

## **Population and Housing Forecasts for Unincorporated Danbury Township Introduction.**

Population and housing forecasts are prepared for community leaders to determine the impact of future population, housing and the demand for services, both public and private, to guide the shaping of the community with public infrastructure.

Forecasting is not an exact science. No population and housing forecast can be absolutely accurate, nor does it need to be. Forecasts should be accurate enough to highlight potential opportunities and future challenges. Forecasts that exhibit the following characteristics improve value:

1. Useful – Forecast results should be presented in a format that encourages their use.
2. Descriptive – There should be a cause and effect relationship between the forecast inputs and the results.
3. Understandable – For the community to take ownership of the forecasts, the cause and effect should be easy to visualize.
4. Vetted – Forecasting normally involves considerable technical manipulation of data, but increased accuracy can only result from local involvement through review and comment.
5. Supportable – Consensus approval of the forecasts is required to encourage their use.

## **Basic Assumptions applied to Unincorporated Danbury Township population forecasts.**

As stated above, there is considerable manipulation of data to arrive at final population forecasts. Nearly all the manipulation involves measuring the four forces that cause population to change: in-migration, out-migration, births, and deaths. Events like new employers in the community (or within a reasonable commuting distance) may result in increased population; but that occurs through an increase in the number of in-migrants and the reduction of out-migrants.

Each community is unique. Its' set of population changing forces are different from every other community. Reasons for this include geography (both human – proximity to major urban areas and natural – proximity to natural resources) and history – the demographic characteristics, the time period, and the magnitude of the community's in-/out-migrants.

Being unique does not imply “unchanging”. Mortality (or survival) rates change as technology lengthens life expectancy; fertility rates change with lifestyle choices; and migration changes with economic opportunities. While mortality and fertility rate changes are largely national in scope; migration rates are the more likely to be impacted by local government activities.

**Population Forecast Methodology.** This forecast is based on the Cohort-Survival method of forecasting using a series of spreadsheets; dividing the total population into age groups (cohorts) and measuring each type of change for each age cohort. Identifying the unique set of population changing forces for Unincorporated Danbury Township begins by identifying the set of rates associated with Ottawa County.

Rates of change should be reflective of the expected future. The small size of Danbury Township's population (and moreover, each age cohort) brings into question the accuracy of using its U.S. Bureau of the Census results for 2010 (a sample of Unincorporated Danbury's population gathered over a 5-year period) for the calculation of cohort in- and out-migrations rates. As explained below, even the Ottawa County migration rates are replaced, initially, with averages from counties similar in size and proximity to metropolitan areas. Ottawa County birth and mortality rates, however, are retained since they are based on rates calculated from complete count data.

*Measuring the Current Rates of Change.* The first year of the forecast is 2011. That beginning point suggests that the average rates of change for the first decade of the 21<sup>st</sup> Century is a reasonable start. Since there are no published averages they need to be calculated.

<b>Table 1. Population by Age, Ottawa County and Uninc. Danbury Twp. Ohio, 2000 and 2010</b>				
Age	Ottawa County, OH		Uninc. Danbury Twp. OH	
	2000	2010	2000	2010
0-4 <sup>1</sup>	2,236	2,114	173	145
5-14	5,513	4,891	337	368
15-24	4,634	4,389	392	313
25-34	4,421	3,789	410	309
35-44	6,581	4,803	527	382
45-54	6,296	6,991	641	693
55-64	4,680	6,664	502	926
65-74	3,610	4,380	542	645
75-84	2,371	2,486	246	311
85+	729	1,002	24	172
	41,071	41,509	3,794	4,264
Source:	2000 - Decennial Census, SF1, Table P012			
	2010 - Decennial Census, SF1, Table QTP1			
	1. 0-4 number increased by 5% to account for the recognized 5% undercount.			
	<u>The Undercount of Young Children</u>			
	U.S. Census Bureau, 2014			

Table 1 displays the 2000 and 2010 complete count totals for Ottawa County and Uninc. Danbury Township. Average rates for In/out-migration, birth, and death by age are calculated so that when applied to the 2000 population and to each subsequent year (through 2009) the result is within 5% the 2010 total.

**Migration Rates.** Ottawa County's migration rates are calculated, first, by aggregating the 121 U. S. counties within a Micropolitan area (Port Clinton), adjacent to small metro area (Toledo), and with a 2010 population of between 25,000 and 49,999 into a single entity (these designations are based on data from the U.S. Dept. of Agriculture's Economic Research Service) and calculating migration rates from the totals. While combining counties appears to deny Ottawa County some of its uniqueness; this is only the starting point and the final rates utilized represent only Ottawa County.

