

# Housing Unit Projections

## Miami Valley Housing Assessment

The method used to project housing needs for the Region in this report is adapted from the method developed for the State of Oregon's Transportation and Growth Management Program, which is a joint program involving the Oregon Department of Transportation and the Oregon Department of Land Conservation and Development. It uses population projections and historical data on housing, readily available from the U.S. Census Bureau, in order to develop a projection of the number of new housing units needed to support projected population growth. This report does not attempt to estimate the geographic location for these units, it is only meant as a tool to aid in understanding whether or not the Region is poised to be able to support its future population.

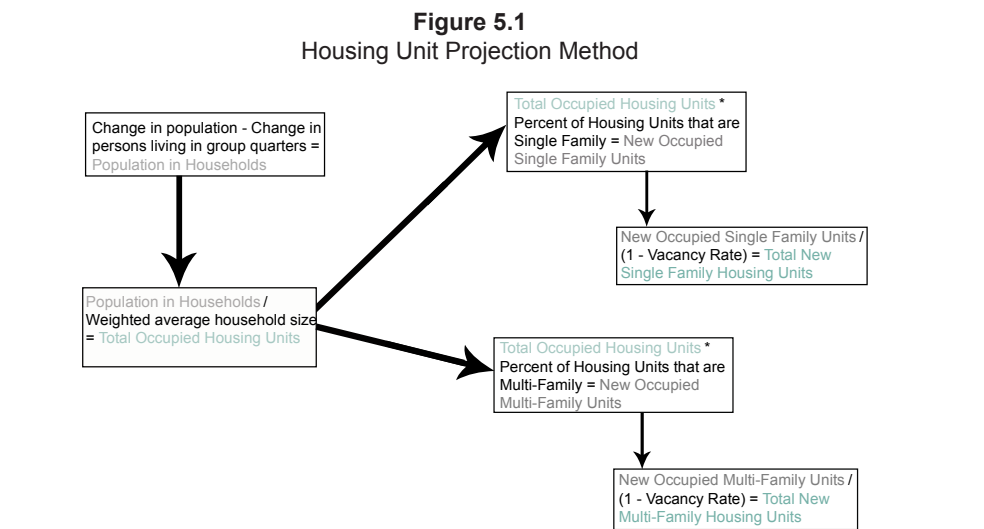
Figure 5.1 maps out the steps of the projection calculation. The population projections calculated by the Ohio Department of Development for each county in the Region were used, adding them together for a Regional total population projection. Throughout the projections, four ratios were held constant to their values from the 2000 Census: the proportion of the population living in group homes, the proportions of persons living in single family and multi-family housing units, the average household size for single family and multi-family housing units, and the vacancy rates for single family and multi-family housing units. The actual values used in the projections are detailed in Table 5.1.

Table 5.2 presents the results of this projection process. Since the projection of the new housing units needed is based on the population projection, the projections for new housing units are closely related to movements of the population projections.

Figure 5.2 offers a comparison of the percent change in population and households each decade from 1970 to 2030 to the percent change in total housing units. The most striking difference between the two numbers is seen in the period from 1970 to 1980, where the total number of housing units grew by 21.06%, while the population only grew by 1.89%. Also interesting is that the percent change in the number of households, until the projected years, is consistently higher than the percent change in the population. In the 1980's, it is actually higher than the percent change in the number of housing units. The projected periods do not show the same fluctuations and differences as the historical periods. For each of the three decades from 2000 to 2030, the percent change in total housing units remains very close to the percent change in popula-

tion, revealing that the projection of total housing units, while only an estimate, may not reflect the reality of the Region's future.

Figure 5.3 compares the number of permits issued for single and multi-family housing units from 1985 to 2005 with the projected growth in housing units from 2010 to 2030. Again, the dramatic difference between the two sets of numbers show that, in reality, housing unit construction in the Region is not closely tied to population changes, a trend also noted in Table 3.4 on Page 8.



**Figure 5.1**  
Housing Unit Projection Method

**Table 5.1**  
Assumptions for Housing Unit Projections for the Miami Valley Region

Assumption	Value
<b>Group Homes</b>	
Proportion of Persons Living in Group Homes	3.11%
<b>Housing Mix</b>	
Single Family	75.36%
Multi-Family	24.64%
<b>Household Size</b>	
Single Family	2.7
Multi-Family	1.9
Weighted Average Household Size	2.5
<b>Vacancy Rate</b>	
Single Family	4.52%
Multi-Family	12.75%

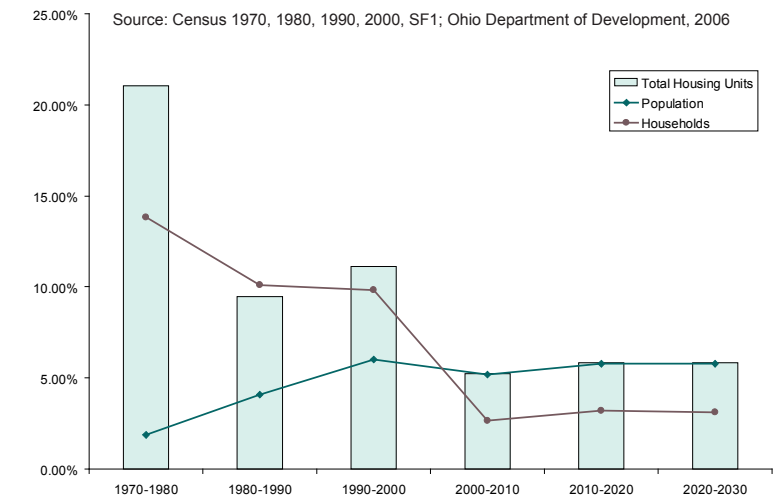
Source: Census 2000, SF3

**Table 5.2**  
Population and Housing Unit Projections for the Miami Valley Region

	2005	2010	2015	2020	2025	2030
<b>New Population<sup>1</sup></b>	39,146	41,010	43,190	50,810	48,340	51,100
<b>Single Family</b>	11,434	11,978	12,615	14,841	14,119	14,926
<b>Vacant</b>	541	567	597	702	668	706
<b>Multi-Family</b>	3,738	3,916	4,124	4,852	4,616	4,879
<b>Vacant</b>	546	572	602	709	674	713
<b>Total New Housing Units</b>	16,259	17,033	17,938	21,103	20,078	21,224

<sup>1</sup>Source: Ohio Department of Development, 2006

**Figure 5.2**  
Comparison of Percent Change in Population, Households, and the Total Number of Housing Units from 1970 to 2030



**Figure 5.3**  
Comparison of Permits Issued from 1985 to 2005 to Projected New Housing Units Needed from 2010 to 2030

