



NORTH CAROLINA
Department of Transportation



Moore County Transportation Committee Meeting

April 19, 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.

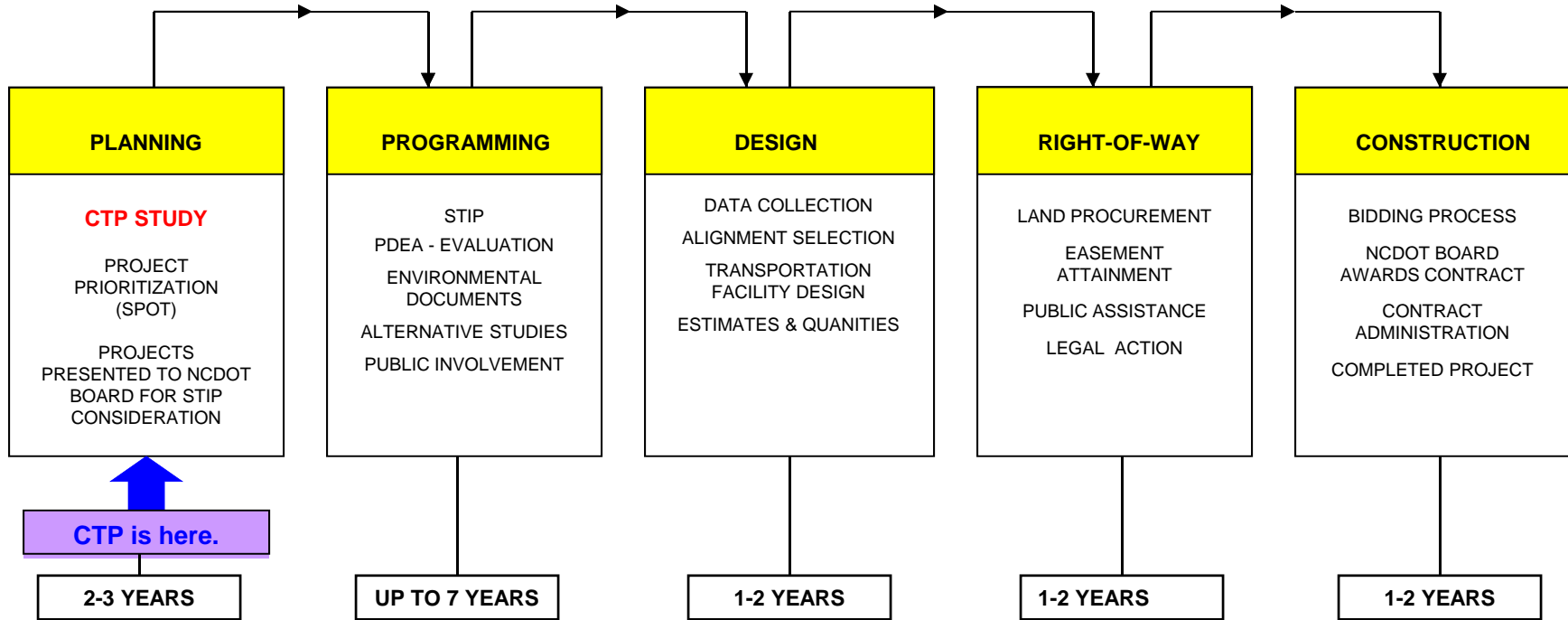
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Comprehensive Transportation Plan Overview

