



EVALUATION OF PAST GROWTH PATTERNS AND TRENDS

CITY OF FARGO GROWTH PLAN

Prepared for:

czb
October 15, 2023,



TABLE OF CONTENTS

TABLE OF CONTENTS.....	2
TABLE OF FIGURES	2
I. INTRODUCTION.....	3
Purpose of the Report.....	3
Growth Trends Overview	3
Growth Trend Analysis Geographies.....	4
II. DEMOGRAPHIC AND EMPLOYMENT GROWTH TRENDS	10
Demographic Trends.....	10
Employment Trends	12
III. FARGO'S GROWTH TREND PATTERNS.....	18
Growth Trends by Land Area	18
Growth Trends by Land Use	21
IV. GROWTH TRENDS KEY FINDINGS	29
Citywide Growth Trend Findings.....	29
Fargo's Infill Growth Nodes	30
Future Growth through Annexation.....	33
V. APPENDIX.....	35

I. INTRODUCTION

Purpose of the Report

Fargo has had two prior growth plans, the first completed in 2001, and the second in 2007. The 2001 plan primarily focused on managing the City's growth at its edges and into extra-territorial areas and only considered a five-year growth horizon. In contrast, the 2007 Growth Plan was more comprehensive, addressing both growth at the City's edge and within existing already developed areas. This plan also considered a 50-year planning horizon intending to manage Fargo's long-term growth in an orderly manner that would limit sprawl and provide a high quality of life for Fargo's residents and its business community. Given the many changes that have occurred in Fargo since the 2007 Growth Plan was completed, not the least of which is construction of the Fargo-Moorhead Area Diversion Project, the City is now preparing an updated growth plan.

This report presents detailed information regarding the ways in which Fargo has grown over the past two decades to provide a measure of comparison with the previous two plans, and to draw inferences regarding potential growth scenarios. Growth has been measured using multiple dimensions including changes in population, jobs by industrial, real estate development and, to the extent possible, changes in acreage. The data are presented both in a time series format to highlight how growth trends compare over time, and spatially, to show where growth has occurred by land use and location. A key outcome of this analysis is to ascertain how much past growth has been accommodated through annexing land into the City, and how growth has occurred by existing underutilized parcels within already developed area of Fargo. A second key outcome from this report will be to identify areas with future growth could occur.

Growth Trends Overview

Fargo is the most populous city in North Dakota with a population of 125,990 according to the 2020 decennial census. The City is the largest jurisdiction of the Fargo-Moorhead, ND-MN Metropolitan Statistical Area and constitutes the majority of the region's residential and commercial real estate inventory. Over the past 20 years Fargo has increased in area and population by one-third. The City is a regional economic hub for the Upper Midwest with a robust and diverse economy that includes specific strengths in the medical, technological, agricultural, and retail industries. Fargo's Sanford Medical Center is the second largest medical campus in the US. to The Fargo Microsoft campus is Microsoft's second largest U. S. campus following the company's main campus in Redmond Washington. North Dakota State University is also an economic anchor for Fargo with an annual enrollment of approximately 14,500 students.

With only a small and brief slowdown during the 2010 national recession followed by continued expansion, Fargo's employment growth has been relatively steady over the last 20 years. From 2012 to 2017, Fargo's property values rose by 75 percent, outpacing other similar cities nationally such as Santa Barbara in California when grew by 67 percent and Austin in Texas which grew by 68 percent¹.

¹ Kaul, Greta (2019) "What's behind Fargo-Moorhead's boom?" *Minnpost*.
(footnote continued)

The City's unemployment rates are some of the lowest in the country and have historically remained so. The growth of medical, tech and manufacturing sectors have diversified Fargo's economy and contributed to its resiliency. As a result, Fargo's real estate performance in terms of its housing, retail and industrial inventory rebounded quickly from the Covid-19 pandemic, the most recent economic shock to the U.S. economy.

Growth Trend Analysis Geographies

FARGO AND OTHER JURISDICTIONS

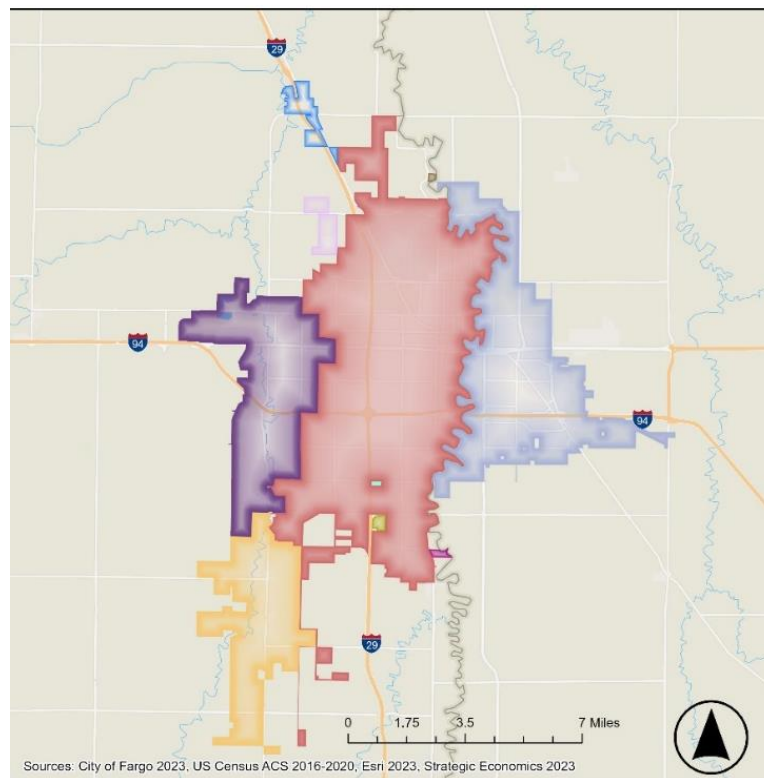
This analysis uses multiple geographies to provide context and reference points for Fargo's growth trends. The primary comparative geographies are the Fargo-Moorhead Metropolitan Statistical Area (MSA), Cass County, Fargo, and five subareas within Fargo.

Although Fargo's growth patterns are not compared to its adjacent communities, these do have an impact on the City in that these neighboring communities comprise the regional economy including both housing and jobs; and Fargo is increasingly becoming a regional service provider through its water district. In addition, the communities that directly abut Fargo also shape the direction in which the City could grow in the future. Under North Dakota law, cities with populations greater than 25,000 can claim up to four miles beyond their city limits as part of an extra-territorial (ET) area. The ET area is within the control of the city for purposes of subdivision and zoning. Other jurisdictions are barred from encroaching onto an ET area once it has been designated by any given city.

As shown in Figure 1, adjacent cities include Moorhead, MN on the east, Horace, and West Fargo, to the west and Harwood and Riley's Acres to the north. Some smaller cities within the Metropolitan Statistical Area include Briarwood, Wild Rice, and St Benedict to the south. Fargo is the largest city in the Fargo-Moorhead MSA, followed by Moorhead and West Fargo, each of which have populations close to one-third of Fargo, as shown in Figure 2. All other neighboring communities have much smaller populations and tend to rely on Fargo for sewer and water services. Figure 3 shows the extra-territorial boundaries for Fargo and its adjacent cities, illustrating that Fargo's primary future growth area will be at its southern border.

<https://www.minnpost.com/economy/2019/07/whats-behind-fargo-moorheads-boom/>

FIGURE 1: FARGO AND ITS NEIGHBORING CITIES



Fargo and Neighboring Cities

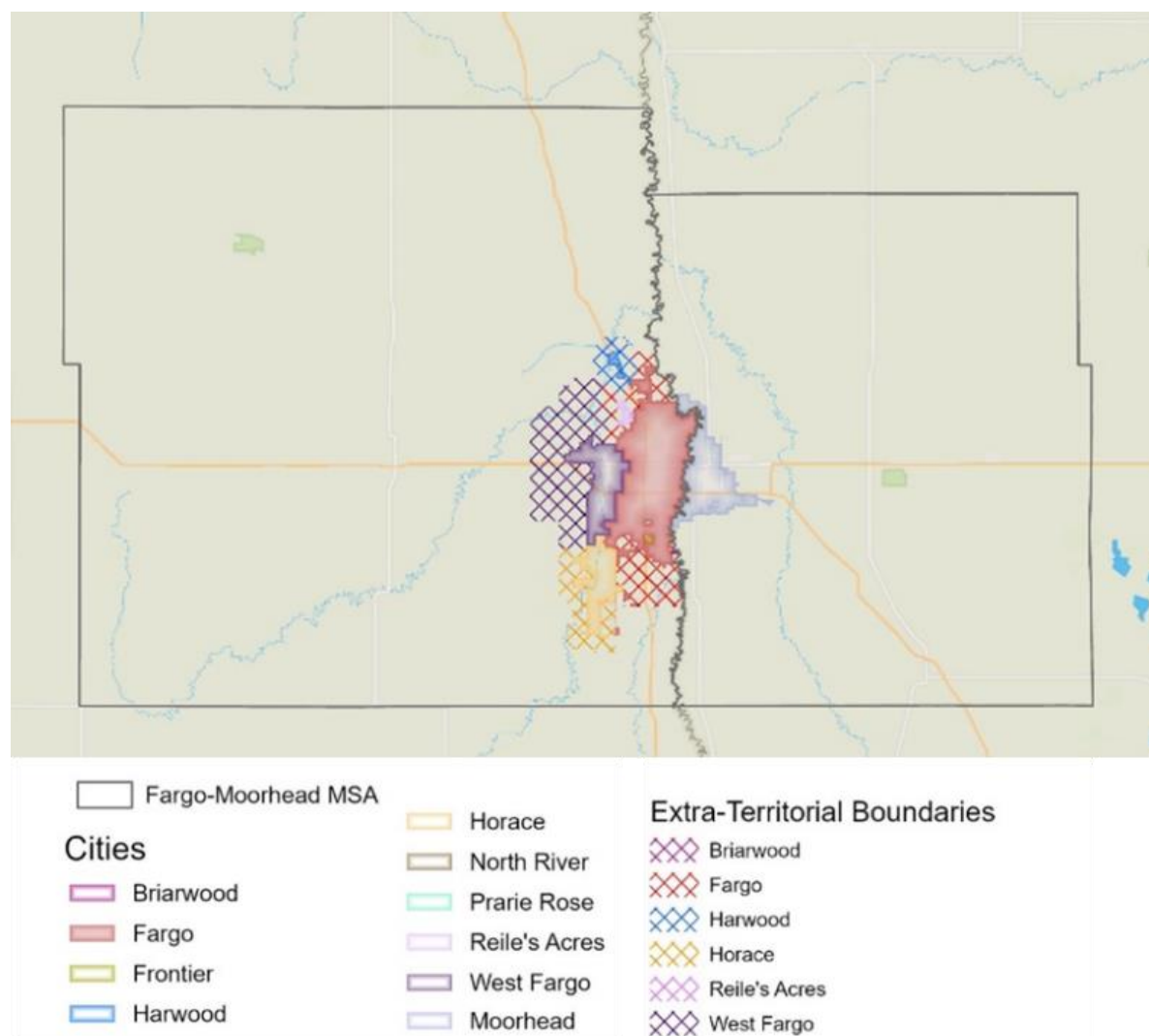


FIGURE 2: FARGO AND NEIGHBORING CITIES

Fargo, ND	Moorhead, MN	Horace, ND	West Fargo, ND	Harwood, ND	Reile's Acres, ND	Briarwood, ND
125,990	44,505	3,085	38,626	794	703	57

Source: Census 2020, U.S. Census Bureau; Strategic Economics, 2023.

Figure 3: Fargo and Neighboring Cities with Extra-Territorial Boundaries



GROWTH TREND ANALYSIS SUBAREAS WITHIN FARGO

New growth and change within Fargo have occurred differently in different parts of the City depending on multiple factors including existing land use patterns, real estate market conditions, the availability of opportunity sites available for future development, land use policy, and available development incentives. This growth trends analysis has divided the City into five subareas to be able to measure how growth has occurred differently in different places over time and by population, employment, and development patterns. Tracking growth trend by subarea allows for comparisons within different parts of the City as compared to Fargo as a whole. This approach provides the ability to track patterns of change that have emerged over the past 20 years which can then help understand the implications of potential growth patterns for the next 20 years. The subarea boundaries are shown in Figure 4.

The five subareas were developed using multiple existing geographic boundaries to align the growth trends analysis with existing available data. These data sets/geographies are described below. Maps showing the boundaries for the boundaries these underlying geographies are shown in the Appendix.

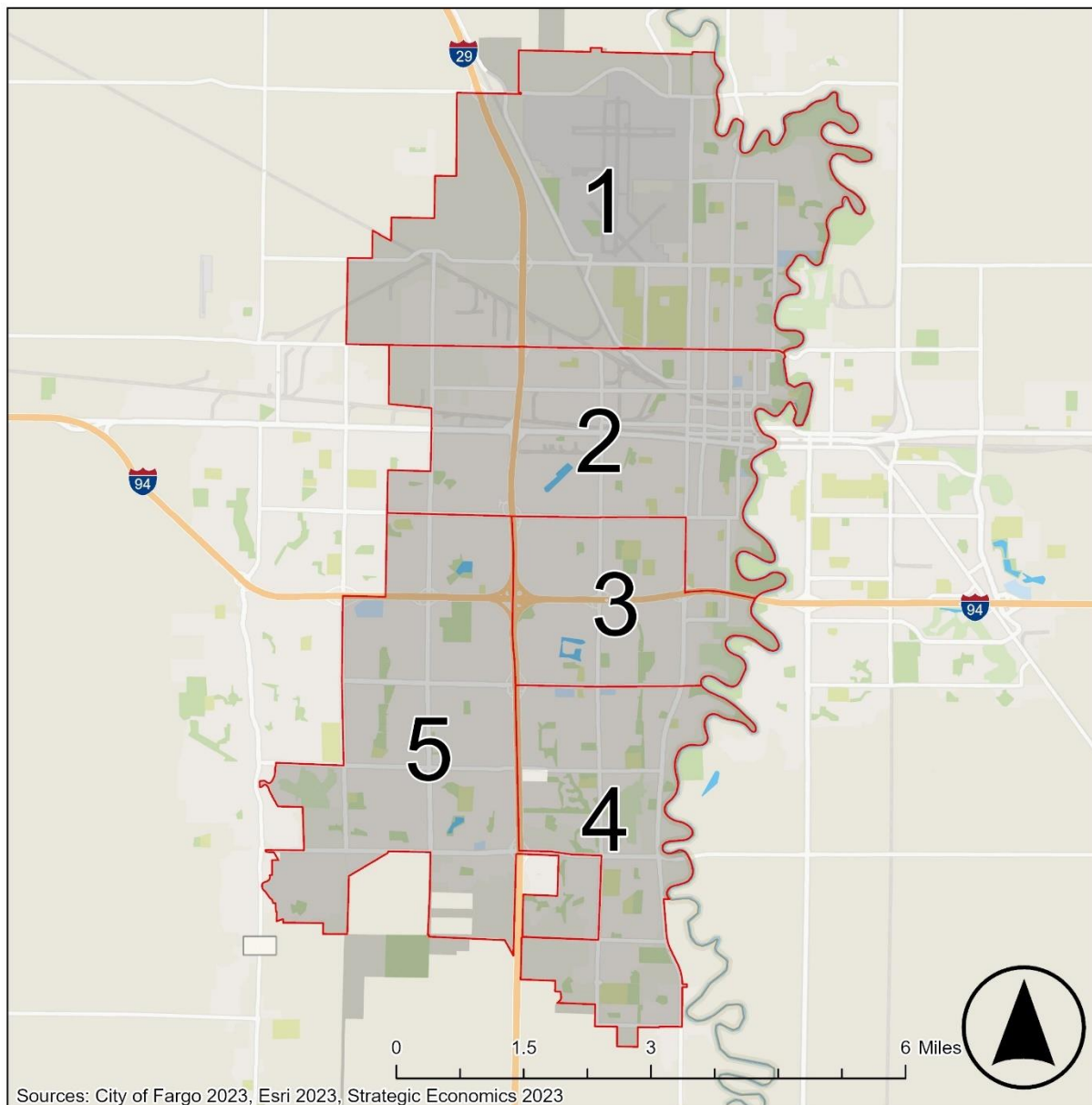
1. **City of Fargo, Office of Assessor's Reappraisal Areas:** The Fargo Assessor's Office reappraises all parcels for the purpose of property tax collection every year. This process considers each parcel's use and other specific attributes as well as general changes in the real estate market for that use and location, as well as other neighborhood or area conditions. This process uses five subareas or reappraisal zones. These zone boundaries generally reflect areas with common characteristic such as existing property values, land use, building age, etc. and several other characteristics. Reappraisal zone boundaries are redrawn every year so that the five zones each have roughly the same number of parcels the 2023 Reappraisal Zone areas were used as the as the base geography for the Growth Trends Subarea because the zones reflect both land use characteristics and real estate market values.
2. **Neighborhood Boundaries:** The City of Fargo has established 39 neighborhoods, each of which has multiple unifying characteristics. Neighborhood boundaries were taken into consideration so that the growth plan subareas boundaries do not cut across neighborhood boundaries.
3. **Distribution of Property Values per Acre in Fargo:** Strategic Economics plotted current property values on a per acre basis for the entire City to identify areas of high, medium, or low property values. In general, this property value analysis lines up with the Reappraisal Zone boundaries, however, this further analysis was used to adjust the boundary between subareas 1 and 2 which have been modified slightly from the Reappraisal Zone boundaries.
4. **Special Assessment Districts established since 2020:** In Fargo, special assessment districts are used to pay for either new infrastructure or certain kinds of infrastructure improvement. Properties in any given assessment district all receive the same benefit and are therefore a type of special or geographic "unit". The special assessment districts created since 2020 are all in the City's southern area where most new development has been built. Therefore, the boundaries of these districts were also considered so that districts were not split across subareas.
5. **Traffic Analysis Zones (TAZ), 2023:** Traffic analysis zones are the geographic units used to model projected traffic flows, journey to work, place of work and population growth statistics, for the MSA. MetroCOG, the metropolitan planning organization for the Fargo-Moorhead MSA defines these boundaries as part of preparing the region's long range transportation plan. Every property in the MSA is assigned to a TAZ and the TAZ boundaries coincide with census block groups (see below). All Fargo TAZ boundaries have been maintained as TAZs were assigned to subareas.
6. **Census Block Groups (CBG):** The CBG is the smallest geographic entity for which the decennial census tabulates and publishes sample data². Census block groups typically contain about 39 census blocks and between 600 to 3,000 people with an optimum size of 1,500 people³. Census block group boundaries are redrawn every ten years as part of the decennial census process to ensure that the block group geographies remain relatively balanced in population size. The 2020 block group geographies used to inform the growth trends subarea boundaries.

