

**Transportation Commission of Colorado
Statewide Plan Committee Meeting**

Meeting Agenda

**Wednesday, November 19, 2014 – 3:45 P.M. – 4:15 P.M.
4201 East Arkansas Avenue
Denver, Colorado**

**Debra Perkins-Smith, Director
Division of Transportation Development**

**Kathy Gilliland, Chair
District 5, Livermore**

**Shannon Gifford
District 1, Denver**

**Kathy Connell
District 6, Steamboat Springs**

**Steven Hoffmeister
District 11, Haxtun**

**Douglas Aden
District 7, Grand Junction**

- **Introductions – Kathy Gilliland – 3 minutes**
- **Approve minutes of October Statewide Plan Committee –
Kathy Gilliland – 2 minutes Page 02**
- **Statewide Transportation Plan (SWP) Draft Executive Summary –
Debra Perkins-Smith – 15 minutes Page 05**
- **Web-Based Statewide Transportation Plan (SWP) Demonstration –
Michelle Scheuerman – 10 minutesPage 35**
- **Adjourn**

THE AGENDA MAY BE ALTERED AT THE CHAIR’S DISCRETION.

STATEWIDE PLAN COMMITTEE MEETING

Date: October 16, 2014

Committee Members Attending: Commissioner Ed Peterson, Commissioner Steven Hofmeister, Commissioner Shannon Gifford, Commissioner Kathy Gilliland, Commissioner Gary Reiff

Other Commissioners Attending: Commissioner Heather Barry, Commissioner Kathy Connell, Commissioner Les Gruen, Commissioner Bill Thiebaut, Commissioner Sidney Zink

Others Attending: CDOT HQ: Don Hunt, Debra Perkins-Smith, Michelle Scheuerman, Scott Richrath, Josh Laipply, David Gordon, Mark Imhoff, Tom Mauser, Trent Josten, Richard Zamora, Alisa Babler, Juan Robles, William Johnson, Ryan Rice, Jeff Sudmeier, Tim Kirby, David Krutsinger, Bob Wilson, Aaron Willis, William Johnson, Heidi Humphreys, Tromila Maile. CDOT Regions: Dave Eller, Johnny Olson, Kerrie Neet, Karen Rowe, Tony DeVito. Other: Vince Rogalski, STAC chair; Chris Nazar, CDM Smith; Steve Cook, DRCOG

- *June 19, 2014, Minutes:* The minutes were approved as written.
- *Election of Statewide Plan Committee:* The committee elected Commissioner Kathy Gilliland by acclamation. Commissioner Gilliland thanked the outgoing committee chair, Commissioner Ed Peterson, for his work chairing the committee. Commissioner Gilliland then chaired the rest of the meeting.
- *Statewide Plan Key Data Findings:* Staff presented an overview of key data findings that are linked to Policy Directive 14 (PD 14) and other CDOT plans and initiatives. The key data findings and messages came from development the 2040 Statewide Transportation Plan (SWP) and are compiled to be more accessible to the general public. The key data and findings are in the following areas: mobility, maintaining the system, economic vitality, funding, and safety. The key data findings support the SWP development efforts: to have a more data driven approach to decision making, convey complex information in a more accessible manner, and develop key messages for the plan. Commissioners saw an example of the key data findings and messages for mobility presented in a Prezi format, which is an interactive PowerPoint. Key data findings and messages are available on www.coloradotransportationmatters.com.
- *Statewide Plan Needs and Gap Analysis:* Staff discussed statewide needs for maintenance/asset management, operations/safety, transit operations/expansion, bicycle/pedestrian, and highway expansion between 2016 and 2040, with a focus on the first 10 years. The discussion included a comparison of the estimated needs with projected future revenue. Preliminary results indicate needs of \$42.9 billion and projected revenues of \$22.44 billion, with a funding gap of \$20.52 billion.

Staff is working with Safety staff to develop overall safety numbers for the Safety programs. Staff noted that the needs figure did not include major rail corridors, as was done in the past. CDOT Executive Director Don Hunt said he was reassured that the gap analysis figure is similar to that arrived at by the governor's initiative, TBD Colorado. Committee members generally agreed with the needs gap analysis.

One commissioner asked if a subset of the goals should capture CDOT work force skills to maximize safety and efficiency. Another commissioner asked if the CDOT work force has the skills needed for the next 20 years. Debra Perkins-Smith responded that the Action Plan will be incorporated by reference in the SWP and is aimed at preparing CDOT for the future, including developing the CDOT workforce.

- *Statewide Transportation Plan Goals and Objectives:* The draft vision for the SWP is: "The statewide plan guides transportation investment for a multi-modal, comprehensive system that balances preservation and maintenance, efficient system operations and management practices, and capacity improvements while incorporating risk-based asset management and cash management practices to optimize cost-effective project delivery." SWP goals and objectives are in alignment with the goal areas of Policy Directive (PD) 14 and the draft vision statement.
- *PD 14 Safety and Infrastructure Condition Measures and Objectives:* The updated PD 14 is to guide the statewide planning process, development of the SWP, and distribution of resources to meet the performance measures. No changes were proposed for the maintenance and infrastructure goal areas, although additional infrastructure condition objectives may be brought to the Transportation Commission at future meetings. Committee members generally approved the proposed changes.

Staff explained these proposed changes to the safety objectives:

- Annual reduction rather than five-year annual average reduction – Annual average is easier to understand and track, while using a five-year annual average reduction may fail to highlight current problems in reducing fatalities and serious injuries.
- 2008 as the baseline for number of fatalities and 2013 as the baseline for the other safety objectives (fatality rate, number and rate of serious injuries) –CDOT set an objective to reduce by half the number of fatalities counted in 2008 by 2030. Objectives for fatality rate and number and rate of serious injuries were set after the safety data for the Strategic Highway Safety Plan became available in 2013. The Strategic Highway Safety Plan is not just a CDOT plan and development involved about 200 people including metropolitan planning organizations, transportation planning regions, counties, cities, police, tribal representatives, and the Federal Highway Administration.

CDOT Executive Director Don Hunt commented that the goal of working toward zero deaths seemed implausible a few years ago. But vehicular technological innovations in use or about to be may help CDOT attain that goal in a few short years.



DATE: November 19, 2014
TO: Statewide Plan Committee of the Transportation Commission
FROM: Debra Perkins-Smith, Director, Division of Transportation Development
SUBJECT: Draft Statewide Plan (SWP) Executive Summary

Purpose

To provide a high-level overview of the Draft 2040 Statewide Plan (SWP) Executive Summary, and next steps for Committee review and public comment.

Action

Staff requests Committee comments on the Draft SWP Executive Summary, and concurrence with releasing the Draft SWP for public review and comment on December 5, 2014. The Draft SWP includes the Executive Summary as well as web-based plan content at www.coloradotransportationmatters.com.

Background

The Draft SWP Executive Summary document has been designed to be a concise, reader-friendly document with more images and infographics. This document provides an overview of statewide key issues and data findings, an expression of statewide transportation needs and priorities, revenue needs and gaps, and a list of strategic actions.

In order to meet a December 5, 2014 release date of the Draft SWP, staff requests that you please bring your comments on the Draft SWP Executive Summary to the November meeting. If you are unable to attend, please send your comments via email to Michelle Scheuerman, the SWP Project Manager, at michelle.scheuerman@state.co.us by November 20, 2015. Please note that this will not be your final opportunity to comment on the SWP Executive Summary. However, comments to be addressed in advance of the release for public review and comment must be received no later than November 20.

Key Benefits

The SWP Executive Summary will serve as a quick reference regarding transportation needs, priorities, and strategic actions.

Next Steps

- December 5, 2014 to January 4, 2015 - Public review and comment period on web-based Draft SWP and Executive Summary
- January 2015 SWP Committee Meeting - High-level overview of public comments and how they were addressed; SWP Committee recommends adoption of SWP
- January 2015 - Transportation Commission adoption of SWP

Attachments

Attachment A: Draft SWP Executive Summary

TRANSPORTATION MATTERS



STATEWIDE TRANSPORTATION PLAN

2040

DRAFT - 11/12/14
FOR REVIEW ONLY

EXECUTIVE SUMMARY



Commissioner Peterson Letter

COLORADO DEPARTMENT OF TRANSPORTATION'S
STATEWIDE TRANSPORTATION PLAN



Message from Executive Director



OUR STATEWIDE PLAN

TOGETHER WE'RE MOVING COLORADO FORWARD

The Colorado Department of Transportation's (CDOT) mission is to provide the best multi-modal transportation system for Colorado that most effectively and safely moves people, goods, and information.

WHAT IS THE STATEWIDE PLAN?

CDOT's roadmap for 10 and 25 years ahead is called the Statewide Plan and we couldn't have created it without your vision. This plan identifies future needs for your transportation system and provides strategic direction to achieve these goals. It also discusses ways to balance maintaining the system and capacity improvements, new travel choices, and increasing efficiency. The Statewide Plan combines perspectives from: regional stakeholders, multi-modal transportation interests, and the public.

Coloradans know that transportation matters - for our state, our economy, and our future. The transportation system connects people to the places that they live, work, and play. When it breaks down - in terms of capacity, reliability, or choice - time is wasted, opportunities are missed, and connections are gone.

This is why the Statewide Plan is performance-based. CDOT has developed a series of performance measures to better indicate how well we are meeting our goals



for safety, mobility, economic vitality and maintenance. Strategic actions and investment strategies proposed in this plan are focused on helping CDOT meet the goals and performance measures set for our transportation system.

MODERNIZING CDOT

As stewards of transportation dollars, CDOT is looking for better ways to get things done, more economically and quicker. That is why CDOT has been modernizing its structure to be more efficient, effective, and smart. The new Program Management Office has been created

to help keep money moving to projects and help track, monitor and evaluate project delivery. The new Division of Transportation Systems Management and Operations is using cost effective solutions and technology to keep the system moving and help you make

informed decisions about travel times and options. CDOT is also getting more out of the system by making wise decisions on the best way to maintain and preserve our transportation system using a risk based approach. The new Office of Emergency Management will enhance our ability to communicate during extreme weather events and introduce proactive strategies in vulnerable areas to prevent transportation system degradation. CDOT's Action Plan, located on the Statewide Plan Website, provides more information on CDOT's modernization initiatives.

TRANSPORTATION NEEDS - WHAT WE HAVE FOUND

CDOT conducted a data driven analysis to determine our multi-modal transportation needs to 2025 and 2040. In the next 25 years, there will be 7.8 million Coloradans. That’s a population increase of 47 percent. There will be 5.0 million jobs, an increase of 51 percent, (Source: DOLA, 2012). Although the number of miles per capita traveled in Colorado is expected to remain flat, the increase in population and employment means the demand for travel will increase by about 47%. Growth of this size will put unique demands on our transportation system. At the same time, CDOT has to maintain its existing transportation assets for the long-term, including more than 23,000 lane miles of roads, over 3,400 bridges, 35 year-round mountain passes, and help support more than 80 rural transit providers. Based on this and other data, this plan identifies needed levels of investments to: maintain the existing system, invest in multi-modal expansion, and improve system operations, interregional, and rural transit, and safety.

Annual funding for transportation can no longer keep pace with the costs of operating, maintaining, and improving the statewide transportation system. The gas tax, CDOT’s main source of funding, has a flat rate that hasn’t increased in the past 20 years. The future growth in population and driving will put more pressure on our transportation system, while increased fuel efficiency of vehicles will translate to less revenue collected at the pump. At the same time, Coloradans are asking for more travel options, improved

mobility, better connectivity, reliable travel times, less congestion, and above all, improved safety.

