DEMOGRAPHIC FORECAST STUDY
for the FM Metropolitan Area

JUNE 2017

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INTRODUCTION

The Fargo-Moorhead Metropolitan Council of Governments (Metro COG) develops demographic forecasts for the Fargo-Moorhead metropolitan area every five years as part of the long-range transportation planning process. These demographic forecasts are also very important for local units of governments and other entities to support other ongoing planning efforts.

Population projections developed in this report will support the update of Metro COG's 2045 Long Range Transportation Plan (LRTP). Beyond supporting core metropolitan-level transportation planning, all subsequent subarea and corridor level planning completed by Metro COG is supported by the demographic projections and resulting travel demand forecasting.

STUDY AREA

Defining the Study Area

Throughout this document, references are made to the Metropolitan Planning Area (MPA) and the Metropolitan Statistical Area (MSA). The Metropolitan Planning Area is the designated study area for Metro COG. The Metropolitan Statistical Area is a Census Bureau defined region consisting of counties that contain at least one urban area with a population of at least 50,000. The Fargo-Moorhead MSA includes Cass County, North Dakota and Clay County, Minnesota.

Metropolitan Planning Area

The Metro COG Metropolitan Planning Area (MPA) is comprised of 30 townships from within Cass County, North Dakota and Clay County, Minnesota. Since the last demographic forecast and travel demand model were completed, the cities of Casselton, Kindred, Hawley, Barnesville, and 14 additional townships have been added to the Metro COG planning area. Table 1 shows the cities and townships within the MPA, and for which forecasts are provided.

For the purposes of the 2016 Demographic Forecast, cities were designated as either a *Primary City* or a *Smaller City*. Forecast methodologies for Primary Cities will use the Cohort-Component approach which results in population forecasts broken down into five-year age groups by sex. Forecast methodologies for Smaller Cities will use the Structural Model approach which results in total population forecasts. These methodologies are explained in greater detail later in this document.

Table 1: Cities and Townships Included in Study Area

North Dakota			Minnesota		
Cities	**Townships**		**Cities**	**Townships**	
Fargo[P]	Berlin	Mapleton	Moorhead[P]	Kragnes	Kurtz
West Fargo[P]	Harwood	Warrant	Dilworth[P]	Morken	Elmwood
Harwood[S]	Casselton[N]	Normanna[N]	Glyndon[S]	Oakport	Elkton[N]
Horace[P]	Harmony[N]	Stanley	Sabin[S]	Moland	Holy Cross[N]
Mapleton[S]	Raymond	Pleasant[N]	Hawley[PN]	Glyndon	Alliance[N]
Casselton[PN]	Reed		Barnesville[PN]	Riverton[N]	Barnesville[N]
Kindred[SN]	Everest[N]			Hawley[N]	Humboldt[N]
Reile's Acres[S]	Durbin[N]			Eglon[N]	Moorhead

[P]Primary City   [S]Smaller City   [N]New City/Township for 2016 Demographic Forecasts

Figure 1: Fargo-Moorhead Metropolitan Council of Governments Planning Area
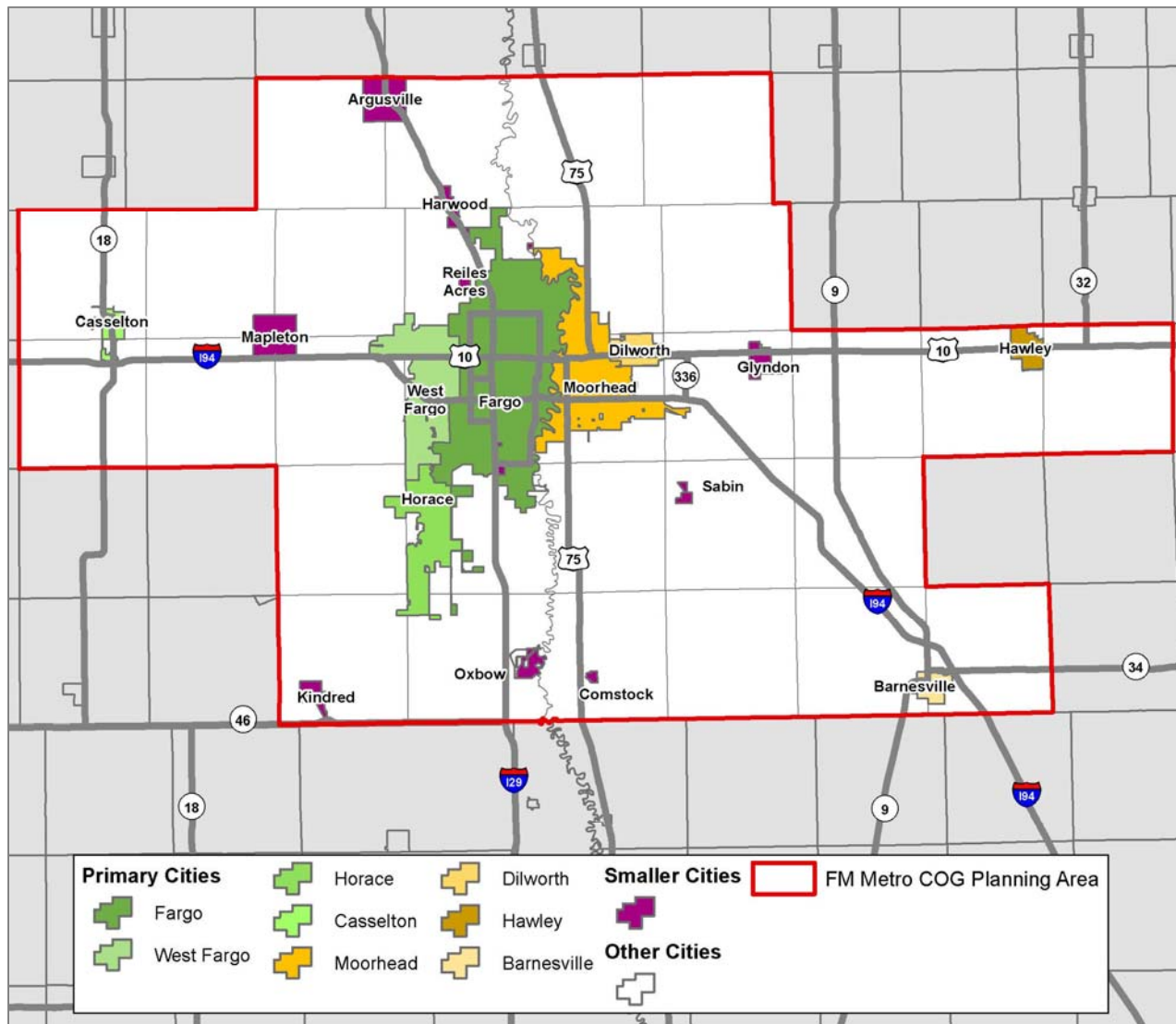
STUDY OBJECTIVES

There are four primary objectives for this study:

» **Review:** Evaluate assumptions and forecasts of the 2012 Demographic Forecast Study in the context of recent trends affecting the Fargo-Moorhead metropolitan area.

» **Collect:** Identify needed data and procedures to prepare Metro COG's Travel Demand Model (TDM) for use in developing the 2045 LRTP.

» **Forecast:** Establish new forecast methodologies for a demographic forecast to 2045.

» **Assign:** Allocate household and employment data to Traffic Analysis Zones (TAZs) for the TDM update.

A more thorough discussion of these activities is included later in this report.

STUDY PROCESS

The Demographic Forecast Study followed the process laid out in Figure 2. Demographic forecast studies require a robust set of data (Table 2), including existing and anticipated employment levels; population, including live births and deaths statistics; the number and size of households; building permit records, and primary, secondary, and post-secondary education enrollment. These datasets were used to determine recent growth and perform a consistency review with previous demographic forecasts and ultimately informed the forecasts included in this study.

Figure 2: Study Process

- Data Collection
- Recent Growth Evaluation
- Stakeholder Interviews
- Consistency Review
- Methodology Design
- Forecast Development & Refinement
- TAZ Allocation

Table 2: Data Needs and Sources

Data Need	Description	Sources
Employment	Number and location (TAZ) of employment.	Bureau of Economic Analysis, Bureau of Labor Statistics, InfoGroup USA
Population	Number of people residing in each city and county in the metropolitan area.	Census Bureau: Decennial Census, Census Estimates Program, American Community Survey.
Number of Households	Number and location (TAZ) of households; household type (single-family, multi-family).	Building permit data, water usage and other local indicators provided by each city in the metropolitan area.
Size of Households	Number of 1-person, 2-persons, 3-persons and 4+-person households.	Census Bureau's Decennial Census, 2015 Census Estimates, American Community Survey, InfoGroup USA.
Primary and Secondary Enrollment	Enrollment data by grade.	Provided by each school district in the metropolitan area.
Post-Secondary Enrollment	Enrollment data by entering class.	Provided by each university and college in the metropolitan area.
Live Births	Annual number of live births, fertility rates.	National Center for Health Statistics, Minnesota Department of Health, North Dakota Department of Health
Deaths	Annual number of deaths, mortality rates	National Center for Health Statistics, Minnesota Department of Health, North Dakota Department of Health

PUBLIC INPUT

Given the technical nature of the Demographic Forecast Study, the majority of the public input into the development of the work product came through face-to-face meetings with key stakeholders early in the process to help form the foundation of the methodology development. The consultant and Metro COG staff engaged with representatives from the following organizations in order to develop a full understanding of demographic trends and factors influencing demographic change in the metropolitan area:

» Greater Fargo-Moorhead Economic Development Corporation
» Metro COG Full and Associate Members
» Metropolitan School Districts
» NDSU, MSUM, North Dakota State College of Science, and Concordia
» Lutheran Social Services
» Cass and Clay County Social Services
» Fargo-Moorhead Homebuilders Association
» Fargo-Moorhead Area Association of Realtors

A Study Review Committee (SRC) comprised of technical staff from the Advanced Traffic Analysis Center (ATAC), Cass County, Clay County, Dilworth, Fargo, Moorhead, West Fargo, North Dakota Department of Transportation, Minnesota Department of Transportation, and Metro COG was involved throughout the consistency review, methodological design, and forecast developments of the study process. They met in four working sessions to provide input and confirm the results of the study process.

At the end of the study process, this final report was made available for public review by advertising a formal public comment period regarding the final outcomes of the study process.

CONSISTENCY REVIEW

The Census Bureau provides population estimates through both the Annual Estimates Program and the American Community Survey. To prepare the 2016 Demographic Forecast Study, both population estimates for 2015 were compared against estimates completed in the 2012 Demographic Forecast Study (Figure 3). The U.S. Census Bureau Annual Estimate for 2015 was 8,006 people, or 3.5 percent, greater than Scenario A, the scenario approved by the Metro COG Policy Board for use in the 2040 LRTP. As shown in Figure 4, as population projections get closer to the actual projection year, accuracy improves. This comes from updated assumptions based on new data and trends.

Figure 3: 2015 Population Estimates
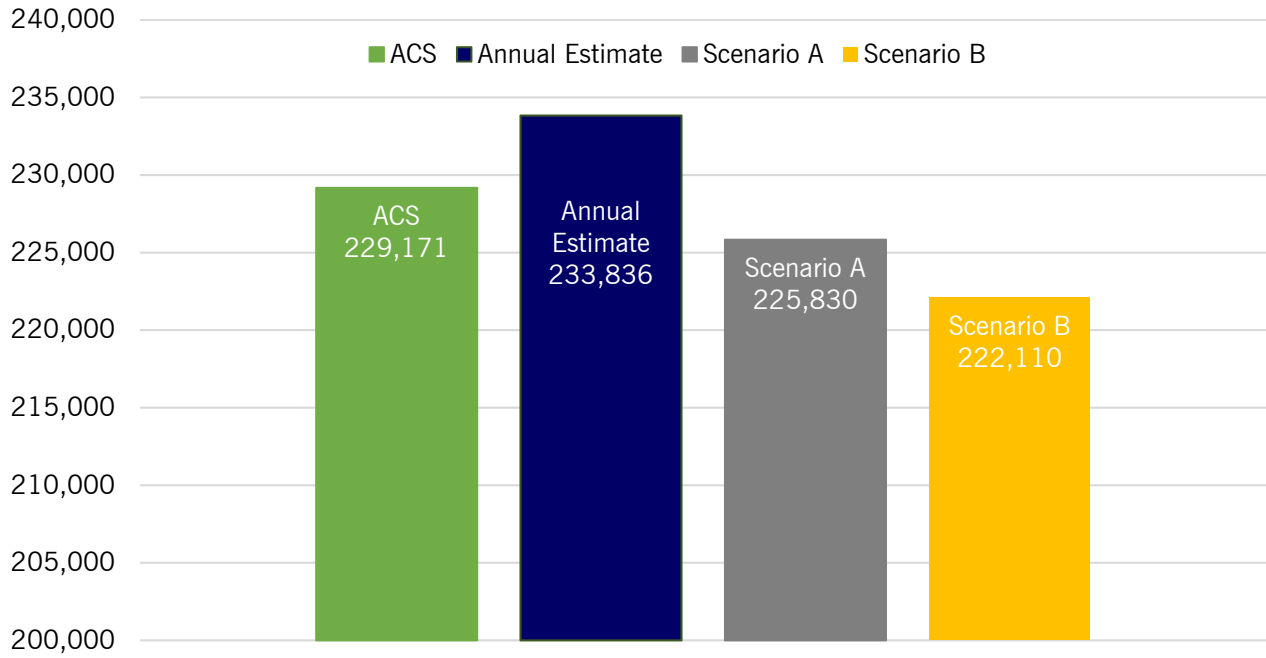
Figure 4: Summary of Previous LRTP Demographic Forecasts
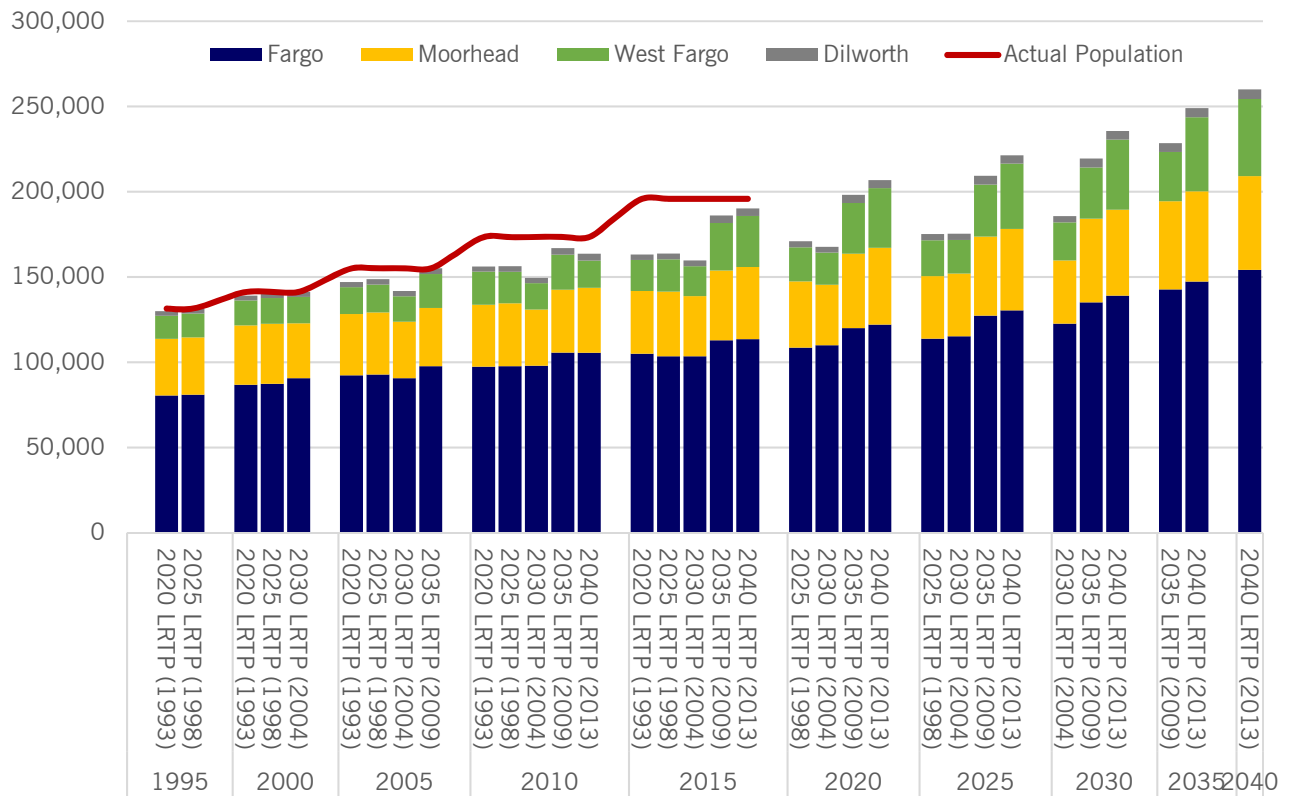
STUDY AREA GROWTH

The demographic forecasts completed for the Fargo-Moorhead metropolitan area include two major components: natural increase, comprised of births and deaths, and net migration, comprised of people moving into and out of the metropolitan area. These two components have undergone significant change since the 2012 Demographic Forecast.

Births

The number of births in the region since the 2010 Decennial Census significantly surpassed 2012 forecast levels. Live births from 2010 to 2015 were 16,024, which is 8.8 percent higher than Scenario A's forecasted births (14,730). It is unlikely that these additional births were a result of increased birth rates, but more likely the case that more females of childbearing age moved into or remained in the region during this time. Figure 5 shows live births in Cass and Clay counties from 2001 to 2015.

Figure 5: Historic Live Births
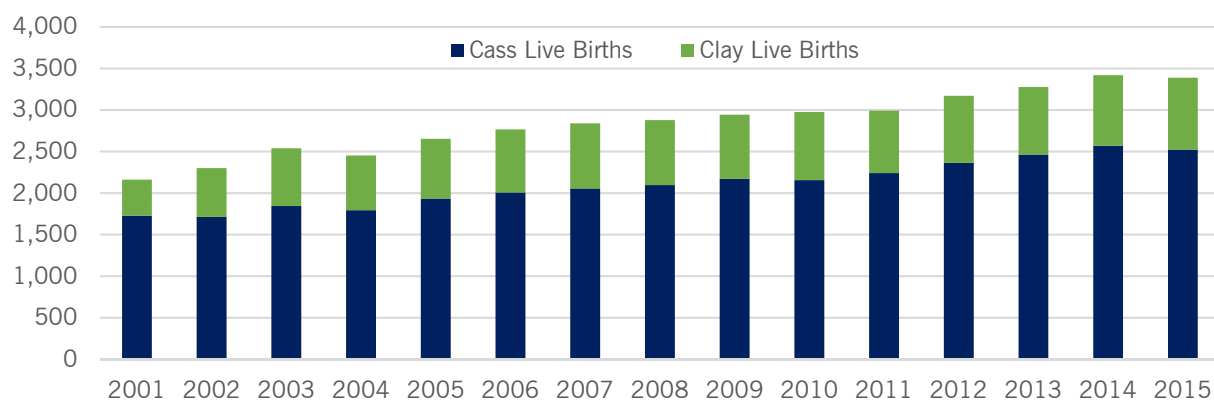
Deaths

The actual mortality rate in Cass and Clay counties was lower than assumed in the 2012 Demographic Forecast. Scenario A's forecasted deaths for 2010 to 2015 was 8,720, but actual deaths were 25.4 percent lower for the same period at 6,505. Figure 6 shows mortality in Cass and Clay counties from 2001 to 2015.

Figure 6: Historic Mortality
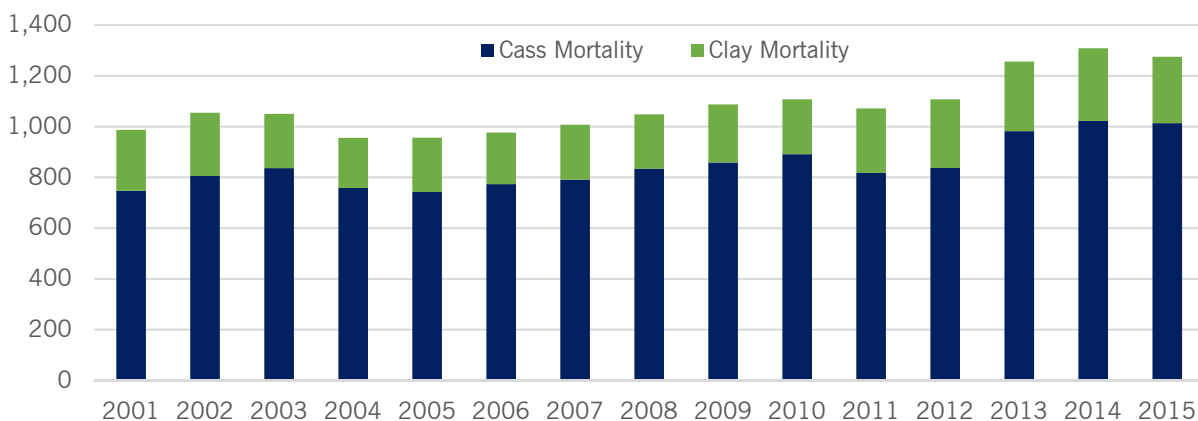
Natural Increase

The result of the lower mortality rate can account for approximately 27 percent of the difference between the Census Bureau Annual Estimate for 2015 and the Scenario A forecast for 2015. Much of the remaining 73 percent of the difference can be accounted for by a combination of lower than expected out-migration of people in their twenties and their subsequent fertility and higher than expected in-migration. This is substantiated by IRS migration statistics. The lower number of deaths (2,215) and the higher number of births (1,294) would account for 3,509 of the approximately 8,000 more people in the Fargo-Moorhead metropolitan area than forecasted. Figure 7 shows the natural population increase in Cass and Clay counties from 2001 to 2015.

Figure 7: Natural Increase
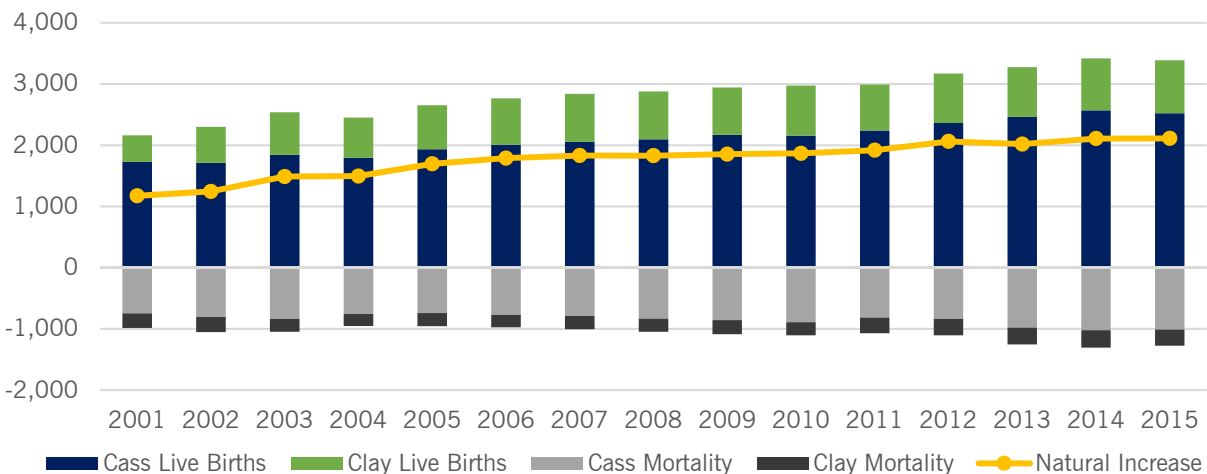
Net Migration

Net migration is not based on easily accessible data, but rather a set of assumptions including foreign immigration, net migration of college students, retention of recently graduated college students (resulting in lower out-migration), and net migration for specific cohorts like those over sixty or young families.

North Dakota's economy expanded from 2011 to 2015 as a result of strong commodity prices (both oil and agricultural), which resulted in lower than expected out-migration and higher than expected in-migration. This, combined with the related age-specific fertility rates of those who chose to stay in the community, can account for most of the remaining difference between the 2015 Census estimates and the 2015 forecast from the 2012 Demographic Forecast Study. (The application of the birth rate suggests 2,300 additional females, which together with their male partner accounts for a total 4,600 increased migration.)

SCHOOL ENROLLMENT

This study focused on the four public school districts found in Fargo, West Fargo, Moorhead, and Dilworth. Since 2010, K-12 school enrollment in the four districts has grown 17.2 percent, from 24,288 in 2010 to 28,454 at the end of the 2015-2016 school year. It is important to note that change in student enrollment in a given year does not equate to change in population for the same year because actual population includes age groups not included in the school population. The most significant additional component are pre-school age children who are in the community. Even in the event that no additional children were to move into the area, a

school district would still see the enrollment growth of the next five years if the number of pre-school age children is larger than those in the high school grades. Table 3 shows the school district enrollment for each of the four public school districts from the 2010-2011 school year through the 2015-2016 school year.

Table 3: Primary City School District Historic Enrollment

School Year	Fargo	West Fargo	Moorhead	Dilworth-Glyndon-Felton	Total
2010-2011	10,307	7,212	5,388	1,381	24,288
2011-2012	10,365	7,535	5,395	1,421	24,716
2012-2013	10,672	8,052	5,556	1,465	25,745
2013-2014	10,775	8,548	5,648	1,511	26,482
2014-2015	10,853	9,079	5,891	1,575	27,398
2015-2016	10,995	9,604	6,217	1,638	28,454

Enrollment Projections
Enrollment projections were provided by each school district listed below.

Fargo Public Schools

Since the 2010-2011 school year, Fargo Public Schools' (FPS) enrollment has grown 6.7 percent, or nearly 700 students, to 10,995; this is an average annual growth rate of 1.1 percent. FPS enrollment projections through the 2020-2021 school year expect to continue to grow at annual growth rates above one percent, to 11,920 students by the 2020-2021 school year.

West Fargo

Of the four primary school districts, West Fargo Public Schools (WFPS) has experienced the largest growth since the 2010-2011 school year. Since 2010-2011, WFPS has grown 33.2 percent, or nearly 2,400 students; this is an average annual growth rate of 5.5 percent. Enrollment forecasts through the 2020-2021 school year expect the annual growth rate to peak in the 2016-2017 school year and slowly decline, adding between 550 and 605 students each year. By the 2020-2021 school year, WFPS will surpass 12,500 students and become the largest school district in the metropolitan area.

Moorhead

Moorhead Public Schools' (MPS) enrollment has grown 15.4 percent, 830 students, since the 2010-2011 school year. This is an average annual growth rate of 2.6 percent. The MPS enrollment projections expect average annual growth around three percent through the 2020-2021 school year. While this is lower than the 2014-2015 and 2015-2016 annual growth rates, it is still significantly higher than growth rates experienced for many previous school years. The expected enrollment for the 2020-2021 school year is 7,250.

Dilworth-Glyndon-Felton

Dilworth-Glyndon-Felton (DGF) is a combined school district in Minnesota that includes the primary city of Dilworth and the smaller city of Glyndon. Felton is outside the Metro COG planning area. DGF's enrollment has grown 20.5 percent, 279 students, since the 2010-2011 school year, or an average of 3.4 percent annually. The 2020-2021 enrollment projections expect nearly 1,900 students for an average annual growth rate around 2.9 percent, which is slightly lower than growth rates experienced since 2011.

Summary of Enrollment Projections

Figure 8 shows the summary of enrollment projections. By the 2020-2021 school year, there is expected to be more than 33,500 primary and secondary students in the metropolitan area, an increase of approximately 18 percent from 2015-2016 enrollment.

Figure 8: Summary of Enrollment Projections
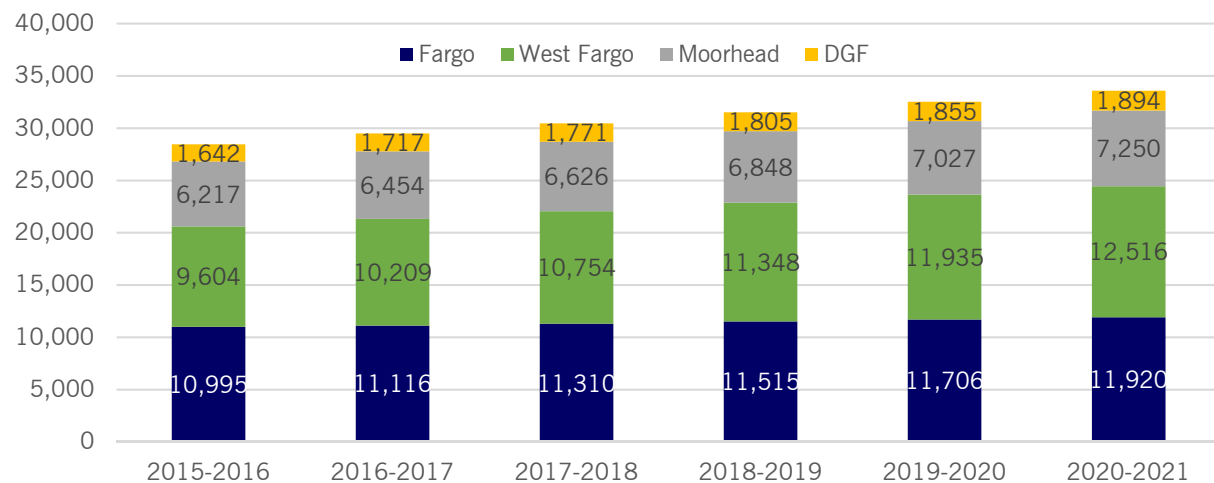
RESIDENTIAL BUILDING PERMITS

Building permit data provides an estimation of the gross number, location and type of dwelling units being constructed within the metropolitan area, allowing an understanding of where new growth is concentrated and the anticipated number and size of new households. Using the 2010 Decennial Census and detailed building permit data allows a fairly accurate estimate of current dwelling units for each primary city. Coupling these data with occupancy rates, existing home sales, and other relevant data allows an estimate of key household characteristics.

Number and Location of Building Permits Issued

From 2010 to 2015, the number of building permits issued in the metropolitan area surpassed 14,000, with 26.5 percent of permits issued in 2014 alone. Building permits issued in Fargo made up 59.2 percent of all permits in the metropolitan area. Table 4 shows the building permits issued by jurisdiction from 2010 to 2015.

Table 4: Building Permits Issued by Jurisdiction

Year	Fargo	% Of Total	Moorhead	% Of Total	West Fargo	% Of Total	Dilworth	% Of Total	Total
2010	841	66.85%	160	12.72%	244	19.40%	13	1.03%	1,258
2011	966	66.76%	161	11.13%	305	21.08%	15	1.04%	1,447
2012	1,135	53.04%	149	6.96%	839	39.21%	17	0.79%	2,140
2013	1,691	57.60%	405	13.79%	809	27.55%	31	1.06%	2,936
2014	2,271	61.02%	449	12.06%	976	26.22%	26	0.70%	3,722
2015	1,428	55.69%	505	19.69%	604	23.56%	27	1.05%	2,564
Total	8,332	59.23%	1,829	13.00%	3,777	26.85%	129	0.92%	14,067

Type

Residential building permits are divided into two general types: single-family and multi-family. From 2003 until 2010, the majority of permits issued in the metropolitan area were single-family building permits. However, since 2011, multi-family building permits have constituted 63.2 percent of all permits issued. If typical patterns of moving into single-family housing continues as family formation happens, a more drastic shortage in the single-family starter home market may occur. However, multi-family housing may become a long-term housing solution for families if single-family housing costs continue to increase, especially if interest rates rise. Table 5 shows the total building permits issued in Fargo, West Fargo, Moorhead and Dilworth by type from 2010 to 2015. Figure 9 shows the building permits issued by type and jurisdiction.

Table 5: Fargo, West Fargo, Moorhead and Dilworth Building Permits Issued by Type

Year	Single Family	% Of Total	Multi Family	% Of Total	Metro Total Units
2010	673	53.5%	585	46.5%	1,258
2011	541	37.4%	906	62.6%	1,447
2012	915	42.8%	1,225	57.2%	2,140
2013	1,118	38.1%	1,818	61.9%	2,936
2014	1,008	27.1%	2,714	72.9%	3,722
2015	1,138	44.4%	1,426	55.6%	2,564
Total	5,393	38.3%	8,674	61.7%	14,067

Figure 9: Building Permits Issued by Type and Jurisdiction
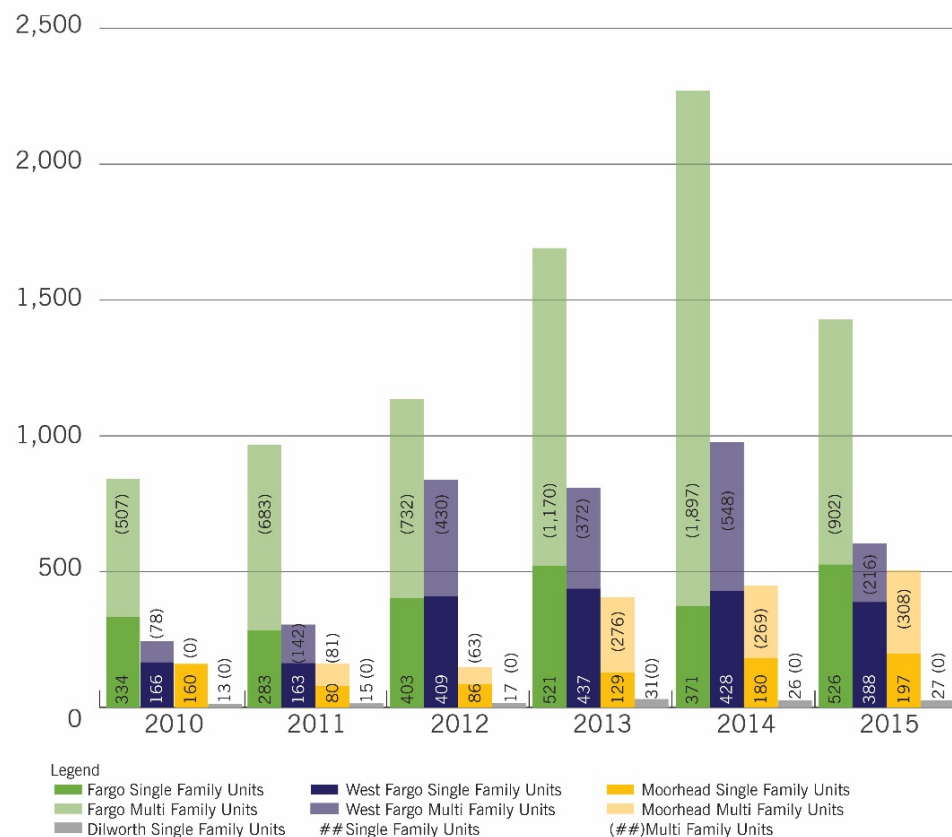
METHODOLOGY DESIGN

STAKEHOLDER INTERVIEWS

The methodologies for this Demographic Forecast stem from an understanding of factors influencing the recent and future change in population, households, and jobs in the Fargo-Moorhead metropolitan area. As a first step in deepening this understanding, a series of interviews were conducted with local subject matter experts. These included individuals from economic development organizations; social service agencies; development, housing and real estate organizations; the FM Flood Diversion Authority; and small community representatives. The following are observations from these discussions about the most significant factors influencing future change within the region.

FM Flood Diversion

The 2012 Demographic Forecast included an assumption on the future construction of the FM Diversion. In the intervening years, the timetable for completion of construction has been delayed to 2025 (from 2021). Completion of area-wide flood protection is critical to the future stability of region's economy and population base. Some local economic development experts contend that if the diversion is not constructed, it would cause some existing and potential future businesses to locate elsewhere. Additionally, there are approximately 19,000 structures in the area that will have significant additional flood insurance costs in four years when the Federal Emergency Management Agency (FEMA) re-maps the 100-year flood elevation to 41 feet. Without the FM Diversion, those properties will be forced to pay flood insurance rates that may be as much as ten times their current rate, and a virtual moratorium on development could occur in much of the southwest metro area.

Economic Development and Job Growth

The Greater Fargo Moorhead Economic Development Corporation (GFMEDC) has recently completed a significant assessment of the current labor market and future job demand growth. The assessment noted that employment in the Fargo-Moorhead metropolitan area grew 24 percent between 2004 and 2014, despite the national downturn in the economy. With an increase of almost 8,000 jobs, the healthcare and education sectors were responsible for adding the most jobs over that time.

Full employment is typically considered to be when unemployment is approximately five percent. During the last ten years, unemployment within the Fargo-Moorhead metro area has never been higher than 4.3 percent. According to the GFMEDC consultant's research, in 2014 there were over 6,700 open jobs in the Fargo-Moorhead metro area. This includes both replacement of existing jobs due to turnover and newly created jobs. By the year 2019 they anticipate that the number of open jobs will grow to 30,000. In addition to the growing demand for workers, employers are finding there is a mismatch between the skills of available workers and the skills employers need. Complicating this more is the fact that, especially in the more skilled occupation categories, the region's wages lag behind the nation's. This means that recruiting workers into the region is especially challenging. Approximately 45 percent of the job demand over the next few years will be in the lower paying jobs such as those in the service, retail and transportation industries, and the remaining 55 percent will be in higher paying jobs such as those in the manufacturing, high tech, education, and health science industries. This is based on the assumption that current plans for FM Diversion construction are implemented.

