



**NORTH CAROLINA**  
Department of Transportation



# Moore County Transportation Committee Meeting

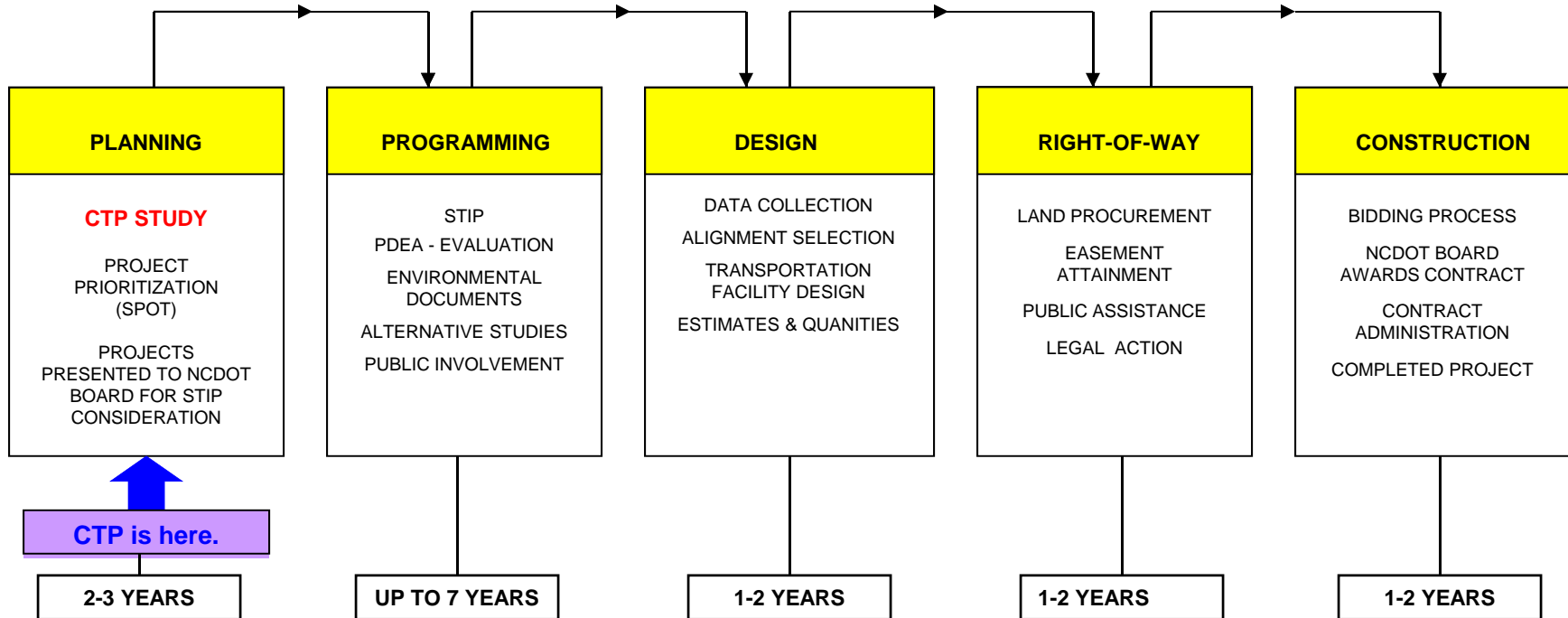
May 24, 2017

## Comprehensive Transportation Plan Overview

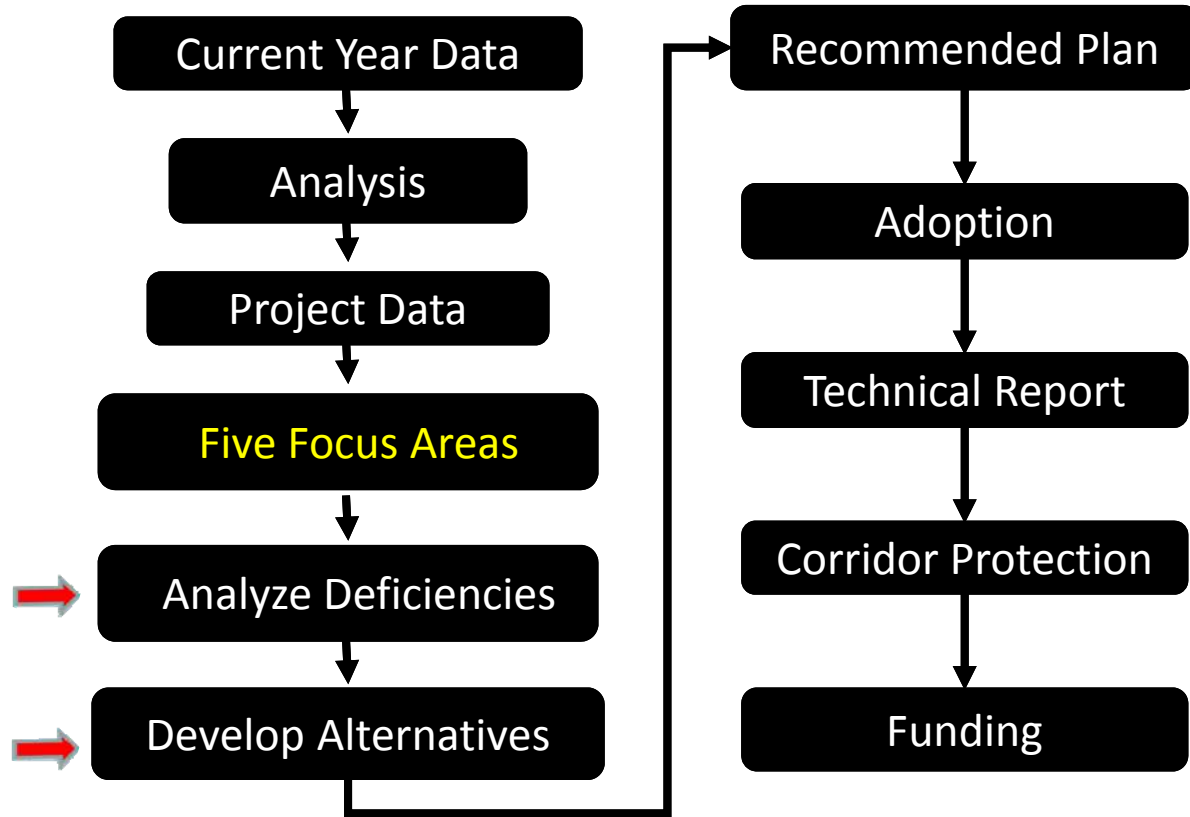
- Is a Long-Range, multimodal transportation plan (highway, public transportation/rail, bicycle and pedestrian).
- Is developed cooperatively with NCDOT, the RPO/MPO, County and Municipal stakeholders.
- Emphasizes the local land development plan as well as community and statewide goals such as the protection of Strategic Corridors.
- Is only a **Concept Plan**.
- Is not fiscally constrained.

*It is important to note that CTP proposals are **Concepts** and any project will go through a rigorous environmental process before final alignments or designs can be determined.*

# Typical Stages of NCDOT Project Development



# Moore County CTP Process



## Tentative Schedule

**June 2017** - MCTC agreement on draft CTP maps, project lists, and finalize process/schedule

**September 2017** – draft documentation complete and posted online

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**(early) December 2017** – MCTC meet to discuss comments received, finalize public meeting plans

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Report finalized.

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Moore County Comprehensive Transportation Plan

This survey—conducted by Moore County, the Triangle Area Rural Planning Organization, and the North Carolina Department of Transportation—will be used to help design a Comprehensive Transportation Plan for the county and its municipalities and to help us understand the transportation needs of local citizens.

