PLAN INTEGRATION TECHNICAL MEMORANDUM

March 16, 2015







Purpose

This technical memorandum has been completed as part of the development of multimodal plan integration material for the Colorado Department of Transportation's Statewide Transportation Plan. As most of the material for the plan is being provided via a web-based format, this document provides background information on material from other plans to be used as part of videos, presentations, and summary documents prepared for the "Moving Forward" and Executive Summary components of the plan. The plans discussed include:

- Statewide Transit Plan (Table 1)
- Statewide Freight Plan (Table 2)
- Statewide Freight and Passenger Rail Plan (Table 3)
- Statewide Bicycle and Pedestrian Plans Phases 1 and 2 (Table 4)
- Statewide Aviation Plan (Table 5)
- Transportation Systems Management and Operations Plan (Table 6)
- Risked Based Asset Management Plan (Table 7)
- Strategic Highway Safety Plan (Table 8)
- Denver Regional Council of Governments (Table 9)
- Grand Valley MPO (Table 10)
- North Front Range MPO (Table 11)
- Pikes Peak Area Council of Governments (Table 12)
- Pueblo Area Council of Governments (Table 13)
- Regional Transportation Plans (Rural) General Overview (Table 14)

Plan Integration Process Summary

The overall plan integration process for the Statewide Plan was conducted over the course of two years of plan development. At the outset, several of the plans to be integrated had not yet begun or had been recently started so the process was flexible in addressing plans in progress. At this point, there are still modal plans and MPO plans without complete drafts, which are being integrated to the extent possible.

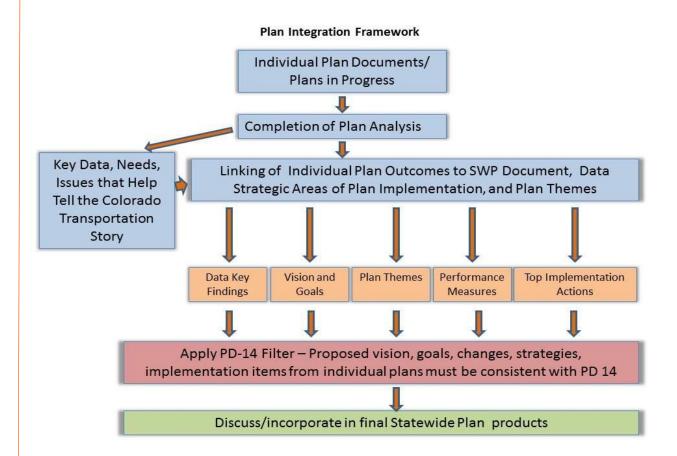
Figure 1 illustrates the general plan integration process. The general integration steps included:

 General review of plans to be integrated by staff and completion of plan "checklists" on key materials



- Two group meetings with CDOT "plan owners" (project managers/branch staff) to discuss plan integration and plan status
- Individual topical/plan discussions and meetings with CDOT project managers/branch staff as needed at various points of plan development
- Rural Transportation Plans developed in parallel and in consultation with the Statewide Plan
- Updates of Metropolitan Planning Organizations (MPOs) at Statewide MPO Meetings and coordination on plan status. Information provided by MPOs when ready. Note that the MPO plans will be formally adopted as part of the Statewide Plan as amendments based on their current schedule.

Figure 1: Plan Integration Framework



Organization of Plan Integration Elements

This plan integration summary is organized using a tabular approach, which incorporates key elements for each plan reviewed and integrated. The following sample table illustrates the information discussed in the tables prepared for each plan.



PLAN INTEGRATION ELI	EMENTS	
PLAN AND DATE	The name of the plan and its publication date (Month and Year)	
PLAN VISION	If the plan has a vision statement it is included here. This would be the top message of the plan to integrate into the Statewide Plan.	
PLAN GOALS	If the plan has a list of goals, they are included here. These would be additional key messages to integrate into the Statewide Plan.	
ADDITIONAL KEY	A quick list of any other key message points from the plan not captured in	
POINTS FOR "MOVING	Vision or Goals.	
FORWARD"		
TOP IMPLEMENTATION	If the plan has implementation actions that are relevant to the Statewide	
ACTIONS FOR	Plan they are listed here.	
"MOVING FORWARD"		
PERFORMANCE	If the plan outlines performance measurement, it is briefly discussed here.	
MEASUREMENT FOR		
"MOVING FORWARD"		
OTHER WAYS	Brief bullet points of the other components of the Statewide Plan where	
INTEGRATED IN THE	plan information was integrated.	
STATEWIDE PLAN		

The Technical Memorandum is organized to first discuss plans for other specific modes of transportation (modal plans), then discuss plans that are more topical in nature and prepared by specific divisions or branches within CDOT (division/branch plans), and finally generally discuss integration of MPO and regional plans.

Modal Plans

Table 1: Statewide Transit Plan

PLAN	STATEWIDE TRANSIT PLAN (COMPLETION ANTICIPATED IN EARLY 2015)
PLAN VISION	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.
PLAN GOALS	 Increase communication, collaboration, and coordination within the statewide transportation network. Improve travel opportunities within and between communities. Develop a framework of a transit system that is environmentally beneficial over time. Create a transit system that will contribute to the economic vitality of the state, its regions, and its communities to reduce transportation costs for residents, businesses, and visitors. Establish public transit as an important element within an integrated multimodal transportation system. Create a transit system in which travelers feel safe and secure and in which transit facilities are protected.
ADDITIONAL KEY POINTS FOR "MOVING FORWARD"	The introduction of Bustang as an interregional transit service on the Front Range and I-70 Mountain Corridor.