² Census Bureau. *Census Blocks and Block Groups*.

<https://www2.census.gov/geo/pdfs/reference/GARM/Ch11GARM.pdf>

³ Current360 (2011) *Research 101: Census Tracts vs. Census Block Groups*.
<https://current360.com/research-101-census-tracts-vs-census-block-groups/>

Figure 4: Growth Trend Analysis Subarea Boundaries



Subareas

- Subareas
- Fargo City Boundary
- 1** Label corresponds with subarea number

Report Contents

This report is divided into five sections.

Introduction - Provides an overview of the report's purpose, summarizes Fargo's demographic and employment growth trends, and provides an overview of the geographic and spatial context for the analyses to follow.

Demographic and Employment Growth Trends - provides an analysis of Fargo's population and employment growth for the past two decades. This growth represents the demand that must be met with a supply of land and buildings to provide people with places to live and work.

Growth Trend Patterns – This section considers where and how Fargo has grown based on land annexation and new development that constitutes the City's major land use patterns. These trends are presented by subarea to track where growth has occurred and how growth relates to annexation. Building permit values have also been included to indicate what types of investments have been most significant by land use type and location.

Growth Trend Key Findings – Summarizes the key findings from the previous two sections, presents a description of four key growth nodes in the City, and discusses the potential for continued growth accommodation at the City's southern border.

Appendix – Includes background information for refer reference.

II. DEMOGRAPHIC AND EMPLOYMENT GROWTH TRENDS

This section presents demographic and employment growth trends at the MSA and City levels. Employment trends are also presented at the subarea level. Although growth in any community is typically understood by measuring population growth, employment or job growth is, in fact, foundational to population growth. People will not stay in or move to a community that has does not offer employment opportunities. Population and employment growth also drive demand for real estate development and infrastructure investment. The form this development takes, in the form of real estate supply, is also essential to understanding Fargo's growth trends. Real estate development trends and the associated land supply required to support these trends are discussed in the next section.

Demographic Trends

Fargo's population growth is driven by multiple factors including natural change (births and deaths), in and out migration from other places, and annexation. Because this demographic analysis relies on U.S. Bureau of the Census data, a detailed profile of natural change (births and deaths) is not directly addressed in this analysis. Growth by annexation accounts for people who were living in areas that have been annexed into the City as some point in the last 20 years.

Tracking population growth by subarea in the City is challenging for two reasons. First, as infill development has occurred, census block group boundaries within the City's established limits have changed. Although these changes are not significant, they are enough to make it impossible to discern what population changes in these areas can by accounted for by natural change or migration, which would be actual change for the entire City, and how much of this change is merely shifting population from one place in the City to another. Second, the census block group boundaries for subareas 4 and 5 have changed dramatically over the last 20 years. In 2000, some of the block groups associated with these two subareas included population that was outside of Fargo at the time but was subsequently annexed into the City but assigned to a new block group. This combination of annexation and new census block group formation makes it impossible to determine where population growth occurred as a result of new development, and how much was from the changing boundaries but where no net growth had occurred in the City. Also, because of these shifting census block group boundaries, demographic trends cannot be reported at the subarea level. Therefore, the analysis below only shows 2020 data at the subarea level.

As will be discussed below, this issue does not exist for reporting employment trends due to differing data sources.

Fargo and the MSA have both grown by approximately 20 percent over the last 20 years. As shown in Figure 5, both the City and the MSA increased in about the same proportions. However, both geographies have added more population in the second decade of the period than in the first decade. Subarea 5 accounted for the largest share of Fargo's population in 2020, closely followed by subarea 2.

Fargo accounted for more than 70 percent of the households in the Fargo-Moorhead MSA in 2020. While population increased across both decades in both geographies, the number of households in

the MSA appears to have declined between 2000 and 2010 but increased again 2010-2020 (see Figure 5). Because this decline is not material to this Growth Trends analysis, it has not been fully explored. Fargo's household count increased across both decades as would be consistent with the City's population growth trend. As with population, in 2020 subarea 5 had the greatest number of households, but subarea 2 had only a slightly smaller household count, as shown in Figure 5.

FIGURE 5: POPULATION AND HOUSEHOLDS IN FARGO-MOORHEAD MSA, CITY OF FARGO AND FARGO'S SUBAREAS

	Population			Numerical Change		Percentage Change	
	2000	2010	2020	2000-2010	2010-2020	2000-2010	2010-2020
Fargo-Moorhead MSA	174,367	208,777	249,843	34,410	41,066	20%	20%
City of Fargo	90,599	105,598	125,990	14,999	20,392	17%	19%
Subarea 1			22,687				
Subarea 2			29,261				
Subarea 3			22,902				
Subarea 4			18,730				
Subarea 5			36,256				
	Households			Numerical Change		Percentage Change	
	2000	2010	2020	2000-2010	2010-2020	2000-2010	2010-2020
Fargo-Moorhead MSA	69,985	62,916	77,027	-7,069	14,111	-10%	22%
City of Fargo	39,268	46,681	55,478	7,413	8,797	19%	19%
Subarea 1			8,064				
Subarea 2			14,899				
Subarea 3			11,230				
Subarea 4			7,659				
Subarea 5			15,014				

Note: Population data is derived from decennial census counts, while household data is derived from 2020 ACS 5 Year Estimates. As a result, there are some discrepancies which show household gain and population loss simultaneously. These discrepancies can be attributed to the difference in data sources and may not accurately display on-ground conditions.

Source: U.S. Census Bureau, 2000, 2010, 2020; U.S. Census Bureau ACS, 2016-2020; Strategic Economics, 2023.

Fargo's household sizes have steadily decreased from 2000 to 2020 whereas household sizes appear to have increased from 2000-2010 and increased slightly 2010-2020. In Fargo, this decrease in household size corresponds to the larger increase in households than in population. In addition, subarea 2, which has some of the smallest household sizes of the five subareas, probably added households through development, not merely as a result of changing census block group boundaries. This topic will be discussed further in the next section (Figure 6).

Figure 6: Household sizes in Fargo-Moorhead MSA, the city of Fargo and Fargo's subareas, 2000, 2010, and 2020

	2000	2010	2020
Fargo-Moorhead MSA	2.4	2.27	2.3
City of Fargo	2.2	2.15	2.1
Subarea 1			2.4
Subarea 2			2
Subarea 3			2
Subarea 4			2.6
Subarea 5			2.2

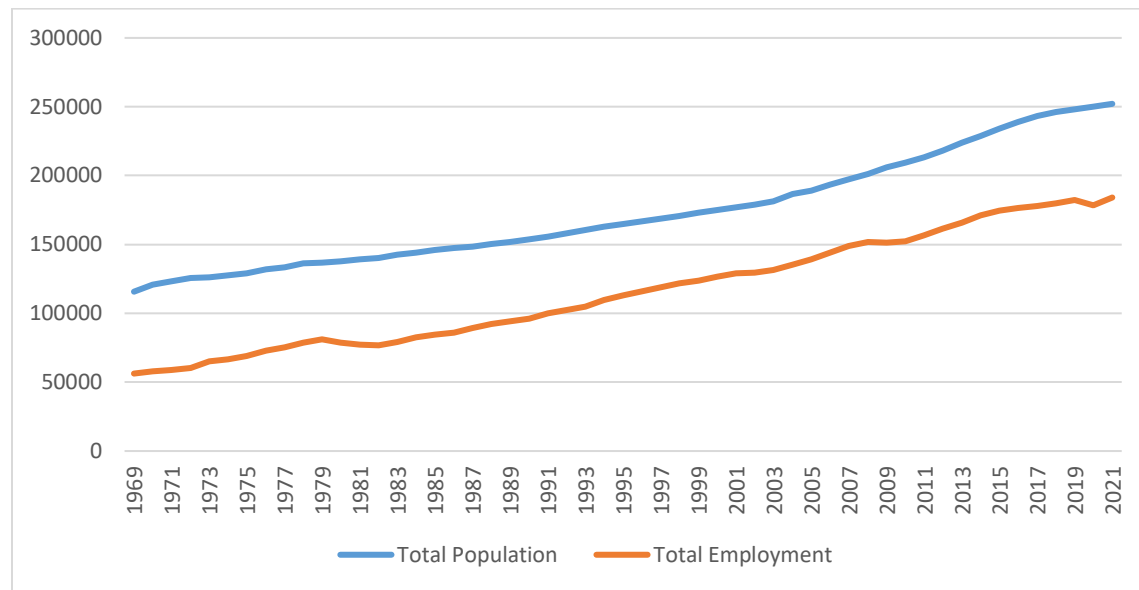
Sources: U.S. Census Bureau ACS 2016-2020; Strategic Economics, 2023.

Employment Trends

This section presents employment trends for the MSA, the City of Fargo, and subareas. Unlike with the population trend analysis, employment change can be measured at the subarea level by time period due to different data sources. However, this data source is only available from 2002, so the detailed analysis starts in 2002, rather than 2000. Job growth is also tracked by industry using the North American Industrial Classification (NAICS) codes to provide detail regarding the major industries comprising Fargo's economy, the dynamism within these industries, and the ways in which these industries may inter-relate with each other. Although this analysis only addresses employment trends, not projections, these trends do indicate how well Fargo's economy is positioned to continue growing and evolving, as opposed to stagnating or declining, as have the economies in many upper midwestern regions, leading to potential population stagnation and/or eventual decline.

The Fargo-Moorhead MSA has shown consistent growth in population and employment in the last five decades (1970-2020). During this same time period the U.S. economy has restructured away from manufacturing and towards more technology or knowledge-based industries. While these changes have been caused great volatility or disruption in some regional economies, the Fargo region has not experienced any significant periods of major employment decline. In fact, as Figure 7 shows, over the past 50 years jobs and population have grown steadily, with only minor dips during recessionary periods, including during the great recession of 2008.

FIGURE 1: POPULATION AND EMPLOYMENT IN FARGO MSA FROM 1969 TO 2021



Sources: Bureau of Economic Analysis, 2023; Strategic Economics, 2023.

Fargo's jobs have grown faster than the Fargo-Moorhead MSA's total employment from 2010 to 2020. In 2002 Fargo accounted for just under 50 percent of the region's total jobs. However, by 2020 Fargo accounted for more than half of the MSA's total jobs and a slightly higher share of incremental job growth. Although the MSA had similar employment gains for 2002-2010 and 2010-2020, Fargo had more almost twice the job growth in the second time period than it did in the first (Figure 8).

FIGURE 8: TOTAL EMPLOYMENT FOR FARGO-MOORHEAD MSA, CITY OF FARGO AND FARGO'S SUBAREAS, 2002, 2010, AND 2020.

	Numerical Change					
	2002	2010	2020	2002-2010	2010-2020	2002-2020
Fargo-Moorhead MSA	86,223	103,285	123,578	17,062	20,293	37,355
City of Fargo	42,053	49,653	62,963	7,600	13,310	20,910
Subarea 1	9,363	9,330	8,190	-33	-1,140	-1,173
Subarea 2	13,768	15,191	13,989	1,423	-1,202	221
Subarea 3	11,134	12,997	12,086	1,863	-911	952
Subarea 4	5,876	9,228	9,160	3,352	-68	3,284
Subarea 5	1,947	2,984	19,556	1,037	16,572	17,609

Sources: U.S. Census Bureau, OnTheMap Application, 2002-2020; Strategic Economics, 2023.

Fargo has a very diverse economy. As Figure 9 shows, no more than 20 percent of Fargo's total employment is concentrated in any one industry sector. Fargo's largest industry sector is Health, which is responsible for 20 percent of the City's total employment. Several other sectors such as Retail Trade, Manufacturing, Professional, Scientific, and Technical, Services and Information, Education, and Accommodation and Food Services all account for significant portions of Fargo's total jobs. Fargo has less than 2 percent of its total employment in legacy industries including Oil and Gas, Mining, and Agriculture, all of which are key industries for the North Dakota economy. Fargo's diverse economy has shown remarkable resilience during periods of national recession. The Other industry category represents many smaller industries within the Fargo economy that, on their own, account for less than 1,000 jobs and as such, have no major implications for the City's economic growth trends.

Figure 9: Fargo Employment Trends, 2002-2020

NAICS Industry Code	2002	2010	2020	2002-2010	2010-2020	2002-2020
Oil and Gas and Agriculture	173	257	386	84	129	213
Manufacturing	3,496	3,708	5,103	212	1,395	1,607
Retail	4,932	6,016	6,702	1,084	686	1,770
Insurance and Banking	2,717	2,868	3,903	151	1,035	1,186
Professional, Scientific and Technical Services (PSTS) and Information	4,919	4,086	4,975	-833	889	56
Education	3,932	4,793	5,058	861	265	1,126
Health	5,444	7,529	13,208	2,085	5,679	7,764
Other	16,440	20,396	23,628	3,956	3,232	7,188
Total	42,053	49,653	62,963	7,600	13,310	20,910

Sources: U.S. Census Bureau, OnTheMap Application, 2002-2020; Strategic Economics, 2023.

