



VOLUME 3: TRANSPORTATION ELEMENT

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Introduction

PLAN PURPOSE

Comprehensive plans are the principal tool used by local governments to provide policy guidance for long-term decisions related to managing growth. A comprehensive planning process gives a community the opportunity to step back and see the big picture. Through analysis and discussion of issues and topics over a long period, planners, public officials, and community members have a chance to discuss both compatibilities and potential points of conflict among different visions, goals, and policy directives for the town.

This Town Plan serves as an update to the Town's 2003 Comprehensive Growth Management Plan and serves as an updated Transportation Plan. It is part of the Town's ongoing efforts to guide local development in response to the changing needs of the community. Specially, the Smithfield Town Plan seeks to address transportation, land use, economic development and recreation priorities within the town. This document is intended to be reference for the general public and for people investing in land and development within Smithfield. The plan should be reviewed and may be amended periodically in response to population changes, land use trends, or to facilitate the town's goals.

PLAN ORGANIZATION

The Smithfield Town Plan is organized into four sections that are described below.

Volume 1: Introduction

This section of the plan provides an introduction to the plan and includes a description of the plan's purpose, the planning process, a summary of input received and background research and analysis results.

Volume 2: Comprehensive Growth Management Element

This section of the plan includes policy recommendations that are targeted at addressing priority goals related to land use, economic development, downtown, neighborhoods, parks, and community character. This section includes a future land use map that identifies the preferred growth pattern recommended for the Town, and policies and strategies that are meant to guide the design of new development, town services and public and private investment. The Growth Management Element includes an Action Plan that outlines priority implementation steps to address key issues in the near term.

Volume 3: Transportation Element

The Transportation Element identifies priority transportation issues and makes recommendations related to the design and alignment of roadways in town. It also contains corridor and intersection improvement priorities and includes key bicycle and pedestrian recommendations.

Volume 4: Appendix

The Appendix includes information that is supplemental to the first three sections of the plan including a more detailed accounting of public involvement results, transportation project sheets, additional maps and a study of the economic contribution of trails in Smithfield.



VISION & GOALS

The vision for the Town of Smithfield was derived from work with a steering committee and feedback from the public through surveys and at public meetings. The vision statement is meant to organize the community around a shared, big-picture vision of the future.

The vision is for the Town to be a place of opportunity with small-town charm that is true to its historic character. Investments will be made in downtown, connections between neighborhoods, to and along the Neuse River. Growth will be balanced, including between residential and non-residential land uses. The environment and natural resources will be respected and will be key to enabling healthy lifestyles and a high quality of life.

Plan Goals

Five goals helped to guide the Smithfield Town Plan. Having a unifying set of goals helped to ensure the same vision for the future of Smithfield. This Transportation Element of the Town Plan centers around the Move and Connect Goal. For more information on the other four goals, please refer to the Comprehensive Growth Management Element (Volume 2).



Balanced Growth

Grow in a fiscally responsible way and balance new residential growth with new commercial and industrial development. Maintain and invest in gateways and commercial corridors. Coordinate land use and transportation decisions while respecting environmental features and existing neighborhoods.



Vibrant Downtown

Preserve the historic charm of downtown. Activate downtown by encouraging redevelopment and infill that builds on downtown's existing strengths and connects to the larger community and a variety of visitors through creating unique places and events.



Healthy Neighborhoods

Strengthen neighborhoods by supporting enhancements and reinvestment. Encourage healthy lifestyles by connecting neighborhoods to parks and open space. Maintain a high-quality educational system to give all future generations opportunities for success.



Community Character

Plan, design, and construct spaces and infrastructure that enhance the community's existing small-town identity and promote a unique sense of place.



Move and Connect

Create a balanced transportation system that connects people to destinations with a safe, efficient, and equitable network that accommodates drivers, pedestrians, and bicyclists, with a particular focus on providing safe access for people of all ages.

