



ACTIVE TRANSPORTATION PLAN

Technical Memorandum II: Bicycle & Pedestrian Policy Best Practices

Updated April 2024



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2024 UPDATE

The 2020 Forward Pinellas Active Transportation Plan (ATP) developed a repository of bicycle and pedestrian policy best practices. As part of the 2024 Active Transportation Plan update, the bicycle and pedestrian policy best practices were updated to ensure up-to-date content and reflect national design standards that have been released since the 2020 ATP, including the Public Right-of-Way Accessibility Guidelines (PROWAG) released in September of 2023 and the Manual on Uniform Traffic Control Devices (MUTCD) 11th Edition released in December 2023.

CONTENTS

01 Introduction.....	2
National Standards & Best Practices	2
02 Bicycle & Pedestrian Supportive Strategies, Policies, & Codes	9

01 Introduction

Effective bicycle and pedestrian policies and codes impact long-term planning strategies and immediate decision-making priorities. It evolves infrastructure development to incorporate more users throughout planning, design, construction, and maintenance. Also, investments and capital improvements are equally connected to the decisions made around bicycle and pedestrian improvements. For these reasons, a review of best practices is important to the development of this Active Transportation Plan. Further, for communities to truly become bicycle and pedestrian-friendly, local government comprehensive plans and land development regulations must incorporate language that is supportive of implementing not only bicycle and pedestrian infrastructure, but also language supporting education, enforcement, encouragement, and evaluation measures for bicycling and walking.

The best practices presented in this document are compiled from a variety of authoritative sources and state/local agencies, including examples from the Federal Highway Administration (FHWA), Florida Department of Transportation (FDOT), the American Association of State Highway and Transportation Officials (AASHTO), the National Association of City Transportation Officials (NACTO), and the Institute of Transportation Engineers (ITE). What follows is a brief overview of national standards followed by a review of local/state policies by topic area. It is recommended that the partner local governments of Forward Pinellas review the policies in their current plans and consider revisions or amendments to give a greater priority and higher requirements to support the bicycle and pedestrian modes, based on the guidance provided here.

National Standards & Best Practices

Table 1 provides a summary of current references for the planning and design of facilities that support walking and biking. Local judgment is recommended to ensure that the application is appropriate for the context of each treatment and community.

Table 1. National Standards & Best Practices

DOCUMENT	SOURCE	PURPOSE
MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)	<i>FHWA</i>	The FHWA's MUTCD sets the standards used by transportation professionals nationwide to install and maintain traffic control devices on all public streets, highways, bikeways, and private roads open to public traffic. The MUTCD provides criteria on lane striping requirements, signal warrants, and recommended signage and pavement markings. The current version of the MUTCD was released in December 2023 and includes some contemporary and more innovative bicycle and pedestrian infrastructure types than the 2009 guide.
www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/mutcd/index.cfm		
BIKEWAY SELECTION GUIDE	<i>FHWA</i>	Resource to help transportation practitioners consider and make informed trade-off decisions relating to the selection of bikeway types. The guide focuses on safety, but it also emphasizes the importance of comfort to appeal to a broad spectrum of bicyclists, and meet the needs of people of all ages and abilities. It is not intended to supplant existing design guides but rather serve as a decision support tool.
www.safety.fhwa.dot.gov/ped_bike/tools_solve/docs/fhwasa18077.pdf		
SEPARATED BIKE LANE PLANNING & DESIGN GUIDE	<i>FHWA</i>	This Separated Bike Lane Planning and Design Guide outlines planning considerations for separated bike lanes (also sometimes called "cycle tracks" or "protected bike lanes") and provides a menu of design options covering typical one and two-way scenarios. It highlights different options for providing separation, while also documenting midblock design considerations for driveways, transit stops, accessible parking, and loading zones. It provides detailed intersection design information covering topics such as turning movement operations, signalization, signage, and on-road markings. Case studies highlight best practices and lessons learned throughout the document. The Guide consolidates lessons learned from practitioners designing and implementing separated bike lanes throughout the U.S. It attempts to capture the current state of practice, while still recognizing that our understanding of this facility type is still evolving and that there is a need for design flexibility. To encourage continued development and refinement of techniques, the guide identifies specific data elements to collect before and after implementation to enable future analysis across facilities in different communities. It identifies potential future research, highlights the importance of ongoing peer exchange and capacity building, and emphasizes the need to create holistic ways to evaluate the performance of a separated bike lane.
www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/separated_bikelane_pdg/separatedbikelane_pdg.pdf		

