



Bicycle Pedestrian Master Plan, City of Delray Beach

Technical Memorandum #3 Recommendations and Implementation Plan

**Prepared for:
City of Delray Beach**

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1. Introduction

The purpose of Technical Memorandum #3 (TM 3) is to provide a comprehensive documentation of recommendations and implementation plan to enhance the bicycle and pedestrian network in Delray Beach to accomplish the vision, goals and objectives of the Citywide Bicycle and Pedestrian Master Plan. In addition, the TM 3 discusses planning level cost estimates for the recommended bicycle and pedestrian network improvements, identifies funding opportunities and initiatives/programs to enhance bicycle/pedestrian safety as well as best practices for shared micromobility. Further, this memorandum summarizes an implementation strategy akin to next steps to advance projects from planning to design and construction phase.

This technical memorandum is organized as described below:

Chapter 1: Introduction – summarizes the purpose of TM #3 and its organization.

Chapter 2: Recommendations – provides a summary description of recommended bicycle and pedestrian improvements in Delray Beach based on technical analysis and public input to accomplish the community’s vision; discusses planning level construction cost estimation approach used to derive investment needs for bicycle and pedestrian improvements as well as list other initiatives/programs to encourage walking and bicycling in Delray Beach. Further, there is also brief discussion on shared micromobility best practices.

Chapter 3: Implementation Plan – includes a brief explanation of the methodology used to develop bicycle and pedestrian improvements priority bundles, identifies funding opportunities at federal, state, and local levels as well as implementation strategy to advance projects from planning phase to design and construction.

2. Recommendations

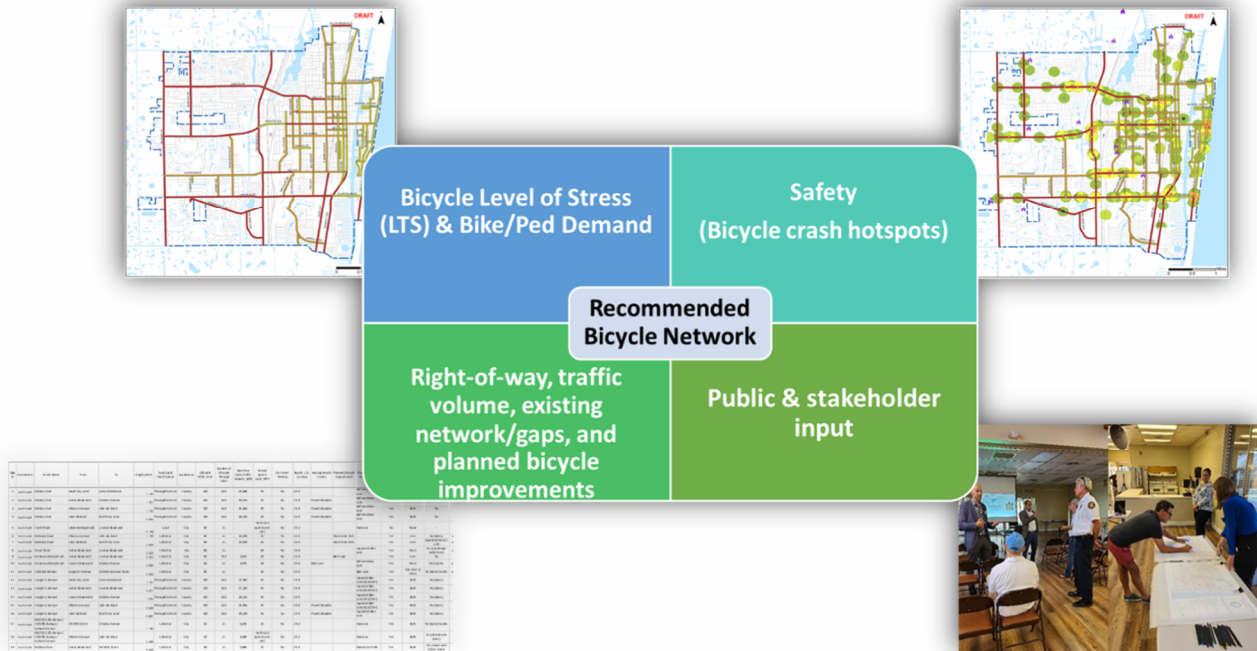
This Chapter provides a summary description of recommended bicycle and pedestrian improvements in Delray Beach based on technical analysis and public input to accomplish the community’s vision; discusses planning level construction cost estimation approach used to derive investment needs for bicycle and pedestrian improvements as well as list other initiatives/programs to encourage walking and bicycling in Delray Beach. Further, there is also brief discussion on shared micromobility best practices.

2.1 Recommended Bicycle Network

As shown in **Figure 2-1**, the following four components provided a strong foundation to identify recommended bicycle network improvements the citywide Master Plan.

- Bicycle Level of Traffic Stress (LTS) and demand analysis
- Bicycle crash analysis
- Technical data, such as right-of-way, number of thru lanes, posted speed limit as well as existing and programmed multimodal improvements
- Public and stakeholder input received through different outreach efforts.

Figure 2-1: Inputs to identify Recommended Bicycle Network Improvements



A comprehensive discussion of existing conditions and the above listed components is available in *Technical Memorandum #2: Existing Conditions and Needs Assessment, April 2024*.

Figure 2-2 depicts the following different types of bicycle facilities recommended throughout Delray Beach to create an integrated network (connected, safe, comfortable, and convenient) for people of all ages to support bicycling and other active transportation modes. These are key components City's overall mobility strategy. The unique map identifiers included in **Figure 2-2** cross reference detailed information for each roadway segment available in **Appendix-A**.

- Separated bicycle lanes: 4.0 miles (8%)
- Buffered bicycle lanes: 16.1 miles (31%)
- Bicycle lanes: 12.1 miles (23%)
- Sharrow/Neighborhood byways : 11.5 miles (22%)
- Shared use path: 8.8 miles (17%)

This recommended bicycle network would add approximately 52.5 miles of improvements (including 8.8 miles of shared use path) to the existing and programmed bicycle network in Delray Beach, which is about 200% increase. The recommended network would significantly expand the 16.4 miles of existing and about 10 miles of programmed network improvements in Delray Beach.

Approximately 55% of the total recommended bicycle network (approximately 52.5 miles) comprises some type of buffer (8% separated bicycle lanes, 31% buffered bicycle lanes 31% and 17% shared use path) from travel lanes or vehicular traffic which should enhance safety.

It is recommended a Roadway Reconfiguration Study along 1.9-mile stretch of Atlantic Avenue from SW 12th Avenue to Florida East Coast (FEC) rail corridor be conducted. This Study would provide a comprehensive evaluation of multimodal needs along Atlantic Avenue and propose appropriate solutions. Further, there is an opportunity to accommodate Greenway mobility improvements along E-4 Canal right-of-way. This 4.4-mile E-4 Canal Greenway would provide connectivity with the Boca Rio Trail to the south and possibility of future extension into Boynton Beach to the north.

Bicycle Pedestrian Master Plan

City of Delray Beach



Recommended Bicycle Network Improvements

Legend

Recommended Bicycle Improvement

- Bike Lane
- Buffered Bike Lane
- Roadway Reconfiguration Study
- Separated Bike Lane
- Shared Use Path
- Sharrows
- E-4 Canal Greenway
- City Boundary
- Streets

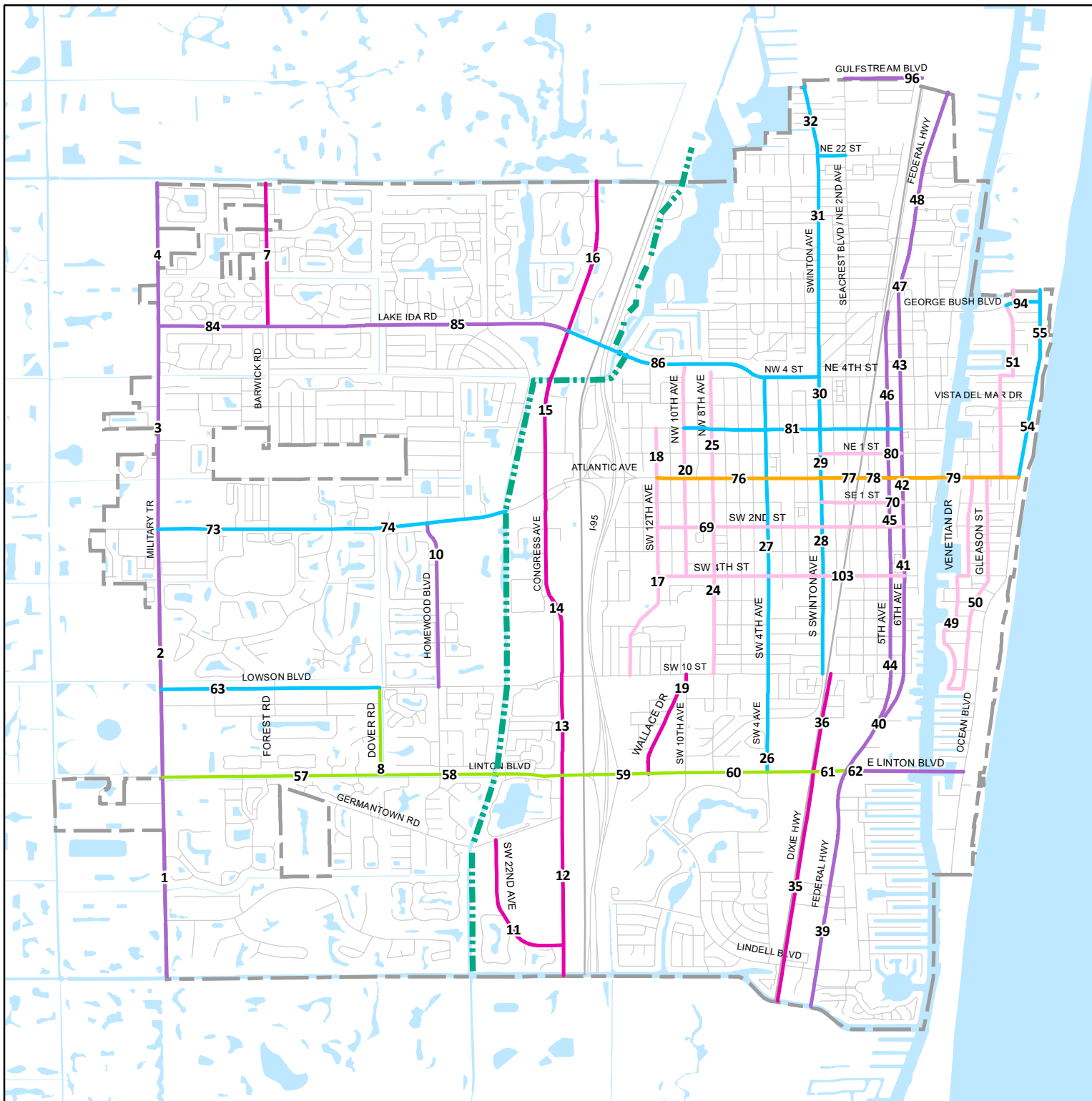


Figure 2-2

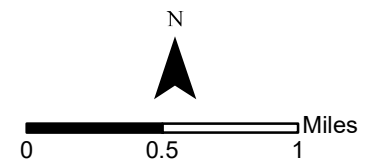


Figure 2-3 illustrates a citywide bicycle network comprised of existing, programmed, and recommended bicycle improvements or project. Out of the total 78.9 miles of bicycle network, approximately 1/4th or 25% of the total bicycle network will have buffered or separated bicycle lanes, which should enhance safety since these facilities will have separation from vehicular traffic. In addition, 1/5th or 21% of the network will be shared use path. In aggregate, approximately 47% of the total network will have low level of traffic stress (LTS). This connected network would allow users to go from point A to B throughout the City while providing regional connectivity to existing Boca Rio Trail through E-4 Canal Greenway as well as East Coast Greenway. **Appendix-A** includes detailed information for each roadway segment, which is cross referenced with unique map identifiers shown in **Figure 2-3**.

In addition to the recommended bicycle network improvements, the City has a stated goal to improve alleyways to the extent possible with permeable pavement and decorative lighting, which would provide enhanced connectivity. Furthermore, the Master Plan recommends E-4 Canal Greenway improvement along the Lake Worth Drainage District right-of-way.

Bicycle Pedestrian Master Plan

City of Delray Beach



Existing, Programmed, and Recommended Bicycle Improvements

Legend

- Existing Bicycle Network
- - - Programmed Improvements
- Recommended Bicycle Improvement
- City Boundary
- Streets

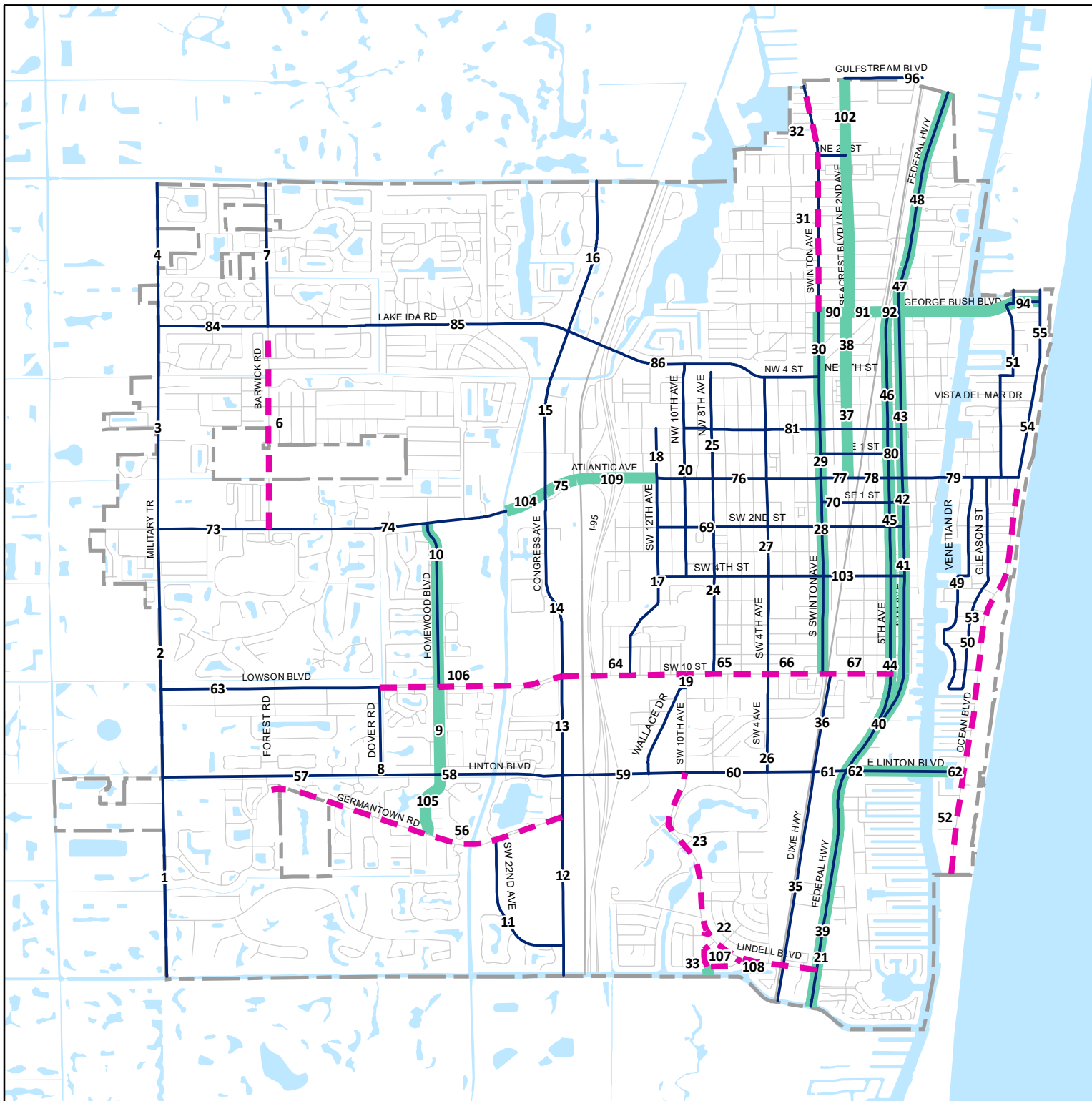
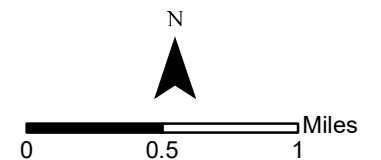


Figure 2-3

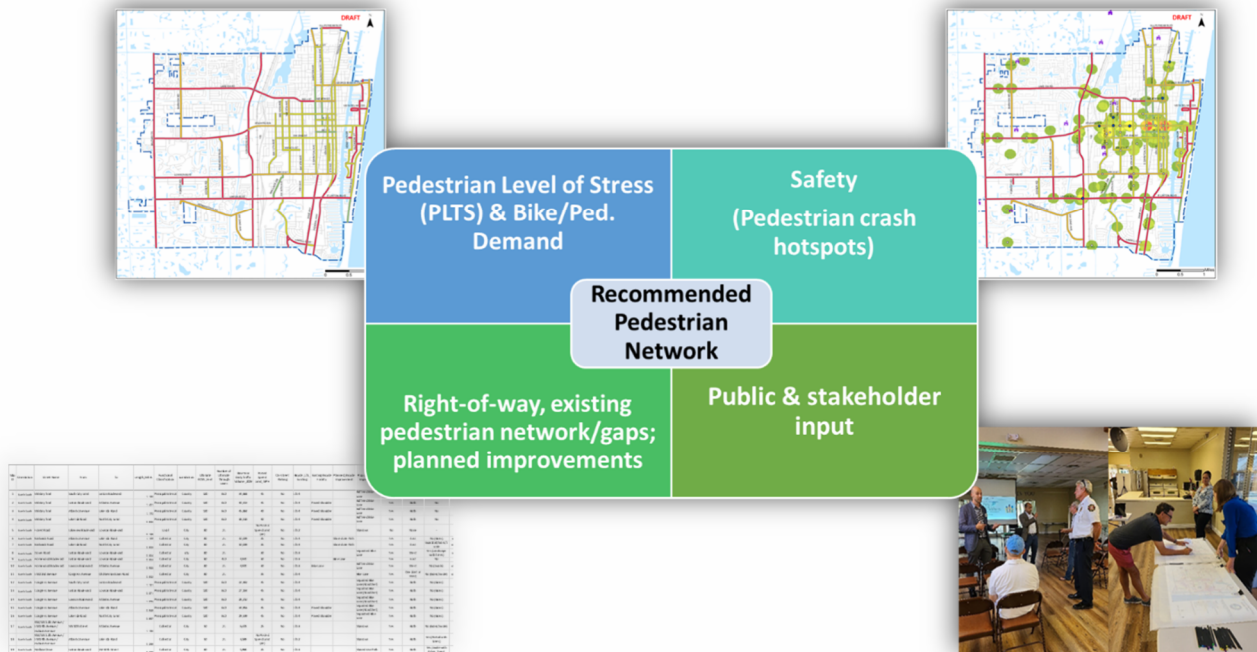


2.2 Recommended Pedestrian Network

As illustrated in **Figure 2-4**, the following four components provided a strong basis to identify recommended pedestrian network improvements to the citywide Master Plan.

