



1. INTRODUCTION

Accommodation of bicyclists for both transportation and recreation has seen increasing emphasis in Colorado and throughout the country. The Colorado Department of Transportation (CDOT) issued a Policy Directive (Bike and Pedestrian Policy 1602) in 2009 and subsequent State Statute 43-1-120 which makes it clear that the Colorado Transportation Commission intends for CDOT to promote mode choice and provide for the needs of bicyclists and pedestrians. Through this policy the Transportation Commission has directed the safe and reliable accommodation of bicyclists and pedestrians in all of CDOT's planning, design, and operation of transportation facilities. Recognizing the state's commitment to integrate bicycle and pedestrian accommodation, this Regional Bicycle Plan for the North Front Range Metropolitan Planning Organization (NFRMPO) serves as the bicycle planning component of the Regional Transportation Plan (RTP).

"For us, the real measure of success is when complete streets [accommodation of all modes] and integrated roadway design is part of how we do business in this country."
– Polly Trottenberg, Assistant Secretary of Transportation Policy at the USDOT

In support of Policy 1602 (and the related Procedural Directive), CDOT adopted the *Statewide Bicycle and Pedestrian Plan* in October 2012. The Statewide Plan establishes goals, investment decision criteria, and performance measures to facilitate project and program funding allocation. This Regional Bicycle Plan is intended to work in concert with the Statewide Plan, identifying evaluation criteria that are specific to the NFRMPO and identifying a regional bicycle corridor network; both of which further CDOT's bicycle and pedestrian initiatives.

Purpose of Regional Bicycle Plan

The primary purposes of the NFRMPO Regional Bicycle Plan are to:

- ▶ Provide a consolidated summary of the existing bicycle infrastructure, data, and design standards throughout the region;
- ▶ Identify opportunities to connect and enhance the local and regional bicycle systems;
- ▶ Identify Regional Bicycle Corridors and outline implementation steps
- ▶ Provide the MPO's 15 member governments with tools to support their local bicycle planning and accommodation initiatives;
- ▶ Position the NFRMPO to pursue state and federal (and other) funding opportunities; and
- ▶ Fulfill the federal requirement to address bicycle planning as a component of the Regional Transportation Plan.

Benefits of Investing in Bicycle Infrastructure

A variety of direct and indirect benefits can be realized as a result of investing in bicycle infrastructure. A recent University of Massachusetts study shows that bike-only projects and roadway projects incorporating bike facilities both create more jobs than a road-only project (38% and 13% respectively)¹. Additional studies point to varying increases in property values near trails,² while other case studies point to increased visitors and tax


¹ Pedestrian and Bicycle Infrastructure: A National Study of Employment Impacts, Political Economy Research Institute, University of Massachusetts Amherst, June 2011.

² Bicycling and Walking in Colorado: Economic Impact and Household Survey Results; CDOT Bicycle/Pedestrian Program, The Center for Research on Economic and Social Policy of the University of Colorado at Denver, April 2000.



revenues from tourism. In Colorado, nearly 10% of households took a bicycle-related vacation, while 40% of vacationers engaged in bicycling would have altered their plans if bicycling facilities were not provided.³ Additional economic impacts include savings from reduced gas consumption, additional retail sales, the attraction of charitable events, and reduced economic costs of mortality.^{4,5} Retail related to biking contributed \$200 million to Colorado in 2000, with bike-related impacts on the state totaling over a billion dollars annually.³ Bicycle tours and races can also have a significant impact on the economy; the inaugural USA Pro Cycling Challenge in 2011 attracted more than a million spectators, resulting in an estimated \$83.5 million in economic impact in Colorado. Northern Colorado will host the sixth stage of the 2013 USA Pro Cycling Challenge, which will start in Loveland, wind through Windsor and Estes Park, and finish in Fort Collins.

Research also concludes that added bicycle infrastructure increases safety for all modes.⁶ Bike lanes have been credited with increasing the number of bicyclists traveling in the right direction, reducing the number of bicyclists on sidewalks, increasing stop sign compliance, and providing an increased buffer between automobiles and pedestrians.⁷ And with a greater number of people bicycling, drivers become more aware of non-motorized users, creating a safer environment for all. A recent FHWA study⁵ that tracked four locations where significant bike investments were made concluded that despite significant increases in trips made by bikes following the investments, fatal crashes over the study period remained steady or decreased. Increased bicycling due to added infrastructure can also provide health-related benefits. Employees who participate in physical activity take fewer sick days, have lower healthcare costs, and even have an increase in productivity.⁸

Increased physical activity can reduce the risk of various chronic diseases, prevent weight gain and obesity, and increase life expectancy. Bicycling for recreational or transportation purposes can help to fulfill recommended daily physical activity. Many research studies have linked the presence of bicycling and walking infrastructure with increased physical activity and improved health. The Center for Disease Control (CDC) provides a series of recommendations for bringing public health considerations into transportation issues . One of the primary recommendations is to promote active transportation by providing safe and convenient walking and bicycling facilities.

It's important to note that many investments in bicycle infrastructure are also paired with programmatic investments such as education and awareness programs. Almost all resources referenced note that such non-infrastructure investments help to better maximize the benefits of bicycle infrastructure investments.

³ Property Value/Desirability Effects of Bike Paths Adjacent to Residential Areas; Center for Applied Demography & Survey Research, November 2006.

⁴ The Economic Benefits of Bicycle Infrastructure Investments, League of American Bicyclists, June 2009.

⁵ Report to the U.S. Congress on the Outcomes of the Nonmotorized Transportation Pilot Program SAFETEA-LU Section 1807, Federal Highway Administration, April 2012.

⁶ Evidence on Why Bike-Friendly Cities are Safer for All Users, Cambridge Journals Online, April 2011.

⁷ Bicycle Lanes Versus Wide Curb Lanes: Operational and Safety Findings and Countermeasures Recommendations, Federal Highway Administration, October 1999.

⁸ Realizing the Benefits of Accelerated Investment in Cycling, British Columbia Cycling Coalition, January 2011.

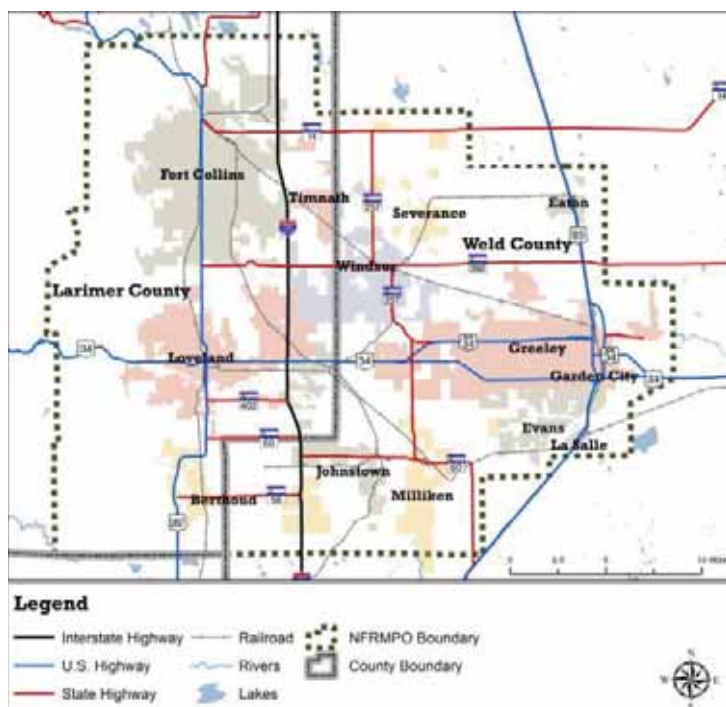


2. BICYCLE INVENTORY

Regional Context

The NFRMPO is a governmental agency responsible for long range transportation planning activities throughout northern Colorado. The NFRMPO, as shown on **Figure 2.1**, has 15 members that include Fort Collins, Greeley, Loveland, Timnath, Berthoud, Windsor, Johnstown, Milliken, Evans, Garden City, LaSalle, Severance, Eaton and Weld and Larimer Counties. CDOT and the State Air Quality Control Commission (AQCC) are also members. The NFRMPO works on a regional scale that covers approximately 600 square miles from Wellington to the north, Denver/Boulder metro to the south, the foothills of the Rockies to the west, and incorporated Greeley to the east.

Figure 2.1 NFRMPO Planning Area



Northern Colorado is the fastest growing region in Colorado. Their cities are recognized nationally as one of the top places to live (<http://cbs4denver.com/business/fort.collins.best.2.771171.html>). The growth of the region is highlighted by the growth of its three largest cities (Loveland, Greeley, and Fort Collins) into one large metropolitan region with the Town of Windsor at its epicenter.

The region's transportation system is relatively young when compared with more established regions in the U.S. A handful of state and federal highways carry commuters daily between the MPO communities and the Denver-Metro Region. Single-occupancy vehicles (SOV) dominate the regional modal split. Congestion projections are stark based on the forecasted doubling of population in the next 30-40 years, existing infrastructure deficiencies, and current

modal split. Further, Northern Colorado was designated by EPA as a Non-Attainment area for 8-hour ozone in 2007.

History of TDM and Bicycle Planning in Northern Colorado

In 1996, the NFRMPO began implementation of the SmartTrips program for Northern Colorado with allocated staff in the NFRMPO and the communities of Fort Collins, Greeley, and Loveland. The program was part of a package of strategies developed to reach the goals established in the long range RTP.

By July of 2000, the SMARTTrips program was staffed by 12 employees responsible for management, outreach and operations amongst the three cities and NFRMPO at the budget of \$1,426,999 (SmartTrips 2001-2006 Strategic Operations Plan). The SmartTrips 2001-2006 Strategic Operations Plan recommended the development of one program as opposed to separate local and regional programs to reduce the confusion in roles and



responsibilities that had developed as a result of having multiple programs. Unfortunately, this led to the eventual dissolution of all three local programs along with their staff. The NFRMPO retained the administration for the carpool (CarGo) and vanpooling (VanGo) programs.

As of January 2012, the SmartTrips program is staffed by two full-time operations and business outreach staff members with limited administrative and accounting support. With extremely limited resources, SmartTrips focuses strictly on the operation of the VanGo program (about 85 vans that travel between Northern Colorado and Denver/Boulder on the regionally significant corridors of I-25, US 287, and US 34) and the maintenance of the well-visited trip-matching website (www.smarttrips.org). Best practices and municipal bicycle maps are presented on the website.

Documents and Programs

Many of NFRMPO member communities have adopted bicycle plans, either as a stand-alone document, an element of their transportation plan, or in the form of a trails plan. The communities' bicycle planning efforts vary in degree of complexity and level of recommendations provided. Additionally, several communities in the region provide bicycle education and outreach programs to encourage bicycle travel and promote safe interaction between bicyclists and motorists. The following sections summarize, by community, the bicycle planning efforts, bicycle facility mapping, and bicycle education and outreach programs in the community. In many cases, hyperlinks to more detailed information have been provided.

Berthoud

Bicycle Planning Efforts

The Town of Berthoud currently does not have a bicycle plan, nor does their Transportation Plan include a bicycle element. They anticipate updating their Transportation Plan in 2013 and may include a bicycle element. The Town's Parks, Open Space and Recreation (PORT) Plan is currently in draft form and includes a full trails element. The plan is currently on hold and has not been adopted by the Town Board.



Online Mapping

Some bicycle trails/routes in Berthoud are displayed by Google Maps .

Bicycle Education and Outreach Programs

The Berthoud Police Department holds a bike safety program/bike rodeo on an annual basis.

Eaton

Bicycle Planning Efforts

The Town of Eaton does not have a bicycle plan or a bicycle element of a transportation plan. The Town completed a Recreation and Trails Master Plan in 2004 and has developed a trail system map which depicts existing and future trails in the community. A citizens committee has recently been formed to look at trail needs to facilitate the movement of children around town. The Town has recently initiated the development of a Transportation Master Plan, which will include a bicycle component.





Online Mapping

No online mapping of bicycle facilities exists.

Bicycle Education and Outreach Programs

Eaton does not currently have any bicycle education or outreach programs.

Evans

Bicycle Planning Efforts

The City of Evans' 2004 *Open Space and Trails Master Plan* is the primary bicycle planning document for the City. The 2004 *City of Evans Transportation Plan* references the Trails Plan and the City's desire to provide additional trails throughout the City. The City is primarily focused on providing off-street shared use trails. Evans does not have a separate bicycle plan at this time.



Online Mapping

No online map of current bicycle routes exists independently. However, the 2004 Transportation Plan shows the Riverside Park Trail as well as sidewalks which are eight feet wide or greater, which are considered by the City to be shared use trails.

Bicycle Education and Outreach Programs

Evans does not currently have any bicycle education and outreach programs.

Fort Collins

Bicycle Planning Efforts

The City of Fort Collins produced a Bicycle Plan in 1995 and updated it in 2008. This plan covers dedicated bike facilities and multi-use trails. The City's *Transportation Master Plan* (2011) references the bike plan and provides steps towards implementation. Fort Collins also produced a *Bicycle Safety Education Plan* in 2011. The 2008 *Bicycle Plan* and 2011 *Bicycle Safety Education Plan* will be updated and combined in 2013.



Online Mapping

Fort Collins maintains an online interactive mapping tool that includes a bikeways layer [\[link\]](#). This tool includes current and proposed bike lanes, bike routes, and multi-use trails and also denotes where bicycles are not allowed. The downtown dismount zone can also be viewed on the City's website [\[link\]](#). For a printable copy of bicycle routes, a PDF version of the official bicycle map is available from the City's website [\[link\]](#). Another map illustrating the City's recreational trails is also available on the website [\[link\]](#).

Google Maps also provides an extensive mapping of bike routes in Fort Collins [\[link\]](#).

Bicycle Education and Outreach Programs

The City of Fort Collins' FC Bikes program promotes cycling as a safe and attractive means of transportation in Fort Collins. FC Bikes works to build the cohesiveness of the bicycle community and also educates residents on bicycle safety and awareness while encouraging the Fort Collins community to use bicycles as a preferred method for getting around. The FC Bikes program has a webpage on the City's website [\[link\]](#).



The City's *Bicycle Safety Education Plan* was created in 2011 as part of its bicycle safety outreach. Fort Collins also publishes a bicycle riding guide that contains stories about bike style, fundamentals of cycling, and a calendar of bike events.

Garden City

Town of Garden City

The community does not currently have a bicycle plan, map or programs in place. Any future efforts will be incorporated into this document when appropriate.

Greeley

Bicycle Planning Efforts

The City of Greeley does not have a dedicated bicycle plan, but its 2011 *2035 Comprehensive Transportation Plan* provides direction for bicycle planning in the City through the plan's Bicycle Vision Plan element. The City also has a *Parks and Trails Master Plan* (2002) and a supplemental *Conceptual Trails Plan* (2002).



Online Mapping

The City of Greeley has recently launched www.greeleybikes.com to provide a PDF map that outlines bicycle and pedestrian routes in the City. Google Maps also illustrates some of the City's bicycle routes.

Bicycle Education and Outreach Programs

The City of Greeley has recently initiated an internal bicycle advisory group and has purchased the www.greeleybikes.com that provides links to bicycle education websites.

Johnstown

Bicycle Planning Efforts

The Town of Johnstown does not have a dedicated bicycle plan, but its 2008 *Transportation Master Plan* addresses bicycling by referencing the *Johnstown/Milliken Parks, Trails, Recreation and Open Space Master Plan* (2003).



The joint Johnstown/Milliken trails plan serves as the primary bike planning document for the area.

Online Mapping

No online map of current bicycle routes exists independently. However, the 2008 Transportation Plan and joint Johnstown/Milliken trails plan do map current and proposed trails for the area. Google Maps also illustrates a limited amount of trails in the western part of Johnstown.

Bicycle Education and Outreach Programs

Johnstown does not currently have any bicycle education and outreach programs, as it is the responsibility of the Thompson Rivers Park and Recreational District to conduct recreational outreach programs. Currently the District does not have any dedicated bicycle programs.



Larimer County

Bicycle Planning Efforts

Larimer County *Transportation Master Plan* (2006) includes a short section on bicycling, but the County does not have a dedicated bicycle plan. Its *Open Lands Master Plan* (2001) provides some additional guidance on regional trails. Larimer County is currently updating their transportation plan and Open Lands plans.



Online Mapping

Larimer County does not provide any online maps specifically for bicycling. However, PDF maps of open space trails can be obtained from the Department of Natural Resources webpage [\[link\]](#). A regional view of trails is also available within the *Open Lands Master Plan* appendix "Master Plan Maps & Inventory". Google Maps displays some bike routes outside of municipalities, but a majority of the routes are within Fort Collins and Loveland [\[link\]](#).

Bicycle Education and Outreach Programs

Larimer County does not currently have any programmed bicycle education and outreach programs, but does provide such services on-demand.

LaSalle

Bicycle Planning Efforts

The Town of LaSalle does not have a dedicated bicycle plan, but its 2010 *Transportation Master Plan* provides a bike and pedestrian planning element that includes proposed bike lanes and shared use trails. The Town also has a Parks Plan that lists trails in the community.



Online Mapping

LaSalle does not currently have any bike facilities, and therefore does not have an online map. A map of proposed bike lanes and shared use trails is available within the Town's transportation plan.

Bicycle Education and Outreach Programs

In 2011 the Town of LaSalle's Recreation Department started community bike rides, which included a brief education component at the start of each ride.

Loveland

Bicycle Planning Efforts

The City of Loveland currently has a draft *Bike and Pedestrian Plan* was adopted on May 1, 2012 and incorporated into the 2035 Transportation Plan which was approved on December, 18 2012. The *Parks and Recreation Master Plan* (2001) includes recreational trails.



