2016
Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan

Adopted
February 16, 2017

Prepared by the Fargo-Moorhead Metropolitan Council of Governments

2016 Fargo-Moorhead
Metropolitan Bicycle and Pedestrian Plan

Prepared by:

The Fargo-Moorhead Metropolitan Council of Governments

Case Plaza, Suite 232
One Second Street North
Fargo, ND 58102

Phone: 701-232-3242

Website: www.fmmetrocog.org

Email: metrocog@fmmetrocog.org

The preparation of this document was funded in part by the United States Department of Transportation with funding administered through the North Dakota & Minnesota Departments of Transportation, the Federal Highway Administration and the Federal Transit Administration. Additional funding was provided by the Minnesota Department of Transportation and through local contributions from the governments of Fargo, West Fargo, and Cass County in North Dakota; and Moorhead, Dilworth, and Clay County in Minnesota. The United States Government and the States of North Dakota and Minnesota assume no liability for the contents or use thereof.

Fargo-Moorhead Metropolitan Council of Governments
701.232.3242 • FAX 701.232.5043 • Case Plaza Suite 232 • One 2nd Street North • Fargo, North Dakota 58102-4807
Email: metrocog@fmmetrocog.org http://www.fmmetrocog.org

Resolution of Adoption of the 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan

WHEREAS, the Fargo-Moorhead Metropolitan Council of Governments (Metro COG) is responsible for the planning and development of safe and functional transportation systems including bicycle and pedestrian facilities;

WHEREAS, Metro COG, as the metropolitan planning organization, is designated by the Governors of North Dakota and Minnesota to maintain the metropolitan area's transportation planning process in accordance with federal regulations;

WHEREAS, Metro COG has undertaken the task of developing the 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan, which is a vital element of the planning process, and which makes transportation-related bicycle and pedestrian needs eligible for future federal funding;

WHEREAS, the 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan was directed by the Metropolitan Bicycle and Pedestrian Committee comprised of a wide cross section of bicycle and pedestrian interest groups including park district representatives, law enforcement, technical city, county and state staff, citizens, and other applicable agencies/organizations;

WHEREAS, the public was invited, encouraged, and involved in this Plan's preparation in full compliance with Metro COG's Public Participation Plan;

WHEREAS, the 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan seeks to enhance the Fargo-Moorhead Metropolitan Area's bicycle and pedestrian environment so as to increase mobility, health, safety, equity, and the quality of life for all citizens;

NOW, THEREFORE BE IT RESOLVED, that Metro COG does hereby adopt the 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan and agrees to use it as a tool to implement area bicycle and pedestrian goals and objectives which will complement the overall development of the Area's transportation system.

Approved and adopted this 16th day of February, 2017.

Brenda Elmer
Metro COG Policy Board Chair

William Christian
Metro COG Executive Director

Resolution in Support of the
2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan

WHEREAS, the West Fargo City Commission is the duly elected governing body responsible for the planning and development of safe and functional transportation systems including bicycle and pedestrian facilities.

WHEREAS, the Fargo-Moorhead Metropolitan Council of Governments, as the metropolitan planning organization designated by the Governors of North Dakota and Minnesota to maintain the metropolitan area's transportation planning process in accordance with federal regulations;

WHEREAS, the Fargo-Moorhead Metropolitan Council of Governments has undertaken the task of developing the 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan, which is a vital element of the planning process, and which makes transportation-related bicycle and pedestrian needs eligible for future federal funding.

WHEREAS, the 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan was directed by the Metropolitan Bicycle and Pedestrian Committee comprised of a wide cross section of bicycle and pedestrian interest groups including park district representatives, law enforcement, technical city, county and state staff, citizens, and other applicable agencies/organizations;

WHEREAS, the public was invited, encouraged, and involved in this Plan's preparation in full compliance with Metro COG's Public Participation Plan;

WHEREAS, the 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan seeks to enhance the Fargo-Moorhead Metropolitan Area's bicycle and pedestrian environment so as to increase mobility, health, safety, equity, and the quality of life for all citizens;

NOW, THEREFORE BE IT RESOLVED, that the City of West Fargo does hereby adopt the 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan and agrees to use it as a tool to implement area bicycle and pedestrian goals and objectives which will complement the overall development of the Area's transportation system.

Approved and adopted this 16 day of Jan., 2017

Approved by:

Rich Mattern, Mayor

Attest:

Tina Fisk, City Administrator

Resolution in Support of the
2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan

WHEREAS, The Fargo City Commission is the duly elected governing body responsible for the planning and development of safe and functional transportation systems including bicycle and pedestrian facilities; and

WHEREAS, The Fargo-Moorhead Metropolitan Council of Governments, as the metropolitan planning organization designated by the Governors of North Dakota and Minnesota to maintain the metropolitan area's transportation planning process in accordance with federal regulations; and

WHEREAS, The Fargo-Moorhead Metropolitan Council of Governments has undertaken the task of developing the 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan, which is a vital element of the planning process, and which makes transportation-related bicycle and pedestrian needs eligible for future federal funding; and

WHEREAS, The 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan was directed by the Metropolitan Bicycle and Pedestrian Committee comprised of a wide cross section of bicycle and pedestrian interest groups including park district representatives, law enforcement, technical city, county and state staff, citizens and other applicable agencies/organizations; and

WHEREAS, The public was invited, encouraged and involved in this Plan's preparation in full compliance with Metro COG's Public Participation Plan; and

WHEREAS, The 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan seeks to enhance the Fargo-Moorhead Metropolitan Area's bicycle and pedestrian environment so as to increase mobility, health, safety, equity and the quality of life for all citizens.

NOW, THEREFORE, BE IT RESOLVED, That the Board of City Commissioners does hereby adopt the 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan and agrees to use it as a tool to implement area bicycle and pedestrian goals and objectives which will complement the overall development of the Area's transportation system.

Approved and adopted this 30th day of January, 2017

Approved by:

Dr. Timothy J. Mahoney, Mayor

Attest:

Steve Sprague, City Auditor

RESOLUTION 2017-0313-P

Resolution to Support 2016 Fargo-Moorhead Metropolitan Bicycle & Pedestrian Plan

WHEREAS, the Moorhead City Council is the duly elected governing body responsible for the planning and development of safe and functional transportation systems including bicycle and pedestrian facilities.

WHEREAS, the Fargo-Moorhead Metropolitan Council of Governments, as the metropolitan planning organization designated by the Governors of North Dakota and Minnesota to maintain the metropolitan area's transportation planning process in accordance with federal regulations;

WHEREAS, the Fargo-Moorhead Metropolitan Council of Governments has undertaken the task of developing the 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan, which is a vital element of the planning process, and which makes transportation-related bicycle and pedestrian needs eligible for future federal funding.

WHEREAS, the 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan was directed by the Metropolitan Bicycle and Pedestrian Committee comprised of a wide cross section of bicycle and pedestrian interest groups including park district representatives, law enforcement, technical city, county and state staff, citizens, and other applicable agencies/organizations;

WHEREAS, the public was invited, encouraged, and involved in this Plan's preparation in full compliance with Metro COG's Public Participation Plan;

WHEREAS, the 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan seeks to enhance the Fargo-Moorhead Metropolitan Area's bicycle and pedestrian environment so as to increase mobility, health, safety, equity, and the quality of life for all citizens;

NOW, THEREFORE BE IT RESOLVED, that the Moorhead City Council does hereby adopt the 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan and agrees to use it as a tool to implement area bicycle and pedestrian goals and objectives which will complement the overall development of the Area's transportation system.

PASSED: March 13, 2017 by the City Council of the City of Moorhead.

APPROVED BY:

DEL RAE WILLIAMS, Mayor

ATTEST:

MICHELLE FRENCH, City Clerk

RESOLUTION 17-05

RESOLUTION IN SUPPORT OF THE 2016 FARGO-MOORHEAD METROPOLITAN BICYCLE AND PEDESTRIAN PLAN

WHEREAS, the Dilworth City Council is the duly elected governing body responsible for the planning and development of safe and functional transportation systems including bicycle and pedestrian facilities; and

WHEREAS, the Fargo-Moorhead Metropolitan Council of Governments, as the metropolitan planning organization designated by the Governors of North Dakota and Minnesota to maintain the metropolitan area's transportation planning process in accordance with federal regulations; and

WHEREAS, the Fargo-Moorhead Metropolitan Council of Governments has undertaken the task of developing the 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan, which is a vital element of the planning process, and which makes transportation-related bicycle and pedestrian needs eligible for future federal funding;

WHEREAS, the 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan was directed by the Metropolitan Bicycle and Pedestrian Committee comprised of a wide cross section of bicycle and pedestrian interest groups including park district representatives, law enforcement, technical city; county and state staff, citizens, and other applicable agencies/organizations; and

WHEREAS, the public was invited, encouraged, and involved in this Plan's preparation in full compliance with Metro COG's Public Participation Plan; and

WHEREAS, the 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan seeks to enhance the Fargo-Moorhead Metropolitan Area's bicycle and pedestrian environment so as to increase mobility, health, safety, equity, and the quality of life for all citizens; and

WHEREAS, the Dilworth Planning Commission has reviewed the 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan and unanimously recommended to the Dilworth City Council on February 1, 2017 to pass a resolution in support of the plan.

NOW THEREFORE, BE IT RESOLVED, by the City Council of Dilworth Minnesota, does hereby adopt the 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan and agrees to use it as a tool to implement area bicycle and pedestrian goals and objectives which will complement the overall development of the Area's transportation system.

ADOPTED by the City of Dilworth the 13th day of February, 2017.

MAYOR: _____

Chad Olson

ATTEST:

L. Peyton Mastera, City Administrator

RESOLUTION #2017-2
2016 FARGO-MOORHEAD METROPOLITAN
BICYCLE AND PEDESTRIAN PLAN

WHEREAS, the Cass County Commission is the duly elected governing body responsible for the planning and development of safe and functional transportation systems including bicycle and pedestrian facilities.

WHEREAS, the Fargo-Moorhead Metropolitan Council of Governments, as the metropolitan planning organization designated by the Governors of North Dakota and Minnesota to maintain the metropolitan area's transportation planning process in accordance with federal regulations;

WHEREAS, the Fargo-Moorhead Metropolitan Council of Governments has undertaken the task of developing the 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan, which is a vital element of the planning process, and which makes transportation-related bicycle and pedestrian needs eligible for future federal funding.

WHEREAS, the 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan was directed by the Metropolitan Bicycle and Pedestrian Committee comprised of a wide cross section of bicycle and pedestrian interest groups including park district representatives, law enforcement, technical city, county and state staff, citizens, and other applicable agencies/organizations;

WHEREAS, the public was invited, encouraged, and involved in this Plan's preparation in full compliance with Metro COG's Public Participation Plan;

WHEREAS, the 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan seeks to enhance the Fargo-Moorhead Metropolitan Area's bicycle and pedestrian environment so as to increase mobility, health, safety, equity, and the quality of life for all citizens;

NOW, THEREFORE BE IT RESOLVED, that the Cass County Commission does hereby adopt the 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan and agrees to use it as a tool to implement area bicycle and pedestrian goals and objectives which will complement the overall development of the Area's transportation system.

Approved and adopted this 17th day of January, 2017.

APPROVED BY:

Chad M. Peterson, Chair
Cass County Commission

ATTEST:

Michael Montplaisir, County Auditor

RESOLUTION 2017-08

Resolution in Support of the
2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan

WHEREAS, the Clay County Board of Commissioners is the duly elected governing body responsible for the planning and development of safe and functional transportation systems including bicycle and pedestrian facilities.

WHEREAS, the Fargo-Moorhead Metropolitan Council of Governments, as the metropolitan planning organization designated by the Governors of North Dakota and Minnesota to maintain the metropolitan area's transportation planning process in accordance with federal regulations;

WHEREAS, the Fargo-Moorhead Metropolitan Council of Governments has undertaken the task of developing the 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan, which is a vital element of the planning process, and which makes transportation-related bicycle and pedestrian needs eligible for future federal funding.

WHEREAS, the 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan was directed by the Metropolitan Bicycle and Pedestrian Committee comprised of a wide cross section of bicycle and pedestrian interest groups including park district representatives, law enforcement, technical city, county and state staff, citizens, and other applicable agencies/organizations;

WHEREAS, the public was invited, encouraged, and involved in this Plan's preparation in full compliance with Metro COG's Public Participation Plan;

WHEREAS, the 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan seeks to enhance the Fargo-Moorhead Metropolitan Area's bicycle and pedestrian environment so as to increase mobility, health, safety, equity, and the quality of life for all citizens;

NOW, THEREFORE BE IT RESOLVED, that the Clay County Board of Commissioners does hereby adopt the 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan and agrees to use it as a tool to implement area bicycle and pedestrian goals and objectives which will complement the overall development of the Area's transportation system.

Approved and adopted this 24th day of January, 2017

Approved by:

Kevin Campbell, Chair
Clay County Board of Commissioners

Attest:

Brian C. Berg, County Administrator

Table of Contents

List of Figures

List of Tables

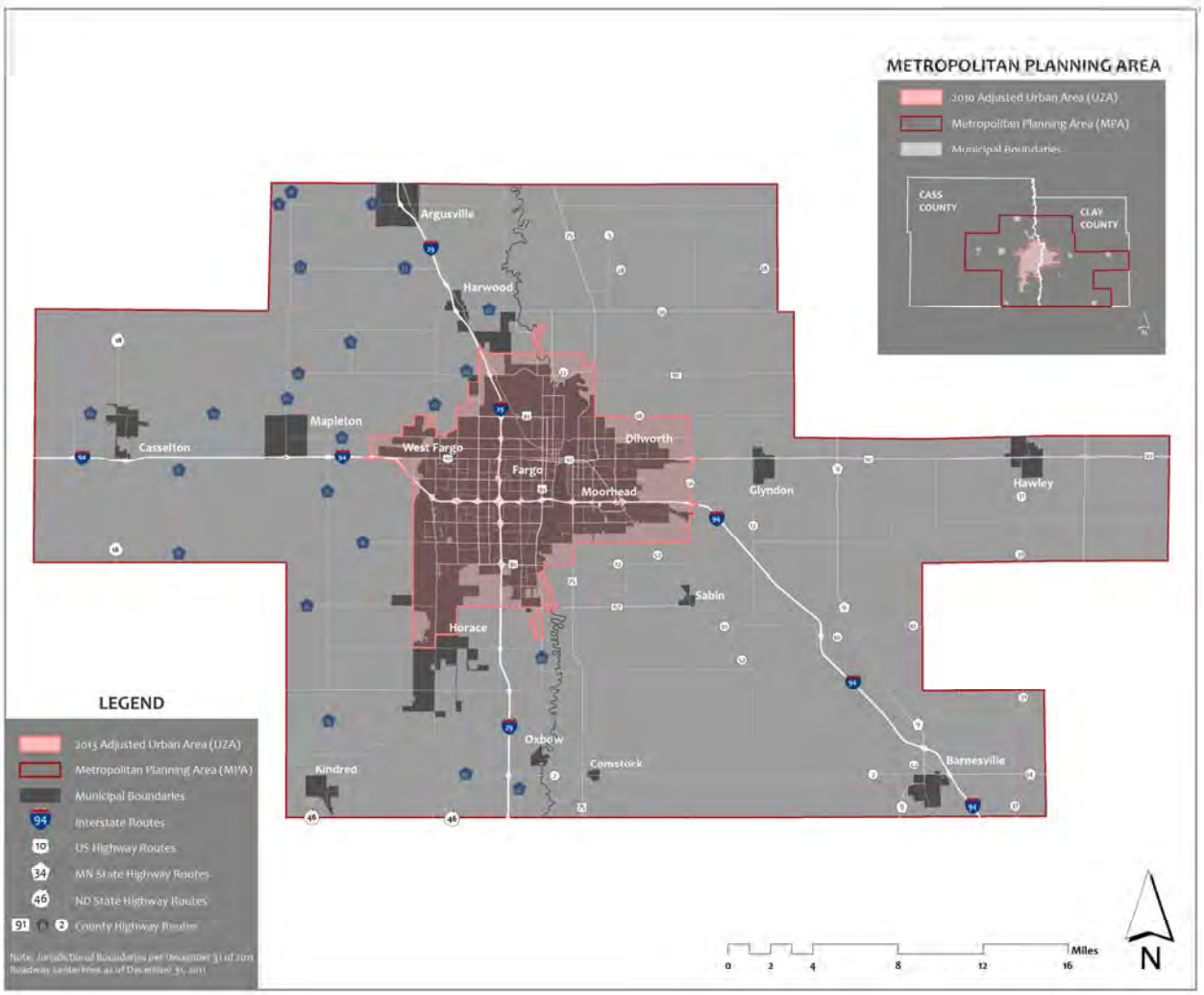
List of Appendices

Chapter 1: Introduction

1.1 Metro COG Overview

The Fargo-Moorhead Metropolitan Council of Governments (Metro COG) is the designated Metropolitan Planning Organization (MPO) for the Fargo-Moorhead Metropolitan area. Figure 1.1 shows Metro COG's planning area. Characteristics of the Fargo-Moorhead area can be found in *Chapter 2 – Existing Conditions*.

Figure 1.1 – Metro COG Planning Area



1.2 Plan Purpose & Need

Metro COG is responsible for maintaining a comprehensive, coordinated, and continuous transportation planning process for all modes of transportation in the region. This update of the Bicycle and Pedestrian Plan is a sub-element of Metro COG's Long Range Transportation Plan which is updated every five years. As such, the Bicycle and Pedestrian Plan is also updated every five years. The Bicycle and Pedestrian Plan has a twenty year planning horizon.

The Plan looks at all types of bicycle and pedestrian facilities that have a transportation element. Therefore facilities that are strictly recreational are not considered on in this Plan. For example, single-track mountain bike trails or hiking trails are not considered in this Plan.

Purpose & Need Statement:
"The purpose of the Plan is to identify current issues and needs as they relate to bicycling and pedestrian movements in the area; develop goals, objectives, and recommendations to enhance bicycle and pedestrian accommodations and safety for all types of users regardless of age, gender, race, social status, or mobility needs."

1.3 Benefits of Bicycle/Pedestrian Transportation

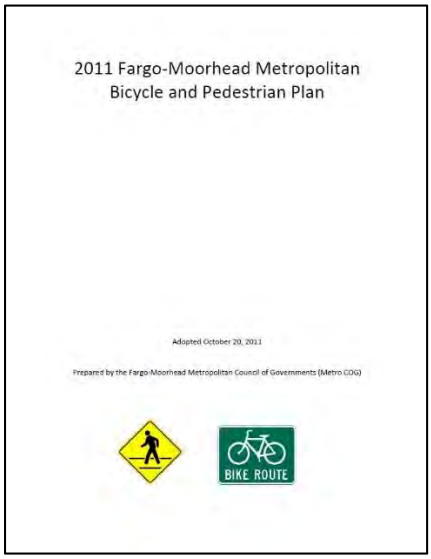
Bicycle and pedestrian transportation provide many societal benefits. Below are three key benefits attributed with bicycling and pedestrian modes of transportation.

- **Health** – bicycle and pedestrian modes of transportation improve our society's health
    - A Transportation Research Board (TRB) report (Report 282) notes that, "walking briskly for 30 minutes on 5 or more days per week reduces the risk of premature mortality and the development of numerous chronic diseases, improves psychological well-being, and helps prevent weight gain and obesity." The same can be attributed to bicycling.
- **Environment** – bicycle and pedestrian modes of transportation have substantial environmental benefits when compared to conventional (automobile) transportation.
    - The average vehicle in the United States uses over 500 of gallons of fuel a year and creates 4.7 metro tons of CO2 a year according to research done by the US Environmental Protection Agency (EPA). Bicycle and pedestrian modes of travel require no fuel and create no emissions.
- **Affordability** – bicycle and pedestrian modes of transportation are considerably cheaper than automotive transportation.
    - An annual study by the American Automobile Association (AAA) finds that the average cost of owning and operating a vehicle in 2015 was $8,698. Meanwhile the average annual cost to own and operate a bicycle can be estimated at less than $350 according to various sources. The annual cost of pedestrian travel is negligible.

This area left intentionally blank

1.4 2011 Fargo-Moorhead Metropolitan Bicycle & Pedestrian Plan

The previous bicycle and pedestrian plan completed for the Fargo-Moorhead area was completed in 2011 and was completed by Metro COG with a consultant component. Metro COG updates the bicycle and pedestrian plan every five years.

