

# 2050 LAND USE PLAN

City of Grand Forks

April 2022

CITY PROFILE





**Contents**

**Introduction ..... 1**

- Data Sources..... 1
- Grand Forks in Context ..... 2

**Socioeconomic Characteristics ..... 4**

- Population Trends..... 4
- Components of Change..... 4
- Age Groups ..... 5
- Household Density ..... 7
- Race and Ethnicity..... 9
- Income ..... 12
- Poverty ..... 12
  - Poverty Guidelines ..... 12
  - Poverty and Planning ..... 13
  - Poverty and Race..... 13
- Language Spoken at Home ..... 13
- Disability Characteristics..... 15

**Economy ..... 17**

- City of Grand Forks Employment..... 17
  - Employment by Industry..... 17
- Employment Flow..... 17
- Regional economy..... 18
- Industry Size and Growth ..... 19
- Industry Structure..... 21
- Industry Earnings Per worker..... 22
- Unemployment ..... 23
- Industry clusters as building blocks for the future economy..... 24

**Housing ..... 26**

- Housing Stock and Supply..... 26
  - Type of Unit ..... 26
  - Growth of Units..... 27
  - City Parcels: Type of Unit..... 28
  - Trends in Construction Building Permits..... 30
- Housing Demand and Market Analysis..... 31

Market Trends..... 31

Apartment Rental Demand..... 32

Market Demand..... 33

**Natural Features ..... 36**

Red River Valley..... 36

Flood Protection..... 36

**City Growth and Development Patterns ..... 39**

Planning Area..... 39

    Extraterritorial Zone..... 39

Recent Annexations..... 39

Existing Land Use..... 41

    Within the Entire Planning Area (City Limits and 4-mile ETZ)..... 43

    Within the City..... 44

    Within the 2-Mile ETZ..... 45

    Beyond the 2-Mile ETZ..... 45

Existing Land Development Regulations..... 46

    Land Development Code..... 46

    Standard Zoning Districts..... 46

    Planned Unit Development..... 47

    Corridor Overlay Zones..... 50

Existing Roadway System..... 50

Existing Infrastructure..... 50

Existing Parks and Recreation Facilities..... 50

**Related Plans and Studies..... 54**

2045 Grand Forks Land Use Plan..... 54

    Growth Tiers..... 54

    Future Land Use Categories..... 54

    Livability and Ladders of Opportunity..... 56

Grand Forks-East grand Forks MPO Metropolitan Transportation Plan..... 56

    Grand Forks-East Grand Forks MPO 2045 Street/Highway Plan Update..... 56

    Grand Forks-East Grand Forks Bicycle and Pedestrian Element..... 57

    Grand Forks-East Grand Forks Transit Development Plan (2017)..... 57

Downtown Action Plan..... 58

University of North Dakota Master Plan..... 59

Downtown Parking Study..... 60

Grand Forks and East Grand Forks Downtown Transportation Study..... 60

**Figures**

Figure 1. Grand Forks in Context ..... 3

Figure 2. Population Change, 2010 to 2020 ..... 5

Figure 3. Age Groups as a Share of Total Population, 2019..... 6

Figure 4. Population by Age Group, 2010 and 2019 ..... 7

Figure 5. Household Density ..... 8

Figure 6. Racial Composition of Grand Forks, 2020..... 9

Figure 7. Minority Populations ..... 11

Figure 8. Income Distribution for Households and Families, 2019..... 12

Figure 9. Poverty Rate ..... 14

Figure 10. Disability by Age, 2019 ..... 16

Figure 11. Employment in Grand Forks City and Grand Forks MSA, 2001-2020..... 19

Figure 12. Employment Growth by Sector in Grand Forks MSA, 2010-2020..... 21

Figure 13. Wages, Salaries, and Proprietor Earnings per Worker by Sector, Grand Forks MSA, 2020 ..... 23

Figure 14. Unemployment Trend, Grand Forks MSA, 2015-2020 ..... 24

Figure 15. Growth of Housing Units by Tenure, 2010-2019, Grand Forks vs. Nation..... 28

Figure 16. Distribution of Housing Units by Year Built ..... 29

Figure 17. Distribution of Single Family Units by Type in Grand Forks ..... 29

Figure 18. Single Family and Townhouse Building Permits by Year in Grand Forks..... 30

Figure 19. Multifamily Building Permits by Year in Grand Forks..... 31

Figure 20. Number of Sales Transactions by Quarter ..... 32

Figure 21. Recent Trends in Apartment Vacancy Rates ..... 33

Figure 22. How well is Grand Forks meeting the housing needs for the following types of households? ..... 34

Figure 23. What housing occupancy type is needed more in Grand Forks? ..... 34

Figure 24. Farmland Resources ..... 37

Figure 25. Flood Protection..... 38

Figure 26. City Annexations, 2015-2020 ..... 40

Figure 27. Existing Land Use ..... 42

Figure 28. Existing Zoning ..... 48

Figure 29. Corridor Overlay Zones ..... 49

Figure 30. Existing Functional Classification ..... 51

Figure 31. Existing City Infrastructure ..... 52

Figure 32. Existing Parks, Recreation Facilities, and Bike Routes ..... 53

Figure 33. Existing Growth Tiers ..... 55



**Tables**

Table 1. Grand Forks Population, 2010-2020.....4

Table 2. Selected Socioeconomic Characteristics by Race and Ethnicity ..... 10

Table 3. Poverty and Race ..... 13

Table 4. Disability Statistics, 2019 ..... 15

Table 5. City of Grand Forks Employment by Industry, 2020..... 17

Table 6. 2020 Employment by Sector and 2010-2020 Percent Change, Grand Forks City and Grand Forks MSA..... 20

Table 7. Sector Job Concentration Relative to National Average, 2020 ..... 22

Table 8. Top Economic Clusters, 2020 ..... 25

Table 9. Housing Unit Distribution, Grand Forks vs. Nation ..... 26

Table 10. Year Householder Moved into Unit..... 27

Table 11. Distribution of Housing Units by Number of Rooms, Grand Forks vs. Nation ..... 27

Table 12. Grand Forks Housing Sales Trends..... 32

Table 13. Distribution of Housing Units by Number of Rooms, Grand Forks vs. Nation ..... 35

Table 14. Land Use Summary (Entire Planning Area) ..... 43

Table 15. Existing Vacant Lots by Guided Land Use Type (Entire Planning Area) ..... 43

Table 16. Land Use Summary (Within City Limits)..... 44

Table 17. Existing Vacant Land by Guided Land Use Type (Within City Limits) ..... 44

Table 18. Land Use Summary (Within the 2-Mile ETZ)..... 45

Table 19. Existing Vacant Land by Guided Land Use Type (Within 2-Mile ETZ)..... 45

Table 20. Land Use Summary (Beyond the 2-Mile ETZ)..... 46

Table 21. Existing Vacant Land by Guided Land Use Type (Beyond the 2-Mile ETZ) ..... 46

Table 22. Existing Zoning Acreage ..... 47

Table 23. 2045 Future Land Use Classification and Projected Growth..... 56

## INTRODUCTION

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To plan effectively for the future of Grand Forks, it is essential to understand the existing state of the community and anticipated trends that will shape the direction of growth and change. The City Profile is intended to communicate existing conditions and community trends, including economic, social, and environmental factors that both shape and are shaped by city planning and policy making. The City Profile combines data analysis with a qualitative assessment of community patterns and trends to provide a solid foundation for the Grand Forks 2050 Land Use Plan (2050 Land Use Plan). Elements include population and household demographics, housing, economy, existing development patterns, and growth projections.

## DATA SOURCES

The City Profile reviews a wide range of data including socioeconomic characteristics, economic conditions, and current planning tools. A number of different data sources were used to gather this data, and notation of these different sources are identified throughout the document. The data gathered represents the most applicable data available at this time. It is understood that the U.S. Census will release new 2020 Census information in the coming months. The City Profile and the 2050 Land Use Plan process will be updated with this new information when it is available. The City profile summarizes data from a variety of sources, including:

- Decennial Census (2010 and 2020)
- American Community Survey (ACS)
- Economic data provided by EMSI

The Census and the ACS provide extensive data describing the city's population and socioeconomic conditions. Each data source has advantages and disadvantages. One advantage of the ACS is that it contains a much wider variety of information than the Census. However, because ACS estimates are based on survey sampling, they are less accurate than Census data and they always include a margin of error. For large subsets of the population, such as the group of persons identifying as White (85.0% of the city population), the margin of error has a small effect on accuracy and interpretation. However, the margin of error can be quite large for small subgroups, such as the group of persons identifying as Native Hawaiian or Pacific Islander (less than 1.0%). All ACS data summarized here come from the survey's five-year estimates. These estimates represent data collected over five-year period. Using the five-year estimates increases the statistical reliability for small population subgroups.

Emsi industry data have various sources depending on the class of worker. (1) For QCEW Employees, Emsi primarily uses the QCEW (Quarterly Census of Employment and Wages), with supplemental estimates from County Business Patterns. (2) Non-QCEW employees data are based on a number of sources including QCEW, Current Employment Statistics, County Business Patterns, BEA State and Local Personal Income reports, the National Industry-Occupation Employment Matrix (NIOEM), the American Community Survey, and Railroad Retirement Board statistics. (3) Self-Employed and Extended Proprietor classes of worker data are primarily based on the American Community Survey, Nonemployer Statistics, and BEA State and Local Personal Income Reports. Projections for QCEW and Non-QCEW Employees are informed by NIOEM and long-term industry projections published by individual states. This report uses state data from the following agencies: Minnesota Department of Employment and Economic Development; North Dakota Job Service, Labor Market Information Center

## Definitions

<i>Count</i>	Historical data developed from a verified study. The decennial Census is one example. It is intended to provide 100% data for Grand Forks and its sub-geographics.
<i>Estimate</i>	An estimate is derived from a representative sample of a population or study group. The American Community Survey is an example. ACS estimates include a margin of error that indicates a numeric range in which the actual value of a variable is likely to fall. Estimates can be derived from and validated against available counts.
<i>Projection</i>	A projection represents a calculated assumption of data for future years. The 2050 Land Use Plan includes projections for future population and employment. Projections incorporate counts and estimates.

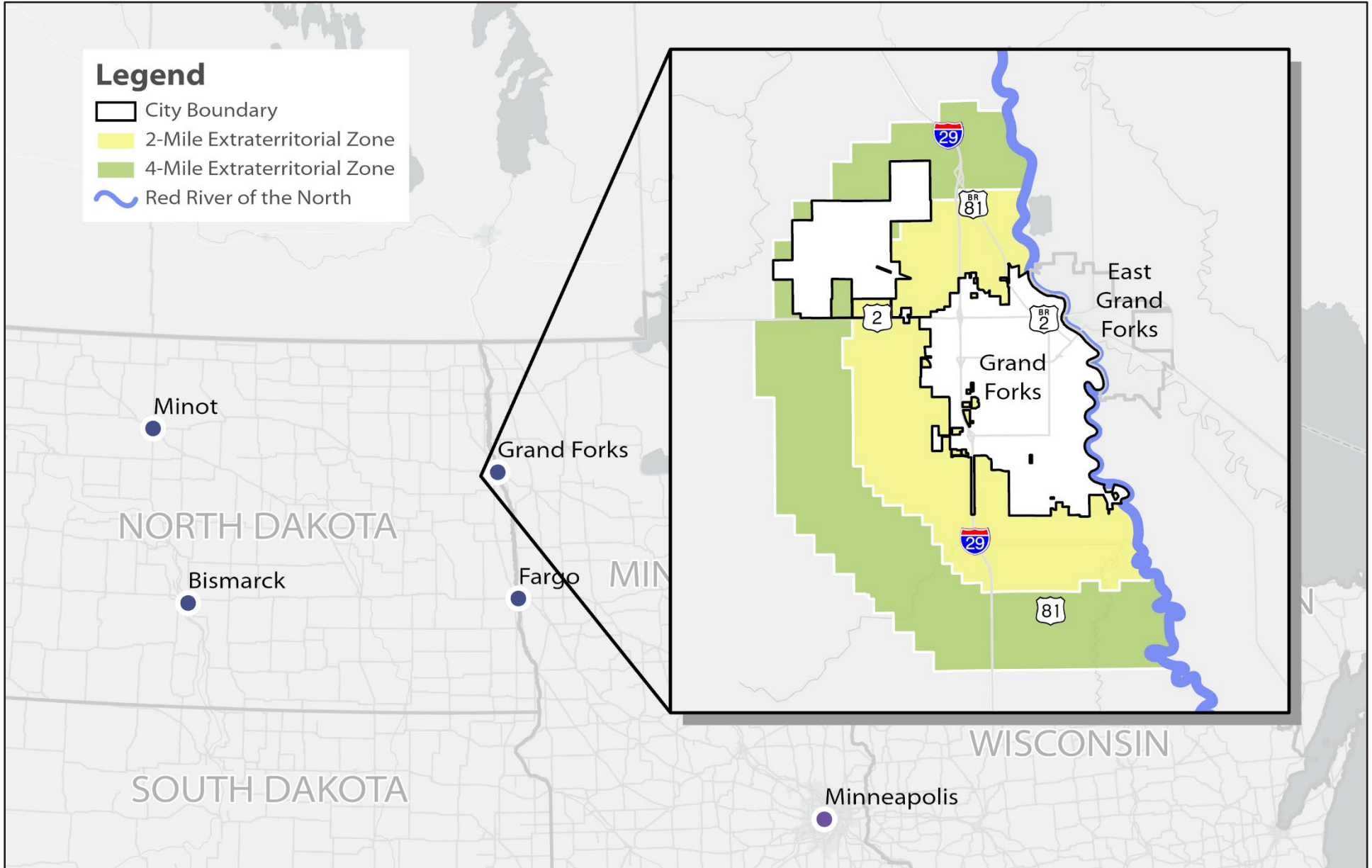
## GRAND FORKS IN CONTEXT

Grand Forks is the county seat of Grand Forks County, North Dakota. With a population of 59,166 in 2020, it is the third largest city in North Dakota. The city contains approximately 28 square miles of land area. Located on the western banks of the Red River of the North, Grand Forks and its neighboring city of East Grand Forks, Minnesota, form the center of the Grand Forks ND-MN Metropolitan Statistical Area, which is often called “Greater Grand Forks” (**Figure 1**). The City of East Grand Forks was estimated to have a 2019 population of 8,535 and contains a land area of approximately 5.9 square miles.

Grand Forks and East Grand Forks have a mutually beneficial relationship that includes exchange of economic opportunities, housing, entertainment, and other resources. This relationship is embodied in the Grand Forks – East Grand Forks Metropolitan Planning Organization (MPO), a cross-jurisdictional agency that is responsible for regional planning and programming. One of the MPO’s major roles is to prioritize and administer federal funding for transportation projects.



Figure 1. Grand Forks in Context



## SOCIOECONOMIC CHARACTERISTICS

### POPULATION TRENDS

The 2020 Census count for Grand Forks' population was 59,166, up from 52,838 in 2010 (12.0% growth in 10 years). When compared with the decennial Census counts, the ACS has historically underestimated the population for Grand Forks. ACS estimates for 2011 and 2012 were lower than the 2010 Census count. Using the ACS estimate for 2019, the population grew 4.7% from 2019 to 2020. This does not indicate an actual spike in growth, but underestimation in the ACS, which is corrected in the Census.

The MPO provides its own population estimates for inter-Census years, using other data sources such as the number of building permits that are issued annually. These estimates may slightly overestimate the City's population, but appear to be more accurate than the ACS when compared to the 2020 Census. Growth projections incorporate multiple data sources and account for historical estimation errors.

**Table 1. Grand Forks Population, 2010-2020**

Year	Census/ACS		MPO Estimates	
	Population	% Change	Population	% Change
2010	52,838	--	52,838	--
2011	52,403	-0.9%	53,502	1.2%
2012	52,773	0.7%	54,358	1.6%
2013	53,315	1.0%	56,262	3.5%
2014	54,095	1.5%	58,012	3.1%
2015	54,944	1.6%	58,766	1.3%
2016	55,831	1.6%	59,299	0.9%
2017	56,236	0.7%	59,871	1.0%
2018	56,556	0.6%	60,351	0.8%
2019	56,500	-0.1%	60,636	0.5%
2020	59,166	4.7%	59,166	-2.4%

Source: U.S. Census, 2010 and 2020; ACS Estimates 2011-2019; Forks MPO Estimates 2011-2019

### COMPONENTS OF CHANGE

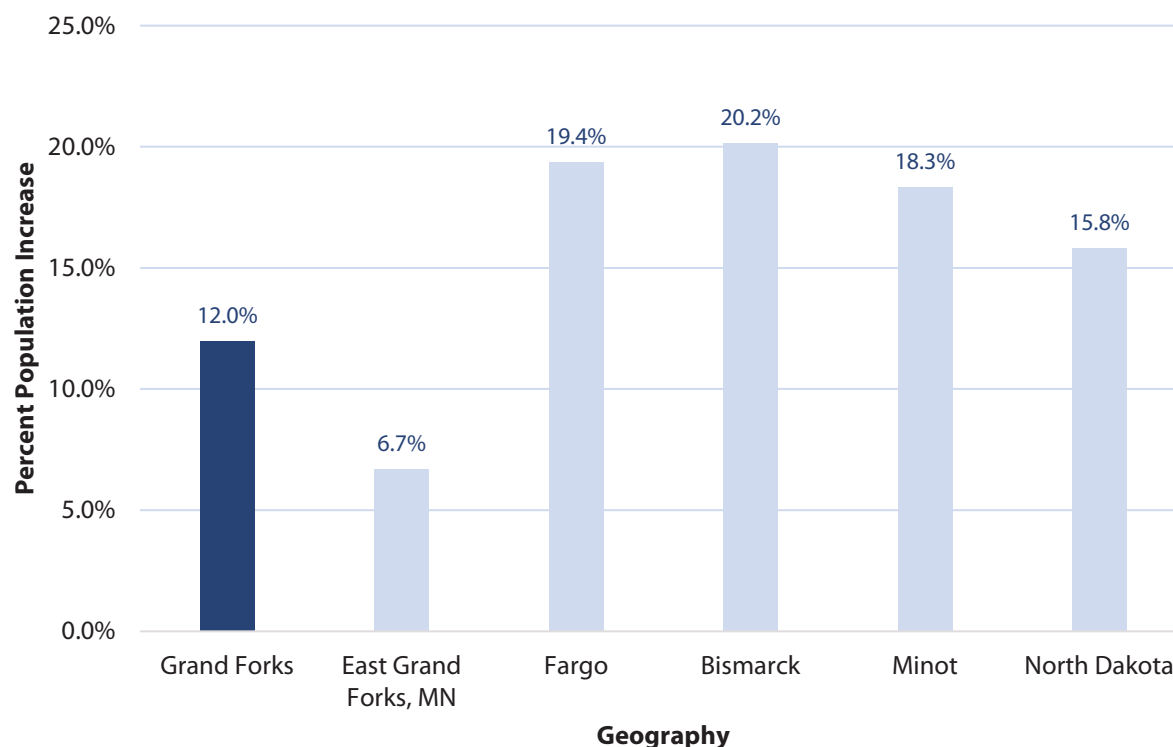
Population change is the sum of live births, deaths, and net migration. "Natural change" is the difference between births and deaths, which is determined by fertility and mortality rates for different age cohorts. Migration exerts a strong influence on the rate of change. During the first half the 2010s, explosive growth in western North Dakota was driven by rapid in-migration.

Understanding the components of change in Grand Forks provides insight for understanding current trends and projecting future growth. The North Dakota Department of Health (NDDoH) provides vital statistics for Grand Forks County. (Grand Forks County is a loose corollary to the City of Grand Forks, which constitutes approximately 80% of the county population.) From 2012 to 2016, the

*From 2010 to 2020, the annual rate of growth in Grand Forks ranged from 0.5% to 1.6%, according to ACS estimates. Growth peaked in 2015.*

natural change in Grand Forks County was 2,740<sup>1</sup>. The actual change in population, according to the ACS, was 2,903. This indicates that the change resulting from net migration for Grand Forks County was 163 over the five-year span. The effect of migration was small but positive, contributing roughly 5% to total population growth. Combined with a modest rate of natural change, this resulted in slow, steady population growth during the 2010s. In the City of Grand Forks, the annual rate of population change ranged from 0.5% to 1.6%. City growth peaked in 2014-2015 and began to level off by 2018. The key takeaway is that Grand Forks’ population saw a modest increase from migration during the economic boom that occurred in North Dakota over the first half of the decade, but the rate of growth was much higher in Fargo, Bismarck, Minot, and other cities in western North Dakota (**Figure 2**).

**Figure 2. Population Change, 2010 to 2020**



Source: US Census, 2010 and 2020

## AGE GROUPS

The U.S. Census subsets the total population by age group. In general, the population of the United States is aging. This trend shows no signs of slowing – the fertility rate hit a record low in 2019 and American women are now expected to have about 1.71 children over their lifetimes.<sup>2</sup> This trend will likely be exacerbated by the COVID-19 Pandemic, with a sharp decline in births anticipated for 2021.<sup>3</sup> The population of Grand Forks is aging as well, although the trend is less obvious due to the presence of the University of North Dakota (UND). Comparing the age structure of Grand Forks’ population to those of North Dakota and the United States illustrates the effect of UND and provides additional context for planning (**Figure 3**). Aside from the high relative concentrations of prime

<sup>1</sup> North Dakota Department of Health: Grand Forks County Community Health Profile (2018)

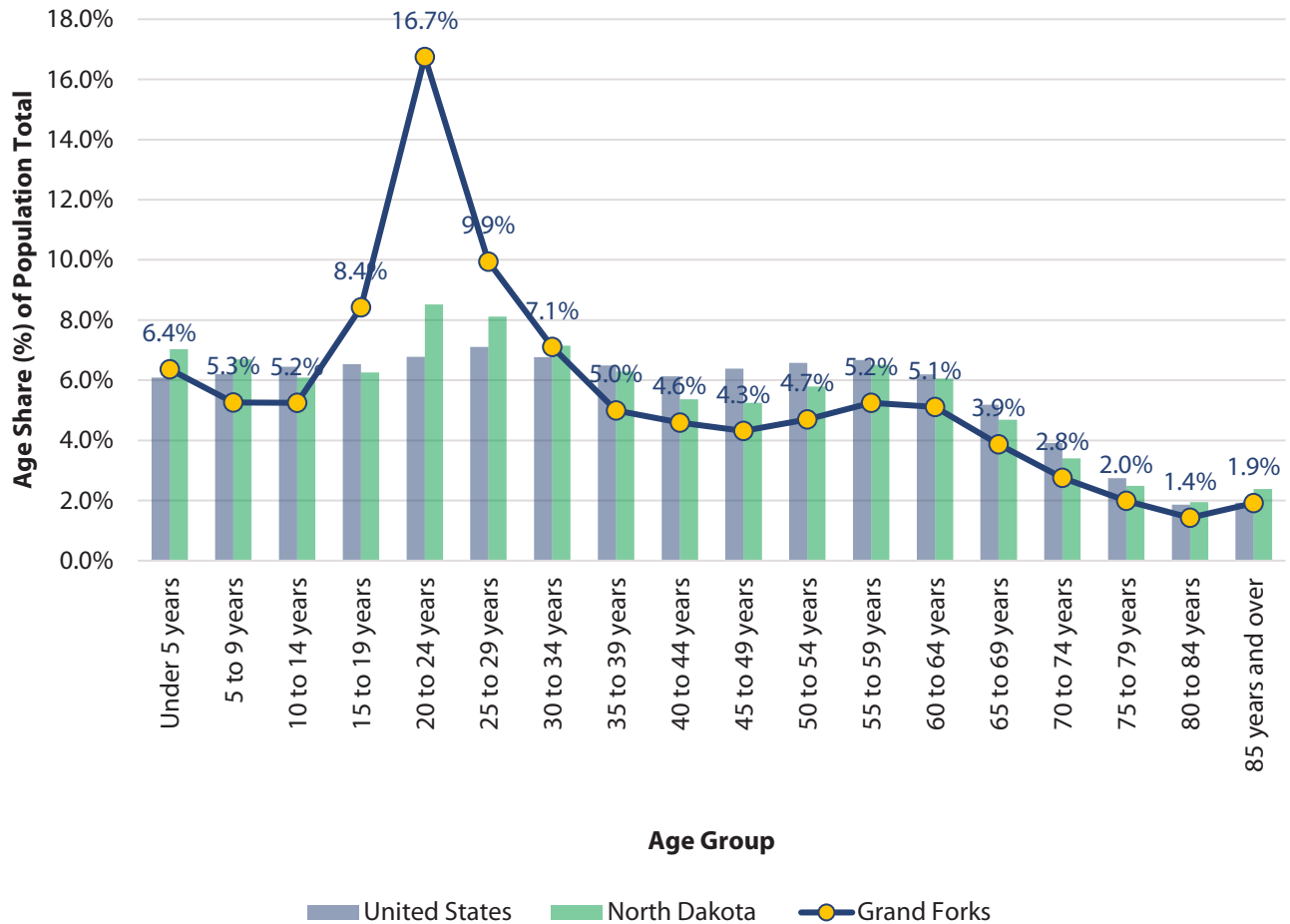
<sup>2</sup> U.S. News & World Report: U.S. Births Continue to Fall, Fertility Rate Hits Record Low (May 20, 2020)

<sup>3</sup> Brookings Institution: Half a Million Fewer Children? The coming COVID Baby Bust



age college students, Grand Forks is home to outsized numbers of residents in the late 20s and early 30s age groups along with children under age ten. The city has fewer seniors than the national average.