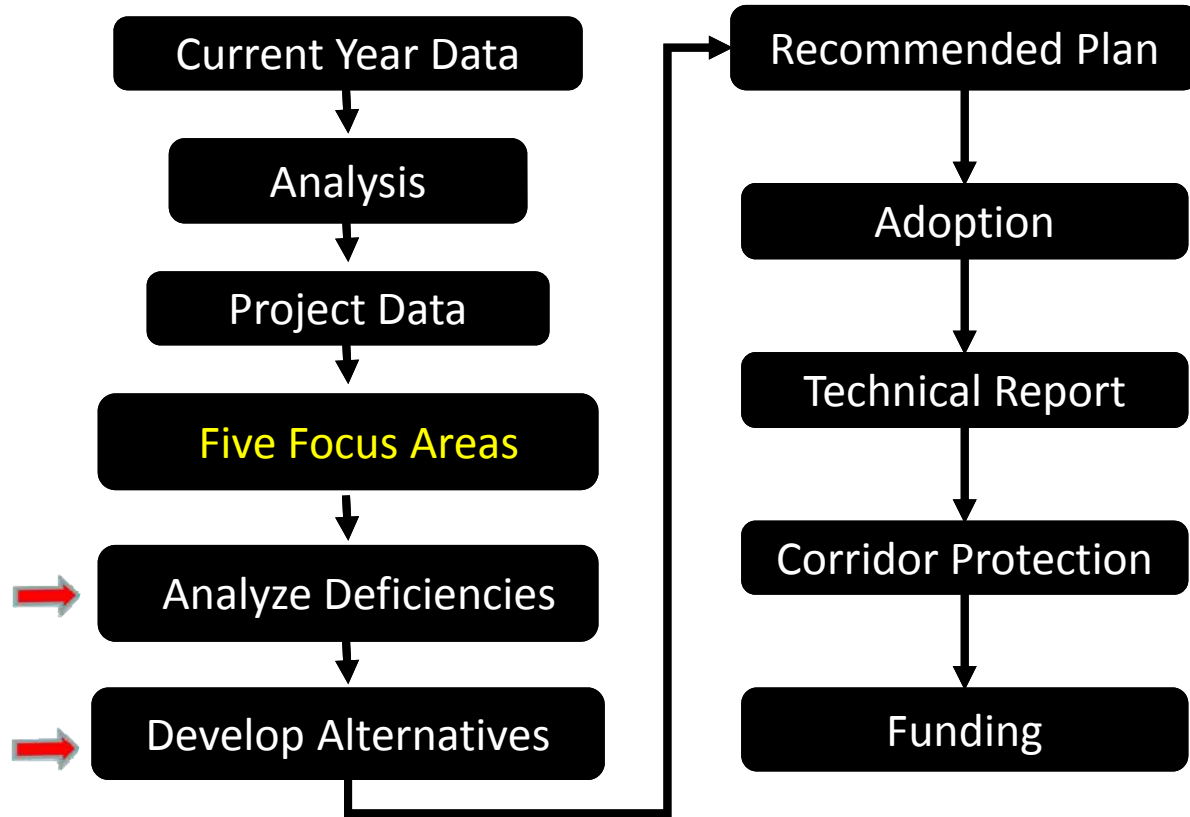
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Typical Stages of NCDOT Project Development



Moore County CTP Process





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 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

Please review and we will discuss next time.

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”

2040 Capacity Deficiencies

Capacity Deficiencies are generally based on the

$$\text{Volume / Capacity} = \text{v/c ratio}$$

Volume /Capacity **less than 0.80 (80%)** generally feel there is no immediate concern (UNDER)

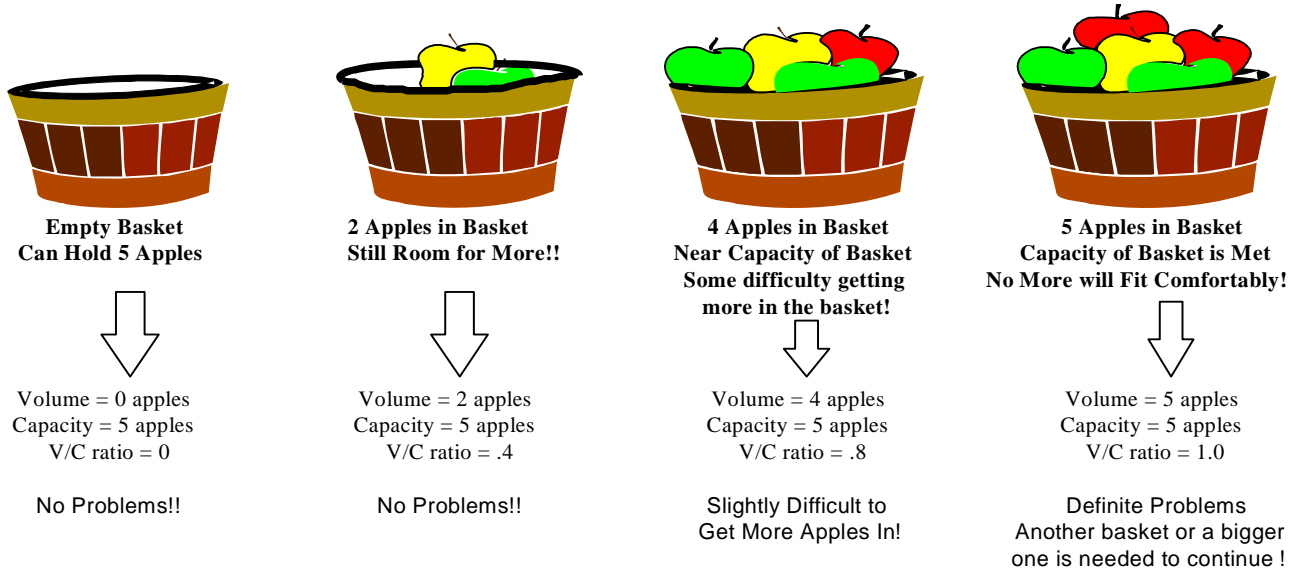
Volume /Capacity **between 0.80-0.99 (80-99%)** generally is **NEAR** capacity

