

# TRANSPORTATION PLANNING IN COLORADO

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CDOT Planning Manual

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**COLORADO**  
Department of  
Transportation

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# INTRODUCTION

## REFERENCE GUIDE

This *Transportation Planning in Colorado: CDOT Planning Manual* summarizes current transportation planning and decision-making processes and provides detailed information on specific programs, funding, and resources. This guide introduces transportation planning processes and provides quick look-up information, web links, and references for transportation professionals.

[Planning 101: Overview of Transportation Planning](#) - This section introduces the performance based transportation planning process in Colorado including descriptions of transportation planning regions, agencies, and stakeholders involved in statewide and regional planning. Links to online resources, tools, and planning products can be found in this section.

[Planning 102: Transportation Funds and Programs](#) - This section provides an overview of how transportation is financed and how CDOT invests transportation funds, including descriptions of priorities, programs, and performance based funding decisions.

[Planning 103: Planning, Programming, and Project Selection](#) - This section describes the major activities, plans, and planning products that CDOT is responsible for, including descriptions of statewide and regional priorities and project selection processes.

[Technical Appendix](#) - The web-based technical appendix contains technical information about planning processes at CDOT. Under Development.



# PLANNING 101 – OVERVIEW OF TRANSPORTATION PLANNING

How do state and local agencies make multi-million dollar decisions to expand a highway, fix a bridge, create an express lane, or extend a transit system? Long before construction crews start work on a project, transportation planners at the Colorado Department of Transportation (CDOT) are looking ahead to solve transportation problems today and well into the future.

## WHY DO WE PLAN?

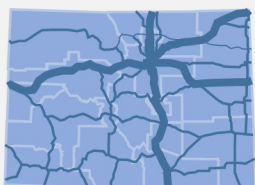
We plan for future investment so that the best solutions for transportation problems can be identified and because we cannot fund every project that is important in every community. Like setting a household budget, CDOT and regional agencies must prioritize spending on projects that provide the greatest benefits at the lowest costs. Transportation planning is a deliberate, thoughtful, and structured process to help make these decisions. CDOT's plans are performance based. This ensures that CDOT's limited funding is applied to the right project, for the right purpose, at the right time. Planning for performance is based in a vision for the future. The performance objectives serve to measure progress in achieving that vision. . Projects often take multiple years of commitment, work, and funding to finish. Planning gives us the starting point and the steps that are necessary to implement those projects and improvements. Plans also provide clear performance rationale for investment decisions. The public, partners, and elected officials can look to the performance objectives of a plan and understand how a project helps meet objectives and why it is important to fund. CDOT is constantly measuring progress toward plan goals and choosing projects that best support performance objectives.

## WHAT IS TRANSPORTATION PLANNING?

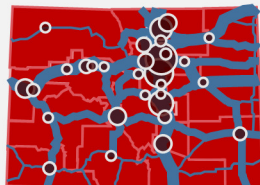
Planning is a continual process to make better decisions that support the CDOT mission of efficiently moving people, goods and information. This process starts by asking residents of Colorado what they want from the transportation system. Questions such as “Is it fewer potholes, a more reliable commute, faster bus service, or safer routes to school?” are posed. The answers are often complicated. However, by involving the public, local officials, and stakeholders in discussions about transportation, CDOT learns what is important. Planning relies on good and comprehensive data to understand both current and future conditions on the highway system and its surrounding environment. Planners try to predict what is going on in the economy, where people will live and work, and how they might travel 20 years in the future. These broad trends identify needs for the current and future system and highlight solutions to address those needs.

With needs established and challenges identified, CDOT's performance-based planning process provides a transparent framework to decide which projects to fund. Using public input, data analysis, local context, and revenue projections, performance goals and objectives for transportation programs are established. Funding is then distributed in a manner to best achieve those performance objectives. Planners and engineers examine how each project aligns with priorities and how well it helps solve a problem. The most efficient and effective projects rise to the top. There are many good projects and not all can be funded. The planning process takes time and involves many people, but results in an understandable and performance-based framework to make decisions and invest limited funds.

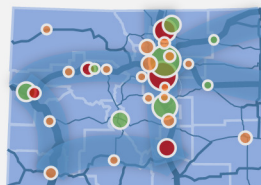
Where Are We Now?



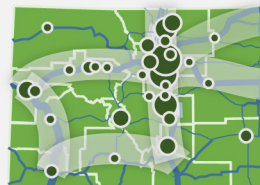
Where Are We Going?



Where Do We Want To Be?



How Do We Get There?



Planning is guided by a complex set of federal and state regulations and restricted by requirements on how, when, and where money is spent. This guidebook summarizes how planning is governed, conducted, and funded and describes CDOT's role and who is involved in planning for Colorado's future transportation system.

## WHAT GOVERNS TRANSPORTATION PLANNING?

Federal and state regulations guide the transportation planning process, but local goals and experiences shape the outcome. The role of the federal government is to provide funding, guidance, oversight, and standards. The Colorado Department of Transportation's role is to comply with federal and state guidelines, conduct planning processes, lead local involvement, and make investment decisions. The State of Colorado provides substantial funding for transportation while laws and policy govern how that money is invested. In metropolitan areas, Metropolitan Planning Organizations (MPOs) receive federal funding, coordinate project selection, and make decisions about long-term planning and performance objectives. In non-metropolitan areas, the Transportation Planning Regions (TPRs) provide input to CDOT on performance planning and project selection.

## FEDERAL TRANSPORTATION PLANNING LAWS

The U.S. Congress periodically authorizes transportation funding through legislation that also provides overall guidance for transportation planning. The U.S. Department of Transportation (DOT) implements legislation by establishing specific regulations and requirements. The Federal Highway Administration and Federal Transit Administration then oversee the planning and investment activities of CDOT and the MPOs to ensure they comply with regulations.

The 2015 Fixing America's Surface Transportation Act (FAST Act) is the most recent federal law governing transportation. Previously, the 2012 Moving Ahead for Progress in the 21st Century Act (MAP-21) significantly restructured transportation funding programs. FAST and MAP-21 emphasize multimodal investments and performance-based decisions. These laws establish core funding programs, each with their own requirements for how and where funds are spent. Individual funding programs and required federal planning processes are described in greater detail in [Section 102](#) and [103](#) of this guide.

CDOT and regional planning partners must also respond to requirements of other major federal laws including: the National Environmental Policy Act, the Clean Air Act, the Clean Water Act, the Civil Rights Act, and the Americans with Disabilities Act.

## COLORADO TRANSPORTATION PLANNING LAWS

The Colorado General Assembly enacts laws that guide state and regional planning. Colorado state statutes clarify some aspects of statewide and regional transportation planning and decision-making. For example, state law establishes regional planning commissions, emphasizes cooperation between CDOT and regional partners, sets public participation requirements, defines factors that must be considered in state and regional plans, and creates statewide transportation advisory committees. The Colorado Transportation Commission adopts policies and procedures for transportation planning within the state. In Colorado, the Statewide Transportation Plan is a fiscally constrained plan which means that the total proposed improvements shall be within the anticipated fiscal resources for the time period.

## MANAGING FOR PERFORMANCE AT CDOT

MAP-21 introduced new guidelines for incorporating performance management into state and regional planning processes. Performance management links long-term planning and short-term project selection by setting performance objectives and applying performance data when making decisions.

Federal legislation requires CDOT to track and report on performance measures, to set targets for those measures, and to link investments to performance goals. CDOT must invest federal funds in projects that support those targets and ensure that minimum performance thresholds and condition standards are met.

CDOT's current performance management system supports national goals as well as state priorities. Managing for performance helps CDOT make decisions that maximize limited transportation funding. [CDOT's annual Performance Plan](#) links the Department's mission to national and state goals and describes short-term focus areas and long-term strategic policy initiatives. CDOT develops performance measures and tracks progress towards goals and objectives.

## POLICY DIRECTIVE 14

The Colorado Transportation Commission adopted Policy Directive 14 (PD 14) to provide a performance based framework for transportation planning. PD 14 sets performance goals and objectives for core investment areas, including:

**Safety** - Moving Colorado toward zero deaths by reducing traffic-related deaths and serious injuries by one-half by 2030.

**Infrastructure Condition** - Preserving the transportation infrastructure condition to ensure safety and mobility at a least life cycle cost.

**System Performance** - Improving system reliability and reducing congestion, primarily through operational strategies and secondarily through the addition of capacity while supporting opportunities for mode choice.

**Maintenance** - Maintaining CDOT's roadways and facilities to minimize the need for replacement or rehabilitation.

These goals guide investments included in the Statewide Transportation Plan, the Transportation Development Program, the Statewide Transportation Improvement Program, and CDOT's annual budget. PD 14 also directs CDOT to consider Economic Vitality and Environmental Quality when making investments toward these performance goals. Measures of success and target achievement levels are also established by PD 14. For example, the number and rate of fatalities and serious injuries are performance measures for safety.

## HOW DOES CDOT CONDUCT PLANNING?

Transportation planning is conducted through a well-established process that relies on data and public input to tell us where we are now; where we are going in the future; what we want to achieve; and, how we can get there. This process is continually improving and evolving as new data and tools become available, as new issues and challenges are encountered, and as new partners are involved.

CDOT conducts a comprehensive, multimodal, and performance-based transportation planning process that meets federal and state requirements. Members of the public are involved throughout and state and regional agencies and local governments cooperate closely. The planning process results in key products and polices that determine what investments are made and where. In metropolitan areas, the transportation process is conducted by the MPO in cooperation with CDOT.

## CDOT'S TRANSPORTATION PLANNING PROCESS

CDOT's planning cycle is a continuous process as illustrated in the graphic below. In general, a new or updated Statewide Transportation Plan is adopted every four years. Throughout plan development, members of the public, elected officials, and planning partners participate and provide input. Planning is led by CDOT's Division of Transportation Development in partnership with CDOT Engineering Regions,

and other CDOT Divisions. Transportation Planning Regions throughout the state each have distinct roles and responsibilities. Key steps in the transportation planning cycle include:

**Examine current conditions and future trends** in travel, economic growth, freight movement, population growth, development patterns, safety, environmental context, and customer demands.

**Identify future needs** such as capacity, mobility, reliability, safety, and maintenance and examine demands on the system for all transportation modes.

**Establish performance goals and objectives** that address needs and support the public vision for the future of transportation.

**Determine available revenue and funding shortfalls.** Estimates of funding levels and gaps determine what level of investment is possible in the future.

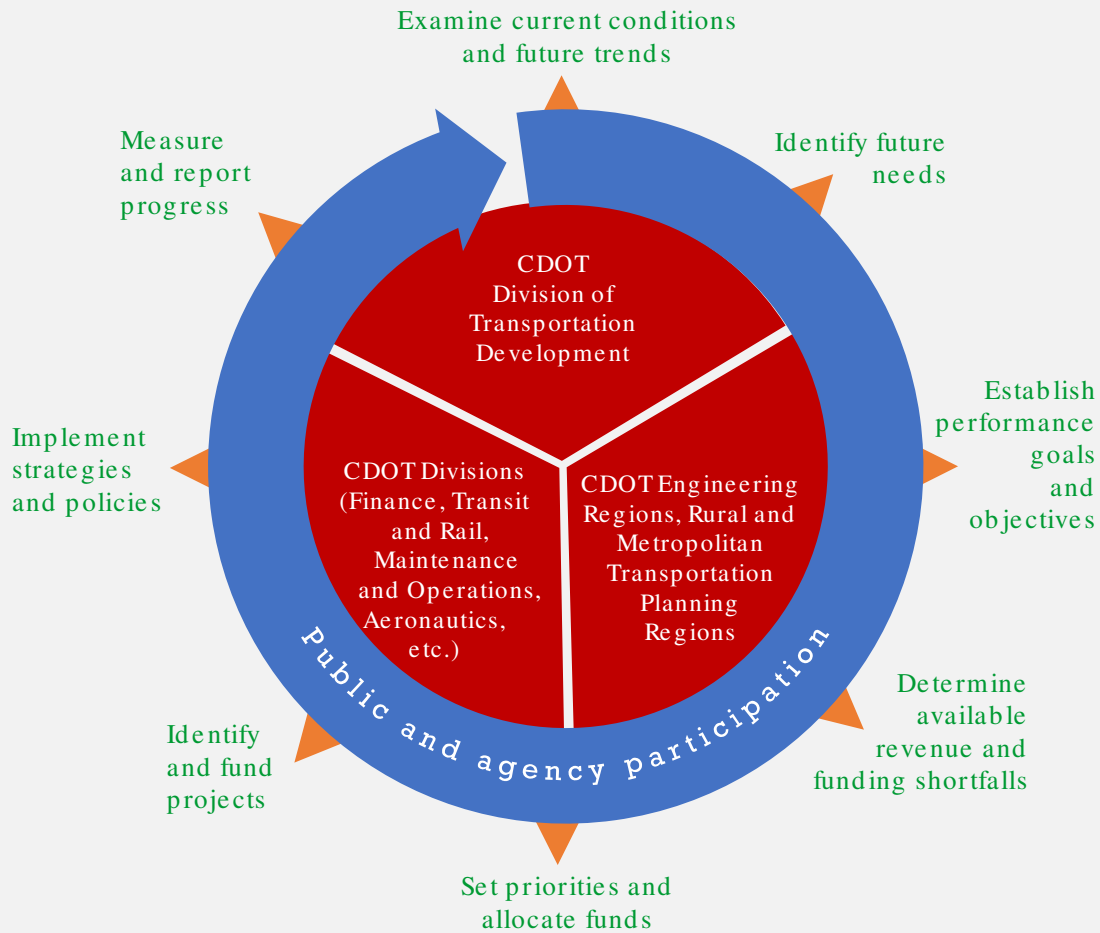
**Set priorities and allocate funds** to programs and focus areas in support of overall performance goals and objectives. Many funds are restricted to certain uses by federal and state regulations.

**Identify and fund projects that support performance objectives.** Projects are identified with input from the public and planning partners and evaluated for how well they meet future needs and support performance objectives.

**Implement strategies and policies** that support performance goals and objectives. Not all investments are projects, some are programs and policies that improve decision-making.

**Measure and report progress** toward performance goals and objectives. Performance measurement provides transparency and is a critical source of feedback in the next iteration of the planning cycle.





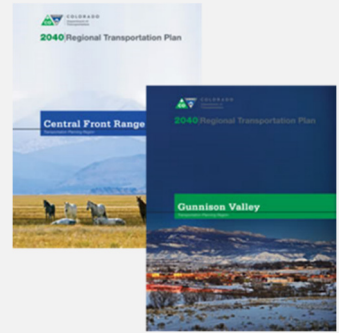
Source: Colorado Department of Transportation, September 2016

Each statewide planning cycle results in the development of a new or updated Statewide Transportation Plan, Regional Transportation Plans, Transportation Development Program, and Statewide Transportation Improvement Program. Colorado’s performance-based transportation planning process is covered in more detail in [Section 103](#) of this guide.

## PLANNING PRODUCTS

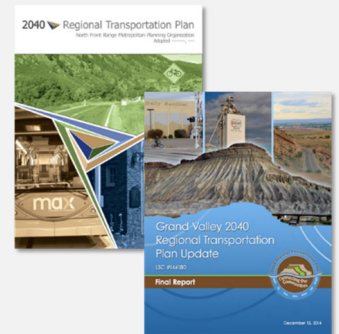
### REGIONAL TRANSPORTATION PLANS

CDOT gathers input from 10 rural Transportation Planning Regions (TPRs) to develop Regional Transportation Plans (RTPs). Regional plans look out 25 years into the future but focus on actions and investments within the first 10 years. Regional stakeholders identify Priority Investment Corridors as those in need of near-term improvements or that are critical to the regional transportation system. Each region’s plan identifies their unique needs, priorities, and strategies for the future. RTPs are integrated into the Statewide Transportation Plan.



### METROPOLITAN TRANSPORTATION PLANS

In metropolitan regions, Long Range Transportation Plans (L RTPs) are prepared by Colorado’s five Metropolitan Planning Organizations (MPOs). MPO plans are governed by federal regulations and developed through a comprehensive process similar to the statewide planning process. L RTPs result in a prioritized set of investments and a fiscally constrained list of regionally significant projects. These plans guide regional investments by aligning project selection with regional goals and performance objectives. MPO L RTPs are integrated into the Statewide Transportation Plan.



### STATEWIDE TRANSPORTATION PLAN (SWP)

The Statewide Transportation Plan (SWP) is the blueprint and vision for how CDOT will improve the state’s transportation system over the next 10 to 25 years. The SWP is developed with input from local and regional stakeholders, multimodal transportation interests, and the traveling public. The plan identifies future needs and outlines goals for Colorado’s multimodal transportation system, including: Safety, Mobility, Economic Vitality, and Maintaining the System. The SWP provides strategic direction to achieve these goals and a transparent framework to select investments. Rural and metropolitan long range plans and other statewide modal plans are integrated within the SWP to provide consistent strategic direction.



### STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM

The Statewide Transportation Plan is implemented by programming projects into the Statewide Transportation Improvement Program (STIP). Projects selected for the STIP support performance objectives and include priority projects from rural and metropolitan transportation plans. The STIP is updated every four years and is fiscally constrained based on projections of available revenue. All federally funded programs and regionally significant projects for which funding has been identified are included in the STIP.