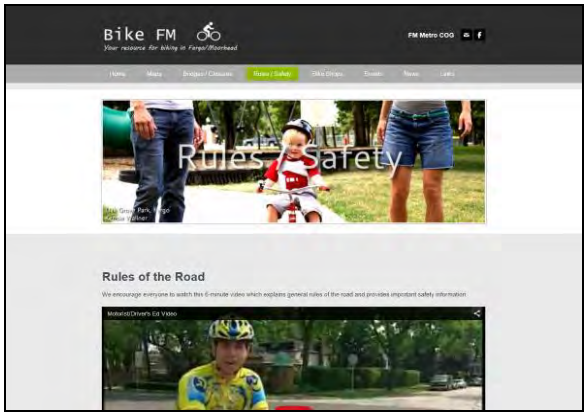


The 2011 Plan was well utilized after completion with many of the recommendations implemented after adoption of the Plan. The recommendations that were implemented include the following:

- ***5 Year Bicycle/Pedestrian Projects*** – The 2011 Plan provided a list of 79 recommended 5-year projects proposed for completion between 2012 – 2016. By the end of 2016 at least 47 of the 79 projects had been completed or partially completed, that's 59% of the projects.
- ***Bicycle Safety Education*** – In 2012 Metro COG in cooperation with the Bicycle & Pedestrian Committee created the Valley Bicycle Summit which provides education and safety information/activities to the public. The Summit has continued each year since 2012. Also, Metro COG created a local bicycle website (bikefm.org) in 2013 which provides a host local bicycle rider information and tools and, most importantly, provides safety information and rules of the road to the public.
- ***Red River Greenway*** – In 2014 Metro COG in cooperation with the City of Moorhead completed the Moorhead River Corridor Master Plan.
- ***Active Living*** – Per the recommendation of the 2011 Plan, Metro COG has been involved with local public health agencies and has been involved with Streets Alive each year since 2013.
- ***Safe Routes to School (SRTS)*** – In 2016 Metro COG began updating SRTS plans for both Moorhead and West Fargo Public Schools. In addition, Metro COG has been involved with providing Fargo Public Schools with SRTS maps whenever a new school opens.
- ***Bicycle and Pedestrian Connections to Transit*** – In 2013 Metro COG provided MATBUS with a technical memorandum which provided recommendations on how to better connect bicycle users and pedestrians to existing bus shelters.
- ***Maintenance and Safety Improvements Recommendations*** – The aforementioned bicycle website (bikefm.org) provides a comment box which allows the public to provide any comments or report any issues with the local bicycle network. Metro COG then relays the comments/concerns to the appropriate jurisdiction.

- ***Performance Measures (bike/ped counts)*** – Metro COG initiated a new bicycle/pedestrian count program in 2013 which annually counts bikes/peds at 17 locations annually. Per the recommendation of the 2011 Plan, some counts are located at locations where known future roadway improvements will occur. In addition, Metro COG installed six 'low cost' automated counters which count bike/ped traffic year-round - this was also a recommendation of the 2011 Plan.
- ***Signage of Bicycle Facilities*** – In January 2016 Metro COG completed the Bicycle Wayfinding Signage Study which provided corridors and locations through the Fargo-Moorhead area for bicycle guide signage. Also, the study provided recommended kiosk sign locations.

Valley Bicycle Summit, 2013



Bikefm.org website

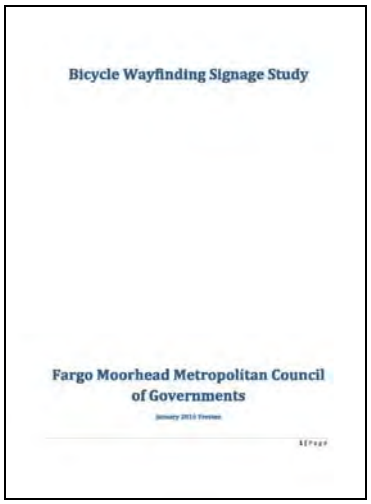
1.5 Related Plans/Studies

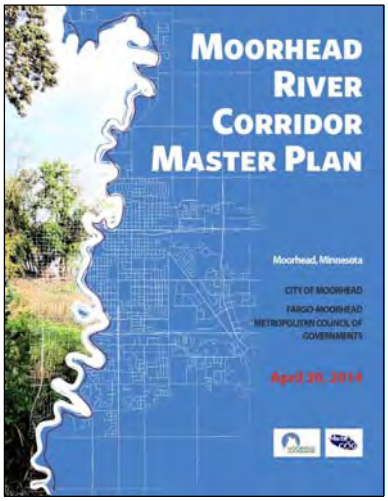
In addition to the Fargo-Moorhead Metropolitan Bicycle & Pedestrian Plan which is updated every five years, numerous other plans or studies have been completed that have major bicycle / pedestrian components. Below are relevant plans that have been completed within the past five years:

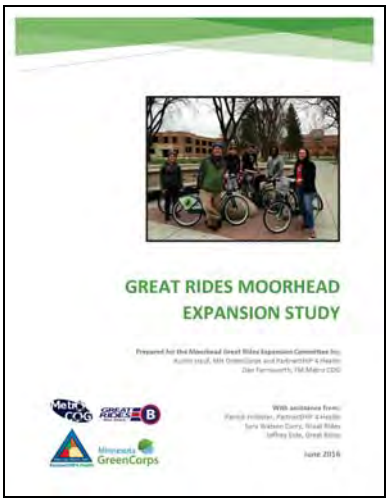
- ***Moorhead River Corridor Master Plan (2014)*** – With the number of home buy-outs due to recent flood protection efforts, the land adjacent to the Red River in Moorhead has opened up green space which provides various recreation opportunities. This study looks at the recreational and environmental opportunities along the Moorhead river corridor which includes paved shared use paths.
- ***Bicycle Wayfinding Signage Study (2016)*** – Initially began in 2013, the Bicycle Wayfinding Signage Study addressed a need for bicycle wayfinding signage in the Fargo-Moorhead Area. This study looks at corridors and locations for bicycle guide signs and also proposes location for sign kiosks maps.
- ***Great Rides Moorhead Expansion Study (2016)*** – With the success of the Great Rides bike share which launched in 2015, there has been a desire to expand the program into Moorhead. Initiated by PartnerSHIP 4 Health, a study was developed to evaluate and prioritize locations in Moorhead for future bike share stations.
- ***MN Statewide Bicycle System Plan (2016)*** – In August 2016 MnDOT completed a comprehensive statewide bicycle system plan. This plan present's MnDOT's vision and goals for bicycle transportation, implementation strategies, and associated performance measures.
- ***MN Walks (2016)*** – In December 2016 MnDOT in cooperation with the MN Department of Health completed a comprehensive statewide pedestrian plan named *MN Walks*. This plan guides

planning, decision-making and collaboration for agencies, organizations, policy-makers, and public and private entities across Minnesota.

- ***Roadway Corridor Studies*** – Since the 2011 Bicycle & Pedestrian Plan, Metro COG has been involved with various roadway corridor studies. Most studies involve a bicycle and pedestrian component. Corridor studies completed by Metro COG since 2011 include but are not limited to: 9th St/Veterans Blvd Corridor Study (2012), Main Ave (Fargo) Corridor Study (2013), US10/US75/Center Ave Corridor Studies (2013), and Sheyenne St Corridor Study (2016).
-







Other plans that are ongoing that are of interest to bicycle & pedestrian efforts include the following:

- ***Downtown Fargo Master Plan*** – This plan began in 2016 and is expected to be completed in mid-2017. The plan is evaluating everything from housing to livability to transportation. An important component of the plan is bicycle and pedestrian improvements.
- ***West Fargo Comprehensive Plan*** – This plan began in late 2016 and is expected for completing around the end of 2017. As part of the plan, bicycle and pedestrian improvements will be a component.
- ***West Fargo Safe Routes to School Study*** – In 2016 Metro COG began the West Fargo Safe Routes to School Study. The study is expected to be completed around the end of 2016. The previous safe routes to school study for West Fargo was completed in 2011.
- ***Moorhead Safe Routes to School Study*** – In 2016 Metro COG began the Moorhead Safe Routes to School Study. The study is expected to be completed around the end of 2016. The previous safe routes to school study for Moorhead was completed in 2009.

1.6 Heartland Trail Planning Efforts

The Heartland Trail is a paved shared use path that currently extends 49 miles from Park Rapids, MN to Cass Lake, MN. In 2006 the Minnesota State Legislature approved the extension of the trail from Park Rapids to Moorhead. In 2014 Metro COG took the initiative to lead Heartland Trail planning efforts in Clay County. The Clay County Heartland Trail Task Force was created at that time to help guide the planning effort. Currently Metro COG and stakeholders are focusing on planning of the Trail between Buffalo River State Park and Hawley. This effort is still in the planning stages with trail alignments still preliminary.

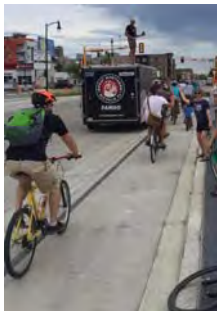
1.7 Bicycle Friendly Community Designation

In 2014 Metro COG applied for Bicycle Friendly Community designation for the Fargo-Moorhead Metropolitan Area. In this application was included the cities of West Fargo, Fargo, Moorhead, and Dilworth. In November of 2014 Fargo-Moorhead Metropolitan Area was awarded Bronze Bicycle Friendly Community by the League of American Bicyclists. The designation is current until 2018 at which time a community will need to re-apply. There are bicycle-friendly tiers given by the League of American Bicyclists: Bronze, Silver, Gold, Platinum, and Diamond. As of 2016 there were three communities in ND with a Bicycle Friendly Community designation and eighteen communities in MN with the designation.

1.8 Description of Bicycle and Pedestrian Facilities

Various types of facilities comprise Fargo-Moorhead's bicycle and pedestrian network. The table below describes the array of facilities.

Table 1.1 – Description of Bicycle & Pedestrian Facilities

Facility Type	Description	Photo
Bicycle Facilities		
Bike Lanes	Typically 5 to 7 feet wide, bike lanes are a designated space for people bicycling. Vehicles are not allowed to drive in the bike lanes unless for parking or turning purposes.	 *15th Ave N, Moorhead*
Buffered Bike Lanes	Similar to standard bike lanes, buffered bike lanes provide additional protective space between the bicycle travel-way and vehicle travel-way.	 *N University Dr, Fargo*
Protected Bike Lanes	New to the Fargo-Moorhead area as of 2015, protected bike lanes provide extra protection from vehicle traffic by separating the bike lane from vehicle lanes with a parking lane.	 *NP Ave, Fargo*

Shared Lane Markings (Sharrows)	Shared lane markings are on-street pavement markings encouraging vehicle drivers to share to roadway with people bicycling. Shared lane markings are located on corridors with prominent bicycle use or corridors where people on bicycles are encouraged to utilize.	 *24th Ave S, Fargo*
Sign-Shared Roadways	Sign-shared roadways are corridors with low vehicle traffic that are recommended routes for bicycle travel. No pavement markings exist on these routes however signs are placed along the corridors identifying the route. Sign displays may vary from guide signs (green) to warning signs (yellow).	 *9th St N, Fargo*
Paved Shoulders	Paved roadway shoulders are recognized as bicycle facilities as long as they are 4 feet in width or greater. These are typically found along rural highways.	 *CR 20, Cass County*
Bicycle/Pedestrian Facilities		
Shared-Use Path	Shared-use paths are paved pathways for use by both pedestrians and people bicycling. Shared-use paths are between 8 and 12 feet in width and are either concrete or asphalt. They can be found along roadways, within greenways, or within parks.	 *Red River Trail, Moorhead*
Pedestrian Facilities		
Sidewalks	Sidewalks are designed for pedestrian use. However, people on bicycles are not prohibited from riding on sidewalks in many parts of the Fargo-Moorhead area. Sidewalks are concrete and are typically between 4.5 and 6 feet in width.	 *1st St E, West Fargo*

Chapter 2: EXISTING SYSTEM CONDITIONS

2.1 Natural Characteristics

The Fargo-Moorhead Metropolitan Area is located in the Red River Valley which is characteristic of significantly flat terrain. This flat terrain can make for ease of bicycling and walking. The only notable topographic features are found near the Red River where minor elevation changes are found. The Red River, along with some of its tributaries and drains, run through the Fargo-Moorhead area making pathway connections within the community a challenge at times. The Red River can be susceptible to extreme springtime and summer flooding as a result of snow melt and heavy rainfalls. These floods often inundate nearby trails and make bridge crossings impossible.

Weather in the Fargo-Moorhead area varies considerably from cold winters to warm summers. January, the coldest month of the year, averages a high of 16 F and a low of -2 F while July, the warmest month of the year, has an average high temperature of 83 F and an average low of 59 F. The area receives moderate amounts of precipitation with 21 inches of rain and 38 inches of snow per year. In comparison, the average US city receives 37 inches of rain and 25 inches of snow a year. With annual average wind speeds of 12 mph in the Fargo-Moorhead area, wind can be a real factor for the desirability of bicycle and pedestrian travel.

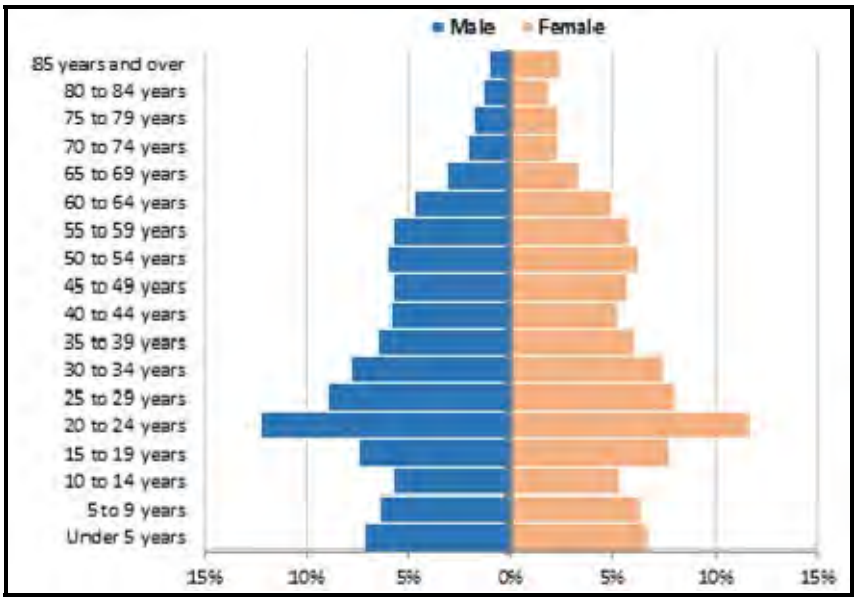
Red River; Source: FMCVB

Downtown Fargo; Source: Fast Horse

2.2 Population Characteristics

The population of the Fargo-Moorhead Metropolitan Statistical area (Cass Co. plus Clay Co.) was estimated at 233,836 in 2015. This is a 12% increase since the 2010 census population of 208,777. The Fargo-Moorhead area has a fairly young population with a median age of 31.8 whereas the national median age is 36.8. This can be attributed to the many universities and colleges in the community along with the number of young families. The figure below shows the area's age distribution.

Figure 2.1 – Age / Gender Composition



Source: ACS Data, 2010 - 2014

The table below shows the Fargo-Moorhead area's commuting trends as gathered by the US Census Bureau's annual American Community Survey (ACS):

Table 2.1 – Means of Transportation to Work

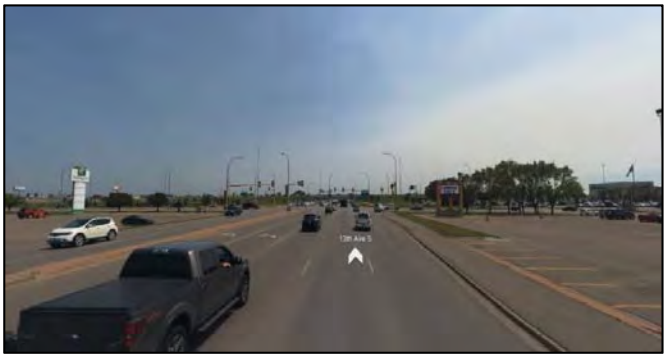
Transportation Means	2005 – 2009	2010 – 2014
Drive alone	81.8%	82.0%
Carpool	8.6%	7.9%
Public Transit	0.7%	1.1%
Walk	3.8%	3.7%
Bike	0.8%	0.6%
Work from home	3.5%	3.7%
Other	0.8%	1.0%
Note: Data for MSA (Cass Co. + Clay Co.)		

Source: US Census ACS data

2.3 Existing Land Use and Urban Design

Land use and urban design can have a significant effect on the practicality and desirability of bicycle and pedestrian travel. The Fargo-Moorhead Area has a variety of land uses and urban design styles. The core of the Area (i.e. Downtown Fargo) has higher densities, a mix of land uses, and has urban design elements that encourage bicycle and especially pedestrian travel. The newer and more outlying parts of the Metro Area have land use and urban design elements where automobile use tends to be the controlling design factor. Below are two examples of commercial corridors in the area and the relationship the land use/urban design has on pedestrian travel.

Table 2.2 – Land Use / Urban Design Comparison – Pedestrian Travel

13th Ave S commercial corridor, Fargo	
 *Source: Bing Maps*	Average September Pedestrian Count*: 8 / hr The 13th Ave S corridor near the West Acres Mall provides standard pedestrian facilities such as a shared-use path, crosswalks and pedestrian signalization at intersections. However, the spacing between businesses, the distance between the path and businesses, roadway speeds, roadway noise, block spacing, aesthetics, and more all play a role in the practicality and desirability of pedestrian travel. *Counts were taken on weekdays in September between 4 pm – 7 pm. Years 2013 – 2015.
Broadway commercial corridor, Downtown Fargo	
	Average September Pedestrian Count*: 344 / hr The Broadway corridor in downtown Fargo provides ample pedestrian accommodations. In addition, the spacing between business entrances, the building uses, the separation between sidewalk and roadway, the low roadway speeds, aesthetics, and more all play a role in the practicality and desirability of pedestrian travel. *Counts were taken on weekdays in September between 4 pm – 7 pm. Years 2014, 2015.

2.4 Bicycle and Pedestrian Network

The Fargo-Moorhead area's bicycle and pedestrian network consists of a variety of facilities intended to provide connectivity throughout the area. As the community grows, the networks follows suit. The area has added a number of facilities that were nonexistent just a few years ago. Table 2.3 displays the total mileage of the urban bicycle and pedestrian facilities in both 2010 and 2016 while Figure 2.2 shows the locations of the existing bicycle and pedestrian facilities.

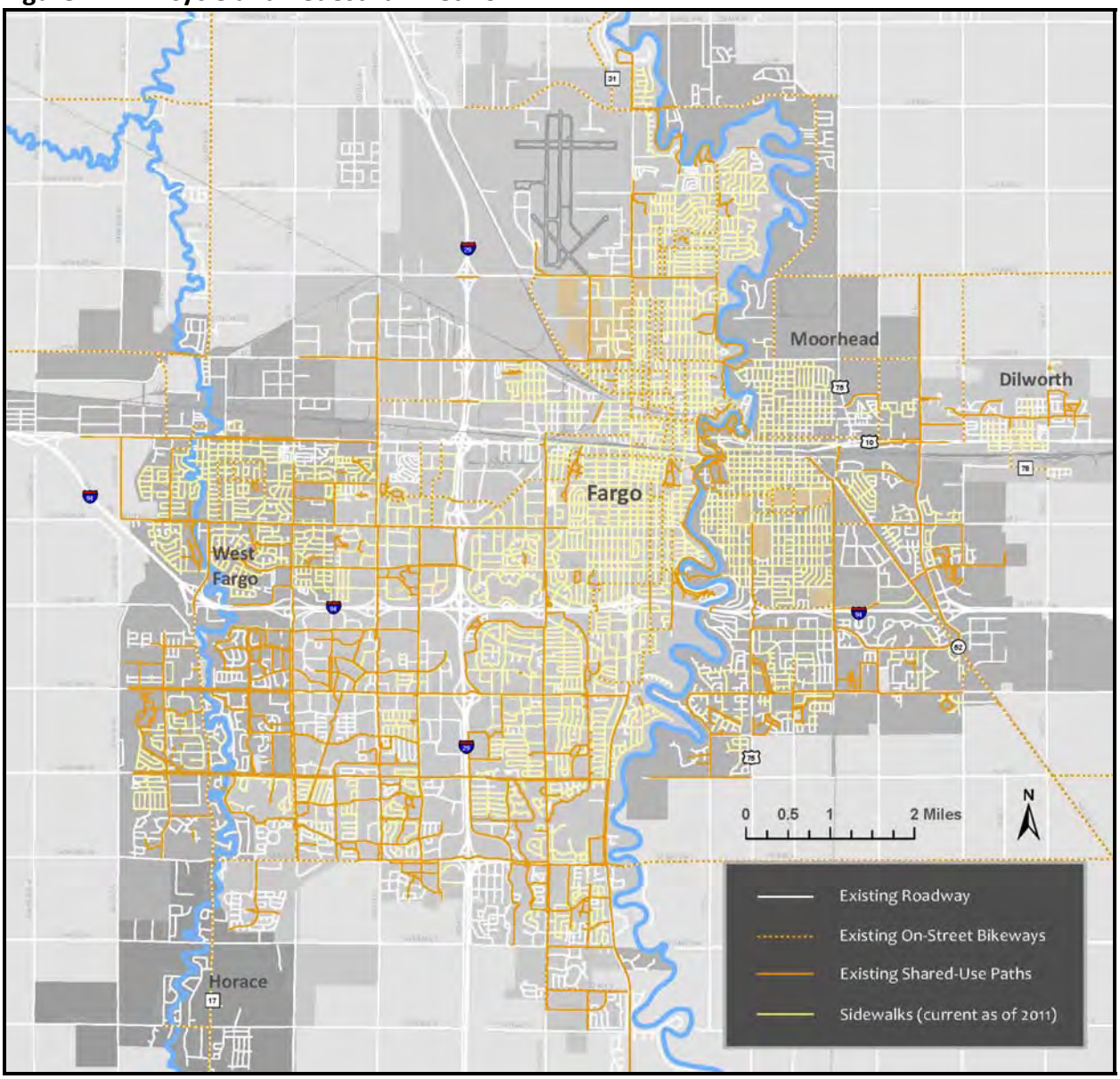
Table 2.3 – Mileage of Urban Bicycle/Pedestrian Facilities (2010, 2016)

Facility	West Fargo		Fargo		Moorhead		Dilworth		Total	
	2010	2016	2010	2016	2010	2016	2010	2016	**2010**	**2016**
Bike Lane*^	0	0	2.7	10.2	1.3	5.7	0	0	**4.0**	**15.9**
Shared Lane Marking (Sharrows)*	0	0	2.5	8.5	0	0.3	0	0	**2.5**	**8.8**
Sign-Shared Roadway*	6.3	3.1	13.9	12.5	2.9	3.3	0	0	**23.1**	**18.9**
Shared-Use Path	33.6	52.4	106	130	35.7	41.1	4.0	5.3	**179**	**229**
Sidewalk** "	121	N/A	480	N/A	157	N/A	10.4	N/A	**768**	**N/A**

** Shown as centerline miles of roadway*
*** Includes sidewalks on both sides of roadway*
^ Includes bike lanes, buffered bike lanes, and separated bike lanes
" Sidewalk data from 2011

Source: 2011 FM Metro Bicycle & Pedestrian Plan, Metro COG GIS database

Figure 2.2 – Bicycle and Pedestrian Network



Sidewalks provide a designated space for pedestrian travel. The vast majority of roadways in the Fargo-Moorhead area provide sidewalks alongside the roadway. Various ordinances exist explaining when and where sidewalks shall to be installed. The table below summarizes sidewalk ordinances for the local jurisdictions.

