

# POPULATION FORECAST METHODOLOGY

Population forecasts serve useful purposes in assisting plan development and in allowing feedback to occur within the planning process. In order to provide comparability among the area's jurisdictions with respect to their population forecasts and to provide uniformity in the generation of the forecasts, the Metropolitan Washington Council of Governments established the cooperative forecasting program. Through this program, which was first established in 1975, regional forecasts of households and population are prepared which, in turn, are used to generate forecasts for each jurisdiction.

Within the context of the plan and the planning process, the numbers used for future growth are not predictions of what will happen. The distinction between prediction and forecast is that a prediction is an end unto itself and can be self-fulfilling prophecy, whereas a forecast provides a gauge against which wanted and unwanted ends can be measured. The numbers are relatively imprecise and primarily provide a means of feedback to update the plan—the numbers are used to estimate future demands for facilities and services and the impacts of providing those facilities and services may change the numbers during a plan revision.

The forecasts are only as good as the implicit and explicit assumptions upon which the forecasts are based. The assumptions relate to components of growth (natural increase and migration), to trends of historical growth, to regional economic growth. More specifically, the forecasts are based on the following assumptions:

- Historical trends were used to develop the County's long-range forecasts only within the context of the regional share allocation model. In this model, long-range forecasts prepared for Fairfax County and all other jurisdictions in the region were based on an extrapolation of past trends from 1950 to 1976 and short-term projections of the residential development pipeline. Because the model generated a set of high and low forecasts which are consistent with forecasts currently in use by the County and considered to be still valid, it was determined that Fairfax County would accept the results of the share allocation model for the County's high and low long-range forecasts.
- Household size factors were used to convert household forecasts into household population. The household size factors used in prepared Round II forecasts were developed by the Fairfax County Office of Comprehensive Planning and John Pershing Associates in 1977 and published in *Economic Projections: Fairfax County, Virginia, 1975-2000*. The projections show households in the County continuing to decline in size from 3.51 persons in 1970 to 2.83 persons by 2000.
- It was assumed from recent trends that the County's group quarters population would remain constant at 14,000 persons for the 1980-2000 period. The group quarters population was added to the household population to obtain the County's expected total population.

- Because the current Comprehensive Plan shows that Fairfax County has the capacity to accommodate the growth projected in the Round II Forecasts and, in fact, provides for growth beyond that projected for the year 2000, zoning constraints were not considered to have an impact on the size of the Round II Forecasts.
- It was further assumed that availability of sewer and water would not impose restrictions on the County's future growth in any long-range manner.

The methodology used to generate the cooperative forecasting projections relates historical increases in the number of households in the County to household increases in the Washington metropolitan area. This method assumes that trends from 1950 to 1976 will continue until the end of the forecasting period, the year 2000. Based on these historical trends, Fairfax is expected to increase its share of households in the suburban ring of jurisdictions from 32.6 percent in 1980 to 36.7 percent in 2000. Low and high forecasts were developed for Fairfax County given these extrapolations and low and high regional household forecasts.

Once the household forecasts were developed, population forecasts were prepared by applying household size factors to the projected number of households and by adding the group quarters population.

The forecasts developed through the Council of Governments provide for an average annual growth rate of 2.1 percent between 1980 and 2000, or an increase of approximately 16,200 persons per year. An analysis of growth by five-year increments shows that between 1980 and 1985 the growth rate is projected to be 2.5 percent per year, as compared to growth rates at 2.0 percent, 2.1 percent, and 1.9 percent in the succeeding five-year intervals. The basis for this trend lies in expected increases in employment in the late 1970s and early 1980s which will act to facilitate immigration.

It is anticipated that the regional forecasts will be revised in 1981 once the final results of the 1980 *Census of Population* have been compiled. If necessary, population and household forecasts for each jurisdiction will be revised to reflect the census results and demographic trends which will have occurred between 1975 and 1981.

These forecasts are considered to be realistic projections of future population growth in Fairfax County. OCP and ORS will continue to monitor changes in local and regional demographic and economic processes and will revise future population forecasts accordingly.