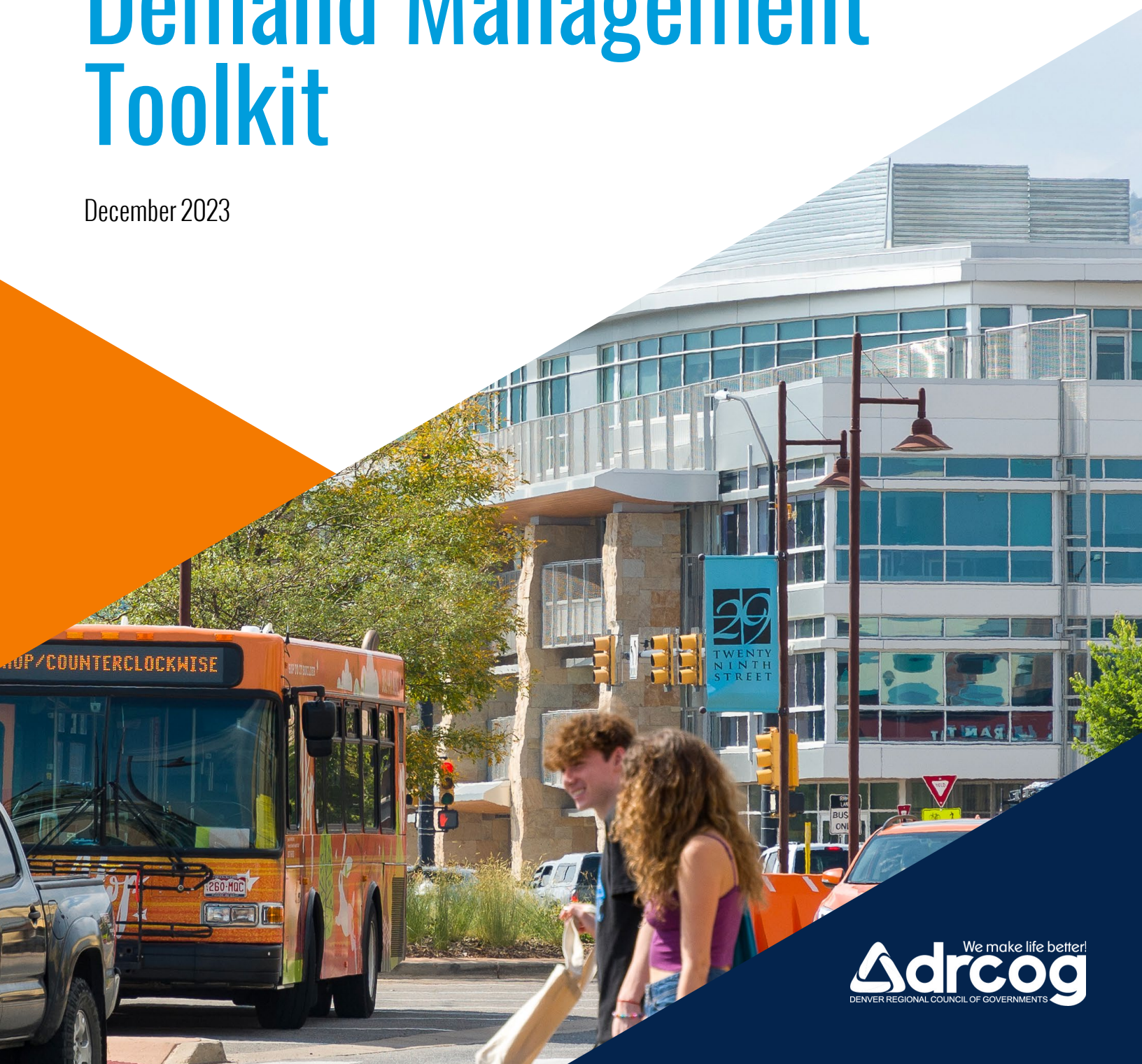
Denver Regional Council of Governments

Transportation Demand Management Toolkit

December 2023



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Contents

Introduction 3
About the toolkit 4
Context guide 5
Funding sources 6

Tools

1. Mobility services 9
Transit service (fixed route, rapid transit) 10
Microtransit 12
Shared micromobility 14
Car share 16
Carpool and vanpool 18
Schoolpool 20

2. Mobility technology 23
Mobility as a service 24
Traveler information 26

3. Transportation infrastructure 29
Mobility hubs 30
Active transportation facilities 32
Active transportation supportive infrastructure 34
Transit supportive infrastructure 36

4. Parking management 39
Curbside management 40
Parking management policies 42

5. Incentives for mode shift 45
Subsidies, rebates and rewards 46
EcoPass District creation 48

6. Roadway management 51
Roadway usage fees 52
Vehicle fees 54

7. Public policies 57
New development 58
Zoning policies 60

8. Employer programs 63
Commute trip reduction programs 64
Flexible work 66

9. Education, outreach and marketing 69
Transportation management association establishment and partnerships 70
Travel training and education programs 72
Promotion of Regional Transportation District discount passes 74
Localized transportation information and kits 76
Transit access marketing plan 78
Marketing commuter tax benefits 80
Promotional events 82

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Introduction

- About the toolkit
- How to use the toolkit
- Context guide
- Funding sources

About the toolkit

This toolkit includes 28 tools to help achieve transportation demand management goals in the Denver region, including reducing drive-alone trips.

Who is the toolkit for?

The toolkit is a reference guide for local governments, private employers, property developers, transportation management associations, nonprofit organizations, community organizations, business associations and any other group that is interested in implementing transportation demand management.

What information does each tool include?

Each tool includes information for practitioners, including guidance about which tools are are applicable in different contexts, as well as equity considerations, case studies and additional resources. Specifically, each tool includes the following six components:

1. Description of the strategy
2. Context guide
3. Equity considerations
4. Implementing agencies
5. Relative cost and impact
6. Case study or resource

How do I use it?

Start with the context guide to shortlist strategies most applicable to your context. Denver Regional Council of Governments' staff can provide a spreadsheet with all strategies and associated context applicability to make filtering easy.

More information about the different contexts is available on this page and the next page.

Context guide

Land use

Urban: Urban land uses generally have high density mixed-use residential and commercial development patterns with easy access to many transportation options such as high-frequency public transit and active transportation infrastructure. Commute and leisure trips are generally shorter and well-suited to transit or active transportation, as access to parking is often limited and dedicated. In urban areas, competition for roadway and curb space is high, which often results in traffic congestion.

Suburban: In suburban areas, land uses are generally separated and connected by moderate frequency transit, some bike and pedestrian facilities and roads designed for cars. Parking is ample and free and transit hubs are often served by park-and-rides. Transit routes are often commuter routes connecting to urban centers.

Rural: Rural areas are low-density. There is limited access to public transit and less access to dedicated active transportation infrastructure. Parking is ample and free and vehicles are often required to due to the distance and time required to travel between destinations.

Transit access

Moderate to high: Locations with moderate to high transit access have strong networks for helping people get where they need to go. Providing educational information or marketing to people in these areas can help them make an easy and convenient transition to transit from other modes.

None to low: Locations with none to low transit access are more challenging, but not impossible to generate behavior change. Focusing on first- and last-mile connections and shared modes, or providing incentives to encourage people to try a new mode can help overcome the barriers posed by limited infrastructure and mobility services.

Audience

Residents: Residents tend to take advantage of travel options that are close by, reliable and quick. They are also more likely to use different modes for different types of trips, depending on the distance and travel time to their destination.

Workers: Workers prefer modes that are reliable and convenient, ensuring they can get to and from work quickly and on time. They also favor low-cost travel options.

Students: Students favor easily accessible, affordable transportation options that help them move easily between campus, home and recreational destinations.

Visitors: Visitors travel via modes that they perceive as safe, familiar and easy to access or navigate.

Bicycle and pedestrian infrastructure quality

Moderate to high: Medium to high bicycle and pedestrian infrastructure quality makes people feel safe and comfortable traveling via active modes. These facilities are especially attractive when they are protected from vehicles, connect major destinations and include secure storage for bicycles and micromobility devices. The presence of dedicated bike and pedestrian infrastructure also lowers the barrier to entry for new users.

Low to none: Low to no active transportation infrastructure can deter users from walking or biking due to real or perceived safety risks. People in these areas generally opt to travel via transit or car.

Funding sources

To support the implementation of transportation demand management strategies, the council's staff has identified several funding sources, which are described below. Funding amounts, match requirements and eligibility vary by source. This is not an exhaustive list of funding sources.

Local funding

Local funds for transportation demand management projects may come from sales taxes, mill levies, vehicle fees, utility fees, fundraising or donations, local chambers of commerce or business improvement districts.

In addition to local public agencies, sometimes funding for transportation demand management strategy implementation comes from the private sector. This can include funding from:

- Developers
- Metropolitan or special districts
- Homeowners associations
- Employers
- Mobility service providers
- Business improvement districts

Regional funding

Denver Regional Council of Governments

As the region's metropolitan planning organization, the Denver Regional Council of Governments solicits project proposals, evaluates and awards funding to a variety of transportation projects in the region which are listed in the Transportation Improvement Program. The Denver Regional Council of Governments is responsible for programming funds from both federal and state sources including:

- Congestion Mitigation and Air Quality (federal)
- Surface Transportation Block Grant Improvement (federal)
- Transportation Alternatives (federal)
- Carbon Reduction Program (federal)
- Multimodal Transportation and Mitigation Options Funds (state)

The Denver Regional Council of Governments solicits project proposals through a regional call for projects, subregional calls for projects and set-aside calls for projects. The council has a dedicated Transportation Demand Management Set-Aside, and additional funds through other set-asides, like the Human Services Transportation Set-Aside, Regional Transportation Operations and Technology Set-Aside, Corridor Planning Set-Aside, Livable Centers Small-Area Planning Set-Aside and Innovative Mobility Set-Aside, that could fund transportation demand management-related projects. Additional information can be found in the council's Policies for Transportation Improvement Program Program Development document and Policies for Fiscal Year 2024-2027 Transportation Improvement Program Set-Aside Programs document.

Regional Transportation District

The Regional Transportation District provides transit facilities and operations throughout the Denver region. The agency also provides funding for select transit-related projects through opportunities like the Regional Transportation District Partnership Program.

State funding

The state offers a variety of funding opportunities for transportation demand management projects, some state funding is apportioned directly to the Denver Regional Council of Governments for project programming. Other opportunities are managed by various state agencies and described below.

Colorado Department of Transportation

The Colorado Department of Transportation has several funding opportunities for transportation demand management projects such as:

Office of Innovative Mobility:

- Transportation Management Organization Seed Funding Grants
- Transportation Demand Management Innovation Grants

Safe Routes to School:

- Infrastructure projects
- Non-infrastructure projects

Revitalizing Main Streets

Transportation Alternatives Program

Regional Priority Projects

Highway Safety Improvement Program

Colorado Department of Energy

The Colorado Department of Energy offers a Community Accelerated Mobility Project funding opportunity, which focuses on community-led mobility programs that support electric mobility.

