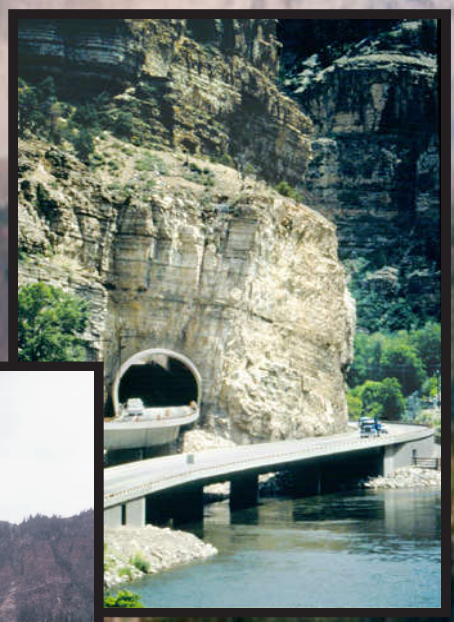
The 2020 Statewide Transportation Plan

INVESTING IN COLORADO'S FUTURE



The Colorado Department of Transportation
November 2000

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(as of 1/12/2001)

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The 2020 Statewide Transportation Plan: Investing in Colorado's Future was prepared in part utilizing federal State Planning and Research funds from the Federal Highway Administration.

INTRODUCTION

The development of the 2020 Statewide Transportation Plan spanned the end of the 20th Century and beginning of the 21st Century. Long-range planning requires looking back at the unmet transportation needs accumulated during the last part of the 20th Century *and* looking forward, trying to envision the transportation requirements of the new millennium.

The Past

Colorado's first transportation plan, adopted in January 1996, covered the period from 1996 to 2015. The 2015 Plan recognized that "*significant resources have been invested in Colorado's transportation system over the past century. Protecting this investment is crucial to the plan and involves sound maintenance practices, maximizing efficiencies, and augmenting existing operations.*" Priorities identified in this first plan included statewide programs such as surface treatment, bridges, maintenance and operation of the state highway system, maintaining existing transit service, safety, etc. In addition, priorities were identified through the regional planning process, ranging from basic roadway improvements like adding shoulders along rural highways, reconstructing roads with poor pavement condition or deteriorated bases, adding capacity to reduce congestion, improving or expanding transit service, and supporting strategies to reduce congestion, such as carpooling programs.

Protecting [our] investment is crucial to the plan and involves sound maintenance practices, maximizing efficiencies, and augmenting existing operations

Revenue projections from existing transportation sources were compared to the priority needs in the 2015 transportation plan, resulting in a funding shortfall. This situation sparked discussion in many venues because transportation is so inter-related with everyday life. A primary challenge to the transportation planning process is balancing the magnitude of transportation demand with available revenues and reaching consensus on priorities.

The Present

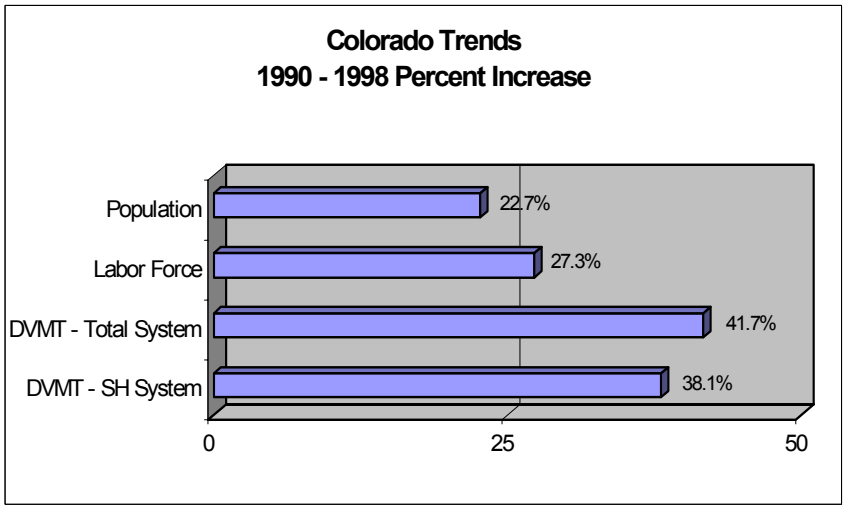
MAJOR ISSUES

Based on a series of public surveys sponsored by CDOT since 1992, transportation remains an important issue facing Colorado. The table below tracks changing perceptions of major issues in Colorado over the past decade.

COLORADO ISSUES				
Issue	**1992 Survey**	**1994 Survey**	**1997 Survey**	**2000 Survey**
Growth	7%	19%	38%	26.5%
Economy	28%	9%	7%	1.3%
Transportation	2%	6.6%	20%	15.6%
Crime	2%	22%	8%	8.1%
Education	24%	5.5%	6%	14.6%

Table 1

As the table illustrates, the number of respondents who identified growth as the most significant issue facing Colorado rose from 7% in 1992 to 19% in 1994, 38% in 1997, and 26.5% in 2000. Obviously, growth and its attendant transportation issues are foremost in the public eye following the growth cycle of the late 1990s. Economic concerns have declined concurrent with the period of economic expansion. Other related trends are presented below.



Colorado Trends - Figure 1

Colorado's existing transportation system is challenged to keep pace with the growth in population and the labor force. The state is crisscrossed with over 80,000 miles of public roads. As the above graph illustrates, use of these roadways measured in terms of daily vehicle miles of travel (DVMT) is growing significantly. Although DVMT is growing at a faster rate on non-state highways, over 60% of daily VMT occur on state highways.

OTHER ISSUES WITH TRANSPORTATION IMPACTS

The March 2000 Customer Survey conducted on behalf of CDOT provides some insights regarding current issues that the 2020 Statewide Transportation Plan should consider:

- Traffic Congestion

  "Traffic congestion was the most frequently mentioned concern, named by 40% of the [survey] respondents. Congestion was more likely to be rated as the number one transportation issue by those residing in the metro Denver or the rest of the Front Range compared to those living in the Eastern Plains or on the Western Slope.

  "When explicitly asked to rate congestion… about three-quarters [in metro Denver and 60% of respondents in the rest of the Front Range] reporting that streets and highways are "very" or "totally" congested. Such sentiment was not as strong in the Eastern Plains and Western Slope.

  "Given the strong feelings about congestion by those living along the Front Range, it is not surprising they were more likely to give a higher priority to congestion relief over maintenance and repair or transportation safety. However, those living in the rest of the state were more likely to rate maintenance and repair as deserving a higher priority over transportation safety and congestion relief."

- Transportation Safety

  "When asked what they perceived to be the most common cause of traffic crashes in Colorado, most (83%) respondents chose driver behavior. However, improvements to roadways were given a higher priority for improving traffic safety than were public safety campaigns."

- Transportation System Management and Operations

  Given the high usage rate of the transportation system, it is imperative that the system operate efficiently and effectively to maximize its performance. A range of operational and management tools can be implemented at relatively low costs compared to expanding the system. Some of these improvements involve the use of higher technologies that transmit critical information to both drivers and system managers, allowing for route alterations, dispatch of emergency vehicles, adjusting traffic control devices, etc.

  Travel demand management provides a set of tools to enhance system operations by reducing or eliminating the number of trips being made during peak periods.

- Transportation Dependent Populations

  Personal mobility is a critical part of quality of life in Colorado, allowing access to jobs, medical, educational, and recreational facilities.

  Coloradans who are either too young to drive, have physical or non-physical impairments which preclude their ability to drive, or do not own a personal vehicle are among those who may not be well-served by the current transportation system. This segment of the population requires transportation options in order to meet their daily mobility needs.

- Goods Movement

  The efficient movement of commodities within and through Colorado is critical to the state's economic well being. Congested roadways and reductions in freight rail service due to consolidations and abandonments are current issues facing the freight industries, and pose significant challenges in terms of planning for long-range transportation system improvements.

- Funding

  Traditional transportation revenue sources in Colorado have not kept pace with need. Among the funding issues that continue to pose significant challenges are the lack of a state source of funding for transit, inflationary impacts on buying power over time, and the requirement for voter approval on taxing and spending.

REGIONAL PLANNING

Colorado's 15 regional transportation plans form the foundation for Colorado's Statewide Transportation Plan

Colorado's 15 Transportation Planning Regions (TPRs) updated their regional transportation plans during 1998 and 1999. Starting with the needs and priorities already in the 2015 statewide transportation plan, each region reviewed current transportation issues and the vision, goals and objectives established to guide the regional transportation planning process. During the update process, a number of events occurred that affected regional as well as statewide transportation planning processes:

- Congress passed the Transportation Equity Act for the 21st Century. The funding provisions of this legislation required an update of CDOT's revenue projections.
- Completion of several major investment studies. The Southeast Corridor in the Denver metropolitan area began the Environmental Impact Statement (EIS) process, and a new funding strategy was developed. This culminated in the passage of two ballot initiatives in November 1999 to allow bonding for both the highway and light rail components of this corridor.
- Acceleration of the development of performance measures and linking these measures to the Transportation Commission's resource allocation process. This activity resulted in the reallocation of the six-year (2001 – 2006) and 20-year (2001 – 2020) revenue projections, affecting the amount available for funding regional priorities.

Since the statewide plan is based on an integration and consolidation of the 15 regional transportation plans, it is important to provide a discussion about the basic similarities as well as important differences concerning the regional process.

Regional Planning by Metropolitan Planning Organizations

Five of the 15 TPRs involve Metropolitan Planning Organizations (MPOs) which have specific federal requirements related to the development of long-range transportation plans and Transportation Improvement Programs (TIPs).

Metropolitan planning areas with populations larger than 200,000 are designated as Transportation Management Areas (TMAs), which places additional federal requirements and responsibilities on the respective MPOs regarding long-range planning, programming, project selection, etc. Colorado has two TMAs, the Denver and Colorado Springs metropolitan areas.

Requirements associated with the federal Clean Air Act Amendments place additional responsibilities on the three MPOs in air quality non-attainment areas; the Denver Regional Council of Governments (DRCOG), Pikes Peak Area Council of Governments (PPACG), and North Front Range Transportation & Air Quality Planning Council (NFRT&AQPC). DRCOG and PPACG are designated as carbon monoxide non-attainment areas. In Colorado Springs, the boundaries for the TMA, the non-attainment area, and the Transportation Planning Region are congruent. However, in the Denver metropolitan area the TMA and carbon monoxide non-attainment area are somewhat smaller than the Transportation Planning Region, which encompasses the rural mountainous and plains areas outside the metropolitan planning area. The non-attainment-area MPOs have a federal requirement to update their long-range transportation plans on a three-year cycle, versus the five-year cycle for the other MPOs.

The following table summarizes key information about Colorado's five MPOs.

COLORADO'S FIVE METROPOLITAN PLANNING ORGANIZATIONS			
Metropolitan Area	**MPO**	**TMA**	**Non-attainment Area**
Denver*	Denver Regional Council of Governments (DRCOG)	Y	Y
Colorado Springs	Pikes Peak Area Council of Governments (PPACG)	Y	Y
Fort Collins, Greeley, Loveland	North Front Range Transportation & Air Quality Planning Council (NFRT&AQPC)	N	Y
Pueblo	Pueblo Area Council of Governments (PACOG)	N	N
Grand Junction	Grand Junction/Mesa County	N	N

Table 2

* The Greater Denver Area Transportation Planning Region includes Adams, Arapahoe, Boulder, Broomfield, Clear Creek, Denver, Douglas, Gilpin, and Jefferson Counties. The non-attainment area does not include Clear Creek or Gilpin or the eastern half of Adams and Arapahoe Counties.

CDOT's transportation planning process recognizes the roles and responsibilities of the MPOs regarding long-range planning, programming, project selection, etc., as described below.

Integration of MPO Long-Range Plans into the Statewide Transportation Plan

Each MPO is required to produce a long-range transportation plan. To meet state requirements, the MPOs produce a "preferred" plan as well as the fiscally constrained plan required under federal regulations. Both the preferred and the fiscally constrained elements of the regional transportation plans are incorporated into the statewide plan.

In air quality non-attainment areas, the DRCOG, PPACG, and NFRT&AQPC's fiscally constrained plans have current air quality conformity determinations as required by federal law. Consequently, any projects contained in these conforming plans are the MPOs' highest priority for funding.

PACOG and Grand Junction/Mesa County MPOs do not have air quality conformity requirements as their respective metropolitan planning areas are designated as attainment areas for air quality. Both of these MPOs have preferred and fiscally constrained elements to their regional transportation plans and both are integrated into the statewide plan.

MPO Transportation Improvement Program (TIP) Development and Project Selection

MPOs are required to produce a staged, multi-year, intermodal fiscally constrained program of transportation projects that is consistent with the metropolitan plan. This program (three to six years in scope) is called a Transportation Improvement Program (TIP). Coordination between the state and the MPOs is required for TIP development. The role of the MPOs regarding project selection is expanded if they are TMAs (DRCOG and PPACG). Further, the MPOs in air quality non-attainment areas (DRCOG, PPACG, and NFRT&AQPC) must have air quality conformity determinations for their respective TIPs.

The Governor must approve the TIPs, which are then wholly incorporated into the Statewide Transportation Improvement Program (STIP).

Regional Planning in Non-MPO Regions

Ten TPRs are rural in nature and do not involve MPOs. In these rural areas, Regional Planning Commissions (RPCs) are responsible for developing regional transportation plans and establishing the regional priorities for projects within the regional transportation plans.

Like their MPO counterparts, the RPCs in the rural transportation planning regions develop long-range transportation plans that have both a "preferred" and financially constrained element. Both elements are integrated into the statewide transportation plan. The fiscally constrained element, reflecting regionally established priorities, becomes the source of projects eligible for inclusion in the STIP through the project priority programming process (4P), discussed below.

STIP Development and Project Selection in non-MPO TPRs

In TPRs that do not contain MPOs, a Transportation Improvement Program (TIP) is not required. However, regional priorities are established by the Regional Planning Commissions through their regional transportation planning process then discussed with CDOT and the Transportation Commission through the Project Priority and Programming Process (4P) on a biennial basis. The 4P utilizes the fiscally constrained regionally prioritized projects as the source for incorporating new projects into the STIP and is further discussed in the STIP section starting on page 111.

Transportation Planning Involving Indian Tribal Governments

Colorado's two Indian Nations, the Southern Ute Indian Tribe and the Ute Mountain Ute Tribe, are members of the Southwest Regional Transportation Planning Commission for the Southwest TPR. The transportation plans for both Tribal Nations are incorporated into the regional transportation plan for the Southwest TPR and subsequently incorporated into the statewide transportation plan. Both Tribes participated in establishing the regional priorities included in the Southwest Regional Transportation Plan and participate in the biennial 4P process for STIP development.

The Future

Just as Colorado's first 20-Year Transportation Plan looked forward to 2015, anticipating how growth and development, economic conditions, advances in technology, and lifestyle changes would impact Colorado's transportation needs, the 2020 Plan pushes the planning horizon even further.

Reader feedback from the *Summer 1998 Statewide Plan Newsletter* highlighted what is important, in terms of transportation, to Coloradans' vision for the future:

- **Multi/Intermodalism:** A seamless multi-modal transportation system fits together and multiple choices will enhance the ability to meet mobility needs

Watchwords for the Future

- Multi-modalism
- Land Use & Transportation
- Growth & Development
- Environment
- Technology
- Energy Sources

- **Land Use and Transportation:** How Colorado's land use decisions determine the way people, goods, and information need to move
- **Growth and Development:** How growth and development is managed can make or break the state's ability to provide for transportation facilities and services
- **The Environment:** How we mitigate transportation impacts to air, soil and water quality, and wildlife habitat directly affects our quality of life
- **Technology:** How quickly new technologies can be deployed will determine the state's ability to avoid stagnation
- **Energy Sources:** How exploring alternative energy sources can open up new opportunities for the 21st Century

The challenge is to balance needs and desires, resources with priorities and equity with effectiveness. The statewide transportation planning process provides the forum for meeting this challenge.

Linking the 2015 Plan to the 2020 Plan

The 2015 plan was Colorado's first long-range, statewide, multi-modal transportation plan. Its strongest asset was the consensus among local, regional, and state participants about the long-term needs expressed in the plan.

The lack of a comprehensive investment strategy was identified as a component that could be strengthened. Although CDOT has been carrying out construction and maintenance priorities since the plan's adoption, detailed accountability for plan accomplishments is difficult to assess. Consequently, the 2015 plan also recommended that the concept of a transportation investment strategy, linked to performance measures, be explored.

The 2020 plan is structured around a transportation investment strategy that focuses on System Quality, Safety, Mobility, Program Delivery and Strategic Projects.

In 1997, CDOT formulated a short-term investment strategy focused on the Strategic Transportation Project Investment Program. A second phase further developed the investment strategy by defining five investment categories. The third phase set goals for the Department and identified pilot performance measures for tracking the impact of investments.

The progress made on the transportation investment strategy provides a critical link to the 2020 plan. The 2020 plan has been structured around the transportation investment strategy, categorizing projects and programs by the investment categories: System Quality, Safety, Mobility, Program Delivery and Strategic Projects.

CDOT has taken an additional step toward accountability by establishing an electronic link between all projects in the 2020 Statewide Transportation Plan to

the six-year Statewide Transportation Improvement Program (STIP). In effect, this electronic link ensures only projects from the long-range plan's fiscally constrained element can be included in the STIP and subsequently funded. This electronic system, when fully implemented, will allow tracking of any project from the long-range plan to construction completion.

The following tables provide a report card on progress in addressing other recommendations contained in the 2015 plan:

Progress on 2015 Plan Recommendations

PROJECT DEVELOPMENT	
Recommendation	**Status**
Conduct statewide transit needs and benefits study	Completed 1999. Information provided for use in regional plan update process.
Conduct statewide passenger rail feasibility study	Completed 1998. Information provided for use in regional plan update process.
Conduct freight needs study	Completed 2000. Draft information provided for use in regional plan update process.
Conduct passenger origin and destination studies in Denver, Colorado Springs, Pueblo and Grand Junction areas	Travel Behavior Inventory for Denver Metro area completed 2000. Information to be used in updated regional travel models.
Conduct major investment study in the I-70 Mountain corridor	Completed 1998. Programmatic Environmental Impact Statement in progress.
Coordinate multiple planning activities in I-25 south corridor	On-going
Assess feasibility of statewide travel demand management (TDM)	Completed 1997 as part of Modal Plan draft report. A TDM "toolbox" was developed for use in the regional plan update process.
Conduct detailed evaluation of congestion pricing techniques	City of Boulder Congestion Pricing Study completed 1996; CDOT Region 6 High Occupancy Toll Lane Study in progress
Conduct ITS corridor studies and expand ITS technologies statewide	Intelligent Transportation System Strategic Plan completed 1998; implementation of Business Plan is in progress

PLANNING PROCESS	
Recommendation	**Status**
Review and refine planning process through rulemaking	Completed 1997 and in place for July 1998 initiation of regional plan update cycle.
Revise regional planning guidebook, focusing on improving data sources, cost information, and format consistency	Completed 1998 and in place for July 1998 initiation of regional plan update cycle
Review and refine the methods and processes for regional/ statewide planning revenue forecasting	Completed 1996. Revenue projections were reviewed in 1998 and 2000.
Review and refine existing resource allocation process	Completed 1998 and revised 1999
Utilize regional planning process to explore potential for developing coordinated decision making process balancing long-range transportation, land use, and quality of life needs	On-going
Review planning resource requirements	Reviewed annually
Develop and implement a transportation information management system	CDOT developing internet links to transportation information

Table 3

As the update of the long-range transportation plan approached, the Transportation Commission made several critical decisions to ensure continuity between the 2015 and the 2020 plans:

- All projects in the 2015 plan and the 1999-2004 Statewide Transportation Improvement Program (STIP) would be provided to the Regional Planning Commissions in the Transportation Planning Regions to consider as they updated their regional transportation plans
- The Strategic Transportation Project Investment Program would be a funded portion of the 2020 statewide transportation plan

THE OUTCOME

This plan is the result of policy decisions developed since the 2015 plan, the update of regional transportation plans during 1998-1999, and a look into the 21st Century. It is the guidebook for identifying transportation needs from a multitude of proposed projects through wise investment policies and strategies; and, it is the sourcebook for those transportation projects to be funded with state and federal transportation funds. It is:

The plan is the blueprint for a multi-modal, accessible, seamless transportation system

THE 2020 STATEWIDE TRANSPORTATION PLAN:

INVESTING IN COLORADO'S FUTURE!

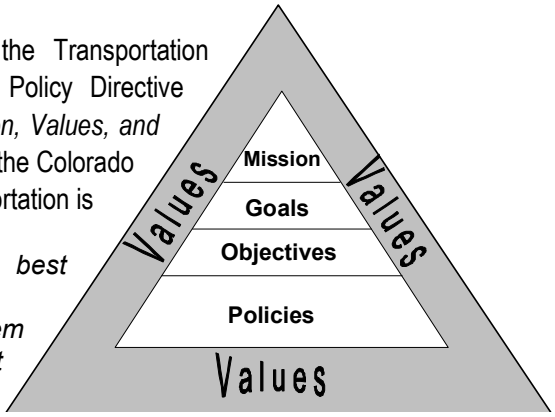
STRATEGIC FRAMEWORK

Regional transportation plans are the primary source for transportation project demand and priorities. These regional plans have been integrated and consolidated into this comprehensive statewide plan using strategies developed by the Transportation Commission. These strategies define how priorities are established and resources allocated. This section describes the framework for setting those priorities.

MISSION STATEMENT

In November 1996, the Transportation Commission adopted Policy Directive 14, *Department Mission, Values, and Goals*. 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."



To guide CDOT in the implementation of this mission, Policy Directive 14 includes the following values:

- Work in partnership with all
- Provide leadership in transportation
- Take pride in ourselves and our work
- Demand quality of ourselves
- Strive to improve our personal skills and talents
- Use resources wisely
- Make decisions which are compatible with Colorado's quality of life, environmental, and economic goals

The Transportation Commission also adopted Policy Directive 13, *Statewide Transportation Policies*. These statements describe CDOT's values in greater detail, and appear on the next two pages.

Colorado Department of Transportation
Statewide Transportation Policies

Adopted: April 21, 1994
Reaffirmed: November 1996; March 1998; February 2000

CUSTOMER FOCUS

CDOT will strengthen its relationships with the increasingly informed and interested citizenry by reinforcing the public participation process to include out-reach, early involvement and review, candid and understandable presentations, and consistency in follow-up. The process must include local governments, interest groups, and formal organizations, along with methods to solicit and respond to the views of all those impacted by transportation performance, improvements and financing.

LEADERSHIP

CDOT will bring together varied interests to address the transportation needs and issues of Colorado's ever-changing social and physical environment. With a commitment to its vision, CDOT will utilize its unique statewide perspective and range of expertise in reaching optimal transportation solutions with its broad customer base.

MANAGEMENT OF THE TRANSPORTATION SYSTEM

CDOT will ensure through partnership that a unified statewide transportation system is planned, developed, coordinated, operated and maintained by considering the full range of alternatives available to service transportation needs. The management process should facilitate the movement of people, goods, information, and services. System management should promote efficient use and enhancement of existing facilities and preserve corridors for future transportation demand.

INTERMODALISM

CDOT will develop a balanced intermodal transportation system that provides the most appropriate transportation options, and takes advantage of the inherent efficiencies of each mode. CDOT will go beyond the traditional single-occupancy vehicle highway improvements by emphasizing a multi-modal and intermodal approach to transportation planning, development, and maintenance. Such an approach is necessary to respond to the diverse needs of both urban and rural customers, to preserve and improve the environment, and to ensure the connectivity and interaction of modes.

PARTNERSHIP

CDOT will develop, support and/or participate in the formation of formal and informal partnerships for the quality development and implementation of Colorado's transportation goals. Through cooperative efforts and shared responsibilities, these partnerships will help to leverage the limited resources available, and tap new sources of support for transportation development in Colorado.

INTEGRATE REGIONAL AND STATEWIDE PRIORITIES

CDOT will collaborate with our partners to build consensus for the integration of local, regional and statewide transportation priorities. In order to optimize a limited resource base, effective integration requires mutual respect while addressing the issues and priorities of competing interests.

FINANCE

CDOT will pursue diverse and cooperative funding options to reflect the interrelated nature of all modes within the transportation system. Public understanding of the financial requirements of the transportation system is a prerequisite for developing additional funding options that are reliable, equitable, flexible, adequate and acceptable. In an increasingly competitive environment for already limited resources, CDOT acknowledges and shares the public's concern over the cost and efficiency of government services. CDOT will continue to enhance its financial management practices to demonstrate accountability toward achieving established benchmarks.

SAFETY

CDOT will work cooperatively to promote safety in transportation through education, engineering and enforcement. CDOT will support innovative programs to enhance user, worker and vehicular safety, to improve conditions and facilities, and to reduce the risk of injuries, fatalities, and related costs.

BALANCE QUALITY OF LIFE FACTORS

CDOT recognizes the complex interrelationship of the environment, economic vitality and mobility, and is committed to balancing these factors in the development and implementation of the statewide transportation plan. By working with local, regional and state interests, CDOT will advocate the development of a coordinated decision-making process that balances the long range transportation, land use and quality of life needs in Colorado. It is not the intent of the Commission or CDOT to prohibit or interfere with local land use decisions.

ENVIRONMENT

CDOT will promote a transportation system that is environmentally responsible and encourages preservation of the natural and enhancement of the created environment for current and future generations. We will incorporate social, economic, and environmental concerns into the planning, design, construction, maintenance and operations of the state's existing and future transportation system. With the active participation of the general public, federal, state and local agencies, we will objectively consider all reasonable alternatives to avoid or minimize adverse impacts.

ACCESSIBILITY

CDOT will promote a transportation system that is reliable and accessible to potential users, including the transportation disadvantaged. Accessibility includes the availability of modal choices and connectivity, ease of use, relative cost, proximity to service and frequency of service. CDOT encourages multi-modal accessibility to employment, medical care, shopping and other commerce, housing and leisure.

SOCIAL RESPONSIBILITY

CDOT recognizes the value of human capital in achieving state goals, and maintains a commitment to fostering nondiscriminatory practices in a safe and healthy work environment. Our commitment to fair and equitable business practices encompasses the interests of all of our customers. Overall, the general welfare of the total public will be continually reflected in CDOT's decision-making processes.

THE COLORADO DEPARTMENT OF TRANSPORTATION'S INTERMODAL VISION

In 1998 the Transportation Commission adopted the "Intermodal Vision" to guide development of mobility strategies on the state transportation system.

> *"CDOT will plan for and develop a transportation system that integrates all modes of transportation including automobile, transit, aviation, rail, truck, bicycle, pedestrian and travel demand management (TDM) to effectively and safely move people, goods and information to meet Colorado's mobility needs in a manner that is environmentally, economically and socially responsible."*

PERFORMANCE-BASED TRANSPORTATION INVESTMENT STRATEGY

When allocating available funds to achieve its mission in the most effective manner possible, the Commission balances many wide-ranging and competing transportation needs. To aid the Commission in making effective investment decisions and to increase accountability to the citizens of Colorado, a transportation investment strategy and performance measurement system has been developed.

This system identifies performance measures and data that gauge progress toward goals and objectives established by the Commission in each investment category.

Five investment categories have been established which can measure performance. Specific objectives are identified within each investment category to measure progress toward the goals. The investment categories are:

- **Safety** - Programs that reduce fatalities, injuries and property damage
- **System Quality** - Programs that maintain existing infrastructure
- **Mobility** - Programs that provide for the movement of people and goods
- **Strategic Projects** - 28 high priority statewide projects
- **Program Delivery** - Support functions that enable the delivery of the program categories listed above

All CDOT programs have been placed in one of five investment categories

All CDOT programs have been placed in one of the five investment categories. The System Quality, Safety, and Mobility categories report the effect of investment decisions on the transportation system. The Strategic Projects category is specially designed to track the construction of the 28 strategic projects and related expenditures. The Program Delivery category reports the efficiency and effectiveness of CDOT staff in delivering projects and programs, as well as other administrative support functions. It should be noted that, when

completed, each of the 28 strategic projects holds benefits for the Mobility, Safety and System Quality categories.

Each of the categories includes goals identified by the Transportation Commission as well as objectives to guide CDOT in achieving these goals. Performance measures are currently being developed to measure progress in these objectives.

Safety Investment Category

Goal

- Reduce transportation-related crashes, injuries and fatalities and the associated loss to society

Objectives

- Reduce the rate and severity of transportation related incidents
- Promote the education and awareness of safe driving behavior
- Emphasize applicable safety features consistent with the population growth

System Quality Investment Category

Goals

- Preserve the transportation system
- Keep the system available and safe for travel

Objectives

- Enhance and maintain the transportation system to ensure maximum useful life
- Preserve and maintain the existing system prior to long term construction investments
- Develop a "travel friendly" transportation system that incorporates customer desires
- Ensure that investments into the transportation system sustain and/or improve quality of life

Mobility Investment Category

Goals

- Improve mobility
- Increase travel reliability

Objectives

- Seek external customer feedback to improve functional and regional delivery of services
- Preserve transportation choices as a part of an integrated statewide transportation planning process
- Maximize efficiency of the existing infrastructure prior to adding new capacity
- Ensure environmental stewardship of the transportation system
- Implement transportation improvements that enhance the quality of life and promote community values

Program Delivery Investment Category

Goals

- Deliver high quality products and service in a timely fashion
- Attract and retain an effective and qualified workforce
- Foster an environment that respects workforce diversity

Objectives

- Maintain fiscal integrity to CDOT through timely encumbrance of funds and project delivery
- Create a funding environment that preserves the base while pursuing new sources
- Ensure timely product and service delivery
- Identify innovative human resource solutions that maximize existing resources to meet business needs
- Create public confidence in departmental accountability
- Incorporate education in project development and implementation
- Develop planning processes that enhance future project development
- Maintain a viable service industry to create a competitive environment

Strategic Projects Investment Category

Goals

- Accelerate the completion of projects
- Increase investment in the program

Objectives

- Promote partnerships with all governments to enhance working relationships

- Accelerate strategic project delivery while minimizing the impact to all other objectives
- Prepare transportation needs for Colorado's future
- Preserve options to anticipate Colorado's future transportation needs in major mobility corridors
- Ensure CDOT's bonding eligibility to secure future funding levels

RESOURCE ALLOCATION

In the Summer of 1999, the Transportation Commission initiated a review of its 1998 20-year revenue projections and resource allocation process. The results of that effort provided 20-year planning allocations for the purpose of the statewide transportation plan (2001 – 2020), as well as six-year programming projections (2001 – 2006) for updating the Statewide Transportation Improvement Program (STIP).

Critical components of the Transportation Investment Strategy were being formulated and therefore not incorporated into the process at that time. However, the Transportation Commission used performance measures in a limited fashion as they allocated resources to the Strategic Projects, Statewide Programs, and Regional Programs. (See diagram on the next page.)

As the "Performance Based Transportation Investment Strategy" is further developed and additional data is collected, performance measurement will be more fully integrated into the resource allocation process.

Resource Allocation to Transportation Investment Categories

Total Revenues

↓

Strategic Project Program

↓

Statewide Programs

Surface Treatment	Performance Based
Bridge Program	Performance Based
Rest Area Program	Plan/Performance Based
Noise Barrier Program	Plan/Performance Based
Small Urban Program	Formula (Population Based)
Safety Program	Plan/Performance Based
Maintenance Program	Performance Based
Intelligent Transportation System (ITS)	Plan/Performance Based
CDOT Operations Program	Actual Budget

↓

Regional Programs

CMAQ	Formula Based to Non-attainment Areas
STP Metro	Formula to Transportation Management Areas
STP Enhancements	Formula *
Other Construction	Formula *

* 45% Vehicle Miles of Travel
40% Lane Miles
15% Truck Miles of Travel

Resource Allocation to Transportation Investment Categories - Figure 2

TRANSPORTATION COMMISSION POLICY DIRECTION AND GUIDANCE

The Transportation Commission has provided specific direction to guide CDOT as it plans and develops the state transportation system. This section highlights the most pertinent policy direction and guidance provided by the Commission.

TRANSPORTATION COMMISSION POLICY

Bicycle Shoulder Policy

The 2015 Statewide Transportation Plan identified a system of High Priority Bicycle Corridors. The Highway Shoulder Policy directs that shoulders on high priority bicycle corridors meet the American Association of State Highway and Transportation Officials (AASHTO) bicycle standards and shoulder improvements should be part of roadway improvement projects.

The Commission has also directed that a high tier of priority bicycle corridors be identified to potentially help focus limited resources to those facilities with the greatest need and benefit. The Commission's Intermodal Committee is refining this map for consideration by the full Commission at a later date.

Rail Corridor Preservation Policy

The Rail Corridor Preservation Policy recognizes the important role that rail corridors play in the current and future transportation system. The policy adopted by the Commission defines criteria for the selection of "State Significant Rail Corridors", and identifies activities which CDOT may take to preserve these corridors for future transportation uses.

Rail corridors of state significance, based on the criteria identified in this policy, are identified on the map on page 52.

TRANSPORTATION COMMISSION GUIDANCE

Transportation Integration

The Transportation Commission recognizes and will support the various roles of our planning partners, and of transportation providers, in coordinating an integrated intermodal transportation system for Colorado.

Flexible Funding for Alternative Modes

The Transportation Commission recognizes the role of alternative modes in addressing mobility needs. To that end, the Commission supports using Other Regional Priority funds for alternative mode projects that benefit the state's

highway system and are prioritized through the regional planning process. Further, the Commission supports utilizing federal and Senate Bill 99-1 funding flexibility on strategic projects; and supports modal flexibility for existing and new transportation revenues within constitutional, legislative and regulatory constraints and Commission program priorities.

Sharing of Transportation Revenues with Local Governments

The Commission recognizes the significant demands placed on local governments to provide and maintain municipal and county roads and bridges. Therefore, the Commission supports continued sharing, as prescribed by existing formula of the Highway User Tax Fund (HUTF) and any increases to the HUTF.

In addition, the Commission supports sharing new sources of voter approved statewide transportation revenues with local governments.

Tiering the Transportation System

The Transportation Commission recognizes the value of a tiered transportation system to aid in optimizing investment and supports the development of performance objectives appropriate to the role facilities play in the transportation system. Therefore, the Commission directs staff, working with transportation system stakeholders, to refine the adopted State Significant Corridors based on transportation investment and asset management programs.

Corridor Optimization / Corridor Alternative Analysis Planning Procedures

The Transportation Commission has directed that procedures to evaluate alternatives for corridor improvements on state highways be updated to ensure the most efficient use is made of available resources and opportunities in the corridor planning process.

The Commission also requested that its role in corridor planning be better defined. To improve coordination, the Commission has directed that any corridor study affecting the state highway system receive its approval prior to study recommendations being implemented.

Growth in the State Transportation System

Given current resources the Transportation Commission will continue its high priority on preservation, enhancement, and maintenance of the existing infrastructure. However, the Commission recognizes that judicious expansion of the state transportation system may be necessary to respond to projected growth. Expansion may include increases in current corridor capacity, addition of new corridors, or redesignation of local roads. Additions to the state system are contingent on the availability of funds, an exchange of facilities with local

governments or partnerships with public and private entities. Any additions to the state system must be consistent with the role and function of the state highway system.

Telecommunications

The Transportation Commission recognizes the important role of telecommunications in the state, and understands that telecommunications may have significant implications for the state transportation system in the future. The Commission also recognizes that development of the telecommunications system is primarily the responsibility of the private sector. Therefore, the Commission does not intend to compete with the private sector in providing telecommunication service to the general public.

To that end, CDOT telecommunication activities will be restricted to the deployment of Intelligent Transportation System (ITS) projects and programs, and in partnership with the private sector, providing telecommunications infrastructure to CDOT facilities statewide.

Regarding the role of ITS within the regional and statewide transportation planning process, Metropolitan Planning Organizations (MPOs) and Regional Planning Commissions (RPCs) are encouraged to consider ITS projects within their regional transportation plans and transportation-related ITS projects are eligible to compete for Other Regional Priority funds. The Commission supports commitment to coordination and planning among the state, local governments, and private providers.

Transit Policy Guidance

The Transportation Commission recognizes that transit is an integral component of Colorado's transportation system as it benefits mobility by providing an alternative to congested roads, options for travel, energy savings, and environmental benefits. The Commission recognizes transit's role in providing transportation to jobs, medical services, and educational institutions for people who may not have access to a car or may be unable to drive. Therefore, the Transportation Commission supports the development of new funding sources to supplement local transit capital needs and fund intermodal projects that benefit the state's transportation system.

Environmental Policy Guidance

The Transportation Commission supports pro-active techniques to mitigate impacts of the transportation system on the environment by developing creative strategies that:

- Comprehensively address anticipated environmental impacts of the state transportation system
- Consider project enhancements in affected communities in a cost effective manner consistent with the mission of the Department; and,
- Expedite project development

Small Urban Program

The Transportation Commission recognizes the concern from Small Urban Fund recipients that the program will expire in 2004. The Commission will form a subcommittee of its members in 2001 to re-evaluate the Small Urban Program and receive input from the Statewide Transportation Advisory Committee (STAC). The subcommittee of the Transportation Commission will report back to the full Transportation Commission prior to the program's 2004 expiration date.

SUMMARY

The challenge embodied in this transportation plan is clear. With the limited resources available, the Commission must work with citizens throughout the state to balance increasing demand for mobility due to a growing population with the need to maintain the existing transportation system.

The Commission believes that we all must work creatively and in partnership to maximize the efficiency of the existing transportation system and preserve the existing system before adding new capacity.

SOCIOECONOMIC AND ENVIRONMENTAL PORTRAIT

Transportation is about movement between origins and destinations, such as getting children to school, people to work, goods to market, tourists to recreational areas, or information to users. Therefore, a transportation plan must take into consideration pertinent geographic, demographic, and economic factors in order to understand the need for transportation improvements.

Colorado is part of the western United States, surrounded by the states of Wyoming, Nebraska, Kansas, Oklahoma, New Mexico, Arizona, and Utah. Colorado is approximately midway between the nation's borders, with Canada to the north and Mexico to the south. With the signing of the North American Free Trade Agreement (NAFTA), attention has focused on how goods will move most effectively between the three partnering nations. Two of Colorado's neighboring states, Wyoming and New Mexico, reference their relationship to this north-south trade corridor in their long-range transportation plans:

"Wyoming should continue to be involved in transportation developments along the Front Range of the Rocky Mountains. Access to Denver International Airport will be important to Wyoming's economy."
- Wyoming's Statewide Long-Range Plan

"New Mexico is planning for and strongly supporting the development of a major international transportation facility at Santa Teresa [I-25 / I-10]. Since New Mexico contains two of the nation's major East/West commerce routes (I-10 and I-40) and connects both to a primary North/South route (I-25) the impact of commercial traffic on both highway and rail systems is enormous. This impact will in all likelihood increase significantly with the commercial development associated with NAFTA."
- New Mexico Long-Range Comprehensive Transportation Plan.

CONNECTING COLORADO

In the rapidly developing global marketplace, Colorado's strategic assets need to be strengthened through appropriate infrastructure investments. Colorado has participated in several studies focusing on key corridors, including the Heartland Expressway, Western Transportation and Trade Network (WTTN), TransAmerica Feasibility Study, and the Ports to Plains Corridor. CDOT is initiating a mobility study to determine the feasibility of existing and possible future transportation corridors and intermodal terminals in eastern Colorado. These studies are excellent tools to aid in the development of the "big picture" and long-range views necessary to prepare Colorado in future endeavors. It is important to prioritize investments to achieve our goals of economic vitality and maintaining the

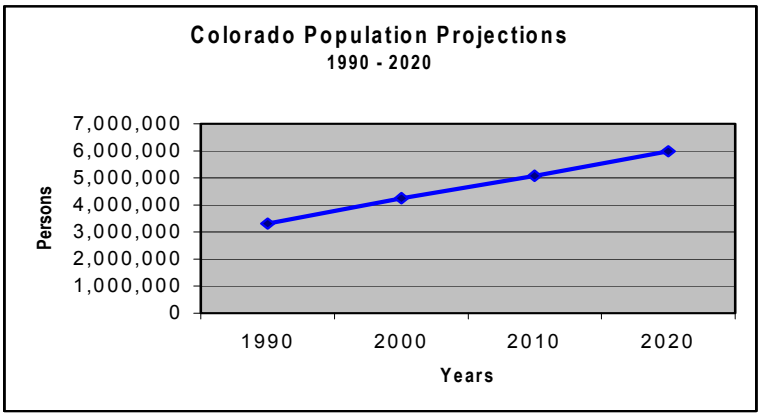
excellent quality of life that Colorado's residents and visitors have come to expect.

