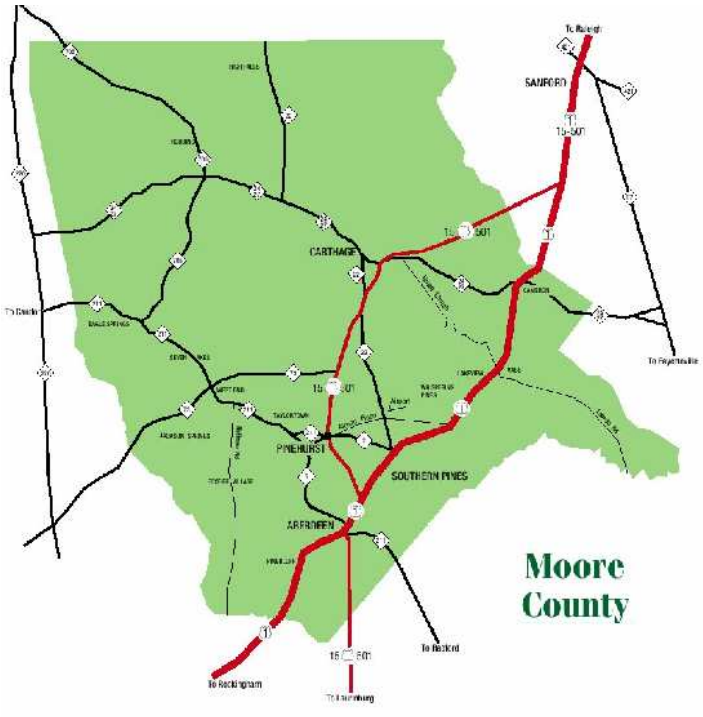
Moore County Comprehensive Transportation Plan (CTP)



Preliminary analyses have determined that key roadway facilities in Moore County will need facility improvements and upgrades based on future traffic projections and forecasted congestion.

These facilities are located in areas where development and growth are expected and/or has already begun to expand. It is critical that we reserve and protect the necessary resources to provide Moore County with the transportation system that can safely and effectively meet the needs of its communities both today and tomorrow.

The projects listed within this presentation state an **OBJECTIVE** for the charrette. ***As you begin to examine the individual projects, enter into the process with no assigned or preconceived solutions. All illustrations and mapping shown reflect previous concepts and are for the general purpose of project orientation only.*** As we move closer to the charrettes, more details and data will be provided within the mapping.

The role of the Moore County Transportation Committee is to help connect the design team with the visions and goals of the community given a roadway facility, its location, and the given parameters of its cross section and classification. Keep in mind, the scope of our study is in generalities and not about specific alignments.

THINGS TO REMEMBER:

The purpose of the charrette is to meet collectively with local stakeholders and residents to capture the community visions in the design process and promote joint ownership of the projects and their recommendations amongst the stakeholders who will ultimately be the beneficiaries of the projects' benefits and liabilities.

As participants and leaders in the design process, there is a shared responsibility to practice due diligence in accordance with sound engineering and planning guidelines and procedures. Here is a basic list of considerations for your convenience:

WHEN LOOKING FOR TRANSPORTATION SOLUTIONS:

- Consider the feasibility of recommendation – public safety, funding, right-of-way, existing development, rationale of the route, extreme variations in topography, existing infrastructure, etc.
- Consider the fact that this is a concept plan with the focus concentrating on areas and not precise design alignments.
- Consider these projects are not funded and funding will be sought through a systematic process that takes many years.
- Try to optimize the use of existing resources before tapping new ones.

AVOID OR MINIMIZE IF POSSIBLE:

- Purchase of new right-of-way
- Impacts on water sheds and wetlands
- State land preservation sites
- School facilities, public service facilities

NOT ALLOWED AND NOT NEGOTIABLE :

- Historical districts and/or interests
- Federal Land preservation sites
- Public Parks
- Inequitable impacts to disadvantaged communities

SOMETHING TO REMEMBER.....

Typical Stages of Project Development

PLANNING	PROGRAMMING	DESIGN	RIGHT-OF-WAY	CONSTRUCTION
CTP STUDY RPO PROJECT PRIORITIZATION PROJECTS PRESENTED TO NCDOT BOARD FOR STIP CONSIDERATION	STIP PDEA - EVALUATION ENVIRONMENTAL DOCUMENTS ALTERNATIVE STUDIES PUBLIC INVOLVEMENT	DATA COLLECTION ALIGNMENT SELECTION TRANSPORTATION FACILITY DESIGN ESTIMATES & QUANITIES	LAND PROCUREMENT EASEMENT ATTAINMENT PUBLIC ASSISTANCE LEGAL ACTION	BIDDING PROCESS NCDOT BOARD AWARDS CONTRACT CONTRACT ADMINISTRATION COMPLETED PROJECT
CTP is here.				
2-3 YEARS	UP TO 7 YEARS	1-2 YEARS	1-2 YEARS	1-2 YEARS

POSSIBLE IMPROVEMENTS

TOOLS IN THE TOOL BOX

- WIDEN EXISTING ROAD TO ADD LANES OR ENCOURAGE MULTI-MODAL USAGE
- EXTEND EXISTING ROAD ON NEW LOCATION
- PROVIDE CONNECTION BETWEEN A SERIES OF EXISTING ROADS TO CREATE A CONTINUOUS CROSS SECTION AND ROADWAY CHARACTERISTICS.
- CREATE A BYPASS THAT WILL SERVE GENERAL COMMUNITY GROWTH TRENDS
- UPGRADE **FACILTY CLASSIFICATION** AND MANAGE ACCESS