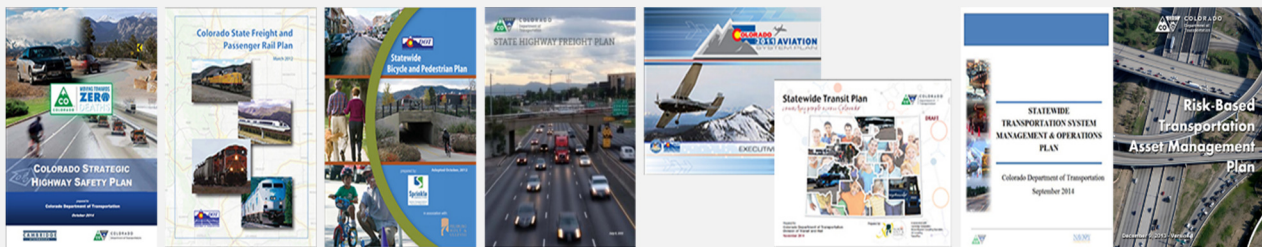
The process for programming projects differs in rural and metropolitan regions. MPOs develop regional Transportation Improvement Programs (TIPs) that include projects consistent with regional plans. MPO TIPs are included without modification into the STIP. In rural regions, regional priorities are established and projects are selected through CDOT’s Region Project Priority Programming Process (4P). The 4P process draws from regional corridor strategies and priorities identified in rural plans. Priority projects are selected in close cooperation with local officials. These projects are incorporated into the STIP.

## STATEWIDE 10-YEAR TRANSPORTATION DEVELOPMENT PROGRAM

The purpose of the 10-Year Transportation Development Program is to bridge the gap between the four-year STIP and the 20-year SWP by capturing major investment needs and priorities within a 10 year timeframe. Major investment needs in the Development Program are identified through statewide planning and development studies and in metropolitan and rural Regional Transportation Plans. The most current Development Program inventory includes roughly 130 highway projects representing more than \$9 billion in funding need, and roughly 100 transit projects representing more than \$2 billion in funding need. Additional bicycle and pedestrian investment needs will be incorporated in the future. While this far exceeds the revenue expected in this timeframe, the Development Program inventory does provide a menu of options for future investment. Furthermore, the Development Program is a tool to help identify potential projects for different purposes, such as candidate projects for different competitive funding programs or projects that would support a specific performance objective.

## OTHER STATEWIDE PLANS

Colorado’s transportation system includes a variety of modes and serves all types of travelers. Plans for various modes are continuously developed and updated by CDOT. These plans are integrated into the Statewide Transportation Plan and help establish a connected multimodal transportation system throughout Colorado. Plans are developed for: transit, rail, freight, bicycle and pedestrian, aviation, safety, transportation system management and operations, and asset management.



## HOW DOES CDOT FUND TRANSPORTATION?

Funding for transportation in Colorado comes from taxes and fees paid by users of the state and national transportation system. Major sources of federal and state revenues are vehicle fuel taxes, vehicle registration taxes, vehicle user fees, grants, and Enterprise revenues.

### FEDERAL REVENUE SOURCES

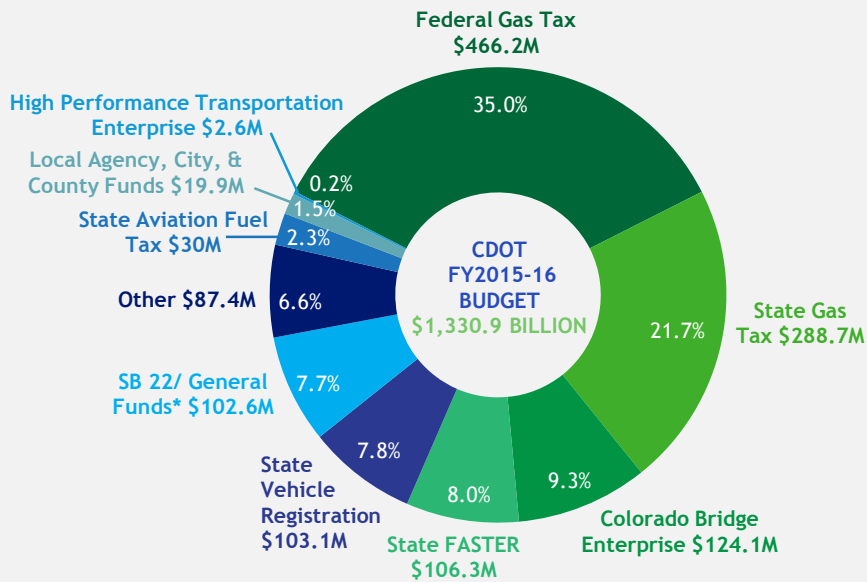
CDOT’s largest funding source is the federal Highway Trust Fund (HTF). This fund is appropriated by the U.S. Congress to support state projects on federal-aid highways and for transit projects. HTF revenue sources include gas tax, special fuel tax (mostly diesel), tire tax, heavy vehicle use tax, and federal vehicle sales tax. HTF funding is distributed by the Federal Highway Administration and Federal Transit Administration to the states. Not all federal transportation funds are allocated to CDOT; some are provided directly to MPOs or to regional and local agencies as grants. Federal funds are assigned to various programs. Each of these programs have different purposes and restrictions on how money is used. These restrictions are often referred to locally as the ‘color of money’.

### STATE REVENUE SOURCES

The largest source of state transportation revenue is motor fuel taxes. The State of Colorado levies taxes on gasoline, diesel, and special fuels used by motor vehicles and aircraft. Colorado also charges various fees and taxes for vehicle use, rental, ownership, and registration. Not all user fee revenues

are directed to CDOT; some are distributed to local governments. CDOT also generates revenue by issuing permits, charging for services (including collection of tolls), sale of right-of-way and property, advertising, and other miscellaneous sources. The Colorado Legislature may also authorize conditional and periodic transfers of state General Fund revenues to CDOT, such as the current SB 228 legislation. Local agencies provide funding matches to complete projects under grants received. Federal and state funds are transferred to the Bridge Enterprise and High Performance Transportation Enterprise as fees for services.

**Where Do CDOT Funds Come From?**



Source: 2015 CDOT Annual Report

**CDOT INVESTMENT PRIORITIES**

CDOT invests funds through a variety of federal and state highway, aviation, transit, rail, bridge, and safety programs. To simplify funding flows, CDOT established six spending categories to describe where money is spent:

**Maintaining What We Have** includes projects that take care of our existing system such as resurfacing and reconstruction of existing pavement and bridges and activities such as roadway and structure maintenance and snow removal.

**Making the Most of What We Have** includes operational upgrades and improvements like traveler information or electronic signs; safety upgrades such as turn lanes; and, safety education programs to increase seatbelt use or reduce impaired driving.

**Expanding Capacity** includes projects that add to our existing system such as new highway lanes. Currently, funding is limited for new capacity.

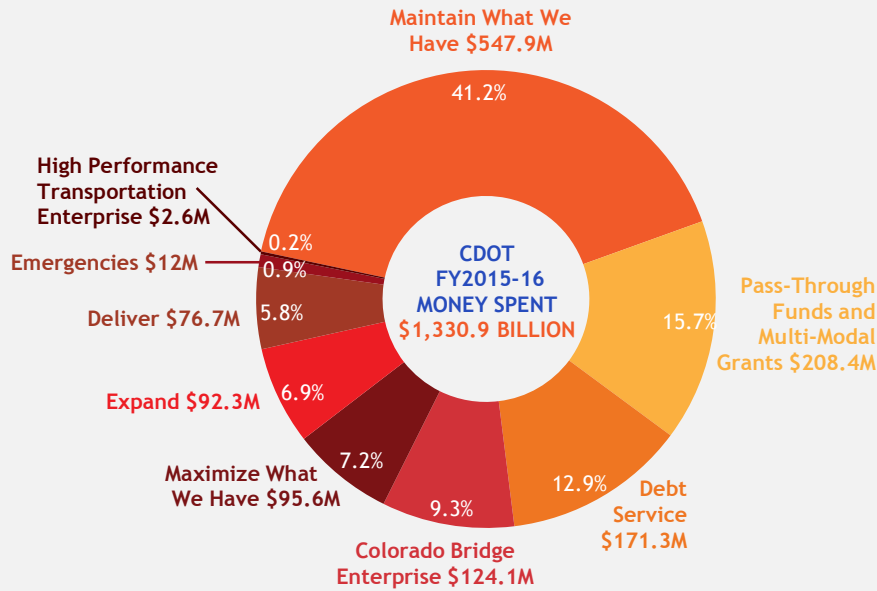
**High Performance Transportation Enterprise and Colorado Bridge Enterprise** are dedicated to increasing highway capacity and improving bridges through innovative finance.



**Pass-through Funds and Multimodal Grants** includes grant funding for specific programs or projects. CDOT only administers these funds and actual work is performed by transit agencies, regional and local agencies, and non-profit groups.

**Emergencies and Debt Service** includes funds the Transportation Commission utilizes for various contingencies and emergencies and pays debt service on outstanding bonds or debt programs.

**Where Does CDOT Invest?**



Source: 2015 CDOT Annual Report

## WHAT IS CDOT’S ROLE IN PLANNING?

*The Colorado Department of Transportation’s mission is to provide the best multimodal transportation system for Colorado that most effectively and safely moves people, goods, and information.*

## CDOT RESPONSIBILITIES

CDOT celebrated its 100-year anniversary in 2010. Today, CDOT provides for the safe and efficient movement of people, goods and information throughout Colorado. CDOT manages an annual budget of \$1.5 billion dollars with significant responsibilities for Colorado’s extensive transportation system. CDOT is responsible for designing, constructing, operating and maintaining state highways, managing infrastructure assets, conducting multimodal planning, and improving highway safety.

Colorado’s state highway system extends more than 23,000 highway lane miles, 3,439 bridges, and 21 tunnels. This system handles 28 billion vehicle miles of travel each year. CDOT manages grants and assists with planning for urban and rural public transit agencies and human service transportation

providers. CDOT supports and operates interregional bus transit service. CDOT's role in aviation and freight rail is limited to planning and grant management. Some bike and pedestrian facilities and trails are maintained by CDOT, but most are the responsibility of local governments.

CDOT is not responsible for the Department of Motor Vehicles, local roads, local transit, or airport operations. Local road development and maintenance are the responsibility of cities, counties, and regional authorities.

## CDOT ORGANIZATION

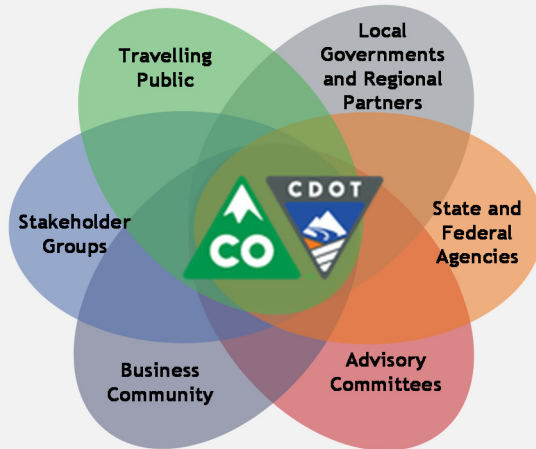
The governor-appointed Colorado Transportation Commission representing 11 districts across the state directs CDOT. Under the leadership of the Commission and CDOT Executive Director, CDOT is organized into Divisions, Branches, and Offices, and Regions that focus on specific functions and issues, as well as five Engineering Regions that are responsible for planning, design, construction, maintenance and operations on the state highways within their geographic area. The Division of Aeronautics, Bridge Enterprise, and High Performance Transportation Enterprise are connected to CDOT but are unique in structure and management. [To view a current organizational chart, click here.](#)

## CDOT PLANNING ROLES

Colorado's multimodal transportation planning process relies on coordination with planning partners. Internal coordination on planning issues occurs among CDOT Regions and Divisions. Most statewide and regional planning processes are coordinated by the Multimodal Planning Branch within the Division of Transportation Development. Planning responsibilities of key CDOT divisions include:

- *Division of Transportation Development (DTD)* - Coordinates planning activities at all levels. DTD is responsible for integrating planning products from different regions and divisions, engaging the public and planning partners, providing data and analysis, and formulating policy.
- *Division of Transit and Rail (DTR)* - Crafts policies and priorities on transit and rail issues. DTR is responsible for statewide transit and rail planning including inter-city rail and bus systems in rural transportation planning regions.
- *Division of Transportation System Management and Operations (TSM&O)* - Focuses on operational and technological improvements to maximize the existing system. TSM&O is responsible for the Strategic Highway Safety Plan and planning for operations.
- *Division of Aeronautics* - Under the direction of the Colorado Aeronautical Board, the Division prepares the State Aviation Systems plan, and administers the Colorado Aviation Fund to provide discretionary grants to develop aviation infrastructure and to promote aviation safety and education.
- *CDOT Engineering Regions* - Regions coordinate the planning, design, construction, maintenance, and operations within their area of the state. Regional planning staff support planning efforts and communicate with citizens, local jurisdictions, and elected officials.

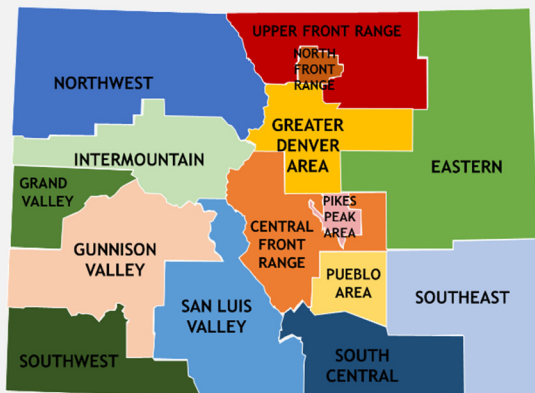
## WHO IS INVOLVED IN PLANNING?



CDOT actively engages partners and stakeholders representing a wide range of interests in all regions of the state. Statewide and regional transportation planning depends on the active involvement of individuals, agencies, and organizations to guide decision-making. CDOT coordinates planning activities with the key groups shown in the graphic at the left. These stakeholders are summarized here and described in more detail in [Section 102](#) of this guide.

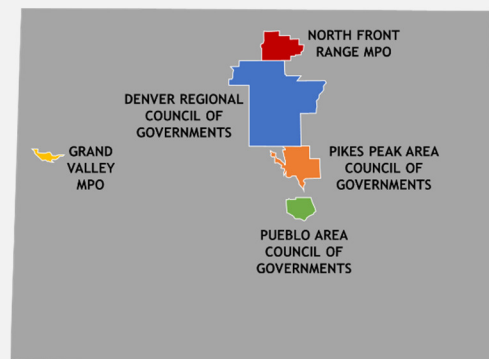
## LOCAL GOVERNMENTS AND REGIONAL PLANNING PARTNERS

CDOT involves local officials, cities, counties, tribal governments, transportation planning regions, and metropolitan planning organizations throughout the planning process. Needs and issues from all areas of the state, both rural and urban, are considered through local government outreach.



**Transportation Planning Regions (TPRs)** - Colorado has 15 transportation planning regions: 10 rural TPRs and 5 metropolitan planning organizations. Regional boundaries are determined by state regulations to account for similar transportation needs and issues. TPRs are represented by Regional Planning Commissions (RPCs) composed of a local official from each jurisdiction within each TPR. These regions provide CDOT with valuable understanding of regional context and local concerns, which helps target public involvement and focus planning efforts.

**Metropolitan Planning Organizations (MPOs)** - MPOs and Councils of Governments (COGs) are federally required organizations that conduct planning for designated urbanized areas. MPOs are policy and decision-making entities representing local governments in urban regions with more than 50,000 people. MPOs are responsible for developing Long Range Transportation Plans that direct federal transportation funding within each region. MPOs in Colorado include the Denver Regional COG, Pike's Peak Area COG, North Front Range MPO, Pueblo Area COG, and the Grand Valley MPO.



## OVERSIGHT AND ADVISORY COMMITTEES

**Colorado Transportation Commission** - CDOT manages the state's transportation system under the direction of the Colorado Transportation Commission. The commission is comprised of 11 commissioners representing urban and rural areas of the state. Responsibilities include: approval of the statewide plan and statewide transportation improvement program; adopting CDOT budget and approving expenditures; advising the Governor and Legislature on transportation issues; and, adopting policies on CDOT management and decision processes.

**Statewide Transportation Advisory Committee (STAC)** - Created by state statute, the STAC provides regional perspectives on transportation issues. STAC members include one representative from each TPR and Tribal Governments. Representatives often include local elected officials and planning staff. The STAC provides a forum for discussion of state and regional transportation issues and provides advice to CDOT on policies and programs.

**Transit and Rail Advisory Committee (TRAC)** - The TRAC was formed in 2011 to advise the Division of Transit and Rail. TRAC members include representatives from public and private transit providers, railroads, local agencies, and the public. The TRAC provides advice and decision-making on public transit and freight and passenger rail policies and priorities.

**Freight Advisory Council (FAC)** - Formed in 2015, the FAC guides CDOT on freight issues and coordinates with private sector partners. The FAC provides a platform for freight industry representatives, businesses, and the public to coordinate on freight issues and advise CDOT.

**Transportation Environmental Resource Council (TERC)** - CDOT and FHWA formed the TERC in 2002 to provide a forum for local, tribal, state, and federal agencies to discuss state transportation decisions and plan for environmental stewardship.

