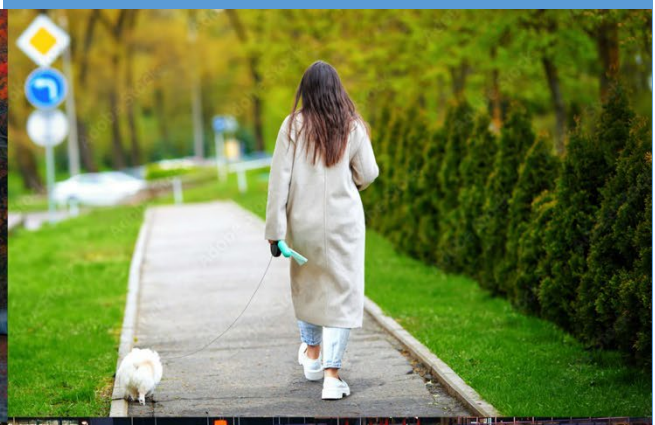
Orange County Transportation Multimodal Plan

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10/17/2024

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1. Project Background

Orange County comprises of multiple transportation planning agencies, including two Metropolitan Planning Organizations (MPOs) – Durham Chapel Hill Carrboro (DCHC) MPO and Burlington Graham (BG) MPO, Central Pines Regional Council (CPRC) four incorporated communities, and North Carolina Department of Transportation (NCDOT). The boundaries of these agencies are shown in Figure 1.1. These agencies have independently conducted several transportation planning studies and plans. The Orange County Transportation Multimodal Plan (OC-TMP) is an effort to consolidate all the projects recommended by these plans and prioritize them based on relevant metrics determined through public and stakeholder engagement process.

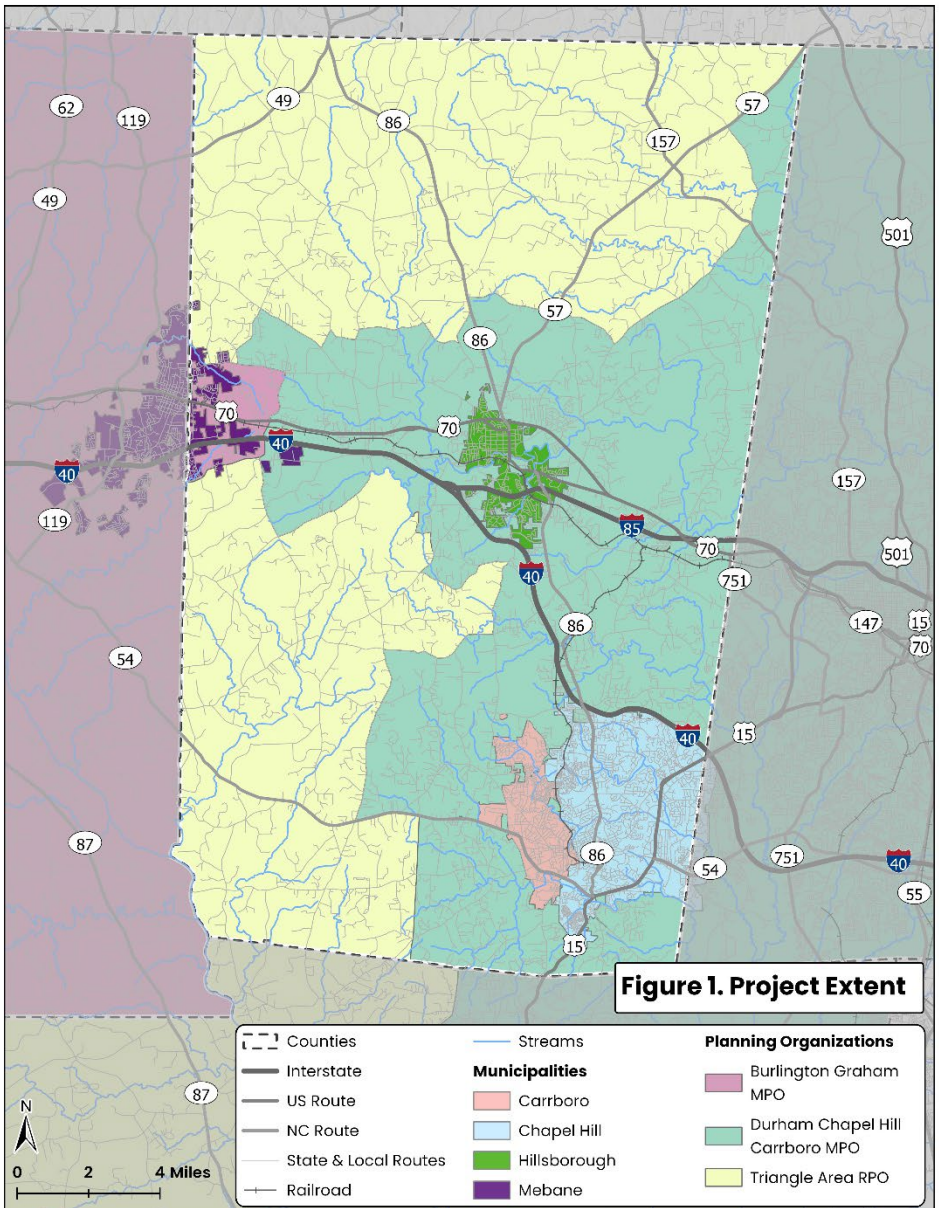


Figure 1.1: Map showing boundaries of transportation planning organizations within Orange County

Purpose

Orange County Transportation (OCT) plays a critical role in managing transportation in the county, as well as local and regional connectivity. The county is a part of several jurisdictions and decision-making authorities pertaining to transportation as listed above. Each of these authorities develop transportation plans for the areas within their boundary. The key purpose of this project is to consolidate all the plans developed by the constituent jurisdictions into one plan such that the final report of this project becomes the primary reference for all transportation plans in Orange County.

There are four incorporated jurisdictions within Orange County - the City of Mebane, the Town of Hillsborough, the Town of Carrboro, and the Town of Chapel Hill. These jurisdictions control transportation planning within their incorporated boundaries. For this purpose, this plan focuses on the unincorporated areas of Orange County, where OCT has complete jurisdiction. While transportation plans were obtained from the City of Mebane, the Town of Hillsborough, the Town of Carrboro, and the Town of Chapel Hill, only those project recommendations that are completely or partially located within Orange County are discussed in this plan.

The purpose of the Orange County Transportation Multimodal Plan is to consolidate the transportation recommendations within the unincorporated regions of Orange County into one comprehensive countywide plan, develop a method for prioritizing projects, and preparing a prioritized list of projects.

Process

	2023		2024									
	November	December	January	February	March	April	May	June	July	August	September	October
Kickoff and Project Setup												
Data Collection												
Consolidation of Projects												
Opportunities Analysis												
Public Engagement												
Prioritization Methodology												
Prioritization Table												
Final Report												

Figure 1.2 Project Development timeline

This project started in November 2023 by constituting a Core Technical Team and identifying the previously adopted transportation plans and studies that will be included in the TMP. The project and policy recommendations from the selected projects were compiled into a combined list and three maps – one map for each mode (Roadway, Bicycle and Pedestrian, and Transit). This compilation revealed several duplicate project recommendations stemming from various plans which our team identified and removed. The final list of projects was then reviewed and additional opportunities for network completion were identified. These projects and maps were presented to the public through online survey and in-person meetings.

Questions regarding prioritization were also asked in the online survey and to the stakeholders to incorporate their inputs into the prioritization process, which was the next step of the study. Our team developed a comprehensive and easy-to-calculate prioritization

methodology including mode-specific factors. This methodology was then used to calculate scores for each project and to compile a prioritized list based on these scores.

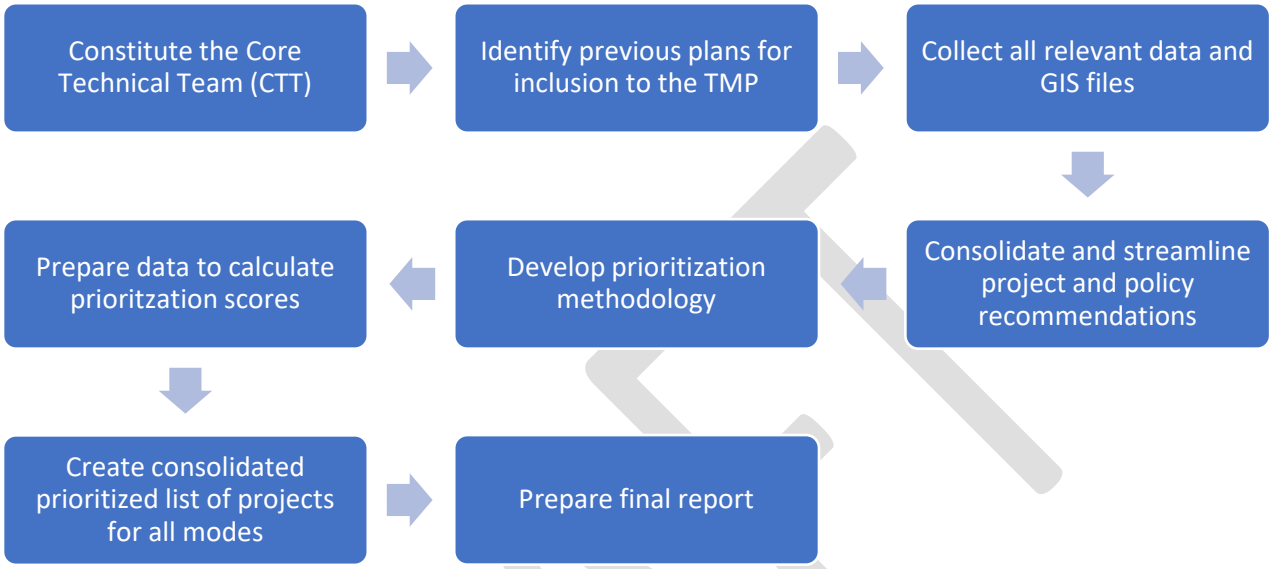


Figure 1.3 Project Development Process

Stakeholder Coordination

A Core Technical Team (CTT) was identified consisting of representatives from key transportation agencies within Orange County, including BGMPO, DCHC MPO, CPRC, NCDOT Division 7. The key purpose of the CTT was to provide technical guidance throughout the course of the plan development. Table 1.1 shows the participants from each of the agencies mentioned above.

Table 1.1 Agencies and representatives constituting the CTT

Agency	Representative	Role
Orange County	Nish Trivedi	Transportation Services Director
	Darlene Weaver	Transportation Planning Manager
NCDOT Div 7	Chad Reimakoski	Division Traffic Engineer
	Nishant Shah	Division 9 Corridor Development Engineer
NCDOT IMD	Nicholas Morrison	Regional Transportation Planner
DCHC MPO	Doug Plachcinski	Executive Director
	David Miller	Transportation Planner
BG MPO	Wannetta Mallette	MPO Administrator
CPRC (TJCOG)	Karyl Fuller	RPO Director

The CTT met 9 times from November 2023 to August 2024 to guide the project process. A short summary of each of these meetings is provided in Table 1.2. Detailed meeting minutes and presentations from each meeting are included in the Appendix I.

Table 1.2 Timeline of CTT coordination meetings

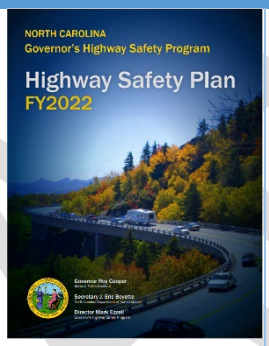
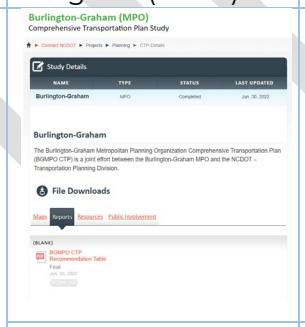
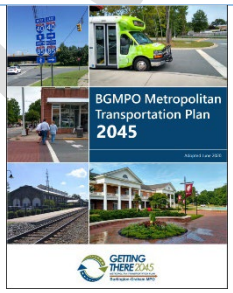
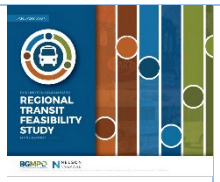
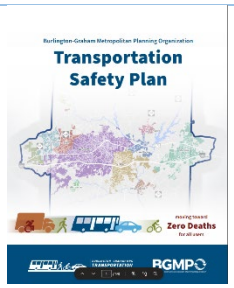
No	Date	Topics discussed
1	Nov 14, 2023	Project Kickoff, description, extents, schedule. Team introduction
2	Dec 11, 2023	Previous plans and studies identified, data requests, mapping template
3	Jan 8, 2024	Data collection, symbology template, project attributes review
4	Feb 12, 2024	Remaining data, maps prepared for TMP, number of projects by mode
5	Mar 11, 2024	Data from ongoing plans, Public Engagement (PE) preparation
6	Apr 8, 2024	Completed consolidated maps for each mode, PE updates
7	May 13, 2024	Policy Recommendations analysis, Prioritization questions to CTT, PE results
8	Jun 10, 2024	Prioritization methodology
9	Jul 12, 2024	Score calculations, preliminary results of prioritization

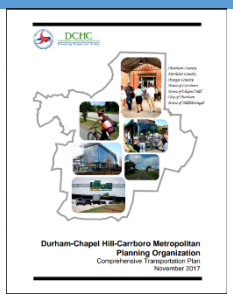
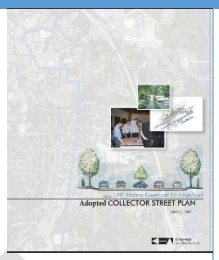
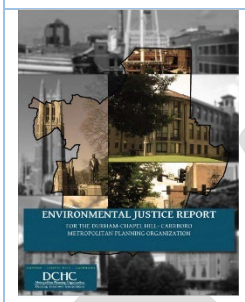
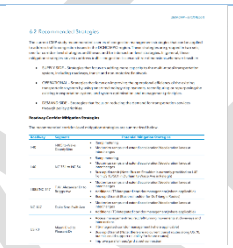
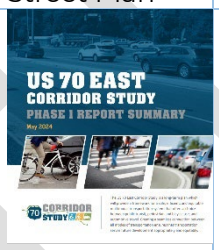
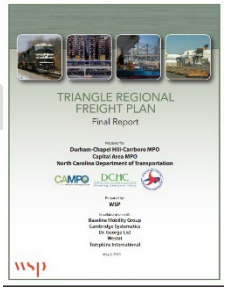
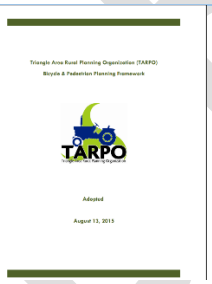
2. Previous Plans and Studies

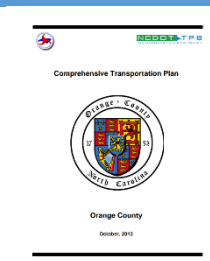
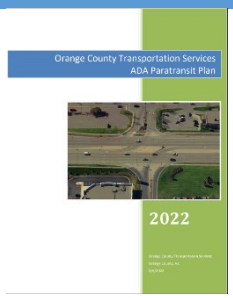
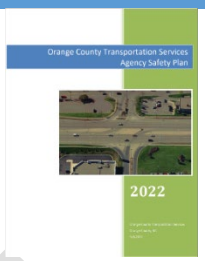
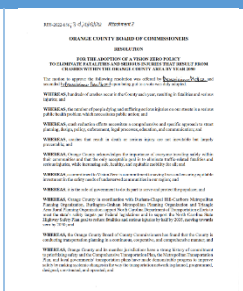
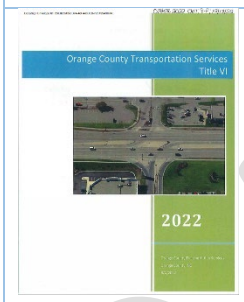
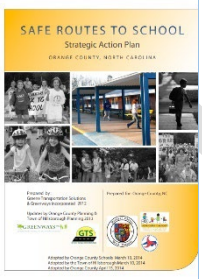
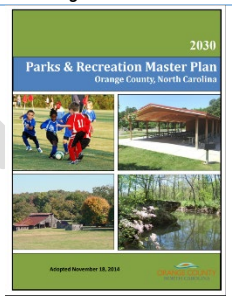
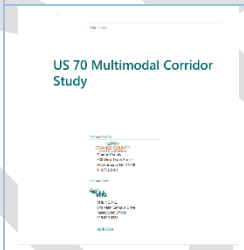
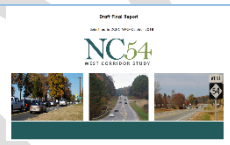
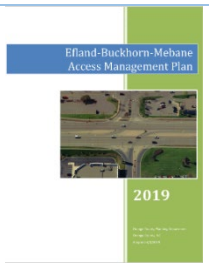
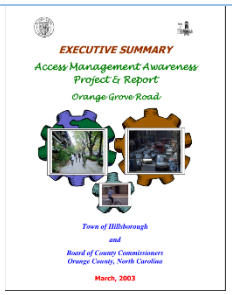
58 plans and studies developed and adopted by 9 agencies were identified for inclusion in the TMP. While some plans do not include specific project recommendations, these plans were still utilized to assist in development of the policy consolidation.

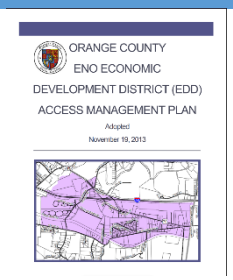
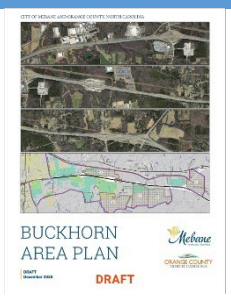
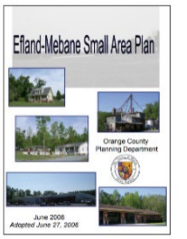
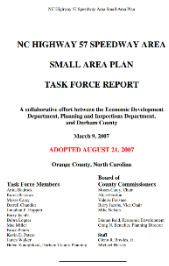
Table 2.1 shows the agencies and the plans adopted whose recommendations are included in this study. Further evaluation showed several plans that were superseded by more recent plans, and these are noted in the table below. These plans are described in detail in Appendix II.

