Chapter 1: Introduction

The North Front Range Metropolitan Planning Organization (NFRMPO) is the state-designated agency responsible for the long-range regional transportation planning efforts in Northern Colorado. Through this role, the NFRMPO is federally required to address bicycle and pedestrian (active transportation) planning as a component of the Regional Transportation Plan (RTP).[1] The NFRMPO is uniquely positioned to offer guidance and support in active transportation planning to its 15 local member agencies, see **Figure 1-1**, and support policies and strategies endorsed by state and federal partners such as the Colorado Department of Transportation (CDOT) and the United States Department of Transportation (USDOT).

CDOT's Policy Directive (Bike and Pedestrian Policy 1602) in 2009 and subsequent State Statute 43-1-120, make clear the Colorado Transportation Commission's (TC) directive for CDOT to promote mode choice and provide for the needs of bicyclists and pedestrians. Through this policy the TC has directed the safe and reliable accommodation of bicyclists and pedestrians in all of CDOT's planning, design, and operation of transportation facilities. The USDOT policy is to incorporate safe and convenient walking and bicycling facilities into transportation projects.[2]

Every transportation agency has the responsibility to improve conditions and opportunities for walking and bicycling and to integrate walking and bicycling into their transportation systems. The *Active Transportation Plan (ATP)* reinforces the NFRMPO's commitment in working with all Northern Colorado partners to ensure safe, accessible, and reliable active transportation accommodations are part of the transportation planning process.