Employment growth by industry and subarea show that Fargo's employment is shifting to the City's south end. As Figure 9 above shows, the subareas that comprise Fargo's older neighborhoods either lost jobs or had small employment gains 2002-2020. However, Subarea 4 has experienced significant job growth, with the Health industry alone accounting for about one-third of this increase. The most significant employment growth has been in subarea 5, which added over 17,000 jobs. Detailed tables showing job growth by subarea and industry sector are shown in the appendix. This data shows that subarea 5 has had employment gains across many sectors including Health and several other knowledge-based industries. These growth trends will be discussed in more detail in the section below.

FIGURE 9: TOTAL EMPLOYMENT FOR FARGO-MOORHEAD MSA, CITY OF FARGO AND FARGO'S SUBAREAS, 2002, 2010, AND 2020.

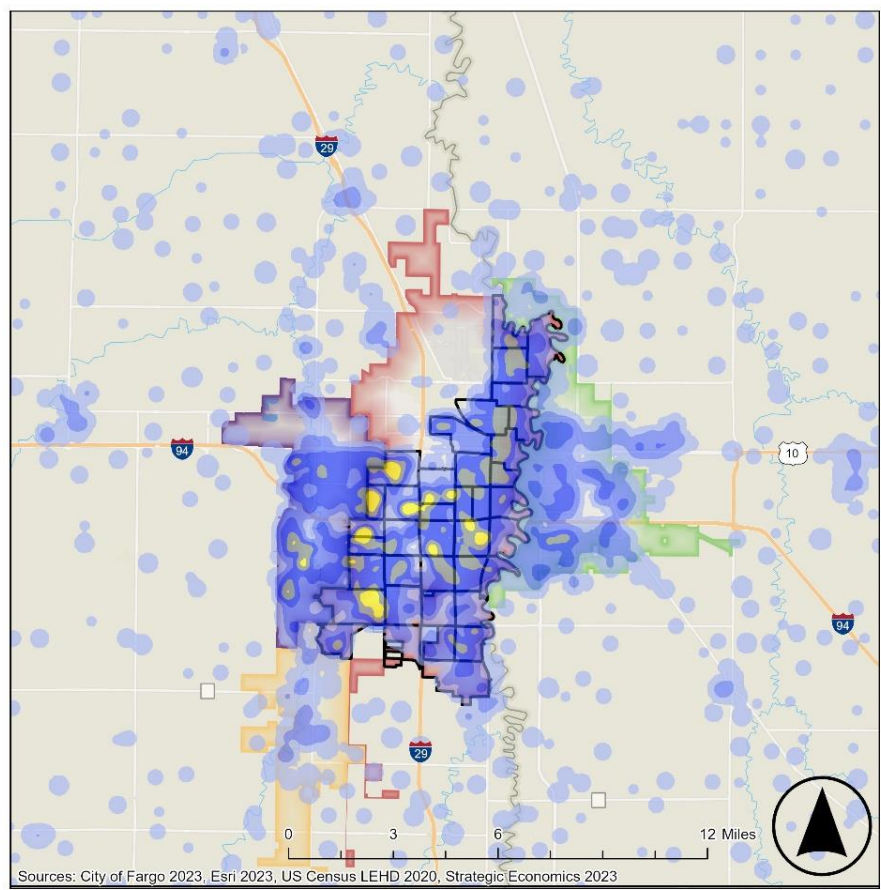
	2002	2010	2020	Numerical Change		
				2002-2010	2010-2020	2002-2020
Fargo-Moorhead MSA	86,223	103,285	123,578	17,062	20,293	37,355
City of Fargo	42,053	49,653	62,963	7,600	13,310	20,910
Subarea 1	9,363	9,330	8,190	-33	-1,140	-1,173
Subarea 2	13,768	15,191	13,989	1,423	-1,202	221
Subarea 3	11,134	12,997	12,086	1,863	-911	952
Subarea 4	5,876	9,228	9,160	3,352	-68	3,284
Subarea 5	1,947	2,984	19,556	1,037	16,572	17,609

Sources: U.S. Census Bureau, OnTheMap Application, 2002-2020; Strategic Economics, 2023.

The City of Fargo was a net importer of jobs in 2020. According to LEHD data, Fargo has a total of 98,071 jobs, of which 45,442 or 63 percent of employees resided in Fargo in 2020. The majority of remaining Fargo workers, nearly 53,000, live in neighboring cities. Figure 10 shows where Fargo's workers reside.

More than 70 percent of Fargo's residents work in Fargo. More than 45,000 Fargo employed residents work in the city, showing that Fargo an a good place to both work and live. Other locations to which a much smaller shares of Fargo residents commute for work include West Fargo (9 percent) and Moorhead (8 percent) which are neighboring cities within the Fargo-Moorhead MSA. Figure 11 shows where Fargo residents work.

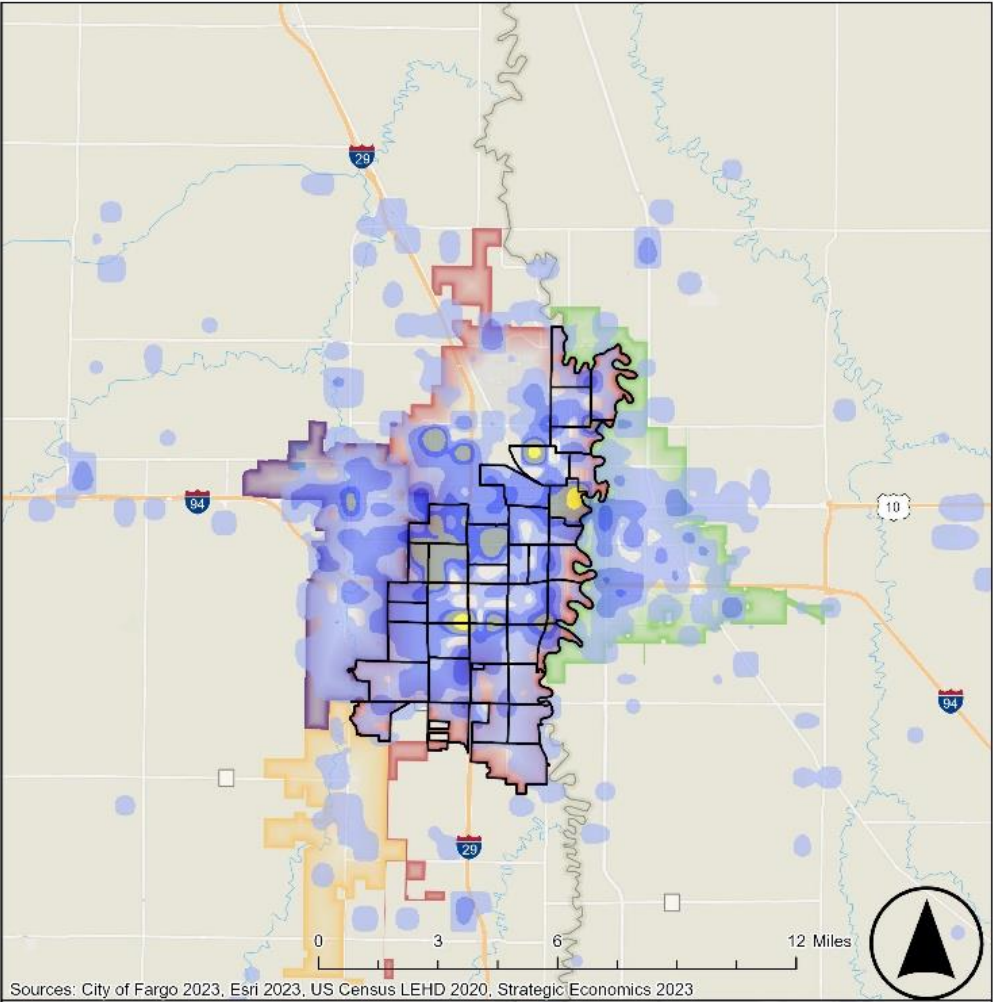
FIGURE 2: WHERE FARGO WORKERS RESIDE, 2020



Where Fargo Workers Reside in 2020



FIGURE 11: WHERE FARGO RESIDENTS WORK, 2020



Where Fargo Residents Work in 2020



III. FARGO'S GROWTH TREND PATTERNS

This section presents Fargo's growth trends by land area (acres), land use and investment, and location. The combination of these three elements shows where and how Fargo has accommodated the population and employment growth discussed in the previous chapter. This discussion concludes with a synthesis of growth nodes or areas within the City that could be considered for areas that could absorb additional future growth, in addition to utilizing remaining vacant land in the City's ET areas.

Growth Trends by Land Area

A key issue for any growth plan is to determine how much future growth can be accommodated by redeveloping land already within Fargo and how much would be accommodated through ongoing land annexation. The following discussion indicates how this pattern has evolved over time. While there are various methods for measure population density and growth, unlike the 2007 Growth Plan, this analysis evaluates incremental changes in Fargo's land area in relation to incremental changes in population. This metric can be viewed as a general measure of density change over time.

Fargo accommodated more growth on less land in the last decade than it has in the past. In 2020, Fargo had 32,493 acres within its corporate boundaries, not including the ET areas, and a population of approximately 126,000. While data are not available regarding the City's total acreage in past decades, there is data regarding the amount of land Fargo annexed by decade. This information is shown in Figure 12. In the six decades from 1960-2010, the City added an average of approximately 4,600 acres per decade. In contrast, between 2010 and 2020, the City only annexed 650 acres or 14 percent of the annual average for the prior six decades. Figure 12 also shows Fargo's population increase by decade and the average number of acres added per person added. Between 1960 and 2010, the City added an average of 2.3 people per acre additional acre. But in the most recent decade, 2010-2020, the City added an average of 31 people per new acre

Figure 12: Fargo Population and Acreage Growth: 1960-2020

Year/Decade	Population	Total Acres	Acres Annexed	Pop. Incr.	Pop/acre
1960	47,000				
1960- 1969			2,219	6,365	2.87
1970	53,365				
1970 -1079			9,142	8,018	0.88
1980	61,383				
1980 -1989			2,116	13,421	6.34
1990	74,804				
1990 - 1999			5,421	15,795	2.91
2000	90,599				
2000-2009			7,055	14,999	2.13
2010	105,598				
2010 -2020			652	20,392	31.28
2020	125,990	32,493			

Source: City of Fargo, Strategic Economics 2023

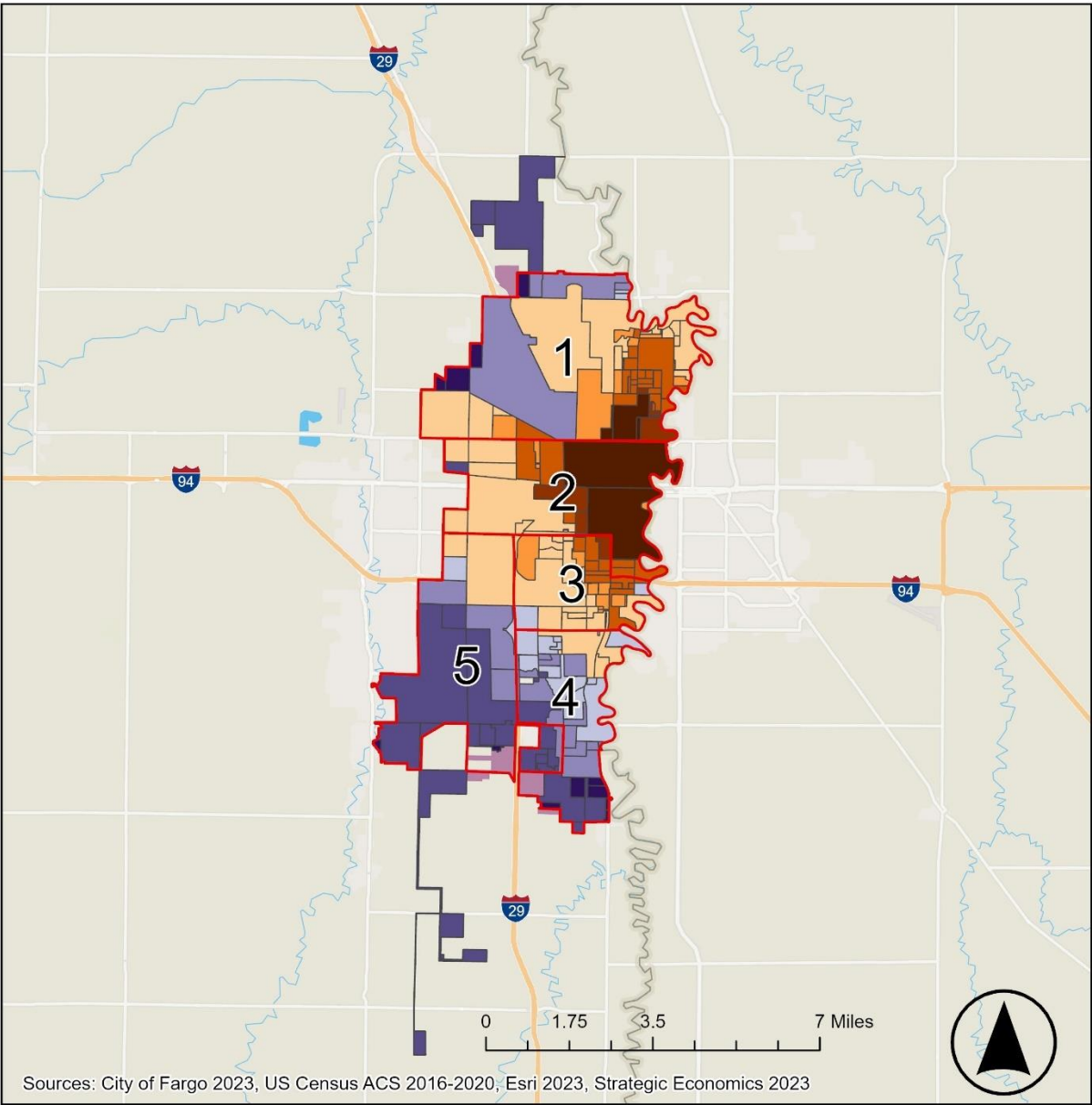
Fargo's more recently annexed subareas now account for a significant proportion of Fargo's population. In 2020, Subareas 4 and 5 accounted for 34 percent of the City's land but 44 percent of the City's population, as shown in Figure 13. Subarea 2, the City's oldest subarea also accounts for almost one-quarter of Fargo's population, but only 18 percent of the land area. However, annexation patterns are not uniform by subarea. For example, as shown in Figure 14, subarea 5 includes land that has been annexed into Fargo over many different decades.

Figure 13: Fargo Acreage and Population by Subarea: 2020

Geography	Acreage (2020)		Population (2020)	
City of Fargo	32,493	100%	125,990	100%
Subarea 1	9,876	30%	22,687	18%
Subarea 2	5,989	18%	29,261	23%
Subarea 3	3,097	10%	22,902	18%
Subarea 4	4,197	13%	18,730	15%
Subarea 5	6,966	21%	36,256	29%

Sources: U.S. Census Bureau, 2020; Strategic Economics, 2023.


Figure 14: Land Annexed into Fargo by Subarea and Decade



Annexation by Decade in Fargo

City Boundary By Decade

1921 - 1930	1981 - 1990
1941 - 1950	1991 - 2000
1951 - 1960	2001 - 2010
1961 - 1970	2011 - 2020
1971 - 1980	2021 - Present

 Subareas
1 Label corresponds with subarea number



Growth Trends by Land Use

Buildings, including housing, medical facilities, shopping centers, offices, and industrial spaces all represent the land uses, or real estate supply, that responds to demand from population and employment growth. Changing land use patterns also correspond to land consumption based on the development density or intensity, e.g., multi-family buildings are more dense than single family homes and office buildings tend to be denser than warehouses. The discussion below tracks changes in land use patterns based on increases in supply for all of Fargo's major building types in units, as expressed in the number of residential units and non-residential building square footage. In addition, the discussion considers building permit valuation as an additional measure of real estate market investment patterns throughout the City.

