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Grand Forks - East Grand Forks
METROPOLITAN
PLANNING ORGANIZATION

GREATER GRAND FORKS BIKE/PED PLAN

A VISION FOR WALKING & BIKING IN GREATER GRAND FORKS

FEDERAL FUNDING
DISCLAIMER

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PLAN
ACKNOWLEDGMENTS

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PROJECT **PARTNERS**

The Greater Grand Forks Bike/Ped Plan is a collaborative plan between regional and local governments. The following individuals and groups were essential in the development of the plan update:

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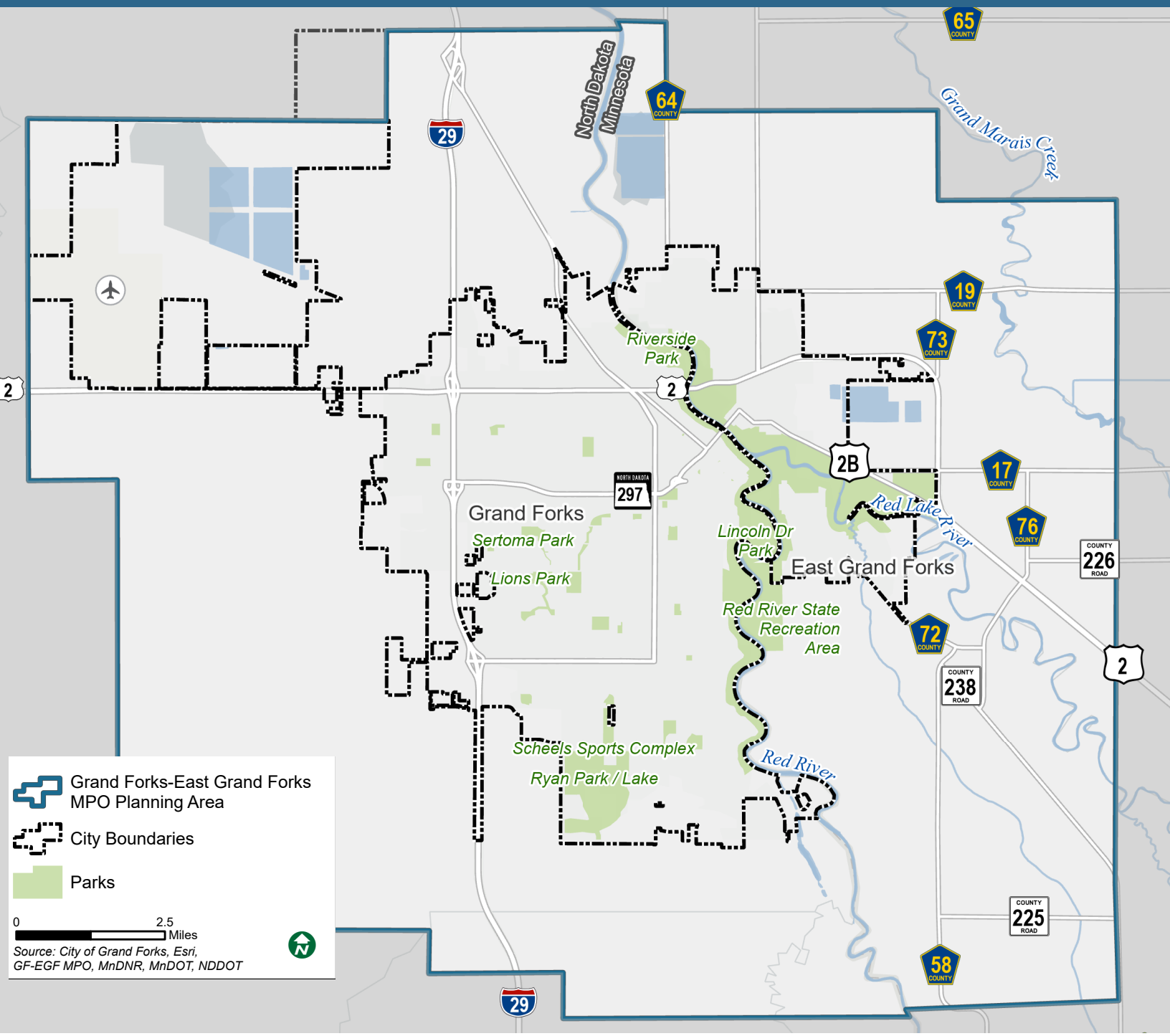


Greater Grand Forks

The Greater Grand Forks Bike/Ped Plan study area encompasses the entirety of Grand Forks and East Grand Forks. The 2020 United States Census reported the two communities have an estimated population of 68,342 people. The plan study area is located on the border of Minnesota and North Dakota, centrally located between the northern and southern border of North Dakota. Greater Grand Forks' location near a confluence of rivers and rail lines on a fertile floodplain allowed the region to establish itself as an agricultural and shipping hub in the late 19th and early 20th century. Grand Forks and East Grand Forks are also the two largest cities in the Grand Forks, ND-MN Metropolitan Statistical Area, which includes the Grand Forks Air Force Base and many small agricultural communities. Many of these people in the rural areas and small towns rely on Grand Forks and East Grand Forks for goods, services, and recreational opportunities.

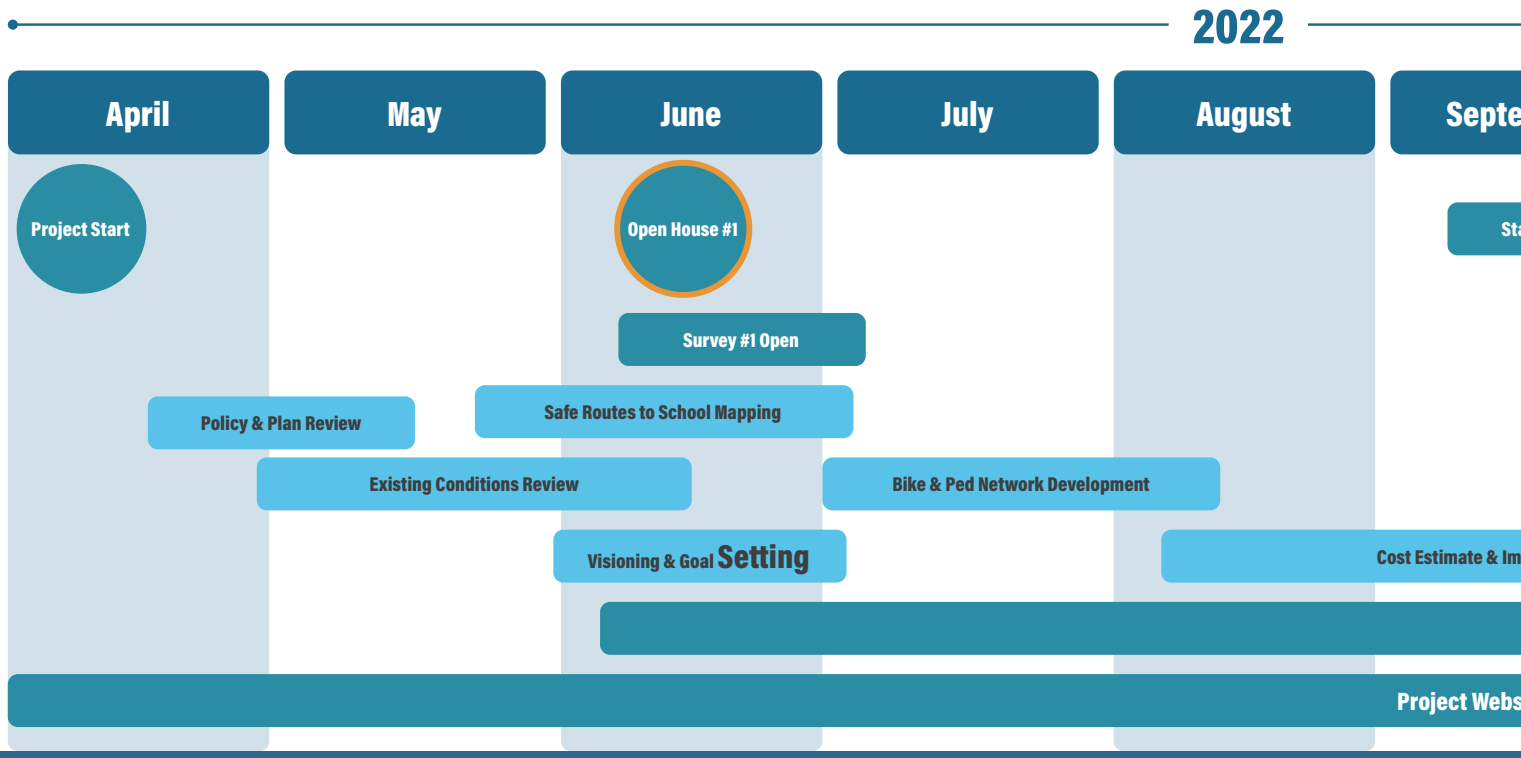
PROJECT PURPOSE & CONTEXT

The Greater Grand Forks Bike/Ped Plan is the active transportation plan for the Grand Forks-East Grand Forks MPO.

Greater Grand Forks has never had so many options for walking and cycling. Residents of the Grand Cities are able to choose between a growing number of opportunities and resources to get around transit, bike, foot, or shared micromobility. In the past twenty years, the cities of Grand Forks and East Grand Forks, as well as Polk County and Grand Forks County have coordinated with the Grand Forks-East Grand Forks MPO and other agencies to expand the regional networks of bicycle and pedestrian facilities. With these new facilities, wayfinding signage, sidewalks and other resources, it has only gotten easier to get around Greater Grand Forks by walking and biking. These efforts were recognized nationally when Greater Grand Forks was awarded with a bronze level Bicycle Friendly Community designation by the League of American Bicyclists.

Efforts from both sides of the river have helped develop Greater Grand Forks into a more walkable and bikeable community. Organizations like Grand Forks' Downtown Development Association have helped to reestablish the downtowns as bikeable and walkable destinations, activating the economic potential of multimodal connectivity. The Greater Grand Forks Greenway, developed after the 1997 Red River flood, has added more than 20 miles of trails for bikers, walkers, and joggers to travel between an extensive selection of amenities on both sides of the Red River. Grand Rides, a dockless bike share system, was launched in 2020. Advocacy groups like Safe Kids Grand Forks and Greenway, Bike, and Pedestrian Advisory Committee have encouraged more people to walk and bike through education, encouragement, and events.

The Greater Grand Forks Bike/Ped Plan gives recommendations for infrastructure and programmatic investments that will increasing walkability and bikeability in Greater Grand Forks. This plan provides a list of priority projects, design guidance, and an implementation schedule for building up Greater Grand Forks' multimodal network in a way that is safe, enjoyable, and sustainable.



BICYCLE & PEDESTRIAN PLANNING PROCESS

The development of the Greater Grand Forks Bike/Ped Plan took place over the course of a year. Plan development started in April 2022 and concluded with plan adoption in Early 2023.

Key components of the planning aspect included:

Project Kick-off

Bicycle and Pedestrian Advisory Committee meetings throughout the planning process to gather direction from the community and provide updates on the planning process

Vision, goals, objectives, and performance measures were identified, prioritized, and codified. All planning was informed by national best practices.

An existing conditions report that reviewed previous planning efforts, policies, and programs while also conducting health, equity, pedestrian and bicycle safety, level of stress, and demand analyses for Greater Grand Forks.

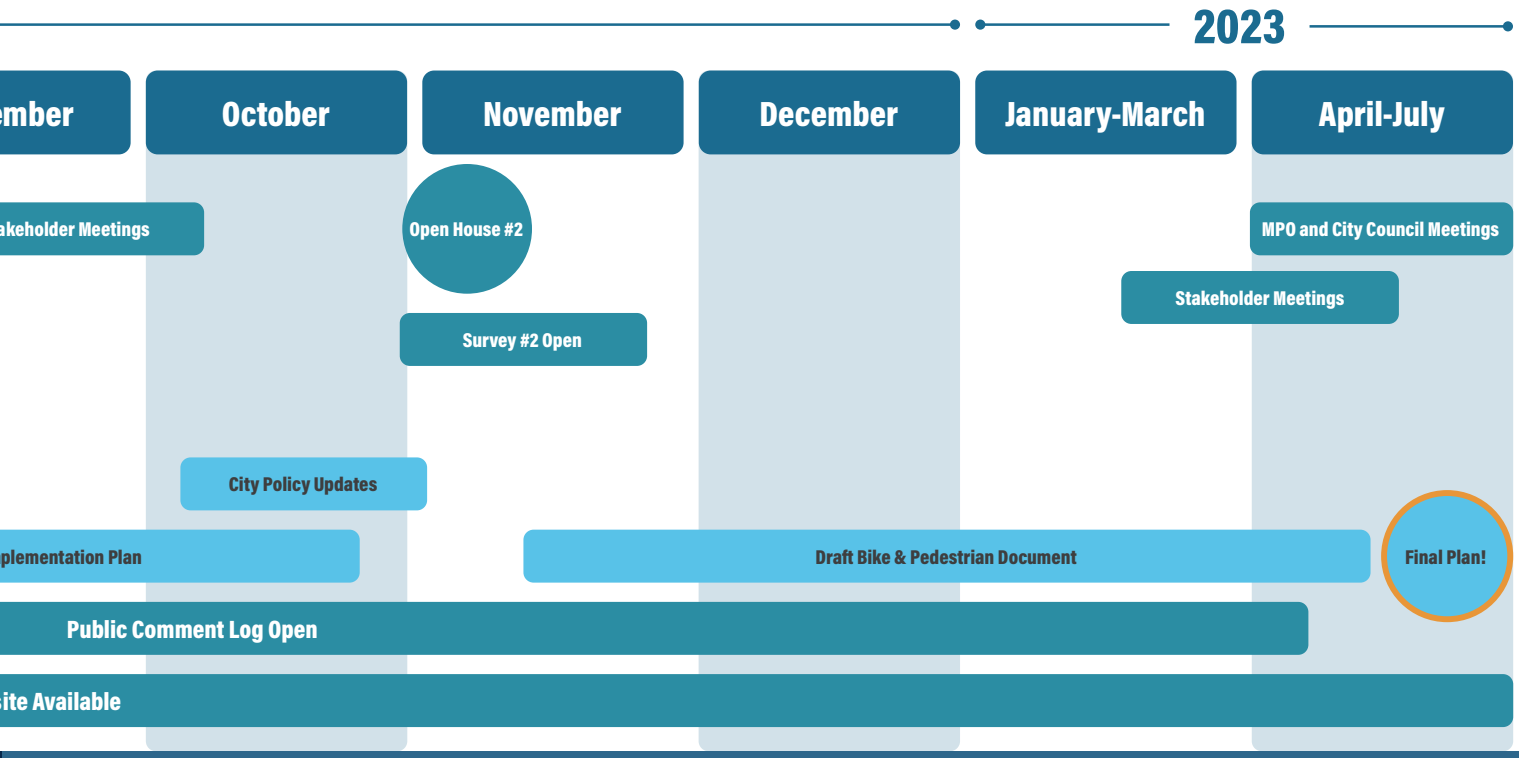
Public input was collected throughout the planning process through a varied mixture of in-person and virtual formats, such as preference surveys, online interactive maps, community bike audits, and two open houses

Development of infrastructure, program, and policy recommendations

Recommendations for project and policy implementation based on sustainability and feasibility

Draft and final report

Public review of draft documents and public adoption by each municipality and the MPO



VISION FOR ACTIVE TRANSPORTATION IN GREATER GRAND FORKS

Greater Grand Forks is a community where year-round walking and biking are safe, comfortable, convenient, common and enjoyable for people of all ages and all abilities

GUIDING PRINCIPLES

The Greater Grand Forks Bike/Ped Plan Guiding Principles serve as the foundation for how the plan will be realized. Guiding Principles help set priorities for the plan and represent the values and sentiments held by the citizens, elected officials, advocates and technical staff of the two cities. These guiding principles are represented in every goal, but some goals might better align with certain principles over others.

The guiding principles are as follows:

Improve Safety: Improving safety conditions for vulnerable road users like bicyclists and pedestrians is the most important outcome of the Bike/Ped Plan. Goals, objectives, and policies must consider the improving safety of conditions for vulnerable road users via investments and road design that follow nationally-recognized best practices to reduce exposure to motor vehicles, address known risk factors for vulnerable road users, and anticipate human error.

Improve Mobility: Goals,objectives, and policies should work to reduce or remove barriers to walking and biking, and make walking and biking an easy, effective, and enjoyable way to move through Greater Grand Forks. Mobility investments should support all trip types.

Increase biking and walking rates: Goals, objectives, and policies should work to increase the number of people who choose to walk or bike for any reason. Increasing the number of people who walk or bike is a foundational goal for the Greater Grand Forks Bike/Ped Vision.

Replace private vehicle trips: Goals, objectives, and policies should work to replace trips that would be made with a personal automobile with biking, walking, or transit. Efforts should be made to balance the needs of pedestrians, transit, freight, motor vehicles, and bicyclists.

Develop from Community Needs: Goals, objectives, and policies should work to improve the lives of the community. Efforts should be made to gather community input and facilitate involvement in the planning process.

Invest Wisely: Goals, objectives, and policies should work to guide projects and initiatives in a way that is financially constrained and responsible, giving equal considerations to capital, operation, and maintenance project costs. The value of a project or initiative should factor in both cost and need. Both public and private funding partnerships should be utilized when feasible.

GOAL 1 -SAFETY
OBJECTIVES

Increase the safety and comfort for people of all ages and abilities when walking and biking in Grand Forks and East Grand Forks

Objective 1.1: Continually improve bicycling and walking comfort and safety through design, operations and maintenance, including development of "low stress" bikeways and walking facilities to attract new cyclists and pedestrians while supporting existing cyclists and pedestrians.

Objective 1.2: Ensure that the transportation system is accessible to people with disabilities, Ensure that both cities adopt and maintain ADA Transition Plans to identify obstacles to ADA accessibility, identify responsible parties to address those obstacles, and create a work plan to remove those obstacles.

Objective 1.3: Ensure that bicycling and walking facilities are provided for all demographics, including people of different ages, races, ethnicities, incomes, and different neighborhoods.

GOAL 2 - MOBILITY & COMFORT
OBJECTIVES

Increase the mobility and comfort of biking and walking in Grand Forks and East Grand Forks

Objective 2.1: Ensure high quality, secure, and adaptive bicycle parking at destinations. Examine and amend existing building codes and ordinances to ensure that bicycle infrastructure and parking are included with new private and public construction at the time of planning.

Objective 2.2: Examine and amend existing building codes and ordinances to ensure that pedestrian amenities and facilities are included with new private and public construction.

Objective 2.3: Provide bicycle parking facilities near transit stations, on-board bicycle storage, and ensure transit stop designs are accessible via bike and compatible with the surrounding streetscape.

Objective 2.4: Ensure that transit stations and stops are fully accessible. Work with Cities Area Transit (CAT) to develop guidance for transit stop design that is ADA accessible and provides desirable amenities for all users and accommodates users in all seasons.

Objective 2.5: Provide guidance and incentives for existing businesses and other entities to add bicycle parking facilities and pedestrian amenities.

Objective 2.6: Provide wayfinding tools for pedestrians and bicyclists, building off the wayfinding guidance developed for the Downtown Grand Forks Action Plan.

Objective 2.7: Increase investment in facilities that improve the quality of the pedestrian environment during the design or reconstruction of roadways. Prioritize the preservation of existing trees and other elements that enhance the public realm whenever feasible in design or reconstruction.

GOAL 3 - MORE WALKING AND BIKING
OBJECTIVES

Increase the number of trips made via biking and walking in Greater Grand Forks

Objective 3.1: Develop a network of all-ages all-abilities bicycle and pedestrian infrastructure that makes cycling and walking a reasonable alternative to driving for trips less than two miles, and appeals to the portion of the population that "interested but concerned" in walking and biking.

Objective 3.2: Increase pedestrian and bicycle connectivity between residential neighborhoods and nearby commercial areas, parks, and schools.

Objective 3.3: Improve connections to transit for pedestrians and bicyclists.

Objective 3.4: Construct high-quality pedestrian and bicycle infrastructure that follows best practices in road design to advance safety and anticipate human error while making streets, paths, and trails (both paved and unpaved) more appealing and well-connected.

Objective 3.5: Build pedestrian and bicycle facilities on new roadways, and include bicycle and pedestrian improvements with roadway reconstruction projects

Objective 3.6: Construct bikeways along new and reconstructed arterial and major collector streets.

Objective 3.7: Provide a continuous sidewalk network along all city streets that have been upgraded to urban standards.

Objective 3.8: Develop diversified financial resources to implement this plan

WHO WILL USE THE BICYCLE & PEDESTRIAN NETWORK?

Pedestrians

When people take walking trips, the quality and cohesiveness of the pedestrian network is only one part of their modal choice. While walking, people interact with the surrounding environment and community, and these interactions play a role in influencing the choice to make trips by foot. Thus, any investment in the pedestrian network must consider the quality of the streetscape and the enjoyability of walking just as it must consider where connections are being made and equity of investments. Creating a walkable place is a complex and contextual process, meaning that there is no single set of strategies to create walkable places in East Grand Forks or Grand Forks, even if walkable places often share certain commonalities. Individual project needs and considerations will vary depending on the land use, transportation, and other unique contextual factors.

This plan provides guidance geared towards generally agreed upon features of an enjoyable and walkable place, in addition to types of pedestrians which form the basis of plan recommendations. These are detailed in **Appendix A - Design Guidelines**.

Types of Pedestrians

An all ages and abilities walking network considers that certain groups require additional resources to fully utilize walking for any reason. Elderly populations might need more time for crossing streets when compared to a young adult. Likewise, young children also move slower than able-bodied adults, in addition to having a reduced ability to assess risk and perceive threats in the environment. The degree of mobility impairment varies greatly across the population, the transportation system should accommodate these users to the greatest reasonable extent. Design Guidelines detailed in Appendix A provide resources for creating an all-ages and abilities network

What is a Walkable Community?

A walkable community is one where...

- Walking serves as a reasonable and appealing alternative to driving for trips less than two miles.
- Facilities are accessible to all people, regardless of disability status, age, or ability.
- People can walk to community and social destinations
- Walking facilities increase access to destinations, such as grocery stores, services, schools, parks, and other essential locations
- The surrounding environment supports walking through well-designed streetscapes, landscaping, street furniture, and other amenities.

Cyclists

A robust and well-developed bicycle network should serve the needs of all users, providing a safe, comfortable, convenient, and enjoyable experience. A well developed cycling network makes biking a viable and desirable alternative to automobile trips between two to three miles.

A bikeable network should support seamless transitions between the network of off-street greenways and side paths to a network of on-street facilities, and provide users of all abilities and confidence levels routes to and from valued destinations. **Appendix A - Design Guidelines** provides resources for developing a bicycle network that supports all cyclist types, and attempts to make cycling an easy choice for the “interested but concerned” portion of the population.