Colorado will need to find new long-term funding solutions to support a transportation system that balances safety, mobility, and expansion needs with the need to maintain the existing system. In the meantime we’re maximizing the existing system through improved operations, greater modal choice, and innovative financing partnerships to stretch our resources further.

Based on what we heard across the state and the needs identified, CDOT has developed goals, performance measures, and strategic action items as part of this plan to build on our work-to-date and address the challenges that lie ahead.

In this executive summary document you will find discussion of:

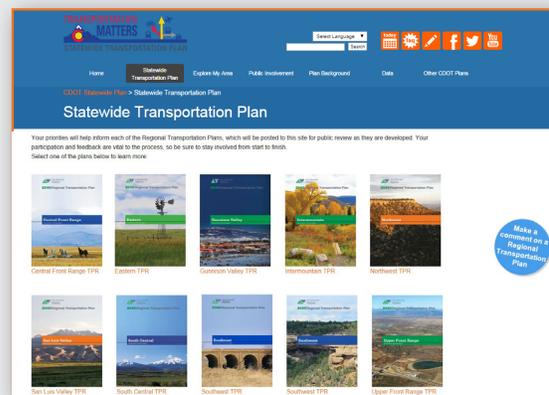
- *Plan goals*
- *How this plan was developed*
- *Identification of our multi-modal transportation system*
- *Discussion of our multi-modal transportation needs, revenue sources, and the funding gap between needs and revenue*
- *CDOT’s overall investment strategy*
- *Top strategic actions to meet the plan goals*

COLORADO’S WEB-BASED TRANSPORTATION PLAN

CDOT developed this plan as a better way to communicate with the public using technology and provide information that the public and stakeholder groups can use to discuss transportation issues. The web-based format allows CDOT to regularly update, adapt, and implement this plan in a manner that responds and evolves to the changing needs of the state in the years ahead, making it a living document. A combination of text, video, audio, and interactive presentations demonstrate where Colorado stands today, the challenges we face, and how we will continue to make progress in the future. Data, comment features, and interactive maps give you the tools to learn, explore, and continue the transportation conversation with CDOT.

The plan discusses the current state of our transportation system and presents a plan for Colorado’s transportation

future in four parts: The Colorado Transportation Story; The Planning Process; Key Data Findings, Needs and Revenue; and Moving Forward. The Statewide Plan can be found at www.ColoradoTransportationMatters.com.



MULTI-MODAL GOALS AND OBJECTIVES

CDOT and the Transportation Commission spoke with the public, stakeholders, and elected officials to develop four basic goals for the transportation system based on the plan vision. For each of these goals, a series of basic objectives has been defined and anticipated performance measures are identified.

GOAL	OBJECTIVES	PERFORMANCE MEASURES
<p>SAFETY: Move Colorado toward zero deaths by reducing traffic-related deaths and serious injuries.</p>	<p>FATALITIES AND SERIOUS INJURIES: Reduce the number and rate of all transportation fatalities and serious injuries, the number of bicyclist and pedestrian fatalities and serious injuries involving motorized vehicles, and the economic impact of crashes.</p>	<ul style="list-style-type: none"> ■ Number of fatalities ■ Fatalities per vehicle miles traveled (VMT) ■ Number of serious injuries ■ Serious injuries per VMT ■ Economic impact of crashes
<p>MOBILITY: Improve mobility and connectivity with a focus on operations and transportation choice.</p>	<p>HIGHWAYS: Ensure that most state highway miles remain uncongested, including the routes truckers use most often. Maintain acceptable levels of daily travel time delay on congested segments of state highways.</p> <p>TRANSIT: Increase ridership of small urban and rural transit agencies; maintain or increase the total number of miles of regional, inter-regional, and inter-city passenger services operated for the general public.</p> <p>BICYCLE AND PEDESTRIAN: Develop an inventory of all bicycle and pedestrian facilities on or next to state highways. Develop a model of bicycle miles traveled in urban areas. Identify measures of the level of service provided by bicycle and pedestrian facilities.</p>	<p>HIGHWAYS:</p> <ul style="list-style-type: none"> ■ Planning Time Index <ul style="list-style-type: none"> ■ Interstates ■ National Highway System <p>TRANSIT:</p> <ul style="list-style-type: none"> ■ Transit Utilization - <ul style="list-style-type: none"> ■ Ridership statewide and by subcategory: small urban and rural; ■ Transit Connectivity - Revenue service miles provided <p>BICYCLE AND PEDESTRIAN:</p> <ul style="list-style-type: none"> ■ Inventory of bicycle and pedestrian facilities ■ Model of bicycle miles traveled ■ Level of service for bicycle facilities ■ Level of service for pedestrian facilities
<p>ECONOMIC VITALITY: Improve the competitiveness of the state economy through strategic transportation investments.</p>	<p>FREIGHT AND ECONOMIC GROWTH: Support measures that facilitate freight movement and promote state, regional, and local economic goals.</p> <p>JOB ACCESS: Ensure the transportation system provides access to jobs within reasonable commute times.</p>	<p>Under development</p>
<p>MAINTAINING THE SYSTEM: Preserve and maintain the existing transportation system.</p>	<p>ASSETS: Bridges; highway pavement; condition of other roadway assets (i.e., culverts, walls, tunnels, etc.); condition of rural transit fleet vehicles.</p> <p>ANNUAL MAINTENANCE: Targets for snow and ice removal and overall maintenance of the highway system.</p> <p>TRANSIT: Require all CDOT transit grantees to have Asset Management Plans by 2017.</p>	<ul style="list-style-type: none"> ■ Condition of National Highway System bridges and pavement condition, excluding Interstates ■ Condition of bridges and pavement on state highway system ■ Pavement condition of the Interstate System ■ Risk-Based Asset Management Plan Goals ■ Transit Asset condition

PLAN DEVELOPMENT – THE PLANNING PROCESS

Planning is a continual process. Once a plan is done, work begins on implementation and measuring progress. To date the steps in developing the Statewide Plan included:

- **Transportation Commission Policy Setting:** The Transportation Commission develops a policy directive that provides an overall framework for the transportation planning process through which the multi-modal, comprehensive Statewide Transportation Plan is developed.
- **Revenue Projections and Program Distribution**
Analysis: The Transportation Commission approves long-term transportation revenue forecasts and a plan for the anticipated distribution of those revenues among programs.

■ **Plan Integration:**

In addition to the ten Regional Transportation Plans and five Metropolitan Planning Organization Plans that have been developed, CDOT has developed several other plans whose important findings are integrated into this Plan.

OTHER CDOT PLANS

- Transit
- Strategic Highway Safety
- Transportation System Management and Operations
- Freight
- Freight and Passenger Rail
- Bicycle & Pedestrian
- Aviation
- Risk-Based Asset Management
- CDOT Action Plan

- **Identify Needs and Gap:** Based on data analysis and the other plans CDOT identifies needed investments in the transportation system at a program level. This is compared to the forecast for revenue and a funding gap (or shortage) is calculated for the timeframe of the plan.

- **Developing this Plan:** This includes addressing Federal and state Planning Factors. Both Federal and State transportation legislation require the plan to address specific planning factors. This is done through the plan goals and objectives, analysis, and recommended strategic actions. Success will be measured through performance measures consistent with federally legislated goals for performance measurement.
- **Public and Stakeholder Participation:** Those involved in planning the future transportation system include:
 - *Planning partners - 10 rural transportation planning regions and five metropolitan planning organizations.*
 - *Statewide Transportation Advisory Committee (STAC)- A group of elected or appointed officials representing the planning partners. STAC meets monthly to advise CDOT on transportation planning issues.*
 - *Other Stakeholders including Federal Highway Administration, other state and federal agencies, advocacy groups and tribal governments.*
 - *Public: The public took part in plan development by participating in various plan activities described on the following page.*

After this Statewide Plan is developed, CDOT then links the Plan goals to the project programming process through the development of the **Statewide Transportation Improvement Program (STIP)**. Working with its planning partners, CDOT in the future will develop a 10-year Capital Improvement Program (CIP) of specific projects and initiatives. The CIP will identify potential projects for design and will feed the STIP, which CDOT uses to directly program dollars to projects.

THE PLANNING PROCESS



PLAN DEVELOPMENT - WHAT WE HAVE HEARD

In developing the plan, CDOT sought input from the public in defining the long-term vision for the multi-modal transportation system. This public input helped to shape the plan goals, objectives, and recommended Strategic

Actions. There were several key results from the public outreach that were important for the development of the plan. These are linked to the plan goals below.

GOAL	PUBLIC OUTREACH RESULTS
SAFETY	<ul style="list-style-type: none"> Many telephone town hall participants cited safety as their top priority for CDOT to pursue.
MOBILITY	<ul style="list-style-type: none"> Surveys showed that most Coloradans believe transportation is important because it “moves people and goods safely.” Reducing congestion and increasing travel choice were also important concerns highlighted by the public surveys. Two hot topics during the majority of the Telephone Town Halls statewide were the need for improved transit and better bicycle infrastructure.
ECONOMIC VITALITY	<ul style="list-style-type: none"> Public Surveys indicated that Coloradans see a clear connection between their transportation system and the economic vitality of their area and the state. Job creation, commuting, freight movement, tourism, agriculture, and energy development were common topics of conversation statewide during the telephone town halls.
MAINTAINING THE SYSTEM	<ul style="list-style-type: none"> Survey questions on Coloradans’ top priorities in light of limited funding showed that maintaining the existing system and improving highway pavement were central concerns. The great majority of questions and comments received during the telephone town halls related to specific local highway maintenance issues, indicating the importance which Coloradans place on their travel experience.

Over 60,000 people participated in the public outreach activities. Both traditional and innovative approaches were used to reach out to the public for comment including:

- Press releases, newspaper, radio, and public access TV announcements
- Statewide Plan Transportation Matters Website - www.coloradotransportationmatters.com
- Public surveys



- Environmental Webinars with transportation planning regions, state and federal agencies and environmental advocacy groups
- 16 Telephone Town Halls - an interactive public meeting conducted over the telephone and hosted by local officials and Colorado Transportation Commissioners
- Public meetings with the Transportation Planning Regions

