Implementation

Bicycle and pedestrian facilities can be implemented through several methods:

- As part of capital projects, like roadway or utility improvements. Whenever there are
 improvements to a roadway, such as widening, adding turn lanes, or safety improvements, the
 capacity to add the recommended bicycle or pedestrian facility should be evaluated at the same
 time. This will require early coordination with NCDOT to ensure the facilities are included in the
 planning and environmental phase of the process.
- Through NCDOT, FHWA, and other grants. Project-specific grants should be pursued, especially for high priority projects. NCDOT Multimodal planning grants and FHWA RAISE grants may be pursued for project construction. In addition, the MPO can seek grant funding through NCDOT's paved trails and sidewalks feasibility study grant program to fund a feasibility study for specific projects.
- As development occurs either through actual construction or payment in lieu of construction for later construction. Policies should be implemented to set these requirements. Recommended policies are detailed in the previous sections.

Funding

North Carolina Department of Transportation (NCDOT): NCDOT offers several funding programs for bicycle-related projects. One key program is the Multimodal Planning Grant Program, which provides financial support for municipalities, counties, and planning organizations to develop comprehensive bicycle plans and multimodal plans, as well as provide updates to existing plans.

Safe Routes to School: NCDOT's IMD administers the federally funded Safe Routes to School Program using funds from SAFETEA-LU and the Bipartisan Infrastructure Law. The program aims to encourage school-aged children to walk and bike to school safely through projects that improve safety and reduce traffic and car pollution. Funding amounts range from \$50,000 to \$500,000 per project.

Surface Transportation Block Grant: WMPO receives annual Surface Transportation Block Grant Program (STBG) funds from FHWA. The STBG Direct Attributable program provides funding for bicycle and pedestrian infrastructure. The STBG Carbon Reduction program provides funding for projects reducing carbon emissions. The STBG Transportation Alternatives Set Aside program provides funding for projects that enhance non-motorized transportation, including bicycle and pedestrian facilities.

NC Parks and Recreation Trust Fund: The NC Parks and Recreation Trust Fund (PARTF) provides matching grants for parks, recreational, and public beach access projects.

Safe Streets and Roads for All: USDOT administers the Safe Streets and Roads for All grant program which funds the development of a safety action plan, as well as planning, engineering, and construction activities associated with projects identified in the safety action plan. The safety action plan should focus on solutions to improve roadway safety for all users, including pedestrians and bicyclists.

Highway Safety Improvement Program: FHWA provides a calculated percentage of Highway Safety Improvement Program funds to NCDOT each year. These funds may be used for pedestrian and bicycle facilities that are designed to improve road safety, including protected bike lanes, intersection improvements, and traffic control devices for pedestrians and bicyclists.

Carbon Reduction Program: FHWA administers the Carbon Reduction Program which provides funding for transportation projects designed to reduce carbon dioxide emissions for roadway sources. These projects may include on and off-road trail projects for pedestrian and bicyclists, as well as micro-mobility projects.

Maintenance

Maintenance of bicycle and pedestrian facilities is crucial for ensuring their safety, functionality, and longevity. Regular upkeep and proactive maintenance practices help preserve the quality of infrastructure, enhance user experience, and promote active transportation. Here are some key aspects to consider when it comes to maintaining bicycle and pedestrian facilities:

- Inspection and Assessment: Conduct routine inspections of bicycle and pedestrian facilities to identify any signs of wear, damage, or hazards. This includes assessing the condition of bike lanes, sidewalks, crosswalks, signage, lighting, benches, and other amenities.
- Repairs and Upgrades: Address any maintenance needs promptly, including repairing potholesand uneven surfaces on bike paths and sidewalks. Ensure that signage and markings are clearly visible and replace them when necessary.
- Vegetation and Landscape Maintenance: Manage vegetation and landscaping along bicycle and pedestrian routes to maintain clear visibility and prevent overgrowth that may impede users. Regularly trim trees and shrubs, clear debris, and ensure that vegetation does not obstruct sightlines or encroach on pathways.
- Lighting and Safety: Adequate lighting is essential for ensuring the safety and visibility of bicycle and pedestrian facilities, particularly during low-light conditions or at night. Regularly inspect and maintain lighting fixtures, replace burnt-out bulbs promptly, and ensure that lighting levels meet the required standards.
- Trash and Litter Control: Regularly clean and maintain bicycle and pedestrian facilities to keep them free of trash, debris, and litter. This includes emptying trash bins, sweeping pathways, and addressing any dumping or unauthorized waste disposal.

