

CHAPTER 4: HOUSING SUPPLY AND DEMAND

Introduction

A housing market is typically sub-divided into renter-occupied and owner-occupied housing markets. The key demographic utilized in assessing trends within these housing markets is households, specifically year-round resident households. A household represents the basic demographic unit and is defined (according to U.S. Census) as including all the people who occupy a housing unit (such as a house or apartment) as their usual place of residence. A household includes related family members and all unrelated people, if any (such as lodgers, foster children) who share the housing unit. A person living alone in a housing unit, or a group of unrelated persons sharing a housing unit such as partners or roomers, also qualifies as a household. Households are subdivided into two categories: family and non-family. Household counts exclude group quarters.

Housing Unit Supply and Demand Methodology

According to the U.S. Census Bureau, a housing unit is a house, an apartment, a mobile home or trailer, a group of rooms, or a single room occupied as separate living quarters; or if vacant, intended for occupancy as separate living quarters. Separate living quarters are those in which occupants live separately from any other individuals in the building and which have direct access from outside the building or through a common hall. For vacant units, the criteria of separateness and direct access are applied to the intended occupants whenever possible. A housing unit is owner-occupied if the owner or co-owner lives in the unit even if it is mortgaged and not fully paid for. A renter-occupied housing unit is one that is rented for cash rent or occupied without payment of cash rent; such as a unit that is not owner-occupied.

A housing unit is considered vacant if no one is living in it at the time of enumeration, unless its occupants are temporarily absent. Units temporarily occupied at the time of enumeration by people who have a usual residence elsewhere are also classified as vacant. Unoccupied housing units are considered vacant; and vacancy status is determined by the terms which the unit may be occupied; whether for rent, or for sale, or for seasonal use only. A vacancy rate is that portion of the inventory (either rental or owner) which is vacant for rent or for sale.

Housing Unit Baseline Supply:

The housing unit supply forecast methodology followed the theory that the number of future housing units in the Town would be correlated and predicted by the number of forecasted housing completions in the Glens Falls MSA, as set forth in the long-term May-June 2018 Moody's Forecast for the MSA, and adjusted to the Town by the study team—within the context of the broader long-term economic forecast for the U.S. economy as a whole. For each category of housing unit (total, single-family, and multi-family), the calendar year 1990 through calendar year 2016 number of housing units in the Town was regressed against the calendar year 1990 through calendar year 2027 number of completions for each respective category. The results of these regressions were then used to forecast the calendar year 2017 through calendar year 2027 housing units in the Town and comparative communities and counties. The forecast was revised and put through a series of reconciliations in order to address housing start and housing permit

data forecasted by the Moody's May-June 2018 Macro Forecast for the MSA as adjusted, and then was used as a baseline to regress against for the purpose of forecasting the Town and MSA housing data. This allowed the development of forecasts specific to the Town and each separate peer community and comparable county. This is consistent with the bottom-up methodology generally employed in this study. One additional matter, namely, seasonal housing (or second homes) are not included in this housing supply forecast. While seasonal housing is an important issue within some portions of the Glens Falls MSA—particularly in the north of Warren County astride Lake George or in the foothills of the Adirondacks, seasonal housing is not a significant part of the housing composition for the Town and its peer communities of Glens Falls City and Kingsbury.¹

Summary of Additional Unit Adjustments:

In addition to the above, three significant adjustments were also made to the data-driven baseline housing unit supply numbers in the study. First, a top-level adjustment was made to the aggregate unit supply forecast to “un-constrain” estimated future housing unit supply so that it was equaled to estimated unit demand going forward from calendar year 2016. The theory behind that adjustment was that housing unit demand should also equal housing unit supply in aggregate over the long-term assuming housing unit supply was and is not otherwise constrained by economic performance or policy, financing, and/or by either infrastructure constraints or natural resource constraints.

The second adjustment was made to ensure that the forecasted regional distribution of the housing supply accurately reflected what has been occurring in the most recent time period prior to the forward-looking calendar year 2017 through calendar year 2027 forecast time frame. While there certainly were several “statistically-based” advantages to using a series of forecasting models that covered a longer time series going back to the early 1980s, the initial results of those longer term forecasting models did not produce a supply forecast that appeared to accurately reflect what has been occurring in the Town and its peer communities over the most recent five-year and ten-year time periods.