REGIONAL PLANS

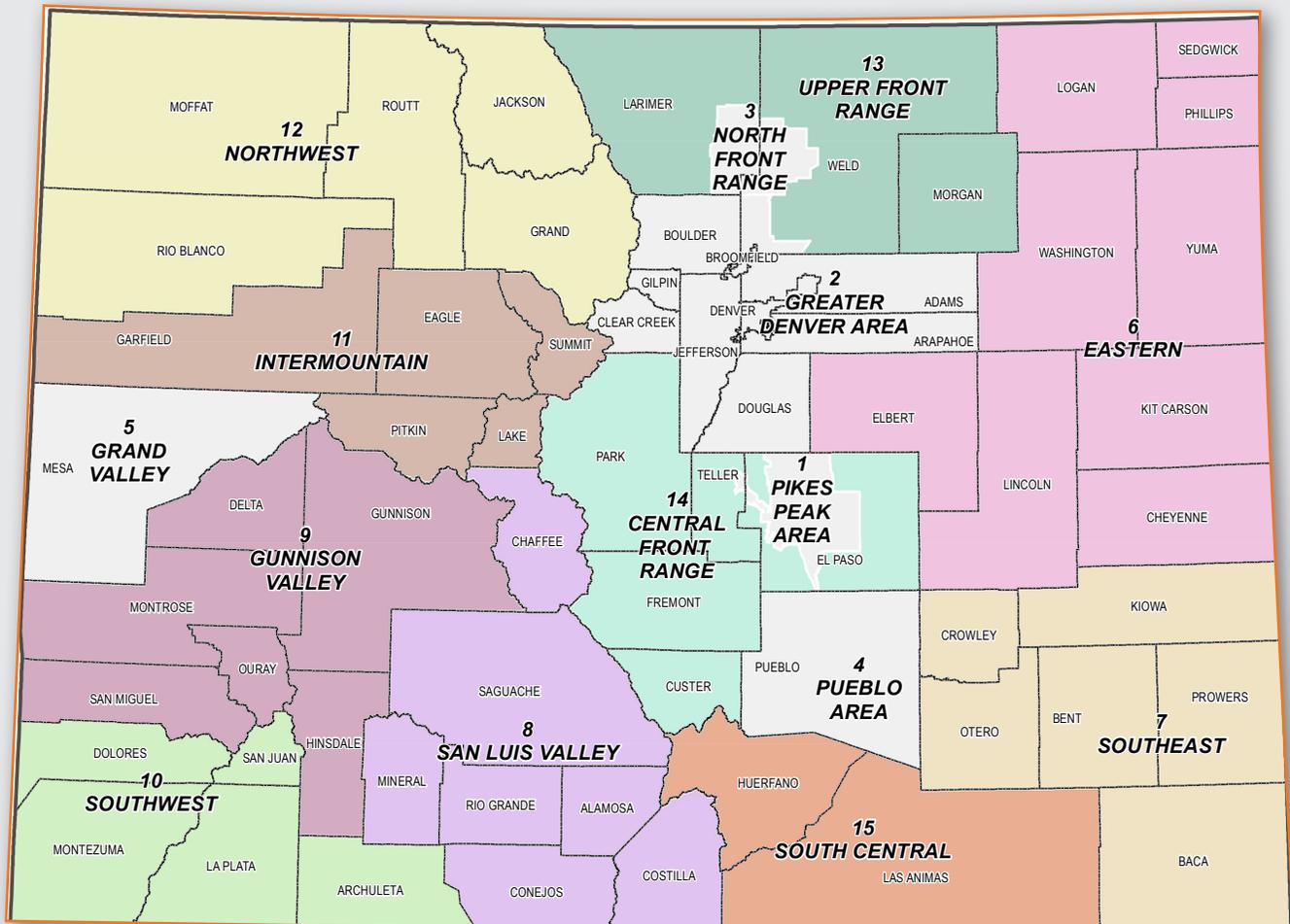
The 10 rural Transportation Planning Regions (TPRs) and the five metropolitan planning organizations (MPOs) each have developed their own regional plans that are reflected in the Statewide Plan. State law requires the 10 rural TPRs to each produce a 20-year Regional Transportation Plan (RTP). The TPRs are shown on the map below.

MPOs are federally required organizations designated to carry out the metropolitan transportation planning process in areas with populations of at least 50,000. MPOs in Colorado include the Denver Regional Council of Governments (DRCOG), Grand Valley MPO (GVMPMO) in Grand Junction, North Front Range MPO (NFRMPO) in the Fort Collins-Loveland-Greeley area, the Pikes Peak Area Council of Governments (PPACG) in the

Colorado Springs area, and the Pueblo Area Council of Governments (PACOG). MPOs are required to update their transportation plans every four to five years.

Important features of the rural RTP are reflected in the Statewide Plan, such as identification of regional priority corridors and multi-modal needs. Each RTP also includes a Regional Transportation Story that describes the unique characteristics of the Region and the transportation system, and informs the overall Colorado Transportation Story in the Statewide Plan.

All the RTPs can be viewed online on the Statewide Plan website. The MPO transportation plans also will be available on the same website once complete.



MODAL PLANS

The following two pages briefly discuss CDOT's plans for specific modes of transportation.

TRANSIT

CDOT has developed a Statewide Transit Plan with a vision that: *Colorado's public transit system will enhance mobility for residents and visitors in an effective, safe, efficient, and sustainable manner; will offer meaningful transportation choices to all segments of the state's population; and will improve access to and connectivity among transportation modes.*

WILL ADD 3 OR 4 KEY TRANSIT ELEMENTS FROM TRANSIT PLAN EXECUTIVE SUMMARY.

In Spring 2015, CDOT will implement express bus service on I-25 between Fort Collins, Denver, and Colorado Springs and on I-70 between Glenwood Springs and Denver. To view the Statewide Transit Plan, please visit the Statewide Plan website.



RAIL

CDOT developed the State Freight and Passenger Rail Plan which outlined the following vision for the rail system: *The Colorado rail system will improve the movement of freight and passengers in a safe, efficient, coordinated and reliable manner. In addition, the system will contribute to a balanced transportation network, cooperative land use planning, economic growth, a better environment and energy efficiency. Rail infrastructure and service will expand to provide increased transportation capacity, cost effectiveness, accessibility and intermodal connectivity to meet freight and passenger market demands through investments which include public-private partnerships.* As most of the rail system is privately owned, needs will be addressed primarily through private funding.



The interregional passenger rail system is currently very limited. Amtrak with only two routes in the state, is the only provider of long-distance passenger rail service. CDOT will continue to support the retention of Amtrak services, although funds are not available to do so financially.

To view CDOT's State Freight and Passenger Rail Plan, visit the Statewide Plan website.



AVIATION



CDOT has prepared the Colorado Aviation System Plan which is used as a tool to help the Division of Aeronautics improve overall system performance. The mission of the plan is: *in support of CDOT's development of a forward-looking multi-modal transportation system in the 21st century, the Colorado Division of Aeronautics shall promote partnering with its public and private constituents to enhance aviation safety, aviation education, and the development of an effective air transportation system through the efficient administration of the Colorado Aviation Fund.*

Objectives of the plan are that the state airport system:

- Has sufficient capacity to meet current and future needs.
- Has the ability to respond to unforeseen changes in the aviation industry or in the local market area.
- Provides support to the economy.
- Leverages historic investment and to make the most out of future investment.
- Operates in such a way as to address security and safety considerations, relative to perceived risks.

To view the Colorado Aviation System Plan, please visit the Statewide Plan website.

BICYCLES & PEDESTRIANS



Colorado ranks 3rd highest for commuter bicycling and 20th for commuter walking in the country. Colorado ranked 6th in the 2014 Bicycle Friendly State Ranking published by The League of American Bicyclists.

In 2012, CDOT adopted its first Bicycle and Pedestrian Plan. Through the plan: *the department intends to increase bicycling and walking activity levels, for both transportation and recreational purposes, through both infrastructure projects and promotional programs, to help achieve the broadly established and supported economic, public health, environmental, and quality of life benefits.*



The Plan's focus was the development of investment criteria for selecting biking and pedestrian projects and programs. An important action for the Bicycle and Pedestrian System is for CDOT to complete a comprehensive inventory of bicycle and pedestrian facilities. To view the plan, please visit the Statewide Plan website.



FREIGHT



Freight movement plays a significant role in Colorado and is vital to both residents and the economy. Almost everything we see in our homes and communities has been transported as freight. CDOT has developed a Statewide Freight Plan, which has determined a vision that: *the Colorado freight system will support improving the movement of freight in a safe, efficient, coordinated and reliable manner. In addition, the system will contribute to a balanced transportation network, cooperative land use planning, economic growth, a better environment, and energy efficiency. Freight infrastructure and service will expand depending on available funds to provide increased transportation capacity, cost effectiveness, accessibility and intermodal connectivity to*

meet freight market demands through investments which include public-private partnerships.

CDOT has identified 37 freight corridors, approximately 4,156 highway miles, which are critical to regional, state, and national freight movement. The plan can be reviewed on the Statewide Plan website.

IN 2011
TRANSPORTATION OF
OF GOODS &
SERVICES
CONTRIBUTED
\$4 BILLION
IN VALUE ADDED TO COLORADO'S ECONOMY

COLORADO'S MULTI-MODAL TRANSPORTATION SYSTEM

The Statewide Plan includes all elements of the transportation system including highways, transit, rail, bicycle/pedestrian and aviation. In order to plan for the

future, it's important to examine and understand the current state of the transportation system.

POPULATION, EMPLOYMENT AND VMT

Population and employment are growing in Colorado, resulting in more people driving more miles on the state highway system. These trends are expected to continue for the next ten and 25 years.

CHANGING DEMOGRAPHICS



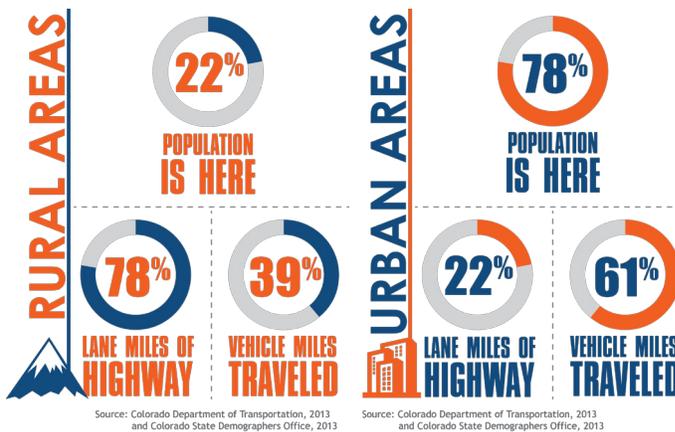
MOST GROWTH IS OCCURRING ALONG THE FRONT RANGE & SELECT MOUNTAIN CORRIDORS

Source: Colorado Department of Transportation and Colorado State Demographers Office, 2013

TOTAL ANNUAL VEHICLE MILES TRAVELED IN COLORADO 2014 - 2040



Source: Colorado Department of Transportation, 2014



Source: Colorado Department of Transportation, 2013 and Colorado State Demographers Office, 2013

Source: Colorado Department of Transportation, 2013 and Colorado State Demographers Office, 2013

HIGHWAYS AND BRIDGES

CDOT builds, maintains, and operates a highway system that encompasses:

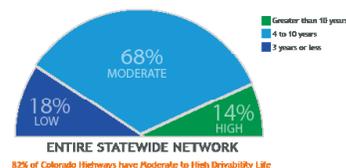
- Interstates, US Highways, and State Routes
- 23,000 total lane miles, 3,454 bridges and, keeps 15 mountain passes open year-round.
- Eighty-two percent of Colorado highways have moderate to high drivability life and 89 percent of Colorado bridges are in fair or good condition.

CDOT IS NOT RESPONSIBLE FOR:

- Local roads



DRIVABILITY LIFE RATINGS



FREIGHT

- CDOT has identified 37 freight corridors, approximately 4,156 highway miles, that are critical to regional, state, and national freight movement.
- Colorado has 15 intermodal connectors on the national highway system (five truck/rail facilities, six airports, and four truck/pipeline facilities) which allow freight to be transferred from one travel mode to another.
- Currently, 14 freight railroads operate in Colorado; these railroads operate more than 2,800 miles of track in the state and currently operate on approximately 2,700 miles of those tracks. This freight rail network directly serves 48 of Colorado's 64 counties.



IN ADDITION TO HIGHWAYS AND BRIDGES, CDOT MAINTAINS

- CDOT manages a fleet of 3,299 vehicles, which are used for road construction, maintenance and general purposes.
- CDOT owns 1,174 buildings.
- Currently CDOT manages 1,317 geohazard sites.
- CDOT maintains 21 tunnels with a total length of 6.9 miles.
- There are currently 6,668 minor structures (culverts) on the state highway system.

2,024
CONGESTION
AHEAD
INTELLIGENT
TRANSPORTATION
SYSTEM
DEVICES

1,317
GEOHAZARD
SITES

3,299
VEHICLES

6,668
CULVERTS

1,174
BUILDINGS

CDOT IS NOT RESPONSIBLE FOR:

- The Division of Motor Vehicles

TRANSIT AND RAIL

CDOT helps support 39 rural and small urban transit service providers and 48 specialized transportation providers that cover approximately 25,000 square miles.

