An Updated Comprehensive Housing Needs Analysis For The City of Ely, Minnesota

Prepared For:

Ely Economic Development Authority
Ely Housing and Redevelopment Authority
Ely, Minnesota

July 2019

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July 3, 2019

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Ms. Omerza and Mr. Novak:

Attached is the analysis titled, "***An Update Comprehensive Housing Needs Analysis for the City of Ely, Minnesota."*** The market analysis examines current housing market conditions and determines the market potential for developing different types of owned and rented housing to 2030 in the City.

The scope of this study includes: an analysis of the demographic and economic characteristics of the City and surrounding area; a review of existing housing stock characteristics; an analysis of the for-sale housing market; an evaluation of rental market conditions in the City; a senior housing supply and demand analysis; an overview of special needs housing; and, an assessment of housing affordability in Ely. Development priorities are identified in the short-term along with specific development concepts for the recommended housing products. Housing demand is identified without and with the operation of the Polymet Mine.

Please contact us if you have questions or require additional information.

Sincerely,

MAXFIELD RESEARCH & CONSULTING LLC

Mary C. Bujold
President

Brian Smith
Senior Associate

Attachment

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Purpose and Scope of Study

Maxfield Research & Consulting, LLC was engaged by the Ely Economic Development Authority to provide an update to the Comprehensive Housing Needs Analysis completed for the City in 2015. The Housing Needs Analysis examines housing market conditions and recommends the amount and types of housing that should be developed to meet the needs of current and future households residing in the City.

The scope of this study includes: an analysis of the demographic and economic characteristics of the City and surrounding area; a review of the existing housing stock; an analysis of the for-sale housing market, rental market conditions, senior housing supply and demand and an assessment of housing affordability in Ely. Detailed recommendations are provided for the housing types identified as needed in Ely to 2030. Projections are provided for household growth scenarios without the addition of new mining operations and with the proposed Polymet Mining plant as they may impact the demand for housing in Ely. An assessment of other challenges associated with housing development is also provided.

Introduction

This section of the report examines factors related to the current and future demand for owner- and renter-occupied housing in Ely, Minnesota. It includes an analysis of population and household growth trends and projections, age distribution, household income, household type and household tenure. A review of these characteristics provides insight into the demand for various housing products in the Market Area.

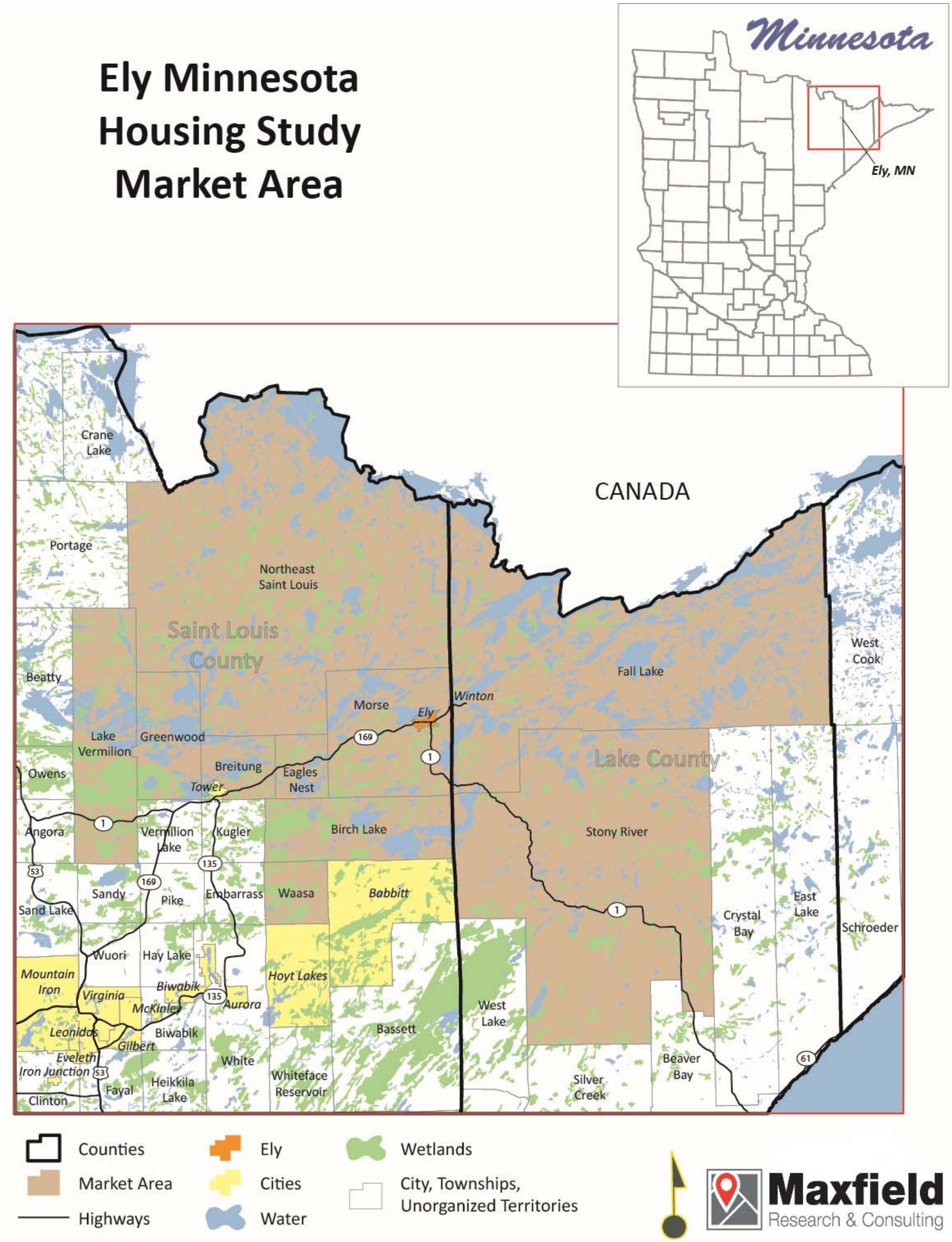
Market Area Definition

The primary draw area (Market Area) for housing in Ely was defined based on traffic patterns, community and school district boundaries, geographic factors and our general knowledge of housing draw areas across Minnesota. The Market Area is comprised of subdivisions in St. Louis and Lake Counties as summarized in Table D-1. Boundaries of these subdivisions were reapportioned between the 2000 and 2010 Censuses but represent the same combined geographic area.

TABLE D-1
MARKET AREA GEOGRAPHIES
ELY MARKET AREA
2000 and 2010

2000	2010
St. Louis County	
Angleworm Lake UT	Babbitt city
Babbitt city	Birch Lake UT
Bear Head Lake UT	Breitung township
Birch Lake UT	Eagles Nest township
Breitung township	Ely city
Crab Lake UT	Greenwood township
Eagles Nest township	Morse township
Ely city	NE St. Louis UT
Greenwood township	Tower city
Morse township	Waasa township
NE St. Louis UT	Winton city
Pfeiffer Lake UT	
Picket Lake UT	
Slim Lake UT	
Sunday Lake UT	
Tower city	
Waasa township	
Winton city	
Lake County	
Fall Lake township	Fall Lake township
Stoney River township	Stoney River township

Source: Maxfield Research & Consluting, LLC.


Ely Minnesota
Housing Study
Market Area
Minnesota
Ely, MN
CANADA
Crane Lake
Portage
Northeast Saint Louis
Saint Louis County
Beatty
Fall Lake
West Cook
Winton
Morse
Ely
Lake Vermilion
Greenwood
Breitung
Eagles Nest
Tower
Owens
Lake County
Angora
Vermilion Lake
Kugler
Birch Lake
Stony River
Sandy
Pike
Embarrass
Waasa
Babbitt
Sand Lake
Crystal Bay
East Lake
Schroeder
Mountain Iron
Wuori
Hay Lake
Hoyt Lakes
Virginia
Biwabik
McKinley
Aurora
West Lake
Leonidas
Biwabik
Bassett
Gilbert
Eveleth
Iron Junction
White
Whiteface Reservoir
Beaver Bay
Fayal
Heikkila Lake
Silver Creek
Clinton
Counties
Market Area
Highways
Ely
Cities
Water
Wetlands
City, Townships, Unorganized Territories
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Population and Household Growth from 2000 to 2010

Table D-2 presents population and household growth in 2000 and 2010. The data is from the U.S. Census Bureau.

Population

- The population in the City of Ely declined by 264 people (-7.1%) between 2000 and 2010 to 3,460 people. Similarly, the Market Area overall declined by 679 people (-6.2%) over the same period.

- Population decline in the City of Ely accounted for 39% of the total population loss in the Market Area over the decade, which is proportional to the percentage of the total Market Area population accounted for by Ely.

TABLE D-2
HISTORIC POPULATION AND HOUSEHOLD GROWTH TRENDS
ELY MARKET AREA
2000-2010

	U.S. Census		Change 2000-2010	
	2000	**2010**	**No.**	**Pct.**
Population				
Ely city	3,724	3,460	-264	-7.1%
Remainder of Market Area	7,285	6,870	-415	-5.7%
Market Area Total	**11,009**	**10,330**	**-679**	**-6.2%**
St. Louis County	*200,528*	*200,226*	*-302*	*-0.2%*
Households				
Ely city	1,694	1,681	-13	-0.8%
Remainder of Market Area	3,245	3,325	80	2.5%
Market Area Total	**4,939**	**5,006**	**67**	**1.4%**
St. Louis County	*82,619*	*84,783*	*2,164*	*2.6%*

Sources: U.S. Census Bureau; Maxfield Research Inc.

- A significant contributing factor to population declines in the 2000s is the housing market downturn and economic challenges faced locally and nationally. The Market Area communities were more affected than other portions of St. Louis County as the population in the County decreased by 302 people (-0.2%) compared to the loss in the Market Area of 679 people (-6.2%).

- As of 2010, the Market Area included an estimated 5% of the total population in St. Louis County.

Households

- Household growth is usually a more accurate indicator of housing needs than population growth since a household is, by definition, an occupied housing unit. Additional housing demand however, can come from changing demographics of the population base, which results in demand for different housing products.

- Ely lost 13 households (-0.8%) during the 2000s, resulting in a household base of 1,681 in 2010. The Remainder of the Market Area however, gained 80 households (2.5%), during the decade, increasing the total Market Area household base to 5,006 (1.4%).

- As mentioned, the Market Area experienced household growth although the population decreased. The disparate growth rates for population and households represent a trend toward fewer people per household, which is driven by demographic and social trends such as increasing divorce rates, a growing senior base, and couples' decisions to have fewer children or no children at all.

Population and Household Estimates and Projections

Table D-3 presents population and household growth estimates and projections for the Market Area to 2030. Estimates for 2019 and projections to 2030 are based on information from ESRI (a national demographics service provider) and the Minnesota State Demographer with adjustments calculated by Maxfield Research and Consulting. Building permit data is also incorporated into household growth estimates.

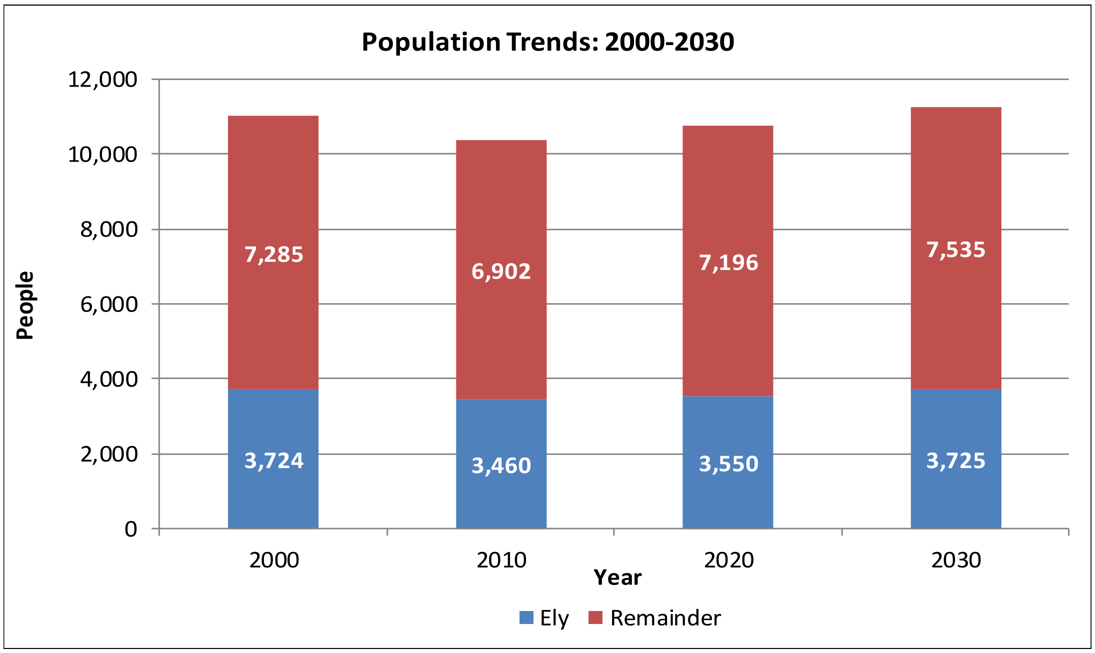
The growth forecasts do not consider any pending changes in the local employment market, such as the proposed Polymet and the Twin Metals projects. They are discussed in a separate section of the report. Table D-3 presents population and household estimates without the opening of these companies. Table D-4 however, presents projected population and household growth with the approved Polymet plant. We exclude the Twin Metals Mine from our projections as we believe this operation would not open before 2030. The Polymet plant will bring additional economic development and will create jobs in Ely and in surrounding communities, spurring construction of housing and other employment opportunities to serve additional households that would locate in the area.

Projected Population and Household Growth w/o Polymet and Twin Metals

- From 2010 to 2020, we estimate that Ely will have a stable household base with a slight increase in total households. Between 2010 and 2020, we estimate that 45 households (3%) would be added in the City for a total of 3,550 households in 2020.

- The Remainder of the Market Area is estimated to increase by 115 households (3.5%) between 2010 and 2020, a more rapid rate of growth than the prior decade during which 80 households (2.5%) were added.

- The population is expected to grow similar to households because of changes in the number of people per household. Population growth in Ely between 2010 and 2020 is projected at 3% or 90 people. Over the same interval, the Remainder of the Market Area is projected to increase by 294 people (4%) as households locate in some of the rural township areas surrounding the City.



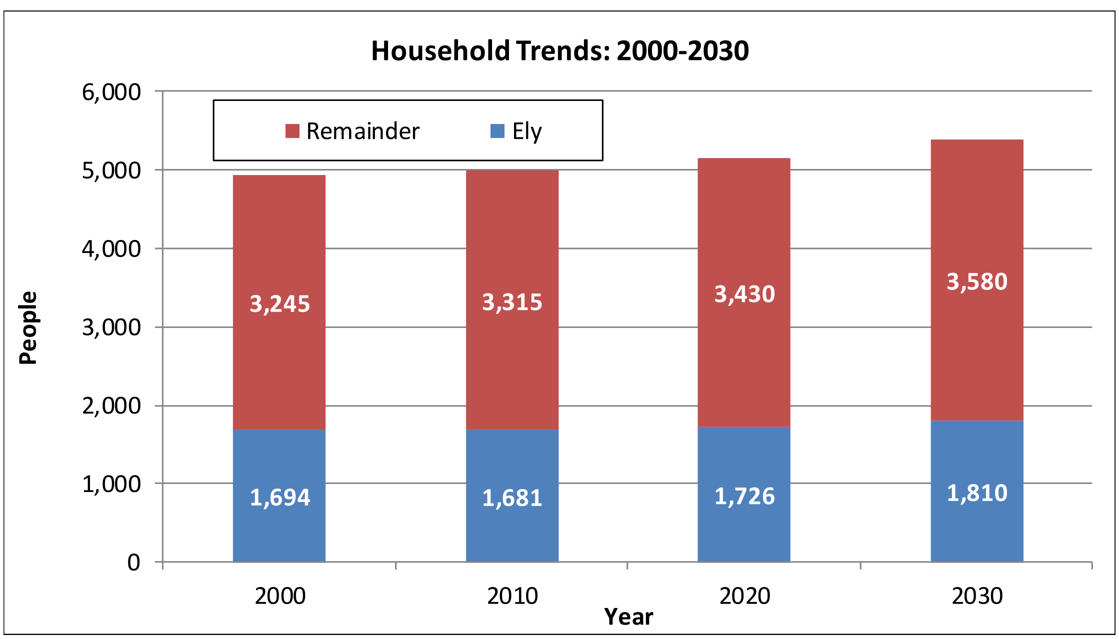


TABLE D-3
POPULATION & HOUSEHOLDS
ELY MARKET AREA
GROWTH SCENARIO - WITHOUT ADDITIONAL MINING OPERATIONS
2000 to 2030

	Number of People						Change					
	U.S. Census		Estimate	Projections								
	2000	2010	2019	2020	2025	2030	2000-2010		2010-2020		2020-2030	
Population	No.	No.	No.	No.	No.	No.	No.	Pct.	No.	Pct.	No.	Pct.
Ely	3,724	3,460	3,538	3,550	3,594	3,635	-264	-7.1%	90	2.6%	85	2.4%
Remainder of PMA	7,285	6,902	7,162	7,196	7,332	7,405	-383	-5.3%	294	4.3%	209	2.9%
PMA Total	**11,009**	**10,362**	**10,700**	**10,746**	**10,926**	**11,040**	**-647**	**-5.9%**	**384**	**3.7%**	**294**	**2.7%**
St. Louis County	*200,528*	*200,226*	*203,665*	*203,950*	*205,625*	*206,900*	*-302*	*-0.2%*	*3,724*	*1.9%*	*2,950*	*1.4%*

	Number of Households						Change					
Households	No.	No.	No.	No.	No.	No.	No.	Pct.	No.	Pct.	No.	Pct.
Ely	1,694	1,681	1,718	1,726	1,760	1,780	-13	-0.8%	45	2.7%	54	3.1%
Remainder of PMA	3,245	3,325	3,422	3,430	3,520	3,560	80	2.5%	105	3.2%	130	3.8%
PMA Total	**4,939**	**4,996**	**5,140**	**5,156**	**5,280**	**5,340**	**57**	**1.2%**	**160**	**3.2%**	**184**	**3.6%**
St. Louis County	*82,619*	*84,783*	*86,025*	*86,400*	*87,000*	*87,550*	*2,164*	*2.6%*	*1,617*	*1.9%*	*1,150*	*1.3%*

People per Household						
Ely	2.20	2.06	2.06	2.06	2.04	2.04
Remainder of PMA	2.24	2.08	2.09	2.10	2.08	2.08
PMA Total	***2.23***	***2.07***	***2.08***	***2.08***	***2.07***	***2.07***
St. Louis County	*2.43*	*2.36*	*2.37*	*2.36*	*2.36*	*2.36*

Source: U.S. Census Bureau, ESRI, MN Demographer, Maxfield Research and Consulting, LLC

TABLE D-4
POPULATION & HOUSEHOLDS
ELY MARKET AREA
GROWTH SCENARIO - WITH POLYMET MINING OPERATION
2000 to 2030

	Number of People						Change					
	U.S. Census		Estimate	Projections								
	2000	2010	2019	2020	2025	2030	2000-2010		2010-2020		2020-2030	
Population	No.	No.	No.	No.	No.	No.	No.	Pct.	No.	Pct.	No.	Pct.
Ely	3,724	3,460	3,538	3,550	3,640	3,725	-264	-7.1%	90	2.6%	175	4.9%
Remainder of PMA	7,285	6,902	7,162	7,196	7,460	7,535	-383	-5.3%	294	4.3%	339	4.7%
PMA Total	**11,009**	**10,362**	**10,700**	**10,746**	**11,100**	**11,260**	**-647**	**-5.9%**	**384**	**3.7%**	**514**	**4.8%**
St. Louis County	*200,528*	*200,226*	*203,665*	*203,950*	*205,900*	*207,130*	*-302*	*-0.2%*	*3,724*	*1.9%*	*3,180*	*1.6%*
Households	No.	No.	No.	No.	No.	No.	No.	Pct.	No.	Pct.	No.	Pct.
Ely	1,694	1,681	1,718	1,726	1,770	1,810	-13	-0.8%	45	2.7%	84	4.9%
Remainder of PMA	3,245	3,315	3,422	3,430	3,550	3,580	70	2.2%	115	3.5%	150	4.4%
PMA Total	**4,939**	**4,996**	**5,140**	**5,156**	**5,320**	**5,390**	**57**	**1.2%**	**160**	**3.2%**	**234**	**4.5%**
St. Louis County	*82,619*	*84,783*	*86,025*	*86,400*	*87,100*	*87,750*	*2,164*	*2.6%*	*1,617*	*1.9%*	*1,350*	*1.6%*
Persons per Household												
Ely	2.20	2.06	2.06	2.06	2.06	2.06						
Remainder of PMA	2.24	2.08	2.09	2.10	2.10	2.10						
PMA Total	**2.23**	**2.07**	**2.08**	**2.08**	**2.09**	**2.09**						
St. Louis County	*2.43*	*2.36*	*2.37*	*2.36*	*2.36*	*2.36*						

Sources: U.S. Census Bureau, ESRI, MN Demographer, Maxfield Research and Consulting, LLC

- Growth expectations by percent in the Market Area surpass those for St. Louis County. Between 2010 and 2020, the household base in the Market Area is projected to grow by 3% compared to the County's 2% growth. Numerically, although the Market Area accounts for about 6% of the County's total household base, it is projected to capture nearly 10% of the County's total projected household growth under the growth scenario (without mining operations) to 2020.

Projected Population and Household Growth with Polymet, excluding Twin Metals

Table D-4 presents population and household growth trends and projections to 2030 under a growth scenario which includes the opening of the Polymet mining operations.

Note: For the purpose of these projections, Polymet is assumed to begin construction in late 2019 with an opening of the plant and mining operations in 2022 for an estimated period of 20 years.

Age Distribution Trends

Age distribution affects demand for different types of housing since needs and desires change at different stages of the life cycle. Table D-5 shows the distribution of the population in nine age cohorts for Ely and the Market Area in 2000 and 2010 with estimates for 2019 and projections for 2024. The 2000 and 2010 age distributions are from the U.S. Census Bureau. Maxfield derived the 2019 estimates and 2024 projections based on data obtained from ESRI Inc., a national demographics forecasting company. The following are key points from the table.

- Between 2000 and 2010, most of the growth in Ely occurred in the older adult and young senior population (ages 55 to 74). To 2020, numerical growth in the City is expected to be most robust among the 65 to 74-year-olds (119 people, 33%) and 75 to 84-year-old (70 people, 30%). This could shift somewhat if mining operations open nearby between the period 2019 and 2024 with additional young to mid-age workers locating in the Ely area employed in mining operations. Types of jobs that would be provided are discussed in the employment section.

- The 18 to 24-year-old cohort, which consists of renters and first-time homebuyers, declined between 2000 and 2010 (-140 people, -23%), but decreases are estimated to have stabilized somewhat as new student housing was added to Vermillion Community College as the school seeks to increase its enrollment in Ely.

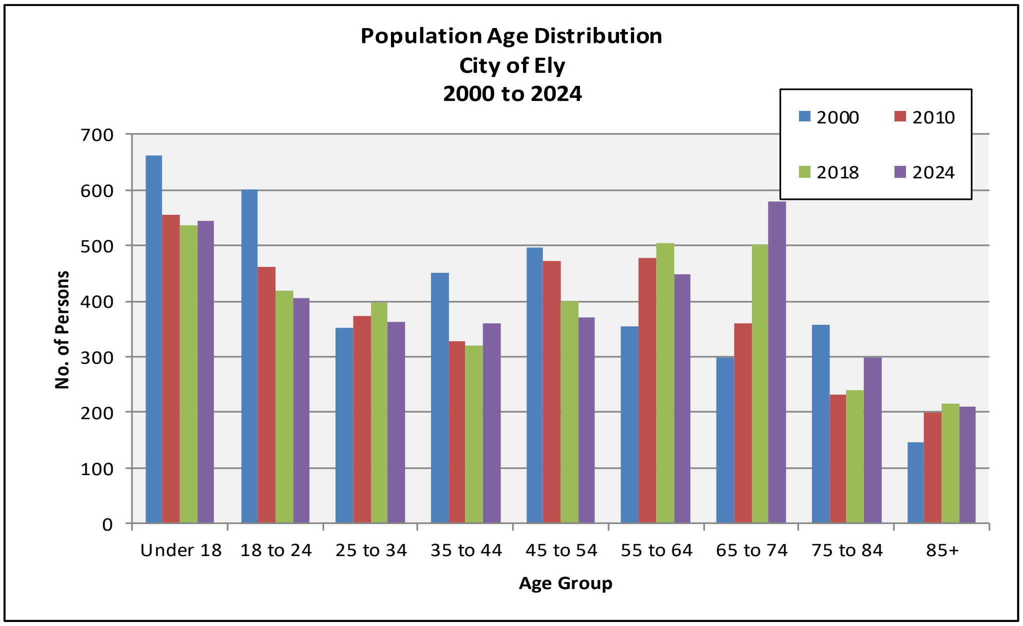
- Mirroring trends observed across the Nation, the aging Baby Boom generation is substantially impacting the composition of the Market Area's population. Born between 1946 and 1964, these individuals primarily comprised the 45 to 54 and 55 to 64-year-old cohorts in 2010. As of 2019, baby boomers accounted for an estimated 38% of the Market Area's population and are all included in the 55 to 74 age cohort. An influx of workers to the area tied to the construction of the proposed mining operations has the potential to shift these proportions somewhat toward a younger working base.

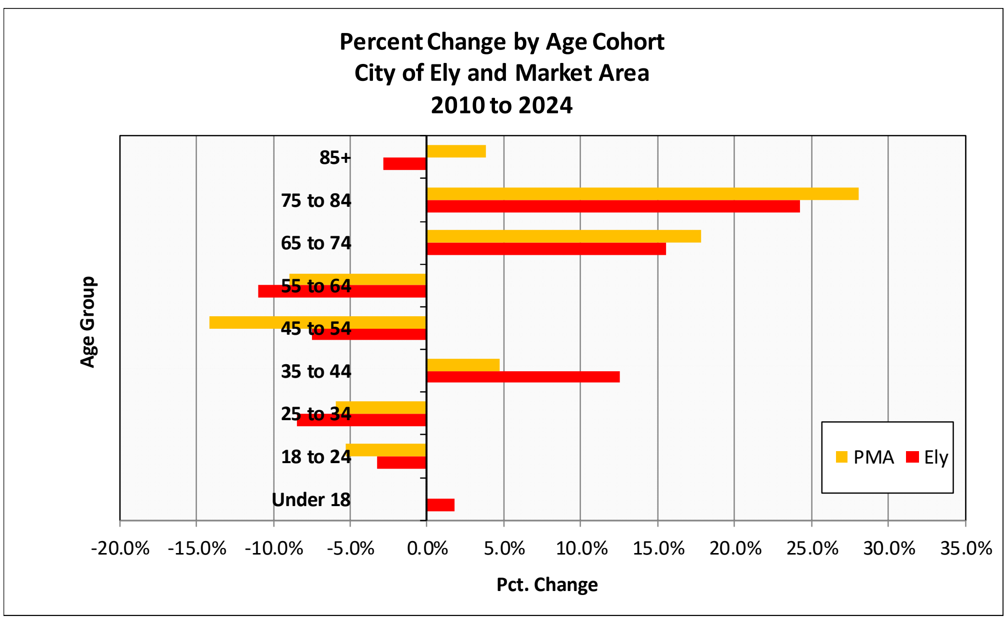
TABLE D-5
POPULATION AGE DISTRIBUTION
ELY MARKET AREA
2000 to 2024

	Number of People				Change					
	U.S. Census		Projections		2000-2010		2000-2019		2019-2024	
	2000	2010	2019	2024						
Ely	**No.**	**No.**	**No.**	**No.**	**No.**	**Pct.**	**No.**	**Pct.**	**No.**	**Pct.**
Under 18	663	555	536	546	-108	-16.3%	-19	-3.4%	10	1.8%
18 to 24	602	462	419	405	-140	-23.3%	-43	-9.4%	-14	-3.2%
25 to 34	353	373	397	363	20	5.7%	24	6.3%	-34	-8.5%
35 to 44	452	329	321	362	-123	-27.2%	-8	-2.3%	40	12.5%
45 to 54	496	472	401	371	-24	-4.8%	-71	-15.1%	-30	-7.5%
55 to 64	355	477	505	450	122	34.4%	28	5.9%	-56	-11.0%
65 to 74	300	359	502	580	59	19.7%	143	39.9%	78	15.5%
75 to 84	357	232	240	298	-125	-35.0%	8	3.5%	58	24.2%
85+	146	201	217	211	55	37.7%	16	7.9%	-6	-2.9%
Total	**3,724**	**3,460**	**3,538**	**3,585**	**-264**	**-7.1%**	**78**	**2.3%**	**47**	**1.3%**
Remainder of PMA	**No.**	**No.**	**No.**	**No.**	**No.**	**Pct.**	**No.**	**Pct.**	**No.**	**Pct.**
Under 18	1,339	982	954	943	-357	-26.7%	-28	-2.9%	-11	-1.2%
18 to 24	356	289	306	282	-67	-18.8%	17	6.0%	-25	-8.1%
25 to 34	526	433	469	452	-93	-17.7%	36	8.4%	-18	-3.7%
35 to 44	1,022	618	597	600	-404	-39.5%	-21	-3.4%	3	0.6%
45 to 54	1,225	1,123	984	818	-102	-8.3%	-139	-12.4%	-166	-16.9%
55 to 64	1,145	1,424	1,568	1,438	279	24.4%	144	10.1%	-130	-8.3%
65 to 74	1,007	1,106	1,434	1,701	99	9.8%	328	29.7%	267	18.6%
75 to 84	512	585	680	880	73	14.3%	95	16.3%	200	29.5%
85+	153	138	170	191	-15	-9.8%	32	23.3%	21	12.4%
Total	**7,285**	**6,698**	**7,162**	**7,305**	**-587**	**-8.1%**	**464**	**6.9%**	**143**	**2.0%**
Primary Market Area	**No.**	**No.**	**No.**	**No.**	**No.**	**Pct.**	**No.**	**Pct.**	**No.**	**Pct.**
Under 18	2,002	1,537	1,490	1,489	-465	-23.2%	-47	-3.1%	-1	-0.1%
18 to 24	958	751	725	687	-207	-21.6%	-26	-3.5%	-38	-5.3%
25 to 34	879	806	866	815	-73	-8.3%	60	7.4%	-51	-5.9%
35 to 44	1,474	947	918	962	-527	-35.8%	-29	-3.1%	44	4.7%
45 to 54	1,721	1,595	1,385	1,189	-126	-7.3%	-210	-13.2%	-196	-14.1%
55 to 64	1,500	1,901	2,073	1,888	401	26.7%	172	9.0%	-185	-8.9%
65 to 74	1,307	1,465	1,936	2,281	158	12.1%	471	32.2%	345	17.8%
75 to 84	869	817	920	1,179	-52	-6.0%	103	12.6%	259	28.1%
85+	299	339	387	402	40	13.4%	48	14.2%	15	3.8%
Total	**11,009**	**10,158**	**10,700**	**10,890**	**-851**	**-7.7%**	**542**	**5.3%**	**190**	**1.8%**

Sources: U.S. Census, Maxfield Research and Consulting LLC, ESRI, Inc.

- Without the addition of the Mine, the 65 to 74 age cohort is projected to have the greatest population increase in the Market Area between 2019 and 2024, an estimated 345 people (18%). The growth in this age cohort can be primarily attributed to the Baby Boom generation aging into their young senior years.





- Social changes that occurred with the aging of the Baby Boom generation, such as higher divorce rates, higher levels of education, and lower birth rates led to a greater variety of lifestyles than existed in the past – not only among baby boomers, but also among their parents and children. The increased variety of lifestyles has fueled demand for alternative housing products to the single-family home. Seniors and middle-aged people tend to do more traveling and participate in more activities than previous generations and they increasingly prefer maintenance-free housing that enables them to spend more time on activities outside the home. While lower maintenance housing products have been more popular in urban areas, these product types are gradually being developed in other locations in

Greater Minnesota. Locations that have higher visitor and seasonal traffic have often seen development of condos and townhomes targeted toward second-home buyers.

Household Income by Age of Householder

The estimated distribution of household incomes in Ely and the Market Area for 2019 and 2024 are shown in Tables D-6 and D-7. The data was estimated by Maxfield Research based on income trends provided by ESRI, Inc. The data helps ascertain the demand for different housing products based on the size of the market at specific cost levels.

The Department of Housing and Urban Development defines affordable housing costs as 30% of a household's adjusted gross income. For example, a household with an income of $50,000 per year would be able to afford a monthly housing cost of about $1,250. Maxfield Research uses a figure of 30% for households under the age of 65 and 40% or more for households age 65 or older, since seniors generally have lower living expenses and can often sell their homes and use the proceeds toward rent payments or to purchase a lower maintenance housing product.

A generally accepted standard for affordable owner-occupied housing is that a typical household can afford to pay 3.0 to 3.5 times their annual income on a single-family home. Thus, a $50,000 income would translate to an affordable single-family home of $150,000 to $175,000. The higher end of this range assumes that the person has adequate funds for down payment and closing costs but does not include savings or equity in an existing home which would allow them to purchase a home above the upper end of the range.

City of Ely

- Ely had an estimated median household income of $40,130 in 2019. It is projected to increase to $45,280 (13%) by 2024.

- With a household income of $46,906, a younger household (the median household income for the 25 to 34 cohort in Ely) could afford an estimated monthly housing cost of $1,173, based on an allocation of 30% of income toward housing.

- A younger senior household with an income of $36,533 (the median household income for the 65 to 74 age cohort in Ely) could afford an estimated monthly housing cost of $1,218, based on an allocation of 40% of income toward housing. Older seniors (age 75+) would be able to afford a monthly housing cost of $752 based on the same income allocation (40%).

Market Area Non-Senior Household

- As of 2019, 15% of non-senior (under age 65) households in the Market Area are estimated to have incomes of less than $15,000 (287 households). All these households would be eligible for subsidized rental housing. An estimated 10% of the Market Area's non-senior households have incomes between $15,000 and $25,000 (269 households). A portion of these households could qualify for subsidized housing, but those with incomes at the higher end of the range could also qualify for "affordable" or older market rate rentals. If housing costs absorb 30% of income, households with incomes of $15,000 to $25,000 could afford to pay between $375 and $625 per month.

- Median incomes for households in the Market Area peak at $57,960 for the 45 to 54 age group in 2019. Households in this age group are in their peak earning years. By 2024, the median income for the 45 to 54 age group is projected to increase to $71,195, an increase of 23%.

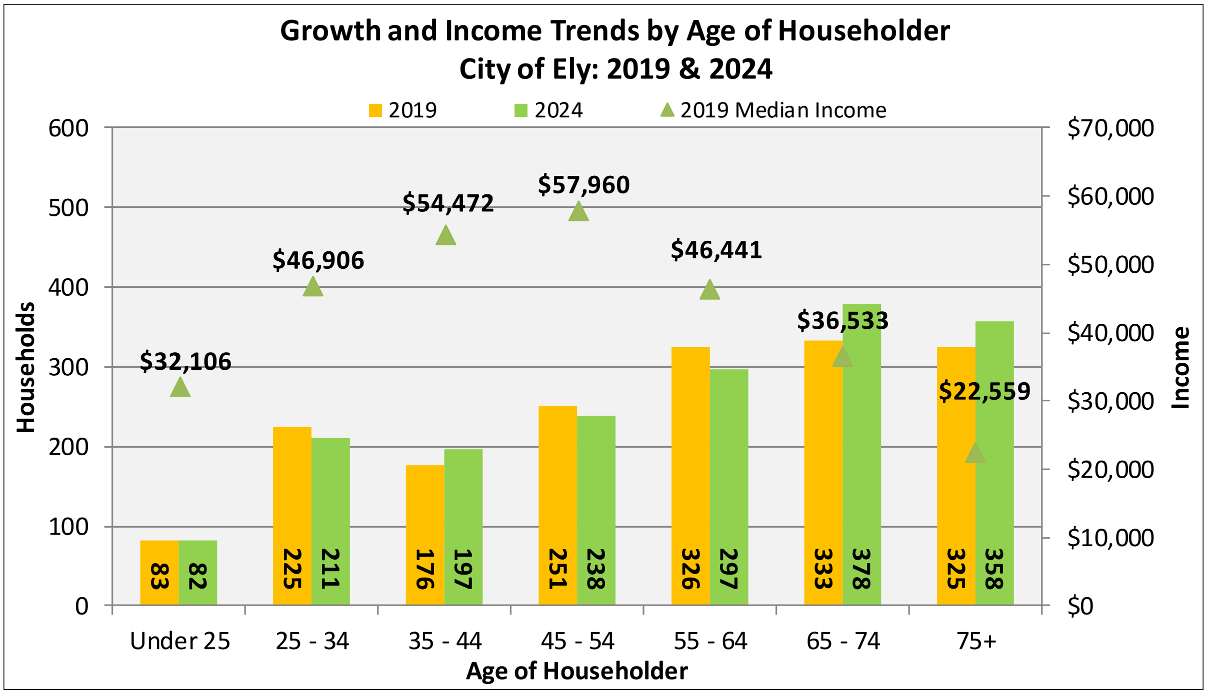
- The median resale price of homes in Ely is estimated at $90,000 in 2019 (see Table FS-1). The income required to afford a home at this price would be about $25,714 to $30,000, based on the standard of 3.0 to 3.5 times the median income (and assuming households within this income range would not have a high level of debt).

- Overall median incomes are expected to increase by 16% between 2019 and 2024 in the Market Area and 13% in Ely. By 2024, the median income is projected to be $58,585 in the Market Area and $45,280 in Ely. An increase in the number of households working in the mining industry could cause the median household income to rise, increasing the level of housing affordability for a larger portion of the household base.

