# **Denver Regional Council of Governments**

# Transportation Demand Management Strategic Plan

December 2023



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# Acknowledgments

# **Denver Regional Council of Governments**

Emily Lindsey Kalie Fallon Steve Erikson Nisha Mokshagundam Ron Papsdorf

# **Consultant team**

Jonny Rotheram, UrbanTrans Matthew Kaufman, UrbanTrans Chris Canon, UrbanTrans Melanie Truhn, Nelson\Nygaard Tien-Tien Chan, Nelson\Nygaard

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# Introduction

Denver Regional Council of Governments staff worked The Transportation Demand Management Toolkit is a closely and extensively with stakeholders and partner companion document to this plan. The toolkit describes agencies from across the region to develop the 28 transportation demand management strategies in Transportation Demand Management Strategic Plan. detail and includes resources and case studies where The strategic plan addresses major transportation issues while also considering the evolving transportation needs governments, partner agencies and transportation of people throughout the Denver region. It will serve as demand management service providers in the a regional roadmap to guide the council's transportation Denver region. The strategies in the toolkit are listed on demand management work through 2029. the next page.

improve efficiency, mobility and safety for travelers of all ages,



available. The toolkit will serve as a resource for member





# What is transportation demand management?

Transportation demand management refers to a suite of strategies, including transportation services, infrastructure, policies, programs and educational and marketing campaigns, that help people use the transportation system more efficiently.

Transportation demand management implementation often includes engaging with decisionmakers to support civic goals around greenhouse gas reduction targets, congestion reduction and access to transportation options.

Transportation demand management-related strategies help residents and visitors alike get the most out of transportation infrastructure and services by making lower-cost, higher-efficiency transportation options accessible, comfortable and easy to use.

# What transportation demand management strategies does the Transportation Demand Management Toolkit include?

#### **Mobility services**

- Transit service
- Microtransit
- Shared micromobility
- Car share
- · Carpool and vanpool
- Schoolpool

#### Mobility technology

- · Mobility as a service
- Traveler information

#### **Transportation infrastructure**

- Mobility hubs
- Active transportation facilities
- Active transportation supportive infrastructure
- Transit supportive infrastructure

#### **Parking management**

- Curbside management
- Parking management policies

#### **Incentives for mode shift**

- Subsidies, rebates and rewards
- EcoPass District creation



#### **Roadway management**

- Roadway usage fees
- Vehicle fees

#### **Public policies**

- New development
- Zoning policies

#### **Employer programs**

- Commute trip reduction programs
- Flexible work

#### Education, outreach and marketing

- Transportation management association establishment and partnerships
- Travel training and education programs
- Promotion of Regional Transportation District discount passes
- Localized transportation information and kits
- Transit access marketing plan
- Marketing commuter tax benefits
- Promotional events

# Regional planning context

Strategic plan purpose

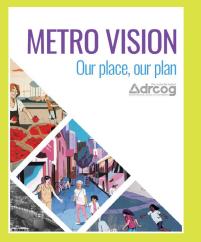
- Regional transportation demand management programs and services
- Transportation demand management partners in the Denver region

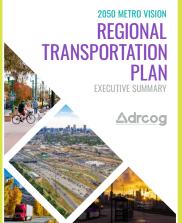
The Denver Regional Council of Governments is a quasigovernmental organization that was established to help its 58 member cities, towns and counties work together in the areas of transportation and mobility, growth and development, and aging and disability resources. As the metropolitan planning organization for the Denver region, the council is responsible for major transportation planning products and services.

The guiding vision for the council is described in Metro Vision, a plan for the region's continued growth and development. Metro Vision is a long-range plan to protect and enhance the quality of live in the region by addressing current and future regional challenges. The first Metro Vision plan was adopted by the Denver Regional Council of Governments' Board of Directors in 1997 and has since been revised regularly to adapt to changes in the region. The five themes of Metro Vision are place, mobility, environment, livability and vitality.

The 2050 Metro Vision Regional Transportation Plan guides investment in transportation projects and programs that support the plan's vision. The 2050 Metro Vision Regional Transportation Plan was adopted in 2021.

In addition to the 2050 Metro Vision Regional Transportation Plan, the council prepares and adopts





several thematic plans. One of those plans closely related to transportation demand management goals is the Denver Regional Active Transportation Plan. The Active Transportation Plan envisions a safe, comfortable and connected network, and highlights opportunities and implementation strategies to improve active transportation across the Denver region. The Board of Directors unanimously adopted the plan in 2019.

Furthermore, both the federal government and Colorado state government are working toward significant reductions in greenhouse gas emissions. In 2021, Colorado's Energy Office published its initial greenhouse gas emissions roadmap. The roadmap set goals to cut the state's emissions by 26% by 2025, 50% by 2030 and 90% by 2050, compared to the levels in 2005. However, in 2022, the U.S. Environmental Protection Agency downgraded the northern Front Range area, including the Denver metro area, from a "serious" to a "severe" violator of federal ozone standards under the Clean Air Act. The reclassification to a "severe" violator triggers additional Environmental Protection Agencymandated rules, such as more restrictive pollution permits.Transportation demand management is seen as a key strategy to help lower regional greenhouse gas emissions and enhance local air quality.

> Denver Regional Active Fransportati

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Cover pages of 2050 Metro Vision (left), 2050 Metro Vision Regional Transportation Plan (middle) and 2019 Denver **Regional Active** Transportation Plan (right).

# Strategic plan purpose

The Transportation Demand Management Strategic Plan seeks to provide the Denver region with a framework to improve efficiency, mobility and safety for travelers of all ages, incomes and abilities by identifying actions that expand sustainable, multimodal travel choices, reduce traffic congestion and improve air guality. The strategic planning process resulted in two final deliverables:

- · Strategic plan recommendations: These actions are intended for regional implementation led by the Denver Regional Council of Governments to advance its transportation demand management programs and related work.
- Transportation Demand Management Toolkit: The toolkit is a standalone resource intended to be a guide for practitioners to understand the full range of transportation demand management strategies that can be implemented in various contexts throughout the region.

One of the first steps in the planning process was for the stakeholder steering committee to identify common, region-wide goals in which transportation demand management strategies can support. The identified goals then guided the development of the strategic plan recommendations.

The goals were developed through a robust stakeholder engagement process. The stakeholder steering committee included staff from the Colorado Department of Transportation, Colorado Department of Public Health and Environment, the Regional Transportation District, the Regional Air Quality Council, Denver International Airport, transportation management associations and member governments. The stakeholder engagement process included extensive workshops, interviews and data analysis

The four regional strategic plan goals are:



# **Regional transportation demand** management programs and services

The Denver Regional Council of Governments provides a range of transportation demand management services, MyWayToGo.org is a free, online trip planning and programs and planning products. Through the Way tracking tool available to employers and individuals. to Go program, the organization provides regionwide My Way To Go provides users with eco-friendly marketing and education to promote services such as transportation options and routes. The gamified platform Schoolpool, Vanpool and Guaranteed Ride Home. Way incentivizes people to drive less through monthly to Go also conducts extensive community and employer challenges, and gives prizes for tracking non-drive alone outreach, and works with large employers in the trips. My Way to Go also provides carpool and vanpool region to establish employee trip reduction plans. The ride-matching. Transportation Improvement Program, administered by the council, sets aside funding for transportation demand The platform's employer hub facilitates mode shift management education and outreach. The Way to Go across an organization by offering surveys and trip reduction templates along with tracking and reporting program oversees this set-aside.

The council's Active and Emerging Mobility Program oversees transportation demand management planning and provides strategy and policy guidance to member governments. The program is also responsible for shared micromobility data collection, bike and pedestrian counts, the active modes crash report, working groups and building transportation demand management partnerships.

An overview of the council's transportation demand management programs and services is available on pages 11 through 15.

# Way to Go Partnership

Way to Go is a regional partnership between the Denver Regional Council of Governments and eight transportation management associations. Each transportation management association works within a specific boundary within the DRCOG region to develop and implement transportation demand management strategies. (see page 15). The DRCOG Way to Go team offers transportation demand management services to areas within the Denver region that are not covered by a transportation management association. Nearly all of Way to Go's services are free or low cost.

# My Way to Go

functionality. The platform is available online and through a smartphone app.

# **Employer Outreach**

Way to Go's commute consultants work with employers in the Denver region to develop custom trip reduction plans. Commute consultants evaluate the best non-drive alone transportation options for employees based on factors such as residence and worksite locations, number of employees and average commute distance. Commute consultants can also advise employers on worksite strategies to make multimodal commuting easier for their employees, such as providing preferential parking for carpool and vanpool, offering secure bike parking and more. Way to Go offers commute consultation free of charge.

# **Colorado Clean Commute**

Clean Commute is a Way to Go campaign that helps employers take advantage of the Alternative Transportation Options Tax Credit (Colorado Senate Bill 22-1026). The bill, effective for 2023 and 2024, allows employers who invest in eco-friendly commute options for staff to claim a tax credit for 50% of costs incurred. Employers who work with Way to Go to develop an employee trip reduction plan are then "Colorado Clean Commute Approved". Through Colorado Senate Bill 22-1026, employers who offer employees alternative commute options are then eligible for tax credits. Colorado Clean Commute supports employers in taking advantage of these tax credits. Working with a Way to Go commute consultant to become a Colorado Clean Commute-approved organization is free.