Federal funding

United States Department of Transportation

As part of the Infrastructure Investment and Jobs Act and Inflation Reduction Act, there are several federal discretionary grant opportunities that could fund transportation demand management and related transportation projects such as:

- Safe Streets and Roads for All
- Reconnecting Communities and Neighborhoods
- Rebuilding American Infrastructure with Sustainability and Equity
- Strengthening Mobility and Revolutionizing Transportation
- Advanced Transportation Technologies and Innovative Mobility Deployment
- Promoting Resilient Operations for Transformative, Efficient and Cost-saving Transportation Program

1

Mobility services

Mobility services include a suite of travel options that increase mobility and access to transportation options.

- Transit service (fixed route, rapid transit)
- Microtransit
- Shared micromobility
- Car share
- Carpool and vanpool
- Schoolpool

Transit service (fixed route, rapid transit)

Transit services in the Denver region include bus, bus rapid transit, light rail and microtransit services. Fixed route services are regularly scheduled with defined routes and required stops. For example, most bus and light rail services in the Denver region are fixed route. Bus rapid transit is a type of express bus service serving high volume corridors that is faster and more frequent than traditional local service. It often operates on dedcaited right-of-way to avoid conflicts with other vehicles and delays caused by traffic congestion. The Regional Transportation District is working on bus rapid transit projects in Denver, Aurora, Boulder and Longmont. Additionally, the Denver Regional Council of Governments 2050 Metro Vision Regional Transportation plan highlights 11 priority bus rapid transit for build out region-wide.

Relative cost and impact

Relative cost: High

Relative impact: High

Context guide

Land use applicability

Urban: High

Suburban: High

Rural: Medium

Transit access applicability

Not applicable

Audience applicability

Residents: High

Workers: High

Students: High

Visitors: High

Bicycle and pedestrian infrastructure quality applicability

Moderate to high: Medium

None to low: Medium

Equity considerations

Spatial

Service area: Prioritize transit access in equity priority areas where there is a larger share of transit-dependent riders.

Temporal

Hours of service: Ensure that transit service is available at all times of day in some form, either through fixed-route or on-demand service, so that riders have a reliable form of transportation.

Economic

Affordability: Provide a subsidy for low-income riders.

Physiological

Accessibility: Ensure transit vehicles are accessible for people of all ages and abilities.

Social

Community engagement: Engage with the community to understand service gaps and gather feedback on planned service changes.

Implementing agencies

- Regional Transportation District
- Colorado Department of Transportation
- Local governments
- Nonprofits (Boulder HOP)

Resource

Regional Transportation District's Transit Service Policies and Standards: This document covers the Regional Transportation District's current and future transit service design and operations. It sets standards for performance and outlines access policies and priorities.

Source: https://www.rtd-denver.com/sites/default/files/files/2017-06/service-standards-7-2016.pdf

Case Study

Boulder HOP: The HOP is made possible through a partnership between the City of Boulder, Regional Transportation District and University of Colorado Boulder. HOP Ridership in 2022 averaged 1,620 passengers per day, although still 43% less than 2019 ridership.

Source: https://bouldercolorado.gov/services/hop-bus

Microtransit

Microtransit is a flexible transportation service where smaller vehicles such as vans or minibuses offer customized rides to passengers. Customers can use a smartphone app and/or call-in services to request a ride that will pick up and drop off passengers within its service area. Microtransit helps address transit gaps and can benefit areas of lower population density, unserved neighborhoods and travelers needing transportation during off-peak hours. Microtransit may also be on a fixed route, such as a downtown circulator. Recently, microtransit programs throughout the Denver region have gained popularity.

Microtransit falls between traditional fixed route public transit and private ride-hailing services like taxis or transportation network companies. It offers a more responsive and convenient transportation option compared to fixed route buses while being more cost effective than traditional ride-sharing services for both passengers and operators. It can also serve as a first- and last-mile connection to fixed-route transit where needed.

Relative cost and impact

Relative cost: High

Relative impact: Medium

Context guide

Land use applicability

Urban: High

Suburban: High

Rural: Medium

Transit access applicability

Moderate to high: Medium

None to low: Medium

Audience applicability

Residents: High

Workers: High

Students: High

Visitors: High

Bicycle and pedestrian infrastructure quality applicability

Moderate to high: Low

None to low: Low

Equity considerations

Spatial

Deployment: Ensure microtransit service areas include equity priority areas and areas without access to other reliable forms of public transportation.

Temporal

Hours of Operation: Ensure microtransit is accessible for shift workers who may need transportation at off-peak hours when fixed route transit service is less frequent or not available.

Economic

Affordability: Ensure microtransit fares are comparable to fixed-route fares and multiple forms of payment are accepted.

Physiological

Accessibility: Ensure microtransit vehicles are accessible to users of all ages and abilities.

Social

Community Engagement: Work with the community to identify potential microtransit zones that meet their needs and connect to key destinations.

Education and Awareness: Work with community-based organizations to raise awareness of the program and encourage ridership.

Implementing agencies

- Local governments
- Regional Transportation District
- Nonprofits
- Transportation Management Agencies
- Employers

Case study

Denver Connector Microtransit Program: the Denver Connector launched in 2021 by the City and County of Denver in partnership with Northwest Transportation Connections. The program began as a pilot in the Montebello neighborhood to allow residents and visitors to commute to local neighborhood destinations and transit stations for no cost. The program was extremely successful and in 2023 the Montebello service areas was expanded to include the Gateway neighborhood. Additionally, a new service was established in the Globeville and Elyria-Swansea neighborhoods. Service remains free and is available from 6 a.m. to 8 p.m. on weekdays.

Source: https://denvergov.org/Government/Agencies-Departments-Offices/Agencies-Departments-Offices-Directory/Department-of-Transportation-and-Infrastructure/Programs-Services/Transit/Montbello-Connector

Shared micromobility

Micromobility vehicles include a range of small, lightweight vehicles operating at slower speeds than a car but faster than a pedestrian. Micromobility vehicles include pedal bikes, e-bikes, e-scooters and other small electric devices like skateboards and hoverboards. Micromobility vehicles may be privately owned by an individual or they may be part of a shared program in which users rent a vehicle for a short period of time.

Shared micromobility programs are generally intended for short trips within urban and suburban areas. They are ideal for covering the first- and last-mile journey connecting riders from home or workplace to transit hubs and other destinations. Their fleets most often include e-scooters and e-bikes. Shared programs are typically implemented two ways, station-based and free-floating. In free-floating systems, vehicles can be picked up and dropped off anywhere within a designated service area. In station-based systems, vehicles must be picked up and dropped off at designated corrals. Devices such as e-scooters can be accommodated at locations by designating specific parking areas using pavement markings, signage or digital geofencing.

Relative cost and impact

Relative cost: Medium

Relative impact: High

Context guide

Land use applicability

Urban: High

Suburban: Medium

Rural: Low

Transit access applicability

Moderate to high: Medium

None to low: Low

Audience applicability

Residents: High

Workers: High

Students: High

Visitors: High

Bicycle and pedestrian infrastructure quality applicability

Moderate to high: High

None to low: Low

Equity considerations

Spatial

Deployment: Ensure deployment areas include equity priority areas and areas without access to other reliable forms of public transportation. Consistently rebalance vehicles in areas to establish shared micromobility as a reliable transportation option.

Temporal

Predictability: Encourage providers to equitably rebalance micromobility devices on a regular basis to ensure access remains consistent across the service area.

Economic

Affordability: Encourage providers to offer a low-income or subsidy program.

Accessibility: Encourage providers to provide multiple forms of payment so that users without mobile phones or electronic payment methods can access shared micromobility devices.

Social

Community Engagement: Work with the community to identify deployment zones that meet their needs and connect to key destinations.

Education and Awareness: Encourage providers to conduct community engagement events to educate users on how to ride safely.

Implementing agencies

- Local governments
- Metropolitan districts
- Employers (as fleet vehicles)

Resource

Understanding and Tackling Micromobility: Transportation's New Disruptor (2020): The Governor's Highway Safety Administration (GHSA) guide discusses common challenges with micromobility deployment like oversight, funding, data collection, enforcement, infrastructure and education and how public agencies and partners can address them.

Source: https://transportation.org/sharedmobility/wp-content/uploads/sites/82/2023/05/GHSA_MicromobilityReport_Final_1.pdf

Case Study

Regional Mobility Data Collaborative: The Denver Regional Council of Governments has been leading a regional mobility data collaborative partnership since 2019, which began with shared micromobility data and has also included other shared modes like carshare. The collaborative, including the Colorado Department of Transportation, Regional Transportation District and local governments with shared mobility programs, is a unique partnership where partners share access to a mobility management platform and regional open data portal.

Source: https://public.ridereport.com/regions/drcog

Car share

Car sharing programs allow residents and visitors in the region to live a car-free or car-light lifestyle. Car sharing consists of vehicles that are generally rented on a short-term basis for a few hours or a few days. Vehicles are often parked at designated parking spots throughout a community, making them convenient to locate and rent.

Car share programs may include fleets of vehicles owned by a private company or nonprofit and rented out to the public or they may include peer-to-peer rentals. Typically, car sharing users are charged based on their vehicle usage, including the time the vehicle is reserved and the distance driven, making it cost-effective for users.

This service encourages a shift away from private car ownership by providing a convenient alternative in urban areas, helping with reducing traffic congestion, parking demands and environmental impacts. Car share can also provide first- and last- mile connectivity to and from transit stations.

Relative cost and impact

Relative cost: Medium

Relative impact: Medium

Context guide

Land use applicability

Urban: High

Suburban: High

Rural: Low

Transit access applicability

Moderate to high: Medium

None to low: High

Audience applicability

Residents: High

Workers: Medium

Students: High

Visitors: Medium

Bicycle and pedestrian infrastructure quality applicability

Moderate to high: Medium

None to low: High

Equity considerations

Spatial

Deployment: Use a broad carpool and vanpool matching program to increase access to rideshare opportunities.

Temporal

Predictability: Encourage providers to allow for 24/7 car share reservations.

Economic

Affordability: Encourage providers to offer a low-income discount or subsidy program.

Accessibility: Encourage providers to provide multiple forms of payment so that users without mobile phones or electronic payment methods can access a vehicle.

Physiological

Accessibility: Encourage car share providers to maintain a diverse fleet of vehicles that can accommodate people with different needs and abilities.

Implementing agencies

- Car share operators (private and nonprofit)
- Local governments
- Employers (as fleet vehicles)

Case study

Colorado CarShare: Colorado CarShare, the region's only nonprofit and electric car share operator, launched a partnership with the City and County of Denver and Denver Housing Authority in 2021 to expand electric car share options to six under-resourced communities in Denver. Colorado CarShare offers discounted rates for residents in qualified housing programs to expand access to car share.

Source: https://carshare.org/colorado-carshare-city-of-denver-launch-electric-car-share-program/

Carpool and vanpool

Carpooling involves two or more people sharing a single vehicle to reach a common destination. Where applicable, vehicles can use dedicated carpool lanes to bypass general purpose traffic, such as the Downtown Express HOV lanes, running 6.6 miles from downtown Denver to US 36. Carpooling is applicable to commuters, students and residents alike.