RESIDENTIAL DEVELOPMENT TRENDS

This section first considers the addition of housing units by subarea and type, then overlays these with reinvestment in residential units by looking at aggregate building permit values for residential properties over the previous two decades.

Subarea 2 had the highest total number of single-family homes in Fargo in 2020, comprising nearly one-fourth of the city's entire single family housing stock. Subarea 1 has the second highest number of single-family units in the city as shown in Figure 15. However, subarea 5 has shown the highest growth in single family home developments from 2000 to 2020, tripling its number of units from 1,400 in 2000 to 4,400 in 2020. From 2010 to 2020, the single-family housing stock in subarea 4 has grown by 42 percent adding more than 1,000 units.

FIGURE 15: DISTRIBUTION OF SINGLE-FAMILY UNITS IN CITY OF FARGO, AND BY SUBAREAS

	City of Fargo	Subarea 1	Subarea 2	Subarea 3	Subarea 4	Subarea 5
2000	15,697	4,769	5,539	2,890	2,863	1,417
2010	18,980	5,272	4,282	4,211	2,594	5,208
2020	21,530	5,257	5,920	3,558	3,689	4,401
Increment Change						
2000-2010	3,283	503	(1,257)	1,321	(269)	3,791
2010-2020	2,550	(15)	1,638	(653)	1,095	(807)
2000-2020	5,833	488	381	668	826	2,984
Percent Change						
2000-2010	21%	11%	-23%	46%	-9%	268%
2010-2020	13%	0%	38%	-16%	42%	-15%
2000-2020	37%	10%	7%	23%	29%	211%

Sources: U.S. Census Bureau ACS, 2017-2021; Strategic Economics, 2023.

The largest inventory of multifamily units in Fargo is in subarea 5, followed by subarea 2. The lowest multifamily inventory is in subarea 1, followed by subarea 4. The inventory of multifamily units by subarea is shown in Figure 16. Subarea 2 had the highest number of multifamily units historically, but it was overtaken by subarea 5 in 2010. Subarea 5 added more than 50 percent to its existing multifamily stock every decade, going from nearly 5,000 multifamily units in 2000 to 11,500 units by 2020.

FIGURE 1: INVENTORY OF MULTIFAMILY UNITS IN FARGO-MOORHEAD MSA, CITY OF FARGO AND FARGO'S SUBAREAS, 2000, 2010 AND 2020

	City of Fargo	Subarea 1	Subarea 2	Subarea 3	Subarea 4	Subarea 5
2000	19,392	1,426	5,436	4,828	2,217	4,792
2010	23,327	1,711	5,924	5,020	2,410	7,569
2020	29,315	1,965	7,029	5,094	2,950	11,470
Increment Change						
2000-2010	3,935	285	488	192	193	2,777
2010-2020	5,988	254	1,105	74	540	3,901
2000-2020	9,923	539	1,593	266	733	6,678
Percent Change						
2000-2010	20%	20%	9%	4%	9%	58%
2010-2020	26%	15%	19%	1%	22%	52%
2000-2020	34%	38%	29%	6%	33%	139%

Sources: U.S. Census Bureau, ACS 2017-2020; Strategic Economics, 2023.

RESIDENTIAL BUILDING PERMITS

Between 2000 and 2020, building permit values for multifamily units far outpaced investment in single family units. While this trend began in the decade between 2000 and 2010, following the Great Recession, the difference in permit values for multifamily units accelerated even further beyond investments in single family units, as shown in Figure 17.

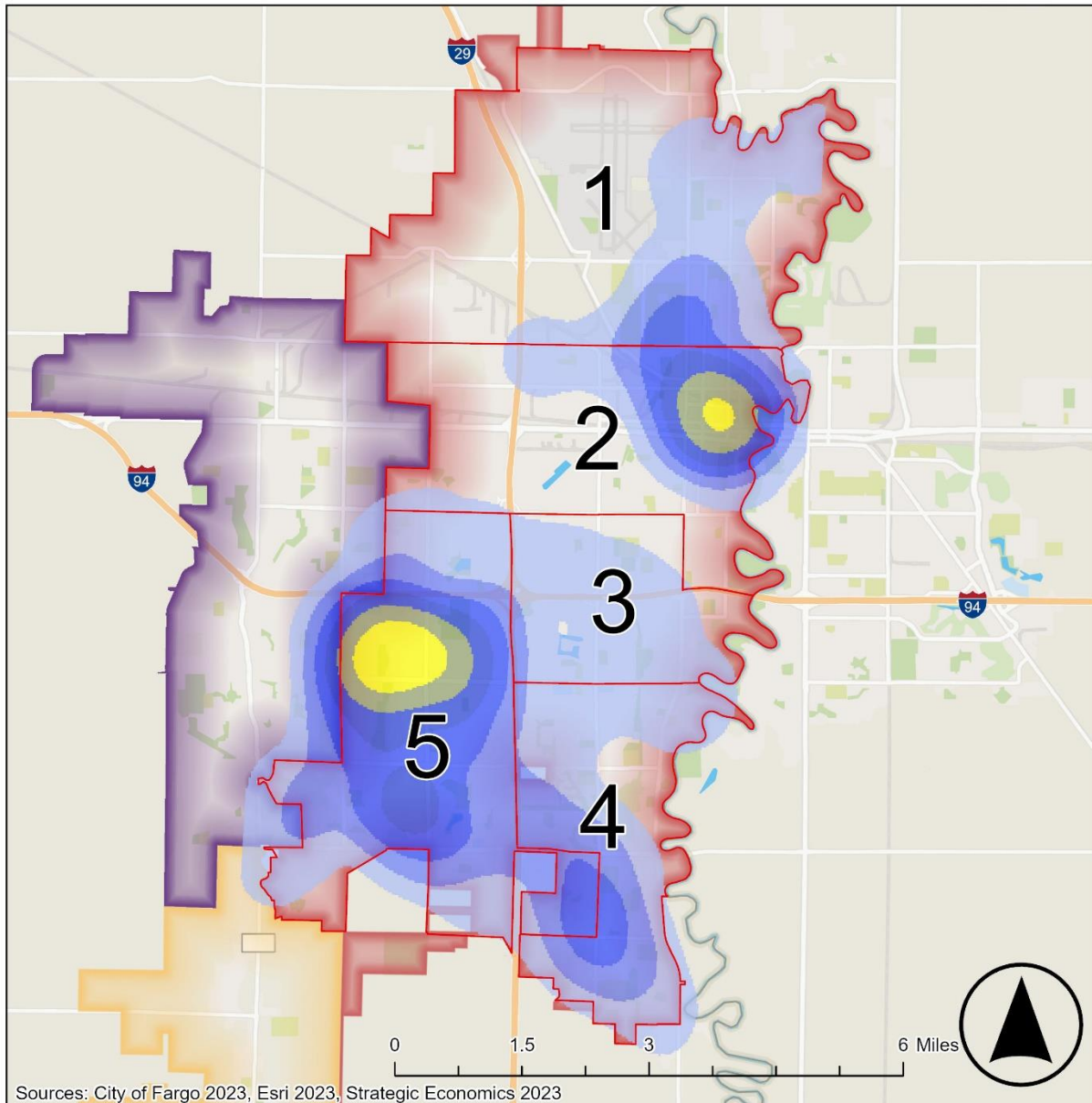
Overall, subarea 5 accounts for the greatest housing permit investment, followed by subarea 2. In both subareas, single family investment accounted for less than 10 percent of total residential permit values. Even in subarea 4, which had the highest level of single-family permit value, the total amount still only accounted for less than 30 percent of total value. This indicates that even in Fargo's fastest growing areas, relatively dense housing is being produced. Figure 18 shows these investment patterns by subarea.

Figure 17: Residential Building Permit Values by Unit Type and Subarea: 2000-2020

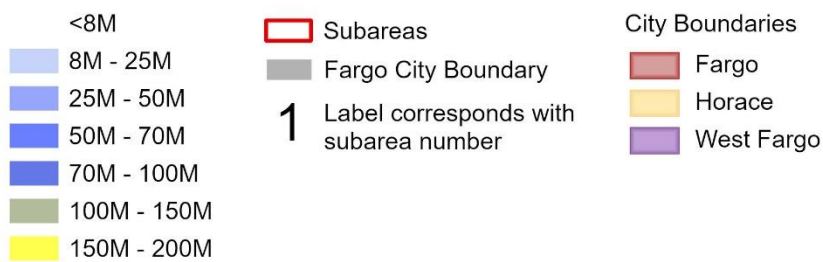
Unit Type	Subarea 1	Subarea 2	Subarea 3	Subarea 4	Subarea 5	Fargo
Single Family Units						
2000-2009	\$ 671,710	\$ -	\$ 2,300,000	\$ 8,230,000	\$ 8,619,800	\$ 19,821,510
2010-2020	\$ 12,503,000	\$ 1,180,000	\$ 765,000	\$ 24,251,445	\$ 46,651,537	\$ 85,350,982
Total Single Family	\$ 13,174,710	\$ 1,180,000	\$ 3,065,000	\$ 32,481,445	\$ 55,271,337	\$ 105,172,492
Multifamily Units						
2000-2009	\$ 25,715,151	\$ 47,246,980	\$ 16,095,000	\$ 29,716,000	\$ 164,490,056	\$ 283,263,187
2010-2020	\$ 33,864,345	\$ 153,645,266	\$ 23,234,590	\$ 48,833,000	\$ 470,534,680	\$ 730,111,881
Total Multifamily	\$ 59,579,496	\$ 200,892,246	\$ 39,329,590	\$ 78,549,000	\$ 635,024,736	\$ 1,013,375,068
Total Residential Value	\$ 72,754,206	\$ 202,072,246	\$ 42,394,590	\$ 111,030,445	\$ 690,296,073	\$ 1,118,547,560

Source: City of Fargo, 2023; Strategic Economics, 2023

Figure 18 Residential Building Permit Valuations by Subarea: 2000-2023



Residential Permit Value Per Square Mile, 2000 - 2023



COMMERCIAL REAL ESTATE TRENDS

To help understand Fargo's changing economy, employment trends, and growth patterns, this section presents trends in Fargo's commercial real estate inventory by use retail, industrial and office, the City's primary commercial land uses not including major institutional uses such as the Sanford medical campus, North Dakota State University, or the airport. It should also be noted that due to the data source used to produce this analysis, the trend years include 2007, 2020, and 2023 year to date, depending on the product type.

RETAIL

Fargo is a regional retail destination. The City has the only super-regional mall in the region, - the West acres mall built in 1972. In addition, Fargo's total retail inventory accounts for 64 percent of the total retail inventory of the Fargo-Moorhead MSA, comprising 84 percent of its strip center and nearly 60 percent of its neighborhood center retail inventory. Fargo's retail inventory by type of shopping center is shown in Figure 19.

FIGURE 19: RETAIL INVENTORY IN SQUARE FEET BY TYPE IN THE FARGO-MOORHEAD MSA AND CITY OF FARGO, 2023 YEAR TO DATE

Type	Fargo	Fargo as percentage of Fargo-Moorhead MSA
Community Center	-	-
Neighborhood Center	754,367	57%
Power Center	-	-
Strip Center	590,311	84%
Super Regional Mall	890,403	100%
Total	2,235,081	64%

Sources: U.S. Census Bureau, OnTheMap Application, 2020; Strategic Economics, 2023

Fargo has added over a million square feet of retail inventory from 2007 to 2020, increasing its total retail inventory to above 10 million square feet. During this period, subarea 2 has added more than 200,000 square feet and subarea 5 has added close to 600,000 square feet of retail space as shown in Figure 20. Subareas 3 and 4 have both added more than 30,000 square feet of retail space.

FIGURE 20: RETAIL INVENTORY IN SQUARE FEET IN FARGO'S SUBAREAS 2007, 2010, 2020

	Fargo	Subarea 1	Subarea 2	Subarea 3	Subarea 4	Subarea 5
2007	9,152,278	530,687	2,331,962	1,111,528	618,071	2,465,744
2010	9,592,408	533,352	2,489,751	1,124,952	618,071	2,726,087
2020	10,234,866	540,755	2,551,624	1,144,104	653,391	3,048,469
Numerical Change						
2007-2010	440,130	2,665	157,789	13,424	0	260,343
2010-2020	642,458	7,403	61,873	19,152	35,320	322,382
2007-2020	1,082,588	10,068	219,662	32,576	35,320	582,725
Percentage Change						
2007-2010	5%	1%	7%	1%	0%	11%
2010-2020	7%	1%	2%	2%	6%	12%
2007-2020	12%	2%	9%	3%	6%	24%

Sources: U.S. Census Bureau, OnTheMap Application, 2020; Strategic Economics, 2023

INDUSTRIAL

Fargo accounts for more than 70 percent of the Fargo-Moorhead MSA's total manufacturing and distribution inventory in 2023. Fargo accounts for 98 percent of Fargo-Moorhead MSA's inventory in distribution and 100 percent in food processing. Fargo also has close to 85percent of the MSA's inventory in manufacturing and refrigeration or cold storage. The largest types of industrial inventory in Fargo in descending order are warehousing, followed by distribution and manufacturing. Nearly eight percent of the city's total employment is involved in manufacturing, and four percent in transportation and warehousing in 2020.

Subareas 1 and 2 represent 85 percent of Fargo's industrial inventory. Among Fargo's subareas, 1, followed by 2 have the highest industrial inventory in the city, and both have added nearly 500,000 square feet of new industrial space from 2007 to 2020 as shown in Figure 21. Subarea 5 has added more than 400,000 square feet of new industrial space and grown by 60 percent. This subarea now has close to one-fourth of Subarea 1's industrial inventory at above 1 million square feet. Subarea 3 has added 35,000 square feet of industrial space and subarea 4's industrial inventory has remained unchanged from 2007 to 2020.

FIGURE 21: INDUSTRIAL INVENTORY IN SQUARE FEET IN THE FARGO-MOORHEAD MSA, CITY OF FARGO, AND FARGO'S SUBAREAS 2007, 2010, AND 2020

	City of Fargo	Subarea 1	Subarea 2	Subarea 3	Subarea 4	Subarea 5
2007	7,737,255	3,778,263	3,109,524	80,750	121,793	676,882
2010	7,962,557	3,949,393	3,109,524	80,750	121,793	693,682
2020	9,225,353	4,250,303	3,607,431	115,626	121,793	1,086,200
Change						
2007- 2010	225,302	171,130	0	0	0	16,800
2010- 2020	1,262,796	300,910	497,907	34,876	0	392,518
2007- 2020	1,488,098	472,040	497,907	34,876	0	409,318
Percentage Change						
2000- 2010	3%	5%	0%	0%	0%	2%
2010- 2020	16%	8%	16%	43%	0%	57%
2007- 2020	19%	12%	16%	43%	0%	60%

Sources: CoStar, 2023; Strategic Economics, 2023.

OFFICE

Like industrial, more than 80 percent of the MSA's office inventory is in Fargo. As noted, before, Fargo is a major employment hub in the region and a net importer of workers in the MSA. Within Fargo, Subarea 5 has the largest inventory of office space, followed by subarea 2 as shown in Figure 22. Together these areas account for nearly 75 percent of the total office space in the City of Fargo.

FIGURE 22: OFFICE INVENTORY IN SQUARE FEET IN FARGO-MOORHEAD MSA, CITY OF FARGO, AND FARGO'S SUBAREAS 2007, 2010, AND 2020

	Fargo	Subarea 1	Subarea 2	Subarea 3	Subarea 4	Subarea 5
2007	7,172,297	255,844	2,934,609	651,988	234,824	2,317,137
2010	7,386,499	320,162	2,964,322	651,988	240,424	2,431,708
2020	8,627,523	351,612	2,970,222	659,988	355,761	3,367,455
Numerical Change						
2007-2010	214,202	64,318	29,713	0	5,600	114,571
2010-2020	1,241,024	31,450	5,900	8,000	115,337	935,747
2007-2020	1,455,226	95,768	35,613	8,000	120,937	1,050,318
Percentage Change						
2000-2010	3%	25%	1%	0%	2%	5%
2010-2020	17%	10%	0%	1%	48%	38%
2007-2020	20%	37%	1%	1%	52%	45%

Sources: CoStar, 2023; Strategic Economics, 2023.

