

# MASTER TRANSPORTATION PLAN

## Summary Report | FINAL

September 2020





# Acknowledgments

On behalf of the project team, the Town of Waxhaw thanks the participants whose input was instrumental to understanding local needs and priorities for a safe, multimodal, and interconnected transportation system in Waxhaw. The Waxhaw Master Transportation Plan reflects the collaborative efforts of the public, stakeholders, local staff, and elected officials. The efforts of everyone are greatly appreciated.

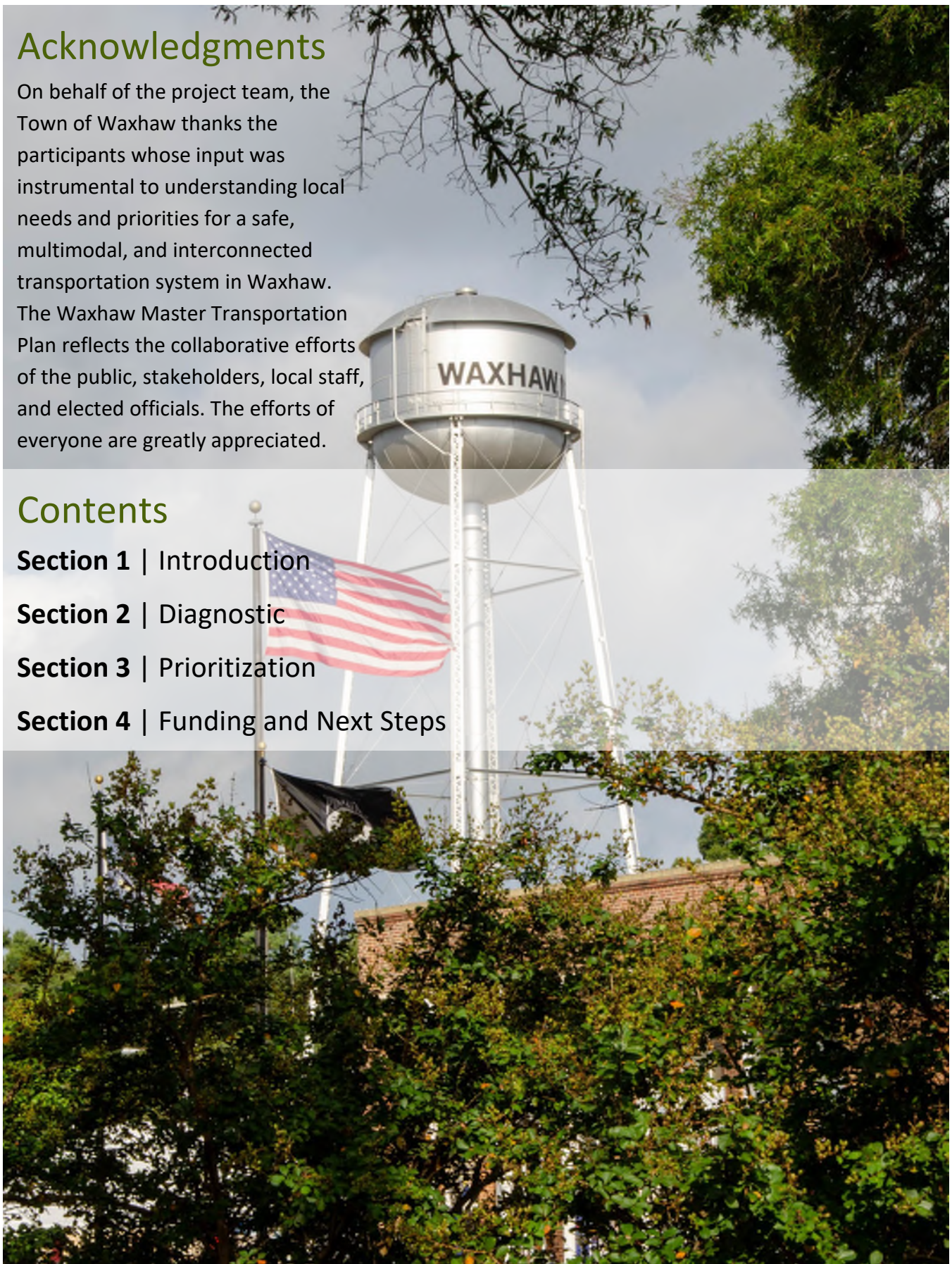
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**Section 1 | Introduction**

**Section 2 | Diagnostic**

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## **SECTION 1**

# Introduction

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## Introduction

In a fast-growing community like Waxhaw, addressing the challenge of planning, designing, and constructing transportation projects requires partnerships and the ability to find funding. Making it safer and easier to travel in Waxhaw begins by understanding the potential impact of likely transportation projects, determining current and future transportation needs, and aligning recommendations with community priorities. Transportation planning is most effective through a collaborative approach. Therefore, the relationships between transportation, land use, the environment, community resources, urban design, and the economy must be considered. The public also should weigh in on the overall process and recommendations.

## Purpose

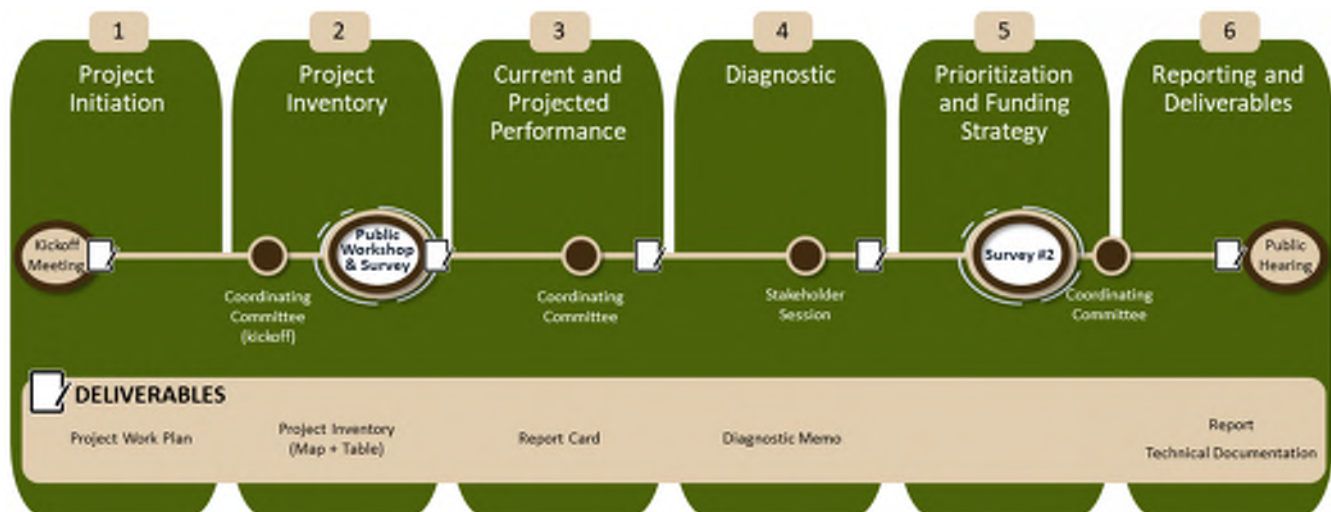
In response to the challenges facing how people and goods move within and through Waxhaw, the Town developed the Waxhaw Master Transportation Plan (WMTP). The overarching goal of the WMTP is to create a locally driven plan that:

- Documents existing transportation conditions
- Identifies transportation needs
- Includes an action plan that outlines priorities, funding options, and partnership needs

The initial efforts presented in this document will provide a foundation for a deeper dive into data, analytics, and communication to yield a more fully functioning prioritization framework.

## Process

The WMTP began with an inventory of local projects identified in previous local, regional, and state plans and studies. This step was followed by a review of traffic and safety conditions to diagnose local needs. The process concluded by refining the list of local projects, creating a local prioritization process, and developing an action plan for implementation. Community engagement occurred in two parts as summarized on the following page.







## Community Engagement

The Waxhaw Master Transportation Plan included a detailed community engagement process that occurred in two parts. Engagement activities were designed to educate the community about the transportation planning process, seek input on issues and needs, and allow the community to vet an initial set of projects and priorities.

### **Part 1 | Diagnostic COMPLETED IN FEBRUARY 2020**

Part 1 was designed to educate the public about the WMTP process and the challenges and constraints that are inherent to the transportation planning process. Participants considered an initial set of transportation projects and made decisions about funding opportunities. In addition to stakeholder discussions, two events occurred during the first round of engagement.

- Public Workshop | 2/20/20
- MetroQuest Online Survey | Active 2/4/20 to 2/28/20

*Public Workshop Photos*



### **Part 2 | Prioritization and Funding COMPLETED IN MAY 2020**

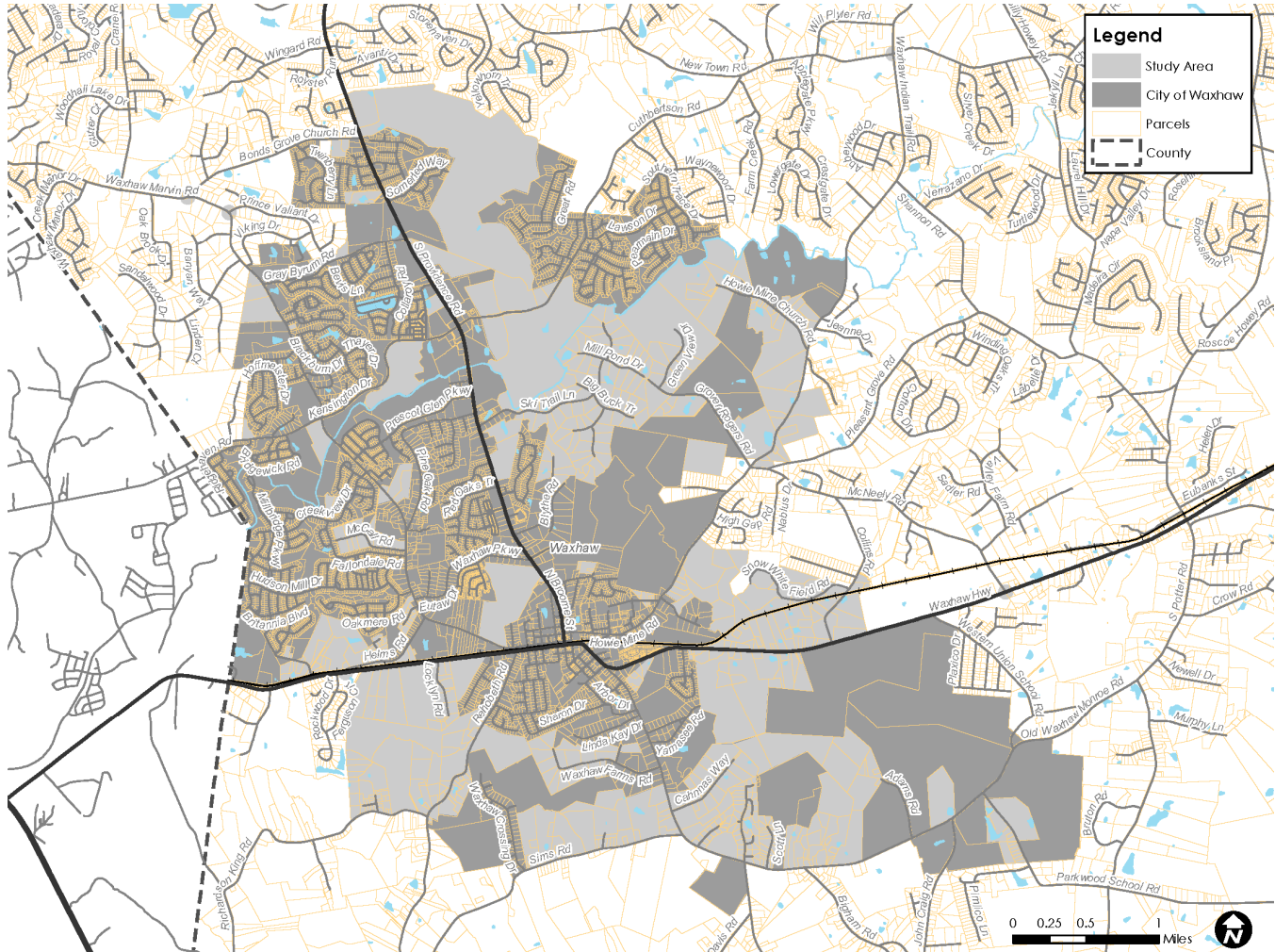
Part 2 was designed to show participants what we heard in Phase 1 and collect more detailed information on community preferences for potential projects and funding. Input received helped inform local transportation priorities and better understand preferences for additional funding options. Phase 2 engagement featured a second online survey.

- MetroQuest Online Survey | Active 5/22/20 to 6/8/20



### Study Area

The Waxhaw Master Transportation Plan considers the transportation needs of the Town of Waxhaw as well as surrounding areas around the Town boundary.



Notable Corridors and Areas		Notable Intersections	
NC 16 (Providence Rd) Waxhaw-Marvin Rd NC 75 (Waxhaw Hwy / South Main St) Bond Grove Church Rd Gray Byrum Road Kensington Drive Waxhaw Parkway Downtown		NC 16 at Bonds Grove Church Rd	Waxhaw-Marvin Rd at Bonds Grove Church Rd
		NC 16 at Gray Byrum Rd	Waxhaw-Marvin Rd at Gray Byrum Rd
		NC 16 at Kensington Dr	Waxhaw-Marvin Rd at Kensington Dr
		NC 16 at Waxhaw Pkwy	Waxhaw-Marvin Rd at Pine Oak Rd
		NC 16 at NC 75	Waxhaw-Marvin Rd at Helms Rd
		NC 75 at Helms Rd	
		NC 75 at Old Providence Rd	





### Overview of the Document

The document is designed to be a brief summary that explains the need for a locally driven approach to transportation priorities. The document is intended to set the stage for more detailed and ongoing discussions about the Town's transportation needs and priorities. This plan is organized into four sections.

**Section 1 Introduction** | Provides an overview of the WMTP and how the plan will be used

**Section 2 Diagnostic** | Describes existing transportation conditions, particularly related to planned projects

**Section 3 Prioritization** | Outlines an initial prioritization process based on readily available data and community input

**Section 4 Funding and Next Steps** | Summarizes funding considerations and next steps

### *How the Plan will be Implemented*

Completing the WMTP is the next step toward implementing a more balanced and functional transportation network in Waxhaw. Implementation will occur over time, taking into consideration the dynamic influences of local priorities, local private development activity, state funding, and potential availability of locally sourced transportation funds. The WMTP has been presented and adopted by the Town's Board of Commissioners.

### *When the Plan will be Updated*

While some projects identified in the WMTP can be constructed in the next few years, transportation planning naturally requires a long-term approach to fully implementing stated priorities. Therefore, the WMTP will work best if used as a living document that is periodically revisited and updated to address new challenges and changing circumstances. The Town should continue to evaluate the availability of transportation data and revisit local priorities through regular community input. Any revisions to the project tiers will be presented to the Board of Commissioners for re-adoption.

### *How the Town Should Use the Plan*

As a blueprint for staff and elected officials, the WMTP is designed as a reference document to inform transportation strategies and public investment choices. It is anticipated to be used in the following ways:

- **Town Staff:** To align department policies, budget decisions, and incremental decisions with the community's long-term vision for transportation.
- **Board of Commissioners:** To inform decisions as local transportation funds are distributed, land use proposal decisions are evaluated, and new funding options are evaluated.
- **Other Boards and Commissions:** To clarify the community's vision and encourage consistency as decisions are made.



## *How Others Should Use the Plan*

While its focus is on creating a functional tool for Town staff and elected officials, the WMTP is also designed for use by a variety of groups and individuals with diverse interests in the Town, such as:

- **Businesses:** To identify where the Town is targeting growth and investment.
- **Residents:** To understand future transportation priorities in support of broader community initiatives.
- **Community Leaders:** To foster ongoing dialogue that maintains forward progress toward common goals.
- **Development Community:** To learn how transportation needs and potential projects align with development interests.
- **Agencies:** To align agency goals and strategies with Waxhaw's vision and priorities for multimodal transportation.



*Downtown Waxhaw*



## SECTION 2

# Diagnostic

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## Introduction

The Waxhaw Master Transportation Plan (WMTP) provides a high-level assessment of the Town’s transportation network by referencing existing planning forecasts, travel model runs, Transportation Impact Analysis (TIAs), and current and projected service needs. This assessment includes an inventory of funded and unfunded transportation projects from existing plans. Community input helped inform issues and needs. The intent is to identify performance gaps and shortcomings of the existing and planned multimodal transportation network. The Diagnostic concludes with a report card that shows at a glance performance of intersections and corridor segments throughout the study area.