Recommendations

STREET TYPOLOGY AND DESIGN

To help provide a link between land use and transportation decision making, community context is an important consideration as the transportation system is improved. This means that transportation improvements made by the Town will be mindful of their location and the context. Building off of the Smithfield Town Plan Future Land Use Map (FLUM) and the NCDOT Complete Streets Planning and Design Guidelines, the street matrix shown on the following pages was created to help inform decision-making in regards to rights-of-way, access, and bicycle and pedestrian treatments. The map shows the roadway network in Smithfield classified by context area. These context areas are listed below, along with example facilities for each.

 Rural Developed (NC 210 near West Smithfield Elementary School, streets within FLUM low

· Countryside (Cleveland Road, streets within

density residential)

FLUM rural residential)

- Urban Center (Market Street)
- Urban Residential (Woodall Street)
- Suburban Center (Market Street near Outlet Malls)
- Suburban Corridor (US 301 near Walmart)
- Suburban Residential (local streets within FLUM medium density residential)

The street matrix tables on the following pages outline the design features associated with each street context area by functional classification. Traffic volume and access density are expressed as High (H), Moderate (M), or Low (L), corresponding to the approximate values below. The street matrix can serve as a tool to determine modal priorities in constrained areas, and as a way to communicate needs and priorities to agency partners or the development community. In some instances, Smithfield's existing streets will require improvements to be compliant with the recommendations; further study will be needed.

Traffic Volume

- Low (L): Less than 8,000 vehicles per day
- Moderate (M): Between 8,000 and 20,000 vehicles per day
- High (H): More than 20,000 vehicles per day

Access Density

- · Low (L): Up to 1 signal per mile OR greater than 1000 ft. average spacing between access points
- Moderate (M): 1-3 signals per mile OR 400 to 1000 ft. average spacing between access points
- High (H): More than 3 signals per mile OR less than 400 ft. average spacing between access points.





Table 1: Urban Center Street Typology

URBAN CENTER- Downtown Core, Downtown Support				
FUNCTIONAL CLASS	ARTERIAL	COLLECTOR	LOCAL	
Right-of-Way 2-Lane (ft.)	60-80	60-80	60	
Right-of-Way 4-Lane (ft.)	80-100	N/A	N/A	
Target Speed (MPH)	35	35	25	
Traffic Volume	Н	M/L	L	
Access Density	М	Н	Н	
Sidewalk Treatment	Both Sides			
Bicycle Treatment	On-Street/Shared	Sha	red	
Edge Treatment		Curb & Gutter		

Table 2: Urban Residential Street Typology

URBAN RESIDENTIAL- Medium Density Residential				
FUNCTIONAL CLASS	ARTERIAL	COLLECTOR	LOCAL	
Right- of-Way 2-Lane (ft.)	N/A	N/A	60	
Target Speed (MPH)	N/A	N/A	25	
Traffic Volume	N/A	N/A	L	
Access Density	N/A	N/A	н	
Sidewalk Treatment	N/A	N/A	Both Sides	
Bicycle Treatment	N/A	N/A	On-Street/Shared	
Edge Treatment	N/A	N/A	Curb & Gutter	

Table 3: Suburban Corridor/Center Street Typology

SUBURBAN CORRIDOR/CENTER- Medium & Low Density Residential, Commercial, Mixed Use Center, Office/Residential, Industrial/Employment				
FUNCTIONAL CLASS	ARTERIAL	COLLECTOR	LOCAL	
Right-of-Way 2-Lane (ft.)	60-80	60-80	60	
Right-of-Way 4-Lane (ft.)	100-110	N/A	N/A	
Right-of-Way 5-Lane (ft.)	100-110	N/A	N/A	
Target Speed (MPH)	40	35	25	
Traffic Volume	Н	М	L	
Access Density	L/M	H/M	н	
Sidewalk Treatment		Both sides		
Bicycle Treatment	On-street/SUP	On-street	Shared	
Edge Treatment		Curb and gutter		



SUBURBAN RESIDENTIAL- Medium Density Residential				
FUNCTIONAL CLASS	ARTERIAL	COLLECTOR	LOCAL	
Right-of-Way 2-Lane (ft.)	N/A	60-80	60	
Target Speed (MPH)	N/A	35	25	
Traffic Volume	N/A	М	L	
Access Density	N/A	H/M	Н	
Sidewalk Treatment	N/A	One Side		
Bicycle Treatment	N/A	Sha	red	
Edge Treatment	N/A	Curb and	Gutter	