Volume /Capacity **more than 1.0 (100%+)** generally **OVER** capacity

Example: Volume = 8,500 Capacity = 10,000 Volume/Capacity = $8500/10000 = 0.85$

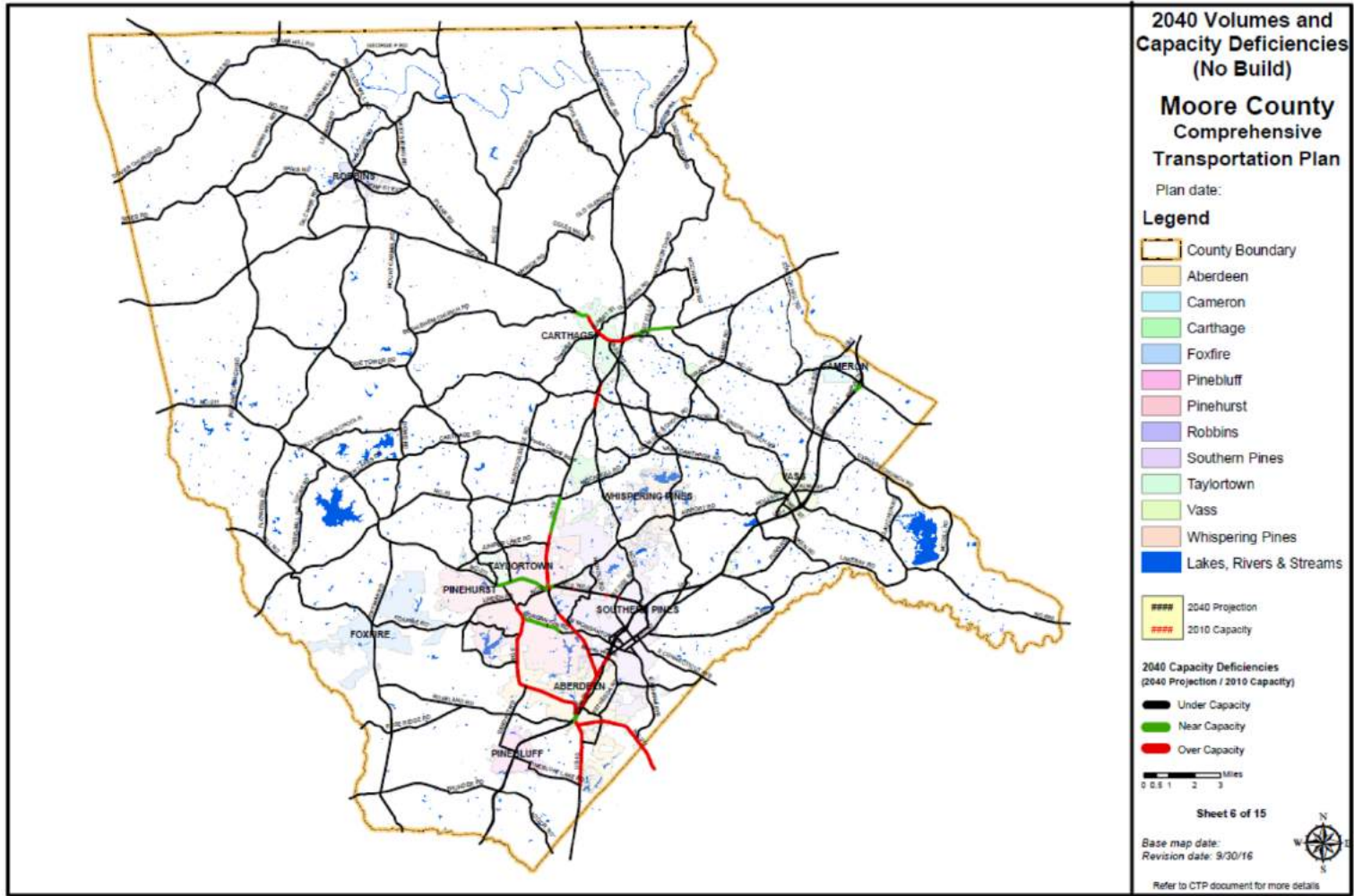
This facility is considered to be **NEAR** capacity.