While subarea 2 shows modest addition of office space from 2007 to 2020, subarea 5 had added more than 1 million square feet of office space. The expansion of the Microsoft campus by 185,000 square feet factors in the addition of new office space in subarea 5. It should be noted that in addition to the expanded Microsoft campus in Subarea 5, there has been significant reinvestment in office space in the Downtown area suggesting that employment will likely remain strong in both locations with employment in Subarea 5 being anchored by tech related sectors and downtown employment being anchored by finance insurance and real estate.

COMMERCIAL BUILDING PERMIT VALUES

Commercial building permit values 2000 -2010 account for only 30 percent of total commercial permit values generated during 2000-2020, As shown in Figure 23, commercial building permit values jumped by a significant amount following 2010.

Figure 23: Commercial Building Permit Valuation by Subarea: 2000-2020

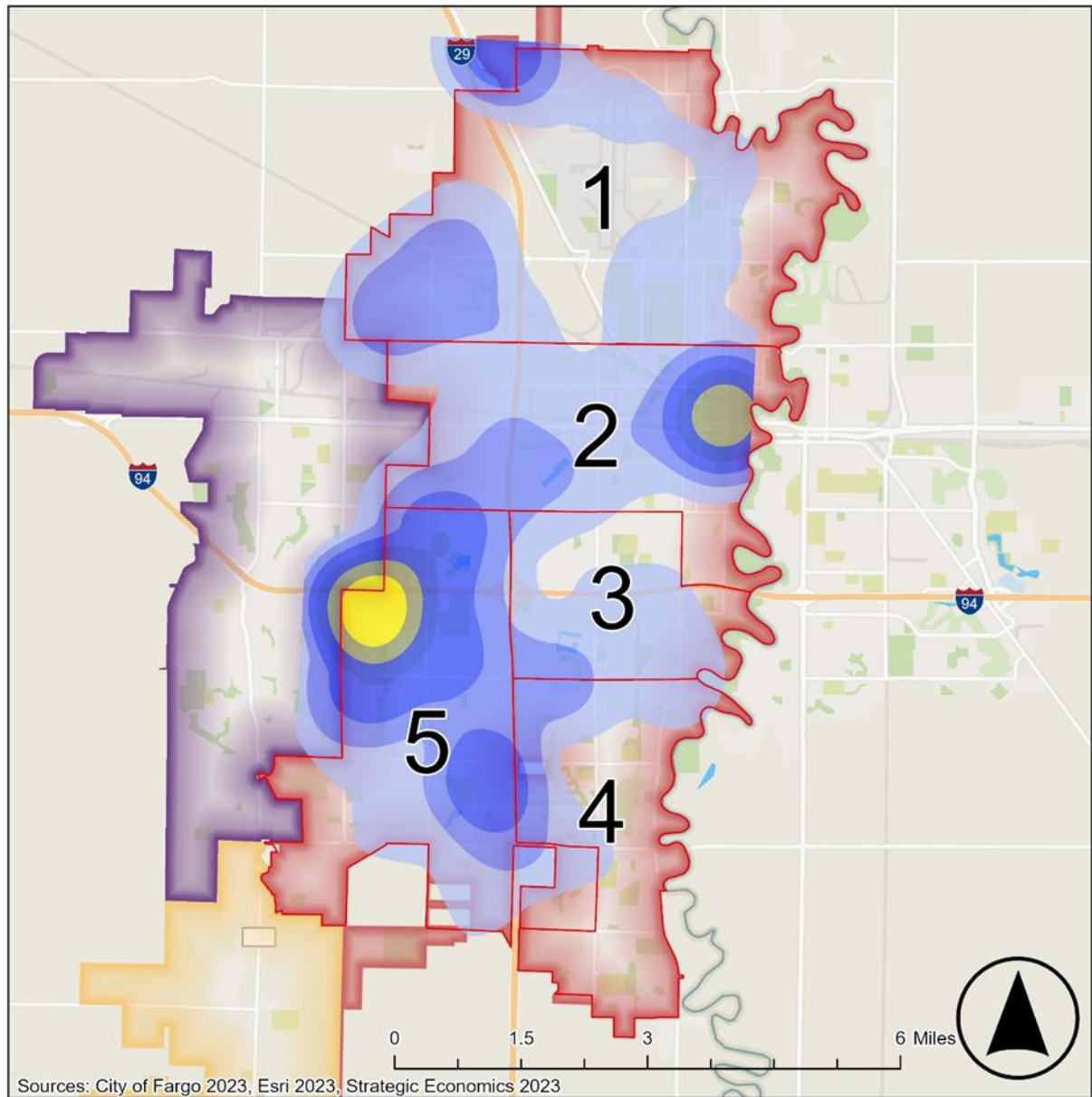
	Subarea 1	Subarea 2	Subarea 3	Subarea 4	Subarea 5	Total
2000-2010	\$70,740,759	\$75,666,642	\$26,147,170	\$33,041,120	\$268,025,579	\$473,621,270
2010-2020	\$102,942,668	\$144,649,138	\$11,106,730	\$60,163,223	\$688,114,328	\$1,006,976,087
2000-2020	\$173,683,427	\$220,315,780	\$37,253,900	\$93,204,343	\$956,139,907	\$1,480,597,357

Source: City of Fargo, Strategic Economics 2023

Note: Only includes building permits for buildings valued \$50,000 or more

Subarea 5 accounts for the highest total commercial building permit values from 2000 to 2020, followed by subarea 2. Subarea 5's total commercial building permit value is more than double the total commercial building permit value of subarea 2 as shown in Figure 23. Figure 24 shows the spatial distribution of commercial building permit values 2000-2020.

Figure 24: Commercial Building Permit Valuations by Subarea: 2000-2023.



Sources: City of Fargo 2023, Esri 2023, Strategic Economics 2023

Commercial Permit Value Per Square Mile, 2000 - 2023

- < 20M
- 20M - 60M
- 60M - 120M
- 120M - 185M
- 185M - 265M
- 265M - 355M
- 355M - 455M

- Subareas
- Fargo City Boundary
- 1** Label corresponds with subarea number

- City Boundaries
- Fargo
 - Horace
 - West Fargo



IV. GROWTH TRENDS KEY FINDINGS

This section starts with an overview of key findings regarding Fargo's growth trends. Next, four key infill growth nodes are described including the specific characteristics that have driven growth in the past and that could support additional growth in the future. Finally, there is a brief discussion regarding future growth potential at the City's southern border.

Citywide Growth Trend Findings

The following summarize the major findings from the demographic, economic, and land use analysis presented above.

Fargo's growth has historically been supported through land annexation, but this pattern has been changing in the last decade. Fargo's growth was not very compact prior to 2010. However, since 2010, growth has focused in infill areas in both subarea 5, where the new Sanford medical campus is located, and in Downtown.

In the last decade, Fargo has grown through infill opportunities to accommodate population growth, creating an important counterbalance to the City's traditional "growth by land expansion" model. Subarea 2, including Fargo's downtown shows more than eight million dollars in building permit values for residential remodeling and more than 170 million dollars in commercial remodeling building permit values from 2010 to 2020. Intensive development in downtown and around the Sanford Medical Center campus in subarea 5 shows that there is market demand for infill development at greater densities than the traditional single family subdivisions present in Subareas 4 and 5. However, if more new development is to be channeled into the other infill opportunities, consideration should be given to enhancing these areas with the same kinds of amenities as have been added in downtown including small scale public spaces, arts and culture, sidewalks and bike facilities, and as it becomes feasible, more and better transit options.

Fargo's economy and population are tied together and have grown together at a steady pace. Fargo has added nearly 35,000 people and 16,000 households from 2000 to 2020. During the same period, it has also added nearly 6,000 single family and nearly 10,000 multifamily units. From 2002 to 2020, Fargo has added nearly 37,000 new employees. From 2007 to 2020, Fargo has added one million square feet of new retail space, 1.4 million square feet of industrial space and nearly 1.5 million square feet of office space. The addition of population and housing units has kept steady pace with the addition of jobs and commercial space in Fargo in the last two decades, from 2000 to 2020.

Continued employment growth in Fargo will rely on population growth to continue as well. Fargo is a major employment hub and has added more jobs than residents in the last twenty years. This indicates that Fargo relies upon population growth from the larger region to fill its local jobs. In particular, Fargo's large Health and Retail sectors serve a very large catchment area and will rely on continued regional population growth for both future workers and patients and/or shoppers.

Fargo's job mix is changing. Historically, Fargo's economy has relied on Agriculture and Oil and Gas. However, in 2020, agriculture accounted for less than 1 percent of Fargo's total employment. Instead, Health, Retail, Information, and Professional Services now represent large shares of Fargo's total employment. Fargo's past industry sectors, in combination with its newer growth sectors have also created other spin-off industry sectors like agriculture-tech companies. Fargo's job growth has been

driven by higher-skill jobs and there has been an addition of more than 6,000 jobs that require at least some college degree in Fargo from 2010 to 2020.

Employment concentrations in new job centers is driving population growth and creating new mixed-use districts within the City. Subareas 1 and 2 represented Fargo's oldest and its most populated subareas until 2010. From 2010 to 2020, these older subareas have shown losses in population and employment. From 2010 to 2020, subarea 5 become the most populated subarea in the city, with the highest number of jobs. Subarea 5 includes two of the four large mixed use growth nodes (Sanford Medical Center and the Microsoft Campus) in Fargo. High concentration of employment in new growth nodes has led to the concentration of residential and commercial activity in subarea 5 and led to the creation of new mixed-use districts within the city.

Fargo's Infill Growth Nodes

Based on the demographic, employment, and land use trends described above, four areas, or nodes, have emerged as important locations where future growth could be accommodated, as shown in Figure 25. These areas are all infill locations where redevelopment of vacant and underutilized properties could accommodate new development continuing the trends that have already been occurring in subarea 2 (Downtown) since 2010. This does not preclude also adding new growth at the City's southern edge, but the availability of so many strong infill locations could relieve some of the future pressure to continue to expand the City's borders into undeveloped agricultural areas.

FARGO'S DOWNTOWN AND RENAISSANCE ZONE

Fargo's historic Downtown is located in Subarea 2. It includes nearly 100 blocks and has received more than \$100 million in public and private investments since 1999 owing to its 39-block Renaissance Zone program⁴. Fargo's downtown and Renaissance Zone show the following characteristics of dense mixed-use development –

- Downtown includes a substantial number of open spaces, recreational areas, and entertainment avenues along with trendy restaurants, shops, and art galleries.
- Investments downtown evolved it into a bike, pedestrian, and transit rider friendly location.
- There are multiple new multifamily housing projects including market rate and affordable units. Subarea 2, which includes Fargo's downtown, represents one of the most populated subareas in Fargo with the largest inventory of single-family houses and the second largest inventory of multifamily units, among all other subareas (include year).
- Fargo's historic downtown, its multimodal transportation facilities and other placemaking efforts resulted in a concentration of health and finance businesses in Fargo's downtown.

Fargo's downtown and renaissance zone has anchored growth through infill development in the City and exhibited several large mixed-use developments in the last two decades. There are still many vacant and underutilized properties within the Renaissance Zone that could continue to support significant additional residential and commercial development. Some of its significant recent infill activity is described below.

⁴ American Planning Association. "Downtown Fargo, North Dakota". *Great Places in America: Neighborhoods*. <https://www.planning.org/greatplaces/neighborhoods/2009/downtownfargo.htm>

- Downtown's core has seen hundreds of new apartment buildings, tens of thousands of square feet of office and retail development and a new hotel, through the redevelopment of parking lots and older buildings.
- Projects include the Mercantile which is a six-story building on Broadway with 100 apartments and 17,000 square feet of commercial space wrapped around a city-owned garage. The six story Kesler building with 109 apartments and 9,000 square feet of retail space are other examples of high-density development in Fargo's downtown.
- Bell bank's new corporate headquarters are all set to be located on Main Ave and is expected to stand 13 stories tall.

SANFORD MEDICAL CENTER

Sanford opened their large new medical campus in Subarea 5, in 2017. The campus is located on Highway 52 and is very close to the retail core of the West Acres mall. The campus marks the largest commercial development in the history of North Dakota and comprises one million square feet. The medical center and neighboring commercial developments are some of the largest employers within the city. Owing to this nexus of newly annexed land (after the 1990s), employment, housing and transportation, the area around the Sanford Medical Center represents an important growth node.

The presence of the Sanford Medical Center spurred mixed use development and spin-off activities anchored the medical center and the West Acres Mall. Some of the newly developed mixed uses around this growth corridor include-

- MEDPark Medical Center was developed in 2018 between the new Sanford Medical Center campus and Essentia Health hospital and was marketed to independent medical providers.
- New multifamily construction near the emerging medical node.
- New hotels that have been built to accommodate medical tourists visiting from other parts of North Dakota or neighboring states.

MICROSOFT CAMPUS AND WOODHAVEN NEIGHBORHOOD

Microsoft opened their Fargo campus in 1999, and it was expanded to accommodate close to 4,000 employees by 2015. The expansion of the formerly one-building Microsoft campus began in 2007 and by 2015 it had four buildings and nearly 1,500 employees. The expansion of the campus and the enhanced capacity enables Microsoft Fargo to continue to employment growth in Fargo way into the future. The four buildings of the recently expanded Microsoft campus (largest outside of Seattle) are located in Fargo's subarea 5, near major roads including Highway 81 and 52nd Ave.

Fargo's Microsoft campus can potentially augment Fargo's economy through the development of spin-off industries. Fargo is home to a number of ag-tech companies, representing Fargo's potential for spin-off research and development and technology companies, owing to the City's high concentration of skilled workers (close to eight percent of all employees in Fargo are employed in information or Professional Technical and Scientific industry sectors). In 2019, prior to the Covid-19 pandemic, Microsoft was also planning to develop a futuristic farm near Fargo, building off Fargo's history of agricultural economy, but conversations about it have since dwindled.

Fargo's Microsoft campus is located within the Woodhaven neighborhood which represents one of the fastest growing neighborhoods in the city since 2001⁵. In 2010 Woodhaven consisted of 1,813 residents, and today it consists of 2,432 residents⁶, showing that this neighborhood has been growing significantly over time. Woodhaven neighborhood shows multiple characteristics of horizontal mixed use.

- The Microsoft campus is located on the eastern edge, Swanson Health Products facility (warehouse) is located in the northern part, and Kennedy Elementary School is located in the center of the neighborhood.
- There is some retail development on the eastern edge of the neighborhood, particularly along Highway 81, and to the north along 40th Ave South.
- PAM Health Rehabilitation Hospital of Fargo is located to the south of the Microsoft Campus, followed by some more retail locations along 52nd Ave.
- There is a mix of both single family residential and multifamily developments in the area. More than 60 percent of the housing units in this area are owner-occupied and the rest are renter-occupied housing units.

The high concentration of commercial spaces spanning office, retail, and industrial types along with high population growth and a mix of housing types indicated high growth potential in the area. The clustering of jobs and housing around the Microsoft campus and its adjoining retail, office and industrial uses could also become the focus of future efforts to create compact, walkable neighborhoods similar to the downtown area, and the area near the Sanford Medical Center.

NORTH DAKOTA STATE UNIVERSITY (NDSU) CAMPUS

The North Dakota State University (NDSU) Campus is located in subarea 1 and accommodates nearly 12,000 students. This institution underpins Fargo's local economy and is known to attract students from all across the state and the region (and even internationally). Fargo retains 80 percent of all NDSU in-state undergraduates who join the local workforce after receiving their degree. High growth characteristics of the NDSU campus is evidenced through the following-

- In 2020, subarea 1 showed the greatest population between 18 to 24 years of age along with a large inventory of single-family homes and multifamily units.
- Subarea 1 has Fargo's largest industrial inventory and has seen large investments over the years in commercial remodeling.