OTHER SOURCES

In addition to regional transportation plans, several other sources have been utilized in this section, including the 1990 Census, the Colorado Division of Local Governments State Demographer's Office, and the Department of Labor and Employment. Information has been gathered from several surveys conducted on behalf of the Department of Transportation by Talmey-Drake (1992), University of Colorado – Denver (1994), In-Motion, Inc. with Talmey-Drake (1997), and URS Greiner Woodward-Clyde with National Research Center (2000). This plan is being completed before the new 2000 Census information will be available. The regional and statewide transportation planning update process, however, is cyclical, and the 2000 Census information will be utilized as the Metropolitan Planning Organizations and the Regional Planning Commissions begin updating their plans to the 2025 planning horizon.

Statewide Demographic Characteristics

Colorado's population grew at an average annual rate of 2.25% between 1990 and 1998. Compared to the national average of 1.08%, this is a significant rate of growth. Colorado will continue to experience a steady growth pace, reaching a projected 5.9 million people by 2020[1].



Colorado Population Projections - Figure 3

For transportation planning purposes it is important to understand the characteristics of our population, such as physical, socio-economic, and travel. With this information the 2020 Plan can address the implications that these

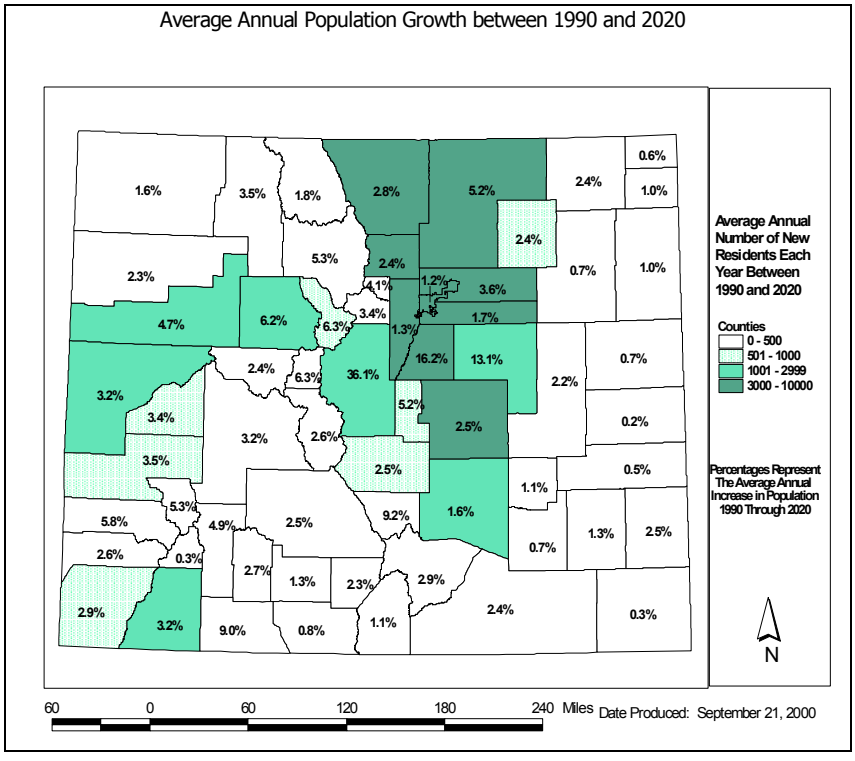
[1] *All demographic projections in this section prepared by The Center for Business and Economic Forecasting for the Demography Section of the Colorado Department of Local Affairs*

characteristics have on our transportation infrastructure and service needs, currently, and in the future.

The total state population is expected to reach 5.9 million by 2020. Of the projected 5.9 million Coloradans, 3% are expected to reside in the Eastern Plains, 83% along the Front Range, and 14% on the Western Slope.

With the projected increase in population, highway congestion and its related environmental problems - such as air pollution - are major concerns. Information from the 1997 Mobility Survey indicated that 73% of the public felt it had gotten more difficult to get to where they wanted to go and 58% cited road and highway problems as the number one reason why. Traffic congestion was specifically mentioned by 40% of the survey respondents. Furthermore, according to the 1999 Transit Needs and Benefits Study, only 44% of Colorado's transit needs are being met.

The map below shows Colorado's total growth and average annual population growth from 1990 to 2020. Growth in total population is concentrated in the Front Range Area, the I-70 West corridor and La Plata County. Growth rates in some rural areas will continue to be quite high, adding pressure to existing infrastructure.



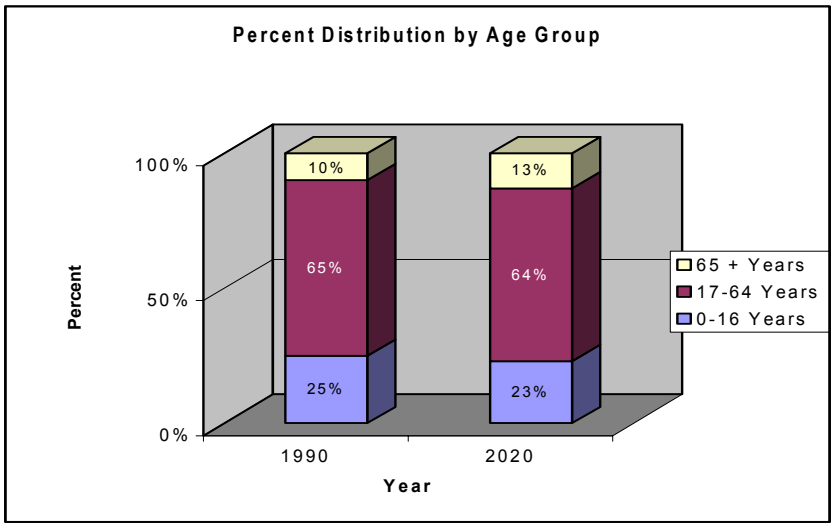
Average Annual Population Growth - Figure 4

AGING POPULATION

Between 1990 and 2020 the 65-years-or-older age group will become a larger segment of the state's population as baby-boomers age, life-expectancy increases, and retirees move into the state. In addition, those 16-years-old or younger will continue to comprise nearly a quarter of the state's population in 2020. Each of the three geographic regions reflects a fairly consistent division among age groups statewide – on average 23% of the population will be in the 0-16 age group, 64% will be 17-64, and 13% will be 65 and older.

Both the over 65 age group and the 0-16 age group are cited in several regional transportation plans as "transportation dependent." Public transportation is critical to meeting the accessibility needs of the elderly, as well as those too young to drive.

Transportation concerns that arise among the aging population include the ability to adequately see roadway signs and markings – both in the daytime and after dark – reaction time, and maintaining speeds consistent with the flow of traffic. Transportation concerns regarding young, less experienced, drivers include speeding and aggressive driving.

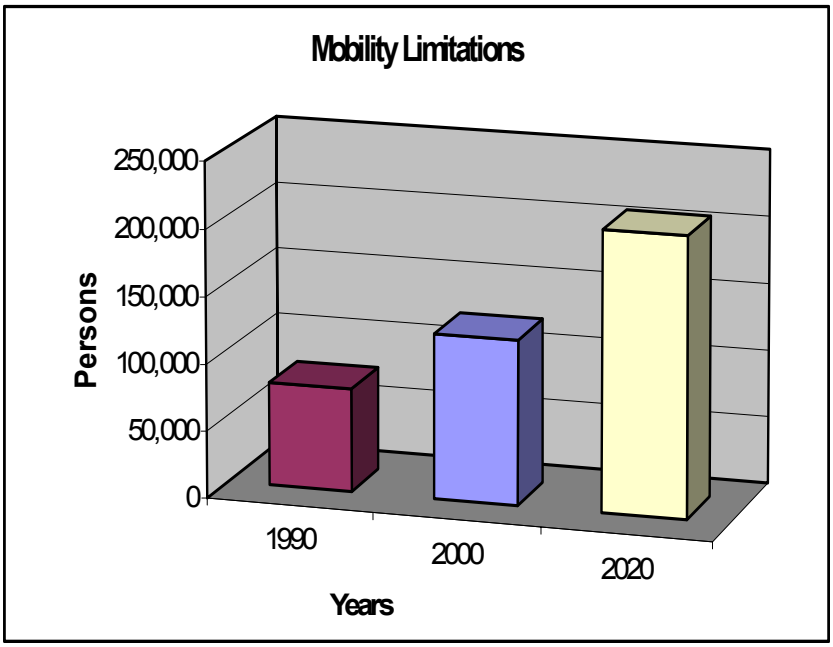


Percent Distribution by Age Group - Figure 5

POPULATION WITH MOBILITY LIMITATION

The 1990 Census identifies 76,847 Coloradans as having a mobility limitation. People were identified as having a mobility limitation if they had a long-lasting health condition that made it difficult to go outside the home alone. Two examples of outside activities on the questionnaire included shopping and visiting the doctor's office. The Transit Needs and Benefits Study, completed in 1999, provided population projections of disabled persons for 2000 and 2020.

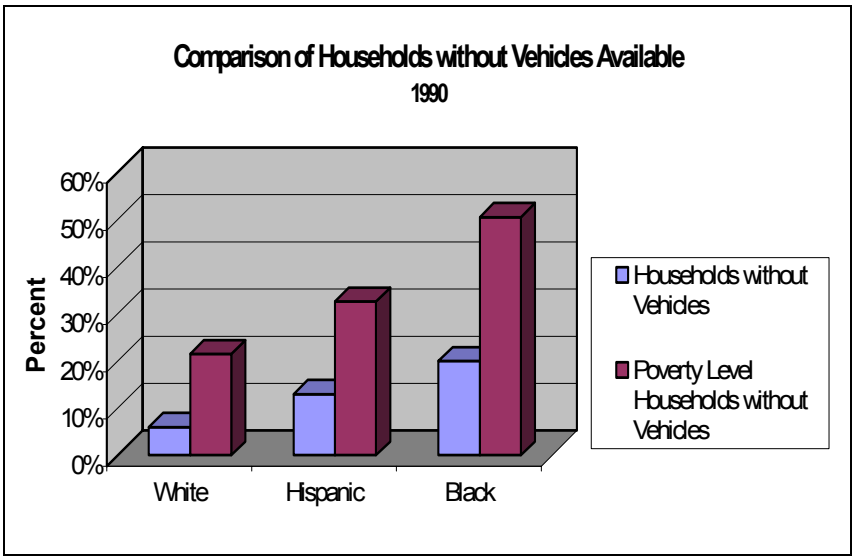
The number of persons with a mobility limitation will more than double between 1990 and 2020.



Mobility Limitations - Figure 6

Population in Households without Vehicles

According to 1990 Census information, 7% of Colorado's occupied housing units reported not having a vehicle available. The percentages change dramatically, however, when adding the racial/ethnic component. Thirteen percent of Hispanic households and 20% of Black households reported not having a vehicle available. The percentage of households without vehicles increases when poverty level status is factored into the equation.



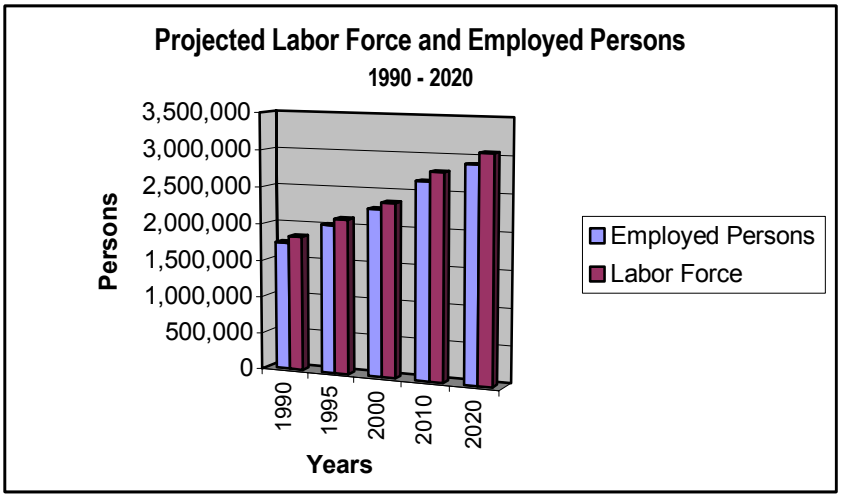
Comparison of Households without Vehicles Available - Figure 7

Although poverty among certain population groups in Colorado is declining, the financial ability to own and operate a car appears to be dramatically lower (34%) among the lowest income groups (under $20,000 per year) according to the 1997 CDOT Mobility Survey. This same survey had 56% of the respondents agree that the state has a responsibility to provide transportation to people who don't own a car or who physically can't drive. Several of the transportation planning regions around the state have developed Access to Jobs/Reverse Commute Plans to better analyze the needs of residents who have transportation-related obstacles in terms of accessing the job market. One of the programs funded under the federal Transportation Equity Act for the 21st Century (TEA-21) provides grants to assist implementing the regional Access to Jobs/Reverse Commute Plans.

Similarly, the transportation planning process at both the regional and state level, must continue to develop and refine its ability to ensure fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income. Fair treatment means that no group of people should bear a disproportionate share of negative consequences of transportation programs. Additional information on these issues is contained in Appendix B of this document.

LABOR AND ECONOMIC GROWTH

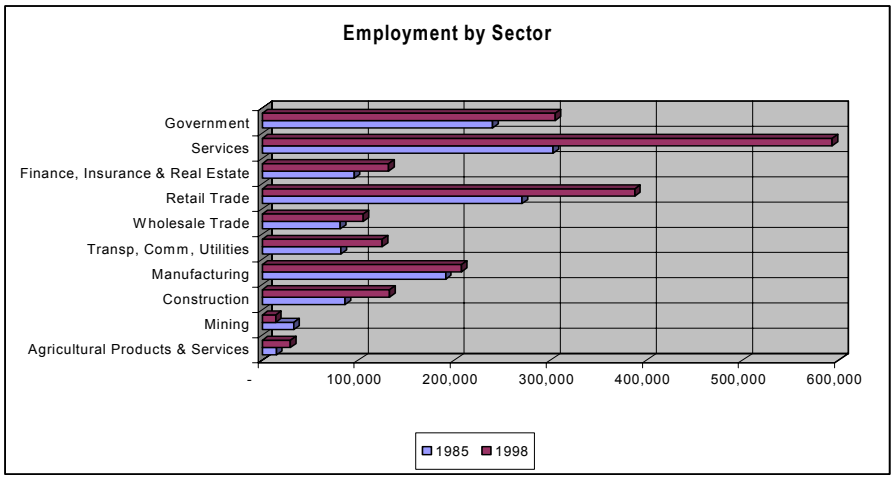
The state's employment is currently strong, and with a well-educated, technically trained workforce, Colorado expects to remain well-positioned to attract and maintain business and industry. Since the majority of these workers travel to their jobs in their own vehicles (77% based on the 1997 Mobility survey results), roadway congestion will continue to be a concern.



Projected Labor Force and Employed Persons - Figure 8

COLORADO'S CHANGING ECONOMY

Colorado's economy has been changing. Mining, once a major industry, has declined since the 1980s. On the other hand, growth in the Service Industry and Retail Trade leads all other sectors during the same time period. These sectors in particular, have significant impacts on our transportation system and needs. Transportation related impacts include the growing number of trips per household, heavier reliance on using the single occupant vehicle for traveling to work for the convenience of making other service oriented trips, and longer trips or accessibility problems for service workers (particularly in lower paying service jobs).



Employment by Sector - Figure 9

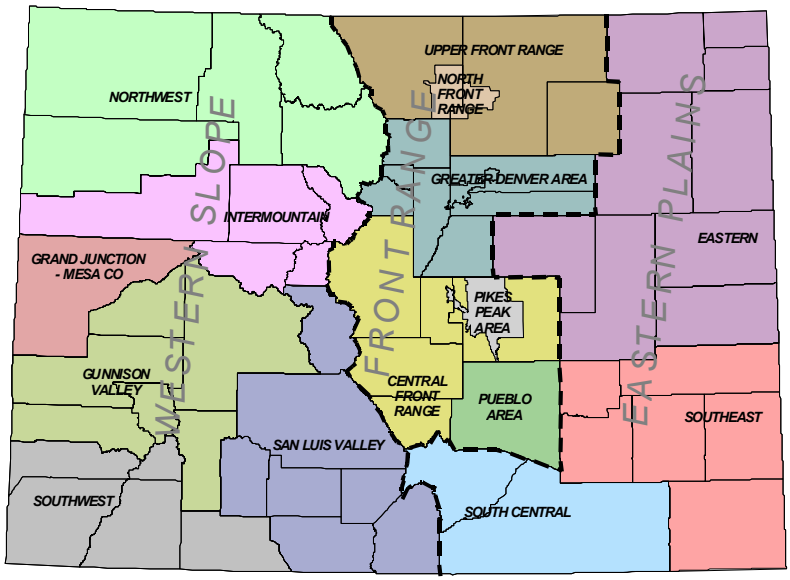
COLORADO'S THREE GEOGRAPHIC AREAS

Colorado is very diverse and can be divided into three primary areas, characterized by distinct geographic and demographic variations:

- The more agricultural, low-density Plains area of Eastern Colorado.
- The urbanized corridor along the Rocky Mountain Front Range.
- The combination of tourist/recreational/high growth areas, expansive federal lands, and agricultural/ranching areas of the Western Slope.

The following general overview of the state is provided as a backdrop for examining specific demographic and economic information for each of the three regions of the state. The regional portraits provide an opportunity to discuss how unique geographic situations affect the transportation system in these areas. The TPR plans developed within these regions provide the best source of information describing these areas.

Colorado's Three Geographic Areas



Colorado's Three Geographic Areas - Figure 10

EASTERN PLAINS AREA

The Eastern Plains area includes the Southeast, Eastern and South Central TPRs. The area lies primarily east of Interstate 25.

Description

Eastern Plains Average Annual Growth 1990 - 2020	
Eastern	3.3%
Southeastern	1.0%
South Central	2.6%
Region	2.2%
Colorado	2.7%

Table 4

The largest TPR in the geographic area is the Eastern TPR, located on the northern and east-central plains of Colorado. The TPR is composed of nine counties: Cheyenne, Elbert, Kit Carson, Lincoln, Logan, Phillips, Sedgwick, Yuma, and, Washington. The Eastern TPR has two multi-county regional organizations, the Northeastern Colorado Association of Local Governments and the East Central Council of Governments. According to the Regional Transportation Plan, *"the area is primarily rural in nature and has a large agricultural base."* The southern portion of the TPR is primarily dryland farming whereas the northern end is mostly irrigated cropland, dry farmland and grassland.

The Southeastern TPR, which is just south of the Eastern TPR, is comprised of Baca, Bent, Crowley, Kiowa, Otero and Prowers counties. This area centers on the Lower Arkansas Valley in southeastern Colorado. The region is generally characterized as "*a large, sparsely populated area with an economy based in agriculture."*

The South Central TPR is located along the southern border of the state and is comprised of two counties, Huerfano and Las Animas. In the regional plan, the counties are characterized by *"small-town urban to sparse settled rural development patterns*." The area was settled early with an economy based in mining. Today the TPR has a strong service economy.

Demographics

The overall population of the Eastern Plains is expected to increase annually at an average rate of 2.2% between 1990 and 2020, slightly less than the state average. By the year 2020, the population in this region is projected to be 218,606, a 67% increase from 1990. Thirteen percent of the Eastern Plains 2020 population will be 65 years or older, down from 17% in 1990. Similarly, the percent of population less than 17-years-of-age will decrease from 26% in 1990 to 22% in 2020. The percent of the Eastern Plains' population 17 to 64-years is expected to increase from 57% in 1990 to 65% in 2020. Although the percentage in the 0-16 and 65-years-or-older are expected to decrease between 1990 and 2020, the number of people within these age groups will increase significantly by 2020.

The percent of Eastern Plains' 1990 households without vehicles matches the state's 7%. However, the South Central TPR has the highest percent of households without vehicles (12%) not only within the Eastern Plains but also within Colorado.

Regional Economy

The area's labor force is expected to grow from 68,907 persons in 1990 to approximately 124,934 by 2020, an 81% increase. In 1990, most of the labor force was employed in the agriculture sector. However, by 1998 the majority had shifted to wholesale and retail trade. Eighty percent of the Eastern Plains residents are employed in the agricultural, wholesale and retail trade, services and government sectors. The unemployment rate for the Eastern Plains was 4% in 1998, the same as it was in 1990. Per capita income rose 23% from $15,873 in 1990 to $19,524 in 1997. This growth may have been a result of the availability of higher paying employment opportunities.

Activity Centers

The Eastern Plains has a variety of activity centers for both residents and tourists, which also serve as focal points for transportation services. Each TPR in the Eastern Plains identified different sets of facilities as major activity centers, reflecting their unique circumstances. These activity centers may be recreational, social service, commercial, institutional, educational, or health care centers. In the Southeast TPR, for example, shopping centers such as K-Mart, Wal-Mart, and the County Market serve as activity centers for the residents and businesses in the area. The Corazon de Trinidad Historical District, in the South Central

TPR, is one of the major activity centers enjoyed by residents and tourists travelling along I-25 into the state.

Students attending higher education institutions account for some of the reported increase in population in the 17 to 64 age group. Many students live permanently in the college communities while others are temporary residents, only residing in the area during the school term. Three state-supported secondary schools are available in the area.

Storage facilities, loading facilities, and feedlots are located in every community in the Eastern TPR. All of these facilities are important to the distribution of agricultural products. The large volume and bulk of the agricultural products makes rail the most efficient mode of transport. The Cargill and Amherst grain elevators generate the most traffic, demonstrating the importance in the continuation and preservation of rail lines in Eastern Colorado.

The Colorado Department of Corrections is one of the largest employers in the Eastern TPR, with two prison facilities, including the state's first "mega-prison" located in Logan County, outside of Sterling and another just outside Walsenburg. The Sterling facility alone employs nearly 1,000 people, which has resulted in housing shortages and increased traffic. Consequently, many employees of the prison now commute from outlying communities. Another new prison facility is also being constructed in the Eastern Plains, just a few miles east of Trinidad on SH-160.

Scenic attractions promote significant visitor traffic annually. Routes such as the Highway of Legends Scenic Byway, the Santa Fe Trail and the South Platte River Trail provide recreational and educational benefits to residents and tourists. Also, state parks, including North Sterling, Bonny Lake, Lathrop, as well as Trinidad Reservoir and Bent's Old Fort National Historic Site, provide recreational activities for both residents and tourists.

Recreational park and tourist attractions, such as these, generate large volumes of traffic from residents and state visitors. In 1998, the total estimated number of visitors to these state parks was 675,081. The majority of visits to these facilities occur during the summer season. The U.S. Forest Service's Comanche National Grassland, once home to the Comanche Indians and other nomadic tribes, covers some 435,000 acres in Baca, Otero and Las Animas Counties.

Transportation Impacts

Just as VMT increased 28% from 1990 to 1998 in the Eastern Plains, the projected increase in population will contribute to higher VMT in the area. Also, because of the agricultural nature of the Eastern Plains, the economy depends greatly on the ability of commercial vehicles to transport large amounts of agricultural products. Consequently, issues such as safety, roadway surface

condition, and congestion/delay were important considerations for this region. In the Eastern TPR, trucks comprise 29% of the total vehicles on state highways, followed by the South Central and Southeast TPRs with 21% and 23%, respectively.

By 2020, youth under the age of 17 and persons 65-years or older will account for 35% of the Eastern Plains' total population. The requirements of these transportation dependent groups, in terms of design and demand for alternative modes, were considered in the regional transportation plans prepared in this region.

For parts of the Eastern Plains it may not be a question of the absence of transportation options for transit dependent populations, but rather a matter of limited service, staff, access, and hours. It is imperative that both public and private transportation providers work together in small urban centers and rural areas to ensure that more transit needs are met.

Another transportation issue facing the Eastern Plains is the preservation and continued development of freight rail projects. The agricultural economy depends on the ability to transport products from farm to marketplace. Many of the Eastern Plains communities rely on the economic advantage that the rail lines provide and support preservation efforts and continued development. Failure to preserve abandoned railroad right-of-way corridors and to avoid further abandonment of rights-of-way may mean economic hardship for the region.

The Eastern Plains TPRs consider the enhancement of their aviation component in their Regional Transportation Plans essential for several reasons. First, a need exists for expanded air ambulance service, including heliport locations. This emergency health service is critical to the well-being of the area's senior population.

Second, increased air freight and passenger air service is important because it would provide more communities in the Eastern Plains with social, economic, and transport opportunities. Loss of air service by United Express in the small urban center of Lamar has resulted in increased dependency on ground transportation. As the Eastern Plains becomes more populated and tourism increases, aviation can play a more significant role in the transportation of goods and people to this part of Colorado.

Bicycling and walking have become increasingly popular in the area as Coloradans integrate these activities into their daily lives. The Eastern Plains' communities and recreational areas view the integration and promotion of pedestrian and bicycle routes as an important aspect of their regional transportation plans. Because of the rural nature of the Eastern Plains, pedestrians' needs are primarily localized, with limited bicycle and pedestrian facilities. Concerns continue to be expressed about adequate shoulders and other safety issues.

Summary

As the Eastern Plains continues to grow in population, there is a greater need for transportation options. As income rises, past studies indicate households will be more receptive to purchase a vehicle for the majority of trips. This increase in vehicle ownership will necessitate the need for maintaining access roads to jobs and activity centers. Growth in transit dependent populations indicates a continuing need for local public transportation services. With a significant portion of its economy still in agriculture, efficient movement of goods by truck and rail are critical considerations in the regional transportation planning process.

FRONT RANGE AREA

The Front Range Region is located in the central portion of Colorado, partly in the Rocky Mountains and partly on the plains, bisected by I-25 from north to south. Transportation Planning Regions (TPRs) located within this area include: Pueblo, Upper Front Range, North Front Range, Greater Denver Area, Pikes Peak Area, and Central Front Range.

Description

The Pueblo Transportation Region (Pueblo County) and the city of Pueblo are located along the Colorado Front Range approximately 110 miles south of Denver and 42 miles south of Colorado Springs. This TPR also includes several small towns and metropolitan districts such as Boone, Avondale, Beulah, Pueblo West, Colorado City and Rye. I-25 bisects the county as well as the city of Pueblo and serves as the primary transportation route for north-south activities in the state. The interstate also serves a significant amount of locally generated traffic travelling within the city and county.

Front Range Average Annual Growth 1990 - 2020	
Upper Front Range	3.7%
Pikes Peak/Central Front Range	2.8%
Pueblo	1.6%
Greater Denver Area	2.2%
Region	2.6%
Colorado	2.7%

Table 5

The Upper Front Range TPR is located in north-central Colorado and is comprised of Larimer, Morgan and Weld counties, excluding the urbanized portions of Larimer and Weld. This TPR is primarily rural, but many small to moderately sized communities are included in the planning area. The region represents a wide diversity of conditions. The northern and eastern areas are primarily rural. The southern portion of the region is also primarily rural, but is heavily influenced by the growth in the Denver area. The western part of the region is mountainous, and is significantly affected by tourism.

The Greater Denver Area is not only the largest TPR in the Front Range, it is also the most populated area of the state. Comprised of eight counties – Adams, Arapahoe, Boulder, Clear Creek, Denver, Douglas, Gilpin and Jefferson.

The North Front Range includes the more populous portions of Larimer and Weld counties. The TPR includes the cities of Fort Collins, Greeley, and Loveland and

the towns of Berthoud, Evans, Garden City, Johnstown, LaSalle, Timnath and Windsor.

The Pikes Peak Region is the second largest metropolitan area in the state. Located 60 miles south of Denver, the area is comprised of the communities of Colorado Springs, Monument, Fountain, Widefield/Security, Manitou Springs, Green Mountain Falls, Woodland Park, Palmer Lake, and portions of El Paso and Teller counties. Terrain in the area ranges from high plain to mountainous.

The Central Front Range is comprised of Custer, Park and Fremont counties, as well as the rural portions of El Paso and Teller counties. The area is geographically diverse with plains, mountains, valleys and canyons, but is unified by its proximity to the populous Front Range.

Demographics

The most populous in the state, the Front Range Region is projected to grow from 2.8 million people in 1990 to nearly 4.9 million in 2020. This is a 78% total increase over the 30-year period, with an average annual increase of 2.6%. The greatest rates of change are expected in Park, Douglas, and Teller Counties.

From 1990 to 2020, the Front Range population in the 65-years-and-older group is projected to grow by 177%. Similarly, the youth under 17-years-of-age group will increase by 70%. The 17 to 64-year-old population group is projected to decrease from 66% in 1990 to 63% in 2020. Although the percentage in this age group decreases from 1990 to 2020, the total number of people in this age group will increase significantly by 2020.

The percent of Front Range households without a vehicle (1990 data) matches the state's 7%. However, the Pueblo TPR had 10% of its 1990 households without a vehicle available and the Greater Denver TPR had 8%.

Regional Economy

The Front Range Region not only has the largest population in the state, but it also has the most jobs in the state. The number of people employed in 1990 for this Region totaled 1.5 million and is projected to grow to 2.5 million by 2020, a 66% increase in employment. In most parts of the Front Range Region the services industry was the dominant sector in both 1990 and in 1998, according to the Colorado State Department of Labor and Employment. Also, the rural parts of the Upper Front Range TPR show agriculture and related industries are still important. Unemployment in the Front Range Region decreased from 5% in 1990 to 4% in 1998, matching the state's unemployment statistics for the same time frame.

Activity Centers

Many activity centers are found along the Front Range Region and draw people locally, regionally and nationally. Activity centers in this Region include: the major business districts in the urban areas of Denver, Boulder, Longmont, Fort Collins, Greeley, Loveland, Colorado Springs and Pueblo. Suburban-type business districts such as the Denver Technical Center and Interlocken also attract numerous weekday trips. Military and other government employment centers, such as the Federal Center in Denver and the Air Force Academy and Fort Carson in Colorado Springs, are also major trip attractors. Additional trip attractors are institutions of higher education, shopping centers (including outlet malls), prisons, nursing homes, historic sites, zoos, museums, resorts, sports centers, concert and entertainment facilities and gambling casinos. In addition, there are many seasonal events, such as the annual State Fair in Pueblo, the National Western Stock Show in Denver and annual craft shows in several areas, which take place at regular times of the year in the same locations.

The historic mining communities of Central City, Black Hawk, and Cripple Creek have undergone an economical transformation with the advent of limited stakes gaming in 1991. These three towns have become popular gambling destinations for tourists and residents alike. However, increased traffic flow has impacted the rural highways significantly. For example, at the junction of SH-119 and US-6 near Central City and Black Hawk, the average daily traffic (ADT) has increased from 3,050 in 1991 to 15,632 in 1999. This reflects a 413% increase in ADT. Cripple Creek has also seen an increase in traffic flow along SH-24 – from 7,050 ADT in 1991 to 16,392 ADT in 1999, a 133% increase. These increases mean more stress on the roadways, requiring additional maintenance and facility improvements.

Throughout the Front Range Region outdoor recreational attractions are plentiful. There are numerous state parks, BLM lands, U.S. Forest Service lands, reservoirs, wilderness areas, a National Park, and the Pawnee National Grassland. Several national forests can also be found bordering the western portion of the Front Range Region including Arapahoe, San Isabel, Pike, and Roosevelt.

Rocky Mountain National Park near Estes Park in Larimer County is very popular, with over three million visitors reported in 1998. Estes Park is a small community with a large number of Rocky Mountain National Park visitors passing through the area. Adequately managing the traffic is important to this community. A popular way to access Rocky Mountain National Park is to drive along the scenic Peak-to-Peak Byway passing by the Indian Peaks Wilderness area just northwest of Boulder.

Numerous state parks can be found throughout the area. During the 1998-1999 time period, the Colorado State Parks and Outdoor Recreation reported 5,852,981 visitors to the 16 state parks in the Front Range Region. State parks reported more than one million visitors to Cherry Creek State Park in the Greater Denver Area and Pueblo State Park in Pueblo County.

Transportation Impacts

Primarily urban, this area's greatest challenges center on growth, land development decisions and congestion management. As population increases, so do VMT, which have increased 38.1% along the Front Range from 1990 to 1998. The increased VMT is not only attributed to population growth, but also to increases in vehicle trip length, reduction in vehicle occupancy, increased person trips per capita, and increased recreation and tourism traffic.

Congestion throughout the Front Range region is of predominant concern, particularly with air quality problems existing in three of the metropolitan areas. Congestion in the Front Range occurs more frequently and for longer durations than elsewhere in the state. The daily commute by workers traveling within and between the urbanized areas along the Front Range has prompted multi-modal solutions such as light rail lines, bus/High Occupancy Vehicle (HOV) lanes on freeway and expressway segments, regional bus service, vanpools, travel demand management techniques, etc. Also being given serious consideration is commuter rail along the Front Range corridor of I-25 and west along I-70.

In addition to the mobility related demands along the Front Range, effective operation of the existing transportation system is an important planning consideration, as well as maintaining the existing transportation system.

The projected increase in the transportation dependent population groups supports the need to increase public transportation services available to the elderly. The unemployment rates for several areas within the Front Range region warrant consideration of programs to provide access to jobs.

Being a predominant market center for the state raises issues related to efficient movement of goods within and through the region. Multi-modal transportation facilities with appropriate intermodal connections are important to meet the diverse trip demand in the Front Range region. The Denver International Airport and Colorado Springs Airport play a significant role in the Front Range economy and beyond. Creating effective linkages from airports to the remainder of the region and state for both people and goods is vital.

Freight rail lines that parallel I-25 along the Front Range continue to be considered for passenger movement potential. Studies have provided pertinent information regarding the feasibility of this option, however, it would most likely occur in the event of abandonment by freight providers in the corridor.

Due to the increased interest in non-motorized modes of transportation by the population, bicycle and pedestrian needs have been given consideration through the regional transportation plans. Local and regional facilities continue to be developed to provide for both transportation-related and recreational trips.

Summary

Population projections forecast continued growth for the Front Range. As the population increases, the challenge will be to provide efficient transportation systems for those who reside in the region. Creating additional alternative modes of transportation is a priority for Front Range residents. Congestion from the reliance on the single occupancy vehicle and dealing with the transportation needs of growing transportation dependent segments of the population are two reasons why alternative transportation systems should be explored. Adequate transportation systems will help promote a strong economy by allowing better accessibility to recreational, business, residential, and commercial opportunities.

WESTERN SLOPE AREA

Western Slope Average Annual Growth 1990 - 2020	
Gunnison Valley	3.7%
Southwest	3.6%
Northwest	3.1%
Intermountain	5.1%
Grand Junction/Mesa County	3.2%
San Luis Valley	1.9%
Region	3.5%
Colorado	2.7%

Table 6

The Rocky Mountains physically separate the Western Slope from the Front Range and Eastern Plains. Traveling to the Western Slope from the Eastern Plains or Front Range areas means negotiating high mountain passes over the Continental Divide such as Loveland, Berthoud, Monarch, and Wolf Creek. In the past, several narrow gauge rail lines were constructed over the Divide and historically played a key role in moving commodities. Over the last several decades roadway travel between the Western Slope and the remainder of the state was greatly enhanced by the construction of I-70, including the Eisenhower Tunnel and the major improvements through the scenic Glenwood Canyon. I-70 is the primary east-west route through Colorado and regardless of its interstate status and improvements, the mountainous portion of I-70 continues to pose freight and passenger-related obstacles, such as weather, geographical limitations, and steep grades. The Western Slope's roadway system is more skeletal than the rest of the state, meaning fewer alternate route options and circuitous routes, contributing to extended travel times or lengthy delays when road closures occur.

Description

The Western Slope has one urbanized area, Grand Junction in Mesa County. This urbanized area provides services to many smaller towns and communities including shopping, higher education, medical services, access to passenger rail, intercity bus, and commercial aviation services.

The Southwest TPR is uniquely situated in the "Four Corners" area, along with northwest New Mexico, southeast Utah, and northeast Arizona. The Southwest

TPR has several small urban centers (5,000 to 50,000), including Durango and Cortez. This TPR also encompasses tribal lands belonging to the Southern Ute Indian Tribe and the Ute Mountain Ute Tribe.

The Northwest TPR has two small urban centers, Steamboat Springs and Craig. According to this TPR's transportation plan, *"two-thirds of this region consists of unpopulated publicly owned land, which exaggerates the low population density."*

The Gunnison Valley's small urban areas are Montrose, Delta, and Gunnison. The TPR plan highlights that "*over 50% of the people in the Region live in incorporated places and the three largest communities contain 29% of the Region's population."*

The Intermountain TPR has an east-west orientation along the I-70 corridor, with the Greater Denver TPR to the east and Grand Junction/Mesa County TPR to the west. The Intermountain small urban areas are Aspen, Carbondale, Glenwood Springs, and Rifle.

While not actually located on the western side of the Continental Divide, the San Luis Valley TPR has many similar characteristics to other regions of western Colorado. This TPR is comprised of Alamosa, Chaffee, Conejos, Costilla, Mineral, Rio Grande, and Saguache counties.

Demographics

The overall population of the Western Slope is projected to grow at an average annual rate of 3.5% between 1990 and 2020, making it the fastest growing region in Colorado. The total population will increase from almost 400,000 to almost 810,000.

Most of the Western Slope will see higher average annual growth rates in the 0-16 and 65-years-and-older age groups. Overall, the percent of the Western Slope's population in the 65-and-over age group will increase from 11% in 1990 to 13% in 2020. The population younger than 17-years-of-age will decrease slightly from 25% in 1990 to 22% in 2020. Similarly, the percent of population in the 17 to 64-year age group will decrease from 66% in 1990 to 65% in 2020. Although the percentages in the 0-16 and 17-64 age groups decrease from 1990 to 2020, there will be significantly more people in these age groups by 2020.

The percent of the Western Slope households without vehicles is 5% (1990 data) compared to the state's 7%. Only the San Luis Valley TPR matches the state's statistic for households without vehicles, whereas all of the other TPRs in the Western Slope are lower than the state's 7%.

Regional Economy

The Western Slope's labor force grew from 200,990 persons in 1990 to 266,409 in 1998, a 4% average annual increase. In 1998, 70% of employment was in services, wholesale and retail trade, and government sectors. The Western Slope depends on tourism as a vital aspect of its economy. In the Northwest TPR, ranching and agriculture are a key aspect of not only its economy but culture as well. The unemployment rate in the Western Slope fell from 6% in 1990 to 5% in 1998, higher than the state's 4% unemployment rate.

Activity Centers

Western Slope Activity Centers Total Visitors	
National Parks and Monuments (1998)	2,384,795
State Parks (1998-99)	1,274,930
Ski Area (1998-99)	10,978,274
Total	14,637,999

Table 7

Western Slope recreational areas are of great interest due to their attractiveness to residents and visitors alike, having significant implications to the transportation network. A map of recreation attractors and tribal lands is on page 44.

The Western Slope also has many scenic byways that showcase the stunning mountainous terrain as well as the area's archaeological and historic richness.

Transportation Impacts

There has been a 43% increase in VMT on the Western Slope from 1990 to 1998. Given projected growth, communities on the Western Slope have begun to consider the impacts on the transportation infrastructure. State Highways form the backbone of the transportation system and, as growth continues, the stress of serving both local trips and regional trips will likely increase.

The aging population raises a number of transportation-related concerns, including the ability of these drivers to adequately see roadway signs and markings, both in the daytime and after dark. Other safety considerations include reaction time and maintaining speeds consistent with the flow of traffic.

The tourism industry is expected to increase over the next 20 years. With this in mind, it is timely for resort areas and local communities to consider alternative modes in their transportation planning efforts. Many ski areas and resort communities along the Western Slope do a good job in providing their visitors with transit options. The ski resorts offer a variety of transportation services such as shuttle buses and hotel vanpooling in an attempt to minimize private motor vehicle use. However, transit opportunities outside of the resort communities are limited or non-existent. In the tourism-oriented areas of the Western Slope, service workers often travel long distances if affordable housing is not available near their jobs.

The scenic byways attract many summer and fall travelers. Although only the Alpine Loop and a portion of the West Elk Loop Byways are closed in the winter, travelers are always encouraged to check weather conditions and forecasts

because portions of the byways may not be paved and long stretches exist without access to services.

