Chapter 2: Existing Conditions

The *2013 Regional Bicycle Plan* and *2016 Non-Motorized Plan* each contained a review and non-exhaustive inventory of NFRMPO member community plans, programs, and policies related to active transportation. Several of these are referenced within **Appendix C: Additional Best Practices**.

Regional Infrastructure Inventory

An ongoing task at the NFRMPO is updating and improving the geographic information systems (GIS) inventory of existing active transportation facilities. Accurately mapping the existing infrastructure involves combining datasets from various agencies and drawing new features based on aerial imagery, development plans, and other available information. Currently, the inventory only indicates the presence of facilities and does not consistently identify characteristics of the facilities such as width or surface condition.

Definitions

- **Sidewalk** – Hard-surface paths providing space intended for pedestrian travel within the public right-of-way and separated from motor vehicle traffic by a curb, buffer, or curb with buffer. Sidewalks often also serve bicyclists.
- **Shared-Use Path** - Typically distinguished from sidewalks by having a consistent width of eight feet or greater that allows for two-way travel or passing by different types of users (foot traffic, wheelchair users, bicyclists, roller skaters, etc.). Shared-use paths (often referred to as trails or multi-use paths) are sometimes characterized by more separation from traffic than sidewalks. Shared-use paths can be paved (hard surface) or unpaved (soft surface). The NFRMPO inventory only includes all hard-surface paths and some soft-surface paths where information is available.
- **Bicycle Lane** - A portion of the roadway that has been designated by striping, signage, and pavement markings for the preferential or exclusive use of bicyclists. Bike lanes enable bicyclists to ride at their preferred speed without interference from prevailing traffic conditions and facilitate predictable behavior and movements between bicyclists and motorists. Bike lanes can have physical barriers (bollards, medians, raised curbs, etc.) that restrict the encroachment of vehicle traffic.
- **Bicycle Route** - Streets with low motorized traffic volumes and speeds, designated and designed for bicycle safety, comfort, and connectivity. Bicycle routes typically use signs, pavement markings, speed and volume management measures, and enhanced bicycle crossings of busy arterial streets. Although the NFRMPO has some information on local bicycle routes, they are not currently included in the inventory because definitions currently vary widely by community.

Chapter 3 and **Appendix F: Crossing Countermeasure Matrices** include high-level guidance for identifying appropriate active transportation treatments based on state and federal guidance. A more comprehensive list of guides and selection tools is listed in **Appendix A: Resource Library**.

Active Modes Facility Miles per Capita

Table 2-1 summarizes the expansion of active transportation infrastructure between the first comprehensive inventory in 2016 and the updated inventory for 2020. Over the course of four years, the NFRMPO region has

added 699.7 miles of active transportation infrastructure, which equates to an additional ¾ mile of facilities per 1,000 residents.

Table 2-1: Non-Motorized Facilities per Capita (Sidewalks, Bike Lanes/Bikeable Shoulders, Shared-Use Paths)			
Year	**Total Miles**	**Total Population**	**Miles per 1,000 residents**
2016	3,313	482,144	6.87
2020	4,013	526,402	7.62

Active Mode Facilities by Community

Table 2-2 summarizes the 2020 active transportation facility mileage by jurisdiction.

Table 2-2: 2020 Active Transportation Facilities Mileage by Jurisdiction			
Jurisdiction	**Sidewalks**	**Shared-Use Paths / Trails**	**Bike Lanes / Bikeable Shoulders**
Berthoud	54.3	1.9	1.1
Eaton	42.1	2.2	0
Evans	105.5	8	3.8
Fort Collins	913.2	83.3	324.5
Garden City	2.9	0	0
Greeley	534.5	41.2	123.5
Johnstown	112.2	7.3	0.5
LaSalle	14.4	0	0
Loveland	576	19	158.2
Milliken	48.9	2.7	0
Severance	51	5.7	0.6
Timnath	55.2	5.1	14.9
Windsor	280.9	35.5	60.6
Unincorporated Larimer County (NFRMPO portion)	51.2	24	93.7
Unincorporated Weld County (NFRMPO portion)	3	14.7	1.9
Total	**2,845.3**	**250.6**	**783.3**
Note: Figures in this table may differ from local estimates. Bicycle routes were omitted because they are defined differently across communities. 2020 data should not be compared with regional estimates for 2016 due to changes in methodology.			

A temporal comparison with the 2016 inventory has been omitted due to reclassification and other improvements within the original inventory and difficulty identifying when recent construction was completed across the region. Moving forward, the 2020 inventory may represent a reliable baseline upon which to measure growth over time.

Presence of a bike infrastructure does not always signify a low-stress facility for people on bikes. For example, properly designed bike routes can play an integral role in creating connectivity and filling gaps in a local or regional bike network at a low cost. Bike route designations are most appropriate where traffic volumes and speeds are low, a road connects to other bike facilities or destination, and/or there is not space for more intensive infrastructure. For future inventories, baseline qualifications for bike routes will be agreed upon and the mileage will be quantified.

This inventory also does not consistently distinguish sidewalks from shared-use paths or classify bikes lanes into categories such as striped bike lanes, buffered bikes lanes, protected bikes lanes, bikeable shoulders, and cycletracks. Future NFRMPO inventory updates will include more robust information on the varying levels of bicycle infrastructure. These efforts should focus on classifications that are meaningful and informative for users trying to choose a route and understand active transportation options in their area.

Soft-Surface Trails

The NFRMPO does not currently maintain a complete inventory of current or proposed soft-surface trails. Data about these facilities are not consistently maintained across communities and limited NFRMPO has focused on updating and maintaining the hard-surface path inventory due to time constraints. Although the regional inventory is lacking, soft-surface trails play a critical role in the multimodal connectivity for all types of trips. Within the NFRMPO, the Great Western Trail and Little Thompson Trail are great examples of regional soft-surface facilities that can be used as much for transportation as for recreation. Less formalized trail spurs can provide crucial connections to neighborhoods, business districts, schools, natural areas, and more. A prime example of the potential impact soft-surface trails is the 240-mile Katy Trail across Missouri. The Katy Trail connect over 34 communities, attracts over 400,000 annual visitors, and has an annual economic impact of $18.5M.[3]

With a firm and stable surface, soft-surface trails can be accessible for individuals with disabilities and are eligible for federal funding through the NFRMPO and other recipients. They may also provide a great interim trail surface if full funding is not yet available for a hard surface. Soft-surface trails paralleling hard-surface trails also help minimize conflicts between users, such a cyclists and equestrians, and is the preferrable surface for many runners. Future local and regional active transportation planning efforts should better incorporate and consider soft-surface trails.

