Denver Regional Active Transportation Plan



## **EXECUTIVE SUMMARY** January 2019

# **Executive Summary**

### INTRODUCTION

The communities that make up the Denver region are interconnected, and their residents and visitors are highly mobile. There are numerous downtowns, activity centers, major employers and other significant destinations that attract people from nearby cities and counties. Today, residents across the Denver region bicycle and walk to access destinations and connect to the regional transit system.

The Denver region has a long history of planning for active transportation that is evident in signature regional trails such as the Clear Creek Trail, Cherry Creek Trail, South Platte River Trail, the C-470 Trail, High Line Canal Trail and numerous others. Local communities have begun to prioritize comfortable on-street bicycle facilities in various planning efforts and to participate in Vision Zero-related traffic safety initiatives.

#### What is Active Transportation?

The term active transportation generally refers to selfpropelled modes such as walking, wheelchairs and bicycling. It encompasses trips made for any purpose such as work, school and shopping. While emerging micromobility devices like electric-assist bicycles and e-scooters do not exclusively rely on human power, people riding them typically use shared-use paths, bike lanes and sidewalks. These devices offer a practical alternative to the use of motor vehicles and contribute to many of the same goals as walking and bicycling.

Many people bicycle in the Denver region, but even more people would bicycle if it were safer and more convenient. According to a regionwide survey, 59 percent of adults in the Denver region are "interested, but concerned" and are unlikely to bike without separated bicycle facilities. This suggests that investing in safe and comfortable bicycle facilities could substantially increase bicycling in the region.

#### **Benefits of Active Transportation**

There are many benefits to active transportation, from physical and mental health to economic vitality and environmental benefits. Some of the benefits include:

- » Bicycling and walking can improve health and help adults and children meet recommended levels of physical activity established by the Centers for Disease Control.
- » Active transportation options contribute to a more equitable transportation system by reducing accessibility barriers for people who ride a bicycle, walk, ride transit or use mobility devices.
- » Planning for people who walk or bicycle improves safety for all users.
- » Bicycling and walking are good for the economy. A 2016 study conducted in Colorado estimated that bicycling and walking account for combined health and economic benefits of approximately \$4.8 billion annually.

#### What is the Active Transportation Plan?

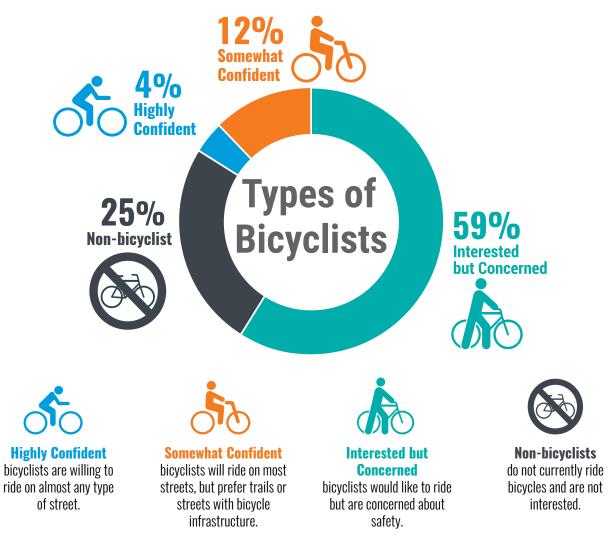
Working with the Active Transportation Stakeholder Committee and local partners, the Denver Regional Council of Governments developed the region's first Active Transportation Plan. The ATP highlights the region's vision for a safe, comfortable and connected active transportation network and highlights opportunities and implementation strategies. The ATP provides:

- » an aspirational framework for connecting current and future communities and destinations across the region with high-comfort bicycle and pedestrian facilities
- » ideas and resources for communities to improve active transportation while supporting regional connectivity
- » information on planning and design approaches and bicycle and pedestrian infrastructure implementation.
- » local and regional actions that support plan goals

The ATP promotes regional cooperation on active transportation issues and encourages municipalities to share ideas and learn from one another to advance a more connected and cohesive active transportation network.

