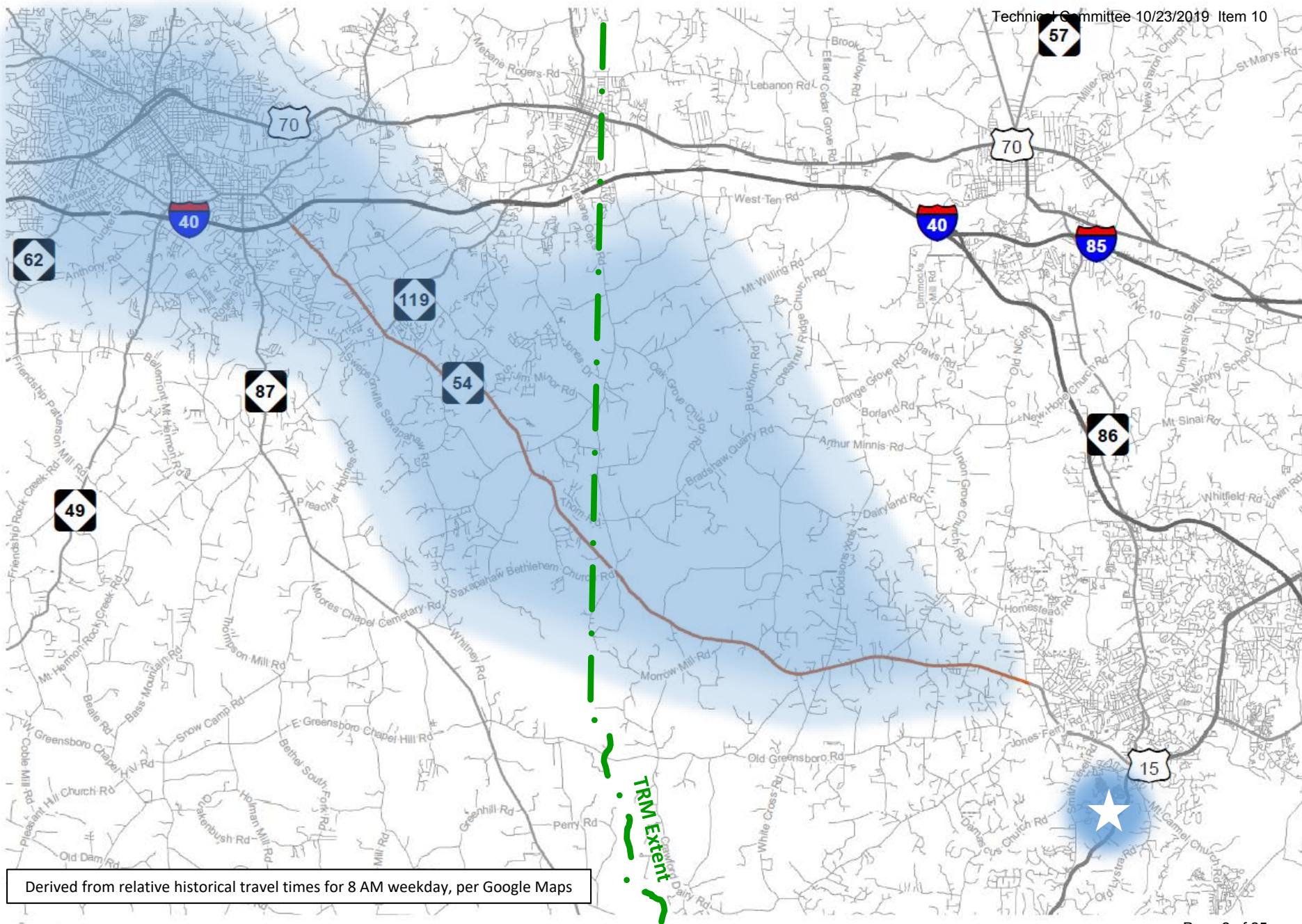


Figure 1: Estimated NC 54 Travelshed for Trips to Chapel Hill



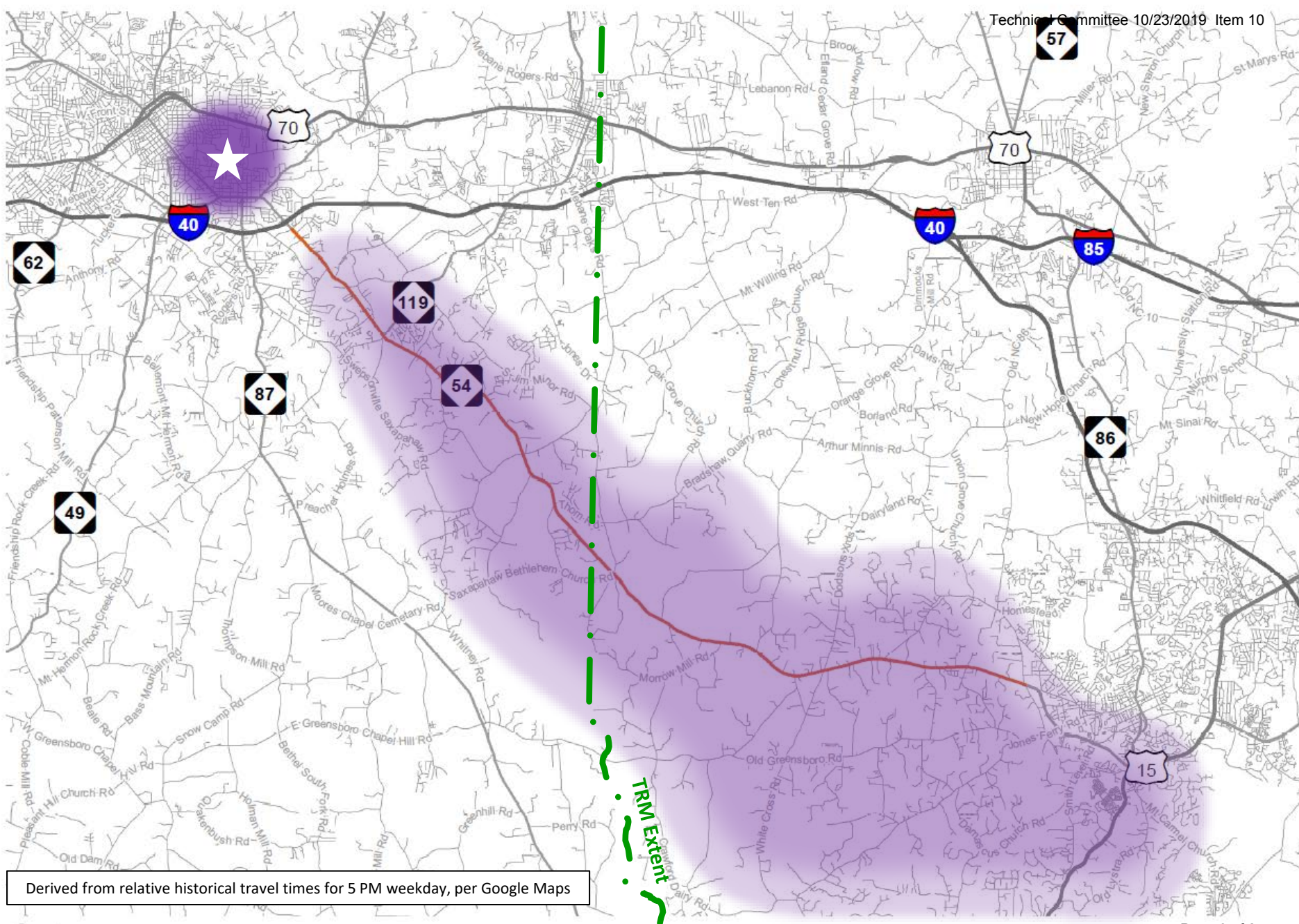


Figure 3: Estimated NC 54 Travelshed for Trips to Burlington

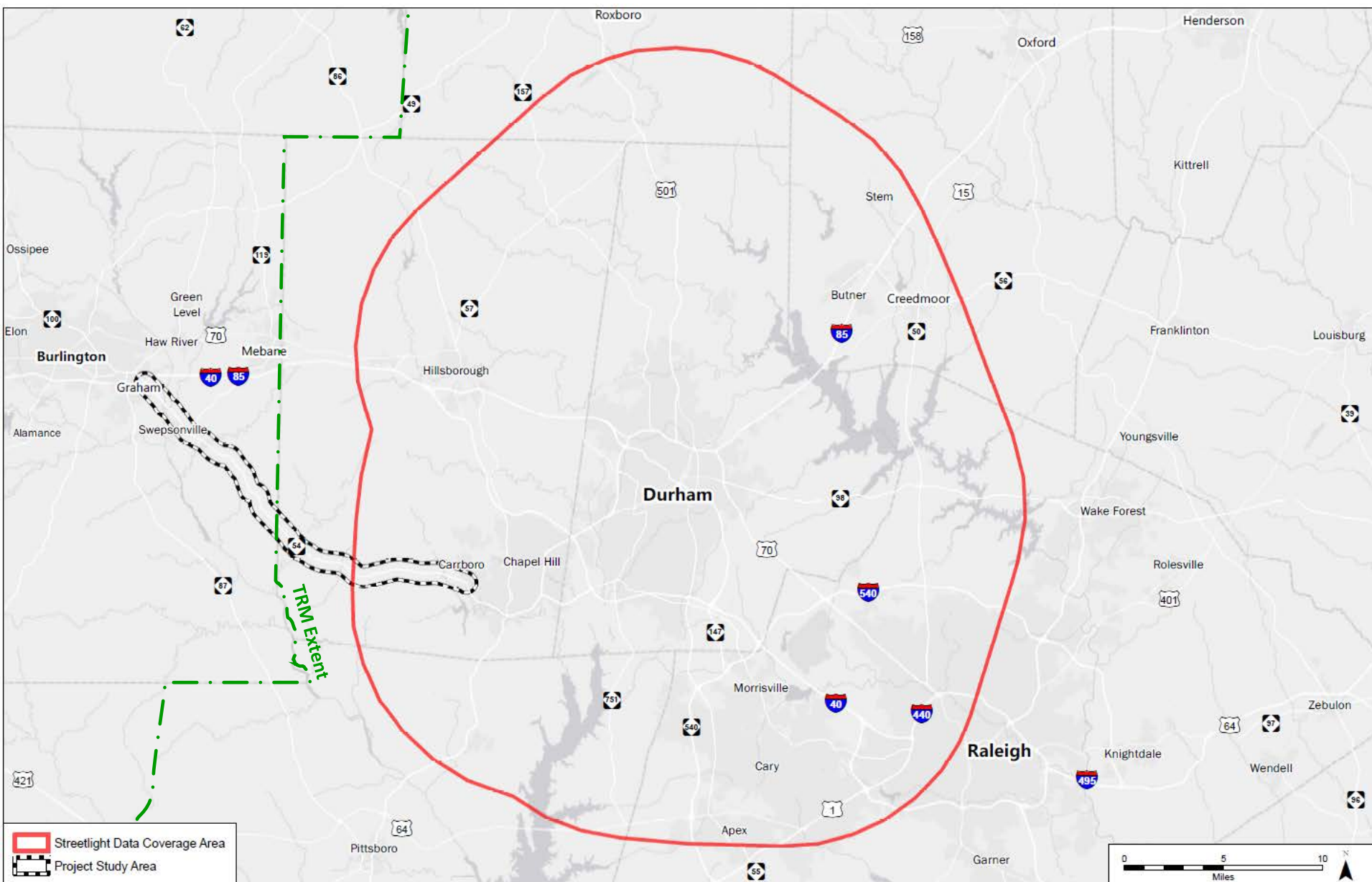