[3] https://mostateparks.com/sites/mostateparks/files/Katy_Trail_Economic_Impact_Report_Final.pdf

Travel Patterns

Commuting, or Journey to Work, data from the US Census Bureau is the most reliable and readily available source of information about how people get to work and how long it takes to get there. For the *ATP*, 2015-2019 American Community Survey (ACS) 5-year estimates were used. **Table 2-3** shows the primary mode share for workers commuting by city and town.

Table 2-3: Commuting Patterns by City or Town (Workers Age 16 and Over)

City or Town	Percent of Workers						
	Drive Alone	Carpool	Public Transportation	Walk	Bicycle	Taxicab, Motorcycle or Other	Work From Home
Berthoud	81.4	7.8	1.3	0	0	0.7	8.7
Eaton	90	3.7	0	3.7	0	0.5	2.1
Evans	81.4	11.3	0.9	0.6	0.6	0.6	4.6
Fort Collins	71.9	7.2	2.3	4.2	5.4	1	8
Garden City	77.2	7.9	0.8	7.9	0.8	5.5	0
Greeley	79.5	11.3	0.6	2.8	0.7	1.2	3.9
Johnstown	77.3	8	0.5	2.7	0.6	2.7	8.2
LaSalle	88.4	7.3	0	1.1	0	0.9	2.2
Loveland	81.1	7.3	0.6	1.4	0.7	1.6	7.3
Milliken	82.9	10.6	0.4	2.9	0	0.5	2.5
Severance	77.6	11.7	0	0.8	0.4	1.2	8.3
Timnath	77	9.6	0	0	0	5.3	8
Windsor	82.5	6.9	0.2	0.5	0.2	1	8.9

Note: Respondents only report the mode they use to get to or from work "most of the time." To fully understand travel patterns, bike and pedestrian counts and travel surveys are recommended.

Source: 2015-2019 American Community Survey (ACS) 5-year estimates

Regionwide, an estimated 5,628 workers typically bike to work and 6,701 workers typically walk to work. Of those who walk to work, 13.9 percent travel 25 minutes or longer one way. For many of these workers, improved bicycle infrastructure could result in significant travel time savings. Additionally, some workers bike or walk to work on an occasional or less frequent basis, and therefore not be captured in the survey results shown above.

An analysis of these patterns by sex show that female workers age 16 and over are 5.9 percent more likely to walk to work and 25.6 percent more likely to take public transportation to work, but 37.9 percent less likely to bike to work. This a common trend across the nation. Studies of bike commuting barriers indicate that women are more concerned than men about safety issues associated with biking, being able to carry daily items while biking, and with the need to fix their physical appearance upon arrival at work.[4] Additionally, women make

[4] Twaddle H, Hall F, Bracic B. Latent Bicycle Commuting Demand and Effects of Gender on Commuter Cycling and Accident Rates. Transportation Research Record. 2010;2190(1):28-36. doi:10.3141/2190-04

more household related stops than men on their commute to or from work for household-sustaining activities or family errands.[5]

Looking at the travel patterns of those who do not currently use active modes can help the NFRMPO quantify the portion of the population who might be interested in choosing an active mode under the right circumstances. This section summarizes some of the data about trips that could be taken by active modes, either under current conditions or with some improvements or incentives.

Regionwide, 222,235 workers age 16 or older report car, truck, or van as their primary commute mode, and 90 percent of these workers drive alone as their primary commute mode. **Table 2-4** shows average commute time (one-way) for these workers. Commutes under 10 minutes are likely to be very bikeable (and potentially walkable) some of the time, assuming safe infrastructure exists. Commutes between 10-15 minutes or 15-19 minutes may also be somewhat bikeable, especially as electric assist (e-bike) popularity grows (discussed more in **Chapter 3**).

Table 2-4: Travel Times for Workers Commuting by Car, Truck, or Van

Commute Travel Time	Number of Workers	Percent of all workers commuting by car, truck, or van
Less than 10 minutes	28,631	12.9%
10-14 minutes	37,608	16.9%
15-19 minutes	42,460	19.1%
TOTAL UNDER 20 MINUTES	108,699	48.9%

Source: 2015-2019 American Community Survey (ACS) 5-year estimates

An additional 3,082 workers commute via public transportation as their primary mode. Of these workers, 1,838 (59.6 percent) have travel times of 30 minutes or longer.[6] Many of these trips have longer times due to long walks or bike rides to (access) and from (egress) transit stops. Active transportation system improvements could shorten these access and egress times, improve safety, and/or provide access where there previously was none. Studies suggest the average person is willing to walk five to ten minutes to access transit but is willing to bike significantly longer.[7] The lack of bike storage accommodations on-board transit vehicles and at transit stops or transit centers may also create a barrier for bike access to transit (discussed more in **Chapter 3**). Additional guidance can be found in the FTA's Manual on Pedestrian and Bicycle Connections to Transit.

For the 1,244 workers with shorter public transportation commutes (less than 30 minutes), active transportation system improvements could provide a reliable alternative mode in instances when public transportation service does not meet their schedule or needs.

Figure 2-1 shows the connectivity of Transfort, City of Loveland Transit (COLT), Greeley Evans Transit (GET), and Bustang bus stops to the regional sidewalk network. Bus stops are represented as connected to the sidewalk network, have sidewalk infrastructure at the bus stop, but are disconnected from the larger sidewalk network, or have no sidewalk infrastructure. Connected bus stops connect into the municipal network at

