4 Identifying Priorities

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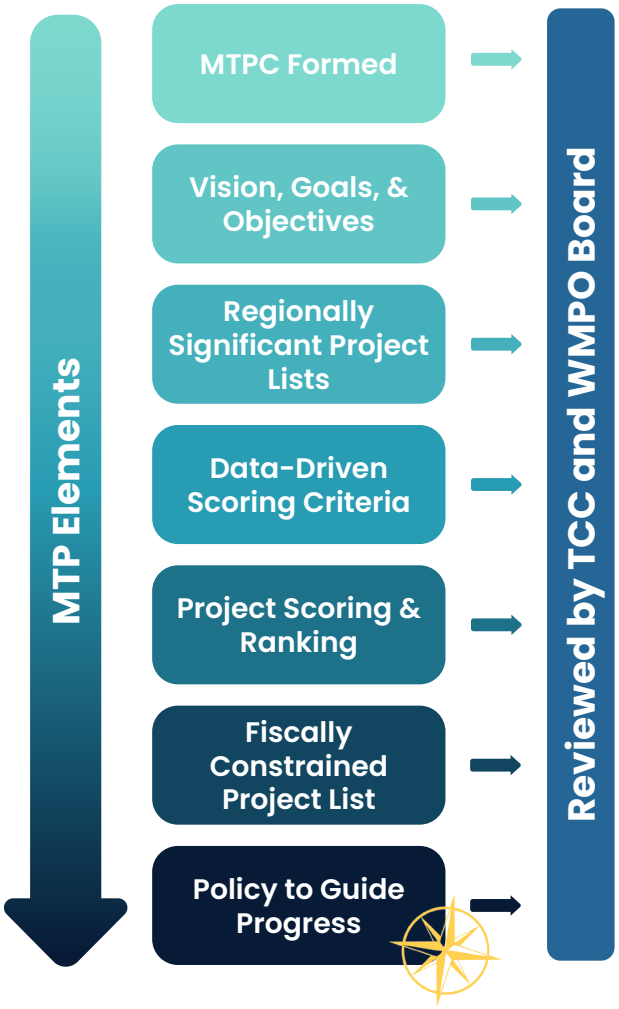
Process for Identifying Priority Projects

The prioritized project list within this plan is the product of a comprehensive process that identified, analyzed, scored, ranked, and fiscally constrained transportation projects by mode in the region. The Metropolitan Transportation Plan Committee (MTPC)—comprised of member jurisdiction planning staff, modal partners, subject matter experts, and other stakeholders—assisted in developing a data-driven approach to project scoring that would allow the submitted projects to be ranked and prioritized in alignment with the plan's adopted vision, goals, and objectives.

Over the course of the planning process, staff from the WMPO's member jurisdictions worked to identify regionally significant projects, which were evaluated through the lens of the plan's goals and objectives. Scoring criteria were identified that applied these measures of success in an objective, data-driven way and allowed each project to be scored based on how well they furthered each goal. In addition, modal policies were established to guide future transportation development within the region.



The MTP prioritizes capital projects that represent major investments in the future of the regional transportation system. These projects are intended to expand capacity, improve safety, and enhance multimodal access across the network. Their selection is based on data-driven evaluation and alignment with long-range goals, positioning them for future funding through programs like the MPO/State Transportation Improvement Program (MPO/State TIP). While maintenance and operations efforts are essential to system performance, they are managed through separate programs and are not prioritized through this process.

Priority Project Submission

In the fall of 2023, WMPO staff coordinated with member jurisdictions and modal planning partners on priority project submissions for *Cape Fear Navigating Change 2050*, to include priority projects for five modes of transportation: bicycle and pedestrian, ferry and water transportation, public transportation, rail, and roadway. A draft list was compiled in December 2023 and in January 2024, members and planning partners were provided results from the recently completed Phase I of public engagement for the opportunity to make any changes, additions, and/or subtractions to their project submissions at that time.

Aviation projects were excluded from the project submission process. Wilmington International Airport (ILM) is not solely dependent on traditional transportation funding sources and has access to dedicated capital funds and grant programs.