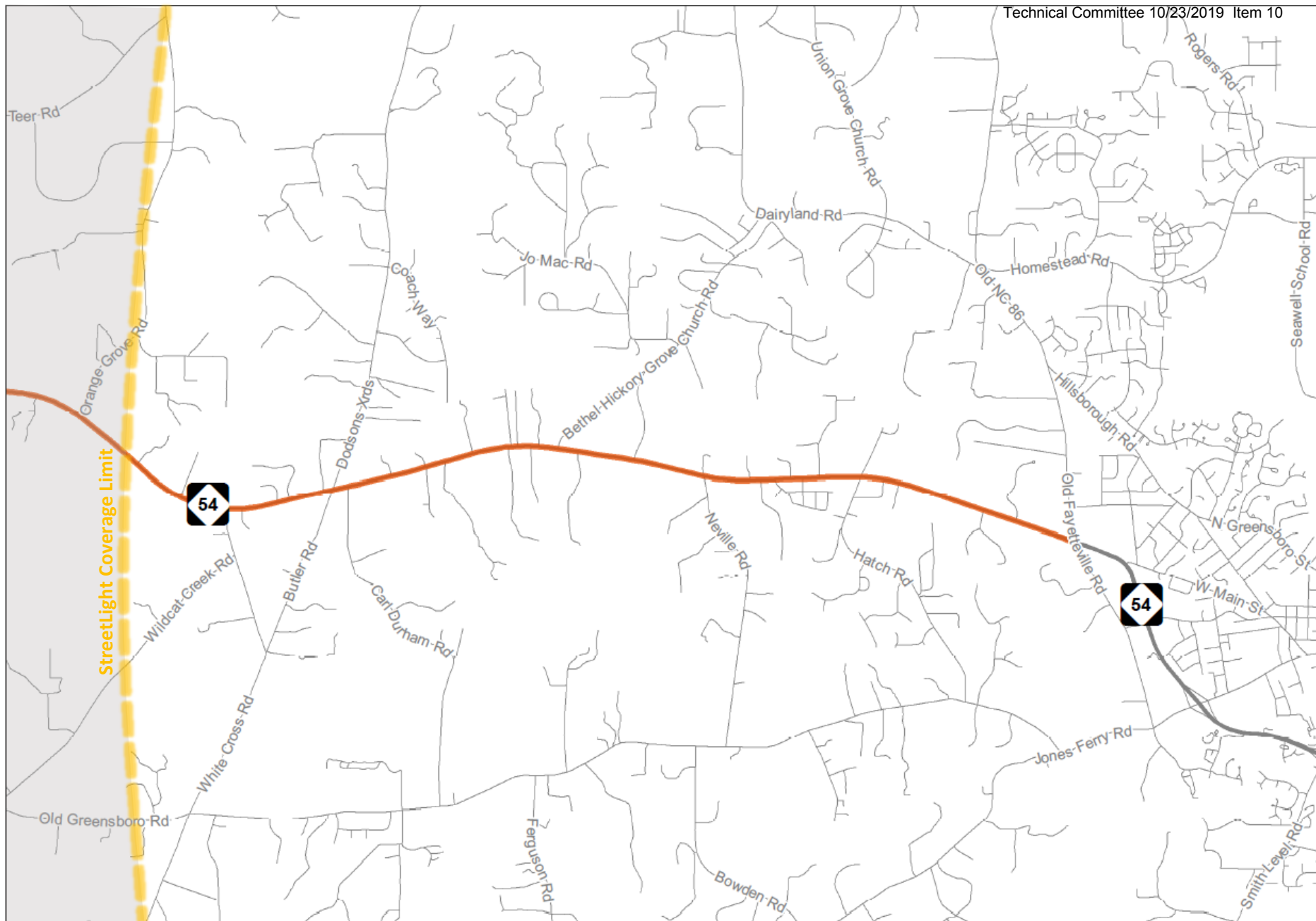


Figure 4: StreetLight InSight Dataset Coverage



Daily Vehicle-Trip Distribution (StreetLight InSight Data)

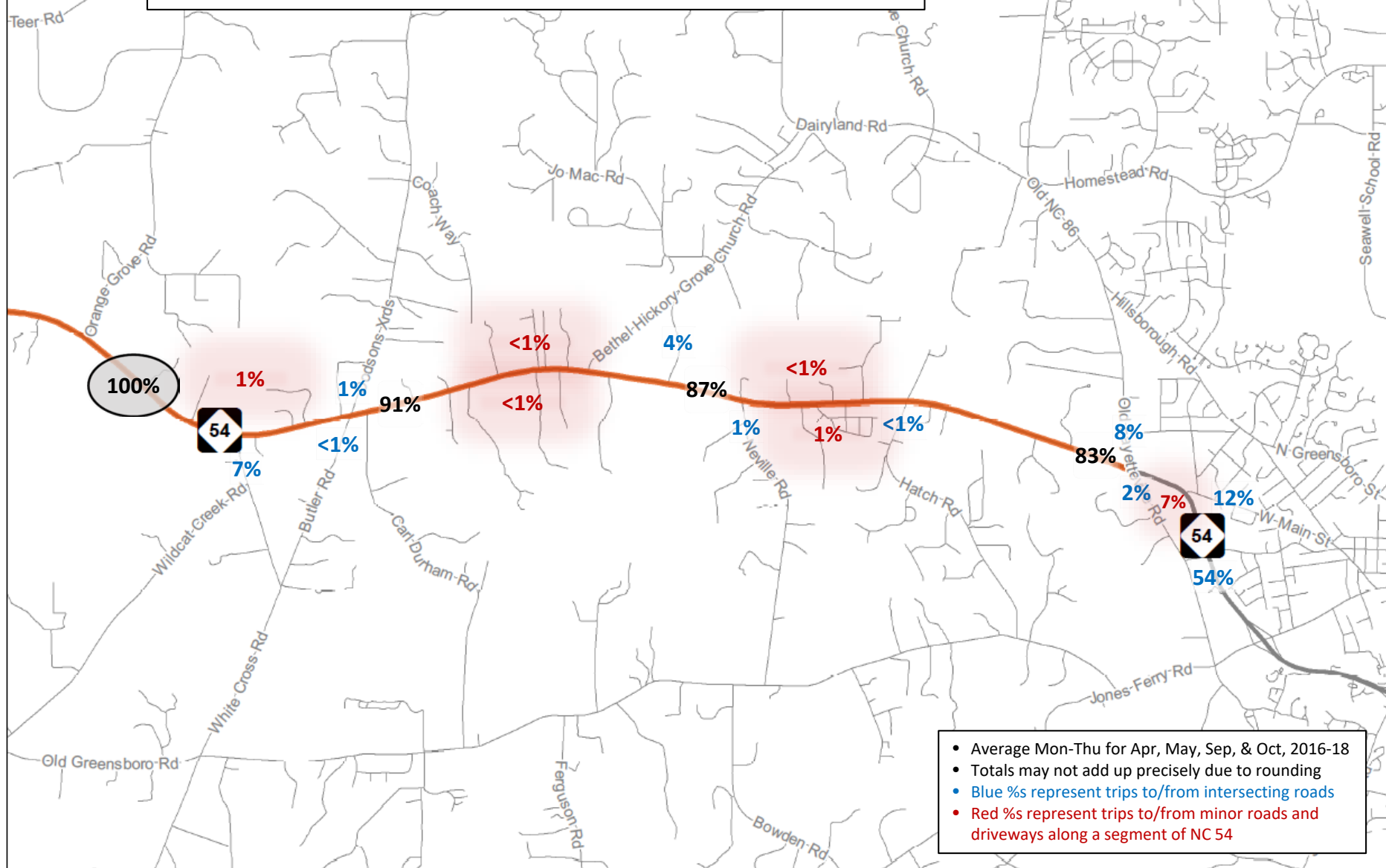
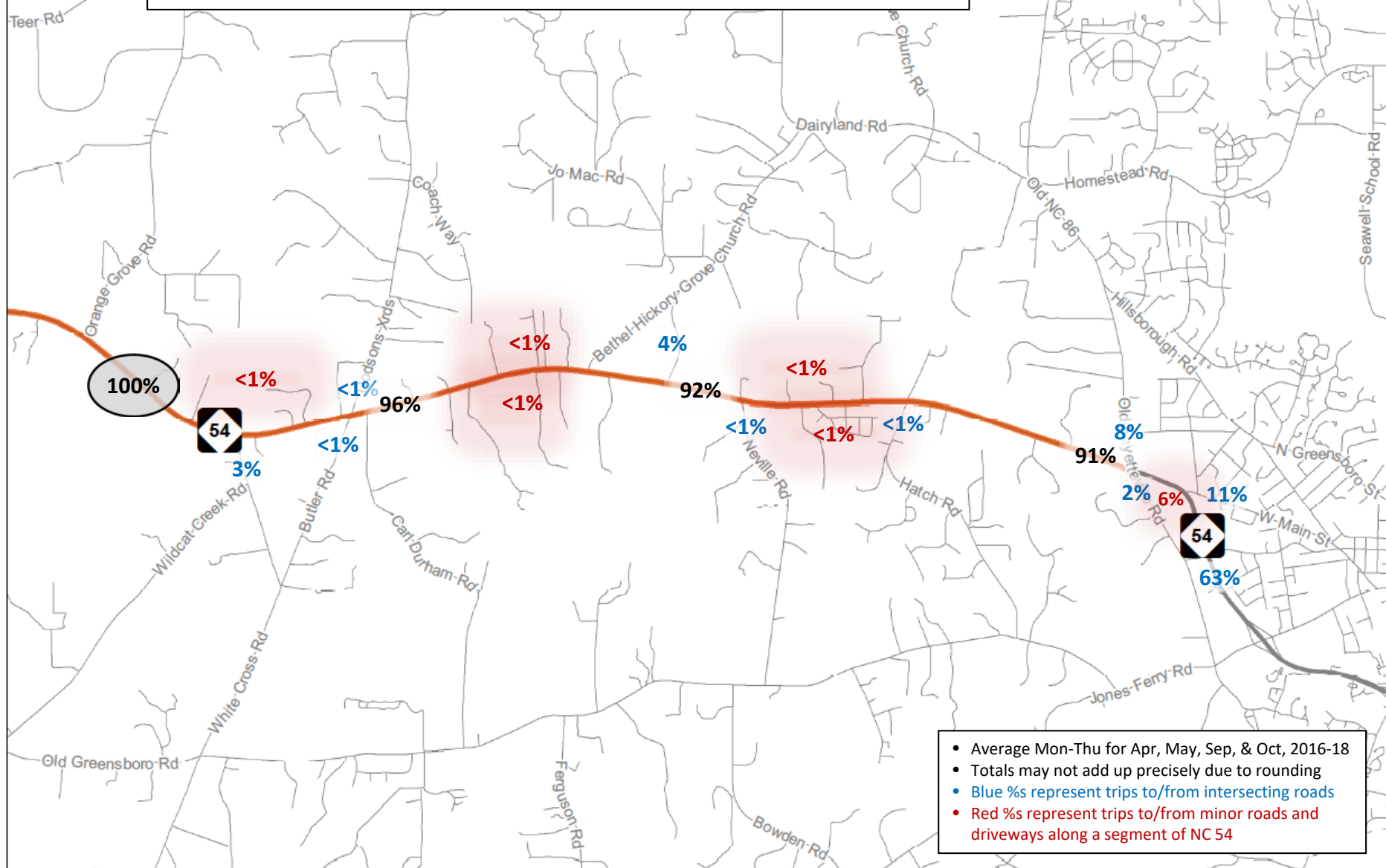


