
Appendix IV: Regional Long-Term Housing Demand Forecast, 2005-2014

Tompkins County Housing Needs Assessment

Tompkins County Planning Department

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As part of this study, a long-term forecast of the future housing demand in the county was completed using the long-term economic and demographic forecasts described in Appendix III. This forecast was completed using county-specific, historical data on tenure by household for the county covering the period back to 1980. The long-term forecast included projections through 2014 of total population (including county births, deaths, and population in-migration and population out-migration), population by age category, total jobs, the total number of households, and households by the age of the head of the household. That long-term forecast was then related econometrically to the historical level and growth of housing units in the county by tenure category—owner and renter.

The study's economic and demographic forecast formed the basis for the household forecast which was the driving force behind the housing demand forecast. The housing demand forecast by tenure was developed econometrically, including relationships that were tied to the county's housing characteristics dating back to 1980, including group quarters residents (e.g. college students) that were factored into the forecast based on the special 2000 Census runs of college student households completed by the U.S. Census Bureau for the Tompkins County Planning Department.¹ After determining the age and tenure breakdown of the county's housing demand going forward, the final step in developing housing unit demand involved a normalizing procedure for each tenure class to simulate a "smoothly-functioning market" standard vacancy rate.² The following section and tables provides a discussion of the results of applying this approach to the long-term economic and demographic forecast for the county, and the population and household baseline forecasts developed for the county as well.

The results of the above-described approach are displayed in Tables IV-1 through IV-4. Table IV-1 summarizes the projected total number of housing units forecasted for the county over the period. Table IV-2 sets forth data on the number of owner housing units and renter housing units that is forecasted to be demanded in the county over the 2005-14 period. Tables IV-3 and IV-4 present data by the age category of the head of the household for the county for the

¹ As a result, this forecast assumes that recent trends of students (and seniors) into and out of the housing market will continue and there will be no significant change in this regard over the forecast period.

² In the case of this study, a 2.0% vacancy rate (versus a HUD estimate of 1.8% in early 2005) was assumed for owner units and a 5.0% vacancy rate (versus a 4.6% actual as estimated by HUD in early 2005) was assumed for renter units in the county in order to have smoothly functioning housing markets. Although these points are clearly open to debate, they were employed in order to present a "conservative estimate" of affordability and trends in affordability in this study.

2005-14 period—with the assumption this long-term regional economic and demographic forecast will substantially come true.

Tompkins County Variable	Number				Number Change		
	1990	2000	Estimated 2005	Projected 2014	1990-05	2000-05	2005-14
Total Owner and Renter Units	34,514	37,703	40,267	43,290	5,754	2,564	3,023

Prepared by Economic & Policy Resources, Inc.

Before moving to the other tables, the reader is cautioned that housing demand is typically driven by regional economic-demographic factors which sometimes involve a region that is larger than a county like Tompkins County. In addition, many times the housing development policies of the individual municipalities within a region also have a strong bearing on demand and supply forecasts—especially long-term forecasts. It is therefore difficult to make long-term housing demand projections for a region because such municipal policies and factors are inter-dependent and constantly changing. The projections used in this study are “status-quo” projections based on current policy and the absence of any specific development constraints—including both natural resource-based and/or policy-based—that could alter the development environment substantially from that which has recently been in force. A good example of a local municipal housing development policy that could impact this forecast would be the imposition of a housing development moratorium in one or more communities.

This baseline forecast expects that housing unit demand will increase by just over 3,000 units over the 2005-2014 period in the county—corresponding to approximately 300 units per year. This rate of increase is slightly less than the roughly 368 units per year that were estimated to have been added to the county’s housing unit inventory over the 2000-2005 period.