Housing and Real Estate Development

Housing and Real Estate Development experts generally concur that the housing and real estate development market will remain strong over the next ten years, assuming the FM Diversion construction continues to move forward. They noted that the national economic downturn which began in 2008 had very little impact on the local market. However, there were several observations made about the type and location of housing development over the next few years:

» Real estate, particularly apartments, is a good investment in the current economic climate. Essentially, they are a good risk compared to the stock market and typical interest generating investments.

» Continued development and population growth in the Fargo-Moorhead metropolitan area is anticipated for the future because there are very few external factors seen to have a significant impact. Even high interest rates may not have a significant effect. The high cost of flood insurance for structures in the floodplain and a major natural disaster are two factors cited with the potential to reduce the growth rate.

» Land costs, construction costs, and special assessments continue to increase, limiting the type of development that can be profitable. This is producing a shortage of newly constructed single family housing below the $300,000 price point. Existing homes are becoming the only option for "affordable homes." It is also affecting the cost of office space.

» The buyer demand characteristics have changed from the past. For example, first time home buyers are not interested in "fixer-uppers" although they will buy starter homes. However, starter homes are more challenging to get into now due to obstacles like higher prices, higher down payments, and high debt loads.

» Older homes nearer to the college campuses are more frequently becoming rentals instead of being sold to a new owner occupant. This pattern may spread to other parts of the metro area in the coming years.

» There is a recent trend towards constructing single occupant one-bedroom apartments with high amenities that are aimed to appeal to more affluent renters. Some of these people are younger workers who prefer not to be tied to a mortgage or home maintenance.

» The likelihood of a significant proportional increase in development in the Minnesota portion of the metro area is considered slim because of the perceived or real higher costs for living there. The draw to live in North Dakota seems to be the perception of cheaper costs, especially from lower income tax rates. The draw to live in Minnesota may be primarily the perception of better social service benefits.

Special Populations

There are several population sub-groups within the Fargo-Moorhead metropolitan area with their own patterns of change. These include young adults and college students, the elderly, and New Americans.

Young Adults and College Students

Young adults, which include those attending college and those moving directly into the workforce after graduating high school, have been a significant component of change in the Fargo-Moorhead metropolitan area. They were a key reason the 2015 metropolitan area population exceeded the forecast of the 2012 Demographic Forecast Study. Considering that the combined student enrollment of the three largest post-secondary educational institutions dropped by approximately 2,600 students between 2010 and 2015, this is even more significant. The impact of the young adult population in the metropolitan area is anticipated to be even greater

in the near-term. Three reasons for this outlook include the anticipated increase in post-secondary enrollment, the increased local base of graduating high school students, and ongoing initiatives to recruit more people for the metropolitan workforce.

» North Dakota State University (NDSU), Minnesota State University Moorhead (MSUM), and Concordia accounted for 22,529 of the students enrolled in local post-secondary educational institutions in 2015. All three institutions have new initiatives underway to bring their combined target enrollment to 27,900 students.

» Based on current and projected K-12 enrollment patterns, the West Fargo, Fargo, Moorhead, and Dilworth-Glyndon-Felton School Districts are anticipated to have graduated a combined 9600 young adults between 2016 and 2020.

» Recent workforce development initiatives between local economic development leaders and post-secondary educational institutions will also encourage increased post-secondary enrollment levels to feed the strong demand for additional workforce that is continuing to growth in the metropolitan area.

Baby Boomers

The aging Baby Boomer population will exert a significant impact on future population patterns of change in the Fargo-Moorhead metropolitan area. In 2010, this sub-group of 47,933 people represented 23 percent of the total MSA population. The oldest of the Baby Boomers are just turning 70 years old this year. In the next ten years, nearly half of the Baby Boomers will be over 70 years old and undergoing significant life changes such as losing a spouse, leaving the workforce, and changing residence.

The probability of dying is three times higher for the population over 80 as compared to the 65 to 69 year old population. Since the majority of the Baby Boomer population will have reached that age of significantly increasing mortality by the year 2045, the net natural increase in the total MSA population will approach zero. Any increase in MSA population will be increasingly dependent on net in-migration.

New Americans

New Americans have often been discussed as a significant element in the Fargo-Moorhead metropolitan area's population growth. New Americans, by definition, are people coming to the United States with no U.S. citizenship at birth. There are two main categories of immigrants: those who enter the United States as refugees, asylees, and unaccompanied alien children, and those who have entered the United States legally or illegally on some other basis. Available data to identify the number refugees, asylees, or unaccompanied alien children who have come to the Fargo-Moorhead area is limited. Available data to identify the number of people who have come to the Fargo-Moorhead area on some other basis is even more limited. The best data available on refugees, asylees, and unaccompanied alien children is from Lutheran Social Services (LSS) because of their involvement in the resettlement program. During the Federal Fiscal Years 2011-2015, 1,787 people were resettled to the Fargo-Moorhead metropolitan area. Based on best estimates available from LSS, it is believed that these resettlement immigrants represent from 15 to 18 percent of the total net migration. Based on statistics pertaining to English Language Learners in the Fargo-Moorhead metropolitan area, there is some suggestion that between 40 percent and 60 percent of the total immigrant population are refugees.

Small Community Growth Capacity

Representatives from several of the small communities in the Metro COG planning area shared information on their communities' capacity for growth. This information, coupled with other data collected, led to the following observations:

- » Barnesville has been growing at a consistent pace over the past couple of decades. They have sufficient utility capacity and land to continue to grow at this rate.
- » Hawley has experienced nearly 18% growth in the last two decades and expects this to continue. A new subdivision was recently approved. The city has planned for additional growth and has sufficient utility capacity through 2030.
- » Sabin has some limitations on growth due to floodplain issues and a lack of land available for development.
- » Glyndon has significant amounts of platted land available for development but has been growing very slowly over the last five years. Some recent activities in the community suggest there might be slightly faster growth in the short term future.
- » Mapleton is anticipating a surge in growth in the next few years. It has potential for long-term growth if flood protection is developed. The current estimated number of additional lots available for development is approximately 150.
- » Casselton has been growing at a slow pace in the last five years. There is limited land available for development, some of which is currently being developed. The estimated number of additional lots to be developed in the next decade is approximately 30.
- » Horace has had a sewage treatment limitation on its potential for growth. A very recent agreement with the City of Fargo will address this limitation. There are over 400 lots which could potentially be developed when a physical connection to the Fargo sewage collection system is constructed.

GROWTH FACTORS

The primary growth factors affecting future population and household change for the entire MSA are anticipated to be the current mortality rate and live birth rate. Based on the current age structure of the MSA, without the effects of net in-migration, these two factors would result in a net decline in population. However, the increased retention of females in prime child-bearing years, which was apparent in the last five years, will delay the onset of a natural decrease in population.

The most significant additional factor anticipated to impact the change in population and households within the next ten years is a continued net in-migration of people of all ages. During the last five years the largest age cohort increases due to net in-migration were those age 25 to 34, and those age 70 to 74 (not in group quarters). The continued retention of those 25 to 34 is anticipated because of the strong local economy with great job opportunities. The continued in-migration and retention of those age 70 to 74 (not in group quarters) is anticipated because of the large existing bubble of baby boomers in the MSA, the large number of baby boomers in the outlying counties, and the increasing level of amenities, services, and housing options expected to be available to them.

The most significant factors which could change the future pattern of growth would be continued delay in construction of the FM Diversion and any weakness in the existing home sales market.

METHODOLOGICAL ALTERNATIVES

Population forecasting methods can be classified into three broad categories: trend extrapolations, cohort component methods and structural models.

Table 6: Methodological Alternatives Summary

Method	Description	Disadvantages
Trend Extrapolations	» Based on the continuation of observed historical trends.	» Unable to account for differing demographic characteristics. » Cannot age cohort level or other demographic characteristics in the projection. » Accuracy is dependent on a consistent pattern of change throughout the forecast period.
Cohort-Component	» Divides the population into age-sex groups or birth cohorts and accounts for the fertility, mortality, and migration behavior of each cohort. Flexible to allow for variances of demographic characteristics and changes in the factors influencing population change over the life of the forecast period.	» Needs detailed demographic characteristics. » Needs a larger base population (2,500 or more) to be reasonably accurate.
Structural Models	» Rely on observed relationships between demographic and other variables, such as employment, housing stock, and land use. Adaptive to small areas using available factors of growth, such as capacity for growth and certain predictive variables.	» Unable to provide forecasts about detailed demographic characteristics such as age structure or household composition. » Rely on symptomatic variables. If quality of the symptomatic variables is limited, the quality of the forecast will also be limited.

FORECAST SCENARIOS

As part of the update to the demographic forecasts for the Fargo-Moorhead metropolitan area, two forecast scenarios were developed. Past forecasts sometimes developed three scenarios, which essentially amounted to low, medium, and high scenarios. Given that the primary purpose of these forecasts is to provide input data for the next version of the TDM, a low forecast does not have any value. Therefore, the Study Review Committee determined that a "Most Likely" and a "Best Case" scenario were appropriate for the forecasts.

The Most Likely scenario is based on the premise that significant factors affecting future growth are controlled primarily by existing conditions, but that some factors of growth are clearly anticipated to change. The result will be future population, housing, and employment forecasts that have been determined the most probable to occur.

The Best Case scenario is based on the premise that all significant factors affecting future growth align in a positive way to provide the best possible realistic conditions for growth. The result will be future population, housing, and employment forecasts that are as high as what may be reasonably expected to be possible.

LARGE AREA FORECAST METHODOLOGY

The large area population and household forecasts were produced using the Cohort-Component method. Assumptions approved by the Study Review Committee were used to govern the model for both scenarios (see Appendix A). In Cohort-Component methodology, the components of change (fertility, mortality, and net

migration) are calculated separately for each birth cohort (persons born in a given year). The base population is advanced each year by using forecasted survival rates and net migration. Each year, a new birth cohort is added to the population by applying the projected fertility rates to the female population. The forecast results were compiled for the five-year periods from 2020 to 2045.

SMALL AREA FORECAST METHODOLOGY

The small area population and household forecasts were produced using a Structural Model approach. This is an allocation method based primarily on existing population and household patterns, and capacity for growth. The small area forecasts were generated by a proportional distribution of the total county growth not accounted for by the growth in the large areas. Then, individual small area growth was refined based on their capacity for growth, past growth patterns, and other available information.

EMPLOYMENT FORECAST METHODOLOGY

Employment forecasts were produced based on existing employment patterns, anticipated economic sector growth, and other factors determined after analyzing 2015 employment data. Employment data from 2001 to 2015 from various sources were reviewed and the methodology used by the recently completed GFMEDC Workforce Study was scrutinized. Employment data obtained through a state-wide data purchase from InfoGroup USA was also reviewed.

A 2015 jobs baseline was developed that closely matched the number of jobs estimated by the Workforce Study. The jobs forecast was developed by applying the proportion of 2015 jobs to working age population in 2015 to the future year working age population. Distribution of jobs by category was established by applying the same ratio of job types identified in the InfoGroup USA employment data for 2015 to future year jobs forecasts.

FORECAST DEVELOPMENT & REFINEMENT

After completing the consistency review of the past forecast and developing appropriate assumptions for the Best Case and Most Likely scenarios, draft forecasts were developed for population and households for each five-year period from 2020 to 2045. The new lower mortality rates were applied to the forecast, and for the Best Case scenario, a slightly higher birth rate was applied. The draft forecasts of both scenarios were presented at the third Study Review Committee meeting, and based on the discussion at the meeting, minor changes were made to the methodology and revised forecasts were presented for review and approval at the fourth Study Review Committee meeting.

An unanticipated change to the development situation in the Fargo-Moorhead metropolitan area occurred when the City of Horace and the City of Fargo reached an agreement that would allow the City of Horace to obtain additional sewage treatment capacity to handle their potential household growth. Additionally, the West Fargo School District announced a land swap and plans to begin building a new school in the City of Horace. These events resulted in the need to reconsider the likelihood and rate of short-term growth in the City of Horace. Based on conversations with landowners and developers, the City of Horace anticipated a high rate of growth during the short term. After a series of meetings with Horace officials, and a review of the Southwest Growth Area study, the population and household growth forecasts were modified to accommodate the anticipated additional growth in Horace by 2025. The Best Case scenario assumed substantial new development would be

underway by the fall of 2017 and that short term growth rates could be as similar to those experienced by West Fargo in recent years. After the FM Diversion is completed in 2025, it is anticipated that the market and capacity for growth in West Fargo and Fargo will increase and that the Horace rate of development will slow substantially.

POPULATION FORECASTS

The Most Likely population scenario provides an overall population increase for the MSA from the 2015 Demographic Forecast Study estimate number of 232,900 to 330,550 in 2045. This represents a 42.9 percent increase in the total population of the MSA between 2015 and 2045. The Best Case population scenario provides an overall population increase for the MSA from the 2015 Demographic Forecast Study estimate number of 232,900 to 342,360 in 2045. This represents an overall increase of 47.0 percent between 2015 and 2045. Figure 10 shows the overall population growth forecasts by scenario.

Figure 10: Overall Population Growth Forecasts by Scenario (2015 to 2045)
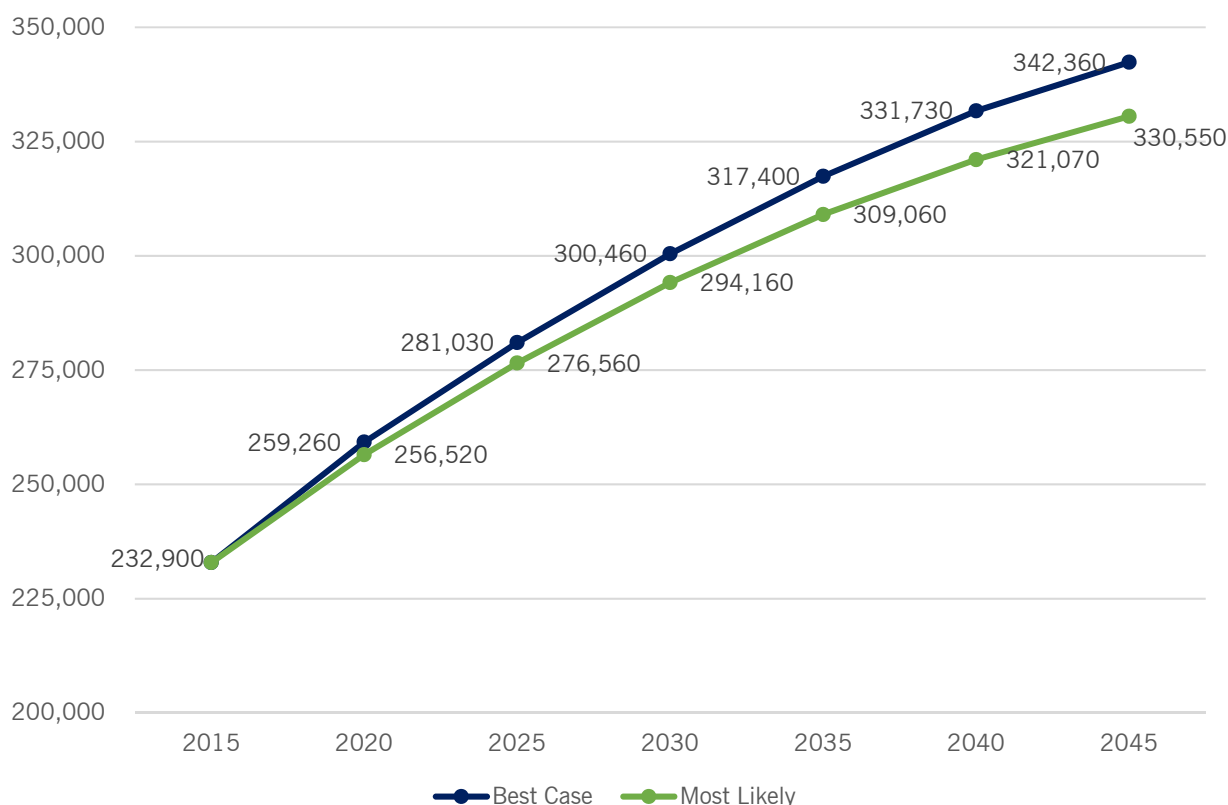
Table 8 summarizes the Best Case scenario growth patterns for each jurisdiction for each five-year period of the forecast. Table 7 summarizes the Most Likely scenario growth patterns for each five-year period of the forecast.

The detailed (age-cohort specific) population forecasts for the jurisdictions included in Table 8 and Table 7 can be found in Appendix B. There are variations in the rate of growth within each geographic area due to a variety of factors including the indigenous population and household characteristics, anticipated future population and household characteristics, and other community characteristics identified in the research.

Table 7: Most Likely Scenario Population Forecasts by Jurisdiction (2015 to 2045)

	2015	2020	2025	2030	2035	2040	2045
MSA	232,900	256,520	276,560	294,160	309,060	321,070	330,550
MPA	222,366	243,525	262,899	280,111	294,429	306,093	315,416
Cass County	168,930	187,740	203,130	216,410	227,540	236,410	243,370
Clay County	63,970	68,780	73,430	77,750	81,520	84,660	87,180
Fargo	117,230	130,590	142,760	153,840	163,360	171,540	178,900
West Fargo	32,300	37,130	39,440	41,020	42,020	42,190	41,720
Horace	2,620	2,770	2,960	3,090	3,180	3,240	3,280
Casselton	2,420	2,520	2,650	2,770	2,850	2,910	2,970
Balance of Cass	14,360	14,730	15,320	15,690	16,130	16,530	16,500
Moorhead	43,840	45,740	48,850	51,860	54,630	56,990	58,870
Dilworth	4,300	4,740	5,160	5,590	5,910	6,180	6,440
Barnesville	2,780	3,000	3,280	3,490	3,650	3,830	3,990
Hawley	2,190	2,290	2,340	2,450	2,510	2,610	2,630
Balance of Clay	10,860	13,010	13,800	14,360	14,820	15,050	15,250

Table 8: Best Case Scenario Population Forecasts by Jurisdiction (2015 to 2045)

	2015	2020	2025	2030	2035	2040	2045
MSA	232,900	259,260	281,030	300,460	317,400	331,730	342,360
MPA	222,366	246,523	267,331	286,013	302,419	316,413	326,782
Cass County	168,930	189,900	206,620	221,350	233,940	244,460	251,940
Clay County	63,970	69,360	74,410	79,110	83,460	87,270	90,420
Fargo	117,230	129,690	140,030	151,810	162,450	172,140	179,800
West Fargo	32,300	37,370	40,140	42,000	43,240	43,660	43,270
Horace	2,620	5,070	8,190	8,940	9,500	9,820	10,040
Casselton	2,420	2,530	2,680	2,800	2,920	2,990	3,110
Balance of Cass	14,360	15,240	15,580	15,800	15,830	15,850	15,720
Moorhead	43,840	47,120	50,290	53,340	56,390	59,100	61,420
Dilworth	4,300	4,760	5,210	5,620	5,960	6,270	6,510
Barnesville	2,780	3,020	3,300	3,530	3,730	3,920	4,110
Hawley	2,190	2,290	2,390	2,460	2,570	2,630	2,700
Balance of Clay	10,860	12,170	13,260	14,160	14,810	15,350	15,680

Population change is a result of three factors: deaths, births, and migration. Deaths and births are usually the dominant factors in areas which are not experiencing some kind of major economic change (such as a gold rush or an oil boom). A population pyramid is a graphical tool which provides a clear illustration of age and sex distribution within a particular geography at a given point in time. The pattern of age distribution can provide insights into the future growth of a given geography. Figure 11 through Figure 15 illustrate the age distribution for the MSA in 2015, and for the MSA Most Likely and Best Case scenarios in 2025 and 2045.

Figure 11: MSA Population Distribution by Age Cohort (2015)
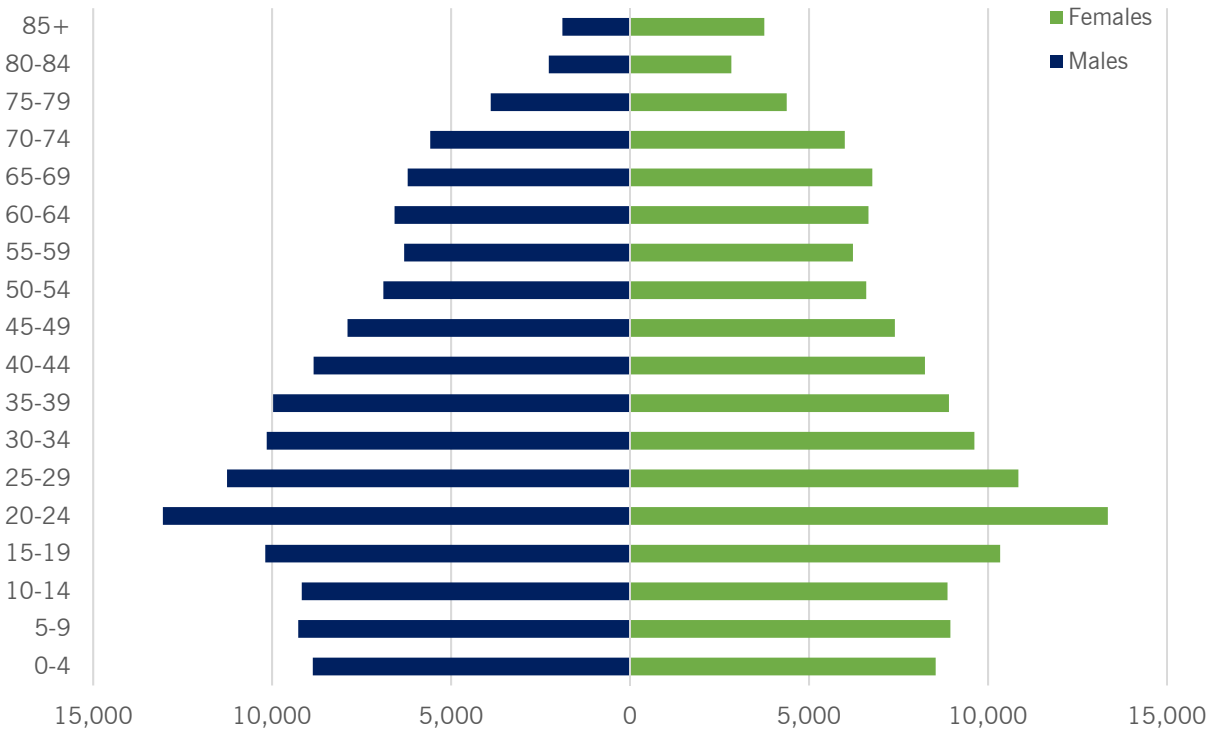
Figure 12: MSA Population Distribution by Age Cohort (2025 Most Likely Scenario)
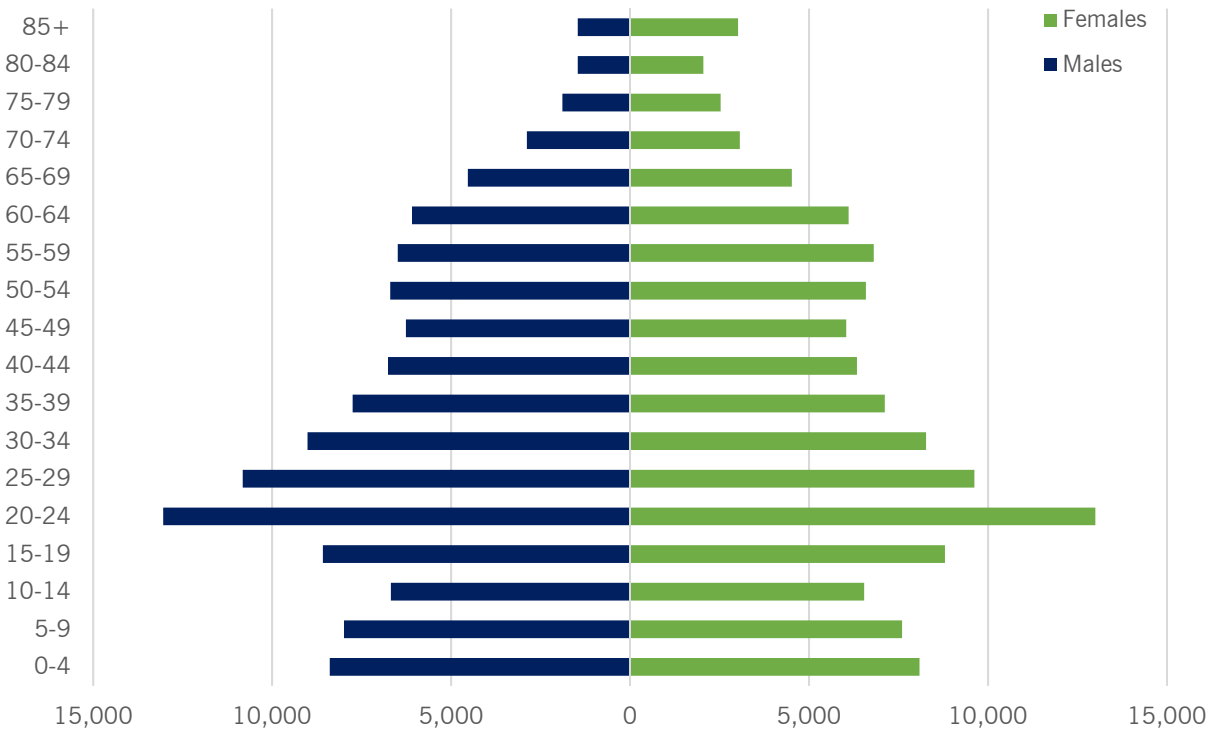
Figure 13: MSA Population Distribution by Age Cohort (2025 Best Case Scenario)
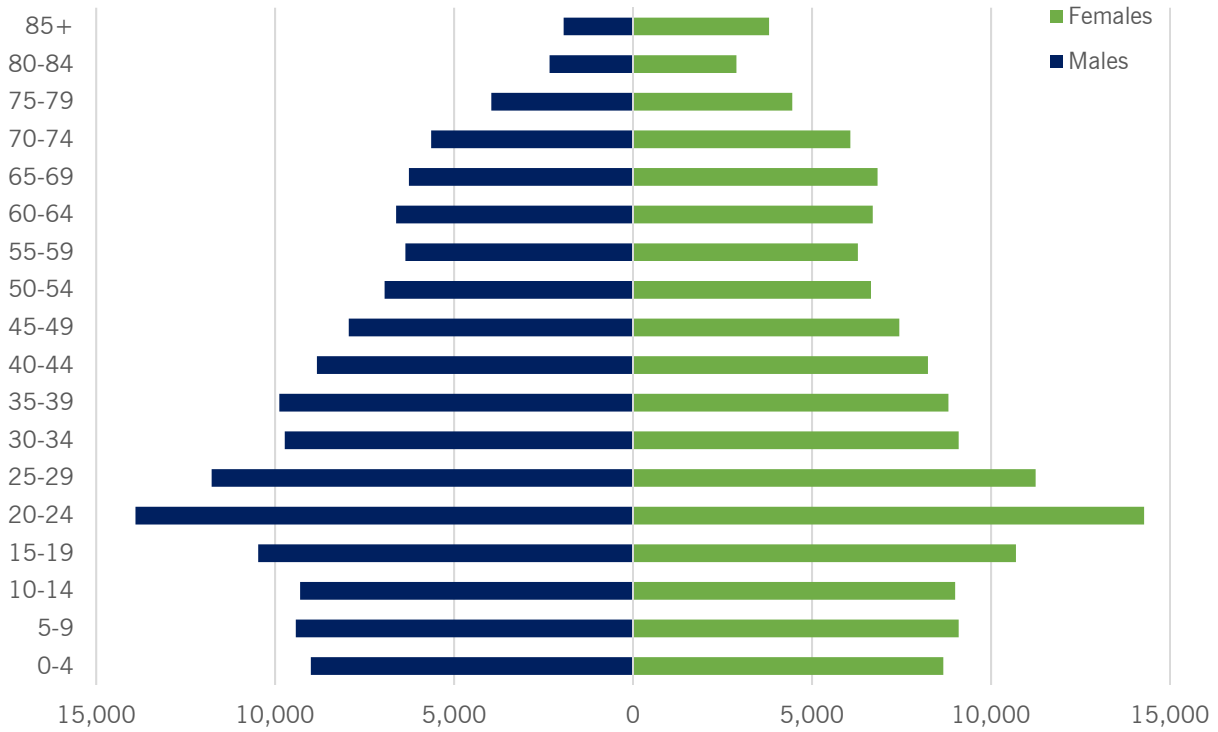
Figure 14: MSA Population Distribution by Age Cohort (2045 Most Likely Scenario)
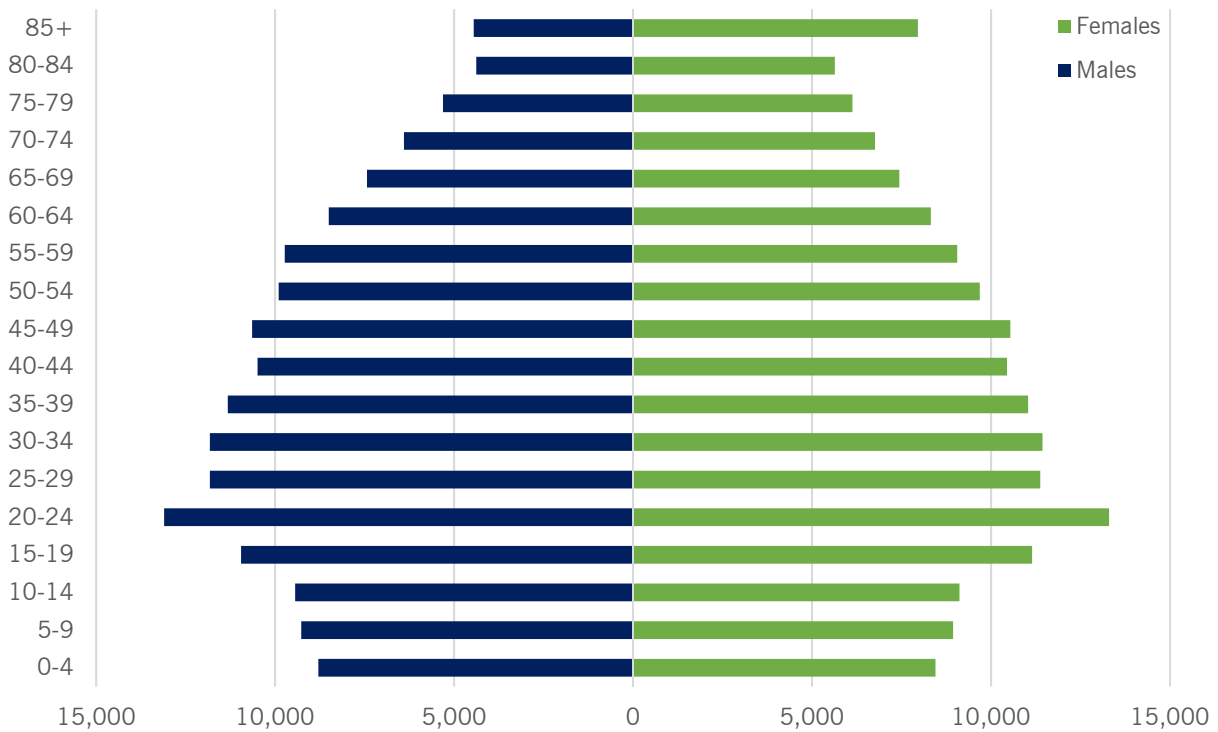
Figure 15: MSA Population Distribution by Age Cohort (2045 Best Case Scenario)
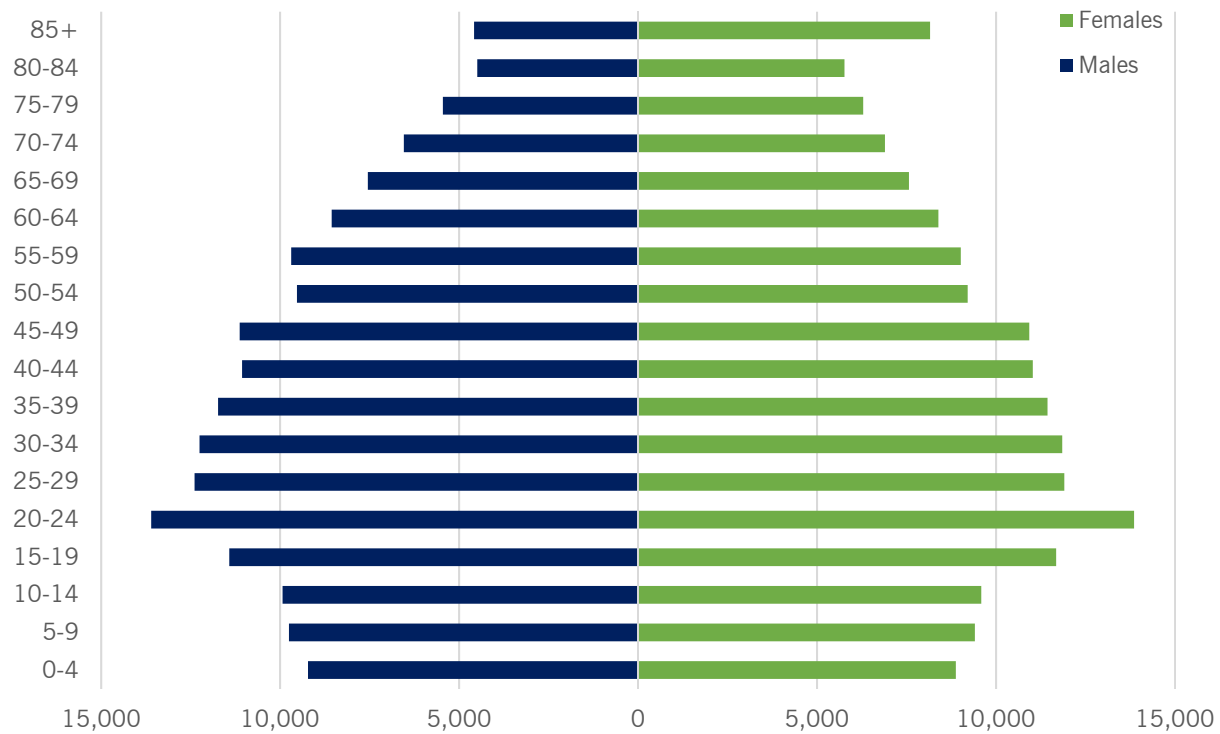
In addition to the Cohort-Component based forecasts, a Structural Model was used to forecast population numbers based on both scenarios for the remaining jurisdictions in the Fargo-Moorhead Metro COG study area (MPA). Summaries of the small area forecasts (areas within the MPA but outside Fargo, West Fargo, Horace, Casselton, Moorhead, Dilworth, Barnesville, and Hawley) are presented in Table 10 and Table 9. Individual small area forecasts are provided in Appendix B.

Table 9: Small Area Most Likely Scenario Population Forecasts (2015 to 2045)

	2015	2020	2025	2030	2035	2040	2045
MPA	222,366	243,525	262,899	280,111	294,429	306,093	315,416
Cass Small Areas	8,803	7,903	8,250	8,438	8,530	8,711	8,662
Clay Small Areas	5,883	5,455	5,810	6,124	6,338	6,436	6,481

Table 10: Small Area Best Case Scenario Population Forecasts (2015 to 2045)

	2015	2020	2025	2030	2035	2040	2045
MPA	222,366	246,523	267,331	286,013	302,419	316,413	326,782
Cass Small Areas	8,803	8,499	8,504	8,534	8,371	8,353	8,253
Clay Small Areas	5,883	6,174	6,597	7,016	7,288	7,530	7,569

HOUSEHOLD FORECASTS

The Most Likely scenario provides an overall household increase for the MSA from the 2015 Demographic Forecast Study estimate number of 94,750 to 129,060 in 2045. This is a 36.2 percent change between 2015 and 2045. The Best Case Scenario provides an overall household increase for the MSA from the 2015 Demographic Forecast Study estimate number of 94,750 to 134,930 in 2045. This is a 42.4 percent change between 2015 and 2045. Figure 16 shows the overall household growth forecasts by scenario from 2010 to 2045. For the purposes of this report, "household" is a group of people living in a dwelling unit while "housing unit" is another term for a dwelling unit.