Vanpooling is a form of ride-sharing where typically 5 to 15 people share a passenger van to commute together. Often organized by employers, vanpool is incentivized by subsidized fares or access to high-occupancy vehicle lanes. Vanpool is an excellent option for essential and shift workers, as many of these employees have off peak commutes that are not typically served by transit schedules.

Both carpool and vanpool involve sharing rides with other travelers to reduce the number of drive alone trips and thereby reducing traffic congestion and improving air quality. The Denver Regional Council of Government's Way to Go program is a great resource for carpool matching and starting a vanpool program.

Relative cost and impact

Relative cost: Low

Relative impact: Medium

Context guide

Land use applicability

Urban: Medium

Suburban: High

Rural: Medium

Transit access applicability

Moderate to high: Medium

None to low: High

Audience applicability

Residents: Low

Workers: High

Students: Low

Visitors: Low

Bicycle and pedestrian infrastructure quality applicability

Moderate to high: Medium

None to low: High

Equity considerations

Spatial

Deployment: Ensure all employees have access to carpool and vanpool matching, regardless of their home or work location.

Temporal

Hours of service: Provide the opportunity for off-peak commuters to be matched together to promote carpool and vanpool use at all hours of the day and ensure program availability to shift workers.

Economic

Affordability: Ensure carpool and vanpool fares are not burdensome for participants. Provide incentives for carpool and vanpool users such as high-occupancy vehicle lane access and priority parking spaces.

Physiological

Accessibility: Use vanpool vehicles that can accommodate people with different needs and abilities.

Implementing agencies

- Local governments
- Denver Regional Council of Governments
- Transportation management associations
- Employers

Case studies

MyWaytoGo.org: Denver Regional Council of Government's MyWaytoGo.org carpool matching and trip planning platform helps people carpool.

Source: https://mywaytogo.org/

Vanpool: The Denver Regional Council of Governments' 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.

Source: https://waytogo.org/regional-incentives

Schoolpool

Schoolpool is a nationally recognized Denver Regional Council of Governments program that helps families share rides to and from school. The platform generates a list of potential matches for interested parents or caregivers to contact other families to carpool, walk, bike or ride transit together. While Schoolpool is available for all Denver region schools, Schoolpool is particularly well suited as a strategy for elementary and middle school families.

Thousands of families in the Denver region are currently part of the Schoolpool program. Schoolpool provides a critical service to families and administrators. It helps administrators relieve traffic congestion during arrival and dismissal, alleviate bus issues caused by bus driver shortages and create community in school. It also enables families to make those connections while limiting liability and privacy issues on the part of the school. With more recent school consolidations and closures in the region, Schoolpool is uniquely positioned to help families plan new ride-sharing travel plans.

Relative cost and impact

Relative cost: Low

Relative impact: High

Context guide

Land use applicability

Urban: High

Suburban: High

Rural: High

Transit access applicability

Moderate to high: High

None to low: High

Audience applicability

Residents: High

Workers: High

Students: High

Visitors: Low

Bicycle and pedestrian infrastructure quality applicability

Moderate to high: High

None to low: High

Equity considerations

Spatial

Students within the Walk Zone: Families who live closer to school may be ineligible for the school bus but unable to walk or bike to school due to limited infrastructure. Targeting Schoolpool for these students can help minimize this barrier and improve school attendance.

Temporal

Varying schedules: Both students and parents may have varying work or school schedules, so it is important to clarify in the context of Schoolpool.

Economic

Needing rides versus giving rides: Some neighborhoods or communities may have more people needing rides than people giving rides, which can pose challenges around reimbursements for gas and time.

Physiological

Students with disabilities: Students with disabilities or medical conditions may require specialized transportation and traditional carpooling options might not meet their needs.

Social

Social norms: Social factors such as cultural norms, safety concerns and language barriers may impact participation in the Schoolpool program.

Implementing agencies

- Denver Regional Council of Governments
- School Districts
- Individual Schools

Case study

Schoolpool: Schoolpool is an award-winning, ride-matching program of the Denver Regional Council of Governments 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.

Source: https://waytogo.org/for-commuters/schoolpool

2

Mobility technology

Transportation technology supports multimodal travel, information sharing and access to transportation options.

- Mobility as a service
- Traveler information

Mobility as a service

Mobility as a service bundles various modes of transportation into one platform, allowing users to plan and pay for trips in a single channel. Modes may include public transit, ridesharing services, shared micromobility and car share. The user behavior and transportation data collected through mobility as a service can help improve transportation services and optimize routes. However regulatory, privacy concerns and interoperability issues between different transportation services can pose a challenge.

Relative cost and impact

Relative cost: High

Relative impact: Medium

Context guide

Land use applicability

Urban: High

Suburban: Medium

Rural: Low

Transit access applicability

Moderate to high: High

None to low: Low

Audience applicability

Residents: High

Workers: High

Students: High

Visitors: High

Bicycle and pedestrian infrastructure quality applicability

Moderate to high: High

None to low: Medium

Equity considerations

Spatial

Deployment: Ensure all employees have access to carpool and vanpool matching, regardless of their home or work location.

Temporal

Hours of service: Provide the opportunity for off-peak commuters to be matched together to promote carpool and vanpool use at all hours of the day and ensure program availability to shift workers.

Economic

Affordability: Ensure carpool and vanpool fares are not burdensome for participants. Provide incentives for carpool and vanpool users such as HOV lane access and priority parking spaces.

Physiological

Accessibility: Encourage vanpool to accommodate people with different needs and abilities.

Social

Community engagement: Work with the community to identify which services need to be integrated.

Education and awareness: Encourage providers to conduct community engagement events to share how to use their services.

Implementing agencies

- Regional Transportation District
- Colorado Department of Transportation
- Transportation service operators
- Private sector

Resource

Regional Transportation District's Reimagine Mobility as a Service Memo (2022): This document is a subcomponent of the Regional Transportation District's Mobility Plan for the Future that identifies strategies to promote integrated transportation services across the Denver region.

Source: https://www.rtd-denver.com/sites/default/files/files/2022-12/Reimagine MaaS Memo.pdf

Case Study

Connected Colorado: The Colorado Department of Transportation is developing a statewide trip planning and payment platform through its Connected Colorado effort. This digital platform will allow statewide transit coordination for passengers and operators alike.

Source: https://www.codot.gov/programs/transitandrail/connected-colorado

Traveler information

Traveler information systems provide information for the traveling public on the real-time status of roadway conditions and transportation services, allowing people to make informed decisions and adjust their travel behavior. Traveler information can be displayed virtually through online websites and apps or in person via physical signage. Traveler information systems play a key role in local, regional and statewide transportation demand management efforts as information allows travelers to efficiently change their behavior and shift their travel mode, time of day or route accordingly. Many factors, including weather, peak travel periods, incidents and road construction, all have the potential to span jurisdictional boundaries and affect travel on a regional scale.

The Denver Regional Council of Governments Regional Transportation and Operations Technology Strategic Plan recommends developing a process to coordinate traveler information messaging across the region.

Staff from the Colorado Department of Transportation, The Regional Transportation District and several local jurisdictions maintain traveler information systems. To avoid confusing the traveling public and to ensure a consistent message is projected by the regional transportation operations partners, a process to coordinate messaging is necessary.

A lead agency has not yet been identified for this initiative, but its scope requires regional administration.

Relative cost and impact

Relative cost: Medium

Relative impact: Low

Context guide

Land use applicability

Urban: High

Suburban: High

Rural: Medium

Transit access applicability

Moderate to high: High

None to low: High

Audience applicability

Residents: Medium

Workers: Medium

Students: Medium

Visitors: Medium

Bicycle and pedestrian infrastructure quality applicability

Moderate to high: High

None to low: High

Equity considerations

Spatial

Multi-modal Infrastructure: Include information on various transportation modes to ensure travelers have all the information necessary to plan all segments of a multimodal trip.

Safety: Implement clear signage and create safe, comfortable and efficient alternative routes to road or pathway closures.

Temporal

Hours of Operation: Update information in real time or as close as possible. Ensure information is available in person and digitally.

Predictability: Provide consistent and predictable access, both online and in person, to ensure that users can plan their travel.

Economic

Accessibility: Ensure traveler information is free, widely accessible and user-friendly.

Physiological

Accessibility: Provide traveler information in a variety of languages to meet local needs both online and in person via physical signage. Design maps and charts with accessibility standards.

Social

Community Engagement: Solicit feedback from the community related to what traveler information is most pertinent to their decision-making processes.

Education and Awareness: Launch campaigns to educate the public about new traveler information and trip planning platforms, ensuring that everyone understands and can benefit from them. Provide traveler information and education campaigns in different languages.

Implementing agencies

- Local governments
- Regional Transportation District
- Denver Regional Council of Governments
- Colorado Department of Transportation
- Private sector

Resource

Traveler Information: The Denver Regional Council of Governments' Regional Transportation Operations and Technology Strategic Plan includes a secondary initiative to develop processes to coordinate traveler information messaging across the region and a tertiary initiative to develop a Regional Multimodal Traveler Information platform. The plan describes the current state of regional traveler information services and outlines the needs moving forward.

Source: https://drcog.org/sites/default/files/resources/TPO-RP-RTOTPLAN.pdf

Case study

Colorado Department COTrip website: The Colorado Department of Transportation's COTrip website is a one stop shop for statewide traveler information and trip planning. The interactive map includes current and future construction zones, express lane locations, weather conditions, crashes, real time traffic speeds and more. Travelers can plan their route, view current road conditions in certain locations via cameras and sign up for direct travel alerts.

Source: https://maps.cotrip.org/

3

Transportation infrastructure

Transportation demand management-supportive infrastructure makes active transportation and transit more convenient, safe and comfortable for travelers.

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

Mobility hubs

Mobility hubs are places that serve as community anchors, connecting travelers to a variety of multimodal transportation options. Modes of travel located at mobility hubs can include fixed route transit, shared micromobility, microtransit, ride-hailing pickup/drop-off, carshare, vanpool and carpool. Supportive mobility hub infrastructure includes wayfinding, as well as separated active transportation infrastructure, such as separated bike lanes, wide sidewalks, secure bike parking and managed curb space. Other amenities include real-time travel information, human-scale lighting, seating and recognizable landmarks or transit system branding.

Rail and bus stations are natural mobility hubs as they have historically served as a meeting place between regional transit trips and local (first- and last-mile) destination access. Major employment and retail destinations, pedestrian plazas and critical junctions in the active transportation network are also strong candidates for mobility hubs. Mobility hubs can be easily scaled by intensity of activity and demand in a variety of land use contexts.

Relative cost and impact

Relative cost: High

Relative impact: Medium

Context guide

Land use applicability

Urban: High

Suburban: High

Rural: Low

Transit access applicability

Moderate to high: High

None to low: Low

Audience applicability

Residents: High

Workers: High

Students: High

Visitors: High

Bicycle and pedestrian infrastructure quality applicability

Moderate to high: High

None to low: Medium

Equity considerations

Spatial

Geographic coverage: Create mobility hubs that include a variety of modes in equity priority areas.

Temporal

Hours of Operation: Ensure mobility hubs and services are available for trips outside of peak hours.

