CITY OF NORTH MIAMI BEACH
Council Conference Meeting
City Hall, Council Chambers, 2nd Floor
17011 NE 19th Avenue
North Miami Beach, FL 33162
Tuesday, November 15, 2016
6:00 PM

Mayor George Vallejo
Vice Mayor Barbara Kramer
Councilman Frantz Pierre
Councilman Anthony F.DeFillipo
Councilwoman Marlen Martell
Councilwoman Phyllis Smith
Councilwoman Beth E. Spiegel

City Manager Ana M. Garcia, ICMA-CM
City Attorney Jose Smith
City Clerk Pamela L. Latimore, CMC

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Any person who receives compensation, remuneration or expenses for conducting lobbying activities is required to register as a Lobbyist with the City Clerk prior to engaging in lobbying activities before City Boards, Committees, or the City Council.

Council Conference Agenda

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1. ROLL CALL OF CITY OFFICIALS

2. DISCUSSIONS

2.1. NACTO Guidelines Update (Richard G. Lorber, AICP, Community Development Director)

2.2. Annexation Update (Ana Garcia, City Manager)

2.3. Special Election Update (Pamela L. Latimore City Clerk)

3. ADJOURNMENT

City of North Miami Beach
17011 NE 19 Avenue
North Miami Beach, FL 33162
305-947-7581
www.citynmb.com

MEMORANDUM

Print

TO: Mayor and City Council

FROM: Ana M. Garcia, City Manager, ICMA-CM

VIA: Richard G. Lorber, AICP, Community Development Director

DATE: Tuesday, November 15, 2016

RE: NACTO Guidelines Update (Richard G. Lorber, AICP, Community Development Director)

BACKGROUND ANALYSIS:

Since the adoption of the Strategic Plan in 2014, the City has advocated for providing a variety of transportation modes through comprehensive street design elements. On March 17, 2015, the City had adopted the appropriate zoning text and map amendments that allowed the creation of several mixed use districts. This included Street Network Connectivity Regulating Plan and Street Standards that illustrated improvements to the public-right-of-way as well as the approximate location of existing and required new streets needed to create the prescribed network of streets within each mixed-use district. Although the regulating plan demonstrates the necessary modifications made to create walkability, pedestrian safety, and traffic calming devices, the plan does not address street design guides for mass transit, bicycle lanes, and other street design elements that encourage alternative modes of transportation.

NACTO Urban Street Design Guide

The NACTO Urban Street Design Guide employs best practices in designing urban streets that make streets safer, more livable, and more economically vibrant. The NACTO Urban Bikeway Design Guide reflects the work of the United States' best practitioners in urban bikeway where cities have demonstrated the most successful bikeway design. Both guides provide outlines for a clear vision of complete streets and ensuring that the City is committed to providing a network that accommodates multiple transportation modes to the built environment.

Both the Florida Department of Transportation (FDOT) and

Miami-Dade County have adopted this type of Complete Streets planning as per the NACTO standards. States that endorse the Urban Street Design Guide include California, Massachusetts, Minnesota, Tennessee, Utah, and Washington. Cities and counties that endorse the Urban Street Design Guide include Arlington, VA, Atlanta, Austin, Baltimore, Bellevue, WA, Boston, Boulder, Brownsville, TX, Charlotte, Chattanooga, Chicago, Davis, Denver, El Paso, Fort Lauderdale, Hennepin County, MN, Hoboken, Indianapolis, Louisville, Memphis, Minneapolis, New York, Oakland, Philadelphia, Pittsburgh, Phoenix, Portland, OR, Portsmouth, NH, Providence, Rochester, NY, Saint Paul, Salt Lake City, San Diego, San Francisco, Seattle, Somerville, MA, Tacoma, WA, and Washington, DC. The Association of Bicycle & Pedestrian Professionals and the Urban Land Institute have also endorsed the Urban Street Design Guide.

NACTO Urban Bikeway Design Guide

The NACTO Urban Bikeway Design Guide is based on the experience of the best cycling cities in the world. To create the guide, the authors conducted a worldwide literature search of design guidelines and real-life experience and worked closely with a panel of planning professionals from NACTO member cities, as well as traffic engineers, planners, and academics.