Figure 16: Overall Household Growth Forecasts by Scenario (2010 to 2045)
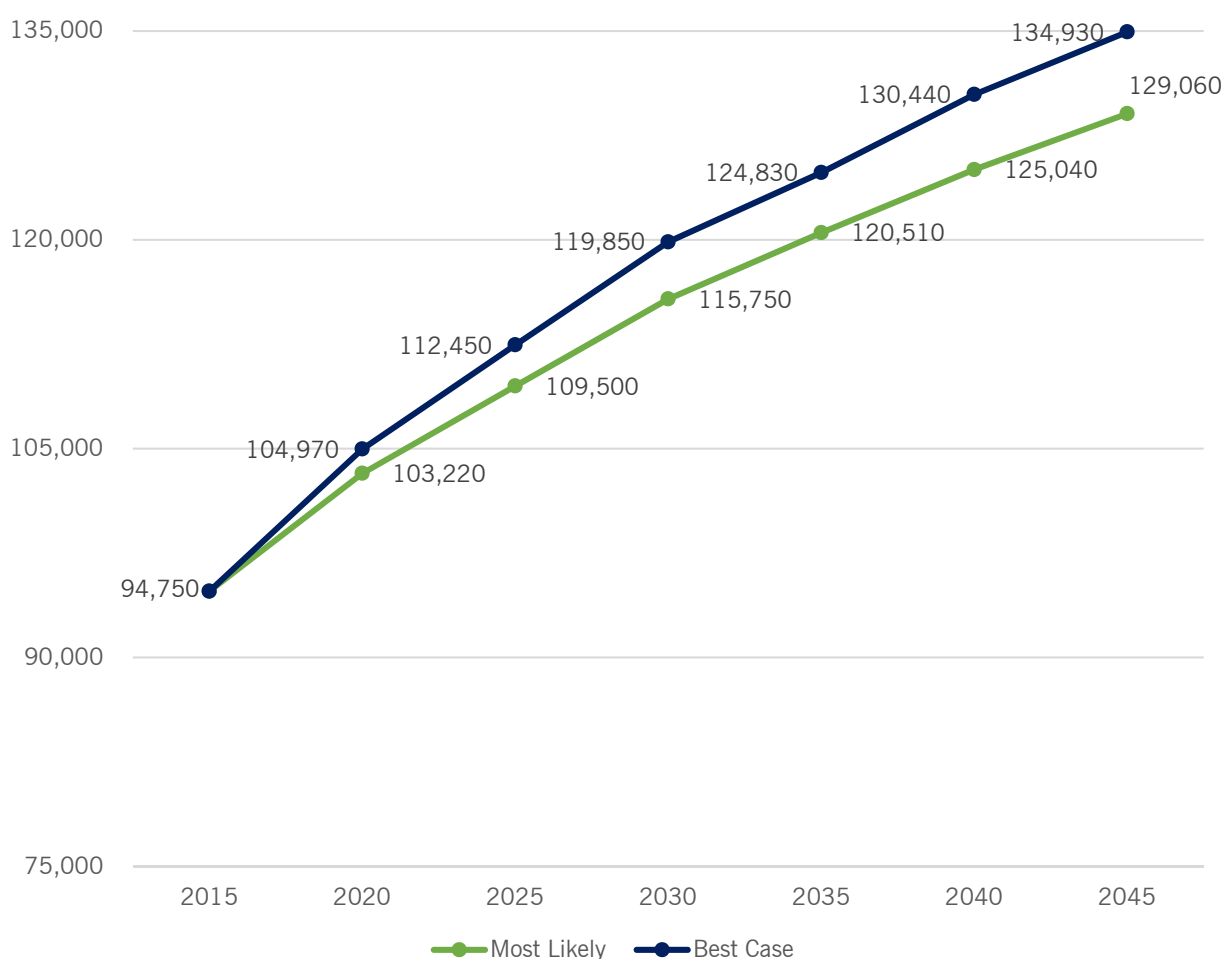
Table 11 summarizes the Most Likely scenario household growth patterns for each jurisdiction for each five-year period of the forecast. Table 12 summarizes the Best Case scenario household growth patterns for each jurisdiction for each five-year period of the forecast.

Table 11: Most Likely Scenario Household Forecasts by Jurisdiction (2015 to 2045)

	2015	2020	2025	2030	2035	2040	2045
MSA	94,750	103,220	109,500	115,750	120,510	125,040	129,060
MPA	90,160	97,920	103,790	109,710	114,080	118,450	122,200
Cass County	70,460	76,950	81,240	85,810	88,880	92,170	95,210
Clay County	24,290	26,270	28,260	29,940	31,630	32,870	33,850
Fargo	50,870	55,890	59,790	63,810	66,270	68,770	71,440
West Fargo	12,410	13,390	13,550	13,780	14,090	14,460	14,680
Horace	840	920	990	1,040	1,060	1,090	1,110
Casselton	890	910	940	980	1,010	1,040	1,060
Balance of Cass	5,450	5,840	5,970	6,200	6,450	6,810	6,920
Moorhead	15,920	17,120	18,560	19,780	20,980	22,030	22,560
Dilworth	1,660	1,990	2,110	2,230	2,390	2,440	2,510
Barnesville	1,050	1,110	1,160	1,230	1,280	1,370	1,520
Hawley	910	930	950	990	1,020	1,050	1,110
Balance of Clay	4,250	5,120	5,480	5,710	5,960	5,980	6,150

Table 12: Best Case Scenario Household Forecasts by Jurisdiction (2015 to 2045)

	2015	2020	2025	2030	2035	2040	2045
MSA	94,750	104,970	112,450	119,850	124,830	130,440	134,930
MPA	90,210	99,550	106,820	113,940	118,700	124,460	128,940
Cass County	70,460	78,160	83,820	89,290	92,520	96,750	99,960
Clay County	24,290	26,810	28,630	30,560	32,310	33,690	34,970
Fargo	50,870	56,280	60,260	64,650	66,630	70,550	73,530
West Fargo	12,410	13,460	13,950	14,630	15,540	15,690	15,840
Horace	840	1,730	2,710	2,980	3,190	3,360	3,520
Casselton	890	920	950	1,000	1,040	1,090	1,150
Balance of Cass	5,450	5,770	5,950	6,030	6,120	6,060	5,920
Moorhead	16,420	17,830	19,190	20,610	21,880	23,010	23,810
Dilworth	1,660	2,030	2,150	2,290	2,470	2,530	2,630
Barnesville	1,050	1,130	1,190	1,270	1,320	1,430	1,570
Hawley	910	940	970	1,020	1,050	1,080	1,140
Balance of Clay	4,250	4,880	5,130	5,370	5,590	5,640	5,820

The detailed projections for the MSA, Cass County, Clay County, Fargo, West Fargo, Horace, Casselton, Moorhead, Dilworth, Barnesville, and Hawley are provided in Appendix B. There are variations in the rate of growth within each geographic area due to a variety of factors including the existing population and household characteristics, anticipated future household composition and household characteristics, and other local dynamics identified in the research.

In addition to the household forecasts for the large areas which were derived from the Cohort-Component based population forecasts, a Structural Model was used to forecast the Most Likely scenario and Best Case scenario household numbers for the remaining jurisdictions in the MPA. Summaries of these small area forecasts are presented in Table 13 and Table 14. Individual small area forecasts are provided in Appendix B.

Table 13: Small Area Most Likely Scenario Household Forecasts (2015 to 2045)

	2015	2020	2025	2030	2035	2040	2045
MPA	81,875	90,160	97,920	103,790	109,710	114,080	118,450
Cass Small Areas	3,000	3,010	3,000	3,080	3,100	3,220	3,220
Clay Small Areas	2,160	2,190	2,270	2,320	2,400	2,490	2,500

Table 14: Small Area Best Case Scenario Household Forecasts (2015 to 2045)

	2015	2020	2025	2030	2035	2040	2045
MPA	81,875	90,210	99,550	106,820	113,940	118,700	124,460
Cass Small Areas	3,000	3,010	3,150	3,160	3,180	3,290	3,290
Clay Small Areas	2,160	2,220	2,300	2,330	2,400	2,430	2,460

School Population Forecast

Additional population forecasts were compiled for student populations (age five to 17) for the MSA and major jurisdictions within. The Most Likely scenario provides an overall school population increase for the MSA from the 2015 Demographic Forecast Study estimate of 31,133 to 39,942 in 2045. This is a 28.3 percent change between 2015 and 2045. The Best Case scenario provides an overall school population increase for the MSA from the 2015 Demographic Forecast Study estimate of 31,133 to 41,961 in 2045. This is a 34.8 percent change between 2015 and 2045. Figure 17 illustrates the overall growth in these two scenarios.

Figure 17: Overall School Population Forecasts by Scenario (2015 to 2045)
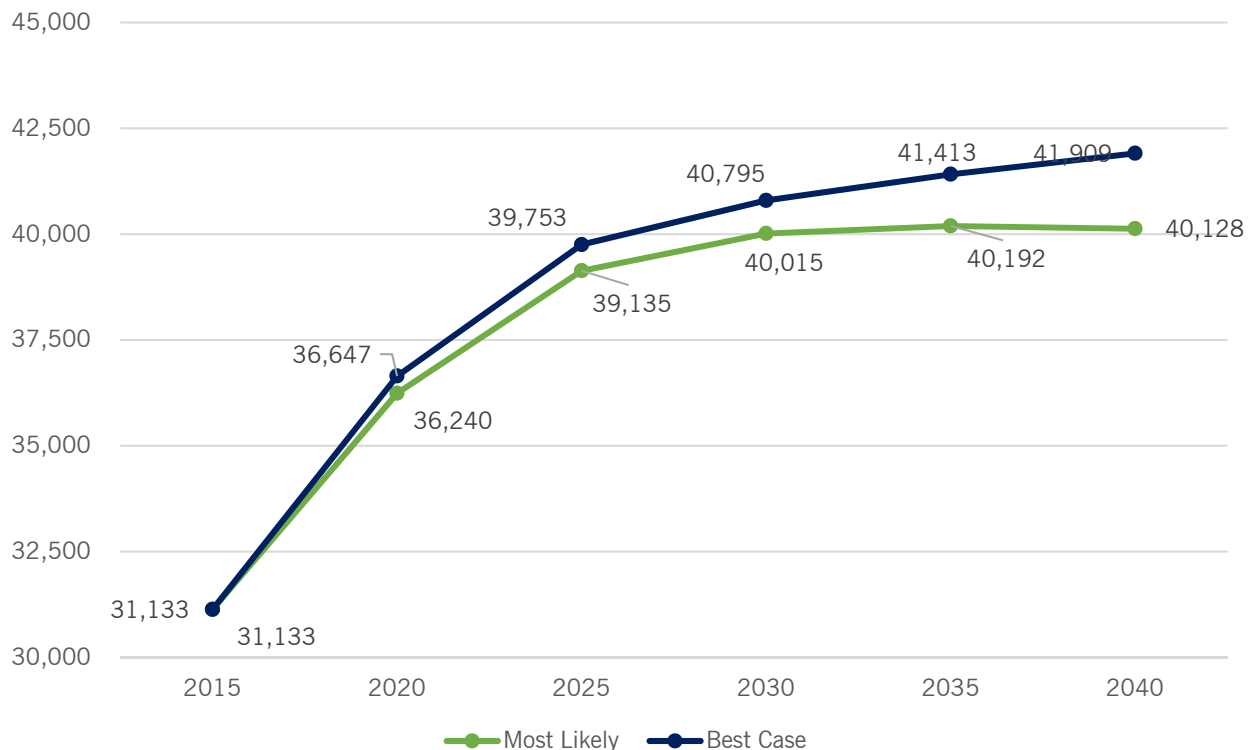
Table 15 summarizes the Most Likely scenario school population patterns for each jurisdiction for each five-year period of the forecast. Table 16 summarizes the Best Case scenario school population patterns for each five-year period of the forecast. In the Most Likely scenario, the school population peaks in 2035. In the Best Case scenario the population growth is nearly flat by 2040.

Table 15: Most Likely Scenario School Population Forecasts by Jurisdiction (2015 to 2045)

	2015	2020	2025	2030	2035	2040	2045
MSA	31,133	36,240	39,135	40,015	40,192	40,128	39,942
Cass County	22,348	26,843	29,474	30,150	30,143	29,908	29,669
Clay County	8,785	9,397	9,661	9,865	10,049	10,220	10,273
Fargo	14,163	17,156	19,760	21,369	22,416	22,891	22,931
Moorhead	5,580	6,097	6,213	6,417	6,685	6,943	7,049
West Fargo	5,203	6,656	6,733	5,851	4,814	4,277	4,031
Dilworth	777	817	926	1,030	1,012	915	846
Horace	522	531	527	577	572	527	490
Casselton	459	509	464	427	398	408	408
Barnesville	522	596	604	628	620	602	588
Hawley	410	430	387	374	350	348	345

Table 16: Best Case Scenario School Population Forecasts by Jurisdiction (2015 to 2045)

	2015	2020	2025	2030	2035	2040	2045
MSA	31,133	36,647	39,753	40,795	41,413	41,909	41,961
Cass County	22,348	27,158	29,970	30,827	31,200	31,328	31,058
Clay County	8,785	9,489	9,783	9,968	10,213	10,581	10,903
Fargo	14,163	17,486	19,999	21,487	22,927	23,478	23,606
Moorhead	5,580	6,158	6,210	6,288	6,517	6,935	7,265
West Fargo	5,203	6,752	6,939	6,152	5,142	4,600	4,332
Dilworth	777	824	934	1,040	1,002	905	851
Horace	522	529	552	622	647	639	592
Casselton	459	505	481	457	440	438	448
Barnesville	522	596	604	638	652	632	632
Hawley	410	430	407	384	372	348	343

HOUSEHOLD SIZE FORECAST

In addition to the preparation of population, household and job forecasts for the metropolitan cities and the remaining areas of Cass and Clay counties, household size forecasts were developed to further stratify trip generation data within the travel demand model. Figure 18 shows the overall distribution of household size (1 person household, 2 person household, three person household and four or more person household) by scenario from 2015 to 2045.

Figure 18: Overall Distribution of Household Size by Scenario (2015 to 2045)
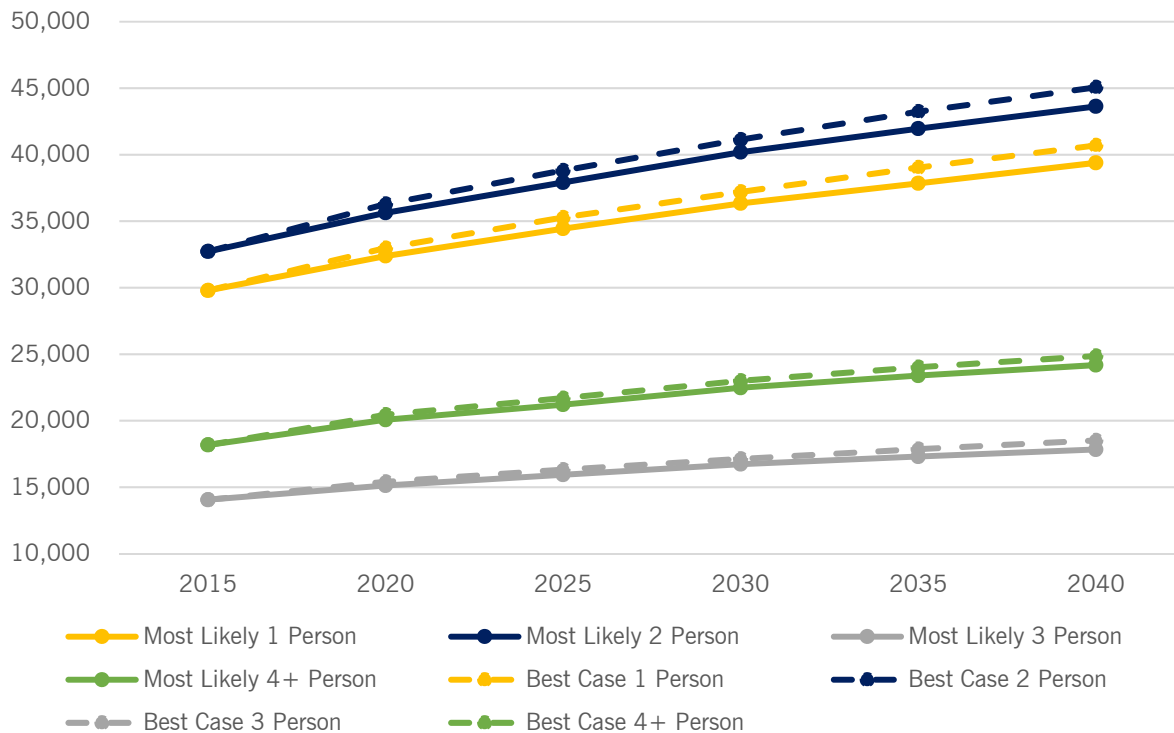
The household size characteristic was forecasted for the MSA, Cass County, Clay County, Fargo, West Fargo, Horace, Casselton, Moorhead, Dilworth, Barnesville and Hawley and distributed into one-person, two-person, three-person, and four-or-more-person households. Table 17 illustrates the distribution for the Most Likely scenario; Table 18 illustrates the distribution for the Best Case scenario. Two-person households are the most prevalent in the MSA and are expected to be through 2045. The least prevalent households are three-person households, and are expected to be through 2045.

Table 17: Most Likely Scenario Percentage of Households by Size for the MSA (2015 to 2045)

Household Size	2015	2020	2025	2030	2035	2040	2045
ML-1	31.4%	31.4%	31.5%	31.4%	31.4%	31.5%	31.7%
ML-2	34.5%	34.5%	34.6%	34.7%	34.8%	34.9%	35.1%
ML-3	14.8%	14.7%	14.6%	14.5%	14.4%	14.3%	14.1%
ML-4+	19.2%	19.4%	19.4%	19.4%	19.4%	19.3%	19.1%

Table 18: Best Case Scenario Percentage of Households by Size for the MSA (2015 to 2045)

Household Size	2015	2020	2025	2030	2035	2040	2045
BC-1	31.4%	31.4%	31.5%	31.4%	31.4%	31.5%	31.7%
BC-2	34.5%	34.5%	34.6%	34.7%	34.8%	34.9%	35.1%
BC-3	14.8%	14.7%	14.6%	14.5%	14.4%	14.3%	14.4%
BC-4+	19.2%	19.5%	19.4%	19.4%	19.3%	19.3%	18.8%

JOBS FORECAST

The Most Likely scenario provides an overall jobs increase for the MSA from the 2015 Demographic Forecast Study estimate of 151,290 to 203,790 in 2045. This is a 34.7 percent change between 2015 and 2045. The Best Case scenario provides an overall jobs increase for the MSA from the 2015 Demographic Forecast Study estimate of 151,290 to 209,363 in 2045. This is a 38.4 percent change between 2015 and 2045. Figure 19 illustrates the overall growth in these two scenarios.

Figure 19: Overall Jobs Growth Forecasts by Scenario (2015 to 2045)
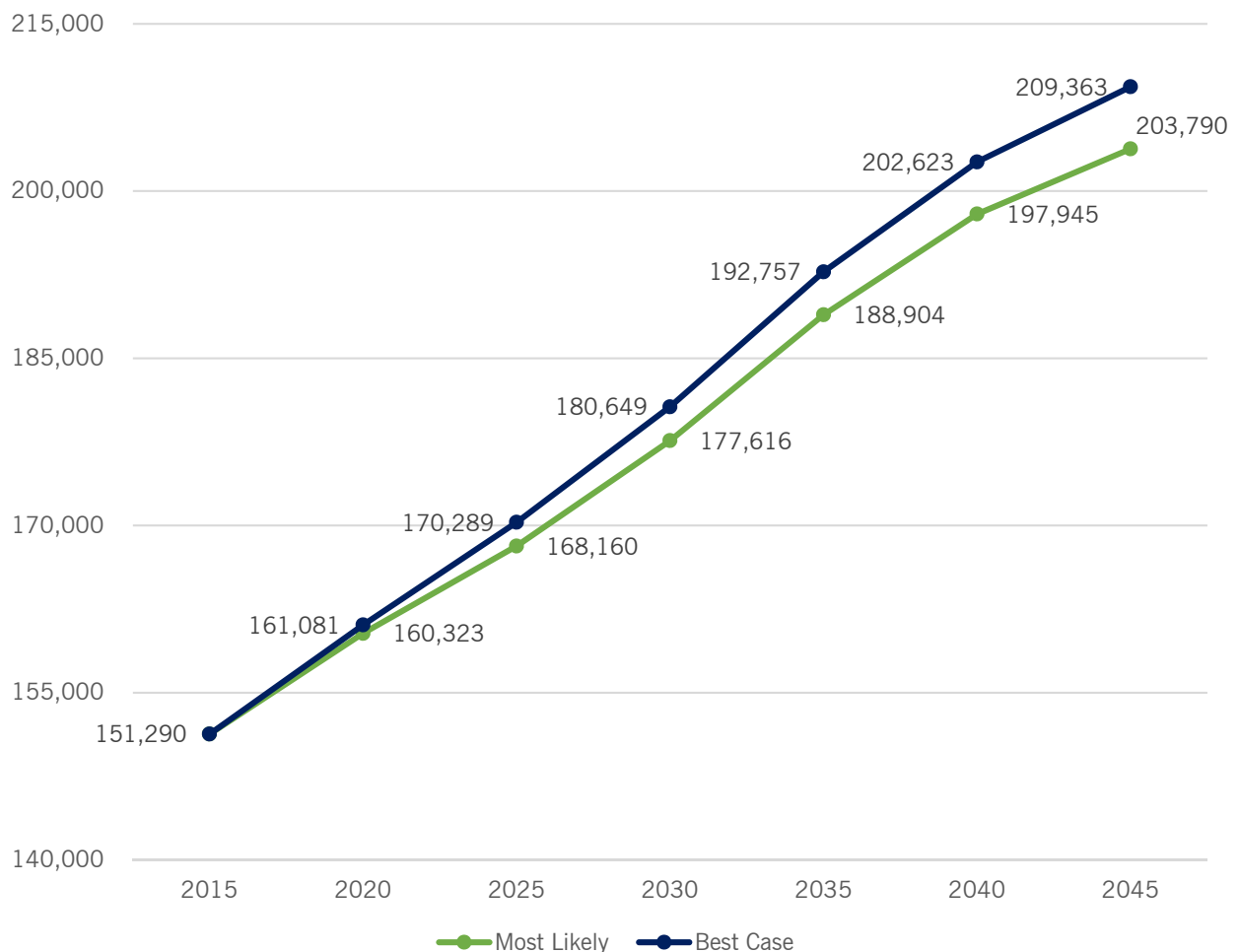
Table 19 summarizes the Most Likely scenario jobs growth patterns for each jurisdiction for each five-year period of the forecast. Table 20 summarizes the Best Case scenario jobs growth patterns for each jurisdiction for each five-year period of the forecast. Jobs are reported for the MPA, not the MSA, so the Balance of Cass and Balance of Clay numbers are only for the parts of Cass and Clay counties within the MPA and outside of the other communities included in the tables (Fargo, Moorhead, etc.).

Table 19: Most Likely Scenario Jobs Forecasts by Jurisdiction (2015 to 2045)

	2015	2020	2025	2030	2035	2040	2045
MPA	147,508	156,315	163,956	173,175	184,181	192,997	198,695
Cass County (MPA)	124,792	132,242	138,707	146,506	155,817	163,275	168,096
Clay County (MPA)	22,716	24,072	25,249	26,669	28,364	29,721	30,599
Fargo	107,253	113,656	119,213	125,915	133,918	140,328	144,471
West Fargo	13,623	14,436	15,142	15,993	17,010	17,824	18,350
Horace	331	351	368	389	414	433	446
Casselton	1,086	1,151	1,207	1,275	1,356	1,421	1,463
Balance of Cass (MPA)	1,441	1,527	1,602	1,692	1,800	1,886	1,941
Moorhead	17,767	18,828	19,748	20,859	22,184	23,246	23,933
Dilworth	1,170	1,240	1,300	1,373	1,461	1,530	1,576
Barnesville	895	948	994	1,050	1,117	1,171	1,205
Hawley	1,149	1,218	1,277	1,349	1,435	1,503	1,548
Balance of Clay (MPA)	1,002	1,062	1,113	1,176	1,251	1,311	1,349

Table 20: Best Case Scenario Jobs by Jurisdiction (2015 to 2045)

	2015	2020	2025	2030	2035	2040	2045
MPA	147,508	157,054	166,032	176,133	187,938	197,557	204,128
Cass County (MPA)	124,792	132,868	140,463	149,008	158,995	167,133	172,693
Clay County (MPA)	22,716	24,186	25,569	27,124	28,942	30,424	31,436
Fargo	107,253	114,193	120,722	128,066	136,649	143,644	148,421
West Fargo	13,623	14,504	15,333	16,266	17,357	18,245	18,852
Horace	331	353	373	396	422	444	458
Casselton	1,086	1,156	1,222	1,296	1,383	1,454	1,503
Balance of Cass (MPA)	1,441	1,534	1,622	1,721	1,836	1,930	1,994
Moorhead	17,767	18,917	19,998	21,215	22,637	23,796	24,587
Dilworth	1,170	1,245	1,317	1,397	1,490	1,567	1,619
Barnesville	895	953	1,007	1,068	1,140	1,198	1,238
Hawley	1,149	1,223	1,293	1,372	1,464	1,539	1,590
Balance of Clay (MPA)	1,002	1,067	1,128	1,196	1,276	1,342	1,386

Table 21 and Table 22 show the relationship between forecasted jobs and population as a ratio. A ratio closer to one suggests a high concentration of jobs and a ratio closer to one suggests primarily residential communities. The benchmark data are the Demographic Study estimates of jobs and population by jurisdiction in 2015. This ratio provides an understanding of the anticipated proportion of jobs to people in each jurisdiction, as well as how that proportion is anticipated to change over time. What is most obvious is the proportion of jobs in the MPA are much greater on the Cass County side than the proportion of jobs on the Clay County side.

Table 21: Most Likely Scenario Jobs per Capita for 2015, 2025, and 2045

	2015	2025	2045
MPA	0.66	0.62	0.63
Cass County (MPA)	0.74	0.68	0.69
Clay County (MPA)	0.36	0.34	0.35
Fargo	0.91	0.84	0.81
West Fargo	0.42	0.38	0.44
Horace	0.13	0.12	0.14
Casselton	0.45	0.46	0.49
Balance of Cass (MPA)	0.10	0.10	0.12
Moorhead	0.42	0.40	0.41
Dilworth	0.27	0.25	0.24
Barnesville	0.32	0.30	0.30
Hawley	0.52	0.55	0.59
Balance of Clay (MPA)	0.08	0.08	0.09

Table 22: Best Case Scenario Jobs per Capita for 2015, 2025, and 2045

	2015	2025	2045
MPA	0.66	0.62	0.62
Cass County (MPA)	0.74	0.68	0.69
Clay County (MPA)	0.36	0.34	0.35
Fargo	0.91	0.86	0.83
West Fargo	0.42	0.38	0.44
Horace	0.13	0.05	0.05
Casselton	0.45	0.46	0.48
Balance of Cass (MPA)	0.10	0.10	0.13
Moorhead	0.41	0.40	0.40
Dilworth	0.27	0.25	0.25
Barnesville	0.32	0.31	0.30
Hawley	0.52	0.54	0.59
Balance of Clay (MPA)	0.09	0.08	0.08

APPENDIX A
LIST OF ASSUMPTIONS

	Assumptions For Demographic Forecast		
	Scenario A - Best Case	Scenario B - Most Likely	Commentary
1	The F-M Diversion Project will be completed by 2025.	The F-M Diversion Project will be completed by 2025.	Perhaps largest growth impact - affecting jobs and population
2	100 year floodplain requirements will limit growth (in fringe areas) of single-family homes from 2015 to 2025 in Fargo and West Fargo.	100 year floodplain requirements will limit growth (in fringe areas) of single-family homes from 2015 to 2025 in Fargo and West Fargo.	The current limitations will remain until the F-M Diversion is completed
3	The age-specific fertility rate of all jurisdictions will rise by an annual rate of 0.3% between 2015 and 2025. The primary determinant of the annual number of births will be the number of women in child bearing ages.	The age-specific fertility rate of all jurisdictions will remain within 3% of current level. The primary determinant of the annual number of births will be the number of women in child bearing ages.	Fertility rates have changed very little in recent years, and it is difficult to envision a likely factor which would cause significant change
4	The age-specific mortality rates of all jurisdictions will decline by 3% between 2015 and 2045. The primary determinant of the annual number of deaths will be the number of people in high mortality age groups (60 and older).There will be no major medical breakthroughs that will reduce mortality (such as finding a cure for cancer or diabetes) or outbreak of new illness that will increase mortality (such as influenza pandemic).	The age-specific mortality rates of all jurisdictions will remain within 3% of current levels. The primary determinant of the annual number of deaths will be the number of people in high mortality age groups (60 and older). There will be no major medical breakthroughs that will reduce mortality (such as finding a cure for cancer or diabetes) or outbreak of new illness that will increase mortality (such as influenza pandemic)**.**	Mortality rates did decline by a small percentage over the last decade
5	The rate of foreign immigration into all areas will be maintained at 1.5% per 5 year forecast period for the next 30 years.	The rate of foreign immigration into all areas will decline from 1.5% annually to 1.0% over the next 30 years.	The basic difference is maintaining or decreasing rates of foreign immigration to the area

	Scenario A - Best Case	Scenario B - Most Likely		Commentary
6	Local colleges will increase their number of on-campus students from 7,600 to 9,000 between 2015 and 2025	Local colleges will increase their current number of on-campus students from 7,600 to 8,400 by 2025.		NDSU is seeking approval for another 350-450 dorm rooms to come online by 2019
7	Over the period between 2015 and 2025 the proportion of local 18-22 year old population becoming four year matriculated college students and attending the colleges in the metropolitan area will increase from 40% to 55%	The proportion of local 18-22 year old population becoming four year matriculated college students and attending the colleges in the metropolitan area will increase over the next 30 years from 40% to 45%.		NDSU is aiming to grow student enrollment from 14,500 to 18,000 by 2020. Concordia and MSUM are both aiming to stabilize enrollment which is down from that of the last decade.
8	The gross out-migration rate for 22 to 30 year old college graduates will decrease from 30% to 20% from 2015 to 2025	The gross out-migration rate for 22 to 30 year old college graduates will decrease from 30% to 25% between 2015 and 2025.		Recent lower out-migration is a likely factor in the higher than forecast 2015 metro estimate
9	The gross out-migration rate of graduating high school seniors and local non-college 18-22 year olds will be reduced from 20% to 15% from 2015 to 2025	The gross out-migration rate of graduating high school seniors and local non-college 18-22 year olds will remain at 20% per five year forecast period for all jurisdictions for the life of the forecasts.		Recent lower out-migration is a likely factor in the higher than forecast 2015 metro estimate
10	The gross out-migration rate for local non-college 22 to 30 year olds will decrease from 13% to 7% from 2015 to 2025.	The gross out-migration rate for local (non-college) 22 to 30 year olds will decrease from13% to 10% between 2015 and 2025		Recent lower out-migration is a likely factor in the higher than forecast 2015 metro estimate
11	The rate of out-migration to the sunbelt area of the 60-69 year old population will increase from a five year rate of 4.0% to 4.5% between 2015 and 2025.	The rate of out-migration to the sunbelt areas of the 60-69 year old population will increase from 4.0% to 5.5% between 2015 and 2025.		

	Scenario A - Best Case	Scenario B - Most Likely		Commentary
12	The age specific in-migration rate of the elderly population (age 60 and older) from the bordering service area (75 mile radius) will increase from 3.0% to 4.0% between 2015 and 2025	The age specific in-migration rate of the elderly population (age 60 and older) from the bordering service area (75 mile radius) will increase from 3.0% to 3.5% between 2015 and 2025.		
13	The primary in-migration destination of non-college students 18-29 years old will be to the areas of the metropolitan area that are dominated by multi-family housing. The primary immigration destination of households 30-39 years old will be to parts of the metropolitan area that are dominated by detached single family starter homes. The primary in-migration destination of households 40-49 years old will be to parts of the metropolitan area that are dominated by detached single family "move up" homes. The net migration rates of 50-59 year old households are traditionally near zero and are expected to continue at that level over the next 30 years.	The primary in-migration destination of non-college students 18-29 years old will be to the areas of the metropolitan area that are dominated by multi-family housing. The primary immigration destination of households 30-39 years old will be to parts of the metropolitan area that are dominated by detached single family starter homes. The primary in-migration destination of households 40-49 years old will be to parts of the metropolitan area that are dominated by detached single family "move up" homes. The net migration rates of 50-59 year old households are traditionally near zero and are expected to continue at that level over the next 30 years.		Past patterns will remain the same
14	The interest rates for traditional 30 year fixed home mortgages will remain below 5.5% between 2015 and 2025	The interest rates for traditional 30 year fixed home mortgages will remain below 7.5% from 2015 to 2025.		The impact of higher rates is less people able to buy homes. Affordable housing is a major issue for future job growth in the metro, but prices have been climbing. Will the status quo remain? Or will some new factor cause a change?
15	The rate of sale of existing single family housing units will increase by an average annual rate of 1% between 2015 and 2025	The rate of sale of existing housing units will remain within 3% of current levels in all jurisdictions		

	Scenario A - Best Case	Scenario B - Most Likely		Commentary
16	The average occupancy rate of all multi-family housing units in all jurisdictions will remain above 95%.	The average occupancy rate of all multi-family housing units in all jurisdiction remains above 90%		Occupancy rates have typically influenced how much multi-family housing is added to the market
17	There will be no expansion of the local or national economy exceeding a 5% annual increase in GDP over any 3 year period for the period 2015 to 2025	There will be no short or long term expansion of the local or national economy exceeding a 2% annual increase in GDP		The difference is between similar to current economic conditions or real growth conditions
18	The price of oil increases by a 3% annual average for the life of the forecasts.	The price of oil stays above $40 a barrel for the life of the forecasts.		
19	Horace will experience high short-term growth			Based on new agreement with Fargo for sanitary sewer service

APPENDIX B
DEMOGRAPHIC FORECASTS

Best Case	Population Forecasts							
	2010	2015	2020	2025	2030	2035	2040	2045
FMMSA	208,777	232,900	259,260	281,030	300,460	317,400	331,730	342,360
Cass	149,778	168,930	189,900	206,620	221,350	233,940	244,460	251,940
Clay	58,999	63,970	69,360	74,410	79,110	83,460	87,270	90,420
MPA	198,446	222,366	246,523	267,331	286,013	302,419	316,413	326,782
Fargo	105,524	117,230	129,690	140,030	151,810	162,450	172,140	179,800
West Fargo	25,840	32,300	37,370	40,140	42,000	43,240	43,660	43,270
Horace	2,430	2,620	5,070	8,190	8,940	9,500	9,820	10,040
Casselton	2,329	2,420	2,530	2,680	2,800	2,920	2,990	3,110
Moorhead	38,065	43,840	47,120	50,290	53,340	56,390	59,100	61,420
Dilworth	4,024	4,300	4,760	5,210	5,620	5,960	6,270	6,510
Barnesville	2,563	2,780	3,020	3,300	3,530	3,730	3,920	4,110
Hawley	2,067	2,190	2,290	2,390	2,460	2,570	2,630	2,700
Cass Balance	13,655	14,360	15,240	15,580	15,800	15,830	15,850	15,720
Clay Balance	12,280	10,860	12,170	13,220	14,160	14,810	15,350	15,680
Cass Small Areas	8,371	8,803	8,499	8,504	8,534	8,371	8,353	8,253
Clay Small Areas	7,233	5,883	6,174	6,597	7,016	7,288	7,530	7,569
Argusville city	475	500	503	506	506	499	491	495
Barnes township	25	26	28	29	22	22	22	22
Berlin township	124	130	107	111	111	109	111	110
Casselton Township	78	82	91	93	92	89	87	85
Durbin Township	83	87	92	94	95	95	92	88
Everest Township	88	93	96	97	96	95	94	90
Frontier city	214	225	217	209	216	214	219	217
Harmony Township	81	85	88	89	88	87	86	83
Harwood city	718	755	723	716	705	712	716	711
Harwood township	345	363	320	332	338	347	349	346
Kindred city	692	728	773	798	805	799	802	797
Mapleton city	762	801	792	809	774	750	761	755
Mapleton township	188	198	181	187	193	190	192	190
Normanna Township	333	350	369	374	379	380	380	377
North River city	56	59	51	48	52	47	48	47
Oxbow city	305	321	335	327	316	301	285	267
Pleasant Township	468	492	518	514	506	491	476	456
Prairie Rose city	73	77	68	65	70	63	63	63
Raymond township	254	267	253	241	251	247	254	252
Reed township	1,175	1,236	1,139	1,131	1,151	1,108	1,124	1,115
Reile's Acres city	513	539	489	483	493	475	468	464
Stanley township	1,182	1,243	1,131	1,122	1,142	1,124	1,109	1,100
Warren township	139	146	135	129	133	127	124	123
Alliance Township	235	232	253	268	282	291	299	304
Barnsville Township	147	145	159	171	182	192	197	206
Comstock City	93	92	100	105	109	111	112	111
Eglon Township	508	526	552	589	625	649	671	685
Elmwood Township	415	409	399	427	440	444	444	427
Glyndon City	1,394	1,409	1,495	1,595	1,698	1,758	1,826	1,857
Glyndon Township	278	274	292	313	333	348	362	355
Hawley Township	474	480	513	548	582	607	628	641
Holy Cross Township	140	138	148	157	164	168	171	172
Humboldt Township	263	259	284	305	324	339	352	361
Kragnes Township	293	289	253	271	288	301	313	302
Kurtz Township	249	245	266	256	273	285	296	265
Moland Township	299	295	279	299	326	341	346	338
Moorhead Township	169	167	159	171	182	190	211	216
Morken Township	156	154	146	157	174	182	181	184
Oakport Township	1,598	232	243	264	269	267	261	251
Sabin City	522	537	633	701	765	815	860	894
Cass Remainder	5,284	5,557	6,741	7,076	7,303	7,459	7,497	7,467
Clay Remainder	5,047	4,977	5,996	6,623	7,144	7,522	7,820	8,111