Table 2.1 Various Plans and Studies adopted by the constituent transportation planning agencies in Orange County

Agency	Plans			
NCDOT				
	Highway Maintenance Improvement Program (HMIP)	Highway Safety Action Plan	2024-2033 State Transportation Improvement Plan (STIP)	
BGMPO				
	BGMPO 2030 Comprehensive Transportation Plan (CTP)	2045 Metropolitan Transportation Plan (MTP)	Regional Transit Feasibility Study	Transportation Safety Plan

Agency	Plans			
DCHC MPO				
	DCHC MPO CTP 2017	Connect 2050 MTP	SW Durham / SE Chapel Hill Collector Street Plan	Triangle Bikeway Feasibility Study
				
	Environmental Justice Report	Congestion Management Plan	US 70 East Corridor Study (Phase I)	Regional Freight Plan
TARPO				
	Regional Bicycle and Pedestrian Planning Framework			

Agency	Plans			
Orange County				
	CTP 2013	ADA Paratransit Plan	Agency Safety Plan	Complete Street Vision Zero Policy
				
	Title VI Plan	Transit Plan	Safe Routes to School Action Plan	2030 Parks & Recreation Master Plan
				
	US 70 Multimodal Study	NC 54 Corridor Study	Efland-Buckhorn-Mebane Access Management Plan	Orange Grove Road Access Management Plan

Agency	Plans			
				
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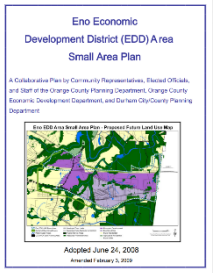
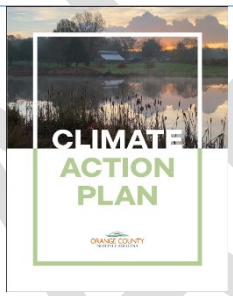
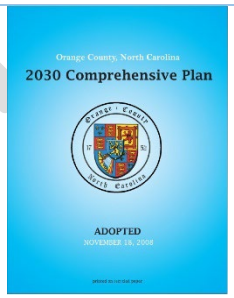
			Cover not available	
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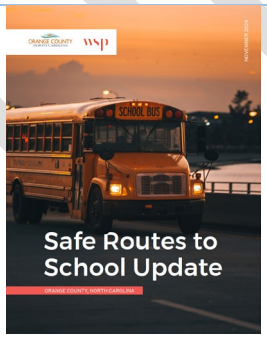
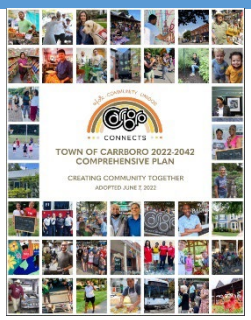
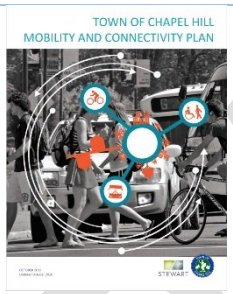
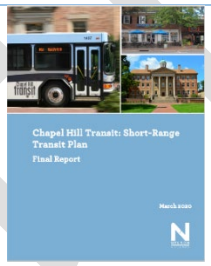
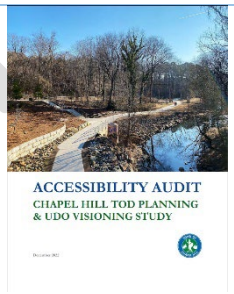
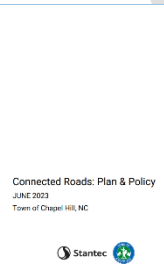
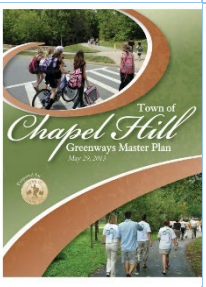
				
	Safe Routes to School Update		Short Range Transit Plan	

Agency	Plans			
Carrboro				
	Updated Bike Plan		2022-2042 Comprehensive Plan	
Chapel Hill		Superseded by Mobility and Connectivity Plan		
	Mobility and Connectivity Plan	Bike Plan	Short Range Transit Plan	Accessibility Audit: Chapel Hill TOD Planning & UDO Visioning Study (North South Bus Rapid Transit)
		Plan not adopted		

Agency	Plans			
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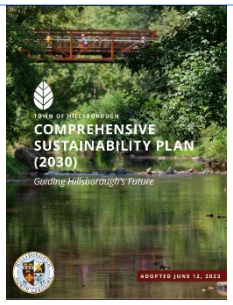
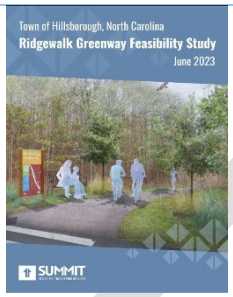
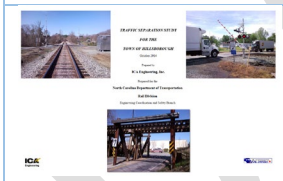
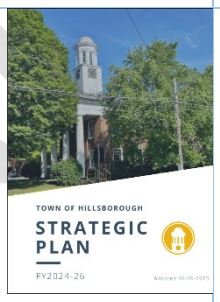
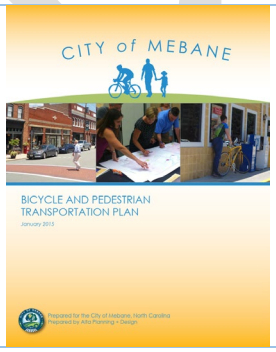
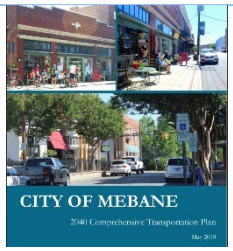
Hillsborough			Superseded by the Comp Plan 2030.	Not adopted as of June 2024
	Comprehensive Sustainability Plan 2030	Ridgewalk Greenway	NC 86 Connector	S Churton St Multimodal Corridor Study
		Superseded by the Comp Plan 2030		Superseded by the Comp Plan 2030
	Traffic Separation Study	US 70/ Cornelius St Corridor Strategic Plan	Strategic Plan FY2024-26	Community Connectivity Plan
Mebane				

Agency	Plans		
	Bicycle and Pedestrian Transportation Plan 2015	2040 CTP	Traffic Separation Study

The combined projects table created from the recommendations from the plans and studies mentioned above contained approximately **325** bicycle and pedestrian, **97** roadway, and **47** transit and rail project recommendations. As mentioned in Chapter 1, the focus of this study is on the unincorporated areas of Orange County. As such, any recommendations that were located entirely in a municipality were excluded from the initial combined projects table. Appendix III contains the tables showing the identified projects for all three modes in greater detail.

This combined table of approximately 500 projects was the starting point which formed the basis of the rest of the TMP process.

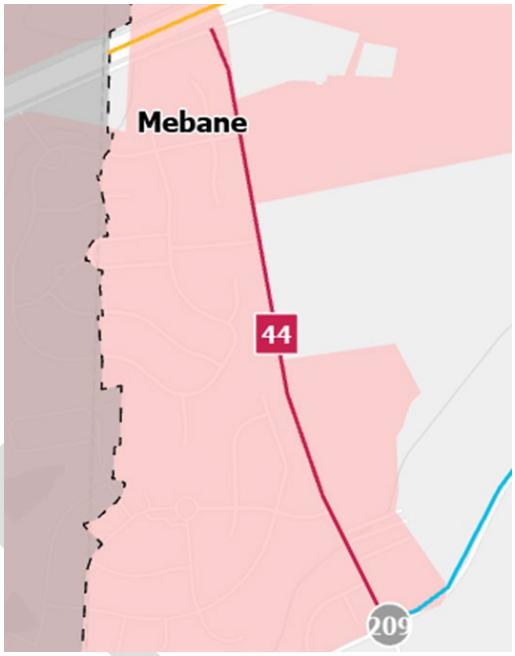
3. Network Opportunities Analysis

Map data was collected for the project recommendations from the included plans and studies. A thorough analysis of these projects revealed that, in addition to several duplicate projects, there were also significant overlaps between some projects. Additionally, there were some projects that with minimal changes to their extents, could lead to a more complete network. This analysis also revealed that some projects, while not located entirely within a municipal boundary, would still fall under the jurisdiction of the municipality. These projects were identified and removed from the list.

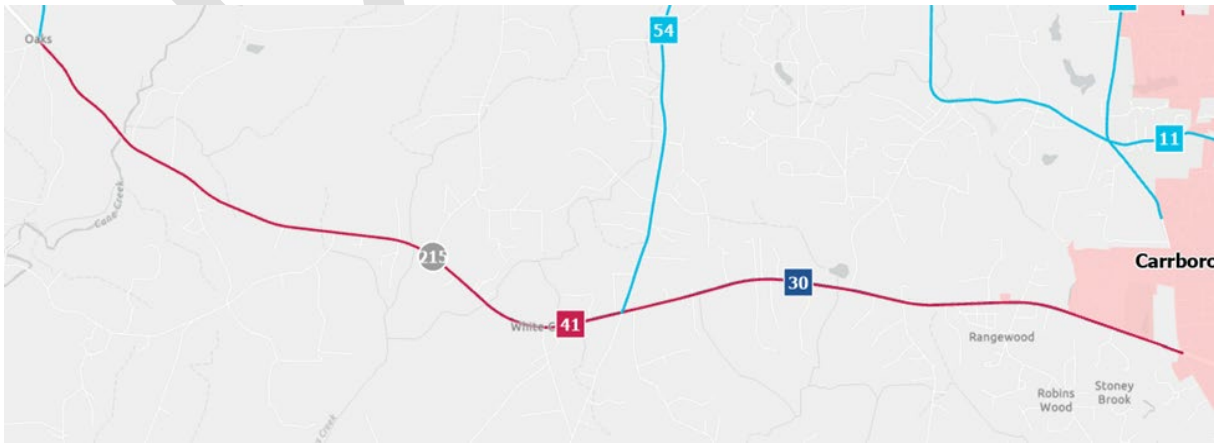
The following instances highlight the locations where such overlaps or opportunities were identified and their resolutions. Please note that the numbers mentioned on the map labels may not match the projects in the table because of multiple rounds of edits made to the list and the map during the consolidation process.

1	**Buckhorn Road at E Washington Street Ext.**
Concern	The “Buckhorn Rd Railroad Grade Separation” project is similar in scope to “Extension of Industrial Drive over railroad to Frazier Rd” project.
Resolution	It is recommended the Buckhorn Rd Railroad Grade Separation be retained due to higher ROW concerns with the other project.

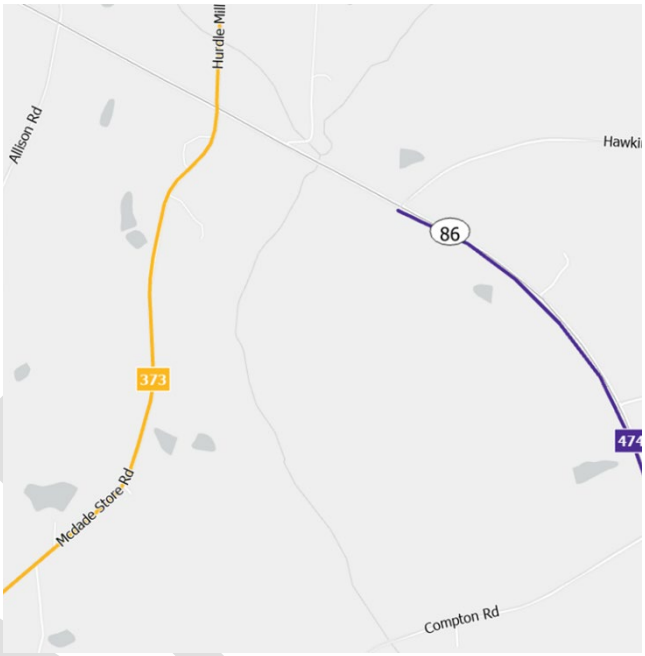
2	Ben Wilson Road
Concern	The “Ben Wilson Road Widening” project is almost entirely within Mebane jurisdiction limits.
Resolution	This project was removed from the list.



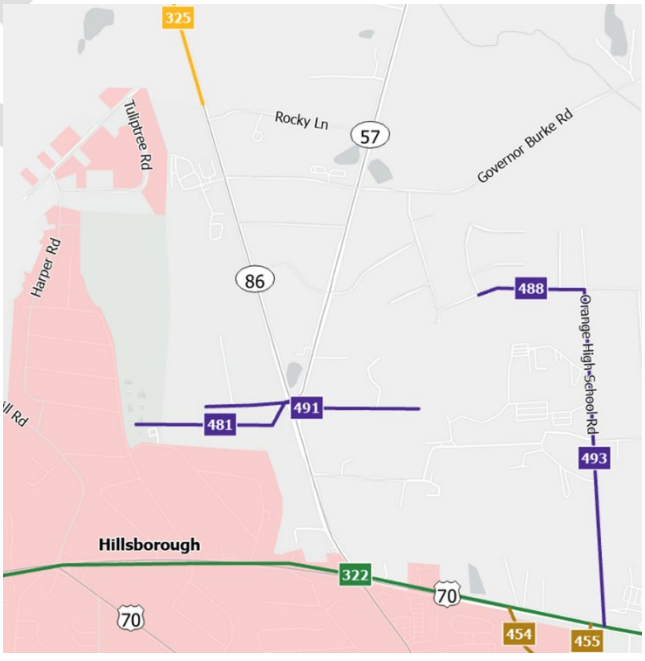
3	NC 54 East of Carrboro		
Concern	Overlapping project recommendations with different timelines.	Resolution	Preliminary engineering on R-5821A is completed. Widening and multimodal recommendations from NC 54 Corridor study to be adopted. Both projects were retained.



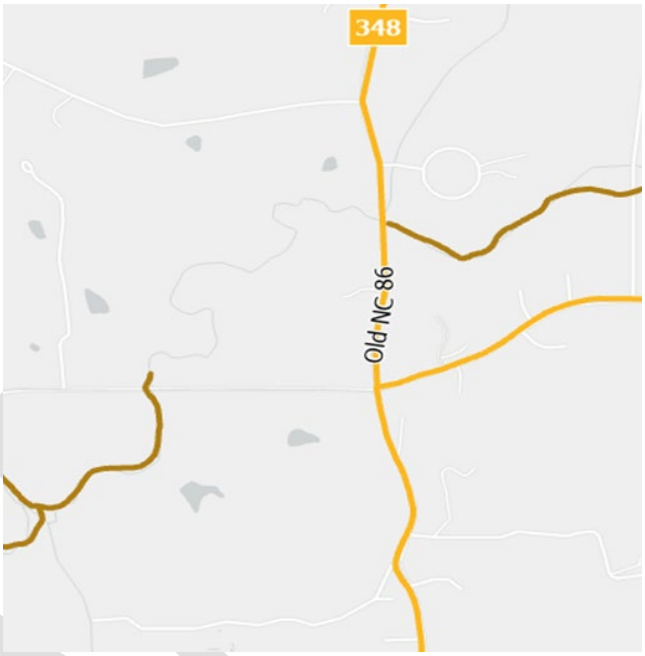
4	NC 86
Concern	There is a gap between the pedestrian project on NC 86 and McDade Store Rd.
Resolution	The pedestrian project on NC 86 was extended to McDade Store Rd as part of the TMP. This should be incorporated in the next bicycle and pedestrian plan update.



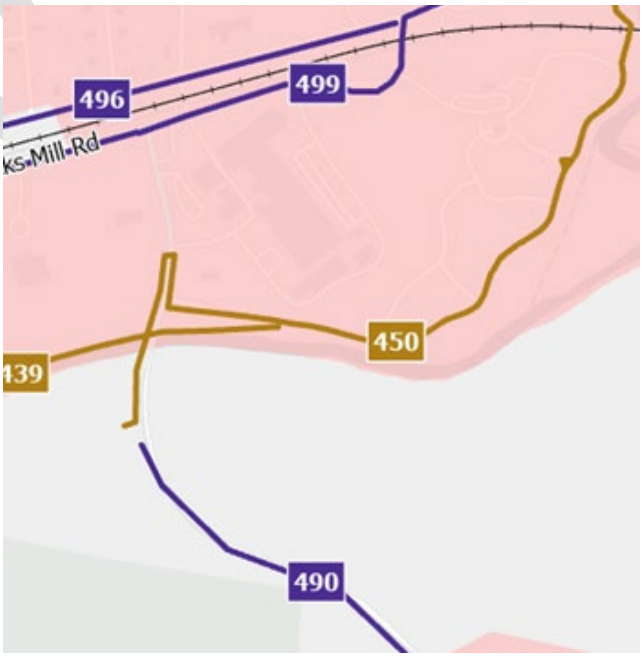
5	Dairy Farm Dr & Governor Dr
Concern	There is a lack of sidewalk connectivity to connect Orange High School to NC 57 and NC 86.
Resolution	This recommendation was considered for the Safe Routes to School Update and later incorporated in the TMP.



6	New Hope Creek Trail Spurs
Concern	There is a disjointed part of New Hope Creek Trail and spurs.
Resolution	The project was extended along the creek in the TMP to provide a connection. This recommendation should be considered for the next CTP amendment.

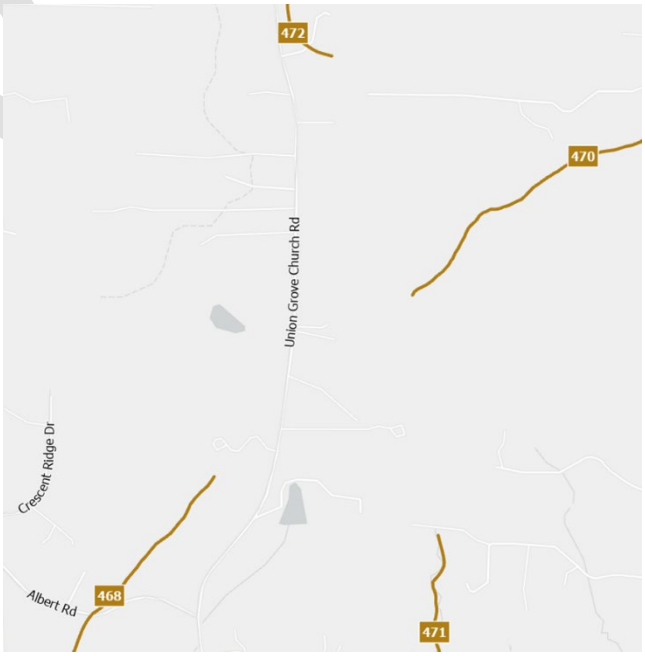


7	Eno Mountain Rd
Concern	There is a pedestrian project gap between Eno Mountain Rd and the Eno River Trail spur.
Resolution	The Eno Mountain Rd and Eno River Trail spur were both removed from the TMP as they would fall under Hillsborough's jurisdiction. It is recommended the Town study this further.



8	New Hope Creek Trail
Concern	There is a bicycle and pedestrian project gap between New Hope Creek Trail and Old NC 86.
Resolution	New Hope Creek Trail was extended to reach Old NC 86 in the TMP. This recommendation should be considered for the next CTP amendment.

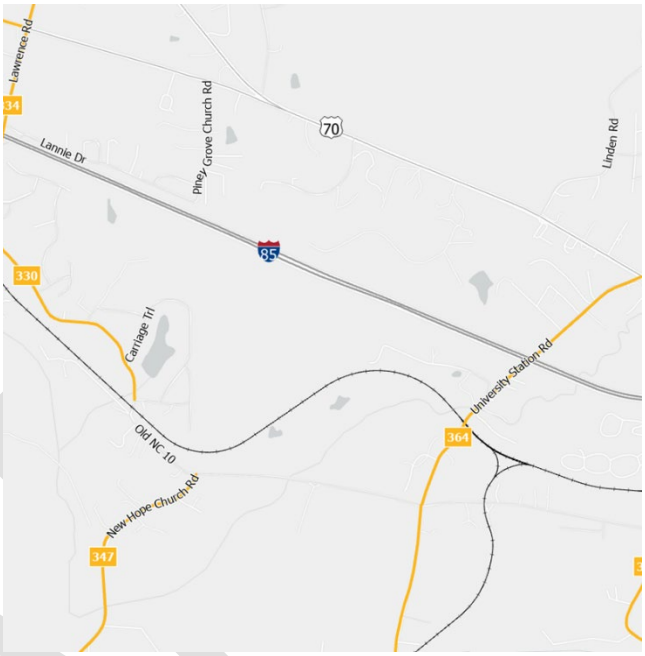
9	Union Grove Church Rd
Concern	Connect the greenways to Union Grove Church Rd and add a greenway on Union Grove Church Rd for network completion.
Resolution	This recommendation should be considered for the next CTP amendment.



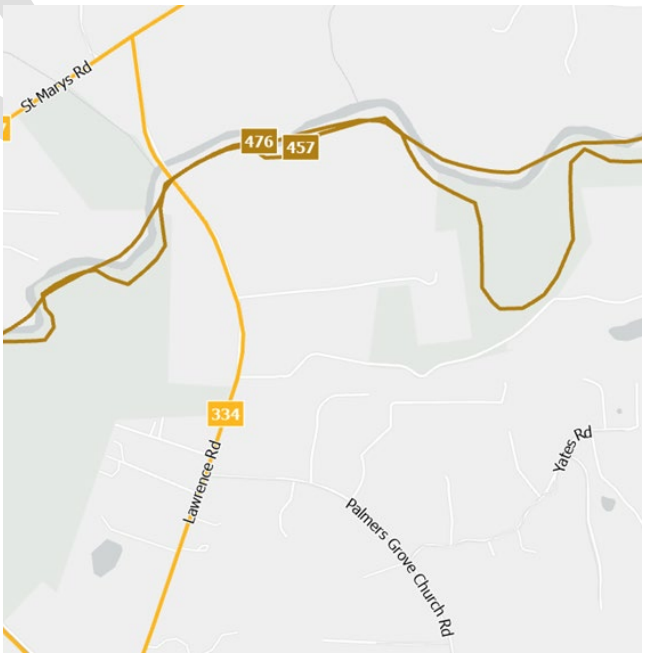
10	Eubanks Rd
Concern	There is a disharmony in project scopes. The CTP project is mentioned as a multi-use-path, but the developments coming up along Eubanks Road show 5' sidewalks on both sides with bike lanes.
Resolution	This project was removed from the TMP as it would fall under the jurisdiction of Chapel Hill. Additionally, this recommendation should be removed from the CTP during the next amendment.

11	NC 54 East of Carrboro		
Concern	There is a bike-ped facility gap between recommended projects on NC 54 and Old Fayetteville Rd. A potential extension is recommended.	Resolution	NC 54 corridor study includes this extension and is approved by DCHC MPO and Orange County BOCC. This extension is also now included in the TMP.

12	Old NC 10
Concern	There is a bicycle project gap in the network along NC 10.
Resolution	NC 10 was made a County Priority during SPOT 7 project selection. A bicycle project has been recommended for NC 10 and included in the TMP.