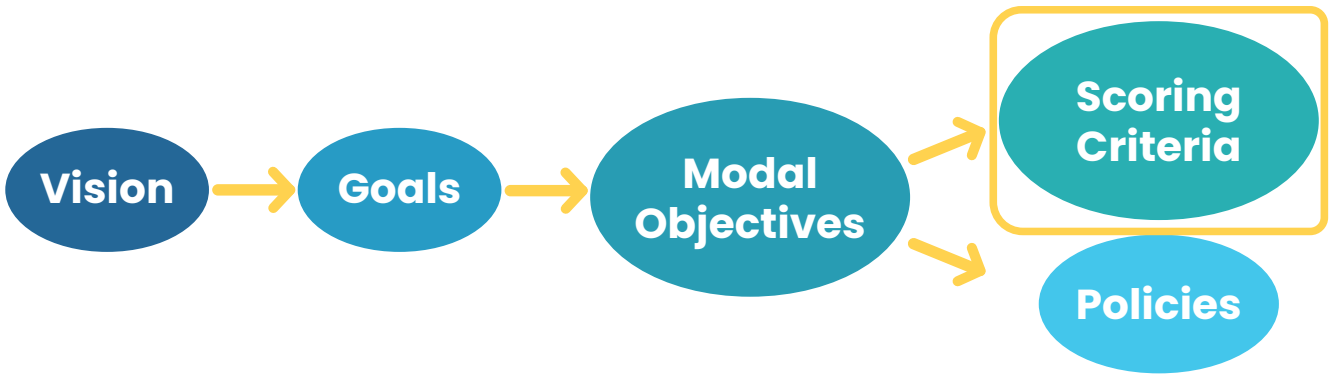
Each member jurisdiction and planning partner played an active role in shaping the priority project list, using adopted plans, programs, and studies. Common sources of guidance include multimodal transportation plans, corridor studies, land use and development plans, feasibility studies, bicycle and pedestrian plans, safety assessments, and capital improvement programs. These resources help ensure that projects submitted for MTP consideration are not only technically justified but also reflect the broader goals of each community. With the feedback collected from the public during Phase I of public outreach; member jurisdictions and planning partners were asked to reconfirm their priority projects. While this approach allows for local flexibility, the collective result is a regionally integrated, forward-looking project list that supports long-term transportation, economic, and quality-of-life goals across the WMPO planning area.

Table 4.1 - Projects Submitted by Mode	
Mode	Total Projects
Bicycle and Pedestrian	119
Ferry and Water Transportation	22
Rail	8
Public Transportation	142
Roadway	73

Priority Project Scoring

To create a ranked list of the proposed projects, WMPO staff worked with the MTPC to develop scoring criteria by assigning a value to objective attributes with identifiable and measurable metrics. To maintain transparency of the process, it was important that metrics were data-driven. This process should allow for replication of point assignments using available quantitative and qualitative datasets.

Each modal priority project could receive up to 100 points. The total score of each project was normalized to create a ranked list of projects for each mode. For Roadway, the ranked list was the basis for the fiscal constraint analysis, which is discussed later in this chapter.



Ranked project lists for the non-highway projects can be found in the following appendices:

- Bicycle and Pedestrian: Appendix F, Table F.2
- Ferry and Water Transportation: Appendix G, Table G.1
- Rail: Appendix H, Table H.1
- Public Transportation: Appendix I, Table I.3

Modal Scoring Matrices

The scoring matrices used to rank the modal projects are shown below in tables 4.2 through 4.6. Ranked and complete project lists can be found in Chapter 6, and the modal appendices.

Bicycle and Pedestrian

Table 4.2 - Bicycle and Pedestrian Scoring Matrix			
Scale (out of 100)	Goal	Objective	Metric
25	**Safe**	Build facilities and traffic engineering solutions that prioritize vulnerable road user safety.	Functional classification of adjacent/ intersecting facility.
		Maintain and increase infrastructure to improve safety between non-motorists, cyclists, and/or motorized vehicles.	Bicycle and/or pedestrian high-crash location.
20	**Fair**	Ensure new bicycle and pedestrian facilities connect to community resources and/or services.	Project provides a connection or fills a gap providing connection to community resources and/or services.
30	**Connected**	Increase multimodal density to facilitate intermodal connection opportunities.	Project intersects roadway or project is an intersection improvement located within a reasonable distance of a transit stop, school or within a reasonable distance of a grocery store or community resource center.
		Create first and last-mile connections.	
		Build connections that fill gaps in the existing network that will allow for an uninterrupted bicycle and/or pedestrian path of travel.	Project fills a gap in an existing network.
15	**Resilient**	Increase bicycle and pedestrian facilities that provide alternatives to auto transport.	Project is located within an area of high household (HH) density or high employment.
10	**Proactive**	Utilize and develop partnerships to support bicycle and pedestrian infrastructure and initiatives.	Project appears in an adopted plan.