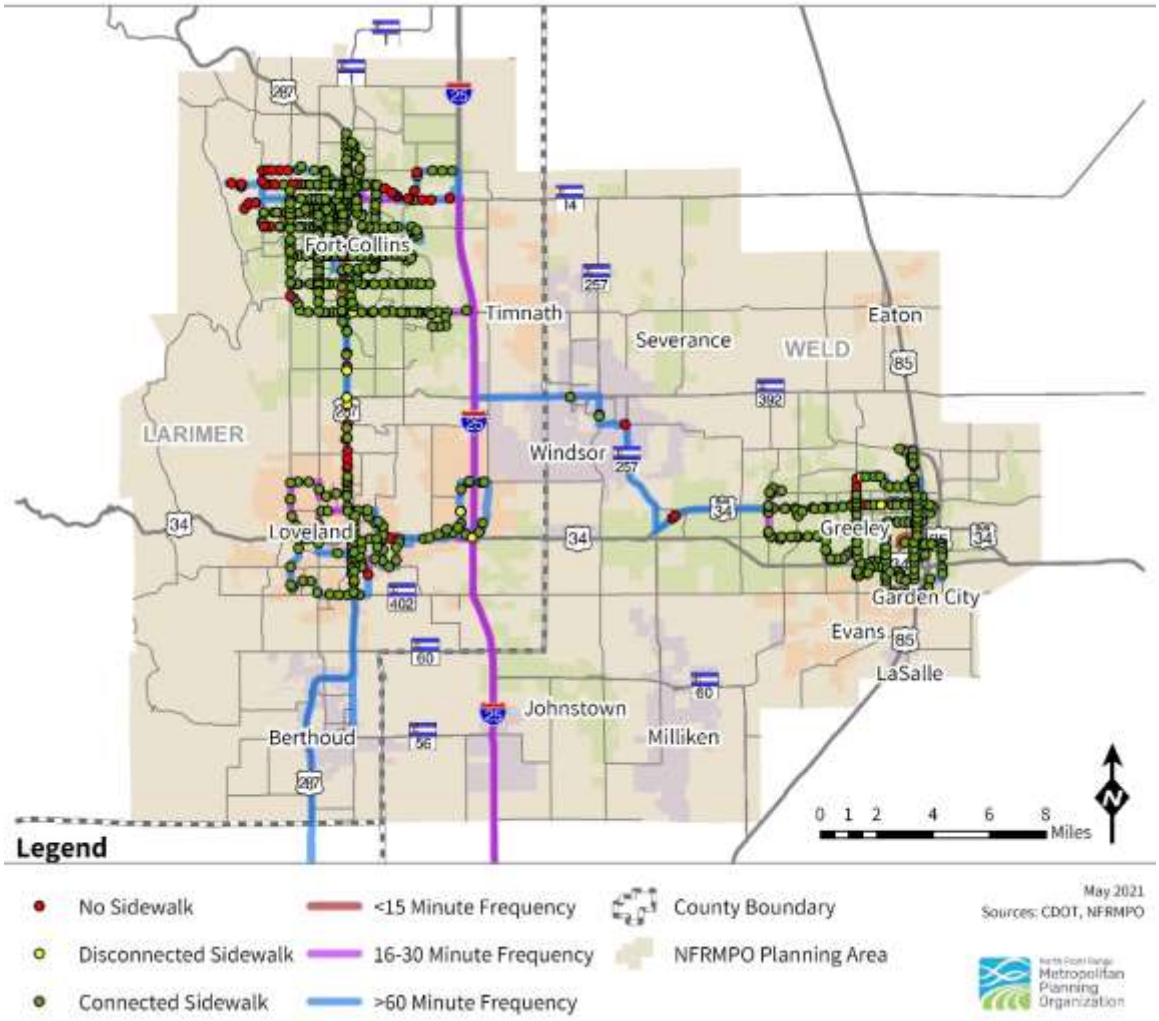
[5] McGuckin N, Nakamoto Y, Difference in Trip Chaining by Men and Women. Transportation Research Board. 2004
[6] 2015-2019 American Community Survey (ACS) 5-year estimates
[7] Federal Highway Administration (FHWA). Pedestrian Safety Guide for Transit Agencies. 2013.

multiple points, while disconnected bus stops may have a portion of a sidewalk but it does not connect into the larger network. Based on the map, areas in need of sidewalk upgrades include northwest Fort Collins, northeast Fort Collins, and along US287 between Fort Collins and Loveland. Some of these stops will be addressed by the Transfort ADA Bus Stop Upgrade program. Data included in this map is available from NFRMPO staff upon request.

Overall, there were 893 bus stops in the NFRMPO region as of December 2020. A further analysis finds:

- 824 (92.3percent) are connected; 14 (1.6 percent) have sidewalk infrastructure at the bus stop but are disconnected; and 55 (6.2 percent) have no sidewalk infrastructure.
    - Of Transfort's 476 bus stops, 425 (89.3 percent) are connected, seven (1.5 percent) have sidewalk infrastructure at the bus stop, but are disconnected, and 44 (9.2 percent) have no sidewalk infrastructure.
    - Of GET's 303 bus stops, 293 (96.7 percent) are connected, five (1.7 percent) have sidewalk infrastructure at the bus stop, but are disconnected, and five (1.7 percent) have no sidewalk infrastructure.
    - Of COLT's 103 bus stops, 100 (97.1 percent) are connected, one (1.0 percent) has sidewalk infrastructure at the bus stop, but is disconnected, and two (1.9 percent) have no sidewalk infrastructure.