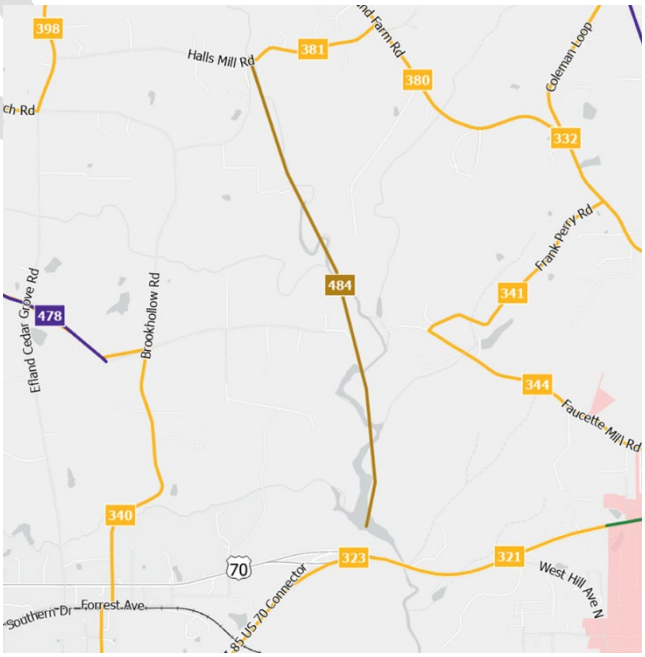


13	Eno River Greenway
Concern	There are duplicate projects along this area.
Resolution	The more comprehensive project, the Mountains to Sea Trail, was retained. Project 457 was removed from the TMP.



14	King's Highway Park Connector and Eno St Trail
Concern	Two trail projects show separate railroad crossings in proximity to connect to Ben Johnston Road.
Resolution	It is recommended the Eno St trail terminate at the King's Hwy Park Connector. Both projects were removed from the TMP as they fall under Hillsborough's jurisdiction.

15	Eno River Trail
Concern	The scope and points of the Eno River Trail need to be defined properly.
Resolution	Project 484 was removed from the TMP. This will be addressed in the County Trails Plan and future CTP update.



4. Recommendations Consolidation

Our team thoroughly reviewed each plan to identify recommended roadway, bicycle and pedestrian, and transit and rail projects. Each project was then evaluated to eliminate the following projects:

- Projects that would be maintained by the incorporated Towns and Cities within Orange County, including projects that are completely within or a majority within the incorporated areas.
- Projects that have been completed.
- Projects that have been deemed unlikely, such as those that involve major cut-throughs.

Projects that were duplicated in multiple plans were consolidated into one project. Additionally, multiple projects that spanned across the same road and have the same scope were also consolidated into one project.

Roadway

Roadway projects were consolidated into 40 final projects and 13 interchange, intersection, and bridge projects for the OC-TMP. Out of the 40 final projects, there are 16 congestion/mobility, 3 access management/operations, 17 modernization, and 4 other projects. Figure 4.1 shows the roadway projects. An enlarged version of the map and the projects table can be found in Appendix IV.

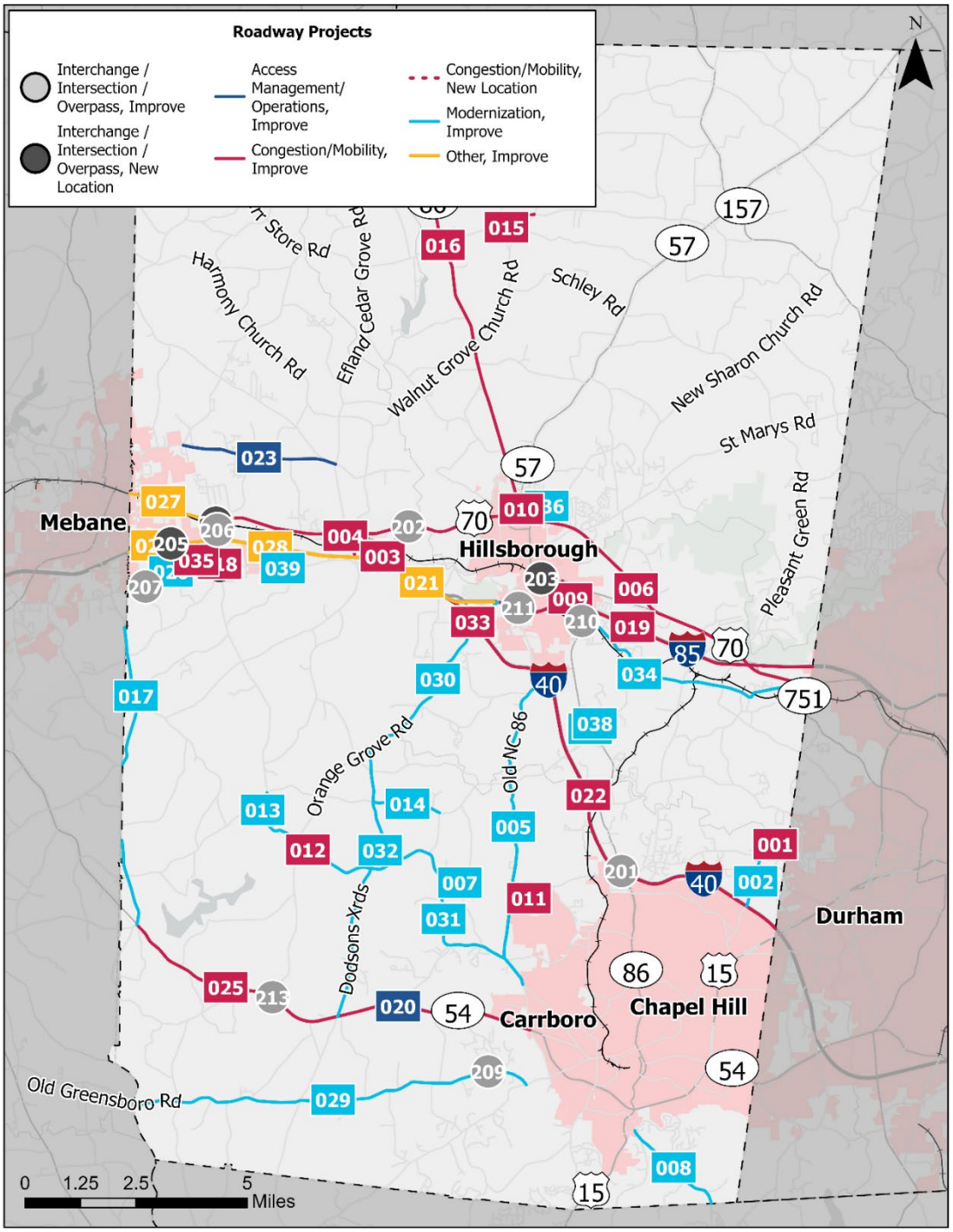


Figure 4.1: Roadway Projects

Bicycle and Pedestrian

Bicycle and pedestrian projects were consolidated into 140 final projects and 1 bicycle and pedestrian bridge project for the OC-TMP. Out of the 140 final projects, there are 70 bicycle, 23 bicycle and pedestrian, 1 multiuse path, 30 pedestrian, and 16 trail projects. Figure 4.2 shows the bicycle and pedestrian projects. An enlarged version of the map and the projects table can be found in Appendix VI.

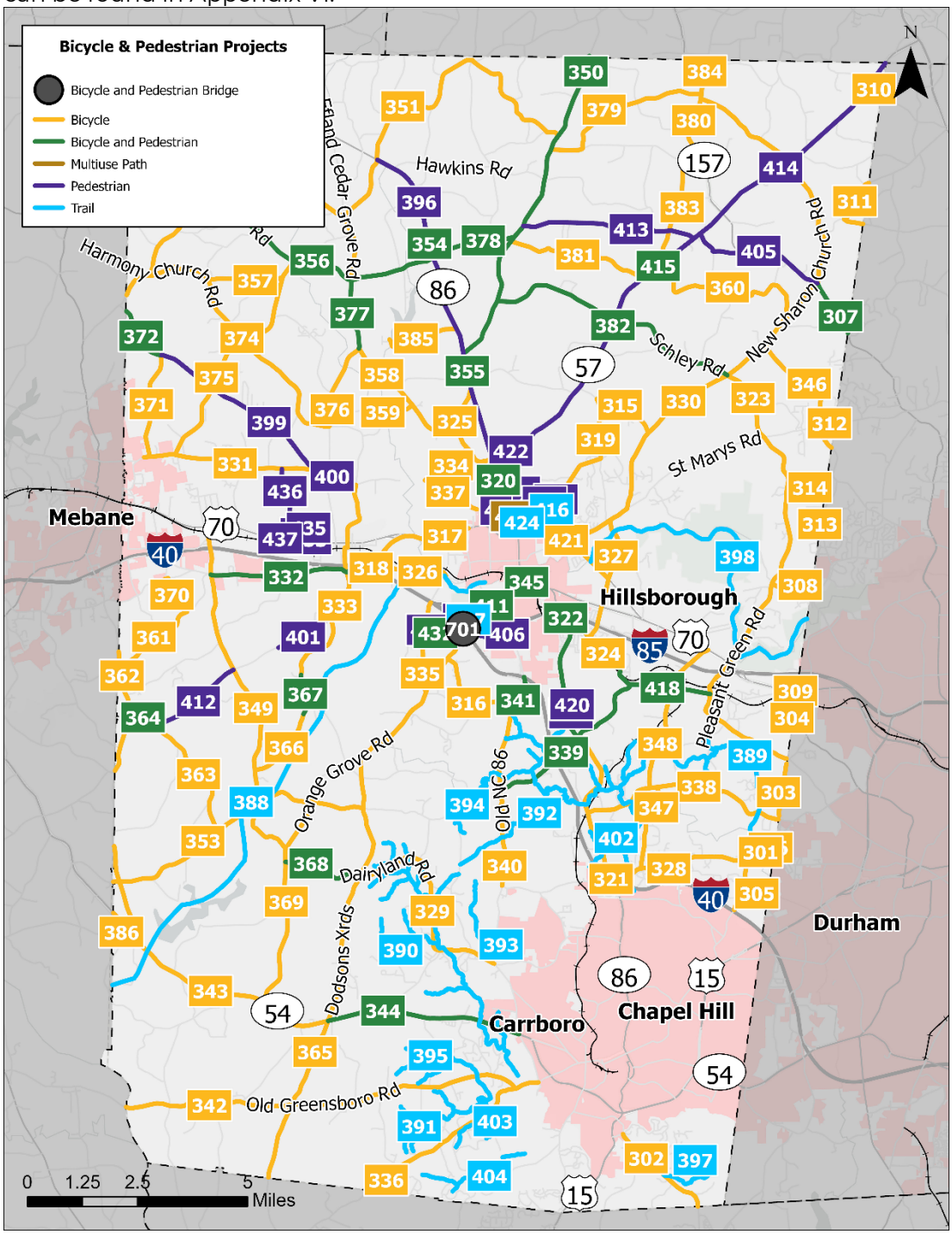


Figure 4.2: Bicycle and Pedestrian Projects

Transit and Rail

Transit and rail projects were consolidated into 23 final projects and 8 park-and-ride lot, Amtrak station, and other projects for the OC-TMP. Out of the 23 final projects, there are 2 rural bus fixed corridors, 17 urban bus fixed corridors, 1 regional bus fixed corridor, and 3 fixed guideways. Figure 4.3 shows the transit and rail projects. An enlarged version of the map and the projects table can be found in Appendix VI.

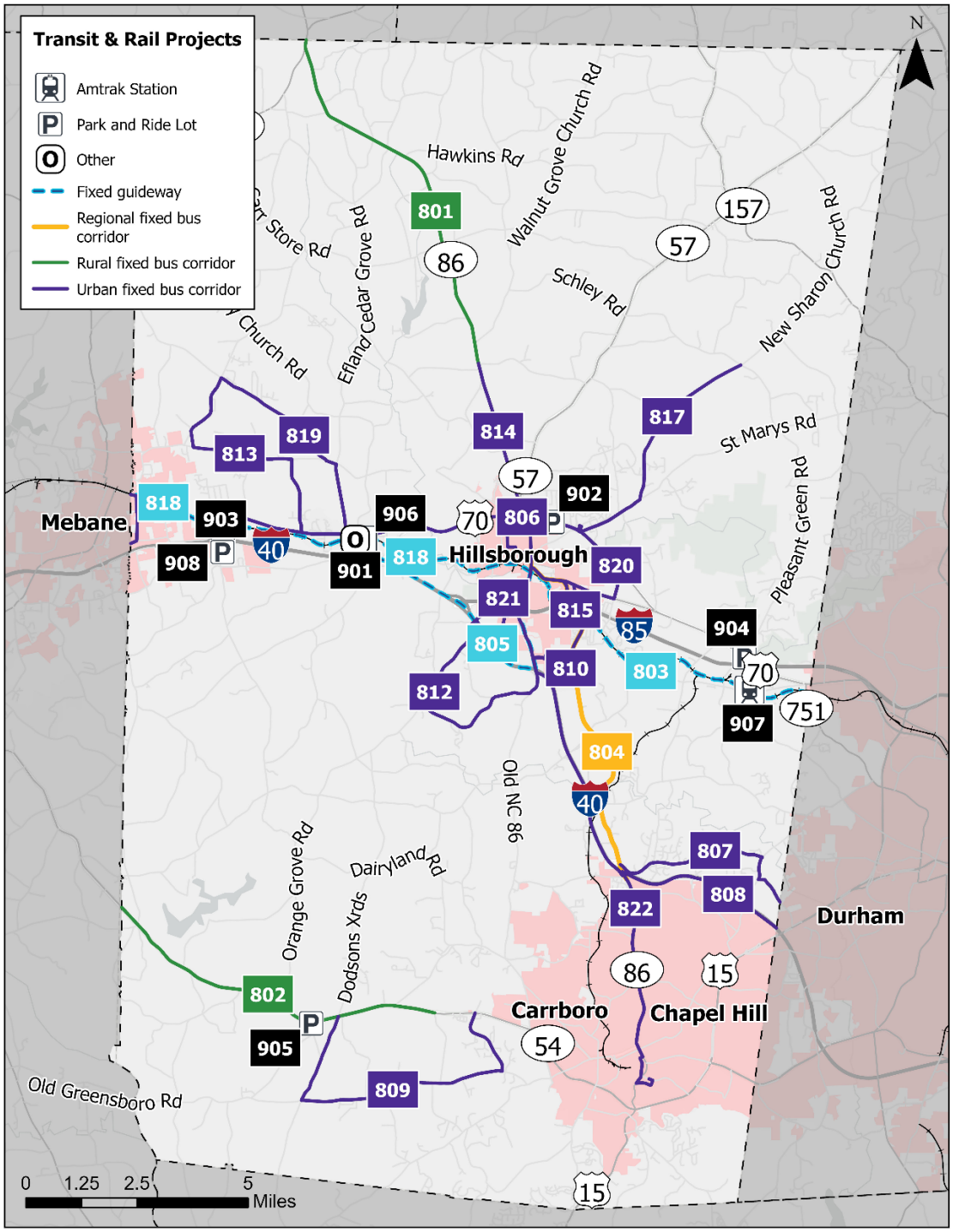


Figure 4.3: Transit and Rail Projects

Policy Recommendations

Our team reviewed goals, objectives, and policies from the included plans to identify common transportation desires for Orange County. 330 policies were identified relating to roadway, multi-modal, transit, freight, land use, and other development. Appendix V lists the policies broken down by category. Examining these policies, 13 overarching goals were identified. Table 4.1 lists the overarching transportation goals and objectives.

Table 4.1: Goals and Objectives

Goals	Objectives
Protect Human and Natural Environment and minimize Climate Change	Reduce emissions, GHG, and energy consumption
	Reduce negative impacts on natural and cultural environment
Connect people and places	Connect people to jobs, education and other important destinations using all modes
	Ensure transportation needs are met for all populations (especially the aging and youth, economically disadvantaged, mobility impaired, and minorities)
Promote and Expand Multimodal & Affordable Choices	Enhance transit services, amenities and facilities
	Improve bicycle and pedestrian facilities
	Increase utilization of affordable non-auto travel modes
Manage Congestion & System Reliability	Allow people and goods to move with minimal congestion, time delay, and greater reliability.
	Promote Travel Demand Management (TDM, such as carpool, vanpool and park-and-ride)
	Enhance Intelligent Transportation Systems (ITS, such as ramp metering, dynamic signal phasing and vehicle detection systems)
Improve Infrastructure Condition & Resilience	Increase proportion of highways and highway assets in 'Good' condition
	Maintain transit vehicles, facilities and amenities in the best operating condition.
	Improve the condition of bicycle and pedestrian facilities and amenities
	Promote resilience planning and practices.
	Support autonomous, connected, and electric vehicles.
Ensure Equity & Participation	Ensure that transportation investments do not create disproportionate negative impacts for any community, especially communities of concern.
	Promote equitable public participation among all communities, especially among communities of concern.
Promote Safety, Health and Well-Being	Increase safety of travelers and residents
	Promote public health through transportation choices
Stimulate Economic Vitality and Opportunity	Improve freight movement.
	Coordinate land use and transportation.
	Target funding to the most cost-effective solutions.
	Improve project delivery for all modes.
Provide a safe, secure, comprehensive, and effective transportation	Enhance mobility and accessibility and manage congestion across the transportation system and across modes of transportation

Goals	Objectives
system to move people and goods within and through the area	Support projects, programs, and policies that advance safe and secure travel for all transportation system users
	Plan and support a freight transportation system that allows for the efficient movement of goods
	Improve resiliency and reliability of the transportation system through increasing roadway network connectivity and supporting multiple route options
Provide a transportation system that enables mobility choices	Integrate walking and bicycling with vehicular travel and encourage the use of walking and bicycling
	Develop an integrated public transportation system that supports multimodal transportation options
	Maximize rail and air transportation opportunities (no changes)
	Support transportation demand management strategies including park and ride lots, carpooling and vanpooling throughout the region
	Support better coordination and integration of existing transit services in Alamance County
Seek to optimize the existing transportation system	Prioritize maintaining existing assets before exploring system expansion options
	Utilize existing transportation capacity through targeted economic redevelopment in areas with sufficient infrastructure
Promote equity and accessibility in transportation options for transportation-disadvantaged populations	Improve opportunities to serve transportation-disadvantaged populations with convenient transportation to needed services and desired travel destinations
	Provide meaningful opportunities for public involvement in the transportation planning process
	Use inclusive design to make the system work for all users
Integrate land use and transportation planning	Support land use planning strategies that facilitate efficient transportation system use and development
	Align the transportation infrastructure investment with community vision of future growth
	Encourage density and destination clustering which will increase accessibility and multimodal transportation options
	Support areas designated for additional economic development potential under programs such as Opportunity Zones and North Carolina Industrial Commission Certified Sites through transportation infrastructure investments

5. Public Engagement

Introduction

In April 2024, the Orange County Transportation Multimodal Plan (TMP) study team lead a public engagement campaign to gather community input on multimodal improvements. The team used various methods of outreach to inform residents and stakeholders about the plan and encourage participation in the study survey — the primary tool for collecting public feedback. Two public open house meetings allowed the community to review multimodal improvements, engage one-on-one with study team members, and provide feedback in person. This document outlines the public engagement tactics used and summarizes public input received from the study survey. A full copy of the Public Engagement Report can be found in Appendix VI.

Promotional Materials & Outreach

The study team utilized a variety of promotional tools and outreach strategies to inform the public about the study, promote the survey, and garner participation for public meetings. Both print and digital means were necessary to promote the study to the public who use the corridor frequently and to the public who may receive information mostly from digital sources. These tools included a study specific webpage, social media, an e-blast, and a press release. A copy of the promotional materials can be found in Appendix A of the Public Engagement Report.

Website

The study webpage, hosted on Orange County's website at www.orangecountync.gov/3349/Transportation-Multimodal-Plan, houses a study overview and serves to provide project updates, contact information, and publicize engagement opportunities. The webpage also includes a link to the study survey and facilitates access to past transportation projects through its location on the County website.

Orange County used its social media accounts on Facebook, Instagram, X (Twitter), and LinkedIn to share two posts about the plan and its public engagement opportunities. The posted content included a study announcement, reminders for each public meeting, and a call to participate in the survey before it closed.

Public Open House Meeting

Public meetings were a key component of the engagement plan. Orange County held two open house style workshops, the first on Tuesday, April 23 at Whitted Building in Hillsborough, and the second on Thursday, April 25 at Southern Human Services Building in Hillsborough. Members of the community were invited to stop by and view display boards that presented the multimodal improvements and speak with study team members who were available to explain the plans, answer questions, and collect public input. The open house format of these meetings allowed participants to review the information at their own pace. When they arrived, attendees were asked to sign in, provide their contact information, and were encouraged to take the online study survey. Four participants attended the first meeting, and two attended the second.