- Elderly/ Disabled - 10,000 square miles
- Rural Transit Provider - 13,000 square miles
- Urban Transit Provider - 2,300 square miles
- In Spring 2015, CDOT will implement express bus service on I-25 between Fort Collins, Denver, and Colorado Springs and on I-70 between Glenwood Springs and Denver.



CDOT IS NOT RESPONSIBLE FOR:

- Local transit agencies, such as RTD, are responsible for transit services in urbanized areas.
- Amtrak has only two routes, the California Zephyr and the Southwest Chief, in the state and is the only provider of long-distance passenger rail service.

AVIATION

- The Colorado Airport System includes a total of 74 public-use airports, of which 14 are categorized as commercial service airports and 60 categorized as non-commercial service general aviation airports.
- The projected average annual increase in airport aircraft landings and takeoffs is 2.4% from 2010-2030.
- Greater concentration of Colorado aviation activity is occurring at Denver International Airport, accounting for 94% of all passenger activity in 2013 compared to 92% in 2005.
- Almost all 74 airports are accessed via the state highway system, thereby making those highways priority corridors for purposes of aviation.
- According to a 2013 study, Colorado airports create the following annual economic impacts: 265,700 jobs statewide and total economic output of \$36.7 Billion.

CDOT IS NOT RESPONSIBLE FOR:

- Airport Operations

BICYCLE AND PEDESTRIAN

CDOT operates a number of bicycle and pedestrian facilities which include shoulders and bike lanes. CDOT is currently building an inventory of bicycle and pedestrian facilities on and along the state highway system. CDOT will then develop a route system that serves recreational and commuter markets and that provides connectivity.

- CDOT operates a well-established system of designated Scenic and Historic Byways.
 - These 25 routes frequently include bicycle and pedestrian facilities.
- In Colorado there are 76 trails identified by the Rails-to-Trails Conservancy consisting of approximately 664 miles of trails.

COMMUTER BICYCLING
3RD HIGHEST
IN THE COUNTRY

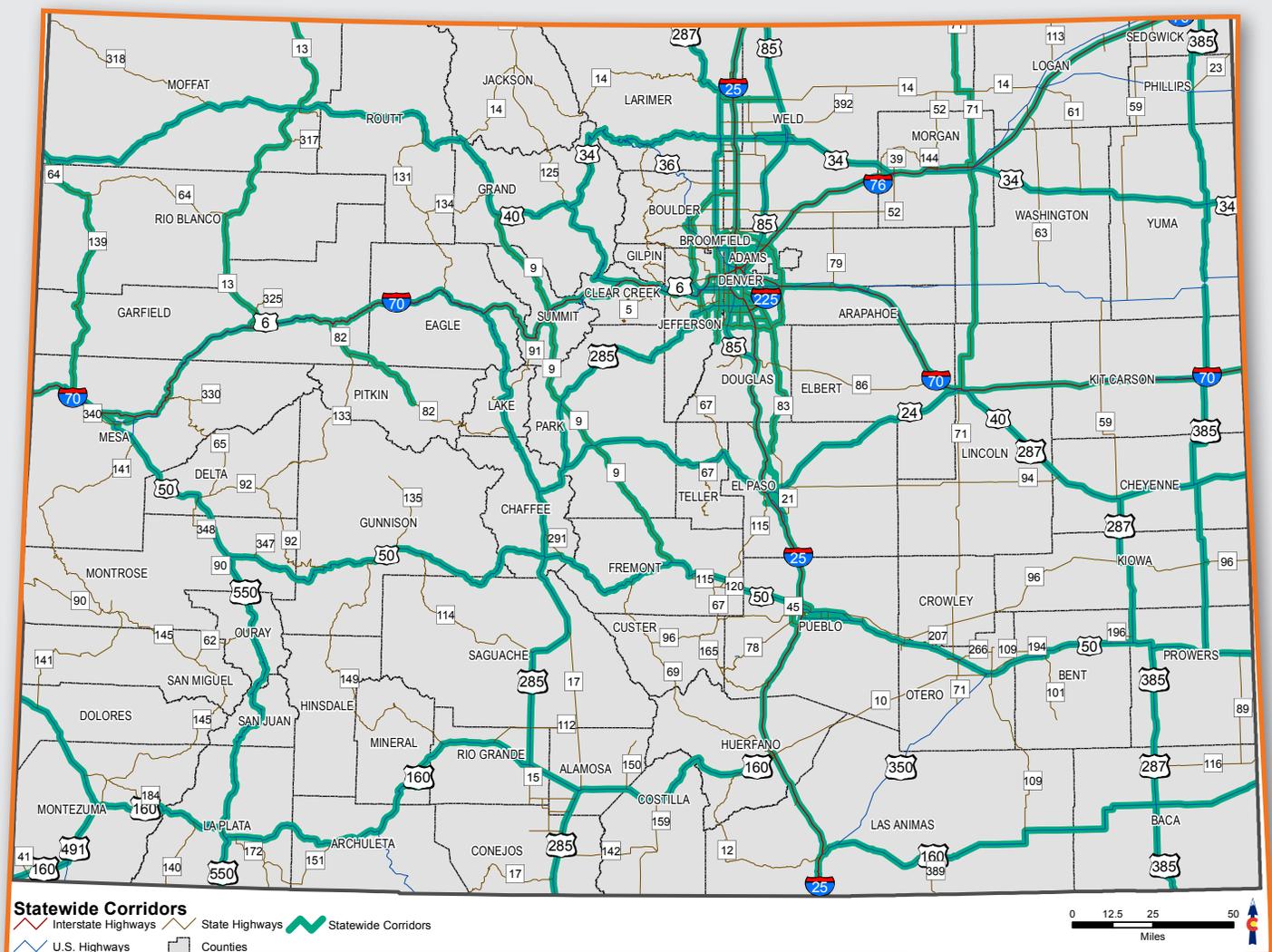
COMMUTER WALKING
20TH
IN THE COUNTRY

CORRIDORS

Transportation corridors are a key part of the overall multi-modal transportation system. CDOT has established a framework of 308 corridors across the state covering all interstate, U.S. and state highways. CDOT defines a corridor as a transportation system that includes all modes and facilities within a described geographic area. For this plan the corridor framework has been used as part of the identification of transportation needs, development of priorities, and as a focus for public and agency input. The Statewide Plan includes two specific corridor designations - statewide major corridors and regional priority investment corridors.

STATEWIDE MAJOR CORRIDORS

Statewide major corridors were determined by considering the National Highway System (NHS) designated routes along with freight and energy corridors. These are corridors that serve important statewide travel needs, support freight movement, and energy development. There are a total of 54 statewide corridors covering 4,593 miles.

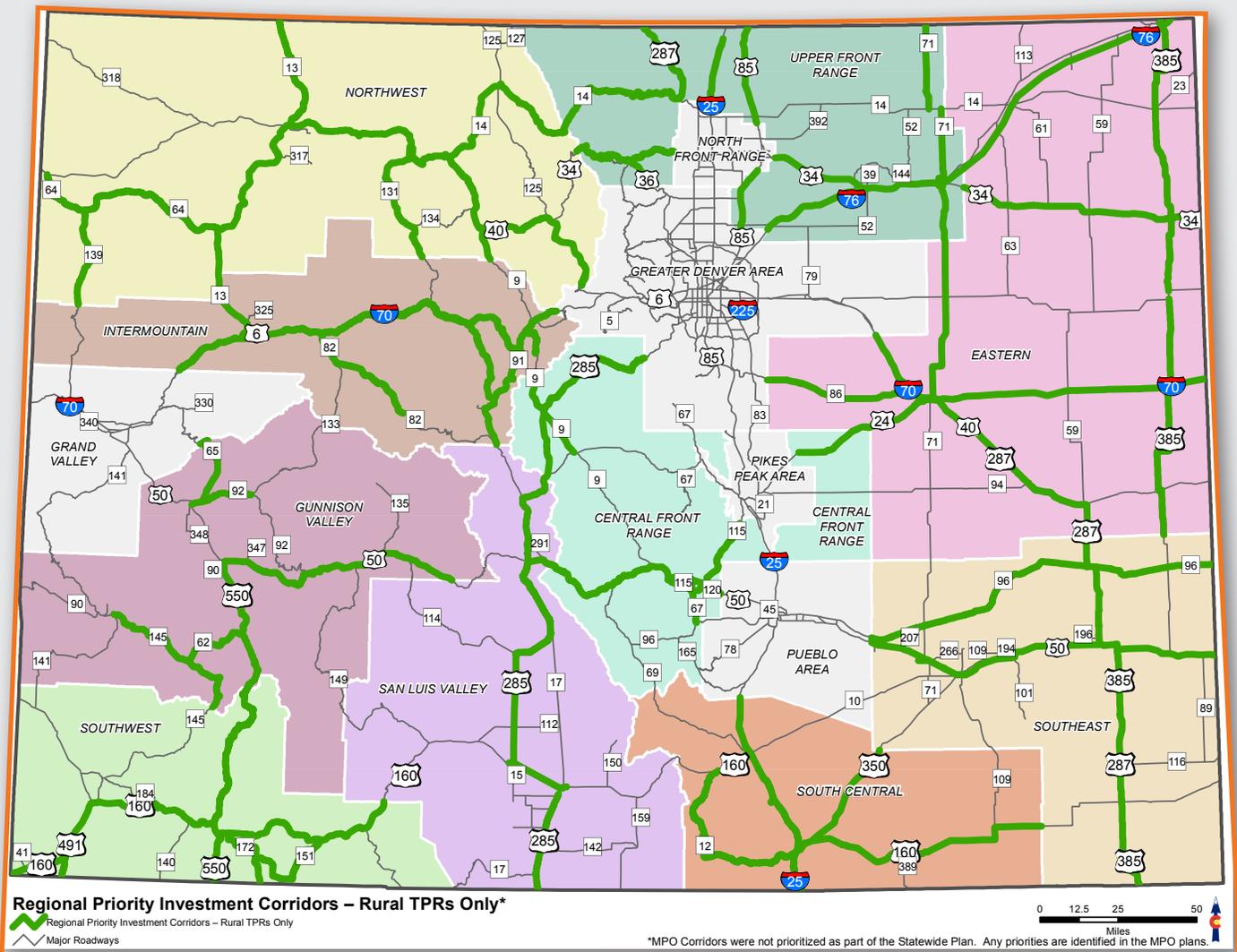


RURAL TRANSPORTATION PLANNING REGIONS (TPR) - REGIONAL PRIORITY INVESTMENT CORRIDORS

Rural TPR regional priority investment corridors were determined by each of the individual ten TPRs. A regional priority investment corridor is a corridor that has been selected by the stakeholders of the TPR as having high importance to the region’s transportation system or it is important because of a need for near-term improvements. These corridors are the corridors designated by the TPRs as higher priorities for investment should funding be available. More information on priorities for individual corridors can be found in the TPR plans, located on the Statewide Plan website.

The TPRs identified 65 regional priority corridors, covering approximately 3,507 miles.

- Eastern - 8 corridors, 656 miles
- Southeast - 4 corridors, 353 miles
- San Luis Valley - 5 corridors, 209 miles
- Gunnison Valley - 6 corridors, 268 miles
- Southwest - 5 corridors, 293 miles
- Intermountain - 7 corridors, 332 miles
- Northwest - 7 corridors, 490 miles
- Upper Front Range - 10 corridors, 397 miles
- Central Front Range - 6 corridors, 238 miles
- South Central - 7 corridors, 271 miles



COLORADO'S TRANSPORTATION NEEDS

How is Colorado preparing for change in transportation needs and demand from the present day outward to 2025 and 2040? In response to this question, CDOT has looked at various forms of data that may affect future transportation needs including: population growth, an aging population, changes in travel patterns and behavior, traffic congestion, preferred transportation modes, and the locations of key industry job growth.