Most of these treatments are not directly referenced in the current version of the AASHTO Guide to Bikeway Facilities, although they are virtually all (with two exceptions) permitted under the Manual on Uniform Traffic Control Devices (MUTCD). The MUTCD is published by the Federal Highway Administration (FHWA) to define the standards used by road managers nationwide to install and maintain traffic control devices on all public streets, highways, bikeways, and private roads open to public travel. The MUTCD, which has been administered by the FHWA since 1971, is a compilation of national standards for all traffic control devices, including road markings, highway signs, and traffic signals. It is updated periodically to accommodate the nation's changing transportation needs and address new safety technologies, traffic control tools and traffic management techniques.

In August 2013, the Federal Highway Administration issued a memorandum officially supporting use of the NACTO Urban Bikeway Design Guide. All of the NACTO Urban Bikeway Design Guide treatments are in use internationally and in many cities around the United States. For each treatment in the Urban Bikeway Design Guide, NACTO provides three levels of guidance:

Required: elements for which there is a strong consensus that the treatment cannot be implemented without.
Recommended: elements for which there is a strong consensus of added value.
Optional: elements that vary across cities and may add value depending on the situation.

NACTO emphasizes that treatments must be tailored to the individual situation with thorough documentation of decisions. To assist with this, the NACTO Urban Bikeway Design Guide links to companion reference material and studies.

National Association of City Transportation Officials (NACTO)
The National Association of City Transportation Officials (NACTO) is an association of 34 cities formed to exchange transportation ideas, insights and practices and cooperatively approach national transportation issues. Members include Atlanta, Baltimore, Boston, Charlotte, Chicago, Denver, Detroit, Houston, Los Angeles, Minneapolis, New York, Philadelphia, Phoenix, Portland, San Diego, San Francisco, Seattle and Washington, DC. Affiliate members of NACTO include Arlington (VA), Austin, Boulder, Burlington (VT), Cambridge, Fort Lauderdale, Hoboken, Indianapolis, Louisville, Memphis, Oakland, Salt Lake City, Somerville (MA), and Ventura (CA). International members include Toronto and Vancouver.

RECOMMENDATION: Community Development Department staff recommends approving the adoption of the NACTO Urban Street Design Guide and the NACTO Urban Bikeway Design Guide.

FISCAL/BUDGETARY IMPACT: n/a

ATTACHMENTS:
Draft Resolution
FDOT Complete Streets info
Miami-Dade Complete Streets
Miami-Dade County ordinance

RESOLUTION NO. _____

A RESOLUTION OF THE MAYOR AND CITY COUNCIL OF THE CITY OF NORTH MIAMI BEACH, FLORIDA, TO ADOPT THE NACTO URBAN SREET DESIGN GUIDE AND NACTO BIKEWAY DESIGN GUIDE AS THE OFFICIAL CITY OF NORTH MIAMI BEACH BIKEWAY AND STREET DESIGN GUIDE

WHEREAS, in 2014, the City of North Miami Beach adopted a Strategic Plan that promotes convenient mobility through an availability of alternative modes of transportation; and

WHEREAS, on March 17, 2015, the City of North Miami Beach adopted zoning text and map amendments for the purpose of creating mixed use districts that encouraged a transit oriented development that enhances walkability, pedestrian safety, traffic calming as means of improving street safety, and the quality of life for North Miami Beach residents and visitors; and

WHEREAS, the Street Network Connectivity Regulating Plan and Street Standards from the adopted Zoning Code amendments does not address the creation of well-designed streets that encourage bicycling and transit on major corridors such as State Road 826, Biscayne Blvd., and other primary, secondary, and tertiary streets; and

WHEREAS, the National Association of City Transportation Official's (NACTO) Urban Street Design Guide employs best practices in designing urban streets that are safe, sustainable, resilient, multi-modal, and economically beneficial; and

WHEREAS, the NACTO Urban Bikeway Design Guide reflects the work of the United States' best practitioners in urban bikeway design in adapting to an American context bikeway design around the world that have demonstrated the most successful bikeway designs; and

DRAFT

WHEREAS, adopting these recommended standards could among other things:

- contribute to the development of green infrastructure;
- improve pedestrian and biker safety;
- increase transportation options;
- reduce congestion;
- reduce reliance on carbon fuels, thereby reducing greenhouse gas emissions;
- improve air quality;
- improve community health;
- enhance community aesthetics;
- augment economic growth;
- create more livable communities by emphasizing critical elements of walkability,
- including shade, aesthetically pleasing walkways, and buffers from automobile
- traffic;
- contribute to the development of a connected and complete transportation network that will reduce hazards and improve safety for pedestrians and cyclists, especially vulnerable elements of the population, who may be unable to operate a motor vehicle, such as young children, the elderly, and the physically disabled; and

WHEREAS, the City of North Miami Beach is committed to creating a well-connected street network that accommodates all modes of transportation, including walking, bicycling, driving, and mass transit that contribute to the built environment;

NOW, THEREFORE, **BE IT RESOLVED** by the City Council of the City of North Miami Beach, Florida adopts the NACTO Urban Street Design Guide and NACTO Urban Bikeway

DRAFT

Design Guide as official guides to be used by City officials, planners, and engineers when designing and implementing bikeways and complete streets within the City of North Miami Beach

APPROVED AND ADOPTED by the City Council of the City of North Miami Beach, Florida at regular meeting assembled this ___ **day of _____, 2016**.

ATTEST:

_____	_____
PAMELA L. LATIMORE CITY CLERK	GEORGE VALLEJO MAYOR
(CITY SEAL)	
	APPROVED AS TO FORM & LANGUAGE & FOR EXECUTION
	_____
	JOSE SMITH CITY ATTORNEY

SPONSORED BY: Mayor and City Council

DRAFT

COMPLETE STREETS IMPLEMENTATION PLAN

M2D2: Multimodal Development and Delivery

December 2015

The Florida Department of Transportation and Smart Growth America

Centennial FDOT 1915 ★ 2015

Smart Growth America
Making Neighborhoods Great Together

ACKNOWLEDGEMENTS

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Project Leadership
Billy Hattaway, P.E. – Secretary, District One
Michael Shepard, P.E. – State Roadway Design Engineer
Paul Hiers, P.E. – Roadway Design Criteria Administrator
DeWayne Carver, AICP – State Bicycle/Pedestrian Coordinator

Smart Growth America
Roger Millar, P.E., AICP – Vice President (former)
Stefanie Seskin – Deputy Director, National Complete Streets Coalition (former)
Rayla Bellis – Program Manager

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District 5
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District 6
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Ron Chin – Traffic Operations

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Any errors and all interpretations are the responsibility of Smart Growth America. Please direct questions about this report to Rayla Bellis, Program Manager, Smart Growth America: rbellis@smartgrowthamerica.org, 202.207.3355x128.

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Complete Streets Implementation Plan

M2D2: Multimodal Development and Delivery

The Florida Department of Transportation and Smart Growth America

December 2015

EXECUTIVE SUMMARY

The Florida Department of Transportation's (FDOT) Complete Streets Policy, adopted in September 2014, promotes safety, quality of life, and economic development in Florida. It states that FDOT will routinely plan, design, construct, reconstruct and operate a context-sensitive transportation network that works for all modes of travel.

FDOT (also referred to as the Department) developed this Complete Streets Implementation Plan in partnership with the national not-for-profit organization Smart Growth America to guide the Department's efforts to implement the Complete Streets Policy moving forward. The recommendations in this plan, summarized below, address the findings from a series of interactive workshops conducted for FDOT's Complete Streets Implementation Team in the spring and summer of 2015.

This plan outlines a five-part implementation framework and process for integrating a Complete Streets approach into FDOT's practices to ensure that future transportation decisions and investments address the needs of all users of the transportation network and respond to community goals and context. This plan also proposes a two-year schedule and process for Complete Streets Implementation, concluding in December 2017. The implementation framework in this plan includes:

1. **Revising guidance, standards, manuals, policies, and other documents:** Integrating a Complete Streets approach into the core documents used to guide daily decisions across programs will be a crucial step in successfully aligning FDOT's practices with the objectives of the Complete Streets Policy. This plan provides detailed recommendations for updating ten FDOT documents prioritized for revision and developing one new document to align with a Complete Streets approach. Integrating a context-sensitive approach into planning, design, and operations is a common theme across these recommendations.
2. **Updating decision-making processes:** Implementing the Complete Streets Policy successfully will involve a shift in FDOT's decision-making approaches. In addition to updating written guidance and procedures, this will mean changing how FDOT staff approach their jobs on a daily basis and shifting perceptions of FDOT's role as a transportation provider. This plan outlines five

strategies for modifying FDOT's decision-making approaches: 1) integrate Complete Streets into FDOT's long-range plans, including the Florida Transportation Plan (FTP) and Strategic Intermodal System (SIS) Policy Plan; 2) align decision-making criteria at all levels with a Complete Streets approach; 3) change decision-making culture to support Complete Streets objectives; 4) expand FDOT's role as a transportation provider and leader to meet the needs of a broader range of travelers; and 5) improve communication across FDOT programs and with external partners.

3. **Modifying approaches for measuring performance:** Successfully integrating a Complete Streets approach into FDOT's practices will require aligning the Department's approaches for measuring success at a variety of scales and levels with the goals of the Complete Streets Policy. This includes measures and criteria used to evaluate proposed future investments, the performance of individual transportation facilities, the performance of the network as a whole, and the general effectiveness of FDOT's programs. This plan outlines strategies for integrating measures into FDOT's decision-making that assess whether people and goods can reach destinations safely, comfortably, and conveniently while also reflecting the broader role of the transportation network in contributing to economic vitality and quality of life.

4. **Managing internal and external communication and collaboration during implementation:** FDOT staff, consultants, and other partners will more readily embrace a Complete Streets approach and interpret it correctly if they are meaningfully engaged in the implementation process. This plan identifies types of stakeholders to engage in implementation and includes a framework for stakeholder outreach and participation, grouping stakeholders into those that should be directly involved in updating documents, those that should be engaged in the process, and those that should be informed or updated periodically throughout the initiative.

5. **Providing ongoing education and training:** Once FDOT has updated documents and procedures to align with the Complete Streets Policy, the Department will need to provide ongoing education and training for staff and consultants working on FDOT projects. This will help create an agency culture in which considering and meeting the needs of all transportation system users is a core part of the Department's mission, while also ensuring that the changes to specific documents are interpreted correctly and the documents are used effectively throughout the agency. FDOT can also provide training to local and regional agencies and other external partners who play a role in implementing Complete Streets. This plan provides a framework for a comprehensive Complete Streets training process.

Complete Streets Implementation Plan

M2D2: Multimodal Development and Delivery

The Florida Department of Transportation and Smart Growth America

December 2015

INTRODUCTION

Overview and Purpose

The Florida Department of Transportation's (FDOT) Complete Streets Policy, adopted in September 2014, promotes safety, quality of life, and economic development in Florida. It states that FDOT will routinely plan, design, construct, reconstruct and operate a context-sensitive transportation network that works for all modes of travel.

FDOT recognizes that to carry out its mission in the context of 21st Century demographics, business practices, and development approaches, the Department must build and operate transportation facilities that address the needs and interactions of all users of the transportation network – including motorists, pedestrians, bicyclists, transit riders, and freight handlers – across many contexts. A Complete Streets approach with a focus on integrating people and place in the transportation decision-making process will help the Department achieve these goals. To do so, FDOT will need to implement policies and professional practices to ensure streets are safe for residents of all ages and abilities, balance the needs of different modes of travel, and contribute to economic competitiveness, community revitalization, environmental preservation, and other state and local goals.

FDOT's Complete Streets Policy lays a foundation for better meeting the needs of all users, but the policy itself is just the first step. To implement the policy successfully, transportation and land use professionals within FDOT and other state, regional, and local agencies will need knowledge and tools to guide them in planning, designing, building, and operating safe, context-sensitive transportation facilities that address and balance all transportation modes. FDOT's practices and measures of effectiveness will need to be aligned with a Complete Streets approach at a variety of scales and levels within the Department.

To address this compelling need, FDOT has partnered with Smart Growth America (SGA) to identify necessary updates to FDOT policies, standards, guidance, manuals, procedures and general practices to put the Complete Streets Policy in to action.