TABLE D-6
HOUSEHOLD INCOME BY AGE OF HOUSEHOLDER
CITY OF ELY
2019 & 2024

		Age of Householder						
	Total	**<25**	**25-34**	**35-44**	**45-54**	**55-64**	**65 -74**	**75+**
2019								
Less than $15,000	287	16	31	18	31	59	55	77
$15,000 to $24,999	269	14	24	17	18	32	58	105
$25,000 to $34,999	196	15	22	17	16	31	51	43
$35,000 to $49,999	307	17	44	29	43	56	66	52
$50,000 to $74,999	285	14	48	36	55	63	43	26
$75,000 to $99,999	148	4	23	21	30	31	23	14
$100,000 or more	225	2	32	36	57	54	37	7
Total	**1,718**	**83**	**225**	**176**	**251**	**326**	**333**	**325**
Median Income	**$40,130**	**$32,106**	**$46,906**	**$54,472**	**$57,960**	**$46,441**	**$36,533**	**$22,559**
2024								
Less than $15,000	256	15	28	17	21	44	50	80
$15,000 to $24,999	237	12	17	15	8	26	53	105
$25,000 to $34,999	181	14	17	16	11	24	52	46
$35,000 to $49,999	300	17	39	29	37	46	74	59
$50,000 to $74,999	294	15	45	39	51	58	52	34
$75,000 to $99,999	173	5	24	27	33	32	33	20
$100,000 or more	320	2	41	54	77	68	64	13
Total	**1,761**	**82**	**211**	**197**	**238**	**297**	**378**	**358**
Median Income	**$45,280**	**$34,525**	**$52,624**	**$62,634**	**$71,195**	**$54,486**	**$41,495**	**$24,462**
Change 2019 - 2024								
Less than $15,000	-32	-1	-4	-1	-10	-15	-5	3
$15,000 to $24,999	-32	-2	-7	-2	-10	-7	-4	0
$25,000 to $34,999	-15	-1	-5	-1	-5	-8	2	3
$35,000 to $49,999	-7	0	-6	-1	-7	-10	8	8
$50,000 to $74,999	9	1	-3	2	-4	-4	9	7
$75,000 to $99,999	25	1	0	5	2	0	9	6
$100,000 or more	94	0	9	18	20	15	27	6
Total	**43**	**-1**	**-15**	**21**	**-13**	**-28**	**45**	**33**
Median Income	**$5,150**	**$2,419**	**$5,718**	**$8,162**	**$13,235**	**$8,045**	**$4,962**	**$1,903**

Sources: ESRI; US Census Bureau; Maxfield Research & Consulting, LLC


Growth and Income Trends by Age of Householder
City of Ely: 2019 & 2024
2019
2024
2019 Median Income
Households
Income
Age of Householder
Under 25
25 - 34
35 - 44
45 - 54
55 - 64
65 - 74
75+
$32,106
$46,906
$54,472
$57,960
$46,441
$36,533
$22,559
83
82
225
211
176
197
251
238
326
297
333
378
325
358
600
500
400
300
200
100
0
$70,000
$60,000
$50,000
$40,000
$30,000
$20,000
$10,000
$0

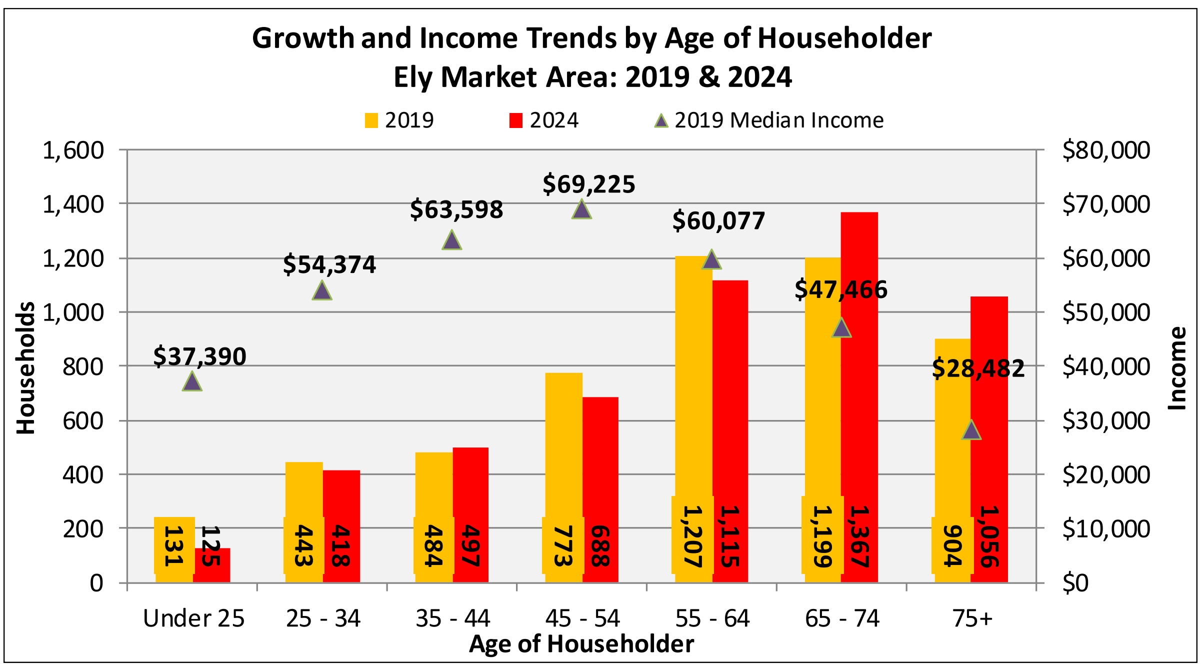

Growth and Income Trends by Age of Householder
Ely Market Area: 2019 & 2024
2019
2024
2019 Median Income
Households
Income
Age of Householder
Under 25
25 - 34
35 - 44
45 - 54
55 - 64
65 - 74
75+
$37,390
$54,374
$63,598
$69,225
$60,077
$47,466
$28,482
131
125
443
418
484
497
773
688
1,207
1,115
1,199
1,367
904
1,056
1,600
1,400
1,200
1,000
800
600
400
200
0
$80,000
$70,000
$60,000
$50,000
$40,000
$30,000
$20,000
$10,000
$0

TABLE D-7
HOUSEHOLD INCOME BY AGE OF HOUSEHOLDER
ELY MARKET AREA
2019 & 2024

		Age of Householder						
	Total	**<25**	**25-34**	**35-44**	**45-54**	**55-64**	**65 -74**	**75+**
2019								
Less than $15,000	554	21	43	31	53	122	142	142
$15,000 to $24,999	654	16	41	37	40	110	148	262
$25,000 to $34,999	542	21	38	40	43	99	151	149
$35,000 to $49,999	850	30	83	78	121	179	211	150
$50,000 to $74,999	944	28	97	105	177	240	196	101
$75,000 to $99,999	587	10	60	65	105	164	124	58
$100,000 or more	1,009	4	81	129	234	293	227	41
Total	**5,140**	**131**	**443**	**484**	**773**	**1,207**	**1,199**	**904**
Median Income	**$50,807**	**$37,390**	**$54,374**	**$63,598**	**$69,225**	**$60,077**	**$47,466**	**$28,482**
2024								
Less than $15,000	462	22	36	29	29	82	120	145
$15,000 to $24,999	545	14	28	26	20	78	123	256
$25,000 to $34,999	470	19	28	32	25	66	141	160
$35,000 to $49,999	799	26	70	66	90	143	221	183
$50,000 to $74,999	949	29	91	98	148	216	232	135
$75,000 to $99,999	665	11	61	72	101	170	163	86
$100,000 or more	1,374	4	103	174	275	361	367	90
Total	**5,265**	**125**	**418**	**497**	**688**	**1,115**	**1,367**	**1,056**
Median Income	**$58,585**	**$37,369**	**$59,049**	**$72,580**	**$79,555**	**$69,369**	**$54,664**	**$30,837**
Change 2019 - 2024								
Less than $15,000	-92	0	-7	-2	-24	-40	-22	3
$15,000 to $24,999	-109	-2	-13	-11	-20	-33	-25	-5
$25,000 to $34,999	-71	-3	-10	-8	-18	-33	-11	11
$35,000 to $49,999	-51	-4	-12	-12	-31	-36	11	33
$50,000 to $74,999	5	1	-6	-7	-29	-24	35	34
$75,000 to $99,999	78	1	1	7	-4	6	40	28
$100,000 or more	365	0	23	45	41	68	140	49
Total	**125**	**-6**	**-25**	**13**	**-85**	**-92**	**168**	**152**
Median Income	**$7,778**	**-$21**	**$4,675**	**$8,983**	**$10,331**	**$9,292**	**$7,199**	**$2,355**

Sources: ESRI; US Census Bureau; Maxfield Research & Consulting, LLC

Market Area Senior Household Trends

- The oldest householders in the Market Area (65+) tend to have lower median household incomes because many are retired and are more likely to have fixed incomes. As shown on Table D-7, 12% of households ages 65 to 74 and 16% of households age 75 and over have incomes less than $15,000. Many of these low-income older senior households rely solely on social security benefits. Typically, younger seniors have higher incomes due to the fact they are still able to work or are married couples with two incomes or higher Social Security benefits. The 2019 median incomes for Market Area householders age 65 to 74 and 75+ are $47,466 and $28,482, respectively.

- Generally, senior households with incomes of $30,000 or higher can afford market rate active adult senior housing. Based on a 40% allocation of income for housing, this translates to monthly rents of at least $1,000. An estimated 1,259 senior households in the Market Area (60% of age 65+ households) are estimated to have incomes of $30,000 or more in 2019.

- Seniors who require a higher level of assistance with activities of daily living and who are able and willing to pay 85% or more of their income for housing and care services would likely need an annual income of $40,000 or greater to afford monthly rents of $3,000, which is roughly the starting level for market rate assisted living in the Market Area. Typically, seniors age 75 and over are the primary market for assisted living housing. There are an estimated 300 older senior households (ages 75 and over) with incomes greater than $40,000 in 2019.

- The median income for all seniors (age 65 to 74 and age 75+ cohorts) is a weighted average of $39,308 in 2019, projected to increase to $44,281 by 2024 (13%).

Net Worth

Table D-8 shows household net worth in the City of Ely and Market Area in 2019. Simply stated, net worth is the difference between assets and liabilities, or the total value of assets after the debt is subtracted. The data was compiled and estimated by ESRI Inc. based on the Survey of Consumer Finances and data compiled by the Federal Reserve Board.

According to data released by the National Association of Realtors in 2016, the average American homeowner has a net worth about 45 times greater than that of a renter. This research was based on the Federal Reserve's Survey of Consumer Finances and showed the average net worth of homeowner households was $231,400, whereas the average net worth of renter households was $5,200.

- The Market Area had an average net worth of $1,059,543 in 2019 and a median net worth of $172,027. Median net worth is generally a more accurate depiction of wealth than the average figure. A few households with very large net worth can significantly skew the average. Communities with high levels of land assets like the Market Area tend to have higher average and median net worth because of these assets. As a comparison, the Twin Cities Metro Area had an average net worth of $941,794 and median net worth of $179,845.

TABLE D-8
NET WORTH BY AGE OF HOUSEHOLDER
ELY MARKET AREA
2019

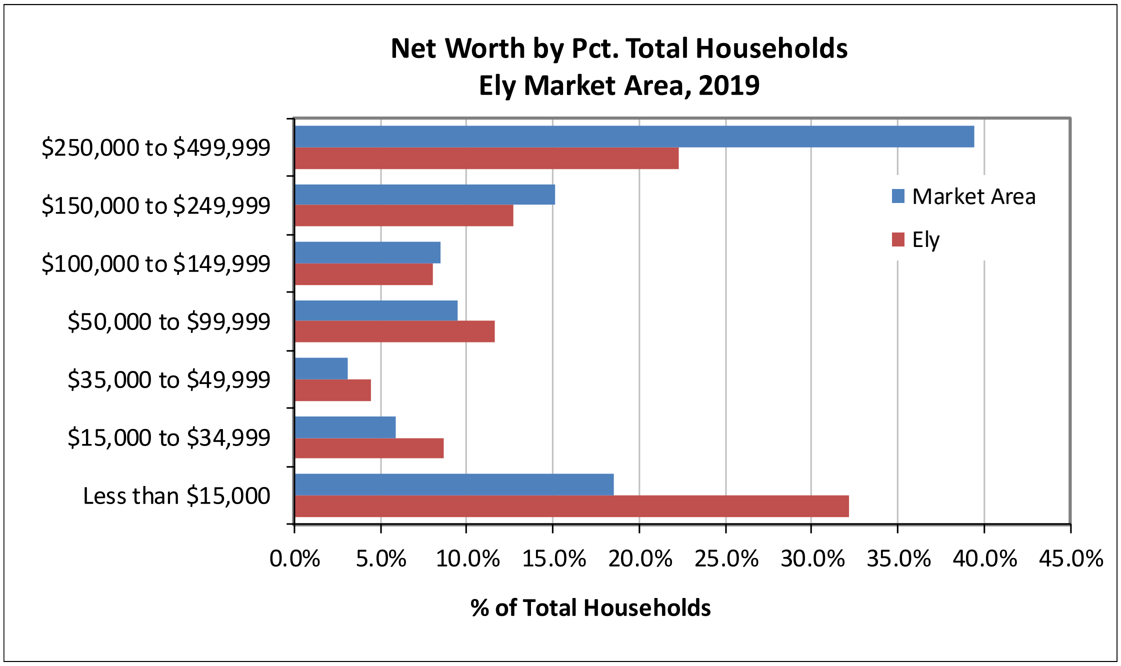
			Age of Householder						
	Total	**% of Total**	**<25**	**25-34**	**35-44**	**45-54**	**55-64**	**65-74**	**75+**
CITY OF ELY									
Less than $15,000	552	32.1%	72	121	60	81	82	67	71
$15,000 to $34,999	148	8.6%	7	26	18	25	21	25	25
$35,000 to $49,999	77	4.5%	2	9	9	11	18	16	11
$50,000 to $99,999	200	11.6%	2	36	29	22	28	37	45
$100,000 to $149,999	138	8.1%	0	14	18	20	28	29	28
$150,000 to $249,999	218	12.7%	0	10	20	37	51	59	40
$250,000 or more	384	22.3%	0	8	21	54	97	100	104
Total	**1,718**	**100%**	**83**	**225**	**176**	**251**	**326**	**333**	**325**
Median Net Worth	**$67,122**		**$8,662**	**$13,938**	**$51,001**	**$63,416**	**$120,526**	**$133,186**	**$115,452**
MARKET AREA									
Less than $15,000	952	18.5%	104	193	114	138	161	141	101
$15,000 to $34,999	301	5.9%	17	62	44	47	46	56	30
$35,000 to $49,999	161	3.1%	5	20	23	25	41	32	14
$50,000 to $99,999	486	9.5%	5	85	79	57	87	90	83
$100,000 to $149,999	439	8.5%	0	36	61	69	105	91	76
$150,000 to $249,999	777	15.1%	0	28	70	154	190	199	136
$250,000 or more	2,025	39.4%	0	18	93	284	577	590	463
Total	**5,140**	**100%**	**131**	**443**	**484**	**773**	**1,207**	**1,199**	**904**
Median Net Worth	**$172,027**		**$9,429**	**$21,487**	**$83,967**	**$173,848**	**$230,398**	**$243,012**	**$250,001**

Data Note: Net Worth is total household wealth minus debt, secured and unsecured. Net worth includes home equity, equity in pension plans, net equity in vehicles, IRAs and Keogh accounts, business equity, interest-earning assets and mutual fund shares, stocks, etc. Examples of secured debt include home mortgages and vehicle loans; examples of unsecured debt include credit card debt, certain bank loans, and other outstanding bills. Forecasts of net worth are based on the Survey of Consumer Finances, Federal Reserve Board. Detail may not sum to totals due to rounding.

Sources: ESRI; Maxfield Research & Consulting, LLC

- Similar to household income, net worth increases as households age and decreases after they pass their peak earning years and move into retirement. Median and average net worth usually peak in the 55 to 64 age cohort; in the Ely Market Area however, the median net worth peaks at $250,001 among the 75+ year olds. Average net worth peaks among people ages 65 to 74 at $1,562,756, which is likely due to land assets being primarily retained by households in this age cohort.

- Households often delay purchasing homes and instead choose to rent until they acquire sufficient net worth to cover the costs of a down payment and closing costs associated with home ownership. Lending requirements have loosened, and home mortgage interest rates have decreased again. Young households may often have difficulty saving for a down payment even though they can afford the monthly mortgage payment. Thus, in the younger age cohorts especially, households at or below the median net worth will likely delay their entries into home ownership due to inadequacy of funds.



Tenure by Household Income

Table D-9 shows estimated household tenure by income in the Market Area according to data from the 2017 American Community Survey (2013-2017, 5-year average) and adjusted to 2019 to reflect the most recent household estimates.

As stated earlier, the Department of Housing and Urban Development determines housing as affordable if total housing costs do not exceed 30% of the household's income. The higher the income, the lower percentage a household typically allocates to housing. Many lower income households, as well as many young and senior households, spend more than 30% of their income on housing, while middle-aged households in their prime earning years typically allocate 20% to 25% of their income to housing.

- As income increases, so does the rate of homeownership. This can be seen in the Market Area, where the homeownership rate increases from 55% of households with incomes below $15,000 to 94% of households with incomes above $150,000.

TABLE D-9
TENURE BY HOUSEHOLD INCOME
ELY MARKET AREA
2019

	ELY				REMAINDER				MARKET AREA TOTAL			
Income	Owner-Occupied	Pct.	Renter-Occupied	Pct.	Owner-Occupied	Pct.	Renter-Occupied	Pct.	Owner-Occupied	Pct.	Renter-Occupied	Pct.
Less than $15,000	103	36.1%	183	63.9%	239	69.9%	103	30.1%	342	54.5%	286	45.5%
$15,000 to $24,999	150	68.1%	70	31.9%	294	76.9%	88	23.1%	444	73.7%	158	26.3%
$25,000 to $34,999	207	66.7%	103	33.3%	313	78.6%	85	21.4%	519	73.4%	188	26.6%
$35,000 to $49,999	207	62.1%	126	37.9%	487	90.5%	51	9.5%	693	79.7%	177	20.3%
$50,000 to $74,999	220	87.3%	32	12.7%	598	89.1%	73	10.9%	818	88.6%	105	11.4%
$75,000 to $99,999	106	67.8%	51	32.2%	423	90.9%	42	9.1%	529	85.1%	93	14.9%
$100,000 to $149,999	92	100.0%	0	0.0%	351	89.3%	42	10.7%	443	91.3%	42	8.7%
$150,000+	59	86.4%	9	13.6%	225	96.6%	8	3.4%	284	94.3%	17	5.7%
Total	**1,144**	**66.6%**	**574**	**33.4%**	**2,929**	**85.6%**	**493**	**14.4%**	**4,073**	**79.2%**	**1,067**	**20.8%**
Median Income	**$40,388**		**$26,618**		**$55,865**		**$29,825**		**$51,672**		**$27,761**	

Sources: U.S. Census Bureau - American Community Survey; Maxfield Research & Consulting, LLC

- A portion of renter households that are referred to as lifestyle renters, or those who are financially able to own but choose to rent, generally have household incomes of $50,000 of higher and are more likely to rent newer apartments or larger homes (an estimated 24% of Market Area renter households). A smaller segment of lifestyle renters could also have lower incomes and be living in older apartments.

- Households with incomes below $15,000 are typically a market for deep subsidy rental housing (an estimated 27% of renter households in the Market Area) whereas those with incomes between $15,000 and $35,000 usually fall within the range of shallow-subsidy rental housing (32.5% of renter households in the Market Area).

- Ely accounts for an estimated 54% of all renter households in the Market Area even though it represents only one-third of the Market Area household base. This reflects the influence of student renters at Vermillion Community College and the trend toward high homeownership in rural or peripheral communities due to household preference and lack of infrastructure to support higher density rental housing. Comparatively, 67% of households in Ely are homeowners compared to 86% in the Remainder of the Market Area.

- The pattern of homeownership in Ely is somewhat dissimilar to the Market Area due to the influence of college and tourist renters compared to the Remainder of the Market Area which has high homeownership. In Ely, 62% of renters comprise the market for deep-subsidy and shallow-subsidy rental housing whereas in the Remainder of the Market Area, this proportion is slightly lower at 56%.

Tenure by Age of Householder

Table D-10 shows the number of owner and renter households in the Market Area by age group in 2010 and 2017 U.S. Census (American Community Survey 2013-2017) and adjusted to 2019 to reflect the most recent estimates. This data is useful in determining demand for certain types of housing since housing preferences change throughout an individual's life cycle. The following are key findings from the table.

- In most markets, the housing market downturn contributed to a decrease in the homeownership rate during the late 2000s as it became more difficult for households to secure mortgage loans. Households delayed purchasing homes due to the uncertainty of the housing market and foreclosures forced households out of their homes. This may have had an impact but to a lesser extent in the Ely Market Area as homeownership declined only slightly from 83.9% to 80.1% over the decade.

- With the improving economy and housing markets, the Ely Market Area is estimated to have stabilized as homeownership rates only declined 0.7% from 2010 (80.1% to 79.4%). Owner households in the Market Area increased by an estimated 2% compared to a 6% increase in renter households between 2010 and 2019.

- As households progress through their life cycle, housing needs change. The proportion of renter households decreases significantly as households age out of their young-adult years. By the time households reach their senior years however, rental housing often becomes a more viable option than homeownership, reducing the responsibility of maintenance and a financial commitment. The chart below visually illustrates the dip in renter households during the middle-aged cohorts with a gradual increase in the senior cohorts.

- In 2019, 18% of the Market Area's households between the ages of 15 and 24 owned their housing, compared to 53% of households between 25 and 34 and 67% between 35 and 44. Householders between 55 and 84 were overwhelmingly homeowners, with no more than 13% of the householders in each 10-year age cohort renting their housing.

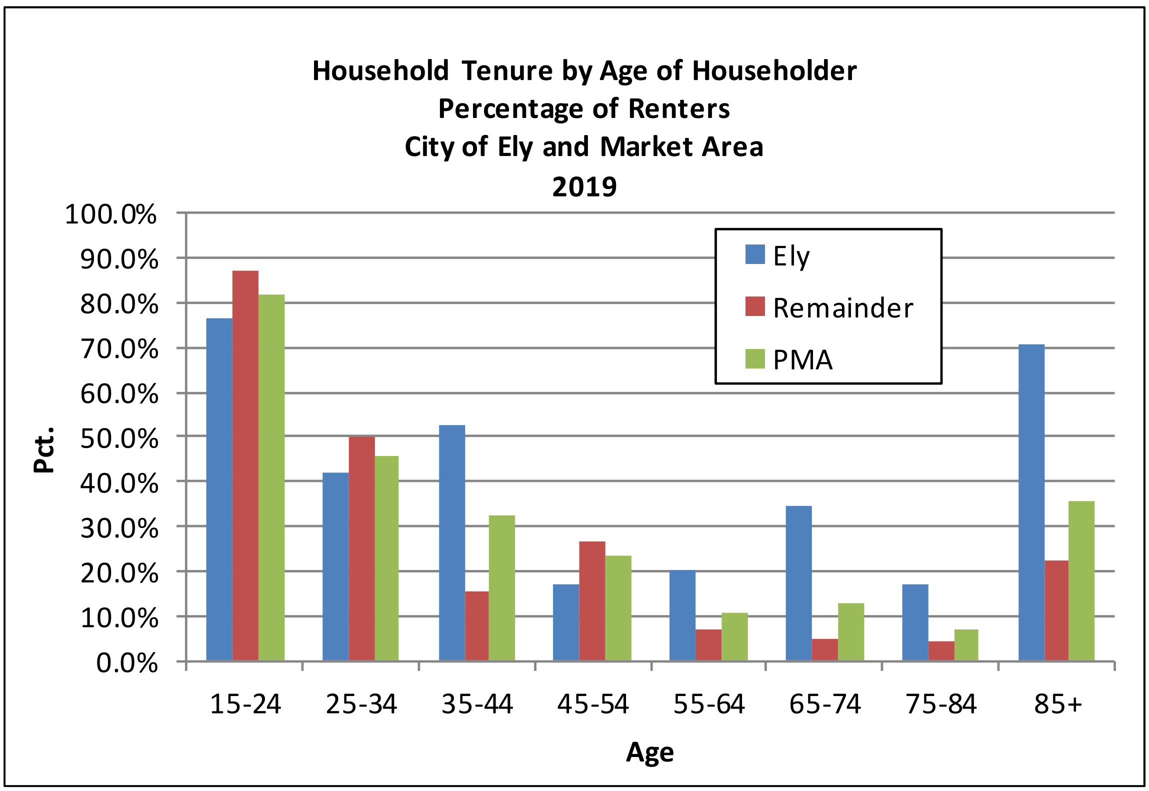


TABLE D-10 TENURE BY AGE OF HOUSEHOLDER ELY MARKET AREA 2010 & 2019						
	2010			2019		
	Owners	Renters	H.O.R.	Owners	Renters	H.O.R.
Ely						
Householder 15 to 24 years	11	84	11.6%	12	40	23.5%
Householder 25 to 34 years	110	106	50.9%	145	104	58.1%
Householder 35 to 44 years	135	49	73.4%	114	126	47.4%
Householder 45 to 54 years	230	76	75.2%	216	44	83.0%
Householder 55 to 64 years	249	70	78.1%	308	79	79.5%
Householder 65 to 74 years	181	64	73.9%	191	102	65.2%
Householder 75 to 84 years	121	57	68.0%	137	28	83.1%
Householder 85 years and over	63	75	45.7%	21	50	29.4%
Total	***1,100***	***581***	***65.4%***	***1,144***	***574***	***66.6%***
Remainder of PMA						
Householder 15 to 24 years	11	47	19.0%	6	40	12.8%
Householder 25 to 34 years	123	93	56.9%	127	125	50.3%
Householder 35 to 44 years	273	64	81.0%	223	41	84.4%
Householder 45 to 54 years	574	65	89.8%	337	122	73.5%
Householder 55 to 64 years	787	58	93.1%	822	62	93.0%
Householder 65 to 74 years	666	42	94.1%	767	41	94.9%
Householder 75 to 84 years	398	29	93.2%	513	24	95.6%
Householder 85 years and over	77	18	81.1%	134	38	77.8%
Total	***2,909***	***416***	***87.5%***	***2,929***	***493***	***85.6%***
PMA						
Householder 15 to 24 years	22	131	14.4%	18	80	18.5%
Householder 25 to 34 years	233	199	53.9%	272	230	54.2%
Householder 35 to 44 years	408	113	78.3%	337	167	66.8%
Householder 45 to 54 years	804	141	85.1%	553	166	76.9%
Householder 55 to 64 years	1,036	128	89.0%	1,130	141	88.9%
Householder 65 to 74 years	847	106	88.9%	958	143	87.0%
Householder 75 to 84 years	519	86	85.8%	651	51	92.7%
Householder 85 years and over	140	93	60.1%	154	88	63.8%
Total	***4,009***	***997***	***80.1%***	***4,073***	***1,067***	***79.2%***
Sources: U.S. Census Bureau, American Community Survey, Maxfield Research & Consulting, LLC						

- The rate of homeownership is lower for nearly every age cohort in Ely relative to the Market Area overall. In 2019, 67% of households in the City were homeowners compared to 79% in the Market Area. In general, high rates of homeownership are common in areas with a rural character where land use and lack of infrastructure typically cannot support higher-density rental housing; this is especially true in the Remainder of the Market Area. Also, homeownership in outlying rural areas may be more affordable because the cost of owning a single-family home in communities in the Market Area is typically lower relative to larger, more population-dense cities.

Tenure by Household Size

Table D-11 shows household tenure by size of household in the Market Area in 2010 and 2017 from the U.S. Census Bureau (American Community Survey 2013-2017) and adjusted to 2019 to reflect the most recent estimates. The tables show the number and percent of renter- and owner-occupied housing units in the Market Area. All data excludes unoccupied units and group quarters such as nursing homes.

- Household size for renters tends to be smaller than for owners. This trend is a result of the typical market segments for rental housing, including households that are younger and less likely to be married with children, as well as older adults and seniors who choose to down-size from their single-family homes.

- In 2010, the average size of renter households in the Market Area was 1.79 people, while the average size of owner households was 2.07 people. By 2019, the average household size is estimated to have increased slightly to 1.89 people in renter households, while the average owner household size decreased to 2.00 people. The decline in owner household sizes can be attributed, in large part, to a shift toward older households and fewer married couple families with children along with economic recession and sluggish housing market in the early part of the decade.

- In 2019, an estimated 45% of all Market Area households are comprised of two people while 36% are one-person households. An estimated 10% are three-person households, 7% of the households consist of four persons, 2% are five-person households and less than 1% are 6+ person households.

- Smaller households comprise the greatest proportion of renter households in the Market Area in 2019. In the Market Area, 52% of all renter households are estimated to be one-person households and 27% are two-person households.

- Renter households are estimated to have grown by 7% since 2010 (70 households). Renter growth is estimated to have increased only among two-person (83 households, 40%) and four-person households (50 households, 95%). All other household sizes are estimated to have declined in renter households. This reflects the market of student and/or more couple/roommate renters.

TABLE D-11
TENURE BY HOUSEHOLD SIZE
ELY MARKET AREA
2010 & 2019

HH Size		City of Ely 2010 No.	City of Ely 2010 Pct.	City of Ely 2019 No.	City of Ely 2019 Pct.	Remainder 2010 No.	Remainder 2010 Pct.	Remainder 2019 No.	Remainder 2019 Pct.	Market Area Total 2010 No.	Market Area Total 2010 Pct.	Market Area Total 2019 No.	Market Area Total 2019 Pct.
1-person	Own	380	49.9	394	54.2	851	80.6	887	79.9	1,231	67.7	1,281	69.7
	Rent	382	50.1	333	45.8	205	19.4	223	20.1	587	32.3	556	30.3
	Total	**762**	**100.0**	**726**	**100.0**	**1,056**	**100.0**	**1,110**	**100.0**	**1,818**	**100.0**	**1,836**	**100.0**
2-person	Own	448	81.9	471	75.7	1,494	93.4	1,531	91.9	1,942	90.5	2,002	87.5
	Rent	99	18.1	151	24.3	105	6.6	136	8.1	204	9.5	286	12.5
	Total	**547**	**100.0**	**622**	**100.0**	**1,599**	**100.0**	**1,667**	**100.0**	**2,146**	**100.0**	**2,289**	**100.0**
3-person	Own	135	68.2	140	73.1	249	84.1	294	84.9	384	77.7	434	80.7
	Rent	63	31.8	52	26.9	47	15.9	52	15.1	110	22.3	104	19.3
	Total	**198**	**100.0**	**192**	**100.0**	**296**	**100.0**	**346**	**100.0**	**494**	**100.0**	**538**	**100.0**
4-person	Own	84	79.2	107	73.2	199	86.5	136	68.0	283	84.2	243	70.2
	Rent	22	20.8	39	26.8	31	13.5	64	32.0	53	15.8	103	29.8
	Total	**106**	**100.0**	**147**	**100.0**	**230**	**100.0**	**200**	**100.0**	**336**	**100.0**	**346**	**100.0**
5-person	Own	39	83.0	21	100.0	80	81.6	60	84.7	119	82.1	81	88.2
	Rent	8	17.0	0	0.0	18	18.4	11	15.3	26	17.9	11	11.8
	Total	**47**	**100.0**	**21**	**100.0**	**98**	**100.0**	**71**	**100.0**	**145**	**100.0**	**91**	**100.0**
6+ person	Own	14	66.7	10	100.0	36	78.3	22	73.3	50	16.1	32	80.3
	Rent	7	33.3	0	0.0	10	21.7	8	26.7	17	5.5	8	19.7
	Total	**21**	**100.0**	**10**	**100.0**	**46**	**100.0**	**29**	**100.0**	**311**	**21.5**	**40**	**100.0**
TOTAL	Own	1,100	65.4	1,144	66.6	2,909	87.5	2,929	85.6	4,009	80.1	4,073	79.2
	Rent	581	34.6	574	33.4	416	12.5	493	14.4	997	19.9	1,067	20.8
	Total	**1,681**	**100.0**	**1,718**	**100.0**	**3,325**	**100.0**	**3,422**	**100.0**	**5,006**	**100.0**	**5,140**	**100.0**
Average HH Size		***1.93***		***1.93***		***2.06***		***2.00***		***2.02***		***1.98***	

Sources: U.S. Census Bureau; Ameican Community Survey; Maxfield Research & Consulting, LLC

- Among homeowners, one-, two-, and three-person households experienced an increase in homeownership with the addition of 50 households (4%), 60 households (3%) and 50 households (13%), respectively. All other age cohorts had declines among owner households.

Ethnicity and Diversity

Table D-12 summarizes the population by race in Ely and Market Area and compares this to St. Louis County as a whole. Data is provided from the 2010 and 2017 U.S. Census (American Community Survey 2013-2017) and adjusted to 2019 to reflect the most recent estimates

- As of 2010, 5.2% of the total population in Ely was minorities, which is estimated to have decrease to 2.4% by 2019. The greatest percentage of minorities in the City was Black or African American and Other & Two Races designation (0.6% of the total population in 2019).

- Compared to the Market Area and St. Louis County, the City had a smaller percentage of minorities in 2010 and 2019; as of 2019, 2.4% of the total population was among minority groups in the City compared to 7.7% in the Market Area and 9.2% in St. Louis County.

TABLE D-12
ETHNICITY AND DIVERSITY
ELY MARKET AREA
2010 and 2019

	2010		2019	
Ely	**No.**	**Pct.**	**No.**	**Pct.**
Non-Hispanic	**3,421**	**98.9%**	**3,519**	**99.5%**
White	*3,280*	*94.8%*	*3,453*	*97.6%*
Black or African American	*33*	*1.0%*	*21*	*0.6%*
American Indian and Alaska Native	*26*	*0.8%*	*8*	*0.2%*
Asian	*23*	*0.7%*	*15*	*0.4%*
Native Hawaiian and Other Pacific Islander	*0*	*0.0%*	*0*	*0.0%*
Other & two or more races	*59*	*1.7%*	*22*	*0.6%*
Hispanic	**39**	**1.1%**	**19**	**0.5%**
Total Population	3,460	100.0%	3,538	100.0%
Percent Minority	--	5.2%	--	2.4%
Market Area	**No.**	**Pct.**	**No.**	**Pct.**
Non-Hispanic	**10,256**	**99.3%**	**10,626**	**99.3%**
White	*9,718*	*94.1%*	*9,873*	*92.3%*
Black or African American	*48*	*0.5%*	*40*	*0.4%*
American Indian and Alaska Native	*298*	*2.9%*	*223*	*2.1%*
Asian	*40*	*0.4%*	*30*	*0.3%*
Native Hawaiian and Other Pacific Islander	*0*	*0.0%*	*0*	*0.0%*
Other & two or more races	*152*	*1.5%*	*460*	*4.3%*
Hispanic	**74**	**0.7%**	**74**	**0.7%**
Total Population	10,330	100.0%	10,700	100.0%
Percent Minority	--	5.9%	--	7.7%
St. Louis County				
Total Population	200,226	--	203,665	--
Minority Population & Pct. Minority	16,423	8.2%	18,644	9.2%

Sources: U.S. Census, American Community Survey, Maxfield Research & Consulting, LLC

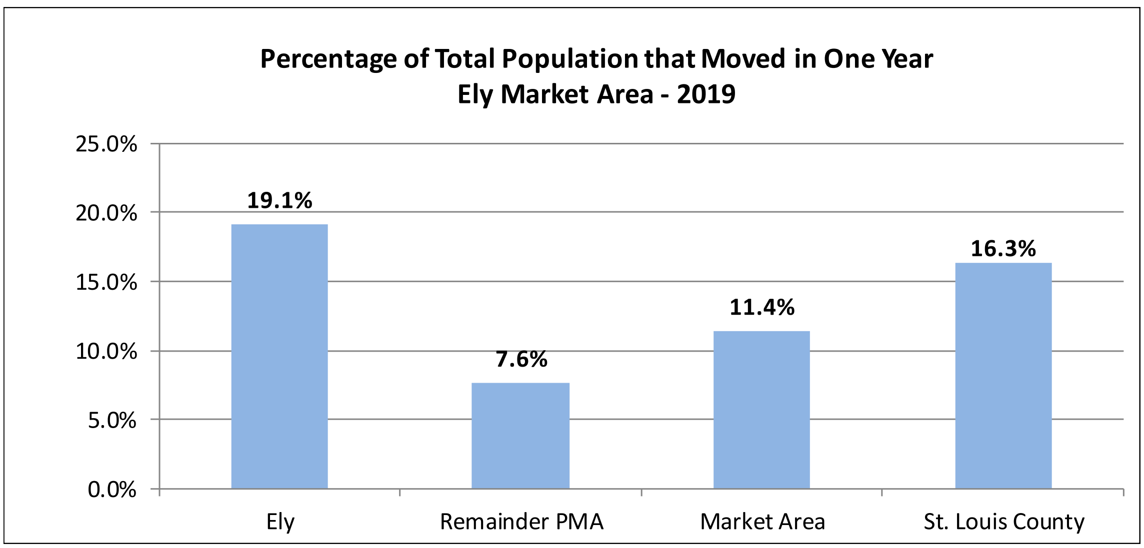
Mobility

Tables D-13 and D-14 present data on the mobility of Market Area residents according to the American Community Survey. The tables show the number and percent of area residents who moved within the past year and to what locations. The data is presented both by geography of origin and by age cohort.

- The youngest cohorts tend to be the most mobile. Of the total, 1,218 people in the Market Area who moved in the past year, 25% were 18 to 24 years old, 20% were 25 to 34 years old, and 18% were under age 18. Other age cohorts moved at a rate of less than 10%, dipping to the lowest or least mobile percentage of 3% among the 75+ age cohort.

- By percentage within the same age cohort, the most mobile group was people ages 18 to 24 with only 61% staying in the same home over the interval compared to the overall rate of 89% among all age cohorts. This is due to the influence of the college.

- An estimated 81% of Ely residents did not move in the past year compared to 89% in the Market Area overall and 84% in St. Louis County.



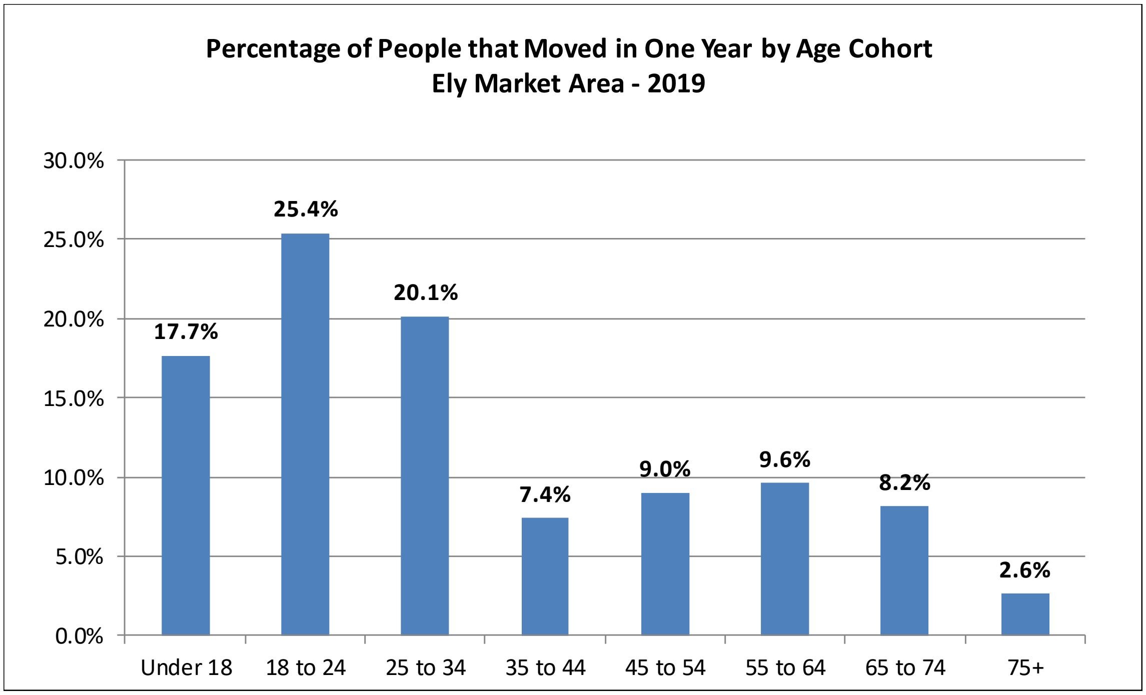


TABLE D-13
MOBILITY IN THE PAST YEAR BY LOCATION FOR CURRENT RESIDENCE
ELY MARKET AREA
2019

	Not Moved		Moved							
	Same House		Within Same County		Different County Same State		Different State		Abroad	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Ely	2,862	80.9%	363	10.3%	188	5.3%	125	3.5%	0	0.0%
Remainder Market Area	6,620	92.4%	269	3.8%	82	1.1%	184	2.6%	7	0.1%
Market Area Total	**9,482**	**88.6%**	**632**	**5.9%**	**270**	**2.5%**	**308**	**2.9%**	**7**	**0.1%**
St. Louis County	**170,472**	**83.7%**	**21,085**	**10.4%**	**7,777**	**3.8%**	**3,840**	**1.9%**	**491**	**0.2%**

Sources: U.S. Census Bureau - American Community Survey; Maxfield Research & Consulting, LLC.

- Among Market Area residents, 1,218 moved within the past year, the majority of which moved within the same county (52% of households that moved, or 6% of all households). An additional 22% of households that moved relocated from counties in the State and 25% relocated from a different state. Less than 1% moved from abroad.