Freeway Facility

US 1 in Sanford

- High mobility, low access
- 55 mph or greater
- Cross-section: minimum 4 lanes with a median
- Connections provided only at interchanges; all cross streets are grade-separated
- Driveways not allowed
- Traffic signals not allowed

Expressway Facility

US 1 Near Lee County Line

- High mobility, low access
- 45 to 60 mph
- Cross-section: minimum 4 lanes
  With a median
- Connections:
  interchanges (major cross streets)
  at-grade intersections (minor cross streets)
- Driveways are limited in location
  And number; right-in/right-out only
- Traffic signals not allowed
- <u>Examples</u>: US 117 north of I-40,
  US 74 east of I-277 in Charlotte

Note: This corridor will be Freeway as part of the Strategic Highway Corridor Vision Plan in the future.

Boulevard Facility

US 1 - Tramway

- 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

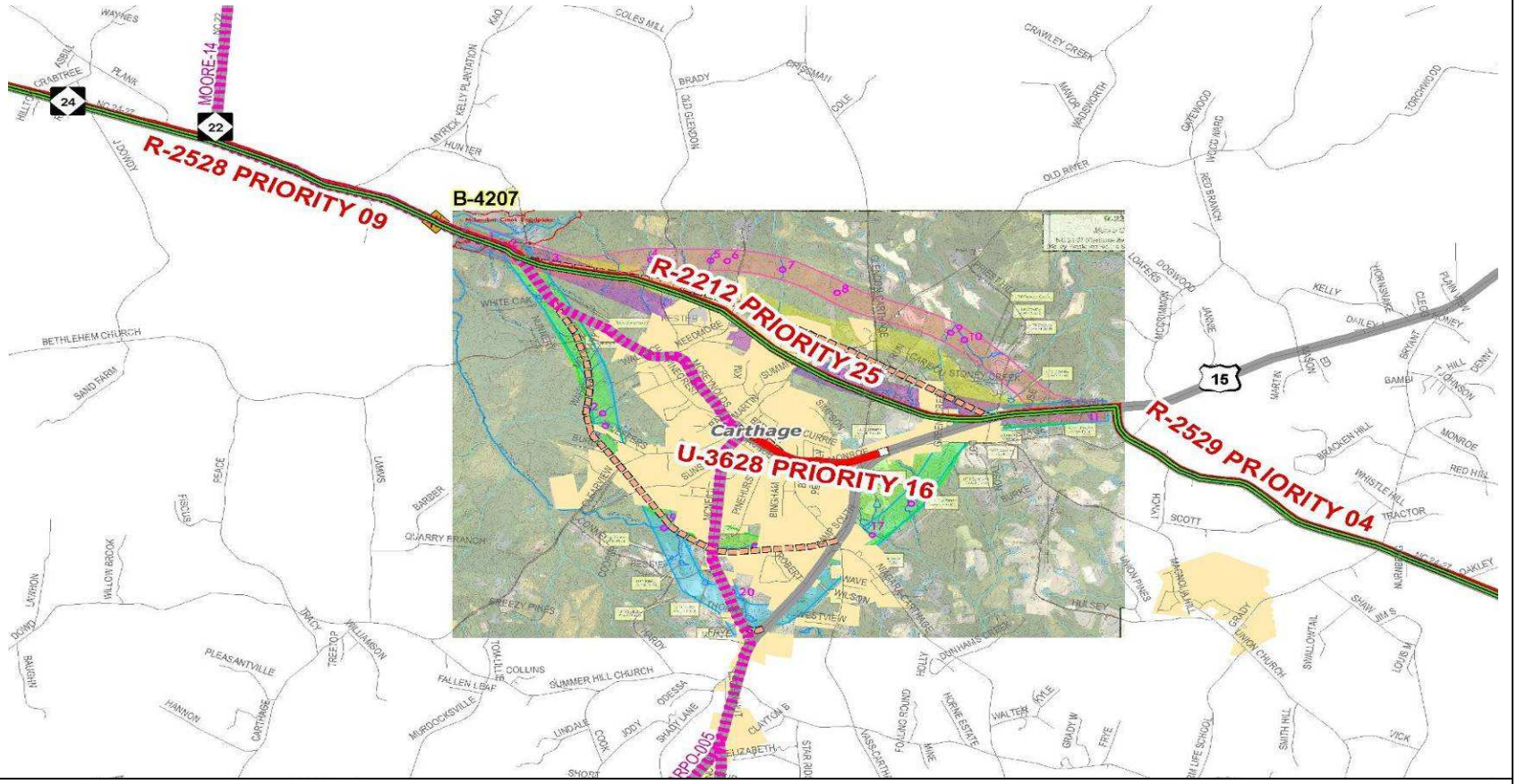
Major/Minor Thoroughfares

Bragg Street

Colon Road

- 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
- <u>Examples</u>**:** US 64 in Siler City, Sunset Blvd. in Rocky Mount near Winstead Ave.

NC 24/27 Carthage Expressway



Objective: Locate an Expressway facility along NC 24/27 to provide continuity and connectivity between R-2528 and R-2529.