This Implementation Plan outlines a five-part framework and process for integrating a Complete

Streets approach into FDOT's practices at a comprehensive level in order to ensure that transportation decisions and investments routinely address the needs of all residents while responding to local goals and context. The recommendations in this plan address the findings from a series of interactive workshops conducted for FDOT's Complete Streets Implementation Team in the spring and summer of 2015. This plan will guide FDOT's efforts to implement the Department's Complete Streets Policy moving forward, including updating specific documents and decision-making practices, engaging partners, and providing education and training to staff and other stakeholders.

Background

FDOT Complete Streets Policy

For many years, state and national organizations used federal datasets to highlight the disproportionately high rates of pedestrian fatalities in Florida. A 2011 report issued by Transportation for America, a program of SGA, again found that Florida's streets were among the most dangerous in the nation for pedestrians.[1]

In response, FDOT launched a broad effort to proactively address the safety needs of all users of the transportation system. Former Secretary Ananth Prasad created Florida's Bicycle/Pedestrian Focused Initiative and tasked District One Secretary Billy Hattaway with championing it. Current FDOT Secretary Jim Boxold has pledged to continue and expand these efforts. Under Hattaway's leadership, FDOT and a coalition of partners from around the state are using a multidisciplinary approach to improve walking and bicycling safety that includes changing how streets are designed and built in Florida, updating policy and process, providing public education and outreach, and partnering with law enforcement.

As a component of this broad effort, in September of 2014, the Department adopted a Complete Streets Policy to ensure that Florida's transportation network supports safe and convenient travel for all transportation system users. The policy states that:

> *"…the Department will routinely plan, design, construct, reconstruct and operate a context-sensitive system of 'Complete Streets.' While maintaining safety and mobility, Complete Streets shall serve the transportation needs of transportation system users of all ages and abilities, including but not limited to: cyclists, freight handlers, motorists, pedestrians, and transit riders."*

Urban Complete Streets may include a variety of facility types, such as this urban shared use path in St. Petersburg, FL.

The policy also states that FDOT will integrate a Complete Streets approach into the Department's internal manuals, guidelines and related documents governing the planning, design, construction, and operation of transportation facilities.[2]

Working with SGA on Complete Streets Implementation

FDOT partnered with SGA in late 2014 to launch a process to help implement the new Complete Streets Policy by aligning FDOT's documents and practices at a broad level with the policy's intent. SGA's program,

1 Transportation for America. (2011). *Dangerous by Design*. http://www.smartgrowthamerica.org/dangerous-by-design-2011.

2 Florida Department of Transportation. (2014, September 17). *Complete Streets Policy*. http://www.dot.state.fl.us/rddesign/CSI/000-625-017-a.pdf.

the National Complete Streets Coalition, has led the nationwide Complete Streets movement since 2004 by developing and promoting policies, decision-making approaches, and design practices that ensure streets are safe, convenient, and comfortable for all transportation system users. With the help of a newly engaged Complete Streets Implementation Team, SGA has assisted FDOT in identifying a comprehensive set of changes to the Department's processes, procedures, and documents that will help institutionalize a Complete Streets approach, and developing this Implementation Plan to guide the process of making the necessary changes moving forward.

Complete Streets Implementation Process

FDOT and SGA developed this Complete Streets Implementation Plan over a period of approximately nine months. FDOT launched the Complete Streets Implementation process in February of 2015 by forming and engaging a Complete Streets Implementation Team to help identify necessary updates to FDOT's documents and practices to align with the Complete Streets Policy. The Implementation Team includes representation from a cross-section of divisions within FDOT's Central Office and the seven District Offices, as well as several external partners chosen for specific perspectives on relevant topics such as local and regional land use planning in Florida and national best practices in creating transportation systems for all types of travelers.

This initiative incorporates a process SGA initially developed with the Michigan Department of Transportation. Known as Multimodal Development and Delivery (M2D2), this process helps transportation agencies build internal capacity regarding best practices in context-sensitive, multimodal transportation decision-making and identify ways to update their practices to meet and balance the needs of all modes of transportation.