TABLE D-14
MOBILITY IN THE PAST YEAR BY AGE FOR CURRENT RESIDENCE
ELY MARKET AREA
2019

Market Area	Not Moved		Moved							
	Same House		Within Same County		Different County Same State		Different State		Abroad	
Age	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Under 18	1,131	84.0%	171	12.7%	28	2.1%	17	1.2%	0	0.0%
18 to 24	480	60.8%	149	18.9%	72	9.2%	88	11.1%	0	0.0%
25 to 34	724	74.7%	142	14.6%	59	6.1%	45	4.6%	0	0.0%
35 to 44	805	89.9%	41	4.6%	7	0.8%	34	3.8%	7	0.8%
45 to 54	1,176	91.5%	64	5.0%	11	0.9%	34	2.7%	0	0.0%
55 to 64	2,057	94.6%	21	1.0%	63	2.9%	33	1.5%	0	0.0%
65 to 74	1,768	94.7%	36	1.9%	11	0.6%	52	2.8%	0	0.0%
75+	1,340	97.7%	8	0.6%	18	1.3%	6	0.5%	0	0.0%
Total	**9,482**	**88.6%**	**632**	**5.9%**	**270**	**2.5%**	**308**	**2.9%**	**7**	**0.1%**

St. Louis County	Not Moved		Moved							
	Same House		Within Same County		Different County		Different State		Abroad	
Age	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Under 18	32,427	88.9%	3,863	10.3%	683	1.8%	432	1.2%	72	0.2%
18 to 24	13,309	52.0%	6,739	25.7%	4,641	17.7%	1,345	5.1%	238	0.9%
25 to 34	18,036	77.2%	4,059	16.9%	1,048	4.4%	791	3.3%	67	0.3%
35 to 44	19,399	89.8%	1,900	8.6%	443	2.0%	427	1.9%	25	0.1%
45 to 54	23,448	93.3%	1,642	6.4%	309	1.2%	374	1.4%	28	0.1%
55 to 64	29,460	96.3%	1,375	4.4%	381	1.2%	197	0.6%	9	0.0%
65 to 74	19,188	97.2%	716	3.5%	162	0.8%	175	0.9%	30	0.1%
75+	15,206	96.2%	791	4.9%	111	0.7%	99	0.6%	23	0.1%
Total	**170,472**	**86.0%**	**21,085**	**10.4%**	**7,777**	**3.8%**	**3,840**	**1.9%**	**491**	**0.2%**

Sources: U.S. Census Bureau - American Community Survey; Maxfield Research & Consulting, LLC

Public School Enrollment Trends

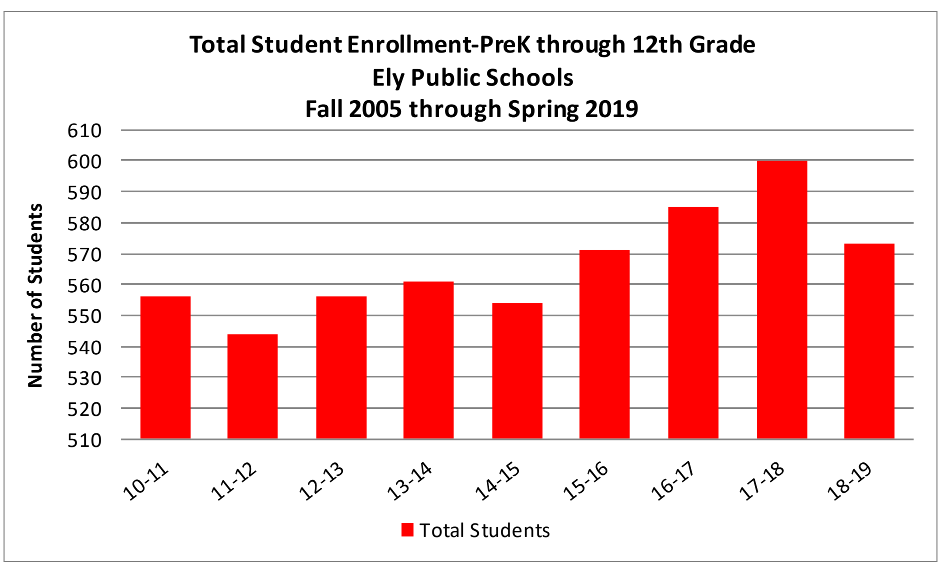
Table D-15 shows the number of students enrolled in Ely Public Schools. Enrollment has fluctuated this decade from September 2010 through May 2019. In September 2010, enrollment in Ely Public Schools totaled 556 students. By May 2019, the enrollment had increased to 573 students with some fluctuations early in the decade before achieving steady growth from 2014 to 2018 and then declining again for the 2018/2019 school year. Enrollments are generally anticipated to experience a modest increase after 2020 depending on location in the State. Also, we note that increases in employment in the area because of new companies (specifically the potential Polymet Mine) opening may have an impact on public school enrollment if families relocate to the area.

TABLE D-15
STUDENT ENROLLMENT
ISD #696-Ely Public Schools
Fall 2005 through Spring 2019

School Year	Total Males	Total Females	Total Minority	Total Students*
10-11	304	252	33	556
11-12	300	244	33	544
12-13	301	255	32	556
13-14	310	251	52	561
14-15	292	262	52	554
15-16	301	270	60	571
16-17	306	279	54	585
17-18	310	290	61	600
18-19	289	284	57	573

* Total minority students are included in the figures for total males and total females.

Sources: Minnesota Department of Education; Maxfield Research & Consulting, LLC



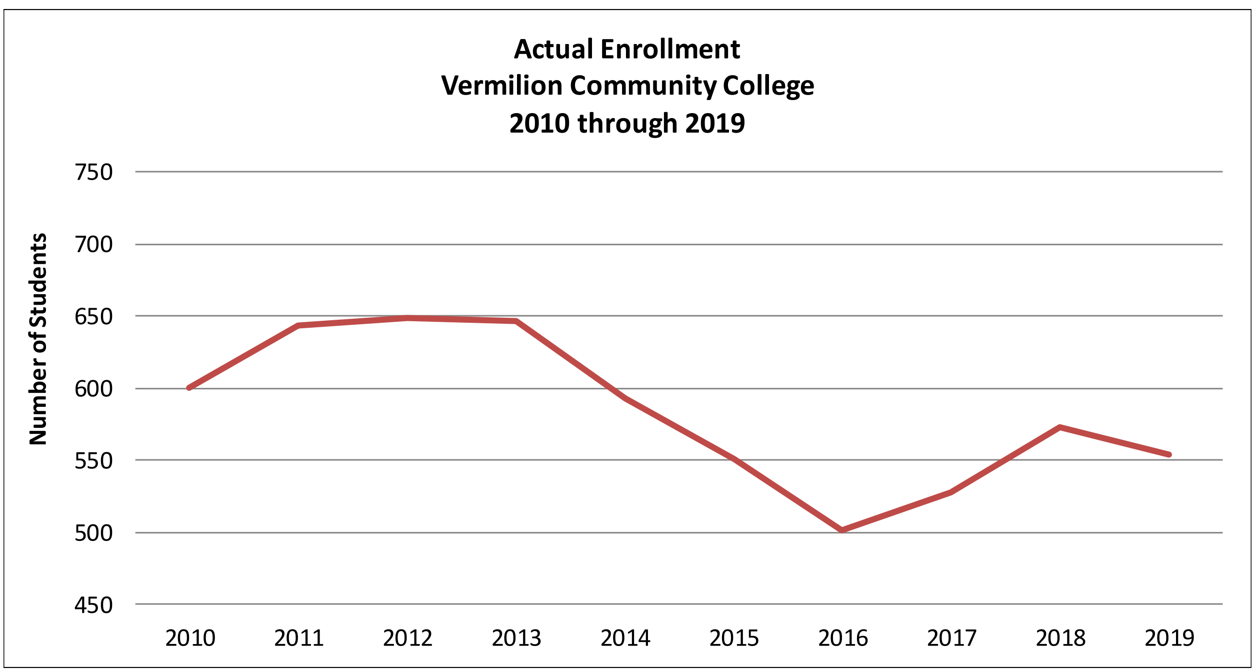
Student Enrollment – Vermilion Community College

Table D-16 presents actual enrollment for Vermilion Community College from fall 2010 through fall 2019 Full-time enrollment at the College is estimated at about 70% of the actual enrollment. Full-time enrollment includes students most likely to reside in the community in student housing or in rental apartments or rooms while they are attending school. Those attending part-time would be more likely to reside at home or may reside in the community but be working either part-time or full-time and attending school part-time. A portion of students attending Vermilion full-time may also be commuting longer distances and living at home to try to reduce overall costs.

TABLE D-16
ACTUAL ENROLLMENT
VERMILION COMMUNITY COLLEGE
2010 THROUGH 2019

Year	Actual Enrollment
2010	600
2011	643
2012	649
2013	646
2014	593
2015	551
2016	501
2017	528
2018	573
2019	554

Source: MNSCU Finance Division



Older Adult and Senior Demographic Trends

Tables D-17 through D-19 present growth trends and demographic characteristics of the population age 55 or older in Ely and the Remainder of the Market Area. While some of this information is presented in previous tables, it is separated here to more easily identify senior population and household growth trends in Ely and the surrounding area.

Older Adult and Senior Population and Household Trends

Table D-17 presents an age distribution of the age 55 or older population in the Ely Market Area. As shown on the table, total population decreased in the Ely Market Area from 2000 to 2010 by 679 people, or 6%. Conversely, people age 55 years or older experienced an increase during the same period of 603 people or 15%. Only one age cohort among the older adult population experienced a decrease during this period, those ages 75 to 79, who were born in the Depression Era, a period of much lower births in the United States.

TABLE D-17
55+ POPULATION & HOUSEHOLD AGE DISTRIBUTION
ELY MARKET AREA
2000 - 2024

POPULATION

Age	2000	2010	2019	2024	2000-2010		2010-2024	
55 to 64	1,500	1,927	2,084	1,935	427	28.5%	8	0.4%
65 to 69	719	789	1,073	1,190	70	9.7%	401	50.8%
70 to 74	588	697	867	1,045	109	18.5%	348	49.9%
75 to 79	521	452	555	683	-69	-13.2%	231	51.1%
80 to 84	348	371	363	452	23	6.6%	81	21.8%
85 +	299	342	385	399	43	14.4%	57	16.6%
Total 55+	3,975	4,578	5,328	5,704	603	15.2%	1,126	24.6%
Total 65+	2,475	2,651	3,244	3,769	176	7.1%	1,118	42.2%
Total 75+	1,168	1,165	1,304	1,534	-3	-0.3%	369	31.6%
Tot. Pop.	**11,009**	**10,330**	**10,700**	**10,890**	**-679**	**-6.2%**	**560**	**5.4%**

HOUSEHOLDS

Age	2000	2010	2019	2024	2000-2010		2010-2024	
55 to 64	789	1,164	1,214	1,112	375	47.5%	-52	-4.5%
65 to 74	802	953	1,357	1,363	151	18.8%	410	43.0%
75 +	667	605	1,041	1,045	-62	-9.3%	440	72.8%
Total 55+	2,258	2,722	3,612	3,520	464	20.5%	798	29.3%
Total 65+	1,469	1,558	2,397	2,408	89	6.1%	850	54.6%
Total 75+	667	605	1,041	1,045	-62	-9.3%	440	72.8%
Tot. HH	**4,939**	**5,006**	**5,140**	**5,250**	**67**	**1.4%**	**244**	**4.9%**

Sources: U.S. Census Bureau; ESRI.; Maxfield Research & Consulting, LLC

From 2010 to 2024, the older adult population is expected to continue growing, increasing by 1,126 people or 25%. Growth in this age category moving forward is being generated by the aging of the baby boom generation, those born between 1946 and 1964. This is one of the largest generations in our nation's history and the baby boom generation has been responsible for major shifts in housing demand and product types as they have aged through their lifecycle. Considerable growth is also anticipated in the 65 years or older category, a total increase of 42% (2010 – 2020) as the leading edge of the baby boomers age into their early 70s and late 60s.

Older Adult and Senior Household Income Distribution

Table D-18 presents an estimated older adult (55+) household income distribution for the Ely Market Area in 2019 with a projection for 2024 based on information provided by ESRI, Inc., and the US Census Bureau. The data helps determine demand for senior housing based on the size of the market at specific income levels. This data is incorporated into our demand calculations which are presented in a following section. The data does not account for the asset base of senior households or supplemental income that a senior household could gain from the proceeds of a sale of a home or from contributions from family members.

The frailer the senior, the greater the proportion of their income they will typically spend on housing and services. Studies have shown that seniors are willing to pay increasing proportions of their incomes on housing with services, beginning with an income allocation of 40% to 50% for market rate adult senior housing with little or no services, increasing to 65% for independent (congregate) housing and to 80% to 90% or more for assisted living housing. The proceeds from the sales of their homes, as well as financial assistance from their adult children, are often used as supplemental income to afford senior housing alternatives. The following are key points from Table D-18:

- Overall, senior households in the PMA have modest incomes. The median income of $37,737 for 65+ households in 2019 compares to a median income of $36,718 for St. Louis County for this same age group. Therefore, a higher proportion of seniors in the PMA would likely be able to income-qualify for market rate senior housing than in St. Louis County as a whole.

- The market for independent, adult/few services senior housing is typically comprised of senior households age 65+ with incomes of $35,000 or more. As of 2019, we estimate there are 1,258 households age 65 and older. Including all households with incomes of $40,000 and over (adjusted for inflation), the number of 65+ senior households projected to income qualify for market rate adult/few services senior housing is expected to grow to 1,308 households as of 2024, an increase of 4%.

TABLE D-18
OLDER ADULT INCOME DISTRIBUTION
ELY MARKET AREA
2019 & 2024

2019

	55-64		65-74		75+		Total 65+	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Under $15,000	121	10.0	160	11.8	162	15.6	322	13.4
$15,000-$24,999	111	9.2	168	12.4	302	29.0	469	19.6
$25,000-$34,999	99	8.2	170	12.5	173	16.6	343	14.3
$35,000-$49,999	181	14.9	238	17.5	174	16.7	412	17.2
$50,000-$74,999	242	19.9	223	16.5	117	11.3	340	14.2
$75,000-$99,999	165	13.6	141	10.4	66	6.4	207	8.6
$100,000 or more	295	24.3	257	19.0	46	4.5	304	12.7
Total	1,214	100.0	1,357	100.0	1,041	100.0	2,397	100.0
Median Income	**$57,428**		**$45,381**		**$27,545**		**$37,337**	

2024

	55-64		65-74		75+		Total 65+	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Under $15,000	81	7.3	119	8.7	142	13.6	261	10.8
$15,000-$24,999	77	6.9	122	8.9	254	24.3	376	15.6
$25,000-$34,999	66	5.9	139	10.2	159	15.2	298	12.4
$35,000-$49,999	143	12.9	221	16.2	182	17.5	403	16.7
$50,000-$74,999	216	19.4	232	17.0	134	12.8	366	15.2
$75,000-$99,999	169	15.2	163	12.0	85	8.1	248	10.3
$100,000 or more	361	32.5	367	26.9	89	8.5	456	18.9
Total	1,112	100.0	1,363	100.0	1,045	100.0	2,408	100.0
Median Income	**$70,899**		**$56,659**		**$32,394**		**$44,993**	

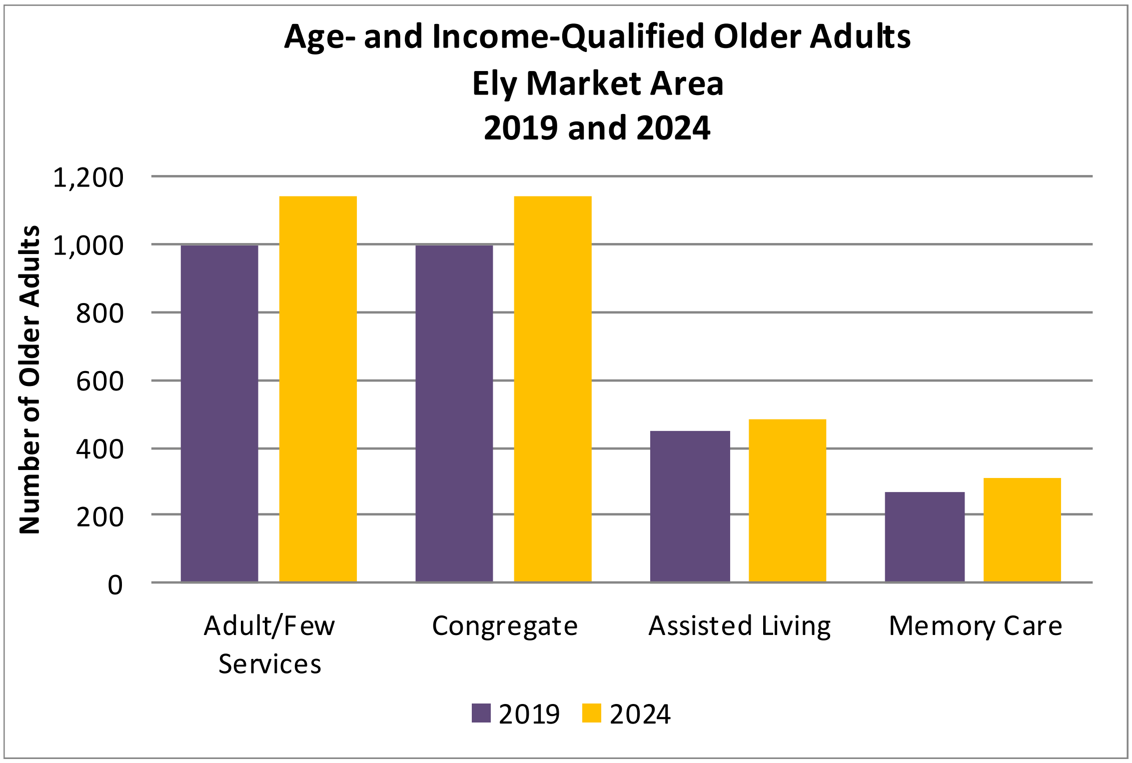
CHANGE 2019 TO 2024

	55-64		65-74		75+		Total 65+	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Under $15,000	-41	-33.6	-41	-25.6	-20	-12.5	-61	-19.0
$15,000-$24,999	-35	-31.2	-46	-27.3	-48	-15.8	-93	-19.9
$25,000-$34,999	-34	-34.0	-31	-18.2	-14	-7.9	-36	-10.4
$35,000-$49,999	-37	-20.8	-17	-7.3	8	4.8	-9	-2.1
$50,000-$74,999	-26	-10.8	9	3.8	17	14.4	25	7.5
$75,000-$99,999	5	2.9	23	16.2	19	28.1	41	20.0
$100,000 or more	66	22.3	110	42.6	42	91.2	152	50.0
Total	-102	-8.4	6	0.5	5	0.5	20	0.8
Median Income	**$13,471**	**23.5**	**$11,278**	**24.9**	**$4,849**	**17.6**	**$7,656**	**20.5**

Sources: ESRI; Maxfield Research & Consulting, LLC

- The key market for independent senior housing with services housing is comprised of senior households (age 75+), with incomes of $35,000 or more. As of 2019, we estimate there are 404 age- and income-qualified households in the PMA (75+) that comprise the key market for market rate senior housing with services. Including all households with incomes of $40,000 and over (adjusted for inflation), the number of 75+ senior households projected to income-qualify for market rate senior housing with services is expected to remain relatively stable at 399 households in 2024 (-1%).

- The target market for assisted living senior housing is comprised of senior households (age 75+), with incomes of $40,000 or more and a portion of senior homeowners within incomes below this level who would spend down their assets to avoid nursing home placement. As of 2019, we estimate there are 346 age- and income-qualified households in the PMA (75+) that comprise the market for market rate senior housing with services. Including all house-holds with incomes of $45,000 and over (adjusted for inflation), the number of 75+ senior households projected to income-qualify for market rate assisted living is expected to decline slightly to 335 households by 2024 (-2.5%).



- The target market for memory care senior housing is comprised of senior households (age 75+), with incomes of $60,000 or more and a portion of senior homeowners with incomes below this level who would spend down assets to avoid nursing home placement. As of 2019, we estimate there are 183 age- and income-qualified households in the PMA (75+) that comprise the market for memory care senior housing. Including all households with incomes of $65,000 and over (adjusted for inflation), the number of 75+ senior households projected to income-qualify for memory care senior housing is expected to grow slightly to 187 households by 2024 (3%).

Older Adult and Senior Household Tenure

Table D-19 presents a distribution of older adults (55+) that owned and rented their housing in the Ely Market Area in 2010 and 2019. This information is compiled by the US Census Bureau. This information lends insight into the number of households that may still have homes to sell and could potentially supplement their incomes from the sales of their homes to support monthly fees for alternative housing.

- The Ely Market Area maintains relatively high rates of homeownership in the older adult age cohorts. The estimated homeownership rate in 2019 was 89% for age 55 to 64 households. The homeownership rate drops slightly to 87% for age 65 to 74 households and then decreases again to 85% for households age 75 years or older.

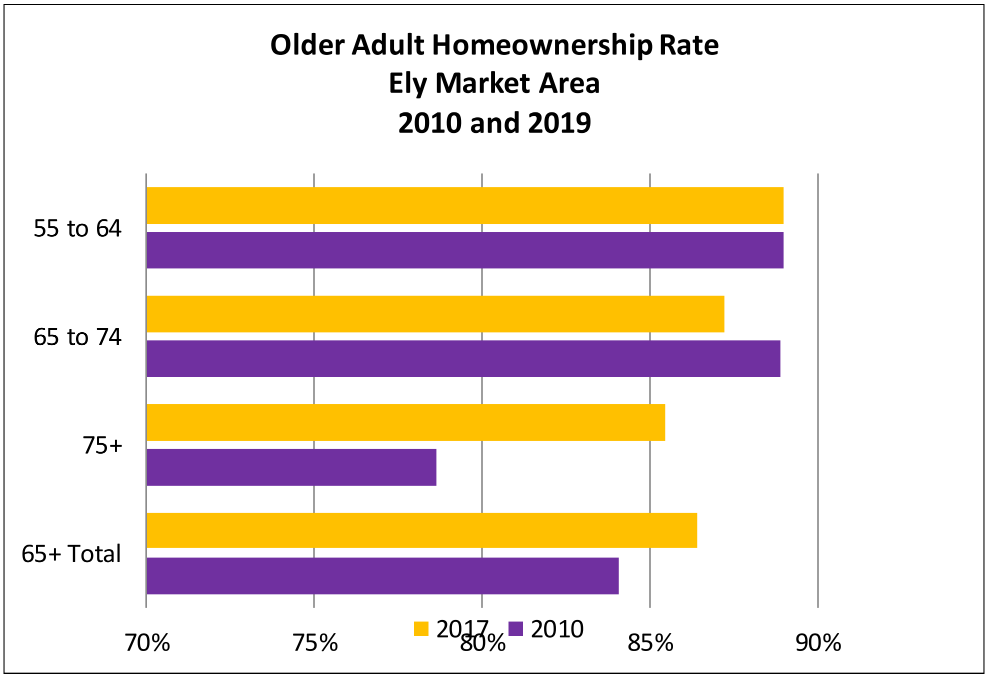
- Seniors typically begin to consider moving into senior housing alternatives in their early to mid-70s. This movement pattern is demonstrated by the decrease in homeownership between the 65 to 74 age cohort (87%) and the 75+ age cohort (85%) although slight. The much higher homeownership rate estimated for those age 75+ in 2019 compared to 2010 indicates that there may be a lack of age-restricted housing for this age group or seniors are choosing to remain in their homes rather than seeking out alternative housing. Seniors may also be concerned that the amount obtained from the sale of a home may be insufficient to afford the costs of care and they may be delaying more for that reason.

TABLE D-19
OLDER ADULT HOUSEHOLD TENURE
ELY MARKET AREA
2010 & 2019

	Age of Householder							
	55-64		65-74		75+		Total 65+	
	Own	Rent	Own	Rent	Own	Rent	Own	Rent
2019								
No. of Households	1,081	133	1,184	173	890	151	2,072	325
Homeownership Rate	89%		87%		85%		86%	
2010								
No. of Households	1,036	128	847	106	659	179	1,506	285
Homeownership Rate	89%		89%		79%		84%	
Change 2010-2019								
No.of Households	45	5	337	67	231	-28	566	40
Pct. Change	4%	4%	28%	39%	26%	-18%	27%	12%

Sources: U.S. Census Bureau, Maxfield Research & Consulting, LLC

- With a homeownership rate of 86% for all households over the age of 65, many residents would be able to use proceeds from the sales of their homes toward senior housing alternatives. The resale of single-family homes would allow additional senior households to qualify for market rate housing products, since equity from the home sale could be used as supplemental income for alternative housing. These considerations are factored into the demand calculations presented in a later section of this study.



Introduction

Since employment growth generally fuels household growth, employment trends are a reliable indicator of housing demand. Typically, households prefer to live near work for convenience. However, housing in outlying areas is often more affordable and/or offers attractive quality of life features, making commuting from outlying communities to work in larger employment centers an attractive alternative among some population segments.

Employment Growth & Projections

Table E-1 shows projected employment growth based on the most recent information available from the Minnesota Department of Employment and Economic Development (DEED). The forecast is based on 2016 to 2026 industry projections for the Northeast Minnesota Region, which includes St. Louis County as well as the following counties: Aitkin, Carlton, Cook, Koochiching, Lake, and Itasca. The Seven-County Twin Cities Metro Area and State of Minnesota are included for comparison. Maxfield Research applied the projected ten-year growth rate of 1.1% for the Northeast Planning Area to arrive at the 2026 forecast. The projected growth rate of 1.1% compares to 5.9% for Minnesota as a whole. These employment projections do not directly consider the proposed Polymet and Twin Metals projects. Potential employment growth that could be realized with the opening of the Polymet operation in the future is shown in Table E-2.

TABLE E-1
EMPLOYMENT PROJECTIONS
NE MINNESOTA
2016-2026

	Estimate	Forecast		
	2016	2026	2016-2026	
	No.	No.	No.	Pct.
NE Minnesota Planning Area	**160,337**	**162,062**	**1,725**	**1.1%**
Twin Cities Metro Area	1,878,351	2,006,300	127,949	6.8%
Minnesota	3,097,300	3,278,900	181,600	5.9%

Sources: MN DEED; Maxfield Research & Consulting, LLC

The Polymet Mining operation is projected to provide 360 direct permanent jobs, 550 construction jobs (during construction of the mine) and another 600 induced jobs (resulting from the construction and direct permanent jobs). These jobs are anticipated to be spread throughout the north central Minnesota region. Ely however, will likely see increased demand for short-term rental housing during the construction period as well as increased demand for traditional owned and rental housing from the direct jobs and induced jobs. Additional increased demand is identified with the Polymet operations in the demand calculations.

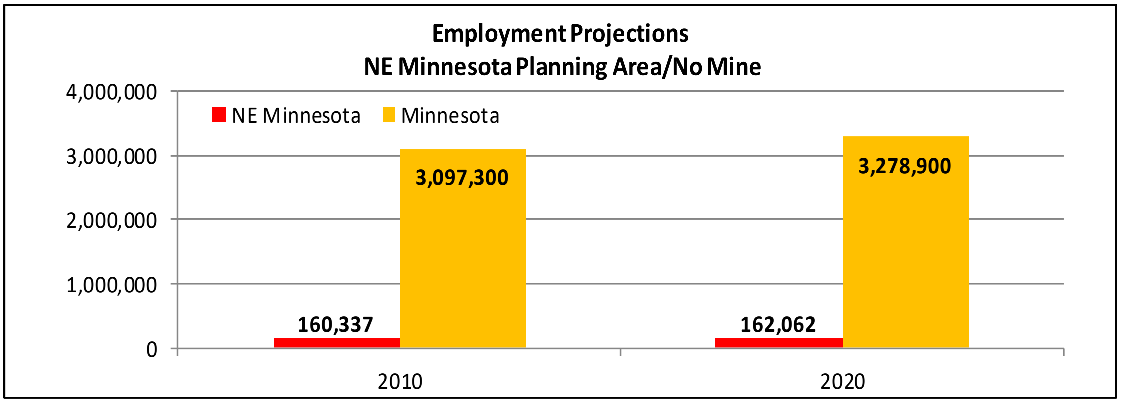
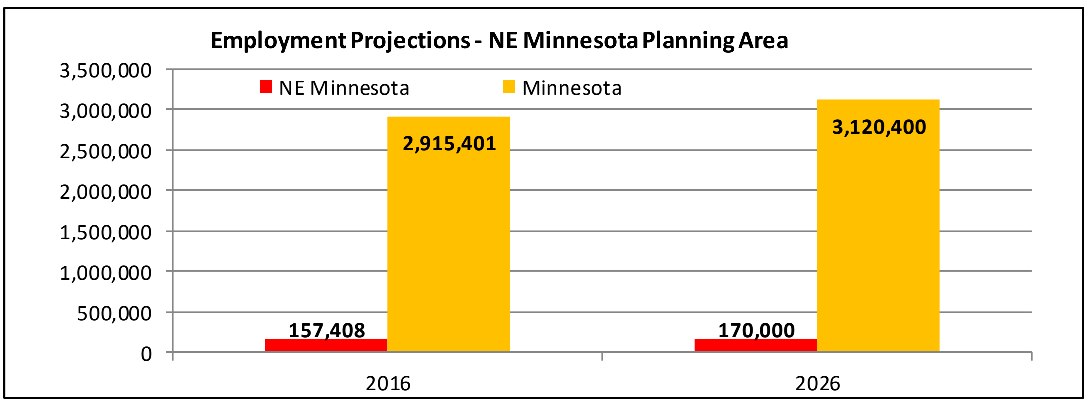


TABLE E-2
EMPLOYMENT PROJECTIONS
GROWTH SCENARIO - WITH POLYMET MINE
NE MINNESOTA
2016-2026

	Estimate	Forecast		
	2016	2026	2016-2026	
	No.	No.	No.	Pct.
NE Minnesota Planning Area	**157,408**	**170,000**	**12,592**	**8.0%**
Minnesota	2,915,401	3,120,400	204,999	7.0%

Sources: MN DEED; Maxfield Research & Consulting, LLC



Local Employment Growth Trends

Recent employment growth trends are shown in Tables E-3 and E-4. The data in both tables is from the Minnesota Department of Employment and Economic Development (DEED). Table E-3 presents resident employment data in St. Louis County from 2005 through Q1 2019. Data is not available at the city level for Ely but is provided for St. Louis County and summarized in the tables. Additional figures on the Duluth, MN-WI Metropolitan Statistical Area and State of Minnesota are provided for comparison. Resident employment is calculated as an annual average *and reveals the work force and number of employed persons living in the County*. Not all these individuals necessarily work in the County.

Resident Employment

- Resident employment in St. Louis County increased by 1,932 people (2%) from 2005 through 2018. The unemployment rate decreased, however from 5.0% (2005) to 3.7% (2018). The 3.7% unemployment rate at the end of 2018 however, reflects a significant decrease from a peak of 9.1% in 2009 during the height of the recession. Since 2009, the unemployment rate in St. Louis County has gradually decreased each year with a fluctuation in 2016 jumping to 5.7% from 4.9% in 2014.

- St. Louis County's unemployment rate has been, on average, 1.0% higher than the unemployment rate in Minnesota in every year from 2005 through 2018. As of 2018, the County's unemployment rate was 3.7% compared to 2.9% in the State. Over the same interval, the Duluth, MN-WI MSA had an unemployment rate closely approximating St. Louis County, estimated at 3.8% in 2018.

TABLE E-3
ANNUAL AVERAGE RESIDENT EMPLOYMENT
ST. LOUIS COUNTY, DULUTH MN-WI MSA, & MINNESOTA
2005 through 2019*

Year	Labor Force	Employed	Unemployed	Rate
ST. LOUIS COUNTY				
2005	101,353	96,270	5,083	5.0%
2006	101,848	96,738	5,110	5.0%
2007	103,338	97,591	5,747	5.6%
2008	104,443	97,825	6,618	6.3%
2009	105,614	95,965	9,649	9.1%
2010	103,374	94,990	8,384	8.1%
2011	102,271	94,758	7,513	7.3%
2012	101,564	94,964	6,600	6.5%
2013	102,216	96,029	6,187	6.1%
2014	102,275	97,072	5,203	5.1%
2015	101,908	96,866	5,042	4.9%
2016	102,893	97,020	5,873	5.7%
2017	102,510	97,844	4,666	4.6%
2018	101,957	98,202	3,755	3.7%
2019*	102,923	97,854	5,069	4.9%
Change 2005 through 2018				
Number	604	1,932	-1,328	--
Percent	0.6%	2.0%	-26.1%	--
DULUTH, MN-WI MSA				
2005	141,058	133,794	7,264	5.1%
2006	142,057	134,891	7,166	5.0%
2007	143,721	135,839	7,882	5.5%
2008	145,259	136,250	9,009	6.2%
2009	146,683	133,622	13,061	8.9%
2010	144,905	133,053	11,852	8.2%
2011	143,518	132,883	10,635	7.4%
2012	142,467	133,061	9,406	6.6%
2013	143,191	134,408	8,783	6.1%
2014	142,972	135,518	7,454	5.2%
2015	141,987	134,900	7,087	5.0%
2016	142,305	134,190	8,115	5.7%
2017	143,458	136,604	6,854	4.8%
2018	145,196	139,695	5,501	3.8%
2019*	144,006	136,831	7,175	5.0%
Change 2000 through 2018				
Number	4,138	3,037	-89	--
Percent	2.9%	2.3%	-1.2%	--

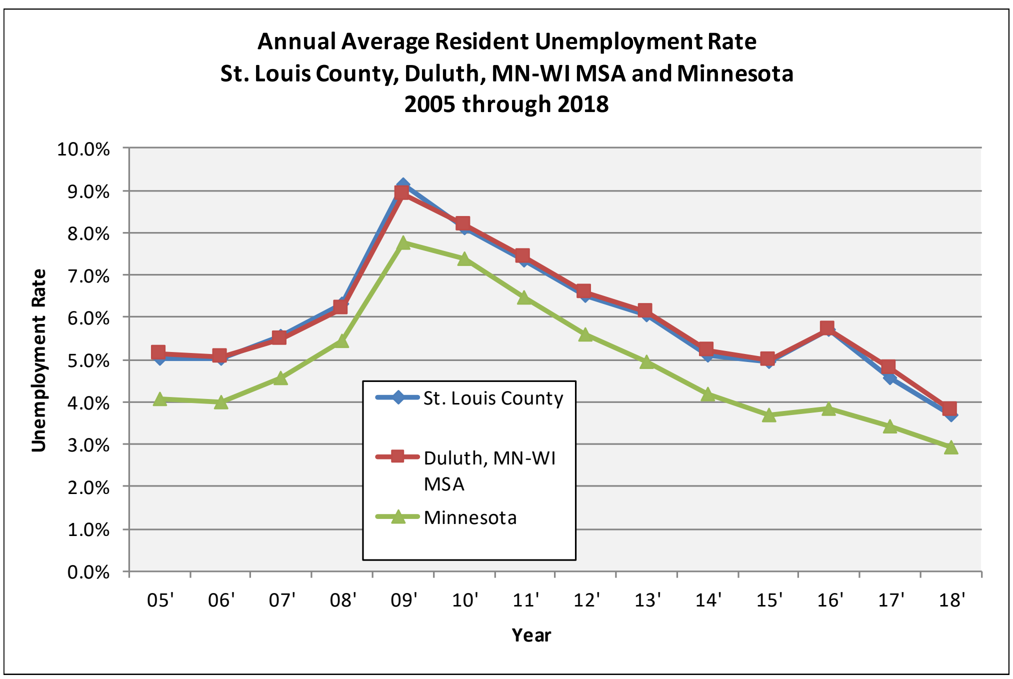
* Data for 2019 is the avearge through Q1

Sources: MN Workforce Center, Maxfield Research & Consulting, LLC

TABLE E-3 (continued) ANNUAL AVERAGE RESIDENT EMPLOYMENT ST LOUIS COUNTY, DULUTH, MN-WI MSA, & MINNESOTA 2005 through 2019*				
Year	**Labor Force**	**Employed**	**Unemployed**	**Rate**
MINNESOTA				
2005	2,879,759	2,762,732	117,027	4.1%
2006	2,887,831	2,772,114	115,717	4.0%
2007	2,906,389	2,773,704	132,685	4.6%
2008	2,925,088	2,766,342	158,746	5.4%
2009	2,941,976	2,713,426	228,550	7.8%
2010	2,938,795	2,721,194	217,601	7.4%
2011	2,946,278	2,755,263	191,015	6.5%
2012	2,946,355	2,781,140	165,215	5.6%
2013	2,958,595	2,811,761	146,834	5.0%
2014	2,972,800	2,848,787	124,013	4.2%
2015	2,997,748	2,887,132	110,616	3.7%
2016	3,033,406	2,916,353	117,053	3.9%
2017	3,057,014	2,952,960	104,054	3.4%
2018	3,070,223	2,980,884	89,339	2.9%
2019*	3,086,381	2,956,423	129,958	4.2%
Change 2000 through 2018				
Number	190,464	193,691	12,931	--
Percent	6.6%	7.0%	11.0%	--

* Data for 2019 is the avearge through Q1

Sources: MN Workforce Center, Maxfield Research & Consulting, LLC



Covered Employment by Industry

Table E-4 presents covered employment in St. Louis County from 2005 through 2018, the most recent data available. Table E-5 presents similar data for Ely. Covered employment data is calculated as an annual average and *reveals the number of jobs in the County and City,* which are covered by unemployment insurance. Most farm jobs, self-employed persons, and some other types of jobs are not covered by unemployment insurance and are not included in the table.

- The Education and Health Services sector accounted for 34.5% of the County's jobs and 25% of Ely's job in 2018, which is the largest percentage by sector in the County. Trade, Transportation, & Utilities (TTU) and Leisure and Hospitality sectors accounted for 18% (18.5% in Ely) and 12% (18% in Ely) of the all jobs in St. Louis County, respectively.

- From 2005 through 2018, the total number of jobs increased by 4,263 (4.5%) while Ely experienced a decrease of 434 jobs (-19%). Numerically, the most jobs were gained in Education and Health Services (4,622 jobs, 16%) and Public Administration (11%) in Ely.

TABLE E-4
COVERED EMPLOYMENT TRENDS
ST. LOUIS COUNTY
2005, 2010, 2015, and 2018
North American Industrial Classification System (NAICS)

Average Number of Employees					Change 2005 - 2018		% of Total				Weekly wage
Industry	2005	2010	2015	2018	No.	Pct.	2005	2010	2015	2018	2018
Natural Resources & Mining	3,024	2,992	3,411	3,565	541	17.9	3.2%	3.2%	3.5%	3.6%	$1,828
Construction	4,170	3,559	4,368	4,462	292	7.0	4.4%	3.8%	4.5%	4.5%	$1,181
Manufacturing	5,699	4,113	4,490	4,812	-887	-15.6	6.1%	4.4%	4.6%	4.9%	$1,079
Trade, Transportation, and Utilities	18,559	17,058	18,099	17,793	-766	-4.1	19.7%	18.3%	18.6%	18.1%	$742
Information	**na**	4,338	1,256	1,053	**na**	**na**	----	4.6%	1.3%	1.1%	$947
Financial Services	4,637	4,338	4,387	4,335	-302	-6.5	4.9%	4.6%	4.5%	4.4%	$992
Professional and Business Services	6,473	7,103	7,258	6,503	30	0.5	6.9%	7.6%	7.5%	6.6%	$1,075
Education and Health Services	29,292	32,849	33,255	33,914	4,622	15.8	31.1%	35.2%	34.1%	34.5%	$980
Leisure and Hospitality	10,891	11,149	11,495	12,164	1,273	11.7	11.6%	11.9%	11.8%	12.4%	$340
Other Services	3,290	3,071	3,506	3,767	477	14.5	3.5%	3.3%	3.6%	3.8%	$580
Public Administration	5,808	5,680	5,886	6,067	259	4.5	6.2%	6.1%	6.0%	6.2%	$1,060
Totals[1]	**94,174**	**93,407**	**97,413**	**98,437**	**4,263**	**4.5**					**$898**

[1] Totals based on annual average of four quarters and may be exceed summation of individual industries as listed in the table.

Sources: MN DEED; Maxfield Research & Consulting, LLC

- Three sectors in St. Louis County lost jobs, most significantly Manufacturing (-827 jobs, -16%), Trade, Transportation, and Utilities (-766 jobs, -4%), and Natural Resources & Mining (-302, -6.5%).

- Ely experienced losses in all but two sectors, most significantly Professional and Business Services (123 jobs, 50%), Education and Health Services (-73 jobs, 14%) and Other Services (-58, 42%)

Average Weekly Wages by Industry

- Average weekly wage data by industry is also presented in the table based on information available in the most recently reported quarter: 2018. Average weekly wages data range from $340 per week in both St. Louis County and Ely ($17,680 annually) for the Leisure and Hospitality sector to $1,828 per week ($95,056 annually) for Natural Resources & Mining sector. The highest average weekly wage in Ely was for Public Administration at $1,031 ($53,612 annually).

- Several industry sectors have low wages. Some of the positions in these industries however, represent part-time jobs with hourly wages or may be in industries such as Leisure and Hospitality that have additional income sources (i.e. tips and gratuities) not accounted for in the data.

TABLE E-5
COVERED EMPLOYMENT TRENDS
CITY OF ELY
2005, 2010, 2015 and 2018
North American Industrial Classification System (NAICS)

Average Number of Employees					Change 2005 - 2018		% of Total				Weekly wage
Industry	2005	2010	2015	2018	No.	Pct.	2005	2010	2015	2018	2018
Natural Resources & Mining*	24	na	na	na	----	-----	1.1%	----	----	----	$857
Construction*	152	na	na	na	----	-----	6.7%	----	----	----	$892
Manufacturing	94	51	66	96	2	2.1	4.1%	2.5%	3.4%	5.2%	$459
Trade, Transportation, and Utilities	371	338	357	343	-28	-7.5	16.2%	16.8%	18.4%	18.5%	$464
Information	41	34	30	22	-19	-46.3	1.8%	1.7%	1.5%	1.2%	$584
Financial Services	138	125	111	96	-42	-30.4	6.0%	6.2%	5.7%	5.2%	$812
Professional and Business Services	244	250	109	121	-123	-50.4	10.7%	12.4%	5.6%	6.5%	$986
Education and Health Services	536	540	534	463	-73	-13.6	23.5%	26.8%	27.6%	25.0%	$934
Leisure and Hospitality	341	328	401	334	-7	-2.1	14.9%	16.3%	20.7%	18.0%	$336
Other Services	138	73	66	80	-58	-42.0	6.0%	3.6%	3.4%	4.3%	$554
Public Administration	203	221	211	225	22	10.8	8.9%	11.0%	10.9%	12.2%	$1,031
Totals	**2,285**	**2,017**	**1,937**	**1,851**	**-434**	**-19.0**					**$703**

* Average weekly wages for Natural Resources/Mining and Construction reflect 2017 figures.

