

## Estimating the average daytime population for the City of Miami National Resource Network – 311 for Cities

*In March 2016, a city submitted a request through the National Resource Network's [311 for Cities](#), for support in estimating the average daytime population of the city, taking the tourist population into account. The city is seeking this information to inform strategic planning and budget development decisions. The following brief write-up was developed by the Network and shared with the city to provide insight on helpful resources for estimating daytime population.*

Understanding the demand for goods and services is a critical component of effective planning in any organization. City officials rely heavily on population estimates to ensure that service levels are sufficient to meet changing levels of demand. The U.S. Census Bureau is a widely used resource of population information for cities and specific areas within cities. While population figures from the Census Bureau are extremely useful, for many large cities, these numbers do not tell the full story. A community's population refers to the number of individuals residing within its boundaries. For cities at the center of a large metropolitan economy, the resident population represents only a portion of the customers being served by the government. Workers commuting from neighboring communities spend the majority of their days within the city limits, where they rely on the city government for safety, sanitation, infrastructure and other essential services. In addition to being at the center of the metropolitan area, the inquiring city is also an international tourism destination, hosting millions of visitors from all over the world each year. In order to plan for adequate levels of service, the city must develop a good understanding of the number of people from each of these categories being served on a daily basis.

Daytime population refers to the number of individuals present in a jurisdiction during normal business hours. For many cities, this figure is a better proxy for required levels of certain services than the resident population. The Census Bureau outlines a formula to calculate what it refers to as the "Commuter-Adjusted Daytime Population". This formula is as follows:

$$\text{Commuter adjusted population} = \text{Total area population} + \text{Total workers working in an area} - \text{Total workers living in an area}$$

This commuter-adjusted daytime population accounts for residents and commuting workers, but doesn't include the number of tourists visiting the city. Tourism varies seasonally and the number of tourists in the City on any given day is difficult to measure with precision. Nonetheless, rough estimates of the average daily number of tourists can be informative for planning around service levels.

To determine the average daily number of tourists, cities can consult with local Convention and Visitors Bureaus, which can typically provide information on the number of hotel rooms booked and average party size. While imprecise, combining these estimates with the commuter-adjusted daytime population can provide a more informed estimate of the total population being served by a city on an average day. Keep in mind, though, that the estimates from the Convention and Visitors Bureaus omit tourists that do not stay in hotels (e.g. cruise passengers, visitors staying with family and friends, visitors that own or rent vacation property in the area).

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