehicles available are the primary market for the Ute transit system. Other market segments include students who have missed the local school bus and the elderly population. The transit system operates one 1995 12-passenger van for their service. The Ute transit service is busiest during the morning hours and during the school year. The summer season is a slower period for the Ute transit system. Passengers traveling to and from Cortez usually meet at the Ute Planning Office and the City Market. A \$0.75 fare is charged for each one-way trip.

## UTE 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 will fluctuate with the seasons. Currently, the Casino Shuttle has one part-time and six full-time employees.

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 the 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 on Monday and Tuesday to Shiprock, New Mexico. The shuttle leaves at

approximately 4:00 p.m. and operates until about 1:00 a.m. The Ute Mountain Ute Casino operates three 1996 15-passenger vans and two 10-passenger electric carts for the Casino Trolley service. Each of the 1996 vans currently has approximately 140,000 miles on the odometer. The Casino would like to replace one van per year for the next three years. Operating expenses are estimated at approximately \$180,000 for the 1998-1999 fiscal year.

### 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 offered two hours per day from Monday through Thursday. The services operates from 7:45 - 8:30 a.m. and from 1:00 - 1:45 p.m. Transportation is also provided off the Reservation, primarily to Cortez. The Head Start Program currently operates two small buses. Six full-time employees operate the vehicles. The employees play dual roles and are also teachers for Head Start.

### UTE MOUNTAIN UTE SENIOR CITIZENS PROGRAM

The Ute Mountain Senior Citizens Program operates Monday through Friday from 8:00 a.m. to 4:30 p.m. The senior citizens program travels daily to Cortez in the morning and travels to Cortez each afternoon by request. Senior citizens living on the Reservation call the office to make reservations. Transportation is also available to Durango and Farmington by request. Five full-time employees operate the Senior Transportation service and have other responsibilities with their jobs. The Senior Program operates two vehicles on a regular basis, but has one spare available when needed. The vehicles operated are one 1994 15-passenger van; one 1999 seven-passenger van; and one 1991 GMC Suburban.

#### UTE MOUNTAIN UTE TRIBE DEPARTMENT OF SOCIAL SERVICES

The Department of Social Services (DSS) for the Ute Mountain Ute Tribe operates from Towaoc for lowincome and at-risk families. DSS provides transportation on and off the Reservation Monday through Friday. The hours of operation vary among the DSS clients and range from 8:00 a.m. to 6:00 p.m. Twelve full-time employees operate DSS. There are three primary drivers for the DSS clients. Transportation for children's activities and for treatment are the primary reasons for the transportation within the department. DSS obtained new vehicles in 1999, consisting of three 4-door 1999 Geo Metros and one 1999 Geo Tracker. DSS estimates approximately 65,000 annual miles and approximately 2,600 trips annually. Annual operating costs are approximately \$25,000 with 100 percent of the funding 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 afterschool activities. The children are picked up at their home and are taken to school in Cortez. The children are then taken home in the afternoon or taken to afterschool activities. The hours of service begin at 10:30 a.m. and return at approximately 2:00 p.m. The after school hours begin at 4:30 p.m. and return at approximately 6:00 p.m. No fares are charged for the transportation service. The JOM program has approximately 25 to 30 students, with 14 after-school children. The JOM operates two vans and is funded by the Ute Mountain Ute Tribe.

### American Cancer Society

The American Cancer Society sponsors a volunteer transportation program for cancer patients in Archuleta County. The program began in 1999 and has approximately 60 volunteers who use their private vehicles for transporting and are reimbursed for mileage.

# **Church Services**

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

# Durango Mountain Resort

Durango Mountain Resort (DMR) currently provides bus transportation between Silverton and DMR for their employees that reside in Silverton. As DMR grows and expands its operations in the future, DMR is committed to building employee housing in Silverton and will likely expand its current employee transportation services to Silverton, or some other sort of public transportation service will need to be established between DMR and Silverton.

# 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 of 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 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 of passengers from San Juan County and Archuleta County to all points in Colorado. Service cannot originate from the Front Range counties.

Durango Transportation can provide taxi, limousine, charter, or sightseeing service between Pagosa Springs and Durango. Based on the 1999 Annual Report, total fare revenue for Durango Transportation was \$303,000. Fifty percent of the revenue came from van service and 31 percent from taxi service. The remaining revenue was generated by sightseeing and charter services. The average taxi ride is approximately five miles, with an average fare of \$14.50.

# Greyhound Bus Lines / TNM&O

Intercity transit providers typically provide a fixed-route service over long distances. TNM&O, a division of Greyhound Bus Lines, provides regularly scheduled service to and from the region. The service operates daily connecting Durango north to Grand Junction and south to Albuquerque. Buses leave Durango daily at 8:30 a.m. for Grand Junction and 10:00 a.m. to Albuquerque.

# Mesa Verde Company

The Mesa Verde Company is a private operator for Montezuma and Dolores Counties. The service is geared toward commuters, shopping trips, medical trips, and airport trips. The service is offered Monday through Friday from Dove Creek to Durango. The service begins at 4:00 a.m. and returns about 8:00 p.m. Service is also scheduled on Saturday and Sunday through Cortez to the Durango Mall. The service is from 7:30 a.m. to 2:45 p.m. Fares range from \$1.50 to \$24.00, depending on pick-up and drop-off locations.

# Noah's Ark Transportation

Noah's Ark Transportation provides chartered transportation service operating luxury limousines and deluxe motor coaches. Prices vary depending on service. Office hours are from 8:00 a.m. to 5:00 p.m., Monday through Friday, but vehicles are available 24 hours a day, seven days a week. Noah's Ark is licensed to operate on both an interstate and intrastate authority. Noah's Ark Transportation can be found in Colorado, Oregon, and Washington, and takes pride in their dependable equipment and outstanding customer service.

# Pine Ridge Extended Care Center

The Pine Ridge Center provides resident transportation in Pagosa Springs. The Center uses one wheelchair-accessible bus for trips.

# Rideshare: Regional Rideshare Program

Rideshare connects people in the Southwest Region who are interested in sharing rides to get 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 initially from 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 and also to those persons in northern New Mexico. The main access to Rideshare is through their website: www.scan.org/rideshare. The website provides a user guide to complete a commuter profile form. Once submitted, entries are processed and potential ride matches are connected by email 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. *Rideshare In person*, the non-electronic assistance for the program, provides help to potential riders without e-mail access. The website also provides a cost savings tool, Commuting Distance Annualized. The link calculates the cost to commute between any two locations in the area and the calculated saving if one would carpool. In year 2001, the utilization of the program is fairly low, with under 200 inquiries per year.

# 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 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.

# 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 year-round basis. SOLRC is interested in expanding and modifying its transportation services in the future to include public transportation to other destinations located within San Juan County.

# Wilderness Journeys / Pagosa Rafting Outfitters, Inc.

Wilderness Journeys / Pagosa Springs Outfitters 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. The round-trip fare from Pagosa Springs to Wolf Creek is \$19. Taxi service is also provided to and from the Durango/La Plata County Airport on demand. The fare for taxi service to the airport is \$100 (120 miles round-trip). Taxi and limousine service make up less than one percent of their operating revenues according to the Public Utilities Commission 1999 Annual Report. According to staff, the taxi is operated on-demand only as a public service. Wilderness Journeys has 10-12 vehicles including vans and Suburbans.

# **Other Area Providers**

Within the Southwest Region are several lodging properties that offer shuttles for visitors. These properties include Mountain Shadows, Hampton Inn, Valley Inn, and Durango Mountain Resort. The Four Corners Health Care Center also provides limited transportation to clients.

# **AVIATION SYSTEM**

Aviation facilities within the region are limited to three general aviation service facilities and two commercial service facilities. 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 departments, airport maintenance and administration, etc.

Commercial aviation facilities provide for the bulk of business and tourist activity. Together general and commercial activities enhance and support the regions economy.

The following table describes the regions airports' facilities and operations.

# Southwest 2030 Regional Transportation Plan

Chapter IV - Transportation System Inventory

	Regional Airport Operations										
County	Dolores	Archuleta	La Plata	La Plata	Montezuma						
Airport	Dove Creek	Stevens Field	Animas Air Park	Durango – La Plata County Airport	Cortez Municipal Airport						
Airport Attribute	Dove Creek	Pagosa Springs	Durango	Durango	Cortez						
FAA Classification	General Aviation	General Aviation	General Aviation	Commercial Service	Commercial Service						
Functional Level	Minor	Major	Intermediate	Major	Major						
Annual Enplanements	-	-	-	91,276	9,110						
Based Aircraft	5	35	48	66	26						
Annual Operations	500	4,448	8,975	50,362	13,322						
Runway ID	1/19	1/19	1/19	2/20	3/21						
Length in Feet	4,200	8,500	5,010	9,201	7,205						
Width in Feet	50	75	50	150	100						
Surface Type	Dirt	Asphalt	Asphalt	Asphalt	Asphalt						
# of Runways	1	1	1	1	1						
Lights	None	MIRL	MIRL	HIRL	MIRL						
Approach Lights	Ν	Y	Ν	Y	Y						

Source: CDOT 2001

**Table 8: Regional Airport Operations** 

### **AVIATION**

The following map locates the three general aviation airports in the TPR at Dove Creek, Durango, and Pagosa Springs, along with the commercial service airports in Cortez and south of Durango.

### Exhibit 17: Aviation Map



### Rail System

### PASSENGER RAIL SERVICE

Passenger rail service is provided from Silverton to Durango and is narrow gauge rail.

### FREIGHT RAIL SERVICE

No freight rail service is indicated in the SWTPR.

### RAIL ABANDONMENTS

No known rail abandonments are in process.

### TOP 10 (MOST DANGEROUS) RAILROAD GRADE CROSSINGS

The following table shows the top ten rated Railroad grade crossings along with the Accident Prediction Value as established by the US Department of Transportation. The Accident Prediction Value is a relative prediction of the likelihood of an accident within any one year and is based on type of crossing protection, number of trains, traffic volumes on the intersecting road, and train speed. Notice all the crossings in the table are in the Durango area of La Plata County.

See "Guidance On Traffic Control Devices At Highway-Rail Grade Crossings," U.S. Department Of Transportation, Federal Highway Administration, Highway/Rail Grade Crossing Technical Working Group, November 2002 for more information about threshold levels for improvements and other procedures.

CROSSING	COUNTY	HIGHWAY	STREET	TRAINS PER DAY	WARNING DEVICE	ACCIDENT PREDICTION VALUE
253699N	La Plata		6 <sup>TH</sup> WO NARROW GUAGE	8	Crossbucks	0.058953
253703B	La Plata		11 <sup>TH</sup> WO NARROW GUAGE	8	Crossbucks	0.052163
253705P	La Plata		MAIN AVE &14TH ST	8	Activated	0.049654
	La Plata		15TH ST AT	8		
253706W			2NDAVE		Flashing lights	0.039090
253700F	La Plata		7 <sup>TH</sup> WO NARROW GUAGE	8	Crossbucks	0.037399
253709S	La Plata	US 550B	US 550 NO CR 203	8	Flashing lights	0.034566
253707D	La Plata		32 <sup>ND</sup> ST EO 2ND AVE	8	Flashing lights	0.032821
253701M	La Plata		8 <sup>TH</sup> WO NARROW GUAGE	8	Crossbucks	0.030393
253702U	La Plata		9 <sup>TH</sup> WO NARROW GUAGE	8	Crossbucks	0.027288
253764S	La Plata		CR 250	8	Crossbucks	0.023355

#### Table 9: Railroad Crossing Accident Rate - Top Ten in the Region

# Exhibit 18: Rail Lines in Southwest TPR Map



#### Exhibit 19: Map Freight Flows To, From, and Within Colorado by Rail: 1998 (tons)

The following map from the Freight Analysis Framework, shows the relative volumes of rail freight originating in or destined to Colorado.



# BICYCLE/PEDESTRIAN SYSTEM

Non-motorized access to recreational areas, historic sites, public lands, and the communities within the TPR were identified as high priorities to enhance and sustain the regions quality of life. The regions highways, local roads, primitive roads, and trails network are the primary systems for non-motorized access.

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. The following map shows state highways with paved shoulders wider than or narrower than four feet, the minimum perceived safety margin. The majority of the state highway system in the SWTPR has shoulders of four feet or greater.

It is the policy of CDOT to incorporate the necessary shoulder improvements to enhance safety for the motoring public an bicycles along state highways whenever an upgrade of the roadways and structures is being implemented and is technically feasible and economically reasonable.



#### Exhibit 20: Paved Shoulders Map

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 TEA 21, the Transportation Efficiency Act for the Twenty First Century (TEA 21), has been and is expected to continue to be a major source of funding for non-motorized trail projects. While the inventory of off state highway trail systems is too extensive to present here, there are resources that can be consulted for specific locations and access points.

- BLM and USFS 15 Burnett Ct. Durango
- Colorado State Parks, PO Box 700 Clifton
- Fort Lewis College, Office of Community Services, 1000 Rim Drive, Durango
- La Plata County Planning Department, 1060 E. 2<sup>nd</sup> Avenue, Durango
- San Juan Mountains Association, P.O. Box 1389, Durango
- Colorado Division of Wildlife, 151 E. 16<sup>th</sup> Street, Durango
- Trails 2000, P.O. Box 3868, Durango
- City of Durango Planning Office 949 E. 2nd Avenue, Durango

### INTELLIGENT TRANSPORTATION SYSTEM

CDOT has done much work with planning, implementing and operating ITS in Colorado. Several regional and project level architectures have been developed and many corridors now have incident management plans.

In 2001, the CDOT ITS branch, in consultation with an ITS Steering Group, developed an ITS Strategic Plan setting forth the vision and strategic goals for ITS investments, describing organizational roles and responsibilities, and establishing strategies and implementation actions to achieve the CDOT goals for ITS investment. This plan also established a Performance Measures program to drive business based investments decisions for ITS.

Gaps in coverage of ITS Architecture include the Eastern Plains and mountain areas of Region 4, and the bulk of CDOT Regions 1, 2, 3 and 5.

For Regions 3 and 5, several ITS elements are deployed including the Hanging Lake Tunnel System, which includes a major Traffic Operations Center. This system is currently being upgraded. There are also a number of dynamic message signs, CCTV cameras installed and incident management plans have been developed for I-70. However, Strategic Plans and Architectures have not been developed for these Regions.

Major Architecture issues identified for Regions 3 and 5 include coordination with the recreation industry, tribal councils and mountain areas of other adjacent CDOT regions.

Currently, CDOT has retained a consultant team to assist them with developing ITS Architecture and Strategic Plans for CDOT Regions 1, 2, 3 and 5, along with developing a plan for Statewide ITS Architecture.

The general process in considering a route for ITS Architecture includes assessing the problems confronted by a particular route and then identifying the ITS Architecture that may assist in mitigating negative situations, such as traffic congestion, safety concerns, etc.

## **INTER-MODAL FACILITIES**

Intermodal facilities are an integral part of the state's transportation system. They not only provide mobility options but also are key components for economic vitality. According to the US Department of Transportation's National Highway System Inter-modal Connections Inventory, the regions airports, public transportation, and intercity bus are important inter-modal facilities and services.

