# Existing Conditions Report

## 2022 Grand Forks – East Grand Forks Bicycle & Pedestrian Element Update

Grand Forks-East Grand Forks Metropolitan Planning Organization

DRAFT - July 2022

Metropolitan Planning Organization

BOLTON & MENK

Real People. Real Solutions.

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# I. Introduction

## A. Project Background & Purpose

The Grand Forks-East Grand Forks Metropolitan Planning Organization (MPO) provides regional transportation planning services for the Grand Forks-East Grand Forks metropolitan area. The MPO implements the Transportation Improvement Plan (TIP), which provides substantial federal funding for transportation projects every year. The MPO's planning efforts represent a consideration and prioritization of projects. Bicycle and pedestrian type projects – both those represented in the four-year TIP and longer-term aspirations – are identified in the MPO's Bicycle and Pedestrian Element, which is a component of the larger Metropolitan Transportation Plan (also considering future land use, streets/highways, and public transportation).

The last Bicycle and Pedestrian Element was adopted in 2019. It set near- and long-term objectives to increase the number of walking and bicycle trips throughout the metropolitan area. This goal was to be met through several strategies, including improving multimodal access to key local destinations, improvements to bicycle and pedestrian safety in the region, and infrastructure investments to remove gaps and barriers to biking and walking. This Existing Conditions Report is intended to detail conditions for bicycling and walking as they currently exist in Grand Forks and East Grand Forks, as well as related sociodemographic information related to bicycling and walking, and transportation choices more generally.

Both Grand Forks and East Grand Forks consistently build pedestrian and bicycle facilities alongside regular development. This has resulted in an extensive sidewalk network along most streets (366 sidewalk miles total) and a substantial and growing shared use path/trail network (72 miles total). The trail network mainly consists of facilities along the Greenway, adjacent to the Red and Red Lake Rivers, the English Coulee, and shared-use paths along some roads. As a factor of its larger size and more stringent statutory requirements for sidewalk construction, Grand Forks has a more extensive bicycle and pedestrian network relative to East Grand Forks.

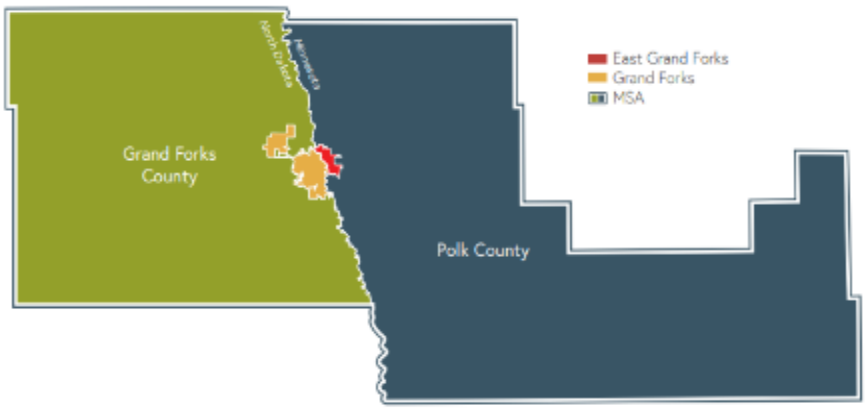



**Figure 1. Grand Forks and East Grand Forks Metropolitan Area and Grand Forks ND-MN MSA**

## B. Study Area

Greater Grand Forks is in the Red River Valley, a flat glacial plain that serves as a geographic barrier between Minnesota and North Dakota (**Figure 1**). Routine river flooding and cold winters result in a unique set of challenges when planning for active transportation in the area. Greater Grand Forks has developed strategies to mitigate the impacts of regular flooding, including the Greenway, which was developed after the flood of 1997. The Greenway that resulted from enhanced flood protection

following 1997, preserves large amounts of the floodplain, bordered by significant levees and flood structures, in addition to functioning as a linear park with over 20 miles of bicycle and pedestrian trails.

The Grand Forks Metropolitan area is one of the coldest communities in the nation, with an average of 42 inches of snowfall per year. The cold season generally runs between November and early March, with average daily high temperatures below 30°F. The prolonged winter conditions greatly impact demand for bicycle and pedestrian infrastructure, as cold depresses demand for bicycling and walking facilities, and effectively supporting these types of infrastructure in the winter requires significant maintenance costs for snow and ice removal. The area is a rail freight hub for Burlington Northern Santa Fe (BNSF) Railway, with a large rail yard along Demers Avenue. BNSF's Great Northern Corridor mainline traverses the area, running between Chicago and ports of the Pacific Northwest. This mainline also serves the Bakken oil fields of western North Dakota, which has resulted in a surge in the number of rail cars hauling crude oil on BNSF mainline tracks that pass through Greater Grand Forks. Frequent and long trains, along with numerous at-grade crossings require special considerations when supporting bicyclists and pedestrians. In August of 2011, Grand Forks established five individual train Quiet Zones. Through this process significant safety features were incorporated for at-grade rail crossings like signing, striping, flashing lights and gates (at pedestrian and vehicle crossings), and power out indicators. The Quiet Zones in Grand Forks require 3-year renewals making the maintenance of these improvements essential to compliance with the program. With the success of this program in Grand Forks, East Grand Forks is presently making improvements to prepare for their own Quiet Zone in downtown near Sacred Heart School.

## C. Socioeconomic and Demographic Characteristics

The Grand Forks – East Grand Forks area is the third largest metropolitan area in the state of North Dakota, with a total population of 68,342 people per the 2017-2021 U.S. Census Bureau American Community Survey (ACS) five-year estimate. The metropolitan area is comprised of the principal cities of Grand Forks (population 59,166) and East Grand Forks (population 9,176). There are over twenty smaller incorporated and unincorporated communities throughout Grand Forks County and Polk County that rely on Greater Grand Forks for services, employment, and other resources. The region is home to both a United States Air Force base as well as the University of North Dakota, both of which help Grand Forks with attracting new residents and investment while also contributing to the growing diversity of the area.

While these contribute to the overall growth of the area, the Greater Grand Forks area did not grow faster than statewide average growth for North Dakota between the 2010 and 2020 decennial censuses, gaining approximately 6,900 people for a growth rate of 11.2 percent, compared to the North Dakota growth rate of 15.8 percent.

The following demographic analysis suggested that there is significant need for accessible, ADA compliant bicycle and pedestrian infrastructure. Roughly 10 percent of households in the area have at least one person with a disability, which is slightly over the statewide averages of Minnesota (7.4 percent) and North Dakota (7.2 percent). The higher percentage of households with at least one person with a disability means accessible ADA compliant pedestrian and bicycle facilities should be prioritized. There were concerns raised by the community about aging infrastructure (like heaving sidewalks) and existing infrastructure not being wide enough to accommodate people with limited mobility. Both issues can be potentially hazardous for people who struggle with movement.

### 1. Population Demographics

Grand Forks closely matches the demographic distribution of North Dakota as a whole and is slightly less diverse when compared to Minnesota. People of color (defined as any person who identifies as Black, Indigenous, Asian, Native Hawaiian or Pacific Islander, some other race, or two or more races) make up just over 19 percent of the population in the Grand Forks & East Grand Forks area, a slightly larger share

when compared to North Dakota, but significantly smaller than Minnesota (**Table 1**). People of color are not equally distributed throughout the Grand Forks metropolitan area, a subject that will be discussed later in this Existing Conditions Report.

**Table 1. Grand Forks MSA Demographic Comparison**

| | Minnesota | | North Dakota | | Grand Forks & East Grand Forks MPO | |
|---|---|---|---|---|---|---|
| | Population | Percent* | Population | Percent | Population | Percent |
| **Total** | **5,706,494** | **-** | **779,094** | **-** | **68,342** | **-** |
| White | 4,423,146 | 77.5% | 645,938 | 82.9% | 55,256 | 80.9% |
| Black or African American | 398,434 | 7.0% | 26,783 | 3.4% | 3,503 | 5.1% |
| American Indian or Alaska Native | 68,641 | 1.2% | 38,914 | 5.0% | 1,821 | 2.7% |
| Asian | 299,190 | 5.2% | 13,213 | 1.7% | 2,423 | 3.5% |
| Native Hawaiian / Pacific Islander | 2,918 | 0.1% | 924 | 0.1% | 33 | 0.0% |
| Some other Race | 168,444 | 3.0% | 11,382 | 1.5% | 1,019 | 1.5% |
| Two or more races | 345,721 | 6.1% | 41,940 | 5.4% | 4,287 | 6.3% |
| Hispanic or Latino** | 345,640 | 6.1% | 33,412 | 4.3% | 3,521 | 5.2% |
| Not Hispanic or Latino | 5,360,854 | 93.9% | 745,682 | 95.7% | 64,8921 | 94.8% |

Source: U.S. Census Bureau (2020) Table P1 & P2, retrieved from IPUMS NHGIS, University of Minnesota, www.nhgis.org.
* Due to rounding totals may not add up to 100 percent
** People who identify as Hispanic, Latino, or Spanish may be any race

2. Dependent Ages

Children and older adults are also more likely to be reliant on nonmotorized modes of travel. Children cannot drive, and older adults might be unable or unwilling to drive as they age. Safe pedestrian access to transit stops and stations, as well as a robust network of pedestrian paths and sidewalks are a key aspect to both accessibility and socialization for older adults and children. The median age of Greater Grand Forks is 32.5 years old, younger than both North Dakota (35.2 years old) and Minnesota (38.1 years old). Approximately 22 percent of people in the Greater Grand Forks are under the age of 18, and approximately 46 percent are under the age of thirty (Figure 3**Error! Reference source not found.**). This combination of school- and university-aged persons should be considered when prioritizing investments in the bicycle and pedestrian network. The City of Grand Forks has already made significant investments for bicycle and pedestrian circulation at the university, in addition to their efforts for Safe Routes to School (SRTS) planning.

3. Low-Income Populations

Low-income populations are more likely to rely on biking, walking, transit, and other non-single occupancy vehicle modes to make trips. The poverty threshold is a national statistic by the United States Department of Health and Human Services. The Census Bureau's 2020 poverty threshold for a single person under 65 was an annual income of $12,760. For the same year, the poverty threshold for a family group of four comprised of two adults and two children was $26,200.

In 2020, the United States Census Bureau estimated that 14.3 percent of people in Greater Grand Forks had incomes below the poverty threshold, and 31 percent of individuals make less that 200 percent of the poverty threshold (**Figure 3**). These statistics are somewhat skewed by the large percentage share of college students that make up the Greater Grand Forks population. Students typically have a limited personal income which may not fully reflect their actual wealth or financial conditions.

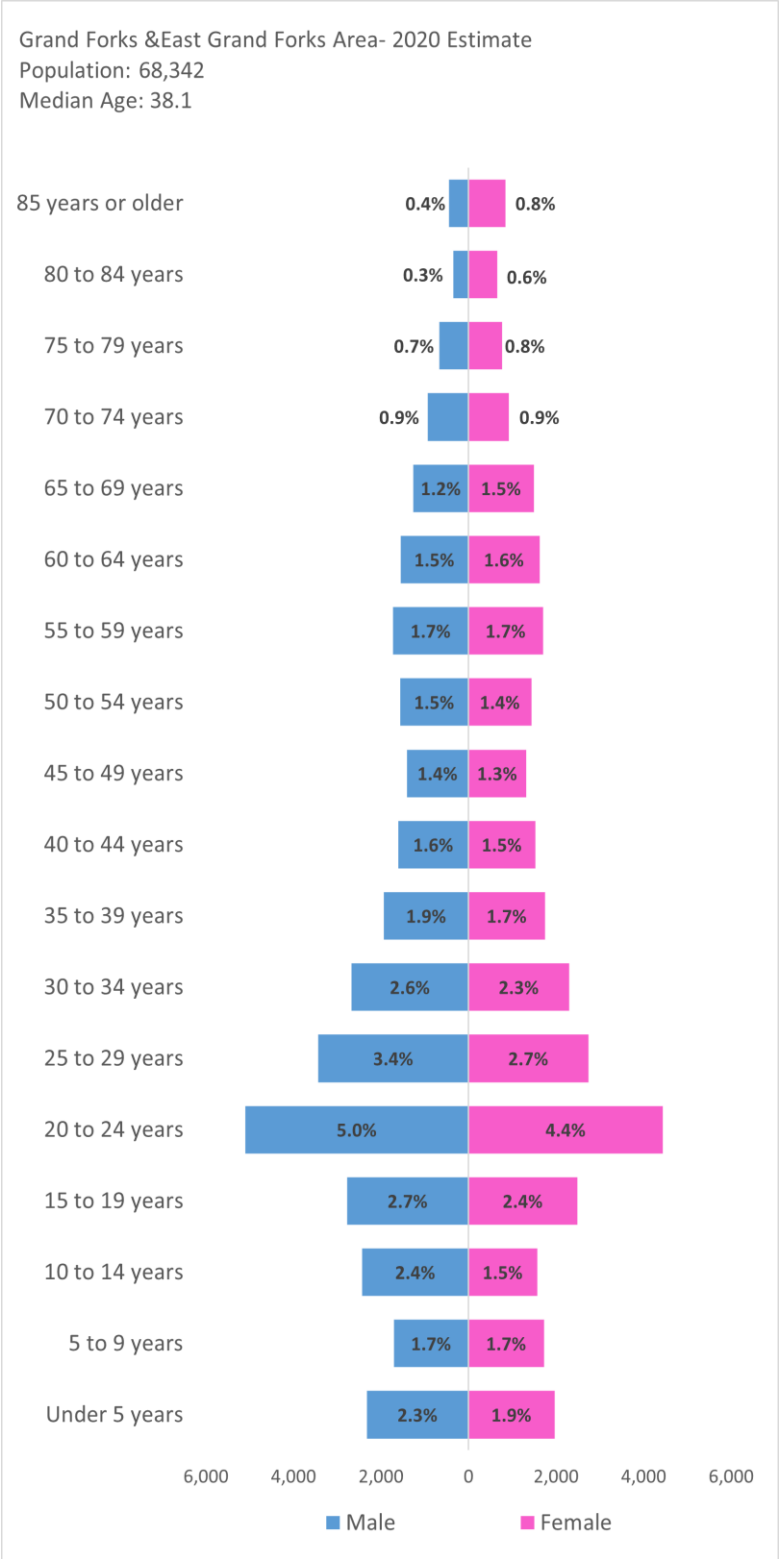
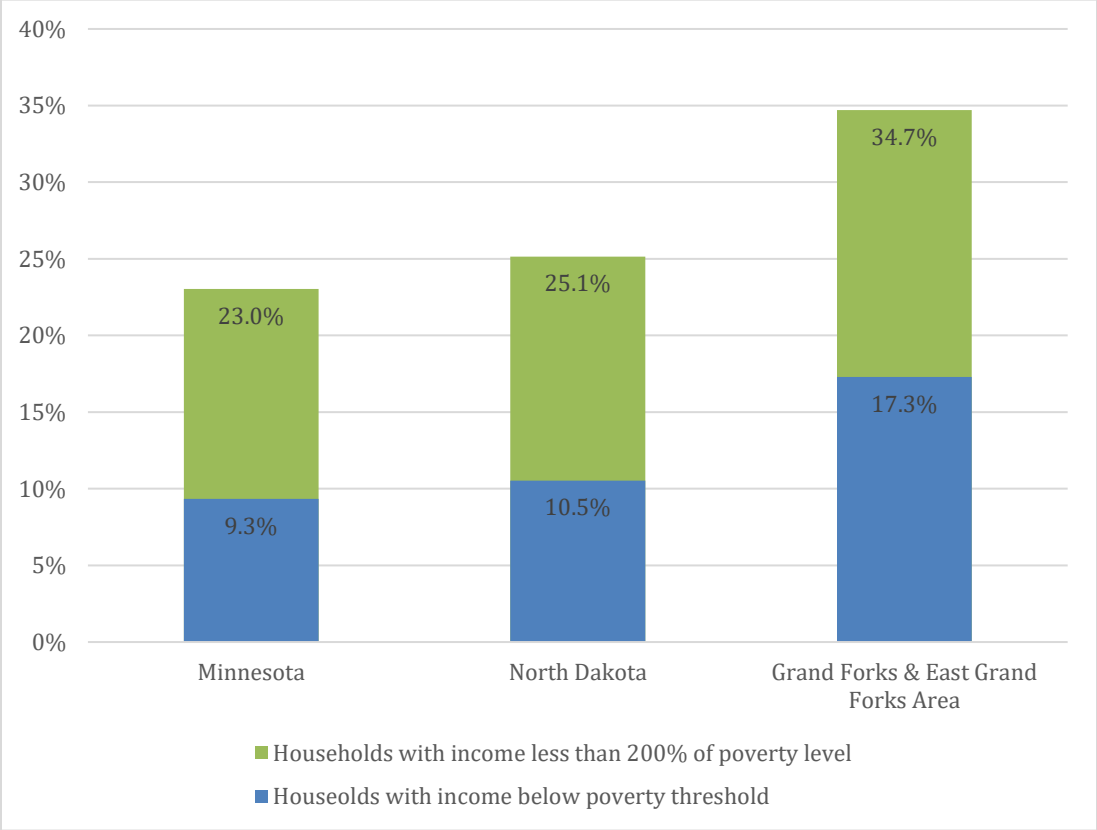



**Figure 2. Population Pyramid for Greater Grand Forks**

Source: *U.S. Census Bureau, ACS 5-Year Estimates (2016-2020) Tables B01001. Retrieved from IPUMS NHGIS, University of Minnesota, www.nhgis.org.*

**Figure 3. Comparison of Individual Incomes as Percent of the Poverty Threshold**




Source: *U.S. Census Bureau, ACS 5-Year Estimates (2016-2020) Tables C17002. Retrieved from IPUMS NHGIS, University of Minnesota, www.nhgis.org.*

Poverty is not equally distributed throughout the area, and places with significantly higher rates of people living below the poverty threshold should be considered for additional engagement or analysis to ensure that the priorities of the Bicycle & Pedestrian Element Update align with their needs. Poverty and BIPOC populations are further analyzed as part of the demand analysis.

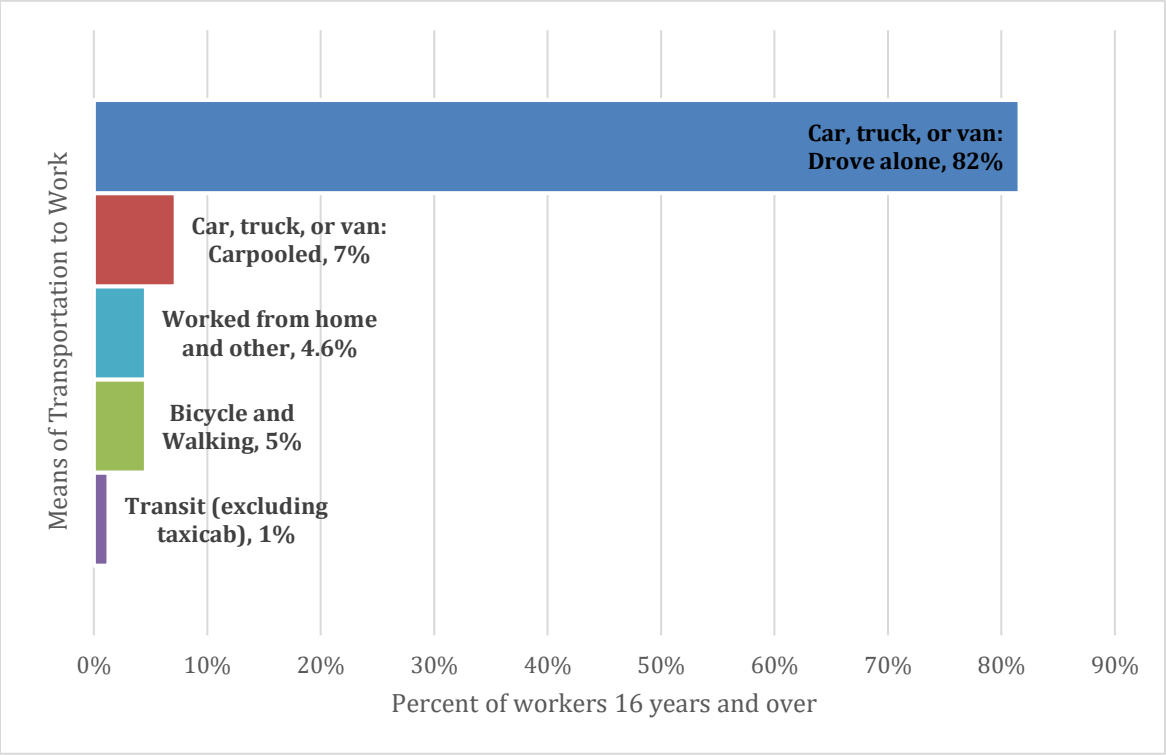
4. Disability

People with disabilities may be more likely to rely on biking, walking, and public transportation for travel, and might suffer disproportionate impacts from poor quality or lack of active transportation infrastructure. About 10 percent of households have at least one person with a disability in Grand Forks, about comparable to the statewide rates for both Minnesota and North Dakota, though the household statistics may not match the rates of individuals with disabilities. The distribution of these populations seems to have a weak positive correlation with areas with high populations under 16 years old and over 65 years old.

5. Means of Travel to Work

Approximately 5 percent of workers in the Grand Forks metropolitan area walk or bike to work, slightly higher than the average statewide rates for biking and walking in North Dakota and Minnesota (**Figure 4**), but lower than most metropolitan areas. Work commute trips only capture a portion of all bicycle and pedestrian trips, but high mode share for commute trips is a common bellwether of overall system quality.

**Figure 4. Grand Forks MSA Means of Travel to Work**




Source: U.S. Census Bureau, ACS 5-Year Estimates (2016-2020) Table B08301, retrieved from IPUMS NHGIS, University of Minnesota, www.nhgis.org.

* Due to rounding totals may not add up to 100 percent

6. Households without a Vehicle

Households without a vehicle are more likely to rely on biking, walking, or public transportation for trips, for the simple reason that a car is not an available option. About 5.7 percent of households in the Grand Forks-East Grand Forks metropolitan area do not have a vehicle, slightly higher than the North Dakota statewide rate of about 5.1 percent of households, but lower than the Minnesota rate of 6.6 percent. While there is a great deal of overlap between households with incomes below the poverty threshold and not having access to an automobile, the essential nature of personal automobiles as a means of accessing employment, goods, and services forces automobile ownership as a matter of course.

## II. Existing Studies Review

A review of existing documents, policies and studies was conducted as part of the existing conditions analysis. A detailed analysis of these plans is included as an appendix to this report. Key plans that will contribute to the development of the Bicycle and Pedestrian Element include:

- The 2019 iteration of the 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. That plan established a regional goal for three or fewer non-motorized fatalities and serious injuries. This plan builds on the MTP recommendations and prioritizes investments in safety for non-motorized travel.
- 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 ped and bicycle projects.

## III. Greater Grand Forks Today

This section considers underlying factors that help shape the structure and character of bicycling and walking use in Greater Grand Forks. Generally, these can be categorized in one of two ways: demand – the things that drive the need to make trips; and land use – which determine the structure of the overall transportation network.

### A. Demand

The bicycle and pedestrian demand analysis reviews where deficiencies exist in the bicycle and pedestrian network and where potential linkages may address latent demand for bicycling and walking. Ultimately, these types of linkages can become potential future projects and can be prioritized for public investment. Latent demand is determined through a mixture of demographic analysis and existing land use. The demographic analysis is meant to determine where there are concentrations of people most likely to walk, bike, or use transit. The existing land use analysis will determine potential origins and destinations for trips within Greater Grand Forks.

Transportation is largely understood to be a derived demand, meaning that demand for transportation is driven by the need to access work, goods, and services. Even recreational trips are often made with a destination in mind, such as to arrive at a park, local coffee shop, or quiet spot along the greenway. Understanding transportation demand as being derived from these needs makes it possible to construct an analysis based on building linkages between points of origin, like places of residence, and destinations, such as employment hubs, schools, and community centers.

### B. Existing Land Use

The Grand Forks – East Grand Forks metropolitan area, like other communities in the United States that experienced rapid growth in the 20$^{th}$ century, has a dispersed development pattern that generally facilitates automobile trips and is less supportive of public transportation and short trips walking or bicycling. As a result of these land use policies, most trips are made with automobiles. However, owing to the age of the community, some areas like downtown were developed in a more compact way, and are more conducive to biking, walking, and transit. Land use patterns help shape the structure of a bicycle and pedestrian transportation network. High density residential areas, major employment

nodes, civic and cultural uses, medical campuses, and commercial nodes all contribute to trip patterns within the transportation network.

The existing land use map (**Map 1**) shows the existing land use in Greater Grand Forks, which represents how most properties are currently being used. Not all streets that serve key areas such as employment nodes and medical facilities are currently easily accessed by bicycle and might not provide for direct routes when walking.

**Key land use factors in Great Grand Forks include:**

1. Downtown Grand Forks and Downtown East Grand Forks

These historic downtowns naturally developed pedestrian friendly networks as their initial platting largely predated automobiles as the dominant means of transportation. Like many other communities in the United States, the two downtowns atrophied in the middle of the century as business and residents moved outside of city centers, drawn away by cheaper development opportunities available outside of the city center the made possible by the highway system and low transportation costs.

Recent revitalization efforts have been successful in reestablishing the downtowns as a primary destination, with the Grand Forks Downtown Action Plan guiding development west of the Red River. This plan recommends large infill development projects at the Water Treatment Plant, Centennial Park, Pillsbury Park, Lyons' Place, and the Greenfield on 1st Area, amongst others. The Downtown Action Plan also includes guidance on future development to support walking and cycling between downtown destinations, such as shortening crossing distances, installing countdown timers, improving lighting, and filling gaps between existing trails. Some of these investments have already begun, including improvements to the downtown streetscape to improve walkability. However, the direction of investment in downtown prioritizes parking and mobility for automobiles on all major downtown roads, placing it at odds with multimodal investment. Crash analysis shows that downtown does have a significant number of bicycle and pedestrian crashes, which is likely related to density of multimodal transportation activity in downtown.

East Grand Forks has a similar downtown urban form along DeMers Avenue, and also has a series of popular restaurants facing the river. However, East Grand Forks is also home to a large number of publicly owned surface parking lots where vehicles park for free. These facilities are a clear invitation that driving and parking in downtown East Grand Forks is highly encouraged.

The two downtowns are connected by the Sorlie Memorial Bridge (DeMers Avenue), one of three regular roadway crossings of the Red River. The bridge itself presents a barrier for cycling between the two downtowns, as it lacks dedicated facilities for cyclists on the bridge (**Figure 5**). These conditions are stressful for all but the most experienced cyclists and discourage non-automobile travel between any destinations divided by the Red River.