DOCUMENT	SOURCE	PURPOSE
<p>ACHIEVING MULTIMODAL NETWORKS, APPLYING DESIGN FLEXIBILITY & REDUCING CONFLICTS</p>	<p>FHWA</p>	<p>This publication is a resource for practitioners seeking to build multimodal transportation networks. The publication highlights ways that planners and designers can apply the design flexibility found in current national design guidance to address common roadway design challenges and barriers. It focuses on reducing multimodal conflicts and achieving connected networks so that walking and bicycling are safe, comfortable, and attractive options for people of all ages and abilities. This resource includes 24 design topics, organized into two themes. The 12 design topics in Part 1 focus on design flexibility. The 12 topics in Part 2 focus on measures to reduce conflicts between modes. Each design topic is four pages in length and includes relevant case studies and references to appropriate design guidelines. This document covers a wide range of solutions to achieve multimodal transportation networks. It includes solutions for streets and intersections, and has information about shared use paths and other trails that can serve both transportation and recreation purposes. It includes information about crossing main streets, bridges and underpasses, and about interactions with freight and transit. This resource addresses common concerns and perceived barriers among planning and design professionals and provides specific information about flexible design treatments and approaches.</p>
<p>www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/multimodal_networks/fhwahep16055.pdf</p>		
<p>GUIDE FOR IMPROVING PEDESTRIAN SAFETY AT UNCONTROLLED CROSSING LOCATIONS</p>	<p>FHWA</p>	<p>This guide assists State or local transportation or traffic safety departments that are considering developing a policy or guide to support the installation of countermeasures at uncontrolled pedestrian crossing locations. This document provides guidance to agencies, including best practices for each step involved in selecting countermeasures. By focusing on uncontrolled crossing locations, agencies can address a significant national safety problem and improve quality of life for pedestrians of all ages and abilities. Agencies may use this guide to develop a customized policy or to supplement existing local decision-making guidelines.</p>
<p>www.safety.fhwa.dot.gov/ped_bike/step/docs/STEP_Guide_for_Improving_Ped_Safety_at_Unsig_Loc_3-2018_07_17-508compliant.pdf</p>		
<p>GUIDE FOR THE DEVELOPMENT OF BICYCLE FACILITIES</p>	<p>ASSHTO</p>	<p>This guide provides information on dimensions, use, and layout of specific bicycle facilities. This resource provides basic information, such as dimensions for bicycle lanes and trails, striping requirements and preferred signage and pavement markings. Despite its utility, it's important to note that this guide may not encompass the latest in contemporary facility designs. While it has its benefits, offering valuable guidelines and standards, it might not fully reflect the most current trends and innovations in bicycle facility planning and design, as it has not been updated since 2012 with supplemental material released in 2017.</p>



DOCUMENT	SOURCE	PURPOSE
GUIDE FOR THE DEVELOPMENT OF BICYCLE FACILITIES (CONT)	<i>AASHTO</i>	The future update is anticipated to focus more on separated and low stress bicycle facilities compared to the current version. The updated AASHTO guide will contain similar recommendations for bikeway selection as the recently released FHWA Bikeway Selection Guide.
www.store.transportation.org/item/collectiondetail/116		
GUIDE FOR THE PLANNING, DESIGN AND OPERATION OF PEDESTRIAN FACILITIES	<i>AASHTO</i>	The AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities, 2nd Edition, provides guidance on the planning, design, and operation of pedestrian facilities along streets and highways. Specifically, the guide focuses on identifying effective measures for accommodating pedestrians on public rights-of-way. Appropriate methods for accommodating pedestrians, which vary among roadway and facility types, are described in this guide. The primary audiences for this manual are planners, roadway designers, and transportation engineers, whether at the state or local level, the majority of whom make decisions on a daily basis that affect pedestrians.
https://store.transportation.org/item/collectiondetail/224		
A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS, 6TH EDITION (GREENBOOK)	<i>AASHTO</i>	The AASHTO Policy on Geometric Design of Highways and Streets 7th edition (“Greenbook”) contains current design research and practices for highway and street geometric design. The document provides guidance to highway engineers and designers who strive to make unique design solutions that meet the needs of highway users while maintaining the integrity of the environment. It is also intended as a comprehensive reference manual to assist in administrative, planning, and educational efforts pertaining to design formulation. Design guidelines are included for freeways, arterials, collectors, and local roads, in both urban and rural locations, paralleling the functional classification used in highway planning.
https://store.transportation.org/Item/CollectionDetail?ID=180		

