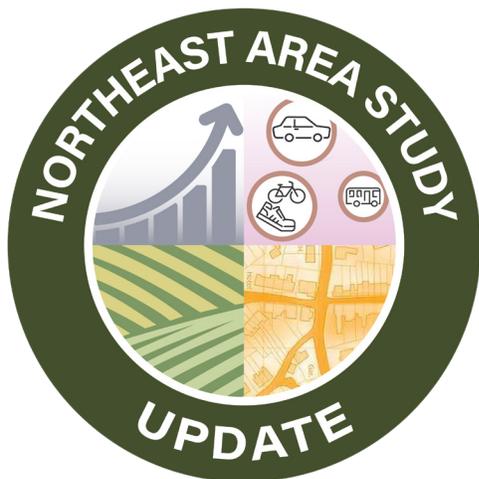


# APPENDIX



## Northeast Area Study Update

WAKE & FRANKLIN COUNTIES





APPENDIX  
**Technical  
Memos**

**A**

To  
Timothy Tresohlavy  
Stantec Consulting

**Comments:**

Timothy,

From  
J. Scott Lane  
J S Lane Company, LLC

Please find in the following pages a summary of the freight patterns and existing conditions assessment, followed by recommendations for how to proceed with integrating freight matters into NEAS.

Re  
Freight Existing Conditions  
Summary

Please let me know if you have any questions.

jsl

Date  
10.01.2020

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## **1. Freight Overview**

The original NEAS documentation did not ignore freight movements, but it did not make specific recommendations or assessments of freight movements in the study area. More often, freight was treated as something that might be an obstacle (e.g., to passenger rail service). The COVID-19 global pandemic has illustrated the dependency of the residents and businesses in NEAS and around the country on logistical supply chains, and those systems' vulnerability. The following assessment of freight movements in and related to NEAS communities is created from both qualitative observations and quantitative data available to the study team.

## **2. Qualitative Assessment**

The following highlights and expands upon the relevant discussion from this meeting as well as a review of freight planning documentation.

### **Freight Focus Group Discussion Points**

On May 22, 2020 a focus group comprised of several freight representatives (NCDOT and Capital Area MPO staff) was convened to discuss the NEAS freight conditions. Discussion of short-line railroads and data sources were among the topics covered in that conversation.

### **Triangle Regional Freight Plan**

The jointly prepared Triangle Regional Freight Plan (April 2018) was completed by the Capital Area and Durham-Chapel Hill-Carrboro MPOs to address freight contexts, trends, and needs for the future. An important observation occurs early in the document:

“The Triangle Region handled 82 million tons of freight worth \$116 billion in 2012. The next three decades are forecasted to see freight tonnage increase by one-third, yet the value of that freight will more than double. This difference points to the importance of valuable goods manufactured in the region's technology sector, and to the growth in consumer products coming to the region from the world. Both sets of goods are time sensitive, with fast, reliable delivery a fundamental requirement and service standards climbing. The availability of same-day delivery for some products ordered on-line is an obvious example of the trend, yet the reliability of service is subject to overcoming the delays and higher costs associated with traffic congestion, and to the ability to locate logistics facilities where they are needed.”

– *Triangle Regional Freight Plan (page 1)*

In this 2018 report, there were several notable points worth mentioning with respect to prioritizing projects and understanding the impact of truck movements of freight.

- High Crash Rates. The percentage of all truck-involved crashes in the Triangle Region was substantially higher in Wake County (43%) than the differential in

population or employment between Wake and the rest of the 10-county study area alone would suggest. The highest density of crashes was in south Raleigh/north Garner, outside of the NEAS planning area, although several fatal crashes were reported in the five-year window of data collected – these were concentrated on Business 64 east of Knightdale.

- Performance Measures. The Study suggests several performance measures which should be kept in mind as projects are moved forward in NEAS: managing congestion, improving infrastructure condition, promote connectivity/route redundancy, reduce crashes, minimize pollution / slow climate change, stimulate the economy, and promote equity by minimizing light and noise pollution.
- Value v. Weight of Flows. Not surprisingly, the quantity of goods shipped most commonly in and out of the Triangle Region (coal, minerals, wood products) differs considerably from the highest-value shipments (pharmaceuticals, machinery, and electronics). Understanding these differences can help prioritize projects and relate value to shipments beyond just visualizing amount of freight moved.
- Dominance of Trucks for Freight. Over 91% of all freight tonnage originating in the Triangle Region moves by truck on roads; about 68% of tonnage with destinations in the Triangle is shipped by truck – lower, but still the most-dominant form of transportation by far. Rail tonnage increases from 1.0% of tonnage originating from the Triangle to 28% of tonnage with destinations in the Triangle Region, a major difference. When the value of items is considered, multiple modes emerge more clearly as an important transportation type, accounting for nearly 20% of total dollar values of shipments (note: this data, sourced from the Freight Analysis Framework and BTS / USDOT, has 2012 as the latest year and 2007 as the base year).
- Centers of Freight Activity. Lincoln Park Industrial site, Glaxo-Smith-Kline, and Carolina Distribution (just across the Johnston County line) were top freight movement companies listed in the study. U.S. Foods (Zebulon), as well as Pepsi bottling (Garner) and pipeline companies (off of US Hwy 70) are also near to the NEAS planning boundary.
- Forecasts of Congestion. I-87 / Business 64 and US Hwy 1 corridors are shown to have volume-to-capacity ratios of greater than 2.0. While the CSX Carolina Connector intermodal terminal at Rocky Mount (CCX) facility is expected to decrease truck miles through North Carolina and the region generally, it will likely increase truck traffic through NEAS.

### **3. Quantitative Assessment**

Data was obtained from NCDOT and third-party sources (notably, StreetLight Data, Inc., not available for the Triangle Regional Freight Study, and the USDOT Freight Analysis Framework v.4 which was used extensively in the regional freight study) to better understand how NEAS routes are used with respect to truck traffic.

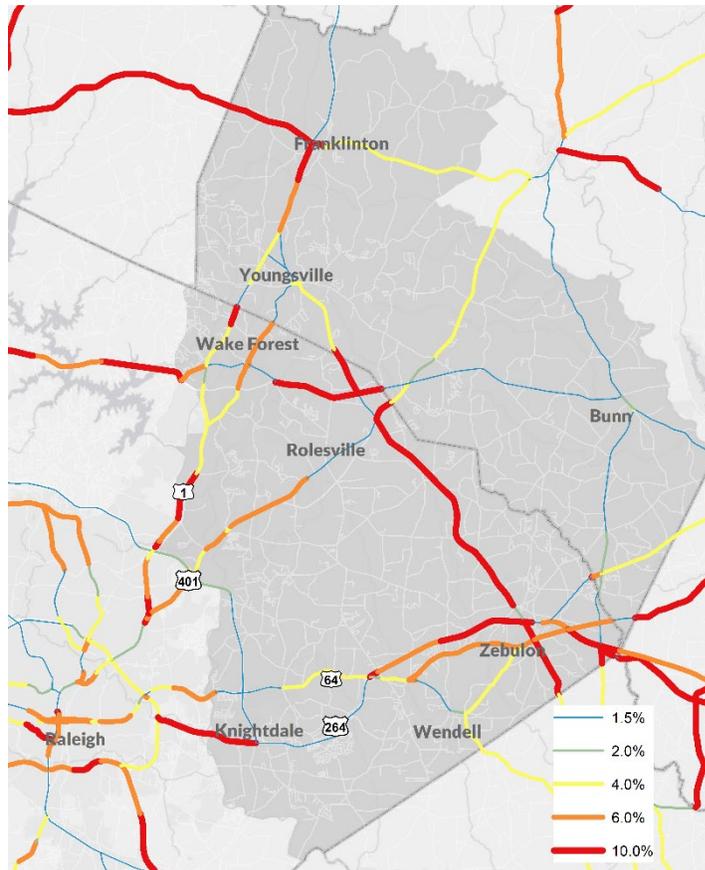


Figure 1. Growth in Truck Traffic, 2012 to 2045 (source: FAF4/BTS/USDOT)

Figure 1 provides an indication of where truck traffic is likely to grow the fastest through 2045. Although these routes in the interior of NEAS are not heavily utilized by many trucks now, the growth on several roads is notable.

Figure 2 shows the relative amounts (percentage) of truck traffic coming from (left) and leaving (right) the NEAS planning area boundary. Destinations and origins near US Highway 1 are significant in both the origin and destination of truck traffic. Note that some destinations in the Research Triangle Park and Raleigh-Durham International Airport are significant as destinations, although air cargo shipments have been declining in recent years,

according to the Triangle Regional Freight Study). Heavy truck (over 14,000lbs.) were more significant in the Youngsville area than all or medium-duty trucks.

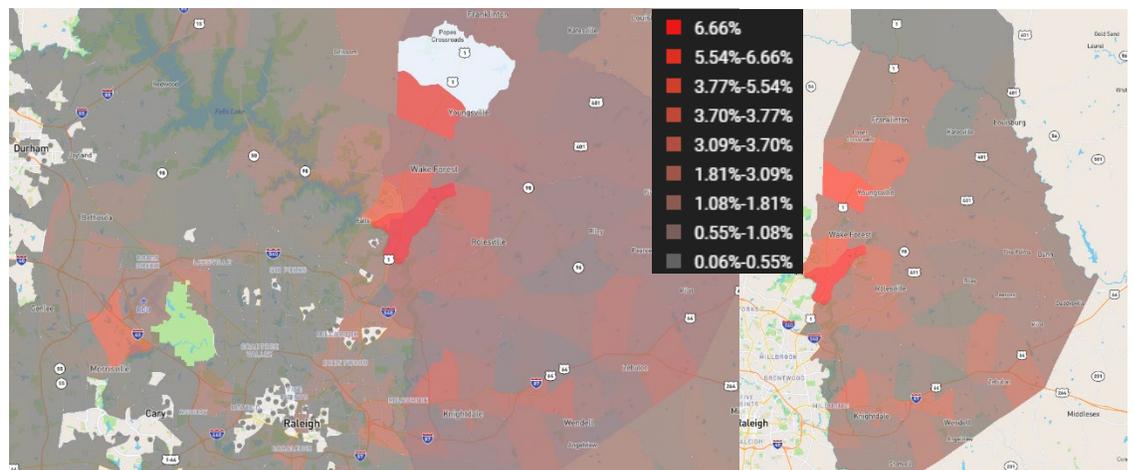


Figure 2. Destinations for (left) and Origins of (right) Truck Trips (source: StreetLight Data, Inc.)

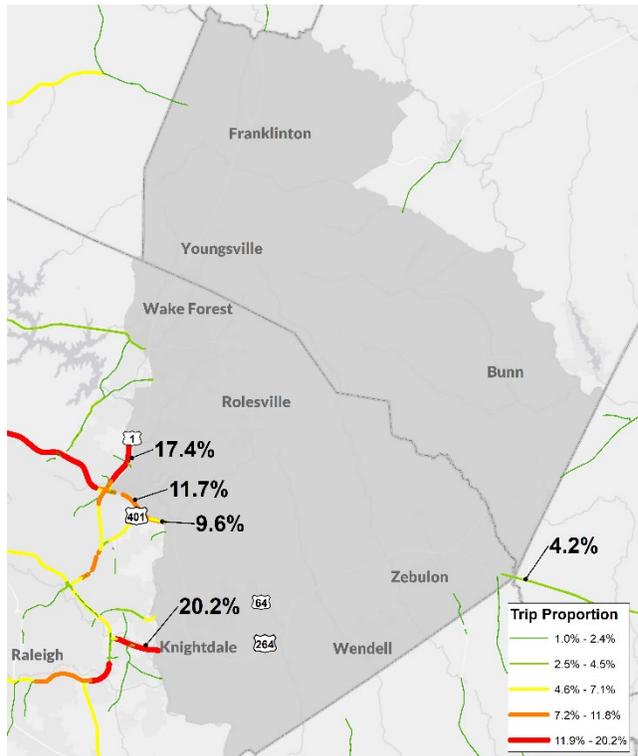


Figure 4. Proportion of Truck Trips Leaving NEAS, 2019 (source: StreetLight Data, Inc.)

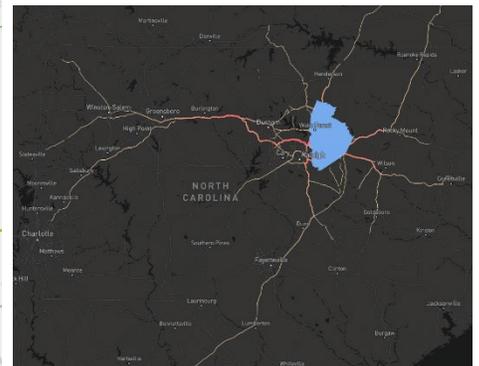
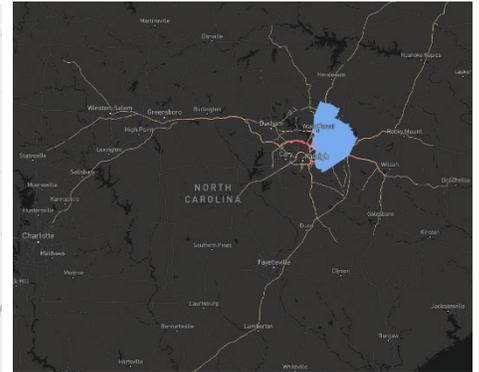


Figure 3. All Trucks (top) and Heavy-Duty Trucks (bottom) Top Truck Routes from NEAS

Figure 3 indicates the percentage of truck trips leaving NEAS in 2019; this figure represents all truck trips sampled using the StreetLight Data, Inc. company’s resources. I-540, US Hwy 1, and I-87 are dominant routes while other streets carry considerably lower volumes of truck traffic.

Figure 4 shows both the geographic extent of truck destinations for truck trips leaving the NEAS planning boundary, as well as the density of those truck volumes for all trucks (top) and heavy trucks (bottom). Note that the I-40 corridor is a much more dominant route for heavy-duty truck trips leaving NEAS, indicating the importance of routes outside of NEAS to the distribution of freight for businesses within the planning area. Note also the importance of the I-87 corridor for heavy truck trips compared to all truck trips, perhaps reflecting the increase in such trips to the CCX terminal, access to the DC corridor, and port of Morehead City. The second point is the importance of the RDU/RTP region, as well as other locations reflecting the geographic reach of truck-borne freight leaving NEAS.

#### 4. Directions Going Forward

Several opportunities exist for tying in freight considerations to the NEAS Update 2020 project. The justification and implementation considerations for each are described below.

1. The degree to which the global pandemic that was taking place during the NEAS update will influence freight companies and transportation going forward is highly

uncertain. However, the vulnerability of “just-in-time” shipping models have been called into question, as has the need to explore localized distribution centers. It is possible that additional capacity for distribution, warehousing, and light industry / assembly land uses and transportation facilities will be in higher demand.

2. The existing nodes where freight distribution and shipping occurs in NEAS are along the US 1 corridor, particularly south and north of Wake Forest into Youngsville. A second node of activity was noted along the US 64 corridor. In this latter corridor, short-line railroads operate parallel to the Class I railroad (CSX), creating opportunities for intermodal interchange of goods.
3. The Triangle Regional Freight Study notes the importance of FASTLANE grants ([link](#)), and it may be a good idea for CAMPO and Councils of Government to work with local and state governments to develop several projects that are competitive for FASTLANE grant funding. The transportation funding world has emerged from the 1990’s “pork”-driven funding mechanism to one that is based on grants and formula allocations. Forging partnerships and preparing early are keys to securing grant funding – even hiring a grant preparation firm that can perform lobbying services as well (financed through other means than CAMPO, which is not eligible to use federal funds in that manner).
4. The Triangle Regional Freight Study identifies (Table 58) many freight-related projects and includes information on justifications via one or more of the performance measures described in this memorandum and that report. It would be advisable to work through that list and assign a value to projects that coincide with it in the NEAS recommendations.
5. Additional analyses using the FAF4 and StreetLight Data platforms can be conducted; please contact Mr. Lane directly to assist with that work. This exercise also illustrates the value of the StreetLight Data, Inc. platform, providing much more recent (up to August 2020 as of this writing) data than the older, 2012 FAF4 dataset.

To  
Timothy Tresohlavy  
Stantec Consulting

From  
Michelle Peele/J. Scott Lane  
J S Lane Company, LLC

Re  
Transit Existing Conditions  
Summary

Date  
07.30.2020

**Comments:**

Timothy,

Please find in the following pages an updated summary of the existing conditions with respect to transit. In this update, a new section addressing the extension and emulation of the Nelson-Nygaard transit propensity is provided for review. The results don't change any of the directions for the future course of recommendations.

Please let me know if you have any questions.

jsl

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  - Conclusions and Directions for NEAS Transit..... 12

### 1. Service Overview

Since the last publication of the Northeast Area Study, some of the local transit providers have undergone several changes. GoTriangle, formally known as Triangle Transit and GoRaleigh, formally known as Capital Area Transit, have increased operations due to the growth and surge in ridership. Since 2010, the study area population has doubled. This increase has put pressures on transportation service demands within the transportation study area. Measures were taken by local leaders and agencies to increase transit service to meet the growing needs of commuters. Additional areas in the Northeast Area are now serviced by transit more than we saw in the 2014 Northeast Area Study. The transit operators that currently serve the study area are outlined below.

#### Urban Transportation Services

**GoTriangle.** Go Triangle provides three express bus routes in the study area including the North Raleigh Express, Zebulon-Wendell-Raleigh Express (ZWX) and the Wake Forest-Raleigh Express (WRX). The Express routes run daily Monday thru Friday. Ridership data reviewed defines an increase in transit use since 2016. The ZWX route has historically had the highest ridership of the three routes that service the area. Ridership for ZWX has nearly doubled in 2019. The KRX bus route averaged 31 riders per month in 2019. Ridership peaked for the KRX route in April 2019 with an increase of nearly 20 percent. Figure 1 illustrates the recent historic ridership of these routes.