Major inter-modal facilities and services in the TPR include:

- Archuleta County Stevens/Archuleta County Airport; Navajo Landing Strip, Archuleta County Public Transportation services
- Dolores County/ Dove Creek Airport
- La Plata County Animas Airpark; Durango/La Plata County Airport; Durango & Silverton Narrow Gauge Railroad; TMN&O Bus Terminal, Durango Lift
- Montezuma County Cortez/Montezuma County Airport, Montezuma Senior Services
- San Juan County Durango & Silverton Narrow Gauge Railroad; TMN&O Bus Terminal
- Southern Ute Tribe Southern Ute Community Action Program
- Ute Mountain Ute Tribe Ute Mountain Ute Public Transportation Services

At present there is little linkage/connection between the various modes and transportation services in the TPR. In particular, Inter-city bus service is limited in most of the TPR. TNM&O, a division of Greyhound Bus lines, provides daily north/south bus service connecting Durango north to Grand Junction and south to Albuquerque on US 550 with stops in Durango and Silverton. There is currently no intercity bus service available in Archuleta, Dolores or Montezuma Counties, the east west axis of the TPR.

# V SOCIOECONOMIC & ENVIRONMENTAL PROFILE

The Socioeconomic and Environmental Regional Profile provides the human and natural environment background necessary to help in estimating future transportation demand through 2030. It also provides the framework to assess the potential impacts of proposed transportation investments on the human and natural environment within the Southwest TPR.

The plan compiles socioeconomic projections for 2030 for the TPR based on U.S. Census projections, Colorado Department of Local Affairs projections and locally generated 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.

The environmental scan provides a broad overview of the human and natural environment. Its main purpose is to identify potential areas where transportation projects may have an adverse impact on the environment. The approach used in this task will *not* result in a NEPA document, but it will provide enough information to inform the regional planning commission and citizens within the TPR that a proposed transportation project may result in "unacceptable or significant detrimental environmental impacts." The environmental scan will identify areas of concern for both the natural and human environment. Natural environment related concerns may include air quality, wetlands, parklands, historic areas, archeological sites, threatened and endangered species sites, noise and hazardous material sites. This chapter will also identify minority and low-income populations as required by the Environmental Justice initiative and a series of demographic factors such as age, vehicle ownership, and income that are traditional indicators of transit dependence.

# POPULATION

Population in the region is anticipated to grow from 80,860 in 2000 to over 151,000 in 2030 reflecting an 87.0% growth rate. In comparison the states population growth is expected to increase by 65.1%. The fastest growing counties in descending order are Archuleta (169.7%), La Plata (80.9%), Montezuma (68.3%), Dolores (49.7%) and San Juan (18.6%). The three highest growth counties all lie within the US 160 corridor. The US Census identified 4,710 American Indians residing in the TPR reflecting 6% of the regions total population. Slightly over 45% of the Native American Indian population are members of the Southern Ute or Ute Mountain Ute Tribe.

Population Estimates and Forecasts by County, 1990 - 2030											
County	1990	2000	2010	2020	2030						
Archuleta	5,393	10,028	14,449	19,813	27,048						
Dolores	1,489	1,844	2,127	2,431	2,760						
La Plata	32,466	44,566	54,881	68,385	80,598						
Montezuma	18,710	23,864	28,182	34,273	40,157						
San Juan	736	558	600	645	662						
Region Total	58,794	80,860	100,239	125,547	151,225						
Colorado Total	3,304,042	4,335,540	5,137,928	6,133,491	7,156,422						

#### Table 10: Population Estimates and Forecasts

### **Table 11: Population Growth Forecast**

County	1990 - 2000	2000 - 2030
Archuleta	85.9%	169.7%
Dolores	23.8%	49.7%
La Plata	37.3%	80.9%
Montezuma	27.5%	68.3%
San Juan	-24.1%	18.6%
Region Total	37.5%	87.0%
Colorado Total	31.2%	65.1%

Source: Colorado Demography Section





Source: Local Affairs 2004

### **Table 12: Household Characteristics**

Household Characteristics, 2000 Census										
County	Total HH	Avg. HH Size	% HH Individuals < 18	% HH Individuals > 65						
Archuleta	3,980	2.47	33.8	20.8						
Dolores	785	2.35	27.1	28.7						
La Plata	17,342	2.43	31.6	16.9						
Montezuma	9,201	2.54	36.5	24.6						
San Juan	269	2.06	25.3	11.2						
Region Total	31,577	2.46	33.10	19.80						

Source: US Census 2000

### **Employment**

The following table reflects on statistics for Labor Force, Unemployed Persons, Unemployment Rate, Employed Persons, and Estimated Total Jobs, all key indicators of the use of the transportation system. Over the ten-year period from 1990 –2000 Labor Force, Employed Persons and Estimated Total Jobs increased at a rate exceeding the regions overall percentage population growth rate of 37.5%. This is a noteworthy figure because employment related figures are often correlated with traffic growth. All statistics from Table 13 reflect only those individuals who reside in the regions counties.

Labor Force and Unemployment by County, 1990 - 2000										
Labor Force				Unemployed Persons Unemployment Ra					yment Rate	
County	1990	2000	% Change	1990	1990 2000 % (		Change	1990	2000	
Archuleta	2,682	4,762	77.6%	135		175		29.6%	5.0%	3.7%
Dolores	668	718	7.5%	31		67		116.5%	4.6%	9.3%
La Plata	17,399	25,087	44.2%	1,009		952		-5.6%	5.8%	3.8%
Montezuma	9,240	11,746	27.1%	667		640		-4.0%	7.2%	5.4%
San Juan	466	272	-41.6%	37		36		-2.7%	7.9%	13.2%
Region Total	30,455	42,585	39.8%	1,879	1	,870		048%	6.2%	4.4%
Colorado Total	1,764,181	2,275,545	29.0%	89,057	62	2,501		-29.8%	5.0%	2.7%
	Employed Persons				Estimated Total Jobs					
County	1990	2000	% Change	1990		200	00	% Change		
Archuleta	2,547	4,587	80.0%	2,285	5	42	267	108.4%		
Dolores	637	651	2.2%	804	ŀ	ç	900	11.9%		
La Plata	16,390	24,135	47.2%	17,082	2	27,0	)17	58.2%		
Montezuma	8,573	11,106	29.5%	8,437	,	12,0	)17	42.4%		
San Juan	429	283	-34.0%	562	2	2	283	-49.6%		
Region Total	28,576	40,672	42.3%	29,170	)	44,9	979	54.2%		
Colorado Total	1,675,124	2,213,044	32.1%	2,021,517	,	2,872,8	399	42.1%		

|--|

Source: Colorado Demography Section

### EMPLOYMENT BY ECONOMIC SECTOR

The following exhibit shows employment by economic sector for 2000. The four highest employment sectors in the TPR are the service industry, wholesale and retail trades, government and construction. Employment by sector does not reflect county of residence, but rather the number of individuals by economic sector irrespective of where they live. It is noteworthy to compare Table 13 "Employed Persons" in 2000 (40,672) to Exhibit 22 "Employment by Economic Sector," 2000 (48,499) for the TPR. The variance between the two figures, approximately 8,000, represents people coming from outside the region for gainful employment within the TPR.

Employment by	/ Econom	nic Secto	or-2000			
	Archuleta	a Dolores	s La Plata	Montezum	a San Jua	n Region
Agricultural	290	259	1,311	1,050	-	2,910
Mining and Extractive Industries	47	37	315	133	-	532
Construction	658	30	3,186	1,440	12	5,326
Manufacturing	109	8	1,023	601	2	1,743
Transportation, Communications and Utilities	97	28	969	426	12	1,532
Wholesale and Retail Trade	1,143	133	6,834	2,812	149	11,071
Finance, Insurance and Real Estate	667	25	1,591	496	55	2,834
Services	1,171	60	10,653	3,896	28	15,808
Government	586	204	3,915	1,955	83	6,743
-	4,768	784	29,797	12,809	341	48,499

#### Exhibit 22: Employment by Economic Sector – 2000

# 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, over 1,900 workers did travel to a different county for their job, presumably commuting on the region's highways.

Table 14: Place of Work by County 1990 - 200
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Place of Work by County, 1990 - 2000										
2000										
County	Workers 16 and Over	Worked in County of Residence	% Worked in County of Residence	Worked Outside County of Residence	Worked Outside State of Residence					
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					
		199	0							
County	Workers 16 and Over	Worked in County of Residence	% Worked in County of Residence	Worked Outside County of Residence	Worked Outside State of Residence					
Archuleta	2,118	1,909	90.1%	140	69					
Dolores	588	427	72.6%	114	47					
La Plata	15,185	14,352	94.5%	262	571					
Montezuma	7,444	6,791	91.2%	252	401					
San Juan	345	335	97.1%	10	0					
Region Total	25,680	23,814	92.7%	778	1,088					
Colorado Total	1,619,760	1,124,306	69.4%	495,454	17,680					

Source: US Census

#### MEANS OF TRANSPORT TO WORK TABLE

The following table 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.

#### Table 15: Means of Transport to Work for Workers 16 and Over by County

Means of Transport to Work for Workers 16 and Over by County, 1990 – 2000														
2000														
Means of Transport	Archuleta		Dolores		La Plata		Montezuma		San Juan		Region		Colorado	
	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total
Drove alone in car, truck, or van	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 in car, truck, or van	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 transportation	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	0.7%	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	100.0%	794	100.0%	22,481	100.0%	10,371	100.0%	292	100.0%	38,403	100.0%	2,191,626	100.0%
1990														
Means of Transport	Archuleta		Dolores		La Plata		Montezuma		San Juan		Region		Colorado	
	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total
Drove alone in car, truck, or van	1,483	70.0%	395	67.2%	10,791	71.1%	5,526	74.2%	164	47.5%	18,359	71.5%	1,216,639	74.3%
Carpooled in car, truck, or van	323	15.3%	97	16.5%	2,075	13.7%	1,028	13.8%	58	16.8%	3,581	13.9%	210,274	12.8%
Public transportation	7	0.3%	2	0.3%	112	0.7%	12	0.2%	0	0.0%	133	0.5%	46,983	2.9%
Motorcycle	0	0.0%	0	0.0%	63	0.4%	5	0.1%	0	0.0%	68	0.3%	3,825	0.2%
Bicycle	8	0.4%	0	0.0%	236	1.6%	16	0.2%	4	1.2%	264	1.0%	13,140	0.8%
Walked	111	5.2%	43	7.3%	866	5.7%	336	4.5%	94	27.2%	1,450	5.6%	69,041	4.2%
Other means	38	1.8%	2	0.3%	148	1.0%	104	1.4%	3	0.9%	295	1.1%	10,349	0.6%
Worked at home	148	7.0%	49	8.3%	894	5.9%	417	5.6%	22	6.4%	1,530	6.0%	67,189	4.1%
Total	2,118	100.0%	588	100.0%	15,185	100.0%	7,444	100.0%	345	100.0%	25,680	100.0%	1,637,440	100.0%

Source: US Census

# **ENVIRONMENTAL JUSTICE**

The public involvement plan considered the needs of those persons or groups that may be considered traditionally under-served or that could potentially be impacted by future transportation decisions. All meetings were held in locations accessible to those with disabilities. Provisions were made to translate meeting notices and documents as needed, but no requests were received.

CDOT has developed recommendations for its **environmental justice** initiative that give specific guidance on its three fundamental principles:

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

These **environmental justice** principles and other guidance on implementing the **Federal Title VI** elements with respect to income, race, ethnicity, gender, age and disability have been central parts of the planning process. The plan used a Geographic Information System to identify areas of concern based on these principles. Every attempt was made to involve those neighborhoods and/or groups in the planning process.

### TRANSIT DEPENDENCY

The following table shows the number of mobility limited, below poverty level, elderly, youth and households with no vehicle for each county, for the region as a whole, and for the state. This information helps provide background on those who might traditionally be dependent on public transportation, rather than a private vehicle. Over 1,700 households in the five county areas have no vehicle available. Please note that the categories within the transit dependent population table are not mutually exclusive; however, the totals do provide a sense of scale as it represents the population with an attribute that correlates to transit dependency.

Transit-Dependent Population Group									
County	Mobility Limited	Below Poverty Level	Elderly (60 Years +)	Youth (0 – 15 Years)	Households with No Vehicle				
Archuleta	258	1,148	1,644	2,162	202				
Dolores	61	241	419	343	36				
La Plata	650	4,941	5,706	8,616	887				
Montezuma	728	3,836	4,317	5,781	563				
San Juan	4	115	71	85	22				
Region Total	1,701	10,281	12,157	16,987	1,710				
Colorado Total	125,994	388,952	558,918	976,064	105,926				

## Table 16: Transit Dependency by County, 2000

% of County Total per Transit-Dependent Population Group									
County	Mobility Limited	Below Poverty Level	Elderly (60 Years +)	Youth (0 – 15 Years)	Households with No Vehicle				
Archuleta	2.60%	11.70%	16.60%	21.80%	2				
Dolores	3.30%	13.10%	22.70%	18.60%	2				
La Plata	1.50%	11.70%	13.00%	19.60%	2				
Montezuma	3.10%	16.40%	18.10%	24.30%	2.4				
San Juan	1.00%	20.90%	12.70%	15.20%	3.9				
Region Total	2.20%	13.20%	15.20%	21.20%	2.1				
Colorado Total	2.90%	9.30%	12.90%	22.50%	6.4				

Source: US Census

#### LOW INCOME AREAS

The following chart shows the percentage of the population with household income below the Censusdefined poverty level. The 1999 definition for a family of four was income under about \$17,000, depending on relative age of the residents and other factors. About 13.2 % of the region falls below this line, significantly more than the statewide average of 9.3%. For more information about how the Census defines poverty, see <u>http://www.census.gov/hhes/poverty/povdef.html</u>.

#### Exhibit 23: Percent of Population Below Poverty Level



### MINORITY STATUS

Minority status as defined for the purposes of this report is all residents who are not White/Non-Hispanic. The Hispanic/Latino population of the region is significantly less (9.6%) than the state average of 17.1%. The Black/African American Populations is very small. Other groups represent an average of 5.5% of the population for the region.

### Exhibit 24: Minority Status Chart


## TOURISM AND MAJOR ACTIVITY CENTERS

The regions activity centers serve as major origins or destinations of trips in the TPR. The nature of these trips may be recreational, social service, commercial, institutional, educational or health care related activities. However, the most significant attractors within the region and those that most influence day-to-day travel are tourist and recreation related destinations. Examples include Mesa Verde National Park, the San Juan National Forest, the Durango and Silverton Railroad, the Durango Mountain, Silverton and Wolf Creek (in adjacent Mineral County) ski areas, gaming facilities on the Southern Ute and Ute Mountain Ute tribal lands, the Trail of the Ancients and San Juan Scenic Byways, and the Pagosa Hot Mineral Springs.

## AGRICULTURE

The Southwest TPR has a substantial amount of land dedicated to farming. According to 2002 data developed by the Colorado State Department of Agriculture 42.3 percent or 1,783,846 acres out of 4,216,281 acres of the land in the Southwest TPR is farm or ranchland. Agricultural commodities such as wheat, oats, beans, hay and alfalfa and cattle production are characteristic of the region.