There were five display boards exhibited at each public meeting; the boards are shown in Appendix VI. Participants were greeted with an introduction board by the check-in table which explained the TMP, its context, and presented a QR code for the online survey. The second board displayed a map of roadway projects, including congestion/mobility improvements, new developments, and other improvements. The third board showed a map of bicycle and pedestrian projects with new routes for bicycle paths, sidewalks, multi-use paths, and bicycle and pedestrian bridges. The fourth board presented a map of transit and rail projects that included fixed guideways, fixed bus corridors, Amtrak stations, and park and ride lots.

Figure 5.1. Welcome station at the first public meeting

Figure 5.2. Residents reviewing recommendation maps

The fifth and final board offered an engagement activity that asked participants how they would allocate $100 of funding to transportation. The engagement board contained three boxes that represented roadway, pedestrian and bicycle, and transit and rail improvement projects. Attendees were given ten stickers with a hypothetical value of $10 each and were asked to distribute their stickers among the three categories however they wished. This activity emulated questions from the online survey and allowed the study team to capture additional data about which areas of improvement the community valued most. Figure 5.3 below shows the activity board and its results. During the first meeting there were four participants, two of whom completed the sticker activity. Bicycle and pedestrian projects received the most support, with $100, followed by roadway projects at $60, and transit and rail projects at $40. One participant added an additional sticky note comment that read “NC complete streets is highway biased but allows DOT to help pay for bike/ped”.

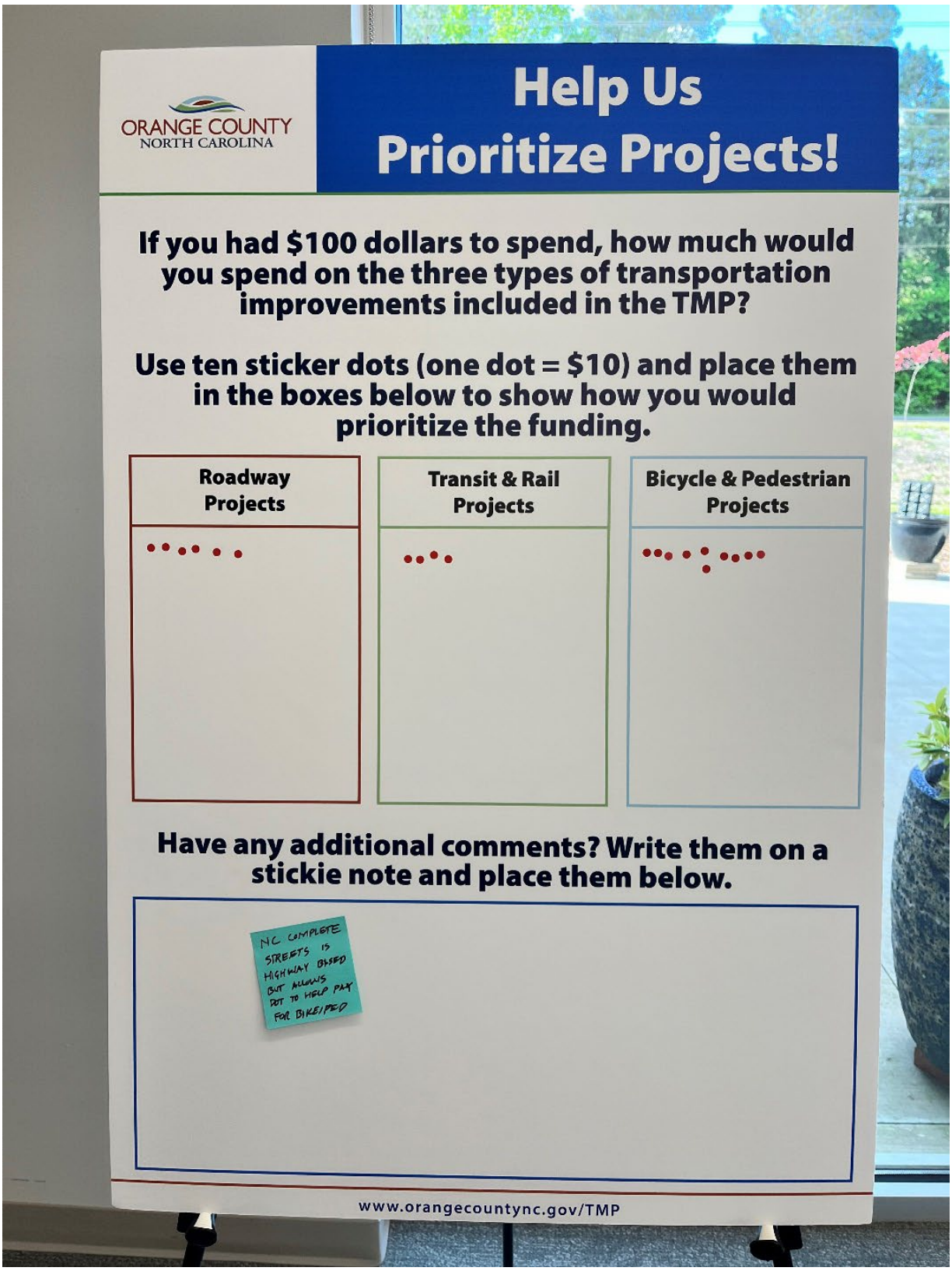


Figure 5.3. Prioritization activity public meeting board

Survey Results & Public Input

The online survey was the primary tool for collecting feedback on community priorities and goals about multimodal improvements. The survey period ran from April 9 to May 3, 2024. The survey included four sections: prioritization of all transportation modes, questions about specific modes, a section for open comment, and optional demographic questions. The survey captured 101 participants and 48 open comments.

Prioritization of All Transportation Modes

The survey's first section asked participants how they would allocate funding to highway, bicycle and pedestrian, and transit and rail improvement projects if they had $100 to spend. Participants were able to distribute the sum however they chose among the three categories of multimodal improvements. 99 participants completed this activity.

- Bicycle and pedestrian improvements received the most hypothetical funding with $3,717.
- Transit and rail improvements received the second most at $3,550.
- Roadway improvements received the least at $2,633.

Questions About Specific Modes

The second section of the survey sought to understand what the community's top priorities are within each of the three categories of transportation improvement projects. Participants were asked to select their top priorities in each category from a list of proposed improvements.

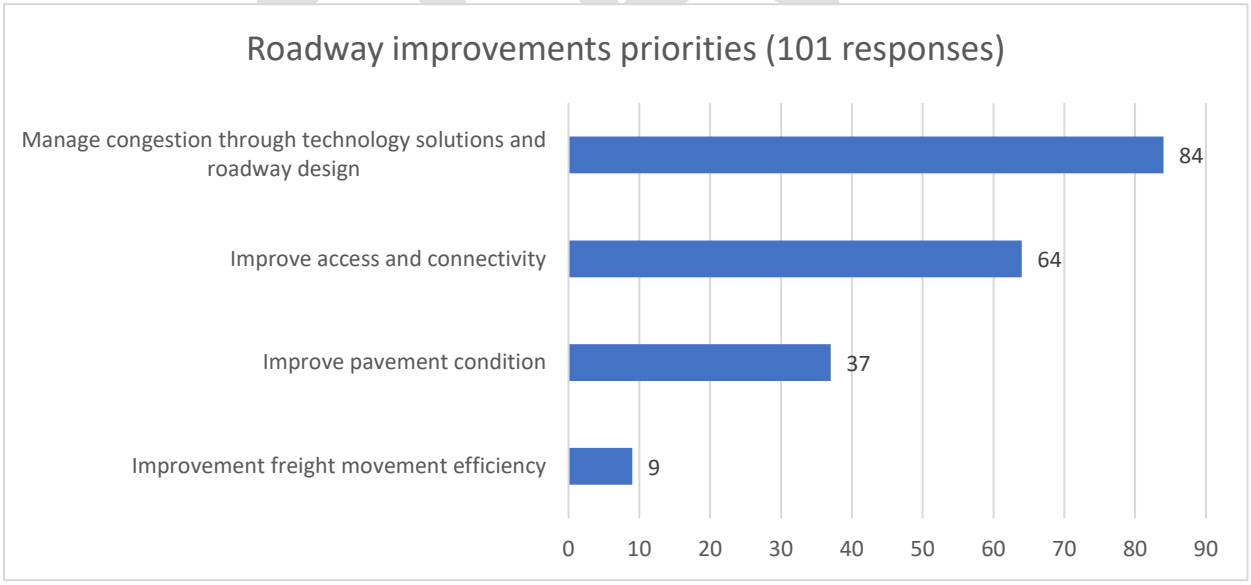


Figure 5.4. Roadway improvements priorities

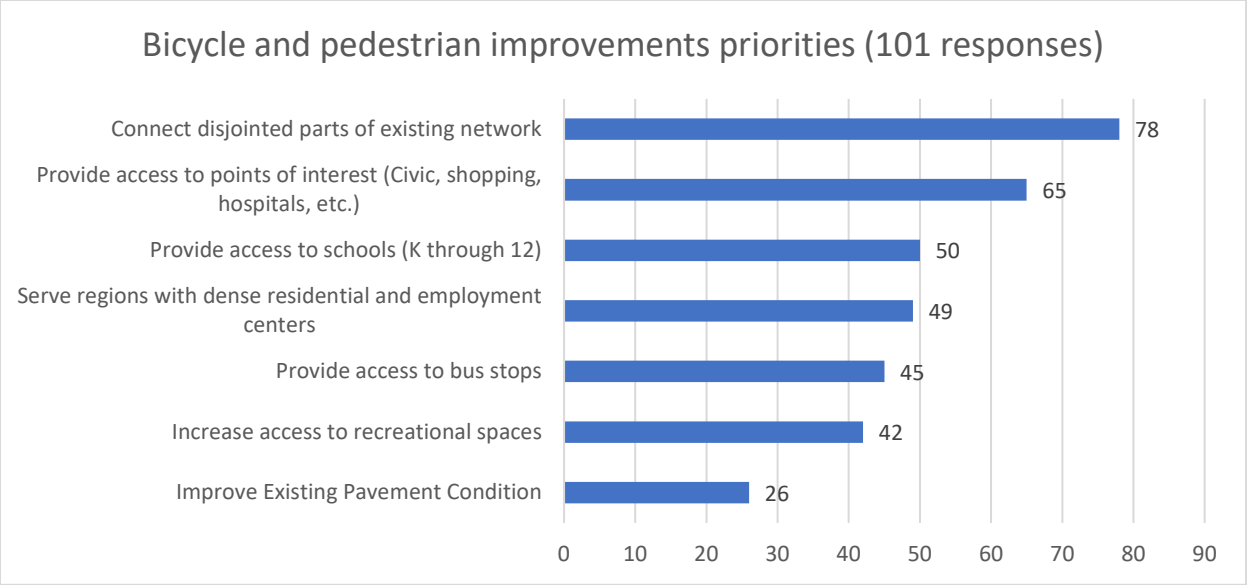


Figure 5.5. Bicycle and pedestrian improvement priorities

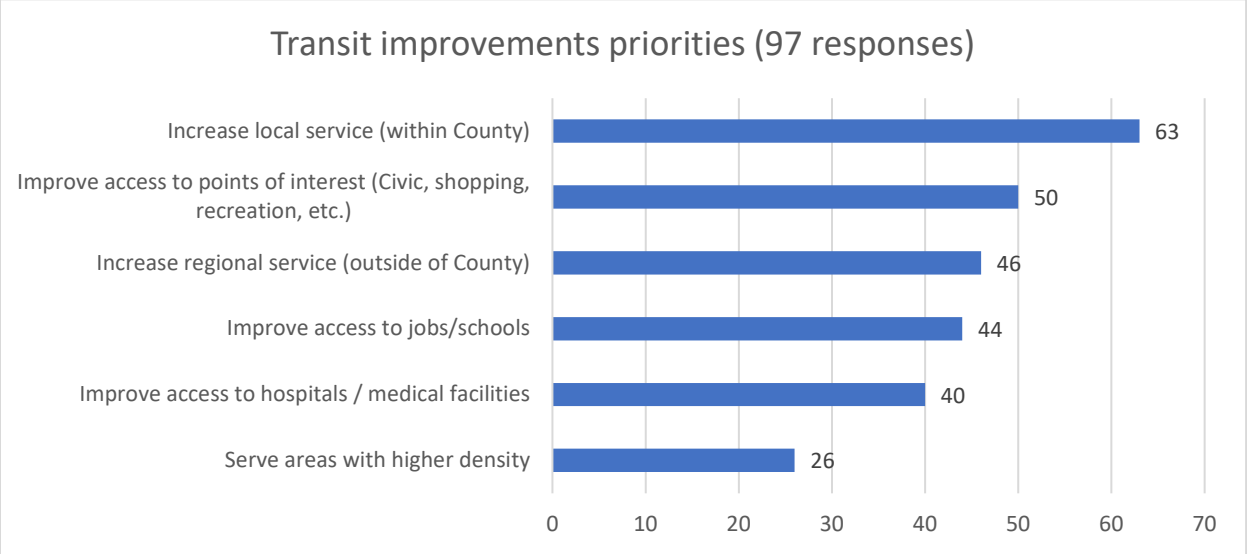


Figure 5.6. Transit improvements priorities

Open Comment

The third section asked participants to share any other comments or questions about how projects should be prioritized. There were 48 written comments submitted. Responses were assigned themes based on what the comment focused on, with six main theme groups identified. Most comments were assigned to multiple theme groups. Several theme groups incorporate subgroups to enhance data visualization; these are described below. The comments can be read in Appendix VI.

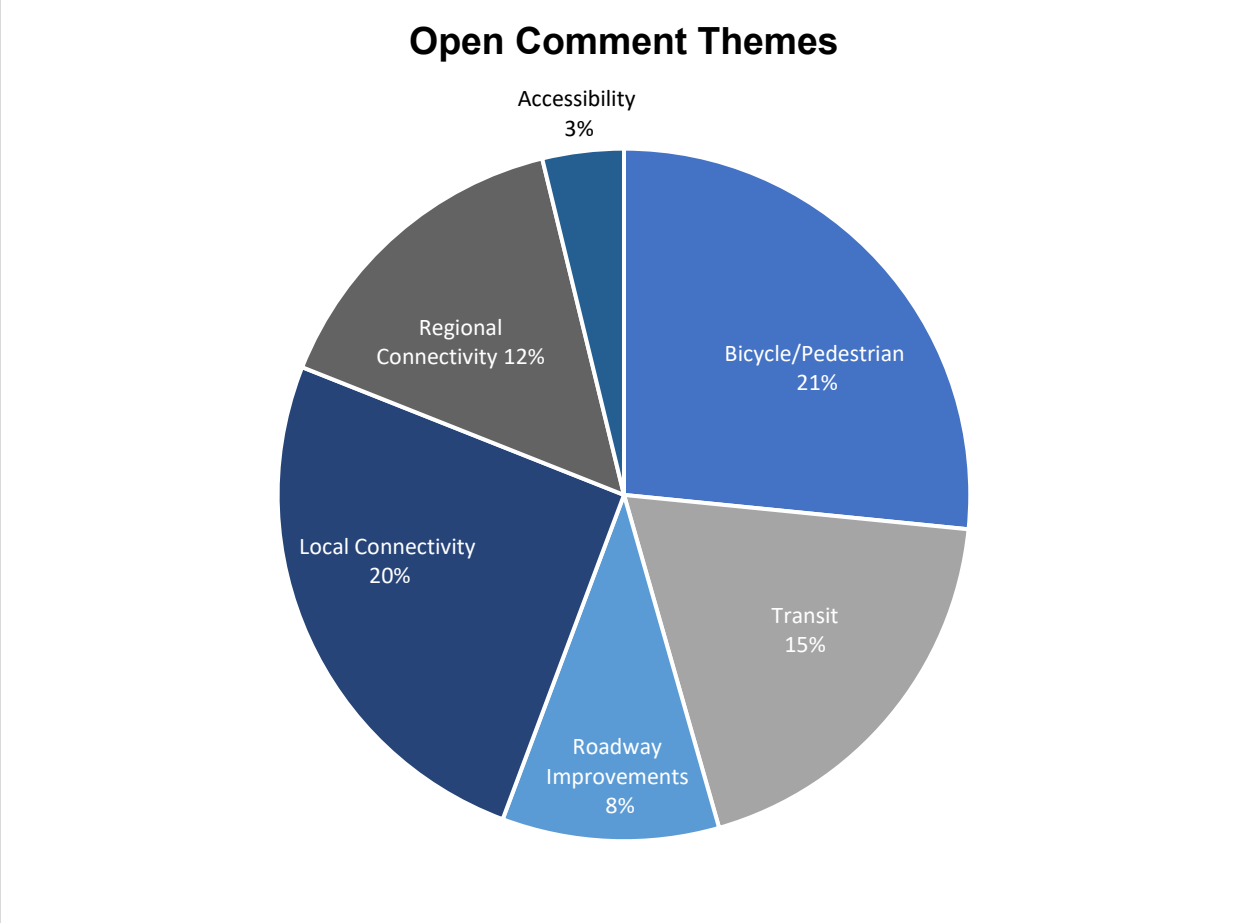


Figure 5.7. Open comment themes

Bicycle & Pedestrian: Comments that mention bicycle and/or pedestrian paths and facilities. Most comments specify a need for improved or additional bicycle and pedestrian paths, with a majority emphasizing safety as a top priority. Responses in this category identified a need for connecting disjointed parts of the existing bicycle/pedestrian network and improving access to points of interest, particularly in under-served areas.

- Against Bicycle: Two comments opposed bicycle lanes in rural areas and busier country access roads.

Transit: Comments mentioning transit-related improvements such as expanded bus routes and stops, enhanced local and regional transit connectivity, and a desire for new modes of transportation like light rail, bus rapid transit (BRT), and rideshare.

- Against Transit: Three comments opposed transit. Two commenters suggested that busses and trains are not a worthwhile investment for the county due to low ridership, and one declared that they didn't want a bus line in their neighborhood.

Roadway Improvements: Statements pertaining to roadway design and traffic management. An example is "Widen two lane roads that have become major commuting arteries. Housing

developments continue to be established with no corresponding improvements in local, two-lane roads." One comment opposed any new road capacity.

Local Connectivity: Comments that support bolstering and expanding the transportation network within Orange County. Central themes in this category highlight a communal desire for safer bicycle and pedestrian paths, new sidewalks, and expanded service routes for public transit, with a focus on connecting people to points of interest, schools and jobs, and linking disjointed parts of the network.

Regional Connectivity: Comments that support expansion of regional transit services to areas outside of Orange County. All comments in this category include interest in transit that connects Orange County to the Research Triangle, with several also showing interest in connectivity with adjacent counties, such as Chatham County.

Accessibility: Comments mentioning a need for improved accessibility for seniors and people with disabilities. An example of such is "You should be making it easier for seniors and disabled to access necessary services."

Optional Demographic Questions

The end of the survey included optional demographic questions to help the study team understand the survey participants. Figures 5.8-5.14 show the results of those demographic questions.