Table 2 displays the in and out movement rates of Ottawa County residents by age group. For every 1,000 residents ages 25-34 (for example) 143 new residents move in each year and 146 move out. “Original” in-/out-migration rates were applied to each age group for each year from 2001 to 2010 on the first iteration of the forecasts (which also include births and deaths). Each age group’s total error at 2010 was incorporated into the model and re-run. This process was repeated as often as necessary until the each age group was within 5% of the target number and the total number of births and deaths for the 10-year period were also within 5%. The “Final” rates are the result of this iterative process and serve as the basis for the future (post 2010) migration rates. **A note about the data:** The 2010 data used is prepared from 5 years’ worth of survey statistics. Though it includes the data from five years and presents it in an annual format, computationally it is not average. But since it includes data for the second half of the decade it is useful. Ideally, it would be paired with its 2005 counterpart (doesn’t exist, first available was 2008) or detailed data from 2000 (unfortunately it doesn’t provide single-year migration data).

**Table 2. Migration Rates by Age, Ottawa County Ave. for Years 2000 through 2009**

	Migration Rates by Age			
	Original		Final	
	In	out	In	out
0-4	0.085	0.079	0.081	0.081
5-14	0.052	0.049	0.067	0.064
15-24	0.166	0.140	0.143	0.184
25-34	0.119	0.111	0.143	0.146
35-44	0.070	0.059	0.077	0.081
45-54	0.046	0.040	0.068	0.037
55-64	0.031	0.026	0.031	0.036
65-74	0.022	0.019	0.036	0.024
est. 75-84	0.025	0.025	0.032	0.032
est. 85+	0.025	0.025	0.023	0.010

Source: Compiled by Bill Leonard from Tables B07001 and B07401 from the 2010 5-yr. American Community Survey (ACS)

**Fertility Rates.** Ottawa County’s fertility rates initially were calculated from state data from the U.S. Centers of Disease Control. These rates were applied and corrected to approximate the decade’s births for Ottawa County as determined from tables supplied by the Ohio Department of Health.

**Table 3. Fertility Rates by Age, Ottawa County Ave. for Years 2000 through 2009**

Age	Original	Final
15-24	0.067	0.063
25-34	0.105	0.099
35-44	0.022	0.021

Source: Compiled by Bill Leonard from data accessed <http://wonder.cdc.gov/natality-current.html>

Table 3 displays the “Final” rate that approximated the total number of births in the County during the decade. This shows that more than half the births are to mothers between the ages of 25-34. 99 out of every 1000 females in this age group will give birth each year. Since the younger half of the 15-24 age-group likely will record a small number of births, the 20-24 aged females bear children at the rate exhibited by the 25-34 cohort.

**Table 4. Survival Rates by Age, Ottawa County Ave. for Years 2000 through 2009**

Age	Original	Final
0-4	0.9982	0.9982
5-14	0.9998	0.9998
15-24	0.9993	0.9993
25-34	0.9991	0.9989
35-44	0.9980	0.9981
45-54	0.9962	0.9962
55-64	0.9924	0.9923
65-74	0.9788	0.9791
75-84	0.9412	0.9416
85+	0.8426	0.8415

Source: Compiled by Bill Leonard from data accessed <http://wonder.cdc.gov>

**Survival Rates.** Ottawa County’s survival rates are composed of State (for ages 0-4 and 5-14) and County rates (for the remaining age groups) calculated from data again retrieved from the U.S. Centers for Disease Control. “Final” rates are also a corrected rate existing upon completion of the estimation process.

Table 5 compares the actual data for Ottawa County’s first decade of the 21<sup>st</sup> century to the modeled results. All fall within the 5% criteria. Comparing the “original” to the “final” rates in each of these population-changing forces demonstrates the difficulty in forecasting. Fertility and mortality (survival) rates are significantly less volatile. They change little over the course of a decade. Migration rates are more volatile and they have a much greater impact on the trajectory of population change.

Table 6 demonstrates that magnitude of possibility difference between natural change and migration. Ottawa County has nearly 7 times as in- and out-migrants as it does births and deaths. The importance is amplified since the age groups with the highest mobility (See Table 2) are also the age groups with the highest rate of fertility (see Table 3.)