A similar finding relating to agricultural usage in Colorado is located on the U.S. Department of Agriculture's Natural Resource Conservation Service website. For more specific information on farmland see the NRCS website for Colorado at the following address - <u>http://www.co.nrcs.usda.gov</u>.

Southwest TPR Farmland by County								
Farm Attributes	Archuleta	Dolores	La Plata	Montezuma	Total Acres			
Number of farms	206	160	781	718	1,865			
Acreage in farms	112,670	155,741	580,135	935,330	1,783,846			
Average acreage/farm	547	973	743	1,303	892			

## Table 17: Farmland by County

For transportation projects identified within the Southwest TPR, project specific surveys will be required to determine the types of farmland and amounts of farmland impacts that would result from construction and plan implementation. Whenever feasible, impacts to farmlands should be avoided and/or mitigated.

## HISTORIC/CULTURAL RESOURCES

The Southwest TPR has a wealth of cultural resources within its 6,155 square miles. 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 National or State Register of Historic Places (NRHP). The Colorado Office of Archaeology and Historic Preservation tracks sites that are considered significant and are on the NRHP. Within the SWTPR there are a substantial number of sites listed as indicated below. For more information on these properties see http://www.coloradohistory-oahp.org/programareas/register/1503/cty.htm.

	Historic and Cultural Resources					
County	City	Resource	Location	National/State Register		
Archuleta	Arboles	LABO DEL RIO BRIDGE	County Rd. F50, Over Peidra River	NR 06/24/1985,5AA.287		
Archuleta	Chimney Rock	CHIMNEY ROCK ARCHAEOLOGICAL AREA	San Juan Nat'l Forest	NR 8/25/1970,5AA.985		
Archuleta	Chromo	CHROMO SCHOOL	US Highway 84	SR 6/12/1996, 5AA.1907		
Archuleta	Cumbres Pass	CUMBRES-TOLTEC SCENIC RAILROAD	Antonio to Chama, NM	NR 01/16/1973, 5AA.664/CN.65		
Archuleta	Pagosa Springs	LA CASA RUIBALID (RIO BLANCO ADOBE)	County Rd. 335, vicinity of Pagosa Springs	SR 06/14/1995, 5AA.1853		
Archuleta	Pagosa Springs	PAGOSA HOT SPRING	Light Plant Road	SR 08/14/1991, 5AA.1652		
Dolores	Cahone	ANSEL HALL RUIN	Cahone vicinity	NR 11/15/1997, 5DL.27		
Dolores	Dove Creek	BEAVER CREEK MASSACRE SITE	San Juan National Forest, East Of Dove Creek	NR 10/02/1986, 5DLI.1216		
Dolores	Dove Creek	BREWER ARCHAEOLOGICAL DISTRICT	Dove Creek vicinity	SR 08/11/1999, 5DL.578		
Dolores	Dove Creek	GLADE RIVER STATION	Dove Creek vicinity	SR 08/08/2001, 5DL.1792		
Dolores	Rico	DEY BUILDING	3 N. Glasgow	NR 04/15/1999, 5DL.479		
Dolores	Rico	DOLORES COUNTY COURTHOUSE (RICO TOWN HALL)	Commercial & Mantz Sts.	NR 12/31/1974, 5DL.423		
Dolores	Rico	KAUFFMAN, WILLIAM, HOUSE	Silver St., off Mantz Ave.	NR 10/29/1982, 5DL.227		
La Plata	Bayfield	ZABEL CANYON INDIAN RUINS/SPRING CREEK ARCHAEOLOGICAL DISTRICT	San Juan National Forest	NR 05/21/1983, 5LP.1254		
La Plata	Durango	COLORADO UTE POWER PLANT	14th St. & Animas River	NR 09/29/1983, 5LP.1146		
La Plata	Durango	DARKMOLD SITE	Durango vicinity	SR 03/08/2000, 5LP.4991		
La Plata	Durango	DURANGO HIGH SCHOOL	201 E. 12th St.	SR 08/08/2001, NR 10/20/2001, 5LP.3443		
La Plata	Durango	DURANGO MAIN AVENUE HISTORIC DISTRICT	Bounded roughly by 5th St., the Durango and Silverton RR right-of- way, 12th St. & the alley between Main & 2nd Aves.	NR 08/07/1980, 5LP.304		
La Plata	Durango	DURANGO ROCK SHELTERS ARCHAEOLOGY SITE	Durango vicinity	NR 02/11/1985, 5LP.1434		
La Plata	Durango	DURANGO-SILVERTON NARROW GAUGE RAILROAD	Durango to Silverton	NHL 07/04/1961, NR 10/15/1966, 5LP.302/5SA.14		
La Plata	Durango	EAST THIRD AVENUE HISTORIC RESIDENTIAL DISTRICT	E. 3rd Ave. between 5th & 15th Sts.	NR 10/11/1984, 5LP.1411		
La Plata	Durango	FLORIDA RIVER BRIDGE 437A	Rancho Florida Rd.	SR 12/13/1995, 5LP.3864		
La Plata	Durango	KERR HOUSE	8147 County Rd. 203, Durango vicinity	SR 03/11/1998, 5LP.4872		
La Plata	Durango	NEWMAN BLOCK/KIVA BUILDING	Main & 8th Sts.	NR 10/15/1979, 5LP.303		
La Plata	Durango	OCHSNER HOSPITAL	805 Fifth Ave.	NR 05/04/1995, 5LP.1336		
La Plata	Durango	RADER HOUSE	6566 County Rd. 250	SR 06/09/1999, 5LP.5094		
La Plata	Durango	ROCHESTER HOTEL	726 E. Second Ave	NR 02/29/1996, 5LP.1210		
La Plata	Durango	SMILEY JUNIOR HIGH SCHOOL	1309 E. 3rd Ave.	NR 11/27/2002, 5LP.1411.56		
La Plata	Durango	TALUS VILLAGE	Durango vicinity	SR 12/11/1996, Additional documentation: SR 09/09/1998, 5LP.4223		
La Plata	Red Mesa	UTE MOUNTAIN	UTE MANCOS CANYON	NR 05/02/1972, 5LP.305/5MT.4342		

## Table 18: Historic and Cultural Resources

## Chapter V Socioeconomic & Environmental Profile

	Historic and Cultural Resources				
County	City	Resource	Location	National/State Register	
			ARCHAEOLOGICAL DISTRICT	<b>x</b>	
Montezuma	Cortez	CANNONBALL RUINS	Cortez vicinity	NR 04/30/1997, 5MT.338	
Montezuma	Cortez	ERTEL FUNERAL HOME	42 N. Market St.	NR 11/07/1995, 5MT.6925	
Montezuma	Cortez	HOVENWEEP NATIONAL MONUMENT	Northwest of Cortez	NR 10/15/1966, 5MT.604	
Montezuma	Cortez	LOWRY RUIN	30 miles northwest of Cortez	NHL 07/19/1964, NR 10/15/1966, 5MT.1566	
Montezuma	Cortez	MAXWELL COMMUNITY	Southwest of Cortez	SR 09/09/1998, 5MT.13041	
Montezuma	Cortez	MESA VERDE ADMINISTRATION DISTRICT	Mesa Verde National Park	NHL 05/28/1987, NR 05/28/1987, 5MT.9790	
Montezuma	CortezWHS	MESA VERDE NATIONAL PARK ARCHAEOLOGICAL DISTRICT	US Hwy. 160, 8 miles east of Cortez	NR 10/15/1966, WHS, 5MT.4341	
Montezuma	Cortez	MITCHELL SPRINGS RUIN GROUP	Cortez vicinity	SR 03/08/2000, NR 11/09/2001_5MT 10991	
Montezuma	Cortez	MONTEZUMA VALLEY NATIONAL BANK	2 E. Main St.	SR 08/11/1993, 5MT.11979	
Montezuma	Cortez	MUD SPRINGS PUEBLO	Cortez vicinity	NR 10/29/1982, 5MT.4466	
Montezuma	Cortez	ROY'S RUIN	Cortez vicinity	NR 01/31/1992, 5MT.3930	
Montezuma	Cortez	YUCCA HOUSE NATIONAL MONUMENT	Via US Hwy. 491, 12 miles south of Cortez	NR 10/15/1966, 5MT.5006	
Montezuma	Dolores	ANASAZI ARCHAEOLOGICAL DISTRICT	Northwest of Dolores	NR 07/19/1984, 5MT.6599	
Montezuma	Dolores	ESCALANTE RUIN	West of Dolores	NR 11/20/1975, 5MT.2149	
Montezuma	Dolores	GALLOPING GOOSE ENGINE NO. 5	421 Railroad Ave.	SR 03/09/1994, 5MT.4336	
Montezuma	Dolores	LEBANON SCHOOL	24925 County Rd. T, Dolores vicinity	NR 05/29/1996, 5MT.12133	
Montezuma	Dolores	O'BRIEN SITE	Dolores vicinity	SR 03/13/2002, 5MT.5518	
Montezuma	Dolores	THE SOUTHERN HOTEL/RIO GRANDE SOUTHERN HOTEL	101 S. Fifth St.	NR 02/23/1989, 5MT.10460	
Montezuma	Mancos	BAUER BANK BUILDING	107 W. Grand Ave.	SR 11/09/1994, 5MT.8590	
Montezuma	Mancos	BAUER HOUSE	102 Bauer Ave	SR 09/11/1996, 5MT.8591	
Montezuma	Mancos	BEMENT SITE	Mancos vicinity	SR 03/13/2002, 5MT.4388	
Montezuma	Mancos	LOST CANYON ARCHAEOLOGICAL DISTRICT	Mancos vicinity	NR 10/18/1988, 5MT.10435	
Montezuma	Mancos	MANCOS HIGH SCHOOL	350 Grand Ave.	NR 12/23/1991, 5MT.11432	
Montezuma	Mancos	MANCOS OPERA HOUSE	136 W. Grand Ave.	NR 01/07/1988, 5MT.8592	
Montezuma	Mancos	WRIGHTSMAN HOUSE	208 Bauer Ave.	NR 02/14/1997, 5MT.8594	
Montezuma	Pleasant View	JAMES A. LANCASTER SITE/CLAWSON RUIN	Pleasant View vicinity	NR 04/14/1980, 5MT.4803	
Montezuma	Pleasant View	PIGGE SITE	Pleasant View vicinity	NR 04/07/1980, 5MT.4802	
Montezuma	Pleasant View	PUZZLE HOUSE	Pleasant View vicinity	SR 09/09/1998, 5MT.11787	
Montezuma	Towaoc	UTE MOUNTAIN UTE MANCOS CANYON HISTORIC DISTRICT	Southeast of Towaoc	NR 05/02/1972, 5MT.4342/5LP.305	
Montezuma	Yellow Jacket	ALBERT PORTER PUEBLO	Yellow Jacket vicinity	NR 03/18/1999, 5MT.123	
Montezuma	Yellow Jacket	BASS SITE	Yellow Jacket vicinity	NR 06/11/1999, 5MT.136	
Montezuma	Yellow Jacket	SEVEN TOWERS PUEBLO	Yellow Jacket vicinity	NR 06/11/1999, 5MT.1000	
Montezuma	Yellow Jacket	WOODS CANYON PUEBLO	Yellow Jacket vicinity	NR 06/11/1999, 5MT.11842	
Montezuma	Yellow Jacket	YELLOWJACKET PUEBLO/SUROUARO	Yellow Jacket vicinity	NR 09/28/1985; Boundary Increase: SR 09/10/1997, 5MT.5	

## Chapter V Socioeconomic & Environmental Profile

	Historic and Cultural Resources					
County	City	Resource	Location	National/State Register		
Montezuma	Yellow Jacket	5MT.4700	Yellow Jacket vicinity	NR 06/11/1999, 5MT.4700		
San Juan	Howardsville	OLD HUNDRED MINE BOARDING HOUSE AND TRAMHOUSE	721 County Rd. 4A,	SR 3/11/1998, 5SA.32		
San Juan	Silverton	CASCADE LODGE	Adjacent to Lime Creek Rd. between Durango and Silverton	NR 9/8/1988, 5SA. 184		
San Juan	Silverton to Durango	DURANGO-SILVERTON NARROW GAUGE RAILROAD	Between Durango and Silverton	NHL 7/4/1961, NR 10/15/1966, 5SA. 14/5LP.302		
San Juan	Silverton vicinity	MARTIN MINING COMPLEX	6350 County Road 2	SR 12/10/2003, 5SA.1058		
San Juan	Silverton vicinity	SHENANDOAH-DIVES MILL	Colo. Hwy 110	NHL 2/16/2000, NR 2/16/2000, 5SA 398		
San Juan	Silverton	SILVERTON HISTORIC DISTRICT	US Hwy 550, includes the entire city boundaries	NHL 7/4/1961, NR 10/15/1966, Boundary Increase: NR 4/3/1997, 5SA. 59		

Note: NR = National Register, SR = State Register, NHL = National Historic Landmark, WHS = World Heritage Site

## NATURAL ENVIRONMENT

CDOT's Environmental Ethic states: "*CDOT will support and enhance efforts to protect the environment and the quality of life for all of Colorado's citizens in the pursuit of the best transportation systems and services possible.*" It encourages CDOT to consider environmental issues at the earliest stage practicable. As part of the 2030 plan, corridor-visioning process, the Transportation Planning Regions should identify the environmental context of the TPR and the corridors.

## General Environmental Issues

Many people associate environmental issues with natural resources like air, water, or wildlife. However, environment actually refers to the whole context of an area. It includes the natural environment and the human environment. The natural environment would refer to a broad range of issues like wildlife, wetlands, clean air, and clean water to name just a few. Factors associated with the human environment would include historic properties, public parks and recreational facilities, communities, human and natural history resources, and cultural facilities as well as clean air and clean water issues.

Many environmental resources are protected by local, state, or federal agencies; impacts to these protected resources require consultation with the regulating agency. Other resources have no legal protection, but are still important to the community.

The regional planning process does not require a complete inventory of all potential environmental resources within the corridor. Many resources are difficult to identify, and all resources will require a more in depth analysis as part of the project planning process. However, the corridor visioning process provides the opportunity to identify the general environmental context within the corridor. Establishing this context at the corridor visioning stage provides valuable information to the project planners and designers to enable the transportation system to be more sensitive to the environment. There are three components to this analysis:

- Known regulated resources with in the TPR or corridor that have the potential to be impacted by projects.
- Known agencies with responsibilities for resources within the TPR or corridor, examples may include the US forest Service, the State Historical Preservation Office, or the City Parks Department.

• Known resources of value to the community that do not have legal protection.

The information that follows identifies general environmental issues within the TPR or along a corridor. The fact that an issue is not identified in these comments should not be taken to mean that the issue might not be of concern along the corridor. This section focuses on issues that are easily identifiable or which are commonly overlooked. The purpose is to encourage the planning process to identify issues that can be acted upon proactively, to identify components of the environment that can be incorporated into the values of the people and communities the TPR serves. The CDOT Environmental Stewardship guide is an excellent resource and source of guidance about ways to accomplish this.

The SWTPR is made up of Archuleta, Dolores, La Plata, Montezuma, and San Juan counties as well as the Ute Mountain Ute and the Southern Ute Tribes. This is a naturally diverse TPR with semi-arid desert shrub land ecosystems as well as high mountain ecosystems and all the transition zones associated with the ecosystems. The TPR is within the area that is part of the ancestral home of the Ute Nation and the Navaho Nation. The Ute Mountain Ute and the Southern Ute Tribe reservations are within the TPR.