Ferry and Water Transportation

Table 4.3 - Ferry & Water Transportation Scoring Matrix			
Scale (out of 100)	Goal	Objective	Metric
10	**Safe**	Reduce conflicts with non-ferry automobile traffic at ferry terminals.	Adds facilities at ferry terminals, such as crosswalks, to increase safety of ferry users and reduce conflicts with non-ferry motorists.
10	**Fair**	Improve ADA-accessibility on ferry vessels and from ferry terminal to adjacent destinations.	Improves ADA accessibility of existing terminal facility or vessel.
40	**Connected**	Prioritize projects that allow for bike share and public transportation at ferry/ water transportation terminals.	Connects or adds transit infrastructure at terminals and/or adds bike share facilities.
		Increase infrastructure to promote biking and walking to and from the ferry/water transportation terminal.	Connects or adds bike network, adds or completes pedestrian connection to facility.
10	**Resilient**	Improve the efficiency of evacuation operations.	Project contributes to or supports evacuation efforts.
30	**Proactive**	Prioritize projects that develop new ferry routes to serve both commuter and tourism markets.	Construction of new facility or acquisition of new vessel.

Rail

Table 4.4 - Rail (Passenger & Freight) Scoring Matrix			
Scale (out of 100)	Goal	Objective	Metric
10	**Safe**	Eliminate and/or mitigate rail conflicts with other modes.	Eliminates or mitigates congestion near at-grade crossing.
		Enhance infrastructure to improve safety for all other modes (cyclists, pedestrians, etc.).	Project adds safety infrastructure in freight corridor or intersection with heightened crash rate.
10	**Fair**	Encourage job creation by providing sufficient transportation capacity for rail users.	Adds capacity or throughput to priority freight route or Class 1 rail.
40	**Connected**	Improve or maintain safe and reliable connections to ports, rail terminals, military bases, and major logistics and manufacturing sites.	Connection to high priority freight corridor, freight asset, or future potential asset.
10	**Resilient**	Build and sustain resiliency to extreme events and hazards by designing and constructing less vulnerable infrastructure to minimize loss and by employing rapid restoration techniques.	Project contributes to or supports evacuation or disaster mitigation efforts.
30	**Proactive**	Promote future opportunities for passenger facilities.	Promote future opportunities for passenger facilities.

Public Transportation

Table 4.5 - Public Transportation Scoring Matrix			
Scale (out of 100)	Goal	Objective	Metric
10	**Safe**	Prioritize installation of crosswalks at or near bus stop locations.	Route or amenity connected to existing pedestrian network.
40	**Fair**	Identify and pursue opportunities to provide public transportation options that benefit transportation dependent populations.	Project is located within an area of projected high household (HH) growth or high employment (HE) growth.
		Improve ADA accessibility.	Improves safety or ADA accessibility at stops.
20	**Connected**	Increase network of bus shelters, benches, and other amenities at bus stop locations.	Stop has no shelter, lighting, bike rack, or bench.
		Prioritize new public transportation facilities that connect to employment centers, community resources and/or services.	Route or amenity improvement within ¼ mile of employment centers, community resources and/or services.
10	**Resilient**	Identify strategies to broaden the ridership base and encourage transit usage.	Improves data collection, analysis, or technology.
20	**Proactive**	Provide direct, time competitive transit services that complement other transportation modes	Improvement increases frequency or efficiency.