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## DIAGNOSTIC | Summary of Key Findings

The following key findings are based on the review of existing (and projected) conditions and feedback received from staff, stakeholders, and the public that is presented in the pages that follow.

- Transportation needs exceed funding that’s available through existing local and state sources.
- The widening of NC 16 (Providence Road) is a critical improvement and should be expedited to the maximum extent possible. The timing of this project affects other priorities; however, construction dates for the widening project will not be finalized until July 2020 (after completion of the WMTP).
- The completion of the Waxhaw Parkway (West and/or East) is seen by the local public as a necessary improvement to alleviate traffic in Downtown. The public places more emphasis on Waxhaw Parkway West.
- Relatively lower cost intersection improvements could be impactful; however, these improvements need to be mindful of the timing of larger corridor improvement projects. Examples include adding turn lanes at intersections along Waxhaw-Marvin Road or installing crosswalks on NC 16 (Providence Road).
- The Town should explore options for smaller connections or realignments that provide critical connectivity and improved safety within the study area. Examples include the Waxhaw Parkway West extension.
- The Town continues to collect significant traffic data through its robust TIA program. This data could be used to understand traffic concerns in Waxhaw by developing and regularly updating a Town-wide microsimulation model. This up-to-date information also would be helpful for developers during the development review process.
- Growth and development likely will continue; however, the Town should explore strategies that encourage more employment-based uses. Through the Waxhaw Master Transportation Plan, the Town should seek ways to tie the transportation network (and priorities) to the future land use map.





## Community Engagement – Part 1 Overview

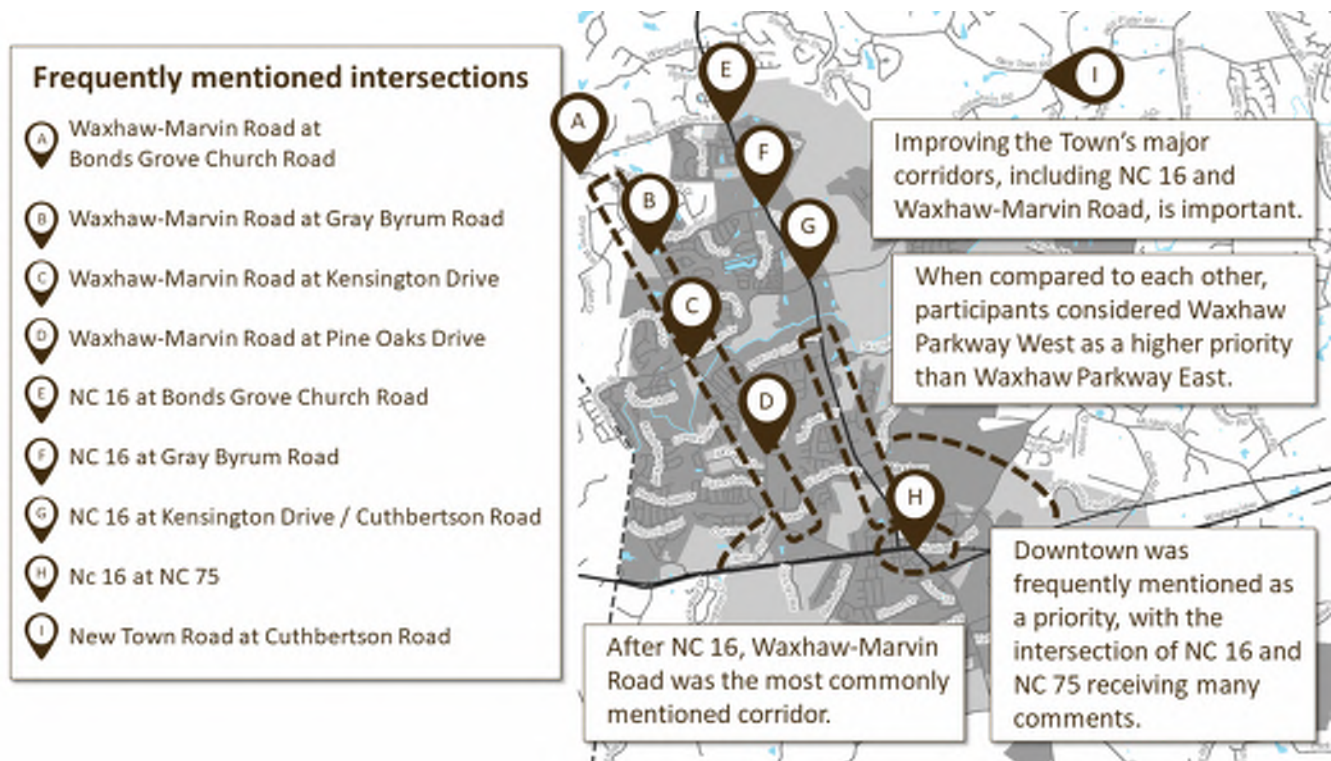
The initial engagement activities were designed to educate the public about the WMTP process and the challenges and constraints that are inherent to the transportation planning process. Participants considered an initial set of transportation projects and made decisions about funding opportunities. In addition to stakeholder discussions, two events occurred during the first round of engagement.

### Key Thoughts

1. Traffic is a growing source of frustration in Waxhaw and the surrounding area.
2. People recognize that growth is contributing to increasing traffic and want to see a plan that aligns growth and transportation needs.
3. Participants want to see clearly defined transportation priorities and a plan for action.
4. People tended to identify more transportation needs than current funding sources can address. However, they expressed support for finding new funding streams for transportation projects.
5. In general, participants don't fully understand how transportation projects are funded.

### Key Locations

The following locations were identified by the public during the public workshop and/or online survey.





### At A Glance

#### Public Workshop

**When and Where** February 20, 2020 at Police Headquarters

**Format** Drop-in Open House with Activity Stations

#### Objectives

- 1) Provide background information on upcoming transportation projects in Waxhaw
- 2) Collect feedback on vision and transportation needs

**Level of Participation** 20+ participants

#### Results by Activity

##### One Word

Participants were asked to respond to prompts using a single word.

One word that describes traveling in Waxhaw TODAY...

*Frustrating | Busy | Traffic | Awful | Slow | Terrified (while on NC 16)*

One word that describes your IDEAL VISION for traveling in Waxhaw in the future...

*Convenient | Wow! | Easier | Steady movement | (traffic) lights*

##### Thought Wall

Participants wrote thoughts, categorized them by importance, then posted thoughts under a topical category.

Traffic	<b>MOST IMPORTANT THOUGHTS</b> Complete the Waxhaw Parkway   Shuttle Service
	<b>Other Thoughts</b> Complete both segments of the Waxhaw Parkway   Begin widening NC 16 now   Where will the Waxhaw Parkway East terminate at NC75?
Safety	<b>MOST IMPORTANT THOUGHTS</b> Prohibit northbound left turn at NC 16 and Gray Byrum
	<b>Other Thoughts</b> Sidewalks   Enforce speeds, 35mph on Waxhaw-Marvin Road
Bicycle & Pedestrian	<b>MOST IMPORTANT THOUGHTS</b> Re-work, re-locate, and improve crosswalks
	<b>Other Thoughts</b> Bike lanes, sidewalks, and multiuse paths   Crosswalks on NC 16   Bike lanes on Waxhaw-Marvin Road
Downtown	<b>MOST IMPORTANT THOUGHTS</b> Take/procure NC 16 Waxhaw Parkway to the Railroad   Broome Street center lane widening   Parking   Add/improve signalized crosswalks
	<b>Other Thoughts</b> Parking behind buildings on southside of NC 75   Connectivity & walkability
Growth & Development	<b>MOST IMPORTANT THOUGHTS</b> Employment centers and business parks in Waxhaw
	<b>Other Thoughts</b> Control limits without infrastructure in place   Widen NC 75 to 4 lanes with connectivity to Waxhaw Parkway
Other / Miscellaneous	<b>Other Thoughts</b> Right-of-way for NC 16 widening





## MetroQuest Online Survey

**What is MetroQuest?** An online survey designed to educate the public about the project and collect feedback using five interactive and visual screens

**How long was the survey active?** February 4, 2020 to February 28, 2020

**How was it advertised?** Town social media channels | Public Workshop | Word of mouth | Internal promotion

### **What were participants asked?**

- 1) To prioritize six locations where transportation improvements are needed
- 2) To allocate available funds toward transportation projects (while being educated about the potential need for additional funding)
- 3) To provide input on their appetite for different types of additional funding

**Level of Participation** 724 participants | ~16,000 individual data points | ~300 written comments

### **Key Takeaways**

#### ***Participant Profile***

- Nearly 80% of participants were between the ages of 30 and 60.
- Nearly three out of four participants live in Waxhaw.
- The participant pool was balanced based on how long they have lived in the County.
- What they hope results from the WMTP? Better traffic or improved safety; better planning; more action; specific priorities; align growth and transportation needs.

**Priorities** Participants were presented with six different transportation project and ranked their top five.

- Downtown improvements are a priority.
- Waxhaw Parkway West rated as a slightly higher priority compared to Waxhaw Parkway East.
- Waxhaw-Marvin Road improvements should be a priority with a focus on improving intersections ahead of the full widening project.



**Funding Balance** Participants allocated \$6 million to transportation projects introduced on the Priorities Screen.

- Participants allocated funding most often to Downtown Improvements (79.4%). On average, participants funded half of the full allotment for these improvements. **TAKEAWAY:** Downtown improvements need to be championed.
- Waxhaw Parkway West was identified as a higher priority than Waxhaw Parkway East. **TAKEAWAY:** Most participants acknowledged the cost-effectiveness of the Waxhaw Parkway West improvement.
- Average funding per participant was \$8.4 million (140% of the available funding, which was \$6 million). **TAKEAWAY:** Additional funding sources are needed to construct the desired project list of most participants.

**Funding Survey** Participants answered a series of questions about different funding options.

- The Town needs to increase awareness of the State’s transportation funding process.
- Nearly 80% of participants indicated they would be in favor of new funding options. The Town should clarify potential funding options and collect additional public feedback.
- Transportation Bond
  - 64.1% participants supported taking a bond for transportation-specific improvements. The Town should clarify potential funding options and collect additional public feedback.
  - Support for transportation bonds for people that do not live in Waxhaw remains, however, more participants indicated a neutral stance. This result likely reflects participants being neutral because they do not live in Waxhaw.
- Transportation Reserve Account
  - 84.8% participants supported establishing a local Transportation Reserve Account. The Town should clarify potential funding options and collect additional public feedback.
  - Most people who do not live in Waxhaw expressed support for a Transportation Reserve Account. However, more than one-in-third people indicated a neutral stance.
- Union County Alternatives
  - Support for a County-wide vehicle registration fee was flat, with 46.0% in support and 41.4% not in support.
  - Support for a County-wide sales tax increase was supported by 49.9% of participants, with 37.7% indicating limited support.



## Mapbook

The Mapbook showcases maps and spatial data relevant to the Waxhaw Master Transportation Plan. The data shown on the various maps was collected via a variety of sources, including the Town of Waxhaw, Union County, Charlotte Regional Transportation Planning Organization (CRTPO), and the North Carolina Department of Transportation (NCDOT). Additional data was developed based on input from staff and stakeholders.

Map Category and Title		Brief Description
<b>1   Study Area Overview</b>		
1a	Environmental Constraints & Barriers	Natural features and physical barriers that affect the cost and constructability of projects
1b	Powell Bill Map	Ownership of and responsibility for streets in the Town of Waxhaw
<b>2   Land Use and Development</b>		
2a	Future Land Use	Future Land Use Map (draft – currently being updated)
2b	Subdivisions	Residential neighborhoods in the study area
2c	Development Projects	Ongoing land development projects in the study area
2d	TIA Intersections	Location and dates of intersections for which traffic analysis occurred during development review ( <i>NOTE: Improvements may not have been recommended at these locations. See Inventory of Projects for more information.</i> )
<b>3   Inventory of Projects – Funding + Developer</b>		
3a	Funded Projects	Transportation projects currently funded for construction
3b	Developer-Led Projects	Transportation projects identified during the development review process
<b>4   Inventory of Projects – CTP Projects</b>		
4a	Highway & Rail	Roadway projects from CRTPO's Comprehensive Transportation Plan as well as rail corridors and existing and recommended grade separation projects
4b	Bicycle	Bicycle projects from CRTPO's Comprehensive Transportation Plan
4c	Pedestrian	Pedestrian projects from CRTPO's Comprehensive Transportation Plan
<b>5   Traffic and Safety</b>		
5a	Traffic Volumes	2018 traffic volumes provided by NCDOT
5b	Level of Service	Existing traffic congestion based on CRTPO's regional travel demand model
5c	Reported Safety Hotspots	Total crashes (2014 to 2018) and bicycle and pedestrian crashes (2007 to 2018) based on NCDOT data





### Project Inventory Table *(projects identified in previous plans and studies)*

The Mapbook includes several maps that illustrate the inventory of projects from existing plans. While many of these projects are in the unfunded Comprehensive Transportation Plan, several projects are in various stages of implementation. These projects will make noticeable improvements to the Town’s transportation network; however, the timing will mean potential worsening of travel conditions through construction. The following table summarizes the project list by category (Corridor, Intersection, Bicycle/Pedestrian, Bridge). A Map ID (e.g. C-1, I-1, M-1, B-1) is provided for each of the funded projects as reference to Map 3. Additional projects, including greenways, crosswalks, and sidewalk segments, have been identified through the WMTP and are included in the Prioritization process detailed in Section 3 of this report.

Description	Source	Project ID	Probable Cost	Status	Timing
<b>Corridor</b>					
<b>C-1 NC 16 (Providence Road South) Widening</b>	STIP	U-5769	\$82,530,300	Funded	2027
This project will widen the corridor to multi-lanes with bicycle and pedestrian facilities. Based on current information, right-of-way acquisition will begin in 2024 with construction starting in 2027. The project will be completed in 2030.					
<b>C-2 Kensington Drive Modifications (east sect.)</b>	CIP	EB-5950	\$4,000,000	Funded	2024
This project is intended to improve vehicular mobility and reduce congestion on Kensington Drive between Connell's Point Drive and Providence Road by permanently removing the existing on-street parking spaces and replacing them with vehicular travel lanes. This project will also improve sight distance issues at Connells Point. State funding approved mid-2018, and the environmental document is being completed. Requested additional funding from CRTPO for utility relocation costs. Next phase is to engage Right-of-Way acquisition.					
<b>Waxhaw Parkway West</b>	Various	n/a	\$5,000,000	Unfunded	TBD
Construction of a three-lane cross section, including parking and bike/ped facilities. This section begins at Broome Street and runs west to Waxhaw-Marvin Road. Ideally this project will coincide with the Helms Road bridge / railroad crossing.					
<b>Waxhaw-Marvin Road Corridor Improvements</b>	WMRCS		\$15,000,000	Unfunded	TBD
Widen to a three-lane cross section that includes a 10' multiuse path on the west side and a 5' sidewalk on the east side.					
<b>Waxhaw Parkway East</b>	Various	n/a	\$30,000,000	Unfunded	TBD
A multi-lane cross section with curb and gutter and sidewalks, transitioning to a paved shoulder beyond the Town limits. The alignment is a continuation of the existing Waxhaw Parkway East segment to the southeast, terminating at NC 75.					
<b>Waxhaw Parkway Southern Loop</b>	Various	n/a	TBD	Unfunded	TBD
Long range project that would create the southern loop of the Waxhaw-Parkway. Contingent on development in the Southern areas of Waxhaw. Union County to perform sewer upgrades in the area to spark development.					
<b>CIP</b> – Town of Waxhaw Capital Improvement Program			<b>CIA</b> – <a href="#">Union County Critical Intersections Analysis</a>		
<b>STIP</b> – State Transportation Improvement Program			<b>WMTP</b> – Waxhaw Master Transportation Plan		
<b>WMRCS</b> – Waxhaw-Marvin Road Corridor Study			<b>DV</b> – Downtown Vision		