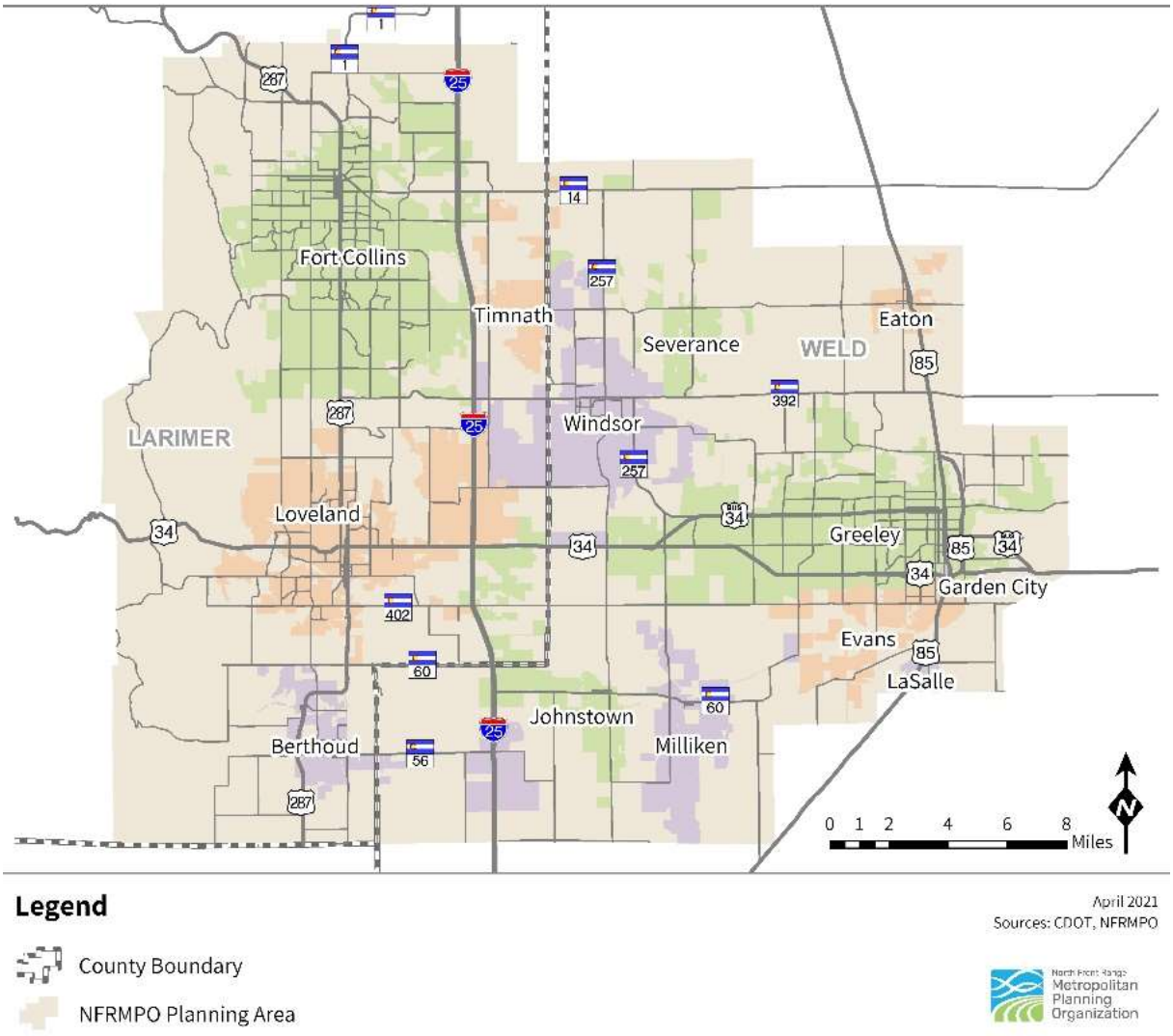
Regional Context

The NFRMPO's 15 local member agencies include the communities of Berthoud, Eaton, Evans, Fort Collins, Garden City, Greeley, Johnstown, LaSalle, Loveland, Milliken, Severance, Timnath, and Windsor, as well as Larimer and Weld counties. CDOT and the Colorado Department of Public Health and Environment's (CDPHE) Air Pollution Control Division (APCD) are also represented on the NFRMPO Planning Council. The area shown in **Figure 1-1** encompasses roughly 675 square miles and is home to 526,402 residents and 309,928 jobs. Rapid population growth is expected to continue, with an additional 426,000 residents and 163,000 jobs forecasted by 2045.

[1] 23 CFR § 450.324

[2] https://www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/policy_accom.cfm

Figure 1-1: The NFRMPO Region



What is Active Transportation

For the purposes of this plan, and subsequent planning efforts, the NFRMPO is defining active transportation as human-powered and human-scaled modes of transportation, including:

- pedestrian (walk or wheelchair)
- bicycle
- scooter
- skateboard
- other personal mobility devices

Above: Image credit: City of Fort Collins

The term active transportation acknowledges the emerging trends in personal- or micro-mobility solutions. For instance, it is more inclusive of electric assist technologies than the term 'non-motorized.' Additionally, active transportation acknowledges the fluidity in the way public space is used, more so than the term 'bicycle and pedestrian.' For instance, many jurisdictions define electric-assist scooter (e-scooter) users as pedestrians, but limit e-scooter use exclusively to operation on roadways. Additionally, the term is consistent with changes within the Association of Metropolitan Planning Organizations (AMPO) and its Active Transportation working group. Where appropriate, the *ATP* will use the terms 'active transportation' and 'active modes.'

Purpose of the Active Transportation Plan (ATP)

The *ATP* is an update to the NFRMPO's *2013 Regional Bicycle Plan* (RBP) and 2016 *Non-Motorized Plan*. The primary purposes of the *ATP* are to:

- Fulfill the federal requirement to address bicycle and pedestrian planning as a component of the *Regional Transportation Plan (RTP)*;
- Present a consolidated summary of the existing bicycle and pedestrian infrastructure, data, policies, programs, and standards throughout the region;
- Summarize best practices for topics such as equity and emerging micromobility solutions (electric bikes, scooters, and skateboards, etc.);
- Identify opportunities to connect and enhance the local and regional active transportation system with an action plan;
- Provide updated tools, analysis, and guidance supporting local and regional planning, funding, and implementation efforts; and
- Position the NFRMPO and its planning partners to pursue state, federal, and other funding opportunities.