Roadway

Table 4.6 - Roadway Scoring Matrix			
Scale (out of 100)	Goal	Objective	Metric
25	**Safe**	Reduce the rate and severity of crashes.	Crash severity at project location.
		Maintain, enhance, and increase infrastructure to improve safety between non-motorists, cyclists, and/or motorized vehicles.	Existing bicycle and pedestrian facilities at project location.
20	**Fair**	Protect and strengthen the region's unique identity, natural surroundings, and overall quality of life while promoting fairness in how benefits and impacts are shared.	Project is located within an area of high household (HH) projected growth or high employment (HE) growth.
30	**Connected**	Increase interconnectivity of roadway facilities and the redundancy of routes.	Project adds a new route/new connectivity.
15	**Resilient**	Build resiliency to extreme events and hazards by designing and constructing less vulnerable infrastructure to minimize loss and employing rapid restoration techniques.	Project is located on a Strategic Transportation Corridor (STC) or Strategic Highway Network (STRAHNET) Corridor or provides redundancy or support for an existing or future approved truck route.
		Develop efficient and redundant routes to support the movement of goods.	
10	**Proactive**	Consider and support projects that facilitate future adaptations and new technology to accommodate changing demands.	Project includes new technology or is located on a corridor identified for future service expansion.
		Consider and support projects that align with anticipated land use patterns and adopted plans.	Project is in a community adopted plan.

Fiscal Constraint and Alternative Funding Considerations

A critical requirement of the MTP, separating it from other long-range plans, is that it must be fiscally constrained. This essentially means that the cost to implement the projects in the plan cannot exceed the expected level of funding. To fiscally constrain *Cape Fear Navigating Change 2050,* the WMPO worked with a consultant, Kimley-Horn and Associates, to develop the financial components necessary to complete this required process.

Financial Forecast

The process of establishing fiscal constraint begins with the development of a financial forecast based on the projection of existing, recurring funding sources. This forecast evaluates both current and anticipated fiscal conditions, guiding policy and programmatic decisions. A complete and reliable transportation network depends equally on capital funding for system growth and O&M funding for ongoing function. For this reason, the financial analysis critically evaluated both funding categories to identify constraints and opportunities across the entire planning horizon. The tables below provide, by transportation mode, a breakdown of the funding sources considered in the financial forecast, the forecasted capital funding for 2024 through 2050, and the forecasted operations and maintenance funding for that same timeframe. An inflation rate of 2% was applied in developing these revenue forecasts.

The financial forecast was conducted with the help of consultants Kimley-Horn & Associates.

Table 4.7 - Funding Sources

Mode	Source
Aviation	State Transportation Improvement Program (STIP), ILM Enplanement Forecast
Bicycle and Pedestrian	STIP, Capital Improvement Plans (CIP)
Ferry and Water Transportation	STIP, Tolls, Operations and Maintenance
Public Transportation	STIP, National Transit Database (NTD), Agency Profiles, Wave Annual Budget
Rail	STIP
Roadway	STIP, CIP, Powell Bill, Operations and Maintenance

Table 4.8 breaks down the forecasted capital funding from existing sources through 2050.

Table 4.8 - Total Capital Funding Forecasted

Mode	Capital Funding
Aviation	$635,764,272
Bicycle and Pedestrian	$73,324,879
Ferry and Water Transportation	$10,834,000
Public Transportation	$79,704,275
Rail	$78,075,000
Roadway	$5,119,133,220
Total	**$5,980,771,646**

See Appendix D for more information about the financial element of this plan, including revenues by mode and funding band.

Table 4.9 - Total Operations and Maintenance (O&M) Funding Forecasted	
Mode	O&M Funding
Aviation	$ --
Bicycle and Pedestrian	$17,942,000
Ferry and Water Transportation	$103,953,000
Public Transportation	$264,930,000
Rail	$ --
Roadway	$962,908,000
Total	**$1,349,733,000**

Table 4.9 breaks down the forecasted operations and maintenance funding from existing sources through 2050.

Maintenance funding within the WMPO planning area is supported by NCDOT, local jurisdictions, and federal sources. NCDOT Division 3 forecasts were developed using historical expenditures from 2018 to 2023 and allocated to Brunswick, New Hanover, and Pender counties. For Brunswick and Pender counties, allocations were adjusted from the county-wide total based on the number of miles of state-maintained facilities in each county. Municipalities also receive Powell Bill funding, which is assumed to support the maintenance of existing facilities. In some cases, local maintenance allocations were based on figures from adopted Capital Improvement Programs.