Table 2.4 – Current Sidewalk Ordinances per Jurisdiction

Jurisdiction	Ordinance No.	Ordinance Summary
Fargo	18-0201 18-0215	Sidewalks shall be constructed along the street or avenue whenever a new building is constructed unless the owner chooses to petition the sidewalk in which case the petition is considered by the board of city commissioners. All sidewalks constructed or reconstructed shall be at least 4.5 feet in width.
Moorhead	11-5-8	All new subdivisions within the City shall provide sidewalks on both sides of all arterial, collector, local and cul-de-sac streets. A sidewalk plan may be submitted by the developer which illustrates the placement of sidewalks on one side of a street or areas with no sidewalks.
West Fargo	2-0102	Sidewalks shall be constructed along both sides of all streets and within cul-de-sac unless instructed otherwise by the City Commission.
Dilworth	6.080	All new subdivisions within the City shall provide sidewalks on both sides of all arterial, collector, local and cul-de-sac streets. A sidewalk may plan may be submitted by the developer which illustrates the placement of sidewalks on one side of a street or areas with no sidewalks.
Horace	2-0102	Sidewalks shall be constructed along both sides of all streets and within cul-de-sac unless instructed otherwise by the City Council.

2.5 Maintenance of Bicycle and Pedestrian Network

Proper maintenance is crucial to the function and safety of bicycle and pedestrian network. Maintenance can involve sweeping, snow/ice removal, surface improvements, and more. Many partners are involved in keeping our bicycle/pedestrian network in operating-order including, municipalities, park districts and property owners.

Debris in bike lane, Moorhead

Snow on sidewalk; Source: Forum

Table 2.5 summarizes the existing snow removal policies and ordinances along with existing sweeping policies.

Table 2.5 – Existing Snow Removal and Sweeping Policies

City of West Fargo		
Sidewalk (snow)	Owner	No snow or ice shall not be allowed to remain on sidewalks. If neglected after 48 hours, the owner will be subject to penalties. (Ord. 2-0121)
Shared use paths (snow)	City	The City of West Fargo clears snow from all shared use paths within City roadway right-of-way. Shared use paths located on City park property are not cleared of snow in the winter.
Streets (snow)	City	The City of West Fargo plows Snow Emergency Routes first followed by the remainder of the streets.
Sweeping	City	The City of West Fargo contracts-out a city-wide sweeping effort twice a year (spring and fall). Also, the City uses its two sweepers to sweep roadways throughout the summer (typically collector and arterial roadways)
City of Fargo		
Sidewalk (snow)	Owner	Snow and ice must be cleared by 9:00 pm of each day or snow/ice will be removed by the city and the owner will be billed. (Ord. 18-0301)
Shared use paths (snow)	City	The City of Fargo clears snow from all shared use paths within City roadway right-of-way. Shared use paths located on City park property are cleared by Fargo Parks.
Streets (snow)	City	The City of Fargo plows primary then secondary snow routes before conducting city-wide plowing. The goal of the City is to have all streets cleared within 24 hours after a snowfall.
Sweeping	City	The City of Fargo sweeps streets on a continuous basis throughout spring, summer and fall. The arterial roadways take priority followed by the rest of the city streets. Downtown and the core neighborhoods (where large trees are present) also get swept more often.
City of Moorhead		
Sidewalk (snow)	Owner	Snow and ice must be cleared by 9:00 pm of each day or snow/ice may be removed by the city and the owner will be billed. (Ord. 3-3-10)
Shared use paths (snow)	City	The City of Moorhead Maintenance crews remove snow from all city and park shared use paths preferably within 24 hours of a snowfall event.
Streets (snow)	City	Snow emergency primary and secondary routes and main thoroughfares are plowed first, followed by residential streets. First pass is made 1 – 2 feet from curb. Second pass (made next scheduled day) is made as close to the curb as possible.
Sweeping	City	The City of Moorhead has three street sweepers which operate throughout the spring, summer, and fall. The intent is to have all streets swept every two or three weeks.
City of Dilworth		
Sidewalk (snow)	Citizens	The City of Dilworth does not have an ordinance detailing snow removal, however in 2014, the City of Dilworth, in cooperation with PartnerSHIP 4 Health, launched the "Shovel Dilworth" initiative. Residents are encouraged to clear snow off their sidewalks, help neighbors shovel theirs or adopt a section of sidewalk, bus stop, or fire hydrant. The program has seen community participation and continues to this day.
Shared use paths (snow)	City	All shared use paths are cleared by the City. Shared use paths located in-front of residences are often voluntarily cleared by residents.
Streets (snow)	City	The City of Dilworth Maintenance Department is responsible for street snow plowing.

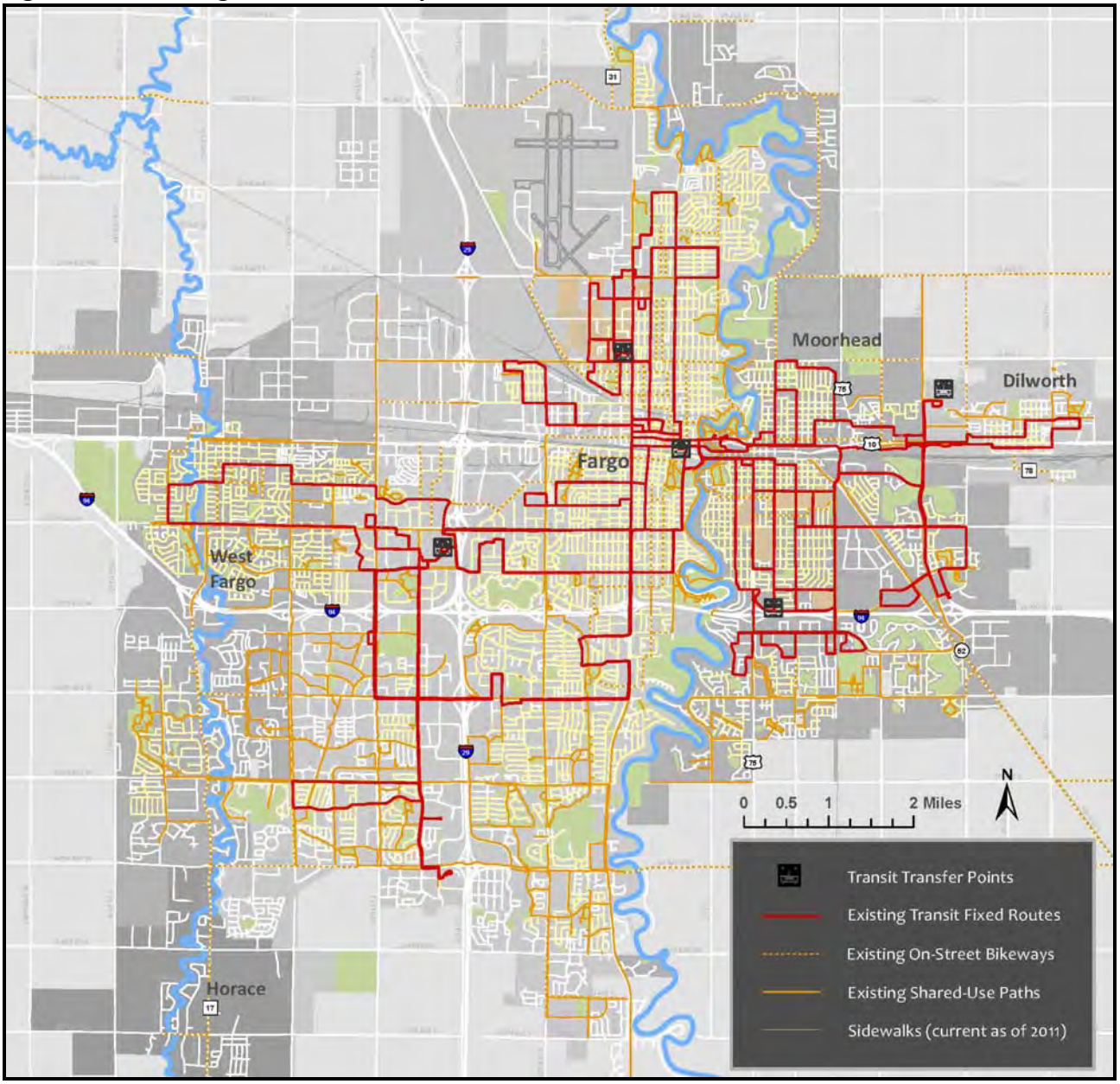
Sweeping	City	The City of Dilworth contract street sweeping which occurs approximately two or three times per year. All streets are swept.
Cass County		
Shared use paths (snow)	County	Cass County removes snow on their shared use paths which are not located within municipalities. County-owned paths located within municipalities are plowed by that municipality.
Roadways (snow)	County	The Cass County Maintenance Division removes snow on roadways on a priority basis. The priorities are as follows: (1) Key Commuter Routes, (2) Secondary Commuter Routes, (3) Other County Hard Surfaced Routes, (4) Gravel Surfaced County Routes.
Sweeping	County	Cass County currently sweeps roadways (shoulders) on an as-needed basis, typically when major debris/mud is on roadway/shoulder.
Clay County		
Shared use paths (snow)	Owner	Clay County does not own any shared use paths.
Roadways (snow)	County	Clay County plows snow on roadways on a priority basis. The priorities are as follows: (1) high volume paved highways, (2) low volume paved highways, (3) high volume gravel roadways and subdivisions, (4) low volume gravel roadways.
Sweeping	County	Clay County sweeps roadways upon request.

2.6 Transit

Transit is an integral part of bicycle and pedestrian planning as most transit users begin and end their trips as pedestrians or bicycle users. The area's transit system consists of fixed-route and paratransit bus service which is operated by Metro Area Transit (MATBUS). The fixed route system includes 25 routes that provide coverage within the cities of West Fargo, Fargo, Moorhead, and Dilworth. Please see Figure 2.3 for locations of the existing fixed-routes. In 2010 MATBUS ridership surpassed 2 million rides. Since 2010 ridership has remained just over 2 million rides per year.

This area left intentionally blank

Figure 2.3 – Existing Fixed-Route Maps



With the development of the U-Pass, MATBUS has seen a large increase in student riders. The U-Pass allows unlimited trips to students of NDSU, MSUM, Concordia, and M-State. Approximately 50% of MATBUS ridership is from college students. All buses are ADA (Americans with Disabilities Act) compliant and are equipped with external bike racks able to hold two bikes. Currently the fleet is in the process with replacing their two-bike racks with three-bike racks.

Table 2.6 shows recent MATBUS ridership along with bicycle boarding information.

Table 2.6 – Historic Fixed Route Transit Ridership and Bicycle Boardings

Total Fixed and Circular Route Ridership		Total Bicycle Boardings		Total Bicycle Boardings	As a Percent of Total Boardings
Year	Trips	Fargo	Moorhead		
2005	1,138,466	5,442	1,945	7,387	0.65%
2006	1,248,800	7,188	3,072	10,260	0.82%
2007	1,318,762	12,262	4,854	17,116	1.30%
2008	1,626,909	12,974	6,309	19,283	1.19%
2009	1,872,630	10,031	4,277	14,308	0.76%
2010	2,001,334	9,009	4,291	13,300	0.66%
2011	2,100,705	10,378	4,054	14,432	0.69%
2012	2,044,932	12,504	4,451	16,955	0.83%
2013	2,134,891	11,586	4,139	15,725	0.74%
2014	2,223,701	13,448	5,109	18,557	0.83%
2015	2,061,126	14,968	6,105	21,073	1.02%

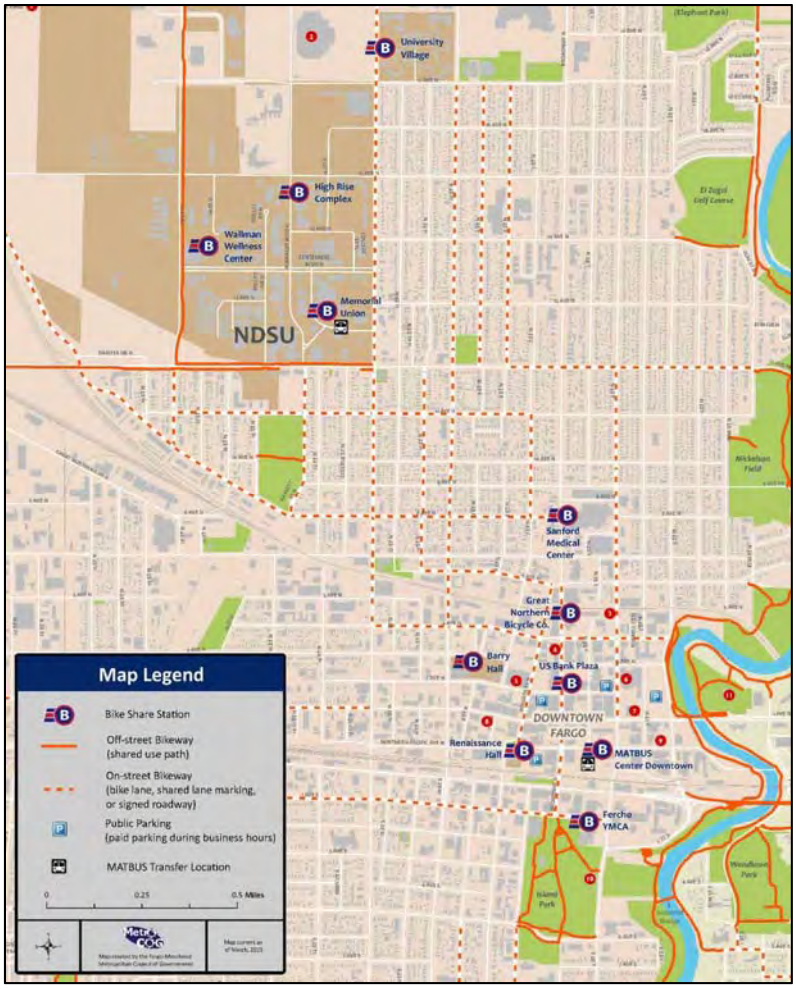
Source: MATBUS

2.7 Bike Share

In March 2015 the Great Rides Bike Share program was launched, the first bike share system of its kind to be created in the area. The program consists of 101 bikes and 11 stations. Of those stations, four are located at NDSU's main campus while the other seven are located in downtown Fargo. Below is a map of the station locations.

This area left intentionally blank

Figure 2.4 – Great Rides Bike Share Station Map



Source: Emerging Prairie

Great Rides bike share operates seasonally with bikes available March/April through the end of October. The system is designed for use by everyone. The public can use the system for a small cost while NDSU students can use bikes for free for the first 30 minutes. Great Rides bike share is easily integrated with the NDSU student ID cards so that students wishing to use the system can simply register and ride for free (under 30 minutes). Table 2.7 displays 2015 rider information.

Table 2.7 – 2015 Bike Share Season Rider Information

Membership	Riders	Trips
NDSU Students	8,103	136,475
Single-day Guests	1,756	4,700
Annual or monthly Members	114	2,178
Total	**9,973**	**145,353**

Source: Great Rides

This cooperation between Great Rides and NDSU proved widely popular among NDSU students and made the first season of Great Rides bike share a greater-than-anticipated success. Upon completion of the first

season (March 2015 – October 2015), Great Rides boasted over 145,000 rides and set national records for bicycle and station usage. Below is a table showing bike checkouts per station.

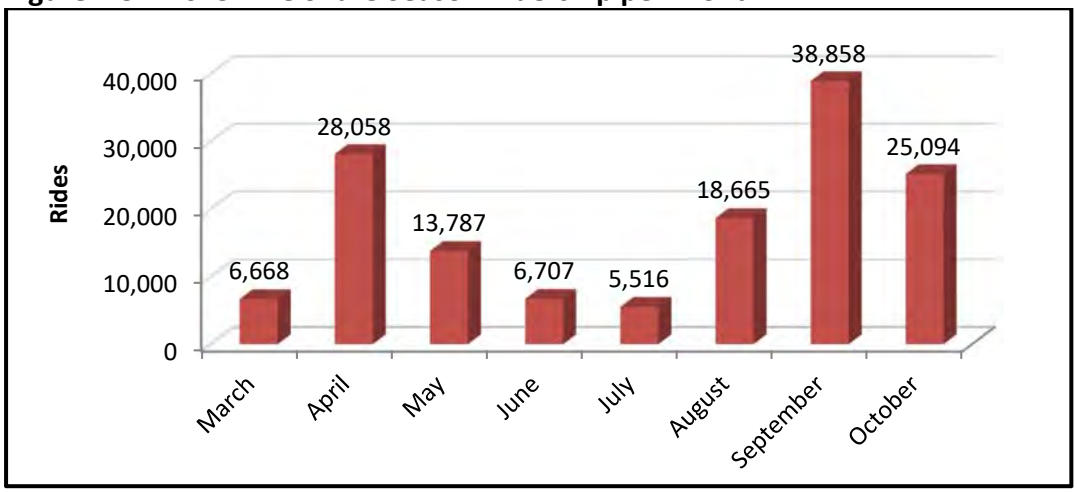
Table 2.8 – 2015 Bike Share Season Station Activity

Station	No. of docks	Checkouts	Returns	Total
NDSU High Rises	22	47,678	47,679	95,357
NDSU Memorial Union	30	23,947	23,892	47,839
NDSU University Village	22	22,503	22,671	45,174
NDSU Wellness Center	11	19,015	19,027	38,042
US Bank Plaza	17	3,608	3,610	7,218
Barry Hall	18	3,105	3,079	6,184
Renaissance Hall	14	1,950	1,903	3,853
Great Northern Bicycle Co.	11	1,878	1,823	3,701
Sanford Medical Center	11	1,707	1,694	3,401
Fercho YMCA	14	1,332	1,333	2,665
MATBUS Center Downtown	9	904	910	1,814

Source: Great Rides

The 2015 season showed that the greatest ridership occurred in September with July actually having the lowest number of users. This can be seen in Figure 2.5. Trends seen in this figure can be attributed largely to the NDSU school schedule.