PLAN	STATEWIDE TRANSIT PLAN (COMPLETION ANTICIPATED IN EARLY 2015)	
TOP IMPLEMENTATION ACTIONS FOR "MOVING FORWARD"	All Implementation Actions are subject to the availability of state and federal funds. At present, with limited funds, maintenance of existing transit service is a top priority. If additional funds become available, CDOT will work with transit providers to look at enhancing and expanding service as identified by the Implementation Actions.	
PERFORMANCE MEASUREMENT FOR "MOVING FORWARD"	Qualitative or quantitative performance measures are identified for each implementation.	
OTHER WAYS INTEGRATED IN THE STATEWIDE PLAN	 Data and graphics used in the Key Data Findings presentations. Integrated as applicable into Regional Transportation Plans. Forecast needs used as part of overall Statewide Needs and Gap Analysis. 	

Table 2: Statewide Freight Plan

PLAN	STATEWIDE FREIGHT PLAN (COMPLETION ANTICIPATED IN SPRING 2015)
PLAN VISION	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.
PLAN GOALS	 Safety: Develop and implement programs and projects to improve the safety of moving goods in a multimodal transportation system. Efficiency: Enhance mobility and connectivity, provide reliability, and relieve congestion for freight movement. Economic Vitality: Invest in and sustain a freight system to support state, regional, and local economic development goals. Environmental Stewardship: Make freight-related decisions consistent with CDOT's commitment to protect the environment and quality of life for Colorado's citizens.
ADDITIONAL KEY POINTS FOR "MOVING FORWARD"	The purpose of the Plan is to guide improvement of the overall effectiveness of the freight system within the state. This Plan is developed to address the highway element of the state's long-range multi-modal transportation plan.
	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. Necessities for daily life, so readily available, are supplied through a complex system of production and transportation. Every shipment of goods provides a tangible or economic benefit to numerous people and communities throughout our state.
TOP IMPLEMENTATION ACTIONS FOR "MOVING FORWARD"	 The Freight Plan has numerous initiatives and action items. Highlights include: Implementing freight project criteria in project decision making. Highway truck crash reduction through annual monitoring with a focus on crash types. Section 130 Rail Crossing Safety Program.
	 Improving Geometric Design - These include elements such as lane and shoulder width, grade, climbing lane requirements.



PLAN	STATEWIDE FREIGHT PLAN (COMPLETION ANTICIPATED IN SPRING 2015)
	 Improve access to safe truck parking facilities and updating the truck parking guide. Identifying options for truck electrified parking. Annual freight bottleneck assessment and reliability assessments. Monitor key energy corridors. Rail improvement fund.
PERFORMANCE MEASUREMENT FOR "MOVING FORWARD"	PD 14.0, adopted February 2015, includes measure and objectives for system performance of Colorado Freight Corridors. Additional safety measures and objectives anticipated for truck freight and freight rail in a later update.
OTHER WAYS INTEGRATED IN THE STATEWIDE PLAN	 Data and graphics used in the Key Data Findings presentations. Integrated as applicable into Regional Transportation Plans.

Table 3: Statewide Freight and Passenger Rail Plan

PLAN	STATEWIDE FREIGHT AND PASSENGER RAIL PLAN (MARCH, 2012)
PLAN VISION	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.
PLAN GOALS	 Create a balanced transportation system utilizing cooperative land use planning to create freight and passenger rail connectivity and accessibility without compromising existing rail service and infrastructure. Provide for the safety of people, infrastructure, and goods. Expand rail infrastructure and freight and passenger rail services to meet future demand through strategic investments, which include public-private partnerships with privately owned service providers. Promote through education the energy efficiency, environmental, and economic benefits of freight and passenger rail transportation throughout the state. Use the efficiencies of freight and passenger rail to support
ADDITIONAL KEY POINTS FOR "MOVING FORWARD"	communities and enhance economic growth throughout the state. Freight and passenger rail have a significant impact on the economy, environmental resources, land use, communities, and of course, transportation. The freight and passenger rail systems in Colorado have the opportunity to move people and goods, create jobs, increase access and connections, manage highway congestion, and help reduce greenhouse gas (GHG) emissions. The only "priority" rail corridors included are the north-south, east-west 994-mile Strategic Rail Corridor Network (STRACNET) to support defense emergencies. Roughly parallels I-25 north and south, I-70 west of Denver, and US 40/287 east of Denver.
TOP IMPLEMENTATION ACTIONS FOR	 Each MPO and Transportation Planning Region should reconsider the definition of the corridors in light of information provided in the plan.
"MOVING FORWARD"	Each MPO and Transportation Planning Region should use the needs