Most Likely	Population Forecasts							
	2010	2015	2020	2025	2030	2035	2040	2045
FMMSA	208,777	232,900	256,520	276,560	294,160	309,060	321,070	330,550
Cass	149,778	168,930	187,740	203,130	216,410	227,540	236,410	243,370
Clay	58,999	63,970	68,780	73,430	77,750	81,520	84,660	87,180
MPA	198,446	222,366	243,525	262,899	280,111	294,429	306,093	315,416
Fargo	105,524	117,230	130,590	142,760	153,840	163,360	171,540	178,900
West Fargo	25,840	32,300	37,130	39,440	41,020	42,020	42,190	41,720
Horace	2,430	2,620	2,770	2,960	3,090	3,180	3,240	3,280
Casselton	2,329	2,420	2,520	2,650	2,770	2,850	2,910	2,970
Moorhead	38,065	43,840	45,740	48,850	51,860	54,630	56,990	58,870
Dilworth	4,024	4,300	4,740	5,160	5,590	5,910	6,180	6,440
Barnesville	2,563	2,780	3,000	3,280	3,490	3,650	3,830	3,990
Hawley	2,067	2,190	2,290	2,340	2,450	2,510	2,610	2,630
Cass Balance	13,655	14,360	14,730	15,320	15,690	16,130	16,530	16,500
Clay Balance	12,280	10,860	13,010	13,800	14,360	14,820	15,050	15,250
Cass Small Areas	8,371	8,803	7,903	8,250	8,438	8,530	8,711	8,662
Clay Small Areas	7,233	5,883	5,455	5,810	6,124	6,338	6,436	6,481
Argusville city	475	500	486	498	502	508	512	520
Barnes township	25	26	27	28	22	23	23	23
Berlin township	124	130	103	109	110	111	116	116
Casselton Township	78	82	88	92	91	90	91	89
Durbin Township	83	87	88	92	94	97	96	92
Everest Township	88	93	93	95	96	97	97	94
Frontier city	214	225	192	205	215	218	228	228
Harmony Township	81	85	86	87	88	89	89	87
Harwood city	718	755	648	680	700	726	747	746
Harwood township	345	363	309	326	336	353	364	363
Kindred city	692	728	747	772	791	815	836	837
Mapleton city	762	801	689	720	741	765	793	792
Mapleton township	188	198	175	184	191	194	200	200
Normanna Township	333	350	356	368	376	387	397	396
North River city	56	59	44	48	52	48	50	49
Oxbow city	305	321	324	322	314	306	298	280
Pleasant Township	468	492	501	506	502	500	496	478
Prairie Rose city	73	77	59	64	69	64	66	66
Raymond township	254	267	221	237	249	252	264	264
Reed township	1,175	1,236	1,061	1,112	1,144	1,129	1,174	1,171
Reile's Acres city	513	539	442	475	489	484	488	487
Stanley township	1,182	1,243	1,046	1,103	1,134	1,145	1,157	1,155
Warren township	139	146	118	127	132	129	129	129
Alliance Township	235	232	247	260	267	273	274	275
Barnsville Township	147	145	156	166	172	179	181	186
Comstock City	93	92	98	102	103	104	102	101
Eglon Township	508	501	540	571	592	608	614	619
Elmwood Township	415	409	324	334	352	369	381	386
Glyndon City	1,394	1,375	1,431	1,490	1,522	1,541	1,535	1,540
Glyndon Township	278	274	219	239	253	267	272	276
Hawley Township	474	467	502	531	551	567	575	579
Holy Cross Township	140	138	144	152	155	157	156	156
Humboldt Township	263	259	279	295	307	317	322	326
Kragnes Township	293	289	223	228	243	261	269	273
Kurtz Township	249	245	182	197	208	224	236	239
Moland Township	299	295	221	251	267	286	301	305
Moorhead Township	169	167	143	160	169	185	193	195
Morken Township	156	154	117	130	141	151	164	166
Oakport Township	1,598	1,576	1,626	1,656	1,695	1,704	1,701	1,708
Sabin City	522	537	390	447	566	596	616	624
Cass Remainder	5,284	5,557	6,827	7,070	7,252	7,600	7,819	7,838
Clay Remainder	5,047	4,977	7,555	7,990	8,236	8,482	8,614	8,769

Best Case	Households Forecasts							
	2010	2015	2020	2025	2030	2035	2040	2045
FMMSA	86,178	94,750	104,970	112,450	119,850	124,830	130,440	134,930
Cass	63,899	70,460	78,160	83,820	89,290	92,520	96,750	99,960
Clay	22,279	24,290	26,810	28,630	30,560	32,310	33,690	34,970
MPA	81,875	90,210	99,550	106,820	113,940	118,700	124,460	128,940
Fargo	46,671	50,870	56,280	60,260	64,650	66,630	70,550	73,530
West Fargo	10,348	12,410	13,460	13,950	14,630	15,540	15,690	15,840
Horace	810	840	1,730	2,710	2,980	3,190	3,360	3,520
Casselton	874	890	920	950	1,000	1,040	1,090	1,150
Moorhead	14,205	16,420	17,830	19,190	20,610	21,880	23,010	23,810
Dilworth	1,595	1,660	2,030	2,150	2,290	2,470	2,530	2,630
Barnesville	1,013	1,050	1,130	1,190	1,270	1,320	1,430	1,570
Hawley	854	910	940	970	1,020	1,050	1,080	1,140
Cass Balance	5,196	5,450	5,770	5,950	6,030	6,120	6,060	5,920
Clay Balance	4,612	4,250	4,880	5,130	5,370	5,590	5,640	5,820
Cass Small Areas	2,922	3,000	3,010	3,150	3,160	3,180	3,290	3,290
Clay Small Areas	2,583	2,160	2,220	2,300	2,330	2,400	2,430	2,460
Argusville city	151	160	160	170	170	170	170	170
Barnes township	12	10	10	10	10	10	10	10
Berlin township	44	50	40	40	40	40	40	40
Casselton Township	29	30	30	30	30	30	30	30
Durbin Township	37	40	40	40	40	40	40	40
Everest Township	36	40	40	40	40	40	40	40
Frontier city	75	80	80	80	80	80	80	80
Harmony Township	30	30	30	30	30	30	30	30
Harwood city	241	250	250	270	270	270	280	280
Harwood township	122	130	120	130	130	130	140	140
Kindred city	267	270	280	280	280	290	300	300
Mapleton city	248	250	260	280	280	280	290	290
Mapleton township	66	70	70	70	70	70	80	80
Normanna Township	123	130	130	140	140	140	150	150
North River city	23	20	20	20	20	20	20	20
Oxbow city	101	110	110	110	110	110	120	120
Pleasant Township	177	180	180	190	190	190	200	200
Prairie Rose city	25	20	20	20	20	20	20	20
Raymond township	100	100	100	110	110	120	130	130
Reed township	399	410	410	430	430	430	440	440
Reile's Acres city	146	150	160	170	180	180	180	180
Stanley township	416	420	420	440	440	440	450	450
Warren township	54	50	50	50	50	50	50	50
Alliance Township	89	90	90	90	90	90	90	90
Barnsville Township	60	60	60	60	60	60	60	60
Comstock City	38	40	40	40	40	40	40	40
Eglon Township	187	190	200	200	200	200	200	200
Elmwood Township	150	150	160	160	160	160	160	160
Glyndon City	464	470	480	500	510	530	540	560
Glyndon Township	105	100	110	120	110	120	130	130
Hawley Township	162	170	170	170	170	170	170	170
Holy Cross Township	53	60	60	60	60	60	60	60
Humboldt Township	96	100	100	110	110	110	110	110
Kragnes Township	114	110	110	110	120	120	120	120
Kurtz Township	92	90	90	90	90	100	100	100
Moland Township	110	110	110	120	120	140	140	130
Moorhead Township	67	70	70	70	70	70	70	70
Morken Township	63	60	60	60	70	70	70	70
Oakport Township	553	110	120	130	140	140	140	150
Sabin City	180	180	190	210	210	220	230	240
Cass Remainder	2,274	2,450	2,760	2,800	2,870	2,940	2,770	2,630
Clay Remainder	2,029	2,090	2,660	2,830	3,040	3,190	3,210	3,360

Most Likely	Households Forecasts							
	2010	2015	2020	2025	2030	2035	2040	2045
FMMSA	86,178	94,750	103,220	109,500	115,750	120,510	125,040	129,060
Cass	63,899	70,460	76,950	81,240	85,810	88,880	92,170	95,210
Clay	22,279	24,290	26,270	28,260	29,940	31,630	32,870	33,850
MPA	81,875	90,160	97,920	103,790	109,710	114,080	118,450	122,200
Fargo	46,671	50,870	55,890	59,790	63,810	66,270	68,770	71,440
West Fargo	10,348	12,410	13,390	13,550	13,780	14,090	14,460	14,680
Horace	810	840	920	990	1,040	1,060	1,090	1,110
Casselton	874	890	910	940	980	1,010	1,040	1,060
Moorhead	14,205	15,920	17,120	18,560	19,780	20,980	22,030	22,560
Dilworth	1,595	1,660	1,990	2,110	2,230	2,390	2,440	2,510
Barnesville	1,013	1,050	1,110	1,160	1,230	1,280	1,370	1,520
Hawley	854	910	930	950	990	1,020	1,050	1,110
Cass Balance	5,196	5,450	5,840	5,970	6,200	6,450	6,810	6,920
Clay Balance	4,612	4,750	5,120	5,480	5,710	5,960	5,980	6,150
Cass Small Areas	2,922	3,000	3,010	3,000	3,080	3,100	3,220	3,220
Clay Small Areas	2,583	2,160	2,190	2,270	2,320	2,400	2,490	2,500
Argusville city	151	160	160	160	160	160	160	160
Barnes township	12	10	10	10	10	10	10	10
Berlin township	44	50	50	40	40	40	40	40
Casselton Township	29	30	30	30	30	30	30	30
Durbin Township	37	40	40	40	40	40	40	40
Everest Township	36	40	40	40	40	40	40	40
Frontier city	75	80	80	80	80	80	80	80
Harmony Township	30	30	30	30	30	30	30	30
Harwood city	241	250	250	250	260	260	270	270
Harwood township	122	130	130	130	130	130	140	140
Kindred city	267	270	270	270	280	280	290	290
Mapleton city	248	250	260	260	270	270	280	280
Mapleton township	66	70	70	70	70	70	80	80
Normanna Township	123	130	130	130	130	130	140	140
North River city	23	20	20	20	20	20	20	20
Oxbow city	101	110	110	110	120	120	130	130
Pleasant Township	177	180	180	180	190	190	200	200
Prairie Rose city	25	20	20	20	20	20	20	20
Raymond township	100	100	100	100	110	110	120	120
Reed township	399	410	410	410	420	420	430	430
Reile's Acres city	146	150	150	150	150	160	170	170
Stanley township	416	420	420	420	430	440	450	450
Warren township	54	50	50	50	50	50	50	50
Alliance Township	89	90	90	90	90	100	100	100
Barnsville Township	60	60	60	60	60	60	70	70
Comstock City	38	40	40	40	40	40	40	40
Eglon Township	187	190	190	200	200	210	220	220
Elmwood Township	150	150	150	160	160	160	160	160
Glyndon City	464	470	480	490	500	520	530	530
Glyndon Township	105	100	100	110	110	120	130	130
Hawley Township	162	170	180	190	190	190	200	200
Holy Cross Township	53	60	60	60	60	60	60	60
Humboldt Township	96	100	100	110	110	110	120	120
Kragnes Township	114	110	110	110	120	120	120	120
Kurtz Township	92	90	90	90	90	100	100	100
Moland Township	110	110	110	120	120	130	130	130
Moorhead Township	67	70	70	70	70	70	80	80
Morken Township	63	60	60	60	70	70	70	70
Oakport Township	553	110	110	110	120	120	130	130
Sabin City	180	180	190	200	210	220	230	240
Cass Remainder	2,274	2,450	2,830	2,970	3,120	3,350	3,590	3,700
Clay Remainder	2,029	2,090	2,930	3,210	3,390	3,560	3,490	3,650

Best Case	Jobs Forecasts							
	2010	2015	2020	2025	2030	2035	2040	2045
FMMSA	139,551	151,290	161,081	170,289	180,649	192,757	202,623	209,363
MPA	136,063	147,508	157,054	166,032	176,133	187,938	197,557	204,128
Cass MPA	115,109	124,792	132,868	140,463	149,008	158,995	167,133	172,693
Clay MPA	20,954	22,716	24,186	25,569	27,124	28,942	30,424	31,436
Fargo	98,931	107,253	114,193	120,722	128,066	136,649	143,644	148,421
West Fargo	12,566	13,623	14,504	15,333	16,266	17,357	18,245	18,852
Horace	306	331	353	373	396	422	444	458
Casselton	1,002	1,086	1,156	1,222	1,296	1,383	1,454	1,503
Moorhead	16,389	17,767	18,917	19,998	21,215	22,637	23,796	24,587
Dilworth	1,079	1,170	1,245	1,317	1,397	1,490	1,567	1,619
Barnesville	825	895	953	1,007	1,068	1,140	1,198	1,238
Hawley	1,060	1,149	1,223	1,293	1,372	1,464	1,539	1,590
Kindred	311	337	359	380	403	430	452	467
Harwood	185	201	214	226	240	256	269	278
Oxbow	61	66	71	75	79	85	89	92
Frontier	59	64	68	72	77	82	86	89
Reiles Acres	36	39	41	44	46	49	52	54
Argusville	14	16	17	18	19	20	21	22
North River	9	10	10	11	12	12	13	13
Prairie Rose	1	1	1	1	1	2	2	2
Glyndon	547	593	631	667	708	755	794	820
Sabin	91	99	105	111	118	126	132	136
Comstock	39	43	45	48	51	54	57	59
Cass MPA Balance	1,329	1,441	1,534	1,622	1,721	1,836	1,930	1,994
Clay MPA Balance	924	1,002	1,067	1,128	1,196	1,276	1,342	1,386

Most Likely	Jobs Forecasts							
	2010	2015	2020	2025	2030	2035	2040	2045
FMMSA	139,551	151,290	160,323	168,160	177,616	188,904	197,945	203,790
MPA	136,063	147,508	156,315	163,956	173,175	184,181	192,997	198,695
Cass MPA	115,109	124,792	132,242	138,707	146,506	155,817	163,275	168,096
Clay MPA	20,954	22,716	24,072	25,249	26,669	28,364	29,721	30,599
Fargo	98,931	107,253	113,656	119,213	125,915	133,918	140,328	144,471
West Fargo	12,566	13,623	14,436	15,142	15,993	17,010	17,824	18,350
Horace	306	331	351	368	389	414	433	446
Casselton	1,002	1,086	1,151	1,207	1,275	1,356	1,421	1,463
Moorhead	16,389	17,767	18,828	19,748	20,859	22,184	23,246	23,933
Dilworth	1,079	1,170	1,240	1,300	1,373	1,461	1,530	1,576
Barnesville	825	895	948	994	1,050	1,117	1,171	1,205
Hawley	1,060	1,149	1,218	1,277	1,349	1,435	1,503	1,548
Kindred	311	337	357	375	396	421	441	454
Harwood	185	201	213	223	236	251	263	270
Oxbow	61	66	70	74	78	83	87	90
Frontier	59	64	68	71	75	80	84	86
Reiles Acres	36	39	41	43	45	48	51	52
Argusville	14	16	17	17	18	20	21	21
North River	9	10	10	11	11	12	13	13
Prairie Rose	1	1	1	1	1	2	2	2
Glyndon	547	593	628	659	696	740	776	798
Sabin	91	99	104	110	116	123	129	133
Comstock	39	43	45	47	50	53	56	57
Cass MPA Balance	1,329	1,441	1,527	1,602	1,692	1,800	1,886	1,941
Clay MPA Balance	924	1,002	1,062	1,113	1,176	1,251	1,311	1,349

Jurisdiction	Scenario	School Population Forecasts							
		2010	2015	2020	2025	2030	2035	2040	2045
MSA	Most Likely	26,882	31,133	36,240	39,135	40,015	40,192	40,128	39,942
	Best Case	26,882	31,133	36,647	39,753	40,795	41,413	41,909	41,961
Cass	Most Likely	18,772	22,348	26,843	29,474	30,150	30,143	29,908	29,669
	Best Case	18,772	22,348	27,158	29,970	30,827	31,200	31,328	31,058
Clay	Most Likely	8,110	8,785	9,397	9,661	9,865	10,049	10,220	10,273
	Best Case	8,110	8,785	9,489	9,783	9,968	10,213	10,581	10,903
Fargo	Most Likely	11,611	14,163	17,156	19,760	21,369	22,416	22,891	22,931
	Best Case	11,611	14,163	17,486	19,999	21,487	22,927	23,478	23,606
Moorhead	Most Likely	4,672	5,580	6,097	6,213	6,417	6,685	6,943	7,049
	Best Case	4,672	5,580	6,158	6,210	6,288	6,517	6,935	7,265
West Fargo	Most Likely	4,049	5,203	6,656	6,733	5,851	4,814	4,277	4,031
	Best Case	4,049	5,203	6,752	6,939	6,152	5,142	4,600	4,332
Dilworth	Most Likely	704	777	817	926	1,030	1,012	915	846
	Best Case	704	777	824	934	1,040	1,002	905	851
Horace	Most Likely	522	522	531	527	577	572	527	490
	Best Case	522	522	529	552	622	647	639	592
Casselton	Most Likely	431	459	509	464	427	398	408	408
	Best Case	431	459	505	481	457	440	438	448
Barnesville	Most Likely	451	522	596	604	628	620	602	588
	Best Case	451	522	596	604	638	652	632	632
Hawley	Most Likely	350	410	430	387	374	350	348	345
	Best Case	350	410	430	407	384	372	348	343

APPENDIX C
TRAVEL DEMAND DEVELOPMENT PROCESS

TRAVEL DEMAND MODEL DEVELOPMENT PROCESS

TRAVEL DEMAND MODEL DEVELOPMENT PROCESS

The Fargo-Moorhead metropolitan area travel demand model (TDM) is a four-step model that develops trip generation rates for traffic analysis zones (TAZs) based on land use, household characteristics, and employment and then distributes trips to other TAZs based on the same factors. A TAZ is a small geographic unit that varies in physical size, employment, and population levels.

The current TDM for the Fargo-Moorhead metropolitan area is a based on a base year of 2010 and two forecast years, 2020 and 2040. These models support the current approved Long Range Transportation Plan (LRTP) for the Fargo-Moorhead metropolitan area.

The base year for the update of Metro COG's LRTP is 2015, with two forecast years, 2025 and 2045. Therefore, outputs from the approved Demographic Forecast Study are used to populate the TDM for years 2025 and 2045. The Demographic Forecast Study used data developed for 2015, 2025 and 2045 to assist with providing key household and employment inputs into the TDM for those years.

This memorandum provides an overview of the process of inputting and refining data into the 2015, 2025, and 2045 TAZs to support the Fargo-Moorhead metropolitan area TDM update. It should be noted that efforts to refine and allocate forecast population and household data TAZs was a cooperative effort between the Fargo-Moorhead Metropolitan Council of Governments (Metro COG), the Advanced Traffic Analysis Center (ATAC), and KLJ. For the remainder of this report, the collective actions of this group is referred to as the "project team".

BASE YEAR TAZ DATA REFINEMENTS AND ALLOCATION

Data inputs which drove the actual allocation of employment and population data into the TDM were based primarily on purchased InfoGroup USA data for the year 2015. The InfoGroup USA data included both employment and household characteristics for the entire Fargo-Moorhead Metropolitan Statistical Area (MSA).

Historically, Metro COG has used InfoGroup USA data exclusively for the allocation of base year jobs data. For the 2015 update of the TDM, Metro COG desired to also use InfoGroup USA data to assist with allocating base year household data. Historically, Metro COG has used a collection of Census data sets to allocate base year household data to the TDM.

What follows is a summary of the efforts deployed by Metro COG and ATAC to ensure a consistent allocation of base year employment and households at the TAZ level.

Households

Evaluating and Refining Data Sets

InfoGroup USA household data had some obvious shortcomings, primarily it was about 20 percent low on households when compared to 2014 American Community Survey (ACS) estimates. Additionally, the project team spot checked several specific TAZs in established parts of the MSA to compare the consistency of the ACS and InfoGroup USA data. Several discrepancies were identified in total households calculated between both ACS and InfoGroup USA.

Due to shortcomings with the InfoGroup USA data, Metro COG directed ATAC to develop and implement a methodology to develop base year (2015) household allocations using a combination of both InfoGroup USA data and 2014 ACS data. In early 2017, the project team developed a methodology to refine 2014 ACS five-year data for the Fargo-Moorhead metropolitan area based on the distribution of 2015 InfoGroup USA data.

Method for Combining ACS and InfoGroup Data

The methodology developed used a combination of the InfoGroup USA data and the ACS data to assign household data to the 2015 TAZs. Because the InfoGroup USA data is point data, it does not suffer from mismatch in TAZ geographies that occurs in ACS data and the 2015 TAZs. The InfoGroup USA data served as a weighted file to assign ACS data to each TAZ 2015 geography that fell within that TAZ and for TAZ 2015 geographies that occurred in more than one ACS block group.

To perform the methodology, four datasets were used: the InfoGroup USA Household dataset, ACS dataset and the 2015 TAZ dataset. The following describes the different steps that were used for this methodology:

1. Spatial join of InfoGroup USA household data to ACS block group data in GIS to create the InfoUSA_ACS dataset.
    a. When performing the spatial join, the option to use the "sum" should be selected. This will ensure that the sum of each Household size will be added to the dataset.
    b. Calculate the ratio of ACS to InfoGroup USA for each Household size, this attribute should be called weight.
2. Perform "Intersect" in ArcGIS between the InfoUSA_ACS dataset and the 2015 TAZ dataset to create the Intersect1.
    a. The Intersect1 will have several new fields e.g. the Intersect ID and a new object ID field that keep the unique geographical feature of each ACS block group and 2015 TAZ.
    b. Note that the Intersect1 dataset will have more TAZ geographies than the 2015 TAZs. This is because the intersect tool creates a new feature from the common areas or edges between the 2015 TAZ dataset and the InfoUSA_ACS dataset. This step ensures that portions of TAZ 2015 geographies that fall in more than one ACS block group will be assigned in their appropriate ACS geography.
    c. The important fields in this dataset are the TAZ_2010 (TAZ number Field) Intersect ID, and the weights from the InfoUSA_ACS dataset.
3. Spatial join the InfoGroup USA Household dataset to the Intersect1 to create a new dataset called Intersect2.
    a. When performing the spatial join, the option to use the "sum" should be selected. This will ensure that the sum of each Household size for each TAZ will be added to the dataset.

      b.   The key attributes to in the Intersect2 dataset are: the weight attribute from the InfoUSA_ACS dataset, and the Household size information from InfoGroup USA dataset.

      c.   Multiply the Household size information from the InfoGroup USA data set to the weight (ratio of ACS to InfoGroup USA Household data).

          i.   This information is the total number of household for each household size category for the intersected TAZs.

          ii.   Again, you will have more TAZs than the 2015 TAZ.

4. Using the "Dissolve" function in ArcGIS, dissolve the Intersect2 data using the TAZ number field. This step will reset the Intersect 2 data to the original TAZ 2015 TAZ geographies.

      a.   When performing dissolve, ensure that the household size fields from 3.C are used and the statistics field should be summed.

      b.   These fields then become the household sizes for each TAZ.

Quality Control

After assigning the ACS data to the TAZs, quality control checks were performed to verify that the assigned data was accurate overall.

Comparing Households between 2010 and Estimated 2015 TAZs

For this comparison, only the 2015 TAZ structure as it existed in 2010 was used. Thus the additional TAZs in the "new" MPA boundary were not considered, ensuring that apples to apples were compared. This comparison was to show where and how much growth occurred. Table 1 shows that the number of households between 2010 and the estimated 2015 data grew for all household sizes with an overall total growth of 3,821 households. This number should be verified for accuracy with building permits, keeping in mind that the ACS data was for 2014.

Comparison of Select ACS Geographies to Estimated 2015 TAZ

This was a random selection of ACS block groups (using the FID field) and estimated 2015 TAZs within that ACS geography. The households for the 2015 TAZs were on average lower than the 2015 ACS block groups albeit not by much. The errors were typically proportional to the spatial size of the TAZ. Table 1 shows these comparisons.

Table 1: Comparison of Select ACS Block Groups to 2015 TAZs within the Selected Block Group

ACS FID	PPHH1			PPHH2			PPHH3			PPHH4			HHTotal		
	ACS	TAZ 2015	Diff	ACS	TAZ 2015	Diff	ACS	TAZ 2015	Diff	ACS	TAZ 2015	Diff	ACS	TAZ 2015	Diff
68	34	34	0	132	134	2	38	38	0	189	168	-21	393	374	-19
129	648	647	-1	497	493	-4	277	277	0	140	132	-8	1,562	1,549	-13
102	68	67	-1	148	148	0	50	50	0	55	53	-2	321	318	-3
63*	414	414	0	218	218	0	75	75	0	42	42	0	749	749	0
64-136-127	724	724	0	580	580	0	146	146	0	162	161	-1	1,612	1,611	-1
48-110-113	393	393	0	482	482	0	190	190	0	93	96	3	1,158	1,161	3
137	296	296	0	908	908	0	151	151	0	412	412	0	1,767	1,767	0
55-111	134	115	-19	86	49	-37	121	106	-15	11	0	-11	352	269	-83
56-66-57-58-62	670	668	-2	953	940	-13	338	345	7	239	229	-10	2,200	2,182	-18

Comparison of Select 2010 TAZs to 2015 TAZs

Households for 2010 TAZs and certain areas were compared to households for 2015 TAZs for identical areas to see whether growth was occurring in the right areas. Table 2 shows that overall, there was growth in the areas that have seen household growth between 2010 and 2014. TAZ 94 which is the area from University Drive to North Broadway and from 12th Avenue N to 7th Avenue N showed a reduction of total households by 75. Table 2 shows the results for these comparisons. Table 2 shows selected TAZs and their differences by household size between ACS data and ATAC's process.

Table 2: Household Comparisons by Select TAZs

TAZ/Area Description	PPHH1			PPHH2			PPHH3			PPHH4			HHTotal		
	2010	2015	Diff	2010	2015	Diff	2010	2015	Diff	2010	2015	Diff	2010	2015	Diff
TAZ 94	607	454	-153	258	286	28	201	279	78	148	120	-28	1,214	1,139	-75
TAZ 29	28	95	67	205	278	73	149	93	-56	236	166	-70	618	632	14
12thAveN-5thAveS/ 2ndStN-UnivDr	2,748	2,570	-178	971	1,047	76	345	537	192	269	310	41	4,333	4,464	131
52nd-64thAve/ 36thSt-UnivDrS	296	266	-30	418	491	73	235	332	97	280	503	223	1,229	1,592	363
32ndAveSW-40th AveS/9thStWest-Veterans	159	298	139	221	403	182	168	321	153	158	395	237	706	1,417	711
I94-CoR75/20thStS-SE MAIN Ave	288	281	-7	376	450	74	156	156	0	347	545	198	1,167	1,432	265

Overall Comparison of ACS and Estimated 2015 Households

The ACS data encompasses an area that is larger than the MPA boundary. In some instances, for example for ACS with FIDs 18 and 94 only part of those ACS TAZs are within the MPA boundaries. In some instances, for example ACS TAZs with FIDs 65 and 109, none of the 2015 TAZs lie within those boundaries. A comparison was done to ensure that the projected 2015 households should be lower than the ACS data. Overall, the estimated 2015 TAZs were lower by 3,914 households in comparison to the total ACS area as expected. The results of this process appeared to more closely match the assumed number of total households established by the Demographic Forecast Study for the year 2015. Table 3 below shows the difference between ACS data and the result of ATAC's methodology for the entire planning area.

Table 3: ACS to ATAC Household Comparison

ACS 2014	2015 Info Group + ACS	2015 Estimate
89,558	85,644	90,210

There was a shortfall to actual projected households in the modeled study area, i.e. Metro COG's Metropolitan Planning Area (MPA). Total estimated (2015) households in Metro COG's MPA was 90,210.

The project team distributed 2014 and 2015 residential permit data from Moorhead, Fargo and West Fargo to TAZs to assist with balancing and ensuring a better match of the 2014 ACS data to the base year of 2015 (see Figure 1).

Data from Metro COG's 2010 TDM was used to review and cross check the allocations for 2015 to determine potential variations within TAZs. Given changes in TAZ structure between 2010 and 2015, and to account for an evaluation of larger geographic areas, TAZs were aggregated to compare 2010 household allocations against 2015 allocations. This process allowed the project team to determine areas where household growth had occurred between the 2010 and 2015 base models. Figure 1 and Table 4 show these comparisons. The project team vetted these distributions both with Metro COG's Transportation Technical Committee (TTC) and with local units of government individually. There was consensus on the validity of the 2015 allocated households.

Figure 1: Housing Permits 2014-2015

Changes to TAZ Household Totals With Addition of 2014-2015 Permit Data

☐ TAZ Boundaries	Total Households Added ▨ 10.1 - 50.0	▨ 150.1 - 300.0
• Permit Locations ☐ 0.0 - 10.0	▨ 50.1 - 150.0	▨ 300.1 - 471.0
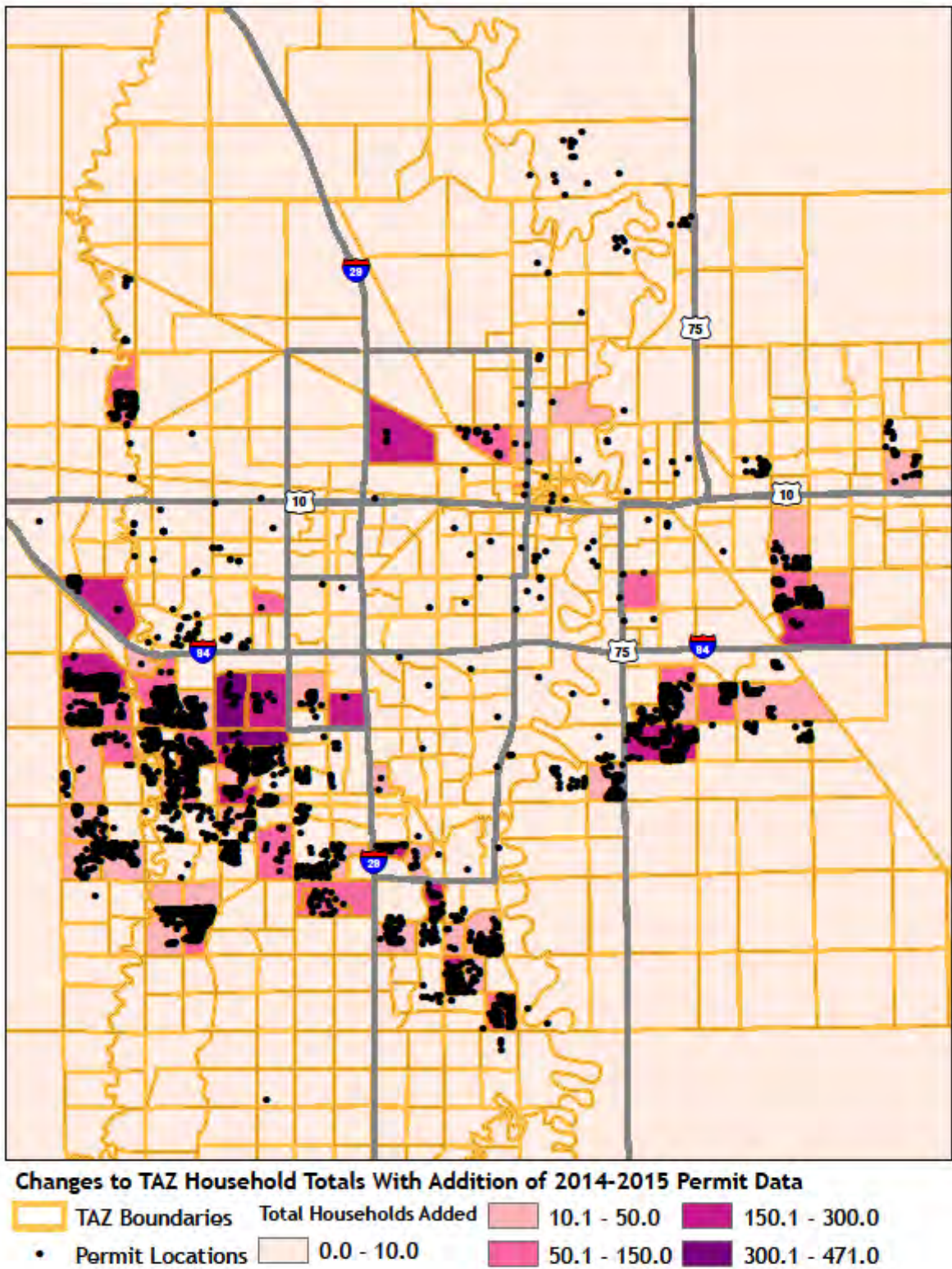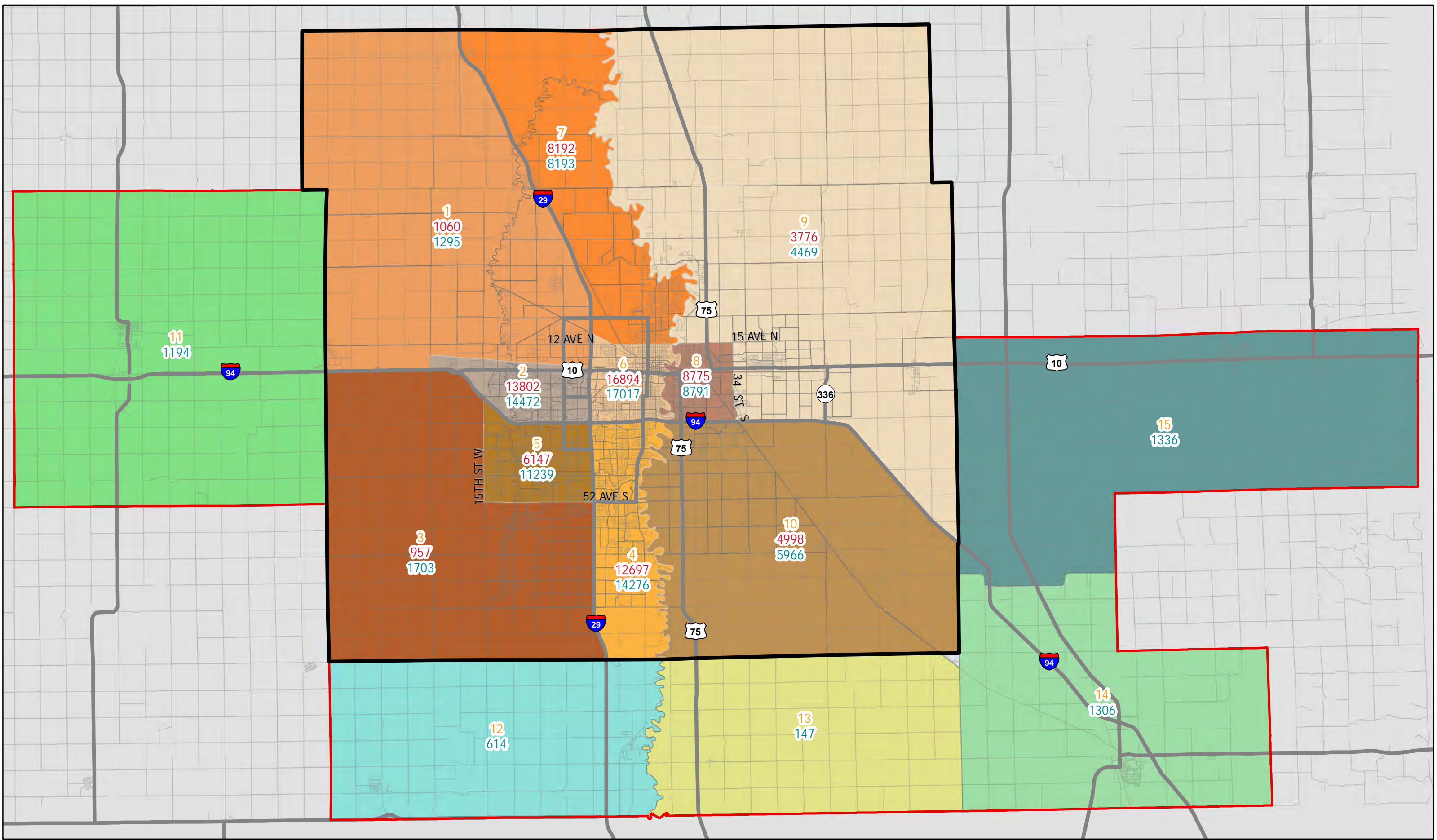
Figure 2: Total Households Comparison For Aggregated TAZs

Total Households by Aggregated TAZ

ID Number

2010 Households

2015 Households

Old MPA Boundary

FM Metro COG Planning Area

0   2.5   5 Miles

N
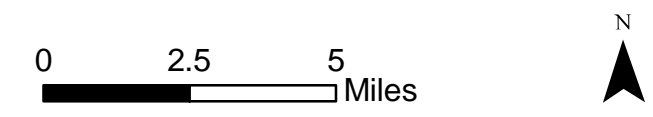
Table 4: Comparison in Allocated HHs between 2010 and 2015 at the Aggregated TAZ Level

TAZ Group ID	2010	2015 (ACS + Infogroup + 2014-2015 permit data)
Old MPA Area		
1	1,060	1,295
2	13,802	14,472
3	957	1,703
4	12,697	14,276
5	6,147	11,239
6	16,894	17,017
7	8,192	8,193
8	8,775	8,791
9	3,776	4,469
10	4,998	5,966
Subtotal - Old MPA	77,298	87,421
New MPA Area		
11	NA	1,194
12	NA	614
13	NA	147
14	NA	1,306
15	NA	1,336
Subtotal - New MPA	77,298	92,018
2015 Estimate (New MPA)		90,210

Jobs

The project team worked in detail with the 2015 InfoGroup USA employment data. As has been historically the case, there were several logistical problems with the data. Through a series of exercises, the project team managed to refine and develop a final allocation of the jobs for 2015. The final allocation of jobs at the TAZ level involved a detailed evaluation approach which included combing through InfoGroup USA point data, identifying issues with the data and finally geocoding the points themselves.