Figure 6: Origin-Destination Analysis – NC 54 East of Orange Grove Road

AM Peak Vehicle-Trip Distribution (StreetLight InSight Data)



- Average Mon-Thu for Apr, May, Sep, & Oct, 2016-18
- Totals may not add up precisely due to rounding
- Blue %s represent trips to/from intersecting roads
- Red %s represent trips to/from minor roads and driveways along a segment of NC 54

Figure 7: Origin-Destination Analysis – NC 54 East of Orange Grove Road

Daily Vehicle-Trip Distribution (StreetLight InSight Data)

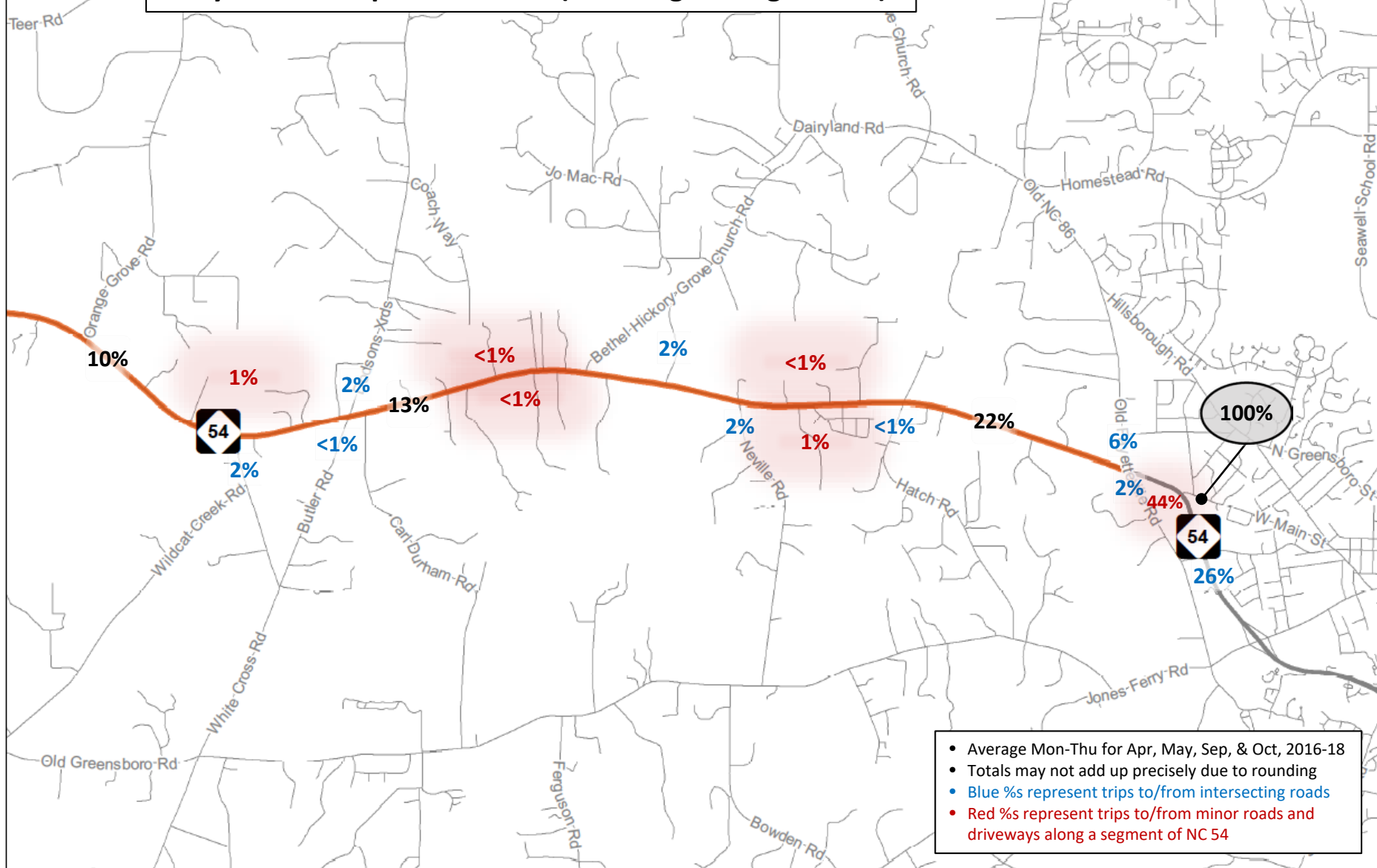


Figure 8: Origin-Destination Analysis – West Main St East of NC 54 Bypass

Daily Vehicle-Trip Distribution (StreetLight InSight Data)

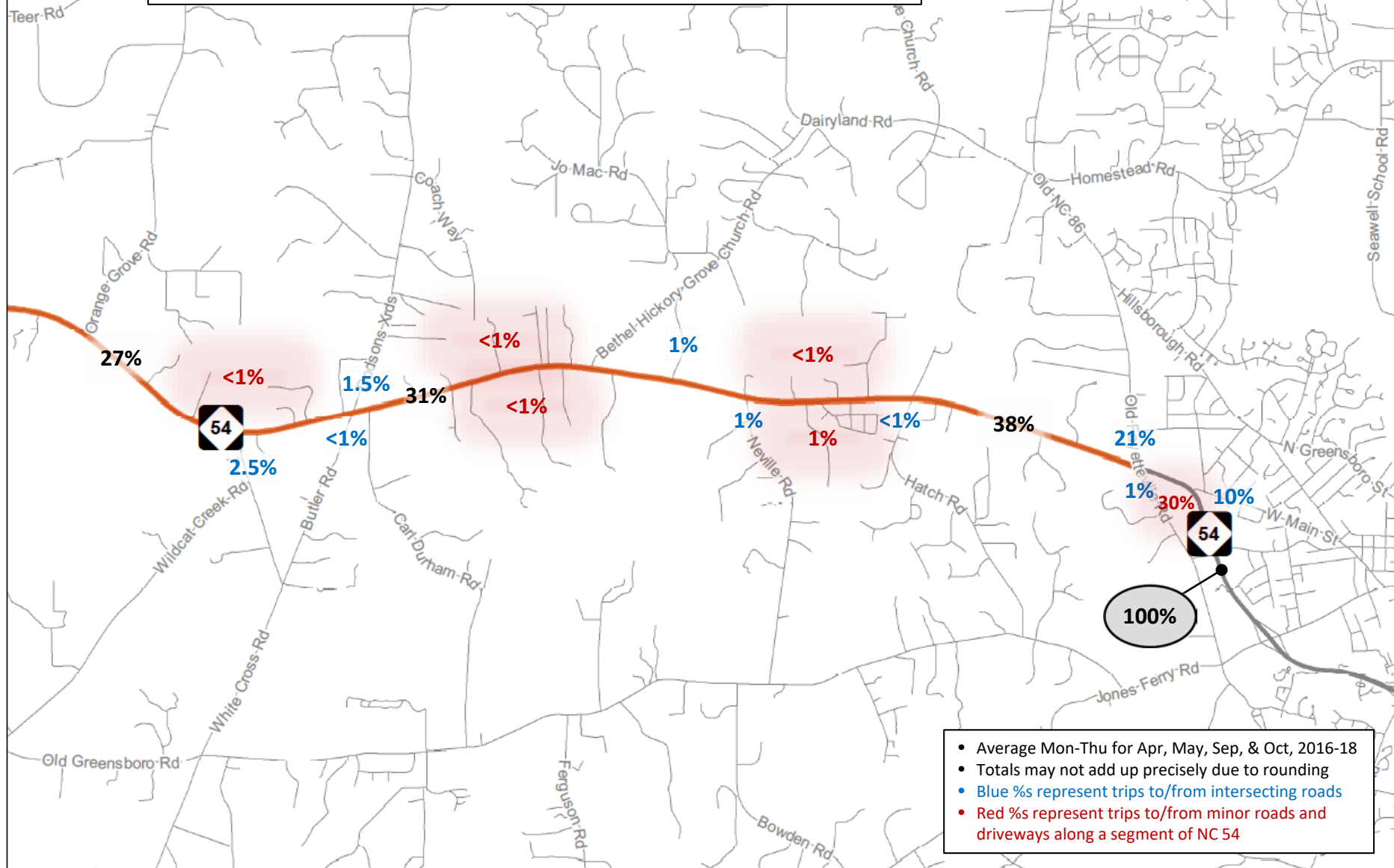


Figure 9: Origin-Destination Analysis –NC 54 Bypass South of West Main St

Figure 10a: TRM & PTRM Population Growth (2013 – 2045)

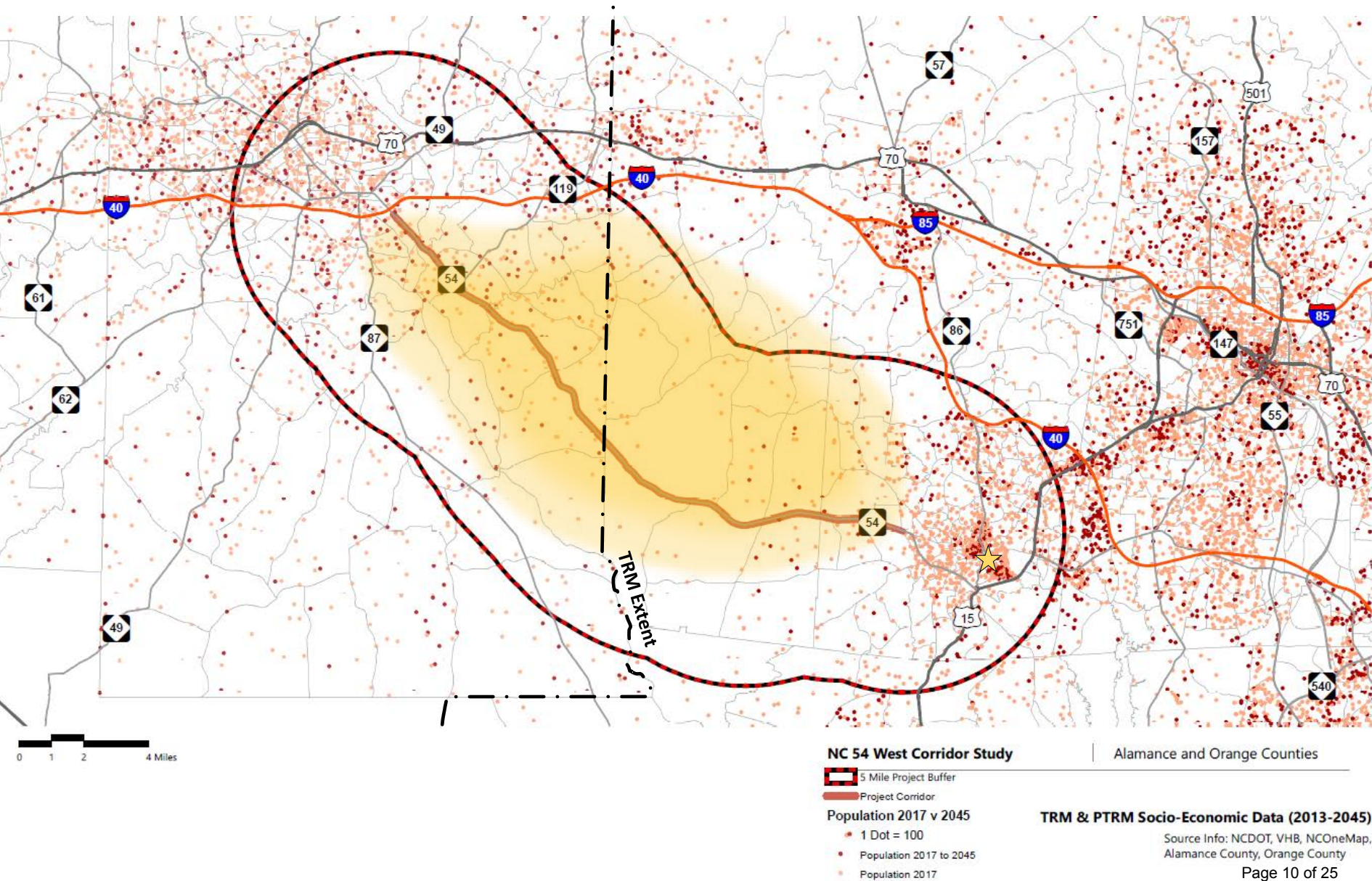


Figure 10b: TRM & PTRM Population Growth (2013 – 2045)