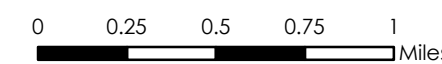
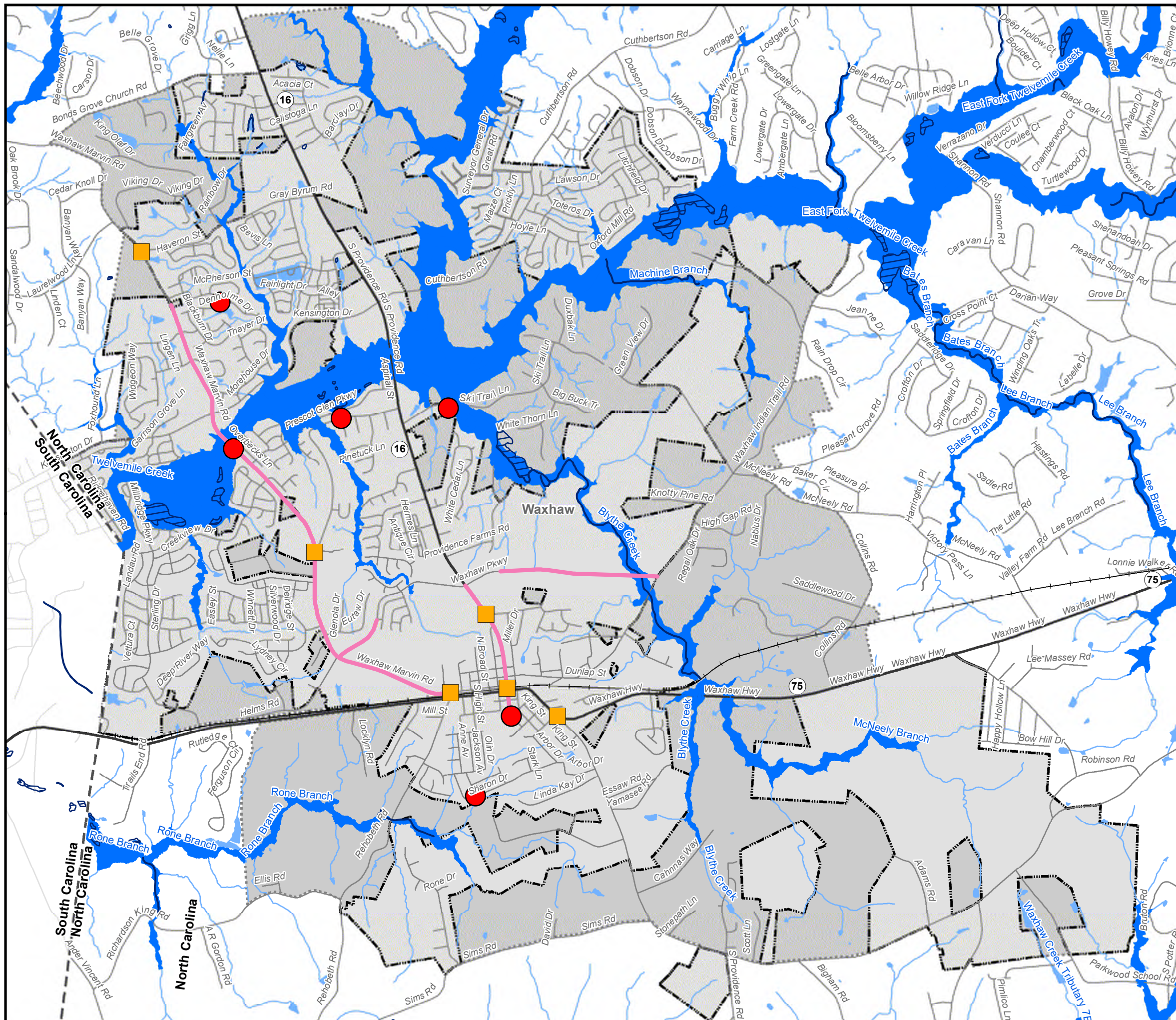




# MASTER TRANSPORTATION PLAN

## 1a Environmental Constraints & Physical Barriers

- Low Lying Crossing
- Right of Way
- Right of Way Constraint
- ▨ Wetland
- Flood Hazard Area
- Railroad
- Stream
- ▭ Town of Waxhaw
- ▭ Extended Study Area
- ▭ State Line



December 2020





# MASTER TRANSPORTATION PLAN

## 1b Powell Bill Map (2019-2020)

- Town Road (54.01 mi)
- State Road
- Private Road
- Ineligible Town Road
- Railroad
- Lake
- Town of Waxhaw
- Extended Study Area
- State Line

0 0.25 0.5 0.75 1 Miles



December 2020

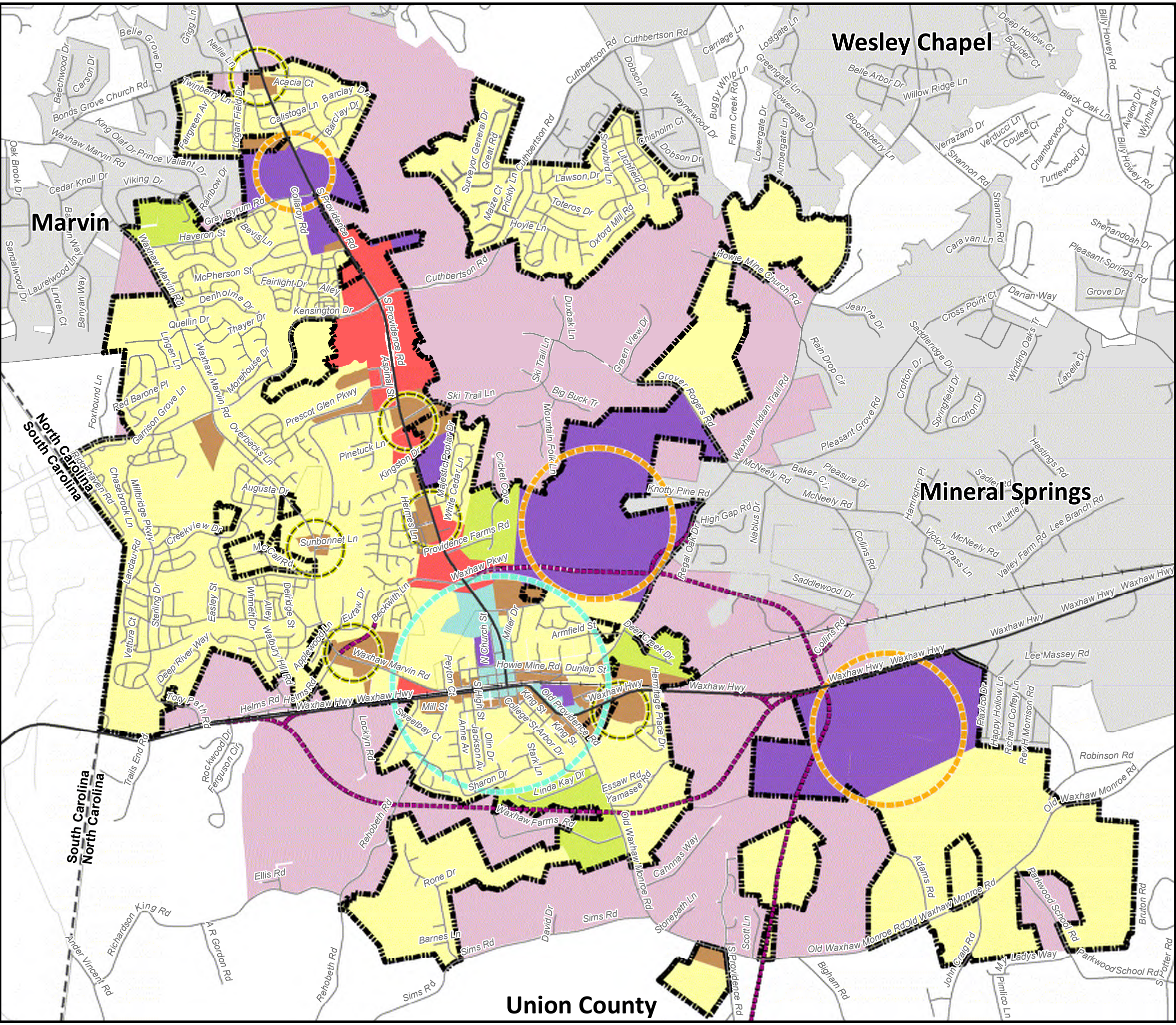




# MASTER TRANSPORTATION PLAN

## 2a Future Land Use Map

- LD Low-Density Residential
- MD Medium-Density Residential
- D Downtown
- MU Mixed-Use
- C Commercial
- EC Employment Center
- JPA Joint Planning Area
- Downtown Center
- Economic Center
- Neighborhood Center
- Conceptual Waxhaw Parkway
- Waxhaw Town Limits
- State Line






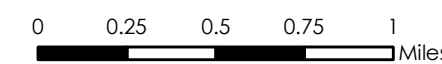
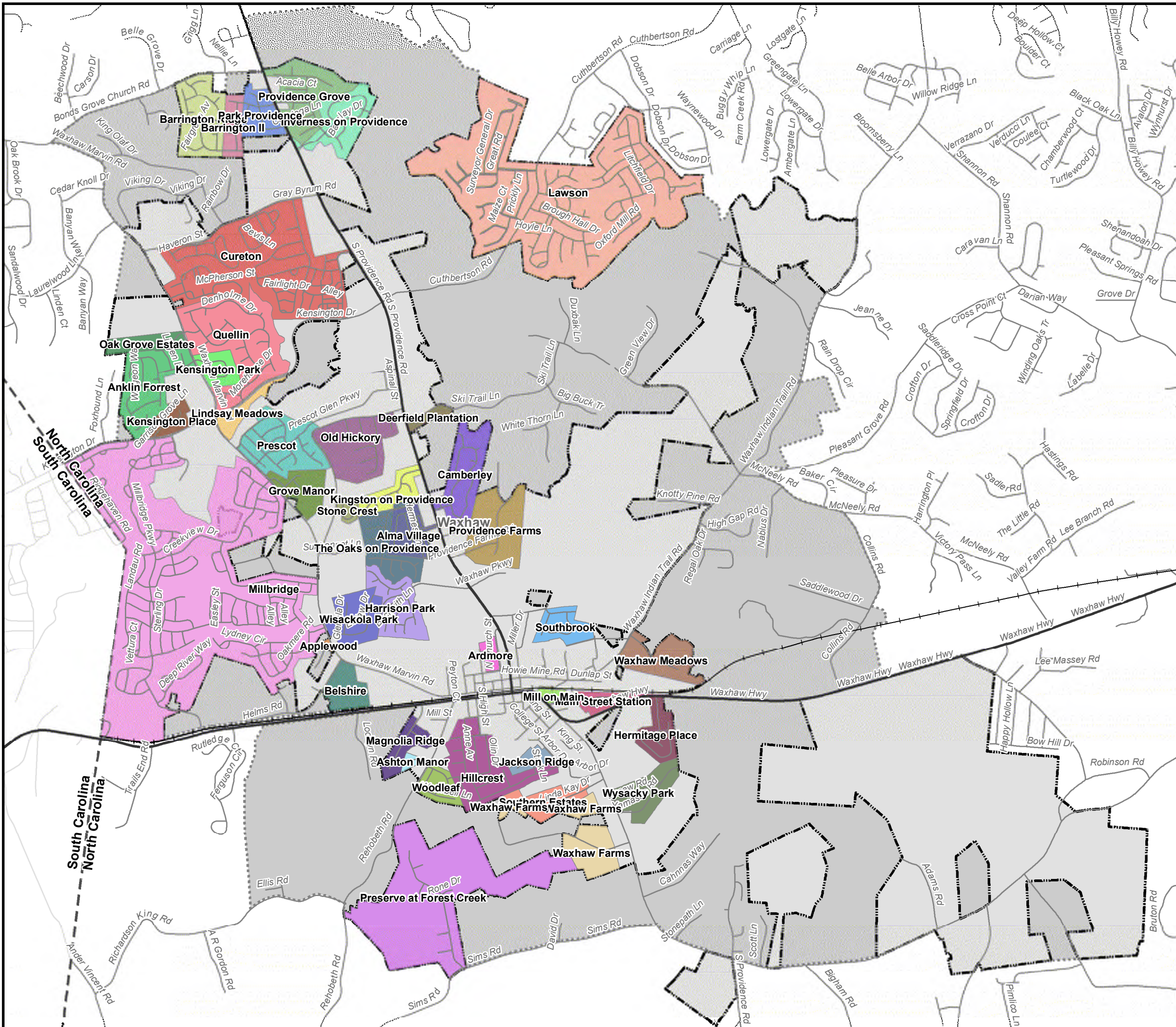




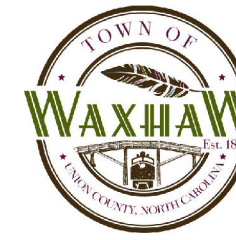
# MASTER TRANSPORTATION PLAN

## 2b Subdivisions

-  Town of Waxhaw
-  Extended Study Area
-  State Line



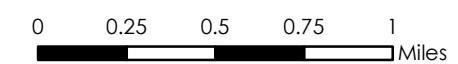




# MASTER TRANSPORTATION PLAN

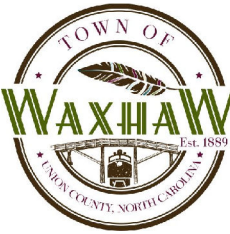
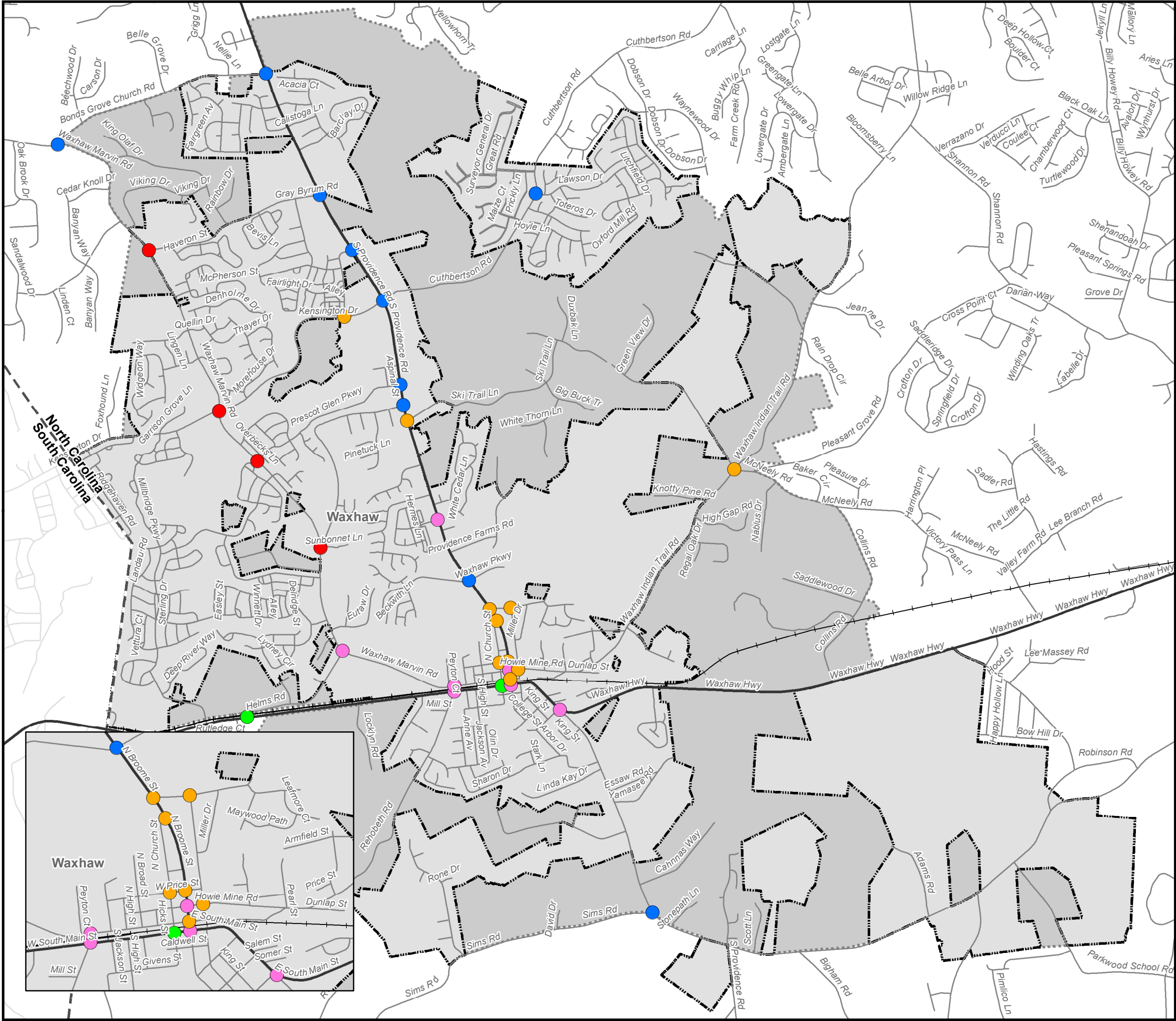
## 2c Development Projects Map