## **General Natural Context**

- This TPR incorporates three major drainage systems.
- The San Juan River basin, which includes the San Juan River and all its tributaries, is habitat to endangered species.
- The Animas River from Lightner Creek to the Purple Cliffs is classified as Gold Medal Water for Trout.
- There is Lynx habitat within the TPR
- There are other Endangered species in the TPR.
- Mesa Verde National Park is located in the TPR
- There is extensive state and federal public lands in the TPR
- Many of the corridors cross rivers and riparian zones.
- There are threatened or imperiled stream reaches in the TPR.

## **General Human Context**

- There are many historically eligible sites in the TPR.
- There are scenic byways in the TPR.
- There are known archeological resources within the TPR.
- There are known to be paleontological resources within the TPR.
- The Silverton National Historic District is located in the TPR.
- This is the historical territory of the Ute and Navaho Nations.
- The Durango Silverton Narrow Gauge Railroad is Located in the TPR.

## **Mineral Resources**

The Southwest TPR contains a number of economically valuable mineral resources. The Colorado Department of Mining and Geology monitors mining activity throughout the state. The table below indicates the number of mines containing the referenced commodity for the SWTPR. Note that San Juan County is not referenced as there was not substantial mining activity in the County. As the table indicates, the most commonly mined commodity in the region is sand/gravel/aggregate/stone.

Southwest TPR							
Commodity	Archuleta	Dolores	La Plata	Montezuma			
Borrow Pits	8	5	14	3			
Coal Mines	5	-	25	1			
Sand, Gravel, Aggregate, Stone	85	18	102	61			
NA (Sodium)	-	-	3	2			
Silver, Gold, Copper	-	4	9	5			
Other Minerals/Metals Mined	-	-	3	-			
Total	98	27	156	72			

## Table 19: Mineral Resources of the TPR

For more information on the location of mines throughout Colorado see:

http//:www.mining.state.co.us/operatordb/report.asp.

## **AIR QUALITY**

The Colorado Air Quality Control Commission, under the Colorado Department of Health and Environment, distributed a "Report to the Public 2002-2003" 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 boundaries of the Western Slope air quality region (encompassing almost half of the western side of Colorado including all five SWTPR counties – Archuleta, Dolores, La Plata, Montezuma and San Juan). Within the SWTPR, Pagosa Springs was from 1990-2000 a designated non-attainment area for particulate matter (PM 10). The community is currently demonstrating attainment for PM 10 and in 2000 requested maintenance area status from the Colorado Department of Health and Environment. A Maintenance Plan that included a number of transportation related measures such as road paving and street sweeping, that will allow Pagosa Springs to not exceed PM 10 standards through 2012, was approved by the Air Quality Control Commission in 2000. In August of 2001, the Environmental Protection Agency designated Pagosa Springs as an attainment area for PM 10.

Within the Western Slope the pollution comes from various sources including: wood burning, dust from unpaved roads and street sanding. Controlled and uncontrolled burns are a significant source of air pollution in the Western Slope Region. Other sources of air pollution in urban areas of the region include motor vehicles, residential burning and street sand and dust. The Western Slope region is in attainment of air quality standards as indicated in the 2002-2003 public report.

However, future air quality in the SWTPR is a concern due to the high elevation areas of the topography. The following information is included as background and as a reference for planners and residents of the area. The Main sources of air pollution found within the region, PM 10, result from the use of or activities

related to: wood stoves, unpaved roads and street sanding, coal mining, oil shale production, refineries, and power plants.

The 1990 Clean Air Act (CAA) renewed and intensified national efforts to reduce air pollution in the United States. These amendments presented a monumental challenge for regulatory officials, regulating industries, and others involved in this environmental control undertaking. The primary purposes of the actions mandated by the CAA were to improve public health, preserve property, and benefit the environment.

The CAA addresses interstate movement of air pollution, international air pollution, permits, enforcement, deadlines, and public participation. The CAA identifies air pollutants and sets primary and secondary standards for each. The primary standard protects human health, and the secondary standard is based on potential environmental and property damage. An area that meets or exceeds the primary standard is called an attainment area; an area that does not meet the primary standard is called a non-attainment area. An estimated 90 million Americans live in non-attainment areas.

The main or "criteria" air pollutants covered by the CAA are ozone, sulfur dioxide (SO<sub>2</sub>), particulate matter (PM), lead, nitrogen oxides (NO<sub>x</sub>), and carbon monoxide (CO). The CAA includes specific limits, timelines, and procedures to reduce these criteria pollutants. The CAA also regulates what are called "hazardous air pollutants" (HAPs). HAPs are released by chemical plants, dry cleaners, printing plants, and motor vehicles. They can cause serious health and environmental effects.

The CAA includes specific goals for reducing emissions from all mobile sources. The comprehensive approach to reduce pollution from mobile sources includes requiring cleaner fuels; manufacturing cleaner cars, trucks, and buses; establishing inspection and maintenance (I/M) programs; and developing regulations for off-road vehicles and equipment.

Air pollution is the contamination of air by the discharge of harmful substances. Air pollution can cause health problems, including burning eyes and nose, itchy irritated throat, and difficulty breathing. Some contaminants found in polluted air (e.g., benzene, carbon dioxide, carbon monoxide, lead, nitrogen oxide, particulate matter, and sulfur dioxide) can cause cancer, birth defects, brain and nerve damage, and long-term injury to the lungs and breathing passages. Above certain concentrations and durations, air pollutants can be extremely dangerous and can cause severe injury or death.

For more specific details on Colorado Air Quality Regulations see www.cdphe.state.co.us/regulate.asp.

## ENVIRONMENTAL OVERVIEW NATURAL RESOURCES

The following map utilizes the Colorado Natural Diversity Information Source (NDIS) database. This database and mapping facility is commonly used within CDOT and other state agencies to identify areas of environmental concern. The NDIS is a combined effort of the Colorado Division of Wildlife, the Colorado Department of Natural Resources, the Colorado Natural Heritage Program, and Colorado State University. Several tools are available within the NDIS, including the System for Conservation Planning, which identifies specific sites of concern with respect to Threatened and Endangered (T& E) species and the Species Occurrence and Abundance Tool, which lists occurrences by location of T & E species.

## Exhibit 25: Environmental Overview Natural Resources Map



## HAZARDOUS WASTE AREAS

The Southwest TPR encompasses a land area of approximately 6,155 square miles. 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.

The Colorado Department of Public Health & Environment tracks Federally listed Superfund sites within the state of Colorado. The Environmental Protection Agency (EPA) designates Federal Superfund sites in Colorado. There are no federally listed superfund sites within the Southwest TPR. For more details on Colorado Federal Superfund sites see <u>www.chphe.state.co.us/hmsf\_sites.asp</u>. The following map shows locations of EPA designated Resource Conservation Recovery Sites (RCRA) in the Southwest TPR. These sites represent hazardous waste, solid (primarily non-hazardous) waste and underground storage tanks that store petroleum or hazardous substances.

## Exhibit 26: Hazardous Waste Areas Map



## Table 20: Potential Environmental Concerns

	Potential Environmental Concerns							
Highway	Corridor Name	Beginning MP	Ending MP	TPR	Potential Environmental Concerns			
US 550	US 550 NM state line to the north end of San Juan County	0	80	10	Southern Ute tribal lands, scenic by way, historic properties, USFS, D&S NGRR, Lynx habitat, Lynx movement corridor, Animas River is on the CDPHE list of impaired waters, water quality issues, wetland/riparian complexes			
US 491	US 491 NM state line to US 160 and from Cortez to the Utah state line	26	70	10	Ute Mountain Ute tribal lands, scenic byway			
SH 41	SH 41 Utah border to US 160	0	9.5	10	Ute Mountain Ute tribal lands, scenic byway			
SH 84	SH 84 from Pagosa Springs to NM border	0	28	10	USFS			
SH 184	SH 184 connects Mancos to Dolores and SH 491	0	27	10	Scenic byway, Anasazi Heritage Center			
SH 145	SH 145 from north of Dolores to the southern boundary of the Gunnison Valley TPR	0	60	10	Scenic byway, Lynx habitat, Lynx movement corridor, USFS, Anasazi Heritage Center, wetland/riparian complexes			
SH 172	SH 172 from NM line to US 160	0	25	10	Southern Ute tribal lands			
SH 151	Ignacio to Jct. US 160	0	34	10	Southern Ute tribal lands			
SH 141	SH 141 west of Dove Creek north to southern boundary of GVTPR	0	8	10				
US 160	Colorado border to San Luis Valley TPR boundary	0	186	10	Ute Mountain Ute/Southern Ute tribal lands, scenic byway, Lynx habitat, wetlands/riparian complexes, USFS			
SH 3	SH 3 within Durango	0	3	10				
SH 140	SH 140 from NM state line to US 160 west of Durango	0	24	10	Ute Mountain Ute tribal lands			
US 491A	NM state line to US 160	0	6.4	10	Ute Mountain Ute tribal lands			
US 491B	Cortez to Utah state line	26	70	10	Ute Mountain Ute tribal lands			

## VI MOBILITY DEMAND ANALYSIS

## **MOBILITY DEMAND PROCESS**

This purpose of this task will be to estimate future travel demand for each mode through 2030. Results from the Mobility Demand Analysis provide the necessary information for the *Alternatives Analysis* task to develop transportation alternatives to serve future mobility needs.

The method for forecasting future demand on the state highway system was based on available CDOT data. The model used in forecasting future traffic volumes is based on a regression analysis equation developed by CDOT that uses past traffic trends in forecasting future traffic.

## Highway

The 2030 volumes are based on CDOT's "expansion factor," the best available statewide tool to predict traffic volumes over the long term and for large areas. It is based on historic growth in traffic volumes for the facility and helps provide a relative measure of growth for planning purposes. Note the growth in AADT 5000+ on US 160, US 491, US 550, and segments of SH 145, SH 172, and SH 141.

## Exhibit 27: Average Annual Daily Traffic 2030 Map



## VOLUME TO CAPACITY RATIO 2001-2030

As stated previously, the volume to capacity ratio (V/C) is a helpful tool in depicting relative levels of highway congestion. A V/C ratio of .00-0.20 reflects a relatively low level of congestion while a V/C ratio of greater than .60 reflects a growing and more noticeable level of congestion. In urban areas, a V/C of greater than .85 is considered congested. The following table and chart show that, while the current level of congestion is low, it increases considerably by 2030.

## Table 21: Volume to Capacity Ratio 2001 - 2030

Volume to Capacity Ratio	2001 Miles	2030 Miles	% Change 2001 - 2030
0.00 – 0.20	204	141	-31.1%
0.21 - 0.40	153	80	-47.4%
0.41 - 0.60	71	119	67.7%
0.61 +	79	166	110.9%
Region Total	507	507	0.0%

Source: CDOT

## Exhibit 28: Volume to Capacity Ratio 2001-2030 Chart



## Volume to Capacity Ratio 2030

Notice the .60 + areas for 2001 are primarily along US 160 between Durango to Pagosa Springs and the Archuleta County line to the north, and US 550 approximately midway between Silverton and Durango to the south. For US 550 in the vicinity of Silverton the Volume to Capacity ratio jumps from .20-.40 in 2001 to .60 + in 2030. Segments of US 491 do the same.

## Exhibit 29: Volume to Capacity Ratio 2030 Map



## Freight

The following two exhibits reflect the growth in freight movement from 1998-2020, the analysis period of the Freight Analysis Framework developed by the US DOT, the analysis reflects a continuing growth in commercial traffic on US 160, US 491, and US 550 through 2000.







## Exhibit 31: Map Estimated Average Annual Daily Truck Traffic: 2020

#### FREIGHT SHIPMENTS TO, FROM, AND WITHIN COLORADO: 1998, 2010, AND 2020

The following table presents information on freight shipments that have either an origin or a destination in Colorado. As shown in the table, in 1998 trucks moved a large percentage of the tonnage (73%) and value (68%) of shipments, followed by rail (26% tonnage, 7% value) and air (<1% tonnage, 25% value).

Colorado	Tc (mill	Tons (millions)			Value (billions \$)		
	1998	2010	2020	1998	2010	2020	
		By Mo	ode				
Air	<1	1	2	33	84	147	
Highway	142	208	257	90	178	296	
Other <sup>a</sup>	<1	<1	<1	<1	<1	<1	
Rail	51	67	76	9	17	26	
Water	0	0	0	0	0	0	
Grand Total	194	276	335	132	279	469	
	Ву	/ Destination	on/Market				
Domestic	190	270	327	127	268	447	
International	4	6	8	5	11	22	
Grand Total	194	276	335	132	279	469	

## Table 22: Freight Shipments To, From and Within Colorado

Note: Modal numbers may not add to totals due to rounding.

a The "Other" category includes international shipments that moved via pipeline or by an unspecified mode.

Truck traffic is expected to grow throughout the state over the next 20 years. Much of the growth will occur in urban areas and on the Interstate highway system (Figures 3 and 4). Truck traffic moving to and from Colorado accounted for 10 percent of the average annual daily truck traffic (AADTT) on the road network. Approximately 10 percent of truck traffic involved in-state shipments, and 20 percent involved trucks traveling across the state to other markets. About 60 percent of the AADTT were not identified with a route-specific origin or destination.

#### TOP FIVE COMMODITIES SHIPPED TO, FROM, AND WITHIN COLORADO BY ALL MODES: 1998 AND 2020

Table shows the top five commodity groups shipped to, from, and within Colorado by all modes. The top commodities by weight are nonmetallic minerals and coal. By value, the top commodities are transportation equipment and mail or contract traffic." (*Freight Transportation Profile – Colorado Freight Analysis Framework*)

Colorado Commodity	Tons (millions)		Colorado Commodity	Value (billions \$)	
	1998	2020	]	1998	2020
Nonmetallic Minerals	40	44	Transportation Equipment	17	24
Coal	35	42	Mail or Contract Traffic	15	47
Farm Products	26	30	Food or Kindred Products	13	26
Clay, Concrete, Glass or Stone	24	47	Freight All Kinds (FAK)	11	23
Food or Kindred Products	15	23	Chemicals or Allied Products	10	21

## Table 23: Top Five Commodities Shipped To, From, and Within Colorado

a U.S. mail or other small packages.

b The "Freight All Kinds" category refers to general freight shipments.

## Railroads

The rail service indicated in the region is the passenger rail from Silverton to Durango.

## **Public Transportation Needs Assessment**

The following section discusses an analysis of the demand for transit services in the Southwest Region based upon standard estimation techniques and comments from residents. The transit demand was used in the identification of transit service for the next 25 years. Different methods are used to estimate the maximum transit trip demand in the Southwest Region:

- Rural Transit Demand Methodology
- Transit Needs and Benefits Study
- Ridership Trends

Feedback from residents within the community also plays a critical role in the regional planning process. Public meetings throughout the region allowed citizens to express their ideas and provide suggestions to the planning document. The SWTPR Transit Element, competed in 2003, provides information regarding the public meetings held in the region and can be located at the following website-WWW.dot.state.co.us/StateWidePlanning/PlanningStudies.