# Survey

The survey should take less than 5 minutes of your time and is also available online at <<insert address>>. Your answers will be anonymous. If you have any questions about the survey, please contact Matt Day at [mday@tcar.org](mailto:mday@tcar.org) or (919) 558-9397. Thanks!

Mail completed survey by November 30, 2016 to: TARPO, 4307 Emperor Blvd, Suite 110, Durham, NC 27703  
 –OR– complete the survey online  
 –OR– deliver in person to the Moore County Planning Department at 1048 Carriage Oaks Dr, Carthage, NC 28327

1 How many people live in your household?  1  2  3  4  5+

2 How many licensed drivers are in your household?  0  1  2  3  4  5+

3 How many licensed personal vehicles are in your household?  0  1  2  3  4  5+

4 Do any members of your household fit the following descriptions:  
 Over age 65?  Yes  No      Disabled?  Yes  No      Unemployed and seeking work?  Yes  No

5 Do you have a student(s) in school in Moore County?  Yes (school name): \_\_\_\_\_  No  
 If yes, how do they get to school?  Ride the bus  Carpool/driven by others  Drive themselves  Walk/Bike

6 Are there areas where you would like to see sidewalks constructed or improved?  Yes  No  
 If yes, where? \_\_\_\_\_

7 Would you use off-road trails or greenways for walking, running, and/or bicycling?  Yes  No  
 If yes, where? \_\_\_\_\_

8 Would you use on-road bicycle lanes or wide shoulders on the side of the road for bicycling?  Yes  No  
 If yes, where? \_\_\_\_\_

9 Would you use bus routes or vanpools if provided?  Yes  No  
 If yes, where? \_\_\_\_\_

10 Are there certain roads in Moore County that you avoid due to traffic?  Yes  No if yes, where, and what alternate routes do you use? \_\_\_\_\_

11 Is truck traffic a problem in Moore County?  Yes  No  
 If yes, what is the nature of the problem? \_\_\_\_\_

Indicate the importance of each of the following on a scale of 1 to 5, where 1 means least important and 5 means most important:	1 least	2	3	4	5 most
12 More transportation choices <i>More ways to get to places—buses, sidewalks, bike trails, etc.</i>					
13 More efficient travel times <i>High speed roads with more lanes and fewer intersections</i>					
14 Economic growth <i>New and improved roads and railways to attract and expand businesses</i>					
15 Increased public transit options <i>Bus service to more destinations; park and ride lots for carpooling</i>					
16 Community and rural culture preservation <i>Keep businesses downtown, protect existing neighborhoods, preserve landscape</i>					
17 Environmental protection <i>Protect wetlands, streams and wildlife; reduce air and noise pollution</i>					
18 Care for special needs citizens <i>Better transportation for elderly, low-income and disabled residents</i>					
19 Improved access <i>Better connections to employment, schools, and services</i>					

20 What other problems do you consider to be major transportation issues in Moore County and where do they exist?  
 \_\_\_\_\_  
 \_\_\_\_\_

21 What is your home zip code? \_\_\_\_\_ 22 What is your work zip code (if applicable)? \_\_\_\_\_

Thank you for your time! This survey is also available online at <<insert address>>.

N.C. DEPT. OF TRANSPORTATION

# Moore County Comprehensive Transportation Plan Public Survey Results Report

Based on October, 2016- January, 2017 Public Survey

4/17/2017

This report documents the results of the 2016 Comprehensive Transportation Plan Survey that was open between October 17, 2016 through January 9, 2017. 716 unique responses were received. The data shown is unedited, with the exception of questions 5&6 where some zip codes with few responses were combined into an "other" category. The results are representative of those that participated, and not the demographics of the county.