2. Parks and Recreation

The Greenway represents a large investment by both communities in the regional parks system and serves a means of mitigating the impacts of regular flooding events. The Greenway and Red River separates the cities of Grand Forks and East Grand Forks, in addition to containing a substantial portion of the region's network of shared use paths and numerous destinations such Riverside Park and Swimming Pool, Lincoln Drive Park, and a new skate park. The shared use paths of the Greenway can be understood both as a transportation resource to reach destinations along and adjacent to the Greenway, and as a destination in themselves for recreational purposes.

Smaller municipal parks are generally well distributed throughout both communities, allowing most of the population easy access to parks within a reasonable distance on foot or by bike. However, this is only true if there are adequate sidewalks or bike facilities and safe crossing opportunities to reach these destinations.

3. Highways and Interstates

Urban development to some extent is constrained in the Grand Forks metropolitan area by Interstate 29 to the west and US 2 (Gateway Drive) to the north. Grand Forks has a system of arterial roadways that serve as commercial nodes and major thoroughfares to access other parts of the city – Columbia Road, Washington Street, Gateway Drive, University Avenue, DeMers Avenue, 17th Avenue, and 32nd Avenue. These major roadways can be significant barriers to safe crossing and cross-city connectivity. Investments that address these barriers can serve as low-cost high-yield investments to improve biking and walking in the community.

In East Grand Forks, US 2 is a major east-west roadway, as are DeMers Avenue, Central Avenue Northwest NW (Minnesota Highway 220), 4th Street, and 2nd Avenue Northeast/Bygland Road Southeast. DeMers is the primary downtown commercial corridor, and also provides access to US Highway 2 and Central Avenue. Central serves as a main north-south spine, connecting downtown East Grand Forks to residential and industrial areas to the north, as well as key educational institutions such as East Grand Forks High School and Northland Community and Technical College. 2nd/Bygland Road is the main connector between downtown East Grand Forks and growing residential areas of southern East Grand Forks.

**Figure 5. Cyclists on Sorlie Bridge**

4. Linear Commercial Corridors

Several of the highways also serve as important regional commercial corridors, such as Columbia Road, Washington Street, DeMers Avenue, Gateway Drive, Central Avenue Northwest, and 32nd Avenue. These corridors generate many trips for commerce, services, and employment. Today, most people access these corridors by automobile. While most of these corridors have dedicated pedestrian facilities, none have dedicated complete bicycle facilities. A related consideration for these corridors is how people may be able to access them from adjacent neighborhoods via side streets.

5. Schools, Civic Uses, and Cultural Destinations

Schools in both cities are frequently located within neighborhoods, which can create a significant amount of traffic during arrival and dismissal times. Each school district operates independently, with Grand Forks Public Schools having an enrollment of 7,567 students in the 2020-2021 school year, and East Grand Forks Public School district having an enrollment of 1,982 students during the same time

period. There are 22 public schools in the region, divided between three high schools, four middle schools, and twelve elementary schools. There are also pre-kindergarten and private schools in the region. The Career Impact Academy is also set to open in the coming years. The Career Impact Academy is a school that will be built as a collaborative effort between the City of Grand Forks and private industry partners. 11$^{th}$ and 12$^{th}$ graders within the Grand Forks Area School District will be able to take classes while obtaining college credit and professional experience in a variety of different career fields. While this project is still in development, it will be a major education trip generator and employment location when finished. Grand Forks is home to the University of North Dakota, with an enrollment of more than 13,000 in 2021. East Grand Forks is home to Northland Community and Technical College, which has a student population of almost 4,000 shared between East Grand Forks and a campus in Thief River Falls. Safe Routes to Schools plans have been developed for 16 schools in Grand Forks, and three schools in East Grand Forks.

Grand Forks - East Grand Forks
METROPOLITAN PLANNING ORGANIZATION

# Bicycle/Pedestrian Element Update

**Grand Forks-East Grand Forks MPO**

## Map 1. Existing Land Use

**July 2022**

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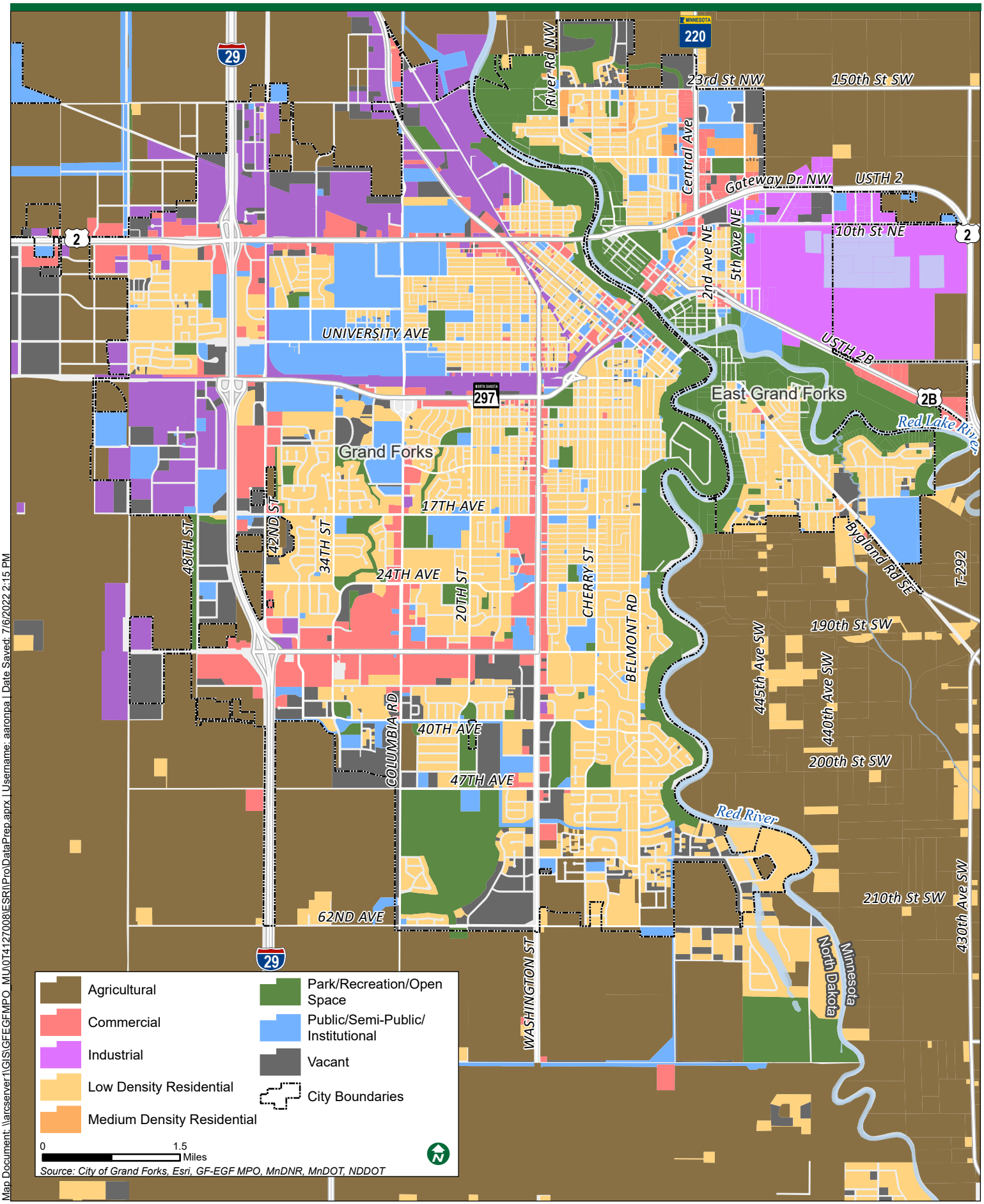


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## C. Future Land Use

Ideally, the active transportation network should be planned in coordination with projected growth of a region to ensure that biking and walking are viable transportation options in more recently developed areas, as they typically are in the older and more compact parts of urban zones. The City of Grand Forks completed its 2050 Land Use Plan in spring 2022. The City of East Grand Forks last updated its land use plan in November 2021. These plans (**Map 2**) were consulted to determine how future developments might impact the future investments into the bicycle and pedestrian networks. Key features of the future land use plans include:

- Planned future land use for East Grand Forks will maintain the same heading as previous plans, with the majority of new housing construction being single-family housing south of the current city boundary at 182nd Street Southwest, and north and northeast of downtown. Multi-family residential and mixed use residential/commercial uses are present in limited quantities throughout the community, mostly concentrated within downtown East Grand Forks and north of downtown.
- Grand Forks' 2050 Land Use Plan divides residential zoning into two categories: urban residential and rural residential, in addition to adding a mixed-use category. Urban residential areas are intended to accommodate a complementary mix of housing units, granting greater flexibility with zoning for higher density housing in what was formerly single-family residential zoning. Urban residential zoning comprises nearly 7,000 acres of the raw developable land.
- Large increase in industrial and mixed-use land uses along major interstate corridors such as Interstate 29 and US-2. Trips between new mixed-use corridors and industrial clusters could generate a significant number of short biking and walking trips.
- The Downtown Action Plan and Renaissance Zone Plan support development goals throughout planned infill projects through Greater Grand Forks. The Downtown Action Plan has several small area plans for infill projects, and the Renaissance Zone Plan sets infill development goals for the Gateway District. The success of mixed-use neighborhoods and dense infill developments is in no small part contingent on supporting biking, walking, and transit to reach destinations, reducing need for parking, and supporting alternatives to private automobile trips.

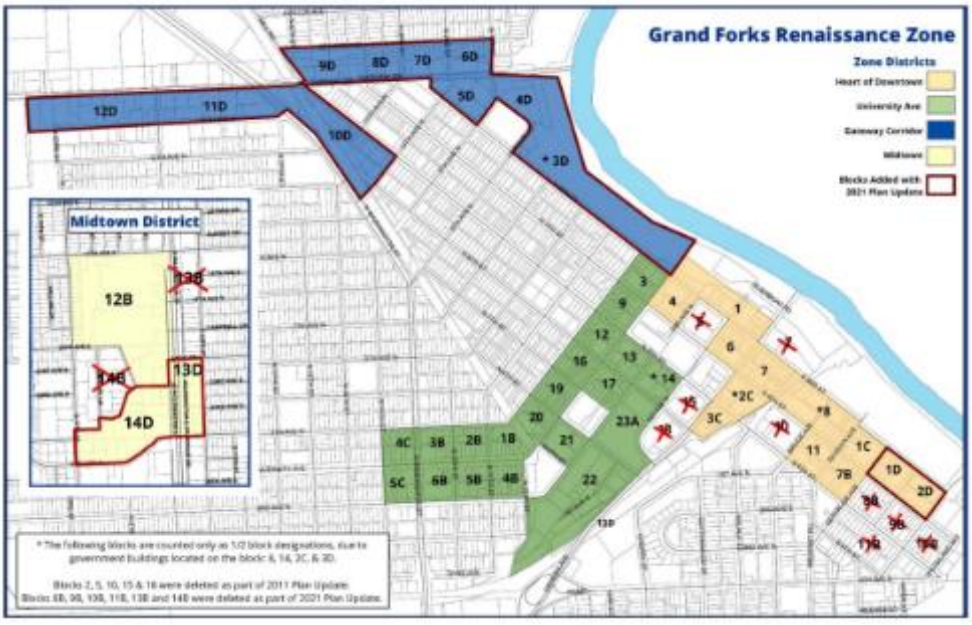
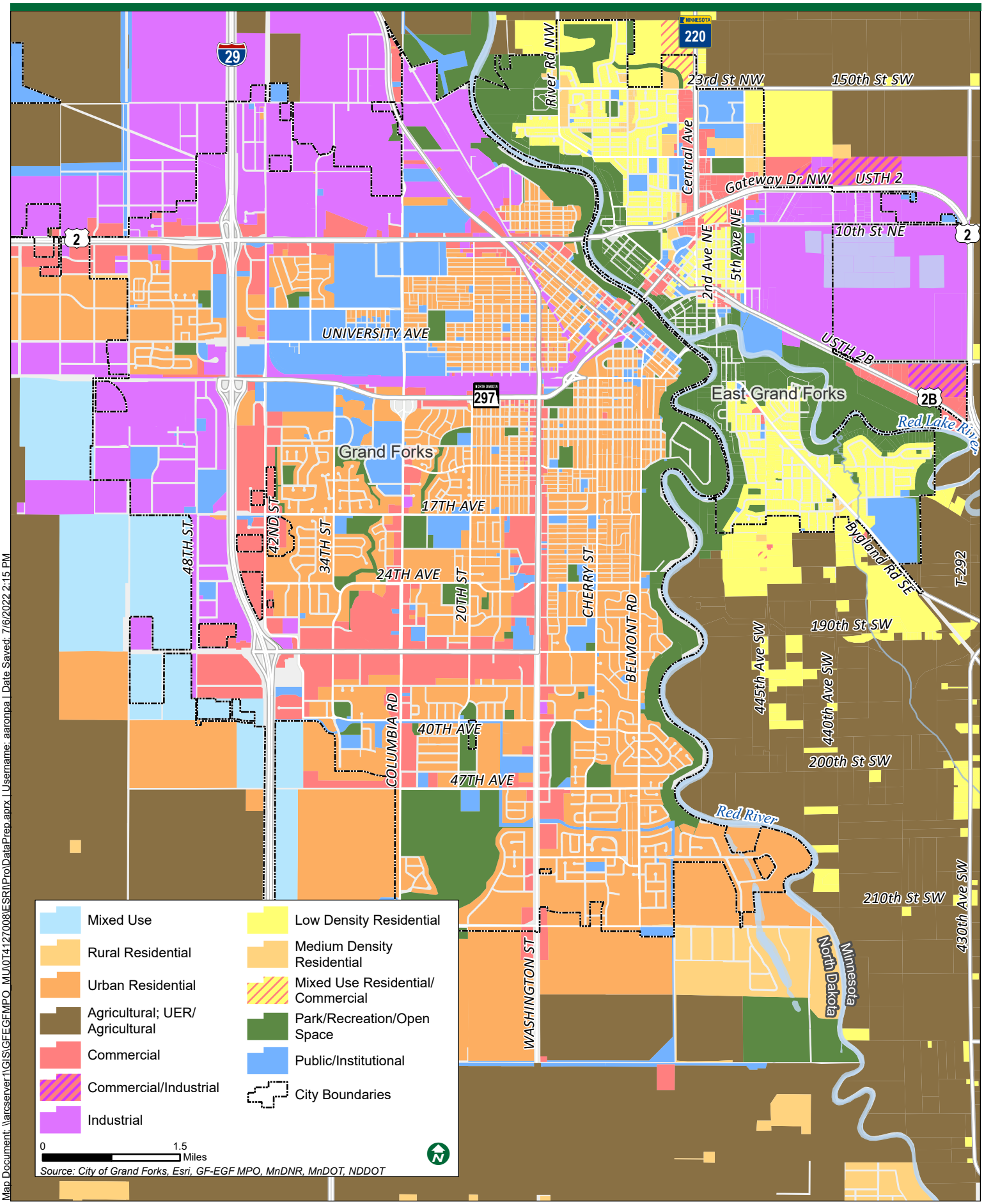



**Figure 6. Renaissance Zone Plan Development Areas.**




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

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## D. Functional Classification

The pedestrian and bicycle trail network are shaped by the street network. The functional classification of streets is a good barometer for determining the suitability of a roadway for use by bicyclists and pedestrians. Lower speed and volume roadways are better suited for on-street investments such as bike lanes and bicycle boulevards. Higher speed and volume roadways are better suited for off-street trails and paths.

The road classification network in Grand Forks is typical for cities in the United States of this size and vintage (**Map 3**). Interstate 29 and US HIGHWAY 2 generally define the borders of the community. Major arterials like Columbia, Washington, 32nd Avenue, and DeMers demarcate neighborhood borders and provide connections to downtown, commercial destinations, and the Greenway. Primary north/south arterials include Columbia Road, Washington Street, Belmont Road, and Bygland Road. The main east/west arterials are US HIGHWAY 2/Gateway Drive, University Avenue, DeMers Avenue, 17th Avenue, and 32nd Avenue. Most of the community is accessible by the local street system.

- Greater Grand Forks development is still largely contained within the borders of I-29 and US Highway-2/Gateway
- The network of principal and minor arterials forms a roughly orthogonal grid that generally define neighborhood boundaries. Likewise, older portions of the local street network are consistently laid out in orthogonal grids. These short blocks with frequent intersections can provide excellent bicycle and pedestrian connectivity. New development street networks are less direct.
- Principal arterials like Demers (Figure 7) connect the local street network to downtown Grand Forks and East Grand Forks. Many of the principal arterials already have shared use paths or alternative routes for biking and walking, but connections between these paths are lacking.

**Figure 7. Demers Avenue in Grand Forks**

Grand Forks - East Grand Forks Metropolitan Planning Organization

# Bicycle/Pedestrian Element Update

**Grand Forks-East Grand Forks MPO**

## Map 3. Functional Classification

**July 2022**

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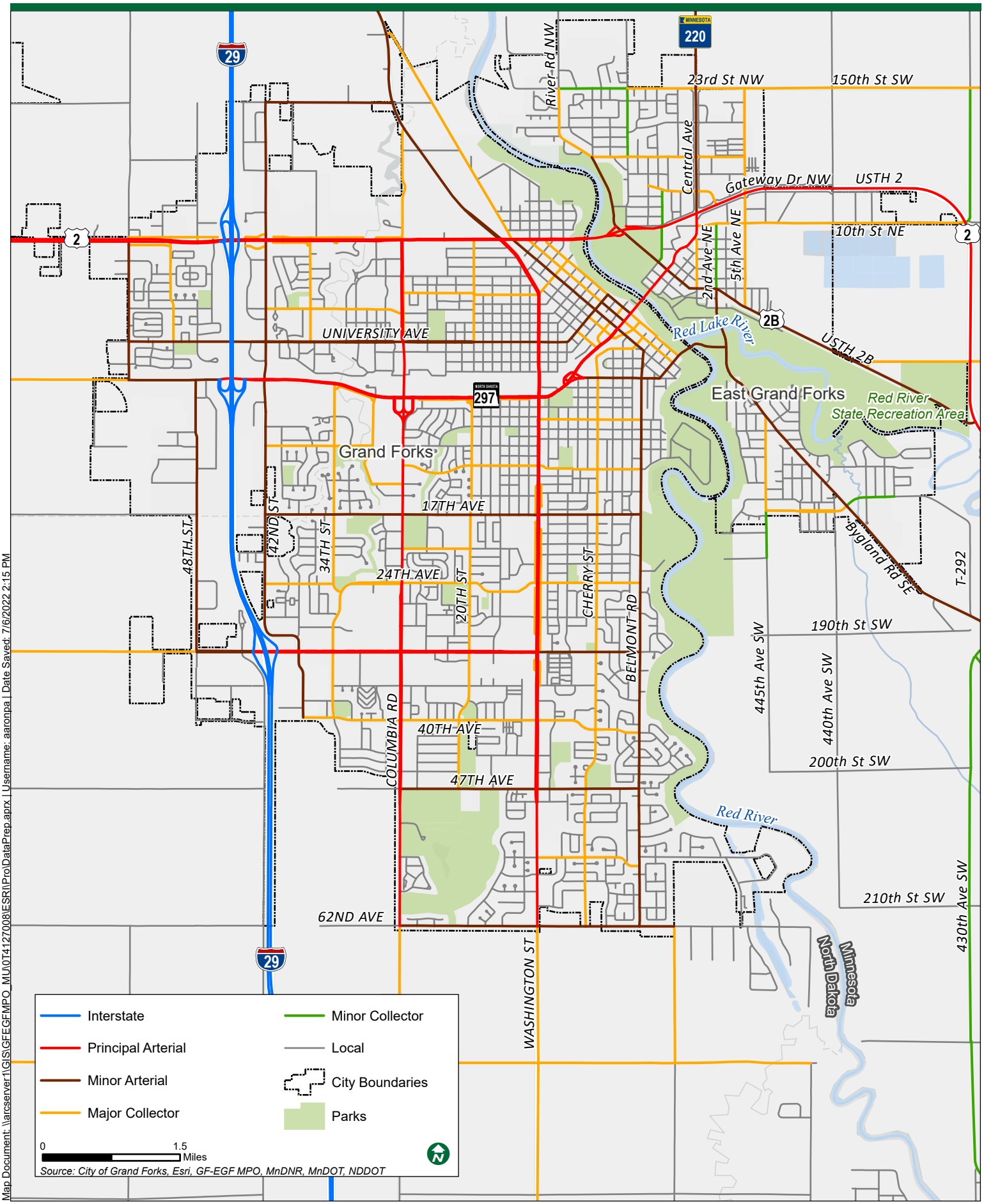


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## E. Existing Bicycle Network

Greater Grand Forks has a growing network of shared use paths and on-street bicycle facilities (**Map 4**). The largest regional investment in the shared use path network is the Greenway, which has over 20 miles of paths along the Red River and Red Lake River and serves as north-south connector in both cities (**Figure 8**).

Grand Forks has consistently developed shared use paths and trails along roadways as part of the new development process, but these paths do not always provide adequate connections to valued destinations. Share use paths along roadways are typically realized as wider sidewalks (typically a minimum of 8 feet wide). Older neighborhoods generally do not have shared use paths, nor do they have the right of way to implement them. Nevertheless, these neighborhoods represent areas that could potentially generate bicycle trips due to their close proximity of destinations. Many streets in older neighborhoods are characterized by low speeds and low numbers of cars, and so may be comfortable places to bicycle given adequate infrastructure.

**Figure 8. A cyclist on the Grand Forks Greenway**

East Grand Forks has limited bicycle facilities outside of the Greenway and the downtown area. Greenway trails links to newer residential development in southern parts of the city, but there are limited connections from neighborhoods to the Greenway in places.

- Previous investment in bicycle facilities has mostly been in the Greenway and shared use paths, presenting issues with first/last mile connections between these resources and neighborhoods. A well-developed bicycle network is comprised of many types of infrastructure to meet the needs of various skill levels and trip types (**Figure 9**), in addition to supporting trips through providing secure storage and other amenities at origins and destinations.
- University of North Dakota has a shared bus/bike lane along University Avenue, which in turn links to a network of shared use paths and bicycle friendly streets. System cohesion could be improved through additional on-street facilities like bike lanes, street markings

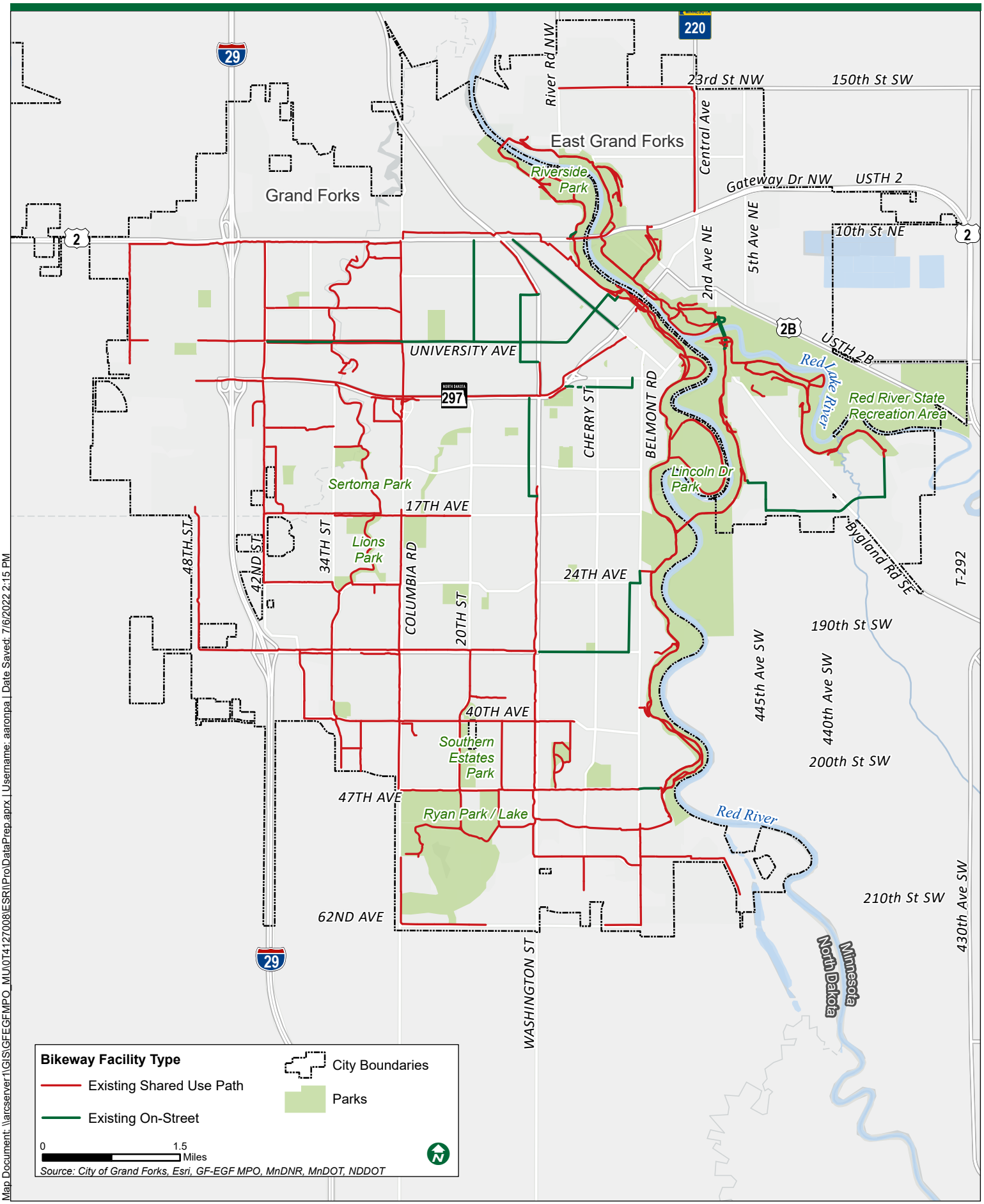

**Figure 9. Examples of Bicycle Facilities**

# Bicycle/Pedestrian Element Update

**Grand Forks-East Grand Forks MPO**

## Map 4. Existing Bicycle Network

**July 2022**

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## F. Existing Pedestrian Network

A well-developed pedestrian network (**Map 5**) supports all trip types. Walking plays a role in all trips, be it as minor as the distance between parking and the final destination, home and a transit stop, or as the primary transportation mode. In addition to pedestrian facilities such as sidewalks and shared use paths, the pedestrian network includes support for crossing roadways, railways, and other natural or constructed barriers.