- 300 North Broad Street Townhomes
- 3808 Providence Rd South
- 415 South Providence St
- Aldi, Bojangles, & Carrington Square
- Arby's
- Ardmore
- Bed And Bark
- Belshire
- Cuthbertson Medical Office Building
- Grove Manor Phase 1 & 2
- Life Storage & Site Improvements
- Lindsay Meadows
- Main Street Station
- Millbridge Phase 7D
- Millbridge Phase 7EF
- Prescot
- Preserve at Forest Creek
- Sams Mart
- Southcreek Commercial Development
- Town Public Services
- Union County Project - Cuthbertson Rd Age-Restricted Residential
- Union County Project - Nixon Commercial Center
- Union County Project - Rone Creek
- Wendy's
- Town of Waxhaw
- Extended Study Area
- State Line



February 2021





# MASTER TRANSPORTATION PLAN

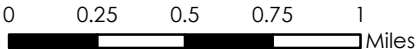


## 2d Traffic Data Analysis

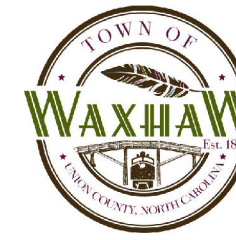
- 2016
- 2017
- 2018
- 2019
- 2020

Town of WaxhawExtended Study AreaState Line

<b>2016</b>	
NC 75 and Helms Rd	Rone Creek Station
NC 75 and S Church St	Rone Creek Station
<b>2017</b>	
Kensington Dr and Sunset Hill Rd	Blue Jay TIA
N Church St and Price St	Ardmore Waxhaw
NC 16 (Broome St) and N Church St	Ardmore Waxhaw
NC 16 (Broome St) and Price St	Ardmore Waxhaw
Waxhaw-Indian Trail Rd and Grover Rogers Rd/Pleasant Grove	Waxhaw Ridge
N Providence St and Blythe Mill Rd	Waxhaw Ridge
N Providence St and Howie Mine Rd	Waxhaw Ridge
NC 16 (Broome St) and Blythe Mill Rd	Waxhaw Ridge
NC 16 (Broome St) and Howie Mine Rd/McDonald St	Waxhaw Ridge
NC 16 (Broome St) and N Main St	Waxhaw Ridge
NC 16 (Providence Rd) and Ski Trail Lane	Waxhaw Ridge
<b>2018</b>	
Waxhaw-Marvin Rd and Gray Byrum Rd	WMR Corridor Study
Waxhaw-Marvin Rd and Helms Rd	WMR Corridor Study
Waxhaw-Marvin Rd and Pine Oak Rd	WMR Corridor Study
Waxhaw-Marvin Rd and Kensington Dr	Prescot Village TTM
Waxhaw-Marvin Rd and Prescot Glen Pkwy	Prescot Village TTM
<b>2019</b>	
NC 16 (Providence Rd) and Kensington Dr/Cuthbertson Rd	South Creek
NC 16 (Providence Rd) and Pine Oak Rd	South Creek
NC 16 (Providence Rd) and Prescot Glen Pkwy	South Creek
NC 75 and NC 16 (Broome St)	The Preserve at Forest Creek
NC 75 and Old Providence Rd	The Preserve at Forest Creek
NC 75 and Rehobeth Rd	The Preserve at Forest Creek
Old Waxhaw-Monroe Rd and Sims Rd	The Preserve at Forest Creek
Rehobeth Rd and N Main St	The Preserve at Forest Creek
NC 16 (Providence Rd) and Alma Blvd	Providence Prof Park
NC 16 (Providence Rd) and Waxhaw Pkwy	Providence Prof Park
NC 16 (Providence Rd) and Bonds Grove Church Rd	Bonds Grove Commons
Waxhaw-Marvin Rd and Bonds Grove Church Rd	Bonds Grove Commons
NC 16 (Providence Rd) and Sunset Hill Rd	Bonds Grove Commons
Cuthbertson Rd and Lawson Dr	Pfister Property
NC 16 (Providence Rd) and Gray Byrum Rd	Pfister Property
<b>2020</b>	
NC 75 and Old Providence Rd	Howie Property
NC 75 and NC 16 (Broome St)	Howie Property
NC 16 (Broome St) and Howie Mine Rd/McDonald St	Howie Property
NC 75 and Rehobeth Rd	Howie Property
Rehobeth Rd and N Main St	Howie Property
NC 16 (Providence Rd) and Waxhaw Pkwy	Howie Property
NC 16 (Providence Rd) and Alma Blvd	Howie Property
Waxhaw-Marvin Rd and Helms Rd	Howie Property







# MASTER TRANSPORTATION PLAN

3

## Inventory of Funded Projects

### Corridor Projects

- C-1 NC 16 Widening (ROW ' 24, Constr. '27)
- C-2 Kensington Dr Modifications (ROW '24)

### Intersection Projects

- I-1 CSX SG Line (ROW '22, Constr. '23)
- I-2 NC 16 at Gray Byrum Rd (Constr. '21)
- I-3 NC 75 at Old Providence Rd (Design '21, Constr. '25)
- I-4 Kensington Dr at Morehouse Dr (Constr. '20)

### Bridge Project

- B-1 Waxhaw-Marvin Rd Bridge Replacement (Design '21, Constr. '22)

### Pedestrian Project

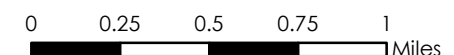
- M-1 Downtown TAP Grant Pedestrian Project (Constr. '21)

### Developer Projects

- Prescot TIA Phase 2
- Southcreek

- Town of Waxhaw
- Extended Study Area
- State Line

See the Project Inventory Table on page 2-21 through 2-23 for more information.



February 2021





# MASTER TRANSPORTATION PLAN

## 4a CTP Projects - Highway & Rail

### CRTPO CTP Railroad/Highway Grade Separated

- Existing
- Recommended

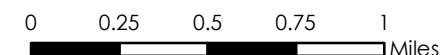
### CRTPO CTP Highway Projects

- Existing
- Needs Improvement
- Recommended

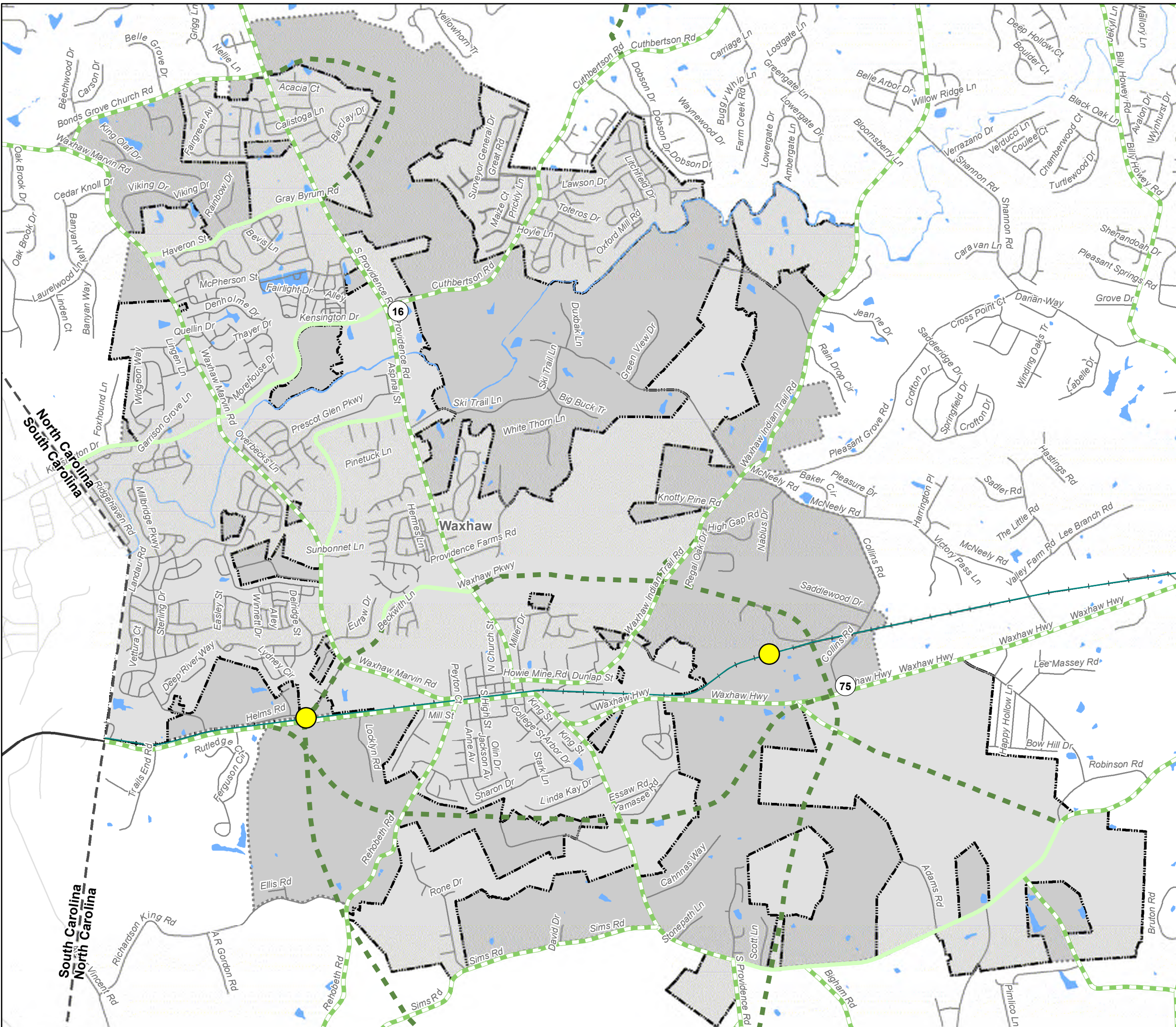
- Town of Waxhaw
- Extended Study Area
- State Line
- Lake

The Charlotte Regional Transportation Planning Organization (CRTPO) creates a Comprehensive Transportation Plan (CTP). The CTP is an unfunded vision document that acts as a first step in the planning process. These highway and rail facilities are based on the CTP and do not reflect existing highway and rail network or current subdivisions.

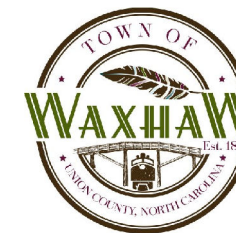
For more information visit: <http://www.crtpo.org/>



December 2020







# MASTER TRANSPORTATION PLAN

## 4b CTP Projects - Bicycle

### CRTPO CTP Bicycle Projects

- Existing Multi-Use Paths
- Existing On-Road
- Needs Improvement Multi-Use Paths
- Needs Improvement On-Road
- Recommended Multi-Use Paths
- Recommended On-Road
- Town of Waxhaw
- Extended Study Area
- State Line

The Charlotte Regional Transportation Planning Organization (CRTPO) creates a Comprehensive Transportation Plan (CTP). The CTP is an unfunded vision document that acts as a first step in the planning process. These bicycle facilities are based on the CTP and do not reflect existing bicycle network or current subdivisions.

For more information visit: <http://www.crtpo.org/>

0 0.25 0.5 0.75 1 Miles



December 2020





# MASTER TRANSPORTATION PLAN

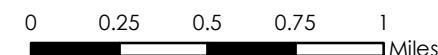
## 4c CTP Projects - Pedestrian

### CRTPO CTP Pedestrian Projects

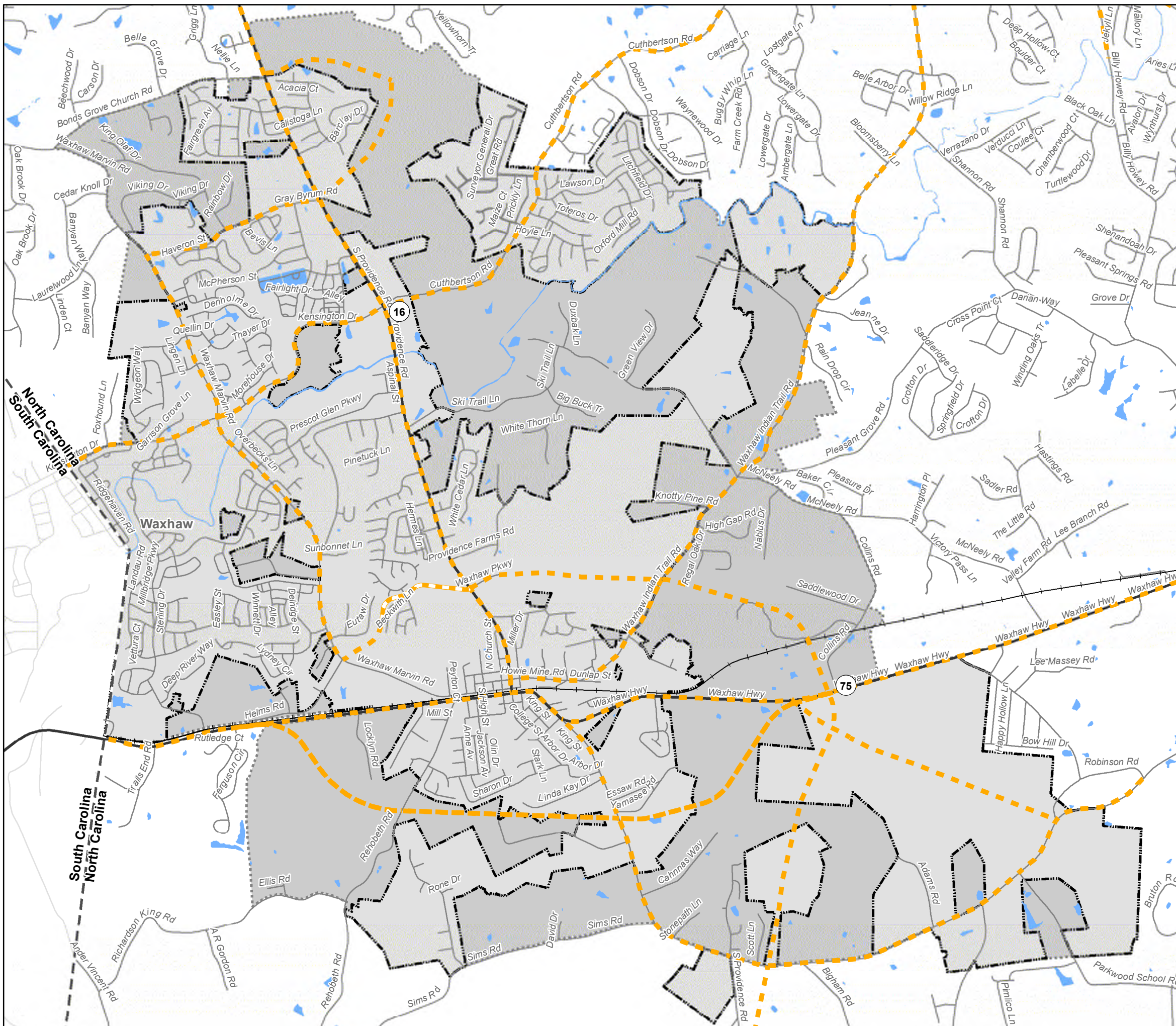
- Existing
- Needs Improvement
- Recommended
- Town of Waxhaw
- Extended Study Area
- State Line
- Lake

The Charlotte Regional Transportation Planning Organization (CRTPO) creates a Comprehensive Transportation Plan (CTP). The CTP is an unfunded vision document that acts as a first step in the planning process. These bicycle facilities are based on the CTP and do not reflect existing bicycle network or current subdivisions.