Predictability: Encourage private operators and partners to rebalance shared micromobility and/or carshare vehicles to high-demand locations during peak periods.

Economic

Affordability and credit access: Partner with mobility service operators to provide low-cost or subsidized fare programs for shared mobility; ensure cash payment options are available and easy to access.

Physiological

Accessibility: Deploy shared micromobility stations and parking corrals to keep access aisles clear from obstructions.

Diverse options for diverse needs: Promote a wide range of modal connections from paratransit loading to shared adaptive cycles at mobility hubs with shared mobility services.

Social

Community engagement: Partner with community members, groups and stakeholders to identify local travel patterns and barriers, key destinations and routes and opportunities for mobility hubs.

Implementing agencies

- Local governments
- Regional Transportation District
- Colorado Department of Transportation
- Developers
- Transportation Management Associations

Case studies

Denver Union Station: Union Station is a transit hub located in an urban core that provides connections to key employment and commercial centers as well to the surrounding suburban and rural communities.In additional to rail and bus servce, bike and scooter share and ride-hailing services located on the premises provide first- and last-mile solutions to key destinations within the urban core.

Source: https://www.denverunionstation.com/transportation/

Olde Wadsworth Boulevard, Arvada: This pedestrianized main street was created as a COVID-era flex street, but is now codified in concrete. It has managed curbs, a major rail station, seating, placemaking and micromobility parking.

38th and Lake Station, RiNo: This station is a rail hub, but also provides ride-hailing pickup, has clear wayfinding and is connected to active transportation infrastructure.

Active transportation facilities

Active transportation facilities are infrastructure that support nonmotorized modes of transportation, primarily walking and biking. Active transportation facilities aim to make active transportation safer, more efficient and more appealing to the complete range of potential users regardless of age or ability, and is an important tool for encouraging first- and last- mile trips with active modes. Examples of active transportation facilities include on-street bikeways, separated paths, sidewalks and crossings. It is critical that active transportation facilities are safe, comfortable and well-connected to transit and key employment and recreational destinations. To be most effective, active transportation facilities such as bike lanes and paths should form a complete network.

Relative cost and impact

Relative cost: High

Relative impact: High

Context guide

Land use applicability

Urban: High

Suburban: High

Rural: High

Transit access applicability

Moderate to high: High

None to low: High

Audience applicability

Residents: High

Workers: High

Students: High

Visitors: High

Bicycle and pedestrian infrastructure quality applicability

Moderate to high: High

None to low: High

Equity considerations

Spatial

Distribution and Connectivity: Ensure that active transportation infrastructure is distributed throughout all areas, including historically underserved neighborhoods.Prioritize connections to essential services like schools, hospitals, grocery stores and transit hubs.

Temporal

Maintenance: Regular maintenance schedules should be established to ensure pathways remain safe, well lit and accessible year-round, including snow removal in winter months.

Economic

Incentives: Consider programs that offer economic incentives for active transportation, like subsidized bike-sharing memberships for low-income individuals.

Physiological

Accessibility: Ensure infrastructure is accessible to people of all abilities, including those with physical disabilities. This includes accessible ramps, wider pathways and tactile paving.

Facilities: Provide amenities like benches for resting, especially in areas frequented by the elderly or those with limited mobility.

Social

Community Engagement: Engage diverse communities in the planning and decision-making processes. Ensure their voices are heard and their needs are addressed.

Cultural Sensitivity: Recognize and respect cultural differences that may influence transportation choices and needs.

Education and Outreach: Implement programs that educate communities about the benefits of active transportation and safe practices. Ensure materials are available in multiple languages and cater to various cultural contexts.

Implementing agencies

- Local governments
- Colorado Department of Transportation
- Regional Transportation District
- Developers
- Property owners

Resources

Federal Highway Administration's Bicycle Facility Selection Guide: The Bicycle Facility Selection Guide provides information about selecting appropriate bicycle infrastructure based on roadway context.

Source: https://highways.dot.gov/sites/fhwa.dot.gov/files/2022-07/fhwasa18077.pdf

National Association of City Transportation Officials' Urban Bikeway Design Guide and Urban Street Design Guide: The Urban Bikeway Design Guide and Urban Street Design Guide provide detailed design and implementation guidance for bicycling and pedestrian facilities in urban and suburban contexts.

Sources: https://nacto.org/publication/urban-bikeway-design-guide/, https://nacto.org/publication/urban-street-design-guide/

Federal Highway Administration's Small Town and Rural Design Guide: The Small Town and Rural Design Guide offers information about accommodating active users in low-density contexts.

Source: https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/small_towns/

Case Study

City and County of Denver Bike Lane Expansion: Denver recently surpassed its goal to install 125 miles of bikeways by 2023. The City is aiming to provide all households with easy access to a high comfort bikeway (shared use path, sidepath, separated bike lane or neighborhood bikeway) and achieve a 15% biking and walking commute mode share by 2030.

Source: https://www.denvergov.org/Government/Agencies-Departments-Offices/Agencies-Departments-Offices-Directory/Department-of-Transportation-and-Infrastructure/Programs-Services/Bicycles

Active transportation supportive infrastructure

Supportive infrastructure for active transportation includes both essential infrastructure and end of trip amenities that reduce barriers to active transportation. Secure bicycling parking and storage is essential supportive active transportation infrastructure and first- and last- mile tool.

Types of bicycle parking may include the following:

- Short-term bicycle parking supports brief stops near building entrances and at parks. The inverted U-rack is preferable, with sufficient space to accommodate cargo bicycles and adaptive bicycles.
- Long-term secure parking facilities can include restricted access for those with a keycard or code. Indoor or covered parking facilities are suitable for transit centers, workplaces, residences and schools.
- Branded, designated corrals support station-based shared micromobility systems and are typically located adjacent to the curb on the street or sidewalk. Station-based micromobility systems require sufficient station density and coverage to support short trips, and expanded station capacity near major destinations and transit stops.
- Designated parking corrals with markings or geofencing can also support free-floating shared micromobility systems by providing anchors for devices and helping to keep sidewalks and bikeways clear and accessible.
- Charging stations in secure parking facilities can help cater to the rising demand for electric micromobility device charging.
- Bike valet is generally used to provide large scale secure bike parking for sporting events, markets or other community gatherings. It operates much like a coat check—users exhange their bike for a ticket and leave it with the bike valet staff until they are ready to retreive it.

Workplace amenities like showers, lockers and changing rooms can address concerns that prevent commuters from walking and biking to work.

Bike repair stations with tools for basic maintenance are helpful at workplaces, transit stops, Bike-n-Ride shelters and along shared-use paths.

Relative cost and impact

Relative cost: Medium

Relative impact: Medium

Context guide

Land use applicability

Urban: High

Suburban: High

Rural: Medium

Transit access applicability

Moderate to high: High

None to low: High

Audience applicability

Residents: High

Workers: High

Students: High

Visitors: High

Bicycle and pedestrian infrastructure quality applicability

Moderate to high: High

None to low: Medium

Equity considerations

Spatial

Distribution: Equitably distributed across all areas, especially in historically underserved or marginalized neighborhoods.

Connectivity: Prioritize locations that connect to essential services like schools, hospitals and transit hubs.

Temporal

Hours of accessibility: Make sure secure parking is accessible during all hours, catering to those with non-traditional working hours or nighttime activities.

Maintenance: Regularly maintain these facilities to ensure they remain functional and safe year-round, including considerations for seasonal changes such as snow removal and adequate lighting.

Economic

Affordability: If there are costs associated with infrastructure (such as paid secure bike parking), ensure they are affordable or offer subsidized rates for low-income individuals.

Physiological

Accessibility: Incorporate design that is accessible to people of all abilities, including those with physical disabilities. This includes wider parking spaces for adaptive bicycles and accessible, easy to read signage.

Health and hygiene: Ensure end-of-trip facilities like showers are clean and hygienic. Consider the needs of different body types and provide appropriate amenities, including accessible and gender-neutral facilities.

Social

Community engagement: Engage diverse communities in the planning and decision-making processes to ensure it meets their specific needs.

Implementing agencies

- Local governments
- Regional Transportation District
- Property owners
- Transportation management associations
- Employers

Resource

Association of Pedestrian and Bicycle Professionals' Bicycle Parking Guidelines (2010): The Association of Pedestrian and Bicycle Professionals' second edition of the Bicycle Parking Guidelines (2010) provides practical information about distinct types of bicycle parking facilities, installation and site planning. It also provides policy guidance for bicycle parking, including recommendations for capacities based on land use and on ridership at transit hubs.

Source: https://www.apbp.org/assets/docs/bpg_exec_summary_4-21-10.pdf

Transit supportive infrastructure

Transit supportive infrastructure includes elements that support transit operations and riders, including stop-area improvements such as accessibility improvements, seating, shelters, trash receptacles and lighting. It also includes system branding, navigation and wayfinding signs, real-time arrival information (and other related traveler information), transit signal priority and secure bicycle parking or storage. These improvements make transit more comfortable and easier to use for travelers.

In order to make transit supportive infrastructure as attractive and useful as possible, it is important to engage with community members, transit riders and other community organizations to learn more about the types of infrastructure that meet the needs of the community the most. Engaging directly with transit users within the community allows for planners to identify gaps in planned projects and develop new projects.

Relative cost and impact

Relative cost: Medium

Relative impact: Medium

Context guide

Land use applicability

Urban: High

Suburban: High

Rural: High

Transit access applicability

Moderate to high: High

None to low: High

Audience applicability

Residents: High

Workers: High

Students: High

Visitors: High

Bicycle and pedestrian infrastructure quality applicability

Moderate to high: High

None to low: Medium

Equity considerations

Spatial

Service Area: Ensure transit supportive infrastructure is present at transit stops and stations in equity priority areas.

Temporal

Hours of Accessibility: Ensure transit stops are well lit, safe and accessible.

Maintenance: Regular maintenance schedules should be established to ensure stops remain accessible year-round and high-use facilities remain in good working condition.

Economic

Affordability: If there are costs associated with use of infrastructure (such as paid secure bike parking), offer subsidized rates for low-income individuals.

Physiological

Accessibility: Ensure transit supportive infrastructure is accessible and easily serves those experiencing both physical and cognitive disabilities.

Social

Community Engagement: Engage with the community to identify gaps and gather feedback on planned capital projects or spot improvements.

Implementing agencies

- Regional Transportation District
- Local governments
- Colorado Department of Transportation
- Transportation management associations
- Business Improvement Districts

Resources

Regional Transportation District's Bus Infrastructure Design Guidelines (2016): This document outlines the Regional Transportation District's design standards for transit supportive infrastructure at different station types and for all users, including people walking and biking.

Source: https://www.rtd-denver.com/sites/default/files/files/2018-08/Bus-Infrastructure-Design-Guidelines-and-Criteria-2016.pdf

Federal Transit Administration's Manual on Pedestrian and Bicycle Connections to Transit (2017): This manual provides best practices to help transportation professionals improve pedestrian and bicycle safety and access to transit. It includes information on evaluating, planning for and implementing improvements to pedestrian and bicycle access.

Source: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/64496/ftareportno0111.pdf

American Public Transportation Association's Bicycle and Transit Integration (2018): This guide includes a series of recommended practices for transit agencies interested in addressing the growing demand for bicycle mobility and connectivity to buses and trains.