Grand Forks has consistently built sidewalks alongside new development, resulting in a relatively complete network of sidewalks within the community. All new residential developments are required to include sidewalks on both sides of the street during construction, though there are exceptions for older parts of the city, and areas zoned for industrial use are exempt from the sidewalk requirement.

East Grand Forks has a relatively complete pedestrian network in its downtown and older residential neighborhoods but has limited pedestrian facilities in more recent residential developments south of the Red Lake River along Bygland Road. Newer developments are not required to construct sidewalks during construction of newly planned streets, which present immediate challenges for pedestrian access for new residents and retrofitting streets with sidewalks after the face can be difficult.

- Grand Forks has made significant investments in signaling technology to improve pedestrian safety at intersections, such as countdown timers, leading pedestrian intervals, blank-out no right turn on red signs, and reducing crossing distances (**Figure 10**).
- Grand Forks has installed rectangular rapid-flashing beacons (RRFB) crossings near many local schools (**Figure 11**). Investments into RRFBs at other community destinations like libraries and public parks can greatly improve network cohesion.
- As previously mentioned, SRTS investments can be highly effective in the community, due to schools being embedded in neighborhoods. Older neighborhoods generally have one or more schools within a quarter-mile walk.
- Gaps in the pedestrian network are sporadic in Grand Forks, attributable to the grandfather clause that exempts specific areas from having to build sidewalks as part of the permitting process. East Grand Forks generally does not require sidewalk as part of the development process, resulting much more sporadic sidewalk network.
- Both communities address Americans with Disabilities Act (ADA) compliance in pedestrian facilities, both during roadway reconstruction and standalone projects


**Figure 10. An accessible pedestrian signal located in downtown East Grand Forks**

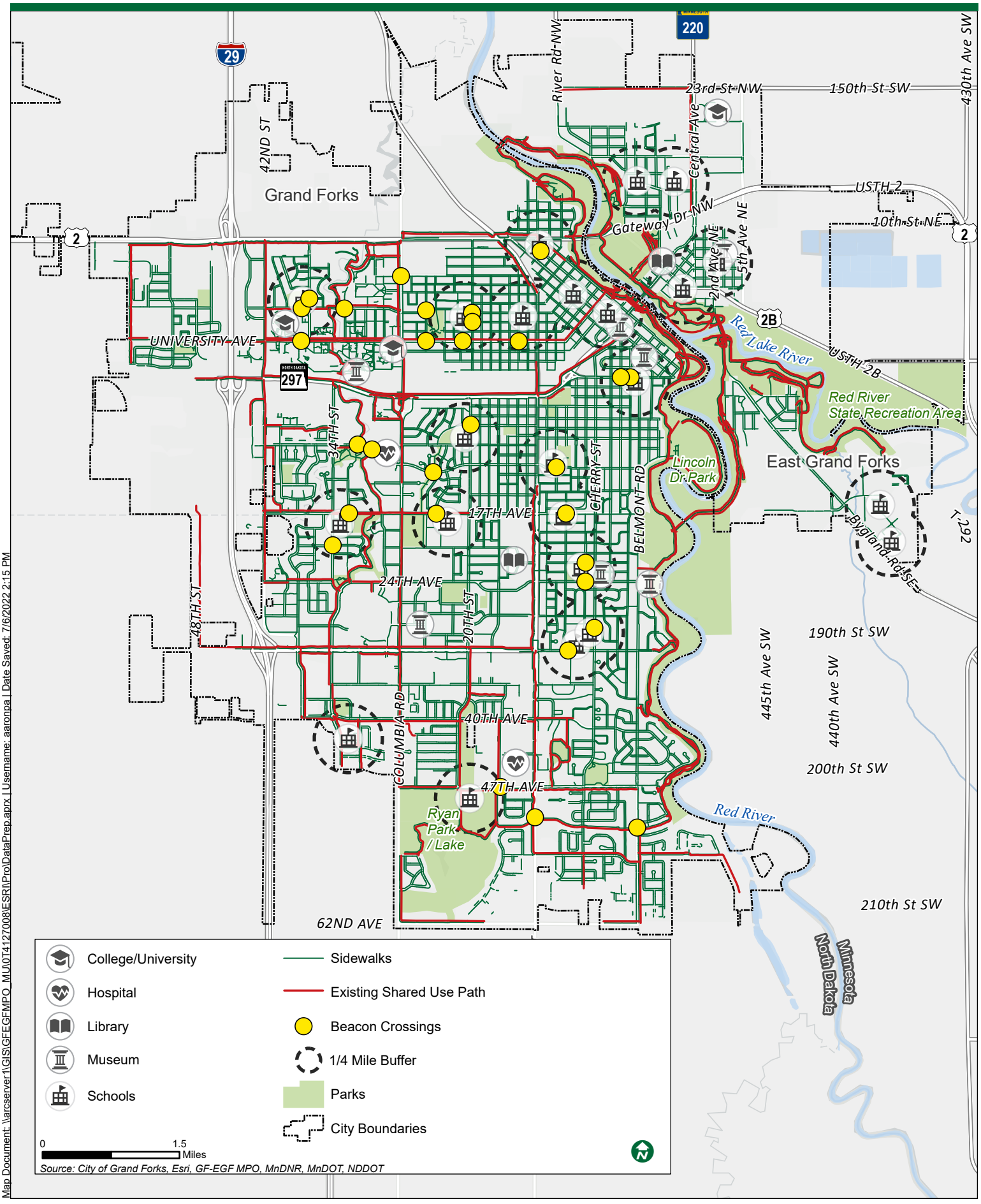
**Figure 11. An example of RRFB being used to cross a four-lane road**

# Bicycle/Pedestrian Element Update

**Grand Forks-East Grand Forks MPO**

## Existing Pedestrian Network

**July 2022**

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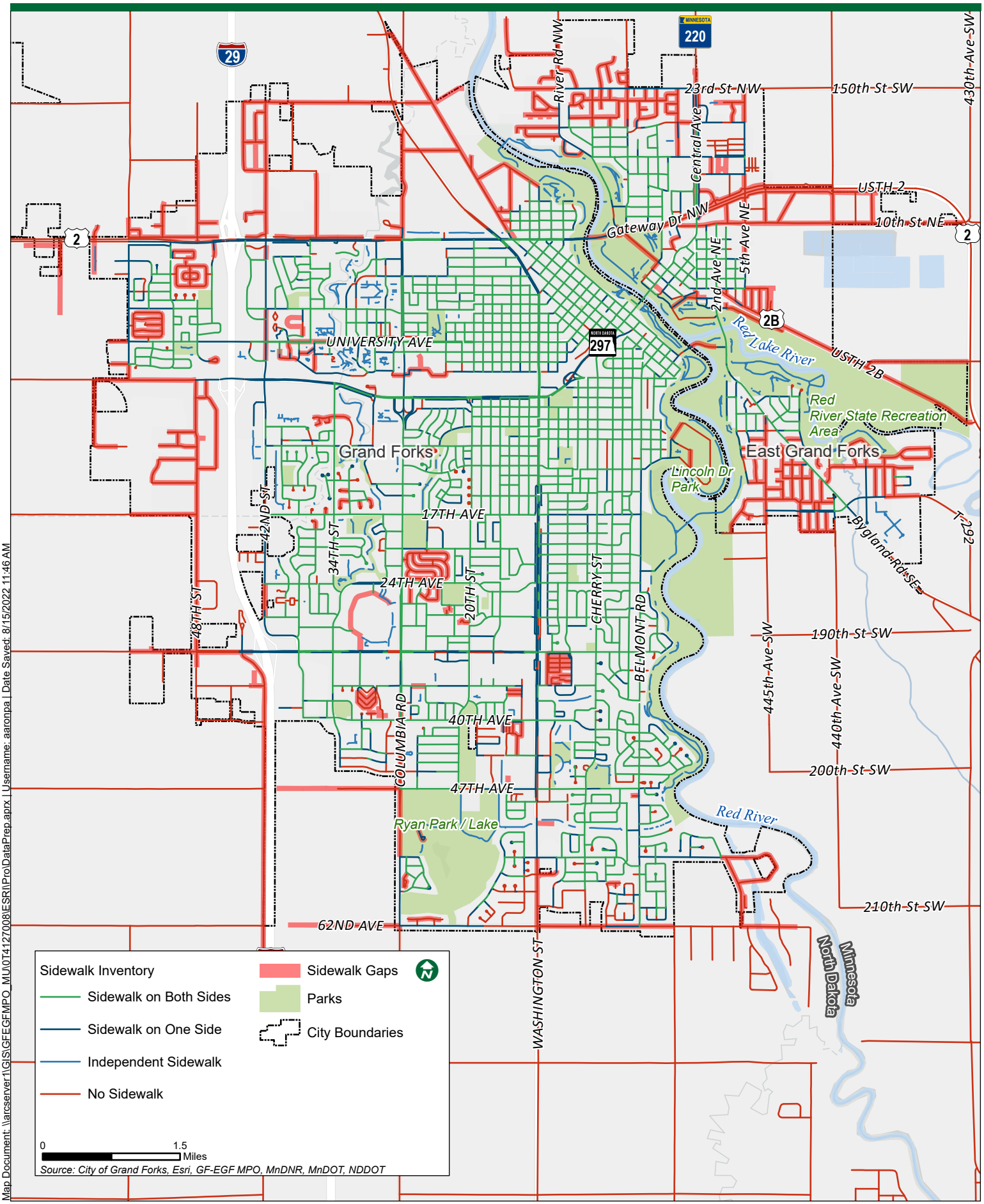
## G. Sidewalk Gap Analysis

A cohesive public sidewalk system is essential for supporting walking as a mode of travel in Greater Grand Forks. While there might be debate over what constitutes a cohesive network, a simple answer would be that pedestrians should be able to travel on a dedicated facility to all the same locations as an automobile. To that end, this study built a new sidewalk analysis based on the previous analysis on sidewalk gaps in Greater Grand Forks. This new analysis examines the completeness of the sidewalk network along public the public right-of-way based on adjacent land use type, presence of the sidewalk on one or both sides of the right of way, and accommodates for independent pedestrian facilities (such as shared use paths, greenways, or other pedestrian facilities not associated with a public right-of-way. This analysis solely relied on the presence of a sidewalk to show completeness and made no considerations for other elements of a cohesive pedestrian network, such as general quality of surface, compliance with ADA standards, and other barriers that might render an existent sidewalk unusable, and other conditions like severely degraded surfaces can be insurmountable barriers to people with disabilities or other conditions that limit mobility.

There are approximately 455 linear miles of public right-of-way in Grand Forks, and an additional 145 miles in East Grand Forks, for a grand total of 600 miles of streets in the Greater Grand Forks transportation network. Between the two communities, there is an additional 30 miles of independent sidewalks, such as the Greenway Trail system or other off-street facilities. This report mapped the findings of a previous sidewalk gap analysis conducted by the MPO to determine if there are observable patterns with the location of gaps in the sidewalk network, and how these gaps align with other components of this report.

Findings from the GIS sidewalk gap analysis are as follows:

- Approximately 13 percent of all streets in Grand Forks have sidewalks on at least one side of the right of way, and about 36 percent of all Grand Forks streets have sidewalks on both sides of the right of way. The remaining 51 percent of streets in Grand Forks have no pedestrian facilities. This analysis included rural roads outside of the core urban area, interstates, and private roads.
- Grand Forks municipal code does not mandate the construction of sidewalks in industrial areas, and as a result only 30 percent of streets in areas zoned for industrial use have sidewalks on either side of the right of way. Sidewalks can be vital in making last mile connections between transit and employment and will be especially important given the 2050 Grand Forks Land Use Plan's emphasis on mixed use development near industrial zones.
- Most residential areas in Grand Forks have near complete pedestrian networks, with 73 percent of places zoned for residential use having sidewalks on at least one side of the right-of-way. The most prominent and consistent exception to this trend is the internal circulation networks associated with manufactured home developments. This presents a potential barrier for residents of manufactured housing developments from accessing the public sidewalk network.
- Sidewalks are much less common in East Grand Forks, where only 21 percent of streets have any pedestrian facilities. Areas zoned for residential use fare slightly better, where 41 percent of the roads in residential areas have sidewalks on at least one side of the right-of-way.



## H. Population Density

There is a positive correlation between the demand for active transportation and population density. As population density increases, so too does the density of destinations in close proximity to people, making short walking and biking trips feasible. The population density throughout the Grand Forks Metropolitan Area was mapped and compared the existing investment in bicycle facilities and shared use paths to explore this relationship (**Map 7**). This should be considered in conjunction with future land use planning, which will increase the density of both population and employment through infill development in addition to a greater emphasis on mixed use development.

The most densely populated areas in the region are associated with the University of North Dakota and central Grand Forks between 17th and 32nd Avenue. Both locations represent multi-family housing developments and high rates of student housing.

- Densely populated areas benefit from both greater internal connectivity, such as parks, schools, and other community destinations, as well as external connectivity to reach employment and other services.
- Some densely populated areas like the University of North Dakota and older neighborhoods near downtown have excellent internal connectivity for pedestrians and cyclists but need additional investment to connect to other areas.

## I. Employment Density

Like population density, there is a correlation between employment density and the demand for active transportation. The Employment Density map (**Map 8**) identifies the census block groups with the greatest job concentrations in the Grand Forks metropolitan area. Some of the larger employment nodes present in the area are diluted by the large size of the census block groups used for the analysis. Like the population density map, this should be considered in the context of both current needs and future growth projections. While areas like downtown Grand Forks are well served by the multimodal transportation network, additional investment will be needed to connect employees with the growing industrial centers east of I-29, as well as other large regional employers (**Figure 12**). The region's most concentrated employment areas include:

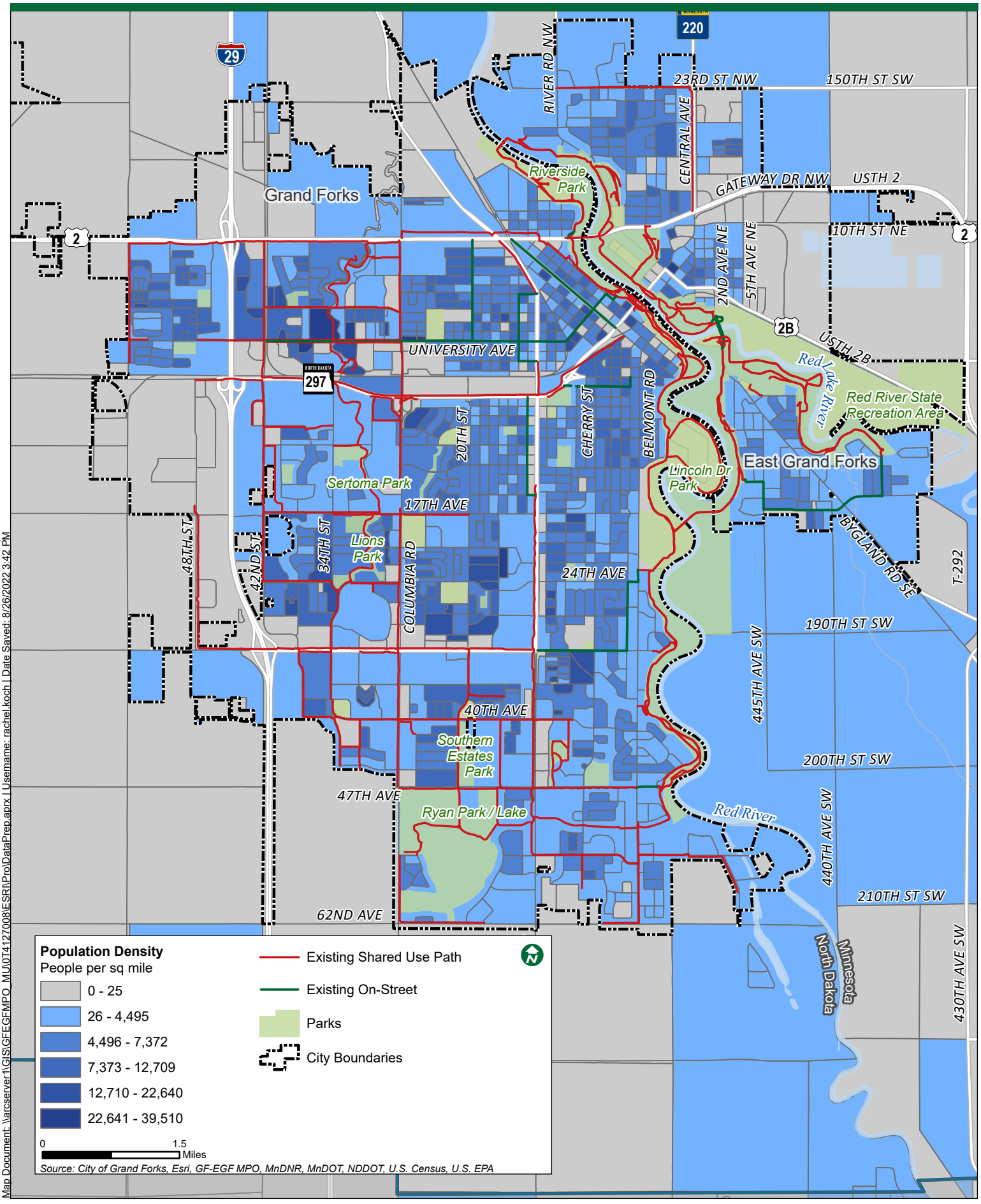
- Downtown Grand Forks
- Columbia Mall and Grand Cities Mall
- The University of North Dakota
- Altru Health Systems (south of DeMers Avenue on Columbia Road)
- LM Wind Power (1580 S. 48th Street, Grand Forks)

**Figure 12. Large employment nodes like the Industrial Park west of I-29 represent opportunities to provide multimodal connections.**

# Bicycle/Pedestrian Element Update  Map 7. Demand Indicators, Population Density

Grand Forks-East Grand Forks MPO

September 2022

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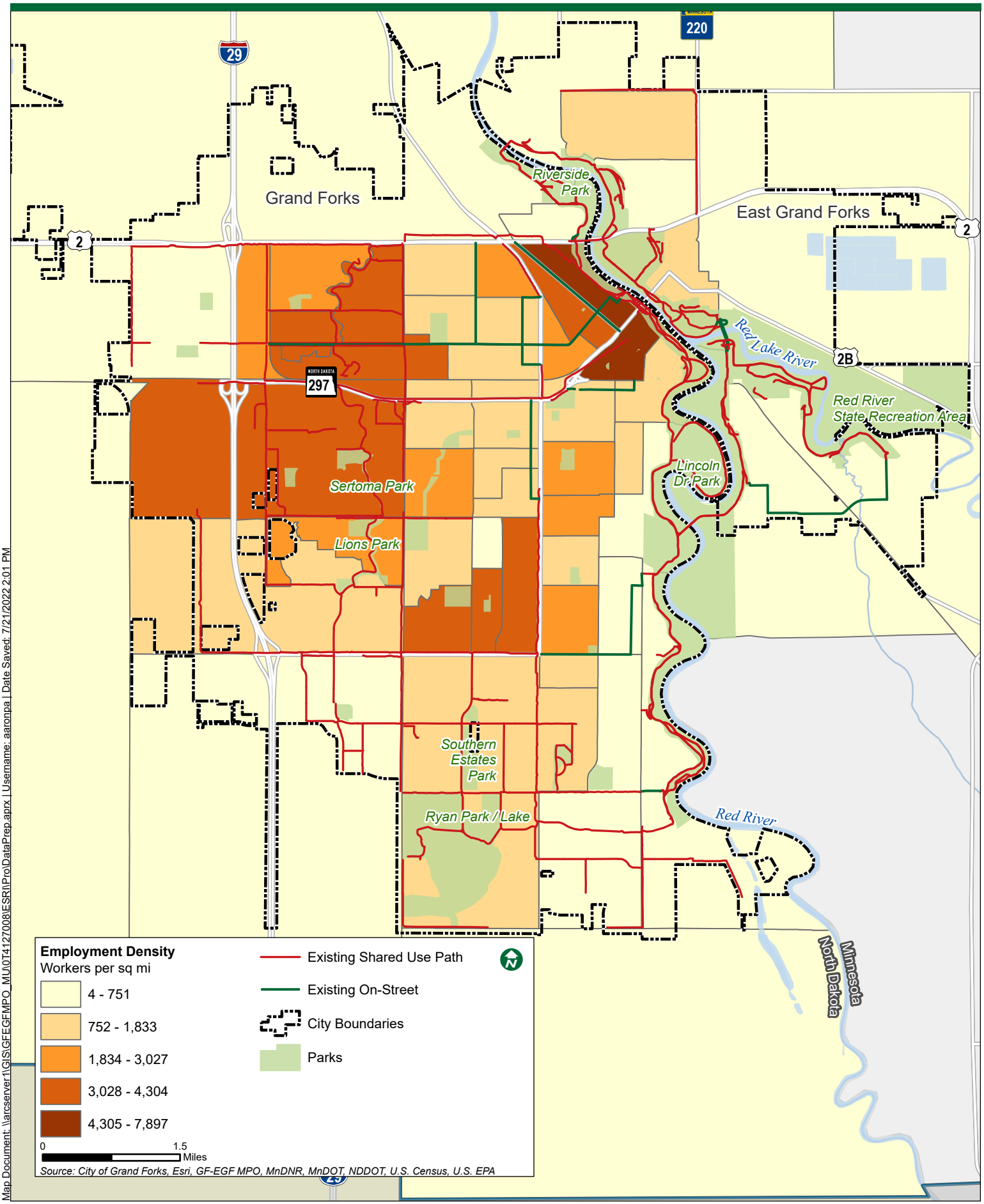
# Bicycle/Pedestrian Element Update Map 8. Demand Indicators, Employment Density

Grand Forks-East Grand Forks MPO

July 2022

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## J. Community Destinations

The transportation network facilitates people getting to necessary destinations for employment, services, goods, housing, and for recreation and enjoyment. Understanding where key destinations are situated throughout the metropolitan area is one way of understanding transportation demand. The distribution of such destinations throughout Greater Grand Forks (**Map 9**) has a substantial impact on determining the future of bicycle and pedestrian infrastructure. Notable clusters of destinations are located in the two downtowns, and along major commercial corridors such as Columbia and Washington.

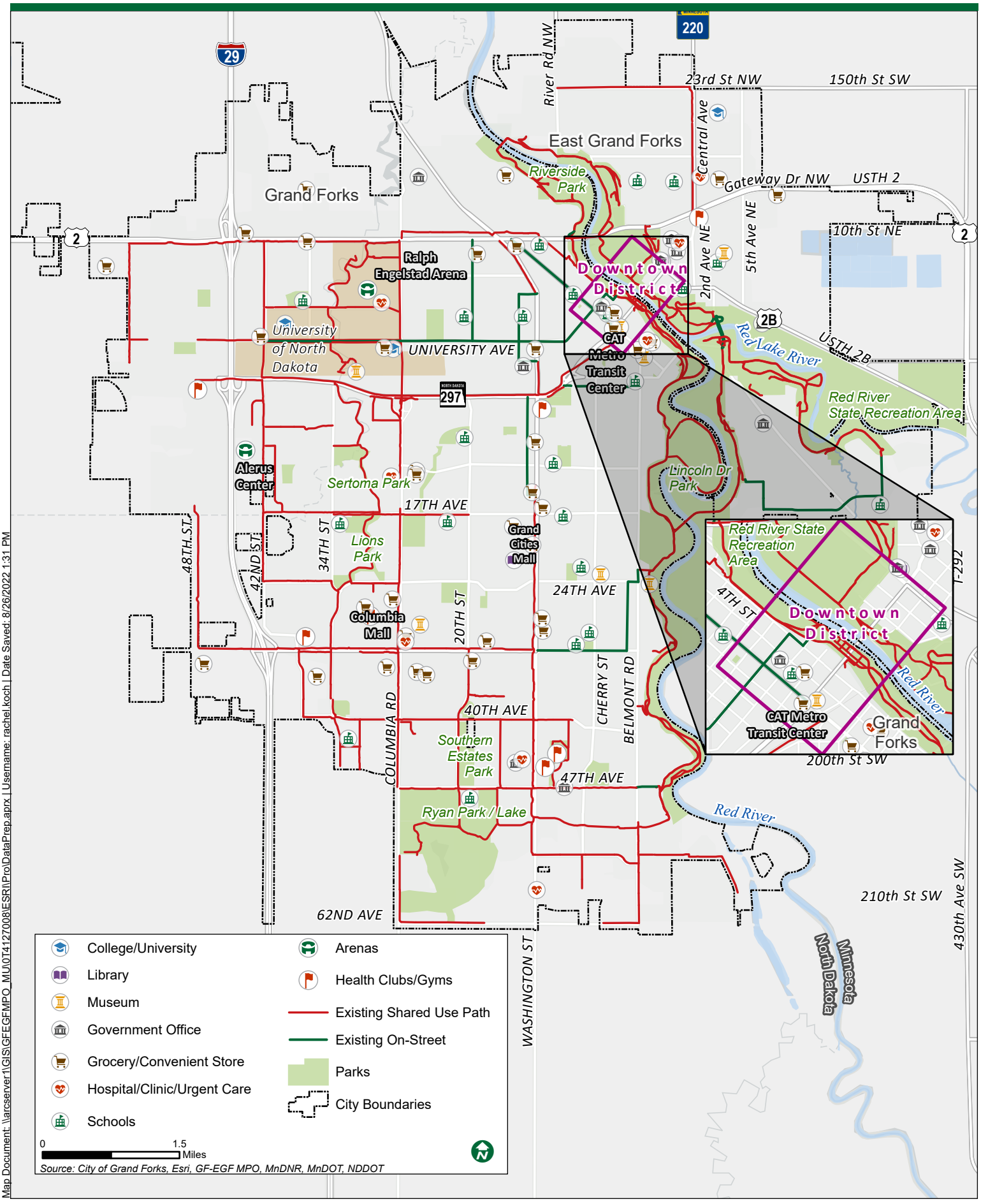
Some destinations, such as schools and parks, are well distributed throughout Greater Grand Forks. Destinations like schools, parks, and grocery stores help create a sense of community and are notable for the frequency of trips to these locations.

- Connections between residential uses around commercial destinations such as Columbia Mall and Grand Cities Mall, and downtown East Grand Forks. Given the prevalence of bicycle and pedestrian involved crashes in parking lots, special care should be taken to improve connectivity between the private and public realms
- Grand Forks has regional event destinations in the Ralph Englestad Arena and Alerus Center that are hubs for pedestrian activities during events. These venues attract 13,000 or more visitors at a time and connectivity and crossings can improve event management and safety.
- Cross connections between East Grand Forks and Grand Forks across the Red River would support connections between newer residential developments, employment, and commercial land uses
- New residential development in Grand Forks and East Grand Forks have very homogenous land uses, with little connectivity to destinations.