## Survey Results

## Survey Results

Survey open between October 17, 2016 – January 9, 2017

716 responses

Unedited, but alphabetized data (except questions 5&6)

Results are representative of those that participated

- Not a “scientific” survey
- Not a consensus



## Survey Results

Summary results generally looking for 10+ responses

Looking for specific areas, so municipality responses (except bus question) were not quantified

The summaries do not replace actually reading the comments

There are a lot of varied responses, so don't expect perfection with the summary *(for example, US 1 was referred to a US 1, Hwy 1 , #1, Rt 1, etc.)*

## Survey Results - #7

Question #7: Are there areas where you would like to see sidewalks constructed or improved? (269 responses)

- 16 NC 5
- 16 Pinehurst #6
- 13 US 15/501
- 12 Morganton Road (Southern Pines)
- 11 Juniper Creek Boulevard (Pinehurst)
- 11 Village Acres (Pinehurst)
- 10 NC 211
  - 9 Burning Tree Road (Pinehurst)
  - 9 Linden Road (Pinehurst)

## Survey Results - #8

Question #8: Would you use off-road trails or greenways for walking, running, and/or bicycling? If yes, where? (312 responses)

14 Pinehurst #6

10 Walthour Moss Foundation

(45 responses for anywhere or everywhere, 72 mentioned Pinehurst, 56 Southern Pines, 22 Carthage, 18 Aberdeen)

## Survey Results - #9

Question #9: Would you use on-road bicycle lanes or wide shoulders on the side of the road for bicycling? If yes, where? (117 responses)

- 12 Midland Road
- 9 Youngs Road

## Survey Results - #10

Question #10: Would you use bus routes or vanpools if provided? If yes, where? (117 responses)

- 39 Pinehurst
- 39 Southern Pines
- 20 Aberdeen
- 11 Raleigh/RDU

## Survey Results - #11

Question #11: Are there certain roads in Moore County that you avoid due to traffic? If yes, where? (433 responses)

- 287 Traffic Circle (66% of all responses)
- 147 US 15/501
- 55 US 1
- 50 NC 211
- 49 Morganton Road
- 29 NC 5
- 23 Midland Road
- 17 NC 22

## Survey Results - #12

Question #12: Is school related traffic a problem in Moore County?  
(165 responses)

- 21 (Sandhills) Farm Life Elementary
- 18 US 15/501
- 18 Traffic Circle
- 15 Pinecrest High
- 11 West Pine Elementary/Middle
- 9 NC 211

## Survey Results - #13

Question #13: Is truck traffic a problem in Moore County? If yes, where? (204 responses)

- 34 US 1
- 33 US 15/501
- 24 Traffic Circle
- 21 NC 211
- 18 NC 5
- 13 Chicken Trucks
- 12 Hoffman Road



## Survey Results - #14

Question #12: What other problems do you consider to be major transportation issues in Moore County? (386 responses)

Didn't see any common themes that haven't been discussed earlier

# Bicycle, Pedestrian, and Transit Recommendations

April 19, 2017

# Basis for Initial Bike/Ped Recommendations

- TARPO Regional Bicycle and Pedestrian Planning Framework (2015)
- Aberdeen Bike Plan & Pedestrian Plan
- Southern Pines Bike Plan & Sidewalk Plan
- Pinehurst Bike Plan & Pedestrian Plan
- Signed/Mapped Bicycle Routes (official)
- Cameron Pedestrian Plan

# Municipal Meetings

- Developed maps based on those initial inputs and held a series of meetings with each municipality back in November 2016 to review
- As a result of those meetings, a number of changes were requested to the initial draft maps

# Municipal Meetings

## Aberdeen

- Remove greenway in Aberdeen Creek corridor and US 15-501 corridor

## Cameron

- Ped crossing improvement in downtown (near post office)

## Carthage

- Extend sidewalks on Dowd Rd
- Pedestrian trail along proposed Carthage Byway
- Add on-road bike improvements on Old Glendon Rd, Glendon-Carthage Rd, Monroe St, and Vass-Carthage Rd

# Municipal Meetings

## Foxfire

- Add on-road bike improvements on Richmond Rd

## Moore County

- Remove greenway corridors that came from County Land Use Plan, with the exception of the Deep River State Trail corridor