Figure 3. Age Groups as a Share of Total Population, 2019



Source: 2019 American Community Survey 5-Year Estimates

Aging is apparent by comparing population totals within different age groups in 2010 to 2019 (Error! Reference source not found.). To get a sense of this, compare the population in 2010 (green bar) to the population in 2019 (blue bar), within the same age group and between age groups spaced approximately 10 years apart. The 45 to 49 age group and the 50 to 54 age group decreased in size, each by about 500 persons, while the size increased for most of the older age groups.

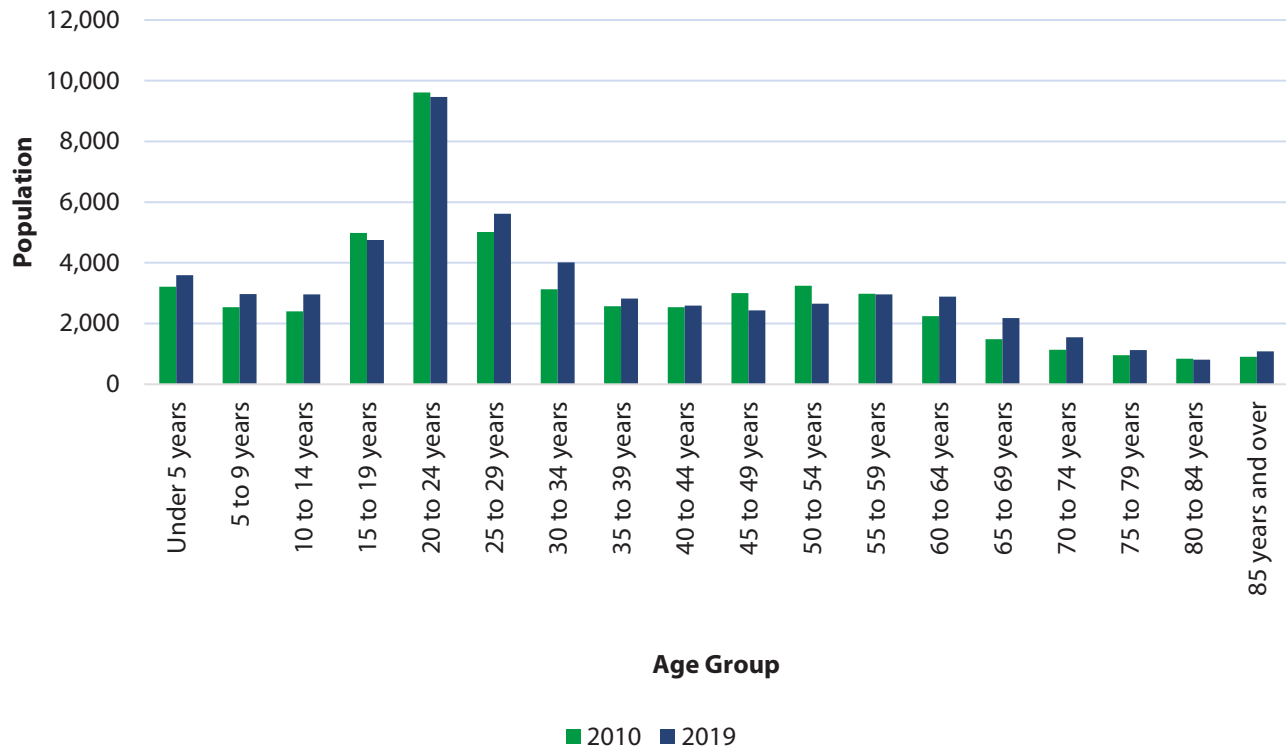
From 2020 to 2050, many more middle-aged adults will become elderly residents. This has several ramifications for planning, including the following examples.

- Many residents will want to “age in place”.
- There will be an increased need for accessible housing.
- There will also be an increasing need for active living communities as well as assisted living communities, with corresponding demands for health care.

As aging home-owners transition to new homes and care communities, this will free up existing single-family housing stock for new occupants, much of which is likely to be more affordable than new development.

The impacts of aging will extend to the city’s work force and tax base. As a large segment of the population retires from the work force, the economic structure of the community will change. The purchasing power of the Baby Boom generation will decrease, although this will be offset in part by the increased earning potential of millennials aging into their 40s and 50s.

**Figure 4. Population by Age Group, 2010 and 2019**



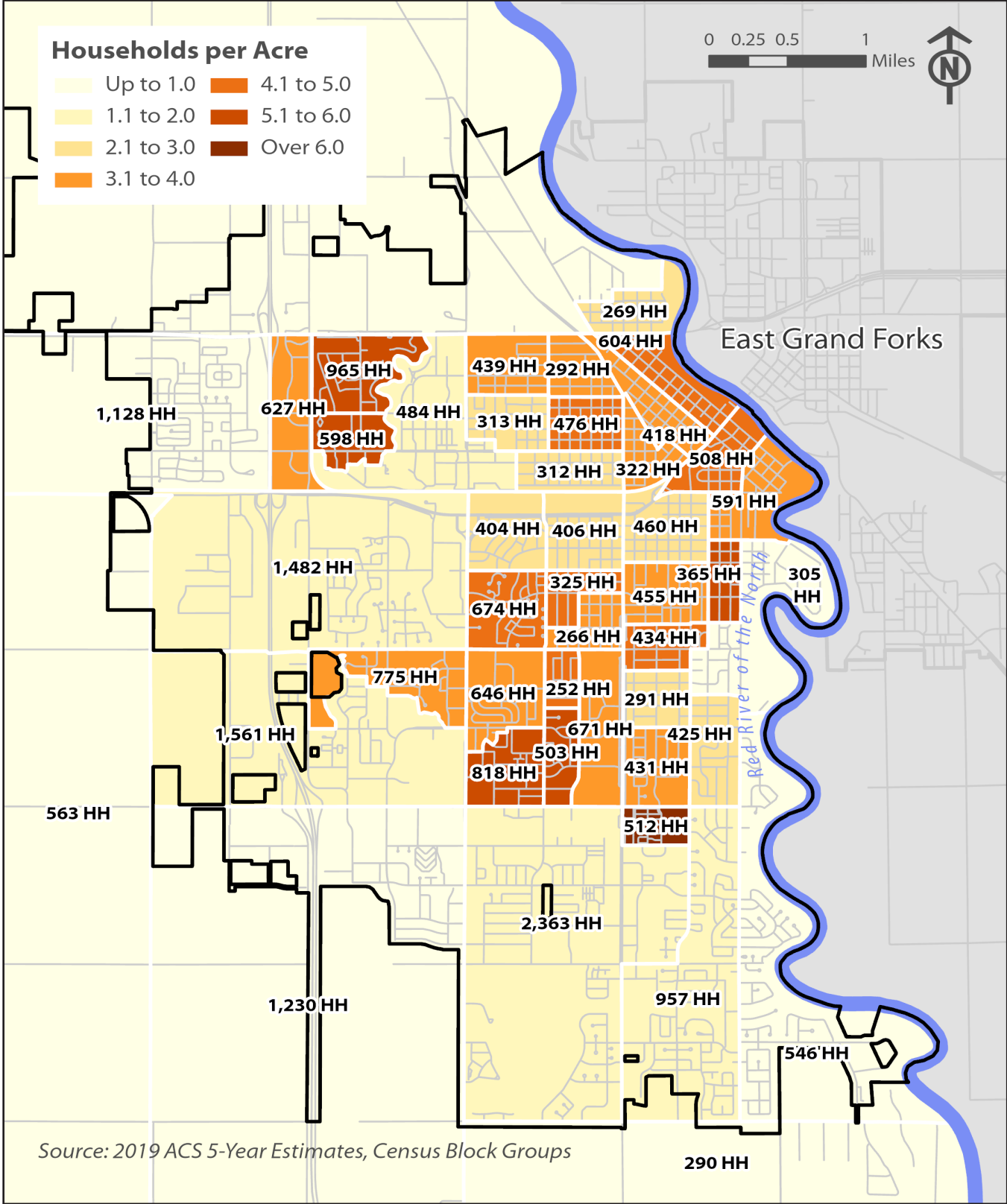
Source: 2010 Census and 2019 American Community Survey 5-Year Estimates

## HOUSEHOLD DENSITY

One important application of land use planning and zoning is to control the density of development across the city. Providing for a range of development densities helps ensure that a variety of housing types are constructed. Low-density residential development primarily consists of single-family homes, satisfies demand for large lots and houses, and contributes to an auto-oriented pattern of development. At higher densities, the costs of supplying land and infrastructure for development decrease on a per-unit basis. Higher-density development also supports public transit and active transportation. Fixed-route transit is often provided to areas with average residential densities of at least 4-5 units per acre (or a similar density of households).

Understanding household density patterns in Grand Forks is key to developing the 2050 Land Use Plan. In most of the city, density does not exceed two households per acre (**Figure 5**). However, in the urban core, density often exceeds 3 or 4 households per acre. In areas with multifamily development, average density approaches 6 households per acre. The data shown in Figure 5 is presented by Census Block Group.

Figure 5. Household Density



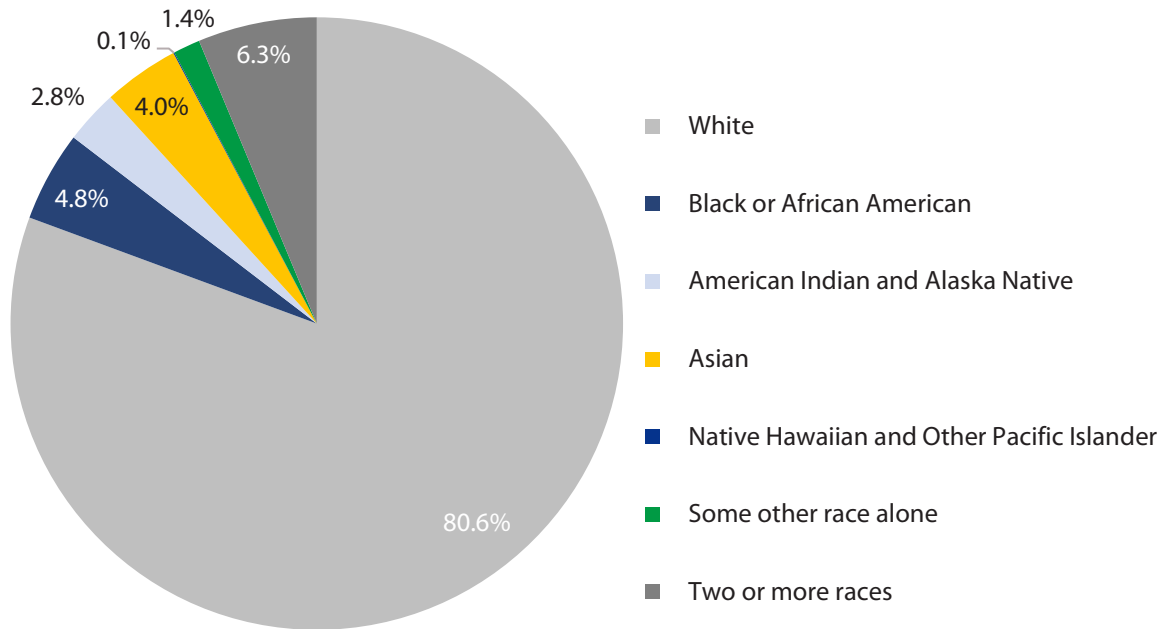
Source: 2019 ACS 5-Year Estimates, Census Block Groups



## RACE AND ETHNICITY

Approximately 80.6% of the population of Grand Forks identifies as White (**Figure 6**). The remaining population consists of minority races, including Black or African American (4.8%), Asian (4.0%), American Indian and Alaska Native (2.8%), and Native Hawaiian and Other Pacific Islander (0.1%). Approximately 1.4% of the population identified as some other race and 6.3% indicated they were of two or more races.

**Figure 6. Racial Composition of Grand Forks, 2020**



Source: 2020 Census

Historically in the United States, racial disparities are evident across multiple measures of economic opportunity and wellbeing, with minorities experiencing lower levels of educational attainment, income, homeownership, geographic mobility, and access to health care, etc. Further, minorities have borne a disproportionate share of negative impacts from land use planning and infrastructure projects. Historical effects include displacement of minorities due to highway expansion and gentrification, health disparities arising from the siting of noxious uses, and the legacy of federal housing policy, which segregated housing and limited access to home loans for non-whites. Racial disparities exist in Grand Forks (**Table 2**).

*While Grand Forks remains a majority-White city, the minority population increased from 11.2% in 2010 to 15.0% in 2019. The population that identifies as Hispanic or Latinx increased from 1,473 persons in 2020 to an estimated 2,444 persons in 2019.*

Table 2. Selected Socioeconomic Characteristics by Race and Ethnicity

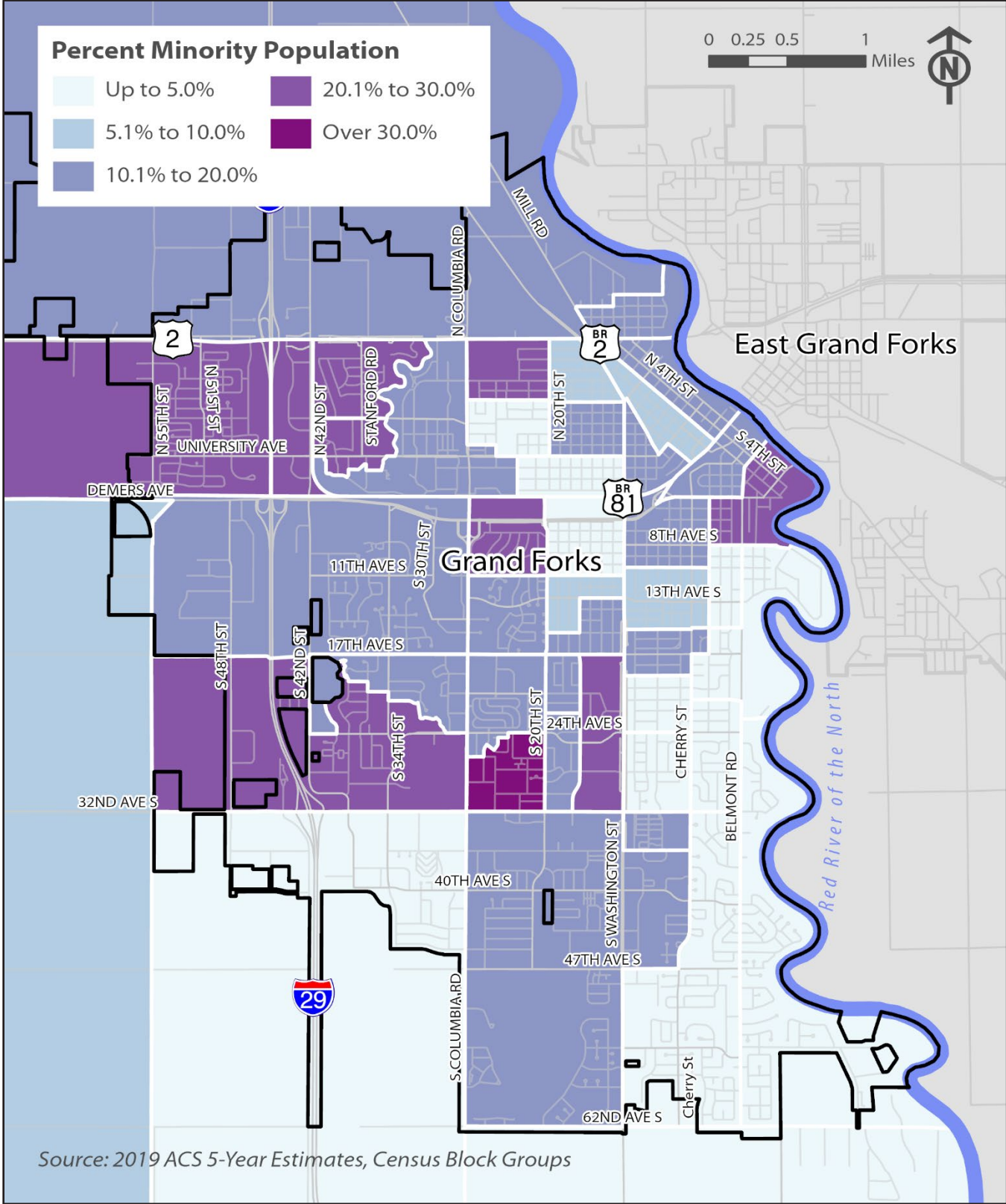
Race/Ethnicity	Median Family Income	% Population Over Age 24 with a Bachelor's Degree or Higher	% of Owner-Occupied Households by Householder Race
White Alone, not Hispanic or Latino Ethnicity	\$88,248	39.3%	47.6%
White Alone, Hispanic or Latino Ethnicity	\$58,750	6.5%	31.0%
Black or African American Alone	\$35,982	9.0%	6.1%
American Indian and Alaska Native Alone	\$21,450	19.3	30.0%
Asian Alone	\$89,308	43.5%	23.4%
Native Hawaiian and Other Pacific Islander Alone	Insufficient Data	Insufficient Data	Insufficient Data
Some Other Race Alone	\$60,398	13.4%	24.2%
Two or More Races	\$60,859	40.8%	21.5%

Source: 2019 American Community Survey 5-Year Estimates

From a planning perspective, it is important to understand where minority populations are concentrated. In Grand Forks, minority populations are concentrated around the UND Campus, Columbia Mall, and within neighborhoods adjacent to the I-29 corridor and Gateway Drive (**Figure 7**). The percent minority population in several Census Blocks exceeds 20%. Around the mall, the minority population exceeds 30%.

The MPO maintains an Environmental Justice Program Manual to articulate the Environmental Justice laws, regulations and polices established by a number of transportation-related federal agencies to understand the low income and minority populations within the planning area. This manual identifies the appropriate laws and procedures the MPO supports to provide equal treatment to all populations within the planning area. In addition to outlining the policies and procedures the MPO will use, it also explores concentrations of low income and minority populations within the metro area. For minority populations, the MPO uses a threshold of 25% of the population within a Census Block to define a concentration of minority populations. According to the current Program Manual, there are two areas within the City of Grand Forks. For low income populations, a threshold of 50% is identified for Grand Forks, with four general locations identified.

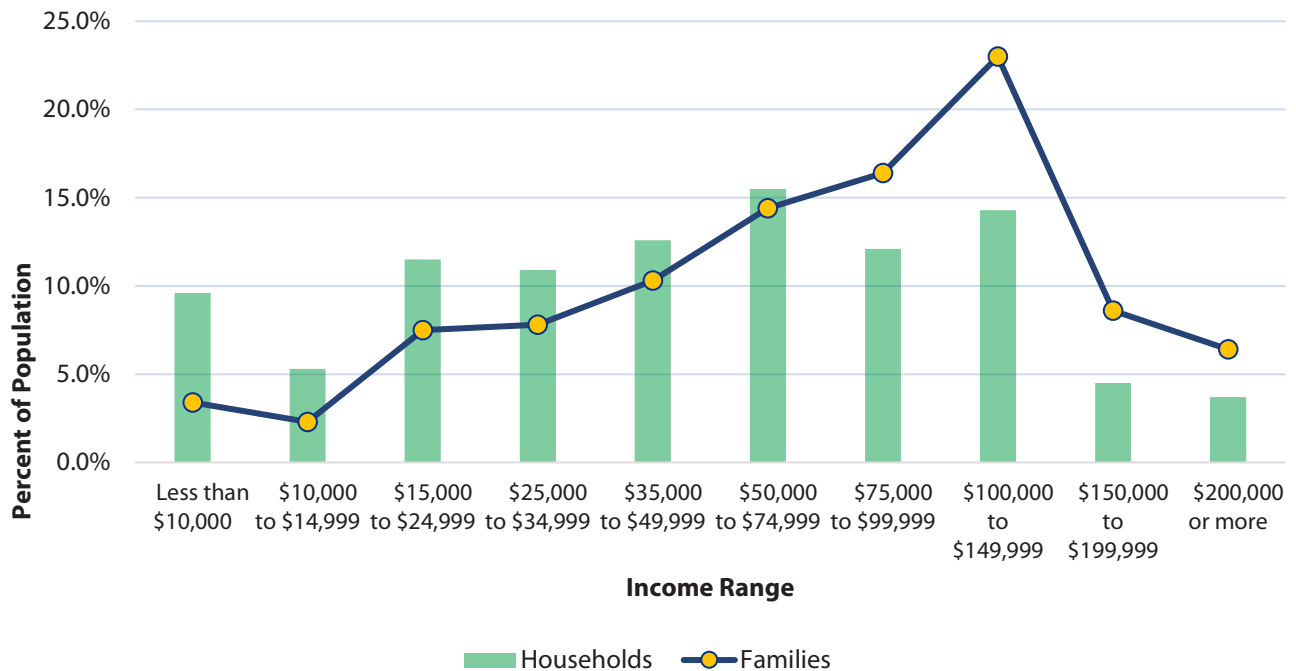
Figure 7. Minority Populations



## INCOME

The ACS provides income statistics for individuals, households, and families. In 2019, the median pre-tax income for all households was \$50,076. For family households, the median pre-tax income was \$81,175. The gap in these statistics illustrates the impact of the student population at the University of North Dakota. Most student households are not family households; removing them from the sample substantially increases average income. Both sets of data are relevant for the purposes of planning and economic analysis (Figure 8).