THE FOUR TYPES **OF CYCLISTS**

Choosing to make bike trips depends on an individual's preferences between many factors, such as comfort, safety, accessibility, and convenience. This plan uses a research-based classification system from the FHWA's Bikeway Selection Guide. This system uses four categories of cyclists to inform bikeway and bicycle network design:

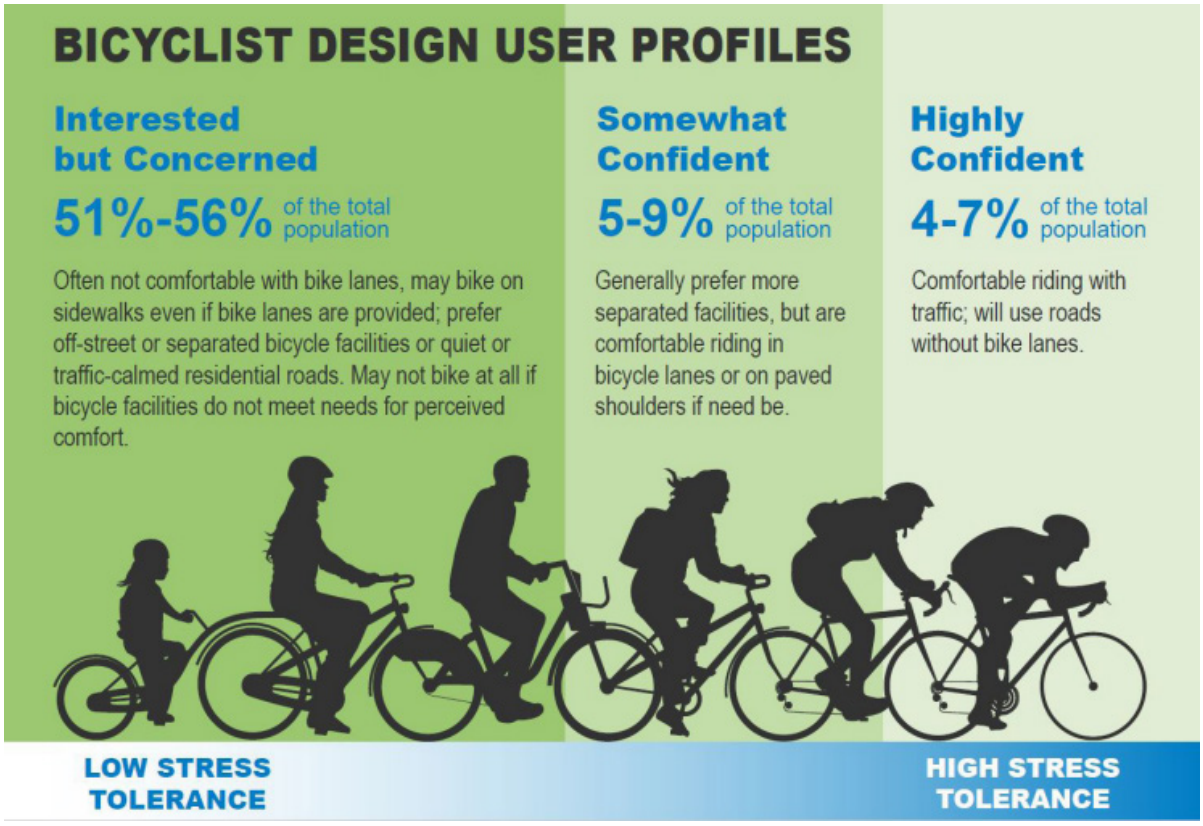
Strong and Fearless: People who feel comfortable traveling by bike under any condition and on any roadway. Approximately four to seven percent of the population.

Interested but Concerned: Cyclists who would ride if roadway conditions were perceived to be safe enough. Between 50 and 56 percent of the population.

Enthused and Confident: More advanced cyclists who will travel on most roadways, but tend to avoid high volume and speed conditions. Between five and nine percent of the population.

No Way No How: The population who will not ride a bike under any circumstances with a range of acceptable levels of traffic stress given the purpose of the trip. About one-third of the population.

Around 40 percent of survey respondents in Grand Forks and East Grand Forks would make more biking and walking trips if they felt the network was safer.



Source: FHWA Bikeway Selection Guide

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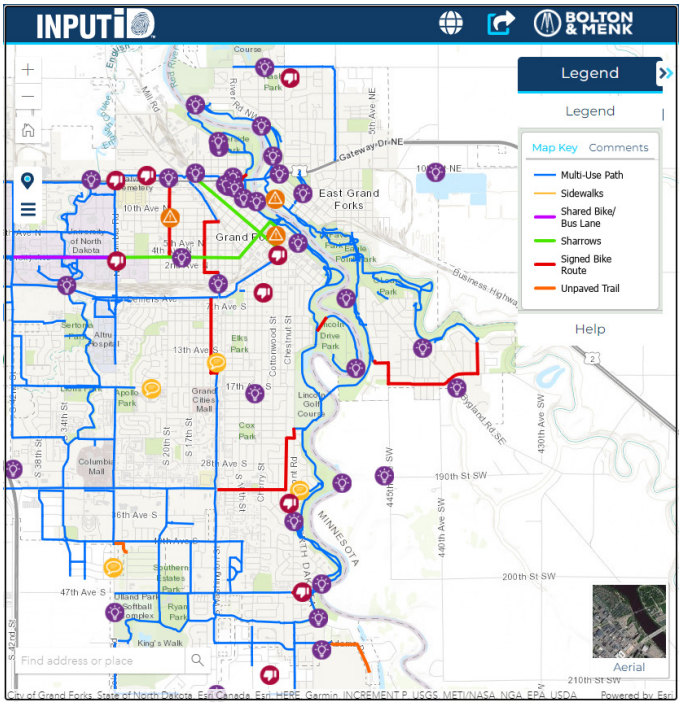
02 – COMMUNITY PARTICIPATION AND ENGAGEMENT

COMMUNITY ENGAGEMENT & PUBLIC INVOLVEMENT

Public engagement was fundamental to the development of Greater Grand Forks Bike/Ped Plan.

Extensive public engagement was a major component in the development of Greater Grand Forks Bike/Ped Plan. Citizens of Grand Forks and East Grand Forks were given opportunities to provide input on community needs and priorities for the Greater Grand Forks walking and biking network. This chapter provides an overview of the plan update's engagement opportunities. Plan engagement included:

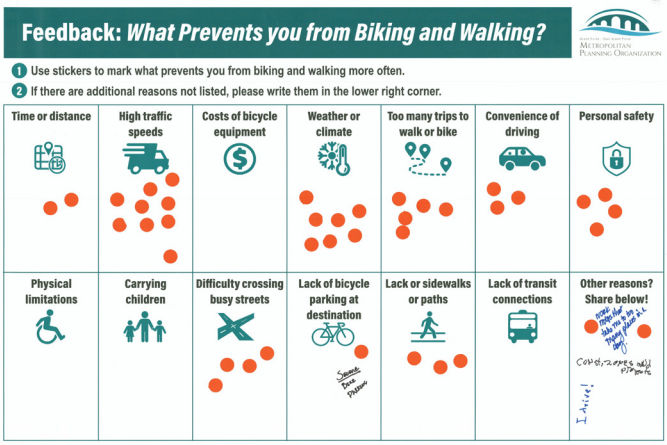
- Two open houses
- Three online interactive maps
- Online and print surveys
- A community bike audit
- A project website
- A project steering committee comprised of community members and staff from both cities
- Five targeted neighborhood input meetings on priority corridor draft concepts



INPUTiD, an interactive mapping software, was used to collect feedback from residents of Grand Forks and East Grand Forks on the existing bike/ped network and the plan's recommended network of bike/ped facilities.

The community provided more than 700 comments throughout the plan engagement. The project team used consensus themes from these comments to shape plan priorities, goals, and recommended projects. Comments and information received are summarized in this chapter. A detailed description of engagement is included in **Appendix E - Community Engagement Summary**

A bike audit of Greater Grand Forks gave the project team an opportunity to meet community members and hear directly from them about what type of policy, programs, and investment would improve cycling in Greater Grand Forks.



Both Open Houses featured interactive posters to gather input on preferred facility types, investment priorities, network recommendations, and more.

OPEN HOUSES

To collect feedback and suggestions from the public, the project team met with residents at two public open houses. Open houses were held in June and November 2022. Both open houses presented members of the public with multiple interactive posters, as well as surveys, comment cards, and maps of suggested improvements.

Public Comment Themes

Dozens of community members attended the open houses, providing feedback on the future of walking and biking in Greater Grand Forks. The first open house was focused on plan goals, objectives, and vision identification. The second open house was focused on determining where investments should be prioritized:

OPEN HOUSE 1

General Safety

- Concern about sharing roads with vehicles
- Priority should be on safety when walking and biking
- Support for separate paths for only cyclists and pedestrians
- Safety issue raised with minors using bike paths to recklessly drive golf carts

Traffic & Congestion

- Fear that roadways are too congested
- Worry about construction of bicycle infrastructure on roadways will cause more congestion
- Support for expansion of paths on to county system

Fiscal Responsibility

- Apprehension about cost
- Worry about direction of funds intended for vehicle infrastructure being redirected to bike infrastructure
- Concern with use of funds that could be directed to other projects and initiatives

OPEN HOUSE 2

Network Recommendations

- Pursue feasible project
- Balance space for pedestrians and cyclists with parking, snow storage, wide vehicles
- Bike and pedestrian routes investments should link to low-stress facilities
- Better bridge connections between Grand Forks and East Grand Forks

Planning for Growth

- Integrate with future development
- Connecting to future bridges
- Support for connections to large industrial areas like Crystal Sugar in East Grand Forks

Project Prioritization

- Community wants short-term readily implementable solutions
- Construct low-cost high-impact to build out a network while garnering public support.

COMMUNITY **SURVEYS**

Two online and print question and answer surveys were administered to guide the development of the Bike/Ped Plan. The surveys were paired with the open houses. The first survey was available for response starting July 1st and concluding July 22nd, 2022. The second was available from November 10th to December 9th, 2022. More than 370 people completed the surveys, in addition to 126 partial responses to the surveys.

Data collection focused on establishing how frequently respondents walked and bicycled, how comfortable they felt while walking and biking in Greater Grand Forks, and what they saw as barriers to walking and biking. The surveys also presented respondents with an opportunity to identify priority improvements for walking and biking safety in the region, and weigh in on plan goals, objectives, and vision.

89%

Of survey respondents stated that living in walkable and bikeable neighborhoods was either "important" or "very important" to them.

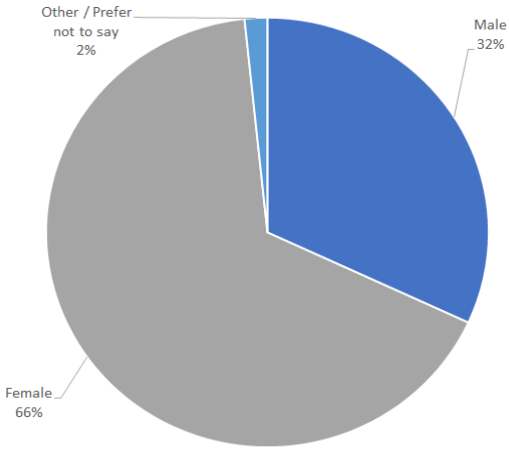
95%

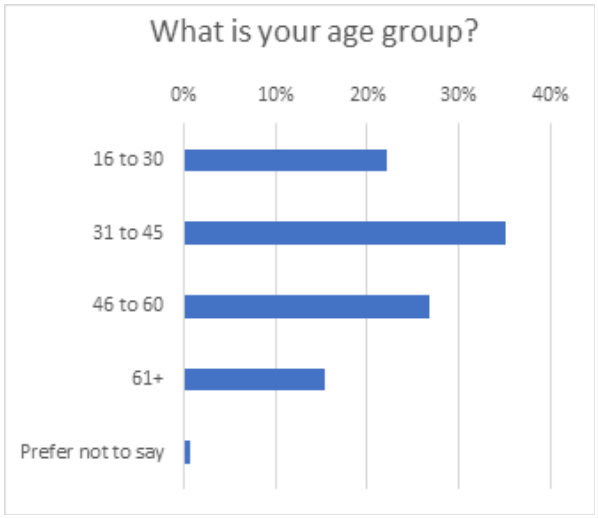
Of survey respondents stated that increasing public investment in walking and biking facilities was "important" or "very important" to them.

47%

Of survey respondents stated that they did not feel their community was a good place for people of all ages and all abilities to walk or bike.

Gender of Survey Respondents



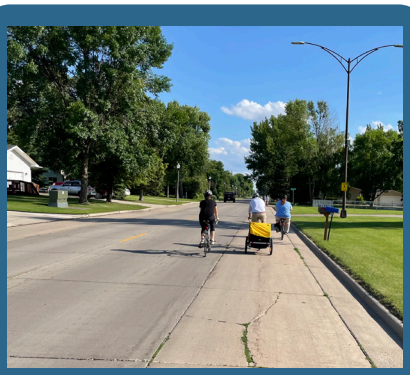


PUBLIC
BIKE AUDIT

On June 30th, 2022, the project team organized a public bike audit to collect first-hand data on the regional bicycle system.

The route took participants along a 9 mile long route that covered a variety of conditions that a cyclist might typically experience in Grand Forks and East Grand Forks: shared use paths along arterials, low volume minor arterial and collector roads, the Greenway, and neighborhood streets.

The ride included several rest points which served as impromptu discussions of issues, barriers, and concerns that they experienced as cyclists in Greater Grand Forks. Project staff took note of these conversations, which were used to develop policy, programmatic, and infrastructure investment. Public Bike Audit topics of discussion are summarized below:



Pavement Conditions – Poor pavement conditions frequently influenced route selection

Bridges – The bridges that link Grand Forks and East Grand Forks are a challenge for cyclists.

Rules of the Road – Riders wanted educational resources for cyclists & motorists roles and responsibilities.

East-West Connectors – Both cities in Greater Grand Forks needs more low-stress bicycle routes for east-west travel.

Railroad Crossings – Audit participants stated that rail crossings at Columbia Road and Washington Street are difficult or uncomfortable to use.

Signage and Control – the group felt there were multiple areas where better signage would be beneficial to direct riders to safer crossings & facilities

DIGITAL COMMENT MAP

INPUTiD, mobile-friendly online interactive mapping software, was used to gather feedback on Greater Grand Forks' existing and recommended pedestrian and bicycle network. The project team released three maps to the public throughout plan development, corresponding with the open houses and the Priority Corridor Draft Concepts virtual public meetings.

Visitors to the map were asked to place points on the map using five different categories:

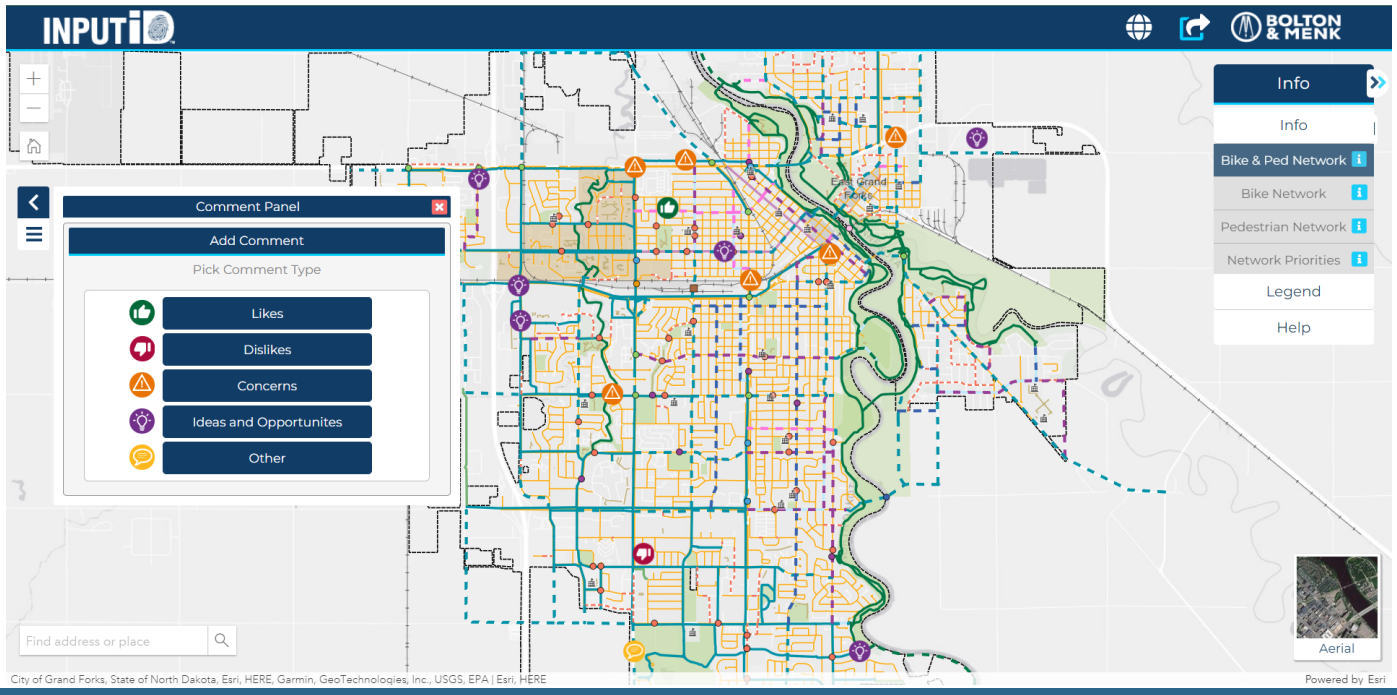
- Likes
- Dislikes
- Concerns
- Ideas & Opportunities
- Other

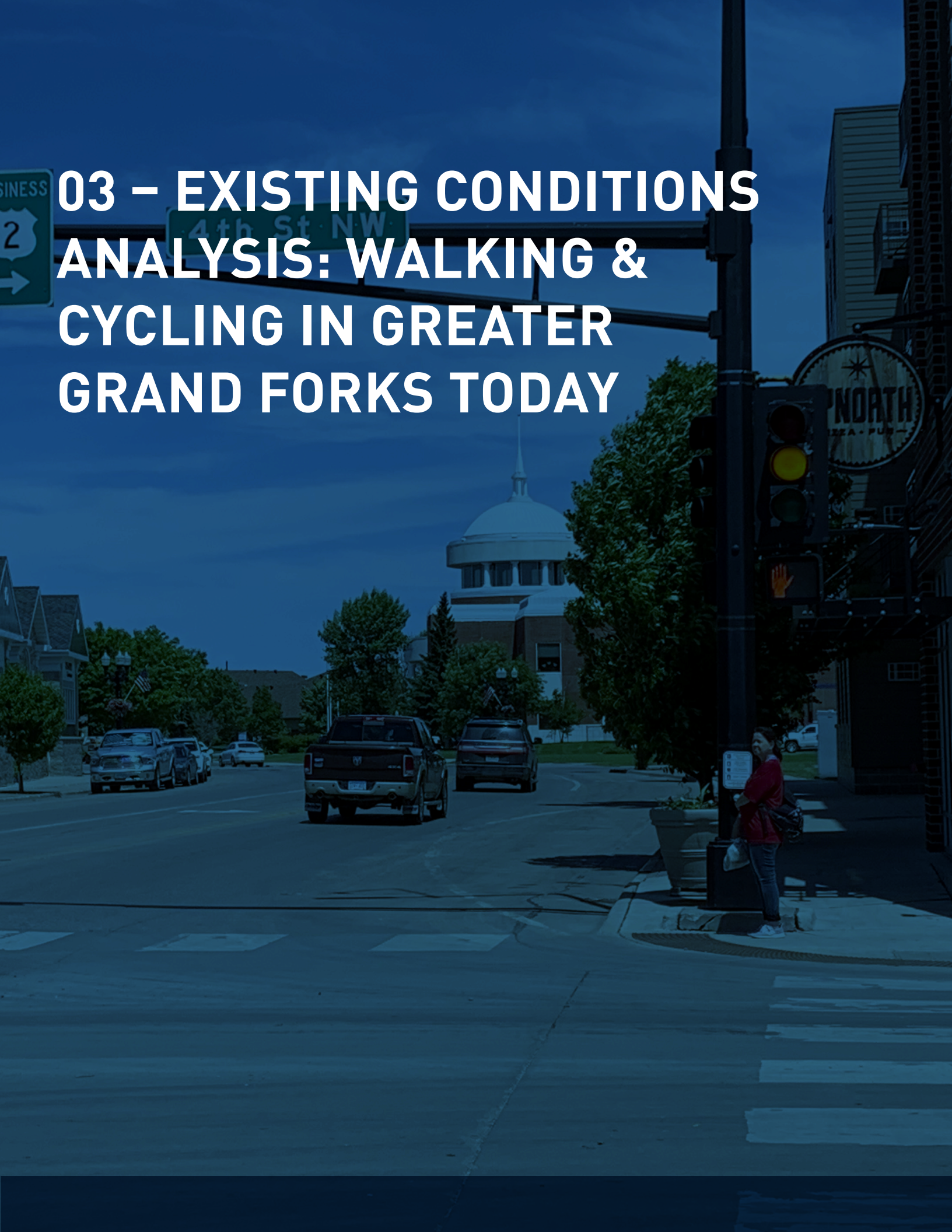
Common themes of across all digital comment mapping included a greater need for safe means to cross the Red River, improved east-west connectivity, and spot fixes for dangerous intersections.

The community responded to this opportunity by tagging 70 locations with guidance on how to expand or address deficiencies in the bicycle and pedestrian network. They left 72 comments on areas of concern in Grand Forks and East Grand Forks.

The second community mapping effort focused on gathering feedback on a draft of the network recommendations map developed by the project team. This map received 15 comments from the public, mostly in support of the recommended infrastructure, in addition to feedback on gaps within the recommended network

The final community mapping effort was dedicated to gathering feedback on five priority corridor draft concepts throughout Grand Forks and East Grand Forks. This INPUTiD effort was paired with five virtual open houses hosted on Zoom, and garnered 110 comments from members of the public. Engagement findings are summarized in Chapter 05 - Implementation and in **Appendix F – Priority Concepts Engagement Summary Memorandum**.