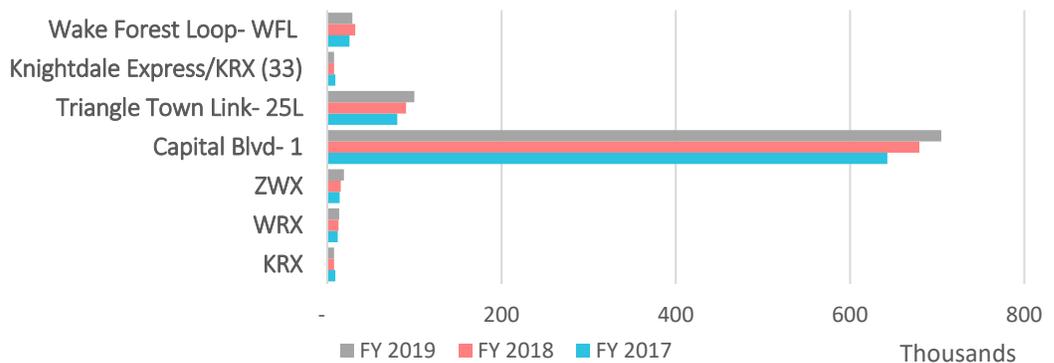


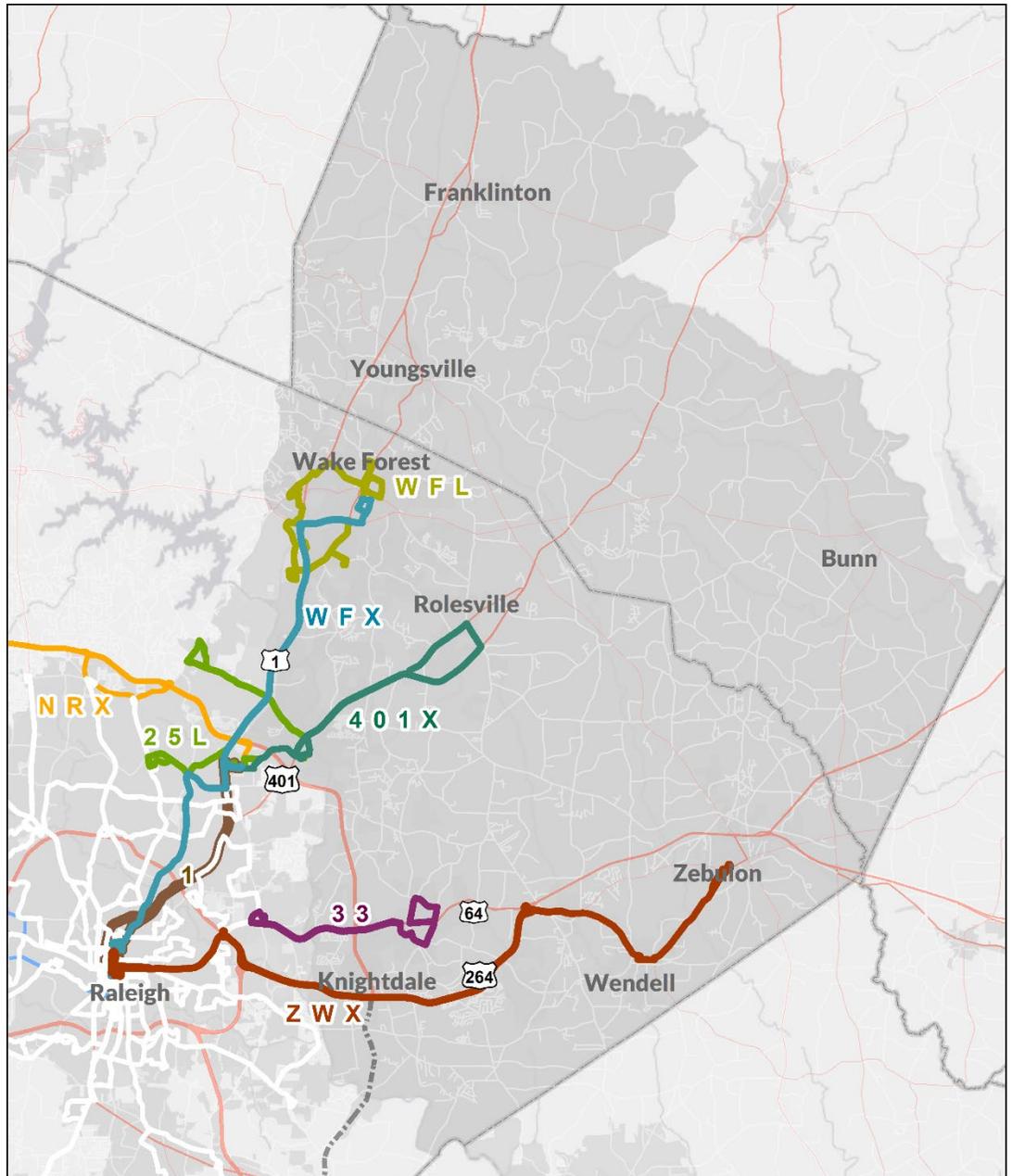
Figure 1. Boardings, FY2017 to FY2019 (note: Rolesville Express started service in October 2019)

**GoRaleigh.** Go Raleigh operates six bus routes including Rolesville 401x (started in October 2019), Knightdale 33 (formerly KRX), Triangle Town Link, Wake Forest Loop and Capital Boulevard (Route 1).

Figure 2 on the next two pages summarize in table and map forms the GoRaleigh and GoTriangle routes that service NEAS.

<b>Route</b>	<b>Service</b>	<b>Period</b>	<b>One-Way Fare</b>
<b>401X</b>	<b>Rolesville Express</b>	<b>Peak M-F</b>	<b>\$1.50</b>
Rolesville 401x (Monday-Friday 6am-8pm) Stops include: Triangle Town Center Mall at Orvis (Park and Ride), Wake Tech Community College – North, New Bethel Park & Ride, Rolesville Town Hall Park & Ride			
<b>25L</b>	<b>Triangle Town Link</b>	<b>Daily Sa-Su</b>	<b>\$1.25</b>
Triangle Town Link (Monday-Friday 5am-9pm) Stops include: Carlos Dr at Falls of the Neuse Rd, Wake Tech Community College – North, Durant Rd at Capital Blvd, Falls of Neuse Rd at Durant Rd (WakeMed North)			
<b>33</b>	<b>Knightdale Local</b>	<b>Daily M-F</b>	<b>\$1.25</b>
Knightdale 33 (Monday-Friday 6am-10pm) Stops include: New Hope Commons Walmart, Knightdale Blvd at Hinton Oaks Blvd (Rex Healthcare), N 1st Ave at Knightdale Station Run, Old Knight Rd at Knightdale Blvd			
<b>1</b>	<b>Capital Boulevard</b>	<b>Daily M-F</b>	<b>\$1.25</b>
Capital Blvd (Monday-Friday 4am-12am) Stops include: GoRaleigh Station, Capital Blvd at Brentwood Rd, Capital Blvd at Spring Forest Rd, Triangle Town Center Mall at Orvis (Park and Ride)			
<b>WFL</b>	<b>Wake Forest Loop</b>	<b>Daily M-F</b>	<b>FREE</b>
Wake Forest Loop (Monday-Friday 6am-8pm) Stops include: White St at Elm Ave, Forest Pines Dr at Kroger, WF Crossing Shopping Center at Lowes Foods, White St at Roosevelt Ave, White St at Elm Ave			
<b>WRX</b>	<b>Wake Forest Express</b>	<b>Commute M-F</b>	<b>\$3.00</b>
Wake Forest-Raleigh Express (Monday-Friday 6am-8pm) Stops include: Wilmington St at E Hargett St (GoRaleigh Station), Wilmington St at E Hargett St (GoRaleigh Station), Elm Ave at White St (Park-and-Ride)			
<b>ZWX</b>	<b>Zebulon-Wendell Exp.</b>	<b>Commute M-F</b>	<b>\$3.00</b>
Zebulon-Wendell- Raleigh Express (Monday-Friday 7am-7pm) Stops include: GoRaleigh Station – Salisbury St @ Lane St, New Bern Ave@ Wake Med, E 4 <sup>th</sup> St @ Wendell Park and Ride, Zebulon Park and Ride			
<b>NRX</b>	<b>North Raleigh Express</b>	<b>Commute M-F</b>	<b>\$3.00</b>
North Raleigh Express (Monday-Friday 7am-7pm) Stops include: GoTriangle Regional Transit Center (RTC) & RTP Connect, Bent Tree Plaza Park and Ride, Triangle Town Center Mall at Orvis (Park and Ride)			

Figure 2. Existing NEAS Transit Routes (including map, next page)



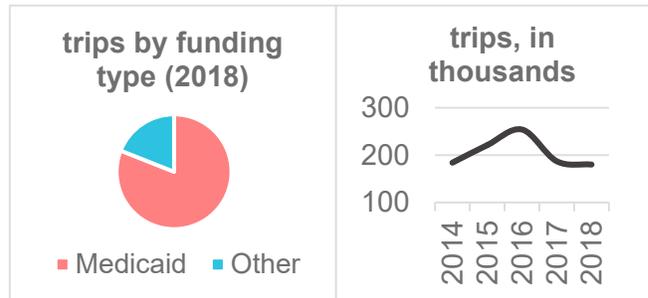
### Existing Fixed-Route Transit Service



J.S. Lane Company, LLC | 4/29/2020

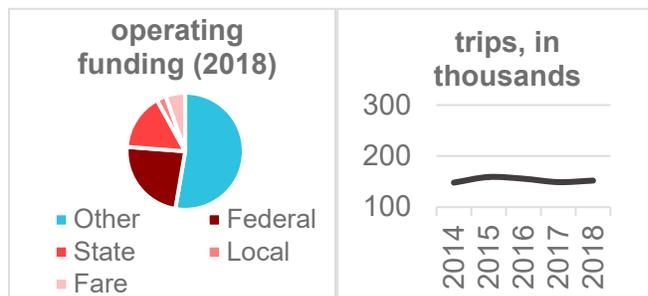


**Rural Transportation Services**



**GoWake Access.** GoWake Access (formally known as TRACS) provides door-to-door, shared-ride service for Wake County residents who are elderly, disabled and/or who participate in an eligible service. Service is provided Monday-Saturday from 6am-6pm. Fees for the service vary from \$2 to

\$4 per trip. GoWake Access has split Wake County into four zones, with the fee per ride dependent on the zones visited during the trip.



**KARTS.** The Kerr Area Transportation Authority is a rural transportation system providing trips for residents of Franklin, Granville, Vance and Warren Counties. Monday-Friday from 8am-5pm. Service requests should be made at least the day before and trip rates determined by mileage.

Recent data (2014 to 2018) obtained from the National Transit Database suggests that ridership on these services is relatively constant over that time period, with some variation for the GoWake Access service in 2015 and 2016.

## 2. Transit Plans Summary

The following is a list of relevant plans that pertain to the transit context or directly to service recommendations from organizations providing transit services in the NEAS planning boundary or are otherwise responsible for land use and complementary policy and financing decisions (municipalities and counties). Note that this list is not all-inclusive and is likely to expand, since some communities (e.g., Wendell and Rolesville) are updating planning documents now, and the Wake Transit Technology Plan was unavailable.

**Wake County Transit Plan.** In November 2016, voters in Wake County approved a half-cent tax referendum to support the expansion of transit operations. The anticipated revenue from the sales tax intends to expand bus routes, implement bus rapid transit and rail commuter service. The goals of transit expansion would provide a regional connection, connect all the areas within Wake County, provide reliable urban mobility, and enhance existing service. Since initial implementation in 2017 the following have been completed.

- Additional tax dollars allowed GoTriangle to continue the Zebulon-Wendell and Knightdale-Raleigh Express routes.
- GoTriangle and GoRaleigh expanded the frequency of bus services adding additional coverage and more frequent service routes.
- GoWake Access expanded its service area and increased trips for eligible residents.
- GoRaleigh has started planning for additional bus stop locations and sidewalk projects to provide additional access.
- GoTriangle and GoRaleigh added new buses to its fleets.
- Planning studies were initiated to understand the feasibility of bus rapid transit in Wake County. New Bern Avenue, Capital Boulevard, South Wilmington Street, and Western Boulevard have been identified as needing dedicated bus lanes.
- Commuter rail studies were completed to understand the benefits of the service in the Triangle area. The first study (Major Investment Study) identified a 37-mile corridor from Orange County to Johnston County. The second study (Greater Triangle Commuter Rail Study) analyzed the need for additional infrastructure and funding needs for implementing commuter rail in the area. Future studies are planned to evaluate risks and engage communities to gather feedback to update the commuter rail plans.

The tax referendum is expected to continue to fund additional transit projects relevant to the NEAS planning boundary. The current *Wake County Transit Plan 2020 Work Plan* builds on services implemented in 2019 by utilizing new buses purchased, working towards investing in commuter rail services and completing planning studies on additional needs for the area. The special tax revenues are anticipated to incur over \$107 million to help fund area transit services. The current work plan identifies the following:

- Allocation of additional \$214,000 to the Town of Wake Forest to enhance the one-way Wake Forest Loop circulator;
- GoWake Access will receive \$87,000 to provide additional trips to areas not currently served; and
- Changes on Route 201 which currently utilizes Spring Forest Road and Millbrook Road (not in the NEAS study area) to instead utilize I-540 to provide service to Triangle Town Center.

**Knightdale Comprehensive Plan.** The *Knightdale Comprehensive Plan* recommends increasing frequency of peak period bus service to the Town. The Town also plans to redevelop areas to include densities that support more frequent bus trips. The Plan identifies utilizing the existing rail corridor for future rail commuter service and U.S. 64 Business for bus rapid transit.

**Rolesville Comprehensive Plan.** The Rolesville Comprehensive Plan recommends a future Park-and-Ride service from Rolesville to Raleigh. The Plan also includes recommendations for Rolesville leaders to work with Wake Forest leadership to develop a route that connects the two towns.

**Wake County Plan Vision Update.** Since the original *Wake County Transit Plan*, local leaders have collaborated to update the Plan to provide an assessment of the transit market. The goal of the Plan was to reassess the demand for transit services and to evaluate the specific needs and emerging opportunities for investments. Factors considered in the study included demographics, development patterns, travel flows, and identifying activity centers. The analysis concluded that population in Wake County has increased significantly since 2010 and will continue to increase past 2035. The transit demand showed strongest in and around Downtown Raleigh and along the major corridors leading to and from Raleigh. The data included in the market analysis indicated that there is a need for improved transit service countywide. Future transit work plan should utilize the market assessment to plan for more reliable service for the growing population.

**Wake Forest Transportation Plan.** The *Wake Forest Transportation Plan* identifies work with GoRaleigh staff to recommend a future transit route from downtown Wake Forest to WakeMed North Hospital and then to downtown Raleigh. Funding for this route would result from the Wake County Transit Tax. Part of this Plan and already implemented is a counterclockwise loop service to complement the existing Wake Forest Loop service. The Plan also identifies a proposed rail commuter service between Raleigh and Wake Forest utilizing the existing rail line.

**Wake County Northeastern Microtransit Service Plan.** Wake County will be completing a study in late 2020 to assist in developing a strategy to integrate microtransit services into the rural areas of Northeastern Wake County, funded in part by a recent awarded grant from the Federal Transit Administration. Demographics highlight a need for additional transportation options for residents living in the lower-density and suburban areas of NEAS. The implementation of on demand transit service would provide access to jobs, healthcare, and education opportunities. The Plan will include a detailed operations and

budget plan; projected ridership and revenues; as well as recommendations to implement on-demand transit service to residents in Northeastern Wake County.

### **3. Directions for Transit Recommendations**

The following is a discussion of preliminary directions for future transit recommendations, all of which will need to be integrated into the rest of the Northeast Area Study Update process. A portion of this discussion is based on the Market Analysis: Wake Transit Plan Vision Update (March 12, 2020) and a recent survey of public attitudes towards transit service. In the case of the latter, the “raw” data was obtained from the original consultant and used to help delineate (to the degree that the sample frame would allow) differences between the NEAS planning area and the rest of Wake County. Additional information was obtained through ESRI Business Analyst Online (BAO) to help supplement the assessment for the NEAS portion of Franklin County.

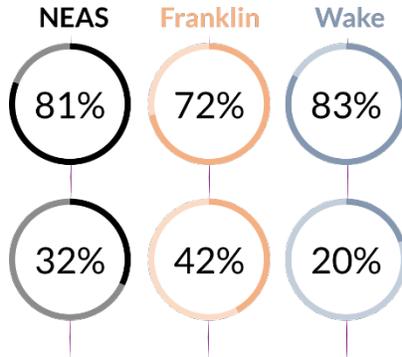
Additional information came from a NEAS Transit Coordination Meeting conducted on March 27, 2020 with transit staff from CAMPO, City of Raleigh, GoTriangle, and Wake / Franklin counties that met to discuss future transit needs for the study area. The purpose of the meeting was to review current policies and programs to ensure they represent the current needs of the population. Several recommendations were discussed for potential bus rapid transit routes, future stops (including park-and-ride locations), and areas to include for potential, future service. A few of the recommendations included additions of park-and-ride locations in Franklin County and bus rapid transit service along US 401 and Capital Boulevard.

It should also be noted that a 2030 – 2033 update to the Wake Transit Plan is being formulated now. This plan (NEAS) is likely to provide recommendations past 2033 as well as policy or program recommendations that aren’t likely to be a part of any existing planning framework that covers the entire study area.

### **Market for Transit in NEAS**

The Northeast Area is comprised of eastern Wake and southeastern Franklin counties, both of which have several municipalities generally separated by low-density suburban and rural development. Key corridors like US Highway 64, US Highway 401, and US Highway 1 (Capital Boulevard) do provide higher-density employment and residential concentrations along their length that connect a number of these communities together.

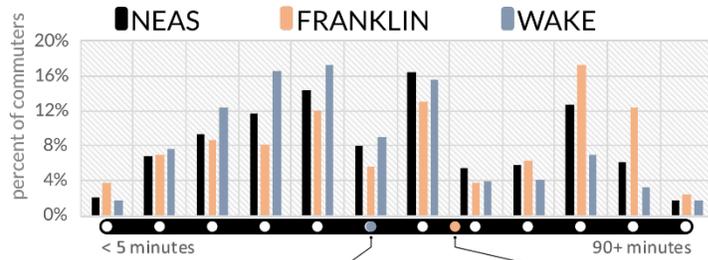
Figure 3 on the following page illustrates some key differences between the NEAS planning area, Wake County, and Franklin County. The transit/land use relationships are based on *Market Analysis, Wake Transit Plan Vision Update*, (March 12, 2020). Not surprisingly, land use densities alone suggest that viable transit service needs to be focused on major corridors or demand-responsive systems. It should be noted that some areas of NEAS exceed 15 or even 30 residents per acre, particularly along major highway corridors within the study area.



Households with Internet Subscription

As public transportation, like many services, is increasingly dependent on micro-scale transactions enabled through computers and cell phones, it's important to understand the NEAS and surrounding markets. About 2/3 of residents in these areas have cell phones.

Commute Time to Work Over 35 Minutes



Wake (25 mins.) and Franklin (33 mins.) average commute times

Commute times vary widely across NEAS and the two surrounding counties of Wake and Franklin. Average commute time for Wake County is substantially shorter than that for Franklin, with jobs and housing tending to be in closer proximity to each other. It's likely that this relationship holds true for some other trips as well, like retail and grocery shopping.

Information on land use-transit thresholds based on the Wake Transit Plan Vision Update Market Analysis.

population / jobs per acre	transit service	frequency (mins.)
45 / 25	Passenger Rail / BRT	10
30 / 15	BRT / Express-Enhanced Bus	15
15 / 10	Local Bus / Express Bus	30
10 / 5	Local Bus / Micro-Transit	60
2 / 2	Micro-Transit / Rideshare	60+
<2 / <2	Door-to-Door / Rideshare	Book

An oversimplification of transit-compatible land uses, but one that still holds true in many cases, the density of jobs or residents provides an indication of the type and frequency of transit services that are cost-feasible.

At bottom is a chart showing the population and jobs in NEAS, Franklin, and Wake now as well as 2050 based on recent population growth trends. Measuring density just around transit stations is a better indicator of service.

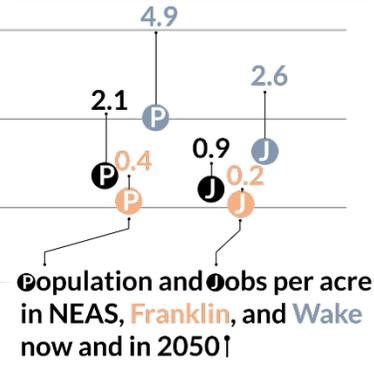
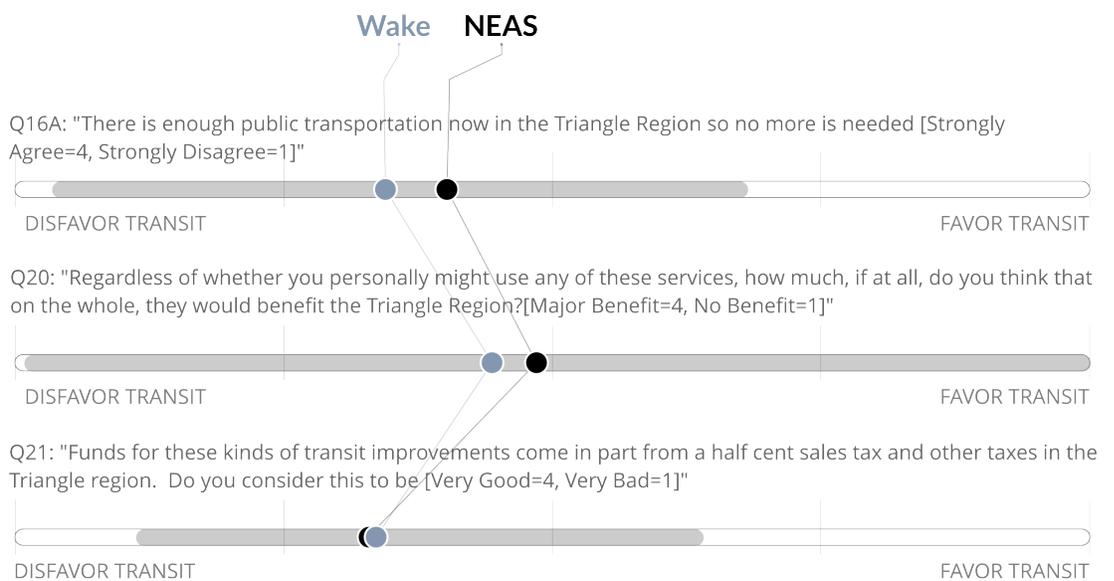


Figure 3. Transit-Relevant Descriptors of NEAS, Wake County, and Franklin County

A survey conducted across the three-county Triangle Region (Wake, Durham, and Orange counties) was obtained to help ascertain differences between the Wake County respondents (n=500) and NEAS-areas respondents (n=178). In fact, Wake County as a whole and the zip codes that touch the NEAS planning area boundary share similar attitudes about transit, with the NEAS-area respondents favoring public transportation service and investments slightly more than Wake County as a whole. Usage of peer-to-peer car sharing services Uber and Lyft were less similar, with more people citing usage of a service in the past 30 days in Wake County as a whole compared to the NEAS-area respondents. When such a service was used by a respondent, there was a slight tendency to cite higher frequencies of use. [Figure 4](#) provides a graphic summary of the responses for these survey questions.