A third adjustment was also made with the intent of more accurately aligning the forecasted future housing unit change numbers among the Town and its peer communities. This involved ensuring that no individual municipality over the forecasted time horizon from calendar year 2017 through calendar year 2027 had an absolute housing unit decline in any given forecasted year—or, in other words, had any single year going forward where total housing unit destruction exceeded the addition of new units. While the historical data for some municipalities indicated that a small decline in a municipality's housing unit inventory was plausible from time to time, such a scenario was unlikely unless accompanied by an atypical or unusual event. As such, since the baseline unconstrained forecast included in this study was not likely to include an atypical or unusual event, the housing unit supply forecast for this study essentially forced all future housing supply additions for all municipalities to include “net positive” unit addition for all years over

¹ According to American Community Survey data, seasonal homes accounts for 7.7 percent of all houses in Queensbury, 1.9 percent in Glens Falls City, and 0.9 percent in Kingsbury.

the calendar year 2017 through calendar year 2027 time period. Adjustments to impacted municipalities included housing unit additions in the “other” category being reallocated to either single-family, multi-family or mobile home/other. That adjustment approach made intuitive sense from the standpoint that an assumption of positive growth in permanent housing units in a particular municipality would likely be accompanied by a reduction in more temporary (e.g. mobile housing unit) housing. These adjustments together produced the final housing unit supply forecast that was then utilized in the study’s various gap analyses.

Housing Unit Demand:

Housing unit demand is closely associated with the number of households headed by a year-round resident residing in a particular locale (In this case, a year-round resident of Queensbury). These households reside in housing units that are either owner-occupied or rental-occupied. Historical housing unit demand—households and owner-occupied/rental-occupied/vacant units are reported by jurisdiction in decennial years by the U.S. Census Bureau and intercensal years by the American Community Survey (or “ACS”). As stated in the definitions described above, housing unit demand is generally synonymous with the number of households. Housing unit demand using variables such as households, owner-occupied units, rental-occupied units—for each peer community were forecasted from calendar year 2017 through calendar year 2027 for this study using an econometric statistical technique known as the “Ordinary Least Squares” (or “OLS”)—based on historical population-demographic data obtained through the May-June 2018 forecast from Moody’s Analytics.

Estimates of housing unit demand were forecasted by using historical trends by age group as set forth in the long-term population and demographic forecast since research is well established that households headed by residents of certain ages have housing preferences (e.g. owner or renter) and household formation rates that can be quantitatively estimated going forward based on the historical relationships of a locale’s resident population and its age and household characteristics such as income level and number of dependents in their household unit. Long-term historical relationships between the past population and past demographic characteristics of the region’s (and Town’s) resident population and the actual or past housing unit inventory estimates for the region as a whole and for the Town and peer communities were estimated. The forecast of future housing unit demand for both owner housing units and renter housing units was then developed based on those quantified historical relationships and the population and demographic forecast for their respective jurisdictions.

Findings

The housing unit projections resulted in a lower rate of housing unit demand growth than was the case during 1990s through to the mid-2000s when the housing market peaked in the Town and for the greater region as a whole. The housing projections also included a shift slightly away from the housing market dynamics associated with the absolute declines in the population of the region and Town during the 2010-2016 period. The housing unit demand projections indicate there will be a slight uptick in owner unit demand during the 2016 to 2022 time frame (but owner unit demand is expected to increase by less than one percent per year over the period), as the

resident population ends its recent decline and begins a slow rebound. Unit demand for renter units is expected to experience a more substantial turnaround during the 2016 to 2022 period, but unit demand also is expected to increase at almost 1.4 percent per year. Both owner and renter unit demand will expand over the 2022 to 2027 period to increase at an average annual rate of more than one percent per year.

The housing unit demand projections indicate that the largest increase in housing unit demand in the county will be in the oldest age group, 65 years and over, which are expected to exhibit stronger than average rates of growth—reflecting the aging population. Demand for units in the youngest age group, aged 15 to 24 years, is expected to experience a housing unit demand decline over the forecast period as this population cohort struggles to cope with increasing costs relative to expected household income growth. Overall, demand in the Town is expected to increase by 1,323 year-round units by 2027 (or at an average annual rate of 120 year-round units per year). Demand for owner units is expected to increase by 883 units by 2027 (or at an annual rate of 80 units per year). Renter unit demand is expected to increase by 440 units (corresponding to an annual increase of 40 units per year). These estimates correspond to an overall annual housing unit growth rate of 0.54% per year.

Table 4.1 Housing Supply and Demand in Queensbury

Queensbury	Change in Units/Households						Average Annual Growth		
	2016	2022	2027	2016-2022	2022-2027	2016-2027	2016-2022	2022-2027	2016-2027
Total Housing Units	13,203	13,642	14,015	439	373	812	0.55%	0.54%	0.54%
Single-family	9,802	9,971	10,135	169	164	333	0.29%	0.33%	0.30%
Multi-family	2,881	3,103	3,307	222	204	426	1.24%	1.28%	1.26%
Other-mobile	520	568	573	48	5	53	1.48%	0.18%	0.89%
Tenure, owner	8,247	8,684	9,130	437	446	883	0.86%	1.01%	0.93%
Tenure, renter	2,956	3,212	3,396	256	184	440	1.39%	1.12%	1.27%
Households	11,203	11,896	12,526	693	630	1,323	1.01%	1.04%	1.02%