# Carpool

The MyWayToGo.org platform allows travelers to directly connect with people looking for carpool matches. Users can set their travel times and origin and destination locations to find commuters with similar routes. Users can choose whether they would prefer to be a driver, passenger or either. Using the MyWayToGo.org platform to find a carpool match is free.

# Vanpool

The Way to Go program offers vanpool services for commuters traveling longer distances to work. Vanpools may be formed by employers to provide service to their employees, or individuals may contact Way to Go and be matched with an existing vanpool serving commuters in the same area. There are a variety of vehicle types and ADA compliant vans can be requested. Way to Go provides the vehicle, insurance, fuel and maintenance. Commuters are responsible for driving the van and coordinating pick-ups and drop offs. The Vanpool program is for adults only and a monthly fee applies. Depending on the location of the route, vanpools are eligible for subsidies which reduce the cost to significant savings over drive-alone commutes.

# Schoolpool

Schoolpool is primarily a ride-matching program that connects thousands of Denver-region families with students attending the same or nearby schools and neighborhoods. Most Schoolpool families carpool, but the program also matches students who wish to walk, bike or take transit together. Participating schools can sign up for the program with Way to Go, and parents can find matches through theMyWayToGo.org platform. Each participating school receives a unique link for registration. Schools can enroll in Schoolpool at no charge.

# **Guaranteed Ride Home**

Denver Regional Council of Governments offers the Guaranteed Ride Home service to organizations whose employees use transportation options such as carpool, vanpool, transit, biking or other non-solo driving modes to get to work. The program assures that in case of emergency including illness, a family emergency or unanticipated overtime, the employee can get home from their worksite by taking a free taxi or ride hail service. Guaranteed Ride Home can be purchased by employers at a low cost per employee.

# **Telework and flexible schedules**

Way to Go can help employers formalize a telework or flexible work policy by providing implementation checklists, webinar scripts and best practices. Way to Go also provides guidance on flexible work programs to help commuters avoid being in traffic during peak hours by recommending strategies including flex time or compressed work weeks.

# Go-Tober

In October, Way to Go invites employers and individuals to participate in the Go-Tober challenge, rewarding organizations that make it easier for their staff to use alternative transportation options. Individuals who track trips will also be entered into a drawing to win prizes. Employers and commuters can participate in the challenge at no cost.

# Bike to Work Dav

Way to Go organizes one of the largest Bike to Work Day events in the nation. The Denver region's Bike to Work Day occurs the fourth Wednesday every June, encouraging tens of thousands of residents to ditch their cars and ride their bikes instead. Way to Go and its partners conduct extensive outreach and engagement across the region, inviting organizations and employers to host hundreds of breakfast and bike-home stations, and sponsor the event through cash or in-kind donations. Employers are also encouraged to join the business challenge to support their staff's participation. Riders and employers can participate in Bike to Work Day at no cost.

# **Transportation Demand Management** Set-Aside

As the region's metropolitan planning organization, Denver Regional Council of Governments is federally required to establish a Transportation Improvement Program. This program identifies all regionally significant transportation projects over a four-year period. As a part of the Transportation Improvement Program, set-aside funds are created for specific project types. The Transportation Demand Management Set-Aside is a call for projects in which organizations who are eligible to receive funds may submit proposals for research, education, marketing and outreach projects that reduce traffic congestion and improve air quality. Applications are evaluated by a review panel and funds are distributed to the highest-scoring projects. The fiscal year 2024–2027 Transportation Demand Management Set-Aside includes \$2 million in federal funds over the four-year period.

# Planning

The Active and Emerging Mobility Program oversees transportation demand management and active transportation planning. This program is responsible for the development and implementation of the Active Transportation Plan and the Transportation Demand

Management Strategic Plan, both of which require robust stakeholder and member government engagement. The program also provides support to member governments looking to develop or update local transportation master plans and transportation demand management plans.

# **Policy support**

The Active and Emerging Mobility Program provides policy support to local governments looking to implement transportation demand management strategies within their jurisdictions. The Colorado Department of Transportation's 1601 Policy Directive requires transportation demand management strategies to be implemented to reduce projected trips when new interchanges are being constructed and existing interchanges are modified. With the passing of Policy Directive 1601, the Active and Emerging Mobility Program and Way to Go have supported local governments with planning, policy development and implementation.

# **Shared Mobility Data Collaborative**

The Active and Emerging Mobility Program oversees the shared mobility data collaborative, a partnership between the Denver Regional Council of Governments and several regional transportation partners, including the Regional Transportation District, the Colorado Department of Transportation and local member governments. The collaborative uses Ride Report to collect and analyze data on shared mobility modes within the region, including e-bike and e-scooter share as well as car share programs. Data analysis of these modes provides local member governments a better understanding of travel patterns within their jurisdictions, policy guidance and support for thoughtful expansion of programs. There is a small fee for member governments to participate.

# **Transportation demand management** partners in the Denver region

The Denver region has a long history of transportation demand management-supportive programs, policies and partnerships. As the region's metropolitan planning organization, the Denver Regional Council of Governments coordinates large-scale transportation demand management funding and efforts in the Denver region alongside partners at the federal, state, regional and local levels.

# State and regional partners



#### **Colorado Department** of Transportation

The Colorado Department of Transportation has a dedicated transportation demand management program in its Office of Innovative Mobility, which provides various grant opportunities for transportation demand management-related programs and projects throughout the state. The Colorado Department of Transportation published the Statewide Transportation Demand Management Plan Phase 1 Report in 2019, which outlines core transportation demand management strategies and Colorado transportation options. Furthermore, the Colorado Department of Transportation's Policy Directive 1601 requires a transportation demand management plan for new interchanges or modifications to existing interchanges.



#### **Regional Transportation District**

The Regional Transportation District provides public transit services throughout the region. Services include bus, light rail and paratransit. The Regional Transportation District's projects also include a partnership program with local governments, various studies regarding bus rapid transit and rail as well as transit-oriented development planning. Additionally, the Regional Transportation District published the First and Last Mile Strategic Plan in 2019, which includes transportation demand management strategies among its tools to improve connections to transit.



### **Regional Air Quality Council**

The Regional Air Quality Council provides support and resources for air quality programs throughout the region. In 2019, the Governor of Colorado designated the Regional Air Quality Council as the lead agency for air quality planning within the Denver Metropolitan Area and North Front Range regions. The Regional Air Quality Council works with state, local, industry and environmental organizations to ensure compliance with federal air quality standards, develop clean air plans and control strategies, as well as track and model air pollutants, primarily ozone. The Regional Air Quality Council also provides educational programs and toolkits to employers, local governments and residents through various marketing initiatives.

# Nonprofits

Many transportation nonprofits support and implement transportation demand management strategies throughout the region, including:





**Via Mobility Services** 

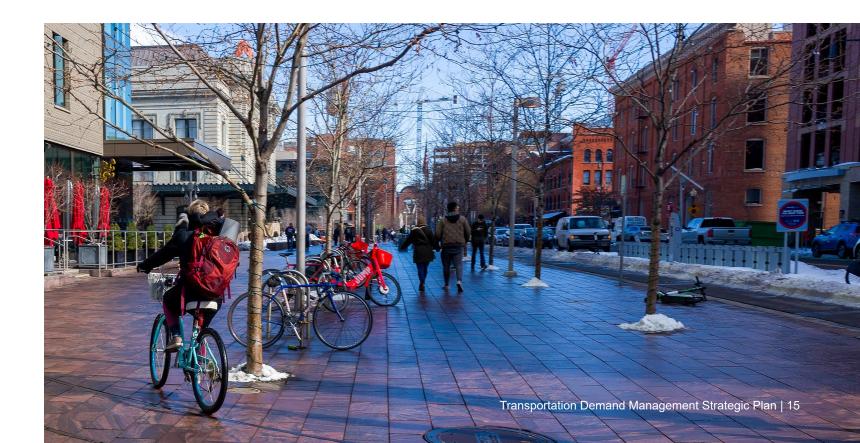
**Bicycle Colorado and** 



**Community Cycles** 



**Colorado CarShare** 







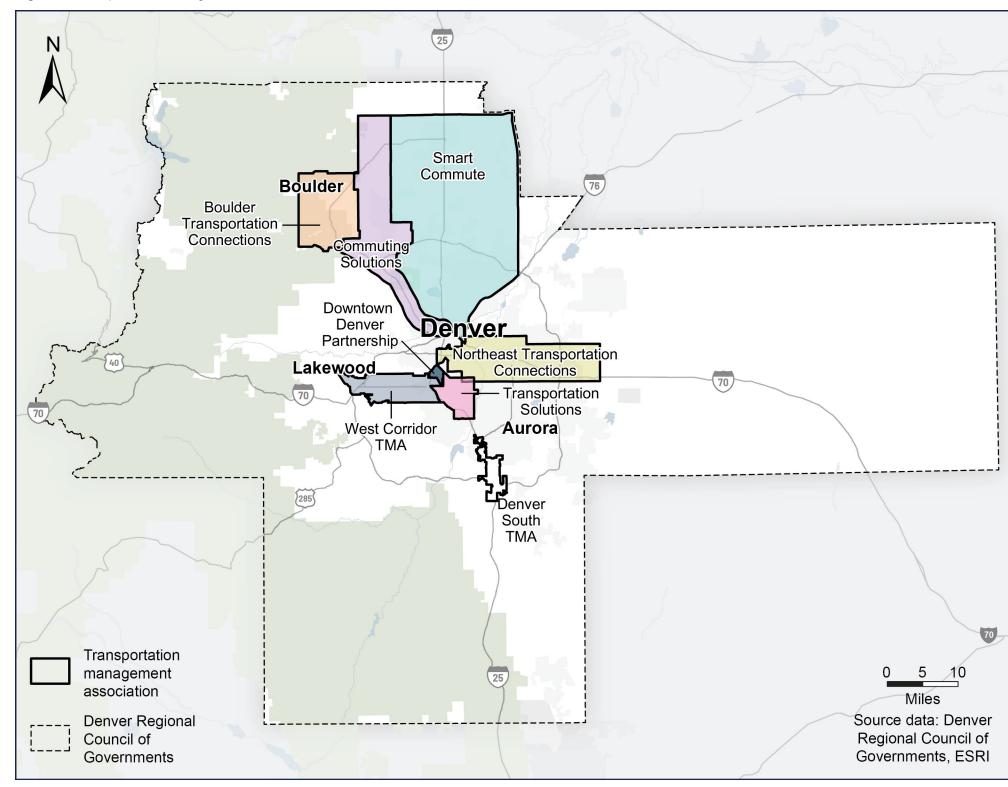


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**Denver Regional Mobility** and Access Council