Figure 2.5 – 2015 Bike Share Season Ridership per Month



2.8 Bicycle and Pedestrian Counts

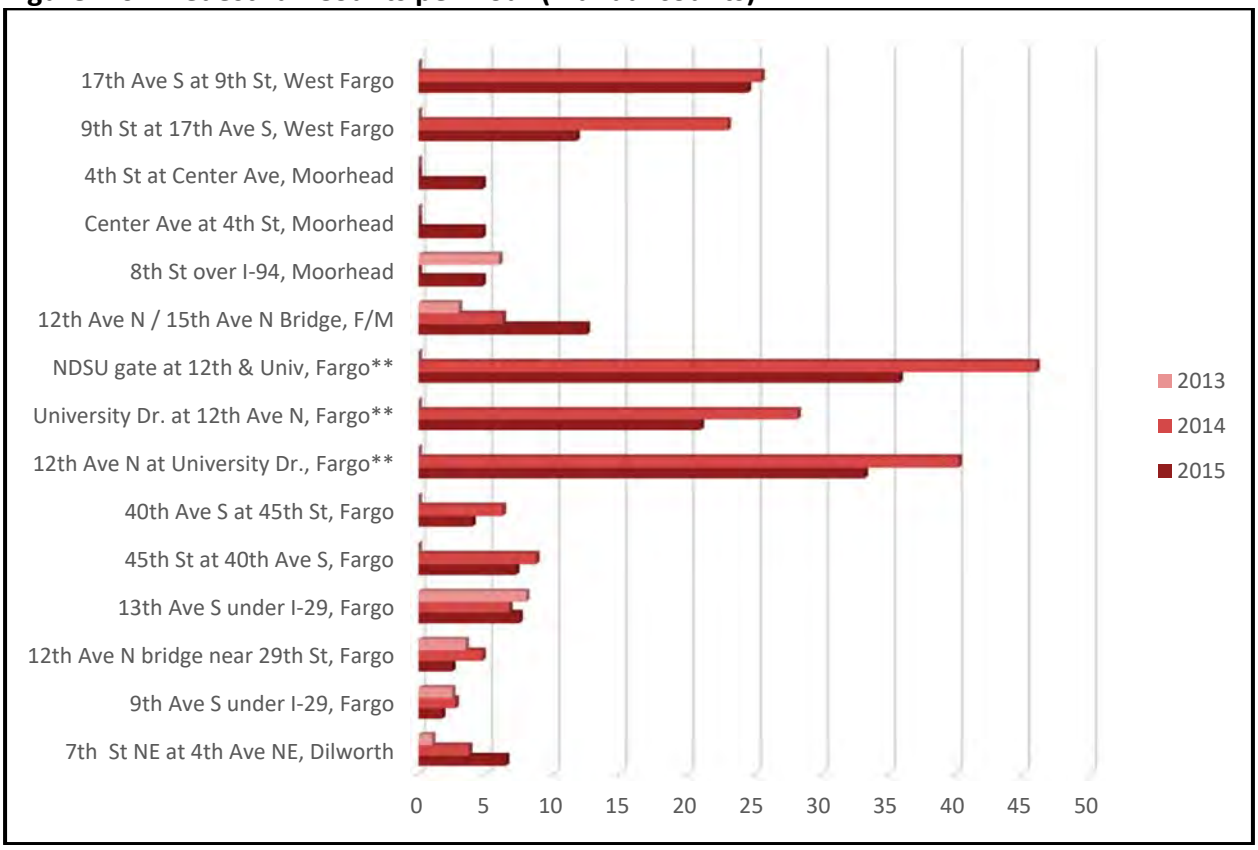
Metro COG has been performing bicycle and pedestrian counts from as far back as 1993.

Manual Counts

In 2013 Metro COG launched a new bicycle and pedestrian count program which implements manual counts at over a dozen locations in the Fargo-Moorhead area. In 2013 manual counts were performed at 34 locations, and in 2014 and 2015 manual counts were scaled-back to 14 locations. Metro COG developed a report of the 2013 counts which can be found on Metro COG's website.

Count locations remain the same since 2013 and all counts are taken on a weekday in September typically between the hours of 3:00 pm – 7:00 pm. Some locations are counted over two days and an average is derived. The counts were taken on days with weather that was considered 'fair' or 'favorable'. Below are the results of the manual bicycle and pedestrian counts since 2013.

Figure 2.6 – Pedestrian Counts per Hour (manual counts)



**Counted between 1:00 pm – 6:00 pm

Note: The Broadway data not shown in above chart since numbers are significantly higher than other locations. Broadway data shown in chart below.

Figure 2.7 – Pedestrian Counts per Hour (manual counts) – Broadway Only

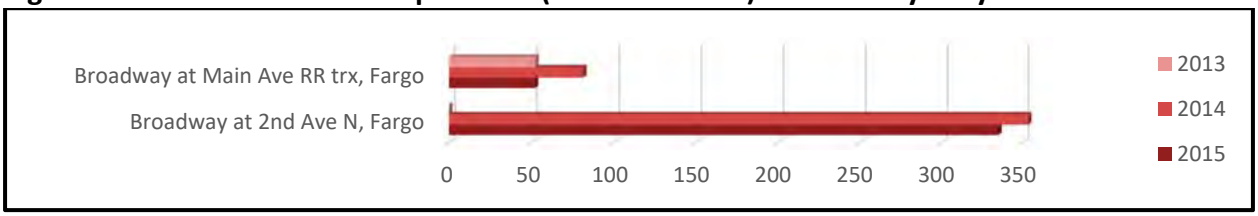
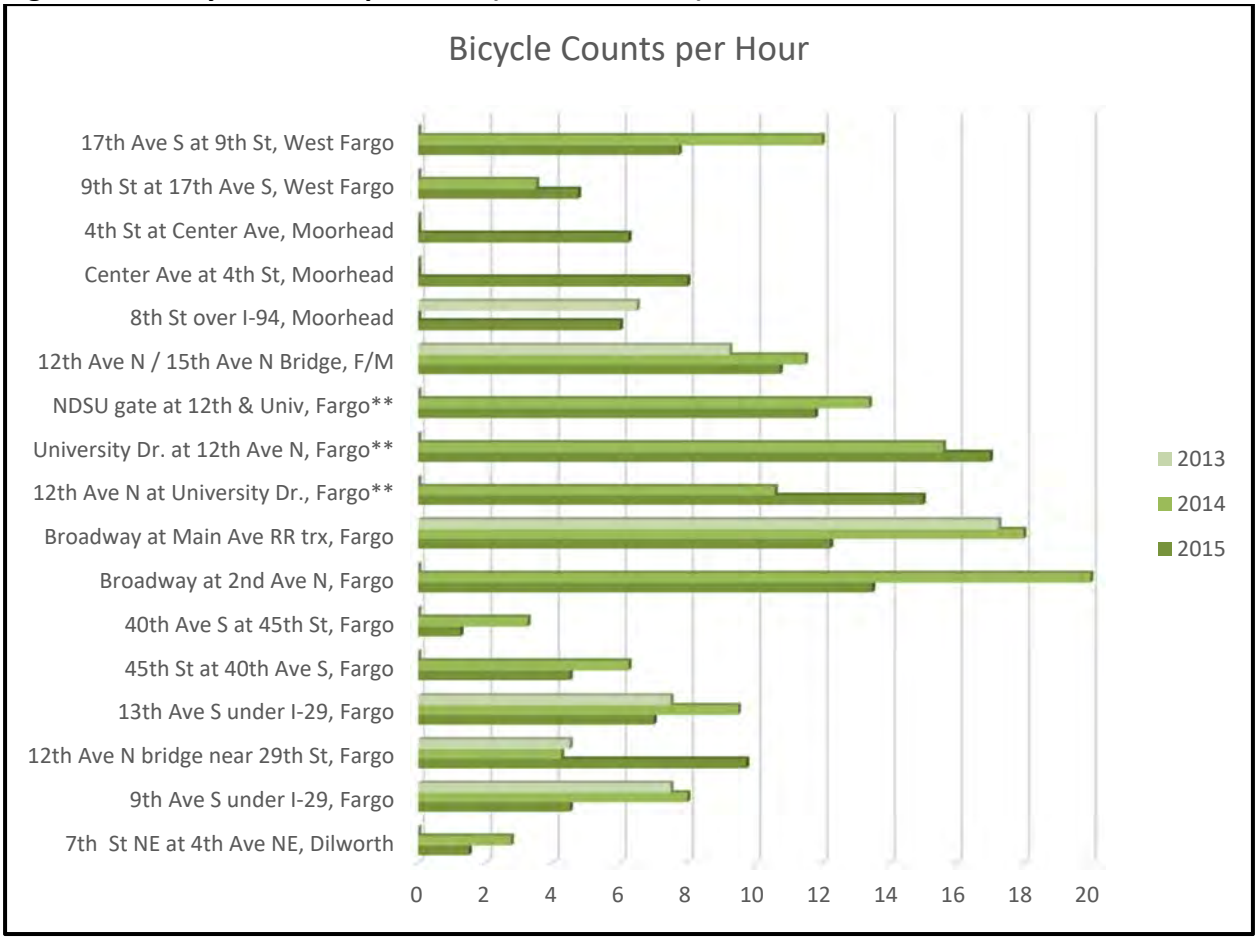


Figure 2.8 – Bicycle Counts per Hour (manual counts)



**Counted between 1:00 pm – 6:00 pm

When analyzing the manual counts, it can be seen that variations occur from year-to-year. This can be attributed to the fact that these counts are only taken one to two days per year and thus are only a sampling of actual bicycle/pedestrian activity. While the counts were taken in 'fair' or 'favorable' weather conditions, various weather factors can still can play a role in the number of bicycle and pedestrian trips.

Automated Counts

In 2014 Metro COG deployed six automated counters used to count passing people bicycling and walking. These counters count bicycle/pedestrian traffic 24 hours a day, 7 days a week and 365 days a year. Below is a list of the six automated counter locations:

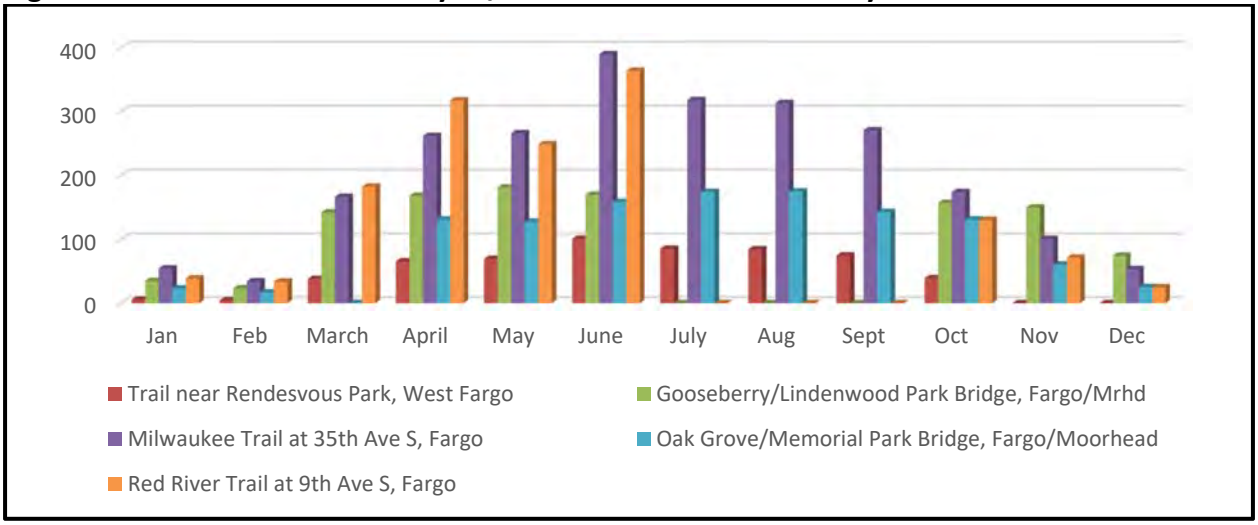
- Trail south of Rendesvous Park, West Fargo
- Milwaukee Trail near 35th Ave S, Fargo
- Red River Trail near 9th Ave S, Fargo
- Gooseberry/Lindenwood Park Bridge, Fargo/Moorhead
- Oak Grove/Memorial Park Bridge, Fargo/Moorhead
- West sidewalk of Broadway just south of 2nd Ave N, downtown Fargo

While these counters provide continuous hourly data, they do have limitations. For example, if two or more people are traveling side-by-side they are likely counted as one. Also the counters are not immune

to vandalism, obstructions or various technical difficulties. Metro COG has experienced all these issues at some point with the automated counters, making the data unreliable at times. It is estimated that some counts could be double what the counter is actually collecting. Nevertheless, the counts provide continuous data and trends that would not be achievable with manual counts.

Below shows the available 2015 data taken from the six automated bicycle/pedestrian counters. Please note that the counters do not differentiate between bicycles and pedestrians.

Figure 2.9 – 2015 Automated Bicycle/Pedestrian Counter Monthly Data



Note: The Broadway counter data not shown in chart since numbers are significantly higher than other locations. Also, Broadway missing reliable data between May – Aug.

To see hourly trends of bicycle/pedestrian traffic in the area, graphs were developed using data from two of the area's automated counters. Below shows the hourly trends from the counter located on the west sidewalk of Broadway in Fargo and the counter located along the Milwaukee Trail in Fargo. Data shown is an average of 2015.

This area left intentionally blank

Figure 2.10 – 2015 Hourly Automated Bicycle/Pedestrian Counter Data
West sidewalk of Broadway just South of 2nd Ave N, Fargo

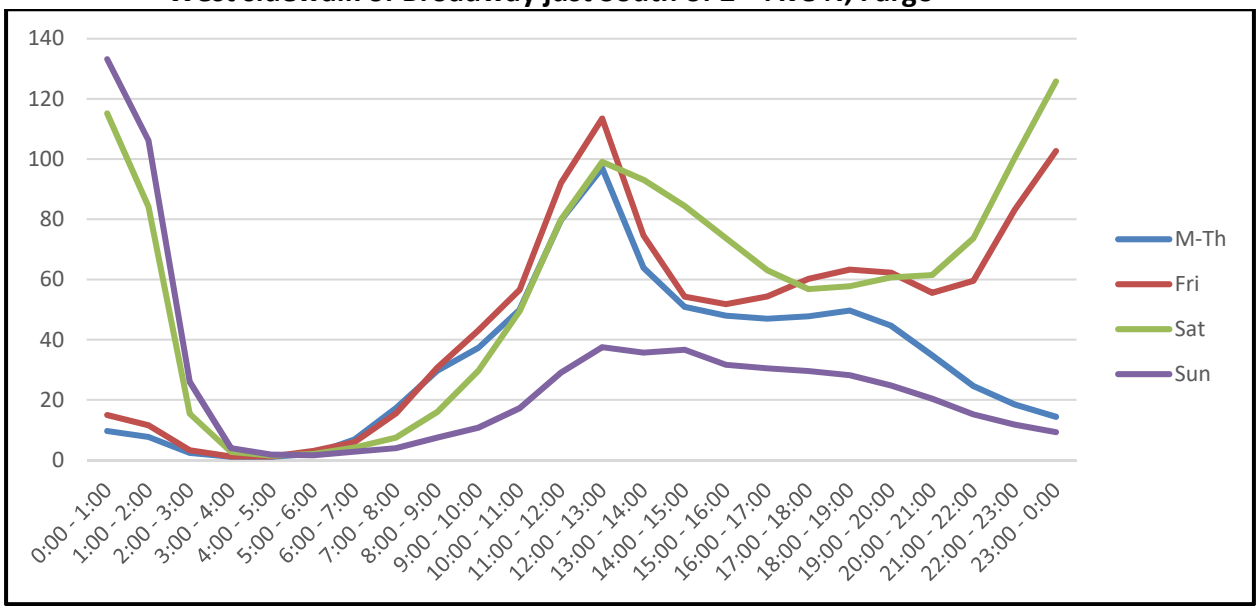
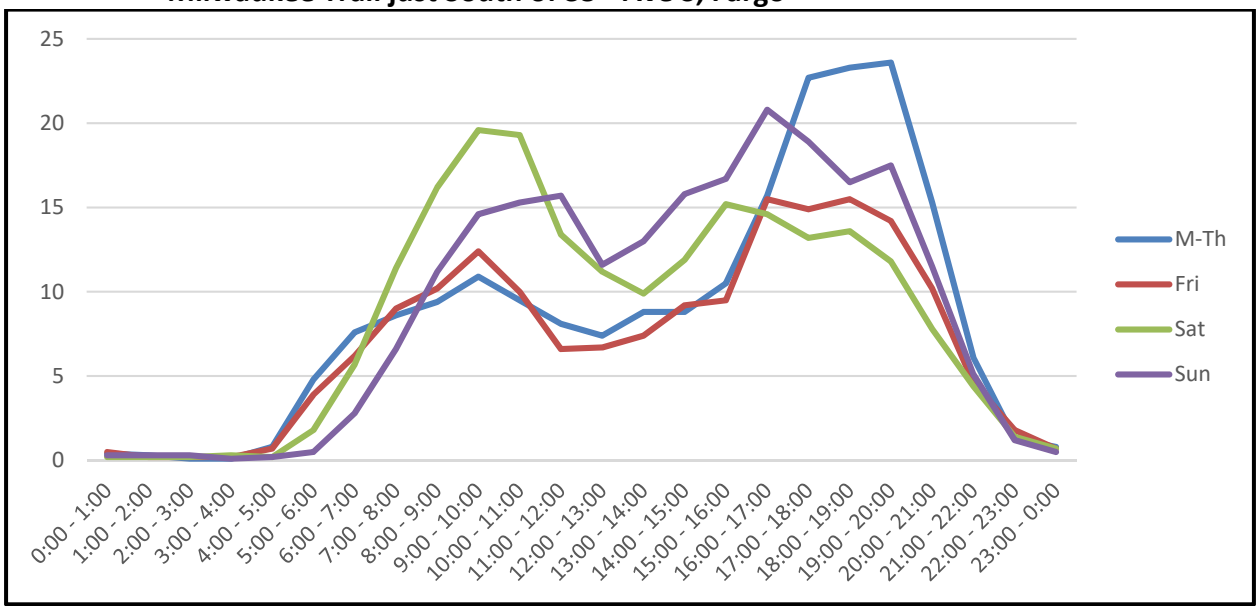


Figure 2.11 – 2015 Hourly Automated Bicycle/Pedestrian Counter Data
Milwaukee Trail just South of 35th Ave S, Fargo



2.9 Bicycle and Pedestrian Crashes

Bicycling and walking are generally considered safe modes of transportation. However, the results of bicycle and pedestrian crashes with motor vehicles can be serious incidents which often result in injuries. As a part of this plan, bicycle and pedestrian crash data were obtained from both NDDOT and MnDOT for a 5-year period (January 1, 2011 – December 31, 2015). A total of 101 pedestrian crashes and 145 bicycle-related crashes occurred within the Fargo-Moorhead area during this time period.

Pedestrian Crashes

Statistics from the 5-years of pedestrian crash data are summarized in Table 2.9.

Table 2.9 – Pedestrian Crash Data (2011 – 2015)

Crash Characteristic	Cass County*		Clay County**	
	No. of Crashes	%	No. of Crashes	%
Crash Severity				
No Injury	0	0%	2	7%
Possible Injury	33	46%	12	41%
Injury	37	52%	15	52%
Fatality	2	3%	0	0%
Year				
2011	21	29%	5	17%
2012	10	14%	3	10%
2013	13	18%	6	21%
2014	15	21%	4	14%
2015	13	18%	11	38%
Junction				
Intersection	35	49%	16	64%
Non-intersection	37	51%	9	36%
Time of Day				
Day	43	60%	15	52%
Night	21	29%	12	41%
Dawn	0	0%	2	7%
Dusk	8	11%	0	0%

* Cass Co data only includes crashes within jurisdictions of Fargo, West Fargo, and Horace

** Clay Co data includes all crashes within Metro COG's planning boundary

Source: NDDOT, MnDOT

After reviewing Table 2.9 we can see that most crashes involving pedestrians occurred during daytime hours. It is also important to note that the vast majority of crashes involving pedestrians resulted in some form of injury. Two pedestrian crashes involving fatalities were recorded between 2011 and 2015. One crash occurred in 2011 during the day while the other occurred in 2012 at night.

Another table, Table 2.10 shows a comparison of pedestrian crash injury rates between the two counties and national statistics.