Current Status: The project is not currently included in the STIP.
Associated Facilities: NC 24/27, NC 22, US 15-501, and US 1
Communities: Carthage

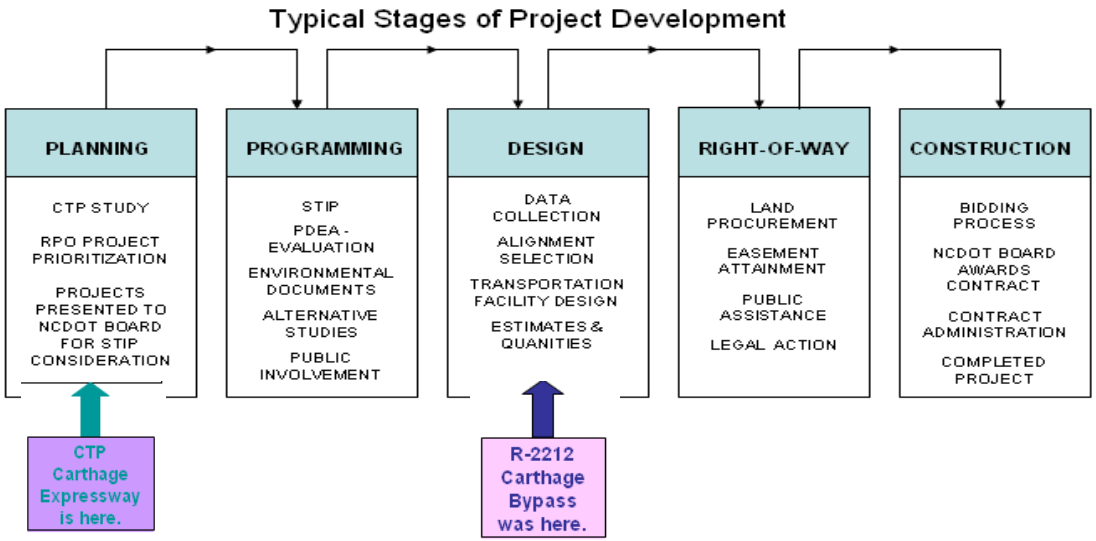
PROPOSED CARTHAGE EXPRESSWAY

PROJECT SUMMARY:

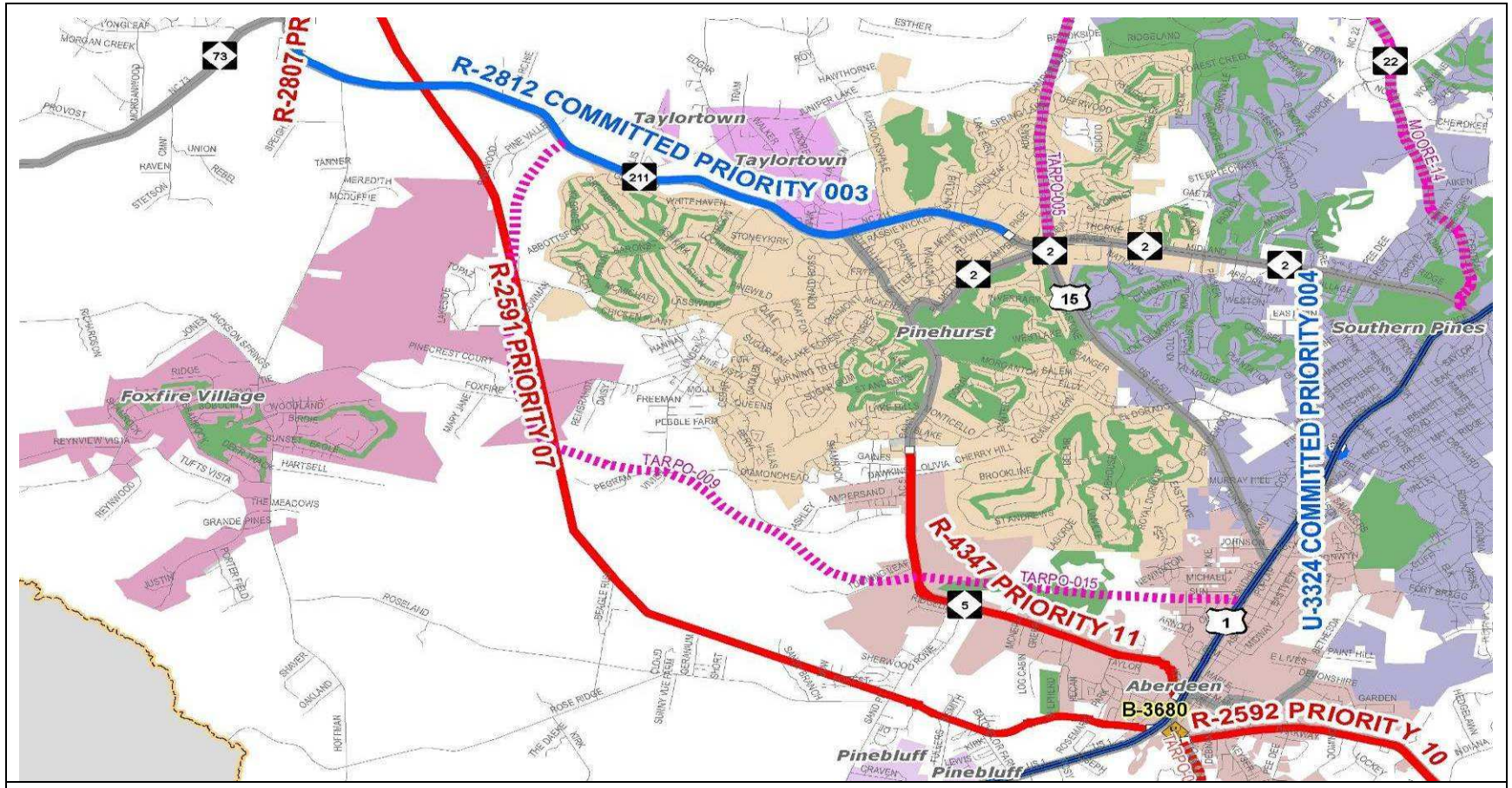
Although it has the foot print of a small town, Carthage ranks in the top 20 for North Carolina's fastest growing municipalities and claims the top seat as the Sandhill's fastest growing municipality in the region. Much of its growth is attributed to its location along NC 24/27 (a major east-west route) and US 15-501 (one of the areas most significant north-south routes). The township provides services for approximately 10,000 rural residents concentrated mainly to the south.