Figure 3 Transportation management association service areas



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# Transportation management associations

Transportation management associations are responsible for implementing transportation demand management strategies, programs and services within their subregional service areas of the Denver region. Transportation management associations are often established in areas where certain criteria are met, such as density of population and employment, traffic congestion or poor air quality and when there is support from local leaders and funding availability. In the Denver region, transportation management associations have emerged organically, over time. Figure 3 depicts the transportation management association service areas in the Denver region.

All transportation management associations belong to the council's Way to Go partnership and meet regularly to share information and collaborate. Partner transportation management associations receive funding through the Transportation Improvement Program Transportation Demand Management Set-Aside for use in localized outreach and marketing. Three transportation management associations in the Denver region- Denver South Transportation Management Association, Downtown Denver Partnership and Boulder Transportation Connections-are part of local economic development partnerships or chambers of commerce.

equity focused programs.







These agencies often work closely with local governments to implement transportation demand management strategies and advocate for mobility improvement projects, such as bike and pedestrian facilities, microtransit and

# Local governments

Local governments throughout the Denver region play an essential role when it comes to implementing and supporting transportation demand management strategies. Local governments are responsible for working on various initiatives from land use and zoning to transportation services and infrastructure. In many cases, transportation demand management strategies are identified in local transportation master plans, comprehensive plans and active transportation plans.

#### Zoning and land use

Many local governments implement transportation demand management strategies related to land use and zoning outlined in their transportation plans.

For example, the City of Boulder established the Boulder Junction **Transportation Demand Management** District, a mixed-use, transit-oriented development area guided by Boulder's Transit Village Area Plan and two overlaying general improvement districts. Not only is the development right next to the Regional Transportation District's Boulder Junction at Depot Square Station, but each resident and employee of Boulder Junction receives benefits such as a Regional Transportation District EcoPass, B-Cycle membership and car share membership. Other communities, including Boulder, Broomfield, Denver and Longmont, have begun managing local parking ordinances to encourage mode shift by eliminating parking minimums or setting maximums or both.

#### Services

Local governments also play a role in providing transportation demand management services.

Several communities, including Boulder, Denver, Lafayette, Lone Tree and Golden have established microtransit services to connect travelers to community destinations, transit stations and recreational opportunities. These services increase mobility for residents and visitors while decreasing traffic congestion.

Additionally, communities such as Arvada, Boulder, Brighton, Denver and Thorton, have piloted and established shared micromobility programs. Shared micromobility programs include bikes, e-bikes and e-scooters. These programs serve as important connectors to transit services and other destinations. Additionally, many local governments implement transportation demand management-related policies and ordinances.

**Policies and ordinances** 

For example, the City and County of Denver has established transportation demand management requirements for new developments that meet certain criteria. Developers can choose from a suite of transportation demand management strategies and must implement a certain number of strategies depending on the size, type and location of the development.

Additional case studies of locally led transportation demand management projects in the Denver region are highlighted in Denver Regional Council of Governments Transportation Demand Management Toolkit.



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During the planning process, the project team and stakeholders identified major transportation and development factors in the Denver region where the implementation of transportation demand management strategies can effect change. This chapter discusses the current state of those regional trends. These trends and challenges, and analyses in chapter 4, were used to identify the strategic recommendations laid out in chapter 5.



Growth in the Denver region

Anticipated growth in population

and employment through 2050

will affect land use patterns and



#### **Traffic congestion**

quality of life.



transportation options.



#### Transit access

Transportation demand management strategies can support awareness and public transit use, making it a more accessible and convenient choice for all residents and visitors to the Denver region.

pandemic from home.

Regional transportation trends

- Growth in the Denver region
- Traffic congestion
- Safety and regional Vision Zero
- Transit access
- Effects of the COVID-19 pandemic
- Innovation and transportation technology



With more people traveling in and around the region, the resulting traffic congestion will lead to increased air pollution, more time spent in traffic and decreased



#### Safety and regional Vision Zero

Safety is a major consideration when choosing between different modes of transportation, especially as an alarming number of serious injury and fatal crashes involve pedestrians and bicyclists.

#### Effects of the COVID-19

The COVID-19 pandemic changed the way people travel and led to an increased number of people working



#### Innovation and transportation technology

Technology has enabled transportation services like mobility on demand, including services such as ride-hailing, microtransit, ridesharing and shared micromobility, all of which may improve access to transportation options if deployed strategically.



# **Growth in the Denver region**

Rapid population and employment growth have contributed to changes in how residents and visitors alike travel throughout the Denver region. The Colorado Department of Local Affairs State Demography Office projects that the Denver region will add more than a million residents between 2020 and 2050. During that time, population, households and employment are projected to increase between 31% to 38%, as illustrated in Figure 4. The continued population growth in the region will affect future travel time, choices and patterns across all travel modes as an increase in residents will create more trips..

37%, while transit trips are projected to increase by 58%. Bicycling and pedestrian trips are expected to increase by 27% and 39% respectively. Moreover, total person trips, which also include other travel measures such as shared-ride passenger and school bus trips, are expected to increase by 37%.

With an increase in total person trips and drive-alone trips, transportation demand management strategies will become even more important to reduce congestion, improve air quality and increase mobility, efficiency and safety for all travelers in the region.

By 2050, the council's travel model estimates that average weekday drive-alone trips are projected to increase by

#### Figure 4 Changes in regionwide travel measures 2020-2050

Modeled system measures: Demographics — weekday for the Denver region	2020 estimate	2050 forecast	Percent change
Population	3,376,700	4,428,000	31%
Households	1,358,200	1,870,800	38%
Employment	2,160,400	2,964,700	37%

Modeled system measures: Person trips — weekday for the Denver region	2020 estimate	2050 forecast	Percent change
Total drive alone trips	7,392,200	10,120,200	37%
Total transit trips	264,000	417,600	58%
Bicycling trips	207,400	264,300	27%
Pedestrian trips	1,242,200	1,723,800	39%
Total person trips Includes other person trip types not listed above, see source for more information	15,323,700	20,949,500	37%

Source: 2050 Metro Vision Regional Transportation Plan, Appendix E: Denver Regional Council of Governments focus travel model: base year is 2020; model year is 2050; trips rounded to nearest hundred.

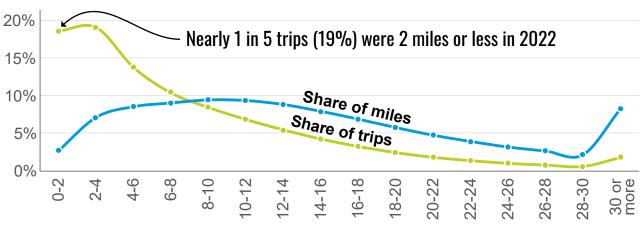
# **Traffic congestion**

The regional transportation system requires extensive than longer drive-alone trips. At the same time, only planning, operations and maintenance to keep people 7% of all trips account for a stunning 25% of all vehicle and goods moving in and around the region. Each year, miles traveled; each of these trips is estimated to be 20 the council's staff uses the Activity Based Model to miles or more. This presents an opportunity to convert estimate changes to vehicle miles traveled in the Denver longer distance drive-alone trips to transit, carpool or region in its Annual Report on Traffic Congestion. In vanpool options. 2021 there were an estimated 82.5 million average daily A variety of transportation demand management vehicles miles traveled, which is approximately 3% less than in 2019, prior to the COVID-19 pandemic. Traffic and other marketing initiatives such as commute volumes on most of the roadways in the Denver region increased in 2021, as compared with 2020, but only to driving alone; these efforts typically focus on 8 a.m. returned to 2019 levels at some locations.

Among the over 15 million trips each day in the Denver region, the council's staff estimates that 45% of trips are fewer than 3 miles and 19% are less than 1 mile. When looking only at drive-alone trips in the region, 19% are less than 2 miles. Over 1 million drive-alone trips of two miles or less are made each day in the Denver region. Figure 5 shows the percent of drive-alone trips by number and distance.

