

Attachment 1

A Connected Multimodal Region

Introduction

The nine-county DRCOG region aspires to have a connected multimodal transportation system that increases mobility and provides viable travel choices for everyone. The region will have a multimodal approach to move people and goods, with transportation solutions tailored to the desires of each community. The region's transportation system must address and adapt quickly to major trends affecting the region, such as a rapidly aging population, new technology, changing residential and workplace styles, and others. Transportation and land use planning will be integrated to achieve coordinated outcomes that improve the region's quality of life. Transportation needs far outweigh available funding. This necessitates difficult tradeoffs and choices, such as balancing the need for additional capacity with maintenance and preservation needs. The region must continue to use a range of funding solutions, such as public-private partnerships, innovative local funding strategies, and other methods.

The region will have a multimodal system of regional roadways and local streets to serve people and goods via all modes of travel. The roadway system will be managed and operated to optimize capacity and enable safe travel for all users. New capacity (new roads and widening projects) will address Metro Vision outcomes as much as possible, and primarily address traffic congestion within the Urban Growth Boundary/Area and along major statewide connections. Managed lanes will be considered as part of new capacity projects where feasible. New and reconstructed roadways will enable mode choices to optimize person-movement capacity.

Public transit will play a crucial role in moving people, and the region will build and maintain a comprehensive public transportation network. This includes completing RTD's FasTracks rapid transit system and envisioning future intra- and inter-regional rapid transit connections. Regional, local, and specialized transit services will be provided, particularly to meet the needs of the region's growing older adult and limited-mobility populations. Finally, the region and local jurisdictions will invest in transit solutions tailored to specific community needs, such as first and last mile connections, access to transit stations, and new or expanded transit service where needed.

Walking and bicycling are valued travel choices in the DRCOG region, with their mode share steadily increasing. The region and local jurisdictions will increase the viability of walking and bicycling by expanding the bicycle and pedestrian network and providing additional supportive infrastructure. The network will also be accessible for persons with mobility devices.

Transportation demand management and other mobility innovations are also key transportation strategies. Carshare, rideshare, and bikeshare programs are increasingly important travel options within the region. Emerging technological innovations, such as connected and driverless cars, also have potential to influence personal mobility in the future. Technology and other innovations play an important role in a connected multimodal transportation system (e.g., broadband, smartphones) and strategies to avoid or manage travel, such as teleworking, flexible work hours, virtual meetings, etc.

This element outlines an overall policy framework and vision for the transportation system through the year 2040, organized around three outcomes:

- A well-connected, regional multimodal transportation system;
- A safe, dependable, and efficiently operated transportation system, and
- A transportation system contributing to a better environment and quality of life.

Supporting objectives and strategies will help the region achieve these outcomes. There are measures to track progress over time and specific key targets to strive for. Key foundational measures are identified for Metro Vision. They are the most important measures representing what the region aspires to achieve for transportation and the other Metro Vision elements.

The companion 2040 Metro Vision Regional Transportation Plan (2040 MVRTP) implements the transportation element of Metro Vision. The 2040 MVRTP also contains the fiscally constrained transportation plan, which defines the specific transportation elements and services the region anticipates being able to fund with expected revenues. The fiscally constrained plan is amended frequently to reflect ongoing system changes and must be demonstrate conformance with Federal Air Quality standards.

(SIDEBAR) CONNECTING THE DOTS: WHY IS THIS IMPORTANT? (Linkages to other sections/issues)

An Efficient and Predictable Development Pattern. Maintaining an integrated approach to land use and transportation planning in the region is essential. Focusing new housing and employment in urban centers that are well-connected to other destinations helps promote efficiency in the provision of transit services, increases transportation options for area residents and employees, and creates less reliance on motor vehicle trips. Likewise, encouraging infill and redevelopment in established parts of the region and limiting urban development outside of the urban growth boundary/area minimizes the need to extend new transportation infrastructure or upgrade existing infrastructure.

Healthy, Inclusive, and Livable Communities. A well-connected transportation system plays a direct role in the health and wellness of the region’s population. By reducing vehicle miles traveled, ground level ozone and other air pollutants can be reduced. This in turn will help reduce chronic and acute respiratory diseases, including asthma. In addition, people who have the option of walking or bicycling to meet many of their daily needs are more likely to incorporate regular physical activity into their daily lives and maintain better health. Lastly, transit can help ensure people of all ages, income levels, and abilities have the means to access needed medical services.