Source: https://www.apta.com/wp-content/uploads/Standards_Documents/APTA-SUDS-UD-RP-009-18.pdf

4

Parking management

Parking management effectively changes travel behavior through mode shift, time shift and location shift. Strategies such as dynamic pricing, permitting and re-zoning apply to both curbside and parking management.

- Curbside management
- Parking management policies

Curbside management

Curbside management plans optimize and regulate the use of curbside space along streets and roads in urban areas. Curbside management is a broad subgenre of transportation planning that includes personal vehicle parking, bicycle and micromobility parking and storage, dynamic passenger and commercial loading zones and electric vehicle charging station management. During and after the COVID-19 pandemic, curbs have also accommodated safe outdoor gathering space through programs such as outdoor dining and parklets. There has also been an increase in demand for curbside loading activity in recent years with the rise of e-commerce, which has led to more creative loading solutions, such as the growing use of e-cargo bikes for first- and last-mile deliveries of food and packages in urban environments.

Curb management may include digitizing the curb with the use of sensors, cameras or Curbside Data Specification to digitally track curb regulations, utilization rates and violations. Curbside management can streamline traffic flow, promote safety and accommodate the various demands of curbside space.

Best practices include designing dedicated loading-unloading zones to reduce traffic disruptions, creating bike lanes to improve bicyclist safety and managing space between sidewalks and curbs to accommodate street trees and outdoor seating.

Relative cost and impact

Relative cost: Medium

Relative impact: Medium

Context guide

Land use applicability

Urban: High

Suburban: Medium

Rural: Low

Transit access applicability

Moderate to high: High

None to low: Low

Audience applicability

Residents: Medium

Workers: Medium

Students: Medium

Visitors: Medium

Bicycle and pedestrian infrastructure quality applicability

Moderate to high: High

None to low: Medium

Equity considerations

Spatial

Accessibility: Ensure that curb management policies maintain space for accessible parking and loading.

Temporal

Flexibility: Support dynamic and flexible curb use policies that promote demand-responsive use of public space.

Economic

Affordability: Wherever possible, provide discounted loading zone fees for small or disadvantaged businesses.

Social

Community Engagement: Engage with the community to identify gaps in parking and passenger/commercial loading access and gather feedback on planned changes.

Implementing agencies

- Local governments
- Colorado Department of Transportation

Resources

Institute of Transportation Engineers' Curbside Management Practitioners Guide: This document provides information about planning considerations, available tools and treatments, treatment consideration and performance measures for managing the curb.

Source: https://www.ite.org/pub/?id=C75A6B8B-E210-5EB3-F4A6-A2FDDA8AE4AA

Regional Transportation District's First and Last Mile Strategic Plan: The Regional Transportation District's strategic approach to the first and last mile encompasses a variety of resources tailored for effective implementation. The strategy emphasizes active transportation infrastructure enhancements, improvements in bus accessibility and curbside management and the refinement of shared-mobility services at specific stations. Additionally, the plan underscores programmatic enhancements like marketing initiatives and behavior modification techniques to boost transit use.

Source: https://www.rtd-denver.com/projects/first-mile-last-mile-strategy

Open Mobility Foundation Curb Data Specification: The Open Mobility Foundation creates standards for the Curb Data Specification, a digital tool that helps cities manage the curb. It allows public agencies to better coordinate with private sector service providers.

Source: https://www.openmobilityfoundation.org/about-cds/

Parking management policies

Parking management aims to balance the supply of parking spaces with demand. Effective parking policies help reduce congestion caused by cruising for parking, promote sustainable transportation options and free up land use once zoned for parking for other development opportunities, such as housing. Policies include pricing, permitting and zoning strategies. Parking management is applicable to both on and off-street parking.

Pricing strategies include dynamic pricing that varies by location and time of day based on demand and can be real time or based on trends. Other strategies include shared parking, parking maximums or elimination of parking minimums for new developments. All of these strategies can be used to avoid underused parking. Technology can also be used to increase parking efficiency, often used to provide real-time information for parking availability or to monitor parking utilization.

Relative cost and impact

Relative cost: Medium

Relative impact: Medium

Context guide

Land use applicability

Urban: High

Suburban: Medium

Rural: Low

Transit access applicability

Moderate to high: Medium

None to low: High

Audience applicability

Residents: High

Workers: High

Students: High

Visitors: Medium

Bicycle and pedestrian infrastructure quality applicability

Moderate to high: High

None to low: Medium

Equity considerations

Spatial

Service Area: Ensure parking is properly managed based on true demand across the region to help users retain reliable access to business and services, especially in equity priority areas.

Temporal

Span: Ensure that managed parking is accessible at all times of day, especially for off-peak and shift workers.

Economic

Pricing: Provide wage-based parking rates or discounted parking rates for people with low incomes.

Use parking fees to fund additional transportation demand management or transportation improvement projects that benefit marginalized communities.

Social

Community Engagement: Engage with the community to identify parking management issues and potential solutions.

Implementing agencies

- Local governments
- Regional Transportation District
- Employers
- Property owners

Case study

Performance-Based Parking Program; Seattle, WA: the City of Seattle has maintained a performance-based parking program since 2010 with the goal of setting on-street parking rates at a level that promotes regular turnover to help customers reliably find parking, reduce emissions, traffic congestion circling and increase access to businesses. Parking rates are adjusted three times each year based on occupancy data. In areas where parking occupancy is above 85% prices are increased and where they are below 85% prices are decreased.

Source: https://www.seattle.gov/transportation/projects-and-programs/programs/parking-program/performance-based-parking-pricing-program

5

Incentives for mode shift

Financial incentives for mode shift have been shown to be effective at changing travel behaviors. Strategies include rewarding travelers for not driving alone, rebates for personal micromobility vehicles, tax benefits for employers and providing free or discounted travel passes.

- Subsidies, rebates and rewards
- EcoPass District creation

Subsidies, rebates and rewards

Subsidies, reimbursements and tax-free commuter options can incentivize travelers to choose different modes of transportation. Workplace strategies such as parking cash out programs, which offer cash payments in lieu of a parking space, incentivize employees to shift from driving alone to work to other modes. Additional employer sponsored programs or government initiatives that offer financial incentives and tax credits to individuals who take active transportation modes to work are available through Colorado's SB-260.

Other financial incentives for mode shift can help offset upfront costs, such as rebates for e-bikes, making them more accessible to a broader range of people. The popularity of e-bike incentives in the Denver region has grown exponentially, with over 6,000 rebates redeemed in the City and County of Denver since the program started in 2022.

Transportation subsidies can encourage commuters who drive alone to try different modes of transportation, from long commutes on transit to short neighborhood errands. Subsidies for public transit can include free transit programs, employer transit subsidies and youth programs for low-cost transit passes. Membership discounts for car-share programs attract occasional car users and discounts for low-income families makes car-sharing a viable option. Offers and discounts on bike-sharing and scooter-sharing services make short trips more affordable.

Relative cost and impact

Relative cost: High

Relative impact: High

Context guide

Land use applicability

Urban: High

Suburban: High

Rural: High

Transit access applicability

Moderate to high: High

None to low: Medium

Audience applicability

Residents: High

Workers: High

Students: High

Visitors: Low

Bicycle and pedestrian infrastructure quality applicability

Moderate to high: High

None to low: Medium

Equity considerations

Temporal

Span: Ensure that incentives for people who travel and/or commute at all times of day. Additional incentives can be offered to people who drive alone at off-peak times, as fewer transportation options are available.

Economic

Payouts: Encourage employers to offer multiple types of incentives for different modes, including but not limited to bike and transit subsidies and parking cash out. This gives commuters a choice between the modes that are available to them.

Social

Community Engagement: Engage with stakeholders to understand what incentives would be most beneficial and compelling.

Implementing agencies

- Local governments
- Regional Transportation District
- Colorado Department of Transportation
- Employers
- Transportation service operators
- Transportation management associations
- Denver Regional Council of Governments

Case studies

Federal Highway Administration's Impacts of City-Level Parking Cash-out and Commuter Benefits Ordinances (2022): This presentation summarizes academic research and case studies that demonstrate the benefits of commuter financial incentives like pre-tax benefits, tax-credits and employer-provided financial incentives.

Source: https://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1228&context=trec_seminar

Active Transportation Subsidies at Amazon HQ; Seattle, WA (2023): Amazon maintains a campus in the South Lake Union neighborhood of Seattle of over 40 buildings and 50,000 employees. The company offers fully subsidized commuter benefits for transit, vanpool and regional ferry service. The company also provides its employees with $170 per month that can be used for bike-sharing, long term bike lease, bike maintenance, ride-sharing or daily parking.

Source: https://www.commuteseattle.com/wp-content/uploads/2023/05/Final-Case-Study-Amazon-1.pdf

EcoPass District creation

One of the most effective ways to increase transit ridership is by reducing the cost. The EcoPass is a program offered by the Regional Transportation District that provides unlimited rides on buses and light rail within the Regional Transportation District network for a calendar year for a fixed-fee.

An EcoPass District is a specific geographic area, often organized by businesses, neighborhood groups or other community organizations, that contracts with the Regional Transportation District to provide EcoPasses for all eligible employees or residents within that area. The EcoPass District effectively pools resources to offer the pass at a reduced rate, making it more affordable and encouraging the use of public transit.

Key points about an EcoPass District:

- **Group Purchase:** The cost of the EcoPass is determined by several factors, including the number of eligible participants in the district and the proximity to Regional Transportation District services. By purchasing in bulk for everyone in the district, the per-pass cost is often reduced.
- **Defined Boundaries:** The district has clearly defined boundaries. Every eligible individual within this boundary can benefit from the pass.
- **Types of Districts:** Different types of entities can create an EcoPass District, including business improvement districts, residential neighborhoods or large employers.
- **Promotes Transit Use:** By making it affordable and convenient for everyone in a district to use public transit, the EcoPass program aims to reduce traffic congestion, decrease environmental impacts and promote sustainable commuting habits.

In essence, an EcoPass District is a collective agreement between a defined group and the Regional Transportation District to offer discounted, unlimited transit access to individuals within that group.

Relative cost and impact

Relative cost: Low

Relative impact: High

Context guide

Land use applicability

Urban: High

Suburban: Medium

Rural: Low

Transit access applicability

Moderate to high: High

None to low: Low

Audience applicability

Residents: High

Workers: High

Students: High

Visitors: Not applicable

Bicycle and pedestrian infrastructure quality applicability

Moderate to high: High

None to low: Medium

Equity considerations

Spatial

Coverage: Ensure that EcoPass districts are equitably distributed, not just in affluent or central urban areas but also in marginalized and historically underserved neighborhoods.

Accessibility: Ensure the benefits of EcoPass are communicated in various languages and formats so that all community members understand the benefits and how to use the pass.

Economic

Affordability: While the EcoPass itself offers a discounted transit experience, consider additional subsidies or sliding scale fees based on income to ensure even the most economically disadvantaged can benefit.

Job Access: Prioritize EcoPass districts in areas that connect residents to employment hubs, educational institutions and essential services.

