

# Capital Area MPO Socio-economic Forecasts

## Purpose

One of the initial critical steps in developing a Metropolitan Transportation Plan is to forecast the amount, type and location of population and jobs for the time frame of the plan. Based on an understanding of community plans and data from local jurisdictions, the Office of State Planning, the US Census Bureau and independent forecasters, estimates of “base year” (2016) and “plan year” (2050) population and jobs were developed by local planners for each of the 1,701 small zones (called Traffic Analysis Zones or TAZs) that make up the area covered by our region’s transportation model.

The information below summarizes the major elements of the socioeconomic forecasts for different portions of the area covered by the region’s transportation model. This includes both the areas within the MPO planning boundaries and areas beyond the MPO boundaries. A summary of methods used for calculating the population and employment guide totals are also included below. More detailed information on a range of socioeconomic data for each TAZ is available from the Capital Area MPO and the Durham-Chapel Hill-Carrboro MPO.

## Actions

The TCC and Executive Board are asked to provide comments on the socio-economic data and total and will be asked to approve them for use in development of the plan. At a later step in the 2050 Metropolitan Transportation Plan process, the Executive Board will approve the final SE Data with the Preferred Option (for the 2050 MTP).

## Use of Guide Totals

The estimated 2016 and forecasted 2050 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 1,701 TAZs. Planners can check the accuracy of the 2016 Census and NC OSMB data (population) and 2016 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 2050 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.

## Population Guide Totals

The population guide totals used for the 2045 MTP and those proposed for the current 2050 MTP process are displayed on page three for each county:

- The 2016 value is from the North Carolina Office of State Management and Budget (NC OSMB), which parallels that of the U.S. Census.
- The 2050 value is based on NC OSMB forecasts that are available through the year 2035. The growth curve of the last five years of that forecast, i.e., 2035 through 2040, is extended ten years to produce a 2050 value. The NC OSMB has provided unofficial population forecasts for the year 2045 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 increased from the 2045 MTP to the 2050 MTP process. This is based on a change in the NC OSMB's projections for those counties and may, in part, reflect some of the impacts related to the recovery from 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 and 2045 MTP 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.

## 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 2050 MTP forecast assumes that this trend continues to our Plan horizon year of 2050. 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 -	<b>2045 MTP (TRM county portion forecast)</b>		<b>2050 MTP (TRM portion county forecast)</b>	
<b>County</b>	<b>2013</b>	<b>2045</b>	<b>2016</b>	<b>2050</b>
Wake	964,934	1,647,536	1,028,509	1,764,577
Franklin (1)	56,444	74,982	56,114	95,616
Johnston (1)	150,715	266,985	160,023	369,014
Granville (1)	43,383	48,293	37,068	70,859
Nash (1)	4,732	4,412	4,004	4,652
Harnett (1)	43,201	70,046	42,317	70,512
<b>CAMPO Total</b>	<b>1,263,409</b>	<b>2,112,254</b>	<b>1,328,035</b>	<b>2,375,230</b>

- (1) TRM Boundary was expanded between the 2035 LRTP and 2040 LRTP modeling efforts. Partial County totals will be calculated as part of the MTP process.

## Employment Guide Totals

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

- The 2013 value in Franklin, Granville, Harnett, Johnston, Nash and Wake counties is based on data from InfoUSA and the TRM Employment Analyst. The Woods & Poole growth rates are applied to the 2016 employment data to develop the 2050 estimate.
- The Wake County growth rate of approximately 73 percent is higher than that used for the 2045 MTP. This may reflect economic conditions related to the post-recession environment.

### 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.

#### EMPLOYMENT by TRM COUNTY

<i>-Guide Totals-</i>	<b>2045 MTP</b>		<b>2050 MTP</b>	
<b>County</b>	<b>2013 Total</b>	<b>2045 Total</b>	<b>2016 Total</b>	<b>2050 Total</b>
<b>Wake</b>	552,018	1,025,938	728,416	1,550,658
<b>Franklin (1)</b>	14,617	25,218	16,735	3,055
<b>Johnston (1)</b>	43,960	72,331	61,052	124,733
<b>Granville (1)</b>	8,576	12,325	17,277	36,065
<b>Nash (1)</b>	335	444	2221	2826
<b>Harnett (1)</b>	5,704	9,639	12,693	20,619
<b>CAMPO Total</b>	625,210	1,145,895	838,394	1,737,956

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