**Figure 8. Income Distribution for Households and Families, 2019**



Source: 2019 American Community Survey 5-Year Estimates

## POVERTY

### Poverty Guidelines

Poverty thresholds are set by the United States Department of Health and Human Services (HHS) and vary with household size, age of householder, and pre-tax income. Note that these guidelines are nationally based and may not respond to nuances at the city level. It is important to remember that college students with limited incomes make up a sizeable percentage of Grand Forks' population, skewing poverty statistics. Analyzing a subset of poverty data that includes only family households or families with children minimizes this skew effect. In 2019, an estimated 9.0% of families lived below the poverty threshold.

Another reference source that provides insight into income and poverty levels throughout the region is the median family income guidelines created by the Department of Housing and Urban Development (HUD). These guidelines help the Grand Forks region quantify its affordable housing need and plan for a suitable amount of affordable housing units. A measure of a median family income can be used to quantify low-income families in the region. The 2020 Median Family Income (MFI) for the Grand Forks Metropolitan Statistical Area (MSA) was \$89,200. Per HUD guidelines, families earning less than 80% of the MFI are considered low income.

## Poverty and Planning

Poverty patterns impact planning. For example, people with incomes below the poverty threshold rely more heavily on public services. Housing vouchers are available for individuals and families with qualifying incomes. Frequently, low-income populations bear a disproportionate share of the negative impacts from new development and infrastructure projects, raising issues of environmental justice.

## Poverty and Race

Poverty has a racial component (**Table 3**). In Grand Forks, an estimated 7.6% of families with a White householder are living under the poverty threshold. The incidence of poverty is higher for families with a Black or African American householder (10.0%) and for families with a householder who is an American Indian or Alaska Native (43.6%).

**Table 3. Poverty and Race**

Families with a householder who is . . .	Percentage of Families below Poverty Level
White alone	7.6%
Black or African American alone	10.0%
American Indian or Alaska Native alone	43.6%
Asian alone	7.4%
Native Hawaiian or Other Pacific Islander alone	Insufficient Data
Some other race alone	5.1%
Two or more races	8.8%
Hispanic or Latino (of any race)	4.7%
White alone, not Hispanic or Latino	7.7%

Source: 2019 American Community Survey 5-Year Estimates

Like the geographic distribution of race, areas of concreted poverty exist in Grand Forks (See Figure 9). The poverty rate exceeds 40.0% for three Census Block Groups.

## LANGUAGE SPOKEN AT HOME

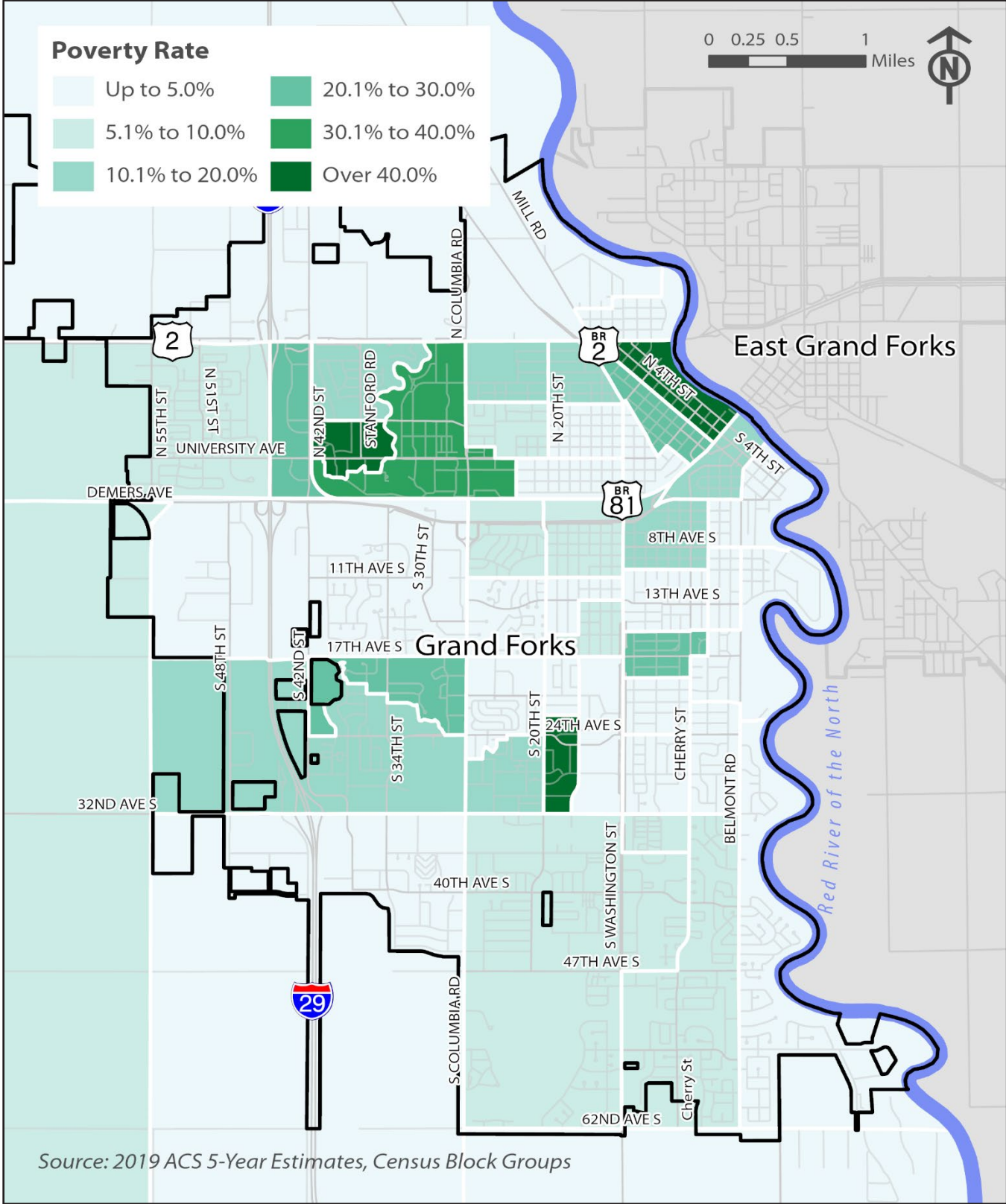
Individuals who do not speak English fluently may experience limited employment opportunities, face challenges accessing basic goods and services, and typically have marginalized representation within a community. In Grand Forks, English is a second language for approximately 8% of the population, with the level of English proficiency ranging from very limited to fluent. The data below indicates the prevalence of various language groups within Grand Forks (2019 ACS 5-Year Estimates). This data may also indicate the presence of cultural differences that warrant attention as part of effective communication and engagement strategies, as well as opportunities to expand multicultural activities in the city. This planning effort shall utilize and support the MPO's Environmental Justice Program Manual to support the activities and direction established by the MPO.

Language spoken at home for the population aged 5 years and over:

- English: 48,842 (92.3%)
- Spanish: 784 (1.5%)
- Other Indo-European Languages: 1,524 (2.9%)
- Asian and Pacific Island languages 915 (1.7%)
- Other languages: 837 (1.6%)



Figure 9. Poverty Rate



## DISABILITY CHARACTERISTICS

Residents of Grand Forks with disabilities or limited mobility have unique transportation and service needs. The city's long-range planning and policies should ensure proper access to employment, healthcare, and social services for these populations. The 2019 ACS estimates that 5,528 people in Grand Forks would identify as experiencing a disability. This accounts for nearly 10% of the total population. The majority of differently abled residents experience cognitive or ambulatory disabilities (**Table 4**).

Age is a factor in experiencing a disability. The percentage of the population experiencing a disability increases dramatically for older age groups (**Figure 10**). The percentage of residents aged 35 to 64 who experience a disability is approximately 12.7%. This increases to 24.5% for the group aged 65 to 74 and 38.9% for the group aged 75 or older. The risk of experiencing cognitive, mobility, hearing, and other impairments increases as we age.

Nonetheless, age is not the only link to disability. Approximately 8% of the population that is working age (18 to 64) was experiencing a disability at the time of survey. Ambulatory difficulty is by far the most common disability within this age group. Individuals with ambulatory difficulty may desire and require mobility accommodations so they can work, maintain their independence, and engage with their community. The city has a responsibility to provide safe, accessible transportation facilities, public engagement opportunities, and other accommodations that meet that the minimum standards of the Americans with Disabilities Act (ADA).

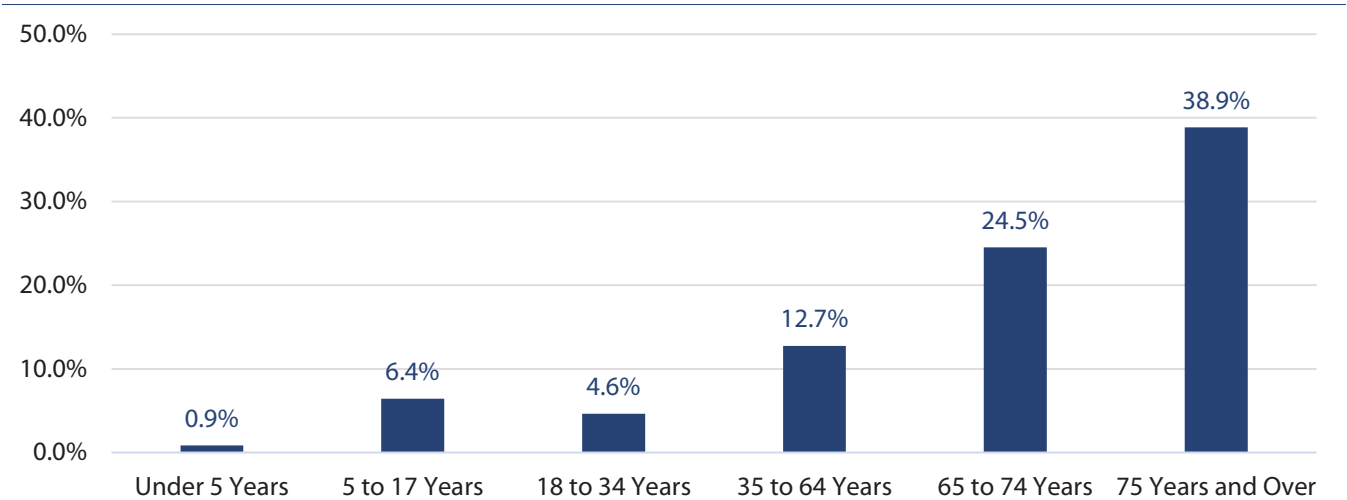
*As Grand Forks ages, a greater percentage of the population will be impacted by a disability. This will necessitate expansion and adaptation of accessible housing, infrastructure, and transportation services.*

**Table 4. Disability Statistics, 2019**

Disability Type	Number of Residents	Percentage of Population
Hearing	1,522	2.7%
Vision	922	1.7%
Cognitive	2,397	4.6%
Ambulatory	2,603	5.0%
Self-care	859	1.7%
Independent Living	1,428	3.2%
<b>Total Population Reporting One or More Disabilities</b>	<b>5,528</b>	<b>9.9%</b>

Source: 2019 American Community Survey 5-Year Estimates

Figure 10. Disability by Age, 2019



Source: 2019 American Community Survey 5-Year Estimates

## ECONOMY

An understanding of changes and trends within the local economy can be used to inform the economic health of an area along with future needs from both a policy and land use perspective. The following section reviews existing economic characteristics for the City of Grand Forks and the regional economy. A large portion of the data presented in the following section is presented in terms of the regional economy including either the Grand Forks ND-MN Metropolitan Statistical Area or Grand Forks County. While Grand Forks is the most significant node in these two areas, it is important to examine the health of the overall area to understand the big picture. The following geographies are used to present economic data and trends within the following pages:

- City of Grand Forks – This geography examines areas within Grand Forks city limits
- Grand Forks County – This geography examines the entirety of Grand Forks County, including all municipalities and townships
- Grand Forks ND-MN Metropolitan Statistical Area – The geography examines the greater metropolitan area, including both Grand Forks County, North Dakota and Polk County, Minnesota

### CITY OF GRAND FORKS EMPLOYMENT

According to federal employment data obtained via EMSI, the City of Grand Forks was home to 39,122 jobs in 2020. This total represents employment located within city limits, including sole proprietors and full-time self-employed workers. Over the past decade, the number of jobs in the city has remained stable, growing about 2% from 2010 until 2019, but declining in 2020 largely due to impacts of the COVID-19 pandemic.

#### Employment by Industry

The jobs located within the City of Grand Forks are stratified by industry (**Table 5**). The largest industries include government (including state and local education, 22.4%), health care and social assistance (17.5 percent), and retail trade (12.5 percent). The presence of Altru and the University of North Dakota are major contributors to these industries. Additionally, the city's role as a regional center is a driver of the high number of retail employment opportunities.

### EMPLOYMENT FLOW

U.S. Census Longitudinal Employer-Housing Dynamics data examines the flow of employment within a specific area to understand the number of employees that live within the same area or who travel from outside for employment. Additionally, the data examines where residents of an area travel for employment. In 2018, nearly 55 percent of jobs within the City of Grand Forks were held by employees who also lived within the City (19,442 jobs). Therefore, nearly 16,000 jobs are held by individuals traveling from outside of the city for employment. This stresses the importance of the regional economy. Additionally, just over 70 percent of City of Grand Forks residents also work within city limits. The remaining 30 percent travel to other locations for work each day. The top three locations that residents leave the city for employment include East Grand Forks (6.7 percent), Fargo (3.1 percent), and Bismarck (1.3 percent).

**Table 5. City of Grand Forks Employment by Industry, 2020**

Industry	Jobs	Share of Total
Agriculture, Forestry, Fishing & Hunting	658	1.7%
Mining, Quarrying, & Oil & Gas Extraction	<10	--
Utilities	249	0.6%
Construction	2,199	5.6%

Manufacturing	2,551	6.5%
Wholesale Trade	1,106	2.8%
Retail Trade	4,897	12.5%
Transportation & Warehousing	1,295	3.3%
Information	228	0.6%
Finance & Insurance	831	2.1%
Real Estate & Rental & Leasing	492	1.3%
Professional, Scientific, & Technical Services	1,551	4.0%
Management of Companies & Enterprises	254	0.7%
Administrative & Support & Waste Management & Remediation Services	1,344	3.4%
Educational Services	295	0.8%
Health Care & Social Assistance	6,843	17.5%
Arts, Entertainment, & Recreation	589	1.5%
Accommodation & Food Services	3,341	8.5%
Other Services (except Public Administration)	1,638	4.2%
Government (Including Local & State Education)	8,759	22.4%
<b>Total</b>	<b>39,122</b>	

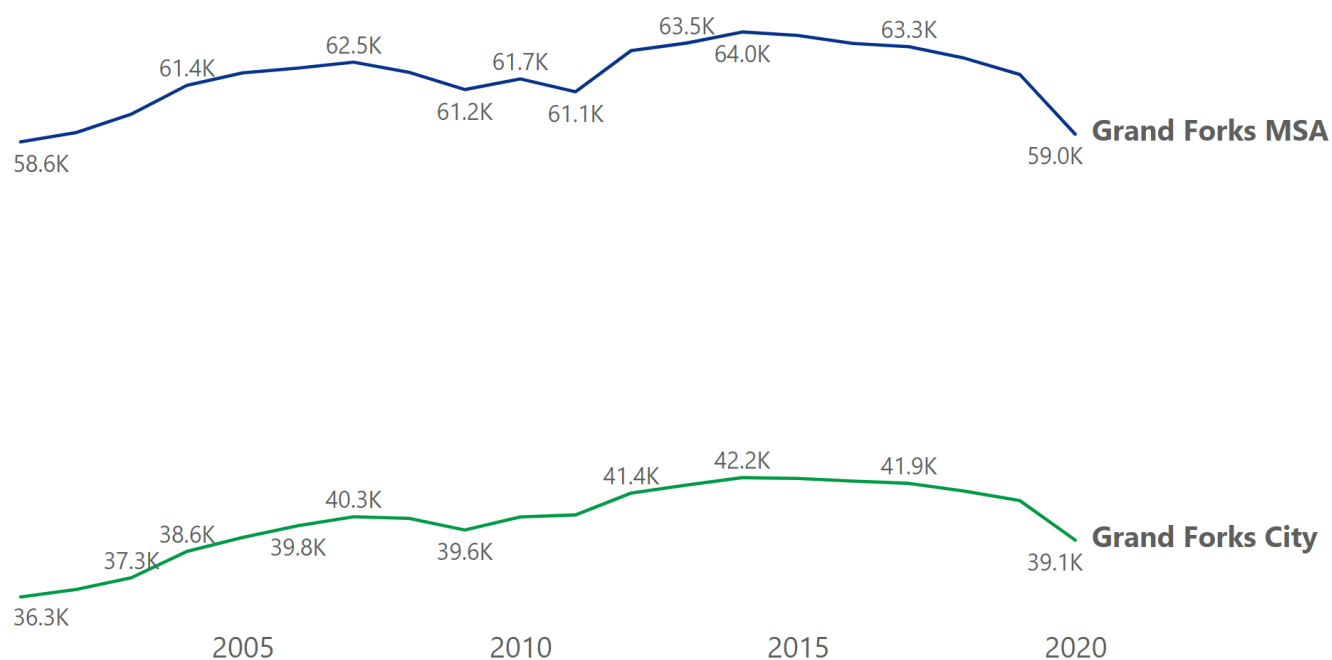
Source: EMSI, 2021.4

## REGIONAL ECONOMY

The City of Grand Forks is the most significant node in the broader Grand Forks, ND-MN Metropolitan Statistical Area economy. As of 2020, there are about 59,000 jobs located in the two-county region, with roughly 66% within the City of Grand Forks. Employment has remained flat over the past decade, with modest growth during the first half of the 2010s, with job losses following in the second half of the decade, including significant losses in 2020 due to the COVID-19 pandemic (**Figure 11**). Overall employment is down 2% from 2010-2020 in the two-county region, with Grand Forks County losing 1% of jobs over this period. Though the labor and retail markets comprise both counties, Grand Forks County slightly outperformed neighboring Polk County, Minnesota from 2010-2020.



Figure 11. Employment in Grand Forks City and Grand Forks MSA, 2001-2020



Source: EMSI, 2021.4

## INDUSTRY SIZE AND GROWTH

The relative size and growth trajectory of particular industry sectors in the Grand Forks region is a key determinant of growth, income generated, and the demand for land and development. Due largely to the presence of the University of North Dakota (UND), Grand Forks Air Force Base, and other federal institutions such as the U.S. Customs and Border Patrol Regional Offices, the government sector dominates the local economy. With more than 11,000 workers, the government sector accounts for more than one fifth of all jobs in the City of Grand Forks County. The government sector is down 6% since 2010, due in part to significant state budget cuts resulting in layoffs at UND during the middle part of the decade.

Other large sectors in the county include health care, retail, and accommodation and food. While the health care sector has grown locally, this sector has not kept pace with national growth in recent years. This lag is a significant contributor to the overall decline in employment from 2015-2020. Retail and hospitality sectors have seen declines, due in part to the impact of the Covid-19 pandemic and the rise and fall in the value of the Canadian Dollar during the 2010s. Grand Forks saw a retail boom during the first half of the decade as the Canadian Dollar reached par with the U.S. Dollar, yet most of this growth recoiled as the relative value of the Canadian Dollar dropped to \$.71 in 2016.

Growth of manufacturing in the region is perhaps the most significant economic trend over the past decade. The manufacturing sector rose 32% in the City of Grand Forks from 2010-2020. The City of Grand Forks holds 66% of the total jobs in the two-county metropolitan area. While Polk County dominates agriculture employment, the city is home to more than 66% of employment in several sectors, led by arts, entertainment, and recreation (85%); real estate (85%), professional, scientific, and technical services (83%); administrative services (81%), corporate headquarters (80%), retail (76%); accommodation and food (76%); and health care (73%).

Several smaller knowledge-based sectors are increasing momentum in the City of Grand Forks since 2010. Growing sectors include professional services (up 12%), arts and entertainment (5%), private sector education (70%), and

corporate headquarters offices (69%) (Table 6). While the sector remains small, robust growth in corporate headquarters is a positive signal for the rest of the economy. However, the finance sector is declining significantly.

The local development sector appears healthy. Construction employment in the region is up 11% over the decade and real estate, rental, and leasing grew 23%. This may point to a continued trend in development momentum.