Physiological

Health Benefits: Promote the health benefits of using public transit combined with walking or biking, highlighting reduced air pollution, increased physical activity and decreased stress from not driving.

Social

Community Engagement: Engage diverse communities in the decision-making process for creating an EcoPass district. Their insights can ensure the district truly serves their needs.

Cultural Competence: Be sensitive to the diverse needs of various cultural or ethnic groups within potential EcoPass districts. This includes multilingual outreach and understanding cultural nuances related to transit use.

Implementing agencies

- Local governments
- Business improvement districts
- Employers
- Property owners and developers
- Homeowners' associations

Case study

The Neighborhood EcoPass is an annual Regional Transportation District transit pass that can be purchased in bulk by neighborhoods, apartment buildings or HOAs. Over 50 neighborhoods in the City of Boulder participate in the Neighborhood EcoPass Program, accounting for over 7,000 households in 2019. Neighborhoods that participate have reported a dramatic increase in public transit use, which results in less congestion and pollution in our community.

The City of Boulder provides a 50% subsidy for first time participating neighborhoods and an ongoing 33%-39% subsidy for renewing neighborhoods based on the affordable housing amount. In comparison, the 2022 cost for a year's worth of individual Regional Transportation District monthly passes is $1,368 for local trips and $2,400 for regional trips. The City of Boulder also provides free EcoPasses to Downtown and University Hill businesses for their employees. The cost of the EcoPass program is partially covered through parking revenues.

Source: https://www.rtd-denver.com/neighborhood-ecopass

6

Roadway management

Roadway management strategies use financial levers to control traffic congestion, incentivize what types of vehicles are on the roadway and raise funding for infrastructure improvements.

- Roadway usage fees
- Vehicle fees

Roadway usage fees

Roadway usage fees are management strategies implemented by transportation authorities to optimize traffic flow and generate revenue for infrastructure improvements, such as roadway maintenance.

Common practices include the use of electronic toll collection, which automatically deducts tolls from pre-paid accounts by scanning a vehicle's license plate or specialized sticker. Toll types include congestion pricing based on real-time traffic conditions as well as standard area-wide pricing and carpool lanes with waived tolls or express lanes with variable tolls allow travelers to make decisions based on pricing.

It is important to note that in order for roadway usage fees to not disproportionately burden low-income populations, they must have access to consistent and reliable alternatives to driving such as public transit service and active transportation infrasructure.

Relative cost and impact

Relative cost: Medium

Relative impact: High

Context guide

Land use applicability

Urban: High

Suburban: High

Rural: Low

Transit access applicability

Moderate to high: High

None to low: High

Audience applicability

Residents: High

Workers: High

Students: Low

Visitors: Medium

Bicycle and pedestrian infrastructure quality applicability

Moderate to high: High

None to low: Medium

Equity considerations

Spatial

Service area: Avoid roadway usage fees in equity priority areas where disadvantaged populations live and work. as their financial impact may be felt disproportionately.

Temporal

Span: Provide fee-free times or alternative options during off-peak hours to limit the financial burden of usage fees on essential shift workers.

Economic

Exemptions: Provide exemptions or reduced priced options for small businesses and people with low incomes.

Social

Community Engagement: Engage with the community to identify and mitigate negative externalities.

Implementing agencies

- Local governments
- Colorado Department of Transportation
- Toll authorities

Resources

Federal Highway Administration's Congestion Pricing Primer (2006): This document provides robust information on congestion pricing, from toll lanes to cordon pricing. It explains the benefits of congestion pricing and highlight examples of congestion pricing in practice from around the US and abroad.

Source: https://ops.fhwa.dot.gov/publications/congestionpricing/congestionpricing.pdf

Colorado Department of Transportation Road Usage Charge Pilot Program Research Study: The gas tax is the main source of funding for road in Colorado. However, the gas tax has not been raised since 1991 and is declining in purchasing power. In 2017, the Colorado Department of Transportation piloted a road usage charge program to evaluate if such a program could sustainably provide long-term funding for the statewide transportation system. The Colorado Road Usage Charge Pilot Program Research Study evaluated a pay-by-mile system as a potential alternative to the gas tax during the four-month pilot program. The pilot demonstrated a road usage charge program as a feasible alternative funding mechanism.

Source: https://www.codot.gov/programs/ruc

Vehicle fees

Vehicle fees are charges imposed on individual vehicles to manage traffic, raise revenue for transportation infrastructure and incentivize purchases of more fuel-efficient vehicles. Vehicle fee structure is typically based on the vehicle type, weight and license plate type. Fees are generally imposed to supplement the gas tax and may go to infrastructure maintenance, safety projects or other public transportation projects. Additionally, fees or surcharges may apply to ride hailing and delivery services to manage congestion and to generate revenue to fund supportive infrastructure like passenger load zones and dedicated food pick-up or delivery zones.

Relative cost and impact

Relative cost: Medium

Relative impact: Medium

Context guide

Land use applicability

Urban: High

Suburban: High

Rural: High

Transit access applicability

Moderate to high: High

None to low: Medium

Audience applicability

Residents: High

Workers: High

Students: Low

Visitors: Not applicable

Bicycle and pedestrian infrastructure quality applicability

Moderate to high: Medium

None to low: High

Equity considerations

Spatial

Service area: Avoid vehicle fees in equity priority areas where their financial impact may be felt disproportionately. Ensure that a wide variety of alternative transportation options are available where vehicle fees are in place.

Benefit distribution: prioritize reinvestment of funds raised by vehicle fees in historically underinvested areas.

Economic

Value: Ensure that vehicle fees are proportionate to the value of the vehicle. Provide reduced fee options for small businesses.

Implementing agencies

- Local governments
- Counties
- Colorado Department of Transportation

Resource

San Francisco County Transportation Network Company Tax: In 2019, San Francisco voters approved a measure to impose a 3.25% tax on transportation network company riders, private transit services and automated vehicles. The tax's purpose is to reduce congestion caused by transportation network companies and encourage users to use public or active transportation. Additionally, the revenue from the tax is used to fund pedestrian and bicycle safety improvements and transit operations. The program is estimated to generate $15 million per year.

Source: https://www.sfcta.org/funding/tnc-tax

7

Public policies

Public policies may be implemented by governments at the local, regional, state or federal levels.

- New development
- Zoning policies

New development

Transportation demand management-related policies and ordinances for new developments help to manage the added traffic and parking demand generated. Early collaboration with land use practitioners and developers can ensure transportation demand management strategies are proactively built into the planning phase of developments. Transportation demand management strategies for new developments can take on a variety of structures. They may be required through an ordinance, or they may be strongly advised through incentives. There may be a variety of strategies a developer can choose from based on location or type of development, or there may be certain strategies that are required for every development. In general, policies and ordinances for new development are based on the land use context of the area where development is occurring. In particular, local jurisdictions should encourage transit-oriented development by incentivizing new construction near planned or existing high capacity bus and light rail stations.

Relative cost and impact

Relative cost: High

Relative impact: Medium

Context guide

Land use applicability

Urban: High

Suburban: High

Rural: Low

Transit access applicability

Moderate to high: High

None to low: Medium

Audience applicability

Residents: High

Workers: High

Students: Low

Visitors: Low

Bicycle and pedestrian infrastructure quality applicability

Moderate to high: Medium

None to low: High

Equity considerations

Spatial

Distribution: Ensure that requirements are met for new developments across the region.

Physiological

Accessibility: Ensure that developer transportation demand management programs are available and accessible to people of all ages and abilities.

Social

Opportunity: Ensure that transportation demand management benefits are available to all users of a new development, including visitors.

Avoid exclusive uses where possible (such as private shuttles).

Implementing agencies

- Local governments
- Regional Transportation District
- Colorado Department of Transportation

Resource

City and County of Denver Transportation Demand Management Rules and Regulations (2021): This document explains transportation demand management requirements for developers in the City and County of Denver. The requirements apply to any development project subject to development review and explain the requirements for different building types and land use categories.

Source: https://www.denvergov.org/files/assets/public/v/3/doti/documents/regulations/dotirr-034.0_transportation_demand_management.pdf

Case study

Boston, MA Developer Transportation Demand Management Point Program Fact Sheets (2021): The City of Boston requires all new developments over 50,000 square feet to develop a transportation demand management program to mitigate transportation congestion impacts associated with the development. The program offers developers the opportunity to select strategies that are most appropriate for the users of the new building and are proven to reduce drive-alone rates. This document describes the different transportation demand management program options, including upfront and ongoing costs, implementation effort, monitoring requirements and program impact.

Source: http://chrome-extension/efaidnbmnnnibpcajpcglclefindmkaj/https:/www.boston.gov/sites/default/files/file/2022/02/Fact Sheets - Point System_022022_1.pdf

Zoning policies

Creating and/or updating zoning codes and land use regulations is a highly effective transportation demand management strategy as travel demand is most often based on land use context and density levels. Example types of zoning codes that support transportation demand management initiatives include expanding mixed-use and pedestrian oriented developments, increasing density in transit-oriented areas, increasing affordable housing requirements and eliminating minimum or adding maximum parking requirements. Zoning policies that encourage transit-oriented housing, commercial or office developments near public transit are economically advantageous for developers and municipalities, as developers will have reduced construction costs associated with on-site parking, and local jurisdictions will have lower infrastructure maintenance costs associated with the new development since transit-rich neighborhoods generate less vehicular traffic.

Relative cost and impact

Relative cost: Low

Relative impact: High

Context guide

Land use applicability

Urban: High

Suburban: Medium

Rural: Low

Transit access applicability

Moderate to high: High

None to low: High

Audience applicability

Residents: High

Workers: High

Students: Medium

Visitors: Medium

Bicycle and pedestrian infrastructure quality applicability

Moderate to high: High

None to low: High

Equity considerations

Economic

Displacement: Ensure that land use updates are equitably distributed throughout the region to avoid disproportionate burden in equity priority areas.

Social

Community engagement: Consult with the community to understand their land use desires and needs and how new land use policies would affect existing communities.

Implementing agencies

- Local governments

Resources

A Business Case for Dropping Parking Minimums (American Planning Association, 2022): This article provides a brief history of the recent legislative movement to eliminate minimum parking requirements. It also shows a map of locations across the country that have adopted parking reforms and explains the benefits of this policy change.

Source: https://www.planning.org/planning/2022/spring/a-business-case-for-dropping-parking-minimums/

Planning for Whole Communities Toolkit: Parking Management (Puget Sound Regional Council, 2014): This chapter of the Planning for Whole Communities Toolkit explores parking management strategies often associated with land use, such as minimum parking requirements and development regulations. It highlights case studies from across the country where parking and land use policies improved congestion and parking performance.

Source: https://www.psrc.org/sites/default/files/2022-03/parking_management.pdf

Denver region transit oriented developments:

- 29th and Welton
- Alameda Station
- Boulder Junction Station
- Denver Union Station
- Olde Town Arvada Station
- Sheridan Station

Source: https://www.rtd-denver.com/projects/transit-oriented-development-projects

8

Employer programs

- Commute trip reduction programs
- Flexible work

Commute trip reduction programs

Commute trip reduction programs aim to reduce drive alone trips at peak commuting hours. Generally, commuter trip reduction programs require employers of a certain size to create a plan for reducing drive alone trips by a certain percentage. This percentage is typically based on number of employees and local or state greenhouse gas emissions reductions goals. Employers may work with local transportation management associations to create plans catered to an employer's location, employee access to transit and employee work hours. Plans may also include the addition of supportive infrastructure and amenities at an employer's location.