**Colorado Aeronautical Board (CAB)** - Created by state statute in 1991, the CAB is comprised of seven members appointed from specific geographic areas of the state and defined aviation constituencies. Under the direction of the CAB, CDOT's Division of Aeronautics administers the Colorado Aviation Fund, which includes statutory aviation fuel tax reimbursements to airports, and a discretionary grant program to support aviation infrastructure, safety and education. The CAB also oversees the Division's preparation of the State Aviation Systems Plan.

## FEDERAL AND STATE AGENCIES

The Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) have a variety of roles and responsibilities for transportation planning in Colorado.

**FHWA** administers federal highway funding programs and regulates transportation planning and investment activities. FHWA approves expenditure and reimbursement of federal funds by CDOT. State and regional transportation plans and planning activities are governed by federal laws and regulations and are reviewed by FHWA.

**FTA** administers federal transit funding and oversees planning and operations of transit agencies. FTA provides grants and distributes funds directly to transit agencies and approves funds that are passed through CDOT to local transit agencies.

CDOT involves other federal agencies throughout the planning process including land management, environmental resource, and regulatory agencies. Planning activities are also coordinated with state agencies responsible for safety, trade, economic development, demographics, and energy.

## STAKEHOLDER GROUPS

**Traveling Public** includes all users of CDOT infrastructure, including drivers, transit users, commercial transport and freight shippers, bicyclists, pedestrians, and others.



**Local and Regional Organizations** such as the Colorado Municipal League, Colorado Counties, Inc. Club 20, Action 22, and Progressive 15 are engaged in transportation planning and policy making.

**Advocacy Organizations** - such as Bicycle Colorado, Colorado Association of Transit Agencies, Colorado Motor Carriers Association, environmental organizations, and others are often represented in planning efforts and are consulted on transportation issues specific to user groups.

# PLANNING INFORMATION AND TOOLS

## TRANSPORTATION MATTERS

Colorado Transportation Matters is CDOT's go to webpage for information on the current statewide plan, regional plans, and other modal plans and CDOT efforts. Information is regularly updated and added.



[www.coloradotransportationmatters.com](http://www.coloradotransportationmatters.com)

## C PLAN

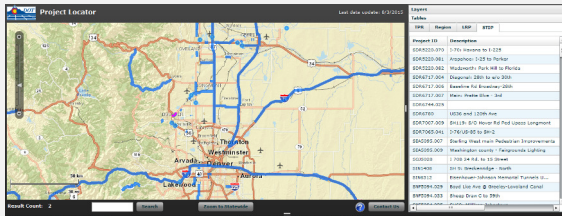
C-Plan offers a collection of CDOT online maps and interactive data. Planning partners will find this tool and data useful throughout the plan development process.



<http://cdot.maps.arcgis.com/>

## CDOT PROJECT LOCATOR

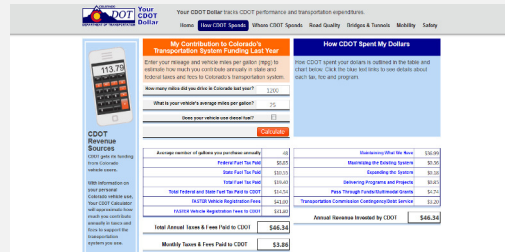
Project Locator is a website with detailed information about Long Range Planning Corridors and Statewide Transportation Improvement Program projects. An interactive map is available to search and locate corridors and projects throughout Colorado.



<http://dtdapps.coloradodot.info/projectlocator/>

## YOUR CDOT DOLLAR

This website tracks CDOT performance and transportation expenditures. An interactive map of CDOT highway projects currently underway in Colorado, including financial facts, expected construction dates and map locations is available.



<http://dtdapps.coloradodot.info/otis/YCD>

## CDOT PLANNING RESOURCES

CDOT publishes plans, studies, planning guidance, rules and regulations and regional data and facts.

<https://www.codot.gov/programs/planning/transportation-plans-and-studies>

More information about the topics covered within this resource guide is available from CDOT staff in statewide and regional planning branches or from CDOT planners in each region.

<https://www.codot.gov/programs/statewide-planning/contacts.html>

## CDOT REGIONS AT A GLANCE

CDOT provides key demographic, economic, and transportation data for each of Colorado's urban and rural transportation planning regions.

Information also is given on key contacts within each region including the CDOT liaison, CDOT region planners, Transportation Commissioners, STAC representatives, and TPR, MPO, and RPC contacts.

<https://www.codot.gov/programs/planning/documents/planning-partners/tp-r-at-a-glance/view>

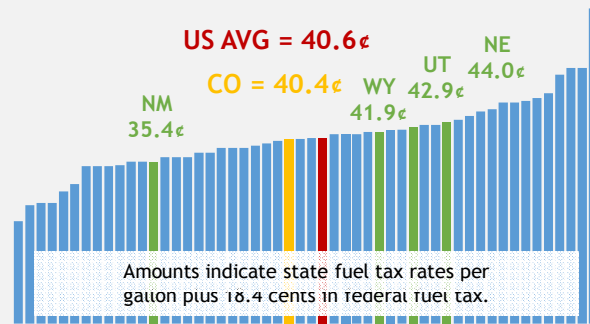
# TRANSPORTATION PLANNING 102: REVENUE AND FUNDING PROGRAMS

Section 102 of this guidebook provides an overview of how transportation is funded: from revenue sources, to federal and state funding programs, and down to investments in Colorado’s transportation priorities. In this section frequently asked questions on transportation finance are answered, including: how is transportation funded, where does CDOT invest, and how are funding decisions made? Further detail on transportation revenues, funding programs, and investments can be found in [CDOT’s Annual Reports, Annual Budget Narratives, and the Statewide Transportation Plan](#).

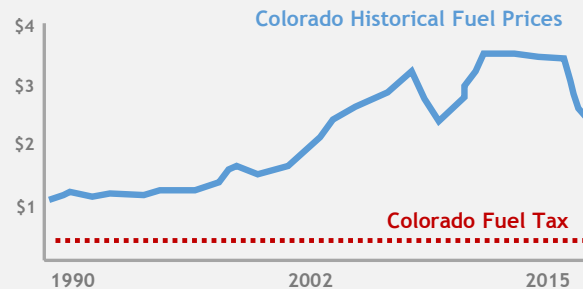
## HOW DOES COLORADO FUND TRANSPORTATION?

Colorado faces significant funding challenges now and in the future. These challenges are a result of the declining purchasing power of a flat gas tax, rising construction costs, and increasing demands on existing infrastructure. Investments in future expansion projects are limited by rising maintenance costs and preservation needs. According to current revenue forecasts, CDOT has only enough money to maintain infrastructure in its current condition for the next 10 years. This is a result of the costs of current and future transportation needs far exceeding available transportation revenues. The largest source of revenue for transportation in Colorado are state and federal motor fuel taxes.

The U.S. Congress last raised the federal gasoline tax in 1993 to the current rate of 18.4 cents per gallon. In Colorado, the current gasoline tax rate is 22 cents per gallon and was last adjusted in 1992. Colorado’s tax rate is below the national average and less than many neighboring states. As of 2015, the state with the highest tax rate is Pennsylvania and the lowest is Florida. Colorado and neighboring states are shown in the figure at right.

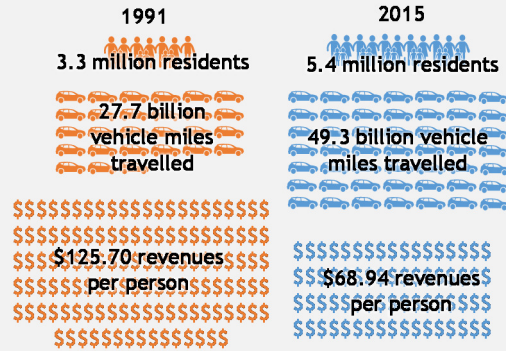


Fuel taxes are based on the volume of fuel sold and do not adjust with changes in price per gallon paid at the pump. Colorado does not raise more revenue with increases in fuel prices. As today’s vehicles become more fuel efficient, less fuel is purchased even though residents may be driving more. As a result, tax revenues grow more slowly than overall increases in travel volumes and infrastructure needs.



Source: CDOT 2016

Tax revenues are not keeping pace with increasing inflation and construction costs. Over time, these trends erode the purchasing power of tax revenues. *Adjusted for inflation, CDOT collected less revenue from fuel taxes in 2015 than it did in 1991.* Even with rising population and travel demand, CDOT has less to spend per person on transportation than 20 years ago. This pattern is not sustainable and will result in difficult choices on investment priorities in the future.

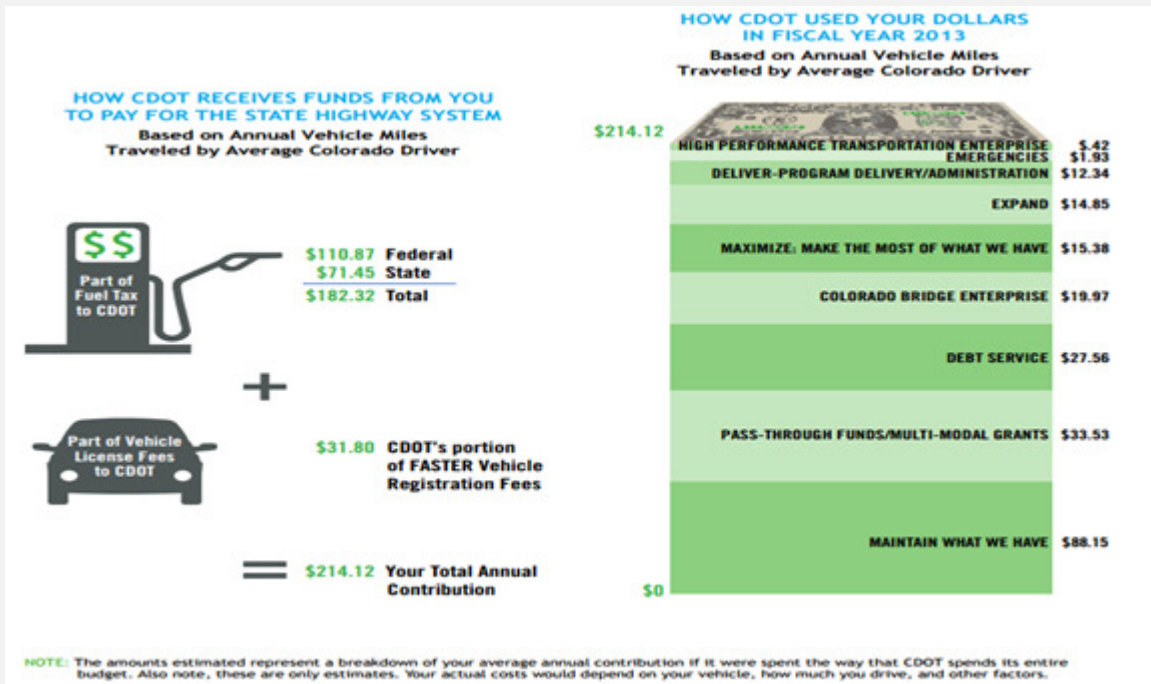


Source: CDOT 2016

## HOW MUCH DOES AN INDIVIDUAL DRIVER CONTRIBUTE ANNUALLY TO SUPPORT THE TRANSPORTATION SYSTEM?

An average driver in Colorado travels about 13,850 miles each year and owns a vehicle that averages 23 miles per gallon. That means residents purchase approximately 580 gallons of gas every year. From that, regardless of the actual price of gas, CDOT receives approximately \$182 annually or \$15 per month -less than a cell phone bill. CDOT also receives roughly \$32 dollars annually in vehicle registration fees from the average driver.

In total, each Colorado driver contributes about \$214 dollars per year toward the transportation systems throughout the state. The graphic at right illustrates how individuals contribute to transportation and how CDOT uses that contribution to maximize revenues.



Source: CDOT 2015 Annual Report



## WHERE DO TRANSPORTATION REVENUES COME FROM?

CDOT's investments are financed through taxes and fees on all users of the state and national transportation systems. User fees are based on the premise that those who use the transportation system the most, should pay more of the costs to operate and maintain that infrastructure. In other words, if you drive more, and buy more gas, you pay more in fuel taxes. However, vehicles vary greatly in their miles per gallon, so this ratio of driving to fuel taxes is not evenly applied. Other fees and taxes also are assessed proportionally. For example, large commercial trucks pay federal weight-based taxes to recover the additional maintenance costs heavier vehicles impose on highways. Primary federal and state revenue mechanisms in Colorado include:

- **Fuel Taxes**
  - The State of Colorado levies excise taxes on gasoline, diesel fuel, and all special fuels used by motor vehicles. Current rates are 22¢ per gallon for gasoline and 20.5¢ per gallon for diesel. Fuel taxes are shared between CDOT and cities and counties.
  - The State of Colorado levies excise taxes of 4¢ per gallon on wholesale non-commercial jet fuel; 6¢ per gallon on aviation fuel sales; and 2.9% sales tax on jet fuel sold in Colorado.
  - The federal government levies excise taxes on gasoline, diesel fuel, and special fuels used by motor vehicles. Current rates are 18.4¢ per gallon for gasoline and 24.4¢ per gallon for diesel.
- **Registration Fees**
  - The State of Colorado levies fees and surcharges on driver's licenses, motorcycles, emission inspections, and registrations for motor vehicles used on public highways.
  - Colorado's FASTER legislation provides additional surcharges, fines and fees on motor vehicle registrations and drivers. The program generates about \$200 million annually for state and local projects across Colorado. Revenues are split between CDOT and local governments. For an average vehicle owner, these fees total approximately \$6 per month.
  - The federal government charges annual weight-based taxes on heavy vehicles registered for interstate commerce.
- **Other Taxes**
  - The federal government levies a tax on the value of heavy commercial vehicle sales and a weight-based excise tax on heavy vehicle tires.
  - The State of Colorado levies a passenger-mile tax on operators of commercial bus services.
- **Other User Fees**
  - CDOT generates revenue from fees by issuing oversize/overweight permits, access permits, and bid plans, as well as the sale of property and excess right-of-way.
  - The State of Colorado generates revenues from penalties on drivers convicted of driving under the influence, from interest on Colorado State Infrastructure Bank funds, fees on rental vehicles, and other sources of miscellaneous income.

The Colorado Constitution requires that all state taxes and fees related to motor vehicles must be used for the construction, maintenance, and supervision of roadway and transit systems. Taxes and fees are shared between CDOT, cities and counties. Local cities and counties and regional transportation

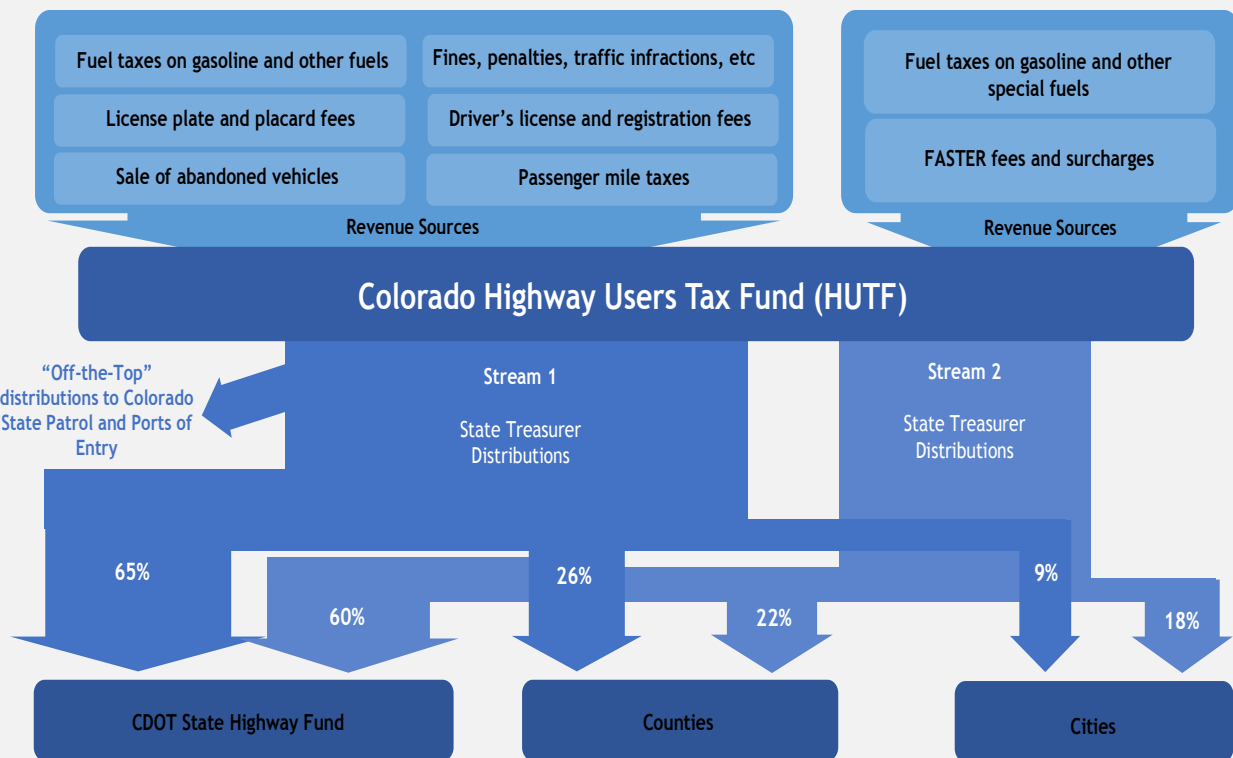
authorities also raise additional revenues from a wide variety of sources including: sales and use taxes, lodging taxes, local general funds, and federal grants.