03 – EXISTING CONDITIONS ANALYSIS: WALKING & CYCLING IN GREATER GRAND FORKS TODAY

COMMUNITY PROFILE
GRAND FORKS & EAST GRAND FORKS

Population and Demographic Growth

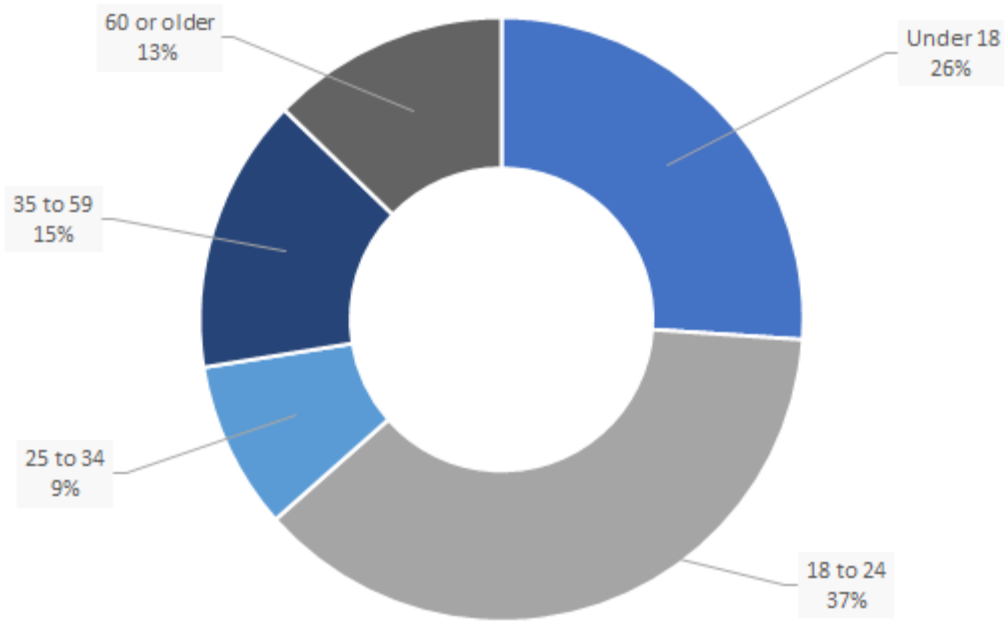
The 2020 U.S. Census reported the total population of Grand Forks and East Grand Forks was 68,342 people, with the over three-quarters of the population (59,166 people) living in Grand Forks, and the remainder (9,176 people) living in East Grand Forks. The region's population has continued to grow since the 1970 census.

Approximately 30% percent of the US population does not drive due to age, disability, or income. A similar percentage of non-drivers likely exists in the Greater Grand Forks region based on the statistical analysis that follows:

Age Distribution

People of all ages benefit from a robust multimodal walking and biking network, but some benefit more than others. An analysis of American Community Survey (ACS) data shows that there is a large population in Greater Grand Forks either too young to drive or old enough to have mobility issues when walking or biking. Thus, investments in a multimodal network supports more than just active adults, but help large groups in Greater Grand Forks make trips.

- The median ages in Grand Forks and East Grand Forks are 29.4 years old and 35.2 years old respectively. This is younger than the statewide median ages for North Dakota and Minnesota (35.4 and 38.5 years old respectively).
- 26 percent of people in Greater Grand Forks are under the age of 18, and more than half of the population is under the age of 30.
- The population over the age of 60 makes up over 10 percent of the population.



Age Distribution of Greater Grand Forks
U.S. Census Bureau. (2021). U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates, Table S0101 Age and Race, retrieved from https://data.census.gov/

COMMUNITY PROFILE
GRAND FORKS & EAST GRAND FORKS

Household Size, Homeownership, & Access to a Vehicle

- Average household size in the **Grand Forks is 2.06 people per household**. The average household size in **East Grand Forks is 2.43 people per household**.
- Around **seven percent of households** in Greater Grand Forks **do not have access to a vehicle**.
- **Forty percent** of households in Greater Grand Forks are **single vehicle households**.

The Red River is a barrier to multimodal access between Grand Forks and East Grand Forks.

Regional Biking & Walking Trends

The 2017-2021 American Community Survey (ACS) 5-year estimate was used to determine the baseline for Greater Grand Forks rates of walking, biking, and transit usage. **Current active transportation commute rates are low for a metropolitan region, and low compared to the average for the United States.** There are several factors at play here that might explain these suppressed rates of biking, walking, and transit usage:

- Grand Forks and East Grand Forks are winter cities, with average temperatures below freezing for several months out of the year and average annual snowfall exceeding 36 inches.
- The low-stress bicycle and pedestrian network is mostly concentrated around the Greenway and the downtowns, which does not serve the needs of all commuters or destinations, and can rendered inaccessible by spring flooding.
- Transit service is limited in frequency, which makes longer trips split between biking and/or walking and transit less appealing.

Why include transit?

Transit networks rely on multimodal access for users to begin and complete their journeys. Providing connections and support services for multiple modes to access public transportation increases the utility and maximizes investments in both systems.

COMMUNITY PROFILE
GRAND FORKS & EAST GRAND FORKS

Rates of Driving to Work Alone Have Increased

Among people living in the cities of Grand Forks and East Grand Forks, rates of driving alone have steadily increased for the past 30 years. **Since 1990, the percentage of commuters who drive to and from work alone has increased from 76.4 percent of all workers in 1990 to 81.7 percent of all workers in 2019.** However, the percent of people with commutes below 15 minutes has remained largely the same. This data shows that there is potential to increase the rates of biking, walking, and using transit in Greater Grand Forks. Over 90 percent of people living in Grand Forks work in the same county as their residence. Other key findings include:

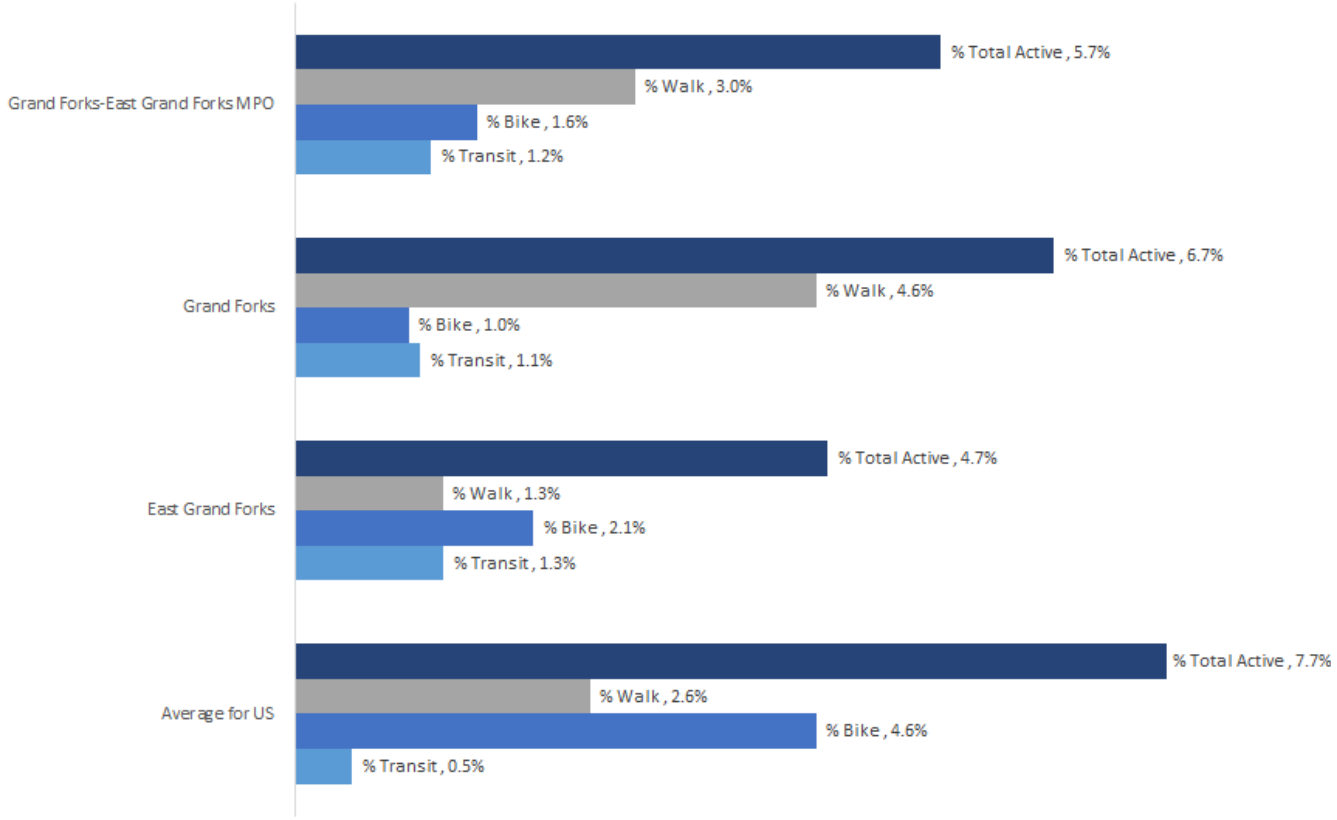
- Only 37 percent of East Grand Forks residents work in their county of residence.
- East Grand Forks commuters are more likely to drive and to drive alone.

50%

of Greater Grand Forks workers have commutes shorter than 15 minutes

30%

of workers in Greater Grand Forks have commutes shorter than 10 minutes. Some of these trips can be replaced by walking or biking, if there are adequate facilities



Commute Mode Comparison for Greater Grand Forks Planning Area

Source: United States Census Bureau (2022). Means of Transportation to Work, 2017-2021 American Community Survey 5-year estimates.

EXISTING NETWORKS
ANALYSIS, PLANS, & POLICIES

This section provides an analysis of the bicycle and pedestrian networks and related plans and policies in Grand Forks and East Grand Forks, as well as their impacts on mobility, safety, and accessibility.

This analysis, combined with the community profile, serves as the foundation of the goals and priorities for plan recommendations to improve walking and biking in Greater Grand Forks.

The following sections describe the finding of the existing conditions analysis:

- Analysis of Existing Facilities
- Safety Analysis
- Equity (Needs) Analysis
- Bicycle Level of Traffic Stress Analysis
- Demands Analysis
- Analysis of Existing Plans
- Analysis of Policies and Programs

EXISTING NETWORKS
WALKING & CYCLING

Existing Pedestrian Facilities

The Grand Forks-East Grand Forks metropolitan area has approximately 280 miles of sidewalk. In Grand Forks, most neighborhood streets and arterials have sidewalks on both sides of the right-of-way. Local ordinance requires the construction of sidewalks on any local street over three hundred feet in length. There are some gaps in the sidewalk network due to a grandfather clause in the ordinance, which allows some streets segments and land uses to be exempt from the sidewalk requirement. This exception includes all areas zoned for industrial use in the City of Grand Forks, representing a potential barrier to walking trips to and from work.

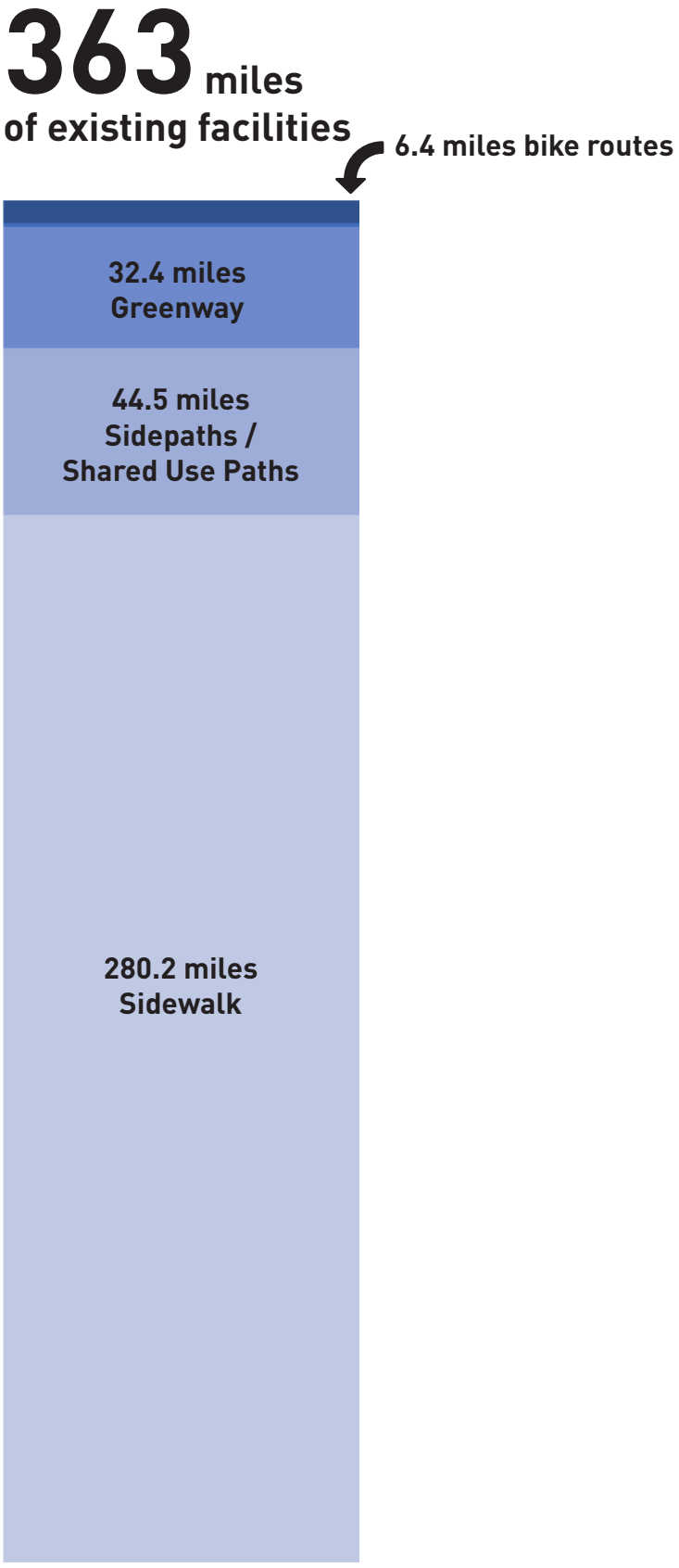
The East Grand Forks sidewalk network is less comprehensive. Older neighborhoods and the downtown generally have sidewalks on both sides of the right-of-way, but newer neighborhoods typically only have sidewalks along major arterials with no sidewalks on interior streets. Some East Grand Forks neighborhoods have expansive off-street shared use paths.

Commercial corridors in Grand Forks and East Grand Forks generally have sidewalks, but lack safe crossings at reasonable distances (i.e., 1,000 feet or less). Most commercial destinations are located behind large surface parking lots. These parking lots generally lack a dedicated facility between the pedestrian realm and businesses.

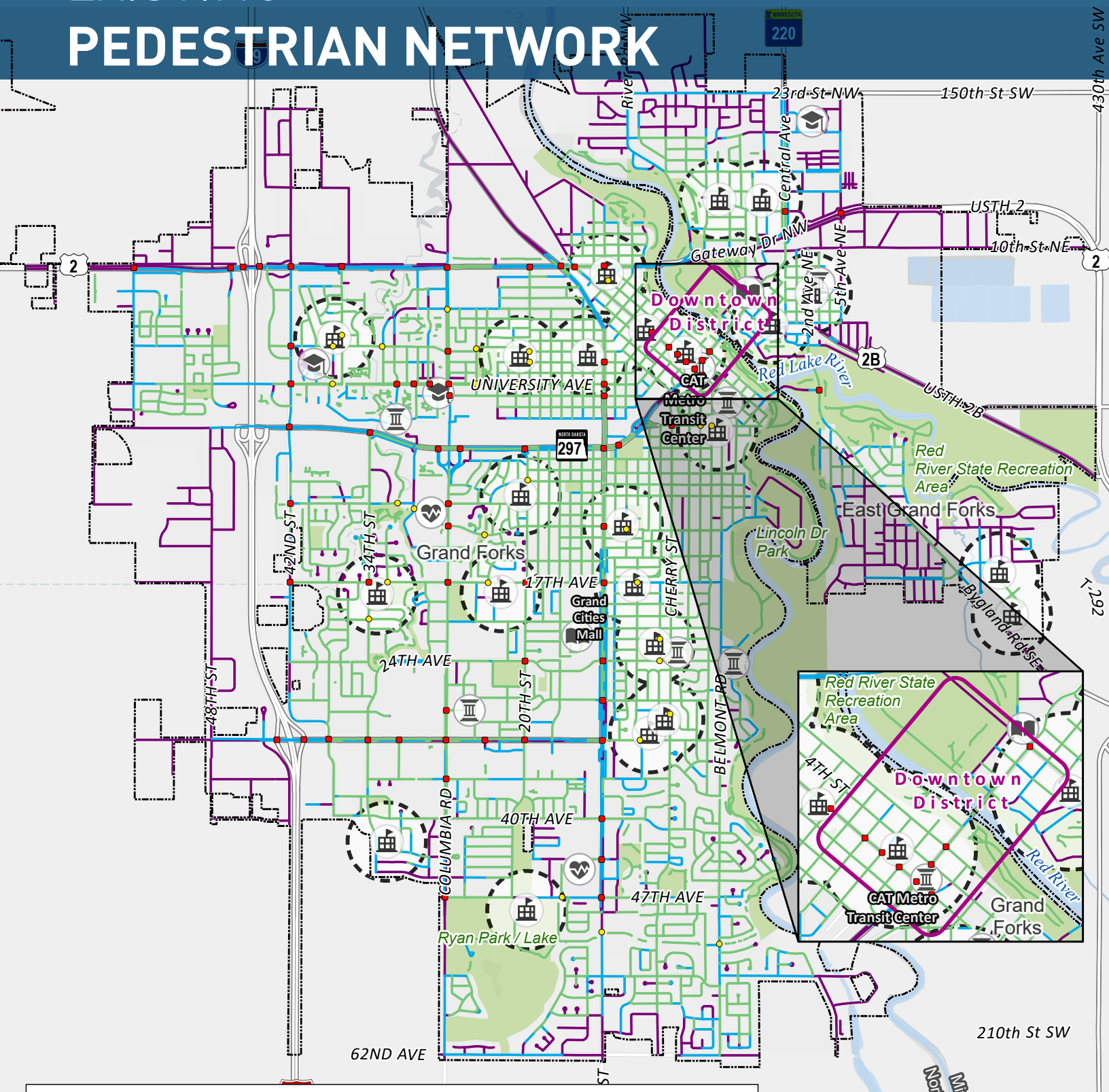
Existing Bicycle Facilities

Grand Forks-East Grand Forks has approximately 77.9 miles of off-road bicycle facilities, and approximately 6.4 miles of on-street bicycle facilities. The bulk of Grand Forks-East Grand Forks' bicycle network is made up of off-road bikeways and shared-use paths, such as the Greenway, English Coulee Trail, in addition to sidepaths along major commercial roads like Washington Street and Columbia Road.

Grand Forks on-street facilities include shared lanes on University Avenue and 5th Street as well as on-street bike routes between neighborhoods and shared use paths such as 32nd Avenue South between Washington and Chestnut Street. East Grand Forks' on-street bike network is limited, with a focus on directing bicycle and pedestrian traffic towards shared use paths. Both cities generally rely on street signage rather than on-street markings to demarcate bicycle facilities.



EXISTING PEDESTRIAN NETWORK



College/University
Hospital
Library
Museum
Schools

Pedestrian Facility Type (as of 12/2022)

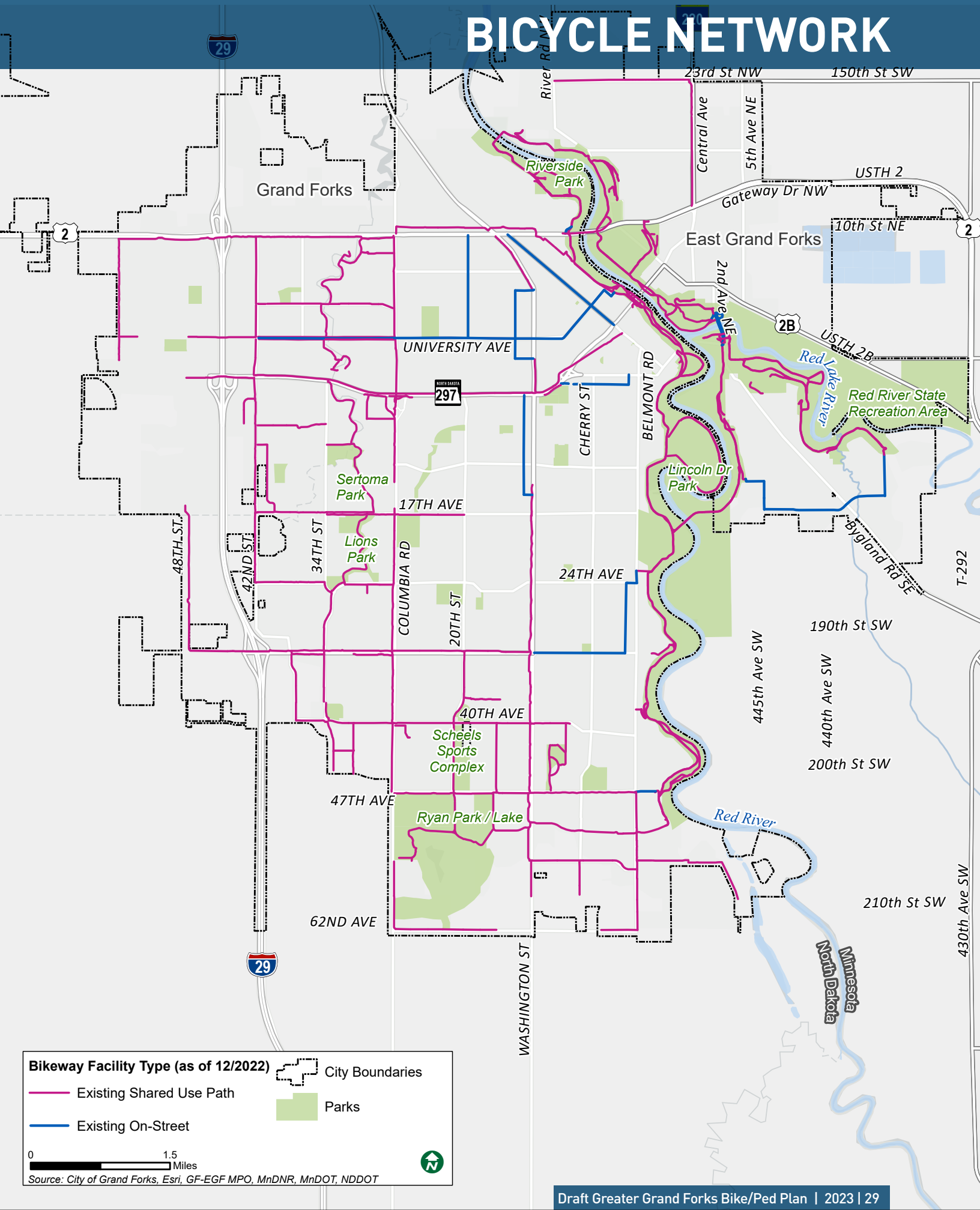
Sidewalk on Both Sides; Independent Sidewalk
Sidewalk on One Side
No Sidewalk
Signalized Intersections
Beacon Crossings

1/4 Mile Buffer
Parks
City Boundaries

0 1.5 Miles

Source: City of Grand Forks, Esri, GF-EGF MPO, MnDNR, MnDOT, NDDOT

EXISTING BICYCLE NETWORK



Bikeway Facility Type (as of 12/2022)

- Existing Shared Use Path
- Existing On-Street
- City Boundaries
- Parks

0 1.5 Miles

Source: City of Grand Forks, Esri, GF-EGF MPO, MnDNR, MnDOT, NDDOT

SAFETY ANALYSIS

North Dakota and Minnesota have some of the lowest rates of pedestrian fatalities in the nation, with less than one pedestrian fatality per 100,000 people. This plan analyzed the location and frequency of automobile crashes involving cyclists and pedestrians in Greater Grand Forks for the five-year period between 2017 through 2021.

