Appendix D

Portage County Planning & Zoning Department
Methodology for Population Projections

Town of Belmont
Comprehensive Plan
2005

EXPLANATION OF THE METHODOLOGY USED FOR POPULATION PROJECTIONS FOR PORTAGE COUNTY AND MUNICIPALITIES, UTILIZING 2000 CENSUS DATA

For the past several years the Portage County Planning & Zoning Department has generated population projections for the towns, city and villages within the county. Planning & Zoning Department projections currently extend out to the year 2020. The State of Wisconsin Department of Administration (DOA) also produces population projections for the counties and municipalities across the state. Portage County has made the decision to produce its own projections, based on DOA projections for Portage County as a whole, which attempt to take into account a variety of growth trends for its individual municipalities. The use of the varied trend data helps, in theory, to fine-tune the distribution of population across the County within the context of the DOA projections.

The base information for the projections is: a) census population data from 1970, 1980, 1990, and 2000 for each town, village and city within Portage County, and b) the DOA total population projection for Portage County for the years 2005, 2010, 2015, 2020, 2025. The following is an explanation of how the Planning & Zoning projections are calculated.

Step 1. Percentage of Overall County Population. The 1970 census population for each of the County's municipalities is divided by the overall 1970 County population total to reveal the percentage of County population for each municipality that year. The same calculation is then performed for 1980, 1990, and 2000.

Step 2. Calculation of Average Annual Change in Population Percentage. The 1970 percentage of County population is then subtracted from the 2000 percentage to reveal the overall change in percentage between the two years. This number is then divided by the number of years between 2000 and 1970 (30 years) to show the average change of percentage per year over the time period.

This procedure is repeated for 1980 and 1990. The result is the creation of three different population trends (change per year over the long, middle and shorter term), as well as the current population ratio for each municipal unit within the County.

Step 3. Population Projections. Population projections are then calculated for the years 2005, 2010, 2015, 2020, and 2025. Before the final projection for each municipality is determined for each projection year, the growth trend data from Step 2 is used to calculate an average growth trend comprised of the 3 different time period and year 2000 ratios. The projection for 2005 is calculated in the following manner.

First, 5 years of average annual population percentage increase for the period 1970 to 2000 is added to the year 2000 municipal percentage of overall County population. Five years is added because it is the amount of time between 2000 and the projection year (it would be 10 years for a 2010 projection, 15 years for a 2015 projection, 20 for 2020, etc.). Next, 5 years of average annual population percentage increase for the period 1980 to 2000 is added to the 2000 municipal percentage of overall County population. Next, 5 years of average annual population percentage increase for the period 1990 to 2000 is added to the 2000 municipal percentage of overall County population. (Each of these calculations is performed separately.) These three numbers are then added with the year 2000 municipal percentage of overall County population. This sum is then divided by 4 to produce an average representing the three historic trends and the present. This average percentage is then applied to the DOA 2005 projection of overall Portage County population to produce the 2005 projected population for the municipality. This process is then repeated for the projection years 2010, 2015, 2020, and 2025.