Online Mapping

Loveland provides a PDF map on its website for the existing bike network [\[link\]](#) and its recreational trail network [\[link\]](#). Google Maps displays a mostly complete bike network for Loveland [\[link\]](#).



Bicycle Education and Outreach Programs

The City of Loveland provides a variety of education and outreach programs. The City is a collaborative partner in the Bicycle and Pedestrian Education Coalition (BPEC) in providing bicycle education and outreach programs, while maintaining a Safe Routes to School (SRTS) program that involves many of the area's schools. The City also operates programs such as Helmet Blitzes and Strap-n-Snap for 3rd graders, while providing outreach at a variety of local events.

Milliken

Bicycle Planning Efforts

The Town of Milliken does not have a dedicated bicycle plan, but its Transportation Master Plan (2008) includes a bicycle element. The joint *Johnstown/Milliken Parks, Trails, Recreation and Open Space Master Plan* (2001) serves as the primary bike planning document for the area.



Online Mapping

No online map of current bicycle routes exists independently. However, the transportation plan and joint Johnstown/Milliken trails plan do map current and proposed trails for the area.

Bicycle Education and Outreach Programs

Milliken does not have any structured education and outreach programs, but the Town occasionally hosts a bike rodeo.

Severance

Bicycle Planning Efforts

The Town of Severance's *Transportation Plan* (2008) includes a brief section that notes plans for trails and bicycle facilities.



Online Mapping

Google Maps does display a regional trail that connects Severance, but no other facilities are displayed .

Bicycle Education and Outreach Programs

The community does not currently have bicycle programs in place. Any future efforts will be incorporated into this document when appropriate.


Timnath

Bicycle Planning Efforts

The Town of Timnath's *Trails Plan* (2005) serves as the primary bicycle planning document, incorporating both bike routes and lanes along with regional trails and pathways. The Town's *Transportation Plan* (2005) and *Comprehensive Plan* (2007) also speak to providing improved bike access in the town. There is no dedicated bicycle plan.



Online Mapping

The Town's Trails Plan provides a map with proposed bike facilities. Google Maps also documents some bike access within the town, but this access is primarily routes providing connection from Fort Collins .



Bicycle Education and Outreach Programs

Timnath does not currently have any bicycle education and outreach programs.

Weld County

Bicycle Planning Efforts

Weld County does not have any dedicated bicycle planning efforts, instead opting to leave bicycle planning to its municipalities and providing support. However, the Weld County *2035 Transportation Plan* (2011) provides some goals related to bicycle accommodation, primarily about supporting municipalities. The bike element also notes the County's assistance to the Weld Trails Coordination Committee (WTCC) whose purpose is to help provide regional trail connectivity.



Online Mapping

The County does not provide online mapping, but the WTCC provides a regional trails inventory map on its website [\[link\]](#). The County's transportation plan includes a small version of this map, along with a national and state trails map. Google Maps displays bike routes of some of the county's municipalities, along with some of the regional trails between communities [\[link\]](#).

Bicycle Education and Outreach Programs

Weld County does not currently have any programmed bicycle education and outreach programs. The WTCC would likely be the primary entity to provide such programs in the county, but no such programs are explicitly advertised.

Windsor

Bicycle Planning Efforts

The Town of Windsor does not have a dedicated bicycle plan or a bike element within its Transportation Study (1999). However, Windsor's *Comprehensive Plan* (2006) speaks to providing bicycle access within the Town. Furthermore, the Town's *Parks, Recreation, Trails and Open Lands Master Plan – 2007 Update* provides guidance and planning for trails.



Online Mapping

A PDF map of Windsor's current and proposed trail system is available on its website [\[link\]](#). Google Maps also illustrates some of the trails within and around Windsor [\[link\]](#).

Bicycle Education and Outreach Programs

The Town of Windsor's Police Department runs a bicycle rodeo, while the Recreational Department hosts a bike to work day.



Bicycle Infrastructure

Communities in the NFRMPO have a variety of bicycle facilities ranging from shared used paths to bike lanes to bike box treatments at intersections. The following sections provide an overview of the bicycle facilities that currently exist in the region.

Definitions

For consistency and clarification, the following definitions are provided for different types of bicycle facilities.⁹

Bicycle Boulevard – A street segment, or series of contiguous street segments, that has been modified to accommodate through bicycle traffic and minimize through motor traffic.

Bicycle Route – A roadway or bikeway designated by the jurisdiction having authority, either with a unique route designation or with BIKE ROUTE signs, along which bicycle guide signs may provide directional and distance information.

Bikeways – A generic term for any road, street, path or way which in some manner is specifically designated for bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are to be shared with other transportation modes.

Bike Box – A designated area at the head of a traffic lane at a signalized intersection that provides bicyclists with a safe and visible way to get ahead of queuing traffic during the red signal phase.



A Bike Box in Fort Collins

Bike Lane – A portion of a roadway which has been designated by striping, signing and pavement markings for the preferential or exclusive use of bicyclists.



A Bike Lane in Fort Collins

Shared Use Path – A bikeway physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right-of-way or within an independent right-of-way. Shared use paths may also be used by pedestrians, skaters, wheelchair users, joggers and other non-motorized users.

Shared Lane – A lane of a traveled way that is open to bicycle travel and vehicular use.



A "Sharrow" in Fort Collins

Shared Lane Marking ("sharrows") – A pavement marking symbol that indicates an appropriate bicycle positioning in a shared lane.

Sidewalk – A shared use path located immediately adjacent and parallel to a roadway.

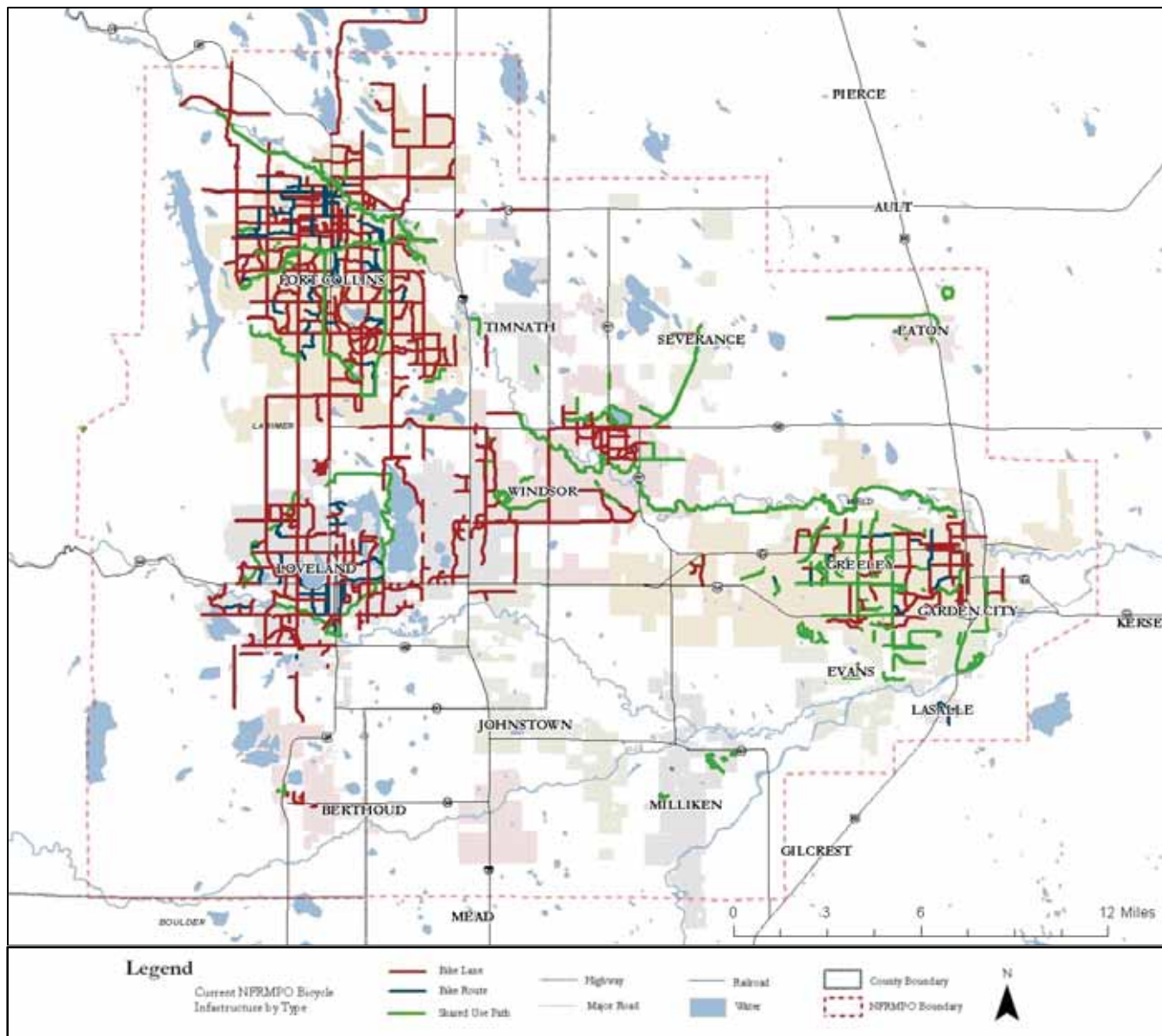
⁹ Sources: AASHTO Guide for the Development of Bicycle Facilities, 2012 and February 2010 Draft; NACTO Urban Bikeway Design Guide.



Existing Bicycle Facilities

As shown on Figure 2.2, the existing bicycle facilities in the NFRMPO region are predominantly located in the three larger cities of Fort Collins, Loveland, and Greeley. There is also considerable bicycle infrastructure in the Windsor area. The foundation of a regional trail system along the Poudre River is discernible on Figure 2.2.

Figure 2.2 Existing Bicycle Facilities and Routes



Map created by NFRMPO



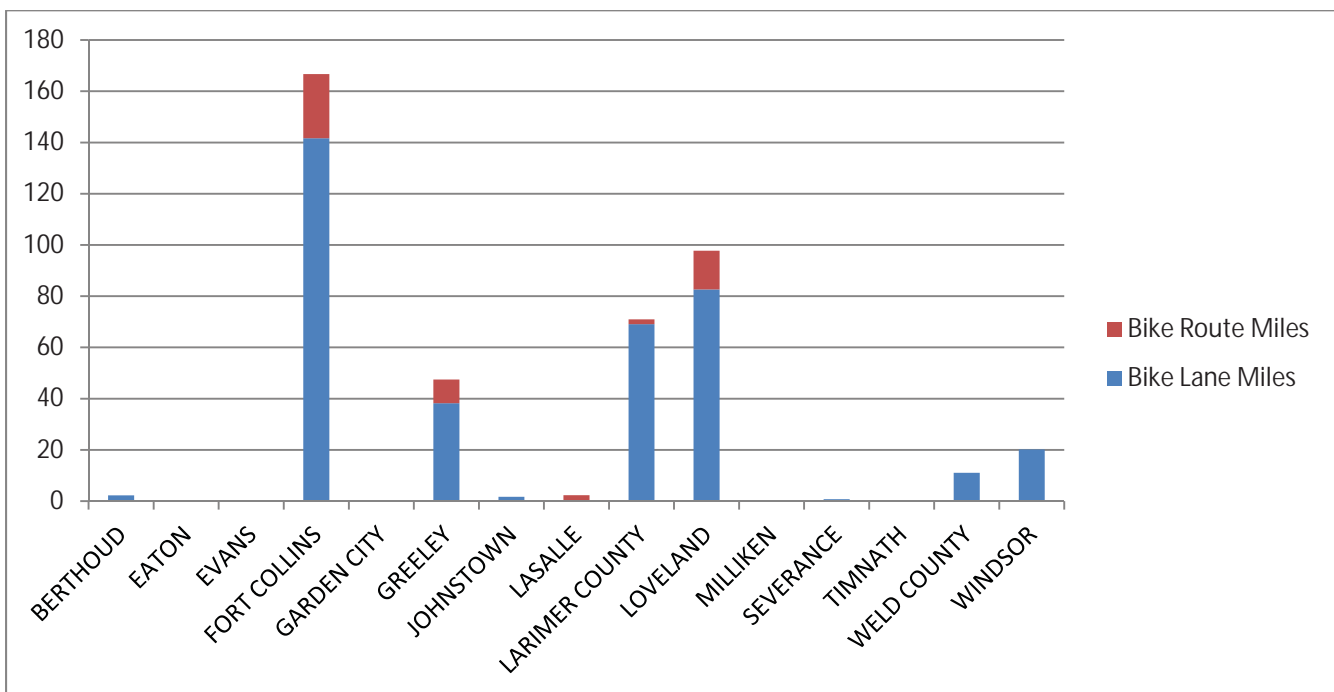
Bike Lanes and Bike Routes

On street bike lanes help to define an area of the street that is for the exclusive use of bicyclists and can decrease the stress level of bicyclists riding in traffic. Bike lanes encourage bicyclists to ride in the correct direction of travel and alert motorists of the potential presence of bicyclists. Many bicyclists prefer to ride the most direct route to their destination, which is frequently along a street; bike lanes help to specify streets within a community where bicycling is preferred.

Bike routes follow roadways without bike lanes. These roadways are properly signed “Bike Route” to provide wayfinding support to the bicyclist while notifying the motorist the roadway is shared with bicyclist.

Nine of the municipalities in the MPO currently have signed routes and striped on-street bike lanes. In total, there are over 421 centerline miles of bike routes and bike lanes in the region. As shown on **Figure 2.3**, Fort Collins and Loveland provide the highest mileage of bike lanes through their communities, with 142 miles of bike lanes in Fort Collins and 83 miles in Loveland. To a lesser extent, Berthoud, Greeley, Johnstown, Windsor, and areas unincorporated Larimer and Weld Counties also have designated bike lanes on their roads,

Figure 2.3 Centerline Miles of On Street Bike Lanes and Bike Routes



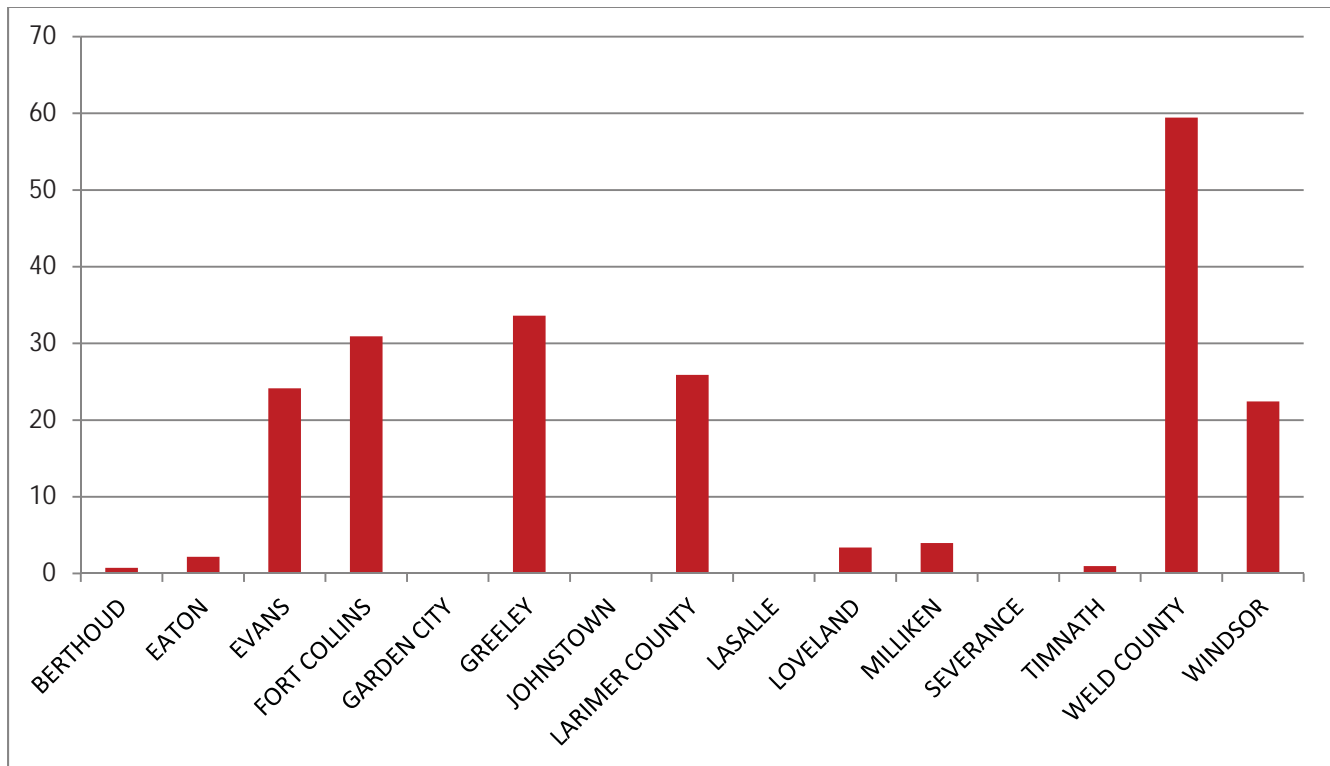
Off Street Bike Facilities

Shared use paths provide valuable benefits to a community including transportation connections and recreational opportunities. Many cyclists, especially families with small children and those who may not be comfortable riding alongside motor vehicles, prefer to ride on shared use paths.


In total, there are over 208 centerline miles of shared use paths in the North Front Range MPO, distributed between nine of the municipalities and areas of unincorporated Larimer and Weld Counties, as shown on **Figure 2.4**.