**Table 5. Comparison of Actual v. Modeled Results, Ottawa County OH**

2010 Population			
Age	Census	Modeled	% Diff.
0-4	2,114	2,171	2.7%
5-14	4,891	4,787	-2.1%
15-24	4,389	4,457	1.5%
25-34	3,789	3,721	-1.8%
35-44	4,803	4,926	2.6%
45-54	6,991	6,939	-0.7%
55-64	6,664	6,654	-0.2%
65-74	4,380	4,385	0.1%
75-84	2,486	2,503	0.7%
85+	1,002	972	-3.0%
<b>Total</b>	<b>41,509</b>	<b>41,515</b>	<b>0.0%</b>

**2000 - 2009 Natural Change**

	Wonder	Modeled	% Diff.
Births	4,162	4,318	3.7%
Deaths	4,488	4,455	-0.7%

Source: Bill Leonard, 2017

**Table 6  
2000 to 2010 Population Change by Type, Ottawa County Oh**

Births	4,318
-Deaths	4,455
<b>Net. Natural Change</b>	<b>-137</b>
In-Migration	30,723
Out-Migration	30,056
<b>Net Migration</b>	<b>667</b>

Source: Bill Leonard, 2017

**Unincorporated Danbury Township Population Forecasts.**

Forecasting Danbury’s population starts by estimating the in- and out-migration rates by age. Final Ottawa County rates were inserted into the model as they are more likely to reflect Danbury’s migration rates at the outset. Evolution of the Danbury rates are evident in Table 7 which contrasts the Final rates for Ottawa County and Danbury Township. Differences can be seen in both the size of the rate (in-migrant rate of 85+in Danbury Twp. is more than 7 times greater than its Ottawa County counterpart) and also in the in/out superiority (more 55-64 yr. olds moving out for Ottawa County, twice as many moving in for Uninc. Danbury.)

**Table 7. Migration Rates by Age, Uninc. Danbury Twp. Average for Years 2000 through 2009**

	Migration Rates by Age			
	Original		Final	
	(Final Ottawa Co.)		(Uninc. Danbury Twp.)	
	In	out	In	out
0-4	0.081	0.081	0.091	0.142
5-14	0.067	0.064	0.105	0.082
15-24	0.143	0.184	0.169	0.218
25-34	0.143	0.146	0.181	0.183
35-44	0.077	0.081	0.094	0.111
45-54	0.068	0.037	0.091	0.041
55-64	0.031	0.036	0.068	0.028
65-74	0.036	0.024	0.061	0.035
est. 75-84	0.032	0.032	0.023	0.040
est. 85+	0.023	0.010	0.168	0.057

Source: Compiled by Bill Leonard, 2017

With the assumption that Fertility and Survival rates by age will vary considerably less within the County than do in- and out-migration rates, Ottawa County’s final rates (as identified in Tables 3 and 4) were inserted into the Danbury Twp. model. A comparison of the Census 2010 to the modeling result 2000 – 2010 is shown in Table 8.

Each modeled age group (except the 85+) fell within 5% of the Census tally of 2010 Uninc. Danbury population. The modeled 85+ population is only 23 shy of the Census count for 2010. Growth in that age group was overwhelming (by a magnitude of 7 times) making the modeling effort challenging. While the modeling could continue eventually to arrive at 5% of the total (anywhere between 164 and 181) the return on the effort is not warranted for a total difference of less than 25.

**Table 8. Comparison of Actual v. Modeled Results, Uninc. Danbury Twp.**

Age	2010		
	Census	Model	% Diff.
0-4 <sup>1</sup>	145	149	2.8%
5-14	368	358	-2.7%
15-24	313	317	1.3%
25-34	309	301	-2.6%
35-44	382	389	1.8%
45-54	693	687	-0.9%
55-64	926	909	-1.8%
65-74	645	644	-0.2%
75-84	311	314	1.0%
85+	172	149	-13.4%
	4,264	4217	-1.1%

Source: Census - 2010 Decennial Census, SF1, Table QTP1  
Model - Bill Leonard, 2017

1. 0-4 number increased by 5% to account for the recognized 5% undercount.

The Undercount of Young Children

U.S. Census Bureau, 2014

Figure 1. below provides a sample insight into the population forecast model using the 0-4 and 5-14 age groups. The forecast always begins by using the 2010 population results regardless of the end result of the process by which rates of change were calculated. The age group's 2010 count is found in column A (and for the 0-4 age group) row 8. Continuing with the 0-4 group, Births and In-migration are added to the Census 2010 number while Deaths, Out-migration, and Aging Out are subtracted.