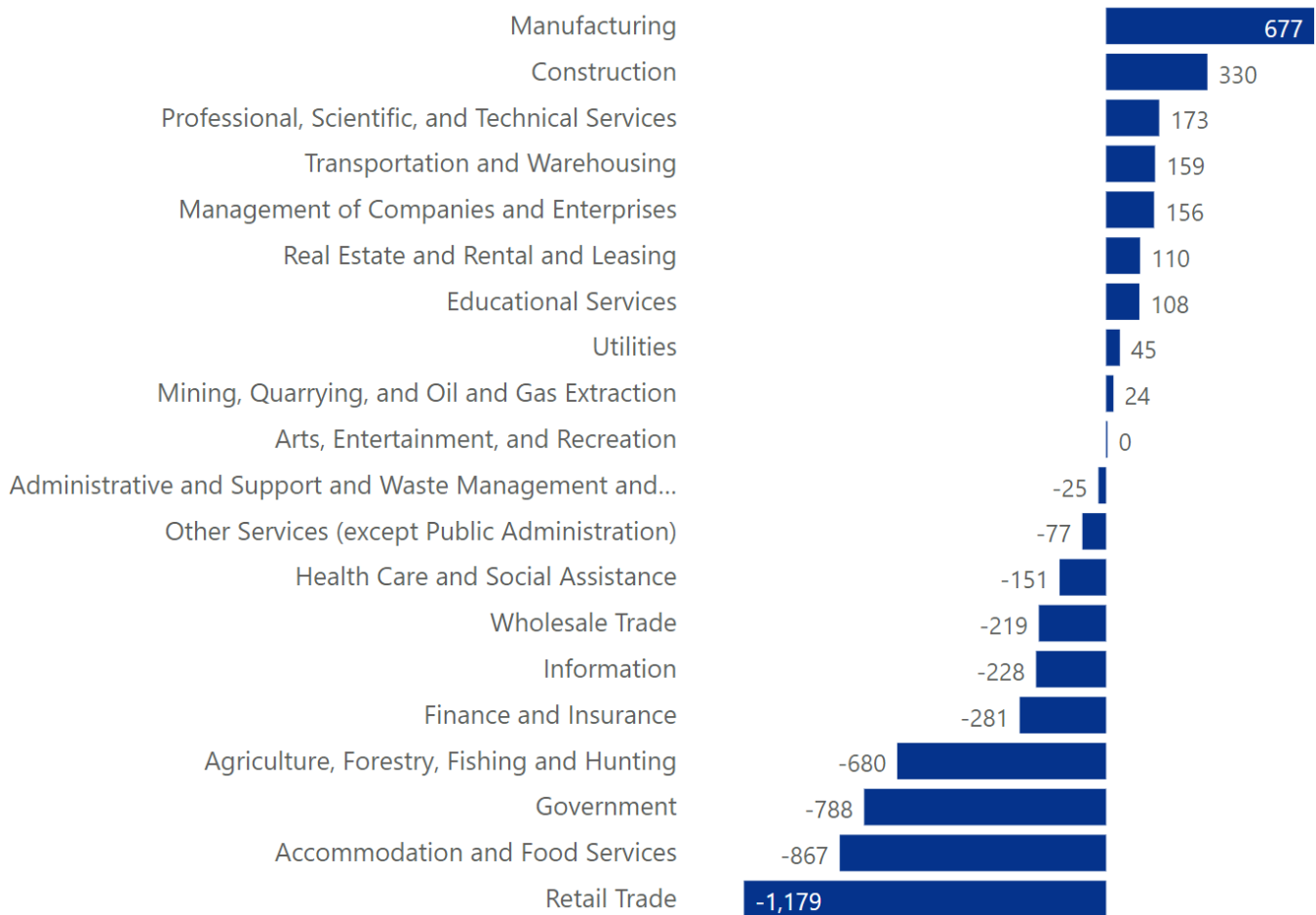
**Table 6. 2020 Employment by Sector and 2010-2020 Percent Change, Grand Forks City and Grand Forks MSA**

Industry	GF City Jobs	GF City % Change	GF MSA Jobs	GF MSA % Change	City Share of MSA Jobs
Government	8,759	-7.0%	14,276	-5.2%	61.4%
Health Care & Social Assistance	6,843	4.1%	9,340	-1.6%	73.3%
Retail Trade	4,897	-13.7%	6,432	-15.5%	76.1%
Accommodation & Food Services	3,341	-14.6%	4,409	-16.4%	75.8%
Manufacturing	2,551	32.3%	4,255	18.9%	59.9%
Construction	2,199	6.0%	3,250	11.3%	67.7%
Agriculture, Forestry, Fishing & Hunting	658	-26.2%	3,006	-18.5%	21.9%
Other Services (except Public Administration)	1,638	-5.9%	2,680	-2.8%	61.1%
Transportation & Warehousing	1,295	9.9%	1,942	8.9%	66.7%
Professional, Scientific, & Technical Services	1,551	12.3%	1,877	10.1%	82.6%
Wholesale Trade	1,106	-2.3%	1,756	-11.1%	63.0%
Administrative & Support & Waste Management & Remediation Services	1,344	-2.5%	1,652	-1.5%	81.4%
Finance & Insurance	831	-22.2%	1,159	-19.5%	71.7%
Arts, Entertainment, & Recreation	589	5.2%	695	0.1%	84.9%
Real Estate & Rental & Leasing	492	24.8%	581	23.5%	84.6%
Information	228	-40.8%	456	-33.3%	50.0%
Educational Services	295	69.7%	446	32.0%	66.2%
Utilities	249	1.6%	327	15.9%	76.1%
Management of Companies & Enterprises	254	68.6%	317	96.7%	80.1%
Mining, Quarrying, & Oil & Gas Extraction	--	--	154	18.3%	--
<b>Total</b>	<b>39,122</b>	<b>-2.9%</b>	<b>59,011</b>	<b>-4.4%</b>	<b>66.3%</b>

Source: EMSI, 2021.4

In terms of total jobs, the manufacturing sector has contributed most to local growth, adding 677 new positions in the past decade (Figure 12). This was followed by construction. The professional services sector, while undersized for the region, added 173 new jobs. Down 1,176 jobs, retail was the biggest loser, though it should be noted that a significant number of these were customer service positions cut by Amazon when it closed a local facility. Many of these Amazon workers remain in the region as contract workers, yet do not appear in official job counts. Government lost nearly 800 jobs (mostly in state university employment) and the agriculture sector shed another 680 jobs. The slow decline in agricultural production is likely to continue as the industry continues to be mechanized and farms are consolidated.

Figure 12. Employment Growth by Sector in Grand Forks MSA, 2010-2020



Source: EMSI, 2021.4

## INDUSTRY STRUCTURE

Another way to understand industry structure in the region is to measure employment concentration (**Table 7**). Table 7 depicts the relative concentration of each sector in the City of Grand Forks and the greater region as a percentage of the national share of jobs. Utilities is the most highly-concentrated sector, at 1.8 times national average in the city and 1.6 times above national average in the metropolitan area.

Due to its role as a regional center, the city shows concentrations in health care and retail at about 34% above national average size. Retail and accommodation and food are both significantly above average and higher in the City of Grand Forks than the greater region, suggesting that the City of Grand Forks is capturing more than its regional share of retail, hotel, and food service businesses. The construction sector is roughly average for the economy’s size.

Table 7. Sector Job Concentration Relative to National Average, 2020

Industry	GF County	GF MSA
Utilities	182%	159%
Government (Including Local & State Education)	147%	158%
Agriculture, Forestry, Fishing & Hunting	136%	412%
Health Care & Social Assistance	134%	121%
Retail Trade	128%	111%
Accommodation & Food Services	119%	104%
Arts, Entertainment, & Recreation	106%	83%
Construction	97%	95%
Manufacturing	83%	92%
Transportation & Warehousing	81%	81%
Other Services (except Public Administration)	80%	87%
Wholesale Trade	77%	82%
Real Estate & Rental & Leasing	73%	57%
Professional, Scientific, & Technical Services	58%	47%
Administrative & Support & Waste Management & Remediation Services	57%	46%
Finance & Insurance	50%	46%
Management of Companies & Enterprises	44%	37%
Information	32%	43%
Educational Services (Private)	29%	29%
Mining, Quarrying, & Oil & Gas Extraction	1%	75%

Source: EMSI, 2021.4

While it has grown significantly in recent years, the county's manufacturing sector remains 17% below national average relative to other sectors in the local economy. Polk County, MN and much of the northern Red River Valley region enjoy over-concentrations of manufacturing, so continued growth of manufacturing may be assumed, even if only to approach national average concentration. Grand Forks County is practically strung in food products, industrial machinery, and composite materials manufacturing.

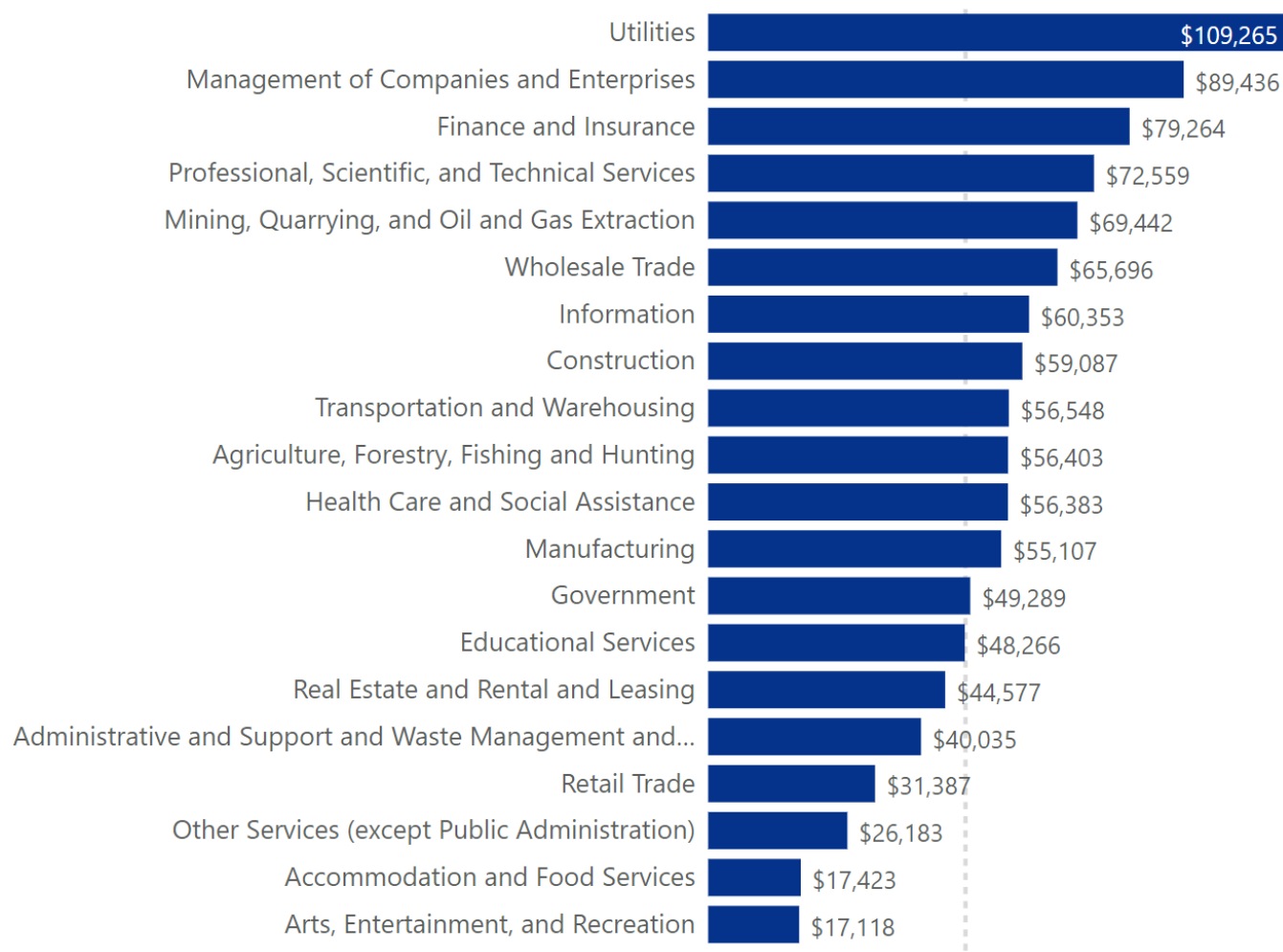
The city lags the nation significantly in several key "white collar" knowledge-based services sectors. These include professional, scientific, and technical services; finance and insurance; information, and corporate headquarters. All of these sectors are 50% smaller than average (or more) and are a significant economic development priority in the City of Grand Forks.

## INDUSTRY EARNINGS PER WORKER

Due to their increased economic impact and elevation of quality of life, economic development strategy typically targets high-wage sectors. In 2020, the overall earnings per worker (exclusive of benefits) was \$48,402. However, this varies greatly across industry sectors (See **Figure 13**). The highest-paying sectors in the metropolitan area include utilities, corporate headquarters, finance, and professional services, all averaging more than \$70,000 in earnings per worker. Health care (\$55,700) and manufacturing (\$54,00) are each well above the overall average.

Several of the region’s largest industries are also the lowest paying. Retail averages roughly \$30,000 per year, other services (such as personal care or repair and maintenance) averages about \$25,000, and accommodation and food just above \$17,000. Earnings are driven down in many of these sectors due to the high reliance on part-time workers.

**Figure 13. Wages, Salaries, and Proprietor Earnings per Worker by Sector, Grand Forks MSA, 2020**



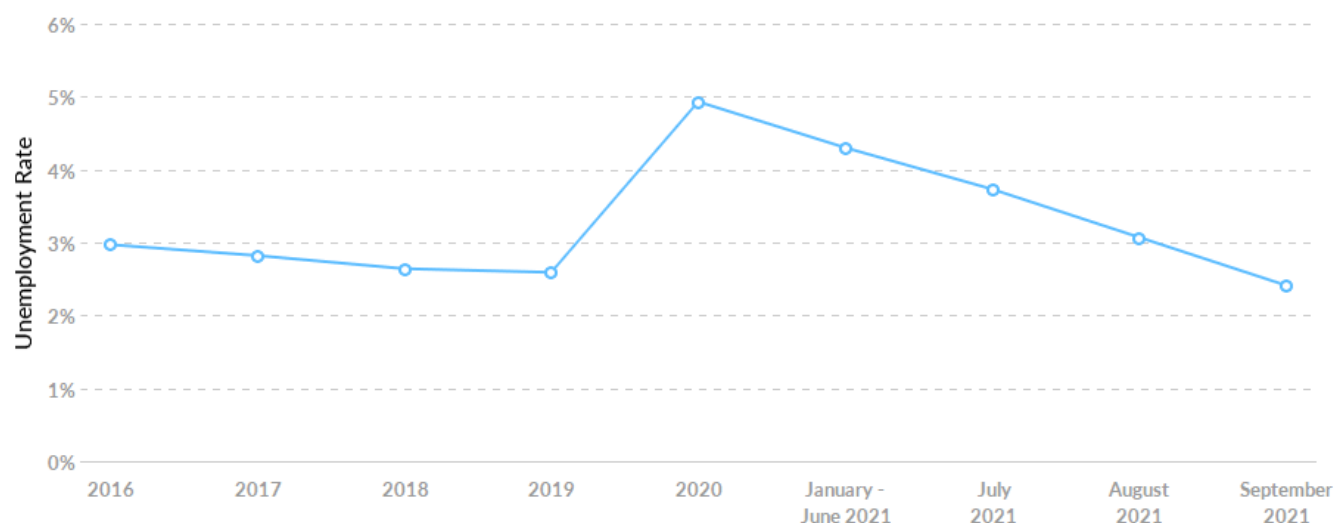
Source: EMSI

## UNEMPLOYMENT

The Grand Forks regional economy has enjoyed low unemployment levels in its recent history, typically remaining below 3%. This persistently low unemployment could be considered a sign of tight labor markets and low supply of talent to fill open positions. While the unemployment rate did spike upwards during the pandemic, it stabilized at a rate below 4% in the last few months of 2020 and reached pre-pandemic levels of below 3% by late 2021 (See **Figure 14**). This suggests that specific workforce challenges may persist, as the bulk of pandemic-related worker displacement occurred in hospitality sectors, while the manufacturing sector continued to grow, and professional services business remained stable.



Figure 14. Unemployment Trend, Grand Forks MSA, 2015-2020



Source: EMSI, 2021.4

## INDUSTRY CLUSTERS AS BUILDING BLOCKS FOR THE FUTURE ECONOMY

Industry clusters are groups of industries across various sectors with some degree of affinity in scope or identity. One example of a key industry cluster pursued in the Grand Forks Region is autonomous systems, which includes elements of aerospace, computer science, robotics, or special manufacturing. The key anchor cluster in the region is perhaps agribusiness, which would include production agriculture, but also value-added food product manufacturing, ag-specific professional services, precision agriculture technologies, and even crossover into autonomous systems.

This cluster analysis is a scoring system aiming to identify the key and emerging clusters that will impact Grand Forks land use in future years. The analysis scores each cluster in Grand Forks County on a scale of 1-100 (**Table 8**) in five equally-weighted factors:

- Earnings, with high-earnings sectors scoring higher
- Growth trend
- Regional competitiveness, with local industries that exceed national growth rates scoring higher
- Regional specialization, with industries exceeding national job concentration scoring higher
- Gross Regional Product, with industries making a high contribution to local gross regional product scoring higher

This index balances growth trajectory, measures of local competitive advantage, and economic impact to help understand how the economy may behave in the near future. These economic shifts are likely to influence demand for local land use and development. Cluster definitions are based on those developed by the U.S. Cluster Mapping Project.

The list of top clusters in Table 8 offers several key takeaways with implications on land use demand:

- Several strong clusters in industrial manufacturing, including vehicles, aerospace, food products, and machinery
- Emerging competencies in high-tech, knowledge-based, and financial services sectors, even though the region significantly lags the nation in these areas currently

- Distribution and electronic commerce scores well due the presence of wholesalers. This cluster could serve as a catalyst for further industrial development

**Table 8. Top Economic Clusters, 2020**

Cluster	2020 Jobs	Index Score
Aerospace Vehicles and Defense	399	94
Electric Power Generation and Transmission	206	92
Local Education and Training	3,123	87
Federal Government Services	3,264	85
Information Technology and Analytical Instruments	100	83
Financial Services	222	79
Food Processing and Manufacturing	1,231	77
Local Utilities	249	75
Business Services	1,413	74
Production Technology and Heavy Machinery	551	72
Nonmetal Mining	156	71
Downstream Metal Products	130	71
Transportation and Logistics	1,046	70
Automotive	353	70
Wood Products	70	70
Local Health Services	8,424	69
Local Financial Services	957	69
Distribution and Electronic Commerce	959	68
Footwear	57	68
Furniture	192	67
Metalworking Technology	21	67
Construction Products and Services	140	67

Source: U.S. Cluster Mapping Project, 2020

## HOUSING

Since the early 2010s, housing has become a policy area of focus for the City of Grand Forks. The City sponsored a special commission in 2012 to address housing policy and revisited the issue later in the decade to tweak infrastructure financing policies to help stimulate more residential land development. Following the 2012 commission, the city saw a boom of multifamily development and some increase in new single-family home building following 2016 policy refinements. However, housing remains a critical issue as employers and policymakers in the city focus on recruiting more people to the region to fill open jobs. The city's recent shift towards a higher concentration of young families may require more adaptation of the housing stock.

### HOUSING STOCK AND SUPPLY

Perhaps the most striking characteristic of housing in the City of Grand Forks is its skew towards rental housing. According to the most recent ACS data, 56% of housing units in Grand Forks are renter-occupied compared to 36% nationally. The share of renters in Grand Forks has risen in the last decade from 50% according to the 2006-2010 ACS data.

#### Type of Unit

This rental skew is reflected in the city's housing unit distribution (**Table 9**). Just 37% of total units are single-family detached homes compared to 62% nationally. Forty percent of units in the city are in multi-family buildings of 10 or more units, roughly three times higher than the national average. Grand Forks is roughly average for duplex, triplex, and others in buildings with fewer than 10 units.

**Table 9. Housing Unit Distribution, Grand Forks vs. Nation**

Unit Type	City of Grand Forks	United States
1-unit, detached	36.5%	61.6%
1-unit, attached	7.7%	5.9%
2 units	3.1%	3.6%
3 or 4 units	4.6%	4.4%
5 to 9 units	4.8%	4.7%
10 to 19 units	10.0%	4.4%
20 or more units	30.1%	9.2%
Mobile home	3.3%	6.2%

Source: American Community Survey 5-Year Estimates, 2015-2019

Part of this skew is due to the city's role as a university and military community. Students and young air force personnel are more likely to be renters, particularly as the university and U.S. Airforce have divested institutional housing in recent years. This makes Grand Forks what could be considered a "high churn" region, with residents moving in and out of housing units at a much higher rate than national average. About 40% of Grand Forks householders moved into their current housing unit in the last four years, and nearly one fifth within the last two years, levels nearly twice the national average (**Table 10**).

**Table 10. Year Householder Moved into Unit**

Year Moved into Unit	City of Grand Forks	United States
Moved in 2017 or later	19.4%	10.3%
Moved in 2015 to 2016	23.8%	15.2%
Moved in 2010 to 2014	26.0%	24.4%
Moved in 2000 to 2009	14.0%	24.2%
Moved in 1990 to 1999	8.4%	12.7%
Moved in 1989 and earlier	8.4%	13.2%

Source: American Community Survey 5-Year Estimates, 2015-2019

The rental distribution skew also impacts the size and number of rooms across all Grand Forks housing units. The median number of rooms in Grand Forks units is 4.8 compared to the national median of 5.5 (**Table 11**). This means the concentration of units with three or fewer rooms is much higher than national average, while the city lags in units of six, seven, and eight rooms.

**Table 11. Distribution of Housing Units by Number of Rooms, Grand Forks vs. Nation**

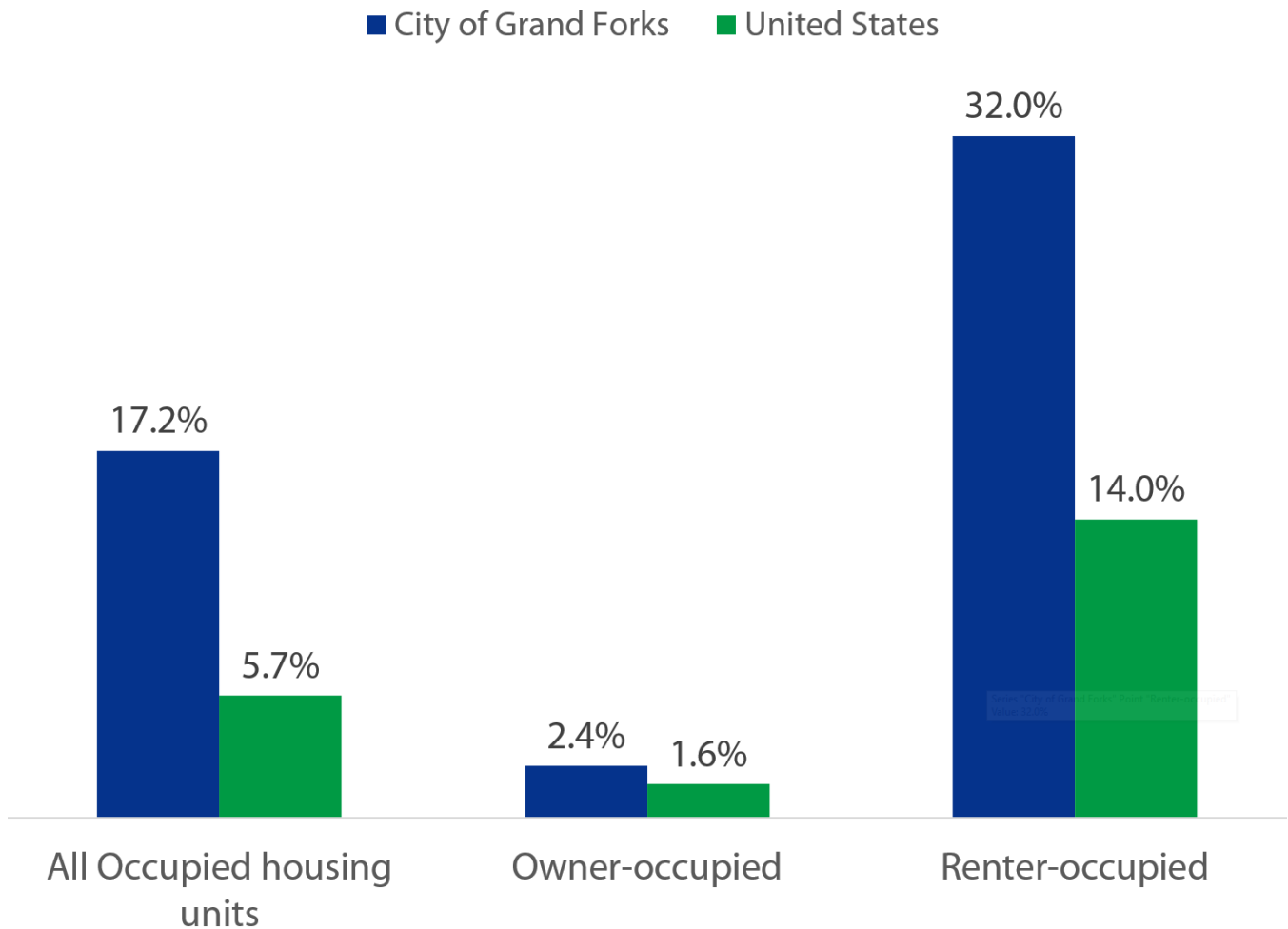
Number of Rooms per Unit	City of Grand Forks	United States
Total housing units	27,137	137,428,986
1 room	2.8%	2.3%
2 rooms	5.3%	2.7%
3 rooms	19.5%	9.0%
4 rooms	18.8%	16.3%
5 rooms	13.6%	19.6%
6 rooms	11.8%	17.8%
7 rooms	7.7%	12.1%
8 rooms	7.1%	8.7%
9 rooms or more	13.4%	11.5%
Median rooms	4.8	5.5

Source: American Community Survey 5-Year Estimates, 2015-2019

## Growth of Units

According to ACS data, over the past decade the number of housing units in Grand Forks has grown 17%, more than three times the national rate. Renter-occupied units grew at a much higher rate than owner-occupied units, which has driven up the relative concentration of renter-occupied units in the city (**Figure 15**). While owner-occupied units grew just 2.4%, this was half again above the national rate. This shift caused the household size of owner-occupied units in the city to drop from 2.59 in 2010 to 2.4 in 2019 and the renter-occupied size to drop from 1.95 to 1.83. These are below the 2019 national household sizes of 2.7 for owner-occupied and 2.49 for renter-occupied.