A Vibrant Economy. Ensuring people, goods, and services can move through the region safely, efficiently, and predictably is essential to our economic health. Providing a range of multimodal travel options will help ensure the Denver region remains competitive with other major metropolitan areas for new employers and residents seeking a high quality of life, lower transportation costs, and diverse lifestyle choices.

A Safe and Resilient Built and Natural Environment. The region’s multimodal transportation system plays a direct role in the quality of our built and natural environment. Minimizing growth in vehicle miles traveled and providing multimodal travel options are key components to reducing ground level ozone, greenhouse gas emissions, and other pollutants. The design and proper use of transportation facilities can reduce the number of fatalities and serious injuries caused by traffic crashes. Likewise, designing roadways and other transportation facilities using stormwater Best Management Practices can help minimize the effects of runoff on the region’s water quality.

Outcome 1: A well-connected, regional multimodal transportation system.

A balanced, well-connected, multimodal transportation system will include regional transit, an integrated regional and local bus system, a regional roadway system, local streets, bicycle and pedestrian facilities, as well as air and freight rail linkages. The integrated components of this system will provide reliable mobility choices to all users throughout the DRCOG region: residents and visitors of all ages, incomes, and abilities, as well as businesses that provide services and manufacture or sell goods. Users will find the transportation system easy to access, safe and secure, and it will permit efficient state and nationwide connections for people and freight. Finally, the transportation system will evolve to address future technology and mobility innovations as appropriate.

OBJECTIVE 1.1: PROVIDE A MULTIMODAL ROADWAY SYSTEM THAT ENABLES PEOPLE TO TRAVEL SAFELY AND RELIABLY BY AUTOMOBILES, TRUCKS, BUSES, WALKING, AND BICYCLING**Strategy 1.1(a): Maintain and enhance a regional roadway system**

Maintain and enhance a regional roadway system comprised of freeways, tollways, major regional arterials, and principal arterials that provide regional and statewide multimodal connectivity for the movement of people and goods.

Strategy 1.1(b): Incorporate multimodal facilities or treatments into all roadways and streets

Build new streets and roadways, and retrofit existing facilities, with applicable multimodal (aka Complete Street) elements where feasible that enable safe, convenient, and comfortable travel and access for people using all modes—driving, transit, walking, and bicycling.

Strategy 1.1(c): Expand the capacity of existing regional roadways in the most critically congested corridors

Expand the capacity of existing regional roadways in the most critically congested corridors, at key traffic bottlenecks, and along major statewide connections only after applying demand management strategies and implementing operational efficiencies to first optimize the use of existing capacity. Consider the use of managed lanes in new capacity projects where feasible.

REGIONAL ACTIONS

- Coordinate with the Colorado Department of Transportation (CDOT), Regional Transportation District (RTD), local governments, and other regional stakeholders to cooperatively manage the existing multimodal roadway system and to plan for future roadway needs.
- Consider the use of managed lanes in new capacity projects where feasible.
- Maintain a fiscally-constrained regional transportation plan that identifies regional priorities and fiscal realities for roadway system improvements.

- Adopt TIP project funding and selection policies that address Metro Vision outcomes and encourage provision of pedestrian, bicycle, and transit facilities within road projects.

LOCAL ACTIONS

- Adopt and implement street and development standards to improve multimodal connectivity in a variety of contexts—urban, suburban, and rural, considering unique land use settings—schools, parks, offices, etc.
- Fund roadway projects through local capital improvement programs that include multimodal connectivity components.

Insert 2040 Metro Vision Regional Roadway System map

OBJECTIVE 1.2: EXPAND TRANSIT FACILITIES AND SERVICES TO ALL PEOPLE

Strategy 1.2(a): Complete FasTracks

Continue to implement strategies to accelerate the completion of FasTracks' remaining components.

Strategy 1.2(b): Develop an expanded metropolitan rapid transit system

Develop an expanded metropolitan rapid transit system comprised of FasTracks and future rail lines, Bus Rapid Transit (BRT) corridors, and transit-capable managed lane facilities that provide connectivity for passengers traveling throughout the region.

Strategy 1.2(c): Provide a comprehensive fixed-route bus system

Provide a comprehensive fixed-route bus system that includes high frequency bus corridors, regional bus service, feeder routes to rapid transit lines, and local route service.

Strategy 1.2(d): Provide demand response service for targeted needs

Provide demand-response transit service to serve targeted needs, such as for older adults and persons with disabilities, travelers in less densely developed areas, or feeder service to rapid transit lines.

