

# Capital Area MPO

## Socioeconomic Data (SE Data) – **Guide Totals**

### Purpose

This document presents:

- Information on how guide totals are used;
- Population and employment guide totals for counties in the Triangle Regional Model (TRM) that are in, or adjacent to, the Capital Area MPO planning area; and,
- The method for calculating the guide totals.

### Actions

The TCC and TAC are asked to provide comments on the socio-economic data and totals. They do not need to approve them at this time. At a later step in the 2040 Long Range Transportation Plan process, the TAC will approve the SE Data with the Preferred Option (for the 2040 LRTP).

### Use of Guide Totals

The estimated 2010 and forecasted 2040 population and employment are key inputs into the TRM, which generates important travel demand information. These population and employment values are developed at the County level (control totals) and entered into the TRM by TAZ (Traffic Analysis Zones). As an example, the Capital Area MPO is divided into 1,674 TAZs. Planners can check the accuracy of the 2010 Census data (population) and 2010 InfoUSA data effort (employment) by comparing the sum of those TAZ values with the guide totals. In the case of forecasts, the MPO will use a land use modeling process called CommunityViz that will use the county-level 2040 guide totals and effectively distribute the population and employment growth to TAZs in each county.

### Partial Counties and Map

It is important to note the all of Wake County but only parts of Franklin, Granville, Harnett and Johnston Counties are in the TRM boundary. While not in the MPO planning boundary, a small portion of Nash County is included in the model boundary and a population forecast was completed as well. As a result, outside of Wake County guide totals are only for that portion of the county within the TRM boundary. The map on the last page of this document shows the county, TRM and MPO boundaries.

### Population Guide Totals

The population guide totals used for the 2035 LRTP and those proposed for the current 2040 LRTP process are displayed on page three for each county:

- The 2010 value is from the North Carolina Office of State Management and Budget (NC OSMB), which parallels that of the U.S. Census.
- The 2040 value is based on NC OSMB forecasts that are available through the year 2031. The growth curve of the last five years of that forecast, i.e., 2026 through 2031, is extended nine years to produce a 2040 value. The NC OSMB has provided unofficial county population forecasts for the year 2040 and those forecasts are almost exactly the

same as the MPO forecasts (i.e., both agencies are using the same trend forecasts method).

- The projected population growth for Wake and Johnston Counties slows from the 2035 LRTP to the 2040 MTP process. This is based on a change in the NC OSMB's projections for those counties since the 2035 LRTP process was carried out in 2008 and may, in part, reflect some of the impacts related to the economic recession.
- There is a large increase in the population and annual rate for Johnston County and Harnett from the 2035 LRTP to the 2040 LRTP process. The expansion of the model boundary as well as increased growth rates since the 2035 LRTP process may account for these increased growth rates.
- There are no values for Nash County in the 2035 LRTP process because no part of that county was within the TRM boundary at that time.

**Partial County:**

An analysis of census block data was used to determine the percent of each County's population within the TRM boundary. Review of 1990, 2000 and 2010 Census data reveal that the area within the TRM boundary receives the majority of each County growth, thus the 2040 LRTP forecast assumes that this trend continues to our Plan horizon year of 2040. While not in the MPO planning boundary a small portion of Nash County is included in the model boundary and a population forecast was completed using the same partial county methodology.

**Population by TRM County**

- Guide Totals -	2035 LRTP		2040 MTP	
County	2005	2035	2010	2040
Wake	880,490	1,951,817	900,993	1,667,841
Franklin (1)	36,259	88,422	60,619	101,992
Johnston (1)	76,494	196,811	168,878	321,468
Granville (1)	23,534	62,148	59,916	82,384
Nash (1)	-	-	95,840	132,864
Harnett (1)	13,869	62,089	114,678	224,591

(1) TRM Boundary was expanded between the 2035 LRTP and 2040 LRTP modeling efforts.

**Employment Guide Totals**

The employment guide totals are displayed on the following page for each county:

- The 2010 value in Franklin, Granville, Harnett, Johnston, Nash and Wake counties is based on data from the North Carolina Employment Security Commission (ESC). Previous studies have concluded that the ESC county-level employment estimates capture 92% of the actual total. The ESC estimate is multiplied by "1/0.92" to compensate for this undercount and produce the MPO estimate.

- The ESC does not forecast employment. An employment growth rate for the 2010 to 2040 period from Woods-and-Poole Economics is applied to the 2010 value to produce the 2040 value.
- The Wake County growth rate of approximately 65 percent is slightly lower than that used for the 2035 LRTP. This may reflect economic conditions related to the recession.

**Partial County:**

The employment values are based on the same methodology and assumptions that were used to forecast the partial county population for Franklin, Granville, Johnston and Harnett counties. While not in the MPO planning boundary a small portion of Nash County is included in the model boundary and an employment forecast was completed using the same partial county methodology.

<b>EMPLOYMENT by TRM COUNTY</b>				
<b>County</b>	<b>2005 Total</b>	<b>2035 Total</b>	<b>2010 Total</b>	<b>2040 Total</b>
<b>Wake</b>	411,119	849,499	470,032	778,820
<b>Franklin (1)</b>	7,242	14,740	10,536	17,875
<b>Johnston (1)</b>	14,930	27,258	37,486	70,981
<b>Granville (1)</b>	3,640	7,504	12,280	21,954
<b>Nash (1)</b>	-	-	1,855	3,262
<b>Harnett (1)</b>	2,784	7,522	7,761	13,719

(1) TRM Boundary was expanded between the 2035 LRTP and 2040 LRTP modeling efforts.