Overview

The crash analysis examined the type, location, and number of crashes that involved people walking or biking in Greater Grand Forks. Key observations from the safety analysis are as follows:

- There were **three fatal crashes and twelve serious injury crashes between 2017 and 2021**.
- Most crashes resulted in possible injuries, minor injuries, or property damage only (PDO).
- Crashes tended to occur around busy arterials like Washington Street, Columbia Road, Gateway Drive/ US 2, and 32nd Avenue South in Grand Forks.
- Bicycle crashes were more likely to occur at intersections and be related to turn movements, while pedestrian crashes were more likely to occur at mid-block locations.
- Intersections of major roadways tended to have higher rates of bicycle and pedestrian crashes.
- Nearly one-fifth of all reported bicycle and pedestrian crashes occurred in parking lots.
- Only three crashes were reported in East Grand Forks during the five year period examined.

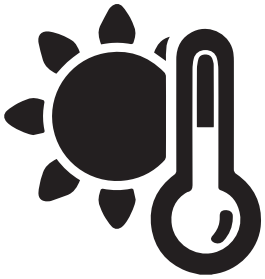
There has been no clear trend that indicates an increase or decrease in bicycle- and pedestrian-involved crashes over the course of the past five years examined. Bicycle and pedestrian crashes peaked in 2019 and dropped substantially in 2020. This is likely due to the changes in travel patterns brought on by the COVID-19 pandemic and subsequent work from home orders. As the region's travel patterns returned to normal in 2021, the number of reported bicycle and pedestrian crashes increased. The MPO and cities should continue to monitor annual and 5-year trends for bicycle and pedestrian crashes as plan recommendations are implemented.

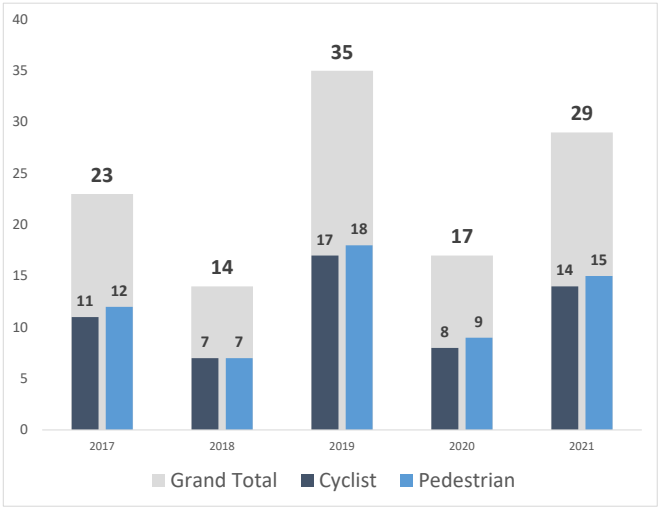
Greater Grand Forks Safety at a Glance

57 Reported Bicycle Crashes

61 Reported Pedestrian Crashes

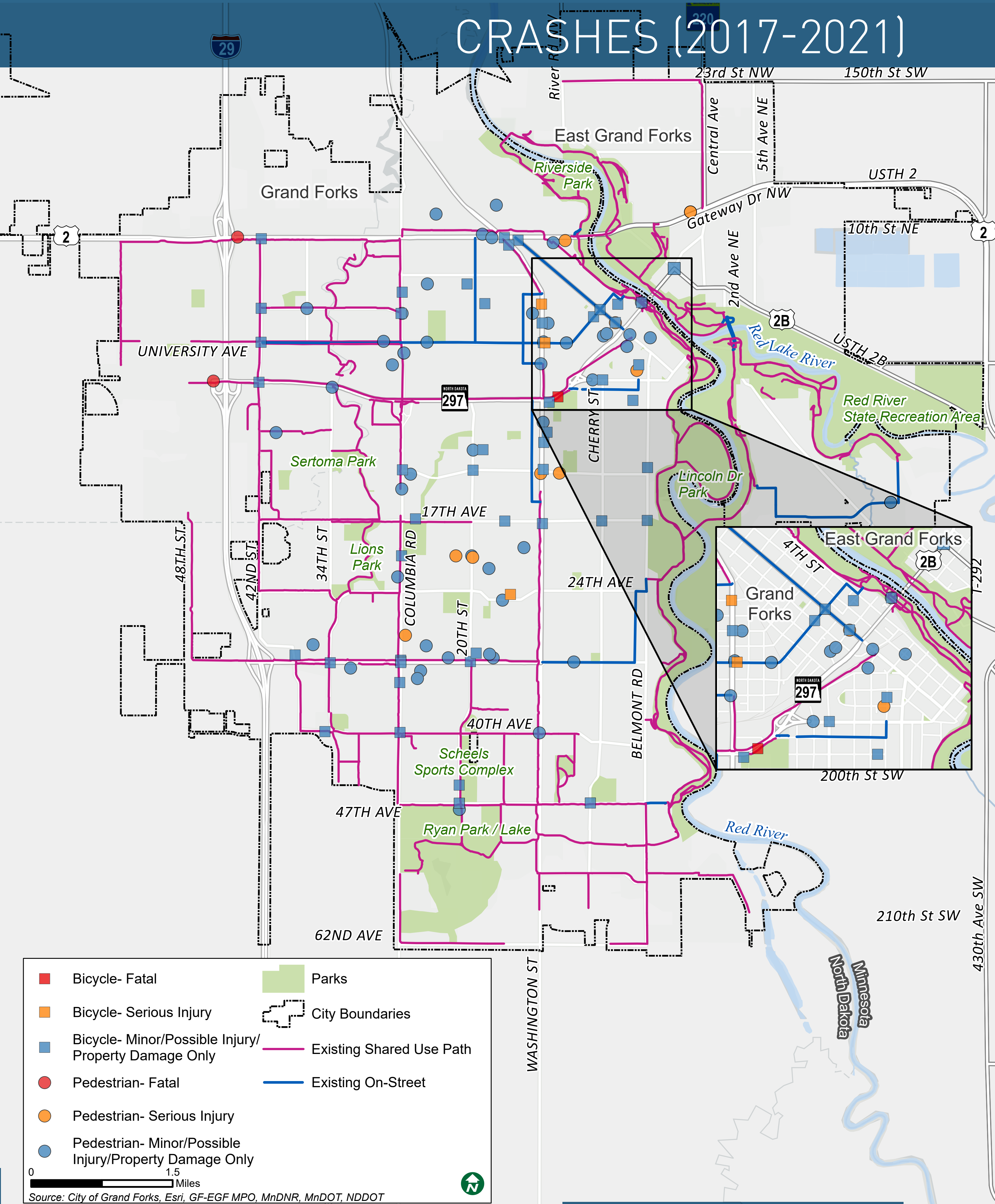
Crashes were most common during daylight hours, and during the warm season





Bicycle and Pedestrian Crashes by Year (2017-2021)

PEDESTRIAN AND BICYCLE CRASHES (2017-2021)



WALKING AND BIKING **NEEDS ANALYSIS**

The purpose of this analysis is to identify areas in Grand Forks and East Grand Forks that have greater need for biking and walking infrastructure as a matter of mobility and economic necessity. A well-developed network of bicycle and pedestrian facilities enables people of all ages, abilities, and socio-economic circumstances to walk and bike. The outcomes of this analysis were included as project prioritization criteria. The full report and detailed description of the methodology is included in Appendix H of this report.

Methodology

The equity analysis utilized the following socioeconomic data to inform the overall network and prioritization:

- Rates of Poverty
- Non-White Population
- Dependent Ages
- Disability Status

Rates of Poverty

The rate of poverty is defined as the percentage of the population in a census block group whose annual income was less than 150% of the federal poverty level. These data came from 5-year ACS estimates from 2016 to 2020. People with lower incomes have less money to spend on transportation and are less likely to have regular access to a motor vehicle, or to be burdened by the cost of owning and maintaining a motor vehicle. As such, they are more likely to rely on walking, biking, and transit to reach destinations, and stand to benefit from reduced transportation costs allowed by a robust network for biking, walking, and transit.

Dependent Ages

This analysis looked at the percentage of the population in a census block group that was under 16 and over 65 years of age. Young people are more likely to rely on walking, biking, and transit. Likewise, seniors benefit greatly from bicycle and pedestrian infrastructure with improved safety, in addition to the benefits related to increased mobility, access to recreational facilities, and opportunities to socialize.

Disability Status

The ACS determines disability status based on whether an individual reports having significant difficulty with any of the following: hearing, vision, cognitive, ambulatory, self-care, and independent living. People with disabilities might require additional accommodation to fully participate in social and physical activities. People with disabilities are more likely to rely on walking, biking, and transit and also might require safer and more accessible infrastructure.

Non-White Population

Non-white population was measured as the whole of the percentage of the population in a census block group that did not identify as White as per the 2016-2020 5-year ACS estimates. These data consider Hispanic/Latino origin as an ethnicity, independent of racial identification. Thus, people of Hispanic origin can be of any race and are not specifically included in this analysis.

Nationwide, households headed by people of color are less likely than white households to have access to a vehicle, and thus more likely to rely on walking, biking, and transit. Similarly, among vulnerable road users, Black, Indigenous, and other Persons of Color (BIPOC) have higher traffic fatality rates compared to White populations, despite these populations generally walking and biking less often and for shorter distances when compared to White populations.

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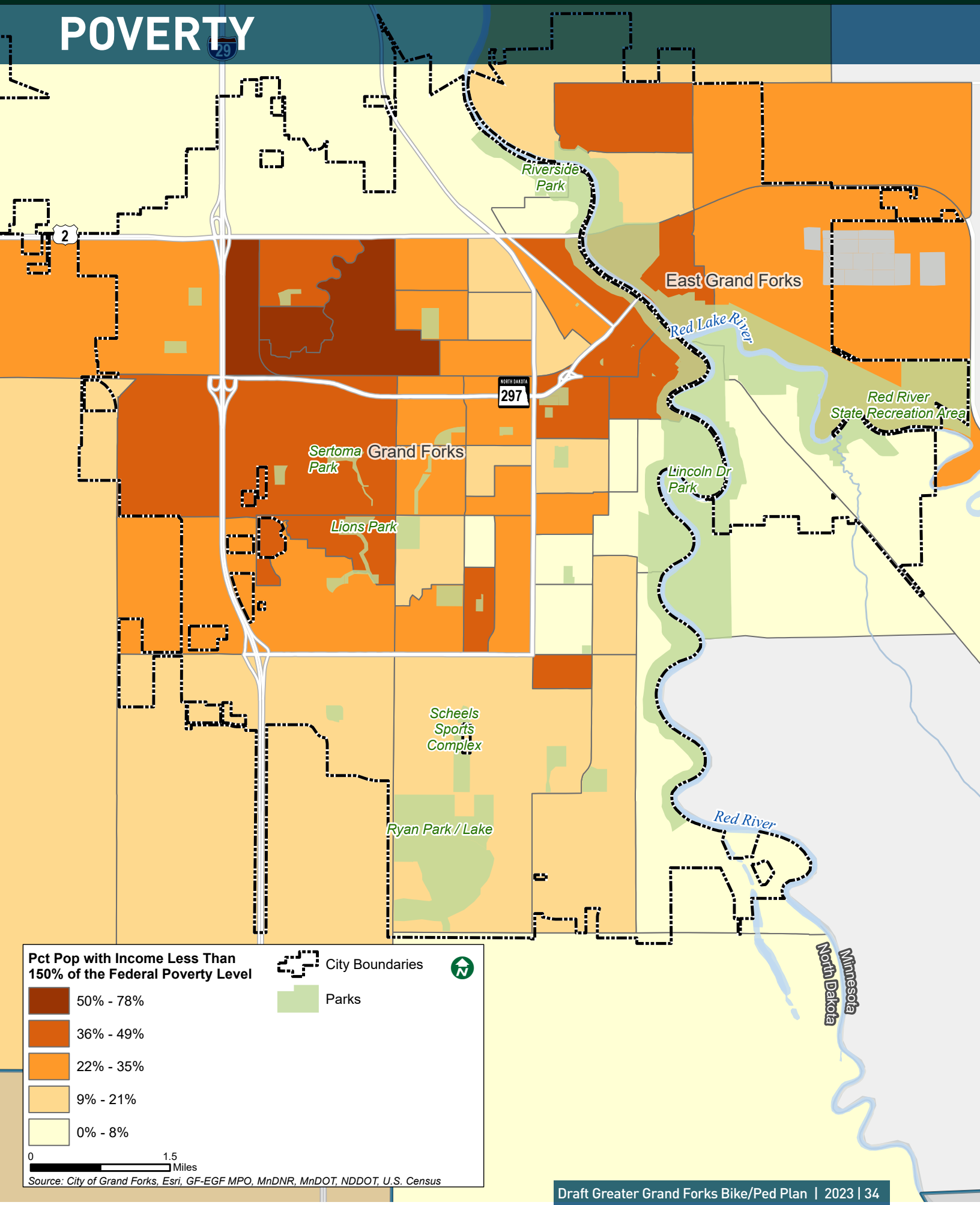
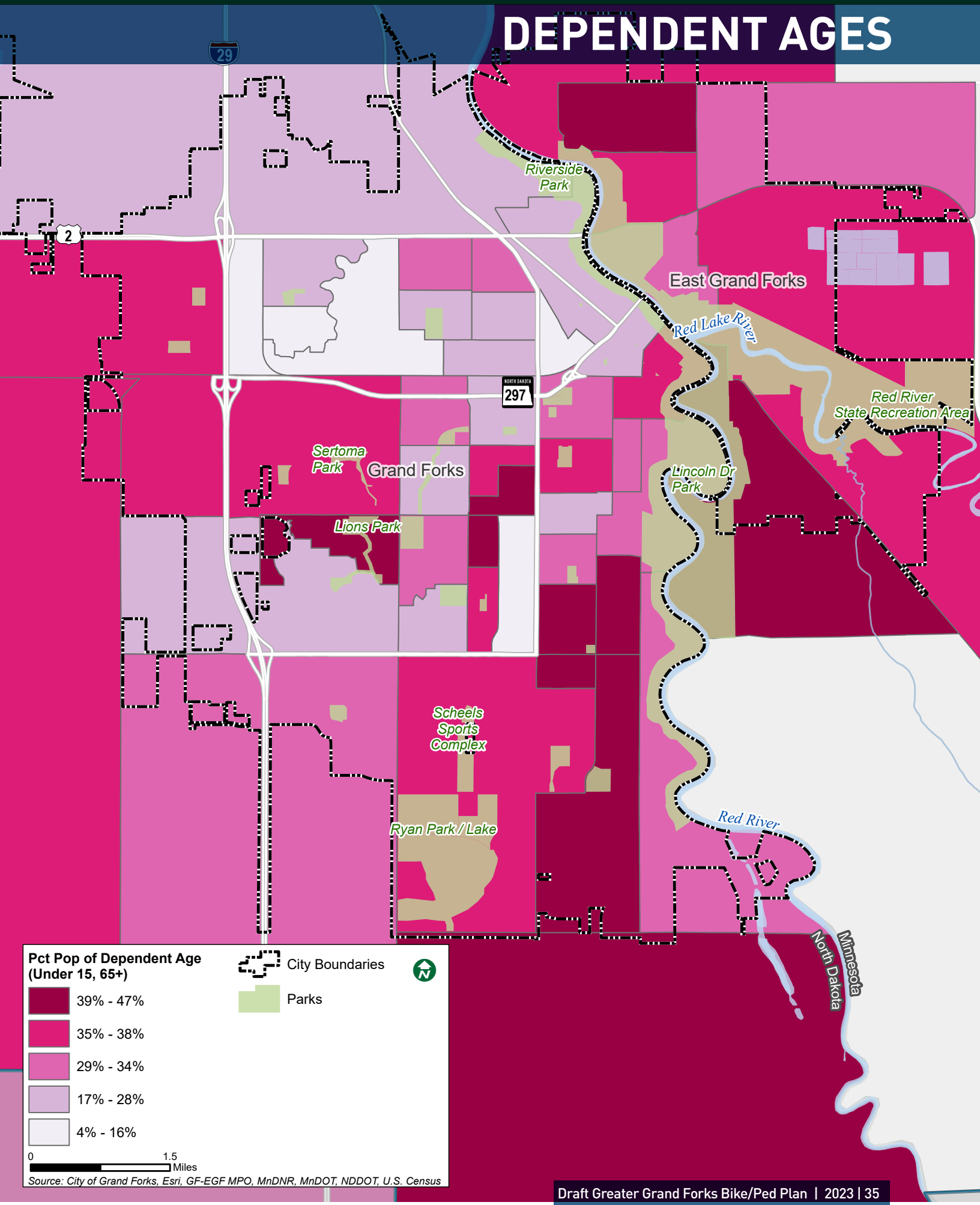
POVERTY

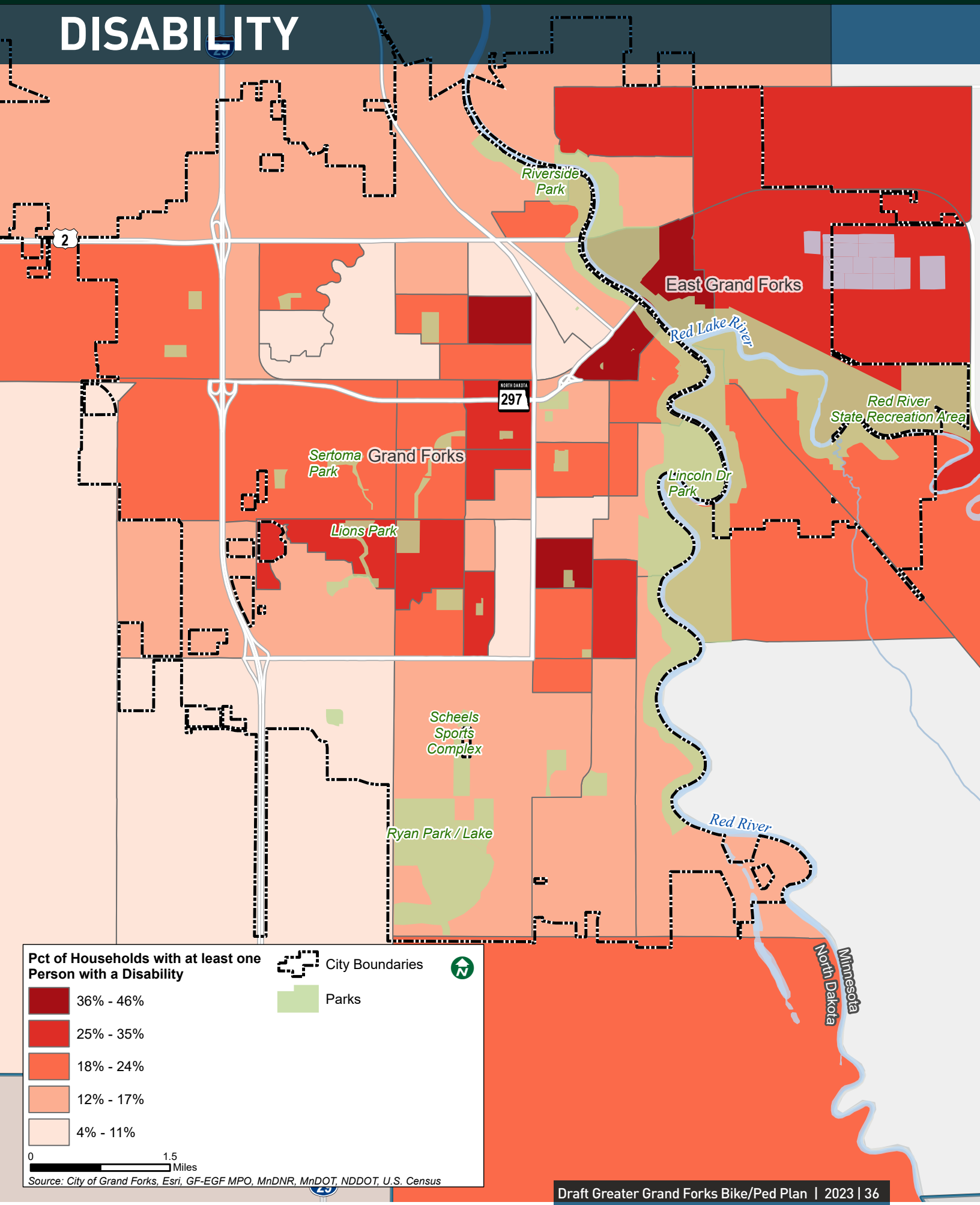

Riverside Park
East Grand Forks
Red Lake River
Red River State Recreation Area
Sertoma Park
Grand Forks
Lincoln Dr Park
Lions Park
Scheels Sports Complex
Ryan Park / Lake
Red River
Minnesota
North Dakota
29
2
NORTH DAKOTA
297
Pct Pop with Income Less Than 150% of the Federal Poverty Level
50% - 78%
36% - 49%
22% - 35%
9% - 21%
0% - 8%
City Boundaries
Parks
N
0
1.5
Miles
Source: City of Grand Forks, Esri, GF-EGF MPO, MnDNR, MnDOT, NDDOT, U.S. Census

NEEDS ANALYSIS

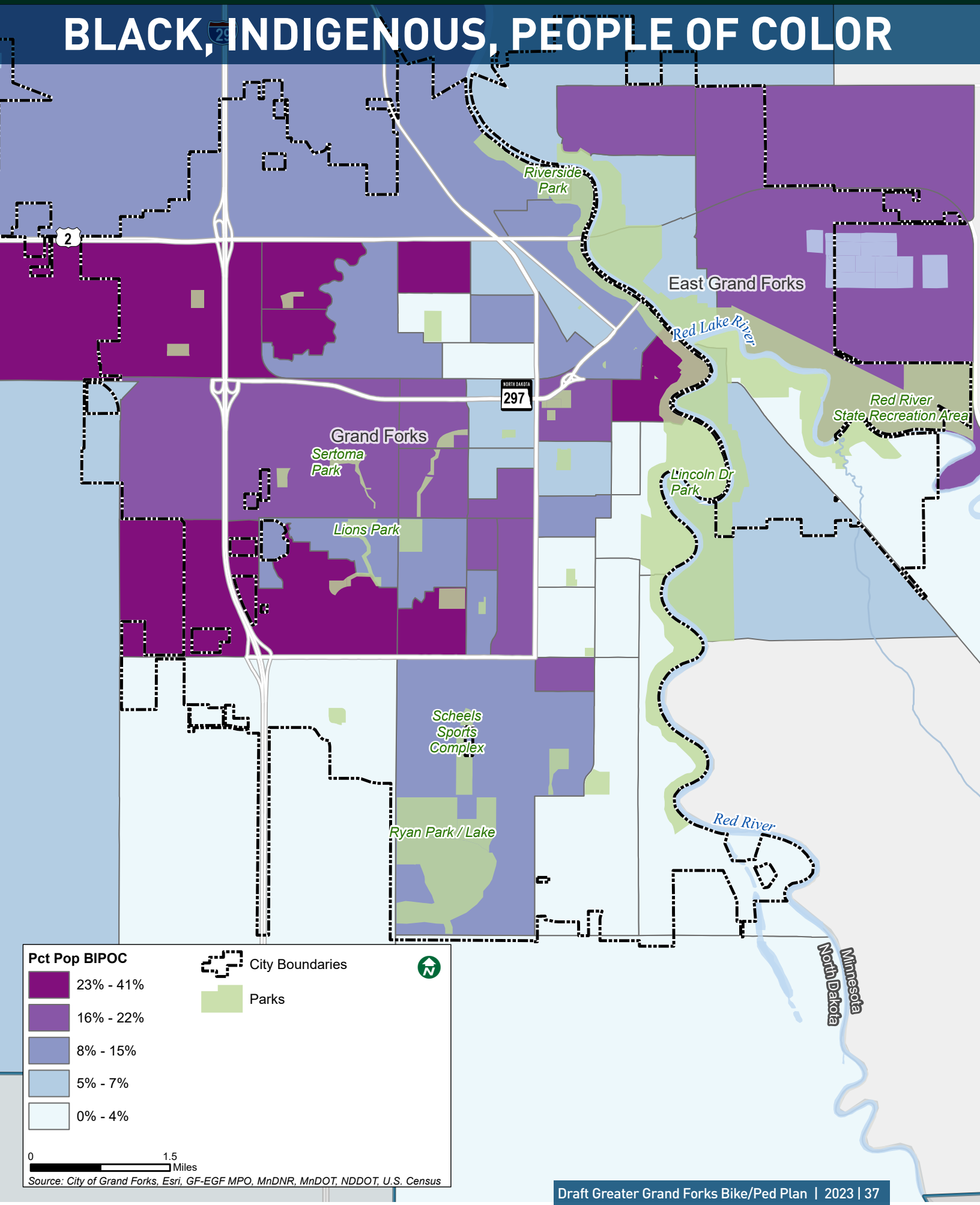
DEPENDENT AGES



DISABILITY


Riverside Park
East Grand Forks
Red Lake River
NORTH DAKOTA 297
Red River State Recreation Area
Sertoma Park
Grand Forks
Lincoln Dr Park
Lions Park
Scheels Sports Complex
Ryan Park / Lake
Red River
North Dakota
Minnesota
Pct of Households with at least one Person with a Disability
36% - 46%
25% - 35%
18% - 24%
12% - 17%
4% - 11%
City Boundaries
Parks
0
1.5
Miles
Source: City of Grand Forks, Esri, GF-EGF MPO, MnDNR, MnDOT, NDDOT, U.S. Census

BLACK, INDIGENOUS, PEOPLE OF COLOR



BICYCLE
LEVEL OF TRAFFIC STRESS

Bicycle Level of Traffic Stress (BLTS) is a method that quantifies the relationship of cyclist comfort in relation to roadway characteristics. BLTS groups roads into four ranks. Additional descriptions of the BLTS system is provided in Appendix A - Design Guidelines

BLTS 1: Negligible stress roadways. Local residential streets, bike paths/cycle tracks. Intersections are rare and easily traversed. Suitable for all riders, though children might require supervision from more experienced cyclists. Suitable for cyclists of all confidence levels.