## K. National Walkability Index – Employment and Household Ratio

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. The National Walkability Index's Employment and Household Entropy score is calculated as being the ratio of occupied housing units in a census block group and number of jobs in the same geographic area (**Map 10**). An entropy score of one represents a maximally mixed land use (i.e., an equal number of occupied housing units and jobs in an area). An entropy score of zero represents an area that is entirely housing or entirely employment, with no variety in land use. This entropy score does not account for factors such as street design, safety (traffic), security (crime), pedestrian-friendly design, topography, or weather. Generally, Grand Forks does not tend to mix land uses, resulting in most trips only being feasible via automobile. Future infill development can help address these conditions by creating destination islands in homogenous land use zones. Other takeaways from this analysis include:

- The twin downtowns of Grand Forks and East Grand Forks, the areas surrounding Grand Cities Mall and Columbia Mall all have entropy scores above 0.75, indicating a very heterogenous land use mix, in addition to having high employment densities.
- There are many residential neighborhoods near high entropy score areas. These should be prioritized for investments that increase connectivity to adjacent high entropy score areas, such as downtown, Grand Cities Mall, and the Columbia Mall areas.
- The industrial area along I-29 north and south of 32$^{nd}$ Avenue have low entropy scores but attract many trips as people travel to work. Investments in these locations should prioritize linking major employers to the bicycle and pedestrian network.

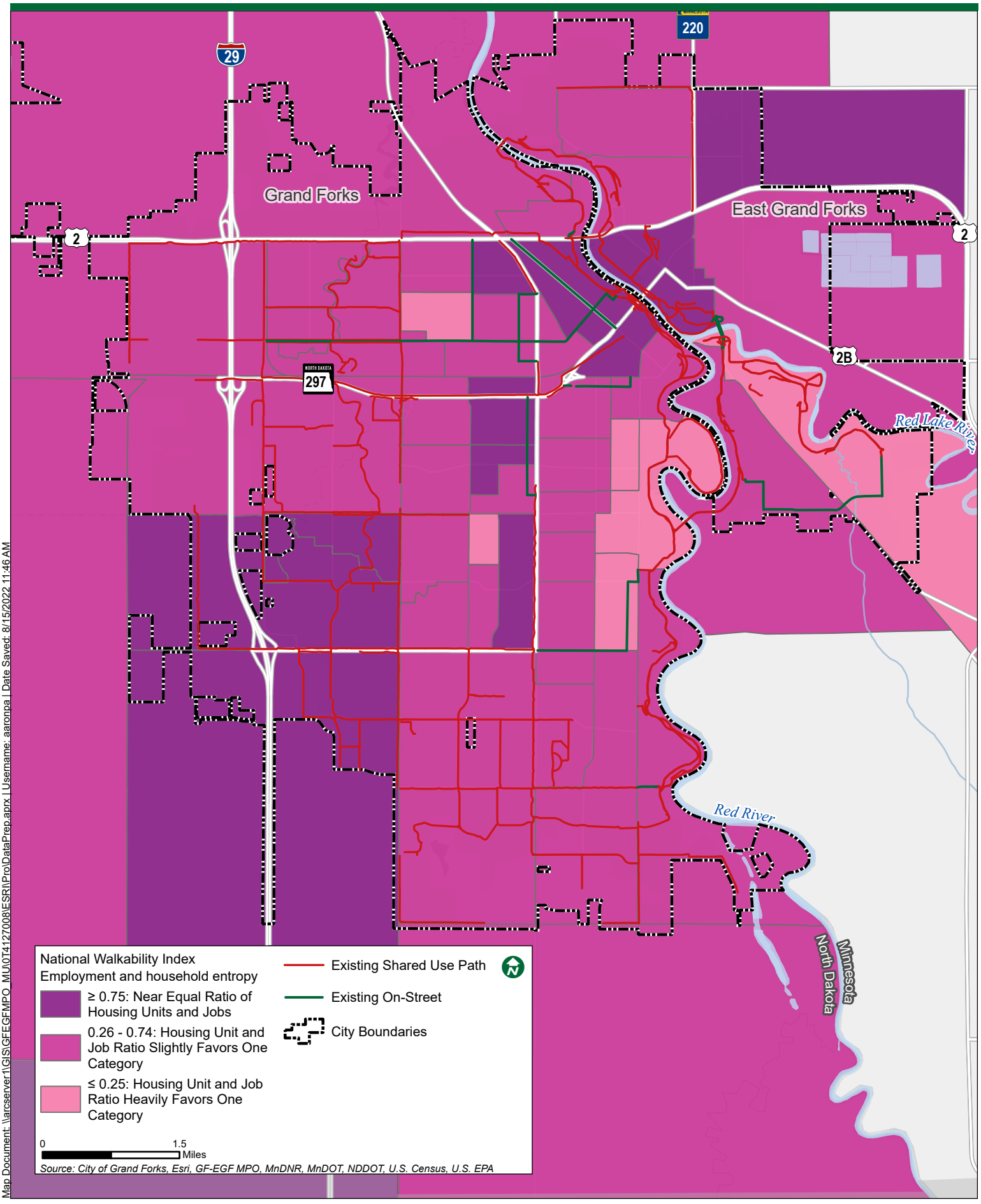


# Bicycle/Pedestrian Element Update

## Map 10. Employment and Household Entropy

Grand Forks-East Grand Forks MPO

August 2022

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# IV. Environmental Justice Analysis

Certain demographics, be it due to economic circumstances, ability, age, or previous/ongoing systemic disinvestment, are more likely to rely on biking, walking, and transit compared to the population overall. At the same time, these analyses address equity concerns, either highlighting areas with high concentrations of minority populations that may have been subject to systemic disinvestment, or showing where investment could be targeted to benefit a group that has a greater need for active transportation investment. These groups can generally be summarized under the title of environmental justice communities.

The following section uses the U.S. Census Bureau data for Black, Indigenous, People of Color (BIPOC) populations within the community as well as data regarding the number of families living below the poverty threshold. This analysis also uses the Environmental Protection Agencies' Environmental Justice (EJ) Demographic Index (**Map 11**) to visualize the relationship between current investments in bicyclists and pedestrian facilities and where equity populations live. The EJ Demographic Index is based on the based on the average of two other EPA demographic indicators; low-income and people of color. The EJ Demographic Index provides a percentile comparison to all other census block groups' home state to contextualize if the census block group would potentially require targeted outreach to address the needs of equity populations. This is not meant to cover the entirety of equity populations within Greater Grand Forks. These analyses are meant to help identify possible locations for future focused investment or community engagement.

## A. BIPOC

Approximately 83.6 percent of the population in Greater Grand Forks identifies as White, with the largest minority population groups corresponding with Black, Asian, and American Indians and Alaska Natives. The racial and ethnic demographics of Greater Grand Forks is detailed previously in this report's demographic analysis section. These populations are not evenly distributed throughout the region, with the following areas showing much higher than average rates of BIPOC populations:

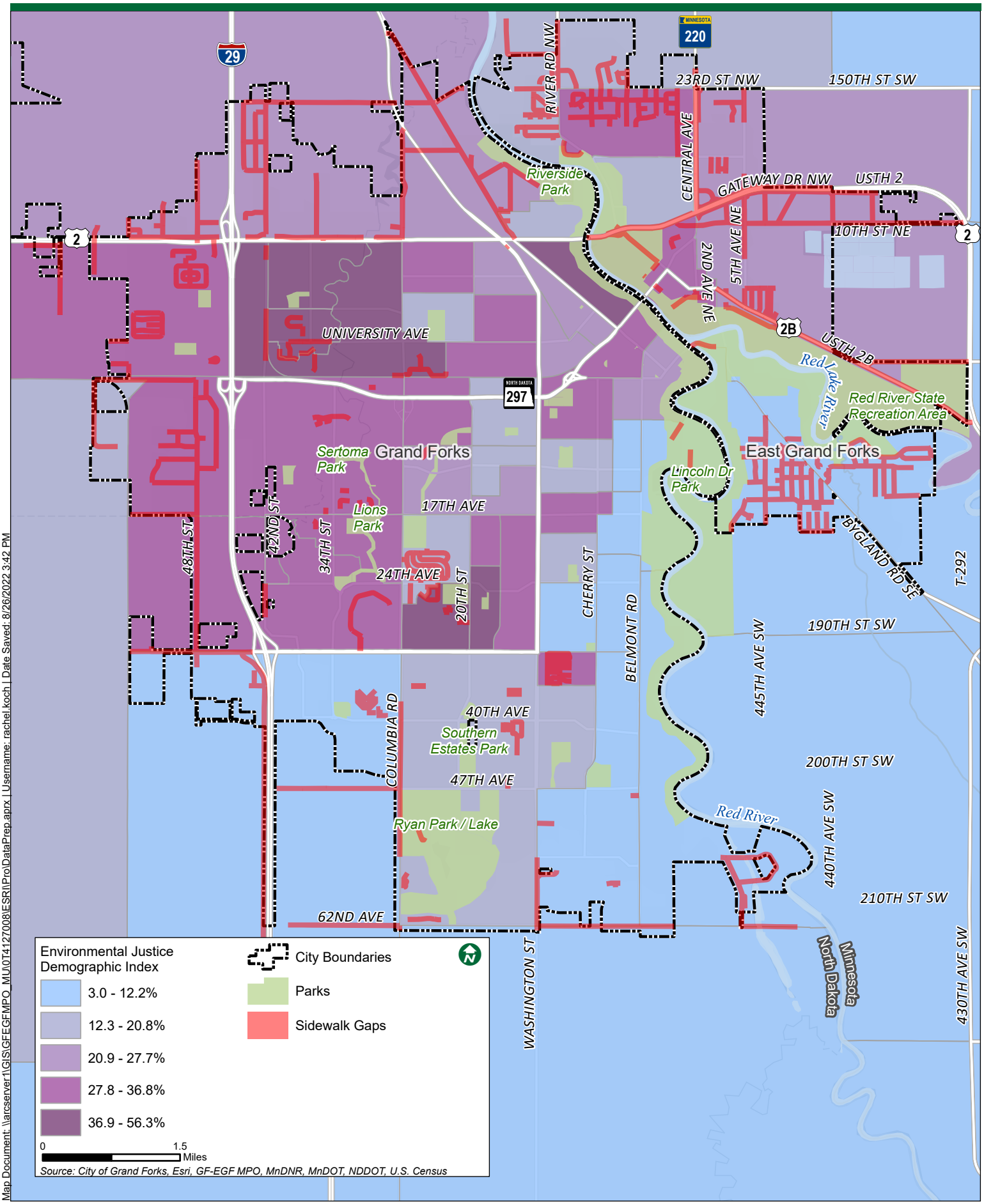
- Neighborhoods surrounding the University of North Dakota
- Neighborhoods surrounding the Columbia Mall, north of 32nd Avenue bordered by 42nd Street and South Columbia Road.

## B. Poverty

An estimated 14.3 percent of the population in the Grand Forks metropolitan area has an income below the poverty threshold. Lower income people are more likely to bike or walk, as low income is correlated with lower automobile ownership rates. However, certain areas within Greater Grand Forks have substantially higher rates of people living below the poverty threshold, indicating potential areas of concentrated poverty. These locations could be the focus of future community engagement efforts to shape investment priorities. Areas that show above average concentrations of poverty include:

- University of North Dakota and surrounding areas
- Symington Park area and surrounding areas
- Downtown Grand Forks and Downtown East Grand Forks
- The northwestern quadrant of East Grand Forks, between Central Avenue and River Road to the east and west, and 23rd Street and 17th Street to the north and south.

Note that income status of university student populations can be somewhat misleading, as these individuals' low-income status might not reflect their actual access to wealth via means not captured in the U.S Census methodology, such as family resources. The University of North Dakota area has one of the most comprehensive bicycle and pedestrian networks in the metropolitan area.

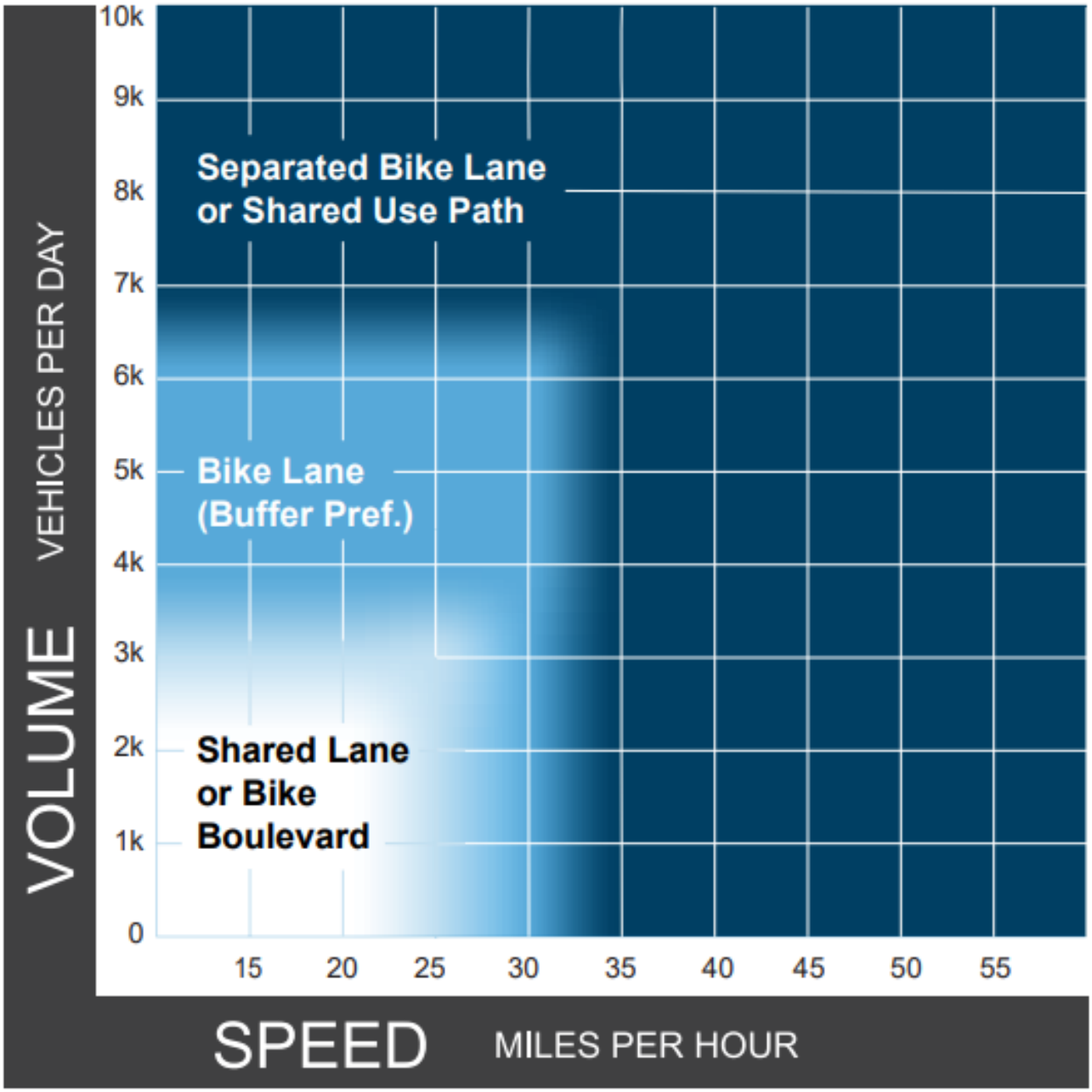


# V. Street Environment

## A. Traffic Volume

Previous sections of this report identified existing bicycle and pedestrian routes and highlighted the primary routes for both active transportation modes and automobiles. This report considered the guidance from the Federal Highway Administration's Bikeway Selection Guide (**Figure 13** & **Figure 14**) to determine the general ranges daily traffic throughout the Grand Forks and East Grand Forks street network and how that should shape analysis (**Map 12**). Higher traffic volume roads generally require investments that provide physical separation between vehicles and active transportation modes and depending on their specific context might also require specialized facilities to aid other movements, such as crossings:

- **0 to 2,000 Vehicles per Day**: Interior neighborhood roads generally have lower volumes of traffic. These roads are comfortable for cyclists of all skill levels. Minor treatments, such as road signs alerting drivers to bicyclists on the roadway or to yield to pedestrians can be very effective in increasing comfort. Crossing is comfortable for most pedestrians. These roads are usually controlled with stop conditions when they intersect busier roads, so crossing busier roads is a key factor.
  Examples: Oak Street, 18th Avenue Southeast
- **2,000 to 3,000 Vehicles per Day**: Minor neighborhood collector roads generally have volumes of traffic in this range. These roads might present some challenges to less experienced or younger bicyclists. At higher traffic volumes, bike lanes or shared lane markings are helpful for increasing user comfort. Marked pedestrian crossings near community destinations like schools, parks, community centers, and convenience stores should be installed when possible, and might be necessary at other locations.
  Examples: 8th Avenue South, James Avenue Southeast
- **3,000 to 5,000 Vehicles per Day**: Popular minor neighborhood collectors; these are the conventional threshold for installing marked bike lanes. Roads with this volume of traffic typically require greater investment for safe crossings, such as well marked crosswalks, signage, and potentially traffic control at key intersections.
  Examples: Cherry Street, Rhineheart Drive
- **5,000 to 10,000 Vehicles per Day**: Only experienced and confident of cyclists will feel confident sharing the road with higher volumes of traffic such as this. Conventional bike lanes may be adequate, but will not feel comfortable due to the frequency of vehicles passing. Most users will prefer separated facilities. Sidewalks should be separated from curbs or have some buffer between pedestrians and automobile traffic. Well-designed crosswalks with traffic controls and pedestrian refuge medians should be installed at key crossings.
  Examples: University Avenue, Minnesota Ave/1st Avenue Southeast, Bygland Road
- **Over 10,000 Vehicles per Day**: Roads with these volumes of automobile traffic are not suitable to all but the most dedicated of bicyclists. Investment should be in separated bicycle facilities, or direct bicycle traffic to alternative parallel routes with lower volumes of traffic. Sidewalks should be set back from the curb. Crosswalks along these corridors should include traffic controls and pedestrian medians refuge islands where possibel.
  Examples: Columbia Road, Washington Street, Gateway Drive/US Highway 2

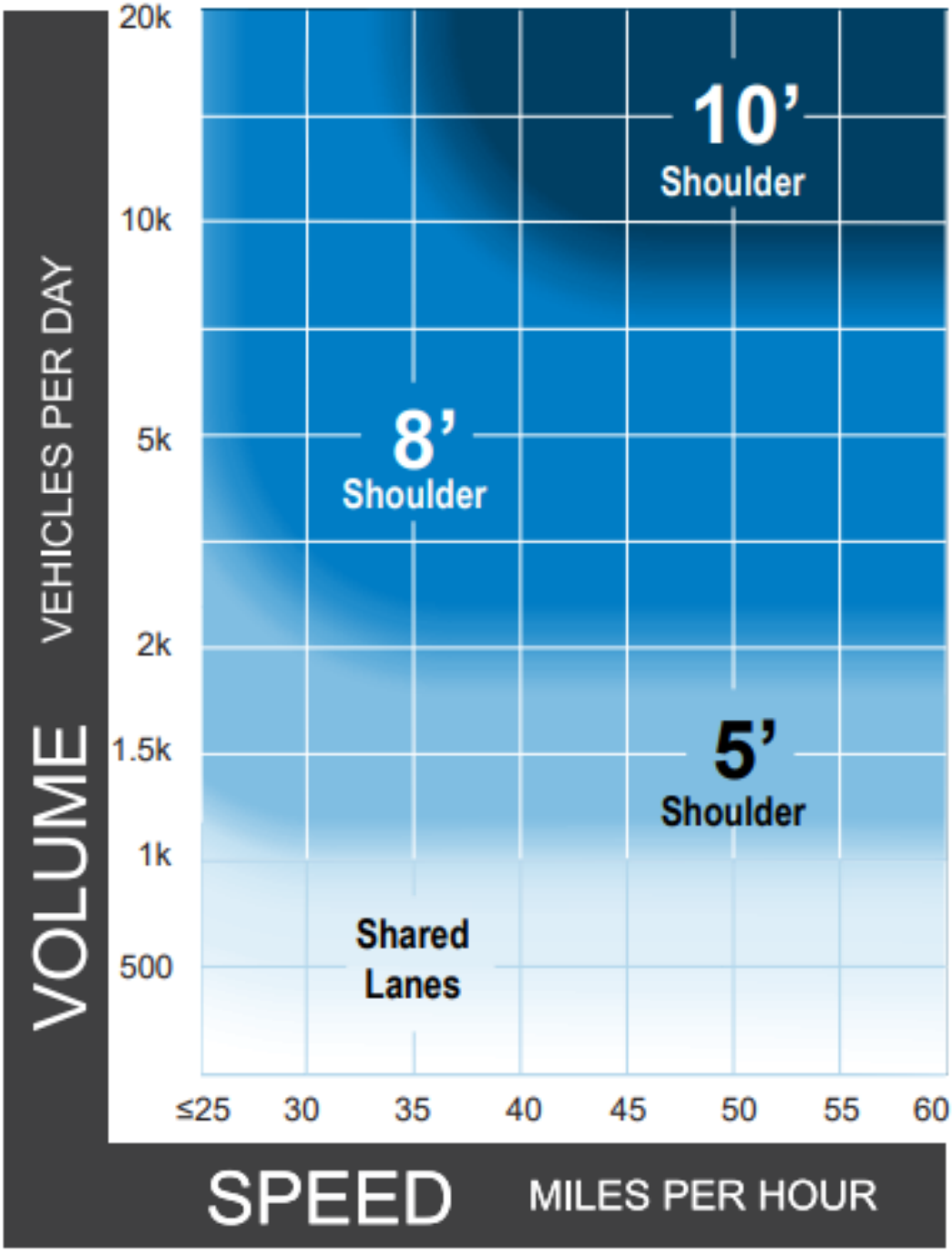



**Notes**

1 Chart assumes operating speeds are similar to posted speeds. If they differ, use operating speed rather than posted speed.

2 Advisory bike lanes may be an option where traffic volume is <3K ADT.

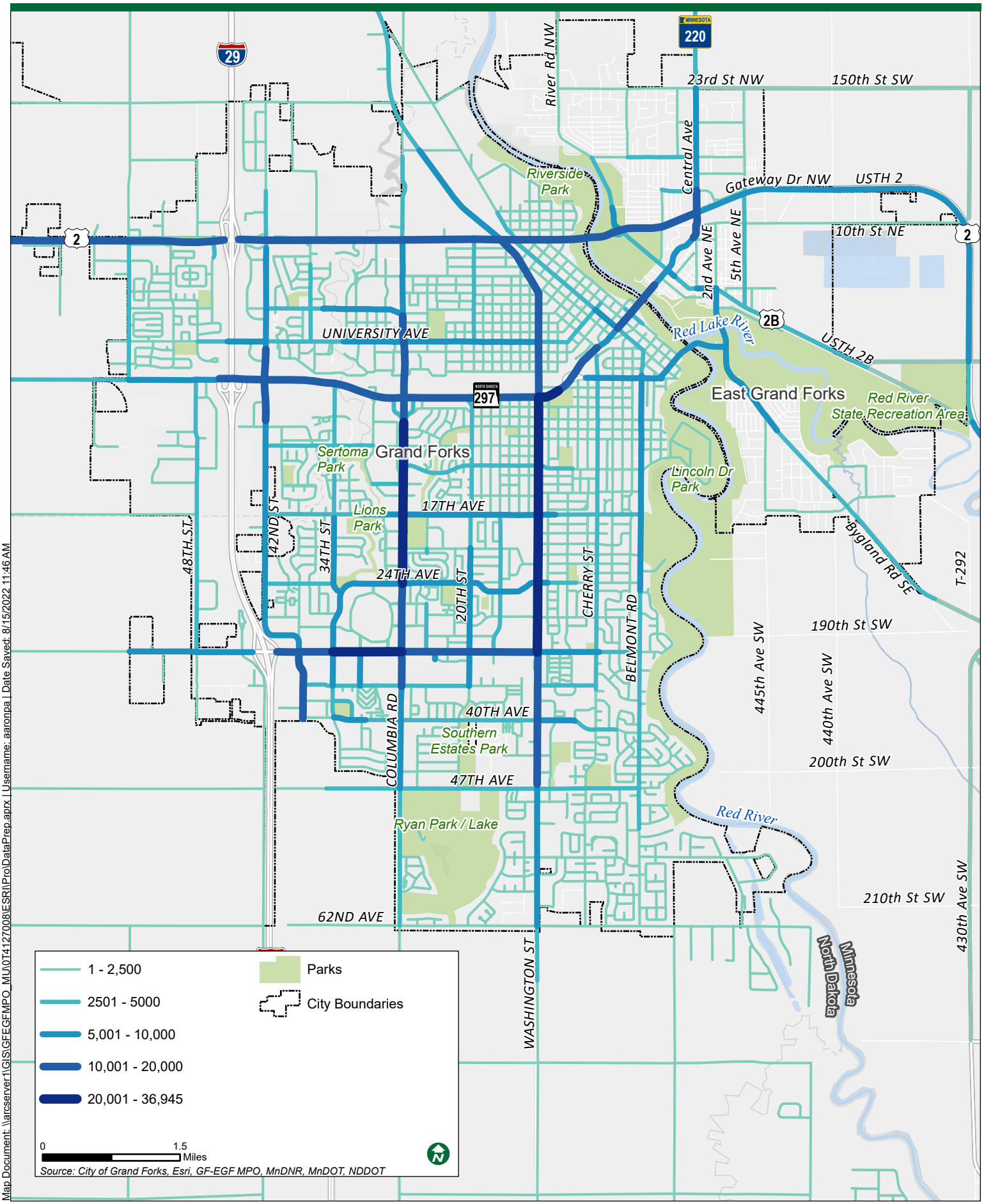
**Figure 13. Preferred Bikeway Type or Urban, Urban Core, Suburban and Rural Town Centers**
Source: FHWA Bikeway Selection Guide, 2019




**Notes**

1. This chart assumes the project involves reconstruction or retrofit in constrained conditions. For new construction, follow recommended shoulder widths in the AASHTO Green Book.
2. A separated shared use pathway is a suitable alternative to providing paved shoulders.
3. Chart assumes operating speeds are similar to posted speeds. If they differ, use operating speed rather than posted speed.
4. If the percentage of heavy vehicles is greater than 5%, consider providing a wider shoulder or a separated pathway.