## RURAL TRANSIT DEMAND METHODOLOGY

An important source of information and the most recent research regarding demand for transit services in *rural areas* and for persons who are elderly or disabled is the Transit Cooperative Research Program (TCRP) Project A-3: Rural Transit Demand Estimation Techniques. This study, completed by SG Associates, Inc. and LSC, represents the first substantial research into demand for transit service in rural areas and small communities since the early 1980s.

The TCRP Methodology is based on *permanent* population. Thus, the methodology provides a good look at transit demand for the Southwest Region. Knowing this information, the LSC Team presents the transit demand for 2002 and for year 2030, based on population projections from the Colorado Department of Local Affairs. Combining the program estimates and non-program estimates—the total current *non-peak* transit demand for the Southwest Region, using the TCRP Methodology, is approximately 647,462 annual trips for the non-peak season. The 2030 Transit Element provides detailed information for the TCRP transit demand.

## TRANSIT NEEDS AND BENEFITS STUDY (TNBS)

The Colorado Department of Transportation completed a Transit Needs and Benefits Study (TNBS) for the entire state in 1999. An update of the existing transit need was performed in 2000 using 1999 data, which replaced the 1996 data from the original study. Transit need estimates were developed for the entire state, for each region, and on a county-by-county basis.



The LSC Team updated the TNBS transit need estimates using the recently released

2000 census data. Table 20 provides a summary of the needs using the 1996, 1999, and 2000 data. The TNBS approach used a combination of methodologies and aggregated the need for the Southwest Region. However, the approach used factors based on statewide characteristics and is not specific to this region. The TNBS level of need should be used as a guideline to the level of need and as a comparison for the other methodologies. Based on the TNBS, for 2002, the region was able to meet only 16% of its total annual trip needs.

TNBS Updated Transit Need Estimates – SW Region						
Transit Category	1996	1999	2002			
Rural General Public	771,420	907,088	1,064,440			
Disabled	2,290	3,040	16,458			
Program Trips	661,231	661,231	674,458			
Urban Area	N/A	N/A	N/A			
Resort Area	4,386,095	4,624,146	4,624,146			
Annual Need	5,821,000	6,196,000	6,379,500			
Annual Trips Provided	900,000	856,829	994,122			
Need Met (%)	15%	14%	16%			
Unmet Need (%)	85%	86%	84%			

## Table 24: TNBS Updated Statewide Transit Need Estimates

Source: LSC, 2003.

## **RIDERSHIP TRENDS**

Another approach to looking at short-term transit demand is to evaluate recent trends in ridership. This approach is valid in areas where there are existing transit services such as in the Southwest Region. This section is based on existing ridership and is projected to the year 2010. It should be noted that the ridership trends and projections *do not* estimate the transit need within the study area.

According to data on file, transit ridership in the TPR is expected to increase slightly (approximately 1.2%) in the future based on recent trends. Much of the transit demand pertains to the number of tourists and visitors to the resort areas and to the increases in population for the study area. Transit ridership for year 2005 is estimated at approximately 402,000 and for 2010 is estimated at 407,000 annual trips for the Southwest Region.

## **VII** CORRIDOR VISIONS - ALTERNATIVES ANALYSIS

## PROCESS

The highway corridors within the Southwest TPR were evaluated individually in terms of establishing corridor visions. Roadway attribute data were input into a Microsoft Access based software program called *Corridor Visions – Version 1* that generated visions, goals, and strategies based on issues identified via the entered data. The next phase of the process involved meeting with the Southwest TPR Regional Planning Commissioners to obtain feedback on the output of the computer software. The comments received from the commissioners were then incorporated into the visions that are presented in this chapter for each corridor. This plan makes a break from past regional planning process. In the past, the plan has been a strictly "project specific" plan, focusing on detailed needs and plans at precise locations. This led to an unwieldy plan that might address very specific needs, but sometimes failed to address regional needs from a systems perspective.

The 2030 Long Range Transportation Plan begins to build a "corridor-based" plan that will more effectively envision the long term needs on any given corridor, rather than focusing on specific intersections, safety issues or capacity issues from milepost X to milepost Y. This part of the plan examined 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 give some level of priority for implementation. These steps will help guide investment decisions throughout the planning period.

Several steps were followed in order to achieve this goal:

- 1. Identify corridor segments with common operating characteristics and future needs
- 2. Develop a Corridor Vision for each corridor segment
- 3. Develop Goals/Objectives for each corridor segment
- 4. Develop Strategies to achieve the Goals for each corridor segment
- 5. Assign a Primary Investment Category

## **Corridor Vision Purpose**

- Integrates community values with multi-modal transportation needs
- Provides a corridor approach for a transportation system framework
- Strengthens partnerships to cooperatively develop a multi-modal 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

## Primary Investment Category

CDOT allocates funds to various programs, including System Quality (Preservation of the Existing System), Mobility, Safety, Program Delivery, Statewide Programs, and Priority Projects. The Corridor Vision process is designed to investigate the first three –System Quality, Mobility, and Safety in terms of regional priorities. The remaining programs are under the authority of CDOT where the Transportation Commission makes programming decisions.

For the purposes of this plan, the RPC examined all the available background data as presented in Chapter IV, Transportation System Inventory, matched unmet needs with the Regional Vision, Values and Goals expressed in Chapter III, and determined what the ultimate needs are 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 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 location in the corridor that need to be addressed from congestion or capacity standpoints, 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 hierarchy.

## **Goal Selection**

The following types of goals can be achieved within each category:

## MOBILITY

- Increase travel reliability and improve mobility
- Reduce traffic congestion and improve traffic flow
- Maintain statewide transportation connections
- Coordinate transportation and land use decisions
- Support economic development while maintaining environmental responsibility
- Support commuter travel
- Support recreation travel
- Provide for tourist-friendly travel
- Improve access to public lands
- Accommodate growth in freight transport
- Provide improved freight linkages
- Expand transit usage
- Increase bus ridership
- Provide for bicycle/pedestrian travel
- Increase air travel availability
- Increase Transportation Demand Management, i.e., carpool, telecommute
- Provide information to traveling public

## **SAFETY**

- Reduce fatalities, injuries and property damage crash rate
- Promote education to improve safe driving behavior
- Provide for safe movement of bicycles and pedestrians
- Eliminate shoulder deficiencies
- Improve signing and stripping

## SYSTEM QUALITY

- Preserve the existing transportation system
  - Maintain or improve pavement to optimal condition
  - Rehabilitate/replace deficient bridges
  - Promote transportation improvements that are environmentally responsible
  - Maintain transit vehicles and facilities in good condition

- Maintain airport facilities in good condition
- Maintain responsible water quality procedures

## **Corridor Vision Discussion Questions**

The following questions were used to help facilitate a Corridor Vision discussion to identify local values and transportation needs.

- 1. What purpose does transportation serve for the community?
- 2. What are the transportation needs for your community in the future?
- 3. Do you expect major growth in population, recreation, employment, and or commercial sectors?
- 4. Are there congested areas?
- 5. Are there areas with safety problems in the corridor?
- 6. Are there areas that will need work, i.e., pavement conditions?
- 7. Is there a need for transit, bicycle/pedestrian, aviation, transportation demand management, and local roadway networks?
- 8. Are there natural resources, environmental concerns or areas of special interest to protect?

## Table 25: Corridor Segments of the TPR

Southwest TPR Corridor Segments						
Corridor Name	Description	Milepost	w/in TPR	Primary Investment		
	(from / to)	Begin	End	Category		
SH 3	US 160 to 8 <sup>th</sup> Street in Durango	0	1.27	System Quality		
SH 41	Utah Border to Intersection with US 160	0	9.5	System Quality		
SH 84	Pagosa Springs, south to the New Mexico Border	0	28	System Quality		
SH 110	US 550 to On/Off Ramp to Silverton	0	0.097	System Quality		
SH 140	North/South Roadway from New Mexico Border to West of Durango at Hesperus	0	24	System Quality		
SH 141	West of Dove Creek and North to the Southern Boundary of the Gunnison Valley TPR	0	7.349	Safety		
SH 145	State Highway from East of Cortez to the Dolores/San Miguel County Line	0	60	Safety		
SH 151	From Ignacio to US 160 West of Pagosa Springs	0	34	System Quality		
US 160	Major East-West NHS Route	0	144	Mobility		
SH 172	New Mexico Line North to US 160	0	25	System Quality		
SH 184	State Highway Connecting Mancos to Dolores and SH 491 (SH 666)	0	27	System Quality		
US 550	New Mexico State Line to San Juan/Ouray County Border	0	80	Safety		
US 491A	New Mexico State Line to Jct. US 160	0	6.422	Mobility		
US 491B	Cortez to Utah State Line	26.371	69.602	System Quality		

## VISION STATEMENT SH 3, JCT. US 160 TO 8TH STREET IN DURANGO

Planning Region	10 - Southwest		
State Highway	SH 3		
Beginning Mile Post	0	Ending Mile Post	1.27

## VISION STATEMENT

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.

## GOALS / OBJECTIVES

- 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

## **CORRIDOR DATA**

Pavement Condition	Poor
2002 traffic volumes	
Average Annual Daily Traffic (AADT)	5,311
AADT Combination trucks	57
2030 projected traffic volumes	
Average Annual Daily Traffic (AADT)	8,583
AADT Combination trucks	92

## SH 41 UTAH BORDER TO INTERSECTION WITH U.S. 160

Planning Region	10 - Southwest		
State Highway	SH 4	1	
Beginning Mile Post	0	Ending Mile Post	9.5

#### VISION STATEMENT

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 2030, 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.

## **GOALS / OBJECTIVES**

- Provide for tourist-friendly travel
- Eliminate shoulder deficiencies
- Maintain or improve pavement to optimal condition

## **STRATEGIES**

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

## **CORRIDOR DATA**

Milepost	Pavement Condition
M.P. 0 to 1.9	Poor
M.P. 1.9 to 2.6	Good
M.P. 2.6 to 4.5	Poor
M.P. 4.5 to 6.6	Good
M.P. 6.6 to 9.5	Poor

2002 traffic volumes:	
Average Annual Daily Traffic (AADT)	895
AADT Combination trucks	21
2030 projected traffic volumes:	
Average Annual Daily Traffic (AADT)	1,647
AADT Combination trucks	39

## SH 84 PAGOSA SPRINGS, SOUTH TO THE NEW MEXICO BORDER

Planning Region	10 - Southwest		
State Highway	SH 84	L	
Beginning Mile Post	0	Ending Mile Post	28
VICION STATEMENT			

## VISION STATEMENT

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 western 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.

#### **GOALS / OBJECTIVES**

- Support recreation travel
- Improve access to public lands
- Eliminate shoulder deficiencies
- Reduce fatalities, injuries and property damage crash rate
- Maintain or improve pavement to optimal condition
- Maintain identified wildlife corridors and wildlife habitat connectivity

## **STRATEGIES**

- Add passing lanes
- Add auxiliary lanes and signage at accesses to public lands, as needed
- Add/improve shoulders
- Replace deficient bridges
- Improve hot spots
- Add surface treatment/overlays
- Add wildlife crossing structures and wildlife fencing

## CORRIDOR DATA

Pavement Condition:

Good

2002 traffic volumes:

Average Annual Daily Traffic (AADT) AADT Combination trucks	1,017 to 4,054 76 to 168
2030 projected traffic volumes:	
Average Annual Daily Traffic (AADT)	1,587 to 7,346
AADT Combination trucks	119 to 290

## SH 110, US 550 TO ON/OFF RAMP TO SILVERTON

Planning Region	10 - S	outhwest	
State Highway	SH 11	0	
Beginning Mile Post	0	Ending Mile Post	0.097

#### VISION STATEMENT

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 2030, 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.

#### **GOALS / OBJECTIVES**

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

#### **STRATEGIES**

- Add/improve shoulders
- Add surface treatment/overlays

#### **CORRIDOR DATA**

Pavement Condition:	Good
2002 traffic volumes:	
Average Annual Daily Traffic (AADT)	2,560
AADT Combination trucks	18
2030 projected traffic volumes:	
Average Annual Daily Traffic (AADT)	3,779
AADT Combination trucks	27

# SH 140 NORTH/SOUTH ROADWAY FROM NEW MEXICO BORDER TO WEST OF DURANGO AT HESPERUS

Planning Region	10 - Sou	uthwest	
State Highway	140		
Beginning Mile Post	0	Ending Mile Post	24

## VISION STATEMENT

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 multi-modal 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 2030, 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.

#### GOALS / OBJECTIVES

- Provide for recreation travel
- Provide for commuter travel
- Reduce fatalities, injuries and property damage crash rate
- Eliminate shoulder deficiencies
- Preserve the existing transportation system
- Maintain or improve pavement to optimal condition
- Rehabilitate/replace deficient bridges

#### **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

## Bridge repairs/replacement

## CORRIDOR DATA

Pavement Condition:	<i>Poor</i> , except for a <b>Fair</b> segment from M.P. 16.9 to 20.7
2002 traffic volumes:	
Average Annual Daily Traffic (AADT)	1,564 to 2,586
AADT Combination trucks	40 to 62
2030 projected traffic volumes:	
Average Annual Daily Traffic (AADT)	2,549 to 4,975
AADT Combination trucks	145 to 264

# SH 141 WEST OF DOVE CREEK AND NORTH TO THE SOUTHERN BOUNDARY OF THE GUNNISON VALLEY TPR

Planning Region 10 - Southwest

State Highway SH 141

Beginning Mile Post0Ending Mile Post7.349

#### VISION STATEMENT

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 multi-modal 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 2030, 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.

## **GOALS / OBJECTIVES**

- 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
- Provide and maintain trash bins
- Improve hot spots
- Add surface treatment/overlays

Chapter VII - Corridor Visions - Alternatives Analysis

## CORRIDOR DATA

Pavement Condition:	<i>Poor</i> , except for a <b>Good</b> segment from M.P. 63 to 75.5
2002 traffic volumes:	
Average Annual Daily Traffic (AADT)	650 to 2,440
AADT Combination trucks	36 to 162
2030 projected traffic volumes:	
Average Annual Daily Traffic (AADT)	942 to 3,431
AADT Combination trucks	93 to 321

## SH 145 STATE HIGHWAY FROM EAST OF CORTEZ TO THE DOLORES/SAN MIGUEL COUNTY LINE (SOUTHERN BOUNDARY OF THE GUNNISON VALLEY TPR)

Planning Region	10 - Southwest
Planning Region	10 - Sout

State Highway SH 145

Beginning Mile Post	0	Ending Mile Post	60
	-		

## VISION STATEMENT

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 multi-modal 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.