- Pedestrian Level of Traffic Stress (PLTS) and demand analysis
- Pedestrian crash analysis
- Technical data, such as right-of-way, number of thru lanes, posted speed limit as well as existing and programmed multimodal improvements
- Public and stakeholder input received through different outreach efforts

Figure 2-4: Inputs to identify Recommended Pedestrian Network Improvements



A comprehensive discussion of existing conditions and the above listed components is available in *Technical Memorandum #2: Existing Conditions and Needs Assessment, April 2024*. As shown in **Figure 2-5**, the recommended pedestrian network comprises approximately 18.9 miles of different types of sidewalks improvements and 7.2 miles of buffers listed below.

- Add Buffer : 7.2 miles
- Fill gaps: 6.5 miles
- Sidewalk (one side): 6.6 miles
- Sidewalk (both sides): 5.8 miles
- *Shared use path: 8.2 miles

These pedestrian network improvements are geographically located throughout the City. These improvements further enhanced the robust existing 59.8 mile-network of sidewalks in the City. The unique map identifiers included in **Figure 2-5** cross reference detailed information for each roadway segment available in **Appendix-B**.

Bicycle Pedestrian Master Plan

City of Delray Beach



Recommended Pedestrian Network Improvements

Legend

- Recommended Pedestrian Improvement**
- Add Buffer
 - Fill Gaps
 - Shared Use Path + Sidewalk
 - Shared Use Path
 - Sidewalk (one side)
 - Sidewalk (both sides)
 - E-4 Canal Greenway
 - City Boundary
 - Streets

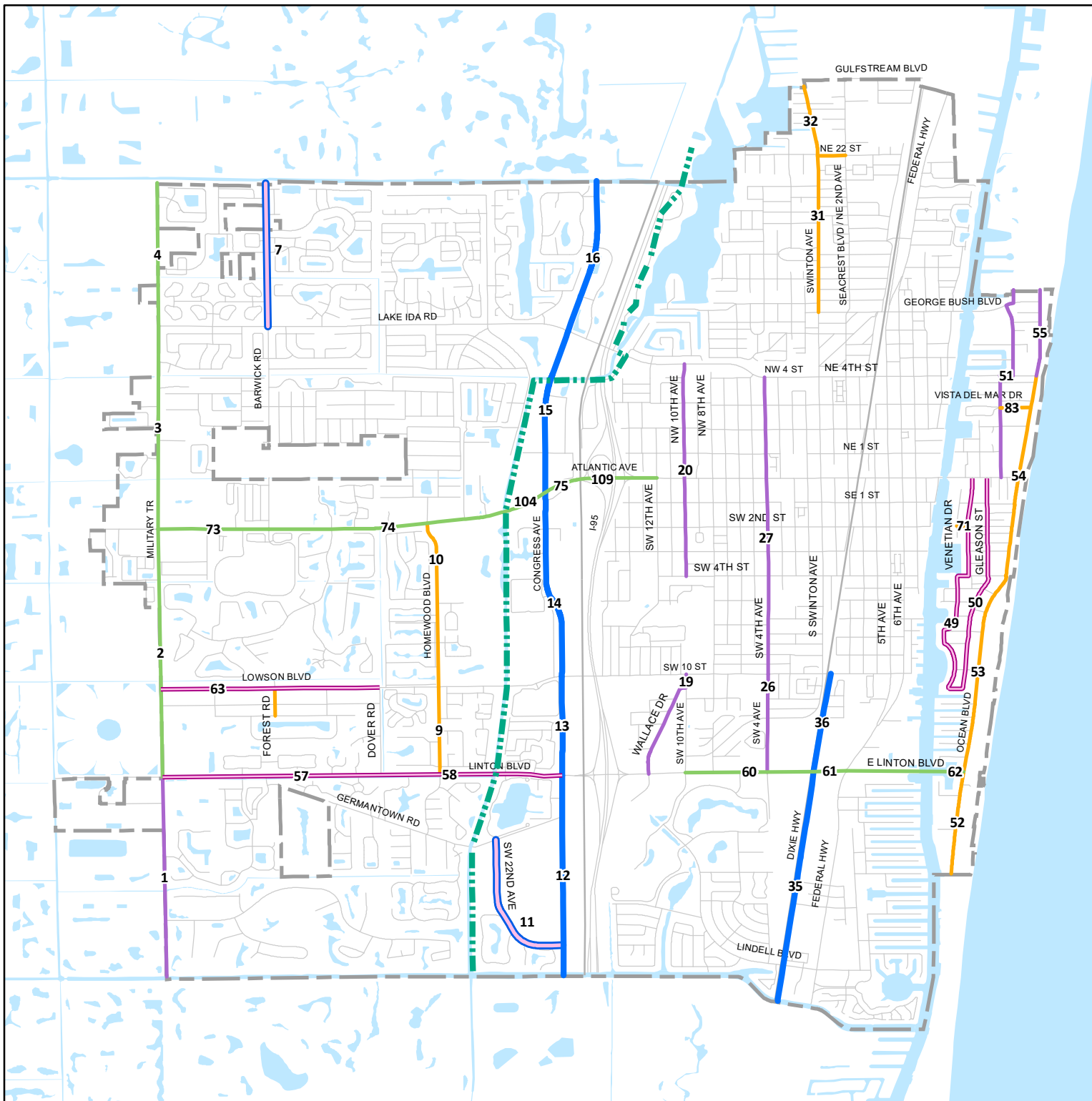
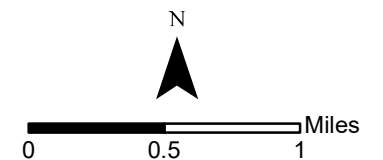


Figure 2-5



2.3 Recommended Bicycle/Pedestrian Safety Improvements

Bicycle and pedestrian improvements identified through this Master Plan are shown in **Figures 2-6** and **2-7**. The improvements are based on GIS based crash hotspot analysis as well as public and stakeholder input. These following safety projects are primarily at intersections along state and county owned roadway. The exceptions are the locations for pedestrian safety improvements at Swinton Avenue and Eastview Avenue.

Bicycle Safety Projects

- Linton Boulevard and SR-A1A
- Atlantic Avenue and Congress Avenue
- Atlantic Avenue and SR-A1A
- Lake Ida Road and Congress Avenue

Pedestrian Safety Projects

- Linton Boulevard and Congress Avenue
- Atlantic Avenue and Swinton Avenue
- Atlantic Avenue and Federal Highway/6th Avenue
- Eastview Avenue and Federal Highway

Since multiple entities have ownership for specific roadway segments comprising the intersection, it is imperative that the City coordinates with the County and FDOT to further analyze safety issues, identify countermeasures, program, and implement projects. All of these agencies have a strong commitment to meet safety targets. While all of the locations identified above are targeted for safety improvements and integrating safety is paramount in all the bicycle and pedestrian projects.

Bicycle Pedestrian Master Plan

City of Delray Beach



Recommended Bicycle Network & Safety Projects

Legend

Safety Project Type

- Bicycle Safety Projects

Recommended Bicycle Improvement

- Bike Lane
- Buffered Bike Lane
- Roadway Reconfiguration Study
- Separated Bike Lane
- Shared Use Path
- Sharrows
- - - E-4 Canal Greenway
- City Boundary
- Streets

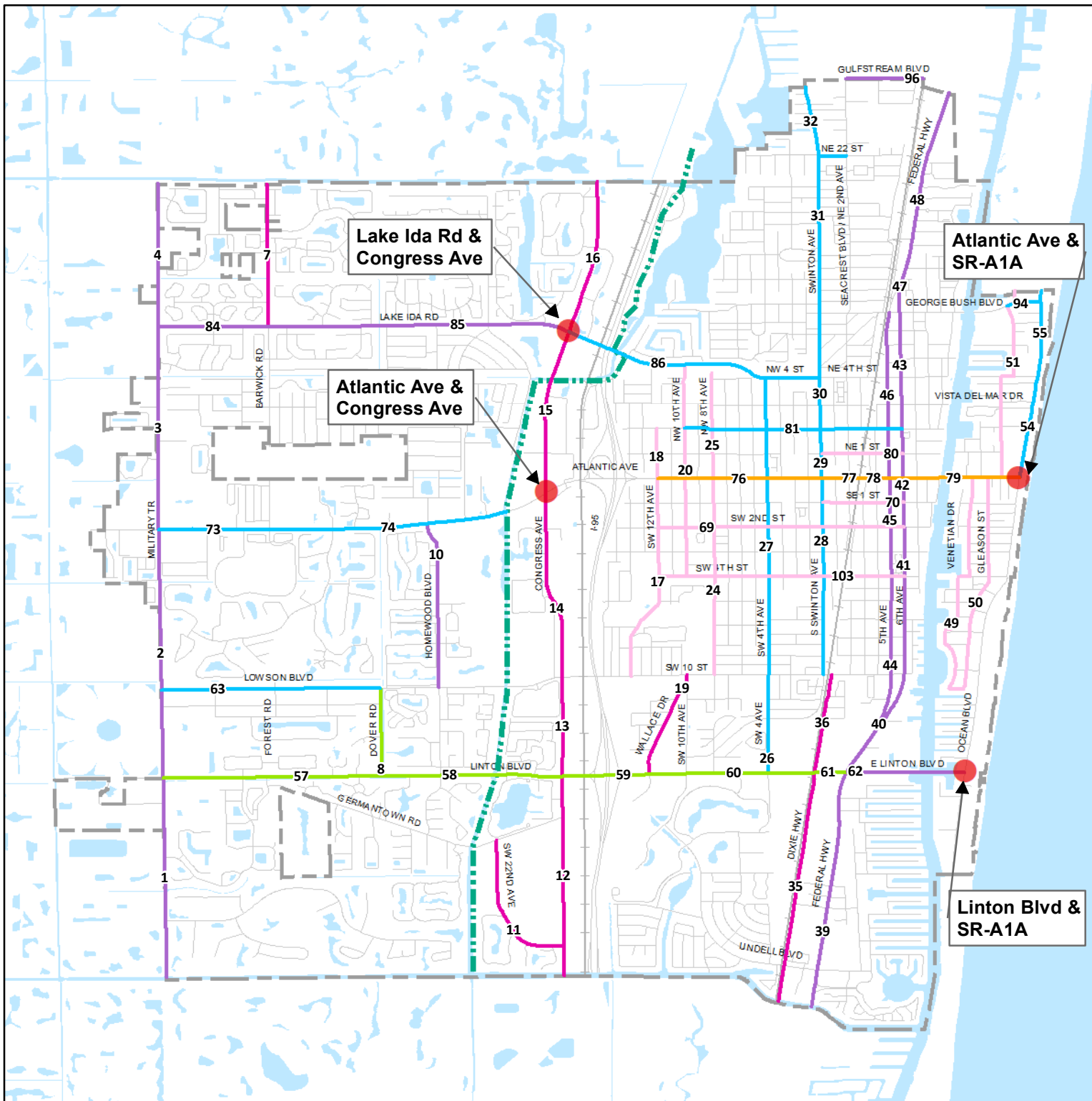
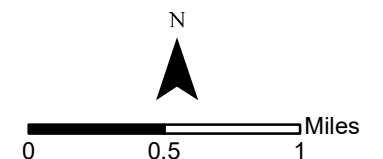


Figure 2-6



Bicycle Pedestrian Master Plan

City of Delray Beach



Recommended Sidewalk Network & Safety Projects

Legend

Safety Project Type

- Pedestrian Safety Projects

Recommended Pedestrian Improvement

- Add Buffer
- Fill Gaps
- Shared Use Path + Sidewalk
- Shared Use Path
- Sidewalk (one side)
- Sidewalk (both sides)
- E-4 Canal Greenway
- City Boundary
- Streets

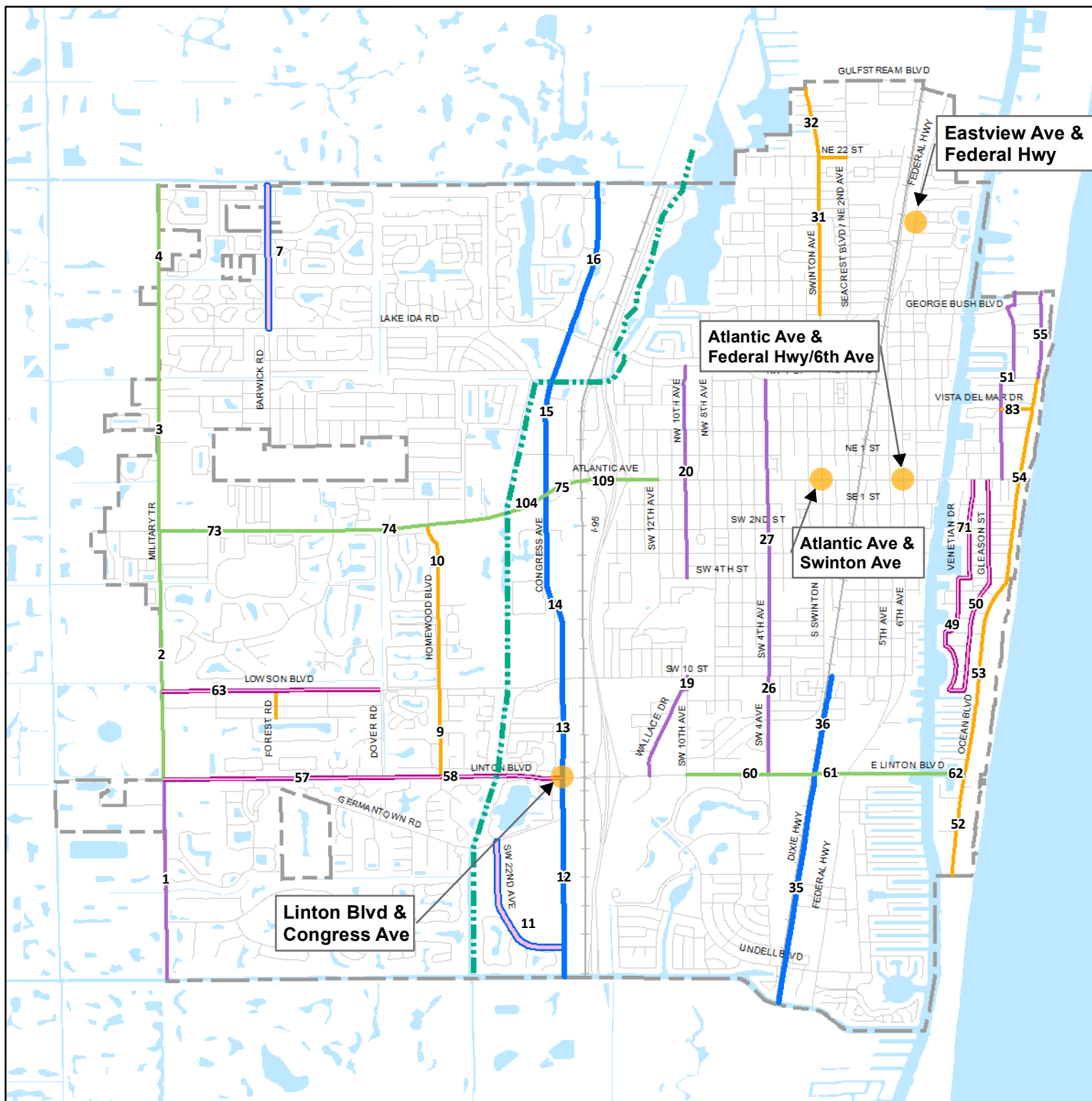
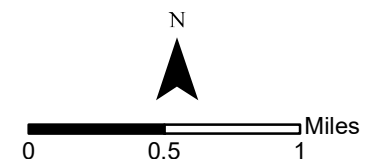


Figure 2-7



2.4 Planning Level Construction Cost Estimates

Planning level construction cost estimates were prepared in year 2022 dollars based on FDOT's generic Cost Per Mile models used for Long Range Estimating (LRE). Two key assumptions that provided the basis for selecting these Cost Per Mile models include:

- Bicycle/pedestrian improvements would be constructed as part of Resurfacing, Restoration and Rehabilitation (RRR) projects, and
- Recommended improvements could be accommodated within the existing right-of-way.

Appropriate adjustments were made to the Cost Per Mile model to incorporate unique project components, such as separated bicycle lanes and buffered bicycle lanes. If an appropriate Cost Per Mile model was not available from FDOT's database, costs were borrowed from cost data available in public domain. For sidewalk improvements, per mile costs were developed based on FDOT's Pay Item Cost History for Area 12 (includes Palm Beach County). The planning level cost estimates accounted for mobilization, Maintenance of Traffic (MOT) and soft costs, such as Preliminary Engineering (PE), Final Design (FD), and Construction Engineering and Inspection (CEI) as well as contingency factors for project unknowns. **Appendix-C** and **Appendix-D** provide planning level order-of-magnitude project cost for each bicycle and pedestrian improvement project, respectively. The total construction cost of all the recommended bicycle network improvements is estimated at approximate \$103.1M (in year 2022 dollars) and approximately \$15.5M (in year 2022 dollars) for pedestrian network improvements.

2.5 Other Recommended Initiatives and Programs

While this Master Plan includes a comprehensive list of bicycle/pedestrian projects throughout Delray Beach, it recognizes that there are several other non-infrastructure related components which are vital for the City to fully realize its vision. Based on input received from key stakeholders, it is recommended for the City continue to implement its current programs and policies that encourage bicycling and walking in the community, and identifies the following initiatives and/or projects. Walking tours, such as Art Walk and Mural Walk.

- Bicycle tours focused on historic preservation and mural tours
- Landscaping/tree canopy to mitigate heat island and hot weather
- Lighting to enhance safety
- Comprehensive wayfinding and signage
- Bicycle parking
 - Outside downtown
 - Indoor parking at schools and mixed-use developments
- Continue Delray Beach's bicycle and safety initiatives and programs
 - High Visibility Pedestrian and Bicycle Safety Enforcement campaign
 - Vision Zero
 - Traffic calming

2.6 Shared Micromobility Best Practices

The National Association of City Transportation Officials (NACTO) has developed best practice recommendations for regulating shared micromobility services. Shared micromobility services may include small fleets of e-scooters, e-bikes and bikes for point-to-point trips. NACTO's *Guidelines for Regulating Shared Micromobility, Version 2 (September 2019)* can be referenced and used for guidance on regulating public-use micromobility services. Best practices that may be relevant to Delray Beach's micromobility network are outlined in the following text.

2.6.1 Regulations and Enforcement

Regulations for the use of micromobility vehicles are recommended to be implemented with the introduction of new services in order to protect the public health, safety and welfare while utilizing the public right-of-way. Local laws should align with state regulations for micromobility, such as F.S. 316.2068 and 316.2128. All vehicles must comply with safety standards established by the Consumer Product Safety Commission and all other federal, state, and city safety standards. It may also be worthwhile to consult and discuss regulations and protocols with neighboring cities for vehicles traveling across municipal boundaries.

Consider the use of procurement processes, such as competitive bidding and requests for proposals versus time-limited permits or pilot programs to explore different options for services. Permits allow cities to implement services and regulations in a faster timeframe and can be revoked for non-compliance of permit terms. Short term pilot programs allow for demonstrations and insight on the operational aspects of proposed services and can be followed with an assessment period to analyze performance metrics.

Best practice recommendations include:

- Operation of micromobility services only within public right-of-way with legal permission from the City.
- The City should reserve the right to terminate, suspend, or modify permits at any time, limit the number of companies operating and number of vehicles deployed, and prohibit specific companies from operating based on conduct. Cities should allow operators to have a means to appeal permit denials, modifications, or suspensions.
- Limiting the duration of licenses and permits to a fixed time period and require applications for renewal. Permit terms may be updated over time.
- Require operators to provide written notice, at least 14 days prior to ceasing operations, if they are no longer willing or able to provide services. Additionally, the City may require operators to hold in escrow sufficient funds to cover the cost of removing equipment from the public right-of-way if the company ceases operations.
- Reimbursement to the city for any costs incurred for any permit violations, including the repair or maintenance of public property.