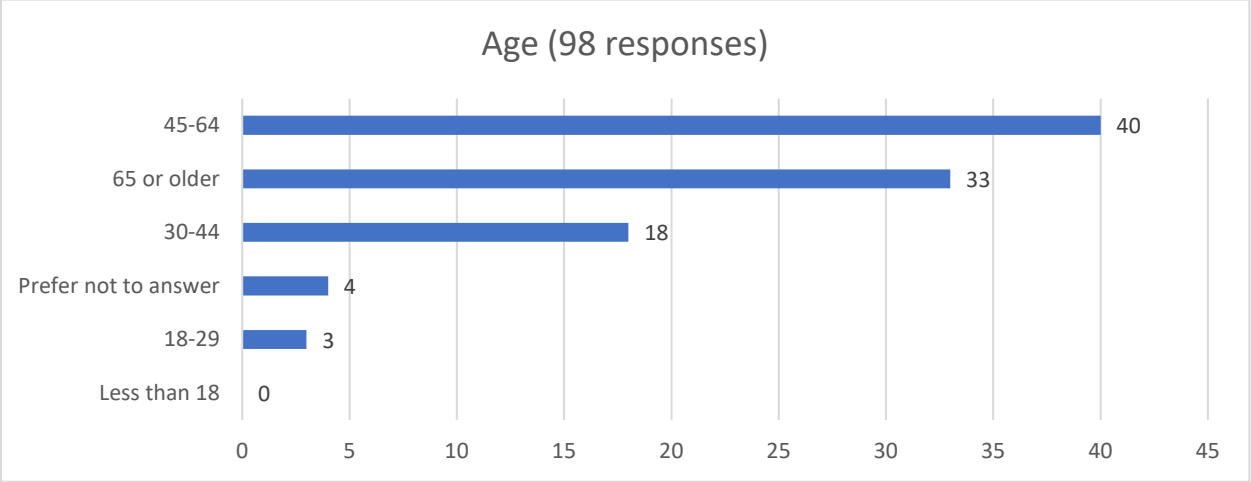


Figure 5.8. Age

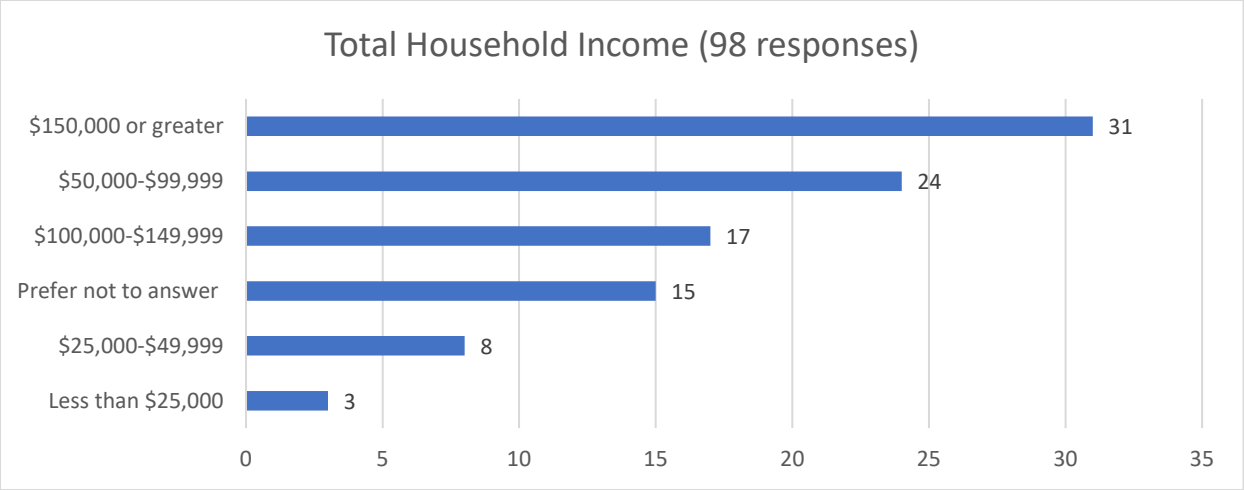


Figure 5.9. Total household income

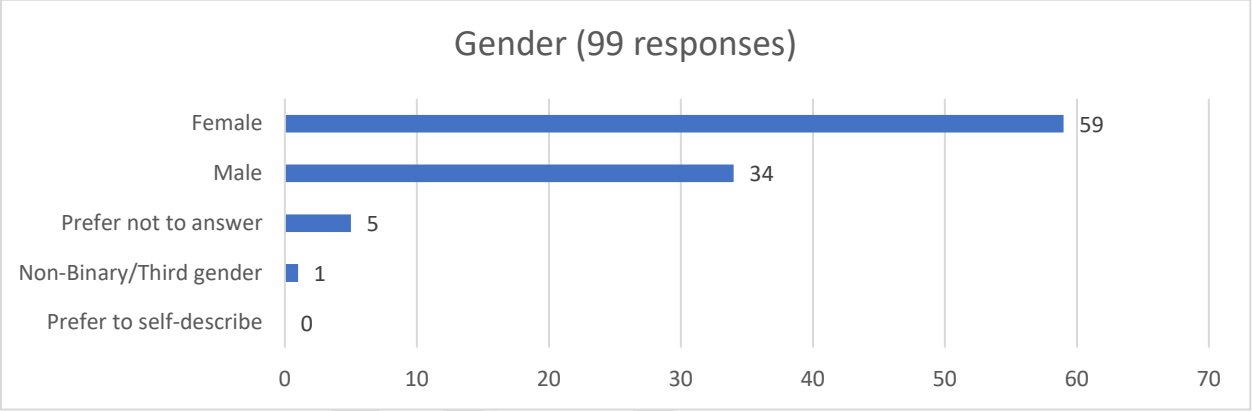


Figure 5.10. Gender

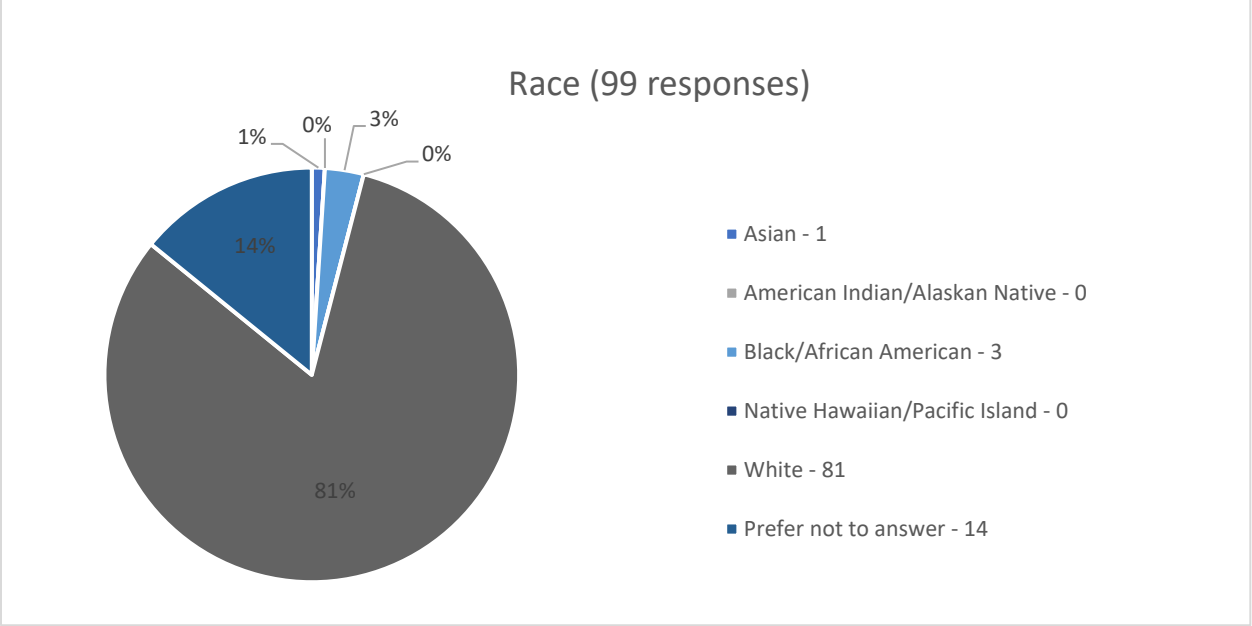


Figure 5.11. Race

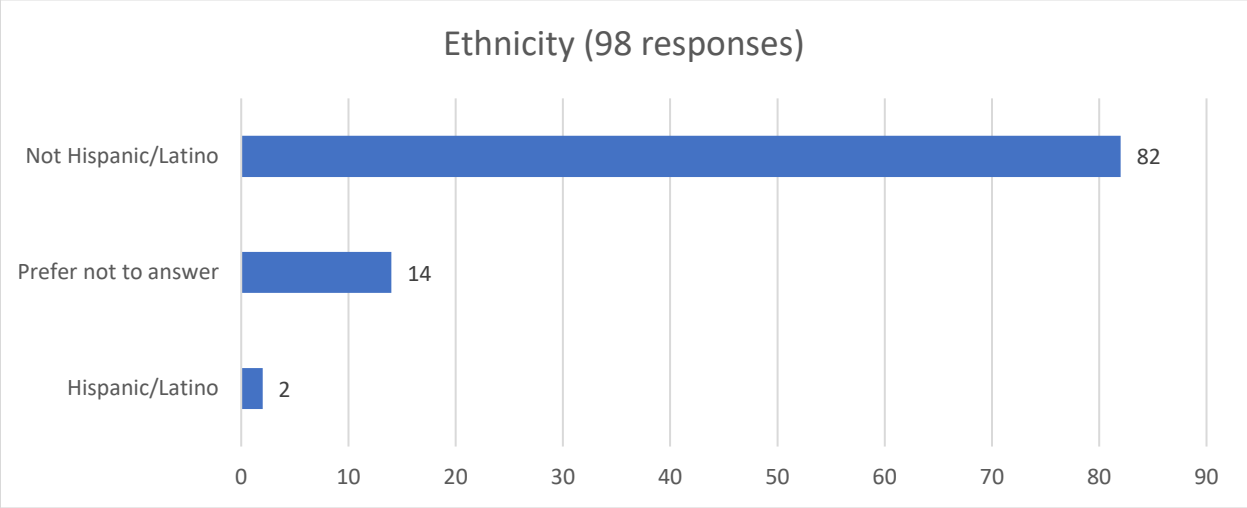


Figure 5.12. Ethnicity

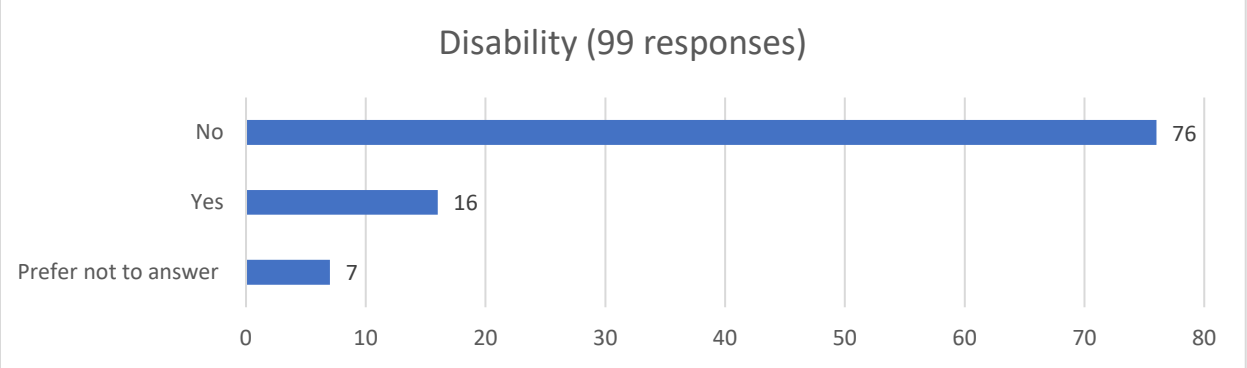


Figure 5.13. Disability

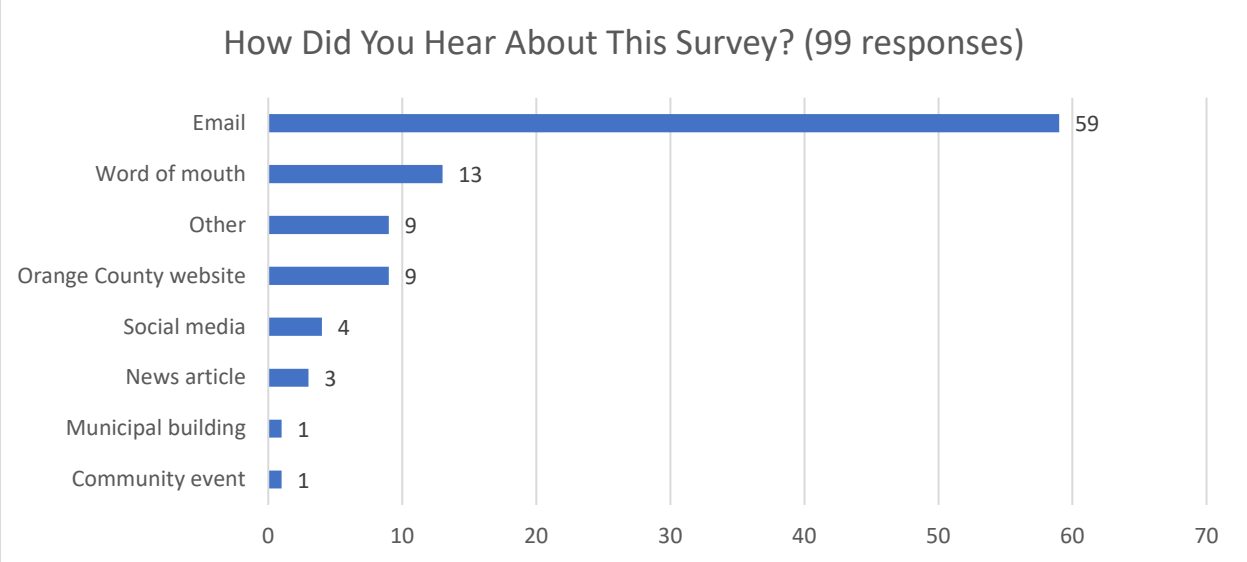


Figure 5.14. How participants discovered the survey

6. Prioritization

A key part of this project was to develop an easy-to-calculate and sound prioritization methodology taking into account public, CTT, and Orange County staff inputs. The feedback received from the public survey results and CTT and Orange County staff inputs received through live polling formed the basis of developing the methodology. A brief description of the steps followed to develop the methodology is provided in the first part of this section, followed by a prioritized list of projects that emerged as a result of this prioritization process. Lastly, this section also includes a list of projects that were too specific to be able to be prioritized based on the methodology chosen.

Methodology

Step 1 – Combining the weightages obtained through the surveys.

In this step, we combined - in equal proportion - the scores of the answers provided by the public, the CTT and the County staff. This method was used to determine the relative weightage to be apportioned to the corresponding parameters while calculating the prioritization scores for the projects, and the relative importance to be given to each of the three modes. Detailed calculation of these weights and method of normalization is explained in Appendix VII.

Table 6.1 Normalized weightage for each parameter to use in calculating prioritization scores

Input	Public	CTT	Orange County	Combined
Roadway Improvements	0.27	0.17	0.25	**0.23**
Bicycle and Pedestrian Improvements	0.38	0.50	0.5	**0.46**
Transit and Rail Improvements	0.36	0.33	0.25	**0.31**
Roadway improvements priorities				
Improve access and connectivity	0.33	0.40	0.5	**0.41**
Manage congestion through technology solutions and roadway design	0.43	0.50	0.5	**0.48**
Improvement freight movement efficiency	0.05	0.10	0	**0.05**
Improve pavement condition	0.19	0	0	**0.06**
Bicycle and pedestrian improvements priorities				
Serve regions with dense residential and employment centers	0.14	0.2	0	**0.11**
Provide access to schools (K through 12)	0.14	0.2	0.25	**0.20**
Provide access to points of interest (Civic, shopping, medical)	0.18	0.25	0.25	**0.23**
Increase access to recreational spaces	0.12	0.1	0	**0.07**
Provide access to bus stops	0.13	0.15	0.25	**0.18**
Connect disjointed parts of existing network	0.22	0.1	0	**0.11**
Improve Existing Pavement Condition	0.07	0	0.25	**0.11**
Transit improvements priorities				

Increase local service (within County)	0.23	0.2	0.33	**0.26**
Increase regional service (outside of County)	0.17	0.2	0	**0.12**
Serve areas with higher density	0.10	0.2	0.33	**0.21**
Improve access to jobs/schools	0.16	0.13	0.33	**0.21**
Improve access to points of interest (Civic, shopping, recreation)	0.19	0.27	0	**0.15**
Improve access to hospitals / medical facilities	0.15	0	0	**0.05**
Other Considerations				
Environmental Justice considerations		0.2	0.33	**0.27**
Safety considerations		0.33	0.33	**0.33**
Cost considerations		0.2	0	**0.10**
Environmental considerations		0	0	**0.00**
Multimodal considerations (esp. for roadway projects)		0.266	0.33	**0.30**

Step 2 – Separation of projects based on types

The projects in the TMP were separated into five categories. Each category, based on their characteristics, contained different parameters to calculate their prioritization score. These categories are

1) Roadway – New Location and Widening
2) Roadway – Modernization and Intersection Improvement
3) Bicycle and Pedestrian – New Location
4) Bicycle and Pedestrian – Bridge
5) Transit – New Route

Step 3 – Finalizing the parameter weightage for each project type

In this step, the parameter weightage for each type of project was determined through a combination of survey results, available data, and relevance to the list of projects. The next set of charts show the relative weights of the parameters for each project type.

1) Roadway – New Location and Widening

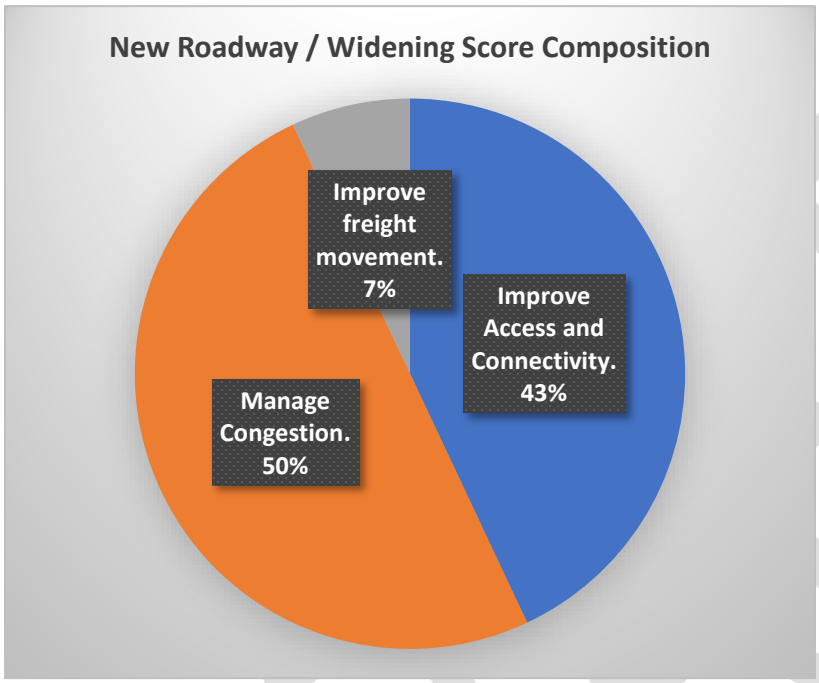


Figure 6.1 Score Composition for New Roadway / Widening projects

The new location and widening projects were evaluated using the Travel Demand Model. This allowed for the comparison of base year and future year volumes.

The list of projects in the TMP are primarily capital projects. Hence, the survey scores pertaining to 'improve pavement condition' were eliminated and equally distributed amongst the other parameters.

For new roadways, there were no base year volumes. In order to calculate the measures, the outputs for build volumes and build V/C ratios were separately normalized. These values were then used for the change in volume and change in V/C scores and merged back with the rest of the list.

Table 6.2: Parameters for New Roadway / Widening Projects

Parameter	Measure
Improve Access and Connectivity	Change in Volume / Change in Capacity
Manage Congestion	Relative change in Volume to Capacity ratios (V/C)
Improve Freight Movement	Change in Truck Volumes

2) Roadway – Modernization and Intersection Improvements

The intersection and modernization projects cannot be evaluated using the travel demand model. For that reason, their evaluation was based on base year metrics. Higher weight was given to the 'freight movement' parameter than its share in survey results because improvement projects have a higher impact on freight traffic and a lower impact on access and congestion than widening projects.

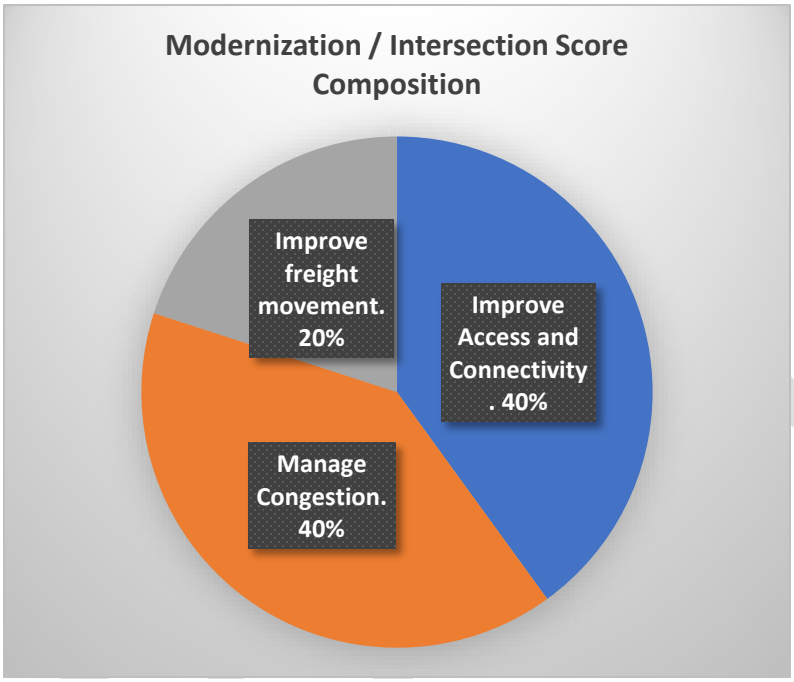


Figure 6.2 Score composition for roadway modernization and intersection improvement projects

Table 6.3: Parameters for Modernization and Intersection Projects

Parameter	Measure
Improve Access and Connectivity	Average volume at the location (base year)
Manage Congestion	Average Volume to Capacity Ratio at the location
Improve Freight Movement	Average Truck volume at the location (base year)

3) Bicycle and Pedestrian – New Location

Similar to roadway projects, the list of bicycle and pedestrian projects in the TMP are primarily capital projects. Hence, the survey scores pertaining to 'improve pavement condition' were eliminated and proportionally distributed amongst the other parameters. In addition, for projects longer than 1 mile, the measures will be calculated on a 'per mile' basis.