Table 2.10 – Pedestrian Crash Injury Rate Comparison

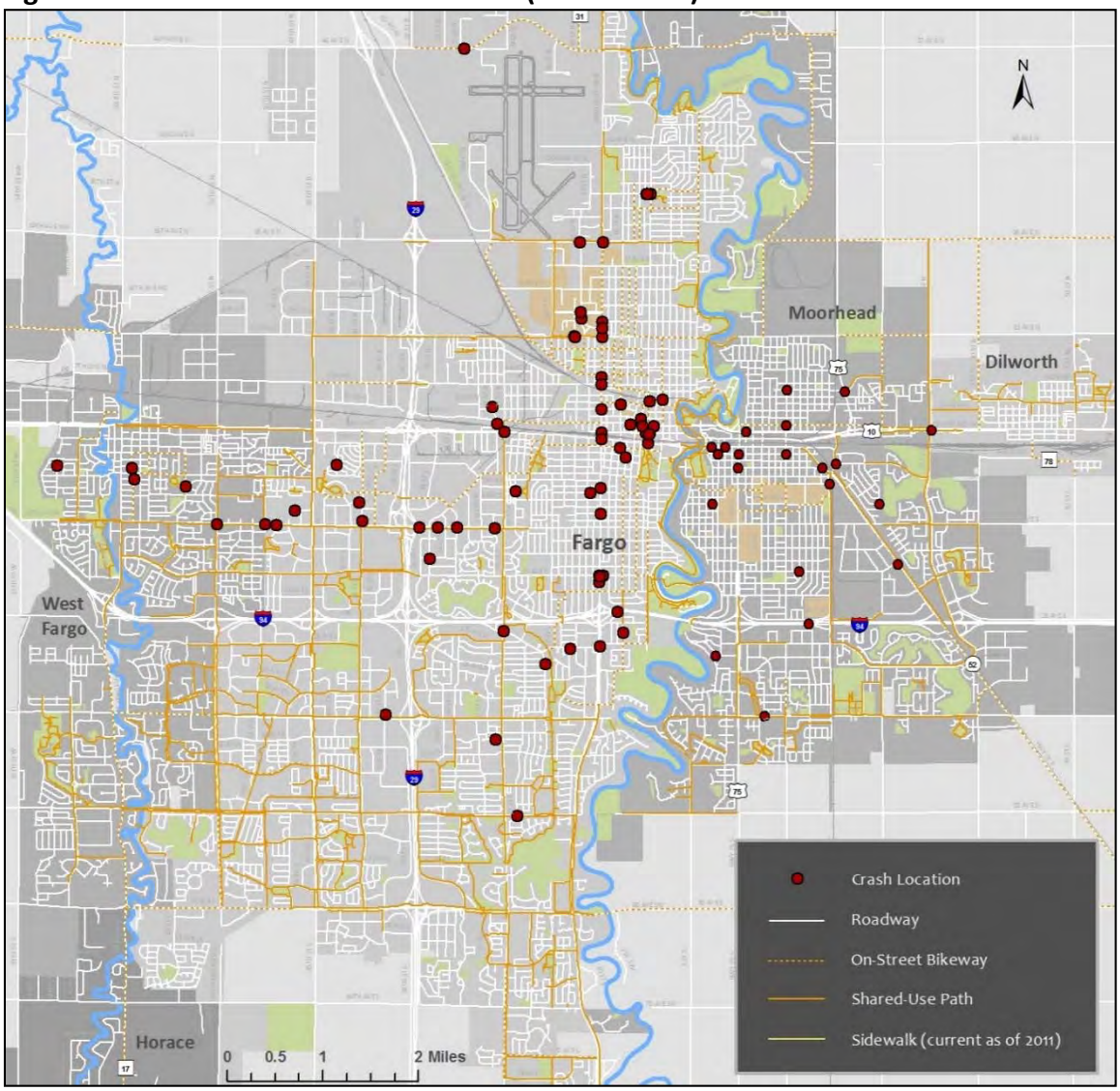
Study Area	Injury Rate*
Cass County average yearly injury rate (2011-2015)	10
Clay County average yearly injury rate (2011-2015)	9
National yearly injury rate (2013)	21
*Per 100,000 population	

Source: NDDOT, MnDOT, NHTSA Report No. DOT HS 812 124

After reviewing the above table, it can be seen that the pedestrian injury rates are comparable between Cass and Clay Counties. However, the local crash rates are shown to be only half the national average. It is unknown the reason for the difference in injury rate between local crashes and the national average.

The map below displays the locations of the pedestrian crashes.

Figure 2.12 – Pedestrian Crash Locations (2011 – 2015)



When looking at the map above, crash areas can be seen. It is important to note that areas with higher number of pedestrians often result in higher number of crashes. For example, downtowns, school areas, and college campuses tend to have a higher number of pedestrians so crash numbers tend to be higher at these locations. However, this plan makes note of locations with a history of crashes to ensure that safety improvements are not overlooked.

Below is a list of locations that this plan has identified as having multiple crashes between 2011 and 2015:

- **Intersection of 17th Ave S & University Dr, Fargo** – two pedestrian crashes were reported at the intersection of 17th Ave S & University Dr. Both crashes occurred in daylight under normal weather and surface conditions. However, alcohol was reported as a factor in one of the crashes. In addition to these two crashes one crash was reported just east of the intersection which occurred during the daytime with possible icy conditions as a factor.
- **600 block of 28th Ave N, Fargo** – Three crashes involving pedestrians were reported on the 600 block of 28th Ave N in Fargo. Of the crashes, two occurred under dark conditions. Also, alcohol may have been a contributing factor in one of the crashes and weather may have been a contributing factor in two of the crashes.
- **Intersection of 12th Ave N & Bolley Dr (NDSU)** – two pedestrian crashes were reported at the intersection of 12th Ave N & Bolley Dr located on the NDSU campus. One crash occurred under dark conditions while the other occurred in the daytime. Weather may have been a contributing factor in both crashes.
- **University Dr between 13th Ave N & 12th Ave N, Fargo** – a total of four pedestrian crashes were reported on University Dr between 13th Ave N & 12th Ave N. All crashes were intersection-related with two of the crashes located at the intersection of University Dr. & 12th Ave N. Three of the four crashes occurred under daylight conditions and two of the crashes may have been weather-related. Alcohol was not a factor in any of the crashes.
- **Downtown Fargo** – A total of 18 crashes involving pedestrians occurred in the defined downtown neighborhood of Fargo. Of these crashes, six were reported as alcohol-related. Also, of these crashes, two locations had multiple crashes. These locations are the following:
    - **NP Ave & Broadway** – This intersection reported two crashes. Both occurred during dark conditions. One crash involved alcohol and weather could have been a factor in the other crash.
    - **University Dr & Main Ave** – This intersection reported two crashes. Both occurred during the daytime and weather could have been a contributing factor in one of the crashes.
- **Downtown Moorhead** – A total of eight crashes occurred in the downtown Moorhead area. Of these crashes alcohol was not reported as a factor in only one of the crashes. Also, of these crashes, one location had multiple crashes. The intersection of
    - **Main Ave & 4th St** – This intersection reported two crashes. Both occurred during daylight hours under normal weather/surface conditions.
    - **Main Ave & 6th St** – This intersection reported two crashes. One occurred under dark conditions and was reported in include alcohol. The other crash occurred during daylight hours under normal weather/surface conditions.
    - **2rd Ave S & 8th St** – This intersection reported two crashes. Both occurred during daylight hours under normal weather/surface conditions.
- **Intersection of US 10 & 34th St, Moorhead/Dilworth** – this intersection reported two crashes. Both occurred during daylight hours under normal weather/surface conditions.

Bicycle Crashes

Statistics from the 5-years of bicycle crash data are summarized in Table 2.11.

Table 2.11 – Bicycle Crash Data (2011 – 2015)

Crash Characteristic	Cass County*		Clay County**	
	No. of Crashes	%	No. of Crashes	%
Crash Severity				
No Injury	2	2%	2	7%
Possible Injury	57	49%	21	70%
Injury	56	49%	7	23%
Fatality	0	0%	0	0%
Year				
2011	23	20%	10	33%
2012	28	24%	4	13%
2013	18	16%	4	13%
2014	25	22%	5	17%
2015	21	18%	7	24%
Junction				
Intersection	93	81%	23	88%
Non-intersection	22	19%	3	12%
Time of Day				
Day	96	84%	27	91%
Night	14	12%	1	3%
Dawn	4	3%	1	3%
Dusk	1	1%	1	3%

* Cass Co data only includes crashes within jurisdictions of Fargo, West Fargo, and Horace

** Clay Co data includes all crashes within Metro COG's planning boundary

Source: NDDOT, MnDOT

After reviewing Table 2.11, we can see that the vast majority of crashes involving people on bicycles occurred during daytime hours. Also, as with the pedestrian crashes, the vast majority of crashes involving people bicycling resulted in some form of injury.

Another table, Table 2.12 shows a comparison of bicycle crash injury rates between the two counties and national statistics.

Table 2.12 – Bicycle Crash Injury Rate Comparison

Study Area	Injury Rate*
Cass County average yearly injury rate (2011-2015)	157
Clay County average yearly injury rate (2011-2015)	96
National yearly injury rate (2013)	152

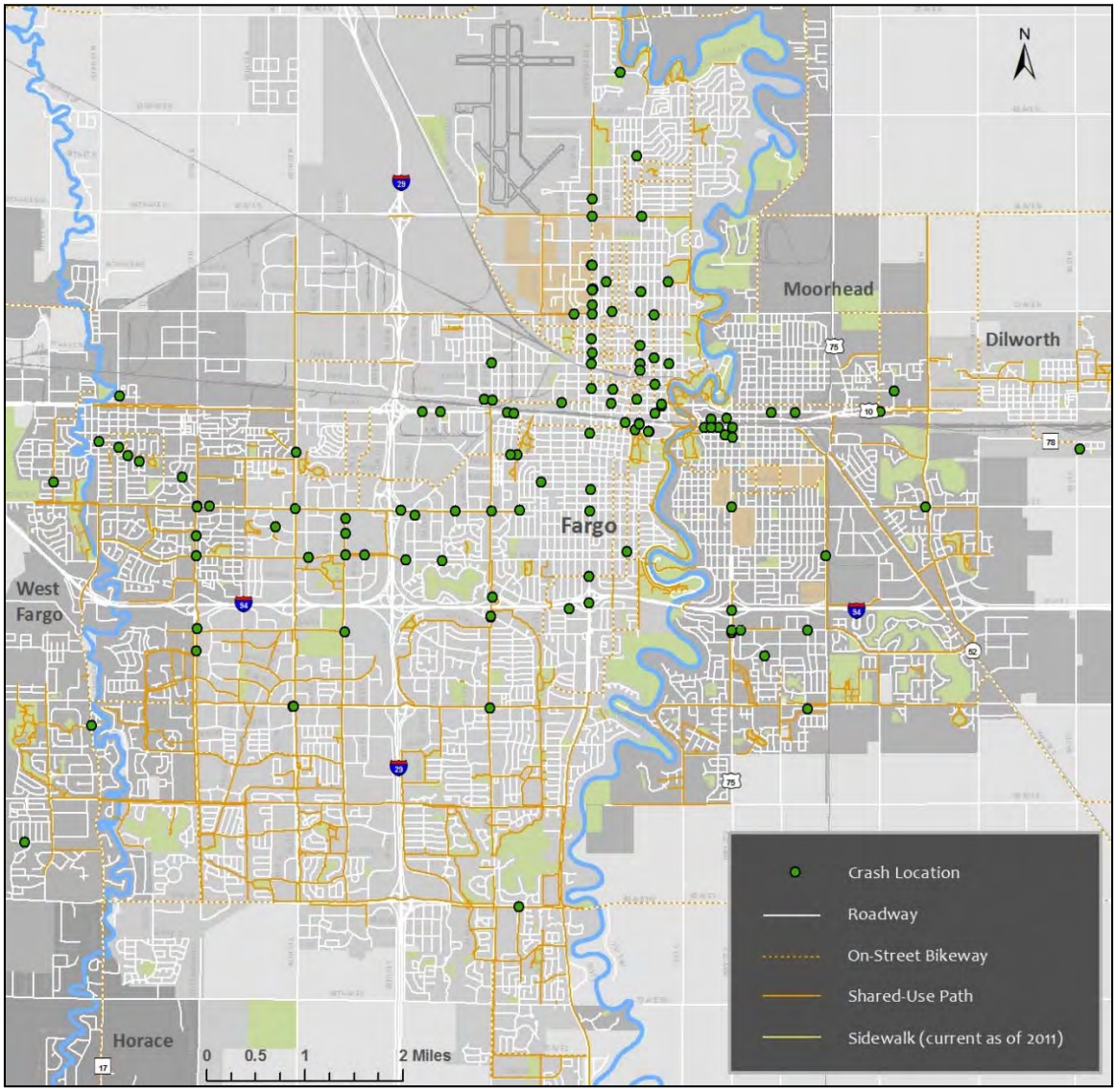
*Per 1,000,000 population

Source: NDDOT, MnDOT, NHTSA Report No. DOT HS 812 151

After reviewing the above table, it can be seen that the bicycle injury rates were noticeably higher in Cass County versus Clay County. Table 2.11 shows that 7% of reported crashes in Clay County resulted in non-injuries while only 2% of crashes in Cass County resulted in non-injuries. This would account for some of the injury rate difference between the counties however there are likely other reasons for the noticeable difference in injury rates. Clay County injury rates were found to be noticeably lower than the nation average while the Cass County injury rates were found to be slightly higher than the nation average of 152.

The map below displays the locations of the bicyclist crashes.

Figure 2.13 – Bicyclist Crash Locations (2011 – 2015)



When looking at the map above, crash areas can be seen. It is important to note that areas with higher number of bicycle users may result in higher number of crashes. However, this plan makes note of locations with a history of crashes to ensure that safety improvements are not overlooked.

Below is a list of locations that this Plan has identified as having multiple crashes between 2011 and 2015:

- **Intersection of 9th St E & 13th Ave E, West Fargo** – three crashes were recorded at the intersection of 9th St E & 13th Ave E. After reviewing the crash data, not enough detail is provided to make any conclusions into the cause of the crashes.
- **Intersection of 15th Ave N & University Dr, Fargo** – This intersection on the east end of the NDSU campus recorded three crashes involving people bicycling. All crashed occurred during daylight hours. Weather may have been a factor in two of the crashes.
- **Intersection of Centennial Blvd & University Dr, Fargo** – This intersection on the east end of the NDSU campus recorded a total of four bicycle crashes. All crashed occurred during daylight hours. Weather could have been a factor in two of the crashes.
- **N University Dr, Fargo** – A total of 12 bicycle crashes were reported on N University Dr. between 15th Ave N and 7th Ave N. 11 of the 12 crashes occurred during daylight hours and four crashes could have been weather-related.
- **Downtown Fargo** – A total of 21 crashes occurred in the defined downtown neighborhood of Fargo. Of these crashes, two crashes were alcohol-related. Also, of these crashes, four locations had multiple crashes. These locations are the following:
    - **1st Ave N & 2nd St** – This intersection reported two crashes. Both occurred during the daytime and were not weather-related.
    - **NP Ave & 4th St** – This intersection reported two crashes. Both occurred during the daytime and were not weather-related. One crash was alcohol-related.
    - **Main Ave & Broadway** – This intersection reported two crashes. Both occurred during the daytime and were not weather-related.
    - **1st Ave S near YMCA** – This location reported two crashes. Both occurred during the daytime and were not weather-related.
- **Downtown Moorhead** – A total of 11 crashes occurred in the downtown Moorhead area. Of these crashes alcohol was reported as a factor in one of the crashes. Also, of these crashes, three locations had multiple crashes. These locations were the following:
    - **Main Ave & 4th St** - This intersection reported two crashes. One occurred during the daytime and the other when it was dark. Also, one crash occurred with wet roadway conditions.
    - **Main Ave & 6th St** - This intersection reported two crashes. One occurred during the daytime and the other when it was dark. Alcohol was a factor in one of the crashes.
    - **Main Ave & 8th St** - This intersection reported two crashes. One occurred during the daytime and the other when it was dark. Also, one crash occurred with slushy roadway conditions.
- **Intersection of 8th St & 30th Ave S, Moorhead** – This intersection recorded two bicycle crashes. Both crashes took place during daylight hours and alcohol was not a factor in either crash. One crash occurred under normal surface conditions while the other reported possible icy conditions.

2.10 Bicycle and Pedestrian Signage

Existing Signage

Bicycle and pedestrian signage is rather limited in the Fargo-Moorhead area. Signage currently consists of downtown map displays, bicycle route signs, and share the road signs. Below is a description of bicycle and pedestrian signage in the area.

Table 2.13 – Bicycle & Pedestrian Signage

Signage Type	Photo	Location	Description
Pedestrian Signage			
Downtown Map Displays		Downtown Fargo	The City of Fargo has several downtown map displays for pedestrian wayfinding along Broadway in downtown Fargo.
Bicycle Signage			
Bicycle Route Signs		Fargo, Moorhead, West Fargo	Bicycle route signage is currently installed along signed shared roadways (Fargo, Moorhead, West Fargo), shared lane marking corridors (Fargo), and bike lane corridors (Fargo).
Share the Road Signs		Fargo, Moorhead	The City of Fargo uses Share The Road signs on some of its corridors with shared lane markings. Another way the City of Moorhead marks its signed shared roadways is by using Share The Road signs instead of bicycle route signs.

2016 Bicycle Wayfinding Signage Study

In early 2016 Metro COG completed the Bicycle Wayfinding Signage Study. The study identified routes for bicycle wayfinding along with locations for wayfinding kiosk maps. The study also identified locations for the wayfinding signs along the routes and provides recommended displays for the signs. The signs would provide direction arrows and distances to destinations. The study is available to view on Metro COG's website.

As of November 2016 no signage from the study had been implemented. However, the City of Fargo has expressed interest in installing signs in the near future.

Metro Trails Signage

In 2008, Metro COG in cooperation with the Metropolitan Bicycle and Pedestrian Committee, adopted a bikeway logo for the Fargo-Moorhead area. The purpose of the logo was to guide users along principle bikeways that offer circular continuity so that users never follow the logo to a dead end. In the past years there has been minimal discussion about implementing the Metro Trails signage.

2.11 Bicycle Parking

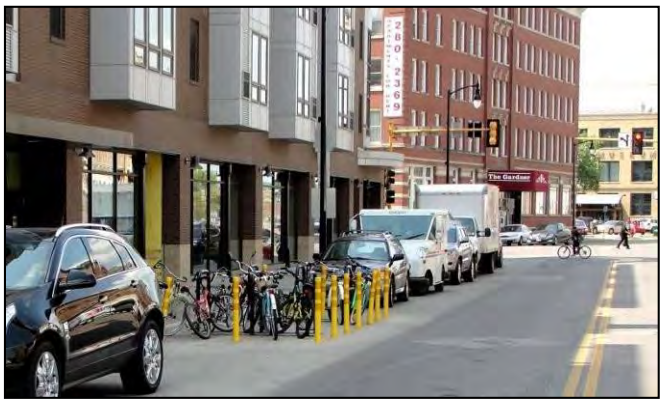
Bicycle parking is available throughout the Fargo-Moorhead area and is provided by both public and private entities. There are no known standards or regulations to bicycle parking in the area and parking is provided as deemed necessary by participating entities. The League of American Bicyclists encourages businesses and municipalities to install bicycle parking in accordance to guidelines set by the Association of Pedestrian and Bicycle Professionals (APBP).

In 2014, as part of the Bicycle Friendly Communities application, Metro COG completed an inventory of all visible bicycle parking in the Fargo-Moorhead area. Below is a table showing the inventory results.

Table 2.14 – 2014 Bicycle Parking Inventory

City	Total No. of Parking Spaces	Spaces that conform to APBP guidelines (%)
Fargo	4,720*	215* (5%)
Moorhead	3,330	1907 (57%)
West Fargo	485	0 (0%)
Dilworth	120	0 (0%)
Total	**8,655**	**2,122 (25%)**
*Of these spaces, 16 are bike lockers and 20 are on-street bicycle corrals, all located in downtown Fargo		

Bike lockers, downtown Fargo



Bike corrals, downtown Fargo

2.12 Enforcement / Ordinances

Various ordinances are in-place to ensure the safety of bicycle users, pedestrians and drivers as they share the transportation network together. Enforcement is also an important component to ensure the ordinances are within compliance. Currently enforcement of bicycle or pedestrian-related ordinances are often of low priority as other infractions tend to take precedence.

While there are a host of ordinances regarding bicycle operations, the ordinances regarding 'where to ride' are commonly of interest to the public. It should be known that people on bicycles have the legal right to use any roadway, however riding on Interstate Highways is illegal in most states. In Minnesota it is illegal to ride on the interstate, however in ND there are no ordinances prohibiting bicycling on the Interstate.

Regarding sidewalks, it is discouraged to ride a bike on the sidewalk however it is not prohibited on many local sidewalks. The table below summarizes the sidewalk bicycling ordinances for the local jurisdictions.

Table 2.15 – Sidewalk Biking Ordinances per Jurisdiction

Jurisdiction	Ordinance Summary
West Fargo	People bicycling are not allowed to ride on any sidewalk unless under the age of 12, supervising a rider under 12, or delivering newspapers. Also, people bicycling are not allowed to ride on the sidewalk of a business district or on a sidewalk if it is part of an underpass regardless of age (Ord. 13-1818)
Fargo	People bicycling are allowed to ride on sidewalks except for the sidewalks of Broadway between NP Ave and 6th Ave N in downtown Fargo (Ord. 8-1418-C)
Moorhead	People bicycling are allowed to ride on the sidewalk except when riding within a business district (MN Statute 169.222 subd. 4(d))
Dilworth	People bicycling are allowed to ride on the sidewalk except when riding within a business district (MN Statute 169.222 subd. 4(d))

Chapter 3: Plan Participation

3.1 Participation Overview

Development of the 2016 Fargo-Moorhead Metropolitan Bicycle and Pedestrian Plan was guided by a study review committee and included comprehensive public participation.