- Require operators to indemnify the City and hold appropriate insurance, and shall remain in good standing with payment of fees, fines, bonds, and data reporting.

2.6.2 Scope and Operations Oversight

The City should consider the implementation of regulations for the fleet of vehicles and operations in order to maintain the safety of the public right-of way. Best management practices for the operations and maintenance of fleets include the following:

- The City should regulate the maximum and minimum number of vehicles available and shall reserve the right to increase and decrease the total number of vehicles permitted per operator. The number of vehicles and designated service area for each operator shall be approved in writing by the City prior to implementing any changes.
- The City should set a reasonable time period for the removal of inoperable, damaged, or unsafe vehicles from the public right-of-way. Vehicles shall be removed that interfere with, impede, or obstruct clear passage or accessibility within the right-of-way, or those that are irretrievable by the general public. Operators should demonstrate that they can remotely lock vehicles that are reported or believed to be inoperable until the vehicles are removed, repaired, and placed back into public service.
- The City should require operators to develop emergency management plans in the case of severe weather or emergencies, and should be filed with the City's emergency department.
- Operators should develop deployment/parking operations plans for special events and routine street maintenance.
- The City should require operators to monitor distribution of vehicles according to established parameters to maintain access to vehicles and limit overcrowding on sidewalks. Operators should rebalance vehicles within the permitted service area.
- Operators should have a service plan outlining how they will deploy and maintain vehicles. Operators shall develop and share their operations plans, which should include detailed information on equipment maintenance and inspection and repair schedules. Battery safety practices shall also be implemented.
- Operators should immediately inform the City of any incidents with e-scooters in public or private space, including but not limited to: crashes, structural integrity issues, fires, tampering, damaged/leaking batteries, and electrical/charging issues.
- The maximum motor assist speed for e-scooters should be no greater than 15 mph, and 20 mph for Class 1 e-bikes. The City should reserve the right to require that operators restrict vehicle speeds to lower than 15 mph, either in specific areas or as a general rule for operations. A unique identifier number should be prominently displayed on both sides of each vehicle. Each vehicle should be equipped with on-board GPS, capable of providing real-time location data. All

vehicles should have equipment meeting all local and state specifications, including but not limited to brakes, reflectors and lighting as set forth in relevant state codes.

- Customer service shall be provided to respond to customer concerns and troubleshooting. Staffing shall be provided for real-time customer support in multiple languages specified by the City.
- Operators shall ensure shared micromobility services are available to people with lower incomes by offering income-based discounted payment plans that waive any applicable service deposits and fees and shall provide advance notification of price increases.
- Operators shall provide trip data to the City to determine permit compliance and evaluate system performance and impact, as well as inform future planning and regulatory actions.

2.6.3 Public Engagement

Cities are encouraged to partner with operators in public engagement activities to introduce, promote, and expand shared micromobility options. New mobility systems will greatly benefit from programming that increases awareness and understanding in order to increase ridership and meet mobility needs. Examples of events and outreach best practices recommendations include:

- Ongoing implementation of outreach and engagement plans by operators and the City for ongoing communications with the public and how to use the product.
- Staffed education efforts at fairs, festivals, and neighborhood meetings.
- Pop-up safety demonstrations and learn-to-ride classes.
- Communications to public in all languages required by the City.

2.6.4 Infrastructure

The implementation of the suggested improvements of the Bicycle Pedestrian Master Plan will play an essential role in the success of any future micromobility transportation option. Bike lane networks that protect users should be implemented in order to encourage riders and provide safety. Additionally, best management practices for infrastructure to support micromobility services include:

- Designate appropriate areas for customers to leave vehicles to reduce encroachment in the right-of-way. The use of “corrals” or designated parking zones in high-volume areas are encouraged.
- Development of a parking management plan by operators that includes geofencing capabilities, communication of appropriate parking methods, detection of improperly parked vehicles, and staff rebalancing services.
- Development of a legal and operational mechanism to direct micromobility permit fees to city infrastructure improvements projects or maintenance.

3. Implementation Plan

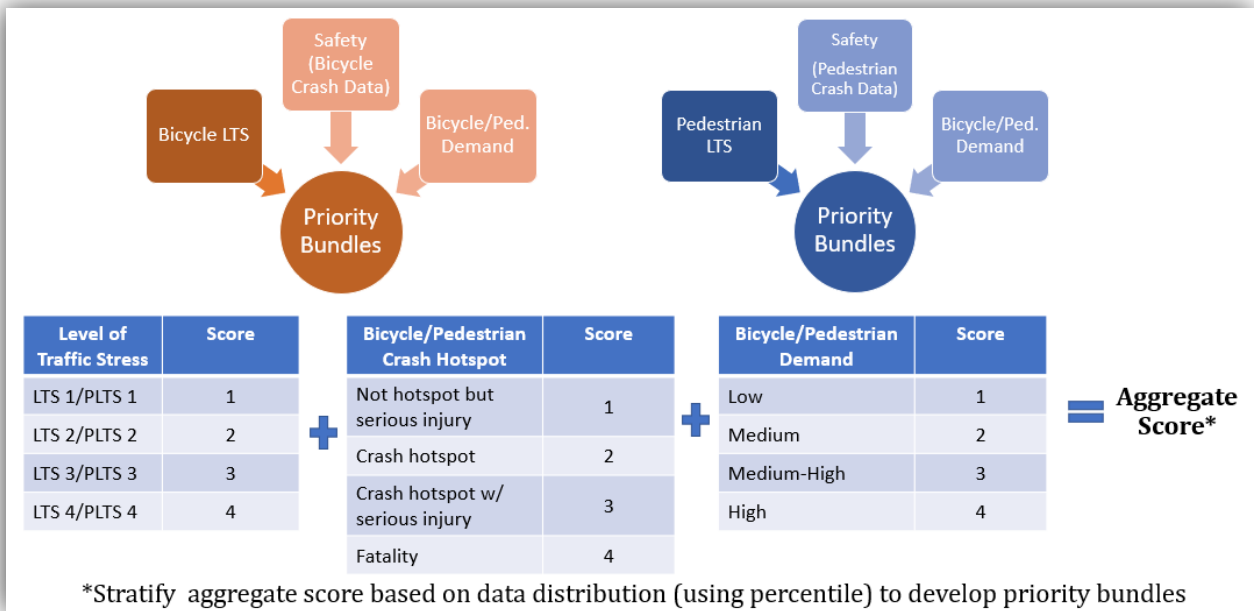
This chapter provides a brief explanation of the methodology used to develop bicycle and pedestrian improvements priority bundles, identifies funding opportunities at federal, state, and local levels as well as implementation strategy to advance projects from planning phase to design and construction.

3.1 Priority Bundles

3.1.1 Priority Bundles Methodology

Given the number of bicycle and pedestrian network improvements identified through this Master Plan, which requires multimillion dollars of investment, the City developed a data-driven process to prioritize projects for implementation. This data-driven process to develop priority bundles or tiers is illustrated in **Figure 3-1** and described below.

Figure 3-1: Priority Bundles Methodology



The methodology used to develop priority bundles includes the following three components:

- Bicycle Level of Traffic Stress (LTS) and Pedestrian Level of Traffic Stress (PLTS)
- Safety – bicycle crash analysis and pedestrian crash analysis
- Bicycle/pedestrian demand analysis

Scores ranging from one (1) to four (4) were assigned corresponding to the components listed above for each roadway segment (or bicycle and pedestrian network improvement). In general, if a roadway segment received a low score, it indicated better performance

whereas a high score indicated weak performance. Further, weak performance and corresponding high score reflected higher priority or need for improvements.

For bicycle and pedestrian level of traffic stress, the following scores were assigned wherein a lower level of traffic stress indicated better performance and therefore received a lower score.

- LTS 1/PLTS 1 – 1
- LTS 2/PLTS 2 – 2
- LTS 3/PLTS 3 – 3
- LTS 4/PLTS 4 – 4

Safety related scores were assigned based on bicycle and pedestrian crash hotspot analysis in conjunction with crash severity (serious injury or fatality). Roadway segments received scores between 1 and 4 as shown below.

- Roadway segment that is not along a crash hotspot but has serious injury crash(es) – 1
- Roadway segment with crash hotspot(s) – 2
- Roadway segment with crash hotspot(s) and serious injury crash(es) – 3
- Roadway segment with fatal crash(es) – 4

Bicycle and pedestrian demand analysis scores were assigned to roadway segments based on intensity of demand location or proximity of the street as indicated below.

- Roadway segment in geographic areas with *low* bicycle/pedestrian demand – 1
- Roadway segment in geographic areas with *medium* bicycle/pedestrian demand – 2
- Roadway segment in geographic areas with *medium-high* bicycle/pedestrian demand – 3
- Roadway segment in geographic areas with *high* bicycle/pedestrian demand – 4

The scores for all the three components were aggregated to develop a composite score for each roadway segment (or bicycle and pedestrian network improvement). These composite scores ranged from a low of three (3) to a high of 12. Once the composite scores were assigned, roadway segments (or bicycle and pedestrian network improvements) were stratified into four (4) tiers or priority bundles based on this composite score data distribution and using percentile break points as noted below.

- Tier 1 – less than 25 percentile
- Tier 2 – 25 to 50 percentile
- Tier 3 – 51 to 75 percentile
- Tier 4 – more than 75 percentile

Bicycle and pedestrian improvements included in the Tier 1 priority bundle have the highest priority followed by those in Tiers 2, 3, and 4. **Appendix-A** and **Appendix-B** includes scores for various components, composite scores and priority bundle or tiers corresponding to all the recommended bicycle and pedestrian network improvements. While the priority bundles methodology and resulting project prioritization output is based

on the data-driven analysis, it allows the City to choose projects in an opportunistic and strategic manner to advance them from planning to design and construction phase. For instance, if state and/or federal funds becomes available through discretionary grants or other sources for given roadway segment for safety improvements or routine maintenance and so on, the City could incorporate bicycle and pedestrian improvements as part of this project for implementation for facilities within a priority bundle or consolidate improvements across priority bundles for project continuity or other synergies.

3.1.2 Bicycle Network Improvement Priority Bundles

Figure 3-2 illustrates bicycle network improvement priority bundles or tiers. **Appendix-A** includes scores of three individual components, composite scores and priority bundle or tier for each recommended bicycle network improvement, which is cross referenced with unique map identifiers shown in **Figure 3-2**. Below is a summary of various types of recommended bicycle network improvements stratified by four priority bundles or tiers.

- Tier 1 (20.5 miles)
 - Shared use path: 3.4 miles
 - Separated bicycle lanes: 3.5 miles
 - Buffered bicycle lanes: 6.8 miles
 - Bicycle lanes: 5.2 miles
 - Sharrow/Nbhd. Byways: 1.6 miles
 - Roadway Reconfiguration Study: 1.0 mile
- Tier 2 (15.5 miles)
 - Shared use path: 4.5 miles
 - Buffered bicycle lanes: 5.7 miles
 - Bicycle lanes: 1.3 miles
 - Sharrows/Nbhd. Byways: 4.7 miles
 - Roadway Reconfiguration Study: 0.2 mile
- Tier 3 (8.8 miles)
 - Shared use path: 0.7 miles
 - Buffered bicycle lanes: 2.9 miles
 - Bicycle lanes: 3.6 miles
 - Sharrow/Nbhd. Byways: 1.4 miles
 - Roadway Reconfiguration Study: 0.7 mile
- Tier 4 (7.8 miles)
 - Separated bicycle lanes: 0.5 miles
 - Buffered bicycle lanes: 0.8 mile
 - Bicycle lanes: 2.7 miles
 - Sharrow/Nbhd. Byways: 3.8miles

While Roadway Reconfiguration Study along Atlantic Avenue spans multiple tiers, this project requires a comprehensive analysis and evaluation of multimodal improvement, which would be conducted at the same time as one contiguous corridor project. In should be noted that the E-4 Canal Greenway improvement is identified as a top priority project based on stakeholder and public input.

Bicycle Pedestrian Master Plan

City of Delray Beach



Bicycle Network Improvement Priority Bundles

Legend

Priority Tier (based on percentile)

- Tier 1
- Tier 2
- Tier 3
- Tier 4
- - - E-4 Canal Greenway (Tier 1)
- City Boundary
- Streets

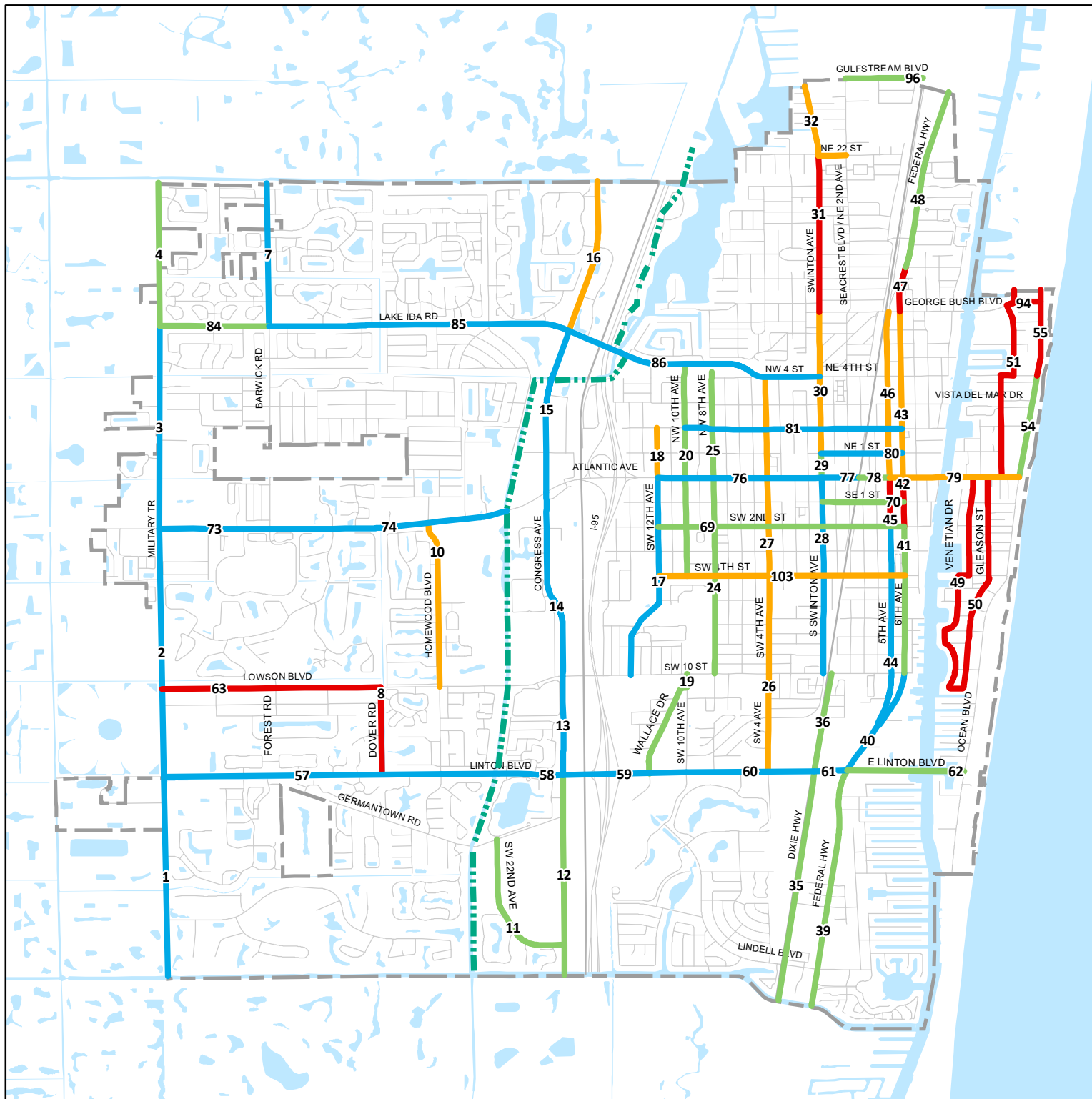
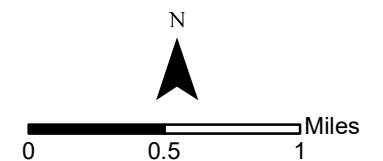


Figure 3-2



Approximately 2/3rd (or 36 miles) of the total recommended bicycle network improvements (approximately 52.5 miles) are prioritized in Tiers 1 and 2, while nearly 1/3rd (or 16.5 miles) of these improvements are in Tiers 2 and 3. Furthermore, a majority of the separated bicycle lanes, buffered bicycle lanes, and shared use paths which provide separation from vehicular traffic, and thereby create a safer environment for bicyclist, have higher priority relative to bicycle lanes and shared lane markings or sharrow.

Table 3-1 shows planning level order-of-magnitude construction cost estimates for recommended bicycle improvements for the four tiers or priority bundles at approximately \$103.1M in year 2022 dollars.

Table 3-1: Recommended Bicycle Network Investment Needs

Priority Bundle	Recommended Bicycle Improvements Construction Cost* (in Year 2022 dollars)
Tier 1 (20.5 miles)	\$55,246,000
Tier 2 (15.5 miles)	\$25,787,000
Tier 3 (8.8 miles)	\$11,440,000
Tier 4 (7.8 miles)	\$10,595,000
*Total for all Tiers (~52.5 miles)	\$103,068,000

**Total construction cost and mileage for various Tiers is slightly different due to rounding.*

From construction cost viewpoint, Tier 1 improvements require approximately 54% to the total investment of \$103.1M, followed by Tier 2 improvements at 25%, Tier 3 improvements at 11% and Tier 4 improvements at 10%.

3.1.3 Pedestrian Network Improvement Priority Bundles

Figure 3-3 illustrates pedestrian network improvement priority bundles or tier. **Appendix-B** includes scores of three individual components, composite scores and priority bundle or tier for each recommended pedestrian network improvement, which is cross referenced with unique map identifiers shown in **Figure 3-3**.