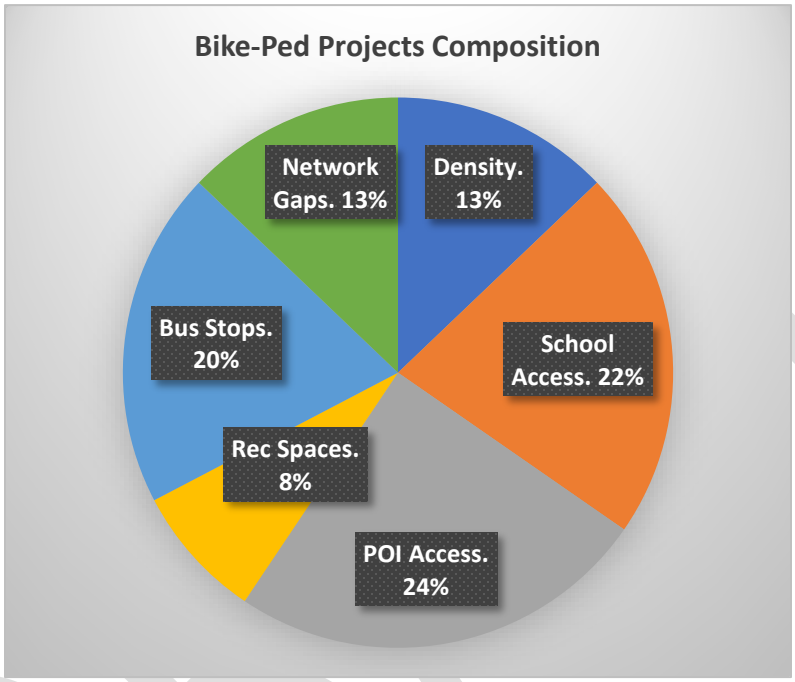


Figure 6.3 Score composition for bicycle and pedestrian projects

Table 6.4: Parameters for Bicycle and Pedestrian Projects

Parameter	Measure
Density	Population and Employment within ½ mile
School Access	Number of schools within ½ mile
Points of Interest (POI) Access	Number of civic, commercial, community, cultural, institutional, retail, and religious points within ½ mile
Recreational Spaces Access	Number of Parks within ½ mile
Access to Bus Stops	Number of Bus stops within ½ mile
Network Gaps	Ratio of walk distance between the endpoints of the project before and after the build (for projects less than 1 mile)

4) Bicycle and Pedestrian – Bridges

For bicycle and pedestrian bridge projects, the only pertinent qualifiers were density and network gaps. These metrics were combined in equal parts to calculate the score of these projects. After several rounds of project revisions, only one bicycle and pedestrian bridge project remained. As such, this project could not be normalized against other projects and is not included in the prioritization list. However, the methodology described in this chapter is still applicable for future projects.

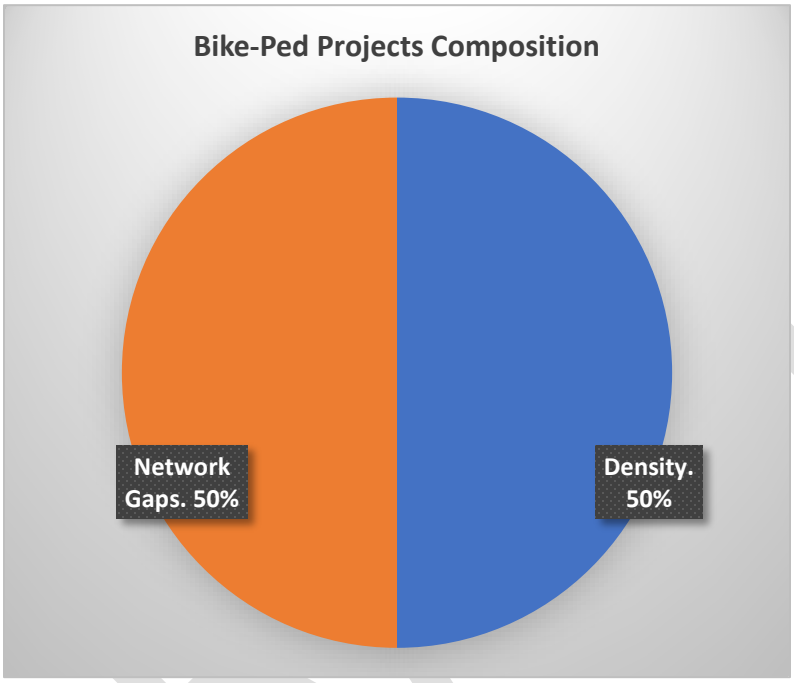


Figure 6.4 Score composition for bicycle and pedestrian bridge projects

Table 6.5: Parameters for Bicycle and Pedestrian Bridge Projects

Parameter	Measure
Network Gaps	Difference between build and no-build walk distance
Density	Population and Employment within ½ mile

5) Transit Projects

Transit scores were focused on route-based projects. This was because the variation between the point-based projects was too high to be able to develop a consistent scoring mechanism for all of them. The parameters for transit routes included local and regional service, access to jobs, schools, points of interest and hospitals, and population density within half mile of the route. For projects longer than 1 mile, the measures were calculated on a 'per mile' basis.

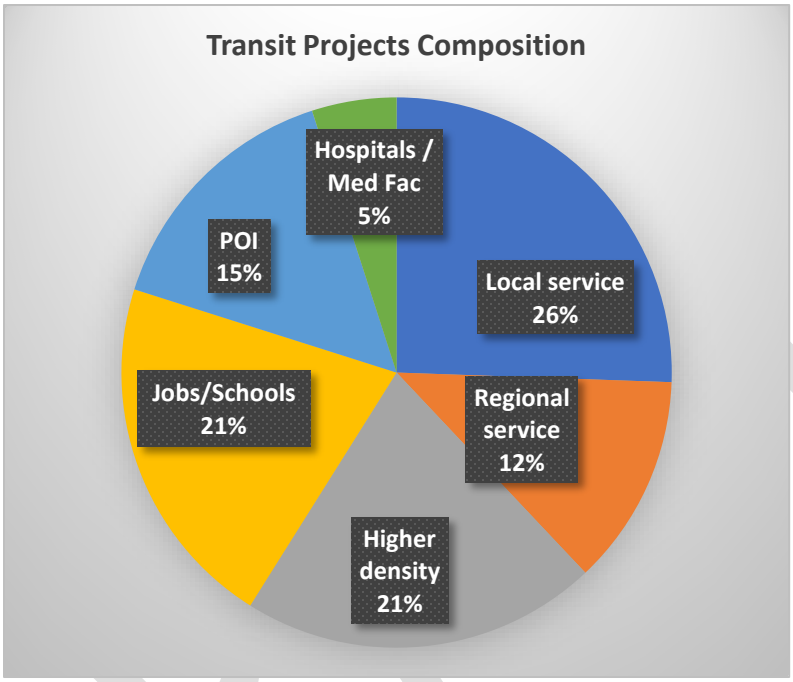


Figure 6.5 Score composition for transit projects

Table 6.6: Parameters for Transit Projects

Parameter	Measure
Increase local service	Percentage of project within the county
Increase regional service	Percentage of project outside the county
Jobs and School Access	Number of places and employment and schools within ½ mile
Points of Interest (POI) Access	Number of civic, commercial, community, cultural, institutional, retail, and religious points within ½ mile
Density	Population within ½ mile
Access to Hospitals	Number of medical facilities within ½ mile

6) Other Parameters

In addition to the mode specific parameters, the projects were scored based on four other factors in different proportions based on the mode. The type and proportion of these parameters are mentioned in Table 6.7. The survey weights were adjusted based on whether a category is applicable to a mode or not. Detailed descriptions of these factors are included in Appendix VII.

Table 6.7: Other factors used in calculating scores for all modes

	Survey	Bike-Ped		Transit		Roadway	
Category	**Weight**	**Weight**	**Parameter**	**Weight**	**Parameter**	**Weight**	**Parameter**
Environmental Justice	27%	38%	TDI	73%	TDI	27%	Negative TDI
Safety	33%	48%	Bike Ped Crash Severity	-	-	33%	Section Safety Score
Cost (inverse rank)	10%	14%	Area & ROW	27%	Capital cost	10%	Area and ROW
Multimodal consideration	30%	-	-	-	-	30%	Bike Ped considerations

Step 4 – Collecting, cleaning, and organizing the data

The calculation of the aforementioned parameters required comprehensive data identification, collection, cleaning, and organizing.

The primary dataset used to calculate most roadway-related parameter scores was developed using the Triangle Regional Model 2nd Generation Version 1.3.1 (TRMG2 V1.3.1). In order to get an accurate impact of building a project, the ideal approach is to compare the model results without that project (no-build) and the results with that project (build). Doing this for every project in the TMP list was extremely time consuming, and the key purpose of this prioritization undertaking was to reduce the level of effort required to develop the prioritized list of projects. As a result, it was decided that the roadway network within Orange County as it existed in 2020 (plus I-885) would be considered as the no-build network, and the build network will include all roadway network enhancements planned in the official model and additional projects from the TMP (that are not in the official model). Note that outside Orange County boundaries, the official future year network was left unchanged for both build and no-build networks. This was done to isolate the impacts of projects only within Orange County, keeping the rest of the region constant.

Table 6.8: TRMG2 Modifications

TRMG2 modifications	Socio-economic Data	Network within Orange County	Network Outside Orange County
No Build Network	2050	2020 Base year network	2050 Future year network
Build Network	2050	2050 FY Network + Additional Orange County Projects	2050 Future year Network

In addition to the TRMG2 data, the other datasets used to calculate project scores are shown in Table 6.9.

Table 6.9: Datasets used to calculate project scores

No.	Dataset	Purpose	Source
1	Transportation Disadvantage Index	1) To determine the areas where transportation disadvantaged populations are concentrated. Positive scores for bike ped and transit, negative for roadways	NCDOT Environmental Justice / Transportation Disadvantage Index Tool (https://connect.ncdot.gov/projects/planning/Pages/EJ-TDI-maps.aspx)
2	TRMG2	2) Current (2020) and future (2050) population and employment 3) 2020 network volumes and V/C ratios 4) 2050 no-build and build volumes and V/C ratios	TRMG2 V1.3.1
3	Section Safety Score	NCDOT-generated safety score for all state-maintained roads.	NCDOT Section Safety Score (https://ncdot.maps.arcgis.com/home/webmap/viewer.html?webmap=7415a4df4df1468585225bc74a77369b)
4	Bike-ped crashes	Number, location and crash severity of all bicycle and pedestrian crashes in the county.	NCDOT Bicyclist and Pedestrian Crash Map (https://www.arcgis.com/home/webmap/viewer.html?webmap=b4fcdc266d054a1ca075b60715f88aef)
5	Parcels	Tax parcels within Orange County to estimate the right-of-way impact of the projects which feeds into the cost calculation	NC One Map (http://data.nconemap.gov)
6	NC Route Characteristics	Existing right-of-way of the roadways maintained by NCDOT. This is used to estimate the cost impact of roadway widening projects.	NCDOT GIS Data Layers (https://connect.ncdot.gov/resources/gis/pages/gis-data-layers.aspx)
7	Points of Interest	Addresses with civic, commercial, community, cultural, institutional, retail, and religious classifications	Orange County Addresses (https://www.orangecountync.gov/2057/Download-GIS-Data)
8	Schools	Public, charter, and private grade schools	NC One Map (http://data.nconemap.gov)

No.	Dataset	Purpose	Source
9	Post Secondary Schools	Colleges and universities	NC One Map (http://data.nconemap.gov)
10	Parks	County and city-owned parks. This is used to calculate access to recreational spaces.	USGS Protected Areas Database (https://www.sciencebase.gov/catalog/item/60259839d34eb12031138e1e)
11	Bus Stops	Chapel Hill Transit, Go Durham, Go Triangle, and Orange County Transit bus stops	Chapel Hill Transit, Go Durham, Go Triangle, and Orange County Transit
12	Existing Bicycle and Pedestrian network	Existing bicycle, pedestrian, and shared use facilities, including sidewalks, bicycle lanes, paved shoulders, shared markings, shared use paths, and sidepaths. This is used to calculate network gaps for bicycle and pedestrian projects.	NCDOT Pedestrian and Bicycle Infrastructure Network (https://connect.ncdot.gov/projects/BikePed/pages/pbin.aspx)
13	Floodplains	100-Year flood zones. This is used to estimate the length of bridges for roadway projects.	NC Floodplain Mapping Program (https://flood.nc.gov/ncflood/)
14	Healthcare Facilities	Medical and healthcare facilities including health clinics, dental offices, doctor offices, hospitals, mental health offices, pharmacies, and physical therapists.	Data Axle Business Data (https://www.data-axle.com/our-data/business-data/)

Step 5 – Calculating the metrics

ArcGIS Pro was utilized to calculate the metrics for each parameter of each project in the TMP. ModelBuilder was used to develop geoprocessing workflows to calculate the metrics for the different measures determined in the previous steps. After calculating the metrics in ArcGIS Pro, they were processed in Excel to calculate their final scores. This section gives an overview of the steps and processes used to develop the geoprocessing workflows. A detailed explanation of the tools used in the ModelBuilder workflows are available in Appendix VII.

Average Transportation Disadvantage Index

Average Transportation Disadvantaged Index (TDI) scores were calculated for all projects in the TMP for the Environmental Justice parameter. Figure 6.6 illustrates the workflow used to determine average TDI scores. TDI scores are available at the census block group level. Once average TDI scores were determined, they were normalized. Normalization was performed by subtracting each average TDI score from the lowest TDI score within the project type and then dividing the result by the highest of the minimum TDI score.

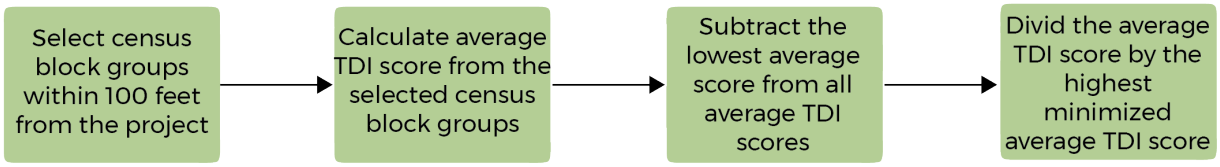


Figure 6.6 Average TDI score Workflow

Average Volume, Capacity, V/C ratio, and Truck Volume

Average volume, capacity, volume over capacity (V/C) ratio, and truck volume were calculated for new location, widening, and modernization roadway projects. These metrics were used to satisfy the Improve Access and Connectivity, Manage Congestion, and Improve freight Movement parameters. New location and widening projects calculated averages from both the no-build and build networks, while modernization projects calculated averages only from the no-build network. Figure 6.7 illustrates the workflow to determine average volume, capacity, V/C ratio, and truck volume. Road segments from the TRM located completely within the buffer were selected to ensure that the correct road segments were captured, even if the TRM roadway links are not perfectly aligned with the roadway project in the project shapefile. Since new location and widening projects generated averages from the no-build and build networks, the relative change for each metric were also calculated. Calculations that are specific to new location and widening projects are highlighted in light blue.

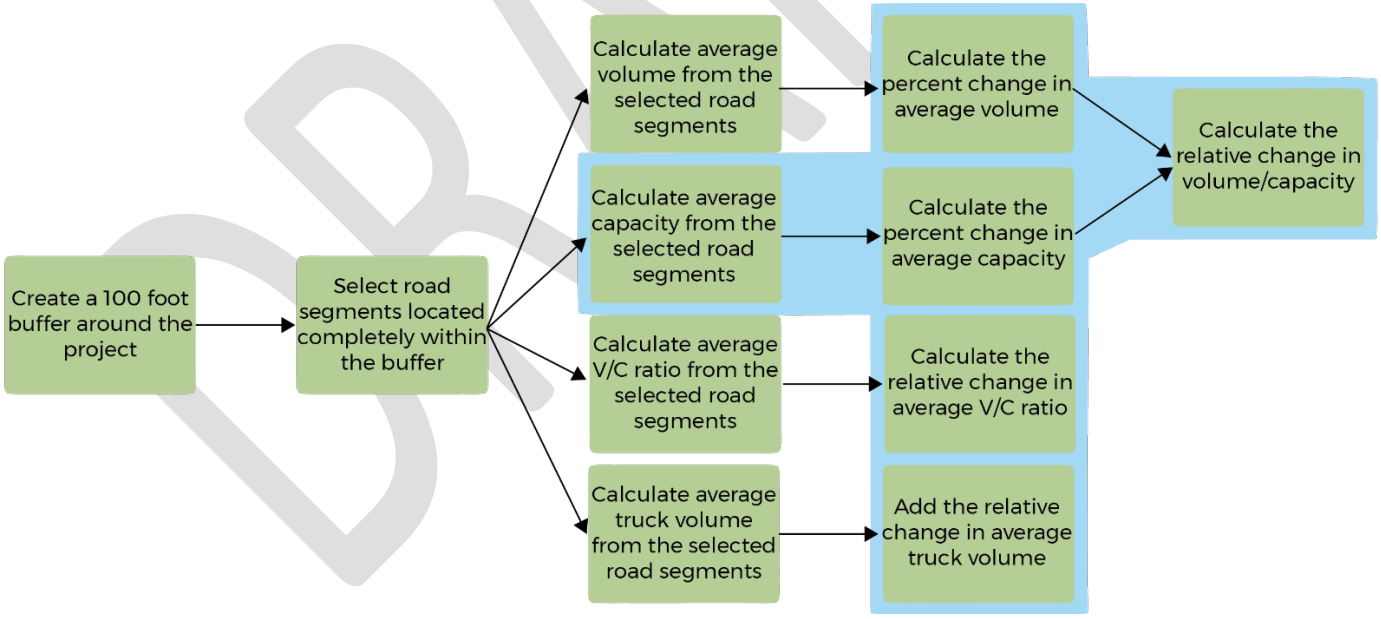


Figure 6.7 Average Volume, Capacity, V/C ratio, and Truck Volume Workflow

Average Section Safety Score

Average section safety scores were calculated for all roadway projects for the Safety parameter. Figure 6.8 illustrates the workflow used to determine the average section safety score. The severity scores of the selected road segments were averaged out to determine a section safety score.

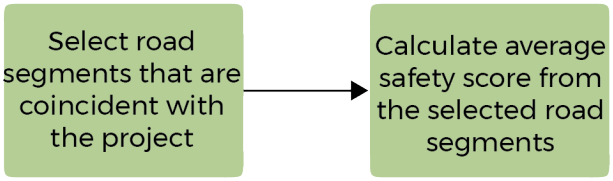


Figure 6.8 Average Section Safety Score Workflow

Connection to Bicycle and Pedestrian Projects

Multimodal connection along roadway projects was used as a metric for the Multimodal parameter. Table 6.10 lists the coefficient based on the connection available. Current infrastructure and bicycle and pedestrian TMP projects were considered when determining multimodal connection. If 50% of the roadway project was adjacent to a multimodal connection it either received a score of 1 or 2; projects with less than 50% received a score of 0.

Table 6.10 Multimodal Connection Coefficients

Coefficient	If more than 50% of roadway project has multimodal connection:
0	No bicycle or pedestrian connection
1	A bicycle or pedestrian connection
2	Bicycle and pedestrian connection

Parcels Impacted

Parcels that may become potential right-of-way were identified for all TMP project minus roadway modernization and improvement and bicycle and pedestrian bridge projects. The number of parcels impacted is a metric factored in the Cost parameter. Figure 6.9 illustrates the workflow used to determine the number of parcels impacted per project.

