

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” (2013) and “plan year” (2045) population and jobs were developed by local planners for each of the 1,548 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 2045 Metropolitan Transportation Plan process, the Executive Board will approve the final SE Data with the Preferred Option (for the 2045 MTP).

Use of Guide Totals

The estimated 2013 and forecasted 2045 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 2013 Census and NC OSMB data (population) and 2013 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 2045 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 2040 MTP and those proposed for the current 2045 MTP process are displayed on page three for each county:

- The 2013 value is from the North Carolina Office of State Management and Budget (NC OSMB), which parallels that of the U.S. Census.
- The 2045 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., 2030 through 2035, is extended ten years to produce a 2045 value. The NC OSMB has provided unofficial 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 slowed from the 2040 MTP to the 2045 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 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.
- The 2040 MTP was the first time part of Nash County was included within the TRM boundary.

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 2045 MTP forecast assumes that this trend continues to our Plan horizon year of 2045. 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 -	2040 MTP (TRM county portion forecast)		2045 MTP (whole county forecast)	
	2010	2040	2013	2045
County				
Wake	900,993	1,667,841	964,934	1,647,536
Franklin (1)	51,723	91,793	62,715	83,313
Johnston (1)	141,112	282,892	177,312	314,100
Granville (1)	35,781	61,788	57,844	64,391
Nash (1)	4,116	6,643	94,633	88,239
Harnett (1)	36,676	78,607	123,432	200,131
CAMPO Total	1,170,401	2,189,564	1,263,409	2,397,711

- (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 the North Carolina Employment Security Commission (ESC) and the TRM Employment Analyst. 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 2013 to 2045 period from Woods-and-Poole Economics is applied to the 2013 value to produce the 2045 value.
- The Wake County growth rate of approximately 89 percent is higher than that used for the 2040 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>	2040 MTP		2045 MTP	
County	2010 Total	2040 Total	2013 Total	2045 Total
Wake	470,032	778,820	552,018	1,025,938
Franklin (1)	10,536	17,875	14,617	25,218
Johnston (1)	37,486	70,981	43,960	72,331
Granville (1)	12,280	21,954	8,576	12,325
Nash (1)	1,855	3,262	335	444
Harnett (1)	7,761	13,719	5,704	9,639
CAMPO Total	539,950	906,611	625,210	1,145,896

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