Furthermore, NC 24/27 is one of North Carolina's longest east-west routes providing the most direct access between Charlotte, Fayetteville and Jacksonville. It also passes near or through three major military bases as well as multiple tourist attractions such as parks and recreational water resources. Many sections are currently 4-lane cross-sections at, or near, freeway classification. Therefore, to promote mobility and provide consistent roadway characteristics the Strategic Highway Corridor Initiative recommends a facility upgrade to Expressway in this area.

The objective of this charrette will be to gain local consensus regarding the general corridor routing that will best serve both Carthage and its supporting rural communities.



Proposed Western Connector - R-2591 Project Area



Objective:	Provide multi-lane facility (type to be determined by CTP analysis) to provide southern Moore County connectivity with arterials to the north and relieve congestion on the existing infrastructure.
Current Status:	Project not included in the current STIP.
Associated Facilities:	NC 211, NC-73, NC 5, NC 2 and US 1, and the Pinehurst Traffic Circle
Communities:	Pinehurst, West End, Foxfire Village, Taylortown, Pinebluff, and Aberdeen

PROPOSED WESTERN CONNECTOR

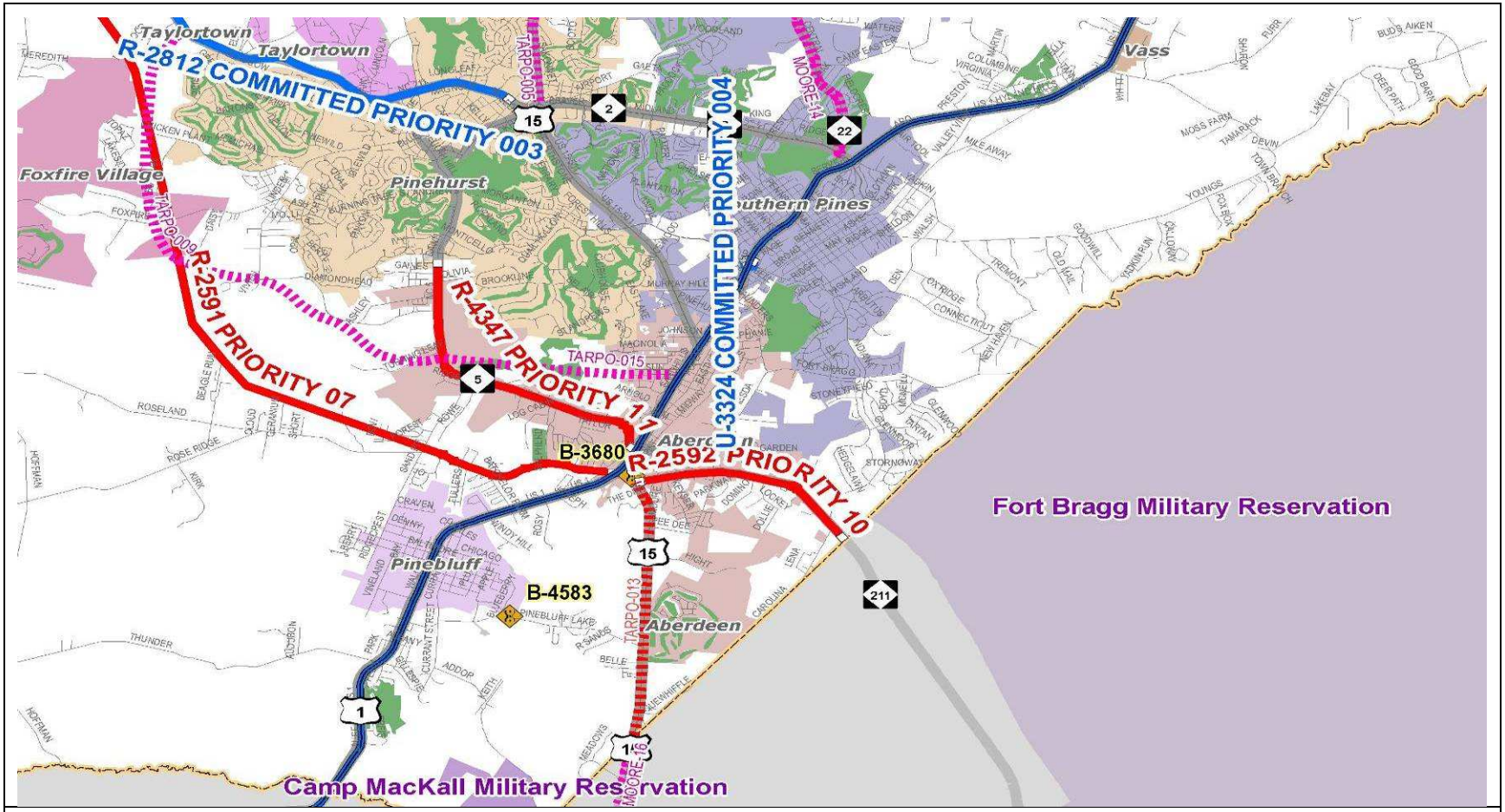
PROJECT SUMMARY:

Traffic congestion along the primary NC routes in the Pinehurst area (NC 211, NC-73, NC 5 and NC 2) is primarily due to motorists and commuters traveling between the communities of Pinehurst, Aberdeen, and Southern Pines as well as the smaller communities of Foxfire Village, Taylortown and Whispering Pines. These communities are clustered in close proximity and share the convenience of area attractions and amenities of the service and retail centers to the south along 15-501 and US 1. Other significant traffic generators within the proposed project area consist of several large developments including, but not limited to, Seven Lakes and Pinewild as well as multiple golf courses, churches, and the Firsthealth Moore Regional Hospital. The hospital is located along NC 211 and is staffed by over 3,000 employees and volunteers with a 400 bed capacity. So, its contribution to traffic along NC 211 is noteworthy.

With a sustained growth rate of approximately 3 percent and key economic generators such as Base Realignment and Closure (BRAC) initiatives, the existing infrastructure is inadequate to sustain a favorable level of service without significant improvements to the existing roadway system in future year projections especially in the dense population centers in the southern districts of Pinehurst and the surrounding communities. Therefore, the CTP will seek to provide residents in the southern communities of the County with improved access to the major roadway arterials of the County and relieve forecasted congestion along NC 2, NC 5 and NC 211. A Western Connector may also divert commercial and industrial truck as an added benefit.

The objective for this charrette will be to gain local consensus on a general corridor route that will improve transportation access for the residents of southern Moore County and relieve congestion along NC 2, NC 5 and NC 211.

US 1 Freeway



Objective: Locate **Freeway** corridor through Moore County.

Current status: The project is not currently included in the STIP.
Associated Facilities: NC 24/27, US-15-501, NC 2, and US 1.
Communities: Cameron, Vass, Southern Pines, Aberdeen, and Pinebluff.

US 1 FREEWAY CONVERSION

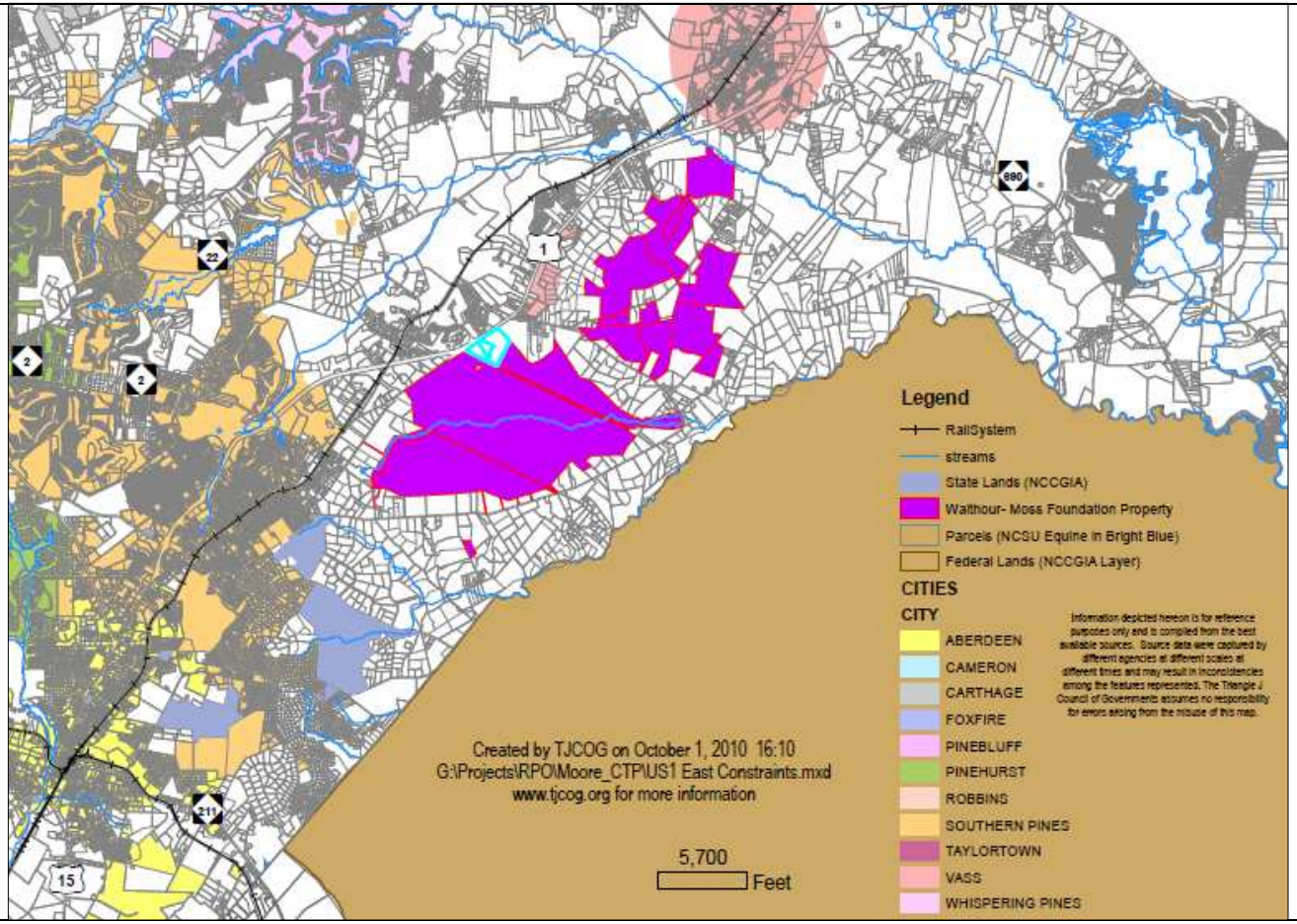
PROJECT SUMMARY:

