

## 2050 MTP

### Alternatives Analysis – Travel Choice Neighborhoods (TCN)

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#### Travel Choice Neighborhoods

Travel Choice Neighborhoods (TCN) are areas that are expected to have a variety of travel modes from which to choose in the future. In many Alternatives Analysis methods, it is difficult to see a mode shift in the TCNs because the analysis encompasses the entire region and much of the region does not have a high degree of mode choice. For example, it is difficult to see the impact of bus rapid transit on the central areas of Durham and Chapel Hill by using the regional Performance Measures. The mode share values change little because the majority of development will be in medium to low density suburban and rural areas. The TCN measure selects data from the areas (called Transportation Analysis Zones, or TAZs) that are impacted by transit investments and compares them with the overall region. This method helps measure the mode share change based on transit investment.

#### Results

The table below shows the mode choice percentages (e.g., bus, auto) for work trips in the All Together scenario for all TAZs and TAZs with High Frequency bus (i.e., 15-minute or better frequency), Bus Rapid Transit (BRT), Commuter Rail Transit (CRT), and all TCNs (i.e., High Frequency or BRT or CRT). The percentage of bus and Non-motorized (i.e., walk and bike) trips increases and the SOV (single-occupied vehicle) trips decrease for TAZs with High Frequency, BRT and CRT services. The increase in non-motorized is the largest.

Work trips were selected because they tend to occur at the peak hours, often requiring roadway capacity improvements and increased transit services to address congestion problems and travel choice needs. The All Together scenarios was selected because it has the largest transit investment among the three scenarios, and there was not much difference in the results of the scenarios.

See this [LINK](#) for detailed information on the TCN concept and method.

All Together - DCHC MPO	DCHC MPO - Percent Work Trips				
	Non-Motorized	Bus	Rail	SOV	HOV
All TAZs in DCHC MPO	5.4%	6.4%	0.2%	78.5%	9.6%
High Frequency Bus	9.4%	9.5%	0.2%	71.7%	9.2%
BRT	12.0%	11.4%	0.2%	67.7%	8.7%
CRT	12.2%	8.8%	0.7%	68.6%	9.7%
All DCHC TCN TAZs	9.0%	9.1%	0.2%	72.4%	9.2%