

Appendix 3-65

NEFCO Population Projections

Methodology of NEFCO Population Projections, 2000 - 2030

In 1995, the Northeast Ohio Four County Regional Planning and Development Organization (NEFCO) released a set of sub-county population projections for the four-county area for the years 1995 to 2020. The goal of the project was to provide a consistent set of figures to be used for planning purposes at the county and regional levels and to incorporate the county control totals calculated by the state's Office of Strategic Research. The 1995-2020 population projections were approved by each county's planning commission and the NEFCO General Policy Board. Sub-county projections are available to the public and private sectors as well as to the general public. Since NEFCO continues to receive numerous requests for these data, revised projections are expected to prove useful.

In 1999, the Akron Metropolitan Area Transportation Study (AMATS), the Metropolitan Planning Organization for Portage and Summit Counties and Chippewa Township in Wayne County, requested a revision in the sub-county projections covering its service area. AMATS will be using the projections to update its Regional Transportation Plan. NEFCO had planned to revise its 1995-2020 projections after the results of Census 2000 were published. However, AMATS' request prompted NEFCO staff to update its current set of projections. A revision reflecting the latest Census figures is planned within the next 2 years.

Staff used the 1995-2020 projections in order to forecast future populations for the years 2025 and 2030. For Portage, Stark, Summit and Wayne Counties, populations for the years 2010, 2015, and 2020 (from NEFCO's projections adopted in 1995) were used to calculate figures for 2025 and 2030. A statistical regression technique calculated by the Excel spreadsheet's "Forecast" function was used. County totals for the years 2000, 2010, 2015 and 2020 were developed by the Ohio Department of Development's Office of Strategic Research. County totals for the years 2025 and 2030 are the sum of the projected populations of the individual communities.

The Stark County methodology differs slightly. For NEFCO's 1995-2020 data set Stark County's projections for the years 2000, 2005, 2010, and 2015 were not prepared. In order to utilize the same straight-line forecasting methodology as used for Portage, Summit and Wayne Counties, staff prepared projections for these missing years as well as for 2025 and 2030. In order to generate numbers for 2000, 2005, 2010, and 2015 the difference between the 1990 Census populations and the approved 2020 figures was calculated for each community. Next, the assumption was made that growth rates for successive five-year increments would be equal over the 30 year span. This step allowed for the populations for each community to total the previously-approved 2020 data. However, the total of the individual entities did not conform to the County Control Total generated by the Ohio Department of Development's Office of Strategic Research. Staff calculated the amounts over or under the control total and then allocated the difference among each of Stark County's communities using that community's percentage of the total county population in 1990.

While a constant rate of growth in the population for each community is unlikely, this assumption was necessary because of the lack of information other than the (declining) population trend between 1980 and 1990. The 2025 and 2030 populations were generated in a way similar to those of Portage, Summit and Wayne Counties. The populations from the years 2010, 2015 and 2020 were entered into a regression equation found in the Microsoft Excel spreadsheet. This equation predicts the population along a linear trend using existing values.

Since this current set of projections includes populations previously released in 1995, a discussion of the methodology used in 1995 is necessary. Adopting county population projections developed by the Ohio Department of Development, Office of Strategic Research (OSR), the model, "Change in County Share-Moderate 1980-1990 Trends," was used to develop a preliminary set of projections for consideration by the NEFCO Planning Advisory Committee. This method used as its base a community's county share, or percent of the county population for 1980 and 1990. The model then calculated the change in a community's percent of county share from 1980 to 1990 and moderated this percentage change by a factor to determine a "trend" for 1995. This trend was applied to 1990 to estimate 1995's population. The process was repeated for the years 2000, 2005, 2010, 2015 and 2020. To determine the 2020 population projection for a county, an average growth rate between 1990 and 2015 was calculated and applied to the estimated county population for 2015.

These projections do not include recent annexations or reflect the building boom which is occurring in many of our communities. We recognize this as a weakness of these projections but it would have been difficult to consider these types of data and provide AMATS with the figures they needed in a timely manner. We will certainly use this information when new projections are prepared.

NEFCO staff is committed to coordinating with our Planning Advisory Committee a new set of population projections for our local governments once the 2000 Census information is available, and when the Ohio Department of Development has issued county control totals.