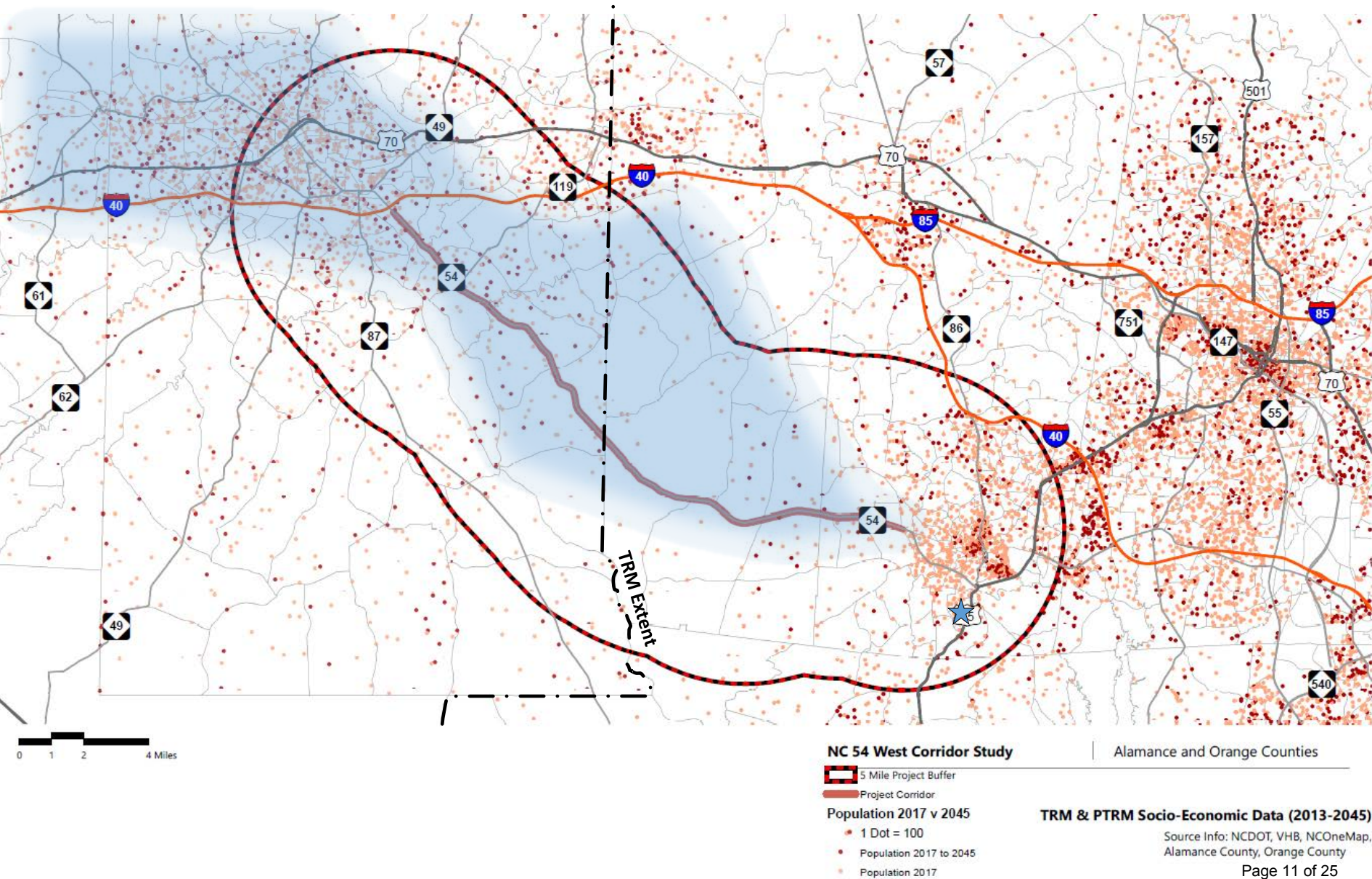
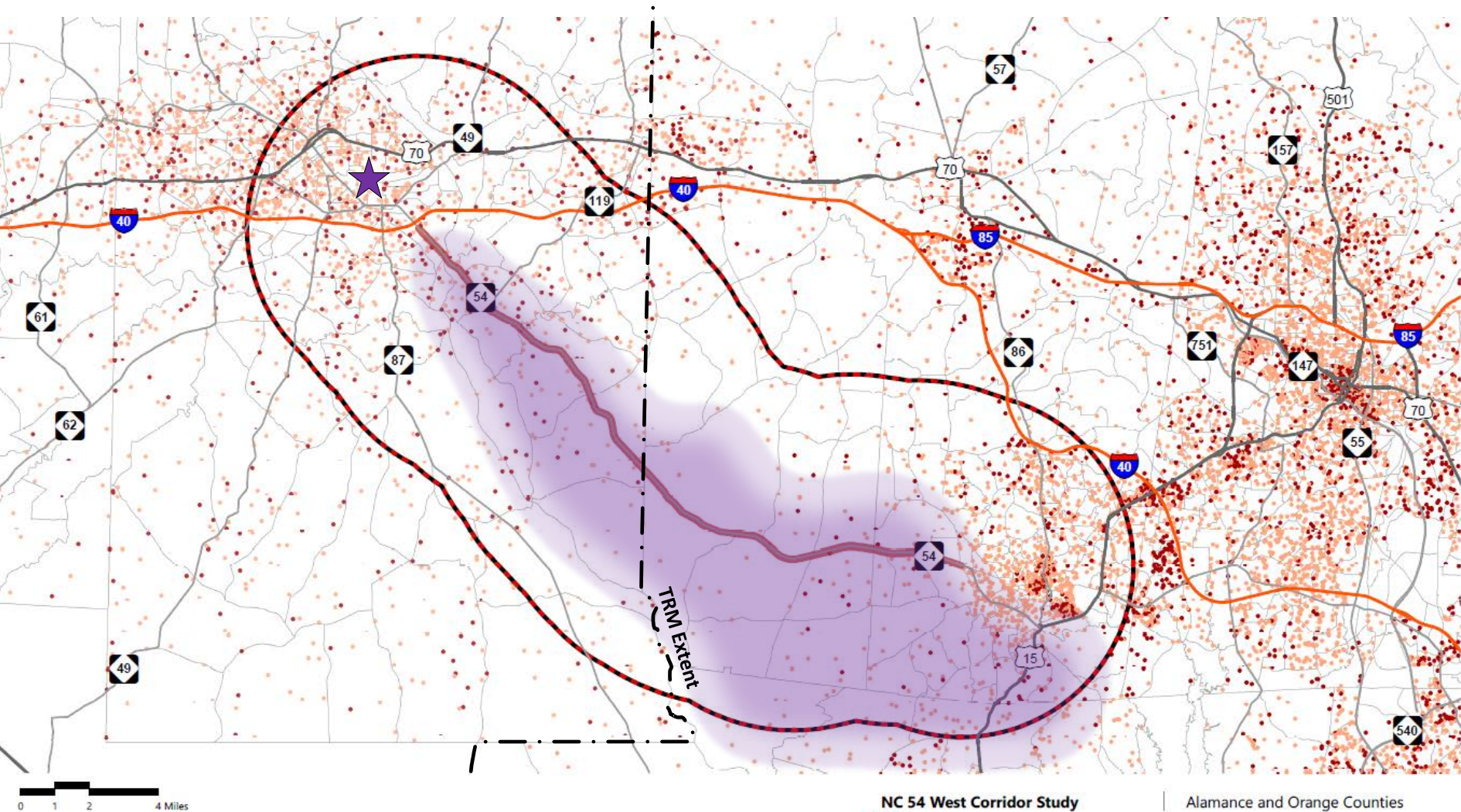


Figure 10c: TRM & PTRM Population Growth (2013 – 2045)



NC 54 West Corridor Study

Alamance and Orange Counties

5 Mile Project Buffer

Project Corridor

Population 2017 v 2045

1 Dot = 100

Population 2017 to 2045

Population 2017

TRM & PTRM Socio-Economic Data (2013-2045)

Source Info: NCDOT, VHB, NCOneMap,
Alamance County, Orange County

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Figure 11a: TRM & PTRM Employment Growth (2013 – 2045)