For more information visit: <http://www.crtpo.org/>



December 2020

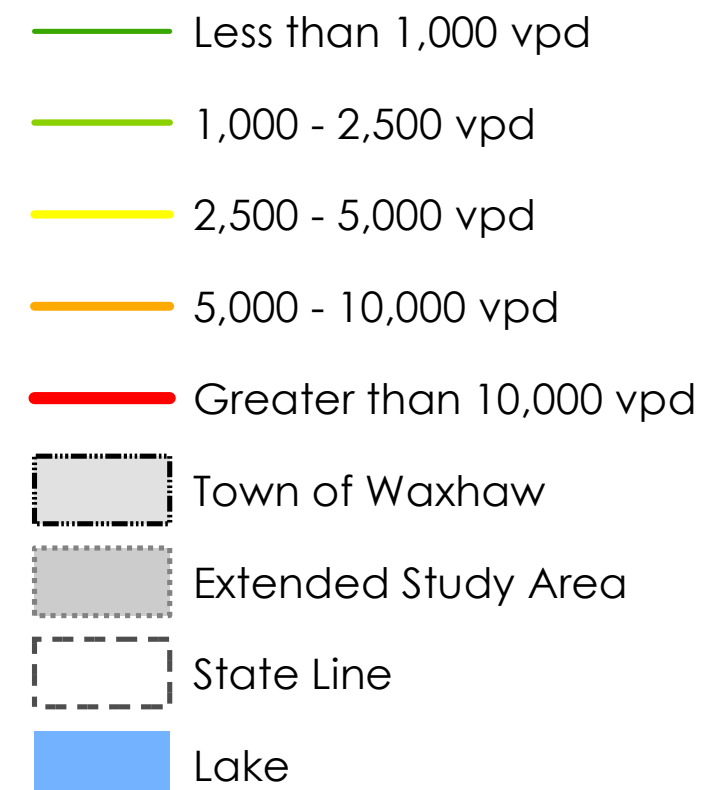






# MASTER TRANSPORTATION PLAN

## 5a Traffic Volumes



Source: NCDOT 2019  
0 0.25 0.5 0.75 1 Miles



February 2021





# MASTER TRANSPORTATION PLAN

## 5b Level of Service

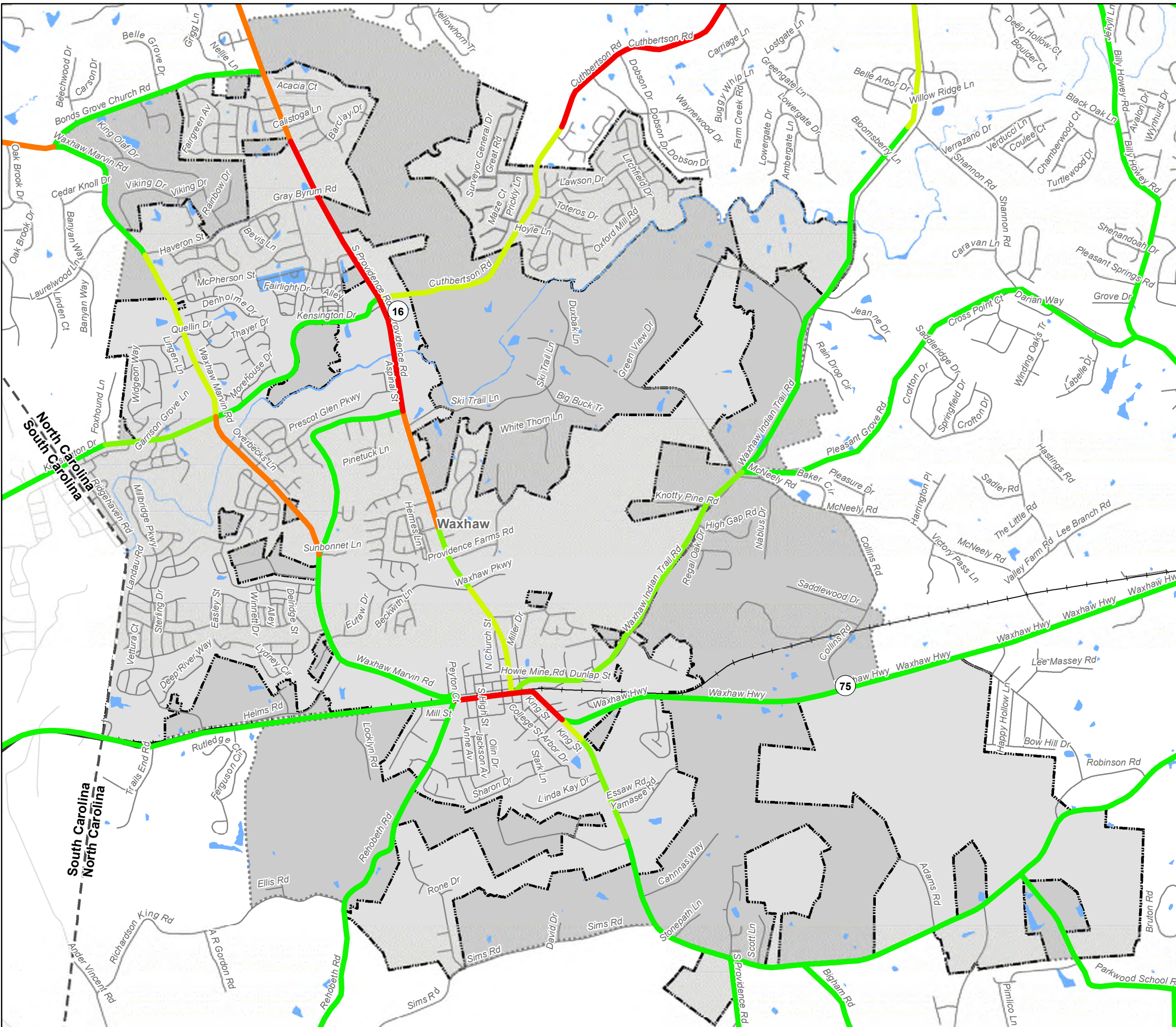
- A - 0.00 to 0.60
- B - 0.61 to 0.70
- C - 0.71 to 0.80
- D - 0.81 to 0.90
- E - 0.91 to 1.00
- F - Greater than 1.00

- Town of Waxhaw
- Extended Study Area
- State Line
- Lake

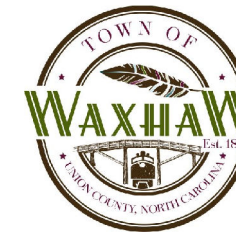
Source: CRTPO 2015  
0 0.25 0.5 0.75 1 Miles



December 2020







# MASTER TRANSPORTATION PLAN

## 5c Reported Safety Hotspots

- Funded Projects to Address Crashes
- ▲ Pedestrian Crashes (2007 to 2018)
- ◆ Bicycle Crashes (2007 to 2018)

### Total Crash Frequency by Intersection (2014-2018)

- Less than 20
- 20 to 40
- More than 40

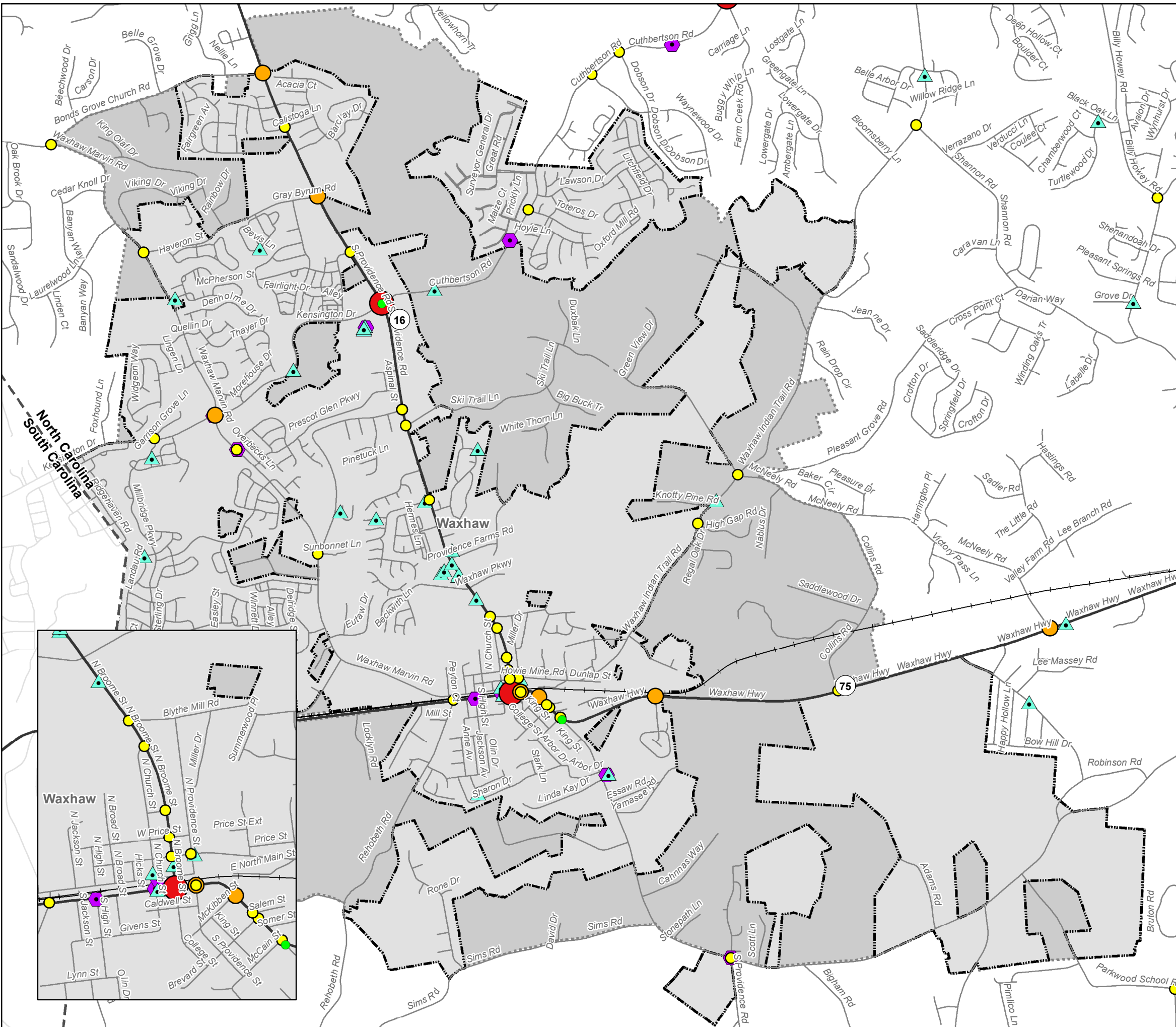
- ▭ Town of Waxhaw
- ▭ Extended Study Area
- ▭ State Line

Source: NCDOT 2018

0 0.25 0.5 0.75 1 Miles



December 2020







Name	Source	Project ID	Probable Cost	Status	Timing
<b>Intersection</b>					
<b>I-1 CSX SG LINE</b>	STIP	P-5748	\$24,000,000	Funded	2023
Construct rail siding and grade separation in vicinity of Helms Road; Close at-grade crossings at Helms Road and Tory Path; Phase 1 (ROW in 2022, Construction in 2023); Phase 2 (ROW in 2022, Construction in 2023)					
<b>I-2 NC 16 at Gray Byrum Road</b>	CIP	W-5710L	\$2,000,000	Funded	2021
Intersection realignment, signalization and turn lanes (northbound left and southbound right). Turn lanes funded by NCDOT's High Hazard Safety Project. Traffic signal funded by the Town.					
<b>I-3 NC 75 at Old Providence Road</b>	CIA	n/a	\$2,000,000	Funded	2025
Currently being evaluated through the CIA. Single Lane round-about most likely, however, it could be a signalized intersection and a realignment. Design 2021; Construction 2025.					
<b>I-4 Kensington Drive at Morehouse Drive</b>	Various	n/a	\$100,000	Funded	2020
Left turn lane into Morehouse Drive. Design Complete; Will be constructed in association with Lindsay Meadows subdivision. 4th Quarter 2020.					
<b>Waxhaw-Marvin Road at Pine Oak Road</b>	WMRCS	n/a	\$1,300,000	Unfunded	TBD
Intersection re-alignment. Re-prioritized (P6.0) due to Waxhaw-Marvin Bridge Detour-Design 2021, Construction 2022.					
<b>Waxhaw-Marvin Road at Kensington Drive</b>	CIA	n/a	\$4,000,000	Unfunded	TBD
Add a second eastbound left-turn lane; Add a northbound right-turn lane; Add a second northbound left-turn lane; Add a second receiving lane along Kensington Drive and drop as a left-turn lane at Kensington Elementary School; Install bicycle and pedestrian accommodations. CIA: Phase 2 Evaluated but not prioritized.					
<b>Waxhaw-Marvin Road at Bonds Grove Church Road</b>	CIA	n/a	\$1,600,000	Part-Funded	TBD
Add turn lanes on all approaches to create two lane approaches at each leg of the intersection. Install traffic signal; Realign the intersection to improve intersection skew and sight visibility; Install bicycle and pedestrian accommodations. CIA: Evaluated - Final Critical Intersection List - Recommended. To be included in the next CIA. Design recommendation available by July 1, 2020. Coordination with Marvin to submit for DA funding in the Fall of 2021.					
<b>Waxhaw-Marvin Road at Gray Byrum Road</b>	CIA	n/a	\$1,200,000	Unfunded	TBD
Add southbound left-turn lane; Widen south leg to receive southbound through lane that will be shifted for installation of the southbound left-turn lane; Install signal at the intersection; Install bicycle and pedestrian accommodations. CIA: Evaluated - Not on Final Critical Intersection List.					
<b>NC 16 at NC 75</b>	CIA	n/a	TBD	Unfunded*	TBD
Currently being evaluated. Alternatives selection by 12/15/20. *Public /Private Partnership funding proposed.					
<b>NC 75 and Rehobeth Road</b>	WMTP	n/a	TBD	Unfunded*	TBD
Create a signalized intersection that would involve turn lane improvements in all quadrants of the intersection. *TIA					

**Bicycle / Pedestrian\* (Projects to be prioritized and funded through 2021 Pedestrian Plan)**

<b>M-1</b>	<b>Waxhaw-Marvin Road Sidewalk</b>	CIP	n/a	\$290,000	Completed	Completed
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Approximately 1750 ft of new sidewalk on the west side of Waxhaw-Marvin Rd from Eutaw Drive to Fallondale Road. Community Development Block Grant (CDBG) Waxhaw-Marvin Road Sidewalk Project. Completed in December 2019.

<b>M-2</b>	<b>Downtown TAP Grant Pedestrian Project</b>	CIP	EB-5819	\$1,030,000	Funded	2021
------------	--	-----	---------	-------------	--------	------

Enhance pedestrian connectivity to/from angled parking on S. Main Street with new sidewalk and crosswalks; Consolidate and remove driveways; Improve access to David G. Barnes Park; Install bike racks.

<b>Multiuse Path Connections to Downtown</b>	DV	M-3	TBD	Unfunded	TBD
--	----	-----	-----	----------	-----

Construct a multi-use path connecting other areas of the community to Downtown Waxhaw. Refer to the New Parks & Recreation Master Plan, Waxhaw-Marvin Corridor Study, and the upcoming Pedestrian Plan.

<b>Broome Street Pedestrian Improvements</b>	DV	M-7	TBD	Unfunded	TBD
--	----	-----	-----	----------	-----

Transform Broome Street into a pedestrian friendly street by adding on-street parking, 10' sidewalks and street trees. Possible after bypass construction. (Proposed but not funded)

<b>Pedestrian Over Railroad west of NC 16</b>	DV	M-10	TBD	Unfunded	TBD
---	----	------	-----	----------	-----

Construct a second pedestrian bridge to anchor the western end of Main Street. Poor Cost-Benefit Ratio along with major right of way issues.

**Bridge**

<b>B-1</b>	<b>Waxhaw-Marvin Road Bridge Replacement</b>	STIP	B-5791	\$3,000,000	Funded	2022
------------	--	------	--------	-------------	--------	------

Replacing and widening the existing bridge to a three-lane cross section with a multi-use path deck and sidewalk deck on each side. Design 2021; Construction 2022. Recommended to coincide with the Waxhaw-Marvin Road and Pine Oak Road Intersection Improvement.





### Report Card

The WMTP Report Card simplifies and streamlines the communication of existing conditions for intersections and corridors in the study area. The Report Card provides a current “at-a-glance” look at the **PERFORMANCE** of the transportation network and **CONSIDERATIONS** that may affect potential improvements. Finally, the Report Card shows **PARTNERSHIPS** that could lead or support implementation of improvements at a given location.

#### NOTES

- The Report Card focuses on locations in the study area rather than specific projects.
- The Report Card was created based on the review of existing conditions and community input.
- The Report Card is based on a qualitative and quantitative review of readily available information in accordance with the following notes and assumptions.

#### Performance

Traffic Flow	Based on Traffic Volumes and Level of Service Maps from the Mapbook.
Traffic Safety	Based on total crashes from 2014 to 2018 and bike/ped crashes from 2007 to 2018.
Walkability	Based on existing facilities (if any) and likely pedestrian demand. Limited facilities with likely demand are shown as red.
Bikability	Based on existing facilities (if any) and likely bicycle demand. Limited facilities with likely demand are shown as red.
Future Land Use Coordination	Based on a review of the (draft) future land use map and whether the existing intersection or corridor can adequately serve desired land uses.