DOCUMENT	SOURCE	PURPOSE
PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG)	<i>United States Access Board</i>	Guidelines for accessibility within public rights of way most recently updated in 2023. The required criteria are more extensive and intended to 'fill the gap' where the ADA Standards do not cover roadway elements. Criteria are current not enforceable by law, but constitute the best practice for accessible rights of way and should be followed where the ADA Standards do not address an issue. The guidelines will be mandatory after they are adopted for enforcement by the Department of Justice and the Department of Transportation under Title II of the ADA.
https://www.federalregister.gov/documents/2023/08/08/2023-16149/accessibility-guidelines-for-pedestrian-facilities-in-the-public-right-of-way		
2010 ADA STANDARDS FOR ACCESSIBLE DESIGN	<i>ADA</i>	Provides standards for the implementation of accessible facilities. This includes requirements for sidewalk curb ramps, slope requirements, and pedestrian railings along stairs.
www.ada.gov/regs2010/2010ADAStandards/2010ADAStandards.pdf		
URBAN BIKEWAY DESIGN GUIDE (2012)	<i>NACTO</i>	Provides state-of-the-practice solutions that can help create complete streets that are safe and enjoyable for bicyclists.
www.nacto.org/publication/urban-bikeway-design-guide/		
URBAN STREET DESIGN GUIDE (2014)	<i>NACTO</i>	The Urban Street Design Guide charts the principles and practices of the nation's foremost engineers, planners, and designers working in cities today. A blueprint for designing 21st century streets, the Guide unveils the toolbox and the tactics cities use to make streets safer, more livable, and more economically vibrant. The Guide outlines both a clear vision for complete streets and a basic road map for how to bring them to fruition.
www.nacto.org/publication/urban-street-design-guide/		
DON'T GIVE UP AT THE INTERSECTION, DESIGNING ALL AGES AND ABILITIES BICYCLE CROSSINGS	<i>NACTO</i>	Expands the NACTO Urban Bikeway Design Guide adding detailed guidance on intersection design treatments that reduce vehicle-bike and vehicle-pedestrian conflicts. It covers protected bike intersections, dedicated bike intersections, and minor street crossings, as well as signalization strategies to reduce conflicts and increase comfort and safety.
www.nacto.org/wp-content/uploads/2019/05/NACTO_Dont-Give-Up-at-the-Intersection.pdf		
ESSENTIALS OF BIKE PARKING	<i>APBP</i>	Developed for operations planning to purchase or install bike parking fixtures on a limited scale. It provides a brief overview of APBP's comprehensive Bicycle Parking Guidelines handbook. This guide covers site planning for short- and long-term parking; bike parking installation; bicycle rack selection--including performance criteria, rack styles, and materials and coatings; and bike parking placement and spacing.
https://www.apbp.org/assets/docs/EssentialsofBikeParking_FINA.pdf		

DOCUMENT	SOURCE	PURPOSE
BICYCLE PARKING GUIDELINES	<i>APBP</i>	This overviews additional best practices on bicycle parking including performance criteria, polices, and other design features.
https://www.apbp.org/Publications		
DESIGN MANUAL (FDM)	<i>FDOT</i>	The FDOT Design Manual (FDM), sets forth geometric and other design criteria, as well as procedures, for FDOT projects. The information contained in the FDM applies to the preparation of contract plans for roadways and structures.
www.fdot.gov/roadway/FDM/		
TRAFFIC ENGINEERING MANUAL (TEM)	<i>FDOT</i>	The purpose of this manual is to provide traffic engineering standards and guidelines to be used on the State Highway System. The manual covers the process whereby standards and guidelines are adopted, as well as chapters devoted to highway signs, traffic signals, markings, and specialized operational topics, such as midblock pedestrian crossings.
www.fdot.gov/traffic/TrafficServices/Studies/TEM/TEM.shtm		
ACCESS TRANSIT DESIGN HANDBOOK FOR FLORIDA BUS PASSENGER FACILITIES	<i>FDOT</i>	Includes technical guidelines in transit facilities design to facilitate transit operations on and off the roadway system. It contains various build standards important to the discussion of accessibility to transit both for those with and without impairment.
https://www.fdot.gov/fdottransit/transitofficehome/transitplanning.shtm/newtransitfacilitiesdesign.shtm		
FLORIDA TOD HANDBOOK	<i>FDOT</i>	The handbook focuses on the land use patterns located within a quarter- to a half-mile of transit stations and corridors served by a premium transit system. TOD maintains a strong emphasis on mobility, walkability, connectivity, urban form, and a mix of uses arranged in a pattern of higher density and intensity than typically found beyond the half-mile "transit shed."
https://planfortransit.com/wp-content/uploads/2013/02/FloridaTODGuidebook.pdf		
MULTIMODAL TRANSPORTATION BEST PRACTICES MANUAL AND MODEL ELEMENT	<i>FDOT</i>	This report provides guidance in developing a multimodal transportation element of a local government comprehensive plan. Two model elements were developed to address differences in statutory requirements for communities of different sizes and planning context. The first model element includes guidance for large local governments and those within the boundary of a metropolitan planning organization (MPO). The second includes guidance for smaller or more rural communities outside of MPO boundaries. Each model element encourages a range of best practices in multimodal transportation planning as identified through a review of the literature, agency plans, and related documents.
www.nctr.usf.edu/wp-content/uploads/2015/08/77954.pdf		