PLAN	STATEWIDE FREIGHT AND PASSENGER RAIL PLAN (MARCH, 2012)
	assessment part of the plan to define the overall corridor goals and strategies. The Transit and Rail Advisory Committee should provide input to the
	STAC and the Transit and Intermodal Committee of the TC on rail issues.
	The plan suggests CDOT support retention of all Amtrak service in Colorado (the California Zephyr basically along the I-70 alignment and the Southwest Chief through the southeast corner of the state) by working with New Mexico and Kansas to maintain the existing route. A proposed Southwest Chief re-routing would terminate service to Lamar, La Junta, and Trinidad.
	 Position Colorado for future federal funding for freight and passenger- related infrastructure improvements.
	 Explore new state and local funding sources for rail-related programs, infrastructure, and services.
	 Maximize use of existing infrastructure and monitor significant rail corridor infrastructure to ensure future corridor preservation and expansion.
	 Facilitate meetings among the Colorado Office of Economic Development, the Class I and short line railroads, regional economic development agencies, and representatives of various economic sectors, such as agriculture, defense, tourism, and energy, to explore win/win opportunities to grow the Colorado and local/regional economies.
	 Develop and implement a Short Line Railroad Assistance Program similar to the one in Kansas and other states, in which state low-interest revolving loans are used to provide necessary capital funding.
	 Support linking of Colorado's passenger rail systems to the developing national intercity and high-speed rail networks.
PERFORMANCE MEASUREMENT FOR "MOVING FORWARD"	The plan suggests performance measures could be developed from those listed in the state and federal planning factor sections of the plan. However, no specific performance measures are outlined in the plan. Accessibility Mobility Economic development Quality of life Environmental and resource conservation Safety Operational efficiency
OTHER WAYS	 System preservation and expansion Data and graphics used in the Key Data Findings presentations.
INTEGRATED IN THE STATEWIDE PLAN	 Integrated as applicable into Regional Transportation Plans.



Table 4: Bicycle and Pedestrian Plan

PLAN	BICYCLE AND PEDESTRIAN PLANS (PHASE 1, OCTOBER 2012 AND PHASE 2 ONGOING) The Colorado Department of Transportation 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.	
PLAN VISION		
PLAN GOALS	 Increase Bicycling and Walking Activity. Enhance Safety. Expand Recreational Opportunities and Enhance Quality of Life. Improve Public Health. Improve the Environment, Air Quality, and Fossil Fuel Independence. Provide Transportation Equity (Social and Educational Opportunities). Maximize Transportation Investments. Improve Statewide and Regional Economy. 	
ADDITIONAL KEY POINTS FOR "MOVING FORWARD"	 CDOT needs to complete an inventory of bicycle/pedestrian assets on the state system to assess needs and gaps for future prioritization. 	
TOP IMPLEMENTATION ACTIONS FOR "MOVING FORWARD"	 Each CDOT region should reconsider the definition of corridors in light of the plan. Use the statewide bicycle and pedestrian goals and objectives to incorporate bicycle and pedestrian needs into the overall corridor goals, objectives, and strategies. Ensure that the Transit Plan and the Statewide Bicycle and Pedestrian Plan complement each other. In the Statewide Transportation Plan: Reference Policy Directive 1602 and Procedural Directive 1602.1 regarding providing for the needs of bicyclists and pedestrians in the planning, design, and operation of transportation facilities. Reference 43-1-120, C.R.S., that codifies PD 1602 and Procedural Directive 1602.1. Include a discussion about existing state and federal funding sources for bicycle and pedestrian projects and programs, in particular Section 217 of Title 23 of the United States Code. That section of federal law makes bicycle and pedestrian projects broadly eligible for funding from almost all major Federal-aid highway, transit, and safety programs. The addition of design standards for bicycles and pedestrians (included as Chapter 14 in the CDOT Roadway Design Guide). The chapter provides clear guidelines for accommodating pedestrians and bicyclists on state transportation facilities. Make more widely known the availability of Federal-aid highway, transit, and safety funding for bicycling and pedestrian facilities (Section 217 of Title 23 of the United States Code). 	
PERFORMANCE MEASUREMENT FOR "MOVING FORWARD"	Safety performance measures and objectives for bicyclists and pedestrians were added to PD 14.0. Bicyclist and pedestrian system performance measures and objectives are expected to be added later.	
OTHER WAYS INTEGRATED IN THE STATEWIDE PLAN	 Data and graphics used in the Key Data Findings presentations Integrated as applicable into Regional Transportation Plans 	



Table 5: Statewide Aviation Plan

PLAN	STATEWIDE AVIATION PLAN (2011) AND THE PLAN TECHNICAL REPORT	
	(MAY, 2012)	
PLAN VISION	In support of the Colorado Department of Transportation'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. (Mission)	
PLAN GOALS	 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. 	
ADDITIONAL KEY POINTS FOR "MOVING FORWARD"	Almost all 76 airports on the map, Exhibit 2-1 in the Technical Report, are located off roadways in the state highway system, thereby making those highways priority corridors for purposes of the plan.	
TOP IMPLEMENTATION ACTIONS FOR "MOVING FORWARD"	The Division of Aeronautics will review the performance measures in later years to establish success. Under the Aviation Plan, airports must have five-year Capital Improvement Programs. Selection of funding grantees using limited funds is based on Capital Improvement Program priorities in relation to all system plans. The Aeronautics Division has implemented a Tier II grant program that would allow the greater flexibility of larger grants. For example, smaller general aviation airports could finish a runway project in one construction season rather than three.	
PERFORMANCE MEASUREMENT FOR "MOVING FORWARD"	 The performance measures for this performance-based report are below. Activity -The system should have sufficient capacity to meet current and future needs Expansion Potential - The system should have the ability to respond to unforeseen changes in the aviation industry from a demand and technological standpoint or in the local market area. Economic Support - The system should provide support to the economy. Coverage and Emergency Access - The system should be accessible for customers and users from both the ground and the air. Investment - The system should be developed to leverage historic investment and to make the most out of future investment. Security - The system should be operated to address security and safety considerations, relative to perceived risks. 	
OTHER WAYS INTEGRATED IN THE STATEWIDE PLAN	 Data and graphics used in the Key Data Findings presentations. Integrated as applicable into Regional Transportation Plans. 	