Declines in college enrollments nationwide can potentially disrupt the NDSU Campus growth node⁷. While the NDSU campus continues to be a growth node today, its status might shift in the future.

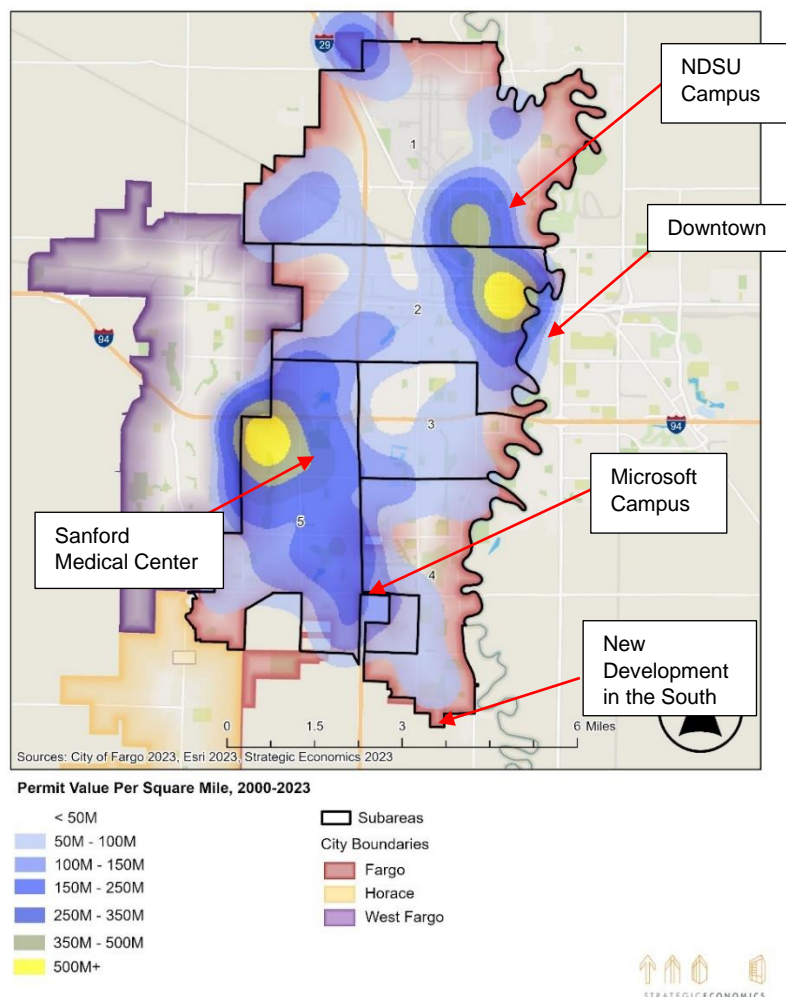
⁵ City of Fargo. *Woodhaven*. Accessed on August 16, 2023. <https://fargond.gov/live/know-your-neighborhood/find-your-neighborhood/woodhaven>

⁶ Niche. *Woodhaven*. Accessed on September 27, 2023. <https://www.niche.com/places-to-live/n/woodhaven-fargo-nd/>

⁷ Steward, Tom (2022) "'Everything is on the table' as NDSU faces enrollment decline". *American Decline*. <https://www.americanexperiment.org/everything-is-on-the-table-as-ndsu-faces-enrollment-decline/#:~:text=Fewer%20high%20school%20graduates%2C%20endless,in%20demand%20in%20the%20economy.>

Despite a future decline in student population at NDSU, subarea 1 has a very large commercial inventory and significant housing stock that could also be integrated into another employment-based growth node. This future node would continue to grow and benefit from more housing and better public infrastructure.

Figure 25: Fargo's Infill Growth Nodes and Annexation Potential



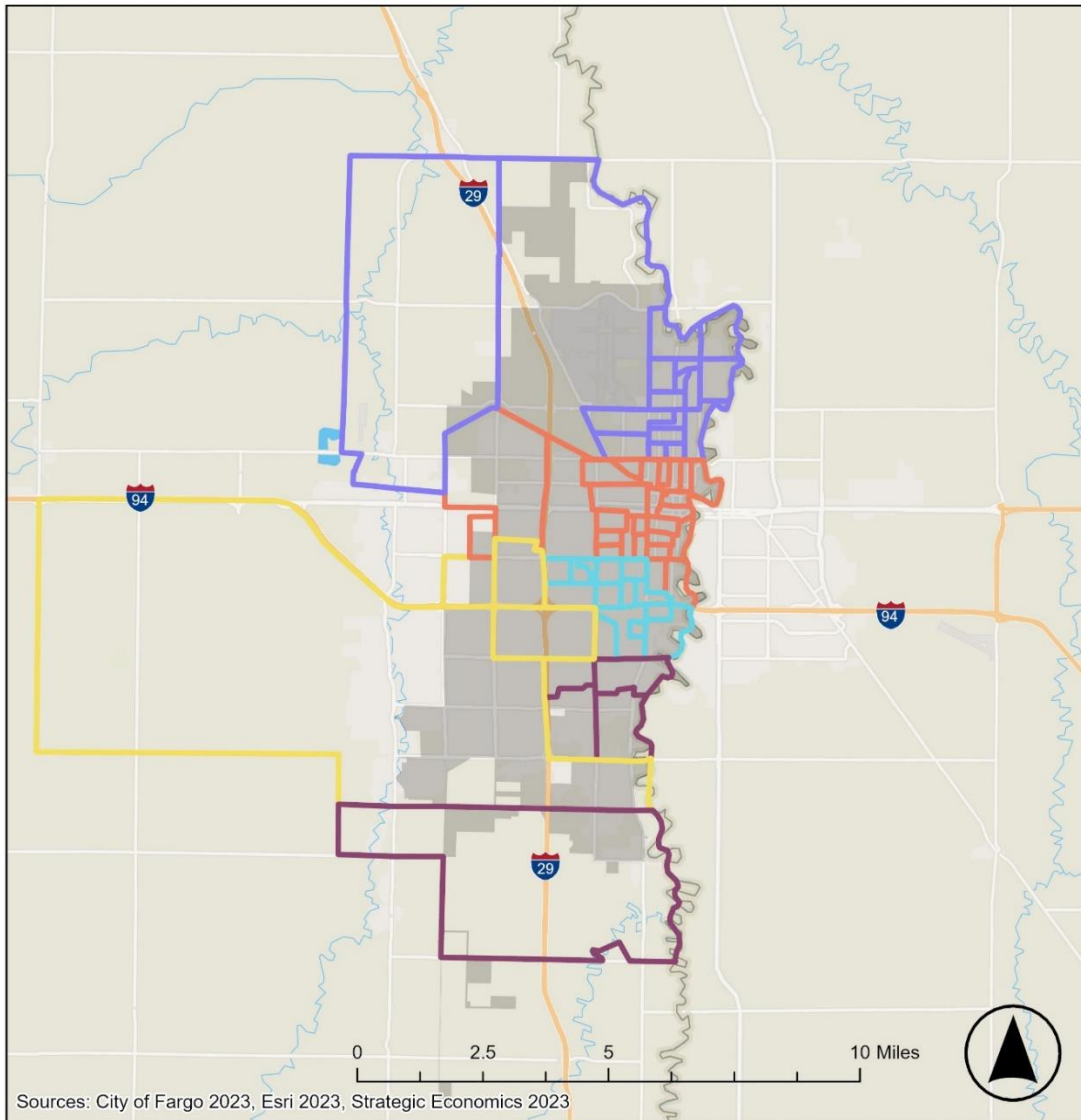
Future Growth through Annexation

There are two directions in which Fargo's could grow into its extra-territorial areas – north and south, although growth opportunities are concentrated in the south. Towards the north of Fargo's existing city boundaries, the land area available for expansion is undercut by the extra-territorial boundaries of smaller cities such as Riley's Acres, Harwood, and West Fargo. Growth opportunities in the north could be enhanced if Fargo's airport were to be relocated to outside the city, such that it opens the old airport area for infill development. However, moving the airport away is a very expensive activity and would increase the available land supply for residential and commercial activity only marginally. Most of Fargo's growth opportunities are located in the south, particularly due to the benefits of the Fargo-Moorhead Flood Diversion Project which will allow houses to be built safely in the south.

There is potential for new commercial and residential development in Southeastern Fargo, particularly towards the southern boundary of subarea 4. Most of this area has been expanding through annexation, and there has been some leapfrogging near 88th Ave. The availability of utility trunk lines and the reduced hazard of development through the flood diversion project could allow for commercial and residential development through southward expansion between 76th and 88th Ave as needed. Should the city choose to expand through annexation in the south, it should do so with the goal of consistency and neighborhood cohesion in mind and avoid leapfrogging. Haphazard, disconnected development through leapfrogging is detrimental to the city, as the City will have to bear the initial costs associated with providing utilities and infrastructure at distant locations, with the risk of not having enough residential density to ultimately earn the money back. Further discussion on how the city pays for its infrastructure and how residents bear the cost of improvements through special assessments will be discussed in the upcoming fiscal trends report.