Short trips present a unique opportunity to focus transportation demand management strategies as shorter drive-alone trips tend to be replaced easier with active modes such as walking, bicycling and scootering

Figure 5 Drive alone trips by number and length



strategies directly address traffic congestion. Educational challenges can encourage people to consider alternatives and 5 p.m. commuters to relieve traffic congestion during morning and afternoon peak travel times. Other strategies that address traffic congestion include increasing investment in active transportation infrastructure, implementing local transportation demand management policies and ordinances and improving roadway management and operations. Reduced travel demand, especially on congested roadways at peak periods, will result in fewer greenhouse gas emissions and improved air quality. Reduced congestion also has benefits related to Metro Vision outcomes associated with public health and quality of life, by promoting healthier communities and a cleaner natural environment.

#### Trip distance (miles)

Source: Denver Regional Council of Governments' Focus activity-based trip model, 2022

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# Safety and regional Vision Zero

In 2020, the Denver Regional Council of Governments adopted the regional Taking Action on Regional Vision Zero plan, which aims to completely eliminate transportation-related deaths and serious injuries in the Denver region's transportation system. The council's staff analyzed crash data as part of the plan development process and identified a high injury network made up of 9% of all roads in the Denver region where 75% of fatal and serious-injury crashes have occurred.

Traffic deaths and serious injuries are preventable. By establishing a safe systems approach when designing and building infrastructure, the Denver region can improve safety for all travelers. Infrastructure investments, coupled with education and outreach campaigns, can decrease the number of vehicles on the road and educate drivers about road safety. Transportation demand management strategies reduce the reliance on single occupant vehicles, thereby reducing the number of vehicles on the road. Riding transit is significantly safer than driving alone, thus increasing transit options, reliability, frequency

and ridership supports both transportation demand management and Regional Vision Zero.

Reaching Vision Zero is essential for planners to consider when identifying appropriate transportation demand management strategies as the level of perceived safety by a traveler serves as a major decision factor when considering alternatives driving alone. According to a survey conducted as part of the region's Active Transportation Plan development process, 59% of the Denver region's residents have expressed interest in biking but have reservations due to safety concerns. Individuals who are "interested but concerned" represent an opportunity for potential mode shift that hinge upon increasing the safety and comfort of the transportation network. While the region has invested in over 2,200 miles of off-street bicycle and pedestrian facilities such as shared-use paths and sidepaths, the region must continue to invest in building out high-comfort active transportation infrastructure as prioritized in the region's Active Transportation Plan.

Figure 6 Percent of fatal and serious-injury crashes by roadway network



Source: Taking Action on Regional Vision Zero (2020)



travel patterns. The plan proposes alignment and Public transit in the Denver region consists mainly frequency alterations to several transit services to meet light rail and microtransit. The Regional Transportation District, Denver Regional Council of Governments, the immediate service needs of the region. Colorado Department of Transportation and local In addition, the Denver Regional Council of governments identify, prioritize and plan for such Governments identifies regionally significant project and services. Then, the Regional Transportation District, program investment priorities in the 2050 Metro Vision the Colorado Department of Transportation and local Regional Transportation Plan. Investment priorities governments provide the service, operations and for transit projects range from corridor planning and maintenance. The Regional Transportation District multimodal improvements to bus rapid transit network provides local and regional connections via bus and rail while local governments often provide service within Plan identifies 11 bus rapid transit corridors, which their municipal boundaries, generally via microtransit. were based on corridors studied, evaluated and The Colorado Department of Transportation provides prioritized by the Regional Transportation District's statewide connections from Denver Union Station via Regional Bus Rapid Transit Feasibility Study. The study bus routes on its Bustang services. Throughout the prioritized projects based on factors including safety, region, the Regional Transportation District provides equity, projected ridership and cost. To collaboratively more than 170 bus routes, 12 light rail lines and several manage the implementation of these projects, the specialty services such as Access-a-Ride, FlexRide, Denver Regional Council of Governments, Regional Free MallRide and SeniorRide. While these existing Transportation District, Colorado Department of services serve as a foundation to the regional transit Transportation and key local government stakeholders system, many residents still lack access to fast, frequent formed a regional Bus Rapid Transit Partnership. As the and reliable transit services. In an effort to increase region continues to improve and expand transit service, public transit ridership, the Regional Transportation there is significant opportunity to develop adjacent District introduced several efforts, including offering farehousing and employment centers as envisioned in free transit for all riders during select summer months the region's Metro Vision plan. Metro Vision supports and zero fares for youth under age 19. The Regional the development of healthy, inclusive and livable Transportation District has also restructured its transit communities through efficient development patterns and fares based on extensive stakeholder outreach and a connected multimodal region. equity analyses.

There are several additional ongoing transit projects, programs and plans that address the challenges of transit access across the region. In 2022, the Regional Transportation District completed its System Optimization Plan, a comprehensive assessment of the agency's performance including an assessment of existing routes and services, ridership demographics and equity zone

buildout. The 2050 Metro Vision Regional Transportation

A wide variety of transportation demand management strategies have the potential to increase access to transit and boost transit ridership. Strategies include employer pass subsidies, discounted passes, fare-free service, integrated trip planning and payment, shared micromobility and microtransit connections, mobility hub development and active transportation infrastructure.

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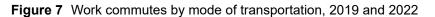
# **Effects of the COVID-19 pandemic**

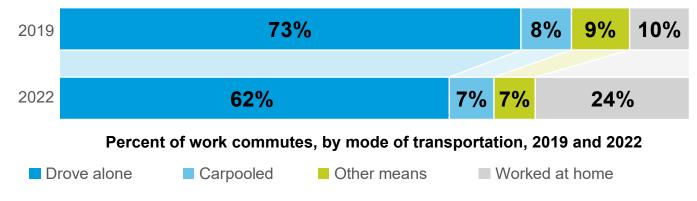
The travel landscape has experienced significant changes since the emergence of the COVID-19 pandemic in March 2020 and these effects continue to impact travel patterns today. During the pandemic, many transportation demand management strategies, albeit unintentional, became the norm. Most notably, there was a significant increase in telework and flexible work arrangements throughout the region. According to the United States Census Bureau's American Community Survey 1-year estimates, work from home rates rose from around 10% in 2019 to 24% in 2022 (Figure 7). Since 2020, employers around the region have continued to implement telework and flexible work policies, spurring a shift in travel behaviors.

Similarly, micromobility modes such as biking and e-scootering became increasingly popular modes as travelers sought transportation alternatives that allowed for social distance. The average daily trips on shared micromobility systems in the Denver region grew from an average of 4,300 trips per day in 2019 to 5,100 trips per day in 2020. In 2021, that number almost doubled, with an average of 10,700 trips per day as programs in different jurisdictions around the region launched and expanded. At the same time, bike shops around the region struggled to keep up with demand for personal micromobility vehicles. Since 2020, local governments around the region continue to prioritize the construction and improvement of active transportation infrastructure for micromobility modes.

Additionally, during the pandemic, many cities and towns closed off streets to allow for social distancing, outdoor dining and other community development activities. As more streets closed to motor vehicles, public perception of parking allowances began to shift ttoward prioritizing active transportation infrastructure and community gathering spaces over parking spots. Local governments have continued to implement shared streets, such as the City and County of Denver's Outdoor Places Program, which permanently closed select streets to motor vehicle traffic.

In contrast, transit ridership on the Regional Transportation District's fixed route services fell by 50% in 2020. Challenges such as driver shortages, service cuts, financial woes and safety concerns created an unreliable and underused transit system. Many of these challenges continue to impact the system today. As a result, ridership levels have only rebounded to approximately 58% of where they were prior to 2020. Furthermore, the downstream financial impacts of the pandemic continue to exacerbate an already strained system, causing transit providers to reassess operations. Through its System Optimization Plan, the Regional Transportation District developed strategies to increase ridership and enhance transit service performance within its operational budget.





Source: American Community Survey, 1-year estimates, 2019 and 2022 (most recent data as of publication)



This section provides an overview of technology infrastructure for trip planning and payment have and transportation, focusing on the innovations and improved access to transportation. These technologies offer multimodal solutions that reduce congestion and challenges in the sector. It is not intended as a set of recommendations, but rather as an informative overview. promote inclusivity. As with any new technology, it is important to consider the potential new challenges In the past decade, transportation technology has that may arise from use and deployment, including revolutionized how people travel. Innovations like unintended increases in traffic congestion.

ride-hailing, shared mobility services, and digital



Carshare

**Microtransit** 

In the context of equity-focused planning, it's essential to highlight the critical role of microtransit shuttles in promoting transportation equity. Services like the Regional Transportation District's Flex Ride, the City of Lone Tree's Link on Demand, the City and County of Denver's Denver Connector, and the City of Golden's Ore Cart are more than just alternatives to traditional transit; they are often vital lifelines for older adults and individuals with disabilities. For many in these groups, microtransit may be the only feasible transportation option that meets their specific needs.

Microtransit routes, which can be either on-demand or fixed, play a significant role in paratransit services within communities. The Denver Connector, for instance, is an app-based, on-demand shuttle offering rides within its service areas, catering to those who need flexible transportation solutions. Conversely, the City of Golden's Ore Cart operates on a fixed route, providing reliable and scheduled services for those who depend on consistent transit options. Both types of microtransit systems are instrumental in connecting travelers to their destinations, significantly reducing the need for solo car trips and enhancing accessibility for all community members, especially those who might otherwise be marginalized in transportation planning.



Car share services provide an alternative to owning a car by allowing travelers to reserve a car only when needed. Car share services are typically app-based or may require an online application. Services in the region have ranged from free-floating operators such as Free2Move, round-trip operators such as ZipCar, community-based nonprofit operators like Colorado CarShare and peer-to-peer app-based platforms like Turo.