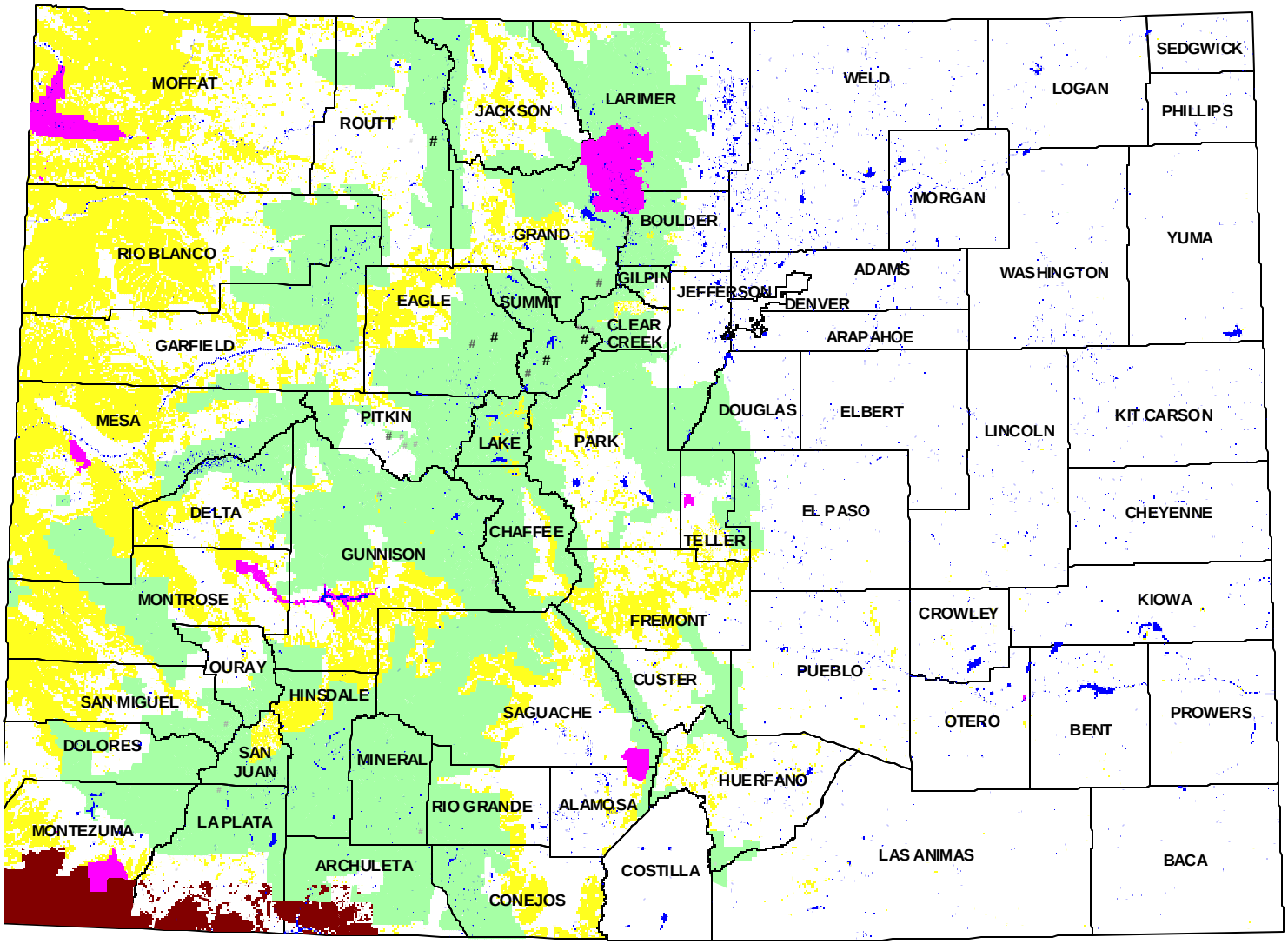
Air service is vital to maintaining and enhancing viability of local and regional economies in the Western Slope. Airports provide a critical link in the transportation system of the Western Slope. Commercial air service reliability and availability varies throughout the region. As a result, rural and small urban areas suffer from poor quality service and higher ticket prices.

Rail line abandonment is also a concern for the Western Slope as well, as it could also mean additional truck VMT on Western Slope roads and highways. Improving surface condition and adding or enhancing highway shoulders is costly, especially in mountainous terrain.

Summary

In summary, the Western Slope's transportation system is affected by the growth in population, the low density of the area, the components of its economy - particularly tourism - and geography. The diversity of lifestyles, including the more urban-oriented newcomers to the area versus the more rural-oriented long-time residents also contributes to complex travel demands. Consequently, transportation needs range from basic preservation and reconstruction of roads to safety considerations, spot congestion problems, transit service for specialized, tourism and general population needs, aviation service and telecommunications.

RECREATION ATTRACTORS and TRIBAL LANDS



Date Produced: April 5, 2000

Environmental Overview

Addressing environmental issues is critical to the development of a successful transportation system that contributes to the quality of life valued by Colorado citizens. As a result, the Transportation Commission (TC) has adopted a policy to guide the Colorado Department of Transportation (CDOT) as it develops, maintains, and operates the state transportation system.

TRANSPORTATION COMMISSION ENVIRONMENTAL POLICY STATEMENT

"CDOT will promote a transportation system that is environmentally responsible and encourages preservation of the natural and enhancement of the created environment for current and future generations. We will incorporate social, economic, and environmental concerns into the planning, design, construction, maintenance and operations of the state's existing and future transportation system. With the active participation of the general public, federal, state and local agencies, we will objectively consider all reasonable alternatives to avoid or minimize adverse impacts."

Department's Value Statement

"In everything we do, we will be guided by certain values. We will: . . . make decisions which are compatible with Colorado's quality of life, environmental, and economic goals."

CDOT uses an integrated and interdisciplinary approach when planning projects in order to comply with local, state, and federal laws and policies pertaining to the environment. On a project specific basis, hazardous waste sites, historic value, archaeology, paleontology, and noise issues will continue to be addressed. Air quality, wetlands, and ecology and wildlife are discussed below.

Department's Goal II, Strategy A

"CDOT will work to implement procedures and methods that will result in a safer, more environmentally sensitive, more cost-effective integrated transportation system."

AIR QUALITY

There is a close link between Colorado's transportation system and its air quality. Emissions from transportation-related pollutants are a significant contributor to many of the air pollution problems experienced in Colorado and around the country. As a result, significant federal regulations that guide transportation decision-making in areas that have violated federal air quality standards have been developed. In addition, the Transportation Commission has directed special attention to those areas in the state that are "at-risk" for poor air quality.

Poor urban visibility, or the "brown cloud" problem, is present in some rural areas in Colorado as well as along the Front Range urban areas. In many areas emissions from vehicle exhausts and re-entrained (kicked up) dust from travel on roads contribute significantly to the "brown cloud" problem. Many of the fastest growing parts of the state are in rural resort communities situated in mountain valleys where significant increases in winter season traffic combined with the right meteorological conditions conducive to causing high levels of air pollution have created local concerns. Although no violations currently exist, early

identification of these areas enables decision-makers to be sensitive when making air quality decisions and implementing proper mitigation measures.

Federal transportation and air quality legislation requires that all projects adopted or approved by a recipient of federal transportation funds be consistent or "conform" with federally required air quality plans for areas violating federal air quality standards (non-attainment). Areas that have been identified as existing non-attainment areas for PM-10 (violating the federal standard for particulate matter of 10 microns or less), ozone carbon monoxide (CO) and at-risk areas are mapped on page 47.

Metropolitan Areas

Metropolitan non-attainment area motor vehicle emissions associated with long-range plans, transportation improvement programs (TIPs) and individual projects, may not exceed the emissions budget identified in the State Implementation Plan (SIP) for Air Quality. The emissions budget is the maximum amount of pollutant emissions allowed per day as identified in the SIP. If the emissions budget is exceeded, plans, TIPs, and regionally significant projects, which must be approved by a recipient of federal funds, may not proceed. Occasional exceptions may be made for safety and maintenance types of projects that do not increase the capacity of the highway.

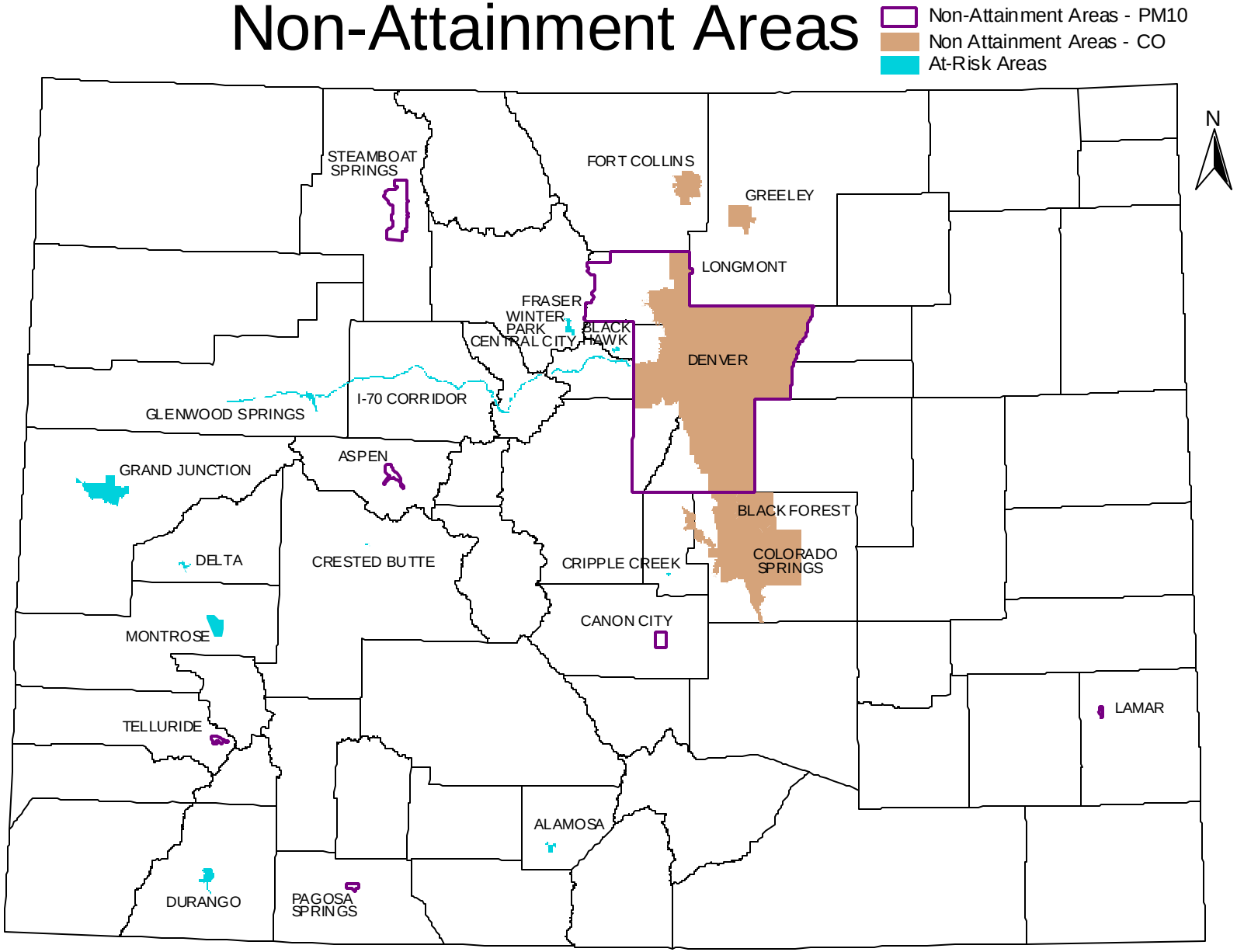
Rural Areas

Projects proposed in rural non-attainment areas adopted or approved by a recipient of federal transportation funds have more flexibility in evaluating conformity with the SIP. Projects can either satisfy the emissions budget criteria or complete a "build/no build" test of emissions reductions.

At-Risk Areas

Areas around the state that have characteristics that may lead to elevated levels of air pollutants have been identified. These areas are called at-risk areas. It is in the interests of CDOT, local governments and citizens to take reasonable steps to ensure that acceptable air quality is maintained in these sensitive areas so that public health and a good quality of life are guaranteed. Transportation projects and maintenance operations in these areas should be evaluated with special care to ensure that they include all practical measures to reduce emissions from transportation-related pollutants.

Non-Attainment Areas



Date Produced: November 29, 1999

WETLANDS

CDOT is heavily involved in wetlands preservation

Wetlands generally include swamps, marshes, bogs, and similar areas, but also may include areas that are regularly, but not continually, submerged. They are important for a variety of reasons including: water quality improvement; fish and wildlife habitat; aquatic food chain support; flood attenuation and stormwater detention; shoreline anchoring; groundwater recharge and discharge; recreation; education and nature study uses. Where wetland impacts cannot be avoided because of impractical circumstances during the construction phase of transportation projects, minimization of impacts and compensatory wetland mitigation is required. However, the first priority is to mitigate the impact at the site of the impacted wetlands. The future of wetlands appears to depend upon stricter wetland regulations and stream restoration.

Wetland Banking

Wetland Banking is one alternative method used to mitigate the potential loss of wetlands if on-site mitigation is not possible. The purpose of a wetland bank is to create wetland acreage in advance that can be used to offset wetland impacts for proposed transportation projects that would impact an existing wetland. CDOT is in the process of developing a statewide wetland banking program agreement with the U.S. Army Corp of Engineers (CE) that would be beneficial to early project planning.

ECOLOGY & WILDLIFE

Ecosystems are significantly and regularly affected by the transportation system and associated development. As the transportation system is developed, maintained and operated, the impacts must be continually evaluated and mitigation opportunities must be identified and implemented. Growing rates of urban and industrial development, a highly mobile public, and changing agricultural practices are rapidly altering the environment for many threatened and endangered species. An increasing number of species are unable to cope with changing habitats and are in danger of extinction.

Threatened and Endangered Species

In Colorado there are 33 species of fish, birds, mammals, and plants appearing on the federal list of threatened or endangered species**.** Another 11 are identified as candidate species (US Fish and Wildlife Service Webpage, 10/19/00). In order to comply with the federal Endangered Species Act, CDOT evaluates all possible adverse impacts and takes all necessary measures to avoid harming threatened and endangered animal and plant species before construction and maintenance activities begin.

There are two ecosystems that support a large percentage of those sensitive Colorado species that are most affected by development. One ecosystem is the short-grass prairie of eastern Colorado that houses the prairie dog, swift fox, mountain plover, black-footed ferret, ferruginous hawk, and other birds. The other ecosystem is the riparian (streamside) system that includes bald eagles, Preble's meadow jumping mouse, southwestern willow flycatcher, several species of fish, Ute ladies' tresses orchid, and Colorado butterfly plant. CDOT works with land management agencies to identify strategies that can address the requirements of these sensitive species while providing an effective transportation system for Colorado.

Rather than protecting a single species and its habitat, the future emphasis for threatened and endangered species will be on protecting ecosystems that support a number of rare species, such as short-grass prairie and riparian systems. Furthermore, it is likely that efforts will be made to restore ecosystems and wildlife corridors, protecting them from additional fragmentation.

PASSENGER MOBILITY

In March 2000 CDOT conducted 1200 telephone surveys throughout the State of Colorado to assess residents' opinions about their travel needs. When asked which should receive the highest priority – transportation safety, maintenance and repair of the transportation system, or providing travel options and relief from congestion – over half chose travel options and congestion relief. Maintenance and repair was chosen as the main concern by almost half of those in the Eastern Plains and Western Slope and congestion relief was viewed as most important by almost two-thirds of those in Metro Denver and almost half of those in the rest of the Front Range.

When the respondents to the telephone survey were asked which method of reducing congestion they favored, just over half (51%) favored adding lanes to highways and 44% preferred adding facilities to serve alternate modes such as transit, bicycles or pedestrians, Transportation Demand Management, or rail. When asked how likely they were to use various transportation alternatives if available, 44% of survey respondents said they would telecommute, another 44% said they would ride light rail, 42% would carpool, 33% would ride a bus and 30% would ride a bicycle. This survey reflects the public's awareness that road building alone will not solve the congestion problems in all cases, especially in the urban areas. The following discussion describes the current status of modal transportation in Colorado.

Rail Element

Rail Project Summary	
Fiscally Constrained	$.003B
Unfunded Projects	$10.7B

Table 8

Rail transportation played a significant role in Colorado's history. Over the last 40 years, land use patterns encouraged a high level of automobile dependence, contributing to the decline in passenger rail service. However, there is a renewed interest in rail transportation in several of Colorado's Front Range and mountain corridor communities. Rail transportation can provide a viable alternative to the automobile traveling between the state's major urban centers.

Existing passenger rail service in Colorado is limited to cross-country trips rather than intra-state travel. Passenger rail service is provided almost exclusively by AMTRAK with the exception of a few small railroads serving tourists.

In order to supplement the limited passenger rail planning information available for regional and statewide transportation planning purposes, CDOT engaged the services of a consultant and the Colorado Passenger Rail Study was completed in January 1997. This study assembled a variety of data and information to determine passenger rail feasibility in a number of selected corridors. Although

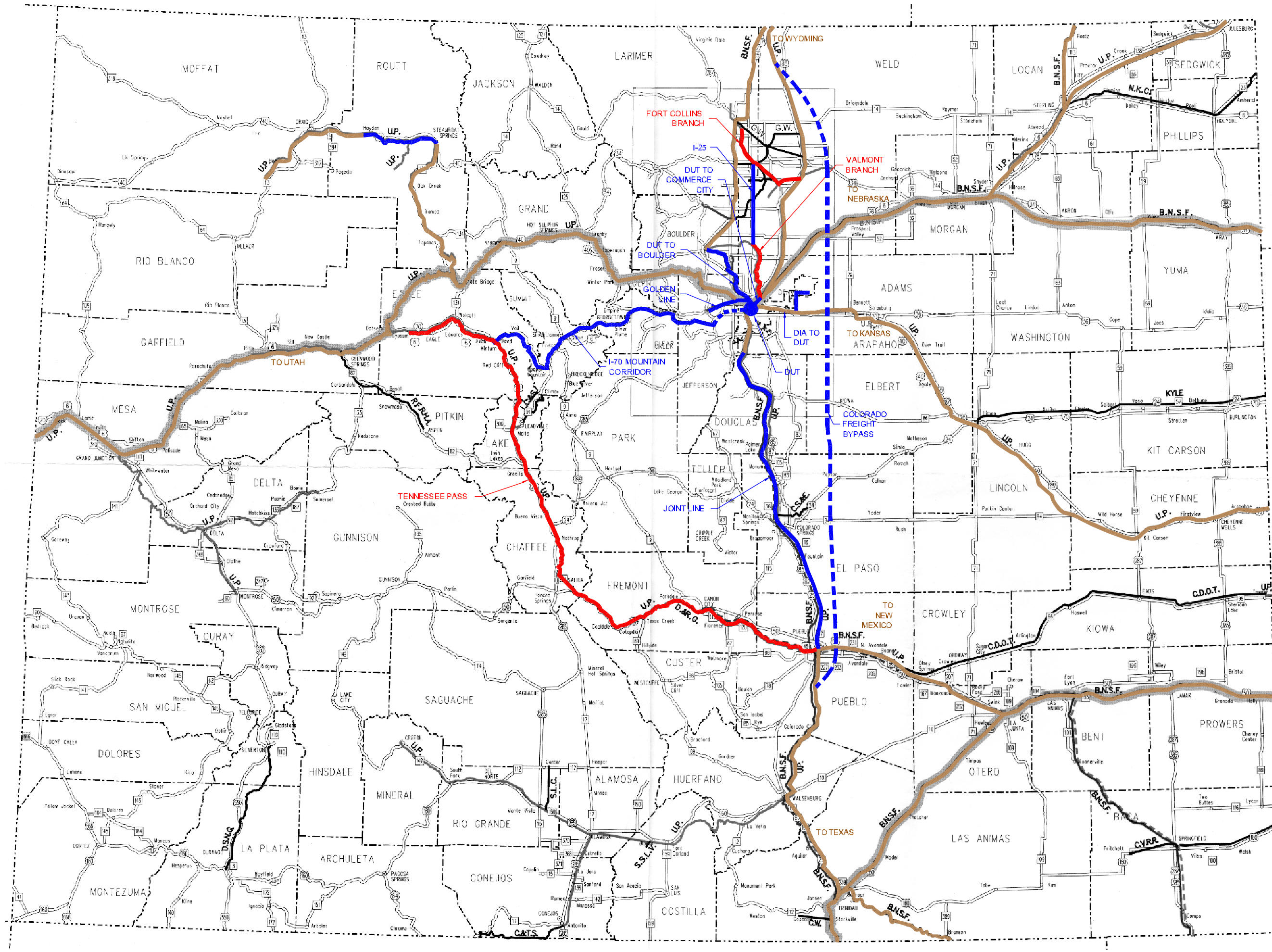
not adopted by the Transportation Commission, the study served as a technical resource for the Regional Planning Commissions around the state as they updated their regional transportation plans in 1998 and 1999.

Several of the Regional Planning Commissions included passenger rail corridor projects in their preferred (unfunded) plans, totaling approximately $10.7 billion. These proposed passenger rail corridors do not include light rail, which is classified with mass transit projects.

In response to the interest in passenger rail, and its own concerns over the impacts of rail abandonment in Colorado, the Transportation Commission recognized the state as having a role in rail transportation in the following circumstances:

- Preserving rail corridors for future use may save money since the cost to preserve a corridor for future transportation purposes is often far less than having to purchase an equivalent corridor in the future.
- Rail transportation can be a cost effective and environmentally preferable mode of transportation in certain situations.
- Freight rail can reduce the maintenance costs on state highways since transport of displaced rail freight will increase deterioration of the state highway system used to transport that freight.
- Freight rail service can serve as a lifeline to the economic health of the community when there are no other economic modes available to serve the needs of the community.

Based on these interests, the Colorado Transportation Commission recently approved a Rail Corridor Preservation Policy that identifies the types of rail activities in which CDOT can engage and the criteria for identifying State Significant Rail Corridors where these activities can occur. The Rail Corridor Preservation Policy recognizes that preservation can include not only purchasing existing rail lines and rights-of-way but also purchasing rights-of-way for new rail lines. These actions are necessary when an existing railroad is subject to abandonment or when there is not sufficient right-of-way within an existing highway corridor identified for rail improvements. In addition, preservation can consist of reserving a rail "envelope" within existing rail or highway rights-of-way. These types of preservation apply to active rail lines that are not in danger of being abandoned or to existing highway corridors designated for rail service in the future. Preservation would ensure that interim improvements made in the corridor by the railroad or CDOT would not preclude the implementation of passenger rail improvements in the future. See the map on page 52 showing the locations of the statewide significant rail corridors.



RAIL CORRIDORS OF STATE SIGNIFICANCE FOR PRESERVATION

THESE CORRIDORS ARE SUBJECT TO ABANDONMENT/SALE. IT MAY BE NECESSARY TO PURCHASE THESE CORRIDORS IN ORDER TO PRESERVE THEM FOR POTENTIAL FUTURE RAIL SERVICE.

THESE CORRIDORS ARE SUBJECT TO IMPROVEMENTS WITHIN EXISTING RAIL OR HIGHWAY CORRIDORS. IT MAY BE NECESSARY TO PLAN PROPOSED IMPROVEMENTS OR PURCHASE SMALL AMOUNTS OF RIGHT-OF-WAY IN ORDER TO PRESERVE THE EXISTING CORRIDORS FOR POTENTIAL FUTURE RAIL SERVICE.

THESE CORRIDORS DO NOT PHYSICALLY EXIST. THE FRONT RANGE TOLL ROAD AUTHORITY HAS DESIGNATED A 12-MILE WIDE CORRIDOR AND NO SPECIFIC HIGHWAY/RAIL ALIGNMENT HAS BEEN DESIGNATED. DRCOG HAS NOT IDENTIFIED A SPECIFIC CORRIDOR FOR CONNECTING THE I-70 CORRIDOR TO DUT.

RAIL CORRIDORS OF STATE SIGNIFICANCE WHICH ARE NOT AT RISK OF BEING ABANDONED.

Transit Element

Some segments of Colorado's population do not have access to an automobile due to their age, financial constraints, physical condition, or as a personal choice. Transit services provide an effective alternative to congestion for those who wish to have an alternative to their automobile to get to work, shopping or school. The Colorado Department of Transportation recognizes the valuable role transit plays in enabling the elderly and disabled to stay active and independent, providing access for rural Colorado residents, providing an alternative to congestion, reducing air pollution, and getting the labor force to work.

Transit in Colorado can be categorized into the following five types of service with the number of providers in parentheses. The map on page 138 illustrates the location of transit services in Colorado:

- Specialized services for the disabled and elderly (50)
- Rural services for the general public (10)
- Resort services for the general public (14)
- Urban services for the general public (11)
- Intercity services for the general public (5)

Generally, the urban, resort and intercity operators provide fixed route services and the rural and specialized operators provide demand responsive services with varying routes. Transit providers currently employ 7,700 people in the state with a payroll of $212 million.

In order to assist the Regional Planning Commissions in estimating their future transit needs, the 1999 Transit Needs and Benefits Study (TNBS) was prepared under CDOT contract. The TNBS included a household telephone survey and a survey of transit providers. Among the findings from the TNBS household survey, some manner of transit service is available to 70% of the urban residents and 39% of the rural residents. According to the TNBS Provider survey, transit agencies in Colorado spent over $287 million in 1996 on moving people by transit. These expenditures included both vehicle purchases and the operation of transit vehicles. These transit agencies provided approximately 69 million trips annually (79% of those trips are in the urban areas), compared to the estimated existing need of 156 million trips. Approximately 44% of the current transit demand is now being met.

The TNBS provided the Transportation Planning Regions with three operating scenarios. These scenarios were based upon three different levels of transit service. Scenario A was based upon providing the same number of trips as provided today; regardless of population growth. Scenario B represented the transit needs if the current level of service kept up with population growth. Scenario C was an estimate of the transit needs if 50% of the needs were met.

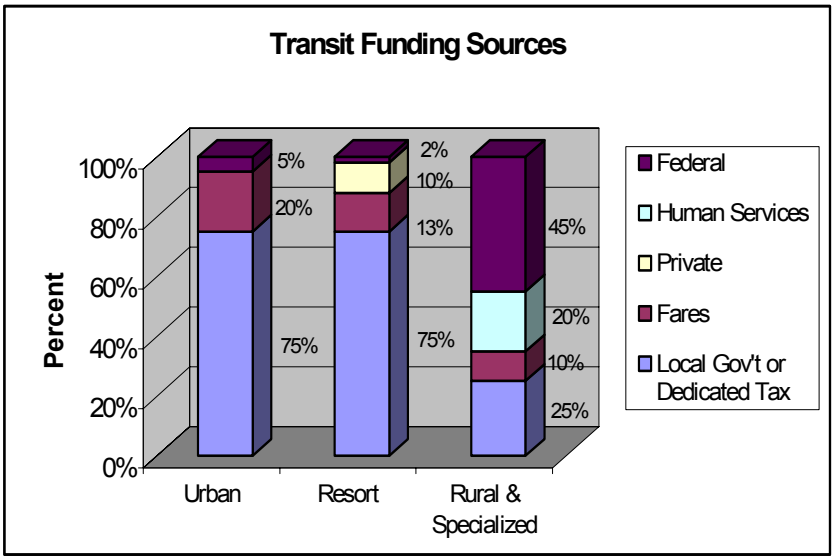
Only the Denver Region and the Intermountain Region (containing a number of ski resorts) currently accommodate 50% or more of their transit demand. It must be noted that transit needs identified in the 2020 Plans for the Denver, Colorado Springs, and North Front Range metropolitan areas were incorporated into the 2020 Statewide Transportation Plan. The Metropolitan Planning Organizations (MPOs) have more sophisticated analytical tools for projecting transit needs than are available to the rural transportation planning regions, which utilized the TNBS information.

Most Regional Planning Commissions adopted Scenario C for their Preferred Plans and Scenario B for their Constrained Plans. The exceptions were the Denver, North Front Range and Upper Front Range regions, which adopted Scenario C for their Constrained Plans. The estimated cost to implement the transit elements (bus and LRT) of the Constrained Plans is $11.8 billion. This funding is needed to purchase buses, operate them, and construct park-n-ride lots and bus stations. The Transportation Planning Regions identified $5.8 billion of unfunded transit demand in the state. Included are bus and rapid transit facilities, as well as passenger-moving gondola projects in Crested Butte, Steamboat Springs, Winter Park and Telluride.

Transit Project Summary	
Fiscally Constrained	$11.8B
Unfunded Projects	$5.8B

Table 9

Transit providers call upon a variety of funding sources to pay their operating expenses. Urban transit providers receive 75% of their operating revenues from local governments or dedicated taxes, 20% from the fare box and 5% from the federal government. Resort providers also receive 75% of their operating expenses from local governments but only 13% from the fare box and 2% from the federal government. The remainder of their funding (10%) comes from the resorts; of which many do not charge fares to better accommodate the needs of their visitors. Finally, the rural and specialized providers derive a higher percentage of their operating revenue (45%) from the federal government and a lesser amount (25%) from the local governments, 20% from contracts with human service agencies and 10% from the fare box. The State of Colorado provides no state funds for transit but does administer approximately $3 million in federal funds that are distributed to transit operators that serve rural areas, the elderly and disabled populations.



Transit Funding Sources - Figure 11

Bicycle and Pedestrian Element

The passage of the Transportation Equity Act for the 21st Century (TEA-21) has given greater emphasis to the role bicycle and pedestrian facilities play in the transportation system. The U.S. Department of Transportation's "Policy Statement on Integrating Bicycle and Walking into the Transportation Infrastructure" provides guidance to transportation agencies for incorporating bicycle and pedestrian facilities into transportation projects.

The Colorado Department of Transportation (CDOT) recognizes the benefits of non-motorized transportation and recommends the use of bicycling and walking for commuting, errands, travel to and from school, and for recreation. In addition to being very energy efficient forms of transportation, bicycling and walking include other benefits such as improved health, less stress, and reductions in air pollution, traffic congestion, and energy consumption. Whereas walking is practical for trips of approximately two miles, bicycling offers the opportunity to travel efficiently for trips of ten miles or less and either mode can be combined with transit for longer trips.

CDOT recently commissioned a study entitled "Bicycling and Walking in Colorado: The Economic Impact of Bicycling and Household Survey Results." The results of the study reveal that the total economic benefit from bicycling in Colorado is over $1 billion annually. Between manufacturing, retail, tourism, and special events, bicycling employs over 10,000 Coloradans with an annual payroll of over $95 million.

In 1998, thirteen of Colorado's ski areas reported 1.38 million summer visitors. They indicated that 699,000 of these visitors bicycled on their vacation generating approximately $193 million in revenue. In surveys conducted by Winter Park and Aspen, Winter Park found that 25% of their visitors came to bicycle and Aspen reported that 20% of their visitors indicated bicycling was very important. When the actual numbers submitted by the ski areas are combined with the surveys, it is estimated that at least 276,400 visitors came primarily to bicycle. If these visitors altered their vacation destination due to the lack of bicycling opportunities, it would result in the loss of nearly $76 million in revenue.

The Household Survey mentioned above indicates that 69% of the households in Colorado own at least one bicycle and the average is 2.7 per household. (There are 3 million bicycles in Colorado!) Approximately 34% of Colorado citizens live within 5 miles of work and 2.1% travel to work by bicycle and 3.3% by walking. This compares to 81% of the survey's respondents that drive alone to work. Of those traveling to school, 6.1% bicycle and 7.8% walk. The factors that prevent people from bicycling and walking include: time of day, distance, weather, traffic conditions on the street, lack of off street bicycle paths, lack of shoulders, poor road maintenance, no showers at their destination, and discourteous motorists.

When asked about their preferences regarding bicycle-related public expenditures, 79% indicated they would approve funding for bicycle facilities to encourage bicycling as a means of transportation and 51% would reallocate funds from other transportation projects to create a statewide bicycle transportation system. Nearly 63% prefer paved, off street bike paths, but also support the construction and maintenance of shoulders on roadways.

There are approximately 1,000 crashes each year involving bicyclists and motorists and in 1999, six bicyclists and 57 pedestrians were killed in Colorado. CDOT's Bicycle/Pedestrian Program is a resource for current developments, standards, and practices in facility design, planning, and engineering.

CDOT is also responding to citizen concerns expressed in the bicycling and walking research study as to the lack of education of motorists, bicyclists, and pedestrians regarding their rights and responsibilities when sharing the road. The CDOT Bicycle/Pedestrian Program is responsible for educating pedestrians, bicyclists, and motorists of all ages regarding the rules of the road and trail, appropriate traffic behaviors, and how to share the road safely and cooperatively with other modes of transportation.

In June of 1999, the Transportation Commission passed a Shoulder Policy (902.0) and a Resolution (TC-747) to address some of the concerns expressed above. CDOT's policy is to incorporate shoulder improvements on state highways "whenever an upgrade of the roadways and structures is being

implemented and is technically feasible and economically reasonable." The Transportation Commission Resolution states that:

- "Bicycling and walking are integral components of Colorado's multi-modal transportation system and shall be considered when all CDOT projects are scoped."
- "Shoulder improvements should be included in all new alignment; major reconstruction; bridge replacements, reconstruction or rehabilitation; and minor widening."
- "Existing shoulders shall be included in resurfacing projects where needed."
- "Paved shoulders should be at least 6' wide to accommodate bicycle travel and rumble strips along High Priority Bicycle Corridors."
- "Rumble Strips may be installed on shoulders which are 4' or narrower only when there is a history of run-off-the-road crashes consistent with the system-wide evaluation."

The Transportation Commission directed the CDOT Bicycle/Pedestrian Program staff to revise the High Priority Bicycle Corridors previously adopted in the 2015 Transportation Plan to reflect higher and lower priority bicycle corridors. In order to recommend revisions CDOT staff sought input from the bicycle community, citizens, CDOT region staff, and the transportation planning regions throughout the state via a series of Bicycle Town Meetings in 32 cities across the state with over 1,000 participants. Those recommendations were then presented to the Regional Planning Commissions for review and comment.

The Transportation Commission's Intermodal Committee is revising the draft map, considering the public comments as well as other factors such as projects already within the plan, resurfacing projects where shoulders could be included as part of the project scope, and proximity to communities of 5,000 or more. The full Transportation Commission will consider the revised map and adoption is expected at a later date.

The Regional Transportation Plans identified over $.088 billion for bicycle and pedestrian projects in their regional constrained plans and $0.96 billion in the Regionally Preferred Plans. Most of these projects consisted of off-street shared-use paths although bike lane projects were also identified.

Bicycle and Pedestrian Project Summary	
Fiscally Constrained	$.088B
Unfunded Projects	$0.96B

Table 10

Transportation Demand Management

Transportation Demand Management (TDM) is a set of actions to move more people in fewer vehicles in order to increase the person carrying capacity of the transportation system. Most TDM programs focus efforts on programs that encourage fewer and shorter trips, spreading peak hour traffic over a wider time frame and promoting the use of alternative modes. The following efforts are typical of TDM programs:

Transportation Demand Management Project Summary	
Fiscally Constrained	$0.010B
Unfunded Projects	$0.017B

Table 11

- Carpooling programs match people who live and work in the same general vicinity and have expressed interest in the program. Carpool programs are currently offered by the Denver Regional Council of Governments (RideArrangers), North Front Range (SMARTTrips), and Colorado Springs (RIDEFINDERS)
- Vanpool programs also match people who live and work in the same general vicinity, but the program also provides the vans used by the matched groups. Vanpool programs are currently being offered by DRCOG, North Front Range (VanGo), and Colorado Springs
- Guaranteed Ride Home programs provide a free taxi ride home for someone who has taken another mode to work and has an unexpected change in work schedule or an emergency. Currently, DRCOG, North Front Range, and CDOT offer Guaranteed Ride Home programs
- Flextime programs give employees the option of changing their starting and ending times each workday while maintaining their usual number of work hours each day. This helps reduce congestion in the peak travel period
- Telecommute programs allow people to work at home one or more days a week. These programs eliminate the trips to and from work
- Teleconference programs allow people to use a phone or audio-video facilities to meet with other people rather than driving to a central facility
- Employer programs promote the use of alternative modes among their respective employees. Typically, Transportation Coordinators are appointed within each company to reach out to the employees to educate them regarding the availability and use of alternative modes
- Reduced Transit Fare programs are promoted to individuals and organizations to increase bus ridership
- Web sites/information kiosks/brochures are created to increase people's awareness regarding the availability of alternative modes

One measure of how many people are carpooling is vehicle occupancy. Statewide, the occupancy rate is 1.5 persons/car. Occupancy rates range from a low of 1.1 for work trips to 2.5 for recreational trips. Vehicle occupancy rates will be monitored on a yearly basis to determine whether the rates are increasing or decreasing.

Approximately $0.010 billion is included in the Constrained Regional Plans for TDM programs and an additional $0.017 billion in TDM programs are included in the Regionally Preferred Plans.

Aviation Element

The Colorado Aviation System is comprised of 79 public use airports ranging from commercial service airports (e.g., Denver International Airport and Colorado Springs) to general aviation airports (e.g., Springfield and Nucla.) This network of airports serves a variety of transportation needs and provides a vital link in the overall statewide multi-modal transportation system. Colorado's rugged mountains and vast plains require an efficient transportation system to enable quick access to remote locations. The traveling public increasingly relies on aviation to accommodate their transportation needs. Not only does the statewide aviation system provide essential access for these critical activities; it also generates billions of dollars in economic benefits, including thousands of jobs.

According to a study completed in 1998, the Colorado Aviation System generates over $14.3 billion in annual economic activity, generates 4.6 billion in annual earnings and creates 246,000 jobs throughout Colorado. Annually, the Colorado Aviation System accommodates a total of 8.5 million visitors who spend $5.2 billion in Colorado. Nearly 90% of these visitors (7.5 million) arrive via scheduled air service, the other 1.0 million visitors arrive via general aviation aircraft. The Colorado Aviation System also provides congestion relief to highway corridors like I-70 through the use of airports located at Aspen, Eagle, Rifle, Grand Junction and Hayden. Based on the number of enplanements at the Eagle, Aspen and Yampa Valley Regional (Hayden) airports, plus passengers arriving by private and general aviation aircraft at the Eagle, Aspen, Rifle, Glenwood Springs, Grand Junction and Hayden airports, it is estimated that almost 1 million vehicle trips are taken off the I-70 corridor annually because of the utilization of these airports.

The Colorado aviation system generates $14.3 billion annually

Airports throughout Colorado are owned and operated by local governments with grant funding assistance from the Colorado Aeronautical Board and Federal Aviation Administration (FAA). Not all airports in Colorado receive funding assistance from the FAA, which provides approximately 90% of eligible airport improvement and development costs. To be eligible for FAA grant funding, airports must be identified as essential to a balanced national air transportation system. The National Plan of Integrated Airports System (NPIAS) has identified 48 airports within Colorado as being eligible for grant funding under the FAA

Airport Improvement Program. A four-year air transportation-funding bill titled "AIR 21" was passed in March of 2000, covering the period 2000 – 2003. AIR 21 provides approximately 40% more funding for airport improvement and development projects for eligible Colorado Airports.

The FAA provides three funding categories for airports in Colorado. The first category consists of Entitlement Funds, which are granted to commercial service airports that enplane over 10,000 passengers annually. These airports receive an annual entitlement amount each year for capital development projects which is based on the total number of enplaned passengers for each airport. The minimum entitlement under AIR 21 was raised from $500,000 to $650,000 for 2000 and to $1 million in 2001. Entitlement amounts range from $5.1 million at DIA to the minimum entitlement at Gunnison, Montrose, Durango, and Telluride. These airports can compete for the second category of federal funds, FAA discretionary funds, on a priority basis within the FAA's Northwest Mountain Region (Wyoming, Washington, Utah, Oregon, Montana, Idaho, and Colorado.)

The third category of FAA funding, State Apportionment funds, are used for general aviation and commercial service airports that do not enplane 10,000 annual passengers. Examples include Cortez' and Alamosa's airports. Annually, Colorado receives $8 million to fund projects at the 38 airports eligible to compete for state apportionment funding. Discretionary funding is also available for projects with the highest priority within the state apportionment category throughout the FAA Northwest Mountain Region.

