

## Memorandum

To: Teri Kouba, Senior Planner, GF-EGF MPO  
Nancy Ellis, City Planner, City of East Grand Forks

From: Tom Ramler-Olson, AICP  
Eric Zweber, AICP

Date: May 17, 2021

Re: East Grand Forks 2050 Land Use Plan – Population Projections  
WSB Project No. 016569-000

The purpose of this memorandum is to discuss the various options available to calculate the 2050 population projection for the East Grand Forks Comprehensive Plan. First, we will review the projections from the 2045 East Grand Forks Comprehensive Plan; then, we will discuss projecting forward to 2050 using the same methodology as the 2045 Comprehensive Plan; and finally, we will present a series of projections based on a building permit basis.

<b>Year</b>	<b>0.6%</b>	<b>0.9%</b>	<b>1.2%</b>
2010	8,604	8,604	8,604
2015	8,865	8,998	9,133
2020	9,134	9,410	9,694
2025	9,412	9,842	10,290
2030	9,698	10,293	10,922
2035	9,992	10,764	11,593
2040	10,295	11,257	12,306
2045	10,608	11,773	13,062

The table above is directly from the 2045 Comprehensive Plan. The 2045 Comprehensive Plan began with the 2010 population of 8,604 residents and projected forward to 2045 using three growth rates: a growth rate of 0.6% annually, 0.9% annually, and 1.2% annually which created 2045 projections of 10,608, 11,773, and 13,062 respectively. Based on recent demographic data and building permits being issued, these projections need reconsideration.

The 2045 Comprehensive Plan projected a 2020 population of 9,134, 9,410, and 9,694 respectively. The Minnesota State Demographic Center estimates a 2018 population of 8,875 residents and ESRI projects a 2020 of 8,971 residents. These two figures would concur with the observation that the 2045 population projects are aggressive. Historically, the range of annual growth was between 0.1% and 1.4%. The growth rate between 2011 and 2020 is projected to be 0.42%.

<b>Table 2: Population Projections to 2050 using the 2045 Land Use Plan Methodology</b>			
<b>Year</b>	<b>0.6%</b>	<b>0.9%</b>	<b>1.2%</b>
2020	8,971	8,971	8,971
2025	9,243	9,382	9,522
2030	9,524	9,812	10,108
2035	9,813	10,261	10,729
2040	10,111	10,732	11,388
2045	10,418	11,223	12,088
2050	10,734	11,738	12,831

The table above displays the results of projecting the City’s population to 2050 using the same variety of growth rates used within the 2045 Comprehensive Plan. The starting point for all three projections is the 2020 ESRI projection of 8,971 residents. The three columns rely on 0.6%, 0.9%, and 1.2% growth rates used in the 2045 Land Use Plan. Since the population projections in the above table start from 2020, they do not match what was calculated in the 2045 Land Use Plan, which projected from the population surveyed in 2010.

<b>Table 3: Single Family Residential (SFR) Building Permits</b>	
<b>Period</b>	<b>Average SFR Units per Year</b>
2010-2017	16.13
2000-2009	47.70
1998-2007	58.30

The table above displays the average numbers of single-family building permits issue by the City each year. The ten-year period immediately following the 1997 Red River flood (1998-2007) averaged an annual issuance of a little over 58 permits. During the period from 2000 to 2009 (the new units that would have contributed population to the 2010 census), there was an average of almost 48 permits issued per year. These two ten-year periods included significant replacement of housing stock that was damaged during the flood. During the period from 2010 to 2017, there was an average of about 16 permits issued per year. The 2010-2017 period shows a single-family home periods market that was not experiencing a significant disruption like the post-flood decades.

<b>Table 4: Multiple Family Residential (MFR) Projects</b>		
<b>Decade</b>	<b>Total MFR Units</b>	<b>Number of Projects</b>
2010-2019	111	3
2000-2009	67	1
1990-1999	28	1
1980-1989	0	0

The table above displays the multiple-family units and projects that we constructed in the most recent decades. The period from 2010 to 2019 constructed three projects (36 units, 36 units, and 39 units respectively) for a total of 111 units. The period from 2000 to 2009 constructed one project of 67 units and the period from 1990 to 1999 constructed one project of 28 units. There were no multiple-family development projects constructed from 1980 to 1989. While the number of multiple-family projects have increased every decade, it can be argued that the last decade of multiple-family development was making up for the limited development between 1990-1999 and no development between 1980-1989.