# **Ride-hailing**

In the Denver region, app-based ride-hailing and ride-sharing services like Uber and Lyft have been active for over ten years, facilitating connections between travelers and their destinations.

Ride-hailing services are particularly beneficial for individuals who are unable to drive or use traditional public transit. However, the impact of these transportation network companies on factors such as affordability, reliability, congestion, and curbside management is increasingly becoming a topic of discussion. Despite these concerns, ride-hailing services are recognized for their ability to provide essential first- and last-mile connectivity for users of public transportation. (Source: https://www.sciencedirect.com/science/article/pii/S2590198221001032.)

# Shared micromobility

Shared micromobility programs have expanded first- and last-mile connectivity throughout the region and provide convenient alternatives to short, drive-alone trips. Programs are typically app-based, although many bike share programs like B-Cycle and the City of Golden's Bike Library have in person and kiosk options. Vehicle choices typically include e-bikes, e-scooters and many programs also include adaptive vehicles. Shared micromobility services can be stationbased or free-floating. Popular operators around the region include B-Cycle, Lyft, Spin, Lime and Bird. The Denver region was home to one of the earliest bike-sharing systems in the country, when Denver B-Cycle launched in the City and County of Denver in 2010. Since the launch of dockless shared micromobility systems in the Denver region in 2017, riders have taken over 16.3 million trips, covering over 19.8 million miles throughout the Denver region. This trend indicates a growing preference among residents and visitors alike for more flexible and efficient travel options. Furthermore, both shared and personal e-bikes and e-scooters have a range of benefits, including allowing travelers to go farther in less time, making rigorous and uphill routes easier and increasing mobility options for older adults and people with limited physical abilities.



### **Connected and automated vehicles**

Connected and automated vehicles use technologies to communicate with nearby infrastructure and other vehicles. This technology has the potential to transform the future of shared mobility and increase access to transit through technologies such as automated microtransit shuttles, connected and automated rapid transit networks and automated first and last mile solutions. These vehicles also have the potential to provide relevant traveler data that can be used to implement more context specific transportation demand management strategies. However, it remains to be established how connected vehicles and automated vehicles will affect the transportation network, including concerns regarding increased traffic congestion due to circulation of vehicles, increased vehicle miles traveled and management of parking infrastructure.

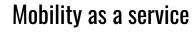


# **Electric vehicles**

Electric vehicles, which use electric motors powered by batteries instead of internal combustion engines that run on fossil fuels, are gaining popularity due to their environmental benefits. These vehicles have no tailpipe emissions, contributing to a reduction in air pollution. Many individuals and organizations are adopting electric vehicles to reduce their carbon footprints and support the transition to electrified transportation. Despite their role in reducing greenhouse gas emissions, electric vehicles still present challenges related to congestion and land use. They do not reduce the number of single-occupancy vehicle trips and require sufficient parking and charging infrastructure to support their use.



Technology advancements in parking and curbside management, such as real-time curb use and parking data, dynamic pricing and app-based or online permits have allowed local governments to better manage demand at the curb and relieve congestion. With the development of the opensource Curb Data Specification, public agencies can better understand activity at the curb and develop policies that prioritize curb use and access.



Mobility as a service integrates multiple transportation services into one platform with a single payment option. Users can book services like transit, ride-hailing and shared mobility and pay for transportation services in a single transaction. This integration allows travelers to conveniently plan and pay for multimodal trips. While the future of what mobility as a service will look like in the Denver region is unknown, it will have implications for transportation demand management.



# How can transportation demand management help address the trends?



# Growth in the Denver region

Transportation demand management can offer solutions to navigate the challenges of a growing population and employment along with the associated land use changes. As the total number drive alone trips increases, the implementation of transportation demand management strategies becomes critical to achieving regional civic goals. By enabling carpooling, supporting efficient transit and encouraging active transportation, transportation demand management can reduce congestion, improve air quality and enhance travel choices. The Denver **Regional Council of Governments** plans for regional growth through its Metro Vision plan and a variety of supportive activities ranging from housing and development planning to corridor and bus rapid transit planning.



# Traffic congestion

At the heart of transportation demand management lies the goal of reducing the number of vehicles on the road. By encouraging travelers to explore alternatives to drive alone trips, such as carpooling, ridesharing, public transit, biking and walking, transportation demand management can actively reduce congestion on regional roadways. By reducing the number drive alone trips on our roadways, the region will see improved air quality, better public health and increased quality of life. The Denver Regional Council of Governments actively monitors and reports on congestion through its 2050 Regional Transportation Plan and a variety of activities like the congestion management process and Annual Report on Traffic Congestion in the Denver Region.



## Safety and regional Vision Zero

Transportation demand management can support and encourage the use of robust public transit systems and reduce the number of drive alone vehicle trips. By bolstering transit networks and ensuring seamless first and last-mile connectivity, transportation demand management can contribute to reducing the reliance on personal vehicles and minimizing exposure to high-risk road segments. Riding transit is one of the safest ways to get around the Denver region. Transportation demand management can also encourage active transportation and with the implementation of safe, comfortable and connected active transportation networks, the region can encourage more people to walk and bike. The Denver Regional Council of Governments adopted a regional Taking Action on Regional Vision Zero plan and actively engages with local, regional and state agencies to support Vision Zero and safety planning throughout the region.



# Transit access

Transportation demand management strategies that support transit may include initiatives that promote or provide discounted passes, fare-free periods and improved transit services. By reducing financial barriers and ensuring ease of access, transportation demand management strategies can encourage a more attractive transit experience for everyone. Transportation demand management doesn't focus on transit alone, but it emphasizes the importance of integrated, multimodal transportation solutions. By creating seamless connections between various modes, transportation demand management encourages travelers to consider a variety of travel options. For instance, combining transit with biking or walking can provide last-mile solutions that make transit a more attractive choice. The Denver **Regional Council of Governments** plans for, and supports, transit in the Denver region alongside partners like the Regional Transportation District and the Colorado Department of Transportation.



# pandemic

program.

# Effects of the COVID-19

The COVID-19 pandemic changed the way people travel and emerged as a catalyst for transformative change. By addressing new travel trends and workplace travel behaviors with flexible work schedules and telework options, transportation demand management can respond to the shift of travel patterns and reduce the need for drive alone trips by supporting other transportation choices. The Denver Regional Council of Governments' Transportation Planning and Operations division actively monitors and models changes in travel behavior, as a result of the COVID-19 pandemic and associated travel changes, the Way to Go program offers employer support through its Telework Tomorrow



## Innovation and transportation technology

Transportation demand management can harness the potential of emerging transportation technologies to create an improved travel experience. By integrating options like car sharing, ridesharing and shared micromobility, transportation demand management can provide travelers with convenient, multimodal transportation solutions. These solutions can also prioritize inclusivity, ensuring that a diverse range of users can access and benefit from the evolving transportation landscape. The Denver Regional Council of Governments, along with regional partners, developed Mobility Choice Blueprint, a strategy to address the changing transportation landscape, and is working with partners through the Advanced Mobility Partnership to actively plan for, and collaborate on, transportation technology efforts.

# Lessons from the community: equity focus group and engagement

An equity-focused group discussion held in the spring of 2023 and additional robust engagement with stakeholders underscore the importance of listening and understanding diverse perspectives when it comes to transportation demand management planning.

Key findings from the equity outreach include:

Transportation issues affecting vulnerable groups include unreliable, inaccessible and unaffordable public transportation, inadequate infrastructure for seniors and disabled individuals and insufficient resources for caregivers.

Stakeholders exhibit strong support for communityoperated, affordable transportation services that connect all areas of the region, enhancing reliability and creating local job opportunities.

Outreach and educational programs should be multiple languages to help residents navigate the transit system, ensuring accessibility for people without internet or literacy skills.

Emphasize largescale community engagement to gather unique insights into the travel experiences and needs of diverse groups, fostering a collaborative relationship between planners, decision-makers and the community.

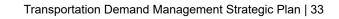
Stakeholders highlighted a need to make programming and messaging accessible to groups less familiar with technology, like seniors and students, and designing communication strategies with all users' needs in mind.

acknowledged the cost-effectiveness of incorporating community feedback during the planning stage, allowing for proactive rather than reactive solutions.

Stakeholders

Transportation demand management can be a powerful tool in the pursuit of transportation equity. By enhancing public transit options, supporting ride share, improving active transportation infrastructure and adopting flexible work arrangements, transportation demand management can break down barriers that restrict transportation access to opportunity. Transportation demand management does not just make commuting more efficient; it opens doors to opportunity for everyone.

> Collaboration builds an inclusive, sustainable and equitable transportation system that serves the needs of the entire community, and emphasizes the importance of gathering diverse perspectives.



# Leading the way: equity focused case studies from transportation organizations in the **Denver region**

Northeast Transportation Connections, the West Corridor Transportation Management Association and the Denver Regional Mobility and Access Council are a few examples of local organizations that are spearheading transportation equity in the Denver region. Through their efforts, these organizations are breaking down barriers and creating pathways to accessible and inclusive mobility solutions.

# **Denver Regional Mobility** and Access Council

The Denver Regional Mobility and Access Council's mission is to empower individuals dealing with mobility challenges to access community resources and lower barriers to regional transportation services. The organization'primarily serves older adults, low-income earners and individuals with disabilities. The organization brings together diverse community stakeholders, by establishing forums where transportation providers, users and advocates can converge to identify and address gaps in transportation.