Benefits of Investing in Active Transportation

Accommodating bicyclists and pedestrians for transportation and recreation has numerous benefits in health, safety, social equity, air quality and climate, economy, congestion, and community resiliency. The full range of benefits is too extensive to be listed in this plan, but this section highlights several benefits within these seven categories. The Northern Colorado (NoCo) Bike & Ped Collaborative has developed a more comprehensive Why Invest in Active Transportation? document to underscore the value that thoughtfully planned, designed, and implemented active transportation infrastructure can bring to a community. Research and data on benefits is everchanging along with our ability to quantify them. The NFRMPO and its planning partners should stay updated on the latest findings.

Health

According to the 2016 report, Economic and Health Benefits of Bicycling and Walking, a 10 percent increase in bicycling and walking in Colorado would prevent an additional 30-40 deaths per year and lead to $258-$387M in additional annual health savings to the state. A 30 percent increase could equal up to $2B in additional health savings. Bicycling currently contributes $511M in health benefits to the State annually and prevents an

estimated 50 deaths. Walking currently contributes $2.7B in health benefits to the State of Colorado annually and prevents an estimated 285 deaths.

Safety

Improvements such a road diets, defined as removing travel lanes from a roadway and utilizing the space for other uses and travel modes, can lead to fewer and less severe pedestrian- and bicycle-involved crashes. This is due to pedestrians spending less time crossing travel lanes, bicyclists having new or better dedicated facilities, and vehicle speeds being reduced. The FHWA 2014 Road Diet Informational Guide suggests roads under 20,000 vehicles per day (vpd) may be good road diet candidates.

Lower speed limits, designs that discourage high speeds, and/or physical separation between vehicle traffic and bicyclists or pedestrians lower the risk of serious injury or death. According to an Institute of Traffic Engineers study on crashes between a vehicle and pedestrian, fatality rates are 10 percent at 20 mph, 40 percent at 30 mph, and 80 percent at 40 mph or faster.

Social Equity

A 2013 League of American Bicyclists report, The New Majority: Pedaling Towards Equity, found that compared to White bicyclists, the fatality rate is 23 percent higher for Hispanic bicyclists and 30 percent higher for African American bicyclists. On average, families with an annual income below $50,000 spend 30 percent of their income on transportation, with the average annual operating cost for a bicycle at $308 and $8,200 for a motor vehicle. Investing in safe active transportation infrastructure can reduce these safety disparities.

According to Building Equity by PeopleForBikes, people of color are more likely to ride bicycles (for recreation or transportation), be regular riders, want to bike more than they currently do, and say protected bike lanes would make them ride more. Additionally, people in the lowest income quartile are more likely to commute by bike.

Air Quality and Climate

Replacing two vehicle trips each week by walking, riding a bike, or taking public transportation can keep 14 pounds of ozone-causing emissions out of the air each year, according to the Regional Air Quality Council.

Six percent of total urban miles traveled are currently by bike/e-bike. If this grew to 14 percent by 2050, there would be an 11 percent reduction in carbon emissions worldwide, according to A Global High Shift Scenario by the Institute for Transportation and Development Policy.

Economy

Bicycling has a $1.1B annual economic impact on the Colorado economy, including $484M from out-of-state visitors (excluding health benefits). Walking has a $497M annual economic impact on the Colorado economy (excluding health benefits), according to the 2016 Colorado-specific report, 2016 Economic and Health Benefits of Bicycling and Walking.

Replacing a car trip with a bike trip saves individuals and society $2.73 per mile in costs related to congestion reduction, roadway cost savings, vehicle cost savings, parking cost savings, air pollution reduction, energy conservation, and traffic safety improvements, according to Biking, On-Street Parking, and Business by Clean Air Partnership.