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#### Quick Facts | Active Transportation in the Denver Region

Percent of commuters who walk to work: 3%

Percent of commuters who bicycle to work: 1%

Number of walking trips per day: 1,900,000

Number of bicycle trips per day: 140,000

Miles of sidewalk in the region: 17,700

Miles of roadway with on-street bicycle facilities in the region: 524

Miles of off-street bicycle facilities in the region: 1,646

## Metro Vision and the Active Transportation Plan

The ATP supports DRCOG's *Metro Vision* plan. *Metro Vision* established performance measures and targets that support fewer people driving single-occupant vehicles to work, improved safety for all users of the transportation system and improved air quality. Considering how active transportation contributes to livability and mobility regionwide, an active transportation plan is necessary to establish a shared vision for active transportation in the Denver region. There is a substantial opportunity to shift the way people in the Denver region get around, reducing driving alone trips and increasing travel by transit, foot and bicycle.

The ATP identifies several objectives that build on the themes and outcomes of *Metro Vision*:

- 1. Reduce the number and severity of crashes involving pedestrians and bicyclists.
- 2. Increase bicycling and pedestrian activity.
- 3. Expand and connect the regional and local bicycle networks.
- 4. Expand and connect comfortable transportation facilities for people who bike and people who walk.
- 5. Improve bicycle and pedestrian access to and from transit.
- 6. Improve the region's multimodal transportation system.
- 7. Improve and expand equitable access to regional active transportation corridors.

#### ATP Planning Process

In 2017 and 2018, DRCOG worked with partners throughout the region to develop the ATP. DRCOG convened an Active Transportation Stakeholder Committee, consisting of representatives from local communities, as well as from the Colorado Department of Transportation, Regional Transportation District, transportation management associations, local advocacy organizations and DRCOG. Throughout the process, the project team engaged members of the public and additional stakeholders.

## Plan Highlights

#### **Regional Active Transportation Network**

The Denver region is renowned for its off-street shareduse path and trail system. This system provides a backbone for active transportation but has significant gaps and connection barriers. An integrated network of on- and off-street facilities is needed to make active transportation safe, comfortable and well-connected throughout the region. The regional active transportation network should seamlessly cross jurisdictional boundaries, connect residents to important destinations and improve quality of life for both residents and visitors.

The planning framework for the ATP includes four distinct geographies that work together (example in Figure 2) to create a comprehensive active transportation network:

- » Regional active transportation corridors connect significant regional destinations and may serve longer distance bicycle trips, as well as local walking and biking trips.
- » **Pedestrian focus areas** have high concentrations of current or potential pedestrian activity.
- » Short-trip opportunity zones have high concentrations of trips 2 miles or less, which shows potential to support bicycle and pedestrian trips.
- » Local active transportation networks connect residents to local destinations and to the regional network.



## Emerging Trends and Approaches for Local Implementation

#### **Emerging Trends**

The transportation system has evolved rapidly over the past decade and continues to undergo significant change. The ATP addresses emerging trends, such as electric-assist bikes, micromobility devices and automated vehicles. Nationwide, there is a great deal of uncertainty as to how some of these trends will affect active transportation. In general, new mobility technologies can address first- and last-mile challenges and provide an alternative to personal automobile trips. However, concerns related to safety and user conflicts are yet to be resolved.

#### Policies, Programs and Practices

Developing a connected and safe active transportation system hinges on policies, programs and practices that support integrating active transportation into routine decision-making. Key strategies include Vision Zero, Complete Streets and other initiatives. The ATP addresses many of the most common approaches, highlighting examples from the Denver region. For example, Denver, Boulder and Brighton have initiated Vision Zero efforts and DRCOG is currently initiating a regional Vision Zero Action Plan.

#### Infrastructure

The plan also includes information for common bicycle and pedestrian infrastructure design treatments that support a safe, comfortable and connected network. The bicycle and pedestrian infrastructure guidance gives special attention to facilities and treatments that are safe and comfortable for people of most ages and abilities. These design considerations cover:

- » bicycle facility types
- » bikeway selection
- » bicycle intersection treatments
- » pedestrian infrastructure
- » supporting elements



Source: Jefferson County Open Space



Source: City and County of Denver Vision Zero Action Plan



Source: Toole Design

#### Figure 2. Regional Active Transportation Network Example

#### **Regional Active Transportation Network Example**



Bicycle parking and other amenities help create synergy between transit and active transportation networks.



Wayfinding is essential for creating seamless transitions between networks across jurisdictions and where routes transition from on-street to off-street facilities. They help bicyclists and pedestrians find destinations and are particularly helpful to people unfamiliar with the area or route.