Source: Minnesota Workforce Center; Maxfield Research & Consulting. LLC

Commuting Patterns

Proximity to employment is often a primary consideration when choosing where to live, since transportation costs often accounts for a large proportion of households' budgets. Tables E-5 and E-6 highlight the commuting patterns of workers in Ely and St. Louis County, respectively, in 2017 (the most recent data available), based on Employer-Household Dynamics data from the U.S. Census Bureau.

TABLE E-6
COMMUTING PATTERNS
CITY OF ELY
2017

Home Destination			Work Destination		
Place of Residence	**Count**	**Share**	**Place of Employment**	**Count**	**Share**
Ely city, MN	629	58.7%	Ely city, MN	629	52.0%
Virginia city, MN	42	3.9%	Babbitt city, MN	65	5.4%
Babbitt city, MN	31	2.9%	Soudan CDP, MN	38	3.1%
Duluth city, MN	26	2.4%	Duluth city, MN	25	2.1%
Hibbing city, MN	14	1.3%	Tower city, MN	25	2.1%
Mountain Iron city, MN	13	1.2%	Virginia city, MN	14	1.2%
Minnetonka city, MN	11	1.0%	Winton city, MN	13	1.1%
Tower city, MN	11	1.0%	Hibbing city, MN	7	0.6%
Minneapolis city, MN	10	0.9%	St. Paul city, MN	5	0.4%
St. Paul city, MN	9	0.8%	Apple Valley city, MN	4	0.3%
All Other Locations	275	25.7%	All Other Locations	385	31.8%
Total Primary Jobs	**1,071**	**100.0%**	**Total Primary Jobs**	**1,210**	**100.0%**

Home Destination = Where workers live who are employed in the selection area
Work Destination = Where workers are employed who live in the selection area

Sources: U.S. Census Bureau Local Employment Dynamics; Maxfield Research & Consulting, LLC

TABLE E-7
COMMUTING PATTERNS
ST. LOUIS COUNTY
2017

Home Destination			Work Destination		
Place of Residence	**Count**	**Share**	**Place of Employment**	**Count**	**Share**
Duluth city, MN	29,587	42.8%	Duluth city, MN	23,154	28.8%
Hibbing city, MN	4,559	6.6%	Hibbing city, MN	4,531	5.6%
Virginia city, MN	4,285	6.2%	Superior city, WI	4,017	5.0%
Hermantown city, MN	2,785	4.0%	Hermantown city, MN	2,735	3.4%
Mountain Iron city, MN	2,534	3.7%	Virginia city, MN	2,223	2.8%
Superior city, WI	2,336	3.4%	Cloquet city, MN	1,394	1.7%
Cloquet city, MN	1,255	1.8%	Rice Lake city, MN	1,362	1.7%
Ely city, MN	1,029	1.5%	Chisholm city, MN	1,320	1.6%
Eveleth city, MN	909	1.3%	Eveleth city, MN	1,095	1.4%
Minneapolis city, MN	862	1.2%	Proctor city, MN	961	1.2%
All Other Locations	18,944	27.4%	All Other Locations	37,738	46.9%
Total Primary Jobs	**69,085**	**100.0%**	**Total Primary Jobs**	**80,530**	**100.0%**

Home Destination = Where workers live who are employed in the selection area
Work Destination = Where workers are employed who live in the selection area

Sources: U.S. Census Bureau Local Employment Dynamics; Maxfield Research & Consulting, LLC

- Of the workers employed in Ely, an estimated 59% also live in Ely. The remaining workers commute primarily from nearby cities including Virginia (4%), Babbitt (3%), Duluth (2%), Hibbing (1%), Mountain Iron (1%), Minnetonka (1%), Tower (1%) and other cities at smaller percentages.

- An estimated 52% of Ely residents also work in Ely. Other areas to which Ely residents commute include Babbitt (5%), Soudan (4%), Duluth (2%), Tower (2%), Virginia (1%) and Winton (1%).

- An estimated 29% of St. Louis County residents work in Duluth, 6% work in Hibbing and 5% work in Superior, Wisconsin. The substantial size of St. Louis County (the largest in land area in Minnesota) means that workers are spread out geographically across many communities.

Inflow/Outflow

Table E-8 summarizes the inflow and outflow of workers in Ely and St. Louis County. Outflow measures workers living in Ely but employed outside of Ely while inflow measures workers who are employed in Ely but live outside. Interior flow is the number of workers living and working in Ely.

- Ely is considered an importer of workers, as the number of residents coming into Ely (inflow) for employment was higher than the number of residents leaving Ely for work (outflow). Of the 1,210 workers in Ely, an estimated 581 workers commuted to Ely for work while 442 Ely workers left. An estimated 629 people live and work in Ely.

- Similarly, St. Louis County is also an importer of workers with a net inflow of 11,445 workers based on an inflow of 27,301 and outflow of 15,856 workers.

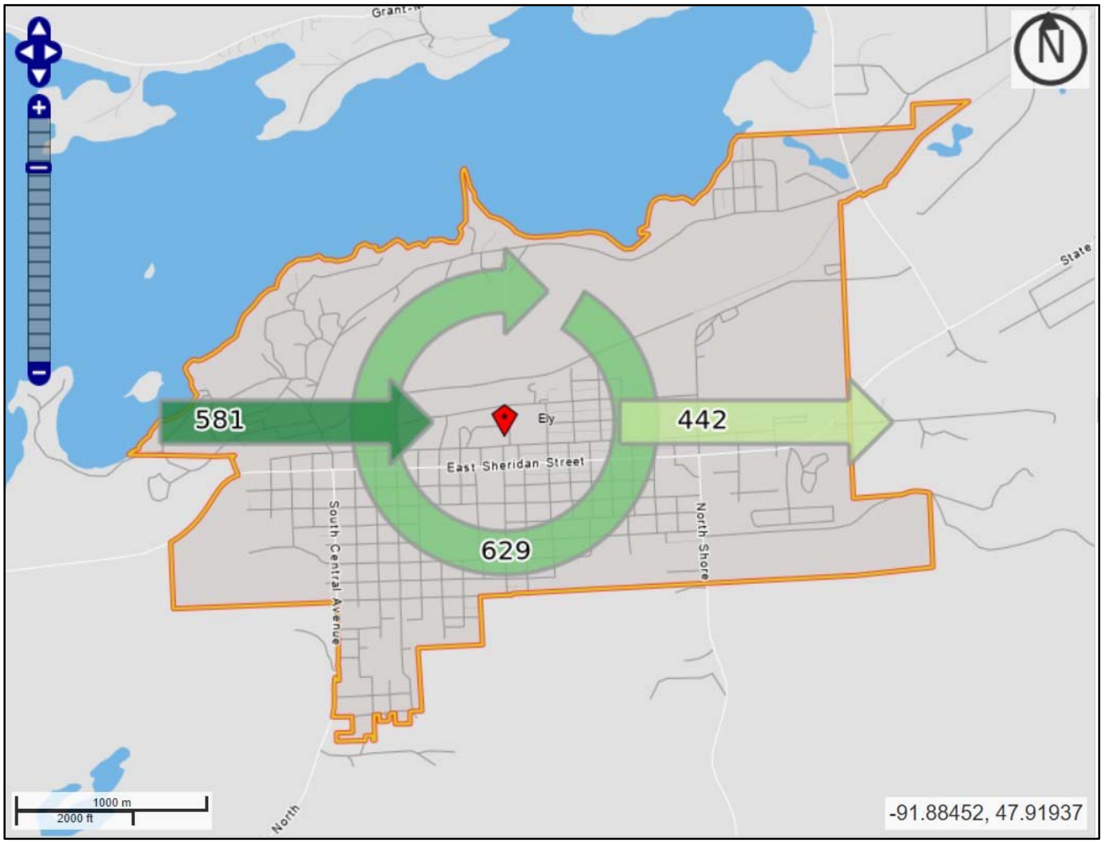
TABLE E-8
COMMUTING INFLOW/OUTFLOW
CITY OF ELY AND ST. LOUIS COUNTY
2017

	Ely	
	Num.	**Pct.**
Employed in the Selection Area	1,662	100%
Employed in the Selection Area but Living Outside	874	52.6%
Employed and Living in the Selection Area	788	47.4%
Living in the Selection Area	1,398	100%
Living in the Selection Area but Employed Outside	610	43.6%
Living and Employed in the Selection Area	788	56.4%

	St. Louis County	
	Num.	**Pct.**
Employed in the Selection Area	80,503	100%
Employed in the Selection Area but Living Outside	27,301	33.9%
Employed and Living in the Selection Area	53,229	66.1%
Living in the Selection Area	69,085	100%
Living in the Selection Area but Employed Outside	15,856	23.0%
Living and Employed in the Selection Area	53,229	77.0%

Sources: Longitudinal Employer-Household Dynamics; Maxfield Research & Consulting, LLC

City of Ely Inflow/Outflow



Existing Business Mix by Industry Category

The business inventory database is compiled from multiple sources, including directory resources from the yellow and white pages, annual reports, 10ks, SEC filings, government data, U.S. Postal Service, business trade directories, newspapers, etc. To ensure accurate information, phone telephone verifications are completed for each business in the database. The data is characterized based on the six-digit North American Industry Classification System (NAICS). The NAICS is the standard used by Federal statistical agencies in classifying business establishments to collect, analyze, and publish statistical data related to the U.S. business economy.

Table E-9 summarizes this data as compiled by ESRI Inc. Information is presented for Ely and the Market Area.

- There are an estimated 277 businesses with 2,476 employees in Ely. This accounts for 46% of the business and 50% of the employee base in the Market Area.
- In Ely, Retail Trade has the greatest number of businesses (59 total, or 21% of the total business base) followed by Other Services (34 total, or 12%), Accommodation & Food Services (29 total, 10.5%) and Public Administration (27 total, or 10%).

- The industry type with the greatest number of employees in Ely is Retail Trade (422 employees, or 17% of the total employee base) followed by Accommodation and Food Services (382 employees, or 15%) and Health Care & Social Services (286 employees, or 12%).

- In the Market Area as a whole, employees are concentrated in Accommodation & Food Services (860 employees, or 17.5%) followed by Health Care & Social Services (631 employees, or 13%) and Retail Trade (605 employees, or 12%).

TABLE E-9
BUSINESS SUMMARY - BY NAICS CODE
CITY OF ELY & MARKET AREA
2018

	CITY OF ELY				MARKET AREA TOTAL			
	Businesses		Employees		Businesses		Employees	
Business/Industry	Number	Pct	Number	Pct	Number	Pct	Number	Pct
NAICS CODES								
Agriculture, Forestry, Fishing and Hunting	1	0.4%	7	0.3%	4	0.7%	84	1.7%
Mining	0	0.0%	0	0.0%	1	0.2%	150	3.1%
Utilities	1	0.4%	6	0.2%	1	0.2%	6	0.1%
Construction	15	5.4%	52	2.1%	44	7.4%	131	2.7%
Manufacturing	9	3.2%	228	9.2%	17	2.8%	263	5.4%
Wholesale Trade	5	1.8%	27	1.1%	7	1.2%	30	0.6%
Retail Trade	59	21.3%	422	17.0%	91	15.2%	605	12.3%
Transportation & Warehousing	1	0.4%	15	0.6%	9	1.5%	44	0.9%
Information	6	2.2%	28	1.1%	11	1.8%	46	0.9%
Finance & Insurance	14	5.1%	54	2.2%	19	3.2%	70	1.4%
Real Estate, Rental & Leasing	14	5.1%	105	4.2%	34	5.7%	193	3.9%
Professional, Scientific & Tech Services	17	6.1%	61	2.5%	24	4.0%	89	1.8%
Management of Companies & Enterprises	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Administrative & Support & Waste Management &	4	1.4%	154	6.2%	14	2.3%	174	3.5%
Educational Services	6	2.2%	271	10.9%	15	2.5%	440	9.0%
Health Care & Social Assistance	18	6.5%	286	11.6%	32	5.4%	631	12.9%
Arts, Entertainment & Recreation	8	2.9%	84	3.4%	27	4.5%	341	7.0%
Accommodation & Food Services	29	10.5%	382	15.4%	104	17.4%	860	17.5%
Other Services (except Public Administration)	34	12.3%	90	3.6%	63	10.6%	166	3.4%
Public Administration	27	9.7%	184	7.4%	58	9.7%	560	11.4%
Unclassified	9	3.2%	20	0.8%	22	3.7%	20	0.4%
Total	**277**	**100.0%**	**2,476**	**100.0%**	**597**	**100.0%**	**4,903**	**100.0%**

Sources: ESRI, Maxfield Research & Consulting, LLC

Introduction

The variety and condition of the housing stock in a community provides the basis for an attractive living environment. Housing functions as a building block for neighborhoods and goods and services. We examined the housing market in Ely and the Market Area by reviewing residential building trends, reviewing data on the age of the existing housing supply, and examining data from the American Community Survey in the Ely Market Area.

Residential Construction Trends

Maxfield Research obtained data from the U.S. Census Bureau on the number of building permits issued for new housing units from 2005 through 2018. Housing cost data is no longer available. Tables HC-1 and HC-2 display permitted units issued for single-family and multifamily dwellings in Ely and St. Louis County, respectively. Multifamily units include for-sale (condominium, twinhomes, and townhomes) and rental developments. The following are key points about housing development since 2005.

- Ely issued permits for the construction of 25 new residential units from 2005 through 2018, approximately 2 units annually. Through 2017 (data for 2018 was not available), St. Louis County issued 6,546 permits or 504 units annually.

- In the early part of the 2000s before the start of the Recession, there was more robust permit activity than the latter part. Building permit activity in St. Louis County started declining in 2005 with 917 permits, which was the highest during the period shown the period. The trend continued downward to a record low of 302 permitted units in 2013.

- Beginning in 2014, building activity in St. Louis County began to rise increasing to 496 permitted units with a spike in 2015 of 715 permitted units due to 368 units in five or more-unit buildings, all of which were in Duluth

- Nearly all the permits issued for new construction in Ely were for single-family homes (94%) compared to about 72% in St. Louis County.

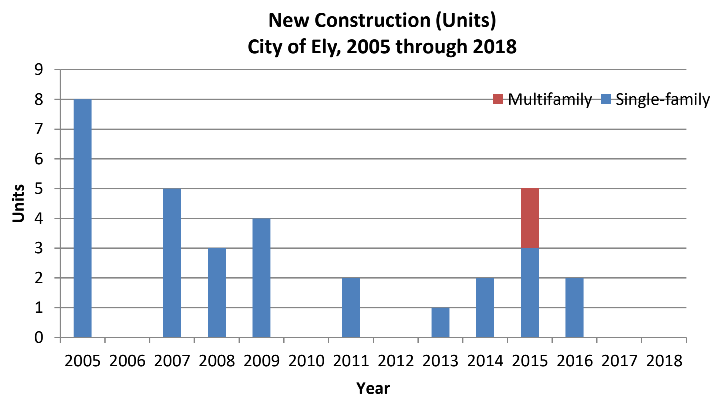
- Among single-family homes, the 9-year average (2005-2013) cost per unit is estimated at $156,031 in Ely and $177,137 in St. Louis County.

- The City of Ely continues to address structures both residential and commercial that are standing vacant and show substantial deterioration and blight.

TABLE HC-1
RESIDENTIAL CONSTRUCTION/ANNUAL BUILDING PERMITS ISSUED
CITY OF ELY
2005 through 2018

	Single-Family Homes	Twin/Town Home	3 & 4 Unit	Multi-family (5+ units)	Total Housing Permits	Single- Family Homes	Twin/Town Home	3 & 4 Unit	Multi- family (5+ units)	Total Housing Permits
	TOTAL UNITS					**TOTAL COST (in $)**				
2005	8	0	0	0	8	$933,464	$0	$0	$0	$933,464
2006	0	0	0	0	0	$0	$0	$0	$0	$0
2007	5	0	0	0	5	$639,574	$0	$0	$0	$639,574
2008	3	0	0	0	3	$383,744	$0	$0	$0	$383,744
2009	4	0	0	0	4	$533,000	$0	$0	$0	$533,000
2010	0	0	0	0	0	$0	$0	$0	$0	$0
2011	2	0	0	0	2	$483,418	$0	$0	$0	$483,418
2012	0	0	0	0	0	$0	$0	$0	$0	$0
2013	1	0	0	0	1	$188,717	$0	$0	$0	$188,717
2014	2	0	0	0	2	na	na	na	na	na
2015	3	2	0	0	5	na	na	na	na	na
2016	2	0	0	0	2	na	na	na	na	na
2017	0	0	0	0	0	na	na	na	na	na
2018	0	0	0	0	0	na	na	na	na	na
Total	**30**	**2**	**0**	**0**	**32**	**$3,161,917**	**$0**	**$0**	**$0**	**$3,161,917**
Avg.	**2**	**0**	**0**	**0**	**2**	**$225,851**	**$0**	**$0**	**$0**	**$225,851**

	COST PER UNIT			
2005	$116,683	--	--	--
2006	--	--	--	--
2007	$127,915	--	--	--
2008	$127,915	--	--	--
2009	$133,250	--	--	--
2010	--	--	--	--
2011	$241,709	--	--	--
2012	--	--	--	--
2013	$188,717	--	--	--
2014	na	na	na	na
2015	na	na	na	na
2016	na	na	na	na
2017	na	na	na	na
2018	na	na	na	na
Avg.	**$156,031**	**--**	**--**	**--**

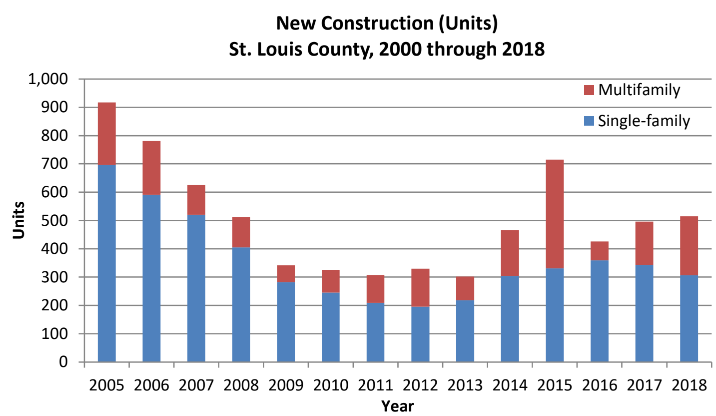


Sources: U.S. Census; Maxfield Research & Consulting, LLC

TABLE HC-2
RESIDENTIAL CONSTRUCTION/ANNUAL BUILDING PERMITS ISSUED
ST. LOUIS COUNTY
2005 through 2018

	TOTAL UNITS					TOTAL COST (in $)				
	Single-Family Homes	Twin/Town Home	3 & 4 Unit	Multi-family (5+ units)	Total Housing Permits	Single-Family Homes	Twin/Town Home	3 & 4 Unit	Multi- family (5+ units)	Total Housing Permits
2005	696	24	32	165	917	$103,321,228	$3,467,805	$3,571,849	$12,554,592	$122,915,474
2006	591	22	23	145	781	$88,614,152	$2,933,550	$2,242,188	$14,196,502	$107,986,392
2007	520	4	15	86	625	$85,177,094	$437,717	$1,496,618	$9,330,948	$96,442,377
2008	405	12	6	89	512	$67,045,021	$1,699,469	$598,648	$8,426,892	$77,770,030
2009	282	6	0	54	342	$48,499,084	$667,600	$0	$5,209,751	$54,376,435
2010	245	10	3	68	326	$45,430,819	$1,094,000	$299,324	$5,439,840	$52,263,983
2011	209	18	3	78	308	$40,871,778	$2,191,336	$299,324	$7,894,066	$51,256,504
2012	196	14	0	120	330	$38,578,943	$1,531,600	$0	$13,456,620	$53,567,163
2013	218	8	0	76	302	$47,239,307	$974,109	$0	$11,100,000	$59,313,416
2014	304	12	12	138	466	na	na	na	na	na
2015	331	4	12	368	715	na	na	na	na	na
2016	359	4	0	63	426	na	na	na	na	na
2017	343	0	0	153	496	na	na	na	na	na
2018	306	8	0	201	515	na	na	na	na	na
Total	**5,005**	**146**	**106**	**1,804**	**7,061**	**$564,777,426**	**$14,997,186**	**$8,507,951**	**$87,609,211**	**$675,891,774**
Avg.	**385**	**11**	**8**	**139**	**543**	**$62,753,047**	**$1,666,354**	**$945,327.89**	**$9,734,357**	**$75,099,086**

	COST PER UNIT			
2005	$148,450	$144,492	$111,620	$76,088
2006	$149,939	$133,343	$97,486	$97,907
2007	$163,802	$109,429	$99,775	$108,499
2008	$165,543	$141,622	$99,775	$94,684
2009	$171,983	$111,267	--	$96,477
2010	$185,432	$109,400	$99,775	$79,998
2011	$195,559	$121,741	$99,775	$101,206
2012	$196,831	$109,400	--	$112,139
2013	$216,694	$121,764	--	$146,053
2014	na	na	na	na
2015	na	na	na	na
2016	na	na	na	na
2017	na	na	na	na
2017	na	na	na	na
Avg.	**$177,137**	**$121,764**	**$101,368**	**$101,450**



Sources: U.S. Census; Maxfield Research & Consulting, LLC.

American Community Survey

The American Community Survey ("ACS") is an ongoing statistical survey administered by the U.S. Census Bureau that is sent to an estimated three million addresses annually. The survey gathers data previously contained only in the long form of the decennial census. As a result, the survey is ongoing and provides a more "up-to-date" portrait of demographic, economic, social, and household characteristics every year, not just every ten years. The most recent ACS highlights data collected between 2013 and 2017. Data has been adjusted to reflect 2019 estimates for housing and most recent building permit information. Tables HC-3 to HC-7 show key data for Ely and the Market Area.

Age of Housing Stock

The following graph shows the age distribution of the housing stock in 2019 based on data from the U.S. Census Bureau and 2019 from the American Community Survey (5-Year). Table HC-3 includes the number of housing units built in Ely and the Market Area, prior to 1940 and during each decade since.

- In total, the Market Area is estimated to have 5,145 housing units, of which 1,663 units (32%) are In Ely. The overall median year built for a home in Ely is 1950, which is older than the median year built of 1966 in the Market Area overall. Median year built for renter-occupied housing was older than for owner-occupied housing in Ely (1949 versus 1953) where as the Market Area overall is estimated to have a median owner- and renter-occupied age of 1966. Numerically, the greatest number of homes in Ely (653 homes, or 39%) and the Market Area (995 homes, or 19%) were built prior to 1940. It is possible that some of these homes may be dilapidated and in need of replacement or repair.

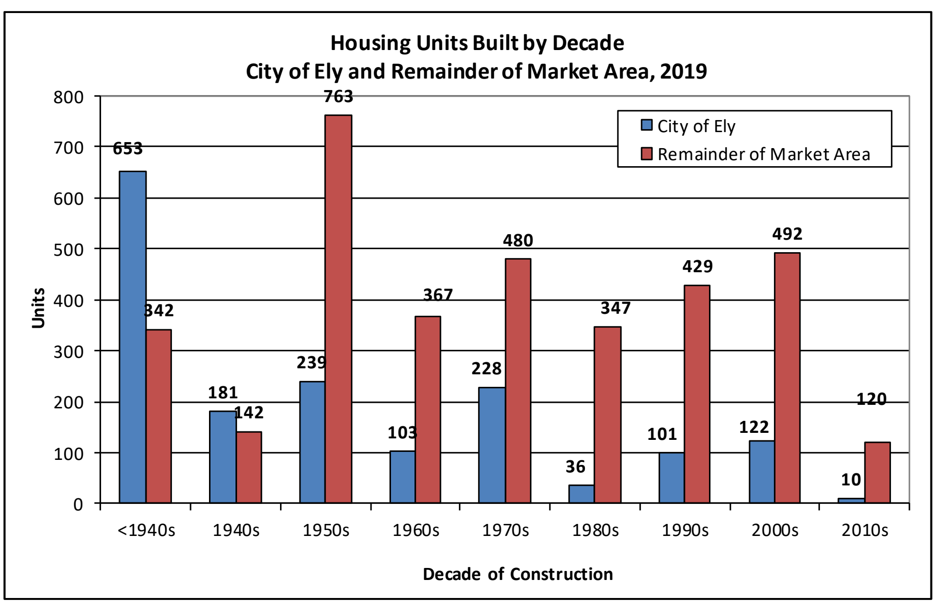


TABLE HC-3
AGE OF HOUSING STOCK
ELY MARKET AREA
2019

	Total Units	Med. Yr. Built	Year Unit Built: <1940 No.	<1940 Pct.	1940s No.	1940s Pct.	1950s No.	1950s Pct.	1960s No.	1960s Pct.	1970s No.	1970s Pct.	1980s No.	1980s Pct.	1990s No.	1990s Pct.	2000s No.	2000s Pct.	2010s No.	2010s Pct.
CITY OF ELY																				
Owner-Occupied	1,117	1949	431	38.6	143	12.8	173	15.5	56	5.0	149	13.3	16	1.4	71	6.4	68	6.1	10	0.9
Renter-Occupied	556	1953	222	39.9	38	6.8	66	11.9	47	8.5	79	14.2	20	3.6	30	5.4	54	9.7	0	0.0
Total	**1,673**	**1950**	**653**	**39.0**	**181**	**10.8**	**239**	**14.3**	**103**	**6.2**	**228**	**13.6**	**36**	**2.2**	**101**	**6.0**	**122**	**7.3**	**10**	**0.6**
REMAINDER OF MARKET AREA																				
Owner-Occupied	2,979	1972	322	10.8	127	4.3	663	22.3	326	10.9	411	13.8	278	9.3	399	13.4	396	13.3	57	1.9
Renter-Occupied	440	1982 ^	20	4.5	15	3.4	100	22.7	41	9.3	69	15.7	69	15.7	30	6.8	96	21.8	63	14.3
Total	**3,419**	**1974 ^**	**342**	**10.0**	**142**	**4.2**	**763**	**22.3**	**367**	**10.7**	**480**	**14.0**	**347**	**10.1**	**429**	**12.5**	**492**	**14.4**	**120**	**3.5**
MARKET AREA TOTAL																				
Owner-Occupied	4,096	1966	753	18.4	270	6.6	836	20.4	382	9.3	560	13.7	294	7.2	470	11.5	464	11.3	67	1.6
Renter-Occupied	1,059	1966 ^	242	22.9	53	5.0	166	15.7	88	8.3	148	14.0	89	8.4	60	5.7	150	14.2	63	5.9
Total	**5,155**	**1966 ^**	**995**	**19.3**	**323**	**6.3**	**1,002**	**19.4**	**470**	**9.1**	**708**	**13.7**	**383**	**7.4**	**530**	**10.3**	**614**	**11.9**	**130**	**2.5**

^ Median year built excludes renter-occupied units in Birch Lake UT, Wassa twp, and NE St. Louis UT due to lack of reported data.

Sources: U.S. Census Bureau - American Community Survey; Maxfield Research & Consulting, LLC

Housing Units by Structure and Occupancy or (Housing Stock by Structure Type*)*

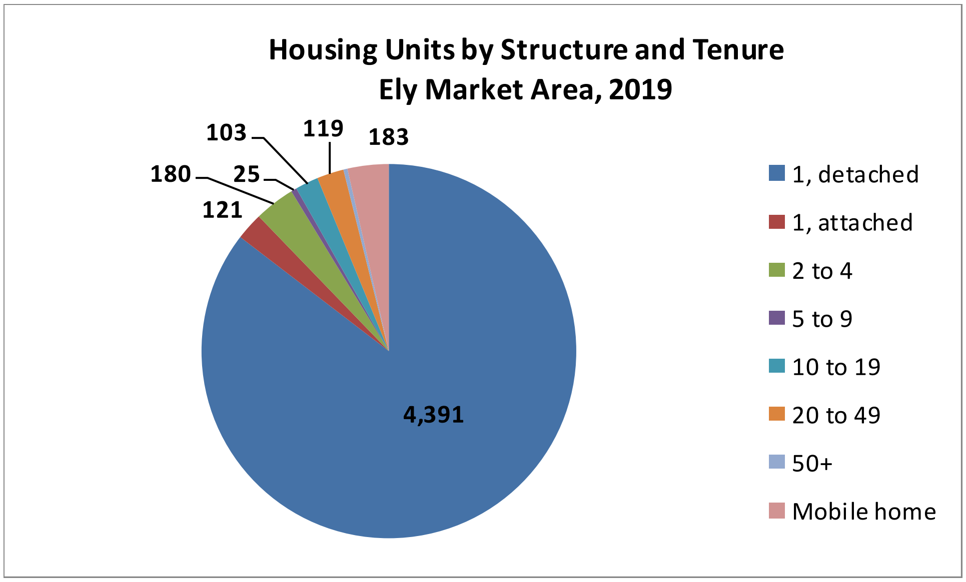
Table HC-4 shows the housing stock in Ely and the Market Area by type of structure and tenure as of 2019.

- The dominant housing type in the Market Area is single-family detached homes, representing an estimated 94.5% of all owner-occupied housing units and 51% of renter-occupied housing units as of 2019.
- Most of the housing units with three or more units are renter-occupied. Over 60% of the Market Area's renter-occupied housing units with three or more units are in Ely.
- Mobile homes account for only 3.5% of all housing units in the Market Area.

TABLE HC-4
HOUSING UNITS BY STRUCTURE & TENURE
ELY MARKET AREA
2019

	ELY				REMAINDER				MARKET AREA TOTAL			
Units in Structure	Owner-Occupied	Pct.	Renter-Occupied	Pct.	Owner-Occupied	Pct.	Renter-Occupied	Pct.	Owner-Occupied	Pct.	Renter-Occupied	Pct.
1, detached	1,060	92.7%	261	45.5%	2,789	95.2%	280	56.9%	3,850	94.5%	542	50.8%
1, attached	9	0.8%	36	6.3%	28	0.9%	48	9.7%	37	0.9%	84	7.9%
2	34	3.0%	77	13.5%	2	0.1%	20	4.0%	36	0.9%	97	9.1%
3 to 4	0	0.0%	20	3.4%	3	0.1%	25	5.0%	3	0.1%	44	4.1%
5 to 9	0	0.0%	21	3.6%	0	0.0%	4	0.8%	0	0.0%	25	2.3%
10 to 19	0	0.0%	49	8.5%	0	0.0%	55	11.1%	0	0.0%	103	9.7%
20 to 49	0	0.0%	87	15.1%	0	0.0%	32	6.6%	0	0.0%	119	11.2%
50 or more	0	0.0%	18	3.1%	0	0.0%	0	0.0%	0	0.0%	18	1.6%
Mobile home	40	3.5%	6	1.1%	107	3.7%	29	6.0%	147	3.6%	36	3.3%
Boat, RV, van, etc.	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	**1,144**	**100%**	**574**	**100%**	**2,929**	**100%**	**493**	**100%**	**4,073**	**100%**	**1,067**	**100%**

Sources: U.S. Census Bureau - American Community Survey; Maxfield Research & Consulting, LLC



Owner-Occupied Housing Units by Mortgage Status

Table HC-5 shows mortgage status and average values from the American Community Survey for 2019 (5-Year). Mortgage status provides information on the cost of homeownership when analyzed in conjunction with mortgage payment data. A mortgage refers to all forms of debt where the property is pledged as security for repayment of debt. A first mortgage has priority claim over any other mortgage; these may also be a household's only mortgage. A second (and sometimes third) mortgage is called a "junior mortgage," a home equity line of credit (HELOC) would also fall into this category. Finally, a housing unit without a mortgage is owned free and clear and is debt free.

- An estimated 49% of Market Area homeowners have a mortgage. Ten percent of homeowners with mortgages in the Market Area also have a second mortgage and/or home equity loan.

- Homes without a mortgage have slightly higher median values than homes without a mortgage in the Market Area; however, the reverse is true in Ely. The median value for homes with a mortgage in Ely is $109,200 compared to $87,300 for homes without a mortgage.

- Median home values are greater in the Remainder of Market Area than in Ely. By comparison, housing units with a mortgage have a median value of $109,200 in Ely compared to $199,331 in the Remainder and $170,618 overall.

TABLE HC-5 OWNER-OCCUPIED HOUSING UNITS BY MORTGAGE STATUS ELY MARKET AREA 2019						
	ELY		REMAINDER		MARKET AREA	
Mortgage Status	No.	Pct.	No.	Pct.	Pct.	Pct.
Housing units without a mortgage	474	42.8	1,625	54.5	2,099	51.4
Housing units with a mortgage/debt	633	57.2	1,354	45.5	1,987	48.6
Second mortgage only	*12*	1.9	29	2.1	41	2.1
Home equity loan only	*19*	3.0	129	9.5	148	7.4
Both second mortgage and equity loan	*0*	0.0	6	0.4	6	0.3
No second mortgage or equity loan	*602*	95.1	1,190	87.9	1,792	90.2
Total	**1,107**	**100.0**	**2,979**	**100.0**	**4,086**	**100.0**
Weighted Median Value by Mortgage Status						
Housing units with a mortgage	$109,200		$199,331		$170,618	
Housing units without a mortgage	$87,300		$219,744		$175,493	
Sources: U.S. Census Bureau - American Community Survey; Maxfield Research & Consulting, LLC						

Owner-Occupied Housing Units by Value

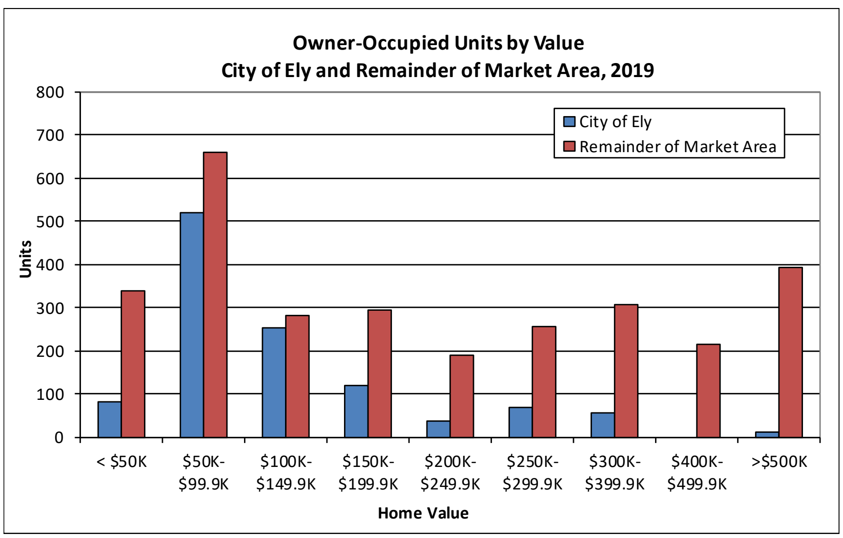
Table HC-6 presents data on housing values summarized by nine price ranges. Housing value refers to the estimated price point the property would sell if the property were for sale. For single-family and townhome properties, value includes both the land and the structure. For condominium units, value refers to only the unit.

- Most of the owner-occupied housing stock in Ely is estimated to be valued between $50,000 and $99,999 (45%).

- The median home value in Ely is $96,000, which is notably less than the median home value in the Remainder of the Market Area ($213,462). This higher median home value in the Remainder is due to greater percentages of homes in all price points above $200,000 as compared to Ely.

- Homes in the highest price brackets (above $300,000) accounted for 31% of all homes in the Remainder of the Market Area compared to 6% in Ely. A greater percentage of these homes in the Remainder of the Market Area are located on acreages or farmsteads, increasing their value and estimated price point considerably.

TABLE HC-6 OWNER-OCCUPIED UNITS BY VALUE ELY MARKET AREA 2019						
	ELY		REMAINDER		MARKET AREA	
Home Value	No.	Pct.	No.	Pct.	No.	Pct.
Less than $50,000	80	7.0	339	11.6	419	10.3
$50,000-$99,999	519	45.4	658	22.5	1,177	28.9
$100,000-$149,999	254	22.2	281	9.6	535	13.1
$150,000-$199,999	118	10.3	293	10.0	411	10.1
$200,000-$249,999	38	3.3	190	6.5	228	5.6
$250,000-$299,999	67	5.9	254	8.7	321	7.9
$300,000-$399,999	57	5.0	307	10.5	364	8.9
$400,000-$499,999	0	0.0	214	7.3	214	5.3
Greater than $500,000	10	0.9	392	13.4	403	9.9
Total	**1,144**	**100.0**	**2,929**	**100.0**	**4,073**	**100.0**
Median Home Value	$96,000		$213,462		$181,639	
Sources: U.S. Census Bureau - American Community Survey; Maxfield Research & Consulting, LLC						



Renter-Occupied Units by Contract Rent

Table HC-7 presents information on the monthly housing costs for renters called contract rent (also known as asking rent). Contract rent is the monthly rent agreed to without consideration of any utilities, furnishings, fees, or services that may be included.

- The median contract rents in Ely and the Remainder of the Market Area were $455 and $517, respectively. Based on a 30% allocation of income to housing, a household in Ely would need an income of about $18,200 to afford an average monthly rent of $399 and an income of $20,680 in the Remainder of the Market Area to afford an average monthly rent of $517.

- About 50% of Ely renters have monthly rents ranging from $250 to $499 and 39% have rents that range from $500 to $749 per month. Only 4% of renters have rents of $750 to $1,000, which may include single-family homes converted into rental properties.

- About 27% of renters in the Remainder of the Market Area have monthly rents ranging from $250 to $499 and 33% have rents that range from $500 to $749 per month. Only 9% of renters have rents of $750 to $1,000, which may include single-family homes converted into rental properties, but this proportion is slightly higher than in Ely. It is likely that there are seasonal homes or lake homes that would have higher rents because of a higher amenity location.

TABLE HC-7
RENTER-OCCUPIED UNITS BY CONTRACT RENT
ELY MARKET AREA
2019

	ELY		REMAINDER		MARKET AREA	
Contract Rent	**No.**	**Pct.**	**No.**	**Pct.**	**No.**	**Pct.**
No Cash Rent	34	5.9	101	20.5	135	12.7
Cash Rent	540	94.1	392	79.5	932	87.3
$0 to $249	8	*1.4*	30	*6.0*	38	*3.5*
$250-$499	285	*49.7*	133	*27.0*	418	*39.2*
$500-$749	226	*39.4*	165	*33.4*	391	*36.6*
$750-$999	20	*3.6*	46	*9.3*	66	*6.2*
$1,000+	0	*0.0*	19	*3.8*	19	*1.8*
Total	**574**	**100.0**	**493**	**100.0**	**1,067**	**100.0**
Median Contract Rent^	**$455**		**$517**		**$490**	

^ Median contract rent excludes units in Stony River twp, Birch Lake UT, Eagles Nest twp, NE St. Louis UT, and Wassa twp due to lack of reported data.

Sources: U.S. Census Bureau - American Community Survey; Maxfield Research & Consulting, LLC

- Households that make no payment of rent ("no cash rent") make up only 6% of Ely renters. There are typically units owned by a relative or friend who lives elsewhere and allow occupancy without charge. Other sources may include caretakers or ministers who may occupy a housing unit without rent charge as indirect compensation.

Vacancy Status

Table HC-8 shows the vacancy status of housing units in Ely and in the Remainder of the Market Area as of 2019 from the American Community Survey. As shown on the table, there is a high proportion of housing units in the Market Area that are for seasonal or occasional use.

The table shows that a high proportion of vacant units in Ely and in the Remainder of the Market Area are classified as "seasonal, recreational or for occasional use." In Ely, this accounts for about 55% of vacant homes and in the Remainder of the Market Area, it accounts for nearly 88% of vacants.

Only a limited number of vacant homes are listed as being "for rent," about 2% in Ely and 0.2% in the Remainder of the Market Area. "Other Vacants" accounted for 15% of housing units that were vacant in Ely, but only 7% in the Remainder of the Market Area.

"Other Vacants" are housing units that are classified by the Census in this category because they do not fit well into any of the other categories. Some reasons that a housing unit may be classified as "other vacant" include:

- The owner does not want to rent or sell.
- Is using the unit for storage.
- Is elderly and is living in a senior housing facility or nursing home.