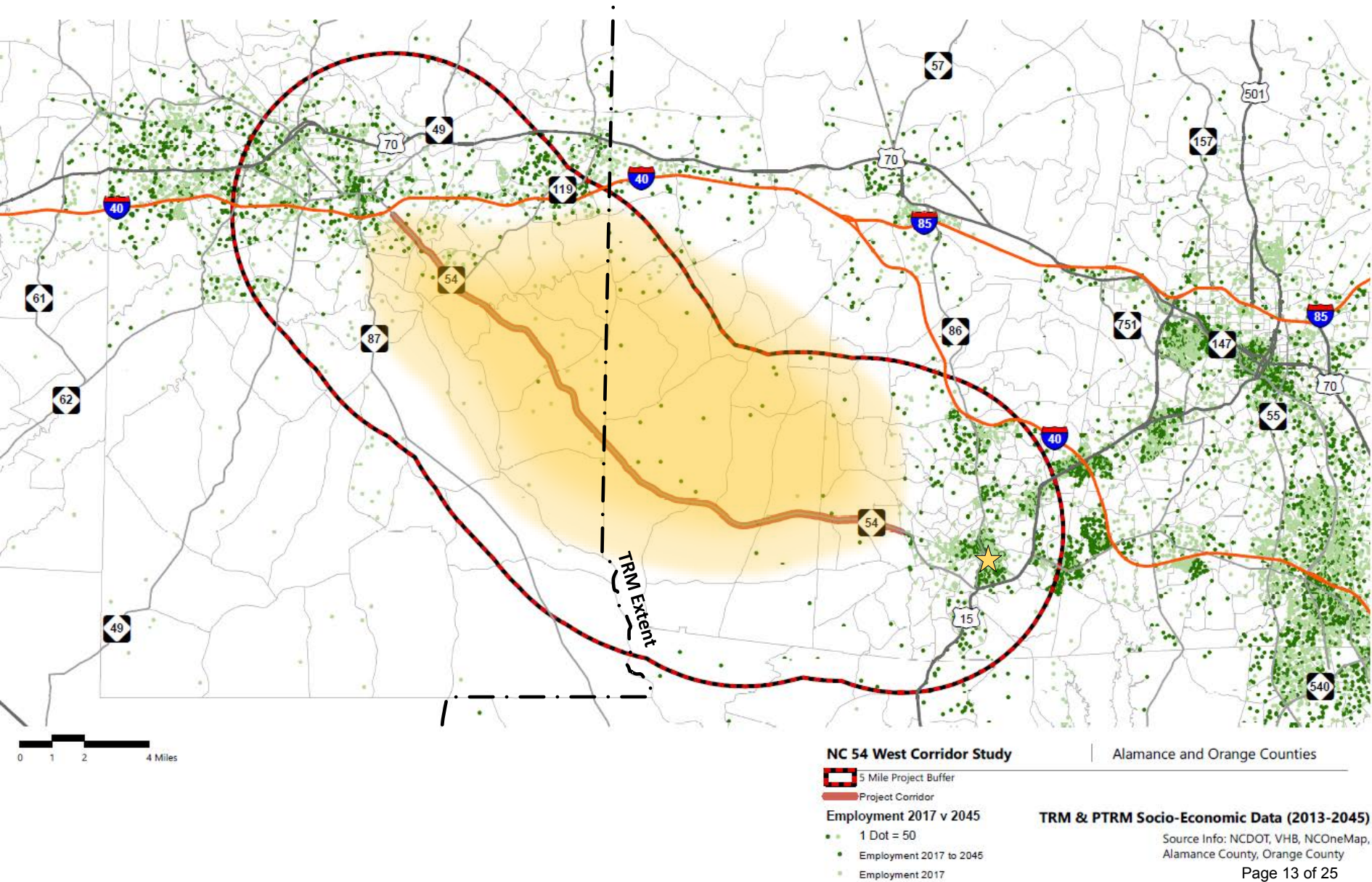


Figure 11b: TRM & PTRM Employment Growth (2013 – 2045)

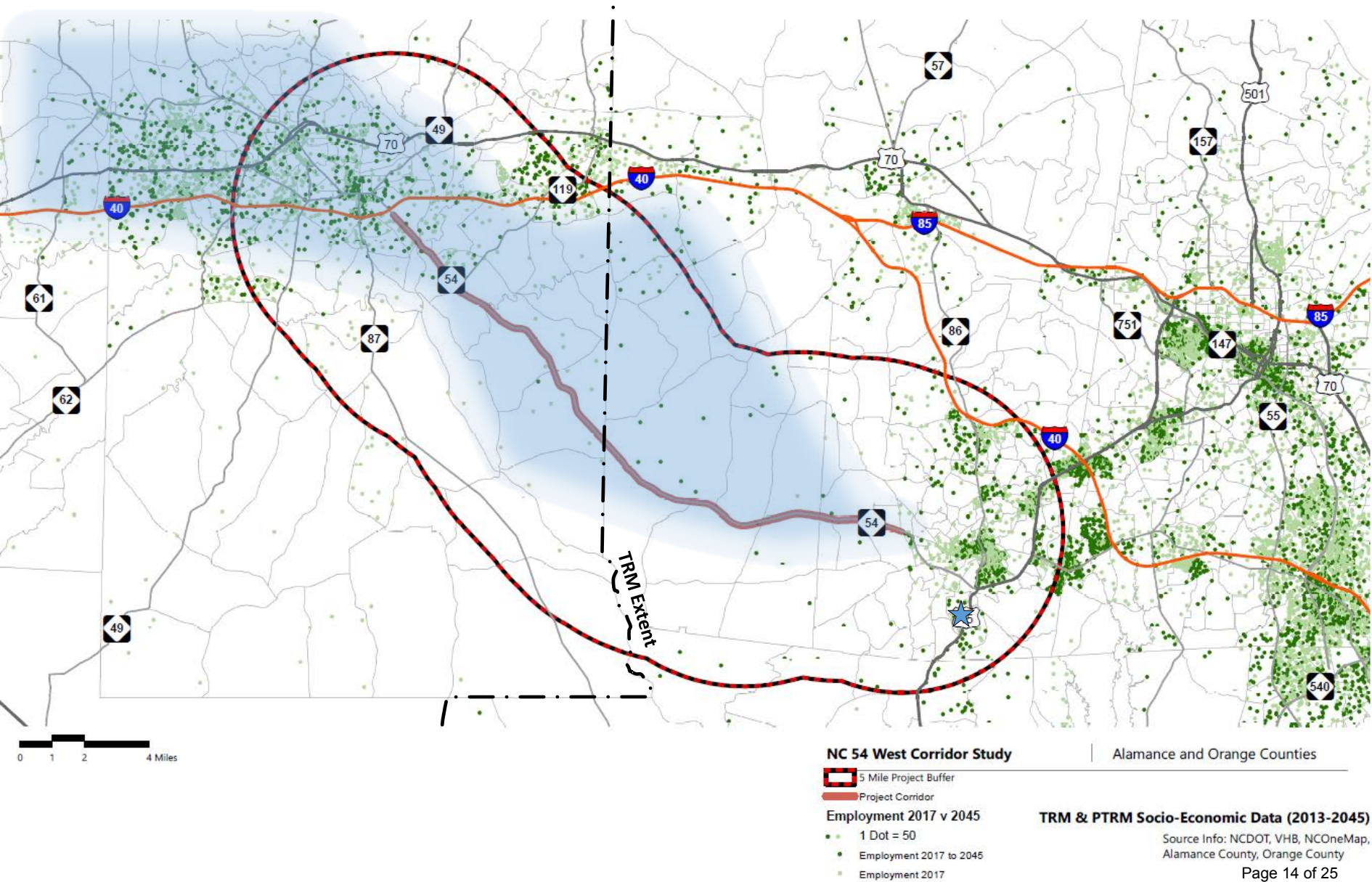
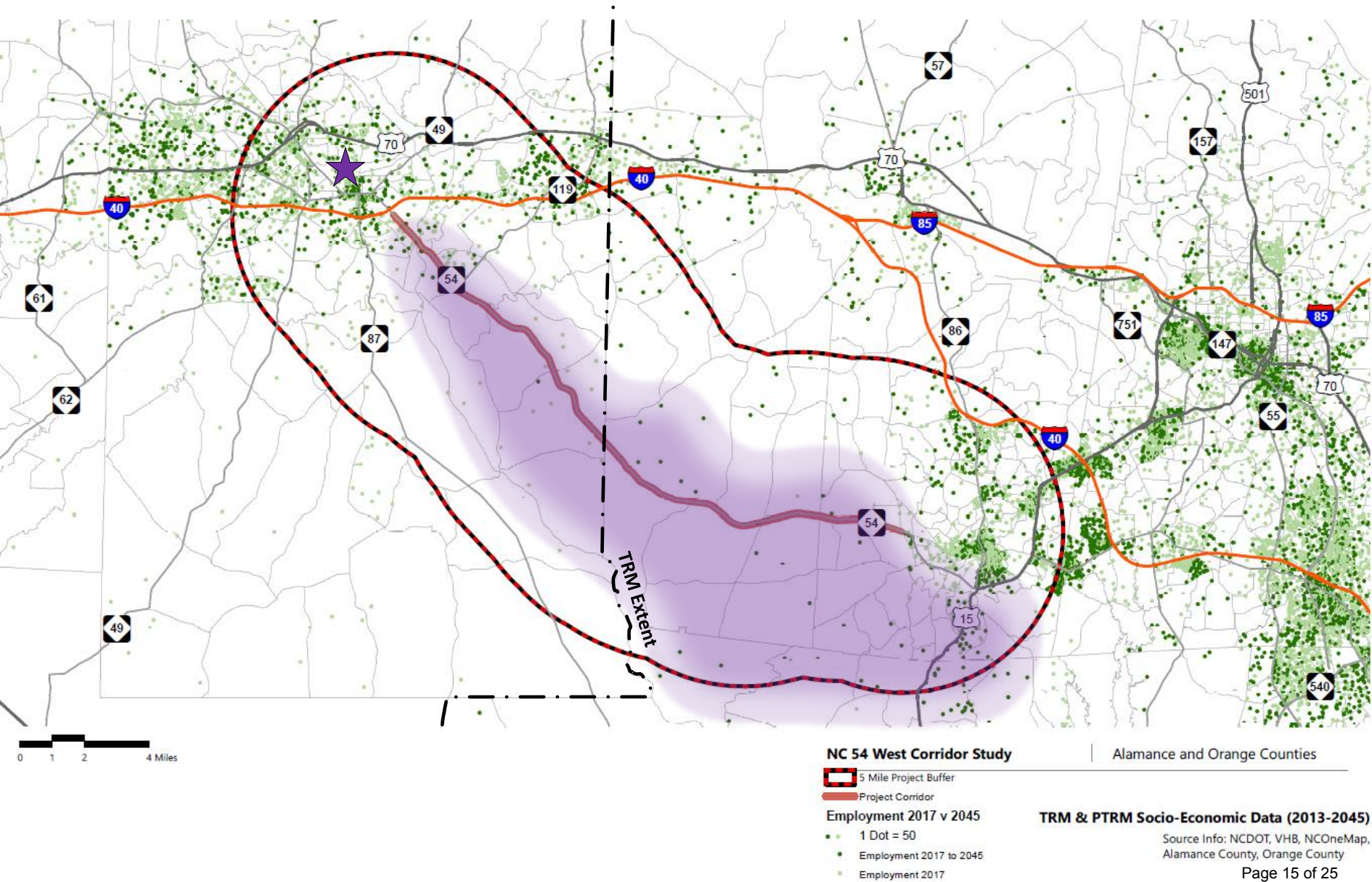


Figure 11c: TRM & PTRM Employment Growth (2013 – 2045)



Daily Vehicle-Trip Distribution (TRM)