After performing quality control checks on employment data allocated to TAZs provided by ATAC, a few TAZs were called into question. Some clearly had too many jobs assigned while some have zero jobs but could actually have some. All TAZs were sorted by 2015 employment size.

Next, the top 100 largest employment TAZs were inspected to see if aerial imagery and general knowledge of the area matched up with employment numbers received. Of these 100, four were believed to have inflated employment numbers. Much of this is likely due to Infogroup USA point data being incorrectly geocoded. For example, a Walmart among single family homes in TAZ 223.

After finding TAZs with too much employment, TAZs with 0 employment were looked at. There were too many to look at each individually and compare. A few were selected that appear to be in already developed areas. Three TAZs were identified with having too little employment. However, this may be due to temporal issues: new employment that started *after* the 2015 data collection date.

InfoGroup USA jobs data were often misplaced throughout the area with several areas of coincident points creating large erroneous accumulations of jobs. Much of this was due to incomplete address information for jobs points leading them to be placed at zip code centroids and the like. Jobs data were summed by TAZ and spot checked compared to 2010 values to check for validity. Several TAZs differed greatly from 2010 values as can be seen in Table 5.

Table 5: Select Example of Suspect Job Number TAZs

TAZ ID	2010 Jobs	2015 Jobs
60 (NDSU between University and 18th St)	2,500	938
707 (NDSU west of 18th St N)	NA	1,636
185 (13th Avenue & 25th Street South)	881	8,924
209 (13th Ave Walmart, Lowes)	1,450	2,382
223 (WF residential neighborhood – 13th Ave & 8th St SW)	51	1,456

After reviewing problem TAZs, it was decided to reallocate the InfoGroup USA points by geocoding them with the metro area street network. This process correctly placed most points and eliminated or simply did not place many points with insufficient address information, e.g. a PO Box address. Points which could not be geocoded were placed manually when it could be done with confidence. Some points that had been placed within the metro area erroneously were removed but likely some jobs were lost due to inability to place. Data points with larger numbers of employees were given priority in this process.

Data from Metro COG's 2010 TDM was used to review and cross check the allocations for 2015. Since much work had been done to prepare the 2010 TDM, it was assumed that most of the values allocated to TAZs in that process would be accurate in 2015 (in areas which had seen little to no growth). However, in some areas the 2015 allocation was significantly lower than the 2010 value. With caution, some TAZs which had been over allocated in 2010 were corrected in 2015.

Given the initial variability between the 2010 jobs data and the 2015 jobs data, the LEHD Origin-Destination Employment Statistics (LODES) data was aggregated at the TAZ level to assist with a triangulation of a more accurate jobs estimate for each TAZ. While LODES data functioned as a convenient check against InfoGroup USA data as it is also in point format, the LODES numbers also seemed inaccurate and in certain places likely undercounted or overcounted. This was likely due to the structure and collection of LODES data. In some instances, several "satellite" workplaces would be counted at the central office for an entity/business. As such, LODES data was not used further for the allocation of jobs to TAZs. Similar to the final review process for householders, TAZs were aggregated into larger geographic units for purposes of comparison between 2010 and 2015. The results can be seen in **Error! Reference source not found.** and Table 6.

Table 6: Comparison in Allocated Jobs between 2010 and 2015 at the Aggregated TAZ Level

TAZ Group ID	2010	2015 (InfoGroup)
Old MPA Area		
1	7,582	9,430
2	26,018	28,560
3	764	978
4	10,348	11,116
5	5,502	9,200
6	42,307	32,612
7	10,413	13,361
8	11,478	11,763
9	2,797	3,195
10	2,487	3,346
Subtotal – Old MPA	119,696	123,561
New MPA Area		
11	NA	1,014
12	NA	579
13	NA	64
14	NA	947
15	NA	1,105
Subtotal – New MPA	119,696	127,270
2015 Estimate (New MPA)		147,508

Details of Demographic Data at the TAZ Level

Once forecasted population, households and employment were developed, refined and approved for 2015, 2025 and 2045 they were presented to Metro COG's TTC for review prior to meeting individually with local units of goverments to start the allocation process. The forecasted household and jobs data is used to allocate growth within each TAZ for year 2025 and 2045 to support the update of Metro COG's next LRTP.

The following data inputs are included:

» *Employment:* Total employment is broken down into seven categories:
  ▪ Retail, Service, Manufacturing, Construction, Wholesale, Education and Agriculture.
» *Population & Households*: Household characteristics, such as type and size. Total households are broken down into both single-family and multi-family and 1-person, 2-person, 3-person and 4 or more person households. Other characteristics requested by to be included by ATAC such as household income and auto ownership were determined to be to difficult to allocate for projection years of 2025 and 2045.
» *School Enrollment* - Elementary, Middle School and High School Enrollment.

YEAR 2025 & 2045 TAZ ALLOCATIONS

Background

A critical element of transitioning from the Demographic Forecast Study to the TDM development process is the allocation of projected employment and households to TAZ. TAZs were allocated growth based on demographic forecasts for each city or jurisdiction for year 2025 and 2045. Table 7 and Table 8 show growth by city/jurisdiction from 2015 to 2025 and 2045.

Table 7: Household Growth by Jurisdiction - Base 2015 to 2025 and 2045

Jurisdiction	Base 2015	Forecast 2025	Growth 2015-2025	Forecast 2045	Growth 2025-2045
Cass County					
Fargo	52,324	60,260	7,936	73,530	13,270
West Fargo	12,971	13,950	979	15,840	1,890
Casselton	975	950	-25	1,150	200
Horace	956	2,710	1,754	3,520	810
Balance of MPA Cass	2,779	3,150	371	3,290	140
Subtotal	70,004	81,020	11,016	97,330	16,310
Clay County					
Moorhead	15,969	19,190	3,221	23,810	4,620
Dilworth	1,661	2,150	489	2,630	480
Barnesville	1,064	1,190	126	1,570	380
Hawley	851	970	119	1,140	170
Balance of MPA Clay	2,470	2,300	-170	2,460	160
Subtotal	22,015	25,800	3,785	31,610	5,810
MPA Total	92,018	106,820	14,802	128,940	22,120

Table 8: Job Growth by Jurisdiction - Base 2015 to 2025 and 2045

Jurisdiction	Base 2015	Forecast 2025	Growth 2015-2025	Forecast 2045	Growth 2025-2045
Cass County					
Fargo	91,647	105,125	13,478	132,825	27,699
West Fargo	11,599	13,310	1,711	16,828	3,518
Casselton	900	1,036	136	1,317	280
Horace	365	407	42	492	86
Balance of MPA Cass	2,164	2,469	305	3,114	645
Subtotal	106,675	122,346	15,671	154,576	32,230
Clay County					
Moorhead	16,036	18,267	2,231	22,856	4,589
Dilworth	1,252	1,399	147	1,701	302
Barnesville	819	931	112	1,162	231
Hawley	973	1,117	144	1,414	297
Balance of MPA Clay	1,340	1,558	218	2,006	448
Subtotal	20,420	23,273	2,853	29,140	5,867
MPA Total	127,095	145,619	18,524	183,715	38,096

Methods for Allocation of Projected 2025 and 2045 Growth

The first step in starting the allocation of 2025 and 2045 employment and household growth TAZs was a review of the inputs allocation process for 2020 and 2040. While there is a change and variation between each projection year (2020 to 2025 and 2040 to 2045), these existing 2020 and 2040 allocations were used to understand former geographic distributions to try and utilize and build upon past assumptions that had been thoroughly vetted in 2013.

For jobs, the initial step in calculating and distributing growth from 2015 to 2025 and 2045 was to calculate the proportion of jobs to working age population in 2015. This proportion was then applied to the 2025 and 2045 working age populations respectively to obtain total jobs for 2025 and 2045. The difference in total number of jobs from 2015 to 2025 was added to the 2015 InfoGroup USA (base year) employment data and distributed into TAZs based on the discussions with local government staff on the location of short term future employment growth. Similarly, the difference in total number of jobs from 2025 to 2045 was added to the 2025 estimated employment and distributed into TAZs based on the discussions with local government staff on the location of long term future employment growth.

The project team met with all the major political jurisdictions to gather additional guidance on allocating the 2025 and 2045 job and household projections to TAZs. For smaller communities within Metro COG MPA, the project team utilized working meetings with planning staff from Cass and Clay County. Of note, the project team had met on three occasions with the City of Horace in later stages of the demographic forecast update, and those meetings provided clear guidance on allocations to cover growth for the City of Horace.

As guidance from local units of government (discussed below) were gathered and processed, new growth assumptions for 2025 and 2045 were developed to assist with the guiding the allocation of jobs and households to TAZs. In all cases, the project team consulted directly with key staff from local units of government to assist with allocating projected growth to assist with allocation of projected growth in households and jobs. Those situations in which a more nuanced allocation process was developed for 2025 and 2045 are discussed below.

Moorhead

The City of Moorhead felt a focus was needed in the 2025 and 2045 allocations to reflect new investment in downtown and to reflect recent growth area planning and infrastructure master planning completed by the city. Therefore, Moorhead provided the following overall guidance to assist with assigning growth to 2025 and 2045.

- » Downtown Infill
    - ▪ Grow downtown core households and jobs by five percent to 2025 and another five percent to 2045.
    - ▪ Grow neighborhoods (TAZs) which buffer downtown by five percent to 2045.
- » New Growth Areas to 2025
    - ▪ Assume 80 percent of 2025 growth within existing city limits.
    - ▪ Assume 20 percent beyond existing city limits.

- Generally, follow the distributions from the 2020 TDM.
  » New Growth Areas to 2045
    - Assume 100 percent of new growth outside existing city limits in predefined growth areas per recent growth area planning and infrastructure staging concepts.
    - Generally, follow the distributions from the 2040 TDM.

Fargo

The City of Fargo was most interested in making sure the 2025 and 2045 allocations reflect two critical issues facing the City of Fargo: 1) continued and expanded infill within the downtown and adjacent neighborhoods and 2) constricted new geographic growth to 2025 based on flood protection and infrastructure limitations. Therefore, the City of Fargo provided the following overall guidance to assist with the assigning growth to 2025 and 2045:

- » Downtown Infill
  - Grow downtown TAZs for both jobs and households by 50 percent beyond previously projected 2020 and 2040 assumptions, which results in the following growth:
    - o 130 percent growth in households 2015 to 2045.
    - o 93 percent growth in jobs 2015 to 2045.
- » Growth in midtown or neighborhoods adjacent to Downtown (12th Avenue North to I-94 and 25th Street to Red River)
  - Grow TAZs buffering downtown by five percent for innermost and three percent for outer TAZs for both households and jobs.
- » NDSU/Roosevelt Neighborhood
  - Base year (2015) allocations were updated and refined to reflect current development trends in these areas (I.e. TAZ 64, 65, 94 and 96).
- » Infill north of 52nd Ave S
  - Add jobs and/or households where appropriate for future development/plats to reflect increased infill demand based on growth limitations south of 52nd Avenue.
  - Grow other infill TAZs until they have met previous 2020 growth forecasts.
    - o TAZs which have already surpassed 2020 model will be kept at 2015 numbers and will be considered "full" so as not to create job or household loss (except downtown, see above).
- » New Growth Areas
  - Grow areas designated as Growth Tier I, II, and III from the Southwest Metro Transportation Plan with remaining households and jobs balancing growth between 2025 and 2045.
  - Allocations of new growth reflected revised assumptions on future municipal infrastructure expansion and imminent or pending flood protection efforts.
  - 2020 growth assumptions from the Southwest Metro Transportation Plan closely matched updated assumptions for 2025; and 2040 assumptions closely matched assumptions for 2045 (less additional growth in downtown and midtown areas).

West Fargo

As with the completed 2020 and 2040 assumptions for TAZ distributions, West Fargo was assumed to be built out prior to the 2045, likely closer to 2025 or 2030. The City of West Fargo provided TAZ by TAZ estimates of projected remaining infill of existing developing TAZs. These projections were directly input into the 2025 and 2045 TAZs. A few nuances considered when smoothing the West Fargo growth assumptions area as follows:

» Growth assumptions from the Sheyenne Street Corridor Study (both phases) were reviewed in detail to ensure linkages between growth assumptions and variations were directly input into the 2025 and 2045 TAZ data assigned for West Fargo.

» Recent and projected infill based on new developments in downtown were evaluated and factored into both 2025 and 2045 assumptions.

Other Communities & Jurisdictions

Through meetings with local staff, the project team received guidance or specific allocations to accurately allocate projected 2025 and 2045 growth to TAZs in Metro COG's MPA. Because the guidance for this process was somewhat rote, the specific details are not included herein. Those assumptions are reflected in the corresponding figures showing TAZ growth to 2025 and 2045.

Geographic Allocations

The following series of figures and tables demonstrate the final allocation of jobs and households to TAZ's for 2025 and 2045. Each Table shows the total amount of new growth allocated to each TAZ between 2015 to 2025 and then 2015 to 2045. Figures demonstrate total change in jobs and households by TAZ between 2015 and 2045.
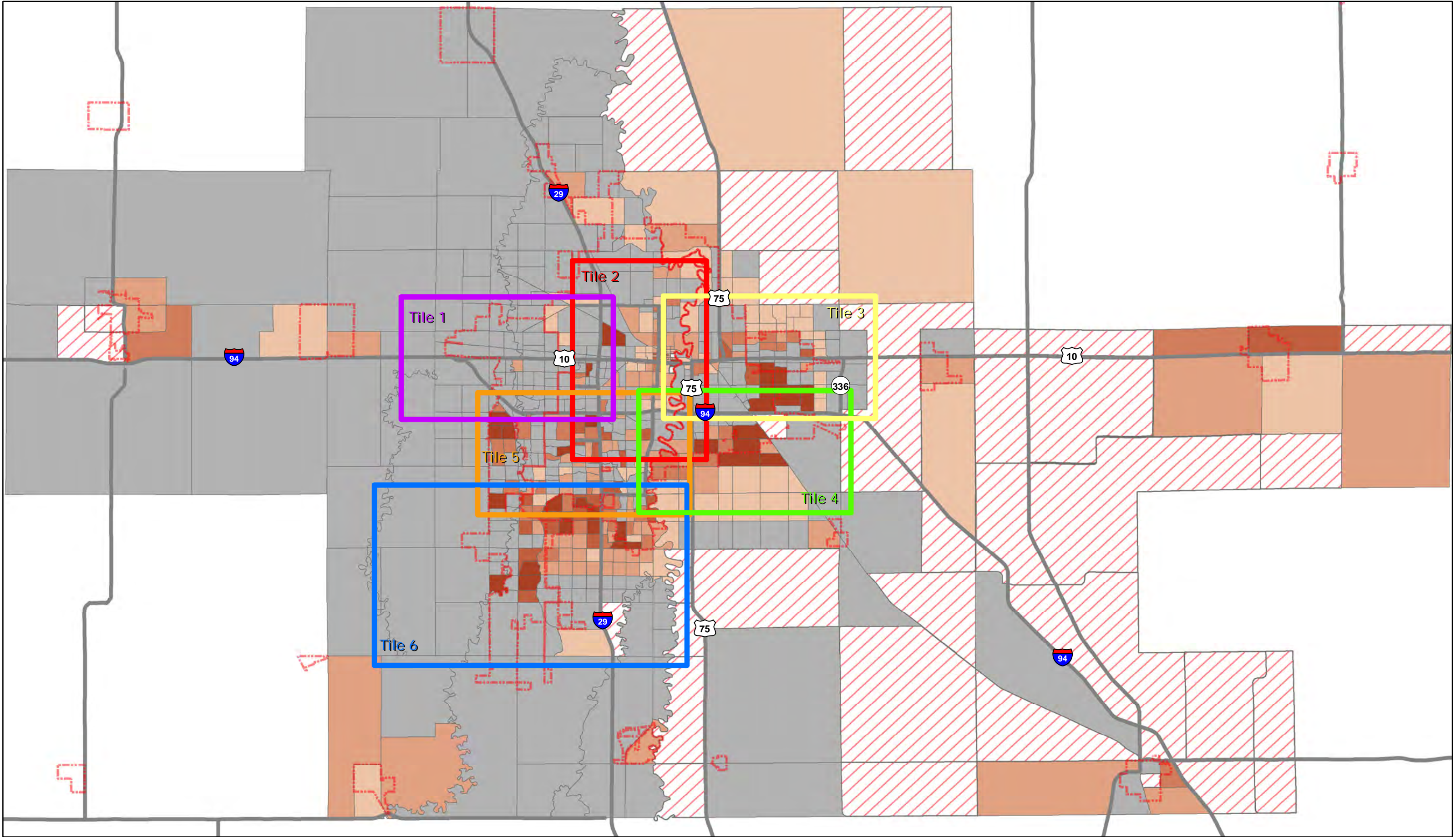
MPA

Household Change 2015-2045

- Gain 1 - 25
- 26 - 100
- 101 - 200
- 201 - 300
- 301 or more
- No Change
- City Limits
- Loss/Revision
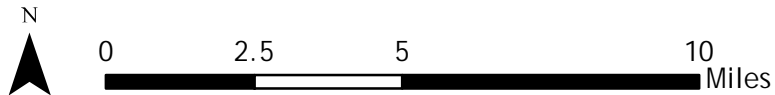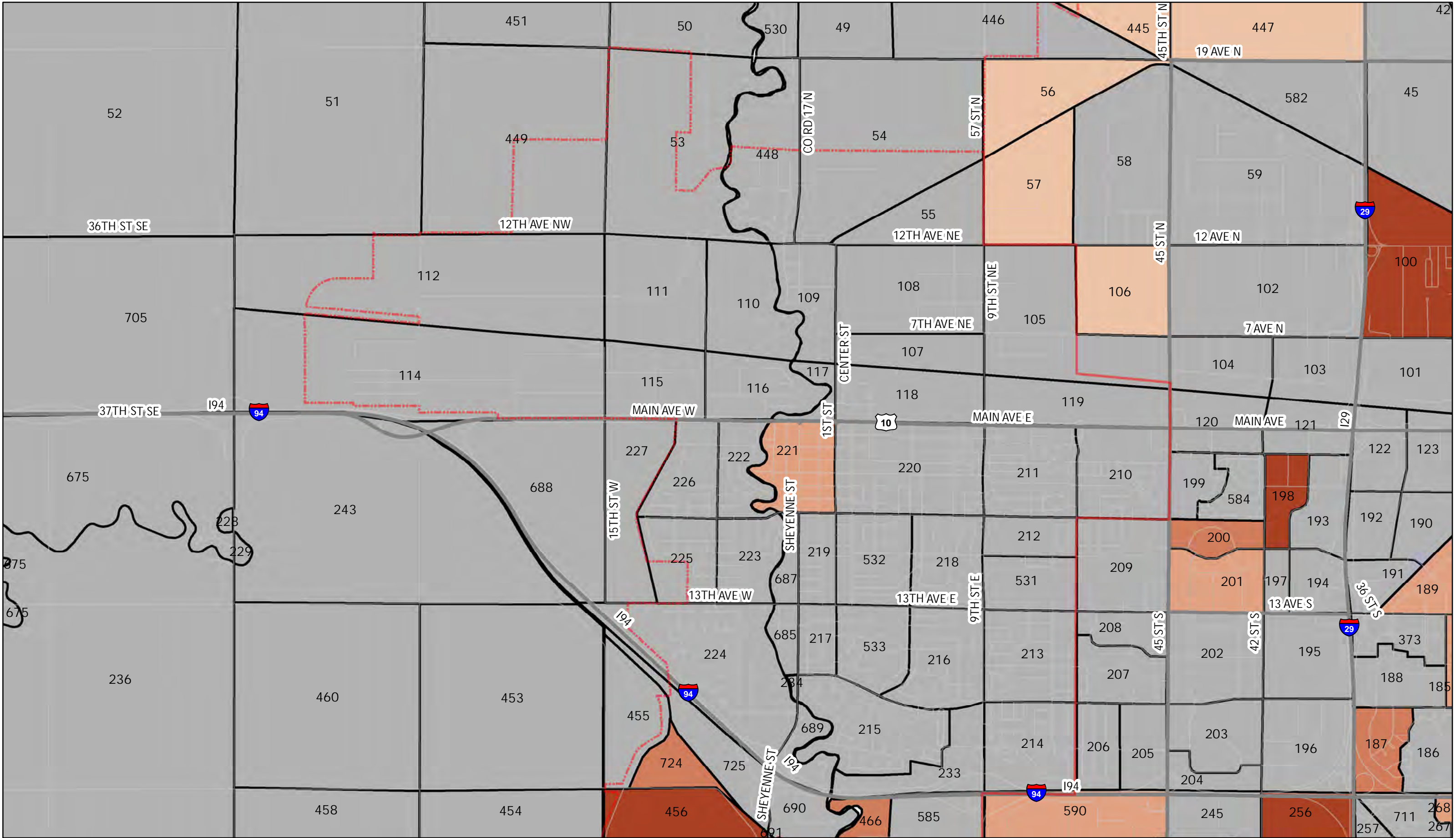
Tile 1

Household Change 2015-2045

- Gain 1 - 25
- 101 - 200
- 301 or more
- City Limits
- Loss/Revision
- 26 - 100
- 201 - 300
- No Change

N
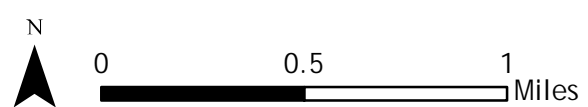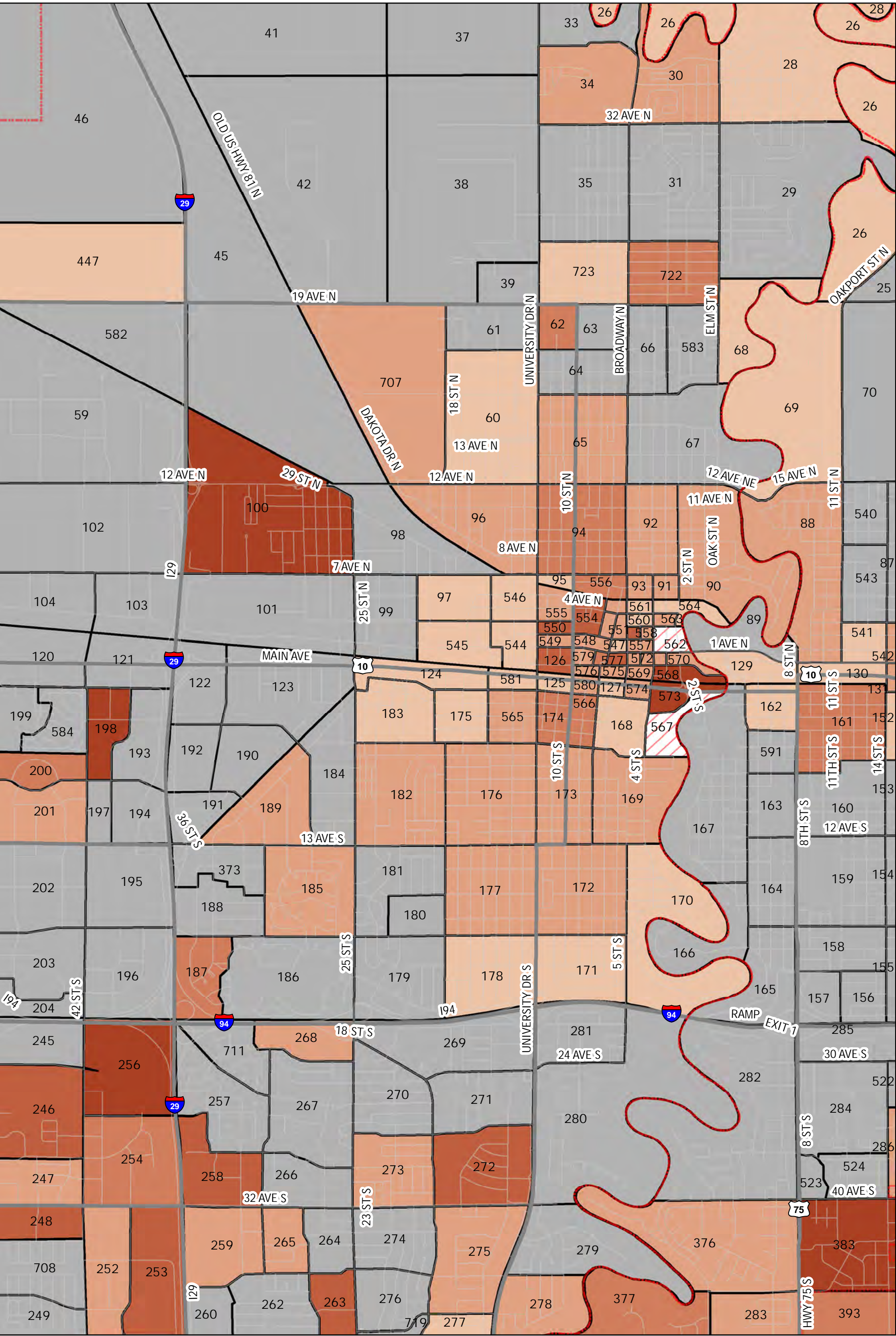
0   0.5   1
Miles

Tile 2

Household Change 2015-2045

Gain 1 - 25   101 - 200   301 or more   City Limits

26 - 100   201 - 300   No Change

Loss/Revision

0   0.5   1 Miles
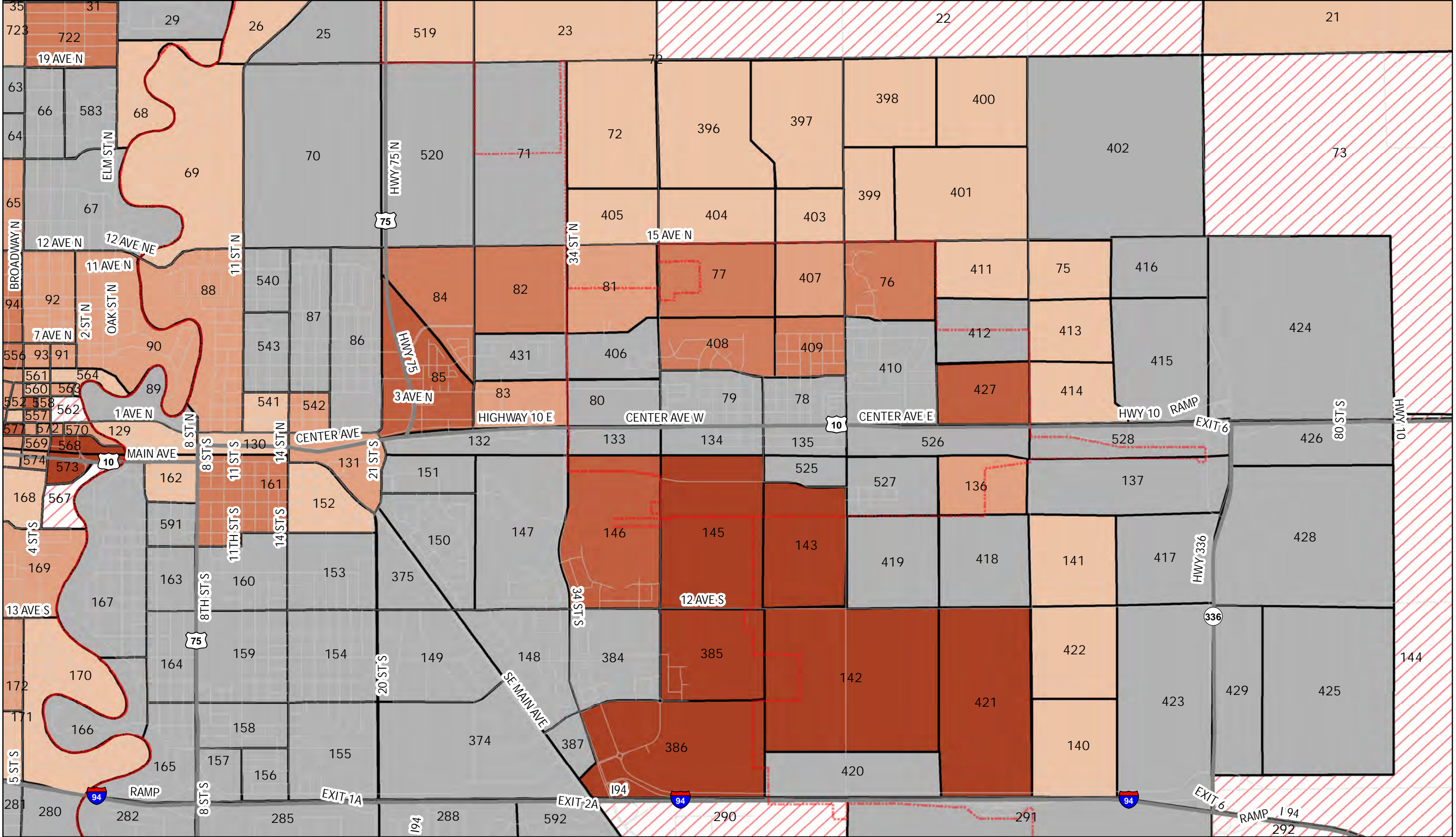
Tile 3

Household Change 2015-2045

Loss/Revision

- Gain 1 - 25
- 26 - 100
- 101 - 200
- 201 - 300
- 301 or more
- No Change
- City Limits

N

0   0.5   1
Miles

Tile 4

Household Change 2015-2045

☐ Gain 1 - 25	☐ 101 - 200	☐ 301 or more
☐ Loss/Revision	☐ 26 - 100	☐ 201 - 300	☐ No Change

⬚ City Limits

N

0   0.5   1
Miles
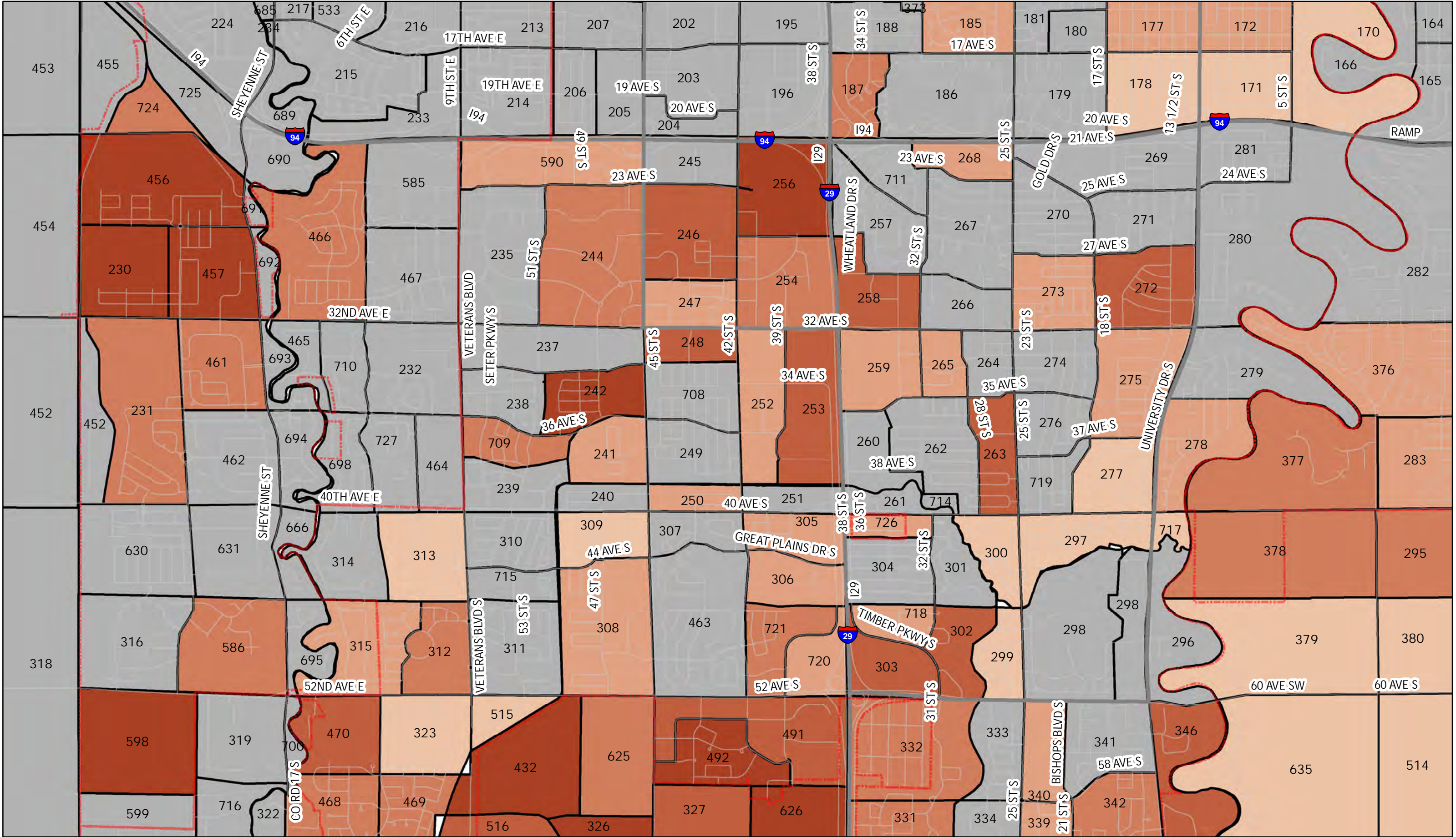
Tile 5

Household Change 2015-2045

Gain 1 - 25
26 - 100
101 - 200
201 - 300
301 or more
No Change
Loss/Revision
City Limits

N

0   0.5   1
Miles
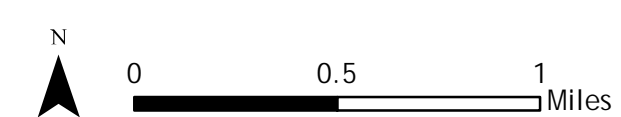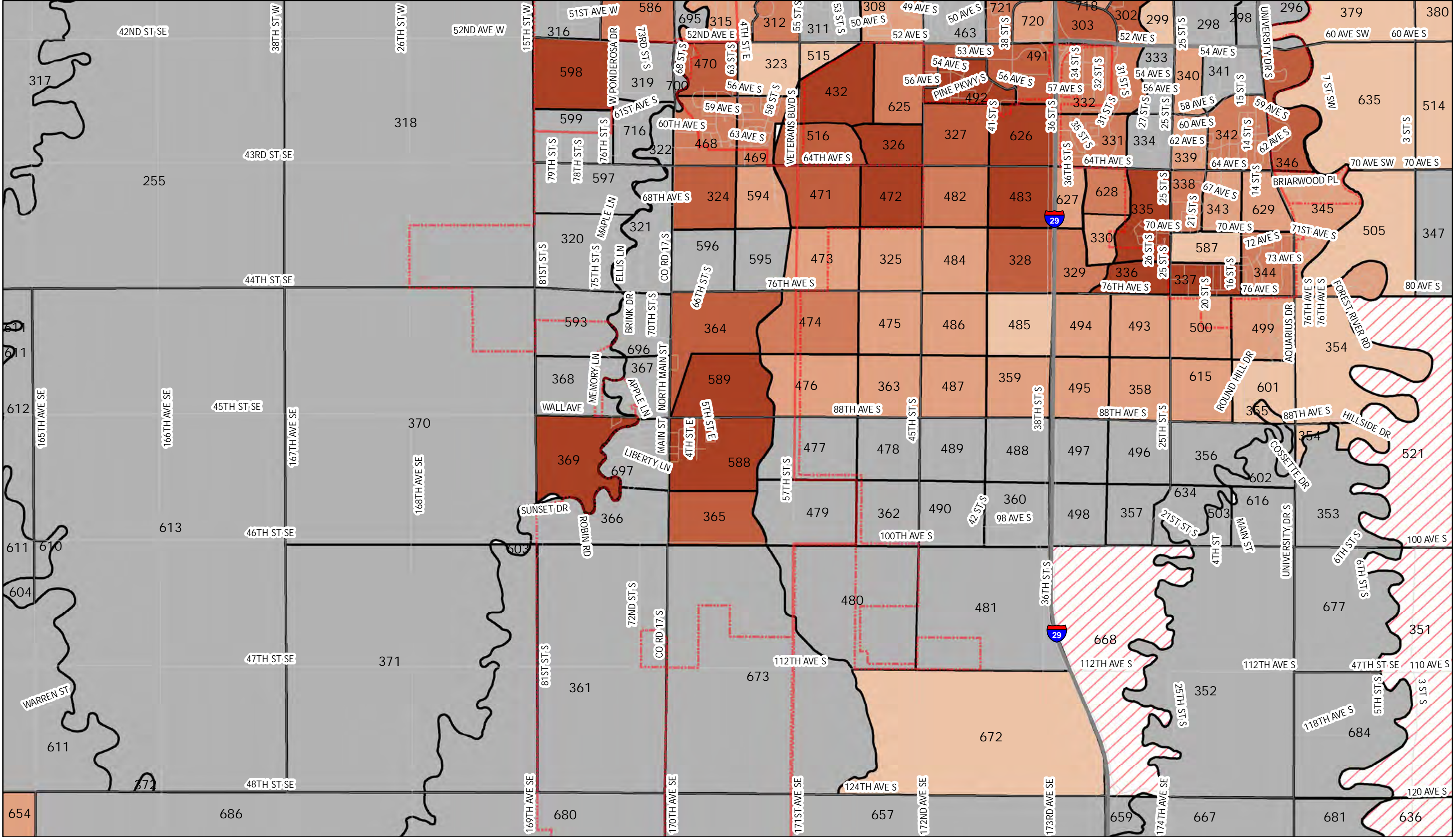
Tile 6