Topic Plans

Table 6: Transportation Systems Management and Operations Plan

PLAN	TRANSPORTATION SYSTEMS MANAGEMENT AND OPERATIONS PLAN (JANUARY, 2015)	
PLAN VISION	Vision: Transform the State's transportation community into a Transportation Systems Management and Operations culture that effectively manages the surface transportation system. Mission: To systematically improve travel time reliability and safety on our highways through Transportation Systems Management and Operations programs and activities that demonstrate measurable benefits for the traveling public and enable the Department to make the best use of available transportation funding.	
PLAN GOALS	 Goal 1: Reduce delay by 5% at critical bottlenecks on TSM&O highest-priority congested corridor in FY15. (The highest-priority corridor is I-25 from SH 7 to Castle Rock during weekdays with emphasis from Evans Avenue to 84th Avenue northbound and from 58th Avenue to Colorado Boulevard southbound.) Goal 2: Reduce eastbound peak-period delays by 5% on the historically congested Sundays and Holidays in the I-70 Mountain Corridor from Vail to Golden in FY15. Goal 3: Reduce incident clearance time by 5% in TSM&O highest-priority congested corridors in FY15. Goal 4: Improve the accuracy and timeliness of our traveler information. Goal 5: Reduce delay by 10% at selected high-priority work zone closures in FY15. Goal 6: Reduce delay by 10% at critical bottlenecks on TSM&O highest-priority congested corridors in FY15. Goal 7: Perform Operations Clearance on all CDOT projects based on Operations Clearance Steering Committee recommendations and full adherence to managed lane policy during planning and project development process. Goal 8: Develop detailed pilot deployment plan to respond to the FHWA RFP regarding connected vehicles scheduled to be released in early 2015. The following goals are based on objectives in PD 14.0, except for Goal 14: Goal 9: Reduce fatalities by 12 per year from 548 in 2008 to 344 in 2025. Goal 10: Reduce the fatality rate per 100 million VMT by 0.02 per year from 1.03 in 2013 to 0.79 in 2025. Goal 11: Reduce serious injuries by 90 per year from 3,200 in 2013 to 2,120 in 2025. Goal 12: Reduce the serious injury rate by 0.2 per 100 million VMT per year from 6.86 in 2013 to 4.46 in 2025. Goal 13: Reduce the economic impact of crashes annually by 1% over the previous calendar year. Goal 14: Reduce incident clearance times by 5 percent per year. Goal 15: Maintain ITS equipment so that the equipment never exceeds 85% of its useful life. 	



PLAN	TRANSPORTATION SYSTEMS MANAGEN (JANUARY, 2015)	NENT AND OPERATIONS PLAN
ADDITIONAL KEY POINTS FOR "MOVING FORWARD"	processes, and can be delivered stated coordinated manner. Its goal is to department's primarily single-mind	he statewide and regional planning atewide in a systematic and fundamentally transform the led approach regarding project new paradigm that emphasizes and ations First".
	ITS TRADITIONAL APPLICATION	TSM&O ENHANCED APPLICATION
	Traffic Signal Timing	Adaptive Traffic Signal Control
	Ramp Metering	Dynamic and Integrated Access System Control
	Traffic Incident Management Plans (TIMP)	TIMP including situational awareness and quick clearance scenarios/training, Coalitions, Incident Commanders and Corridor Managers
	Courtesy Patrol (Mile High and I-70)	Optimized Courtesy Patrol based on crash data and hot-spot analysis
	Heavy Tow	Optimized Heavy Tow based on predictive weather data
	Traveler Information	Personalized Traveler Information including push notifications, geo fencing and targeted information
	Traffic Management and HOV/HOT	Active Traffic Management, Managed Lanes, Variable Speed Limits, Peak Period Shoulder Lanes and Bus on Shoulder
	Congestion Mitigation	Bottleneck Mitigation (targeted locations/strategies) and restriping, resigning and low-cost civil improvements



PLAN	TRANSPORTATION SYSTEMS MANAGEMENT AND OPERATIONS PLAN
TOP IMPLEMENTATION ACTIONS FOR "MOVING FORWARD"	 Integrate the Statewide TSM&O Plan into the statewide and regional planning processes, and provide outreach to educate stakeholders regarding purpose, benefit, and value of implementing systematic statewide operations by providing and using data to support decisions regarding improvements. Develop Region Operations Implementation Plans, Corridor Operations Plans, TSM&O Toolkit for Planners/Implementers, and TSM&O Design Guide to ensure that operations is comprehensively and conscientiously considered at the very earliest project conceptual stage. Incorporate operations into the CDOT Project Development Manual as a specialty area so that operations will be evaluated throughout the project development process. Implement Operations Clearance process as part of CDOT Form 463 to ensure that operations is addressed as a condition precedent to project implementation. Measure the operations application to evaluate and quantify benefit and effectiveness, and to refine the operations application if necessary, to ensure that data-driven decisions are utilized. Establish TSM&O Pool or a dedicated funding source by fiscal year 2016 to ensure that operations can be implemented systematically.
PERFORMANCE MEASUREMENT FOR "MOVING FORWARD"	 Many of the plan goals above are expressed as performance objectives. Other performance measures are: Average incident clearance time Number of incidents resulting in lane(s) or full closure including duration of the incident Number of secondary incidents Average Courtesy Patrol assists clearance time Number of Courtesy Patrol assists Percent of congested corridors implemented with Incident Management Plans Average heavy tow assists clearance time Number of heavy tow assists Travel delay Number of safety countermeasures Crash data processing time Implement ITS solutions Travel Time Index Buffer Index Queue length Throughput Capacity loss Traveler information Highway Safety Improvement Program FASTER Safety RAMP Program Operations Clearance Maintain ITS equipment
OTHER WAYS INTEGRATED IN THE STATEWIDE PLAN	 Used as part of determining Expansion and Operations Needs for the Transportation Needs and Gap Analysis. Data and graphics used in the Key Data Findings presentations.