## Pinebluff

- Add existing trail through town
- Add sidewalks on US 1, Chicago, Baltimore, Philadelphia, and New England

# Municipal Meetings

## Pinehurst

- Remove on-road bicycle improvements from several village streets (Monticello, Lake Pinehurst area, McKenzie Rd, Magnolia Rd, Rattlesnake Trail, Gun Club/Spring Lake, Juniper Creek Blvd)

## Robbins

- Add existing trail system
- Add on-road bike connections to North Moore H.S. and town park
- Add sidewalks on Salisbury, Hemp, S. Broad, NC 705 N.
- Streetscape/ADA/crossing improvements downtown

# Municipal Meetings

## Southern Pines

- Add sidewalk on Murray Hill from US 1 to US 15-501
- Add on-road bike improvement on NC 22

## Taylortown

- Connection from end of existing sidewalk to Olmsted
- Sidewalks on Main St and Taylor St

## Vass

- Sidewalk on NC 690 from US 1 Business to Alma St, and connection to downtown

## Whispering Pines

- Remove recommendations from old Open Space Plan, which has since been updated



# Additional Items

- Reflect Midland Road Corridor Study results (recommended multi-use path between Airport Road and San Davis Drive; recommended road diet with on-road bike lanes between US 1 and Clark St)
- Reflect projects being considered for Prioritization 5.0
- Clean up locations with potentially-conflicting on-road and off-road bike recommendations (Knoll Rd, Pee Dee Rd, Bethesda Rd, NC 5, Central Dr, Linden Rd) – need feedback on these
- Bike/ped facilities on new/improved roadways (incidental projects) – need feedback on these