Household Change 2015-2045

Loss/Revision

Gain 1 - 25	101 - 200	301 or more
26 - 100	201 - 300	No Change

City Limits

N

0   0.5   1
Miles

Downtown

Household Change 2015-2045

Legend	
Gain 1 - 25	101 - 200	301 or more	City Limits
26 - 100	201 - 300	No Change	
Loss/Revision			

0   0.25   0.5 Miles

N
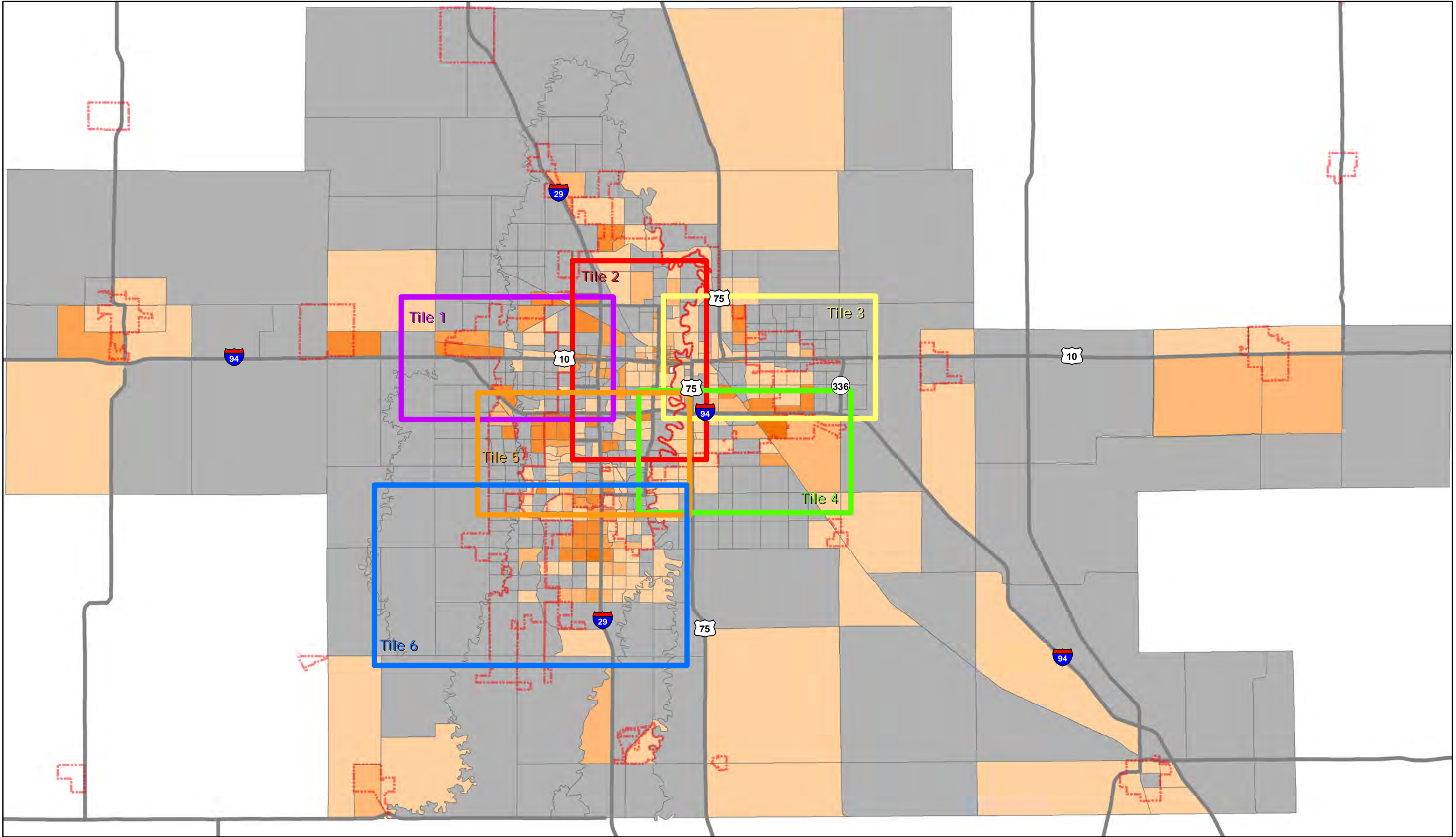
MPA

Job Change 2015-2045

Gain 1 - 100	201 - 350	1001 or more	City Limits	
Loss/Revision	101 - 200	351 - 1000	No Change	

Tile 1
Tile 2
Tile 3
Tile 4
Tile 5
Tile 6

N

0   2.5   5   10
Miles

Tile 1

Job Change 2015-2045

- Gain 1 - 100
- 101 - 200
- 201 - 350
- 351 - 1000
- 1001 or more
- No Change
- Loss/Revision
- City Limits

Tile 2

Job Change 2015-2045

	Gain 1 - 100		201 - 350		1001 or more	City Limits
Loss/Revision		101 - 200		351 - 1000	No Change	
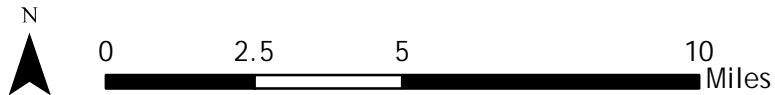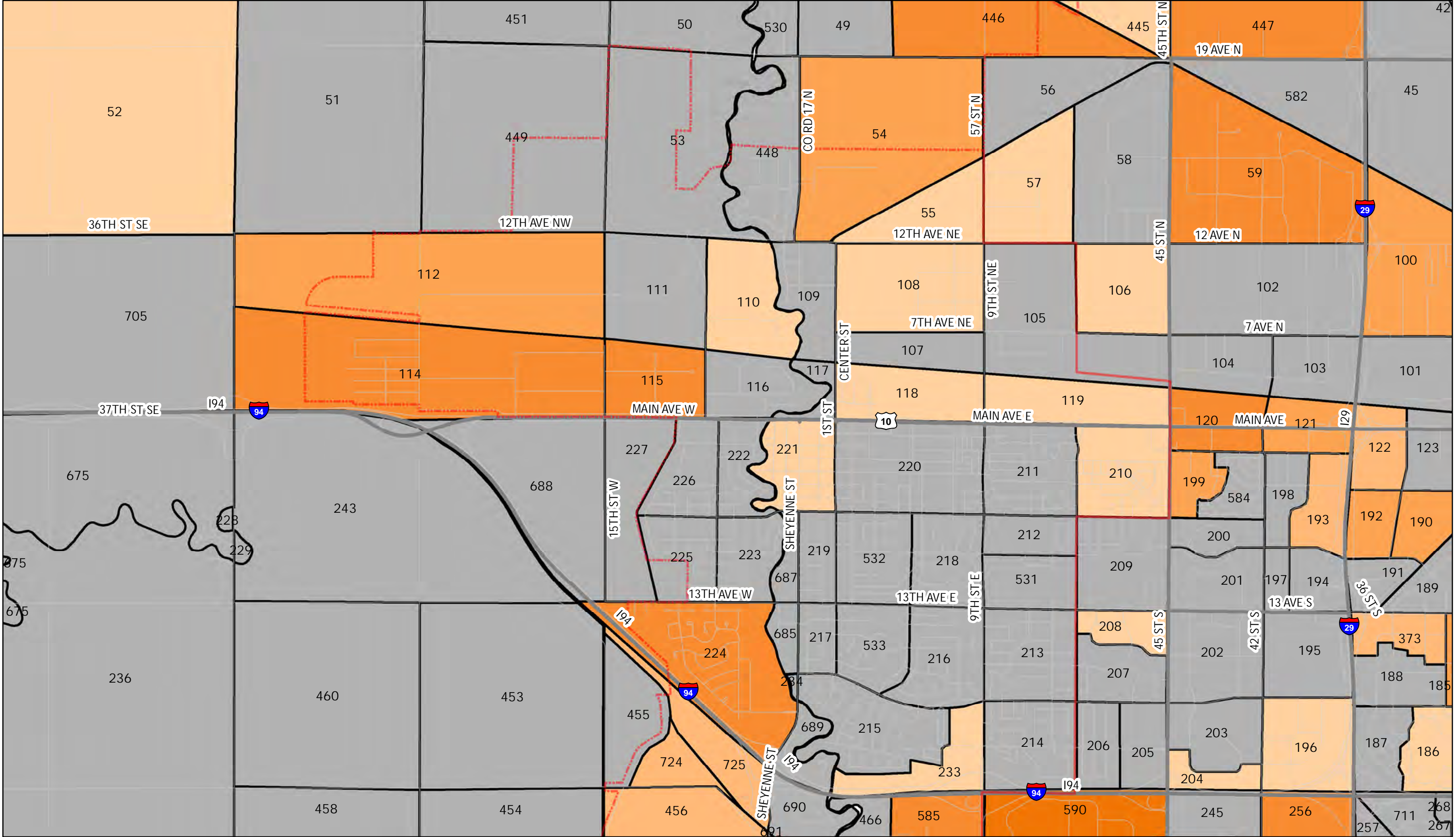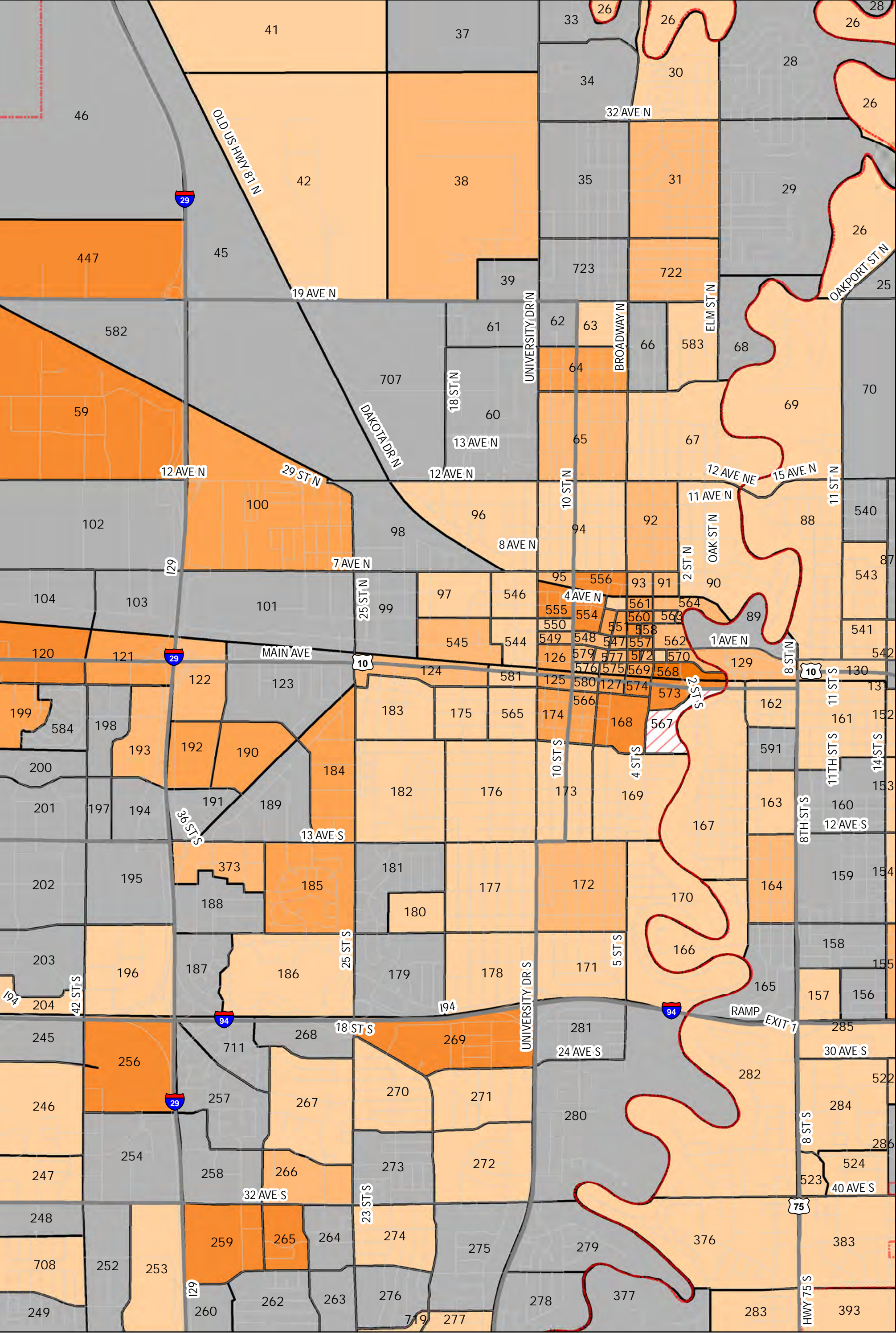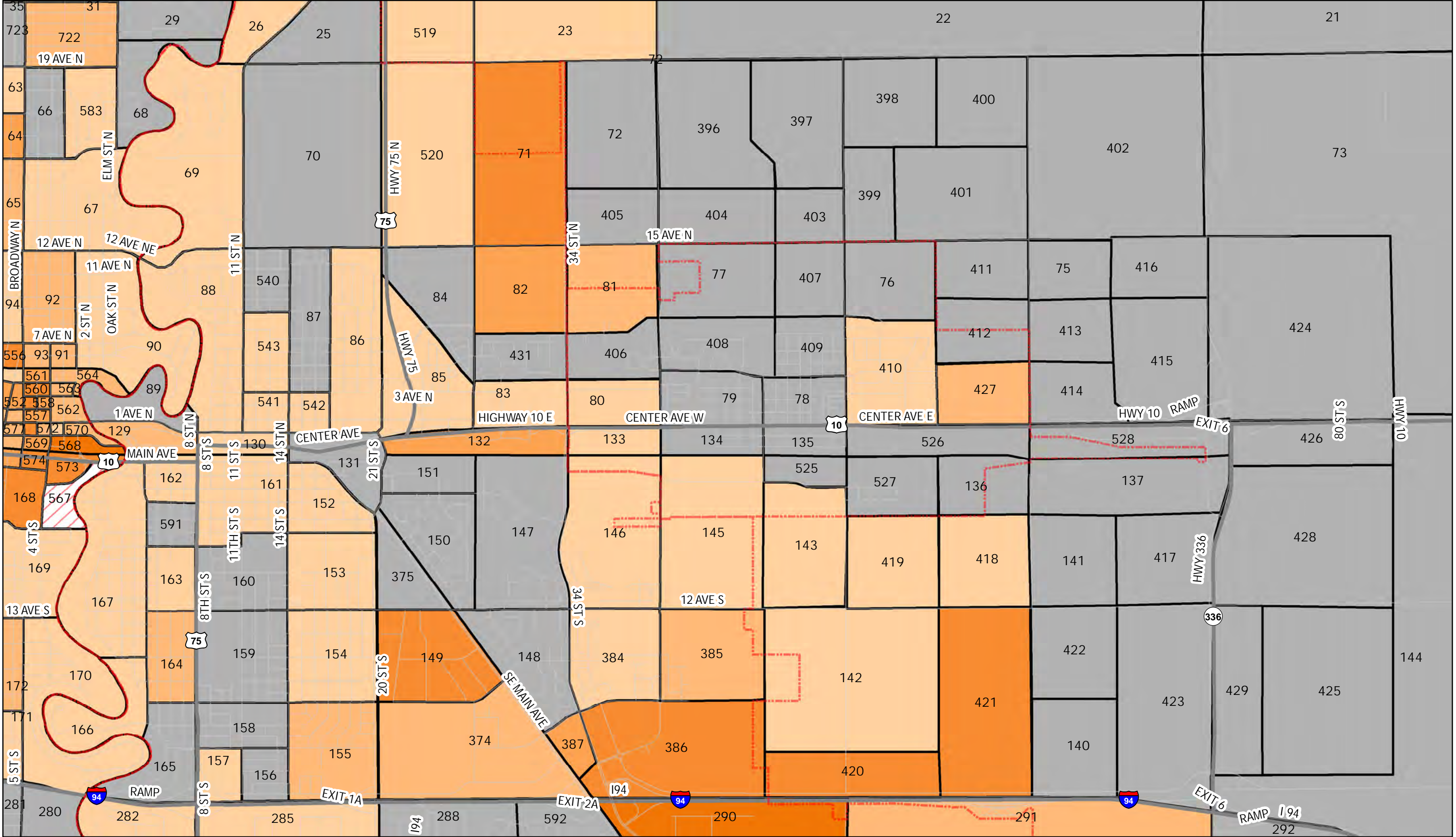
0   0.5   1 Miles

Tile 3

Job Change 2015-2045

Loss/Revision

Gain 1 - 100
101 - 200
201 - 350
351 - 1000
1001 or more
No Change

City Limits

N

0   0.5   1
Miles
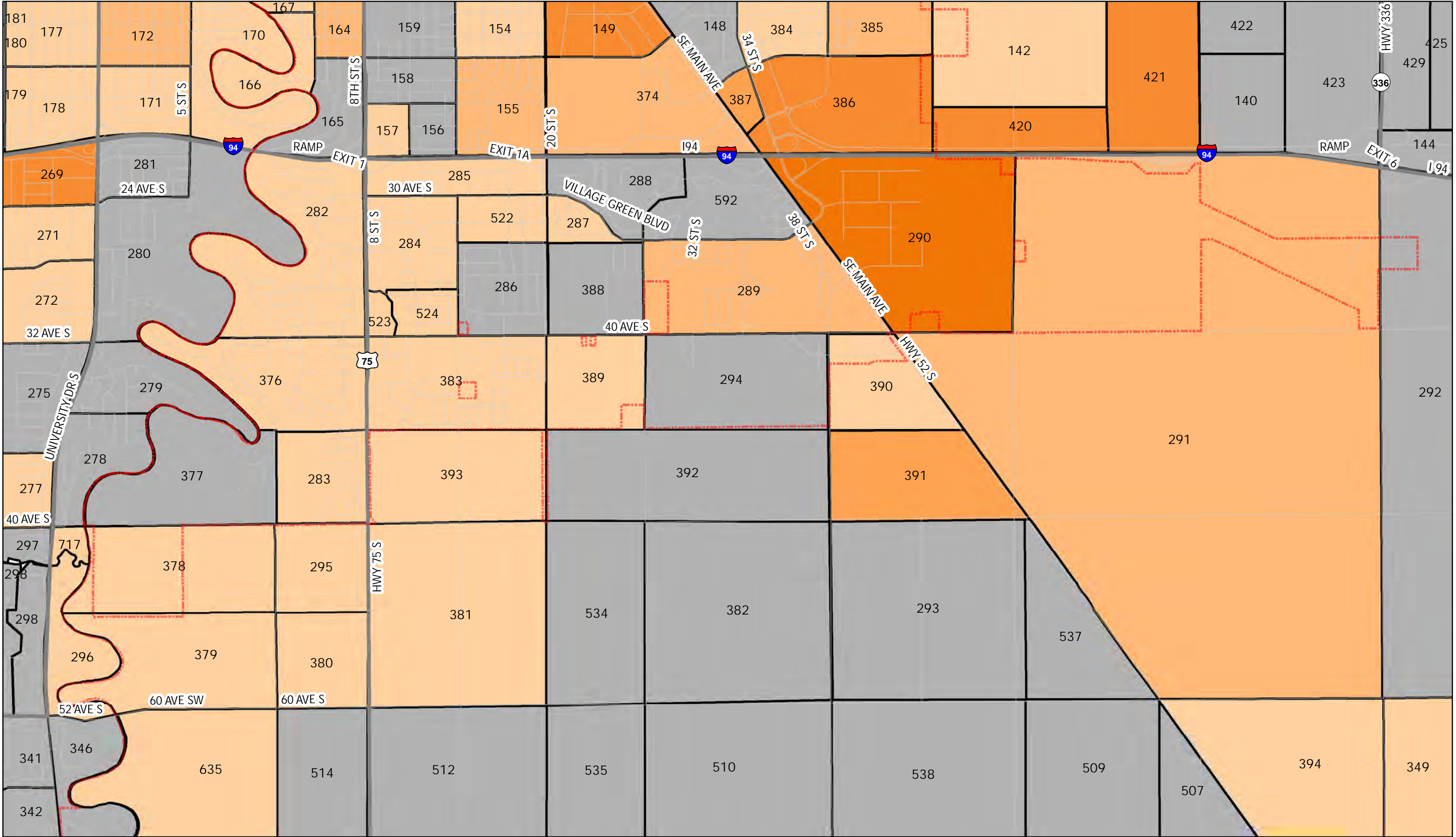
Tile 4

Job Change 2015-2045

Loss/Revision

Gain 1 - 100
101 - 200
201 - 350
351 - 1000
1001 or more
No Change
City Limits

N

0   0.5   1
Miles

Tile 5

Job Change 2015-2045

	Gain 1 - 100		201 - 350		1001 or more	City Limits
Loss/Revision		101 - 200		351 - 1000		No Change

N

0   0.5   1
Miles

Tile 6

Job Change 2015-2045

▢ Loss/Revision	▢ Gain 1 - 100	▢ 201 - 350	▢ 1001 or more	⬚ City Limits
	▢ 101 - 200	▢ 351 - 1000	▢ No Change	
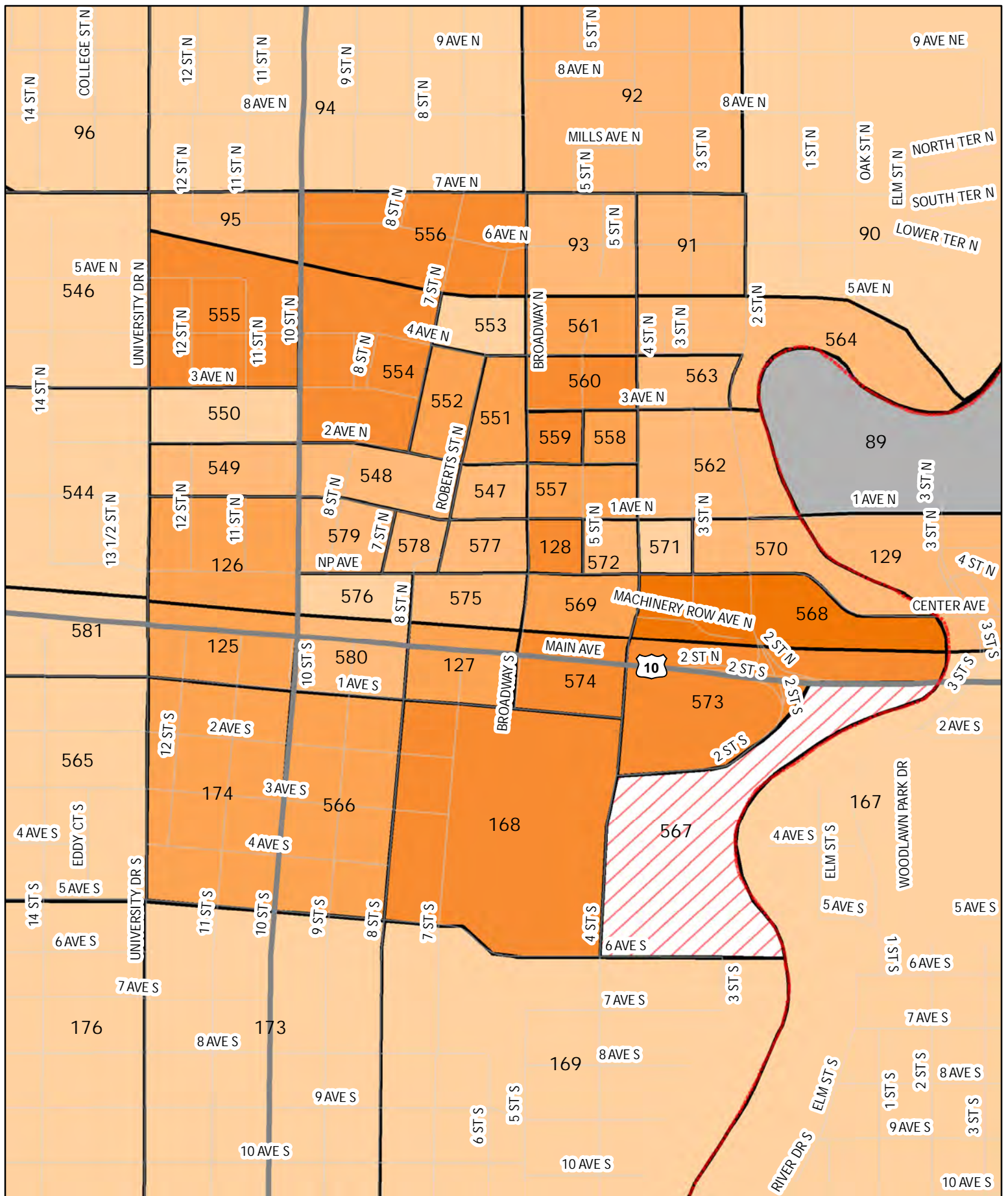
Downtown

Job Change 2015-2045

- Gain 1 - 100
- 101 - 200
- 201 - 350
- 351 - 1000
- 1001 or more
- Loss/Revision
- City Limits
- No Change

0   0.25   0.5 Miles
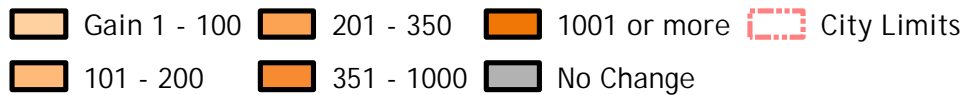
N

Summary Tables

TAZ	Current Jurisdiction	Future Jurisdiction	HH 2015	Jobs 2015	Added HH by Year			Added Jobs by Year			Total Households by Year		Total Jobs by Year		Acres	County
					HH added 15-25	HH added 25-45	HH added 15-45	Jobs added 15-25	Jobs added 25-45	Jobs added 15-45	2025	2045	2025	2045		
1	Argusville	Argusville	111	14	0	0	0	0	0	0	111	111	14	14	15573.9	Cass
2	Argusville	Argusville	1	0	0	0	0	0	0	0	1	1	0	0	2329.1	Cass
3	Argusville	Argusville	64	4	0	0	0	0	0	0	64	64	4	4	854.7	Cass
345	Briarwood	Briarwood	23	18	6	55	61	0	0	0	29	84	18	18	295.3	Cass
4	Cass	Cass	53	2	0	0	0	0	0	0	53	53	2	2	8485.1	Cass
10	Cass	Cass	46	43	0	0	0	0	0	0	46	46	43	43	5997.0	Cass
11	Cass	Cass	36	27	0	0	0	0	0	0	36	36	27	27	8736.3	Cass
12	Cass	Cass	22	45	0	0	0	0	0	0	22	22	45	45	5147.1	Cass
13	Cass	Cass	23	6	0	0	0	0	0	0	23	23	6	6	2582.9	Cass
14	Cass	Cass	8	0	0	0	0	0	0	0	8	8	0	0	914.6	Cass
15	Cass	Cass	27	15	0	0	0	0	0	0	27	27	15	15	1003.0	Cass
44	Cass	Cass	1	76	0	0	0	0	0	0	1	1	76	76	388.4	Cass
48	Cass	Cass	1	0	0	0	0	0	0	0	1	1	0	0	433.8	Cass
49	Cass	Cass	0	0	0	0	0	0	0	0	0	0	0	0	322.4	Cass
50	Cass	Cass	9	3	0	0	0	0	0	0	9	9	3	3	637.4	Cass
51	Cass	Cass	7	1	0	0	0	0	0	0	7	7	1	1	1942.1	Cass
227	Cass	Cass	0	106	0	0	0	0	0	0	0	0	106	106	170.1	Cass
228	Cass	Cass	1	0	0	0	0	0	0	0	1	1	0	0	6.2	Cass
229	Cass	Cass	0	0	0	0	0	0	0	0	0	0	0	0	8.3	Cass
236	Cass	Cass	8	2	0	0	0	0	0	0	8	8	2	2	3211.3	Cass
243	Cass	Cass	0	0	0	0	0	0	0	0	0	0	0	0	931.9	Cass
255	Cass	Cass	3	10	0	0	0	0	0	0	3	3	10	10	3667.3	Cass
317	Cass	Cass	10	2	0	0	0	0	0	0	10	10	2	2	3997.1	Cass
352	Cass	Cass	8	1	0	0	0	0	0	0	8	8	1	1	1378.5	Cass
371	Cass	Cass	4	0	0	0	0	0	0	0	4	4	0	0	1956.0	Cass
372	Cass	Cass	0	0	0	0	0	0	0	0	0	0	0	0	10.6	Cass
430	Cass	Cass	11	9	0	0	0	0	0	0	11	11	9	9	2767.6	Cass
433	Cass	Cass	1	0	0	0	0	0	0	0	1	1	0	0	662.4	Cass
434	Cass	Cass	6	0	0	0	0	0	0	0	6	6	0	0	1314.2	Cass
435	Cass	Cass	1	0	0	0	0	0	0	0	1	1	0	0	417.2	Cass
437	Cass	Cass	24	1	0	0	0	0	0	0	24	24	1	1	450.5	Cass
438	Cass	Cass	9	7	0	0	0	0	0	0	9	9	7	7	341.6	Cass
439	Cass	Cass	22	153	0	0	0	0	0	0	22	22	153	153	861.9	Cass
440	Cass	Cass	5	0	0	0	0	0	0	0	5	5	0	0	652.0	Cass
442	Cass	Cass	6	2	0	0	0	0	0	0	6	6	2	2	267.1	Cass
443	Cass	Cass	0	0	0	0	0	0	0	0	0	0	0	0	119.6	Cass
444	Cass	Cass	1	5	0	0	0	0	0	0	1	1	5	5	369.4	Cass
450	Cass	Cass	10	10	0	0	0	0	0	0	10	10	10	10	659.5	Cass
451	Cass	Cass	2	0	0	0	0	0	0	0	2	2	0	0	633.4	Cass
453	Cass	Cass	1	1	0	0	0	0	0	0	1	1	1	1	635.6	Cass

TAZ	Current Jurisdiction	Future Jurisdiction	HH 2015	Jobs 2015	Added HH by Year			Added Jobs by Year			Total Households by Year		Total Jobs by Year		Acres	County
					HH added 15-25	HH added 25-45	HH added 15-45	Jobs added 15-25	Jobs added 25-45	Jobs added 15-45	2025	2045	2025	2045		
454	Cass	Cass	1	0	0	0	0	0	0	0	1	1	0	0	627.0	Cass
455	Cass	Cass	0	0	0	0	0	0	0	0	0	0	0	0	125.2	Cass
458	Cass	Cass	1	0	0	0	0	0	0	0	1	1	0	0	639.0	Cass
459	Cass	Cass	1	14	0	0	0	0	0	0	1	1	14	14	661.7	Cass
460	Cass	Cass	7	11	0	0	0	0	0	0	7	7	11	11	652.6	Cass
529	Cass	Cass	2	0	0	0	0	0	0	0	2	2	0	0	852.6	Cass
530	Cass	Cass	80	8	0	0	0	0	0	0	80	80	8	8	251.3	Cass
603	Cass	Cass	0	0	0	0	0	0	0	0	0	0	0	0	8.8	Cass
604	Cass	Cass	0	0	0	0	0	0	0	0	0	0	0	0	30.5	Cass
610	Cass	Cass	0	0	0	0	0	0	0	0	0	0	0	0	33.1	Cass
611	Cass	Cass	14	0	0	0	0	0	0	0	14	14	0	0	5004.0	Cass
612	Cass	Cass	2	0	0	0	0	0	0	0	2	2	0	0	470.4	Cass
613	Cass	Cass	7	0	0	0	0	0	0	0	7	7	0	0	4751.0	Cass
641	Cass	Cass	0	0	0	0	0	0	0	0	0	0	0	0	25.1	Cass
642	Cass	Cass	34	36	0	0	0	0	0	0	34	34	36	36	9138.4	Cass
643	Cass	Cass	28	18	0	0	0	0	0	0	28	28	18	18	16219.2	Cass
644	Cass	Cass	2	7	0	0	0	0	0	0	2	2	7	7	2431.1	Cass
645	Cass	Cass	25	6	0	0	0	10	0	10	25	25	16	16	12763.0	Cass
647	Cass	Cass	15	3	0	0	0	0	0	0	15	15	3	3	11957.9	Cass
648	Cass	Cass	0	0	0	0	0	0	0	0	0	0	0	0	664.7	Cass
653	Cass	Cass	23	24	0	0	0	0	0	0	23	23	24	24	23851.4	Cass
654	Cass	Cass	18	2	20	30	50	25	20	45	38	68	27	47	6272.6	Cass
657	Cass	Cass	19	4	0	0	0	0	0	0	19	19	4	4	7115.4	Cass
658	Cass	Cass	4	1	0	0	0	0	0	0	4	4	1	1	1657.2	Cass
659	Cass	Cass	0	0	0	0	0	0	0	0	0	0	0	0	49.3	Cass
668	Cass	Cass	2	0	0	0	0	0	0	0	2	2	0	0	876.7	Cass
669	Cass	Cass	1	0	0	0	0	0	0	0	1	1	0	0	1473.5	Cass
670	Cass	Cass	9	0	0	0	0	0	0	0	9	9	0	0	2269.0	Cass
671	Cass	Cass	1	2	0	0	0	30	120	150	1	1	32	152	1816.1	Cass
672	Cass	Cass	21	93	3	0	3	10	50	60	24	24	103	153	1168.4	Cass
674	Cass	Cass	0	0	0	0	0	0	0	0	0	0	0	0	726.0	Cass
675	Cass	Cass	25	35	0	0	0	0	0	0	25	25	35	35	1968.4	Cass
677	Cass	Cass	15	10	0	0	0	0	0	0	15	15	10	10	487.7	Cass
679	Cass	Cass	6	1	0	0	0	0	0	0	6	6	1	1	667.8	Cass
681	Cass	Cass	14	0	0	0	0	0	0	0	14	14	0	0	865.4	Cass
684	Cass	Cass	5	0	0	0	0	0	0	0	5	5	0	0	492.0	Cass
686	Cass	Cass	26	17	0	0	0	0	0	0	26	26	17	17	4913.3	Cass
688	Cass	Cass	0	46	0	0	0	0	0	0	0	0	46	46	348.7	Cass
699	Cass	Cass	25	6	0	0	0	0	0	0	25	25	6	6	5124.1	Cass
703	Cass	Cass	21	7	0	0	0	0	0	0	21	21	7	7	166.1	Cass
705	Cass	Cass	2	2	0	0	0	0	0	0	2	2	2	2	1240.4	Cass
706	Cass	Cass	3	0	0	0	0	0	0	0	3	3	0	0	3515.6	Cass
325	Cass	Fargo	0	0	0	76	76	0	232	232	0	76	0	232	163.9	Cass