## **GOALS / OBJECTIVES**

- Improve traffic flow in congested areas
- Support recreation travel, and enhance the traveling experience
- Eliminate shoulder deficiencies
- Reduce fatalities, injuries, and property damage crash rate
- Maintain identified wildlife corridors and wildlife habitat connectivity

## **STRATEGIES**

- Add passing/climbing lanes
- Provide commuter transit service to Telluride
- Flatten slopes
- Flatten curves
- Add/improve shoulders
- Add pullouts and provide signage directing slow-moving vehicles to pull over
- Provide rest areas

- Provide auxiliary lanes and signs at access points to public lands, as feasible
- Retain natural and cultural resources and viewsheds
- Add guardrail, where feasible
- Improve intersections in urban areas
- Improve hot spots
- Consolidate accesses, where feasible
- Improve wildlife crossings
- Add surface treatment/overlays
- Add wildlife crossing structures and wildlife fencing

NOTE: Dolores and Montezuma County officials have proposed an alternate route to SH 145: Forest Service Road No. 526, from Dolores to Norwood. The route is currently a gravel road, and Dolores County officials have investigated Federal Highway Administration requirements to rebuild the road to current standards. It is noted that the Colorado Transportation Commission's policy concerning growth of the transportation system provides, "...Additions to the state system are contingent on the availability of funds, an exchange of facilities with local governments, partnerships with public and private entities, and consideration of the long term maintenance and preservation costs of added facilities. Any additions to the state system must be consistent with the role and function of the state highway system".

#### CORRIDOR DATA - SH 145

Pavement Condition:	Poor, except:	
M.P. 0 to 1.7	Fair	
M.P. 2.7 to 4.3	Good	
M.P. 59 to 84.289	Good	
2002 traffic volumes:		
Average Appuel Deily Troffie (AADT)	1,498 (W. Dolores Rd.) to	
Average Annual Daily Trailic (AADT)	7,889 (S. of SH 145 at Telluride)	
AADT Combination trucks	84 (N. of Vance Creek) to	
ADT Combination trucks	335 (Cortez)	
2030 projected traffic volumes:		
	2,651 (W. Dolores Rd.) to	
Average Annual Daily Tramic (AADT)	13,853 (S. of SH 145 at Telluride)	
AADT Combination trucks	138 (N. of Vance Creek) to	
AADT Combination trucks	537 (Cortez)	

## SH 151 IGNACIO TO JCT. US 160

Planning Region	10 - Southwest			
State Highway	SH 1	SH 151		
Beginning Mile Post	0	Ending Mile Post	34	

## Vision Statement

The Vision for the SH 151 corridor is primarily to maintain system quality as well as to improve safety and to 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 2030, 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.

## GOALS / OBJECTIVES

- Enhance mobility
- Support recreation travel
- Reduce fatalities, injuries and property damage crash rate
- Eliminate shoulder deficiencies
- Maintain or improve pavement to optimal condition
- Recognize the increased oil and gas production impacts to the road system.
- Recognize the potential impact of tribal projects (casinos, roadside businesses) to the road system
- Maintain identified wildlife corridors and wildlife habitat connectivity

## **STRATEGIES**

- Enhance transit service
- Provide auxiliary lanes and signs at access points to public lands, as feasible.
- Provide rest areas
- Improve geometrics
- Add/improve shoulders
- Improve hot spots
- Provide measures to reduce wildlife impacts
- Add surface treatment/overlays

- Continue to strengthen partnerships to implement solutions and mitigation for tribal and oil and gas projects.
- Collaboratively develop a process for managing tribal projects
- Add wildlife crossing structures and wildlife fencing

## CORRIDOR DATA - SH 151

Poo	Poor
719 to 3,103	
50 to 106	
1,494 to 4,928	
72 to 196	
	<i>Poo</i> 719 to 3,103 50 to 106 1,494 to 4,928 72 to 196
## U.S. 160 MAJOR EAST-WEST NHS ROUTE

Planning Region	10 - Southwest		
STATE HIGHWAY	U.S. 160		
Beginning Mile Post	0	Ending Mile Post	144

## VISION STATEMENT

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 multi-modal 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, 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 were identified as candidate projects in the CDOT 2003 Strategic Investment Program. These projects are identified in the Preferred Roadway Plan on pages 111-112 of this document.

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.

#### **GOALS / OBJECTIVES**

- Reduce traffic congestion and improve traffic flow
- Provide for growth and increased traffic
- Support commuter travel
- Provide for tourist-friendly travel
- Support bicycle/pedestrian travel
- Reduce fatalities, injuries and property damage crash rate
- Preserve the existing transportation system
- Eliminate shoulder deficiencies
- Recognize the increased oil and gas production impacts to the road system.
- Recognize the potential impact of tribal projects (casinos, roadside businesses) to the road system
- Ensure airport facilities are maintained in a safe operating condition and are adequate to meet existing and projected demands

Maintain identified wildlife corridors and wildlife habitat connectivity

## **STRATEGIES**

- Improve highway geometrics
- Add through lanes, where feasible
- Provide and expand transit bus
- Provide inter-modal connections and transit transfer centers
- Coordinate service among transit providers
- Provide bus pullouts
- Construct intersection/Interchange improvements
- Add passing lanes
- Add turn lanes
- Consolidate and limit access and develop access management plans
- Add accel/decel lanes
- Add turn lanes
- Add wildlife crossing structures and wildlife fencing
- Add surface treatment/overlays
- Bridge repairs/replacement
- Collaboratively develop a process for dealing with tribal projects
- Encourage partnerships between CDOT and affected communities for studies, projects, access management plans, etc.
- Provide telecommunications infrastructure with road improvements to attract home-owned businesses.
- Meet facility objectives for the airports as identified in the Colorado Airport System Plan

#### TOWNS, CITIES AND AIRPORTS LOCATED ALONG THE HIGHWAY WITHIN THIS CORRIDOR SEGMENT:

This highway is located within and impacts the following towns/cities: Cortez, Mancos, Durango, Bayfield, Towaoc, and Pagosa Springs.

The following airports are located within this corridor segment: Cortez Municipal, Stevens Field – Pagosa Springs and Durango Animas Airpark.

All planning and improvements should be coordinated with these communities. Partnerships between CDOT and affected communities should be encouraged for potential improvements, access management plans, etc.

## GOALS AND STRATEGIES FOR US 160 THROUGH THE ABOVE-MENTIONED TOWNS:

- Recognize local planning efforts, including trails plans.
- Coordinate improvements with affected communities.

- Provide for safe bicycle and pedestrian travel within towns. Consider access control options.
- Provide park-n-rides, as feasible, and in lighting in towns.
- Improve aesthetics
- Improve safety/highway geometrics from Bayfield to Pagosa Springs
- Construct better-integrated trails to facilitate bicycle and pedestrian commuting
  - Construct a separated bikepath in Grandview (east of Durango)
  - Construct a separated bikepath from Cortez toward Durango

#### CORRIDOR DATA - US 160

#### **Pavement Condition:**

M.P. 18.298 to 52.905	Good or fair
M.P. 60.37 to 83.207	Good or fair
M.P. 86.799 to 88.2	Good or fair
M.P. 94 to 118	Good or fair
M.P. 134.41 to 149.3	Good or fair
M.P. 152 to 152.8	Good or fair
M.P. 159.004 to 172.84	Good or fair
M.P. 174 to 174.7	Good or fair
M.P. 159.004 to 172.84	Good or fair
M.P. 181.12 to 186.9	Good or fair
M.P. 221.6 to 231.2	Good or fair
M.P. 235.7 to 240.7	Good or fair
M.P. 241.7 to 246.473	Good or fair
M.P. 252.4 to 257.2	Good or fair
M.P. 267.2 to 282.2	Good or fair

The remaining segments of US 160A have a poor pavement condition.

#### 2002 traffic volumes:

Average Annual Daily Traffic (AADT)	<b>1,339</b> (SW of SH 41) to <b>27,196</b> (SE of Jct. US 550- range within the segment
AADT Combination trucks	<b>94</b> (SW of SH 41) to <b>791</b> (W of CR 25.00, Airport Rd. Pagosa Springs) – range within the segment
2030 projected traffic volumes:	
Average Annual Daily Traffic (AADT)	<b>1,976</b> (SW of SH 41) to <b>27,196</b> ( <b>52,884</b> S. of Jct. SH 3 – range within the segment
AADT Combination trucks	139 (SW of SH 41) to 1,433 (W of CR 25.00, Airport Rd., Pagosa Springs) – range within the

segment

## SH 172 New Mexico Line North to U.S. 160

Planning Region	10 - Southwest		
State Highway	SH 172		
Beginning Mile Post	0	Ending Mile Post	25

#### VISION STATEMENT

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 Airport). The transportation system in the area primarily serves destinations within the corridor.

Based on historic and projected population and employment levels, both passenger and freight traffic volumes are expected to increase. The communities along the corridor value 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.

#### **GOALS / OBJECTIVES**

- Enhance mobility
- 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
- Provide for safe pedestrian travel across the highway
- Recognize the increased impacts of oil and gas production to the road system.
- Recognize the potential impact of tribal projects (casinos, roadside businesses) to the road system
- Ensure airport facilities are maintained in a safe operating condition and are adequate to meet existing and projected demands
- Maintain identified wildlife corridors and wildlife habitat connectivity

## **STRATEGIES**

- Provide inter-modal connections
- Enhance transit service
- Provide transit service between Durango and Ship Rock
- Improve geometrics
- Add/improve shoulders

- Provide passing lanes, where feasible.
- Improve hot spots
- Add surface treatment/overlays
- Continue to strengthen partnerships to implement solutions and mitigation for tribal and oil and gas projects.
- Collaboratively develop a process for managing tribal projects
- Meet facility objectives for the airport as identified in the Colorado Airport System Plan
- Add wildlife crossing structures and wildlife fencing

#### CORRIDOR DATA - SH 172

Pavement Condition:	
M.P. 0 to 12.8	Poor
M.P. 24.5 to 25	Poor
M.P. 12.8 to 24.5	Good/Fair
2002 traffic volumes:	
Average Annual Daily Traffic (AADT)	420 to 7,661
AADT Combination trucks	47 to 352
2030 projected traffic volumes:	

Average Annual Daily Traffic (AADT)	937 to 12,916
AADT Combination trucks	105 to 667

## SH 184 STATE HIGHWAY CONNECTING MANCOS TO DOLORES AND SH 491 (666)

Planning Region	10 - Southwest	
State Highway	SH 184	4
Beginning Mile Post	0	Ending Mile Post

#### VISION STATEMENT

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.

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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.

## GOALS / OBJECTIVES

- Support recreation travel
- Eliminate shoulder deficiencies
- Preserve the existing transportation system
- Maintain identified wildlife corridors and wildlife habitat connectivity

## **STRATEGIES**

- Assess intersection configurations and signage of access points to public lands, and provide auxiliary lanes and signs, as feasible.
- Improve geometrics
- Add/improve shoulders
- Provide passing lanes, where feasible.
- Improve hot spots
- Add surface treatment/overlays
- Add wildlife crossing structures and wildlife fencing

## CORRIDOR DATA - SH 184

#### Pavement Condition:

Good/Fair:
Good/Fair:
Poor
Poor
Poor

#### 2002 traffic volumes:

Average Annual Daily Traffic (AADT)	1,257 to 3,225
AADT Combination trucks	8 to 12
projected traffic	

#### 2030 projected tra volumes:

Average Annual Daily Traffic (AADT)	1,943 to 6,064 (Mancos)
AADT Combination trucks	16 to 22

## US 491A (FORMALLY 666A), NEW MEXICO STATE LINE TO JCT. US 160

Planning Region	10 - Southwest		
State Highway	491A	(666A)	
Beginning Mile Post	0	Ending Mile Post	6.422

#### VISION STATEMENT

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 multi-modal 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 waste 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. Segments of the US 491 corridor were identified as candidate projects in the CDOT 2003 Strategic Investment Program. The projects have been identified in the Preferred Roadway Plan on pages 111-112 of this document.

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.

## **GOALS / OBJECTIVES**

- Reduce traffic congestion and improve traffic flow
- Accommodate growth in freight transport
- Provide for tourist-friendly travel
- Eliminate shoulder deficiencies
- Maintain or improve pavement to optimal condition

#### **STRATEGIES**

- Provide transit service
- Add passing lanes, as feasible
- Install rumble strips in high accident areas
- Add accel/decel lanes
- Add turn lanes
- Add/improve shoulders

## • Add surface treatment/overlays

CORRIDOR DATA 491A	
Pavement Condition:	Fair
2002 traffic volumes:	
Average Annual Daily Traffic (AADT)	3,391
AADT Combination trucks	581
2030 projected traffic volumes	
Average Annual Daily Traffic (AADT)	5,290
AADT Combination trucks	906

## U.S. 491B (FORMALLY 666B) CORTEZ TO UTAH STATE LINE

ooutimest	
S. 491	
.371 Ending Mile Post 69.	602
5	5. 491 6.371 Ending Mile Post 69.

#### VISION STATEMENT

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 multi-modal 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. The 2002 average annual daily traffic (AADT) ranged from 2,089 to 9,402 in different segments of the highway, including 75 to 749 combination trucks, and the estimated 2030 AADT is 3,317 to 14,567, including 129 to 1,234 combination trucks. 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 four-lane 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.

## **GOALS / OBJECTIVES**

- Improve traffic flow
- Accommodate growth in freight transport
- Reduce fatalities, injuries and property damage crash rate
- Improve pedestrian safety along/across the highway through towns
- Maintain or improve pavement to optimal condition
- Protect views of Mesa Verde, Sleeping Ute, and La Plata Mountains.
- Consolidate and limit access and develop access management plans
- Ensure airport facilities are maintained in a safe operating condition and are adequate to meet existing and projected demands
- Maintain identified wildlife corridors and wildlife habitat connectivity

#### **STRATEGIES**

• Add passing lanes where feasible

- Eliminate shoulder deficiencies
- Rehabilitate/replace deficient bridges
- Improve hot spots
- Add accel/decel lanes
- Add turn lanes
- Coordinate land use to protect viewsheds
- Meet facility objectives for the airport as identified in the Colorado Airport System Plan
- Add wildlife crossing structures and wildlife fencing

**NOTE:** Local elected officials have proposed that Montezuma County Road G (McElmo Canyon Road) become a state highway, as an interstate connection between Colorado and Utah. They predict increased traffic, due to the recent designation of the Canyons of the Ancients as a national monument. It is noted that the Colorado Transportation Commission's policy concerning growth of the transportation system provides, "...Additions to the state system are contingent on the availability of funds, an exchange of facilities with local governments, partnerships with public and private entities, and consideration of the long term maintenance and preservation costs of added facilities. Any additions to the state system must be consistent with the role and function of the state highway system".

Pavement Condition	Good,
except M.P. 27.22 to 35.4	Poor, with 0 Remaining Years of Service Life
2002 traffic volumes:	
Average Annual Daily Traffic (AADT)	3,391
AADT Combination trucks	581
2030 projected traffic volumes:	
Average Annual Daily Traffic (AADT)	5,290
AADT Combination trucks	906

#### CORRIDOR DATA - U.S. 491 (666)

## U.S. 550 New Mexico state line to San Juan/Ouray County Border

Planning Region	10 - Southwest
State Highway	U.S. 550

Beginning Mile Post0Ending Mile Post80

## VISION STATEMENT

The Vision for the U.S. 550 corridor is primarily to improve safety as well as to increase mobility 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 multi-modal 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, 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. These projects have been identified in the Preferred Roadway Plan on pages 111-112 of this document.

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<sup>th</sup> 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. 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.