2040 Capacity Deficiencies












Green lines = "Near Capacity." It is like a basket with 4 or 5 apples - getting crowded but not too full

Red lines = "Over Capacity." It is like a basket with more than 5 apples - too crowded



Proposal Listing Review

DRAFT MOORE COUNTY CTP PROPOSALS










#	Name	Section	Description / Comment	Proposed Cross Section	CTP	Modes	Area	Agree
1	US 1 Synchronized Street	Roseland Road - 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	4 Lane Divided Expressway / Boulevard	Boulevard Needs Improvement, Expressway Recommended		County Pinehurst	
4	US 15-501 and Pinehurst Traffic Circle Improvements	Page Road (SR 1208) - Voit Gilmore Lane, 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 - Brucewood Road	Address current and future congestion. Fills short gap between projects U-5814 and U-5976	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	
9	NC 5 Moderization	US1 - Pinehurst Limits	Add turn lanes and shoulders for congestion. Funded TIP Project (U-5756) with tentative schedule for FY 2025.	2-3 lanes	Major Thoroughfare Needs Improvement		Aberdeen County Pinehurst	Yes

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





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

DRAFT MOORE COUNTY CTP PROPOSALS









Not in priority order

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DRAFT MOORE COUNTY CTP PROPOSALS

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33								
34								
35								
36								

Definitions / Abbreviations:

Modes =  Highway improvement,  - Bicycle improvement,  Highway & Bicycle improvements,  - Public Transportation improvement,
 - Rail improvement,  - Pedestrian improvement,  - Bicycle & Pedestrian improvements,  - Safety Improvements

Cross-Sections = A6 (Freeway), Modified F1 (Expressway/Boulevard), Modified E-2 (Expressway/Boulevard), B1 (Boulevard/Major Thoroughfare Inside Town), Modified B-1 (Boulevard/Major Thoroughfare Outside Town), Modified H-1 (Minor Thoroughfare Inside Town), Modified H-2 (Minor Thoroughfare Outside Town), B-3 (Minor Thoroughfare), B-4 (Minor Thoroughfare), K (Minor Thoroughfare)

COA = Control of Access - adjacent land access is not allowed; ROW = Rights-of-way
 PAB = Planning Area Boundary (PAB N = PAB North, PAB S = PAB South)
 Rd = Road; St = Street; Ave = Avenue; Blvd = Boulevard; Ln = Lane (usually 12 feet wide); Div = Divided (usually with a median)
 Alt = Alternate route; Co = County; CL = City limits (NCL = North CL, SCL = South CL)
 Freeway = Full control of access facility (no driveways) with entrances only at interchanges
 Expressway = Limited/No driveway access encouraged with entrances at intersections or interchanges