TAZ	Current Jurisdiction	Future Jurisdiction	HH 2015	Jobs 2015	Added HH by Year			Added Jobs by Year			Total Households by Year		Total Jobs by Year		Acres	County
					HH added 15-25	HH added 25-45	HH added 15-45	Jobs added 15-25	Jobs added 25-45	Jobs added 15-45	2025	2045	2025	2045		
326	Cass	Fargo	0	0	0	411	411	0	0	0	0	411	0	0	105.8	Cass
327	Cass	Fargo	0	0	26	273	300	0	0	0	26	300	0	0	169.3	Cass
328	Cass	Fargo	0	5	26	266	291	10	399	409	26	292	15	414	177.2	Cass
329	Cass	Fargo	0	0	12	122	134	8	338	346	12	134	8	346	103.8	Cass
330	Cass	Fargo	0	0	6	62	68	0	0	0	6	68	0	0	67.4	Cass
336	Cass	Fargo	0	0	35	359	394	3	132	135	35	394	3	135	89.1	Cass
353	Cass	Fargo	0	0	0	0	0	0	1	1	0	0	0	1	338.1	Cass
354	Cass	Fargo	31	11	0	19	19	0	0	0	31	50	11	11	503.7	Cass
355	Cass	Fargo	0	0	0	2	2	0	0	0	0	2	0	0	15.2	Cass
356	Cass	Fargo	3	0	0	0	0	0	2	2	3	3	0	2	197.7	Cass
357	Cass	Fargo	0	0	0	0	0	0	0	0	0	0	0	0	127.4	Cass
358	Cass	Fargo	6	0	0	45	45	0	169	169	6	51	0	169	157.3	Cass
359	Cass	Fargo	0	0	0	44	44	0	92	92	0	44	0	92	160.3	Cass
360	Cass	Fargo	0	0	0	0	0	0	270	270	0	0	0	270	169.6	Cass
362	Cass	Fargo	0	0	0	0	0	0	120	120	0	0	0	120	167.8	Cass
363	Cass	Fargo	1	0	0	75	75	0	1	1	1	76	0	1	159.7	Cass
432	Cass	Fargo	0	0	0	387	387	0	77	77	0	387	0	77	212.6	Cass
475	Cass	Fargo	0	10	0	61	61	0	371	371	0	61	10	381	163.6	Cass
478	Cass	Fargo	0	0	0	0	0	0	0	0	0	0	0	0	160.8	Cass
482	Cass	Fargo	0	0	16	168	184	11	435	446	16	184	11	446	163.9	Cass
483	Cass	Fargo	0	0	77	799	876	9	378	387	77	876	9	387	165.2	Cass
484	Cass	Fargo	0	0	0	50	50	0	524	524	0	50	0	524	176.5	Cass
485	Cass	Fargo	0	0	0	17	17	0	1076	1076	0	17	0	1076	167.7	Cass
486	Cass	Fargo	3	3	0	89	89	0	621	621	3	92	3	624	166.2	Cass
487	Cass	Fargo	1	0	0	100	100	0	0	0	1	101	0	0	166.8	Cass
488	Cass	Fargo	0	0	0	0	0	0	64	64	0	0	0	64	169.5	Cass
489	Cass	Fargo	2	3	0	0	0	0	0	0	2	2	3	3	170.5	Cass
490	Cass	Fargo	0	0	0	0	0	0	140	140	0	0	0	140	174.1	Cass
493	Cass	Fargo	0	0	0	90	90	0	74	74	0	90	0	74	155.1	Cass
494	Cass	Fargo	0	0	0	60	60	0	368	368	0	60	0	368	149.4	Cass
495	Cass	Fargo	0	0	0	50	50	0	131	131	0	50	0	131	148.2	Cass
496	Cass	Fargo	0	0	0	0	0	0	17	17	0	0	0	17	163.5	Cass
497	Cass	Fargo	0	0	0	0	0	0	100	100	0	0	0	100	153.2	Cass
498	Cass	Fargo	0	0	0	0	0	0	160	160	0	0	0	160	144.2	Cass
499	Cass	Fargo	50	16	0	33	33	0	0	0	50	83	16	16	164.5	Cass
503	Cass	Fargo	4	14	0	0	0	0	0	0	4	4	14	14	71.8	Cass
516	Cass	Fargo	0	0	0	212	212	0	0	0	0	212	0	0	142.9	Cass
601	Cass	Fargo	25	6	0	14	14	0	0	0	25	39	6	6	148.0	Cass
602	Cass	Fargo	12	1	0	0	0	0	1	1	12	12	1	2	104.3	Cass
615	Cass	Fargo	0	0	0	44	44	0	0	0	0	44	0	0	159.2	Cass
616	Cass	Fargo	0	0	0	0	0	0	0	0	0	0	0	0	150.9	Cass
625	Cass	Fargo	0	0	0	146	146	0	124	124	0	146	0	124	166.8	Cass
626	Cass	Fargo	0	0	40	416	456	6	248	254	40	456	6	254	166.7	Cass

TAZ	Current Jurisdiction	Future Jurisdiction	HH 2015	Jobs 2015	Added HH by Year			Added Jobs by Year			Total Households by Year		Total Jobs by Year		Acres	County
					HH added 15-25	HH added 25-45	HH added 15-45	Jobs added 15-25	Jobs added 25-45	Jobs added 15-45	2025	2045	2025	2045		
627	Cass	Fargo	0	0	7	74	81	4	168	172	7	81	4	172	74.5	Cass
628	Cass	Fargo	0	0	12	122	134	0	13	13	12	134	0	13	84.1	Cass
634	Cass	Fargo	1	0	0	0	0	0	4	4	1	1	0	4	110.9	Cass
676	Cass	Fargo	0	6	0	0	0	0	0	0	0	0	6	6	22.0	Cass
369	Cass	Horace	16	1	360	216	576	0	0	0	376	592	1	1	258.5	Cass
667	Cass	Oxbow	68	21	0	0	0	0	0	0	68	68	21	21	3188.0	Cass
646	Casselton	Casselton	19	210	0	0	0	100	190	290	19	19	310	500	2335.9	Cass
649	Casselton	Casselton	419	183	-84	16	-68	20	30	50	335	351	203	233	932.9	Cass
650	Casselton	Casselton	478	270	20	24	44	16	30	46	498	522	286	316	990.3	Cass
651	Casselton	Casselton	58	162	20	20	40	0	10	10	78	98	162	172	1262.6	Cass
652	Casselton	Casselton	1	75	20	140	160	0	20	20	21	161	75	95	2203.4	Cass
17	Fargo	Fargo	0	0	0	0	0	0	0	0	0	0	0	0	1213.3	Cass
28	Fargo	Fargo	407	112	3	0	3	0	0	0	410	410	112	112	426.6	Cass
29	Fargo	Fargo	632	137	0	0	0	0	0	0	632	632	137	137	398.6	Cass
30	Fargo	Fargo	602	40	93	0	93	7	0	7	695	695	47	47	144.7	Cass
31	Fargo	Fargo	1170	215	0	0	0	136	0	136	1170	1170	351	351	208.9	Cass
32	Fargo	Fargo	194	57	0	0	0	91	0	91	194	194	148	148	299.7	Cass
33	Fargo	Fargo	325	17	0	0	0	0	0	0	325	325	17	17	140.1	Cass
34	Fargo	Fargo	342	34	36	0	36	0	0	0	378	378	34	34	149.6	Cass
35	Fargo	Fargo	748	688	0	0	0	0	0	0	748	748	688	688	207.3	Cass
36	Fargo	Fargo	16	13	7	0	7	0	0	0	23	23	13	13	417.1	Cass
37	Fargo	Fargo	1	72	0	0	0	0	0	0	1	1	72	72	446.4	Cass
38	Fargo	Fargo	3	1108	0	0	0	182	0	182	3	3	1290	1290	631.8	Cass
39	Fargo	Fargo	2	784	0	0	0	0	0	0	2	2	784	784	50.8	Cass
40	Fargo	Fargo	1	81	0	0	0	242	0	242	1	1	323	323	128.3	Cass
41	Fargo	Fargo	3	60	0	0	0	7	0	7	3	3	67	67	683.4	Cass
42	Fargo	Fargo	6	336	0	0	0	79	0	79	6	6	415	415	658.2	Cass
43	Fargo	Fargo	1	178	0	0	0	259	500	759	1	1	437	937	490.8	Cass
45	Fargo	Fargo	7	11	0	0	0	0	0	0	7	7	11	11	811.2	Cass
46	Fargo	Fargo	0	0	0	0	0	0	0	0	0	0	0	0	835.8	Cass
56	Fargo	Fargo	0	118	0	0	0	0	0	0	0	0	118	118	168.1	Cass
57	Fargo	Fargo	0	0	0	0	0	4	0	4	0	0	4	4	190.2	Cass
58	Fargo	Fargo	8	1093	0	0	0	0	0	0	8	8	1093	1093	294.4	Cass
59	Fargo	Fargo	19	3369	0	0	0	86	503	589	19	19	3455	3958	481.5	Cass
60	Fargo	Fargo	57	5635	1	0	1	0	0	0	58	58	5635	5635	244.1	Cass
61	Fargo	Fargo	12	770	0	0	0	0	0	0	12	12	770	770	83.2	Cass
62	Fargo	Fargo	142	250	132	0	132	0	0	0	274	274	250	250	34.1	Cass
63	Fargo	Fargo	5	161	0	0	0	53	0	53	5	5	214	214	46.2	Cass
64	Fargo	Fargo	330	8	0	0	0	320	0	320	330	330	328	328	78.5	Cass
65	Fargo	Fargo	783	332	82	0	82	112	0	112	866	866	444	444	156.7	Cass
66	Fargo	Fargo	266	77	0	0	0	0	0	0	266	266	77	77	68.0	Cass
67	Fargo	Fargo	593	325	0	0	0	12	0	12	593	593	337	337	224.9	Cass
68	Fargo	Fargo	43	851	1	0	1	0	0	0	44	44	851	851	96.1	Cass

TAZ	Current Jurisdiction	Future Jurisdiction	HH 2015	Jobs 2015	Added HH by Year			Added Jobs by Year			Total Households by Year		Total Jobs by Year		Acres	County
					HH added 15-25	HH added 25-45	HH added 15-45	Jobs added 15-25	Jobs added 25-45	Jobs added 15-45	2025	2045	2025	2045		
90	Fargo	Fargo	433	102	22	23	44	12	0	12	454	477	114	114	225.1	Cass
91	Fargo	Fargo	87	73	37	19	56	104	88	192	124	143	177	265	12.4	Cass
92	Fargo	Fargo	456	1422	23	24	47	71	75	146	479	502	1493	1568	92.4	Cass
93	Fargo	Fargo	25	232	27	8	35	0	114	114	52	60	232	346	12.6	Cass
94	Fargo	Fargo	1156	200	58	61	118	10	11	21	1213	1274	210	221	157.7	Cass
95	Fargo	Fargo	13	17	5	3	8	72	45	117	18	21	89	134	9.1	Cass
96	Fargo	Fargo	891	270	45	47	91	93	0	93	935	982	363	363	175.8	Cass
97	Fargo	Fargo	156	196	5	5	10	6	6	12	161	166	202	208	66.6	Cass
98	Fargo	Fargo	56	789	0	0	0	0	0	0	56	56	789	789	155.3	Cass
99	Fargo	Fargo	129	757	0	0	0	0	0	0	129	129	757	757	102.6	Cass
100	Fargo	Fargo	1029	1192	0	305	305	0	331	331	1029	1334	1192	1523	403.3	Cass
101	Fargo	Fargo	8	1821	0	0	0	0	0	0	8	8	1821	1821	254.0	Cass
102	Fargo	Fargo	15	916	0	0	0	0	0	0	15	15	916	916	336.7	Cass
103	Fargo	Fargo	10	504	0	0	0	0	0	0	10	10	504	504	103.8	Cass
104	Fargo	Fargo	4	170	0	0	0	0	0	0	4	4	170	170	109.4	Cass
106	Fargo	Fargo	0	22	0	0	0	3	0	3	0	0	25	25	159.1	Cass
120	Fargo	Fargo	3	568	0	0	0	59	300	359	3	3	627	927	105.3	Cass
121	Fargo	Fargo	6	356	0	0	0	15	200	215	6	6	371	571	89.2	Cass
122	Fargo	Fargo	1	462	0	0	0	100	54	154	1	1	562	616	85.0	Cass
123	Fargo	Fargo	9	1450	0	0	0	0	0	0	9	9	1450	1450	180.6	Cass
124	Fargo	Fargo	28	661	1	1	2	199	0	199	29	30	860	860	63.2	Cass
125	Fargo	Fargo	46	118	2	7	9	95	107	202	48	56	213	320	12.5	Cass
126	Fargo	Fargo	60	221	177	119	296	144	183	327	238	357	365	548	18.4	Cass
127	Fargo	Fargo	245	448	0	10	10	0	216	216	245	255	448	664	9.5	Cass
128	Fargo	Fargo	14	496	40	27	68	115	305	420	55	82	611	916	3.3	Cass
168	Fargo	Fargo	159	462	0	12	12	283	372	655	159	171	745	1117	56.4	Cass
169	Fargo	Fargo	626	406	31	33	64	20	21	42	657	690	426	448	143.2	Cass
170	Fargo	Fargo	217	48	23	0	23	10	0	10	240	240	58	58	234.7	Cass
171	Fargo	Fargo	326	433	10	10	20	91	0	91	336	346	524	524	119.5	Cass
172	Fargo	Fargo	538	169	16	17	33	139	0	139	554	571	308	308	161.1	Cass
173	Fargo	Fargo	534	113	27	28	55	52	0	52	561	589	165	165	108.5	Cass
174	Fargo	Fargo	150	525	70	34	103	0	206	206	220	254	525	731	33.2	Cass
175	Fargo	Fargo	161	140	5	5	10	74	0	74	166	171	214	214	55.8	Cass
176	Fargo	Fargo	718	354	36	38	74	37	0	37	754	792	391	391	181.8	Cass
177	Fargo	Fargo	733	558	22	23	45	17	17	34	755	778	575	592	160.2	Cass
178	Fargo	Fargo	284	423	9	9	17	13	13	26	293	301	436	449	136.6	Cass
179	Fargo	Fargo	613	48	0	0	0	0	0	0	613	613	48	48	149.6	Cass
180	Fargo	Fargo	19	267	0	0	0	5	0	5	19	19	272	272	45.6	Cass
181	Fargo	Fargo	383	375	0	0	0	0	0	0	383	383	375	375	113.7	Cass
182	Fargo	Fargo	1089	528	33	34	66	16	16	32	1122	1156	544	560	181.6	Cass
183	Fargo	Fargo	211	190	6	7	13	6	6	12	217	224	196	202	93.2	Cass
184	Fargo	Fargo	15	1837	0	0	0	0	339	339	15	15	1837	2176	125.0	Cass
185	Fargo	Fargo	900	539	54	0	54	342	0	342	954	954	881	881	160.9	Cass

TAZ	Current Jurisdiction	Future Jurisdiction	HH 2015	Jobs 2015	Added HH by Year			Added Jobs by Year			Total Households by Year		Total Jobs by Year		Acres	County
					HH added 15-25	HH added 25-45	HH added 15-45	Jobs added 15-25	Jobs added 25-45	Jobs added 15-45	2025	2045	2025	2045		
186	Fargo	Fargo	469	32	0	0	0	12	0	12	469	469	44	44	212.2	Cass
187	Fargo	Fargo	393	35	148	0	148	0	0	0	541	541	35	35	82.8	Cass
188	Fargo	Fargo	1180	52	0	0	0	0	0	0	1180	1180	52	52	90.5	Cass
189	Fargo	Fargo	48	2774	61	0	61	0	0	0	109	109	2774	2774	128.7	Cass
190	Fargo	Fargo	2	224	0	0	0	0	211	211	2	2	224	435	80.1	Cass
191	Fargo	Fargo	2	542	0	0	0	0	0	0	2	2	542	542	53.0	Cass
192	Fargo	Fargo	2	163	0	0	0	0	232	232	2	2	163	395	62.9	Cass
193	Fargo	Fargo	4	1104	0	0	0	56	100	156	4	4	1160	1260	89.0	Cass
194	Fargo	Fargo	27	1052	0	0	0	0	0	0	27	27	1052	1052	67.6	Cass
195	Fargo	Fargo	4	2946	0	0	0	0	0	0	4	4	2946	2946	143.2	Cass
196	Fargo	Fargo	1000	353	0	0	0	15	0	15	1000	1000	368	368	161.6	Cass
197	Fargo	Fargo	0	454	0	0	0	0	0	0	0	0	454	454	30.2	Cass
198	Fargo	Fargo	245	492	443	0	443	0	0	0	688	688	492	492	63.2	Cass
199	Fargo	Fargo	194	642	0	0	0	285	0	285	194	194	927	927	55.2	Cass
200	Fargo	Fargo	626	120	127	0	127	0	0	0	752	752	120	120	56.7	Cass
201	Fargo	Fargo	945	983	31	0	31	0	0	0	977	977	983	983	109.6	Cass
202	Fargo	Fargo	296	4091	0	0	0	0	0	0	296	296	4091	4091	161.0	Cass
203	Fargo	Fargo	166	1871	0	0	0	0	0	0	166	166	1871	1871	115.2	Cass
204	Fargo	Fargo	5	365	0	0	0	2	1	3	5	5	367	368	45.0	Cass
205	Fargo	Fargo	8	928	0	0	0	0	0	0	8	8	928	928	76.0	Cass
206	Fargo	Fargo	872	33	0	0	0	0	0	0	872	872	33	33	70.1	Cass
207	Fargo	Fargo	799	712	0	0	0	0	0	0	799	799	712	712	95.5	Cass
208	Fargo	Fargo	5	1291	0	0	0	25	0	25	5	5	1316	1316	59.3	Cass
209	Fargo	Fargo	343	1621	0	0	0	0	0	0	343	343	1621	1621	160.9	Cass
235	Fargo	Fargo	736	199	0	0	0	350	607	957	736	736	549	1156	214.5	Cass
237	Fargo	Fargo	506	345	0	0	0	250	0	250	506	506	595	595	151.5	Cass
238	Fargo	Fargo	285	0	0	0	0	25	2	27	285	285	25	27	84.3	Cass
239	Fargo	Fargo	225	60	0	0	0	50	0	50	225	225	110	110	90.3	Cass
240	Fargo	Fargo	143	76	0	0	0	0	0	0	143	143	76	76	47.6	Cass
241	Fargo	Fargo	118	36	100	0	100	30	48	77	218	218	66	113	91.5	Cass
242	Fargo	Fargo	244	26	236	85	322	63	109	173	480	566	89	199	104.2	Cass
244	Fargo	Fargo	499	1061	100	0	100	100	652	752	599	599	1161	1813	271.3	Cass
245	Fargo	Fargo	3	385	0	0	0	0	0	0	3	3	385	385	85.7	Cass
246	Fargo	Fargo	164	882	194	50	244	50	0	50	358	408	932	932	169.3	Cass
247	Fargo	Fargo	225	120	100	0	100	50	0	50	325	325	170	170	84.0	Cass
248	Fargo	Fargo	37	141	213	0	213	0	0	0	250	250	141	141	59.8	Cass
249	Fargo	Fargo	294	77	0	0	0	0	0	0	294	294	77	77	105.5	Cass
250	Fargo	Fargo	139	23	27	0	27	13	0	13	166	166	36	36	47.9	Cass
251	Fargo	Fargo	1	481	0	0	0	0	0	0	1	1	481	481	52.7	Cass
252	Fargo	Fargo	105	496	0	46	46	0	0	0	105	151	496	496	127.9	Cass
253	Fargo	Fargo	4	508	86	119	206	0	49	49	90	209	508	557	171.3	Cass
254	Fargo	Fargo	179	981	100	0	100	0	0	0	279	279	981	981	172.5	Cass
256	Fargo	Fargo	0	25	600	0	600	1000	0	1000	600	600	1025	1025	174.5	Cass

TAZ	Current Jurisdiction	Future Jurisdiction	HH 2015	Jobs 2015	Added HH by Year			Added Jobs by Year			Total Households by Year		Total Jobs by Year		Acres	County
					HH added 15-25	HH added 25-45	HH added 15-45	Jobs added 15-25	Jobs added 25-45	Jobs added 15-45	2025	2045	2025	2045		
257	Fargo	Fargo	654	55	0	0	0	0	0	0	654	654	55	55	133.0	Cass
258	Fargo	Fargo	411	378	289	0	289	0	0	0	700	700	378	378	107.3	Cass
259	Fargo	Fargo	105	570	63	0	63	0	668	668	168	168	570	1238	116.6	Cass
260	Fargo	Fargo	32	229	0	0	0	0	0	0	32	32	229	229	78.7	Cass
261	Fargo	Fargo	112	14	0	0	0	16	0	16	112	112	30	30	42.2	Cass
262	Fargo	Fargo	726	37	0	0	0	0	0	0	726	726	37	37	149.7	Cass
263	Fargo	Fargo	505	96	293	0	293	0	0	0	799	799	96	96	91.3	Cass
264	Fargo	Fargo	204	312	0	0	0	0	0	0	204	204	312	312	59.5	Cass
265	Fargo	Fargo	339	652	31	0	31	0	698	698	370	370	652	1350	55.3	Cass
266	Fargo	Fargo	150	676	0	0	0	13	100	113	150	150	689	789	83.7	Cass
267	Fargo	Fargo	592	115	0	0	0	88	0	88	592	592	203	203	170.6	Cass
268	Fargo	Fargo	129	99	60	0	60	0	0	0	189	189	99	99	71.0	Cass
269	Fargo	Fargo	960	1022	0	0	0	25	373	398	960	960	1047	1420	178.0	Cass
270	Fargo	Fargo	396	191	0	0	0	14	0	14	396	396	205	205	114.0	Cass
271	Fargo	Fargo	1004	401	0	0	0	64	0	64	1004	1004	465	465	114.3	Cass
272	Fargo	Fargo	512	737	235	0	235	13	0	13	747	747	750	750	149.1	Cass
273	Fargo	Fargo	465	324	74	0	74	0	0	0	539	539	324	324	116.3	Cass
274	Fargo	Fargo	386	278	0	0	0	82	0	82	386	386	360	360	100.8	Cass
275	Fargo	Fargo	546	1204	60	0	60	0	0	0	606	606	1204	1204	162.2	Cass
276	Fargo	Fargo	248	83	0	0	0	0	0	0	248	248	83	83	82.9	Cass
277	Fargo	Fargo	143	134	13	0	13	50	0	50	156	156	184	184	107.3	Cass
278	Fargo	Fargo	278	577	56	0	56	0	0	0	334	334	577	577	140.2	Cass
279	Fargo	Fargo	379	273	0	0	0	0	0	0	379	379	273	273	172.5	Cass
280	Fargo	Fargo	396	1021	0	0	0	0	0	0	396	396	1021	1021	445.5	Cass
281	Fargo	Fargo	263	283	0	0	0	0	0	0	263	263	283	283	109.1	Cass
296	Fargo	Fargo	20	0	0	0	0	66	0	66	20	20	66	66	124.1	Cass
297	Fargo	Fargo	167	21	11	0	11	0	0	0	179	179	21	21	118.2	Cass
298	Fargo	Fargo	191	126	0	0	0	0	0	0	191	191	126	126	322.0	Cass
299	Fargo	Fargo	94	30	11	0	11	10	0	10	105	105	40	40	69.1	Cass
300	Fargo	Fargo	40	111	11	0	11	74	0	74	51	51	185	185	73.5	Cass
301	Fargo	Fargo	109	20	0	0	0	6	0	6	109	109	26	26	74.6	Cass
302	Fargo	Fargo	17	2	100	119	219	50	16	66	117	236	52	68	85.6	Cass
303	Fargo	Fargo	0	0	79	166	244	1000	0	1000	79	244	1000	1000	99.9	Cass
304	Fargo	Fargo	286	17	0	0	0	4	0	4	286	286	21	21	109.5	Cass
305	Fargo	Fargo	26	528	50	0	50	0	0	0	76	76	528	528	83.6	Cass
306	Fargo	Fargo	0	393	30	0	30	0	0	0	30	30	393	393	89.0	Cass
307	Fargo	Fargo	158	6	0	0	0	153	0	153	158	158	159	159	68.8	Cass
308	Fargo	Fargo	656	104	50	0	50	37	146	183	706	706	141	287	229.7	Cass
309	Fargo	Fargo	250	669	17	3	21	0	0	0	268	271	669	669	85.7	Cass
310	Fargo	Fargo	397	21	0	0	0	21	24	45	397	397	42	66	96.8	Cass
311	Fargo	Fargo	310	153	0	0	0	0	32	32	310	310	153	185	160.6	Cass
312	Fargo	Fargo	1	27	150	0	150	400	0	400	151	151	427	427	105.4	Cass
313	Fargo	Fargo	168	59	10	0	10	0	0	0	179	179	59	59	139.8	Cass

TAZ	Current Jurisdiction	Future Jurisdiction	HH 2015	Jobs 2015	Added HH by Year			Added Jobs by Year			Total Households by Year		Total Jobs by Year		Acres	County
					HH added 15-25	HH added 25-45	HH added 15-45	Jobs added 15-25	Jobs added 25-45	Jobs added 15-45	2025	2045	2025	2045		
314	Fargo	Fargo	149	9	0	0	0	24	7	31	149	149	33	40	117.9	Cass
323	Fargo	Fargo	97	141	0	7	7	0	0	0	97	104	141	141	134.1	Cass
331	Fargo	Fargo	132	14	15	131	146	7	291	298	147	279	21	312	158.1	Cass
333	Fargo	Fargo	334	47	0	0	0	4	157	161	334	334	51	208	90.6	Cass
334	Fargo	Fargo	127	6	0	0	0	0	6	6	127	127	6	12	101.3	Cass
335	Fargo	Fargo	13	0	27	281	307	0	2	2	40	320	0	2	175.5	Cass
337	Fargo	Fargo	1	0	89	923	1012	4	171	175	90	1013	4	175	93.9	Cass
338	Fargo	Fargo	198	0	9	138	147	2	65	67	208	345	2	67	81.7	Cass
339	Fargo	Fargo	225	13	7	60	68	4	173	177	233	293	17	190	80.6	Cass
340	Fargo	Fargo	51	264	4	32	36	0	0	0	55	87	264	264	81.7	Cass
341	Fargo	Fargo	486	17	0	0	0	0	0	0	486	486	17	17	129.8	Cass
342	Fargo	Fargo	366	159	11	97	108	0	0	0	377	474	159	159	179.6	Cass
343	Fargo	Fargo	19	0	5	53	58	0	3	3	24	77	0	3	94.8	Cass
344	Fargo	Fargo	63	50	12	134	146	0	10	10	75	209	50	60	139.2	Cass
346	Fargo	Fargo	123	89	27	228	255	0	0	0	150	378	89	89	195.9	Cass
373	Fargo	Fargo	21	843	0	0	0	133	0	133	21	21	976	976	73.7	Cass
436	Fargo	Fargo	5	0	0	0	0	0	0	0	5	5	0	0	746.0	Cass
445	Fargo	Fargo	1	0	1	0	1	0	0	0	2	2	0	0	144.2	Cass
446	Fargo	Fargo	2	0	0	0	0	68	300	368	2	2	68	368	315.1	Cass
447	Fargo	Fargo	0	0	0	0	0	0	771	771	0	0	0	771	296.6	Cass
463	Fargo	Fargo	518	102	0	0	0	0	0	0	518	518	102	102	260.2	Cass
469	Fargo	Fargo	209	2	8	122	130	0	0	0	217	339	2	2	120.3	Cass
470	Fargo	Fargo	50	5	19	208	227	1	35	36	69	277	6	41	121.3	Cass
471	Fargo	Fargo	0	0	23	235	257	0	0	0	23	257	0	0	191.5	Cass
472	Fargo	Fargo	0	0	28	293	321	0	0	0	28	321	0	0	154.6	Cass
473	Fargo	Fargo	0	0	0	70	70	0	0	0	0	70	0	0	188.9	Cass
480	Fargo	Fargo	4	0	0	0	0	0	0	0	4	4	0	0	618.0	Cass
481	Fargo	Fargo	4	23	0	0	0	0	0	0	4	4	23	23	694.8	Cass
491	Fargo	Fargo	68	89	22	240	261	22	860	882	90	329	111	971	201.8	Cass
492	Fargo	Fargo	108	0	41	443	484	7	295	303	149	592	7	303	121.5	Cass
500	Fargo	Fargo	0	0	0	66	66	0	74	74	0	66	0	74	158.5	Cass
515	Fargo	Fargo	1	89	0	2	2	0	0	0	1	3	89	89	48.3	Cass
544	Fargo	Fargo	109	610	5	6	11	31	32	63	114	120	641	673	39.3	Cass
545	Fargo	Fargo	37	352	1	1	2	130	0	130	38	39	482	482	67.3	Cass
546	Fargo	Fargo	82	220	4	4	8	23	0	23	87	91	243	243	42.2	Cass
547	Fargo	Fargo	77	334	0	19	19	7	171	178	77	97	341	512	4.4	Cass
548	Fargo	Fargo	27	369	51	12	63	0	182	182	78	90	369	551	10.1	Cass
549	Fargo	Fargo	3	281	75	12	87	22	151	173	78	90	303	454	8.9	Cass
550	Fargo	Fargo	243	53	160	62	222	38	46	84	403	465	91	137	9.1	Cass
551	Fargo	Fargo	54	362	3	29	32	91	227	318	58	86	453	680	6.4	Cass
552	Fargo	Fargo	19	141	20	20	40	160	150	310	40	59	301	451	6.7	Cass
553	Fargo	Fargo	70	64	47	18	65	37	50	87	117	135	101	151	5.6	Cass
554	Fargo	Fargo	45	235	52	201	252	160	197	357	96	297	395	592	23.7	Cass

TAZ	Current Jurisdiction	Future Jurisdiction	HH 2015	Jobs 2015	Added HH by Year			Added Jobs by Year			Total Households by Year		Total Jobs by Year		Acres	County
					HH added 15-25	HH added 25-45	HH added 15-45	Jobs added 15-25	Jobs added 25-45	Jobs added 15-45	2025	2045	2025	2045		
555	Fargo	Fargo	58	209	24	13	37	400	305	705	82	95	609	914	23.6	Cass
556	Fargo	Fargo	138	186	139	43	182	175	180	355	277	320	361	541	23.3	Cass
557	Fargo	Fargo	34	698	36	11	47	0	336	336	70	81	698	1034	6.7	Cass
558	Fargo	Fargo	4	371	44	24	68	78	224	302	48	72	449	673	3.3	Cass
559	Fargo	Fargo	2	53	0	298	298	347	200	547	2	300	400	600	3.3	Cass
560	Fargo	Fargo	55	393	0	5	5	242	318	560	55	60	635	953	6.7	Cass
561	Fargo	Fargo	12	49	4	2	6	128	89	217	16	18	177	266	7.2	Cass
562	Fargo	Fargo	3	246	-3	0	-3	13	130	143	0	0	259	389	17.0	Cass
563	Fargo	Fargo	0	86	33	5	38	65	76	141	33	38	151	227	5.8	Cass
564	Fargo	Fargo	27	191	16	7	22	16	103	119	43	50	207	310	22.9	Cass
565	Fargo	Fargo	369	549	18	19	38	27	29	56	387	406	576	605	50.8	Cass
566	Fargo	Fargo	106	391	128	36	164	46	219	265	234	270	437	656	27.3	Cass
567	Fargo	Fargo	3	287	-2	0	-1	-211	0	-211	1	2	77	77	38.5	Cass
568	Fargo	Fargo	76	472	0	679	679	713	593	1306	76	755	1185	1778	19.6	Cass
569	Fargo	Fargo	12	160	43	27	70	121	141	262	55	82	281	422	7.5	Cass
570	Fargo	Fargo	2	127	30	5	35	44	86	130	33	38	171	257	11.3	Cass
571	Fargo	Fargo	12	75	36	24	60	30	52	82	48	72	105	157	3.3	Cass
572	Fargo	Fargo	0	45	64	10	74	72	59	131	64	74	117	176	3.4	Cass
573	Fargo	Fargo	284	282	196	374	570	517	399	916	480	854	799	1198	27.5	Cass
574	Fargo	Fargo	30	295	25	27	52	300	297	597	55	82	595	892	9.7	Cass
575	Fargo	Fargo	56	377	0	27	27	0	126	126	56	82	377	503	6.6	Cass
576	Fargo	Fargo	10	117	38	24	62	0	12	12	48	72	117	129	5.5	Cass
577	Fargo	Fargo	82	354	202	44	245	0	160	160	283	327	354	514	5.0	Cass
578	Fargo	Fargo	111	55	117	35	153	88	71	159	229	264	143	214	3.6	Cass
579	Fargo	Fargo	63	95	49	17	66	64	80	144	112	129	159	239	7.2	Cass
580	Fargo	Fargo	49	248	4	26	30	37	142	179	53	79	285	427	9.6	Cass
581	Fargo	Fargo	18	208	1	1	2	10	11	21	19	20	218	229	19.8	Cass
582	Fargo	Fargo	4	211	0	0	0	0	0	0	4	4	211	211	203.7	Cass
583	Fargo	Fargo	233	2	0	0	0	40	0	40	233	233	42	42	83.0	Cass
584	Fargo	Fargo	373	22	0	0	0	0	0	0	373	373	22	22	64.0	Cass
587	Fargo	Fargo	26	164	0	5	5	0	0	0	26	30	164	164	90.4	Cass
590	Fargo	Fargo	1	173	61	5	66	2000	1024	3024	61	67	2173	3197	170.8	Cass
629	Fargo	Fargo	12	4	6	58	64	0	0	0	18	76	4	4	104.5	Cass
707	Fargo	Fargo	57	89	29	0	29	0	0	0	86	86	89	89	360.6	Cass
708	Fargo	Fargo	440	6	0	0	0	43	0	43	440	440	49	49	108.1	Cass
709	Fargo	Fargo	13	0	100	47	147	50	0	50	113	160	50	50	73.0	Cass
711	Fargo	Fargo	320	23	0	0	0	0	0	0	320	320	23	23	76.3	Cass
714	Fargo	Fargo	28	1	0	0	0	1	0	1	28	28	2	2	10.1	Cass
715	Fargo	Fargo	117	57	0	0	0	0	5	5	117	117	57	62	53.9	Cass
717	Fargo	Fargo	0	0	1	0	1	12	0	12	1	1	12	12	23.3	Cass
718	Fargo	Fargo	277	0	50	0	50	69	146	215	327	327	69	215	53.2	Cass
719	Fargo	Fargo	200	9	0	0	0	29	0	29	200	200	38	38	66.9	Cass
720	Fargo	Fargo	0	0	100	0	100	100	73	173	100	100	100	173	74.5	Cass

TAZ	Current Jurisdiction	Future Jurisdiction	HH 2015	Jobs 2015	Added HH by Year			Added Jobs by Year			Total Households by Year		Total Jobs by Year		Acres	County
					HH added 15-25	HH added 25-45	HH added 15-45	Jobs added 15-25	Jobs added 25-45	Jobs added 15-45	2025	2045	2025	2045		
721	Fargo	Fargo	19	0	150	0	150	131	93	224	169	169	131	224	97.4	Cass
722	Fargo	Fargo	441	54	140	0	140	136	0	136	581	581	190	190	112.7	Cass
723	Fargo	Fargo	318	581	19	0	19	0	0	0	337	337	581	581	110.5	Cass
332	Frontier/Fargo	Frontier/Fargo	183	84	13	119	132	2	72	74	196	315	86	158	247.4	Cass
8	Harwood	Harwood	161	112	0	0	0	0	0	0	161	161	112	112	920.8	Cass
9	Harwood	Harwood	85	41	0	0	0	0	0	0	85	85	41	41	334.9	Cass
16	Harwood	Harwood	0	52	40	30	70	45	105	150	40	70	97	202	835.0	Cass
441	Harwood	Harwood	27	1	0	0	0	0	0	0	27	27	1	1	689.1	Cass
318	Horace	Horace	4	0	0	0	0	0	0	0	4	4	0	0	3807.9	Cass
319	Horace	Horace	36	5	0	0	0	0	0	0	36	36	5	5	147.2	Cass
320	Horace	Horace	37	0	0	0	0	0	0	0	37	37	0	0	273.8	Cass
321	Horace	Horace	82	13	0	0	0	0	0	0	82	82	13	13	205.1	Cass
322	Horace	Horace	59	2	0	0	0	0	0	0	59	59	2	2	53.6	Cass
324	Horace	Horace	0	0	240	0	240	0	0	0	240	240	0	0	162.9	Cass
361	Horace	Horace	96	12	0	0	0	0	0	0	96	96	12	12	1875.9	Cass
364	Horace	Horace	3	32	204	36	240	120	46	166	207	243	152	198	271.7	Cass
365	Horace	Horace	11	0	297	0	297	40	40	80	308	308	40	80	198.7	Cass
366	Horace	Horace	54	16	0	0	0	0	0	0	54	54	16	16	283.4	Cass
367	Horace	Horace	134	57	0	0	0	0	0	0	134	134	57	57	130.9	Cass
368	Horace	Horace	3	0	0	0	0	0	0	0	3	3	0	0	197.3	Cass
370	Horace	Horace	8	0	0	0	0	0	0	0	8	8	0	0	2598.3	Cass
479	Horace	Horace	1	0	0	0	0	0	0	0	1	1	0	0	262.0	Cass
588	Horace	Horace	131	37	219	219	438	0	0	0	350	569	37	37	288.3	Cass
589	Horace	Horace	2	0	339	339	678	0	0	0	341	680	0	0	226.2	Cass
593	Horace	Horace	11	0	0	0	0	0	0	0	11	11	0	0	220.5	Cass
594	Horace	Horace	3	2	95	0	95	0	0	0	98	98	2	2	123.8	Cass
595	Horace	Horace	0	0	0	0	0	0	0	0	0	0	0	0	133.2	Cass
596	Horace	Horace	2	0	0	0	0	0	0	0	2	2	0	0	160.3	Cass
597	Horace	Horace	4	0	0	0	0	0	0	0	4	4	0	0	229.7	Cass
599	Horace	Horace	2	0	0	0	0	0	0	0	2	2	0	0	174.8	Cass
673	Horace	Horace	7	0	0	0	0	0	0	0	7	7	0	0	1655.8	Cass
680	Horace	Horace	34	114	0	0	0	0	0	0	34	34	114	114	9123.0	Cass
696	Horace	Horace	20	0	0	0	0	0	0	0	20	20	0	0	139.4	Cass
697	Horace	Horace	201	58	0	0	0	0	0	0	201	201	58	58	164.6	Cass
700	Horace	Horace	0	4	0	0	0	0	0	0	0	0	4	4	20.6	Cass
716	Horace	Horace	40	17	0	0	0	0	0	0	40	40	17	17	102.3	Cass
474	Horace	Horace/Fargo	0	0	0	103	103	0	0	0	0	103	0	0	235.7	Cass
476	Horace	Horace/Fargo	3	0	0	68	68	0	34	34	3	71	0	34	227.7	Cass
477	Horace	Horace/Fargo	0	0	0	0	0	0	0	0	0	0	0	0	231.4	Cass
468	Horace/Fargo	Horace/Fargo	28	0	16	169	185	0	12	12	44	212	0	12	176.7	Cass
655	Kindred	Kindred	227	221	5	10	15	25	80	105	232	242	246	326	1318.4	Cass
656	Kindred	Kindred	80	113	10	30	40	40	30	70	90	120	153	183	5313.8	Cass
52	Mapleton	Mapleton	106	25	0	0	0	20	40	60	106	106	45	85	7700.2	Cass