The largest increase in the number of housing units demanded is forecasted to be in the renter category at 1,580 total units or 158 units per year over the period (see Table IV-2). Although the owner category is not expected to add units at the same rate as the very favorable 2000-05 time frame, the 1,442 unit forecast is still reflective of the still favorable ownership fundamentals over at least the initial part of the forecast period (e.g. still relatively “low” mortgage interest rates). Table IV-2 also shows that the rate of growth owner housing unit demand is projected to be about 2/3 of the rate of the growth in owner housing unit demand growth rate experienced in the county during the 2000-2005 period. This would be expected given the highly favorable ownership fundamentals for these households during the early 2000s with the lowest interest rates in 40 years encouraging more of the county’s households to move into the owner category.

Tompkins County Variable	Number				Number Change		
	1990	2000	Estimated 2005	Projected 2014	1990-05	2000-05	2005-14
Total Owner and Renter Units	34,514	37,703	40,267	43,290	5,754	2,564	3,023
Tenure Splits:							
Owner	18,803	19,973	21,128	22,571	2,326	1,156	1,442
Renter	15,711	17,731	19,139	20,719	3,428	1,408	1,580

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Looking more closely at the age grouping data for the owner units category see Table IV-3), this “status quo” demand forecast baseline shows that the largest rates of increase in the two age categories Aged 45 Years and higher. The largest contribution to owner unit demand is expected in the Aged 45 to 65 Years category (at a forecasted 1,526 units). This is followed by the forecasted 522 unit increase in the Over 65 Years category by 2014. The Aged 45-65 Years category is expected to increase by +1.6% per year (or by an expected 152.6 units per year) over the period. The Over 65 Years age category is expected to increase at an annual rate of +1.1% per year, or by a total of approximately 50 units per year (at 52.2 units per year). Between those two categories, unit demand is expected to increase by just over 2,000 total owner units, off-setting the decline in the Age 25 Years to 44 Years category over the 2005-2014 period. This profile represents a logical expectation given the aging of the population in the county. For the Age 15-24 Years age group, this demand forecast represents a small increase in demand following a period of slight declines as the backend of the baby-boom generation aged over the 1990-2005 period.

	Estimated Projected				Abs Chge			CAA		
	1990	2000	2005	2014	1990-00	1990-05	2005-14	1990-00	1990-05	2005-15
Total >15 Years	18,803	19,973	21,128	22,571	1,170	2,326	1,442	0.6%	0.8%	0.7%
< 24	305	216	239	282	(89)	(66)	43	-3.4%	-1.6%	1.9%
25-44	7,899	6,370	6,086	5,439	(1,529)	(1,813)	(648)	-2.1%	-1.7%	-1.2%
45-64	6,495	8,994	9,971	11,497	2,500	3,476	1,526	3.3%	2.9%	1.6%
65 +	4,104	4,392	4,832	5,354	288	728	522	0.7%	1.1%	1.1%
Total 55 Years+	6,995	7,776	9,273	11,554	781	2,279	2,280	1.1%	1.9%	2.5%
Total Households	33,390	36,541	38,566	41,416	3,151	5,176	2,850	0.9%	1.0%	0.8%

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Table IV-4 highlights the “status quo” forecast baseline for the renters category. Overall, the table indicates that the county is expected to experience an increase in demand of roughly 1,580 renter units per year over the 2005-2014 time frame. The largest increase in demand is expected at both ends of the age spectrum. First, the largest collective number of units is expected in the lowest age category reflecting the very tight renter market in the urban core region and reflecting the

increasing needs of the homeless and special needs populations in the county. The second highest rate of increase is expected in the Age 65 Years and Up category (at +2.3% per year and corresponding to a total of 519 units overall) indicating the likely gentrification of rental housing demand in the county. The other significant trend among the age groups is the forecasted increase in age 55 Years and Up age category. According to this forecast, Age 55 Years and Up housing unit demand is expected to total over 800 units over the 2005-2014 period, reflecting an average annual rate of increase that is nearly $\frac{3}{4}$ of a percentage point higher per year than was the case during the 2000-05 timeframe.