For public transportation, Wave Transit's operations and maintenance funding is supported through a combination of federal transit formula funds, state grants, local contributions, and farebox revenues. The City of Wilmington and New Hanover County provide annual appropriations to support ongoing operations, supplemented by state grant programs and dedicated funding for specific services such as the UNCW Seahawk Shuttle. While operations and maintenance (O&M) data were not provided by ILM, airport staff indicated that both capital and O&M revenues generally trend linearly with total enplanements and that all O&M revenues are fully expended each year. Rail is not included in O&M funding forecasts, as all rail service within the WMPO planning area is currently privately operated and lacks public passenger service. Operations and maintenance for the North Carolina ferry system are primarily funded through the State Highway Fund, with additional support from route-specific toll revenues and limited federal assistance. Given that maintenance needs typically exceed available revenue, all available maintenance funding is assumed to be fully expended over the life of the plan.

Project Cost Estimates

Project cost estimates were prepared for five transportation modes. To develop these estimates, a project cost estimation spreadsheet was developed for each mode which contained a list of proposed projects, along with key attributes of each project necessary for assessing the total cost. These attributes varied by mode and costs were calculated using mode-specific tools and estimation methods. Capital project costs were provided in five-year increments, starting in 2025 through 2050, assuming a 4% rate of annual inflation.

Table 4.10 - Cost Estimate Data Sources	
Mode	Primary Source(s)
Aviation	N/A
Bicycle and Pedestrian	NCDOT Bicycle and Pedestrian Facility Cost Tool
Ferry and Water Transportation	NCDOT P7 Project Details
Public Transportation	NCDOT P7 Project Details, Wave Short Range Transit Plan
Rail	NCDOT P7 Project Details
Roadway	Kimley-Horn NC Roadway Cost Estimator Tool

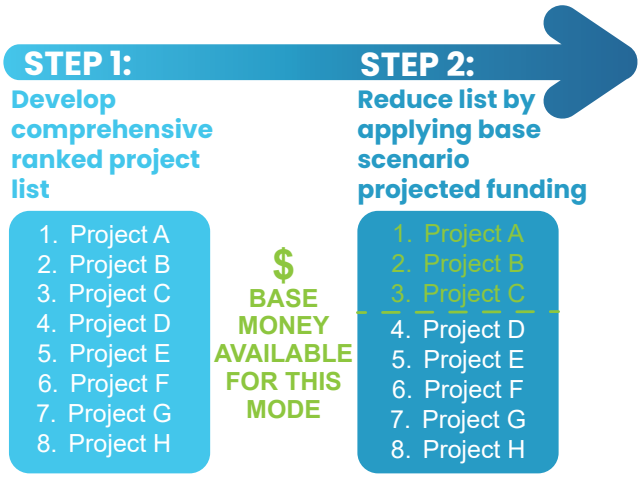
The data source were used to estimate the project costs for each mode.

Project cost estimates for new projects within the MTP only.

Table 4.11 - Project Cost Estimates by Mode	
Mode	Total Cost
Aviation	N/A
Bicycle and Pedestrian	$553,200,000
Ferry and Water Transportation	$255,100,000
Public Transportation	$950,000,000
Rail	$1,229,400,000
Roadway	$4,611,000,000
Total (All Projects)	$7,598,700,000

Fiscal Constraint

Fiscally constrained project selection was conducted for priority roadway projects by first accounting for committed projects in the State/MPO Transportation Improvement Program (STIP/MPO TIP), developed through the Strategic Prioritization Process. The funding bands from which to account for the projects' costs were based on programmed years within the MPO/State TIP document once complete, ranked projects were selected in order, until forecasted fund balances for each funding band neared zero. The final fiscally constrained project lists contain regionally significant projects that could potentially be funded during the life of this plan based on historic funding trends.



Project expenditure by funding band for fiscally constrained roadway project. This includes existing and committed MPO/State TIP projects and MTP roadway projects that underwent fiscal constraint.