**Favor or Disfavor Public Transportation Use and Investment (survey responses)**



**Have NOT used Uber or Lyft in the Past 30 Days**

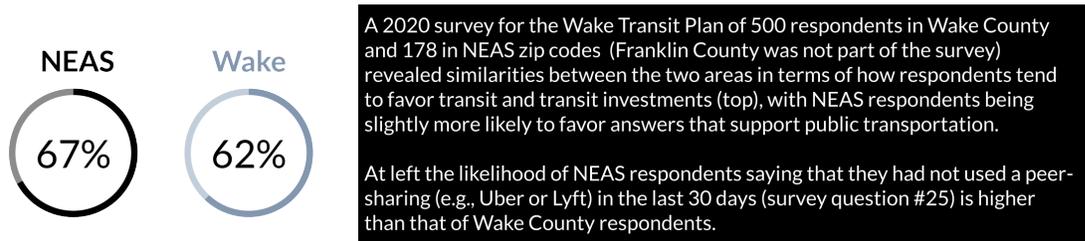


Figure 4. Transit Attitudinal Survey Results, Wake County and NEAS

A market analysis for transit was performed for GoForward (March 2020) covering the traditional Triangle Region (Wake, Durham, and Orange counties). The keystone of the market analysis was producing a “transit propensity” for subareas. The units of geography were traffic analysis zones (TAZs) and the accompanying population and employment figures and forecasts for 2013 (base year), 2025, 2035, and 2045 (model horizon or forecast years). The population and employment forecasts used in the TRM (Triangle Regional Model) have a high level of importance, in part because of the rigorous nature of their development and review that has improved with each successive iteration of the modeling program for nearly three decades, but also because these forecasts are at a relatively fine level of geography and are reviewed by the individual communities in the modeling area. The TRM includes Franklin County and all of NEAS.

While it was not possible to emulate the exact methodology used in the *Wake Transit Plan Vision Update Market Analysis* report, it is possible to approximate them using readily available US Census data (in this case, five-year American Community Survey, or ACS, summary files for Census block group geography). The general procedure used is described in brief in the text box. The results are mapped for the model base year (2013 and 2018 data sets), as well as an indicator of relative, potential change across the NEAS planning area in [Figure 5](#). Changes and differences in areas tend to be exaggerated based on the display model chosen for the map to heighten contrast.

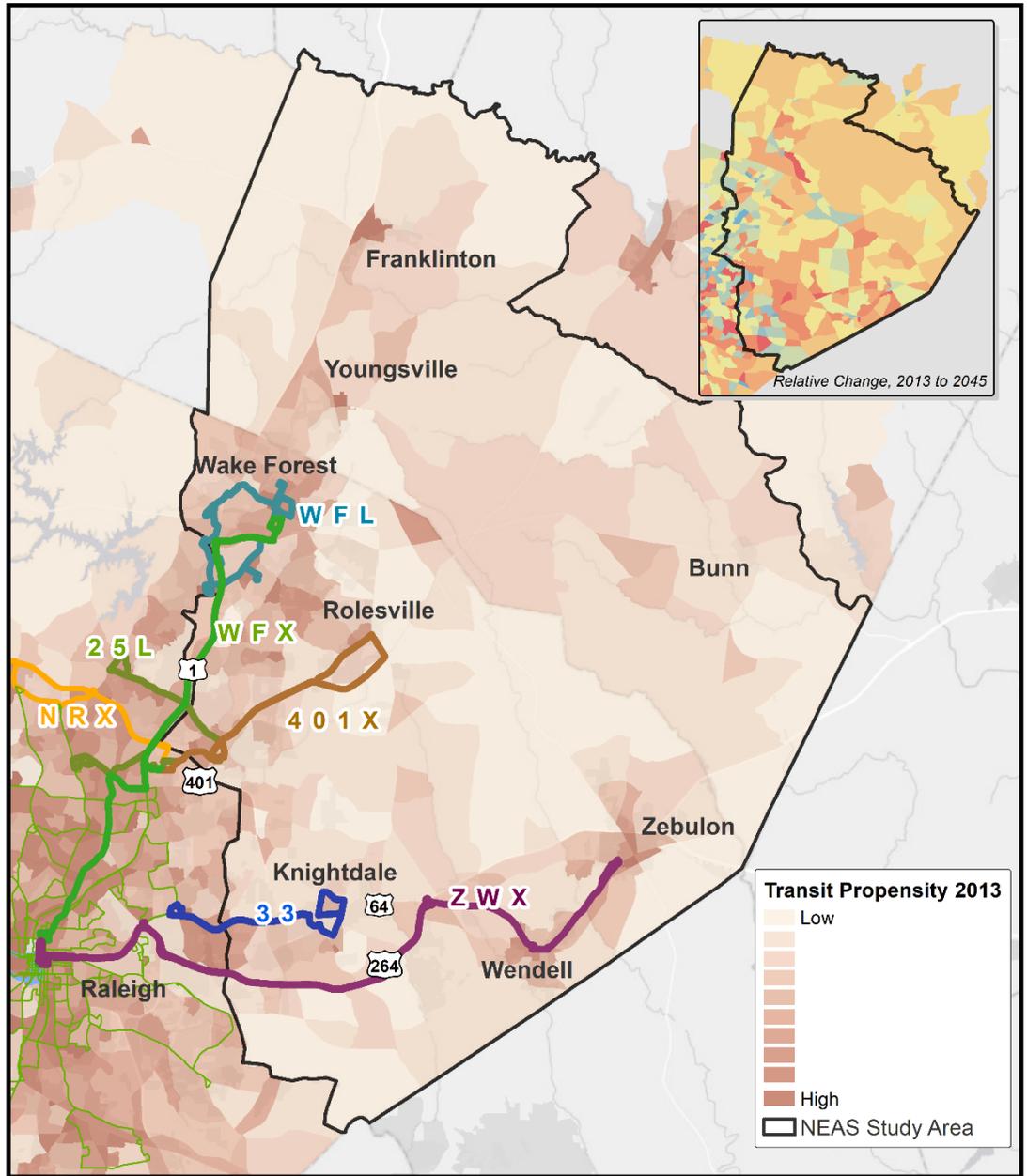
As expected, corridors with high population growth exhibit positive (relative) changes for additional transit capacity – although the overall propensity remains low and reflects population and employment growth rates in these corridors. Observations include:

1. There is an increasing propensity for transit between Wake Forest and Rolesville.
2. Existing transit routes service most of the higher-propensity areas in NEAS.
3. Corridors are key: high-propensity mirrors US 1, US 401, and US 64 corridors.

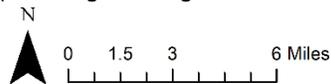
There are limitations to this approach including the relative age of some data, rate of growth / change in some areas of NEAS, and level of granularity of some data (e.g., car ownership and percent living in poverty).

### **Methodology for Developing Transit Propensity**

1. Create joint TAZ / block group geography in ArcGIS™ by merging the two polygon files together, then export to MS-Excel™ for development. Use only TAZs / block groups near to existing transit for this and future steps.
2. Using the “LOOKUP” function, tag each TAZ with Census data for percent living in poverty and car ownership (adding 3, 4, and 5+ car households into one field).
3. Based on the results of regression modeling, use the t-statistic values to weight each variable in the formula: *Transit Propensity* =  $(12.22 * Car0) + (1.45 * Car1) + (4.37 * PctPvrty) + (0.43 * Pop) + (0.28 * Emp) + (0.67 * Service-Low) + (1.44 * AvgBlckLength)$ .
4. Normalize all values from 0 (lowest) to 100 (highest) to account for differences in units in employment, population, percent poverty, etc.
5. Using the “JOIN” function in ArcMap, re-join the spreadsheet data (with fields named to ESRI limitations) back to the TAZ polygon file.
6. Mapping is accomplished by quantile breakouts across 10 categories and normalized by TAZ area (important).



**Transit Propensity**  
(showing existing transit routes)



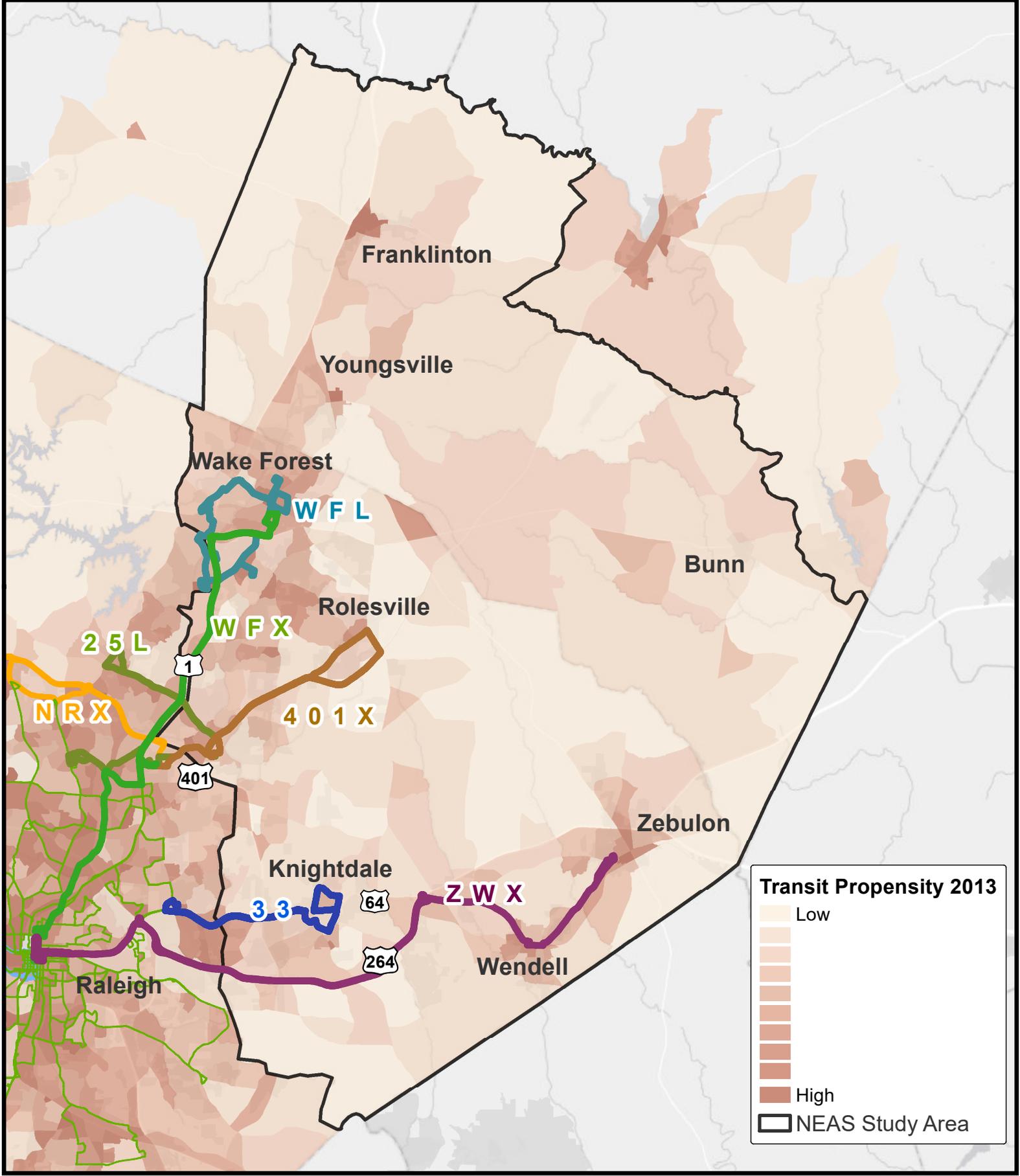
This map indicates relative propensity for public transit usage from 2013 to 2045 using U.S. Census (2018 five-year ACS) and population & employment forecasts from the Triangle Regional Model (v6). Zero-car households (weighted heavily), percent living in poverty, and average block length were static across all years. Formula (normalized by individual variable and land area):  $Transit\ Propensity = (12.22 * Car0) + (1.45 * Car1) + (4.37 * PctPrty) + (0.43 * Pop) + (0.28 * Emp) + (0.67 * SrLow) + (-1.44 * AvgBlckL)$

Figure 5. Transit Propensity.

**Conclusions and Directions for NEAS Transit**

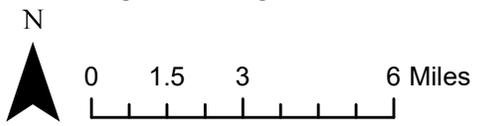
The following summarizes a set of directions for developing recommendations to be considered for inclusion into the NEAS Update project. These directions are based on a review of the current planning and available data obtained from several sources.

1. Focus on Corridors for Fixed-Route Transit and Measures of Effectiveness (MOE). In addition to the Triangle Regional Model transit allocation element, population and employment densities in the vicinity of station areas should be used to evaluate potential services. The Market Assessment for the Wake Transit Plan Update suggests a half-mile radius for walking; an additional two-mile radius for drive-to station ridership is also recommended for capturing potential riders. Such an evaluation should feed into the policy recommendations and Policy Guidebook as well to reinforce the connection between density variables and public policy in the vicinity of transit stations.
2. In addition to population and employment densities, how the design of a station area supports access to public transportation or presents barriers is also of concern when evaluating potential transit services. Ideally, a metric that is readily available like Walk Score (which has its own set of limitations) can be used for a broad-brush examination, but a more detailed look at station areas and how pedestrian, bicycle, and parking accommodations may support fixed-route public transportation services can create additional, micro-scale project recommendations for NEAS.
3. The large areal extent of NEAS (435 square miles, larger than 45 of North Carolina's 100 counties) combined with the predominant low-density suburban and rural development patterns suggest that a few fixed-route services with 60-minute headways is a reasonable goal for the near-term. As the horizon years extend, the recommendations should support increasing the quality / performance of the fixed-route services, perhaps to enhanced express and bus rapid transit (BRT) service in major corridors.
4. The propensity of NEAS-area residents to have cell phones or support public transportation is not substantially different than Wake County as a whole, and it is likely the same is true for the portion of Franklin County within the NEAS planning boundary even though recent survey work did not include those residents. The corridor-based services mentioned previously should therefore be supplemented with node-based, on-demand service or demand-responsive deviated services taking advantage of micro-scale interactions with customers and evolving mobility-as-a-service (MaaS) concepts that rely on information and seamless multimodal transfers to reach new markets.
5. Respecting connectivity between land policies, programmatic elements, technology advances, public preferences, and private sector market trends and credit markets should also be a part of the development of public transportation recommendations.

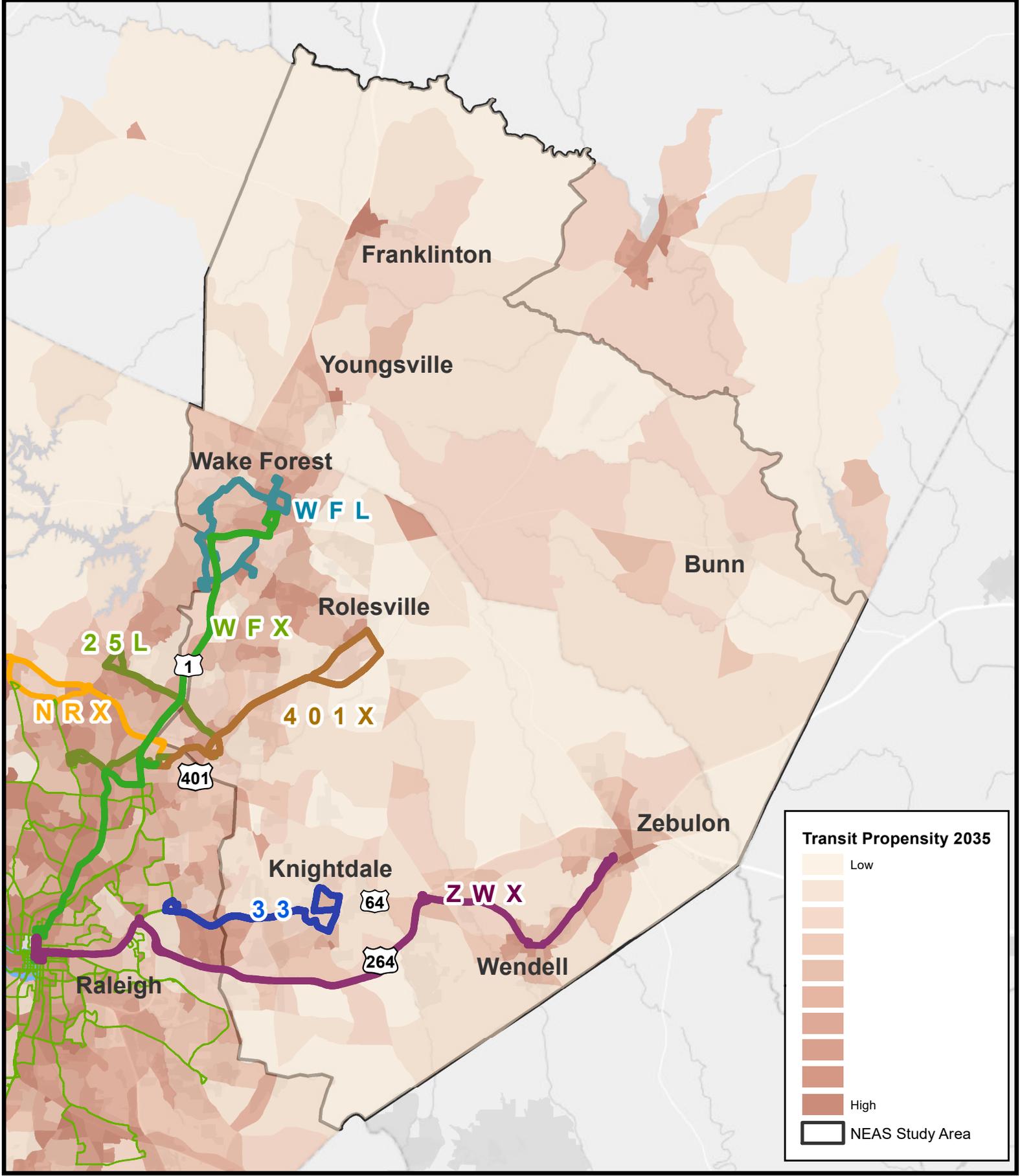


# Transit Propensity

(showing existing transit routes)

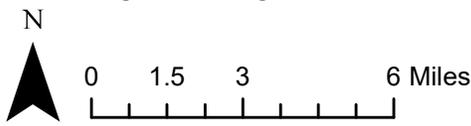


This map indicates relative propensity for public transit usage in 2013 using U.S. Census (2018 five-year ACS) and population & employment forecasts from the Triangle Regional Model (v6). Zero-car households (weighted heavily), percent living in poverty, and average block length were static across all years. Formula (normalized by individual variable and land area):  $Transit\ Propensity = (12.22 * Car0) + (1.45 * Car1) + (4.37 * PctPvrty) + (0.43 * Pop) + (0.28 * Emp) + (0.67 * SrLow) + (-1.44 * AvgBlckL)$ .