Relative cost and impact

Relative cost: Medium

Relative impact: High

Context guide

Land use applicability

Urban: High

Suburban: High

Rural: Low

Transit access applicability

Moderate to high: High

None to low: High

Audience applicability

Residents: High

Workers: High

Students: Low

Visitors: Low

Bicycle and pedestrian infrastructure quality applicability

Moderate to high: High

None to low: Medium

Equity considerations

Economic

Affordability: Provide resources and/or financial support for small business to voluntarily implement employee trip reduction programs.

Social

Education and awareness: Provide educational materials to employers and employees on the benefits of employee trip reduction policies and how to take advantage of them.

Implementing agencies

- Local governments
- Colorado Department of Transportation
- Regional Air Quality Council
- Colorado Department of Public Health
- Local businesses

Resource

Regional Air Quality Council ETRP Resources: This site serves as a landing page and resource for best practices, case study examples and past presentations that pertain to employer trip reduction in the greater Denver region.

Source: https://raqc.org/etrp-resources

Flexible work

COVID-19 showed employers that many employees generally enjoy remote work and maintain high levels of productivity. Even in a post-pandemic world, flexible work remains a valuable strategy. However, unlike most other transportation demand management strategies, flexible work must implemented by employers themselves. It is not a municipal or jurisdictional policy.

Flexible work takes many forms including but not limited to

- **Telework:** Allowing employees to complete their work duties from home or another non-office location
- **Flexible work hours:** Allowing employees to begin and/or end their day outside traditional 9-to-5 working hours
- **Compressed work schedule:** Allowing employees to work full longer days, fewer times per week

Flexible work can help reduce congestion by shifting work hours to off-peak times, making it more convenient for workers to use scheduled public transportation or shared rides or reducing overall trips on days when employees are able to work fully from home.

Flexible work schedules can also be combined with incentives to encourage workers to use non drive-alone modes when they do travel to work. Employers can collaborate with TMAs to develop and implement flexible work strategies that are feasible and implementable in their unique workplace context.

Relative cost and impact

Relative cost: Low

Relative impact: High

Context guide

Land use applicability

Urban: High

Suburban: High

Rural: High

Transit access applicability

Moderate to high: High

None to low: High

Audience applicability

Residents: High

Workers: High

Students: Low

Visitors: Low

Bicycle and pedestrian infrastructure quality applicability

Moderate to high: High

None to low: Low

Equity considerations

Spatial

Distribution: Ensure that all employees capable of completing their job duties from home have equal opportunity to do so, regardless of their typical commute distance or mode.

Temporal

Working hours: Allow employees flexible start and end times for their workday that align with fixed-route transit schedules or make it possible for them to use non drive-alone travel modes

Economic

Offset remove work costs: Offer financial or in-kind contributions to employees to ensure that they can maintain a comfortable and effective remote work environment.

Social

Career development: Ensure that remote employees have access to the same resources and opportunities as on-site employees, regardless of how frequently they commute to their job site.

Implementing agencies

- Employers
- Transportation Management Associations

Resources

Remote and Flexible Work Toolkit for Employers (City of Vancouver, BC, 2022): This document provides employers with information and tools on how to develop and implement a remote work policy, and provides additional resources such a sample remote work policy and employee agreement and surveys for evaluating program effectiveness.

Source: https://vancouver.ca/files/cov/remote-work-toolkit.pdf

Colorado Department of Labor Remote Work Initiative: This website serves as repository of resources for employers and employees on remote work. Resources include details on the Remote Work Certification Program, academic research on the benefits of remote work, funding opportunities for employers looking to implement remote work policies, and case studies of businesses of all sized and industries which have successfully implement remote work.

Source: https://cdle.colorado.gov/offices/office-of-the-future-of-work/remote-work-initiative

9

Education, outreach and marketing

Education, outreach and marketing techniques represent a variety of ways to support transportation demand management goals.

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

Transportation management association establishment and partnerships

Transportation management associations (TMAs) are organizations that provide transportation demand management services and strategies for a particular geographic area. Transportation management associations are rooted in the communities they serve, and are able to provide tailored, specialized knowledge and information to help their target populations access a variety of transportation options. They are typically standalone nonprofits, but can also be a part of chambers of commerce and business improvement districts. Transportation management associations provide a range of services, including transit marketing and promotions, bicycle education programs, carpooling campaigns, telework support and parking management. Historically, transportation management associations have served office businesses and their employees, however, many organizations also serve residents, students and essential workers.

Typically, transportation management associations combine private and public funding sources, establishing partnerships with important local stakeholders to reach transportation demand management objectives. Through partnerships, transportation management associations can help amplify the impact of new infrastructure investments through outreach to their network. Expanded partnerships, from employers to advocacy groups, universities and community-based organizations can broaden community awareness of multimodal transportation options. These partnerships can also champion the implementation of associated policies to complement new infrastructure and services.

Relative cost and impact

Relative cost: Medium

Relative impact: Medium

Context guide

Land use applicability

Urban: High

Suburban: High

Rural: Low

Transit access applicability

Moderate to high: High

None to low: Medium

Audience applicability

Residents: High

Workers: High

Students: Medium

Visitors: Medium

Bicycle and pedestrian infrastructure quality applicability

Moderate to high: High

None to low: High

Equity considerations

Spatial

Infrastructure investment: Partnering with local stakeholders to advocate for the development of transportation infrastructure in underserved areas

Temporal

Service hours: Work to ensure that transportation services have operating hours to meet the needs of various demographic groups, including shift workers.

Carpooling and telework: Promote programs like carpooling and telework, which can help individuals with different daily schedules access transportation options more equitably.

Economic

Affordability: Focus on making transportation services more affordable by providing subsidies, discounts or incentives, thus reducing economic barriers to accessing transportation.

Physiological

Active transportation: Programs like bicycle education and encouragement initiatives can promote active transportation modes that benefit the physical well-being of residents.

Social

Community engagement: Expanding partnerships with advocacy groups and residents helps TMA staff address social barriers by involving the community in transportation planning and decision-making.

Implementing agencies

- Local governments
- Chambers of commerce
- Economic development corporations
- Nonprofits
- Educational institutions
- Business Improvement Districts
- Denver Regional Council of Governments

Case study

Way to Go: The Denver Regional Council of Governments and eight transportation management association partners together form Way to Go. This group of partners is dedicated to working together across the region to reduce traffic congestion, improve air quality and make life better in the Denver region.

Source: https://drcog.org/services-and-resources/way-go-commuter-services

Travel training and education programs

Travel training and education programs teach travelers how to use other modes such as transit, bicycling, micromobility and ride-hailing. For example, the Denver Regional Mobility and Access Council's "Getting There Travel Training" offers several in person and virtual courses designed to build the skills, knowledge and confidence for travelers taking transit and ride-hailing services like Uber and Lyft. Trainings cover basics such as planning a trip, reading schedules, payment methods, safety tips and more. Other programs focus on bicycling and micromobility modes, such as Bicycle Colorado's Bike School program. Bike School teaches people of all ages and abilities how to ride a bike, navigate routes to schools safely and the basics of riding and owning an e-bike.

Relative cost and impact

Relative cost: Low

Relative impact: Low

Context guide

Land use applicability

Urban: High

Suburban: Medium

Rural: Low

Transit access applicability

Moderate to high: High

None to low: Medium

Audience applicability

Residents: High

Workers: High

Students: High

Visitors: Low

Bicycle and pedestrian infrastructure quality applicability

Moderate to high: High

None to low: Low

Equity considerations

Spatial

Availability: Ensure that travel training programs are available to people across the region, with a special focus on equity priority populations.

Temporal

Time of day: Ensure that travel training programs are available at different times of day, including daytime and evening hours, to reach a broader audience.

Economic

Reimbursement: Provide travel vouchers or reimbursement to attendees for their travel to and from in-person training.

Physiological

Accessibility: Continue to provide both in-person and virtual meeting options. Ensure that in-person meetings are accessible to people with disabilities, and that virtual meetings have interpreters and/or live transcription.

Social

Cultural sensitivity: When developing curriculum, consider and address different cultural norms that may impact people's travel decisions.

Implementing agencies

- Employers
- Local governments
- Transportation management associations
- Non-profits

Case studies

Bicycle ambassadors: Bicycle ambassadors are volunteers who work within their communities to encourage bicycling and improve bicycle safety. They often lead presentations on bicycling and promote safe bicycling at community events. Fort Collins has a successful Bicycle Ambassadors program.

Source: https://www.fcgov.com/bicycling/bicycle-ambassador-program

Confident commuting: This type of workshop or course focuses on increasing bicyclists' confidence by teaching the safety, traffic, maintenance and navigation skills necessary to commute by bike. Programs can also include guidance for taking bicycles on transit, storing bicycles at transit stations and using bike-sharing service with transit. Bicycle Colorado offers this course in a three-part series.

Source: https://www.bicyclecolorado.org/initiatives/bike-school/confident-commuting/

Promotion of Regional Transportation District discount passes

Promotion of the various transit pass programs developed by the Regional Transportation District, targeted to specific populations around the station or transit service location can create mode shirt through education and marketing. As of 2023, the Regional Transportation District offers several discount pass programs:

- **LiVE Pass:** 40 percent discount to qualifying riders whose incomes are at or below 185 percent of the federal poverty guidelines.
- **Youth Special Discount Card:** 70 percent fare discount for youth ages 6-19 on all regular bus and train services. Currently, there is ongoing pilot that enables youth to ride transit fare-free through 2024.
- **Senior Special Discount Card:** 50 percent fare discount for people ages 65+ on all regular bus and train services.
- **Individuals with Disabilities Special Discount Card:** 50 percent fare discount for individuals with disabilities on all regular bus and train services.
- **CollegePass:** CollegePass is an annual college-sponsored pass providing students unlimited rides on bus and rail for a nominal cost included in their tuition and fees. All participating colleges receive Local, Regional and Airport bus and rail service.
- **U.S. military ride for free:** Active-duty members of the U.S. military currently ride for free on all Regional Transportation District services.

Discounted pass programs encourage increased access and use of transit, while reducing financial burdens on those that need it most.

Relative cost and impact

Relative cost: Low

Relative impact: Medium

Context guide

Land use applicability

Urban: High

Suburban: Medium

Rural: Low

Transit access applicability

Moderate to high: High

None to low: Low

Audience applicability

Residents: High

Workers: High

Students: High

Visitors: Low

Bicycle and pedestrian infrastructure quality applicability

Moderate to high: High

None to low: Medium

Equity considerations

Spatial

Transit deserts: Address and consider areas that are underserved by transit. Promotion in such areas can be paired with advocacy for better transit services.

Temporal

Campaign Span: Ensure that promotional campaigns cover various times to cater to those with non-traditional working hours or schedules. Longer promotional campaigns can ensure that more people, especially those who might be less connected to regular communication channels, become aware of the discounts.