The following sections identify key trends driving Colorado's long-term transportation needs for each of the four goal areas of the Statewide Plan. Using these trends, along with statewide and corridor specific data and information on the condition of the existing transportation system, CDOT was able to estimate the needed levels of investment in the transportation system for the next 10-years (to 2025) and to 2040.

MOBILITY

Increasing population and employment are putting greater demand on the existing statewide transportation system, leading to congestion and impairing mobility. At the same time, changing demographics and travel behavior are increasing the demand for greater modal choice in the transportation system. CDOT is working to improve mobility by enhancing system operations, providing greater travel options and travel reliability, increased connectivity, and investing in focused capacity expansion as limited funding allows.

Colorado's population is projected to increase 47 percent between 2012 and 2040 (Source: State Demographers Office, 2013).

Vehicle Miles Traveled (VMT) per capita decreased between 2006 and 2013. It is now projected to stay constant. Due to population and employment growth, however, total VMT is projected to increase 47 percent between 2012 and 2040 (Source: CDOT and State Demographers Office, 2013).

SAFETY

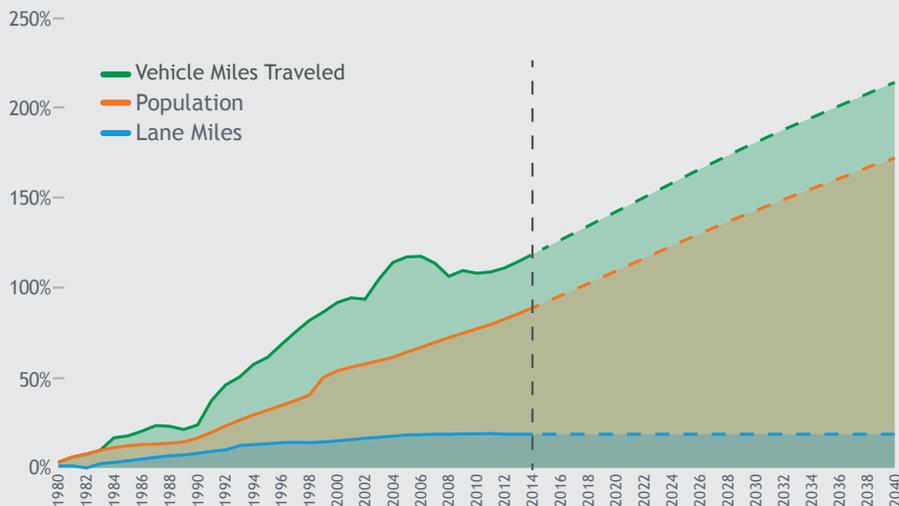
Colorado has made substantial progress in reducing deaths and injuries on the statewide transportation system over the past decades. New technology, ongoing educational campaigns and targeted safety investments are critical to supporting CDOT's goal of Moving Towards Zero Deaths.

Over the past decade, Colorado has seen a steady decrease in traffic fatalities (from 742 in 2002 to 472 in 2012) and serious injuries (from 5,014 in 2002 to 3,242 in 2012), (Source: CDOT, 2014). This is despite the fact that both population and total vehicle miles traveled have increased during the same period of time. Bicyclist and pedestrian fatalities and serious injuries remained fairly constant between 2006 and 2011, with a slight increase in 2012, decreasing again in 2013 (Source: CDOT, 2014). CDOT does not have sufficient data to determine a trend in regards to transit, but in 2012, there were 77 transit collision incidents, 2 transit collision fatalities, and 105 transit collision injuries in Colorado (Source: BTS, State Transportation Statistics 2014).

CDOT has partnered with stakeholders to develop the Strategic Highway Safety Plan, which includes many actions and initiatives to reach the safety goal.

One method CDOT will use to enhance the overall mobility of the transportation system in a cost effective manner is implementing the Transportation Systems Management and Operations Plan. Operational strategies will alleviate congestion issues to some degree, but in many cases will only delay the need for long-term solutions.

Percentage Increase in Population, VMT, and Lane Miles From 1980 Projected to 2040



ECONOMIC VITALITY

The transportation system is a key element of a vibrant and globalized state economy, and transportation investments will create and enhance access to jobs, enhance freight movement, support increased trade, and improve economic competitiveness. CDOT is emphasizing economic benefits such as job creation, job access, and economic savings in making investment decisions. Investments will be needed just to ensure the transportation system continues to function at the level necessary to maintain the state's economic competitiveness.

Employment is forecasted to grow by 51 percent between 2012 and 2040 (Source: DOLA, 2012). Most of those jobs will require some form of commute. In 2013, estimated traffic delays on congested corridors during peak hours cost the state \$133 million (Source: CDOT, 2013).

Colorado has a number of significant industries that are particularly reliant on the transportation system, such as agriculture, energy development, tourism, and freight. For example, the agriculture industry, which generates more than \$5 billion in economic



output annually (Source: OEDIT, 2014), depends on the transportation system to get goods to market. The energy industry relies on the transportation system to move equipment and product. As of July, 2014, there are over 52,000 active oil and gas wells in Colorado (Source: Colorado Oil and Gas Conservation Commission, 2014). Visitors rely on the transportation system to access tourist destinations and provide an enjoyable experience. A record 57.9 million visitors spent \$14.6 billion in Colorado in 2011 (Source: OEDIT, 2014).

MAINTAINING THE SYSTEM

With limited funding available, CDOT is focused on maintaining the existing transportation system in the most cost-effective manner possible. CDOT maintains over 23,000 lane miles of highways, over 3,400 bridges and keeps 35 mountain passes open year-round. Every \$1 spent now to keep a road in good condition avoids \$6-14 needed later to rebuild the same road once it has deteriorated beyond repair (Source: AASHTO, 2009).

CDOT will implement its Risk-Based Asset Management plan to drive its performance on maintaining the system. A key part of this is Drivability Life, which is a new method used to assess pavement condition that promotes more frequent surface treatment and optimization of pavement investment. This new method is anticipated to increase treatment miles by 64 percent between FY 2012 and FY 2017 (Source: CDOT, 2014).

The Statewide Plan will also focus on more preventative maintenance and using risk factors to determine which roads, bridges, and other assets need to be addressed first.

DRIVABILITY LIFE

PRIORITY BASED ON **DRIVER'S EXPERIENCE**

PRIORITIZED ROADS WILL RECEIVE **MORE MINOR TREATMENTS**

ENTIRE SYSTEM WILL RECEIVE **MORE FREQUENT TREATMENTS**

MORE LANE MILES TREATED PER YEAR

NEW METHOD

TRANSPORTATION INVESTMENT NEEDS

Transportation investment needs are generally defined as the dollars required to accomplish the plan goals for safety, maintaining the system, mobility, and economic vitality. CDOT used a range of data to identify multi-modal investment needs. The needs are divided into categories and into two time periods: a short-term planning horizon (2016 to 2025) and a long-term planning horizon (2026 to 2040).

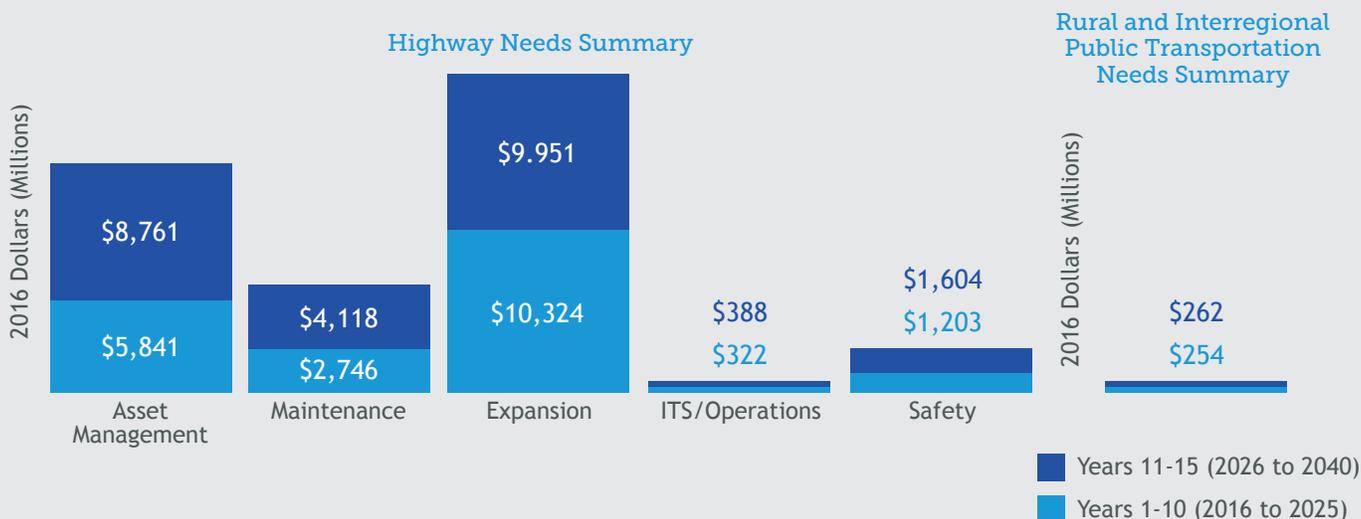
- **ASSET MANAGEMENT:** Replacing and rehabilitating existing and future transportation facilities on a long-term basis, including preventative maintenance.
- **MAINTENANCE:** Every day and annual maintenance of the transportation system, for example: snow plowing, equipment maintenance, and minor road and bridge repairs.
- **EXPANSION:** Investments that add capacity to the multi-modal transportation system by enhancing existing facilities or creating/building new infrastructure and services.
- **OPERATIONS:** Activities to improve traffic flow without adding capacity. This includes intelligent transportation systems (ITS) which provide traveler information and allow for management of traffic flow.
- **SAFETY:** Safety is generally enhanced with every project. The safety category includes education and targeted safety focused projects such as rail crossings and safety hot spots.

■ **RURAL AND INTERREGIONAL PUBLIC TRANSPORTATION:** CDOT specific investments in rural local, rural regional and interregional transit services, including the new Bustang interregional service.

BICYCLE/PEDESTRIAN NEEDS: CDOT currently has insufficient data to fully determine bicycle and pedestrian needs and is conducting an inventory of bicycle and pedestrian facilities on and along the state highway system. CDOT will also develop a route system that serves recreational and commuter markets and that provides connectivity between attractions, work locations and population centers. As this system is under development, only example bicycle/pedestrian needs were considered as part of the analysis.

LOCAL NEEDS: The needs discussed above only represent needs on the state transportation system. The state transportation system does not include local road systems, transit in major cities or aviation. For urban areas, MPOs address local system needs and revenues in their plans.

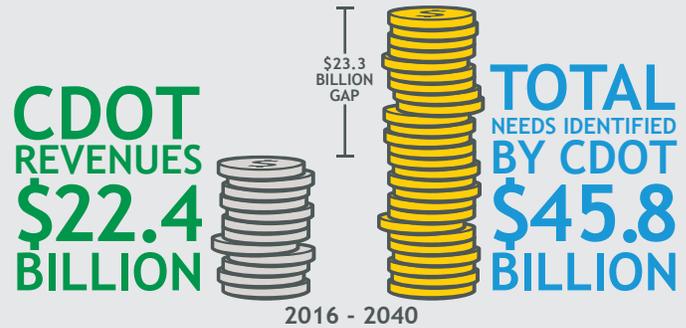
TOTAL NEEDS: CDOT, in its role as owner-operator of the state’s multi-modal transportation system, requires approximately \$45.8 billion (in 2016 dollars) in funding over the next 25 years. \$20.7 billion in needs have been identified in the next 10-years. The charts below provide a summary of the needs identified by category.