The Strategic Highway Corridor (SHC) initiative seeks to identify, protect and maximize the use of highway corridors that play a critical role in regional and/or statewide mobility. This effort is an ongoing effort to enhance transportation, economic development and environmental stewardship throughout the State. US 1 is designated as a Strategic Highway Corridor and classified as Freeway in the initiative.

Freeways typically post speeds of 55 mph, or greater, and have a 4-lane minimum cross section which is divided by a median barrier. Note, there are no at grade crossings or entrances for side-streets, pedestrian facilities or driveways and there are no traffic signals along a designated Freeway route. It is important to understand that SHC's are a top priority for NCDOT as well as our State. Therefore, an alternative will be chosen as the need becomes critical. This is the community's opportunity to be a part of that decision and reduce both social and environmental impacts through diligent and prudent land use management.

The objective of this charrette will be to gain local consensus regarding a general corridor routing for US 1 as it is called for by the SHC plan as **Freeway** throughout Moore County.

US 1- Eastern Constraints



Objective: Avoid Horse Country and specifically Walthour-Moss Foundation. Involve BRAC Representatives, Explore Base and Western Alternatives

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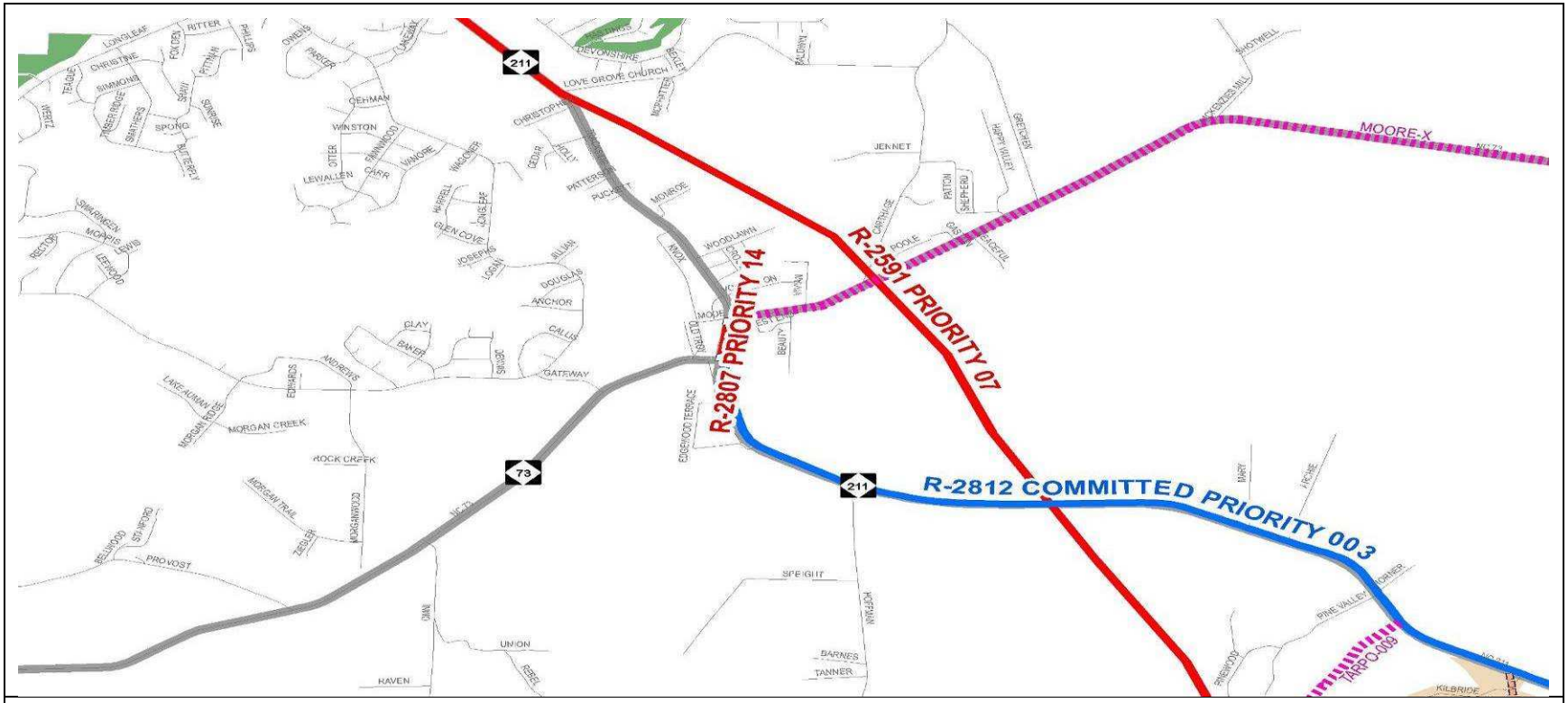
West End Focus Area