Strategy 1.2(e): Incorporate bicycle and pedestrian support facilities

Provide bicycle and pedestrian support facilities by accommodating bicycles on transit facilities, and by providing amenities such as secure bicycle parking (racks, lockers, bike stations), bicycle repair kiosks, and infrastructure that supports bicycle and pedestrian movement to and from stations, park-and-rides, and major transit stops.

Strategy 1.2(f): Add transit service in areas lacking adequate transit service

Encourage the establishment of new or increased transit service in, or to underserved, communities and major activity nodes.

REGIONAL ACTIONS

- Coordinate with the Regional Transportation District (RTD) and other transit service providers to implement major projects and services.
- Coordinate with Denver Regional Mobility and Access Council (DRMAC) and transit operators to provide transportation services to older adults, persons with disabilities, and low income populations to expand availability, improve the quality of service, and increase efficiency.
- Encourage and support pricing structures and subsidy programs that keep transit service affordable to all users.
- Maintain a fiscally-constrained regional transportation plan that identifies regional priorities and fiscal realities for transit system improvements.
- Develop a regionwide evaluation of potential BRT corridors via a joint effort of RTD, DRCOG, CDOT, and other stakeholders.

LOCAL ACTIONS

- Adopt transit-supportive policies and development regulations.
- Implement bicycle and pedestrian facility connections to transit service (e.g., first and last mile connections).
- Consider the needs of mobility-limited populations in transportation planning activities.
- Coordinate with DRCOG, the Regional Transportation District (RTD) and other transit service providers on the provision of transit facilities and infrastructure in development projects.

Insert 2040 Metro Vision Rapid Transit System map

OBJECTIVE 1.3: PROVIDE ROBUST BICYCLE AND PEDESTRIAN ACCESSIBILITY THROUGHOUT THE REGION

Strategy 1.3(a): Require pedestrian and bicycle accommodations along all roadways

Require sidewalks or other pedestrian accommodations, and bicycle accommodations, that meet or exceed applicable standards along all roadways and within private developments in the region's urbanized area and in rural communities.

Strategy 1.3(b): Develop local and regional bicycle facilities

Develop well-connected regional off-street and on-street bicycle corridor facilities and encourage the provision of local facilities throughout the region.

Strategy 1.3(c): Provide bicycle and pedestrian support facilities and services

Provide bicycle and pedestrian support facilities and services, such as bikesharing, wayfinding, and bicycle parking in association with major multi-use trails, transit stations, and other popular destinations.

Strategy 1.3(d): Provide first and last mile connections to transit

Provide specific bicycle and pedestrian facilities that connect transit services and stations to nearby residential, employment, school, office, shopping, park, and other major destinations.

REGIONAL ACTIONS

- Facilitate coordination between jurisdictions in expanding the region’s bicycle and pedestrian network.
- Support public and private bicycle sharing programs throughout the region.
- Maintain a fiscally-constrained regional transportation plan that identifies regional priorities and fiscal realities for bicycle and pedestrian system improvements.
- Provide tools, educational forums, and resources to jurisdictions on bicycle and pedestrian design, guidance, and implementation.

LOCAL ACTIONS

- Adopt and implement local street standards that address multimodal connectivity objectives in a variety of land use contexts, and other development codes/standards, such as cul-de-sac cut-throughs.
- Fund projects that address multimodal connectivity objectives through local capital improvement programs.
- Establish wayfinding signage, bicycle parking, and other supportive infrastructure in high traffic areas to assist pedestrians and bicyclists.
- Provide first and last mile bicycle and pedestrian facilities and connections to transit, such as sidewalks and bicycle facilities; and bikesharing, wayfinding, bicycle parking and shelters, and carsharing at transit stations.
- Implement striped and/or protected bike lanes (on-street and separated by a barrier from traffic) with proper consideration of how users transition to and from the lanes.
- Implement off-street sidewalks and multi-use paths that are more comfortable to a wide array of users by providing separation (by landscaping, etc) from traffic.
- Conduct education and promotional events to encourage bicycling and walking.
- Partner with local law enforcement agencies and advocacy groups on education and enforcement activities.
- Ensure ADA standards are met or exceeded in constructing or retrofitting facilities, such as curb cuts, ramps, etc.

OBJECTIVE 1.4: PROVIDE EFFICIENT INTERCONNECTIONS OF THE TRANSPORTATION SYSTEM WITHIN THE REGION AND TO THE REST OF THE STATE AND NATION

Strategy 1.4(a): Facilitate the movement of goods and services throughout the region

Facilitate the movement of goods and services throughout the region by reducing obstructions such as congestion, bottlenecks, and disconnections between facilities, while providing sufficient opportunities for intermodal freight connection to destinations outside of the region.