Abbreviations and descriptions on last page

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

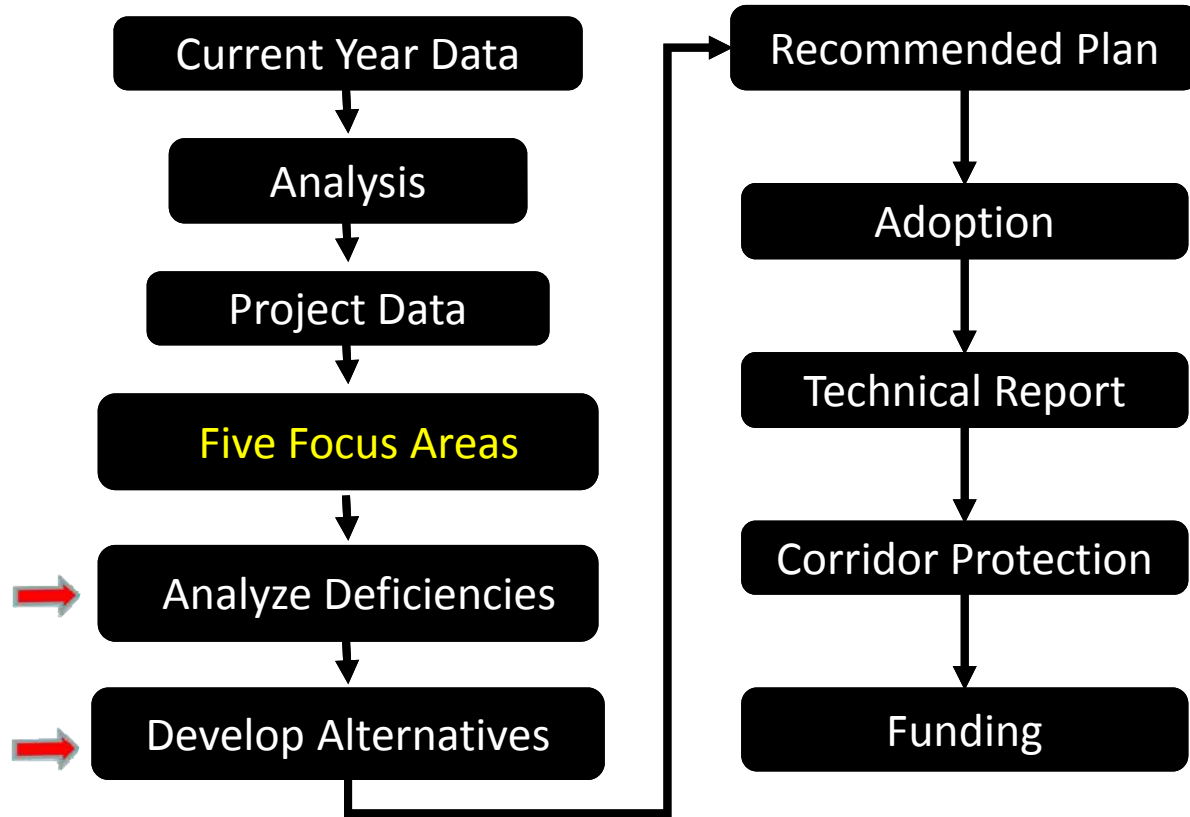
- Balanced mobility and access
- 25 to 55 mph
- Cross-section: Minimum 2 lanes, no median; includes facilities with a continuous left turn lane
- Connections: At-grade intersections
- Driveways allowed with full movements; consolidate or share connections if possible
- Examples: NC 5, Roseland Road

Additional Projects to Consider

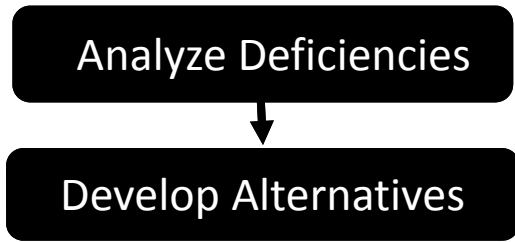
Can discuss in depth next time

Multimodal Discussion

Moore County CTP Process



Moore County CTP Process



- MCTC develops **DRAFT CTP**
- **DRAFT CTP** documentation complete
- Draft plan presented to county and its municipalities
- Public Involvement on draft plan
- MCTC consider public feedback to see if Final/Recommended Plan can be created *(or redo previous steps)*.