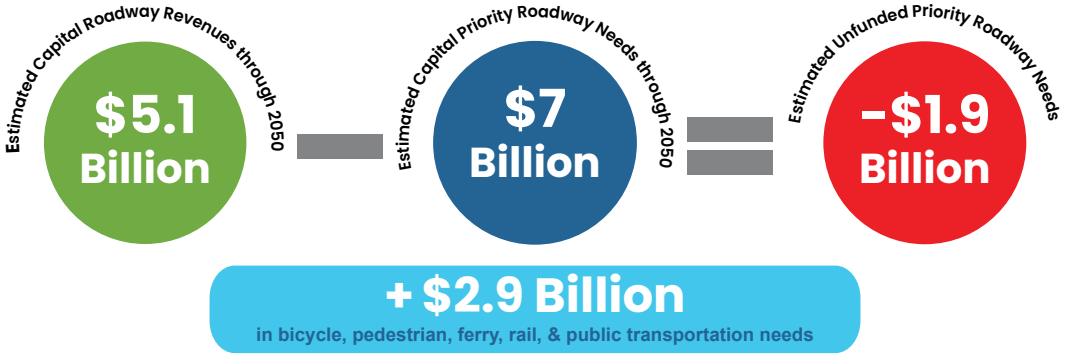
Table 4.12 - Fiscally Constrained Roadway Project Expenditure by Funding Band	
Revenue Band	Total Expenditure
2024-2028	$1,272,560,000
2029-2033	$309,991,192
2034-2040	$726,192,000
2041-2050	$866,465,356
Total	$3,175,208,548

See Chapter 6 to view the fiscally constrained roadway project list.

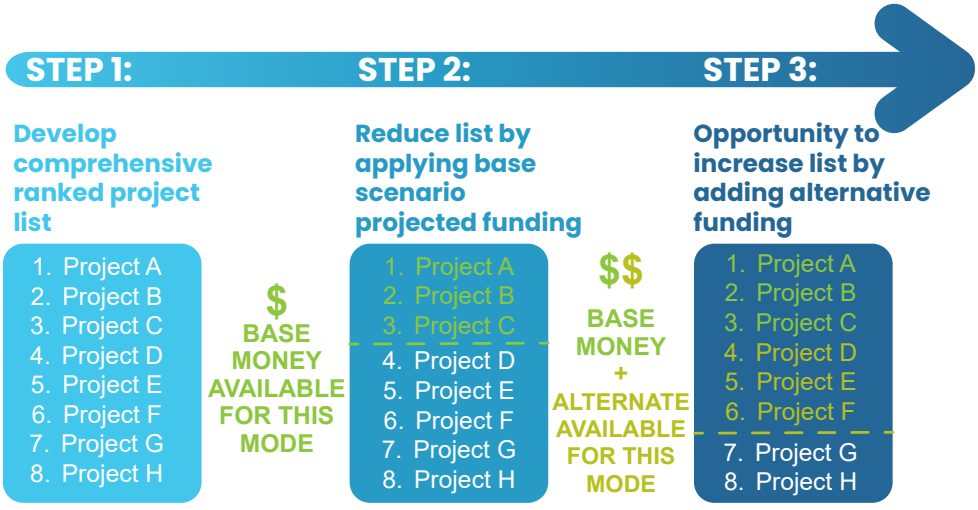
The difference between anticipated revenues and roadway needs highlights one of the greatest challenges facing the transportation system: a structural funding gap that leaves many important projects without a path to implementation. This funding gap poses a challenge to achieving the region's transportation goals, but it also presents an opportunity to explore innovative funding solutions. The following section explores alternative funding strategies that could provide additional resources to advance priority projects.

Alternative Funding Considerations

It is nearly always the case that the cost for implementing prioritized projects exceeds the funding available in the financial forecast, creating a gap between the needs for the region and available resources. In these cases, an alternative funding plan can be developed to help close that gap.



The development of the MTP requires the MPO to select and prioritize projects within the available funding as identified by the financial forecast combined with the alternative funding plan. Alternatively funded projects provide for the opportunity to advance the WMPO's long-range transportation plan further. Through the development of the MTP, the WMPO identified and considered a range of alternative funding mechanisms that could potentially supplement the transportation funding anticipated to be available through traditional sources. A wide variety of these mechanisms were identified, including those currently in place elsewhere in North Carolina and the United States. Funding sources recommended in the previous MTP, *Cape Fear Moving Forward 2045*, were also reviewed as a funding mechanism. Each alternative funding mechanism was explored in greater detail through discussions with the MTPC, TCC, and Board. Based on these discussions, a subset of preferred alternative funding mechanisms was identified and evaluated to determine potential future funding levels. The assessment of alternative funding sources provides WMPO with information for further consideration and study in the future.