Bicycle Pedestrian Master Plan

City of Delray Beach



Pedestrian Network Improvement Priority Bundles

Legend

Priority Tier (based on percentile)

- Tier 1
- Tier 2
- Tier 3
- Tier 4
- - - E-4 Canal Greenway (Tier 1)
- City Boundary
- Streets

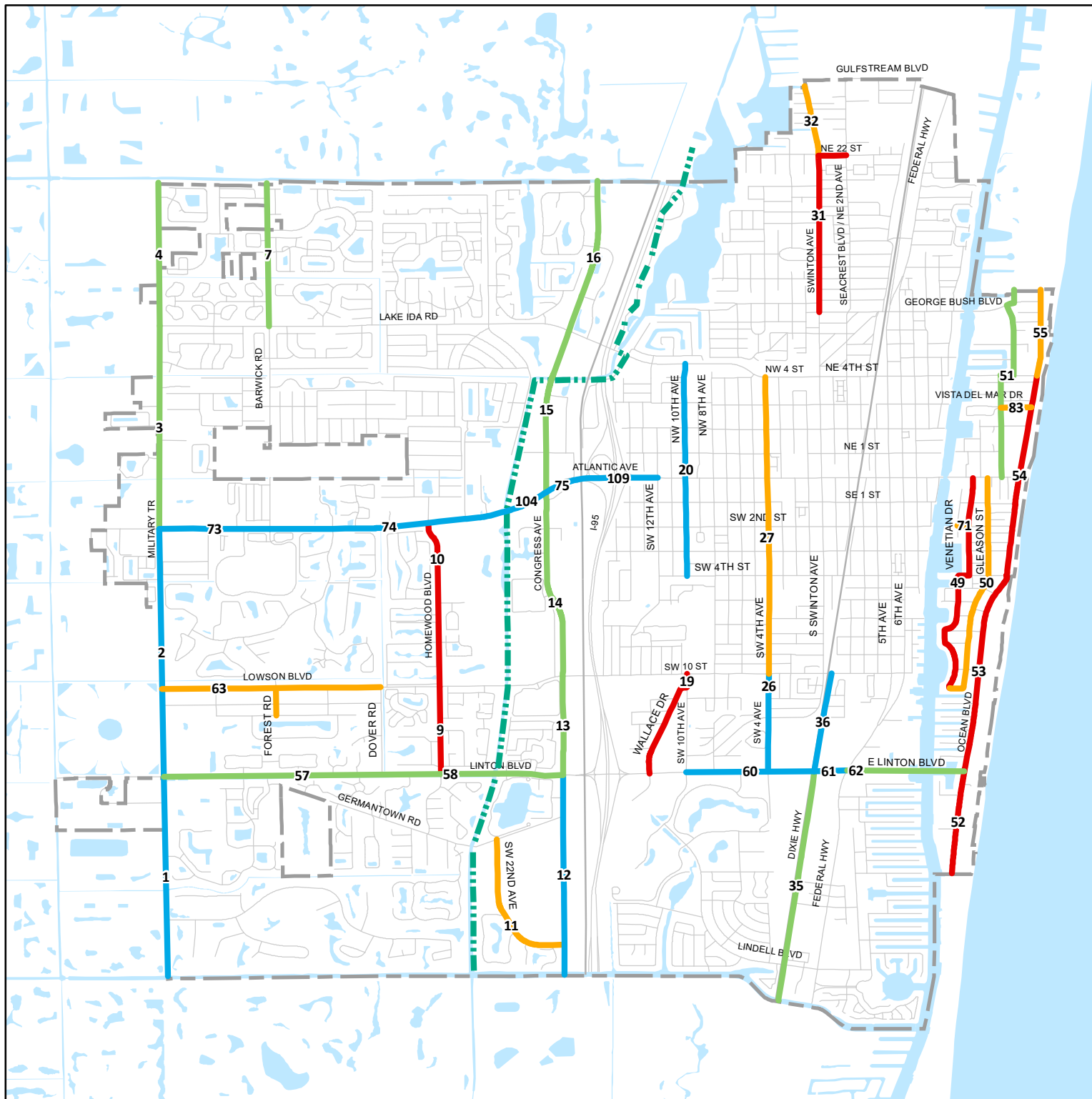
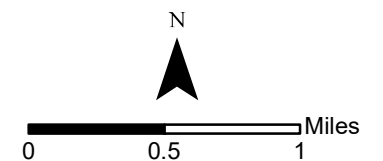


Figure 3-3



Below is a summary of various types of recommended pedestrian network improvements stratified by four priority bundles or tiers.

- Tier 1 (2.9 miles)
 - Add Buffer : 4.6 miles
 - Fill gaps: 2.9 miles
- Tier 2 (3.3 miles)
 - Add Buffer : 2.6 miles
 - Fill gaps: 1.2 miles
 - Sidewalk (both sides): 2.1 miles
- Tier 3(5.4 miles)
 - Fill gaps: 1.7 miles
 - Sidewalk (one side): 1.3 miles
 - Sidewalk (both sides): 2.4 miles
- Tier 4 (7.2 miles)
 - Fill gaps: 0.6 miles
 - Sidewalk (one side): 5.3 miles
 - Sidewalk (both sides): 1.3 miles

Approximately 1/3rd (or 6.1 miles) of the total of the recommended pedestrian network improvements (approximately 18.8 miles) are prioritized in Tiers 1 and 2, while nearly 2/3rd (or 12.7 miles) of these improvements are in Tiers 2 and 3. Furthermore, Tiers 1 and 2 include projects that would be considered easier to implement, such as adding buffers to existing sidewalks and constructing missing sidewalk links to fill network gaps. Construction of sidewalks either on one side of the street or both sides is part of Tier 3 and 4.

Table 3-2 shows planning level order-of-magnitude construction cost estimates for recommended pedestrian network improvements for the four tiers or priority bundles at approximately \$15.5M in year 2022 dollars.

Table 3-2: Recommended Pedestrian Network Investment Needs

Priority Bundle	Recommended Sidewalk Improvements Construction Cost* (in Year 2022 dollars)
Tier 1 (2.9 miles)	\$4,774,000
Tier 2 (3.3 miles)	\$4,428,000
Tier 3 (5.4 miles)	\$3,020,000
Tier 4 (7.4 miles)	\$3,268,000
*Total for all Tiers (18.8 miles)	\$15,490,000

**Total construction cost and mileage for various Tiers is slightly different due to rounding.*

From a construction cost viewpoint, Tier 1 improvements require approximately 31% of the total investment of \$15.5M, followed by Tier 2 improvements at 29%, Tier 3 improvements at 19% and Tier 4 improvements at 21%.

3.2 Funding Opportunities

Figure 3-4 includes a list of potential funding sources and opportunities available at federal, state, and local level for planning, design and construction of recommended bicycle and pedestrian improvements as well as safety projects.

Figure 3-4: Federal, State and Local Funding Sources

Federal	State	Local
<ul style="list-style-type: none"> • Safe Streets and Roads for All (SS4A) – Annual Funding (\$1B) • Rebuilding American Infrastructure with Sustainability and Equity (RAISE) – Annual Funding (\$1.5B) • Reconnecting Communities Program (RCP) – Annual Funding (\$200M) • Carbon Reduction Program (CRP) • Highway Safety Improvement Program (HSIP) • Areas of Persistent Poverty (AoPP) • Recreational Trails Program (RTP) • National Highway Transportation Safety Administration (NHTSA Section 402 and 405) 	<ul style="list-style-type: none"> • Safe Routes to School (SRTS) • Shared Use Network (SUN) Trail Program • Resurfacing, Restoration and Rehabilitation (RRR) Project 	<ul style="list-style-type: none"> • Transportation Alternatives (TA) Program <ul style="list-style-type: none"> • Funds (2023): ~5.1M • Funding Range: \$250K to \$1.5M • Eligibility: On- and off-system Roads • State Road Modification (SRM) Program <ul style="list-style-type: none"> • Funds (2023): ~20.4M • Funding Range: \$500K to \$5M • Eligibility: On State Roads • Local Initiatives (LI) Program <ul style="list-style-type: none"> • Funds (2023): ~26M • Funding Range: \$250K to \$5M • Eligibility: On Federal-Aid Roads

The Infrastructure Investment and Jobs Act (IIJA) also known as the “Bipartisan Infrastructure Law” provides several discretionary funding programs for bicycle and pedestrian projects, and related infrastructure, that local governments can either directly compete for or pursue through the Palm Beach Transportation Planning Agency (TPA) and FDOT. Some of the most relevant IIJA programs for this Master Plan implementation would be SS4A, Local and Regional Project Assistance similar to the Rebuilding American Infrastructure with Sustainability and Equity (RAISE), Healthy Streets, and others included in **Exhibit 3-4. Appendix-E** provides comprehensive information on funding opportunities available under USDOT highway, transit and safety programs for eligible bicycle and pedestrian improvements and activities. More information on state and local funding sources is available on Palm Beach TPA’s at <https://palmbeachtpa.org/funding/>.

Delray Beach has extensive experience and a successful record with receiving discretionary federal grants, such as Safe Streets and Roads for All (SS4A) and local funding through Palm Beach TPA’s Transportation Alternatives (TA) program in the last few years for planning and implementing safety improvements, bicycle and pedestrian, multimodal and active transportation projects. It is anticipated the City would leverage its understanding of the grants application process to strategize and position projects identified through this Master Plan to compete for discretionary funds available at all levels.

3.3 Implementation Strategy

This citywide Master Plan serves as a blueprint for Delray Beach to expand the bicycle and pedestrian network and build robust infrastructure to promote active transportation modes of transport. In addition, the citywide Master Plan allows the City to leverage this document to secure local, state, and federal grants required for implementation purposes. Outlined below are key next steps as part of the City's plan implementation strategy highlighting coordination and collaboration efforts to advance projects from planning to design to construction and operations.

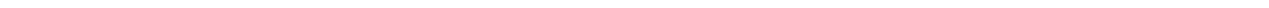
- Coordinate with Palm Beach TPA to include proposed bicycle and sidewalk improvement projects in the 2050 Long Range Transportation Plan (LRTP).
- Continue to coordinate with Palm Beach County and Florida Department of Transportation to accommodate proposed improvements on their facilities.
- Evaluate and refine recommended improvements for specific corridors based on detailed traffic analysis, lane repurposing studies and engineering effort.
- Evaluate grant opportunities and submit applications to secure discretionary federal, state, and local funds; Use regional approach to leverage funds.
- Identify opportunities to implement proposed bicycle/sidewalk improvements as part of private developers' projects + City's CIP, County, and FDOT projects.
- Collaborate with other departments within Delray Beach to promote bike/ped safety programs as well as implement "other initiatives."
- Coordinate and discuss possibility of accommodating E-4 Canal Greenway improvements with Lake Worth Drainage District.
- Update existing bicycle and sidewalk inventory and Bicycle Pedestrian Master Plan on a periodic basis.

APPENDIX-A

Recommended Bicycle Network Improvements & Priority Bundles

Existing Bicycle Network

Programmed Bicycle Network



Recommended Bicycle Network Improvements

Map ID	Orientation	Street Name	From	To	Length (miles)	Recommended Bicycle Improvement	Functional Classification	Jurisdiction	Ultimate ROW (feet)	Number of Ultimate Through Lanes	Posted Speed Limit (mph)	On-Street Parking	Bicycle Level of Traffic Stress (LTS)	Bicycle Crash Hotspot	Bicycle LTS Score	Bicycle Crash Score	Bike Ped Demand Score	Recommended Bicycle Improvement Total Score	Priority Tier (based on percentile)
1	North-South	Military Trail	South City Limit	Linton Boulevard	1.1	Buffered Bike Lane	Principal Arterial	County	120	6LD	45	No	LTS 4	Yes	4	2	4	10	Tier 1
2	North-South	Military Trail	Linton Boulevard	Atlantic Avenue	1.4	Buffered Bike Lane	Principal Arterial	County	120	6LD	45	No	LTS 4	Yes (Serious)	4	3	2	9	Tier 1
3	North-South	Military Trail	Atlantic Avenue	Lake Ida Road	1.2	Buffered Bike Lane	Principal Arterial	County	120	6LD	40	No	LTS 4	Yes	4	2	3	9	Tier 1
7	North-South	Barkwick Road	Lake Ida Road	North City Limit	0.8	Shared Use Path	Collector	City	80	2L	35	No	LTS 4	Yes	4	2	4	10	Tier 1
13	North-South	Congress Avenue	Linton Boulevard	Lowson Boulevard	0.6	Shared Use Path	Principal Arterial	County	120	6LD	45	No	LTS 4	Yes (Serious)	4	3	3	10	Tier 1
14	North-South	Congress Avenue	Lowson Boulevard	Atlantic Avenue	1.1	Shared Use Path	Principal Arterial	County	120	6LD	45	No	LTS 4	Yes (Serious)	4	3	3	10	Tier 1
15	North-South	Congress Avenue	Atlantic Avenue	Lake Ida Road	0.9	Shared Use Path	Principal Arterial	County	120	6LD	45	No	LTS 4	Yes (Serious)	4	3	3	10	Tier 1
17	North-South	NW/SW 12th Avenue / SW 14th Avenue / Auburn Avenue	SW 10th Street	Atlantic Avenue	1.2	Sharrows	Collector	City	50	2L	25	No	LTS 3	Yes (Serious)	3	3	4	10	Tier 1
28	North-South	Swinton Avenue	SE 10th Street	Atlantic Avenue	1.1	Bike Lane	Collector	City	60	2L	35	No	LTS 3	Yes	3	2	4	9	Tier 1
40	North-South	Federal Highway/US-1	Linton Boulevard	SE 10th Street	0.6	Buffered Bike Lane	Minor Arterial	State	120	4LD	45	No	LTS 4	Yes	4	2	4	10	Tier 1
44	North-South	Federal Highway/US-1 (SE 5th Avenue)	SE 10th Street	SE 2nd Street	0.8	Buffered Bike Lane	Minor Arterial	State	60	2L (One Way)	35	Yes	LTS2	Yes (Serious)	2	3	4	9	Tier 1
57	East-West	Linton Boulevard	West City Limit	Homewood Boulevard	1.4	Separated Bicycle Lane	Minor Arterial	County	120	6LD	40	No	LTS 4	Yes (Serious)	4	3	3	10	Tier 1
58	East-West	Linton Boulevard	Homewood Boulevard	Congress Avenue	0.6	Separated Bicycle Lane	Minor Arterial	County	120	6LD	40	No	LTS 4	Yes	4	2	3	9	Tier 1
59	East-West	Linton Boulevard	Congress Avenue	SW 10th Avenue	0.6	Separated Bicycle Lane	Minor Arterial	County	120	6LD	35	No	LTS 4	Yes	4	2	4	10	Tier 1
60	East-West	Linton Boulevard	SW 10th Avenue	Old Dixie Highway	0.7	Separated Bicycle Lane	Minor Arterial	County	120	6LD	40	No	LTS 4	Yes	4	2	4	10	Tier 1
61	East-West	Linton Boulevard	Old Dixie Highway	Federal Highway/US-1	0.2	Separated Bicycle Lane	Collector	County	120	6LD	40	No	LTS 4	Yes	4	2	4	10	Tier 1
73	East-West	Atlantic Avenue, West	Military Trail	Barkwick Road	0.6	Bike Lane	Principal Arterial	State	120	6LD	45	No	LTS 4	Yes (Serious)	4	3	3	10	Tier 1
74	East-West	Atlantic Avenue, West	Barkwick Road	E-4 Canal	1.0	Bike Lane	Principal Arterial	State	120	6LD	45	No	LTS 4	Yes (Serious)	4	3	3	10	Tier 1
76	East-West	Atlantic Avenue, West	SW 12th Avenue	Swinton Avenue	0.8	Roadway Reconfiguration Study	Minor Arterial	State	110	4LD	35	Yes	LTS 4	Yes (Serious)	4	3	4	11	Tier 1
77	East-West	Atlantic Avenue, East	Swinton Avenue	FEC Rail Corridor	0.2	Roadway Reconfiguration Study	Minor Arterial	City	65	2LD	35	Yes	LTS 4	Yes	4	2	4	10	Tier 1
80	East-West	NE 1st Street	Swinton Avenue	Federal Highway (NE 6th Avenue)	0.4	Sharrows	Collector	City	55	2L	25	Yes	LTS 3	Yes (Fatality)	3	4	4	11	Tier 1
81	East-West	NE/NW 2nd Street	SW 12th Avenue	Federal Highway (NE 6th Avenue)	1.1	Bike Lane	Collector	City	50	2L	25	No	LTS 3	Yes (Serious)	3	3	4	10	Tier 1
85	East-West	Lake Ida Road	Barkwick Road	Congress Avenue	1.6	Buffered Bike Lane	Collector	City	110	4LD	35	No	LTS 4	Yes (Serious)	4	3	3	10	Tier 1
86	East-West	Lake Ida Road	Congress Avenue	NW 5th Avenue	1.0	Bike Lane	Collector	City	110	4LD	35	No	LTS 4	Yes	4	2	3	9	Tier 1
87	East-West	Lake Ida Road	NW 5th Avenue	Swinton Avenue	0.3	Bike Lane	Collector	City	110	4L	35	No	LTS 4	Yes	4	2	4	10	Tier 1
4	North-South	Military Trail	Lake Ida Road	North City Limit	0.8	Buffered Bike Lane	Principal Arterial	County	120	6LD	40	No	LTS 4	No	4	0	3	7	Tier 2
11	North-South	SW 22nd Avenue	Congress Avenue	Old Germantown Road	0.8	Shared Use Path	Collector	City	80	2L	35	No	LTS 4	No	4	0	3	7	Tier 2
12	North-South	Congress Avenue	South City Limit	Linton Boulevard	1.2	Shared Use Path	Principal Arterial	County	120	6LD	45	No	LTS 4	No	4	0	3	7	Tier 2
19	North-South	Wallace Drive	Linton Boulevard	SW 10th Street	0.6	Shared Use Path	Collector	City	80	2L	25	No	LTS 3	No	3	0	4	7	Tier 2
20	North-South	NW/SW 10th Avenue	SW 4th Street	Lake Ida Road	1.2	Sharrows	Collector	City	50	2L	25	No	LTS 3	No (Serious)	3	1	4	8	Tier 2
24	North-South	NW/SW 8th Avenue	SW 10th Street	Atlantic Avenue	1.1	Sharrows	Collector	City	50	2L	25	No	LTS 3	Yes	2	2	4	8	Tier 2
25	North-South	NW/SW 8th Avenue	Atlantic Avenue	Lake Ida Road	0.6	Sharrows	Collector	City	50	2L	No Posted Speed Limit (30)	No	LTS 2	No	3	0	4	7	Tier 2
29	North-South	Swinton Avenue	Atlantic Avenue	NE 1st Street	0.1	Bike Lane	Collector	City	60	2L	25	No	LTS 3	No	3	0	4	7	Tier 2
35	North-South	Dixie Highway	South City Limit	Linton Boulevard	1.3	Shared Use Path	Collector	County	80	2L	45	No	LTS 4	No	4	0	3	7	Tier 2
36	North-South	Dixie Highway	Linton Boulevard	SE 10th Street	0.6	Shared Use Path	Collector	City	80	2L	40	No	LTS 4	No	4	0	4	8	Tier 2
39	North-South	Federal Highway/US-1	South City Limit	Linton Boulevard	1.4	Buffered Bike Lane	Minor Arterial	State	120	4LD	45	No	LTS 4	No (Serious)	4	1	3	8	Tier 2
41	North-South	Federal Highway/US-1 (SE 6th Avenue)	SE 10th Street	SE 2nd Street	0.8	Buffered Bike Lane	Minor Arterial	State	60	2L (One Way)	35	Yes	LTS 2	Yes	2	2	4	8	Tier 2
48	North-South	Federal Highway/US-1	Bond Way	North City Limit	1.0	Buffered Bike Lane	Minor Arterial	State	120	4LD	35	Yes	LTS 2	Yes (Serious)	2	3	3	8	Tier 2
54	North-South	Ocean Boulevard/SR-A1A	Atlantic Avenue	Beach Drive	0.5	Bike Lane	Collector	State	50 to 60	2L	30	Yes	LTS 2	Yes (Serious)	2	3	3	8	Tier 2
62	East-West	Linton Boulevard	Federal Highway/US-1	Ocean Boulevard/SR-A1A	0.6	Buffered Bike Lane (WB)	Collector	County	120	4LD	40	No	LTS 2	Yes	2	2	3	7	Tier 2
69	East-West	SW/SE 2nd Street	SE 12th Avenue	Federal Highway (SE 6th Avenue)	1.3	Sharrows	Collector	City	50	2L	25	No	LTS 3	No (Serious)	3	1	4	8	Tier 2
70	East-West	SE 1st Street	Swinton Avenue	Federal Highway (SE 6th Avenue)	0.4	Sharrows	Collector	City	55	2L	25	Yes	LTS 3	No	3	0	4	7	Tier 2
78	East-West	Atlantic Avenue, East	FEC Rail Corridor	Federal Highway (5th Avenue)	0.2	Roadway Reconfiguration Study	Minor Arterial	City	70	2L	35	Yes	LTS 4	No	4	0	4	8	Tier 2
84	East-West	Lake Ida Road	Military Trail	Barkwick Road	0.6	Buffered Bike Lane	Collector	City	110	4LD	35	No	LTS 4	No	4	0	4	8	Tier 2
96	East-West	Gulf Stream Boulevard	Seacrest Boulevard/NE 2nd Avenue	Old Dixie Highway	0.4	Buffered Bike Lane	Collector	City	80	4LD	30	No	LTS 4	No	4	0	4	8	Tier 2
10	North-South	Homewood Boulevard	Lowson Boulevard	Atlantic Avenue	1.0	Buffered Bike Lane	Collector	City	80	2L	30	No	LTS 3	No (Serious)	3	1	2	6	Tier 3
16	North-South	Congress Avenue	Lake Ida Road	North City Limit	0.9	Shared Use Path	Principal Arterial	County	120	6LD	45	No	LTS 4	No	4	0	2	6	Tier 3
18	North-South	NW/SW 12th Avenue / SW 14th Avenue / Auburn Avenue	Atlantic Avenue	Lake Ida Road	0.3	Sharrows	Collector	City	50	2L	No Posted Speed Limit (30)	No	LTS 2	No	2	0	4	6	Tier 3
26	North-South	NW/SW 4th Avenue	Linton Boulevard	Lowson Boulevard	0.6	Bike Lane	Collector	City	50	2L	25	No	LTS 3	No	2	0	4	6	Tier 3
27	North-South	NW/SW 4th Avenue	Lowson Boulevard	Lake Ida Road	1.7	Bike Lane	Collector	City	50	2L	25	One Block (N of Atlantic Avenue)	LTS 3	No	2	0	4	6	Tier 3
30	North-South	Swinton Avenue	NE 1st Street	George Bush Boulevard	0.8	Bike Lane	Collector	City	66	2L	25	No	LTS 3	No	3	0	3	6	Tier 3
32	North-South	Swinton Avenue	NE 22nd Street	North City Limit	0.4	Bike Lane	Collector	City	60	2L	30	No	LTS 3	No	3	0	3	6	Tier 3
43	North-South	Federal Highway/US-1 (SE 6th Avenue)	Atlantic Avenue	George Bush Boulevard	1.0	Buffered Bike Lane	Minor Arterial	State	60	2L (One Way)	35	Yes (opposite of bike)	LTS 2	No	2	0	4	6	Tier 3