The Denver Regional Mobility and Access Council's flagship Getting There Travel Training initiative aims to improve air quality and reduce congestion by providing information to bridge the gap between local and regional transportation services. The program offers four free online travel training courses which offer guidance on navigating various facets of public transportation options.



Photo: Northeast Transportation Connections.

## Northeast Transportation Connections

Northeast Transportation Connections fosters equitable, The West Corridor Transportation Management Association recently initiated measures to improve sustainable and active multimodal travel choices for historically underserved communities. The organization transportation equity in its service area. Collaborating published a white paper titled "Bringing TDM Solutions with the Denver Housing Authority and the City and to Communities of Diversity" which provides information County of Denver's Climate Action, Sustainability and and recommendations on how transportation demand Resiliency office, the West Corridor Transportation management can be equitably implemented in the region. Management Association established several e-bike libraries at low-income housing facilities. Although the In October 2021, Northeast Transportation Connections program is no longer active, residents of the housing partnered with the City and County of Denver to launch facilities were able to keep the e-bikes for personal use. the Denver Connector Pilot, an on-demand microtransit service. The pilot program offered Montbello residents Additionally, the West Corridor Transportation free ride-sharing services for traveling to nearby Management Association was awarded regional destinations and transit hubs. After a year of successful Transportation Demand Management Set-Aside operation and growing demand, the pilot program was funds to implement culturally sensitive marketing extended for two more years and the service area was campaigns available in Spanish and Vietnamese, to extended to encompass the Gateway, Globeville and engage community groups, particularly along Federal Elyria Swansea neighborhoods. The service prioritizes Boulevard. The organization was also awarded regional hiring Montbello and Gateway, Globeville and Elyria Transportation Demand Management Set-Aside funds

Swansea residents as operators to further support to create transportation-focused welcome kits for new residents in the neighborhoods. residents in Denver's Sun Valley neighborhood.

Additionally, Northeast Transportation Connections staff work with the Globeville and Elyria Swansea neighborhoods as a part of their Tolling Equity Program. This initiative ensures that low-income residents have access to complimentary transponders and toll credits for Express Lanes on Interstate 70, along with free transit passes to foster a more inclusive and equitable transportation network.

## West Corridor Transportation **Management Association**

Beyond development of the strategic plan recommendations, the planning process also included analyses of the council's existing regional transportation demand management programs. Three distinct analyses were conducted on each program: a strengths, weaknesses, opportunities and threats analysis, a return-on-investment analysis and an equity analysis. For a more in depth explanation of existing regional transportation demand management programs and services provided by the council, reference pages 11 through 15.

# Strengths, weaknesses, opportunities and threats analysis

In the strengths, weaknesses, opportunities and threats analysis, DRCOG staff evaluated the existing conditions of regional transportation demand management programs based on several criteria such as impact, program costs and staffing requirements. The evaluation used a scale from one to four representing varying levels of effectiveness and resource investment. This scoring mechanism provided high-level feedback based on the knowledge or assumptions of current subject matter experts, covering various aspects of the transportation demand management programs, from funding to implementation and outreach.

The results yield some key takeaways:

• Many programs are resource or time-intensive to operate, which can make expansion challenging due to limited staff and available funding.

# Existing transportation demand management program analysis

- · Strengths, weaknesses, opportunities and threats analysis
- · Return on investment analysis
- Equity analysis
- · Summary of results from analyses

<ul> <li>Programs such as Vanpool and carpool</li> </ul>
matching may have an opportunity to increase
effectiveness with a slight increase in effort,
especially since these programs are shown to
be quite effective with few resources.

- Bike to Work Day is a popular, annual event and is one of the largest Bike to Work Days in the nation. However, planning falls to a small team and incentivizing participation each year is a challenge due to funding constraints.
- The opportunities highlighted for each program show that DRCOG staff have creative ideas of how to optimize, expand and improve the council's programming to reach more people

# **Return on investment analysis**

The project team developed a methodology to understand the relative return on investment of various transportation demand management programs provided by the Denver Regional Council of Governments. The analysis covered both services and outreach programs and was based on a range of criteria including program administration costs, user costs, target audiences, number of users, mode shift percentages, reduction in vehicle miles traveled, average commute distances, frequency of non-drive alone trips, user cost savings per trip and an equity evaluation score.

The results indicated that the Vanpool program scored the highest among transportation demand management services due to its effect on vehicle

miles traveled reduction, high average usage frequency, moderate user cost and substantial user savings, along with its high equity score. On the other hand, carpool matching scored the lowest, due to its limited use, limited effect on reducing the percent of people who drive alone, low vehicle miles traveled reduction and a lower equity score.

For outreach programs, programs with the highest return on investment were successful primarily due to low barriers to participation and extensive reach among employers and employees, albeit being resource intensive for staff to manage. However, some programs like Guaranteed Ride Home and Colorado Clean Commute, though cost-effective to administer present an opportunity to increase their reach.

# **Equity analysis**

The project team conducted an analysis to assess the equity implications of the council's transportation demand management services. The evaluation leveraged the council's regional equity index tool to prioritize investments that enhance travel options and modes, focusing on environmental justice and equity. This analysis considers various criteria including geography, target populations and improved transportation access and options.

The analysis identified programs actively promoting equitable transportation in the Denver region. Schoolpool emerged as the highest-scoring program due to its presence in equity priority areas and its focus on youth. In contrast, Go-Tober, Guaranteed Ride Home and employer outreach were the lowest scoring programs, primarily due to the limited or unknown impact on marginalized communities. The results suggest targeted marketing strategies, partnerships with local community organizations and initiatives to reduce transportation costs for users.

# Summary of results from analyses

The results from the analyses resulted in the identification of key strengths and opportunities for each existing Denver Regional Council of Governments transportation demand management service.

## Schoolpool

#### Key strengths

This is an award-winning, wellknown and successful program with positive community reception.

#### Key opportunities

Expand Schoolpool across the region, consider a focus on schools in equity priority zones and target either families with longer commutes or families affected by school closures or both

# MyWaytoGo Platform

#### Key strengths

A user-friendly, multi-functional trip planning, tracking, ride-matching and campaign management platform that supports many Way to Go campaigns.

#### **Key opportunities**

Improve and expand technology, including enhancing the mobile experience and utilizing data collection for better equity analyses.

#### Vanpool Key strengths

A valuable program for regional commuters with a high return on investment score.

#### Key opportunities

Expand the Vanpool program and conduct targeted outreach to essential and shift workers and enhance multilingual outreach.

# Way to Go Partnership

#### Key strengths

Allows focused transportation transportation management associations have in-depth support regionwide efforts.

#### Key opportunities

Increase collaboration with community-based organizations and to use memorandum of understandings between partners to identify equity and engagement goals.

demand management strategy implementation in specific subregions of the Denver region and regionwide marketing and outreach coordination; community knowledge. The Denver Regional Council of Governments manages foundational resources to

# Carpool

#### Key strengths

The carpool program encourages easy behavior change and supports sustainable transportation mode shift goals.

#### Key opportunities

Target off-peak commuters, potentially could combine efforts with the Vanpool strategy to provide targeted outreach to essential and shift workers.

# **Colorado Clean** Commute

#### Key strengths

This program is an employer outreach and recognition campaign. Way to Go provides trip reduction recommendations, some of which are eligible for tax credit.

#### Key opportunities

Enhance outreach and mentorship programs for increased participation.

# Bike to Work Day and Winter Bike to Work Day

#### Key strengths

A popular annual event with potential for expansion to increase participation and mode shift.

#### Key opportunities

Focus on non-traditional commute hours and engage more diverse people.

# Go-Tober

#### Key strengths

An employer and commuter challenge that offers prizes and public recognition for tracking non-solo driving trips.

#### Key opportunities

Engage more with community-based organizations.

# **Guaranteed Ride Home**

#### Key strengths

A program with a low barrier for participation and available through employers who subscribe, typically in concert with transit passes.

#### Key opportunities

Develop partnerships for promotion and expand eligibility to a broader range of workers.

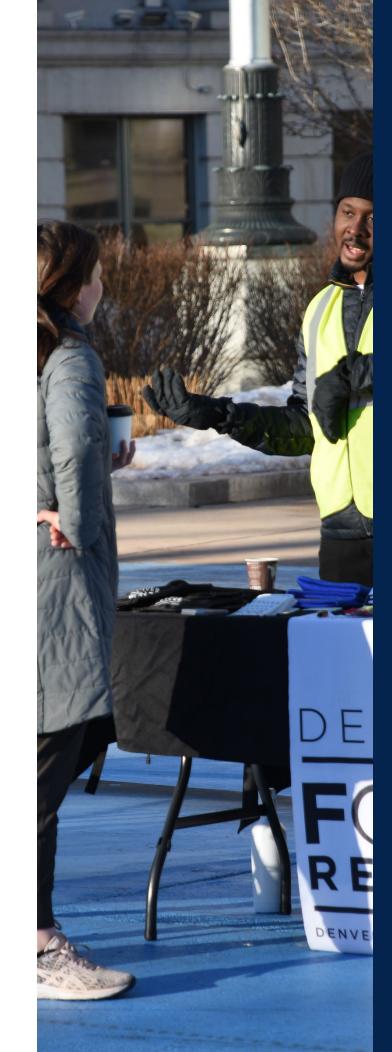
# **Employer Outreach**

#### Key strengths

Employer outreach conducted by the council staff is a wellestablished service that provides a range of commute trip reduction strategies to large employers throughout the region.