Low-volume, low-speed streets can provide s comfortable space for bicycling and walking relatively low cost. Such streets will be espe important in leveraging available funding for greatest effect.

#### Legend:

#### Pedestrian Focus Area

2m

areas with a high concentration of existing or potential pedestrian activity

#### Short-trip Opportunity Zone

areas with a high concentration of short trips (2 miles or less), where there is a high potential for converting car trips to bicycling

**Kipling St** 



**Regional Active Transportation Corridor** 



**Light Rail Station** 



W 20th Ave

W Colfax Ave

## W 32nd Ave **Pierce St** W 29th Ave Marked crosswalks alert drivers to expect bicyclists and pedestrians crossing the road. Easy connections between on-street and off-street Public art provides visual interest along regional routes and showcases community character. facilities create a seamless experience for bicyclists and pedestrians. W Colfax Ave W 14th Ave ā...... "Inns Denver Sherdan Blvd Knox Ct

High-quality, accessible connections to neighbor-hoods adjacent to regional routes ensure the active transportation network is available to everyone.

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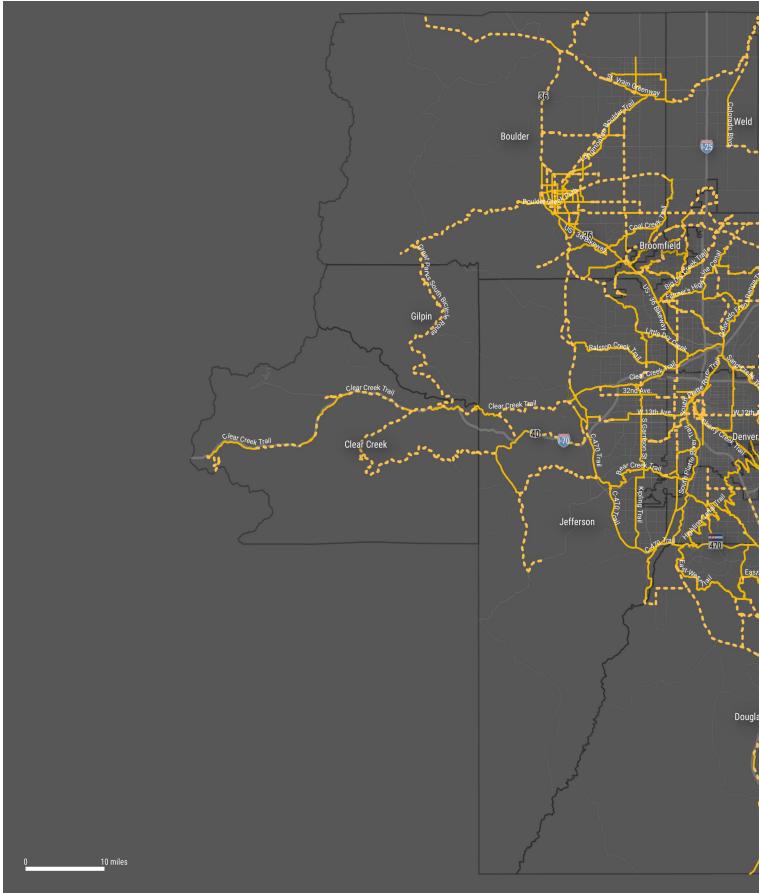
Executive Summary | vii