Figure 2.4 Centerline Miles of Off Street Shared Use Paths



Shoulders

The AASHTO *Guide for the Development of Bicycle Facilities* (2012) notes that “adding or improving paved shoulders can greatly improve bicyclist accommodation on roadways with higher speeds or traffic volumes, as well as benefit motorists.” According to AASTHO (as well as the CDOT *Roadway Design Guide*), the minimum paved shoulder width to accommodate bicycle travel is four feet. CDOT has a Policy Directive which states that shoulder improvements shall be incorporated on all state highways when upgrades are being made  (note: bicycle use is prohibited on I-25 in urban areas, including throughout the NFRMPO region). While many roadways in the NFRMPO have shoulders adequate for bicycle use, a comprehensive database of shoulder widths in the region is not currently available.

Other Bicycle Facilities

In addition to bike lanes and shared used paths, the Fort Collins and Greeley bicycle networks include short segments of share lane markings (“sharrows”). In Fort Collins, the half-mile stretch of Mountain Avenue between Mason Street and Riverside Drive is marked with sharrows. Greeley’s network includes sharrows at four locations, covering a total of approximately 1.2 miles:

- ▶ 16th Street between 4th Avenue and 6th Avenue
- ▶ 20th Street between 7th Avenue and 12th Avenue
- ▶ 24th Street between Balsam Avenue and Bearwood Avenue
- ▶ 71st Avenue between Grizzly Drive and C Street



Fort Collins also has one bike box near the Colorado State University Campus at the intersection of Shields Street and Plum Street on the side Street (Plum) approach.

Signing and Signal Equipment

Fort Collins and Loveland both have bike detectors at some signalized intersections under their jurisdiction. Fort Collins uses a video detection system capable of detecting bikes at 84 out of 178 (47%) of their signalized intersections (2012). Loveland uses both video and loop detection systems. Around 40-50% of Loveland’s traffic signals are equipped with bike detection systems; however, their downtown signals are pre-timed with no detection.

Bicycle Amenities

Buses and Vanpools Equipped with Bike Carriers

Three fixed-route transit systems operate in the MPO: Transfort in Fort Collins, Greeley-Evans Transit (GET), and City of Loveland Transit (COLT). All fixed-route buses in each system are equipped with bicycle racks; GET and COLT buses have a capacity of two bikes per bus and Transfort buses have a capacity of three bikes per bus.

Figure 2.5 shows the number of bike boardings on buses for the three transit providers in 2010. In total, there were over 121,000 bike boardings on buses in the region. **Figure 2.6** shows Transfort’s seasonal variation of bicycle boardings on buses. The NFRMPO currently operates 85 active VanGo vanpooling routes. Twenty-one of the 85 vans (25 percent) are equipped with bike racks.

Figure 2.5 Bike Boardings on Buses in 2010

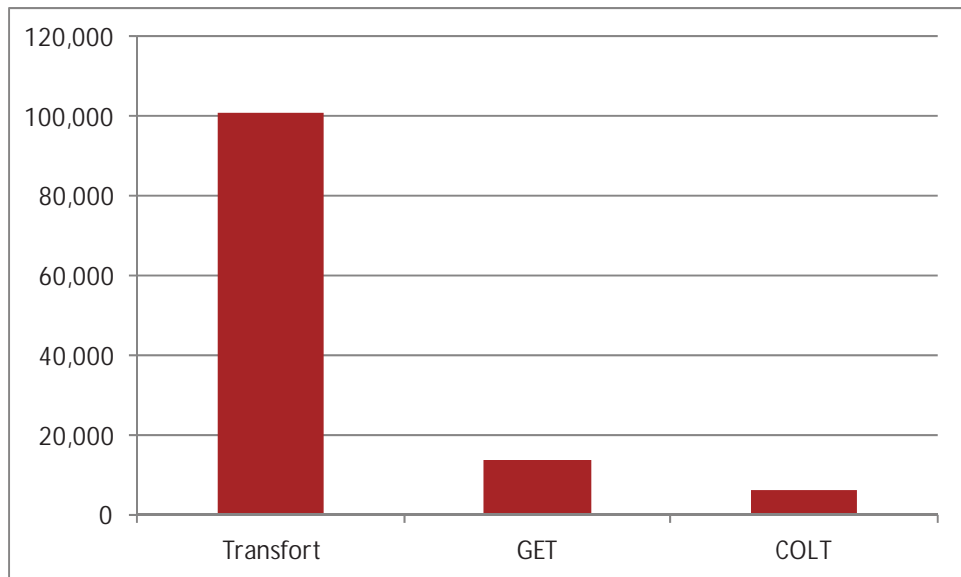
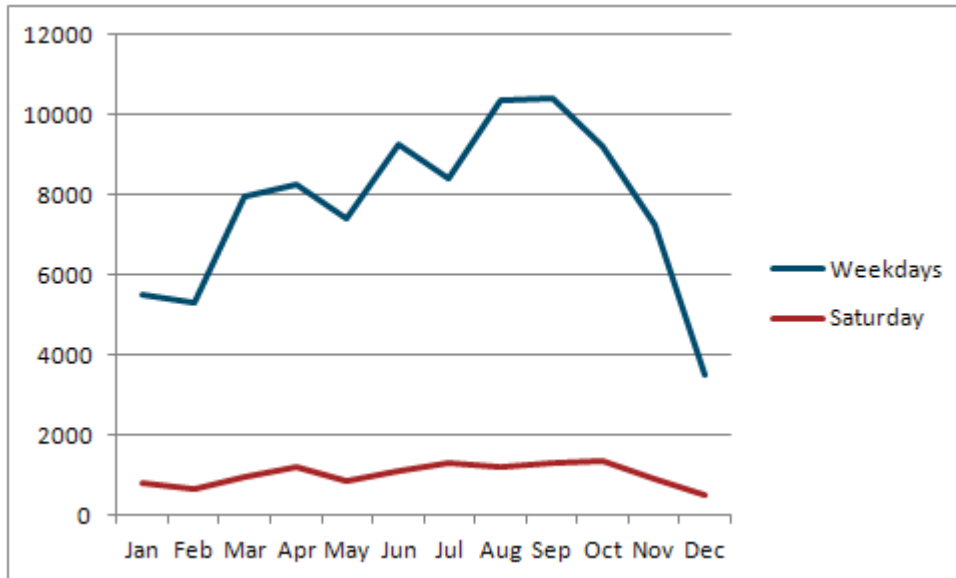




Figure 2.6 Transfort Monthly Bike Boardings on Buses (2011)



Bike Storage and/or Showers at Municipal Buildings

As shown in Table 2.1, five of the communities in the NFRMPO provide bicycle amenities at their municipal buildings to encourage employees and visitors to bike to the facilities. Fort Collins’s facility at 215 N. Mason is a LEED certified building that provides secure indoor bicycle storage.

Table 2.1 Bike Amenities at Municipal Buildings

Community	Bike Racks	Bike Lockers/ Secure Storage	Bike Fleet	Showers
Berthoud				
Eaton				
Evans				
Fort Collins		•	•	•
Garden City				
Greeley				
Johnstown	•			•
Larimer County	•			•
LaSalle				
Loveland	•			•
Milliken				
Severance				
Timnath				
Weld County				
Windsor	•			•

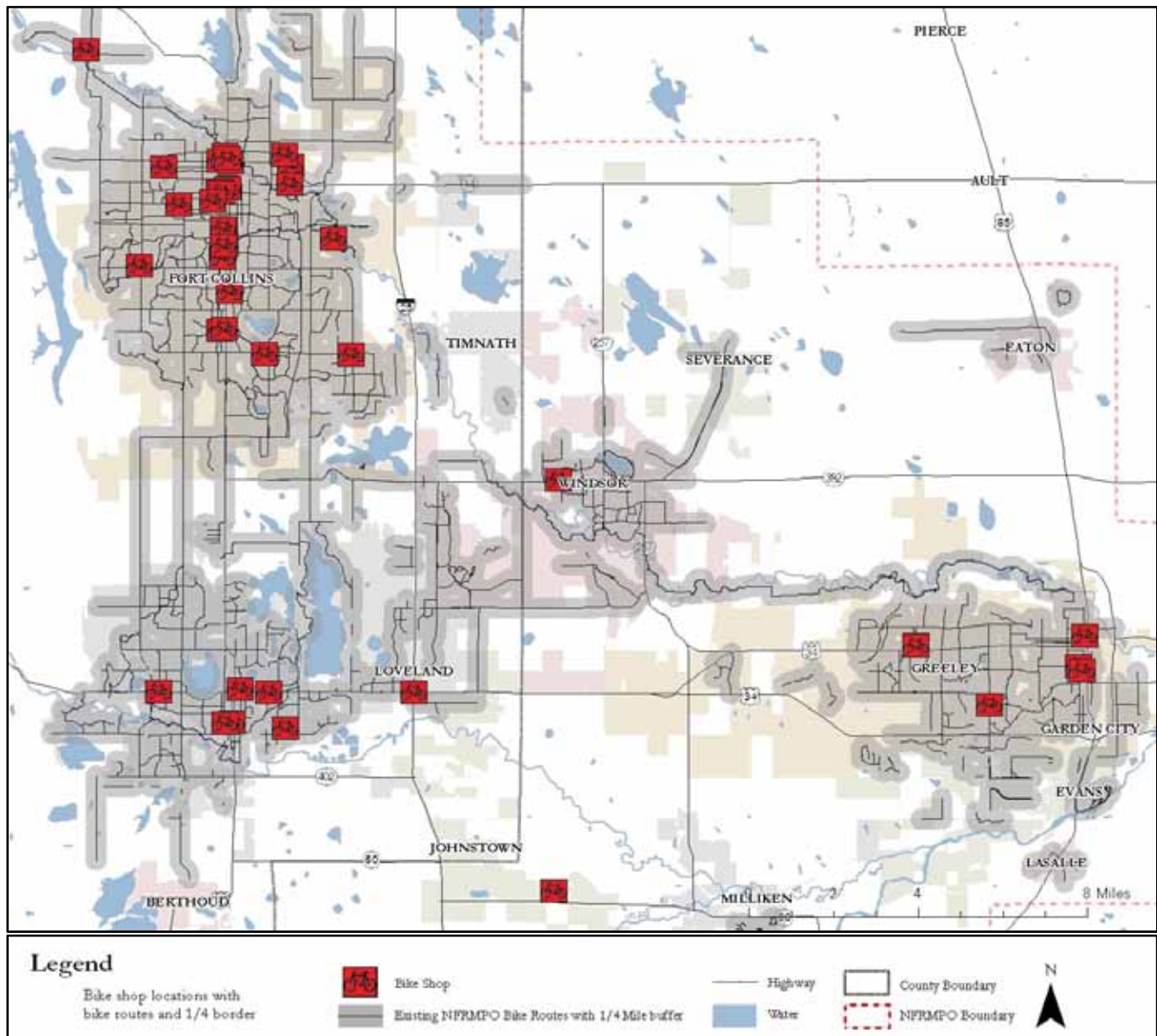


Privately-Owned Bicycle Shops

In 2012, the NFRMPO region supported 40 privately-owned bicycle shops, as shown on **Figure 2.7**. These businesses are documented in this regional plan because they support for bicycle commuters and serve as a source of education/information dissemination for area bicyclists.

The businesses predominantly reside in Larimer County in the cities of Fort Collins and Loveland. Weld County has 6 bike shops between Greeley, Windsor, and Johnstown.

Figure 2.7. Bike Shops



Map created by NFRMPO



Standards and Policies

Bicycle Facilities Standards

Bicycle facility design standards have been established on a nation level by the American Association of State Highway and Transportation Officials (AASHTO *Guide for the Development of Bicycle Facilities*, 2012) and the National Association of City Transportation Officials (NACTO *Urban Bikeway Design Guide*, 2011). CDOT recently completed the bicycle and pedestrian chapter (Chapter 14) of the *CDOT Roadway Design Guide*, which documents standards and best practices for designing facilities for bicyclists and pedestrians. Several of the counties and municipalities in the NFRMPO have also developed standards, with some based on national and state resources, and others geared towards local conditions. Larger municipalities often communicate design standards through bike plans and roadway design guidelines, while smaller communities rely on design standards in municipal code or construction design standards documents. **Table 2.2** compares which typical bicycle facility standards have been documented at the national, state, and local levels.



Table 2.2 Bicycle Facilities Standards

Design Element	AASHTO	NACTO	CDOT	Berthoud	Eaton	Evans	Fort Collins	Garden City	Greeley	Johnstown	Larimer County	LaSalle	Loveland	Milliken	Severance	Timnath	Weld County	Windsor
Shoulders	●		●				●			●	●		●		●	●	●	●
Curb lanes	●		●										●					
Bike lanes	●	●	●	●			●		●	●	●		●	●	●	●	●	●
Left-side bike lanes	●	●	●															
Buffered bike lanes	●	●	●															
Contra-flow bike lanes		●	●										○					
Bike boulevards	●		●										○					
Shared use paths	●		●	●		●	●		●	●	●		●	●		●	●	●
Bike boxes		●	●				○						●					
Signal timing	●	●	●										●					
Bike detectors	●	●	●				●				●		●			●		
Bike signals	●	●	●										○					
On-street parking	●	●	●						●				●					
Railroad crossings	●		●														●	
Barriers	●	●	●				●				●		●			●		
Lighting for bikes	●		●			●												
Surface type	●	●	●	●		●	●		●	●	●		●	●		●	●	●
Striping	●	●	●				●				●		●			●		●
Painted symbols (e.g., sharrows)	●	●	●				●		●		●		●			●		●
Signage	●	●	●				●		●		●		●			●	●	●
Slopes	●		●	●		●	●		●	●	●		●	●		●	●	●
Design speeds	●		●				●				●		●			●		●
Bike parking	●		●	●		●	●		●		●		●			●		●

National or State Resource / Local Entity

- = defines elements and recommends or requires following of standards
- = defines element, but does not set any standards

Bicycle Related Regulations

Many of the NFRMPO communities have regulations or ordinances that pertain to bicycle use. Table 2.3 shows the communities which have regulations related to the use of bike facilities, snow removal on bicycle facilities, and bicycle registration programs. Each item is described in more detail in the subsequent sections.



Table 2.3 Bicycle Related Regulations

Community	Regulations on Bike Facility Usage	Snow Removal Policy (for Bike Facilities)	Bicycle Registration Program
Berthoud	•	•	
Eaton			•
Evans	•		
Fort Collins	•	•	•
Garden City			
Greeley	•		•
Johnstown	•	•	
Larimer County			
LaSalle			•
Loveland	•	•	
Milliken	•		•
Severance			
Timnath			
Weld County			
Windsor	•		

Regulations on Bicycle Facility Use

Eight of the 15 communities have regulations about what type of users are allowed on sidewalks or bicycle facilities. Greeley and Windsor both allow bicyclists to use sidewalks, while in Berthoud and Milliken bicycles are prohibited from using sidewalks. In Fort Collins, bicycles are allowed on sidewalks except in the “Downtown Dismount Zone.” Likewise, Johnstown allows bicycles on sidewalks except in restricted areas like downtown and Loveland allows bicycles on sidewalks except in zoning districts E and DE. Evans allows bicycles on sidewalks that are eight feet or wider.

Berthoud, Evans, Johnstown allow motorized bicycles on bike facilities, while Greeley and Milliken prohibit motorized bikes on trails. Fort Collins allows motorized bicycles on bike lanes, but not on recreational trails.

Snow Removal Policies

Many Coloradoans enjoy riding their bikes year-round, as demonstrated in the bicycle count section of this report. Four of the NFRMPO communities have policies related to the removal of snow from bicycle facilities. Berthoud’s Parks Department plows the paved bike trails in the community. Fort Collins’ 2008 Bike Plan includes the designation of priority commuter routes which maintained to minimize surface hazards including snow. Johnstown plows their bicycle and pedestrian paths. And Loveland plows their bike lanes and shoulders at the same time as other travel lanes. Loveland’s Parks Department plows the trail system within 24-48 hours after a storm.

Bicycle Registration Programs

Hundreds of bicycles are stolen each year, as documented in bicycle theft section in this report. Several communities in the NFRMPO have bicycle registration programs that help the local police departments to recover stolen bicycles and return them to their rightful owner. Fort Collins’ bicycle registration program is free



and can be completed online through the FCBikes program. Bicycle registration is not required in Eaton, LaSalle and Milliken, but can be done through the local Police Departments. Greeley has a bicycle ordinance which requires an annual fee for bicycle registration.

Bicycle Accommodation Requirements

As shown on Table 2.4, CDOT and six of the NFRMPO communities have requirements for bicycle accommodation to be included in roadway expansion and/or resurfacing projects. Ten of the communities require bicycle accommodation as an element of new development or redevelopment. A brief description of the requirements by community follows.

The National Complete Streets Coalition defines complete streets as the simple idea that “our streets should work for everyone, of all ages and abilities, regardless of how they travel.” Their *Complete Streets Policy Analysis* document (PDF) outlines elements of complete streets policies and defines a methodology for evaluating the strength of complete streets policies based on each of ten elements. Using this document as a guide, three agencies in the NFRMPO (CDOT, Fort Collins, and Loveland) have complete street policies in place that are comprehensive and clear in intent. Several other communities, as noted by the partial circle in Table 2.4, have some elements of a complete streets policy in place.