#### Key opportunities

Establish annual equity goals for employer recruitment and expand to focus on a broader range of businesses, including those in areas more likely to see mode shift, like those in close proximity to transit, areas with priced parking or in pedestrian focus areas.



# Strategic plan recommendations

- Summary of recommendations
- Recommendations and next steps

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# Summary of recommendations

Guided by the strategic plan goals and robust stakeholder engagement, these strategic plan recommendations offer a comprehensive approach to enhancing transportation demand management efforts in the region. These recommendations highlight specific actions that the Denver Regional Council of Governments' staff can take to improve transportation options, equity, and effectiveness. These recommendations are intended for internal adoption by the council and are not mandated policies for local municipalities. While the council will collaborate closely with various municipalities, the focus of these recommendations is to guide the council's own strategies and actions.

There is often confusion regarding the role of Denver Regional Council of Governments, especially in relation to the Regional Transportation District. It's important to clarify that the council is not responsible for the direct management of bus or rail services and infrastructure. Unlike the Regional Transportation District, which operates and manages public transportation services, the council's primary role involves regional planning and coordination, including transportation planning, environmental planning, and aging services.

The recommendations outlined in this strategic transportation demand management plan are starting points. They represent the broad direction the council intends to take in managing transportation demand within its organizational scope. Denver Regional Council of Governments' staff will be responsible for developing more detailed action plans and next steps to support each recommendation. The intention is to evolve these recommendations into practical and effective measures, ensuring they contribute positively to Denver Regional Council of Governments' transportation demand management goals.



1. Prepare a white paper2. Establish athat explores ways to fundtransportation demandtransportation demandmanagement technicalmanagement incentiveassistance program



programs



5. Revise the Transportation Demand Management Set-Aside scoring criteria to better address equity and innovation



communities





10. Collaboratively develop and share an annual work plan for the Way to Go partnership

9. Expand the focus of Way to Go to include all trips



3. Support and expand Safe Routes to School programs across the region



4. Integrate transportation demand management as a requirement for certain projects in the next Transportation Improvement Program policy update



7. Enhance mobility on demand assistance for member governments, transportation demand management partners and major employers



8. Expand ways the council can better understand results delivered by transportation demand management programs across the region



# 1. Prepare a white paper that explores ways to fund transportation demand management incentive programs

The council will actively explore funding mechanisms for transportation demand management incentive programs to address the growing need for diverse transportation options and the challenge of implementing widespread behavior change. Financial incentives have proven effective in altering travel behavior, but the council's current funding sources do not allow these incentives.

#### Next steps

- · Conduct Case Study Research: Investigate successful incentive programs and their funding in other regions. Assess the effectiveness of various incentives, focusing on how they influence mode shifts over time.
- Engage Partners and Stakeholders: Work closely with the Colorado Department of Transportation and transportation management association partners for a unified approach.
- Explore Funding Opportunities: Identify potential funding sources, ranging from local to federal levels, and learn from regions with successful incentive programs.
- Outline Next Steps: Collaboratively determine a range of funding strategies with partners and stakeholders, from traditional to innovative solutions. Present clear recommendations based on this analysis.
- · Publish a White Paper: Compile and share findings with partners.

#### Equity considerations

In developing incentive programs, prioritize all communities, especially those historically marginalized. This includes finding targeted funding opportunities for communities, ensuring equitable incentive distribution, and emphasizing engagement and partnerships with community-based organizations.

#### Connection to strategic plan goals



and travel choices



Enhancing transportation equity



# 2. Establish a transportation demand management technical assistance program

To address the evolving needs of its member governments and partners, the council will establish a technical assistance program to support transportation demand management. Currently, the council provides technical assistance for transportation demand management on an ad-hoc basis. The new program will aim to develop and implement transportation demand management plans, policies, ordinances and regulations. It will also focus on areas such as transit-oriented development, zoning, subdivision regulations, parking regulations, support for developers in transportation demand management, assistance with Policy Directive 1601 and curbside management. This initiative aligns with the Denver Regional Council of Governments' Metro Vision, the 2050 Metro Vision Regional Transportation Plan and the Mitigation Action Plan.

#### Next steps

- Developing the program scope: The council staff, in collaboration with partner agencies and stakeholders, will define the components of a regional technical assistance program. They will identify existing gaps and determine where the council's staff can most effectively offer technical assistance.
- · Identify funding sources: The council will identify potential funding sources based on the approved program scope to ensure sustained delivery.
- Creating resources: The council will produce resources such as case studies, templates and tools tailored to various land use contexts, based on the program scope. It will also continue updating the Transportation Demand Management Toolkit and create additional resources for its support.
- · Collaborating with partners to offer technical assistance: The council will organize training sessions, workshops and provide consistent support for the deployment of transportation demand management strategies. The technical assistance program and resources will be adapted to meet the unique needs and objectives of member governments.

#### Equity considerations

The council will design the technical assistance program to provide specialized support, resources and guidance tailored to the unique needs of partner organizations, including partners serving marginalized communities. The council will ensure that tools and resources are available in multiple languages to achieve a broader reach

#### Connection to strategic plan goals



Improving mobility and travel choices



Improving air quality

Equity



# 3. Support and expand Safe Routes to School programs across the region

The council will take the lead in addressing both equity and safety through regional Safe Routes to School initiatives, aligning with multiple transportation demand management goals. Building on the council staff's existing involvement in Safe Routes to School-related activities, community-based transportation plans and the nationally renowned Schoolpool program, the Denver Regional Council of Governments sees an opportunity to expand its role in Safe Routes to School.

#### Next steps

- Documenting the state of Safe Routes to School in the Denver region and **nationally:** The council will examine current Safe Routes to School programs to understand their reach, efficacy and areas of operation. It will identify gaps in existing programs, whether geographic or programmatic, and evaluate successful initiatives like the Massachusetts Safe Routes to School, potentially adapting their strategies and resources for regional use.
- Developing a regional Safe Routes to School blueprint: The council, in collaboration with stakeholders, will create a regional framework outlining objectives and methods to enhance and promote Safe Routes to School activities. This blueprint will likely focus on equity, targeting high-need areas and fostering community-driven programs. It may include a comprehensive set of region-specific Safe Routes to School tools, guidelines, toolkits, best practices and case studies.
- Cultivating partnerships and resources: The council will engage educational institutions, member governments, community organizations and transportation partners to build partnerships and secure dedicated funding for Safe Routes to School projects.

#### Equity considerations

In emphasizing equity in Safe Routes to School programs, the council will focus on introducing multilingual resources for parents and community-based organizations to encourage ride-sharing and ensure robust community engagement in planning projects. With ongoing school closures in the region, the council recognizes the growing connection between Safe Routes to School and transportation demand management.





and travel choices



transportation equity



transportation safety



# 4. Integrate transportation demand management as a requirement for certain projects in the next Transportation **Improvement Program policy update**

The council developed this recommendation to explore the inclusion of transportation demand management requirements in certain Transportation Improvement Program projects during the next update of the Transportation Improvement Program Policy document. It is important to clarify that this is merely a recommendation to explore and consider the option. Council staff will propose considering transportation demand management requirements for specific Transportation Improvement Plan projects in the next policy development process.

#### Next steps

- Require transportation demand management strategies for certain project types: In preparation for and during the next update of the Transportation Improvement Program Policy document, the council will collaborate with stakeholders to determine if specific project types should include transportation demand management strategies. These strategies would mitigate travel demand and could vary based on factors like project type, size, location and impact on travel demand during and after construction. This recommendation will be considered in relation to other 2050 Metro Vision Regional Transportation goals, such as mode shift, congestion reduction, safety and air quality.
- Engage with project sponsors and assess impacts: The council will work with project sponsors during TIP calls for projects. It will provide guidance on incorporating transportation demand management strategies into projects and plans and assess the potential effects of these requirements on project implementation, cost and schedule.
- · Offer technical assistance: The council will explore the feasibility of providing technical assistance and resources, including the Denver Regional Council of Government's Transportation Demand Management Toolkit. This toolkit offers a range of strategies to help project sponsors implement transportation demand management in Transportation Improvement Plan projects.

#### Equity considerations

The council will examine the potential disproportionate effects of construction activities on marginalized communities for projects identified in the Transportation Improvement Program. It will evaluate mitigation strategies to prevent exacerbating existing inequalities, including measures to minimize disruptions and ensure accessible and affordable transportation alternatives are available.

#### Connection to strategic plan goals



Improving mobility and travel choices



Improving air quality

Equity

Enhancing transportation equity

Safety

Improving transportation safety



# 5. Revise the Transportation Demand Management Set-Aside scoring criteria to better address equity and innovation

To enhance the effectiveness of the Transportation Demand Management Set-Aside project's equity and innovation evaluation, the council plans to delve into the finer points of equity and examine how to replicate successful innovations. This approach aims to gain a deeper insight into the benefits of each project. To put these improvements into action, it will be necessary to modify the Policies for Fiscal Years 2024 to 2027 Transportation Improvement Program Set-Aside Programs document.

#### Next steps

Update set-aside scoring criteria:

- Equity: Introduce a multi-factor scoring system focused on equity, employing data and definitions from the regional equity index created by the Denver Regional Council of Governments. Specifically, ensure that the equity scoring includes both the starting points (home locations) and destinations (work locations) of trips, emphasizing the importance of considering equity throughout the entire journey.
- Innovation: Modify the criteria to give credit to projects that either present new strategies or build upon previously successful innovations. Previously, innovation points were only given to entirely new ideas, rather than those enhancing established successful projects. This adjustment will enable innovative concepts to become more established and widely used in the region.