Map ID	Orientation	Street Name	From	To	Length (miles)	Recommended Bicycle Improvement	Functional Classification	Jurisdiction	Ultimate ROW (feet)	Number of Ultimate Through Lanes	Posted Speed Limit (mph)	On-Street Parking	Bicycle Level of Traffic Stress (LTS)	Bicycle Crash Hotspot	Bicycle LTS Score	Bicycle Crash Score	Bike Ped Demand Score	Recommended Bicycle Improvement Total Score	Priority Tier (based on percentile)
46	North-South	Federal Highway/US-1 (SE 5th Avenue)	Atlantic Avenue	George Bush Boulevard	1.0	Buffered Bike Lane	Minor Arterial	State	60	2L (One Way)	35	Yes	LTS2	No	2	0	4	6	Tier 3
79	East-West	Atlantic Avenue, East	Federal Highway (5th Avenue)	Ocean Boulevard/SR-A1A	0.7	Roadway Reconfiguration Study	Minor Arterial	State	80	4LD	25	Yes	LTS 3	No	3	0	3	6	Tier 3
95	East-West	NE 22nd Avenue	Swinton Avenue	Seacrest Boulevard/NE 2nd Avenue	0.1	Bike Lane	Collector	City	60	2L	25	No	LTS 3	No	3	0	3	6	Tier 3
103	East-West	SW 4th Street	SW 12th Avenue	Federal Highway (NE 6th Avenue)	1.1	Sharrows	Collector	City	50	2L	25	No	LTS 3	No	2	0	4	6	Tier 3
8	North-South	Dover Road	Linton Boulevard	Lowson Boulevard	0.5	Separated Bicycle Lane	Collector	city	80	2L	30	No	LTS 3	No	3	0	1	4	Tier 4
31	North-South	Swinton Avenue	George Bush Boulevard	NE 22nd Street	0.9	Bike Lane	Collector	City	66	2L	25	No	LTS 3	No	3	0	2	5	Tier 4
42	North-South	Federal Highway/US-1 (SE 6th Avenue)	SE 2nd Street	Atlantic Avenue	0.3	Buffered Bike Lane	Minor Arterial	State	60	2L (One Way)	35	Yes (opposite of bike)	LTS 2	No	2	0	3	5	Tier 4
45	North-South	Federal Highway/US-1 (SE 5th Avenue)	SE 2nd Street	Atlantic Avenue	0.3	Buffered Bike Lane	Minor Arterial	State	60	2L (One Way)	35	Yes	LTS2	No	2	0	3	5	Tier 4
47	North-South	Federal Highway/US-1	George Bush Boulevard	Bond Way	0.3	Buffered Bike Lane	Minor Arterial	State	60	4LD	35	No	LTS 2	No	2	0	3	5	Tier 4
49	North-South	Seasage Drive/Venetian Drive	Poinsettia Road	Atlantic Avenue	1.3	Sharrows	Local	City	50	2L	25	No	LTS 2	No	2	0	2	4	Tier 4
50	North-South	Seagate Drive/Gleason Drive	Poinsettia Road	Atlantic Avenue	1.3	Sharrows	Local	City	50	2L	25	No	LTS 2	No	2	0	2	4	Tier 4
51	North-South	Andrews Avenue	Atlantic Avenue	Pelican Lane	1.2	Sharrows	Local	City	50	2L	25	No	LTS 2	No	2	0	3	5	Tier 4
55	North-South	Ocean Boulevard/SR-A1A	Beach Drive	North City Limit	0.5	Bike Lane	Collector	State	50 to 60	2L	35	No	LTS 2	Yes	2	0	3	5	Tier 4
63	East-West	Lowson Boulevard	Military Trail	Dover Rd	1.1	Bike Lane	Collector	City	80	2L	30	No	LTS 3	No	3	0	2	5	Tier 4
94	East-West	George Bush Boulevard	Andrews Avenue	Ocean Boulevard/SR-A1A	0.2	Bike Lane	Collector	City	60	2L	30	No	LTS 3	No	3	0	1	4	Tier 4

Existing Bicycle Network

Map ID	Orientation	Street Name	From	To	Length (miles)	Existing Bicycle Facility Type	Functional Classification	Jurisdiction	Ultimate ROW (feet)	Number of Ultimate Through Lanes	Posted Speed Limit (mph)	On-Street Parking	Bicycle Level of Traffic Stress (LTS)	Bicycle Crash Hotspot
9	North-South	Homewood Boulevard	Linton Boulevard	Lowson Boulevard	0.5	Bike Lane	Collector	City	80	4LD	30	No	LTS 3	No (Serious)
10	North-South	Homewood Boulevard	Lowson Boulevard	Atlantic Avenue	1.0	Bike Lane	Collector	City	80	2L	30	No	LTS 3	No (Serious)
28	North-South	Swinton Avenue	SE 10th Street	Atlantic Avenue	1.1	Sharrow	Collector	City	60	2L	35	No	LTS 3	Yes
29	North-South	Swinton Avenue	Atlantic Avenue	NE 1st Street	0.1	Sharrow	Collector	City	60	2L	25	No	LTS 3	No
30	North-South	Swinton Avenue	NE 1st Street	George Bush Boulevard	0.8	Sharrow (partial)	Collector	City	66	2L	25	No	LTS 3	No
34	North-South	Brant Drive	South City Limit	Avocet Road	0.2	Shared Use Path	Collector	City	80	2L	25	No	LTS 3	No
37	North-South	Seacrest Boulevard/NE 2nd Avenue	Atlantic Avenue	NE 4th Street	0.6	Sharrow	Collector	City	60	2L	25	Yes	LTS 3	No
38	North-South	Seacrest Boulevard/NE 2nd Avenue	NE 4th Street	George Bush Boulevard	0.4	Bike Lane	Collector	City	60	2L	25	No	LTS 2	No
39	North-South	Federal Highway/US-1	South City Limit	Linton Boulevard	1.4	Bike Lane	Minor Arterial	State	120	4LD	45	No	LTS 4	No (Serious)
40	North-South	Federal Highway/US-1	Linton Boulevard	SE 10th Street	0.6	Bike Lane	Minor Arterial	State	120	4LD	45	No	LTS 4	Yes
41	North-South	Federal Highway/US-1 (SE 6th Avenue)	SE 10th Street	SE 2nd Street	0.8	Bike Lane	Minor Arterial	State	60	2L (One Way)	35	Yes	LTS 2	Yes
42	North-South	Federal Highway/US-1 (SE 6th Avenue)	SE 2nd Street	Atlantic Avenue	0.3	Bike Lane	Minor Arterial	State	60	2L (One Way)	35	Yes (opposite of bike)	LTS 2	No
43	North-South	Federal Highway/US-1 (SE 6th Avenue)	Atlantic Avenue	George Bush Boulevard	1.0	Bike Lane	Minor Arterial	State	60	2L (One Way)	35	Yes (opposite of bike)	LTS 2	No
44	North-South	Federal Highway/US-1 (SE 5th Avenue)	SE 10th Street	SE 2nd Street	0.8	Bike Lane	Minor Arterial	State	60	2L (One Way)	35	Yes	LTS 2	Yes (Serious)
45	North-South	Federal Highway/US-1 (SE 5th Avenue)	SE 2nd Street	Atlantic Avenue	0.3	Bike Lane	Minor Arterial	State	60	2L (One Way)	35	Yes	LTS 2	No
46	North-South	Federal Highway/US-1 (SE 5th Avenue)	Atlantic Avenue	George Bush Boulevard	1.0	Bike Lane	Minor Arterial	State	60	2L (One Way)	35	Yes	LTS 2	No
47	North-South	Federal Highway/US-1	George Bush Boulevard	Bond Way	0.3	Bike Lane	Minor Arterial	State	60	4LD	35	No	LTS 2	No
48	North-South	Federal Highway/US-1	Bond Way	North City Limit	1.0	Bike Lane	Minor Arterial	State	120	4LD	35	Yes	LTS 2	Yes (Serious)
62	East-West	Linton Boulevard	Federal Highway/US-1	Ocean Boulevard/SR-A1A	0.6	Buffered (EB Only)	Collector	County	120	4LD	40	No	LTS 2	Yes
75	East-West	Atlantic Avenue, West	Congress Avenue	Westside of I-95	0.5	Sharrow	Minor Arterial	State	110	4LD	35	No	LTS 2	Yes (Serious)
90	East-West	George Bush Boulevard	Swinton Avenue	NE 2nd Avenue	0.3	Bike Lane	Collector	City	50	2L	30	No	LTS 3	No
91	East-West	George Bush Boulevard	NE 2nd Avenue	Federal Highway (NE 5th Avenue)	0.1	Bike Lane	Collector	City	66	2L	30	No	LTS 3	No
92	East-West	George Bush Boulevard	Federal Highway (NE 5th Avenue)	Federal Highway (NE 6th Avenue)	0.1	Bike Lane	Collector	City	80	2L	30	No	LTS 3	No
93	East-West	George Bush Boulevard	Federal Highway (NE 6th Avenue)	Andrews Avenue	0.6	Bike Lane	Collector	City	66	2L	30	No	LTS 3	No (Serious)
94	East-West	George Bush Boulevard	Andrews Avenue	Ocean Boulevard/SR-A1A	0.2	Sharrow	Collector	City	60	2L	30	No	LTS 3	No
101	North-South	Seacrest Boulevard/NE 2nd Avenue	George Bush Boulevard	NE 22nd Street	0.9	Bike Lane	Collector	City	60	2L	30	No	LTS 2	No
102	North-South	Seacrest Boulevard/NE 2nd Avenue	NE 22nd Street	Gulfstream Boulevard	0.4	Bike Lane	Collector	City	60	2L	30	No	LTS 2	No
104	East-West	Atlantic Avenue, West	E-4 Canal	Congress Avenue	0.2	Bike Lane	Principal Arterial	State	120	6LD	45	No	LTS 4	Yes (Serious)
105	North-South	Homewood Boulevard	Old Germantown Road	Linton Boulevard	0.3	Bike Lane	Collector	City	-	-	-	-	-	
109	East-West	Atlantic Avenue, West	Westside of I-95	SW 12th Ave	0.1	Bike Lane	Minor Arterial	State	110	4LD	35	No	LTS 2	Yes (Serious)
2	North-South	Military Trail	Linton Boulevard	Atlantic Avenue	1.4	Paved Shoulder	Principal Arterial	County	120	6LD	45	No	LTS 4	Yes (Serious)

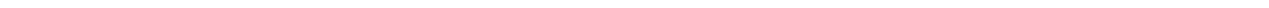
Map ID	Orientation	Street Name	From	To	Length (miles)	Existing Bicycle Facility Type	Functional Classification	Jurisdiction	Ultimate ROW (feet)	Number of Ultimate Through Lanes	Posted Speed Limit (mph)	On-Street Parking	Bicycle Level of Traffic Stress (LTS)	Bicycle Crash Hotspot
3	North-South	Military Trail	Atlantic Avenue	Lake Ida Road	1.2	Paved Shoulder	Principal Arterial	County	120	6LD	40	No	LTS 4	Yes
4	North-South	Military Trail	Lake Ida Road	North City Limit	0.8	Paved Shoulder	Principal Arterial	County	120	6LD	40	No	LTS 4	No
15	North-South	Congress Avenue	Atlantic Avenue	Lake Ida Road	0.9	Paved Shoulder	Principal Arterial	County	120	6LD	45	No	LTS 4	Yes (Serious)
16	North-South	Congress Avenue	Lake Ida Road	North City Limit	0.9	Paved Shoulder	Principal Arterial	County	120	6LD	45	No	LTS 4	No
73	East-West	Atlantic Avenue, West	Military Trail	Barkwick Road	0.6	Paved Shoulder	Principal Arterial	State	120	6LD	45	No	LTS 4	Yes (Serious)
74	East-West	Atlantic Avenue, West	Barkwick Road	E-4 Canal	1.0	Paved Shoulder	Principal Arterial	State	120	6LD	45	No	LTS 4	Yes (Serious)
84	East-West	Lake Ida Road	Military Trail	Barkwick Road	0.6	Paved Shoulder	Collector	City	110	4LD	35	No	LTS 4	No
85	East-West	Lake Ida Road	Barkwick Road	Congress Avenue	1.6	Paved Shoulder	Collector	City	110	4LD	35	No	LTS 4	Yes (Serious)
96	East-West	Gulf Stream Boulevard	Seacrest Boulevard/NE 2nd Avenue	Old Dixie Highway	0.4	wide shoulders provided	Collector	City	80	4LD	30	No	LTS 4	No

Programmed Bicycle/Pedestrian Improvements

Map ID	Orientation	Street Name	From	To	Length (miles)	Programed Bicycle/Pedestrian Improvement	Functional Classification	Jurisdiction	Ultimate ROW (feet)	Number of Ultimate Through Lanes	Posted Speed Limit (mph)	On-Street Parking	Bicycle Level of Traffic Stress (LTS)	Bicycle Crash Hotspot
6	North-South	Barkwick Road	Atlantic Avenue	Lake Ida Road	1.2	Shared Use Path	Collector	City	80	2L	35	No	LTS 4	Yes (Serious)
21	North-South	Lindell Boulevard	Federal Highway	Dixie Highway	0.2	Shared Use Path	Collector	City	80	2L	25	No	LTS 3	No
22	North-South	Lindell Boulevard	Dixie Highway	Carl Bolter Drive	0.5	Shared Use Path	Collector	City	80	2L	25	No	LTS 3	No
23	North-South	Lindell Boulevard	Carl Bolter Drive	Linton Boulevard	1.0	Shared Use Path	Collector	City	80	2L	25	No	LTS 3	No
33	North-South	Carl Bolter Drive	Avocet Road	Lindell Boulevard	0.3	TBD	Collector	City	80	2L	25	No	LTS 3	No
52	North-South	Ocean Boulevard/SR-A1A	South City Limit	Linton Boulevard	0.6	Bike Lane	Collector	State	50 to 60	2L	35	No	LTS 4	No
53	North-South	Ocean Boulevard/SR-A1A	Linton Boulevard	Atlantic Avenue	1.5	Bike Lane	Collector	State	50 to 60	2L	30	No	LTS 2	Yes (Serious)
56	East-West	Old Germantown Road	Park Access Road	Congress Avenue	1.7	Shared Use Path	Collector	City	80	2L	35	No	LTS 4	Yes (Fatality)
64	East-West	SW 10th Street	Congress Avenue	SW 10th Avenue	0.6	Shared Use Path (Under Construction)	Collector	City	80	4L	30	No	LTS 4	Yes
65	East-West	SW 10th Street	SW 10th Avenue	SW 4th Avenue	0.4	Shared Use Path (Under Construction)	Collector	City	60	2L	30	No	LTS 3	Yes (Serious)
66	East-West	SW/SE 10th Street	SW 4th Avenue	Swinton Avenue	0.3	Shared Use Path (Under Construction)	Collector	City	77 to 90	2L	30	No	LTS 3	No (Serious)
67	East-West	SE 10th Street	Swinton Avenue	Federal Highway (SE 6th Avenue)	0.4	Shared Use Path (Under Construction)	Collector	City	60	2L	30	No	LTS 3	Yes
106	East-West	Lowson Boulevard	Dover Road	Congress Avenue	1.0	Shared Use Path (Under Construction)	Collector	City	80	2L	30	No	LTS 3	No
107	North-South	Blue Jay Turn	Carl Bolter Drive	Lindell Boulevard	0.1	TBD	Collector	City	80	2L	25	No	LTS 3	No
108	East-West	Avocet Road	Carl Bolter Drive	Lindell Boulevard	0.2	TBD	Collector	City	80	2L	25	No	LTS 3	No