Table 4: Suburban Residential Street Typology

Table 5: Rural Developed Street Typology

RURAL DEVELOPED- Low Density & Rural Residential, Office/Residential, Industrial/Employment				
FUNCTIONAL CLASS	ARTERIAL	COLLECTOR	LOCAL	
Right-of-Way 2-Lane (ft.)	60-80	60-80	60	
Right-of-Way 3-Lane (ft.)	80	80	N/A	
Target Speed (MPH)	45	35	25	
Traffic Volume	Μ	L	L	
Access Density	L	L	L	
Sidewalk Treatment	One Side or Shared Use Path			
Bicycle Treatment		Paved Shoulders		
Edge Treatment		Ditch		

Table 6: Countryside Street Typology

COUNTRYSIDE- Low & Rural Residential, Commercial				
FUNCTIONAL CLASS	ARTERIAL	COLLECTOR	LOCAL	
Right-of-Way 2-Lane (ft.)	60-80	60-80	50	
Target Speed (MPH)	45	35	25	
Traffic Volume	М	L	L	
Access Density	L	L	L	
Sidewalk Treatment		No Sidewalks		
Bicycle Treatment		Paved Shoulders		
Edge Treatment		Ditch		

COLLECTOR STREET NETWORK

Expanding Smithfield's transportation system with an increased number of collector streets will enhance travel between local streets, arterials, and other collectors. The primary purpose of a collector street is to collect traffic from neighborhood and local level streets and distribute it to other thoroughfares. Responsibility for building a collector street system relies on developers for funding, design and construction. A properly implemented plan can improve accessibility to activity centers and minimize harmful impacts to sensitive areas. Both local and through-traffic can and will benefit from the reduced reliance on more major thoroughfares.

The Functional Classification map found in Figure 14 of Volume 1, provides locations of existing collector streets within Smithfield. The Town may choose to further distinguish between major and minor collector streets at a later date as a mechanism to clarify their interaction with residential driveways.

Consideration should be given to reclassifying the below roads from local streets to collector streets. Further study may be needed to determine if additional right of way is required for these roadways.

- Outlet Center Drive
- Peedin Road
- Bradford Street
- Barbour Road

What does a connected street network look like?



Fragmented Street Network



Connected Street Network

Why do we include collector streets?

- · Offers options to avoid congested intersections
- · Reduces reliance on major routes
- · Integrates bicyclists and pedestrians
- · Improves emergency response time
- · Lower speed limits and less traffic

Figure 2, on page 7, illustrates existing and recommended collector street locations. The vast majority of recommended collector streets will be development-driven. While the termini of the recommended collector street alignments are important, the alignments are illustrative and can vary based on the needs of the development.





TRANSPORTATION RECOMMENDATIONS

As an outcome of the planning process, a series of recommendations have been identified for the study area. These recommendations are intended to address existing deficiencies and plan for future needs. There is no single preferred improvement type. By having a blend of various improvement types, the Town retains the greatest flexibility to pursue project funding while maintaining the local character and advancing the goals of the Town Plan. The map on page 9 identifies the locations of the recommended roadway improvements.

Corridor Improvements

- Access and Operations improvements are intended to increase the efficiency at which existing roadways operate without adding travel lanes. Access improvements can include the addition of medians, turn lanes (not continuous two-way left turn lanes), and driveway consolidation, while operations improvements include signal system upgrades and re-timing.
- **Capacity and Mobility** improvements aim to reduce congestion or disperse existing traffic through the network. Congestion reduction will most often occur through the addition of travel lanes. Traffic dispersion and increased mobility options include the addition of new location roadways.
- **Modernization** improvements are intended to upgrade substandard roads. Upgrades can include elements such as wider travel lanes and paved shoulders, curb and gutter, sidewalks, ADA compliant features, and improved intersection turn lane facilities.