Connections to adjacent parks help residents meet

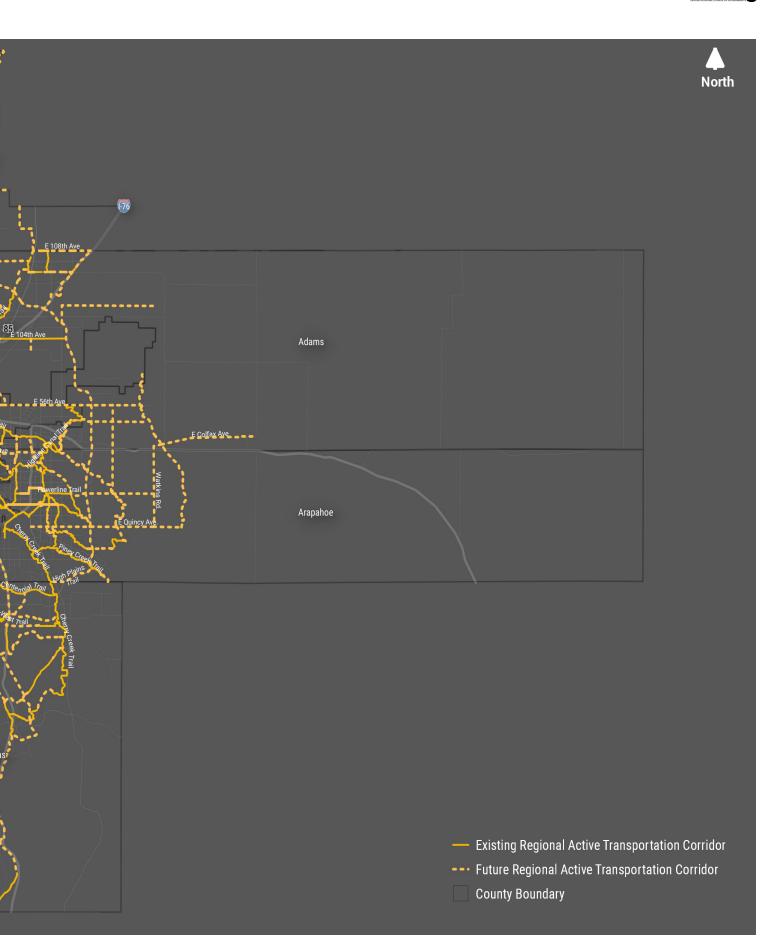
physical activity goals.



#### Figure 3. Existing and Future Regional Active Transportation Corridors



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#### **Taking Action**

Successful plans catalyze change. Because DRCOG does not construct bicycle and pedestrian infrastructure directly, the ATP will succeed only if local agencies and other regional partners act to improve active transportation across the Denver region. DRCOG's role in the implementation of the ATP is to facilitate and encourage collaboration and coordination and to provide support for local implementation efforts, including funding local projects and programs through the Transportation Improvement Program and associated set-asides and programs.

The plan identifies how regional organizations and local agencies can support bicycling and walking. These opportunities highlight policies, programs and actions that will help the region achieve the objectives set forth in this plan and, more broadly, in *Metro Vision*.

The plan also includes case studies to demonstrate how various actions have been implemented in other regions or by local agencies within the Denver region.

### Regional Opportunities to Support Bicycling and Walking

The regional opportunities outlined in the ATP are intended to foster collaboration and prioritize information-sharing to ensure local communities have the tools they need to improve active transportation. The opportunities are organized in three categories: collaboration, education and assistance, and investments. Some of the opportunities include:

- » Convene local, regional and statewide bicycle and pedestrian stakeholders to coordinate policy efforts on active transportation-related issues such as electric-assist bicycles, micromobility devices, data and stop-as-yield legislation.
- » Coordinate with local partners to further explore traffic safety in the Denver region and develop a Vision Zero Action Plan.
- » Conduct analyses and provide data on topics such as level of traffic stress and crashes.
- » Consider prioritization criteria that encourage investment in high-comfort bicycling and walking facilities that are part of the regional active transportation network.

#### Local Opportunities to Support Bicycling and Walking

The local opportunities outlined in the plan are grouped into three categories: collaboration, policies, plans and regulations, and investments. These opportunities vary in the amount of investment required, allowing local communities to move forward with opportunities that best align with their capacity. Some of the opportunities include:

- » Adopt a Vision Zero policy with the goal of eliminating traffic fatalities and serious injuries.
- Adopt policies, regulations or standards promoting Complete Streets principles and context-sensitive design for users of all ages, incomes and abilities.
- » Design and build low-stress bicycle networks and complete sidewalk networks that facilitate on- and off-street facility connectivity.
- » Implement safety projects that improve conditions for bicyclists and pedestrians and track their effectiveness by analyzing crash data.

#### **Appendices**

More detailed information produced during the ATP process is contained in these appendices:

- » County Profiles
- » Survey of Residents about Active Transportation
- » Technical Documentation
- » Bicycle and Pedestrian Crash Report
- » Stakeholder Engagement Process
- » Local Plan Inventory

### Learn More

To learn more about the Denver region's Active Transportation Plan, please visit the project page at: <u>drcog.org/atp</u>