Table 7: Risk-Based Asset Management Plan

PLAN	RISKED BASED ASSET MANAGEMENT PLAN (DECEMBER, 2013)
PLAN VISION	The overall goal of CDOT's asset management program is to minimize lifecycle costs for managing and maintaining the department's assets subject to acceptable levels of risk.
PLAN GOALS	 Based on PD 14.0 Goals: Safety - Reduce traffic fatalities and serious injuries and work toward zero deaths for all users. Infrastructure Condition - Preserve the transportation infrastructure condition to ensure safety and mobility at a least life-cycle cost. System Performance - Improve system reliability and reduce congestion, primarily through operational improvements and secondarily through the addition of capacity. Support opportunities for mode choice. Maintenance - Annually maintain CDOT's roadways and facilities to minimize the need for replacement or rehabilitation.
ADDITIONAL KEY POINTS FOR "MOVING FORWARD"	The plan addresses the following CDOT-owned assets: Pavements Rridges Maintenance/traffic assets, such as signs and striping Buildings Intelligent Transportation System (ITS) equipment Fleet (Road Equipment) Tunnels Culverts Geohazard sites Investment Strategies (summarized): Conduct more preventive maintenance on pavements and bridges. Address preventative maintenance on all assets. When selecting surface treatment projects, prioritize Interstates and High- and Medium-Volume roadways over other roadways. Achieve economic efficiencies by coordinating pavement activities with activities on other CDOT assets. Prioritize bridge treatments to preserve structures to prolong bridge service, reduce structure risk of failure due to scour, vertical clearance, and load restrictions. Consider cost-effectiveness when selecting bridge activities. Follow the manufacturer's recommended maintenance schedule. Preserve transportation assets through maintenance and follow an asset management approach in prioritization. Replace critical systems on a regular cycle in manned tunnels. For culverts, transition from a worst first program to one based on asset management. Assess preventive maintenance cost-effectiveness to identify alternative mitigation methods for geohazards.



PLAN	RISKED BASED ASSET MANAGEMENT PLAN (DECEMBER, 2013)
TOP IMPLEMENTATION ACTIONS FOR "MOVING FORWARD"	 Developing and documenting the budget distribution, project selection and project tracking process. Integrating risk analysis into planning and programming processes. Developing strategies to manage project and program delivery risks. Establishing a framework to evaluate alternative strategies for agency risks. Analyzing budget tradeoffs across asset programs. Improving project scoping and optimization. Incorporating life-cycle analysis into decision-making. Clarifying the role of performance target-setting. Implement a strategic management framework to reflect on progress. Communicating the benefits of Transportation Asset Management.
PERFORMANCE MEASUREMENT FOR "MOVING FORWARD"	PD 14.0 sets objectives for pavement and bridge. A table attached to PD 14.0 includes all asset management objectives and targets: those within PD 14.0 and additional ones for bridges, buildings, ITS, roadway equipment, culverts, geohazards, tunnels, traffic signals, and walls.
OTHER WAYS INTEGRATED IN THE STATEWIDE PLAN	 Data and graphics used in the Key Data Findings presentations. Integrated as applicable into Regional Transportation Plans. Forecast needs used as part of overall Statewide Needs and Gap Analysis.

Table 8: Strategic Highway Safety Plan

PLAN	STRATEGIC HIGHWAY SAFETY PLAN (OCTOBER, 2014)
PLAN VISION	The future for Colorado is zero deaths so that all travelers, whether they drive, walk, ride, or bike, arrive at their destinations safety.
PLAN GOALS	"Moving Toward Zero Deaths" (TZD) is the goal. Nationally, TZD is defined as reducing traffic-related deaths and serious injuries by one-half by 2030. For Colorado, this means saving an average of one life per month or reducing fatalities from 548 in 2008 to 416 by 2019.
ADDITIONAL KEY POINTS FOR "MOVING FORWARD"	Emphasis areas were selected to work as part of the overall effort to reduce fatalities and serious injuries. Emphasis areas chosen were: aging road users, bicyclists and pedestrians, data, impaired driving, infrastructure - rural and urban, motorcyclists, occupant protection (i.e., seatbelt use), young drivers (ages 15-20), and distracted driving (cell phones etc.). An action plan for distracted driving was still under development when the plan was finalized, and is not included in the Top Implementation Actions below.



