

Travel Choice Neighborhoods

At the scale of the entire region, any subset of transportation investments and associated land use changes will have limited ability to significantly affect travel behavior. But in key locations or along critical corridors land use choices, infrastructure investment choices, and pricing decisions (such as parking charges and transit fares) can make meaningful differences in offering people housing choice, job access and mobility options. To help decision-makers better understand these opportunities, the Connect2045 Plan established criteria to define *Travel Choice Neighborhoods* -- places where both roadway investments and high quality transit service would be available under different future development and mobility scenarios. Travel Choice Neighborhoods are a way to understand the relative significance of focused land use and transportation infrastructure among scenarios, and how policies might affect these neighborhoods.

Travel Choice Neighborhoods are individual Traffic Analysis Zones (TAZs) in the region's Transportation Regional Model (version 6) that meet the following criteria:

1. Each BRT station, LRT station and CRT station was identified with a point in the GIS file representing a location roughly equivalent to the assumed centerpoint of a station platform. Station points were coded to reflect technology/service type (BRT, LRT, CRT) and Connect2045 Scenario (CP for Community Plans, AH if only in the AIM-High Scenario). An attribute field should also be included to permit associating each station with one or more transit alignments to allow selection of a subset of stations (example: Wake County BRT stations might be coded to relate to the North, South, East or West BRT alignment from the Wake Transit Plan).
2. A half mile radius circle was drawn from each station point and every TAZ with any portion of the TAZ lying within the half mile radius was designated a Travel Choice Neighborhood TAZ.
3. A GIS line file with every bus line with 15-minute or greater peak period frequency in the scenario network was created, and coded by the Connect2045 Scenario with which the line is associated (CP for Community Plans, AH if only in the AIM-High Scenario).
4. A quarter mile buffer on each side of the frequent bus GIS line was created; every TAZ with any portion of the TAZ lying within the quarter mile buffer was designated a Travel Choice Neighborhood TAZ.
5. The following TAZs that met one or both of the above tests and would otherwise be designated a transit TAZ were excluded for the reasons given:
 - a. [List any such TAZ by number and clear reason for exclusion]
6. The following TAZs that did not meet either of the above tests and would otherwise not be designated a transit TAZ were included for the reasons given:
 - a. [List any such TAZ by number and clear reason for inclusion]

After designating Travel Choice Neighborhood TAZs, the following initial supply metrics were calculated (by scenario) to understand the relative magnitude of these neighborhoods at the regional scale:

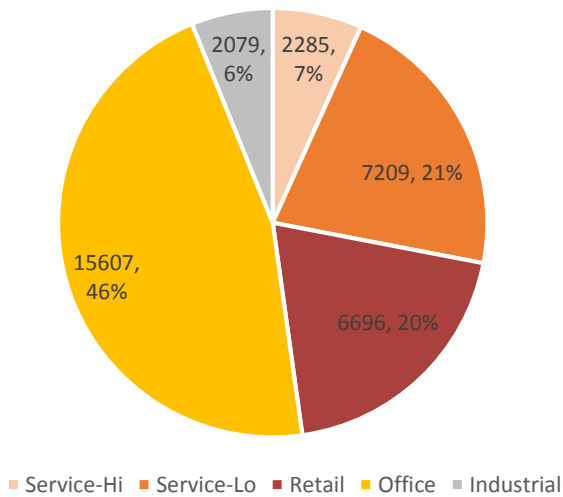
1. Population capacity
2. Dwelling units capacity by SF and MF
3. Jobs capacity
4. Land acreage by place type and development status
5. Public and Anchor Institution management status

Travel Choice Neighborhoods Along E-W BRT in Wake County

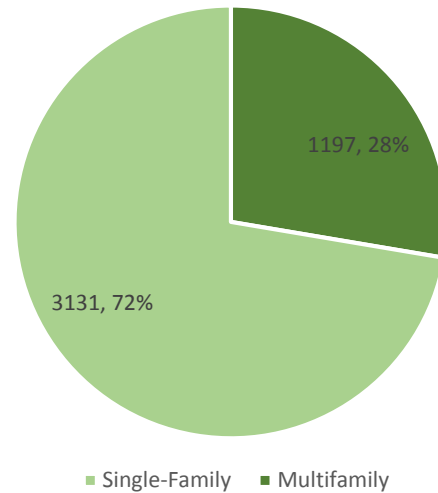
A Travel Choice Neighborhood analysis was completed along the aspirational E-W BRT line in Wake County that is proposed to run from downtown Cary to RTP Park Center. Using the criteria outlined in the overview, 81 TAZs were selected (shown in teal on the map). TAZs that had only a small portion of area in the ½ mile buffer, or that had a barrier to easy access to the BRT station area, such as I-40 or I-540, were removed from the selection. The remaining 68 Travel Choice Neighborhoods for this BRT line are shown in purple on the map.

In the Community Plans scenario run, these Travel Choice Neighborhoods saw an increase of 9,934 persons, 4,328 housing units, and 33,876 jobs over the 2013 base year. The breakdown of acreage by place type and development status is shown below.

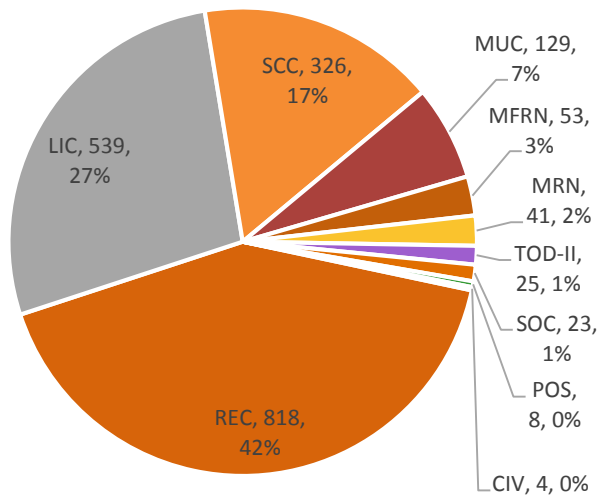
Added Employment



Added Dwelling Units



Acreage By Place Type



Acreage By Development Status