Objective:	Examine West End's land use development and area connectivity given the completion of four significant transportation facilities: R-2807 (Re-alignment of NC 73 intersection at NC 211), R-2812 (NC 211 widening), R-2591 (Western Connector) and locally requested project widening NC 73.
Current Status:	R-2807 is listed in the STIP; R-2812 is scheduled in the STIP with construction slated for 2012; R-2591 is not in the STIP; and a local request has been submitted for a feasibility study widening NC 73.
Affected Facilities:	NC 73 and NC 211
Communities:	West End

West End Focus Area

PROJECT SUMMARY:

West End is a small community basically located at the intersection of NC 211 and NC-73. The Triangle Area Rural Planning Organization (TARPO) has suggested a comprehensive, local evaluation of the proposed improvements from these four projects each contributing significant impacts to the community of West End based on the regional importance of the corridors as well as the multi-lane cross sections and accompanying foot prints.

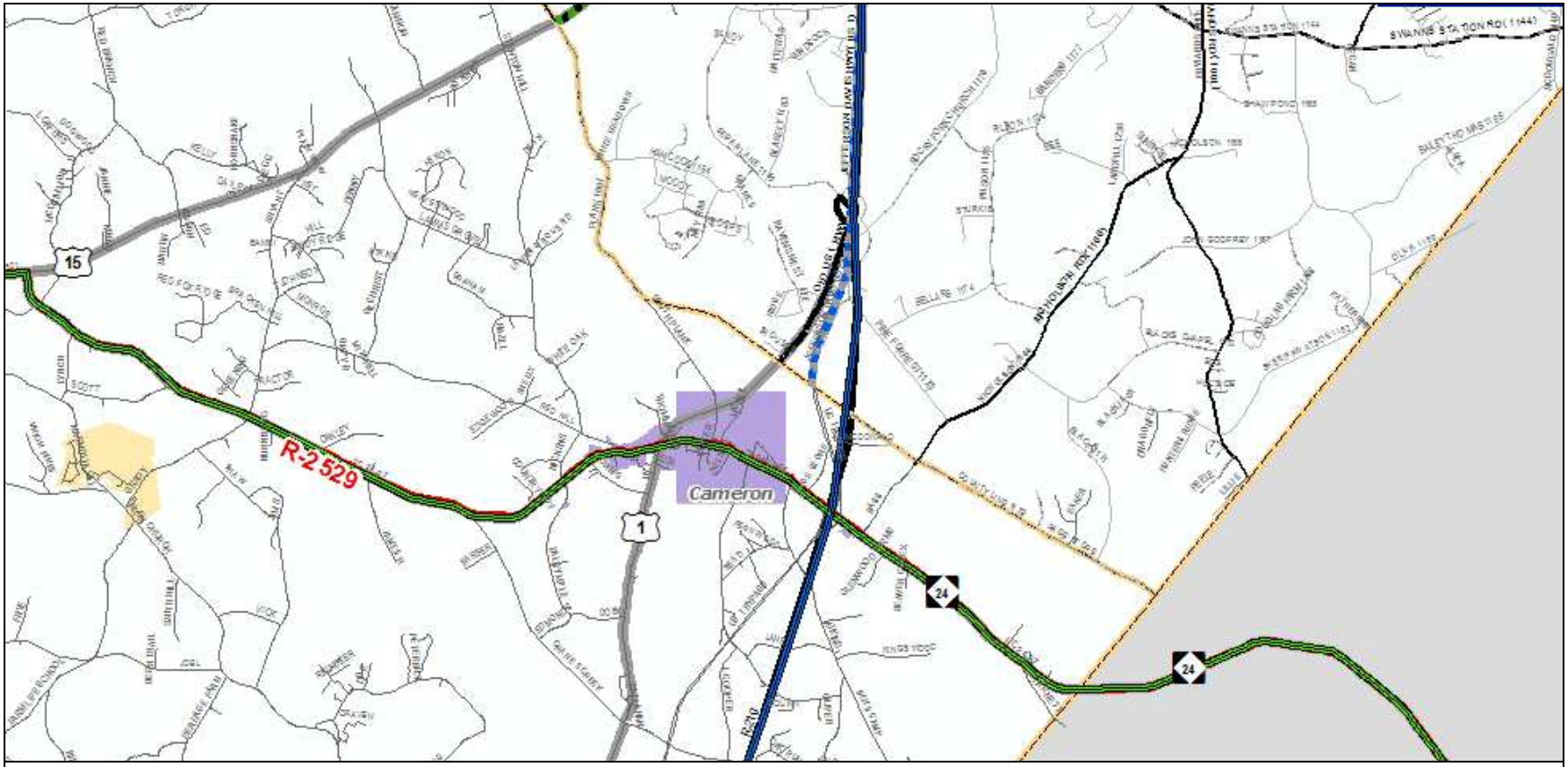
NC-73 is scheduled for improvements that will eliminate the offset at its intersection with NC 211. This project has the highest SPOT score of any TARPO project. Additionally, a local request was submitted for a feasibility study to widen NC 73 as a means to relieve congestion along NC 211 and as a response to two large proposed developments dependent upon NC 73 capacity.