BLTS 2: Low stress roadways. Collector level streets with bike lanes or streets within the central business district. Traffic speed differential between cars and cyclists is low (signed for less than 25 miles per hour), and intersections are not difficult to cross for most users. BLTS 2 roads requires more attention than BLTS 1, and are thus not suitable for young children without supervision from more experienced cyclists. Suitable for cyclists of all confidence levels, but some "Interested but Concerned" cyclists may avoid routes requiring travel along BLTS 2 roadways.

BLTS 3: Moderate stress roadways. Lower-speed arterials (signed for 25-35 miles per hours) with bike lanes or moderate speed (30-40 miles per hour) non-multi-lane roadways with buffered bike lanes. Suitable for most observant adult cyclists. Suitable for "Enthused & Confident" and "Strong & Fearless" cyclists, but some of the former group may avoid routes that require travel along BLTS 3 roadways.

BLTS 4: High stress roadways. Moderate to high traffic speeds (signed for speeds greater than 40 miles per hour), with complex intersections, long crossing distances, and high traffic volumes. Suitable only for "Strong & Fearless" cyclists.

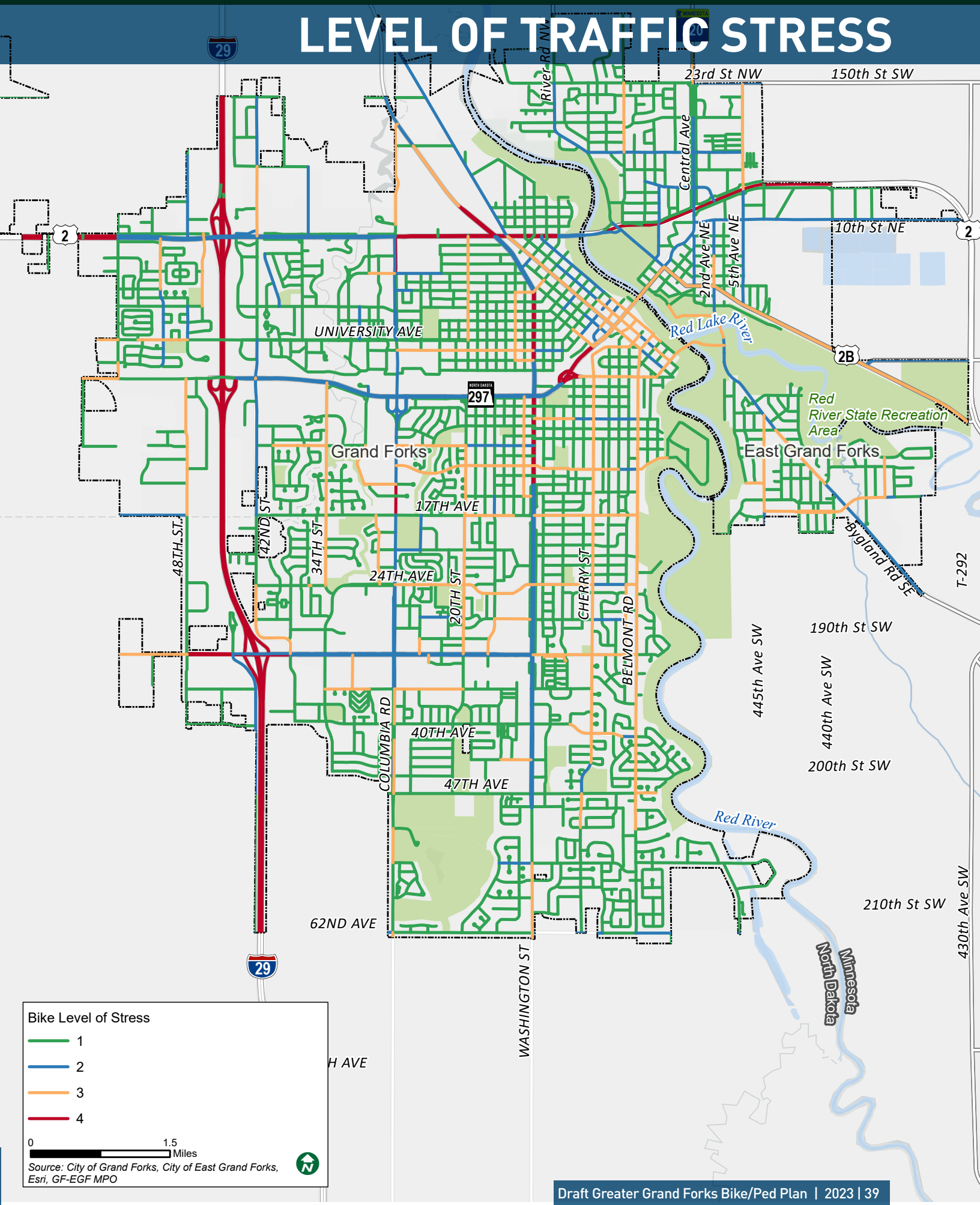
This analysis is based on methodology developed by the Mineta Transportation Institute and the Oregon Department of Transportation. Greater Grand Forks BLTS was determined at the road segment level through a GIS analysis that accounted for prevailing speed, functional classification, average vehicles per day, number of lanes, and presence of bike facilities such as lanes, shared lane markings, or separated paths.

The BLTS methodology pairs with three groupings of cyclists by confidence level illustrated in Chapter 01. Expanding the BLTS 1 and BLTS 2 network is a key goal of the Greater Grand Forks Bike/Ped Plan. More than half of the population typically falls into the largest of the group of "Interested but Concerned" cyclists. These are people who would ride if roadway conditions were perceived to be safe enough.

Results

Most of the network is low- to moderate-stress roadway systems, with connections between the roadways limited by large high-stress corridors preventing travel between low-stress areas. The low-stress networks are largely comprised of neighborhood streets located between principal arterials and commercial corridors like Washington Street, DeMers, US 2, and Columbia Road. Many of these corridors have parallel shared use facilities, allowing for low-stress travel along them.

BICYCLE LEVEL OF TRAFFIC STRESS



WALKING AND BIKING **DEMANDS ANALYSIS**

The bicycle and pedestrian demand analysis for Greater Grand Forks was a quantitative analysis of features that indicate demand for biking and walking, as well as features that are known to generate biking and walking trips.

Methodology

The demand analysis included the following factors:

- Population Density
- Employment Density
- Population and Employment Density (Entropy Index)
- Connections to Existing Network
- Community Destinations
- Schools

Population Density

Areas with higher population density represent a greater potential for bicycle and walking trips as an origin and destination. The places with higher population density are:

- Grand Forks and East Grand Forks Downtowns
- University of North Dakota
- Residential areas around the Grand Cities Mall

Employment Density

The following were found to be high employment density areas:

- Grand Forks and East Grand Forks downtowns
- University of North Dakota
- Commercial corridors such as Washington Street, 32nd Avenue South, Columbia Road, and DeMers Avenue

There are also pockets of dense employment associated with Altru Hospital, large commercial destinations like the Grand Cities Mall and Columbia Mall, and industrial uses along US 2 and MN220 in East Grand Forks and west of Interstate 29 in Grand Forks.

Connections to Existing Network

This analysis looked at the existing bicycle and pedestrian network, as well as addressing regional barriers in the network.

Population and Employment Density

Areas with a diverse set of employment types (such as jobs in the office, retail, and service sectors) plus many occupied housing units are more conducive to walking trips as people can take short trips to meet their daily needs. Areas with a near equal mix of employment and housing include downtown Grand Forks and East Grand Forks and the areas surrounding Grand Cities Mall and Columbia Mall.

Community Destinations

Not all trips are between home and work. Retail destinations, daily services, and amenities like trails and parks all create a demand for trips. These locations were mapped, and the density of these destinations was used when determining which investments should be a priority. The areas with the highest density of these destinations include:

Downtown Grand Forks and Downtown East Grand Forks. Cross river connectivity is an essential component of supporting investments in the twin downtowns areas as well as commercial corridors like Columbia Road and Washington Street.

Schools

Universities, K-12 schools, daycares, preschools, and other educational destinations are all expected to have a built in demand for pedestrian and bicycle trips.

Transit Connections

Trips to and from transit are typically multimodal, with people walking, biking, or rolling between transit service and their final destinations. Thus, it can be assumed that all transit stops are potential pedestrian and bicycle trip generators, including the two CAT transit centers located in Downtown Grand Forks and the Grand Cities Mall.

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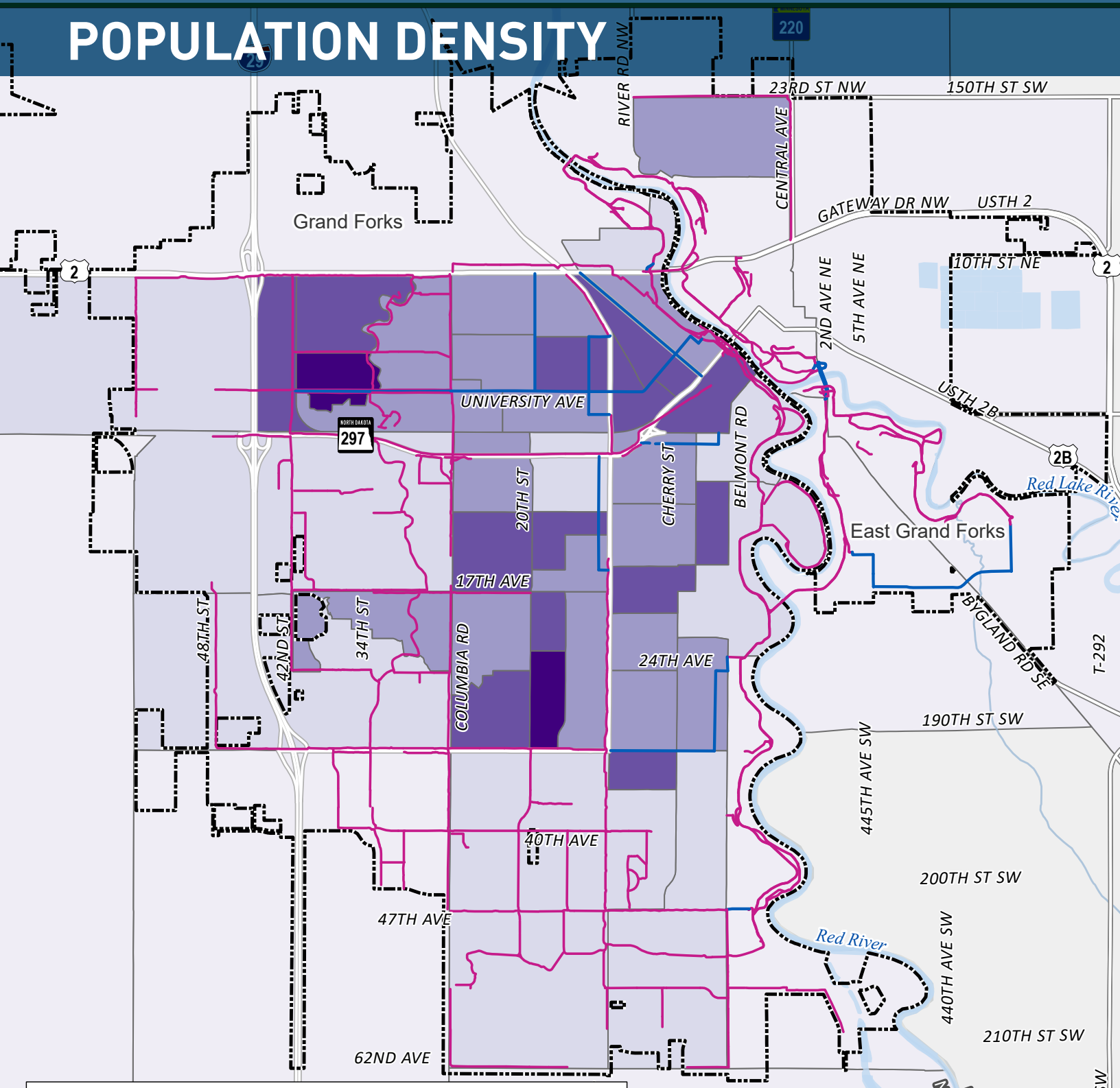
POPULATION DENSITY



Population Density, Block Groups
People per sq mi

- 14 - 1,210
- 1,211 - 3,260
- 3,261 - 5,181
- 5,182 - 7,650
- 7,651 - 13,692

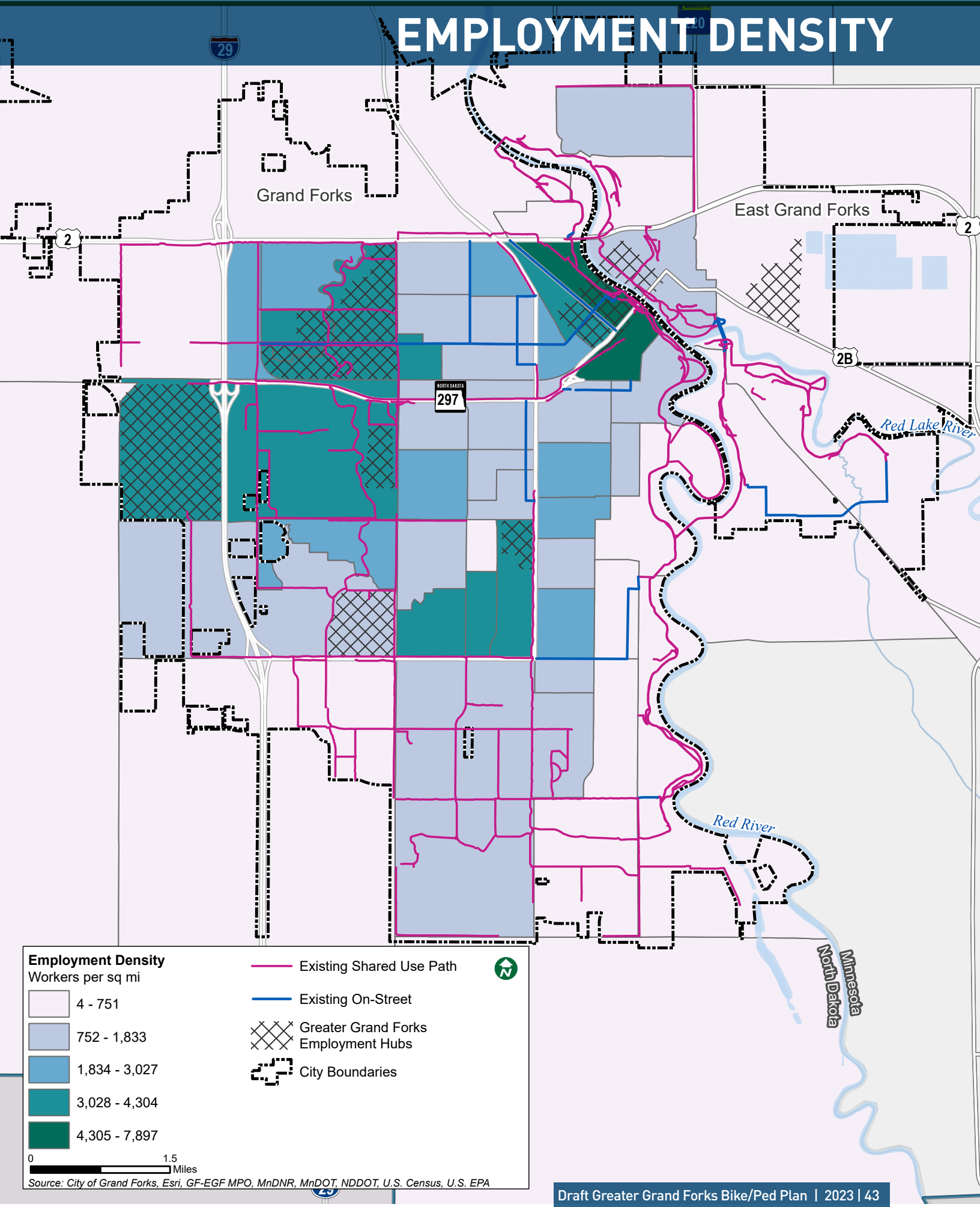
0 1.5 Miles

- Existing Shared Use Path
- Existing On-Street
- City Boundaries

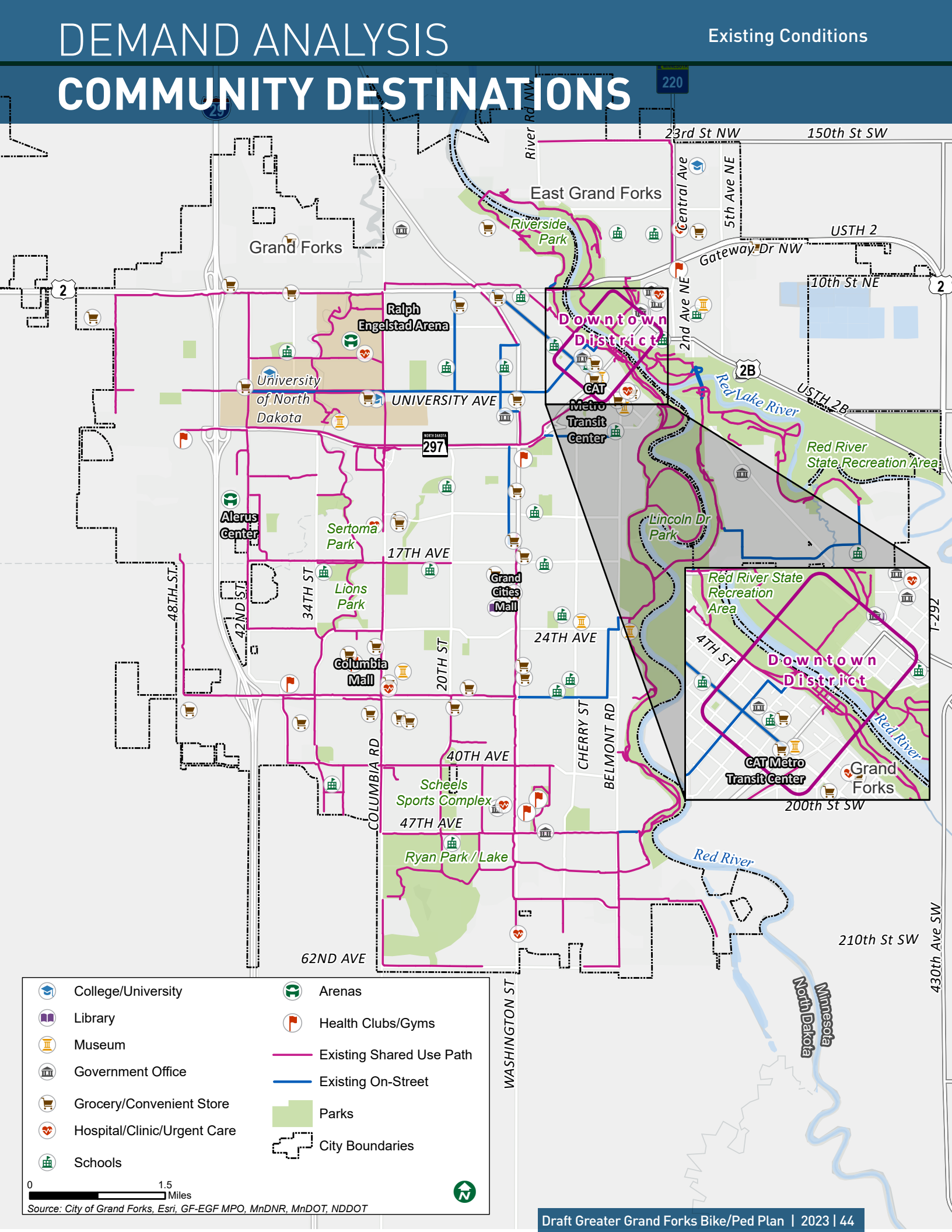
Source: City of Grand Forks, Esri, GF-EGF MPO, MnDNR, MnDOT, NDDOT, U.S. Census, U.S. EPA

