

**To: Cape Elizabeth Comprehensive Planning Committee**  
**From: Jessa Berna, Greater Portland Council of Governments**  
**Date: December 22, 2017**  
**RE: Inventory chapter data**

As a part of Cape Elizabeth's Comprehensive Plan update, The Greater Portland Council of Governments worked with the Comprehensive Plan Committee to draft several inventory chapters – Population and Demographics, Economy, Housing, and Transportation. Much of the data in these chapters was provided by the State through the Maine Municipal Planning Assistance Program (MPAP), which includes data directly from the US Census and contains a mix of Decennial Census and American Community Survey (ACS) data. In some instances, GPCOG supplemented the Decennial Census data included in the MPAP data set with 2015 ACS 5-year sample data to provide a more current perspective on economic and demographic trends in Cape Elizabeth.

Data is a valuable tool that can be used to identify community trends, opportunities, and challenges. However, framing and understanding the limits of Census data is very important, particularly in a comprehensive plan, which is often the foundation for local land use policy decisions. The context and limitations of the US Census data used in these inventory chapters is outlined below:

The Decennial Census is largely considered the best and most complete demographic data available. However, this survey does not cover all of the demographic data required for comprehensive plans in Maine. Additionally, data from the Decennial Census is most pertinent closest to when it was collected, which in this case was nearly eight years ago. Starting with the 2010 Census, the US Census no longer includes questions about employment, occupations, race, age, housing, and various other characteristics on the full Census form. These data are now collected as part of the American Community Survey (ACS), which reports estimates extrapolated from a random sample of about 2% of the population. Because of this random sampling, the data reported by the ACS include a margin of error, and this margin of error tends to increase as the geographic unit of analysis decreases in size. This can especially problematic for smaller, more rural communities because a small sample size may skew the ACS estimates to reflect the characteristics of the populations that are more likely to respond to the ACS, typically those that are more affluent, have higher levels of educational attainment, or have the time to fill out surveys.

Unlike the Decennial Census data, which are released every ten years and depict a snapshot in time, ACS data are released as 1-year, 3-year, and 5-year period estimates that average out economic and demographic trends over several years. For communities with fewer than 20,000 residents, ACS data

are only available as 5-year period estimates to minimize the sampling error in the population estimates. Despite this precaution, the population estimates for many smaller communities still have a very high margin of error, which presents a significant challenge for municipal planning in a home rule state like Maine, where only 8 out of the 533 municipalities and unorganized territories included in the Census have a population exceeding 20,000 residents. Working with 5-year period estimates also makes it challenging to identify significant trends over a shorter time, such as fluctuations in employment or income from one year to the next.

Despite these limitations, the US Census Decennial Census data along with the ACS data are still the most current and accurate data available for community-wide demographics. They help community measure the impact of trends, and offer the ability to compare to past years, and compare to neighboring communities. For this reason, they are consistently used in planning efforts across the nation. Comprehensive plan inventory chapters are meant to provide some general background information and serve as a starting point for community engagement and dialogue around land use decisions. A balance must be found between the need for accuracy and the need for readily available and measureable data. The data in these chapters were selected, categorized and presented with this balance in mind, and should always be interpreted in the context of regional trends and local knowledge.