TABLE HC-8
VACANCY STATUS OF HOUSING UNITS
ELY MARKET AREA
2019

	ELY		REMAINDER		MARKET AREA	
Vacancy Status	**No.**	**Pct.**	**No.**	**Pct.**	**No.**	**Pct.**
For Rent	8	2.4	8	0.2	16	0.3
Rented, Not Occupied	0	0.0	14	0.3	14	0.3
For-Sale Only	29	8.7	109	2.5	138	2.9
Sold, Not Occupied	61	18.4	25	0.6	86	1.8
Seasonal, Recreational Use	183	55.1	3,978	90.1	4,161	87.7
For Migrant Workers	0	0.0	0	0.0	0	0.0
Other Vacant	51	15.4	279	6.3	330	7.0
Total	**332**	**100.0**	**4,413**	**100.0**	**4,745**	**100.0**

Sources: U.S. Census Bureau - American Community Survey; Maxfield Research & Consulting, LLC

Introduction

This section presents information on rental market conditions in Ely and the surrounding area. Information is presented on fair market rents, housing choice vouchers, deep- and shallow-subsidy rental properties and market rate rental properties. We also discuss the rental licensing program currently in place in Ely. Senior housing options are presented in the following section.

This section considers the market conditions for general occupancy rental housing in the Ely Market Area by examining data on:

- Inventory and performance of market rate rental developments,
- inventory and performance of subsidized rental developments,
- cost burdens for renter households in the County,
- usage trends of Housing Choice Vouchers,
- planned and proposed general occupancy rental housing developments and
- interviews with contacts familiar with the local rental market.

Fair Market Rents

Fair Market Rents for Ely are allocated on the basis of County-wide rents. St. Louis County covers a large geographic area. As such, rent levels in smaller communities are likely to be lower, on average, than rent levels in larger communities such as Duluth, Virginia and Hibbing. However, rents in Ely are also affected significantly by the number of people that move in and out of Ely seasonally. During the summer months, many people come to Ely for work and tourism and to spend the summer. This seasonal increase influences rents that are charged over the short-term (nightly or weekly) or rents that are charged during the summer versus the winter, or for longer periods such as month-to-month or several months. Fair Market Rents for St. Louis County are shown below on Table H-1:

TABLE H-1
FAIR MARKET RENTS-ST. LOUIS COUNTY
2019

	EFF	1BR	2BR	3BR	4BR
Fair Market Rents	$626	$670	$871	$1,121	$1,390

Source: Ely HRA; HUD; Maxfield Research & Consulting, LLC

Income Limits – Deep-Subsidy Rental Housing

HUD proscribes maximum income limits to qualify for project-based or voucher-based housing assistance for the Section 8 program. The Section 8 program limits a household's income to no more than 50% of the area median income adjusted for certain types of expenses. Table H-2 shows the current 2019 income limits at 50% of AMI by household size. A single-person household would be able to afford rents of about $635 at the Very Low-Income limit (allocating 30% of income) and about $1,015 at the Low-Income limit.

TABLE H-2
INCOME LIMITS - 50% OF AREA MEDIAN INCOME
ST. LOUIS COUNTY, MN
2019

	Household Size							
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Very Low Income (50%)	$25,350	$29,000	$32,600	$36,200	$39,100	$42,000	$44,900	$47,800
Low Income (80%)	$40,550	$46,350	$52,150	$57,900	$62,550	$67,200	$71,800	$76,450

Source: Ely HRA; HUD; Maxfield Research & Consulting, LLC

Deep-Subsidy General Occupancy Housing

Our analysis of general occupancy (all ages) housing that is considered income-restricted identified two properties with a total of 46 units. ***Pine Manor*** was funded under the Section 8 program and includes two- and three-bedroom townhomes for families. ***Vermillion Homes*** has two-, three- and four-bedroom apartment units and is under the public housing program through the HRA. Residents qualify to reside in these units with an adjusted gross income of 80% of the area median income based on maximum income thresholds that are designated by the Department of Housing and Urban Development. If the household's income is at or below the maximum income limit, then they pay 30% of their income for rent.

The Ely HRA owns and manages public housing units in several buildings including four senior properties and 16 family units in eleven buildings that are duplexes for a total of 146 units. The senior properties are discussed in a following section. There were two units available among the public housing family units, Vermillion Homes, which were built in 1971. Units generally remain full and there is usually a small waiting list. Table H-3 presents information on deep-subsidy general occupancy properties in Ely.

Shallow-Subsidy Rental Properties

Maxfield Research examined information regarding shallow-subsidy properties in the Ely Area. The only shallow-subsidy property identified is in Tower-Soudan at the ***Lakeview & Mineview Apartments.*** These apartments were funded under the Rural Development program, a division of the US Department of Agriculture, which provides multifamily loans for moderate and low-income housing in rural communities. According to information provided by Rural Development, there are 52 units, a mix of one-bedroom and two-bedroom. A total of 32 units have additional rent assistance which provides deep-subsidy housing for those whose incomes are at or below 50% of area median income which helps pay for rent where the tenant's income qualifies them for a rental payment that is less than the "basic rent." Information on Lakeview is presented in Table H-3.

TABLE H-3
DEEP AND SHALLOW SUBSIDY GENERAL OCCUPANCY RENTAL DEVELOPMENTS
ELY MARKET AREA
April/May 2019

Project	City	Year Built	Total Units	Funding Program	Vacant
SHALLOW SUBSIDY					
Lakeview Manor	Tower	1980s	40	RD	8
Mineview Manor	Soudan	1980s	12	RD	0
Boise Forte TC III	Tower	2018	20	LIHTC	1
					9
DEEP-SUBSIDY					
Pine Manor TH's	Ely	1970s	30	Sec. 8	3
Vermillion Homes	Ely	1971	16	Sec. 8	2
			46		5

Note: Income-qualified residents pay 30% of their income for rent at deep-subsidy properties and a fixed rent at shallow-subsidy properties. Residents at deep-subsidy properties tend to have lower incomes than residents at shallow-subsidy properties.

RD=Rural Development; Division of the US Department of Agriculture
LIHTC=Low Income Housing Tax Credit; Minnesota Housing Finance Agency (MHFA)

Source: Maxfield Research & Consulting, LLC

Housing Choice Vouchers

The Virginia Housing and Redevelopment Authority administers the Housing Choice Voucher program for the northern half of St. Louis County. The southern half of St. Louis County is administered by the Duluth HRA. Voucher data for the past four years for Ely, Babbitt, and Tower are as follows:

	Ely	Babbitt	Tower
2016	2	10	3
2017	3	13	2
2018	0	10	0
2019	0	12	1

There is no specific allocation for communities in northern Minnesota. Applications are taken and based on income eligibility of the applicant and the cost and quality of the unit. This figure has decreased over the past three years as shown above.

In speaking with the Virginia HRA, it was mentioned that very low vacancies across the County have limited the number of units available for use with vouchers. There are a significant number of homes remaining that are unable to meet the inspection standards as set forth by HUD. This creates additional availability challenges when housing units that could be occupied with a voucher do not meet the quality standards.

The Virginia HRA also stated that tenants are being told that landlords are planning on putting the homes on the market in anticipation of the influx of new employment for the Polymet Mine. Losing these rental properties currently occupied by voucher holders will place an additional strain on the subsidized housing market in Northern St. Louis County and surround communities.

In total, northern St. Louis County has 490 active vouchers and another 450 households on the waiting list for vouchers. Vouchers are currently on hold as funding for the current vouchers is insufficient as spending is outpacing the funds. According to our discussions, the HRA occasionally receives applications for units in Ely, but are not significant.

Market Rate General Occupancy Housing

Ely offers a variety of market rate general occupancy rental housing options in the community. These include traditional apartments, duplexes, triplexes, four-plexes, single-family homes, private rooms within single-family homes, cabins and lakeshore property (usually homes/cabins). A number of the properties that we identified are marketed as being fully renovated or upgraded with new appliances, updated kitchens and bathrooms, new flooring, etc. Single-family homes may offer other types of features and amenities such as outdoor decks, barbeques, detached garage, attached garage, in-unit washer/dryer, wood stove, fireplace, full basement, etc. are allowed in some units, but not in others depending on the requirements of the owner/landlord.

The City of Ely has a rental licensing program for all housing units that are being rented in the City. Requirements under the rental licensing program are found in Ordinance No. 242 2nd Series of the Ely City Code, Chapter 16 and Sections 16.01 through 16.23. The intent of the ordinance is to maintain a standard for existing and newly constructed Rental Dwellings and ensures neighborhood stability. The City provides a rental housing checklist for owners/landlords of rental dwelling units to determine if their units meet the rental licensing standards. Some of these items include the following:

- Operable bath fans are required if there is not a bathroom window;
- There must be washable and water tight surfaces around tub, shower, floor and toilets and all must be operable.
- There must be locks on the ground floor windows and doors;
- All holes in walls and any water damage must be repaired;
- All appliances must be operable and in good condition;

- Building permits are required for improvements to mechanical, plumbing and building structures;
- Owner/landlord must arrange for garbage and recycling service to the dwelling unit;
- Other requirements to ensure that dwellings are safe, secure, sanitary, free from noise, nuisances and annoyances and free from unreasonable fears about the safety of persons and property.

Rental Rates – Market Rate General Occupancy Rental Units

Rental rates among apartment units in Ely range from a low of $350 per month to roughly $2,500 per month for a fully-furnished single-family home on lakefront property. The amount of $325 per month was the lowest monthly rental rate that was identified for a traditional apartment unit. Private rooms in single-family homes may rent for below this amount, although per person rents for students were quoted at between $350 to $500.

Average rental rates for various types of apartments typically range between $400 and $700 per month for one- and two-bedroom apartments. Some two- and three-bedroom duplexes and homes may rent in this range depending on their size, age and condition. Homes that have been remodeled and that have two or three bedrooms typically rent for more per month, ranging from $750 to $1,200 per month with some properties that are fully-furnished to appeal to those that are potentially going back and forth between one or more residences and are not intending to reside permanently in the community.

During the summer months, the Ely area population swells due to outdoor employment, resort employment, tourism and vacation rentals. Some people that are planning to be in the area for an extended period (three months or longer) begin planning far in advance to try to secure a property.

Table H-4 presents information on market rate rental properties that are in the Ely area. The rental licensing list identified approximately 185 units in the City that have current rental licenses excluding units that were under construction as of 2014 which would add a few additional units. This number of units combined with other larger properties in Ely accounts for nearly 100% of the units that are estimated to be occupied as rentals as of 2017, excluding mobile homes and other types of more temporary situations such as RVs. This information is the most recent data from the American Community Survey which provides annual estimates of demographic and housing characteristics. The annual American Community Survey data provides more recent information that was traditionally collected through the “long form” during the Decennial Census. ACS data is sample data, with a margin of error attached to it. This information however, is more current than the Decennial Census.

According to the survey, deep-subsidy units had the lowest vacancy rate with no units standing open. In our discussions with management however, it was noted that this is somewhat unusual as occupancies tend to fluctuate over different periods of time. Units have stayed full, but waiting lists remain relatively modest.

TABLE H-4
RENTAL VACANCY SUMMARY
ELY MARKET AREA - GENERAL OCCUPANCY RENTAL DEVELOPMENTS
April 2019

	Market Rate			Shallow-Subsidy			Deep-Subsidy			Total		
	Total Units	Vacant	Vac. Rate	Total Units	Vacant	Vac. Rate	Total Units	Vacant	Vac. Rate	Total Units	Vacant	Vac. Rate
Ely Market Area	185	4	2.2%	124	2	1.6%	56	0	0.0%	365	6	1.6%
Total	185	4	2.2%	124	2	0.7%	56	0	0.0%	365	6	1.6%

Note: The surveyed units are those in larger rental buildings and smaller individual units. The surveyed units account for nearly 100% of Ely's general occupancy rental units identified as being licensed including single-family home rentals.

Source: Maxfield Research & Consulting, LLC

Table H-4A shows average rents among the market rate general occupancy properties that were surveyed. There is a significant diversity among rentals in the area as we have mentioned before, from efficiency units to up to four- and five-bedroom homes. The inventory has a number of one- and two-bedroom apartments and then two- and three-bedroom single-family homes. Many homes in-town have been converted over to rentals from owner-occupied housing over the past several years. Once these homes are converted to rentals, it is difficult to convert them back to owner-occupied units. If mining operations begin in Ely, there may be an opportunity to convert some of these properties back to owned housing, but it may require some incentive by a public agency to bridge the gap between the pricing of renter-occupied property and owner-occupied property.

Initially, workers may be inclined to come to the area and rent while they explore the housing environment. If they come during the late fall and winter months, it may be easier for them to find housing. If they come during the summer months, then the housing supply is likely to be constrained, perhaps severely. It may be necessary to consider some temporary housing at first, followed by additional permanent construction when the plant opens.

TABLE H-4A
RENT SUMMARY
ELY MARKET AREA - SURVEYED GENERAL OCCUPANCY RENTAL DEVELOPMENTS
April 2019

	Market Rate						Shallow Subsidy		
	Total	--- Avg. Rent ---					Total	--- Avg. Rent ---	
City	**Units**	**EFF**	**1BR**	**2BR**	**3BR**	**4BR**	**Units**	**1BR**	**2BR**
Ely Market Area	185	$375	$550	$750	$900	$1,100	104	$450	$550
Total	**185**	**$275**	**$550**	**$750**	**$900**	**$900**	**104**	**$450**	**$550**

Source: Maxfield Research & Consulting, LLC

Student Housing – Vermilion Community College

The Community College currently provides 44 units of apartment-style housing on its campus in Ely. In summer 2015, the College demolished the 10 duplex units which each have four bedrooms and constructed 12 new townhomes on the campus to replace them. Upgrades were also made to the other existing units. In total, 84 beds in the duplexes were removed to make way for the 112 beds in the new townhomes. The redevelopment project increased student housing capacity from 260 students to 288 students with double-occupancy for each bedroom, a net increase of 28 beds of housing for students.

The College has a current enrollment of 554, of which about 70% are full-time. This would total 388 students that would need some type of housing arrangement while attending school in Ely unless some of these students are local and may commute to the school or live in Ely at a parent's residence. Accommodating 288 students on-campus accounts for a 52% proportion of housing the student body, higher than many larger institutions. However, there is always a waiting list for housing on-campus and a portion of students that would attend Vermilion Community College elect not to do so if they cannot obtain housing close to the school. The addition of student housing beds was intended to increase the full-time enrollment at Vermilion.

An estimated 100 full-time students need to be housed in off-campus housing. The College maintains and provides a list of landlords that have properties for-rent in Ely and are listed on the off-campus housing list as available for students. Considering that no student would share a bedroom, the number of units listed on this list totals roughly 159 bedrooms in various types of structures including single-family homes, duplexes, apartment buildings, four-plexes, triplexes and single rooms in private homes. Rents for these units range from a low of $300 to $550 per month for a bedroom. Utility costs vary usually by type of structure. Some units include the utilities and are usually priced at a higher amount and others (often single-family homes) require the tenant to pay all the utilities. Rents may be $100 to $200 per month lower when the utilities are not included.

These units may be absorbed by others needing rental housing, especially in the scenario where employment could increase substantially due to opening of mining operations at one or more locations. During the construction phase, in particular, there would be a strong demand to house workers that will be building and upgrading various facilities. Some of these workers will come from the existing labor pool, but others will come from outside of the immediate area and will need housing for a period of 18 to 24 months. Available rental housing would "fit" this need.

During the summer months, the College leases its rooms in the on-campus housing for those coming up during the summer months when school is not in session.

Cost-Burdened Households

Table H-5 presents information on cost-burdened households in the Ely Market Area. A household is considered to be cost-burdened if they pay more than 30% of their income for their housing. Households paying 35% to 50% are considered moderately cost-burdened and those that pay 50% or more are considered severely cost-burdened.

TABLE H-5
COST BURDENED HOUSEHOLDS
ELY MARKET AREA
2019

	Owner		Renter	
	No.	Pct.	No.	Pct.
ELY MARKET AREA				
Less than 20.0 percent	2,280	56.0%	337	31.5%
20.0 to 24.9 percent	531	13.0%	95	8.9%
25.0 to 29.9 percent	315	7.7%	87	8.1%
30.0 to 34.9 percent	175	4.3%	117	11.0%
35.0 to 39.9 percent	207	5.1%	26	2.5%
40.0 to 49.9 percent	144	3.5%	25	2.4%
50.0 percent or more	389	9.5%	245	22.9%
Not computed	32	0.8%	136	12.7%
	4,073	100.0%	1,067	100.0%
ST. LOUIS COUNTY				
Less than 20.0 percent	37,303	915.9%	5,574	522.4%
20.0 to 24.9 percent	7,368	180.9%	2,905	272.3%
25.0 to 29.9 percent	4,866	119.5%	2,856	267.7%
30.0 to 34.9 percent	2,746	67.4%	2,633	246.8%
35.0 to 39.9 percent	2,029	49.8%	1,511	141.6%
40.0 to 49.9 percent	2,339	57.4%	2,050	192.1%
50.0 percent or more	4,093	100.5%	5,805	544.0%
Not computed	252	6.2%	1,696	159.0%
	60,995	1497.5%	25,030	2345.8%

Source: American Community Survey; Maxfield Research & Consulting, LLC

As shown on the table, 432 renter households and 772 owner households were estimated to have spent 35% or more of their income on housing costs, or 23% of households. Roughly 12% of households were estimated to have spent 50% or more of their income on housing costs. This compares to 11.5% of owner households throughout St. Louis County. Overall, there is a smaller percentage of renter households in Ely that are moderately cost-burdened or severely cost-burdened than in St. Louis County as a whole. Conversely, there is a slightly higher proportion of owner households that are estimated to be moderately or severely cost-burdened in the Ely Market Area compared to St. Louis County as a whole.

Mobile Homes

Maxfield Research identified one mobile home park in Ely, Northern Terrace Mobile Homes, located near the Vermilion Community College.

Pending Rental Developments

Discussions with the City Planning and Economic Development staff revealed that City is considering the potential development of a mix of workforce and market rate rental housing of up to 24 units in 2021 in the Ely West End Redevelopment District.

The City of Babbitt is proposing a multifamily rental project in the City and is sending to the County approvals in the next few months. This project is in the very early preliminary planning stage and no developer is set for the potential project. The City stated it is planning for the potential need brought by the employment from the planned Polymet Mine. The project will be in West Babbitt, but no further details are available at this time.

Rental Housing Demand Analysis

Table H-6 presents a calculation of general-occupancy rental housing demand with and without the planned Polymet Mine in Ely. This analysis identifies potential demand for rental housing that is generated from both new households and turnover households. A portion of the demand will be drawn from existing households in that want to upgrade their housing situations.

First, we calculate potential demand from new household growth based on the propensity of households to rent their housing. For the purpose of this analysis, we focus on households between the ages of 18 and 64 that will account for the vast majority of general-occupancy rental demand. Based on an analysis of household growth forecast in specific age cohorts, household growth is projected in the age 25 to 34 age cohort and the 35 to 44 age cohort. Nearly all household age cohorts under age 65 are expected to experience little to no growth. We also include a portion (15%) of the demand potential generated by households age 65 and older, as a segment of this age group that is able to live independently could be drawn to a new general occupancy rental housing development in the community. Next, we calculate the percentage of household growth that will likely rent their housing based on 2017 Census data by age group. In 2017, roughly 25% of households under the age of 65 rented. We increase this figure to an estimated 30% for the future Polymet Mine scenario.

The second part of the analysis calculates demand from existing households, or turnover demand. Younger households tend to be highly mobile, relative to older households. Mobility rates were calculated for the renter population based on 2012-2017 American Community Survey data and were applied to the existing renter household base. Finally, we estimate the percentage of the existing renter households will seek new rental housing by age cohort resulting in demand for 93 units by 2030 without the mine and 202 units with the Polymet Mine.

TABLE H-6
DEMAND FOR GENERAL OCCUPANCY RENTAL HOUSING
ELY MARKET AREA
2019 TO 2030

Demand From Household Growth		**Without Mine**	**With Polymet**
Projected household growth in the PMA 2019 to 2030[1]		200	250
(times) Pct. Of HH growth for general occupancy housing[2]	x	20%	30%
(equals) Projected demand for general occupancy units	=	40	75
(times) Proportion Estimated to Be Renting Their Housing[3]	x	25%	30%
(equals) Projected Demand for Rental Housing Units	=	10	23
Demand From Existing Households			
Number of renter households in the PMA, 2019[4]	=	822	822
(times) Estimated % of renter turnover between 2019 & 2030[5]	x	90%	90%
(equals) Existing Renter Households Projected to Turnover, 2019 to 2030	=	740	740
(times) Estimated % Desiring New Rental Housing[6]	x	10%	20%
(equals) Demand From Existing Households	=	74	148
Total Demand From Household Growth and Existing Households		**84**	**170**
(plus) Rental demand from outside Market Area	+	15%	25%
(equals) Total Demand for Rental Housing in the PMA	=	**99**	**227**
(times) percent of PMA Demand Capturable in the Ely	x	50%	50%
(equals) Total Demand for Rental Housing the Ely	=	**49**	**114**

		Deep-Subsidy		**Shallow-Subsidy**		**Market Rate**	
		W/OUT	**POLY**	**W/OUT**	**POLY**	**W/OUT**	**POLY**
(times) Percent of rental demand by product type[7]	x	20%		30%		50%	
(equals) Total demand for new general occupancy rental housing units	=	**10**	**23**	**15**	**34**	**25**	**57**
(minus) Units under construction or approved*	-	0	0	0	0	0	0
(equals) Excess demand for new general occupancy rental housing	=	**10**	**23**	**15**	**34**	**25**	**57**

[1] Estimated household growth based per ESRI and Maxfield Research & Consulting, LLC.
[2] Pct. of household growth under age 65 plus 15% of households age 65 and older.
[3] Pct. Renter households under age 65 in 2019
[4] Renter households age 64 and younger plus 15% of renter households age 65 and older.
[5] Based on household turnover and mobility data (2017 American Community Survey, Five Year Estimates).
[6] Source - The Upscale Apartment Market: Trends and Prospects. Prepared by Jack Goodman of Hartrey Advisors for the National Multi Housing Council.
[7] Based on the combination of current rental product, income limits, and household incomes of area renters (non-senior households).
*Pending competitive units at 95% occupancy.

Source: Maxfield Research & Consulting, LLC

We estimate that 15% (no mine) to 25% (w/Polymet) of the total demand for new rental housing units in Ely will come from people currently living outside of the area. As a result, we find demand for 109 renter households without the mine and 269 renter households with the mine based on household growth and turnover of existing households between 2018 and 2030. Due to factors such as the geographic distribution of the renter population in the PMA along with the location of services (entertainment, shopping, education, etc.) in the PMA, we anticipate that Ely can capture 50% of the excess demand potential in the PMA. Based on this capture rate, we find demand for 55 new general occupancy rental units without the mine and 135 new units with the mine in Ely between 2018 and 2030.

Based on a review of renter household incomes and income limits set by HUD, we estimate that 20% of the total demand will be for deep-subsidy housing, 30% will be for shallow-subsidy housing, and 50% will be for market rate housing. Next, we subtract any housing projects that are under construction or pending at this time at 95% occupancy (equilibrium), since these projects will satisfy some of the demand for new general occupancy rental housing. We did not identify any rental units under construction.

In total, we find demand for 11 deep-subsidy units, 16 shallow-subsidy units, and 27 market rate rental units in Ely between 2018 and 2030 without the mine moving forward and 27 deep-subsidy, 40 shallow-subsidy, and 67 market rate units to 2030 with the new Polymet mine moving forward.

The analysis of the competitive inventory identified that the vacancy rate for all types of general occupancy rental product is only just slightly below market equilibrium (5.0% vacancy rate) at 2.0%, suggesting that there is some demand for rental housing, but caution should be exercised in developing too many units at once.

Based on feedback provided by rental property managers, Ely is a highly cyclical rental market with strong seasonality including student renters during the school year and vacation renters during the summer months. However, the community does have a scarcity of newer modest price affordable rental units as most product is relatively old, even though some has been updated.

Strong demographics from the echo boom generation may be likely to generate rental housing demand over the next several years. Additionally, there continues to be more lifestyle renters in the market, those with busy professional lives and people who prefer to spend their free time in leisure pursuits rather than on the upkeep and maintenance of a home. Demand for new market rate rental housing is driven primarily by professional young to mid-age adults and empty nesters. These households tend to have higher incomes and desire rental housing with modern features and higher finish levels. The furnished rental market in Ely is currently capturing a portion of the older age demand that resides only in the community during the summer months.

The strongest sources of demand for rental housing in Ely will likely be young to mid-age singles and couples without children who currently work in Ely or may relocate to Ely for employment, either short-term or long-term. Additionally, mid-age households (never-nesters or empty-nesters) attracted to the area could account for a portion of demand for new rental housing in the area. A rental townhome development could also attract family households, and shallow-subsidy rental housing will draw from a wide variety of population segments, including; low-wage workers, single-parent households, and low-income family households.

Introduction

This section evaluates market conditions for senior housing in the Ely Market Area by examining data on:

- Inventory and performance of market rate senior housing developments,
- Inventory and performance of deep-subsidy and shallow-subsidy senior developments;
- planned and proposed senior housing developments, and
- interviews with housing professionals who are familiar with senior housing trends.

This section of the report includes data on current market conditions.

Senior Housing Defined

The term "senior housing" refers to any housing development that is restricted to people age 55 or older. Senior housing includes an entire spectrum of housing alternatives, with overlapping markets making the differences somewhat ambiguous. However, the level of support services offered best distinguishes them. Maxfield Research Inc. classifies senior housing developments into four categories based on the level of support services:

Adult/Few Services; where few, if any, support services are provided. "Adult" housing includes both rental and ownership (such as senior condominiums, cooperatives, or townhomes).

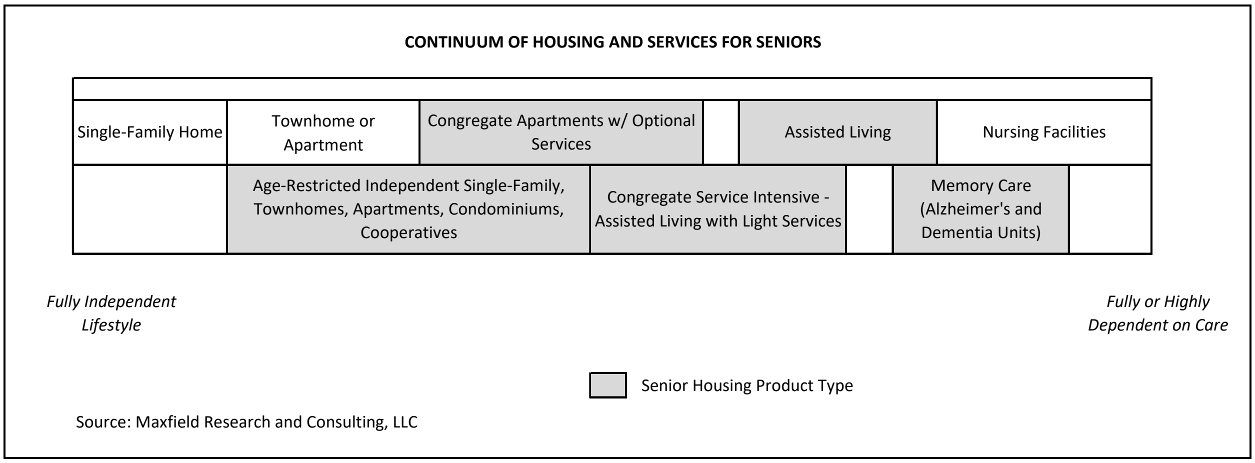
Congregate or Independent Living; where support services such as meals and light housekeeping are provided, either on an optional basis for an additional fee (optional-service) or included in the monthly fee (service-intensive).

Assisted Living; where two or three daily meals as well as basic support services such as transportation, housekeeping and/or linen changes are included in the fees. Personal care services such as assistance with bathing, grooming, and dressing is included in the monthly fees or is available for an additional fee.

Memory Care; where more service-intensive personal care is required for people with dementia and Alzheimer's disease. Typically, support services and meal plans are similar to those found at assisted living facilities, but the heightened levels of personalized care demand more staffing and higher rental fees.

These four senior housing products tend to share several characteristics. First, they usually offer individual living apartments with living areas, bathrooms, and kitchens or kitchenettes. Second, they generally have an emergency response system with pull-cords or pendants. Third, they often have a community room and other common space to encourage socialization.

Finally, they are age-restricted and offer conveniences desired by seniors, although assisted living developments sometimes serve non-elderly people with special health considerations.
The four senior housing products offered today form a continuum of care (Figure 1), from a low level to a fairly intensive one. Often the service offerings at one type overlap with those at another. In general, however, adult developments tend to attract younger, more independent seniors, while assisted living and memory care developments tend to attract older, frailer seniors.



Senior Housing Market Trends

There has been a growing acceptance of senior housing in Minnesota along with absolute growth in the number of senior households. In 1990, there were an estimated 11,000 market rate senior units in the seven-county Twin Cities Metro Area. Although there have been a number of senior housing developments constructed in Greater Minnesota during the 1990s and 2000s, the proportion of market rate senior housing is much lower outside of the Metropolitan Area. Since 2010, development of market rate senior housing has slowed somewhat primarily due to the earlier economic recession and also to demographic shifts which resulted in lower numbers of seniors ages 75 to 84, which are the prime years for many seniors to relocate to senior housing. In Ely and the surrounding area, seniors living on lake properties often delay moving to senior housing until they must because of a preference for remaining in their residence due to the natural amenities that are available. Seniors residing in cities and on non-lake properties are somewhat more likely to consider relocating to a senior-specific property.

The Ely Market Area currently has age-restricted, non-service product and age-restricted service-enhanced product. These products are in Ely and Tower. ***Northwoods Townhomes*** (26 units) provides market rate age-restricted housing for those 55 years or older and units are single-level. Carefree Living is adjacent to the Ely Bloomenson Hospital and offers independent living with optional services, assisted living and memory care housing for those that need some assistance with activities of daily living. ***Golden Horizons*** in Tower provides assisted living and memory care services. Attached to the Hospital is a skilled nursing facility, Birchwood Care Center, with 40 skilled nursing beds.

Market Rate Senior Developments

Maxfield surveyed market rate senior housing developments in the Market Area to analyze current market conditions. The developments are listed in Table S-1, by service level, along with information on location, year built, total units, general price range for housing and services and vacant units.

TABLE S-1
MARKET RATE SENIOR HOUSING PROPERTIES
ELY MARKET AREA
April/May 2019

Project	Location	Year Built	Rental Range	Number of Units	Vacant Units
Adult, Age-Restricted Rental - Deep Subsidy**					
Dr. Grahek Apartments	Ely	1979	30% of AGI	42	4
Sibley Manor	Ely	1974	30% of AGI	39	1
Zenith Apartments	Ely	1971	30% of AGI	25	0
Pioneer Apartments	Ely	1970	30% of AGI	40	0
				146	**5**
Adult, Age-Restricted Rental-Market Rate					
Northwoods Townhomes	Ely	2008	$805 - $995	26	0
Assisted Living*					
Carefree Living	Ely	2004	$2,948 - $3,244+	30	0
Vermillion Senior Living (formerly Golden Horizons)	Tower	2008	$3,000+	20	6
Carefree Living	Babbitt	2013	$2,846 - $3,142+	19	0
Total				69	6
Memory Care*					
Carefree Living	Ely	2004	$2,887 - $3,091+	16	0
Carefree Living	Babbitt	2013	$2,846 - $3,091+	19	1
Total				35	1

** Deep Subsidy properties also allow individuals under age 62 to reside in the building if they have a disability.
* Base price range reflects housing costs plus services included in the base price; additional charges apply for higher levels of care.
Source: Maxfield Research & Consulting, LLC

The following are key points.

- Market rate service-enriched (housing that also provides services to residents, either optional or included in a monthly rent/fee) senior housing is available in Tower, Ely, and Babbitt, the larger cities included in the Primary Market Area. Properties are considered mid-size, in the 20-to 40-unit range. Small size properties would have less than 20 units while larger size properties would typically have more than 50 units.

- For assisted living and memory care housing, a minimum of 10 units is necessary to meet required staffing ratios at competitive pricing levels. As the baby boom and senior populations increase in the area, we anticipate increased demand for senior housing. All the service-enriched senior housing has been added to the market since 2000.

- As shown on the Table, the majority of market rate senior housing in the area is focused on providing services to seniors with assisted living and memory care products. In addition to service enriched care (assisted living and memory care), there is a limited number of independent living with optional services units at Carefree Living and adult/few services townhomes at Northwoods. In total, 20% of the senior units are age-restricted with no services (rental), 50% are assisted living (including enhanced assisted living) and the remaining 30% are memory care.

- Most of the assisted living and memory care units are full and one of the properties indicated they have a waiting list usually. Northwoods Townhomes is full, but occupancy can fluctuate, with units sometimes vacant in the winter months because people do not want to move in the winter. Vacancy rates at existing assisted living facilities are above market equilibrium, however all the vacant units are at one property. Vermillion Senior Living, formerly Golden Horizons, has six vacant units. All the memory care is full. The low vacancy rates at these facilities indicate some pent-up demand for additional service-based senior housing.

- Spectrum Health has been exceptionally active in developing service-enriched senior housing in northeastern Minnesota and has several properties in communities such as Aurora, Babbitt, Ely, Eveleth, and Orr. Senior properties in the Market Area have the following vacancy rates: 0.0% for market rate adult/few services, 8.7% for assisted living and 0.0% for memory care.

- Seniors with greater care needs can allocate a higher portion of their income toward housing because they have few other expenses. Typically, seniors are able and willing to allocate 40% of their income for adult units, 65% for congregate and 85% to 90% for assisted living and memory care. In addition, most seniors allocate at least a portion of the equity from their single-family home and other savings to pay for senior housing with services. Thus, seniors with lower incomes can often afford market rate senior housing. This is particularly true for assisted living where many seniors are willing to spend down assets to avoid placement in a nursing home.

Shallow-Subsidy and Deep-Subsidy Senior Housing

The remaining senior properties in Ely are income-restricted, deep-subsidy and are targeted to households age 62 years or older in addition to those under age 62 with a physical limitation or other type of disability. These properties are also listed on Table S-1, along with their location, total units and vacant units. There are no shallow-subsidy senior units currently in the Ely Market Area.

- The age-restricted properties that also have a disability waiver include project-based Section 8 and public housing. Residents' adjusted gross income must be at or less than 50% or the area median income. Residents residing in these properties often have very low incomes and could not afford monthly rents at shallow-subsidy or market rate senior rental developments. However, the maximum income limit for a single-individual is

$25,350. At this income level, some of the units may compete with market rate properties for residents.

- Funding through project-based Section 8 has virtually disappeared as a funding tool for the development of very low income housing. HUD's Section 202 program funding has also been significantly reduced and is targeted primarily in urban areas in census tracts with high concentrations of seniors that have low incomes. Rural Development funding remains available for seniors and MN Housing recently indicated that it would again consider the potential to support tax credit development (shallow subsidy) for households age 55 and older. This has not been a focus of MN Housing since the mid-1990s when a number of senior tax credit properties were developed, many in the Twin Cities. A Statewide consortium of HRAs and EDAs received funding through a pilot program for an increase in funding for low- and moderate-income senior housing because of high demand and limited availability.

- Senior properties classified as deep-subsidy had a total of five units vacant of 146, which equals a vacancy rate of 3.4%. This rate is above the 2% rate considered to be market equilibrium for deep-subsidy properties. When we asked about waiting lists, property managers stated they keep waiting lists but many seniors are not ready to move or sell their homes when they are contacted. They want to remain on the list for the future, but the timeframe is likely longer-term.

Pending Senior Housing Developments

Interviews with representatives of communities in the County revealed that there is currently no additional senior housing planned for development in the Ely Market Area.

Market Rate Adult/Few Services Senior Housing Demand

Table S-2 presents demand calculations for market rate active adult/few services housing in the Ely Market Area in 2019 and 2024. The market for active adult/few services housing is comprised of older adult (age 55 to 64), younger senior (age 65 to 74) and older senior (age 75+) households, with market demand weighted most heavily toward older seniors.

In order to arrive at the potential age-, income- and asset-qualified base for active adult housing, we include all age-qualified households with incomes of $35,000 or more plus homeowner households with incomes between $30,000 and $34,999 who would qualify with the proceeds from a home sale. The number of qualifying homeowner households is estimated by applying the appropriate homeownership rate to each age cohort. We estimate there are 2,337 age-, income- and asset-qualified PMA households that comprise the market for active adult housing in 2019, remaining relatively stable at 2,311 qualified households in 2024.

Adjusting to include appropriate capture rates for each age cohort (0.5% of households age 55 to 64, 4.5% of households age 65 to 74, and 12.0% of households age 75 and older) results in a demand potential for 104 active adult housing units in 2019 and 106 units in 2024. These capture rates reduce the total number of age/income/asset-qualified households to consider only the portion of older adult and senior households who would be able, willing, and inclined to move to senior housing alternatives, including both owner- and renter-occupied housing.

TABLE S-2
MARKET RATE ADULT/FEW SERVICES HOUSING DEMAND
PRIMARY MARKET AREA
2019 & 2024

		2019				2024		
		Age of Householder				Age of Householder		
		55-64	65-74	75+		55-64	65-74	75+
# of Households w/ Incomes of >$35,000[1]		882	859	404		841	909	429
# of Households w/ Incomes of $30,000 to $34,999[1]	+	50	85	86	+	48	74	61
(times) Homeownership Rate	x	89%	87%	85%	x	89%	87%	85%
(equals) Total Potential Market Base	=	927	933	477	=	884	973	481
(times) Potential Capture Rate	x	0.5%	4.5%	12.0%	x	0.5%	4.5%	12.0%
(equals) Demand Potential	=	5	42	57	=	4	44	58
Potential Demand from PMA Residents		=	**104**			=	**106**	
(plus) Demand from Outside PMA (20%)[2]		+	26			+	26	
(equals) Total Demand Potential		=	**130**			=	**132**	
		Owner-Occupied		**Renter-Occupied**		**Owner-Occupied**		**Renter-Occupied**
(times) % by Product Type	x	30%	x	70%	x	30%	x	70%
(equals) Demand Potential by Product Type	=	39	=	91	=	40	=	93
(minus) Existing and Pending MR Active Adult Units[3]	-	0	-	25	-	0	-	25
(equals) Excess Demand for MR Active Adult Units	=	**39**	=	**66**	=	**40**	=	**68**
(times) Percent capturable in Ely	x		50%		x		50%	
(equals) # of units supportable in Ely	=	**19**		**33**		**20**		**34**

[1] 2020 calculations define income-qualified households as all households with incomes greater than $40,000 and homeowner households with incomes between $35,000 and $39,999.
[2] Based on interviews and historical trends. We estimate that roughly 20% of demand will come from outside the PMA.
[3] Existing and pending are deducted at market equilibrium (95% occupancy).

Source: Maxfield Research & Consulting, LLC

We estimate that seniors currently residing outside the Ely Market Area will generate 20% of the demand for active adult housing – increasing demand to 130 active adult units in 2019. Demand from outside the PMA includes parents of adult children living in the area, individuals who live outside the PMA but have an orientation to the area and former residents who desire to return upon retirement.

Demand for active adult/few services housing in the Ely Market Area is apportioned between ownership and rental product types. Based on the age distribution of the population, homeownership rates and trends for active adult housing products, we project that 30% of the demand will be for owner-occupied active adult housing (39 units in 2019), and the remaining 70% of demand will be for rental active adult housing units (91 units in 2019).

From the demand potential, we subtract existing and pending active adult units in the Ely Market Area at 95% occupancy. In total, there are 26 existing age-restricted market rate renter units in Ely located at Northwoods Townhomes. In total, we calculate pent-up demand for 39 owner-occupied units and 66 renter-occupied units in 2019. Adjusting for inflation, we estimate that households with incomes of $40,000 or more and homeowners with incomes of $35,000 to $39,999 would be candidates for market rate active adult housing in 2024. Following the same methodology, we project demand to remain stable at 40 owner-occupied units and 68 renter-occupied units by 2024.

Due to factors such as the geographic distribution of the senior population in the Ely Market Area along with the location of services (medical, religious, retail, etc.), we anticipate that Ely can capture 50% of the excess demand potential in the Market Area. Based on this capture rate, we find demand for 52 market rate active adult units in Ely in 2018 (19 owner-occupied and 33 renter-occupied units), reaming stable at 54 units by 2024 (19 owner-occupied and 34 renter-occupied units).

Shallow-Subsidy/Deep-Subsidy Independent Senior Housing Demand

Table S-3 presents our demand calculations for shallow-subsidy and deep-subsidy independent senior housing in Ely in 2019 and 2024. While the methodology used to calculate demand for affordable housing closely mirrors the methodology used to calculate demand for market rate housing, we make adjustments to more precisely quantify demand among this market segment. The following points summarize these adjustments:

- **Income-Qualifications**: In order to arrive at the potential age and income-qualified base for low-income and affordable housing, we include all senior households age 55 and older that qualify for the income guidelines for two-person households in 2019. Households earning between 30% and 60% of AMI are generally candidates for affordable housing, while households earning less than 30% AMI are typically a market for subsidized housing. The income-restriction for a two-person household at 30% AMI is $17,400 and the income-restriction for a two-person household at 60% AMI is $34,800.