DEMAND ANALYSIS

EMPLOYMENT DENSITY



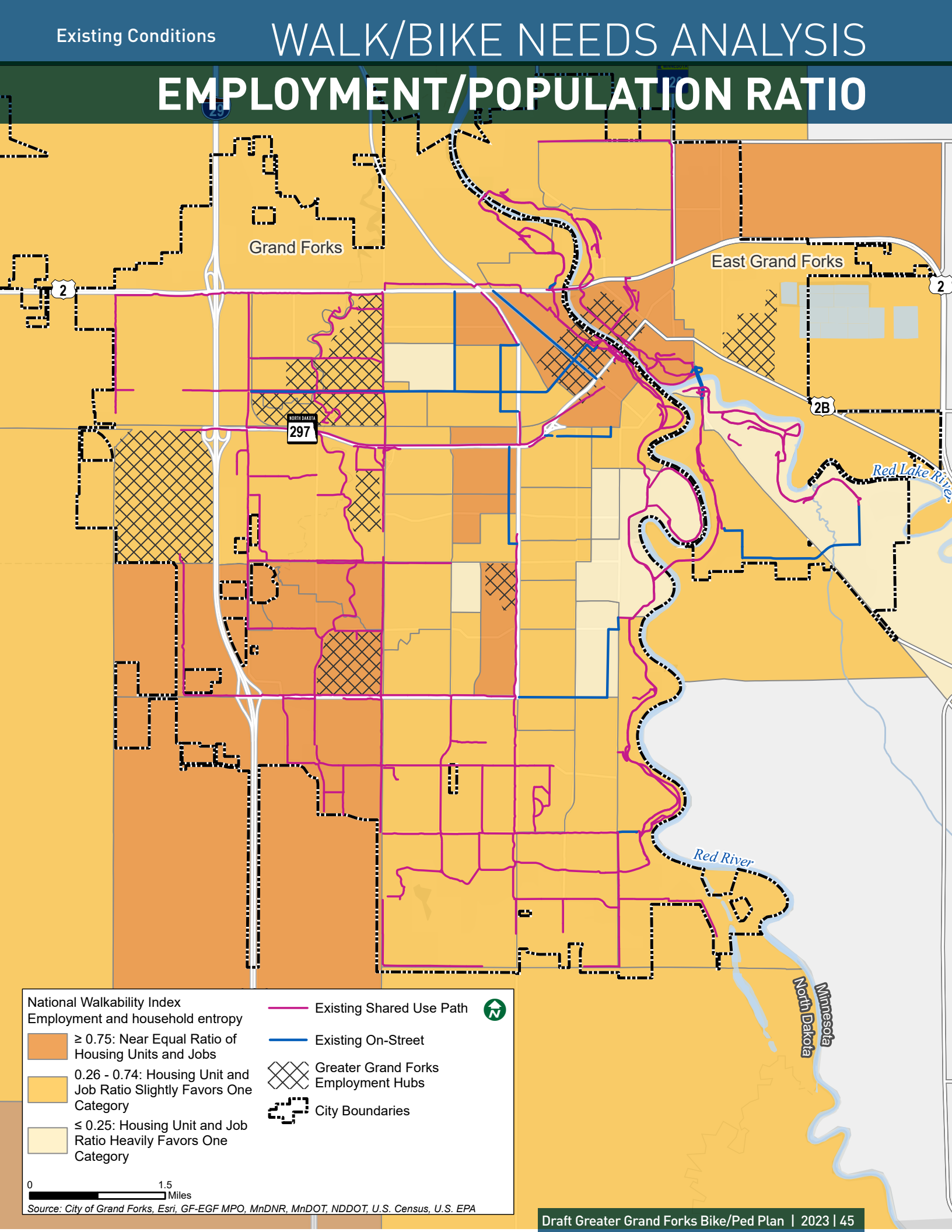
COMMUNITY DESTINATIONS



Source: City of Grand Forks, Esri, GF-EGF MPO, MnDNR, MnDOT, NDDOT

WALK/BIKE NEEDS ANALYSIS

EMPLOYMENT/POPULATION RATIO



ANALYSIS OF **EXISTING PLANS**

There are several recent plans that are relevant to the goals and objectives of the Greater Grand Forks Bike/Ped Plan. These are detailed in Table 1 below. This plan will complement these existing local and regional plans. A detailed summary of the plans can be found in **Appendix B – Existing Conditions**.

Summary of Findings

The recommendations in this plan are in part drawn from previous local and regional planning efforts, and are designed to comply with state-level multimodal planning policy and guidance. Key documents for developing network recommendations are as follows:

The **2019 Grand Forks-East Grand Forks Bicycle and Pedestrian Element Update** prioritized bicycle and pedestrian improvements in the MPO study area. Recommendations from this plan build on the recommendations from the 2019 plan.

The **2045 Metropolitan Transportation Plan (MTP)** provides direction and guidance that illustrates the need for investment in bicycle and pedestrian infrastructure and provides a legislative justification for these investments. The MTP established a regional goal of zero fatalities and three or fewer non-serious injuries for non-motorized user per year by 2045.

The **Grand Forks-East Grand Forks Downtown Transportation Study** conducted a bicycle and pedestrian level of service analysis for both downtowns. The results of that study were used to help prioritize pedestrian and bicycle projects.

Table 1: Previous Relevant Bicycle and Pedestrian Planning Efforts

Plan	Agency	Year
MnDOT Statewide Bicycle System Plan	MnDOT	2016
Metropolitan Transportation Plan	GF-EGF MPO	2018
GF-EGF Bicycle and Pedestrian Element Update	GF-EGF MPO	2019
North Dakota Moves Active and Public Transportation Plan	NDDOT	2019
Grand Forks Downtown Parking Study	GF-EGF MPO	2019
Grand Forks / East Grand Forks Downtown Transportation Study	GF-EGF MPO	2019
Minnesota 220 N Corridor Study	GF-EGF MPO	2019
MnDOT Statewide Pedestrian System Plan	MnDOT	2021
University Avenue Corridor Study	Community Foundation of Grand Forks. East Grand Forks & Region	2021
2050 East Grand Forks Land Use Plan	City of East Grand Forks	2021
GF-EGF Transit Development Plan	GF-EGF MPO	2022
2050 Grand Forks Land Use Plan	City of Grand Forks	2022

ANALYSIS OF EXISTING POLICIES & PROGRAMS

The following summarizes key policy and programs for walking and biking in the region.

Grand Forks

Grand Forks improves conditions for biking and walking through installation of new facilities and regular maintenance of existing facilities. Grand Forks generally addresses gaps in the pedestrian network at the time of roadway reconstruction projects.

The Downtown Action Plan has established direction for making a more vibrant, bikeable, and walkable downtown area.

The community has recently welcomed Grand Rides, a bike-share system. The debut of this shared micromobility program included a new requirement that the maintainer of the Grand Ride fleet provide bike parking.

The City of Grand Forks City Council adopted a "Complete Streets" policy in 2018.

Grand Forks requires any public road over 300 feet in length to have sidewalks on both sides of the right of way. Roads in certain areas are exempt from this requirement and are detailed in the sidewalk policy grandfather clause. All public roads in areas zoned for industrial use are not mandated to include sidewalks. Private roads are not required to include sidewalks.

Grand Forks has not published an ADA Transition plan as of this time of writing, but the city includes annual project and budget line item to address ADA deficiencies. An ADA Transition Plan is budgeted for 2023.

The Grand Forks-East Grand Forks Downtown Transportation Study conducted a bicycle and pedestrian level of service analysis for both downtowns. The results of that study were used to help prioritize pedestrian and bicycle projects.

East Grand Forks

East Grand Forks does not host any regular biking or walking events.

East Grand Forks adopted a sidewalk ordinance in 2010. Prior to this, installation of sidewalks was left to the discretion of housing developers and individual property owners. As a result, the pedestrian networks in the newer developments completed prior to 2010 are generally limited to principal arterials, with few segments of sidewalks within the interior of neighborhoods. There is no explicit policy for addressing gaps in the pedestrian network.

East Grand Forks does not regulate or require bike parking in any districts, nor has the community adopted a complete streets policy.

East Grand Forks published an ADA Transition Plan in 2019. The plan included a summary of a physical barriers that limit the accessibility of programs, activities, or services, and provided a schedule and budget to address ADA deficiencies in a timely manner. ADA transition plans only assess existing infrastructure, and might not provide recommendations for places where ADA infrastructure is entirely absent.

04 – RECOMMENDATIONS

FRAMING THE REGIONAL NETWORK

The recommendations for investments into the Greater Grand Forks pedestrian and bicycle networks were developed from public & steering committee input, analysis of existing conditions, the needs & demands analysis, project goals & objectives, and national and local best practices for active transportation infrastructure and programs.

Creating the list of recommendations and refining them was a multi-step, iterative, adaptive process that utilized quantitative data from the existing conditions analysis in conjunction with the qualitative results of public and key stakeholder input.

The proposed walking & bicycling network for Greater Grand Forks balance the following:

- The vision, goals, and objectives for the Bike/Ped Plan
- Public Engagement
- Existing Conditions Analysis
- Prioritization Analysis & Results
- Steering Committee and Stakeholder Engagement
- Guidance from NDDOT and MnDOT
- Collaboration between Grand Forks, East Grand Forks, and the MPO
- Recommendations from previous plans and studies
- The **Design Guidelines documented in Appendix A**

Network recommendations also reflect:

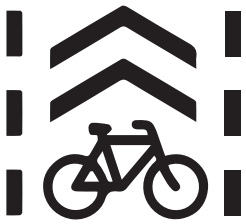
Updated project recommendations from previous plans

- Addressing regional barriers such as major roadways, railroads, and river crossings
- Gaps in the sidewalk/pedestrian network
- Gaps in the existing bike network

Recommended Investments at a Glance

130 miles of recommended facilities

13.7 miles bike lanes, bike routes and boulevards



13.3 miles buffered bike lane

18.5 miles sidewalk

8.7 miles Greenway

76.3 miles sidepaths / shared use paths

Table 2: Summary of Existing and Recommended Facilities by Type

Facility Type	Existing Facilities (mi)	Recommended by Bike/Ped Vision (mi)	Existing + Recommended Facilities (mi)
Bicycle Route/Bicycle Boulevard	6.4	3.9	11.3
Buffered Bike Lane	0.0	13.3	13.3
Conventional Bike Lane	0.0	9.8	9.8
Greenway & Trail System	32.4	8.7	41.1
Sidepath/Separated Bike Lane with Sidewalk	44.5	76.3	120.8
Sidewalk	280.2	18.5	289.7
Total	364.7	130.6	495.3

PEDESTRIAN NETWORK: **LONG TERM VISION**

The Pedestrian Network map shown on the following page represents the long-term vision for regional pedestrian access. It aims to provide a connected network of pedestrian facilities that provide a comfortable experience for a wide array of users. The recommendations expand the existing network with a focus on improvements to destinations most likely to be accessed by people walking and/or using transit.

Network recommendations reflect:

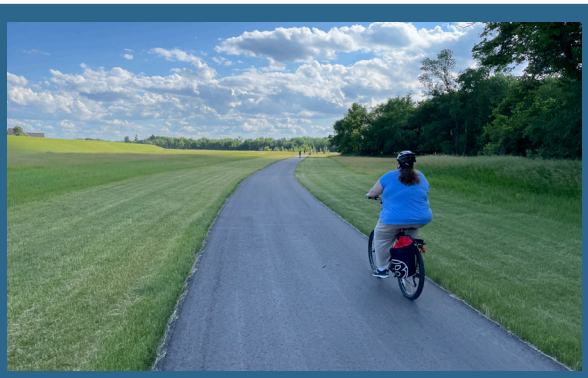
- Updated project recommendations from previous plans
- Addressing regional barriers such as major roadways, railroads, and the river
- Gaps in the sidewalk/pedestrian network
- Opportunities to improve pedestrian crossings of roadways and other regionally significant barriers

Sidewalks & Sidewalks Gaps

- The sidewalk network is the largest component of the multimodal network
- A network of direct pedestrian paths encourages walking and reduces delay
- Filling sidewalk gaps or removing barriers between segments of existing sidewalk can greatly expand the pedestrian network

Mid-block Crossing Improvements

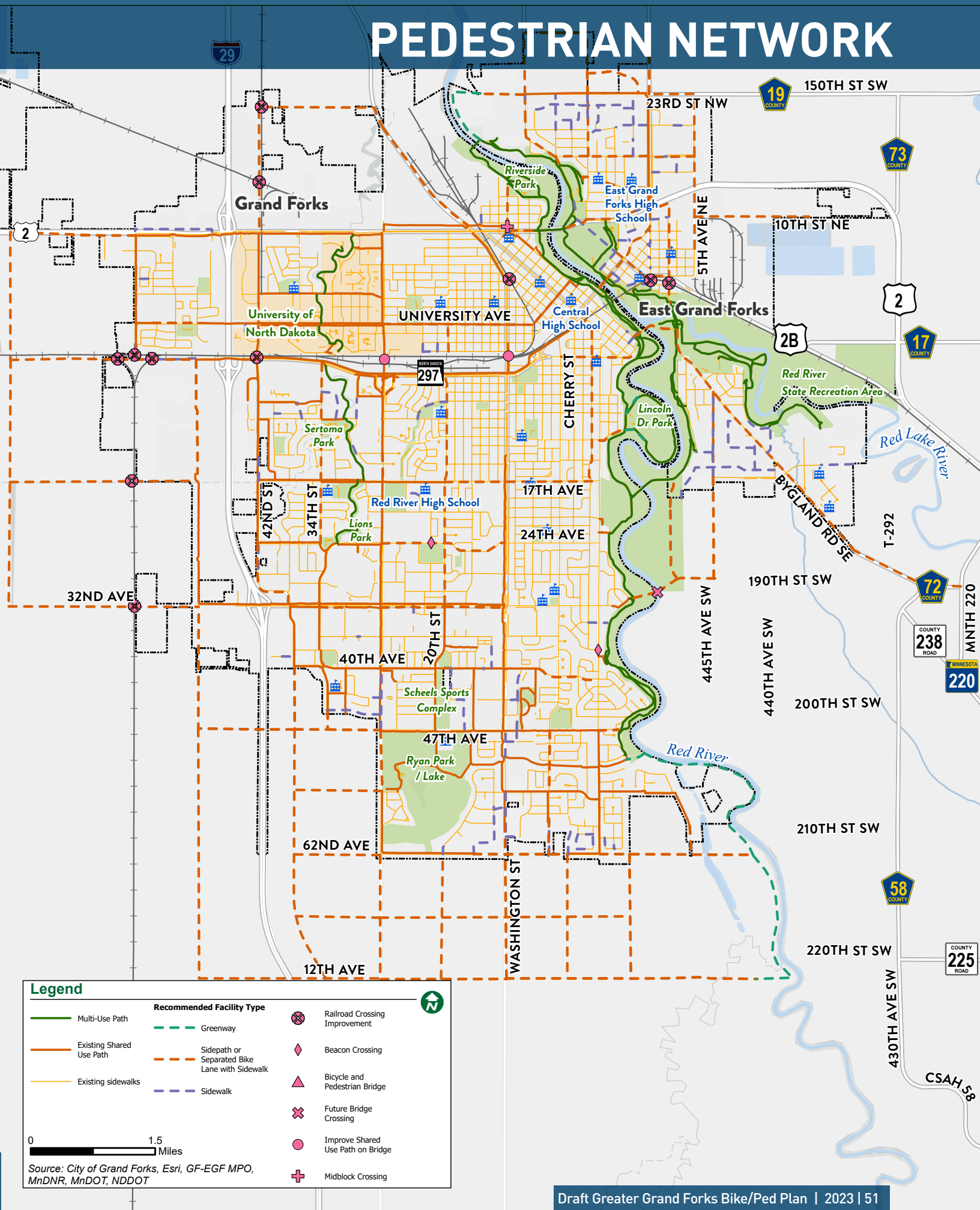
- Pedestrian crossings across a roadway are a critical part of any pedestrian network
- Mid-block crossings should be used at places with high amounts of pedestrian traffic, such as mid-block transit stops, plazas, or building entrances
- Pair with other treatments such as enhanced crossings, median crossings islands, and curb extensions



Shared Use Paths / Multi Use Paths

- Physically separated from motor vehicle traffic by an open space or barrier.
- Most shared use paths are designed for two-way travel and can serve a variety of non-motorized users. Paint marking and signage can be used to separate/direct walking and biking traffic.
- They may be located within roadway right-of-way or an independent right-of-way

RECOMMENDED PEDESTRIAN NETWORK



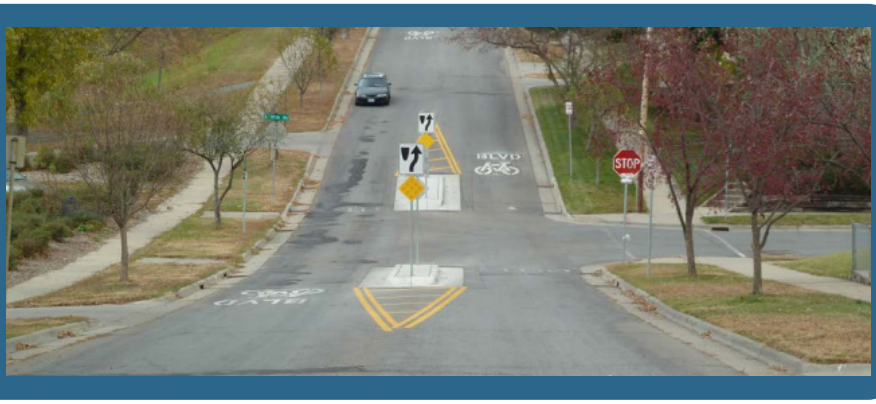
BICYCLE NETWORK: **LONG TERM VISION**

The Bike Network map shown on the following page represents the long-term vision for a high quality, connected regional network of bicycle facilities network. The recommendations build on the existing network, and broadens the spectrum of bicycle facility types in the region. Network recommendations reflect:

- Updated project recommendations from previous plans
- Addressing bike network gaps and regional barriers such as major roadways, railroads, and the river
- The latest national and local guidance on all-ages-and-abilities bicycle facility types
- Opportunities for enhanced bike routes on low-traffic neighborhood streets

Bicycle Boulevards

- Shared roadway designed to prioritize bicycle traffic on low-volume, low-speed streets such as local and residential streets.
- Often paired with signs, pavement markings, traffic calming and diversion treatments, and intersection modifications.

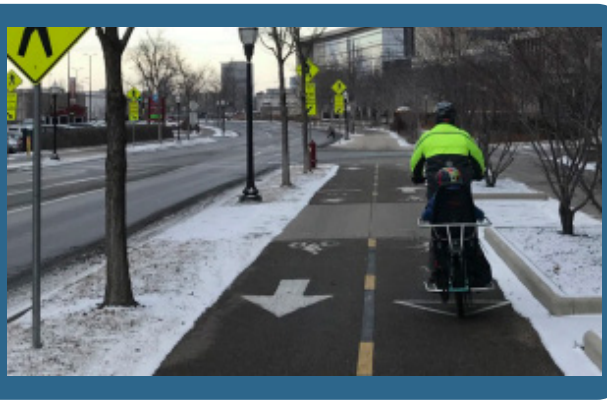


Bike Lanes & Buffered Bike Lanes

- On-road bike lanes use pavement markings and signs to designate exclusive space for bicyclists.
- Buffered bike lanes provides increased horizontal separation between bicyclists, travel lanes, and/or parking lanes.
- Buffers can be a double solid white line or a solid line along with a broken line.

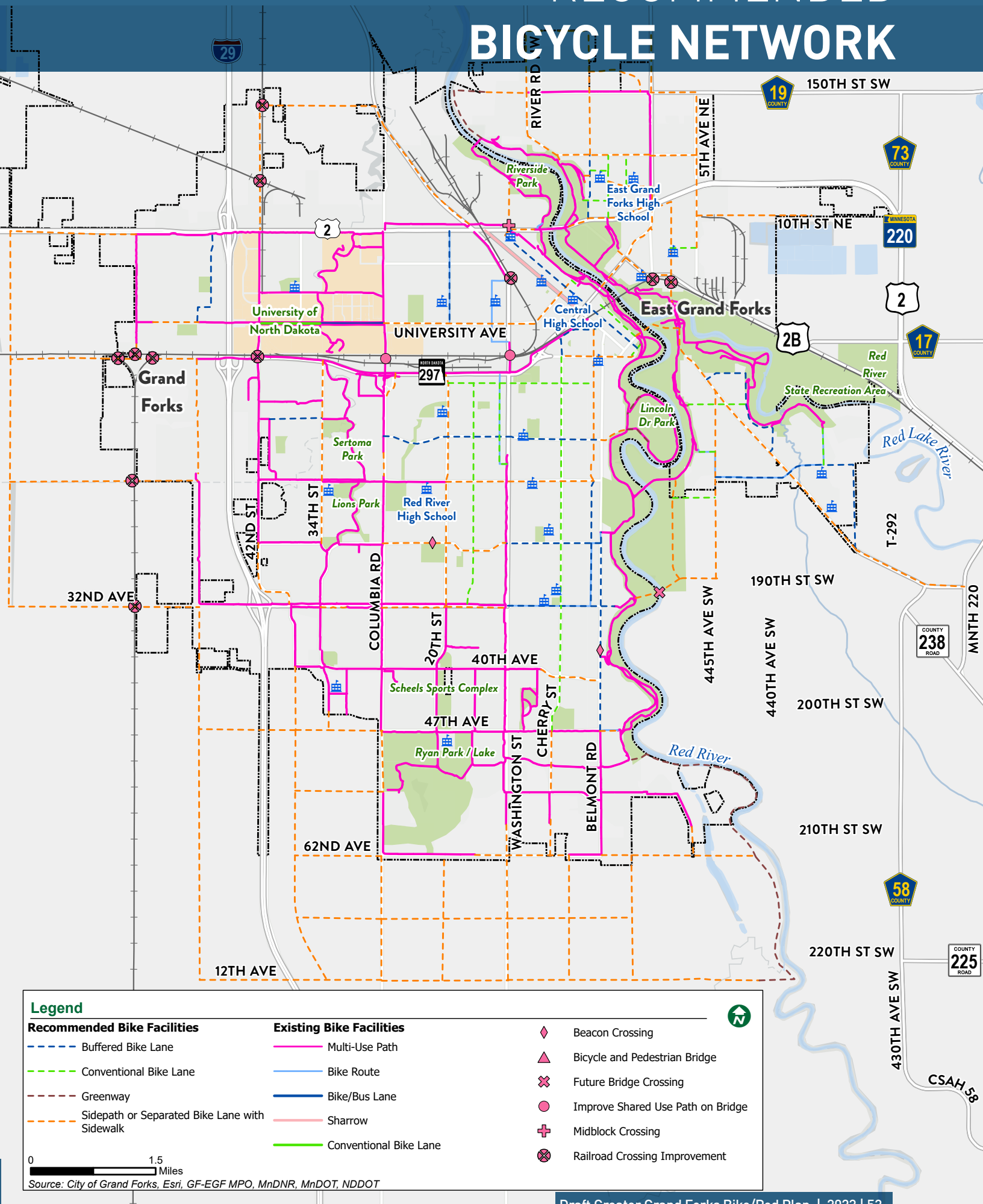
Separated Bike Lanes & Sidepaths

- Also known as cycle tracks and/or protected bike lanes.
- Bike-only facilities located within or directly adjacent to a roadway. If paired with sidewalks, sidepaths are typically placed between the roadway and walking path, and separated from the walking path by a buffer.
- Separated vertically and horizontally with element such as flexible post delineators, curb, bollards, raised medians, parked motor vehicles, landscaping, and/or other physical objects.