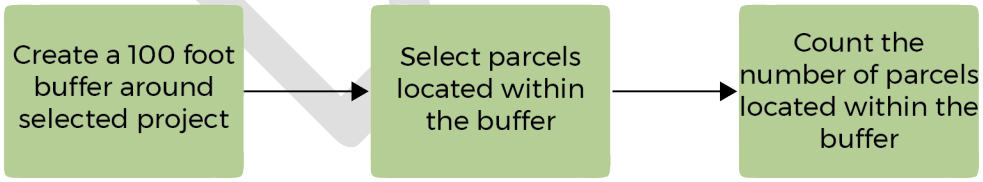


Figure 6.9 Parcels Impacted Workflow

Bridge

All TMP projects, apart from roadway intersections and transit, were analyzed to assess whether they would cross a floodplain and require construction of a bridge. The area of a potential bridge is a metric for the Cost parameter. Figure 6.10 illustrates the workflow used to determine the area of a potential bridge. For roadway projects, the width of the bridge is designated by the cross section minimum right-of-way; bicycle and pedestrian project width was determined by the project's width, as noted in the gray cell.

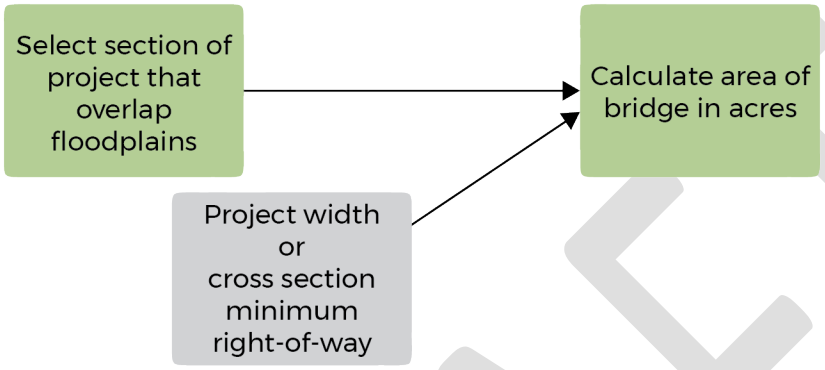


Figure 6.10 Bridge Area Workflow

New Ground Area

The new ground area was calculated for all TMP project except for roadway intersections, bicycle and pedestrian bridges, and transit. New ground area is a metric for the Cost parameter used to determine additional right-of-way needed. Figure 6.11 illustrates the workflow used to calculate a project's new ground area. Predefined values are illustrated in gray cells, while bridge length, located in a yellow cell, was determined in the bridge area workflow.

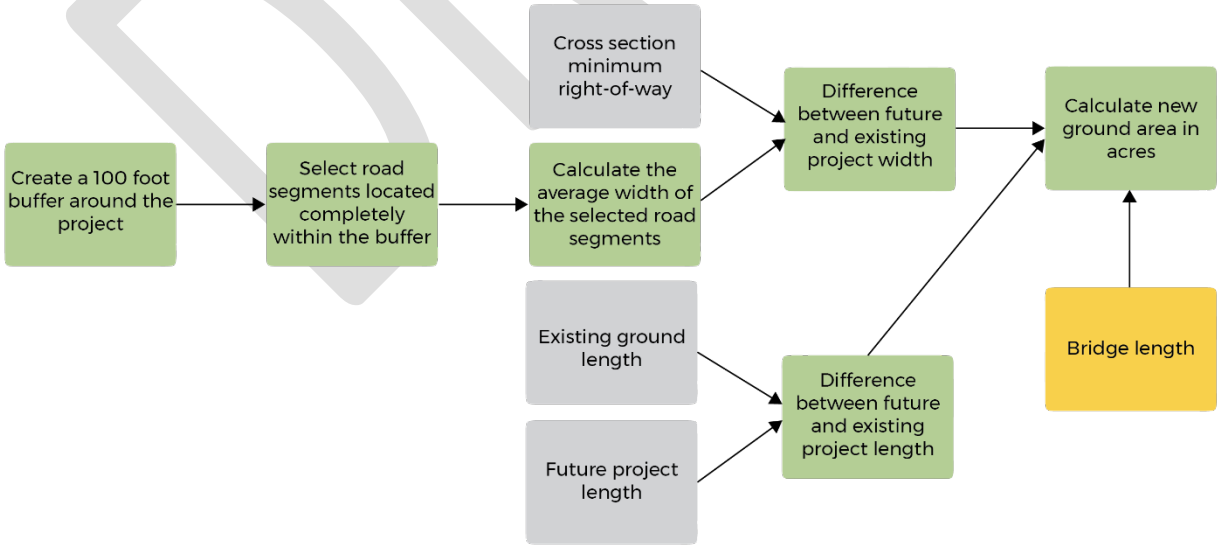


Figure 6.11 New Ground Area Workflow

Average Population and Employment

Figure 6.12 illustrates the workflow used to determine either socioeconomic metric – population or employment. Average population and employment that surrounds the bicycle and pedestrian and transit TMP projects was calculated. Average population and employment are metrics that satisfy the Density parameter. Population and employment data was sourced from the TRMG2 model and is calculated at traffic analysis zone (TAZ) unit level.

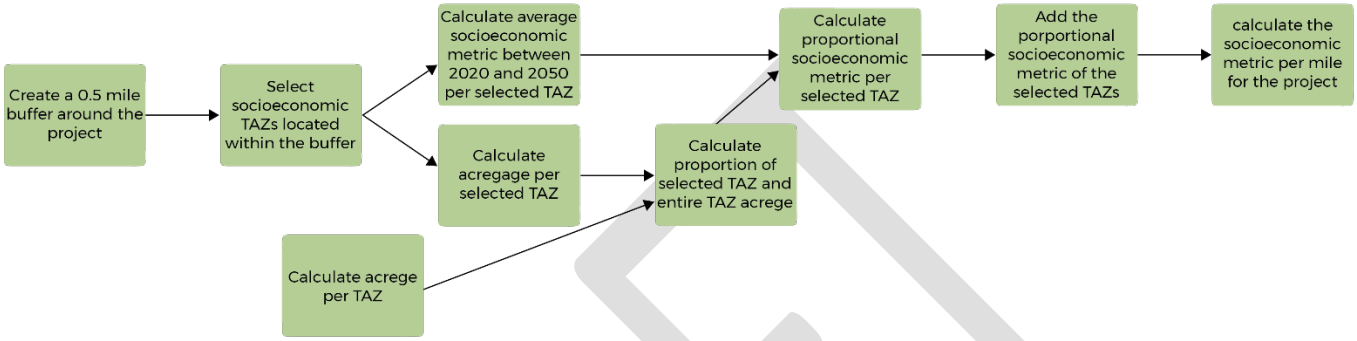


Figure 6.12 Average Population and Employment Workflow

Amenities

Amenities located on or near bicycle and pedestrian and transit projects were identified to assess a project's accessibility to various services and facilities. Figure 6.13 lists the types of services and facilities identified, along with the TMP project types for which they were identified. Figure 6.14 includes the workflow used to determine the amount of a specified amenity for each project per mile.

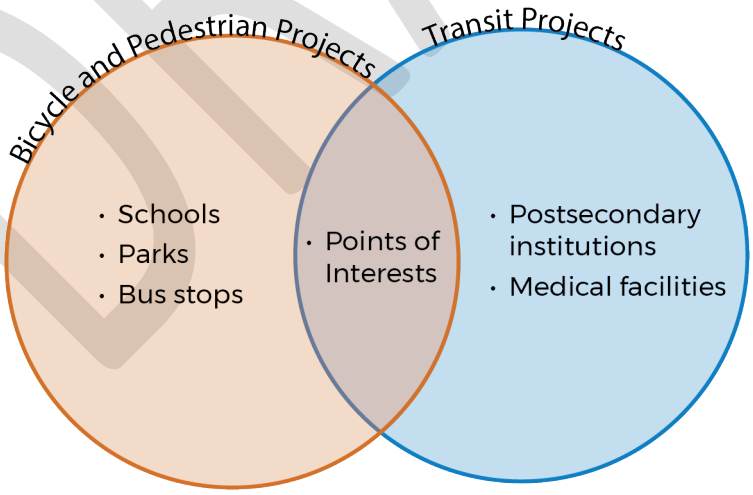


Figure 6.13 Amenities per Project Type

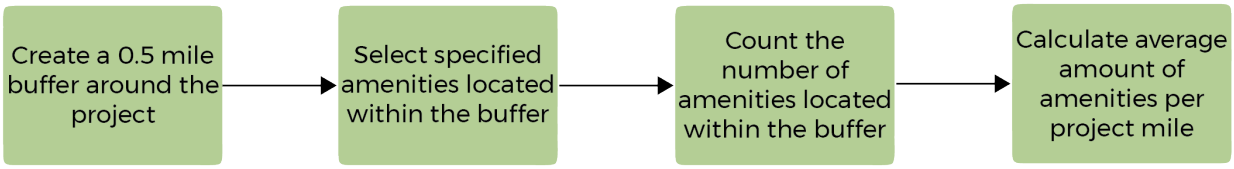


Figure 6.14 Amenities (Points of Interest) Workflow

Bicycle and Pedestrian Crash Severity Score

Bicycle and pedestrian crash severity scores were calculated for all bicycle and pedestrian TMP projects and used as the metric for the Safety parameter. Figure 6.15 illustrates the workflow used to calculate the average severity score per project mile. A 500 feet buffer was used to located crash locations directly adjacent to and near bicycle and pedestrian projects.

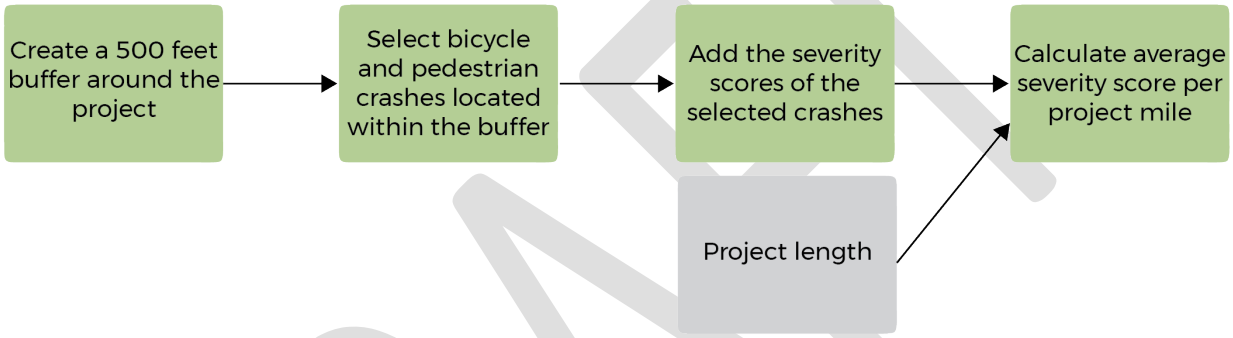


Figure 6.15 Bicycle and Pedestrian Crash Severity Score

Prioritized table of projects

Each mode has its own project list ranked by score. The modes were then combined to create an overall prioritization list with projects in a 4/3/2 succession with 4 bike-ped projects, 3 transit project, and 2 roadway projects to align with the survey results where bicycle and pedestrian improvements were rated with 46% priority, transit and rail improvements were rated with 31% priority, and roadway improvements were rated with 23% priority. Table 6.11 presents the prioritized list of 213 projects. The mode specific prioritization lists are included in Appendix VIII.

Table 6.11: Prioritized Projects

Overall Rank	Mode Rank	Project ID	Type	Route	From	To	Mode Specific Score	Additional Factors Score	Total Score
1	1	BP-411	Bike Ped	Orange Grove Rd	New Grady Brown School Rd	Elfin Blvd	34%	82%	117%
2	2	BP-406	Bike Ped	Oakdale Dr	Morgan Rd to Old NC 86	Orange Grove Rd to Turner End Dr	38%	69%	107%
3	3	BP-423	Bike Ped	Holman Dr / School Rd	NC 86	School Business Garage Rd	40%	44%	83%
4	4	BP-345	Bike Ped	US 70 A	S Churton St	Morelanda Dr	59%	23%	83%
5	1	TR-810	Transit	Waterstone Dr	Old NC 86	NC 86	69%	77%	147%
6	2	TR-815	Transit	Hampton Pointe	Walmart Parking Lot	NC 86	64%	81%	145%
7	3	TR-822	Transit	I-40	Downtown Hillsborough	UNC	76%	59%	136%
8	1	Hwy-011	New Location / Widening	Lake Hogan Farms Rd	Lake Hogan Farm Rd Ext	North of Legends Way	85%	60%	145%
9	2	Int-201	Intersection	I-40/NC 86 Interchange			77%	60%	137%
10	5	BP-429	Bike Ped	Sidewalk	Orange Middle School entrance	Orange High School Rd	40%	33%	74%
11	6	BP-439	Bike Ped	Timber St	Orange Grove Rd	Termini	8%	64%	72%
12	7	BP-408	Bike Ped	Rencher St	West of NC 57	Eastern street terminus	32%	39%	72%
13	8	BP-410	Bike Ped	Orange High School Rd	Harold Latta Dr	US 70	38%	33%	71%
14	4	TR-811	Transit	Old NC 86	Davis Rd	Waterstone Dr	60%	61%	121%
15	5	TR-823	Transit	Oakwood St / US 70	Oakwood St	Mebane	28%	88%	117%
16	6	TR-808	Transit	I-40	NC 86	Orange county border	47%	48%	96%
17	3	Int-206	Intersection	Buckhorn Road/Industrial Drive			91%	40%	130%
18	4	Hwy-020	Modernization	NC 54	Orange Grove Rd	Old Fayetteville Rd	52%	78%	130%
19	9	BP-301	Bike Ped	Erwin Rd	I-40	Durham/Orange County line	18%	50%	68%
20	10	BP-438	Bike Ped	New Grady Brown School Rd	Dimmocks Mill Rd	Grady Brown School Entrance	19%	47%	67%

Overall Rank	Mode Rank	Project ID	Type	Route	From	To	Mode Specific Score	Additional Factors Score	Total Score
21	11	BP-424	Bike Ped	Trail connection	Walgreens	Orange Middle School	33%	33%	66%
22	12	BP-437	Bike Ped	US 70	Redman Xing	Ashwick Dr	24%	41%	65%
23	7	TR-803	Transit	NCRR	Hillsborough	Selma	36%	58%	94%
24	8	TR-812	Transit	Davis Rd / Orange Grove Rd	S Churton St	Old NC 86	35%	56%	90%
25	9	TR-821	Transit	NC 86 / Old NC 86 / Orange Grove Rd /S Churton St	South of downtown	UNC Hospital	43%	46%	90%
26	5	Int-213	Intersection	NC 54 / SR 1006			60%	66%	125%
27	6	Int-210	Intersection	NC 86			59%	63%	122%
28	13	BP-336	Bike Ped	Jones Ferry Rd	Chatham/Orange County line	Old Fayetteville Rd	5%	60%	64%
29	14	BP-428	Bike Ped	Gwen Rd	Orange High School Rd	US 70	34%	29%	63%
30	15	BP-417	Bike Ped	Trail Connection from Patriot's Pointe to Timbers Dr	Patriots Pointe	Timbers Drive	8%	54%	62%
31	16	BP-419	Bike Ped	Benton Dr	NC 86	AL Stanback Middle	22%	39%	61%
32	10	TR-813	Transit	Richmond / Lebanon / Doe Run / Mill Creek	High Rock Rd	US 70	29%	59%	87%
33	11	TR-820	Transit	US 70 / Lawrence Rd / US 70A	Hillsborough Downtown	Walmart	40%	46%	87%
34	12	TR-814	Transit	NC-86	Phelps Rd	US 70	33%	54%	87%
35	7	Hwy-008	Modernization	Mt. Carmel Church Rd	Bennett Rd	Chatham County	50%	69%	118%
36	8	Hwy-028	Modernization	I-40	Buckhorn Rd	I-40 / I-85 Split	54%	62%	116%
37	17	BP-422	Bike Ped	Strouds Creek Rd	Tumbling Brook Ln	Pathways Elementary entrance	21%	38%	60%
38	18	BP-433	Bike Ped	Fuller Rd	US 70	Tinnin Rd	18%	42%	60%
39	19	BP-435	Bike Ped	Tinnin Rd	US 70	Termini	18%	41%	59%
40	20	BP-432	Bike Ped	Arbor Ln	New Grady Brown School Rd	Termini	16%	43%	59%
41	13	TR-801	Transit	NC 86	Orange County border	Coleman Loop Rd	27%	54%	81%
42	14	TR-805	Transit	I-40/I-85	Forrest Ave	US 70	43%	35%	78%

Overall Rank	Mode Rank	Project ID	Type	Route	From	To	Mode Specific Score	Additional Factors Score	Total Score
43	15	TR-804	Transit	NC 86	Orange County border with Chapel Hill	Hillsborough	45%	33%	78%
44	9	Hwy-021	Modernization	I-40 / I-85	West of Buckhorn Rd	West of Orange Grove Rd	54%	58%	111%
45	10	Hwy-024	Modernization	I-40	BGMPO eastern boundary	BGMPO western boundary	60%	50%	110%
46	21	BP-322	Bike Ped	NC 86	Hillsborough northern town limit	South of New Hope Church Rd	21%	38%	59%
47	22	BP-421	Bike Ped	St Marys Rd	1600ft east of River Park Elementary	US 70	30%	29%	58%
48	23	BP-427	Bike Ped	Joyce Rd	Orange High School Rd	Termini	27%	30%	58%
49	24	BP-321	Bike Ped	NC 86	South of New Hope Church Rd	Eubanks	20%	38%	58%
50	16	TR-816	Transit	Saint Marys	US 70	New Sharon Church Rd	35%	42%	77%
51	17	TR-802	Transit	NC 54 West	Orange County border	Broadwell Rd	27%	46%	73%
52	18	TR-819	Transit	High Rock Rd / Efland Cedar Grove Rd	Mill Creek Rd	US 70	29%	42%	71%
53	11	Int-212	Intersection	I-85 / NC 86			32%	74%	106%
54	12	Int-211	Intersection	I-85 / SR 1009			32%	72%	104%
55	25	BP-426	Bike Ped	Ann Rd	Orange High School Rd	Joyce Rd	29%	29%	58%
56	26	BP-436	Bike Ped	Richmond Rd	US 70	Termini	11%	47%	58%
57	27	BP-317	Bike Ped	US 70	Le Nare Trl	Lawrence Rd	20%	37%	57%
58	28	BP-320	Bike Ped	NC 86	Coleman Loop	920 ft south of Coleman Loop	7%	50%	57%
59	19	TR-806	Transit	US-70	Matthis Briggs Dr	St Marys Rd	34%	34%	68%
60	20	TR-817	Transit	New Sharon Church	St Marys Rd	Schley Rd	27%	41%	68%
61	21	TR-809	Transit	Hatch Road / Old Greensboro Rd / White Cross Rd / Butner Rd	NC 54	Dodsons Xrd	28%	39%	67%
62	13	Hwy-005	Modernization	Old NC 86	I-40	Hillsborough Road	42%	61%	103%

Overall Rank	Mode Rank	Project ID	Type	Route	From	To	Mode Specific Score	Additional Factors Score	Total Score
63	14	Hwy-015	New Location / Widening	Little River Church Rd Ext	Walnut Grove Church Rd	Sawmill Rd	59%	43%	102%
64	29	BP-418	Bike Ped	Old NC 10	Buckboard Dr	Mount Hernon Church Rd	3%	53%	56%
65	30	BP-420	Bike Ped	Storey Ln	NC 86	AL Stanback Middle	15%	40%	55%
66	31	BP-416	Bike Ped	Trail Connection from English Hill Lane to Buttonwood Dr	English Hill Lane	Buttonwood Drive	26%	28%	54%
67	32	BP-355	Bike Ped	NC 86	Walnut Grove Church Rd	Coleman Loop Rd	1%	52%	54%
68	22	TR-818	Transit	Amtrak Track	Mebane	Hillsborough	36%	23%	60%
69	23	TR-807	Transit	Mt Moriah / Whitfield / Erwin	MLK Boulevard	Orange county border	35%	12%	46%
70	15	Hwy-017	Modernization	Mebane-Oaks Road	North of Dallas Ct	NC 54	37%	63%	100%
71	16	Hwy-009	New Location / Widening	NC 86	Old NC 10	US 70 Business	28%	70%	99%
72	33	BP-344	Bike Ped	NC 54	Dodsons Xrds	Old Fayetteville Rd	7%	46%	53%
73	34	BP-341	Bike Ped	Old NC 86	I-40	North of Oak Ridge Rd	16%	36%	52%
74	35	BP-407	Bike Ped	Harold Latta Dr	Cloverfield Dr	Orange High School Rd	19%	34%	52%
75	36	BP-409	Bike Ped	New Grady Brown School Rd	Grady Brown School	Orange Grove Rd	21%	32%	52%
76	17	Int-204	Intersection	Buckhorn Road			54%	44%	98%
77	18	Hwy-001	New Location / Widening	Erwin Rd.	W Cornwallis Rd	Whitfield Rd	26%	70%	96%
78	37	BP-324	Bike Ped	Old NC 10	NC 86	US 70	9%	43%	52%
79	38	BP-335	Bike Ped	Dimmock Mill Rd	I-40	Orange Grove Rd	12%	39%	51%
80	39	BP-370	Bike Ped	Whitaker Rd & Bowman Rd	Hebron Church Rd	Rock Quarry Rd	2%	48%	50%
81	40	BP-309	Bike Ped	Hillsborough Rd	Sparger Rd	Orange County Line	3%	46%	49%
82	19	Hwy-004	New Location / Widening	Mt. Willing Rd	I-40/85	US 70	43%	50%	92%
83	20	Hwy-036	New Location / Widening	West Ten Road	I-40/I-85	Buckhorn Rd	60%	31%	90%