3.2 Study Review Committee

The purpose of the study review committee (SRC) was to guide the development of the Bicycle and Pedestrian Plan. With the expertise of the SRC members, the SRC was able to identify local bicycle/pedestrian needs and provide Plan recommendations.

The SRC included all members from the Fargo-Moorhead Metropolitan Bicycle & Pedestrian Committee and one additional member from the public. Below is a list of the SRC members.

Table 3.1 – Study Review Committee

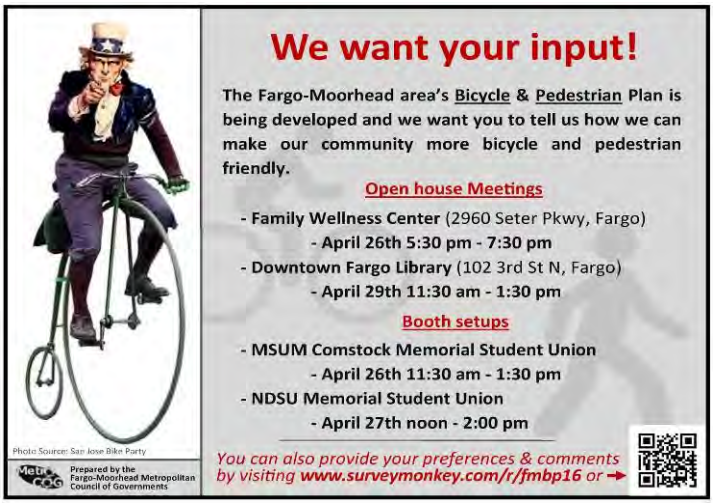
Name	Representing	Member of Metro Bicycle & Pedestrian Committee
Tim Solberg	City of West Fargo	Yes
Jeremy Gorden	City of Fargo Engineering	Yes
Maegin Elshaug	City of Fargo Planning	Yes
Vic Pellerano	Fargo Parks	Yes
Jonathan Atkins	City of Moorhead Engineering	Yes
Kristie Leshovsky	City of Moorhead Planning	Yes
Stan Thurlow	City of Dilworth	Yes
Hali Durand	Cass County	Yes
Erik Hove	Clay County	Yes
Bob Walton	NDDOT – Fargo District	Yes
Jane Butzer	MnDOT – District 4	Yes
Dep Chief Joe Anderson	Fargo Police	Yes
Kim Lipetzky	Cass County Public Health	Yes
Patrick Hollister	Clay County Public Health	Yes
Christine Holland	River Keepers	Yes
Brit Stevens	NDSU	Yes
Sara Watson Curry	Great Rides	Yes
Margaret Mowery	Citizen	Yes
Ruth Danuser	Citizen	Yes
Justin Kristan	ND Active Transportation Alliance	No

The SRC met four times during the development of the Plan. The SRC meetings were held on the following dates:

- March 30th, 2016
- July 20th, 2016
- October 31st, 2016
- December 7th, 2016 - held in conjunction with regular Bicycle & Pedestrian Committee meeting

3.3 Public Participation

During the early stages of the Plan's development, a series of public participation opportunities were provided. The goal of these opportunities were to reach out to as many members of the public as possible and reach out to as many demographic groups as possible. Therefore, public open houses were provided at a variety of locations at various times of day and other forms of public input was also available such as online surveys.



Flyer used to advertise public input opportunities

Public Open Houses / Booth Setups

Two public open houses and two booth setups were held the week of April 25 – 29, 2016. Below is a description of the events:

- **Public Open House – April 26th, 5:30 pm – 7:30 pm; Family Wellness Center, Fargo**
  The open house included informational posts, a public input map, 'gaps' map, handouts, and survey forms. This meeting was attended by over nine individuals
- **Public Open House – April 29th, 11:30 am – 1:30 pm; Downtown Fargo Public Library**
  The open house included informational posts, a public input map, 'gaps' map, handouts, and survey forms. This meeting was attended by over 27 individuals
- **Booth Setup – April 26th, 11:30 am – 1:30 pm; MSUM Comstock Memorial Student Union, Moorhead**
  A table was set up near a busy corridor of the MSUM Comstock Memorial Student Union. A few students and faculty that stopped by to discuss bicycle/pedestrian issues in the area and some surveys were completed. Survey cards were also handed-out to passing students encouraging them to take the online survey.
- **Booth Setup – April 27th, noon – 2:00 pm; NDSU Memorial Student Union, Fargo**
  A table was set up along a busy corridor at the NDSU Memorial Student Union. Over 70 survey cards were handed-out to passing students along with Metro COG's bikeways maps. Opportunities were available to discuss issues with interested students and some opted to take the survey at the table.

Surveys

Surveys were developed to gain an understanding of the public's habits, usage and preferences of the area's bicycle and pedestrian network. The surveys consisted of 19 questions with opportunity for comments at the end. Both paper surveys and online surveys were provided. In total 24 paper surveys were completed and 318 online surveys were submitted.

To get a better understanding of the demographic of survey participants, please refer to the graphs below. The results below combine both paper and online surveys.

Figure 3.1 – Survey Results - Age

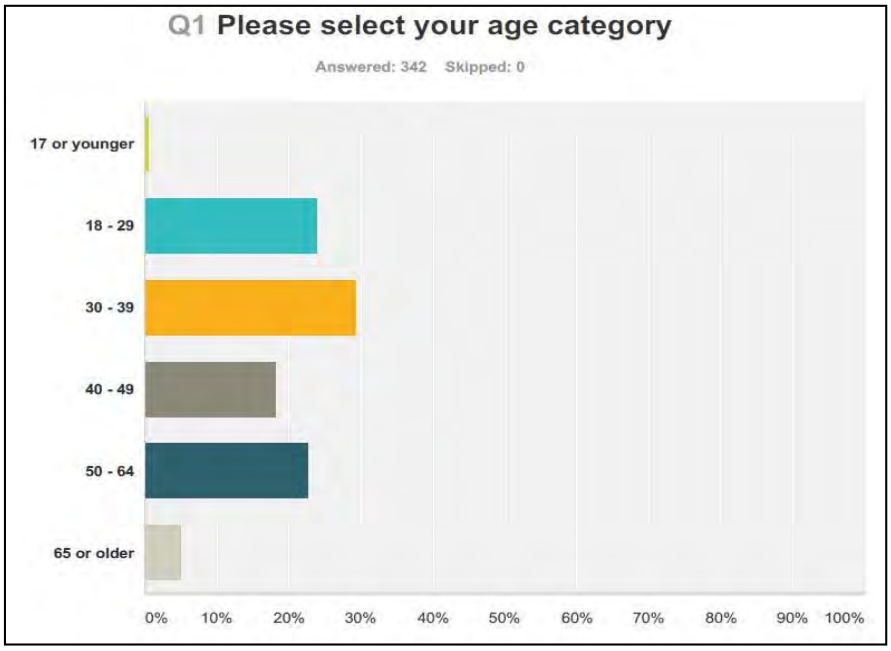


Figure 3.2 – Survey Results - Gender

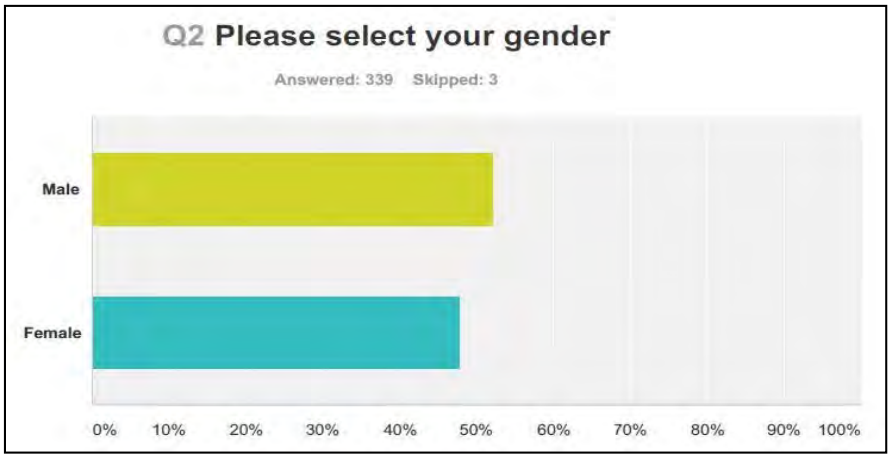


Figure 3.3 – Survey Results – Student Status

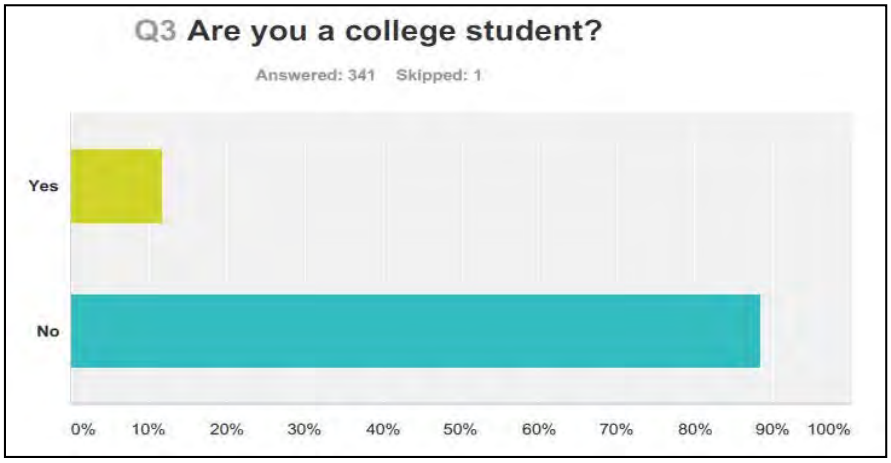


Figure 3.4 – Survey Results – City of Residence

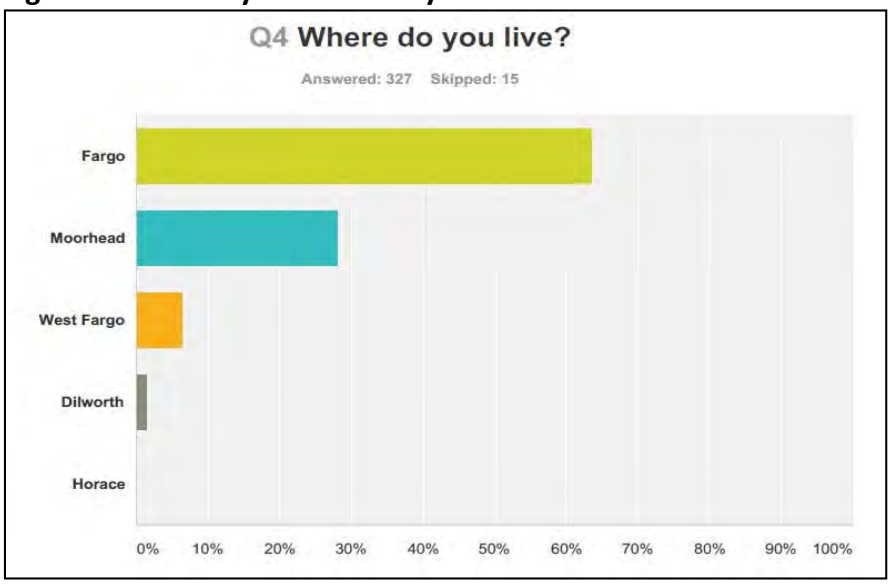


Figure 3.5 – Survey Results – Auto Ownership

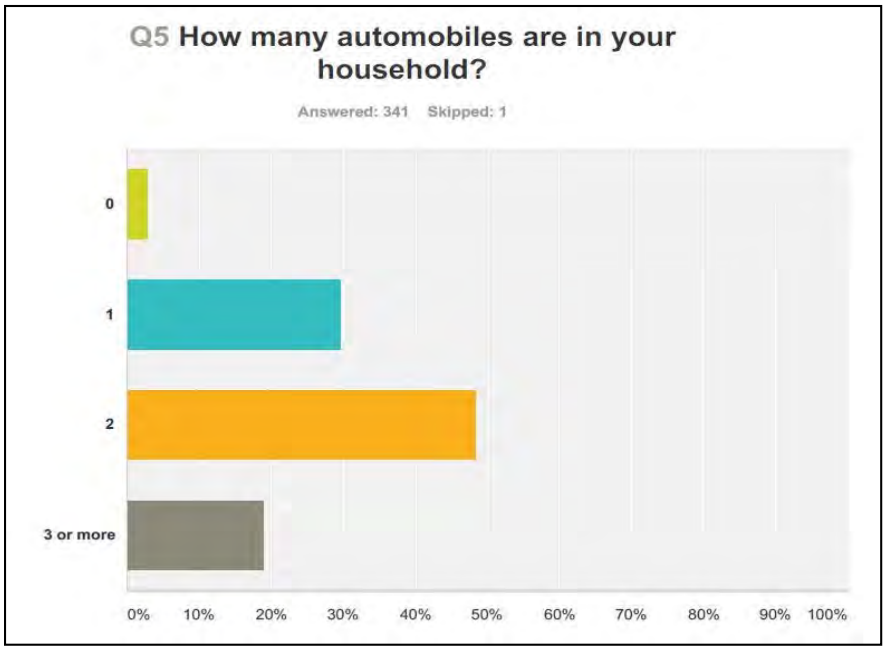
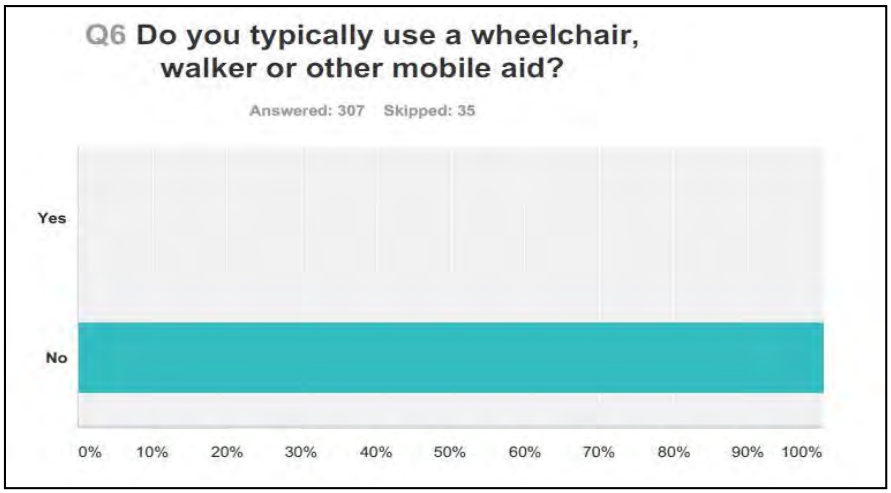


Figure 3.6 – Survey Results – Mobility



Senior and Disabled Population

After collecting the initial survey data, Metro COG found that few elderly and disabled individuals completed surveys. In an effort to gain more data from the senior and disabled population, Metro COG delivered cards to various retirement facilities in the area. The survey cards provided an online link for seniors to take the survey. It became apparent that few seniors chose to take the online survey, so Metro COG then delivered paper surveys to a retirement facility in Fargo, Touchmark Living Center. Metro COG collected the surveys eleven days later. Two surveys and one comment form were completed.

More results of the surveys are discussed in *Chapter 4 – Identification of Issues*. Also, full results, including all comments can be viewed in *Appendix A* of this report.

Chapter 4: Identification of Issues

4.1 Identification of Issues Overview

Issues with existing bicycle and pedestrian-related matters were identified under a two-phase approach. First input was gathered from the general public as described in *Chapter 3*, and next the study review committee weighed-in and provided their expertise regarding issues that affect bicycle and pedestrian travel in the Fargo-Moorhead area.

Puddle on path, south Fargo

Sidewalk without curb cut, Moorhead

4.2 Public Identification of Issues

With ample participation from the public, we were able to gauge which issues are of importance to the public.

Public Comments

A total of 166 comments were received from the public as part of this Plan's public participation efforts. A wide variety of issues were identified with this open-ended comment process. After analyzing all 166 comments, trends/themes could be identified. Below is a list of the most common comment topics that were identified.

Table 4.1 – Public Comment Topics

Rank	Issue	No. of Comments
1	Better driver education / driver awareness	31
2	Better connectivity	17
3	Better cyclist education	16
4	More bike lanes	14
5	More river trails	10
6	Improved pavement conditions (shared use paths)	9
7	Improved pavement conditions (roadways / bike lanes)	9
8	Better sweeping (roadways / bike lanes)	8
9	Distracted driving concerns	8
10	Improved signage / new signage	7
11	Intersection improvements	7
12	Sidewalk issues	6
13	More east-west routes	6

14	Better walkability / better urban design	6
15	A continuous trail (in-town)	5
16	Better enforcement – vehicles stopping improperly	5
17	Improved sidewalk conditions	4
18	More shared use paths	4
19	New Red River crossing(s)	4
20	More maps / better maps	4
21	New / revised laws	4

Several of the comments were specific to certain locations / jurisdictions. Below is a table showing the comments for each jurisdiction. It is not feasible to display each comment in the body of this report, however a number is provided which corresponds to each comment. Please refer to *Appendix A* to view the full comments.

Table 4.2 – Jurisdiction-Specific Comments

Jurisdiction	No. of Comments	Comment ID Numbers*
City of Fargo	24	6,8,11,13,22,30,32,34,35,40,41,59,73,94,98,101, 103,110,126,136,144,164,165,166
City of Moorhead	18	10,12,17,31,32,44,45,46,72,74,80,83,89,116,136, 139,165,166
City of West Fargo	6	6,7,25,30,49,110,
**Please refer to Appendix (Survey - Q21) to view full comments*		

Bicycle Network Gaps Exercise

At the public open houses, attendees were presented with an exercise which identified the current gaps in the bicycle network and were asked to note which gaps they felt were of high importance and medium importance for completion. The gaps were determined based on the 2011 Bicycle & Pedestrian Plan, Moorhead River Corridor Study, and this plan's Study Review Committee. A total of 21 individuals participated in this exercise. Locations of 'high importance' were given two points while locations of 'medium importance' were give one point. A cumulative score for each location was then developed. Below is a map showing the score per location. Also a table is provided below describing the top ten locations as scored.

This area left intentionally blank

Figure 4.1 – Bicycle Network Gaps Exercise Results

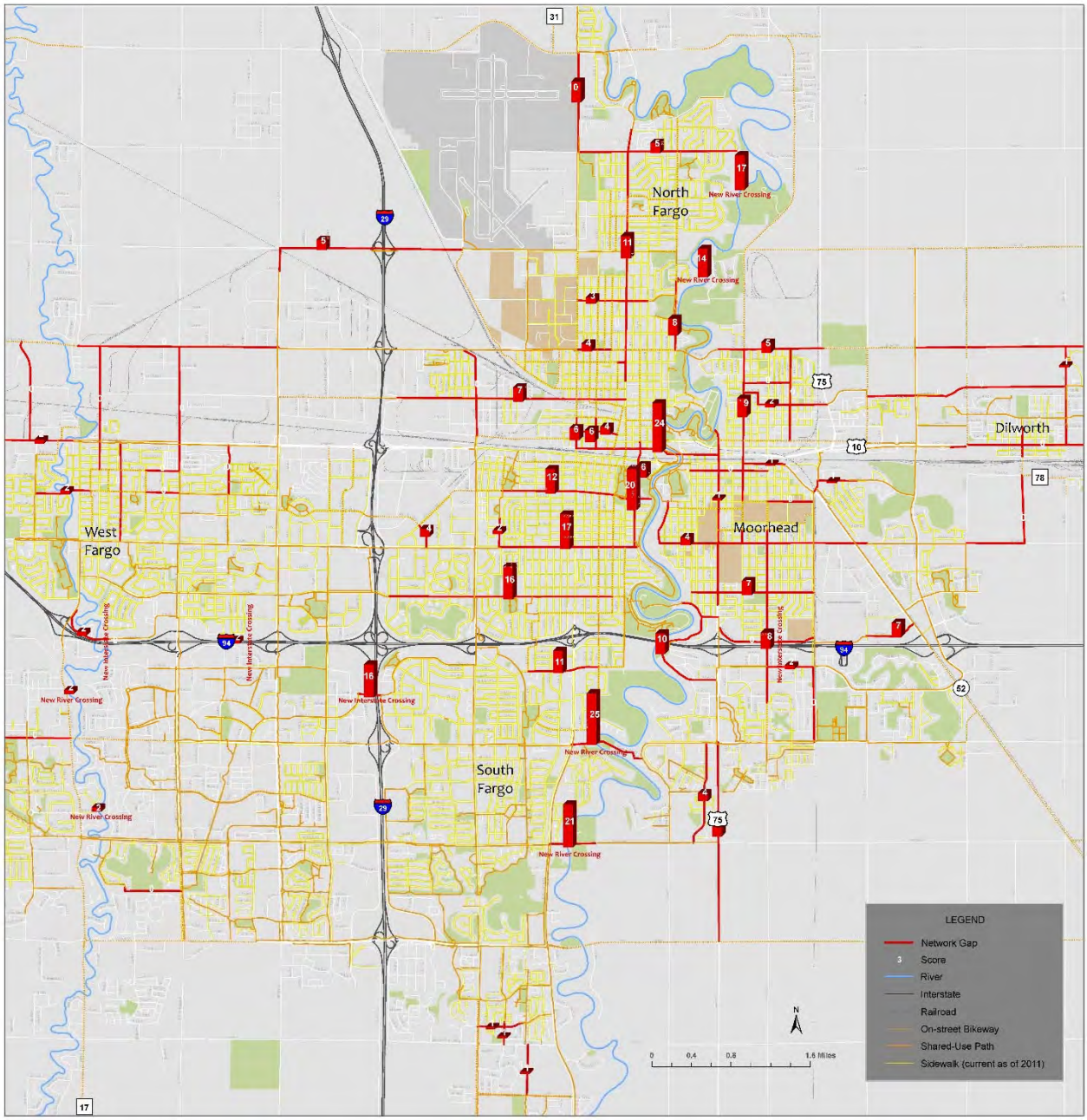


Table 4.3 – Bicycle Network Gap Exercise - Top Ten Locations

Rank	Location	Jurisdiction	Score
1	Red River Crossing at 32nd Ave S/River Oaks Park	Fargo/Moorhead	25
2	NP Avenue / Center Avenue between University Dr & Hwy 75	Fargo/Moorhead	24
3	Red River Crossing at 40th Ave S/Bluestem Park	Fargo/Moorhead	21
4	4th St between 1st Ave N & 13th Ave S	Fargo	20
5	Red River Crossing at North Fargo/MB Johnson Park	Fargo/Moorhead	17
5	13th Ave S between 21st St & Red River	Fargo	17
7	I-29 Crossing at 28th Ave S	Fargo	16
7	17th Ave S between 35th St & Lindenwood Park	Fargo	16
9	Red River Crossing at North Fargo/Moorhead Country Club	Fargo/Moorhead	14
10	5th Ave S between 21st St & Red River	Fargo	12

For more detailed results from the public participation process, please refer to *Appendices A & B*.