#### Considerations

Environmental Constraints	Based on review of the Environmental Constraints Map from the Mapbook
Right-of-Way Constraints	Based on a visual review of likely right-of-way and/or structure constraints should expansion of transportation network be necessary.
Survey Availability	Based on the availability of survey data that could expedite improvements.
Traffic Data Availability	Based on whether locations have had intersection-level data collected as part of a TIA.
Local Interest	Based on frequently mentioned intersections and corridors during the public workshop and first survey.

#### Partnerships

This section indicates which parties should lead and which should support should improvements be made in the future.

- Each location received a score of 0 to 10, with a higher score indicating positive results. The categories are then weighted, and a raw and weighted score is provided for each location.
- The Report Card uses a color code to show results. Good Mixed Poor Lead Partner Supporting Partner
- Locations with Poor **Performance** and Good **Considerations** should be a focus of the Town and align with stated priorities.
- As indicated on Map 3, several locations shown with Poor or Mixed **Performance** have funded transportation projects. These locations are highlighted in BLUE.



WMTP Report Card	Performance					Considerations					Partnerships		
	Traffic Flow	Traffic Safety	Walkability	Bikability	Future Land Use Coordination	Environmental Constraints	Right-of-Way Constraints	Survey Availability	Traffic Data Availability	Local Interest	Town	Region / State	Private Sector
Intersections													
NC 16 (Providence Road) at Bonds Grove Church Road													
NC 16 (Providence Road) at Gray Byrum Road													
NC 16 (Providence Road) at Kensington Drive/Cuthbertson Road													
NC 16 (Providence Road) at Prescot Glen Parkway													
NC 16 (Providence Road) at Pine Oak Road													
NC 16 (Providence Road) at Alma Boulevard													
NC 16 (Providence Road) at Waxhaw Parkway													
NC 16 (Broome Street) at NC 75 (South Main Street)													
Waxhaw-Marvin Road at Bonds Grove Church Road													
Waxhaw-Marvin Road at Prince Valiant Drive													
Waxhaw-Marvin Road at Gray Byrum Road													
Waxhaw-Marvin Road at Kensington Drive													
Waxhaw-Marvin Road at Pine Oak Road													
Waxhaw-Marvin Road at Helms Road													
NC 75 (Waxhaw Highway) at Helms Road													
NC 75 (Waxhaw Highway) at Rehobeth Road													
NC 75 (South Main Street) at Old Providence Road													
NC 75 (Waxhaw Highway) at McNeely Road													





WMTP Report Card <i>(continued)</i>	Performance					Considerations					Partnerships		
	Traffic Flow	Traffic Safety	Walkability	Bikability	Future Land Use Coordination	Environmental Constraints	Right-of-Way Constraints	Survey Availability	Traffic Data Availability	Local Interest	Town	Region / State	Private Sector
Corridors													
<b>NC 16 (Providence Road)</b> <i>Bonds Grove Church Road to Kensington Drive/Cuthbertson Road</i>													
<b>NC 16 (Providence Road)</b> <i>Kensington Drive/Cuthbertson Road to Waxhaw Parkway</i>													
<b>NC 16 (Providence Road)</b> <i>Waxhaw Parkway to North Church Street</i>													
<b>NC 16 (Broome Street)</b> <i>North Church Street to South Main Street</i>													
<b>Waxhaw-Marvin Road</b> <i>Bonds Grove Church Road to Carindale Road</i>													
<b>Waxhaw-Marvin Road</b> <i>Carindale Road to Twelvemile Creek</i>													
<b>Waxhaw-Marvin Road</b> <i>Twelvemile Creek to Helms Road</i>													
<b>Bond Grove Church Rd</b> <i>Waxhaw-Marvin Road to NC 16 (Providence Road)</i>													
<b>Gray Byrum Road</b> <i>Waxhaw-Marvin Road to NC 16 (Providence Road)</i>													
<b>Kensington Drive</b> <i>Stateline to NC 16 (Providence Road)</i>													
<b>Cuthbertson Road</b> <i>NC 16 (Providence Road) to New Town Road</i>													
<b>Pine Oak Road</b> <i>Waxhaw-Marvin Road to NC 16 (Providence Road)</i>													





WMTP Report Card <i>(continued)</i>	Performance					Considerations					Partnerships		
	Traffic Flow	Traffic Safety	Walkability	Bikability	Future Land Use Coordination	Environmental Constraints	Right-of-Way Constraints	Survey Availability	Traffic Data Availability	Local Interest	Town	Region / State	Private Sector
Corridors <i>(continued)</i>													
<b>NC 75 (Waxhaw Highway)</b> <i>Stateline to Rehobeth Road</i>													
<b>NC 75 (South Main Street)</b> <i>Rehobeth Road to Old Providence Road</i>													
<b>NC 75 (Waxhaw Highway)</b> <i>Old Providence Road to Western Union School Road</i>													
<b>Waxhaw Parkway West</b> <i>Western Terminus to NC 16 (Providence Road)</i>													
<b>Waxhaw Parkway East</b> <i>NC 16 (Providence Road) to Eastern Terminus</i>													
<b>Howie Mine Road</b> <i>NC 16 (Broome Street) to Deer Creek Drive</i>													
<b>Waxhaw Indian Trail Road</b> <i>Deer Creek Drive to Twelvemile Creek</i>													
<b>Old Providence Road</b> <i>South Main Street to Sims Road</i>													
<b>Old Waxhaw Monroe Road</b> <i>Sims Road to Western Union School Road</i>													
<b>Rehobeth Road</b> <i>NC 75 (Waxhaw Highway) to Richardson King Road</i>													



## SECTION 3

# Prioritization

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## Introduction

The Waxhaw Master Transportation Plan (WMTP) is designed to help set local transportation priorities for the Town and outline ways to get projects completed. Several transportation projects in the study area are funded and will be constructed in the next several years. These projects include **NC 16 widening north of Waxhaw Parkway; a grade-separated connection from NC 75 to Waxhaw-Marvin Road; NC 75/Old Providence Road intersection improvements; and various improvements associated with new developments.** The prioritization process described in the pages that follow is based on the need for a defensible and transparent approach to identifying the Town’s most important smaller-scale projects. The selected projects represent a crucial first step toward implementing the Town’s vision for a safe, connected, and multimodal transportation system.

## PRIORITIZATION | Summary of Key Findings

The following key findings are based on the outcome of the preliminary prioritization process and feedback received from staff, stakeholders, and the public that is presented in the pages that follow.

- Numerous projects in Waxhaw are funded either through NCDOT, the Town, or in partnership with private developers. These projects include the widening of NC 16, a new connection from NC 75 to Waxhaw-Marvin Road, and improvements at NC 75 and Old Providence Road. The prioritization process for the WMTP focuses on other projects that are currently unfunded.
- When asked to prioritize different types of projects, participants focused on improvements to the existing transportation network (e.g., intersection improvements and widening projects) as well as multimodal facilities (e.g., multiuse paths, sidewalks, and bicycle lanes).
- The intersection of NC 16 and NC 75 was consistently mentioned as a high priority project, which is in keeping with the recurring request for improvements to traffic within and near downtown Waxhaw.
- The WMTP prioritization process evaluated 16 projects using a combination of qualitative and quantitative factors. The outcomes present the projects in two implementation tiers.







### Community Engagement – Part 2 Overview

Part 2 was designed to show participants what we heard in Phase 1 and collect more detailed information on community preferences for potential projects and funding. Input received helped inform local transportation priorities and better understand preferences for additional funding options. Phase 2 engagement featured a second online survey.

#### **Key Thoughts**

1. The highest priority project was the intersection of NC 16 and NC 75, which is representative of a general preference for intersection improvements throughout the study area.
2. Center turn lanes and new greenways also scored high.
3. More information is needed regarding potential funding options.

#### **MetroQuest Online Survey**

**What is MetroQuest?** An online survey designed to educate the public about the project and collect feedback using five interactive and visual screens

**How long was the survey active?** May 22, 2020 to June 8, 2020

**How was it advertised?** Town social media channels | Word of mouth | Internal promotion

#### **What were participants asked?**

- 1) To review 14 potential locally led transportation projects and select five as a priority
- 2) To identify roadway, bicycle, and pedestrian needs and priorities for locations near where they live
- 3) To provide input on four funding scenarios

**Level of Participation** 400 participants | ~7,000 individual data points | ~450 written comments

#### **Key Takeaways**

##### **Participant Profile**

- Nearly 75% of participants in the second survey took the online survey, attended the public workshop, read a news article about the plan, or saw information about the plan on Facebook
- Slightly more than 30% of participants work or go to school in Waxhaw; 18% and 13% work or go to school in South Charlotte or Uptown Charlotte, respectively



***MetroQuest Projects***

Based on the Diagnostic and Part 1 of the WMTP community engagement, the Town identified 14 potential unfunded projects the Town could construct with local funds and/or the support of public or private partners. Survey participants were asked to identify their preferred projects from this list. First, they were asked to select five projects in no order. Later in the survey, they were asked to select their single top priority project. *The list of projects was refined following the survey for inclusion in the prioritization tool.*

- **NC 16/NC 75 Intersection** would improve the intersection of NC 16 and NC 75 by adding turn lanes and crosswalks in coordination with the Critical Intersection Analysis.
- **Broome Street Center Turn Lane** would widen Broome Street to include a center turn lane between Church Street and NC 75 (South Main Street). The improvement would remove left turns from travel lanes, thereby improving safety and reducing travel times along the corridor.
- **Howie Mine Road Sidewalk** would replace and improve the existing narrow/deteriorating sidewalk along Howie Mine Road and extend it east toward the eastern Town limits.
- **Waxhaw Parkway East** would build a new roadway that connects Waxhaw Parkway east, crossing Waxhaw-Indian Trail Road and connecting to NC 75 (Waxhaw Highway). The extension of the parkway would improve connectivity and help relieve downtown traffic. The alignment would need to be determined based on additional study.
- **Waxhaw Parkway West** would construct a new roadway that extends Waxhaw Parkway west to connect with NC 75 (Waxhaw Highway). The alignment is to be determined and would need to consider the crossing of Waxhaw-Marvin Road and the funded grade-separation of the railroad adjacent to NC 75.
- **Pine Oak Road/Waxhaw-Marvin Road Intersection** would construct a turn lane for southbound Waxhaw-Marvin Road and realign Pine Oak Road to improve sight lines and safety conditions.
- **Providence Road Crosswalks** would improve pedestrian safety and connectivity by installing crosswalks at three locations along Provide Road (NC 16): Kingston Drive, Red Oaks Trail, and Alma Boulevard. This project would be an interim improvement ahead of NCDOT's widening of Providence Road.
- **Pine Oak Road Sidewalk** would construct a meandering sidewalk on the south side of Pine Oak Road to connect neighborhoods to each other and to a new sidewalk on Prescott Glen Parkway.
- **12 Mile Creek Greenway** would construct a 10' multi-use path along 12 Mile Creek to connect Nesbit Park and Town Creek Park. It would be an important segment of the Carolina Thread Trail.
- **Waxhaw-Marvin Road Center Turn Lane** would construct a center turn lane on Waxhaw-Marvin Road from Bonds Grove Church Road to Helms Road. The improvement would remove left turns from travel lanes, thereby improving safety and reducing travel times along the corridor.
- **Waxhaw-Marvin Road Multiuse Path (west)** would construct a new 10' multi-use path on the west side of Waxhaw-Marvin Road with the community-wide benefit of providing a continuous multimodal connection to downtown.
- **Waxhaw-Marvin Road Sidewalk (east)** would construct a new sidewalk on the east side of Waxhaw-Marvin Road.
- **Waxhaw-Marvin Road/Kensington Drive Intersection** would continue the improvements at the intersection of Waxhaw-Marvin Road and Kensington Drive with the second of three phases. Based on

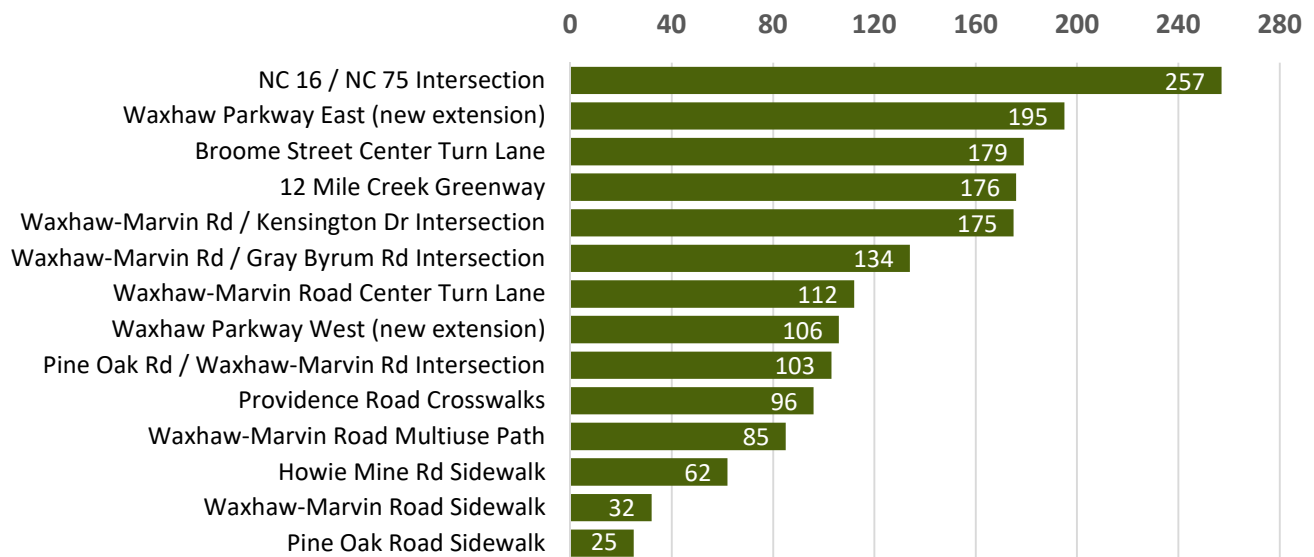




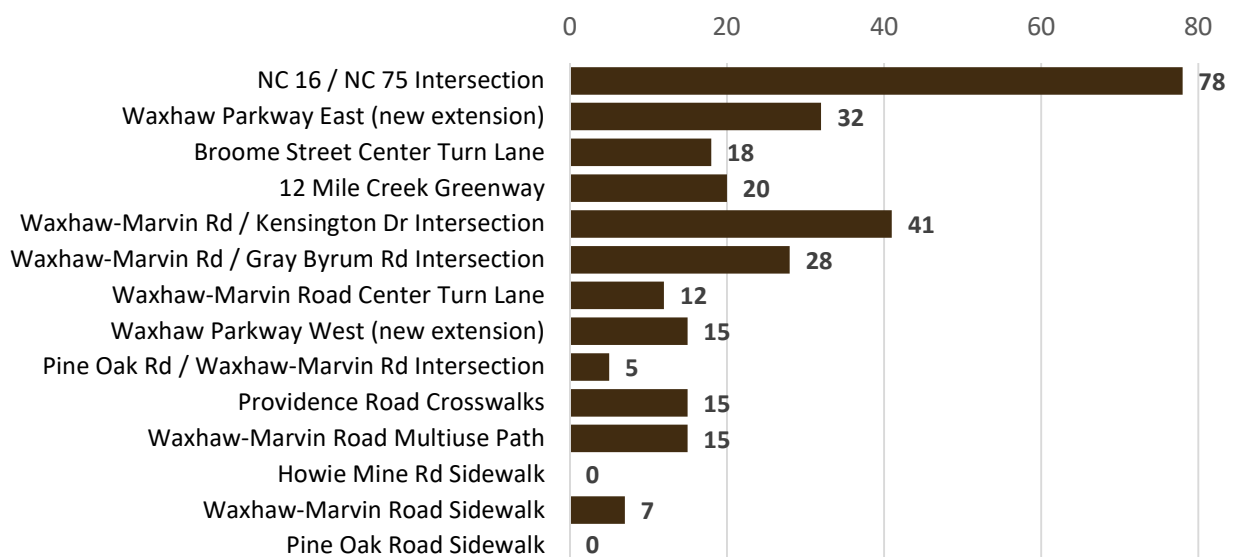
the Waxhaw-Marvin Road Corridor Study, this phase would provide additional storage and turn lanes beyond this year's improvement.