Photos courtesy of MnDOT

RECOMMENDED BICYCLE NETWORK



Legend

Recommended Bike Facilities

- Buffered Bike Lane
- Conventional Bike Lane
- Greenway
- Sidepath or Separated Bike Lane with Sidewalk

Existing Bike Facilities

- Multi-Use Path
- Bike Route
- Bike/Bus Lane
- Sharrow
- Conventional Bike Lane

- Beacon Crossing
- Bicycle and Pedestrian Bridge
- Future Bridge Crossing
- Improve Shared Use Path on Bridge
- Midblock Crossing
- Railroad Crossing Improvement

0 1.5 Miles

Source: City of Grand Forks, Esri, GF-EGF MPO, MnDNR, MnDOT, NDDOT

SAFE ROUTES TO SCHOOL

Safe Routes to School (SRTS) is a national effort to encourage students and families to walk and bicycle to school. SRTS programs are often realized through a combination of capital and programmatic investments to improve safety and increase rates of walking and biking to schools. Detailed SRTS recommendations are included in Appendix C

Grand Forks & East Grand Forks Safe Routes to School

Schools in both communities have a history of SRTS planning. This update to the Greater Grand Forks Bike/Ped Plan included an SRTS element, realized as the formation of committee who assisted in surveying current SRTS practice in Grand Forks, analyzed previous SRTS survey data, and developed updated walking and biking maps for elementary and middle schools.

Recommendations for Non-Infrastructure Programs

SRTS programs were identified and inventoried via consulting sessions with MPO staff, the SRTS Committee, and stakeholders. The SRTS team used this data analysis and interviews to develop a comprehensive list of recommendations for existing programs and opportunities for new programs to increase rates of walking or biking to school. A complete list of recommended programs can be found in **Appendix C - GF-EGF Safe Routes to School Memo**.

Safe Routes to School Maps

As the result of multiple meetings with MPO staff, the SRTS Steering Committee, and stakeholders, the project team decided to replace the previous SRTS maps. These new maps were developed using the Microsoft Office suite rather than specialized mapping software. The logic behind this choice is as follows:

- Maps can be made quickly
- Maps can be updated easily
- Maps can be prepared and printed by the schools
- Development can include community participation
- Helps with capacity building at schools; builds sense of ownership and inclusion in the SRTS process
- Easier to understand and use by people of all ages and abilities.

The opposite page shows an example of SRTS map. Due to being developed in the Microsoft suite, schools will be able to update the map as conditions in their community change.

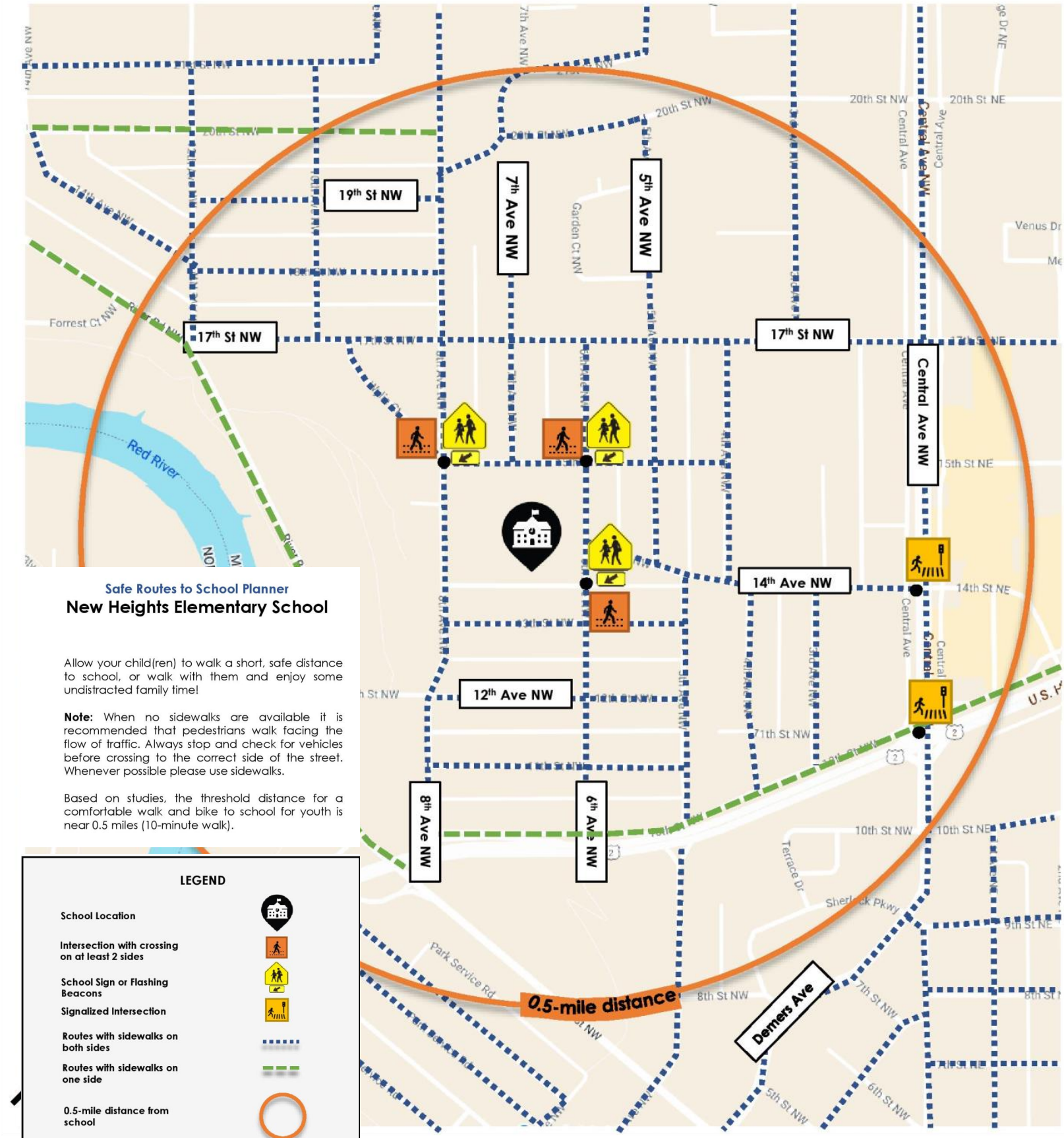
These maps are only one part of a comprehensive SRTS strategy detailed in **Appendix C.**

Program Recommendation		Purpose	Responsibility to Lead	Description	Timing	Resources
Weather						
Suggestion	Dress For the Weather Campaign	To encourage kids and families to walk and wheel in all seasons.	School/PTO/PTA/Parents and Families	An education and awareness initiative focused on teaching students how to dress to be comfortable walking or cycling in different weather conditions and help them obtain the clothing and equipment they need. We experience a wide range of weather conditions — ice, snow, rain, sun — and often a large range in temperatures from freezing cold to sweltering hot. With the right clothing and equipment, walking and wheeling can be safe and enjoyable in all seasons. To remind students of this, and to celebrate year-round active transportation, running a Dress for the Weather campaign is very helpful. A Dress for the Weather campaign can also be a fun part of a Walking and Wheeling Day event, such as Winter Walk Day.	Ongoing throughout the school year	• Tips for Winter Walking by Ontario School Travel • Minnesota Winter Walking 101
	Winter Walk Day	To celebrate families who already walk or wheel to school in colder months and encourage others to give active transportation a try	School/PTO/PTA/Parents and Families	Winter Walk Day (WWD) is an annual celebration of winter walking that takes place on the first Wednesday of February across Canada. A one-day celebration event during winter when all students who can are encouraged to walk or cycle all or part way to and from school. Use announcements and posters to promote the event, offer refreshments (hot chocolate) and prizes, and make it fun for everyone with music and activities when students arrive at school. Include bussed students by giving them the opportunity to walk on the school site.	The annual event (First week of February)	• Minnesota Winter Walk to School Day • Winter Walk Day Activity Ideas • Winter Walk Day sample messages
Ride Sharing						
Existing	• Survey results show that some families are Carpooling to school instead of driving individual cars. • There was no mention of any sort of program or arranged plan for this.					

Sample of non-infrastructure Safe Routes to School program recommendations

SAMPLE

SAFE ROUTES TO SCHOOL MAP



Safe Routes to School Planner

New Heights Elementary School

Allow your child(ren) to walk a short, safe distance to school, or walk with them and enjoy some undistracted family time!

Note: When no sidewalks are available it is recommended that pedestrians walk facing the flow of traffic. Always stop and check for vehicles before crossing to the correct side of the street. Whenever possible please use sidewalks.

Based on studies, the threshold distance for a comfortable walk and bike to school for youth is near 0.5 miles (10-minute walk).

LEGEND

- School Location
- Intersection with crossing on at least 2 sides
- School Sign or Flashing Beacons
- Signalized Intersection
- Routes with sidewalks on both sides
- Routes with sidewalks on one side
- 0.5-mile distance from school

05 – IMPLEMENTATION

PLAN
IMPLEMENTATION

Implementation is critical component of turning the Bike/Ped Plan's vision and guiding principles into a reality. Implementation includes identifying multimodal network priorities, developing concepts for corridors, estimating the costs of project elements, and developing recommendations to address non-infrastructure barriers to walking and biking.

Project Prioritization Framework & Recommendations

This plan identifies bicycle and pedestrian priority projects for both Grand Forks and East Grand Forks. These are shown in **Table 2** and **Table 3**, respectively. These bicycle and pedestrian projects were identified through a prioritization methodology. A detailed description of the prioritization methodology can be found in **Appendix H - Network Prioritization Criteria Memo.**

Priority Corridor Draft Concept Development

This plan included the development of five priority corridor draft concepts, meant to illustrate how the Cities of Grand Forks and East Grand Forks could expand the bicycle and pedestrian network along key corridors that present unique design challenges. These concepts were shown to the public at a series of online virtual open house events in late March, 2023. A summary of these open houses, project typical sections, and a record of stakeholder feedback are included in **Appendix F - Priority Corridor Draft Concepts Engagement Summary Memo**.

Cost Estimates

Additionally, this section includes a summary of general bicycle and pedestrian facility cost estimates, which are shown in **Table 4**. Cost estimates are based on the generalized cost of completing similar projects throughout North Dakota and Minnesota. The cost estimates are high level, and do not accommodate for unique elements that may raise overall project cost, such as grading, drainage, utilities, ROW acquisition and/or easements, or landscaping.

Performance Measures

Performance based planning promotes informed decision making by relating community goals and investment goals to measurable outcomes. This plan provides several outcome- and investment-based tracking measures meant to assist the MPO and partners in tracking and measuring the efficacy of local and regional government actions.

Policy and Programs Recommendations

This plan also provides policy and programmatic recommendations which the Grand Forks-East Grand Forks MPO, the City of Grand Forks, the City of East Grand Forks, and other non-governmental organizations can adopt in order to help to develop a more walkable and bikeable community. A review of policies and programs with recommendations are shown in **Table 5**.

PRIORITIZATION **FRAMEWORK**

Project prioritization can be used to ensure that investments that best meet the goals and objectives of the plan and provide the largest return are implemented first. Implementation also leverages on planned/programmed investments and capitalizes on new infrastructure. Finally, it ensures that improvements are distributed equitably. A detailed summary of the prioritization methodology can be found in **Appendix H - Network Prioritization Criteria Memo.**

Key Prioritization Parameters

- Projects shall be prioritized based on goals identified by public input and the project steering committee
- Bicycle projects and pedestrian projects all support the same multimodal network, and thus will be prioritized together, rather than separately.
- Prioritization criteria will be conducted using GIS, with a reproducible data-driven methodology

Prioritization Criteria

- Functional Classification (Pedestrian Projects Only)
- Signed Road Speed (Pedestrian Projects Only)
- Level of Traffic Stress (Bicycle Projects Only)
- Sidewalk Gap (Pedestrian Projects Only)
- Pedestrian/Bike Crash Location
- Employment Density
- Destination Density
- Schools
- Regional Barrier
- Environmental Justice Demographic Index
- Transit Stations
- Greenway Connection (Bicycle Projects Only)

FLEXIBLE IMPLEMENTATION

The implementation of a walking and cycling network should be pursued pragmatically and opportunistically. When feasible, the improvements recommended by this plan update should be realized through the following methods:

- Included in scheduled street and utility improvement projects.
- Executed as stand-alone sidewalk, shared use path, bikeway, and ADA accessibility improvement projects
- Included with private development projects

Recommended projects from this plan should be included in the City of Grand Forks and City of East Grand Forks Capital Improvement Programs (CIP) on a case-by-case basis as determined by the public, elected officials, and staff.

PRIORITY CORRIDOR
DRAFT CONCEPTS

The study team worked with the MPO and cities to develop draft typical sections for five priority corridors from the recommended bicycle and pedestrian network. The five corridors that were developed into draft concepts were:

Grand Forks

- University Avenue – North 3rd Street to North Columbia Road
- 13th Avenue – South Columbia Road to Greenway
- 17th Avenue – South 20th Street to Belmont Road

East Grand Forks

- River Road - River Road to 21st Northwest to Levee
- Rhinehart Drive - Bygland Road to Greenway Boulevard.

The public feedback provided at the Priority Corridor Draft Concepts Open Houses suggest that the trade-offs and options of some of the priority corridors are too varied and complex, and public opinion too diverse, to present any corridor recommendations without further analysis and engagement. A detailed summary of the engagement efforts are included in **Appendix F - Priority Corridor Draft Concepts Engagement Summary Memo**.

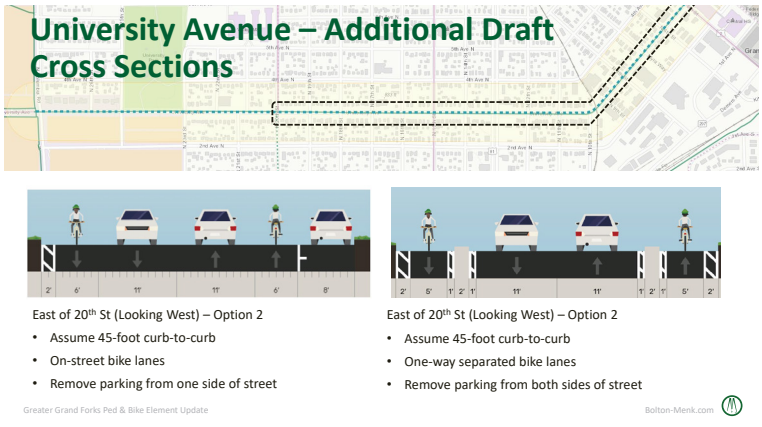
These corridors require further detailed analysis to assess feasibility and impacts, or to initiate preliminary design, or project phasing. Each plan will be considered and prioritized as per the MPO's or city's existing review, scope development, and engagement processes. Preliminary and final design should use the resources in **Appendix A - Design Guidelines** when developing draft concepts for the priority corridors.

Virtual Public Open Houses

The virtual public open houses were hosted via Zoom during the week of March 27th, 2023. The virtual public open houses were advertised via direct mailers to stakeholders along the corridor, along with digital notices on the project website, MPO social media, and other local social media. Each priority corridor received one evening session. Approximately 50 participants joined across all five sessions. Each session included a presentation about the plan update, the specific corridor concept, a tutorial on using the interactive online mapping platform, and an open discussion about the concept.

Corridor Concept Typical Sections

The study team developed a series of project typical sections for the priority corridor concepts. These are planning level suggested typical sections for visualizing possible layouts for these projects, and do not reflect or imply a final design decision.



Corridor Concept Feedback

Feedback was collected during the Virtual Open House, via project email, and using INPUTiD, a web-based comment mapping utility. Over 100 comments were received between INPUTiD and email.

GRAND FORKS
PRIORITY PROJECTS

Table 2: City of Grand Forks Recommended Priority Projects

Corridor Name (Alphabetical)	From	To	Facility Type	Length (mi)	Estimated Cost*
13th Ave S†	Columbia Rd	S Washington St	Buffered Bike Lane	1.02	$153,000
13th Ave S†	S Washington St	Belmont Rd	Buffered Bike Lane	0.75	$112,500
17th Ave S†	S 20th St	Belmont Rd	Sidepath or Separated Bike Lane with Sidewalk	1.12	$3,770,000
24th Ave S	S Washington St	Belmont Rd	Buffered Bike Lane	0.76	$154,000
24th Ave S	Columbia Rd	S Washington St	Sidepath or Separated Bike Lane with Sidewalk	1.03	$3,625,000
32nd Ave S	S 34th St	S 31st St	Sidepath or Separated Bike Lane with Sidewalk	0.22	$1,130,000
32nd Ave S	Columbia Rd	S 20th St	Sidepath or Separated Bike Lane with Sidewalk	0.53	$1,945,000
32nd Ave S	S 20th St	S Washington St	Sidepath or Separated Bike Lane with Sidewalk	0.47	$1,795,000
Minnesota Ave/1st St SE	S 3rd St	3rd Ave SE	Sidepath or Separated Bike Lane with Sidewalk	0.38	$1,300,000
S 48th St/Shared use path/47th Ave S	32nd Ave S	Proposed shared use path	Sidepath or Separated Bike Lane with Sidewalk	1.76	$4,800,000
University Ave†	Columbia Rd	N 3rd St	Sidepath or Separated Bike Lane with Sidewalk	1.68	$5,730,000

The priority projects are listed in alphabetical order by corridor name for ease of reference.
**2023 Dollars*
†These projects were the focus on priority corridor draft concepts development detailed in Appendix F

EAST GRAND FORKS
PRIORITY PROJECTS

Table 3: City of East Grand Forks Recommended Priority Projects

Corridor Name (Alphabetical)	From	To	Facility Type	Length (mi)	Estimated Cost*
14th St NW/2nd Ave NE	6th Ave NW	Existing bike facility	Sidepath or Separated Bike Lane with Sidewalk	1.51	$5,265,000
182nd St SW†	Existing shared use path	445th Ave SW	Conventional Bike Lane	0.34	$51,000
Bygland Rd SE	1st St SE	Existing shared use path	Sidepath or Separated Bike Lane with Sidewalk	2.3	$6,690,000
Bygland Rd SE	Existing side-walk	MN TH 220	Sidepath or Separated Bike Lane with Sidewalk	0.95	$2,415,000
Greenway Blvd SE	Rhinehart Dr SE	19th Ave SE	Buffered Bike Lane	0.9	$195,000
Proposed shared use path	Existing inde-pendent side-walk	Proposed shared use path	Sidepath or Separated Bike Lane with Sidewalk	0.23	$655,000
Rhinehart Dr SE	Greenway Blvd SE	Proposed shared use path	Sidepath or Separated Bike Lane with Sidewalk	0.81	$2,145,000
Rhinehart Dr SE	Bygland Rd SE	Greenway Blvd SE	Sidepath or Separated Bike Lane with Sidewalk	0.69	$1,985,000
Rhinehart Dr SE‡	11th St SE	Greenway Blvd SE	Sidewalk	0.2	$180,000
Rhinehart Dr SE‡	Bygland Rd SE	11th St SE	Sidewalk	0.48	$408,000
River Rd NW‡	30th St NW	19th St NW	Sidepath or Separated Bike Lane with Sidewalk	0.84	$2,300,000
Proposed shared use path	Existing independent sidewalk	Proposed shared use path	Sidepath/Separated Bike Lane with Sidewalk	0.2	$580,000
Minnesota Ave/1st St SE	S 3rd St	3rd Ave SE	Sidepath or Separated Bike Lane with Sidewalk	0.4	$1,350,000

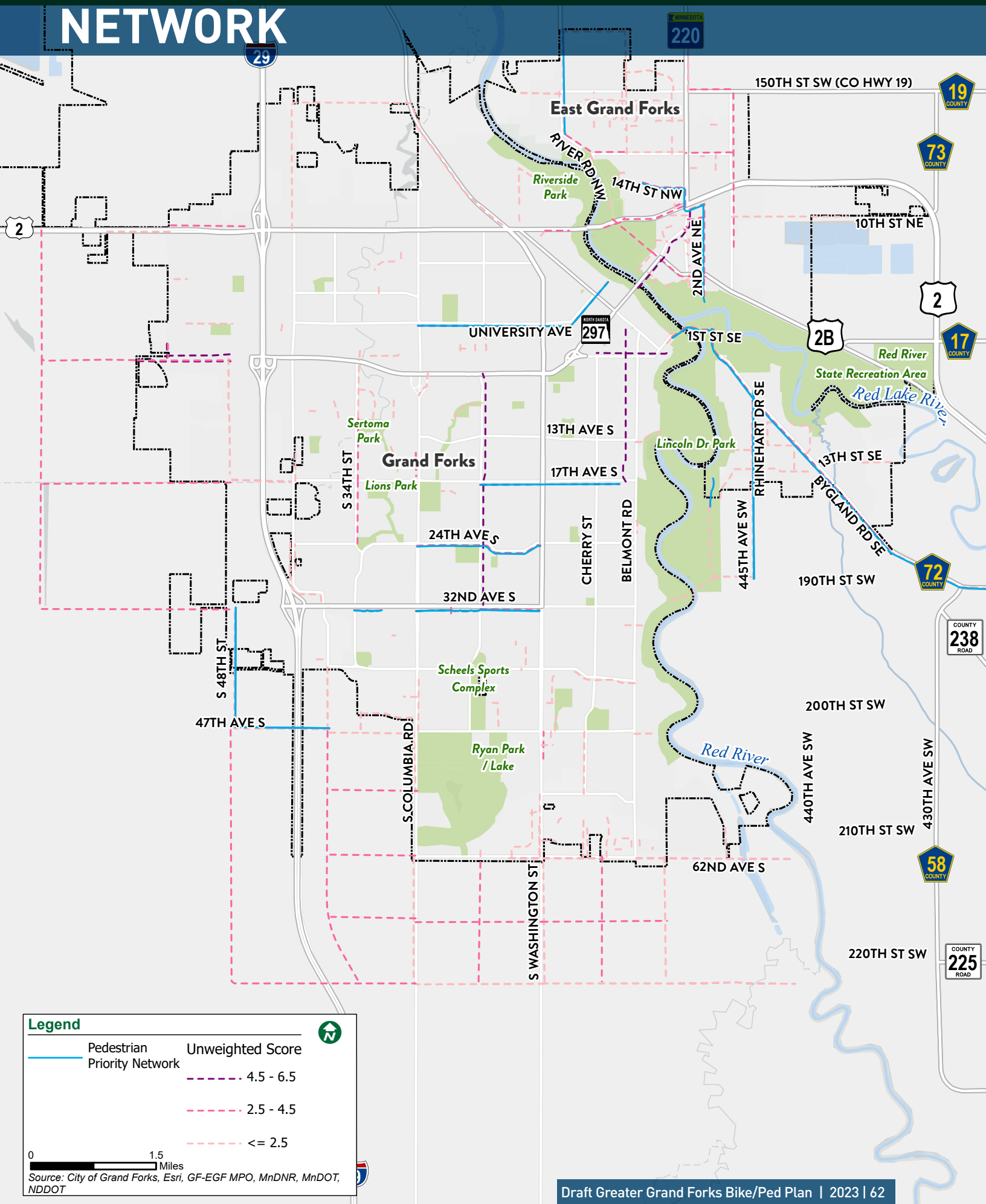
The priority projects are listed in alphabetical order by corridor name for ease of reference.