In addition to the recommendations for physical improvement, the project team recommends two major functional classification upgrades: M. Durwood Stephenson Highway from collector to minor arterial, and US 301 from minor arterial to major arterial.

Intersection/Interchange Improvements

Enhancing travel safety is an important outcome of any transportation plan. Through consultation with local staff, residents, and available safety data, the Smithfield Town Plan identified intersections for safety improvements. Though the ultimate redesign of an intersection will have to be finalized after a detailed study, there are several standard countermeasures to improve safety and operations.

- **Realignment:** Roadways are realigned to meet as close to a 90-degree angle as possible. This improves visibility and turning radius.
- **Signalization:** Some non-signalized intersections may be eligible for a traffic signal based on their traffic counts.
- Improved Crossings: Often the danger to pedestrians and bicycles can be reduced by providing improved crossing facilities, such as painted crosswalks and median refuges.
- Roundabouts: Replacing a traditional intersection with a roundabout reduces the number of serious crashes while improving traffic flow.
- Turn lanes: Turn lanes allow space for vehicles waiting to turn and reduces the risk of rear-end crashes.

- Driveway Consolidation: Curb cuts that are too close to an intersection are consolidated or relocated to reduce the number of turning movements or potential crashes.
- Improve/Advance Signage: Providing advanced warning signs or installing reflective backplates on traffic signals can reduce crashes due to reduced visibility.
- Restricted Crossing U-Turn Intersection (RCUT): RCUT intersections, also sometimes referred to as super street intersections work by redirecting left-turn and through movements from the side street approaches. These movements are accommodated by making a right turn followed by a U-turn maneuver at a median opening downstream. RCUT intersections can improve efficiency and safety of roadways.





FIGURE 3: TRANSPORTATION RECOMMENDATIONS

lane median divided section.

ROADWAY MAINTENANCE

Roadway maintenance was discussed throughout the entirety of the planning process. Currently, there are 82 miles of Town-maintained roadways and 109 miles of state-maintained roadways. As the Town continues to grow and expand, maintenance will be of even greater concern. To help ensure roadways and each of its associated elements are maintained appropriately, the Town should continue to regularly update the pavement quality and drainage inventories of all town-maintained roadways. Having an up to date inventory will provide town staff with vital information to create a maintenance schedule and ensure appropriate funding is available. It is recommended that a pavement condition assessment (last updated in 2018) be conducted every 3-5 years to maintain accurate information. For more information see the Growth Management volume of the Town Plan.

TRANSIT SERVICE

Currently Smithfield residents have access to on-demand transit service provided by Johnston County Area Transit Service (JCATS). JCATS provides human services transportation through contracting agencies, as well as general public transportation. General public transportation is available between 6am and 5pm on weekdays (Monday-Friday). Several local plans have considered the options for expanding transit access in Johnston County, including:

- · Commuter rail line between Raleigh and Selma
- · Bus route between Selma, Smithfield, and Benson

As these concepts continue to advance into a planning phase, it will be critical for the Town to remain involved in the planning process and decision-making. Additionally, if growth continues around Johnston Community College, Johnston Health, and downtown the Town may explore the option for a local fixed-route shuttle or deviated fixed-route shuttle between these growing activity centers. This service could be provided by the Town, JCATS, or a private contractor.





FIGURE 4: ROADWAY MAINTENANCE RESPONSIBILITY

OUTLET CENTER DRIVE ROUNDABOUT

Throughout the entire planning process, the Outlet Center Drive roundabout was brought up as an area of particular concern within the community. Located on Outlet Center Drive and the I-95 off-ramp, the roundabout's current configuration is confusing and dangerous for drivers. This is especially the case for visitors coming to the outlet malls who are unfamiliar with the intersection.

Several alternatives were proposed and studied, including modifications of the roundabout and neighboring intersections as well as eliminating the roundabout and replacing it with a traffic signal. A modified roundabout configuration was identified as the likely preferred scenario. The modified roundabout scenario would be the most cost-effective solution, since it retains most of the existing infrastructure. This scenario also greatly reduces the possibility of a traffic backup onto I-95 since traffic would never experience a full stop condition.