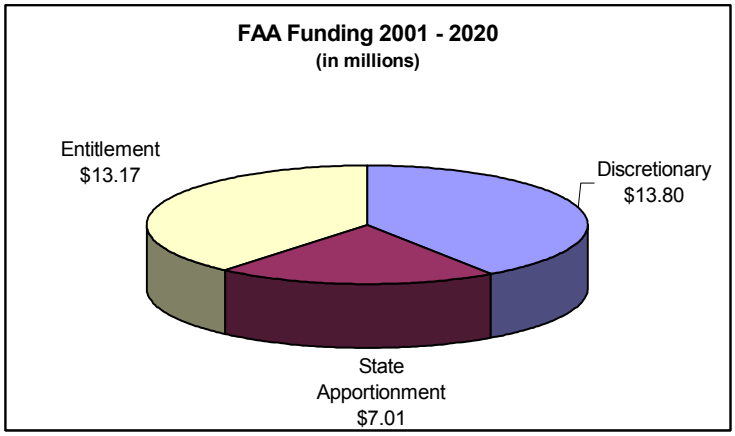
State funding for the aviation system comes through discretionary grants from the Colorado Aeronautical Board. The Colorado Aviation Fund is comprised of a portion of state sales and excise taxes on aviation fuel and distributed annually through local grants by the Colorado Aeronautical Board. State funding averages $2.5 million annually and may be used for any airport that is publicly owned and open for public use. With limited financial resources available for Colorado airports, there is a constant struggle to maintain the current system's facilities and to meet safety standards. In addition, rapid growth in population and tourism have increased demand for airport services and facilities, placing pressure on some airports to expand or upgrade.

To assist the Colorado Aeronautical Board and the FAA in making efficient funding decisions with limited financial resources, the Colorado Aviation Systems Plan was developed and finalized in late 2000. The primary goal of the plan is to examine the adequacy of Colorado's system of airports to determine the ability of the system to meet both current and future aviation needs on a statewide basis.

Before the adequacy of the airport system could be measured, first it was necessary to determine each airport's current performance and what each airport contributes to the overall system. To identify the functional level of each airport,

five criteria were used to develop an overall functional level for each airport. These criteria included:

- Activity - the existing and forecasted level of aviation activity
- Expandability - each airport's ability to accommodate future airside and land-side facilities
- Economics - the economic benefit that each airport provides the community it serves
- Coverage/Emergency - each airport's ability to serve a distinct geographic area and to support health services where no or limited hospital services are available
- Investment - the level of investment that historically has taken place at each system airport



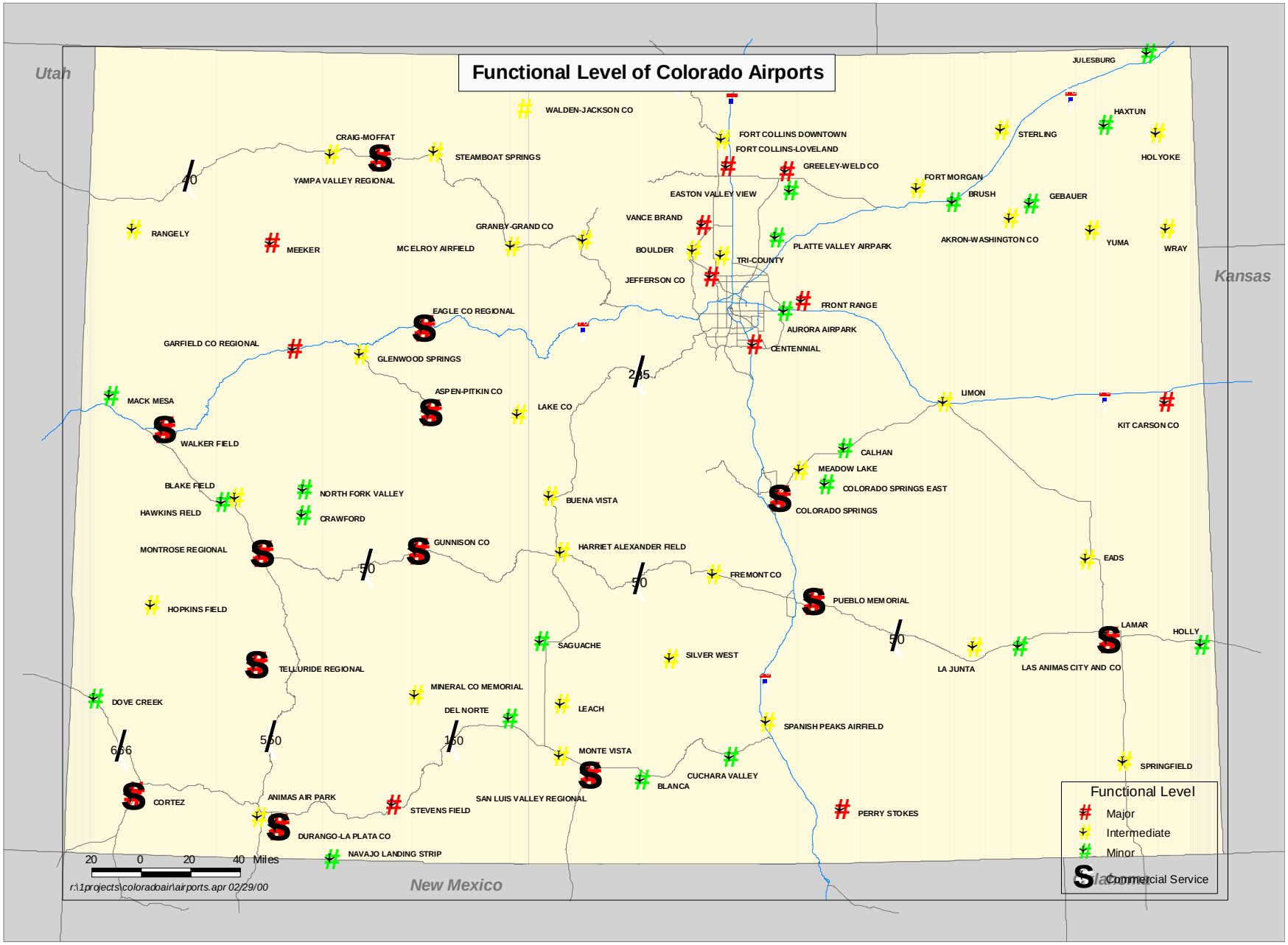
FAA Funding - Figure 12

Based on the rating and ranking process using these criteria, the system airports were divided into three functional levels: Major, Intermediate, and Minor (see map on page 62). Performance measures have been developed within each airport functional level with the highest standards set for the major airport category, and the lowest set for the minor airport category. The airport functional roles and performance measures developed within each functional level will be used as a tool in determining future funding decisions by the Colorado Aeronautical Board and the FAA. The final Colorado Systems Plan document will be provided to each of the Transportation Planning Regions and Metropolitan Planning Regions by mid-summer 2000 to be used as guidance throughout the next regional and statewide transportation plan update cycle.

Aviation Project Summary	
Fiscally Constrained	$0.20B
Unfunded Projects	$0.17B

Table 12

Estimated revenues total $0.20 billion; leaving a deficit of approximately $0.17 billion. The total 20-year aviation needs in the state are estimated to total $0.37 billion (not including Denver International Airport or other metropolitan area airport needs). Aviation system needs for the Denver, Colorado Springs, and North Front Range metropolitan areas are being considered while these three MPOs update their regional plans to 2025, which is currently underway.


Functional Level of Colorado Airports
Utah
Kansas
New Mexico
Oklahoma
WALDEN-JACKSON CO
CRAIG-MOFFAT
STEAMBOAT SPRINGS
YAMPA VALLEY REGIONAL
RANGELY
MEEKER
MC ELROY AIRFIELD
GRANBY-GRAND CO
EAGLE CO REGIONAL
GARFIELD CO REGIONAL
GLENWOOD SPRINGS
ASPEN-PITKIN CO
MACK MESA
WALKER FIELD
LAKE CO
BLAKE FIELD
HAWKINS FIELD
NORTH FORK VALLEY
CRAWFORD
MONTROSE REGIONAL
GUNNISON CO
HOPKINS FIELD
TELLURIDE REGIONAL
DOVE CREEK
MINERAL CO MEMORIAL
DEL NORTE
CORTEZ
ANIMAS AIR PARK
DURANGO-LA PLATA CO
STEVENS FIELD
NAVAJO LANDING STRIP
SAN LUIS VALLEY REGIONAL
MONTE VISTA
BLANCA
CUCHARA VALLEY
LEACH
SAGUACHE
SILVER WEST
BUENA VISTA
HARRIET ALEXANDER FIELD
FREMONT CO
FORT COLLINS DOWNTOWN
FORT COLLINS-LOVELAND
GREELEY-WELD CO
EASTON VALLEY VIEW
VANCE BRAND
BOULDER
TRI-COUNTY
JEFFERSON CO
FRONT RANGE
AURORA AIRPARK
CENTENNIAL
PLATTE VALLEY AIRPARK
JULESBURG
STERLING
HAXTUN
HOLYOKE
FORT MORGAN
BRUSH
GEBAUER
AKRON-WASHINGTON CO
YUMA
WRAY
LIMON
KIT CARSON CO
CALHAN
MEADOW LAKE
COLORADO SPRINGS EAST
COLORADO SPRINGS
EADS
PUEBLO MEMORIAL
LAMAR
HOLLY
LA JUNTA
LAS ANIMAS CITY AND CO
SPANISH PEAKS AIRFIELD
SPRINGFIELD
PERRY STOKES
20 0 20 40 Miles
r:\1projects\coloradoair\airports.apr 02/29/00
Functional Level
Major
Intermediate
Minor
Commercial Service

Intelligent Transportation Systems

WHAT IS ITS?

Intelligent Transportation Systems (ITS) is a widely used term to describe a collection of advanced transportation technologies and applications of information processing techniques to improve transportation system efficiency, safety, and convenience. It applies not only to passenger vehicles, but also to commercial vehicle operations, transit systems and other multi-modal activities. These "smart" systems are both urban and rural in scope and are being adopted not only by CDOT but also by a variety of other transportation-related agencies in Colorado and around the world.

ITS is a management tool that can help maximize existing facilities by enhancing the mobility and safety of the motoring public. Some of the more successful ITS systems include: Advanced Traffic Management System (ATMS), Advanced Traveler Information System (ATIS), Commercial Vehicle Operations (CVO) and Advanced Public Transportation System (APTS).

ATMS utilize, evaluate and analyze information that is collected from various devices to address and mitigate freeway incidents and congestion. National studies for typical metropolitan areas show that 50% of the capacity of an urban freeway system is lost due to non-reoccurring incidents such as accidents, spilled loads and stalled vehicles. They also show that if a stalled vehicle blocks one lane out of three, the capacity of the freeway is reduced by half. Even if the disabled vehicle or vehicles are moved to the shoulder of the freeway, the system capacity is still reduced by about 15%.

ITS helps maximize the potential of existing transportation infrastructure

Delays in clearing incidents are also costly. These studies show that for every minute it takes to clear an incident from a freeway there will be an average of four additional minutes in clearing the queue that has formed behind the stopped vehicles. In addition, some cities report that 10% to 15% of their freeway accidents are "secondary collisions" caused by vehicles coming upon the back-up queue of cars from incidents that have occurred earlier but which still have not been cleared.

ATIS disseminates accurate real-time information about transportation options and conditions to travelers so that they can use it to make decisions that facilitate their travel needs. Information is provided to the traveler through variable message signs, highway advisory radios, 1-800 numbers, pager and cell phone reports from private partners, web sites, kiosks, traffic and weather channels, broadcast faxes and press releases. This allows the traveler to exercise choices concerning their travel; from taking alternative forms of travel, modifying travel times and/or routes or choosing not to travel.

ITS Strategic Work Plan and ITS Business Plan

The ITS Strategic Work Plan was developed in 1998. It is consistent with CDOT's mission and is intended to give direction to CDOT's ITS efforts through the vision, mission, goals and objectives that were developed as part of the plan. It provides guidance for planning ITS projects on CDOT facilities and encourages opportunities for CDOT to work with other agencies to realize a statewide vision for ITS in Colorado. In addition, it states a strategic commitment regarding CDOT's support, outlines critical building blocks and the ITS Business Plan process and identifies roles and responsibilities of the ITS Office and the ITS Steering Committee.

The ITS FY 1999-2003 Business Plan was developed using an abbreviated version of the planning process outlined in the ITS Strategic Plan. The ITS Steering Committee developed program areas and project evaluation criteria that reflected the mission, goals and objectives of the ITS Strategic Plan. Several workshops were conducted to solicit input and project requests from CDOT Regions, TPRs and private industry. Seven program areas were developed that directly supported the ITS Strategic Plan. They are: System Maintenance, Operation and Integration, Traveler Information – Collection and Dissemination, Active System management – Travel and Traffic, Incident Management, Commercial Vehicle Operations and Updating Legacy Systems. These program areas were used to identify and categorize projects for the Business Plan. Projects categorized in the program areas were combined into Focus Area Packages, which outlined the strategy for ITS deployment in a systematic manner within the specific focus area. The plan also identified funding levels, project budgets, timelines and project participants.

Intelligent Transportation Systems Project Summary	
Fiscally Constrained	$0.59B
Unfunded Projects	$0.22B

Table 13

ITS Projects Identified in the Statewide Plan

CDOT is partnering with the private sector to build a high-speed fiber optic backbone within its right-of-way

As mentioned previously, the ITS Business Plan outlined project and integration activity deployment over a five-year period. These activities are estimated at $67 million, which includes annual operation of the Traffic Operations Center, maintenance of the ITS devices and CDOT Region ITS activities. Also, the Business Plan identifies another $15 million in unfunded demand.

The 2020 Statewide Plan has $0.59 billion dollars for ITS in the constrained element, and an additional $0.22 billion in unfunded ITS projects. It is difficult to determine if the ITS "pooled" funds contained in the Statewide Transportation Plan overlap the ITS Business Plan.

Colorado Transportation Management System

The Colorado Transportation Management System (CTMS) is a statewide transportation management and traveler information system, and is also CDOT's

current program to expand, enhance and augment deployment and integration of the state's ITS. CDOT recognizes that in addition to deploying field devices, integration of ITS control centers; communications; and control, monitoring and information dissemination subsystems is fundamental to the CTMS' ultimate success. The CTMS has a two-fold purpose: 1) to deploy additional field devices and communications infrastructure (to increase overall volume, reliability and flow of data); and 2) to increase systems integration (to enhance timeliness and utility of data for CTMS operators and the public).

CDOT has selected CTMS work tasks using five considerations: 1) maximize private sector in-kind participation; 2) focus on integration; 3) use a modular approach to integrate "pieces" of the system as they are done; 4) use initial integration activities as a "blueprint" for future, expanded integration; and 5) select projects which best "fit" CDOT's ITS Business Plan in terms of vision, mission, goals, objectives and program areas.

When fully built out, CDOT will have access to a high-speed fiber optic backbone paralleling the majority of the Interstate highways (and some other state highways) from border to border. A smaller, localized communications ring is also being established within the Denver area.

Multi-agency partnerships are crucial to the successful implementation of projects such as CTMS. CDOT's public partners include the City & County of Denver, the Denver Regional Council of Governments (DRCOG), the Cities of Colorado Springs and Aurora, the Regional Transportation District and the Colorado State Patrol. Other partners that have emerged include Douglas County, and the City of Lakewood. Additional partnerships have been identified and are being developed as work on the Southeast Corridor begins.

Telecommunications

The State of Colorado envisions a state-of-the-art statewide telecommunications network to support the communication needs of its citizens, businesses and industry, government, educational and medical institutions, public and private organizations and others.

Towards this vision, the state developed a strategy for a multi-use fiber optic network (MNT) in order to connect all state government offices and educational institutions across the state. The MNT identifies 76 Aggregated Network Access Points (ANAPs), basically one per county, where telecommunication traffic associated with state offices and agencies can be aggregated for cost effectiveness. Implementation of the MNT will be occurring through public/private partnerships.

In 1998, Colorado's Legislature passed House bill 99-1102, which provides funding to local entities for the link from their locations to the ANAP site. This

public sector activity has the ability to stimulate private sector investment in telecommunications infrastructure around the state.

CDOT's interest in telecommunications is strictly limited to transportation related needs such as enhancing transportation system operations through the exchange of information on traffic conditions, hazardous conditions, road closures, incident management, transit, rail, airline scheduling information, route planning, etc. In order to move forward with implementing its Intelligent Transportation System (ITS) initiatives requiring advanced telecommunications networks provided by the private sector, the Transportation Commission approved CDOT to enter into public/private partnerships. The first such partnership is the Shared Resources Effort, where CDOT offers use of its highway right-of-way to private sector telecommunications providers. Through this partnership, CDOT receives advanced telecommunication network access for linking its transportation facilities and for ITS deployment.

The Southwest, Gunnison Valley, and San Luis Valley Transportation Planning Regions consider the development of telecommunications to be a significant element of their transportation plans. To that end, the TPRs developed the following vision of telecommunications in the region:

"Our vision is the deployment of a robust, wide-band, high speed, redundant, fiber optic and wireless telecommunication network with sufficient capacity for future growth linking all strategic cities and towns in our region. These city and community networks will then be connected to a public telecommunications backbone for deployment to the worldwide telecommunications infrastructure. The use of this network should be open to reasonable competition among multiple providers, and the company or companies providing the capital to install new infrastructure should be provided ample resources, funding, and every opportunity to recapture their investment with profit.

The Transportation Commission provided the following guidance for Telecommunications concerning transportation planning, programming, and funding:

- In response to the CDOT Mission to provide the best multi-modal transportation system for Colorado that most effectively moves people, goods, and information, the Transportation Commission's interest in "moving information" is restricted to ITS implementation and ensuring its Department buildings and operations centers are interlinked for communication and operational purposes. In no way should the Transportation Commission's interest be interpreted to be in competition with private sector telecommunications providers.
- Regional Planning Commissions are encouraged to consider ITS and transportation-related telecommunications projects within their regional

plans. These projects will compete for transportation funding made available to the CDOT Regions for regional priorities.

Regional Planning Commissions are not precluded from incorporating non-transportation telecommunications projects and programs within their regional transportation plans but the Transportation Commission has determined these non-transportation telecommunications projects and programs ineligible for funding with revenues allocated by the Transportation Commission.

Roadway Assessment

The presence of an extensive public roadway system, low population densities, and historical dependence on automobiles contributes significantly to automobiles being the most popular form of transportation in Colorado. Although this preference will continue in the future, public awareness of traffic congestion, environmental issues, physical constraints, and financial limitations is leading to a more balanced approach to mobility in Colorado. One example is the use of High Occupancy Vehicle (HOV) lanes, which increases the person-carrying capacity compared to general purpose lanes used by single occupant automobiles. Another example is providing mass transit in combination with highway improvements in heavily traveled corridors.

Public Roadway System - 1999	
State	9,147 miles
Local (city/county)	71,107 miles
Total	80,254 miles

Table 14

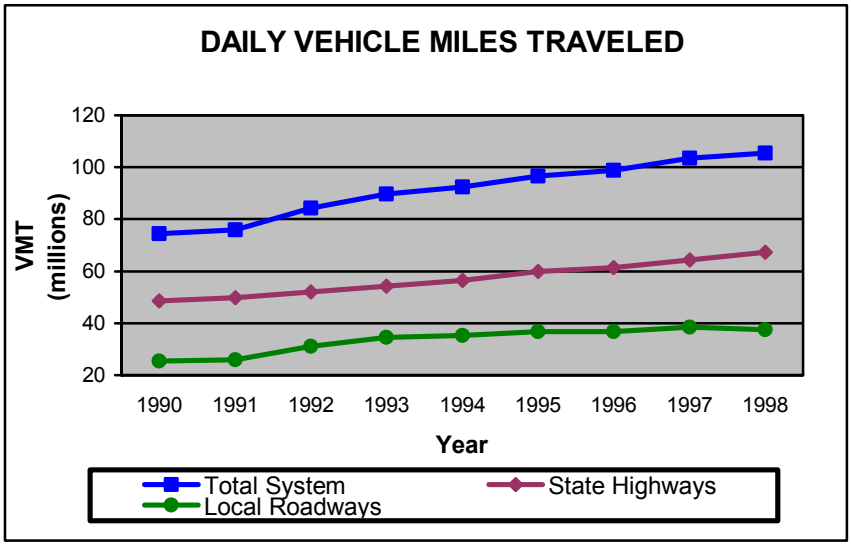
Autos, trucks, buses, and bicycles utilize Colorado's public roadways and users of this system expect a seamless experience in terms of ease of access, physical conditions, and safety. The entities responsible for maintaining and improving the public roadway system, including the Colorado Department of Transportation, municipal, and county governments, strive to achieve this seamlessness for public roadway users.

The interaction of these vehicles is taken into account in the planning process, resulting in a variety of recommendations, such as:

- Safety improvements (channelizing intersections, adding or widening shoulders, signs, guardrails, bus pullouts, sidewalks, etc.)
- Capacity improvements (new highway lanes, HOV/bus lanes, passing lanes, climbing lanes, bicycle lanes, etc.)
- Travel demand management strategies (carpooling, telecommuting, etc.)
- Traffic operations and management strategies (ramp metering, traffic signal timing, incident management, etc.)
- Intermodal connections (e.g., park-n-ride lots)

ROADWAY CHARACTERISTICS

Vehicle Miles of Travel (VMT) is often used as an indicator of increased traffic, which leads to congestion. VMT measures the miles of use on the roadway system. The graph below shows that from 1990 to 1998 the number of daily vehicle miles traveled has steadily increased. VMT increases are due in part to the state's population increase, increases in the number of trips made and trip length, and reduced vehicle occupancy. The map on page 72 illustrates where on the state highway system congestion is occurring. The measure for congestion represented on this map is traffic volume equal to or greater than 85% of capacity. It should be noted that congestion in urban areas occurs more frequently, and for longer periods, than in rural areas.



Daily Vehicle Miles Traveled - Figure 13

CDOT's 1997 Mobility Survey provides insight into public perception concerning congestion. Seventy-three percent of the respondents to the 1997 survey indicated their belief that travel has gotten more difficult over the past several years, with 40% citing traffic congestion as the reason. Although a different question was asked in CDOT's March 2000 Customer Survey, congestion [too many cars on the road] was cited by 38% of the respondents asked why their commute takes longer than usual. With 81% of the 2000 survey respondents commuting to work alone in their vehicles (up from 77% in the 1997 survey), it is not surprising that daily VMT is projected to grow to 165 million by 2020. The projected congestion during high use periods is illustrated on the map on page 73 and can be compared to current mobility conditions illustrated on page 72.

165 million daily vehicle miles of travel projected by 2020!

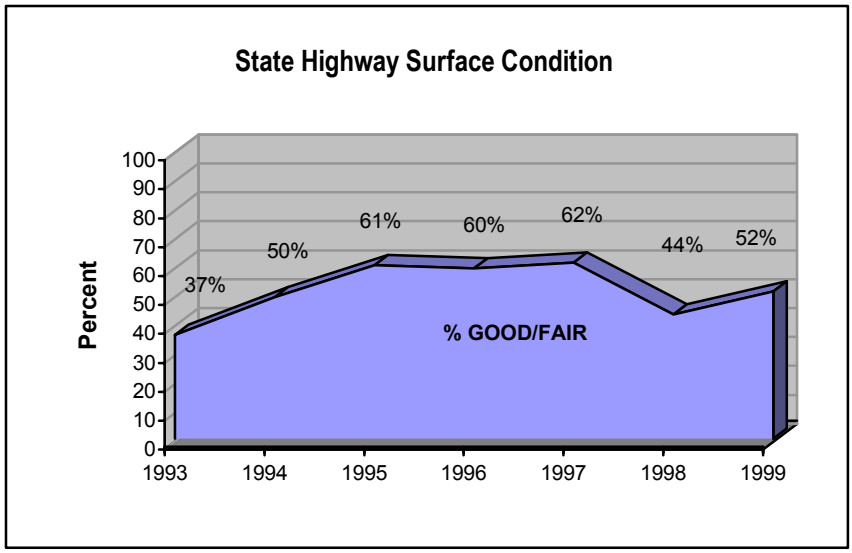
SURFACE CONDITION

Roadway surface is monitored to determine overall condition and provide information regarding treatments necessary to improve the smoothness and

rideability of the pavement, extend useful pavement life, and delay costly reconstruction. Three general roadway condition states are used in this monitoring process, using "remaining service life" as the primary indicator:

- Good (having 12 or more years of remaining service life);
- Fair (6 to 11 years); and,
- Poor (less than 6 years).

In 1999, 52% of the state highway surface condition was rated as Good or Fair.



State Highway Surface Condition - Figure 14

The Transportation Commission allocated $2.3 billion in funding for the surface treatment program. However, an additional $300 million is needed to achieve the Commission's objective of 60% of the state highway pavement in Good or Fair condition. This additional $300 million is included in the unfunded portion of the statewide plan.

Surface Condition Project Summary	
Fiscally Constrained	$2.3B
Unfunded Projects	$0.3B

Table 15

BRIDGES

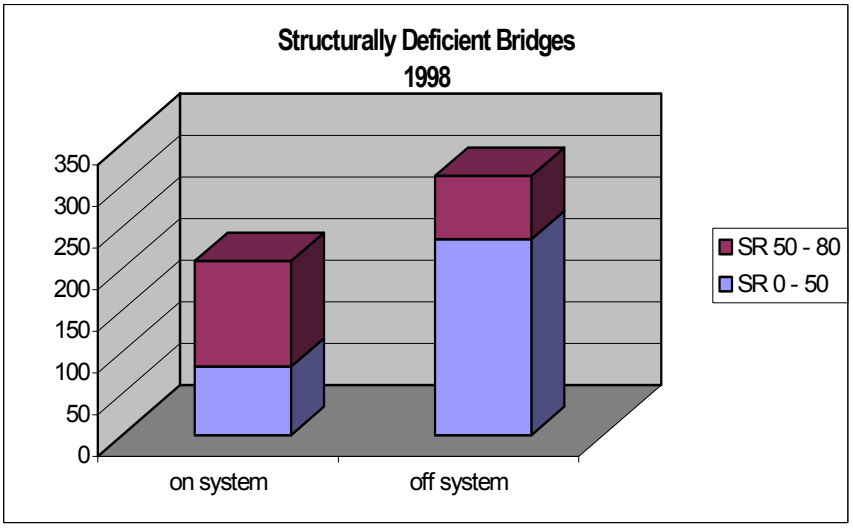
There are 8,413 bridges on Colorado's public roadway system; 3,709 are on the state highway system (noted as "on-system" bridges) whereas 4,206 bridges are "off-system" and under the jurisdiction of counties and municipalities. The remaining bridges are Forest Service and miscellaneous bridges on which CDOT maintains records.

Bridge Project Summary	
Fiscally Constrained	$0.72B
Unfunded Projects	$0.003B

Table 16

Systematic inspections of bridges are performed and data that is collected for numerous structural and operational characteristics are used in CDOT's bridge management system. This system provides information to determine a "sufficiency rating" between 1 and 100, with 100 depicting excellent condition. In addition to the sufficiency rating, bridge inspection information is used to identify structurally deficient (SD) or functionally obsolete (FO) bridges. A bridge is

structurally deficient (nearing the end of its useful life) if the structural integrity fails specific criteria defined by the Federal Highway Administration (FHWA). A bridge is classified as functionally obsolete if the bridge fails FHWA serviceability criteria. Current information from the Bridge Management system is illustrated in the graphs below.



Structurally Deficient Bridges - Figure 15

The Transportation Commission allocated $0.72 billion in funding for this program. Three million dollars of additional bridge needs are identified beyond the fiscally constrained plan.

SAFETY

Safety Project Summary	
Fiscally Constrained	$0.891B
Unfunded Projects	$3B

Table 17

While traffic volume is continuing to increase, the statewide fatal crash rate - per one hundred million vehicle miles of travel - on the highway system is decreasing, from 1.63 in 1995 to 1.38 in 1998. This decrease can be attributed to a number of factors, including programs focused on impaired driving, aggressive driving, restraint usage, improved roadway design, better traffic enforcement, and vehicle safety features, etc. Safety was an issue considered in each of the Transportation Planning Regions, and many projects identified through the regional transportation planning process have potential safety benefits even if the project is primarily described as addressing mobility or system quality.

In addition to CDOT's driver related safety programs, the Transportation Commission allocated $0.556 billion for its signing and striping programs. Additionally, $0.335 billion is allocated to the Safety Pool to be allocated based on the Safety Roundtable's recommendations. Safety-related projects and programs account for 7% of the fiscally constrained element of the 2020

Statewide Transportation Plan. An additional $3 billion of safety related projects are identified in the unfunded portion of the plan.

Noise Barriers and Rest Areas

Transportation is a key aspect of quality of life in Colorado

The fiscally constrained statewide plan identifies $4.9 million for Type II noise barriers at selected locations and $14 million to achieve planned improvements to rest areas. The Type II Noise Barrier program sunsets in 2002 and the Rest Area Program sunsets in 2004. Beyond that, projects will compete for Other Regional Priority Funds.

Maintenance and Operations

State Highway System Maintenance includes routine activities such as blading roadway surfaces and shoulders, fence repair, roadway sweeping, mowing vegetation and litter removal in the right of way, as well as snow and ice control.

Maintenance and Operations Project Summary	
Fiscally Constrained	$4.7B
Unfunded Projects	$2.6B

Table 18

The fiscally constrained statewide plan identifies $3 billion to achieve an overall "B+" rating for these activities. Achieving a level of service "A" would require an additional $213 million.

Much of the Transportation Commission's guidance for the 2020 Statewide Transportation Plan focuses on maintaining the current state highway system, by judiciously increasing the number of centerline miles under CDOT's responsibility, focusing CDOT revenue on the state highway system, and maximizing the efficiency of the current system before adding capacity.

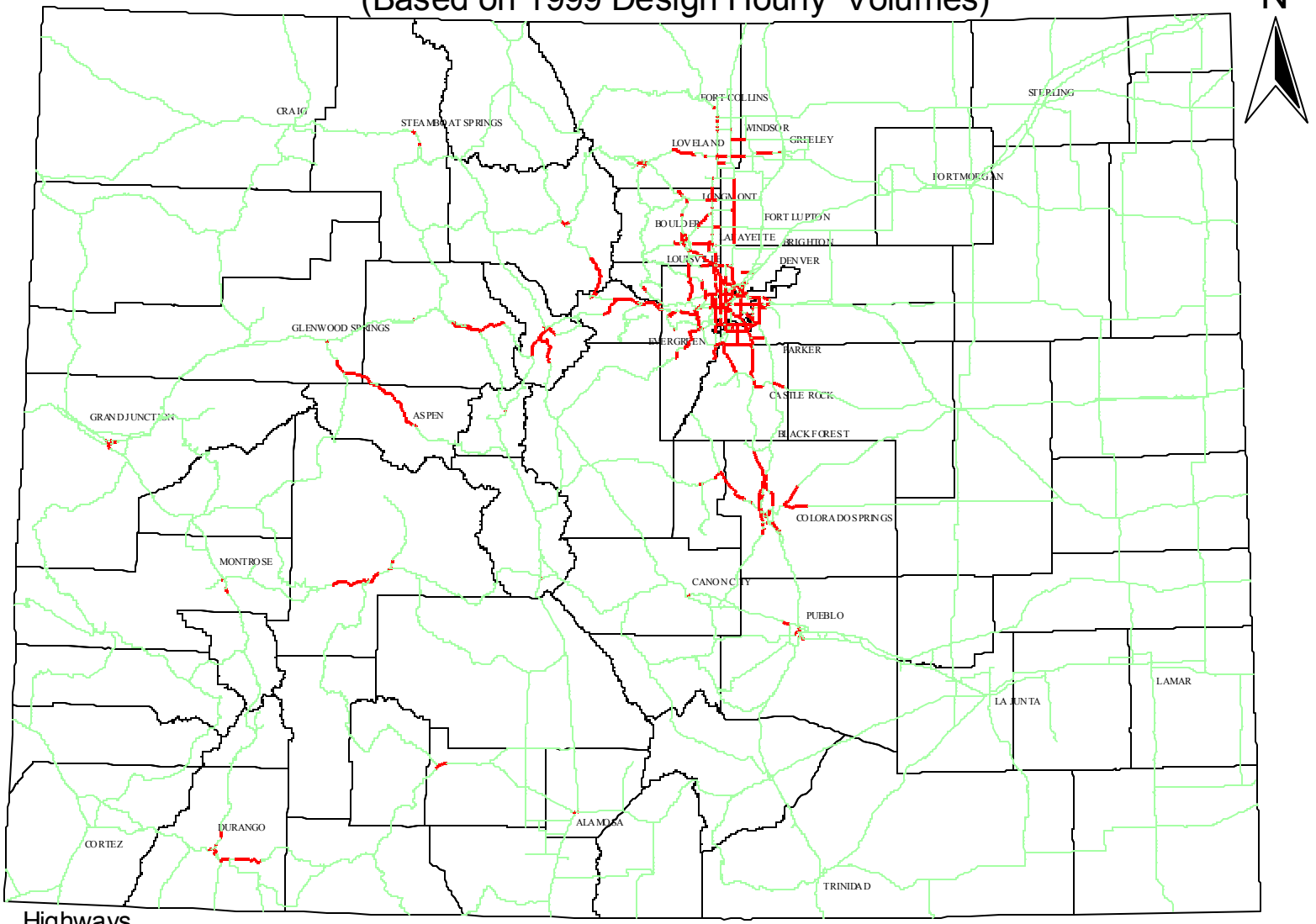
Highway Project Summary	
Fiscally Constrained	$13.88B
Unfunded Projects	$13.98B

Table 19

The majority of the projects and programs contained in the 2020 Statewide Plan are related to highways. The Regional Planning Commissions identified $13.88 billion for highway projects in their constrained plans and $13.98 billion in the Regionally Preferred Plans.

Mobility Conditions on Colorado State Highways

(Based on 1999 Design Hourly Volumes)



Highways

Uncongested -- 0.00<V/C<0.85

Some Congestion -- 0.85<V/C<1.20

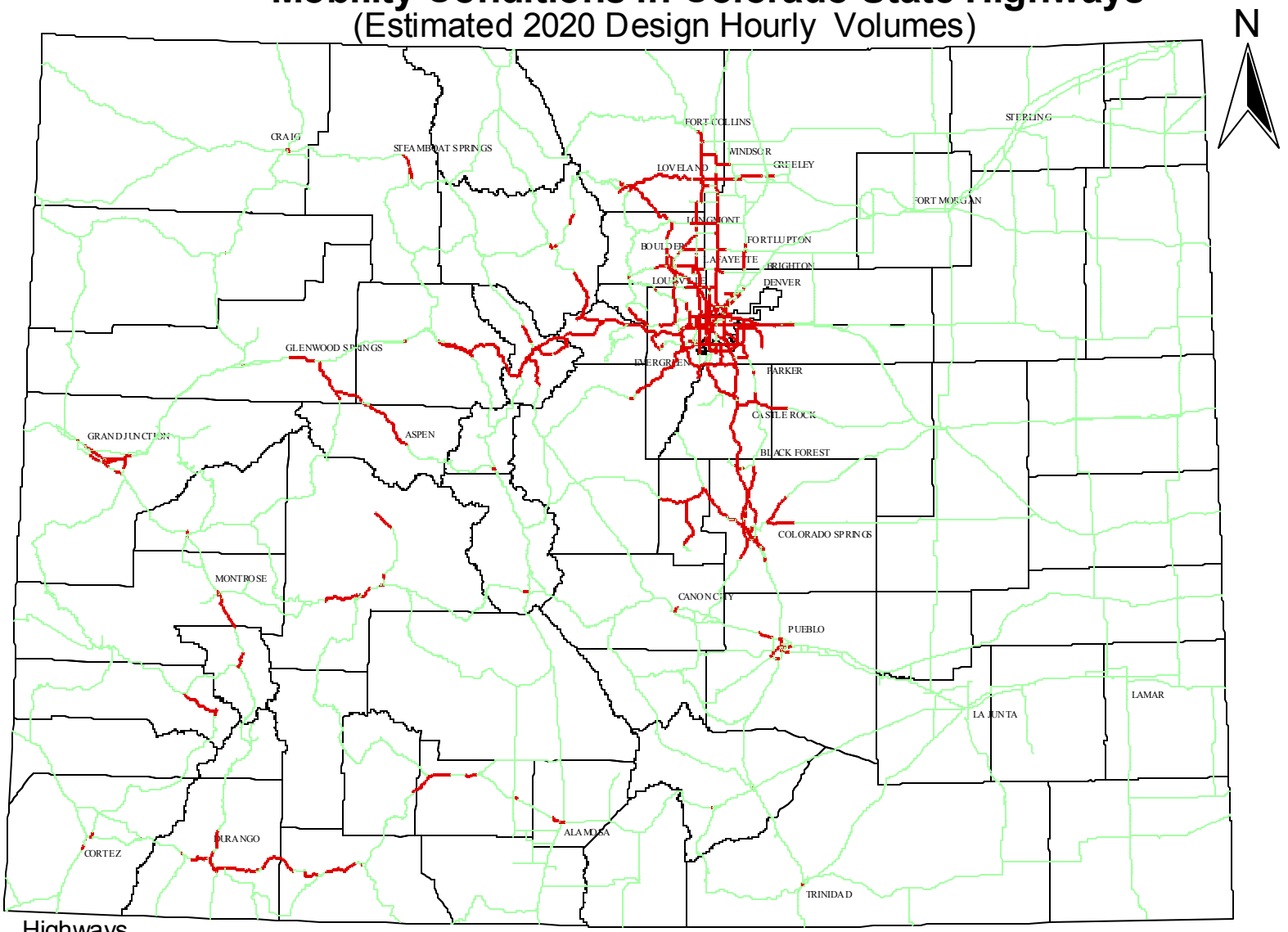
V/C = volume-to-capacity ratio

Design volume = the 30th highest hourly volume

Congestion in urban areas occurs more frequently, and for longer periods, than in rural areas

Mobility Conditions in Colorado State Highways

(Estimated 2020 Design Hourly Volumes)



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COLORADO FREIGHT REPORT

Process

Colorado's 20-Year Transportation Plan adopted in 1996 clearly indicated that freight planning should be more extensive in future statewide plans. Freight planning has improved significantly with the completion of the Western Transportation Trade Network (WTTN) studies, and the draft Colorado Statewide Rail Needs Study (CSRNS) and draft Freight Infrastructure Study (FIS). In the latter half of 1998 and all of 1999, CDOT collected data on freight movement, issues, concerns, and potential projects related to freight throughout most of Colorado via the FIS. Draft FIS reports were available to the Transportation Planning Regions (TPRs) in time to develop their regional plans. The FIS was oriented toward trucking since recent rail studies included significant rail freight data. The data within these and other studies are valuable to the transportation planning process from the local to the statewide levels. The increasing use of the transportation system, limited financial resources, and public expectations demand more efficient and effective planning to support investments in the transportation system.

FEDERAL FREIGHT PLANNING

In 1991 the federal government acknowledged the importance of freight mobility in the Intermodal Surface Transportation Efficiency Act (ISTEA). Within the legislation a variety of funding, planning, and other provisions and requirements were adopted to support state and regional governments in freight transportation planning activities. Subsequent to ISTEA, Congress passed additional legislation to accentuate freight transportation planning in a variety of ways. Additional legislation included the National Highway System Designation Act in 1995, the Transportation Equity Act for the 21st Century in 1998 and the Federal Motor Carriers Safety Administration in 1999. The U.S. Department of Transportation's development and adoption of a National Freight Transportation Policy Statement and Guiding Principles in 1997 is a continuing effort to encourage freight considerations in planning, programming, and project implementation.

COLORADO FREIGHT PLANNING

In Colorado, this and other aforementioned plans address freight transportation through a number of considerations, recommendations and policies. In general, the plans support system quality, safety, and mobility of the transportation system not only for the traveling public but also for freight-haulers and shippers.

The FIS, regional transportation plans, and other local transportation plans for metropolitan areas identify many transportation objectives, actions, projects, and/or programs including freight mobility issues. These plans are intended to be the sources of projects ultimately included in the Statewide Transportation Improvement Program.

Freight and Colorado's Economy

During the 1990s, Colorado was the third fastest growing state in the United States. The state grew by 1,00,687 people to a population of 4,301,261[2]. This growth in population and employment creates growth in all other aspects of society, including the freight industry. Colorado's renowned livability has been a major contributing factor to the population and employment turn-around from the early 1980s when much of the state underwent a severe economic recession. Further contributing to the turnaround was a conscious effort to develop a more balanced economy that would be less adversely affected by national and international swings in prosperity and decline.