Table 2.4 Bicycle Accommodation Requirements

Community	Bicycle Accommodation Requirements for Roadway Expansion/ Resurfacing	Bicycle Accommodation Requirements for New Development/ Redevelopment	Complete Streets Policy
CDOT	●		●
Berthoud	●	●	
Eaton			
Evans	●	●	○
Fort Collins	●	●	●
Garden City			
Greeley	●	●	○
Johnstown	●	●	○
Larimer County	●	●	
LaSalle			○
Loveland		●	●
Milliken		●	○
Severance			○
Timnath		●	○
Weld County			
Windsor		●	

- = Policy/requirement in place
- = Some elements of Complete Streets Policy in place



- ▶ The Colorado Transportation Commission’s Bike and Pedestrian Policy Directive 1602.0 (dated October 22, 2009) and subsequent State Statute 43-1-120 support the development of fully integrated active transportation networks. CDOT’s Policy Directive states that “the needs of bicyclists and pedestrians shall be included in the planning, design, and operation of transportation facilities, as a matter of routine.” As such, bicycle and pedestrian accommodation needs to be incorporated into all CDOT transportation projects.
- ▶ **Berthoud** is currently working on updating their development code, and it will likely require developers to implement the proposed trails in the PORT Plan. The Town requires bike parking depending on size of parking lot.
- ▶ The typical cross-sections in **Evans’** Transportation Plan do not include bike lanes, but they do include 8 foot (or greater) shared use paths. These cross-sections are treated as standards for development and road expansion projects.
- ▶ **Fort Collins** uses the Larimer County Urban Area Street Standards document as a guiding document for providing bicycle facilities through the development review process and for roadway expansion projects. The City has specific policies for on-street bike parking.
- ▶ **Greeley** requires the developers construct bike lanes on collectors streets and higher classification. The City has been active in constructing road diets with bike lanes.
- ▶ Many of **Johnstown’s** typical cross-sections include bike lanes, and they are treated as standards in development review process. Bicycle facilities are added as a part of roadway expansion projects if the facility has been identified as a planned route.
- ▶ Outside of growth management areas (GMAs), **Larimer County** holds developers to the rural area road standards (RARS), which includes shoulders. For reconstruction projects, the County adheres to standards (including shoulders) to the extent practicable. For resurfacing projects, the County tries to widen the paved width as much as easily possible (typically 1-2 feet of additional shoulder width).
- ▶ **Loveland** requires bicycle facilities in accordance with the Larimer County urban area street standards (LCUASS) and Site Development Standards. Bike parking is required for multi-family and all other non-residential development per the planning standards for new development.
- ▶ Many of **Milliken’s** typical cross-sections include bike lanes, and they are treated as standards in development review process.
- ▶ **Timnath** requires bicycle facilities in accordance with LCUASS and parking requirements in the Town’s Land Use Code for development.
- ▶ Many of **Windsor’s** typical cross-sections include bike lanes, and they are treated as standards in development review process.

Data and Analysis

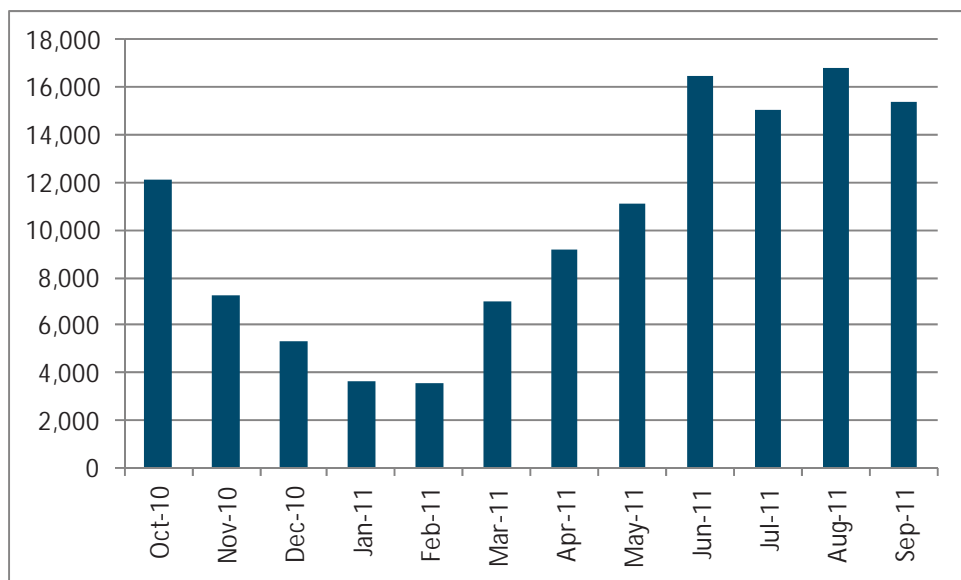
Bicycle Counts

Fort Collins and Loveland are the only communities in the NFRMPO that have completed bicycle counts. Fort Collins has counted bicycle volumes at over 40 intersections throughout the City during the morning, noon, and afternoon peak hours. Loveland rented a bike counter from CDOT in October 2010; they used the counter to collect nearly a month of bicycle and pedestrian counts on the recreational trail underpass of Eisenhower Boulevard (US 34) between Cheyenne Avenue and Denver Avenue. Available counts from Fort Collins and Loveland are included in **Appendix B**.



A permanent loop counter has been installed in downtown Boulder on the bike lanes on 13th Street approximately one block south of Pearl Street. Since Boulder’s climate is similar to that in the NFRMPO, these data are useful to understand the variation in bicycle activity that can be expected over the course of a year. The monthly bicycle count data for southbound 13th Street, which has been compiled by the University of Colorado, is presented in **Figure 2.8**. From this count summary, April and May represent approximately average bicycle use over the twelve month period. June through September represent a considerable peak in bicycle activity. Bicycle activity during the winter months is in the range of 20 percent of the peak summer activity.

Figure 2.8 Monthly Bicycle Counts on Southbound 13th Street in Boulder

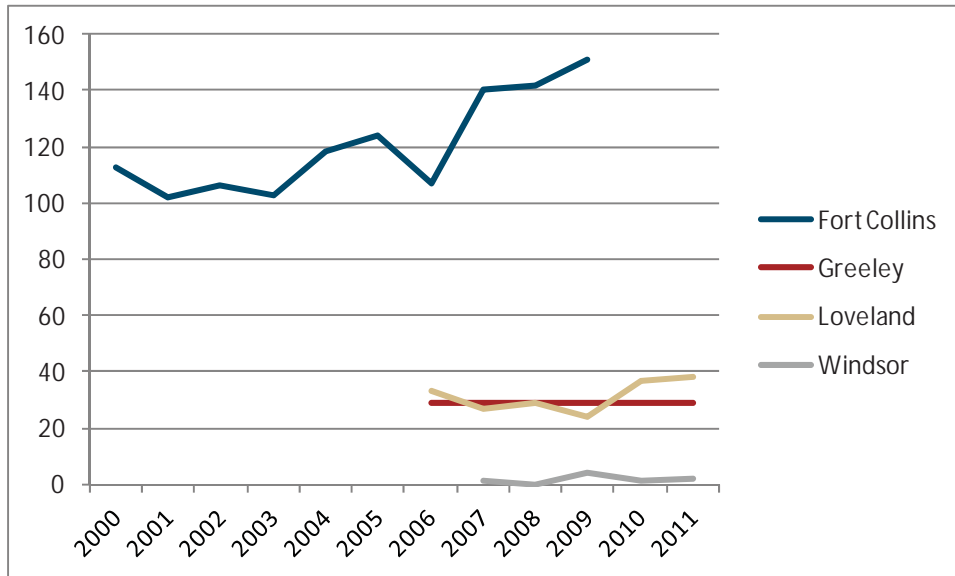


Reported Bicycle Crashes

Fort Collins, Greeley, Loveland, and Windsor each track bicycle related crashes, as shown on **Figure 2.9**. Larimer and Weld Counties also track bicycle crashes, but the data are not presented in the graph because they include some crashes in incorporated areas of the Counties as well as areas of the County outside of the NFRMPO boundary. Typically, the reported bicycle crashes involve a motor vehicle and a bicyclist, rather than crashes between two bicyclists or a single bicycle crash. The crash data, particularly in Fort Collins, show an upward trend in the number of bicycle crashes over time, which is likely to a large extent a result of increased population and increased bicycling in the City.



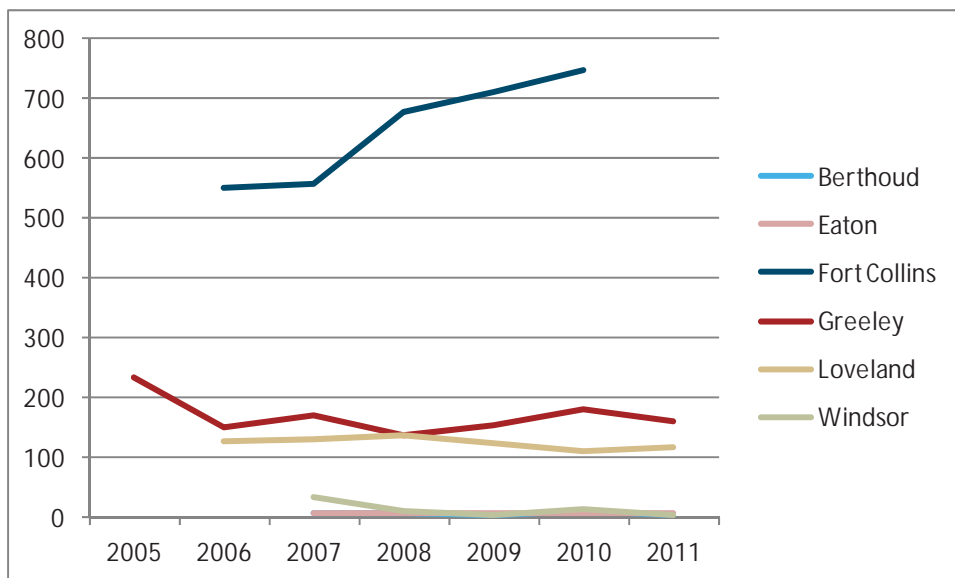
Figure 2.9 Annual Bicycle Crash Data



Bicycle Theft

Bicycle theft data for six of the MPO communities are shown in **Figure 2.10**. Again, Larimer County also tracks bicycle thefts, but the data are not presented in the graph because they include some crashes in incorporated areas of the County (such as Fort Collins) as well as areas of the County outside of the NFRMPO boundary. Between 2006 and 2010, bicycle theft in Fort Collins has increased over 35 percent.

Figure 2.10 Annual Bicycle Theft Data





Bike Participation by Community

The 2010 NFRMPO Household Survey provides insight into the travel modes used to travel to and from work, as shown in **Table 2.5**. Region-wide, 6.3 percent of survey respondents reported bicycling to work. Of the three large cities in the region, Fort Collins respondents indicated the highest rate of bicycle use for commuting at over 13 percent.

Table 2.5 Travel Mode for Commuting (2010 Household Survey)

	Fort Collins	Greeley-Evans	Loveland	Larimer	Weld	Region-wide
Walk	3.60%	5.00%	1.70%	3.20%	1.70%	3.40%
Bike	13.30%	4.10%	1.00%	0.60%	1.00%	6.30%
Driver	76.80%	82.20%	89.80%	93.80%	90.90%	84.50%
Passenger	4.40%	8.00%	5.90%	2.30%	6.20%	4.80%
Local bus	0.70%	0.60%	1.40%	0.00%	0.00%	0.50%
Express bus	0.00%	0.10%	0.00%	0.00%	0.00%	0.00%
Other	1.20%	0.00%	0.20%	0.20%	0.20%	0.60%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Household Density

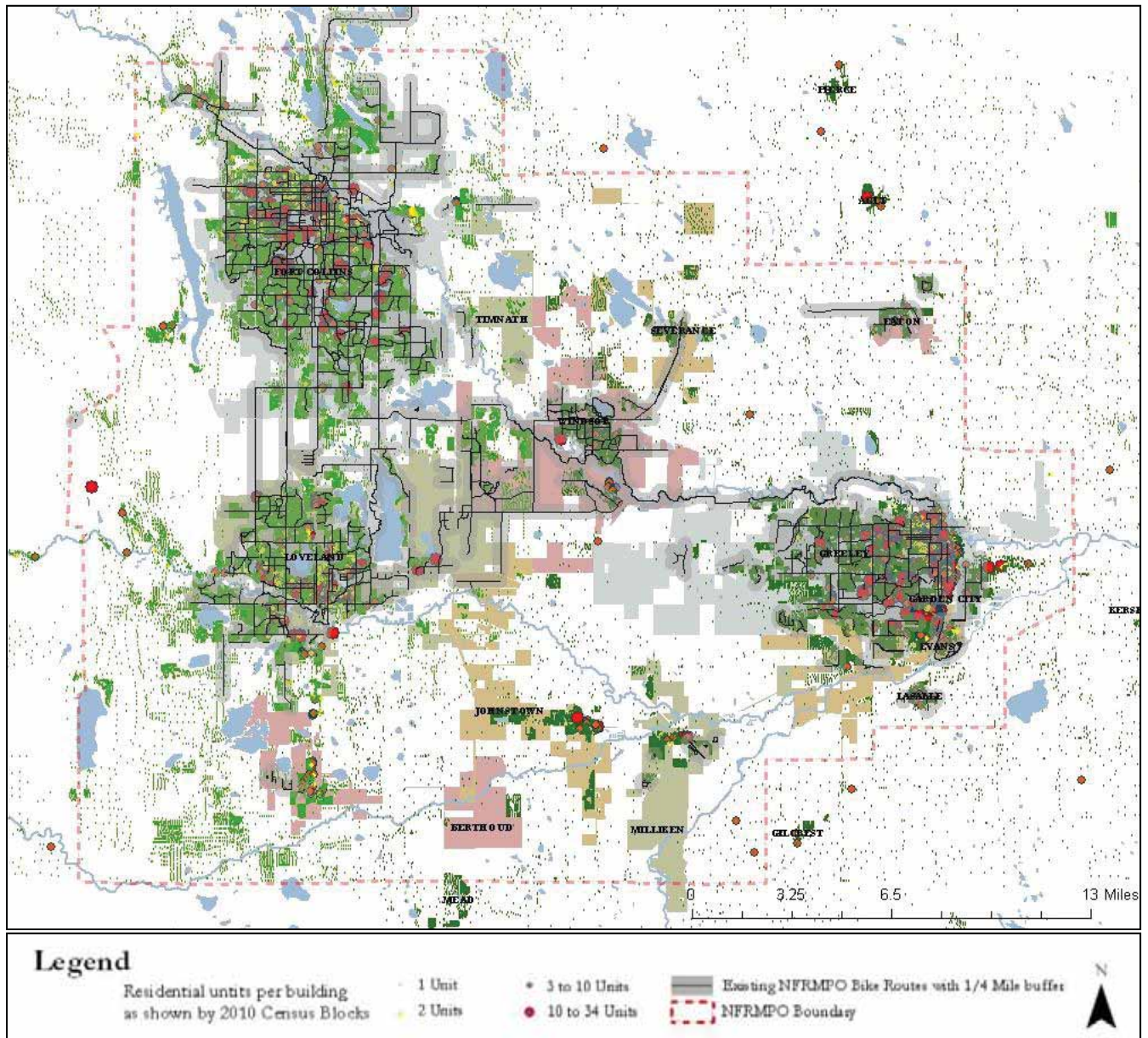
Figure 2.11 below depicts the density of households across the NFRMPO region as compared with the regional bicycle system as of the writing of this plan. A simple review of the map demonstrates where existing bicycle infrastructure is paired with the densities of households. The cities with larger populations have an observably larger investment in bicycle infrastructure likely indicating:

1. An increased public demand for bicycle trails and bike lanes
2. Subsequent policies to add infrastructure with new development
3. Diverse or dedicated funding sources for bicycle infrastructure

Conversely, the smaller population towns in the NFRMPO region have a lower density and their current investment is smaller.