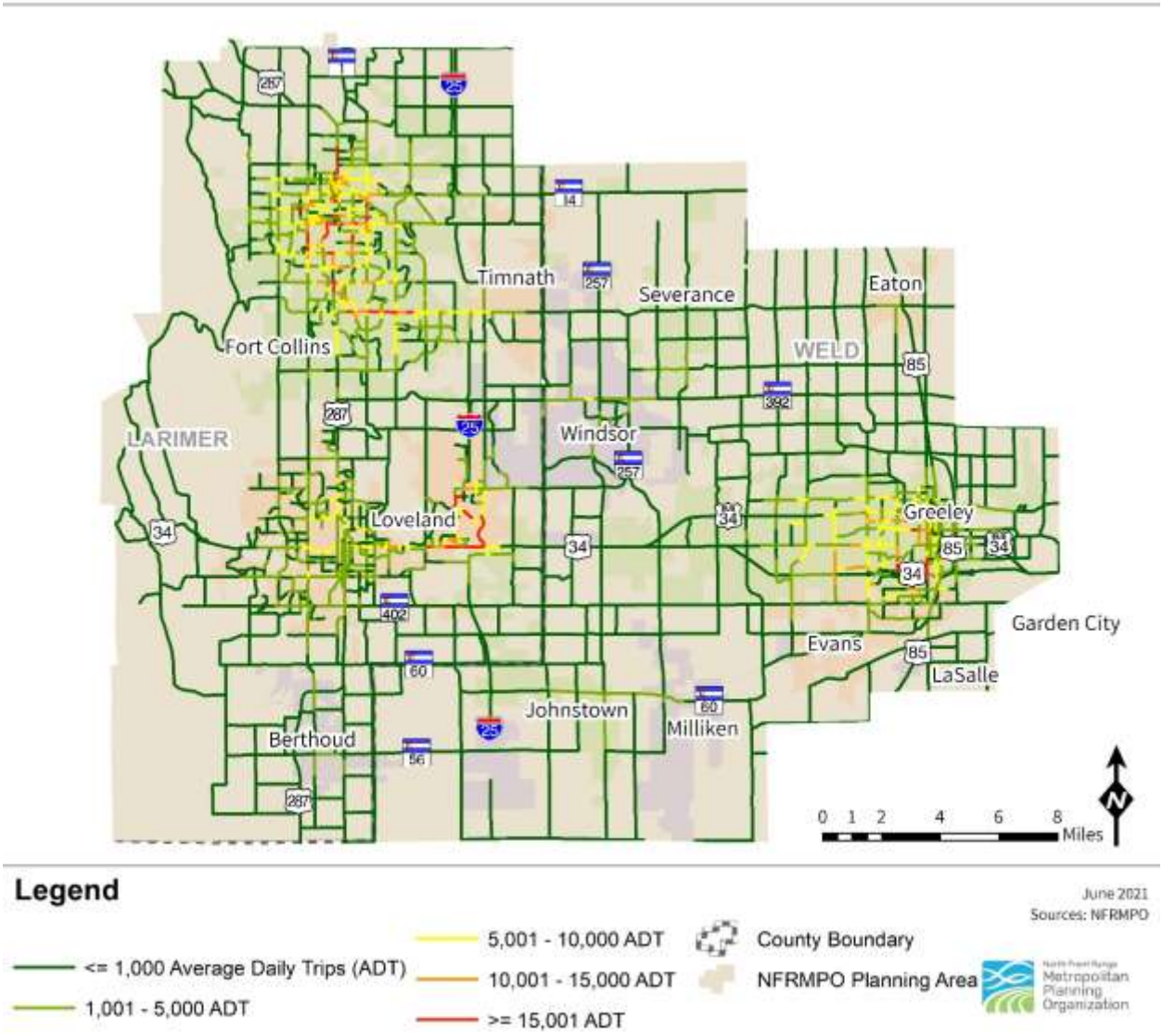
Figure 2-1: Transit Stop to Sidewalk Connectivity Analysis



The NFRMPO's Regional Travel Demand Model (RTDM) is another tool for estimating current travel patterns and forecasting them into the future. The RTDM can be used to identify trips that are likely to be bikeable and somewhat likely to be walkable, based on distance. For short trips, a threshold of four miles was chosen. Biking four miles takes approximately 20 minutes on average, assuming a pace of 12 mph. Using the four-mile threshold is consistent with the approach used in **Table 2-4**, which summarizes mode choice for commute trips under 20 minutes. Additionally, 53 percent of all trips are four miles or less according to the 2017 National Household Travel Survey. **Figure 2-2** shows graduated line sizes representing the number of average daily "short trips," trips of four miles or less, on RTDM segments in 2020. These results do not include recreation-based trips. Many of these short trips are highly concentrated in in the most urban settings, such as the downtown areas of Fort Collins, Loveland, and Greeley; however, many short trips also take place in suburban, small town, and rural settings. For instance, on SH60 between Johnstown and Milliken, there are between 1,160 and 2,760 daily short trips. Between Loveland and Berthoud on LCR17, there are approximately 1,150 daily short trips. Just south of US34 on 35th Avenue near the Greeley-Evans boundary, there are 3,900-9,500

daily short trips. On US85, north of LaSalle, there are approximately 3,000 short trips towards Evans. Each of these segments is parallel to, or part of a proposed Regional Active Transportation Corridor (RATC) segment (more on RATCs in **Chapter 4**). These figures suggest there may be a latent demand for more active mode facilities between communities, especially the RATCs.