Strategy 1.4(b): Encourage multimodal commuting and carpooling

Provide location-appropriate balances of parking and development at park-and-ride lots to encourage transit ridership and carpooling.

Strategy 1.4(c): Provide safe and convenient access for pedestrians and cyclists

Provide safe and convenient access for pedestrians and bicyclists to access rapid transit stations, bus stops, and park-and-ride lots. Also provide secure bicycle parking and bike sharing at these locations and maintain and expand the capability of transit vehicles to carry bicycles.

Strategy 1.4(d): Support and maintain Denver Union Station (DUS) as the region’s primary multimodal hub and further develop other transit hubs

Support and maintain DUS as the primary multimodal hub of the region’s transportation system. Further develop transit hubs to support other urban centers and major destinations across the region.

Strategy 1.4(e): Improve transportation linkages to major destinations and attractions outside the region

Continue to plan for future intercity bus and rail linkages to destinations outside of the region as articulated in CDOT State Transit and Rail Plans and applicable studies.

Strategy 1.4(f): Encourage multimodal access to Denver International Airport

Encourage convenient access to Denver International Airport (DIA) for all modes of travel, and maintain DIA’s important role in connecting the Denver region to the rest of the world.

Strategy 1.4(g): Maintain and enhance airport capacity throughout the region

Maintain the capacity of DIA and aviation airports throughout the region by supporting the provision of facility enhancements in response to air transportation demands, consistent with adopted plans.

REGIONAL ACTIONS

- Coordinate with CDOT and other stakeholder to include recommended projects identified through major studies into DRCOG’s fiscally constrained Regional Transportation Plan once construction funding is identified for such project recommendations.
- Support continuing activities that might eventually enable through rail freight traffic to bypass population centers.
- Provide wayfinding signage for bicyclists, pedestrians and transit users to reach key destinations.

LOCAL ACTIONS

- Adopt local multimodal transportation plans that address connections within and between jurisdictions and communities.
- Adopt land use standards around airports to carefully guide compatible long range development plans.
- Facilitate the provision of wayfinding signage for bicyclists, pedestrians and transit users to reach key destinations.

Outcome 2: A safe, dependable, and efficiently operated transportation system.

As the region continues to grow, maintaining the safety, dependability, and efficiency of the region’s multimodal transportation system is essential. A variety of approaches will be used to monitor and manage the flow of people and goods throughout the system and to identify ways to enhance safety and improve functionality. The region will maximize the multimodal transportation system’s capacity through coordinated operations and management. As technology and mobility innovations occur, the multimodal system will evolve accordingly.

OBJECTIVE 2.1: ASSURE EXISTING AND FUTURE TRANSPORTATION FACILITIES ARE WELL-MAINTAINED

Strategy 2.1(a): Maintain the transportation system infrastructure in good condition

Allocate transportation funds and conduct maintenance and preservation efforts to keep roadways, multi-use trails, sidewalks, transit vehicles and all supporting infrastructure in good operating condition.

Strategy 2.1(b): Develop and apply asset management principles and techniques

Develop and apply asset management principles and techniques for operating, maintaining, and improving existing transportation infrastructure.

REGIONAL ACTIONS

- Collaborate with the Colorado Department of Transportation (CDOT), the Regional Transportation District (RTD), local governments, and other regional stakeholders on a variety of asset management considerations.
- Coordinate with local governments on periodic updates to the Transportation Improvement Program.
- Maintain a fiscally-constrained regional transportation plan that identifies regional priorities and fiscal realities for transportation system maintenance and operations.
- Consider the use of managed lanes in new capacity projects where feasible.

LOCAL ACTIONS

- Actively participate in periodic updates to the Transportation Improvement Program.
- Implement appropriate asset management principles and techniques.

OBJECTIVE 2.2: IMPLEMENT MEASURES TO ACTIVELY OPERATE, MANAGE, AND INTEGRATE SYSTEMS TO OPTIMIZE PERFORMANCE

Strategy 2.2(a): Monitor and manage transportation systems

Deploy Intelligent Transportation Systems (ITS) such as roadway and traffic monitoring systems, transit monitoring systems, and coordinated traveler information systems to improve the effectiveness and efficiency of the transportation system. Develop and deploy performance monitoring procedures and processes and integrate into system operations.