TAZ	Current Jurisdiction	Future Jurisdiction	HH 2015	Jobs 2015	HH added 15-25	HH added 25-45	HH added 15-45	Jobs added 15-25	Jobs added 25-45	Jobs added 15-45	2025	2045	2025	2045	Acres	County
					Added HH by Year			**Added Jobs by Year**			**Total Households by Year**		**Total Jobs by Year**			
113	Mapleton	Mapleton	90	20	20	0	20	0	0	0	110	110	20	20	2864.0	Cass
704	Mapleton	Mapleton	97	371	80	20	100	90	300	390	177	197	461	761	1236.2	Cass
18	North River	North River	105	20	0	0	0	0	0	0	105	105	20	20	255.3	Cass
678	Oxbow	Oxbow	107	83	20	20	40	10	20	30	127	147	93	113	778.6	Cass
726	Prairie Rose/Fargo	Prairie Rose/Fargo	50	1	41	0	41	6	0	6	91	91	7	7	37.9	Cass
47	Reiles Acres	Reiles Acres	200	32	0	0	0	0	0	0	200	200	32	32	988.5	Cass
53	West Fargo	West Fargo	7	132	0	0	0	0	0	0	7	7	132	132	460.8	Cass
54	West Fargo	West Fargo	2	85	0	0	0	150	150	300	2	2	235	385	515.2	Cass
55	West Fargo	West Fargo	0	359	0	0	0	0	8	8	0	0	359	367	129.3	Cass
107	West Fargo	West Fargo	1	55	0	0	0	0	0	0	1	1	55	55	99.2	Cass
108	West Fargo	West Fargo	3	783	0	0	0	0	16	16	3	3	783	799	248.7	Cass
109	West Fargo	West Fargo	55	294	0	0	0	0	0	0	55	55	294	294	110.5	Cass
110	West Fargo	West Fargo	1	69	0	0	0	0	11	11	1	1	69	80	169.9	Cass
111	West Fargo	West Fargo	1	12	0	0	0	0	0	0	1	1	12	12	209.5	Cass
112	West Fargo	West Fargo	1	1	0	0	0	150	150	300	1	1	151	301	631.0	Cass
114	West Fargo	West Fargo	20	1294	0	0	0	500	500	1000	20	20	1794	2294	641.1	Cass
115	West Fargo	West Fargo	2	575	0	0	0	200	200	400	2	2	775	975	139.0	Cass
116	West Fargo	West Fargo	144	334	0	0	0	0	0	0	144	144	334	334	121.1	Cass
117	West Fargo	West Fargo	17	36	0	0	0	0	0	0	17	17	36	36	29.1	Cass
118	West Fargo	West Fargo	111	128	0	0	0	0	10	10	111	111	128	138	148.0	Cass
119	West Fargo	West Fargo	13	339	0	0	0	0	10	10	13	13	339	349	151.9	Cass
210	West Fargo	West Fargo	527	259	0	0	0	0	10	10	527	527	259	269	161.6	Cass
211	West Fargo	West Fargo	578	112	0	0	0	0	0	0	578	578	112	112	162.0	Cass
212	West Fargo	West Fargo	123	146	0	0	0	0	0	0	123	123	146	146	69.9	Cass
213	West Fargo	West Fargo	509	319	0	0	0	0	0	0	509	509	319	319	159.8	Cass
214	West Fargo	West Fargo	507	217	0	0	0	0	0	0	507	507	217	217	155.5	Cass
215	West Fargo	West Fargo	552	29	0	0	0	0	0	0	552	552	29	29	194.4	Cass
216	West Fargo	West Fargo	438	352	0	0	0	0	0	0	438	438	352	352	147.8	Cass
217	West Fargo	West Fargo	194	82	0	0	0	0	0	0	194	194	82	82	50.4	Cass
218	West Fargo	West Fargo	412	196	0	0	0	0	0	0	412	412	196	196	125.7	Cass
219	West Fargo	West Fargo	296	18	0	0	0	0	0	0	296	296	18	18	63.9	Cass
220	West Fargo	West Fargo	964	959	0	0	0	0	0	0	964	964	959	959	257.6	Cass
221	West Fargo	West Fargo	339	616	86	0	86	0	47	47	425	425	616	663	123.3	Cass
222	West Fargo	West Fargo	213	115	0	0	0	0	0	0	213	213	115	115	84.6	Cass
223	West Fargo	West Fargo	239	52	0	0	0	0	0	0	239	239	52	52	99.5	Cass
224	West Fargo	West Fargo	874	66	0	0	0	500	0	500	874	874	566	566	338.1	Cass
225	West Fargo	West Fargo	262	96	0	0	0	0	0	0	262	262	96	96	111.1	Cass
226	West Fargo	West Fargo	180	233	0	0	0	0	0	0	180	180	233	233	107.6	Cass
230	West Fargo	West Fargo	182	0	410	0	410	0	0	0	592	592	0	0	154.1	Cass
231	West Fargo	West Fargo	465	89	100	0	100	0	0	0	565	565	89	89	281.6	Cass
232	West Fargo	West Fargo	309	24	0	0	0	500	0	500	309	309	524	524	161.5	Cass
233	West Fargo	West Fargo	5	514	0	0	0	0	7	7	5	5	514	521	111.7	Cass
234	West Fargo	West Fargo	6	0	0	0	0	0	0	0	6	6	0	0	3.4	Cass

TAZ	Current Jurisdiction	Future Jurisdiction	HH 2015	Jobs 2015	Added HH by Year			Added Jobs by Year			Total Households by Year		Total Jobs by Year		Acres	County
					HH added 15-25	HH added 25-45	HH added 15-45	Jobs added 15-25	Jobs added 25-45	Jobs added 15-45	2025	2045	2025	2045		
316	West Fargo	West Fargo	61	38	0	0	0	0	0	0	61	61	38	38	184.1	Cass
448	West Fargo	West Fargo	209	45	0	0	0	0	0	0	209	209	45	45	200.8	Cass
449	West Fargo	West Fargo	0	0	0	0	0	0	0	0	0	0	0	0	652.8	Cass
452	West Fargo	West Fargo	20	3	0	0	0	0	0	0	20	20	3	3	737.9	Cass
456	West Fargo	West Fargo	203	0	350	0	350	150	0	150	553	553	150	150	263.3	Cass
457	West Fargo	West Fargo	299	19	501	0	501	500	0	500	800	800	519	519	152.1	Cass
461	West Fargo	West Fargo	534	147	150	0	150	0	0	0	684	684	147	147	142.1	Cass
462	West Fargo	West Fargo	266	20	0	0	0	0	0	0	266	266	20	20	163.8	Cass
464	West Fargo	West Fargo	12	72	0	0	0	0	0	0	12	12	72	72	85.1	Cass
465	West Fargo	West Fargo	134	0	0	0	0	0	0	0	134	134	0	0	55.2	Cass
466	West Fargo	West Fargo	216	4	170	0	170	0	0	0	386	386	4	4	273.3	Cass
467	West Fargo	West Fargo	77	106	0	0	0	350	11	361	77	77	456	467	164.8	Cass
531	West Fargo	West Fargo	63	981	0	0	0	0	0	0	63	63	981	981	94.9	Cass
532	West Fargo	West Fargo	414	140	0	0	0	0	0	0	414	414	140	140	129.7	Cass
533	West Fargo	West Fargo	375	52	0	0	0	0	0	0	375	375	52	52	110.4	Cass
585	West Fargo	West Fargo	0	230	0	0	0	750	10	760	0	0	980	990	158.6	Cass
586	West Fargo	West Fargo	86	0	150	0	150	0	0	0	236	236	0	0	187.7	Cass
630	West Fargo	West Fargo	510	25	0	0	0	0	0	0	510	510	25	25	194.8	Cass
631	West Fargo	West Fargo	40	0	0	0	0	0	0	0	40	40	0	0	152.2	Cass
666	West Fargo	West Fargo	24	0	0	0	0	0	0	0	24	24	0	0	51.6	Cass
685	West Fargo	West Fargo	45	2	0	0	0	0	0	0	45	45	2	2	32.6	Cass
687	West Fargo	West Fargo	36	57	0	0	0	0	0	0	36	36	57	57	34.0	Cass
689	West Fargo	West Fargo	94	85	0	0	0	0	0	0	94	94	85	85	56.2	Cass
690	West Fargo	West Fargo	37	100	0	0	0	0	0	0	37	37	100	100	79.4	Cass
691	West Fargo	West Fargo	0	0	0	0	0	0	0	0	0	0	0	0	11.4	Cass
692	West Fargo	West Fargo	31	0	0	0	0	0	0	0	31	31	0	0	29.8	Cass
693	West Fargo	West Fargo	36	6	0	0	0	0	0	0	36	36	6	6	38.5	Cass
694	West Fargo	West Fargo	95	13	0	0	0	0	0	0	95	95	13	13	77.0	Cass
695	West Fargo	West Fargo	40	12	0	0	0	0	0	0	40	40	12	12	56.9	Cass
698	West Fargo	West Fargo	106	5	0	0	0	0	0	0	106	106	5	5	88.1	Cass
710	West Fargo	West Fargo	100	25	0	0	0	0	0	0	100	100	25	25	74.3	Cass
724	West Fargo	West Fargo	2	0	170	0	170	150	0	150	172	172	150	150	60.3	Cass
725	West Fargo	West Fargo	0	23	0	0	0	200	0	200	0	0	223	223	113.2	Cass
727	West Fargo	West Fargo	164	7	0	0	0	0	0	0	164	164	7	7	89.7	Cass
105	West Fargo/Fargo	West Fargo/Fargo	9	381	0	0	0	0	0	0	9	9	381	381	319.5	Cass
315	West Fargo/Fargo	West Fargo/Fargo	79	6	75	0	75	16	0	16	154	154	22	22	160.9	Cass
598	West Fargo/Horace	West Fargo/Horace	2	0	580	200	780	0	0	0	582	782	0	0	230.8	Cass
622	Barnesville	Barnesville	119	36	36	55	91	20	41	61	155	210	56	97	1261.9	Clay
623	Barnesville	Barnesville	0	0	0	0	0	0	0	0	0	0	0	0	24.9	Clay
640	Barnesville	Barnesville	110	97	20	35	55	12	25	37	130	165	109	134	6718.7	Clay
660	Barnesville	Barnesville	356	201	0	0	0	10	21	31	356	356	211	232	245.8	Clay
661	Barnesville	Barnesville	33	132	0	0	0	30	62	92	33	33	162	224	1175.3	Clay
662	Barnesville	Barnesville	37	27	0	0	0	20	41	61	37	37	47	88	9071.3	Clay

TAZ	Current Jurisdiction	Future Jurisdiction	HH 2015	Jobs 2015	Added HH by Year			Added Jobs by Year			Total Households by Year		Total Jobs by Year		Acres	County
					HH added 15-25	HH added 25-45	HH added 15-45	Jobs added 15-25	Jobs added 25-45	Jobs added 15-45	2025	2045	2025	2045		
663	Barnesville	Barnesville	43	1	-8	0	-8	0	0	0	36	36	1	1	659.2	Clay
712	Barnesville	Barnesville	433	304	0	0	0	0	0	0	433	433	304	304	232.8	Clay
713	Barnesville	Barnesville	13	49	70	80	150	20	41	61	83	163	69	110	469.4	Clay
5	Clay	Clay	75	15	-13	0	-13	0	0	0	62	62	15	15	10277.9	Clay
6	Clay	Clay	57	72	0	10	10	10	10	20	57	67	82	92	21713.4	Clay
7	Clay	Clay	62	0	-11	0	-11	0	0	0	51	51	0	0	15446.5	Clay
21	Clay	Clay	117	25	10	10	20	0	0	0	127	137	25	25	15676.2	Clay
22	Clay	Clay	28	0	-5	0	-5	0	0	0	23	23	0	0	3779.6	Clay
72	Clay	Clay	0	0	0	3	3	0	0	0	0	3	0	0	217.9	Clay
73	Clay	Clay	28	10	-5	0	-5	0	0	0	23	23	10	10	4416.6	Clay
75	Clay	Clay	0	0	0	1	1	0	0	0	0	1	0	0	93.2	Clay
137	Clay	Clay	0	0	0	0	0	0	0	0	0	0	0	0	212.0	Clay
140	Clay	Clay	0	0	0	3	3	0	0	0	0	3	0	0	158.7	Clay
141	Clay	Clay	0	0	0	3	3	0	0	0	0	3	0	0	148.5	Clay
144	Clay	Clay	19	10	-3	0	-3	0	0	0	16	16	10	10	4816.8	Clay
292	Clay	Clay	12	68	-2	0	-2	0	0	0	9	9	68	68	3568.2	Clay
293	Clay	Clay	2	0	0	11	11	0	0	0	2	14	0	0	654.8	Clay
347	Clay	Clay	0	3	0	0	0	0	0	0	0	0	3	3	314.1	Clay
348	Clay	Clay	43	7	-7	0	-7	0	0	0	35	35	7	7	10075.3	Clay
351	Clay	Clay	6	1	-1	0	-1	0	0	0	5	5	1	1	1353.1	Clay
382	Clay	Clay	1	0	0	11	11	0	0	0	1	12	0	0	629.4	Clay
395	Clay	Clay	5	2	-1	0	-1	0	0	0	4	4	2	2	2700.4	Clay
396	Clay	Clay	0	0	0	4	4	0	0	0	0	4	0	0	243.3	Clay
397	Clay	Clay	3	0	0	3	3	0	0	0	3	6	0	0	207.4	Clay
398	Clay	Clay	3	0	0	2	2	0	0	0	3	6	0	0	155.9	Clay
399	Clay	Clay	0	0	0	1	1	0	0	0	0	1	0	0	90.0	Clay
400	Clay	Clay	0	0	0	2	2	0	0	0	0	2	0	0	154.2	Clay
401	Clay	Clay	0	0	0	3	3	0	0	0	0	3	0	0	233.9	Clay
402	Clay	Clay	1	2	0	0	0	0	0	0	1	1	2	2	606.0	Clay
403	Clay	Clay	0	0	0	1	1	0	0	0	0	1	0	0	69.1	Clay
404	Clay	Clay	6	0	0	2	2	0	0	0	6	8	0	0	119.7	Clay
405	Clay	Clay	2	0	0	1	1	0	0	0	2	3	0	0	96.2	Clay
411	Clay	Clay	0	0	0	2	2	0	0	0	0	2	0	0	102.6	Clay
413	Clay	Clay	0	0	0	1	1	0	0	0	0	1	0	0	98.4	Clay
414	Clay	Clay	9	0	0	2	2	0	0	0	9	10	0	0	102.5	Clay
415	Clay	Clay	1	1	0	0	0	0	0	0	1	1	1	1	220.6	Clay
416	Clay	Clay	0	0	0	0	0	0	0	0	0	0	0	0	111.0	Clay
417	Clay	Clay	0	0	0	0	0	0	0	0	0	0	0	0	172.2	Clay
422	Clay	Clay	0	0	0	3	3	0	0	0	0	3	0	0	149.6	Clay
423	Clay	Clay	0	0	0	0	0	0	0	0	0	0	0	0	357.9	Clay
424	Clay	Clay	2	0	0	0	0	0	0	0	2	2	0	0	636.1	Clay
425	Clay	Clay	0	0	0	0	0	0	0	0	0	0	0	0	414.7	Clay
426	Clay	Clay	0	0	0	0	0	0	0	0	0	0	0	0	157.7	Clay

TAZ	Current Jurisdiction	Future Jurisdiction	HH 2015	Jobs 2015	Added HH by Year			Added Jobs by Year			Total Households by Year		Total Jobs by Year		Acres	County
					HH added 15-25	HH added 25-45	HH added 15-45	Jobs added 15-25	Jobs added 25-45	Jobs added 15-45	2025	2045	2025	2045		
428	Clay	Clay	2	0	0	0	0	0	0	0	2	2	0	0	462.8	Clay
429	Clay	Clay	0	33	0	0	0	0	0	0	0	0	33	33	158.9	Clay
502	Clay	Clay	25	22	-4	0	-4	0	0	0	20	20	22	22	2952.7	Clay
505	Clay	Clay	4	24	0	5	5	0	0	0	4	9	24	24	354.4	Clay
507	Clay	Clay	1	0	0	0	0	0	0	0	1	1	0	0	248.3	Clay
508	Clay	Clay	1	0	0	0	0	0	0	0	1	1	0	0	679.6	Clay
509	Clay	Clay	0	0	0	7	7	0	0	0	0	7	0	0	488.2	Clay
510	Clay	Clay	1	0	0	10	10	0	0	0	1	11	0	0	679.8	Clay
511	Clay	Clay	1	2	0	0	0	0	0	0	1	1	2	2	667.2	Clay
513	Clay	Clay	7	0	0	0	0	0	0	0	7	7	0	0	629.5	Clay
521	Clay	Clay	1	15	0	0	0	0	0	0	1	1	15	15	1016.8	Clay
534	Clay	Clay	0	0	0	6	6	0	0	0	0	6	0	0	339.7	Clay
535	Clay	Clay	1	0	0	5	5	0	0	0	1	7	0	0	352.5	Clay
536	Clay	Clay	2	3	0	0	0	0	0	0	2	2	3	3	349.3	Clay
537	Clay	Clay	0	0	0	4	4	0	0	0	0	4	0	0	235.2	Clay
538	Clay	Clay	1	0	0	10	10	0	0	0	1	12	0	0	707.0	Clay
539	Clay	Clay	0	0	0	0	0	0	0	0	0	0	0	0	469.3	Clay
600	Clay	Clay	50	1	-9	0	-9	0	0	0	41	41	1	1	5029.5	Clay
605	Clay	Clay	10	5	-2	0	-2	0	0	0	9	9	5	5	2596.6	Clay
606	Clay	Clay	17	1	-3	0	-3	0	0	0	14	14	1	1	3853.0	Clay
607	Clay	Clay	91	73	10	30	40	0	0	0	101	131	73	73	12755.1	Clay
608	Clay	Clay	2	0	0	0	0	0	0	0	2	2	0	0	1917.7	Clay
617	Clay	Clay	66	5	-12	0	-12	0	0	0	54	54	5	5	17054.3	Clay
618	Clay	Clay	12	2	-2	0	-2	0	0	0	10	10	2	2	4541.4	Clay
619	Clay	Clay	63	27	-11	0	-11	0	0	0	52	52	27	27	9438.3	Clay
620	Clay	Clay	5	6	-1	0	-1	0	0	0	4	4	6	6	3542.2	Clay
621	Clay	Clay	21	15	-4	0	-4	0	0	0	17	17	15	15	6730.3	Clay
624	Clay	Clay	45	37	-8	0	-8	0	0	0	37	37	37	37	3034.5	Clay
633	Clay	Clay	82	18	-14	0	-14	0	0	0	68	68	18	18	10461.2	Clay
636	Clay	Clay	8	14	-1	0	-1	0	0	0	6	6	14	14	3885.6	Clay
664	Clay	Clay	14	13	-3	0	-3	0	0	0	12	12	13	13	6751.7	Clay
682	Clay	Clay	5	3	-1	0	-1	0	0	0	4	4	3	3	2160.4	Clay
701	Clay	Clay	17	0	-3	0	-3	0	0	0	14	14	0	0	6446.2	Clay
702	Clay	Clay	39	5	-7	0	-7	0	0	0	32	32	5	5	15160.9	Clay
19	Clay	Moorhead	40	13	6	17	24	19	25	44	46	63	32	57	3635.4	Clay
20	Clay	Moorhead	98	11	-17	0	-17	0	10	10	81	81	11	21	8329.8	Clay
23	Clay	Moorhead	3	0	0	9	9	0	0	0	3	12	0	0	639.2	Clay
142	Clay	Moorhead	3	3	119	250	369	21	30	51	122	372	24	54	475.4	Clay
295	Clay	Moorhead	0	0	0	122	122	0	20	20	0	122	0	20	156.2	Clay
379	Clay	Moorhead	1	0	0	5	5	0	10	10	1	6	0	10	336.3	Clay
380	Clay	Moorhead	4	0	0	2	2	0	20	20	4	6	0	20	164.7	Clay
381	Clay	Moorhead	3	18	0	100	100	25	25	50	3	103	43	68	617.5	Clay
390	Clay	Moorhead	52	6	25	0	25	0	9	9	78	78	6	15	182.8	Clay

TAZ	Current Jurisdiction	Future Jurisdiction	HH 2015	Jobs 2015	Added HH by Year			Added Jobs by Year			Total Households by Year		Total Jobs by Year		Acres	County
					HH added 15-25	HH added 25-45	HH added 15-45	Jobs added 15-25	Jobs added 25-45	Jobs added 15-45	2025	2045	2025	2045		
391	Clay	Moorhead	0	0	49	324	373	64	147	211	49	373	64	211	284.5	Clay
392	Clay	Moorhead	0	0	82	713	794	0	0	0	82	794	0	0	486.0	Clay
393	Clay	Moorhead	2	44	45	100	145	0	15	15	47	147	44	59	310.1	Clay
418	Clay	Moorhead	0	0	0	0	0	7	21	28	0	0	7	28	156.4	Clay
419	Clay	Moorhead	0	0	0	0	0	7	21	28	0	0	7	28	158.9	Clay
420	Clay	Moorhead	1	0	0	0	0	212	200	412	1	1	212	412	149.2	Clay
421	Clay	Moorhead	1	0	0	573	573	121	396	517	1	573	121	517	328.5	Clay
512	Clay	Moorhead	2	0	0	10	10	0	0	0	2	12	0	0	637.0	Clay
514	Clay	Moorhead	0	2	0	4	4	0	0	0	0	4	2	2	319.8	Clay
517	Clay	Moorhead	8	4	0	0	0	0	0	0	8	8	4	4	628.7	Clay
518	Clay	Moorhead	0	0	0	4	4	0	0	0	0	4	0	0	333.9	Clay
519	Clay	Moorhead	18	42	0	4	4	0	34	34	18	22	42	76	328.7	Clay
635	Clay	Moorhead	5	0	0	9	9	0	2	2	5	13	0	2	578.8	Clay
637	Comstock	Comstock	57	34	0	0	0	10	20	30	57	57	44	64	15999.7	Clay
683	Comstock	Comstock	22	8	0	0	0	10	10	20	22	22	18	28	6459.5	Clay
76	Dilworth	Dilworth	82	2	60	60	120	0	0	0	142	202	2	2	133.8	Clay
77	Dilworth	Dilworth	22	0	59	50	109	0	0	0	81	131	0	0	162.3	Clay
78	Dilworth	Dilworth	218	41	0	0	0	0	0	0	218	218	41	41	75.6	Clay
79	Dilworth	Dilworth	332	410	0	0	0	0	0	0	332	332	410	410	105.0	Clay
80	Dilworth	Dilworth	21	159	0	0	0	34	25	59	21	21	193	218	81.9	Clay
81	Dilworth	Dilworth	0	0	50	50	100	42	75	117	50	100	42	117	149.6	Clay
133	Dilworth	Dilworth	1	90	0	0	0	46	50	96	1	1	136	186	50.8	Clay
134	Dilworth	Dilworth	52	25	0	0	0	0	0	0	52	52	25	25	56.2	Clay
135	Dilworth	Dilworth	82	61	0	0	0	0	0	0	82	82	61	61	47.4	Clay
406	Dilworth	Dilworth	67	292	0	0	0	0	0	0	67	67	292	292	86.7	Clay
407	Dilworth	Dilworth	0	0	50	50	100	0	0	0	50	100	0	0	97.3	Clay
408	Dilworth	Dilworth	193	11	60	60	120	0	0	0	253	313	11	11	119.3	Clay
409	Dilworth	Dilworth	166	10	60	60	120	0	0	0	226	286	10	10	78.9	Clay
410	Dilworth	Dilworth	373	54	0	0	0	0	35	35	373	373	54	89	179.5	Clay
412	Dilworth	Dilworth	0	0	0	0	0	0	0	0	0	0	0	0	111.1	Clay
427	Dilworth	Dilworth	0	4	150	150	300	25	117	142	150	300	29	146	106.4	Clay
525	Dilworth	Dilworth	3	0	0	0	0	0	0	0	3	3	0	0	45.2	Clay
526	Dilworth	Dilworth	1	73	0	0	0	0	0	0	1	1	73	73	108.4	Clay
527	Dilworth	Dilworth	32	2	0	0	0	0	0	0	32	32	2	2	102.2	Clay
528	Dilworth	Dilworth	0	18	0	0	0	0	0	0	0	0	18	18	135.0	Clay
143	Dilworth	Moorhead	8	0	41	304	344	7	21	28	48	352	7	28	190.7	Clay
136	Dilworth	Moorhead/Dilworth	0	0	0	94	94	0	0	0	0	94	0	0	100.4	Clay
74	Glyndon	Glyndon	22	40	0	0	0	10	30	40	22	22	50	80	1270.9	Clay
138	Glyndon	Glyndon	508	395	20	50	70	0	0	0	528	578	395	395	1283.8	Clay
139	Glyndon	Glyndon	68	10	0	10	10	10	70	80	68	78	20	90	6331.0	Clay
501	Glyndon	Glyndon	37	8	-6	0	-6	0	0	0	31	31	8	8	5065.8	Clay
614	Glyndon	Glyndon	7	0	-1	0	-1	0	0	0	6	6	0	0	1250.3	Clay
632	Glyndon	Glyndon	21	0	-4	0	-4	0	0	0	17	17	0	0	5424.5	Clay

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					HH added 15-25	HH added 25-45	HH added 15-45	Jobs added 15-25	Jobs added 25-45	Jobs added 15-45	2025	2045	2025	2045		
665	Glyndon	Glyndon	3	0	-1	0	-1	0	0	0	3	3	0	0	584.0	Clay
504	Hawley	Hawley	13	60	35	120	155	24	50	74	48	168	84	134	2261.1	Clay
609	Hawley	Hawley	777	654	80	160	240	20	41	61	857	1017	674	715	2290.2	Clay
638	Hawley	Hawley	125	136	0	80	80	50	103	153	125	205	186	289	7646.3	Clay
639	Hawley	Hawley	61	123	4	20	24	50	103	153	65	85	173	276	5722.2	Clay
24	Moorhead	Moorhead	163	6	0	0	0	0	0	0	163	163	6	6	184.2	Clay
25	Moorhead	Moorhead	0	0	0	0	0	0	0	0	0	0	0	0	234.4	Clay
26	Moorhead	Moorhead	94	15	9	0	9	0	7	7	103	103	15	22	837.5	Clay
27	Moorhead	Moorhead	287	47	50	0	50	0	0	0	337	337	47	47	1354.2	Clay
69	Moorhead	Moorhead	216	206	19	0	19	13	0	13	235	235	219	219	345.7	Clay
70	Moorhead	Moorhead	21	578	0	0	0	0	0	0	21	21	578	578	476.9	Clay
71	Moorhead	Moorhead	0	5	0	0	0	271	110	381	0	0	276	386	320.6	Clay
82	Moorhead	Moorhead	0	0	150	0	150	75	158	233	150	150	75	233	153.8	Clay
83	Moorhead	Moorhead	59	616	43	25	68	5	15	20	102	127	621	636	82.8	Clay
84	Moorhead	Moorhead	78	5	87	100	187	0	0	0	165	265	5	5	142.6	Clay
85	Moorhead	Moorhead	196	311	225	0	225	50	24	74	421	421	361	385	178.9	Clay
86	Moorhead	Moorhead	450	256	0	0	0	0	12	12	450	450	256	268	179.9	Clay
87	Moorhead	Moorhead	394	13	0	0	0	0	0	0	394	394	13	13	110.3	Clay
88	Moorhead	Moorhead	653	1233	16	16	33	24	31	55	670	686	1257	1288	228.7	Clay
89	Moorhead	Moorhead	116	112	0	0	0	0	0	0	116	116	112	112	68.4	Clay
129	Moorhead	Moorhead	13	1344	11	1	12	66	71	137	24	25	1410	1481	49.9	Clay
130	Moorhead	Moorhead	7	154	0	0	1	8	8	16	7	8	162	170	37.3	Clay
131	Moorhead	Moorhead	5	191	96	0	96	0	0	0	101	101	191	191	85.3	Clay
132	Moorhead	Moorhead	4	334	0	0	0	0	224	224	4	4	334	558	87.9	Clay
145	Moorhead	Moorhead	4	0	210	215	425	0	0	0	214	429	0	0	298.9	Clay
146	Moorhead	Moorhead	260	46	73	150	223	0	41	41	332	482	46	87	273.4	Clay
147	Moorhead	Moorhead	274	70	0	0	0	0	0	0	274	274	70	70	260.6	Clay
148	Moorhead	Moorhead	464	142	0	0	0	0	0	0	464	464	142	142	162.1	Clay
149	Moorhead	Moorhead	21	492	0	0	0	100	388	488	21	21	592	980	180.3	Clay
150	Moorhead	Moorhead	402	58	0	0	0	0	0	0	402	402	58	58	138.5	Clay
151	Moorhead	Moorhead	2	228	0	0	0	0	0	0	2	2	228	228	67.0	Clay
152	Moorhead	Moorhead	308	57	8	8	15	1	2	4	316	323	58	61	87.0	Clay
153	Moorhead	Moorhead	441	72	0	0	0	0	91	91	441	441	72	163	128.4	Clay
154	Moorhead	Moorhead	644	25	0	0	0	0	9	9	644	644	25	34	154.4	Clay
155	Moorhead	Moorhead	336	354	0	0	0	0	106	106	336	336	354	460	165.1	Clay
156	Moorhead	Moorhead	172	85	0	0	0	0	0	0	172	172	85	85	46.4	Clay
157	Moorhead	Moorhead	46	682	0	0	0	15	0	15	46	46	697	697	46.1	Clay
158	Moorhead	Moorhead	251	147	0	0	0	0	0	0	251	251	147	147	80.1	Clay
159	Moorhead	Moorhead	340	34	0	0	0	0	0	0	340	340	34	34	159.5	Clay
160	Moorhead	Moorhead	271	101	0	0	0	0	0	0	271	271	101	101	122.5	Clay
161	Moorhead	Moorhead	466	899	100	100	200	50	50	100	566	666	949	999	145.6	Clay
162	Moorhead	Moorhead	176	722	4	4	9	13	18	32	181	185	735	754	47.5	Clay
163	Moorhead	Moorhead	53	945	0	0	0	0	8	8	53	53	945	953	59.4	Clay

TAZ	Current Jurisdiction	Future Jurisdiction	HH 2015	Jobs 2015	Added HH by Year			Added Jobs by Year			Total Households by Year		Total Jobs by Year		Acres	County
					HH added 15-25	HH added 25-45	HH added 15-45	Jobs added 15-25	Jobs added 25-45	Jobs added 15-45	2025	2045	2025	2045		
164	Moorhead	Moorhead	369	397	0	0	0	0	102	102	369	369	397	499	83.0	Clay
165	Moorhead	Moorhead	247	258	0	0	0	0	0	0	247	247	258	258	115.2	Clay
166	Moorhead	Moorhead	63	1	0	0	0	0	5	5	63	63	1	6	98.7	Clay
167	Moorhead	Moorhead	536	140	0	0	0	0	7	7	536	536	140	147	258.6	Clay
282	Moorhead	Moorhead	844	247	0	0	0	0	29	29	844	844	247	276	412.4	Clay
283	Moorhead	Moorhead	194	2	81	0	81	0	1	1	276	276	2	3	159.7	Clay
284	Moorhead	Moorhead	674	585	0	0	0	0	48	48	674	674	585	633	165.4	Clay
285	Moorhead	Moorhead	61	915	0	0	0	75	0	75	61	61	990	990	136.3	Clay
286	Moorhead	Moorhead	475	3	100	-1	99	0	0	0	575	575	3	3	157.8	Clay
287	Moorhead	Moorhead	95	9	0	0	0	0	1	1	95	95	9	10	48.2	Clay
288	Moorhead	Moorhead	308	32	0	0	0	0	0	0	308	308	32	32	148.9	Clay
289	Moorhead	Moorhead	439	39	200	200	400	28	88	116	639	839	67	155	388.3	Clay
290	Moorhead	Moorhead	5	490	0	0	0	326	1263	1589	5	5	816	2079	633.6	Clay
291	Moorhead	Moorhead	21	44	0	0	0	0	200	200	21	21	44	244	3671.7	Clay
294	Moorhead	Moorhead	94	41	100	350	450	0	0	0	194	544	41	41	329.3	Clay
374	Moorhead	Moorhead	10	696	0	0	0	179	0	179	10	10	875	875	335.9	Clay
375	Moorhead	Moorhead	0	6	0	0	0	0	0	0	0	0	6	6	75.1	Clay
376	Moorhead	Moorhead	397	27	100	-6	94	0	53	53	497	491	27	80	288.3	Clay
377	Moorhead	Moorhead	61	12	80	100	180	0	0	0	141	241	12	12	304.1	Clay
378	Moorhead	Moorhead	0	100	80	100	180	0	0	0	80	180	100	100	320.3	Clay
383	Moorhead	Moorhead	602	141	300	8	308	0	88	88	902	910	141	229	318.0	Clay
384	Moorhead	Moorhead	239	304	0	0	0	100	0	100	239	239	404	404	158.9	Clay
385	Moorhead	Moorhead	49	0	300	150	450	100	0	100	349	499	100	100	178.9	Clay
386	Moorhead	Moorhead	302	29	150	250	400	100	300	400	452	702	129	429	323.1	Clay
387	Moorhead	Moorhead	0	25	0	0	0	200	66	266	0	0	225	291	33.8	Clay
388	Moorhead	Moorhead	132	143	40	100	140	0	0	0	173	273	143	143	165.0	Clay
389	Moorhead	Moorhead	5	0	118	13	131	0	0	0	123	136	0	0	176.3	Clay
431	Moorhead	Moorhead	212	128	0	0	0	0	0	0	212	212	128	128	81.5	Clay
520	Moorhead	Moorhead	0	21	0	0	0	0	2	2	0	0	21	23	320.1	Clay
522	Moorhead	Moorhead	418	140	0	0	0	0	77	77	418	418	140	217	80.2	Clay
523	Moorhead	Moorhead	0	175	0	0	0	24	0	24	0	0	199	199	23.2	Clay
524	Moorhead	Moorhead	264	10	0	0	0	0	47	47	264	264	10	57	57.5	Clay
540	Moorhead	Moorhead	187	15	0	0	0	0	0	0	187	187	15	15	55.2	Clay
541	Moorhead	Moorhead	123	142	3	3	6	4	4	7	126	129	146	149	35.4	Clay
542	Moorhead	Moorhead	46	86	50	1	51	50	2	52	96	97	136	138	31.5	Clay
543	Moorhead	Moorhead	201	125	0	0	0	0	71	71	201	201	125	196	68.7	Clay
591	Moorhead	Moorhead	152	62	0	0	0	0	0	0	152	152	62	62	40.2	Clay
592	Moorhead	Moorhead	400	30	0	0	0	0	0	0	400	400	30	30	196.6	Clay
349	Sabin	Sabin	57	89	0	0	0	20	10	30	57	57	109	119	5333.5	Clay
350	Sabin	Sabin	62	41	0	0	0	20	10	30	62	62	61	71	2889.2	Clay
394	Sabin	Sabin	7	3	0	0	0	0	35	35	7	7	3	38	663.7	Clay
506	Sabin	Sabin	140	7	10	30	40	0	10	10	150	180	7	17	685.4	Clay