

POPULATION AND HOUSING ESTIMATE METHODOLOGY

INTRODUCTION

Each year the Planning Commission prepares population and housing estimates for the entire county and the three cities: Temple Terrace, Plant City, and Tampa. These estimates are used for a variety of purposes by numerous agencies. Recently, the entire process was overhauled to create a system that was streamlined and user-friendly¹. This change decreased human error, increased efficiency, and reduced costs. It also allows for a visual representation of the housing estimates. This provides new analysis opportunities since the data can now be displayed on a map using a geographic information system.

Population estimates are based on residential building permit activity as reported by each of the four jurisdictions (*Temple Terrace, Plant City, Tampa, and Unincorporated Hillsborough County*). The Planning Commission tracks this data as part of a separate permit processing system. This data is published quarterly on the Planning Commission's website.

The methodology to generate population estimates is comprised of three major steps.

- First, annual residential building permit data is compiled. These permits are reconciled with certificate of occupancy data. This results in the number of new residential structures.
- Second, the results are combined with previous year's data to create a master estimate database. This database is used to calculate the population estimate for each year. The data is summed and added to the 2000 Census population to create the final population estimate.
- Third, adjustments are made for recent annexations and group quarter population. Throughout the entire process numerous quality control measures are taken.

¹ It is important to note that the underlying methodology was not modified as part of the streamlining.

RESIDENTIAL BUILDING PERMIT ACTIVITY

Quarterly permit activity from each jurisdiction is combined to create an annual file². These files are compared to certificate of occupancy data to identify completed residential units from those still under construction. This results in the number of new residential units per year for each jurisdiction. This data is combined to create one database of all new residential units.

MASTER ESTIMATE DATABASE

Once the new residential units are compiled, they are added to the master estimate database. The master estimate database contains all residential building permits that have received a certificate of occupancy. The database spans all years beginning in 2000³.

Before calculating population estimates, the master estimate database is used to summarize residential units. The result lists new housing units by location, by year, and by type (*single-family detached, single-family attached, apartments, and mobile homes*). When added to the existing housing stock, as reported in the 2000 Census, an estimate of housing inventory is created. Tabulations of each of the four housing unit types by jurisdiction and by census tract are compiled and presented each year on the Planning Commission's website.

Population estimates by census tract are calculated using the housing inventory from the master estimate database. Population is calculated by multiplying the number of housing units of each type, in each census tract, by persons per household for that census tract. Then the result is multiplied by the occupancy rate for that census tract. This results in an estimate of new population by year and by census tract. When combined with the reported 2000 census tract population, the result is a population estimate for any given year.

² For purposes of this task, annual means beginning April 1st and ending March 31st of the following year.

³ In addition, residential permits for demolitions are included.

The persons per household and occupancy rates for each census tract were obtained from the 2000 Census. These factors remain constant and are used in each annual estimate. Census tracts with new apartments totaling 50 units or more are the only exception to the occupancy factors. In this case, a maximum occupancy rate of 60 percent is used for the first year. Any remaining occupancy is applied to the following year. This exception accounts for large apartment complexes that are rarely occupied to capacity during the first year following construction.

ADJUSTMENTS

The addition of group quarter population to the population estimate creates the total population estimate. Group quarter populations are monitored by the Planning Commission annually as part of the population estimate process. Lastly, total population estimates are adjusted due to any recent annexations to create jurisdictional totals. Total population estimates are rounded then reported by census tract, by jurisdiction, and countywide. This data is available annually as a spreadsheet on the Planning Commission's website.