The preferred scenario is shown on the following page and notable design features and characteristics are listed below.

Configuration Features

- · Overall roundabout size maintained to reduce improvement cost.
- Channelizing features removed or modified along Outlet Center Drive and I-95 access ramp. Revisions will be directly before the roundabout and will not hinder traffic exiting the I-95 southbound lane or along US 70 Business. This eliminates confusion caused by median-divided lanes that travel in the same direction.
- · Advance signage and lane markings added to aid in decision-making.
- Does not require adjustments to laneage approaching/departing roundabout.
- · Acceptable traffic levels-of-service and driver delay, based on existing and projected future traffic.
- Removal of the channelizing islands may result in slightly wider lanes which may be a concern for increased speeds. The issue may be mitigated with traffic calming devices such as rumble strips or textured pavement.
- Addition of stop bar, yellow dotted lane lines, raised retro-reflective pavement markers, and advanced signage along Outlet Center Drive near Smithfield Cinema parcel to limit conflict (see image below).





FIGURE 5: EXISTING ROUNDABOUT CONFIGURATION



FIGURE 6: PROPOSED ROUNDABOUT CONFIGURATION



US 70 BUSINESS/ E MARKET STREET RAILROAD BRIDGE

As part of the Southeast Area Study conducted by the Capital Area Metropolitan Planning Organization, NCDOT, and the Upper Coastal Plain Rural Planning Organization in Spring 2017, recommendations were presented for the section of US 70 Business/E Market Street between US 301 and I-95 including the railroad bridge. The corridor and bridge are intended to act as a gateway into Downtown Smithfield. This corridor is recommended to have a phased approach to improvements, with access management and operational improvements as a first phase and capacity addition in the second phase. Future redesignation of the US 70 Business corridor may allow for added flexibility in lane and right-of-way allocation. The needed right-of-way to realize this corridor vision is 96-ft in constrained locations and 108-ft in all other locations. To realize this ultimate vision, US 70 Business/E Market Street would require the following improvements:

- Widening to four-lanes with a grass median and dedicated turn lanes from US 301 to I-95.
- The Southeast Area Study recommended bicycle lanes going in both directions in addition to sidewalks. As a part of the Town Plan, this recommendation was updated to a sidewalk running along the northern section and a shared-use path running along the southern portion of the corridor. This modification provides a greater separation for bicycle and pedestrian traffic than unbuffered bicycle lanes.
- Additionally, the railroad bridge and lines are recommended to be raised to allow for sufficient clearance for trucks and other large vehicles. The bridge would also need to be widened to accommodate the additional travel lanes and bicycle and pedestrian facilities.

FIGURE 7: US 70 BUSINESS VISUALIZATION







US 301 GATEWAY

US 301 runs through the southern portion of the Study Area and acts as a major corridor and gateway for Smithfield. Recommendations for the corridor embrace multimodal transportation concepts to ensure there is an equal opportunity for citizens and visitors to move around Smithfield. In the near-term, the Town should work with NCDOT and Upper Coastal Plain Rural Planning Organization (UCPRPO) to complete a corridor study that identifies the appropriate locations for access management strategies such as median installation and driveway consolidation.

Recommendations for the corridor include:

- A four-lane divided roadway with a landscaped median.
- A multi-use path along one side and a sidewalk on the other.



FIGURE 8: US 301 VISUALIZATION

Existing



BICYCLE AND PEDESTRIAN RECOMMENDATIONS

As part of the recommendations for the transportation element of the Smithfield Town Plan, both bicycle and pedestrian improvements are included to help promote a more holistic and multimodal transportation network. The following pages present an overview of recommendations as well as a general timeline of execution.