PLAN	STRATEGIC HIGHWAY SAFETY PLAN (OCTOBER, 2014)
TOP IMPLEMENTATION	Action plans for the emphasis areas included, but were not limited to:
ACTIONS FOR "MOVING FORWARD"	 Aging Road Users - Develop and promote aging road user licensing policies and practices; identify and promote alternative transportation; identify hot spots in the counties with highest percentage of aging drivers (Denver, Arapahoe, El Paso and Jefferson) for fatal and serious injury crashes. Bicyclists and Pedestrians - Research the effectiveness of technology, countermeasures, or design affecting bicyclist and pedestrian crashes; improve quality of data of bicycle- and pedestrian-related data; improve bicyclist and pedestrian safety at high crash locations; instigate safety campaigns aimed at motorists, pedestrians, and bicyclists. Data - Improve the timeliness, completeness, accuracy, uniformity, accessibility, and integration of individual agency traffic information system databases; document traffic safety redundancy, needs, and gaps in current traffic safety data systems; revise the current crash report to reflect data needs; integrate the crash, EMS/injury surveillance, citation,
	 and roadway databases. Impaired Driving - Ensure greater awareness of the dangers of drug-impaired driving; improve the data that informs enforcement, education, and prosecution of impaired driving; improve existing and new impaired driving messaging and awareness and enforcement programs and activities; continue and when possible increase Colorado's prosecution and adjudication programs.
	 Infrastructure (Rural and Urban) - Prioritize local road safety problems on all roadways; use proven behavioral countermeasures to reduce crashes; increase safe driving behaviors on rural roadways; improve collision and accessibility of data on all roads; implement countermeasures, technology, or design to reduce crashes on all roadways; provide training
	 and outreach to state/local stakeholders and the public. Motorcyclists - Train motorcyclists on the skills related to crash causes in Colorado; promote motorcyclists safety; develop a motorcycle crash awareness course for police officers to further their understanding of motorcycle crash dynamics; limit the length of each motorcycle permit and the number of lifetime permit renewals; increase awareness among state and local personnel about motorcycle roadway safety; support policies that promote helmet use.
	 Occupant Protection - Support policies and activities that promote seat belt use; increase awareness of risks of not using seat belts; support and expand Colorado's high-visibility seat belt enforcement initiatives. Young Drivers - Improve coordination, collaboration, and mission alignment among state-level motor vehicle partners related to evidence-based practices that reduce motor vehicle occupant injuries among youth ages 15-20; increase the number of state-funded teen motor vehicle safety programs; increase seat belt use among teens; increase the percentage of law enforcement officers who report enforcing the graduated driver's license law; educate parents about the graduated driver's license law; decrease the number and rate of impaired driving-related crashes among young drivers.
PERFORMANCE MEASUREMENT FOR "MOVING FORWARD"	Measures and objectives to reduce the numbers and rate of vehicular fatalities and serious injuries and the economic impact of crashes were added to PD 14.0. Other PD 14.0 safety measures are to reduce the number of bicyclist and pedestrian fatalities and serious injuries.



PLAN	STRATEGIC HIGHWAY SAFETY PLAN (OCTOBER, 2014)
OTHER WAYS	 Data and graphics used in the Key Data Findings presentations.
INTEGRATED IN THE	 Integrated as applicable into Regional Transportation Plans.
STATEWIDE PLAN	 Forecast needs used as part of overall Statewide Needs and Gap Analysis.

Table 9: Metro Vision Regional Transportation Plan

PLAN	DENVER REGIONAL COUNCIL OF GOVERNMENTS 2040 FISCALLY CONSTRAINED
	REGIONAL TRANSPORTATION PLAN (FEBRUARY, 2015)
PLAN VISION	 The Metro Vision 2040 Plan will: Identify common values and regional priorities. Increase understanding of challenges and opportunities. Point the region in a direction. Serve as a call to action. Guide decisions. Support collaboration and efficient use of resources.
PLAN GOALS	Goals for the 2040 Metro Vision - the framework for the 2040 RTP - will continue to focus on key regional issues such as transportation and the environment. The planning process also will explore two critical issues in depth: housing and economic development. Detailed goals and policies for Metro Vision 2040 are under development.
ADDITIONAL KEY POINTS FOR "MOVING FORWARD"	The RTP classifies transportation projects into two broad categories: those that are regionally significant for air quality conformity purposes, and those that are not. Regionally significant projects are major roadway, interchange, and rapid transit projects that significantly change the capacity of the transportation network.
TOP IMPLEMENTATION ACTIONS FOR "MOVING FORWARD"	 Detailed project evaluation and process for roadway capacity projects and rapid transit projects (FasTracks and others). List of fiscally constrained projects.
PERFORMANCE MEASUREMENT FOR "MOVING FORWARD"	 Performance measures are in Table 6 on p. 53. Some of the performance measures in the RTP are: Per capita VMT: 24.3 in 2040 (25.4 in 2015). Rail transit trips (boarding): 258,320 in 2040 (152,140 in 2015). Transit share of all daily trips: 3.4% in 2040 (2.7% in 2015). Transit share of all daily work trips: 7.10% in 2040 (5.8% in 2015). Share of total population with good transit-job accessibility: 63% in 2040 (53% in 2015). Share of population in low-income or minority areas with good transit-job accessibility: 77% in 2040 (69% in 2015). Percent of VMT in severe congestion: 18.7% in 2040 (13.1% in 2015).
OTHER WAYS INTEGRATED IN THE STATEWIDE PLAN	 Integration by incorporation into SWP now that 2040 RTP is adopted.