# Transit Recommendations

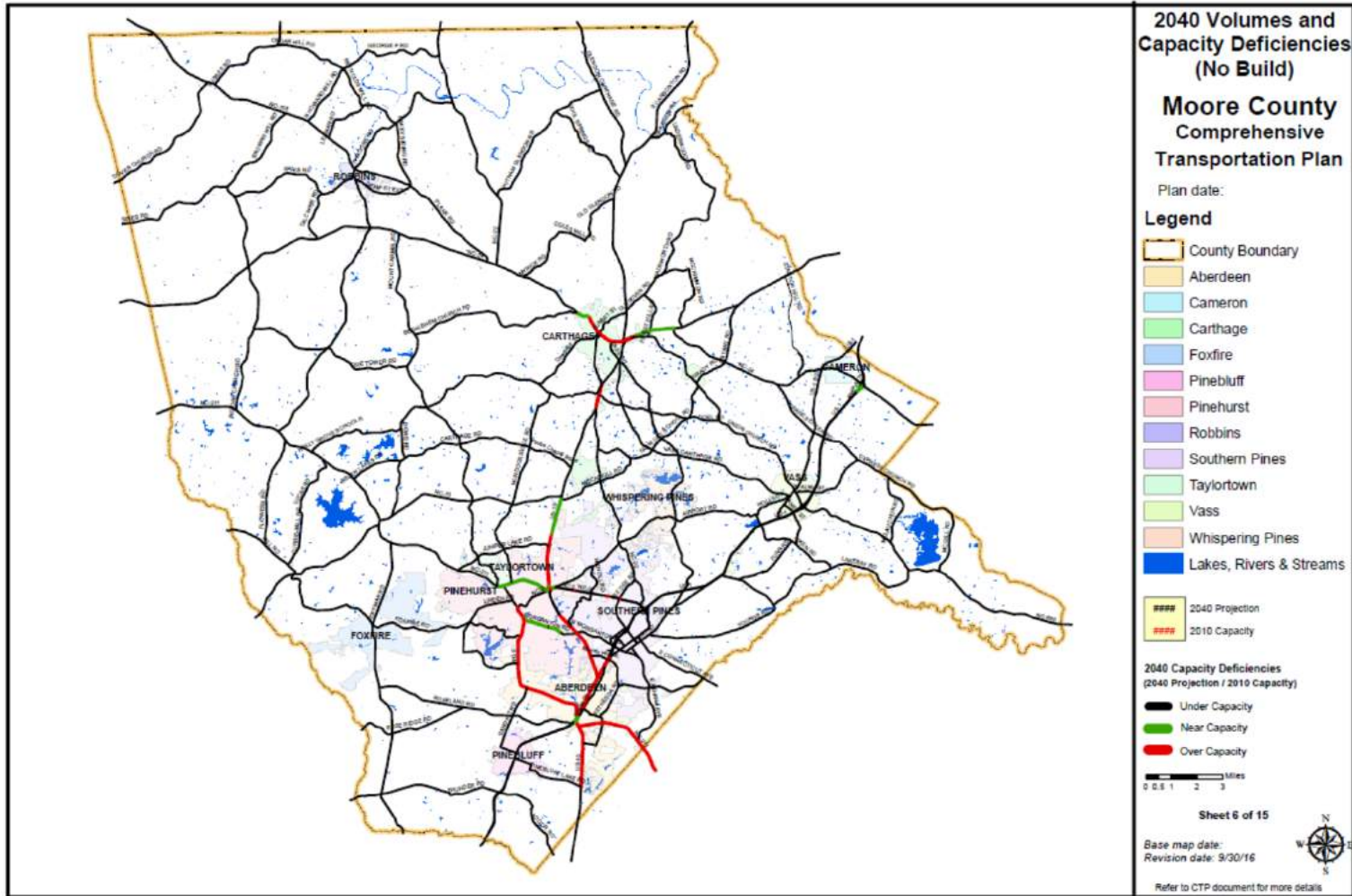
- At this time, there is one “deviated fixed route” transit service provided in the county – the “A-Pines” route. This serves Pine Hill Apartments, Providence Place, Blue’s Crossing, Pinebrook Apartments, Brookside Apartments, South Henley Park, Crescent Commons, Sandhills Community College, Southern Pines Village Shopping Center, Walmart, Aberdeen Commons Shopping Center, and the Town and Country Shopping Center on a regular schedule roughly every 90 minutes. The route will also “deviate” up to one mile to pick up or drop off customers who request the service.
- The TARPO Locally Coordinated Human Service Transportation Plan also recommends a future deviated fixed route service that would connect the northern part of the county (Robbins and Carthage) to the southern part.
- These are the only transit services and recommendations we know of at this time. Are there others we need to consider?

# Next Steps for Bicycle, Pedestrian, and Transit

- TARPO staff is providing draft maps today for review by the committee members
- TARPO staff will go through the comments received in the surveys for any additional ideas we should consider
- Barring any major issues, we will ask for MCTC approval of the draft bicycle, pedestrian, and transit maps at the next MCTC meeting









## 2040 Capacity Deficiencies

- Capacity (definition) – number of vehicles can be reasonably expected to travel on a particular roadway per day.
  - Capacity can be changed by: roadway lane width, number of lanes, number of trucks, type of terrain (mountains vs coast),
- Deficiencies = Problems
- The Capacity Deficiencies Map shows future traffic problems by marking those roads as red and green.
- Recommended roadway improvements or new location facilities in the CTP are generally based on these “problems”