The alternative funding and financing sources analyzed during the development of *Cape Fear Navigating Change 2050* were not applied to specific projects, nor were they used to increase the value of the fiscally constrained plan. Rather, they were incorporated to provide member jurisdictions with insight into the types of locally generated revenue options that may be explored independently to advance priority transportation projects. By identifying alternative funding possibilities, this plan aims to support informed financial decision-making and encourage continued local investment strategies that align with long-term regional goals. The WMPO supports the implementation of any of the alternative funding sources listed in the table and caption below, by its members.

The WMPO considered a number of alternative funding and financing sources as additional revenue generators for the plan. Funding refers to financial resources that do not require repayment, such as taxes, grants, or dedicated user fees. These funds are typically used for ongoing operations or to support specific project costs. Financing, however, involves borrowing funds through mechanisms like loans or bonds, which must be repaid with interest over time. While financing allows for larger, more immediate capital expenditures, it creates future repayment obligations. The following were further analyzed by the Board for the WMPO region:

- Quarter-Cent Local Option Sales Tax
- Quarter-Cent Local Option Sales Tax for Transit
- Vehicle Registration Fee
- Motor Vehicle License Tax
- Short Term Vehicle Rental Tax
- Transportation Bonds
- Tolling (Cape Fear Crossing and Cape Fear Memorial Bridge replacement projects)

Table 4.13, below, provides a summary of five of the seven alternative funding options further analyzed, including their total revenue estimates over the life of the plan, adjusted to 2025 values. For a breakdown of these options by county, as well as details on transportation bond and toll revenues, please refer to Tables 4.14, 4.15, and 4.16 on the following page.

Table 4.13 lists the estimated revenues from alternative revenue sources that are not currently in use. Tolling and transportation bond revenues not shown due to variable amounts.

Table 4.13 - Alternative Funding Revenue Estimates	
Quarter-Cent Local Option Sales Tax	$1,931,000,000
Quarter-Cent Local Option Sales Tax for Transit	$1,181,000,000
Vehicle Registration Fee	$67,780,000
Motor Vehicle License Tax	$12,280,000
Short Term Vehicle Rental Tax	$59,430,000
Total	$3,251,490,000

Transportation bonds and tolling were analyzed individually as their revenue estimates depend on factors that can change more than the other funding sources listed in Table 4.13. Bonds involve borrowing money upfront to build a project and then repaying it over time with interest, so the total cost and capacity depend on market conditions such as interest rates and repayment terms. Tolls, on the other hand, generate revenue directly from drivers using a facility, which means the amount collected can vary based on traffic volumes and toll rates. Given these uncertainties, their projections are shown apart from the other options. The WMPO Board continues to support considering tolling as a funding approach for the Cape Fear Crossing and Cape Fear Memorial Bridge Replacement projects, recognizing that tolls could provide a dedicated source of revenue for large transportation improvements.

The following tables further elaborate on the total revenue estimates between 2025 and 2050. The detailed revenue estimates, below, can help the WMPO member jurisdictions supplement federal and state sources, enhancing the ability of local government to address their unique needs and priorities. These local revenue streams provide municipalities with greater flexibility and control over local projects. By leveraging these funds, local authorities can invest in infrastructure projects that align more closely with community demands, such as improving public transit, expanding pedestrian and bicycle pathways, and upgrading local road networks. Local funds may also be used to lower the cost to NCDOT and potentially expedite projects funding through the MPO/ State TIP.

Table 4.14 below provides an additional breakdown of the alternative funding revenue estimates by county.

Tax/Fee	Table 4.14 - Revenue Estimates (Rounded to the nearest million)			
	Total	New Hanover	Brunswick	Pender
Quarter-Cent Local Option Sales Tax	$1,931	$1,181	$535	$215
Quarter-Cent Local Option Sales Tax for Transit	$1,181	$1,181	-	-
Vehicle Registration Fee	$68	$68	-	-
Motor Vehicle License Tax	$12	$8	$5	-
Short Term Vehicle Rental Tax	$59	$59	-	-
Total	**$3,252**	**$2,497**	**$540**	**$215**
Percentage by County	-	76.8%	16.6%	6.61%

Source: NCDOR, NCOSMB, and New Hanover County Finance.