Figure 15. Growth of Housing Units by Tenure, 2010-2019, Grand Forks vs. Nation



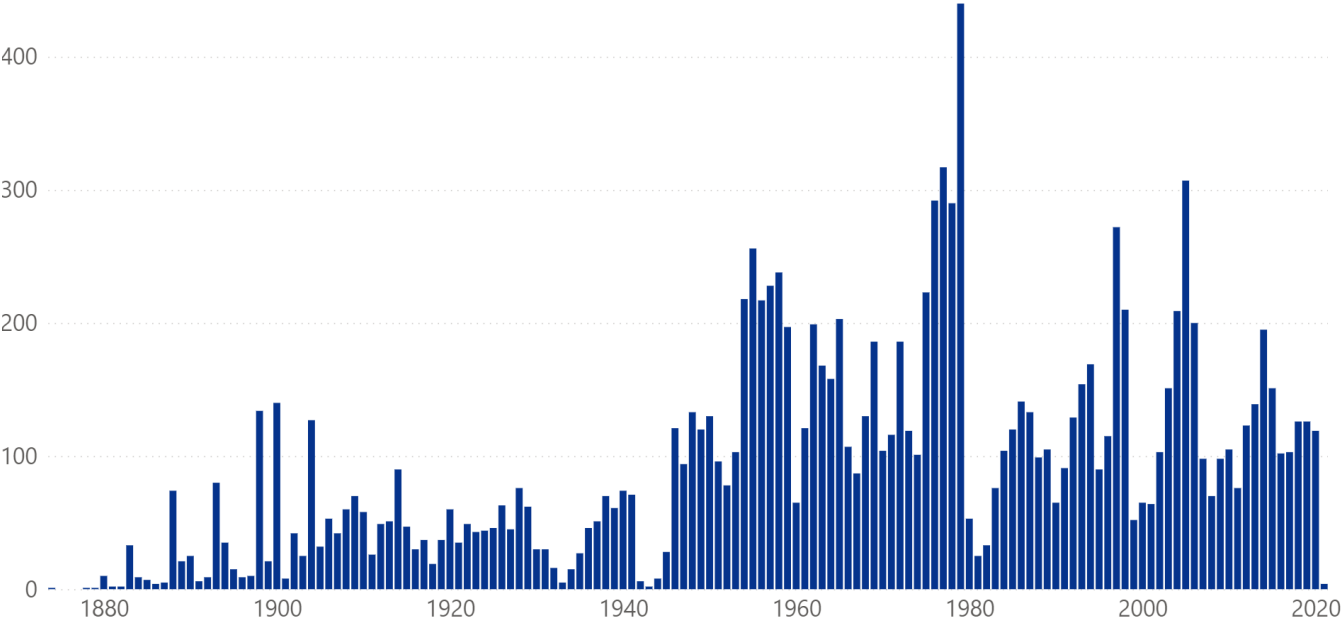
Source: American Community Survey 5-Year Estimates, 2015-2019

**City Parcels: Type of Unit**

According to the City’s database, there are 13,431 residential units in the city. The median unit was constructed in 1973, with a median living area of 1,283 square feet, lot size of 7,752 square feet, value of \$194,900, and value per square foot of \$152. Noting that many older units in the city were lost in the flood of 1997, the following chart of current units by year built shows construction occurring in waves with the highest peak in the late 1970s, including 1979 when more than 250 condominiums were constructed (Figure 16).



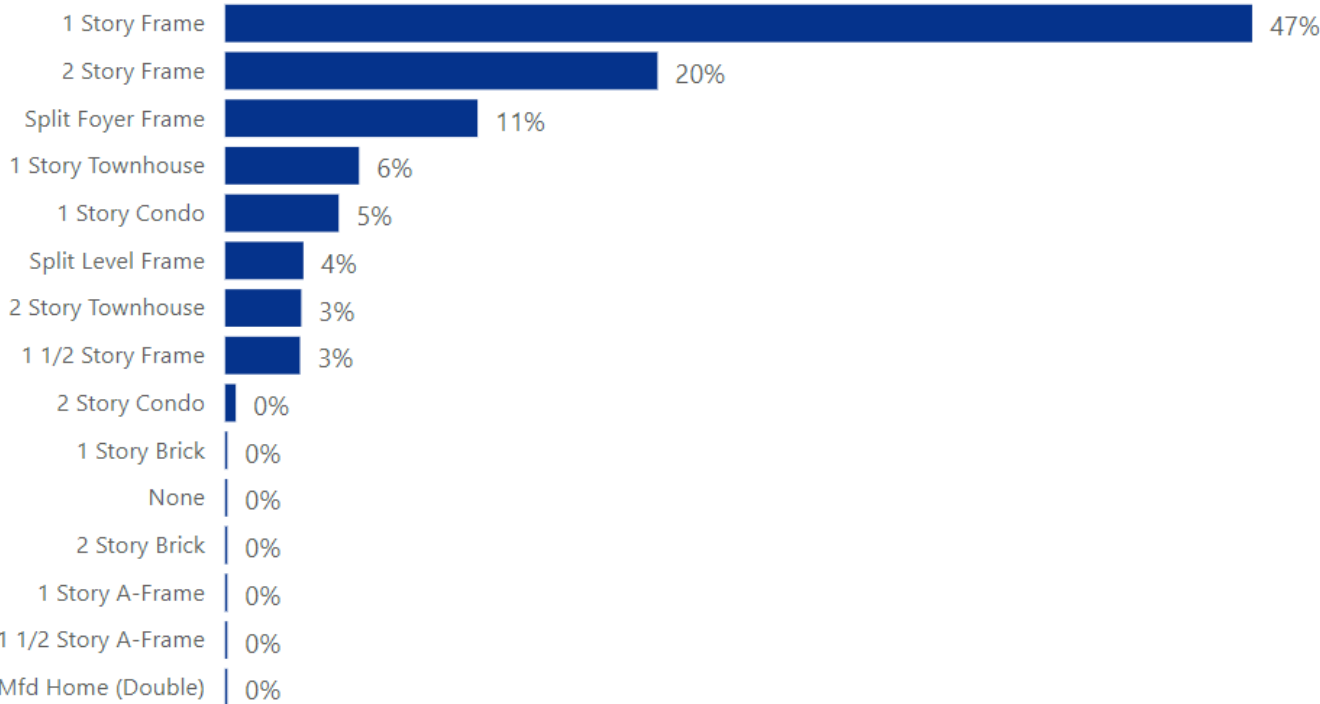
Figure 16. Distribution of Housing Units by Year Built



Source: City of Grand Forks

According to City data, nearly half of single-family units in the city are one-story frame, one-fifth are two-story frame, 15% are split foyer or split level, 9% are townhouses, and 5% are condominiums (Figure 17).

Figure 17. Distribution of Single Family Units by Type in Grand Forks



Source: City of Grand Forks

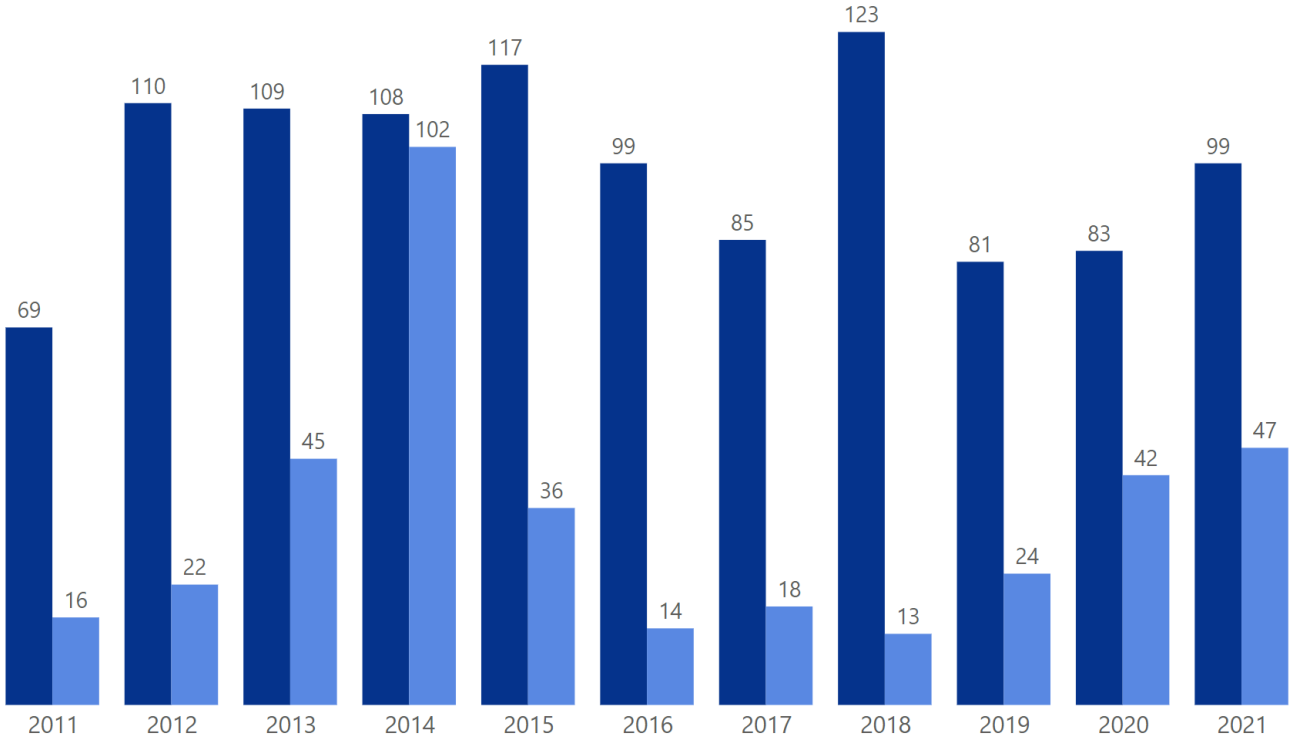
### Trends in Construction Building Permits

According to City data, on average, 101 single family units were permitted per year over the past decade. There were generally more single family units constricted during the first half of the decade with activity slowing after 2016. Townhouse units were constructed in waves, peaking in 2014 and accelerating in recent years (Figure 18).

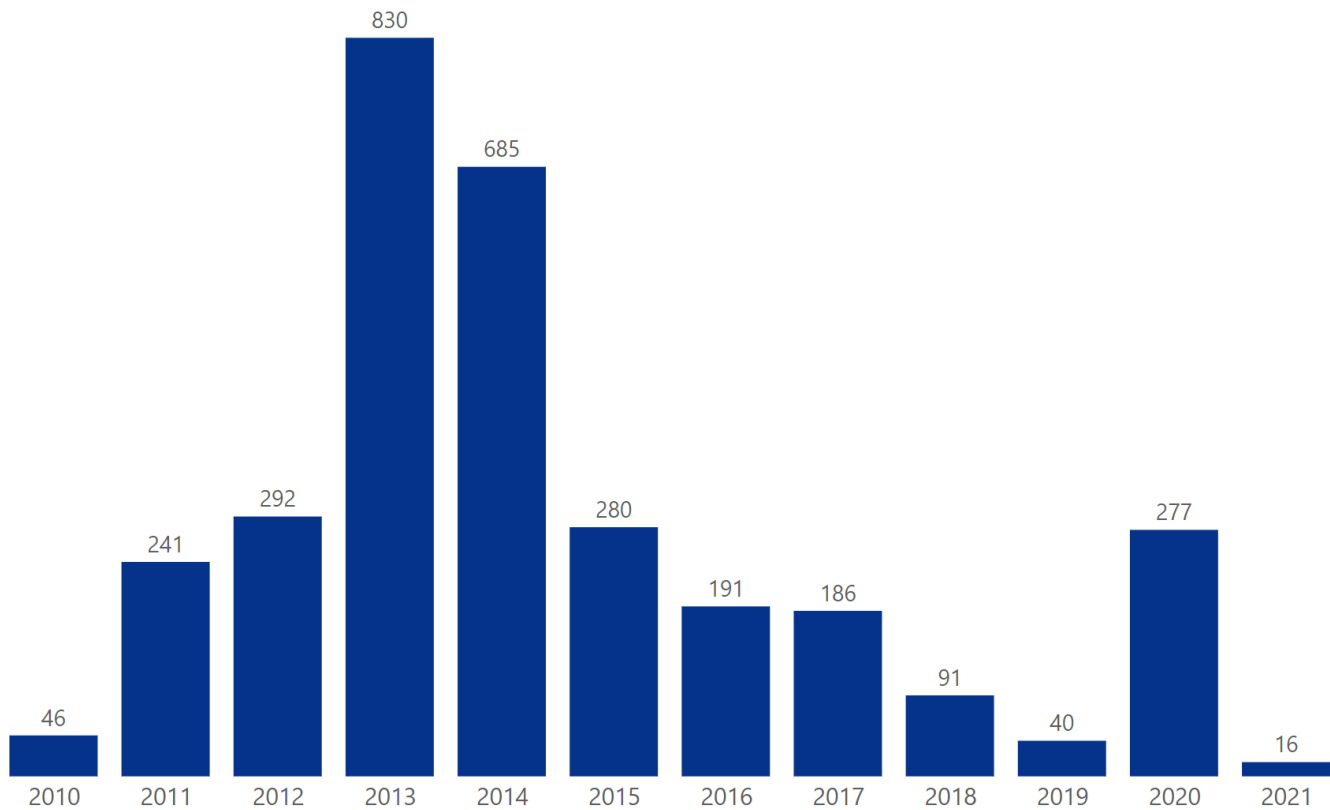
The city saw a boom of multifamily construction in 2013 and 2014, with a total of 1,515 units permitted in those years. Activity slowed following the boom, but another spurt of 277 units permitted in 2020 followed by the lowest permitted number in more than 10 years with 16 in 2021 (Figure 19).

Figure 18. Single Family and Townhouse Building Permits by Year in Grand Forks

Housing Type ● Single Family ● Townhouse



Source: City of Grand Forks

**Figure 19. Multifamily Building Permits by Year in Grand Forks**

Source: City of Grand Forks

## HOUSING DEMAND AND MARKET ANALYSIS

In calendar year 2021, the overall median home price in Grand Forks was \$249,150. This comprised median home prices of \$275,000 for single-family/owner-occupied units, \$196,200 for townhomes, and \$110,000 for condominiums.

### Market Trends

The past five years has seen several trends in the City of Grand Forks housing market (**Table 12**):

- The median home price rose to \$249,000 in 2021 after three consecutive years hovering around \$230,000,
- Sales transactions have decreased slowly from 712 in 2017 to 598 in 2021,
- Median square footage of sold units has declined slightly the past two years,
- Median lot size for sold units was roughly 7,600 square feet in 2020-2021 compared to 8,400 in 2018-2019,
- Price per square foot for sold units rose to \$188 in 2021 from \$170.
- By occupancy, 76% of units sold since 2017 were single-family/owner-occupied, 14% townhomes, and 7% condominiums. These trends held similar across individual years.

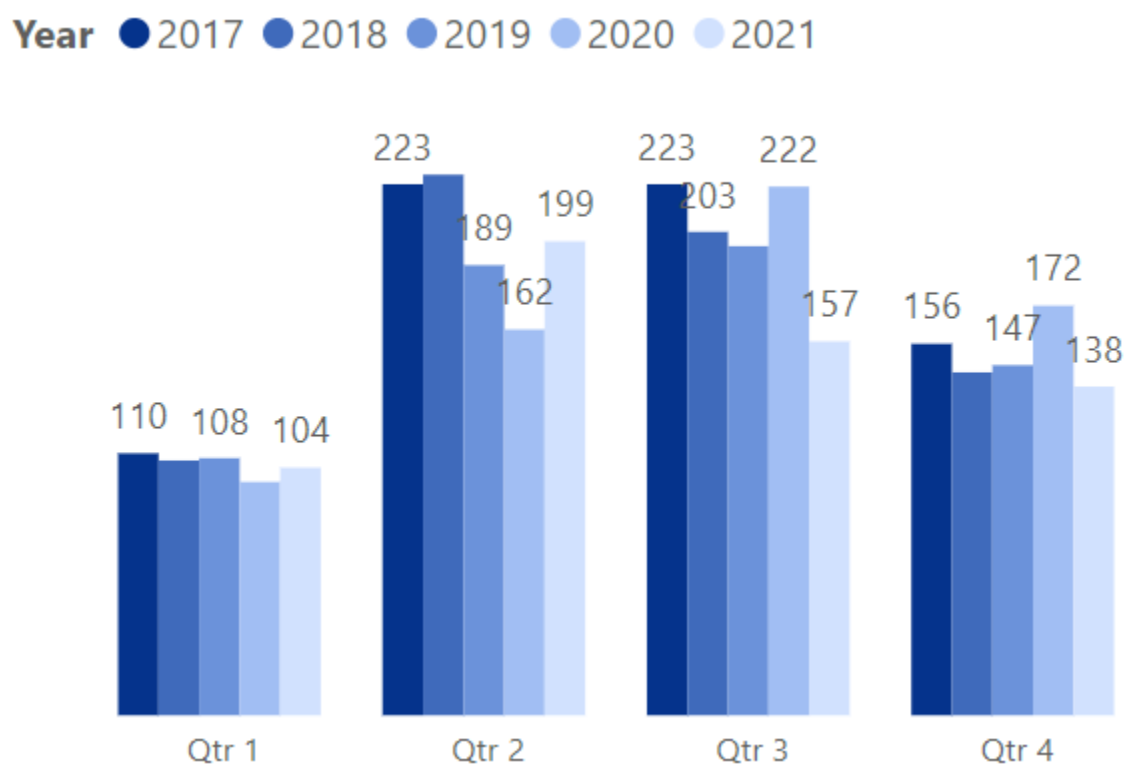
As a northern city, home sales in Grand Forks are highly seasonal. The market saw a strong rebound in sales volume during the third and fourth quarters of 2020 after the initial impact of COVID-19 business closures. However, fewer transactions occurred during the third and fourth quarters of 2021, with particularly low volume occurring during the third quarter of 2021 (**Figure 20**).

Table 12. Grand Forks Housing Sales Trends

Year	Number of Transactions	Median Sale Amount	Median Living Area	Price per Sq Ft	Median Lot Size	Median Year Built
2017	712	\$211,500	1,298	\$167	7,900	1977
2018	681	\$235,000	1,336	\$174	8,400	1979
2019	641	\$228,000	1,339	\$169	8,400	1979
2020	654	\$228,200	1,311	\$170	7,632	1978
2021	598	\$249,150	1,314	\$188	7,625	1979

Source: City of Grand Forks

Figure 20. Number of Sales Transactions by Quarter

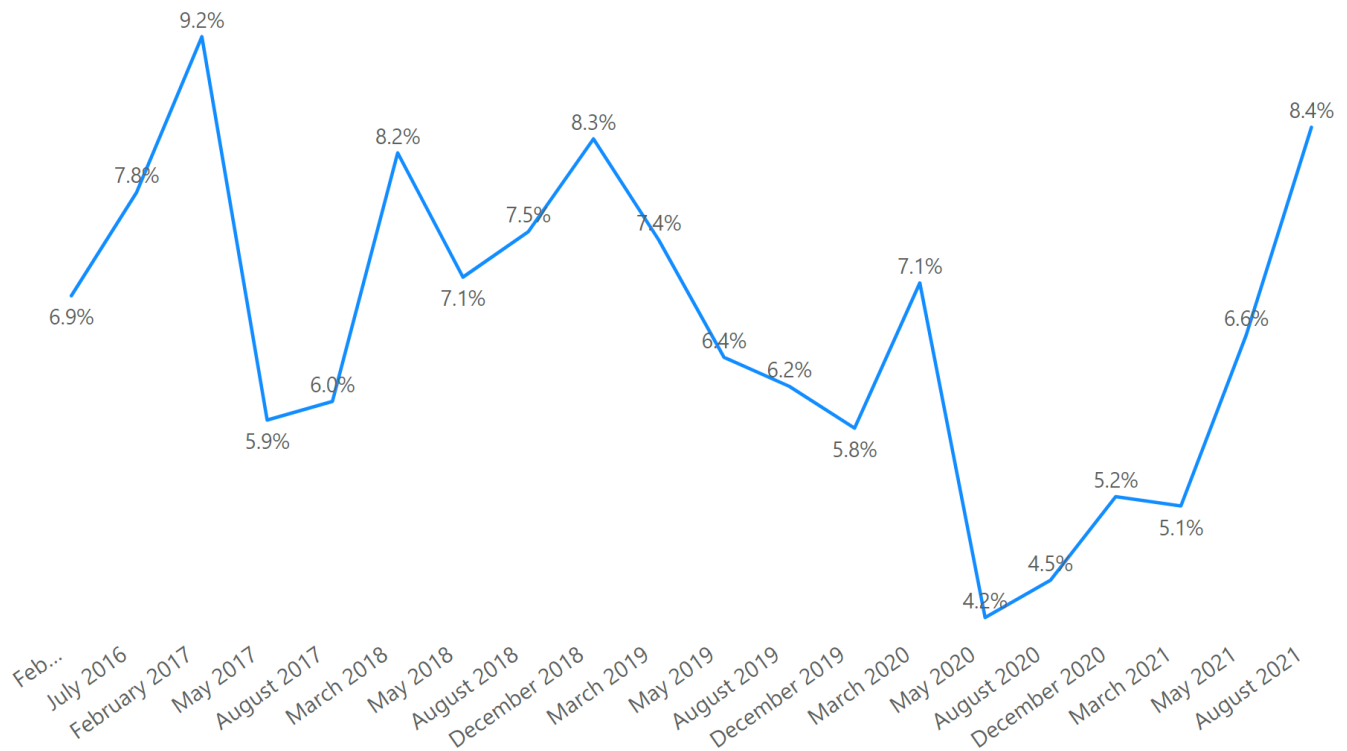


Source: City of Grand Forks

### Apartment Rental Demand

Over the past five years, apartment vacancy rates have seen a general downward trend from roughly 8% in early 2018 to at or below 5% in the winter of 2020 (**Figure 21**). Apartment vacancies spiked to above 8% in the fall of 2021, perhaps due to a combination of the coming online of 277 multifamily units permitted in 2020 and reduced post-pandemic enrollment of on-campus students at the University of North Dakota.