Downtown Bicycle and Pedestrian Enhancements

As Downtown Smithfield continues to grow, both pedestrian and bicycle enhancements are needed to improve general safety, especially at intersections, as well as provide alternative means of transportation around town. Pedestrian crossing enhancements can take a variety of forms. Often features allow for increased visibility of pedestrians and help to improve overall safety. Working crossing signals are the basis of pedestrian enhancements. Crossings can be upgraded to brick or stamped concrete to make them more aesthetically pleasing. While crossing improvements should be considered any time an intersection is being repaved or improved, there are certain locations within the study area that would benefit in the near-term from crossing improvements. The portion of E Market Street running through the downtown area is recommended to have crossing improvements at almost all of its intersections. These improvements may include one or several of the types described above. The intent of these improvements will be to study enhancements to traffic signals and crossing facilities that help to slow down vehicle traffic and enhance pedestrian crossing safety and comfort. Longer-term, the Town could consider working with NCDOT to move the designation of US 70 Business to an alternate facility. This relocation would reduce trucks and improve bicycle and pedestrian comfort in downtown.

In addition to functioning crossing signals, the Town should conduct a pavement quality inventory of all downtown sidewalks to ensure that maintenance is being conducted in a timely manner. Having an updated inventory also helps to locate gaps in the sidewalk network and identify where new connections can be made.

With regard to bicycles, several bicycle boulevards are recommended; one north and one south of E Market Street, and the on-street segments of the Mountains to Sea Trail (MST). A bicycle boulevard is a bikeway on a low-speed street that has been optimized for bicycle traffic. By having multiple route options, connections are created between the existing greenway and other recreational areas. In addition to the bicycle boulevard, a greenway extension is proposed between E Church Street and E Woodall Street. This connection would run along the existing floodway of the Spring Branch and would provide connections to the new park proposed in the Comprehensive Growth Management Plan.





FIGURE 9: DOWNTOWN BICYCLE AND PEDESTRIAN RECOMMENDATIONS

Additional Pedestrian Recommendations

The Town of Smithfield's Unified Development Ordinance establishes requirements for the provision of pedestrian facilities. The Pedestrian Priority Areas identify locations such as main corridors, parks, downtown, and schools where the provision of pedestrian facilities is especially important. Enhanced pedestrian facility coverage or facility types should be considered in these areas.

Community Driven pedestrian priority areas are those areas which the community deems that it is especially important to have pedestrian facilities present. These areas include schools, the East Coast Greenway, Downtown, Johnston Health, and the Smithfield Recreation & Aquatics Center.

Corridor Connectivity pedestrian priority areas are main corridors throughout Smithfield that have a significant amount of foot traffic and/or have major destinations situated along them. These areas include but are not limited to M. Durwood Stephenson Highway, Brightleaf Boulevard, and Market Street.

Proposed Timeline of Recommendations

Near-Term

- Downtown crossing enhancements.
- Greenway expansion.
- S Third Street traffic calming and enhanced crosswalks.

Mid-Term

- · Create a downtown plan.
- · Bicycle boulevards.
- · Crossing enhancements across the railroad tracks.
- Enhanced crossings and streetscape.

Long-Term

- US 70 Business re-designation.
- · Corridor space reallocation/updating the cross section and laneage of E Market Street.





FIGURE 10: PEDESTRIAN PRIORITY AREAS

Funding and Implementation

INTRODUCTION

The success of the Smithfield Town Plan hinges on the effective collaboration of local, regional, and state officials. The recommendations outlined in Chapter 1, as well as those in the Growth Management Element, build upon previous and ongoing efforts by the Town to improve the transportation network through facility improvements, close coordination with regional partners, and town policies. Completion of this plan represents an important step toward implementing multimodal improvements that affect travel safety, mobility, development patterns, and aesthetics in the Town of Smithfield. This chapter lays out a set of recommendations to help staff continue to focus their efforts and seek strategic opportunities to expedite the implementation of this plan.

FUNDING OPPORTUNITIES

With tight budgets constraining municipalities across the board, the funding to implement the recommendations in the Town Plan will likely come from a patchwork of local, state, and federal programs, as well as through the receipt of private contributions. With this in mind, this chapter identifies available funding resources that are being used now and can continue to be explored to maximize potential revenues for the Town.

It will be important for the Town of Smithfield, in collaboration with Johnston County, UCPRPO, and NCDOT, to continue pursuing funding resources to implement the recommendations of this plan. While some projects and programs may be funded locally, alternatives are available to provide a wider base of financial support for improving the local transportation network, as this goal will ultimately benefit the larger region.