Overall Rank	Mode Rank	Project ID	Type	Route	From	To	Mode Specific Score	Additional Factors Score	Total Score
84	41	BP-425	Bike Ped	Orange High School Rd	Harold Latta Dr	Miller Rd	19%	30%	49%
85	42	BP-402	Bike Ped	Old Field Creek Trail	I-40	New Hope Creek Trail	13%	35%	48%
86	43	BP-332	Bike Ped	W Ten Rd	Rock Quarry Rd	I-85 Connector	6%	43%	48%
87	44	BP-337	Bike Ped	Faucette Mill Rd	Frank Perry Rd	Odie St	21%	27%	48%
88	21	Hwy-026	New Location / Widening	NC 54	Old Fayetteville Road	Mebane Oaks Rd	29%	55%	84%
89	22	Hwy-012	New Location / Widening	Buckhorn Road Extension	Orange Grove Rd	Dairyland Rd	31%	52%	83%
90	45	BP-306	Bike Ped	Pickett Rd	Chapel Hill Rd	Erwin Rd	1%	47%	48%
91	46	BP-348	Bike Ped	University Station Rd	Mt. Sinai Rd	US 70	4%	44%	48%
92	47	BP-434	Bike Ped	School House Rd	Fuller Rd	Tinnin Rd	18%	29%	47%
93	48	BP-431	Bike Ped	Governor Dr	Governor Burke Rd	Harold Latta Dr	12%	35%	47%
94	23	Hwy-019	New Location / Widening	I-85	West of Orange Grove Rd in Orange County	West of Sparger Rd in Durham County	44%	38%	82%
95	24	Hwy-010	New Location / Widening	NC 86	US 70 Bypass	North of NC 57	28%	52%	80%
96	49	BP-339	Bike Ped	New Hope Church Rd	Old NC 86	Old NC 10	4%	43%	47%
97	50	BP-302	Bike Ped	Mt Carmel Church Rd	Bennett Rd	Chatham/Orange county line	11%	35%	47%
98	51	BP-329	Bike Ped	Dairyland Rd / Homestead Rd	Dodsons Xrds	Past Clermont Greenway Crossing	5%	41%	46%
99	52	BP-319	Bike Ped	Miller Rd / Baldwin Rd	Walker Rd	Orange High School Rd	7%	38%	46%
100	25	Hwy-038	Modernization	New Hope Church Road	New Hope Elementary School eastern driveway	New Hope Elementary School western driveway	11%	68%	79%
101	26	Hwy-002	Modernization	Erwin Rd.	I-40	Whitfield Rd	27%	52%	79%
102	53	BP-323	Bike Ped	Mt Hernon Church Rd / W Cornwallis Rd / Schley Rd / Pleasant Green Rd	New Sharon Church Rd	Bay Meadows Ln	1%	44%	45%
103	54	BP-352	Bike Ped	NC 49	NC 86	NC 49	0%	44%	45%
104	55	BP-373	Bike Ped	Lynch Store Rd / Doc Corbett Rd / McDade	Alamance Co line	NC 49	0%	44%	44%

Overall Rank	Mode Rank	Project ID	Type	Route	From	To	Mode Specific Score	Additional Factors Score	Total Score
				Store Rd / Pentecost Rd					
105	56	BP-304	Bike Ped	Hwy 751	Constitution Dr	Hillsborough Rd	3%	40%	43%
106	27	Hwy-029	Modernization	Old Greensboro Road	Jones Ferry Road	Alamance County	17%	62%	79%
107	28	Hwy-030	Modernization	Orange Grove Road	I-85	Dodson Crossroads	15%	62%	77%
108	57	BP-430	Bike Ped	Dairy Farm Rd	NC 57	Governor Dr	12%	31%	43%
109	58	BP-363	Bike Ped	Oak Grove Church Rd / Vernon Rd	Mount Willing Rd	Bradshaw Quarry Rd	0%	43%	43%
110	59	BP-364	Bike Ped	Oak Grove Church Rd	Mount Willing Rd	Mebane Oaks Rd	0%	42%	43%
111	60	BP-325	Bike Ped	Coleman Loop	NC Hwy 86	NC Hwy 86	1%	42%	43%
112	29	Hwy-034	Modernization	Orange Grove Road	Patriot's Pointe Dr	New Grady Brown School Rd	8%	68%	76%
113	30	Hwy-023	New Location / Widening	I-40	I-85 in Orange County	I-85 in Durham County	30%	44%	75%
114	61	BP-396	Bike Ped	NC 86	Hurdle Mills Rd	920 ft south of Coleman Loop	5%	37%	43%
115	62	BP-338	Bike Ped	Mt Sinai Rd	NC 86	Kerley Rd	4%	39%	42%
116	63	BP-400	Bike Ped	Lebanon Rd	High Rock Rd	West of Brookhollow Rd	1%	41%	42%
117	64	BP-414	Bike Ped	NC 57	NC 86	Orange County line	3%	39%	42%
118	31	Int-209	Intersection	SR 1005 (Old Greensboro Road)			24%	50%	75%
119	32	Hwy-039	Modernization	West Ten Road	Gravelly Hill Middle School	300 ft east	1%	73%	74%
120	65	BP-362	Bike Ped	Mebane-Oaks Rd	Orange County Line	NC 54	0%	41%	42%
121	66	BP-351	Bike Ped	McDade Store Road / Hurdle Mills Road / Ormond Road	Pentecost Rd	Walnut Grove Church Rd	0%	41%	42%
122	67	BP-327	Bike Ped	Lawrence Rd	Old NC 10	St Mary's Rd	4%	38%	41%
123	68	BP-395	Bike Ped	Phils Creek Trail	Neville Creek Trail	McCauley Ln	1%	40%	41%
124	33	Hwy-037	Modernization	New Hope Church Road	New Hope Elementary School	NC 86	11%	61%	72%
125	34	Hwy-031	Modernization	Dairyland Road	Orange Grove Rd	Old NC 86	9%	62%	71%
126	69	BP-340	Bike Ped	Old NC 86	Oak Ridge Rd	Eubanks Rd	6%	35%	41%

Overall Rank	Mode Rank	Project ID	Type	Route	From	To	Mode Specific Score	Additional Factors Score	Total Score
127	70	BP-366	Bike Ped	Chestnut Ridge Church Rd	Buckhorn Rd	Mt Willing Rd	2%	39%	41%
128	71	BP-361	Bike Ped	Hebron Church Rd	Mebane-Oaks Rd	Whitaker Rd	1%	39%	40%
129	72	BP-318	Bike Ped	I-85 Connector	W Ten Rd	Cornelius St	5%	35%	40%
130	35	Hwy-003	New Location / Widening	I-85/US 70/I-40 connector	I-40/85	US 70	4%	67%	71%
131	36	Hwy-032	Modernization	Dodson Crossroads	Orange Grove Road	NC 54	11%	60%	71%
132	73	BP-357	Bike Ped	Lonesome Rd	Harmony Church Rd	Mill Creek Rd	0%	39%	40%
133	74	BP-390	Bike Ped	Morgan Creek Trail	Parallel	and south of Dairyland Rd	2%	37%	39%
134	75	BP-401	Bike Ped	Mount Willing Road	Chestnut Ridge Church Rd	South of Buddy Ln	3%	34%	38%
135	76	BP-350	Bike Ped	Walnut Grove Church Road	Orange County Line	NC 86	0%	37%	38%
136	37	Hwy-016	New Location / Widening	NC 86	Caswell County	NC 57	14%	56%	70%
137	38	Hwy-027	Modernization	US 70	BGMPO western boundary	BGMPO eastern boundary	23%	46%	69%
138	77	BP-378	Bike Ped	Sawmill Rd	NC 86	Walnut Grove Church Rd	3%	35%	38%
139	78	BP-316	Bike Ped	Ode Turner Rd	Orange Grove Rd	Old Chapel Hill-Hillsborough Rd	1%	37%	38%
140	79	BP-356	Bike Ped	Carr Store Rd	NC 49	NC 86	1%	37%	38%
141	80	BP-333	Bike Ped	Brookhollow Rd / Mt Willing Rd	E Lebanon Rd	Chestnut Ridge Ch Rd	4%	34%	37%
142	39	Hwy-013	Modernization	Buckhorn Road	Orange Grove Rd	Bradshaw Quarry Rd	7%	62%	69%
143	40	Hwy-023	Modernization	Lebanon Road	Mill Creek Road	Efland-Cedar Grove Road	9%	60%	68%
144	81	BP-349	Bike Ped	Buckhorn Rd	US 70	Orange Grove Rd	1%	36%	37%
145	82	BP-342	Bike Ped	Old Greensboro Rd	Haw River	Jones Ferry Rd	1%	37%	37%
146	83	BP-412	Bike Ped	Mount Willing Road	Mebane Oaks Rd	Buckhorn Rd	0%	36%	37%
147	84	BP-387	Bike Ped	Corbett Ridge Rd	NC 49	Caswell Co line	0%	36%	37%
148	41	Int-208	Intersection	Buckhorn Road/West Ten Road			19%	49%	67%

Overall Rank	Mode Rank	Project ID	Type	Route	From	To	Mode Specific Score	Additional Factors Score	Total Score
149	42	Hwy-014	Modernization	Arthur Minnis Road	Dodsons Cross Rd	Rocky Ridge Rd	24%	37%	61%
150	85	BP-375	Bike Ped	Mill Creek Rd	Lebanon Rd	Carr Store Rd	1%	35%	37%
151	86	BP-377	Bike Ped	Efland-Cedar Gr Rd	Highland Farm	north of Carr Store (in larger project)	1%	36%	36%
152	87	BP-393	Bike Ped	Bolin Creek Trail Extension	Lower Trading Path	Bolin Creek (Hogan Lake)	2%	34%	36%
153	88	BP-365	Bike Ped	Dodsons Xrd / Orange Grove Rd / White Cross Rd / Butler Rd	New Grady Brown School Rd	Orange County line	2%	34%	36%
154	43	Hwy-018	New Location / Widening	Buckhorn Rd	I-40	W Ten Rd	23%	35%	58%
155	44	Hwy-006	New Location / Widening	US 70	Buckhorn Road	Durham County	9%	47%	55%
156	89	BP-353	Bike Ped	Bradshaw Quarry Road / Arthur Minnis Rd	Orange County Line	Dodsons Xrd	0%	36%	36%
157	90	BP-388	Bike Ped	Mountains to Sea Trail	Alamance/Orange County line	Hillsborough Riverwalk	3%	33%	36%
158	91	BP-394	Bike Ped	New Hope Creek Trail / Long Branch Trail			2%	33%	36%
159	92	BP-354	Bike Ped	NC 86	Merlot Ln	Carr Store Rd	5%	31%	36%
160	45	Int-207	Intersection	Ben Wilson Road/Bowman Road			22%	30%	51%
161	46	Hwy-034	New Location / Widening	Old NC 10	NC 86	US 70 Business	2%	49%	51%
162	93	BP-399	Bike Ped	High Rock Rd	Saddle Club Rd	Lebanon Rd	1%	35%	36%
163	94	BP-343	Bike Ped	NC 54	Orange County Line	Dodsons Xrd	1%	35%	36%
164	95	BP-371	Bike Ped	Saddle Club Rd	Lebanon Rd	High Rock Rd	3%	32%	36%
165	96	BP-368	Bike Ped	Dairyland Rd	Orange Grove Rd	Union Grove Ch Rd (in DCHC)	1%	35%	35%
166	47	Int-202	Intersection	I-85/US 70 Connector interchange upgrade			14%	37%	51%
167	48	Int-205	Intersection	I-85/I-40 at Mattress Factory Rd			21%	24%	45%
168	97	BP-389	Bike Ped	Piney Mountain Creek Trail	New Hope Creek	Murphy School Rd	2%	33%	35%

Overall Rank	Mode Rank	Project ID	Type	Route	From	To	Mode Specific Score	Additional Factors Score	Total Score
169	98	BP-347	Bike Ped	Turkey Farm Rd	Mt. Sinai Rd	Whitfield Rd	5%	30%	35%
170	99	BP-391	Bike Ped	Neville Creek Trail	Parallel	and north of Jones Ferry Rd	1%	34%	35%
171	100	BP-330	Bike Ped	St Mary's Rd / New Sharon Church Rd / Holly Ridge Rd	NC 157	US 70	2%	33%	35%
172	49	Hwy-026	Modernization	Bowman Rd	Ben Wilson	West Ten Road	18%	26%	44%
173	50	Hwy-007	Modernization	Albert Rd	Dairyland Rd	Union Grove Church Rd	6%	37%	43%
174	101	BP-303	Bike Ped	Kerley Rd	Erwin Rd	NC 751	4%	31%	35%
175	102	BP-379	Bike Ped	Laws Store Rd / Brown Rd	Walnut Grove Church Rd	NC 157	0%	34%	35%
176	103	BP-308	Bike Ped	Cole Mill Rd	Rose of Sharon Rd	Orange County Line	1%	33%	34%
177	104	BP-413	Bike Ped	Little River Church Rd	Walnut Grove Church Rd	NC 57	0%	34%	34%
178	51	Hwy-036	Modernization	Orange High School Road	Ann Road	Orange Middle School entrance	4%	36%	41%
179	105	BP-405	Bike Ped	Green Riley Rd	NC 57	New Sharon Church Rd	2%	32%	34%
180	106	BP-382	Bike Ped	Schley Rd	NC 57	New Sharon Church Rd	1%	32%	33%
181	107	BP-398	Bike Ped	Mountains to Sea Tr	Orange County Speedway	Durham County	1%	32%	33%
182	108	BP-386	Bike Ped	Saxapahaw Rd	NC 54	Alamance Co line	0%	33%	33%
183	109	BP-369	Bike Ped	Orange Grove Rd	NC 54	Arthur Minnis Rd	0%	32%	33%
184	110	BP-397	Bike Ped	Buck Branch Trail	Parallel	Mt Carmel Church Rd	2%	30%	32%
185	111	BP-380	Bike Ped	NC 157	Berry Pearce Rd	Laws Store Rd	0%	32%	32%
186	112	BP-381	Bike Ped	Pearson Rd	Walnut Grove Church Rd	NC 57	0%	32%	32%
187	113	BP-315	Bike Ped	Walker Rd	Walker Rd	New Sharron Church Rd	1%	31%	32%
188	114	BP-376	Bike Ped	Efland-Cedar Grove Rd	McDade Store Rd	Harmony Church Store Rd	1%	31%	32%

Overall Rank	Mode Rank	Project ID	Type	Route	From	To	Mode Specific Score	Additional Factors Score	Total Score
189	115	BP-383	Bike Ped	Mary Hall Rd and a short section of Laws Store Rd	NC 157	NC 57	0%	31%	31%
190	116	BP-385	Bike Ped	Lake Orange Rd for bicycle travel	Ausling Way	NC 86	1%	31%	31%
191	117	BP-358	Bike Ped	Highland Farm Rd	Efland-Cedar Grove Rd	Coleman Loop Rd	1%	30%	31%
192	118	BP-372	Bike Ped	High Rock Rd	Saddle Club Rd	Alamance Co line	1%	30%	31%
193	119	BP-415	Bike Ped	NC 57	Pearson Rd	Kiger Rd	1%	29%	30%
194	120	BP-367	Bike Ped	Chestnut Ridge Church Rd	Camp Chestnut Ridge Rd	Westwood Dr	1%	29%	30%
195	121	BP-305	Bike Ped	Mt Moriah Rd	Erwin Rd	Orange County Line	1%	29%	30%
196	122	BP-384	Bike Ped	Berry Rd	NC 157	Person County line	0%	29%	30%
197	123	BP-331	Bike Ped	Lebanon Rd	Brook Hollow Rd	Mill Creek tributary	2%	27%	29%
198	124	BP-334	Bike Ped	Frank Perry Rd	Coleman Loop	Faucette Mill Rd	1%	28%	29%
199	125	BP-374	Bike Ped	Harmony Church Rd	Lynch Store Rd	Efland Cedar Grove Rd	0%	29%	29%
200	126	BP-326	Bike Ped	Ben Johnston Rd	I-85 Connector	Dimmocks Mill Rd	10%	18%	29%
201	127	BP-328	Bike Ped	Whitfield Rd	NC 86	Erwin Rd	7%	20%	28%
202	128	BP-360	Bike Ped	Kiger Rd	NC 57	New Sharon Church Rd	0%	26%	26%
203	129	BP-307	Bike Ped	Guess Rd	New Sharon Ch Rd	Durham County line	3%	21%	25%
204	130	BP-392	Bike Ped	Mountain Creek Tr	New Hope Crk Trl	Union Grove Church Rd	1%	24%	24%
205	131	BP-404	Bike Ped	Pritchard's Mill Creek Trail	Morgan Creek (University Lake)	Wolfs Trl	1%	22%	23%
206	132	BP-346	Bike Ped	Bivens Rd / Terry Rd	New Sharon Church Rd	Ebenezer Ch Rd	1%	21%	22%
207	133	BP-403	Bike Ped	Jones Ferry Road Parallel Trail	Morgan Creek (University Lake)	Deerfield Trl	1%	21%	22%
208	134	BP-310	Bike Ped	Bacon Rd	Roxboro Rd	NC 57	0%	21%	22%
209	135	BP-314	Bike Ped	Ebenezer Church Rd	Bivins Rd	Pleasant Green Rd	1%	19%	20%
210	136	BP-311	Bike Ped	Bill Poole Rd / Hopkins Rd	Orange County Line	Redleaf Ln	0%	20%	20%
211	137	BP-312	Bike Ped	Saint Marys Rd	Guess Rd	Bivens Rd	0%	19%	19%
212	138	BP-313	Bike Ped	Craig Rd	Bivins Rd	Umstead Rd	0%	18%	19%
213	139	BP-359	Bike Ped	Halls Mill Rd	Highland Farm Rd	Bane Rd	1%	11%	12%

Non-prioritized projects

10 projects did not undergo the prioritization process. This is because their project descriptions don't render them comparable with other projects to be scored and ranked appropriately. For these projects, Orange County staff can determine the priority based on their understanding of the projects and add them to the overall list.

Int-203 is an intersection project that would be constructed as part of an overall new location roadway. Since it would not be a standalone project, it is not included in the prioritization process.

BP-701 is the only bicycle and pedestrian bridges project included in the plan. Since it cannot be compared to other bicycle and pedestrian bridges projects, it did not render itself to this prioritization process.

The remaining 8 projects - **TR-901 to TR-908** are the park-and-ride lots, Amtrak stations, and other transit point projects. They did not render themselves to this prioritization process, so they were not included. These projects would also be constructed as part of larger transit projects and likely managed by outside agencies. It is recommended that Orange County prioritize these projects at their discretion.

7. Conclusion

This study allowed Orange County to take 500+ proposed projects from 9 different agencies and 58 different plans and consolidate them into one County-wide document. The result is a comprehensive list of 223 projects recommended for the unincorporated areas of Orange County.

This study took this list a step further by developing a prioritization method based on County and public desires. The prioritization list will assist the County in determining how to allocate future funding by determining which projects would have the most beneficial impact.

It is recommended that the project list be routinely updated as constituent agencies adopt new plans and project recommendations. The TMP should be updated every 5 years to include new projects, remove completed projects, and re-prioritize projects based on future public and County desires. This will allow Orange County to maintain and up-to-date and comprehensive list of projects for future needs.