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 DCHC MPO planning area; and,
- The method for calculating the guide totals.

Actions
The TCC and TAC are asked to provide comments on the guide 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 entered into the TRM by TAZ (Traffic Analysis Zones). As an example, Durham County is divided into 510 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 Durham County and Orange County, and but only part of Chatham County and Person County are in the TRM boundary. As a result, the Chatham County and Person 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).
• There is a large increase in population and annual rate for both Durham County and Orange County from the 2035 LRTP to the 2040 LRTP process. This is based on a large increase in the NC OSMB’s 2030 projections for those counties since the 2035 LRTP process was carried out in 2008.
• There is a large decrease in the population and annual rate for Chatham County from the 2035 LRTP to the 2040 LRTP process. The 2035 LRTP forecast was based on an independent method, not the NC OSMB forecasts, that more closely reflected the build-out values.
• There are no values for Person County in the 2035 LRTP process because no part of that county was within the TRM boundary at that time.
• Partial county:
  o Chatham County: Census block analysis shows that 61% of 2010 Chatham population is in the TRM boundary. Review of 1990, 2000 and 2010 Census data reveal that the area within the TRM boundary receives the majority of Chatham County growth, thus the 2040 LRTP forecast assumes that 67% of the total 2040 Chatham County population will be within the TRM Boundary.
  o Person County: Census block analysis shows that 82% of 2010 Person population is in the TRM boundary. Review of 1990, 2000 and 2010 Census data reveal that the area within the TRM boundary receives the majority of Person County growth, thus the 2040 LRTP forecast assumes that 85% of the total 2040 Person County population will be within the TRM Boundary.
## Population

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>2005</th>
<th>2035</th>
<th>Annual Rate</th>
<th>2010</th>
<th>2040</th>
<th>Annual Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Durham County</td>
<td>242,207</td>
<td>355,639</td>
<td>1.3%</td>
<td>268,925</td>
<td>432,571</td>
<td>1.6%</td>
</tr>
<tr>
<td>Orange County</td>
<td>121,992</td>
<td>171,453</td>
<td>1.1%</td>
<td>134,325</td>
<td>197,675</td>
<td>1.3%</td>
</tr>
<tr>
<td>Chatham County(1)(2)</td>
<td>34,067</td>
<td>117,130</td>
<td>4.2%</td>
<td>38,991</td>
<td>71,672</td>
<td>2.0%</td>
</tr>
<tr>
<td>Person County(1)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>31,845</td>
<td>44,784</td>
<td>1.1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>398,266</td>
<td>644,222</td>
<td>1.6%</td>
<td>474,086</td>
<td>746,702</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

**Notes**

(1) Includes population and employment from part of county in TRM area.
(2) The area of Chatham County in the TRM expanded between LRTP efforts.
N/A = Not available. Person County was not in the TRM in the 2035 LRTP effort.
2005 and 2035 values are ESC-based guide totals for Durham and Orange, and SE Data totals for Chatham.

## Employment Guide Totals

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

- The **2010** value in Durham, Chatham and Person 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 **2010** value in Orange County is based on InfoUSA data, which Chapel Hill staff believe more accurately accounts for the large proportion of temporary jobs at UNC-CH.
- 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 Durham County and Orange County growth rates remain the same for both the 2035 LRTP and 2040 LRTP.
- The Chatham County growth rate has decreased for the **2040** value. Again, this change occurred because the 2035 LRTP process for Chatham County used a method that more closely reflected the build-out values.
- Partial county: The employment values are based on the same methodology and assumptions that were used to forecast the partial county population for Chatham and Person counties.
<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>2005</th>
<th>2035</th>
<th>Annual Rate</th>
<th>2010</th>
<th>2040</th>
<th>Annual Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Durham County</td>
<td>184,130</td>
<td>285,761</td>
<td>1.5%</td>
<td>194,770</td>
<td>306,637</td>
<td>1.5%</td>
</tr>
<tr>
<td>Orange County</td>
<td>68,680</td>
<td>116,669</td>
<td>1.8%</td>
<td>70,491</td>
<td>119,787</td>
<td>1.8%</td>
</tr>
<tr>
<td>Chatham County(1)(2)</td>
<td>8,199</td>
<td>23,863</td>
<td>3.6%</td>
<td>10,011</td>
<td>19,509</td>
<td>2.2%</td>
</tr>
<tr>
<td>Person County(1)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>8,791</td>
<td>13,093</td>
<td>1.3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>261,009</strong></td>
<td><strong>426,293</strong></td>
<td><strong>1.6%</strong></td>
<td><strong>284,063</strong></td>
<td><strong>459,026</strong></td>
<td><strong>1.6%</strong></td>
</tr>
</tbody>
</table>