- **Capture Rates**: Households in a need-based situation (either requiring services or financial assistance) more readily move to housing alternatives than those in non-need based situations. Based on our experience in market feasibility for affordable and subsidized senior housing, along with our analysis of demographic and competitive market factors in the PMA, we apply a conservative 20% capture rate to the age/income-qualified market in the PMA to arrive at a total potential demand from the PMA.

Using the methodology described above results in a demand potential for 832 shallow-subsidy and deep-subsidy active adult housing units in 2019. We estimate that seniors currently residing outside the Ely Market Area will generate 20% of the demand for shallow/deep-subsidy active adult housing – increasing demand to 318 units. Based on the existing and projected distribution of households with incomes below $35,000, we estimate that roughly 60% of the demand will be for deep-subsidy units and 40% will be for shallow-subsidy units. Next we subtract existing competitive deep-subsidy units. There are no shallow-subsidy units in the Market Area.

TABLE S-3
SUBSIDIZED INDEPENDENT HOUSING DEMAND
PRIMARY MARKET AREA
2019 & 2024

	2019				2024			
		Age of Householder				Age of Householder		
		55-64	65-74	75+		55-64	65-74	75+
# of Households w/ Incomes of <$35,000		232	328	464		158	241	396
Less Households w/ Incomes of $30,000 to $34,999[1]	-	50	85	86	-	48	74	61
(times) Homeownership Rate	x	89%	87%	85%	x	89%	87%	85%
(equals) Total Potential Market Base by Age	=	188	254	391	=	115	177	344
(equals) Total Potential Market Base	=		832		=		636	
(times) % of Seniors Needing/Desiring Affordable Hsg	x		20.0%		x		20.0%	
(equals) Potential Demand from PMA		=	**166**				**127**	
(plus) Demand from Outside PMA (20%)		+	42			+	32	
(equals) Total Demand Potential		=	**208**			=	**159**	
		Deep-Sub.		**Shallow-Sub.**		**Deep-Sub.**		**Shallow-Sub.**
(times) % by Product Type	x	60%	x	40%	x	60%	x	40%
(equals) Demand Potential by Product Type	=	125	=	83	=	95	=	64
(minus) Existing and Pending Independent Units[2]	-	143	-	0	-	143	-	0
(equals) Excess Demand for Subsidized Units	=	**0**	=	**83**	=	**0**	=	**64**
(times) Percent that could be captured in Ely	x		50%				50%	
(equals) Excess subsidized demand in Ely	=	**0**		**42**		**0**		**32**

[1] 2020 calculations define income-qualified households as all households with incomes less than $40,000. Homeowner households with incomes between $35,000 and $39,999 are excluded from the market potential for financially-assisted housing.
[2] Existing units are deducted at market equilibrium, or 95% occupancy.

Source: Maxfield Research & Consulting, LLC

Overall, we subtract 143 deep-subsidy units from the demand potential after accounting for a 2% vacancy rate, resulting in excess demand for no deep-subsidy active adult housing in the Ely Market Area. We also find excess demand potential for 83 shallow-subsidy active adult housing units in the Ely Market Area in 2019. To calculate demand in 2024, we increase the income-qualifications to account for inflation. Following the same methodology, demand is projected to remain at no deep-subsidy units and 64 shallow-subsidy units by 2024.

We anticipate that Ely could capture 50% of the excess demand potential for subsidized active adult housing in the Market Area. Based on this capture rate, we find demand for no deep-subsidy units and 42 shallow-subsidy units in Ely in 2019. Demand is expected to remain at no deep-subsidy units and decline to 32 shallow-subsidy units by 2024.

Some existing public housing units are likely capturing some of the demand for shallow-subsidy housing in Ely because households can qualify to reside in those units with incomes of $35,000 or less.

Demand for Independent Living (Congregate) Senior Housing

Table S-4 presents our demand calculations for independent living (congregate) senior housing in Ely in 2019 and 2024. This analysis focuses on the potential private pay/market rate demand for independent living (congregate) units in the City.

In order to arrive at the potential age-income qualified base for independent living (congregate) senior housing, we include all senior households with incomes of $35,000 or more and home-owners with incomes between $30,000 and $35,000 who would qualify with the proceeds from a home sale (this proportion was estimated based on the homeownership rates for each age cohort). Senior householders with incomes of $35,000 allocating 65% of their income toward base housing cost could afford beginning rents of $1,900. We estimate the number of age/income/asset-qualified households in the Market Area to be 1,410 householders in 2019, increasing to 1,454 in 2024.

Demand for congregate housing is need-driven, which reduces the qualified market to only the portion of seniors who need some assistance. Thus, the age/income-qualified base is multiplied by the percentage of seniors who need some assistance with IADLs (at least three), but not six or more ADLs/IADLs, as these frailer seniors would need the level of care found in service-intensive assisted living.

According to the Summary Health Statistics of the U.S. Population: National Health Interview Survey, 2007 (conducted by the U.S. Department of Health and Human Services), the percentage of seniors having limitation in activities of daily living (bathing, dressing, toileting, transferring, eating) and instrumental activities of daily living (using the telephone, shopping, food preparation, housekeeping, laundry, transportation, taking medication, handling finances) are as follows:

Limitation in ADLs & IADLs

Age	ADLs	IADLs
65-74 years	3.3%	6.3%
75+ years	11.0%	20.0%

It is likely that seniors who need assistance with ADLs also need assistance with multiple IADLs, and are more likely to be candidates for service-intensive assisted living. The prime candidates for independent living (congregate) are seniors needing assistance with IADLs, but not ADLs. We derive the capture rate for independent living (congregate) housing by subtracting the percentage of seniors needing assistance with ADLs from those needing assistance with IADLs, which equates to 3.0% of seniors age 65 to 74 and 9.0% of seniors 75+. For the purposes of this report and understanding current market conditions, we have reduced the potential capture rates for the 65 to 74 age group to 1.5% while increasing the capture rate of the 75+ age group to 13.0%. Multiplying the senior household base by these capture rates results in Market Area demand potential for 76 independent living units in 2019 and 2024.

TABLE S-4
INDEPENDENT LIVING (CONGREGATE) DEMAND
ELY MARKET AREA
2019 & 2024

		2019				2024		
		Age of Householder				Age of Householder		
		65-74		75+		65-74		75+
# of Householders w/ Incomes of $35,000+ in 2015 / $40K in 2023		859		404		909		429
(plus)	+				+			
# of Hhldrs w/ Incomes of $30K - $35K in 2015 / $35K - $40K in 2023		85		86		74		61
(times) Homeownership Rate	x	87%		85%	x	87%		85%
(equals) Potential Market	=	74		73	=	64		52
(equals) Total Potential Market Base	=	933		477	=	973		481
(times) Potential Capture Rate of Ind. Lvg (Congregate) Demand[1]	x	1.5%		13.0%	x	1.5%		#####
(equals) Potential Demand	=	14	+	62	=	15	+	63
Total Local Demand Potential	=		76		=		77	
(plus) Demand from Outside the PMA (20%)	+		19		+		19	
(equals) Total Demand Potential	=		95		=		96	
(minus) Existing Competitive Units[2]	-		0		-		0	
(equals) Excess Independent Living Demand Potential	=		**95**		=		**96**	
(times) Proportion Capturable in Ely	x		30%		x		30%	
(equals) Excess Independent Living Demand Potential in Ely	=		**29**		=		**29**	

[1] The potential capture rate is derived from data from the Summary Health Statistics for the U.S. Population: National Health Interview Survey, 2007 by the U.S. Department of Health and Human Services. The capture rate used is the percentage of seniors needing assistance with IADLs, but not ADLs (seniors needing assistance with ADLs typcially need assistance with multiple IADLs and are primary candidates for service-intensive assisted living.).

[2] Competitive existing and pending units at 95% occupancy (market equilibrium).

Source: Maxfield Research & Consulting, LLC

We estimate that seniors currently residing outside the PMA will generate 20% of the demand for independent living senior housing – increasing total demand by 19 independent living units. This demand consists primarily of parents of adult children living in the PMA, individuals who live just outside the PMA and have an orientation to the area, retirees who wish to relocate to the area and former residents who desire to return upon retirement. Together, the demand from PMA seniors and demand from seniors who would relocate to the area totals about 95 independent living (congregate) units.

Carefree Living no longer offers independent living (congregate) units and thus excess demand remains for 95 independent living (congregate) units in 2019 and 2024.

Due to factors such as the geographic distribution of the senior population in the PMA along with the location of services (medical, religious, retail, etc.) in the PMA, we anticipate that Ely could capture 30% of the excess demand potential in the PMA. Based on this capture rate, we find demand for 98 independent living (congregate) units in 2019 and 2024.

Assisted Living Demand Estimate

Table S-5 presents demand calculations for assisted living housing in Ely in 2019 and 2024. This analysis focuses on the potential *private pay/market rate* demand for assisted living units in the City.

The availability of more intensive support services such as meals, housekeeping and personal care at assisted living facilities usually attracts older, frailer seniors. According to the 2009 Overview of Assisted Living (which is a collaborative research project by the American Association of Homes and Services for the Aging, the American Seniors Housing Association, National Center for Assisted Living, and National Investment Center for the Seniors Housing and Care Industry), the average age of residents in freestanding assisted living facilities was 87 years in 2008. Hence, the age-qualified market for assisted living is defined as seniors ages 75 and over, as we estimate that of the half of demand from seniors under age 87, almost all would be over age 75. In 2019, there are an estimated 1,303 seniors ages 75 and over in the PMA. We project that this number will increase to 1,534 in 2024.

Demand for assisted living housing is need-driven, which reduces the qualified market to only the portion of seniors who need assistance. According to a study completed by the Centers for Disease Control and the National Center for Health Statistics (Health, United States, 1999 Health and Aging Chartbook), about 35% of seniors needed assistance with everyday activities (from 25.5% of 75-to-79-year-olds, to 33.6% of 80-to-84-year-olds and 51.6% of 85+ year olds). Applying these percentages to the senior population yields a potential assisted living market of an estimated 462 seniors in the PMA in 2019 and 532 units in 2024.

Due to the supportive nature of assisted living housing, most daily essentials are included in monthly rental fees which allow seniors to spend a higher proportion of their incomes on housing with basic services. Therefore, the second step in determining the potential demand for assisted living housing in the PMA is to identify the income-qualified market based on a senior's ability to pay the monthly rent. We consider seniors in households with incomes of $40,000 or greater to be income-qualified for assisted living senior housing in the PMA. Households with incomes of $40,000 could afford monthly assisted living fees of $3,500 by allocating a high proportion of their income toward the fees.

According to the 2009 Overview of Assisted Living, the average arrival income of assisted living residents in 2008 was $27,260, while the average annual assisted living fee was $37,281 ($3,107/month). This data highlights that seniors are spending down assets to live in assisted living and avoid institutional care. In addition to households with incomes of $40,000 or greater, there is a substantial base of senior households with lower incomes who would income-qualify based on their assets – their homes, in particular.

An estimated eighty-five percent of age 75+ households (2019) in the PMA are homeowners and the median sale price of older homes in the City in 2018 was $84,500. Seniors selling their homes for the median price would generate about $79,430 in proceeds after selling costs. Using an average monthly fee of $2,500, these proceeds would last about 32 months in assisted living housing, which is longer than the average length of stay in assisted living (20 months according to the 2009 Overview of Assisted Living).

We estimate the income-qualified percentage to be all seniors in households with incomes at or above $40,000 (who could afford monthly rents of $3,000+ per month) plus 40% of the estimated seniors in owner households with incomes below $40,000 (who will spend down assets, including home-equity, in order to live in assisted living housing). This results in a total potential market for 250 units from the PMA in 2019.

Because the vast majority of assisted living residents are single (88% according to the 2009 Overview of Assisted Living), our demand methodology multiplies the total potential market by the percentage of seniors age 75+ in the PMA living alone, or 50% based on Census data. This results in a total base of 125 age/income-qualified singles.

The 2009 Overview of Assisted Living found that 12% of residents in assisted living were couples. Including couples results in a total of 142 age/income-qualified seniors needing assistance in the PMA in 2019.

We estimate that 60% of the qualified market needing significant assistance with ADLs could either remain in their homes or less service-intensive senior housing with the assistance of a family member or home health care, or would need greater care provided in a skilled care facility. The remaining 40% could be served by assisted living housing. Applying this market penetration rate of 40% results in demand for 57 assisted living units in 2019.

We estimate that a portion of demand for assisted living units in the PMA (20%) will come from outside the area. This secondary demand will include seniors currently living just outside the area, former residents, and parents of adult children who desire supportive housing near their adult children. Applying this figure results in total potential demand for 71 assisted living units in 2019.

Next, existing and pending assisted living units are subtracted from overall demand. There is a total of 69 assisted living units in the Market Area. However, we exclude estimated units occupied by low-income seniors utilizing Elderly Waivers (14 units). Subtracting these existing units (minus a 7% vacancy factor) from the total demand equates to excess demand potential for 20 market rate assisted living units in the PMA in 2019, increasing to 38 units in 2024.

We anticipate that the Ely can capture 30% of the excess assisted living demand potential in the PMA. Based on this capture rate, we find demand for 6 assisted living units in 2019, growing to 11 units in 2024.

TABLE S-5
MARKET RATE ASSISTED LIVING DEMAND
ELY MARKET AREA
2019 AND 2024

		2019			2024		
Age group		People	Percent Needing Assistance[1]	Number Needing Assistance[1]	People	Percent Needing Assistance[1]	Number Needing Assistance[1]
75 - 79		555	25.5%	**142**	683	25.5%	**174**
80 - 84		363	33.6%	**122**	452	33.6%	**152**
85+		385	51.6%	**199**	399	51.6%	**206**
Total		1,303		**462**	1,534		**532**
Percent Income-Qualified[2]				54%			59%
Total potential market				250			314
(times) Percent living alone	x			50%			50%
(equals) Age/income-qualified singles needing assistance	=			125			157
(plus) Proportion of demand from couples (12%)[3]	+			17			21
(equals) Total age/income-qualified market needing assistance	=			142			178
(times) Potential penetration rate[4]	x			40%			40%
(equals) Potential demand from PMA residents	=			57			71
(plus) Proportion from outside the PMA (20%)	+			14			18
(equals) Total potential assisted living demand	=			71			89
(minus) Existing market rate assisted living units[5]	-			51			51
(equals) Total excess market rate assisted living demand	**=**			**20**			**38**
(times) Percent that could be captured on Site	x			30%			30%
(equals) Excess market rate assisted living demand	**=**			**6**			**11**

[1] The percentage of seniors unable to perform or having difficulting with ADLs, based on the publication Health, United States, 1999 Health and Aging Chartbook, conducted by the Centers for Disease Control and Prevention and the National Center for

[2] Includes households with incomes of $40,000 or more (who could afford monthly rents of $3,000+ per month) plus 40% of the estimated owner households with incomes below $40,000 (who will spend down assets, including home-equity, in order to live in assisted living housing).

[3] The 2009 Overview of Assisted Living (a collaborative project of AAHSA, ASHA, ALFA, NCAL & NIC) found that 12% of assisted living residents are couples.

[4] We estimate that 60% of the qualified market needing assistance with ADLs could either remain in their homes or reside at less advanced senior housing with the assistance of a family member or home health care, or would need greater care provided in a skilled care facility.

[5] Existing and pending units at 93% occupancy, minus 20% of units estimated to be occupied by Elderly Waiver residents.

Source: Maxfield Research & Consulting, LLC

Demand for Memory Care Senior Housing

Table S-7 presents our demand calculations for memory care housing in Ely in 2019 and 2024. Demand is calculated by starting with the estimated PMA senior (ages 65+) population in 2018 and multiplying by the incidence rate of Alzheimer's/dementia among this population's age co-horts. This yields a potential market of about 375 seniors in the PMA. We project that this number will climb to 428 by 2024.

TABLE S-6
MEMORY CARE DEMAND
ELY MARKET AREA
2019 AND 2024

		2019		2024
65 to 74 Population		1,940		2,227
(times) Dementia Incidence Rate[1]	x	2%	x	2%
(equals) Estimated Senior Pop. with Dementia	=	39	=	45
75 to 84 Population		918		1,135
(times) Dementia Incidence Rate[1]	x	19%	x	19%
(equals) Estimated Senior Pop. with Dementia	=	174	=	216
85+ Population		385		399
(times) Dementia Incidence Rate[1]	x	42%	x	42%
(equals) Estimated Senior Pop. with Dementia	=	162	=	168
(equals) Total Population with Dementia		**375**		**428**
(times) Percent Needing Specialized Memory Care Assistance	x	25%		25%
(equals) Total Need for Dementia Care	=	94	=	107
(times) Percent Income/Asset-Qualified[2]	x	43%	x	48%
(equals) Total Income-Qualified Market Base	=	40	=	51
(plus) Demand from Outside the Market Area (20%)	+	10	+	13
Total Demand for Memory Care Units		50		64
(minus) Existing and Pending Memory Care Units	-	26	-	26
(equals) Excess Primary Market Area Demand Potential	**=**	**24**	**=**	**38**
(times) Estimated Percent Capturable on Site	x	30%	x	30%
(equals) Memory Care Demand Capturable on Site	**=**	**7**	**=**	**11**

[1] Alzheimer's Association: Alzheimer's Disease Facts & Figures (2007)

[2] Income greater than $60,000 in 2018 and greater than $65,000 in 2023, plus some lower-income homeowners.

Source: Maxfield Research & Consulting, LLC

According to data from the National Institute of Aging, about 25% of all individuals with memory care impairments are a market for memory care housing units. This figure considers that seniors in the early stages of dementia will be able to live independently with the care of a spouse or other family member, while those in the latter stages of dementia will require intensive medical care that would only be available in skilled care facilities. Applying this figure to the estimated population with memory impairments yields a potential market of 94 seniors in the PMA in 2019 and 107 by 2024.

Because of the staff-intensive nature of dementia care, typical monthly fees for this type of housing start at about $4,500. Although some of the seniors will have high monthly incomes, most will be willing to spend down assets and/or receive financial assistance from family members to afford memory care housing. Based on our review of senior household incomes in the PMA, homeownership rates, and home sale data, we estimate that 43% of all seniors in the PMA have incomes and/or assets to sufficiently cover the costs for memory care housing. This figure takes into account married couple households where one spouse may have memory care needs and allows for a sufficient income for the other spouse to live independently. Multiplying the potential market by 43% results in a total of 40 income-qualified seniors in the PMA in 2014.

We estimate that 20% of the overall demand for memory care housing would come from outside the PMA, for a total demand for 51 units in 2018. Currently, there are two memory care facilities in the PMA with a total of 35 units. We subtract 20% of these units (excluding public Elderly Waivers) and allocate a 7% vacancy factor for a total of 26 existing units. This reduces excess demand potential in the PMA to 24 units in 2019. Excess demand is expected to grow to 38 units by 2024.

We anticipate that the Ely can capture 30% of the excess memory care demand potential in the PMA. Based on this capture rate, we find demand for 7 memory care units in 2019, growing to 11 units by 2024.

Introduction

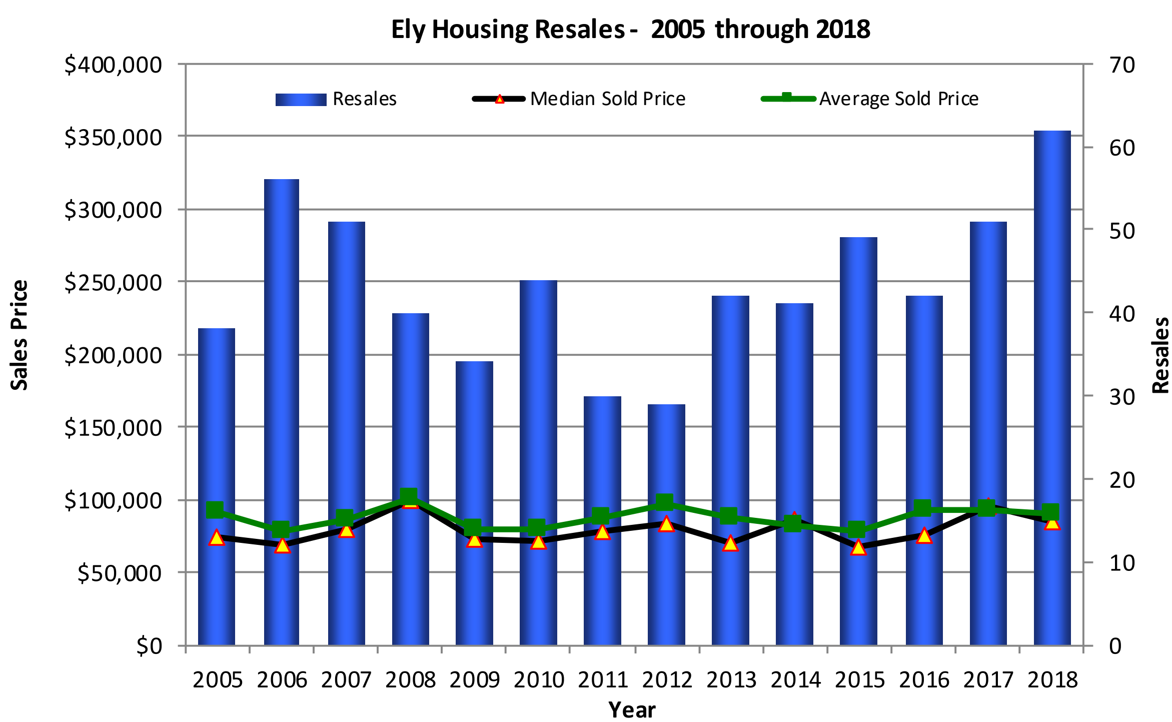
Maxfield Research assessed for-sale housing market conditions in Ely through an analysis of data on single-family and multifamily home sales and active listings, identifying active subdivisions and pending for-sale developments, and conducting interviews with local real estate professionals, developers and planning officials.

Overview of For-Sale Housing Market Conditions

Table FS-1 presents home resale data on single-family and multifamily housing in Ely from 2005 through 2018. The data was obtained from the Regional Multiple Listing Services of Minnesota and shows annual number of sales, median and average pricing, average days on market, cumulative days on market, and percent of sales that were lender-mediated (i.e. short-sale or foreclosure). Lender-mediated sales were not identified and separated until July 2008.

Table FS-2 breaks down resale activity from Table FS-1 into single-family and multifamily resales. The following are key points observed from the data.

- Over the period (2005 through 2018), the median sales price in Ely has fluctuated. The median sales price of single-family homes was $74,500 in 2005 and by 2018, the median price had increased to $84,500 (13%). The highest median sales price occurred in 2008 at $100,000 and the lowest in 2015 at $68,000.



- The number of lender-mediated properties accounted for 5% of all transactions reported to the Regional Multiple Listing Service (DAAR, Duluth Area Association of Realtors) between 2008 and 2018. Lender-mediated properties were at there lowest points recently in 2016 and 2017 accounting for 2.0% and 3.2% of transitions, respectively.

- Only two multifamily resales (less than 1%) were reported in the Market Area among all multifamily resales, 2005 through 2018. None were reported in Ely.

- An estimated 32% of all single-family resales in the Market Area occurred in Ely. Mirroring trends in Ely, the Remainder of the Market Area experienced fluctuating pricing since 2005. Median pricing bottomed out in the Remainder of the Market Area at $99,250 in 2013.

TABLE FS-1
HOME RESALES
CITY OF ELY
2005 through 2019*

Year	No. Sold	Avg. Sales Price	Avg. % Change	Med. Sales Price	Median % Change	Days on Market Avg.	% Lender Mediated^
2005	38	$90,818	-	$74,500	-	156	-
2006	56	$78,730	-13.3%	$68,750	-7.7%	107	-
2007	51	$85,900	9.1%	$80,000	16.4%	146	-
2008	40	$100,776	17.3%	$100,000	25.0%	121	0.0%
2009	34	$78,761	-21.8%	$72,500	-27.5%	111	2.9%
2010	44	$79,714	1.2%	$71,000	-2.1%	139	6.8%
2011	30	$87,739	10.1%	$78,000	9.9%	188	6.7%
2012	29	$97,086	10.7%	$83,000	6.4%	119	10.3%
2013	42	$86,966	-10.4%	$69,750	-16.0%	130	7.1%
2014	41	$82,108	-5.6%	$86,000	23.3%	134	4.9%
2015	49	$78,223	-4.7%	$68,000	-20.9%	146	8.2%
2016	42	$92,104	17.7%	$75,000	10.3%	151	4.8%
2017	51	$93,100	1.1%	$95,000	26.7%	179	2.0%
2018	62	$89,612	-3.7%	$84,500	-11.1%	105	3.2%
2019*	9	$103,900	15.9%	$119,000	40.8%	115	11.1%
Total 05'-18'	**609**						
Summary 05' through 18'							
Change		**-1.3%**		**13.4%**			
Average	**44**	**$88,447**		**$80,771**		**138**	

* Data Through April 2019.

^ Lender Mediated Properties include foreclosures and short sales. Statistics for this data were collected beginning July 2008.

Sources: DAAR; Maxfield Research & Consulting, LLC

TABLE FS-2
SINGLE-FAMILY AND MULTIFAMILY RESIDENTIAL RESALES
CITY OF ELY & MARKET AREA
2005 through 2019*

Ely

Year	Number of Sales	Median Sales Price	% Chg.	Average Sales Price	% Chg.
Single-Family					
2005	38	$74,500	--	$90,818	--
2006	56	$68,750	-7.7%	$78,730	-13.3%
2007	51	$80,000	16.4%	$85,900	9.1%
2008	40	$100,000	25.0%	$100,776	17.3%
2009	34	$72,500	-27.5%	$78,761	-21.8%
2010	44	$71,000	-2.1%	$79,714	1.2%
2011	30	$78,000	9.9%	$87,739	10.1%
2012	29	$83,000	6.4%	$97,086	10.7%
2013	42	$69,750	-16.0%	$86,966	-10.4%
2014	41	$86,000	23.3%	$82,108	-5.6%
2015	49	$68,000	-20.9%	$78,223	-4.7%
2016	42	$75,000	10.3%	$92,104	17.7%
2017	51	$95,000	26.7%	$93,100	1.1%
2018	62	$84,500	-11.1%	$89,612	-3.7%
2019	9	$119,000	40.8%	$103,900	15.9%
Pct. Change 05' - 18'	63.2%	13.4%		-1.3%	
Multifamily**					
2005	0	--	--	--	--
2006	0	--	--	--	--
2007	0	--	--	--	--
2008	0	--	--	--	--
2009	0	--	--	--	--
2010	0	--	--	--	--
2011	0	--	--	--	--
2012	0	--	--	--	--
2013	0	--	--	--	--
2014	0	--	--	--	--
2015	0	--	--	--	--
2016	0	--	--	--	--
2017	0	--	--	--	--
2018	0	--	--	--	--
2019	0	--	--	--	--
Pct. Change 05' - 18'					

Remainder of Market Area

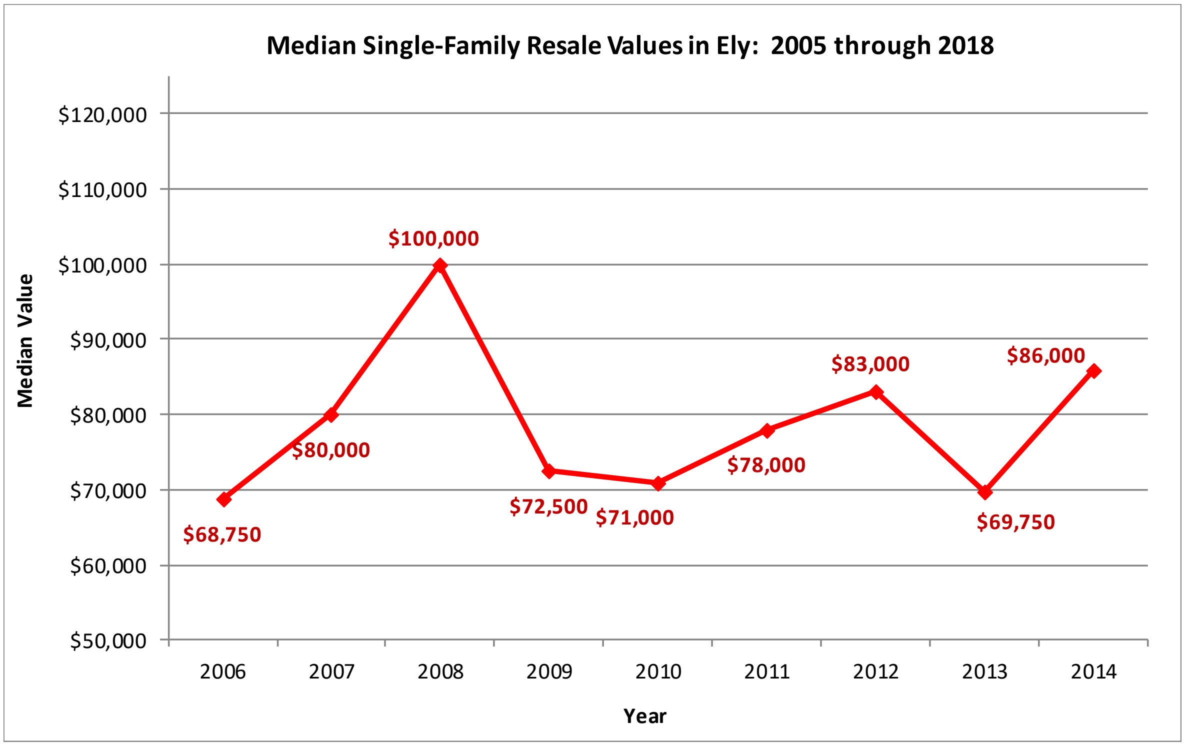
Year	Number of Sales	Median Sales Price	% Chg.	Average Sales Price	% Chg.
Single-Family					
2005	85	$195,750	--	$272,909	--
2006	74	$199,900	2.1%	$268,195	-1.7%
2007	69	$122,000	-39.0%	$260,707	-2.8%
2008	49	$205,000	68.0%	$297,690	14.2%
2009	47	$152,500	-25.6%	$217,993	-26.8%
2010	60	$148,500	-2.6%	$206,301	-5.4%
2011	49	$115,000	-22.6%	$158,806	-23.0%
2012	74	$136,750	18.9%	$228,197	43.7%
2013	97	$99,250	-27.4%	$172,924	-24.2%
2014	95	$168,500	69.8%	$231,189	33.7%
2015	110	$162,000	-3.9%	$197,514	-14.6%
2016	147	$180,000	11.1%	$251,443	27.3%
2017	163	$179,750	-0.1%	$218,654	-13.0%
2018	133	$147,000	-18.2%	$224,742	2.8%
2019	32	$220,000	49.7%	$253,567	12.8%
Pct. Change 05' - 18'	56.5%	-24.9%		-17.6%	
Multifamily**					
2005	0	--	--	--	--
2006	0	--	--	--	--
2007	0	--	--	--	--
2008	0	--	--	--	--
2009	0	--	--	--	--
2010	0	--	--	--	--
2011	0	--	--	--	--
2012	0	--	--	--	--
2013	0	--	--	--	--
2014	0	--	--	--	--
2015	0	--	--	--	--
2016	0	--	--	--	--
2017	1	$107,000	--	$107,000	--
2018	1	$40,000	-62.6%	$40,000	-62.6%
2019	0	--	--	--	--
Pct. Change 05' - 18'					

Market Area Total

Year	Number of Sales	Median Sales Price	% Chg.	Average Sales Price	% Chg.
Single-Family					
2005	123	$135,500	--	$213,899	--
2006	130	$105,500	-22.1%	$186,132	-13.0%
2007	120	$96,750	-8.3%	$188,521	1.3%
2008	89	$139,900	44.6%	$228,615	21.3%
2009	81	$98,900	-29.3%	$159,241	-30.3%
2010	104	$91,000	-8.0%	$153,525	-3.6%
2011	79	$81,000	-11.0%	$130,578	-14.9%
2012	103	$116,000	43.2%	$195,113	49.4%
2013	139	$79,500	-31.5%	$147,074	-24.6%
2014	136	$115,950	45.8%	$190,175	29.3%
2015	159	$110,000	-5.1%	$158,562	-16.6%
2016	189	$144,000	30.9%	$218,457	37.8%
2017	214	$139,000	-3.5%	$197,953	-9.4%
2018	195	$117,900	-15.2%	$188,257	-4.9%
2019	41	$142,000	20.4%	$233,758	24.2%
Pct. Change 05' - 18'	58.5%	-13.0%		-12.0%	
Multifamily**					
2005	0	--	--	--	--
2006	0	--	--	--	--
2007	0	--	--	--	--
2008	0	--	--	--	--
2009	0	--	--	--	--
2010	0	--	--	--	--
2011	0	--	--	--	--
2012	0	--	--	--	--
2013	0	--	--	--	--
2014	0	--	--	--	--
2015	0	--	--	--	--
2016	0	--	--	--	--
2017	1	$107,000	--	$107,000	--
2018	1	$40,000	-62.6%	$40,000	-62.6%
2019	0	--	--	--	--
Pct. Change 05' - 18'					

** Multifamily includes twinhomes, townhomes, and condominiums.

Sources: DAAR; Maxfield Research & Consulting, LLC



Current Supply of Homes on the Market

To more closely examine the current market for owner-occupied housing in Ely, we reviewed the current supply of homes on the market (listed for sale). Table FS-3 homes shows homes listed homes for sale in Ely and the Market Area distributed into 14 price ranges. The data was provided by the Duluth Area Association of Realtors (DAAR) and is based on active listings in May 2019. MLS listings generally account for the clear majority of all residential sale listings in a given area. Table FS-4 shows listings by home-style (i.e. one-story, two-story, townhome) and Table FS-5 shows listings by property type and pricing.

- As of May 2019, there were 22 homes listed for sale in Ely and 126 homes in the Remainder of the Market Area. There were no multifamily properties listed. The median list price in Ely for a single-family home is $95,500. The median sale price is generally a more accurate indicator of housing values in a community than the average sale price. Average sale prices can be easily skewed by a few very high-priced or low-priced home sales in any given year, whereas the median sale price better represents the pricing of most homes in a given market.

- Based on a median list price of $95,500, the income required to afford a home at this price would be about $27,285 to $31,830 based on the standard of 3.0 to 3.5 times the median income (and assuming these households do not have a high level of debt). A household with significantly more equity (in an existing home and/or savings) could afford a higher priced home.

TABLE FS-3
HOMES CURRENTLY LISTED FOR-SALE
CITY OF ELY AND MARKET AREA
May 2019

	City of Ely				Remainder of Market Area				Market Area Total			
	Single-Family		Multifamily[1]		Single-Family		Multifamily[1]		Single-Family		Multifamily[1]	
Price Range	**No.**	**Pct.**	**No.**	**Pct.**	**No.**	**Pct.**	**No.**	**Pct.**	**No.**	**Pct.**	**No.**	**Pct.**
< $49,999	4	18.2%	0	----	5	4.0%	0	----	9	6.1%	0	----
$50,000 to $74,999	4	18.2%	0	----	14	11.1%	0	----	18	12.2%	0	----
$75,000 to $99,999	3	13.6%	0	----	9	7.1%	0	----	12	8.1%	0	----
$100,000 to $124,999	5	22.7%	0	----	5	4.0%	0	----	10	6.8%	0	----
$125,000 to $149,999	3	13.6%	0	----	4	3.2%	0	----	7	4.7%	0	----
$150,000 to $174,999	1	4.5%	0	----	5	4.0%	0	----	6	4.1%	0	----
$175,000 to $199,999	1	4.5%	0	----	3	2.4%	0	----	4	2.7%	0	----
$200,000 to $249,999	0	0.0%	0	----	8	6.3%	0	----	8	5.4%	0	----
$250,000 to $299,999	1	4.5%	0	----	6	4.8%	0	----	7	4.7%	0	----
$300,000 to $349,999	0	0.0%	0	----	9	7.1%	0	----	9	6.1%	0	----
$350,000 to $399,999	0	0.0%	0	----	6	4.8%	0	----	6	4.1%	0	----
$400,000 to $449,999	0	0.0%	0	----	10	7.9%	0	----	10	6.8%	0	----
$450,000 to $499,999	0	0.0%	0	----	10	7.9%	0	----	10	6.8%	0	----
$500,000 and Over	0	0.0%	0	----	32	25.4%	0	----	32	21.6%	0	----
	22	100%	0	----	126	100%	0	----	148	100%	0	100%
Minimum	$24,700		----		$28,900		----		$29,750		----	
Maximum	$250,000		----		$3,750,000		----		$2,895,000		----	
Median	$95,500		----		$344,250		----		$380,250		----	
Average	$102,134		----		$413,261		----		$550,510		----	

[1] Includes townhomes, twinhomes, and condominiums

Sources: DAAR; Maxfield Research & Consulting, LLC

- About half of homes for sale in Ely are priced under $100,000 with roughly one-third of homes listed below $49,999, one-third listed between $50,000 and $74,999, and one-third between $75,000 and $99,999. On the other end of the price spectrum, nearly 4.5% of Ely's listings are priced between $250,000 and $299,999 and none over $300,000. Overall, 86% of homes in Ely are listed below $150,000.

- Median list prices of single-family homes in Ely ($95,500) are $248,750 less than those in the Remainder of the Market Area. This is due to a large proportion of homes listed as acre-age and/or waterfront.

- In other cities in the Market Area, prices are similar to Ely. Babbitt has 23 active listing at the time of this study with an average list price of $86,391 and a median list price of $74,000 which is roughly 30% less than in Ely. Tower/Soudan only had six listings with an average list price of $64,300 and a median list price of $63,400. Winton only had one listing at $125,000.