Colorado currently exports $6 billion to international markets annually

Even though Colorado has been growing at a significant pace, on the national scale it is a relatively small state in terms of population and employment. Therefore Colorado depends on bringing in money from other states and nations for a considerable part of its economic livelihood. This includes income derived from the export of agricultural, high technology, and other products as well as income from tourism and a wide variety of businesses that sell their services to customers outside the state.

"Colorado's central location within North America, its supportive business climate and well-trained workforce, and the broad array of high-quality products found locally add up to a formula for successful exporting" is the statement repeated often at the Colorado International Trade Office. Colorado businesses currently export about $6 billion (1/3 of that is to Canada and Mexico) worth of manufactured and agricultural products annually. It is estimated that exporting from the state supports about 65,000 jobs.

Canada, Japan, Germany, United Kingdom, and China are among Colorado's major trading partners. Colorado has international trading offices in Osaka, Japan; London, England; and Guadalajara, Mexico. Colorado ranked 13th nationally in value of exports to Asia in 1996. Colorado's freight value moving in international markets totaled $4.6 billion in the first nine months of 1999. High technology equipment accounted for 80%, by value, of Colorado's foreign trade in 1999, up 13.3% from the same period in the previous year.

[2] U.S. Census Bureau – 2000 Census

In part because of the North American Free Trade Agreement, Colorado's trade with Canada and Mexico continues to grow. Canada and Mexico account for nearly $2.1 billion in imported and exported value and one and a quarter million tons of imported goods traded with Colorado. Trucks move over 80% of Colorado's freight to and from Canada and Mexico. The freight industry is also the conduit for access to foreign markets in Colorado's export sector of the economy to and from the Pacific Rim nations and Europe.

Freight is a major generator in moving Colorado's economy. Most freight moves by truck, rail, air, and pipeline, with trucks and rail dominating the greatest volume of freight moved nationally and in Colorado. This has created an increasing demand on the rail and roadway system. Adequate, convenient and reliable transportation is a key variable underlying the success of Colorado's economy. Maintaining a balanced transportation system for moving raw materials to manufacturers and finished products to consumers helps Colorado companies compete favorably with companies elsewhere. Over time, failure to maintain and improve the transportation system for moving freight could result in Colorado's economy becoming less competitive with those in other states and nations.

Colorado's Freight Transportation System

HIGHWAYS

Much of Colorado's highway, rail, and pipeline freight travels the North-South corridor of Interstate 25 and the East-West corridor of Interstate 70. State Highways 160, 50, 40, 36, 34 and I-76 are other important corridors for East and West freight movements. State Highways 550, 385, 287, 285 and 71 are other important North/South corridors. Most truck freight moves on the National Highway System (see map on page 77), which accounts for about 32% of Colorado's total highway mileage.

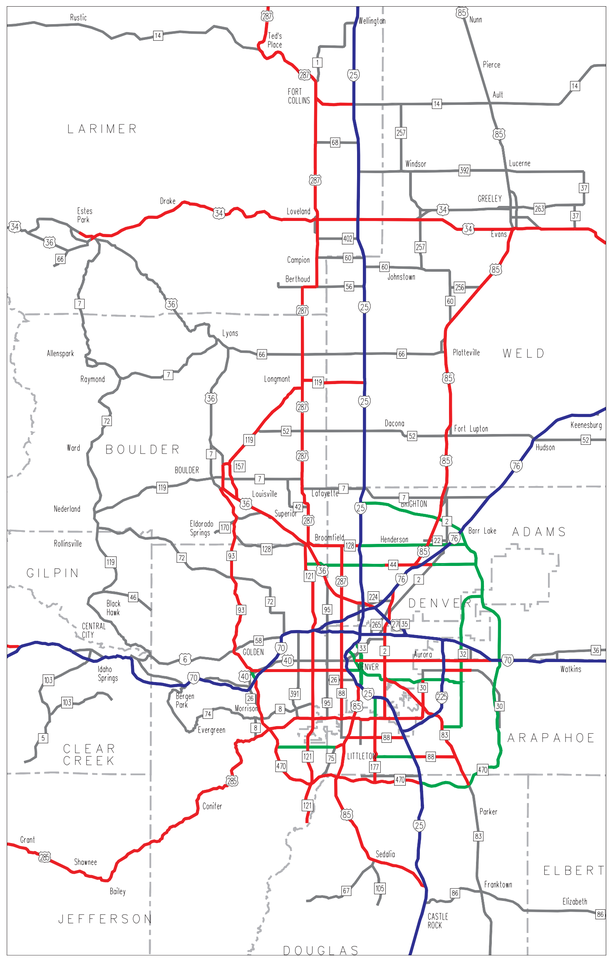
TRUCKING

Among Colorado's leading truck freight-related businesses, in terms of employment and shipments, are United Parcel Service, Federal Express, Roadway Express, Consolidated Freightways, USF Reddaway, Werner Enterprise, Westway Express, and Yellow Freight System. The package delivery market is projected as an area of significant growth. Data are lacking in this area due to exemptions in the reporting requirement for the US Department of Commerce's Commodity Flow Study. In the Denver area, more than 25,000 trucks daily traverse the junction of I-25 and I-70 and more than 19,000 daily traverse the junction of I-25 and I-225. Depending on location, truck volumes on interstate highways in the state range from approximately 1,600 to 21,000 daily.

COLORADO
NATIONAL HIGHWAY SYSTEM

October, 2000

- NHS Routes - Interstates
- NHS Routes - State Highways
- NHS Routes - Local Roads
- Other State Highways



RAIL

Two major Class One railroads and 11 regional/local/switching and terminal railroads operate on 3,039 miles of rail line in Colorado. The Union Pacific (UP) accounts for the most rail mileage, about 1,595 miles. Burlington Northern/Santa Fe (BN/SF) operates on 952 miles of rail. Short-line railroads account for about 12% of total rail mileage. Among short line railroads, four operate on between 50 and 100 miles of rail. In Colorado, coal dominates all originating traffic with 67% of the total. Other rail freight originating in Colorado includes food products, farm products, nonmetallic minerals, and waste and scrap. Coal is also the largest commodity that terminates its rail shipments in Colorado, at 56% of the rail tonnage. Other incoming products include lumber and wood products, nonmetallic minerals, farm products, and mixed freight.

PIPELINES

Amoco, Chase, Chevron, Conoco, Diamond Shamrock, Kaneb, Phillips, Sinclair, and Wyco Pipeline Companies are the primary pipeline companies in Colorado related to the petroleum products industry. The products in these pipelines flow into Colorado from Medicine Bow and Cheyenne, Wyoming; Scott City, Kansas; and Borger, Texas. Crude oil for Colorado's Conoco and Total refineries are supplied through the pipelines as well as refined petroleum products, such as gas, jet fuel and diesel. One pipeline runs from Denver to Fountain, Colorado and another runs from the Conoco refinery to the Chase Aurora Terminal that supplies the Denver International Airport. The main lines are six to ten inches in diameter.

INTERMODAL FACILITIES

The mergers of the Union Pacific with the Southern Pacific and the Burlington with the Santa Fe railroads left Colorado with only two intermodal railroad/truck freight facilities, located at 53rd and Elati (UP) and at 40th and York Street (BN/SF) in Denver. There are currently 69 licensed grain storage and loading facilities served by both rail and highway in Colorado. Only three are located on the Western Slope, one in Craig and two in the San Luis Valley.

AVIATION

Colorado's has 79 public-use airports that provide a variety of services. The airline industry employs over 22,000 people in Colorado; most are involved with air freight shipments to some degree. The air cargo industry is of increasing interest to Commercial Service and General Aviation airports in the state. Air cargo shipments at DIA alone accounted for 323,394 tons of freight movement in

1998. Air freight is typically a low weight and high value type shipment. According to the Colorado Aeronautics Division, the 79 public-use airports in the state generate an annual economic activity impact of $14.3 billion.

Other Freight Generators

Colorado is primarily a tourist, communications, and agricultural economy, therefore it is relatively dependent on the wholesale trade and distribution associated with the freight side of the goods movements supporting these industries. A large number of distribution facilities are located in Denver, Colorado Springs, Pueblo and Grand Junction as well as elsewhere in the state. The distribution centers and warehouses are mostly concentrated near major highways such as I-25, I-70, I-225 and I-270.

The majority of Colorado's truck terminals are located in the Denver metropolitan area. Much of the state's national and international air cargo moves through re-load facilities in Denver, Grand Junction, Colorado Springs and Pueblo and is shipped by truck to the major airports.

Colorado grows a variety of agricultural commodities and ranks in the top 10 states in production of all potatoes, sheep, sunflowers, cattle, edible dry beans, onions, spinach, wheat, barley and cantaloupe. The freight industry is relied on to deliver this almost $4.5 billion market from the farming communities to storage facilities, processing plants, and customers.

Commodity Movements

Data from the federal Commodity Flow Survey show that Illinois, Texas, and Alabama are the leading destination states, in tonnage, for products shipped from Colorado. Wyoming, Texas and Nebraska are the leading origins for products shipped to Colorado. By value of the product, leading destination states are California, Texas, and New York. Also by value, California, Texas, and Wisconsin are the leading origins of product shipped to Colorado. In 1997, trucks moved 64% of the value and 76% of the weight of shipments originating in Colorado. About 38% of commodities by value and 80% by weight were shipped less than 100 miles. Truck and rail freight tonnage will increase 28% by the year 2020.

Freight Needs Assessment

Performance Indicators

Information about freight-related concerns and potential projects has been obtained in several ways. Interviews with stakeholders such as shippers, carriers, haulers, quasi-governmental, and other freight representatives were

conducted as part of the Freight Infrastructure Study (FIS). Based on these interviews, 196 potential projects were identified. Additional information was collected for the WTTN Study and the Colorado Statewide Rail Needs Study. In the spring of 2000, a Statewide Customer Telephone Survey was conducted that also included two freight industry focus groups. The focus group participants corroborated the findings of the freight industry derived from the FIS and the Statewide Customer Telephone Survey. Congestion and road conditions topped the list of concerns. A number of the concerns regarding the movement of freight by highway, rail, and air are addressed in the plan.

Highways/Trucks

There will be more trucks in the years to come because of the internet. "E-commerce" is the reality that faces the freight industry and everyone else that uses the transportation system.

Poor pavement condition was identified as a concern in the FIS. Current state highway pavement condition is rated approximately 52% good or fair in all categories of highways, with interstate at 63% (22% less than the goal), NHS non-interstate at 50% (20% less than the goal), and other highways at 49% (6% below the goal). The Transportation Commission increased funding to $135 million for surface treatment from $120 million in late 1999. Based on increased traffic, including trucks, on the system, pavement conditions are expected to deteriorate slightly until 2005 before increased resources will begin to turn the trend around. Because of this increased allocation, the concerns identified in the FIS should be reduced over time.

The study identified 204 highway-related projects. The majority of these were for highway widening, intersection improvements (signalization, geometry, widening, etc.), and bypasses/new roadway construction. Interchange improvements, resurfacing, railroad/highway grade separation, maintenance (ice and snow removal, etc.), and bridge replacement/widening were also identified as needed in many locations throughout Colorado. Also mentioned were noise barriers, relocating railroad tracks, and an assortment of other projects. Approximately 31% of the identified projects were included in the Regional Transportation Plans and are subsequently included in the 2020 Statewide Transportation Plan's fiscally constrained or unfunded demand lists. That leaves over $2.6 billion in additional projects identified by the freight community. Also, there are currently $610 million in bridge replacement and rehabilitation projects identified throughout Colorado. The FIS identified an additional $45.1 million for unmet bridge (non-railroad/highway separation) replacement, rehabilitation, or new construction.

The concerns of truckers are primarily safety or congested related. The major metropolitan areas on the Front Range have a congestion problem that negatively affects freight deliveries. Concerns in rural areas center less on congestion and more on problems such as insufficient rest areas, inadequate bridges, sharp curves, lack of shoulders, or pavement in poor condition. Signage and bridge conditions were listed as other freight industry concerns.

According to U.S. Census Bureau statistics, some 47% of all ton-miles traveled on Colorado roads are through-state miles. That means that of the 14 billion ton-miles traveled on Colorado roads in 1993, 6.5 billion impacted road conditions, but did not contribute appreciable value to the state's economy, other than through fuel and vehicle taxes.

With the estimated future increase of 41% (in truck Vehicle Miles Traveled (VMT) by 2020 on Colorado roads and a 28% increase in freight tonnage on Colorado highways and railways by 2020, needs and associated impacts may increase proportionately.

COLORADO TRUCK TON-MILES
(000)

	From	To	Within	Through
Ton-Miles	1,430	2,158	3,934	6,574

Source: U.S. Census Bureau, Commodity Flow Survey 1993
According to the USDOT Bureau of Statistics, 46.6% of all commodities (measured by ton miles) carried on Colorado roads are moving through the state.
Table 20

TRUCK DAILY VEHICLE MILES TRAVELED						
Urban						
	Interstate	Freeway	Other Principal Arterial	Minor Arterial	Collector	Local
1995	1,065,802	353,200	428,263	59,858	3,972	89
2020	1,520,874	518,238	593,504	92,715	7,070	97
Rural						
1995	1,813,412	n/a	1,064,674	566,491	135,515	5,869
2020	2,660,722	n/a	1,421,177	746,103	188,779	7,985
Total 1995						**5,497,145**
Total Projected 2020						**7,757,264**
Projected % VMT Increase from 1995 to 2020						**41.1%**

Table 21

Source: CDOT Division of Transportation Planning – FIS (Table B.1)

Rail

Decreasing access to freight rail service due to rail abandonments was identified as a concern across the state. Since the completion of the 1979 State Rail Plan, 310 route-miles of track have been abandoned in Colorado. The Leadville Branch and the Templeton Gap Spur are currently pending or have recently completed abandonment proceedings. Another potential abandonment includes the Sage-Canon City (Tennessee Pass Line) rail line that provides services to the central East/West rail corridor.

One of the major concerns identified in the FIS and the Colorado State Rail Needs Study is Colorado's 1,942 at-grade railroad crossings, not only because of the safety issues but also for the delays to freight delivery and the traveling public. The state has identified a total of 19 at-grade crossings exceeding an "exposure factor" to vehicles of 75,000 vehicles per day. Seventeen of these are in the Denver metropolitan area and two are in Grand Junction. The estimated cost to build grade-separated crossings at these locations is $176 million. Where crossings cannot be grade-separated or closed, resources should be targeted to install, at a minimum, automated safety devices.

Other than at-grade rail crossings, improving tracks in poor condition and adding rail capacity are the most significant freight related projects for Colorado's rail industry, according to the FIS. According to interviews conducted with railroad companies, capacity problems in the North/South rail corridor parallel to I-25 between Denver and Colorado Springs continue to be an issue. An average of 53 trains per day operate in this rail corridor, part of which is single track. A 1994 analysis of this corridor identified improvements estimated at $57.6 million.

The WTTN study identified 17 deficiencies in Colorado rail corridors ranging from single track/dual track operation to eliminating the creation of community barriers.

COLORADO FREIGHT TONNAGE (000) (Truck and Rail)			
Year	Originating in Colorado	Destined for Colorado	Total
1993	232,891	205,170	438,061
2020	269,867	291,122	560,989
Projected % Increase in Tonnage Shipped 1993 to 2020			28%

Source: U.S. Census Bureau, Commodity Flow Survey 1993
Note: Originating Tonnage includes data Colorado to Colorado Shipments

Note of Importance: Tonnage does not include freight going through the state.

Table 22

Intermodal Facilities

Issues at the state's several intermodal facilities have been identified. The UP intermodal facility in Denver has a large unpaved parking area and provides only limited parking for empty trucks. If the proposed "air-train" from Denver Union Terminal to Denver International Airport becomes a reality, it would bisect this facility and necessitate its relocation. If operations at this facility increase significantly, there may also be a need for signalization at the access onto 40th Avenue.

BN/SF also maintains an intermodal operation in Denver. The facility is in good condition, however the access on 53rd Place is in need of maintenance. Throughout the state additional air/truck, rail/truck transfers, inter-city bus, and Amtrak terminals manage other freight movements.

Aviation

In 1997, Colorado's Aeronautics Division identified a number of improvements that would directly or indirectly enhance air freight movements. These include: developing commercial service at five airports; expanding air cargo aprons at general aviation airports; making improvements to air cargo facilities; and, developing a sixth parallel runway at DIA. CDOT's Aeronautics Division has completed a Colorado Aviation Plan that includes policies and actions to address various issues associated with Colorado's air transportation system. Individual airports currently are updating airport master plans that identify various types of improvements. For air cargo/freight facilities, this includes the cargo apron, cargo building area, dock facilities, parking spaces, and cargo site area. Costs for these projects and programs are not currently available.

Regulations, Policies and Issues

The Freight Infrastructure Study also solicited information from government entities, economic development officials, and truck / rail shippers and providers in each Transportation Planning Region (TPR) to determine their concerns regarding freight-related policies and issues. The table below lists the concerns expressed within the three major sub-regions of Colorado. The issues of concern to most TPRs are the high taxes and registration fees required to operate trucks in Colorado. Concerns over load limits, rail abandonments and reliable rail service were also expressed by a number of TPRs. Companies that ship by truck would like the allowable load limits to be increased during agricultural harvest season in order to increase efficiency and speed up the critical farm-to-market delivery time. Many shippers, particularly in the coal industry on the western slope, prefer to ship via rail rather than truck due to the associated cost savings. However, rail car availability and service reliability often hinder this shipping method. Many are concerned that rail lines in their area will be abandoned, thereby precluding use of this vital shipping method. Other responses suggest that the infrastructure is in poor condition and needs better routine maintenance.

COLORADO FREIGHT INDUSTRY ISSUES													
Geographic Area	Competitive Rail Rates	Freight/Passenger Rail Issues	High Taxes and Fees	Increase Allowable Loads	Increase Overpass/Tunnel Heights	Maintenance	More Reliable Rail Service	Poor Highway Pavement/Bridge Conditions	Poor Snow & Ice Removal	Rail Abandonment	Stricter Emission Controls	Support Local vs Out-of-State Companies	Truck/RR Whistle Noise
Front Range	X		X	X		X	X	X		X	X	X	
Eastern Plains			X	X						X		X	X
Western Slop	X	X	X	X	X	X	X	X	X	X			X

Table 23

THE 2020 TRANSPORTATION PLAN

This section discusses the integration of the regional plans with statewide programs to produce the project component of the 2020 Statewide Transportation Plan. This section also discusses the local roadway system in terms of its importance to Colorado's transportation system, and acknowledging that a comprehensive statewide assessment of local roadway capital and maintenance needs must still be pursued.

Developing Regional Transportation Plans

Each Regional Planning Commission (RPC) was asked to develop a regional plan that identifies all modes of transportation, including roadway, public transit, rail, aviation, intermodal, telecommunications, travel demand management strategies, and bicycle and pedestrian projects which:

- Address mobility and accessibility requirements
- Support economic growth and development
- Protect the environment
- Sustain the desired quality of life as defined in the values, vision and goals

Five considerations for the regional and statewide plans

- Envision **The Future**
- Sustain **Quality of Life**
- Create **Balance**
- Provide **Accountability**
- Build **Partnerships**

The regional plans consider the role of each mode of transportation in providing mobility to people, goods and services. Key elements of the regional plans include an emphasis on maintaining the integrity of the existing transportation system and encouraging alternatives to the single occupancy vehicle form of travel.

RPCs used the following criteria to select potential projects:

- Does the project aid in the attainment of the goals developed by the RPC?
- Does the project represent a justifiable need?
- Does the project contribute to an integrated system that meets the RPCs' needs?
- Does the project seem to be realistic based on environmental and physical constraints?

Affirmative answers to these types of questions more than likely would enable a project to become part of a regional plan.

The regional transportation planning process in the metropolitan areas vary from what is described above due to specific federal requirements applicable to the Metropolitan Planning Organizations (MPOs) as described in the Introduction.

Statewide Programs and Transportation Commission Priorities

The Transportation Commission identified a number of specific statewide programs to be integrated with regional projects as part of the 2020 Statewide Transportation Plan. These statewide programs include:

- CDOT Strategic Projects (7th Pot) – 28 long-term high-priority transportation corridors identified by the CDOT Transportation Commission to receive accelerated funding. See Map on page 105.
- CDOT Surface Treatment Program – The CDOT Surface Treatment program uses a process of identifying the remaining service life of the state highway system to determine where the surface treatment funding should be used in meeting the Transportation Commissions goals. The Transportation Commission has set an objective of having 60% of the state highway system rated as good or fair.
- CDOT Bridge Program – The CDOT Bridge program uses a process of identifying the condition of every bridge on the highway system to determine where bridge funding should be used. The Transportation Commission has set a goal to meet 100% of structural, functional, and maintenance needs of the structures on the state highway system.
- CDOT Rest Area Program – The CDOT Rest Area program identified current rest areas that needed to be replaced, reconstructed, and maintained to meet the Transportation Commission's goals for the program. Funding for construction and replacement of rest areas will sunset in Fiscal Year 2004 when prioritized projects are expected to be completed.
- CDOT Noise Barrier Program – The CDOT noise barrier program identified Type II noise barriers. A Type II noise barrier is a barrier placed along an existing highway facility to address significant noise impact from traffic. The CDOT Transportation Commission has determined that the program will sunset in Fiscal Year 2002.
- CDOT Small Urban Program – Federal Aid Urban System (FAUS) funding was eliminated with the passage of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). The CDOT Transportation Commission created the Small Urban program to allow Small Urban Areas time to transition from the FAUS program and to

honor their Transportation Improvement Program commitments. The Small Urban Program is scheduled to sunset in 2004. (See discussion on page 23).

- CDOT Safety Program – The CDOT Safety Program is aimed at meeting the Transportation Commission's goal to reduce motor vehicle crashes, injuries, and fatalities on the state highway system. In addition, safety program objectives for sign replacement and roadway striping have been established.
- CDOT Maintenance Program – The CDOT Maintenance program uses a process of grading maintenance levels of service on the state highway system. The Transportation Commission has established specific grade levels as objectives for the various activities associated with the maintenance program.
- CDOT Operations – the CDOT Operations program addresses the variety of administrative functions enabling CDOT to deliver its construction and maintenance programs. These include general support activities such as procurement services and human resource management, as well as program support activities such as transportation planning and roadway design.
- CDOT Transportation Enhancement Program – Starting with ISTEA and continuing with the TEA-21, 10% of Surface Transportation Program funds are set aside for transportation enhancements. Transportation enhancements include facilities for bicycles and pedestrians, scenic or historic highway programs, landscaping, historic transportation building preservation, preservation of abandoned railway corridors, mitigation of water pollution due to highway runoff, and others. The CDOT Regions are responsible for the administration of this program, working with their TPRs.

Local Roadways

LOCAL STREET AND ROADWAY DESCRIPTION

The System

The municipal and county streets and roads are a vital component of the state's public roadway network. In addition to providing mobility for all citizens on a daily basis, local streets and roads provide seamless access to and from markets and play a key role in the state's tourism industry.

The local roadway system represents nearly 86% - or 71,107 miles - of the state's 80,254 centerline miles of public roadway that are eligible for state Highway Users Tax Fund (HUTF) revenues. Over the past decade, the system

has grown by over 2,600 centerline miles, from 68,504 miles in 1990 to its current size.

On average, 290 centerline miles of streets and roads are added to the local system each year. The majority of growth in system mileage has occurred in municipalities where centerline miles have increased by nearly 17% in the last 9 years. In contrast, county roadway growth over the same period increased by 1.5%.

At present, about 35% of the state's Vehicle Miles of Travel (VMT) are on the local roadway system (see Figure 13). The local roadway system share of statewide VMT has remained stable at this level over the past decade.

The local bridge system of over 4,500 bridges (includes only those in excess of 20-feet in length) constitutes about 55% of the state's bridge system.

Locally Defined Needs

The most recent CDOT effort to determine local system needs was included in Colorado's 20-Year Transportation Plan adopted January 1996. The analysis covered a 12-year period from 1988-2001. Specifically, it reflected system-wide improvements to surface condition, maintenance and operations, bridge, and additional roadways for both "high" and "medium" growth scenarios.

The "medium" scenario identified $14.06 billion in needs and $5.18 billion in revenue reflecting a shortfall of $8.88 billion. The "high" scenario identified $17.74 billion in need and $5.18 in revenue reflecting a shortfall of $12.56 billion.

Assessment Process

Because of the lack of both a compatible database *and* a mutually agreed upon methodology for determining local roadway needs, a comprehensive assessment of Colorado's 63 counties and 270 municipalities continues to be an elusive goal.

It is evident, however, that in a number of areas where there have been comprehensive efforts to quantify local roadway needs (often in response to the citizens' demands to better address growing maintenance and mobility transportation problems), the number of unfunded roadway improvements identified are significant.

Recently collected data on unfunded roadway improvements put together by the Colorado Municipal League and Colorado Counties Inc. reflects on their concerns. A brief description of some of the findings follows.

- **Elbert County** - The county needs to replace 22 temporary bridges that were built following a flood in 1965. They are estimated to cost

$22.6 million. With about $4 million available annually, of which about 50% is allocated to construction-preservation activities, it would take approximately 12 years to replace these bridges.

- **La Plata County** - The county has identified $263 million in reconstruction projects, safety enhancements, and efficiency enhancements. Given the county's current funding level for road and bridge special projects of $2.5 million per year, only $50 million of these projects can be completed over the next 20 years.
- **Larimer County** - The 1998 Larimer County Transportation Plan identified $100 million in existing construction deficiencies on the county road system and an additional $100 million over the next 20 years. Based on the current level of funding for construction of about $2 million annually, it could take 100 years to make the improvements.
- **Pitkin County** - A recent Pavement Management Study recommended the expenditure of $2.1 million annually to improve the pavement integrity of the existing county road system. Given other county transportation priorities, there is only $1.4 million available annually to maintain the existing roadway system, leaving a shortfall of $14 million over the next 20 years.
- **Fort Collins** - The city has identified $324 million in capital projects through 2015 and only $43 million in funding. In addition, annual shortfalls of $3.8 million for maintenance and operations and $6 million for transit were identified.
- **Loveland** - The city's 2020 Transportation Plan indicates only half the needed $250 million for capital projects would be available. In addition, the maintenance and operations budget is underfunded by $700,000 annually.
- **Grand Junction** - The city has identified $35 million of unfunded overlays and other capital transportation requirements over the next 15 years, and is funding only $1-1.5 million of the $2.5 million per year recommended by the pavement management program.
- **Pagosa Springs/Archuleta County** - A 1998 Road Assessment Study identified $66 million in capital improvements to accommodate traffic through 2017 and identified only $1.5 million annually in county and municipal sales tax revenues to address those improvements.
- **Steamboat Springs** - The city has documented an estimated $3-10 million shortfall for street widening, bridge replacement, intersection improvements.
- **Lake City** - The city has identified $2.2 million in unfunded improvements to pave gravel roads and to provide adequate storm drainage to protect the new investment.

- **Pueblo** - The city has identified the need for about $9 million to resurface local streets that are in poor condition plus $2 million per year for resurfacing to maintain the streets that are in fair condition. However, the City can only provide $1.3 million annually for these maintenance activities.
- **DRCOG** - The DRCOG fiscally constrained 2020 Regional Transportation Plan identified $1.5 billion in local roadway projects in the Denver Metropolitan Area. The Metro Vision phase of the planning process estimated an additional $13.4 billion in local roadway needs including such activities as constructing new roads, widening of existing roads, paving gravel roads, reconstruction, maintenance and operations, and off-system bridges.

This list of unfunded transportation improvements, from only a sampling of the 63 counties and 270 municipalities, underscores the level of unfunded demand on the municipal and county street and road systems. Despite the increased financial efforts of local taxpayers to support these locally defined improvements (as discussed in more detail below), there remain significant immediate and future unfunded roadway projects and related improvements.

Local Revenue

In 1998, CDOT, municipal and county governments had combined revenues of about $1.7 billion for transportation improvements to the state and local roadway system. In that year, local governments' share of $857.1 million represented slightly over half of the total revenue directed toward highway, street, and road projects and maintenance activities throughout the state. Local revenues spent on county roads and municipal streets are generated from local, state, federal and private sources (see Table 24).

BREAKDOWN OF LOCAL REVENUE
1998
(Dollars in Millions)

Source	1998	Percent of Total
Local	578.7	68
HUTF	241.7	28
Federal	12.3	1
Private	24.4	3
Total	857.1	100

Table 24

Source 1998 Annual Statement of Receipts and Expenditures for Roads, Bridges, and Streets – City/County Report

The 68% of locally generated revenues are from sources such as local sales taxes, property taxes, and general fund appropriations as contrasted to the 28%

comprised of user fees such as motor fuel taxes and vehicle registration fees. Federal and private sources account for approximately 4% of local revenues.

Local governments have attempted to keep pace with ever-increasing demand for local roadway needs as demonstrated on the following table. Local government revenues allocated to transportation purposes has increased by 68% since 1990, from $510.3 million annually to $857.1 million annually in 1998.

LOCAL REVENUE GROWTH BY SOURCE
1990-1998
(Dollars in Millions)

Source	1990	1995	1998	Percent Growth
Local	348.2	417	578.7	66.2
HUTF	152.6	196.6	241.7	58.4
Federal	9.5	10.9	12.3	29.5
Private	0	17.0	24.4	-
Total	510.3	641.5	857.1	68

Table 25

Locally generated revenue has been the fastest growing source available for local roadways. Between 1990 and 1998, the locally generated sources grew by 66%. Local taxpayers contribute about $2 of revenues for every $1 of state-shared user fees received.

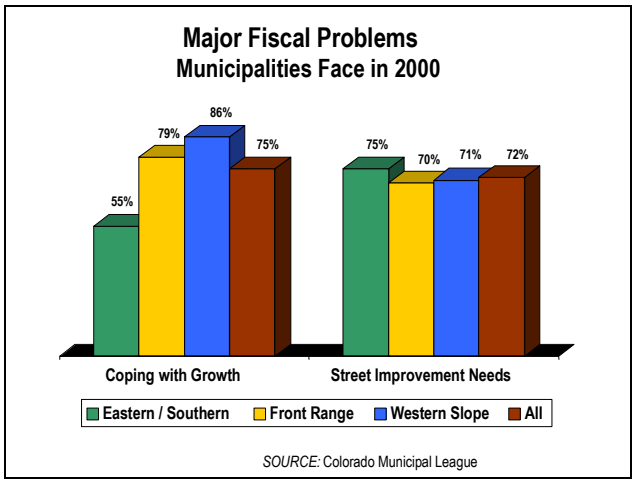
In addition to local governments providing the majority of funding for local roads, the 2020 Statewide Transportation Plan indicates that the vast majority of the state's public transit operating revenues also comes from local sources. These transit revenues are not included in Table 25

For both the state's urbanized areas (Denver, Colorado Springs, Fort Collins, Grand Junction, Greeley and Pueblo) and the operators that serve the mountain resort communities, approximately 75% of their operating revenues are derived from local government sources. The state's rural and specialized services (i.e., demand responsive service aimed at elderly persons with disabilities) receive about 25% of their annual operating revenues from local sources. The 1999 Transit Benefit and Needs Study identified about $190 million annually (1996 dollars) in locally derived revenue going to support transit operating costs in the state.

Fiscal Challenge

Despite ever-increasing demands on strained financial resources, local governments are expected to not only maintain the existing system but increase capacity on local roadways. A recent survey by the Colorado Municipal League of its member governments found that coping with growth and street improvement needs ranked 2nd and 3rd, respectively, as their top financial concerns. (See Figure 16). With Colorado's population expected to grow by 40%,

from 4.3 million in 2000 to nearly 6 million by 2020, meeting these demands will not get easier.



Major Fiscal Problems Municipalities Face - Figure 16

TRANSPORTATION FINANCING

TOTAL TRANSPORTATION REVENUE

CDOT prepares revenue projections periodically as part of its resource allocation and budgeting process. Revenue projections are made for both 20 and six-year planning periods for purposes of developing the statewide and regional long-range transportation plans, the Metropolitan Planning Organizations' Transportation Improvement Programs (TIPs), and the Statewide Transportation Improvement Program (STIP). For purposes of developing the MPO long range transportation plans, the MPOs and the state cooperatively develop estimates of funds that will be available to support plan implementation.

REVENUE SOURCES

Federal

The 1998 Transportation Equity Act for the 21st Century (TEA-21), is the federal legislation that directs how much and for what purposes each state can spend federal transportation dollars. The main sources of funding at the federal level include the various modal trust funds and accounts that distribute funds back to the states by formula or at the discretion of Congress. Federal revenues that flow into these funds come predominately from the federal tax levied on motor fuel and various other transportation taxes and fees. Federal transportation funds currently account for about 35% of the total funds available to CDOT.

State

All revenue collected at the state level for transportation and transportation related purposes is initially deposited into the Highway Users Tax Fund (HUTF). Traditional revenue sources include taxes collected on motor fuel purchased within the state and various taxes and fees associated with transportation (e.g., motor vehicle registrations and other fees). A recent additional source of revenue for transportation has come from legislation that has directed some state general fund surplus to transportation. State generated funds currently account for about 65% of the total funds available to CDOT.

Besides using the more traditional sources of revenue and mechanisms to advance projects, CDOT has also taken advantage of other financing options to accelerate project construction.

- Recent federal legislation allows for the creation of State Infrastructure Banks (SIB). The SIBs are capitalized with federal transportation funds

that are then lent to local governments for transportation projects that benefit the state's transportation system.

- Passage of the recent Transportation Revenue Anticipation Notes (TRANs) statewide transportation ballot issue provides funding for critical state highway projects based on the sale of anticipation notes backed by federal funds earmarked to the state. The proceeds from these notes will accelerate construction projects that would take many years longer to complete if they were funded on a "pay-as-you-go" basis. Because the rate of the bonds is lower than the current annual cost increases of the projects, it is anticipated that actual cost savings can be expected.

The following table provides an historical perspective of CDOT's revenues from Fiscal Years 1990 to 1998 to illustrate several trends. The dollars in this table are presented in millions.

Source	FY90	FY95	FY98	Percent Change FY90-98
State HUTF	$233.1	$289.7	$362.6	56%
Sales & Use Tax	$ 0.00	$ 0.0	$153.1	N/A
Federal Funds	$224.0	$211.4	$268.2	20%
Miscellaneous	$ 52.9	$ 45.7	$ 50.8	-4%
Total	$500.0	$546.8	$834.7	67%

Source: CDOT's Office of Financial Management and Budget
Table 26

Overall, CDOT's revenues have increased by 67% between FY90 and FY98. In FY90, Federal funds accounted for a larger share (45%) of CDOT's total revenues than in FY98, at which time the share of federal funds decreased to 32% of CDOT's total revenues.

Looking at FY98 revenues by source, as illustrated in Table 27

, the majority of the funds are being generated from state sources, such as the user-fee based HUTF (44%) and sales and use taxes (18%). The dollars are presented in millions.

Revenue Source	FY98	Percent of total
State HUTF	$362.6	44%
Sales & Use Tax	$153.1	18%
Federal Funds	$268.2	32%
Miscellaneous	$ 50.8	6%
Total	$834.7	100%

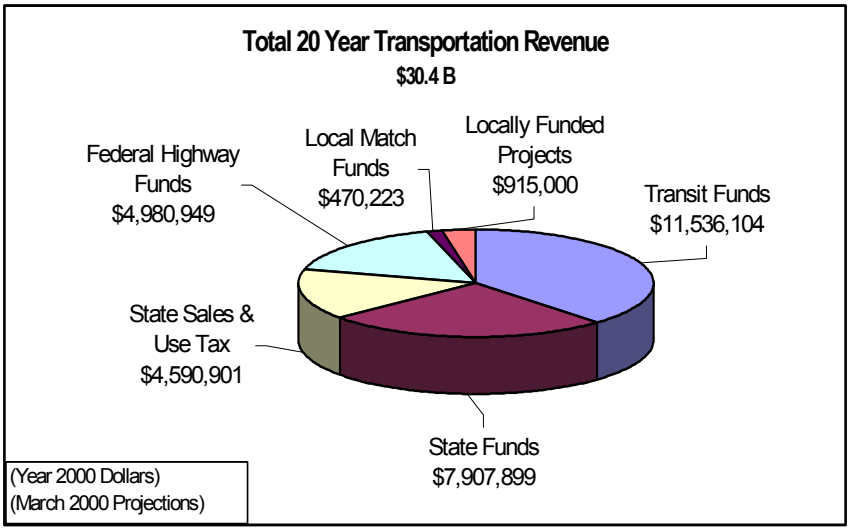
Table 27

Based on the most recent revenue projections, over the next 20 years, approximately $30.4 billion (2000 Dollars) are expected to be available from federal, state, local and private sources. These revenues will be used to address the $63.9 billion in projects identified in the Fiscally Constrained element and the Unfunded Projects and Programs component of the 2020 Statewide Transportation Plan. This does not include revenues local governments receive for maintenance and improvements on their local roads. The revenue projection includes $2.1 billion of sales and use taxes above the revenue projections used in the August and November 1999 resource allocation. Projected transportation revenues are summarized in Figure 17. These revenues will be used to address the fiscally constrained element of the 2020 Statewide Transportation Plan. (See page 98).

Over the next 20 years, $30.4 Billion (2000 Dollars) will be available from federal, state, local and private sources. This does not include revenues local governments receive for maintenance and improvements on their local roads

Approximately $17.6 billion (2000 dollars) of the $30.4 billion (2000 dollars) in expected funds will flow directly to the CDOT from federal and state sources to build, reconstruct and maintain the 9,100 mile state highway system. In addition, over $1.4 billion (2000 dollars) will come from local governments to match federal funds and improve roads in major metropolitan areas. Also, $11.5 billion (2000 dollars) in local and federal transit funds will be used by transit providers to maintain and expand public transportation systems throughout the state.

State funds cannot be used to construct non-highway projects or to match non-highway federal funds



Twenty-Year Transportation Revenue - Figure 17

Revenue Distribution

CDOT does not receive all the state funds deposited into the HUTF for use on the state highway system. By law, other state agencies and the cities and counties receive a share of the funds for transportation related activities.

- The diversion of funds to other state agencies from the HUTF is commonly called "off-the-top" funding. Agencies and activities that receive funding include the Colorado State Patrol, the Department of

Revenue's Ports of Entry Division and the State Capital Construction Fund. While there has been a sharp reduction in funds going to "off-the-top" agencies since 1996, in Fiscal Year 1999-2000 about 10% of the HUTF or $67.2 million is allocated to "off-the-top" agencies.

- Two distinct funding formulas guide the distribution of funds to the cities and counties. The first 7-cents of the 22-cents gasoline fuel tax and various fees enacted before 1969 are distributed 26% to counties and 9% to cities. Subsequent increases in motor fuel taxes and fees are distributed 22% to counties and 18% to cities.

The remaining funds are deposited into the State Highway Account for projects on the state highway system.

FUNDING LIMITATIONS

Colorado has yet to establish a dedicated state revenue source for public transportation

The CDOT share of the HUTF that goes into the State Highway Account is bound by the Colorado Constitution to be spent solely on highway-related activities. State funds cannot be used to construct non-highway projects or to match non-highway federal funds.

The sales and use revenues received by the Department are restricted to the Strategic Projects.

While Colorado does have a dedicated state aviation fuel tax, the state is one of a few that does not have a dedicated state revenue source for public transportation. Public transportation has traditionally been funded at the local level. However, both aviation and public transportation projects are eligible for grants from the Federal Aviation Administration and the Federal Transit Administration, respectively. The interchangeability of federal transportation funds is now permissible under federal law. TEA-21 and its precursor, the Intermodal Surface Transportation and Efficiency Act of 1991 allowed for the "flexible" use of a portion of each state's highway fund for transit related purposes and also for permitting a state to use its transit funds for highway construction.

The State Transportation Commission has used this "flexible" provision only occasionally because of the overwhelming demands placed on CDOT to maintain the structural integrity of the existing highway system and to build additional highway capacity. Over the past three years, more than $28 million has been "flexed" from various federal transportation programs for public transit projects. In all cases, local entities have matched the federal dollars. Nearly $19 million has been allocated to the Southwest Corridor Light Rail Project in metro Denver, with the remainder going to capital acquisition for transit service throughout the state.