Chapter 5: Goals and Objectives

The goals within this plan are broad-based and non-specific and they respond to identified issues from *Chapter 4*. Specific strategy recommendations to help achieve the goals and objectives are identified in *Chapter 7*. The goals and objectives should also be used as a guidance tool when reviewing bicycle and pedestrian studies and projects within the Fargo-Moorhead area.

The goals and objectives described below have been organized to follow the six E's of planning. The six E's are the following:

- Engineering and Planning
- Education
- Encouragement
- Enforcement
- Evaluation
- Equity

5.1 Engineering and Planning

Goal 1 – Improve connectivity of the regional bicycle and pedestrian network

- ***Objective A –*** *Implement 50% or more of the proposed short range projects as identified in Chapter 7.*
- ***Objective B –*** *Implement additional bike lanes and/or separated bike lanes.*
- ***Objective C –*** *Implement additional miles of trails along the Red River.*
- ***Objective D –*** *Provide a network of bikeway guide signs per Metro COG's 2016 Bicycle Wayfinding Signage Study.*
- ***Objective E –*** *Provide map kiosks at key locations around the region per Metro COG's 2016 Bicycle Wayfinding Signage Study.*
- ***Objective F –*** *Implement recommendations from local plans (i.e. Moorhead River Corridor Study, Great Rides Moorhead Expansion Study, Bicycle Wayfinding Signage Study).*
- ***Objective G –*** *Continue to pursue efforts on Heartland Trail planning through Clay County via the Clay County Heartland Trail Task Force.*
- ***Objective H –*** *Ensure that local ordinances require the installation of sidewalks along all new streets. Encourage local jurisdictions to install sidewalks along existing streets where sidewalks are missing.*

Goal 2 – Continue / increase maintenance efforts on regional bicycle and pedestrian network

- ***Objective A –*** *Decrease the number of paths in 'poor' surface condition.*
- ***Objective B –*** *Increase frequency of street/bike lane sweeping.*

Goal 3 – Improve safety of the regional bicycle and pedestrian network

- ***Objective A –*** *Reduce the number of bicycle and pedestrian–related crashes by 10%.*
- ***Objective B –*** *Implement traffic calming measures at locations where pedestrian use is common or where high pedestrian use is anticipated.*

5.2 Education

Goal 4 – Educate motorists, pedestrians, and bicycle users regarding rules of the road, and safety

- ***Objective A –*** *Implement a bicycle safety education campaign and associated committee immediately after completion of this plan.*
- ***Objective B –*** *Continue to provide safety information in FM Bikeways Maps and increase number of distribution locations by 25% by 2020.*
- ***Objective C –*** *Maintain bikefm website and keep safety / rules of the road information effective, relevant, and up-to-date.*
- ***Objective D –*** *Continue the use of the Valley Bicycle Summit and ensure that the Summit occurs a minimum of two times per year.*
- ***Objective E –*** *Work with NDDOT and MnDOT in providing and promoting bicycle / pedestrian safety and rules of the road information. This can include information in driver education manuals, increased social media efforts, safety campaigns, and more.*
- ***Objective F –*** *Provide support and materials to any public safety agencies, advocacy groups or members of the public as it relates to bicycle / pedestrian safety and rules of the road information.*
- ***Objective G –*** *Work with local schools in assisting with bicycle education. Assist and promote safe routes to school activities and planning.*

5.3 Encouragement

Goal 5 – Promote bicycle and pedestrian modes of travel for both recreation and transportation purposes

- ***Objective A –*** *Continue to produce FM Bikeways Maps and increase number of distribution locations by 25% by 2020. Increase distribution of pdf FM Bikeways Maps to more agencies throughout the region. Implement a regional online map that could be used by the public's smartphones.*
- ***Objective B –*** *As designated by the League of American Bicyclists, apply for Bicycle Friendly Community status before current status expires. Increase Bicycle Friendly Community status from Bronze to Silver (or higher). Increase number of Bicycle Friendly Businesses and Universities.*
- ***Objective C –*** *Work with the state of North Dakota in developing a statewide bicycle and pedestrian plan.*
- ***Objective D –*** *Adopt standards for bicycle parking that conform to APBP guidelines. Increase the number of APBP-compliant parking spaces. Encourage bicycle parking in lieu of on-street parking.*
- ***Objective E –*** *Promote Bike Month and other events that promote bicycling and walking as modes of transportation (i.e. Streets Alive).*

Goal 6 – Improve bikeability/walkability within region

- ***Objective A –*** *Evaluate the need for Complete Streets on all roadway reconstruction projects per the Fargo-Moorhead Metropolitan Area Complete Streets Policy Statement.*
- ***Objective B –*** *Promote infill, increase density, and enhance urban design in order to encourage livability and more bicycle and pedestrian use.*
- ***Objective C –*** *Ensure that local ordinances require planting of boulevard trees along all new roadways to provide a desirable environment for pedestrians.*

5.4 Enforcement

Goal 7 – Encourage on-going enforcement of motorists, bicycle users and pedestrian laws so as to create a safer transportation network

- ***Objective A –*** *Encourage regular enforcement of school zone speed limits and crosswalk compliance.*
- ***Objective B –*** *Encourage regular enforcement of motor vehicle, bicycle and pedestrian laws.*
- ***Objective C –*** *Encourage increased enforcement of distracted driving violations.*

Goal 8 – Promote safety throughout the region's bicycle and pedestrian network

- ***Objective A –*** *Encourage use of law enforcement on bicycles to promote safety throughout the bicycle and pedestrian network and to act as an example of safe and legal riding etiquette.*
- ***Objective B –*** *Increase more law enforcement presence.*
- ***Objective C –*** *Encourage reporting of bicycle and pedestrian crashes.*

Goal 9 – Provide support for existing and proposed laws

- ***Objective A –*** *Provide support for existing laws as they pertain to bicycle and pedestrian safety.*

5.5 Evaluation

Goal 10 – Evaluate usage of regional bicycle and pedestrian network

- ***Objective A –*** *Continue to manually count bicycle and pedestrian traffic annually consistent with the Metro COG count program initiated in 2013.*
- ***Objective B –*** *Continue to count bicycle and pedestrian traffic with at least 6 automated counters which are capable of counting 24/7, 365 days a year. Implement more accurate counters in the future.*
- ***Objective C –*** *Continue to maintain bicycle/pedestrian crash information and evaluate crash trends as part of the 5-year Bicycle & Pedestrian Plan and address trends accordingly. Identify intersections and corridors with high crash rates and provide safety recommendations.*

5.6 Equity

Goal 11 – Ensure equal bicycle and pedestrian opportunities for all

- ***Objective A –*** *Ensure a network where equal bicycle and pedestrian accommodations are provided to all regardless of age, gender, race, social status, or mobility needs per Metro COG's Title VI policies.*

Chapter 6: Recommendations

Recommendations for this plan are based on both the issues identified as part of the public participation process and the goals and objectives of this plan which were developed by the Plan's Study Review Committee. The recommendations are prioritized based on determined need. The prioritized recommendations are as follows:

6.1 Priority 1 - Bicycle and Motorist Education

The identification of issues in this plan's public input process found that bicycle and motorist education was of paramount concern to the public. To address these concerns, recommended action items are as follows:

- **Bicycle Safety Education** - Implement a bicycle safety education campaign and associated committee immediately after completion of this plan. The focus of the campaign should be to provide bicycle safety education to as much of the cycling and driving public as possible. In November 2016, PartnerSHIP 4 Health in cooperation with Bike MN began a Local and Regional Education Network (LREN) in the Fargo-Moorhead Area. Metro COG and local jurisdictions are advised to become involved with this network and provide necessary support for these efforts. If the LREN program fails to continue in the future, Metro COG or another applicable agency should continue such a network/campaign.
- **FM Bikeways Maps** - Metro COG should continue to provide safety information in the FM Bikeways Maps and increase the number of distribution locations by 25%.
- **Bikefm.org website** - Metro COG should maintain bikefm.org website and keep safety / rules of the road information effective, relevant, and up-to-date. This website should be used to leverage any other safety and education-related information or events.
- **NDDOT Coordination** – Metro COG and local agencies should continue working with NDDOT in seeing if there are any opportunities to provide more educational materials in the NDDOT Driver's License Manual.

6.2 Priority 2 - Safety

Safety goes hand-in-hand with bicycle and motorist education. The need for improved safety is always of importance to both the public, Metro COG, and local jurisdictions. Below are the recommendations to help address bicycle and pedestrian safety:

- **Intersection Safety Improvements** – With over 50% of pedestrian crashes and over 80% of bicycle crashes occurring at intersections, local jurisdictions should consider feasible safety improvements at intersections which have a history of bicycle and pedestrian crashes (see Section 2.9 for detailed crash history information).
- **Law Enforcement** – Local jurisdictions should maintain and even increase enforcement efforts as they relate to school zone speed limits, crosswalk compliance, bicyclist infractions, and distracted driving.
- **State DOT Coordination** – Metro COG and local agencies should work with both MnDOT and NDDOT in the update of future bicycle and pedestrian plans. NDDOT is considering developing a new bicycle/pedestrian plan to update the most current plan completed in the mid-1990s.

6.3 Priority 3 - Bicycle and Pedestrian Network Improvements

The need for various improvements to the bicycle and pedestrian network were identified in many aspects as part of the public involvement process. These improvements ranged from better connectivity to more river trails, to more bike lanes.

Below is a list and corresponding maps of short-range and long-range network improvement projects. These project were prioritized based on public comments from the public input meetings. Please note that not all project were prioritized by the public so projects prioritized as 'N/A' do not indicate any lesser importance than any other project. It is also important to note that these projects are not fiscally-constrained.

Table 6.1 – Proposed Projects – West Fargo

ID	Jurisdiction	Project Location	Project Range	Public Votes	Project Description
56	West Fargo	12th Ave NE - CR 17 to 9th St	Short Range	0	Construct shared use path
62	West Fargo	Path over Drain 45 - Main Ave to 13th Ave	Short Range	0	Construct shared use path
93	West Fargo	Sheyenne St - Christianson Dr to 52nd Ave	Short Range	N/A	Construct shared use path (per Sheyenne St Corridor Study)
98	West Fargo	8th St W - 2nd Ave W to Main Ave	Short Range	N/A	Construct shared use path
99	West Fargo	17th Ave E to Sheyenne St (Charleswood Area)	Short Range	N/A	Construct shared use path & river bridge
103	West Fargo	9th St W to 11th St W (Wilds Area)	Short Range	N/A	Construct shared use path & river bridge
105	Fargo/West Fargo	52nd Ave S - Sheyenne St to 47th St	Short Range	N/A	Construct shared use path
114	West Fargo	Sheyenne St – 13th Ave to 7th Ave	Short Range	N/A	Construct separated bike lanes (per Sheyenne St Corridor Study)
115	West Fargo	7th Ave E – Sheyenne St to 1st St	Short Range	N/A	Install sharrows (per Sheyenne St Corridor Study)
116	West Fargo	Sheyenne St – 7th Ave to Main Ave	Short Range	N/A	Install bike lane (7th Ave to 6th Ave) Install sharrows (6th Ave to 1st Ave) Construct shared use path (1st Ave to Main Ave) (per Sheyenne St Corridor Study)
61	West Fargo	7th Ave - 8th St W to Sukuts St	Long Range	2	Shared use path, bike lanes, sharrows or signed roadway
66	West Fargo	Beaton Dr - Sheyenne St to 0.6 mi East	Long Range	2	Construct shared use path
57	West Fargo/Fargo	9th St NE - 19th Ave N to 4th Ave E	Long Range	0	Construct shared use path
58	West Fargo	Center St - 12th Ave NE to Main Ave	Long Range	0	Construct shared use path
63	West Fargo	4th Ave E - 6th St to 9th St	Long Range	0	Bike lanes, sharrows, or signed roadway
64	West Fargo	7th Ave E - 6th St to 9th St	Long Range	0	Bike lanes, sharrows, or signed roadway
59	West Fargo	2nd Ave W at Sheyenne River	Long Range	N/A	Construct bridge over Sheyenne River
65	West Fargo	Sheyenne St to Armour Park	Long Range	N/A	Construct bridge over Sheyenne River
71	West Fargo/Horace/ Cass County	CR 17 - 40th Ave S to 100th Ave S	Long Range	N/A	Construct shared use path
72	West Fargo/Horace/ Cass County	Horace Diversion - 21st Ave W/Sheyenne St to 100th Ave S	Long Range	N/A	Construct shared use path

102	West Fargo	23rd Ave E to Sheyenne St	Long Range	N/A	Construct shared use path & river bridge
104	West Fargo	52nd Ave W - Horace Diversion to Sheyenne St	Long Range	N/A	Construct shared use path
117	West Fargo	Sheyenne St – 7th Ave to Main Ave	Long Range	N/A	Construct separated bike lanes (per Sheyenne St Corridor Study)

Table 6.2 – Proposed Projects - Fargo

ID	Jurisdiction	Project Location	Project Range	Public Votes	Project Description
50	Fargo/Moorhead	NP Ave - 10th St to Red River Center Ave - Red River to 11th St	Short Range	24	Separated bike lanes or bike lanes
26	Fargo	4th St - 2nd St S to 1st Ave N	Short Range	20	Bike lanes
2	Fargo	University Dr - CR 20 to 32nd Ave N	Short Range	10	Construct shared use path
55	Fargo	7th Ave N - University Dr to 2nd St	Short Range	7	Bike lanes, sharrows, or signed roadway
49	Fargo	2nd St - Island Park to Dike East Park	Short Range	6	Construct shared use path
1	Fargo	32nd Ave N - University Dr to Eagle St	Short Range	5	Signed roadway
113	Fargo	19th Ave N - 45th St to I-29 45th St - 19th Ave N to 16th Ave N	Short Range	5	Construct shared use path
97	Fargo	19th Ave N - I-29 to Dakota Dr	Short Range	5	Construct shared use path
39	Fargo	Path - 64th Ave S to 70th Ave S	Short Range	1	Construct shared use path
40	Fargo	21st St S - 58th Ave S to 64th Ave S	Short Range	1	Construct shared use path
41	Fargo	62nd Ave S - 25th St to 18th St	Short Range	1	Construct shared use path
74	Fargo/Cass County	CR 81 - 19th Ave N to Harwood	Short Range	N/A	Share-the-road signs
7	Fargo	Path - Broadway to University Dr Path - around new (Ponyland) development	Short Range	N/A	Construct shared use paths
44	Fargo	5th St - 13th Ave S to Island Park	Short Range	N/A	Sharrows - 13th Ave to 7th Ave S Construct shared use path - 7th Ave S to Island Park
83	Fargo	38th St - 56th Ave S to 64th Ave S	Short Range	N/A	Construct shared use path
84	Fargo	64th Ave - 25th St to 45th St	Short Range	N/A	Construct shared use path and/or bike lanes
86	Fargo	45th St - 52nd Ave S to 64th Ave S	Short Range	N/A	Construct shared use path
87	Fargo	Path along Drain - 52nd Ave S to 55th Ave S	Short Range	N/A	Construct shared use path
53	Fargo/Moorhead	Oak Grove/Memorial Park Bike/Ped Bridge	Short Range	N/A	Replace existing lift bridge with new automated lift bridge
105	Fargo/West Fargo	52nd Ave S - Sheyenne St to 47th St	Short Range	N/A	Construct shared use path
106	Fargo	Path - 42nd St to 38th St	Short Range	N/A	Construct shared use path
4	Fargo/Moorhead	Red River at 40th Ave S	Long Range	21	Construct new bike/ped bridge
47	Fargo	4th St - 2nd St S to 13st Ave S	Long Range	20	Bike lanes or sharrows
45	Fargo	13th Ave S - 21st St to 4th St	Long Range	17	Shared use path, bike lanes, sharrows or signed roadway
6	Fargo	28th Ave S at I-29	Long Range	16	Construct underpass/overpass. Construct shared use path
43	Fargo	17th Ave S - 35th St to 5th St	Long Range	16	Shared use path, bike lanes, sharrows or signed roadway

48	Fargo	5th Ave S - 21st St to 4th St	Long Range	12	Bike lanes, sharrows, or signed roadway
42	Fargo	24th Ave S - Milwaukee Trail to 9th St	Long Range	11	Sharrows
77	Fargo	Broadway - 15th Ave N to 8th Ave N	Long Range	11	Bike lanes, sharrows, or signed roadway
11	Fargo	Elm St - 12th Ave N to Woodlawn Dr	Long Range	8	Sharrows
54	Fargo	7th Ave N - 36th St to University Dr	Long Range	7	Bike lanes, sharrows, or signed roadway
51	Fargo	University Dr - 4th Ave N to NP Ave	Long Range	6	Bike lanes
52	Fargo	10th St - 4th Ave N to NP Ave	Long Range	6	Bike lanes
12	Fargo	12th Ave N - University Dr to 8th St	Long Range	4	Construct shared use path
9	Fargo	15th Ave N - University Dr to 3rd St	Long Range	3	Bike lanes, sharrows, or signed roadway
46	Fargo	Path - 9th Ave S to 13th Ave S	Long Range	2	Construct shared use path
57	Fargo/West Fargo	9th St - 19th Ave N to 4th Ave E	Long Range	0	Construct shared use path
3	Fargo	19th Ave N - 9th St to 45th St	Long Range	N/A	Construct shared use path
8	Fargo	River Path - Lemke Park to 40th Ave S	Long Range	N/A	Construct shared use path
10	Fargo	River Path - 32nd Ave N to 16th Ave N	Long Range	N/A	Construct shared use path
74	Fargo/Cass County	CR 81 - 19th Ave N to Harwood	Long Range	N/A	Construct paved shoulders (4ft +)
75	Fargo	Path - Airport Park to Pepsi Soccer Complex	Long Range	N/A	Construct shared use path
76	Fargo	Path - Broadway to Edgewood Golf Course	Long Range	N/A	Construct shared use path
81	Fargo	76th Ave S - 25th St to Univeristy Dr	Long Range	N/A	Construct shared use path
82	Fargo	Path along Drain - 64th Ave S to 76th Ave S	Long Range	N/A	Construct shared use path
85	Fargo	38th St - 64th Ave S to 70th Ave S	Long Range	N/A	Construct shared use path
89	Fargo	Path - 64th Ave S to 76th Ave S	Long Range	N/A	Construct shared use path
88	Fargo/Horace	Path along Drain - 55th Ave S to 70th Ave S	Long Range	N/A	Construct shared use path
90	Fargo/Horace	76th Ave S - CR 17 to 45th St	Long Range	N/A	Construct shared use path
91	Fargo/Horace	70th Ave S - Drain to 38th St	Long Range	N/A	Construct shared use path
92	Fargo/Horace	64th Ave S - CR 17 to 45th St	Long Range	N/A	Construct shared use path
80	Fargo/Moorhead	Red River - midtown floating bridge	Long Range	N/A	Replace existing floating bridge with more permanent bridge
57	Fargo/West Fargo	9th St - 19th Ave N to 4th Ave E	Long Range	0	Construct shared use path