Congestion

According to the Texas A&M Transportation Institute's (TTI) 2019 Urban Mobility Report, congestion costs the Fort Collins-Loveland Urbanized Area $119M annually, or $414 and 21 hours of delay per commuter. Congestion costs the Greeley Urbanized Area $58M annually, or $485 and 23 hours of delay per commuter. The capacity of a 10-foot lane (or equivalent width) at peak conditions with normal operations is 600-1,600 persons/hour for private motor vehicles only, 1,000-2,800 persons/hour for mixed traffic with frequent buses, 7,500 persons/hour for a two-way protected cycleway, and 9,000 persons/hour for a sidewalk, according to the Transit Street Design Guide by the National Association of City Transportation Officials (NACTO).

Community Resiliency

Active transportation facilities across Northern Colorado experienced an average 28 percent increase in usage compared with 2019, mostly due to the COVID-19 pandemic. Some facilities saw usage increase over 200 percent in the early months of the pandemic. Built environment attributes such as the presence of active transportation facilities are associated with a favorable net effect on infectious diseases, according to James Sallis, Ph.D.

According to Gas Prices and Bicycling by Bikes Belong, when gas prices peaked to $4.11/gallon in 2008, bike commuting increased 15 percent nationally and 23 percent in the 31 largest bicycle-friendly cities (BFCs) compared to 2007.

Development of the ATP

NFRMPO staff worked on the *ATP* over the course of 2020 and early- to mid-2021. Staff relied heavily on the input and support of the NFRMPO TAC and Planning Council, the NoCo Bike & Ped Collaborative, other local agency and partner staff, stakeholder groups comprised of NFRMPO residents and experts working in the areas of transportation and mobility, and the general public. Collected feedback is summarized in **Appendix I: Outreach and Engagement Summary**. Feedback highlights are also spread throughout the document in relevant areas.

Northern Colorado (NoCo) Bike and Pedestrian Collaborative

Several members of the NoCo Bike & Ped Collaborative (NoCo) served as part of the informal steering committee that guided the early stages of the *ATP*. NoCo is composed of staff and elected officials from the NFRMPO's member agencies, NFRMPO staff, state partners, and other partners, regardless of affiliation or location, who are interested in helping achieve the vision of a safe, convenient, and cost-effective bicycle and pedestrian network for people of all ages and abilities. NoCo typically meets monthly to discuss current initiatives, best practices, and approaches for improving active transportation in the region. Throughout development of the *ATP*, NoCo provided feedback on various components of the Plan. Although NoCo is independent from the NFRMPO, the group advises NFRMPO Staff and the Technical Advisory Committee (TAC) on a variety of plans, programs, and projects. NoCo has been directly or indirectly responsible for the awarding of several million dollars of federal funding to active transportation project across the region.

Above: NoCo members update regional maps with project information. Credit: NFRMPO Staff

NoCo played an instrumental role in the implementation of the NFRMPO's *2013 Regional Bicycle Plan* and the *2016 Non-Motorized Plan (NMP),* and has created a goal to continue this work with the *ATP* and successive plans. NoCo is referenced throughout the *ATP* as a leader or partner on various initiatives. Learn more about NoCo's values and operating procedures at https://nfrmpo.org/bike-ped/noco/.

Public and Stakeholder Engagement

Many elements of the *ATP* were guided by NoCo, as well as community members and planning partners who provided feedback through various media. Formal dialogue about the *ATP* between NFRMPO staff and the community began in January 2020 and carried into early 2021; however, conversations have been ongoing since the adoption of the *2016 NMP* through the NoCo Bike & Ped Collaborative, NFRMPO Technical Advisory Committee (TAC) meetings, and NFRMPO staff outreach efforts across the region. With help from local partners, NFRMPO staff relied on an *ATP* project webpage, an interactive Community Remarks webpage, an online survey, targeted social media outreach, newsletters, group email lists, and other means to reach individuals across the region.

Above: NFRMPO Staff discuss the ATP with the public at the 2020 Fort Collins Transportation Projects Fair