**Births** for the period of April 1, 2010 to April 1, 2011 are the fertility rates (Table 3.) applied to one-half (rough estimate of the female portion) of the age group's 2010 population.

**Deaths** for that period are the mortality rates for each age group (1 minus the survival rates found in Table 4) times its 2010 population. There are also some minor alterations going on at the same time as, for example, survival rates are applied to half of the in-migrants (a compromise between not applying the survival to them and applying the rates to all in order to capture the year-long movement of people in and out of the Township.)

	A	B	C	D	E	F	G	H
1	<b>Figure 1. Example of the Uninc. Danbury Twp. Population Forecast Model</b>							
2								
3								
4								
5	2010							
6	Census	Beginning Apr. 1 of	2010	2011	2012	2013	2014	2015
7		For Apr. 1 of	2011	2012	2013	2014	2015	2016
8	145	<b>Total: 0 - 4</b>	<b>142</b>	<b>139</b>	<b>138</b>	<b>136</b>	<b>134</b>	<b>130</b>
9		Births	30	29	29	28	28	27
10								
11	Mod.	Deaths	0	0	0	0	0	0
12	0.9064	In-Migrated	12	11	11	11	11	10
13	0.8887	Out-Migrated	19	17	16	16	16	16
14		Aged Out	26	26	25	25	25	25
15								
16								
17	368	<b>Total: 5 - 14</b>	<b>362</b>	<b>355</b>	<b>348</b>	<b>341</b>	<b>334</b>	<b>328</b>
18		Aged In	26	26	25	25	25	25
19								
20	Mod.	Deaths	0	0	0	0	0	0
21	0.8512	In-Migrated	33	30	29	28	27	26
22	0.8429	Out-Migrated	24	23	22	21	21	20
23	0.1195	Aged Out	41	40	39	39	38	37

Source: Bill Leonard, 2017

**In-Migrated** population by age is calculated by multiplying the age group's population by rates found in Table 7. Also, to maintain consistency with Ottawa County, preliminary forecasts for each of the County's component parts were prepared (each township, Port Clinton, and Marblehead—because it was subtracted from the remainder of Danbury Township). In- and out-migration populations by age were summed and forecast rates were corrected to reflect Ottawa County totals. For the 5-14 cohort for example, the correction is located in cell A21 which is applied each year to the migration rate. One additional modification is applied to the 15-64 population. By the year 2020 Ottawa County's percentage of 15-64 population (the ages that cover the majority of the labor force) has shrunk to only 95% of the 2000 and 2010 average. This indicates that there may not be enough of a labor force to support the necessary job

market. To compensate, the in-migration for Ottawa County and Danbury is increased by 10% in those age groups.

**Out-Migrated** population is determined using an identical process. To compensate for the increasing labor force age population; the out-migrating population is increased by 3%. This may appear contradictory (increasing versus decreasing out-migration when more workers are needed.) Introducing more in-migration generally results in more out-movement, as well; but the overall difference still increases the labor force-age population.

**Aged Out** population represents the number of people reaching the age of the next group during the year. Cell C14 identifies 26 children reaching the age of 5 between April 1, 2010 and April 1, 2011. Because the forecast uses 10-year age groups (except the youngest) a crude estimate of 10% of each age group should progress to the next age group each year. Unfortunately that doesn't adequately describe the aging process and causes significant errors for some of the ages. The 15-24 age group for example where the population is weighted towards the first few years (15-18) in Ottawa County. After graduation, opportunities for educational or career advancement are more numerous elsewhere and many leave the area before reaching the age of 24. Therefore, the Aged Out population is closer to 9% rather than 10%.

**Aged In** population is equal to the Aged Out of the next younger age group. The 26 that Aged Out of 0-4 is the same 26 Aged In population for the 5-14 age group. Results of the calculations are exhibited in Tables 9. and 10. below.