NC 211 is a primary route through the Sandhills and Coastal Plains of North Carolina that eventually reaches the beaches of Brunswick County. With the proposed improvements, both NC-73 and NC 211 will be facilities with substantial cross sections, and, therefore, the possibility of managed access exists.

R-2591 (Proposed Western Connector) will also be a multi-lane facility with connectivity to NC 211 and/or NC 73. The close proximity of these substantial projects warrants examination of West End's future land use development plan and area.

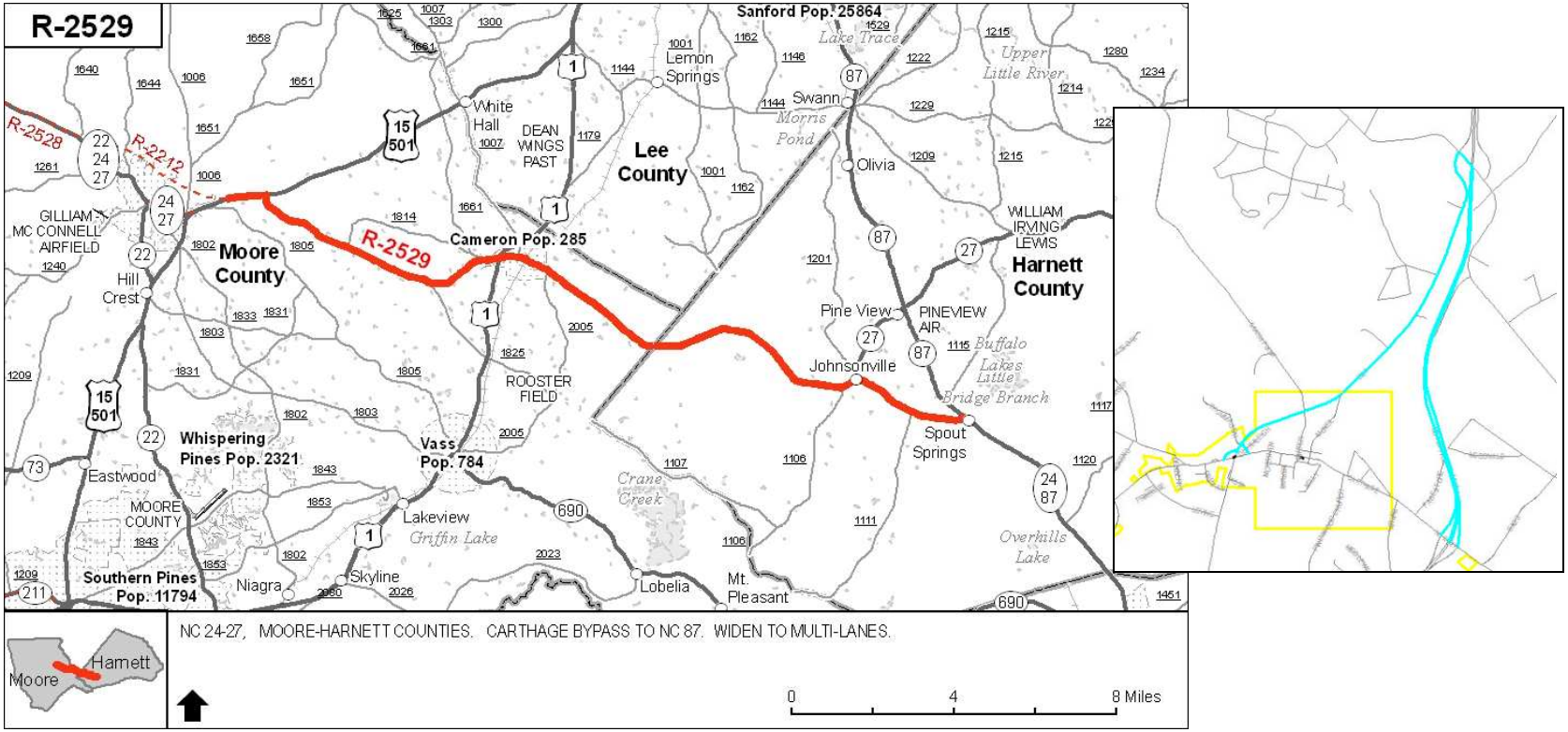
The task before to the Moore County Transportation Committee is to consider local vision, future land use development goals and the impact of the proposed projects to area's connectivity and long-range goals.

Cameron



Objective:	Examine feasibility and existing geometric constraints of projects on line.
Current Status:	Strategic Highway Corridor Plan calls for NC 24/27 to be an Expressway. R-2529 is a widening project
Affected Facilities:	NC 24/27, NC 87
Communities:	Cameron

Cameron Focus Area



The Strategic Highway Corridor Plan calls for NC 24/27 to be expressway as it goes through the town of Cameron. Additionally, R-2529 also calls for the widening of NC 24/27 from the Carthage Bypass to NC 87. Based on right-of-way, infrastructure, and geometric constraints, widening through the central business district of Cameron does not appear to be feasible. Therefore, it appears preliminarily that the Cameron area will need to be a focus for analysis with existing facilities and future traffic considered for alternative routing.