## **GOALS / OBJECTIVES**

- Increase travel reliability and improve mobility
- Provide for tourist-friendly travel
- Reduce fatalities, injuries and property damage crash rate
- Eliminate shoulder deficiencies
- Maintain or improve pavement to optimal condition
- Maintain identified wildlife corridors and wildlife habitat connectivity

## **STRATEGIES**

- Provide passing/climbing lanes, as feasible
- Provide transit service between Farmington and Durango
- Provide transit service between Durango and Silverton
- Improve/add intersections/interchanges, as feasible
- Retain natural and cultural resources and viewsheds

- Provide pullouts, as feasible, as well as signage directing slow-moving vehicles to pull over
- Assess intersection configurations and signage of access points to public lands, and provide auxiliary lanes and signs, as necessary.
- Improve ITS traveler information, traffic management and incident management
- Improve geometrics
- Improve visibility/sight lines
- Add guardrail
- Improve hot spots
- Provide rockfall mitigation
- Provide fencing in areas that ranchers no longer want to use as open range.
- Consolidate and limit access and develop access management plans
- Bridge repairs/replacement
- Recognize local planning efforts, including trails plans.
- Coordinate improvements with affected communities.
- Provide for safe bicycle and pedestrian travel within towns. Consider access control options.
- Provide park-n-rides, as feasible, and lighting in towns.
- Improve aesthetics
- Construct better-integrated trails to facilitate bicycle and pedestrian commuting
- Add wildlife crossing structures and wildlife fencing

#### CORRIDOR DATA – U.S. 550

#### **Pavement Condition:**

M.P. 0 to 3.53	Good
M.P. 3.53 to 16.6	Poor
M.P. 21 to 24.142	Good
M.P. 24.142 to 25.7	Poor
M.P. 26 to 27.2	Good
M.P. 27.2 to 66.95	Poor
M.P. 66.95 to 67.65	Good
M.P. 67.65 to 70.8	Poor
M.P. 70.8 to 103	Good
M.P. 103 to 105.7	Poor
M.P. 105.7 to 106.3	Fair
M.P. 106.3 to 114.4	Good
M.P. 114.4 to 116.394	Poor
M.P. 116.394 to 117.47	Fair

#### 2002 traffic volumes:

Chapter VII - Corridor Visions - Alternatives Analysis

Average Annual Daily Traffic (AADT)	
M.P. 0 to 93.855 (Ouray)	1,997 (Silverton) to 32,883 (Durango)
AADT Combination truck	
M.P. 0 to 93.855 (Ouray)	
	74 (Silverton) to 339 (Durango)
2030 projected traffic volumes:	
Average Annual Daily Traffic (AADT)	
M.P. 0 to 93.855 (Ouray)	3,227 (Silverton) to 50,377 (Durango)
AADT Combination trucks	
M.P. 0 to 93.855 (Ouray)	120 (Silverton) to 669 (Durango)

# **VIII PREFERRED TRANSPORTATION PLAN**

The Preferred Transportation Plan reflects the long-range transportation vision for the TPR. It highlights the interrelated nature of transportation to land use, development, and to the TPR's quality of life including a vital economy and protecting the human and natural environment. The Preferred Plan is an intermodal transportation plan that considers all modes of transportation as having a necessary role in providing mobility for people and freight and is consistent with the Vision, Goals and Strategies expressed in Chapter 3 and with the individual Corridor Visions detailed in Chapter 7. Key features of the plan include an emphasis on enhancing safety, maintaining system quality and improving mobility.

Based on the alternatives analysis conducted for each corridor, the planning team assisted the RPC in identifying a set of representative projects for each mode to be included in the preferred plan. The projects in the existing (2020) list were reviewed to identify projects that have been completed, those that need to be moved forward in the updated plan to address current needs, and include new projects not on the list to address new or developing needs anticipated in the current planning period. All reasonable and appropriate modes were considered. The projects were grouped by corridor.

All projects identified through the planning process were subjected to a preliminary screening process, which included the following questions:

- Does the project aid in the attainment of the vision and goals developed by the RPC?
- Is the project a justifiable need?
- Does the project provide a viable contribution to a system that meets the RPC's transportation needs?
- Is the project realistic based on the human and natural environment and the physical constraints of the area?

The resulting multi-modal preferred project list was entered into CDOT's new on-line project database, PlanSite, which will greatly increase the efficiency and accuracy of project listings. The list comprehensively addresses mobility, safety and system quality needs for the region, while supporting economic growth and development, protecting the human and natural environment, and sustaining the quality of life as defined in the TPR's values, vision, and goal statements.

## PREFERRED SWTPR ROADWAY PLAN

The Preferred Roadway Plan consists of projects identified as important transportation improvements by the TPR. Many of these projects were also identified in the 2015, and 2020 SWTPR Transportation Plans. However, primarily due to funding issues many of these projects, with the exception of those identified below that are currently in the 2005-2010 State Transportation Improvement Program have not advanced beyond the Preferred Roadway Plan.

	Southwest TPR projects in the 2030 Preferred Plan - Map Key and Summary						
Map #	Corridor (HW#)	County	Project Description	Mile Post Marker	Investment Category	2005 - 2010 STIP	Cost Estimate
1	3	La Plata	SH 3 - US 160 to 6th Durango - geometrics/safety	0 - 2.6	Safety		\$20,000,000
2	41	Montezuma	SH 41 - US 160 to Utah state line	0 - 9.5	Safety		\$20,100,000
3	84	Archuleta	New Mexico state line to M.P. 22	0 - 22	Safety		\$81,000,000
4	140	La Plata	New Mexico state line to Jct. CR 141	0 - 15.6	Safety		\$39,000,000
5	141	Dolores	SH 141 - US 491 to San Miguel Co Line	0 - 7.3	System Preservation		\$16,050,000
6	145	Montezuma	SH 145 - East Dolores CL to East Reconst/shoulders	8.75 - 16.4	Safety		\$69,750,000
7	151	Archuleta	SH 151 - South of Chimney Rock drainage and realign	20 - 25	System Preservation		\$1,342,000
8	151	La Plata	M.P. 0.5 to 2.0, East of Ignacio	0 - 2.0	Safety		\$7,300,000
9	160	Archuleta	US 160 - Vista Dr. to Jct. SH 84	138 - 143	Mobility		\$31,000,000
10	160	Archuleta	US-160 & Turkey Springs Road, East & West	129.6 - 133.6	Safety	\$ 200,000	\$9,900,000
11	160	Archuleta	US 160 - Jackson Mtn slide EO SH 84	149.1	System Preservation		\$33,000,000
12	160	Montezuma	US 160B-4 Corners to Jct. US 160B/491	0 - 18.3	Mobility		\$84,000,000
	160		Segment 1-US 160B NM State Line to SH 41 Int.	0 - 4.9			\$29,000,000
	160		Segment 2-US 160B SH 41 Int. to US 491	4.9 - 18.3			\$55,000,000
12a	160	Montezuma	US 160 South of Cortez to Mancos	22.5 - 56.8	Safety		\$94,000,000
13	160	La Plata	US 160 from SH 3 to East of Florida River	86.0 - 94	Mobility		\$259,000,000
	160		Segment 1-US 160/550 from SH 3 to Farmington Hill	86.6 - 89.1			\$88,000,000
	160		Segment 2-US 160 and US 550	88.3 - 89.1			\$79,000,000
	160		Segment 3-US 160 from E Int. of US 160/US 550 to E of SH 172	89.1 - 91.9			\$59,000,000
	160		Segment 4-US 160 from SH 172 to E of Florida River	91.8 - 95			\$33,000,000
14	160	La Plata	US 160-Florida River to East of Bayfield	95- 105	Mobility	\$1,849,000	\$115,000,000
15	160	La Plata	US 160/US 550-SH 3 to Doubletree Hotel		Safety		\$191,000,000
16	172	La Plata	SH 172 - SH 151 North & South for 1 mile	7.9 - 9.9	System Preservation		\$5,050,000
17	491	Dolores	US 491 - Montezuma Co Line to Utah State Line	49.64 - 69.6	Safety		\$36,705,480
18	491	Montezuma	US 491, New Mexico state line to one mile North of Jct. US 160 in Cortez	0 - 27.5	Mobility	\$ 550,000	\$225,000,000
	491		Segment 1-NM State Line to US 160B intersection	0 - 6			\$37,000,000
	491		Segment 2-US 160B Int. to Cty Rd G	6.4 - 22.5			\$144,000,000
	491		Segment 3-Cty Rd G to Start of 4-Lane in Cortez	22.5 - 25.5			\$19,000,000
	491		Segment 4-Start of 4-Lane in Cortez to 1-Mile East of US 160 Interchange	25.5 - 27.5			\$25,000,000

## Table 26: 2005-2030 Preferred SWTPR Roadway Plan

## Southwest 2030 Regional Transportation Plan

Chapter VIII - Preferred Transportation Plan

	Southwest TPR projects in the 2030 Preferred Plan - Map Key and Summary						
Map #	Corridor (HW#)	County	Project Description	Mile Post Marker	Investment Category	2005 - 2010 STIP	Cost Estimate
19	550	La Plata	US 550 State Line to CR 220	0 - 15.6	Mobility		\$137,000,000
20	550	La Plata/Ouray/ San Juan/ Montrose	US 550-Durango to Colona North	25.1 - 125	Mobility		\$769,100,000
	550		Segment 1-Durango to Durango Mt Resort	25.1 - 50.2			\$321,000,000
	550		Segment 2-Durango Mt Resort to Ridgway	50.2 - 103.9			\$382,000,000
	550		Segment 3-Ridgway to Colona	103.9 - 117			\$40,000,000
			Segment 4- Colona north	117 - 125			\$26,100,000
21	550	San Juan	US 550 - South of Silverton - truck net/ramp	69.9	Safety		\$505,000
21	550	San Juan	US 550 - Coal Bank Hill to Silverton - scenic pullouts	63	System Preservation		\$4,205,000
21	550	San Juan	US 550 - Coal Bank Hill - passing lanes	56.7 - 58.0	Mobility		\$6,205,000
21	550	San Juan	US 550 - Molas Pass - passing lanes (0.3 miles)	63.9 - 64.3	Mobility		\$6,205,000
22	184	Montezuma	Mancos to Dolores and SH 491- widen lanes & add shoulders	0-26.6	System Quality		\$54,000,000

Source: CDOT 2004

Bolded projects reflect projects identified in the 2003 Strategic Investment Program Specific GIS maps reflecting each preferred project are referenced in Appendix A.

Total Preferred Plan \$2,315,417,480

Since a percentage of the TPRs Regional Priority Program funds go to intersection improvements, it is noteworthy to identify those proposed intersection improvement projects that have not been identified in previous Plans or currently do not appear in ranked CDOT Region 5's intersection improvement list.

2005-2030 Proposed Intersection Projects					
Map #	Corridor (HW#)	County	Project Description	Investment Category	Cost Estimate
9	160	Archuleta	US 160 - 8th St - Pagosa Springs	Safety	TBD
14a	160	La Plata	US 160 at Commerce Drive	Safety	TBD
14a	160	La Plata	Turn lanes at Roadside Park - Bayfield	Safety	TBD
14a	160	La Plata	US 160E Bayfield business route @ east intersection of US 160	Safety	TBD
14a	160	La Plata	US 160E Bayfield business route @ west intersection of US 160	Safety	TBD
14a	160	La Plata	US 160E Bayfield business route @ 8 Corners	Safety	TBD
17	491	Dolores	US 491 - CR H intersection	Safety	TBD

## **AVIATION PREFERRED PROJECT 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 it further identifies anticipated funding sources that will be used to accomplish the project. Those funding sources can 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, CDOT-Aeronautics or other similar sources.

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

included in the NPIAS are intended to bring these airports up to current design standards and add capacity to congested airports.

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

**Colorado Statewide airport inventory and Implementation Plan 2000 (State Airport System Plan):** In 1999, CDOT-Aeronautics contracted with a consulting firm to develop an Airport System Plan. This plan, done by Wilbur Smith and Associates, was completed in 2000.

The State of Colorado is served by a system of 78 public-use airports. These 78 airports are divided into two general categories, commercial service and general aviation. The Statewide Airport Inventory and Implementation Plan was designed to assist in developing a Colorado Airport System that best meets the needs of Colorado's residents, economy and visitors. The study was designed to provide the Division of Aeronautics with information that enables them to identify projects that are most beneficial to the system, helping to direct limited funding to those airports and those projects that are of the highest priority to Colorado's airport system.

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

**Airport Survey Information:** As a part of the CDOT 2030 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 2030 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 (copy attached) whereby airports could list their anticipated projects through the year 2030. 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 did not 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 28 lists the aviation projects of the preferred plan.

## Table 28: 2005-2030 Preferred Aviation Plan

Preferred Aviation Projects				
Airport	Projects	CDOT Investment Category	Corridor Number	Cost Estimate
Dava Croak	1. Rotating Beacon	Safety	US-491	\$15,000
Dove Cleek	2. Runway Reflectors	Safety		\$5,000
	1. GPS Approach survey	Safety	US-160	\$100,000
	2. Automated weather reporting	Safety		\$130,000
	3. Partial Parallel Taxiway phase I	Mobility		\$2,777,776
Pagosa Springs	4. Partial taxiway to midfield apron	Mobility		\$2,777,776
	5. Taxiway midfield to north end	Mobility		\$250,000
	6. Expand midfield parking apron	Mobility		\$500,000
	7. Construct north terminal / admin facility	System Quality		\$1,000,000
	1. Rehab GA Apron south	System Quality	SH-172	\$888,888
	2. Expand Terminal Building	Mobility		\$1,500,000
	3. Construct GA Apron north development	Mobility		\$1,294,444
Duranaa	4. Extend Parallel taxiway south	Mobility		\$9,738,889
Durango	5. Extend parallel taxiway south phase II	Mobility		\$9,738,889
	6. Grading and drainage ga apron and east taxiway	Safety		\$1,400,000
	7. Strengthen runway 2-20	System Quality		\$963,000
	8. Construct Perimeter road	Safety		\$1,272,000
Animas Air Park	1. Extend runway 710'**	Safety	US-160	\$7,100,000
	2. Widen runway to 60'**	Safety		\$231,000
	3. Add taxiway turn aounds	Safety		\$288,000
	4. Super Unicom	Safety		\$40,000
	5. MIRLS	Safety		\$90,000
	6. REILs, PAPIs, Beacon, Segmented Circle	Safety		\$69,000
Cortez	1. Remove Part 77 safety obstruction	Safety		\$500,000
	2. Widen taxiway A south	Safety		\$2,222,222
	3. Acquire land for precision instrument approach	Safety		\$310,000

## Southwest 2030 Regional Transportation Plan

Chapter VIII - Preferred Transportation Plan

Preferred Aviation Projects				
Airport	Projects	CDOT Investment Category	Corridor Number	Cost Estimate
	4. Acquire land- relocate business to correct runway protection zone	Safety		\$1,800,000
	5. Install runway 21 MALSR	Safety		\$500,000
	6. Expand GA Apron	Mobility		\$500,000
	7. Construct terminal building	System Quality		\$1,500,000
	8. Widen and rehab taxiway A	Safety		\$2,000,000
	9. Construct de-ice pad	Safety		\$500,000
	10. Rehab runway 3-21	System Quality		\$1,250,000
TOTAL OF ALL PROJECTS (PREFERRED PLAN):				\$53,251,884

Source: CDOT (In many cases the projects identified above are local community generated and not necessarily endorsed or supported by either the Federal Aviation Administration or CDOT)

# PREFERRED TRANSIT PLAN

The development of the 2003 Transit Element for the TPR included the creation of a Transit Advisory Committee composed of transit providers in the region. Each provider in the TPR was responsible for submitting an operational and capital project list for the next 25 years to address long-range transit needs. The Preferred Plan presented in the following section is based on *unrestricted funding* for the transit providers. The data include costs to maintain the existing system and to enhance the current transit services. The transit information assumes that primary funding will not be from Regional Priority Project (RPP) funds, however, all of the projects are eligible.