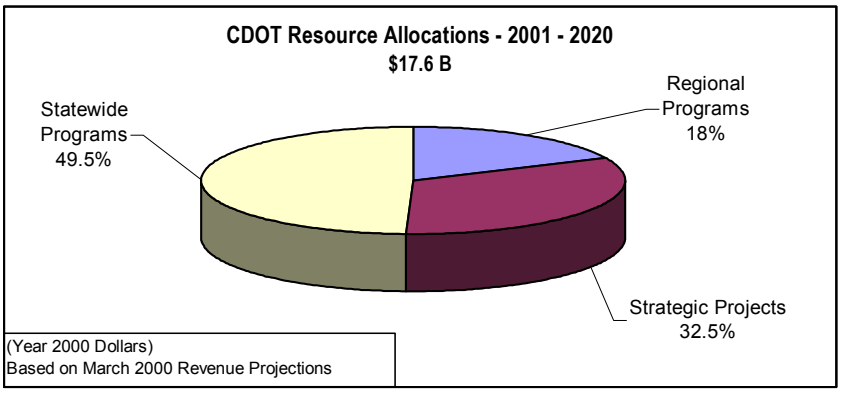
INTERNAL DISTRIBUTION OF CDOT REVENUE

The current distribution of funds within CDOT is primarily directed to activities that enhance and maintain the 9,100 miles of state highway. Funding for these transportation activities is reflected in the following three program categories.

- **Statewide Programs (Transportation Commission Priorities)** - High priority activities identified by the Transportation Commission include the Surface Treatment, Bridge, Rest Area, Noise Barrier, Safety, Maintenance, Intelligent Transportation System, and the CDOT Operations programs. The Noise Barrier and Rest Area programs are scheduled to "sunset" after 2002 and 2004, respectively.
- **Strategic Projects (7th Pot)** - 28 high-priority statewide transportation projects identified by the Transportation Commission for accelerated funding.
- **Regional Programs** - Includes the Other Regional Priorities Program, the Congestion Management and Air Quality Improvement Program (CMAQ), the Metropolitan Surface Transportation and Metropolitan Planning Programs, and the Enhancement Program.

CDOT RESOURCE ALLOCATIONS

CDOT employs its Resource Allocation Model to decide funding levels for each of the three programs. Allocations to the Strategic Projects and Statewide Programs are partially based on performance measure information. Of the funds allocated to Regional Programs, about 65% are distributed to the six CDOT Regions for construction activities based on a formula that reflects 45% vehicle miles of travel, 40% lane miles, and 15% truck traffic. The remaining funds in the Regional Programs category are distributed statewide by formulas that reflect the unique characteristic of each individual program.



CDOT Resource Allocations - Figure 18

FISCALLY CONSTRAINED PLAN

Developing the fiscally constrained element required collaboration at the state, regional, and local levels, reflecting TEA-21's intended approach for transportation planning. Limited resources compared to the magnitude of projects requires collaboration in order to make the hard choices about which projects may be funded.

Of the 2020 Plan's $64 billion project and program total, half ($32 billion) comprises the fiscally constrained portion and the remaining half comprises the unfunded projects and programs described in the next section. Total revenues expected to be available total $30.4 billion. Both figures are presented in year 2000 dollars, recognizing the impact of inflation since construction of these projects will occur at different times throughout the 20 year period. The $1.6 billion difference between projects and revenues resulted from the early completion of the Denver, Colorado Springs, and North Front Range MPOs' 2020 Plans utilizing the Commission's January 1998-2020 revenue projection and resource allocation program. The Denver, Colorado Springs and North Front Range metropolitan areas began updating their long-range plans to 2025 beginning Summer/Fall 2000. CDOT will be providing 2025 revenue projections and allocations by CDOT Region for use by these MPOs to develop their fiscally constrained 2025 Plans. The $1.6 billion variance will be resolved through this 2025 plan update process.

The plan's fiscally constrained appendix of projects and programs is available as a separate document referenced as Appendix E.

The Transportation Commission's resource allocation decisions made in August and November 1999 prioritized over 80% of the $17.6 billion of projected revenues under their authority. Utilizing information from several management systems and program-level plans, the Commission identified its expectations for the following statewide programs:

STRATEGIC PROJECTS

- The Commission's objective is to accelerate the completion of these 28 projects by committing $75 million per year of Department revenues. Approval by voters in November 1999 of the TRANs initiative provides an effective tool to accelerate the program. The Transportation Commission has not yet prioritized the $1.4 billion in sales and use tax, based on the March 2000 revenue projections from Office of State Planning and Budgeting.

TRANSPORTATION COMMISSION PRIORITIES

- Surface Treatment Program – The Commission's objective is for at least 60% of the state highway system to have a pavement condition rating of "good" or "fair". Based on management system projections, the Commission's allocation of $135.0 million per year, of which $20.5 million is coming from the maintenance pool, will fall short of its objective.
- Maintenance Program – The Commission's objective for activities performed by the Department's maintenance forces is to achieve a level of service "grade" of B+, committing $3 billion over the 20 years to achieve and maintain this objective.
- Bridge Program – The Commission's objective is to reduce the number of deficient bridges, and is committing $25 million per year for the state system bridges and an additional $7 million per year for local bridges. Some Maintenance Program dollars are also used for preventative maintenance on state system bridges.
- Operations – The Commission recognized the need for funding Department-wide administrative and other functions necessary for delivering its construction and maintenance programs, allocating $1.65 billion over the 20-year period. This figure includes aeronautics, safety education, transit, and several special allocations such as gaming funds.
- ITS Program – The Commission allocated $5 million per year (2001 through 2003) for capital improvements identified in the ITS Business Plan; an additional $6 million in 2004 for the construction of the traffic operations center, and $3 million per year (2004 through 2020) for maintenance of the ITS infrastructure.
- Rest Areas - The Commission allocated $14 million (2001 – 2004) to complete capital improvements identified in the Rest Area Plan.
- Noise Barrier Program – The Commission allocated $4.9 million to continue the Type II Noise Barrier construction program only through 2002.
- Safety Programs – The Commission examined two specific programs within Safety: (1) roadway striping - the Commission allocated $344 million over the 20 years; and, (2) sign replacement, the Commission allocated $212 million over the 20 years. An additional $335 million over the 20 years was set aside for programs to be identified in the Department's Safety Plan.

REGIONAL PROGRAMS

Subsequent to these allocation decisions, the remaining $3.2 billion was available for regional priorities, including Transportation Enhancement and Congestion Mitigation Air Quality (CMAQ) programs. The Regional Planning Commissions utilized a broad set of criteria for prioritizing their projects, including:

- Public Support
- Congestion Relief
- Safety
- Environmental Factors
- System Continuity
- Economic Impact
- Intermodal and Multi-modal Factors
- Ability to Implement
- Preservation of the Transportation System

The majority of projects receiving a high priority for the regional funds are highway-related projects. However, other modal projects, with funding identified primarily from non-CDOT revenues, were identified and prioritized through the regional planning process.

Transit capital and operating programs to continue existing service were a high priority for the transportation planning regions. The fiscally constrained element of the 2020 Statewide Transportation Plan includes $11.5 billion for transit, primarily funded through local sources.

In addition, a number of projects to be funded through local or private revenue sources were prioritized and included in the fiscally constrained plan. These projects total $1.4 billion.

Each of these components comprises the fiscally constrained plan totaling $32.0 billion, as illustrated in the following table.

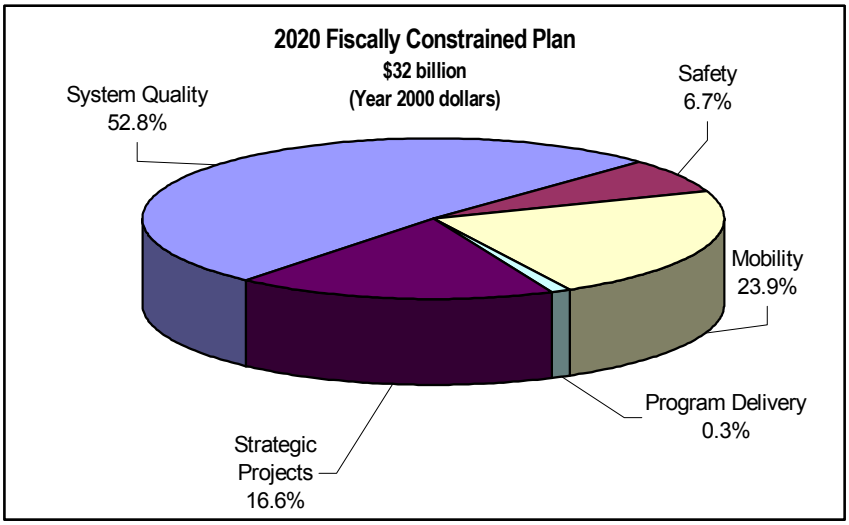
FISCALLY CONSTRAINED PLAN COMPONENTS	
Strategic Projects	$ 5.7
Transportation Commission Priorities	$ 8.7
Regional Programs	$ 4.7
Transit	$11.5
Local/Private	$ 1.4
Total	**$32.0**

Table 28

The Fiscally Constrained Plan can also be represented in terms of CDOT's five investment categories:

- **Safety** - Programs that reduce fatalities, injuries and property damage
- **Mobility** - Programs that provide for the movement of people and goods
- **System Quality** - Programs that maintain existing infrastructure
- **Strategic Projects** - 28 high priority statewide projects
- **Program Delivery** - Support functions that enable the delivery of the program categories listed above

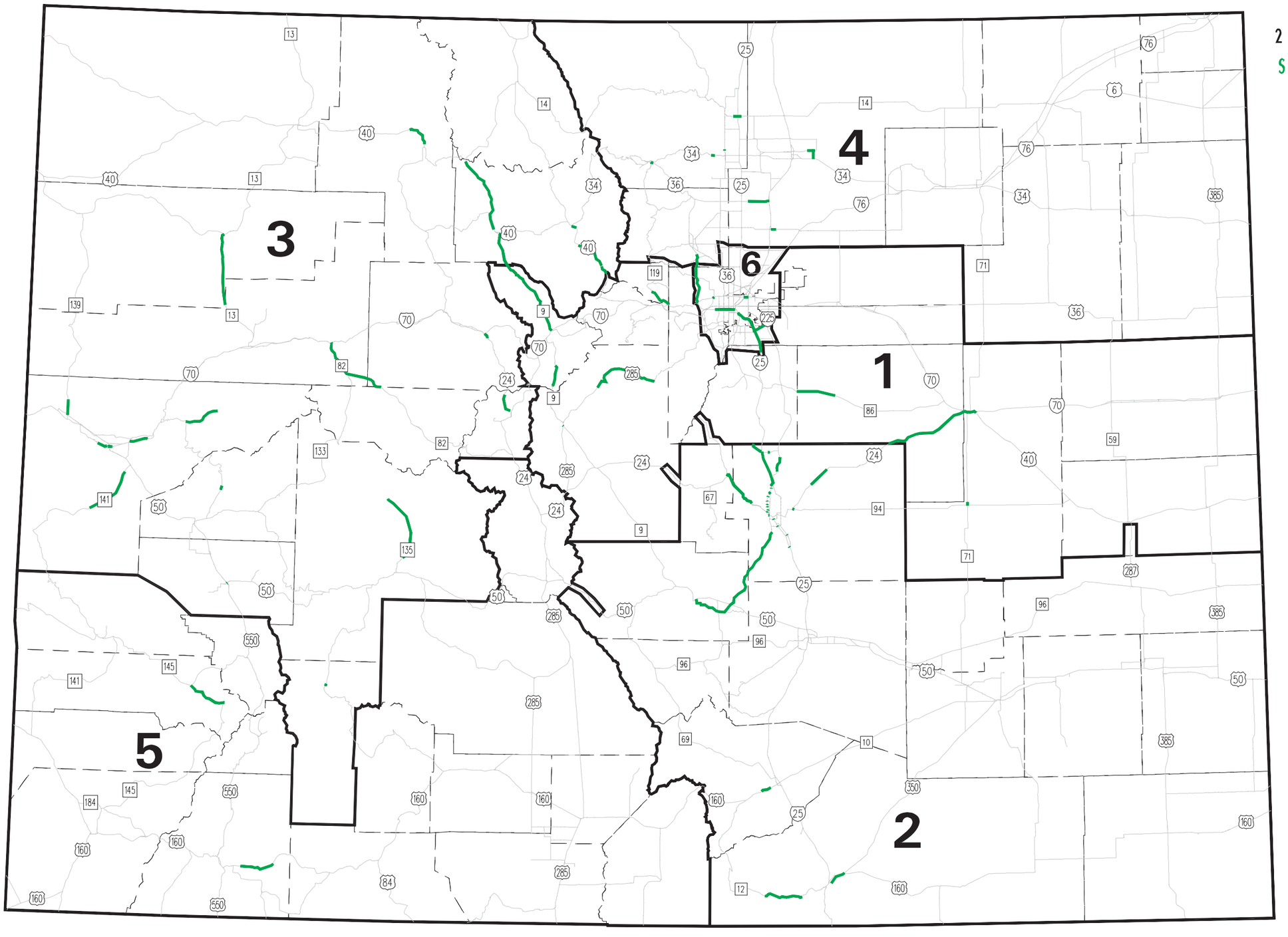
A graphic representation of the Fiscally Constrained Plan by investment category is presented below.



2020 Fiscally Constrained Plan - Figure 19

Fiscally Constrained 2001-2020 Statewide Plan

Safety Project Locations



Legend

Safety Projects

CDOT Region Boundaries — 1

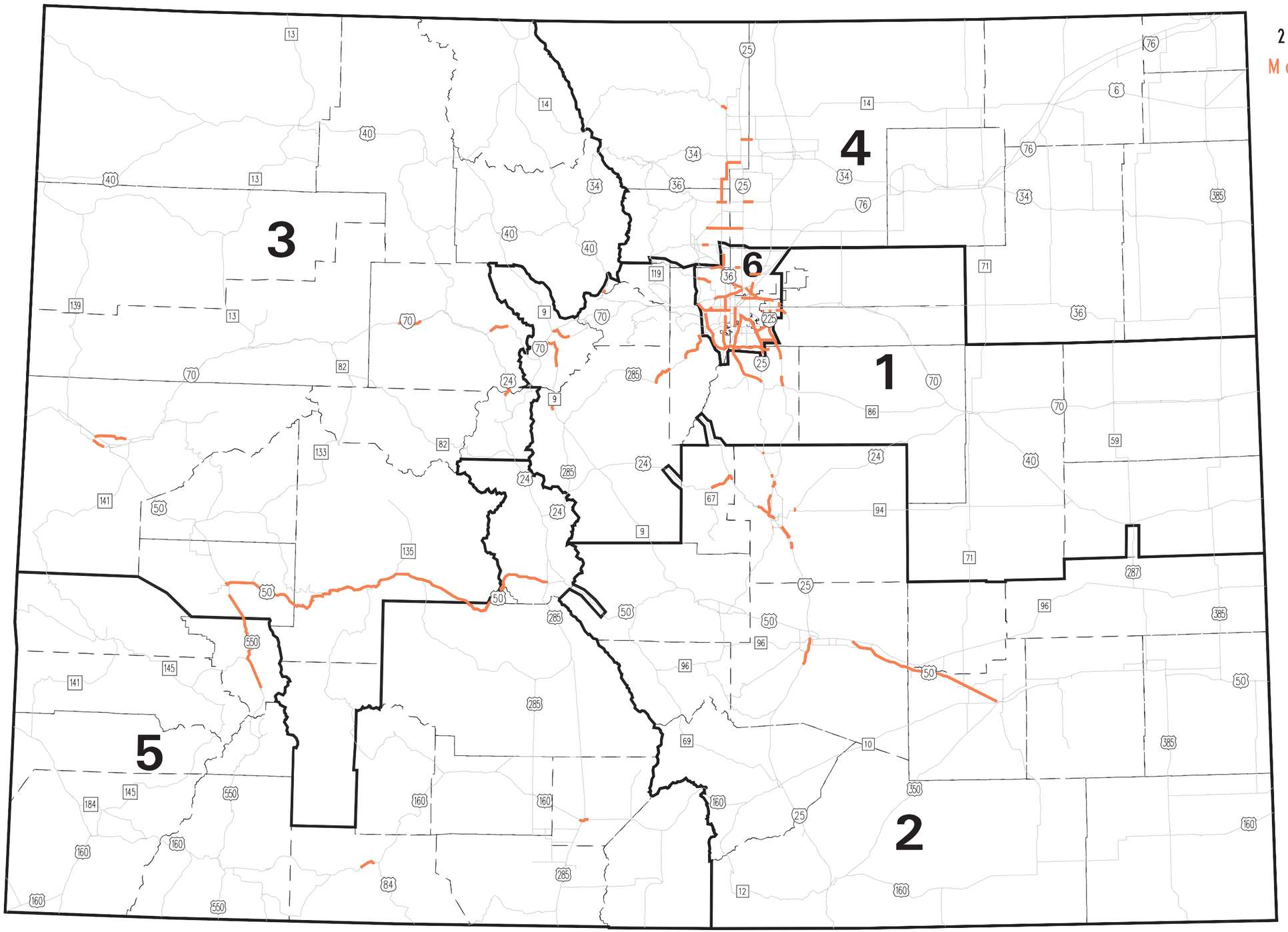
Note:
Not all projects are shown on this map. Please refer to the Project Lists for complete information.

November 1, 2000

Colorado Department of Transportation

Fiscally Constrained 2001-2020 Statewide Plan

Mobility Project Locations



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Mobility Projects

CDOT Region Boundaries — 1

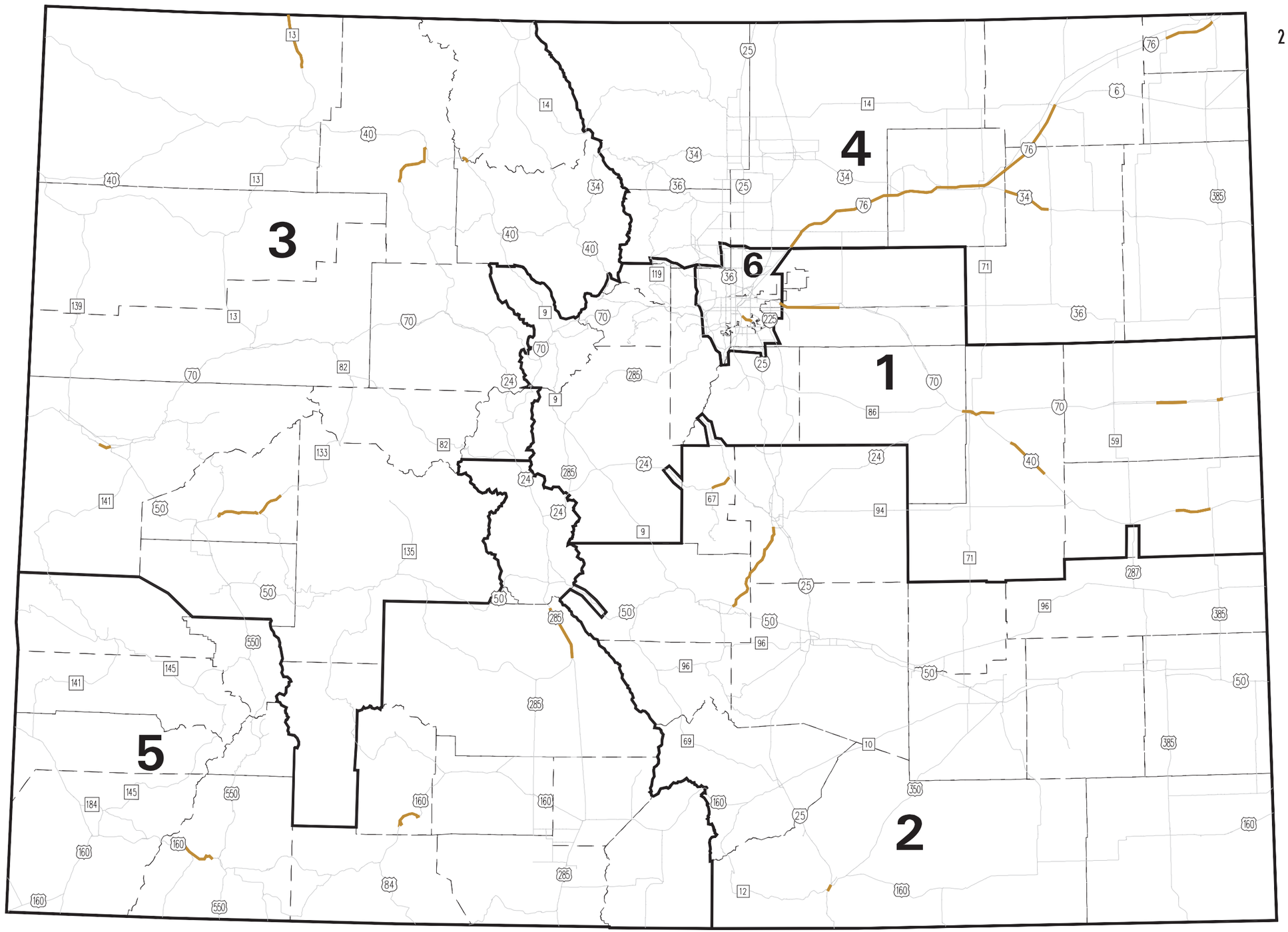
Note:
Not all projects are shown on this map. Please refer to the Project Lists for complete information.

November 1, 2000

Colorado Department of Transportation

Fiscally Constrained 2001-2020 Statewide Plan

System Quality Project Locations



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System Quality Projects

CDOT Region Boundaries — 1

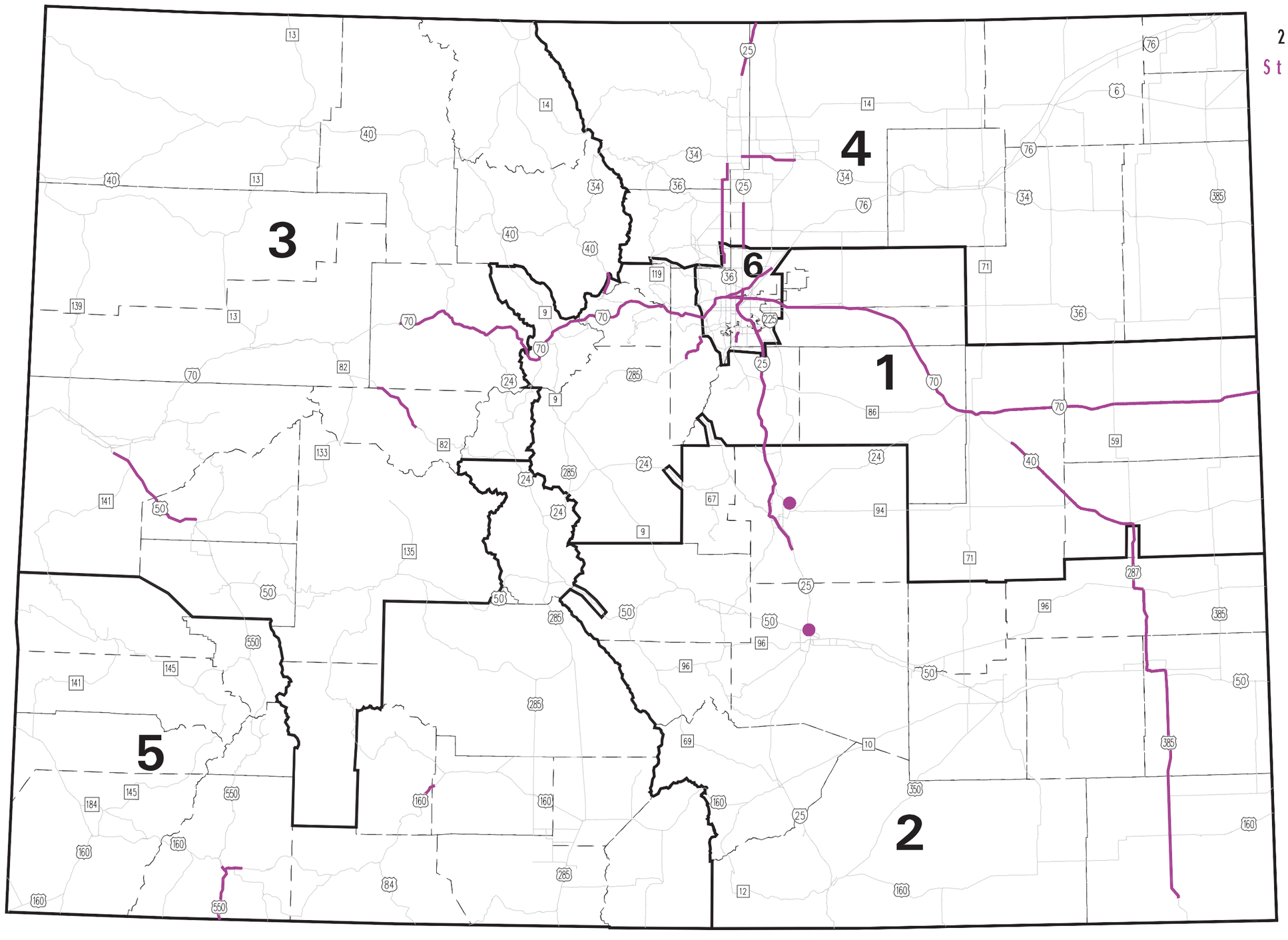
Note:
Not all projects are shown on this map. Please refer to the Project Lists for complete information.

November 1, 2000

Colorado Department of Transportation

Fiscally Constrained 2001-2020 Statewide Plan

Strategic Project Locations



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Strategic Projects

CDOT Region Boundaries — 1

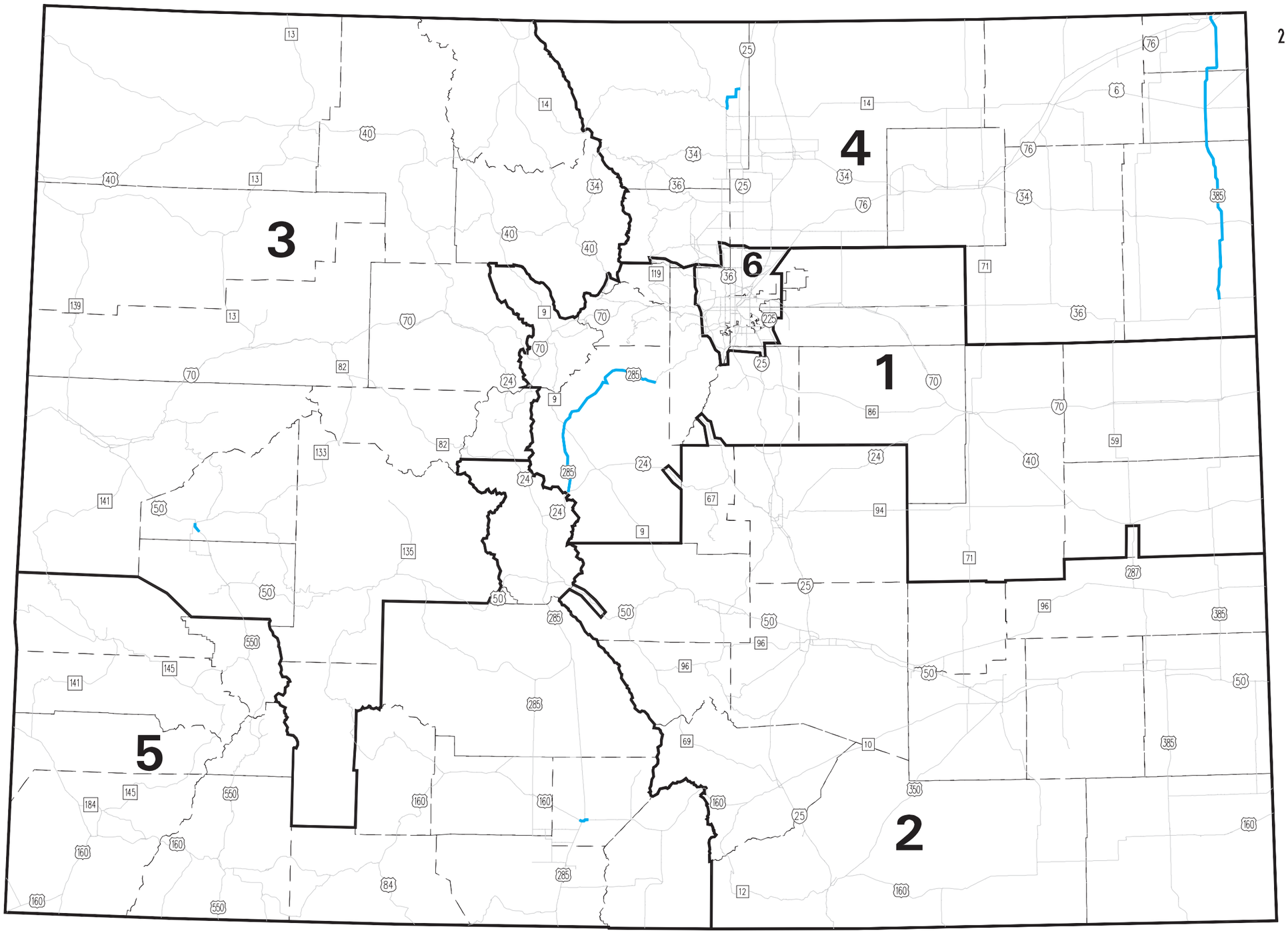
Note:
Not all projects are shown on this map. Please refer to the Project Lists for complete information.

November 1, 2000

Colorado Department of Transportation

Fiscally Constrained 2001-2020 Statewide Plan

Program Delivery Project Locations



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Program Delivery Projects

CDOT Region Boundaries — 1

Note:
Not all projects are shown on this map. Please refer to the Project Lists for complete information.

November 1, 2000

Colorado Department of Transportation

UNFUNDED PROJECTS AND PROGRAMS

As described in the previous section, $32 billion of the plan's $64 billion total projects and programs comprise the fiscally constrained element and the remaining $32 billion comprise the unfunded projects and programs that were identified primarily through the regional transportation planning process. These projects and programs are identified in a separate document referenced as Appendix F and Appendix G, respectively. The Transportation Commission has not evaluated these unfunded projects and programs, which were identified through the regional transportation planning process. Before any of these projects and programs are included in the fiscally constrained portion of the transportation plan further prioritization by the appropriate metropolitan planning organization or regional planning commission, and subsequent consideration by the Transportation Commission, will be necessary.

As the regional plan update process concluded nearly one year ago, several amendments are under consideration, which could increase this $32 billion of unfunded projects and programs by at least an additional $4 billion.

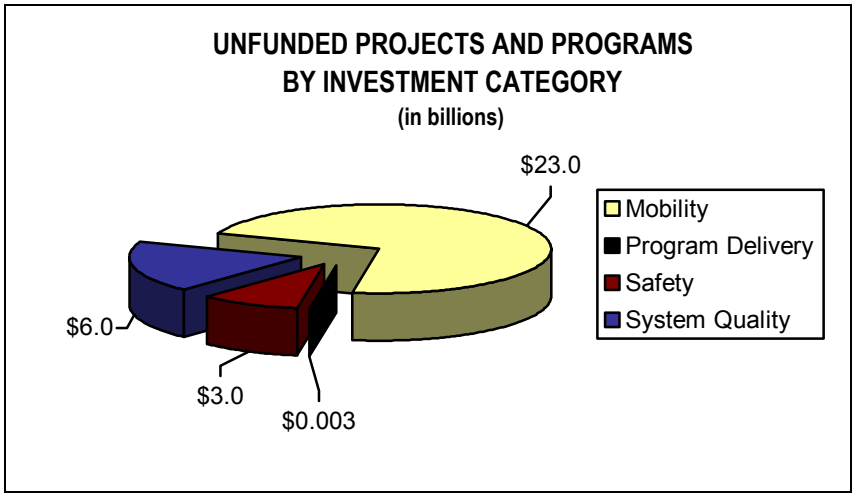
To better understand what comprises the $32 billion of unfunded projects and programs identified in the 2020 Statewide Transportation Plan, they have been sorted in the following manner:

- by Investment Category -- System Quality, Safety, Mobility, and Program Delivery
- by Mode
- by Strategic Corridor (corridors which contain the 28 projects comprising the Transportation Commission's Strategic Project Program); and,
- by Projects and Programs estimated to cost $50 million or more

The specific projects and programs comprising each of the following graphics have been compiled into Appendix G.

INVESTMENT CATEGORY

This chart sorts the unfunded projects and programs by the Department's investment categories.

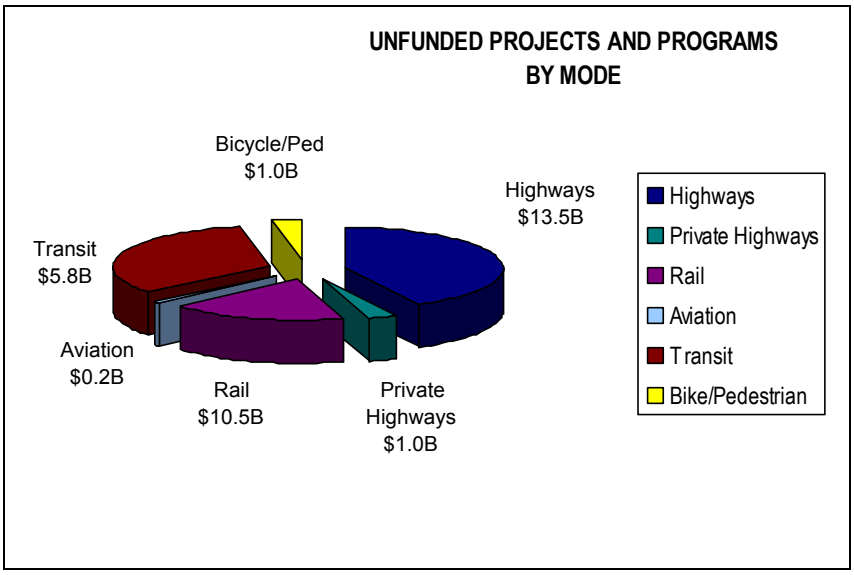


Unfunded Projects and Programs by Investment Category - Figure 20

Seventy-two percent of the unfunded projects and programs fall in the mobility investment category; whereas the majority (53%) of the projects and programs in the fiscally constrained element are in the system quality investment category.

MODES

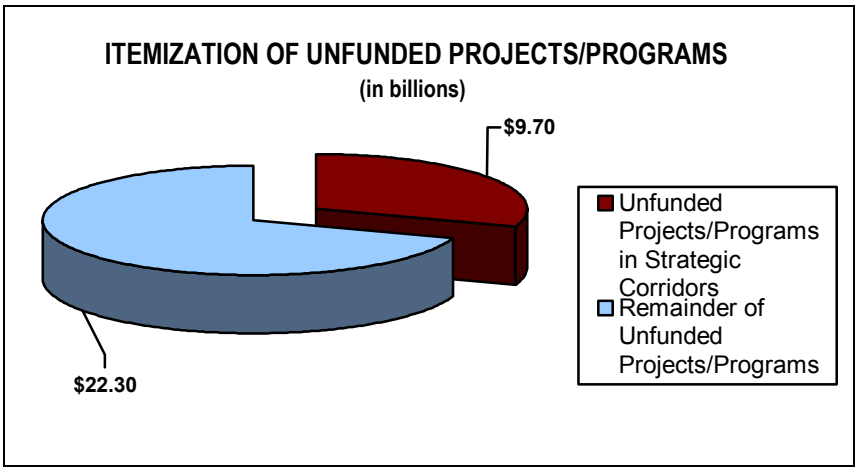
This chart sorts unfunded projects and programs by mode. Highway projects and programs comprise 45% of the unfunded projects and programs followed by rail and transit. Certain categories of funds can only be used for specific modes. Highway projects and programs are eligible for both federal and state sources of funding. Several projects are likely to be funded through private consortiums. Mass transit projects are eligible for federal funding programs (including flexible provisions of some federal highway funds); the flexible portion of the sales and use taxes available from the state, and the funds dedicated by local governments (including special districts like the Regional Transportation District in the Denver metropolitan area). There is no dedicated source of state funds for transit. Aviation projects are eligible for federal and state aviation trust fund revenues. Rail projects have extremely limited funding available from federal and state (State Rail Bank) sources. Bicycle and pedestrian projects are eligible for federal, state and local sources of revenues.



Unfunded Projects and Programs by Mode - Figure 21

STRATEGIC CORRIDORS

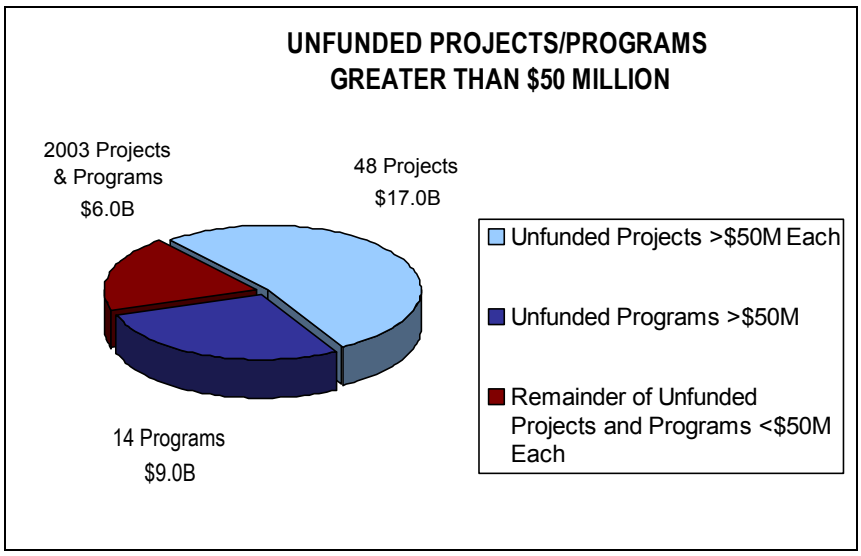
The chart below depicts unfunded projects and programs within corridors that contain the 28 Strategic Projects of the Transportation Commission's Strategic Project Program. These unfunded projects and programs are not part of the Strategic Project program but represent additional requested improvements within the corridors beyond the funded Strategic Project Program.



Itemization of Unfunded Projects/Programs - Figure 22

PROJECTS/PROGRAMS GREATER THAN $50 MILLION

There are 2,065 discrete projects and programs comprising the unfunded portion of the 20-Year Statewide Transportation Plan. Each of the discrete projects range in estimated cost from $4 thousand to as much as $8.1 billion. Unfunded programs range from $32 thousand to $2.4 billion. Consequently, it is helpful to illustrate what portion of the $32 billion is comprised of "big ticket" projects and programs. Sixty-two projects and programs have an unfunded estimated cost of more than $50 million each, and account for over 80% of the total unfunded amount. Of these 62 unfunded projects and programs, 48 are projects (e.g., U.S. 50 capacity improvements east of Pueblo) versus 14 that are programs (e.g., roadway operational and maintenance programs).



Unfunded Projects/Programs Greater than $50 million - Figure 23

2020 STATEWIDE TRANSPORTATION PLAN (in billions)	
FISCALLY CONSTRAINED	$32.0
UNFUNDED	$32.0
TOTAL	$64.0

Table 29

STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM

The 2020 Statewide Transportation Plan will be implemented by programming priority projects into the six-year document called the Statewide Transportation Improvement Program (STIP). The STIP is required under the federal transportation planning requirements of TEA-21 and is a staged, multi-year, statewide intermodal program of transportation projects that is consistent with the statewide transportation plan.

The STIP must, by federal regulation, be fiscally constrained. Consequently, only projects identified in the fiscally constrained portion of 2020 plan are eligible to be included in the STIP. In the non-attainment areas of the state, conformity must be determined for projects and programs included in these Metropolitan Planning Organizations' (MPO) Transportation Improvement Programs (TIPs) and the STIP.

At the statewide plan level, revenues from all sources are pooled and allocated to programs such as the Strategic Projects, Commission Priorities, and Other Regional Priorities. The statewide plan does not identify how much Interstate Maintenance, National Highway System, etc. funds are allocated to any one project or program. In this way, it facilitates selecting the highest priority projects based on their merit rather than selecting among projects eligible for the specific category of funding.

The second aspect of fiscal constraint works around the "highest use" concept. When priority projects are programmed from the statewide plan into the STIP, the funds associated with the Interstate system are applied first until they are all programmed. Then the next highest system funds are used (e.g., National Highway System), and so forth. This assures CDOT effectively utilizes all its resources to fund its priorities.