# Transit Propensity 2035

(showing existing transit routes)



This map indicates relative propensity for public transit usage in 2035 using U.S. Census (2018 five-year ACS) and population & employment forecasts from the Triangle Regional Model (v6). Zero-car households (weighted heavily), percent living in poverty, and average block length were static across all years. Formula (normalized by individual variable and land area):  $Transit\ Propensity = (12.22 * Car0) + (1.45 * Car1) + (4.37 * PctPvrty) + (0.43 * Pop) + (0.28 * Emp) + (0.67 * SrLow) + (-1.44 * AvgBlckL)$ .



APPENDIX  
**Public Engagement** **B**



Brandon Watson  
Transportation Planner  
Capital Area Metropolitan Planning Agency  
421 Fayetteville St,  
Raleigh, NC 27601

Mr. Watson,

Our organization is excited to support the work taking place regionally to enhance pedestrian and cycling connectivity as part of the Capital Area Metropolitan Planning Agency's work with the Northeast Area Study Update. Oaks and Spokes is an established advocacy organization that has been in our community since 2012 with the intent of advancing people powered mobility options in Raleigh and the greater region. We have the following feedback on this draft plan:

Any planned infrastructure for this corridor should be all ages and abilities. Especially as it relates to corridors where traffic may travel at higher speeds, it is absolutely crucial to ensure the safety of all road users. Specific portions of the plan call for wide shoulders to be used on selected corridors, and although this may appeal to specific riders, we believe that it is critical that any planned transportation investments create infrastructure that someone from 8 to 80 would be comfortable riding. From an equity and sustainability perspective, we must elevate our transportation model to better incorporate more road users.

Other additional guidance we would provide during this portion of public comment include:

- Enhancing connectivity to existing and planned greenway segments throughout the corridor. We need to both work to actively connect into what is already there, while strategically adding corridors and capacity for new greenways to establish safer routes for commuting and recreation for the Wake Forest and Wendell/Zebulon regions
- Staff should work to identify high crash corridors and recommend new bike facilities to separate vehicles and bicycle traffic
- Staff should work to identify sidewalks gaps for pedestrian safety - within urban, mixed use environments and within 1/2 mile of all transit facilities
- Continue to identify opportunities for a "Rails *with* Trails" bike routes along the Carolina Coast Railway route through Knightdale and Wendell and S-line corridor from Raleigh to Wake Forest
- Consider tactical projects to help provide near term solutions for communities to experience investments in a shorter time scale. Oaks and Spokes has partnered with communities on past activations and would love to support these efforts

We believe that a healthier and happier population will result from a transportation network that is people oriented by design. As we commit to long term strategic planning processes within our community, it is essential that we come at the process with the most elevated tools we have for achieving better outcomes. We appreciate the opportunity to provide feedback and appreciate your leadership in helping our community to build back better to create greater outcomes.

Respectfully,

Mary Sell

A handwritten signature in cursive script that reads "Mary Sell".

Interim Executive Director  
Oaks and Spokes

Station	with the recommended improvements you've seen?	Are we missing anything? Leave your feedback below.
Walking & Bicycling	Yes	Even with dedicated lanes and other enhancements, <b>safety</b> will continue to be an issue on many busy
Walking & Bicycling	Yes	I don't see how you can make 401/Leesville Rd an urban "complete street." This is a traffic sewer designed to be - and used - as a highway between Rollesville and North Raleigh. Any walking and biking infrastructure here must be segregated and protected from drivers, many who speed in excess of 65
Walking & Bicycling	No	<b>I am against biking improvements</b> . Motor vehicles are paying taxes on roads and just about ALL folks in these communities have to use their cars to get to work, shop, etc. I believe all the tax dollars should go towards improving roads and congested intersections. Biking is a form of exercise & a hobby. When bikers pay as many dollars in road improvements, then they can have road improvements geared
Walking & Bicycling	Maybe	Hard to tell what's new and what's just been pulled from another plan
Walking & Bicycling	Yes	<b>There should be an emphasis on connectivity with residential subdivisions to have walkable access to</b>
Walking & Bicycling	Yes	The <b>more connections to existing greenways</b> the better. The northeast side of the Neuse River has been missing out on using the Neuse River Trail System because it's on the other side of the river. There are so many neighborhoods that are close but cannot access, so adding more connections is needed.
Walking & Bicycling	Maybe	I see no plans to <b>ensure students are able to walk or bike to their locally zoned schools</b> . Here in Wake Forest my son lives less than 5 minutes drive from his school. But cannot walk or bike there. Also ensure residents can walk or bike to local shopping areas. All streets should be walk and bike friendly, this plan
Walking & Bicycling	Yes	
Walking & Bicycling	Yes	We need <b>more walking and biking improvements on major thoroughfares</b> - not just greenways especially if you want people to use these thoroughfares for getting to work. Direct access.
Walking & Bicycling	No	<b>Roads first</b>
Walking & Bicycling	Maybe	
Walking & Bicycling	Yes	<b>Overall looks good.</b>
Walking & Bicycling	Maybe	Some of the roads indicated for redesign to accommodate bikers are not ideal. Those of us who live and drive on curvy country roads don't want them redesigned to accommodate bikes. The roads weren't meant for that, and they should remain the way they are. Specifically in mind right now are Oak Grove Church Road and Averette Road in northeastern Wake Forest. Please leave roads such as these as they
Walking & Bicycling	Yes	The Greenway following the RR tracks thru Wake Forest and north is <b>not a good idea</b> . Those tracks are in the SE High speed rail corridor and it should be used only for that. The <b>Richland Creek GW going North</b> , then a spur to Youngsville is a good idea, then connect it to the NRT. Connecting <b>Young and Flaherty parks in WF</b> is a good idea. Smith Creek GW north from the Reservoir would be a good connection to Youngsville, but the priority should be the <b>connection to the Neuse River Trail</b> . 1 of the 2 routes between Zebulon and Wendell would be a good idea. A more direct <b>connection from the Wake</b>
Walking & Bicycling	Yes	
Walking & Bicycling	Yes	
Roadways	Yes	
Roadways	No	No mention of <b>interconnection of other trails</b> to allow bike commuting and reduction of congestion
Roadways	Yes	<b>Way too much emphasis on cars</b> and improvements for them - spend money elsewhere!
Roadways	No	I am concerned with <b>increased neighborhood traffic</b> in Pine Hall Plantation due to Skycrest Road extension (Project A161a). Pine Hall Wynd will become a shortcut to Headingham neighborhood(s), much like Valley Stream Dr. is a shortcut from Louisburg Rd to Buffalo Road/Southall Rd. Pine Hall Wynd
Roadways	No	<b>Many more roads require widening and improved traffic controls</b> . The intersection of grasshopper and Stone Wealth Drive requires a three way stop. I would like to see additional community opportunity for
Roadways	No	<b>Why don't you complete the connection for Virginia Water to go all the out to Main Street in Rolesville?</b>
Roadways	Yes	The <b>North Youngsville bypass should be a high priority</b> . Also, the Harris Rd extension in WF should be
Roadways	No	You are adding roads ovetop of existing houses, adding roads that are neither needed nor wanted in rural areas, and <b>making connections that are completely unnecessary</b> . Also, some of your maps are not updated. There are neighborhoods being built that have included paved and named roads for more than a year, yet you don't show them at all. <b>Please stop trying to urbanize rural areas--we don't want it!!</b>
Roadways		Plan should consider <b>alternate means of fueling vehicles</b> , such as charging stations.
Roadways		East/West connector around Youngsville is needed, either to the north or south from NC 96 to US 1.
Roadways	No	I disagree with how the plan is restricted to Wake Forest and points east. There is <b>ONLY ONE primary access route to Durham from Wake Forest - Rte 98</b> . This route is also 1 of 2 routes to RTP. The traffic conditions and road noise along Rte 98, particularly from Capital Blvd to Creedmore Rd, is absolutely unbearable and needs to be addressed. I understand that there is a separate study (CAMPO); however I do not see how you can focus the NEAS study on addressing the problems created by the explosive growth in Wake Forest, Rolesville, and Youngsville without recognizing that this growth is directly responsible (in part) for the deplorable traffic conditions on the length of 98 I identified. Please consider

Transit	Yes	Two quick points: First, I'm not sure the average person would know what "BRT" is and I don't see that defined anywhere. Secondly, I always find myself taking the posture of what I presume may be the typical, car owning resident - <b>what about this plan may persuade me to view transit differently ?</b>
Transit	Yes	<b>How can rail service connect to the jobs in the RTP area instead of just downtown Raleigh?</b>
Transit	Yes	
Transit	Yes	Currently you must change buses at the Walmart on New Bern Ave. to reach downtown Raleigh from Knightdale. There should be an <b>express services or full bus service down New Bern Ave</b> for ease of
Transit	Yes	<b>Commuter rail service to Knightdale/Wendell/Zebulon should be considered utilizing existing rights of</b>
Transit	Yes	
Transit	Yes	Will there be <b>adequate parking for those residents</b> who are not near a bus line and would have to drive to get to a route? There are a lot of locations that are not helped by these bus routes.
Transit	Yes	Improve <b>transit opportunities up US 401 to Louisburg</b> . Up NC 56 between Louisburg and Franklinton
Transit	No	The <b>high speed rail project needs to completely avoid Wake Forest/Youngsville</b> . As is planned, it will bisect our town, closing intersections that are vital to our transportation. The high speed rail brings absolutely ZERO benefit to the citizens of our town. Our citizens shouldn't suffer daily frustrations and small business closings (due to proximity of existing buildings to the railroad) simply to help those in
Transit	Yes	Extending the BRT lines to Wake Forest and Knightdale are good ideas, then that ridership would be enhanced with the East side Circular, getting more people to WF and Kdale. The <b>High Speed Rail to</b>
Transit		<b>Eastern Regional Center in Zebulon</b> needs bus service
Transit		Transit service is needed for people that live in smaller communities rather than just one express route
Transit	Yes	
Transit	Yes	I would love the train from our area into Raleigh.

%	
60%	Yes
10%	Maybe
21%	No
10%	Blank

# Public Engagement Efforts

## Digital Outreach – April 15<sup>th</sup> – July 31<sup>st</sup>

- Interactive Web Map
- Online Survey

## Virtual Discussions

- Stakeholder Interviews – May 21<sup>st</sup> – 22<sup>nd</sup>
- Public Symposium – June 9<sup>th</sup> and 13<sup>th</sup>
- Core Technical Team

## Guiding Principles

- Feedback from above will guide our next steps



Interactive Web Map

Digital Outreach

# What have we heard?

*"Redevelop as niche airport or industrial use" – Raleigh East Airport, US 64 Bus*

*"Protect Little Creek and add greenway"*

*"Historical site, ideal for regional park" - Clifton's Pond*

*"Regional transit hub for GoRaleigh, GoTriangle" – US 64 @ I-540*

*"Redevelopment underway along Main Street" - Franklinton*

*"Need a food store here" – Poole Rd @ Hodge Rd, Knightdale*

*"Live/Work/Play model is possible near Knightdale Station, and (former) Square D Plant"*

*"Protect agricultural areas"*

*"Redevelop Steeple Square Shopping Center" Knightdale*

*"Bridge needs bicycle lanes and sidewalk" – Buffaloe Rd over Neuse River*

*"Joyner Park" – Wake Forest*

*"Upgrade pedestrian facilities along US-64 Bus"*

Add Comments

Select a template to create features

Points of Interest

- Destination You Visit Often
- Significant Change Since 2015
- Redevelopment Potential
- Protect This Area

Issues To Be Addressed

- Barrier to Biking or Walking
- Intersection Needs Improving
- Safety or Speeding Issues
- Traffic Congestion
- Other



# Interactive Map Points

Summary of points by type

28%

Intersection Improvement

16%

Barrier to Biking or Walking

9%

Traffic Congestion

23%

Other (widen, bypass, rail)

8%

Protect this Area

6%

Safety or Speeding Issue

4%

Destination You Visit Often

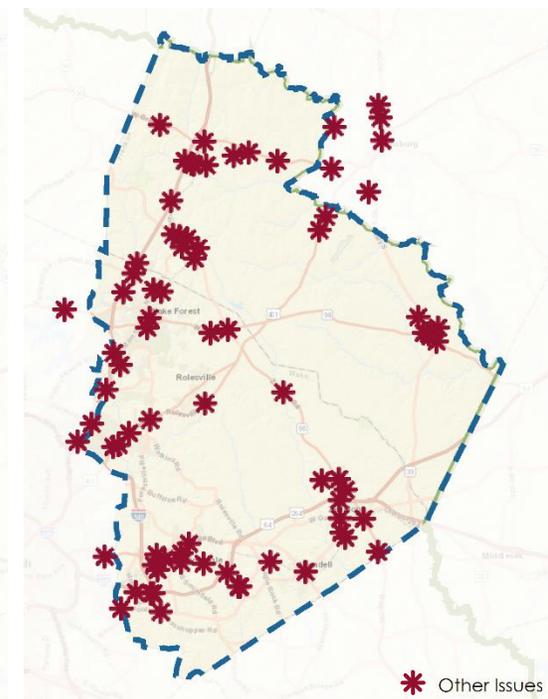
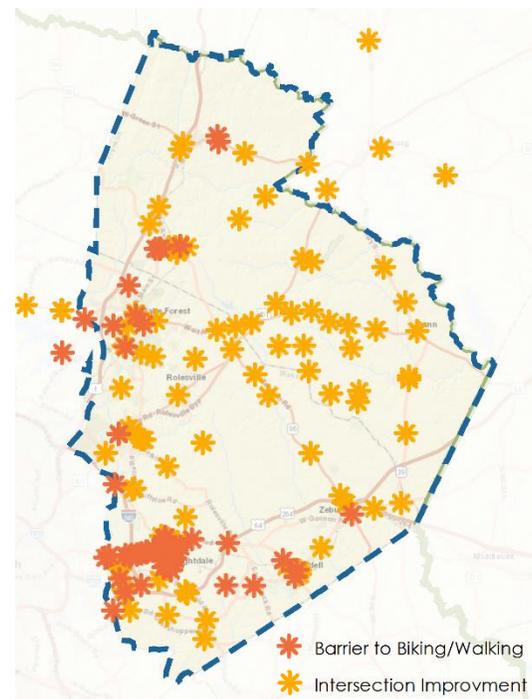
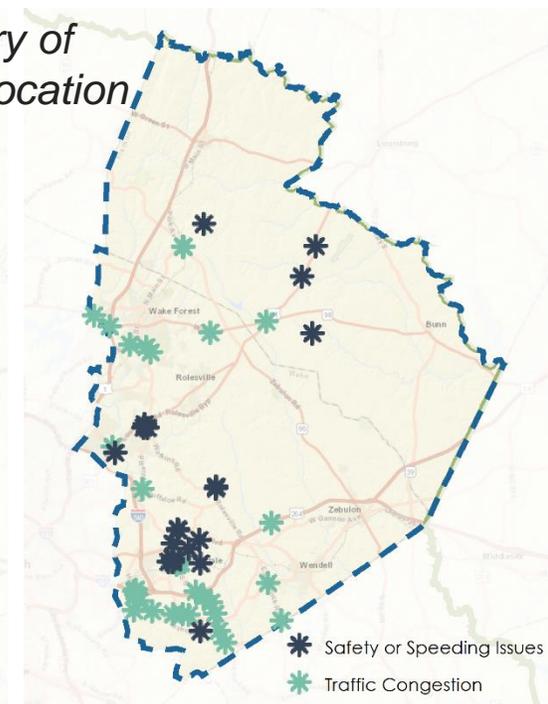
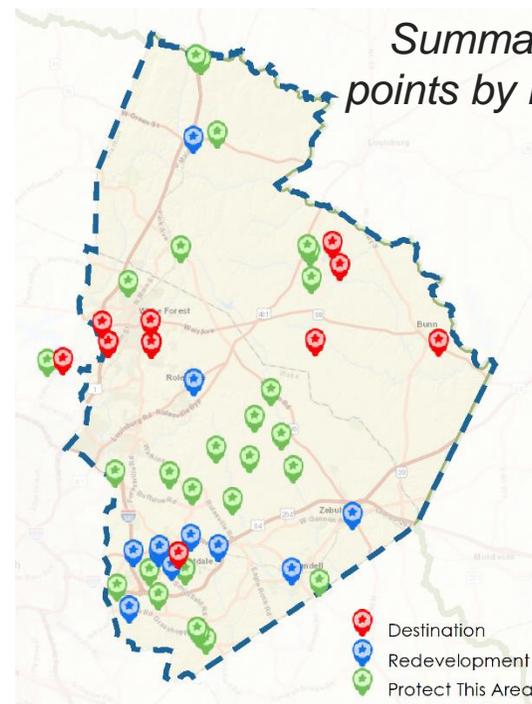
3%

Significant Change Since 2015

3%

Redevelopment Potential

Summary of points by location



Online Survey

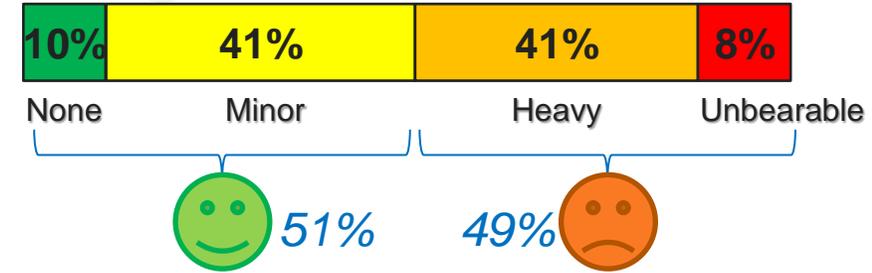
Digital Outreach

Survey Respondents

## Most critical **transportation** problem

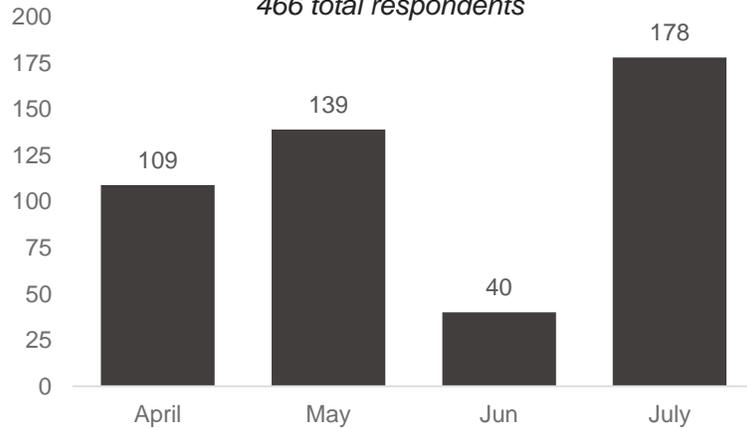
- Roadway congestion (37%)
- Lack of sidewalks (19%)
- Lack of quality transit (15%)
- Safety/crashes (12%)
- Lack of bike lanes/trails (10%)

## Congestion level on a typical day

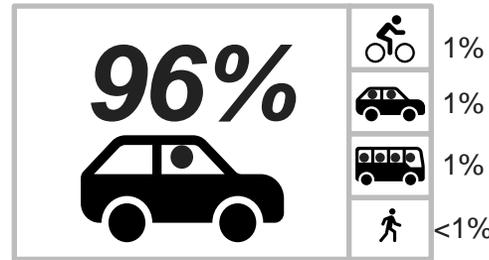


## Survey Participants by Month

466 total respondents



## Primary mode of transportation



## Strategies for **Bicycling**

- Greenways/sidepaths (24%)
- Separated bike lanes (24%)
- Bike lanes (14%)
- Destinations (10%)
- Regional connections (9%)
- Safe crossings (8%)