Available funding is expected to be far short of meeting all the identified needs. Therefore, it is important to provide a Preferred Plan that is not constrained by financial resources. The unconstrained transit information could be advanced through the amendment process to the Constrained Plan, if new or additional funds were identified—subject to the approved performance and environmental considerations. Under this arrangement, decision-makers have flexibility to consider new projects and to respond to funding opportunities that may present themselves in the future.

Table 28 presents a regional total for the Long-Range Preferred Transit Plan. The data for the region is summarized for the next 25 years. Additional information related to specific projects identified in the Preferred Transit Plan is included in the Southwest Transportation Planning Regions Transit Element located at <u>WWW.dot.state.co.us./StateWidePlanning/PlanningStudies</u>

## Table 29: 2005-2030 Preferred Transit Plan

Region	Project Description	Investment Category	2030 Plan Cost
SW TPR	Bus purchase - capital (existing service)	System Quality	\$26,246,264
SW TPR	Transit operating funds (existing service)	System Quality	\$92,251,346
Total			\$118,497,611

The following table reflects the cost of the 2005-2030 preferred highway, transit, and aviation plan for the Southwest TPR.

## Table 30: 2005 – 2030 Preferred Plan – Summary

2005 – 2030 Preferred Plan – Summary *			
Highway Corridors	2,315,417,480		
Transit	118,497,611		
Aviation	\$53,251,884		
Total Preferred Plan	\$2,487,166,975		

\* includes 2005-2010 STIP

# **IX PRIORITIZATION PROCESS**

In this step in the planning process, costs for the preferred plan list were developed and became part of the analysis. The following criteria were developed to assist the RPC in determining priorities.

## **CORRIDOR PRIORITIZATION CRITERIA**

These criteria reflect the regional vision, goals and strategies and ensure that corridor priorities identify the best improvements to meet those goals.

## Mobility/Congestion

- Significant current congestion (0.85 v/c urban or 0.60 v/c rural)
- Significant projected congestion (0.85 v/c urban or 0.60 v/c rural)
- Elevated current or projected AADT
- Mobility improvements contribute to significant reduction in congestion
- Mobility improvements contribute to access for low income, elderly, or physically disabled
- Significant interregional or interstate corridor
- Preserve options to anticipate future transportation needs in major mobility corridors

## Safety

- High accident rate
- Services and programs that reduce fatalities, injuries and property damage
- Substandard shoulder width
- Dangerous curves/intersections, etc.
- Signalization or other Transportation System Management expected to reduce crashes contributes to bicycle/pedestrian safety

## System Quality

- Maintains the functionality and aesthetics of existing transportation infrastructure
- Heavily used truck route
- Remaining Service Life is Low (Poor Surface Condition)
- Optimize life cycle costs with timely maintenance
- Develop a "travel friendly" transportation system that incorporates customer desires
- Ensure that investments into the transportation system sustain and/or improve quality of life

## Ability to Implement

• Perceived cost/benefit

- Generally acceptable engineering parameters
- Funding availability
- Dedicated funding program

## **Public Support**

- Strategic Project Program (7<sup>th</sup> Pot)
- Programmed in 2005-2010 STIP
- Documented in 2020 Constrained Plan
- Documented in 2020 Preferred Plan
- High-level public support demonstrated through public meetings, letters, etc.
- Contributes to geographic equity

## Environment

- Completed environmental study or documentation
- Significant environmental improvements result from project

## Economic Impact

- Important tourist or recreational route
- High volume interstate or interregional truck route
- Critical to <u>regional</u> economy

## **PLANNING LEVEL RESOURCE PROJECTIONS**

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 in CDOT Region 5 that also includes the San Luis Valley and a portion of the Gunnison Valley Transportation Planning Regions. The RRP allocation for 2005-2030 including resources already programmed in the 2005-2010 State Transportation Improvement Program (STIP) is projected to be \$62.4 million, approximately \$37.0 million is allocated to the 2005-2010 STIP.

The remaining \$25.4 million is available for RRP eligible projects in CDOT Region 5 from 2011-2030. These funds are allocated to each TPR based on a formula that takes into consideration the number of counties/tribes within each TPR. The SWTPR allocation is estimated to be \$10.8 million. Based on this number, a prioritized project list of \$32.0 million was developed by the TPR for planning purposes in the event that additional revenues become available. This list of projects will enable the TPR to advance new projects or complete additional segments of existing projects that appear on the prioritized list without having to go through the Plan amendment process.

## Intersection Analysis and Prioritization Study

CDOT Region 5, with the concurrence of the three TPRs in the region, has for several years maintained the Intersection and Analysis Prioritization Study. This program analyzes the most pressing intersection redesign or reconstruction needs throughout the region. Basis for analysis includes safety and accident data, level of congestion, signalization, geometrics, and other traffic and engineering data. The resulting list of over 40 intersections has been prioritized by CDOT with the goal of creating improvements on a "worst first" basis. The Region works down the list with the most immediate needs using available funding. The list is regularly updated to remove intersections as improved and add new ones. Several intersections from each TPR are on the list at any given time.

A funding pool has been set up that includes 1/3 of the Regional Priority Program from the entire region. This pool is currently valued at just over \$21 million over the 2005-2030 time frame. It has proven popular with local governments and residents because it addresses immediate needs no matter the location. A second pool fund has been created for engineering studies, intersection design, shoulder, and environmental studies totaling over \$2 million. The current list includes the following 17 intersections in the TPR. These intersections may also be identified in the Preferred Plan – Representative Projects and in the Corridor Visions as existing or future needs. Overall Ranking is a score used to rank the intersections across the region. Intersections in other areas may appear in the overall list.

2003 Intersection Analysis and Prioritization Study - SWTPR				
Intersection**	County	Overall Rank		
US 550 at CR 252, Trimble Lane	La Plata	74.0		
US 160 at CR 222/223, Durango	La Plata	73.0		
US 160 at Roosa Avenue, Durango	La Plata	71.5		
US 550 at Animas View Drive, Durango	La Plata	70.5		
US 160 CR 29 Totan Road, Cortez	Montezuma	66.0		
US 160 at US 491, Cortez	Montezuma	67.0		
US 160 at US 491, Four Corners	Montezuma	63.0		
US 491 at CR J, Dove Creek	Dolores	60.0		
US160 at US 550 at Sawyer Drive, Durango	La Plata	50.0		
US 550 at Cometti Lane, Hermosa	La Plata	50.0		
US 550 at SH 110, Silverton	San Juan	54.5		
US 160 at US 160 E Bus, Bayfield	La Plata	54.0		
US 550 at CR 316, Bondad	La Plata	54.0		
US 160 at US 550, Durango Doubletree	La Plata	53.0		
US 160 Bus at CR 501/521 Buck Hwy, Bayfield	La Plata	51.0		
US 160 at CR 502, Bayfield	La Plata	50.5		
SH 172 at CR 322, La Boca	La Plata	41.5		

#### Table 31: 2003 Intersection Analysis and Prioritization Study

\*\*This list of intersections does not reflect those identified as proposed intersection improvements on page 113, Table 27 of this document.

## **PRIORITIZED ROADWAY PLAN**

The RPC developed a matrix based on the corridor evaluation criteria to prioritize the transportation corridors within the region. Each corridor was given a high, medium or low ranking for each of the transportation investment categories including Mobility, Safety and System Quality. The result of that ranking is reflected in Table 32.

## **Table 32: Prioritized Corridors**

Southwest TPR Corridor Priorities						
Regional Priority Program						
Primary Investment			Overall	Investment Category Priority		
Corridor	Project Description	Category	gory Priority	Mobility	Safety	System Quality
TPR	Region 5 Intersection Improvements	M/S/SQ	н	Н	н	н
160	NM State Line to Archuleta/Mineral CL	Mobility	н	н	н	М
550	NM State Line to San Juan/Ouray CL	Mobility	н	н	н	М
491 A	NM State Line to North of US160 Int. in Cortez	Safety	Н	М	н	н
140	NM State Line to Hesperus	Mobility	Н	м	н	н
84	NM State Line to Pagosa Springs	Safety	Н	н	н	М
491B	Cortez to Utah State Line	System Quality	М	м	М	L
141	West of Dove Creek to Montrose/Mesa CL	System Quality	М	L	Н	Н
172	NM State Line to US160	System Quality	М	L	L	н
145	East of Cortez to Dolores/San Miguel CL	System Quality	м	м	н	М
151	US160 to Ignacio	Safety	М	L	н	н
41	Utah State Line to US160	Safety	М	L	L	н
3	US160 to 8th Street in Durango	Safety	М	М	L	н
184	Mancos to US491	Safety	L	L	М	L
110	US550 to on/off ramp in Silverton	System Quality	L	L	L	L

Based on the corridor prioritization matrix developed by the RPC, a list of specific projects and cost estimates were developed reflecting RPC priorities based on projects identified in the Preferred Plan.

## Table 33: Prioritized Roadway Plan Projects

2005-2030 Prioritized Roadway Plan				
Priority	Project	County	Cost	
1	Region 5 Intersection Pool	Various	TBD	
2	US 160, Florida River to east of Bayfield, MP 95 to MP 105	La Plata	\$ 8,000,000	
3	Jct. US 160/US 491 to south of Cortez, MP 6.4 to MP 22.5	Montezuma	\$ 7,000,000	
4	US 160, Turkey Springs, east and west, MP 129.6 to MP 133.6	Archuleta	\$ 2,000,000	
5	US 550, New Mexico state line to County Road 220, MP 0.0 to MP 15.6	La Plata	\$ 7,000,000	
6	US 160/US 491, Cortez to 1 mile north of Cortez	Montezuma	\$0	
7	SH 140, New Mexico state line to County Road 141, MP 0.0 to 15.6	La Plata	\$ 5,100,000	
8	SH 84, New Mexico state line to Light Plant Road, MP 0.0 to 22.0	Archuleta	\$ 3,300,000	
Total			\$ 32, 400,000	

# X FISCALLY CONSTRAINED PLAN

## BACKGROUND

This task identifies those transportation projects and programs that can be reasonably expected to receive funding within the planning period of 2005-2030.

The first step in the process of defining a Fiscally Constrained Plan was to obtain an estimate of "reasonably expected" revenues from CDOT. CDOT provided these financial projections for the entire state as well as by CDOT region based on its Resource Allocation formula. The allocation to CDOT Region 5 was \$62.4 million for the period 2005-2030 for distribution among the regions TPRs. Including committed allocations to the 2005-2010 State Transportation Improvement Program, the TPR can expect to receive \$13.4 million in RRP funds.

At a joint meeting of all TPRs within Region 5, CDOT and the other TPRs met to prioritize all roadway projects from the Region based on "reasonably expected" revenues. The following table reflects the TPRs priorities.

## FISCALLY CONSTRAINED ROADWAY PLAN

Southwest TPR 2005-2030 Fiscally Constrained Roadway Plan *			
Corridor Segment	Description	Amount	
US 160	Florida River to East of Bayfield, MP 95 to MP 105 - Widen to four lanes, upgrading intersections and access consolidation	\$5,849,000	
US 491	Jct. US 160/US 491 (666) to South of Cortez, MP 6.4 to MP 22.5- Widen to provide four lanes with shoulders and auxiliary lanes at county roads	\$4,334,668	
US 160	Turkey Springs East & West, MP 129.6 to MP 133.6 - Safety and intersection improvements	\$3,200,000	
Total		\$13,383,668	

## Table 34: 2005-2030 Fiscally Constrained Roadway Plan

# FISCALLY CONSTRAINED 2030 AVIATION PLAN

The table below lists the fiscally constrained aviation plan for the SWTPR.

<b>Table 35:</b>	2005-2030	Fiscally	Constrained	<b>Aviation Plan</b>	

Fiscally Constrained Aviation Projects					
Airport	Projects	CDOT Investment Category	Corridor Number	Cost Estimate	
Pagaga Springs	1. GPS Approach survey	Safety	US-160	\$100,000	
ragosa oprings	4. Partial taxiway to midfield apron	Mobility		\$2,777,776	
	1. Rehab GA Apron south	System Quality	SH-172	\$888,888	
	2. Expand Terminal Building	Mobility		\$1,500,000	
Durango	3. Construct GA Apron north development	Mobility		\$1,294,444	
	4. Extend Parallel taxiway south	Mobility		\$9,738,889	
	5. Extend parallel taxiway south phase II	Mobility		\$9,738,889	
Cortez	1. Remove Part 77 safety obstruction	Safety		\$500,000	
	2. Widen taxiway A south	Safety		\$2,222,222	
TOTAL				\$28,761,108	

# FISCALLY CONSTRAINED 2030 TRANSIT PLAN

This section of Chapter X presents the funding plan for the Southwest Region Long-Range Financially-Constrained Transit Plan. This Fiscally-Constrained Plan relies on the funding sources that are currently being used by the transit agencies or are likely to be realized over the planning horizon. Funding for transit services within the region will come from federal and local (public and private) sources.

The following section presents the Fiscally-Constrained Transit Plan and the identified funds. The longrange constrained plan includes the continuation of existing services and funded projects. Table 34 and Table 35 present the long-range transit costs and funding. The estimated total for the existing services over the next 25 years is approximately just under \$87 million.

Location	Project Description	Investment Category	2030 Plan Cost
SWTPR	Capital Projects	System Quality	\$20,268,193
SWTPR	Transit Operating Projects	System Quality	\$66,655,922
		Total	\$86,924,115

## Table 36: 2005-2030 Fiscally Constrained Transit Plan

#### Table 37: 2005-2030 Transit Funding Sources

Funding Source	\$ Amount
Local/Other Funding	\$73,041,159
FTA 5309	\$3,902,097
FTA 5310	\$737,891
FTA 5311	\$9,242,967
2005-2030 Total	\$86,924,115

## SUMMARY

Table 36 below provides a summary of Highway Corridors, Transit, and Aviation for the 2030 Fiscally Constrained Plan.

#### Table 38: 2005-2030 Fiscally Constrained Plan - Summary

2030 Fiscally Constrained 2030 Plan – Summary *			
Highway Corridors	\$13,383,668		
Transit	\$86,924,115		
Aviation	\$28,761,108		
Total Fiscally Constrained Plan \$129,068,891			

\* includes 2005-2010 STIP

## **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. CDOT has included projects on US 160 and US 491 in the short-term plan, as well as identifying additional segments of highways as high priority.

While CDOT Region 5 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. Congestion and railroad grade crossing safety issues will also fall into this category of significant need, but insufficient funding.

As a result, congestion will continue to deteriorate in spot locations and many of the region's highways will continue to operate without adequate shoulders providing challenges to the trucking industry and cyclists.

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.

# **APPENDIX A**

The following are GIS Maps of Preferred Plan Projects 1 through 22.