DOCUMENT	SOURCE	PURPOSE
<p>IMPLEMENTING CONTEXT SENSITIVE DESIGN ON MULTIMODAL THOROUGHFARES</p>	<p><i>ITE</i></p>	<p>This combined ITE & Congress for New Urbanism (CNU) report was developed in response to widespread interest for improving both mobility choices and community character through a commitment to creating and enhancing walkable communities. The report’s objective is to identify how context sensitive solutions (CSS) principles can be applied in the process involved with planning and developing roadway improvement projects on urban thoroughfares for walkable communities, describe the relationship, compatibility and trade-offs that may be appropriate when balancing the needs of all users, adjoining land uses, environment and community interests when making decisions in the project development process, describe the principles of CSS and the benefits and importance of these principles in transportation projects, present guidance on how to identify and select appropriate thoroughfare types and corresponding design parameters to best meet the walkability needs in a particular context, and provide criteria for specific thoroughfare elements, along with guidance on balancing stakeholder, community and environmental needs and constraints in planning and designing walkable urban thoroughfare projects.</p>

www.cnu.org/our-projects/cnu-ite-manual

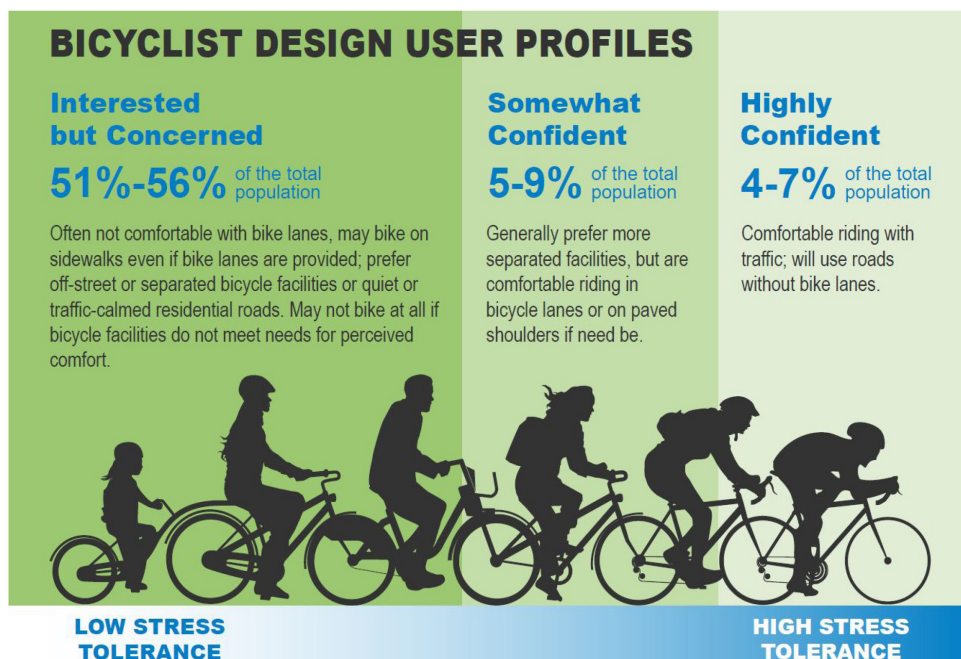
02 Bicycle & Pedestrian Supportive Strategies, Policies, & Codes

Bicycle and pedestrian use and safety is impacted through policy decisions. These decisions can increase the numbers of people walking and riding bicycles, provide active transportation options, support individual health and mobility, and also improve regional environmental health. **Table 2** summarizes a variety of bicycle and pedestrian-specific policy planning strategies and best practices.