Table 10: Grand Valley 2040 Regional Transportation Plan

PLAN	GRAND VALLEY 2040 REGIONAL TRANSPORTATION PLAN (DECEMBER, 2015)
PLAN VISION	 The vision encompasses key messages heard during the 2040 planning process: Build multimodal systems that enable people to easily travel from work to home or to readily transfer from bike to bus. Maintain what we have before adding new capacity. Support quality community growth.
PLAN GOALS	 In support of the vision, the following 2040 RTP Goals were adopted: Improving roadway SAFETY for all travelers. MAINTAINING the existing transportation system. Linking communities through an EFFICIENT multimodal transportation network. Increasing bike and pedestrian MOBILITY and expanding transit options. Promoting ECONOMIC competitiveness. Creating QUALITY communities, providing access to recreation, and encouraging healthy lifestyle choices. Encouraging regional LEADERSHIP and cooperation.
ADDITIONAL KEY POINTS FOR "MOVING FORWARD"	 2040 transportation investment priorities are in this order: Maintaining existing roadways and bridges. Expanding cycling and walking options. Enhancing public transportation and transit options. Improving air, rail, and truck freight movement. Adding new roadways and lane capacity.
TOP IMPLEMENTATION ACTIONS FOR "MOVING FORWARD"	The GV MPO RTP proposes using the performance objectives below to evaluate regional investment programs, individual project or packages of projects, or strategies. As final guidance on MAP-21 becomes available, GV MPO will establish regionally appropriate objectives, or targets, or continue to support state targets.
PERFORMANCE MEASUREMENT FOR "MOVING FORWARD"	 Grand Valley MPO uses CDOT performance measures as a basis. These are the GV MPO performance objectives: Safety: 0.94 regional fatality rate per 100 million vehicle miles traveled (VMT); 6.5 regional serious injuries per 100 million VMT; 2.6 five-year average annual reduction in fatalities; 6.8 five-year average annual reduction in serious injuries; 0.8 five-year average annual increase in pedestrian and cyclist fatalities and serious injury crashes. Infrastructure Condition: 63% of regional on-system road surfaces are rated High/Moderate Drivability Life; 99% of regional bridges have a deck rating that is not structurally deficient. <i>Transit</i>: 55% of vehicles in the Grand Valley Transit (GVT) fleet are currently in fair, good, or excellent condition. Draft asset management plan is in place. Congestion Reduction: 5.4 minutes of delay per traveler, per day. GVT draft asset management plan in place. <i>Transit</i>: 8% five-year average annual increase in annual fixed route ridership on GVT. System Reliability: More than 1.25 average Planning Time Index (PTI) for regional interstate system. Freight Movement and Economic Vitality: Annual average daily truck travel on regional roadways. Environmental Sustainability: 19% of school children walk, run, or bike to school at least one day a week; 4.8% of workers commute to work by biking or walking; 75% of residents report that neighborhood sidewalks are safe to walk, run, or bike. Reduced Project Delays: 40% of projects identified in 2035 RTP have been acted on.



PLAN	GRAND VALLEY 2040 REGIONAL TRANSPORTATION PLAN (DECEMBER, 2015)
OTHER WAYS	 Integration by incorporation now that the Grand Valley RTP is adopted.
INTEGRATED IN THE	
STATEWIDE PLAN	

Table 11: North Front Range 2040 Regional Transportation Plan

PLAN	NORTH FRONT RANGE 2040 REGIONAL TRANSPORTATION PLAN (ANTICIPATED COMPLETION BY FALL 2015)
PLAN VISION	Value Statement: We seek to provide a multi-modal transportation system that is safe, as well as socially and environmentally sensitive for all users that protects and enhances the region's quality of life and economic vitality.
PLAN GOALS	 Economic Development/Quality of Life: Foster a transportation system that supports economic development and improves resident' quality of life. Mobility: Provide a transportation system that moves people and goods safely, efficiently, and reliably. Multi-modal: Provide a multi-modal transportation system that improves accessibility and transportation system continuity. Operations: Optimize operations of transportation facilities.
ADDITIONAL KEY POINTS FOR "MOVING FORWARD"	Not available.
TOP IMPLEMENTATION ACTIONS FOR "MOVING FORWARD"	Not available.
PERFORMANCE MEASUREMENT FOR "MOVING FORWARD"	 Four-year performance measures and targets: Air quality conformity tests on plans and programs - passes conformity Number of facility samples with poor surface condition - reduce by 1% Bridges with a sufficiency rating below 50.0 - less than 5% of bridges Five-year rolling average of injury and fatal crashes - no increase in crashes Regionally significant congested corridors with a travel time index of 2.5 time or less than free flow - maintain at least 80% Population and essential destinations within para-transit and demand response service area within the MPO boundary - at least 85% Non-motorized facilities per capita - increase by at least 2% Fixed-route revenue hours per capita within service areas - increase by 30% Transit service vehicles within useful life parameters established by FTA - maintain 75% VMT growth per capita - change in VMT should not exceed change in population Fixed-route ridership per capita within service areas - increase by 10%
OTHER WAYS INTEGRATED IN THE STATEWIDE PLAN	 Integration by incorporation once the North Front Range RTP is adopted.