Figure 2.11 Household Density



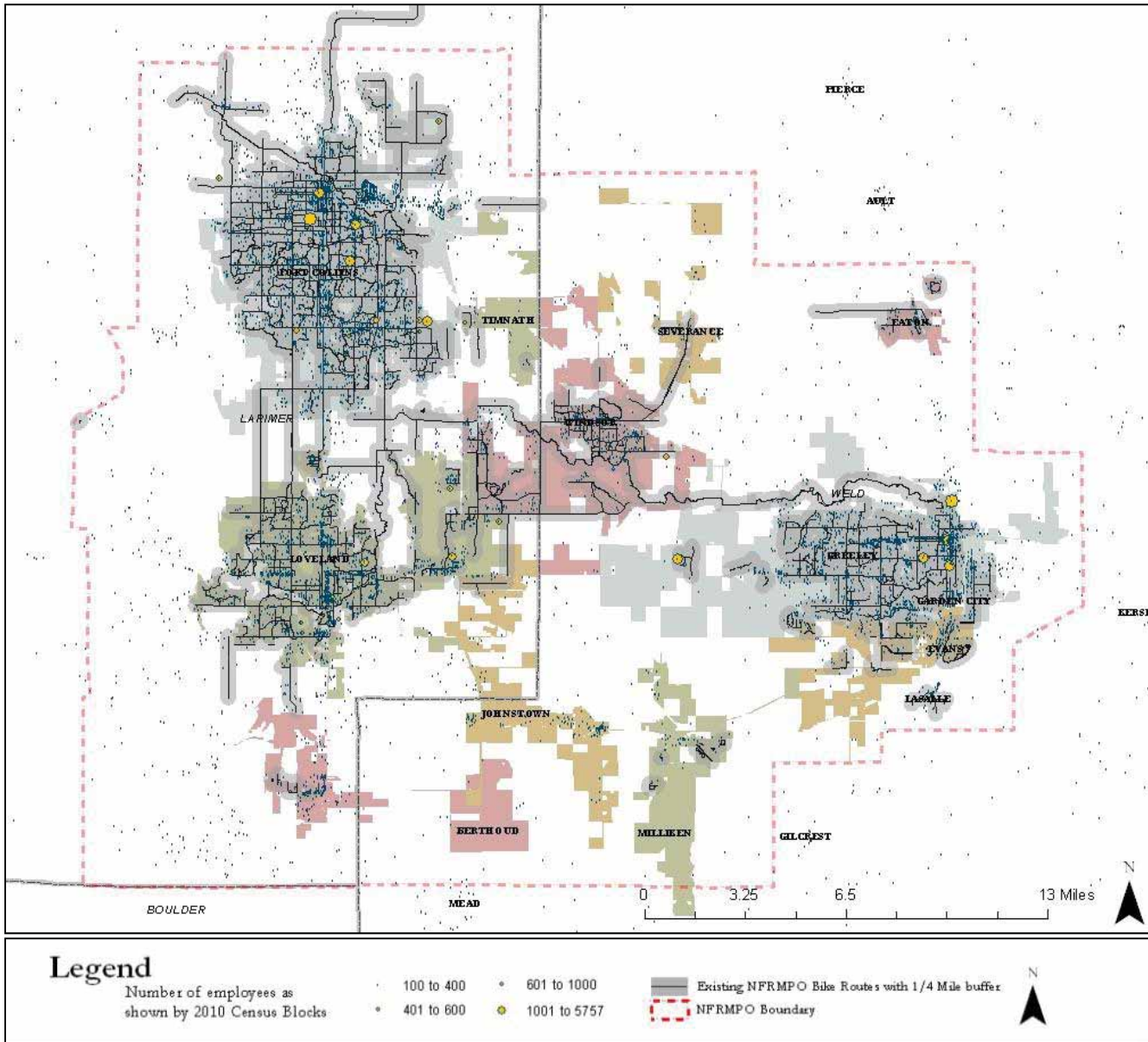
Map created by NFRMPO



Business Locations

There are over 11,000 businesses in the NFRMPO, as shown on **Figure 2.12**, and approximately 176,600 employees. Approximately 84 percent of businesses are located within a ¼ mile of an existing bike route, and over 85 percent of employees work within a ¼ mile of an existing bike route.

Figure 2.12 Business Locations

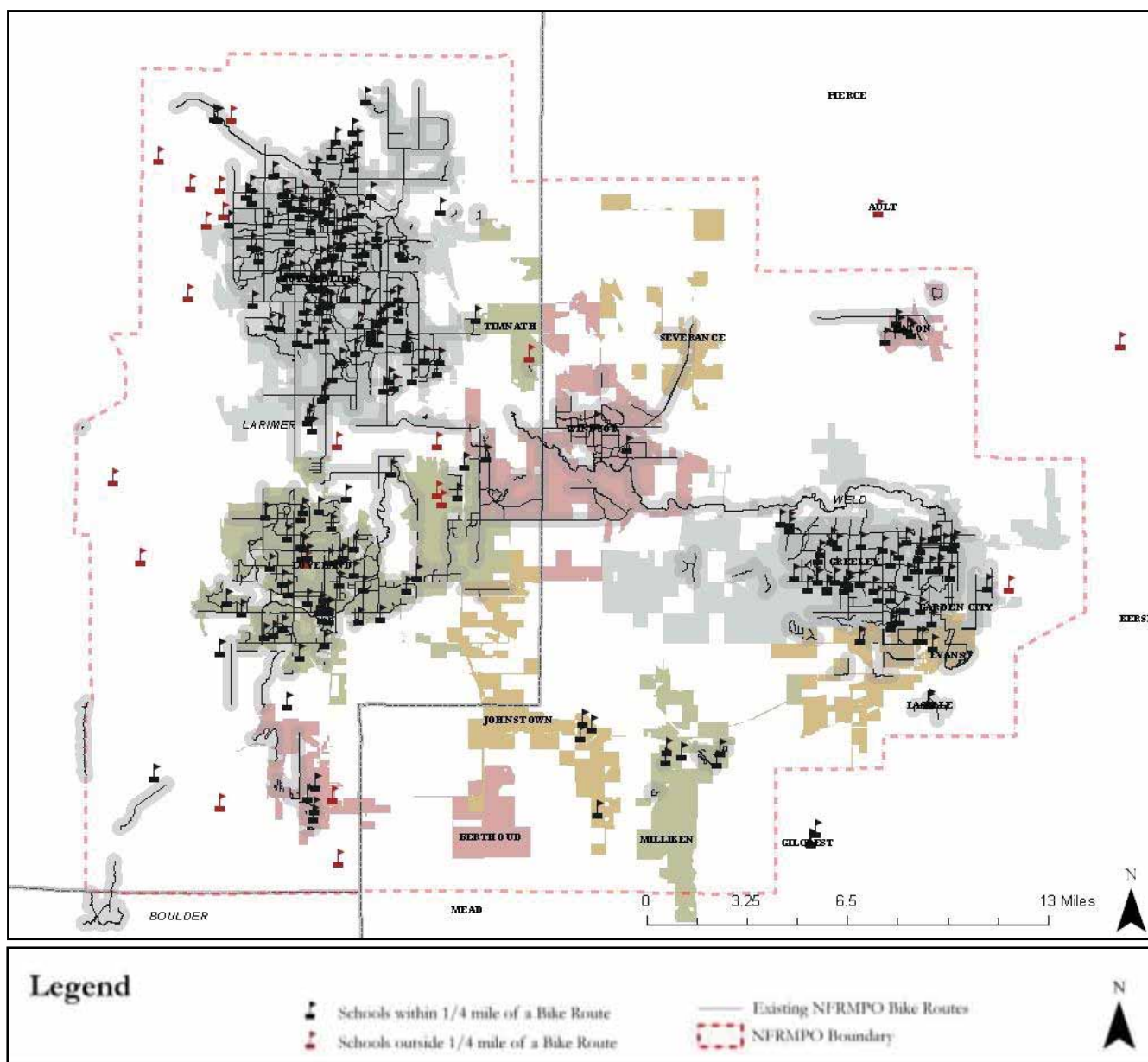




Student Access to Bicycle Facilities

There are 266 schools in the NFRMPO region. Of those schools, 86 percent (229 schools) are within a ¼ mile of an existing bike route. The remaining 37 schools have no existing bike routes within a ¼ mile distance (shown in red on Figure 2.13).

Figure 2.13 School Access to Bike Routes



Map created by NFRMPO



Figures 2.14, 2.15, and 2.16 represent the frequency of students living within a two mile bicycle commute to each college campus (except Front Range Community College due to data restrictions) in the NFRMPO region. At the University of Northern Colorado and Colorado State University in 2012, 65% (5,087) and 70% (11,664) of the students lived within two miles of campus respectively. AIMS Community College had 31% (1,651) at their Greeley Campus and 5% (286) at their Loveland Campus in 2012.

Figure 2.14 Enrolled Student Residence within 2 Miles of University of Northern Colorado

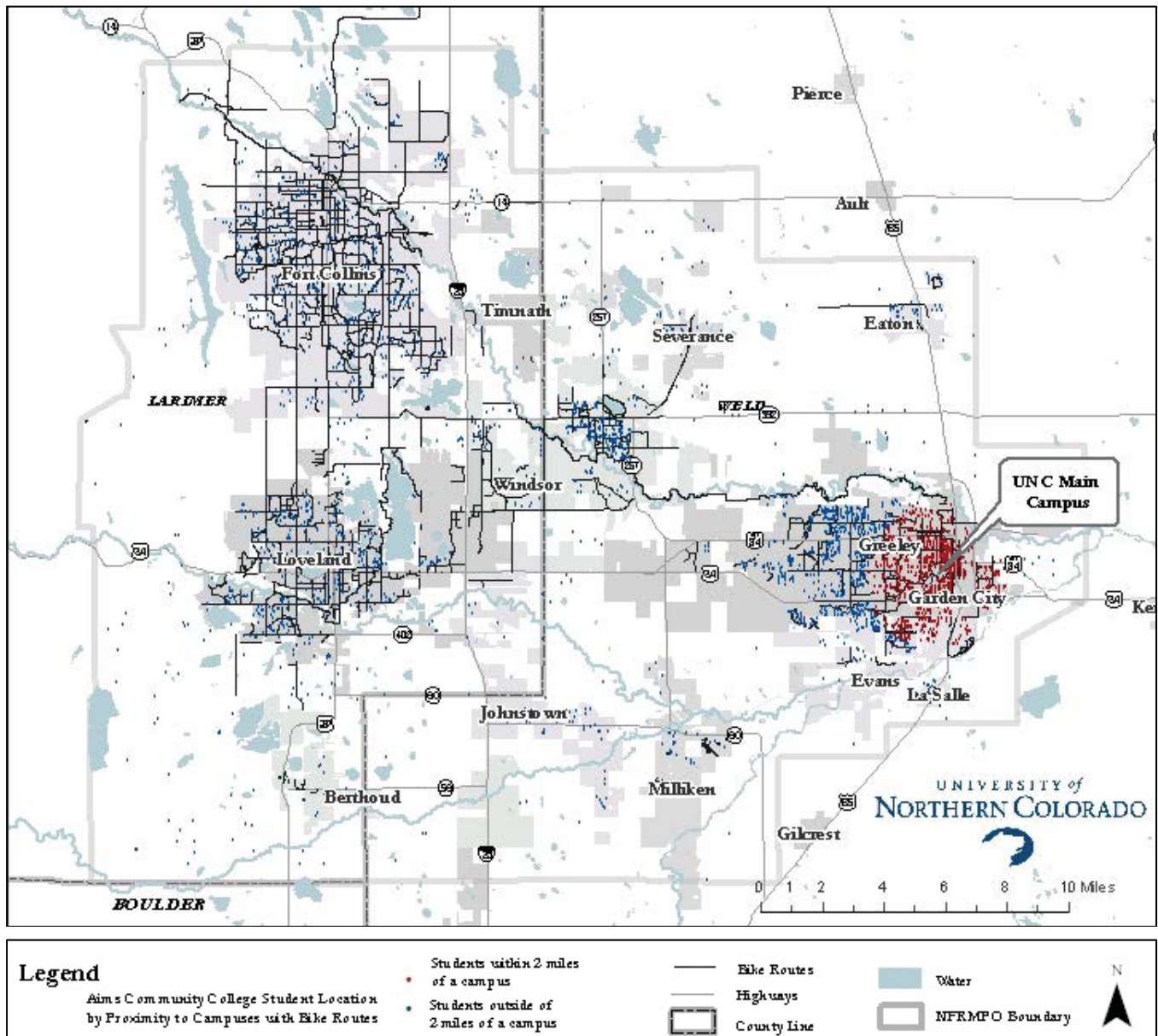
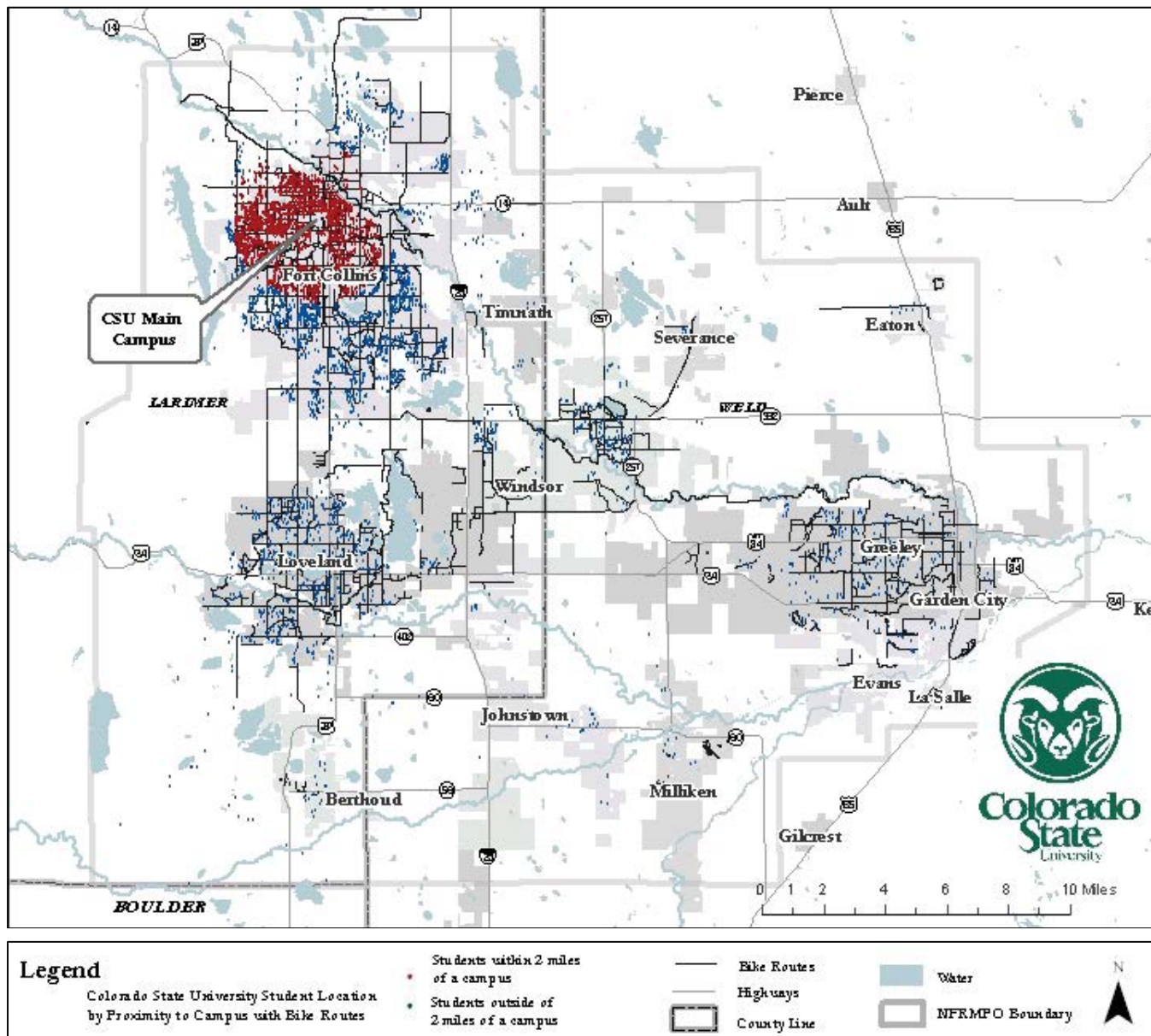




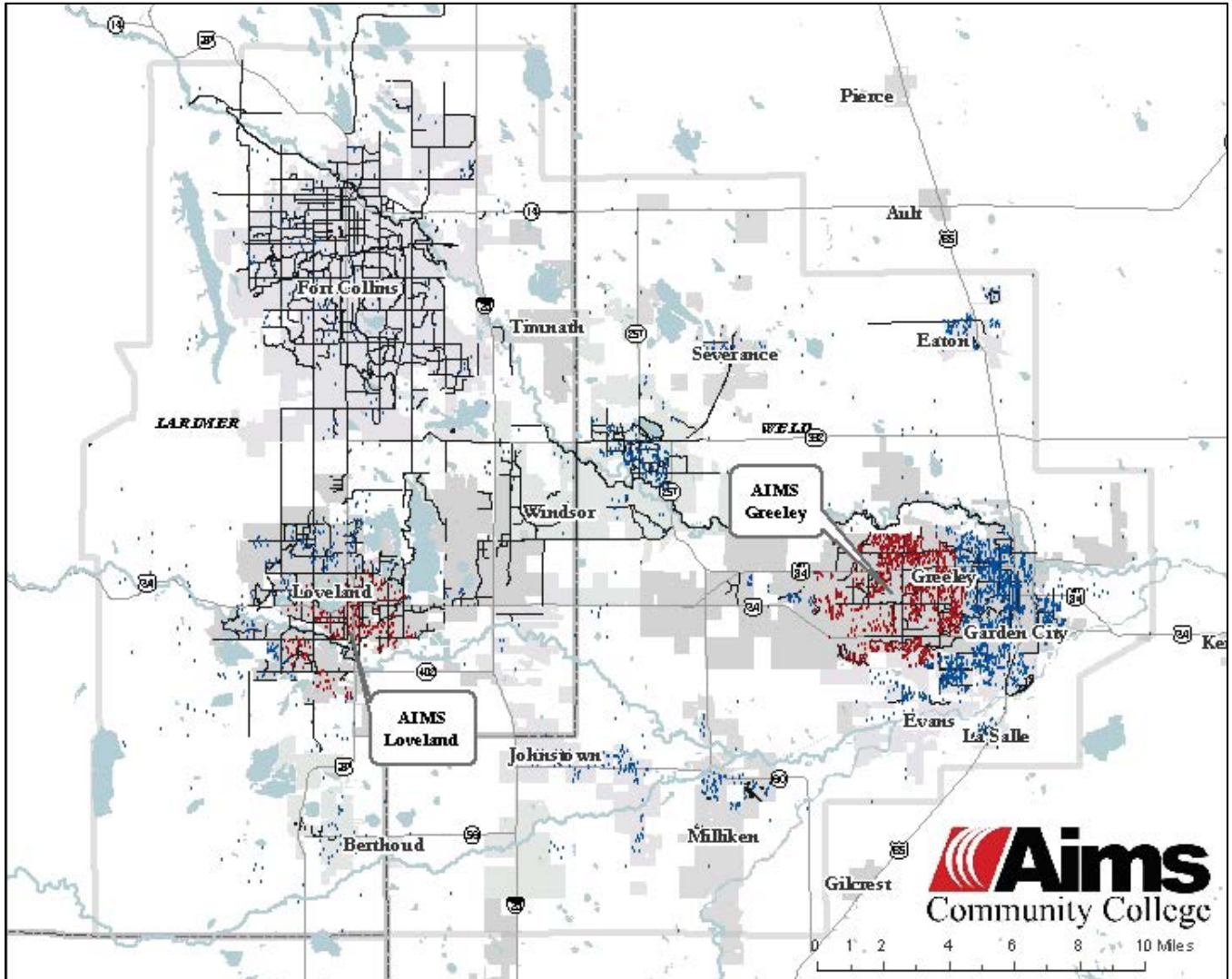
Figure 2.15 Enrolled Student Residence within 2 Miles of Colorado State University



Map created by NFRMPO



Figure 2.16 Enrolled Student Residence within 2 Miles of AIMS Community College



<p>Legend</p> <p>Aims Community College Student Location by Proximity to Campuses with Bike Routes</p>	<p>• Students within 2 miles of a campus</p>	<p>— Bike Routes</p>	<p>Water</p>	<p>N</p>
	<p>• Students outside of 2 miles of a campus</p>	<p>— Highways</p>	<p>NFRMPO Boundary</p>	
		<p>□ County Line</p>		

Map created by NFRMPO



Safe Routes to Schools

Colorado's Safe Routes to Schools (SRTS) program and grants are administered by the Colorado Department of Transportation. As shown on Table 2.6, many schools within the NFRMPO region have benefited from SRTS funding over the last eight years.