Of particular importance is the recent change in bicycle planning and design related to the target design user. In many communities, bicycle facilities have traditionally defaulted to serving “Highly Confident” and “Somewhat Confident” bicycle users, which make up a relatively small portion of the existing and potential bicyclist population. The largest category of bicyclists falls into the “Interested but Concerned”

group. These users will often not use traditional bicycle facilities like on-street bike lanes on high speed or high volume roadways due to the close proximity of motor vehicle traffic and a perceived safety threat. These users require more separation from traffic or very low volume, low speed neighborhood streets in order to feel comfortable riding a bike. As such, communities that desire to attract a wider range of bicycle users will need to establish low stress bicycle networks that will serve users of all ages and abilities. Local policies should establish the “Interested but Concerned” bicycle user group as the target design user in establishing local bicycle networks and then seek to build low stress bicycle networks that incorporate separation from motor vehicle traffic and more neighborhood bikeways.

Figure 1. Bicycle Design User Profiles



Source: FHWA Bikeway Selection Guide

Table 2. Bicycle and Pedestrian-Specific Policy Planning Strategies and Best Practices

TOPIC	POLICY
<p>BICYCLE NETWORK PLANNING & IMPLEMENTATION</p>	<ul style="list-style-type: none"> • Prioritize “Interested but Concerned” bicyclists as the target bicycle user group to develop and expand a low-stress bicycle network to accommodate users of all ages and abilities. • Adopt the bicycle facility selection guidance included in FHWA’s Bikeway Selection Guide including volumes and speeds as contexts for appropriate levels of bikeway separation. Prioritize low-stress facilities, including trails, separated bikeways, shared-use wide sidewalks, and neighborhood bikeways. • Street improvements in the Transportation Improvement Program (TIP) or a local municipality Capital Improvement Plan (CIP) shall be consistent with the bicycle and pedestrian facility type(s) identified in the Forward Pinellas Active Transportation Plan, including the provision of separated bikeways. • Evaluate corridors with excess capacity for potential lane reconfiguration to provide appropriate bicycle facilities. • Plan and design sidewalk and pathways, including separated bikeways, adjacent to roadways to minimize conflicts between turning motor vehicles and sidewalk/path users. Strategies include minimizing bicycle and pedestrian crossing distances and exposure to conflicts, reducing motor vehicle speed at conflict points, communicating right-of-way priority, and providing adequate sight distance. • Local municipalities should consider reducing posted speed limits on all streets that are designated as bicycle boulevards or bicycle routes to no more than 25 mph. • Consider omitting centerline striping (no double yellow centerline marking) on corridors serving as bicycle boulevards. An unstriped condition encourages flexibility in the behavior of drivers and cyclists, as drivers tend to be less inclined to give a safe passing clearance to people riding bikes if doing so involves crossing a striped centerline. • Use traffic calming tools and other available tools and methods to create and maintain sufficiently low automotive volumes and speeds on bicycle boulevards to ensure a comfortable cycling environment on the street. Speed cushions are particularly advantageous as they provide cutouts for bike traffic to pass through and can be configured so spaces match axel widths of emergency vehicles. • When reconstructing roadways within the recommended bicycle and/or pedestrian network, review existing driveway configurations (width, placement, frequency) as a standard part of the design process to identify and eliminate unnecessary conflict points with bicycle and pedestrian infrastructure. • Create conditions that make bicycling more attractive than driving for trips of 3 miles or less. Form a countywide network of connected bikeways on facilities that provide low-stress environments for bicyclists, including trails, separated bikeways, and streets with low traffic speeds and low traffic volumes.

TOPIC	POLICY
<p>BICYCLE PARKING & END-OF-TRIP FACILITIES</p>	<ul style="list-style-type: none"> • Local municipalities should develop a bicycle parking ordinance that increases bicycle parking facilities at destinations such as transit stations, parks, schools, and activity centers. • Address both short term bicycle parking (outside racks at short term destinations) and long term bicycle parking (secure rooms, cages, or lockers for extended bicycle storage such as at schools, employment centers, or apartments). • Include quantities of bicycle parking based upon ratios related to square footage of land use, number of vehicular parking spaces, or specific units (such as bedroom, residential units, or employees). • Include incentives for developers to replace some of the vehicular parking spaces with bicycle parking facilities. • Create a specific program addressing bicycle parking within licensed parking lots and commercial buildings. In St. Petersburg, bicycle parking minimums by land uses types are now required as part of new construction. • Require special events permits to include provisions for bicycle parking. • Provide design standards, such as size of parking space, width of aisles, vertical and horizontal clearances, parking location, and style of racks. It is recommended that the preferred rack type be the “inverted U”, and that any other type of rack considered for use support the bicycle frame at two points above the wheel hubs. • The installation surface should be a sturdy concrete pad which can accommodate in-ground mounting or freestanding bike racks such as inverted U-racks mounted to rails. • Establish a free or subsidized bike rack program to allow racks to be placed in public rights-of-way or within an easement at businesses that request bike parking. • Revise land use/development codes to require bicycle parking minimums possibly as a ratio to vehicle parking to ensure that bike parking facilities are included in new development or redevelopment projects as well as streetscape elements in public rights of way for roadway corridor projects. • Encourage the provision of showers and changing facilities for commuting cyclists, including the development of such facilities in commercial buildings and at central locations. • Encourage large employers to provide bicycle parking facilities and changing rooms. • Good locations for bicycle parking are high demand bus stop and station areas. These locations can be identified through consultations with local bicycle groups and transit rider surveys and will include all bus rapid transit stops.
<p>BIKE SHARE</p>	<ul style="list-style-type: none"> • Work with regional stakeholders to expand bike share throughout the county, including dockless bikes. • Provide municipal employees with memberships or subsidized rides on existing bike and scooter share services during the workday, leveraging the widespread availability and convenience of existing bike and scooter share programs to meet their employees' transportation needs. Encourage other large employers to do the same.