## TRANSPORTATION REVENUE FUNDS

The state and federal revenue sources described above are directed to different funds and agencies for different purposes. Not all transportation revenues collected are allocated to CDOT, some are distributed to other state agencies and local governments. From fuel taxes, surcharges, license fees, penalties, and other state revenue sources, CDOT receives on average 62.5% of revenues collected. Another 23% is distributed to counties and 13.5% to cities. CDOT receives revenues from the following major sources:

**Federal Highway Trust Fund (HTF)** is a constitutionally dedicated revenue source comprised of a combination of motor fuel taxes, motor vehicle registration fees, and other revenues. Funds are authorized by the U.S. Congress to assist states in providing for construction, reconstruction, and improvement of highways and bridges on eligible federal-aid highway routes, to states or transit agencies for mass transit projects, and for other special purpose programs and projects.

**State Highway Users Tax Fund (HUTF)** is the principal account in which state-levied fees and fuel taxes associated with the operation of motor vehicles are deposited. The Legislature annually appropriates “Off-the-Top” HUTF moneys to the Departments of Revenue and Public Safety for motor vehicle-related programs. The remaining HUTF proceeds are distributed to CDOT and to county and local governments in Colorado according to statutory formulas. The graphic below illustrates the flow of revenue sources into the HUTF and distribution to agencies, CDOT, and county and city governments.



Source: CDOT 2016

Other funds and programs that CDOT receives revenue from include:

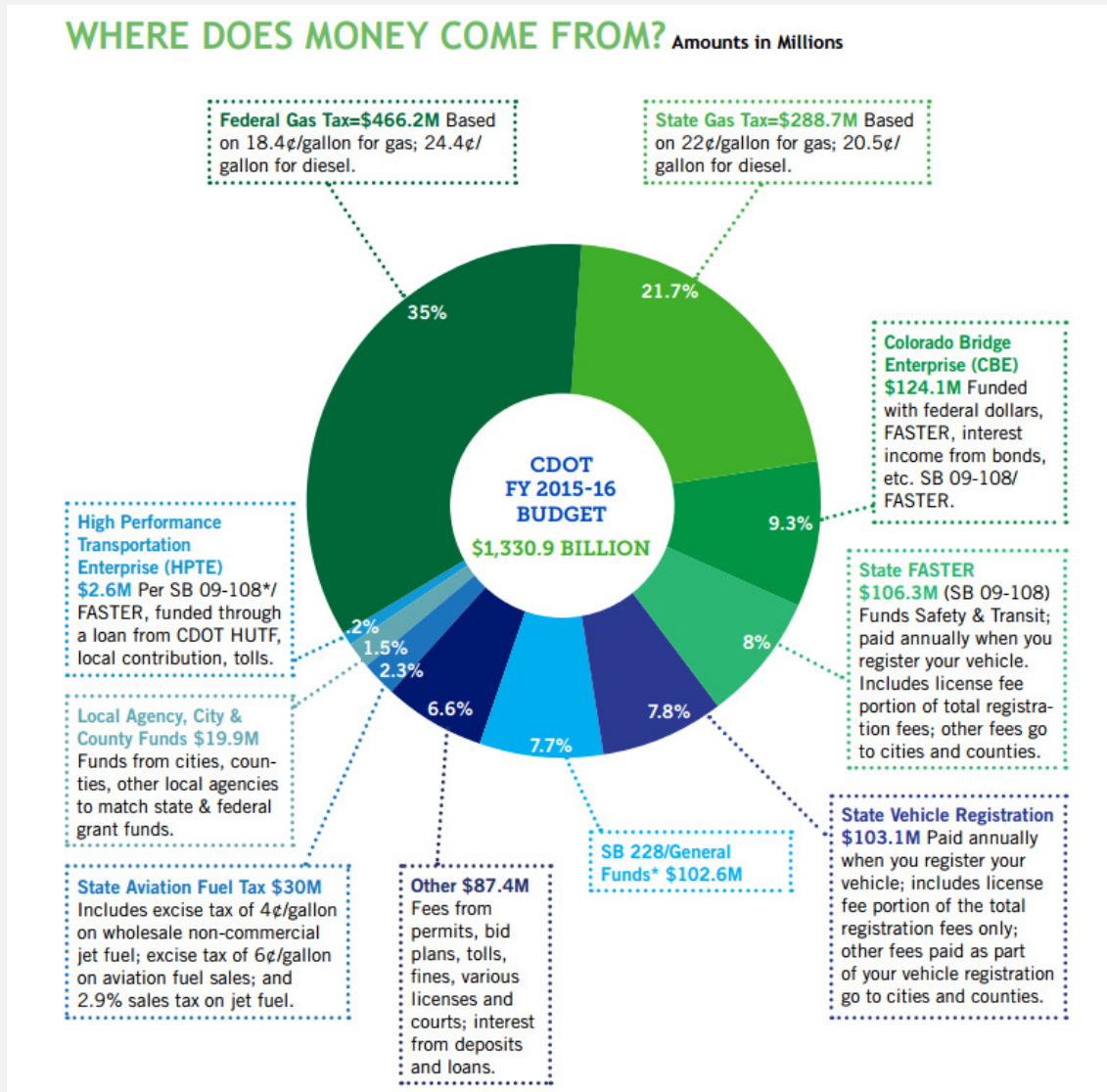
**General Fund Transfers** are periodically authorized by the state legislature to transfer funds to CDOT. Passed in 2009, SB 228 authorized a five-year sequence of transfers if certain economic and fiscal conditions are met. General Fund transfers help finance strategic projects as directed by the Colorado Transportation Commission. Previous legislative bills authorizing transfer include 1997 SB-01 and 2002 HB 1310.

**Colorado Aviation Fund** includes all revenues from state excise and sales taxes on aviation gasoline and jet fuel, along with project-specific Federal Aviation Administration funding.

**Local Agency, City & County Funds** are received by CDOT from cities, counties, and other local agencies in order to meet matching fund requirements for state and federal grants.

**Colorado Bridge Enterprise (CBE) and High Performance Transportation Enterprise (HPTE)** are government-owned businesses. Enterprises raise their own revenue from bonds and user fees and must receive less than 10 percent of revenue from public government sources. CBE revenues include federal dollars, FASTER fees, and interest income from bonds. HPTE revenues include FASTER, local government contributions, and loans from the Colorado HUTF.

The graphic on the following page illustrates the contributions of major revenue sources and funds to CDOT's annual budget.



Source: CDOT 2015 Annual Report

## WHAT ARE CDOT'S MAJOR TRANSPORTATION FUNDING PROGRAMS?

### FEDERAL HIGHWAY FUNDING PROGRAMS

Colorado receives federal funding for highways on the federal-aid road system from the Federal Highway Administration (FHWA). All federal highway funds are received on a reimbursable basis. This means that a project sponsor (CDOT or local agency) must first fund projects and are then reimbursed by FHWA as those projects are completed. Most federal highway formula funding is allocated to states based on formulas that account for population, travel volumes, lane miles, and other factors. Other federal programs provide discretionary funds (funds received when an entity competes for a federal grand award), and loan programs. Federal funding normally requires a “match” of state or local funds - usually between 10 and 25 percent of the total project cost. Very few federal highway programs provide funding at 100% of the total project cost.

Congress authorizes federal funds for transportation programs through multi-year transportation funding acts. The most recent authorization, Fixing America's Surface Transportation (FAST) Act was signed into law December of 2015. Transportation legislation amends or creates new funding programs and sets the requirements governing those programs. For Colorado, the FAST Act increases highway formula funding from \$516 million in 2015 to \$592 million in 2020. Major federal highway and transportation funding programs include:

- **National Highway Performance Program (NHPP):** This formula program provides funds to improve the condition and performance of the National Highway System (NHS); to construct new NHS facilities; and, to ensure that investments are directed to support progress toward performance targets established in a state's asset management plan.
- **Surface Transportation Block Grant Program (STBGP):** This formula program provides flexible funding for projects that preserve and improve the condition and performance of the transportation system, including funding federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects. STBGP funding is allocated to statewide programs, to CDOT Regions and to some MPOs in Colorado. The program includes several set-aside and formula programs:
  - **STP- Transportation Alternatives Program Set-Aside (TAP):** This set-aside program was formerly known as the Transportation Alternatives Program under MAP-21. The TA program funds bicycle, pedestrian, historic, scenic, and environmental mitigation transportation projects. An additional set-aside funds the Recreational Trails Program managed by the Department of Natural Resources.
  - **STP-State Planning and Research:** This set-aside program funds statewide planning and research activities to establish a performance-based cooperative, continuous, and comprehensive framework for making transportation investment decisions.
  - **STP Off System Bridges:** The STP guidance directs states to expend 15 percent of Highway Bridge Program funds for activities on off-system bridges. Eligible activities include replacement, rehabilitation, preservation, and construction of bridges and tunnels. The terms on-system and off-system refer to the Federal Functional Classification description of the route carried by the bridge. Generally, CDOT owned bridges are on-system and city and county owned bridges are off-system.
  - **STP-Metro:** These funds are allocated to the eligible MPOs that select and prioritize projects for funding.
- **Congestion Mitigation and Air Quality Program:** This federally mandated grant program provides funding to improve air quality in non-attainment and maintenance areas for criteria pollutants such as ozone, carbon monoxide, and particulate matter. Funds are used for transportation projects that contribute to the attainment or maintenance of national air quality standards.
- **Highway Safety Improvement Program (HSIP):** This core federal-aid formula grant program supports activities to achieve a significant reduction in traffic fatalities and serious injuries on all public roads. Funds support strategic safety planning and hazard elimination improvements on all public roads in the state.
  - **Section 130 Railway-Highways Crossing Program:** This HSIP set-aside program provides funds for the elimination of hazards at railway-highway crossings, including roadways, bike trails, and pedestrian paths.
- **National Freight Program:** This formula program funds projects that contribute to the efficient movement of freight on the National Highway Freight Network. Up to 10 percent of freight funds may be used to support intermodal projects, including freight rail.



- **National Significant Freight and Highway Projects Program:** This discretionary grant program provides funding for highway, bridge, rail grade crossing, intermodal, and freight rail projects. FHWA awards the grants competitively.
- **Metropolitan Planning:** This formula grant program funds transportation planning processes for MPOs in Colorado. The program requires MPOs to adopt performance-based planning processes. Both FHWA and FTA funds support this program.

## FEDERAL TRANSIT FUNDING PROGRAMS

Funding for transit services in Colorado is a complex partnership among federal, state, and local agencies. The Federal Transit Administration (FTA) provides funding directly to large transit providers. FTA grants to small transit providers typically pass through the CDOT. FTA grant programs provide the largest source of federal funds to support transit services. Other federal agencies, state programs, local governments, and civic organizations also provide funding directly to transit providers. Transit agencies generate a portion of revenues directly from fares, advertising, contract services, and other revenue sources. Similar to FHWA funding programs, FTA funding programs normally require a “match” of state or local funds, usually between 10 and 25 percent of the total project cost. Very few federal transit programs provide funding at 100% of the total project cost.

FTA funds are divided into different programs or “section” grants, named for the sections of the U.S. Code of Federal Regulations. Some FTA funding is allocated to CDOT and transit providers in urban areas by formula, while other funds are made available through discretionary and competitive awards. FTA funds are complex, governed by varying requirements and provisions for use. Under current federal authorization, in 2015 Colorado received approximately \$93.0 million in FTA funds. Of that apportionment, CDOT administers roughly \$14.6 million or 15 percent. The majority of funds are distributed directly to large transit providers. Major FTA transit funding programs are described below.

## STATEWIDE AND REGIONAL TRANSPORTATION PLANNING

- **5303 Metropolitan Planning:** This formula grant program funds transportation planning processes at MPOs in Colorado. The program requires MPOs to adopt performance-based planning processes. FHWA and FTA funds support this program with a local match requirement.
- **5304 Statewide Planning:** This formula grant program provides funding in metropolitan areas and statewide for planning, technical studies and training. Federal funds are apportioned to CDOT and then passed-through to MPOs by formula.
- **5305 State Planning and Research Program:** This formula grant program provides financial assistance for statewide transportation planning and other technical assistance activities.

## URBAN AND RURAL TRANSIT FUNDING

- **5307 Urbanized Area Formula Program:** This formula grant program provides funding to urbanized areas for public transportation capital, planning, job access and reverse commute projects, and operating expenses in certain circumstances. Most funds are apportioned directly to transit providers in Colorado.
- **5311 Rural Area Formula Program:** This formula grant program provides funding for public transportation programs in non-urbanized (rural) areas. Funds may be used for planning, capital, operating, or administrative expenses; job access and reverse commute projects; and, acquisition of transportation services. Previous Job Access and Reverse Commute (5316) and New Freedom (5317) services are eligible under this program. This section includes the following sub-programs:

- **5311(b)(3) Rural Transportation Assistance Program:** This discretionary and formula grant program provides funding for technical assistance, training, and research and support activities in rural areas.
- **5311(c)(1) Public Transportation on Indian Reservations:** This discretionary and formula grant program funds capital, operating, planning, and administrative expenses for transit projects in tribal communities.
- **Section 5311(f) Intercity Bus:** This section requires states to expend at least 15 percent of annual Section 5311 apportionment to carry out programs to develop and support intercity bus transportation.
- **5340 Growing States and High Density States Distribution:** This section distributes formula funding to states given certain conditions. FTA apportions Growing States funds by formula based on state population forecasts and distributes funds between urbanized and rural areas within Colorado. High Density funds are apportioned only to urbanized areas within states with high population densities. These funds supplement Section 5307 and 5311 programs.

### TRANSIT FORMULA GRANTS

- **5310: Enhanced Mobility for Seniors and Individuals with Disabilities:** This formula grant program provides financial assistance to private and nonprofit organizations in meeting the transportation needs of the elderly and persons with disabilities. Funds are apportioned based on each state's share of population for these groups.
- **5337 State of Good Repair Program:** This formula grant program funds repairs and upgrades to rail transit systems and bus systems that use high-occupancy vehicle lanes, including bus rapid transit. The program includes two set-aside allocations for High Intensity Fixed Guideway and High Intensity Motorbus systems.
- **5339 Bus and Bus Facilities Formula:** This formula grant program provides capital funding to replace, rehabilitate, and purchase buses and related equipment and to construct bus-related facilities. Urbanized areas receive a direct formula award. For rural areas, a formula award is provided to CDOT which then conducts a competitive grant process.
- **5329 State Safety Oversight Formula Grants:** This formula grant program provides funding to develop and carry out state safety oversight programs, developing transit agency safety plans, and providing safety certification training.

### TRANSIT DISCRETIONARY GRANTS

- **5309 Fixed Guideway Capital Investment Grants Program:** This discretionary grant program provides capital investment funds for new and expanded rail and bus rapid transit systems in key corridors. The program also streamlines the New Starts and Small Starts processes.
- **5312 Research, Development, Demonstration, and Deployment Projects:** This discretionary grant program supports research activities that improve the safety, reliability, efficiency, and sustainability of public transportation, including development, testing, and deployment of innovative technologies, materials, and processes; and, deployment of low-emission vehicles.
- **5314 Technical Assistance & Standards Development:** This discretionary grant program provides technical assistance to the public transportation industry to more effectively and efficiently provide transit service.
- **20005(b) Transit-Oriented Development Planning Pilot Program:** This discretionary grant program provides funding to advance planning efforts that support transit-oriented developments associated with new fixed-guideway and core capacity improvement projects.

- **5326 Transit Asset Management:** This section establishes new requirements for transit asset management, including development of asset management plans and reporting requirements to promote accountability. No grant funding is provided under this section, but technical assistance is available.

## FEDERAL AVIATION ADMINISTRATION FUNDING PROGRAMS

Colorado's airports and aviation system are primarily funded through revenues self-generated by airports. The Federal Aviation Administration's (FAA) Airport Improvement Program (AIP) provides grants directly to airport sponsors for the planning and development of eligible public use airports. The State of Colorado's Discretionary Aviation Grant Program helps provide local matches for FAA AIP funds and to help fund other projects including non-federally eligible airport improvements, infrastructure and equipment improvements, and aviation safety initiatives. In accordance with the policy guidance of the Colorado Aeronautical Board, CDOT's Division of Aeronautics provides grants to airports under the Discretionary Aviation Grant Program.

## NATIONAL HIGHWAY TRANSPORTATION SAFETY ADMINISTRATION FUNDING PROGRAMS

The National Highway Traffic Safety Administration (NHTSA) is responsible for establishing and enforcing safety performance standards for motor vehicles and equipment. NHTSA provides grants to states to conduct effective highway safety programs. Most NHTSA funds are awarded as formula grants through two primary programs.

- **Section 402 State and Community Highway Safety Grants:** These formula grants provide funding to support countermeasure strategies and projects identified in Colorado's *Strategic Highway Safety Plan*.
- **Section 405 grants** are provided as incentives for states to adopt or enforce legislation or to implement effective safety programs. Grant programs under this section include:
  - **405(b) Occupant Protection Grants:** This program supports occupant protection programs to reduce deaths and injuries resulting from unrestrained individuals in vehicles.
  - **405(c) State Traffic Safety Information System Improvement Grants:** This program supports efforts to improve data systems that help identify priorities and high-risk roadways for safety improvements.
  - **405(d) Impaired Driving Countermeasure Grants:** This program supports programs to reduce incidences of individuals driving while under the influence.
  - **405(e) Distracted Driving Grants:** This program provides funds to enact and enforce laws to prohibit distracted driving.
  - **405(f) Motorcyclist Safety Grants:** This program supports programs to reduce the number of crashes involving motorcyclists.