Strategy 2.2(b): Implement Transportation Systems Management and Operations (TSM&O) projects

Implement transportation systems management and operations (TSM&O) processes and projects, such as intersection improvements, ramp metering, acceleration/deceleration lanes, active traffic management, and others that improve the flow of motor vehicles and transit to reduce bottlenecks while balancing considerations for all modes.

Strategy 2.2(c): Implement access management projects to optimize existing infrastructure, reduce conflict points, and improve safety

Manage access (curb cuts on arterials or interchange ramps on freeways) to optimize existing infrastructure capacity, reduce conflict points, and improve safety for all users.

Strategy 2.2(d): Develop and deploy effective procedures and processes for incident management

Develop and deploy procedures and processes for incident management to reduce the duration and impact of incidents such as motor vehicle crashes or stalled vehicles upon the movement of vehicles on the regional roadway system. These procedures and processes will promote interdepartmental and interagency collaboration and consistency across the region.

Strategy 2.2(e): Implement and operate coordinated traffic signal systems

Implement and operate coordinated traffic signal systems across jurisdictional lines that integrate transit signal priority and pre-emption techniques for transit and emergency vehicles, respectively. Continue to research and employ innovative traffic signal system management techniques where appropriate.

Strategy 2.2(f): Support the use of congestion pricing and other tolling techniques

Support congestion pricing and other tolling techniques on existing freeways, and implement a tolling component (price-management) on new freeway lane-addition projects, where feasible. Include all impacted communities in tolling decisions, considering issues of social and economic equity, and using surplus revenues for multimodal investment or system preservation. Implement other active demand management, including parking supply and pricing mechanisms, where appropriate.

REGIONAL ACTIONS

- Work with CDOT, RTD, and other regional stakeholders to implement effective TSM&O projects, incident management procedures and processes, transportation demand management initiatives, and other innovative tools and techniques to safely optimize performance.
- Consider legislation that would implement VMT-based fees, pay-as-you-drive insurance, and other pricing strategies that more directly and equitably reflect the cost of vehicle travel to the user.

LOCAL ACTIONS

- Develop and implement access management principles along major streets.
- Monitor and manage transportation systems (including traffic signal systems) in collaboration with neighboring jurisdictions.

OBJECTIVE 2.3: DEVELOP AND MAINTAIN A SAFE AND SECURE TRANSPORTATION SYSTEM

Strategy 2.3(a): Identify and implement safety enhancement projects

Identify and implement safety enhancement projects that analyses show will reduce the likelihood and severity of crashes involving motor vehicles, freight and passenger trains, buses, bicycles, and pedestrians.

Strategy 2.3(b): Develop and implement strategies that enhance security

Develop and implement projects and strategies that enhance the security of all transportation facilities and users, including air and transit passengers, and aid in the efficient movement of people and vehicles during homeland security events.

REGIONAL ACTIONS

- Support legislation aimed at cost-effectively improving the safety of drivers, passengers, pedestrians, and bicyclists.
- Collaborate with public safety stakeholders to assess threats to and vulnerabilities of the transportation system, including consideration of national and regional homeland security initiatives, and establish and implement resolution processes in response.
- Coordinate with federal, state, regional, and local agencies to implement applicable homeland security plans and initiatives.
- Facilitate interagency coordination on safety and homeland security initiatives.

LOCAL ACTIONS

- Accurately monitor and maintain crash and traffic safety data for all transportation modes.
- Implement projects that analyses show will reduce the likelihood and severity of crashes involving motor vehicles, freight and passenger trains, buses, bicycles, and pedestrians.
- Enforce traffic laws and ordinances as they apply to all users of the transportation system.
- Participate in federal, state, and regional initiatives related to safety and homeland security initiatives.

Outcome 3: A transportation system contributing to a better environment and quality of life.

Integrated planning and decision-making for land use, transportation, and the environment will contribute to a better environment and quality of life for the region’s residents. Concentrating new housing, employment, and services near transit and in mixed-use urban centers will provide a broader range of travel options for residents of all ages, incomes, and abilities. Although specific needs will vary by location—all development will be encouraged to incorporate compact development patterns, a mix of land uses, complete streets, direct bicycle/pedestrian connections to transit and multiple land uses, and other features that can help reduce vehicle miles traveled, support aging in place, and enhance the quality of life of the region’s residents. These actions will also help to protect the region’s essential natural resources; strengthen the interconnected network of open space, parks, and trails; and conserve agricultural lands. Minimizing growth in vehicle miles traveled and providing multimodal travel options are also key components to reducing ground level ozone, greenhouse gas emissions, and other pollutants.