The first year of the STIP comprises CDOT's budget. An electronic database has been recently implemented at CDOT that links projects in the STIP directly to the state transportation plan source. This linkage ensures consistency between the long-range plan and the STIP, as well as provides tracking and accountability through the life of the project, from planning to implementation.

An electronic database has been recently implemented at CDOT that links projects in the STIP directly to the state transportation plan source

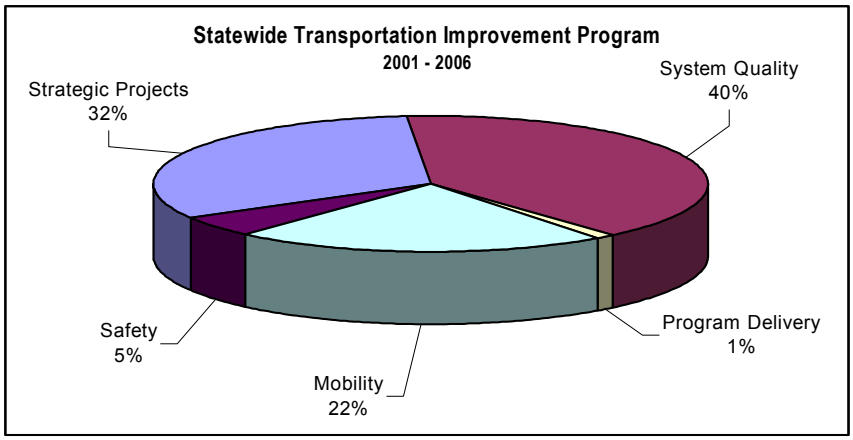
The STIP is updated on a two-year cycle through the Project Priority Programming Process (4P). The 4P incorporates the state statutory requirement that CDOT have a formal hearing process for the boards of county commissioners. It also meets the federal requirement that CDOT work cooperatively with the MPOs to develop metro area TIPs prior to incorporating

them into the STIP. The 4P also provides the mechanism for consulting with local elected officials in the rural portions of the state during STIP development.

The components of the 4P include:

- Individual county level meetings - The Transportation Commissioner and CDOT's Regional Transportation Director meet with the county commissioners and municipal officials within the county to discuss long-range transportation needs, priorities, as well as the day to day transportation issues facing the county.
- Regional meetings - The Transportation Commissioner(s) and CDOT's Regional Transportation Director(s) meet with the Regional Planning Commission for each Transportation Planning Region (TPR). These are public meetings during which project priorities, established through the regional planning process and included in the fiscally constrained plan, are discussed and proposed for inclusion in the STIP.
- Statewide meeting - This public meeting, hosted by the Transportation Commission, allows the Commission to hear public comments on the draft STIP and provides direction to CDOT staff for preparing the final STIP to be submitted to FHWA and FTA for approval.

The STIP can be amended as needed. Policy amendments to the STIP must go through a formal public review and comment process, including determining fiscal constraint impacts, etc. Policy amendments are processed biannually. Administrative amendments have no major fiscal impact and generally accommodate minor scheduling and funding changes. Administrative changes may be processed monthly.



Statewide Transportation Improvement Program - Figure 24

The Transportation Commission adopted the FY2001 - 2006 STIP in June 2000, programming approximately $7.4 billion. The above chart summarizes the distribution of dollars to CDOT's investment categories.

The 2020 Statewide Transportation Plan acknowledges various TEA-21 discretionary grant programs such as the Recreational Trails Program, the Transportation and Community and System Preservation Program, Access to Jobs/Reverse Commute program, and various FTA discretionary grant programs. The statewide plan recognizes the benefit these types of programs can provide in terms of additional funding sources for transportation projects and is supportive of local governments, metropolitan planning organizations, regional planning commissions, and other eligible entities to apply for these types of discretionary grants. Program and grant applicants are to coordinate with their regional planning commissions or metropolitan planning organizations to ensure consistency with regional transportation plans and programs. Similarly, notification of CDOT is necessary to facilitate coordination between regional and statewide plans and programs. Consistency at the regional plan and Transportation Improvement Programs (TIP) level would be considered consistent with the statewide transportation plan, and enables the projects awarded grants under the discretionary programs eligible for inclusion in the STIP.

FUTURE UPDATE & ISSUE RESOLUTION

UPDATE CYCLE

The statewide plan is updated on a six-year cycle to accommodate changes in conditions related to growth, development, employment, demographics and other transportation-related conditions. The update process is initiated through Metropolitan Planning Organizations (MPOs) and regional planning commissions (RPCs) in the state's 15 Transportation Planning Regions (TPRs) as they update their regional transportation plans to the new planning horizon. The regional plan update cycle is approximately 15 months long. When the regional plan updates have been completed, they are provided to CDOT to integrate and consolidate into the updated statewide transportation plan. The state portion of the update takes up to one year.

A caveat to the regional plan update cycle is necessary due to the presence of air quality non-attainment areas within the state. The three MPOs in the non-attainment areas are required by federal regulations to update their plans every three years. Consequently, the 2020 plans for these three MPOs were completed in 1998/1999 while the other TPRs were still in the process of updating their regional plans. All three non-attainment MPOs have initiated their processes for updating their plans to 2025 prior to the 2020 statewide transportation plan's adoption in November 2000.

In anticipation of the MPO plan updates, CDOT recommends that all 15 TPRs participate in the process of fiscally constraining regional plans to 2025 and not limiting this fiscal constraint process to the three non-attainment MPOs. Each of the regional planning commissions and the other two MPOs identified projects beyond those included in the fiscally constrained element of the statewide transportation plan. Consequently, these unfunded projects, some of which have been prioritized at the TPR level, can compete with the non-attainment area MPOs' priorities for the revenues projected to be available between 2021 and 2025. This effort would result in a "minor" update of the other 12 TPR plans while the three non-attainment areas MPOs meet their requirement for a full plan update.

WORK IN PROGRESS

Several issues were raised during the update of the regional and statewide plans to 2020 that have not been resolved:

- Several MPOs and RPCs have requested the Transportation Commission to reopen its resource allocation process. As a first step, CDOT will work with the MPOs and RPCs to recommend a process through which local and regional input will be solicited and considered. The recommendation will be forwarded to the Commission at the appropriate time. Related to this issue is the Transportation Commission's decision to form a sub-committee to re-evaluate the Small Urban Program, due to sunset in 2004. The Commission will initiate the Small Urban Re-evaluation Subcommittee in 2001, and will solicit input from the Statewide Transportation Advisory Committee (STAC) on the issue.
- A number of policy guidance areas requiring further development and refinement have been identified in the Strategic Framework Section. An example is developing a tiered transportation system, involving refinement of the State Significant Corridors (SSCs), through continued efforts on the transportation investment strategy and asset management programs. A process is needed to ensure opportunities for public input and dialogue on the policy guidance areas with the Transportation Commission. The expectation is for all policy guidance areas to be refined and in place in advance of the next full update of the regional and statewide transportation plans.
- Other areas requiring further development prior to the next full plan update cycle include:

    a) clarifying how various modal programs integrate with the regional planning process

    b) developing additional planning data and methods for analyzing the data for use in the regional plan update process

    c) training and guidance on planning requirements such as Title VI and Environmental Justice

    d) consistency in revenue projections/resource allocation decisions through the planning update process

    e) guidance regarding integration of regional plans into the statewide plan

    f) incorporation of more transportation demand management strategies into the statewide planning process and plan

    g) development of a statewide freight planning approach, including identifying appropriate data and analytical methods

A key activity related to addressing these issue areas will be the planning process de-briefing with those who participated in the 1998-1999 regional plan update cycle.

- The identification of local roadway needs has been a significant challenge due to the lack of reliable and consistent data and methodologies for use by Colorado's numerous municipal and county entities. In an attempt to identify a better method of assessing local roadway needs on a statewide basis, CDOT, working through a subcommittee of the Statewide Transportation Advisory Committee (STAC), Colorado Municipal League (CML) and Colorado Counties, Inc. (CCI), explored options for identifying local system requirements. The results of this effort are discussed in the Local Roadway Section beginning on page 87. To the extent a more comprehensive picture of the local street and roadway needs is desired for the next statewide transportation plan, CDOT will design a program for local roadway needs assessment. This methodology will provide a consistent, comparable and accepted method for assessing local roadway needs for the state's 270 municipalities and 63 counties. Needs will be developed for new roads, paving gravel roads, reconstruction, bridges, maintenance and operations. In addition, funding options for this assessment, and grants to local governments will be explored.

Appendix A - Conformance with Federal and State Legislation

The 2020 Statewide Transportation Plan was developed through a planning process designed to meet all state and federal legislative requirements. How each of the federal and state requirements was addressed is summarized below.

Federal Legislative Requirements

1. The process for developing the plans and programs shall provide for consideration of all modes of transportation and shall be continuing, cooperative, and comprehensive to the degree appropriate.

Response: The statewide transportation plan identifies needs and priorities inclusive of all modes of transportation, as well as system preservation, maintenance and operation. At the regional level, the Regional Planning Commissions and Metropolitan Planning Organizations consider the impact of current and future traffic on the existing transportation system. Once demand is forecasted, alternatives are examined to consider how demand can be addressed. Alternatives include trip reduction strategies, operational improvements, and a variety of modal solutions that can work in concert to meet travel demand.

The 2 CCR 604-2, Statewide Transportation Planning Process and Transportation Planning Regions establishes a continuing, cooperative, comprehensive planning process. This process was established to provide a grassroots level approach to identifying transportation needs. The process for updating regional plans to cover the period 2001 to 2020 began in the spring of 1998. Completed plans were provided to CDOT in November 1999 for integration into the statewide plan. The Regional Planning Commissions (RPCs) and Metropolitan Planning Organizations (MPOs) continue to be involved in regional and statewide planning activities, even when plans are not being updated. Plan and STIP amendments are considered annually and the Statewide Transportation Improvement Program (STIP) is updated biennially. The Statewide Transportation Advisory Committee (STAC) meets quarterly, providing recommendations on regional and statewide transportation plan amendments, discussing issues and providing advice to CDOT on transportation matters. The STAC is comprised of one representative from each of the fifteen transportation planning regions in the state.

2. The state shall coordinate with the metropolitan areas of the state.

Response: TEA-21 requires each of Colorado's five MPOs, in cooperation with CDOT, to develop long-range plans. These metropolitan planning processes are generally more complex and comprehensive than the processes used in the rural areas of the state. Three of Colorado's five MPOs are required to comply with the Clean Air Act amendments, including doing air quality conformity determinations on their long-range plans and short range programs. The three non-attainment MPOs completed their 2020 Plans in the spring of 1998. The remaining two MPOs aligned with the update schedule for the ten rural areas and completed their plans in November 1999. Each of the five MPOs have a representative on the Statewide Transportation Advisory Committee (STAC) and participation by both metropolitan and rural representatives have developed a broader understanding of the state's transportation needs. The MPOs also participate with their rural counterparts during the process of developing fiscally constrained transportation plans and programs. The Transportation Commission allocates resources to CDOT's six transportation regions. Consequently, each of the MPOs and RPCs within these six regions must come together to determine which projects from the regional transportation plans will be prioritized as part of the state's fiscally constrained transportation plan.

3. The state shall carry out its responsibilities for the development of the transportation portion of the Clean Air Act.

Response: CDOT complies with the requirements of the federal Clean Air Act and TEA-21. Specifically, CDOT requires that all projects, plans, and programs that affect air quality non-attainment or maintenance areas comply with the transportation conformity regulation.

Colorado has areas designated non-attainment or maintenance for the following pollutants: carbon monoxide (3 areas); ozone (one area); and, PM-10 (seven areas.)

4. The state's transportation planning process shall provide for the consideration of projects and strategies that will:

   a) Support the economic vitality of the United States, the states and metropolitan areas, especially by enabling global competitiveness, productivity, and efficiency;

Response: The regional and statewide transportation planning process follows a format that provides for the deliberate consideration of current and future demographic and economic forecasts and the implications of these forecasts on the transportation system. A number of transportation implications were addressed in the context of Colorado's current and future economic conditions, particularly in terms of identifying key transportation corridors which link Colorado to other economic markets within the U.S. and to other nations. Included in these considerations are high priority corridors such as the Ports to Plains corridor (Mexican border to Denver, CO); and the Front Range Toll Road, proposed in the Eastern Plains paralleling Colorado's primary N-S corridor, I-25. The planning process also raised awareness to a number of freight rail corridors considered for abandonment and the impact such abandonment would have on Colorado. This led to the Transportation Commission's work on a draft statewide rail policy that will provide direction for the state's interest and role in significant rail corridors in the state. The regional planning process also gave serious consideration of the role tourism plays in Colorado's economy, and identified transportation related needs and priorities associated with this important industry.

   b) Increase the safety and security of the transportation system for motorized and non-motorized users;

Response: In its resource allocation process, the Transportation Commission programmed resources into the safety investment category, targeting programs such as roadway safety and driver behavior programs. Additional resources were programmed for addressing safety-related transportation problems, identified and prioritized through the regional planning process. In addition, CDOT provides safety-related programs for bicycle and pedestrian safety and, through the regional planning process, is completing the update of the high priority bicycle corridors, which will assist in programming resources to improve shoulders along these corridors for both bicyclist and motorist safety.

   c) Increase the accessibility and mobility options available to people and freight;

Response: CDOT's planning process provided a number of mobility-related tools and enhancements for the Regional Planning Commissions during the update of the plans. Included was a transportation planning data set applicable to GIS-based software to assist Regional Planning Commissions in their demand analysis and alternatives analysis tasks. CDOT also completed a Transit Needs and Benefits Study to provide current information to the Regional Planning Commissions on operating and capital costs associated with providing a basic level as well as an enhanced level of transit service within their planning regions. CDOT also commissioned a Freight Study to provide information and assistance to the Regional Planning Commissions concerning freight-related issues in their respective regions, and identifying transportation projects aimed at addressing freight related concerns. These projects were considered in the regional planning process during the identification of the preferred and fiscally constrained regional transportation plans.

   d) Protect and enhance the environment, promote energy conservation, and improve quality of life;

Response: The 2020 plan includes a Socioeconomic and Environmental Profile chapter. This chapter addresses the current population and employment condition of the state and includes an analysis of the anticipated changes that will occur by the year 2020. The chapter also contains an Environmental Overview that provides an assessment of the state's environmental situation and

identifies strategies currently being developed to integrate environmental considerations into the planning process as early as possible.

CDOT is currently coordinating with environmental agencies to develop a process for streamlining the environmental review process especially during the major investment study process. Partnerships with the Environmental Protection Agency (EPA) and the Department of Health and Human Services have be established to determine effective methods that will assist in improving the project development phase by integrating the NEPA process as early as possible in the transportation planning process. This process involves coordinating environmental reviews for highway and mass transit projects early on in the planning process while looking at potential impacts of both the natural and human environment.

e) Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;

Response: CDOT released the document entitled *Integrating CDOT Modal Planning Processes with the Statewide Planning Process* in 1998. This report, targeting primarily the Strategic Transportation Project Investment Program, transit programs, the aviation planning process, and Intelligent Transportation Systems (ITS) planning, details processes that would better clarify the roles, responsibilities and interrelationships of process that needed to be integrated into the regional and statewide planning process. During the update of the regional transportation plans, CDOT also conducted a review of the State Significant Bicycle Corridors as part of the process. Continual efforts to integrate remaining modal programs and an evaluation of their effectiveness will be completed by mid-2000.

f) Promote efficient system management and operation;

Response: To meet the growing demands of the state, CDOT is in the process of improving its current infrastructure through the use of Intelligent Transportation Systems (ITS). The ITS Strategic Plan proves direction to CDOT to ensure plans and programs integrate management and operation of transportation systems that will function as an intermodal transportation system.

CDOT worked with various TPRs and MPOs in 1999 to develop an ITS Strategic Plan. This process entailed a collaborative working session in which all participants were encouraged to provide input to develop a statewide vision for ITS. Through this effort, a list of projects was established which were included in the transportation plans. Further, CDOT's Shared Resources efforts, public/private partnerships which allow provide use of public highway right-of-way by the private sector to install advanced telecommunications infrastructure. CDOT uses telecommunications to deploy its ITS strategies for improving transportation system operations.

Other efforts under way involve upgrading the Pavement and the Bridge management systems. The pavement management system ensures an effective link between network level surface treatment decision making and project specific surface treatment activities. Roadway surface condition data is collected annually to determine the Remaining Service Life over the next several years. This data assists in determining the Good/Fair/Poor state of the system. The 2020 plan discusses this system and the strategies that will be used to determine optimum use of the state's surface treatment dollars.

The Bridge Program obtains information to report to the Federal Highway Administration. Information is also included in the National Bridge Inventory (NBI) and is used by Congress to allocate Federal Highway Bridge Replacement and Rehabilitation Program Funding (HBRRP). The Federal Select List of Bridges contains a list of qualifying bridges in Colorado. The regional and the statewide transportation plans include bridges that will qualify for replacement or repair over the next 20 years. These bridges have a Sufficiency Rating (SR) of eighty or less and must be either Structurally Deficient (SD) or Functionally Obsolete (FO).

g) Emphasize the preservation of the existing transportation system.

Response: CDOT's transportation investment strategy includes a System Quality category which addresses road surface, structure, roadside facilities and appearance, rest areas, traffic operations, tunnels, and maintenance of other modes (e.g., airport runway pavement condition.) System quality goals are established by the Transportation Commission and resources are allocated to the various programs aimed at protecting the state's investment in its existing transportation system.

The Transportation Commission has established a number of system preservation policies, such as corridor optimization, and a state rail policy addressing the state's role in preserving transportation corridors when a significant rail line is being abandoned.

CDOT and the Regional Planning Commissions (including the MPOs) realize the potential of the federal Transportation and Community and System Preservation Pilot (TCSP) program for preserving the existing transportation system. This program funds innovative projects that assist in integrating transportation investment strategies, community preservation, land development and environmental quality. One objective of the grant program is CDOT and various local governments have submitted applications for funding under this program. For fiscal year 2000, three projects were selected. These projects included The Denver Union Terminal Work and Entertainment Connection, the 16th Street Pedestrian Improvements, and Estes Valley Transportation Alternatives Feasibility Study.

5. Consider the concerns of non-metropolitan local elected officials;

Response: Section 43-1-1101 of the Colorado Revised Statutes (C.R.S.) provides for the creation of up to fifteen transportation planning regions (TPRs) to assist with the development of the statewide transportation plan. Of these fifteen regions, thirteen of them are fully or partially rural and fourteen of them have established Regional Planning Commissions that act as the formal policy body, directing the transportation planning activities within the TPR. Each RPC consists of elected officials that represent counties and/or municipalities within the region.

The rural Regional Planning Commissions, as well as the urban Metropolitan Planning Organizations, produce regional transportation plans which are submitted to the state for integration into the statewide transportation plan. The Regional Planning Commissions, including the MPOs, participate with their respective CDOT Region Director to develop a set of fiscally constrained projects for inclusion in the fiscally constrained element of the statewide transportation plan. Each year, during CDOT's Project Priority Programming Process (4P) which updates the Statewide Transportation Improvement Program, the Regional Planning Commissions, MPOs, CDOT representatives and Transportation Commissioners collaborate on selecting projects consistent with the state's fiscally constrained transportation plan for inclusion in the STIP.

6. Consider the concerns of Indian Tribal governments and federal land management agencies that have jurisdiction over land within the boundaries of the state;

Response: Colorado has two Indian Tribal Nations, the Southern Ute and the Ute Mountain Ute Tribes, located in the southwestern part of the state that are incorporated in the Southwest Transportation Planning Region. Representatives participate on the Southwest Regional Planning Commission and the Statewide Transportation Advisory Committee (STAC). This ensures adequate involvement and inclusion into all phases of the planning process. Regional transportation plans from each tribal government are incorporated in both the regional and statewide transportation plans.

Federal land management agencies such as the National Park Service and the National Forest Service are invited to be involved in the transportation planning process at the regional as well as statewide level. Staffing limitations pose a barrier to active participation by the federal land agencies in all of the transportation planning regions. Specific workshops have been held with the federal and state land agencies to provide information on the state's transportation planning process, and opportunities for their participation and sharing of information and plans. A

memorandum of agreement between CDOT with the U.S. Forest Service, and the Bureau of Land Management, specifically addressed this latter point, and copies of the adopted statewide transportation plan are provided to these federal land management agencies.

7. Coordination of transportation plans and programs being carried on outside the metropolitan areas;

Response: The Regional Transportation Planning Guidebook updated in 1998, was designed to assist local governments and interested parties with the update of the regional transportation plans. CDOT distributed the Guidebook to each TPR and MPO and encouraged them to update their plans using the eleven primary steps identified. These steps were a framework for the plans to ensure certain elements were addressed and to ensure consistent information was provided. Representatives from CDOT provided guidance to each TPR and their consultants during the update process. The 2020 regional plans have been summarized and presented in a technical document that supplements the statewide plan. The 2020 plan also contains data extracted from the regional plans that is presented on a statewide basis.

8. The statewide planning process shall provide interested parties with a reasonable opportunity to comment on the proposed plan.

Response: Upon releasing the draft 2020 statewide transportation plan for public review and comment in July 2000, CDOT held public forums in each of the fifteen transportation planning regions. These forums were designed to provide the public with a general overview of the planning process and contents of the plan and allow the public to ask questions, made comments, and provide feedback for Transportation commission consideration prior to finalizing the plan.

Public participation in all phases of the statewide planning process is crucial to ensuring effective input. Each phase of the planning process has an extensive public involvement component and will use different techniques based on the nature of the process.

As federal guidelines suggest, public involvement should be proactive. Early and continuous involvement is important for policy or project decisions. Informational flyers were distributed to citizens and interest groups to keep them abreast of upcoming planning meetings. The draft and final transportation plans were distributed to various locations throughout the state in order to allow for public review and comment. Also, public meetings were held in each TPR to obtain input on the draft regional and statewide transportation plans. CDOT continually conducts yearly public involvement opportunities which include quarterly newsletters that target planning activities, an annual report that provides a status on the implementation of the statewide transportation plan and information on project amendments to the statewide transportation plan as necessary.

The overall goal of CDOT is to provide the highest quality of transportation services possible to customers. Since the citizens of Colorado are varied, groups must be identified and invited into the planning process if we are to effectively meet their needs. This includes not only the general public but also business and industry, organizations that represent people with specific transportation needs and the transportation services providers.

9. The statewide transportation plan shall identify transportation strategies necessary to efficiently serve the mobility needs of people.

Response: During the development of the updated regional transportation plans, the Regional Planning Commissions and Metropolitan Planning Organizations were encouraged to consider alternative solutions when addressing mobility issues and problems. In order to consider these solutions, the regions had to examine all transportation modes within the state. These included aviation, bicycles, highway, pedestrian, transit, and rail. CDOT-commissioned studies, such as the Transit Needs and Benefit Study, the Travel Demand Management (TDM) Toolbox, Intercity Bus Study, results of the

Modal Survey (1997) and other pertinent modal planning data were made available to the RPCs to assist them in developing a multi-modal transportation plan addressing their mobility needs.

Step seven of the Regional Planning Guidebook, that was utilized during the update of the 2020 plans, recommended each region develop a list of options that address the mobility and geometric needs of each major corridor in the area. This process was done with the inclusion of Transportation Demand Management (TDM), the No Build, and low cost options such as Transportation Systems Management (TSM). The end result of the analysis was a series of transportation solutions that meet the needs of passenger and freight transportation through each major transportation corridor. The 2020 Statewide Plan incorporates these alternatives in the preferred plan to assist with implementation.

10. The statewide transportation plan may include a financial plan that demonstrates how the plan can be implemented, identifies resources from public and private sources that are reasonably expected to be available to carry out the plan, and recommends any additional financing strategies for needed projects and programs.

Response: The 2020 Statewide Plan includes a preferred plan and a fiscally constrained plan. The preferred plan identifies the transportation needs of the state for the next 20 years. This is the chapter that reflects a transportation vision.

The fiscally constrained plan contains only those projects that can expect to receive state and federal funding that will be allocated over the 20-year period. Projects identified in the fiscally constrained plan were prioritized at the regional level, with representatives from the RPCs and MPOs working with their CDOT Region Director to identify projects to be funded with Other Regional Priority funds. In addition, the state's fiscally constrained plan contains various statewide programs, such as the Strategic Projects, surface treatment, bridges, maintenance, etc.

State Requirements

1. Section 43-1-1101 C.R.S. recognizes the Department of Transportation as the proper body, in cooperation with Regional Planning Commissions and local government officials, for developing and maintaining the state transportation planning process and the state transportation plan. This statute also provides for the creation of up to fifteen transportation planning regions (TPRs) and a transportation planning process set by rules and regulations promulgated by the Transportation Commission.

Response: The Transportation Commission adopted the rules and regulations for the statewide and regional transportation planning process and the boundaries for the Transportation Planning Regions in September 1991. These rules and regulations were updated in 1994 and 1997.

2. State statute requires CDOT to integrate and consolidate the regional transportation plans for the transportation planning regions into a comprehensive statewide transportation plan.

Response: In November 1999, the Regional Planning Commissions provided CDOT with their finalized regional transportation plans, covering the time period 2001 through 2020. CDOT integrated these plans, primarily be incorporating the regional-selected and prioritized projects with the statewide programs identified by the Transportation Commission. Further, CDOT organized the needs identified in the regional transportation plans along with the statewide program needs into the five investment categories as a first step towards integrating the transportation investment strategy into the planning process.

The state plan is to include:

a) An emphasis on multi-modal transportation considerations, including the connectivity between modes of transportation;

Response: To assist with the update to the Regional Transportation Plans, CDOT provided information extracted from the Transit Needs and Benefits Study, the Freight Infrastructure Study, and other modal program information for inclusion in the regional transportation plans. Steps are currently underway to develop methods to better integrate modal planning processes with the statewide planning process.

b) An emphasis on coordination with county and municipal land use planning, including examination of the relationship between land use decisions and transportation needs and the exploration of opportunities for preservation of transportation corridors;

Response: The 2020 plan recognizes the relationship between transportation and land use. In March of 1997, the Governor's Office of Energy Conservation, the Department of Local Affairs, a citizen's advisory committee, and CDOT coordinated the development of a guidebook entitled, Managing Colorado's Future. This guidebook identifies methods for integrating local and regional land use, air quality, and transportation plans. This guidebook was used as a tool in updating the regional transportation plans.

CDOT continues to play an active role in supporting the Governor's Smart Growth Initiatives: saving natural landscapes, promoting strong neighborhoods, improving the transportation system, and providing opportunities for a better life for citizens.

c) The development of area-wide multi-modal management plans in coordination with the process of developing the element of the state plan.

Response: CDOT established six ad hoc steering committees in 1996 to assist with the development of modal plans. These plans addressed aviation, bicycle/pedestrian, commercial vehicle, rail, transit, and travel demand management. In order to meet the needs of one of the twelve Transportation Commission policies, Intermodalism, the Commission adopted the policy document entitled CDOT's Intermodal Vision, Goals and Strategies. This document provided three goals and respective strategies that assisted the Transportation Planning Regions in updating their transportation to address the use of alternative modes.

Appendix B - Title VI and Environmental Justice

Background

Title VI of the Civil Rights Act, and Executive Order 12898 on Environmental Justice are important considerations in the transportation planning process. Title VI requires nondiscrimination in federally assisted programs, including metropolitan and statewide planning. Environmental Justice is defined as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people, including a racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies."

Current Activities

CDOT's current activities related to Title VI and Environmental Justice requirements include the following:

- CDOT, through agreements with the Regional Planning Commissions (RPCs), provides the RPCs with planning assistance funds to undertake regional planning activities. Title VI requirements are incorporated into these agreements between CDOT and the RPCs.

- CDOT provides guidance to the RPCs concerning the preparation and update of their regional transportation plans, including public involvement responsibilities. Primary guidance is from the Statewide Transportation Planning Process and Transportation Planning Region Rules and Regulations (2 CCR 604-2) adopted by the Transportation Commission. Additional guidance is provided in CDOT's Regional Planning Guidebook. Briefly, the directions provided by these resources are described below.

    - RPCs are asked to consider current and future populations in their planning process, including those people traditionally under-served by the transportation system.

    - CDOT provides RPCs with a transportation planning dataset assembled from several sources, including the U.S. Census, and the Colorado Division of Local Affairs' State Demographer's Office. Regional Planning Commissions are asked to consider low income, minority, elderly, disabled populations, households without vehicles, etc. Further, they are asked to supplement this information with local data for special population groups in their areas, such as students, seasonal workers, workers in tourism or recreation industries, etc.

    - The socio-economic data is to be used by the RPCs in the Mobility Demand Analysis phase of the regional planning process, to determine projected demand on the transportation system and identify system deficiencies. The results of this analysis are considered in the next phase of the process, Alternatives Analysis. In this phase, the Regional Planning Commissions are asked to consider the range of multi-modal transportation improvements and travel demand management strategies for addressing transportation deficiencies.

    - Regional Planning Commissions are provided guidance for meeting the public involvement requirements of the planning process. Specifically, the RPCs are required to maintain a mailing list of people interested in the transportation planning and are guided to supplement the mailing list with persons typically under-served by transportation in their areas. The mailing list is one vehicle the RPCs are asked to use to inform the public how to become involved in plan and STIP

updates. RPCs are required to hold public involvement opportunities at the beginning of the regional plan update process and for review and comment on their draft transportation plan.

- CDOT prepared guidelines for public involvement in the statewide planning process and provided these guidelines to the Regional Planning Commissions for reference. The state's guidelines discuss mechanisms for outreach to the public, including under-served, and preparations for anyone with special needs wishing to attend the public involvement activities.

- In January 2000, an assessment of CDOT's Title VI Implementation Plan was conducted in cooperation with Federal Highway Administration (FHWA) and the Department of Justice. In the Strengths and Major Accomplishments section of the assessment report, the state's transportation planning, public involvement and transit processes were cited as models for CDOT.

Future Activities Related to Title VI and Environmental Justice

CDOT anticipates making several refinements to the planning process to strengthen consideration of Title VI and Environmental Justice, such as:

- CDOT will propose refinements to the statewide planning rules and regulations based on federal requirements for Title VI and Environmental Justice provisions.

- The transportation planning data set will be enhanced to include the most recent Census 2000 data for low income, minority, elderly, disabled persons, and households without vehicles. This information will be provided in a geographic information system (GIS) mapable format.

- The Regional Planning Guidebook will be refined to:

  - Include suggested methods for considering Title VI and Environmental Justice concerns in developing the regional transportation plan, particularly in terms of identifying where under-served people are located so their transportation needs will be specifically considered;

  - Suggest methods for inventorying existing transportation services in relation to under-served populations;

  - Suggest Title VI and Environmental Justice related criteria for RPCs to consider in their project prioritization.

- CDOT will refine its Public Involvement guidelines to:

  - Expand outreach activities to under-served populations, including developing and maintaining a directory of organizations and locations of active minority groups and recognized leaders throughout the state. This will help establish a dialogue about the Transportation Planning Process in geographical areas;

  - Provide mechanisms for making public involvement opportunities more accessible to under-served populations, such as holding meetings in low-income, minority neighborhoods, advertising and providing information to newspapers, bulletins, active neighborhood associations, and media outlets utilized by low-income, minority and other under-served populations.

- CDOT will explore various mapping techniques to assess planning and programming decisions in relation to Title VI and Environmental Justice provisions.

CDOT will develop these refinements through a participative process, utilizing various mechanisms such as workshops, de-briefing sessions, focus groups, surveys, etc., with the goal of having all refinements in place prior to the next update of the regional and statewide transportation plans.

Appendix C - Public Involvement Process

The Colorado Department of Transportation continues to have a proactive public involvement process at all stages of planning and project development. The views, ideas and opinions of all interested parties on the future of Colorado and its transportation system are important to assist in setting the future direction for transportation in the state.

Refinement of the Public Involvement Requirements

Prior to the adoption of TEA-21, CDOT modified the "Rules and Regulations for the Statewide Transportation Planning Process and Transportation Planning Regions"(the Rules). This amendment, which occurred in August of 1997, incorporates more current planning requirements of the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). Draft documents were distributed and a public hearing with the Transportation Commission was held to provide citizens and interest groups the opportunity to comment on the changes.

Refinement of Public Involvement Techniques

The "Guidelines for Public Involvement in Statewide Transportation Planning and Programming" were amended in early 1998 to reflect the new requirements and techniques recommended through the document titled, "Public Involvement Techniques for Transportation Decision-making."

CDOT strives to have an inclusive process by aggressively seeking to identify and involve the affected and interested public, including those traditionally under-served by existing transportation systems and facilities. It is important to involve the public early, often and continually.

Two major comments received on the planning process were that citizens were not receiving information on the meetings and they were confused about how to get involved in the process. To meet this need, CDOT mailed out address cards asking for updates for the database. Approximately 1,000 cards were returned. The "Get Plugged In!" brochure provides citizens with a step-by-step process for getting involved in the planning process.

A statewide planning database of over 4,000 mailing addresses is maintained and continually updated to advise interested individuals and agencies of on-going planning activities. This database includes representatives of various transportation agencies, county and municipal contacts, representatives of Indian tribal governments and organizations that reach those traditionally under-served by the existing transportation system. Any person that desires to be included in the planning process is welcome to participate.

In order to keep citizens apprised of the planning process and amendments to the current transportation plan, quarterly newsletters and annual reports are submitted to citizens. In some cases, information flyers were developed to inform the public of upcoming opportunities. Each of these documents provides a wealth of information on studies and programs that drive the planning process. Citizens also have the option of educating themselves on the overall Department by interacting through the internet. CDOT's website provides information on various offices throughout CDOT and allows people to quickly access information on upcoming planning meetings. This website, *http://www.dot.state.co.us*, is accessible through any Internet service provider.

Public Involvement in the Regional Planning Process

Much like the 1996 document, the current 2020 plan was developed using the grassroots approach. The public was continually included in the regional planning process during the update of the 2020 regional transportation plans. Each Regional Planning Commission held a public meeting to gather input on the

region's visions and goals for the 20-year horizon. This meeting was the initial meeting to begin the process.

Meeting announcements were sent to citizens and media outlets to provide information on upcoming planning meetings throughout the update cycle. A public forum and meeting was held in each area to provide the public opportunity to view and comment on the 2020 regional transportation plan.

Other Public Involvement Related Activities

A series of customer surveys provided valuable information regarding the public's perception of the state of Colorado and the transportation system. The Colorado Department of Transportation Modal Transportation Survey was completed in 1997. This survey addressed the citizen's perception of mobility and their desire to have and use alternative modes as a means of travel. The Statewide Resident Survey and the Freight Focus Group: Final Report of Results were conducted in the early spring of 2000. This survey included questions related to Coloradans' perceptions regarding safety, system preservation and mobility. This survey information supplements the performance indicators for the Department's investment strategy. The Freight Focus group was conducted in order to determine the freight industry's perception of the transportation system, in a more in-depth analysis, in regards to congestion.

Public Involvement in the Statewide Planning Process

A similar public involvement process was used during the development of the 2020 plan. Early in the process, CDOT sent out a written survey asking what the respondents considered important to Colorado's future. Approximately 300 surveys were returned and this information was considered in the development of the state plan document. Information on the plan's context, socioeconomic trends, existing transportation revenues and policy direction were distributed for public review and comment in late March 2000 and presented at the Transportation Commission's Public Hearing on April 19, 2000. This hearing provided interested individuals and organizations an opportunity to comment on the 2020 Fiscally Constrained Project Appendix and the policy areas being considered by the Commission. The public will also be provided the opportunity to review and comment on the draft 2020 plan at public meetings and forums in each transportation planning region during July and August 2000. The Department prepared responses to the significant comments received during the public comment period and prepared a final draft which was released in October 2000 for final public review. The 2020 Statewide Transportation Plan: Investing in Colorado's Future was adopted by the Transportation Commission in November 2000.

Appendix D - Public Comments and Responses

DRAFT – PUBLIC COMMENTS AND RESPONSES

In order to meet the requirements of the Transportation Equity Act of the 21st Century, the Colorado Department of Transportation released the draft 2020 Statewide Transportation Plan for public review and comment on July 7, 2000. Notices were sent to over 3,000 individuals on our mailing list. This includes not only the general public but also business and industry, organizations that represent people with specific transportation needs and the transportation services providers. The draft document was made available for review at approximately 70 public libraries, county clerk offices, on the Department's web site and on request.

Twenty-eight open houses were held around the state to obtain public input on the draft Plan. The table below shows the number of people who attended the open houses and the number of comments received from citizens and special interest groups within each Transportation Planning Region (TPR).

2020 STATEWIDE PLAN OPEN HOUSE SUMMARY

TPR/MPO	Review Locations	Attendees	Comments Received
Greater Denver Area	30	44	70
Pikes Peak Area	3	16	6
North Front Range/ Upper Front Range	7	19	3
Pueblo	2	21	1
Grand Junction	2	14	1
Eastern	12	54	1
Southeast	6	24	1
San Luis Valley	12	10	2
Gunnison Valley	24	37	0
Southwest	6	25	2
Intermountain	6	23	3
Northwest	6	25	3
Central Front Range	12	12	3
South Central	4	8	0
Total	132	332	96

Table 30

The public involvement period began on July 7, 2000 and officially concluded on September 8, 2000. Following is a summary of the substantive comments that were received during this review period and the responses to each one:

Comments on the Bicycle Shoulder Policy/Draft High Tier Bicycle Corridor Map:

Citizens want the Department to consider the development of bicycle and pedestrian paths and routes as an alternative to help alleviate some of the traffic congestion and encourage the use of bicycle transportation. They believe that off-road bicycle trails should be investigated for feasibility prior to committing funds to simply add shoulders. Significant local bicycle corridors along state highways should be considered if they are used as key commuter routes.

Response: The draft map included in the draft 2020 Statewide Transportation Plan was a compilation of data from 32 Bicycle Town Meetings that were held from October of 1999 through March of 2000. Participants indicated their highest priority was to add shoulders and they bicycle on all highways, mostly near the town centers. The Colorado Transportation Commission's Intermodal Committee has been revising the draft Bicycle Corridor Map in response to various comments received. The revised map illustrates where roadway resurfacing projects are scheduled to occur within the next 3 years, and the locations of shoulder projects within the 2020 Plan's fiscally constrained element and unfunded element. The revised map also reflects 10-, 15-, and 20-mile radii around selected municipalities of at least 5,000 people. The title of the map has been changed to High Priority Shoulders Projects since they include more than bicycle projects. Maps will be distributed for further public involvement and will be referred by the Intermodal Committee to the full Commission later this year.

Comments on the Rail Corridor Preservation Policy:

Significant comments were received regarding the Rail Corridor map. The consensus of comments was that the scope of the map is insufficient. The Rail Corridor map does not include eastern Colorado; therefore the assumption is that there are no significant rail lines in that area. The map also indicates that there are also no rail lines in western Colorado that are determined to be significant.

Other citizens requested the Department to adopt the Colorado Passenger Rail Feasibility Study (1998) as a blue print for determining future passenger rail corridors in the state. They also want the CDOT to consider a low cost commuter rail service in several major corridors.

Response: All areas of the state are equally important and the Rail Corridor map is currently being revised to show the entire state of Colorado. The Transportation Commission will be discussing the Policy and Guidance Statements at the October 18, 2000 workshop.

Modal Flexibility of New Transportation Revenues:

Citizens and special interest groups agreed that the statement appears to eliminate all flexibility for use of existing funds for alternative modes and it does not support flexibility for new revenue sources that do not require voter approval. They support maximum modal flexibility for current and new sources of revenue within constitutional, legislative and regulatory constraints. They would like the Department to go further with the multi-modal concept and eliminate the "highway department" mentality.

Response: The recommendation is to merge this policy guidance with the policy guidance on Flexible Funding for High Priority Modal Projects. Further, the recommendation is to:

a) Recognize the role of alternative modes in congested corridors and in addressing under-served populations;

b) Allow use of Other Regional Priority funds for alternative modes which have been identified through the regional planning process and benefit the state transportation system;

c) Support utilizing federal and Senate Bill 1 funding flexibility on strategic projects where it benefits the state transportation system;

d) Support modal flexibility of existing and new voter approved transportation revenues within constitutional, legislative, and regulatory constraints and Commission program priorities.

Sharing of Transportation Revenues with Local Governments:

Comments expressed concern that the policy guidance indicates the Department is not supportive of the traditional sharing the current Highway User Tax Fund (HUTF) or increases to the HUTF Commentors did not want the policy guidance to be limit support for sharing just new voter approved revenues with local governments. Further, commentors would like to see acknowledgment that the current funding for local road improvements is not adequate and new sources must be considered.