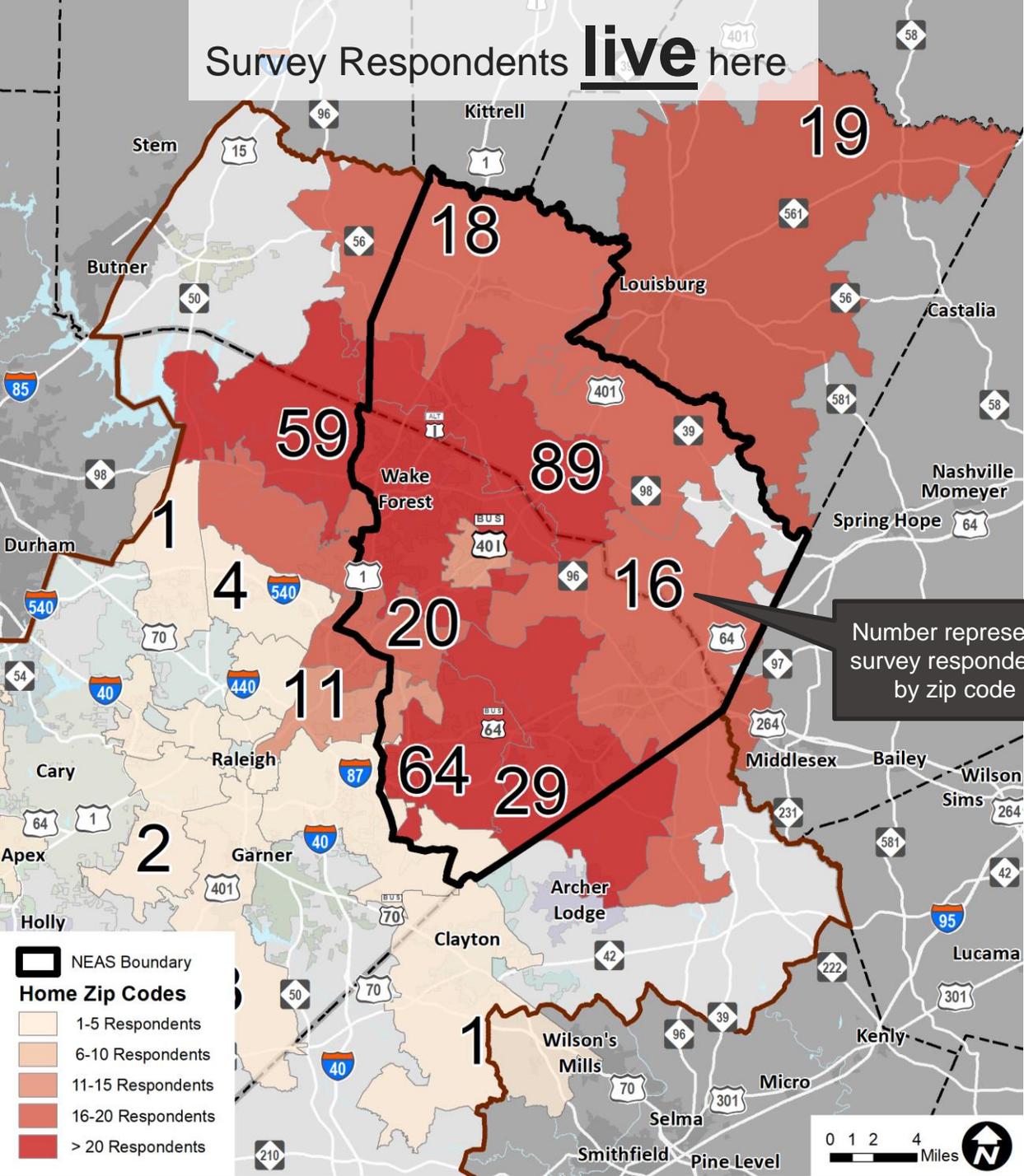
## Strategies for **Transit**

- More places/destinations (22%)
- Convenience to home (22%)
- Speed of service (18%)
- Increased frequency (13%)

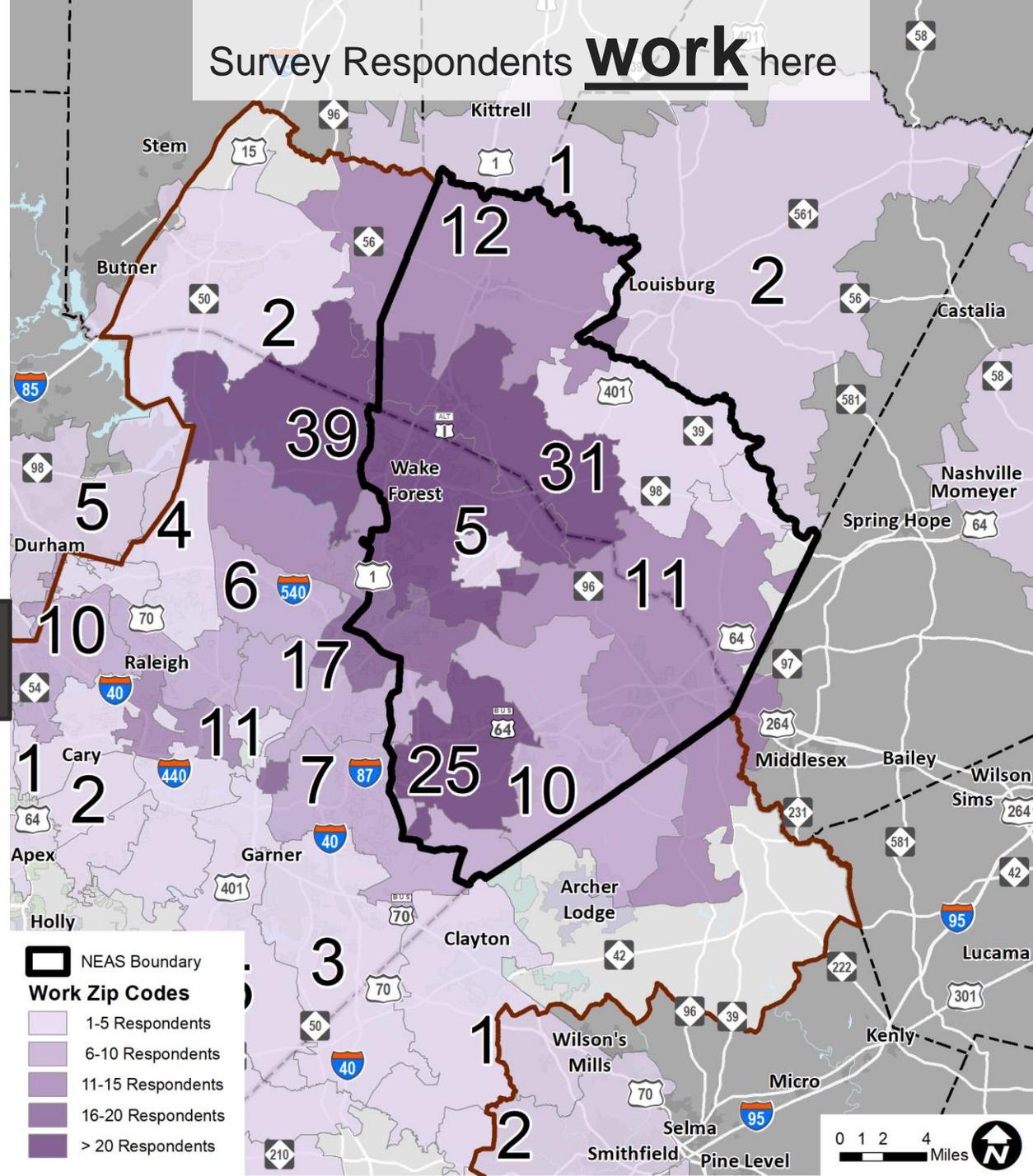
## Strategies for **Walking**

- More sidewalks (28%)
- All-Ages-&-Abilities (16%)
- Safe crossings (14%)
- Fill in the gaps (13%)
- Safety/lighting (12%)

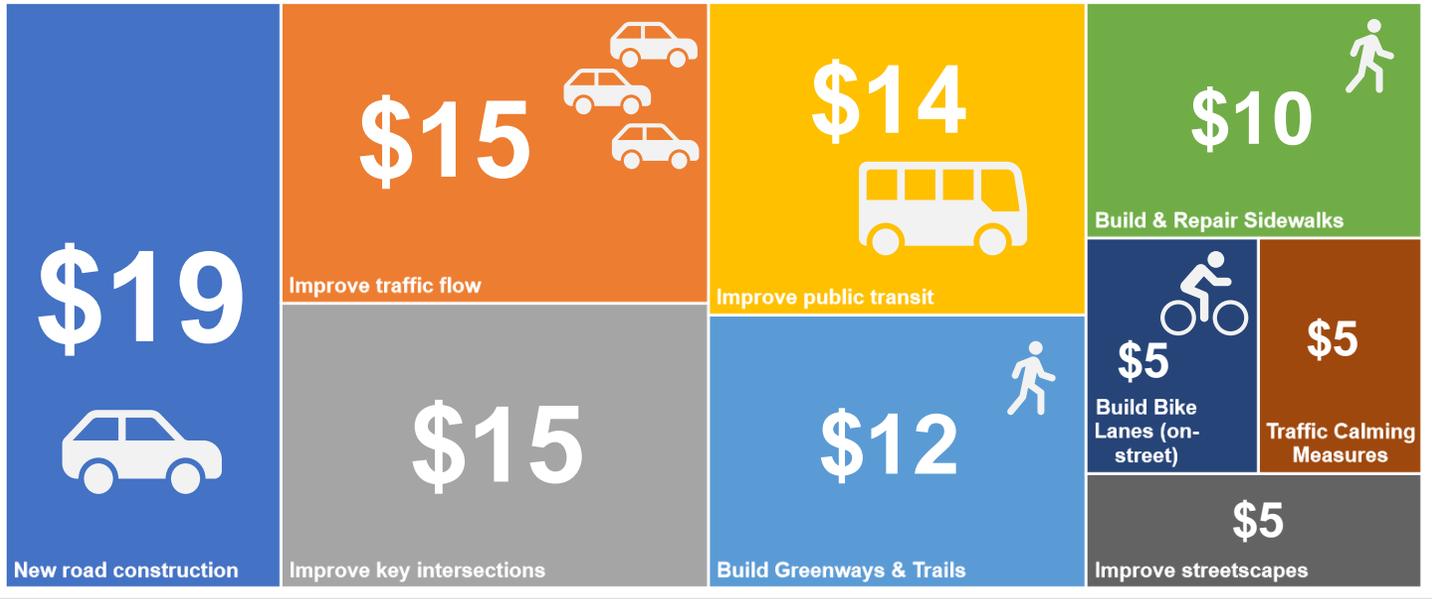
# Survey Respondents live here



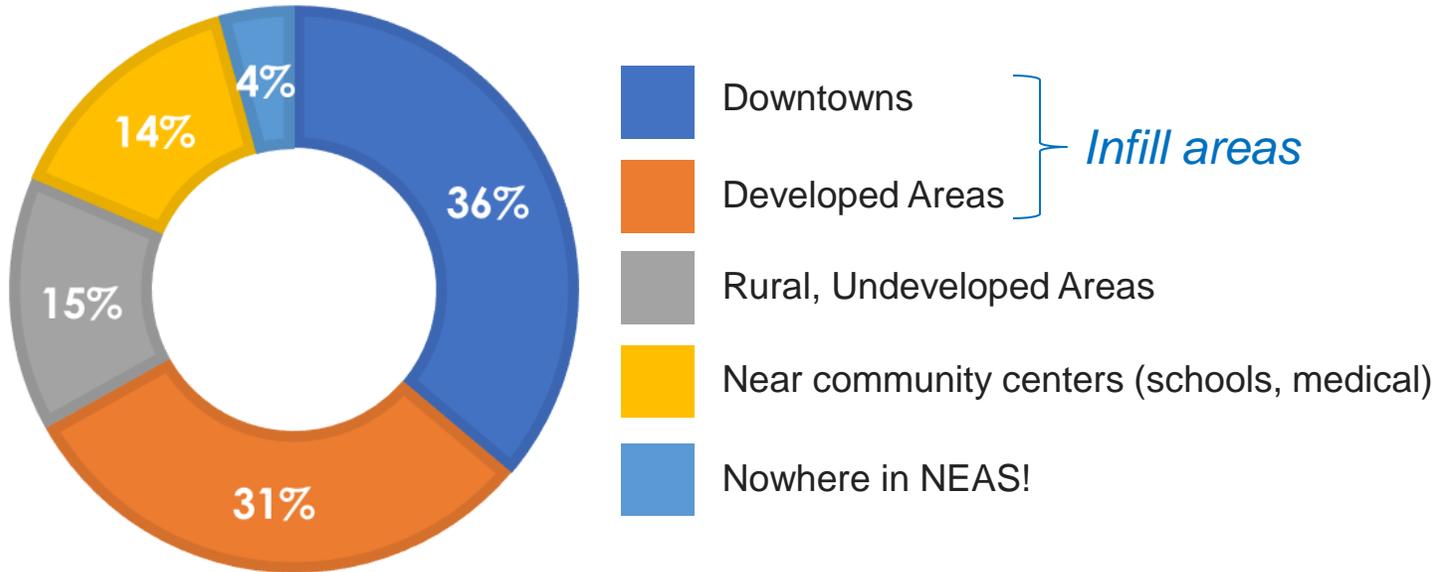
# Survey Respondents work here



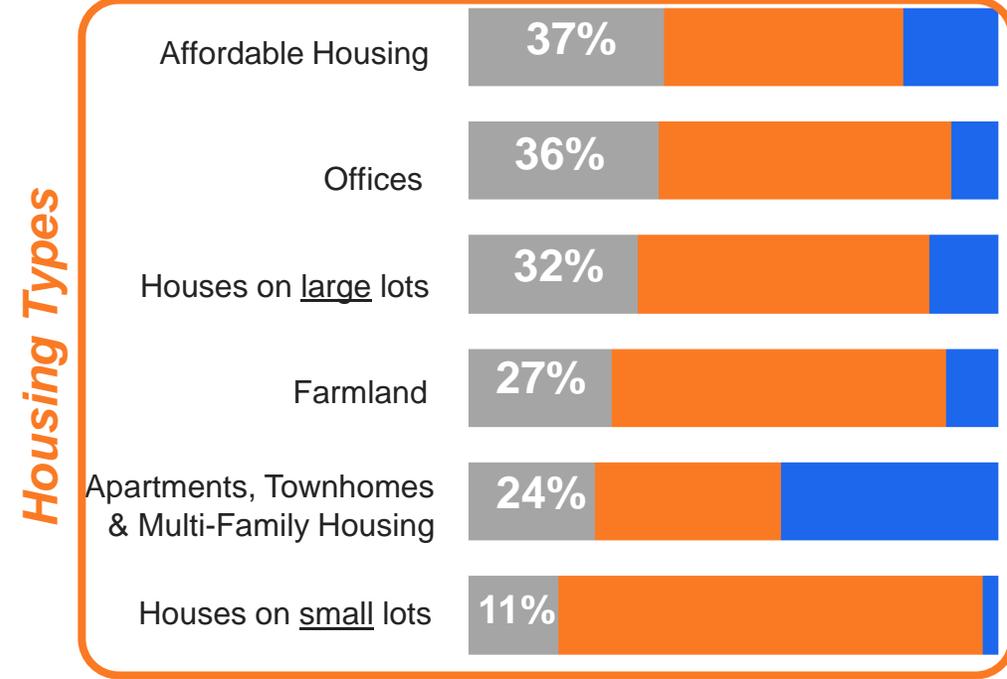
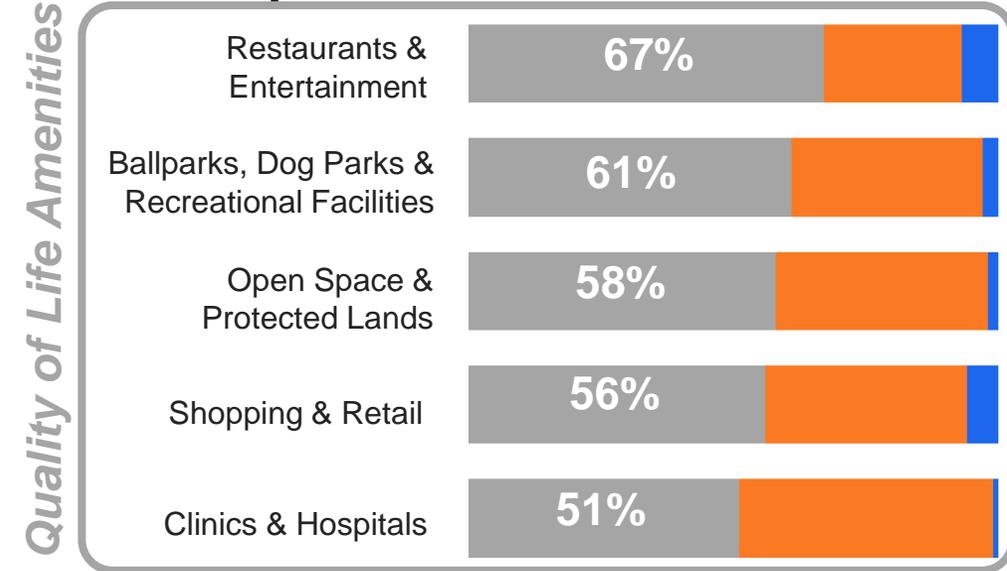
# How would you spend \$100 on transportation?



# Future development should be located...



# Development I would like to see...



Need More
  Right Amount
  Too Much



Stakeholder Interviews

Virtual Discussions

# Zoom Meetings – Recurring Themes

Stakeholder  
Interviews

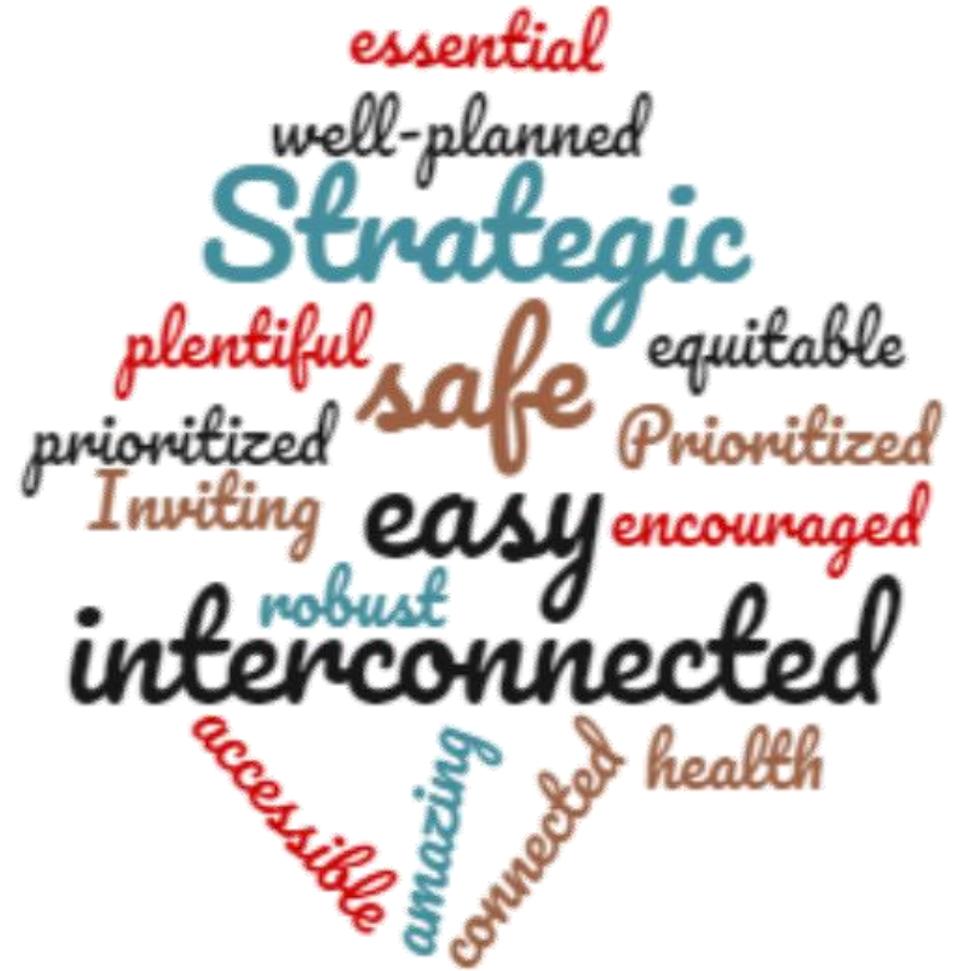
Nine (9)  
stakeholder  
interviews

- ❑ **Community amenities** are viewed as essential.
  - Sidewalks, trails, and transit access, **broadband Internet**, and water/sewer utilities.
  - Traditional neighborhoods want/need same quality of amenities as new developments, especially to **reallocate existing pavement for bicycle facilities**.
- ❑ Growth is correlated with **conservation of resources** & rural history.
- ❑ **Job growth within NEAS**: most employees travel *outside* of region for work.
- ❑ Rail/freight and **manufacturing** is still strong – must coexist in NEAS towns.
  - Alternative truck routes to avoid Main Street districts.
  - Easy access to ports of Norfolk (VA), Morehead City (NC), and Wilmington (NC).