Figure 21. Recent Trends in Apartment Vacancy Rates



Source: Grand Forks Apartment Association Quarterly Survey

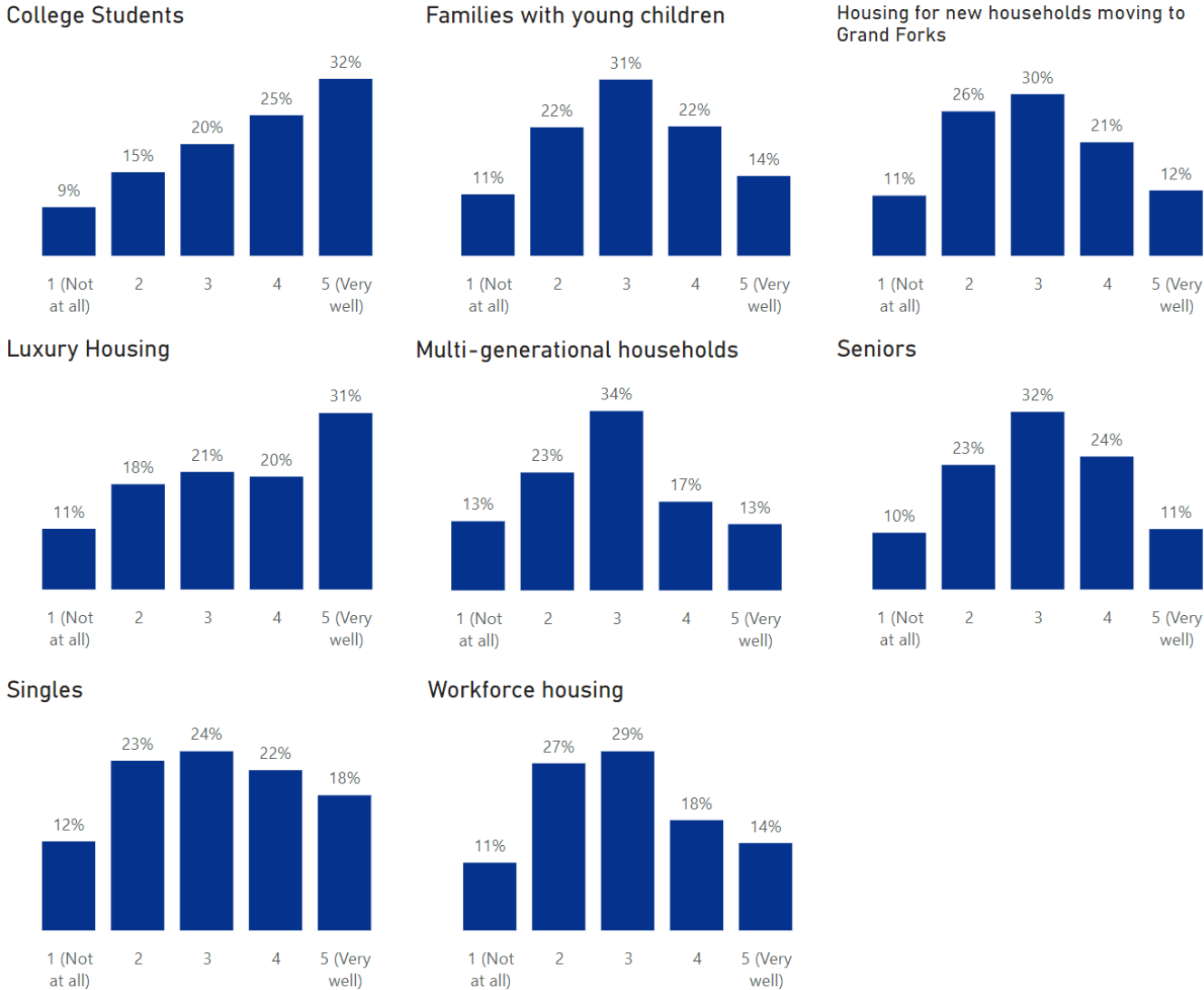
### Market Demand

A survey of area residents conducted for this plan garnered 890 responses and contained several insights about the perceptions of housing in the community. Fully two-thirds of local residents rated the cost of housing in Grand Forks to be poor or fair, with 30% calling it poor. A majority of residents were generally positive about other aspects of the community that impact housing, such as athletic facilities and events, the look and character of development, parks, privacy and space, and trail facilities.

Residents feel that the community is doing a good job meeting the housing needs of college students and luxury housing but were most pessimistic about the housing options for middle-income workers, new households entering the region, singles, and multi-generational households (**Figure 22**).

A strong majority (79%) of respondents felt that more housing is needed in Grand Forks (**Figure 23**). The sense of need is split between 45% feeling the need for predominantly more owner-occupied housing and 34% seeing the need for rental housing. These results were stratified by age, with those age 30-49 much more likely to call for more owned housing, and those age 18-24 strongly most in favor of more rental housing.

Figure 22. How well is Grand Forks meeting the housing needs for the following types of households?



Source: Project Survey

Figure 23. What housing occupancy type is needed more in Grand Forks?



Source: Project Survey



Overall, 56% of residents see a need for “more” or “a lot more” single-family homes (**Table 13**). Other housing types with significant perceived need are senior housing, townhomes and condos, mixed use buildings, apartments, small multi-family units of four or fewer.

**Table 13. Distribution of Housing Units by Number of Rooms, Grand Forks vs. Nation**

Housing Type	Much less of this type	Less	About the same as now	More	A lot more of this type	More or a lot more
Single-family homes	8.6%	8.7%	26.3%	38.3%	17.6%	55.9%
Senior housing	8.1%	8.2%	35.3%	34.3%	14.1%	48.4%
Townhomes/Condominiums (5 or more attached units)	11.1%	12.3%	31.4%	32.3%	12.8%	45.1%
Mixed Use	10.3%	14.4%	33.7%	25.9%	15.6%	41.5%
Apartments	21.6%	19.9%	21.1%	23.6%	13.6%	37.2%
Duplex, Triplex or Quad homes (2, 3, or 4 attached units)	11.9%	16.0%	34.9%	25.6%	11.3%	37.0%
Rural residential homes	11.2%	15.3%	39.7%	23.4%	9.5%	32.9%
Attached Accessory Dwelling Units	11.7%	23.1%	33.6%	21.0%	10.1%	31.1%
Detached Accessory Dwelling Units	14.1%	22.3%	32.7%	22.2%	8.8%	31.0%

Source: Project Survey

## NATURAL FEATURES

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### RED RIVER VALLEY

Grand Forks lies in the Red River Valley. This watershed is drained by the Red River of the North as it flows northward to Canada. The Red River Valley is known for having some of the most fertile farmland in the world, which has provided the basis for the regional agricultural economy dating to European settlement in the late-19<sup>th</sup> century. Much of the farmland surrounding Grand Forks, including nearly all soils within its southern growth area, is classified as prime farmland (**Figure 24**). The prime farmland classification is given by the U.S. Department of Agriculture (USDA) to soils that have the best combination of chemical and physical characteristics for agriculture. Another classification, farmland of statewide importance, is also highly productive, but is generally characterized by steeper slopes and a higher erosion factor – this classification is common around rivers and streams.

Productive agriculture land is valuable. This value is reflected in the cost of land acquisition that precedes development. Growth that is orderly and efficient helps slow the loss of farmland and lowers the cost of development. A variety of growth management techniques and strategies can be employed to conserve farmland on the urban fringe.

### FLOOD PROTECTION

Several factors related to the physical geography of the Red River Valley make the area prone to flooding. The floor of the valley left by Glacial Lake Agassiz is one of the flattest expanses of land in the world. Because of this, the spatial coverage of floodwaters can be extensive and flood waters recede slowly. In addition, the northward flow of the Red River coincides with the direction of spring thaw, so runoff from the southern portion of the valley gradually drains northward, increasing the flood risk at northern latitudes. Ice jams also contribute to delayed river flow and pressure build-up that releases during the spring thaw.

The devastating flood of 1997 was a turning point in the history of Grand Forks and East Grand Forks. Following the disaster, a new flood protection system was erected on both sides of the Red River. Grand Forks' flood protection system consists of floodwalls and earthen levees that extend approximately 8 miles around the city's perimeter, along with a coulee diversion that channels overland flows around the west side of the city (**Figure 25**). The levees are built to a river gauge of approximately 60 feet, while flood walls provide protection to 63 feet. The levees are 10 feet wide at the top, providing room to add clay fill during an emergency flood event. Together, these defenses allow the city to withstand a 500-year flood event. In addition, they have expanded the extent of the city's flood-protected growth area.

Figure 24. Farmland Resources

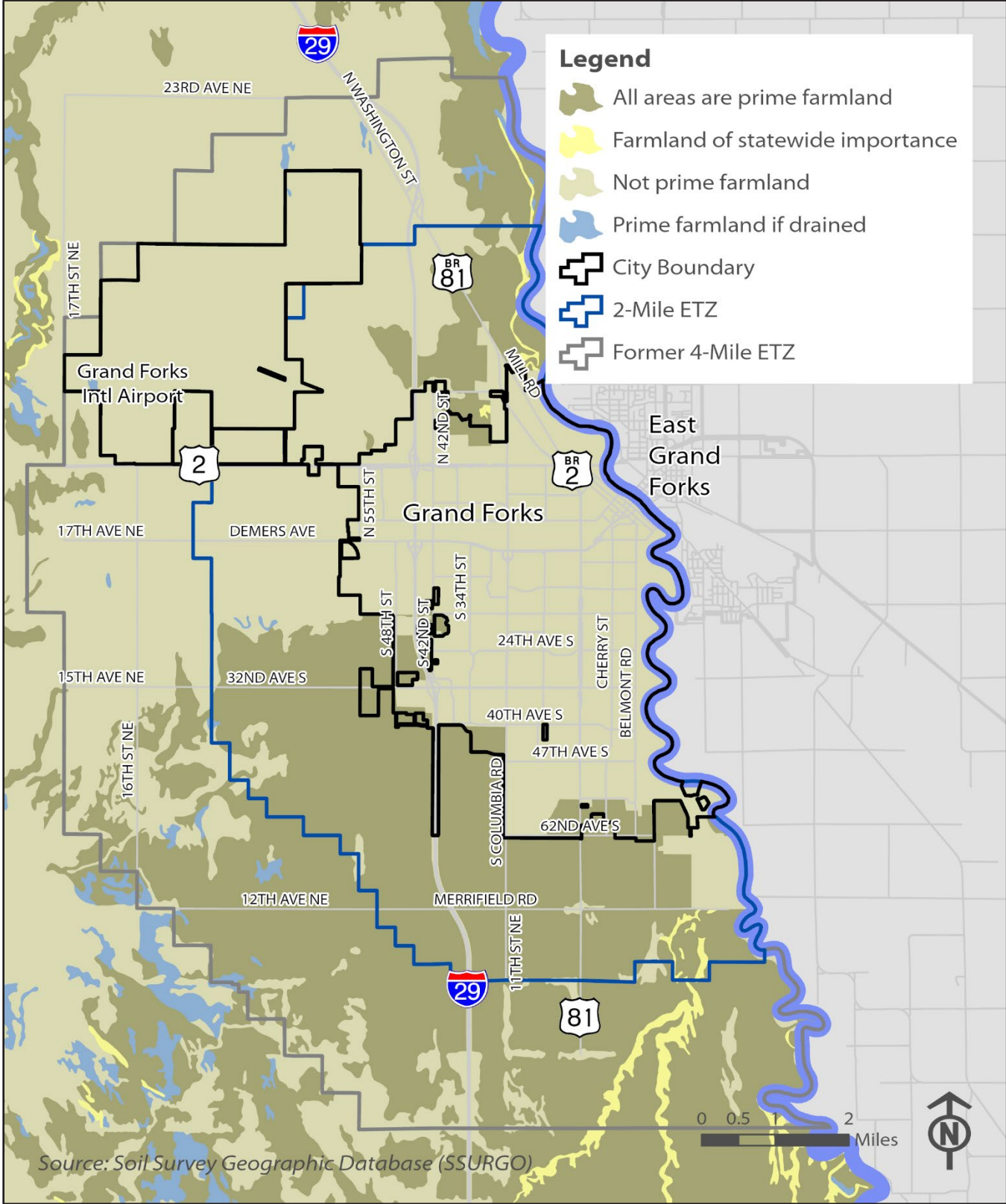
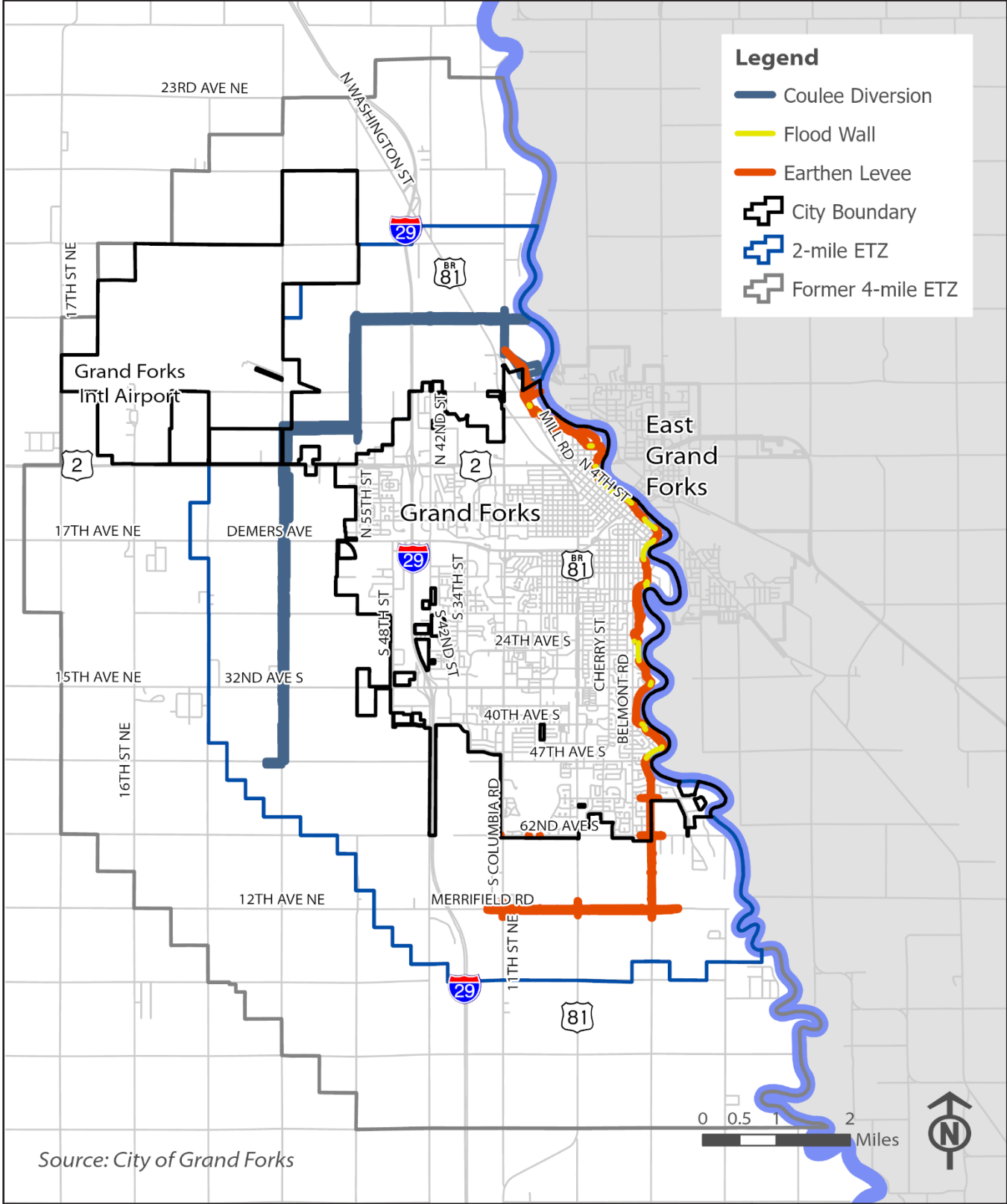


Figure 25. Flood Protection



## CITY GROWTH AND DEVELOPMENT PATTERNS

Recent growth and development patterns are illuminating for land use planning. It is important to understand where and in what quantities development has occurred. In addition, it is useful to review the type and character of development. This section reviews the city's current and historical data to shed light on growth and development character.

### PLANNING AREA

The planning area includes two important boundaries: the Grand Forks city boundary and the extraterritorial zone (ETZ). The city boundary can also be considered as two pieces, with the primary city and the area encompassed by the airport and waste wastewater ponds. Land use patterns were analyzed separately for these areas in the 2045 Land Use Plan. That methodology is carried forward for this analysis.

### Extraterritorial Zone

The North Dakota Century Code (NDCC) contains provisions that empower cities to extend their zoning and subdivision regulations to a defined area beyond the city boundary. Grand Forks' ETZ boundary roughly corresponds to a 2-mile radius that extends from the city boundary. The actual boundary is generally drawn to quarter-section lines and adopted through formal agreement between the city and county. When the City of Grand Forks annexes new territory, an extension of the ETZ may be implied, but again this requires an amended agreement.

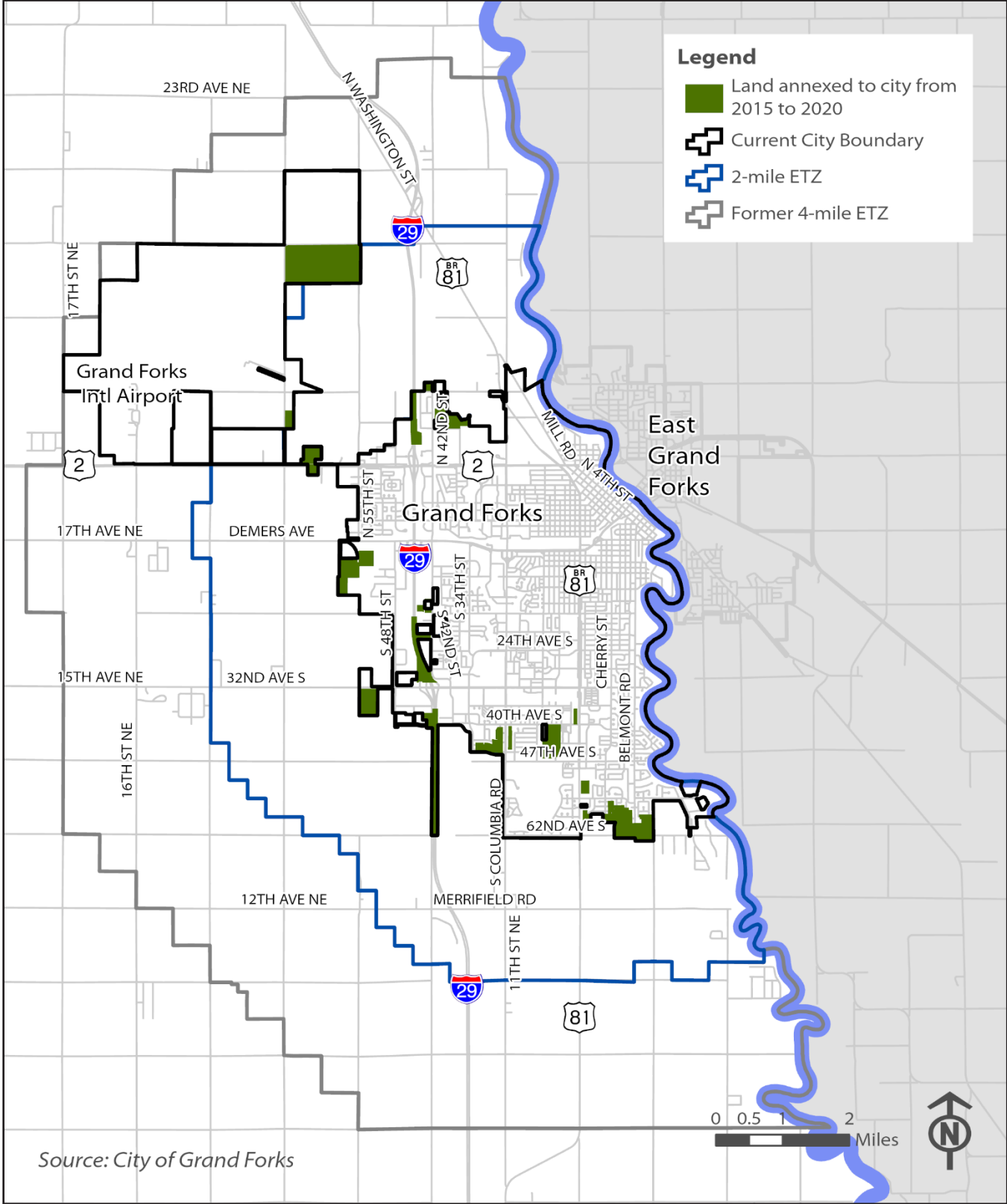
In 2009, the City of Grand Forks relinquished its right to exercise joint planning authority with Grand Forks County over the area contained within the outer half of its ETZ. A 4-mile ETZ was shown in the 2045 Comprehensive Land Use Plan. Per the 2009 agreement with Grand Forks County, the city has planning authority within city limits and the 2-mile ETZ. However, understanding the current and future uses for areas within the 4-mile ETZ should also be factored into the planning process. Additionally, an understanding of which entities have planning authority within the 4-mile ETZ, and surrounding area will help to provide a complete picture of long-range planning in Grand Forks' growth areas. The planning team will continue to define the study area of the 2050 Land Use Plan with this understanding. At this time, the following pages refer to the 2-mile ETZ that sets the limits for the City of Grand Forks' zoning authority as the ETZ.

Development that occurs within the ETZ or at the fringe of existing developed area is often called "greenfield development", whether it replaces existing farmland or space. Development that occurs on vacant or underutilized parcels within already-developed urban areas is called "infill". These definitions will be used throughout the 2050 Land Use Plan.

### RECENT ANNEXATIONS

The city's annexation history reveals the general rate of land consumption and location of development over time. City expansion occurred slowly from 2000 to 2010 as Grand Forks recovered from the 1997 flood and weathered the national recession. Then, from 2010 to 2015, Grand Forks annexed over 4,000 acres. In the time following adoption of the 2045 Land Use Plan, the city annexed 1,173 acres, according to City of Grand Forks GIS data (**Figure 26**).

Figure 26. City Annexations, 2015-2020





## EXISTING LAND USE

This section reviews land use data maintained by the Grand Forks-East Grand Forks MPO. It includes a map of existing land use in 2020 (**Figure 27**). Then, it compares the 2020 data to the MPO's records from 2015, which were documented for the 2045 Grand Forks Land Use Plan Update. Both datasets use the same classifications for existing land use: agricultural, residential, commercial, industrial, recreation/open space, public/semi-public, and vacant. Comparing these datasets reveals the pace and nature of development that occurred from 2015 to 2020, including the general extent of greenfield development (conversion of agricultural land to other uses) and infill (development of vacant parcels to active uses).