Table 6.3 – Proposed Projects - Moorhead

ID	Jurisdiction	Project Location	Project Range	Public Votes	Project Description
50	Fargo/Moorhead	NP Ave - 10th St to Red River Center Ave - Red River to 11th St	Short Range	24	Separated bike lanes or bike lanes
30	Moorhead	River Path - Gooseberry Park to 32nd Ave S Rivershore Dr/4th St - 32nd Ave S to 40th Ave S	Short Range	10	Construct shared use path Bike lanes, sharrows or signed roadway
15	Moorhead / Clay County	11th St - 6th Ave S to 15th Ave N	Short Range	9	Bike lanes, sharrows, or signed roadway
29	Moorhead	20th Ave S - Red River to 20th St	Short Range	7	Bike lanes, sharrows, or signed roadway
34	Moorhead	27th Ave S - 26th St to SE Main Ave	Short Range	7	Bike lanes, sharrows, or signed roadway
14	Moorhead/ MnDOT	15th Ave N - 9th St to 700 ft east of US 75 Intersection US 75 & 15th Ave N	Short Range	5	Shared use path, bike lanes, sharrows or signed roadway New signal, crosswalk/trail crossing
36	Moorhead	6th St - 40th Ave S to 50th Ave S	Short Range	4	Sharrows, or signed roadway
38	Moorhead	12th Ave S - Red River to 20th St	Short Range	4	Bike lanes, sharrows, or signed roadway
28	Moorhead	7th St - Red River to Center Ave	Short Range	1	Bike lanes - Red River to 1st Ave N Sharrows - 1st Ave N to Center Ave
25	Moorhead	6th Ave S - 14th St to 20th St	Short Range	0	Bike lanes, sharrows, or signed roadway
23	Moorhead	45th St - 4th Ave S to 0.4 mi S of 12th Ave S	Short Range	0	Construct shared use path
78	Moorhead	River path - 4th Ave N to 11th Ave N Residential streets - 11th Ave N to 15th Ave N	Short Range	N/A	Construct shared use path Sharrows or signed roadway
31	Moorhead	24th Ave S - Rivershore Dr to 8th St	Short Range	N/A	Bike lanes, sharrows or signed roadway
33	Moorhead	14th St - 30th Ave S to 35th Ave S	Short Range	N/A	Bike lanes
22	Moorhead	12th Ave S - 40th St to 45th St	Short Range	N/A	Construct shared use path
111	Moorhead	28th St - US 10 to 15th Ave N	Short Range	N/A	Shared use path or bike lanes
53	Fargo/Moorhead	Oak Grove/Memorial Park Bike/Ped Bridge	Short Range	N/A	Replace existing lift bridge with new automated lift bridge
4	Fargo/Moorhead	Red River at 50th Ave S	Long Range	21	Construct new bike/ped bridge
37	Moorhead	US 75 - 40th Ave S to 50th Ave S	Long Range	7	Construct shared use path
16	Moorhead	8 1/2 Ave N / 7th Ave N - 11th St to US 75	Long Range	2	Bike lanes, sharrows, or signed roadway
24	Moorhead	4th Ave S - 21st St to Rensvold Blvd	Long Range	1	Construct shared use path
13	Moorhead	17th St - 2nd Ave N to 15th Ave N	Long Range	0	Protected bike lanes, bike lanes, sharrows or signed roadway
23	Moorhead	45th St - 4th Ave S to 0.4 mi S of 12th Ave S	Long Range	0	Construct shared use path
27	Moorhead	2nd Ave S - Woodlawn Park to 6th St	Long Range	0	Bike lanes, sharrows, or signed roadway
17	Moorhead	8th Ave N - 28th St to 34th St	Long Range	0	Construct shared use path
15	Moorhead / MnDOT	11th St - 1st Ave N to Main Ave	Long Range	N/A	Underpass under RR Tracks (Prosper Line and KO Line)
18	Moorhead	River Path - 6th Ave S to Gooseberry Park	Long Range	N/A	Construct shared use path

32	Moorhead	14th St - 10th Ave S to 28th Ave S	Long Range	N/A	Bike lanes, sharrows, or signed roadway
35	Moorhead	11th St - 10th Ave S to 24th Ave S	Long Range	N/A	Bike lanes, sharrows, or signed roadway
79	Moorhead	24th Ave S – 11th St to 20th St	Long Range	N/A	Bike lanes, sharrows, or signed roadway
112	Moorhead	6th St – 24th Ave S to Center Ave (through Concordia campus)	Long Range	N/A	Bike lanes, sharrows, or signed roadway. Shared use path through campus
80	Fargo/Moorhead	Red River – midtown floating bridge	Long Range	N/A	Replace existing floating bridge with more permanent bridge

Table 6.4 – Proposed Projects - Dilworth

ID	Jurisdiction	Project Location	Project Range	Public Votes	Project Description
19	Dilworth	7th St NE - 8th Ave NE to 15th Ave NE	Short Range	1	Construct shared use path
94	Dilworth	7th St NE - US 10 to 3rd Ave NE	Short Range	1	Construct shared use path
20	Dilworth	Path - 34th St N to 7th St NE	Long Range	0	Construct shared use path
21	Dilworth	US 10 - W of 40th St to 12th St NE	Long Range	0	Construct shared use path
95	Dilworth	12th St NE - US 10 to 3rd Ave NE	Long Range	N/A	Construct shared use path

Table 6.5 – Proposed Projects – Cass County

ID	Jurisdiction	Project Location	Project Range	Public Votes	Project Description
60	Cass County	CR 10 - ND Hwy 18 to CR 11	Short Range	N/A	Construct paved shoulders (4ft +)
70	Mapleton	1st St - CR 11 to ball diamond	Short Range	N/A	Construct shared use path
74	Fargo/Cass County	CR 81 - 19th Ave N to Harwood	Short Range	N/A	Share-the-road signs
74	Fargo/Cass County	CR 81 - 19th Ave N to Harwood	Long Range	N/A	Construct paved shoulders (4ft +)
73	Cass County	CR 81 - Harwood to Argusville	Long Range	N/A	Construct paved shoulders (4ft +)
68	Casselton	Tinta Tawa Park to Langer Ave	Long Range	N/A	Construct shared use path
69	Casselton/NDDOT	Langer Ave (Hwy 18) - 3rd Ave NW to 37th St SE	Long Range	N/A	Construct shared use path
71	West Fargo/Horace/ Cass County	CR 17 - 40th Ave S to 100th Ave S	Long Range	N/A	Construct shared use path
67	Mapleton	Intersection of Main St/CR 11 to ball diamond	Long Range	N/A	Construct shared use path
72	West Fargo/Horace/ Cass County	Horace Diversion - 21st Ave W/Sheyenne St to 100th Ave S	Long Range	N/A	Construct shared use path
88	Fargo/Horace	Path along Drain - 55th Ave S to 70th Ave S	Long Range	N/A	Construct shared use path
90	Fargo/Horace	76th Ave S - CR 17 to 45th St	Long Range	N/A	Construct shared use path
91	Fargo/Horace	70th Ave S - Drain to 38th St	Long Range	N/A	Construct shared use path
92	Fargo/Horace	64th Ave S - CR 17 to 45th St	Long Range	N/A	Construct shared use path

Table 6.6 – Proposed Projects – Clay County

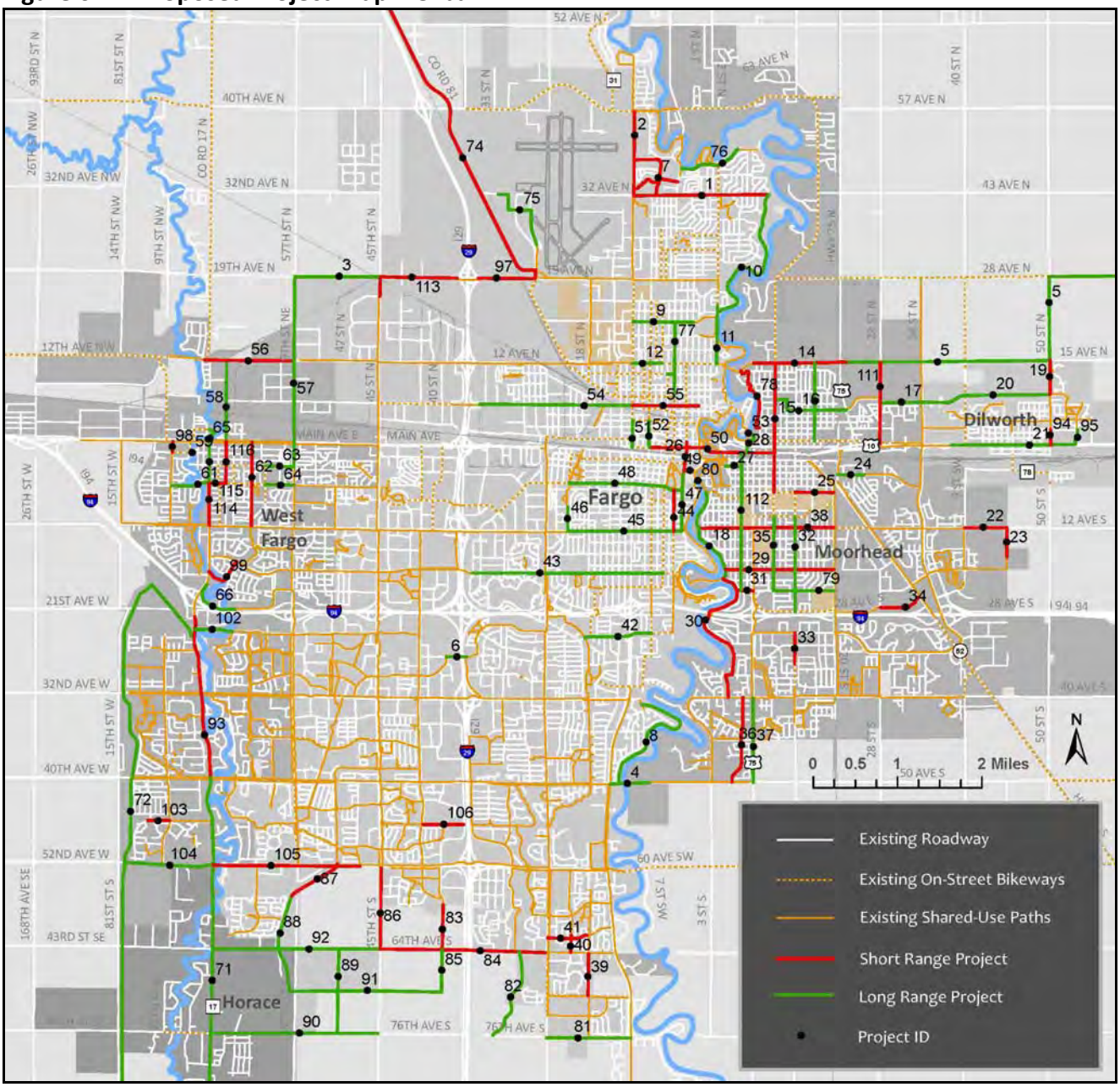
ID	Jurisdiction	Project Location	Project Range	Public Votes	Project Description
109	Barnesville	Hwy 34 - Front St to Blue Eagle Park	Short Range	N/A	Construct shared use path
96	Glyndon	Parke Ave - US 10 to 12th Ave S	Short Range	N/A	Construct shared use path
101	Hawley	Future Heartland Trail – US 10 to just N of Reno St.	Short Range	N/A	Construct shared use path (MN state trail)
107	Barnesville	Hwy 34 - Campground to Blue Eagle Park	Long Range	N/A	Construct shared use path
108	Barnesville	160th Ave S - 5th St NW to Front St	Long Range	N/A	Construct shared use path
5	Clay County	Future Heartland Trail – Moorhead to Hawley	Long Range	N/A	Construct shared use path (MN state trail)
118	Clay County	70th St S (Hwy 11) – I-94 to Sabin	Long Range	N/A	Construct paved shoulders (4ft +)
119	Clay County	60th Ave S (Hwy 12) – 80th St S to Hwy 17	Long Range	N/A	Pave roadway and include 4ft + paved shoulders

Table 6.7 – Proposed Projects – NDDOT

ID	Jurisdiction	Project Location	Project Range	Public Votes	Project Description
110	NDDOT	ND Hwy 46 - 163rd Ave SE to CR 81	Long Range	N/A	Construct paved shoulders (4ft +)
69	Casselton/NDDOT	Langer Ave (Hwy 18) - 3rd Ave NW to 37th St SE	Long Range	N/A	Construct shared use path

This area left intentionally blank

Figure 6.1 – Proposed Project Map – Urban



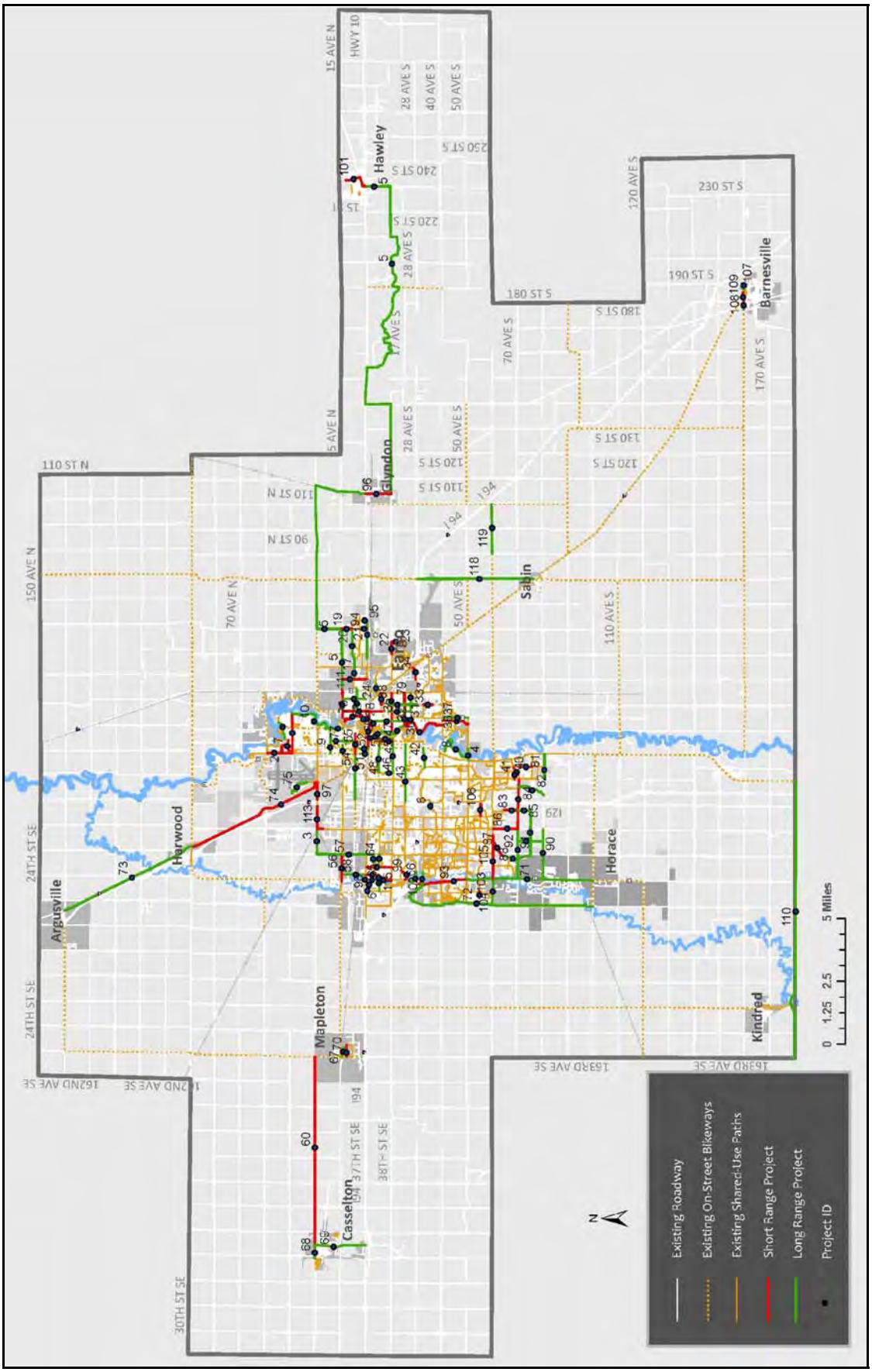


Figure 6.2 – Proposed Project Map - Rural

Figure 6.3 – Proposed Project Map – Casselton

Figure 6.4 – Proposed Project Map – Mapleton

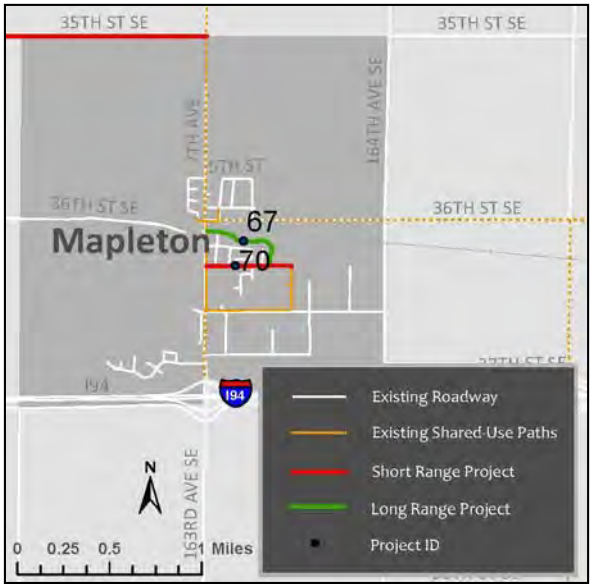


Figure 6.5 – Proposed Project Map – Hawley

Figure 6.6 – Proposed Project Map – Barnesville

- **Sidewalks** – If an ordinance does not already exist, local jurisdictions should adopt an ordinance requiring the installation of sidewalks on both sides of all new streets including col-de-sacs. Local jurisdictions should also make reasonable efforts to install sidewalks along existing streets where sidewalks are missing.
- **Implementation of Plans/Studies** – Local jurisdictions should implement recommendations from recent plans / studies. These plans include but are not limited to:
    - Moorhead River Corridor Master Plan (2014)
    - Bicycle Wayfinding Signage Study (2016)
    - Great Rides Moorhead Expansion Study (2016)
    - Any future plans / studies

6.4 Priority 4 - Improved Maintenance

The public identified the need for improved maintenance efforts on existing facilities. These facilities include roadways, bike lanes, shared use paths, and sidewalks. The following recommendations are provided to address these concerns:

- **Path Surface Conditions** – Local jurisdictions should perform regular maintenance and occasionally reconstruct shared use paths so that pavement conditions are never considered in 'poor' condition.
- **Street Sweeping** – Local jurisdictions should consider increasing sweeping efforts in order to minimize debris in bike lanes and on local streets.
- **Snow Removal** – Local jurisdictions should make all feasible efforts to keep bike lanes and shared use paths cleared of snow in the winter with the exception of any paths that are used for winter recreation activities such as cross-country skiing.

6.5 Priority 5 – Encouragement

Encouraging the use of the existing bicycle and pedestrian network can increase the number of users. With more of the population choosing to walk or bike, this can provide several benefits such as health, safety (safety in numbers), and decreased vehicle use. Below are recommendations that could help encourage more bicycle and pedestrian use:

- **Urban Design/Planning** –
    - Local jurisdictions should revisit current planning standards to allow and encourage more density, mixed use developments, infill, and complete streets in order to encourage livability and encourage more bicycle and pedestrian use.
    - Local school districts in cooperation with local jurisdictions should revise school siting policies so that distances between residential areas and schools are walkable for more students.
    - If an ordinance does not already exist, local jurisdictions should adopt an ordinance adopt an ordinance requiring the planting of boulevard trees along all new local, collector and arterial roadways so as to provide a desirable environment for pedestrians.
    - Local jurisdictions should implement standards such that city-provided bicycle parking conforms to APBP bicycle parking guidelines.
- **Bicycle Friendly Community** – Fargo-Moorhead's existing Bronze Bicycle Friendly Community status will expire in 2018. Metro COG should re-apply prior to 2018 and endeavor for Silver status.
- **FM Bikeways Maps** - Metro COG should continue to provide the public with the FM Bikeways Maps and increase the number of distribution locations by 25%. Metro COG should also

implement a mobile app that would display all bicycle facilities in the FM Area along with user location capability.

- **Public Notifications** – Metro COG in cooperation with local jurisdictions should provide information to the public via websites, social media, and other means in order to inform the public of bicycle/pedestrian-related events such as StreetsAlive, Bike to School Day/Week, Bike to Work Day/Month, etc.