## STATE OF COLORADO FUNDING PROGRAMS

In addition to federal highway, transit, safety and other core programs, the State of Colorado provides for dedicated funding programs that support transportation investments.

- **Senate Bill 228:** In 2009, the General Assembly enacted SB 228, which updated state laws governing General Fund transfers. Among its provisions, the new law requires that when personal income growth reaches or exceeds five percent in a given year, a five-year block of transfers is made from the General Fund to: (1) the Highway Users Tax Fund (HUTF); (2) the Capital Construction Fund; (3) and the General Fund statutory reserve. This transfer continues throughout the five years, even if personal income growth falls beneath five percent. For transportation, the transfer is equivalent to two percent of total annual General Fund revenue.
- **FASTER:** The Funding Advancements for Surface Transportation and Economic Recovery Act of 2009 (FASTER) was signed into law in 2009. FASTER allows Colorado to improve roadway safety, to repair deteriorating bridges, and to support and expand transit. FASTER raises approximately \$200 million every year for transportation projects across Colorado, about half of which is programmed by CDOT. Revenue is generated through vehicle registration fees and fines. FASTER funds support the Colorado Bridge Enterprise and two key CDOT funding programs:
  - **FASTER Road Safety Fund:** This formula grant program supports the construction, reconstruction, or maintenance of state and local safety projects. Funds are allocated based on a statutory formula: 60 percent to CDOT, 22 percent to counties, and 18 percent to municipalities.
  - **FASTER Transit Grants Program:** This competitive grant program provides \$15 million annually for statewide and local transit projects, including: bus stops, bike parking, transit maintenance facilities, vehicle replacements, multimodal transportation centers, and other capital projects. FASTER transit funds are split between local transit grants and statewide and regionally significant projects.
- **Highway Safety Education Program:** CDOT's Office of Transportation Safety (OTS) oversees several state and federally funded programs to reduce the incidence and severity of motor vehicle crashes. OTS administers NHTSA funding as well as several Colorado specific programs supported by state revenues.
  - **Enhanced Drunk Driving Enforcement:** This program provides reimbursements to local law enforcement agencies to increase enforcement of impaired driving laws at high-risk times of the year. Funding is provided by court fees, fines, and revenues from the state Law Enforcement Assistance Fund and First Time Drunk Driving Offenders Account.
  - **Motorcycle Operator Safety Training Fund (MOST):** This program provides high quality, low-cost motorcycle safety training to residents. MOST is funded from fees that riders pay for motorcycle licenses and motorcycle registrations.
  - **Marijuana-Impaired Driving Program:** This program funds statewide public awareness campaigns to prevent impaired driving and supports heightened enforcement and other marijuana-impaired driving prevention efforts, including data collection and Drug Recognition Expert training. This program is funded by sales tax revenue from retail and wholesale sale of marijuana.
- **Colorado Aviation Fund:** The Colorado Aviation Funds is funded by 100% of the state sales and excise taxes collected on aviation fuel. Under state statute, this fund is used to provide fuel tax reimbursements to eligible airports, and to fund a Discretionary Aviation Grant program to support infrastructure, safety and education initiatives statewide and at individual eligible public use airports. The CDOT Division of Aeronautics administers the Colorado Aviation Fund under the guidance of the Colorado Aeronautical Board.
- **Safe Routes to School:** This program distributes state funds to support construction, planning, and education projects that encourage children to safely bicycle and walk to and from school. Funds are awarded through a statewide competitive process for both infrastructure and non-infrastructure projects. How Does CDOT Invest in Transportation?

## HOW DOES CDOT MAKE FUNDING DECISIONS?

A wide array of federal and state highway, transit, aviation, safety, bridge, and crosscutting funding programs are summarized in the previous section. The realities of these various programs result in complex financial arrangements, as certain funds are restricted to certain purposes and for certain areas. However, many funding programs provide flexibility for how CDOT and its planning partners distribute funds to meet Colorado's transportation needs and achieve performance objectives.

CDOT's performance-based planning process guides the allocation of resources and identifies investments that will result in the best possible performance outcomes. At CDOT, financial planning and performance-based planning come together in a process known as Program Distribution. Program Distribution occurs whenever the long-range Statewide Transportation Plan and STIP are updated (See Section 103 for more information.) CDOT reviews and updates the Program Distribution allocations for the budget and STIP years during CDOT's annual budget development cycle.

To complete this process, CDOT's Office of Financial Management & Budget (OFMB) provides financial analysis and support to CDOT Divisions, Engineering Regions and the Colorado Transportation Commission. Projected future revenues and formula apportionments are allocated to specific funding programs per federal and state regulations and according to Transportation Commission guidance.

To prioritize funding across programs and regions, DAF, DTD, and other CDOT Divisions, Branches, Offices, Regions, and MPOs work together to estimate future needs and required funding levels. CDOT's transportation planners in DTD and Engineering Regions coordinate with stakeholders, seek input from the public, utilize performance measures, and perform analyses to assess how spending in certain program areas will contribute to statewide performance objectives.

Funding scenarios are presented to the Transportation Commission for decision making on allocations to program areas. DTD leads these efforts with support from DAF and CDOT Divisions and Engineering Regions. For example, models on the impact of funding levels on the condition of the state's pavement and bridges are used. The impact of congestion relief strategies such as operational improvements, technology, and capacity additions can also be estimated. CDOT evaluates these impacts through statewide planning efforts such as the *Risk-Based Asset Management Plan* and *Statewide Transportation Plan* and estimates future needs through statewide modal plans and regional plans. These plans and associated performance-based decisions are discussed in more detail in Section 103. Overall resource needs and performance impacts are balanced against available revenues. Resources are then allocated to CDOT's primary budget categories. Funding in CDOT's primary budget categories are distributed to CDOT Engineering Regions, MPOs, and/or statewide through performance-based decisions or formulae determined by federal and state regulations.

## WHERE DOES CDOT INVEST?

CDOT administers funding programs according to federal and state laws and the policies of the Colorado Transportation Commission. To increase accountability and transparency to stakeholders and the public, the following six major budget categories describe where CDOT invests limited transportation dollars:

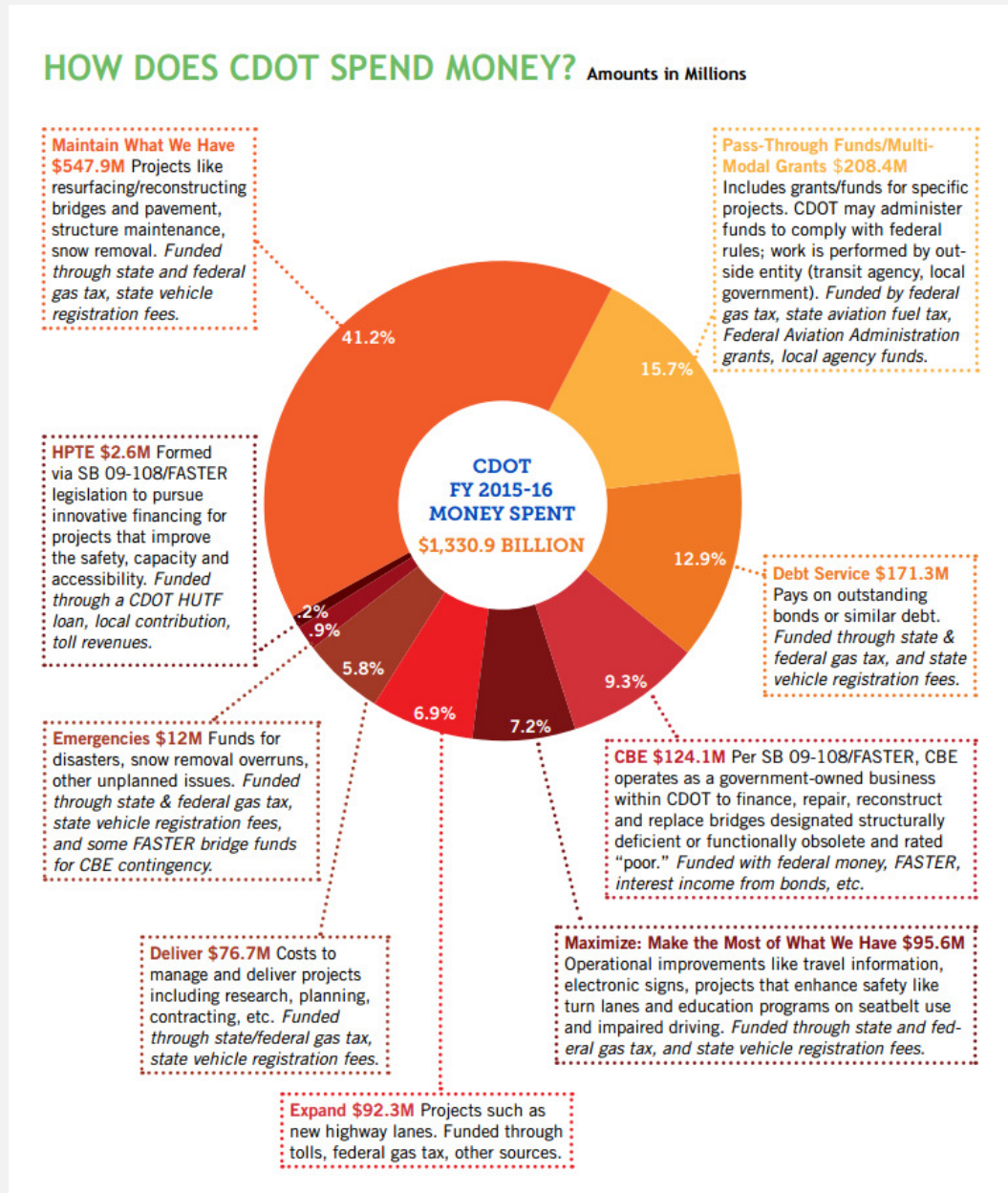
1. **Maintain - *Maintaining What We Have***: Includes projects that take care of our existing system such as resurfacing and reconstruction of existing pavement and bridges, and maintenance activities such as roadway and structure maintenance and snow removal.
2. **Maximize - *Making the Most of What We Have***: Includes operational upgrades and improvements like traveler information, electronic signs, projects that add safety upgrades like turn lanes and traffic safety education programs to increase seatbelt use or reduce impaired driving.
3. **Expand - *Increasing Capacity***: Includes projects that expand the existing system such as adding new lanes to highways. Currently, limited funding is available for this category. However, the High Performance Transportation Enterprise, which is dedicated to increasing



highway capacity through innovative finance, is expected to play a role in filling the gap in this category in the future.

4. **Deliver - *Program Delivery and Administration***: Includes costs to manage and deliver projects such as research, planning, project delivery, and contracting.
5. **Pass-Through Funds and Multimodal Grants**: Includes grant funding and funds mandated for specific programs or projects. CDOT administers funds in compliance with federal requirements but actual grant activities are performed by nonprofit groups, transit agencies, or local governments.
6. **Emergencies, Contingency, and Debt Service**: Includes funds the Transportation Commission utilizes for emergencies or to pay debt service on outstanding bonds or debt programs.
7. **Colorado Bridge Enterprise (CBE) and High Performance Transportation Enterprise (HPTE)** are government-owned businesses. The CBE is tasked with the repair, rehabilitation, and replacement of bridges that do not meet federal standards throughout the state. The HPTE enters into agreements with the Transportation Commission and private industry to finance, build, operate, and maintain new transportation infrastructure using innovative financing and contracting methods.

The graphic below shows the magnitude of recent investments in each of CDOT's budget categories.



Source: CDOT 2015 Annual Report

## CDOT BUDGET CATEGORIES

Of CDOT’s six major budget priorities, four categories account for nearly two-thirds of the total annual budget. These four categories - Maintain, Maximize, Expand, and Deliver constitute the core responsibilities and investment areas of CDOT.

### MAINTAIN – MAINTAINING WHAT WE HAVE

More than 50 percent of CDOT’s budget is spent on engineering and maintenance projects that maintain existing infrastructure in a state of good condition. Ongoing maintenance activities include roadway

surface maintenance; snow and ice control; updates to traffic signs, striping, and signals; and, maintenance of bridges, buildings, equipment, major tunnels, and control centers.

CDOT's goal is to improve or preserve the condition of roadway assets and, as a result, the performance of the highway system. Focusing on preventive maintenance extends the useful life of roads, tunnels, and bridges. This minimizes life-cycle costs and avoids regularly replacing entire assets. By investing smaller amounts now to preserve and protect infrastructure, greater future costs are avoided.

The repair, reconstruction, and replacement of bridges is accelerated through the Colorado Bridge Enterprise. CDOT is responsible for nearly 3,500 bridges and is currently exceeding the state goal of having 90 percent of bridge deck area listed as "not structurally deficient." Colorado's Risk-Based Asset Management Plan directs funding in this budget category to maximize overall pavement and bridge conditions. However, with increasing maintenance needs the state does not have adequate funding to keep up current conditions for more than the next decade.

### **MAXIMIZE – MAKING THE MOST OF WHAT WE HAVE**

Approximately 7 percent of CDOT's budget is spent on making the most of current infrastructure. Colorado's population, employment, freight movement, and visitor traffic continues to grow, placing increasing demands on the state transportation system to move people and products. CDOT works to increase the capacity of existing transportation infrastructure by investing in active management and operations, technology and information, and multimodal improvements.

CDOT's Division of Transportation Systems Management & Operations (TSM&O) is charged with improving travel time reliability through technology, innovation, targeted traffic management activities, and safety improvements. Colorado's Statewide Operations Plan helps direct investments within this budget priority. Major investments and activities to maximize the system include projects such as: real-time traffic data, communications, and alert systems for travelers; real time traffic and incident management, including the administration of the Traffic Management Center; deploying ramp meters, continuous flow metering, and using shoulder lanes for buses and vehicles during peak periods; and, education and training efforts.

Recent operational improvements along the I-70 Denver to Vail corridor have resulted in a decline in periods of delay, congested conditions, and weather and traffic related incidents. As travel demand continues to increase, but funding for new highway expansion decreases, operational investments in the maximize category will remain critical.

### **EXPAND – INCREASING CAPACITY**

CDOT currently allocates approximately seven percent of its annual budget to capacity expansion. This is relatively little funding given statewide needs. Funding is anticipated to be more limited in the future within this budget priority. The era of large-scale expansion of highways and addition of new travel lanes funded by the gas tax has passed. Colorado does not have enough funding to keep up with maintenance needs over the long run and cannot afford to continue adding to those needs without some funding to support them.

Instead, to finance new capacity and major improvements, CDOT is turning to the High Performance Transportation Enterprise (HPTE). As a quasi-public entity, HPTE is able to raise revenue through bonds and employ innovative financing to complete projects that CDOT would not be able to fund otherwise. Innovative financing includes arrangements such as: public-private partnerships, operating concession agreements, user fee-based project financing, availability payments, and design-build contracting.

Recent examples of public-private partnerships include the completion of the US 36 Express Lanes project and addition of I-70 Mountain Express Lanes. The HPTE is also arranging financing on the I-70 east, I-25 north, and C-470 corridors. These partnerships, which are largely paid for with user fees and are operated by private concession, have enabled CDOT to increase capacity in congested corridors with managed lanes and to invest in improving Colorado's transportation system, while also leveraging limited dollars and maximizing return on investment.

## **DELIVER - PROGRAM DELIVERY AND ADMINISTRATION**

This budget category accounts for 6 percent of CDOT's budget. This budget category includes costs to manage, administer and deliver projects, and also includes funding for research and planning activities that help CDOT perform as an agency.

## **PASS-THROUGH, MULTIMODAL AND CROSS-CUTTING BUDGET CATEGORIES**

The following program areas overlap the maintain, maximize, expand, deliver, and pass-through/multimodal budget categories. Projects funded in these program areas accomplish performance objectives across multiple budget categories.

### **PASS-THROUGH**

This category includes grant funding and funds mandated to go to specific programs or projects. CDOT may administer these funds for compliance of federal rules or requirements but the actual work is performed by an entity outside of CDOT such as a nonprofit group, transit agency or local government.

### **SAFETY**

Making travel safer on Colorado roadways is one of CDOT's top priorities. To improve traffic safety across the state, CDOT works with partners and stakeholders to implement safety improvements and programs. CDOT's Traffic and Safety Engineering Branch and the Office of Transportation Safety coordinate investments in safety on all public roads throughout the state.

Funding is drawn from the FASTER safety program, Highway Safety Improvement Program, and NHTSA grants among other sources. Investments are guided by the state's *Strategic Highway Safety Plan* and the annual *Integrated Safety Plan*. Major activities and investments include regular safety assessments of hot-spots and high risk roadways; education and enforcement campaigns; work zone and school zone awareness; rock fall mitigation; access management and speed control, and other safety, operational, and infrastructure improvements.

Colorado has adopted the Toward Zero Death philosophy to move the state closer to eliminating fatal crashes and serious injuries by 2030. More than one person dies every day on Colorado roads. Investments in safety programs and projects will continue to make traveling safer.