**Figure 14. Preferred Shoulder Widths for Rural Roadways**
Source: FHWA Bikeway Selection Guide, 2019



## B. Traffic Speeds

The following map (**Map 13**) shows the posted speed limit for Grand Forks and East Grand Forks streets. Speed in conjunction with functional classification and traffic volume, is a major factor when determining the suitability of a roadway for bicycle and pedestrian usage. Streets with both low speeds and low traffic counts are ideal candidates for investments into active mobility. However, these corridors are only as useful as they can link people to destinations or connect to the greater network of bicycle and pedestrian facilities.

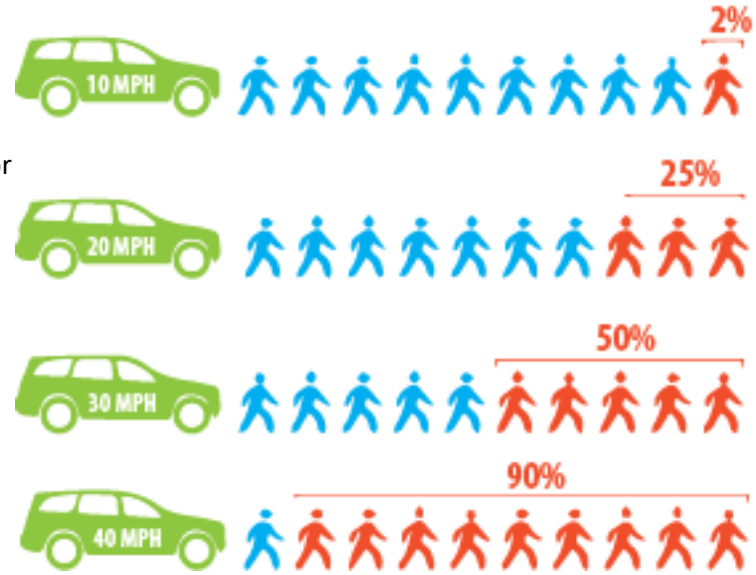
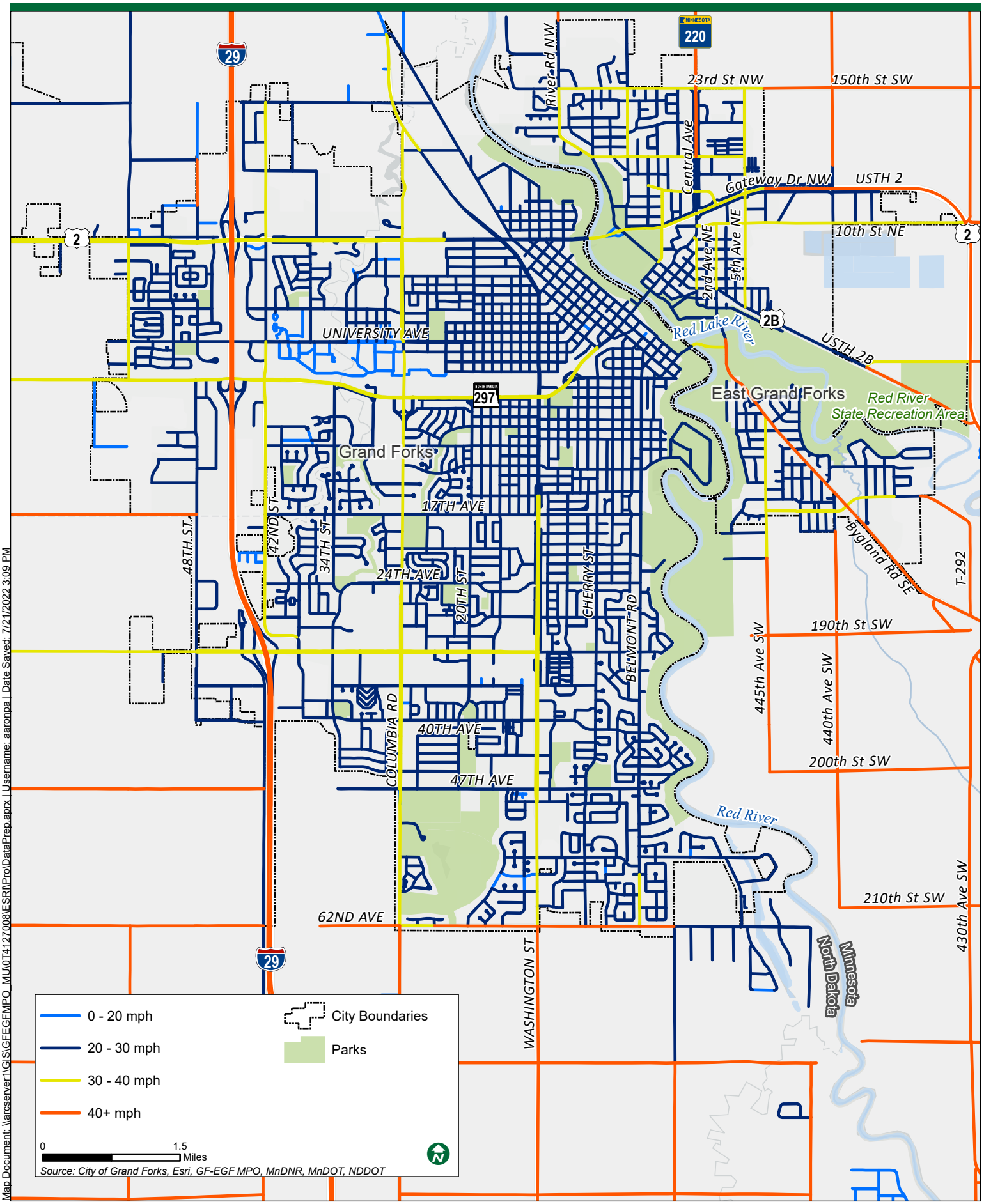



**Figure 15. Vehicle Speed in Relation to Chance of Fatality or Severe Injury**

Traffic speeds also provide helpful data when determining where there is need for greater separation between automobile traffic bicycle/pedestrian road users. Higher speed roadways generally require greater physical separation between automobiles and active modes of transportation and require additional treatment for safe crossings. As automotive speeds increase, the survivability of pedestrian and bicyclist crashes rapidly decrease (Error! Reference source not found.).

This relationship between speed and potential for injury or death informs network design both in terms of minimizing crash exposure for active transportation users, in addition to engineering improvements to manage prevailing vehicle speed along active transportation corridors. Minimizing crash exposure can be done through directing active mobility traffic onto lower traffic roads, reducing crossing distances, and providing enhanced crossing facilities. Actual vehicle travel speeds often differ from these posted speeds, especially in areas with low enforcement. Prevailing speed can be managed passively through engineering and design features such as travel lane width, lane striping, frequency of intersections, streetscape design, and other factors.

- Higher speed corridors that separate residential areas from schools, such as Bygland Road, should be priorities for SRTS investments.
- Road speeds between commercial corridors are generally low, and traffic volumes are manageable. A simple network of east-west connections to major investments in shared use
- The areas along high-speed corridors tend to have Housing and Employment Entropy scores closer to 1.0, indicating a more diverse land use and thus greater suitability for biking and walking trips. Investments around areas like Washington Street near Grand Cities Mall, Columbia Road near the Columbia Mall, and Demers Avenue headed into Downtown Grand Forks should focus on enabling short trips between residential and commercial destinations, addressing crossing barriers, and reducing conflict points for bicyclists and pedestrians.



## C. Bicycle and Pedestrian Crashes

One of the primary goals of active transportation system planning is to plan for and create accessible and safe places for people to bicycle and walk. A key part of this is to reduced the number of bicycle and pedestrian crashes in Greater Grand Forks (**Map 14**). Both North Dakota and Minnesota have a Vision Zero plan, a traffic safety program that deploys an interdisciplinary approach to reducing all traffic crashes, injuries, and deaths on public roads. Figure 15 displays crashes reported by local law enforcement between 2017 and 2021. While these crash data provide useful insights to guide investments and identify areas in need of treatment, they have often been referred to as the "tip of the iceberg" because they are limited almost entirely to motor vehicle-related events that occur on public roadways, and thus might not include crashes that occur on private property such as parking lots and driveways, or crashes that do not involved motor vehicles. Finally, these generally do not include near-misses, which can greatly impact modal choices. Although under-reporting and omissions do present limitations on the dataset, analysis of crashes in Greater Grand Forks can still provide valuable insights into community safety issues and should be paired with engagement and community communication to identify other crash hot spots.

Analysis of the crashes from 2017-2021 indicate the following

- There were 118 bicycle and pedestrian crashes in the five-year study period. The split between bicyclists and pedestrians was about equal, with 61 pedestrian crashes, and 57 bicycle crashes (**Table 2**).

**Table 2. Grand Forks Area Bicycle and Pedestrian Crashes 2017-2021**

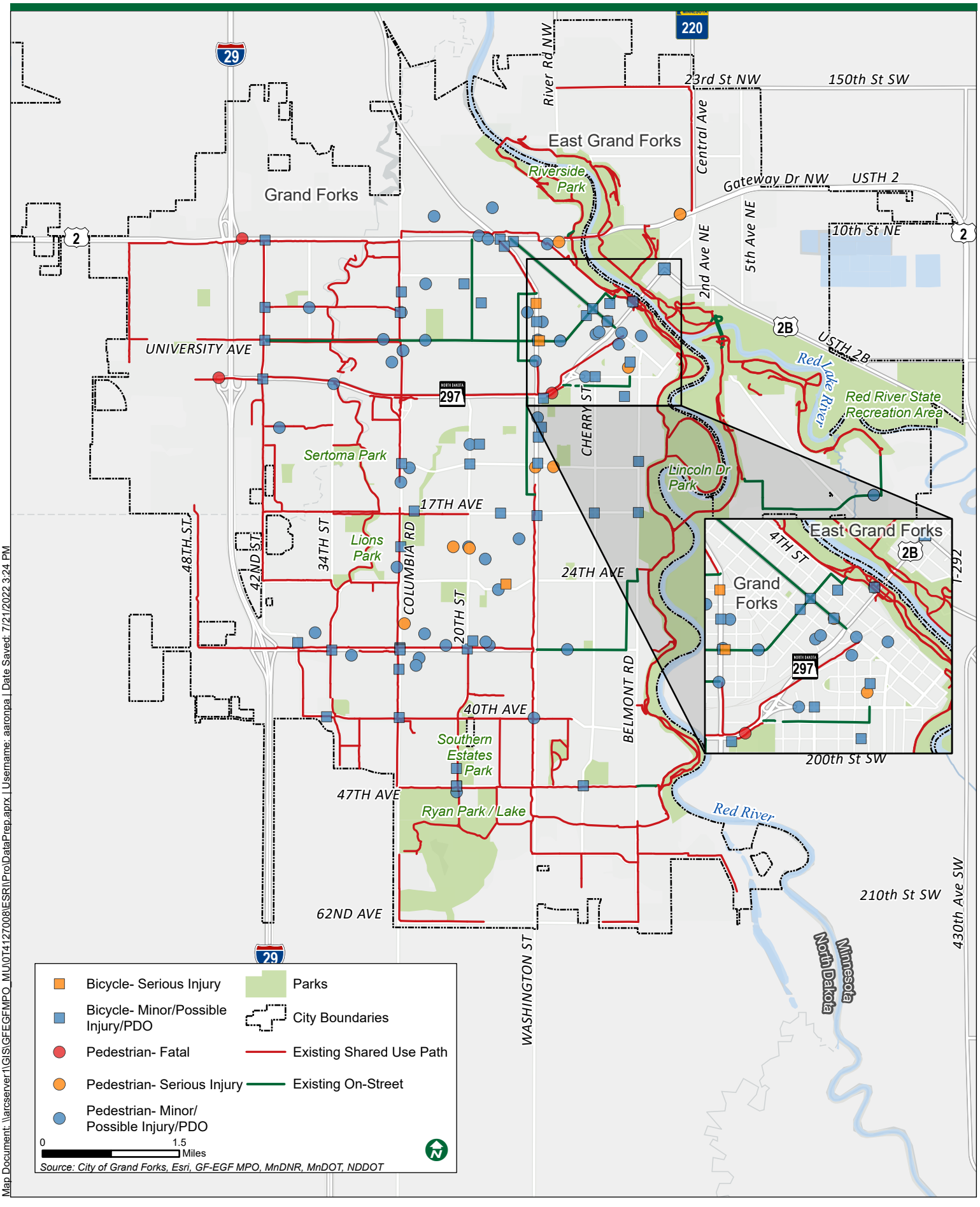
| Municipality | East Grand Forks | Grand Forks | Combined Grand Forks MPO |
|---|---|---|---|
| Pedestrian | 2 | 59 | 61 |
| Bicyclists | 1 | 56 | 57 |
| **Total** | **3** | **115** | **118** |

- Bicycle crashes were much more likely to occur at intersections (43 out of 57 bicycle crashes). Pedestrian crashes trended slightly towards occurring at non-intersection locations (39 out of 61 pedestrian crashes). Crashes at controlled intersections (i.e., with traffic signals or signs) accounted for 32 bicycle crashes and 16 pedestrian crashes.
- There were a combined 42 crashes which reported that the vehicle was making a turn during the crash, accounting for a little over one third of all crashes. Most of these crashes (n=35) were reported at intersections. The prevalence of non-intersection turning crashes might be indicative of conflicts with private access such as driveways and alleyways. Right turn crashes were only slightly more common than left turn crashes.
- Crashes tend to cluster around busy arterials and downtown Grand Forks. Crashes along arterials are most common where the road separates residential areas from retail and commercial land uses, such as 32nd Avenue South, Washington Street, and Gateway Drive.
- There was a combined 23 bicycle and pedestrian crashes in parking lots during the study period, representing nearly 20 percent of all crashes. Parking lots are not formally part of the street system and are frequently not under the planning and engineering control of a city, but zoning policy can affect their design to better accommodate safety goals.
- There were three fatal crashes and twelve serious injury crashes during the study period. The three fatal crashes involved pedestrians. The fatal crashes occurred at DeMers between South 12th Street and 5th Avenue South, across from the fire station, at the Demers Interstate 29 southbound on-ramp, and at the Interstate 29 northbound on-ramp at US-2.

# Bicycle/Pedestrian Element Update Map 14. Pedestrian & Bike Crashes (2017-2021)

**Grand Forks-East Grand Forks MPO**

**July 2022**

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## D. Bicycle and Walking Crossing Barriers

A lack of crossing opportunities can severely hinder the efficacy of a regional bicycle and pedestrian network, especially if a barrier prevents people from walking or biking to access school, work, or services. This analysis (**Map 15**) examines three of the most common crossing barriers for active transportation networks: Freeways and expressways, rail corridors, and natural features such as bodies of water like rivers and streams. These barriers are present in the Greater Grand Forks and they affect biking and walking network continuity.

Freeway and expressways were defined as any roadway that met the following criteria: a full access-controlled highway, or any non-freeway principal arterials consisting of at least four lanes and divided by a median. This analysis identified Interstate 29, US HIGHWAY 2, and parts of principal arterials such as Columbia Road, Washington Street, and 32nd Avenue in this category.

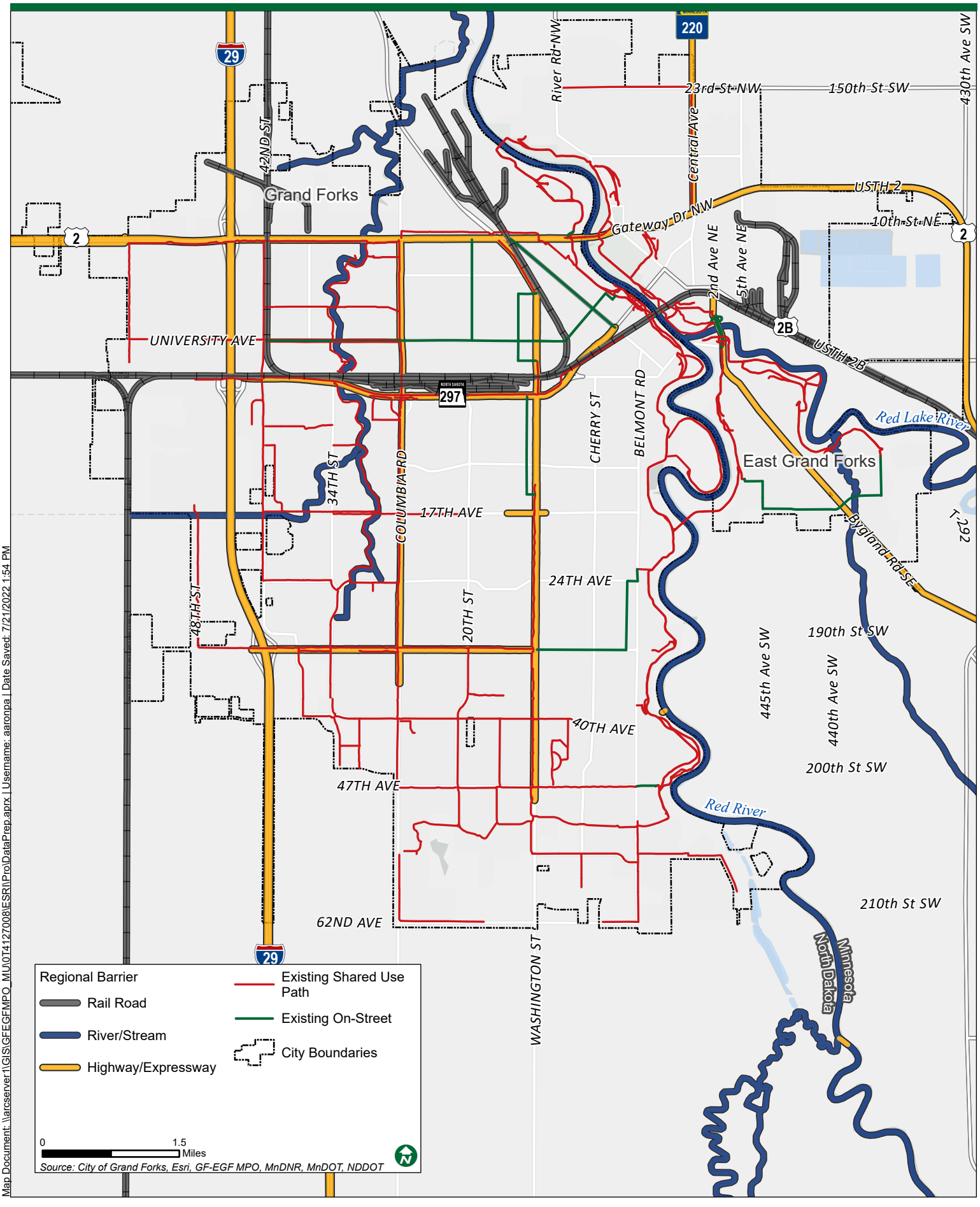
Grand Forks is situated on a major BNSF rail corridor. Rail tracks bisect some of the oldest and densest parts of the community, with many gated and uncontrolled at-grade crossings, some of which service multiple trains a day, and can be the cause of delay for all road users. Activity relating to the Bakken oil field development in recent years has greatly increased the number of trains with over 100 cars, increasing delays. The rail switching yard north of DeMers Avenue between Washington and 42nd Street is another barrier that limits north/south connectivity for all road users. Switching operations can cause substantial delays for traffic traversing at-grade crossings near the rail yard (42nd Street, Washington Street). The 2017 Freight Rail Access Study found that there were five crossings in the city with daily delay that exceeded 75 minutes per day. At grade crossings are also present in downtown Grand Forks – directly south of downtown and along the Mill Road spur accessing the North Dakota Mill and Elevator. Many crossings are uncontrolled along the Mill Spur.

The Red River and Red Lake River are the dominant natural features in the region. They are a regular natural barrier, and much more so during flooding when bridges may be closed. For bicyclists and pedestrians, this can result in detours. There are three main roadway crossings of the Red River – US Highway 2, DeMers Avenue, and Minnesota Avenue. Of these only DeMers Avenue and US Highway 2 are available for people walking and bicycling. There are also two bicycle/pedestrian bridges over the Red River – one located 0.6 miles north of US HIGHWAY 2 and another near 17th Avenue. The Red Lake River connects with the Red River in the southern part of East Grand Forks, with the main crossing being the Louis Murray Bridge at the intersection of 2nd Avenue Northeast and 3rd Avenue Southeast.

Lesser waterways, such as the English Coulee that winds through the University of North Dakota campus, also presents a less substantial barrier for biking and walking. This creek already has several bike and pedestrian crossings.

Key aspect of these crossing barriers include:

- Interstate 29 is a major barrier to the west, with crossings limited to Demers Avenue, Gateway Drive/US Highway 2, and 32nd Avenue.
- Railroad crossings are a significant north-south barrier, especially along and west of Columbia Road. Cyclists might struggle with the steep grades and narrow path for the Columbia overpass, requiring detouring to 42nd Street or Washington Street.
- Crossing the Red River is limited to three existing bridges, none of which have dedicated cyclists facilities, and mixed quality of pedestrian facilities. Other planning efforts, such as the Downtown Action Plan and Downtown Transportation Study have made recommendations on how to address these deficiencies during bridge reconstruction.



## E. Bicycle Level of Traffic Stress

Data from the previous sections were used to calculate the bicycle level of traffic stress (BLTS) for bicyclists in Greater Grand Forks. BLTS methodology quantifies the perceived safety issues of being near vehicles as a relation to the speed and spacing of vehicles per road segments. These are grouped into four ranks of impact of traffic-based stress on cyclists. This analysis is based on methodology developed by the Mineta Transportation Institute and the Oregon Department of Transportation. BLTS for Greater Grand Forks was calculated using GIS data of road segments from data provided 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 analysis included the network of shared use paths. The levels of traffic stress are grouped into the four following categories:

- **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.
- **BLTS 2 – Low stress roadways**. Collector level streets with bike lanes or streets within the central business district. Traffic speed differential is low, and intersections are not difficult to cross for most users. Requires more attention than BLTS 1, thus not suitable to young children.
- **BLTS 3 – Moderate stress roadways**. Low-speed arterials with bike lanes or moderate speed non-multilane roadways. Suitable for most observant adult cyclists.
- **BLTS 4 – High stress roadways**. Moderate to high traffic speeds and volumes with complex intersections, wide crossing distances, or high volumes/speed. Suitable only for the most confident and skilled cyclists.

The BLTS methodology pairs these levels of traffic stress with four groupings of cyclists based on tendency to use bicycles as a mode of transportation and their route making choices (**Figure 16**). The smallest group, “Strong and Fearless” represents people who feel comfortable travelling by bike under any condition and on any roadway. The second group, “Enthused and Confident”, are more advanced cyclists who will travel on most roadways but tend to avoid high volume and speed conditions. More than half of the population falls into the largest of the group, “Interested but Concerned”. These are people who would ride if roadway conditions were perceived to be safe enough. The final group in not depicted in the graphic. This “No Way No How” group represents the approximately one-third of the population who will not ride under any circumstances. with a range of acceptable levels of traffic stress given the purpose of the trip.


**Figure 16. Bicyclist preferences profiles**
Source: FHWA Bikeway Selection Guide, 2019

Growing the number of people bicycling means making gains in the enthused and confident category (with supportive infrastructure that takes them where they want to go) and interested and concerned category (who are averse to high stress traffic environments but may be compelled to bike more if high comfort facilities can be created).

The data collected throughout this study was used to determine the bicycle level of traffic stress for the Greater Grand Forks road network (**Map 16**). Unsurprisingly, the analysis indicates what is generally understood about various street types in Grand Forks. Neighborhood streets tend to be quite comfortable (BLTS 1 or 2), minor arterials are more difficult (BLTS 3), and major arterials are quite uncomfortable (BLTS 4). Shared Use Paths along major arterials provide a more appealing alternative to many cyclists, but these paths still might be intimidating to low-stress cyclists due to the proximity to high-speed traffic, and potential conflicts with vehicular traffic at intersections and street crossings.

This analysis supports the findings of the regional barriers analysis, including:

- The north-south gap in Grand Forks could be addressed by reducing level of traffic stress along Washington Street, and improving continuity along Columbia Road
- Many east-west gaps could be readily addressed with low-cost interventions, such as bike boulevards and on-street facilities.

Grand Forks - East Grand Forks
METROPOLITAN PLANNING ORGANIZATION

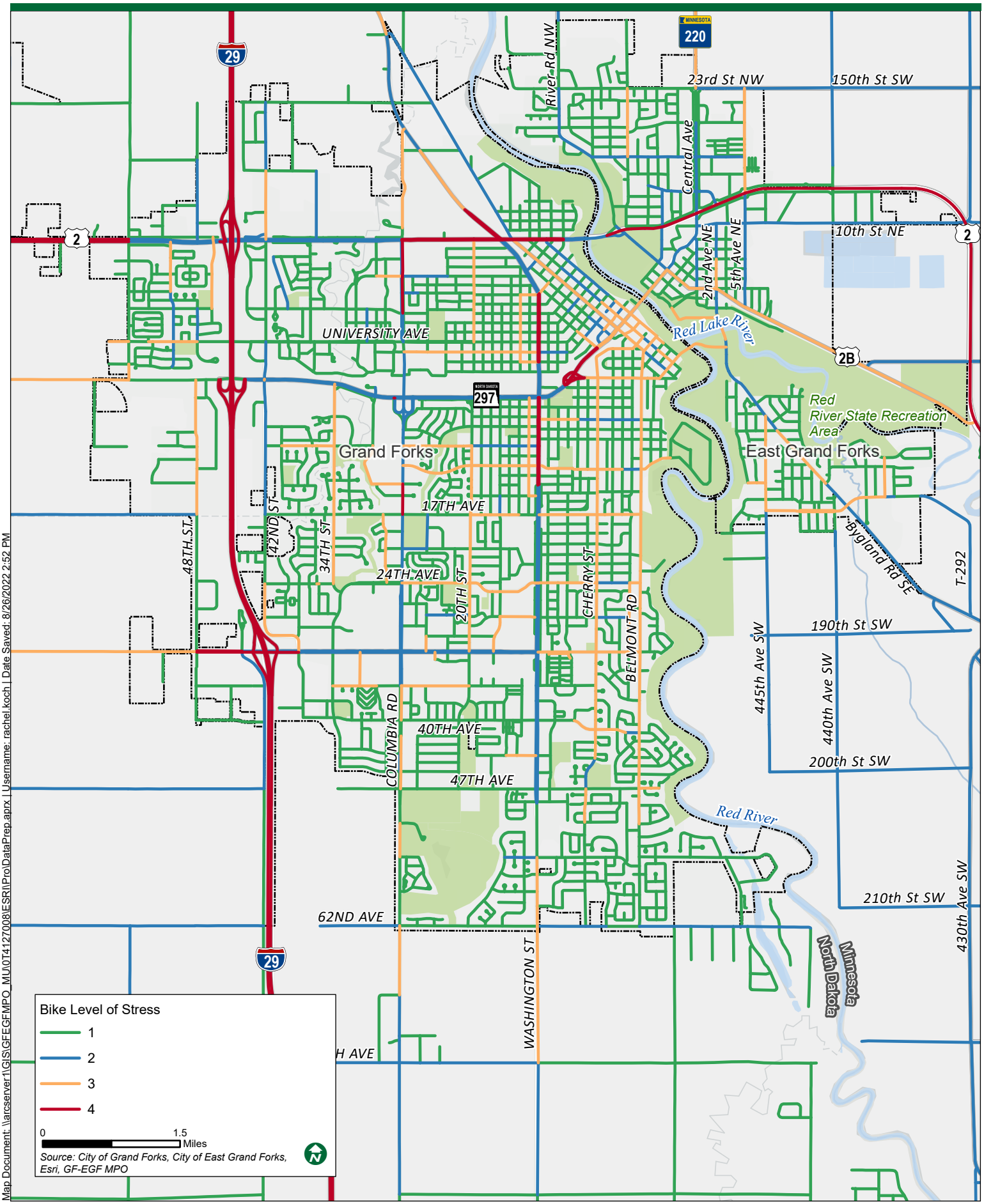
# Bicycle/Pedestrian Element Update

**Grand Forks-East Grand Forks MPO**

## Map 16. Bike Level of Traffic Stress

**August 2022**

BOLTON & MENK



# Appendix A: Summary of Existing Plans and Policies


# Plans & Policies Report

## 2023 Grand Forks – East Grand Forks Bicycle & Pedestrian Element Update

Grand Forks-East Grand Forks Metropolitan Planning Organization

DRAFT – January, 2023

Grand Forks - East Grand Forks
METROPOLITAN
PLANNING ORGANIZATION

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BOLTON & MENK

Real People. Real Solutions.