Source: U.S. Census Bureau; Moody's Analytics; EPR

Table 4.2 Housing Supply and Demand in Glens Falls City

Glens Falls City	Change in Units/Households						Average Annual Growth		
	2016	2022	2027	2016-2022	2022-2027	2016-2027	2016-2022	2022-2027	2016-2027
Total Housing Units	7,230	7,426	7,529	196	103	299	0.45%	0.28%	0.37%
Single-family	3,613	3,795	3,866	182	71	253	0.82%	0.37%	0.62%
Multi-family	3,605	3,606	3,638	1	32	33	0.00%	0.18%	0.08%
Other-mobile	12	25	25	13	0	13	13.01%	0.00%	6.90%
Tenure, owner	3,201	3,337	3,424	136	87	223	0.70%	0.52%	0.61%
Tenure, renter	3,174	3,304	3,336	130	32	162	0.67%	0.19%	0.45%
Households	6,375	6,641	6,760	266	119	385	0.68%	0.36%	0.53%

Source: U.S. Census Bureau; Moody's Analytics; EPR

Table 4.3 Housing Supply and Demand in Warren County

Warren County	Change in Units/Households						Average Annual Growth		
	2016	2022	2027	2016-2022	2022-2027	2016-2027	2016-2022	2022-2027	2016-2027
Total Housing Units	39,793	40,742	41,637	949	895	1,844	0.39%	0.44%	0.41%
Single-family	29,388	29,824	30,368	436	544	980	0.25%	0.36%	0.30%
Multi-family	8,399	8,856	9,204	457	348	805	0.89%	0.77%	0.84%
Other-mobile	2,006	2,063	2,065	57	2	59	0.47%	0.02%	0.26%
Tenure, owner	19,693	20,420	21,167	727	747	1,474	0.61%	0.72%	0.66%
Tenure, renter	8,180	8,699	9,051	519	352	871	1.03%	0.80%	0.92%
Households	27,873	29,119	30,218	1,246	1,099	2,345	0.73%	0.74%	0.74%

Source: U.S. Census Bureau; Moody's Analytics; EPR

Table 4.4 Housing Supply and Demand in Kingsbury

Kingsbury	Change in Units/Households						Average Annual Growth		
	2016	2022	2027	2016-2022	2022-2027	2016-2027	2016-2022	2022-2027	2016-2027
Total Housing Units	5,604	5,830	5,990	226	160	386	0.66%	0.54%	0.61%
Single-family	3,541	3,702	3,810	161	108	269	0.74%	0.58%	0.67%
Multi-family	1,923	1,982	2,042	59	60	119	0.50%	0.60%	0.55%
Other-mobile	140	146	138	6	-8	-2	0.70%	-1.12%	-0.13%
Tenure, owner	2,850	2,985	3,126	135	141	276	0.78%	0.93%	0.85%
Tenure, renter	2,189	2,177	2,179	-12	2	-10	-0.09%	0.02%	-0.04%
Households	5,039	5,162	5,305	123	143	266	0.40%	0.55%	0.47%

Source: U.S. Census Bureau; Moody's Analytics; EPR

Table 4.5 Housing Supply and Demand in Washington County

Washington County	Change in Units/Households						Average Annual Growth		
	2016	2022	2027	2016-2022	2022-2027	2016-2027	2016-2022	2022-2027	2016-2027
Total Housing Units	29,444	30,012	30,517	568	505	1,073	0.32%	0.33%	0.33%
Single-family	22,438	23,092	23,610	654	518	1,172	0.48%	0.44%	0.46%
Multi-family	5,069	5,196	5,289	127	93	220	0.41%	0.36%	0.39%
Other-mobile	1,937	1,724	1,618	-213	-106	-319	-1.92%	-1.26%	-1.62%
Tenure, owner	17,902	18,487	19,077	585	590	1,175	0.54%	0.63%	0.58%
Tenure, renter	6,863	6,830	7,027	-33	197	164	-0.08%	0.57%	0.21%
Households	24,765	25,317	26,104	552	787	1,339	0.37%	0.61%	0.48%

Source: U.S. Census Bureau; Moody's Analytics; EPR

Table 4.6 Housing Supply and Demand in Glens Falls Metropolitan Statistical Area

Glens Falls MSA	Change in Units/Households						Average Annual Growth		
	2016	2022	2027	2016-2022	2022-2027	2016-2027	2016-2022	2022-2027	2016-2027
Total Housing Units	69,237	70,754	72,154	1,517	1,400	2,917	0.36%	0.39%	0.38%
Single-family	51,826	52,916	53,978	1,090	1,062	2,152	0.35%	0.40%	0.37%
Multi-family	13,468	14,052	14,493	584	441	1,025	0.71%	0.62%	0.67%
Other-mobile	3,943	3,787	3,683	-156	-104	-260	-0.67%	-0.56%	-0.62%
Tenure, owner	37,595	38,907	40,244	1,312	1,337	2,649	0.57%	0.68%	0.62%
Tenure, renter	15,043	15,529	16,078	486	549	1,035	0.53%	0.70%	0.61%
Households	52,638	54,436	56,322	1,798	1,886	3,684	0.56%	0.68%	0.62%

Source: U.S. Census Bureau; Moody's Analytics; EPR

DRAFT