This section provides land use statistics for four planning areas:

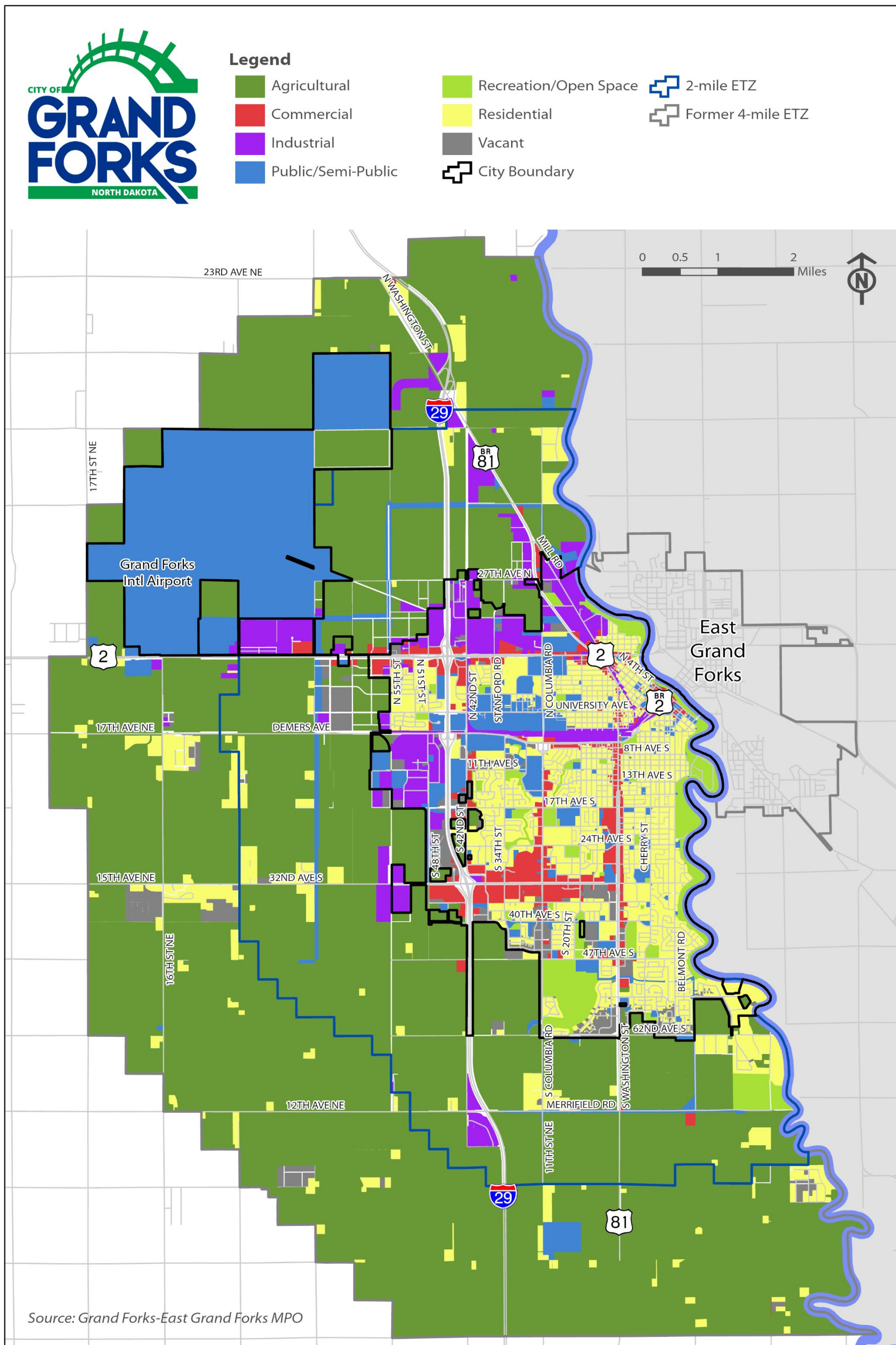
1. The entire planning area (total for areas 2, 3, and 4)
2. Grand Forks city limits
3. The 2-mile ETZ
4. Beyond the 2-mile ETZ (formerly the 4-mile ETZ)

In addition, this section reviews the growth capacity for areas identified as vacant in 2020. Reviewing the future land use designations from 2015 gives a sense of the capacity for these vacant areas to be developed as envisioned in 2045 Grand Forks Land Use Plan. Understanding the availability and suitability of vacant land for various types of development is the first step in updating the growth plan.

A couple of notes for this analysis:

1. Several isolated areas within the main city boundary have not been incorporated by the City of Grand Forks. These areas are considered as part of the 2-mile ETZ; most remain in agricultural use.
2. The total acreage within each planning area appears to decline from 2015 to 2020. This is an effect of the subdivision process. During this process, some land is dedicated for right-of-way. The land use analysis does not account for land use within public right-of-way (i.e., roads).
3. Land identified as vacant is platted, yet undeveloped.

Figure 27. Existing Land Use



### Within the Entire Planning Area (City Limits and 4-mile ETZ)

Across the entire planning area – the City of Grand Forks, its ETZ, and the area beyond the ETZ – land use parcels contain approximately 60,389 acres. Roughly two-thirds of this area is in agricultural use. From 2015 to 2020, approximately 326 acres of agricultural land and 359 acres of vacant parcels were developed, primarily for residential (+321 acres) and industrial (+222 acres) uses (Table 14).

**Table 14. Land Use Summary (Entire Planning Area)**

Land Use	2020 Acres (%)	2015 Acres	Acres Change	% Change
Residential	6,055.5 (10.0%)	5,734.5 (9.5%)	321.0	5.3%
Commercial	1,194.7 (2.0%)	1,251.2 (2.1%)	-56.5	-4.7%
Industrial	2,450.2 (4.1%)	2,228.4 (3.7%)	221.8	9.1%
Recreation/Open Space	1,461.0 (2.4%)	1,532.6 (2.5%)	-71.6	-4.9%
Public/Semi-Public (all)	7,213.2 (11.9%)	7,039.1 (11.6%)	174.2	2.4%
Vacant	1,327.1 (2.2%)	1,686.3 (2.8%)	-359.2	-27.1%
Agricultural	40,687.0 (67.4%)	41,012.8 (67.8%)	-325.8	-0.8%
Public/Semi-Public (Airport, landfill, wastewater ponds)	4,724.4 (7.8%)	4,724.4 (7.8%)	0.0	0.0%
Non-Ag Total	19,701.7 (32.3%)	19,694.8	229.7	1.2%
<b>Grand Total</b>	<b>60,388.7</b>	<b>60,484.9</b>	<b>-96.2</b>	<b>-0.2%</b>

Source: Grand Forks-East Grand Forks MPO

The total amount of vacant land within the entire planning area is approximately 1,327 acres. If development continues at its current pace, this supply of vacant property could in theory accommodate most of the growth that would be anticipated within the next five years. Most vacant property is platted, according to parcel addressing information available with the MPO's data. Vacant lots are currently guided for a mix of commercial, industrial, and residential uses (Table 15).

**Table 15. Existing Vacant Lots by Guided Land Use Type (Entire Planning Area)**

Future Land Use (2015 Designation)	Platted Acres	Unplatted Acres	Platted Lots
Commercial	207.0	45.8	120
Industrial	325.6	16.5	75
Public	20.0	26.8	10
Residential	401.5	0.0	130
Urban Residential	249.4	34.5	489
<b>Grand Total</b>	<b>1,203.5</b>	<b>123.5</b>	<b>824</b>

Source: Grand Forks-East Grand Forks MPO

## Within the City

Within city limits, land use parcels contain approximately 14,983 acres. Nearly 42 percent of land is categorized as public/semi-public (**Table 16**). This includes the city's airport, wastewater ponds, and landfill, which cover approximately 4,724 acres. Excluding these areas, public/semi-public uses occupy approximately 1,548 acres. Roughly one-quarter of land is used for residential. In addition, most commercial properties are located within the city. From 2015 to 2020, approximately 198 acres of agricultural land and 210 acres of vacant parcels were developed, primarily for residential use (+247 acres).

**Table 16. Land Use Summary (Within City Limits)**

Land Use	2020 Acres (%)	2015 Acres	Acres Change	% Change
Residential	3,787.7 (25.3%)	3,540.7 (23.5%)	247.1	6.5%
Commercial	1,081.1 (7.2%)	1,117.3 (7.4%)	-36.1	-3.3%
Industrial	1,411.9 (9.4%)	1,350.2 (9.0%)	61.7	4.4%
Recreation/Open Space	1,253.4 (8.4%)	1,309.5 (8.7%)	-56.0	-4.5%
Public/Semi-Public (all)	6,282.8 (41.9%)	6,155.5 (40.9%)	127.3	2.0%
Vacant	681.0 (4.5%)	890.7 (5.9%)	-209.7	-30.8%
Agricultural	485.3 (3.2%)	683.3 (4.5%)	-198.0	-40.8%
Public/Semi-Public (Airport, landfill, wastewater ponds)	4,724.4 (31.5%)	4,724.4 (31.4%)	0.0	0.0%
Non-Ag Total	14,498.0 (96.8%)	14,368.7 (95.5%)	134.2	0.9%
<b>Grand Total</b>	<b>14,983.3</b>	<b>15,047.1</b>	<b>-63.8</b>	<b>-0.4%</b>

Source: Grand Forks-East Grand Forks MPO

Approximately 681 acres are currently vacant within city limits. Most of this land is platted, and much is contained within planned unit developments. From the 2045 Plan, these areas are primarily intended for commercial (184 acres), industrial (157 acres), and urban residential (196 acres) uses (**Table 17**). Most vacant properties that are suitable for future commercial or industrial are located within the I-29 corridor and the S Washington Street corridor. Vacant lots guided for future urban residential are available in the developing neighborhoods located north of 62<sup>nd</sup> Avenue S and 47<sup>th</sup> Avenue S. Several large tracts within the city are identified as unplatted. These tracts could be suitable for infill development, but it appears that further platting and coordination will be needed to prepare them for development.

**Table 17. Existing Vacant Land by Guided Land Use Type (Within City Limits)**

Future Land Use (2015 Designation)	Platted Acres	Unplatted Acres	Platted Lots
Commercial	184.4	45.8	115
Industrial	157.6	16.5	42
Public	20.0	26.8	10
Residential	0.0	0.0	0
Urban Residential	195.5	34.5	483
<b>Grand Total</b>	<b>557.5</b>	<b>123.5</b>	<b>650</b>

Source: Grand Forks-East Grand Forks MPO

### Within the 2-Mile ETZ

Within the 2-mile ETZ, land use parcels contain approximately 19,109 acres. Over 84 percent of this area is categorized as agricultural use (**Table 18**). Other uses include residential, industrial, and public/semi-public. There is limited commercial development within the 2-mile ETZ. From 2015 to 2020, approximately 29 acres of agricultural land and 110 acres of vacant parcels were developed. This growth consisted primarily of industrial development (+82 acres) and residential development (+31 acres) on available platted lots within existing subdivisions.

**Table 18. Land Use Summary (Within the 2-Mile ETZ)**

Land Use	2020 Acres (%)	2015 Acres	Acres Change	% Change
Residential	1,072.4 (5.6%)	1,041.5 (5.4%)	30.8	2.9%
Commercial	108.3 (0.6%)	122.7 (0.6%)	-14.5	-13.3%
Industrial	859.0 (4.5%)	776.9 (4.1%)	82.0	9.5%
Recreation/Open Space	207.1 (1.1%)	222.5 (1.2%)	-15.4	-7.4%
Public/Semi-Public (all)	518.7 (2.7%)	484.2 (2.5%)	34.5	6.7%
Vacant	276.2 (1.4%)	385.8 (2.0%)	-109.6	-39.7%
Agricultural	16,067.0 (84.1%)	16,095.5 (84.1%)	-28.5	-0.2%
Non-Ag Total	3,041.6 (15.9%)	3,033.6 (15.9%)	8.0	0.3%
<b>Grand Total</b>	<b>19,108.5</b>	<b>19,129.1</b>	<b>-20.6</b>	<b>-0.1%</b>

Source: Grand Forks-East Grand Forks MPO

Approximately 276 acres of land are currently vacant within the 2-mile ETZ, all of which are platted. These properties are guided for a mix of industrial (160 acres), residential (40 acres), and urban residential (54 acres) (**Table 19**).

**Table 19. Existing Vacant Land by Guided Land Use Type (Within 2-Mile ETZ)**

Future Land Use (2015 Designation)	Platted Acres	Unplatted Acres	Platted Lots
Commercial	22.6	0.0	12
Industrial	159.8	0.0	27
Public	0.0	0.0	0
Residential	39.9	0.0	12
Urban Residential	53.8	0.0	32
<b>Grand Total</b>	<b>276.1</b>	<b>0.0</b>	<b>69</b>

Source: Grand Forks-East Grand Forks MPO

### Beyond the 2-Mile ETZ

The planning area beyond the 2-Mile ETZ contains approximately 26,269 acres. Nearly 92% of this land is categorized as agricultural use (**Table 20**). Other uses include residential, industrial, and public/semi-public. This area contains limited commercial development and no dedicated recreation/open space. From 2015 to 2020, approximately 100 acres of agricultural land and 40 acres of vacant parcels were developed. Growth consisted primarily of industrial development (+78 acres) and residential development on available platted lots within existing subdivisions (+41 acres).



**Table 20. Land Use Summary (Beyond the 2-Mile ETZ)**

Land Use	2020 Acres (%)	2016 Acres	Acres Change	% Change
Residential	1,192.3 (4.5%)	1,151.7 (4.4%)	40.6	3.5%
Commercial	5.3 (0.0%)	11.3 (0.0%)	-5.9	-52.7%
Industrial	174.1 (0.7%)	96.1 (0.4%)	78.0	81.2%
Recreation/Open Space	0.0 (0.0%)	2.4 (0.0%)	-2.4	-100.0%
Public/Semi-Public (all)	416.0 (1.6%)	399.8 (1.5%)	16.2	4.0%
Vacant	369.8 (1.4%)	409.5 (1.6%)	-39.7	-9.7%
Agricultural	24,111.5 (91.8%)	24,211.0 (92.1%)	-99.5	-0.4%
Non-Ag Total	2,157.5 (8.2%)	2,070.7 (7.9%)	NA	NA
<b>Grand Total</b>	<b>26,269.0</b>	<b>26,281.7</b>	<b>-12.7</b>	<b>0.1%</b>

Source: Grand Forks-East Grand Forks MPO

Beyond the 2-mile ETZ, vacant land currently occupies approximately 370 acres. Approximately 362 acres are currently guided for future residential (**Table 21**). These are vacant, platted lots that are ready for new housing construction.

**Table 21. Existing Vacant Land by Guided Land Use Type (Beyond the 2-Mile ETZ)**

Future Land Use (2015 Designation)	Platted Acres	Unplatted Acres	Platted Lots
Commercial	0.0	0.0	0
Industrial	8.2	0.0	8
Public	0.0	0.0	0
Residential	361.6	0.0	118
Urban Residential	0.0	0.0	0
<b>Grand Total</b>	<b>369.8</b>	<b>0.0</b>	<b>126</b>

## EXISTING LAND DEVELOPMENT REGULATIONS

### Land Development Code

The 2050 Land Use Plan will provide the foundation for the Land Development Code, which contains the city's zoning and subdivision regulations, and the accompanying zoning map. The zoning map is frequently updated as the city processes amendments. The 2050 Land Use Plan will guide the Planning Commission, City Council, Board of Adjustment, and the Zoning Administrator as they apply and interpret the Land Development Code and consider policy changes.

### Standard Zoning Districts

Currently, the city's zoning regulations consist of 14 base zoning districts, two overlay districts, and three special districts, organized as follows:

- Agricultural districts (2)
- Residential districts (6)
- Business districts (4)



- Industrial districts (2)
- Overlay districts (3)
  - Corridor, floodway and floodplain
- Special Districts (3)
  - Airport
  - Planned Unit Development
  - University

### Planned Unit Development

Planned Unit Development (PUD) is a tool that gives developers more zoning flexibility to execute projects that might be more difficult to achieve under the city's standard, single-use zoning districts. This district is intended to produce coordinated development of supportive land use types and help organize larger development plans that are executed in phases. In exchange for greater zoning flexibility, developers are held to a higher standard, and may be asked to demonstrate unique project benefits that serve the public interest. In Grand Forks, PUDs occupy approximately 6,966.6 acres, or 18.3% of the city's zoned area (**Table 22**). They incorporate a range of uses, from mixed residential to heavy industrial. Planned Unit Development agreements are binding, so major changes, such as increasing density, require an amendment to the development plan. This provides security for homeowners and businesses but makes it more challenging to add future improvements or produce infill.

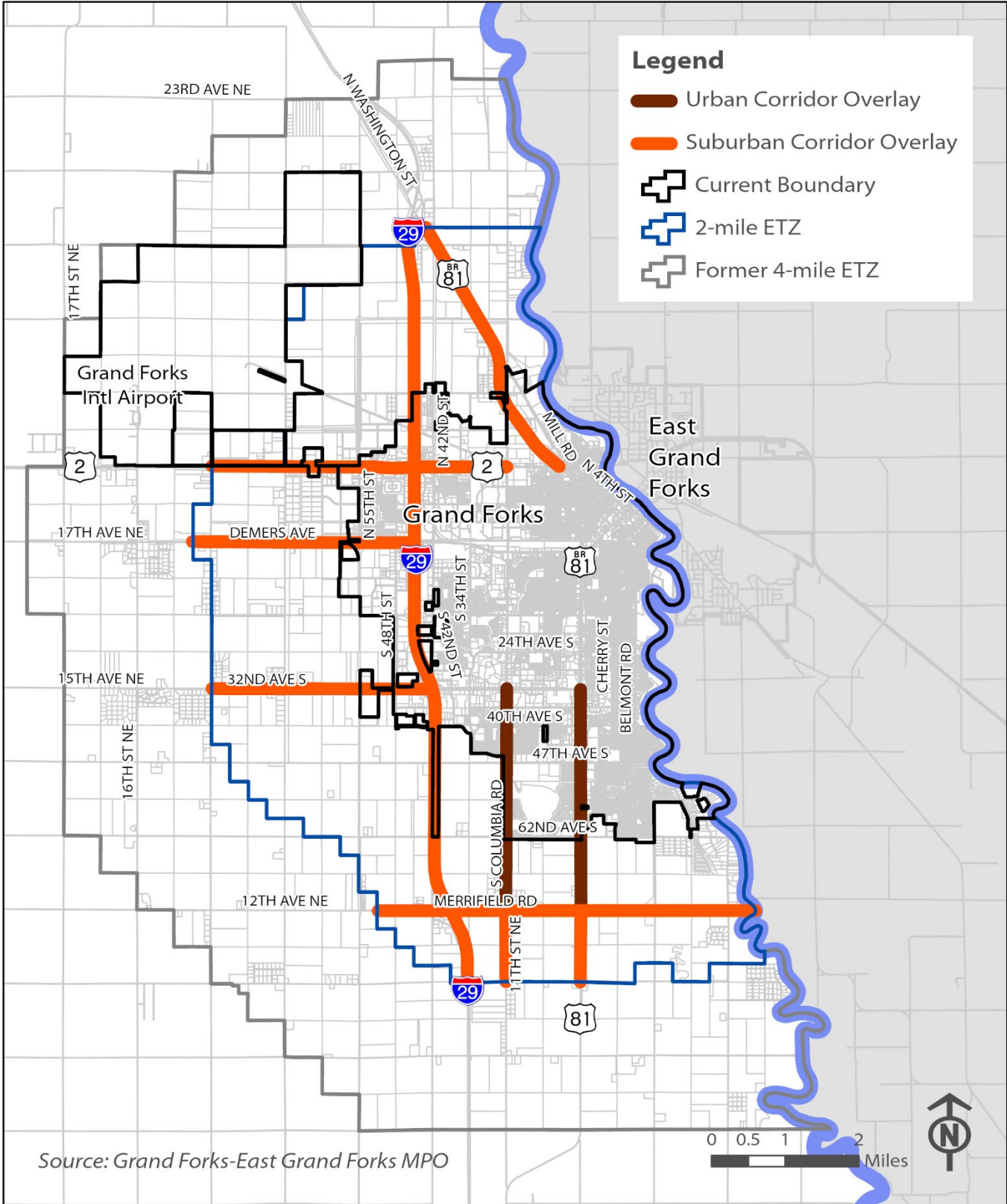
**Table 22. Existing Zoning Acreage**

Zoning District	Acres	% Total Zoned Area
A-1 (Agricultural Limited Development)	9,568.3	25.2%
A-2 (Agricultural Reserve)	10,032.2	26.4%
B-1 (Limited Business)	101.9	0.3%
B-2 (Shopping Center)	50.4	0.1%
B-3 (General Business)	860.7	2.3%
B-4 (Central Business District)	144.1	0.4%
I-1 (Light Industrial)	283.5	0.7%
I-2 (Heavy Industrial)	2,445.0	6.4%
R-1 (Single Family Residential)	1,278.9	3.4%
R-2 (One & Two Family Residential)	1,478.2	3.9%
R-3 (Multiple Family Residential, Medium Density)	18.7	Less than 0.1%
R-4 (Multiple Family Residential, High Density)	539.4	1.4%
R-5 (Mobile Home Residential)	142.0	0.4%
R-M (Manufactured Home Residence)	0.0	0.0%
A-D (Airport)	1,577.5	4.1%
PUD (Planned Unit Development)	6,966.6	18.3%
UD (University)	468.1	1.2%
Wastewater ponds	2,059.7	5.4%
<b>Total</b>	<b>38,015.2</b>	<b>100.0%</b>

Source: City of Grand Forks GIS Data, 2020



Figure 29. Corridor Overlay Zones



## Corridor Overlay Zones

The city created a series of corridor overlay zones as a tool for implementing desired development tools and policies for specific corridors within the city (**Figure 29**). These zones apply to important transportation corridors (arterial roads) throughout the community that are expected to continue carrying high traffic volumes. As such, development within these corridors is highly visible to the traveling public. The corridor overlay zones are intended to accomplish the following:

- Establish high standards for building design, landscaping, and other corridor improvements
- Encourage substantial capital investments for development of corridor properties
- Allow for a variety of supportive land use types
- Establish standards that promote full multimodal accessibility

The boundaries of the corridor overlay zones extend to all parcels located within 400 feet of the right of way. The ordinance includes detailed standards for architectural design and site design that extend beyond the base zoning districts. Several corridors that are included in the overlay district are also planned for reconstruction within the 10-20 years. Developing corridor standards at this juncture will serve the community as it proceeds with corridor studies and considers future design alternatives.

## EXISTING ROADWAY SYSTEM

The transportation system within the City of Grand Forks and the surrounding area is key to economic success and quality of life for residents. Specifically, the roadway network provides access to goods and services throughout the community. Grand Forks-East Grand Forks MPO classifies roadways according to function (**Figure 30**). Interstate 29 and the principal provide opportunities for movement to and from the greater region, serving the community well for tourism and freight travel. Minor arterials and major collectors facilitate travel throughout the city and extraterritorial areas. Local street connections provide access to property.

The functional classification system is directly related to land use planning. For example, large commercial and industrial uses are typically located within arterial corridors, which provides visibility and access conducive to business, as well as convenient access for freight. Conversely, residential neighborhoods are served by local streets and private streets, which are designed to minimize through traffic and limit travel speeds. In this way, land use is highly correlated to roadway access control.

## EXISTING INFRASTRUCTURE

Infrastructure enables development. The city's utility infrastructure includes stormwater and sewer systems that serve residential, commercial, industrial, and other uses throughout the community (**Figure 31**). Development is geared toward areas with existing infrastructure capacity and areas where new infrastructure connections can be made at reasonable cost.

## EXISTING PARKS AND RECREATION FACILITIES

The city's recreational facilities are key components to a high quality of life for residents. These locations provide spaces for social gathering, physical activity, and refuge for residents and visitors of Grand Forks. The existing park system includes a number of community parks, golf courses, ice arenas, and sports complexes that provide a range of activities (**Figure 32**). This system is supplemented by the expansive greenway system located along the Red River of the North. The city's existing bike route system provides connectivity to many locations throughout Grand Forks.