Table 4.15 shows the potential revenue for Wilmington and Leland through Transportation Bonds.

Table 4.15 - Transportation Bond Revenue Estimates		
Potential Revenue	Wilmington	Leland
2029-2033	$27,130,985	$5,383,380
2034-2040	$37,983,379	$7,536,732
2041-2050	$54,261,970	$10,766,760
Total	**$119,376,334**	**$23,686,872**

The City of Wilmington adopted a transportation bond in 2014. Both Wilmington and the Town of Leland could leverage future bond programs.

Table 4.16 shows the potential revenue from tolling on the Cape Fear Crossing and the Cape Fear Memorial Bridge as estimated for the Prioritization 7.0 process conducted by NCDOT and the North Carolina Turnpike Authority.

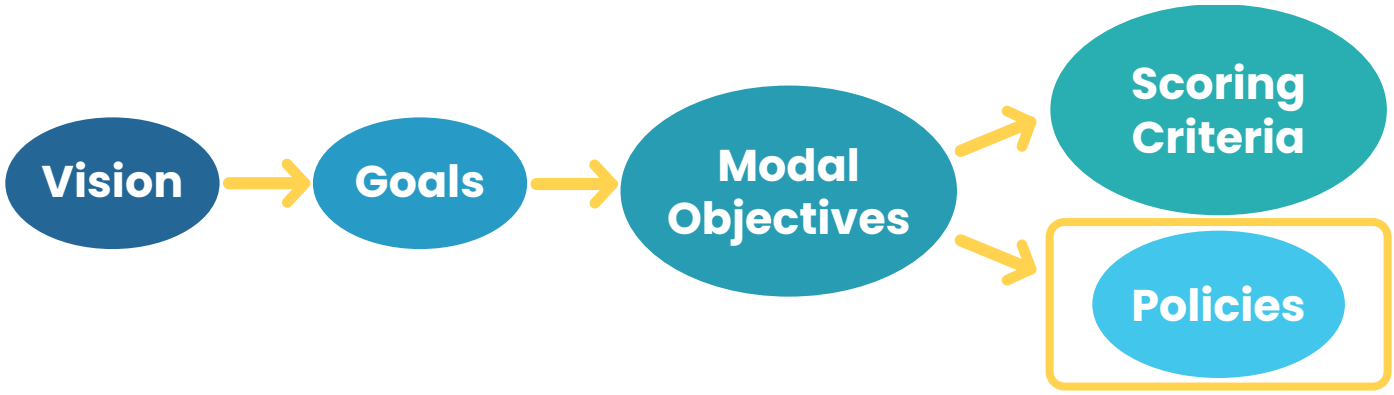
Table 4.16 - Toll Revenue Estimates	
Roadway	Revenue
Cape Fear Crossing	$275,580,000
Cape Fear Memorial Bridge	$359,000,000
Total	**$634,580,000**

Estimated toll revenues from NCDOT/NCTA Traffic and Revenue (T&R) Studies.

Policies to Guide Progress

Policies were developed for each of the transportation modes to guide progress toward achieving the plan's adopted vision, goals, and objectives. These policies were developed in collaboration with the Metropolitan Transportation Plan Committee (MTPC), along with modal experts and planning partners. This ensures the policies reflect regional priorities and are in line with stakeholder perspectives. The policies were formally adopted by the Technical Coordinating Committee (TCC) and WMPO Board for inclusion in *Cape Fear Navigating Change 2050*.

The modal policies serve as a critical component of the MTP and support the integration of federal planning factors into further project development and design. The policies are intended to guide decision-making over the life of the plan and promote comprehensive, multimodal transportation planning into the future.



See Chapter 6 for the modal policies.

Sources

- North Carolina State Transportation Improvement Program (STIP)
- ILM Enplanement Forecast
- Roadway and Bicycle and Pedestrian Capital Improvement Plans
- National Transit Database
- Wave Annual Budget
- Powell Bill
- NCDOT Prioritization 7.0
- Wave Short Range Transportation Plan
- Kimley-Horn NC Roadway Cost Estimator Tool
- North Carolina Department of Revenue (NCDOR) Sales Tax Collection Data
- North Carolina Office of State Management and Budget (NCOSMB) Registration Data
- FHWA Licensed Drivers by State
- New Hanover County Finance Department

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