APPENDIX-B

Recommended Pedestrian Network Improvements & Priority Bundles

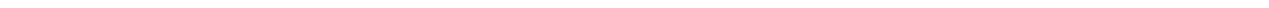


Recommended Pedestrian Network Improvements

Map ID	Orientation	Street Name	From	To	Length Miles	Recommended Sidewalk Improvement	Functional Classification	Jurisdiction	Ultimate ROW (feet)	Number of Ultimate Through Lanes	Posted Speed Limit (mph)	On-Street Parking	Existing Sidewalk_SUP	One_BothSides	Pedestrian LTS	Pedestrian Crash Hotspot	Pedestrian Crash Score	Pedestrian LTS Score	Bike Ped Demand Score	Pedestrian Improvement Score	Priority Tier (based on percentile)
1	North-South	Military Trail	South City Limit	Linton Boulevard	1.1	Fill Gaps (Eastside)	Principal Arterial	County	120	6LD	45	No	Yes	Both	PLTS4	No	0	4	4	8	Tier 1
2	North-South	Military Trail	Linton Boulevard	Atlantic Avenue	1.4	Add Buffer (Westside)	Principal Arterial	County	120	6LD	45	No	Yes	Both	PLTS4	Yes (Serious)	3	4	2	9	Tier 1
12	North-South	Congress Avenue	South City Limit	Linton Boulevard	1.2	Shared Use Path	Principal Arterial	County	120	6LD	45	No	Yes	Both	PLTS4	No (Serious)	1	4	3	8	Tier 1
20	North-South	NW/SW 10th Avenue	SW 4th Street	Lake Ida Road	1.2	Fill Gaps	Collector	City	50	2L	25	No	Yes	Both	PLTS2	No (Fatality)	4	2	4	10	Tier 1
26	North-South	NW/SW 4th Avenue	Linton Boulevard	Lowson Boulevard	0.6	Fill Gaps (Eastside)	Collector	City	50	2L	25	No	Yes	Both	PLTS2	Yes (Serious)	3	2	4	9	Tier 1
36	North-South	Dixie Highway	Linton Boulevard	SE 10th Street	0.6	Shared use path	Collector	City	80	2L	40	No	Yes	East	PLTS4	No	0	4	4	8	Tier 1
60	East-West	Linton Boulevard	SW 10th Avenue	Old Dixie Highway	0.7	Add Buffer	Minor Arterial	County	120	6LD	40	No	Yes	Both	PLTS4	No	0	4	4	8	Tier 1
61	East-West	Linton Boulevard	Old Dixie Highway	Federal Highway/US-1	0.2	Add Buffer	Collector	County	120	6LD	40	No	Yes	Both	PLTS4	Yes (Serious)	3	4	4	11	Tier 1
73	East-West	Atlantic Avenue, West	Military Trail	Barkwick Road	0.6	Add Buffer	Principal Arterial	State	120	6LD	45	No	Yes	Both	PLTS4	Yes	2	4	3	9	Tier 1
74	East-West	Atlantic Avenue, West	Barkwick Road	E-4 Canal	1.0	Add Buffer	Principal Arterial	State	120	6LD	45	No	Yes	Both	PLTS4	Yes	2	4	3	9	Tier 1
75	East-West	Atlantic Avenue, West	Congress Avenue	Westside of I-95	0.5	Add Buffer	Minor Arterial	State	110	4LD	35	No	Yes	Both	PLTS3	Yes (Fatality)	4	3	3	10	Tier 1
104	East-West	Atlantic Avenue, West	E-4 Canal	Congress Avenue	0.2	Add Buffer	Principal Arterial	State	120	6LD	45	No	Yes	Both	PLTS4	Yes	2	4	3	9	Tier 1
109	East-West	Atlantic Avenue, West	Westside of I-95	SW 12th Ave	0.1	Add Buffer	Minor Arterial	State	110	4LD	35	No	Yes	Both	PLTS3	Yes (Fatality)	4	3	3	10	Tier 1
3	North-South	Military Trail	Atlantic Avenue	Lake Ida Road	1.2	Add Buffer (where possible)	Principal Arterial	County	120	6LD	40	No	Yes	Both	PLTS4	No	0	4	3	7	Tier 2
4	North-South	Military Trail	Lake Ida Road	North City Limit	0.8	Add Buffer (where possible)	Principal Arterial	County	120	6LD	40	No	Yes	Both	PLTS4	No	0	4	3	7	Tier 2
7	North-South	Barkwick Road	Lake Ida Road	North City Limit	0.8	Shared Use Path + Sidewalk (Westside)	Collector	City	80	2L	35	No	Yes	East	PLTS3	No	0	3	4	7	Tier 2
13	North-South	Congress Avenue	Linton Boulevard	Lowson Boulevard	0.6	Shared Use Path	Principal Arterial	County	120	6LD	45	No	Yes	Both	PLTS4	No	0	4	3	7	Tier 2
14	North-South	Congress Avenue	Linton Boulevard	Atlantic Avenue	1.1	Shared Use Path	Principal Arterial	County	120	6LD	45	No	Yes	Both	PLTS4	No	0	4	3	7	Tier 2
15	North-South	Congress Avenue	Atlantic Avenue	Lake Ida Road	0.9	Shared Use Path	Principal Arterial	County	120	6LD	45	No	Yes	Both	PLTS4	No	0	4	3	7	Tier 2
16	North-South	Congress Avenue	Lake Ida Road	North City Limit	0.9	Shared Use Path	Principal Arterial	County	120	6LD	45	No	Yes	Both	PLTS4	No (Serious)	1	4	2	7	Tier 2
35	North-South	Dixie Highway	South City Limit	Linton Boulevard	1.3	Shared use path	Collector	County	80	2L	45	No	Yes	East	PLTS4	No	0	4	3	7	Tier 2
51	North-South	Andrews Avenue	Atlantic Avenue	Pelican Lane	1.2	Fill Gaps	Local	City	50	2L	25	No	No (Only some sections)	One (East or West)	PLTS4	No	0	4	3	7	Tier 2
57	East-West	Linton Boulevard	West City Limit	Homewood Boulevard	1.4	Sidewalk (both sides)	Minor Arterial	County	120	6LD	40	No	Yes	North	PLTS4	No	0	4	3	7	Tier 2
58	East-West	Linton Boulevard	Homewood Boulevard	Congress Avenue	0.6	Sidewalk (both sides)	Minor Arterial	County	120	6LD	40	No	Yes	Both (Partial)	PLTS4	No	0	4	3	7	Tier 2
62	East-West	Linton Boulevard	Federal Highway/US-1	Ocean Boulevard/SR-A1A	0.6	Add Buffer	Collector	County	120	4LD	40	No	Yes	Both	PLTS4	No	0	4	3	7	Tier 2
5	North-South	Forest Road	Lakeview Boulevard	Lowson Boulevard	0.2	Sidewalk (One side)	Local	City	80	2L	No Posted Speed Limit (30)	No	No	None	PLTS4	No	0	4	2	6	Tier 3
11	North-South	SW 22nd Avenue	Congress Avenue	Old Germantown Road	0.8	Shared Use Path	Collector	City	80	2L	35	No	Yes	One (East or West)	PLTS3	No	0	3	3	6	Tier 3
27	North-South	NW/SW 4th Avenue	Lowson Boulevard	Lake Ida Road	1.7	Fill Gaps	Collector	City	50	2L	25	One Block (N of Atlantic Avenue)	Yes	Both	PLTS2	No	0	2	4	6	Tier 3
32	North-South	Swinton Avenue	NE 22nd Street	North City Limit	0.4	Sidewalk (Eastside)	Collector	City	60	2L	30	No	Yes	Both	PLTS3	No	0	3	3	6	Tier 3
50	North-South	Seagate Drive/Gleason Drive	Poinsettia Road	Atlantic Avenue	1.3	Sidewalk (both sides)	Local	City	50	2L	25	No	No (Only some sections)	One (East or West)	PLTS4	No	0	4	2	6	Tier 3
55	North-South	Ocean Boulevard/SR-A1A	Beach Drive	North City Limit	0.5	Fill Gaps (Westside) & Sidewalk (Eastside)	Collector	State	50 to 60	2L	35	No	Yes	West	PLTS3	No	0	3	3	6	Tier 3
63	East-West	Lowson Boulevard	Military Trail	Dover Rd	1.1	Sidewalk (both sides)	Collector	City	80	2L	30	No	No	None	PLTS4	No	0	4	2	6	Tier 3
71	East-West	Ingraham Avenue	MacFarlane Drive	Venetian Drive	0.1	Sidewalk (one side)	Local	City	50	2L	No Posted Speed Limit (30)	No	No	None	PLTS4	No	0	4	2	6	Tier 3
83	East-West	Vista Del Mar Drive	Andrews Avenue	Ocean Boulevard/SR-A1A	0.2	Sidewalk (Southside)	Local	City	30	2LD	10	No	No	None	PLTS4	No	0	4	2	6	Tier 3
9	North-South	Homewood Boulevard	Linton Boulevard	Lowson Boulevard	0.5	Sidewalk (Westside)	Collector	City	80	4LD	30	No	Yes	East	PLTS4	No	0	4	1	5	Tier 4
10	North-South	Homewood Boulevard	Lowson Boulevard	Atlantic Avenue	1.0	Sidewalk (Eastside)	Collector	City	80	2L	30	No	Yes	West	PLTS3	No	0	3	2	5	Tier 4
19	North-South	Wallace Drive	Linton Boulevard	SW 10th Street	0.6	Fill Gaps	Collector	City	80	2L	25	No	Yes	Both	PLTS1	No	0	1	4	5	Tier 4
31	North-South	Swinton Avenue	George Bush Boulevard	NE 22nd Street	0.9	Sidewalk (Eastside)	Collector	City	66	2L	25	No	Yes	Both	PLTS2	No	0	2	2	4	Tier 4
49	North-South	Seasage Drive/Venetian Drive	Poinsettia Road	Atlantic Avenue	1.3	Sidewalk (both sides)	Local	City	50	2L	25	No	Yes (Venetian Drive)	East	PLTS2	No	0	2	2	4	Tier 4
52	North-South	Ocean Boulevard/SR-A1A	South City Limit	Linton Boulevard	0.6	Sidewalk (Eastside)	Collector	State	50 to 60	2L	35	No	Yes	West	PLTS1	No	0	1	1	2	Tier 4
53	North-South	Ocean Boulevard/SR-A1A	Linton Boulevard	Casuarina Road	1.2	Sidewalk (Eastside)	Collector	State	50 to 60	2L	30	No	Yes	West	PLTS2	No	0	2	1	3	Tier 4
54	North-South	Ocean Boulevard/SR-A1A	Casuarina Road	Beach Drive	1.2	Sidewalk (Westside)	Collector	State	50 to 60	2L	30	Yes	Yes	Both	PLTS2	No	0	2	3	5	Tier 4
95	East-West	NE 22nd Avenue	Swinton Avenue	Seacrest Boulevard/NE 2nd Avenue	0.1	Sidewalk (Northside)	Collector	City	60	2L	25	No	Yes	South	PLTS2	No	0	2	3	5	Tier 4

APPENDIX-C

Planning Level Construction Cost Estimates for Recommended Bicycle Improvements



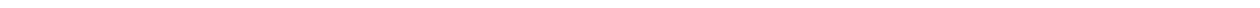
Recommended Bicycle Improvements: Planning Level Construction Cost Estimates

Map ID	Orientation	Street Name	From	To	Length (miles)	Recommended Bicycle Improvement	Functional Classification	Jurisdiction	Priority Tier (based on percentile)	Sides	Cost per Mile (in 2022 dollars)	Construction	MOT (15%)	Mobilization (10%)	Sub Total	Scope Contingency (20%)	ROW Cost	Total Construction Cost	PE Desig (15%)	CEI (10%)	Project Cost (in 2022 dollars)
1	North-South	Military Trail	South City Limit	Linton Boulevard	1.1	Buffered Bike Lane	Principal Arterial	County	Tier 1	1	\$2,000,000	\$2,299,578	\$344,937	\$229,958	\$2,874,472	\$574,894	\$0	\$3,449,367	\$517,405	\$344,937	\$4,311,708
2	North-South	Military Trail	Linton Boulevard	Atlantic Avenue	1.4	Buffered Bike Lane	Principal Arterial	County	Tier 1	1	\$2,000,000	\$2,861,762	\$429,264	\$286,176	\$3,577,203	\$715,441	\$0	\$4,292,643	\$643,897	\$429,264	\$5,365,804
3	North-South	Military Trail	Atlantic Avenue	Lake Ida Road	1.2	Buffered Bike Lane	Principal Arterial	County	Tier 1	1	\$2,000,000	\$2,339,138	\$350,871	\$233,914	\$2,923,922	\$584,784	\$0	\$3,508,707	\$526,306	\$350,871	\$4,385,884
7	North-South	Barkwick Road	Lake Ida Road	North City Limit	0.8	Shared Use Path	Collector	City	Tier 1	1	\$400,000	\$329,937	\$49,491	\$32,994	\$412,421	\$82,484	\$0	\$494,905	\$74,236	\$49,491	\$618,631
13	North-South	Congress Avenue	Linton Boulevard	Lowson Boulevard	0.6	Shared Use Path	Principal Arterial	County	Tier 1	1	\$400,000	\$228,549	\$34,282	\$22,855	\$285,686	\$57,137	\$0	\$342,824	\$51,424	\$34,282	\$428,530
14	North-South	Congress Avenue	Lowson Boulevard	Atlantic Avenue	1.1	Shared Use Path	Principal Arterial	County	Tier 1	1	\$400,000	\$430,501	\$64,575	\$43,050	\$538,126	\$107,625	\$0	\$645,751	\$96,863	\$64,575	\$807,189
15	North-South	Congress Avenue	Atlantic Avenue	Lake Ida Road	0.9	Shared Use Path	Principal Arterial	County	Tier 1	1	\$400,000	\$379,027	\$56,854	\$37,903	\$473,784	\$94,757	\$0	\$568,540	\$85,281	\$56,854	\$710,675
17	North-South	NW/SW 12th Avenue / SW 14th Avenue / Auburn Avenue	SW 10th Street	Atlantic Avenue	1.2	Sharrows	Collector	City	Tier 1	1	\$650,000	\$771,120	\$115,668	\$77,112	\$963,900	\$192,780	\$0	\$1,156,680	\$173,502	\$115,668	\$1,445,850
28	North-South	Swinton Avenue	SE 10th Street	Atlantic Avenue	1.1	Bike Lane	Collector	City	Tier 1	1	\$700,000	\$788,857	\$118,329	\$78,886	\$986,071	\$197,214	\$0	\$1,183,285	\$177,493	\$118,329	\$1,479,106
40	North-South	Federal Highway/US-1	Linton Boulevard	SE 10th Street	0.6	Buffered Bike Lane	Minor Arterial	State	Tier 1	1	\$1,600,000	\$1,031,145	\$154,672	\$103,115	\$1,288,932	\$257,786	\$0	\$1,546,718	\$232,008	\$154,672	\$1,933,397
44	North-South	Federal Highway/US-1 (SE 5th Avenue)	SE 10th Street	SE 2nd Street	0.8	Buffered Bike Lane	Minor Arterial	State	Tier 1	1	\$800,000	\$676,931	\$101,540	\$67,693	\$846,164	\$169,233	\$0	\$1,015,396	\$152,309	\$101,540	\$1,269,245
57	East-West	Linton Boulevard	West City Limit	Homewood Boulevard	1.4	Separated Bicycle Lane	Minor Arterial	County	Tier 1	1	\$2,500,000	\$3,573,204	\$535,981	\$357,320	\$4,466,505	\$893,301	\$0	\$5,359,806	\$803,971	\$535,981	\$6,699,758
58	East-West	Linton Boulevard	Homewood Boulevard	Congress Avenue	0.6	Separated Bicycle Lane	Minor Arterial	County	Tier 1	1	\$2,500,000	\$1,579,388	\$236,908	\$157,939	\$1,974,235	\$394,847	\$0	\$2,369,082	\$355,362	\$236,908	\$2,961,353
59	East-West	Linton Boulevard	Congress Avenue	SW 10th Avenue	0.6	Separated Bicycle Lane	Minor Arterial	County	Tier 1	1	\$2,500,000	\$1,586,503	\$237,975	\$158,650	\$1,983,129	\$396,626	\$0	\$2,379,755	\$356,963	\$237,975	\$2,974,693
60	East-West	Linton Boulevard	SW 10th Avenue	Old Dixie Highway	0.7	Separated Bicycle Lane	Minor Arterial	County	Tier 1	1	\$2,500,000	\$1,657,589	\$248,638	\$165,759	\$2,071,986	\$414,397	\$0	\$2,486,383	\$372,957	\$248,638	\$3,107,979
61	East-West	Linton Boulevard	Old Dixie Highway	Federal Highway/US-1	0.2	Separated Bicycle Lane	Collector	County	Tier 1	1	\$2,500,000	\$420,177	\$63,027	\$42,018	\$525,222	\$105,044	\$0	\$630,266	\$94,540	\$63,027	\$787,833
73	East-West	Atlantic Avenue, West	Military Trail	Barkwick Road	0.6	Bike Lane	Principal Arterial	State	Tier 1	1	\$2,000,000	\$1,142,766	\$171,415	\$114,277	\$1,428,458	\$285,692	\$0	\$1,714,149	\$257,122	\$171,415	\$2,142,687
74	East-West	Atlantic Avenue, West	Barkwick Road	E-4 Canal	1.0	Bike Lane	Principal Arterial	State	Tier 1	1	\$2,000,000	\$2,000,000	\$300,000	\$200,000	\$2,500,000	\$500,000	\$0	\$3,000,000	\$450,000	\$300,000	\$3,750,000
76	East-West	Atlantic Avenue, West	SW 12th Avenue	Swinton Avenue	0.8	Roadway Reconfiguration Study	Minor Arterial	State	Tier 1	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
77	East-West	Atlantic Avenue, East	Swinton Avenue	FEC Rail Corridor	0.2	Roadway Reconfiguration Study	Minor Arterial	City	Tier 1	0	\$0	\$0	\$0	\$0	\$0	\$0	\$1	\$0	\$0	\$0	\$0
80	East-West	NE 1st Street	Swinton Avenue	Federal Highway (NE 6th Avenue)	0.4	Sharrows	Collector	City	Tier 1	1	\$650,000	\$272,867	\$40,930	\$27,287	\$341,084	\$68,217	\$0	\$409,301	\$61,395	\$40,930	\$511,626
81	East-West	NE/NW 2nd Street	SW 12th Avenue	Federal Highway (NE 6th Avenue)	1.1	Bike Lane	Collector	City	Tier 1	1	\$700,000	\$786,572	\$117,986	\$78,657	\$983,215	\$196,643	\$0	\$1,179,858	\$176,979	\$117,986	\$1,474,823
85	East-West	Lake Ida Road	Barkwick Road	Congress Avenue	1.6	Buffered Bike Lane	Collector	City	Tier 1	1	\$1,600,000	\$2,488,803	\$373,320	\$248,880	\$3,111,004	\$622,201	\$0	\$3,733,204	\$559,981	\$373,320	\$4,666,506
86	East-West	Lake Ida Road	Congress Avenue	NW 5th Avenue	1.0	Bike Lane	Collector	City	Tier 1	1	\$1,400,000	\$1,409,040	\$211,356	\$140,904	\$1,761,300	\$352,260	\$0	\$2,113,560	\$317,034	\$211,356	\$2,641,951
87	East-West	Lake Ida Road	NW 5th Avenue	Swinton Avenue	0.3	Bike Lane	Collector	City	Tier 1	1	\$1,200,000	\$411,279	\$61,692	\$41,128	\$514,099	\$102,820	\$0	\$616,918	\$92,538	\$61,692	\$771,148
4	North-South	Military Trail	Lake Ida Road	North City Limit	0.8	Buffered Bike Lane	Principal Arterial	County	Tier 2	1	\$2,000,000	\$1,652,025	\$247,804	\$165,202	\$2,065,031	\$413,006	\$0	\$2,478,037	\$371,706	\$247,804	\$3,097,547
11	North-South	SW 22nd Avenue	Congress Avenue	Old Germantown Road	0.8	Shared Use Path	Collector	City	Tier 2	1	\$400,000	\$332,931	\$49,940	\$33,293	\$416,164	\$83,233	\$0	\$499,396	\$74,909	\$49,940	\$624,246
12	North-South	Congress Avenue	South City Limit	Linton Boulevard	1.2	Shared Use Path	Principal Arterial	County	Tier 2	1	\$400,000	\$460,226	\$69,034	\$46,023	\$575,282	\$115,056	\$0	\$690,339	\$103,551	\$69,034	\$862,923
19	North-South	Wallace Drive	Linton Boulevard	SW 10th Street	0.6	Shared Use Path	Collector	City	Tier 2	2	\$400,000	\$506,020	\$75,903	\$50,602	\$632,525	\$126,505	\$0	\$759,030	\$113,854	\$75,903	\$948,787
20	North-South	NW/SW 10th Avenue	Lake Ida Road	SW 4th Street	1.2	Sharrows	Collector	City	Tier 2	1	\$650,000	\$794,438	\$119,166	\$79,444	\$993,047	\$198,609	\$0	\$1,191,657	\$178,749	\$119,166	\$1,489,571
24	North-South	NW/SW 8th Avenue	SW 10th Street	Atlantic Avenue	1.1	Sharrows	Collector	City	Tier 2	1	\$650,000	\$732,466	\$109,870	\$73,247	\$915,583	\$183,117	\$0	\$1,098,700	\$164,805	\$109,870	\$1,373,375
25	North-South	NW/SW 8th Avenue	Atlantic Avenue	Lake Ida Road	0.6	Sharrows	Collector	City	Tier 2	1	\$650,000	\$397,992	\$59,699	\$39,799	\$497,490	\$99,498	\$0	\$596,988	\$89,548	\$59,699	\$746,235
29	North-South	Swinton Avenue	Atlantic Avenue	NE 1st Street	0.1	Bike lane	Collector	City	Tier 2	1	\$700,000	\$98,792	\$14,819	\$9,879	\$123,490	\$24,698	\$0	\$148,188	\$22,228	\$14,819	\$185,235
35	North-South	Dixie Highway	South City Limit	Linton Boulevard	1.3	Shared Use Path	Collector	County	Tier 2	1	\$400,000	\$533,818	\$80,073	\$53,382	\$667,272	\$133,454	\$0	\$800,727	\$120,109	\$80,073	\$1,000,908
36	North-South	Dixie Highway	Linton Boulevard	SE 10th Street	0.6	Shared Use Path	Collector	City	Tier 2	1	\$400,000	\$228,363	\$34,254	\$22,836	\$285,453	\$57,091	\$0	\$342,544	\$51,382	\$34,254	\$428,180
39	North-South	Federal Highway/US-1	South City Limit	Linton Boulevard	1.4	Buffered Bike Lane	Minor Arterial	State	Tier 2	1	\$1,600,000	\$2,200,463	\$330,069	\$220,046	\$2,750,579	\$550,116	\$0	\$3,300,695	\$495,104	\$330,069	\$4,125,868
41	North-South	Federal Highway/US-1 (SE 6th Avenue)	SE 10th Street	SE 2nd Street	0.8	Buffered Bike Lane	Minor Arterial	State	Tier 2	1	\$800,000	\$676,343	\$101,451	\$67,634	\$845,428	\$169,086	\$0	\$1,014,514	\$152,177	\$101,451	\$1,268,143
48	North-South	Federal Highway/US-1	Bond Way	North City Limit	1.0	Buffered Bike Lane	Minor Arterial	State	Tier 2	1	\$1,600,000	\$1,659,983	\$248,997	\$165,998	\$2,074,978	\$414,996	\$0	\$2,489,974	\$373,496	\$248,997	\$3,112,467
54	North-South	Ocean Boulevard/SR-A1A	Atlantic Avenue	Beach Drive	0.5	Bike Lane	Collector	State	Tier 2	1	\$700,000	\$350,000	\$52,500	\$35,000	\$437,500	\$87,500	\$0	\$525,000	\$78,750	\$52,500	\$656,250
62	East-West	Linton Boulevard	Federal Highway/US-1	Ocean Boulevard/SR-A1A	0.6	Buffered Bike Lane (WB)	Collector	County	Tier 2	0.5	\$1,600,000	\$484,676	\$72,701	\$48,468	\$605,845	\$121,169	\$0	\$727,014	\$109,052	\$72,701	\$908,767
69	East-West	SW/SE 2nd Street	SE 12th Avenue	Federal Highway (SE 6th Avenue)	1.3	Sharrows	Collector	City	Tier 2	1	\$650,000	\$824,774	\$123,716	\$82,477	\$1,030,968	\$206,194	\$0	\$1,237,162	\$185,574	\$123,716	\$1,546,452
70	East-West	SE 1st Street	Swinton Avenue	Federal Highway (SE 6th Avenue)	0.4	Sharrows	Collector	City	Tier 2	1	\$650,000	\$273,268	\$40,990	\$27,327	\$341,585	\$68,317	\$0	\$409,902	\$61,485	\$40,990	\$512,378
78	East-West	Atlantic Avenue, East	FEC Rail Corridor	Federal Highway (5th Avenue)	0.2	Roadway Reconfiguration Study	Minor Arterial	City	Tier 2	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
84	East-West	Lake Ida Road	Military Trail	Barkwick Road	0.6	Buffered Bike Lane	Collector	City	Tier 2	1	\$1,600,000	\$904,156	\$135,623	\$90,416	\$1,130,195	\$226,039	\$0	\$1,356,234	\$203,435	\$135,623	\$1,695,293
96	East-West	Gulf Stream Boulevard	Seacrest Boulevard/NE 2nd Avenue	Old Dixie Highway	0.4	Buffered Bike Lane	Collector	City	Tier 2	1	\$1,600,000	\$642,482	\$96,372	\$64,248	\$803,102	\$160,620	\$0	\$963,723	\$144,558	\$96,372	\$1,204,654
10	North-South	Homewood Boulevard	Lowson Boulevard	Atlantic Avenue	1.0	Buffered Bike Lane	Collector	City	Tier 3	1	\$800,000	\$764,269	\$114,640	\$76,427	\$955,336	\$191,067	\$0	\$1,146,404	\$171,961	\$114,640	\$1,433,005
16	North-South	Congress Avenue	Lake Ida Road	North City Limit	0.9	Shared Use Path	Principal Arterial	County	Tier 3	1	\$400,000	\$354,912	\$53,237	\$35,491	\$443,640	\$88,728	\$0	\$532,368	\$79,855	\$53,237	\$665,460
18	North-South	NW/SW 12th Avenue / SW 14th Avenue / Auburn Avenue	Atlantic Avenue	Lake Ida Road	0.3	Sharrows	Collector	City	Tier 3	1	\$650,000	\$187,265	\$28,090	\$18,726	\$234,081	\$46,816	\$0	\$280,897	\$42,135	\$28,090	\$351,121
26	North-South	NW/SW 4th Avenue	Linton Boulevard	Lowson Boulevard	0.6	Bike Lane	Collector	City	Tier 3	1	\$700,000	\$394,433	\$59,165	\$39,443	\$493,041	\$98,608	\$0	\$591,649	\$88,747	\$59,165	\$739,562
27	North-South	NW/SW 4th Avenue	Lowson Boulevard	Lake Ida Road	1.7	Bike Lane	Collector	City	Tier 3	1	\$700,000	\$1,197,719	\$179,658	\$119,772	\$1,497,148	\$299,430	\$0	\$1,796,578	\$269,487	\$179,658	\$2,245,723
30	North-South	Swinton Avenue	NE 1st Street	George Bush Boulevard	0.8	Bike Lane	Collector	City	Tier 3	1	\$700,000	\$569,793	\$85,469	\$56,979	\$712,241	\$142,448	\$0	\$854,689	\$128,203	\$85,469	\$1,068,361
32	North-South	Swinton Avenue	NE 22nd Street	North City Limit	0.4	Bike Lane	Collector	City	Tier 3	1	\$700,000	\$285,454	\$42,818	\$28,545	\$356,818	\$71,364	\$0	\$428,181	\$64,227	\$42,818	\$535,226
43	North-South	Federal Highway/US-1 (SE 6th Avenue)	Atlantic Avenue	George Bush Boulevard	1.0	Buffered Bike Lane	Minor Arterial	State	Tier 3	1	\$800,000	\$765,636	\$114,845	\$76,564	\$957,045	\$191,409	\$0	\$1,148,454	\$172,268	\$114,845	\$1,435,567
46	North-South	Federal Highway/US-1 (SE 5th Avenue)	Atlantic Avenue	George Bush Boulevard	1.0	Buffered Bike Lane	Minor Arterial	State	Tier 3	1	\$800,000	\$766,274	\$114,941	\$76,627	\$957,842	\$191,568	\$0	\$1,149,410	\$172,412	\$114,941	\$1,436,763