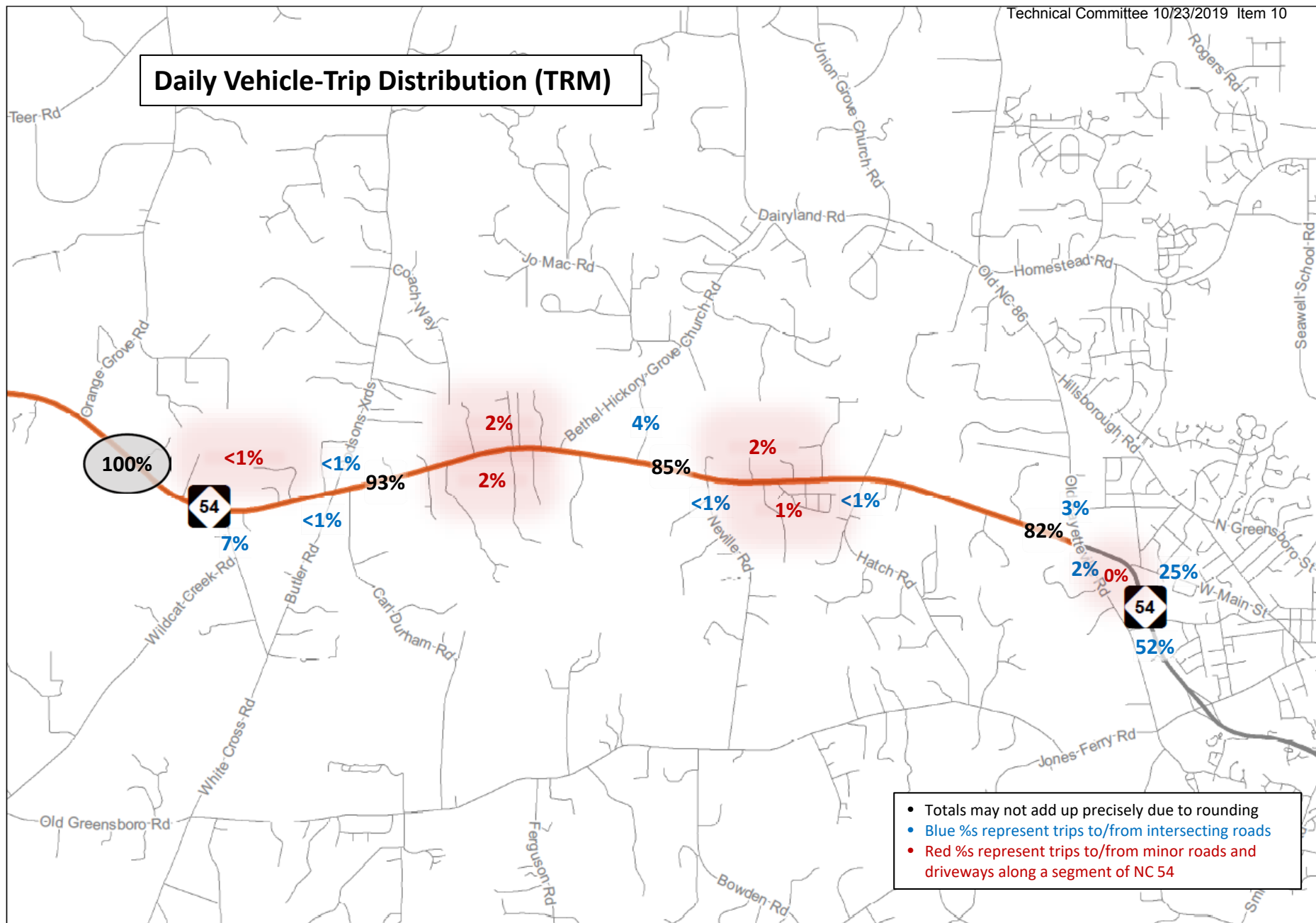


Figure 12: TRM Select Link Analysis – NC 54 East of Orange Grove Road

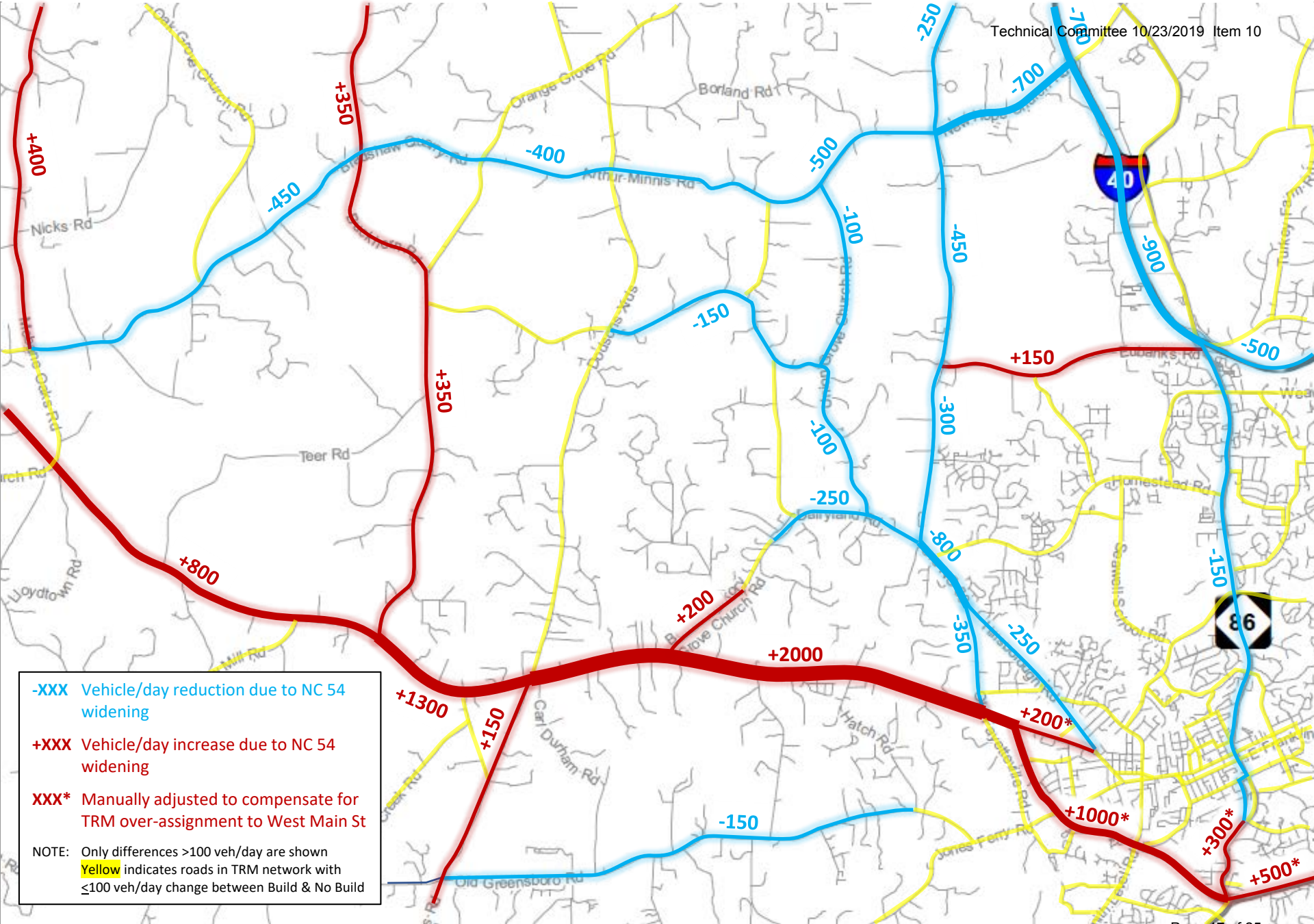


Figure 13: TRM – Daily Traffic Differences between 2045 NC 54 Widened and No-Build Scenarios

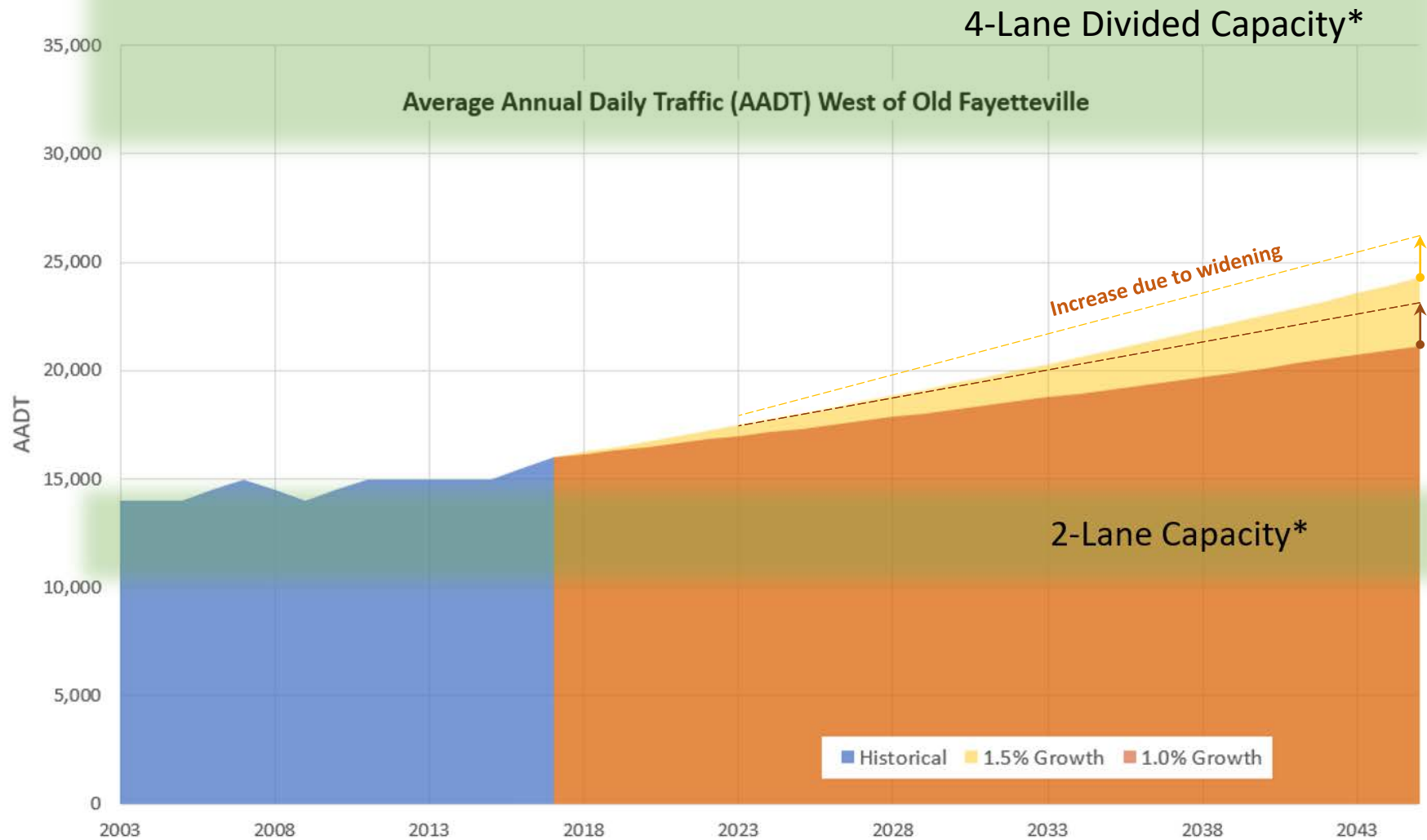
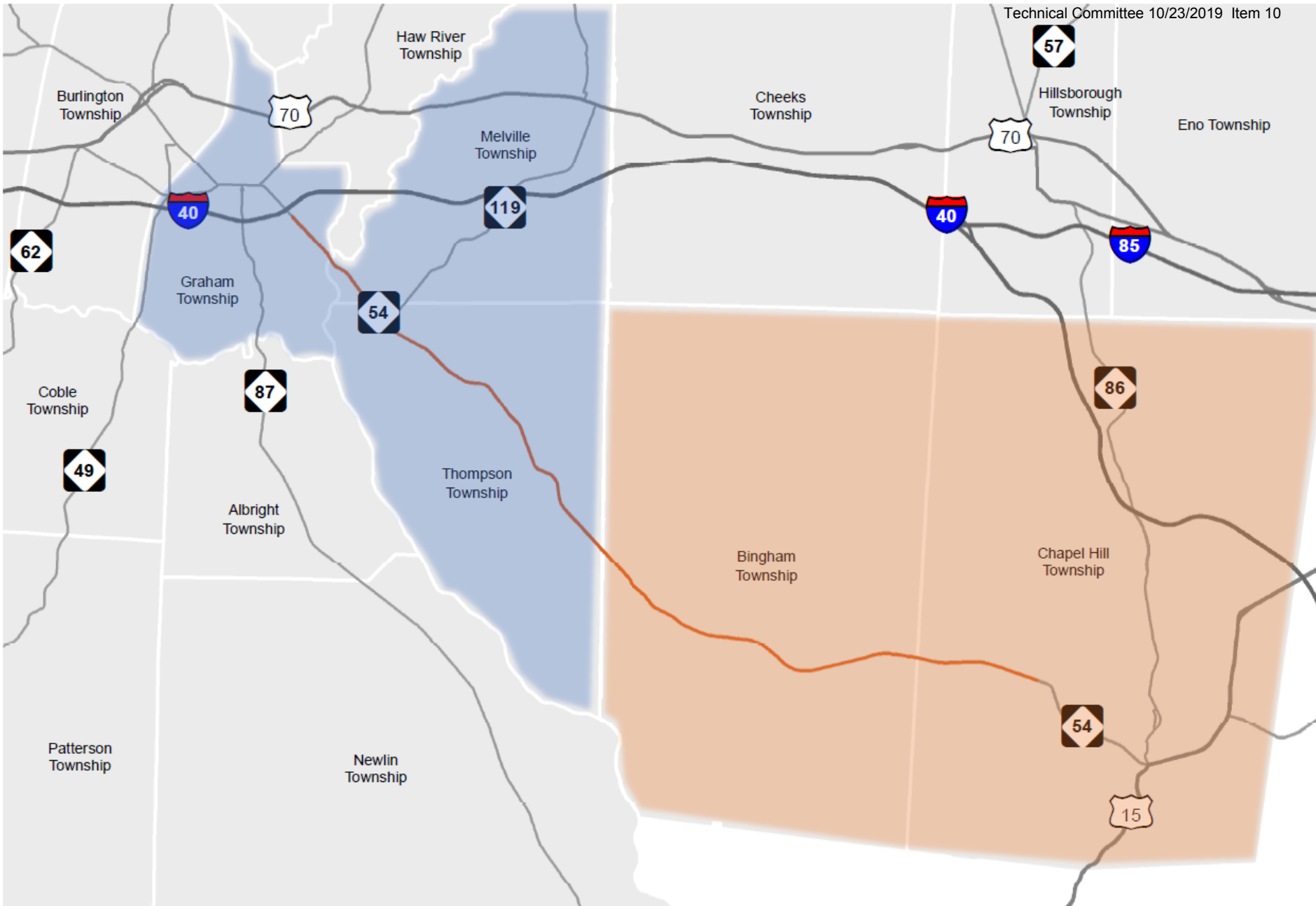