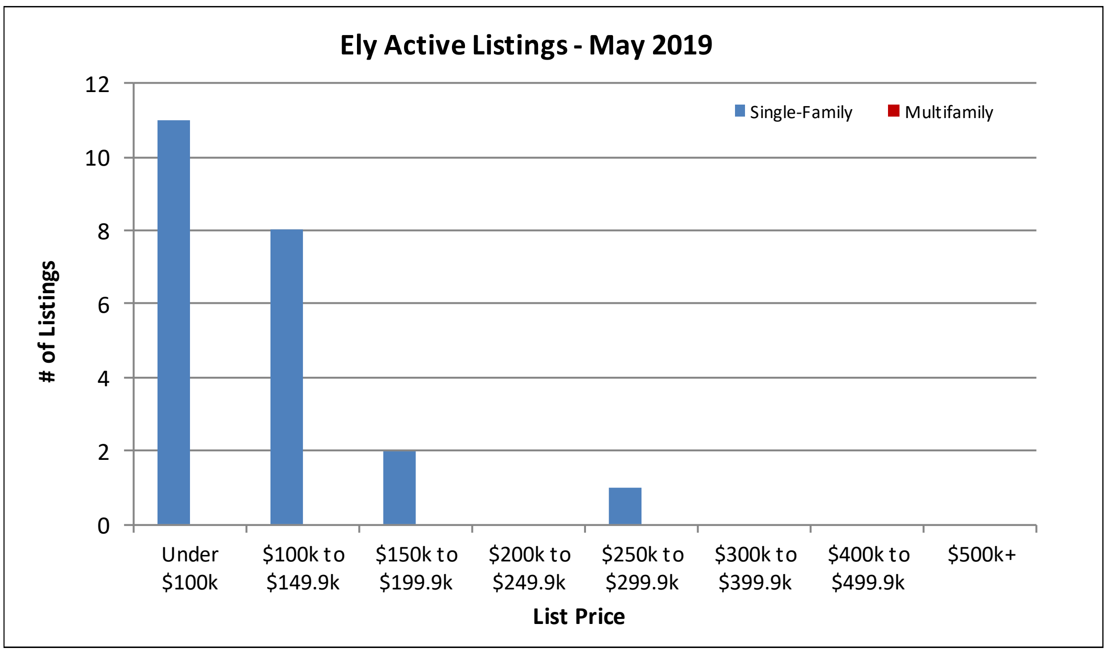


TABLE FS-4
ACTIVE LISTINGS BY HOUSING TYPE
CITY OF ELY
May 2019

Property Type	Listings	Pct.
Single-family	22	100.0%
Townhome/Twinhome	0	0.0%
Condominium	0	0.0%
Total	**22**	**100.0%**

Sources: Minneapolis Area Association of Realtors; Maxfield Research & Consulting, LLC

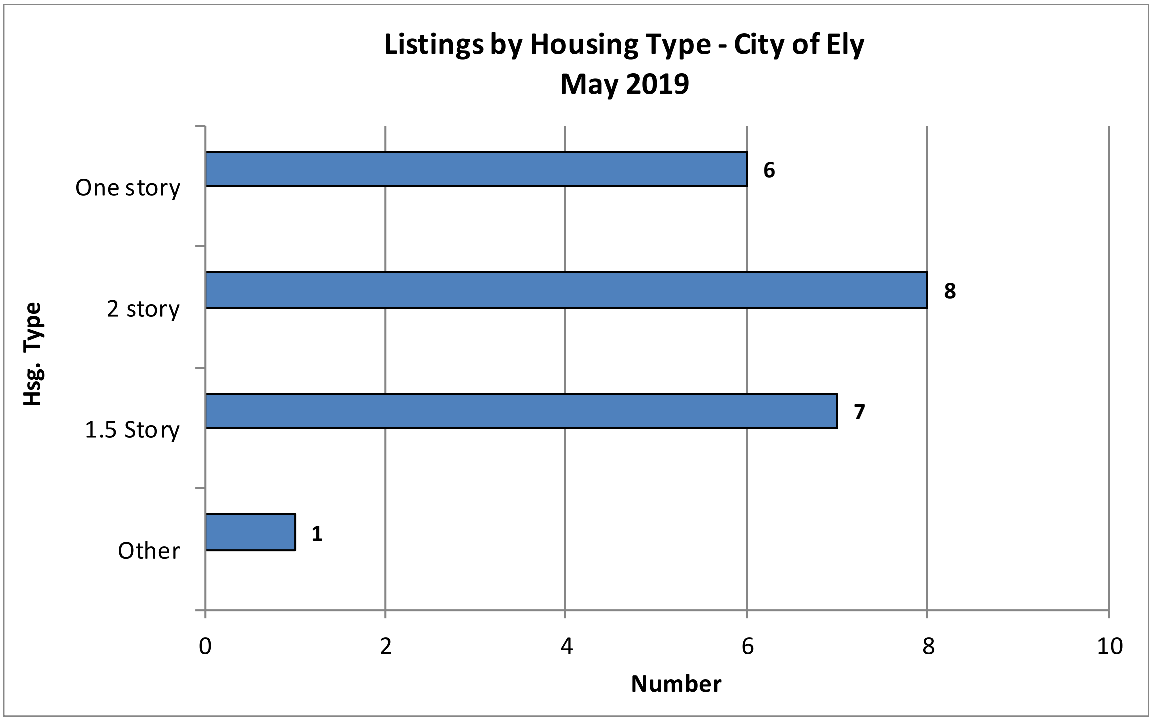
TABLE FS-5
ACTIVE LISTINGS BY HOUSING TYPE
CITY OF ELY
May 2019

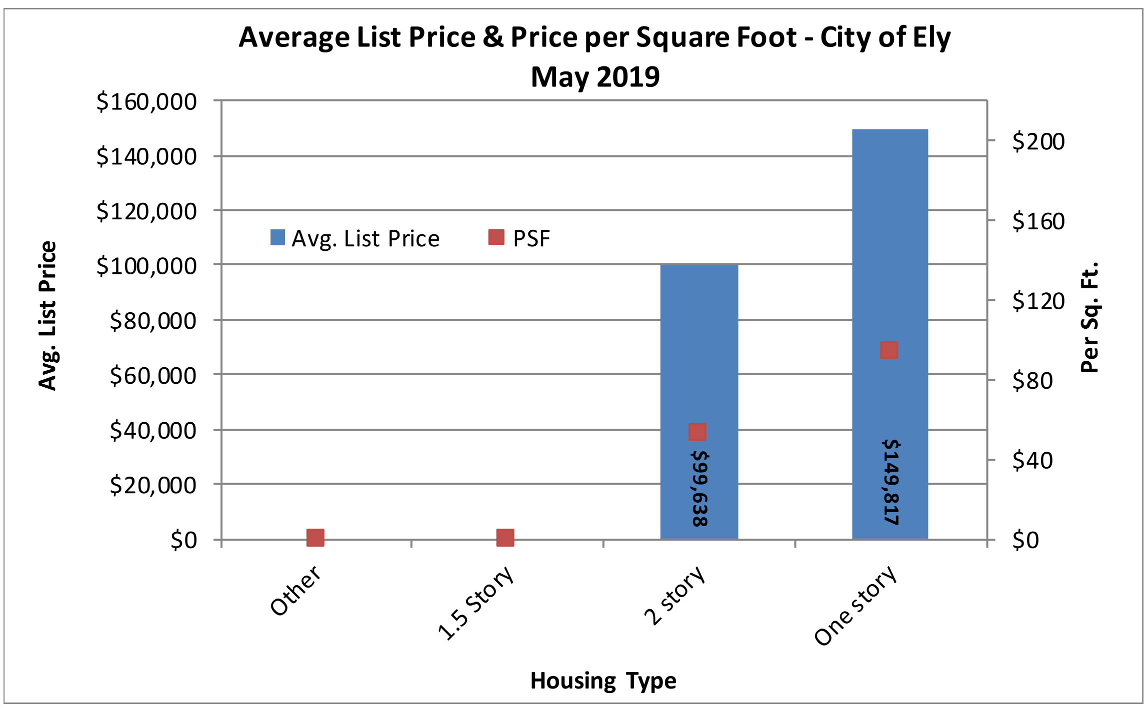
Property Type	Listings	Pct.	Avg. List Price	Avg. Size (Sq. Ft.)	Avg. List Price Per Sq. Ft.	Avg. Bedrooms	Avg. Bathrooms	Avg. Age of Home
Single-Family								
One story	6	27.3%	$149,817	1,596	$94	3.2	2.3	1973
1.5-story	7	31.8%	$60,850	1,088	$56	2.7	1.7	1909
2-story	8	36.4%	$99,638	1,880	$53	3.4	1.6	1924
Split entry/Bi-level	0	0.0%	-	-	-	-	-	-
Other	1	4.5%	$125,000	852	$147	1.0	0.0	2004
Total	**22**	**100.0%**	**$102,134**	**1,504**	**$68**	**3.0**	**1.8**	**1938**
Townhomes/Twinhomes								
Side-by-Side	**0**	**-----**	**$0**	**0**	**-----**	**0.0**	**0.0**	**N/A**

Sources: Minneapolis Area Association of Realtors; Maxfield Research & Consulting, LLC.

- Two-story homes made up the highest percentage (36.4) of active single-family listings followed by 1.5-story homes (31.8%) and one-story homes (27.3%).

- Overall, the average list price per square foot ("PSF") among all active single-family listings is $68/square foot. One-story homes have a higher PSF ($94/square foot) compared to two-story homes ($53), which is expected due to larger overall sizes (1,880 versus 1,596 square feet) in the two-story type.





Months of Active Supply

Table FS-6 illustrates the historic supply of actively marketing properties in Ely and St. Louis County from 2015 through May 2019. The table depicts the number of homes for sale at the end of each year and the months of supply. The months of supply metric calculates the number of months it would take for all actively marketing homes to sell given the monthly sales absorption. Generally a balanced supply is considered six months. The higher the months of supply indicates there are more sellers than buyers ("buyers' market"); the lower the months of supply indicates there are more buyers than sellers ("sellers' market").

The following are key findings from Table FS-6.

- The number of homes listed for-sale in Ely has remained relatively stable between the end of 2016 through May 2019 after a significant increase from 14 homes in 2015 to 26 homes in 2016. It appears some of the homes previously listed for sale sold and others were taken off the market. Current months of supply remains relatively high (10 months in 2019) and overall, it takes about one year to sell a home in Ely.

- Ely's housing market is highly cyclical and seasonal. People flock to Ely during the warm summer months, but market activity slows down considerably during the winter and a number of snowbirds head back to the south leaving their properties vacant, to be managed or looked after by a caretaker or neighbor. Over the decade, many older homes in the core of the City have been converted to rental units to meet a growing demand for vacation and short-term rentals in the Ely market during the peak seasons and for student housing. This reduces the number of homes affordable to first-time homebuyers that may have been willing to purchase these homes and upgrade them. Homes that have been upgraded are now rentals.

TABLE FS-6
ACTIVE LISTINGS OF HOMES FOR SALE
ELY & ST LOUIS COUNTY
2015 through 2019*

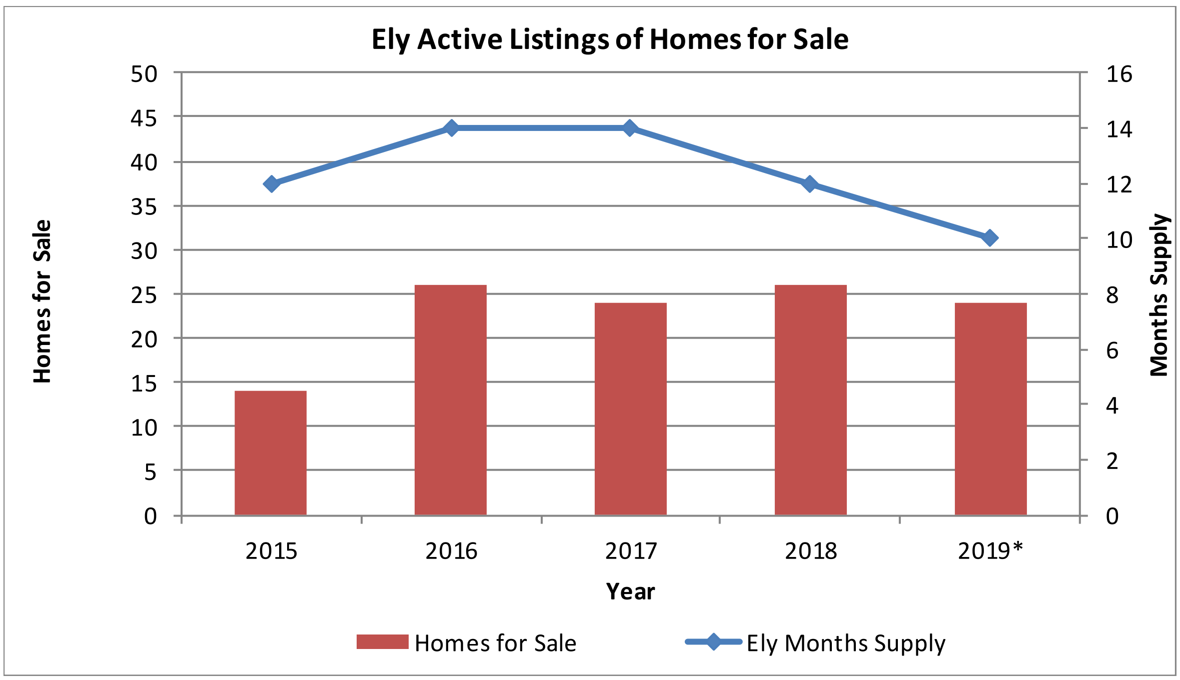
	Months Supply		Homes for Sale	
Year	Ely	St Louis County	Ely	St Louis County
2015	12	21	14	202
2016	14	16	26	264
2017	14	12	24	261
2018	12	11	26	301
2019*	10	10	24	302

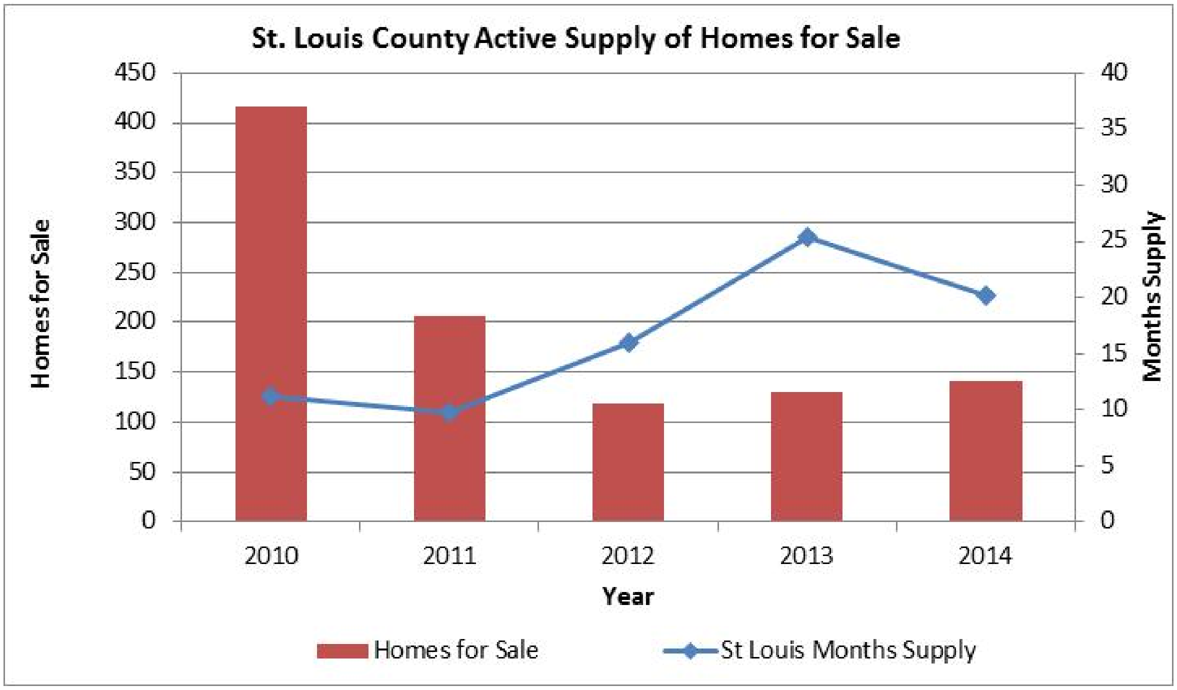
* Data in 2019 through May

Sources: Northstar MLS - Infosparks, Maxfield Research & Consulting, LLC

- Young households may initially prefer to rent their housing because they may want to try out the area, but are not necessarily committed to residing in Ely permanently. These households may be interested in purchasing housing at some time in the future, but may want to wait until they are more secure in their employment. This could include teachers, medical workers, and natural resource workers, staff at the College or other business and technical positions. Rental housing is available, but some landlords want to take advantage of short-term seasonal rentals while the students are out of town and then rent to students when they return in the fall and thus leaving fewer long-term rental options for this market. In addition, our discussion with the City's building official indicates that the quality of rental housing in the City is lacking which may dissuade this market as there may be no quality rentals available.

- Although St. Louis County remains significantly above the balanced supply level (10 months of supply in May 2019), absorption appears to be occurring more rapidly as current inventory remains high, but months of supply has been steadily decreasing over the period.





Owner-Occupied Turnover

Table FS-7 illustrates existing home turnover as a percentage of owner-occupied units in Ely and the Market Area. Resales are based on historic transaction volumes between 2010 and 2018 as listed on the Multiple Listing Service. The numbers of owner-occupied housing units are sourced from the 2010 U.S. Census.

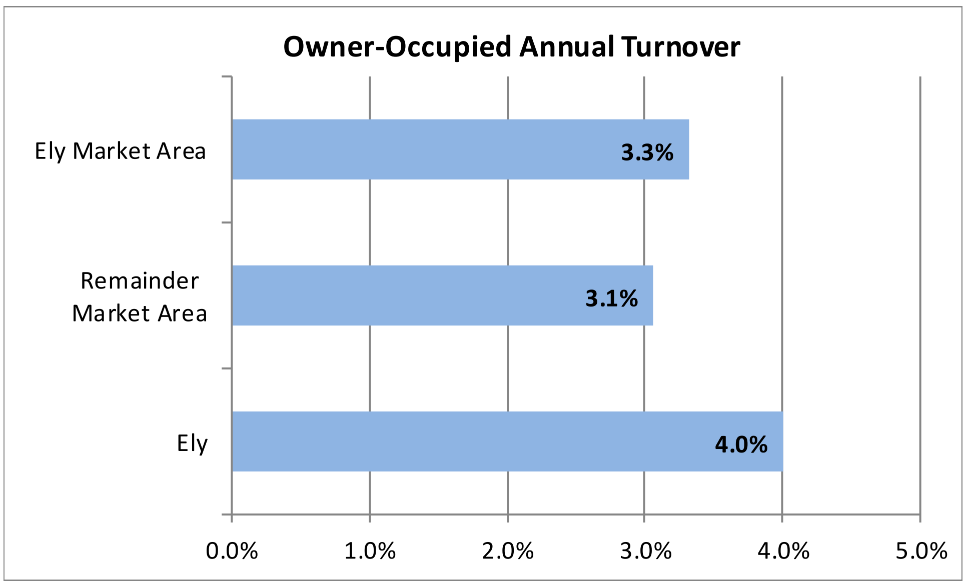
As displayed in the table, 3.0% of the Ely Market Area's owner-occupied housing stock is sold annually. Ely had a turnover rate of 4.0% while the Remainder of the Market Area had a lower turnover of only 3.1%. The low turnover outside of Ely is typical in rural settings. We find owner-occupied turnover ranges from 3% at the low-end to 8% at the high-end in many communities throughout Minnesota.

TABLE FS-7
OWNER-OCCUPIED TURNOVER
ELY MARKET AREA

Submarket	Owner-occupied Housing Units[1]	Resales Annual Avg.[2]	Turnover Pct.
Ely	1,100	44	4.0%
Remainder of Market Area	2,909	89	3.1%
Ely Market Area	**4,009**	**133**	**3.3%**

[1] Owner-occupied housing units in 2010
[2] Average of MLS resales between 2010 and 2014

Source: U.S. Census Bureau (American Community Survey), DAAR, Maxfield Research & Consulting, LLC



Lender-Mediated Properties

Table FS-8 identifies lender-mediated real estate sales activity in Ely and St. Louis County as listed on Duluth Area Association of Realtors (DAAR) and the Regional Multiple listing Service of Minnesota (RMLS). Lender-mediated transactions (foreclosures and short sales) are different from traditional sales because a third party (often the lender) is involved in the transaction, either acting as the seller in the case of foreclosures, or as an intermediary with approval powers in the case of a short sale.

Foreclosures are properties in which the financial institutions or lender has taken possession of the home from the owner due to non-payment of mortgage obligations/default by the borrower. In a short sale, the lender(s) and the home owner work together and attempt to sell the home prior to foreclosure. Because the net proceeds from the sale are not enough to cover the sellers' mortgage obligations, the difference is forgiven by the lender, or other arrangements are made with the lender to settle the remainder of the debt. In either circumstance, lenders want to move the debt off their books and will hence discount the asking price.

Lender-mediated property information is an important metric when reviewing the health of real estate markets. After the real estate bust and ensuing recession, lender-mediated homes increased substantially as an overall market share of the for-sale inventory. The higher market share resulted in downward pricing on aggregate sales price figures, giving the impression that the entire housing market was losing considerable value. However, real estate sales data shows stark differences between traditional and lender-mediated transactions. Key points from the table follow.

- The percentage of lender-mediated sales in Ely remained low, calculating to 2% to 10% of all single-family resales annually from 2010 through 2018.

- In St. Louis County overall, however, the percentage of lender-mediated sales accounted for just over 40% of single-family resales in 2012. The proportion was highest during the 2012 to 2014 period accounting for 23.5% to 43% of the sales. This percentage decreased after 2014 to 14% in 2015 and continued to decrease to 8% by 2018.

- Pricing for lender-mediated properties in the County was the lowest in 2016 when the median sales price was $38,500. As the number of lender-mediated properties continues to decrease, pricing is anticipated to adjust accordingly.

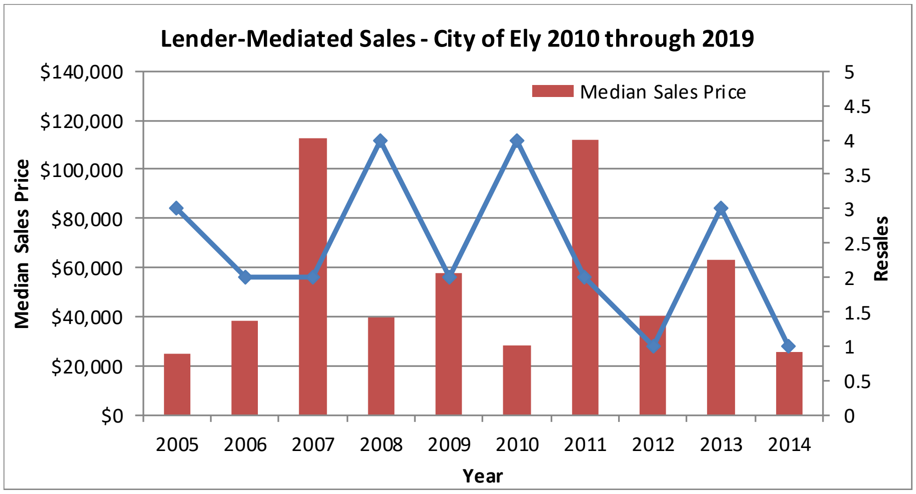
- From 2010 to 2018, 11% of all lender-mediated transactions in St. Louis County were in Ely.

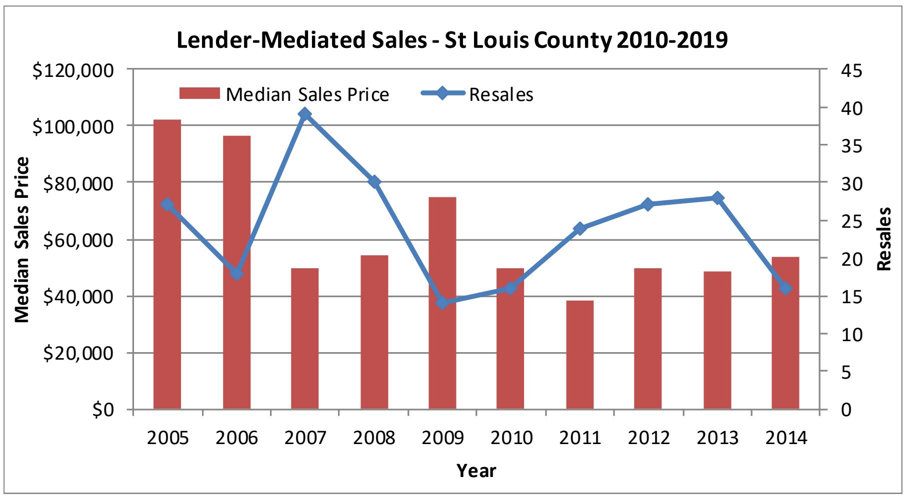
TABLE FS-8
LENDER-MEDIATED SALES
CITY OF ELY AND ST LOUIS COUNTY
2010 to 2019

	CITY OF ELY		ST LOUIS COUNTY	
Year	Resales	Median	Resales	Median
2010	3	$25,000	27	$102,314
2011	2	$38,200	18	$96,450
2012	2	$112,950	39	$49,750
2013	4	$39,750	30	$54,050
2014	2	$58,000	14	$75,000
2015	4	$27,950	16	$50,000
2016	2	$111,950	24	$38,500
2017	1	$40,000	27	$50,000
2018	3	$63,000	28	$48,750
2019	1	$25,600	8	$53,500

Note: Lender-mediated includes short sales and foreclosures

Sources: DAAR; Northstar MLS - Infosparks; Maxfield Research & Consulting, LLC





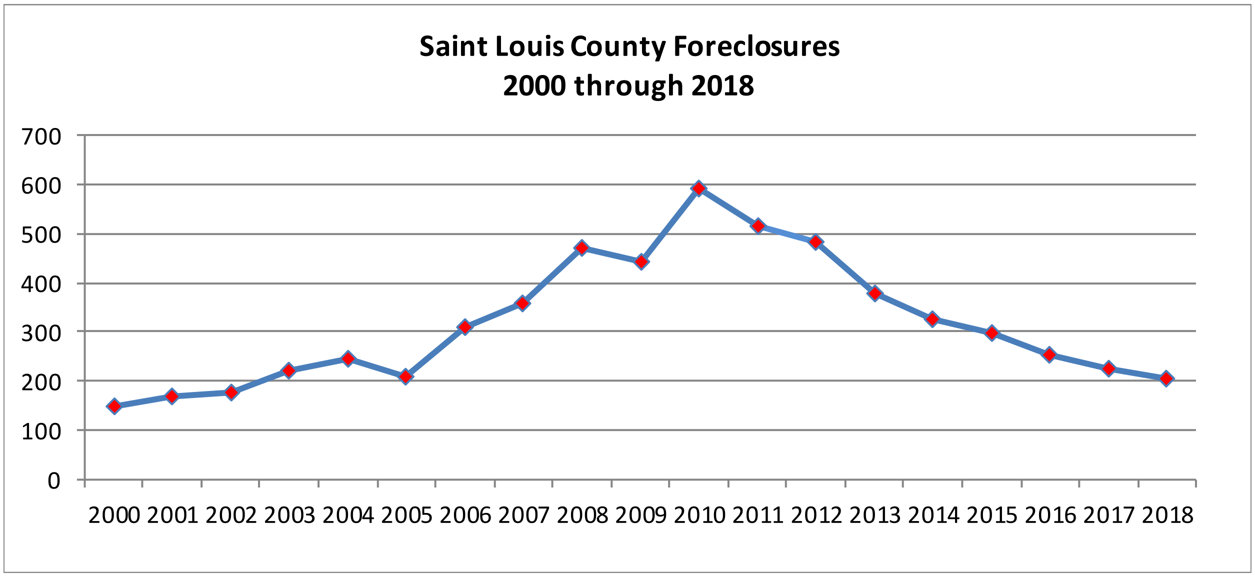
Foreclosures

The following chart shows the number of foreclosures in St. Louis County for the period from 200 through 2018. This information was compiled by St. Louis County. A property may be foreclosed upon, but may continue to be bank owned and rented instead of sold outright or may be standing vacant. This information is different from lender-mediated sales where the property where the property has actually been resold.

As shown on the chart, foreclosures rose in St. Louis County similar to other areas across the State and the nation as the recession took hold. At the peak in 2010, there were 591 foreclosures in St. Louis County. As of the end of 2018, St. Louis County ranked 6th among all counties in Minnesota in number of foreclosures. Counties that had higher total included Hennepin, Ramsey, Anoka, Dakota and Washington, all Metro Area counties.

After 2010, the number of foreclosures has decreased in each year to a low of 204 in 2018. A slight increase occurred in 2017, the most recent reported year by the County.

Distressed property sales in Ely represented less than 5% of all sales between 2008 and 2014. This suggests that prior to the Recession; there was not as significant a run up in housing activity and pricing as in other parts of Minnesota and in St. Louis County.



Actively Marketing Subdivisions

There are no sizeable actively marketing subdivisions in Ely at this time. A couple of lots are still available in East Spaulding and the Spaulding First Addition was platted, but this occurred during the downturn in the housing market. Most of the activity in Ely are scattered lots much of which are lake front. The following points are from the lot inventory.

- In total, there are currently 18 lots listed for-sale in Ely. Roughly half of the lots are priced over $60,000 and the other half from $25,000 to $49,000. The average lot price is $102,011 and the median price is $54,500.

- The lowest priced lot is $8,500 and is also the smallest at 0.15 acres while the largest lot (15.56 acres) is priced the highest at $395,000. Overall, the average lot size is 1.4 acres and the median lot size is 0.67 acres.

- Three combined lots adjacent to the Golf Course are listed for a combined price of $35,000 and a total 0.43 acres.

- There are three lots in Shagawa Pines listed at $60,000 (1) and $165,000 (2) for around an acre of lakefront land.

Except for Spaulding First Addition, the other lots being marketed could be considered as "orphan lots" or lots that remain as less desirable or were caught in the market downturn.

Market activity appears to be greater in surrounding townships rather than in-town. However, there is more land available in the townships and on lakes which typically has attracted retirees and those that prefer to live in a more rural setting.

Most of the new housing currently being built is move-up housing or custom homes being built for those that want to retire to northern Minnesota and live on lakefront property.

Pending For-Sale Developments

According to the City of Ely, the Spaulding subdivision has a limited number of lots for sale in the East Spaulding subdivision, but no homes have been constructed in the Spaulding First Addition (11 lots). The City owns four lots in the East Spaulding subdivision for a total of 15 lots combined with the East Spaulding First Addition. Local real estate agents are marketing a couple of lots in East Spaulding not owned by the City with listed prices of $25,000 and $35,000. These lots are priced similarly to roughly half of the lots that are available in-town in Ely which range in price between $25,000 and $49,900 depending on the view, size and topography of the property. These lot sizes ranged from 0.4 acres to nearly 5.6 acres with an average of 2.1 acres and a median at 0.78 acres. Lots in the East Spaulding subdivision generally sold to move-up buyers putting homes on those lots in the $200,000 and up price range.

Babbitt is planning to plat 18 lots. There are no further details about the future subdivision at this time.

For-Sale Housing Market Demand Analysis

Table FS-9 presents demand calculations for general occupancy for-sale housing in Ely between 2019 and 2030. This analysis identifies potential demand for general occupancy for-sale housing that is generated from both new households and turnover households. The following points summarize our findings.

- According to our projections, the PMA is expected to grow by 200 households between 2019 and 2030 without the proposed mine and 268 households with the new Polymet Mine. Because the 65 and older cohort is typically not a target market for new general occupancy for-sale housing, we limit demand from household growth to only those households under the age of 65. In the PMA, roughly 20% (30% with the Polymet Mine) of the projected household growth will occur among households age 64 and younger which results in projected demand for 43 general occupancy (75 households with Polymet Mine) for-sale units from household growth. Based on household tenure data from the US Census, we expect that 75% of the demand will be for owner-occupied housing units, equating to a potential of 30 owner households (53 households with Polymet Mine) from household growth.

- As of 2019, there are an estimated 4,073 owner households under the age of 65 in the PMA. Based on household turnover data from the 2017 American Community Survey and sales activity in the PMA, we estimate that 35% of these under-65 owner households will experience turnover between 2019 and 2030. This estimate results in anticipated turnover of 1,426 existing households by 2030.

- We then estimate the percent of existing owner households turning over that would prefer to purchase new housing. In the United States, an estimated 8% of all home sales were for new homes in recent years while nearly 5% of Midwest sales were for new homes. Considering the age of Ely's housing stock along with recent sale trends in the Market Area and understanding that new construction activity slowed significantly due to the Great Recession, we estimate that 5% of the households turning over in the City will desire new housing. This estimate results in demand from existing households for 71 new owned units in the PMA between 2019 and 2030.

- Total demand from household growth and existing household turnover between 2019 and 2030 equates to 101 new for-sale (124 housing units with Polymet Mine) housing units in the PMA. An additional proportion is added for households that would move into ownership housing in the PMA who currently reside outside the area.

- Due, in large part, to the natural amenities in the area, Ely will draw a portion of potential home buyers from areas outside the PMA. We estimate that 15% (25% with the jobs created by the Polymet Mine) of the demand potential for general occupancy ownership housing in Ely would be derived from outside the area, increasing total demand to 119 units (141 with Polymet Mine).

- Based on our population and household growth projections, we estimate that Ely will capture 25% (30% with Polymet Mien) of the PMA's demand for new for-sale housing between 2019 and 2030, equating to demand for 30 units (42 with Polymet Mien) between 2019 and 2030. Based on building permit trends, new construction sales data, and our household growth projections by age group in the Market Area, we estimate that 70% of the householders seeking new housing will desire single-family housing, while the remaining 30% will seek multifamily units. We anticipate that there will be demand for 21 single-family homes and 9 multifamily units in Ely between 2019 and 2030 as conditions stand currently. If the Polymet Mine continues to move forward, we estimate demand will increase to 30 single-family homes and 13 multifamily for-sale units capturable in Ely from 2019 to 2030.

TABLE FS-9
GENERAL OCCUPANCY FOR-SALE HOUSING DEMAND
ELY MARKET AREA
2019 TO 2030

		Without Mine		Polymet Mine	
DEMAND FROM PROJECTED HOUSEHOLD GROWTH					
Projected household growth in the PMA 2019 to 2030[1]		200		250	
(times) Pct. of HH growth for general occupancy housing[2]	x	20%		30%	
(equals) Projected demand for general occupancy units	=	40		75	
(times) Propensity to Own[3]	x	75%		70%	
(equals) Number of potential owner households from HH growth	=	**30**		**53**	
DEMAND FROM EXISTING OWNER HOUSEHOLDS					
Number of owner households (age 64 and younger) in the PMA, 2019	=	4,073		4,073	
(times) Estimated % of owner turnover (age 64 and younger, 2019 to 2030)[4]	x	35%		35%	
(equals) Total existing households projected to turnover between 2019 and 2030	=	1,426		1,426	
(times) Estimated % desiring new owner housing	x	5%		5%	
(equals) Demand from existing households	=	71		71	
Total Demand From Household Growth and Existing Households, 2019 to 2030	**=**	**101**		**124**	
(times) Ownership demand generated from outside PMA	+	15%		25%	
(equals) Total demand potential for ownership housing in the PMA	**=**	**119**		**141**	
% of PMA Demand Capturable in the City of Ely	x	25%		30%	
Demand from Household Growth and Existing Households in Ely	**=**	**30**		**42**	
		Single Family	**Multi-family**	**Single Family**	**Multi-family**
(times) Percent desiring for-sale single family (SF) vs. multifamily (MF)[5]	x	70%	30%	70%	30%
(equals) Total demand potential for new for-sale housing in Ely	**=**	**21**	**9**	**30**	**13**

[1] Estimated household growth based per ESRI and Maxfield Research & Consulting, LLC
[2] Pct. of household growth under age 65
[3] Pct. Owner households under age 65 in 2019
[4] Based on household turnover and mobility data (2017 American Community Survey, Five Year Estimates).
[5] Based on new construction sales data, building permit data, and growth projections by age group.
[*] Multifamily demand includes demand for townhomes, twinhomes, and condominium units.

Source: Maxfield Research & Consluting, LLC

Housing Costs as Percentage of Household Income

Housing costs are generally considered affordable at 30% of a household's adjusted gross income. Table E-1 on the following page illustrates key housing metrics based on housing costs and household incomes in the Ely Market Area. The table estimates the percentage of Ely Area householders that can afford rental and for-sale housing based on a 30% allocation of income to housing. Housing costs are based on the Ely Market Area average.

The housing affordability calculations assume the following:

For-Sale Housing
- 10% down payment with good credit score
- Closing costs rolled into mortgage
- Current 30-year mortgage at 3.75% interest rate
- Private mortgage insurance (equity of less than 20%)
- Homeowners insurance for single-family homes and association dues for townhomes
- Owner household income estimates 2017 ACS

Rental Housing
- Background check on tenant to ensure credit history
- 30% allocation of income
- Renter household income estimates per 2017 ACS

Because of the down payment requirement and strict underwriting criteria for a mortgage, not all households will meet the income qualifications as outlined above.

- An estimated 78% of existing owner households in the PMA could afford to buy a modestly-priced single-family home (2018 median resale price - $84,500) in Ely, but the proportion of income-qualified households declines as the sale price increases. About 44% of existing PMA owner households could afford to purchase a move-up single-family home priced at $175,000, but the proportion able to afford an executive single-family home priced at $250,000 declines to 27% of existing owner households.

- We note however, that the affordability ratios in locations outside of Ely are affected to a greater degree because of households coming into the area from other locations in Minnesota and from outside of the State.

- About 72% of existing PMA renter households can afford to rent a one-bedroom unit in Ely ($400/month). The percentage of renter income-qualified households decreases to 63% that can afford an existing two-bedroom unit ($550/month) and again to an estimated 36% of renters could afford to rent a three-bedroom apartment renting for $700 per month.

TABLE G-1
ELY HOUSING AFFORDABILITY - BASED ON HOUSEHOLD INCOME

For-Sale (Assumes 10% down payment and good credit)

	Single-Family			Condos/Townhomes	
	Entry-Level	Move-Up	Executive	Entry-Level	Move-Up
Price of House	$85,000	$175,000	$250,000	$100,000	$200,000
Pct. Down Payment	10.0%	10.0%	10.0%	10.0%	10.0%
Total Down Payment Amt.	$8,500	$17,500	$25,000	$10,000	$20,000
Estimated Closing Costs (rolled into mortgage)	$2,550	$5,250	$7,500	$3,000	$6,000
Cost of Loan	$79,050	$162,750	$232,500	$93,000	$186,000
Interest Rate	3.750%	3.750%	3.750%	3.750%	3.750%
Number of Pmts.	360	360	360	360	360
Monthly Payment (P & I)	-$366	-$754	-$1,077	-$431	-$861
(plus) Prop. Tax	-$92	-$190	-$271	-$108	-$217
(plus) HO Insurance/Assoc. Fee for TH	-$28	-$58	-$83	-$100	-$125
(plus) PMI/MIP (less than 20%)	-$34	-$71	-$101	-$40	-$81
Subtotal monthly costs	-$521	-$1,072	-$1,532	-$679	-$1,284
Housing Costs as % of Income	30%	30%	30%	30%	30%
Base Minimum Income Required	$20,831	$42,886	$61,266	$27,173	$51,346
Pct. of ALL Ely HHDS who can afford[1]	**86.4%**	**66.7%**	**49.4%**	**81.3%**	**57.9%**

Rental (Market Rate)

	Existing Older Rental			New Rental		
	1BR	2BR	3BR	1BR	2BR	3BR
Monthly Rent	$400	$550	$700	$850	$1,000	$1,100
Annual Rent	$4,800	$6,600	$8,400	$10,200	$12,000	$13,200
Housing Costs as % of Income	30%	30%	30%	30%	30%	30%
Base Minimum Income Required	$16,000	$22,000	$28,000	$34,000	$40,000	$44,000
Pct. of ALL Ely HHDS who can afford[1]	**90.3%**	**85.5%**	**75.2%**	**75.9%**	**69.8%**	**65.5%**

[1] Based on 2019 household income for ALL households

Source: Maxfield Research & Consulting, LLC

Introduction

This section summarizes demand calculated for specific housing products in the Ely Market Area and recommends development concepts to meet the housing needs forecast for the City. All recommendations are based on findings of the *Comprehensive Housing Needs Analysis*.

Demographic Profile and Housing Demand

The demographic profile of a community affects housing demand and the types of housing that are needed. The various housing life-cycle stages can generally be described as follows.

1. **Entry-level householders**
   - Often prefer to rent basic, inexpensive apartments and will often “double-up” with roommates in apartment setting. Usually singles or couples without children in their early 20's. In Ely, this segment also includes students that typically rent with roommates and are short-term renters.

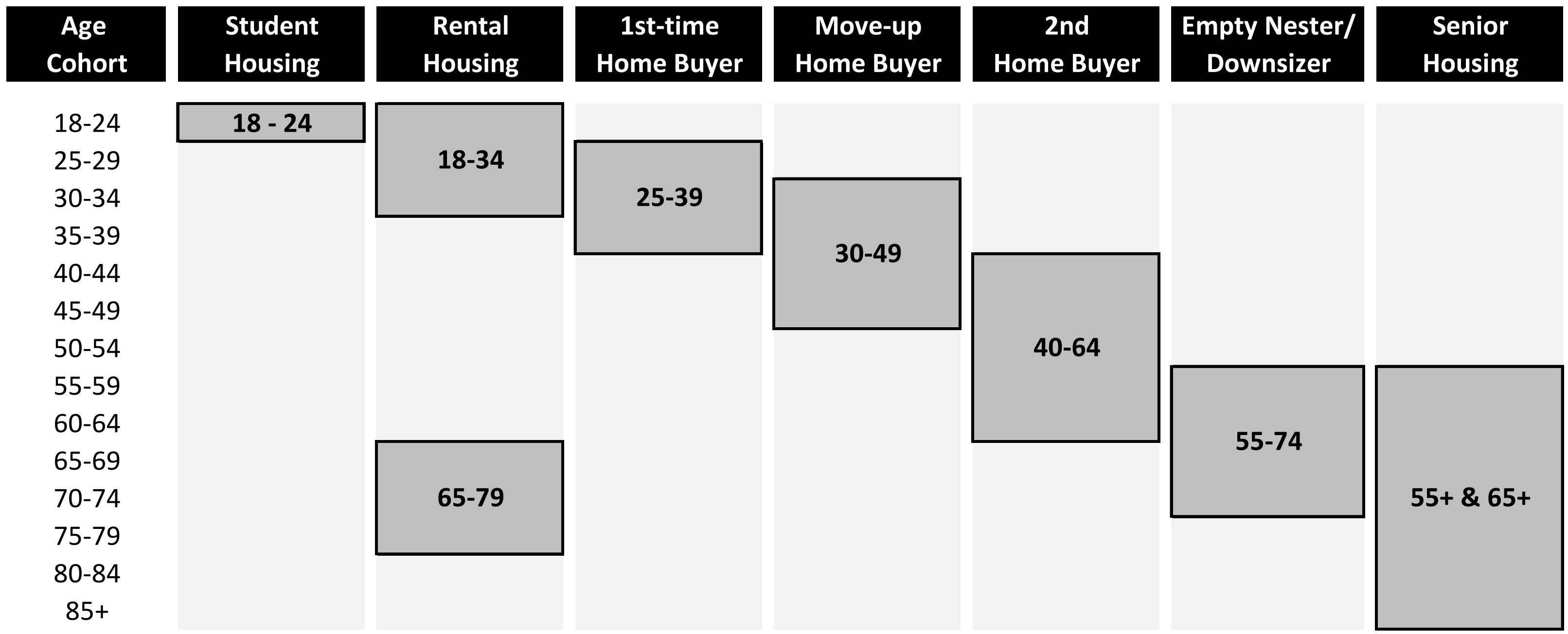
2. **First-time homebuyers and move-up renters**
   - Usually married or cohabitating couples in their mid-20's or 30's, some with children, but most are without children that prefer to purchase modestly-priced single-family homes or rent more upscale apartments.