	<b>2010 -14</b>	<b>2015 - 19</b>	<b>2020 - 24</b>	<b>2025 -29</b>	<b>2030 -34</b>	<b>2035-39</b>
Births	144	132	122	117	113	107
Deaths	368	403	448	495	537	570
Net Natural Change	-224	-271	-326	-378	-424	-463
In-Migration	1,643	1,569	1,615	1,640	1,623	1,600
Out-Migration	1,319	1,239	1,214	1,199	1,180	1,150
Net Migration	324	330	401	441	443	450
Source: Bill Leonard, 2017						

**Table 10. Population by Age, Unincorporated Danbury Township OH,  
2010 - 2040**

<b>Age</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>
<b>0-4</b>	145	133	123	116	110	108	103
<b>5-14</b>	368	331	301	277	258	244	233
<b>15-24</b>	313	305	285	271	261	248	237
<b>25-34</b>	309	280	261	257	252	242	231
<b>35-44</b>	382	331	295	273	261	254	247
<b>45-54</b>	693	654	608	572	544	518	498
<b>55-64</b>	926	1,000	1,030	1,051	1,059	1,050	1,031
<b>65-74</b>	645	774	873	941	990	1,018	1,028
<b>75-84</b>	311	363	429	489	537	575	599
<b>85+</b>	172	182	198	221	251	278	305
<b>Total</b>	4,264	4,353	4,403	4,468	4,523	4,535	4,512

Source: Bill Leonard, 2017

In general, Table 10. displays modest population growth for Unincorporated Danbury to the year 2040, but not across-the-board. Population younger than age 55 declines over that time period while the 55 and older population increases. Size and growth/decline of age-group populations matter since addressing their needs often is expensive and requires considerable lead time to implement. For example, Unincorporated Danbury’s anticipated school-age population (crudely estimated as the 5-14 cohort plus half of the 15-24 population) declines throughout the forecast period. Unless the Village of Marblehead’s school-age population increases the local school-age population will decline. That trend could influence long-term decision-making of the School Board. At the other end of the age spectrum, the 65 and older population nearly doubles between 2010 and 2040. Implications to that trend may include additional safety service facilities and programs, additional local transportation alternatives, and recruitment of supplementary goods and services providers. As stated earlier, forecasts are generated to highlight potential opportunities and to anticipate challenges resulting from Danbury’s changing demographics.



**Housing Forecast Methodology.**

While the connection between population and the demand for housing is obvious, the precise relationship is not. Determining the needed number of units requires estimating/forecasting three basic categories of housing: units occupied by permanent residents (households), units occupied by seasonal residents (All seasonal units are vacant in the U.S. Census since their focus is to document the voting population of an area.), and all other vacant units (for sale or rent not occupied being the most common). Vacant units (not including seasonal units) are important to the housing demand because they provide housing choice flexibility for both current residents and newcomers.

In most areas, demand for housing is driven by the number of households. As shown in Table 11. below, more than half of all adults are householders (also known as the Head of the Household.) The percentages will vary from community to community; but the pattern of increasing percentages from the time that most strike out on their own through the age of 84 generally holds. The percentage of 15-24 year old householders is understandably low. Were we able to extract those still in high school, there would be a large increase between its corresponding householder percentage and that of the 25 to 34 cohort. After age 34 small increases continue until age 85+ when, presumably, residents start entering into group homes at a somewhat accelerated pace; but currently trending towards a more independent lifestyle.

Normally, applying householder percentages to the appropriate age groups and adding some percentage of vacant units (5% or more) would result in a useable forecast on its own. Danbury Township numbers among the exceptions to this because of its large number of seasonally-occupied units. When seasonally-occupied units account for more than half the total number of units in the Township (See Table 13.), forecasting housing becomes more speculative. Most of the seasonal units could easily be occupied year-round if demand demonstrated a need. To experience a significant decline in Danbury’s seasonal housing component, one or both of the following need to occur:

1. Area employment (within a reasonable commuting distance) would need to increase dramatically; and
2. Demand for seasonal residences would have to decline dramatically.

<b>Table 11. Percentage of Population by Age as Householders, 2010 and 2000-2010 Average; Ottawa County and Uninc. Danbury Twp. OH</b>				
<b>Age</b>	<b>Ottawa County</b>		<b>Uninc. Danbury Twp.</b>	
	<b>2000-10</b>	<b>2010</b>	<b>2000-10</b>	<b>2010</b>
<b>15-24</b>	9.43%	9.50%	10.47%	9.58%
<b>25-34</b>	44.74%	44.23%	45.75%	47.90%
<b>35-44</b>	52.83%	52.18%	53.76%	52.88%
<b>45-54</b>	55.13%	54.93%	56.51%	55.84%
<b>55-64</b>	58.10%	57.70%	59.87%	56.91%
<b>65-74</b>	63.49%	63.54%	63.89%	65.58%
<b>75-84</b>	68.89%	70.03%	64.80%	75.88%
<b>85+</b>	63.78%	69.36%	52.05%	69.19%
Bill Leonard, 2017				
Calculated using data : Table QTH2				
from Summary File 1, 2000 & 2010 U.S.Census				
U.S. Bureau of the Census				

Since neither of those two is likely to occur, forecasting can proceed assuming that the seasonal/permanent resident distribution will remain largely intact. Table 12. displays the results of multiplying Danbury’s age cohorts by its corresponding householder percentage. Since the percentages remain constant throughout the forecast period the changes in householders by age follow the same pattern as the age distribution. Significance of this is found in the life-stage of householders and their changing housing preferences.