### **BICYCLE AND PEDESTRIAN**

Colorado's multimodal transportation system includes connections, infrastructure, and facilities for cyclists and pedestrians. CDOT owns and maintains some public trails and bike lanes on state highways, but most facilities are the responsibility of local governments. CDOT's Bicycle and Pedestrian Program coordinates plans, programs, and projects to improve mobility for all travelers and to increase connections for cyclists and pedestrians to other modes.

Investments are guided by the statewide *Bicycle and Pedestrian Plan* and coordinated with regional and local partners. Funding is provided from federal programs such as the STP-Transportation Alternative Set-Aside, Recreational Trails Program, CMAQ, as well as flexible funding sources such as STP-Metro and the Regional Priority Program. Projects can include facilities such as bus shelters and bike lockers, as well as regional trails and dedicated bike lanes. The US 36 Express Lanes project includes a dedicated biking and walking trail along its length to expand travel options. CDOT's design, engineering, and maintenance guidelines also consider and incorporate bike and pedestrian elements into routine maintenance or reconstruction projects in order to cost effectively expand the network.

Colorado continues to be a global recreational destination for cyclists and biking and walking to work is becoming an increasingly popular commute option for Coloradoans. Investments in this area continue to improve the bike and pedestrian options and serve to maximize the efficiency of the existing transportation system.

## TRANSIT AND RAIL

CDOT actively works to plan, develop, operate, and integrate transit and rail services into the statewide transportation system. CDOT's role is coordinated by the Division of Transit and Rail which works with public and private transit and rail providers to plan, promote, and implement investments in transit and rail services statewide.

Investments are guided by the *Statewide Transit Plan*, *Regional Transit Plans*, and the *State Freight and Passenger Rail Plan* along with input from stakeholders and regions. Funding is provided through flexible federal and state funds, FASTER Transit program, the Railroad Crossings Program, and through other state and local funding sources. CDOT administers FTA grants and makes competitive grants to local agencies using state funds. CDOT is also empowered to own and operate transit systems, including the recent Bustang interregional bus service along the I-25 and I-70 corridors. Investments and activities made in transit and rail include expansion of interregional bus services, planning and technical assistance, and grants to support local transit projects.

Colorado's transit system provides essential long-distance travel options within the state that private providers may not adequately serve, helps veterans and persons with disabilities travel, and increases employment opportunities by expanding commute options. Investments in transit and rail serve to maximize and expand the state transportation system.

## FREIGHT

Colorado's freight system includes major interstate corridors, essential national rail lines, and local and regional highway and rail networks that serve the freight needs of important industries. CDOT's Freight Program and the Colorado Freight Advisory Council coordinate planning and investment activities that address freight needs.

Investments are guided by the *State Freight and Passenger Rail Plan*. Activities and investments include the identification and elimination of highway bottlenecks for truck traffic, strategic freight highway connectors and intermodal projects, programs to make roads safer for trucks, improvements to railroad grade crossings to improve safety and efficiencies, and coordination of public and private investments in the intermodal, aviation, and rail freight projects. CDOT's role in funding freight projects has traditionally been limited by federal regulations and funding availability. With the FAST Act and the National Freight Program, CDOT and its partners can invest in private intermodal and freight projects and expand state programs that address issues on highway and rail networks.

Investments that improve freight movements help support critical industries such as agriculture, manufacturing, and tourism and increase the state's competitiveness in global markets. These investments also help maximize the existing transportation system by improving traveler safety and reducing congestion.

## CONGESTION MITIGATION AND AIR QUALITY IMPROVEMENT (CMAQ)

The CMAQ program started in the early 1990s and has made significant improvements in Colorado's air quality. Along with the economic and environmental benefits of improved air quality, CMAQ has also made investments in multimodal infrastructure and congestion relief efforts.

CMAQ is a flexible funding source for transportation projects and programs that help meet the requirements of the Clean Air Act. Funding is available to reduce congestion and improve air quality for non-attainment and maintenance areas including: Denver Metropolitan Region, North Front Range, Pikes Peak Area, Upper Front Range TPR, Canon City, Aspen/Pitkin County, Steamboat Springs/Routt County, and Pagosa Springs/Telluride areas.

CMAQ investments may include roadway paving, transit projects, travel demand management programs and shared ride services, pedestrian and bicycle facilities, along with education to encourage alternative commuting modes. Investments are coordinated regionally by MPOs and local governments within non-attainment and maintenance areas. CMAQ funds contribute to CDOT's maximize priority by enhancing commute options and making the most of the existing transportation system.



## FUNDING CHALLENGES IN COLORADO

CDOT faces growing challenges now and in the future in adequately funding the transportation needs of all travelers in all areas of the state. With continued growth in population and diversification of the state economy, sheer demand for travel continues to rise. This means more vehicles and trucks on roadways, more transit users, and more need for safety and multimodal investments. Simply maintaining the existing system will continue to consume a greater share of CDOT's budget, leaving less available to meet increased travel demand. The future is also uncertain and CDOT must be prepared to respond to changes in travel patterns as population centers grow and change, as worker commute habits shift, and as new technologies and autonomous and connected vehicles become available. CDOT must secure funding to leverage these technologies, respond to demographic and economic shifts, and meet the challenges of operating transportation systems in a state as diverse as Colorado.

However, with the current reliance on fuel taxes to fund transportation needs at both the state and federal level, CDOT is faced with doing more with less. CDOT is increasingly efficient with resources and investment choices are performance-based and outcome-driven. This means that the right investments in the right assets are made at the right time. Performance-based planning and decisions within CDOT's major budget priorities help make the most of limited transportation dollars. New and alternative revenue sources, such as Colorado's innovative FASTER program, High Performance Transportation Enterprise, and public-private partnerships will be more necessary and more common in the future.

This section provides an overview of major revenue sources, funding programs, and investment areas. The specifics of funding transportation in Colorado is much more complex. For more information and details, consult CDOT's Annual Budget Narrative and Annual Report. The following section of this CDOT Transportation Planning Guide provides additional information on how funding, program, and project decisions are made within CDOT.

# TRANSPORTATION PLANNING 103: PLANNING, PROGRAMMING, AND PROJECT SELECTION

Section 103 provides an overview of statewide transportation planning and programming processes - from the statewide long-range plan to intermediate program development, to short-term project programming. This section provides an overview of how performance-based planning guides CDOT's development and investment decisions. Summary information addressing how projects are selected for funding within CDOT's major budget priority and program areas is covered in this section. Further detail on performance-based planning and project selection criteria for individual program areas can be found in the *Statewide Transportation Plan* and online through CDOT's website ([www.codot.gov](http://www.codot.gov).)

## HOW DOES CDOT PLAN FOR PERFORMANCE?

Planning at CDOT is performance-based. This means that CDOT's limited funding is applied to the right project, for the right purpose, at the right time in order to support performance goals and objectives. Performance-based planning is embedded in all of CDOT's activities - from policy, to programs, and into project decisions.

At the policy level, CDOT develops a performance-based *Statewide Transportation Plan* and prepares an annual Performance Plan that align all planning and programming activities with agency and statewide goals. These goals and objectives inform major funding program decisions that are data-driven and performance-based. These programs include asset management, maintenance, capacity, safety, operations, and others. Performance objectives and program requirements then direct funding to projects that have the greatest performance benefits. Individual projects are evaluated based on expected performance outcomes and how well they may help achieve statewide performance goals.

The performance-based planning process is led by the Multimodal Planning Branch (MPB) in the Division of Transportation Development (DTD). The transportation planning process includes extensive coordination both internally and externally. Primary internal partners include CDOT Engineering Regions, Division of Accounting and Finance (DAF), Division of Transportation System Management & Operations (TSMO), Division of Transit & Rail (DTR), Division of Aeronautics, Staff Engineering Branches, and other branches within DTD. External coordination includes regional planning partners (Metropolitan Planning Organizations (MPOs) and Transportation Planning Regions (TPRs)), other state and federal agencies, public and private stakeholders, and the traveling public. The MPB coordinates all multimodal planning activities, integrates planning products and plans from different CDOT Regions and Divisions, seeks and incorporates input from planning partners and the public, and provides analysis and policy development from a consolidated, statewide, and multimodal perspective.

CDOT's annual Performance Plan is built upon the agency's Vision and Mission, which create the framework for performance areas, including long-term strategic policy initiatives and shorter-term focus areas. Based on transportation priorities, CDOT establishes mid- to long-term performance goals and objectives. Policy Directive 14 (PD 14) provides policy direction on investment decisions to reach desired performance levels for safety, infrastructure condition, maintenance, and travel reliability. The objectives in PD 14 help set strategic direction and funding levels for policies and programs in the long-range Statewide Transportation Plan, the 10-year Transportation Development Program, the four-year Statewide Transportation Improvement Program, and in CDOT's annual budget process.

## NATIONAL PERFORMANCE GOALS

The Moving Ahead for Progress in the 21st Century Act (MAP-21) became law in 2012. MAP-21 restructured how federal surface transportation programs are funded and introduced significant new performance requirements. More recently, the Fixing America's Surface Transportation (FAST) Act became law in 2015 and is the first federal transportation legislation in over a decade to provide long-term funding certainty for surface transportation infrastructure planning and investment. The FAST Act and MAP-21 create a streamlined, performance-based, and multimodal federal funding program. These new federal programs and requirements enhance transportation planning processes to incorporate performance goals, measures, and targets into the process of identifying transportation investments and selecting projects for funding.

Under current federal legislation, CDOT must invest resources in projects that help achieve statewide targets and make progress toward national goals. National performance goals for federal highway programs are:

- *Safety*—To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
- *Infrastructure condition*—To maintain the highway infrastructure asset system in a state of good repair.
- *Congestion reduction*—To achieve a significant reduction in congestion on the National Highway System.
- *System reliability*—To improve the efficiency of the surface transportation system.
- *Freight movement and economic vitality*—To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
- *Environmental sustainability*—To enhance the performance of the transportation system while protecting and enhancing the natural environment.
- *Reduced project delivery delays*—To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving work practices.

For each of these goal areas, the U.S. Department of Transportation (USDOT) establishes performance measures. Performance measures cover pavement conditions and performance for the Interstate and National Highway System (NHS), bridge conditions, injuries and fatalities, traffic congestion, on-road mobile source emissions, and freight movement on the Interstate system. CDOT must then set performance targets in support of these measures and the statewide transportation plan must describe how programs and project selection practices help achieve performance targets. Colorado's five MPOs and large transit agencies also set performance objectives for metropolitan areas in cooperation with CDOT.

CDOT is required by federal law to report on progress toward state and national performance goals. If progress is not met in some areas, CDOT must take corrective action. For example, if no significant progress is made toward targets for fatalities or serious injuries, then CDOT must dedicate additional funding to safety projects and prepare an annual implementation plan. In addition, states must maintain minimum standards for Interstate pavement and NHS bridge conditions. If conditions fall below standards, then CDOT must invest in improving pavement and bridge conditions until the minimum standard is exceeded.

Federal transportation legislation also requires that new information be considered within state and regional long range transportation plans. The Statewide Transportation Plan must describe performance measures and targets used in assessing system performance. The State Transportation

Improvement Program (STIP) and Transportation Improvement Programs (TIPs) prepared by MPOs must also link projects and investments to performance objectives and describe progress toward achieving targets.

## CDOT'S PERFORMANCE GOALS

CDOT must accomplish its mission and performance goals with very limited and constrained funding. Increasing fuel efficiency and construction cost inflation are weakening the ability of state and federal fuel taxes, which have not increased for two decades, to provide sufficient funding for the transportation system. At the same time, population and economic growth means increasing wear and tear and congestion on the state transportation system. Current forecasts suggest that even with CDOT's best efforts and targeted investments, Colorado will at most only slow future growth in congestion and will experience a decline in condition and maintenance levels on state highways within the next 10 years.

In 2015, CDOT developed a strategic framework that includes statewide performance goals and measures for key policy initiatives. CDOT's current performance initiatives and measures are consistent with state and federal requirements and help the agency make better decisions and track progress toward long-term goals. CDOT continues to coordinate statewide goals with regional MPO goals. CDOT's current statewide performance goals, measures, and objectives, as set out in PD 14 include the following areas:

**Safety: *Move Colorado "toward zero deaths" by reducing traffic-related deaths by one-half by 2030.*** Colorado's vision of moving toward zero deaths is consistent with federal goals and other states. With new technology in vehicles and increased safety education for drivers, movement toward this aspirational goal may be attainable. Performance measures tracked include fatal and serious injury crashes and crash rates.

**Infrastructure Condition: *Attain High or Moderate Drivability Life for 80 percent of sampled lane miles of pavement on the state highway system by 2025.*** CDOT's long-term performance objectives in this area are set below current condition levels. This is a reflection of the challenges of funding continually increasing maintenance needs. Performance measures are established in this area by measures of "Drivability Life", which is an indicator of pavement condition. Bridge condition measures are also tracked and reported, as well as other transportation assets including: buildings, ITS, maintenance fleet, culverts, tunnels, traffic signals, and walls. The condition of highway segments with certain geohazards (landslides and rock falls) are reported.

**System Performance: *Slow the growth of congestion on critical Interstate highways (e.g. I-25 and I-70) and regional corridors (e.g. C-470).*** Congested traffic conditions cannot be eliminated, but congestion can be effectively managed and made more reliable. Performance is tracked based on a measure of Planning Time Index. This indicator assesses travel reliability in congested corridors by measuring the difference in trip time required during normal delays and time required with unexpected delays.

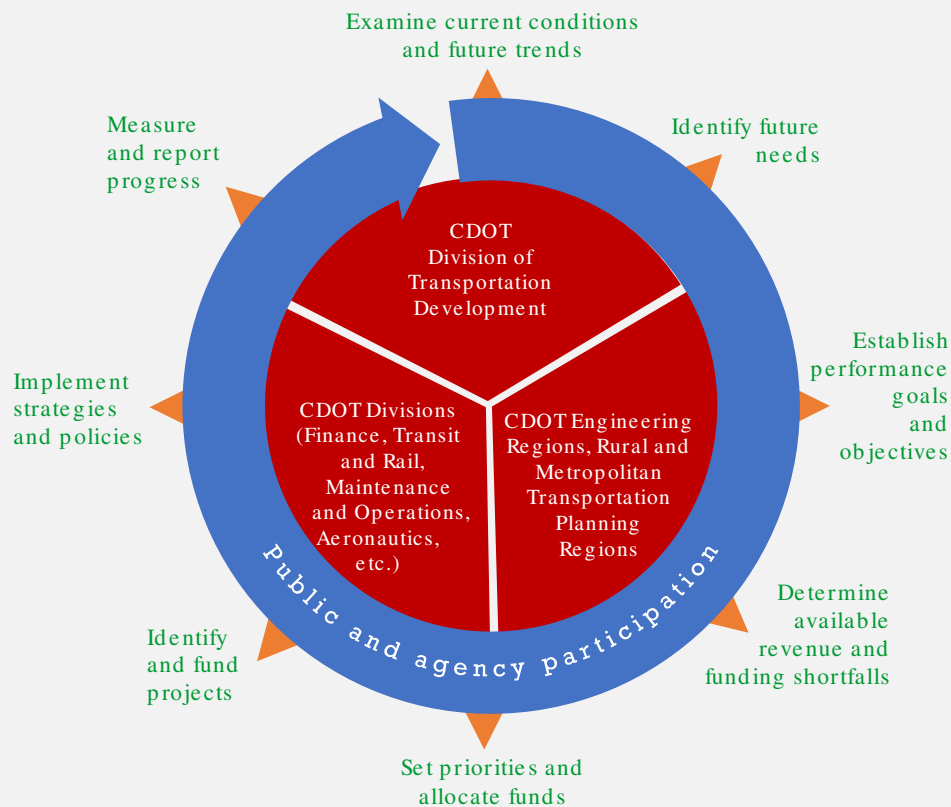
**Maintenance: *Maintain CDOT's roadways and facilities to minimize the need for replacement or rehabilitation in a constrained funding environment.*** A C grade may be the best that Colorado can hope for given funding levels, aging infrastructure, rising maintenance needs, and geographic challenges such as weather events, snow, ice, and rock fall. This goal includes achieving an overall Maintenance Levels of Service grade of C for the state highway system. Performance is tracked in this area by a measure of Maintenance Level of Service that is an indication of conditions given certain funding levels.

## WHAT IS THE STATEWIDE TRANSPORTATION PLANNING PROCESS IN COLORADO?

CDOT conducts a continuing, comprehensive, and cooperative performance-based multimodal transportation planning process in accordance with federal and state requirements. This process includes developing both long-term and short-term goals and performance objectives for the transportation system, identifying strategies to achieve objectives, and then establishing priorities for investing in programs and projects. CDOT’s multimodal transportation planning process reflects a performance-based approach that incorporates data and analysis to inform decision-making, establish goals and performance objectives, distribute resources, and select projects on a performance-basis. This multimodal transportation planning process results in the development of key planning products including a Statewide Transportation Plan, 10-year Development Program, four-year Statewide Transportation Improvement Program, and Regional Transportation Plans.

### TRANSPORTATION PLANNING CYCLE

CDOT’s statewide planning cycle is a continuous process that is renewed every four years. This process is led by the Multimodal Planning Branch (MPB) within the CDOT Division of Transportation Development (DTD), but many planning partners provide input and CDOT Divisions, Engineering Regions, and Transportation Planning Regions each have distinct roles and responsibilities. Each planning cycle includes the development of a new or updated long range Statewide Transportation Plan (SWP), Regional Transportation Plans (RTPs), 10 year Transportation Development Program (TDP), and four-year Statewide Transportation Improvement Program (STIP). The graphic below illustrates the major process steps, partners involved, and key activities that occur within the statewide planning cycle.