AVAILABLE REVENUE AND FUNDING GAP

CDOT compared the 25-year needs estimate to an estimate of transportation revenue available over the same time period. This resulted in a funding gap. Projected revenues are less than the needs estimated, and revenues will only cover approximately 50 percent of the projected needs. The projected needs exceed revenues by \$23.3 billion. The average annual funding gap is \$932 million. For the next 10-years alone the funding gap is \$10.1 billion.

CDOT faces a significant funding challenge for the present and the future in part due to a decline in purchasing power. When adjusting for inflation and rising construction costs, CDOT's annual revenues have declined to pre-1991 levels. In addition to inflation and rising construction costs, CDOT revenues have been hurt by decreases in state



and federal gas tax revenue, which were 61 percent of all revenues in fiscal year 2013. Colorado's combined state and federal gas tax is 40.4 cents per gallon and does not rise with the price of gas. Colorado last increased its gas tax in 1992 and it ranks below 34 other states (Source: American Petroleum Institute, 2014). Revenue is also decreasing due to more fuel efficient vehicles and the elimination of state general fund transfers that CDOT received between 1998 and 2009. Fuel efficient vehicles are great for the environment and allow their owners to fill up gas tanks less frequently. But these fuel efficient vehicles put just as much wear and tear on the highway system. Due to these funding challenges, CDOT only has enough money to maintain the infrastructure in its current condition for the next 10 years. Maintenance and asset management gradually take up a higher and higher percentage of available revenue over time.

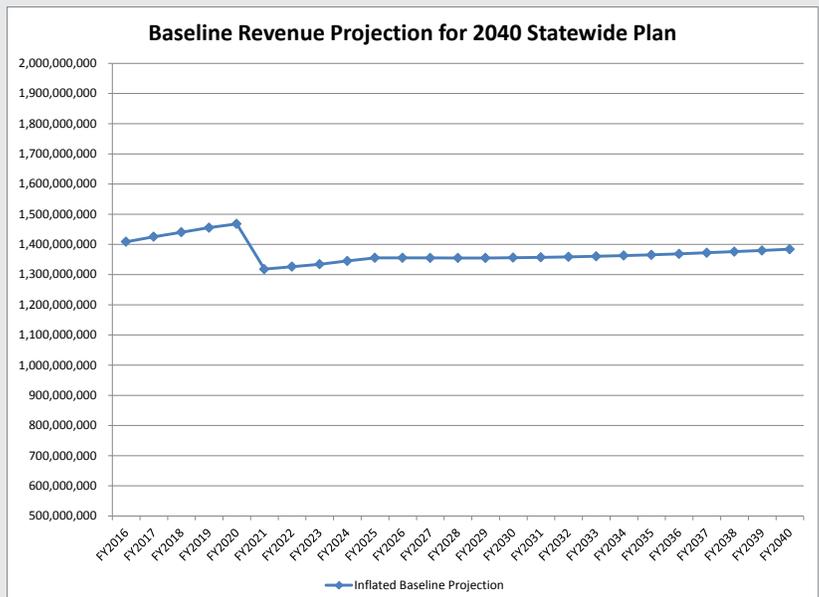
Purchasing Power



In 1992 one tax dollar collected would purchase one dollar of construction work. By 2034, that same dollar will likely purchase less than 20 cents of goods and labor.

SPACE TO ADD ADDITIONAL REVENUE DETAIL IF PERTINENT.

Baseline Revenue Projection for 2040 Statewide Plan



INVESTMENT STRATEGY

The current revenue picture and funding gap require difficult choices. CDOT's current investment strategy reflects today's funding reality, and charts a balanced approach that seeks to maintain the system and optimize our limited funding.

CDOT's investment strategy is reflected in the Program Distribution process. Program Distribution is a part of the Statewide Plan and outlines the assignment of projected revenues to various program areas for the time period of the Plan (FY 2016-FY 2040).

Revenues are updated and programs are funded annually through the annual budget process. However, Program Distribution provides a long-term view of what revenues are likely to look like, and how they will likely be allocated among programs in the future. Program Distribution reflects an investment strategy based on the policies and priorities established as part of the development of the Statewide Plan.

CDOT's investment strategy includes:

- 1) Safety is considered in every project type and will be addressed not only through targeted safety investment programs (such as HSIP and FASTER Safety), but through all programs and projects.
- 2) Optimizing limited funding, CDOT has placed an emphasis on maintaining our existing system rather than

expanding capacity or focusing on other discretionary programs. CDOT maintains the transportation system through annual maintenance and the asset management program (capital maintenance). For each asset category (i.e. pavement, bridge, etc.), goals have been set to achieve a performance level which considers the limited funding and other factors such as the current overall condition of the assets in that category.

3) Operational strategies will be considered before more costly capacity expansion. CDOT will use operational strategies such as active traffic management, managing travel demand, traveler information, incident management, and lane configuration changes as cost-effective ways to improve the mobility and travel time reliability of the existing transportation system where feasible. Operational strategies can provide immediate relief to some congestion issues and delay the need for many costly long-term solutions.

4) CDOT will invest in focused capacity expansion as limited funding allows, primarily through the use of managed lanes including high occupancy vehicle lanes and tolled express lanes. CDOT's Managed Lanes Policy requires that the use of managed lanes be strongly considered during the planning and development of capacity improvements on state highways.

PLACEHOLDER FOR PIE CHARTS SHOWING HIGH LEVEL PROGRAM DISTRIBUTION FOR 2014, 2025 AND 2040

5) CDOT will continue to invest in a multi-modal transportation system through a balanced investment approach that considers highway, transit, aviation, and bicycle and pedestrian needs. As an example, CDOT’s Bicycle and Pedestrian Policy requires that the needs of bicyclists and pedestrians shall be included in the planning, design, and operation of transportation facilities, as a matter of routine.

Reflecting the investment strategy outlined above, Program Distribution prioritizes investment in asset management and maintenance. In the first year of Program Distribution, a substantial allocation of funds go to debt service- paying down debt used to fund some major improvements in the past. In 2018 CDOT will have paid this debt off. As the debt is retired, Program Distribution anticipates those funds will be available to help meet asset management and maintenance goals. Between 2016 and 2025 the proportion of CDOT’s program going to asset management and maintenance increases from 53% to 67% as debt service funds are redirected to maintaining the system. While this helps to achieve goals for asset management and maintenance for the next 10 years - it is insufficient to achieve those goals beyond 2025. Revenues remain relatively flat between 2025 and 2040, as does the proportion of revenues going to asset management and maintenance. However, as construction costs increase and purchasing power declines the funds allocated to asset management and maintenance must also increase to achieve plan goals beyond 2025- and that means new sources of revenue.

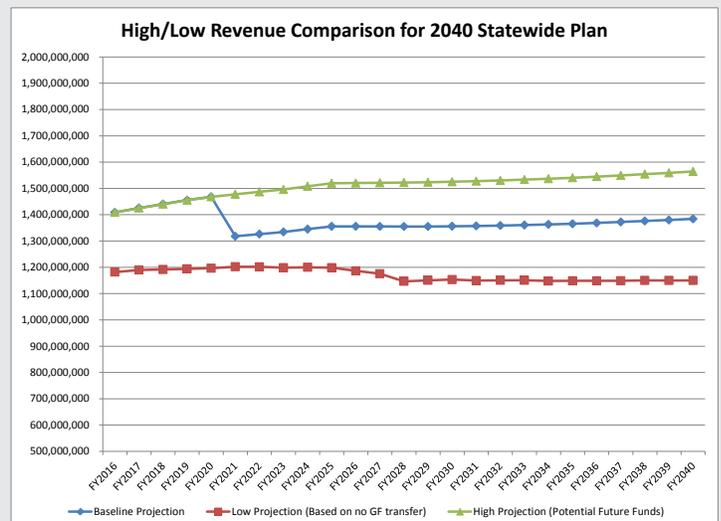
MAINTAINING THE SYSTEM

CDOT has set the following targets as part of measuring our performance on maintaining the system.

- Maintain the percent of National Highway System and State Highway total bridge deck area that is not structurally deficient at or above 90%.
- Achieve 80% High or Moderate Drivability Life for Interstates, non-Interstate National Highway System, and State Highways based on condition standards and treatments set for traffic volume categories.
- Meet bridge, pavement, and other condition goals in the Risk-Based Asset Management Plan.
- Maintain the percentage of vehicles in the rural Colorado transit fleet to no less than 65% operating in fair, good, or excellent condition per Federal Transit Administration definitions.
- Maintain a maintenance Level of Service B grade for snow and ice removal.
- Maintain an overall maintenance Level of Service B- grade for the state highway system.

PLACEHOLDER FOR PLANNING FUNDING LEVELS

Text will be added here to discuss how CDOT will adjust the Investment Strategy for different funding levels. Region input from the regional transportation plans will be discussed.



TOP STRATEGIC ACTIONS—WITHIN 10-YEARS

To assist in addressing the goals and objectives for the transportation system, CDOT has identified the Top Strategic Actions to focus on, as limited funding allows. The Strategic Actions are the focus of specifically the next ten years of the plan. Some of the actions are quickly implementable and build on existing CDOT activities. Others will take longer to implement. To ensure the list of actions was multi-modal and covered all of the goal

areas, CDOT incorporated actions from various plans for different modes of transportation and different topics (safety, operations, maintaining the system) as well as recent CDOT policies and stakeholder and public input. The Top Strategic Actions are organized by goal area and an icon in the right hand column shows which modes are the focus of each Strategic Action.

SAFETY: Move Colorado toward zero deaths by reducing traffic-related deaths and serious injuries.

SAFETY FOCUS AREAS: Focus targeted safety investments and strategies on eight emphasis areas: aging road users, bicyclists and pedestrians, data, impaired driving, infrastructure, motorcyclists, occupant protection, and young drivers.



REDUCE CRASHES: Identify and prioritize local road safety problems on all roadways using data driven processes and implement infrastructure, operations, and policy improvements as well as behavioral educational programs to reduce roadway crashes.



MOBILITY: Improve mobility and connectivity with a focus on operations and transportation choice.

OPERATIONS: Develop Region Operations Implementation Plans and Corridor Operations Plans and tools to better focus cost-effective transportation systems management and operations solutions at the regional and corridor level.



BUSTANG: Implement Bustang (CDOT’s new interregional express bus service) on I-25 between Fort Collins, Denver, and Colorado Springs and on the I-70 mountain corridor between Glenwood Springs and Denver.



MANAGED LANES: Enhance travel reliability and reduce congestion through the use of managed lanes, which includes high occupancy vehicle lanes, and tolled express lanes. CDOT’s policy is to strongly consider managed lanes during the planning and development of capacity projects.



MULTI-MODAL SOLUTIONS: Consider multi-modal transportation opportunities and choices in all project development. Cooperate with local entities to coordinate and support efforts to implement multi-modal transportation infrastructure improvements (i.e. transit stations, bus bike racks, park-and-rides, transit slip ramps) that meaningfully integrate bicycle, pedestrian, and transit connectivity in the state’s transportation network.



BICYCLE/PEDESTRIAN: Complete an inventory of bicycle/pedestrian assets on the state system to assess needs and gaps for future prioritization.



ECONOMIC VITALITY: Improve competitiveness of the state economy through strategic transportation investments.

PROJECT SELECTION: In selecting projects, consider economic benefits such as job creation, job access, and economic savings.



FREIGHT: Implement freight project criteria from the State Freight Plan in project decision making and selection.



FUNDING TO MAINTAIN COMPETITIVENESS: Investigate alternative funding sources to meet the needs of the transportation system and ensure the transportation system continues to function at the level needed to maintain the state’s economic competitiveness.