Table 2.6 Safe Routes to Schools Grant Recipients (2004 – 2011)

Year	City	Project Summary	Schools
2006	Fort Collins	Sidewalk improvements	Dunn Elementary School
2006	Evans	New and improved walkways	Chappelow Magnet School
2006	Evans	Sidewalk/crosswalk improvements	John Evans Middle School
2007	Fort Collins	Audit, Bike and Walk across Colorado, School Award	Bacon Elementary School Beattie Elementary School Laurel Elementary School Lopez Elementary School Werner Elementary School
2008	Loveland	T-n-T Tuesdays	Centennial Elementary School Garfield Elementary School Winona Elementary School
2008	Loveland	Improve flashing school-zone signals	Centennial Elementary School Garfield Elementary School Winona Elementary School
2009	Fort Collins	Poudre School District Safe Routes to School	Bennett Elementary School Dunn Elementary School Leshar Junior High School McGraw Elementary School Tavelli Elementary School
2009	Loveland	T-n-T Tuesdays Education Program	Programmatic
2009	Milliken	Sidewalk and signage improvements	Milliken Elementary School Milliken Middle School
2010	Fort Collins	Fort Collins Safe Routes to School	Bauder Elementary School Blevins Middle School Boltz Middle School Harris Elementary School Irish Elementary School Johnson Elementary School Kinard Middle School Krus Elementary School Lab Elementary School Linton Elementary School Moore Elementary School O'Dea Elementary School



Year	City	Project Summary	Schools
			Olander Elementary School Preston Middle School Putnam Elementary School Riffenburgh Elementary School Shepardson Elementary School Traut Elementary School Webber Middle School Zach Elementary School
2010	Loveland	Loveland T-n-T Tuesdays	BF Kitchen Bill Reed Middle School Centennial Elementary School Sarah Milner Elementary School Truscott Elementary School Van Buren Elementary School Winona Elementary School
2011	Fort Collins	New bike racks, education and encouragement activities	Bacon Elementary School Bauder Elementary School Bennett Elementary School Dunn Elementary School Zach Elementary School
2011	Fort Collins	Community wide effort to encourage biking and walking to school	Programmatic
2011	Loveland	New sidewalk and curb extensions	Truscott Elementary School
2011	Loveland	T-n-T Tuesdays	BF Kitchen Centennial Elementary School Cottonwood Plains Elementary School Laurene Edmondson Elementary School Namaqua Elementary School Ponderosa Elementary School

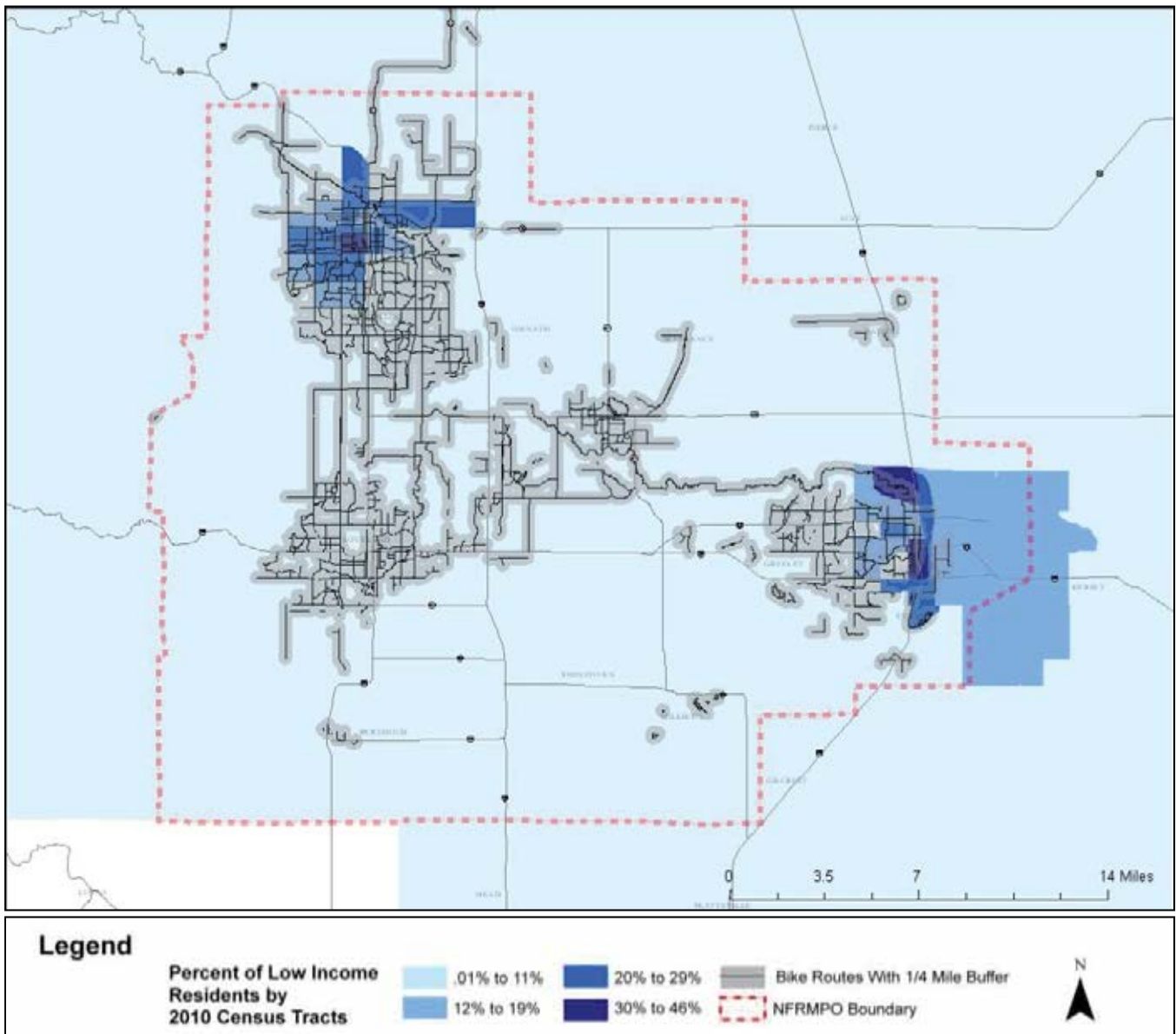


Access to Bicycle Facilities

Low Income Population Access to Bicycle Facilities

The highest concentrations of low income residents are depicted in **Figure 2.17** below. The analysis is somewhat limited due to the granularity of the data (2010 US Census Tracts instead of Census Blocks), but the highest concentrations center around the urban downtowns of Fort Collins and Greeley. Certainly, these concentrations are influenced by large universities in both of these downtown areas, yet, these areas represent some of the larger concentrations of bicycle infrastructure in the NFRMPO Region.

Figure 2.17 Low Income Access to Bicycle Facilities



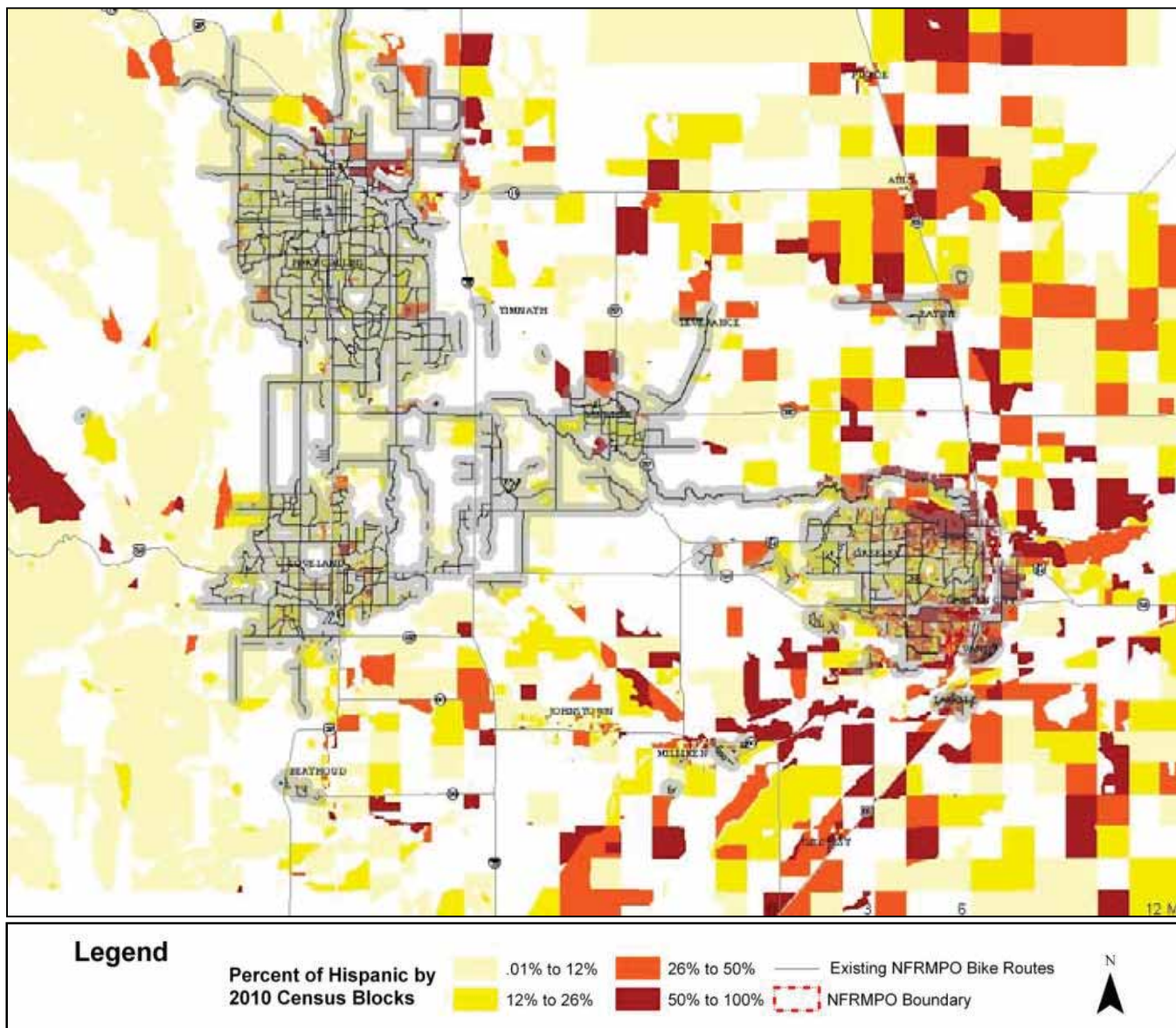
Map created by NFRMPO



Minority Population Access to Bicycle Facilities

Figure 2.18 depicts the concentration of Hispanics (largest recognized minority population) in Northern Colorado by 2010 US Census Block. The map demonstrates significant Census Blocks of Hispanics throughout each of our NFRMPO communities. A significant number of high percentage blocks exist in rural Weld and Larimer County where existing bicycle infrastructure and connections to the larger cities do not currently exist.

Figure 2.18 Minority Access to Bicycle Facilities



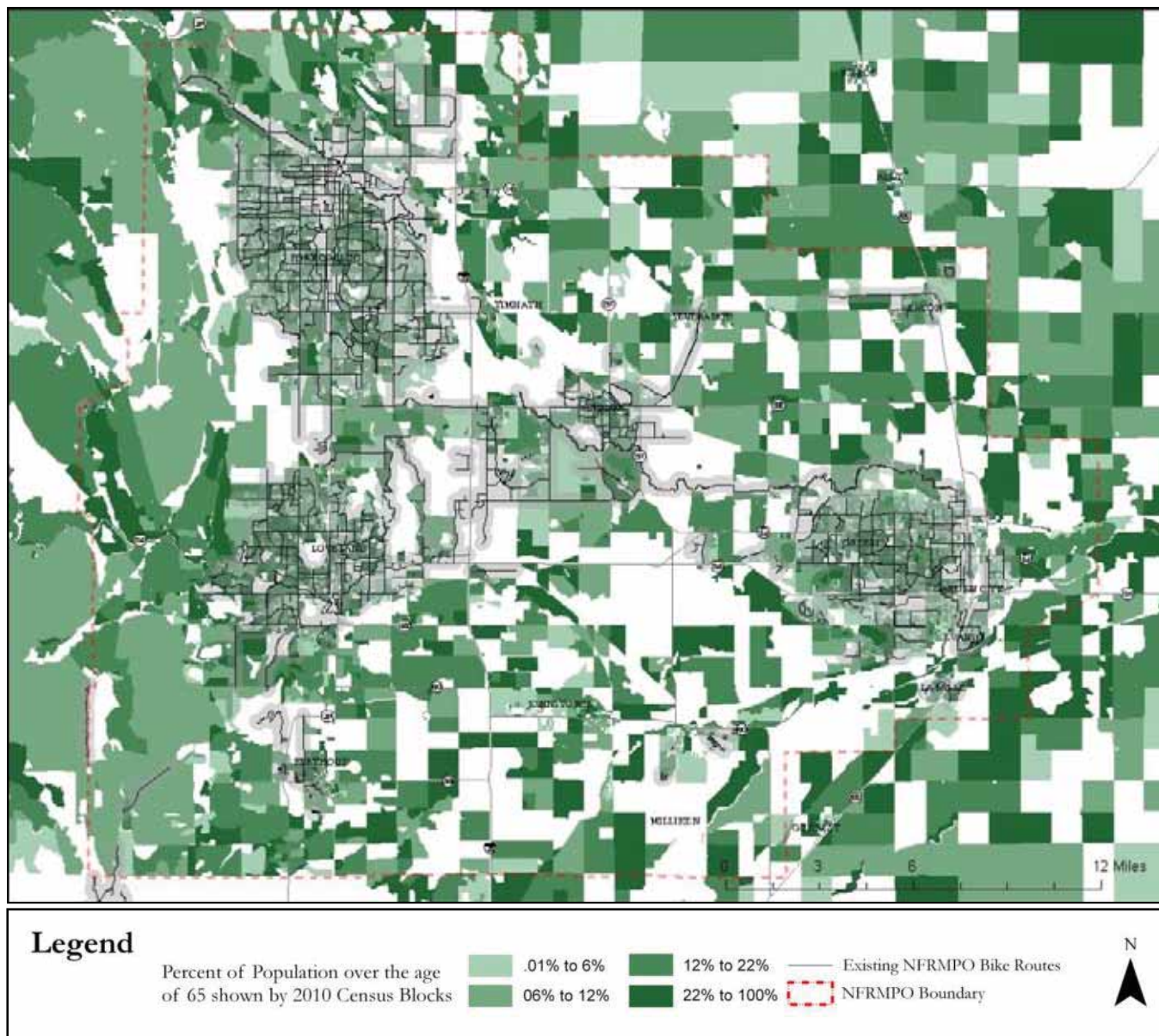
Map created by NFRMPO



Senior Access to Bicycle Facilities

Seniors are increasingly recognized users of bicycle infrastructure across the country for transportation and fitness. **Figure 2.19** depicts the concentration of Seniors Over 65 across Northern Colorado. The map clearly shows a broad distribution of Seniors across our member governments likely indicating the popularity of Northern Colorado for retirees and increased demand for bicycle infrastructure from the “Baby Boomer” generation now reaching retirement age.