V. APPENDIX

CENSUS BLOCK GROUPS COMPOSING SUBAREAS IN 2000



Census Block Groups Composing Subareas in 2000

Subarea

1

2

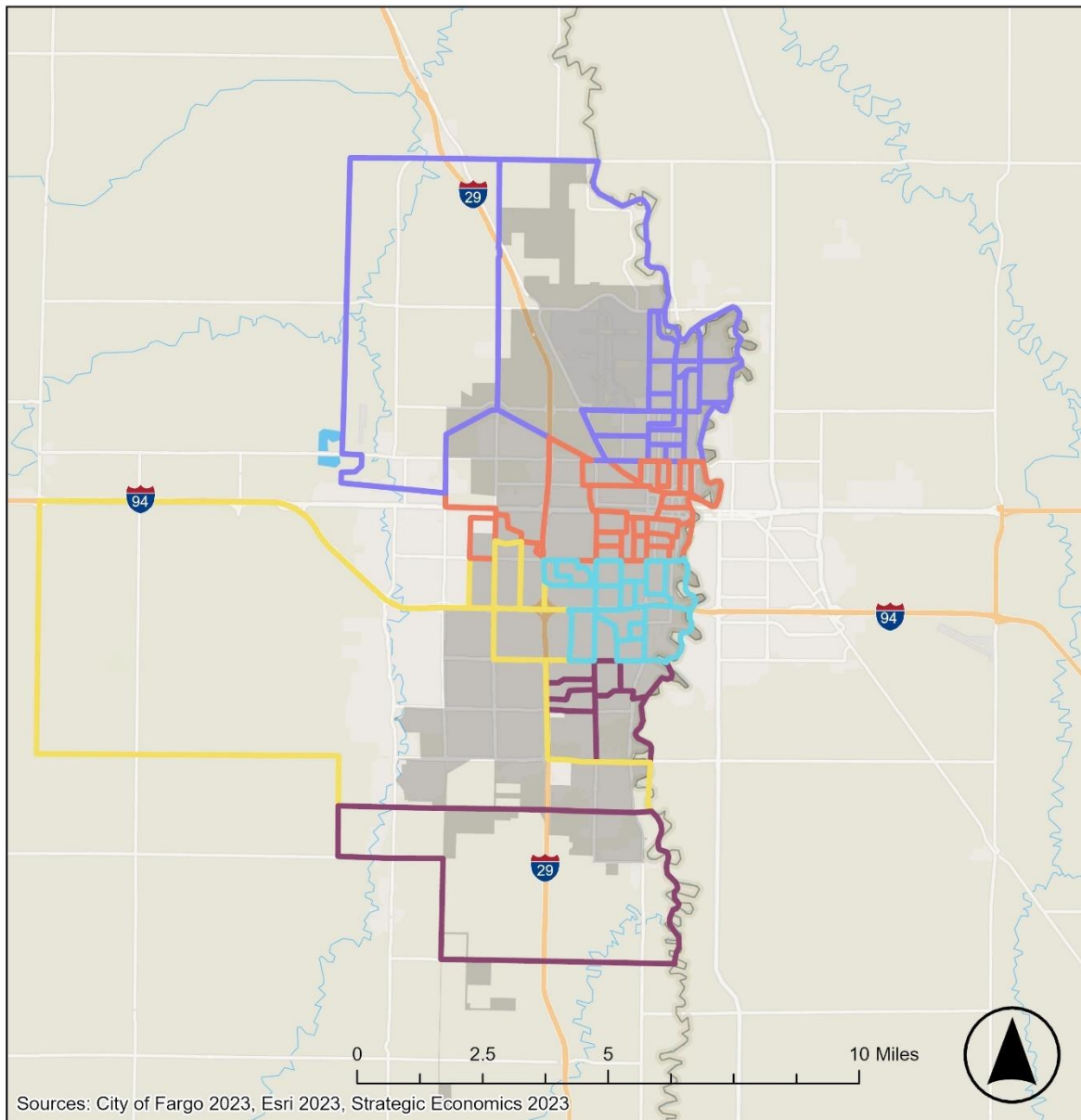
3

4

5

City Limits

CENSUS BLOCK GROUPS COMPOSING SUBAREAS IN 2010

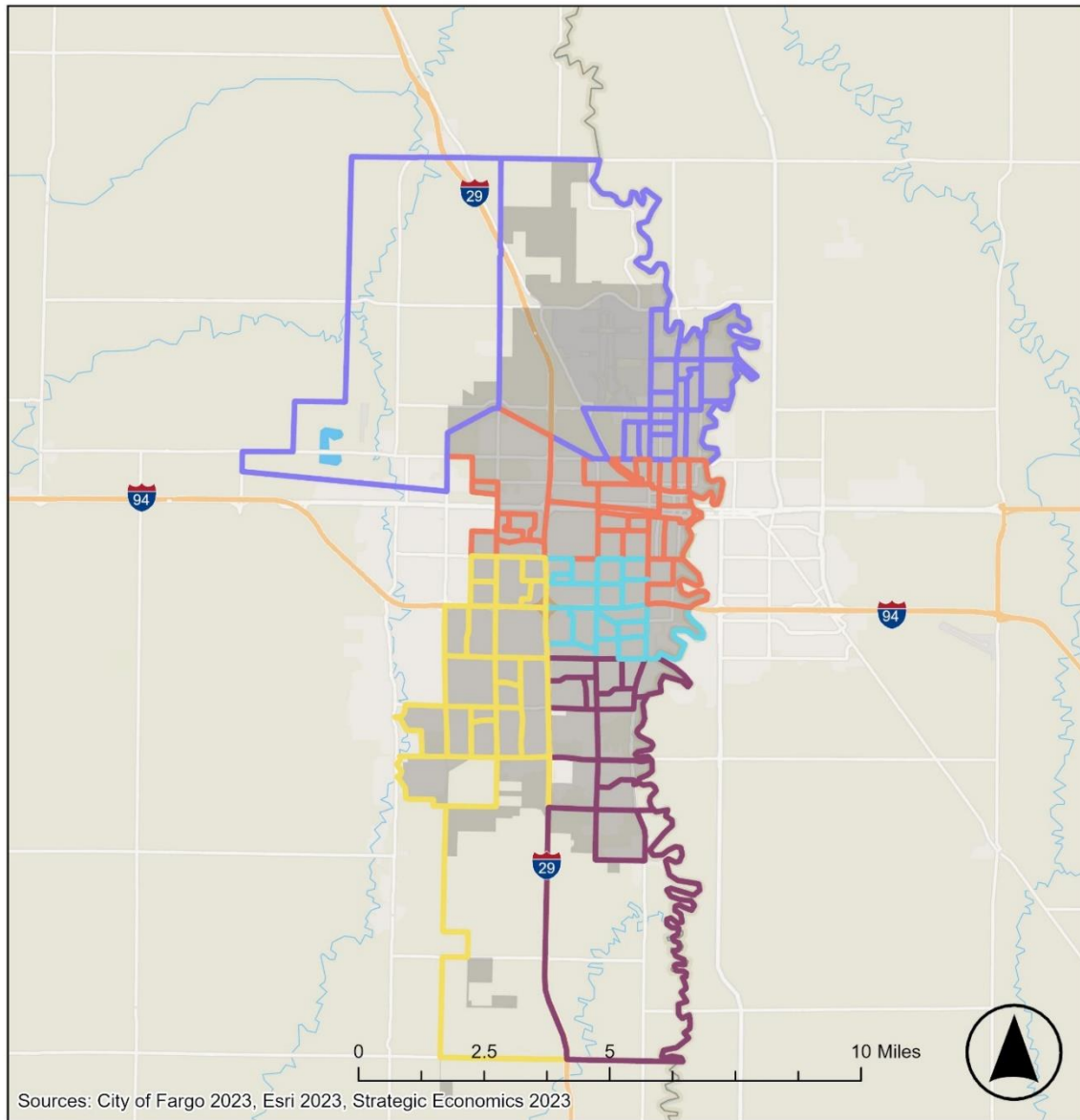


Census Block Groups Composing Subareas in 2010

- Subarea
- 1
 - 2
 - 3
 - 4
 - 5
 - City Limits



CENSUS BLOCK GROUPS COMPOSING SUBAREAS IN 2020

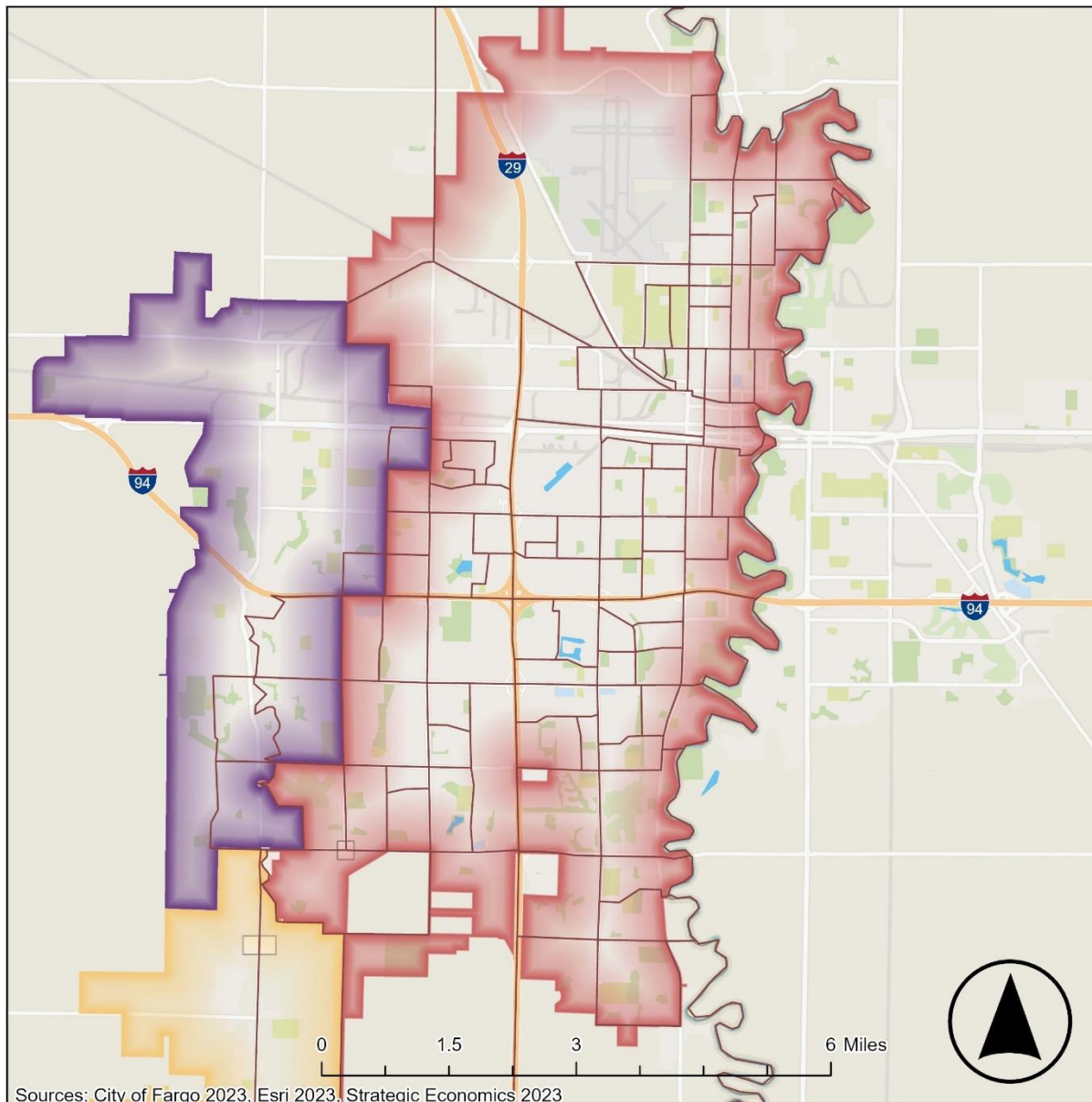


Census Block Groups Composing Subareas in 2020

- Subarea
- 1
 - 2
 - 3
 - 4
 - 5
- City Limits



CENSUS BLOCK GROUPS IN FARGO (2023)



Census Block Groups in Fargo

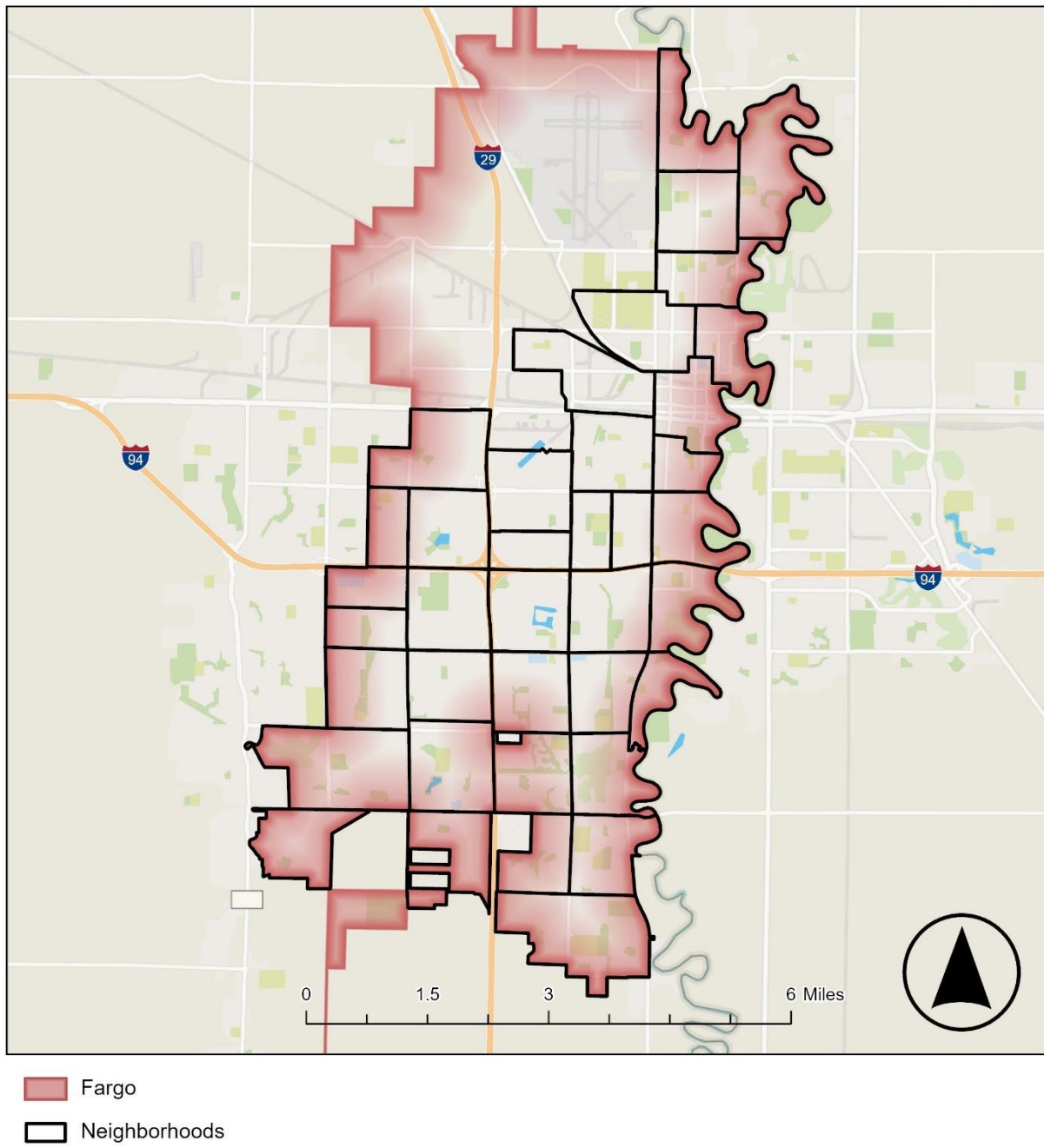
2020 Census Block Groups

City Boundaries

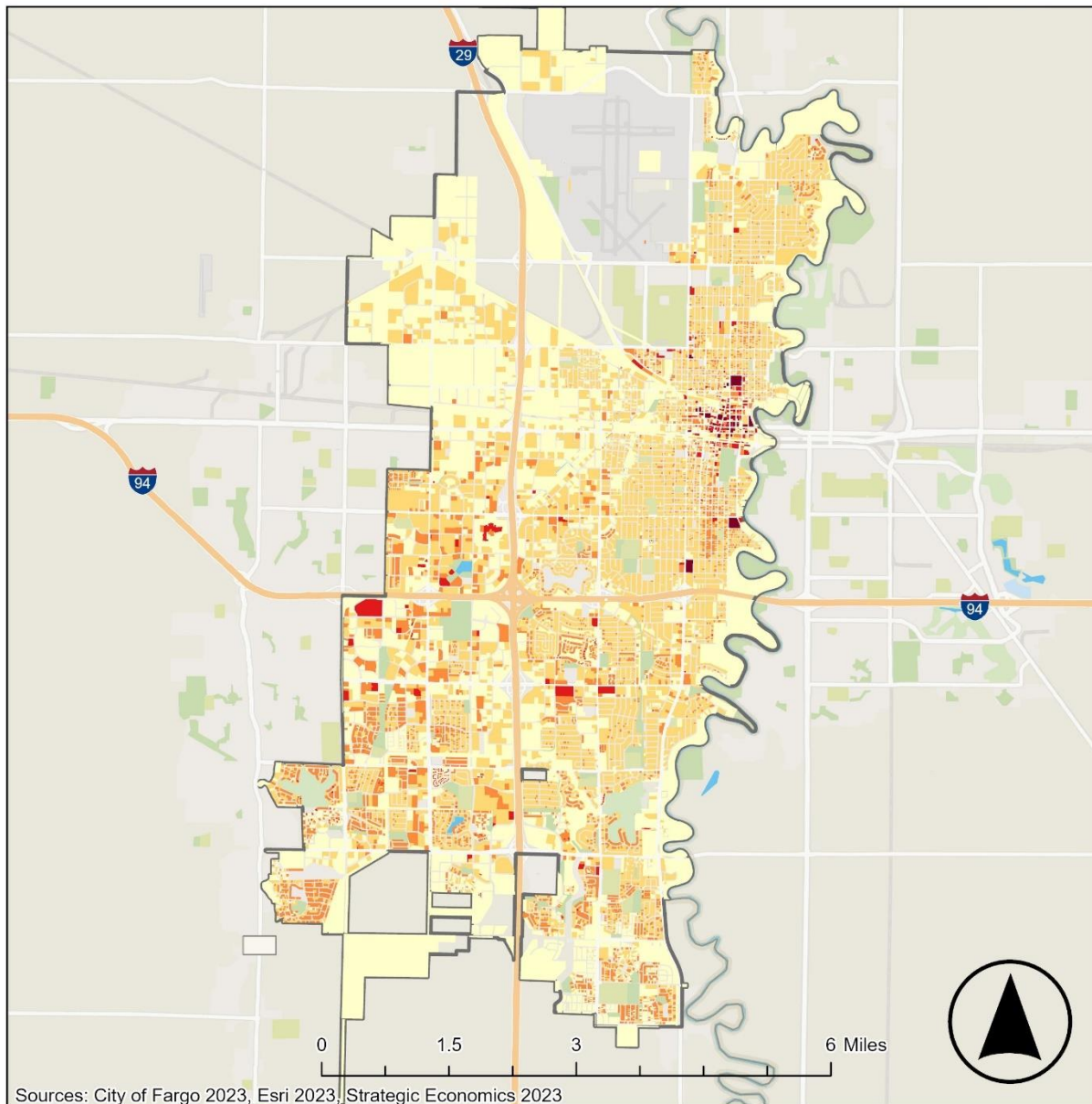
- Fargo
- Horace
- West Fargo



NEIGHBORHOOD BOUNDARIES IN FARGO (2023)



DISTRIBUTION OF PROPERTY VALUES IN FARGO



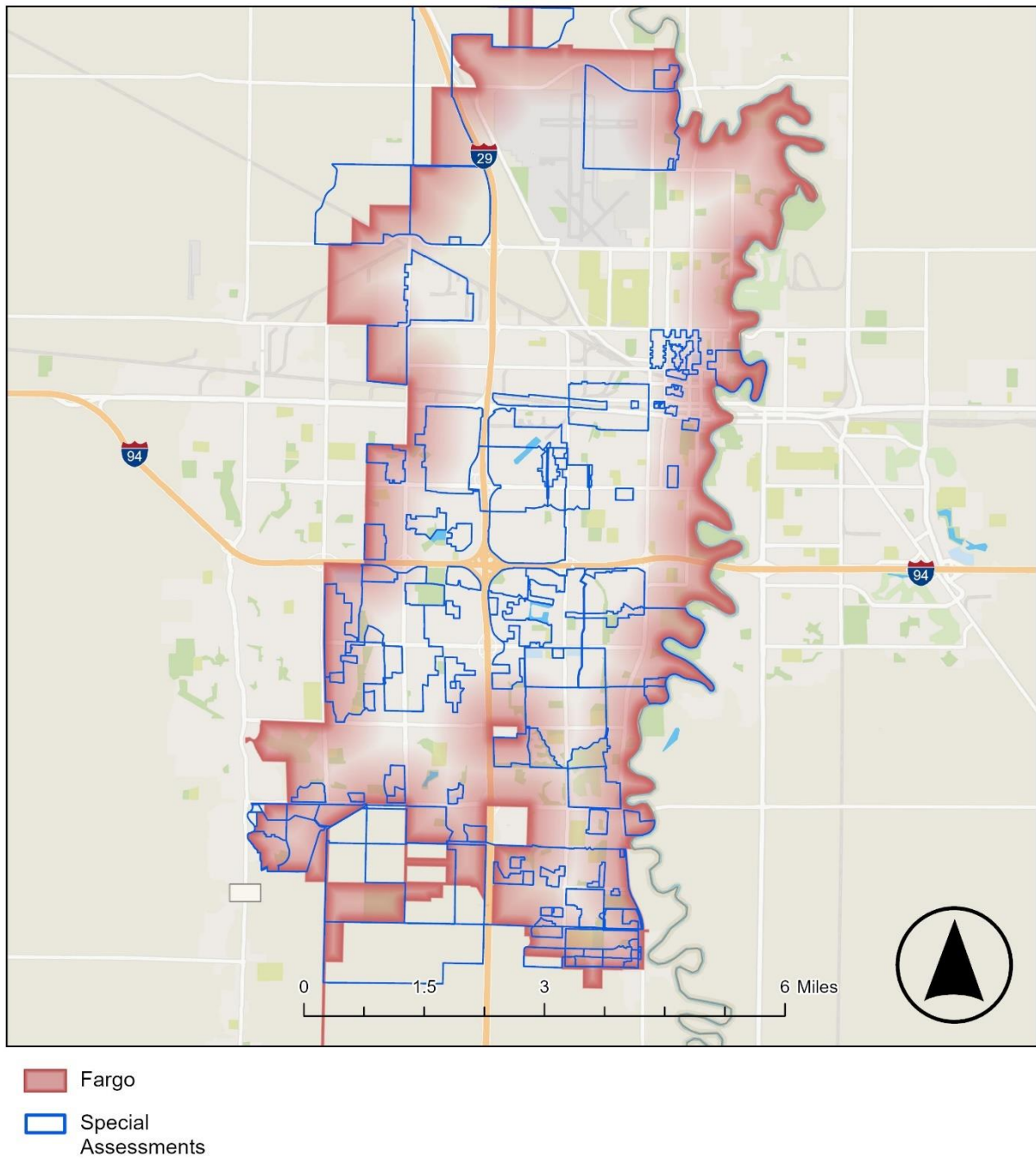
Property Values in Fargo (constant 2022 dollars) net non-tax generating land