Figure 14: Relative Impacts of Traffic Shifts due to NC 54 Widening



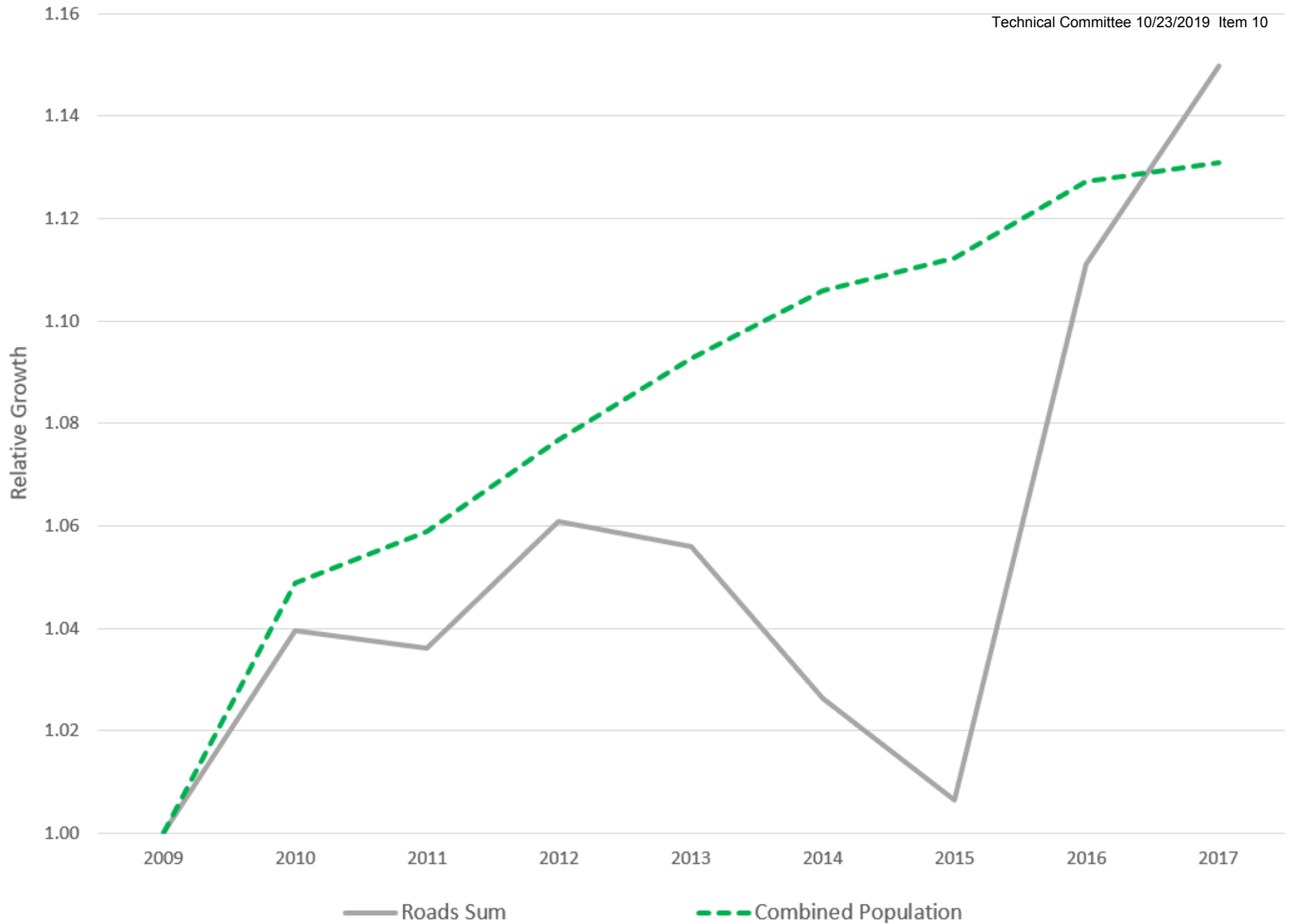


Figure 16: Comparison of Historical Population and AADT Aggregations

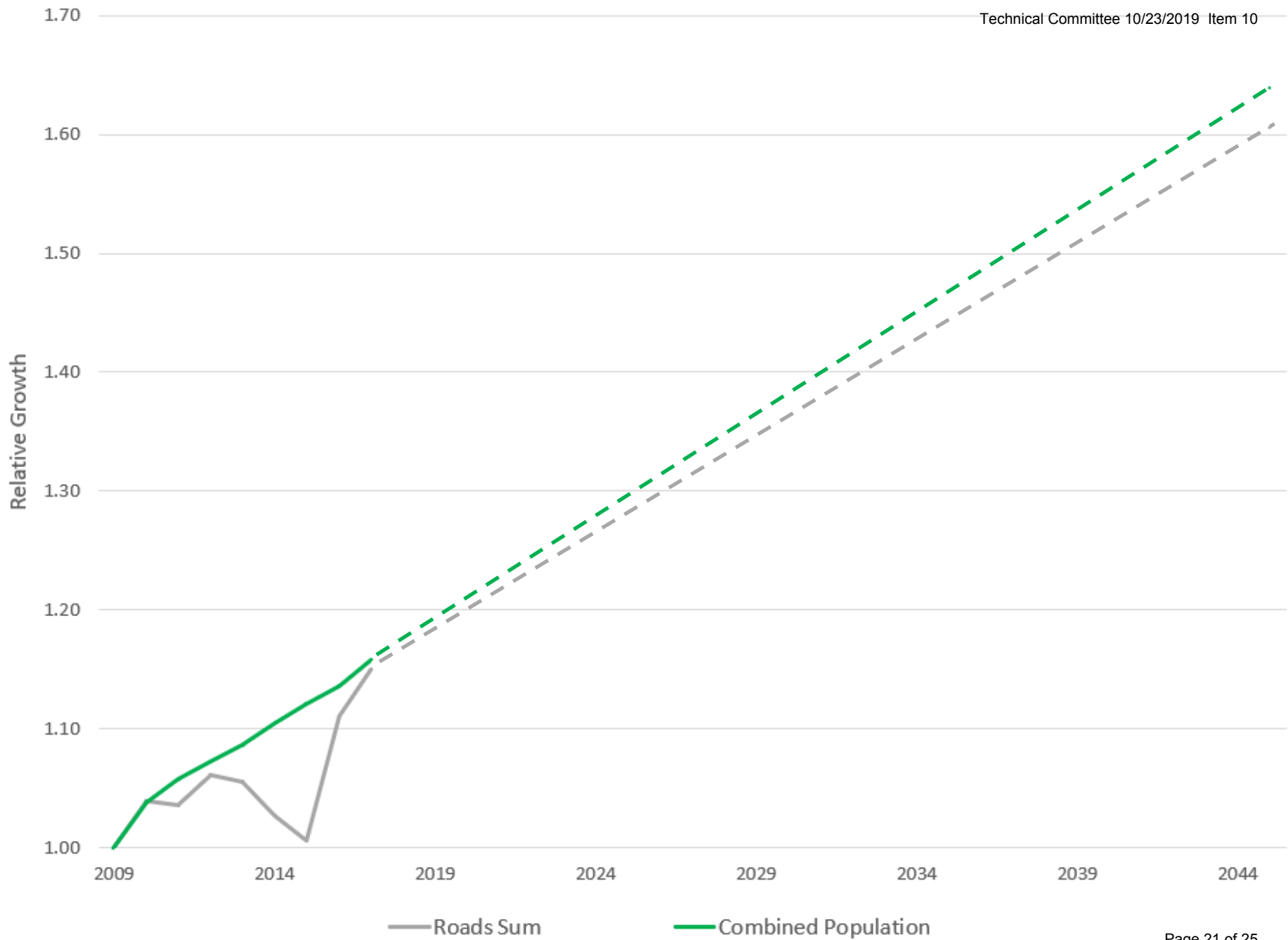


Figure 17: Comparison of Aggregated Population and AADT Forecasts

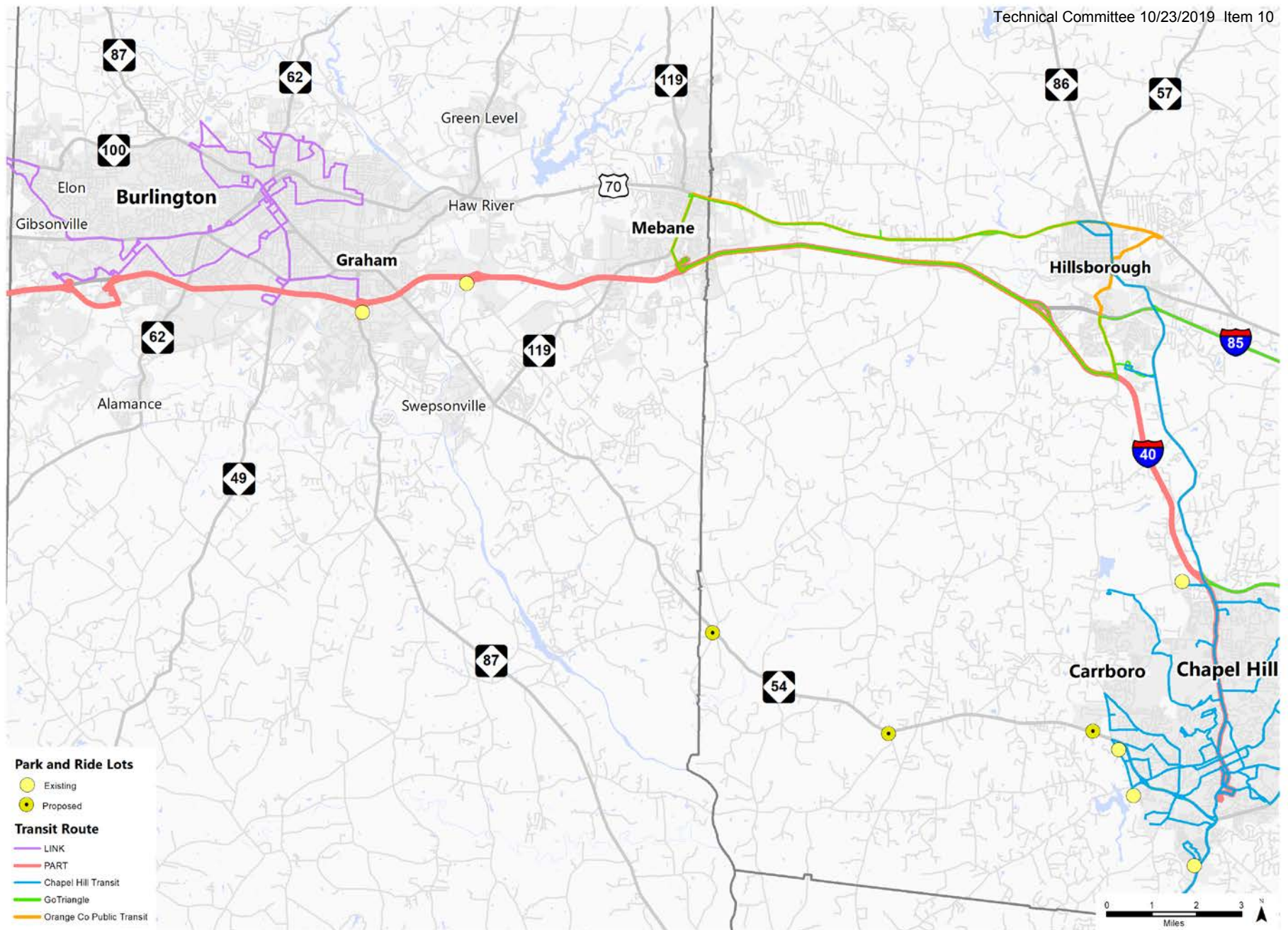