Figure 30. Existing Functional Classification

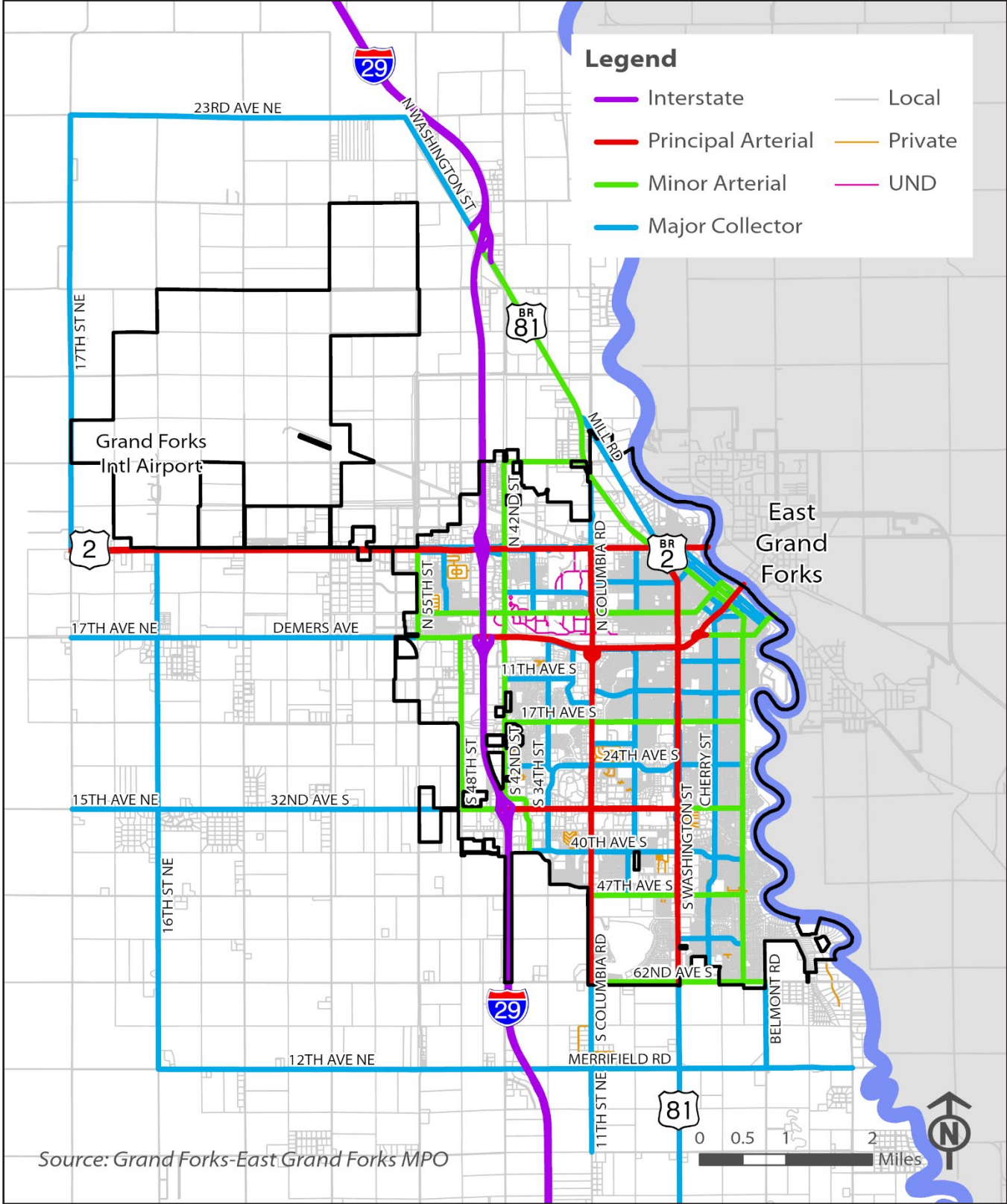


Figure 31. Existing City Infrastructure

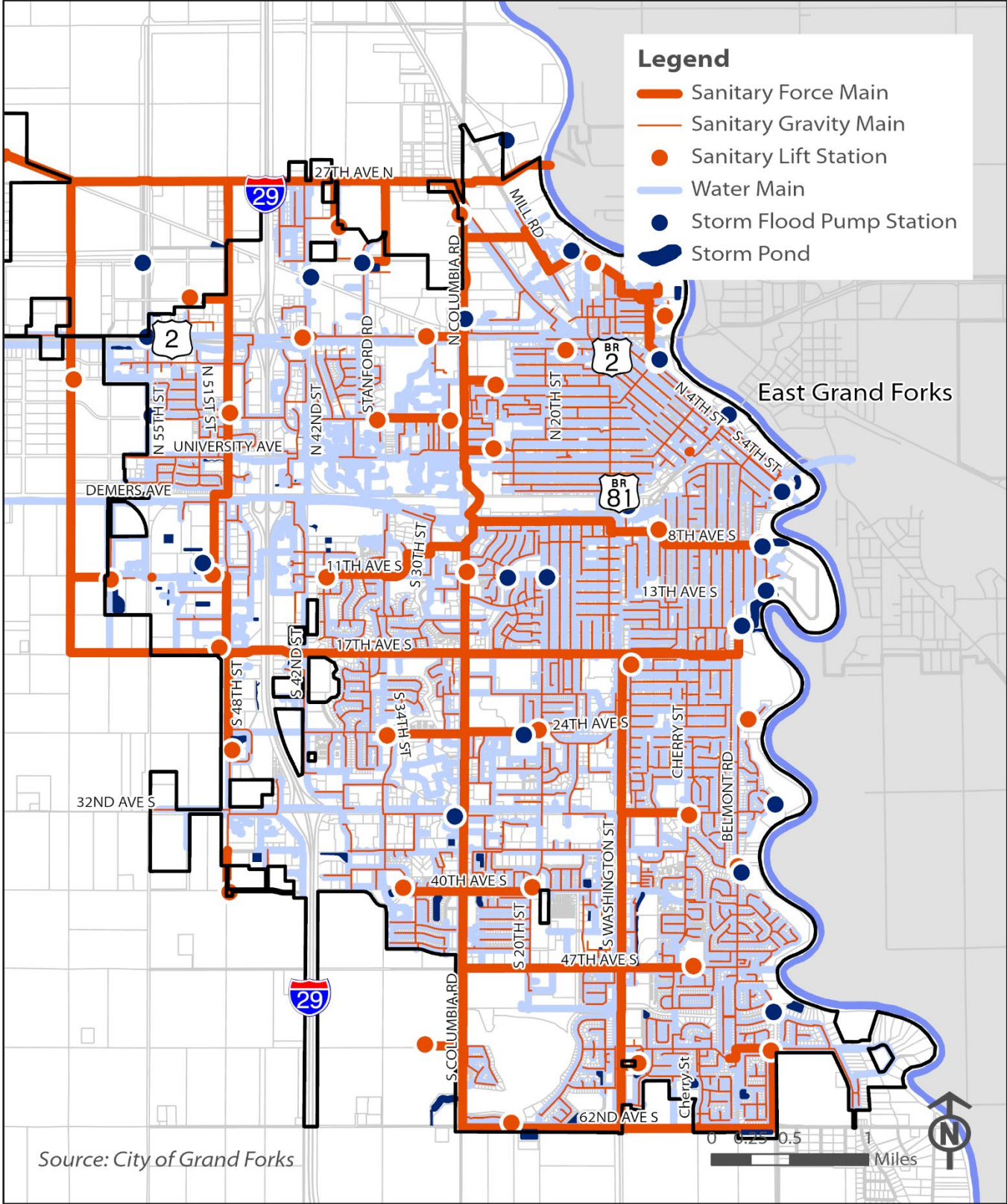
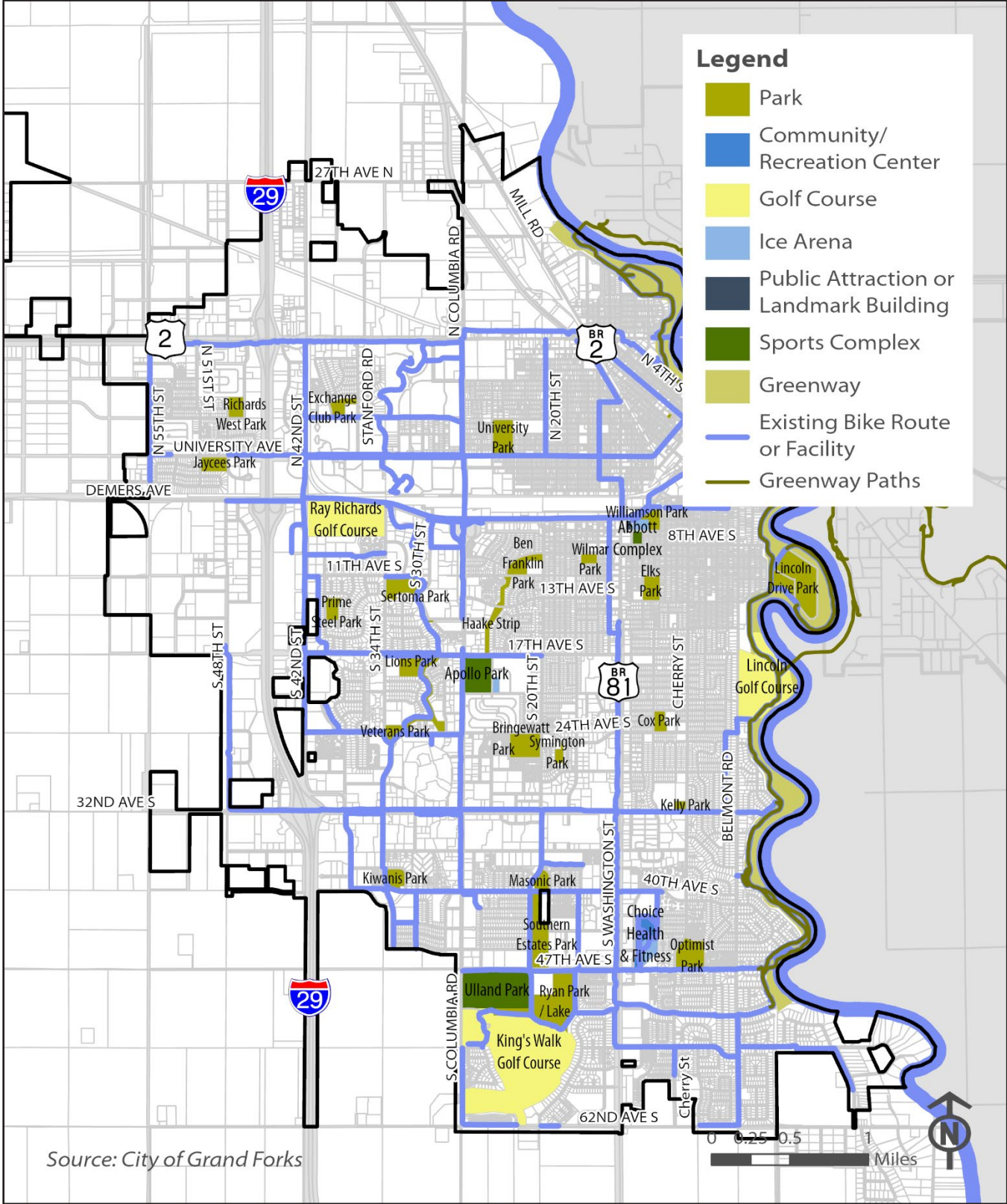




Figure 32. Existing Parks, Recreation Facilities, and Bike Routes

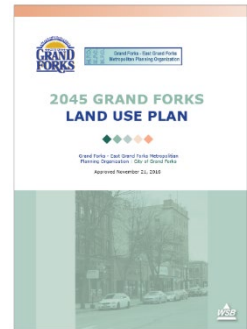


## RELATED PLANS AND STUDIES

There are a number of recently completed planning efforts and studies that should be referenced and incorporated into the development of the 2050 Land Use Plan. This effort will help to build from these completed efforts and support the policy and goal direction established within each plan. The following pages highlight recently completed plans that should be considered during the planning process. Other planning efforts that should be referenced during the planning process include, but are not limited to on-going environmental studies, fertilizer plan siting studies, and Grand Sky at the Grand Forks Air Force Base planning.

### 2045 GRAND FORKS LAND USE PLAN

The 2045 Grand Forks Land Use Plan was adopted in November 2016. This plan updated the city's growth tier framework, land use classifications, and growth projections. It provided the basis for the 2045 Long Range Transportation Plan (LRTP), which was adopted in 2019, and also serves as the starting point for the 2050 Grand Forks Land Use Plan.



#### Growth Tiers

The 2045 Plan provides a growth tier framework to organize development and expansion (**Figure 33**). This framework consists of the following growth tiers:

- **Tier 1 and City Limits** – this tier is intended to accommodate all projected growth from 2016 to 2045.
- **Tier 2, Urban Reserve Area** – this tier allows for residential development only on existing lots that were already platted at the time of plan adoption
- **Tier 3, Agricultural Preservation Area** – this tier limits development to uses that support preservation of active agricultural uses.

As a tool to manage fringe development, this framework has prioritized infill over greenfield development. Current growth area boundaries are essentially the same as proposed in the 2045 Plan, reflecting one amendment that was adopted following the plan. Figure 24 overlays the three growth tiers with areas that have been annexed to the city since 2015. This illustrates how the growth management plan has shaped city growth policy. Note that the city has only annexed areas in Tier 1, as intended in the plan.

#### Future Land Use Categories

The 2045 Plan projected provided eight classifications for future land use and a range of growth projections for each (**Table 23**). These classifications and projections provide a starting point for the 2050 Land Use Plan update. However, the current land use classification system and descriptive text may not provide sufficient guidance to match the complexities of development. A more thorough classification system may also be needed to help city staff consistently apply city zoning policy in a complementary fashion.



**Table 23. 2045 Future Land Use Classification and Projected Growth**

2045 Future Land Use Classification	2016-2045 Projected Growth
Residential	1,560 to 2,744 acres
Commercial	296 to 329 acres
Industrial	440 to 1,246 acres
Public/Semi-Public	12 to 564 acres
Recreation/Open Space	55 to 394 acres

Source: Grand Forks 2045 Land Use Plan

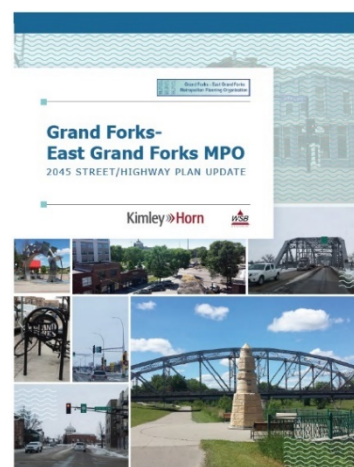
### Livability and Ladders of Opportunity

The 2045 Plan emphasizes the Ladders of Opportunity Initiative. This initiative recognizes the role that transportation has in connecting communities to economic opportunity. It is focused on utilizing transportation planning and construction projects to better connect and revitalize the community. Of particular importance is a multimodal transportation system that improves connectivity and revitalized transportation infrastructure that supports equitable business and residential development. The 2045 Plan supports transportation projects, particularly multimodal improvements, that connect residents to services and areas of employment. The 2045 Plan also recognizes that multimodal improvements planned alone will not suffice without planning and ensuring that future land use development is responsive to multimodal access that strengthens equitable connections between businesses, services, and residential development. Examples include increasing mixed use development opportunities and promoting neighborhood commercial development. These focuses retain their relevance for the 2050 Land Use Plan update.

## GRAND FORKS-EAST GRAND FORKS MPO METROPOLITAN TRANSPORTATION PLAN

The MPO updates the Long-Range Transportation Plan for the region every five years to comply with federal law and to align with current needs and changing trends. The 2045 Metropolitan Transportation Plan serves as the MPO’s long-range transportation plan and sets the direction and strategies that will shape the region’s transportation network. The 2045 plan evaluates current and future transportation needs for multiple modes of transportation, including streets and highways; transit; and bicycles and pedestrians. These modes define the three elements of the 2045 Metropolitan Transportation Plan.

The MPO’s Long-Range Transportation Plan is part of the City of Grand Forks’ Comprehensive Plan, per Article 8 of the Land Development Code. Section 18-0802 currently identifies the three elements of the Comprehensive Plan as the 2045 Land Use Plan Update, the Grand Forks-East Grand Forks Central Business District Plan Update (2009) and the Grand Forks-East Grand Forks Long-Range Transportation Plan Update.



### Grand Forks-East Grand Forks MPO 2045 Street/Highway Plan Update

The transportation system is the backbone that supports the pattern of land use throughout the city. Public investments in the roadway system often trigger new development or redevelopment. Adopted in December 2018, the Grand Forks -East Grand Forks MPO 2045 Street/Highway Plan Update is a comprehensive transportation plan for the entire metropolitan area that prioritizes available MPO funding. It identifies programmed and conceptual projects of regional significance. Planned projects of significance include improvements on portions of US 81 Business, Columbia Road, Washington Street, and 32<sup>nd</sup> Avenue South. Most of these projects are planned for



the Short-Range (2023 to 2027) or Mid-Range (2028 to 2037). All of these corridors are subject to overlay zoning standards. Note also that programmed funding heavily prioritizes reconstruction and maintenance of the existing system over system expansion. This is consistent with the city's existing growth tier framework.

Roadway reconstruction is an opportunity to redesign deficient roadways to better serve the community. Some roadways may require capacity expansion (additional lanes) to meet forecasted travel volumes, while others may be candidates for a road diet (lane reduction) and conversion to a more pedestrian-friendly environment. The 2050 Land Use Plan needs to be sensitive to planned roadway investments. The planned density or intensity of uses should be generally consistent with current expectations, but corridor improvements may also coincide with opportunities for infill or redevelopment. Ultimately, corridor planning needs to support adjacent land development and vice versa.

Other significant transportation studies and projects on the horizon include a future Red River crossing in south Grand Forks and a planned interchange at I-29 and 47<sup>th</sup> Avenue South. The MPO is studying the regional traffic impacts and feasibility of several river crossing alternatives. The 47<sup>th</sup> Avenue South interchange is currently undergoing environmental review. Any new river crossing or connection to the arterial system will have a dramatic impact on future development and regional traffic flow. Understanding the potential impacts of likely improvements will shape the growth tier update and future land use pattern.

### **Grand Forks-East Grand Forks Bicycle and Pedestrian Element**

Bicycle and pedestrian mobility is an important component of the city's overall transportation network. The MPO's Bicycle and Pedestrian Element of the 2045 Metropolitan Transportation Plan examined existing and future needs for bicycle and pedestrian mobility within the MPO's region for the next 20-years. While the plan identifies a number of objectives for consideration, the plan focused on advancing:

- Increase bicycle and walking trips whether for recreational or economic development objectives
- Improve bicycle and pedestrian access to key local activity centers and destinations
- Promote bicycle and pedestrian activities as available, yet affordable transportation options
- Promote consistency between transportation improvements and State and local planned growth and economic development patterns
- Foster accessibility and mobility
- Improve quality of life
- Foster bicyclist and pedestrian safety
- Assess current conditions, initiatives and opportunities
- Emphasize the preservation of the existing bicycle and pedestrian transportation system

The Bicycle and Pedestrian Element analyzed the existing bicycle and pedestrian infrastructure within the region, along with public and stakeholder engagement to identify policy and project recommendations within the network. This effort supported the engagement heard throughout the Grand Forks 2045 Land Use Plan engagement process including a focus on bicycle and pedestrian mobility. Infrastructure improvements are identified within the 2045 document, including planned bike paths and bike routes throughout the city.

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

The Transit Development Plan reviews public transit infrastructure as part of the MPO's Metropolitan Transportation Plan. Cities Area Transit (CAT) is the public transportation provider for the metropolitan area and includes fixed route and dial-a-ride services within the City of Grand Forks. The Transit Development Plan update explored existing conditions, analyzed operational concepts and defined future implementation actions for the region's transit system.

The Transit Development Plan prioritized the transportation goals for the region specific to the transit system. Significant priority was given to access/mobility, integration/connectivity, efficient system management, and economic vitality. Objectives are identified to inform future transit activities in the region.

## DOWNTOWN ACTION PLAN

The Downtown Action Plan was presented to City Council in December 2019 (this Plan was not formally adopted by the City of Grand Forks). This plan provides a comprehensive vision for downtown, which needs to be carried forward in the 2050 Land Use Plan. It illustrates conceptual improvements to the public realm – streetscapes and parks – that build off existing momentum and can catalyze further investment. It also illustrates concepts for private development, including various scenarios for residential development that will further activate downtown. Redevelopment opportunities should be carried forward in the 2050 Land Use Plan. Implementation of the Downtown Action Plan may also benefit from creation of supportive land use and zoning policies that are further developed in the 2050 Land Use Plan.

Highlights of the Downtown Action Plan include:

- A streetscape concept for Demers Avenue with thematic elements that tie together design elements throughout downtown.
- A gateway concept for the Demers Avenue overpass.
- A vision that transforms Town Square park into a community focal point that celebrates Grand Forks' cultural history and hosts a variety of events and activities throughout the year.
- An illustrative redevelopment concept for the water treatment plant site that injects a variety of housing options into downtown.
- New paths, trails, and bike route connections in and around downtown that build off the LRTP.



*The vision for Town Square Park includes a performance, splash pad, and outdoor dining areas (Source: Downtown Action Plan)*

## UNIVERSITY OF NORTH DAKOTA MASTER PLAN

The University of North Dakota (UND) updated their Academic Master Plan in 2018 to “establish a comprehensive framework for campus development consistent with the long-term vision set forth in the university’s strategic plan, One UND”. The planning process used to develop the Master Plan included three phases to explore existing conditions and needs, analyze alternative concepts, and define a preferred plan. The resulting 30-year plan identifies 14 major building projects that are tied to short term (1 to 6 years), mid term (7 to 12 years) and long term (12 to 30 years) actions. These actions are identified to help UND achieve the define Campus Development Vision. As a result, development plans include demolition and construction projects to create a more navigable and sustainable campus. The findings and recommendations of the Master Plan should be considered in the development of the 2050 Land Use Plan, helping to support UND’s future growth and sustainability. Note that this Plan was not formally adopted by the City of Grand Forks.



- NEW CONSTRUCTION
- RENOVATION
- POTENTIAL FUTURE PARKING STRUCTURE
- DEMOLITION
- POTENTIAL DEVELOPMENT SITE



## **DOWNTOWN PARKING STUDY**

The Downtown Parking Study was completed in June 2019 (this Plan was not formally adopted by the City of Grand Forks). This study inventories the existing supply of parking within downtown and typical parking availability throughout the week. It also forecasts future parking demand and supply issues. The timing of the study coincided with development of the Downtown Action Plan, so it likely incorporates similar assumptions about future growth in downtown and associated impacts on parking demand. Future level of service scenarios include a 10-year redevelopment scenario, a redevelopment plus increased multimodality scenario, and a redevelopment plus autonomous vehicles scenario. A series of maps identify forecasted levels of services for study area blocks. These figures indicate the extent of parking availability within or near each destination.

The study finds that redevelopment may increase parking demand up to 925 spaces over the next 10 years. This demand creates parking deficiencies on certain blocks, but in general, there is an acceptable level of service throughout downtown. The study recommends shared parking rules to leverage the full capacity of public and private parking supply in downtown, which provides nearly 1,300 spaces on a typical weekday. It also notes that as downtown becomes more of an attraction, people may begin to accept lower levels of service for parking and be willing to walk longer distances from vehicles to experience downtown.

## **GRAND FORKS AND EAST GRAND FORKS DOWNTOWN TRANSPORTATION STUDY**

The Downtown Transportation Study was completed in October 2020. The study identifies transportation-specific challenges within the downtown areas of both Grand Forks and East Grand Forks. The study analyzes existing and future operational and safety conditions in both Downtowns. Study analysis coupled with stakeholder input informed the development of improvement concepts for all transportation modes. The implementation section identifies and prioritizes short-term, mid-term, and future concepts for considerations.