**Table 12. Householders by Age, Uninc. Danbury Twp., OH 2010-2040**

Age	2010 <sup>1</sup>		2020 <sup>2</sup>		2030 <sup>2</sup>		2040 <sup>2</sup>	
15-24	30	178	30	149	27	142	25	131
25-34	148		119		115		106	
35-44	202		159		140		133	
45-54	387	1116	344	1120	307	1081	281	1031
55-64	527		617		634		617	
65-74	423		558		633		657	
75-84	236	778	278	939	348	1112	388	1204
85+	119		103		131		159	
<b>Total</b>	2,072		2,208		2,335		2,366	
<b>Source:</b>	1. Table QTH2, Summary File 1, 2010 Decennial Census							
	2. Bill Leonard, 2017							

Growth in 65+ aged residents spawns a growth in older householders in the Township pushing the demand well-beyond anything previously experienced. Over the long-term, the more family-sized households (ages 35- 64) remain relatively constant. Aging householders wouldn't generally trade their family-sized units for those of a similar size. Though the number of newer/younger householders, with presumably smaller units, declines; the number is not near enough to satisfy the growth of older households even if their tastes in unit preference were similar (which is quite unlikely.) Individual householders' preferences for housing vary; but, older householders tend to down-size for easier maintenance and to capture equity from selling the larger house. To satisfy the demand for units by older householders, construction of additional smaller units will be accompanied by older householders migrating into already existing seasonal units; converting them to their permanent residences. Of course not all will move. There will always be many choosing to "retire in place"; meaning that they remain in the family home regardless of its being over-sized. Which combination of events will accommodate the older population is unknown and may depend on the number households purchased seasonal units to serve as their retirement homes. Regardless of the precise combination of housing choices, the composition of Unincorporated Danbury's population and its associated housing market will change.

The size of the seasonal housing component is the "elephant in the room" relating to housing forecasts. There isn't a reliable set of indicators to permit forecasting seasonal units so there is no way of knowing if the 400 unit increase between 2000 and 2010 should be expected to continue. For the time being, the 420 buildable lots in Unincorporated Danbury Township will be distributed among "households", "seasonal units", and "non-seasonal, vacant units". As Table 13 displays, 294 of the 420 are accounted for by household growth from 2010 to 2040 (2072 households in 2010 and 2366 in 2040). The non-seasonal vacant rate in 2000 was 11.5% (a more stable market than the recessionary market of 2010); so that was arbitrarily selected to represent future rates. That translates into a decline of 11 non-seasonal vacant units and a corresponding increase of 137 seasonal/vacation homes.

**Table 13. Households, Seasonal and Vacant Units, Danbury Township OH,  
2000 - 2040**

	<b>2000</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>
<b>Total Population</b>	<b>3,794</b>	<b>4,264</b>	<b>4,403</b>	<b>4,523</b>	<b>4,512</b>
<b>Total Housing Units</b>	<b>4,730</b>	<b>5,542</b>	<b>5,678</b>	<b>5,836</b>	<b>5,962</b>
Households (Occupied Housing Units)	1,746	2,072	2,208	2,335	2,366
Persons Per Household	2.17	2.06	1.99	1.94	1.91
Total Vacant Housing Units	2,984	3,470	3,470	3,501	3,596
Total Vacancy Rate	63.1%	62.6%	61.3%	64.0%	65.5%
Seasonal Units (counted as vacant)	2,758	3,153	3,184	3,199	3,290
Total Vacant less Seasonal	226	317	286	302	306
Non-Seasonal Vacancy Rate	11.5%	13.3%	11.5%	11.5%	11.5%

Source: 2000 and 2010, Table QTH2, Summary File 1, 2000 and 2010

U.S. Bureau of the Census

2020, 2030, and 2040 Bill Leonard, 2017