Economic

Affordability and Access: Emphasize cost-savings, especially targeting individuals and families with limited financial means. Highlight how discounted passes can connect individuals to employment hubs, potentially leading to economic upliftment.

Physiological

Accessibility features: Ensure promotions highlight accessible features of the transit system, catering to seniors and individuals with disabilities.

Social

Inclusive outreach: Ensure promotional campaigns are inclusive, utilizing multiple languages and culturally sensitive materials.

Community engagement: Engage community leaders and organizations in promotional efforts, ensuring that the message reaches deeply into communities.

Implementing agencies

- Local governments
- Chambers of commerce
- Economic development corporations
- Nonprofits
- Educational institutions
- Business Improvement Districts
- Denver Regional Council of Governments

Case study

Northeast Transportation Connections: Northeast Transportation Connections actively promotes transit discount passes within their service area using a range of marketing and events to get word out and sign people up. The organization released a white paper called “Bringing TDM Solutions to Communities of Diversity” which provides a discussion and recommendations on how transportation demand management can be equitably implemented in the region, including how to promote services.

Source: https://www.netransportation.org/white-paper

Localized transportation information and kits

Localized transportation information kits can be crafted to specific local transportation needs. Acting as an all-inclusive guide, these kits aim to enhance the utility of local transit networks, foster eco-friendly commuting patterns and mitigate area-specific traffic congestion. These information kits can be distributed to new residents, businesses and students in the area.

Key features of the kits include:

- **Transit maps:** Detailed visuals spotlighting bus pathways, railway routes and other pivotal public transport services pertinent to the region.
- **Guides for cyclists and pedestrians:** Insights on bike-friendly zones, walking routes to major destinations and essential safety recommendations.
- **Drive alone alternatives:** Information on car-sharing, carpool and other green commuting methods prevalent in the area.
- **Fare perks:** Information about fare reductions, available subsidies and incentives to stimulate transit ridership.
- **Current schedules:** Links to online transit service schedules and relevant transit apps.

The overarching goal of these kits is to provide travelers with the insights required to navigate the transport landscape efficiently. By streamlining the use of the transit infrastructure and endorsing eco-friendly travel habits, these kits are pivotal in achieving transportation demand management goals. Key life transitions, like starting a new job, moving homes or business locations, enrolling in school or welcoming a family addition, are opportune moments when individuals are more open to altering their daily travel routines. For instance, a company's shift to a new location is the perfect time to reshape the commuting dynamics of its entire workforce.

Relative cost and impact

Relative cost: Low

Relative impact: Low

Context guide

Land use applicability

Urban: High

Suburban: Medium

Rural: Medium

Transit access applicability

Moderate to high: High

None to low: Low

Audience applicability

Residents: High

Workers: High

Students: High

Visitors: Medium

Bicycle and pedestrian infrastructure quality applicability

Moderate to high: High

None to low: Low

Equity considerations

Spatial

Localized needs: Customize the content of the kits based on the unique transportation needs and challenges of specific neighborhoods or regions.Emphasize connections between various modes of transportation.

Temporal

Timely updates: Ensure that the information in the kits is updated regularly to reflect any changes in transportation schedules, routes or services.

Seasonal variations: Address seasonal changes in transportation, such as winter biking tips or seasonal transit routes.

Economic

Affordability: Highlight any cost-saving opportunities, such as discounts, subsidies or incentive programs.

Job access: Emphasize routes and modes that connect to major employment hubs.

Physiological

Accessibility: Ensure the kits are available in formats that cater to individuals with disabilities, including braille, large print or digital formats with screen reader compatibility.

Social

Cultural sensitivity: Ensure the kits are available in multiple languages and consider cultural norms or practices that might influence transportation choices.

Community engagement: Collaborate with local community leaders or organizations when developing kit contents.

Implementing agencies

- Local governments
- Transportation management associations
- Employers
- Educational institutions
- Chambers of Commerce
- Denver Regional Council of Governments
- Property owners and homeowners' associations

Case study

Transportation Solutions welcome kit: Transportation Solutions developed a welcome kit for residents at a new apartment building called "The Henry" near the Regional Transportation District's I-25 and Broadway station. Door hangers were left on apartment doors for new residents with information about the Transit App, two free transit tickets, a bike map and information about how to enter a sweepstakes to win a bike.

Transit access marketing plan

Developing a transit access marketing plan can help to increase ridership and spread information about a specific transit station or bus stop location. Marketing plans should show the connection from transit stops to significant nearby commercial, residential and recreational destinations. Doing so will enhance the campaign's effectiveness by underscoring the convenience and practicality of using public transit for accessing essential locations.

Marketing campaigns can be distributed at local events or transportation fairs. Plans should have a start and end date and track any increases in ridership during the campaign's lifespan through participant surveys.

Relative cost and impact

Relative cost: Low

Relative impact: Low

Context guide

Land use applicability

Urban: High

Suburban: Medium

Rural: Low

Transit access applicability

Moderate to high: High

None to low: Low

Audience applicability

Residents: High

Workers: High

Students: High

Visitors: Low

Bicycle and pedestrian infrastructure quality applicability

Moderate to high: High

None to low: Medium

Equity considerations

Spatial

Connectivity: Certain communities may lack access to reliable transit, where marketing and promotional efforts alone are not enough to overcome the barriers to access.

Temporal

Low transit service levels: Limited transit schedules, especially during off-peak hours, can hinder the ability of some individuals to access transportation for work, education and other needs.

Economic

Affordability: Fare affordability can be a barrier for low-income individuals, preventing them from using public transit. Include information on reduced fare programs as part of the marketing plan.

Physiological

People with disabilities: People with disabilities or mobility challenges may encounter difficulties accessing and using transit services. Consider partnerships with community-based organizations as part of the marketing plan.

Social

Stigma: Social stigma, language barriers and safety concerns can deter travelers using public transit. Ensure that marketing materials highlight a variety of benefits and represent the needs of the communities they serve.

Safety: Address safety concerns by highlighting security measures such as well-lit stations, surveillance cameras and transit police presence.

Implementing agencies

- Local governments
- Regional Transportation District
- Transportation management associations

Case study

OmniTrans Marketing Plan; San Bernadino, CA: OmniTrans' 2021-2022 Marketing Plan presents a strategic approach to grow transit ridership and increase community engagement and support. It outlines the agency's goals around community partnerships and customer experience and identifies key performance indicators for measuring successful marketing campaigns.

Source: https://omnitrans.org/wp-content/uploads/2021/06/Omnitrans-Marketing-Plan-FY2022.pdf

Marketing commuter tax benefits

The federal commuter tax benefits based on Section 132(f) of the federal tax code enables employees to use pre-tax income to pay for transit, vanpool and parking expenses through a payroll deduction up to a maximum amount designated by the IRS every year, much like a flexible savings plan. This allows the employer to save money through reduced payroll taxes. Tax benefits can incentivize both employers and employees to reduce drive alone commutes.

This strategy targets large employers that are located near transit stops to provide commuter tax benefits information to their employees.

Relative cost and impact

Relative cost: Low

Relative impact: Medium

Context guide

Land use applicability

Urban: High

Suburban: Medium

Rural: Low

Transit access applicability

Moderate to high: High

None to low: Low

Audience applicability

Residents: Not applicable

Workers: High

Students: Not applicable

Visitors: Not applicable

Bicycle and pedestrian infrastructure quality applicability

Moderate to high: Not applicable

None to low: Not applicable

Equity considerations

Spatial

Distribution: Ensure that marketing campaigns for commuter tax benefits cover a broad geographic area, with a specific focus on equity priority areas.

Temporal

Time of day: Ensure that marketing campaigns for commuter tax benefits are broadcast at all times of day.

Physiological

People with disabilities: Ensure that marketing campaigns are accessible to people with disabilities, including people who are blind or hard of hearing.

Social

Complicated rules: Commuter tax benefits are complicated, increasing the barriers for participation.

Implementing agencies

- Transportation management associations
- Denver Regional Council of Governments

Case studies

Best Workplaces for Commuters: Best Workplaces for Commuters provides qualified employers with national recognition for offering commuter benefits based on the standards described by the National Center for Transit Research. Employers that achieve the standard are recognized on their website. The website also provides employers with resources on how to promote their recognition and support their employees to commute more sustainably.

Source: https://www.bestworkplaces.org/

Colorado Clean Commute: Colorado Clean Commute is a Denver Regional Council of Governments program that can help businesses get up to $125,000 in tax credit in 2023 and 2024 while supporting transportation demand management goals around improving employee travel choices, reduced vehicle miles traveled and air quality improvement.

Source: https://waytogo.org/colorado-clean-commute

Promotional events

This strategy encompasses all promotional events and incentives that encourage multimodal trips such as transit, biking and walking. Events can range from information tables at an employment site to regional month-long competitions that allow individuals and organizations to compete against each other. Targeted “Try It” days or weeks, such as Bike to Work Day, are another way to encourage travelers to use other modes of transportation.

Competitions, prizes and public commitments are all great tools to incentivize participation in promotional events and establish behavior changes.

Relative cost and impact

Relative cost: Low

Relative impact: Low

Context guide

Land use applicability

Urban: High

Suburban: Medium

Rural: Low

Transit access applicability

Moderate to high: High

None to low: Medium

Audience applicability

Residents: High

Workers: High

Students: High

Visitors: Low

Bicycle and pedestrian infrastructure quality applicability

Moderate to high: High

None to low: Medium

Equity considerations

Spatial

Access to promotions: Spatial barriers can arise if promotional events are primarily held in certain areas, causing other locations to be underserved or have less access to participate.

Temporal

Timing of promotions: Often, promotions are only available to people who change their behavior from drive alone trips to a new mode, making people who are already doing the desired behavior ineligible.

Economic

Type of worker: Promotional events often target white collar office workers negating shift and essential workers.

Physiological

Accessibility of information: Promotions may not effectively reach individuals with disabilities if they rely solely on traditional promotional materials.

Social

Inclusivity and diversity: Promotions should be designed to be inclusive of all demographic groups, including those from different cultural backgrounds, genders, ages and socioeconomic statuses.

Implementing agencies

- Transportation management associations
- Local governments
- Denver Regional Council of Governments
- Regional Transportation District
- Colorado Department of Transportation
- Employers

Case study

Go-Tober Challenge: Go-Tober is a month-long challenge run by the Denver Regional Council of Governments’ Way to Go program. The annual challenge has competing employer sizes up against each other to encourage employees to try new modes of commuting to and from work in October.

Source: https://waytogo.org/gotober

Where to go from here

This toolkit is a supplement to the Transportation Demand Management Strategic Plan.

The strategic plan is a roadmap for Denver Regional Council of Governments to advance transportation demand management. In addition to strategies for the council, it includes more information about:

- Services currently offered by the Denver Regional Council of Governments, which may be useful to your organization.
- Regional transportation trends and challenges, and how transportation demand management address them.

The strategic plan is available at [insert URL when available].

The strategic plan and toolkit are just the beginning. For more additional information or support, please visit drcog.org.

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DENVER REGIONAL COUNCIL OF GOVERNMENTS