What one word describes walking and bicycling in the NEAS region today?



What one word describes what walking and bicycling in the NEAS region should be?



Public Symposium

Virtual Discussions

# Virtual Public Symposium

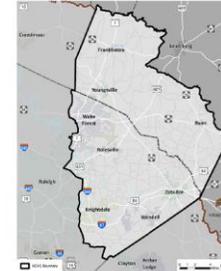


## Virtual Public Meetings

Help us plan for the future transportation network, and tell us about challenges and opportunities in your area.

WHERE: Online! [www.NEASupdate.com/events](http://www.NEASupdate.com/events)

WHEN: Two Online Sessions - Pick 1 that fits your schedule.



Session #1 - Tuesday 06/09/2020  
5:30 pm - 7:00 pm  
<https://zoom.us/join>  
Meeting ID: 955 9382 9217  
Password: 8675309

Session #2 - Saturday 06/13/2020  
10:00 am - 11:30 pm  
<https://zoom.us/join>  
Meeting ID: 986 0178 7429  
Password: 8675309

Can't join the video? Join by phone: +1 (301) 715-8592, Meeting ID above



### Transit ridership influenced by...

- Ease of access (50%)
- Type of service (19%)
- No vehicle at home (13%)
- Time spent waiting (13%)

### Conserve additional open space?

- Yes (91%)
- Maintain existing (9%)

### I want more public... (*multi-choice*)

- Greenways/trails (85%)
- Conservation areas (39%)
- Community gardens (39%)
- Play spaces / Plazas (33%)

### City-flight population growth

- Very likely to continue (55%)
- Somewhat likely (39%)
- Not likely (6%)

### Walkable amenities are...

- Very important (68%)
- Somewhat important (27%)
- Not important (5%)

### Walk/Bike Investments

- Retrofit older communities (37%)
- Fill the gaps (33%)
- Improve intersections (17%)
- Expand regional network (13%)

### Roadway Improvements (*multi-choice*)

- Complete Streets – all modes (53%)
- Congested corridors (35%)
- Upgrade old infrastructure (32%)
- Connectivity (29%)
- Crashes (26%)
- Streetscape (15%)
- Signals (9%)

### Time spent driving in congestion

- < 20 min (47%) 
- > 30 min (34%) 

# Placemaking Tools

## Preference for placemaking elements



21%

**A** Ambient Lighting



15%



12%

**C** Interactive Play



18%



7%

**E** Interactive Water



27%

**F** Outdoor Dining

*Symposium results (two events)*

# Public Spaces

## Preference for public space elements

**A** Passive Gardens



**C** Play Spaces



**E** Greenway/Trails



**G** Flexible Plazas



**B** Flexible Lawns



**D** Community Gardens



**F** Conservation



**H** Alleyways/Courtyards

# Single Family Housing Development

Symposium

## Preference for residential development types

**A** Large Home-Narrow Lot



**C** Large Home-Large Lot



**E** Accessory Dwelling Granny Flat



**B** Small Home-Narrow Lot



**D** Cottage Court



**F** Accessory Dwelling Garage Apartment

*Symposium results (two events)*

# Multi-Family Housing Development

Symposium

## Preference for multi-family residential

**A** Live-Work



**C** Quadplex



**E** Apartments



**B** Duplex

**D** Townhomes

**F** Upper Lofts in Mixed Use

*Symposium results (two events)*

# Commerce Expansions

## Preference for commercial developments

Symposium

**A** Flex/Industrial Campus



**C** Lifestyle Centers



**E** Small Town Retail



**B** Corporate/Research



**D** Big Boxes



**F** Agribusiness

*Symposium results (two events)*

Guiding Principles

# Guiding Principles

Synthesizing public engagement feedback into themes that represent community values for the future.

Guiding Principles ensure that the final plan recommendations align with the public's vision, goals, and perspectives.



# Guiding Principles – We hear you!

- ❑ **Mobility Choice**: All citizens must have adequate transportation service, options, and safe infrastructure
- ❑ **Access = Opportunity**: Convenient and efficient access to destinations of health and recreation as well as transport services will enhance individual opportunities for growth
- ❑ **Redefining Infrastructure**: We must be strategic to improve key corridors and enhance mobility through retrofitting existing infrastructure
- ❑ **Connectivity**: Work with our leadership and the development community to support enhanced connectivity for street and trail networks
- ❑ **Preserving & Enhancing our Open Space**: Protecting sensitive areas are critical to our community, and enhancing active/passive investment in our parks
- ❑ **Balanced Communities**: We strive to build our communities to balance live, work, and play. Placemaking and urban design will enhance opportunities for balance

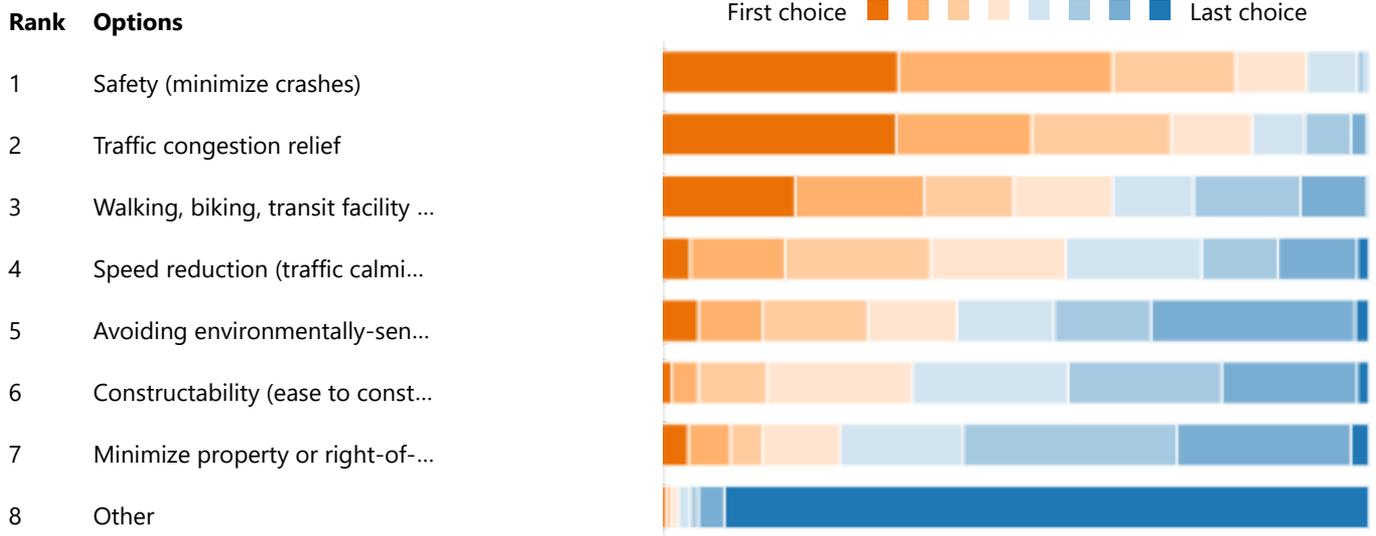
# Station 6: NEAS Online Survey - Round 2

299  
Responses

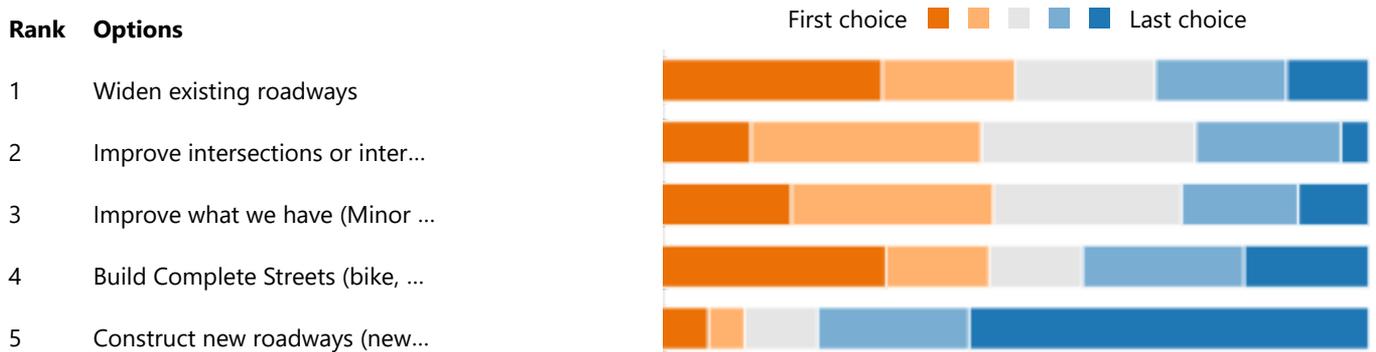
15:53  
Average time to complete

Active  
Status

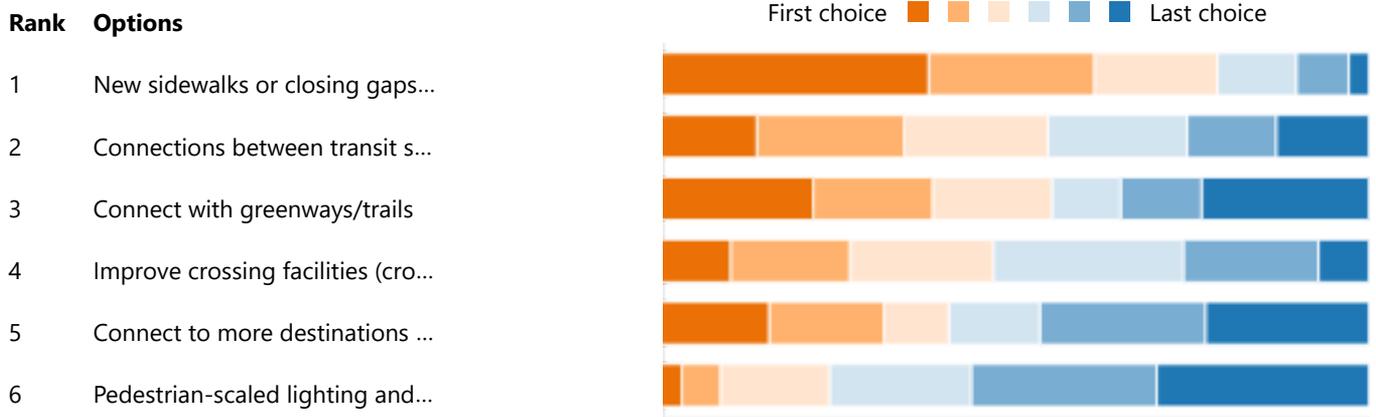
1. Please RANK each of the following goals/objectives for roadway improvements within the Northeast study area, from Least Important (bottom) to Most Important (top):



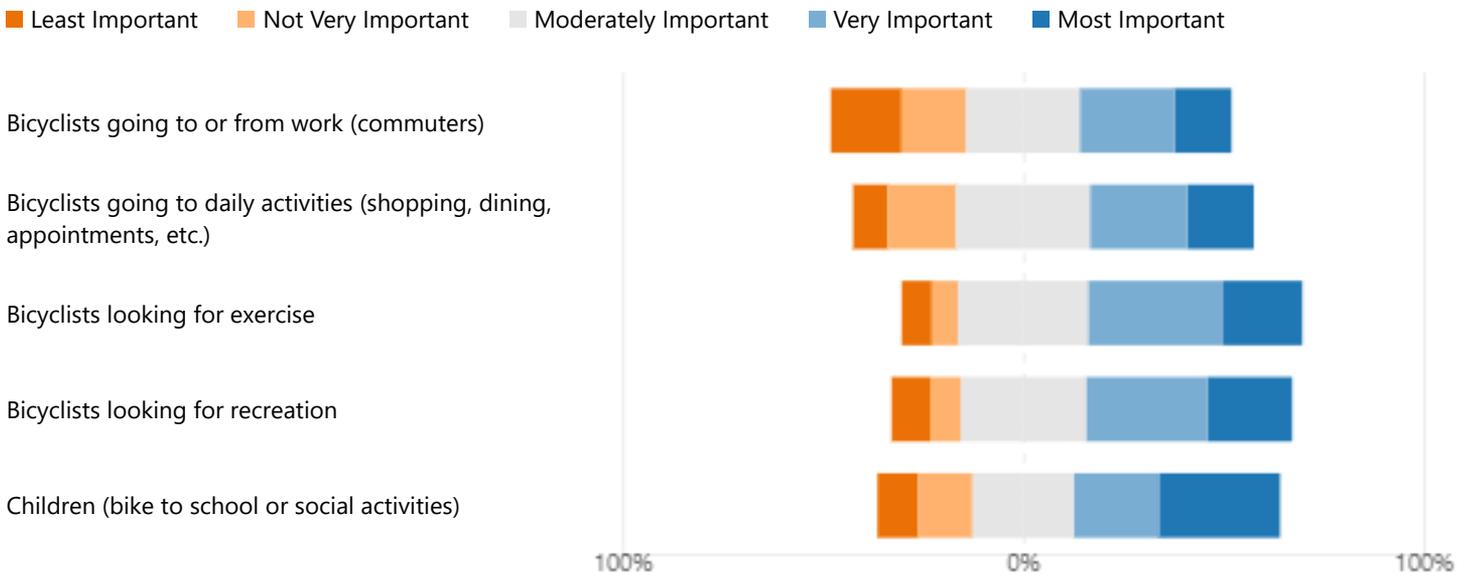
2. Please rank the following TYPES of roadway improvements for the study area, from Least Important (bottom) to Most Important (top):



3. Shifting to non-motorized transportation, please RANK the following goals/objectives for pedestrian improvement types from Least Important (bottom) to Most Important (top):

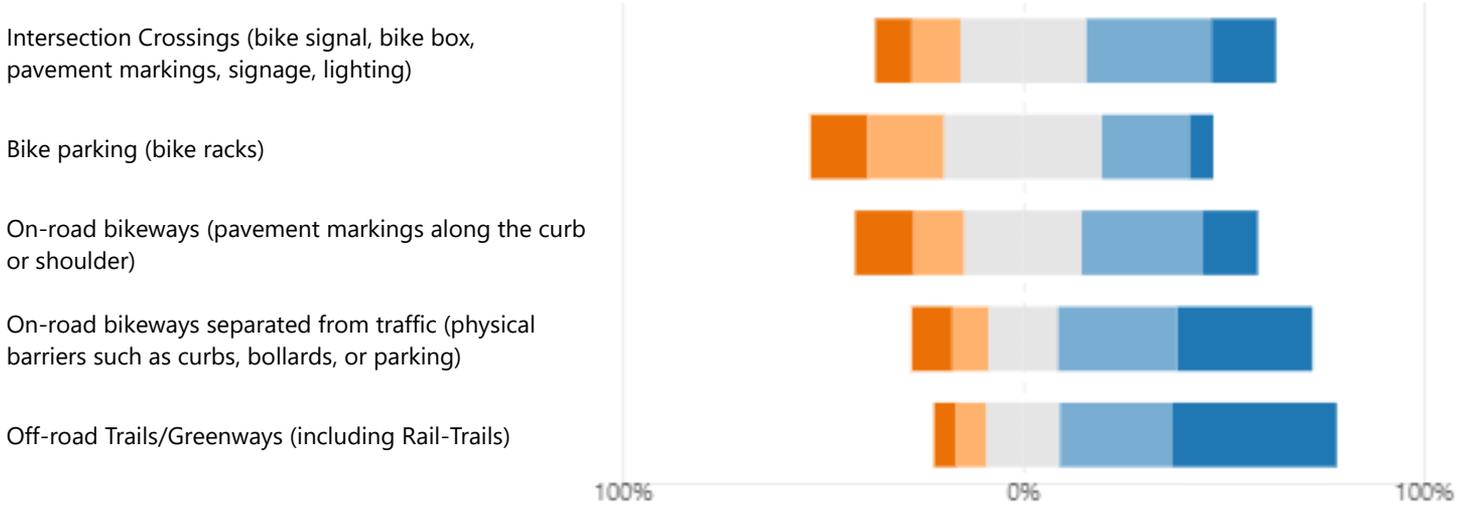


4. Please RATE the following bicycle USER types you would like to see within the Northeast study area, from Least Important to Most Important:



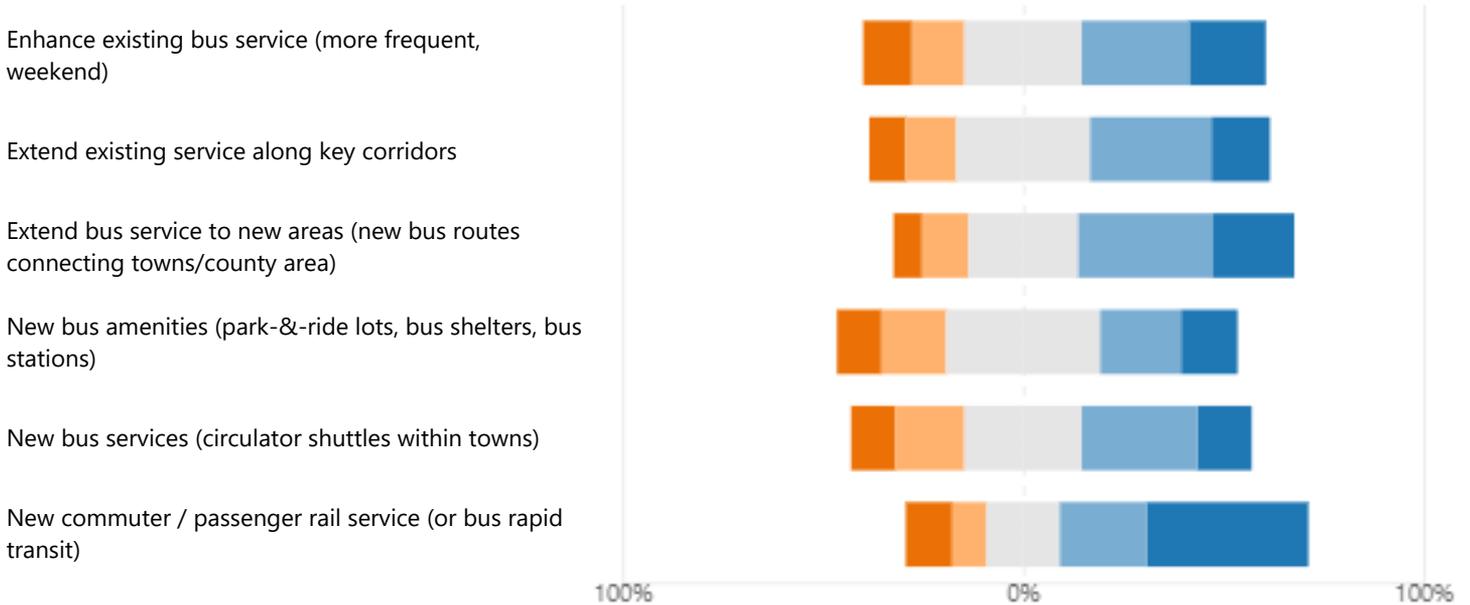
5. Please RATE the following bicycle FACILITY types you would like to see within the Northeast study area, from Least Important to Most Important:

Least Important Not Very Important Moderately Important Very Important Most Important



6. Please RATE the following public transportation service & operations improvements you would like to see within the Northeast study area, from Least Important to Most Important:

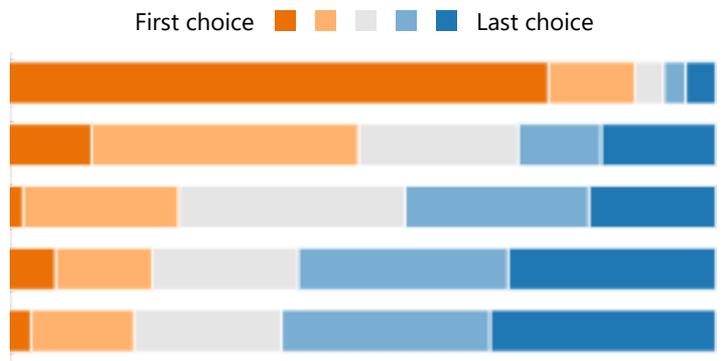
Least Important Not Very Important Moderately Important Very Important Most Important



7. Now please RANK the following types of transit trips for the study area from Least Important (bottom) to Most Important (top):

**Rank Options**

- 1 Daily commuter (work or scho...
- 2 Medical appointments
- 3 Shopping
- 4 Social/leisure trips
- 5 Special event-based trips (con...