FUNDING SOURCE	DESCRIPTION	
FAST Act	Transportation funding at the federal level is governed by a spending authorizations bill that sets the nation's agenda and priorities for the next few years' major transportation projects. The Fixing America's Surface Transportation (FAST) Act, was passed in 2015, and sets the country's transportation priorities through 2020. In North Carolina, federal transportation funds are allocated through the state's Transportation Improvement Program.	
Governor's Highway Safety Program (GHSP)	GHSP funding is provided through an annual program, upon approval of specific project requests, to undertake a variety of safety initiatives. Communities may apply for a GHSP grant to be used as seed money to start a program to enhance highway safety. Once a grant is awarded, funding is provided on a reimbursement basis and evidence of reductions in crashes, injuries and fatalities is required.	
North Carolina Clean Water Management Trust Fund (CWMTF)	CWMTF funds, are allocated as grants to local governments, State agencies, and conservation non-profits to help finance projects that specifically address water pollution problems. Th funds may be used to establish a network of riparian buffers and greenways for environmental, educational, and recreation benefits.	
NCDOT STIP Funding	The State Transportation Improvement Program (STIP) is the traditional source of allocating transportation funding in North Carolina for state roads – most of this funding comes from vehicle sales tax and state and federal gasoline tax revenues. In Smithfield, all state and federal funding is programmed in collaboration with UCPRPO and NCDOT. NCDOT uses the Strategic Mobility Formula to more efficiently invest its transportation dollars by using a data-driving scoring process along with local input.	
Powell Bill	Powell Bill funds, also known as State Aid to Municipalities fund are generated by the state gasoline tax and then distributed by the State to municipalities to help fund transportation projects on municipally-maintained roads. Also known as State Aid to Municipalities funding. In 2018, the Town of Smithfield was allocated approximately \$321,000.	
Transportation Bonds	Bonds position the Town to better leverage additional funding by allowing the Town to provide necessary funding matches.	
Grant Funding	Limited funding is available for transportation projects through competitive grants offered by both non-profit organizations (such as projects that promote health) and the federal government (such as the BUILD program). These opportunities are typically highly competitive and grants are awarded based on specific criteria established for each program. Grants can also require as much as a 50% local match.	

Table 7: Transportation Funding Sources

ACTION PLAN

The Smithfield Town Plan lays out a strategy for identifying and implementing recommendations to address the highest priority needs within the community. Through well-guided transportation and land use policies as well as leveraging strategic partnerships, each set of recommendations becomes a set of achievable goals with a basis in realistic expectations. It should be noted that projects in the "Near-Term" category should be prioritized first, however they do not have funding obligated. As such, no time frame has been identified for their completion.

Table 8: Action Plan

PROJECT NAME	то	FROM	IMPROVEMENT TYPE	ESTIMATED PROJECT COST
Near-Term				
Cleveland Road at Swift Creek Road			Intersection	\$1,775,000
College Road at Market Street			Intersection	\$6,890,000
Equity Drive	Outlet Center Drive	Outlet Center Drive	Modernization	\$827,000
Market Street (US 70 Business)	NC 210	Front Street	Access and Operations	\$3,630,000
Market Street (US 70 Business)	Ninth Street	I-95	Access and Operations	\$6,925,000
Market Street at M. Durwood Stephenson Highway			Intersection	\$2,600,000
Market Street at Fourth Street			Intersection	\$2,000,000
Market Street at Wilson's Mills Road			Intersection	\$2,600,000
NC 210 at Cleveland Road			Intersection	\$1,775,000
N. Brightleaf Boulevard (US 301)	Market Street (US 70 Business)	Booker Dairy Road	Access and Operations/ Signal Coordination	\$5,825,000
Outlet Center Drive Roundabout			Intersection	\$300,000*
S. Brightleaf Boulevard (US 301)	Brogden Road	Market Street (US 70 Business)	Access and Operations	\$5,095,000
US 301 at Booker Dairy Road			Intersection	\$2,600,000
US 301 at Brogden Road/S. Third Street			Intersection	\$2,600,000