6 months



3 months

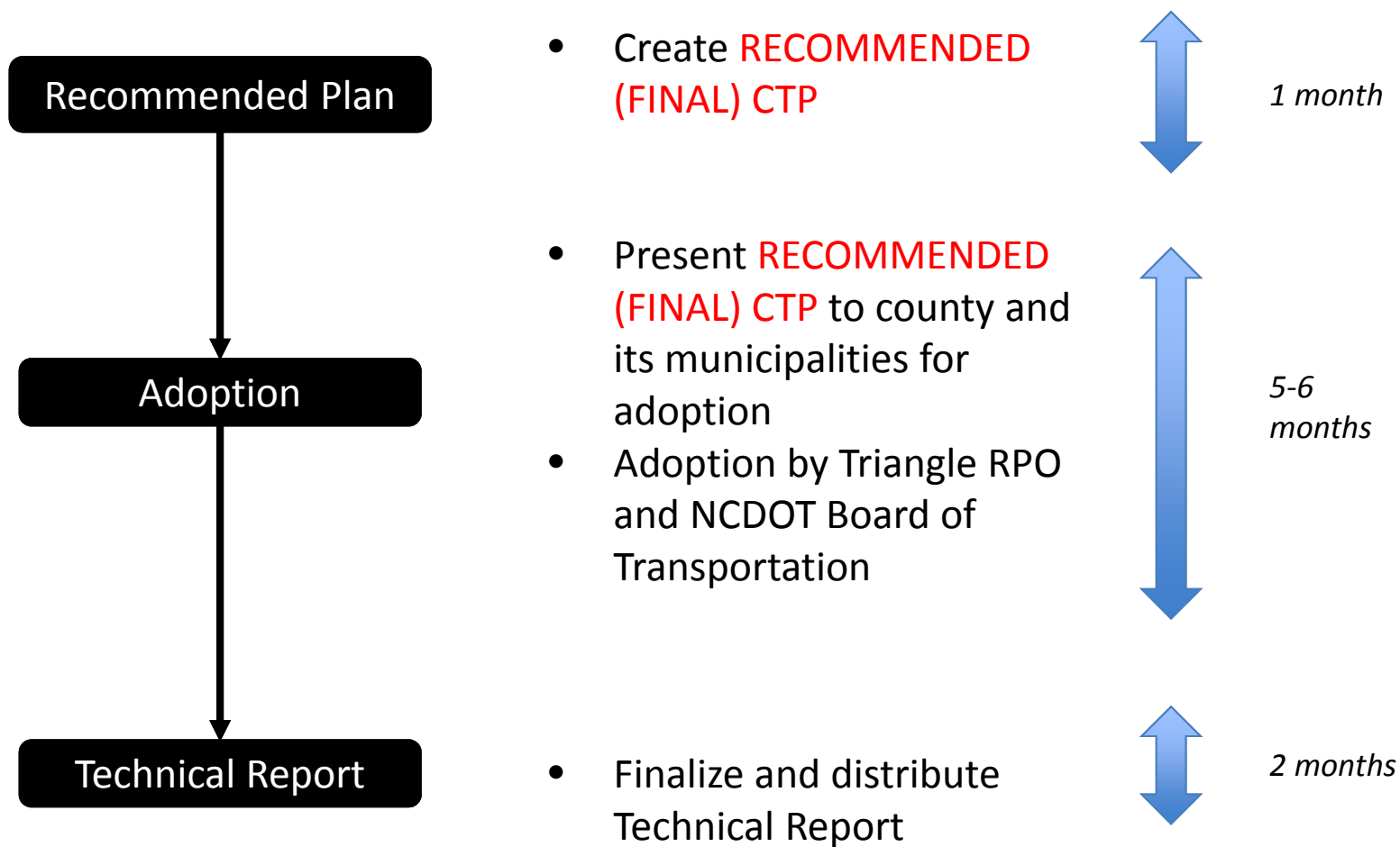


2 months



1 month

Moore County CTP Process



Next Meeting / Questions

- Next meeting Wednesday, May 24?
- May 31 is the week of Memorial day