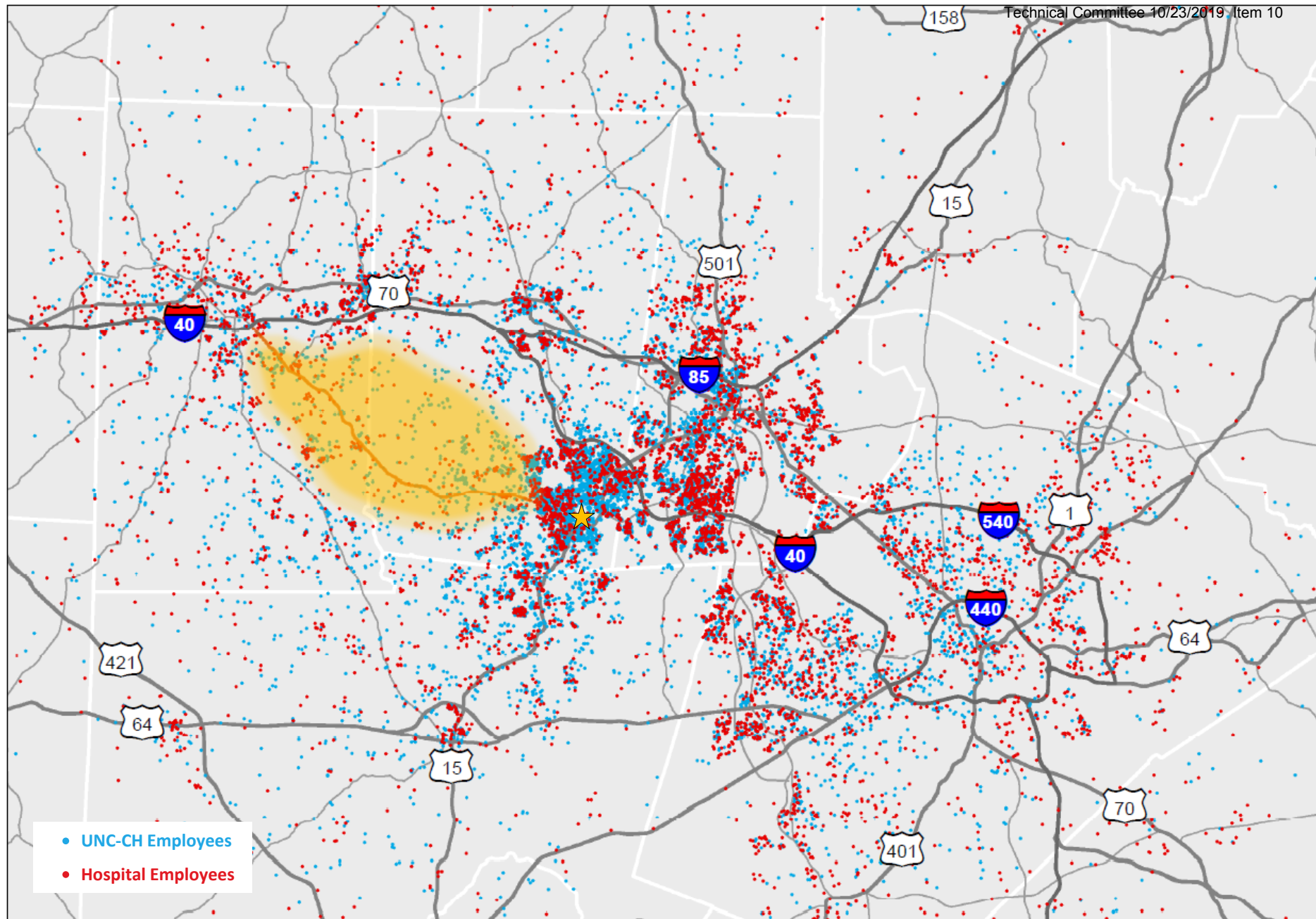


Figure 18: Transit Routes and Park-&-Ride Lots



Source: UNC-CH Development Plan 2017 Update

Figure 19: Regional Distribution of UNC-CH and Hospital Employee Residences (2017)

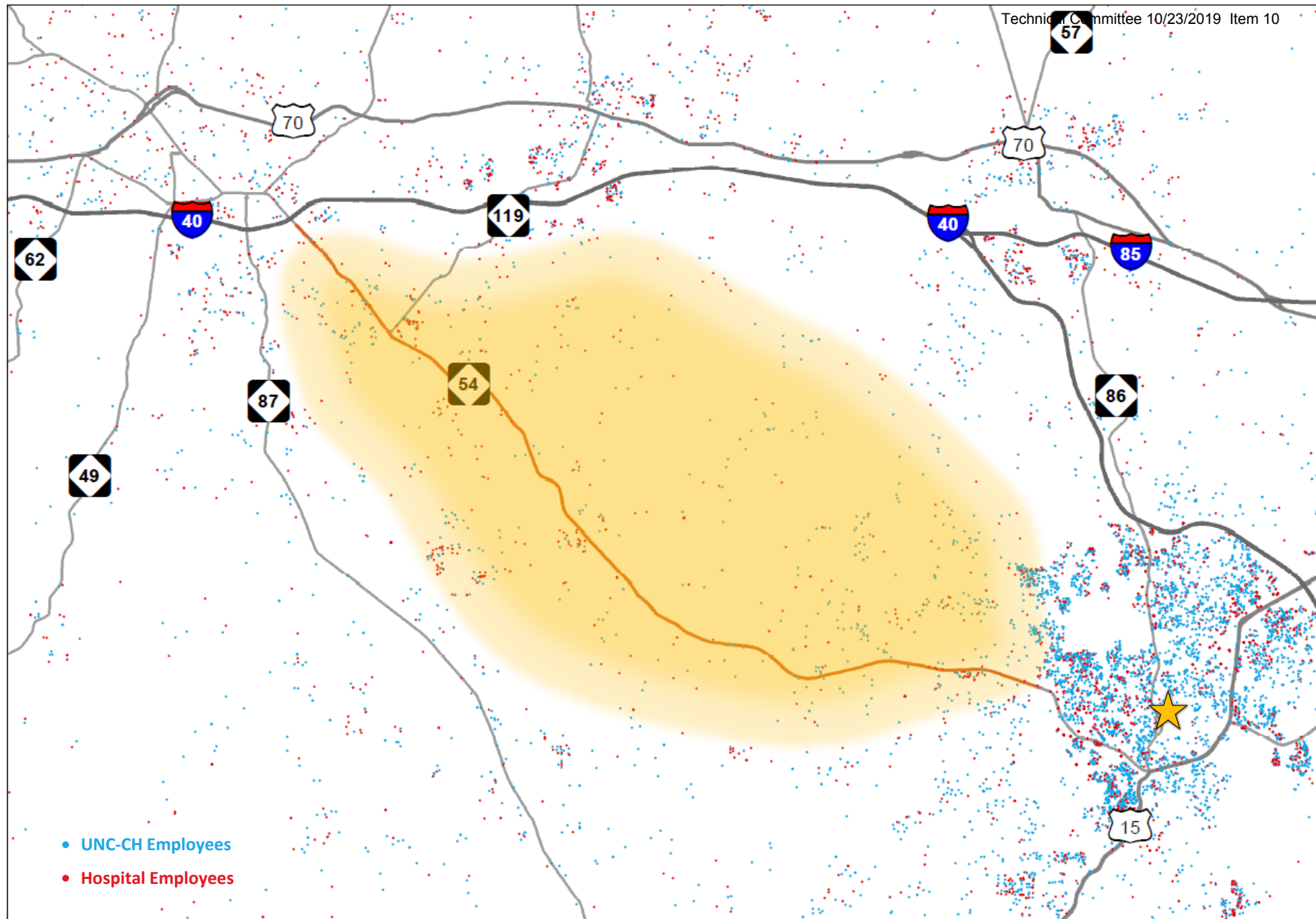


Figure 20: Study Area Distribution of UNC-CH and Hospital Employee Residences (2017)