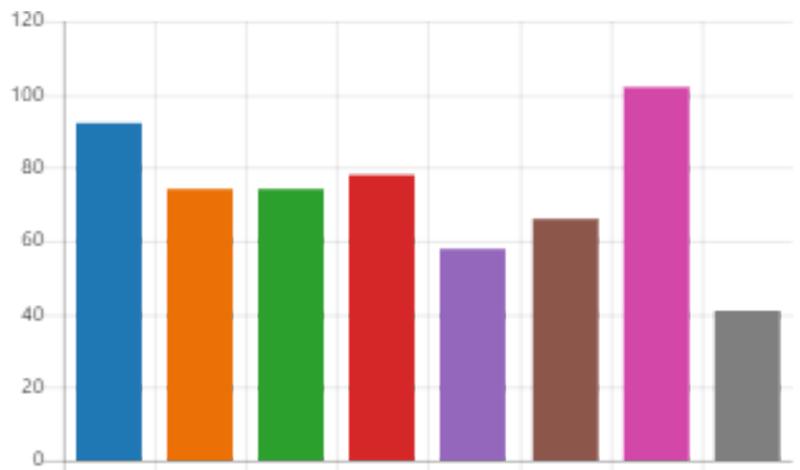
8. Wake County is considering launching a new transportation service in the northeastern portion of the county (including the towns of Rolesville, Wendell, and Zebulon). This would be an on-demand real-time ride-sharing service that would provide short trips within northeastern Wake County. It is one example, among many, of how microtransit (including ride-hailing (uber/lyft), car-sharing, bikeshare, e-scooters) may serve as a complement to traditional bus service. In your opinion, what would influence you to utilize microtransit? Please choose up to 3 choices.

- Low/Reduced Price 199 67%
- Convenience to pick up locati... 247 83%
- Education/training materials o... 35 12%
- Free trial of the service 110 37%
- If my workplace, shops that I f... 120 40%



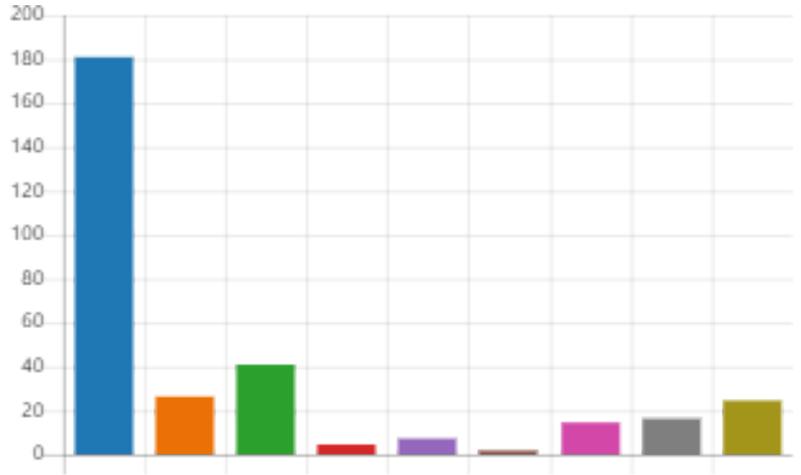
9. Despite growing needs for transportation spending, the current sources of funds (state gas tax, vehicle fees, occasional local bonds, and federal funds) are on a downward trend. Which of the following ways to increase dollars for transportation maintenance, repair, and development in our region would you support (select all that apply)?

- Increase the existing gasoline ... 92 31%
- Increase existing fees (such as ... 74 25%
- Charge users of particular roa... 74 25%
- Develop mileage-based user f... 78 26%
- Add other taxes + fees on tra... 58 19%
- Increase or add other taxes, b... 66 22%
- I would not support an increas... 102 34%
- Other 41 14%



### 10. How did you hear about this engagement session?

<span style="color: blue;">●</span> Social media (Twitter, Faceboo...	181	61%
<span style="color: orange;">●</span> Neighborhood listserve/Nextd...	26	9%
<span style="color: green;">●</span> Email/Electronic newsletter	41	14%
<span style="color: red;">●</span> Online news advertisement	5	
<span style="color: purple;">●</span> Printed flyer	7	
<span style="color: brown;">●</span> Print newspaper ad	2	
<span style="color: pink;">●</span> Government website	15	
<span style="color: gray;">●</span> Word-of-mouth (friend, family...	16	
<span style="color: olive;">●</span> Other	25	



### 11. What is your age category?

<span style="color: blue;">●</span> Under 18 years old	0	
<span style="color: orange;">●</span> 18 to 30 years old	29	10%
<span style="color: green;">●</span> 31 to 64 years old	214	72%
<span style="color: red;">●</span> 65 years or older	53	18%



### 12. What is your home zip code?

**286**  
Responses

#### Latest Responses

- Wake Forest 24%
- Raleigh 20%
- Wendell 18%
- Zebulon 9%

### 13. What is your work zip code?

**249**  
Responses

#### Latest Responses

- Raleigh 33%
- Wake Forest 16%
- Durham 8%
- Zebulon 6%

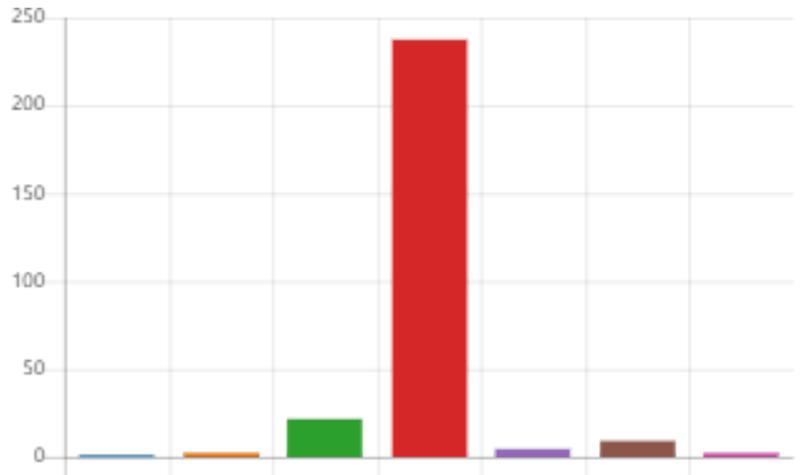
### 14. What is your gender?

Female	138	46%
Male	134	45%
Non-binary	3	
Prefer not to say	14	
Other	0	



### 15. Which of the following best describes your race/ethnicity? Choose all that apply.

American Indian or Alaska Nat...	1	
Asian or Middle Eastern	2	
Black or African American	22	7%
Caucasian or White	237	79%
Hispanic or Latino	5	2%
Two or More	9	3%
Other	2	



### 16. Please indicate which language(s) are spoken at home. Choose all that apply.

English	283	95%
Spanish	6	
Other: Deutsch French Swahili	4	



17. Lastly, if you would like to receive email updates regarding the NEAS Update, or other transportation projects in the area, please type your email here:

119  
Subscribers

## Watson, Brandon

---

**From:** Thomas Barbieri <tjbarbieri@gmail.com>  
**Sent:** Tuesday, June 9, 2020 9:19 PM  
**To:** Watson, Brandon  
**Subject:** Re: Northeast Area Study Update

**Follow Up Flag:** Follow up  
**Flag Status:** Completed

Hello Mr. Watson,  
Thanks very much for reaching out. I do plan to attend Saturday's symposium.  
This project itself does not directly impact me, as I live in the Stoney Hill area. However, I do have interest in the NEAS project because the population growth in that region directly contributes to the significant traffic jams on Rte 98 during rush hour.

Are you aware of any active projects that directly impact my part of Wake County?

Thanks,  
Tom

On Mon, May 11, 2020 at 12:34 PM Watson, Brandon <[brandon.watson@campo-nc.us](mailto:brandon.watson@campo-nc.us)> wrote:

Mr. Barbieri,

I saw your inquiry from another email thread regarding the NC 98 Corridor Study. I just wanted to follow up with you directly about the Northeast Area Study Update (NEAS Update) that began in February. The NEAS Update is an update to the original 2014 Northeast Area Study that looked at land use and transportation needs in the study area which covers parts of Wake and Franklin Counties, as well as all or parts of the municipalities of Bunn, Franklinton, Knightdale, Raleigh, Rolesville, Wake Forest, Wendell, Youngsville, and Zebulon. All municipalities, along with the N.C. Dept. of Transportation, are partners in the study. This update will produce recommendations across all transportation modes, as well as refresh policies and priorities that may have evolved since the original study. The 2014 NEAS website is: <https://www.campo-nc.us/programs-studies/area-studies/northeast-area-study>

If you would like more information about the NEAS Update, please visit the project website at [www.neasupdate.com](http://www.neasupdate.com) where there is a short introductory video on the home page. Within the video, you will find good information on the study background and objectives, as well as key deliverables and public engagement events. The website also includes a community Survey and Interactive Map, where you can identify issues, concerns, and points of interest in the study area that will be looked into in more detail as the study progresses. **Feel free to share the links to the survey and map with anyone you think would be interested.**

**Last, we are planning a virtual project symposium and would love for you to be a part of it if you can.** We will be discussing what's important in the region to determine guiding principles, discuss trade-offs, and obtain feedback on identifying issues in the area.

[Save the Dates! NEAS Update Virtual Project Symposium](#)

**Tuesday, June 9<sup>th</sup> 2020 at 5:30 PM**

**Saturday, June 13<sup>th</sup> 2020 at 10:00 AM**

Feel free to email me or give me a call at my number below if you would like any additional information or have any questions.

Thanks,

**Brandon Watson**

**Transportation Planner**

**Capital Area MPO**

421 Fayetteville St, Suite 203

Raleigh, NC 27601

[Brandon.Watson@campo-nc.us](mailto:Brandon.Watson@campo-nc.us)

919-996-4397

[www.campo-nc.us](http://www.campo-nc.us)

Twitter: [@CapitalAreaMPO](https://twitter.com/CapitalAreaMPO)

Facebook: [@NCCapitalAreaMPO](https://www.facebook.com/NCCapitalAreaMPO)

--

Thomas Barbieri

602-628-5254

[TJBarbieri@gmail.com](mailto:TJBarbieri@gmail.com)

## Watson, Brandon

---

**From:** Parker, Bonnie  
**Sent:** Thursday, March 4, 2021 6:17 PM  
**To:** David Bland  
**Cc:** Watson, Brandon  
**Subject:** RE: Northeast Wake County Transportation Discussions

**Follow Up Flag:** Follow up  
**Flag Status:** Completed

Hello Mr. Bland,

Thank you for your follow-up email. I am sharing this email with Brandon, and also adding it to our public comments folder for both NC 98 and Falls of Neuse. Is it also ok if I subscribe you to our email list for any future updates for the following?

- Northeast Area Study Update
- NC 98 Corridor
- Falls of Neuse – North of 540
- US 1 – Capital Blvd. North

Thanks again,  
Bonnie

***Bonnie A. Parker***  
***Public Engagement Planner***  
***Capital Area Metropolitan Planning Organization***  
***919-996-4403***  
***421 Fayetteville St., Ste 203***  
***Raleigh, NC 27601***  
[www.campo-nc.us](http://www.campo-nc.us)  
**Twitter: @CapitalAreaMPO**  
**Facebook: @NCCapitalAreaMPO**

---

**From:** David Bland <dhbland9@gmail.com>  
**Sent:** Wednesday, March 3, 2021 4:30 PM  
**To:** Parker, Bonnie <Bonnie.Parker@campo-nc.us>  
**Subject:** Northeast Wake County Transportation Discussions

I was on the virtual conference earlier today and raised the question about lightning North Carolina 98 W. of capital Boulevard. I tried to go on your tent tour but it would not permit me to click the road transportation option.

I think the widening of 98 should take priority over widening falls of the noose Road from 98 two 540.

--

David H Bland  
2040 Hornbeck Court  
Raleigh NC 27614  
H 919-803-6971  
C 919-538-3912

## Watson, Brandon

---

**From:** Watson, Brandon  
**Sent:** Tuesday, March 9, 2021 9:39 AM  
**To:** Thomas, Eric Nathaniel  
**Subject:** RE: US1 Stadium Drive Interchange

Eric,

Thanks for the comments on this proposed interchange. I'll be sure to pass this along to the project team and NCDOT as it is considered moving forward. Feel free to reach out if you have any additional comments or questions about the project. Hope you have a great week.

Thanks,

**Brandon Watson**  
**Transportation Planner**  
**Capital Area MPO**

421 Fayetteville St, Suite 203

Raleigh, NC 27601

[Brandon.Watson@campo-nc.us](mailto:Brandon.Watson@campo-nc.us)

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Facebook: [@NCCapitalAreaMPO](https://www.facebook.com/NCCapitalAreaMPO)

---

**From:** Thomas, Eric Nathaniel <ethomas@sog.unc.edu>  
**Sent:** Monday, March 8, 2021 11:48 AM  
**To:** Watson, Brandon <brandon.watson@campo-nc.us>  
**Subject:** US1 Stadium Drive Interchange

Hi Brandon- I hope you are well. I have been fortunate to work with the Town of Wake Forest and the Southeastern Baptist Theological Seminary for the last couple years on the development of the Wake Forest Tech Park just south of the US 1 corridor and Stadium Drive. The incorporation of an interchange at Stadium Drive and US1 would allow this hugely important development opportunity to move forward with pre-development planning. Without the interchange, and the imminent widening of US1, the ability to attract high quality development partners to realize the goals of the Town and the Seminary would potential be very limited.

DFI is projecting hundreds of millions of dollars of private investment potential in this site that would further support this region's economic development goals. My hope is that the interchange at Stadium Dr. can be further studied and supported as it is a catalyst for some significant development opportunities in the area.

I appreciate the consideration and look forward to following the progress of this project.

Please reach out if you have any questions regarding our work on the Seminary site.

Thanks,

**Eric Thomas**  
Senior Project Manager

Development Finance Initiative | UNC School of Government

T: 919.433.6914

[dfi.sog.unc.edu](http://dfi.sog.unc.edu)

*E-mails sent to or from this e-mail address that relate to the School of Government's work are public records and may be subject to public access under the North Carolina public records law.*

## Watson, Brandon

---

**From:** Wayne Moore <waynemoore670@gmail.com>  
**Sent:** Tuesday, March 9, 2021 1:36 PM  
**To:** Watson, Brandon  
**Subject:** Re: US1 Stadium Dr

**Follow Up Flag:** Follow up  
**Flag Status:** Completed

I'm probably early with this concern, but the aerial view shows an access/service road going right through Wake Forest Presbyterian's Community Garden. As a long term member of the church, and a two term Officer I'm concerned about the location chosen for access/service road. From the Community Garden we harvest around 10,000 lbs of produce each year. This produce is distributed to those in need in our immediate area through various food pantry organizations and through the Tri-Area Ministry organization we reach others outside our immediate community. I do hope the interchange gets accepted and that we as a group can then focus on the access/service roads with the same creativity as was used in developing the US 1Stadioum interchange.

In support,  
Wayne Moore

On Tue, Mar 9, 2021 at 9:37 AM Watson, Brandon <[brandon.watson@campo-nc.us](mailto:brandon.watson@campo-nc.us)> wrote:

Wayne,

Thanks for your comment, I'll be sure to let the project team know. Let me know if you have any other questions or comments.

Thanks,

**Brandon Watson**

**Transportation Planner**

**Capital Area MPO**

421 Fayetteville St, Suite 203

Raleigh, NC 27601

[Brandon.Watson@campo-nc.us](mailto:Brandon.Watson@campo-nc.us)

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Facebook: [@NCCapitalAreaMPO](https://www.facebook.com/NCCapitalAreaMPO)

---

**From:** Wayne Moore <[waynemoore670@gmail.com](mailto:waynemoore670@gmail.com)>  
**Sent:** Friday, March 5, 2021 4:19 PM  
**To:** Watson, Brandon <[brandon.watson@campo-nc.us](mailto:brandon.watson@campo-nc.us)>  
**Subject:** US1 Stadium Dr

The proposed revision for Stadium Dr. looks good. It definitely improves this intersection and lessens the impact on the affected area homes and stores.

Good Job!

--

*Wayne Moore*

919-625-9562

[waynemoore670@gmail.com](mailto:waynemoore670@gmail.com)

--

*Wayne Moore*

919-625-9562

[waynemoore670@gmail.com](mailto:waynemoore670@gmail.com)

## Watson, Brandon

---

**From:** Parker, Bonnie  
**Sent:** Friday, February 26, 2021 8:36 PM  
**To:** Watson, Brandon  
**Subject:** Fwd: an email reply to NEAS Update needs your review

---

**From:** Alan Smith <alanr3277@gmail.com>  
**Sent:** Friday, February 26, 2021 7:35:52 PM  
**To:** Parker, Bonnie <Bonnie.Parker@campo-nc.us>  
**Subject:** Re: an email reply to NEAS Update needs your review

Bonnie,

Thank you so much for the detailed response. That was very enlightening! I have been wanting to get more involved in CAMPO but always seem to have so much going on. Can't wait to see the prioritized project list.

Btw, do you get involved in very small projects?

The intersection at Knightdale Blvd & Widewaters (heading north) has 3 lanes. Two are left turn lanes and one is a straight/right turn lane.

Traffic wanting to turn right usually backs up behind a single car waiting to go straight across Knightdale Blvd and into the shopping center

The straight lane should be combined with one of the left turn lanes and the right lane should be a dedicated turn lane. All of the other intersections in the area are like this, except this one.

Do you have any idea why this one intersection would be designed like this?

Do you think it makes sense to change the straight lane as I described?

Thanks so much for your time!

Looking forward to hearing from you,

Alan Smith

On Fri, Feb 26, 2021 at 6:19 PM Parker, Bonnie <[Bonnie.Parker@campo-nc.us](mailto:Bonnie.Parker@campo-nc.us)> wrote:

Hello Mr. Smith –

Thank you for sending an email comment for the [NEAS Update](#) regarding traffic signal syncing in the Knightdale area. Your comments are being shared with the study project team and will be incorporated with the rest of the feedback received during this public engagement phase.

Regarding the timeline, the next step for the study team (following public engagement), is to make final recommendations for the proposed projects, which will include categorizing them into short-term, mid-term, and long-term recommendations. Those final recs will be released publicly for review as part of the final report, closer to May/June of this year. Our Executive Board will then consider endorsement of the Study's final report for consideration in the larger Triangle Region's long-range transportation plan. That plan, known as the [2050 MTP](#), is where all of the region's transportation projects get programmed into 10-year "horizon" buckets. So, the Northeast Area Study projects will be considered along with projects from the rest of the region. More community engagement will occur with the 2050 MTP Development process later this year, as well, so please stay tuned.

I hope that helps answer your question, and please help spread the word to your acquaintances and neighbors so that we can get as many community members' eyes on these proposed projects and how they should be prioritized before the March 10th deadline.