Property Value Per Acre

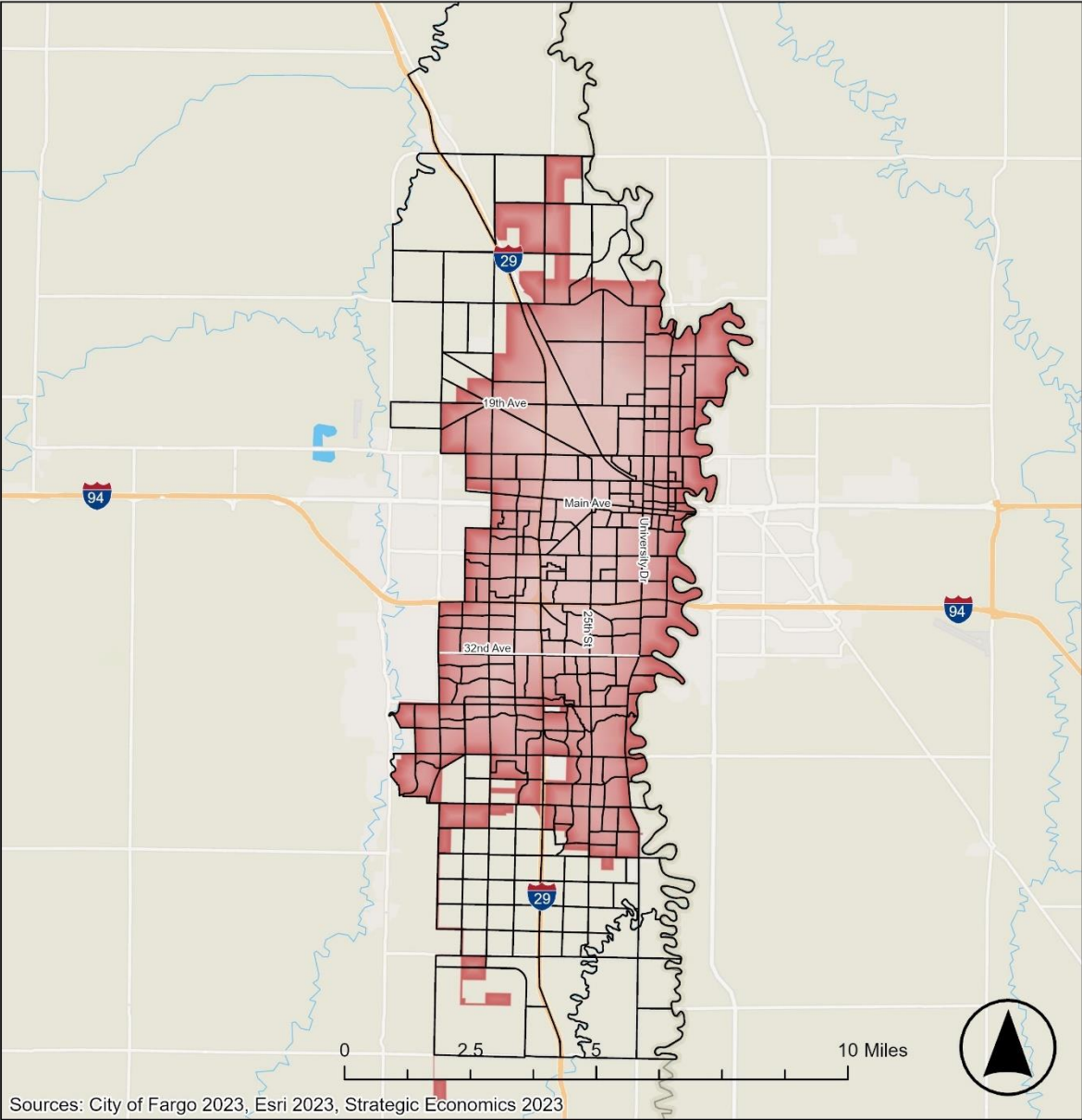
- \$0 - \$600,000
- \$600,001 - \$1,500,000
- \$1,500,001 - \$3,000,000
- \$3,000,001 - \$8,000,000
- > \$8,000,000
- City Limits



SPECIAL ASSESSMENTS IN FARGO (2020 ONWARDS)



TRAFFIC ANALYSIS ZONES FOR FARGO (2023)



Fargo Traffic Analysis Zones (2022, 2035, & 2050)

- Fargo
- Fargo TAZs



EMPLOYMENT BY INDUSTRY IN FARGO, 2002, 2010, AND 2020

NAICS Industry Code r	Change in Number					
	2002	2010	2020	2002-2010	2010-2020	2002-2020
Agriculture, Forestry, Fishing and Hunting	153	182	261	29	79	108
Mining, Quarrying, and Oil and Gas Extraction	20	75	125	55	50	105
Utilities	102	138	136	36	(2)	34
Construction	1,900	2,455	3,266	555	811	1,366
Manufacturing	3,496	3,708	5,103	212	1,395	1,607
Wholesale Trade	2,679	2,996	3,707	317	711	1,028
Retail Trade	4,932	6,016	6,702	1,084	686	1,770
Transportation and Warehousing	1,247	1,469	2,435	222	966	1,188
Information	1,930	1,715	1,644	(215)	(71)	(286)
Finance and Insurance	2,717	2,868	3,903	151	1,035	1,186
Real Estate and Rental and Leasing	670	722	945	52	223	275
Professional, Scientific, and Technical Services	2,989	2,371	3,331	(618)	960	342
Management of Companies and Enterprises	823	1,224	956	401	(268)	133
Administration & Support, Waste Management and Remediation	1,851	2,402	2,637	551	235	786
Educational Services	3,932	4,793	5,058	861	265	1,126
Health Care and Social Assistance	5,444	7,529	13,208	2,085	5,679	7,764
Arts, Entertainment, and Recreation	658	849	1,129	191	280	471
Accommodation and Food Services	3,627	4,758	5,050	1,131	292	1,423
Other Services (excluding Public Administration)	1,641	1,781	1,807	140	26	166
Public Administration	1,242	1,602	1,560	360	(42)	318
Total	42,053	49,653	62,963	7,600	13,310	20,910

Sources: U.S. Census Bureau, OnTheMap Application, 2002-2020; Strategic Economics, 2023

EMPLOYMENT BY INDUSTRY SUBAREA 1, 2002, 2010, AND 2020

NAICS Industry Sector	Change in Number					
	2002	2010	2020	2002-2010	2010-2020	2002-2020
Agriculture, Forestry, Fishing and Hunting	20	41	44	21	3	24
Mining, Quarrying, and Oil and Gas Extraction	1	22	32	21	10	31
Utilities	20	28	20	8	(8)	0
Construction	399	481	457	82	(24)	58
Manufacturing	688	627	652	(61)	25	(36)
Wholesale Trade	554	546	509	(8)	(37)	(45)
Retail Trade	972	1,088	772	116	(316)	(200)
Transportation and Warehousing	291	283	306	(8)	23	15
Information	369	257	164	(112)	(93)	(205)
Finance and Insurance	550	467	441	(83)	(26)	(109)
Real Estate and Rental and Leasing	140	120	142	(20)	22	2
Professional, Scientific, and Technical Services	657	430	451	(227)	21	(206)
Management of Companies and Enterprises	190	228	111	38	(117)	(79)
Administration & Support, Waste Management and Remediation	439	429	318	(10)	(111)	(121)
Educational Services	1,278	1,309	1,006	31	(303)	(272)
Health Care and Social Assistance	1,218	1,365	1,478	147	113	260
Arts, Entertainment, and Recreation	128	147	154	19	7	26
Accommodation and Food Services	699	721	588	22	(133)	(111)
Other Services (excluding Public Administration)	346	318	222	(28)	(96)	(124)
Public Administration	404	423	323	19	(100)	(81)
Total	9,363	9,330	8,190	(33)	(1,140)	(1,173)

Sources: U.S. Census Bureau, OnTheMap Application, 2002-2020; Strategic Economics, 2023

EMPLOYMENT BY INDUSTRY SUBAREA 2, 2002, 2010, AND 2020

NAICS Industry Sector	Change in Number					
	2002	2010	2020	2002-2010	2010-2020	2002-2020
Agriculture, Forestry, Fishing and Hunting	63	57	68	(6)	11	5
Mining, Quarrying, and Oil and Gas Extraction	13	31	25	18	(6)	12
Utilities	39	43	30	4	(13)	(9)
Construction	701	836	845	135	9	144
Manufacturing	1,392	1,319	1,244	(73)	(75)	(148)
Wholesale Trade	808	904	793	96	(111)	(15)
Retail Trade	1,752	1,818	1,547	66	(271)	(205)
Transportation and Warehousing	391	501	548	110	47	157
Information	605	459	341	(146)	(118)	(264)
Finance and Insurance	784	759	729	(25)	(30)	(55)
Real Estate and Rental and Leasing	212	254	183	42	(71)	(29)
Professional, Scientific, and Technical Services	942	704	745	(238)	41	(197)
Management of Companies and Enterprises	254	369	204	115	(165)	(50)
Administration & Support, Waste Management and Remediation	647	835	735	188	(100)	88
Educational Services	1,059	1,202	1,054	143	(148)	(5)
Health Care and Social Assistance	1,720	2,166	2,538	446	372	818
Arts, Entertainment, and Recreation	215	253	280	38	27	65
Accommodation and Food Services	1,298	1,703	1,377	405	(326)	79
Other Services (excluding Public Administration)	551	570	438	19	(132)	(113)
Public Administration	322	408	265	86	(143)	(57)
Total	13,768	15,191	13,989	1,423	(1,202)	221

Sources: U.S. Census Bureau, OnTheMap Application, 2002-2020; Strategic Economics, 2023

EMPLOYMENT BY INDUSTRY SUBAREA 3, 2002, 2010, AND 2020

NAICS Industry Sector	Change in Number					
	2002	2010	2020	2002-2010	2010-2020	2002-2020
Agriculture, Forestry, Fishing and Hunting	43	42	42	(1)	0	(1)
Mining, Quarrying, and Oil and Gas Extraction	3	11	22	8	11	19
Utilities	22	40	26	18	(14)	4
Construction	462	583	597	121	14	135
Manufacturing	831	895	984	64	89	153
Wholesale Trade	750	812	707	62	(105)	(43)
Retail Trade	1,357	1,629	1,383	272	(246)	26
Transportation and Warehousing	335	365	529	30	164	194
Information	564	454	260	(110)	(194)	(304)
Finance and Insurance	795	821	761	26	(60)	(34)
Real Estate and Rental and Leasing	193	186	172	(7)	(14)	(21)
Professional, Scientific, and Technical Services	833	658	626	(175)	(32)	(207)
Management of Companies and Enterprises	201	320	189	119	(131)	(12)
Administration & Support, Waste Management and Remediation	468	612	494	144	(118)	26
Educational Services	903	1,147	891	244	(256)	(12)
Health Care and Social Assistance	1,462	2,039	2,521	577	482	1,059
Arts, Entertainment, and Recreation	197	247	217	50	(30)	20
Accommodation and Food Services	971	1,292	1,020	321	(272)	49
Other Services (excluding Public Administration)	451	467	370	16	(97)	(81)
Public Administration	293	377	275	84	(102)	(18)
Total	11,134	12,997	12,086	1,863	(911)	952

Sources: U.S. Census Bureau, OnTheMap Application, 2002-2020; Strategic Economics, 2023

EMPLOYMENT BY INDUSTRY SUBAREA 4, 2002, 2010, AND 2020

NAICS Industry Sector	2002	2010	2020	Change in Number		
				2002-2010	2010-2020	2002-2020
Agriculture, Forestry, Fishing and Hunting	21	35	40	14	5	19
Mining, Quarrying, and Oil and Gas Extraction	3	8	14	5	6	11
Utilities	17	21	23	4	2	6
Construction	254	400	431	146	31	177
Manufacturing	395	594	646	199	52	251
Wholesale Trade	434	558	554	124	(4)	120
Retail Trade	596	1,121	932	525	(189)	336
Transportation and Warehousing	167	233	322	66	89	155
Information	295	437	299	142	(138)	4
Finance and Insurance	450	612	619	162	7	169
Real Estate and Rental and Leasing	97	116	172	19	56	75
Professional, Scientific, and Technical Services	433	444	482	11	38	49
Management of Companies and Enterprises	140	258	132	118	(126)	(8)
Administration & Support, Waste Management and Remediation	217	384	310	167	(74)	93
Educational Services	593	923	788	330	(135)	195
Health Care and Social Assistance	809	1,551	2,122	742	571	1,313
Arts, Entertainment, and Recreation	86	153	161	67	8	75
Accommodation and Food Services	465	734	568	269	(166)	103
Other Services (excluding Public Administration)	214	315	274	101	(41)	60
Public Administration	190	331	271	141	(60)	81
Total	5,876	9,228	9,160	3,352	(68)	3,284

Sources: U.S. Census Bureau, OnTheMap Application, 2002-2020; Strategic Economics, 2023

EMPLOYMENT BY INDUSTRY SUBAREA 5, 2002, 2010, AND 2020

NAICS Industry Sector	Change in Number					
	2002	2010	2020	2002-2010	2010-2020	2002-2020
Agriculture, Forestry, Fishing and Hunting	7	7	67	0	60	60
Mining, Quarrying, and Oil and Gas Extraction	0	4	32	4	28	32
Utilities	5	6	37	1	31	32
Construction	86	155	936	69	781	850
Manufacturing	192	278	1,577	86	1,299	1,385
Wholesale Trade	135	182	1,147	47	965	1,012
Retail Trade	260	370	2,072	110	1,702	1,812
Transportation and Warehousing	2664	87	731	23	644	667
Information	101	115	580	14	465	479
Finance and Insurance	140	211	1,352	71	1,141	1,212
Real Estate and Rental and Leasing	29	47	276	18	229	247
Professional, Scientific, and Technical Services	125	142	1,028	17	886	903
Management of Companies and Enterprises	41	52	319	11	267	278
Administration & Support, Waste Management and Remediation	82	144	780	62	636	698
Educational Services	100	219	1,324	119	1,105	1,224
Health Care and Social Assistance	237	419	4,550	182	4,131	4,313
Arts, Entertainment, and Recreation	32	49	317	17	268	285
Accommodation and Food Services	197	317	1,499	120	1,182	1,302
Other Services (excluding Public Administration)	80	116	504	36	388	424
Public Administration	34	64	428	30	364	394
Total	1,947	2,984	19,556	1,037	16,572	17,609

Sources: U.S. Census Bureau, OnTheMap Application, 2002-2020; Strategic Economics, 2023