Figure 2-2: Average Daily Short Trips (Four Miles or Less), 2020

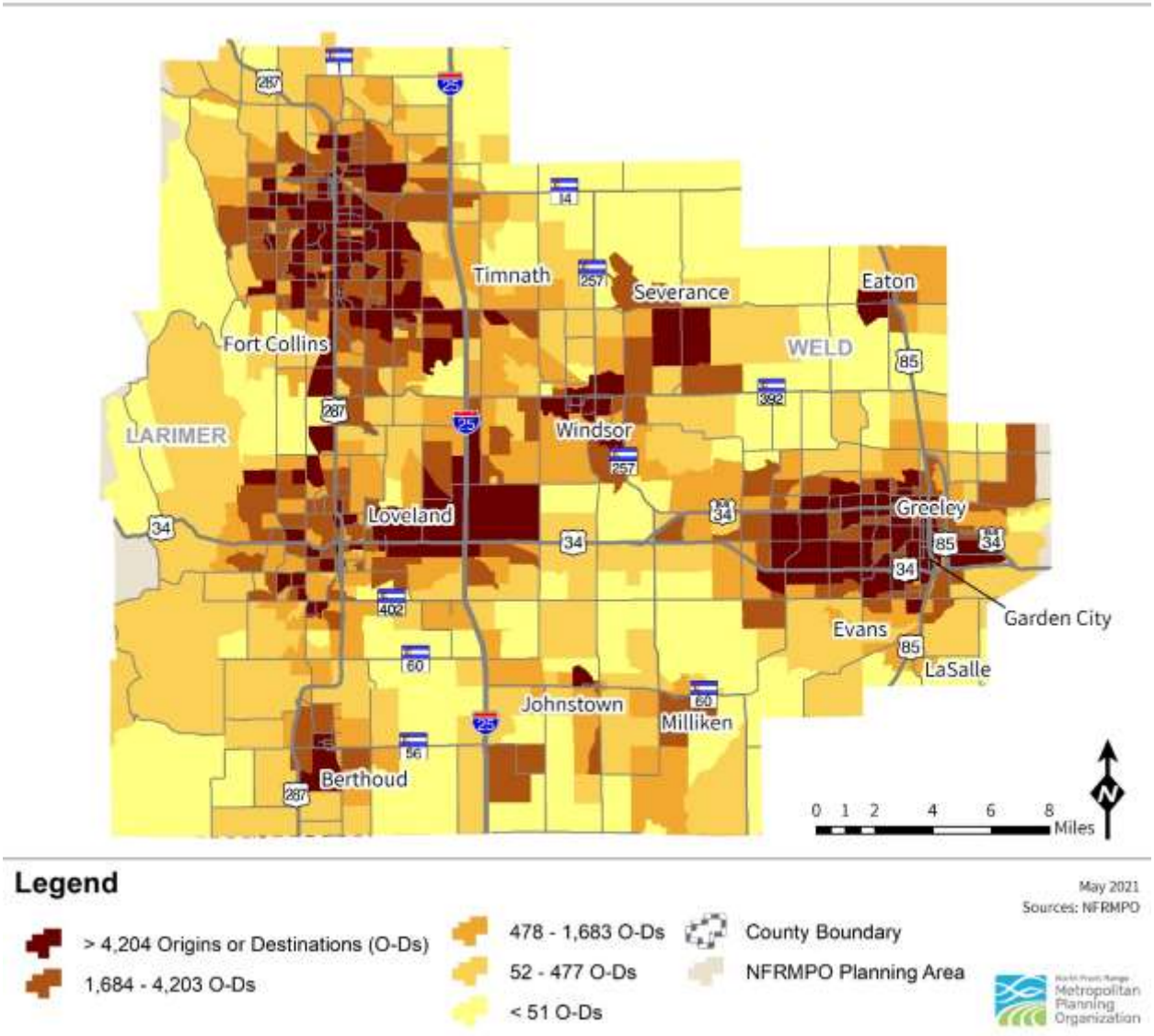


Source: NFRMPO Regional Travel Demand Model (RTDM). Note: Outputs for certain areas of the Regional Travel Demand Model (RTDM) should be reviewed more closely before applying findings due to population adjustments.

Figure 2-3 shows the number of daily short trips that begin or end in each traffic analysis zone (TAZ). TAZs generally represent neighborhoods, districts, or subdistricts consisting of relatively homogenous land uses. Like **Figure 2-2**, many of the short trip origins or destinations occur in the most densely populated areas with wide-

ranging land uses; however, there are several exceptions, such as the town cores of Berthoud, Eaton, Johnstown, Severance, and Timnath. One criterion for prioritizing active transportation infrastructure investments could be the existing demand for short trips in a geographic area and/or along the roadway network. Observed travel times data sources such as INRIX and Streetlight can supplement the RTDM.

Figure 2-3: Number of Origin and Destinations for Trips Four Miles or Less by TAZ, 2020



Demand

On any given day, nearly everyone is a pedestrian at some point. Anyone who parks their car or bike, or gets off a bus still needs to be able to safely walk or roll to and from their destination, no matter the distance. Although active transportation affects everyone regardless of their main transportation mode, quantifying the demand for active transportation is a difficult task. It can be approached through tools such as surveys; however, if safe

walking and biking options do not exist in an area and community members are unaware of the possibilities for safer active transportation options, survey respondents in that area may not report demand even when asked what would help them to walk or bike more often. This is a form of latent demand, in which the option either is not available, or the user does not know the option exists, so the user does not report their demand. The phenomenon in which more people suddenly want to walk or bike because they see infrastructure improvements is called induced demand. With induced demand for active transportation, the provision of safe infrastructure reveals pent-up latent demand, or previously suppressed trips. Local agencies should consider the possibilities of latent and induced demand within their communities when planning for active transportation.

Responses to the 2020 Active Transportation Challenge survey allude to possible latent demand for walking and/or biking across the region. Of the respondents, 60 percent walk or bike 1-3 times per month or less. In response to the question, "What would help you bike, walk, or take transit more often?," 31 percent of responses cited infrastructure and maintenance improvements. Additionally, 60 percent of responses cited programs, events, education, or improved personal habits, equipment, and/or knowledge. To some extent, each of these factors can be addressed through educational, promotional, and/or incentive programs. It is unlikely this demand would have been captured without a survey. These surveys are a good first step to identifying cost-effective improvements that would encourage the most mode shift.

Community Health Assessments

Periodically, the Health District of Northern Larimer County (HDNLC) and the Weld County Department of Public Health and Environment (WCDPHE) conduct community health assessments (CHAs) in which they survey a sample of residents on various topics related to health and quality of life. Increasingly, these CHAs have included questions related to active transportation. The collected data is useful in assessing overall perceptions on the ease of walking or biking, infrastructure deficiencies and barriers, individual habits, and latent demand for improved infrastructure. Moving forward, NFRMPO Staff and its partners should work more closely with HDNLC and WCDPHE to analyze geographic and socioeconomic disparities in the CHA results related to active transportation. Such an analysis, combined with other tools, such as the Multimodal Index (MMI, discussed further in **Appendix C: Additional Best Practices**) can help inform decision-making through processes such as the NFRMPO Call for Projects.

According to the 2019 HDNLC CHA, 65 percent of Fort Collins respondents and 49 percent of Loveland respondents agree they can get where they need to go by walking or biking. Outside of Fort Collins or Loveland, typically characterized by lower built environment density, only 24 percent agree with that statement.

According to the WCDPHE CHA, 59 percent of respondents in the Johnstown-Milliken area, 47 percent of respondents in the Greeley-Evans area, and 34 percent of respondents in the Severance-Windsor area see lack of trails or sidewalks as a major or minor problem. Thirty-two percent of all respondents report it is not possible to get to many of the places they need to go by walking or biking.