ICON LEGEND



PEDESTRIAN



HIGHWAY



AVIATION



BICYCLE



TRANSIT



RAIL



FREIGHT

MAINTAINING THE SYSTEM: Preserve and maintain the existing transportation system.

PAVEMENT MANAGEMENT: Continue to implement a drivability life approach to pavement management which measures the conditions drivers notice most including smoothness, pavement distress, and safety, and considers the amount of traffic highways carry. Through this updated approach, pavement condition can be optimized within available funds, driving surfaces will remain safe and all of Colorado’s highways will receive periodic resurfacing.



PREVENTATIVE MAINTENANCE: Conduct more preventive maintenance on pavements and bridges. Address preventative maintenance on all assets.



ASSET MANAGEMENT: Develop a program for prioritizing assets in different categories (e.g. pavement, bridges, buildings, culverts, etc.) by analyzing budget trade-offs across asset programs.



MAXIMIZE FUNDING: Create opportunities to maximize existing maintenance funding through increased efficiencies, innovation, and shared resources.



STRATEGIC POLICY ACTIONS: Address multiple goal areas through key policies and initiatives. These five actions are expanded upon in the sections that follow.

SUSTAINABLE FUNDING: Work with transportation partners and elected officials to pursue sustainable transportation funding by investigating funding alternatives. Expand the use of partnerships with the public and private sector to help fund and deliver projects.



CDOT ACTION PLAN: Continue to implement improved business practices as outlined in CDOT’s Action Plan, which covers the first few years of plan implementation.



PROJECT SELECTION AND PROGRAMMING: Continue to make more effective and efficient use of limited funding through the enhanced application of data-driven decision making processes, particularly for project selection.



RESILIENCY AND REDUNDANCY: Improve the resiliency and redundancy of the transportation system to address the potential effects of extreme weather and economic disasters, emergency management and security. CDOT will develop further planning efforts in this area including identification of key corridors and coordination as needed with other states.



SUSTAINABILITY AND THE ENVIRONMENT: Continue to implement CDOT’s Sustainability Plan and other environmental initiatives. Ensure all projects undergo timely and proper environmental review and compliance under the National Environmental Policy Act and other state and federal statutes.



Implementation of the Strategic Actions will be a collaborative effort including:

- The Colorado Transportation Commission
- CDOT staff from various parts of the organization including staff in all regions of the state
- Federal Highway Administration
- Statewide Transportation Advisory Committee
- Our partners in local governments, rural Transportation Planning Regions, and Metropolitan Planning Organizations
- Other state and federal agencies
- Members of the public



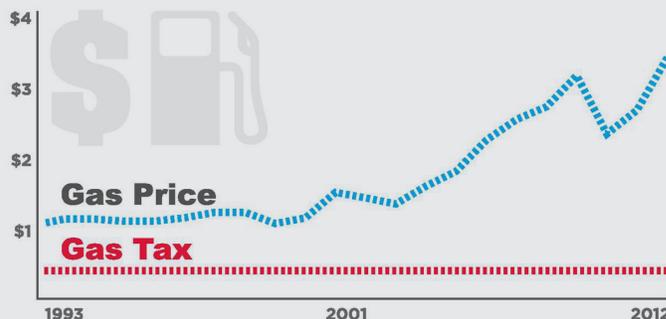
STRATEGIC POLICY ACTION - SUSTAINABLE FUNDING

Annual funding for transportation can no longer keep pace with the costs of operating, maintaining and improving the statewide transportation system. Like many other states, Colorado needs to explore funding options and finance mechanisms to stretch dollars further, replace declining gas tax revenues and reduce dependency on uncertain federal funding. CDOT needs a long-term, sustainable source of revenue. Options that could be considered include:

- Establishing a dedicated state sales tax for transportation.
- Increasing the state gas tax and indexing it to inflation.
- Exploring road user charges, which are fees on a per-mile basis for driving.
- Other user charges, like tolling new roadway capacity.
- Using more public-private partnership financing mechanisms.

While no single approach is likely to resolve all of CDOT’s revenue challenges, a solution is necessary to prevent

the decline of the state’s transportation system after the next 10-years. CDOT will employ innovative business practices, operational strategies, and data driven decision making to stretch existing funds while exploring new partnerships and revenue sources for the future. CDOT has developed “Your CDOT Dollar” as a tool to help citizens track CDOT spending, performance, and construction projects. You can access it via the Statewide Plan website.



Gas taxes are the main source of funding for Colorado Highways. The price of gas has risen, but the tax per gallon—18.4¢ federal + 22¢ state—has remained the same since 1992.

STRATEGIC POLICY ACTION – CDOT ACTION PLAN

CDOT is enacting several key program and policy changes through its **Action Plan** to modernize business practices and provide an organizational structure that is responsive to today’s demands.

EXPENDITURE BASED CASH MANAGEMENT APPROACH	To get as much money as quickly as possible to construction, CDOT will continue to implement a program which looks at the schedule of projects that can go to construction and matches available cash to those construction schedules.
PROGRAM MANAGEMENT	Tracking project schedules and budgets is critical to expenditure-based cash management. The program management office has been established to track all project and program schedules and budgets at CDOT.
ASSET MANAGEMENT	CDOT has developed the Risk-Based Asset Management Plan to define a framework for implementing new asset management strategies. The Plan outlines: the current and forecasted condition of assets, performance goals, specific investment strategies that CDOT will implement to maintain the transportation system, and a framework for how risk will be included in asset management decisions
TRANSPORTATION SYSTEM MANAGEMENT AND OPERATIONS	CDOT will focus on implementing low cost, high value improvements to get more out of the existing system through the recently formed Division of Transportation Systems Management and Operations. Traffic Operations strategies include traffic signal timing, ramp meters, traveler information, dynamic re-routing, and the limited use of shoulders as travel lanes during peak periods to reduce congestion.
EMERGENCY MANAGEMENT	Based on what we learned during the flood of 2013, a new Office of Emergency Management was created to respond quickly and efficiently when emergencies and disasters strike.
WORKFORCE DEVELOPMENT	As CDOT employee’s responsibilities change and grow, so must their skill sets. Training programs are being put into place to develop the skills needed to deliver Colorado’s next generation transportation system.
FUTURES FORWARD INITIATIVE	CDOT Teams are working to identify near-term and long-term actions that are needed to proactively address emerging issues. The five emphasis areas will include big data, technology, extreme weather, workforce, and finance.

STRATEGIC POLICY ACTION – PROJECT SELECTION AND PROGRAMMING

CDOT is continuing to make more efficient and effective use of limited resources. A key element of this involves the continued application of more data-driven decision making. One of the best examples of this is Asset Management. CDOT uses a defined data-driven process for core asset management categories including pavement, bridges, maintenance, ITS, road equipment, culverts, and buildings.

The Asset Investment Management System (AIMS) is a budget trade-off tool which inherits data from individual asset management systems. AIMS assists decision-makers in identifying the most appropriate funding levels for asset categories based on forecasted condition over many years. It also provides a candidate list and recommended treatments which are then leveraged by the asset managers to identify the best projects. While AIMS represents a significant shift towards data-driven decision making, it is not inclusive of all asset categories. Geohazards, tunnels, signals, and walls are asset categories that are currently being developed in AIMS. The expansion of AIMS to include other asset categories represents an opportunity to further strengthen the Asset Management program. This will also better position AIMS to perform cross-asset optimization;

allowing decision makers to better understand the trade-offs between assets associated with various funding levels for the best overall investment strategies.

Many other CDOT programs are also data-driven, including FASTER Safety and the Highway Safety Improvement Program (HSIP). Others may be less data-driven but have established project selection processes (such as competitive grant programs). There are, however, other programs that could benefit from more defined, data-driven processes to support decision-making. Examples include the selection of major capacity or mobility projects which typically require multiple funding sources, and special programs such as the ARRA or TIGER programs. Recent efforts to develop and implement more defined, data-driven process include the processes used to identify projects for the RAMP program. The continued development and refinement of these processes going forward provides an opportunity to better inform decision-making, ultimately resulting in the more efficient and effective use of limited resources.

STRATEGIC POLICY ACTION – RESILIENCY AND REDUNDANCY

As part of moving forward with this plan, CDOT will develop an overall initiative to address resiliency and redundancy in the transportation system. Resiliency is needed to be better prepared for extreme weather, natural and economic disasters, and security issues. In developing a transportation system resiliency initiative, CDOT will:

- Build on lessons learned from the 2013 flooding and other recent extreme weather/natural events.
- Integrate with work to be completed by CDOT’s new Office of Emergency Management.
- Use results and analysis from the CDOT’s Futures Forward Initiative, particularly from the team working on extreme weather.
- Coordinate with local jurisdictions and stakeholders on specific resiliency, security, and emergency management needs.

- Develop a program that identifies key emergency routes, access routes to communities where resiliency may be an issue, key bridges and tunnels, and coordinate with other jurisdictions, including neighboring states as appropriate on addressing resiliency in the transportation system.
- Incorporate risk and resiliency factors into criteria for project selection.
- Coordinate this initiative with the Governor’s Resiliency Panel.



Before and after 2013 flood at Highway 24 and MP 116 East.

STRATEGIC POLICY ACTION - SUSTAINABILITY AND THE ENVIRONMENT

As part of implementing the Statewide Plan, CDOT will continue several key initiatives related to sustainability and the environment.

- **CDOT's Sustainability Program and Plan:** CDOT is committed to developing and supporting a sustainable organization and transportation system. Sustainability is defined as meeting present and future transportation needs while preserving and restoring environmental and ecological systems, fostering community health and vitality, promoting economic development and prosperity, and ensuring equity between and among population groups and over generations. CDOT has developed and will continue to implement its Sustainability Plan.
- **Alternative Fuels Program:** CDOT has partnered with the Colorado Energy Office (CEO), Regional Air Quality Council (RAQC), and Colorado Department of Local Affairs (DOLA) to foster the development of a sustainable, statewide market for compressed natural gas (CNG) and other alternate fuel vehicles. The ALT Fuels Colorado program is funded with Congestion Mitigation and Air Quality (CMAQ) funds as well as Energy and Mineral Impact Assistance funds administered by DOLA.
- **Environmental Compliance:** CDOT will continue to comply with State requirements and continue to improve its environmental performance, and endeavor to be a leader in sustainable efforts.
- **Innovation:** As new and innovative sustainability tools and techniques are developed those techniques will be tested on CDOT projects and after feedback and recommendations, will become a fixture in CDOT design and construction.
- **C-PLAN:** As part of the development of the Statewide Plan, CDOT developed C-PLAN, an on-line mapping system that allows for better coordination with resources agencies on environmental data as well as public access to data. CDOT has used the C-PLAN information to conduct multiple webinars in coordination with environmental agencies.



WHERE DO WE GO FROM HERE?

The implementation of the Statewide Plan will include several important initial steps to best position CDOT to achieve the plan goals and move forward with the Strategic Actions. Essential first steps include:

- **Implement CDOT’s Action Plan:** Move Forward with the steps outlined in CDOT’s Action Plan, which includes key activities and initiatives for the next four years. A copy of the Action Plan is on the Statewide Plan website.
- **Develop work plans to implement the Strategic Action items:** Implement work plans and the plans developed for the various modes of transportation (public transportation, bicycle/pedestrian, rail, aviation, and freight) and the Transportation Systems Management and Operations, Risked-Based Asset Management, and Strategic Highway Safety plans.
- **MPO Plans:** CDOT will continue to coordinate with its Metropolitan Planning Organization (MPO) partners on the development and finalization of their plans and the incorporation of MPO plans into the Statewide Plan. MPO plan implementation will be part of and coordinated with the ongoing implementation of the Statewide Plan.
- **Address funding:** CDOT and the Transportation Commission will work closely with its

planning partners as well as elected officials to develop proposals to address the funding gap identified in the plan.