Table 12: Pikes Peak 2040 Moving Forward Plan

PLAN	PIKES PEAK AREA COUNCIL OF GOVERNMENTS (MAY, 2015)
PLAN VISION	Create a sustainable multi-modal transportation system that meets regional mobility and accessibility expectations as essential elements of the Pikes Peak region's quality of life. (The PPACG board agreed in November 2012 that the 2035 vision should become the 2040 vision.)
PLAN GOALS	 Maintain or improve current transportation system infrastructure condition. Improve the operation of transportation systems and services to enhance emergency response, minimize travel times, and maximize service quality of all modes of commercial and private travel throughout the region. Prioritize transportation funding towards those projects/programs that have the highest life-cycle cost-effectiveness. Improve system connectivity within and between modes and accessibility for everyone. Improve safety for all travelers. Increase resiliency and redundancy of the transportation system. Ensure transportation system investment benefits are equitably distributed to minorities, and citizens with disabilities, low incomes, and/or special needs. Reduce transportation-related adverse impacts to communities, neighborhoods, natural environments, and areas identified for cultural and/or historical preservation. Improve economic vitality and freight movement in the region by enhancing the transportation system. Incentivize infill in, and redevelopment of, existing communities. Improve, protect, and mitigate impacts to critical habitat and connecting corridors suitable for threatened, endangered, and imperiled species. Minimize the amount of storm water runoff and transportation-associated pollutants that enter the region's streams. Reduce absolute regional transportation-related greenhouse gas emissions and air criteria pollutant emissions.
ADDITIONAL KEY POINTS FOR "MOVING FORWARD" TOP IMPLEMENTATION ACTIONS FOR "MOVING FORWARD"	The mission for the 2040 RTP is to plan multi-modal transportation facilities and services that efficiently move people and goods, support economic vitality, and sustain and improve the quality of life in the Pikes Peak region. The 2040 RTP includes implementation guidance for maintenance, operational, safety, and capacity improvements, as well as public transportation, the non-motorized transportation systems, and ridesharing programs.
PERFORMANCE MEASUREMENT FOR "MOVING FORWARD" OTHER WAYS INTEGRATED IN THE STATEWIDE PLAN	Performance measures have been identified for all 13 Plan Goals. The performance measures, listed in the Planning Framework, were approved in February 2014. See http://www.ppacg.org/library/func-startdown/1248/ Integration by incorporation once Pikes Pike 2040 Moving Forward RTP is adopted.



Table 13: Pueblo Area Long Range Transportation Plan

PLAN	PUEBLO AREA COUNCIL OF GOVERNMENTS (ANTICIPATED COMPLETION BY JULY, 2015)
PLAN VISION	2035 LRTP Vision: The Pueblo Area Regional Transportation Vision provides for a well-integrated multimodal transportation system that serves individual, local, regional, state, and national needs to support the continued development of a quality community with sustainable growth, economic vitality, and adequate mobility options. This Vision is supported by four goals that together form the basis for the proposed projects and programs of the Long Range Plan.
PLAN GOALS	 2035 LRTP Goals: Mobility: Plan, develop, and maintain a safe and efficient transportation system to preserve and enhance the present and future mobility needs of the Pueblo Region. Livability: Balance the mobility needs of the community with the community objective of creating a livable human and natural environment. Plan and develop transportation along with land use planning activities. Intermodalism: Encourage the use of transportation modes other than the single-occupant automobile. Focus on developing facilities that link modes together. Strategic Planning: Implement and maintain the planned transportation system in a coordinated and cost-effective manner
ADDITIONAL KEY POINTS FOR "MOVING FORWARD"	Not available.
TOP IMPLEMENTATION ACTIONS FOR "MOVING FORWARD"	Not available.
PERFORMANCE MEASUREMENT FOR "MOVING FORWARD"	Not available.
OTHER WAYS INTEGRATED IN THE STATEWIDE PLAN	 Integration by incorporation once MPO LRTP is adopted.



Table 14: Regional Transportation Plans

PLAN	REGIONAL TRANSPORTATION PLANS (GENERAL OVERVIEW)
PLAN VISION	Each TPR plan identified a regional transportation vision.
PLAN GOALS	Each TPR plan identified regional transportation goals.
ADDITIONAL KEY POINTS FOR "MOVING FORWARD"	The TPR plans collectively identified regional high priority corridors. These have been combined/integrated as part of a look at Statewide High priority corridors in a separate memorandum.
TOP IMPLEMENTATION ACTIONS FOR "MOVING FORWARD"	Each TPR developed a corridor and/or project prioritization for use for Regional Priorities Program and other funding. These are meant to help guide future funding decisions. In addition, each TPR developed "implementation actions" they would undertake in the next five years generally centered on coordination, education, and advocacy activities. They were refined from a master list of safety, system performance/asset management, economic development, rail, aviation, freight, transit, bike/pedestrian, capacity, leveraging partnerships, and operations actions that TPRs could carry out. These are the implementation actions listed in each RTP, with the most commonly actions cited first: Transit - 8 Economic Development - 7 Safety - 6 Rail; Leveraging Partnerships - both 5 Freight; Bike/Pedestrian - both 4 Aviation - 3 Capacity - 2 Operations; STAC improvement; Coordination with CDOT RTD and Transportation Commissioners - all 1
PERFORMANCE MEASUREMENT FOR "MOVING FORWARD"	Performance measures were not part of TPR plans
OTHER WAYS INTEGRATED IN THE STATEWIDE PLAN	Coordination on revenue scenario planning