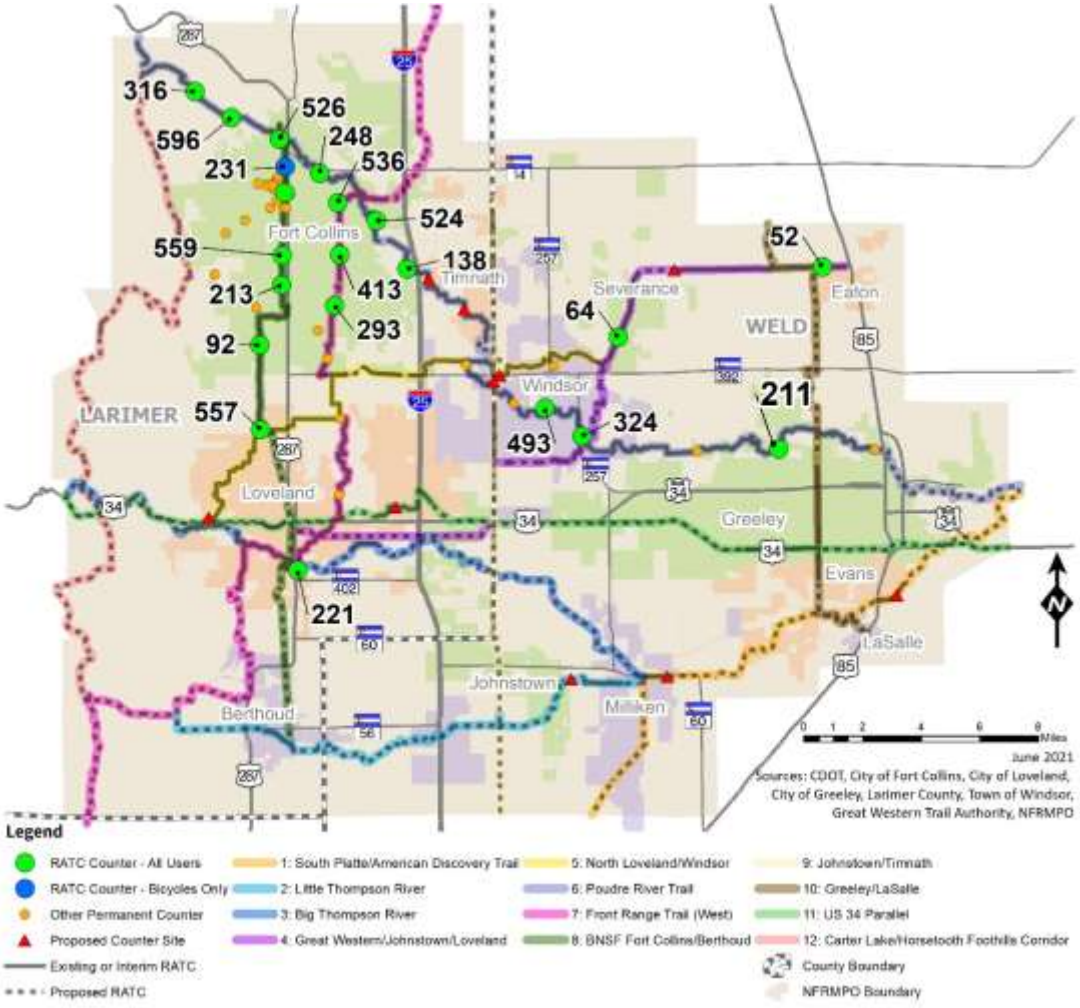
> *"[We need a] Better biking system. In no way is it safe to bike on city or county roads with no bike lane. The bike lanes that are provided connect to nowhere." – Weld County resident, 2019*

Count Program

In 2016, the NFRMPO began a regional active transportation counting and monitoring program. Through this program, the NFRMPO has purchased five permanent electronic counting devices (counters) and four mobile/temporary counters for use on trails or roadways. In addition to the five permanent counters purchased by the NFRMPO, there are 23 permanent counters purchased by member agencies located on the regional corridors at the locations shown in **Figure 2-4**. The five mobile/temporary counters are available to any NFRMPO member agency. To date, they have been loaned out to Eaton, Loveland, Timnath, and Windsor for various purposes. The counters help highlight travel patterns, quantify facility usage, evaluate investment effectiveness, identify areas of need, and develop maintenance schedules that avoid the periods of highest usage. The data is often used to support grant applications and other investment decisions. There are currently 28 permanent counters on the regional corridors, with another 17 spread across additional facilities, and several mobile/temporary counters deployed at any given time.

Some counters on the Regional Active Transportation Corridor (RATC) network did not have reliable data for 2020 and are simply labeled as "Other Permanent Counter." **Figure 2-4** also highlights priority locations for conducting temporary counts on the RATC network. NFRMPO and local agency staff should coordinate temporary (minimum two weeks) counts at these locations within the next two years. The NoCo Bike & Ped Collaborative should continue to identify priority count locations on existing segments that were recently constructed/improved and adjacent to upcoming construction projects.

Figure 2-4: 2020 Average Daily Traffic (ADT) at Permanent Count Sites across the RATC Network



In 2020, counts across the region rose dramatically due to the COVID-19 pandemic. With changes in perceptions of transit service, transit service reductions, and gym and recreation facility closures, Northern Colorado turned to active transportation and outdoor recreation more than ever before. Across 2020, regional trail usage throughout Northern Colorado increased 28 percent, compared with 2019. Early in the pandemic, March through June 2020, certain trails experienced usage increases as high as 200 percent compared with the same period in 2019. The 2020 trends foreshadow the likely long-term rise in demand for active transportation and recreation as Northern Colorado continues its rapid population growth.

Local agencies are encouraged to take advantage of the NFRMPO count program and invest in their own equipment. **Appendix H: Count Program Guidance** includes considerations for starting and managing a count program. The City of Fort Collins operates a volunteer-based manual count program, with data collected annually.

Safety

With the adoption of the *2045 Regional Transportation Plan* (RTP) in September 2019, the NFRMPO chose to support CDOT's statewide target of reducing the number of non-motorized fatalities and serious injuries to 514. The NFRMPO does not currently have region-specific targets related to pedestrian and bicycle safety. In September 2020, the NFRMPO Planning Council took a step towards a safer transportation system by adopting an organizational safety vision called the Towards Zero Deaths Policy. This vision was developed out of a desire to eliminate deaths and serious injuries on the region's roadways. The Towards Zero Deaths Policy commits the NFRMPO to:

- Continue prioritizing safety in future NFRMPO Calls for Projects;
- Analyze all available crash data to make more informed decisions for safety related projects;
- Integrate the Towards Zero Deaths framework in future planning initiatives, including the *Environmental Justice (EJ) Plan*, *Active Transportation Plan (ATP)*, *Congestion Mitigation Process (CMP)*, and *Regional Transportation Plan (RTP)*;
- Provide regionally specific crash data to compare to statewide crash data when possible; and
- Identify crash types and characteristics which are most prevalent in the region as well as best practices to mitigate those specific crash types.

Other NFRMPO partner agencies have been leaders in visionary safety initiatives. In 2015, CDOT announced a Moving Towards Zero Deaths program of goals. Shortly thereafter, in 2016, the City of Fort Collins became the first local agency to join CDOT's initiative.