TOPIC	POLICY
<p>SIDEWALKS & WALKWAYS</p>	<ul style="list-style-type: none"> • In sparsely populated areas, the shoulders of rural roads usually accommodate pedestrians. There are, however, roadways outside urban areas where the urban character creates a need for sidewalks. Where sidewalks are not provided, shoulders should be wide enough to accommodate both pedestrians and bicyclists. • Sidewalks must be provided on both sides of all arterial and collector streets, unless there are physical limitations and land use characteristics that render a sidewalk unsuitable on one side. • Sidewalks should be provided on both sides of the street on minor collectors and local streets. There is a point below which sidewalks on both sides of a local street may not be critical: e.g., on short dead-end streets with few potential residences and with no access to other facilities.
<p>CROSSINGS & MEDIANS</p>	<ul style="list-style-type: none"> • At signalized intersections with high volumes of pedestrians and turning vehicles, Leading Pedestrian Intervals (LPI) should be used to give pedestrians a head start to cross the road. • All multi-lane facilities should be designed with a raised or restrictive median except four-lane sections with design speeds of 40 mph or less. Facilities having design speeds of 40 mph or less are to include sections of raised or restrictive median where possible for enhancing vehicular and pedestrian safety, improving traffic efficiency, and attainment of the standards of the Access Management Classification of that highway system. • Raised medians benefit pedestrians on two-way, multi-lane streets, as they allow pedestrians to cross only one direction of traffic at a time: it takes much longer to cross four lanes of traffic than two. Where raised medians are used for access management, they should be constructed so they provide a pedestrian refuge. Where it is not possible to provide a continuous raised median, island refuges can be created between intersections and other accesses. These should be located across from high pedestrian generators such as schools, park entrances, libraries, parking lots, etc. In most instances, the width of the raised median is the width of the center turn-lane, minus the necessary shy distance on each side. Ideally, raised medians should be constructed with a smooth, traversable surface, such as brick pavers. If a median is landscaped, the plants should be low enough so they do not obstruct visibility, and spaced far enough apart to allow passage by pedestrians. • Local municipal codes should ensure pedestrians have the right-of-way on sidewalks, especially in special districts like business districts. In addition, municipal codes should not require that bicycles be operated on sidewalks or be restricted from operating on the sidewalk (exceptions for special locations such as downtown commercial districts are permissible).

TOPIC	POLICY
LIGHTING	<ul style="list-style-type: none"> • Lighting should be provided at all marked pedestrian or trail crossings, major transit stops, along street corridors with a history of midblock bicycle and/or pedestrian crashes at a minimum, as well as at other locations where personal security may be an issue. • Lighting should be pedestrian-scale, with fixtures located about 15 feet above the sidewalk or trail and with 0.5 to 2.0 foot candles. • Where lighting is not provided, reflective edge lines should be marked on the pavement.
LANDSCAPING	<ul style="list-style-type: none"> • Urban street designs should provide for streetscape amenities like street furniture, street lighting, trees, and landscaping, which buffer pedestrians from street traffic and parking areas. • To effectively provide drainage and shade support, street trees should be placed no more than 50 feet apart. Trees should be placed in basins with a large opening or capped with pervious material to allow for maximum water absorption.
TRANSIT	<ul style="list-style-type: none"> • Consider expanding bike accommodations on transit, namely augmenting capacity (potentially with vertical racks inside buses) to facilitate bike boardings and cycling as a means of accessing transit. • Work with PSTA and other local partners to install public bicycle repair tool kiosks at transit stations or stops with high bike boardings or at other visible locations on key cycling routes, such as along the Pinellas Trail; post contact information for cycling clubs and shops on kiosks. • Work with PSTA to install bicycle lockers at intermodal stations throughout the county. • Consider bicycle accommodations in the planning, design, and development of all rapid transit corridors, station areas, and transit hubs. • Work to improve bicycle access on PSTA and partner Van Pool vans. • Bicycles extend access to transit to a larger area. Look for opportunities to enhance the connections between bicycles and buses and provide for bicycle parking as needed at both ends of the trip. • Bicycle lanes should be placed to the left of bus travel lanes where possible, as buses stop and start and bicyclists need to maintain momentum. An alternative is to keep bicycle lanes on the curb side, and ramp up to sidewalk level to have the bike lane go around the back side of transit stops/stations. • Utilizing “bulb-outs” (sidewalk extensions) can be a useful tool at transit stops. Bulb outs increase sidewalk areas and improve efficiency by enabling transit vehicles to stop in travel lanes rather than pulling into bus bays, which can reduce passenger boarding time and eliminate the need to weave in and out of traffic, thereby improving travel time and reducing potential conflicts with automobiles. • Detectable warnings are necessary at intersecting roads connecting to any bus stop under ADA regulations.