Map ID	Orientation	Street Name	From	To	Length (miles)	Recommended Bicycle Improvement	Functional Classification	Jurisdiction	Priority Tier (based on percentile)	Sides	Cost per Mile (in 2022 dollars)	Construction	MOT (15%)	Mobilization (10%)	Sub Total	Scope Contingency (20%)	ROW Cost	Total Construction Cost	PE Desig (15%)	CEI (10%)	Project Cost (in 2022 dollars)
79	East-West	Atlantic Avenue, East	Federal Highway (5th Avenue)	Ocean Boulevard/SR-A1A	0.7	Roadway Reconfiguration Study	Minor Arterial	State	Tier 3	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
95	East-West	NE 22nd Avenue	Swinton Avenue	Seacrest Boulevard/NE 2nd Avenue	0.1	Bike Lane	Collector	City	Tier 3	1	\$700,000	\$100,349	\$15,052	\$10,035	\$125,436	\$25,087	\$0	\$150,523	\$22,578	\$15,052	\$188,154
103	East-West	SW 4th Street	SW 12th Avenue	Federal Highway (NE 6th Avenue)	1.1	Sharrows	Collector	City	Tier 3	1	\$650,000	\$715,000	\$107,250	\$71,500	\$893,750	\$178,750	\$0	\$1,072,500	\$160,875	\$107,250	\$1,340,625
8	North-South	Dover Road	Linton Boulevard	Lowson Boulevard	0.5	Separated Bicycle Lane	Collector	city	Tier 4	1	\$850,000	\$428,098	\$64,215	\$42,810	\$535,122	\$107,024	\$0	\$642,146	\$96,322	\$64,215	\$802,683
31	North-South	Swinton Avenue	George Bush Boulevard	NE 22nd Street	0.9	Bike Lane	Collector	City	Tier 4	1	\$700,000	\$632,236	\$94,835	\$63,224	\$790,296	\$158,059	\$0	\$948,355	\$142,253	\$94,835	\$1,185,443
42	North-South	Federal Highway/US-1 (SE 6th Avenue)	SE 2nd Street	Atlantic Avenue	0.3	Buffered Bike Lane	Minor Arterial	State	Tier 4	1	\$800,000	\$225,990	\$33,899	\$22,599	\$282,488	\$56,498	\$0	\$338,985	\$50,848	\$33,899	\$423,731
45	North-South	Federal Highway/US-1 (SE 5th Avenue)	SE 2nd Street	Atlantic Avenue	0.3	Buffered Bike Lane	Minor Arterial	State	Tier 4	1	\$800,000	\$225,816	\$33,872	\$22,582	\$282,270	\$56,454	\$0	\$338,724	\$50,809	\$33,872	\$423,406
47	North-South	Federal Highway/US-1	George Bush Boulevard	Bond Way	0.3	Buffered Bike Lane	Minor Arterial	State	Tier 4	1	\$1,600,000	\$414,117	\$62,118	\$41,412	\$517,647	\$103,529	\$0	\$621,176	\$93,176	\$62,118	\$776,470
49	North-South	Seasage Drive/Venetian Drive	Poinsettia Road	Atlantic Avenue	1.3	Sharrows	Local	City	Tier 4	1	\$650,000	\$862,762	\$129,414	\$86,276	\$1,078,453	\$215,691	\$0	\$1,294,143	\$194,121	\$129,414	\$1,617,679
50	North-South	Seagate Drive/Gleason Drive	Poinsettia Road	Atlantic Avenue	1.3	Sharrows	Local	City	Tier 4	1	\$650,000	\$850,434	\$127,565	\$85,043	\$1,063,042	\$212,608	\$0	\$1,275,650	\$191,348	\$127,565	\$1,594,563
51	North-South	Andrews Avenue	Atlantic Avenue	Pelican Lane	1.2	Sharrows	Local	City	Tier 4	1	\$650,000	\$769,246	\$115,387	\$76,925	\$961,558	\$192,312	\$0	\$1,153,870	\$173,080	\$115,387	\$1,442,337
55	North-South	Ocean Boulevard/SR-A1A	Beach Drive	North City Limit	0.5	Bike Lane	Collector	State	Tier 4	1	\$700,000	\$347,360	\$52,104	\$34,736	\$434,200	\$86,840	\$0	\$521,040	\$78,156	\$52,104	\$651,300
63	East-West	Lowson Boulevard	Military Trail	Dover Rd	1.1	Bike Lane	Collector	City	Tier 4	1	\$700,000	\$770,000	\$115,500	\$77,000	\$962,500	\$192,500	\$0	\$1,155,000	\$173,250	\$115,500	\$1,443,750
94	East-West	George Bush Boulevard	Andrews Avenue	Ocean Boulevard/SR-A1A	0.2	Bike Lane	Collector	City	Tier 4	1	\$700,000	\$124,348	\$18,652	\$12,435	\$155,436	\$31,087	\$0	\$186,523	\$27,978	\$18,652	\$233,153

APPENDIX-D

Planning Level Construction Cost Estimates for Recommended Pedestrian Improvements

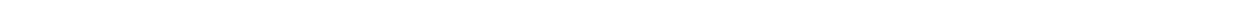


Recommended Pedestrian Network Improvements: Planning Level Construction Cost Estimates

Map ID	Orientation	Street Name	From	To	Length_Miles	Recommended Sidewalk Improvement	Functional Classification	Jurisdiction	Priority Tier (based on percentile)	Sides	Cost per rMile (in 2022 dollars)	Construction	MOT (15%)	Mobilization (10%)	Sub Total	Scope Contingency (20%)	ROW Cost	Total Construction Cost	PE Desig (15%)	CEI (10%)	Project Cost (in 2022 dollars)
1	North-South	Military Trail	South City Limit	Linton Boulevard	1.1	Fill Gaps (Eastside)	Principal Arterial	County	Tier 1	1	\$200,000	\$229,958	\$34,494	\$22,996	\$287,447	\$57,489	\$0	\$344,937	\$51,740	\$34,494	\$431,171
2	North-South	Military Trail	Linton Boulevard	Atlantic Avenue	1.4	Add Buffer (Westside)	Principal Arterial	County	Tier 1	1	\$250,000	\$357,720	\$53,658	\$35,772	\$447,150	\$89,430	\$0	\$536,580	\$80,487	\$53,658	\$670,726
12	North-South	Congress Avenue	South City Limit	Linton Boulevard	1.2	Shared Use Path	Principal Arterial	County	Tier 1												
20	North-South	NW/SW 10th Avenue	SW 4th Street	Lake Ida Road	1.2	Fill Gaps	Collector	City	Tier 1	1	\$200,000	\$244,442	\$36,666	\$24,444	\$305,553	\$61,111	\$0	\$366,664	\$55,000	\$36,666	\$458,330
26	North-South	NW/SW 4th Avenue	Linton Boulevard	Lowson Boulevard	0.6	Fill Gaps (Eastside)	Collector	City	Tier 1	1	\$200,000	\$112,695	\$16,904	\$11,270	\$140,869	\$28,174	\$0	\$169,043	\$25,356	\$16,904	\$211,303
36	North-South	Dixie Highway	Linton Boulevard	SE 10th Street	0.6	Shared use path	Collector	City	Tier 1												
60	East-West	Linton Boulevard	SW 10th Avenue	Old Dixie Highway	0.7	Add Buffer	Minor Arterial	County	Tier 1	2	\$250,000	\$331,518	\$49,728	\$33,152	\$414,397	\$82,879	\$0	\$497,277	\$74,591	\$49,728	\$621,596
61	East-West	Linton Boulevard	Old Dixie Highway	Federal Highway/US-1	0.2	Add Buffer	Collector	County	Tier 1	2	\$250,000	\$84,035	\$12,605	\$8,404	\$105,044	\$21,009	\$0	\$126,053	\$18,908	\$12,605	\$157,567
73	East-West	Atlantic Avenue, West	Military Trail	Barkwick Road	0.6	Add Buffer	Principal Arterial	State	Tier 1	2	\$250,000	\$285,692	\$42,854	\$28,569	\$357,114	\$71,423	\$0	\$428,537	\$64,281	\$42,854	\$535,672
74	East-West	Atlantic Avenue, West	Barkwick Road	E-4 Canal	1.0	Add Buffer	Principal Arterial	State	Tier 1	2	\$250,000	\$500,000	\$75,000	\$50,000	\$625,000	\$125,000	\$0	\$750,000	\$112,500	\$75,000	\$937,500
75	East-West	Atlantic Avenue, West	Congress Avenue	Westside of I-95	0.5	Add Buffer	Minor Arterial	State	Tier 1	2	\$250,000	\$250,000	\$37,500	\$25,000	\$312,500	\$62,500	\$0	\$375,000	\$56,250	\$37,500	\$468,750
104	East-West	Atlantic Avenue, West	E-4 Canal	Congress Avenue	0.2	Add Buffer	Principal Arterial	State	Tier 1	2	\$250,000	\$100,000	\$15,000	\$10,000	\$125,000	\$25,000	\$0	\$150,000	\$22,500	\$15,000	\$187,500
109	East-West	Atlantic Avenue, West	Westside of I-95	SW 12th Ave	0.1	Add Buffer	Minor Arterial	State	Tier 1	2	\$250,000	\$50,000	\$7,500	\$5,000	\$62,500	\$12,500	\$0	\$75,000	\$11,250	\$7,500	\$93,750
3	North-South	Military Trail	Atlantic Avenue	Lake Ida Road	1.2	Add Buffer (where possible)	Principal Arterial	County	Tier 2	2	\$250,000	\$584,784	\$87,718	\$58,478	\$730,981	\$146,196	\$0	\$877,177	\$131,577	\$87,718	\$1,096,471
4	North-South	Military Trail	Lake Ida Road	North City Limit	0.8	Add Buffer (where possible)	Principal Arterial	County	Tier 2	2	\$250,000	\$413,006	\$61,951	\$41,301	\$516,258	\$103,252	\$0	\$619,509	\$92,926	\$61,951	\$774,387
7	North-South	Barkwick Road	Lake Ida Road	North City Limit	0.8	Shared Use Path + Sidewalk (Westside)	Collector	City	Tier 2												
13	North-South	Congress Avenue	Linton Boulevard	Lowson Boulevard	0.6	Shared Use Path	Principal Arterial	County	Tier 2												
14	North-South	Congress Avenue	Lowson Boulevard	Atlantic Avenue	1.1	Shared Use Path	Principal Arterial	County	Tier 2												
15	North-South	Congress Avenue	Atlantic Avenue	Lake Ida Road	0.9	Shared Use Path	Principal Arterial	County	Tier 2												
16	North-South	Congress Avenue	Lake Ida Road	North City Limit	0.9	Shared Use Path	Principal Arterial	County	Tier 2												
35	North-South	Dixie Highway	South City Limit	Linton Boulevard	1.3	Shared use path	Collector	County	Tier 2												
51	North-South	Andrews Avenue	Atlantic Avenue	Pelican Lane	1.2	Fill Gaps	Local	City	Tier 2	1	\$200,000	\$236,691	\$35,504	\$23,669	\$295,864	\$59,173	\$0	\$355,037	\$53,256	\$35,504	\$443,796
57	East-West	Linton Boulevard	West City Limit	Homewood Boulevard	1.4	Sidewalk (both sides)	Minor Arterial	County	Tier 2	2	\$200,000	\$571,713	\$85,757	\$57,171	\$714,641	\$142,928	\$0	\$857,569	\$128,635	\$85,757	\$1,071,961
58	East-West	Linton Boulevard	Homewood Boulevard	Congress Avenue	0.6	Sidewalk (both sides)	Minor Arterial	County	Tier 2	2	\$200,000	\$252,702	\$37,905	\$25,270	\$315,878	\$63,176	\$0	\$379,053	\$56,858	\$37,905	\$473,816
62	East-West	Linton Boulevard	Federal Highway/US-1	Ocean Boulevard/SR-A1A	0.6	Add Buffer	Collector	County	Tier 2	2	\$250,000	\$302,922	\$45,438	\$30,292	\$378,653	\$75,731	\$0	\$454,384	\$68,158	\$45,438	\$567,980
5	North-South	Forest Road	Lakeview Boulevard	Lowson Boulevard	0.2	Sidewalk (One side)	Local	City	Tier 3	1	\$200,000	\$31,676	\$4,751	\$3,168	\$39,595	\$7,919	\$0	\$47,514	\$7,127	\$4,751	\$59,392
11	North-South	SW 22nd Avenue	Congress Avenue	Old Germantown Road	0.8	Shared Use Path	Collector	City	Tier 3												
27	North-South	NW/SW 4th Avenue	Lowson Boulevard	Lake Ida Road	1.7	Fill Gaps	Collector	City	Tier 3	1	\$200,000	\$342,205	\$51,331	\$34,221	\$427,757	\$85,551	\$0	\$513,308	\$76,996	\$51,331	\$641,635
32	North-South	Swinton Avenue	NE 22nd Street	North City Limit	0.4	Sidewalk (Eastside)	Collector	City	Tier 3	1	\$200,000	\$81,558	\$12,234	\$8,156	\$101,948	\$20,390	\$0	\$122,337	\$18,351	\$12,234	\$152,922
50	North-South	Seagate Drive/Gleason Drive	Poinsettia Road	Atlantic Avenue	1.3	Sidewalk (both sides)	Local	City	Tier 3	2	\$200,000	\$523,344	\$78,502	\$52,334	\$654,180	\$130,836	\$0	\$785,016	\$117,752	\$78,502	\$981,269
55	North-South	Ocean Boulevard/SR-A1A	Beach Drive	North City Limit	0.5	Fill Gaps (Westside) & Sidewalk (Eastside)	Collector	State	Tier 3	1.5	\$200,000	\$148,869	\$22,330	\$14,887	\$186,086	\$37,217	\$0	\$223,303	\$33,495	\$22,330	\$279,129
63	East-West	Lowson Boulevard	Military Trail	Dover Rd	1.1	Sidewalk (both sides)	Collector	City	Tier 3	2	\$200,000	\$440,000	\$66,000	\$44,000	\$550,000	\$110,000	\$0	\$660,000	\$99,000	\$66,000	\$825,000
71	East-West	Ingraham Avenue	MacFarlane Drive	Venetian Drive	0.1	Sidewalk (one side)	Local	City	Tier 3	1	\$200,000	\$11,467	\$1,720	\$1,147	\$14,333	\$2,867	\$0	\$17,200	\$2,580	\$1,720	\$21,500
83	East-West	Vista Del Mar Drive	Andrews Avenue	Ocean Boulevard/SR-A1A	0.2	Sidewalk (Southside)	Local	City	Tier 3	1	\$200,000	\$31,671	\$4,751	\$3,167	\$39,588	\$7,918	\$0	\$47,506	\$7,126	\$4,751	\$59,383
9	North-South	Homewood Boulevard	Linton Boulevard	Lowson Boulevard	0.5	Sidewalk (Westside)	Collector	City	Tier 4	1	\$200,000	\$100,722	\$15,108	\$10,072	\$125,903	\$25,181	\$0	\$151,084	\$22,663	\$15,108	\$188,855
10	North-South	Homewood Boulevard	Lowson Boulevard	Atlantic Avenue	1.0	Sidewalk (Eastside)	Collector	City	Tier 4	1	\$200,000	\$191,067	\$28,660	\$19,107	\$238,834	\$47,767	\$0	\$286,601	\$42,990	\$28,660	\$358,251
19	North-South	Wallace Drive	Linton Boulevard	SW 10th Street	0.6	Fill Gaps	Collector	City	Tier 4	1	\$200,000	\$126,505	\$18,976	\$12,650	\$158,131	\$31,626	\$0	\$189,757	\$28,464	\$18,976	\$237,197
31	North-South	Swinton Avenue	George Bush Boulevard	NE 22nd Street	0.9	Sidewalk (Eastside)	Collector	City	Tier 4	1	\$200,000	\$180,639	\$27,096	\$18,064	\$225,799	\$45,160	\$0	\$270,958	\$40,644	\$27,096	\$338,698
49	North-South	Seasage Drive/Venetian Drive	Poinsettia Road	Atlantic Avenue	1.3	Sidewalk (both sides)	Local	City	Tier 4	2	\$200,000	\$530,931	\$79,640	\$53,093	\$663,663	\$132,733	\$0	\$796,396	\$119,459	\$79,640	\$995,495
52	North-South	Ocean Boulevard/SR-A1A	South City Limit	Linton Boulevard	0.6	Sidewalk (Eastside)	Collector	State	Tier 4	1	\$200,000	\$118,100	\$17,715	\$11,810	\$147,624	\$29,525	\$0	\$177,149	\$26,572	\$17,715	\$221,437
53	North-South	Ocean Boulevard/SR-A1A	Linton Boulevard	Casuarina Road	1.2	Sidewalk (Eastside)	Collector	State	Tier 4	1	\$200,000	\$233,106	\$34,966	\$23,311	\$291,383	\$58,277	\$0	\$349,659	\$52,449	\$34,966	\$437,074
54	North-South	Ocean Boulevard/SR-A1A	Casuarina Road	Beach Drive	1.2	Sidewalk (Westside)	Collector	State	Tier 4	1	\$200,000	\$233,160	\$34,974	\$23,316	\$291,451	\$58,290	\$0	\$349,741	\$52,461	\$34,974	\$437,176
95	East-West	NE 22nd Avenue	Swinton Avenue	Seacrest Boulevard/NE 2nd Avenue	0.1	Sidewalk (Northside)	Collector	City	Tier 4	1	\$200,000	\$28,671	\$4,301	\$2,867	\$35,839	\$7,168	\$0	\$43,007	\$6,451	\$4,301	\$53,758