<b>Population Projections to 2050 based a Methodology of Housing Unit Growth</b>						
<b>Year</b>	<b>20 SFR units/yr plus 36 MFR units/5 years</b>	<b>20 SFR units/yr plus 54 MFR units/5 years</b>	<b>30 SFR units/yr plus 36 MFR units/5 years</b>	<b>30 SFR units/yr plus 54 MFR units/5 years</b>	<b>40 SFR units/yr plus 36 MFR units/5 years</b>	<b>40 SFR units/yr plus 54 MFR units/5 years</b>
2018	8,875	8,875	8,875	8,875	8,875	8,875
2020	8,971	8,971	8,971	8,971	8,971	8,971
2025	9,307	9,338	9,443	9,474	9,580	9,611
2030	9,642	9,705	9,915	9,978	10,188	10,251
2035	9,978	10,072	10,387	10,481	10,797	10,891
2040	10,314	10,439	10,860	10,985	11,406	11,531
2045	10,649	10,806	11,332	11,488	12,014	12,171
2050	10,985	11,173	11,804	11,992	12,623	12,811
<b>Annual Growth Rate (2020-2050)</b>	0.75%	0.82%	1.05%	1.12%	1.36%	1.43%

SFR = Single-Family Residential  
MFR = Multiple-Family Residential

Note: Projection assumes 2.73 persons per household for SFR and 1.74 persons per household for MFR

The six columns in the table above were created using a methodology basis on housing growth. To create the housing unit methodology, we evaluated the building permits that have been issued by the City of East Grand Forks that are displayed in Tables 4 and 5. The average annual rate of building permits between 2010 and 2017 is 16.13 single-family residential dwelling units and a growth of 111 multiple-family residential units over the decade between 2010-2019. The decade between 2000-2009 had an average annual rate 47.70 single-family residential dwelling units and a growth of 67 multiple-family residential units.

The table above creates projection based on an annual building permit issuance of 20, 30, and 40 single-family units annually respectively expecting that the single-family residential growth rate will not return to the full growth rate before the Great Recession. From the 2045 transportation analysis zone (TAZ) data, the existing single-family housing units have an average of 2.73 persons per household. Additionally, WSB

considered the likelihood of multiple-family housing units being constructed between 2020 and 2050.

There have been three multiple-family residential project permits issued for a total 111 units between 2010 and 2019. As stated with the analysis of Table 5, it is possible that that this growth is higher than normal to make up for the limited development between 1980-1999. To reflect the multiple-family residential demand, three projections have been created where a 36-unit multiple-family residential building would be constructed every five years on top of the 20, 30, and 40 single-family units annually respectively and three projections of a 54-unit multiple-family residential building on top of three single-family projections. From the 2045 TAZ data, the existing multiple-family housing units have an average of 1.74 persons per households.

Based on these six projection methods, the East Grand Forks 2050 population would be projection to between 10,985 and 12,811 residents which would create an annual growth rate between 0.75% and 1.43% from 2020 and 2050.

#### Recommendation

WSB would recommend focusing on the projections the result from adding 20 single-family housing units per year plus a 36-unit multiple-family residential building once every five years. Those this projection would create a 2050 population projection of 10,985 residents and annual growth rate of 0.75%. This projection would be slightly greater than the growth experienced between 2010 and 2020 but less than the historic high growth rate of 1.4%. WSB believes that this projection anticipates of an improving economy and housing demand based on the strong employment growth within a number of large companies in northeast North Dakota and northwest Minnesota.

#### Next Steps:

Please review this information and provide feedback on which growth rate(s) should be used to create future land use scenarios and growth areas. I am happy to schedule a meeting to discuss the pros and cons of each. Also, if you would like the Steering Committee to weigh in on this please let me know and I will be happy to forward