By implementing a proactive and comprehensive maintenance strategy for bicycle and pedestrian facilities, communities can ensure that these vital infrastructure elements remain in good condition, provide a positive user experience, and continue to promote active and sustainable transportation options.

Maintenance Management

Maintenance of bicycle and pedestrian facilities may be managed through several options:

• Establishing a new maintenance department specifically dedicated to bicycle and pedestrian facilities. This can ensure proper upkeep and safety of facilities. This department would be responsible for the regular inspection, repair, and improvement of bike lanes, side paths, sidewalks, and other facilities. Key considerations when setting up a new maintenance department for bicycle and pedestrian facilities include department structure and staffing,

budget and resources, maintenance procedures, facility management, and collaboration with other departments.

- Adding bicycle and pedestrian facility management to an existing department. This process will require many of the key considerations identified above, as well as continuous collaboration with the existing department. Key steps in this process may include:
 - Identify which department will be responsible for bicycle and pedestrian facility management. Considerations include facilities and fleet services, parks and recreation, and planning and community development.
 - Assess the departments current resources, such as staff and budget to determine if any existing resources can be used for facility management or if additional resources will be required.
 - Create a proposal outlining the goals and objectives of incorporating facility management into the existing department. The proposal should include outcomes, staffing needs, and project budget. Present the proposal to governing bodies as needed.
 - o Secure funding and additional resources needed for implementation of the proposal.
 - Establish policies and procedures, including maintenance guidelines and facility management.
 - Work with staff within the existing department to fully integrate bicycle and pedestrian management into their department.
- Through a contractor. By managing bicycle and facility maintenance through a contractor, you can leverage external expertise and resources while maintaining flexibility and potentially reducing costs. The contractor would be responsible for regular maintenance tasks, repairs, inspections, safety checks, and any other specific requirements. Once a contractor has been selected, performance monitoring measures, including regular inspections, progress meetings, performance reviews, and feedback from users or stakeholders, should be implemented to ensure quality work.

Checklist

The following checklist provides a list of action items for Pender County and WMPO to begin implementation of the plan. This is not a comprehensive list, but rather, provides the high-level action items that should be completed in order to ensure successful implementation of this plan.

Short-term (0-3 years)

Plan Adoption: Pender County and Wilmington Urban Area Metropolitan Planning Organization should adopt the plan. In addition, the Board of Commissioners and other appropriate bodies should adopt the Bicycle and Pedestrian Plan.

Comprehensive Transportation Plan and Metropolitan Transportation Plan Updates: WMPO should add the network recommendations to their Comprehensive Transportation Plan and their Metropolitan Transportation Plan at the next update. Pender County should add the network recommendations to their Comprehensive Transportation Plan.

Overlay Districts: Pender County should adopt bicycle and pedestrian overlay districts along network recommended corridors.

Define Facility Dimensions and Designs: Determine the appropriate dimensions for facility types and any special considerations for design, such as landscaping requirements. Add requirements to the Unified Development Ordinance.

Project Funding Plan: Develop a long-term plan for project implementation and funding for high priority projects, including grants to pursue, responsible party for grant writing, and timeline.

Medium-term (3-5 years)

Maintenance Plan: Establish a maintenance plan that would include the responsible party for bicycle and pedestrian maintenance. See the previous section for potential maintenance management structure.

Developer Requirements: Add developer requirements or fee in lieu provisions to the Pender County Unified Development Ordinance.

Long-term (5-10 years)

Plan Revisions and Updates: Re-evaluate and update the Pender County Bike/Pedestrian Plan as needed. This includes evaluating policy recommendations, development pressures, and network constraints. Establish performance indicators to measure each project's success and impact on the community.