Response: The recommendation is to clarify the language of the guidance to clarify the Transportation Commission supports the continued sharing, as prescribed by existing formula, of the HUTF and any increases to the HUTF. Further recommendations include recognition of the significant demands placed on local governments to provide and maintain municipal and county roads and bridges and support for sharing of new sources of voter approved statewide transportation revenues with local governments.

Funding for Off System Roads:

Commentors expressed concern that this policy will not allow regionally significant projects on local roadways to receive state funds even though they may be designated as part of the National Highway System or have a direct benefit to the state highway system. The policy should be based on need and importance to the public roadway system and to citizens. They would like Transportation Commission to consider funding off-system road improvements when they result in improvements to carrying capacity of state roads.

Response: The recommendation is to revise the policy guidance to recognize that the state and local roads are a continuous system that must be addressed in partnership with local governments. However, given the needs of the state highway system, the recommendation is to limit the funds under Transportation Commission jurisdiction to state highways except where trades with local governments are under consideration.

Tiering the Transportation System:

This guidance should support tiering beyond the needs of CDOT and should include every area of the transportation system. The policy should be clarified to indicate the effect this effort would have on all areas of the state. The Department should work in cooperation with local agencies in establishing the tier system and the tiering efforts should include consideration of the State Significant Corridors (SSC) adopted in the 2015 Statewide Transportation Plan.

Response: The recommendation is to expand the policy guidance to recognize the value of a tiered transportation system to aid in optimizing investment; support development of performance objectives appropriate to the role facilities play in the transportation system; refine adopted State Significant Corridors based on transportation investment and asset management programs, and work with transportation system stakeholders to define tiers.

No Net Growth in Centerline Miles

Commentors expressed concern that this policy guidance appears to contradict the policy guidance on corridor preservation. Also, this policy guidance raised questions about the implied significance of lane-miles over centerline miles. Comments suggested state roads be analyzed for "state significance" and a partnership should be established between the state and local governments.

Response: The recommendation is to combine the No Net Growth in Centerline Miles policy guidance with the Corridor Preservation Policy Guidance. Further, the recommendation is to expand the policy guidance to include:

a) Clarification that given current resources, there is a continued high priority on preservation, enhancement and maintenance of the existing infrastructure;

b) Recognition that judicious expansion of the state highway system may be necessary to respond to projected growth and expansion may include increases in current corridor capacity, addition of new corridors, or re-designation of local roads;

c) Additions to the state system are contingent on the availability of funds, an exchange of facilities with local governments, or partnerships with public and private entities; and

d) That any additions to the state transportation system must be consistent with the role and function of the state transportation system.

Flexible Funding for High Priority Modal Projects

Commentors expressed concern that although significant local commitment is needed for FTA funds federal funds through TEA 21 are flexible for these projects. Further, commentors questioned why significant local financial commitment is not required for roadway projects if they are to be required of alternative mode projects. Commentors expressed that fiscally constrained plans should include all modes of transportation and highway needs must not take priority over non-highway transportation needs.

Response: The recommendation is to combine this policy guidance with the policy guidance on Modal Flexibility of New Transportation Revenues. Please see response on page 136.

Corridor Optimization/Corridor Alternative Analysis Planning Procedures

Commentors asked for clarification how this policy guidance relates to alternatives analyses, the NEPA process, and the role it plays in rural areas. Commentors also expressed that implementation of the projects should go through the Regional Planning Process.

Response: The recommendation is to keep the current policy guidance wording at this time as Corridor Optimization guidelines are currently being drafted with involvement of stakeholders which should assist in clarifying the intent of Corridor Optimization and respond to the concerns expressed above.

Corridor Preservation

Commentors asked for clarification between this policy statement and the "No Net Growth in Center Line Miles" policy. Also, comprehensive plans and other development tools for linkages to land use and transportation should be referenced in the policy guidance.

Response: The recommendation is to combine this policy guidance with the policy guidance on No Net Growth in Center Line Miles. Please see response on page 137.

Telecommunications

Commentors suggested the policy statement be revised to allow for planning regions to be eligible for State transportation funds for telecommunications projects if the Department supports development and integration of a common ITS architecture. State should coordinate with the Office of Technology and the public entities involved with developing telecommunications systems. Need to consider if the policy will affect the use of state owned right of way for telecommunication.

Response: The recommendation is to expand the language of the policy guidance to clarify that Regional Planning Commissions and Metropolitan Planning Organizations are encouraged to consider ITS projects within their regional transportation plans; clarify that ITS projects are eligible for Other Regional Priority funding; and to express commitment to coordination and planning among state, local governments, and private providers.

Small Urban Funds

Several areas have expressed concern regarding the sunsetting of the Small Urban Program. These areas would like the program to continue past 2004 since these funds are used for critical urban area projects which may not otherwise be eligible to compete for Other Regional Priority funds or should not have to compete against projects in the rural areas. Commentors suggest that The FTA recognizes the difference between urban and rural areas and funds accordingly and CDOT should do likewise to avoid creating undue competition between urban areas and rural areas for federal and state transportation resources.

Response: The recommendation is to clarify the commitment to create a committee to re-evaluate the program prior to its sunset in 2004, and to have STAC representation on the re-evaluation committee.

State Significant Corridors

Commentors expressed The 2020 Plan should recognize the need for a prioritized system of corridors both statewide and regionally. Regionally significant corridors in the 2025 Regional Transportation Plans should be eligible for State and Federal funds.

Response: The recommendation is to address State Significant Corridors within the policy guidance for Tiering the Transportation System. See response on page 137.

Other Substantive Comments

Transit

Some respondents requested the following policy statements be added to the Transportation Commissions Policy and Guidance Statement section of the plan:

> "The Transportation Commission supports the need for state revenues for transit services throughout Colorado, especially the current need for the state to pay one-half of the match to obtain federal funds for transit capital needs prioritized through the regional transportation planning and prioritization process during STIP development. Such state funding for transit may come from current transportation revenues such as surplus general funds or from voter approved new sources."
>
> "As the population of Colorado continues to grow we should anticipate an increased need for greater capacity of multiple modes of travel. To that end, the commission and CDOT should encourage, plan and develop improved public transportation services"

Response: Recommendation is to include new policy guidance for transit which recognizes that transit is an integral component of Colorado's transportation system; recognizes transit benefits mobility by providing an alternative to congested roads, options for travel, energy savings, and environmental benefits; recognizes transit as necessary to provide transportation access to jobs, medical services, and educational institutions for population groups traditionally underserved by transportation, including Colorado's increasing population 65 years and older; and to support development of a new funding source to supplement local transit capital needs and fund intermodal projects that benefit the state transportation system.

Alamosa Bypass

Citizens in Alamosa, Colorado were inquiring about the status of the Alamosa Bypass Project that would provide an alternative travel route through the city. They are in favor of the bypass, but are against the plans to close of some of the major exits into the business district.

Response: The study for the Alamosa Bypass is currently in the Fiscally Constrained Plan. The Department has been continually meeting with residents to discuss concerns and develop alternatives.

I-70/Dillon Noise Barrier

Residents in the Dillon Valley submitted concerns about the postponement of the noise barrier project along I-70 and Dillon Valley. They are requesting information on the future plans for the project.

Response: Background information was submitted to those that requested a status. The Department and the Intermountain Transportation Planning Region are exploring options to reconsider the priority of this project within the plan.

SH-82 Entrance to Aspen

Several citizens inquired about the completion of the SH-82 entrance to Aspen. The first element of the Entrance, a roundabout at Castle Circle and Maroon Circle, has been completed and they are in favor of the new design. They would like to see the improvements to the entrance completed to alleviate

congestion issues and make it a safer intersection for not only automobiles, but transit, pedestrians and bicyclists as well. A concern was received regarding the impact to the Marolt Park. Also mentioned in the comments was the need for more buses and park-and-ride spaces.

Response: The SH-82 entrance to Aspen is included in the Unfunded Long-Range Demand Project Appendix. An Environmental Impact Study was completed on the project. This study included several mitigation features to protect Marolt-Thomas Open Space.

US-36

Several citizens in Boulder, Colorado have stated they are not in favor of widening in this corridor and they a desire for commuter rail in this corridor. Citizens would like to see a noise abatement on the southern end of Boulder between Baseline and Table Mesa Drive.

Response:A study is being conducted along the US-36 corridor to determine transportation alternatives for alleviating congestion. Noise abatement is not listed in the draft 2020 Statewide Transportation Plan nor is it in the regional transportation plan. The Denver Regional Council of Governments is currently developing their 2025 Regional Transportation Plan and this issue can be addressed in their update process

Quebec Street

The Unfunded Long-Range Demand Project Appendix shows a Quebec Expansion Project from Leetsdale to 23rd Avenue. Citizens in this Denver neighborhood are concerned about environmental impacts the expansion will create to this area.

Response: This is a local project that is sponsored by the City and County of Denver. They are aware of the citizens' concerns and are working with them to develop solutions.

Several other comments were received from individual citizens and responded to individually. A summary of all comments was developed and presented the Statewide Transportation Advisory Committee (STAC) on August 31, 2000. The STAC is comprised of representatives from each of the Transportation Planning Regions. A summary was provided to the Colorado Transportation Commission and discussed at a workshop held on October 18, 2000.

Since the document changed substantially after the first comment period, the Department conducted a second review and comment period from October 30 through November 10, 2000. Once again, notices were sent to everyone on the mailing list and copies of the Plan were available for review at county clerk offices, an expanded list of public libraries (110), on the Department's web site and on request.

Following is a summary of the substantive comments that were received during this second review period and the responses to each one:

Comments on the Rail Corridor Preservation Policy:

Citizens would like further development of rail as alternative approach for congestion management and would like the following action plan included in the 2020 Statewide Transportation Plan:

- Adopt the Colorado Rail Feasibility Study
- Apply for a high speed rail corridor designation between Fort Collins and Greeley
- Identify corridors where low cost, peak hour commuter rail can be implement to help mitigate traffic congestion
- Periodic static and mobile equipment displays to demonstrate existing rail technology to the public
- Assist in the formation of a coalition to create a dedicated source of revenue for at least two passenger rail corridors

Response: CDOT staff believes the Transportation Commission's policies and policy guidance as presented in the Plan allows for development and implementation of rail corridors primarily through

the regional planning process, corridor study/optimization process, and through public/private partnerships.

Comments on the State Significant Corridors

Comments stressed the importance for including the State Significant Corridors (SSC) in the Statewide Transportation Plan. There is concern that the exclusion of the SSC may jeopardize the future economic growth and transportation viability in the Eastern Plains. It was also stated that tiering of the transportation system is seen as "weak response" to their request for inclusion on the SSC in the Plan.

Response: CDOT staff revised text to reflect the Commission's direction for pursuing a tiered transportation system utilizing the SSC as a starting point.

Staff did not interpret the Commission direction to mean incorporating the SSC map within the 2020 Plan because it may contribute to confusion over what the role of the SSC currently plays in the Commission's investment strategy.

Comments on the use of and funding for Alternative Modes

There is concern that the Transportation Commission is not actively seeking transportation options to the expansion of highways and that the statewide plan does not include funding for alternative transportation options. Commentors urge a review of the plan priorities to include maintaining and expanding alternative modes of public transportation with funding from CDOT

Response: The Flexible Funding for Alternative Modes policy was revised to recognize the importance alternative modes in alleviating congestion. Further, the Transportation Commission supports the use of Other Regional Priority funds for alternative mode projects.

Regional Transportation Plans included alternative mode projects in their prioritization process and these projects are eligible for funding through the STIP 4P process.

Other Substantive Comments:

The discussion of the Statewide Transportation Improvement Program (STIP) does not effectively link the STIP to the Statewide Plan. Text also needs to be included that will show the linkage of the Regional Planning Process to the 4P process.

Regarding aviation, it was pointed out that the Yampa Valley (Hayden) Airport and Walker Field (Grand Junction) both assist in relieving congestion along the I-70 Corridor, therefore they should be added to the list of airports in the *Aviation Element* section of the Plan.

Response: The text has been edited in the discussion of the Statewide Transportation Improvement Program (STIP) to show the linkage of the 2020 Plan to the STIP. Also included is text detailing the 4P process at the regional planning level

The *Aviation Element* section has been edited to include the Yampa Valley (Hayden) Airport and Walker Field (Grand Junction).

Project Specific Comments:

- Reduce the estimated Fixed Guideway System in the Unfunded Project Appendix from $8.85 billion to $3.9 billion.
- Simba Run Underpass project in Vail should be separated from the I-70 West Vail to East Vail project in the Plan appendices because the scope of work is different.
- Recommendation to change SH-17 to US-285 from Villa Grove to Alamosa since the route is much shorter than taking the current US-285 route though Saguache and Monte Vista.
- Additional shoulder work along state highway system should be completed in conjunction with the installation of fiber optics systems.

Response: Citizens will need to coordinate these project amendments through the appropriate transportation planning regions. Once project amendments are approved at the Regional Planning

Commission level, the request can be made for CDOT to amend the Statewide Transportation Plan accordingly.

FINAL DRAFT -- PUBLIC COMMENTS AND RESPONSES

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- Assist in the formation of a coalition to create a dedicated source of revenue for at least two passenger rail corridors

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COMMENTS ON THE STATE SIGNIFICANT CORRIDORS

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Response: CDOT staff revised text to reflect the Commission's direction for pursuing a tiered transportation system utilizing the SSC as a starting point.

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COMMENTS ON THE USE OF AND FUNDING FOR ALTERNATIVE MODES

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Response: Citizens will need to coordinate these project amendments through the appropriate transportation planning regions. Once project amendments are approved at the Regional Planning Commission level, the request can be made for CDOT to amend the Statewide Transportation Plan accordingly.

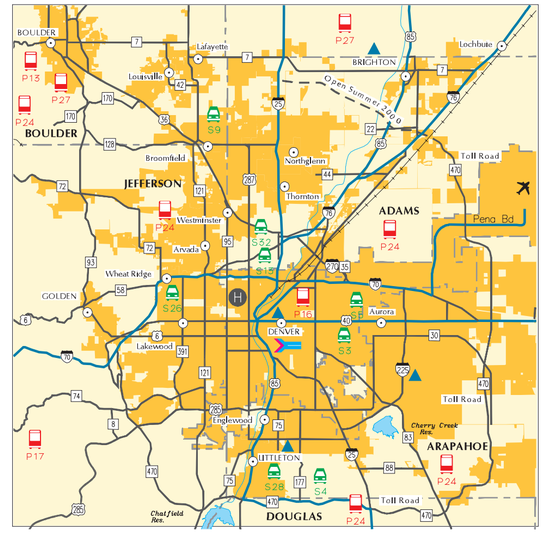
Colorado Passenger Services Map

LEGEND

- Highways
- Projected Highways
- Highway with a Greyhound/TNM&O Bus Route
- Other Local Roads
- Passenger Rail Lines
- State Boundary
- County Boundary
- Major Streams
- Lakes and Reservoirs
- National Monuments and Parks
- Indian Reservation
- Urbanized Areas
- Continental Divide
- P4 — Public Transportation
- S16 — Specialized Transportation
- Intercity Bus Stations
- Amtrak Stations
- Commercial Service Airports
- Ski Areas
- $$ — Gaming Locations
- A - I — Scenic/Historic Trains/Trolleys
- 25 — Interstate
- 40 — US Highways
- 291 — State Highways
- City Location

Compiled from information available as of January, 2000

Metro Denver Inset



ASISTENCIA DENTRO ESPAÑOL

Para asistencia dentro Español, buscar eso simbolo:

RTD-DENVER: Para asistencia dentro Español, llamado el principal numero 303-299-6000.

PUBLIC TRANSPORTATION OPERATORS

These providers operate public transportation services. They receive public funds to provide services open to the general public.

Fixed route services are regularly scheduled transit services operated over a set route. All public operators are required to be in compliance with standards of the Americans with Disabilities Act (ADA). Public operators of fixed route services are also required to offer supplementary para-transit services for people with disabilities who are unable to ride the accessible fixed route bus system. Para-transit is a curb-to-curb transportation service offering specialized passenger assistance for people with disabilities. For more specific information about ADA para-transit services, contact the transportation provider, using the ADA phone number when one is provided.

Demand responsive services are personalized, direct transit service on an advance telephone reservation basis and are primarily a curb-to-curb or door-to-door service and may include elderly, disabled and other general services. Some agencies provide free services, some request donations, and others have fixed fares. Contact the agency for fare and schedule information.

Organizations that are not public agencies are private non-profit organizations and are designated by a "star" icon. Some services may be seasonal in mountain communities.

Contact the agency directly for detailed information.

LEGEND

- Area Commuter Service
- Private non-profit
- Bicycle alternatives
- Call and Ride (demand responsive)
- Fixed Route Service
- Light Rail
- Airport, supports commercial service
- Asstencia en Espanol Assistance in Spanish
- Trolley Bus Service
- Wheelchair accessible

P1 Avon/Beaver Creek Transit 970-748-4120
TDD Service 970-949-1646
Avon and Beaver Creek, and by contract with ECO Transit: Leadville, Redcliff, Minturn, Vail, Edwards, Eagle, Gypsum and Dotsero.

P2 Breckenridge Transit 970-547-3140
Breckenridge

P3 Central City Tramway (Closed in April, 2000)

P4 Clean Air Transit Company 303-660-1359
Castle Rock

P5 COLT 970-962-2429
Call and Ride (ADA) 970-962-2700
City of Loveland Transit
Loveland

P6 County Express (NECALG)
Logan County 970-522-6440
Morgan County 970-867-6494
Phillips County 970-774-6343
Sedgwick County 970-474-3675
Washington County 970-345-2225
Yuma County - Wray 970-332-4419
Yuma County - Yuma 970-848-3867
Administrative Offices 970-867-9409

P7 Cripple Creek Transportation 719-689-3753
Call and Ride 719-689-7711
Cripple Creek

P8 Durango LIFT 970-259-5438
Opportunity Bus Call and Ride (ADA) 970-247-3577
Durango

P9 ECO Transit 970-748-4120
TDD Service 970-949-1646
Interstate 70 corridor of Eagle County including Avon and Beaver Creek, Leadville, Redcliff, Minturn, Vail, Edwards, Eagle, Gypsum and Dotsero.

P10 Galloping Goose Transit 970-728-5700
Call and Ride 970-728-2179
Telluride, Norwood, Placerville, Town of Mountain Village

P11 Grand Valley Transit 970-245-2626
Grand Junction

P12 City of Greeley the BUS 970-350-9287
Greeley and Evans Call and Ride 970-350-9290
TDD Service 970-350-9287

P13 The HOP 303-447-8282
Boulder

P14 Ignacio Road Runner 970-563-4545
So. Ute Community Action Programs
Ignacio with commuter service to Durango

P15 City of La Junta 719-384-5453
La Junta

P16 The Link 303-744-6806
Southeast Transit Authority
Denver Tech Center area

P17 Mountain Wheels 303-674-2843
Service of Seniors' Resource Center
Evergreen/Conifer corridor

P18 Mountain Village Metro Dist. 970-728-8888
Town of Mountain Village and to and from Telluride

P19 Mountain Express 970-264-2250
Archuleta County Transit, Pagosa Springs

P20 Mountain Express 970-349-7318
Crested Butte and Mount Crested Butte

P21 Outback Express (ECCOG)
Stratton 719-348-5562
Outside Stratton 800-825-0208
Also Cheyenne, Elbert, Lincoln and Kit Carson counties.

P22 Prairie Dog Express 719-336-8034
Lamar and Holly in Prowers County

P23 Pueblo Transit 719-542-4306
CitiLift Call and Ride 719-546-2484
Pueblo

P24 RTD Denver 303-299-6000
Access-A-Ride (Access-A-Cab) 303-299-2960
TDD Service 303-299-2980
Denver
RTD serves all or part of six front range counties from Denver.

P25 RIDE Transit Services
Chaffee County 719-221-7433
Fremont/Custer Counties 719-269-3417
Administrative offices 719-275-1616

P26 Roaring Fork Transit Agency 970-925-8484
Pitkin County, including Aspen and Snowmass Village; Eagle County (portion of Basalt); Glenwood Springs and Carbondale in Garfield County

P27 Special Transit 303-447-2848
Call and Ride (ADA) 303-447-0686
TDD Service 303-447-0686
Boulder County, Estes Park and rural Adams County

P28 Village Shuttle 970-923-3500
Snowmass Village

P29 South Central COG 719-846-4401
Call and Ride (ADA) 719-846-4121
Trinidad and Walsenburg areas

P30 Springs Transit 719-385-5974
Springs Mobility Call and Ride(ADA) 719-392-2396
Colorado Springs

P31 Steamboat Springs Transit 970-879-3717
Steamboat Springs and commuter services to Craig, Hayden and Milner

P32 Summit Stage 970-668-0999
Summit County, including Arapahoe Basin, Breckenridge, Copper Mountain, Dillon, Frisco, Keystone and Silverthorne

P33 TransFort 970-221-6620
Dial-A-Ride TDD Service 970-224-6066
Fort Collins

P34 Town of Vail Transit 970479-2178
Vail Recorded Information 970-328-8143
TDD Service 970-479-2825

P35 Weld County Transportation 970-356-4000 ext. 3494
Greeley

P36 Winter Park LIFT 970-729-4163
Winter Park and Fraser

INTERCITY BUS OPERATORS

Greyhound Lines, Texas, New Mexico and Oklahoma Coaches (TNM&O), Autobus Turismos Rapidos, Inc., Golden State Transportation, and **Powder River Transportation** provide scheduled city-to-city, interstate bus service. These companies operate a number of regularly scheduled routes in over-the-road coaches, capable of seating 30-55 passengers, that follow specific bus routes. A central, computerized passenger reservation center operates to ensure that complete information concerning bus station locations, fares, schedules and reservations is available from a single location.

For schedules, fares and information
English 800-231-2222
Espanol 800-531-5332
TDD Services 800-345-3109

The companies above may offer special assistance to passengers with disabilities at all points on their bus trip. If traveling alone or with a companion call 800-752-4841 to inquire or to arrange for special assistance. In some instances the traveling companion may be eligible for free travel. Please note that requests for assistance should be made at least two days prior to travel.

El Paso- Los Angeles Limousine Express, Inc., is another city-to-city, interstate bus provider.

For schedules, fares and information 303-293-2244.

SPECIALIZED TRANSIT OPERATORS

These operators provide demand responsive transit services for seniors (over 60, disabled or not)and/or non-seniors with disabilities. Services may also be open to disadvantaged people (e.g., low income people). Demand responsive services are personalized, direct transit services provided on an advanced reservation basis which are generally either curb-to-curb or door-to-door. While service areas are stated in each listing, some operators travel to destinations well outside their stated service areas. Some providers may serve only portions of the counties listed in their service areas.

Contact the operator directly for specific information about services, destinations, assistance provided, as well as response times, fares, and hours of operation. Most providers are private nonprofit organizations. Public agencies are designated with a "diamond" icon.

LEGEND

- Senior services
- Services for people with disabilities
- Call and Ride
- Wheelchair accessible

S1 Alamosa Senior Citizens 719-589-3277
Alamosa, Hooper and Mosca areas.

S2 Amblicab 719-633-4677
Pikes Peak Partnership
Colorado Springs and Manitou Springs.

S3 American Red Cross 303-722-7474 ext. 113
Mile High Chapter
Adams, Arapahoe, Denver, Douglas, Jefferson counties, City of Aurora for medically-related trips only.

S4 Arapahoe County Transportation Svcs.
Seniors 303-738-8090
Medicaid clients 303-738-8096
Arapahoe, Denver and Douglas counties.

S5 Aurora Senior Center 303-739-7940
Aurora

S6 Beaver Creek Dial-A-Ride 970-845-6274
Homeowners and guests in Beaver Creek, Avon, Arrowhead and Bachelor Gulch.

S7 Baca County Seniors Van 719-523-6532
TDD Service 800-721-4327
Baca County, including Springfield

S8 Berthoud Area Golden Links 970-532-3049
Berthoud

S9 Broomfield EasyRide 303-469-0536
City of Broomfield

S10 Bus For Us 719-346-8652
City of Burlington

S11 Castle Rock Senior Center 303-688-9498
Castle Rock and portions of Douglas County

S12 CMC Senior/Disabled Transit 970-945-9117
Garfield County, including Glenwood Springs 970-625-1366
In Rifle

S13 Community Wheels 303-235-6972
Medicaid clients 303-235-6903
Service of Seniors' Resource Center in Jefferson and Adams county, and metro Denver.

S14 Costilla County Senior Citizens 719-672-3935
Southern portion of Costilla County

S15 Delta County Council on Aging
Delta County
Cedaredge 970-856-6924
Delta 970-874-7661
Hotchkiss 970-872-3491
Paonia 970-527-3435

S16 Dolores County Senior Svcs. 970-677-2203
Dove Creek and Cahone areas of Dolores County.

S17 Douglas Cty Neighbor Network 303-660-7519
Douglas County and nearby areas.

S18 Eagle County Senior Services 970-328-8827
TDD Service 970-328-8797
Eagle County area

S19 Estes Park Senior Center 970-586-8767
Transportation referrals in Estes Park area.

S20 Fountain Valley Sr. Ctr. Transp. 719-520-6471
Southern and eastern El Paso County.

S21 Golden Age Transp. Svc. 719-456-1372
Bent County, including Las Animas

S22 Golden Shuttle 719-276-5200
Service of Senior Transit of Canon City. Includes Canon City, Florence and Penrose.

S23 Grand County Council on Aging 970-887-3222
Grand County, including Granby

S24 Hinsdale County Jubileers 970-944-2829
Hinsdale and Gunnison counties.

S25 Kiowa County Transit 719-438-5570
Kiowa County area, including Eads.

S26 Lakewood Rides 303-987-4826
TDD Service 303-987-4842
City of Lakewood area

S27 Leadville Senior Center Information 719-486-1774
Reservations 719-486-2572
Lake County, including Leadville

S28 Littleton Omni Bus 303-795-3700
City of Littleton. "Shopping Cart" bus also available.

S29 Meeker Streaker Transit Sys. 970-878-5047
Within town limits of Meeker.

S30 Moffat County Housing Auth. 970-824-3911
Moffat County, including Craig. (Ext. 3660)

S31 Montrose County Sr. Transp. 970-249-0128
Montrose County

S32 North Denver Alliance 303-433-7200
Metro Denver area.

S33 Northerner Seniors 719-274-4029
Conejos County, including La Jara

S34 Older Americans Transp. Svcs. 970-723-4636
Jackson County area, including Walden

S35 Ouray County Council on Aging 970-325-4306
Ouray County and nearby trade areas

S36 Park County Senior Coalition 719-836-4295
Park County

S37 Parker Senior Center 303-841-5370
Area within 10 mile radius of Senior Center

S38 Pueblo SRDA 719-543-9983
CitiLift Program 719-546-2484
TDD Service 719-545-8900
Pueblo County, including Pueblo. CitiLift ADA services in Pueblo only.

S39 Routt County Council on Aging 970-879-0633
Routt County

S40 S.A.I.N.T 970-223-8604
Fort Collins and Loveland. SAINT is acronym for Senior Alternatives in Transportation.

S41 San Luis Valley Transportation 719-589-5734
Serves six county area in San Luis Valley
Alamosa

S42 Senior Outreach/Nutrition 970-565-4166
Montezuma County, including Cortez.

S43 Silver Key Senior Services 719-633-2611
Colorado Springs, Monument, Palmer Lake, Stratton Meadows, Strathmoor Hills, Black Forest and Manitou Springs.

S44 Tri-County Senior Citizens & Housing, Inc. 719-852-5778
Mineral, Rio Grande and Saguache counties

S45 Tri-Valley Senior Citizens' Association 303-734-1223
Rural areas of eastern Arapahoe and Adams counties.

S46 Ute Mountain Ute Tribe 970-565-3751
Towaoc

S47 VOA Gilpin/Clear Creek Project 303-294-0111
Gilpin and Clear Creek counties.

S48 Wellington Senior Resources 970-568-7402
Wellington area of Larimer County

S49 Windsor Senior Center 970-686-7476
Windsor area

S50 Young At Heart Seniors 970-641-2960
Gunnison County

FOR MORE INFORMATION

To gain more complete information about transit in Colorado, look for these sites on the Internet's World Wide Web:

www.coloradotransit.com
Sponsored by the Colorado Association of Transit Agencies (CASTA) this site provides mini-web pages for each transit provider in Colorado with links to e-mail addresses and to websites for those agencies who have them.

www.cotrip.org
This site provides a wide-ranging look at air, rail, and ground transportation across the Front Range of Colorado and along the I-70 corridor to the Continental Divide.

www.dot.state.co.us/public/index
This is the official web site of the Colorado Department of Transportation.

colorado transit *your ride is here*

COMMERCIAL TRANSPORTATION OPERATORS

These commercial providers operate public transportation services on a "for-hire" basis and provide services to the general public upon request. Cities listed below the operator are base of operations and service may be available to other cities and towns in the area.

Charter Vehicle Services are services prearranged by the traveler, generally for exclusive use of vehicles for special trips outside the operator's service area. In many instances, services may be provided to any destination in the state. Contact the operator directly for detailed information.

Shuttle Services are scheduled/on demand services which tend to be longer trips (usually to and from airports). The hours and destinations may vary. To find a Shuttle operator, look for the city in which the operator is based that is closest to your destination. Contact the operator directly for detailed information.

Taxi Services are "on call" local taxicab services, although some operators may extend trips out of their normal service areas with an accompanying extra charge. Contact the operator directly for detailed information.

Wheelchair Accessibility. Operator listings which show the disabled persons wheelchair symbol indicate that some portion of their fleet is wheelchair accessible. It maybe very limited in some cases. Contact the operator directly for detailed information.

IN ALL INSTANCES, please contact the operator directly **before** arriving at your transfer point or destination to determine service areas specific to your needs, charges for the services required, and the extent of wheelchair accessible equipment that might be available.

This list does not include all commercial operators in Colorado, only those who responded to a statewide operator survey.

LEGEND

- *C* Charter Services
- *S* Shuttle Services
- *T* Taxi Services
- Wheelchair accessible

Akron	Dash-a-bout Roadrunner *CS*	800-720-3274
Aspen	High Mountain Taxi *CT*	970-925-8294
Boulder	Freedom Cabs - Boulder *T*	303-292-8900
	Powder River Transportation *CS*	800-442-3682
	Yellow Cab - Boulder *T*	303-777-7777
Castle Rock	Need-A-Lift* *T*	303-922-3997
	* *specializing in elderly/disabled transportation*	
Colorado Springs	Broadmoor Transportation *CS*	719-577-5769
	Kids Transit of Colorado Springs *T*	719-391-9381
	Peak Transit *S*	719-687-3456
	Ramblin' Express, Inc. *CS*	800-772-6254
	Yellow Cab - Colorado Springs *T*	719-634-5000
Crested Butte	Crested Butte Town Taxi, Inc. *CST*	970-349-5543
Denver Metro	Actually Quite Nice Brew Tours *CS*	303-431-1140
	Carey Limousine Service *C*	303-693-0732
	Coach USA, Denver *CS*	888-223-2877
	Colorado Sightseer *CS*	303-423-8200
	Freedom Cabs *T*	303-292-8900
	Golden West Communter, LLC *CS*	303-342-9300
	Metro Taxi *T*	303-333-3333
	Mobility Transportation Services, Inc.	303-295-3900
	Need-A-Lift* *T*	303-922-3997
	People's Choice *CS*	303-289-2222
	Presidential Limousine *C*	303-286-1114
	Super Shuttle - Denver *CS*	303-370-1300
	Yellow Cab - Denver *T*	303-777-7777
	Zone Cab Company *T*	303-444-8888
	**specializing in elderly/disabled transportation*	
Durango	Durango Ski Corp, MT Transport *S*	970-247-9000
	Durango Transportation, Inc. *CST*	800-626-2066
	Rocky Mountain Whitewater/Jeep Tours *C*	970-247-0807
Estes Park & Grand Lake	Ram's Run *ST* (Seasonal-Summer)	970-627-8400
	Emerald Taxi/Shuttle/Tours *CST*	970-586-1991
Florence	Fremont County Cab *CST*	719-784-2222
Fort Collins	Airport Express, Inc. *S*	970-482-0505
	Shamrock Transportation *CST*	970-868-9999
Frisco	Rainbow Taxi and Limousine *CST*	970-453-8294
Grand Junction	Care Cars Medial Transportation *T*	970-245-8949
	GISDHO Shuttle *CS*	888-226-5081
	Sunshine Taxi *CST*	800-324-9013
	W.W. Stage Lines, Inc. *CS*	888-858-4087
Greeley	Shamrock Transportation *CST*	970-868-9999
Lamar	Arkansas Valley Charters *C*	719-336-4651
Leadville	Dee Hive Tours/Transportation *S*	719-486-2339
Longmont	Express Charters,Inc. *C*	970-482-0505
	Yellow Cab - Boulder *T*	303-777-7777
Montrose	Come and See Travel Services *CST*	877-899-2274
Pueblo	City Cab, Inc. *T*	719-543-2525
	Shuttle Service. Of Southern Colo. *CS*	877-545-9435
Salida	Timberline Express *CS*	800-288-1375
Silverthorne	Resort Express *CS*	800-334-7433
Steamboat Springs	Alpine Taxi and Limo *CST*	800-343-7433
	Steamboat Taxi *CT*	970-879-3335
Sterling	Dash-a-bout Roadrunner *T*	800-720-3274
Telluride	Telluride Shuttle and Taxi *CST*	970-728-6667
	Telluride Transit Company *CST*	800-800-6228
Trinidad	Your Ride Transportation Services *T*	719-859-3344
Vail	Colorado Mountain Express *CS*	800-525-6363
Windsor	Shamrock Transportation *CST*	970-868-9999
Winter Park	Home James Transportation *T*	800-451-4844
	Winter Park LIFT *C*	970-726-4163
Woodland Park	Teller Cab *T*	719-687-8222

COLORADO DEPARTMENT OF TRANSPORTATION

CASTA COLORADO ASSOCIATION OF TRANSIT AGENCIES

SERVICES AND RECREATION

There are a number of additional services and recreational opportunities for travelers in Colorado. Included are:

Amtrak Rail Service. Amtrak is the only interstate, long haul passenger rail service available for Colorado. Amtrak provides several on-board amenities such as full-service dining, snack bars, lounges, video entertainment, and a variety of sleeping accommodations. It also offers a variety of travel services before you board, including travel Planning and vacation packages, such as Ski Amtrak's fully inclusive winter tours to some of Colorado's ski resorts .

Reservations or information 800-872-7245

Amtrak stations in Colorado are located at: Denver*, Fort Morgan, Fraser (Winter Park), Glenwood Springs*, Granby, Grand Junction*, Greeley, La Junta, Lamar, and Trinidad. Stations with an asterisk handle ticketing, Baggage and package express. Others have no passenger services and may be unmanned.

Bicycle Information. For free information packet on bicycling in Colorado, contact:

Bicycle Colorado 719-530-0051
P.O. Box 698
Salida, CO 812010698
email: info@bicyclecolo.org

Carpool/Vanpool Information. Carpooling and vanpooling services help the environment and provide relief from driving in congestion. Programs listed below match persons who reside or work in reasonable proximity to each other for ride sharing purposes. Carpool programs rely on volunteer drivers using their own personal vehicles. Vanpool programs rely on volunteer drivers using program-owned vehicles. Some programs offer contingency transportation in emergency situations when the carpool or vanpool cannot be used. Contact the agencies directly for detailed information:

Aspen/Glenwood Springs corridor
Ride Share (carpool, Aspen only) 970-920-5038

Colorado Springs and Teller, Park and El Paso counties
RIDEFINDERS carpool\vanpool info 719-385-7433

Denver metro area
RideArrangers (carpool/vanpool) 303-458-7665

Fort Collins, Greeley, Loveland and Larimer, Weld counties
Commuter Pool/VanGo (car\vanpool) 800-332-0950

Summit, Park, Lake, Grand counties
Summit State (Carpool/Vanpool) 970-668-0999

Statewide
VPSI (vanpool) 303-373-8804
RideBoard (carpool) www.rideboard.org

Colorado Ski Resorts. There are two dozen ski areas in the state which provide facilities in the Rocky Mountains for skiers from all over the world. For general information or questions about a specific ski area or resort, contact:
Colorado Ski County USA 303-873-0793

For Cross Country (Nordic) skiing information:
Colo. Cross Country Ski Assoc. www.coloradoxc.org

Hearing and Speech Disability Telephone. Telephone numbers listed on this map that are equipped to receive calls from people with hearing and speech disabilities are designated with the "TDD" abbreviation. TDD numbers have a telecommunication device for the deaf (TDD), a teletypewriter, or a text telephone. Persons who have a TDD, teletypewriter or text telephone can relay calls from anywhere in the United States to any Colorado telephone number that is not TDD equipped by using **Relay Colorado**, via a toll-free number. There is no charge when placing a local call. Long distance charges may apply, depending on the Colorado number called. Those charges may be billed through a credit card, telephone calling card, or your preferred long distance company by notifying them before you make the call. **Relay Colorado** may be accessed from outside the United States via a toll number.
Service is available 24 hours a day, each day of the year. There is no limit on the length or number of calls placed.
For TDD users: 800-659-2656
For ASCII users: 800-659-4656
For information: 800-676-3777 (TDD/voice)
For access from outside the U.S. (TDD or ASCII): 605-224-1837

Light Rail Transit (LRT). Light rail is a system of public passenger vehicles operated on a fixed route on metal rails on a dedicated right of way or city street. Each LRT vehicle has 64 passenger seats and can carry a maximum of 250 occupants. The vehicles can be operated independently or connected to form trains of two or more cars. The Denver metro area has in place, under construction or planned for construction a total of 35.5 miles of light rail service. The initial 5.3 mile LRT Central Corridor was opened in 1994. The Southwest LRT corridor (8.7 miles) opens in July, 2000, and construction on the Southeast (19.7 miles) and Central Platte Valley (1.8 miles) corridors Is scheduled to begin in 2000.

PARK-N-RIDE Services. These services are offered to make transit use to and from the workplace more convenient and less stressful. These facilities provide a place to park your vehicle free of charge, ride a bus from the lot to your destination and return to your vehicle at the lot. Contact the agencies below for information on Park-N-Ride services in their areas:

ECO Transit	970-748-4120
Regional Transportation District, Denver (RTD)	303-299-6000
Roaring Fork Transit Agency (RFTA)	970-925-8484
Summit Stage	970-668-0999

Other agencies may have Park-N-Ride facilities. Check with the agency of your choice directly for detailed information.

Rio Grande Ski Train is a private, for profit passenger train operated seasonally from the Denver Union Terminal to the Winter Park Ski Resort, following the Amtrak route from Denver to Fraser. The Ski Train is operated Saturdays and Sundays from January to April. First Class and Coach tickets are available. Onboard services include snack bars, lounge cars, and discounted Winter Park Resort lift tickets.
Information and reservations 303-296-4754

Ski Express Bus Service. Alternative transportation is available for skiers from the Denver metropolitan area to Vail, Keystone and Winter Park Resorts. Service is generally provided on a daily basis between December 26 and December 31. Weekend service generally begins the second week of January and continues through early April. Holiday Service is generally provided on Martin Luther King Day and Presidents' Day. Skiers board at locations around the metro area. Call the information line below for specific operating dates, current fares and skier boarding locations.
For information 303-271-1028

Scenic and Historic Trains and Trolleys. These trains and trolleys are operated as historic or scenic tourist excursions. Generally they operate only during the summer months and have very limited departure times. Some operators provide year-round service, although providing only limited schedules. Some operations make only one or two trips a day at the height of summer operations although some, such as the Fort Collins Municipal Railway, Platte Valley Trolley and Royal Gorge Route make several trips on Saturday and Sundays during the warm weather season. Contact the operator directly for fares, schedule, and departure information.

A -	Cumbres & Toltec Scenic Railroad	Antonito	719-376-5483
B -	Cripple Creek & Victor Railroad	Cripple Creek	719-689-2640
C -	Durango & Silverton Narrow Gauge Railroad	Durango	970-247-2733
D -	Fort Collins Municipal Railway (trolley)	Fort Collins	970-224-5372
E -	Georgetown Loop Railroad	Georgetown	888-724-5748
F -	Leadville, Colorado & Southern Railroad	Leadville	719-468-3936
G -	Manitou & Pikes Peak Cog Railway	Manitou Springs	719-685-5401
H -	Platte Valley Trolley	Denver	303-458-6255
I -	Royal Gorge Route Railway	Canon City	888-724-5748