**2023 Dollars*

†Located outside of City of East Grand Forks municipal limits. Project implementation would be contingent on growth of city limits.

‡These projects were the focus on priority corridor draft concepts development detailed in Appendix F

PRIORITY PEDESTRIAN NETWORK



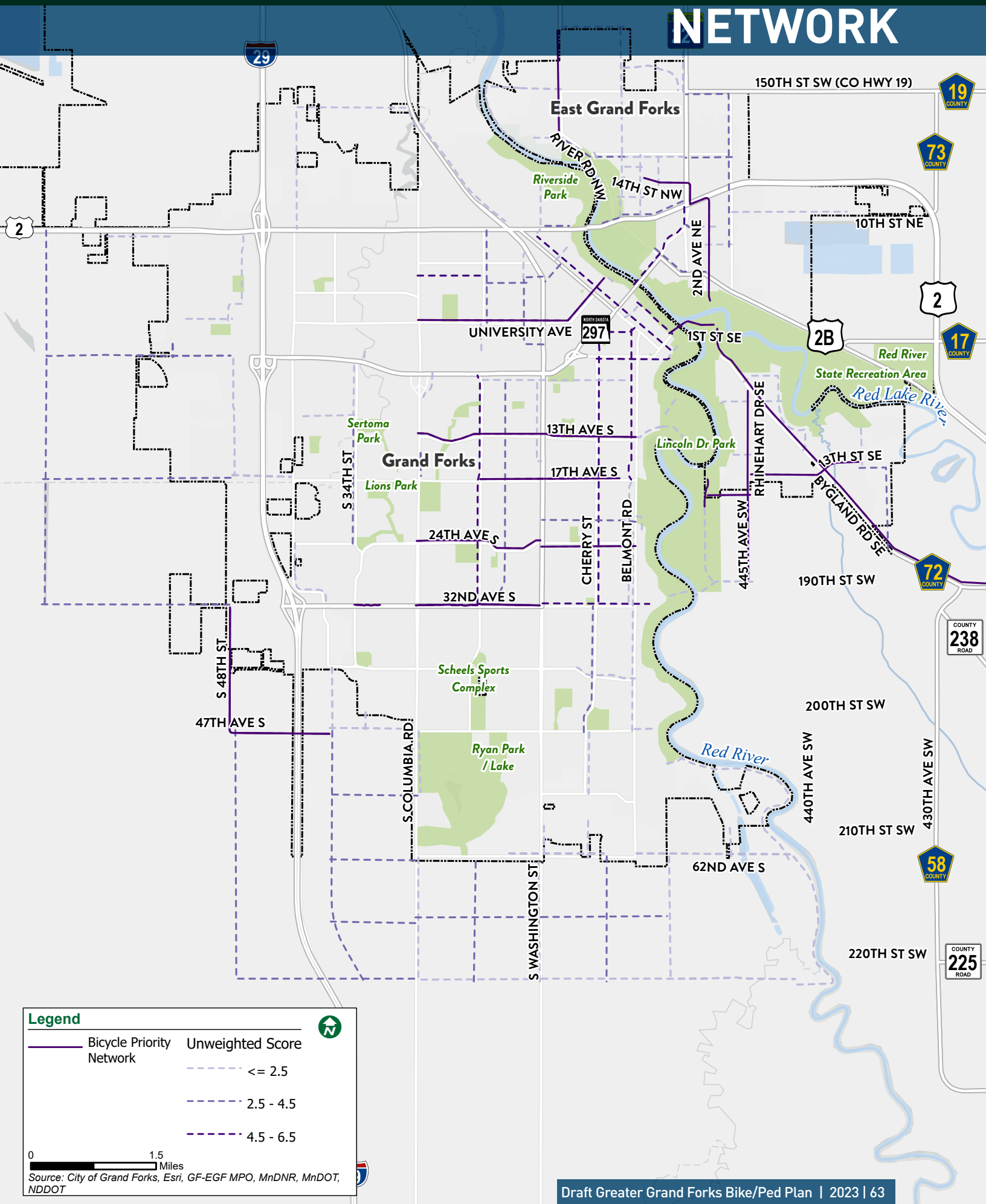
Legend

- Pedestrian Priority Network
- Unweighted Score
  - 4.5 - 6.5
  - 2.5 - 4.5
  - <= 2.5

0 1.5 Miles

Source: City of Grand Forks, Esri, GF-EGF MPO, MnDNR, MnDOT, NDDOT

PRIORITY BICYCLE NETWORK



Legend

- Bicycle Priority Network
- Unweighted Score
  - <= 2.5
  - 2.5 - 4.5
  - 4.5 - 6.5

0 1.5 Miles

Source: City of Grand Forks, Esri, GF-EGF MPO, MnDNR, MnDOT, NDDOT

COST ESTIMATES

In order to assist the MPO and Cities with the prioritization of projects and to understand future budgetary needs, this project team developed a list of cost estimates. These are intended to assist in the development of planning level costs for projects by city engineering and public works staffs. Capital costs were estimated based on completed project costs in North Dakota and Minnesota.

Table 4: Bicycle and Pedestrian Facility Cost Estimates

	Facility Type	Annual O+M Cost	Capital Cost	Estimated Life
Linear Facilities	Concrete Trail (8' wide or less)	$1,200 to $2,000 / Mile	$1,400,000 to $1,700,000 / Mile	25+ years
	Concrete Trail (10' wide)	$1,500 to $2,500 / Mile	$2,200,000 to $2,500,000 / Mile	25+ years
	Asphalt Greenway (12' wide)	$1,800 to $3,000 / Mile	$1,600,000 to $1,900,000 / Mile	25+ years
	On-Street Bikeways (8' wide)	$50,000 to $100,000 / Mile	$100,000 to $150,000 / Mile	20 years
	Sidewalks (5' wide concrete)	$500 to $1,000 / Mile	$500,000 to $600,000 / Mile	25 to 40 years
	Separated Bikeways (8' wide)	$1,500 to $2,500 / Mile	$2,700,000 to $3,100,000 / Mile	20 years
Crossing Treatments	Kiosk-Style Signs	Minimal	$5,000 - $25,000	20 years
	Wayfinding Sign	Minimal	$1,000 - $1,500	20 years
	Pedestrian/Bicycle Tunnel	$2,000 - $5,000 / yr	$800,000 - $1,500,000	50 years
	Pedestrian/Bicycle Overpass	$10,000 - $20,000 / yr	$1,500,000 - $3,000,000	50 years
	ADA Curb Ramp Retrofit	Minimal	$5,000 - $10,000 / Ramp	25 to 40 years
	Half Corner Curb Extension	Minimal	$20,000 - $30,000 / Quadrant	25 to 40 years
	Full Corner Curb Extension	Minimal	$35,000 - $55,000 / Quadrant	25 to 40 years
	High Visibility Crosswalks	$1,000 - $2,500	$1,000 - $2,500	2 to 5 years
	Median/Refuge Island (6' to 8' wide)	Minimal	$25,000 - $40,000 / 100 LF	25 to 40 years
	Crossing Signs	Minimal	$500 - $1,500	7 to 10 years
Signals	HAWK (Pedestrian Hybrid Beacon Signal)	$4,000 - $6,000 / yr	$200,000 - $250,000	20 years
	RRFB (Rectangular Rapid Flashing Beacons)	Minimal	$20,000 - $30,000	20 years
	Flashing Warning Sign	Minimal	$4,000 - $8,000	10 to 15 years
	Signalized Intersection	$6,000 - $10,000 / yr	$400,000 - $500,000	20 years
	Upgrade Signal Cabinet for Push Buttons	Minimal	$3,000 - $5,000	20 years
	Pushbutton Station	Minimal	$2,000 - $4,000	20 years
	Countdown Head	Minimal	$1,250 - $2,000	20 years
	Relocate Signal Pole	Minimal	$10,000 - $25,000 / Pole	20 years
	Pedestrian Level Lighting	$800 - $1,000 / yr	$6,000 - $15,000 / Light	20 years
	Street Light at Intersection	$1,200 - $1,800 / yr	$7,500 - $10,000 / Light	20 years
Amenities	Bike Repair Station	$50 - $100	$500 - $1,500	5 years
	Bench	Minimal	$3,000 - $5,000	10 years
	Trash/Recycling Cans	Minimal	$2,500 - $3,500	10 years
	Bike Parking Rack	Minimal	$1,500 - $2,000	20 years

PERFORMANCE **MEASURES**

As the Grand Forks-East Grand Forks MPO works with the cities of Grand Forks and East Grand Forks to implement the objectives set out in this plan, some key indicators should be used to measure success and track progress on creating a safe and comfortable multimodal network. Performance measures are essential for assessing and understanding whether the goals of the Greater Grand Forks Bike/Ped Plan are being achieved over time.

While these performance measures are best assessed between updates of the Bike/Ped Plan (i.e., at least five years), this does not remove the need for the MPO or community partners to collect data between plan updates, and use that data to track progress towards policy goals. Frequent tracking will provide the Grand Forks-East Grand Forks MPO with feedback on investments and policy changes, and allow for the fine tuning of both.

These performance measures were designed to be easily tracked through data that can be obtained on a regular basis. Each performance measure is paired with a goal that it best supports, such as safety, mobility and comfort, or increasing rates of biking and walking.

The MPO will coordinate between agencies to determine responsibility for tracking these data and interpreting them.

GOAL 1 - SAFETY
PERFORMANCE MEASURES

To align with the performance measures in the MPO's Transportation Improvement Plan (TIP), this plan will adopt safety performance measures are based off an analysis of crash data. A 5-year rolling average for all pedestrian and bicycle crashes, as well as 5-year rolling average for fatal and severe pedestrian and bicycle crashes from 2017-2021 was used to establish a base value for future system performance targets. Adherence to these targets should be assessed annually during the TIP update.

Reported crashes for pedestrians and cyclists: Both pedestrian- and bicycle-involved crashes should be tracked and analyzed on an annual basis, and compared to a 5-year rolling average. Crash data comes from the MnDOT and NDDOT crash analysis databases, which compile police reports from a variety of sources. While not all crashes are reported to the police, these data represent the most accurate records of crashes currently available.

- Baseline: See Table 5
- Data Source: NDDOT & MnDOT Crash Data
- 5-Year Goal: Decline in 5-year rolling average for bicycle and pedestrian crashes
- 10-Year Goal: Decline in 5-year rolling average for bicycle and pedestrian crashes

Reported severe injury and fatal crashes for pedestrians and cyclists: Special attention should be paid to severe or fatal pedestrian and bicycle crashes. Crash data should be tracked and analyzed on an annual basis, and compared to a 5-year rolling average.

- Baseline: See Table 5
- Data Source: NDDOT & MnDOT Crash Data
- 5-Year Goal: Decline in 5-year rolling average for severe injury and fatal bicycle and pedestrian crashes
- 10-Year Goal: Decline in 5-year rolling average for severe injury and fatal bicycle and pedestrian crashes

Table 5: 2017-2021 Bicycle and Pedestrian Crashes Summary and 5-Year Rolling Averages

Performance Measure	Baseline	5-year Rolling Average
Total Crashes (2017-2021)	118	23.6
Total Fatalities (2017-2021)	3	0.6
Total Severe Injuries (2017-2021)	15	3

GOAL 2 - MOBILITY AND COMFORT
PERFORMANCE MEASURES

Increase the mobility and comfort of biking and walking in Greater Grand Forks

Implementation of Priority Projects:
Priority projects were developed to be an efficient and implementable pathway to close gaps and remove barriers in the Greater Grand Forks active mobility network.

- Baseline: Current Conditions
- Data Source: MPO, City of Grand Forks, City of East Grand Forks
- 5-Year Goal: Monitor and report back miles of priority projects constructed.
- 10-Year Goal: Monitor and report back miles of priority projects constructed.

ADA Transition Plan Progress: Track progress
made by the cities of Grand Forks and East Grand Forks towards identifying and addressing deteriorated and non-ADA compliant facilities is an essential part of developing an all ages all abilities network.

- Baseline: ADA Transition Plan Assessment
- Data Source: MPO, City of Grand Forks, City of East Grand Forks
- 5-Year Goal: Grand Forks has adopted an ADA transition plan. Compare progress to benchmarks set in ADA transition plan
- 10-Year Goal: Compare progress to benchmarks set in ADA transition plan

Bicycle Parking Standards: Context-
appropriate, high quality bicycle parking is a necessary element of a complete bicycle network. Cyclists depend on secure storage for their bicycles once they have arrived at their destinations.

- Baseline: Not applicable. No current standard.
- Data Source: MPO, City of Grand Forks, City of East Grand Forks
- 5-year goal: Development and adoption of community-wide bicycle parking standards that adhere to current Association of Pedestrian and Bicycle Professional (APBP) guidelines

Bicycle Parking Ordinance: The League of
American Bicyclists recommended that Grand Forks and East Grand Forks adopt a bike parking ordinance for new and existing buildings. Incorporating bicycle parking as part of the development cycle can ensure that new facilities are ready to integrate with existing network

- Baseline: Not applicable.
- Data Source: MPO, City of Grand Forks, City of East Grand Forks
- 10-year goal: Both communities have adopted ordinances/bylaws that mandate bicycle parking with certain types of new development and redevelopment.

Public Facilities Bicycle Parking Inventory:
Local governments can lead the way by ensuring that publicly owned and managed building and properties have bicycle parking that complies with APBP standards for facility use and size.

- Baseline: 2023 Conditions
- Data Source: Bicycle, Pedestrian and Greenway Advisory Committee, MPO, Cities.
- 5-year goal: Cities/MPO have an inventory of bicycle parking at all publicly owned or managed facilities, and have developed a plan address deficient facilities

Shared Micromobility Utilization: Shared
micromobility, like Grand Rides, provides insight into "interested but concerned" riders. New rider registration, and total rides taken can be used to gauge how the Greater Grand Forks bike network is growing to meet the demands of residents and visitors.

- Baseline: 2023 Grand Rides Membership and Total Rides
- Data Source: Grand Rides/Downtown Development Association
- 5-year goal: Track and trend from 2023 data
- 10-year goal: Track and trend from 2028 data

GOAL 3 - MORE BIKING AND WALKING **PERFORMANCE MEASURES**

Increase the number of trips made via biking and walking in Greater Grand Forks

Commute to work data: Commute and trip data should be tracked as available through the American Community Survey (annual, U.S. Census Bureau), as well as any local counts that may occur. Commute to work trips represent only a portion of all trips but are a readily accessible bellwether for rates of walking and biking. To address this shortcoming, the MPO and cities should include analysis from any household travel survey data, in addition to pursuing opportunities to install automated counters at key points in the pedestrian and bicycle network.

- Baseline: 5.7% (combined walk, bike, & transit)
- Data Source: American Community Survey 5-Year Estimates
- 5-Year Goal: 7% of commuters walk, bike, or take transit
- 10-Year Goal: 10% of commuters walk, bike, or take transit

Safe Routes to School: Safe Routes to School encourages biking, walking, rolling to school, and engages with some of the most vulnerable road users. Events like Walk and Bike to school days, as well as annual student travel tallies can be used to see how new programs and investments in biking and walking infrastructure have influenced walking and biking rates for school-aged children.

- Baseline: 2023 Safe Routes to School Travel Surveys
- Data Source: School Safe Routes to School Travel Surveys
- 5-Year Goal: 10% increase in the number of Greater Grand Forks students who walk, bike, or take transit to school
- 10-Year Goal: 25% increase in the number of Greater Grand Forks students who walk, bike, or take transit to school

POLICY & PROGRAMMATIC **RECOMMENDATIONS**

The following policy and regulatory recommendations will assist the MPO and cities to realize the goals of the Greater Grand Forks Bike/Ped Plan. These were developed through input of the Steering Committee, public input, and a review of existing plans and policies. This builds off the analysis of Appendix G - Policy & Plan Review Memo.

Recommended Priority Policy & Program Initiatives

The following priority policy recommendations are intended for implementation by the cities and their partners in the region over the next five years.

These policy initiatives also support established criteria for the national Walk Friendly Community (WFC) and Bike Friendly Communities (BFC) designation programs, which use the categories of **Education, Encouragement, Equity, and Evaluation to support the Engineering (infrastructure) initiatives and investments** proposed in the network recommendations section of this plan. **(Recommended policy leads and partners are noted in parentheses.)**

Education

- Publicize & distribute SRTS maps to schools, parents, students each school year in conjunction with orientations, walk/bike events, and transportation info. Update maps annually. (Leads: School districts, Safe Kids Grand Forks)
- Increase amount of bicycle safety education programs in schools (Leads: school districts, Safe Kids, police departments)

Encouragement

- Provide guidance and incentives for existing non-residential property owners/businesses to add bicycle parking facilities (leads: cities, downtown organizations, UND, schools)
- Develop wayfinding program for pedestrians and bicyclists, building off the wayfinding guidance developed for the Downtown Grand Forks Action Plan. (Cities, school districts, downtown organizations & UND)
- Implement or expand Safe Routes to Schools encouragement & education programs noted in Appendix C - SRTS Components Memo beginning Fall 2023. (Leads: school districts, PTAs/PTOs)

Equity

- Finalize ADA Transition plan for Grand Forks. (Lead: City of Grand Forks)
- Ensure that all CAT transit stations and stops are fully accessible for people walking and biking. Evaluate on an ongoing basis. (Lead: Transit agency & cities)

Evaluation (Planning, Policy, & Funding)

- Amend local ordinances to support walking and cycling infrastructure. See Table 6 - Policy and Program Recommendations (Lead: Cities)
- Develop local capital budgets and funding programs with implementation and funding partners to support the implementation of the priority network recommendations (Leads: Cities, MPO, state DOTs, transit agency, school districts)
- Track Performance Measures noted in this plan and in the WFC and BFC programs annually. Considering applying/reapplying for WFC and BFC programs (Leads: Cities, MPO)
- Convene an on-going Pedestrian & Bicycle Advisory Committee to evaluate progress on plan recommendations and support regional active transportation initiatives. (Lead: MPO)
- Update this plan by 2028 (Lead: MPO)

Engineering

- Develop or enhance engineering standards for bikeway/greenway design and pedestrian facility (sidewalks, lighting, amenities) design based on the Design Guidelines in this plan and associated references. Existing state DOT or national design guidance can be adopted by reference. (Lead: cities)

POLICY & PROGRAMMATIC **RECOMMENDATIONS**

Recommended Changes to Pedestrian and Bicycle Regulations/Standards

Based on adopted plans, public input, and this plan's analysis, the following priority ordinance changes are recommended to be considered and adopted by the cities to better align the existing regulatory framework with the vision of bicycling and walking in the region. These recommended priority ordinance changes will help cities and their public and private implementation partners to develop a walking and bicycling network in the region that is more comprehensive, safer, more equitable, and more enjoyable.

Table 6 - Policy and Program Recommendations Summary

Topic	Existing Requirements		Recommendations/Resources
	Grand Forks	East Grand Forks	
Bicycle Parking	Very Limited. (Land Development Code (LDC) Art. 3 Sec. 18-0302 (11)(C) Provision of bicycle parking may be used to reduce motor vehicle parking requirements.)	None required. Incentive provided for provision of bike parking to reduce motor vehicle parking requirements.	Require short term (visitors) and long-term bicycle parking (for residents of multi-unit buildings and employees) based on land use types for all non-residential uses and multi-unit residential uses. Model ordinance resources. See also the EGF Land Use Plan recommendations.
Sidewalks	Arterials, collectors, and local streets over 300': min. 5' sidewalk required on both sides (CH. XVI, Art. 2)	Sidewalks will be built on both sides of street to these widths: residential districts, 5'; commercial districts, 8'; and industrial districts, 5'.	Similar to what East Grand Forks has done, develop context-specific sidewalk requirements that relate to the type of streets and the land use conditions. See the pedestrian design guidance in the Design Guidelines of this Plan as a model expand upon.
Street Trees	Not required. Grand Forks Park District is responsible for maintenance, plantings, and removals of boulevard tree and plants approx. 1,000 annually.	Not required.	Street trees planted between sidewalk and back of curb provide shade for pedestrians, traffic calming effects, and separation from the roadway. These can be required as part of subdivision landscape/streetscape requirements.
Pedestrian-scale Street Lighting	Not required, per se, but typology is provided for in Std. Construction Drawings.	Not required.	Pedestrian-scale lighting provides lighting of pedestrian ways and crossings for safety and comfort. These can be required on sidewalks and pathways with new development using context-based standards tied to facility/street type and land use.
Bikeway/ Greenway Implementation	Not required with new development	Not required with new development	Shared Use Paths along street frontages and adopted alignments shown in this plan can be required to be constructed on land dedicated with new development. Developers can be required to construct bikeways or dedicate easements for on-street bikeways.

POLICY & PROGRAMMATIC RECOMMENDATIONS

Table 6 Cont - Policy and Program Recommendations Summary

Topic	Existing Requirements		Recommendations/Resources
	Grand Forks	East Grand Forks	
Bikeway/ Greenway Design Requirements	8' and 10' "bike path" included in Standard Drawings for Construction. No other bikeway types noted or determination on when each type should be used.	None noted in available documents.	The Design Guidelines developed as part of this plan can be adopted by reference to be used in public and private development of bikeways and greenways. Other state and national design guidance referenced therein can also be adopted by reference and/or included in local design standards.
Connectivity	Cul-de-sacs: max. 500' Street; Connectivity: required, but not quantified. Block length: Ped connection required for blocks longer than 800'	Cul-de-sacs: max. 500' Street; Connectivity: required, but not quantified. Block length: Ped connection required for blocks longer than 800'	Cul-de-sacs create long out-of-direction travel conditions for people walking and cycling. They can be more limited in application (certain conditions and locations) and length (150-200' is a good maximum for pedestrian connectivity unless there is a ped/bike connection provided at end of cul-de-sac). Ped bike connections between cul-de-sacs and nearby streets can be required as well.

06 – APPENDICES

APPENDICES

In order to simplify the organization of this document and reduce overall file size, the appendices to this report are included as separate attachments to the Greater Grand Forks Bike/Ped Plan. Report appendices are as follows:

Appendix A – Design Guidelines

Appendix B – Existing Conditions Technical Memorandum

Appendix C – Safe Routes to School Memorandum

Appendix D – Recommended Project Tables

Appendix E – Community Engagement Summary Memorandum

Appendix F – Priority Concepts Engagement Summary Memorandum

Appendix G – Policy and Plan Review Memorandum

Appendix H – Project Prioritization Criteria Memo and Maps