Table IV-4: Renter Housing Unit "Status Quo" Housing Unit Demand Projections for Tompkins County

	1990	2000	Estimated	Projected	Abs Chge	Abs Chge	Abs Chge	CAA	CAA	CAA
			2005	2014	1990-00	1990-05	2005-14	1990-00	1990-05	2005-15
Total >15 Years	15,711	17,731	19,139	20,719	2,020	3,428	1,580	1.2%	1.3%	0.8%
< 24	4,678	5,351	5,956	6,535	673	1,278	580	1.4%	1.6%	0.9%
25-44	7,943	8,112	8,564	8,720	168	621	156	0.2%	0.5%	0.2%
45-64	1,521	2,404	2,567	2,894	882	1,046	326	4.7%	3.5%	1.2%
65 +	1,568	1,864	2,051	2,570	296	484	519	1.7%	1.8%	2.3%
Total 55 Years+	2,203	2,545	2,884	3,706	342	681	822	1.5%	1.8%	2.5%
Total Households	33,390	36,541	38,566	41,416	3,151	5,176	2,850	0.9%	1.0%	0.7%

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The above demand forecast by age category through 2014 was then cast into the household affordability categories that are the subject of this housing assessment analysis. This involved developing prospective estimates of affordability by category for 2005 and 2014 (for households, excluding student households) and applying those estimates to both the 1,442 housing unit demand forecast through 2014 for owners and the 1,580 unit demand forecast for renters. Cross tabulations by age were calibrated to the household income categories for both the 1990 and 2000 Census, and these shares were estimated prospectively through 2014. Table IV-5 below highlights the results of this tabulation and forecast.

Table IV-5: Estimate of 2006-14 Demand by Tenure and Affordability Category (Excludes Changes in Student Demand)

	Estimated 2006-14 Housing Demand	Affordable At of Below 50% of Median Income	Affordable At of Below 80% of Median Income	Affordable At of Below 100% of Median Income	Affordable At of Below 120% of Median Income	Affordable Above 120% of Median Income [1]
		[Cumulative]	[Cumulative]	[Cumulative]	[Cumulative]	[>120% Category Only]
Total Housing Units	3,023	1,131	1,644	2,017	2,325	697
Percent of Total	100.0%	37.4%	54.4%	66.7%	76.9%	23.1%
Tenure Class:						
Owner	1,442	388	657	852	1,019	424
Percent of Total	100.0%	26.9%	45.5%	59.0%	70.6%	29.4%
2014 Affordable Price [2]		\$61,600	\$105,200	\$134,700	\$164,400	>\$164,400
Renter	1,580	744	987	1,166	1,307	274
Percent of Total	100.0%	47.1%	62.5%	73.8%	82.7%	17.3%
2014 Affordable Rent [3]		\$625	\$975	\$1,225	\$1,475	>\$1,475

Note:

[1] Total may not add due to rounding.

[2] In \$2005, Rounded to nearest \$100; Assumes CPI inflation at +3.2% per year through 2014.

[3] In \$2005, Rounded to nearest \$25; Assumes CPI inflation at +3.2% per year through 2014; Excluding utilities.

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For owners, this forecast indicates that just over ¼ (or 388 units) of projected need going forward over the next 10 years will be found in the affordable to households that are at or below 50% of median household income in the county. Nearly ½, or a cumulative total of 657 total owner units (corresponding to 45.5% of the total), will be needed for those households that have household income at or below 80% of county median household income. A cumulative total of 852 owner units (or 59.0% of the total) will be needed for households at or below 100% of the county median household income level over the period. Just over 2/3 (or 70.6% of the total) will be needed for households at or below the 120% level of median household Income in the county over the next 10 years. This forecast also expects that another 424 units (or 29.4% of the total) will be needed to satisfy demand for households above 120% of median household income in the county by 2014.