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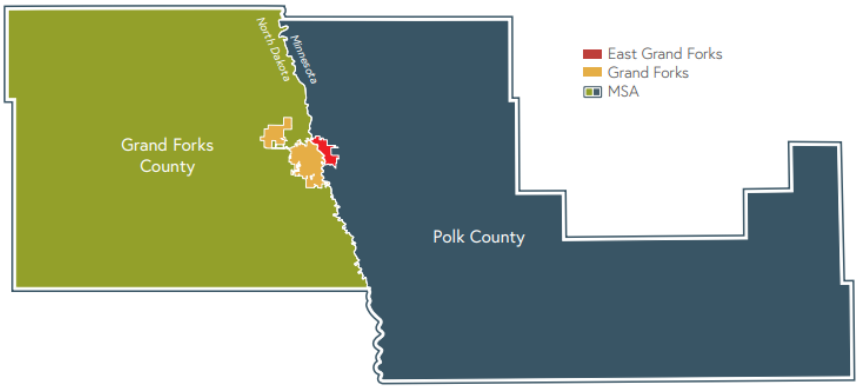
# Appendix

# I. Study Area

The Grand Forks Metropolitan area is made up of the City of Grand Forks, North Dakota, and the City of East Grand Forks, Minnesota (**Error! Reference source not found.**). Separated by the Red R iver, the Grand Forks/East Grand Forks (GF/EGF) metropolitan area straddles the border of two states. For the purposes of this Bicycle & Pedestrian Element Update, the study area focuses on the urbanized areas of Grand Forks and East Grand Forks, notably omitting the Grand Forks International Airport area to the northwest of the city proper. The Policy and Plan Review examines pertinent planning and policy documents from both cities and states to provide context for past planning and inform the future visioning process.

**Figure 1. Study Cities, Counties, and Metropolitan Statistical Area**




# II. Existing Plans

This review of existing policies and plans examined the contents of seven plans, four studies, and existing ordinances that guide and regulate the operations of bicyclists, pedestrians, and supportive infrastructure within the study area. This is not assumed to be an exhaustive review of all policies.

## A.

MnDOT Statewide Bicycle System Plan (2016)

https://www.dot.state.mn.us/bike/statewide-bicycle-system-plan.html

The Minnesota Department of Transportation (MnDOT) Statewide Bicycle System Plan is part of the Minnesota GO (MnGO) family of plans, meant to provide a system level planning approach to all modes of Minnesota's transportation infrastructure. The MnGO family of plans sets goals and guidance for investment in all modes of Minnesota's transportation network, with specialized plans for cycling and pedestrian planning. This Bicycle System plan provides a framework for MnDOT to address bicycling needs and interests in Minnesota, with a focus on growing ridership in Minnesota, expanding local bicycle network connections, developing a connected network of state bicycle routes, and increasing user safety and comfort.

As previously stated, the Grand Forks metropolitan area sits on the border of Minnesota and North Dakota, and as such must consider the frameworks set forth by both MnDOT and NDDOT. As a systems-level plan, the MnDOT Statewide Bicycle System Plan provides general guidance for project selection, including:

- Future investments in bicycle infrastructure must be prioritized based on public engagement, have a focus on local connections, and special considerations must be made to include environmental justice populations in the planning process.

- Plan sets three general goals for measuring success: changes in ridership, changes to the rate of crashes and injuries, and evaluation of projects as meeting community needs.

B.

MnDOT Statewide Pedestrian System Plan (2021)

https://www.dot.state.mn.us/minnesotawalks/index.html

As part of the MnGO family of plans, the Statewide Pedestrian System Plan is meant to help guide MnDOT's investments throughout the state of Minnesota in walking while centering equity in their approach and responding to the challenges posed by climate change, especially for the most vulnerable Minnesotans. MnDOT's pedestrian planning has historically focused on improvements for ADA compliance. The most recent update of this document sets a new focus with the following goals: promoting walking as a universal need, creating healthy and equitable communities, creating safer spaces for walking, creating enjoyable places to walk, and building internal capacity to advance walking. The document provides four guiding principles and sets investment priorities and investment scenarios. Key determinations include:

- Policies and practices around MnDOT's processes for cost participation, maintenance, and project scoping and needs identification. Since MnDOT assists in funding many of the projects throughout the Minnesota, this is an effective means to mandate specific design considerations without resorting to legislation.
- A robust public engagement process revealed that there is general support sidewalks/sidepaths in all land use contexts, and that Minnesotans strongly support improvements to pedestrian crossings, streetscape landscaping, adequate space on sidewalks, buffers from automobile and truck traffic, and separate facilities from cyclists.
- Provides context-sensitive and climate change mitigation investment scenarios.

C.

Grand Forks-East Grand Forks Transit Development Plan (2017)

The Transit Development Plan (TDP) reviewed public transit infrastructure and is part of the MPO's Metropolitan Transportation Plan. Transit service in the Grand Forks-East Grand Forks Metropolitan area is provided by Cities Area Transit (CAT). CAT is an agency of the City of Grand Forks, and their operations include fixed route and dial-a-ride services within the Cities of Grand Forks and East Grand Forks. Services to East Grand Forks are supported through a cost sharing agreement.

As of September 2019, CAT operates 12 routes six days a week (Monday to Saturday), with service starting at 6 a.m., and concluding around 6 p.m. on weekdays and from 8 a.m. to 6 p.m. on Saturdays. All fixed route buses are equipped with bicycle racks but require a certification card to use said racks. The central transit hub was relocated from Downtown Grand Forks to a new hub located near the Grand Cities Mall in alignment with recommendations from the transit plan.

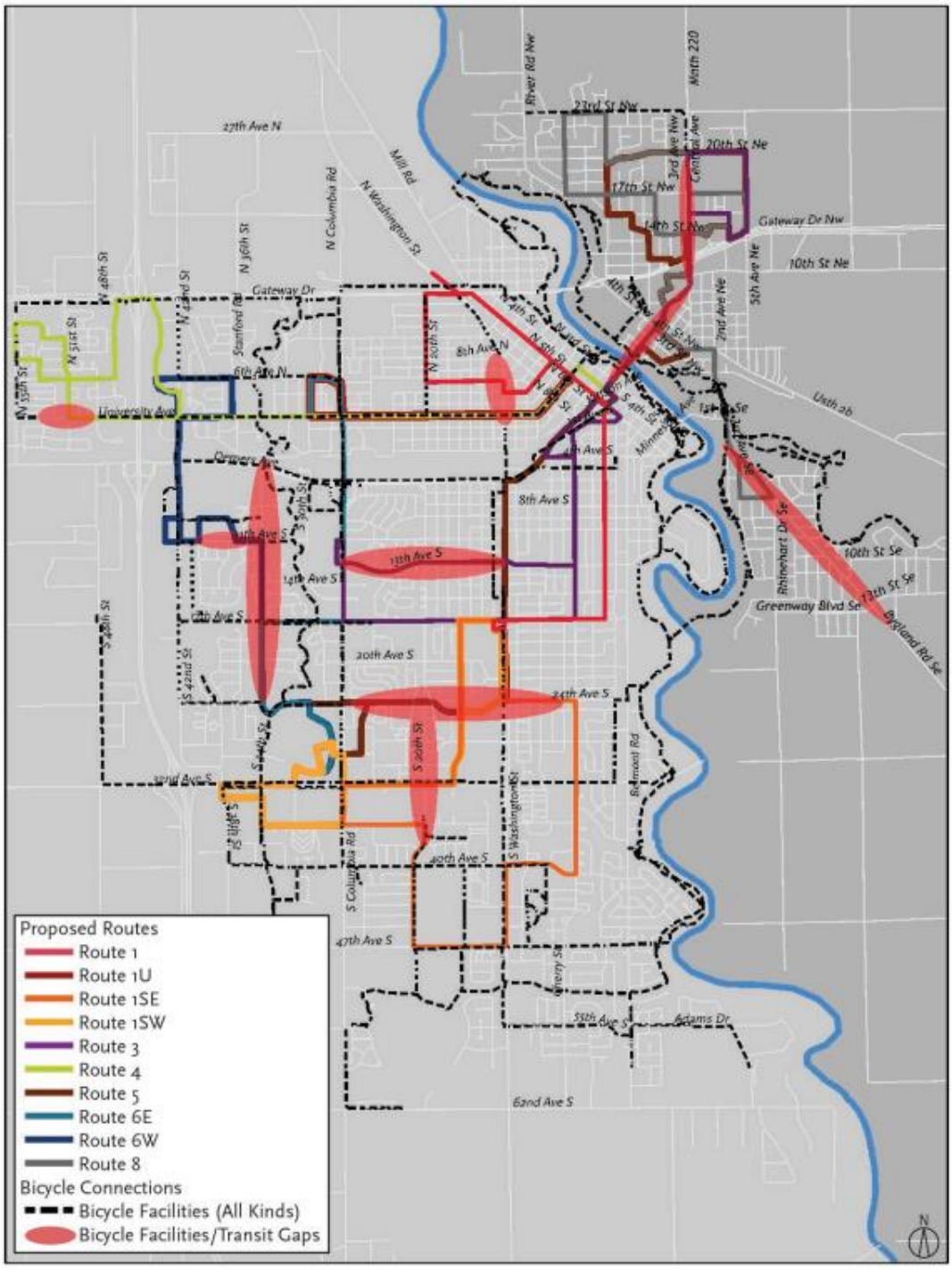
The Transit Development Plan prioritized the transportation goals for the region specific to the transit system. Priority was given to integration and connectivity with the multimodal transportation system, specifically improving biking and walking access to transit. The study conducted a simple bicycle route gap analysis (Figure 2). The analysis prioritized gaps along functionally classified roadways since these roadways have the highest need for dedicated bicycle facilities due to their relative high speeds and volumes.

An update to the Transit Development Plan is currently underway. Tentative short- and

long-term goals from the current TDP update include:

- Integration of University of North Dakota Campus Bus Routes
- General fare policy changes to increasing ridership or funding
- New or improved fixed route, paratransit, and Senior Rider services
- Investments in capital improvements like buses, bus stop enhancements, and support equipment

**Figure 2. Bicycle Gaps Analysis from 2017 Transit Development Plan**



D.

2014 Metropolitan Transportation Plan (2018)

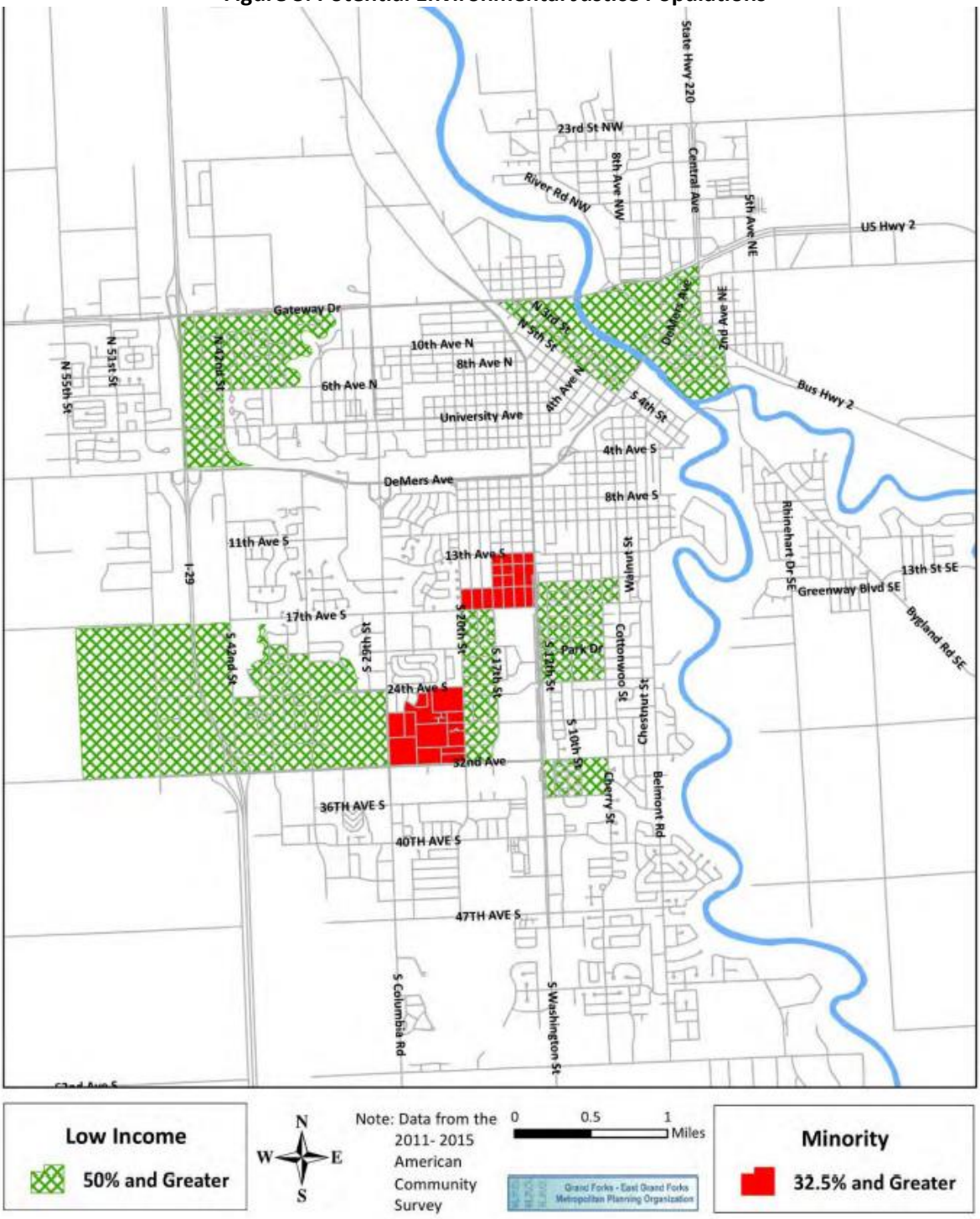
The GF/EGF Metropolitan Transportation Plan (MTP) identifies existing and future needs to maintain a robust regional, multimodal transportation system in the near- and long-term future, based on the vision crafted during the update process for the Transit and Pedestrian/Bicycle elements of the 2045 MTP. The 2045 MTP engagement process produced the following vision statement: "A community that provides a variety of complementary transportation choices for people and goods that is fiscally constrained."

Actions and strategies outlined within the MTP are complemented by the GF/EGF Metropolitan Planning Organization's (MPO) Transit Development Plan (adopted July 2017) and Bicycle and Pedestrian Plan (adopted December 2018). These three documents work together to guide planning and funding for multimodal transportation in the GF/EGF metropolitan area. The GF/EGF MPO also developed ten goal areas that align with national performance goals. Goals were identified based on engagement with GF/EGF MPO staff, staff from NDDOT and MnDOT, and the public. These goals have objectives, which are broad visions of system outcomes, and standards, which speak to how processes will be implemented or modified to meet objectives.

Not all goals from the MTP apply to the Bicycle and Pedestrian Element Update. Pertinent elements of the MTP include:

- The 2045 Metropolitan Transportation Plan provides direction and guidance that illustrates the need for investment in bicycle and pedestrian infrastructure, and provides a legislative justification for these investments
- Objectives and standards related to Economic Vitality, Accessibility and Mobility, Environmental/Energy/Quality of Life, Efficient System Management, and Safety may be used to justify infrastructure investments that support non-motorized modes of transportation like cycling and walking.
- The plan's safety analysis identified an increase in the rate of non-motorized fatality and severe injury crashes in the region. The five-year rolling average ranged from 2.4 to 3.4 with a rising trend of 0.18 per year. For 2018, the region established a target of 3 or fewer non-motorized fatalities and serious injuries with a decline in the trend beyond this time.
- Plan identifies potential environmental justice populations using the metric outlined by the Environmental Justic Program Manual. Identifying these populations allows for directed investments that can address community specific barriers for transportation (Figure 3).

**Figure 3. Potential Environmental Justice Populations**




Source: Grand Forks-East Grand Forks MPO

E

Grand Forks/East Grand Forks Bicycle & Pedestrian Element Update (2019)

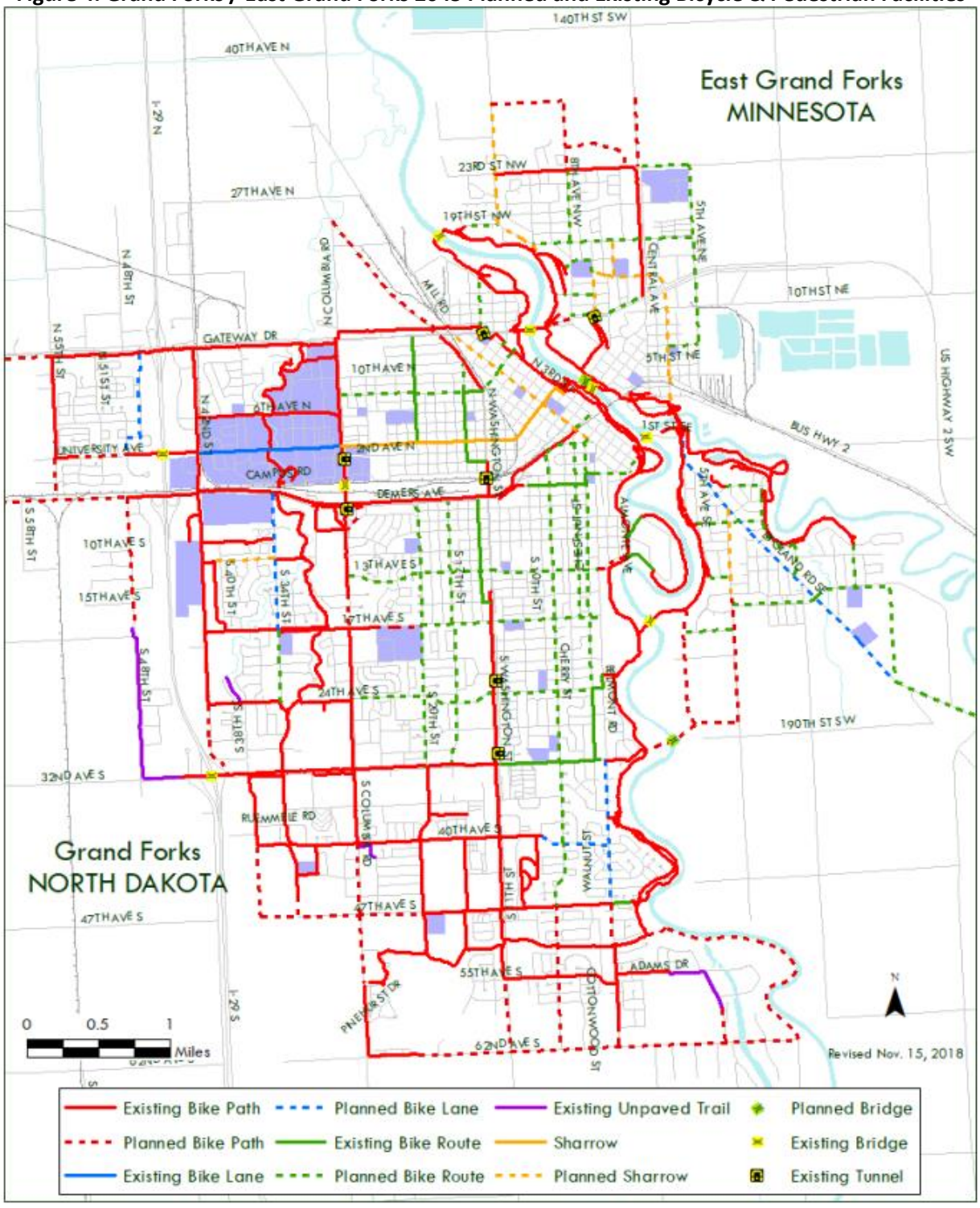
The current Bicycle and Pedestrian Element is a part of the greater suite of documents that comprise the 2045 Metropolitan Transportation Plan. This update was prepared by the GF/EGF MPO with the assistance of a bicycle and pedestrian advisory committee (BPAC). The BPAC provided direction and assistance to the regional MPO in identifying pedestrian and bicyclist issues and needs, giving input on policy recommendations and proposed bicycle and pedestrian networks, and evaluation of the technical and financial criteria for

the prioritization of project recommendations.

This plan update was developed to increase the share of bicycling and walking as part of all trips, improve bike and pedestrian accessibility to key destinations, improve safety outcomes, grow the existing bicycle and pedestrian network, and preserve existing infrastructure. Several near- and long-term objectives were identified as part of the engagement for the study, and existing conditions analysis. Key takeaways include:

- A community survey provided insights into community behaviors and preferences and identified problem areas such as the lack of bicycle parking at destinations.
- Study produced several resources to guide future investments, such as an inventory of trip attractors and generators, and an analysis of access in the existing pedestrian & bicycle network.
- Study provided summary of the existing policy environment that shaped GF/EGF's bicycle and pedestrian networks
- Summarizes existing and proposed bicycle and pedestrian infrastructure throughout the GF/EGF metropolitan area (Figure 4), in addition to an appraisal of current bike and pedestrian infrastructure that forms the basis of the short-, medium-, and long-term project scheduling

**Figure 4. Grand Forks / East Grand Forks 2045 Planned and Existing Bicycle & Pedestrian Facilities**




North Dakota Moves Active and Public Transportation Plan (2019)

This plan was collaborative effort between the North Dakota Department of Transportation (NDDOT), the North Dakota Department of Health, and North Dakota State Parks and Recreation to consider the needs and improvements of the active and public transportation network over the next twenty years. The North Dakota Moves Active and Public Transportation Plan (ND Moves) included a significant public involvement effort to shape plan goals and priorities to align with public desires and needs for these modes. The plan

drafting process developed eight goals for active transportation and six goals for public transportation. Key outcomes include:

- Produced a series of recommendations on instituting new best practices for active and public transportation investment.
- Provided a framework for determining whether and which type of active transportation infrastructure is appropriate in a given context. This process evaluates need based on the development context (urban, suburban/commercial, rural) and provides guidance on the type of facility to consider, and whether a facility should be installed on one or both sides of a roadway.
- Provided a strategic action and implementation plan divided into ten issue areas.

Grand Forks Downtown Parking Study (2019)

G.

The GF/EGF MPO completed a parking study for downtown Grand Forks in the summer of 2019. This study found that around half of the 3,600 parking spaces throughout downtown sit empty on a typical weekday (Figure 4). The study's projections for parking demand in the future showed that even under the most ambitious future development scenarios, the current parking supply in downtown would be adequate. The study included a series of management strategies, policy recommendations, as well as infrastructure investments to maintain or improve the parking environment through Downtown Grand Forks. The study also highlighted the relationship between parking and the urban form, and how providing excessive space for parking detracts from the ability of other modes of travel to function. To that end, the study recommended that policy makers consider changes to the ordinances that dictate parking minimums and prioritize investments in the pedestrian environment and bicycle infrastructure.

- Recommended that the city conduct a complete ADA evaluation for the downtown area
- Recommended investment in lighting improvements in key areas of downtown to address pedestrian safety concerns
- Recommended investment in alleyway improvements and wayfinding to increase pedestrian accessibility and encourage mode shift
- Recommended that future investment prioritizes high quality bicycle infrastructure, and additional investments be made for secure bicycle storage.

**Figure 5. Weekday Total Parking Availability**

H.

Grand Forks / East Grand Forks Downtown Transportation Study (2019)

The GF/EGF Downtown Transportation Study focused on identifying solutions that would support healthy and vibrant downtowns in both communities. The two downtown areas share a desire to balance the needs of business traffic, parking, regional traffic, freight on vital corridors like DeMers Avenue, transit, bicyclists, pedestrians, and taxis and ride-hailing as they compete for limited space on the road. This study built off the Grand Forks Downtown parking study, the Downtown Action Plan, future land use plans from previous comprehensive planning efforts, among other plans not covered in this policy review.

The study included an analysis of the downtown pedestrian and bicycle environments. The pedestrian analysis included mapping all pedestrian facilities in the downtown area, tabulating the pedestrian level of service (LOS) for intersections and segments, and conducting crossing counts at major intersections. The bicycle LOS analysis examined travel lane width, vehicle volumes, speeds, heavy truck traffic and pavement condition to determine LOS for the downtown area. The following are select findings pertinent to this Bicycle & Pedestrian Element Update:

- In Downtown Grand Forks, most areas see a pedestrian level of service “B” or better (Figure 5). DeMers Avenue is LOS “C” due primarily to high traffic volumes. Pedestrian traffic volumes are generally higher in downtown Grand Forks.
- Most areas in downtown Grand Forks have a bicycle level of service rating of “D” or worse (Figure 6), with the exclusion of Kittson Avenue and 4th Street south of DeMers Avenue. DeMers Avenue is LOS “E” from 5th Street in Grand Forks through 4th Street NW in East Grand Forks. High traffic volumes, speeds, and lack of dedicated facilities contributed to the lower levels of service.
- The study did not provide any explicit recommendations for moving forward with infrastructure investments in the downtown areas, but LOS data and intersection crossing counts should be considered when prioritizing investment.