Figure 2.19 Senior Access to Bicycle Facilities



Map created by NFRMPO

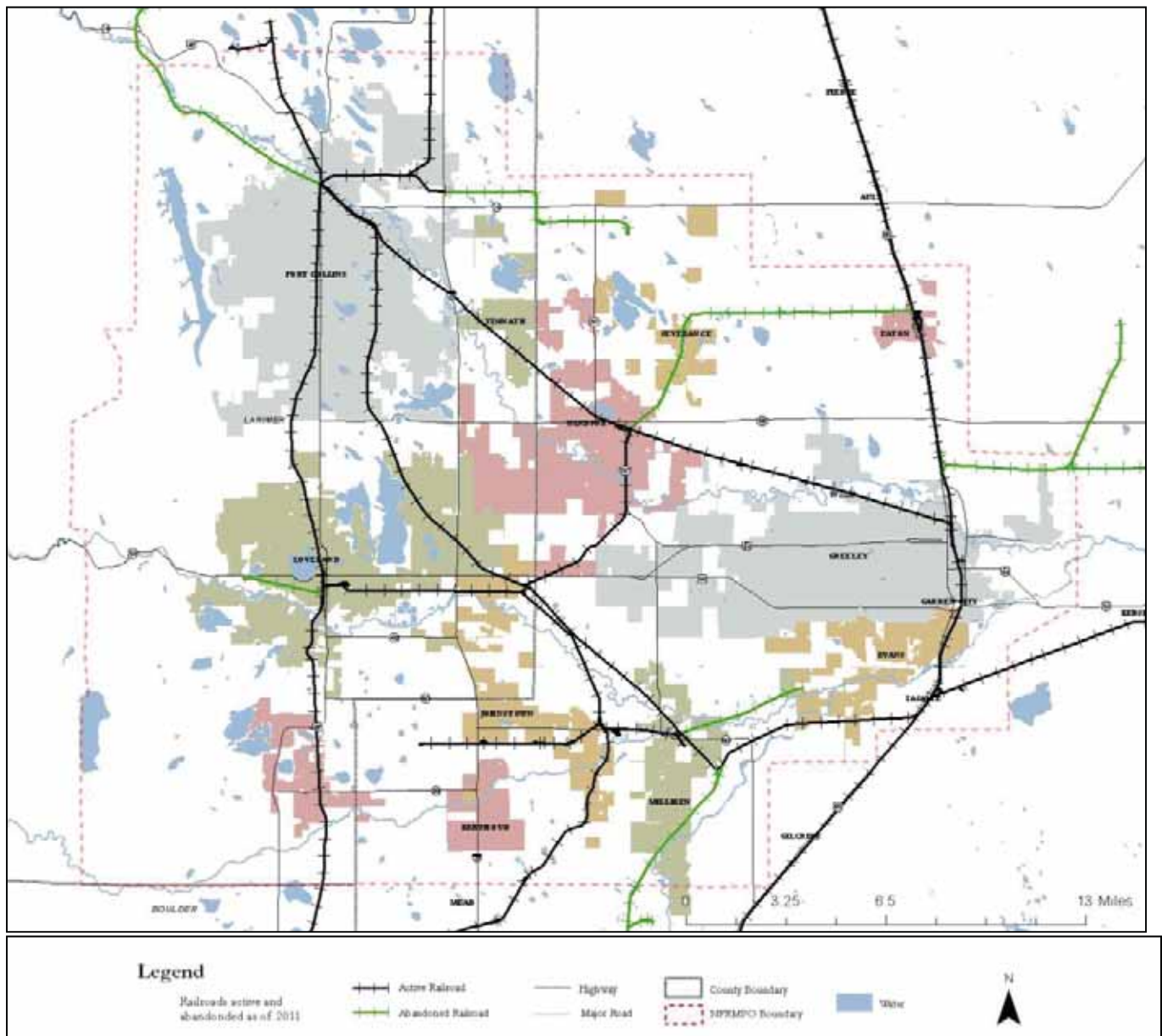


Rail Corridor Potential

Historically, Northern Colorado, like much of the West, created railroad connections between all NFRMPO communities to facilitate the movement of people, agricultural goods, and natural resources (see **Figure 2.20**). Rail corridors provide an option for trail development as they connect neighboring communities and have few property owners. Two types of trail development along trails exist with regional example in “()”:

1. Rails-to-Trails (Great Western Trail in Weld County) – Use of abandoned rail corridor to develop a trail
2. Rails-with-Trails (Mason Trail in Fort Collins)—Trail adjacent to or within an active railroad corridor (often with fencing between the pathway and the railway) with a maintenance and liability agreement

Figure 2.20 Rail Corridor Potential



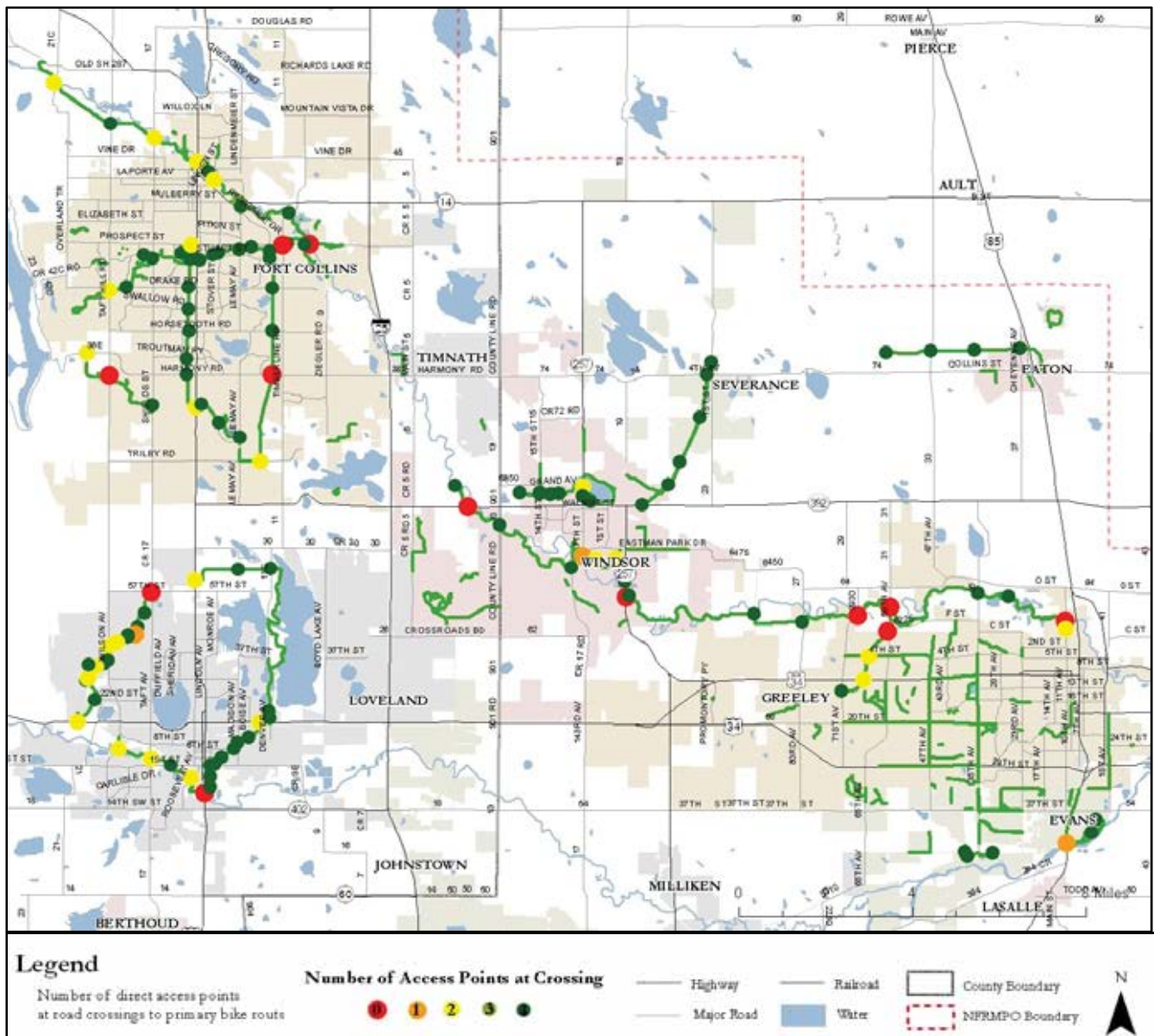
Map created by NFRMPO



Bike Routes and Roadway Crossings

Figure 2.21 below depicts the number of direct access points from a roadway crossing to the existing shared use trails in the NFRMPO Region. The map measures the number of access points, from zero (0) to four (4), for bicyclists to access a trail/route from a roadway crossing.

Figure 2.21 Trail and Roadway Crossings

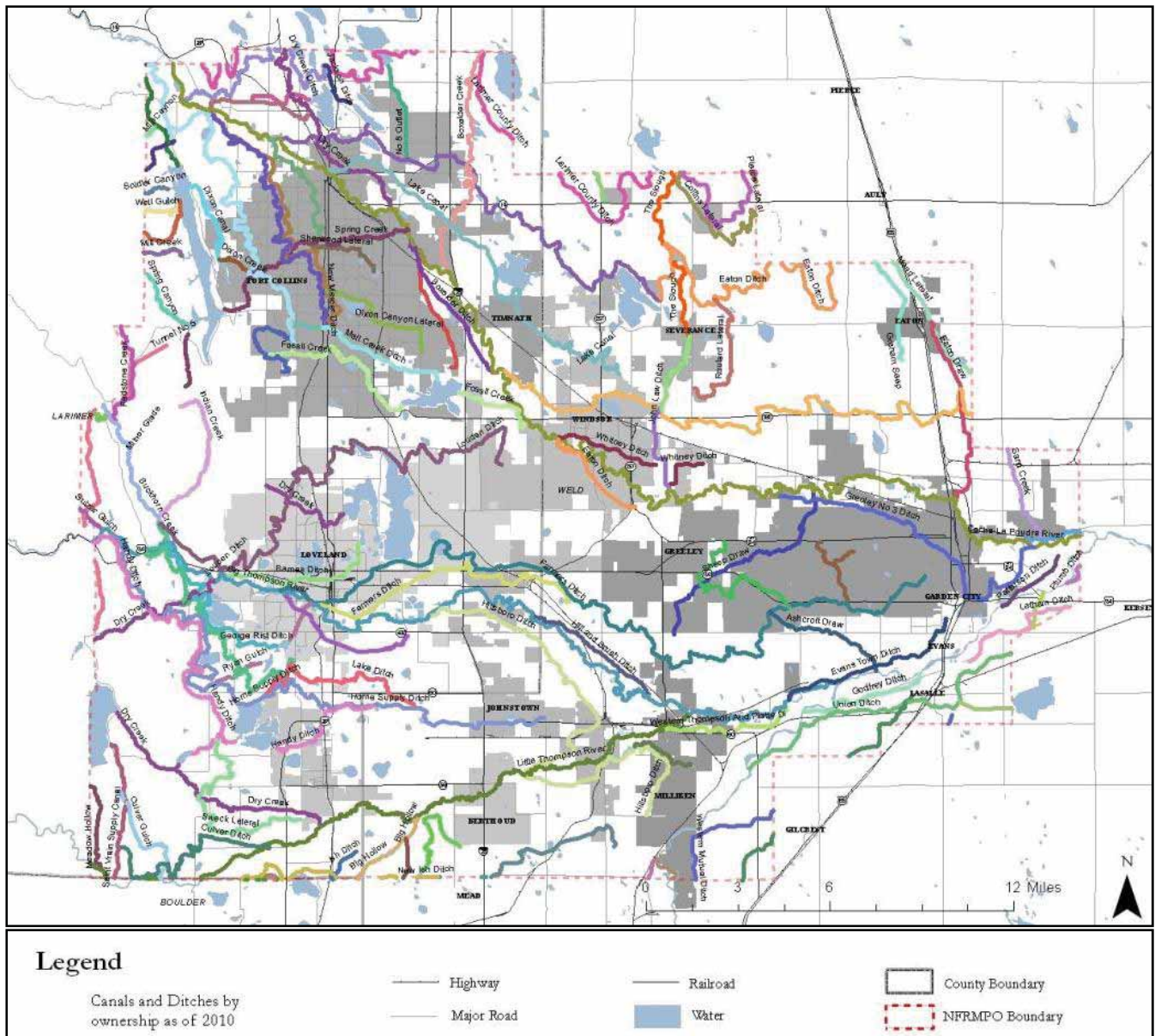




Ditch Ownership

The NFRMPO region has a diverse network of ditches connecting with all NFRMPO governments. Figure 2.22 below depicts those ditches by ownership. Ditches are frequently referenced in local plans as desired bike trail infrastructure in our region because they have a limited number of owners while connecting neighborhoods and communities. Ditch trails typically require a Master Agreement between the ditch company and managing agency to provide infrastructure improvements, maintenance, and liability coverage.

Figure 2.22 Ditch Ownership



Map created by NFRMPO



3. PUBLIC AND STAKEHOLDER OUTREACH

The NFRMPO recognizes the value of public input to define and implement effective transportation, congestion and air quality solutions. The organization is guided by the Public Involvement Plan (PIP) that outlines the importance of, and establishes specific guidelines for, involving community members, organizations, governments, transportation professionals and other entities in NFRMPO projects, plans and programs.

The Regional Bicycle Plan included the following public engagement strategies to encapsulate existing conditions for bicycle system users along with desired improvements for commuting, recreation, and community connections:

- ▶ **Bicycle Technical Advisory Committee** convened with local government and State of Colorado staff to guide and inform the planning process.
- ▶ **Project Webpage** created for posting documents, meeting minutes, and related project news
- ▶ **Work Session** with each member government council/board to discuss existing bicycle infrastructure and desired improvements to the regional system.
- ▶ **Phone Survey** of the businesses over 100 employees in the NFRMPO region
- ▶ **Mailed Survey** to residents geographically proportional to their population size with a sample size of 1600
- ▶ **Citizen Meetings** (Charettes) to conduct mapping exercise to capture desired routes and destinations from their community by bicycle.
- ▶ **Corridor Vetting** with local governments boards, councils and committees regarding their feedback about the Regional Bicycle Corridor to guide plan introduction to the NFRMPO Planning Council and Technical Advisory Committee.

Bike Technical Advisory Committee

The NFRMPO convened the Bicycle Technical Advisory Committee (Bike TAC) to guide and inform the Regional Bicycle Plan. Specifically, the group provided technical data (Inventory), local coordination (meeting scheduling /charettes), strategic recommendations (Regional Bicycle Corridors), and final plan editing.

The Bike TAC convened on the following dates during the planning process:

- ▶ Tuesday, March 6, 2012 – 10am-12pm – Loveland Fire Station #6
- ▶ Tuesday, May 8, 2012 – 10am-12pm – Loveland Fire Station #6
- ▶ Tuesday, August 7, 2012 – 10am-12pm – Loveland Chamber of Commerce
- ▶ Tuesday, October 30, 2012 – 10am-12pm – Loveland Chamber of Commerce
- ▶ Tuesday, December 4, 2012 – 10am-12pm – Loveland Chamber of Commerce



Project Webpage

NFRMPO staff created a project webpage housed within the NFRMPO's website located at <http://www.nfrmipo.org/Projects/BikePlan.aspx>. The visitor could access the webpage from the organization's home page as a highlighted project.

The webpage provided project contacts, Bike TAC meeting minutes, calendar of meetings, related bicycle news from local and national sources, maps and plan drafts. For those unable to participate one of the schedule charrettes, an online survey option was provided on the project webpage.

Figure 3.1 Project Webpage



Work Sessions

During the first quarter of 2012, NFRMPO staff conducted work sessions with member government councils, boards, and commissions. NFRMPO staff sought guidance for the planning effort with respects to desired local and regional bicycle infrastructure improvement along with a level of comfort with the parameters and public involvement propose for the planning effort. NFRMPO staff asked the following questions and recorded collective responses (see **Appendix C**):



Figure 3.2 Questions Asked During Regional Bicycle Work Sessions

1. How can the Regional Bicycle Plan serve your community?
2. Possible:
 - a. Destinations by bicycle (inside/outside your community)?
 - b. Bike routes to investigate:
 - i. on-system/bike lanes?
 - ii. off-system/bike trails?
3. What is your level of comfort depicting future improvements in the plan?
4. What are your expectations for public involvement in for this plan?

The NFRMPO conducted the following work sessions:

- | | |
|-----------------------------------------------|-------------------|
| ▶ Eaton | January 19, 2012 |
| ▶ Loveland TAB | February 6, 2012 |
| ▶ Evans | February 7, 2012 |
| ▶ Milliken | February 8, 2012 |
| ▶ Johnstown | February 13, 2012 |
| ▶ Berthoud | February 21, 2012 |
| ▶ LaSalle | February 28, 2012 |
| ▶ Loveland | March 13, 2012 |
| ▶ Windsor | March 19, 2012 |
| ▶ Greeley CTAB | March 26, 2012 |
| ▶ Timnath | March 27, 2012 |
| ▶ Thompson Rivers Parks & Recreation District | April 2, 2012 |
| ▶ Bicycle & Pedestrian Education Coalition | April 3, 2012 |
| ▶ Fort Collins BAC | April 9, 2012 |

Employer Survey Results

Between October 2011 and March 2012, NFRMPO Customer & Business Relations Representative, Jeff McVay, conducted a phone survey of employers to determine their level of support for bicycle commuting by their employees.

Mr. McVay contacted the 291 businesses in the NFRMPO region with 100 employees or more (Data Source: Reference USA). He worked with each company to identify the appropriate employee that could answer questions about transportation, facility infrastructure, and human resources. These contacts were recorded for future survey work with area businesses.

He successfully captured 282 responses (97% success rate). The question and response frequency are show below:



Figure 3.3 Does your organization provide bike parking that is located near the entrance? (Short-term)

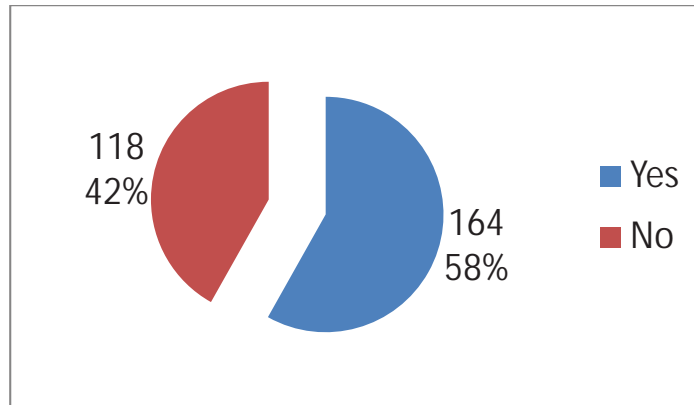


Figure 3.4 Does your organization have showers that a cyclist could use after their commute?