Major elements of CDOT's continual planning cycle include:

**Examining current conditions and future trends** in travel, economic growth, freight movement, population growth, development patterns, safety, and customer demands to understand what will be needed in the future. CDOT's Division of Transportation Development, Staff Engineering Branches, and Engineering Regions analyze these data on a regular basis. Key statewide planning activities include:

- Compiling and analyzing data to assess transportation conditions and trends for the next 10 and 20 years, or more. Projections are developed for system condition, congestion, safety, vehicle miles traveled, population, and other demographic information. Analyses of travel demand from the Statewide Travel Model, including scenario planning analysis, are incorporated.

**Identifying future needs** such as congestion, capacity, mobility, safety, and maintenance and examine demands on the system for all transportation modes. Future needs are identified with input from planning partners and the traveling public. Key statewide planning activities include:

- Projecting condition data and drawing funding needs from the Transportation Development Program, Asset Management program, Transportation System Maintenance and Operations, Division of Transit and Rail, as well as input from Engineering Regions, MPOs and planning partners.
- Identifying trends and themes for further consideration and discussion in other statewide, modal, and regional planning processes.
- Seeking broad public input on statewide transportation issues, needs, challenges and solutions and incorporating that input into a future vision for the state. The traveling public is involved throughout the statewide planning cycle.

**Establishing performance goals and objectives** that address needs and support the public vision for the future of transportation. CDOT's DTD works with other CDOT Divisions and Engineering Regions, MPOs and TPRs, and the public to regularly update statewide goals and measures, with a major update at least every four years. Key statewide planning activities include:

- Developing goals, performance measures, and objectives for safety, infrastructure condition, system performance, and maintenance. Additional focus areas, including economic vitality, are anticipated in the future. Goals, objectives, and measures are based on the results of data collection, needs analysis, revenue forecasts, and information from existing plans.
- Policy Directive 14 (PD 14) provides an overall framework for the transportation planning process and guides the distribution of resources across CDOT's plans and programs. PD 14 is updated periodically to reflect new or updated measures and statewide objectives.

**Determining available revenue and funding shortfalls.** Estimates of funding levels and gaps determine what level of investment is possible in the future. CDOT's Division of Accounting and Finance (DAF), in cooperation with planning partners, prepares a new revenue forecast for the statewide planning cycle every four years that is updated annually. Key statewide planning activities include:

- Developing detailed state and federal revenue forecasts for the minimum 20-year time horizon of the Statewide Transportation Plan and Regional Transportation Plans.
- Identifying funding constraints, including funding needed to achieve established performance objectives and estimating the gap between actual needs and forecasted available revenues.

**Setting priorities and allocating funds** to funding programs and priority areas in support of overall performance goals and objectives. CDOT DTD and DAF lead the program distribution process every four years. Key statewide planning activities include:

- Developing program distribution estimates which assign forecasted revenues to funding programs over a 20-year time horizon. Program distribution is based on forecasted revenues and helps identify the funding needed to support performance objectives. Priorities and projects within long range plans and the four-year STIP must be fiscally constrained to anticipated revenues.
- Preparing CDOT's annual budget in the spring of each year. DAF prepares the annual budget which is based on updated revenue forecasts and information on funding needed to achieve performance objectives.

**Identifying projects that support performance objectives.** Projects are identified using data analysis and input from the public and planning partners and evaluated for how well they meet future needs and support performance objectives. CDOT Divisions, CDOT Engineering Regions, MPOs, and TPRs each prepare long-range plans or multimodal plans that identify priority projects and programs. Key statewide planning activities include:

- Incorporating priority projects from regional, modal, and functional plans into the Statewide Transportation Improvement Program (STIP). The STIP is a four-year work program that details future investments within fiscal constraints of anticipated revenue. Projects included in the STIP must describe how investments contribute to performance goals. Projects are identified through CDOT Engineering Regions, TPR input, MPO project selection processes, and other data-driven or competitive selection processes.

**Implementing strategies and policies** that support performance goals and objectives. Not all investments are projects; some are programs and policies that improve decision-making. All CDOT Divisions and Engineering Regions engage in a continuous process to implement state and regional plans. Key statewide planning activities include:

- Identifying strategies and actions to achieve statewide goals and performance objectives. Examples include the deployment of new operational techniques, implementation of construction projects, studies on emerging transportation issues, or improvements to data collection and analysis.
- Integrating and aligning strategies and policies across statewide modal plans, performance plans, and regional plans.

**Measuring and reporting progress** toward performance goals and objectives. Performance measurement provides transparency and is a critical source of feedback in the each iteration of the planning cycle. CDOT DTD and other CDOT Divisions continually monitor and report progress and performance. Key statewide planning activities include:

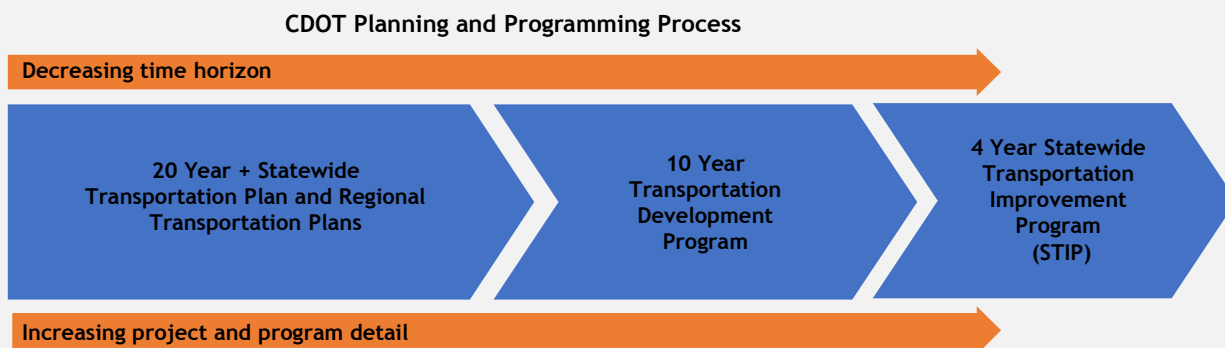
- Tracking progress toward meeting statewide performance objectives and continuously monitoring performance measures and indicators.
- Preparing CDOT's annual Statewide Plan Performance Report that tracks current performance compared to PD 14 performance objectives and reports status of implementation activities.

## KEY STATEWIDE PLANNING PRODUCTS

CDOT's statewide transportation planning cycle results in a number of products and plans used throughout the planning process. Several key documents guide major decisions throughout the typical four-year planning cycle. These major plans include:

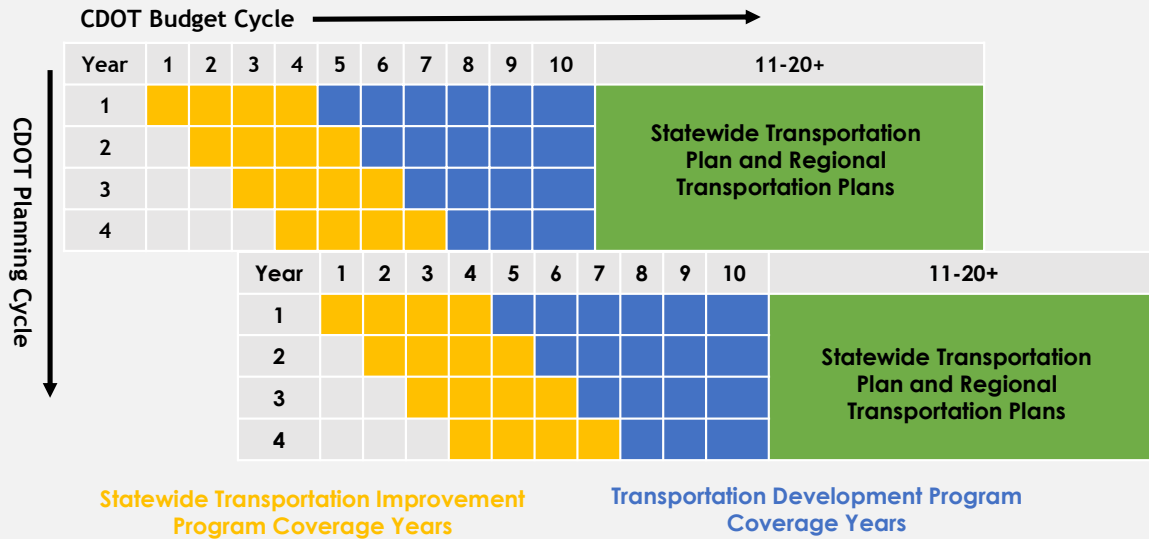
- The Statewide Transportation Plan (SWP)
- Statewide modal and functional plans
- Regional Transportation Plans (RTPs) and MPO Long Range Transportation Plans (LRTP)
- 10-year Transportation Development Program (TDP)
- Four-year Statewide Transportation Improvement Program (STIP)
- MPO Transportation Improvement Program (TIP)

These plans are discussed in more detail in the following pages of this section. Generally, the SWP provides a long-term vision and strategic framework for statewide transportation decision making. Statewide modal and functional plans along with regional transportation plans are incorporated within the SWP. Planning time horizons decrease and the level of detail on projects and programs increases as the planning cycle advances. As seen in the graphic below, the 10-year Transportation Development Program and Statewide Transportation Investment Program are created following the SWP and RTPs in order to implement those plans.



*Source: CDOT 2016*

The TDP and the STIP work together to put into effect the statewide and regional long range plans. As the planning cycle advances, the future period covered by each of these plans also progresses until the next major plan update and beginning of a new planning cycle. This coverage can be seen in the chart below. Each year the budget is updated and an additional year is added to the STIP, Every four years the full planning cycle is conducted resulting in a four-year STIP, 10-year statewide TDP and long range plan.



Source: CDOT 2016

## STATEWIDE TRANSPORTATION PLAN

The [Statewide Transportation Plan](#) (SWP) integrates long range regional and metropolitan plans into a blueprint and vision document for improving Colorado’s transportation system over the next 10 to 20 years. The SWP guides transportation investments that address preservation and maintenance needs, efficient system operations and management practices, and capacity improvements within existing financial constraints. The SWP identifies future needs for the transportation system and outlines four key goals for Colorado’s multimodal transportation system:

- **Safety**
- **Mobility**
- **Economic Vitality**
- **Maintaining the System**

The SWP provides strategic direction and outlines performance objectives to achieve these goals. The plan also presents key information on: public and stakeholder input; system needs, revenue and funding gaps; and, overall investment strategies.

The SWP is developed with input from regional stakeholders, multimodal transportation interests, and the traveling public. Individual modal plans for transit, rail, aviation, freight, and bicycles/pedestrians are integrated within the overall state plan. Public involvement and coordination helps ensure that all Coloradans have a voice in deciding the vision, goals, and priorities for the statewide transportation system.

This process also ensures that CDOT considers all available information when planning for Colorado’s future multimodal transportation system. When all data is analyzed together, the SWP tells a story about Coloradans’ ability to get around quickly and safely, about Colorado’s continuing economic vitality, and about how CDOT can keep the transportation system functioning for the next 20 years and beyond.

The SWP provides critical guidance on what investments Colorado should make today to ensure that the transportation system is ready for tomorrow. Current levels of annual funding for transportation can no longer keep pace with the costs of operating, maintaining, and improving

the state’s transportation system, so it is more important than ever to use data-driven and performance-based investment strategies that maximize available funds. Colorado’s future transportation needs are significant and challenging to meet at current funding levels. Without additional revenue sources, CDOT will only be able to maintain the existing transportation system for another ten years. Beyond that point, the functionality and condition of Colorado’s transportation system will begin to decline.

[For more information on the current Statewide Transportation Plans visit:  
http://coloradotransportationmatters.com](http://coloradotransportationmatters.com)

## STATEWIDE MODAL AND FUNCTIONAL PLANS

CDOT Divisions and Offices prepare new or updated multimodal or functional plans generally every four years.

- *Modal Plans* are developed or updated for transit, rail, aviation, freight, and bicycle and pedestrian modes and are integrated into the Statewide Transportation Plan. These plans help guide decisions and investments in each of these cross-cutting areas. Plans are led by CDOT Divisions or Offices and involve the public, stakeholders, and planning partners.
- *Functional Plans* are developed or updated for specific transportation functions, including the *Strategic Highway Safety Plan*, *Statewide Transportation System Management & Operations Plan*, and *Risk-Based Asset Management Plan*. CDOT Divisions lead these plans with input from the public, planning partners, and CDOT Engineering Regions. These plans identify strategic direction in each focus area, identify challenges and solutions, and prioritize investments and strategies for implementation.

[For more information on the current Statewide Transportation Plans visit:  
http://coloradotransportationmatters.com](http://coloradotransportationmatters.com)

## 10-YEAR TRANSPORTATION DEVELOPMENT PROGRAM

The purpose of the [10-Year Transportation Development Program](#) (TDP) is to bridge the gap between the four-year STIP and the 20-year SWP by capturing major investment needs and priorities within a 10-year timeframe. The 10-Year TDP serves to:

- Communicate the status of major investments to the public and stakeholders;
- Provide a resource for the prioritization of additional major investments if significant additional revenue were to become available and for other “list” development exercises;
- Provide a guide to previously identified transportation needs and priorities to inform updates to Regional Transportation Plans and Transportation Improvement Programs, as well as other statewide project selection, design, or development decisions;
- Provide an aid in quantifying identified transportation needs to support planning and programming processes.

Major investment needs in the TDP are identified through statewide planning and development studies and are also identified in metropolitan and rural Regional Transportation Plans. The most current Development Program inventory includes roughly 130 highway projects representing more than \$9 billion in funding need, and roughly 100 transit projects representing more than \$2 billion in funding need. Additional bicycle and pedestrian investment needs will be incorporated in the future. While this far exceeds the revenue expected in this timeframe, the Development Program inventory does provide a menu of options for future investment.

The Development Program is not intended to capture every potential project identified to date. At a minimum, it captures highway projects defined as “major” by each CDOT Engineering Region, and



major project priorities for transit, bike/ped, and operations. Information is also collected on other regionally significant projects identified in regional plans, but that may not be included in the statewide inventory of major investment needs.

The Development Program is a tool to help identify potential projects for different purposes, such as candidate projects for different competitive funding programs or projects that would support a specific performance objective. To aid in this analysis, the TDP includes a variety of data and criteria that can be queried or filtered for particular types of projects.

[For more information and to view current Development Program documents visit:  
https://www.codot.gov/programs/planning/projects/development-program](https://www.codot.gov/programs/planning/projects/development-program)

## STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM

The Statewide Transportation Plan (SWP) is implemented by programming priority projects into the short-term, four-year [Statewide Transportation Improvement Program](#) (STIP). The STIP is federally required, is fully updated every four years, and must be fiscally constrained based on CDOT revenue projections. With each CDOT budget cycle, a fourth year is added to the STIP so that it always covers a full four years. STIP projects must be consistent with the corridor visions identified in the SWP. All federally funded and regionally significant projects are identified in the STIP. The STIP is adopted by the Transportation Commission and approved by FHWA and FTA.

In rural TPRs, regional priorities are often voiced through the CDOT Region Project Priority Programming Process (4P). The 4P effort incorporates the state statutory requirement that CDOT formally hear the transportation needs of Colorado's 64 counties through meetings with the Transportation Planning Regions. This priority project process also utilizes the regionally prioritized corridor strategies outlined in long range RTPs as the basis for projects and priorities to be included in the STIP. Projects are selected, in cooperation with local officials in TPRs, based on a set of criteria developed to solve or improve a particular congestion, safety, or system quality need on the transportation system.

In metropolitan areas, MPOs develop their own Transportation Improvement Programs (TIPs) in cooperation with CDOT and Engineering Regions. TIPs must be consistent with the MPO long range RTP. MPO TIPs are included without modification into the STIP. Non-urban TPRs do not develop TIPs and their projects and priorities are included directly in the STIP.

[For more information and to view current STIP documents visit:  
https://www.codot.gov/business/budget/statewide-transportation-improvement-program-stip-reports-information](https://www.codot.gov/business/budget/statewide-transportation-improvement-program-stip-reports-information)

## HOW DOES CDOT MANAGE FOR PERFORMANCE?

CDOT utilizes performance data and performance objectives to make decisions on many activities, including asset management investments, allocating operations and maintenance resources, project identification and prioritization within long-range plans and investment programs, as well as agency effectiveness and efficiency. This ensures that decisions to invest limited funds are data-driven and help contribute to strategic statewide goals.

For example, priority bridge projects are identified based on the condition of their structures and decks and not simply location, age, or when it was last rehabilitated. Decisions on where to deploy snowplows, where to invest in technology, or where to install center-median guardrails, rumble strips, or other safety improvements are all based on data. These data tell us what areas are most heavily traveled, have a high occurrence of safety incidents, are most likely to be congested, and other key indicators. Information and data on the impact and effectiveness of investments in these areas are then used to mark progress toward statewide performance objectives.