Regionwide Crash Trends

Figures 2-5 and **2-6** show the number of pedestrian- and bicycle-involved crashes and serious injuries or fatalities in the NFRMPO between 2015 and 2019. Over the five-year period, pedestrian-involved crashes trended slightly upward while bike-involved crashes trended slightly downward. For fatalities and serious injuries (FSI), the numbers fluctuated, but generally trended downward for both pedestrian- and bike-involved crashes. Most regions across the nation have seen the crash and FSI trends increase over the same period. Although the NFRMPO's year-over-year crash trends are promising, analysis of crash characteristics still identifies troubling trends. Pedestrian- and bike-involved crashes between 2015-2019 are analyzed in further detail in **Appendix D: Crash Analysis**. Many of these trends warrant further analysis.

Figure 2-5: Total Pedestrian- and Bike-Involved Crashes in the NFRMPO Region, 2015-2019

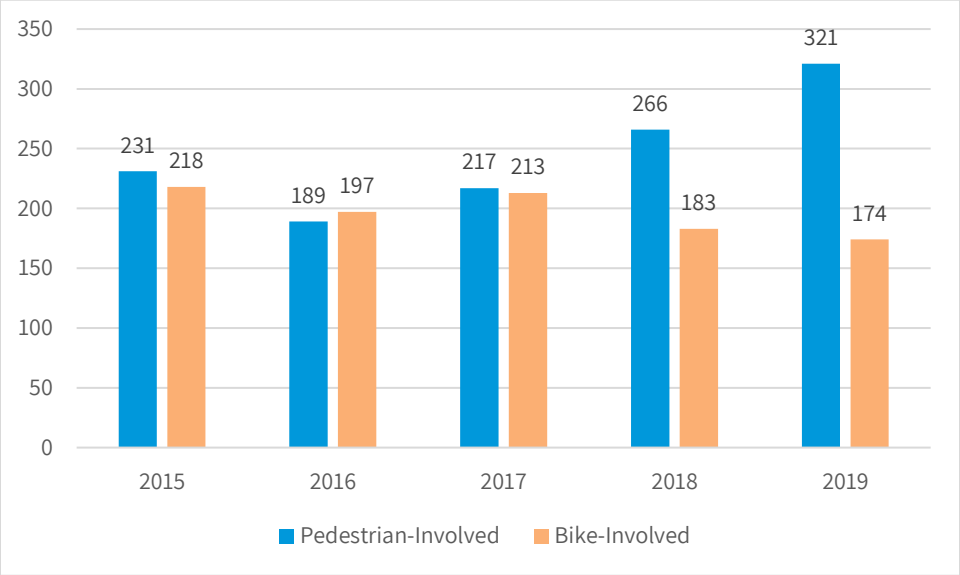
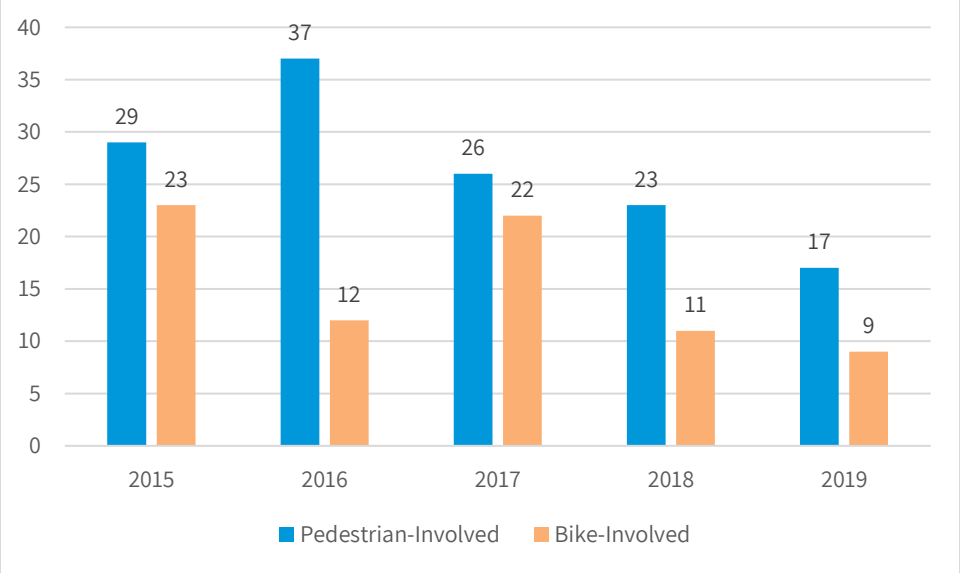


Figure 2-6: Total Pedestrian- and Bike-Involved Fatalities or Serious Injuries in the NFRMPO Region, 2015-19



National Crash Trends

A nationwide analysis of 60 pedestrian crash "hot spots" with six or more pedestrian deaths over eight years found consistent characteristics, including:

- 97 percent were multilane roadways (70 percent required pedestrians to cross five or more traffic lanes);
- Over three-quarters had speed limits of 30 mph or higher;

- 62 percent had volumes over 25,000 vehicles per day;
- All had adjacent commercial retail and service land uses;
- 72 percent had billboards; and
- 75 percent were bordered by low-income neighborhoods.[8]

Reducing bicycle and pedestrian crashes can also have significant direct economic impacts. According to a 2010 National Highway Traffic Safety Administration (NHTSA) report[9], pedestrian-involved crashes resulted in $65B in comprehensive costs (includes economic costs and quality-of-life valuations) annually, a cost of $258,094 per crash. Likewise, bike-involved crashes results in $21.7B in comprehensive costs, or $118,938 per crash.

Motor vehicle design is also a major factor in bicycle and pedestrian safety. According to a 2020 study by the Insurance Institute for Highway Safety, sport utility vehicles (SUVs) are disproportionately likely to injure and kill pedestrians compared with cars, primarily at crashes of intermediate speed (20-39 mph).[10] This raises concerns for walkability in communities across the nation given the rising consumer preference for SUVs. In 2010, 27 percent of total car sales in the United States were SUVs. In 2018, that number was up to 48 percent.[11] Over the past decade, pedestrian fatalities involving SUVs have increased 69 percent, compared with just a 46 percent increase for pedestrian fatalities involving passenger cars.[12] As the motor vehicle size continues to trend upward, additional infrastructure, traffic control, and enforcement that promote safe driving practices will become increasingly important.