**Figure 6. Pedestrian Level of Service for Downtown Grand Forks / East Grand Forks**

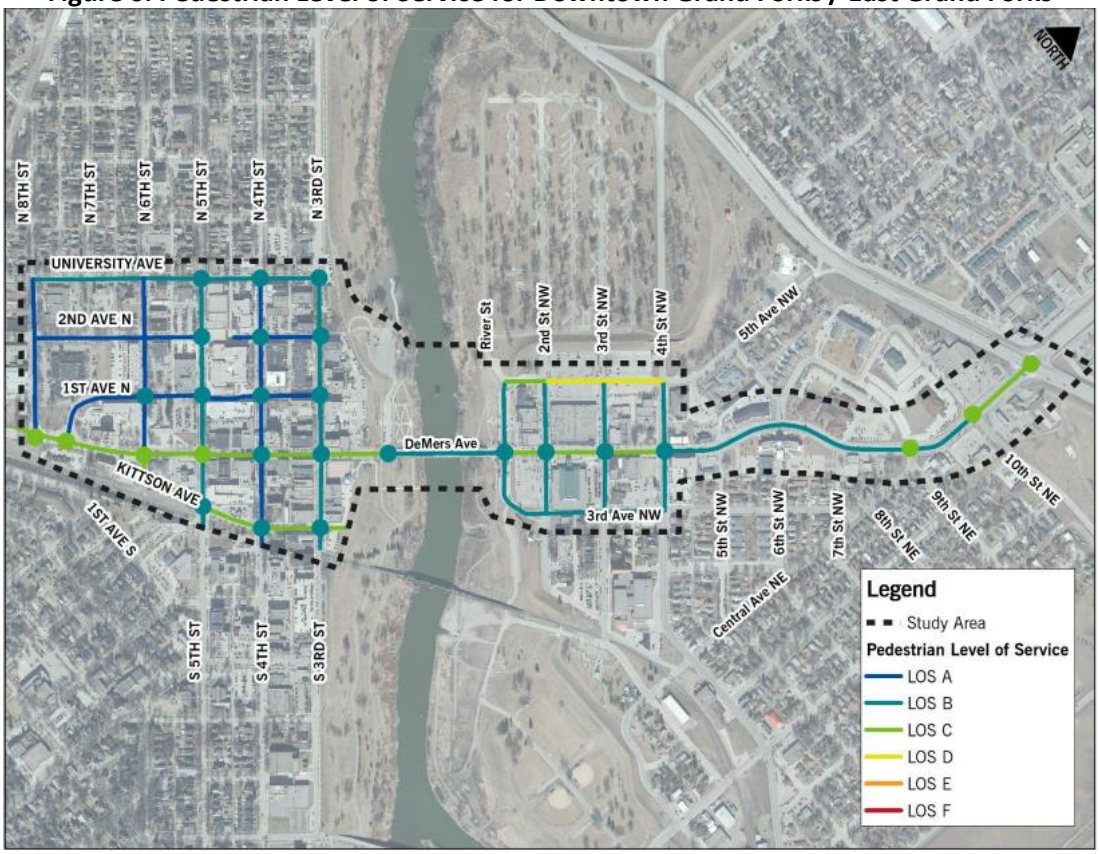
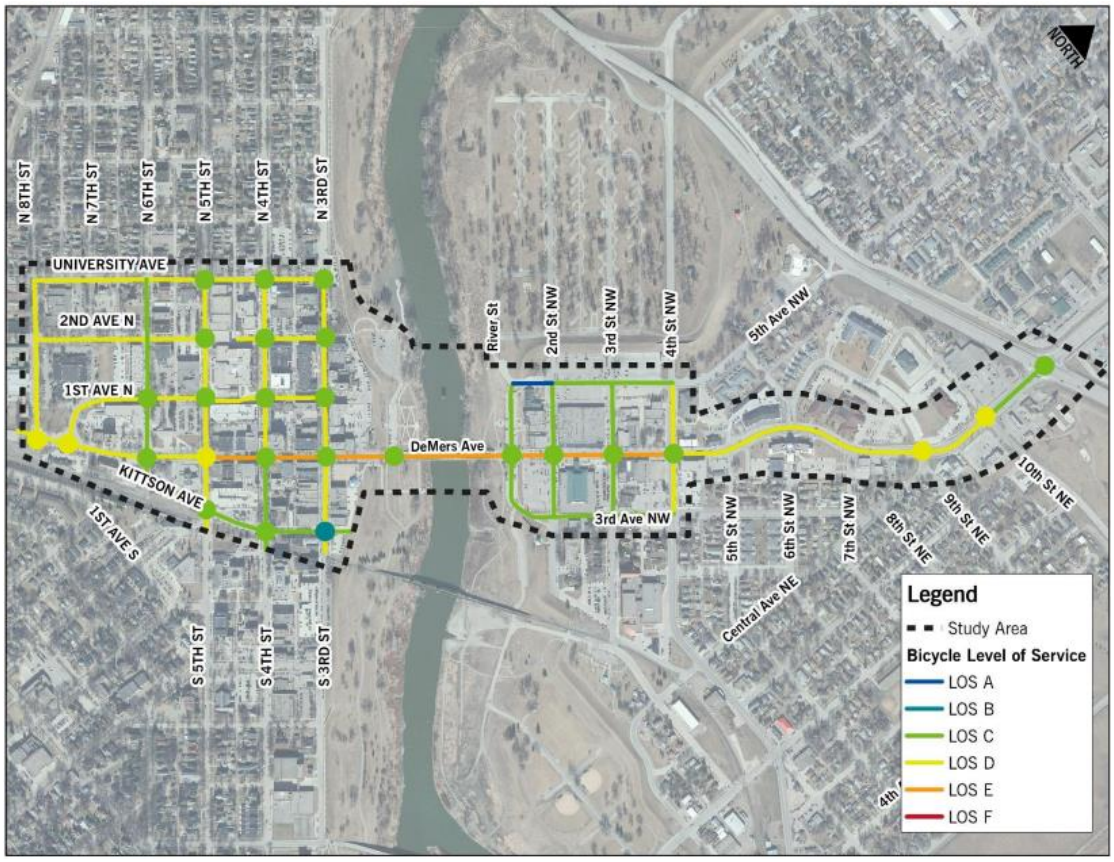



**Figure 7. Bicycle Level of Service for Downtown Grand Forks / East Grand Forks**



Minnesota 220 N Corridor Study (2019)

I. The Minnesota (MN) 220 corridor is an important connection within the Grand Forks region, providing a vital connecting corridor between downtown, residential, and commercial areas within East Grand Forks, MN. This study examined MN 220 within East Grand Forks between 140th Street Southwest and 9th Street Northeast, about two miles of MN 220 located on the northern edge of the city and extending into Polk County. The purpose of the study was to provide an update on previous evaluations and develop recommendations for future transportation needs along MN 220 and its crossroads. Significant findings include:

- The study conducted an analysis of corridor multimodal characteristic and accessibility, in addition to identifying safety deficiencies along the corridor. This included an assessment of ADA compliance along the corridor, and mapping of existing and proposed bicycle and pedestrian infrastructure, as well as the location of sidewalk gaps.
- The study provided several alternatives to align with the goal of improving pedestrian crossing opportunities, accessibility, and safety at key locations along the corridor.

University Avenue Corridor Study (2021)

J. With a grant from the Knight Foundation, the City of Grand Forks completed a corridor study for University Avenue from Columbia Street to North 6th Street. This study created a redevelopment strategy, programmatic recommendations, and streetscape renderings and sketches for University Avenue. The study's recommendations can be broadly grouped into four themes: enhancing corridor safety, integrating all forms of transportation, boosting corridor activity, and celebrating neighborhood identity. The study included a significant community engagement component, and the results of the engagement indicated broad community support for improvements to cyclist and pedestrian safety along the corridor. Other items of note from this study as they pertain to the future of bicycle and pedestrian planning in Grand Forks include:

- Recommendations to enhance corridor safety for all road users, with specific focus on improving lighting, intersections, streets, and sidewalks.
- Online survey indicated that the public was interested in cycling safety improvements to the corridor.

K.
- Study provided a phased implementation action plan for near-, medium-, and long-term improvements (many of these have been completed)

2050 East Grand Forks Land Use Plan (2021)

Every five years, both main cities update their land use plans, serving the needs of both the cities, the MPO, and overall planning and development strategy for the region. The land use plan, goals and polices, implementation measures, and other plan elements serve as tools that can be referenced on a regular basis by city staff and elected officials for making decisions regarding the management of community growth. The community of East Grand Forks, through engagement for the land use planning process, has shown sustained interest in using land use to support a greater variety of transportation options in the city. The plan proposed guidelines for recommendations and changes to the legal apparatus that shapes new development. East Grand Forks' most recent update to their land use place organized its goals and policies around five topics: Housing/Residential, Economic Development, Urban Expansion Area, Parks, Recreation and Open Space, and Transportation.

These recommendations should be considered when developing the future bicycle and pedestrian policies and plans for the region. The Land Use Plan included an analysis of existing policies and ordinances as they apply to East Grand Forks and provides recommendations for changes to the existing ordinances to better support active transportation.

- Recommended that the city adopted new ordinances or revise existing ordinances to better support biking and walking as modes of transportation. This includes:
    - Instituting new requirements for bike parking at new developments, and install bike parking at existing destinations, in addition to following AASHTO, NACTO, FHWA, MnDOT and other guidance on developing bicycle facilities.
    - Develop a dedicated funding source to build out the City's sidewalk and trail network.
    - Review/modify sidewalk policies to include goal of providing sidewalks on both sides of urban (curb and gutter) local streets including new development and retrofits on existing streets, (including dead-ends) to provide cut-throughs or park/trail connections.
    - Recommended changes to the transportation standards for development that will encourage biking and walking infrastructure. These included:
        - Develop a dedicated funding source to build out the East Grand Forks sidewalk and trail network
        - Review/modify the existing sidewalk policies to include goal of providing sidewalks on both sides of urban local streets, including new developments and retrofits on existing streets. This includes providing cut-throughs or park/trail connections
        - Allow for facilities that enhance the pedestrian environment including pedestrian-scaled lighting, public art, wayfinding, vegetation, etc.
        - Accommodate commercial activities that invite walking and add activity and interest to the area.
        - Establish guidelines for installation of rest stop facilities including benches, water refill stations, short-term parking, bicycle maintenance stations, trash and recycling, and restrooms.
    - The 2050 Land Use Plan also provided addition recommendations for additional standards and procedures to be considered for any new development proposed in East Grand Forks. These included:
        - Permit use of an in-lieu-of ratio of 6 to 1 for providing bicycle parking in place of automobile parking for commercial and residential uses in Downtown and in areas adjacent to Downtown where off-street parking is currently required.
        - Require bike parking minimums as a percentage of total automobile parking spots provided.
        - Adopt APBP's Bicycle Parking Guidelines as official policy.
        - Provide regular, safe, and marked crossing opportunities for people

walking or biking. The plan recommended a crossing every ½ mile along minor arterials, and a safe crossing every ¼ in neighborhoods and areas adjacent to schools, parks, and commercial or retail land uses.

- Install ADA-compliant curb ramps at all marked and unmarked crosswalks
- Install curb extensions where possible, including commercial districts, neighborhoods, near schools, and where on-street parking is permitted.
- Include advanced stop bars to improve safety and motorist positioning away from crosswalks.

2050 Grand Forks Land Use Plan (2022)

L.

The latest iteration of Grand Forks' Land Use Plan is built around five topic areas, Housing, Transportation, Public Health, Economic Development, and General Development, and six livability principles (Figure 8). While similar to the East Grand Forks 2050 Land Use plan, this is a distinct document with individual but sometimes parallel goals to the East Grand Forks plan. When possible, this update to the Bicycle and Pedestrian Element will work to find parity between the goals of the two land use plans in order to provide recommendations that help meet the needs of both governments.

**Figure 8. Grand Forks 2050 Land Use Livability Principles**


The plan recognizes the relationship between land use and the viability of alternative modes of transportation. The region's rural foundations do provide some barriers to biking and walking, but changes in policy and investment direction can provide some opportunities to address the outcomes of these previous investments. To help planners and policy makers meet this policy objectives, the 2050 Land Use Plan provides three goals to measure the efficacy of land use development and its support for improved multimodal accessibility:

1. Ensure that the transportation system and associated land use patterns provide high quality, accessible choices for all users.
2. Ensure that future land use patterns respond to new transportation technologies.
3. Improve and expand facilities related to multimodal transportation.

The Land Use Plan also includes an analysis of several key transportation corridors in the city

(activation areas) and three growth tiers meant to organize development and expansion. The plan prioritizes infill development over greenfield development, which should be supported via increased viability of biking, walking, and transit. The five activation corridors include:

- Gateway Drive
- University Avenue
- South 42nd Street
- 32nd Ave South
- South Washington Street

The 2050 Land Use Plan addresses where previously land use planning policy clashed with plans to improve transportation options within Grand Forks. To reconcile these conflicts, the 2050 Land Use Plan recommits to the Ladders of Opportunity initiative, which recognizes the role that transportation, especially multimodal transportation options, have in connecting communities to economic opportunity. The Ladders of Opportunity initiative is focused on utilizing transportation planning and construction projects to better connect and revitalize communities.

## III. Existing Policies

A. Grand Forks and East Grand Forks Ordinances

The previous iteration of the Bicycle and Pedestrian Element (2019) included a review of ordinances that regulated bicycle and pedestrian activity and infrastructure throughout the metropolitan area and provided some analysis on the ordinances. As Grand Forks and East Grand Forks maintain separate municipal codes, there is some discrepancy between the expectations and standards of the two communities with regards to sidewalk design standards and where bicycles may be operated.

1. Grand Forks Sidewalk and Pedestrian Ordinances

   The City of Grand Forks Municipal Code Ch. 14, § 4 prescribes the expectations for the development and maintenance of the greenway, and Ch. 16, § 2 prescribes the expectations for sidewalk construction and maintenance. Sidewalks must be built to the specifications determined and established by the city engineer. Specific ordinances that are pertinent to the bicycle and pedestrian element are as follows:

   a) City of Grand Forks Code of Ordinances Ch 14, § 4 - The Greenway

      The Greenway serves both as a linear park fronting the Red River that supports the systems of levees and flood mitigation measures. The Greenway was established by ordinance in 2006. Owing to its length and central location between the communities of East Grand Forks and Grand Forks, the Greenway has developed into a north-south pedestrian and cycling route. Subdivision 1 of Article 4 establishes the purpose of the greenway area and facilities and sets the city council as the legal entity responsible for the protection and preservation of the greenway. The greenway is a vital part of the bicycle and pedestrian network and serves as both a utilitarian connection as well as a recreational destination.

   b) City of Grand Forks Code of Ordinances Ch 16, § 2 - Sidewalk Construction and Maintenance

The content of the following subdivisions of the ordinance help contribute to a complete and comprehensive sidewalk system. Most streets, except those detailed in Subd. 22, are required to include sidewalks as part of the development process. Subdivisions of the ordinance mandate sidewalks on most of the public right-of-way in the City of Grand Forks, with limited exceptions afforded to areas historically excluded from the requirements to include sidewalk construction. Maintenance, such as snow removal and other responsibilities are also set in the article. Unlike East Grand Forks, the City of Grand Forks has not adopted any ordinances that mandate ADA compliant construction. However, as per Subd. 2 through Subd. 4, all sidewalk construction must be meet the specifications of grade, material, and width specification set by the city engineer, which is used to enforce ADA compliance in construction. Subdivisions of the article set timeframes for sidewalk construction, which varies from time that the street is paved to within nine months of after a building permit is issued.

c) Sidewalk construction statutes:

- Ch 16, § 2, Subd. 17 - Installation on Arterial and Collector Streets
- Ch 16, § 2, Subd. 18 - Installation on local streets over three hundred feet in length
- Ch 16, § 2, Subd. 19 - Installation on minor streets less than three hundred feet in length
- Ch 16, § 2, Subd. 22 - Grandfather Clause

The City of Grand Forks allows certain areas to be exempt from the requirement to construct sidewalks, which extends to all industrial areas and scattered sites where, due to historic precedent, sidewalks were not required in the past. This exemption can be overturned if 55 percent of the owners of lot footage abutting the proposed sidewalk request the sidewalk. The sites listed in the clause not associated with industrial development are largely located in the core of Grand Forks and represent significant gaps in the pedestrian network. The city has a policy of filling these gaps in the sidewalk network as opportunities arise.

d) City of Grand Forks Code of Ordinances Ch. 8, § 4 – Pedestrians

This ordinance relates to the basic rules pertaining to pedestrians, such as crossing at intersections, yielding the right-of-way to vehicles on the roadway, and prohibition against walking in the street unless no other pathway has been provided.

2. City of Grand Forks Bicycle Ordinances

The City of Grand Forks Municipal Code Ch. 8, § 11 prescribes the expectations for the usage of bicycles and motorcycles on the public right-of-way and bicycle paths, such as the Greenway. Bicycles are subject to same provision as they would be as the operator of any motorized vehicle, except for special considerations outlined within the article. Bicycles are permitted to ride on the sidewalk in residential districts within Grand Forks, even in the case where there are dedicated facilities. Other components of the article regulate the behavior of vehicles entering. There are no regulations listed in the municipal code that mandate the inclusion of bicycle parking for new development and major renovations. The only guidance offered for bicycle parking is limited to requirements for parking provide by businesses operating a bike share service.

a) Ch. 8, § 11, Subd. 3 – Cyclists subject to traffic regulations

b) Ch. 8, § 11, Subd. 4 – Riding on sidewalks in residential districts

c) Ch 8, § 11, Subd. 6 – Vehicular traffic prohibited on designated bicycle lanes

d) Ch. 8, § 11, Subd. 10 – Yielding and stopping while operating a bicycle on a roadway

3. East Grand Forks Sidewalk and Pedestrian Ordinances

In East Grand Forks, standards for the pedestrian environment such as sidewalks and trails are set through Ordinance 313 3rd Series, an amendment to Chapter 151 "Subdivision Regulation" Section 151.106 (B). The amendment updates the ordinance to define requirements for physical attributes of the sidewalks such as width, thickness, and grade, in addition to requiring compliance with the most current ADA standards. The ordinance lists no exemptions and sets a timeline for sidewalk installation in new subdivisions and provides for a penalty in the case that sidewalks are not installed in a timely manner. The ordinance does not provide guidance for installation of sidewalks during road reconstruction projects of roadways without existing sidewalks.

4. East Grand Forks Bicycle Ordinances

The bicycle component of the code is covered in Title VII (Traffic Code) Chapter 75 of the East Grand Forks municipal code. These are derived from the Minnesota Statue 169. The East Grand Forks ordinance states that bicycles are prohibited from riding on the sidewalk in businesses districts but are required to ride on a sidewalk or shared use path when one is available. This is a holdover from a previous iteration of the Minnesota Statute 169 which has since been repealed. The *Grand Forks Bicycle and Pedestrian Element* notes that while shared use paths are part of the greater bicycle network, they are not able to fully substitute the need for street access, and that this statute does not consider the variety in comfort and skill among cyclists and how that might impact their choice to use a shared use path over the road. Like Grand Forks, the East Grand Forks code of ordinances does not mandate bicycle parking as part of the development or redevelopment process.

5. East Grand Forks Greenway Ordinance

To ensure that the Greenway remains safe and peaceful, the East Grand Forks city council added sections 90.02 through 90.19 to their city code, last updated September 2021. These ordinances cover the maintenance and operations of the Greenway, set up permitted uses, and attempt to ensure the general safety and public welfare of people using the Greenway.

- 90.04 Hours of Operation: The greenway is option to the public from 5:00 a.m. to 11:00 p.m.
    - This ordinance may limit the ability of cyclists and pedestrians to use the Greenway for any reason outside of designated hours. This could impact odd-hours commuters who rely on the Greenway.
- All other related ordinances address the general regulation of parkland, such as special uses, alcohol, public safety, environmental protection, animals in the Greenway, wildlife protection, picnicking, motor vehicle use, and permits. The regulatory motor vehicle definition includes an exception for electric assist/pedal assist bicycles on the Greenway.

# Sub-Appendix A: Grand Forks Sidewalk Grandfather Clause

# *ARTICLE 4. PEDESTRIANS*

## 8-0401. Crossing streets; jaywalking.

(1) Where traffic signals are in operation, pedestrians shall not cross or enter any road or portion thereof at any place except in a marked crosswalk. Where no marked crosswalks exist, pedestrians shall directly cross the road from the traffic signal to the opposing traffic signal.

(2) Pedestrians shall not cross or enter any road or portion thereof when prohibited by a traffic-control device or sign.

(3) No pedestrian shall cross or enter any roadway designated as closed to pedestrian traffic.

(4) Except when otherwise prohibited, a pedestrian may cross a roadway, or portion thereof, provided that such pedestrian yields the right-of-way to all vehicles upon the roadway.

(5) A pedestrian may cross a roadway when directed to do so by a police officer.

(Ord. No. 3545, § 2, 9-18-95; Ord. No. 4551, § I, 11-16-15)

## 8-0402. Unloading school children from motor vehicles.

No person driving or in charge of a motor vehicle shall permit any passenger under the age of thirteen (13) years to be unloaded for the purpose of attending school or picked up from attendingschool if the vehicle is stopped or parked in such a manner that the passengers cross the street to reach such school or vehicle other than at a marked crosswalk or intersection.

(Ord. No. 3545, § 2, 9-18-95)

## 8-0403. Obedience to traffic-control signals and officers.

(1) At any intersection where the traffic is being regulated by a traffic officer or a system of traffic-control signals, no pedestrian shall cross any street except upon a crosswalk, and no pedestrian shall cross such street upon a crosswalk except when such officer or traffic-control signal shall authorize traffic to pass in that direction; provided, that any person who shall have commenced to cross such street when permitted by such officer or traffic signal, may complete the crossing after the signal has changed.

(2) No pedestrian shall disobey or disregard any traffic control device, including a sign, unless otherwise directed by a police officer.

(Ord. No. 3545, § 2, 9-18-95; Ord. No. 4551, § II, 11-16-15)

## 8-0404. Right-of-way of pedestrians—Intersections.

(1) No vehicle shall cross such crosswalk where traffic is so regulated until pedestrians who have properly commenced to cross the street have completed their passage across in front of such vehicle, and any vehicle permitted to turn to either right or left shall yield the right-of-way to all pedestrians who are proceeding on

crosswalks in a direction authorized by the officer or traffic signal, and failure to yield such right-of-way shall be a violation of this section.

(2) All vehicles shall yield the right-of-way to pedestrians upon all crosswalks, and failure to yield such right-of-way shall be a violation of this section, provided, however the intersection is not being regulated by an officer or traffic signals, in which case the provisions of section 8-0403 of this article shall govern.

(Ord. No. 3545, § 2, 9-18-95)

### 8-0405. Vehicles blocking traffic of pedestrians.

Vehicles shall not stop on the crosswalks so as to interfere with the passage of pedestrians.

(Ord. No. 3545, § 2, 9-18-95)

### 8-0406. Hitchhiking prohibited.

No person shall solicit or hitchhike a ride while standing or walking on a street.

(Ord. No. 3545, § 2, 9-18-95)

### 8-0407. Walking in street prohibited.

(1) Wherever sidewalks are provided, no person shall walk, run, or jog upon the street, either along the direction or against the direction of traffic.

(2) Wherever official signs prohibiting walking or pedestrian travel are provided, no person shall walk, run, or jog upon the street, either along the direction or against the direction of traffic.

(Ord. No. 3545, § 2, 9-18-95)

### 8-0408. Running and jogging in parking facilities restricted.

No person shall run, jog or walk for recreational purposes on, upon, or within any municipally owned, operated or maintained parking lot, ramp, structure or facility, except such jogging, running or walking incidental to the ingress and egress of such lot, ramp, structure or facility.

(Ord. No. 3545, § 2, 9-18-95)

### 8-0409. Reserved.

Editor's note(s)—Ord. No. 4587, § I, adopted November 7, 2016, repealed § 8-0409, which pertained to prohibition of panhandling on median strips of roadway and derived from Ord. No. 4346, § II, 10-3-11.

## *ARTICLE 11. BICYCLES AND MOTORCYCLES; BICYCLE PATHS*

### 8-1101. Number of persons to be carried.

No bicycle or motorcycle shall be used to carry more persons at one (1) time than the number for which it is designed or equipped.

(Ord. No. 3545, § 2, 9-18-95)

## 8-1102. Riding more than two abreast prohibited.

All motorcycles and bicycles when operated on the streets of the city shall proceed in single file, except that on four-lane traffic ways within the city, no more than two (2) vehicles shall drive side by side and will at all times remain in the single lane, provided, that this restriction shall not apply to bicycles on paths or parts of roadways set aside for the exclusive use of bicycles.

(Ord. No. 3545, § 2, 9-18-95)

## 8-1103. Cyclists subject to traffic regulations.

Every person riding a bicycle upon a roadway shall be subject to the provisions of this chapter applicable to the driver of a vehicle, except as to special regulations in this article and except as to those provisions of this chapter which by their nature can have no application.

(Ord. No. 3545, § 2, 9-18-95)

## 8-1104. Riding on sidewalks in residential districts.

Persons may ride bicycles upon sidewalks in residential districts only. Such person shall at all times have the bicycle under control, and shall drive it in a careful manner and with due regard to the safety and convenience of pedestrians. Such person shall yield the right-of-way to any pedestrians and shall give audible signals before overtaking and passing such pedestrians.

(Ord. No. 3545, § 2, 9-18-95)

## 8-1105. Bicycles may be impounded by police.

Bicycles operated in violation of this article may be impounded by the police department.

(Ord. No. 3545, § 2, 9-18-95; Ord. No. 4229, § I, 5-5-08)

## 8-1106. Vehicular traffic prohibited on designated bicycle lanes.

Motor vehicle traffic is prohibited on all designated bicycle lanes except to enter or to exit from parking spaces or driveways, or to make right-hand turns. Vehicular traffic must yield to bicycle traffic in crossing the bicycle lane.

(Ord. No. 3545, § 2, 9-18-95)

## 8-1107. Care required on bike paths.

Persons riding a bicycle on or along a bike path, or otherwise utilizing the bike path in any other manner, shall at all times be under proper control and shall behave in a careful manner and with due regard to the safety of pedestrians, other cyclists, and other users.