Performance data and outcomes are then a critical source of feedback that is tracked on an ongoing basis and evaluated within each planning cycle. In this way, CDOT can strategically establish performance objectives based on what is realistic and achievable given limited funding and target investments that provide the greatest impact on those objectives. Tracking and reporting performance measures then provides transparency and accountability and helps CDOT set expectations for what can be accomplished with the traveling public and planning partners. As CDOT's data systems and analytical capabilities continue to improve, performance data and decision-making processes will also become more robust and effective.

To fund statewide needs, CDOT utilizes a variety of federal and state highway, transit, aviation, safety, bridge, and crosscutting funding programs. Within these programs, CDOT and regional planning partners identify projects that best meet Colorado's transportation needs and best achieve performance objectives.

CDOT funding programs and budget categories are summarized below and discussed in detail within [Section 102](#). The following major budget categories, and associated funding programs, provide an overview of where CDOT invests limited transportation dollars. The remainder of this Section discusses how CDOT identifies projects for funding and implementation.

**Maintain** - Includes projects that take care of the existing transportation system such as resurfacing and reconstruction of existing pavement and bridges and maintenance activities such as roadway and structure maintenance and snow removal. Examples of primary federal and state funding programs are:

- National Highway Performance Program
- Surface Transportation Block Grant Program
- State Highway Fund
- Regional Priority Program
- Colorado Bridge Enterprise

**Maximize** - Includes operational upgrades and improvements like traveler information, electronic signs, projects that add safety upgrades like turn lanes and traffic safety education programs to increase seatbelt use or reduce impaired driving. Examples of primary federal and state funding programs include:

- Surface Transportation Block Grant Program
- Highway Safety Improvement Program
- State Highway Fund (safety and operations programs)

**Expand** - Includes projects that expand the existing system such as adding new lanes to highways. Currently, limited funding is available for this category. Examples of primary federal and state funding programs include:

- National Highway Performance Program
- Surface Transportation Block Grant Program
- State Highway Fund
- Senate Bill 228 – Strategic Projects
- Regional Priority Program

**Pass-Through, Multimodal and Cross-Cutting Budget Priorities** - Includes funding programs that are allocated to others, or that overlap the maintain, maximize, and expand priorities. Projects funded through these programs include safety, bicycle and pedestrian, transit and rail, freight, and congestion mitigation and air quality. Examples of primary federal and state funding programs include:

- National Freight Program
- Highway Safety Improvement Program
- Federal Transit Administration formula grants and programs
- National Highway Traffic Safety Administration formula grants and programs
- Surface Transportation Block Grant Program (STP-Metro, Transportation Alternatives and Recreational Trails)
- Congestion Mitigation and Air Quality Program
- Safe Routes to School
- Colorado FASTER Safety funds
- Colorado FASTER Transit funds
- Senate Bill 228 – Strategic Projects
- Regional Priority Program
- MPO planning funds

## IDENTIFYING PRIORITIES AND PROJECTS

CDOT processes to identify priorities and select projects vary across funding programs due to federal and state restrictions and regulations on the use of funds. The common denominators of these processes are extensive public and partner involvement and performance-based planning. Investment priorities are identified in the Statewide Transportation Plan, statewide modal plans, Regional Transportation Plans, and MPO Long-Range Transportation Plans. The investment priorities within these plans advance through state and regional prioritization processes that are data-driven and reflect public input. Based on statewide and regional priorities, projects are identified for inclusion in the 10 year TDP and in the four-year STIP. Transportation planners at CDOT, representing each Engineering Region and Transportation Planning Region, use data and analytical methods to determine potential performance outcomes of each project and to recommend projects that represent the best use of limited funding. The following sections describe how investment decisions are made within each major CDOT budget category.

### MAINTAIN

CDOT's Division of Transportation Development, the Colorado Bridge Enterprise, CDOT Staff Branches and Engineering Regions, TPRs, and MPOs identify and prioritize projects that maintain existing transportation system assets - primarily pavement and bridges. State and regional long-range plans and

the statewide [Risk-Based Asset Management Plan](#) direct investments and project selection within this budget category.

CDOT's Asset Management Program develops and implements risk based strategies to ensure the department's limited funding is applied to the right projects. Asset management is a business methodology emphasizing lowering costs and generating a high return on investment. CDOT developed the Asset Investment Management System (AIMS) to predict the long-term performance of each asset given various budget scenarios. CDOT uses the AIMS data to determine the allocation of funds invested in each asset class. The system facilitates discussion of priorities given the lack of sufficient funding to achieve performance targets for all assets.

Major funding for asset management and infrastructure preservation projects come from federal programs, including the National Highway Performance Program and state sources, such as FASTER funds. Routine maintenance activities for roads and bridges is largely non-federal and funded through state sources. Maintenance funding is distributed across CDOT's Engineering Regions. These regions utilize pavement condition data and prioritization methods to determine which road and bridge preservation and maintenance projects are the highest priority in each region and which projects will best help meet statewide condition targets.

In 2009, the Colorado Bridge Enterprise (CBE) was created in order to finance, repair, reconstruct, and replace any bridges designated as structurally deficient or functionally obsolete, and rated "poor" using additional funding provided through FASTER. The CBE uses a performance-based evaluation process to determine which bridges represent the best use of available funding, using a scoring worksheet to prioritize bridges in need of repair. This process takes into account quantitative factors such as condition ratings as well as additional qualitative factors such as project readiness, programmatic resources and anticipated project costs.

## MAXIMIZE

CDOT's Division of Transportation Systems Management & Operations (TSM&O), CDOT Staff Branches and Engineering Regions, TPRs and MPOs identify and prioritize projects that maximize the existing transportation system. State and regional long-range plans and the *Statewide Transportation System Management & Operations Plan* direct investments and project selection within this budget priority.

CDOT's TSM&O division aligns core business areas and coordinates across agencies to improve travel time reliability and safety on Colorado highways through technology, innovative programs and strategies, targeted traffic management activities, and safety improvements. Major funding for management, operations, and safety investments is provided through federal programs such as the Highway Safety Improvement Program (HSIP), and flexible federal and state funding sources. State initiatives such as RoadX, the Congestion Relief Program, and Incident Management Program are innovative programs CDOT has developed to maximize the return on investment of transportation funds. More information on these programs can be found on the CDOT website.

Management, operations, and safety projects are prioritized and programmed at the regional and state level depending on funding sources and geography. At the state level, dedicated safety funds, such as HSIP, are prioritized using data-driven approaches that evaluate a project's potential to reduce fatalities and serious injuries. ITS and technology investments are evaluated on potential to alleviate congestion and improve travel time reliability. CDOT and its regional partners select projects in order to help best meet statewide performance goals for safety and mobility.

## EXPAND

CDOT's Division of Transportation Development, the High-Performance Transportation Enterprise (HPTE), CDOT Staff Branches and Engineering Regions, TPRs and MPOs prioritize projects that add capacity to Colorado's multimodal transportation system. The *Statewide Transportation Plan* and *Regional Transportation Plans* direct investments and project selection within this budget priority.

Funding for capacity expansion projects, including highway and multimodal projects, is provided by flexible federal and state funding sources. MPOs receive some direct federal funding that may be applied to capacity expansion projects. Performance-based processes along with stakeholder and public input are applied to identify priority projects. When funding does become available for strategic capacity investments, decisions are made by the Colorado Transportation Commission. However, funding for capacity investments is very limited statewide and expected to become even more constrained in the future.

The High Performance Transportation Enterprise (HPTE) is a government-owned business within CDOT that was created to help leverage funds for capacity expansions. HPTE leverages federal and state funding with bond and toll revenue to help move major capacity expansion projects forward. Many of these projects would not otherwise be funded, given limited funding for expansion. Recent projects include US-36, I-70 Mountain Express Lanes, I-25 Express Lanes, and C-470 Managed Lanes.

## PASS-THROUGH, MULTIMODAL AND CROSS-CUTTING BUDGET PRIORITIES

Pass-through funds are allocated to external entities for project selection. CDOT provides contracting and regulatory oversight.

CDOT's Division of Transportation Development, Division of Transit and Rail, CDOT Staff Branches and Engineering Regions, TPRs and MPOs identify and prioritize cross-cutting projects that improve the condition and performance and capacity of Colorado's multimodal transportation system. The *Statewide Transportation Plan*, *Regional Transportation Plans*, and statewide modal plans such as the *Bicycle and Pedestrian Plan*, *Strategic Highway Safety Plan*, and the *State Highway Freight Plan* direct investments and project selection within this budget priority.

**Safety investments** are primarily funded through federal programs such as HSIP and NHTSA grants. HSIP funding is distributed to Engineering Regions and MPOs for prioritization based on identified safety hotspots or to address known safety issues on local and state roads. The statewide *Strategic Highway Safety Plan* establishes investment priorities and project selection criteria based on an evaluation of crash trends and safety data.

**Transit investments** and projects funded through state sources, such as FASTER are prioritized through an evaluation process established by the Division of Transit and Rail. State FASTER funds are distributed to Engineering Regions and projects are selected within each region based on priorities in long-range plans and criteria that examine a project's contribution to mobility, transit ridership, and multimodal connectivity, among other factors. Federal grant funds are awarded directly to large transit agencies or passed through CDOT to smaller transit agencies. These agencies make independent decisions on investment priorities. Many FTA and other federal transit programs are competitively awarded based on performance and priorities. CDOT and transit agencies must apply to these programs and demonstrate the performance outcomes and benefits of the projects.

**Freight investments** on the highway system are identified within state and regional long-range planning processes based on safety, operational, and capacity needs for truck movements. Rail and intermodal projects are identified based on priorities established in the *State Highway Freight Plan*, the *Multimodal Freight Plan* (under development), *State Freight and Passenger Rail Plan*, and through regional long-range plans. Freight projects are prioritized by examining contributions to the state's economic vitality and contributions to reducing bottlenecks and delays at key points in the system.

**Bike and pedestrian investments** are identified based on priorities established in the statewide Bicycle and Pedestrian plan and within Regional Transportation Plans. Safe Routes to Schools and other specific funding programs, such as STP-Transportation Alternatives program, are awarded competitively based on established criteria and estimated impact.

**Congestion Mitigation and Air Quality (CMAQ) Program investments** are identified through the CMAQ program. CMAQ is a flexible funding source for transportation projects and programs that help meet the requirements of the Clean Air Act. Funding is available only in non-attainment and



maintenance areas: Denver Metropolitan Region, North Front Range, Pikes Peak Area, the Upper Front Range TPR, Canon City, Aspen/Pitkin County, Steamboat Springs/Routt County, and Pagosa Springs/Telluride areas. CMAQ investments may include roadway paving, transit projects, travel demand management programs and shared ride services, pedestrian and bicycle facilities, along with education to encourage alternative commuting modes. Investments are identified and prioritized regionally by MPOs and local governments within non-attainment and maintenance areas.

[For more information on the Statewide Transportation Plans mentioned above visit:  
http://coloradotransportationmatters.com](http://coloradotransportationmatters.com)

## PROJECT SELECTION

Project selection processes are typically tied to a specific funding source, although larger projects are often funded with multiple funding sources, and may move through multiple project selection processes in order to develop a complete funding package. Given limited funding, many needs or projects are not able to move forward to be funded. In general, project selection processes include:

- 1) **TPR/Region Prioritization** -TPR and MPO input is incorporated into many processes. It is from these bodies that needs and improvements are prioritized for funding. For example, a TPR may identify a specific corridor as being the highest priority for safety funding and this input is then considered in selecting safety projects, or a TPR may identify their number one priority improvement, leading to its consideration as part of a statewide prioritization process. The CDOT Regions, in partnership with the TPRs and MPOs, also prioritize projects for funding with Regional Priority Program (RPP) funds. RPP is a flexible funding source allowing for a wide-variety of projects of importance to each Region.
  - Funding Sources: RPP
- 2) **Technical Evaluation** - Most asset management and safety projects are identified for funding based on recommendations from CDOT asset management and safety systems. These systems identify the location and type of treatment needed, and CDOT Region staff identify from those recommendations the priorities for funding in their area, and develop specific projects. The CDOT Engineering Regions consider the priorities of the TPRs in identifying the priorities for funding.
  - Funding Sources: Asset Management (i.e. Surface Treatment, Structures, Geohazards, Equipment, Property, ITS Maintenance, Bridge ), Traffic and Safety (i.e. Hot Spots, Traffic Signals, HSIP, FASTER Safety, ITS Investments)
- 3) **Applications** - Many projects are selected through open calls for projects where eligible applicants submit project applications for consideration. Projects typically go through some sort of review and evaluation process that includes scoring projects based on criteria to identify which to fund. Several CDOT fund programs use a competitive application process for selecting projects to fund. Most projects selected by MPOs are identified through a call for projects.
  - Funding Sources: STP-Metro, CMAQ, TAP, Safe Routes to School, Transit grants, Aeronautics grants, Rail-Highway Crossings, Bridge Off-System
- 4) **Statewide Prioritization** - Some large projects cannot be funded through traditional funding sources, or to do so would require spreading implementation over many years. Although these projects may be funded in part through traditional funding sources, some other sources are

often necessary. These sources can include funding from the legislature, grant programs, or a special funding commitment from the Transportation Commission (TC). Typically decisions to advance these projects are made by the TC, relying on a combination of TPR/MPO input, and technical evaluation. The **10-year [Development Program](#)** includes an inventory of these major investment needs, and the priorities for investments over the next 10-years.

- Funding Sources: Strategic Projects (i.e. SB 228), Discretionary Grants, Innovative Financing
- 5) **Programs** - Some CDOT funding is allocated to a program category, rather than to specific projects. Typically a decision to fund these programs is made by the TC or mandated by federal or state statute. Some programs include funds for education or administration while others fund operational enhancement or minor improvements identified by staff.
- Funding Sources: Maintenance, Transportation Systems Management and Operations Programs, Traffic Incident Management, Safety Education, Congestion Relief, RoadX, Program Delivery/Administration, Metropolitan Planning, Regional Commuter Bus, Transit Administration and Operations, Infrastructure Bank, Debt Service

Once projects are identified for funding within the constrained revenue projection, the projects are listed by year within the STIP (or TIP if within an MPO area). When the STIP has been fully approved, then projects can proceed through the budgeting process so that implementation can begin.

## HOW CAN I PROVIDE INPUT?

Citizens can bring transportation improvement needs forward into the planning process. Contacting your CDOT Region planning staff and/or attending a TPR or MPO meeting are good first steps. There are several ways to participate in the project selection processes, including:

- Through the CDOT Regions, via [Regional Planning staff](#).
- Through [TPR and MPO transportation planning processes](#). Opportunity for public comment is provided at regular meetings.
- Through meetings of the [Transportation Commission](#), [STAC](#), or [other advisory bodies](#).
- Through **public meetings** for specific projects. Regional planning staff can provide information on current project opportunities.
- Through [C-Plan](#), an online mapping tool with opportunities to provide comments at specific geographic locations.

## PERFORMANCE OUTCOMES AND REPORTING

Performance measurement provides transparency to the public and stakeholders and helps CDOT make better-informed decisions. CDOT is committed to making progress toward statewide performance objectives and to continuously monitoring performance measures and indicators. For example, the Statewide Plan Performance Report tracks current performance compared to PD 14 performance objectives and reports status of implementation activities. CDOT also tracks performance outcomes and makes these results available on CDOT's website and through portals such as [Your CDOT Dollar](#). Some of the key performance measures tracked by CDOT are shown in the graphic below.



Your CDOT Dollar tracks CDOT performance and transportation expenditures.

- [Home](#)
- [How CDOT Spends](#)
- [Where CDOT Spends](#)
- [Road Quality](#)
- [Bridges & Tunnels](#)
- [Mobility](#)
- [Safety](#)

Performance Area:  
**Road Quality**

**Highways** | Pavement | Maintenance | Snow & Ice | Traffic Services

**Highways**  
CDOT maintains 9,146 miles of highways across the state. Colorado motorists drove 28.1 billion miles on these roads in 2012. [Learn More](#)

Long Range Goal: **B-** | Actual for 2015: **C+**

**Highway Grade Overall Roadway Condition**

Year	Grade
2011	D
2012	C
2013	C
2014	D
2015	D

Performance Area:  
**Bridges & Tunnels**

**Bridges** | Tunnels

**Bridges**  
CDOT maintains 3,437 bridges statewide to keep them safe and in good repair for the traveling public. [Learn More](#)

Long Range Goal: **90%** | Actual for 2015: **94.4%**

**Bridge-Deck Area Rated 'Not Structurally Deficient'**

Year	Percentage
2011	92%
2012	93.5%
2013	94%
2014	94.2%
2015	94.4%

Performance Area:  
**Mobility**

**Congestion** | Transit | COTrip.org

**Congestion**  
Traffic congestion in Colorado costs drivers \$1.35 billion annually in delays and fuel; an average of \$913 per person in the Denver area. [Learn More](#)

Long Range Goal: **<22\*** | Actual for 2014: **18.6\***

**Travel Delays in Congested Highway Segments**

Year	Minutes
2010	17
2011	13
2012	16
2013	17
2014	18.6

\*Minutes

Performance Area:  
**Safety**

**Fatalities** | Injuries

**Fatalities**  
Making roads safer is one of CDOT's most important jobs. Average yearly traffic fatalities fell from 510 in the 2006-10 period to 464 in the 2009-13 period, a 9 percent reduction. [Learn More](#)

Average for 2009-13: **464**

**Fatalities (five-year averages)**

Period	Fatalities
2006-10	510
2007-11	480
2008-12	470
2009-13	464