2020 regionwide crash data was not available when the *ATP* was adopted, but an analysis will be important in understanding how the COVID-19 pandemic impacted traffic safety. Nationwide between January and June 2020, pedestrian deaths remained consistent with the same period in 2019 despite a 16.5 percent reduction in vehicle miles travelled. Drivers also struck and killed pedestrians at a rate of 2.2 per billion VMT in 2020. This was a significant increase from the rate of 1.8 per billion VMT over the same period in 2019.[13] Analysis of select metropolitan areas found a median 22 percent increase in speeds between 2019 and 2020.[14] Research suggests a 10 percent change in speeds is likely to have a greater impact than a 10 percent change in traffic volume.[15]

[8] Schneider, R. J., Sanders, R., Proulx, F., & Moayyed, H. (2021). United States fatal pedestrian crash hot spot locations and characteristics. Journal of Transport and Land Use, 14(1), 1-23. https://doi.org/10.5198/jtlu.2021.1825
[9] https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812013
[10] https://www.iihs.org/topics/bibliography/ref/2203
[11] https://www.iea.org/commentaries/growing-preference-for-suvs-challenges-emissions-reductions-in-passenger-car-market
[12] "Projected 2020 U.S. Pedestrian Death Rate on Pace for Record High Despite Significant Drop in Driving.: Governors Highway Safety Association (GHSA). https://www.ghsa.org/resources/news-releases/pedestrians21
[13] Ibid.
[14] Pishue, B. (2020, December). COVID-19 effect on collisions on interstates and highways in the US. INRIX Research.
[15] Elvik, R. (2005). Speed and road safety: Synthesis of evidence from evaluation studies. Transportation Research Record, 1908(1), 59–69. https://doi.org/10.1177/0361198105190800108

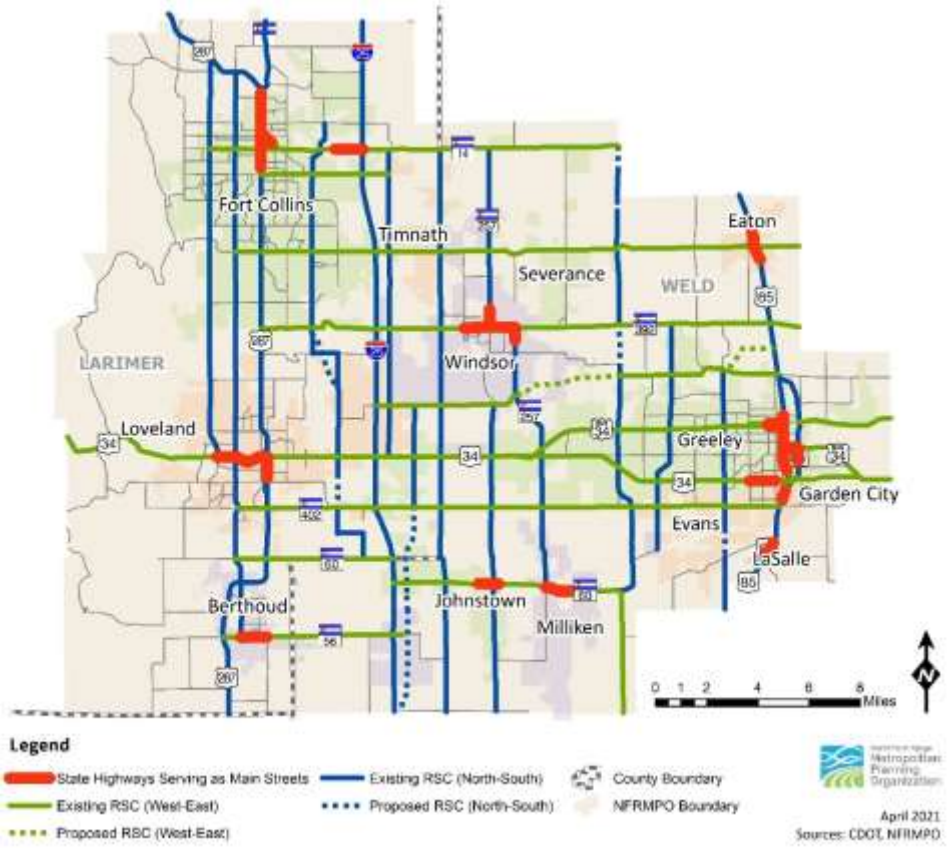
Highways through Community Cores

The Towns of Severance and Timnath are the only NFRMPO member communities without a state highway bisecting its main street or a primary commercial corridor. Across the NFRMPO region, heavily traveled highway corridors pass directly through centers of commerce and dense downtown areas that are important to community character. In most instances, these highways can inhibit safe biking and walking. Often, they isolate neighborhoods where household access to motor vehicles is already low. Although these corridors may not be appropriate for on-street biking, destinations along them should be accessible via parallel alternatives and safe intersections or access points. Multi-agency coordination is important to facilitate mobility for all user types. The NFRMPO and its partners should work closely with CDOT Region 4 on upcoming safety initiatives and needs assessments.

The corridors listed below should be analyzed in further detail as part of the NFRMPO's update to the Regionally Significant Corridor (RSC) visions with the next Regional Transportation Plan (RTP) update. Potential strategies to increase safety for active modes should be identified from resources such as the Colorado Downtown Streets Guide. **Figure 2-4** highlights the portions of the State Highway System that pass through the core of an NFRMPO community.

- US287 – downtown Loveland and downtown Fort Collins, North Fort Collins
- US85 – downtown LaSalle, Evans, Garden City, and Greeley
- US85 Business – Garden City, downtown Greeley
- US34 – Loveland, Greeley, and Evans
- US34 Business – Greeley
- SH392 – downtown Windsor
- SH257 – downtown Milliken and downtown Windsor
- SH60 – downtown Milliken and downtown Johnstown
- SH56 – downtown Berthoud
- SH14 – downtown and east Fort Collins

Figure 2-4: Regionally Significant Corridors (RSCs) and Highways through Community Cores



Additional off-system RSCs such as Shields Street and Harmony Road in Fort Collins, Wilson and Taft Avenues in Loveland, and WCR74 in Severance often act as highways through commercial districts and residential areas.