PROJECT NAME	то	FROM	IMPROVEMENT TYPE	ESTIMATED PROJECT COST
Near-Term Continued				
US 301 at Dail Street			Intersection	\$2,600,000
US 301 at Hospital Road			Intersection	\$2,600,000
US 301 at Peedin Road			Intersection	\$2,600,000
Wilson's Mills Road	Market Street (US 70 Business)	M. Durwood Stephenson Highway	Widening	\$7,855,000
Wilson's Mills Road at M. Durwood Stephenson Highway			Intersection	\$2,600,000
Mid-Term				
Brogden Road	US 301	Old Dupree Road	Modernization	\$2,600,000
Market Street (US 70 Business)	Mallard Road	Yelverton Grove Road	Widening	\$9,770,000*
NC 210	Market Street (US 70 Business)	Cleveland Road	Modernization	\$9,215,000
Wilson's Mills Road	M. Durwood Stephenson Highway	US 70 (Future I-42)	Modernization	\$14,335,000
Long-Term				
Market Street (US 70 Business)	Front Street	Ninth Street	Lane Reallocation	\$2,765,000
Market Street (US 70 Business)	Ninth Street	I-95	Widening	\$11,610,000
M. Durwood Stephenson Highway Extension	Market Street (US 70 Business)	Cleveland Road (NC 210)	New Location	\$13,500,000
Peedin Road Extension	Components Drive	Yelverton Grove Road	New Location	\$5,415,000
S. Brightleaf Boulevard (US 301)	Brogden Road	Country Club Road	Widening	\$35,930,000

*This cost estimate does not include the replacement of the existing railroad bridge.

Policy Recommendations and Other Studies

Several policy suggestions are recommended in addition to the above roadway and intersection recommendations.

- The Town should adopt a resolution for the support of median treatments to allow for future project advancement. This will help educate the public about future projects and will streamline future outreach efforts.
- To help expedite the maintenance of traffic signals, citizens are encouraged to report any concerns about traffic signals to town staff. NCDOT maintains all traffic signals in the Town of Smithfield, and the Town can communicate issues directly to NCDOT. NCDOT is in the process of bringing signals into a new signal system and will be re-timing those signals to provide better coordination.
- Two ongoing studies are looking at the provision of commuter rail service to Selma as well as a
 potential extension of the NCDOT operated Piedmont service. If these studies yield positive results,
 commuter rail travel could become a viable transportation means to Smithfield and the general area.
 The Town should consider developing a resolution supporting the study of transit options via rail, as
 well as interim bus connections.
- The Town should pursue a NCDOT grant through the Bicycle and Pedestrian Planning Grant Program. Based on feedback received during the development of the Town Plan, a pedestrian plan should be pursued first.
- The Town should consider updating its street design standards to align with the recommendations in the Smithfield Town Plan and update the UDO to include a policy for right-of-way reservation to accommodate the recommendations listed in the previous section.

RESPONSIBLE AGENCIES

Several different agencies will need to work together in order for the projects listed in the Action Plan to be implemented in a timely and efficient manner. Agencies that will need to be involved in every project are the Town, UCPRPO, NCDOT, and FHWA. Other stakeholders may need to be involved depending on the project and should be engaged as seen fit.









CONCLUSION

The recommendations laid out as part of the transportation element of the Smithfield Town Plan help to envision a town that strives to maintain reliable and safe access to multiple forms of transportation and promotes a high quality of life throughout. This plan is a vision for mobility in all its forms that supports associated land uses, economic development, and social equity while complementing the qualities that make Smithfield unique. The combined focus of the Smithfield Town Plan further ensure that transportation decision-making will be considerate of the needs of existing and future land use.

The Town Plan provides transportation strategies that consider both the existing and future needs of Smithfield residents, visitors, and employers. The creation of this financially-constrained plan ensures that the identified projects can reasonably be funded and implemented during the life of the plan and that the priorities expressed throughout the public involvement process will influence the Town's transportation planning decisions. With this document, the leaders and citizens of Smithfield can set the stage for the Town's future and how it will accommodate its needs moving forward.