OBJECTIVE 3.1: IMPLEMENT EFFICIENT LAND USE AND DEVELOPMENT PATTERNS

Strategy 3.1(a): Maintain and improve efficient transportation access to downtown Denver and other regional employment hubs

Continue to support transportation improvements that enhance access to downtown Denver and other major employment hubs within the region, such as the Denver Tech Center/South I-25 Corridor, Denver Federal Center, Anschutz Medical Campus and the Fitzsimons Life Science District, the Interlocken Business Park, and Boulder/University of Colorado.

Strategy 3.1(b): Support mobility options within urban centers

Provide internal pedestrian, bicycle, and transit connections between common and multiple land uses, and provide more mixed and compact land uses.

Strategy 3.1(c): Focus roadway capacity increases within the urban growth boundary/area

Focus roadway capacity increases and new freeway interchanges primarily in areas within the urban growth boundary/area, in the most critically congested corridors, at key traffic bottlenecks, and along major statewide connections. Link the provision of new capacity to supporting Metro Vision outcomes, and add capacity only after applying demand management strategies and implementing operational efficiencies to first optimize the use of existing capacity.

Strategy 3.1(d): Promote multimodal connectivity

Promote multimodal connectivity in the design of new development and the retrofitting of established communities to facilitate the efficient movement of pedestrians, bicyclists, buses, and motor vehicles within and between centers, corridors, and neighborhoods.

Strategy 3.1(e): Implement transportation improvements that enhance transit-oriented development (TOD) opportunities

Implement targeted bus, other transit, bicycle, pedestrian, and other transportation improvements in locations where transit-oriented development (TOD) already exists or is planned.

Strategy 3.1(f): Consider issues of land use compatibility

Encourage coordinated decision-making to ensure potential issues of compatibility between high intensity uses—such as airport operations, intermodal facilities, or other similar uses—and neighboring land uses can be minimized.

REGIONAL ACTIONS

- Promote integrated land use and transportation planning among state and regional agencies, local governments, and the development community.

LOCAL ACTIONS

- Integrate comprehensive plan and transportation plan updates when feasible to promote efficiency and minimize the potential for future conflicts.
- Adopt land use policies and development regulations to support compact, mixed-use development patterns where appropriate.
- Reserve adequate rights-of-way in newly developing and redeveloping areas for pedestrian, bicycle, transit, and roadway facilities.

OBJECTIVE 3.2: EXPAND TRANSPORTATION SERVICES AND ACCESS THAT ADDRESS THE NEEDS OF PERSONS WITH MOBILITY OBSTACLES OR IMPAIRMENTS

Strategy 3.2(a): Provide local and regional transportation services that improve personal mobility, employment access, independence, and health for those with mobility obstacles or impairments.

Provide transportation services, such as fixed route and specialized transit, ridesharing, travel training, and other services that improve personal mobility, employment access, independence, and health for those with mobility obstacles or impairments (mobility-limited populations).

Strategy 3.2(b): Proactively consider the transportation needs of mobility-limited populations in land use planning and development.

Proactively consider the transportation needs of mobility-limited populations in land use planning and development.

Strategy 3.2(c): Consider the needs of older adults and mobility-limited populations in upgrading and redeveloping existing transportation facilities.

Ensure that traffic engineering and roadway redevelopment activities consider the needs of mobility-limited populations who are traveling on foot and/or with the use of mobility devices.

REGIONAL ACTIONS

- Routinely evaluate and monitor the mobility needs of persons with mobility obstacles or impairments.
- Coordinate information and services among regional and multi-jurisdiction providers of transportation services.
- Continually assess and fill service and access gaps by streamlining eligibility processes, encouraging carpooling, assisting limited English-proficient populations, and other actions.
- Consider the transportation needs of mobility-limited populations in local and regional transportation and land use planning and decision-making.
- Continually improve transportation services to reduce trip times and increase access for low-income and mobility-limited populations to access employment and vital human services.

LOCAL ACTIONS

- Facilitate connections between populations in need of transportation assistance and service providers.
- Develop transportation service options to address mobility needs within communities.
- Include criteria for evaluating transportation needs of mobility-limited populations in new developments serving or adjacent to such populations.
- Upgrade existing facilities (sidewalks, signal timing, bus stops/shelters) to promote transit accessibility for older adults and mobility-limited populations.
- Encourage local governments to use DRCOG's Boomer Bond assessment tool to help their communities address the needs of the region's rapidly increasing aging population.