# Proposal Listing Review

## DRAFT HIGHWAY MOORE COUNTY CTP PROPOSALS

#	Name	Section	Description / Comment	Proposed Cross Section	CTP	Type	Area	MCTC Agree
1	US 1 Synchronized Street	Roseland Road (SR 1112) - Old US 1	Project addresses a current and future congestion issue. Solution agreed-to as part of US 1 Focus Area. Funded TIP Project (U-5815), with construction scheduled for FY 2020	4 Lane Divided (short term) Synchronized Street, 6 Lane Divided Synchronized Street (long term)	Boulevard Needs Improvement		Aberdeen Southern Pines	Yes
2	US 1 (Pinebluff)	US 1 Alt (south of SR 1133) to Richmond County line	Add median to address safety and operational concerns and creates a consistent divided cross section on US 1 throughout the county.	4 Lane Divided Boulevard	Boulevard Needs Improvement		Pinebluff	Yes
3	Western Connector	NC 211 - US 1	Multilane divided facility, part on new location and part using existing roads, connecting NC 211 west of Pinehurst to US 1 south of Aberdeen. Project provides relief to congested corridors on NC 5, NC 211, and US 15-501 by providing an alternate route. Project was discussed as part of Western Connector Focus Area discussions. Project was scored in STI Prioritization 4.0. <b>Could be segmented when funded.</b>	4 Lane Divided Expressway / Boulevard	Boulevard Needs Improvement, Expressway Recommended		County Pinehurst Aberdeen Foxfire	Yes
4	US 15-501 and Pinehurst Traffic Circle Improvements	Page Road (SR 1208) - Voit Gilmore Lane (SR 1905), including traffic circle	Improvements to traffic circle, approaches, and intersections. Project scored in STI Prioritization 4.0 and included in draft funding list. U-5976 (draft)	4 Lane Divided Boulevard	Boulevard Needs Improvement		County Pinehurst Southern Pines	
5	US 15/501 Synchronized Street	US 1 - Brucewood Road	4 lane synchronized street, TIP Project (U-5814) with construction in FY 2020	4 Lane Divided Synchronized Street	Boulevard Needs Improvement		Aberdeen County Pinehurst Southern Pines	Yes
6	US 15/501	Page Road (SR 1208) - Carthage	Address current and future congestion. Scored in STI Prioritization 4.0	4 Lane Divided Boulevard	Boulevard Needs Improvement		Carthage County Pinehurst	
7	US 15/501	Voit Gilmore Road (SR 1905) - Brucewood Road	Address current and future congestion. Fills short gap between projects U-5814 and U-5976. <b>Includes intersection improvements with Morganton.</b>	4 Lane Divided Boulevard	Boulevard Needs Improvement		County Pinehurst Southern Pines	
8	US 15/501	US 1 - Hoke County	Address future congestion. Scored in STI Prioritization 4.0.	4 Lane Divided Boulevard	Boulevard Needs Improvement		Aberdeen County	

The following proposals are **NOT listed in any priority order.**

ALL OF THESE CTP RECOMMENDATIONS ARE DRAFT AND CAN BE CHANGED AS NEEDED

## Tentative Schedule

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## Next Meeting / Questions



- › Next meeting Wednesday, June 28?
  
- › Decisions Next time:
  1. Finalize draft maps
  2. Finalize draft project lists
  3. Finalize schedule/process
  4. MCTC agreement to move forward



## Expressway Facility



US 221 (Marion Bypass)



US 220 in Rockingham County

- High mobility, low access
- 45 to 60 mph
- Cross-section: Minimum 4 lanes with a median
- Connections: Interchanges (major cross streets) and at-grade intersections (minor cross streets)
- Driveways are limited in location and number; right-in/right-out only
- Traffic signals not allowed
- *Examples: US 117 north of I-40, US 74 just east of I-277 in Charlotte, US 1 (North of Southern Pines)*

## Boulevard Facility



US 70 East of Goldsboro



Cary Parkway

- Moderate mobility, moderate access
- 30 to 55 mph
- Cross-section: Minimum 2 lanes with a median
- Connections: At-grade intersections for most major and minor cross streets
- Driveways allowed - primarily right-in/right-out; encourage consolidation and/or sharing of access
- *Examples: US 1 in Raleigh, NC 55 (Holly Springs Bypass), NC 24/27 between Troy and Biscoe.*

## Major / Minor Thoroughfares



US 441 South of Dillsboro



US 13 North of Ahoskie

- Balanced mobility and access
- 25 to 55 mph
- Cross-section: Minimum 2 lanes, no median; includes facilities with a continuous left turn lane
- Connections: At-grade intersections
- Driveways allowed with full movements; consolidate or share connections if possible
- Examples: NC 5, Roseland Road