For renters, this forecast expects that just under ½ (or total 744 units) of projected need going forward through 2014 will be found in the affordable to households with household income at or below 50% of median household income. Nearly 2/3 (or a total of 987 units of new demand for renters (corresponding to 62.5% of the total) will be needed for those households that are at or below 80% of median household income. An additional 1,166 renter units (or a total of 73.8% of total renter units demanded over the 2005-2014 period) will be needed for households at or below 100% of the median household income level in the county through 2014. A total of 1,307 renter units (or 82.7% of the total) is forecasted to be needed for households at or below 120% of the county median household income level over the period. Beyond that level, another 274 renter units (or 17.3% of the expected total) will be needed for households above the 120% level of median household Income in the county over the next 10 years.

The above housing unit demand forecast includes those units that will be needed in the county prospectively over the 2005-14 period. They do not include those that are currently needed as of December 2005 to make up for existing housing conditions and low vacancy rates in the county. Table IV-6 presents data pertaining to the estimate of the current housing demand and supply gap in the county by household income category that should be added to the above housing unit demand projections.

Table IV-6: Estimate of Current Housing Units Needed

	2005 Estimate of Housing Units Needed	# of Units Needed At or Below 50% of Median Income	# of Units Needed At or Below 80% of Median Income	# of Units Needed At or Below 100% of Median Income	# of Units Needed At or Below 120% of Median Income	# of Units Affordable Above 120% of Median Income
		[Cummulative]	[Cummulative]	[Cummulative]	[Cummulative]	[>120% Category Only]
Total Housing Units	871	331	470	539	606	266
Percent of Total	100.0%	38.0%	54.0%	61.9%	69.5%	30.5%
Tenure Class:						
Owner	324	96	141	157	177	147
Percent of Total	100.0%	29.7%	43.4%	48.4%	54.7%	45.3%
Affordable Price [1]		\$58,500	\$99,900	\$128,000	\$156,100	
Renter	547	235	329	382	428	119
Percent of Total	100.0%	43.0%	60.2%	69.9%	78.3%	21.7%
Affordable Rent [2]		\$575	\$950	\$1,200	\$1,450	

Notes:

[1] In \$2005, Rounded to nearest \$100; Assumes CPI inflation at +3.2% 2004-05.

[2] In \$2005, Rounded to nearest \$25; Assumes CPI inflation at +3.2% 2004-05; Excluding utilities.

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From the table, the owner tenure data indicates that there is a current shortage of supply of 96 units (or almost 30% of the total) is found in the affordable to households that are at or below 50% of median household income in the county. Over 40%, or 141 owner units, are currently needed for those households in the county that have household income at or below 80% of the county median. A total of just under ½ of the current owner housing demand gap (corresponding to 157 owner units or 48.4% of the total) are currently needed for households at or below 100% of the county median household income level. Just over ½ (or 177 total owner units or 54.7% of the total) are currently needed for households at or below the 120% level of median household Income in the county. This estimate also includes another 147 units (or 45.3% of the total) that are needed to satisfy demand for households above 120% of median household income currently in the county.

For renters, the data indicates that demand currently exceeds supply by a total of 235 units (or 43.0% of the total) that are affordable to households at or below 50% of median household income in the county. A total of 60.2%, or 329 total renter units, are currently needed to be affordable to those households in the county that have household income at or below 80% of the county median. Over 2/3 of the current renter housing demand gap (corresponding to 382 units or

69.9% of the total) are currently needed for households at or below 100% of the county median household income level. Just over ¾ (or 428 total owner units or 78.3% of the total) are currently needed for households at or below the 120% level of median household Income in the county. This estimate also includes another 119 units (or 21.7% of the total) that are needed to satisfy higher demand versus supply for households above 120% of median household income currently in the county.