TOPIC	POLICY
MAINTENANCE	<ul style="list-style-type: none"> Establish a permanent budget item for bicycle infrastructure maintenance and spot improvements including debris removal, possibly coupled with existing streets and/or stormwater system maintenance programs. Implement bicycle improvements as a part of all resurfacing and maintenance activities.
SIGNAGE & WAYFINDING	<ul style="list-style-type: none"> Develop bicycle maps and wayfinding signage that provide designated routes for pedestrians and bicyclists to navigate between significant destinations. Example: The WalkArlington program provides maps for 23 “Walkabouts” through different neighborhoods and to different destinations (visit www.walkarlington.com/pages/walkabouts). Prioritize implementation of improvements that necessitate paint and wayfinding signage with minimal capital investment including bicycle boulevards, buffered bike lanes, and other low cost rapid implementation opportunities. Implement and install wayfinding signage on off-road portions of bike mobility network as a means of garnering interest and support for the construction of safer multi-use paths. Install regulatory signs bearing the message Bikes May Use Full Lane instead of signs bearing the more ambiguous message Share the Road.
ADOPTION OF ATP	<ul style="list-style-type: none"> Put forth a resolution and required amendments for consideration by local governments in Pinellas County to formally adopt the Forward Pinellas' Active Transportation Plan for integration into local plans.



TOPIC	POLICY
<p>COMPLETE STREETS POLICY</p>	<ul style="list-style-type: none"> Local municipalities should develop and adopt a complete streets policy. The policy could be developed by a variety of methods such as by ordinance or resolution, by policy in a Comprehensive Plan or Strategic Plan document, and with implementation requirements by land development code amendments or by department directive. Smart Growth America and the Complete Streets Coalition have developed a detailed Local Policy Development workbook that may be a useful reference in developing a complete streets policy (visit https://smartgrowthamerica.org/resources/elements-complete-streets-policy/).
<p>PROJECT & DEVELOPMENT CODES & REVIEW</p>	<ul style="list-style-type: none"> Develop and implement a Bicycle and Pedestrian Checklist to be used in the plan review process for both public and private projects. The checklist may be divided into three sections for each stage of the development process: planning, scoping, and design. Revise land use/development codes to define a mechanism by which developers' contributions in lieu of land dedication may be used to build out the bicycle infrastructure network. Revise land use/development codes to define vehicle parking maximums rather than minimums. Discourage new and expanded high-traffic, auto-oriented uses in neighborhood commercial nodes. Direct auto-oriented uses to locations on commercial corridors that are not at the intersection of two designated corridors, where more traditional urban form would be appropriate. Every community, especially suburban communities with open land that will be developed, should consider enacting subdivision regulations that plan ahead for bicyclists and pedestrians. New developments should include walkways that create a grid pattern for pedestrians at locations where cul-de-sacs and other nontraditional street designs fail to provide direct routes along a roadway sidewalk. Ensure that development review processes acknowledge bicycle parking and other bicycle facility needs. Re-evaluate standard contracting language for roadway construction projects to ensure that required provisions for pedestrians and cyclists in active roadway construction zones is adequate.