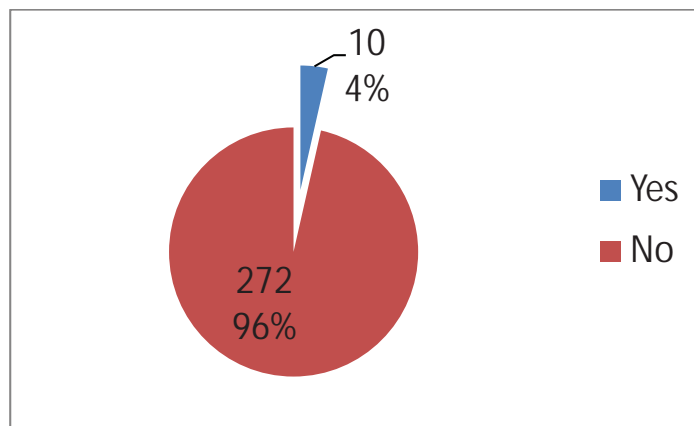


Figure 3.5 Does your organization provide an incentive (i.e. gift cards) for employees to bicycle to your office?

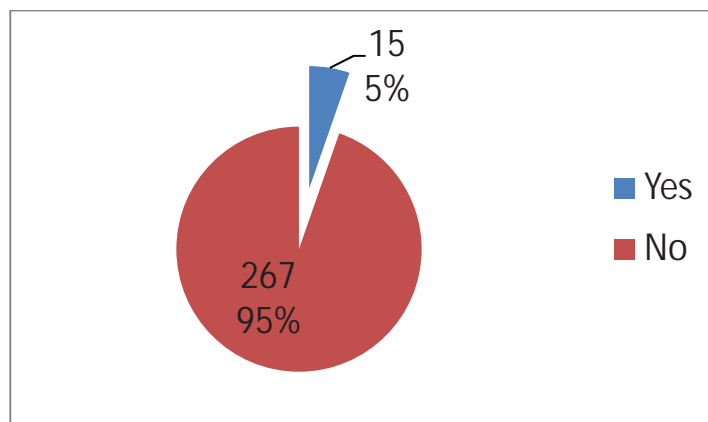




Figure 3.6 Does your company or employees participate in “Bike to Work Day” in June?

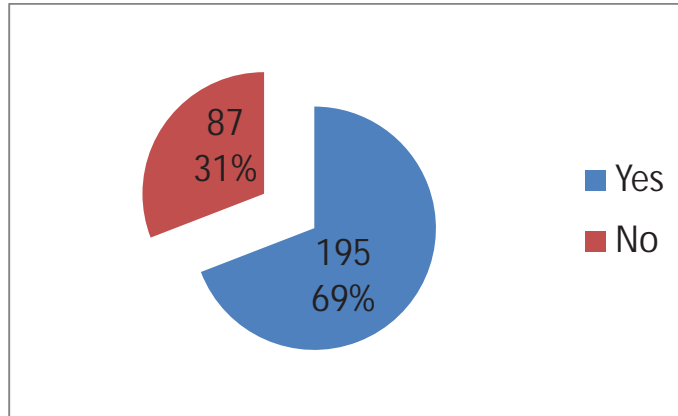


Figure 3.7 Is your organization situated on a road that is equipped with bicycle lanes?

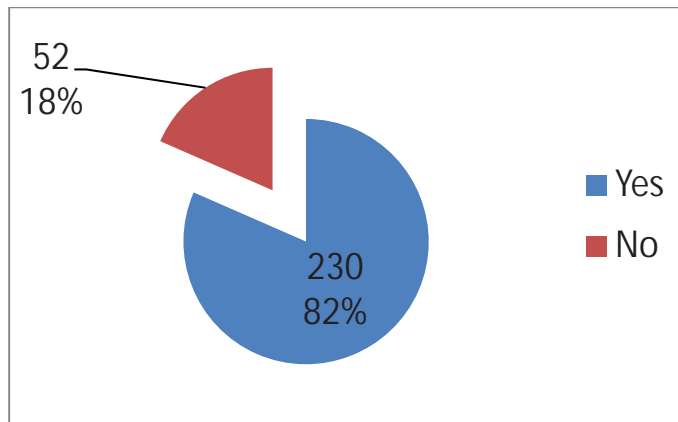
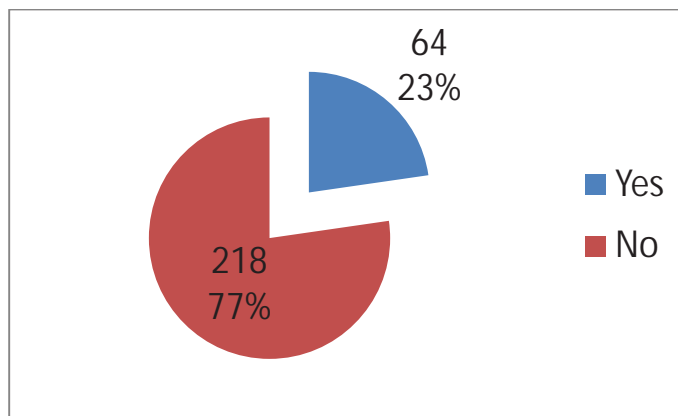


Figure 3.8 Is your organization situated in a location that is near a multi-use trail (not on roadway)?





Community Charrettes

The NFRMPO scheduled a series of facilitated exercises (charrettes) to capture citizen input. Specifically, the charrette consisted of a mapping exercise where the participant provided their ideas for future bicycle routes and corresponding destinations. The charrettes provide everyone who participates to be a contributing author to the plan while providing immediate guidance for the planning effort.

NFRMPO staff strategically targeted a large community event in each host community to maximize the opportunity to collect completed mapping exercises. NFRMPO staff actively recruited event visitors to a 10' x 10' tented booth where they were introduced to the planning effort and shown a map of where bicycle infrastructure exists today.

The visitor received a map of their home community with a 2-mile perimeter drawn around their town/city boundary. NFRMPO staff instructed the visitor to draw 1) Destinations they or their family would like to frequent by bicycle and 2) what routes they would like to see bicycle infrastructure. A summary of the completed mapping exercise can be found in **Appendix C**.

The NFRMPO scheduled the following charrettes in NFRMPO member communities willing to have a public engagement event conducted in their community:

▶ Loveland	Bike Plan Open House	March 15, 2012
▶ Fort Collins	9Health Fair	April 20, 2012
▶ Evans	Planning Commission	April 24, 2012
▶ Johnstown/Milliken	9Health Fair	April 28, 2012
▶ Johnstown/Milliken	Glenn A. Jones Library	May 31, 2012
▶ Berthoud	Berthoud Day	June 2, 2012
▶ Evans	Parks & Recreation	June 6, 2012
▶ Windsor	All Town BBQ	June 7, 2012
▶ Loveland/ Fort Collins	BPEC Ride	June 8, 2012
▶ Eaton	Sertoma Club	June 26, 2012
▶ Eaton	Eaton Days	July 14, 2012
▶ LaSalle	LaSalle Day	July 14, 2012
▶ Severance	Severance Day	August 18, 2012

Household Survey Results

The NFRMPO subcontracted the National Research Center (Boulder, CO) to conduct a statistically-valid survey of Northern Colorado residents. A randomly selected sample of 1,600 residential addresses within the North Front Range was mailed the NFRMPO Bicycle Survey in April 2012. The sample was stratified by areas corresponding to the 13 cities and towns to be included in the Regional Bicycle Plan: Berthoud, Eaton, Evans, Fort Collins, Garden City, Greeley, Johnstown, La Salle, Loveland, Milliken, Severance, Timnath and Windsor. A total of 1,521 surveys were successfully delivered to occupied households. A total of 228 surveys and mapping exercises were completed, for a response rate of 15%. The 95 percent confidence level for this survey is generally no greater than plus or minus seven percentage points around any given percent reported for the entire sample (228).



A select listing of frequencies and cross-tabulations are provided below. The complete survey results can be found on the project website: <http://www.nfrmpo.org/Projects/BikePlan.aspx>. A summary of the completed mapping exercise can be found in **Appendix C**.

Table 3.1 Length of Residency

How many years have you lived in this region?	Percent of respondents
Less than 5 years	27%
5 to 9 years	22%
10 to 14 years	12%
15 to 19 years	6%
20 or more years	33%
Average years in the region	16.2

Table 3.2 Housing Tenure

Do you rent or own your home?	Percent of respondents
Rent	38%
Own	62%

Table 3.3 Respondent Gender

What is your gender?	Percent of respondents
Male	50%
Female	50%

Table 3.4 Respondent Age

In which category is your age?	Percent of respondents
18-24 years	10%
25-34 years	29%
35-44 years	15%
45-54 years	19%
55-64 years	14%
65-74 years	9%
75 years or older	4%



Table 3.5 Respondent Ethnicity

Are you Spanish, Hispanic or Latino?	Percent of respondents
Yes	7%
No	93%

Figure 3.9 Frequency of Bicycle Use

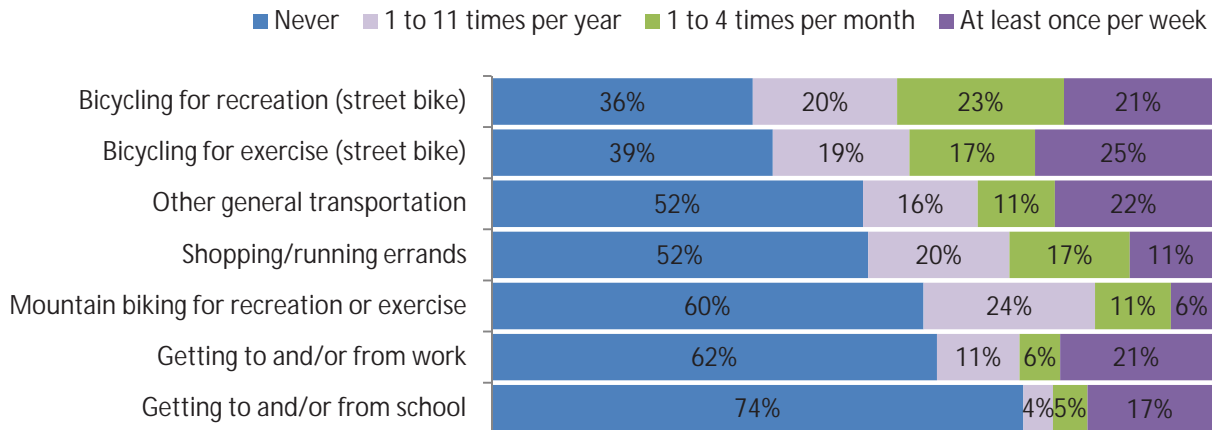


Figure 3.10 Percentage of All Respondents Who Rode Their Bicycle in the Last Six Months

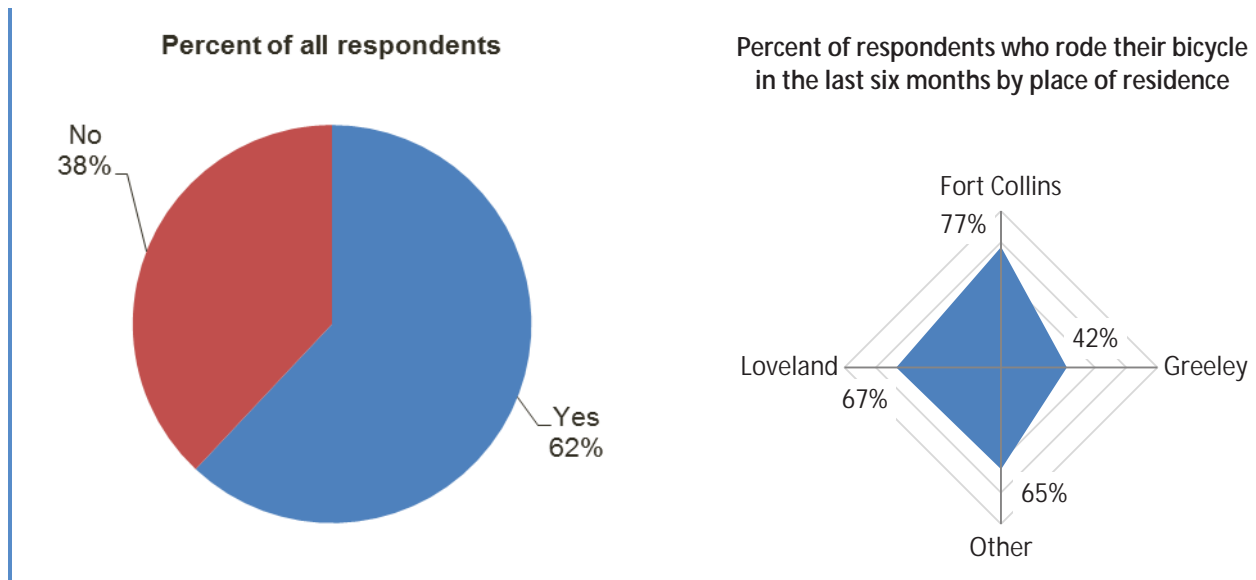




Figure 3.11 When you ride a bike for the work or school commute, what distance do you usually travel?

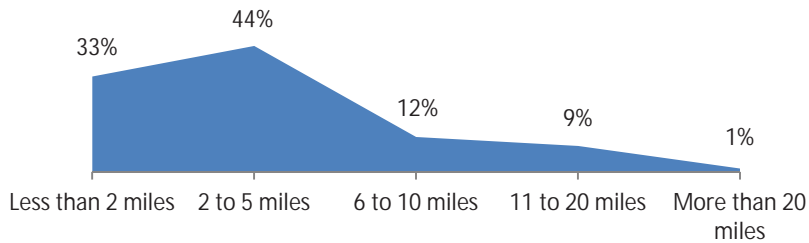
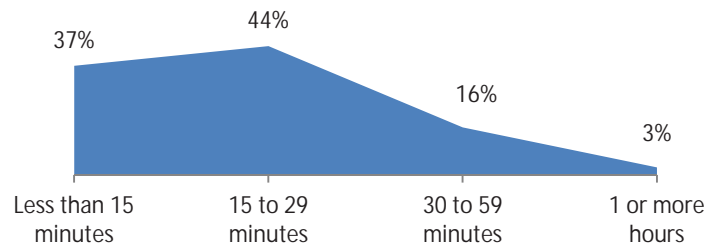


Figure 3.12 How long is your usual bike ride for the work or school commute?



The following questions below were asked only of those respondents who reported not riding a bike in the last six months.

Table 3.6 Reason for Having Not Ridden a Bicycle in the Past Six Months

Why haven't you ridden a bicycle in the last six months?	Percent of respondents
I don't own a bike	57%
I'm not interested in riding a bike	22%
I am unable to ride a bike (health conditions, etc.)	18%
I'm too busy; I don't have time	17%
It is unsafe to ride a bicycle	16%
Distances to destinations are too far	5%
I don't know how	4%
No adequate facilities exist	4%
Other	9%



Figure 3.13 Percent of non-riders who would like to be able to ride their bike more than they currently (and by place of residence).

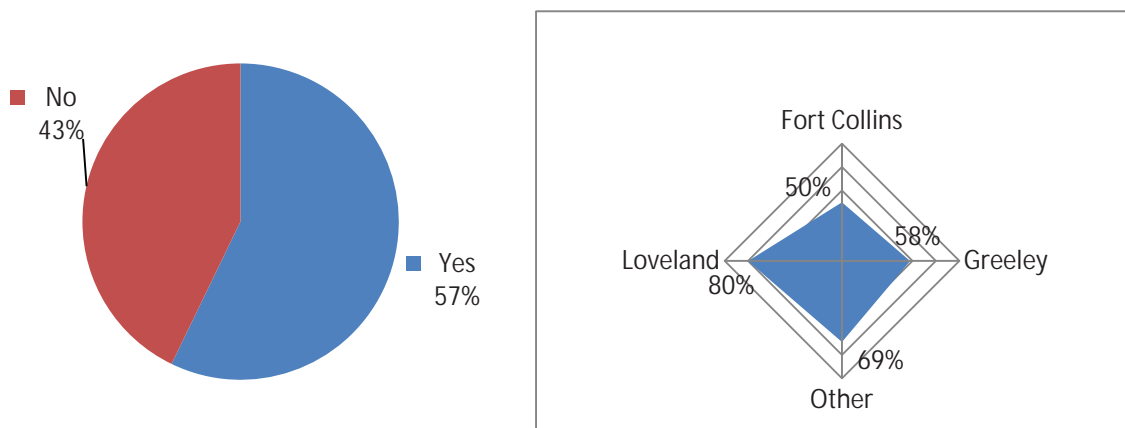


Table 3.7 Reason Respondent Would Be More Inclined to Bicycle More

I would ride my bike more if:	Percent of respondents
There were more well-marked greenways and off-road paths	50%
Motorists drove slower & respected cyclists	34%
There were wider roads for riding or roads had paved shoulders	34%
There were more on-road facilities such as bike lanes	31%
I felt safer	27%
Street/road conditions were better, such as smooth pavement & less debris	22%
I felt more confident on my bike	13%
I knew how to ride a bicycle	0%
Other	49%



Figure 3.14 To what extent, if any, do each of the following bicycling challenges on the road concern you?