3. **Move-up homebuyers**
   - Typically, families with children where householders are in their late 30's to 40's and prefer to purchase newer, larger, and therefore more expensive single-family homes.

4. **Empty-nesters (persons whose children have grown and left home) and never-nesters (persons who never have children)**
   - Generally couples in their 50's or 60's that prefer owning but will consider renting their housing and some will move to alternative lower-maintenance housing products.

5. **Younger independent seniors**
   - Prefer owning but will consider renting their housing and may spend a portion of the year) in retirement havens in the Sunbelt and desire to reduce their responsibilities for housing upkeep and maintenance. Generally in their late 60's or 70's.

DEMOGRAPHICS & HOUSING DEMAND



Source: Maxfield Research & Consulting, LLC

6. **Older seniors**
   - May need to relocate from their single-family home or other independent living situation due to physical and/or health constraints or a desire to reduce their responsibilities for upkeep and maintenance. Generally, includes a higher proportion of single females (widows) in their mid-70's or older.

TYPICAL HOUSING TYPE CHARACTERISTICS

	Housing Types	Target Market/ Demographic	Unit/Home Characteristics	Lot Sizes/ Units Per Acre[1]
For-Sale Housing	Entry-level single-family	First-time buyers: Families, couples w/no children, some singles	1,200 to 2,200 sq. ft. 2-4 BR | 2 BA	80'+ wide lot 2.5-3.0 DU/Acre
For-Sale Housing	Move-up single-family	Step-up buyers: Families, couples w/no children	2,000 sq. ft.+ 3-4 BR | 2-3 BA	80'+ wide lot 2.5-3.0 DU/Acre
For-Sale Housing	Executive single-family	Step-up buyers: Families, couples w/no children	2,500 sq. ft.+ 3-4 BR | 2-3 BA	100'+ wide lot 1.5-2.0 DU/Acre
For-Sale Housing	Small-lot single-family	First-time & move-down buyers: Families, couples w/no children, empty nesters, retirees	1,700 to 2,500 sq. ft. 3-4 BR | 2-3 BA	40' to 60' wide lot 5.0-8.0 DU/Acre
For-Sale Housing	Entry-level townhomes	First-time buyers: Singles, couples w/no children	1,200 to 1,600 sq. ft. 2-3 BR | 1.5BA+	6.0-12.0 DU/Acre
For-Sale Housing	Move-up townhomes	First-time & step-up buyers: Singles, couples, some families, empty-nesters	1,400 to 2,000 sq. ft. 2-3 BR | 2BA+	6.0-8.0. DU/Acre
For-Sale Housing	Executive townhomes/twinhomes	Step-up buyers: Empty-nesters, retirees	2,000+ sq. ft. 3 BR+ | 2BA+	4.0-6.0 DU/Acre
For-Sale Housing	Detached Townhome	Step-up buyers: Empty-nesters, retirees, some families	2,000+ sq. ft. 3 BR+ | 2BA+	4.0-6.0 DU/Acre
For-Sale Housing	Condominums	First-time & step-up buyers: Singles, couples, empty-nesters, retirees	800 to 1,700 sq. ft. 1-2 BR | 1-2 BA	Low-rise: 18.0-24.0 DU/Acre Mid-rise: 25.0+ DU/Acre Hi-rise: 75.0+ DU/Acre
Rental Housing	Apartment-style rental housing	Singles, couples, single-parents, some families, seniors	675 to 1,250 sq. ft. 1-3 BR | 1-2 BA	Low-rise: 18.0-24.0 DU/Acre Mid-rise: 25.0+ DU/Acre Hi-rise: 75.0+ DU/Acre
Rental Housing	Townhome-style rental housing	Single-parents, families w/children, empty nesters	900 to 1,700 sq. ft. 2-4 BR | 2BA	8.0-12.0 DU/Acre
Rental Housing	Student rental housing	College students, mostly undergraduates	550 to 1,400 sq. ft. 1-4BR | 1-2 BA	Low-rise: 18.0-24.0 DU/Acre Mid-rise: 25.0+ DU/Acre Hi-rise: 50.0+ DU/Acre
Both	Senior housing	Retirees, Seniors	550 to 1,500 sq. ft. Suites - 2BR | 1-2 BA	Varies considerably based on senior product type

[1] Dwelling units(DU) per acre expressed in net acreage (minus right-of-way)

Source: Maxfield Research & Consulting, LLC.

Smaller, outstate communities and rural areas tend to have higher proportions of younger households that own their housing than in the larger growth centers or metropolitan areas. In addition, senior households tend to move to alternative housing at an older age. These conditions are a result of housing market dynamics, which typically provide more affordable single-family housing for young households and a scarcity of senior housing alternatives for older households. In Ely, a portion of the older single -family stock has been converted to student rentals.

Although in many markets, the baby boom generation is expected to have the biggest effect on their retrospective housing markets, the housing market dynamics in Ely have been dominated more by students, short-term renters and a limited supply of entry-level housing. It is observed that there has recently been less move-up demand in the City proper.

Housing Demand Summary

The following table and charts illustrate calculated demand by product type. Housing demand is comprised of several components, including projected household growth, pent-up demand (below market equilibrium vacancy rates) and replacement needs (housing functionality or physically obsolete units). Projected household growth depends, to a degree, on hiring by local employers, retirees increasing in the Ely area and the potential for additional substantial employment that would be generated from the Polymet mining operation in northeastern Minnesota, or other employment attracted to the area.

In total, demand was identified at 79 general occupancy housing units between 2019 and 2030 without the mine moving forward and 156 housing units with the planned Polymet Mine. Demand is expected to be 30 units of owned housing and 49 units of rental housing without the mine and 42 owned housing units and 114 rental housing units with the planned Polymet Mine.

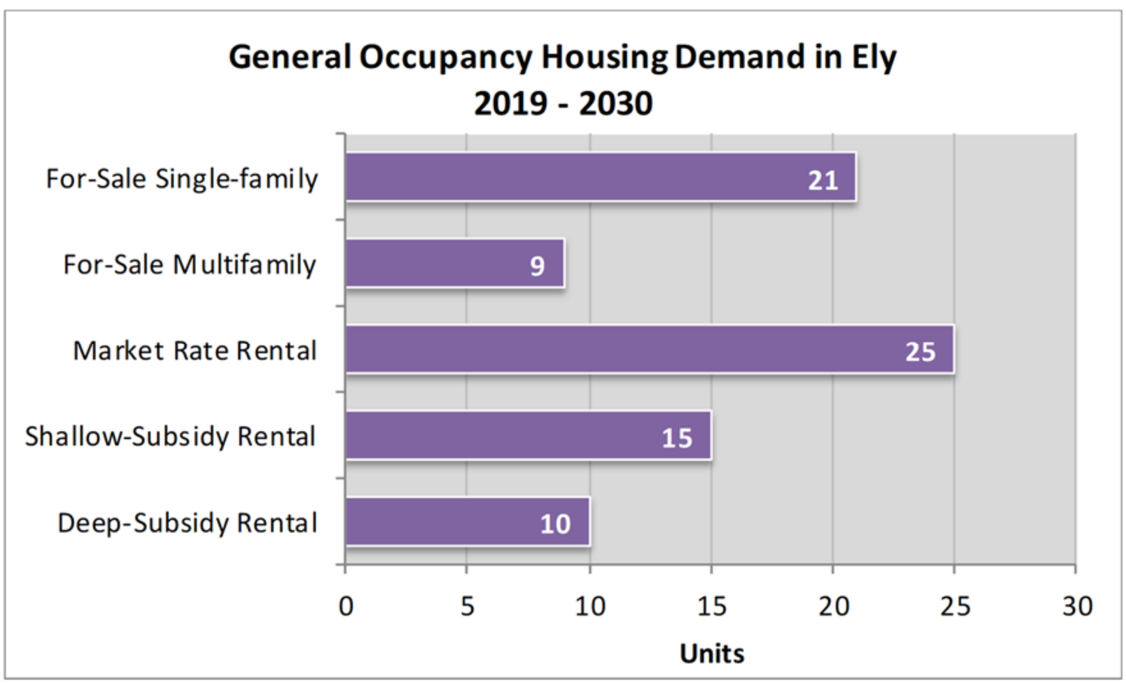


TABLE I-1
SUMMARY OF HOUSING DEMAND
CITY OF ELY
2019-2030

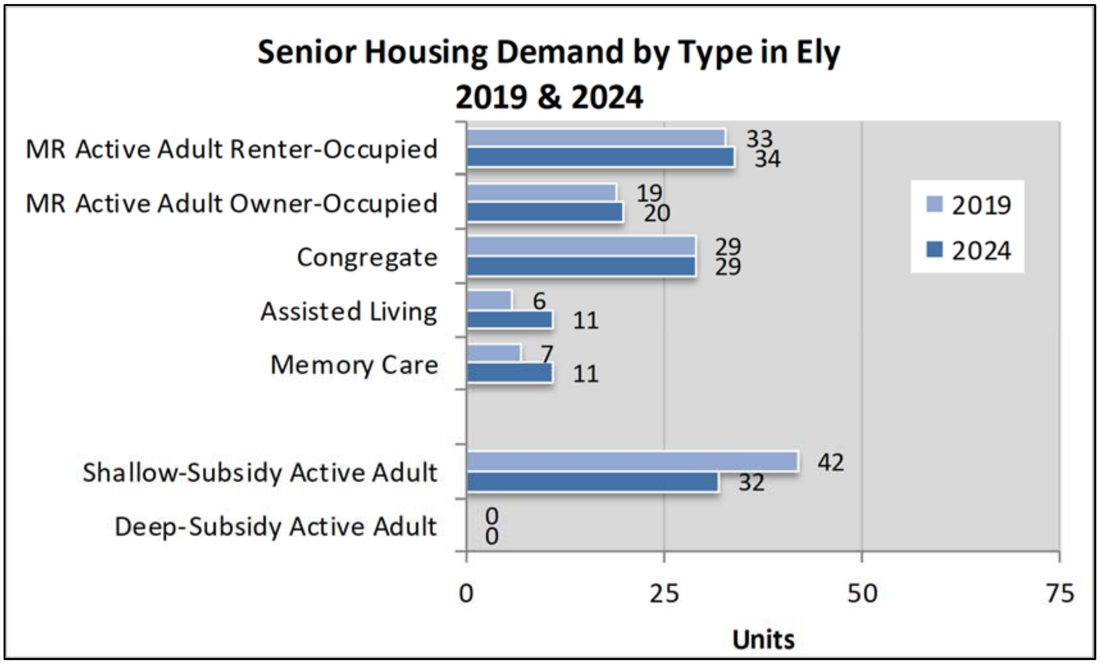
General-Occupancy Housing	2019-2030	
	Without Mine	With Polymet
For-Sale Units	**30**	**43**
Single-Family	21	30
Multifamily	9	13
Rental Units	**50**	**114**
Market Rate	25	57
Shallow-Subsidy	15	34
Deep-Subsidy	10	23
Total General Occupancy Housing Units	**80**	**157**

Senior Housing*	2019	2024
Market Rate Senior Housing		
Market Rate Active Adult	**52**	**54**
Renter-Occupied	*33*	*34*
Owner-Occupied	*19*	*20*
Independent Living (Congregate)	**29**	**29**
Assisted Living	**6**	**11**
Memory Care	**7**	**11**
Total Market Rate Senior Housing Units	**94**	**105**
Subsidized Senior Housing		
Shallow-Subsidy Active Adult	**42**	**32**
Deep-Subsidy Active Adult	**0**	**0**
Total Subsidized Senior Housing Units	**42**	**32**

* Senior Housing Demand not affected by Planned Polymet Mine in the short-term.

Source: Maxfield Research & Consulting, LLC

In the short-term (2019-2024) excess demand was identified for a total of 137 market rate senior housing units by 2024. Of these senior units, roughly 77% would be market rate housing and the remaining 23% would be shallow-subsidy or deep-subsidy units. This level of senior housing demand (particularly market rate active adult) may not be realized in the short-term as many seniors, especially in rural areas, prefer to age in place and delay moving to senior housing until they need services.



Based on the findings of the analysis and demand calculations, Tables I-2 to I-4 provide a summary of demand by product type for Ely. The demand summary identifies the development potential for various types of housing in Ely and is intended to act as a guide to meet future housing needs in the community.

Without Polymet Mine:

- Without the Polymet Mine, demand is estimated for 21 new single-family homes to 2030, which equates to a growth rate of 1.9 units annually. The pace of growth is on par with the current rate of single-family development activity that occurred in the City between 2005 and 2018 (2 units per year).

- Demand is estimated for nine owned multifamily (townhomes/twinhomes) units. Although there has been virtually no development of this kind in Ely, this product could be attractive to an increasing older adult/senior base, according to local sources.

- Demand was identified for 49 new multifamily rental units, which includes 25 market rate, 15, shallow-subsidy (restricted to households with incomes between 40% and 60% of Area Median Income) and 10, deep-subsidy units (restricted to households at 50% or less of AMI).

- Few rental units have been built in Ely over the past several years with the college redeveloping existing housing and adding a net gain, but this is focused towards students. New rental units in the community have been created by converting single-family homes to rental housing, increasing the rental stock without new construction. Conversions have also decreased the supply of entry-level ownership product.

With Polymet Mine:

- With the opening and operation of the Polymet Mine, demand is estimated for 30 new single-family homes from 2019 to 2030, which equates to a growth rate of 2.7 units per year. The pace of growth would be slightly higher than the rate of single-family development activity that occurred in the City between 2005 and 2018 (2 units per year)

- Demand is estimated for 13 units of for-sale multifamily housing to 2030 with the addition of the Polymet Mine. This equates to 1.2 units per year.

- Demand is estimated for 134 new multifamily rental units, including 57 market rate, 34 shallow-subsidy and 23 deep-subsidy units. In total, the 134 units would equate average annual development of 12 units to 2030.

Recommendations

Based on the findings of the analysis and demand calculations, Tables I-2 and I-3 on the following pages provide a summary of recommended development concepts for for-sale and rental housing in Ely. It These proposed concepts are intended to act as a development guide to meet the housing needs of existing and future households in the City.

For-Sale Housing

Based on information gathered on for-sale properties in the City, we provide the following conclusions regarding the Ely for-sale housing market. Our recommendations include a breakdown of units by price range: Modest housing is defined as housing priced less than $170,000; move-up housing would be priced between $170,000 and $250,000 and executive housing would be priced over $250,000.

- Demand is estimated at 30 units of new for-sale housing in the City by 2030 without the Mine opening and 43 new for-sale with the Polymet Mine proceeding. There is a consensus that there is likely a need for some units in Ely with or without the Mine, but that the cost of new construction is high, and incomes are relatively modest. Demand for housing coming from outside of the area tends to prefer higher-priced housing, but usually looks outside the City boundaries for this product and typically near or adjacent to water. Housing demand in the City appears to be highest for low-priced housing in the $50,000 to $125,000 range, but that is likely due to first-time home buyer demand that can't be satisfied because homes are tied up as rentals.

- Multifamily housing can be an option for buyers looking for a starter home and households seeking to downsize or do not want the responsibilities of upkeep and maintenance. As such, we estimate that 30% of the demand for new for-sale housing development in the City will be multifamily units, and we recommend that most for-sale multifamily units in the City be geared toward the entry-level market or for older households.

- While there is currently demand for modestly-priced homes, it is difficult to build new single-family detached housing priced less than $150,000. Entry-level home demand will primarily be satisfied by existing single-family homes as residents of existing homes move into move-up and executive housing products built in the community. However, lot absorption history in Ely has been minimal as there has been no movement in households purchasing new lots to build move up homes with the City. A move-up buyer is typically one who is selling one house and purchasing another one, usually a larger and more expensive home. The move is typically desired because of a lifestyle change, such as a new job or a growing family. The 45 to 54 and 35 to 44 age groups are target markets for move-up and executive housing.

TABLE I-2
GENERAL OCCUPANCY FOR-SALE HOUSING RECOMMENDATIONS
CITY OF ELY
2019

		Without Mine	With Polymet	
Product Type	**% of Total**	**# of Units**	**# of Units**	**Development**
Single-Family	**70%**	**21**	**29**	
Modest (less than $150,000)	50%	11	15	2019+
Move-up ($150,000 - $300,000)	45%	9	13	2019+
Executive (over $300,000)	5%	1	1	2019+
Multifamily	**30%**	**9**	**13**	
Modest (less than $150,000)	50%	5	6	2019+
Move-up ($150,000 - $200,000)	50%	5	6	2019+
Total For-Sale Housing	**100%**	**30**	**42**	
Modest (less than $150,000)	50%	15	21	2019+
Move-up ($150,000 - $300,000)	47%	14	20	2019+
Executive (over $300,000)	4%	1	1	2019+

Source: Maxfield Research & Consulting, LLC

- We found demand for 21 single-family homes in the City between 2019 and 2030 without the mine and 30 single-family homes with Polymet. Based on the age distribution of City households, we recommend that that 45% of these homes be priced in the move-up range (9 units – no mine and 13 units - Polymet), 5% priced as executive homes (1 unit with and without mine), and 50% in the modest price range (11 units – no mine and 15 units - Polymet).

- Demand for nine owned multifamily units without the mine and 13 with Polymet. Because the multifamily target market will likely exclusively for empty nesters and senior householders looking to downsize, we recommend that multifamily housing be evenly split between the modest and move-up price ranges.

- There are several lots available for development in the City (11 in Spaulding and four in East Spaulding, and some orphan lots). Absorption of the new Spaulding lots in Ely has been extremely low while orphan lots have been very sporadic. Based on an average of two lots per year, the 15 lots in both Spaulding and East Spaulding would absorb in seven- and one-half years. The current lot situation is challenging however, in that limited choice does not always result in higher absorption. While the existing lot supply is adequate to meet a portion of demand, additional choice may be needed to spur absorption of Spaulding and any other subdivisions.

General Occupancy Rental Housing

The competitive rental analysis that the vacancy rates for nearly all types of general occupancy rental product are below market equilibrium (5.0% vacancy rate), indicating that there is limited pent-up demand for rental housing in Ely at this time. Our conversations with local property managers and landlords revealed that Ely's rental market is highly cyclical and seasonal.

Due to the positioning of much of the existing rental supply, a significant portion of the market rate units are priced at or below guidelines for affordable housing, which satisfies some demand from households that income-qualify for financially assisted housing. However, today's renter base is seeking newer rental properties with additional and updated amenities that are not offered in older developments. Because of the older age of the rental housing inventory, a number of properties do not provide modern features and amenities.

Based on our analysis, Ely is estimated to be able to accommodate 25 new market rate rental housing units, 15 shallow-subsidy units, and 10 deep-subsidy units to 2030 without the addition of the Mine and 57 new market rate units, 34 shallow-subsidy units, and 23 deep-subsidy units with Polymet moving forward. Deep-subsidy projects are no longer being built as available funding is very limited. Rural Development typically has rental assistance to support very low-income households and vouchers could also assist these households.

Table I-3 provides a summary of the recommended mix of general housing rental housing including unit type, monthly rents, and development timing. Because the existing inventory of rental housing currently has vacancy rates that are below equilibrium, we suggest that new rentals could be constructed immediately.

TABLE I-3
RECOMMENDED RENTAL HOUSING DEVELOPMENT
CITY OF ELY
2019 to 2030

	Monthly Rent Range[1]	Without Mine No. of Units	With Polymet No. of Units	Development Timing
Market Rate Rental Housing				
Apartment-style (move-up)	$600/1BR - $1,000/3BR	12 - 16	40 - 45	2019+
Townhomes	$900/2BR - $1,200/3BR	8 - 10	10 - 12	2019+
Total		**20 - 26**	**50 - 57**	
Affordable Rental Housing				
Apartment-style	Moderate Income[2]	15 - 15	30 - 35	2019+
Subsidized	30% of Income[4]	0 - 0	20 - 20	2019+
Total		**15 - 15**	**50 - 55**	

[1] Pricing in 2019 dollars. Pricing can be adjusted to account for inflation.
[2] Affordablity subject to income guidelines per US Department of Housing and Urban Development (HUD)

Source: Maxfield Research & Consulting, LLC

- Market Rate Rental – Without the Mine we recommend a new rental building with about 12 to 16 units that will attract a diverse resident profile; including young to mid-age professionals as well as singles and couples across all ages. Additional rental townhomes could also be developed, we recommend eight to 10 units.

  If the Polymet Mine moves forward, we recommend new middle-market rental development with a total of 40 to 50 units phased out in 12-unit buildings.

  Monthly rents (in 2019 dollars) should range from $600 for a one-bedroom unit to $1,000 for a three-bedroom unit. Average rents in Ely are very low, but we understand that new construction will need to command higher rents to be financially feasible. Monthly rents can be trended up by 1.0% annually prior to occupancy to account for inflation depending on overall market conditions. Because of construction and development costs, it may be difficult for a market rate apartment to be financially feasible with rents lower than the suggested per square foot price. Thus, for this type of project to become a reality, there may need to be a public – private partnership to reduce development costs and bring down the rents or the developer will need to provide smaller unit sizes.

New market rate rental units should be designed with contemporary amenities that include open floor plans, higher ceilings, in-unit washer and dryer, full kitchen appliance package, and garage parking)

- Market Rate General Occupancy Rental Townhomes– In addition to the recommended apartment project, we find that demand exists for some townhome units for families – including those who are new to the community and want to rent until they find a home for purchase. About 8 to 12 rental townhome units (12 to 16 units with Polymet mine) could be supported to 2030. We recommend a with rents of $900 for two-bedroom units to $1,200 for three-bedroom units. Units should feature contemporary amenities (i.e. in-unit washer/dryer, high ceilings, etc.), an attached two car garage, and the development should provide open/green space as well as a play area for children.

- Shallow-Subsidy General Occupancy Multifamily Housing– We estimate that demand exists for 165 shallow-subsidy units (34 units with Polymet Mine) to 2030. Shallow-subsidy housing attracts households that cannot afford market rate housing units but do not income-qualify for deep-subsidy housing. Shallow-subsidy projects attract a broad group of tenants based on the unit type. One-bedroom units target singles and couples, whereas two and three-bedroom units target families. Some retired seniors would also be attracted to an affordable concept. Although there is an older supply of market rate apartment units in Ely that indirectly serves as affordable housing, we recommend a shallow-subsidy concept that would target residents between 40% to 60% AMI. We recommend a project(s) with one, two- and three-bedroom units. Units should feature central air conditioning, full appliance package, in-unit washer/dryer, and an attached one/two car garage.

- Deep-Subsidy Rental Housing– Subsidized housing receives financial assistance (i.e. operating subsidies, rent payments, etc.) from governmental agencies to make the rent affordable to low-to-moderate income households. Although demand for 10 deep-subsidy rental housing units (23 units with Polymet Mine) to 2030, this housing is very difficult to develop financially. A new subsidized or public housing development would have pent-up demand. But since this housing is challenging to develop today, an alternative to a multifamily structure is to acquire single-site housing structures to meet a portion of this demand.

We believe the addition of the rental developments suggested above will provide greater housing choices in the City and will continue to serve the needs of households that live and/or currently work in Ely and the surrounding area.

Senior Housing

Demand exists primarily for independent living units in Ely as demand for assisted living and memory care senior housing is largely satisfied at the present time. Development of additional senior housing could occur to provide housing opportunity to older adults that are still active. The development of additional age restricted housing serves a two-fold purpose in meeting the housing needs in the City: older adult and senior residents can relocate to new age-restricted housing in Ely, and existing homes and rental units that were occupied by seniors become available to other households. Hence, development of additional senior housing does not mean the housing needs of younger households are neglected; it simply means that a greater percentage of housing need is satisfied by housing unit turnover.

Demand was identified for primarily active adult product over the next several years and the vacancy rate among the existing senior housing inventory is currently low. Those we spoke with indicated the market can fluctuate. Based on current and projected excess demand, we expect that the market could support a new active adult building in Ely over the next five years.

- **Market Rate Active Adult** – Demand is estimated for 34 market rate active adult rental units in Ely by 2024. Currently, there is one active adult rental property that is fully occupied. With an increasing senior base and those in the community stating more older adults are moving to retire to the area, we recommend an active adult development of either apartments or townhome-style units.

TABLE I-4
RECOMMENDED SENIOR RENTAL HOUSING DEVELOPMENT
CITY OF ELY
2024

	Purchase Price/ Monthly Rent Range[1]	No. of Units	Development Timing
Senior Housing (i.e. Age Restricted)			
Active Adult Market Rate Rental[2]	$850/1BR - $1,000/2BR	30 - 35	2019+
Active Adult Shallow-Sub. Rental[2]	Moderate Income	25 - 30	2019+
Catered Living[3]	$1,200 - $2,800	0 - 0	2019+
Memory Care[4]	$4,000 - $4,500	0 - 0	2019+
Total		**55 - 65**	

[1] Pricing in 2019 dollars. Pricing can be adjusted to account for inflation.

[2] Alternative development concept is to combine active adult affordable and market rate active adult into mixed-income senior community

[3] Catered living is a hybrid concept of congregate and assisted living service levels.

[4] Memory care housing could be a component of an assisted-living or service-intensive building.

Source: Maxfield Research & Consulting, LLC

- **Shallow-Subsidy Senior Rental** – Demand was calculated for 25 to 30 shallow-subsidy active adult units by 2024. While there are a number of deep-subsidy senior units in the Market Area, there are no units targeted to seniors with moderate incomes. The lack of shallow-subsidy senior housing may be due to the cost and funding associated with this type of development as MN Housing has not prioritized this type of product through the Low-Income Housing Tax Credit program for many years. Depending on the product type developed, units that would appeal to seniors could be developed as part of a larger mixed income rental property.

- **Deep-Subsidy Senior Rental** - The study shows some limited demand for additional deep-subsidy units in Ely, the development of deep-subsidy senior housing is currently challenging. Financing subsidized senior housing is difficult as federal funds have been shrinking. Therefore, a new development would likely rely on a number of funding sources; from low-income tax credits (LIHTC), tax-exempt bonds, Rural Development 515 program, Rural Development rental assistance, among others.

- **Service-Enhanced Senior Housing** – Demand was identified for 50 service-enhanced units in Ely by 2024 (28 independent with optional services units, 11 assisted living units and 11 memory care units). Although demand was identified for additional service-enhanced units, we believe that the market is sufficiently served through existing product at this time.

If a new developer or existing facility were to pursue a service-enriched development, we recommend the following:

Independent Living (Congregate) Service Level

The monthly fees for an independent living development should include the base monthly rent, utilities, and some assisted living services, including: social, health, wellness and educational programs; 24-hour emergency call system; and, regularly scheduled van transportation. In addition, meals and other support and personal care services should be made available to congregate residents on a fee-for-service basis. When care needs increase, residents should be provided the option of receiving assisted living services in their existing units, either in bundled packages or a-la-carte.

Assisted Living Service Level

The fees should include the base monthly rent, utilities, and assisted living services, such as: three meals per day plus snacks; weekly housekeeping and linen service; professional activity programs and scheduled outings; nursing care management; and 24-hour on site staffing. Additional services should also be available either in service packages or a la carte for an extra monthly charge.

Memory Care Component

We suggest that any memory care units be in a separate, secured, self-contained wing located on the first floor of the building with its own dining and common area amenities including a secure outdoor patio and wandering area. Fees should include the base rent, utilities and services such as; medication reminders, medication administration, and personal care assistance, with other service packages available a-la-carte.

Development Priorities

Although there is demand for housing in Ely among of a variety of market segments, the greatest needs currently are for market rate and affordable general occupancy rental housing. Greater demand in this segment is anticipated if the Polymet Mine moves forward.

The second priority for development would be for market rate and affordable active adult age restricted housing targeted to households age 55 years or older. There is a lack of independent, no services product for this market with only the existing Northwoods Townhomes (Ely), which is typically fully occupied. With the growing older adult and senior population and growth among those retiring to the area from outside of Ely, this housing need will continue to grow.

TABLE I-5
RECOMMENDED HOUSING DEVELOPMENT PRIORITY
CITY OF ELY
2019 to 2030

	Without Mine No. of Units	With Polymet No. of Units	Development Timing
Market Rate Rental Housing			
Apartment-style	12 - 16	40 - 45	2019+
Townhomes	8 - 10	12 - 16	2019+
Moderate Income Affordable Rental Housing			
Apartment or Townhome Style	15 - 15	30 - 35	2019+
***Market Rate Active Adult Senior Rental Housing (i.e. Age Restricted)**			
Apartment or Townhomes Style	30 - 35		2019+
*** Moderate Income Active Adult Senior Rental Housing (i.e. Age Restricted)**			
Apartment or Townhomes Style	25 - 30		2019+

* Senior Housing Demand not affected by planned Polymet Mine in the short-term.

Source: Maxfield Research & Consulting, LLC

Recommended Development Concepts

Table R-1 presents our recommended development concepts for the housing products identified as high priorities for Ely. These include market rate and shallow-subsidy rental housing and active adult rental housing.

The table shows a recommended unit mix, unit sizes and estimated pricing for the units that would be developed. We recommend development of townhome-style units for all the products as we believe this product type would be most attractive in the market for a diverse array of prospects. Developing townhome-style units creates additional privacy for different household types and can accommodate from small to large households by varying the floor plan configurations. Smaller unit types may be developed on top of each other, while larger unit types may be developed as two-story. Active adult units would be developed as single-level living.

TABLE R-1
UNIT SIZE/MIX/RENT RECOMMENDATIONS
ELY RENTAL HOUSING
July 2019

Unit Type	No. of Units	% of Total	Average Square Feet	Average Rent Range	Average Rent Per Sq. Ft.
Townhome-Style Rental (Market Rate)					
1BR	4	44%	725 - 750	$800 - $825	$1.10 - $1.10
2BR	4	44%	950 - 1,150	$1,100 - $1,200	$1.04 - $1.16
3BR	1	11%	1,250 - 1,280	$1,300 - $1,500	$1.04 - $1.17
Totals/Avg.	**9**	**100%**	**935**	**$1,028**	**$1.10**
Townhome-Style Rental (Workforce)					
1BR	5	33%	725 - 750	$680 - $700	$0.93 - $0.94
2BR	6	40%	950 - 1,150	$880 - $950	$0.83 - $0.93
3BR	4	27%	1,250 - 1,280	$1,000 - $1,050	$0.80 - $0.82
Totals/Avg.	**15**	**100%**	**1,003**	**$869**	**$0.87**
Townhome-Style Rental (Active Adult-Affordable)					
1BR	10	45%	725 - 750	$815 - $815	$1.09 - $1.12
2BR	12	55%	980 - 1,050	$995 - $1,100	$1.02 - $1.05
Totals/Avg.	**22**	**100%**	**889**	**$942**	**$1.06**
Townhome-Style Rental (Active Adult-Market Rate)					
1BR	4	33%	725 - 750	$1,000 - $1,050	$1.38 - $1.40
2BR	8	67%	1,100 - 1,250	$1,300 - $1,350	$1.08 - $1.18
Totals/Avg.	**12**	**100%**	**1,029**	**$1,225**	**$1.19**

Note: Pricing in 2019 dollars and can be trended upward by 2% prior to occupancy.
One-bedroom units should be single-level

Source: Maxfield Research & Consulting, LLC

Features and Amenities

Standard features should include:

- High ceilings (9 ft);
- Full kitchen appliance package including microwave oven;
- Center kitchen island;
- Attached and/or detached garages (additional rent charge for enclosed garage);
- Walk-in closet in master suite;
- Wood plank flooring in kitchen and entry foyer;
- Tile flooring in bath;
- Carpeting in living and bedroom areas;
- Central air;
- Patio or deck;
- USB plug-ins in kitchen;

Common area features should include:

- Outdoor play area;

Challenges and Opportunities

Tables I-2 to I-4 identified and recommended housing types to satisfy the housing needs in Ely to 2030. The following were identified as the greatest challenges and opportunities for developing the recommended housing types (in no particular order).

- **Affordability. An estimated** 23% of all owner households in the Ely Market Area are considered cost burdened, while 51% of the existing renter households in the Market Area are considered cost-burdened. Based on current home prices, 76.5% of existing owner households in the Ely PMA could afford to purchase a single-family home at a price of $85,000. Roughly 66% of existing renter households could afford to rent a one-bedroom unit in Ely, but this decreases to 40% or less for new construction.

- **Residential Development Costs.** Developing land is generally considered to be a profitable segment of the housing industry, yet it is also risky if the lot inventory goes unsold. Due to raw land costs, entitlements, and the cost to develop infrastructure, developers will be cautious given achievable lot prices. Subdivisions in Ely could take several years to sell out and developers have carrying costs (property taxes, financing) on improved lots.

  The value of building lots is often benchmarked against the value of the completed retail housing package (sales price). Target ratios for builders show that the cost of sales should be held to 70% of the purchase price; 50% for construction hard costs and 20% for the land (raw land, improvements, financing costs, etc.) These ratios however, vary considerably based on builder, product, topography, lot type, etc. An improved single-family lot should generally cost from 18% to 25% of the projected retail price of the home.

Based on lot costs of $25,000 to $35,000 in the active subdivisions in Ely, the retail price for a new single-family home should range from $125,000 to $175,000 based on a 20% lot-to-home ratio. However, additional infrastructure costs are likely increasing the price of the finished home and pushing down the cost of land.

We do not recommend that the City engage in the development of any new single-family lots currently, unless substantial development pressure occurs with the opening of the Polymet Mine. While Spaulding offers larger lots, we believe there would be a demand for smaller homes on smaller lots that could be more affordable. This product could include a traditional bungalow concept on a traditional urban lot targeted to first-time homebuyers or those seeking an efficient living space.

Another option would be to purchase existing low-cost single-family homes that need improvements to preserve these homes for ownership, provide structural and mechanical improvements and then offer these homes under an affordable ownership program to first-time homebuyers. The program could consist of a contract for deed, low-interest loans with some type of payback on sale of the property.

- **Multifamily Development Costs.** It is challenging to develop new construction rental units given market rents and development costs. High construction costs require rents per square foot much higher than the existing product. Based on the funding gaps, the private sector is not likely to step into this segment to meet demand. As a result, a private-public partnership or other financing programs will be required to spur development and potentially reduce rent levels to bridge some of the gap between existing older product and new product. Conversion of under-utilized commercial structures to multifamily may reduce some of the costs to place new units in the market.

- **Job Growth/Employment.** Employment has increased in the area with from 2010 by about 15%. There is the potential for employment to increase dramatically with the opening of the proposed Polymet Mine. Should employment in the area surge, it will likely require a mix of new housing initiatives including conversion of some underutilized buildings, new construction and temporary housing for short-term workers.

- **Land Supply.** Based on our research, there remain 11 platted lots without infrastructure and some additional orphan lots that are being marketed. Based on this lot supply construction activity, we anticipate that the City would not require additional lot variety within the next five years. If the Polymet Mine opens and employment increases are realized, more lots are likely to be needed as absorption would likely increase. Alternate single-family products could be considered should the need arise.

- **Housing Programs.**

  – The City has a rental licensing program to maintain the existing rental housing stock in the City.

  There are other programs the City could consider to aid and improve its housing stock. The following is a sampling of potential programs that could be explored.

  – Remodeling Advisor – Partner with local architects and/or builders to provide ideas and general cost estimates for property owners to upgrade and improve their homes.
  – Construction Management Services – Assist homeowners with local building codes, reviewing contractor bids, etc. Typically provided as a service by the building department.
  – Home-Building Trades Partnerships – Expand partnership between local Technical Colleges or High Schools that offer building trades programs. Affordability is gained through reduced labor costs provided by the school. New housing production serves as the "classroom" for future trades people to gain experience in the construction industry.
  – Foreclosure Home Improvement Program – Low-interest loans to buyers of foreclosed homes to assist home owners with needed home improvements while stabilizing owner-occupied properties. A portion of the loan could be forgivable if the occupant resides in home at least five years. Eligibility should be based on income-guidelines (typically 80% AMI or lower).
  – Rent to Own - Income-eligible families rent for a specified length of time with the end-goal of buying a home. The HRA saves a portion of the monthly rent that will be allocated for a down payment on a future house.
  – Rental Rehabilitation – The City has a growing supply of rental units, many that are older and could be enhanced through renovation. Some local landlords may have difficulty investing in their rental properties if market demand and market rents remain low. Grant funding such as the Small Cities Development Program HOME funds may be available. The HOME Program is funded through the U.S. Department of Housing and Urban Development (HUD) and is a primary source for funds for rental rehabilitation.
  – Greater Minnesota Housing Fund - The Greater Minnesota Housing Fund ("GMHF") provides numerous programs, financing mechanisms, technical support, and research to support production of affordable housing across Greater Minnesota.
  – Minnesota Housing Finance Agency - Minnesota Housing is a housing finance agency whose mission is to finance affordable housing for low- and moderate-income households across Minnesota. The organization provides numerous products and services for single-family and multifamily housing. The organizations five strategic priorities are as follows: Preserve federally-subsidized rental housing; Promote and support successful homeownership; Address specific and critical needs in rental housing markets; Prevent and end homelessness, and; Prevent foreclosure and support community recover.

APPENDIX

TABLE K-1 PROJECTED EMPLOYMENT POLY-MET MINING FACILITIES June 2019			
Position	**Mean**	**Median**	**# of Positions**
Engineers			37
Civil	$41.34	$42.19	
Electrical	$43.97	$43.92	
Environmental	$40.02	$43.39	
Mining	$49.75	$48.01	
Mettalurgy	$47.34	$45.58	
Mechanical	$37.53	$35.54	
Business and Finance			13
Finance	$37.01	$36.54	
Accounting	$32.40	$29.69	
Purchasing	$29.59	$28.84	
Inventory Control	$26.01	$26.58	
Human Resources	$27.46	$25.59	
Employee Development	$25.07	$22.56	
Information Technology	$36.20	$35.25	
Managers/Supervisors			52
Mine Operations			
Operations	$33.90	$33.54	
Maintenance	$28.99	$29.32	
Planning			
Plant Operations			
Operations	$27.01	$25.31	
Maintenance	$28.99	$29.32	
Planning			
Dispatchers	$21.37	$19.88	
Control Room Operators	$21.51	$22.03	
Lab	$40.98	$38.96	
Quality Assurance	$27.73	$24.37	
Warehouse			
Inventory	$23.25	$23.44	
Product Handling	$16.03	$15.12	
Business			16
Accounting	$18.46	$17.73	
Information Technology	$33.67	$33.43	
Warehouse			
Inventory Control	$23.25	$23.44	
Product Handling	$16.03	$15.12	
Human Resources			
Payroll	$22.44	$21.07	
Benefits	$32.16	$33.12	
Administrative Assistants	$18.54	$18.24	

TABLE K-1 PROJECTED EMPLOYMENT POLY-MET MINING FACILITIES June 2019 (continued)			
Position	**Mean**	**Median**	**# of Positions**
Technical Crafts			65
Mechanical	$33.32	$32.48	
Maintenance	$23.14	$24.71	
Electrical	$35.52	$35.93	
Instrumentation	$25.63	$27.58	
CAD Technician	$23.40	$22.70	
Surveyors	$28.02	$25.96	
Mining and Mineral Tech			177
Mining Equipment Techs			
Shovel	$26.65	$26.67	
Drilling	$24.00	$23.07	
Blasting	$25.82	$24.39	
Truck	$20.20	$18.46	
Mobile Equipment	$24.19	$25.32	
Train	$33.85	$35.89	
Ore Beneficiation Techs			
Crushing	$24.11	$22.73	
Milling	$20.72	$20.40	
Flotation	$25.18	$23.77	
Mineral Extraction Technician			
Hydrometallurgy	$27.21	$26.69	
Lab	$27.21	$26.69	
Quality Assurance	$27.73	$24.37	
Construction Trades			550
Pipefitters	$40.55	$37.86	
Carpenters	$25.47	$25.90	
Cement Finishers	$25.02	$24.61	
Bricklayers	$35.96	$41.56	
Roofers	$25.96	$23.27	
Millwrights	$30.17	$33.33	
Truck Drivers	$23.22	$22.20	
Boilermakers	$31.48	$31.49	
Insulators	$37.41	$41.72	
Electricians	$33.19	$32.62	
Ironworkers	$32.37	$34.25	
Sheetmetal	$30.19	$30.87	
Painters	$26.61	$27.81	
Summary			
On-Site Workers			360
Construction Workers			
2 million hours			550
3,636 hours or 1.74 years			
Note: Hourly wage rates shown in 2019 dollars			
Sources: Polymet; MN DEED - Quarterly Census of Employment and Wages			