TOPIC	POLICY
EDUCATION	<ul style="list-style-type: none"> • Work with state and local agency partners and advocacy groups to educate bicyclists, pedestrians, and drivers about bicycle and pedestrian safety and existing laws and regulations. Work with partners to push out messaging regarding safe cycling, safe passing, use of helmets for minors, front and back lights for night riding, and yielding to pedestrians at crosswalks. • Provide pedestrian and bicycle awareness campaigns for motorists, cyclists, and pedestrians through public service announcements, blogs, the City’s newsletter, and the bicycle page on the City’s website. Example: Florida DOT provides web-based infographics to educate the public on various bicycle tips and safety measures (visit https://alerttodayflorida.com/). • Capitalize on cost-effective opportunities for communicating bicycle and pedestrian safety messages including wraps on municipal vehicles, safety information/placards on buses and at transit stops/shelters, PSAs, and elementary school education workshops. • Work with local bike shops to provide safety information to customers and host smart cycling trainings. • Offer frequent courses in on-road riding skills with instructors certified by the League of American Bicyclists or Cycling Savvy. Consider covering the costs for interested residents to take this low-cost course.
ENFORCEMENT	<ul style="list-style-type: none"> • Enforce existing Safe Passing Law. • Implement a traffic ticket diversion program which provides an opportunity for cyclists who have received traffic violations to attend bicycle/pedestrian education classes in lieu of payment of the traffic ticket. • Implement targeted traffic law enforcement campaigns in locations with high rates of pedestrian or bicycle use, or locations identified as high crash locations. Example: The Best Foot Forward program, run by Bike/Walk Central Florida (visit www.iyield4peds.org), targets crosswalk enforcement with highly visible enforcement campaigns at intersections across Orange, Osceola and Seminole Counties. • Emphasize and encourage police officer training related to bicycle and pedestrian transportation. Work with state and local agency partners and advocacy groups to develop new or use existing training materials targeted towards law enforcement personnel. • Enforce codes relating to encroachment including vehicles or vegetation in public rights of way.
EQUITY	<ul style="list-style-type: none"> • Prioritize bicycle and pedestrian investments and maintenance in identified areas of low bicycle and/or pedestrian service, and in particular those areas that overlap with equity emphasis areas, e.g., areas having multiple socioeconomic indicators of bicycling and/or walking demand above countywide average values. • Encourage and partner with non-profit groups to provide bikes to low income and minority residents.

TOPIC	POLICY
<p>EVALUATION & PLANNING</p>	<ul style="list-style-type: none"> • Continue to conduct research on bicycle and pedestrian use within the county through surveys and physical counting. Example: Boston Bikes tracks key bicycle usage through an annual bicycle count and annual bicycle survey (visit www.cityofboston.gov/bikes/statistics.asp) • Track bicycle and pedestrian crashes annually and provide a summary of crash statistics, including fatalities, injuries, hot spot locations, and prominent crash types. Provide accounting of successful measures in reducing crashes at locations previously identified as bicycle and/or pedestrian hot spots.
<p>ENCOURAGEMENT</p>	<ul style="list-style-type: none"> • Work with local employers to develop incentive programs that encourage bicycle and pedestrian commuting by employees. • Work with businesses to implement/encourage a bicycle friendly accreditation program and encourage businesses to submit applications to become Bicycle Friendly Businesses. • Implement a municipal tax credit program possibly using a street user fee credit or waiver for businesses that make investments in community bicycle infrastructure. • Encourage local businesses and organizations to register for the National Bike Challenge as a means of promoting cycling through friendly competition. • Provide information and incentives to all city or county employees about bicycling for transportation/recreation and encourage other businesses and corporations to do so as well. • Host “open streets” events (with an ultimate goal of once per month) that temporarily close a route of surface streets to automobile traffic so that bicyclists and pedestrians can use the streets without vehicular conflicts. • Host “Bike and Walk to Work” and “Bike and Walk to School” days. These events are typically sponsored by municipalities or schools but coordinated by bicycle advocacy groups. • Refine the process whereby neighborhoods and or businesses can establish local improvement districts to request and fund pedestrian and bicycle improvements as part of an effort to improve their local street environment. • Establish a Bicycling Buddy program encouraging current cyclists to partner with new riders. • Promote walking among youth to other activities in addition to school, possibly through a Bike Walk Ambassador Program. • Implement an incentive program for bike commuters using certificate of credit to local bike shops, ability to earn points for rewards, safety gear, or the provision of bikes available for employee use. • Implement a Safe Route to Schools program for all elementary and middle schools that includes bicycle and pedestrian education. Safe Routes to Schools projects are eligible for federal funding through the Transportations Alternatives Program under the federal transportation legislation. This effort would require a partnership with the Pinellas County school system. Work with school districts to develop programs that address safe routes to school including in-class safe riding education for students and practical on-bike exercises. Work with schools to design/designate a school crossing guard program at strategic locations.