- **Waxhaw-Marvin Road/Gray Byrum Road Intersection** would improve the intersection of Waxhaw-Marvin Road and Gray Byrum Road by adding turn lanes on Waxhaw-Marvin Road and installing a new traffic signal. This project would improve safety and reduce congestion during peak travel hours.
- **NC 16/NC 75 Intersection** would improve the intersection of NC 16 and NC 75 by adding turn lanes and crosswalks in coordination with the Critical Intersection Analysis.

When asked to select up to FIVE priorities in no order...



When asked to select ONE transportation project...





### Local Preferences

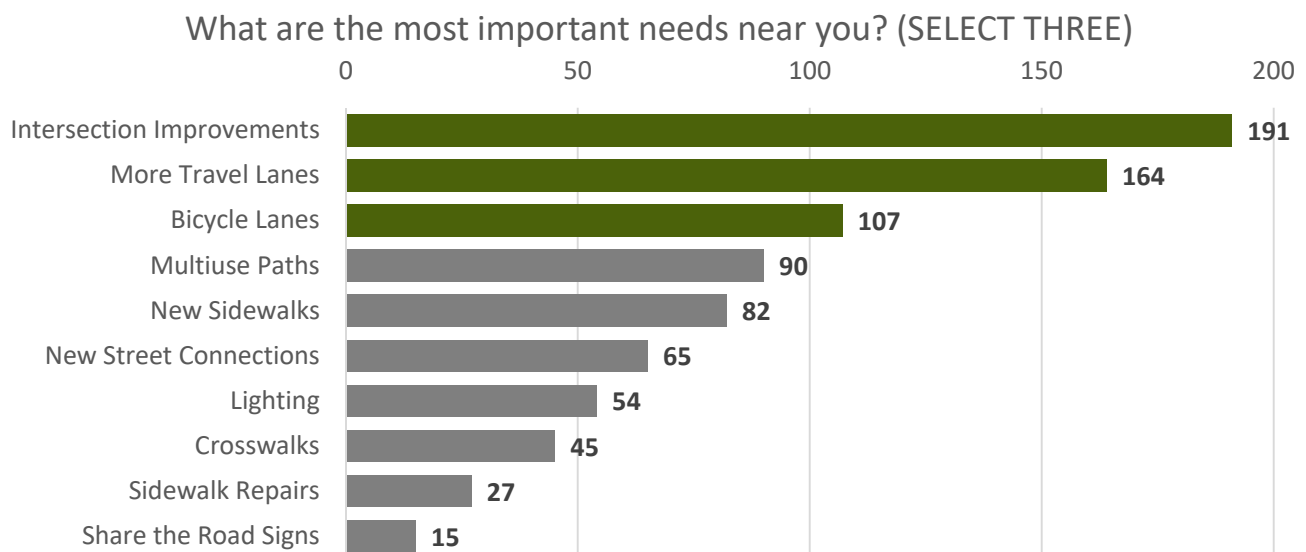
The survey allowed participants to identify the types of projects needed near where they live. First, participants indicated where in the study area (or outside the study area) they lived. Then, they indicated which types of projects were needed in that area.

#### Participants

- 45.3% of participants lived in the northwest portion of the study area, generally defined as west of NC 16 and north of NC 75; 17.1 % lived in northeast portion of the study (east of NC 16 and north of NC 75); 14.9% lived in the study area south of NC 75
- 22.7% of participants indicated they lived outside the study area, either in another Town/City in Union County (7.5%), unincorporated Union County (7.1%), or somewhere else (8.1%)
- 62% of participants lived north of the NC 75

#### Preferences

- Roadway Projects – The most popular roadway projects were Intersection Improvements (190), More Travel Lanes (169), Street Lights (97), and New Street Connections (59). *Participants were able to select all that apply.*
- Bicycle Projects – The most popular bicycle projects were Bicycle Lanes (194), Multiuse Paths (142), Lighting (60), and Share the Road Signs (44). *Participants were able to select all that apply.*
- Pedestrian Projects – The most popular pedestrian projects were New Sidewalks (161), Multiuse Paths (141), Crosswalks (128), Lighting (105), and Sidewalk Repairs (61). *Participants were able to select all that apply.*
- When asked to select only the THREE most improvement needs near them, participants selected intersection projects, more travel lanes, and bicycle lanes.







### Funding Options

As a follow up to the first online survey, participants were presented with four funding options that varied in how much money could be generated for transportation projects and how much control the Town of Waxhaw would have on those funds. Based on the information provided for each scenario, participants, rated each option on a scale of 1 to 5. Later, participants were asked to select their preferred funding scenario.

NCDOT Funding	General Obligation Bond
Currently most projects receive funding through NCDOT. For a project to be eligible for NCDOT funding, it must first be recognized in the MPOs financially constrained plan and then compete for funding within the statewide prioritization process.	A general obligation bond could be secured and repaid by the Town's general tax revenue. A bond measure would require voter approval but has the potential to significantly supplement the Town's transportation spending power. General obligation bonds are fairly low risk to the Town, but the Town is limited in the amount of debt they can take on. General obligation bonds often require construction ready projects, meaning the Town would likely need another funding source to complete design.
Property Tax Increase	County Sales Tax
Property taxes make up 47% of the Town's annual revenue, and property owners currently pay 38 cents per \$100 of valuation. Every penny of property tax in Waxhaw yields roughly \$190,000 in revenue. A small property tax increase could go a long way to fund transportation improvements, and the Town has full control over the expenditure of property taxes. Property taxes are a very reliable source of funding, as property values are fairly stable over the long term.	Currently, North Carolina does not have a provision to allow counties to levy a dedicated sales tax for transportation. In neighboring SC, a local sales tax can be levied by the county and collected by the state on purchases made within the county. These funds would be distributed county-wide. This would require legislative action at the statewide level.

	NCDOT Funding	General Obligation Bond	Property Tax Increase	County Sales Tax
Town Control of Funds	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>
Stability of Funding Source	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>
Level of Funds Generated/Available	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>
Final Burden to Residents	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>
Ease of Establishing Funding	<i>Funding Source Already Established</i>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>

- NCDOT Funding received the highest average rating (3.74) despite giving the Town the least control of funds and having the lowest stability as a funding source. General Obligation Bonds received the second highest rating (3.21).
- Similar feedback was received when participants were asked to select their preferred funding source. 84.3% of participants selected NCDOT Funding or General Obligation Bonds.

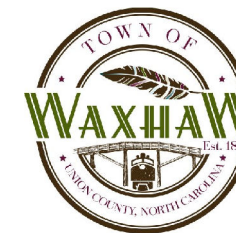


## Prioritization

While identifying the need and describing the project scope is important, the reality of budget constraints and the influence of regional and state funding cycles makes wholesale implementation impossible. The result is additional pressure on identifying priority improvements that align with stated local goals. The projects presented for feedback in the second online survey were refined to create a list of 16 initial projects subject to Town prioritization. It is expected that the list of projects will change over time. Therefore, the WMTP represents the first step in creating a local prioritization process that can be repeated in the years to come as additional projects are identified and new information becomes available. The project prioritization process described below allows the Town to pursue recommendations with noticeable effect on Waxhaw's future.

Projects Subject to Town Prioritization		
Name	Type	Description
<b>Alma Blvd, Kingston Dr, and Red Oaks Tr Crosswalks</b>	Crossing	Crosswalks across NC 16
<b>NC 16 (Providence Rd) at NC 75 (South Main St)</b>	Intersection	Intersection improvement (Union County Critical Intersection Analysis concept)
<b>Waxhaw-Marvin Rd at Bonds Grove Church Rd</b>	Intersection	Intersection improvement (realignment, traffic signal, turn lanes)
<b>Waxhaw-Marvin Rd at Gray Byrum Rd</b>	Intersection	Intersection improvement (traffic signal, turn lanes)
<b>Waxhaw-Marvin Rd at Kensington Dr</b>	Intersection	Intersection improvement (turn lanes)
<b>Waxhaw-Marvin Rd at Pine Oak Rd</b>	Intersection	Intersection improvement (realignment)
<b>Broome St (NC 16) Center Turn Lane</b>	Widening	Widening from North Church Street to South Main Street
<b>Howie Mine Rd Sidewalk</b>	Sidewalk	Sidewalk repair/construction from NC 16 (Broome Street) to Waxhaw Indian Trail Road
<b>Pine Oak Rd Sidewalk</b>	Sidewalk	New sidewalk from NC 16 (Providence Road) to Buckeye Circle
<b>Twelve Mile Creek Greenway</b>	Greenway	New multi-use path between Nesbit Park and Town Creek Park
<b>Waxhaw Parkway Extension West</b>	New Road	New roadway from existing terminus to Waxhaw-Marvin Road at Helms Road
<b>Waxhaw Parkway Ext. East Part 1</b>	New Road	New roadway from existing terminus to Waxhaw Indian Trail Road
<b>Waxhaw Parkway Ext. East Part 2</b>	New Road	New roadway from Waxhaw Indian Trail Road to Waxhaw Highway (NC 75)
<b>Waxhaw-Marvin Corridor (A)</b>	Widening	Widening from Bonds Grove Church Road to Carindale Road (to three lanes with multi-use path)
<b>Waxhaw-Marvin Corridor (B)</b>	Widening	Widening from Carindale Road to Twelve Mile Creek (to three lanes with multi-use path)
<b>Waxhaw-Marvin Corridor (C)</b>	Widening	Widening from Twelve Mile Creek to Helms Road (to three lanes with multi-use path)





# MASTER TRANSPORTATION PLAN

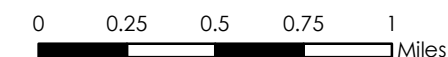
## 6a Projects Subject to Town Prioritization

### Intersections

- A. Alma Blvd, Kingston Dr, and Red Oaks Tr Crosswalks
- B. NC 16 (Providence Rd) at NC 75 (South Main St)
- C. Waxhaw-Marvin Rd at Bonds Grove Church Rd
- D. Waxhaw-Marvin Rd at Gray Byrum Rd
- E. Waxhaw-Marvin Rd at Kensington Phase II
- F. Waxhaw-Marvin Rd at Pine Oak Rd

### Corridors

- G. Broome St (NC 16) Center Turn Lane
- H. Howie Mine Rd Sidewalk
- I. Pine Oak Rd Sidewalk
- J. Waxhaw Pkwy Extension East
- K. Waxhaw Pkwy Extension East
- L. Waxhaw Pkwy Extension West
- M. Twelve Mile Creek Greenway
- N. Waxhaw-Marvin Corridor Context Zone A
- O. Waxhaw-Marvin Corridor Context Zone B
- P. Waxhaw-Marvin Corridor Context Zone C
- Town of Waxhaw
- Extended Study Area
- State Line



December 2020



### Prioritization Criteria

The prioritization process includes a combination of qualitative and quantitative factors based on the analysis and input from the community. The prioritization criteria included 10 categories, based in part on information presented in the Report Card. Each project received a score of 0 to 10 based on its performance in each category. The total cumulative score in all 10 categories was determined, then a weighting factor was applied.

Prioritization Criteria		
Category	Description	Weighting Factor
<b>Traffic Flow</b>	Based on the corridor Level of Service. Higher scores are given to locations with more congestion issues due to the need for mitigation.	<b>15%</b>
<b>Safety</b>	Based on NCDOT reported crashes for roadway, bicycle, and pedestrian users. Higher scores are given to locations within a safety hotspot due to the need for mitigation. Higher scores are given to locations with higher demand.	<b>10%</b>
<b>Walkability</b>	Based on a geospatial analysis of likely pedestrian demand using inputs such as population, demographics, and proximity to destinations. Higher scores are given to locations with higher demand. Sidewalk, crosswalk, and greenway projects automatically received a higher score.	<b>10%</b>
<b>Bikeability</b>	Based on a geospatial analysis of likely bicycling demand using inputs such as population, demographics, and proximity to destinations. Sidewalk, crosswalk, and greenway projects automatically received a higher score.	<b>5%</b>
<b>Constructability</b>	Based on the presence of environmental and right-of-way constraints as well as the availability of data that could expedite improvements.	<b>15%</b>
<b>Order of Magnitude</b>	Based on the relative cost of implementation. Higher scores are given to projects with a lower relative cost for implementation.	<b>10%</b>
<b>Private Sector Involvement</b>	Based on the likely involvement of the private sector in the construction of the project. Higher scores are given to locations referenced for potential improvement through the Town's TIA program.	<b>10%</b>
<b>Economic Development</b>	Based on whether a project or a portion of a project is location within any of the three Economic Zones on the Town's Future Land Use Map. Higher scores are given to projects completely within a Economic Zone.	<b>10%</b>
<b>Local Priorities</b>	Based on stated community and stakeholder preference for a project. Higher scores are given to projects that were frequently mentioned in the first online survey and/or scored high on the second online survey.	<b>10%</b>
<b>Previous Plans</b>	Based on whether a project was previously recommended in a local or regional plan. Higher scores are given to projects that have been previously recommended.	<b>5%</b>

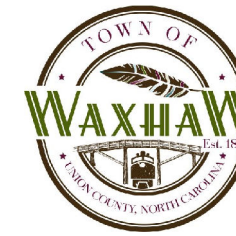




### Prioritization Results

Following the scoring, the top scoring projects were identified and categorized as the plan's Tier 1 recommendations. Other projects are shown as Tier 2 recommendations. Tier 1 and 2 are to be evaluated upon completion of project(s) and with annual review of the Capital Improvement Program. Any changes to the Tiers will go before the Board of Commissioners for adoption. The WMTP is not a good mechanism for comparing pedestrian projects with road projects. Bike and pedestrian projects will be prioritized and funded through the 2021 Pedestrian Plan Update. The Project Prioritization Tiers are shown in the table below and on the map that follows.

Project Prioritization Tiers		
Project	Description	Weighted Score
<b>Tier 1</b>		
<b>NC 16 (Providence Road) at NC 75 (South Main Street)</b>	Intersection improvement (Union County Critical Intersection Analysis concept)	<b>7.89</b>
<b>Alma Boulevard, Kingston Drive, and Red Oaks Trail Crosswalks</b>	Crosswalks across NC 16	<b>7.23</b>
<b>Waxhaw Parkway Extension East Part 1</b>	New road from existing terminus to Waxhaw-Indian Trail Road	<b>7.08</b>
<b>Broome Street (NC 16) Center Turn Lane</b>	Widening from North Church Street to South Main Street	<b>6.35</b>
<b>Waxhaw Parkway Extension East Part 2</b>	New roadway from Waxhaw Indian Trail Road to Waxhaw Highway (NC 75)	<b>6.14</b>
<b>Waxhaw-Marvin Road at Bonds Grove Church Road*</b>	Intersection improvement (realignment, traffic signal, turn lanes) *Being funded by Union County CIA & CRTPO	<b>5.78</b>
<b>Waxhaw-Marvin Road at Pine Oak Road</b>	Intersection improvement (realignment)	<b>5.51</b>
<b>Waxhaw Parkway Extension West</b>	New roadway from existing terminus to Waxhaw-Marvin Road at Helms Road to connect P-5748 with U-5769	<b>5.39</b>
<b>Tier 2</b>		
<b>Waxhaw-Marvin Corridor Context Zone A</b>	Widening from Bonds Grove Church Road to Carindale Road (to three lanes with multi-use path)	<b>4.98</b>
<b>Waxhaw-Marvin at Kensington Phase II</b>	Intersection improvement (turn lanes)	<b>4.92</b>
<b>Waxhaw-Marvin Rd at Gray Byrum Rd</b>	Intersection improvement (traffic signal, turn lanes)	<b>4.80</b>
<b>Waxhaw-Marvin Corridor Context Zone B</b>	Widening from Carindale Road to Twelve Mile Creek (to three lanes with multi-use path)	<b>4.76</b>
<b>Waxhaw-Marvin Corridor Context Zone C</b>	Widening from Twelve Mile Creek to Helms Road (to three lanes with multi-use path)	<b>4.71</b>
<b>Howie Mine Road Sidewalk</b>	Sidewalk repair/construction from NC 16 (Broome Street) to Waxhaw Indian Trail Road-Potential CDBG Funding	<b>4.88</b>
<b>Pine Oak Road Sidewalk</b>	New sidewalk from NC 16 (Providence Road) to Buckeye Circle	<b>4.60</b>
<b>Twelve Mile Creek Greenway</b>	New multi-use path between Nesbit Park and Town Creek Park	<b>3.75</b>



# MASTER TRANSPORTATION PLAN

## 6b Project Prioritization Tiers

### Tier 1

- A. Alma Blvd, Kingston Dr, and Red Oaks Tr Crosswalks
- B. NC 16 (Providence Rd) at NC 75 (South Main St)
- C. Waxhaw-Marvin Rd at Bonds Grove Church Rd

- G. Broome St (NC 16) Center Turn Lane
- J. Waxhaw Pkwy Extension East
- K. Waxhaw Pkwy Extension East
- L. Waxhaw Pkwy Extension West

### Tier 2

- D. Waxhaw-Marvin Rd at Gray Byrum Rd
- E. Waxhaw-Marvin Rd at Kensington Phase II
- F. Waxhaw-Marvin Rd at Pine Oak Rd
- H. Howie Mine Rd Sidewalk
- I. Pine Oak Rd Sidewalk
- M. Twelve Mile Creek Greenway
- N. Waxhaw-Marvin Corridor Context Zone A
- O. Waxhaw-Marvin Corridor Context Zone B
- P. Waxhaw-Marvin Corridor Context Zone C

- Town of Waxhaw
- Extended Study Area
- State Line

0 0.25 0.5 0.75 1 Miles



November 2020



## SECTION 4

# Funding and Next Steps



## Introduction

The success of the Waxhaw Master Transportation Plan (WMTP) hinges on the effective collaboration of local, regional, and state officials. The strategy of supplementing larger scale transportation projects funded by NCDOT with smaller, locally led projects is the preferred approach for a safe, connected, and multimodal transportation network in the study area. This approach builds upon previous and ongoing efforts by the Town to improve the transportation network through facility improvements, close coordination with regional partners, and Town policies. This final section describes funding considerations and next steps as staff continues to focus their efforts and seek strategic opportunities to expedite the implementation of the Town’s most pressing transportation needs.