(Ord. No. 3545, § 2, 9-18-95)

## 8-1108. Operation of motor vehicles on bike paths prohibited.

No person shall operate any motor vehicle on or along any such bike paths which are so designated and posted, "bike path," by the City of Grand Forks. This section shall not apply to emergency and police vehicles or maintenance vehicles while on official duties, or motor vehicles crossing at a permanent or temporary driveway. For purposes of this section, the term "motor vehicle" shall include but not be limited to snowmobiles, go-carts, mopeds, mini-bikes, and any and all conveyances driven by a motor.

(Ord. No. 3545, § 2, 9-18-95)

## 8-1109. Attaching bicycles to vehicles prohibited.

No person riding upon any bicycle, coaster, roller skates, sled or toy vehicle shall attach the same or himself or herself to any vehicle upon a roadway.

(Ord. No. 3545, § 2, 9-18-95)

## 8-1110. Yielding and stopping while operating a bicycle on a roadway.

(1) An individual operating a bicycle who is approaching a stop sign at an intersection with a roadway having three (3) or more lanes for moving traffic shall come to a complete stop before entering the intersection.

(2) An individual operating a bicycle who is approaching a stop sign at an intersection where a vehicle is stopped in the roadway at the same stop sign shall come to a complete stop before entering the intersection.

(3) An individual operating a bicycle who is approaching a stop sign at an intersection with a roadway having two (2) or fewer lanes for moving traffic shall reduce speed and, if required for safety, stop before entering the intersection. After slowing to a reasonable speed or stopping, the individual shall yield the right-of-way to any vehicle in the intersection or approaching on another roadway so closely as to constitute an immediate hazard during the time the individual is moving across or within the intersection, except that an individual, after slowing to a reasonable speed and yielding the right-of-way if required, cautiously may make a turn or proceed through the intersection without stopping.

(4) An individual operating a bicycle who is approaching an intersection shall yield the right-of-way to any vehicle that already has entered the intersection.

(5) When an individual operating a bicycle and a vehicle enter an intersection from different roadways at approximately the same time, the operator of the vehicle or bicycle on the left shall yield the right-of-way to the vehicle or bicycle on the right.

(6) If the individual operating a bicycle is involved in a collision with a vehicle in the intersection or junction of roadways after proceeding past a stop sign without stopping or past a steady red traffic-control light, the collision is deemed prima facie evidence of the individual's failure to yield the right-of-way.

(Ord. No. 4809, § 10, 10-4-21)

# *ARTICLE 2. SIDEWALK CONSTRUCTION AND MAINTENANCE*

## 16-0201. Additional bond required of sidewalk contractors.

When any contract for the construction of sidewalks is about to be entered into by the city in accordance with the provisions of Sections 40-29-07 and 40-29-08, North Dakota Century Code, and succeeding sections, the contractor to whom any such contract shall be awarded, shall be required, before such contract is entered into, to give, in addition to the contract bond required by Sections 40-22-19 through 40-22-24, North Dakota Century Code, a bond in the sum of two thousand dollars ($2,000.00), with sufficient sureties, running to the City of Grand Forks, conditioned that the contractor shall maintain and keep in good repair for a period of two (2) years all sidewalks so constructed by such contractor under the terms of such contract, and that in case of default on the part of such contractor to so maintain and keep such sidewalks in good repair for the said period of two (2) years, or in case such sidewalks shall within such time begin to crumble or disintegrate or become cracked and broken to such an extent that, in the opinion of the city engineer, the same is not a satisfactory compliance with the specifications for the construction thereof as provided by this article, then and in that event the city engineer may direct that such sidewalk be immediately repaired or relaid, in whole or in part, as the city engineer shall deem best, and the contractor shall immediately cause the same to be repaired or relaid as aforesaid; and in case of such contractor's neglect, refusal, or failure so to repair or relay the same, the city may at any time within said two-year period, or thereafter, cause the same to be repaired or relaid, as the case may be, and the cost thereof, whether done by the city directly or through a contract thereof, may be recovered against said contractor and the surety or sureties upon such bond.

## 16-0202. Built to grade.

All sidewalks shall be constructed in accordance with the elevation and grade therefor to be furnished by the city engineer and shall be constructed under said city engineer's direction and supervision. All sidewalks shall be laid so that the inner edge of the same shall coincide with the line of the street or avenue.

## 16-0203. Construction materials.

All sidewalks constructed within the limits of the city shall be constructed of concrete or interlocking paver bricks according to specifications in the office of the city engineer.

## 16-0204. Width.

Sidewalks shall be constructed of such width as shall be determined and established by the city engineer.

## 16-0205. Walks over areaways.

Where sidewalks are laid over areaways or excavations or wherever the foundations for any such sidewalks rests on other than the solid earth or where retaining walls are necessary in the construction of sidewalks, the same shall be constructed under the direction of the city engineer, and if constructed by the city contractor for sidewalks, said city contractor shall receive for the construction of all such sidewalks and work in connection therewith, such sum as the city engineer shall certify to be fair and reasonable worth and value of the work and material furnished (payable, however, in the same manner as other moneys due such city contractor for sidewalks), which sum shall be assessed against the abutting property benefited by such improvement in the same manner as the cost of construction of ordinary sidewalks is assessed.

## 16-0206. Stairways and open areas in streets—Extension, railing, prohibited.

(1) No stairway or open areas in and under sidewalks shall be permitted. No existing stairway or open area or structure covering same shall extend into or under the sidewalks more than three (3) feet. Existing stairways and open areas shall be properly protected by smooth metal railings or may be enclosed or covered by structures upon application to the city council pursuant to 16-0310 of the Grand Forks City Code and the provisions of this article 3.

(2) Existing stairways extending into the sidewalks at street corners shall be set back from the front or side, as the case may be, a distance of three (3) feet.

## 16-0207. Same—Permit for repair, maintenance and covering structures; bond.

Permits for the repair, maintenance and covering structures of open areas and stairways in the sidewalks shall be granted only by action of the city council. The owner of the premises shall furnish a bond in the sum of five thousand dollars ($5,000.00) acceptable to the city council, which bond shall remain in full force and effect, as long as the area shall remain in use, to save the city harmless for any damage suit or expense whatsoever by the existence of such stairway or open area.

## 16-0208. Same—Bond.

Any person, company, or private corporation, who keeps or maintains any openings in, on, or under, or structures above, upon, or under the public streets, avenues, alleys, or sidewalks of the City of Grand Forks, North Dakota, shall provide a bond to save the city harmless from any damage suit or expense whatever, resulting from or by reason of such opening or structure, in accordance with the provisions of section 16-0209.

## 16-0209. Same—Insurance in lieu of bond.

In lieu of the bond required by section 16-0206 hereof, such person, company or corporation may procure and furnish to the City of Grand Forks, insurance, the policy evidencing same to be so conditioned as to insure and indemnify the City of Grand Forks from and against any and all loss arising or resulting from claims made upon the insured or damages on account of bodily injuries, including death, at any time therefrom suffered or alleged to have been suffered as a result of any accident occurring while such policy is in force.

## 16-0210. Same—Declared a nuisance for nonconformance with bond, structural specifications.

All openings in, on, or under, or structures over, upon, or under any street, avenue, alley, or sidewalk, kept or maintained by any person, company, or private corporation who has not complied with section 16-0207 and whose bond or policy of insurance as herein provided for has not been accepted and approved by the city council, shall be deemed and is hereby declared to be a nuisance and the city council shall, upon information of any such violation, give ten (10) days' notice to the owner of such opening or structure, or to said owner's agent, and on failure of such owner to provide the security herein required and in all things to comply, forthwith, with sections 16-0208 and 16-0209, then the city council may abate such nuisance by the destruction or removal of the same.

## 16-0211. Private crossings.

It shall be unlawful for any person, firm or corporation, or association whatsoever to construct across any boulevard or sidewalk within the city a private or other crossing for the use of vehicles or for any purpose

whatever, except by a proper license issued by the city council, and then only in conformity to the specifications to be prescribed by the city engineer.

## 16-0212. Keeping sidewalks in repair.

It shall be the duty of the owner or occupant of any property along which any sidewalk is constructed to maintain and keep the same in good repair, and in case they fail to make any repairs thereto within five (5) days after receiving notice thereof from the city, they shall be subject to the penalty as hereinafter defined for such neglect and a like penalty for each additional day of such continuance thereof.

## 16-0213. Sidewalk repair, replacement or construction—Permit required.

(1) Any person desiring to repair, rebuild, replace or construct sidewalks within the city shall, before commencing such work, obtain a permit therefor from the city engineer. On application to the city engineer and on payment of the fee herein specified therefor, the city engineer shall issue a permit to the person desiring to do such work, which permit shall state the location and extent of the work to be done, and which shall expire in thirty (30) days from the date of issuance thereof. A record of such permits shall be maintained in the city engineer's office. A separate permit shall be issued for each separate piece of work, but one (1) permit may be issued only to a person or firm holding a valid sidewalk contractor's license, or to a property owner for the property owner's residence.

(2) The permit fees to be paid shall be set by resolution of the city council.

## 16-0214. Same—To be completed in time limit.

All such work licensed by any such permit shall be fully completed and the sidewalk restored to a fit and suitable condition for travel within the life of such permit.

## 16-0215. Same—Barriers required.

Every person doing any such work as is herein provided for shall guard the portions of the street where the sidewalk is torn out or obstructed, with suitable barriers by day, the barriers and red lights by night, so as to prevent injury to persons lawfully upon the streets. All barriers must conform to the requirements of the current Uniform Traffic Control Device Manual.

## 16-0216. Same—City contractor not required to take out permits; liability for violation.

The provisions hereof shall apply to all persons doing such work as is herein first above-mentioned but no permit shall be required of the city contractor for sidewalks in cases where walks are constructed by the city contractor under the order of the city council. Property owners as well as the contractors or other person in whose name the permit is issued shall be liable to prosecution for violation of the provisions of this article, but no property owner shall be liable to prosecution except for a violation of the provisions hereof occurring in connection with the construction or repair of the sidewalk abutting the property of such property owner. The penalty provisions of section 23-0101 of the Grand Forks City Code shall apply for violations of this article.

## 16-0217. Installation of arterial and collector streets.

Arterials (principal and minor) and collector streets as outlined in the Grand Forks comprehensive plan shall require a minimum five-foot wide sidewalk on both sides of the street. All sidewalks paralleling arterial and collector streets shall be installed no later than the time the street is paved.

## 16-0218. Installation on local streets over three hundred feet in length.

(1) Local streets, regardless of their designated names, consisting of culs-de-sac, loops, courts, drives and similar configurations of three hundred (300) feet or more in length, measured along the centerline from centerline to centerline, shall require a minimum five-foot sidewalk on both sides of the street located one (1) foot off the property line unless otherwise indicated on the approved P.U.D. detailed development plan or as approved by the city engineer. For the purpose of this article, the length and measuring of a local street shall not extend through an intersecting arterial or collector street and shall be subject to a variance in length of a maximum five (5) percent.

(2) Installation of sidewalks on the undeveloped properties shall be required when seventy-five (75) percent of the abutting lot footage, as determined by the city engineer, is developed or the owners of fifty-five (55) percent of the abutting lot frontage, as determined by the city engineer, petition the city council for installation of sidewalks and the city council adopts a resolution for the installation and construction of such sidewalks. Nothing in this section shall prohibit individual property owners from installing sidewalks on or adjacent to their own property.

(3) Sidewalk installation, as provided in section 16-0218, shall begin within nine (9) months after the building permit is issued, after which time the city may construct the sidewalk and special assess it to the benefiting property owner.

## 16-0219. Installation on minor streets less than three hundred feet in length.

(1) Minor streets, regardless of the designated name, consisting of loops, drives, culs-de-sac or courts of less than three hundred (300) feet in length, measured along the centerline from centerline to centerline of intersecting streets, shall require a five-foot wide sidewalk on both sides of the street located one (1) foot off the property line when the owners of fifty-five (55) percent of the abutting footage in the loop, drive, cul-de-sac or court, as the case may be, as determined by the city engineer, petition the city council for installation of sidewalks on public rights-of-way and the city council adopts a resolution for the installation and construction of such sidewalks. Nothing in this section shall prohibit individual property owners from installing a sidewalk on or adjacent to their own property. Additionally, this section does not require the installation of a sidewalk on the interior island of any cul-de-sac.

(2) An exception to section 16-0219 shall be along streets of less than three hundred (300) feet in length which serve as cross connections between two (2) streets having a length greater than three hundred (300) feet in length, in which case section 16-0219 shall govern.

## 16-0220. Installation of sidewalks in easements.

A minimum five-foot sidewalk shall be required to be installed, by resolution of city council, in pedestrian walkways or sidewalk easements located in side yards or rear yards, whenever any one (1) of the following occur:

(1) Both streets connected by such sidewalk easements are paved;

(2) A petition is received by owners of fifty-five (55) percent of the footage abutting the easement;

(3) When fifty-five (55) percent of the abutting property area is developed, the limits of the abutting property area which is to be connected by the sidewalk shall begin and end at the nearest street right-of-way line; provided, however, that the requirements of subsections (1) and (3) shall not apply to areas developed on or prior to July 19, 1982.

## 16-0221. Waiver of protest.

(1) Prior to the issuance of a building permit relating to properties designated for sidewalk construction, the owner must sign a request for sidewalk or a waiver of protest; said waiver shall be recorded with the register of deeds office and shall deny the property owner, said owner's heirs or assigns the right to protest the installation of sidewalks on designated public rights-of-way.

(2) The lots for which waiver of protest forms have been signed shall be counted as in favor of sidewalks in determining the percentages in sections 16-0218, 16-0219 and 16-0220.

## 16-0222. Grandfather clause.

The following areas are exempt from required sidewalk construction unless sidewalks are requested by petition of fifty-five (55) percent of the owners of lot footage abutting proposed sidewalk:

(1) *Front service roads:*

South Washington Street.

Gateway Drive.

Demers Avenue.

(2) *Rear service roads:*

South 12th Street (west side).

South 14th Street (east side).

13th Avenue North (north side).

7th Avenue South (north side, between South 20th Street and South 26th Street).

(3) *Public parks:*

Lincoln Park, along Belmont Road, Lincoln Drive and Elks Drive.

Riverside Park, along Park Avenue, Lewis Boulevard and North Third Street.

University Park.

Central Park.

Apollo Park, along 20th Avenue South and South 25th Street.

(4) *Cemeteries:*

Calvary.

Memorial Park.

Montifiore.

Sunset Memorial Gardens.

(5) *Arterial roadways (principal):*

South Washington Street (rural section only).

North Washington Street (rural section only), north of Gateway Drive.

Gateway Drive (rural section only).

(6) *Arterial roadways (minor):*

17th Avenue South between Belmont Road and South 12th Street (north side).

6th Avenue North between State Street and North 42nd Street (south side).

(7) *Collector roadways.* None.

(8) *Local roadways:*

Linden Court (east side).

27th Avenue South (south side) between Belmont Road and Chestnut Street.

32nd Avenue South (south side) between Belmont Road and Elmwood Drive.

Elmwood Drive (west side) south of 32nd Avenue South.

34th Avenue South (both sides) between Belmont Road and Elmwood Drive.

Oak Street (east side) between 17th Avenue South and 19th Avenue South.

Cherry Lynn Drive (east side) between 34th Avenue South and Chestnut Street.

Hammerling Avenue (north side) from South 10th Street and west one-half block.

Fourth Avenue South (north side) between River Street and Elm Avenue.

East Conklin (north side).

Riverside Drive (west side) between East Conklin and Fenton Avenue.

11th Avenue South (south side) between South 30th Street and the English Coulee.

Knight Drive (northerly side) west of South Columbia Road.

Chestnut Street from 47th Avenue South to 55th Avenue South until January 1, 2016.

(9) *Mobile home parks;*

President Park, along South 10th Street, 36th Avenue South and South 12th Street.

(10) *River bank side of roadways:*

Elmwood Drive (Olson Drive to South 34th Avenue South).

South 3rd Street (Minnesota Avenue to Elm Avenue).

Elm Avenue (South 3rd Street to South 4th Street).

(11) *Unpaved roadways:*

Woodland Avenue.

Seward Avenue (east of Lewis Boulevard).

Riverside Drive (south of Fenton Avenue).

(12) *Additions:*

Lindays.

Oak Park.

The Sun-beam Addition to the City of Grand Forks until January 1, 1991. However, the area west of Belmont Road and east of Cherry Street, north of 47th Avenue South, shall not be exempt from sidewalk construction.

The Richard's West Addition to the City of Grand Forks until January 1, 1991, or until the construction and completion of a pedestrian overpass at the grade separation of Interstate 29, whichever event occurs first.

(13) *Industrial zones.*

All industrial zones shall be exempt from the provisions of this section.

(Ord. No. 3032, § 1, 5-21-90; Ord. No. 3158, § 1, 12-16-91; Ord. No. 3820, § I, 9-20-99; Ord. No. 4251, § 1, 9-15-08)

# *ARTICLE 3. USE AND CARE OF STREETS AND SIDEWALKS*

## 16-0301. Snow and ice—Removal from sidewalks.

The owner or occupant of any building, grounds or premises within the limits of the city shall keep the sidewalks and approach walks adjacent to the same free from snow and ice. The superintendent of streets may remove or cause to be removed all snow and ice from the sidewalks and approach walks adjacent to any such building, or grounds, or premises whose owner or occupants shall refuse or fail to remove such snow and ice within twenty-four (24) hours after the same has fallen or accumulated, at the expense of such owner or occupant. The cost and expense of such removal of snow and ice by the superintendent of streets shall be assessed against, and shall be a lien upon, the adjacent property where such snow and ice is removed from the sidewalk or approach walk by the superintendent of streets. However, no person shall be required to remove snow and ice during the continuance of any snowstorm.

(Ord. No. 3250, § 1, 1-4-93)

## 16-0302. Same—Assessments by superintendent of streets when work is done by city.

Whenever the superintendent of streets shall, pursuant to section 16-0301 of this article, remove or cause to be removed any snow or ice from any sidewalks or sidewalk along or in front of any building, grounds, or premises, the superintendent of streets shall assess the cost of the same against said property, and on or before the first day of May in each year, make and file in the office of the city auditor a list of the property chargeable with such expense, the actual cost and expense of such removal and a description of the lot, lots, or parcels of land along or in front of which is the sidewalk or sidewalks from which snow or ice has been removed.

## 16-0303. Same—Notice and publication of assessments by auditor; hearing by city council.

The city auditor shall give notice by publication in the official newspaper of the hearing and confirmation of such report and assessment at the regular June meeting of the city council, notifying all persons objecting thereto to appear and present their objections, such notice to be published twice, once in each week's issue for two (2) consecutive weeks, the last publication to be not less than eight (8) days before the time fixed for the hearing. At the June meeting of the city council or at such later meeting as the hearing and confirmation of such assessment may be adjourned to, the city council shall take up and consider said assessment and shall hear any objections thereto, or to any part thereof, and after revising and correcting the same, if necessary to do so, shall approve and confirm the same; the city auditor shall thereupon attach to such list the city auditor's certificate that the same is correct as confirmed by the city council and shall thereupon file said assessment list in the city auditor's office as provided by law, and such assessment shall be certified to the county auditor by the city auditor at the same time and in the same manner that sidewalk assessments are certified.

## 16-0304. Driving on sidewalks prohibited.

No person shall ride, drive, push, draw, or back any horse, team, wagon, cart, sled, sleigh, or other vehicle upon or over or across any sidewalk, except at the regular crossings or where the alleys intersect the streets; provided, that the occupant of any yard, lot or warehouse may have access across the same by placing in front thereof, at said occupant's expense, with the consent of the superintendent of streets, a temporary bridge or carriage way over the sidewalks, gutter, and curbing in such manner as will preserve the same from injury.

## 16-0305. Bicycles on sidewalks; when permitted.

Persons may ride bicycles upon sidewalks in residential districts only. Such person shall at all times have the bicycle under control, and shall drive it in a careful manner and with due regard to the safety and convenience of pedestrians. Such person shall yield the right-of-way to any pedestrians and shall give audible warning before overtaking and passing such pedestrians.

## 16-0306. Amusements on streets prohibited.

No person shall, in any street or avenue of the city, fly a kite, play at ball, or engage in any other game, sport or amusement having a tendency or likely to annoy persons passing in the streets or sidewalks, or to hinder the passage of vehicles.

## 16-0307. Penalty.

Any person, firm or corporation violating the provisions of this article shall be guilty of a misdemeanor and, upon conviction thereof, shall be fined in an amount not less than ten dollars ($10.00) nor more than five hundred dollars ($500.00); provided, however, that each operation of such vehicle in violation of this article shall constitute a separate offense.

## 16-0308. Obstructing sidewalks—With merchandise delivered or received.

No person, firm or corporation receiving or delivering goods, wares, or merchandise in the City of Grand Forks shall place or keep upon, or suffer to be placed or kept upon any sidewalk, any goods, wares or merchandise which said person, firm or corporation may be receiving or delivering, without leaving a passageway clear upon said sidewalk, where such goods may be, of four (4) feet wide, for the use of foot passengers, and no persons, firm or corporation receiving or delivering such goods shall suffer the same to remain on such sidewalk for a longer period than ten (10) hours.

## 16-0309. Same—With packing cases.

No person, firm or corporation shall place or suffer to be placed upon any sidewalk or street in the City of Grand Forks any empty packing cases for a longer period than ten (10) hours.

## 16-0310. Buildings, fences, etc., on streets and sidewalks—Prohibited; barricaded streets.

(1) Except as hereinafter provided in this section, no person, firm or corporation shall build, erect, place, or construct, any house, barn, shed, booth, structure, or other building of any kind, or any fence or other obstruction in whole or in part upon or in any street, alley, avenue, sidewalk, or other public place or ground within the city, under a penalty as hereinafter provided, and such person shall be subject to a like penalty for

every forty-eight (48) hours said person shall fail to remove such house, barn, shed, booth, structure, or other building, fence or other obstruction, after notice so to do from the chief of police.

(2) The city engineer, chief of police or chief of the fire department may, by appropriate signs and/or barricades, designate streets, sidewalks, districts, zones or areas, during construction and repair or emergencies, wherein vehicles and trailers, as defined under section 8-0101, shall not be permitted to be operated or parked, and pedestrians shall not be permitted to walk, and bicycles shall not be permitted to be ridden. It shall be unlawful to walk or to operate or park a vehicle or trailer, as defined under section 8-0101, or ride a bicycle upon such street or sidewalk or within such district, zone or area when the same is marked by standards, barricades, ropes, lines or no-parking notices, or to go around or move or remove such markings.

(3) Upon written application to and in the discretion of city council, permission may be granted by the council to erect elevator shafts and to place public telephone booths upon public property or erect a structure to cover existing stairwells situated on public property, upon such terms and conditions as may be required and designated by the city council, including, but not restricted to, contract agreements, indemnification bonds, insurance or agreements, commission payments to the city, location, number, style, size and manner and type of construction.

(Ord. No. 2959, § 1, 8-7-89; Ord. No. 4780, § I, 1-4-21)

## 16-0311. Same—Failure to remove declared a nuisance.

Whenever the owner or builder of any building, fence, or other obstruction, on or upon any street, avenue, alley, sidewalk, or other public place or ground in the city, shall refuse or neglect to remove the same after notice as provided in section 16-0310, the same shall be deemed a nuisance, and it shall be lawful to cause the same to be removed or taken down in the discretion of the chief of police, and the expense thereof shall be recoverable of the owner or builder in an action before any court of competent jurisdiction; and no person shall resist or oppose the execution of the orders of the chief of police in the premises.

## 16-0312. Permits for poles in streets.

No pole or poles for the holding or carrying of any wire or wires or cables to be used in connection with telegraph, telephone, electric lighting, or electric power service shall be placed in any street, alley, avenue, park or other public place within the city, by any person, firm, company or corporation, unless permission to do so shall have first been obtained by a permit from the office of the city engineer.

## 16-0313. Gasoline stations and pumps on streets prohibited.

It shall be unlawful for any person, firm or corporation to locate, build, construct, or maintain any gasoline or oil filling station or pump or service station or pump, in whole or in part upon any public street, road, alley, parking lot or sidewalk in the city, or in such location as will cause vehicles being serviced at such pumps to interfere with the unrestricted use of adjacent streets or sidewalks. All such gasoline or oil filling stations or pumps or air service stations or pump shall be constructed and maintained only upon private property, providing a permit is granted and license issued by the city.

## 16-0314. Vehicle traffic adjacent to sidewalk; curbs required.

Every person, firm or corporation, which on private property, permits vehicular traffic adjacent and parallel to public sidewalks, shall provide on said private property and abutting the inside sidewalk line, a curb six (6) inches in width and six (6) inches in height above the sidewalk level; such curbing shall extend and be constructed wherever such vehicular traffic is permitted on private property adjacent and parallel to public sidewalks, except

that same may be cut to permit ingress and egress provided written permission is obtained from the city engineer who shall prescribe the dimensions and location of such cut.

## 16-0315. Injury to or removal of pavement, sidewalks, etc.

No person shall injure, tear up, break or remove any pavement, sidewalk, crosswalk, drain, or sewer within the city.

## 16-0316. Vehicles soliciting business prohibited on streets.

No vehicle shall be permitted to stand upon any of the streets of the City of Grand Forks, North Dakota, for the purpose of soliciting business, without first obtaining a special permit from the governing body and any required license.

## 16-0317. Depositing of snow or ice on city streets or sidewalks prohibited.

(1) No person shall deposit or cause any snow or ice to be deposited upon any city street or sidewalk; nor shall snow or ice be deposited or moved upon public or private property so as to create a traffic hazard or to interfere in any manner with the vision or view of a driver of a motor vehicle or pedestrian at or near street intersections or where traffic merges or near school/pedestrian crossings.

(2) No person shall deposit any snow or ice removed from any parking lot, filling station area, driveways, or from any other private property upon any public or city property or city street or sidewalk.

(3) No person shall deposit or cause any snow or ice to be deposited on or against any fire hydrant or traffic-signal-control device or traffic sign or appurtenance; or any loading and unloading area of a public transportation system or emergency access land.

(Ord. No. 2930, § 1, 4-3-89)

## 16-0318. Seasonal and weight restrictions.

The city engineer may prohibit the operation of vehicles upon any street or highway or impose restrictions as to the size, weight, or load of vehicles to be operated thereon whenever any such street or highway by reason of deterioration, rain, snow, frost, flooding, or other climatic condition will be seriously damaged or destroyed unless the use of such vehicles thereon is prohibited or the permissible size, weight, or load thereof reduced. The city engineer shall erect or cause to be erected and maintained reasonable signs plainly indicating the prohibition or restriction of any street or highway affected thereby and the prohibition or restriction shall not be effective unless and until such signs are erected.

(Ord. No. 3268, § 1, 3-1-93)