- **Futures Forward Initiative:** CDOT is taking proactive steps to ensure that short-term (5 years or less) and long-term (5-20 years) planning anticipates a variety of potential future trends and scenarios. The Futures Forward Initiative will identify, predict, and develop strategies to ensure that CDOT will be poised and prepared to address short-and long-term needs and requirements. Five emphasis areas will include big data, technology, extreme weather, workforce, and finance.
- **Living plan approach:** Statewide planning shouldn’t end with the development of the Statewide Plan. It is an on-going process. This web-based plan and Executive Summary will serve as the framework for continued engagement of the public and planning partners on important transportation issues, key data, and findings. This continuous planning process will guide the path for monitoring our progress and updating the Strategic Actions and will lead to the development of the next Statewide Plan.
- **Measuring performance:** As described below, it is important that CDOT measures the performance of the transportation system as this plan is implemented.

MEASURING OUR PERFORMANCE

Performance measurement is how an organization measures its progress toward attaining its goals. Organizations like CDOT undertake performance measurement to understand how well they are doing and what may need changing or correcting. CDOT has been measuring its performance in a variety of areas for some time.

The most recent federal transportation reauthorization law, Moving Ahead for Progress in the 21st Century Act (MAP-21) enacted in 2012 is the first federal transportation reauthorization law to set national goals for transportation. The national goals are for safety, infrastructure condition, congestion reduction, system reliability, freight movement and economic vitality, environmental sustainability, and reduced project delays. MAP-21 also describes what should be measured or leaves establishment of measures to later rule making.

As part of the statewide plan process, the Transportation Commission is updating the statewide planning policy,

Policy Directive 14 (PD 14), to refine performance measures and objectives and to bring them into alignment with MAP-21. PD 14 provides an overall framework for the transportation planning process, including the SWP, that optimizes the transportation system by balancing preservation and maintenance, efficient operations and management practices, and capacity improvements.

The performance measures developed by CDOT are in direct alignment with the goals and objectives of the Statewide Plan including safety, maintaining the system (infrastructure condition and maintenance), mobility (system performance), and economic vitality. The performance measurement framework will allow for annual tracking of CDOT’s performance in addressing the goals set forth in the Statewide Plan.

WRAP UP AND PLAN MONITORING

This Statewide Plan provides CDOT's roadmap for the next 10 and 25 years and identifies:

- Goals and objectives for the statewide transportation system related to safety, mobility, economic vitality and maintenance
- The current state of our system
- Investment needs, revenue sources, and a funding gap
- Top Strategic Actions to meet the plan goals
- An overall investment strategy
- Methods and criteria for measuring transportation system performance

Moving from Planning to Projects: Working with its planning partners, CDOT in the future will develop a 10-year Capital Improvement Program (CIP) of specific projects and initiatives. The CIP will identify potential projects for design and feed the four-year Statewide Transportation Improvement Program (STIP), which CDOT uses to directly program dollars to projects. The goals, objectives, investment strategy, and performance measures set through the Statewide Plan will inform and provide a basis for the programming of projects.

Plan Monitoring: Monitoring of the plan will be an ongoing and continuous process to ensure the state moves efficiently and effectively towards meeting its goals and objectives and implementing the strategic actions. Close monitoring will reveal the potential need for any adjustments in strategic actions and other priorities that may be necessary to address changing conditions or unforeseen circumstances. As with plan development, monitoring of the plan will involve various parts of CDOT, multiple regional and local planning partners, FHWA and other state and federal agencies and the public. All will play an important role in this new living plan approach.

Monitoring will also include receiving feedback from planning partners and the public on progress in implementing the Strategic Action. We are also going to track progress made on Regional Priority Corridors. Feedback will be solicited using a host of outreach methods including telephone town halls, web site content, and social media throughout the next four-years, leading to the next plan update.

Plan Report Card: CDOT will prepare an annual report card on plan implementation, which will be added to the space below and updated on the Statewide Plan website.

REPORT CARD GOES HERE



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STATEWIDE TRANSPORTATION PLAN



DATE: November 19, 2014
TO: Statewide Plan Committee of the Transportation Commission
FROM: Debra Perkins-Smith, Director, Division of Transportation Development
SUBJECT: Draft Web-based Statewide Plan (SWP)

Purpose

To provide an overview of the general content, layout and format of the first web-based Draft 2040 Statewide Plan (SWP), tentatively scheduled for public release on December 5, 2014. A demonstration of the web-based Draft SWP will be provided at the November SWP Committee meeting.

Action

None. Information only.

Background

As noted previously, the Draft SWP is a “web-based plan”. The Draft SWP includes four main parts: The Colorado Transportation Story; The Planning Process; Key Data Findings, Needs & Revenue; and Moving Forward. Attachment A: Welcome to Colorado’s Web-Based 2040 Statewide Plan! provides more detail on the history, content, and location of SWP components on the SWP website.

Please encourage others to visit the SWP website at: www.coloradotransportationmatters.com and view the Draft SWP, Draft Statewide Transit Plan, and the 10 rural Draft Regional Transportation Plans (RTPs) upon release.

Key Benefits

A public friendly, web-based plan (with infographics and minimal text) has the potential to attract more readers and solicit an increased level of participation during the public comment period.

Next Steps

- December 5, 2014 to January 4, 2015 - Public review and comment period on web-based Draft SWP and Executive Summary
- January 2015 SWP Committee Meeting - High-level overview of public comments and how they were addressed; SWP Committee recommends adoption of SWP
- January 2015 - Transportation Commission adoption of SWP

Attachments

Attachment A: Welcome to Colorado’s Web-Based 2040 SWP

Welcome to Colorado's Web-Based 2040 Statewide Transportation Plan!

For the first time, Colorado's Statewide Transportation Plan (SWP) will be a living, web-based document. CDOT developed this plan as a better way to communicate and interact with the public using technology and to provide information that the public and stakeholders can use to discuss transportation issues. This format allows CDOT to regularly update, adapt, and implement the SWP in a manner that responds and evolves to the changing needs of the state in the years ahead. A combination of text, video, audio, and interactive presentations demonstrate where Colorado stands today, the challenges that we face, and how we will continue to make progress in the future. Data, comment features, and interactive maps give Coloradans the tools to learn, explore, and continue the conversation with CDOT. See www.coloradotransportationmatters.com.

Figure 1: SWP Website Home Page



When the Draft SWP becomes available for public review, visitors to the website will be welcomed by a video of Transportation Commission Chairman Ed Peterson inviting them to review the SWP, the Statewide Transit Plan, and the rural Regional Transportation Plans (RTPs). Direct links to both the SWP and RTPs will be provided on the SWP website homepage. **Figure 1** illustrates where these plans can be found. Note the second and third tabs to the right of home (under the Colorado transportation Matters logo) direct users to the SWP and RTPs respectively.

Figure 2: RTPs on the SWP Website

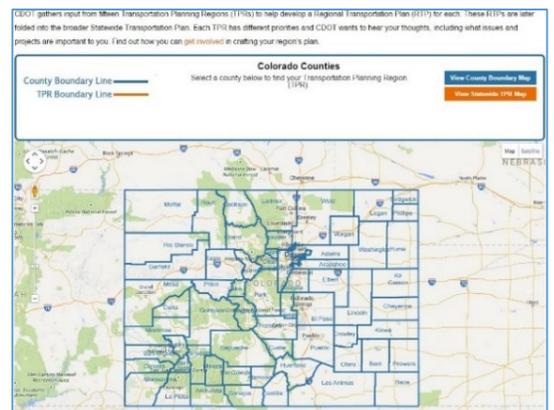
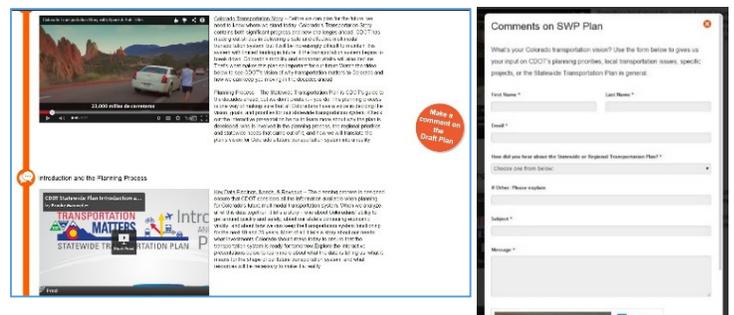


Figure 2 shows the introduction for the Regional Transportation Plans web page where all of the draft rural RTPs will be located during the public comment period. The plans highlight regional transportation needs and priorities out to the year 2040. Visitors can click on the map to access the RTP for their area.

Figure 3: Comments on the SWP

Website visitors will have the ability to submit comments on the SWP, Statewide Transit Plan, and RTPs. The comment form is accessible on the SWP and RTP web pages. See **Figure 3** for a snapshot of the comment form button, and the comment form.



The SWP is comprised of the following four parts: The Colorado Transportation Story; The Planning Process; Key Data Findings, Needs, and Revenue; and Moving Forward.

Part 1: The Colorado Transportation Story (Video)

Explains why Colorado's transportation system matters and what challenges CDOT will need to overcome to maintain and improve it for the future. See **Figure 4**.

Figure 4: Screen Shot of Part 1



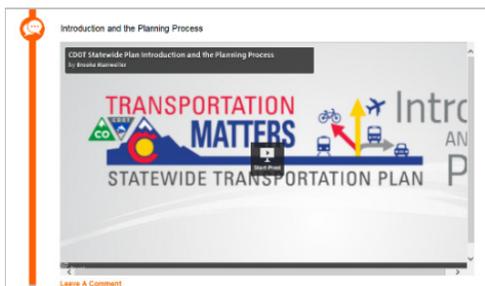
Part 2: The Planning Process (Prezi)

Explains how CDOT worked with key stakeholders to develop the plan.

Part 2 is in an interactive presentation format called Prezi.

See **Figure 5**.

Figure 5: Screen Shot of Part 2

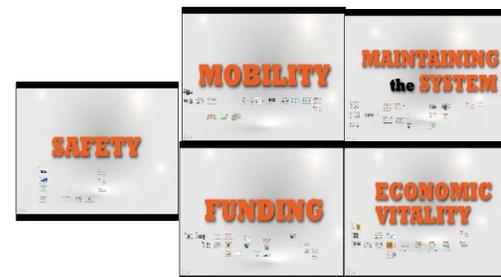


Part 3: Key Data findings, Needs and Revenue (5 Prezis and Summary Report)

Illustrates which trends will influence our transportation future and how much funding will be needed to maintain and expand the system.

The five Prezis align with CDOT's statewide goals covering topic areas of Safety, Mobility, Maintaining the System, Funding, and Economic Vitality. Each Prezi includes data and analysis regarding CDOT's past, current responsibilities, associated funding needs and revenue, current and future strategies, and key messages. See **Figure 6**.

Figure 6: Screen Shot of Part 3



Part 4: Moving Forward (1 Video, Action Plan, Maps, and Summary documents)

Describes what steps CDOT is taking to deliver on the promises of the SWP. The video will cover the topic of CDOT's adaptability and use of innovative ideas in the past 100 years, along with CDOT's focus on continuing adaptive and innovative practices in the future. Other elements of Part 4 will include: an Action Plan that looks at internal business practices at CDOT; Strategic Actions to move forward SWP implementation; Statewide Major Corridors, shown to the right (see **Figure 7**); and Regional Priority Investment Corridors (integrated from the rural RTPs).

Figure 7: Screen Shot of Part 4