OBJECTIVE 3.3: DEVELOP AND MAINTAIN A TRANSPORTATION SYSTEM THAT PROTECTS AND ENHANCES AIR QUALITY, ENERGY EFFICIENCY, AND THE OVERALL ENVIRONMENT

Strategy 3.3(a): Implement Travel Demand Management (TDM) services and strategies

Implement Travel Demand Management (TDM) services and strategies, including selective incentives and targeted promotions that will reduce vehicle miles traveled and the demand for single occupant motor vehicle trips, and improve personal mobility and regional air quality.

Strategy 3.3(b): Provide efficient, low-polluting alternatives to single occupant vehicles

Provide a wide variety of transportation facilities, including rapid transit, bus service, high-occupancy vehicle (HOV) lanes, and bicycle and pedestrian facilities, that are more energy efficient and less polluting in aggregate than single occupant vehicles.

Strategy 3.3(c): Ensure traditionally underserved populations receive a proportionate share of transportation improvements

Ensure that minority, low-income, and older adult populations, as well as individuals with disabilities are not disproportionately affected by negative impacts associated with transportation projects and facilities.

Strategy 3.3(d): Reduce potential environmental impacts of roadway construction and maintenance activities

Promote improvements in roadway construction and street maintenance activities to reduce dust and particulates; decrease associated energy consumption and pollutant emissions; and minimize and mitigate polluted water running off roadways.

Strategy 3.3(e): Encourage the use of alternative fuel vehicles and infrastructure

Encourage use of alternative fuel sources and clean-burning technology and provision of supporting infrastructure and services for alternative fuels that lead to lower levels of criteria pollutants and greenhouse gas emissions.

Strategy 3.3(f): Support legislation that increases fuel economy standards and incentives

Support legislation that would increase fuel economy beyond current Federal Corporate Average Fuel Economy (CAFE) standards, establish fuel economy standards for heavy duty vehicles, incentivize purchasing high fuel economy or alternative fuel vehicles, and provide incentives for accelerated retirement of inefficient and/or high-polluting personal, commercial and fleet vehicles beyond repair.

REGIONAL ACTIONS

- Manage a regional TDM program consisting of outreach, promotion, and marketing activities to shift commute choices to non-single occupant vehicle modes. Examples include Bike to Work Day and “Stop Being an SOV” ad campaigns.
- Facilitate and provide services for ride-sharing (e.g., carpools and vanpools).
- Prioritize transportation system improvements that minimize transportation-related fuel consumption and air pollutant and greenhouse gas emissions.
- Provide first and last mile bicycle and pedestrian facilities and connections to transit, such as sidewalks and bicycle facilities; and bikesharing, wayfinding, bicycle parking and shelters, and carsharing at transit stations.
- Monitor and coordinate with new technological applications for sharing rides and reducing single occupant vehicle trips and vehicle miles traveled.
- Provide funding, tools, educational forums, and resources to jurisdictions and TDM stakeholders on best practices.
- Support actions or regulations that reduce engine idling.
- Cooperatively develop mitigation strategies with affected regulatory or resource agencies in instances of unavoidable environmental impacts.
- Ensure that benefits are proportional and negative impacts are not disproportional to vulnerable populations (e.g., environmental justice).
- Develop and invest in regional alternative fueling station infrastructure plans focused on fuels that lead to the greatest reductions in air pollution and greenhouse gas emissions.
- Facilitate large-scale fleet conversions by local governments and shared fleets around the region.

LOCAL ACTIONS

- Conduct local activities to educate and promote the use of TDM strategies and services.
- Implement parking supply and pricing mechanisms, such as shared, unbundled, managed, and priced parking in urban centers and other major activity nodes to incentivize walking, bicycling, carpooling and transit use.
- Include alternative fuel infrastructure within transportation projects as feasible.
- Develop supporting infrastructure and local regulations, policies, and ordinances regarding alternative fuels, fleet conversions, environmental preservation, and related topics.