## FUNDING AND NEXT STEPS | Summary of Key Findings

The following key findings are based on the funding considerations and action items identified throughout the WMTP process. More information is presented in the pages that follow.

- 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 Waxhaw.
- The Town’s funding strategy needs to consider who owns the road and who is best positioned to lead.
- The WMTP is the next step in aligning transportation needs with community goals.

## Funding Considerations

With uncertain budgets affecting projects locally and across North Carolina, funds to construct improvements in Waxhaw will need to come a combination of from local, state, and federal programs, as well as the support of private contributions. It will be important for the Town of Waxhaw, in collaboration with Union County, CRTPO, and NCDOT, to continue pursuing funding resources to address local transportation needs. While the focus of the WMTP was on projects that can be funded locally, alternatives are available to provide a wider base of financial support for improving the local transportation network. This broader support for transportation funding ultimately will benefit neighboring communities, Union County, and the Metrolina region.

### *Who Owns the Road?*

Not all roads in Waxhaw are owned by the Town. The Town (or neighborhood associations) own most of the roads within neighborhoods, but the state (NCDOT) owns many of the major roads in Waxhaw. The Powell Bill Map (See Section 2, Map 1b) shows who owns the roads in Waxhaw. Powell Bill funds are distributed to cities and towns to help the Town fund maintenance, repairs construction, and other improvements. However, these funds are limited. As a result, the Town depends on other state funding sources to improve major roads such as NC 16 and Waxhaw-Marvin Road.



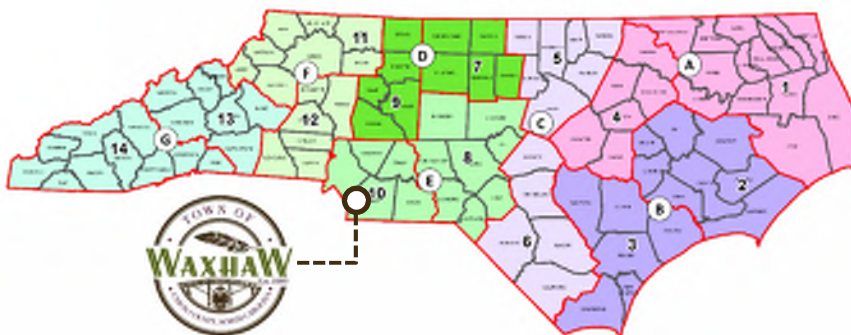


### *How do we pay for transportation projects?*

Who pays (and how) for a transportation project depends on a variety of factors, including who controls the road, the cost of the improvement, and whether the transportation need is related to a land development project. The state, region, and Town each have a role to play in delivering transportation projects in Waxhaw.

#### The State

The state places transportation projects into three categories based on the reach of the project. The projects are ranked using a quantitative scoring process. The study area is in **Division 10**, which is part of **Region E**. More information can be found at [www.ncdot.gov](http://www.ncdot.gov).



Statewide Mobility	Projects in this category receive 40 percent of available revenue. The project selection process is based 100 percent on data.
Regional Impact	Projects in this category receive 30 percent of available revenue. Projects on this level compete within regions made up of two NCDOT transportation divisions, with funding divided among the regions based on population. Data makes up 70 percent of the project scores in this category. Local rankings account for the remaining 30 percent.
Division Needs	Projects in this category will receive 30 percent of the available revenue, shared equally over NCDOT's 14 transportation divisions, which are groupings of local counties. Project scores are based 50 percent on data and 50 percent on rankings by local planning organizations and the NCDOT transportation divisions.

#### The Region

The study area is part of the Charlotte Regional Transportation Planning Organization (CRTPO), which stretches from Iredell County to Union County. CRTPO is the federally designated Metropolitan Planning Organization (MPO) and carries out the transportation planning process among member jurisdictions. CRTPO oversees a regional financially-constrained transportation plan, which is a necessary step to receive state funds.

#### The Town

Waxhaw doesn't receive enough funds through the Powell Bill program to cover maintenance of existing roads. And while some projects are included in the Town's Capital Improvement Project (CIP) program, only a few small-scale projects can be funded at the local level. The Town continues to work with private developers to ensure the traffic generated from new developments are accounted for.

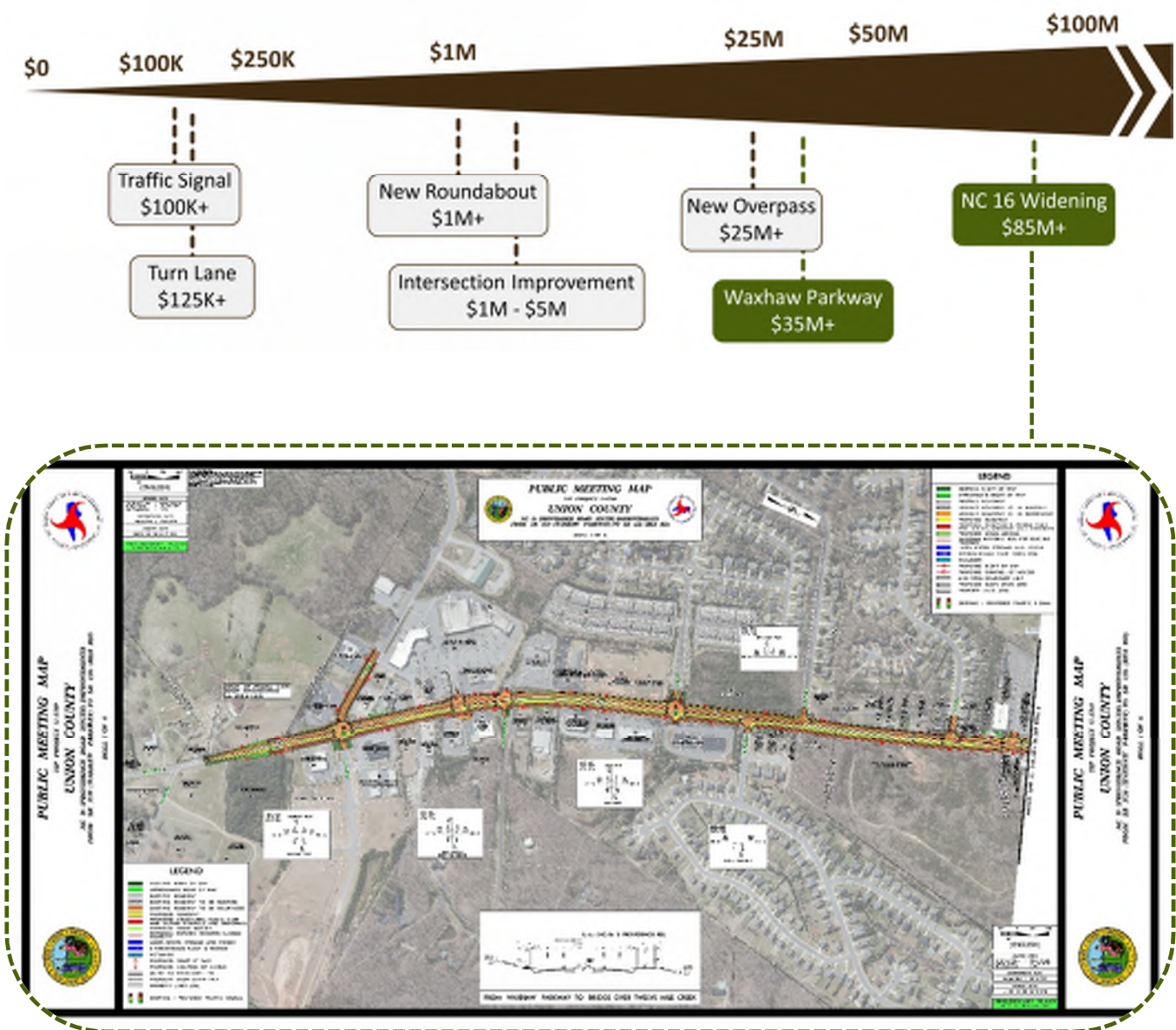
Knowing who owns the road and who is (or who should be) responsible for transportation improvements is only part of the funding consideration. The Town also needs to recognize how much transportation improvements will cost and what options the Town has when transportation needs exceed local and regional transportation dollars.



### What does it cost to build something?

The dollars allocated to transportation improvements do not go as far as they used to. As the Town seeks to address its most pressing transportation needs, an understanding of how much improvements likely will cost is critical. The WMTP has reinforced the notion that the Town (and region and state) do not have enough money to cover these costs. The preferred local choice is to explore other funding options rather than simply accept that improvements will be scaled back or will be implemented more slowly.

Many factors determine how much transportation projects will cost. Some factors the Town has more influence over, while other factors may be outside local control. The scale of the project, amount of right-of-way to be acquired, utilities that will be disrupted, and complexity of the construction phase all have a bearing on how far the Town and its implementation partners can stretch each transportation dollar.



Map of NC 16 Widening – <https://publicinput.com/nc-16-providence>





### *What are our funding options?*

With tight budgets in Waxhaw and elsewhere, funding transportation improvements will likely require a combination of local, state, and federal programs as well as private contributions. Waxhaw will need to continue to collaborate with Union County, CRTPO, and NCDOT to address its transportation needs. While some projects may be funded locally, alternatives that leverage wider financial support could help broaden the scope of local improvements and benefit the larger region. The following are just a few options that could be considered.

**STIP Funding.** The State Transportation Improvement Program (STIP) is the traditional source of allocating transportation funds in North Carolina for state roads. Most of this funding comes from vehicle sales tax and state and federal gasoline tax revenues. In Waxhaw, all state and federal funding is programmed in collaboration with CRTPO. The NC 16 widening is a STIP project (U-5769). *No proposed projects are currently funded through 2029.*

**Powell Bill.** These funds are generated by the state gasoline tax and distributed by the state to municipalities to help fund transportation projects on municipally maintained roads. The Town of Waxhaw receives approximately \$400,000 per year in Powell Bill funds, which is also known as State Aid to Municipalities funding.

**Transportation Bonds.** This is a form of financing in which a local government issues bonds as a way to borrow money to fund local improvements. These bonds are paid back over time. Transportation bonds could allow the Town to pay outright for transportation projects or position the Town to leverage outside funding by having a revenue source for matching contributions.

**Transportation Reserve Account.** Like a savings account, a transportation reserve account (TRA) can be created to set aside local funds for transportation improvements.

**Developer Contributions.** This category includes local requirements that new developments construct necessary infrastructure to serve that development. This infrastructure includes relevant roadway improvements from adopted plans.

**County Sales Tax.** Following approval by voter referendum, a local sales tax can be levied by the county and collected by the state on purchases made within the county. These funds would be distributed county wide.

**Grant Funding.** Limited funding is available for transportation projects through competitive grants offered by non-profit organizations (such as projects that promote health) and the federal government (such as the BUILD program). Typically, these opportunities are highly competitive, and grants are awarded based on specific criteria established for each program.

*The WMTP continued the local conversation about funding options and the public's appetite to explore new ways to expedite long overdue transportation improvements. While the intent of the WMTP was not to conduct an exhaustive education campaign on funding options nor was it intended to recommend a locally preferred funding option, the input received during the WMTP engagement process reaffirmed frustration with the pace by which projects are delivered and an interest in exploring new funding options even as the Town continues to lean on established State and Federal funding programs.*



### Future Actions

Implementing the WMTP will be an ongoing and iterative process that should be reevaluated on a regular basis. Moving forward, key steps for the Town that will help advance the recommendations include the following:

**Prioritization Enhancements.** The WMTP prioritization process was a point-in-time evaluation of transportation needs, available data, community input, and potential solutions. Future enhancements could include the following:

- Revisit the potential projects annually to ensure projects and objectives remain relevant. Update the WMTP alongside the Capital Improvement Plan for consistency. Present any changes in project Tiers to the Board of Commissioners for adoption.
- Adapt the prioritization criteria to accommodate new data sources and refine how transportation needs and priorities are communicated.
- Establish a way to fully leverage data available through the Town's Traffic Impact Analysis (TIA) program.
- Include relevant recommendations from the upcoming Waxhaw Comprehensive Pedestrian Plan.
- Align the Town's Sidewalk Priority Rating System with the prioritization process.

**Local Policies and Processes.** Several policy suggestions are recommended in support of the physical transportation improvements recommended as part of the WMTP.

- Establish an official Town policy to guide the funding of "betterments" associated with NCDOT projects.
- Evaluate projects annually for inclusion in the Town's Capital Improvement Projects (CIP) to ensure that selected transportation projects are consistent with WMTP priorities to the extent possible.
- Revisit recommendations from the Waxhaw-Marvin Corridor Study for ways to enhance walkability in the interim with crossings and sidewalks that account for the future widening project.

**Future Plans and Studies.** The WMTP offers an initial view of local transportation priorities to help staff and elected officials advocate for projects that will have the greatest impact to the Town. Previous plans identified many transportation needs. The Town will need to monitor emerging needs and changes in the way projects can be funded and implemented.

- Evaluate interim pedestrian crossing improvements as part of the Waxhaw Comprehensive Pedestrian Plan, especially along NC 16 at location where a neighborhood is located on the opposite side of the street from existing sidewalks.
- Bicycle and pedestrian projects will be evaluated in the 2021 Pedestrian Plan Update. Pedestrian projects do not prioritize well in the WMTP due to limited scope of improvement.
- Consider an alignment study for the Waxhaw Parkway East and Waxhaw Parkway West to clarify the preferred alignment and better determine feasibility, cost, and implementation timeframe. The alignment study also should consider traffic impacts associated with planned Downtown improvements, the NC 16 widening, etc.

**Partnerships.** Even with the WMTP's focus on locally led solutions, numerous agencies will need to work together for local transportation projects to be implemented in a timely and efficient way. In addition to the Town of Waxhaw, partnering agencies that will need to be involved in many of the projects include Union County, CRTPO, NCDOT, and FHWA. Other stakeholders, including the private sector and neighboring jurisdictions, may need to be involved depending on the project and should be engaged as seen fit.





### Conclusion

The recommendations communicated as part of the Waxhaw Master Transportation Plan envision a Town that strives to maintain reliable and safe access to multiple forms of transportation and supports long-standing quality of life initiatives. The WMTP is one part of a broader vision for mobility that supports local goals related to land use, design, economic development, natural resources, and social equity. It is these attributes that make Waxhaw a unique and desirable place to live, work, and recreate. The focus of the WMTP ensures that transportation decision-making will consider existing and future issues and needs. The WMTP provides transportation strategies that consider the existing and future needs of Waxhaw residents, visitors, and employers alike. The plan seeks to align potential projects with reasonable expectations for funding. It also seeks to align priority projects with a combination of data and community input to direct the Town's transportation planning decisions. With this document, the leaders and people of Waxhaw can set the stage for the Town's future and how it will accommodate its needs moving forward.

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## Waxhaw Master Transportation Plan

*September 2020*

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**Kimley»Horn**