#### Equity considerations

Equity should encompass age, gender, ability, race, ethnicity, income and other factors. Projects should be prioritized based not only on the target demographics but also on the tangible benefits. Considerations should also include transportation affordability, cultural sensitivities and flexibility to cater to diverse needs. While quantitative data such as the regional equity index can guide decisions, it should be balanced with qualitative information from the project proposal.

#### Connection to strategic plan goals



and travel choices



Enhancing transportation equity



# 6. Explore opportunities to reduce or remove the local match requirements for Transportation **Demand Management Set-Aside projects that benefit** marginalized communities

The Denver Regional Council of Governments, in partnership with regional and state transportation entities, will evaluate the possibility of lowering or eliminating the local funding contribution for Transportation Demand Management Set-Aside projects aimed at helping marginalized communities. This initiative aims to boost the development of transportation demand management projects with a focus on equity. This topic might also be included in the upcoming Transportation Improvement Program Policy discussions.

#### Next steps

- · Define objectives with partners: Collaborate with stakeholders, including the Colorado Department of Transportation, to set the priorities for this initiative, considering inputs from the regional equity index.
- Look into funding options: Research creative funding approaches to potentially lower or eliminate the local match for projects financed through the Transportation Demand Management Set-Aside. This could involve strategies like using toll credits, exchanging federal funds for state funds, or combining different funding sources to minimize the required match.
- Develop a proposal if viable: If suitable funding sources or mechanisms are identified, prepare a proposal that outlines the reasons and methods for reducing or eliminating the local match for projects aiding marginalized communities. This would involve updating relevant policy documents where these match requirements are mentioned.

#### Equity considerations

Reducing or removing the local match requirement for Transportation Demand Management Set-Aside projects will remove financial barriers for project sponsors working with or in marginalized communities or representing marginalized communities.

#### Connection to strategic plan goals



Improving mobility and travel choices



Improving air quality

Equity



## 7. Enhance mobility-on-demand assistance for member governments, transportation demand management partners and major employers

Local governments and major employers in the Denver region are showing growing interest in mobility-on-demand, including microtransit and micromobility, to enhance transportation services for commuters and travelers. As the region's metropolitan planning organization, the council's staff can assist organizations intending to launch mobility-on-demand services. An example of such a collaborative initiative is the Denver region's Ride Alliance, where agencies have united to improve mobility-on-demand for older adults, veterans and people with mobility challenges. This recommendation will include coordination with the Colorado Department of Transportation, Regional Transportation District, transportation management associations and member governments.

#### Next steps

- Identify needs and opportunities: Many agencies currently offer support for mobility-on-demand (including policy, planning, capital and operations), but the region lacks a unified approach to address regional needs and devise a strategy for on-demand service delivery and technical assistance. Activities might include evaluating existing services, understanding the needs of partners with and without such services and exploring ways to develop resources, plans and service operations.
- **Explore feasibility and implementation:** Look into potential partnerships among transportation partners, service operators, member governments and major employers for jointly providing mobility-on-demand solutions. Define the roles and responsibilities for implementing the regional strategy.

#### Equity considerations

To promote equity in developing mobility-on-demand services, member governments and transportation demand management partners should implement these services in areas identified as local equity zones or using the regional equity index. When partnering with major employers, focus on collaborating with companies that employ service and shift workers, who often face unique transportation challenges. Investigating options to offer on-demand services for free or at a significant discount can help alleviate financial strains on those already burdened with high housing and transportation costs.

#### Connection to strategic plan goals





Improving air quality



Enhancing transportation equity



# 8. Expand ways the council can better understand results delivered by transportation demand management programs across the region

This recommendation will be developed in collaboration with the Colorado Department of Transportation and transportation demand management stakeholders and aims to refine the process for evaluating the benefits of transportation demand management projects. Its primary objective is to provide the Denver Regional Council of Governments, member governments and partner agencies in the Denver region with essential resources and tools to assess the effectiveness of transportation demand management projects. This refined approach will enable regional partners to enhance and replicate the most effective transportation demand management strategies. Additionally, it aims to assist partners with improved data collection and evaluation.

#### Next steps

- · Determine needs: Collaborate with stakeholders to define the desired goals and outcomes for enhanced data collection, analysis tools and methodologies. This collaboration will help staff and partners better understand the results delivered by program results.
- Evaluate data and methods: Review current data availability, methodologies and tools used for evaluating transportation demand management programs. Identify any gaps or challenges that hinder the council's understanding program results.
- · Review data and tools: Assess the data collection methods and analysis tools available to the Denver Regional Council of Governments and stakeholders. Pinpoint areas where enhancements can improve the capture of program outcomes.
- Improve data collection: Aid program partners in refining their data collection methods. Provide resources, training and technical support to bolster data collection and reporting.
- · Invest in evaluation tools: Consider acquiring or developing new evaluation tools tailored to the region's transportation demand management programs' specific needs. These tools should aid in data collection and analysis without making direct comparisons between different programs. This investment might be a potential area for cost-sharing among regional partners interested in understanding project benefits.
- Engage stakeholders: Work closely with key stakeholders, including transportation management associations and program managers, to gain insights into program evaluations. Leverage their expertise to continue refining investments in data and analysis tools that support program evaluation.

#### Equity considerations

By improving data, methods and tools to evaluate the effectiveness of transportation demand management programs, the council's staff can integrate return on investment and equity analysis tools into standardized program evaluations.

#### Connection to strategic plan goals



Improving mobility and travel choices



Improving air quality

Equity



# 9. Expand the focus of Way to Go to include all trips

This recommendation advocates for broadening the council's Way to Go program scope to encompass a wide variety of trip types, recognizing that a significant portion of vehicle miles traveled in the Denver region are not commute-related. Future efforts should consider trip types like non-traditional or off-peak commutes, daily household errands, trips made by parents and caregivers and visitor and recreational trips. This expansion aligns with the regional Metro Vision plan's goal of providing equitable transportation demand management services in the Denver region and improving access to opportunities.

#### Next steps

- Stakeholder involvement: Collaborate with stakeholders, including transportation partners, employers, community organizations and shift and essential workers to identify gaps and opportunities. Seek stakeholder input regarding the specific transportation challenges and needs pertinent to transportation options.
- Identify collaborative opportunities: Identify potential partners, such as employers, health care facilities and community organizations, that can support marketing and education campaigns tailored to various trip types.
- Develop and deploy outreach strategies: Create marketing and education campaigns that directly address the needs of non-commute trips.
- Monitor impact: Evaluate the impact of the expanded Way to Go program. Gather data on participation rates, mode shift and user feedback to assess the efficacy of new initiatives and campaigns.

#### Equity considerations

Emphasizing more focused and accessible marketing efforts geared toward a variety of trip types will ensure outreach to better suit the needs of diverse travel patterns. By connecting effectively with distinct audience segments like shift workers or caregivers, this recommendation promotes a more inclusive approach to transportation demand management.

#### Connection to strategic plan goals



Improving mobility and travel choices



Improving air quality



Enhancing transportation equity



# 10. Collaboratively develop and share an annual work plan for the Way to Go partnership

Building on the existing structure of the Denver Regional Council of Governments' Way to Go program and its partnerships, this recommendation aims to enhance collaboration in creating an annual work plan.

#### Next steps

- Conduct a collaborative workshop: Organize a workshop that involves partner discussions to determine the priorities and desired outcomes for the Way to Go partnership for the coming year.
- Create an annual work plan: The Way to Go program staff will draft an annual work plan based on partner feedback. They will then review this plan with transportation management association partners before finalizing it.
- Facilitate support and ongoing collaboration: The Way to Go program staff will maintain regular engagement with partners throughout the year, organizing informal meetings, monthly outreach team meetings, quarterly partnership meetings and executive director calls.

#### **Equity considerations**

The council's staff and partners will clearly outline equity goals in each annual plan. These goals might include community engagement targets, accessibility considerations and strategies for resource allocation.

#### Connection to strategic plan goals



Improving mobility and travel choices



Improving air quality

Equity

# Conclusion

This strategic plan for transportation demand management goes beyond the historical focus on traditional 9-to-5 commuters and vehicle miles traveled reduction. It adapts to the evolving landscape of travel behavior and transportation technology, proposing a broader range of strategies and focus areas. The plan outlines 10 strategic recommendations across policy, planning, and services. These include updates and enhancements to current programs and policies, tailored to meet the region's present and future demands.

The timeline for implementing these strategies is varied, requiring cross-divisional leadership and coordination. The council will spearhead these initiatives through stakeholder engagement and collaboration with regional partners. The council will provide planning, technical support, funding distribution, and transportation demand management services in the Denver region. Council staff will continually adapt the toolkit strategies



to meet the community's changing needs, working closely with regional transportation partners like the Colorado Department of Transportation and the Regional Transportation District, among others.

Envisioning different scenarios, if transportation demand management is fully embraced, there will be a transformative shift in the regional multimodal transportation landscape. Benefits of robust

- transportation demand management include reduced congestion, improved air quality, and a more inclusive
- transportation system that caters to a diverse range of needs. Conversely, if transportation demand management strategies are ignored, the region will face
- escalating traffic problems, deteriorating air quality, and a transportation system that fails to meet the needs of all its residents. This strategic plan aims to steer the Denver region toward a more efficient, equitable, and sustainable transportation future.