OUTCOMES/OBJECTIVES	FOR DISCUSSION	
	POSSIBLE MEASURES	POSSIBLE 2040 TARGETS
	<ul style="list-style-type: none"> • 1.2d: Annual RTD transit (bus and rail) boardings • 1.2e: Annual RTD Access-a-Ride boardings • 1.2f: RTD transit on-time performance 	<ul style="list-style-type: none"> • 1.2d: Increase to 200 million annual RTD bus and rail boardings (est. 102 million in 2013)
<p>Objective 1.3: Provide robust bicycle and pedestrian accessibility throughout the region.</p>	<ul style="list-style-type: none"> • 1.3a: Bicycle and pedestrian mode share to work • 1.3b: Percent of population and employment within ½ mile of an off-street or on-road bike lane bicycle facility • 1.3c: Number of pedestrian and/or bicycle overpasses or underpasses of RRS roadways, major waterways, or railroads • 1.3d: Number of bikeshare stations and bicycles • 1.3e: Miles of off-street multi-use trails 	<ul style="list-style-type: none"> • 1.3e: 1,500 miles of off-street multi-use trails
<p>Objective 1.4: Provide efficient interconnections of the transportation system within the region and to the rest of the state and nation.</p>	<ul style="list-style-type: none"> • 1.4a: Number of protected bicycle parking spaces at transit stations/park-and-ride lots 	
<p>Outcome 2. A safe, dependable, and efficiently operated transportation system</p>		
<p>Objective 2.1: Assure existing and future transportation facilities are well-maintained.</p>	<ul style="list-style-type: none"> • 2.1a: Bridge structural ratings • 2.1b: CDOT roadways: Drivability Life (high or moderate) • 2.1c: Other arterials: pavement condition (fair/good) 	<ul style="list-style-type: none"> • 2.1b: Maintain at least 80% Drivability Life on CDOT system
<p>Objective 2.2: Implement measures to actively operate, manage, and integrate systems to optimize performance.</p>	<ul style="list-style-type: none"> • 2.2a: SOV mode share to work (census) ** Foundational MV Measure • 2.2b: SOV mode share of all trips (travel model) 	<ul style="list-style-type: none"> • 2.2a: Reduce SOV mode share to work to 65% (= increase non-SOV mode share to work to 35%)

OUTCOMES/OBJECTIVES	FOR DISCUSSION	
	POSSIBLE MEASURES	POSSIBLE 2040 TARGETS
	<ul style="list-style-type: none"> • 2.2c: Annual avg. weekday VMT • 2.2d: Annual avg. weekday VMT per capita ** Foundational MV Measure • 2.2e: VMT percent of total PMT 	<ul style="list-style-type: none"> • 2.2d: Reduce VMT per capita by 10% from 2010 level
<p>Objective 2.3: Develop and maintain a safe and secure transportation system.</p>	<ul style="list-style-type: none"> • 2.3a: Annual # fatal crashes and fatalities • 2.3b: Rate of fatal crashes per VMT • 2.3c: Rate of fatalities per 100,000 Population ** Foundational MV Measure (Health Element also) • 2.3d: Annual # serious injury crashes and injuries • 2.3e: Rate of serious injury crashes per VMT • 2.3f: Rate per of serious injuries per population • 2.3g: Annual number of bicyclist and pedestrian fatalities & serious injuries 	<ul style="list-style-type: none"> • 2.3a: Reduce to less than 100 fatalities per year (166 in 2010) • 2.3c: Decrease rate of fatalities per 100,000 population to 2.3 (est. 5.7 in 2010) • 2.3g: Reduce to less than 1,000 bicyclist + pedestrian fatalities & serious injuries (est. 1,300 in 2010)

Outcome 3. A transportation system contributing to a better environment and quality of life		
Objective 3.1: Implement efficient land use and development patterns.	<ul style="list-style-type: none"> • 3.1a: Average weekday vehicle trip length 	<ul style="list-style-type: none"> •
Objective 3.2: Expand transportation services and access that address the needs of persons with mobility obstacles or impairments.	<ul style="list-style-type: none"> • 3.2a: Number of demand response trips provided by non-RTD public transportation service providers • 3.2b: Share of population in EJ areas with good transit-job accessibility • 3.2c: Share of bicycle facilities in low-income communities/ neighborhoods 	<ul style="list-style-type: none"> • 3.2a: 1.2 million annual trips (600k in 2013)
Objective 3.3: Develop and maintain a transportation system that protects and enhances air quality, energy efficiency, and the overall environment.	<ul style="list-style-type: none"> • 3.3a: Transportation GHG Emissions (total annual) (and per capita) ** Foundational MV Measure • 3.3b: Petroleum Fuel Burned (total annual) (and per capita) • 3.3c: Number of CNG and Electric vehicles (also Environment element) 	<ul style="list-style-type: none"> • 3.3a: Reduce Transportation GHG Emissions per capita by 60% from the 2010 level