Brandon Watson, the NEAS Update Project Manager, is cc'd on this email. I've also added you to the email updates list for both the NEAS Update and the 2050 MTP. Please let me know if you'd prefer not to be added.

Have a good weekend,

Bonnie

***Bonnie A. Parker***

***Public Engagement Planner***

***Capital Area Metropolitan Planning Organization***

***919-996-4403***

***[421 Fayetteville St., Ste 203](#)***

***[Raleigh, NC 27601](#)***

***[www.campo-nc.us](http://www.campo-nc.us)***

***Twitter: @CapitalAreaMPO***

***Facebook: @NCCapitalAreaMPO***

---

**From:** PublicInput.com Alerts <[ProjectEmail\\_912171@publicinput.com](mailto:ProjectEmail_912171@publicinput.com)>  
**Sent:** Friday, February 26, 2021 1:20 PM  
**To:** Parker, Bonnie <[Bonnie.Parker@campo-nc.us](mailto:Bonnie.Parker@campo-nc.us)>  
**Subject:** An email reply to NEAS Update needs your review

--- Reply above this line ---

An email comment has been received. It was posted in response to "NEAS Update".

This comment can be reviewed [here](#).

From: [alanr3277@gmail.com](mailto:alanr3277@gmail.com)

To: [neasupdate@publicinput.com](mailto:neasupdate@publicinput.com)

Subject: Knightdale Blvd Light Syncing

The proposed projects look great! One very important thing is missing.

**Sync the traffic signals on Knightdale Blvd between First Ave and 540.**

This was supposedly scheduled two years ago but seems to keep getting delayed. This one project would help immensely as traffic congestion continually gets worse. The cost would be minimal compared to widening or new construction and the benefit would be huge.

When will a timeline for the proposed projects be issued?

Thanks,

**Alan Smith**

■

--

Thanks,

Alan Smith

## Watson, Brandon

---

**From:** Parker, Bonnie  
**Sent:** Friday, February 26, 2021 6:19 PM  
**To:** alanr3277@gmail.com  
**Cc:** Watson, Brandon  
**Subject:** RE: an email reply to NEAS Update needs your review

Hello Mr. Smith –

Thank you for sending an email comment for the [NEAS Update](#) regarding traffic signal syncing in the Knightdale area. Your comments are being shared with the study project team and will be incorporated with the rest of the feedback received during this public engagement phase.

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I hope that helps answer your question, and please help spread the word to your acquaintances and neighbors so that we can get as many community members' eyes on these proposed projects and how they should be prioritized before the March 10th deadline.

Brandon Watson, the NEAS Update Project Manager, is cc'd on this email. I've also added you to the email updates list for both the NEAS Update and the 2050 MTP. Please let me know if you'd prefer not to be added.

Have a good weekend,  
Bonnie

***Bonnie A. Parker***  
***Public Engagement Planner***  
***Capital Area Metropolitan Planning Organization***  
***919-996-4403***  
***421 Fayetteville St., Ste 203***  
***Raleigh, NC 27601***  
[www.campo-nc.us](http://www.campo-nc.us)  
**Twitter: @CapitalAreaMPO**  
**Facebook: @NCCapitalAreaMPO**

---

**From:** PublicInput.com Alerts <ProjectEmail\_912171@publicinput.com>  
**Sent:** Friday, February 26, 2021 1:20 PM  
**To:** Parker, Bonnie <Bonnie.Parker@campo-nc.us>  
**Subject:** An email reply to NEAS Update needs your review

--- Reply above this line ---

An email comment has been received. It was posted in response to "NEAS Update".

This comment can be reviewed [here](#).

From: alanr3277@gmail.com

To: [neasupdate@publicinput.com](mailto:neasupdate@publicinput.com)

Subject: Knightdale Blvd Light Syncing

The proposed projects look great! One very important thing is missing.

**Sync the traffic signals on Knightdale Blvd between First Ave and 540.**

This was supposedly scheduled two years ago but seems to keep getting delayed. This one project would help immensely as traffic congestion continually gets worse. The cost would be minimal compared to widening or new construction and the benefit would be huge.

When will a timeline for the proposed projects be issued?

Thanks,

**Alan Smith**

▪

## Watson, Brandon

---

**From:** Charles Good <goodcr@bellsouth.net>  
**Sent:** Monday, April 26, 2021 9:34 AM  
**To:** Watson, Brandon  
**Subject:** RE: Capital Area MPO Northeast Area Study Update CTT/SOT#10

One way to address this for future presentations would be to have a web page dedicated to listing acronyms and abbreviations.

On the last slide of any presentation, add one that reads, "For More Information."

On that slide list the home page URL... <https://www.campo-nc.us/>

On the home page, add a "Glossary of Terms" button/box to the end of your list of Quick Links.

In this way, you only have to maintain one page of acronym definitions and it can be referenced by presentations, as well as, other documents.

---

**From:** Watson, Brandon <brandon.watson@campo-nc.us>  
**Sent:** Friday, April 23, 2021 10:02 PM  
**To:** Charles Good <goodcr@bellsouth.net>  
**Subject:** RE: Capital Area MPO Northeast Area Study Update CTT/SOT#10

Hi Charles,

Sure no problem. Sorry about that, looks like most of those acronyms are from previous presentations and activities from throughout the project. I think the report documents should have all of the acronyms spelled out but that's a really good point and I'll talk to the project team about making sure. Thanks for pointing that out. Please see my response below regarding the acronyms you mentioned. I actually just caught your email as I was putting up my away message but wanted to make sure to respond. I'll be back on May 4<sup>th</sup> if you have any additional questions. If you would like to reach out to someone before then you can contact Alex Rickard at [alex.rickard@campo-nc.us](mailto:alex.rickard@campo-nc.us). Thanks for the email and hope you have a great weekend.

Thanks,

**Brandon Watson**  
**Transportation Planner**  
**Capital Area MPO**  
421 Fayetteville St, Suite 203  
Raleigh, NC 27601  
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**From:** Charles Good <[goodcr@bellsouth.net](mailto:goodcr@bellsouth.net)>  
**Sent:** Friday, April 23, 2021 9:41 PM  
**To:** Watson, Brandon <[brandon.watson@campo-nc.us](mailto:brandon.watson@campo-nc.us)>  
**Subject:** Capital Area MPO Northeast Area Study Update CTT/SOT#10

Hello,

I am reviewing the subject PowerPoint (actually a PDF of the PPT).

There are 15 acronyms in the presentation, but no glossary.

Does a glossary exist that will tell us what the following acronyms mean?

If not, could you please have someone reply to this email and provide definitions.

Thank you.

1. AGOL – ArcGIS Online (references the software that was used for the building block exercise)
2. ArGIS – ArcGIS is the software used for the interactive maps (If you click the link it will take you to the interactive map from the second public engagement period)
3. CIT – I think this is supposed to say CTT and stands for the Core Technical Team (made up of planners and local jurisdiction staff) that worked on the technical side of the project
4. CTP – Comprehensive Transportation Plan – longer range portion of CAMPO's transportation planning. The CTP holds all of the projects that do not make it into the first 3 decades of the Metropolitan Transportation Plan ([information at this link](#))
5. DU – Dwelling Units
6. MTP – Metropolitan Transportation Plan ([information at this link](#))
7. NEAS – Northeast Area Study (acronym for the name of this project)
8. PM – time as in AM or PM
9. SOT – stands for Stakeholder Oversight Team which is the team made up of local elected officials, organization leaders, and group leaders and local staff that helped to guide the project and with outreach
10. TIA – Traffic Impact Assessment
11. TOD – Transit Oriented Development
12. TRM – Triangle Regional Model
13. VHT – Vehicle Hours Traveled
14. VMT – Vehicle Miles Traveled
15. ZWX – Acronym for the bus express route that serves Zebulon and Wendell ([information at this link](#))

## Watson, Brandon

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**From:** Watson, Brandon  
**Sent:** Tuesday, March 9, 2021 9:41 AM  
**To:** Hutchinson, Ryan  
**Subject:** RE: Interchange at Stadium & Capital

Ryan,

Thanks for the input on this proposed interchange. I'll be sure to share your comment with the project team and NCDOT as the project moves forward. Let me know if you have any additional comments or questions about the Northeast Area Study Update. Hope you have a great week.

Thanks,

**Brandon Watson**  
**Transportation Planner**  
**Capital Area MPO**  
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**From:** Hutchinson, Ryan <hutchinson@sebts.edu>  
**Sent:** Tuesday, March 9, 2021 8:46 AM  
**To:** Watson, Brandon <brandon.watson@campo-nc.us>  
**Subject:** Interchange at Stadium & Capital

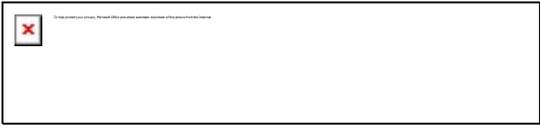
Brandon,

As owner of land around the area and having an interest in how the land can be developed to its greatest and highest use, we would like to see an interchange installed at Stadium Dr & Capital Blvd as a part of the planned upgrades to Capital Blvd. Having this interchange would ensure good access for emergency services, alleviate a pushing all traffic into the heart of Wake Forest down Durham Rd, and would all for retail and other business to better operate.

If you have any questions, please let me know.

Blessings,

**Ryan Hutchinson**  
Executive Vice President  
Southeastern Baptist Theological Seminary  
919-761-2200 | [www.sebts.edu](http://www.sebts.edu) | [visit us](#)



## Watson, Brandon

---

**From:** Watson, Brandon  
**Sent:** Tuesday, February 2, 2021 5:48 PM  
**To:** Don Berryann  
**Subject:** RE: NEAS - feedback from today's meeting

Don,

Thanks for sending these comments. It's definitely pretty busy around here pulling together all of the final project recommendations but it's the result of a year of hard work and input so I'm pretty excited about showing everything out to the public.

We had a discussion today about some of the comments received and I really appreciate you giving your input. We had some long discussions about how exactly to display the bike/ped recommendations on the map and ultimately landed here to see what the SOT thought and get feedback like this. I've passed your comments about what treatments are considered under each category along to the project team so it will definitely be something we take into consideration moving forward.

I definitely see what you are saying about the modes needing to be planned together. I think Nathan brought up in the meeting regarding the example with transit and bike/ped as well. All of these recommendations are meant to build on each other so that if a project is planned on a certain street, consideration will be given for all of the recommendations that are shown for that street regardless of mode. For the example you gave, Poole Road is actually showing proposed to be "Street Redesign Off Road" which would only include a separated bike lane or sidepath. If a widening project surfaced for this corridor and these recommendations are approved, we would be suggesting that a street redesign off road improvement would be considered.

I'd love to catch up with you here soon to discuss this before we open up for public engagement if you can. Do you have a few minutes for a phone call this week or next? If so let me know a few times and I'll put it on the calendar.

Thanks,

**Brandon Watson**  
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**From:** Don Berryann <djberrmann@gmail.com>  
**Sent:** Monday, February 1, 2021 6:24 PM  
**To:** Watson, Brandon <brandon.watson@campo-nc.us>  
**Subject:** NEAS - feedback from today's meeting

Hi Brandon, I hope all is well. I'm sure you have been VERY busy pulling together all the work finally culminating into the NEAS recommendations. Obviously a lot of work has gone into this project. The Virtual Open House is an amazing solution to public engagement in times of a pandemic. I hope you are enjoying the work.

I wanted to reach out about my concern about planning the bike/roadway/transit recommendations separately. I know these recommendations will go through much more vetting and detailed planning by the municipalities involved. I believe much of our existing transportation infrastructure has examples of the different modes being planned separately. The NEAS project has held the promise of real comprehensive planning so I am concerned about the separation I am seeing.

First, I think it is a mistake to give the municipalities a recommendation for any bike infrastructure which isn't safe for all users. I would prefer that Sharrows, Wide Lanes and Wide Shoulders just be removed. They are not bike infrastructure and it's better to make the bold move and declare it. Not all roads should have bike infrastructure so it's fine to indicate - "no bike infrastructure here". **General guidance could be provided that in places where speed limits are appropriate for bicycles to mix with motor vehicle traffic, those are strategies municipalities could use where bikes are likely to be present - but don't call it safe bike infrastructure.** Keeping them in your bike infrastructure categories dilutes the real plans you are recommending for safe biking. I hope you will seriously consider this - just take them out.

Second, when routes are not planned together, one mode almost always gets sub-optimized. Here's an example from the current NEAS plan: The Bike/Ped recommendation for Poole Road from the Neuse River beyond I-540 all the way to Martin Pond Rd in Wendell is "Buffered Bike Lane or Wide Paved Shoulder". The Roadway recommendation is widening from 2 lanes to 4 lanes and the speed limit will undoubtedly be 45mph+. This Bike Route would cross multiple greenways and is a direct route to Wendell. This could easily be a well traveled bike commuting corridor but not with a Buffered Bike Lane/Wide Paved Shoulder treatment. Planning a parallel but separate bike route as an integral part of the road widening project would yield a different solution, I believe. This is just one example.

I know there are many, many voices expressing opinions. Thanks for giving me a chance to voice mine.

Sincerely,

--

Don Berryann

919-656-6856

## **Watson, Brandon**

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**From:** Watson, Brandon  
**Sent:** Friday, February 26, 2021 5:51 PM  
**To:** Don Berryann  
**Subject:** RE: NEAS Update Open House Virtual Meeting this Saturday at 10 AM

Don,

Yeah I think the closest thing to what you are referring to is that board directly to the left of the bike/ped map in the virtual tent that shows what was analyzed to formulate the draft recommendations, including existing plans, equity analysis, demand analysis, level of service analysis, crash analysis, sidewalk gap analysis, upcoming roadway projects, and stakeholder and public input. There are a number of different data sets and maps that have been reviewed by the project team and CTT to refine the recommendations, so this board is the really condensed explanation of the why. We debated on including more background information on all of these, but with providing so much information already we were trying to keep it clean and focused on the recommendations but able to provide more information on specifics if needed. We also have those additional more in depth maps up on the project website.

I definitely see what you are saying in regards to showing examples of big plays for not just transit but bicycle/pedestrian as well. Thanks for pointing that out and I'll keep that in mind in updating materials and presentations. Also, as far as implementation, we will be looking for endorsement from the municipalities for the recommendations but we also recognize that these recommendations, especially when it comes to bike/ped, are not all encompassing. We tried to incorporate all of the local plans in the area for this update and analyzed different data sets to see what is needed, while also identifying those regional routes and connections that will be important to the regional network as a whole. There are more detailed recommendations, such as sidewalk specific recommendations or smaller collector street roadway recommendations, that are maintained at the local level that I think would hit on this as well. Hopefully I explained that well enough but feel free to let me know and I could give more details on the process and what happens once the NEAS Update is done and the recommendations are rolled up into consideration for the 2050 MTP.

Hope you have a great weekend and feel free to give me a call early next week or if not I look forward to speaking with the group on Wednesday.

Thanks,

**Brandon Watson**  
**Transportation Planner**  
**Capital Area MPO**  
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**From:** Don Berryann <djberrmann@gmail.com>  
**Sent:** Friday, February 26, 2021 4:44 PM  
**To:** Watson, Brandon <brandon.watson@campo-nc.us>  
**Subject:** Re: NEAS Update Open House Virtual Meeting this Saturday at 10 AM

Thanks Brandon.

I think what I have been looking for is something which shows what is on the interactive maps in a more explanatory way. It feels like the story is missing the “why?”

It seems that the maps show a mix of things which have been proposed in prior planning efforts by various groups, and some which are new, proposed by NEAS. It is difficult to understand the reasoning behind the recommendations on the maps. The Transit map has some such explanations in the 1 through 8 ‘big plays’.

Looking specifically at the bike/ped map, is there some reasoning which explains a few big plays? For example,

- \* the strategy behind some of the greenway recommendations - connecting what is there, what is already planned and adding new, to establishing a longer, safe route for commuting and recreation (Wake Forest to Wendell/Zebulon)
- \* Identified High Crash Corridors and recommending new bike facilities to separate vehicles and bicycle traffic - many examples
- \* Identifying Sidewalks gaps for pedestrian safety - within urban environments and within 1/2 mile of bus stops - many examples

This kind of explanation would be helpful now but very important when handing this to municipalities for implementation. I don’t know if your team has begun thinking about what gets handed to the municipalities to assist implementation.

Thanks for these PDFs, they do make it easier to bounce between charts.

On Fri, Feb 26, 2021 at 3:09 PM Watson, Brandon <[brandon.watson@campo-nc.us](mailto:brandon.watson@campo-nc.us)> wrote:

Don,

I have some pdf’s of the maps that we created in case people aren’t going through the virtual open house. We have a description of each of the recommendations for the transit recommendations on the map on the board, which we also have a pdf of instead of just in the open house. We have a separate website where the pdf’s are located in case people aren’t able to use the virtual open house very well.

<https://www.campo-nc.us/programs-studies/area-studies/neas-update-phase-2-materials>

During virtual meetings and throughout the public engagement process so far, I’ve been speaking individually with people or groups to help describe what the recommendations are around the area they are interested in and also placing points on the map if they would like. It’s a pretty large amount of information so I’ve been trying to make

myself available for one on one calls if people have specific questions or need everything described to them. Let me know if there is anything else that you think would be helpful or feel free to direct anyone to give me a call.

Thanks,

**Brandon Watson**

**Transportation Planner**

**Capital Area MPO**

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**From:** Don Berryann <[djberryann@gmail.com](mailto:djberryann@gmail.com)>

**Sent:** Friday, February 26, 2021 2:06 PM

**To:** Watson, Brandon <[brandon.watson@campo-nc.us](mailto:brandon.watson@campo-nc.us)>

**Subject:** Re: NEAS Update Open House Virtual Meeting this Saturday at 10 AM

Brandon, beyond the interactive maps, is there any supplemental descriptions of the roadway, bike/ped, and transit recommendations being made?

On Thu, Feb 25, 2021 at 4:38 PM Watson, Brandon <[brandon.watson@campo-nc.us](mailto:brandon.watson@campo-nc.us)> wrote:

Good afternoon NEAS Update Stakeholder Oversight Team Members,

First, thanks for all of your help on pushing out information for our public engagement period and helping us to schedule additional virtual engagement meetings. We have seen a good amount of traffic to the virtual open house tent and have been receiving some great comments.

**I wanted to remind everyone that we have our next virtual open house meeting this coming Saturday, February 27, at 10 AM where I will give a brief presentation on the NEAS Update, walk through the virtual open house tent, and then just open it up for discussion and questions.** Information on how to join is located at [www.neasupdate.com/outreach](http://www.neasupdate.com/outreach). If you are able to, please help to share social media messages or remind anyone in your organization about this opportunity. We also could really use help in driving more traffic to the survey to get feedback on prioritizing the recommendations. Direct link to the survey is below along with the link to our communications resource page. We've also posted recently regarding the NEAS Update on CAMPO's social media so feel free to share those posts as well.

**[DIRECT SURVEY LINK](#)**

**[communications package webpage](#)** that includes:

- Social media post suggestions,
- Links to the NEAS Update website, and the Virtual Open House,
- Documents including a one-pager explaining the study and a flyer advertising the virtual Open House (in English and Spanish), and,
- Image files for the study logo, interactive map and survey.

Let me know if you have any questions or comments.

Thanks again for all of the help.

**Brandon Watson**

**Transportation Planner**

**Capital Area MPO**

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Don Berryann

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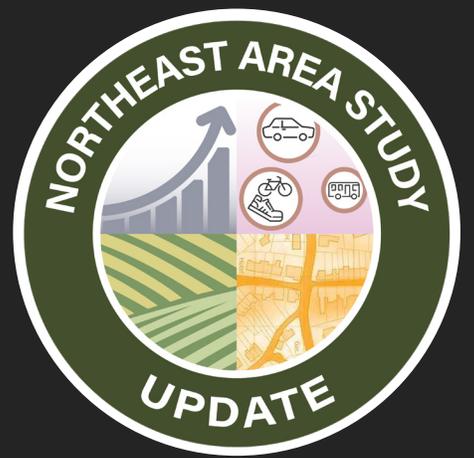
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2021