Combining the current gap with the county’s prospective needs through 2014 results in the need for just under 3,900 units overall through calendar year 2014—to close both the existing housing needs gap and to provide for expected increased demand over the 2005-14 period. The breakdown by tenure and household income category are presented in Table IV-7 (below). For owners, the existing and prospective demand-supply gap in the county’s prospective estimates that just over ¼ (or 484 owner units corresponding to 27.4% of the total) of the demand going forward over the next 10 years will be found in the price range that is affordable to households that are at or below 50% of median household income in the county. Nearly ½, or 798 total owner units (corresponding to 45.2% of the total), will be needed for those households that have household income at or below 80% of county median household income. A total of 1,009 owner units (or 57.1% of the total) will be needed for households at or below 100% of the county median household income level over the period. Just over 2/3 (or 1,196 units corresponding to 67.7% of the total) will be needed for households at or below the 120% level of median household Income in the county over the next 10 years. This analysis also expects that another 571 units (or 32.3% of the total) will be needed to satisfy demand for households above 120% of median household income in the county over the 2005-14 time frame.

Table IV-7: Estimate of Total Housing Unit Need Through 2014 (Excludes Changes in Student Demand)

	2005-14 Estimate of Total Housing Unit Need	# of Units Needed At or Below 50% of Median Income	# of Units Needed At or Below 80% of Median Income	# of Units Needed At or Below 100% of Median Income	# of Units Needed At or Below 120% of Median Income	# of Units Affordable Above 120% of Median Income
		[Cummulative]	[Cummulative]	[Cummulative]	[Cummulative]	[>120% Category Only]
Total Housing Units	3,894	1,463	2,114	2,556	2,931	963
Percent of Total	100.0%	37.6%	54.3%	65.7%	75.3%	24.7%
Tenure Class:						
Owner	1,767	484	798	1,009	1,196	571
Percent of Total	100.0%	27.4%	45.2%	57.1%	67.7%	32.3%
2014 Affordable Price [2]		\$61,600	\$105,200	\$134,700	\$164,400	>\$164,400
Renter	2,127	979	1,316	1,548	1,735	392
Percent of Total	100.0%	46.0%	61.9%	72.8%	81.5%	18.5%
2014 Affordable Rent [3]		\$625	\$975	\$1,225	\$1,475	>\$1,475

Notes:

[1] The changes in student demand referred to above include both potential increases and declines.

[2] In \$2005, Rounded to nearest \$100; Assumes CPI inflation at +3.2% per year through 2014.

[3] In \$2005, Rounded to nearest \$25; Assumes CPI inflation at +3.2% per year through 2014; Excluding utilities.

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For renters, the data indicates that current and future demand requires a total of 979 units (or 46.0% of the total) are needed to be affordable to households at or below 50% of median household income in the county over the ten year, 2005-14 period. A total of 61.9% of the total, or 1,316 renter units, are currently and prospectively needed to be affordable to those households in the county that have household incomes at or below 80% of the county median. Nearly $\frac{3}{4}$ of the renter units (or a total of 1,548 renter units corresponding to 72.8% of the total) are currently and prospectively needed to support demand by households at or below 100% of the county median household income level. A total of 81.5% of the current and future renter housing demand (or 1,735 total units) are currently and prospectively needed to be affordable to households at or below the 120% level of median household income in the county. This estimate also includes a current and projected need for another 392 units (or 18.5% of the total) that are/would be affordable to households with household incomes at or above 120% of median household income in the county.

Before moving on to the supply side of the ledger and related to the reader caution first mentioned above, one final point with respect to the demand issue needs to be made. The reader will note that these demand projections correspond only to the demand within the county. As was pointed out earlier, the economics of the regional housing market reaches beyond just the county, and demand for both renter and owner units in the county may in fact be driven by factors that are external to the county. In effect, it is possible—if not likely—that housing market developments in individual communities outside of the county have their origins in economic and demographic factors and developments that have occurred in the region.

The point is that housing demand by type (e.g. owner or renter) and housing “affordability” needs cannot be looked at in the vacuum of just the county or even the region. This regional dynamic is likely one of the greatest housing and economic development policy challenges for each individual community in the county and as the county as a whole works in a coordinated way to meet the housing challenges it faces as a whole. This is especially true given the more than two centuries old culture of autonomy among the individual communities that comprise the study region.