APPENDIX-E

USDOT Highway, Transit & Safety Funding Programs



<p>HSIP: Highway Safety Improvement Program</p> <p>IIJA: Infrastructure Investment and Jobs Act (Pub. L. 117-58), also known as the Bipartisan Infrastructure Law</p> <p>INFRA: Infrastructure for Rebuilding America Discretionary Grant Program</p> <p>NAE: Neighborhood Access and Equity Program</p> <p>NHPP: National Highway Performance Program</p> <p>NHTSA 402: National Highway Traffic Safety Administration State and Community Highway Safety Grant Program</p> <p>NHTSA 405(g): National Highway Traffic Safety Administration National Priority Safety Programs (Nonmotorized safety)</p> <p>NSBP: National Scenic Byways Program</p>
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<p>TASA: Transportation Alternatives Set-Aside (formerly Transportation Alternatives Program, Transportation Enhancements)</p> <p>Thrive: Thriving Communities Initiative (TA: Technical Assistance)</p> <p>TIFIA: Transportation Infrastructure Finance and Innovation Act (loans)</p> <p>TOD: Transit-Oriented Development</p> <p>TTP: Tribal Transportation Program</p> <p>TTPSF: Tribal Transportation Program Safety Fund</p>
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Cross-cutting notes

This table indicates likely eligibility for pedestrian, bicycle, and micromobility activities and projects under U.S. Department of Transportation surface transportation funding programs. Activities and projects must meet program eligibility requirements. See notes and links to program information below. Although the primary focus of this table is stand-alone activities and projects, programs can also fund pedestrian and bicycle facilities as part of larger projects. Project sponsors are encouraged to consider [Complete Streets](#) and Networks that routinely integrate the safety, accessibility, equity, and convenience of walking and bicycling into surface transportation projects. The Federal-aid eligibility of the pedestrian and bicycle elements are considered under the eligibility criteria applicable to the larger highway project. Pedestrian and bicycle activities also may be characterized as environmental mitigation for larger highway projects, especially in response to impacts to a Section 4(f) property or work zone safety, mobility, and accessibility impacts on bicyclists and pedestrians.

- See FHWA’s [Policy on Using Bipartisan Infrastructure Law Resources to Build a Better America](#).
- See [FHWA Bicycle and Pedestrian Planning, Program, and Project Development](#) (Guidance), [Publications, Pedestrian and Bicyclist Safety](#), and Bicycle transportation and pedestrian walkways statute at [23 U.S.C. 217](#).
- Bicycle Project Purpose: 23 U.S.C. 217(i) requires that bicycle facilities “be principally for transportation, rather than recreation, purposes”. However, 23 U.S.C. 133(b)(7) and 133(h) authorize recreational trails under [STBG](#) and [TASA](#), therefore, 23 U.S.C. 217(i) does not apply to trail projects (including for bicycle use) using [STBG](#) or [TASA](#) funds. Section 217(i) applies to bicycle facilities other than trail-related projects, and section 217(i) applies to bicycle facilities using other programs ([NHPP](#), [HSIP](#), [CMAQ](#)). The transportation requirement under section 217(i) only applies to bicycle projects, not to any other trail use or transportation mode.
- Signs, signals, signal improvements includes ensuring accessibility for persons with disabilities. See [Accessible Pedestrian Signals](#). See also [Proven Safety Countermeasures](#), such as [Crosswalk Visibility Enhancements](#), [Leading Pedestrian Interval](#) signals, [Lighting](#), [Pedestrian Hybrid Beacons](#), and [Rectangular Rapid Flashing Beacons](#).
- Technical Assistance includes assisting local agencies and other potential grantees to identify pedestrian and bicycle safety and infrastructure issues, and to help them develop and implement successful projects. Technical assistance may be authorized under a program or sometimes as a limited portion of a program. See FHWA links to [Technical Assistance and Local Support](#).
- The [DOT Navigator](#) is a resource to help communities understand the best ways to apply for grants, and to plan for and deliver transformative infrastructure projects and services.
- Aspects of DOT initiatives may be eligible as individual projects. Activities above may benefit safe, comfortable, multimodal networks; environmental justice; and equity.
- Occasional DOT or agency incentive grants may be available for specific research or technical assistance purposes.
- Operation costs: In general, ongoing and routine operation costs (such as ongoing costs for bike sharing or scooter sharing) are not eligible unless specified within program legislation. See links to program guidance for more information.

Program-specific notes

DOT funding programs have specific requirements that activities and projects must meet. Eligibility must be determined on a case-by-case basis. See links to program guidance for more information.

- FHWA Programs**
- [ATIIP](#) (IIJA § 11529): Subject to appropriations. Projects costing at least \$15,000,000 to develop or complete active transportation networks and spines, or at least \$100,000 to plan or design for active transportation networks and spines.
 - [BRI](#): [BFP](#), (IIJA, Div. J, title VIII, para. (1)), [BIP](#) (23 U.S.C. 124), [BRR](#) (Department of Transportation Appropriations Act, 2022): For specific highway bridge projects and highway bridge projects that will replace or rehabilitate a bridge; project must consider pedestrian and bicycle access as part of the project and costs related to their inclusion are eligible under these programs.
 - [CRP](#) (23 U.S.C. 175): Projects should support the reduction of carbon dioxide emissions from on-road highway sources.
 - [CMAQ](#) (23 U.S.C. 149): Projects must demonstrate emissions reduction and benefit air quality. See the [CMAQ guidance](#) for a list of projects that may be eligible for CMAQ funds. CMAQ funds may be used for shared use paths, but not for trails that are primarily for recreational use.
 - [HSIP](#) (23 U.S.C. 148): Projects must be consistent with a State’s [Strategic Highway Safety Plan](#) and (1) correct or improve a hazardous road location or feature, or (2) address a highway safety problem. Certain noninfrastructure safety projects can also be funded using HSIP funds as specified safety projects.
 - [RHCP](#) (23 U.S.C. 130): Projects at all public railroad crossings including roadways, bike trails, and pedestrian paths.
 - [NHPP](#) (23 U.S.C. 119): Projects must benefit National Highway System (NHS) corridors and must be located on land adjacent to any highway on the National Highway System (23 U.S.C. 217(b)).
 - [PROTECT](#) (23 U.S.C. 176): Funds can only be used for activities that are primarily for the purpose of resilience or inherently resilience related. With certain exceptions, the focus must be on supporting the incremental cost of making assets more resilient.
 - [STBG](#) (23 U.S.C. 133): Broad eligibility for pedestrian, bicycle, and micromobility projects under 23 U.S.C. 206, 208, and 217 (23 U.S.C. 133(b)(7)). Activities marked “\$SRTS” means eligible only as an SRTS project benefiting schools for kindergarten through 12th grade. Nonconstruction projects related to safe access for bicyclists and pedestrians (such as bicycle and pedestrian education) are eligible under STBG (23 U.S.C. 217(a)).

- [TASA](#) (23 U.S.C. 133(h)): Broad eligibility for pedestrian, bicycle, and micromobility projects. Activities marked “\$SRTS” means eligible only as an SRTS project benefiting schools for kindergarten through 12th grade.
- [RTP](#) (23 U.S.C. 206): Projects for trails and trailside and trailhead facilities for any recreational trail use. RTP projects are eligible under TA Set-Aside and STBG.
- [SRTS](#) (23 U.S.C. 208): Projects for any SRTS activity. FY 2012 was the last year for dedicated - funds, but funds are available until expended. SRTS projects are eligible under TA Set-Aside and STBG.
- [PLAN](#) (23 U.S.C. 134 and 135): Funds must be used for planning purposes, for example: Maps: System maps and GIS; Safety education and awareness: for transportation safety planning; Safety program technical assessment: for transportation safety planning; Training: bicycle and pedestrian system planning training. Transportation planning associated with activities would be eligible, SPR and PL funds are not available for project implementation or construction.
- [NSBP](#) (23 U.S.C. 162): Discretionary program subject to annual appropriations. Projects must directly benefit and be located on or near an eligible designated scenic byway.

FHWA Federal Lands Programs

- [FLTTP](#) (23 U.S.C. 201-204): Projects must provide access to or within Federal or Tribal lands. Programs include: Federal Lands and Tribal Transportation Programs ([Federal Lands Access Program](#), [Federal Lands Transportation Program](#), [Federal Lands Planning Program](#)) and related programs for Federal and Tribal lands such as the [Nationally Significant Federal Lands and Tribal Projects](#) (NSFLTTP) program.
 - [Federal Lands Transportation Program](#) (23 U.S.C. 203): For Federal agencies for projects that provide access within Federal lands.
 - [Federal Lands Access Program](#) (FLAP) (23 U.S.C. 204): For State and local entities for projects that provide access to or within Federal or Tribal lands.
- [TTP](#) (23 U.S.C. 202): For federally recognized Tribal governments for projects within Tribal boundaries and public roads that access Tribal lands.
- [TTPSF](#) (23 U.S.C. 202(e)(1) and 23 U.S.C. 148(a)(4)): Grants available to federally recognized Indian Tribes through a competitive, discretionary program to plan and implement transportation safety projects.

OST Grant Programs

- [INFRA](#) (IIJA § 11110): Funds projects that improve safety, generate economic benefits, reduce congestion, enhance resiliency, and hold the greatest promise to eliminate freight bottlenecks and improve critical freight movements.
- [RAISE](#) (IIJA § 21202): Funds capital and planning grants to help communities build transportation projects that have significant local or regional impact and improve safety and equity.
- [RCN](#): Combines [RCP](#) (IIJA § 11509 and div. J, title VIII, Highway Infrastructure Programs, para. (7)), which provides funds for planning grants and capital construction grants that relate to a transportation facility that creates a barrier to community connectivity and [Neighborhood Access and Equity Grant Program](#), Inflation Reduction Act (IRA) § 60501; enacted as Pub. L. 117-169, 23 U.S.C. 177, which provides funds for projects that improve walkability, safety, and affordable transportation access and funding for planning and capacity building activities in disadvantaged or underserved communities.
- [SMART](#) (IIJA § 25005): Provides grants to eligible public sector agencies to conduct demonstration projects focused on advanced smart community technologies and systems in order to improve transportation efficiency and safety.
- [SS4A](#) (IIJA § 24112): Discretionary program funds regional, local, and Tribal initiatives through grants to prevent roadway deaths and serious injuries. Projects must be identified in a comprehensive safety action plan (§ 24112(a)(3)).
- [Thrive](#) (Department of Transportation Appropriations Act, 2022 (Pub. L. 117-103, div. L, title I): Technical assistance, planning, and capacity-building support in selected communities.

OST Loan Programs

- [RRIF](#) (Chapter 224 of title 49 U.S.C.): Program offers direct loans and loan guarantees for capital projects related to rail facilities, stations, or crossings. Pedestrian and bicycle infrastructure components of “economic development” projects located within ½-mile of qualifying rail stations may be eligible. May be combined with other grant sources.
- [TIFIA](#) (Chapter 6 of title 23 U.S.C.): Program offers secured loans, loan guarantees, or standby lines of credit for capital projects. Minimum total project size is \$10 million; multiple surface transportation projects may be bundled to meet cost threshold, under the condition that all projects have a common repayment pledge. May be combined with other grant sources, subject to total Federal assistance limitations.

FTA Programs

- [FTA](#) (49 U.S.C. 5307): Multimodal projects funded with FTA transit funds must provide access to transit. See [Bicycles and Transit, Flex Funding for Transit Access](#), the FTA [Final Policy Statement on the Eligibility of Pedestrian and Bicycle Improvements Under Federal Transit Law](#), and [FTA Program & Bicycle Related Funding Opportunities](#).
 - Bicycle infrastructure plans and projects must be within a 3-mile radius of a transit stop or station. If more than 3 miles, within a distance that people could be expected to safely and conveniently bike to the particular stop or station.
 - Pedestrian infrastructure plans and projects must be within a ½ mile radius of a transit stop or station. If more than ½ mile, within a distance that people could be expected to safely and conveniently walk to the particular stop or station.
 - FTA funds cannot be used to purchase bicycles for bike share systems.
- [FTA AoPP](#) (Further Consolidated Appropriations Act, 2020 (Pub. L. 116-94); Consolidated Appropriations Act, 2021 (Pub. L. 116-260)): Promotes multimodal planning, engineering, and technical studies, or financial planning to improve transit services, facilities, and access in areas experiencing long-term economic distress, not for capital purchases.
- [FTA TOD](#): Provides planning grants to support community efforts to improve safe access to public transportation, services, and facilities, including for pedestrians and cyclists. The grants help organizations plan for transportation projects that connect communities and improve access to transit and affordable housing, not for capital purchases.

NHTSA Programs

- NHTSA [402](#) (23 U.S.C. 402): Project activity must be included in the State’s Highway Safety Plan. Contact the [State Highway Safety Office](#) for details.
- NHTSA [405](#) (23 U.S.C. 405): Funds are subject to eligibility, application, and award. Project activity must be included in the State’s Highway Safety Plan. Contact the [State Highway Safety Office](#) for details. The [Bipartisan Infrastructure Law](#) expanded the eligible use of funds for a Section 405 Nonmotorized Safety grant beginning in FY 2024. [See 23 U.S.C. 1300.26](#). For prior year grant awards, FAST Act eligible uses remain in place.
- Project agreements involving safety education, or any other positions must specify hours of eligible activity required to perform the project. Project agreements may not be expressed in terms of full or part time positions.