FDOT's Complete Streets Implementation effort includes the following major phases:

1. **M2D2 workshops (spring/summer 2015):** A series of training workshops on meeting and balancing the needs of all modes of travel provided to the Complete Streets Implementation Team by SGA to facilitate discussions about how to modify current FDOT practices;
2. **Complete Streets Implementation Plan (summer/fall 2015):** Development of an implementation program for updating FDOT's documents and practices to align with the new Complete Streets Policy through broad stakeholder engagement; and
3. **Implementation (late 2015-ongoing):** Modifying the identified FDOT documents and procedures and providing ongoing training to FDOT staff and other partners.

This plan encapsulates the results of phases 1 and 2 described above and lays the foundation for phase 3. The first two phases of this initiative are described in more detail below.

M2D2 Workshop Series

In spring of 2015, SGA facilitated a series of four workshops led by national experts on multimodal development and delivery to the Complete Streets Implementation Team. The primary goals of these workshops were to educate project stakeholders on the national state of the practice in implementing a Complete Streets approach, provide a common vocabulary, and facilitate discussions about barriers, gaps, and opportunities in current FDOT practices and documents – as well as the practices of FDOT's external partners – to supporting and balancing the needs of all users of the state transportation network. A categorized list of the major issues identified during the workshop series can be found in Appendix B: Findings from the M2D2 workshops.

Following the fourth workshop, SGA developed a draft Complete Streets Implementation Technical Memorandum outlining a proposed five-part framework for implementation based on the findings from previous workshops. The technical memorandum served as a tool for collecting feedback from the Implementation Team during a fifth M2D2 workshop in August of 2015.

Table I summarizes the M2D2 workshop schedule and topic areas.

Prioritizing FDOT Documents To Revise

Discussions during the M2D2 workshop series assisted FDOT and SGA in identifying a set of manuals, guides,

Table I. M2D2 Workshops

WORKSHOP #1

Land Use and Transportation
(March 10, 2015)

- Introduction to planning
- Zoning and subdivisions
- Land use planning in the Florida context
- Planning for economic and fiscal health
- Integrating land use and transportation planning

WORKSHOP #2

Active Transportation: Walking, Bicycling, and Transit
(April 7-8, 2015)

- Active transportation at FDOT
- The state role in active transportation
- Active transportation, land use, and successful transit-oriented development
- Designing for active transportation, and understanding and overcoming challenges
- Transit fundamentals
- Implementing a decision-making process to routinely create great environments for active transportation
- Performance measures for active transportation, and making the case for Complete Streets

March	April	May	June	July	August

2015

WORKSHOP #3

Intelligent Transportation Systems (ITS), Transportation Demand Management (TDM), and Freight Logistics (May 13-14, 2015)

ITS

- Overview of ITS
- State of the ITS practice in Florida
- ITS strategies and applications for all modes
- Establishing a multimodal ITS vision for FDOT

TDM

- Overview of TDM
- TDM in Florida
- Typical and atypical tools for TDM and implementation
- The state role in TDM
- Incorporating TDM into FDOT project development and design

Freight Logistics

- Overview of freight at FDOT
- Overview of supply chain management
- Role of supply chain decisions in firm strategy
- How firms make supply chain decisions
- Integrating supply chain management considerations into FDOT planning and design practices

WORKSHOP #4

Multimodal Integration and Tradeoffs
(June 1-2, 2015)

- Summary of findings from past workshops
- Implementing design flexibility
- Discussion of FDOT internal and external decision-making practices that could be modified to support Complete Streets
- Discussion of FDOT policies and guidance to update
- Discussion of how to structure a process to update FDOT documents and practices

In spring and summer of 2015, SGA facilitated a series of workshops led by national experts on multimodal development and delivery to the Complete Streets Implementation Team.

WORKSHOP #5

Discussion of draft Complete Streets Implementation Technical Memorandum (August 26, 2015)

- Overview of the Complete Streets Implementation Technical Memorandum
- Feedback from the Complete Streets Implementation Team on how to modify and expand the draft implementation framework

policies, and other documents that should be revised to incorporate a Complete Streets approach.

While many FDOT documents will likely require some level of updating to align with the Complete Streets Policy, trying to address all of these changes upfront during the initial implementation effort would make the process daunting and unmanageable. Therefore, SGA and FDOT worked with the Complete Streets Implementation Team to prioritize a relatively small subset of documents that guide daily decision-making on a broad scale across programs or currently pose specific barriers to Complete Streets decision-making.

SGA surveyed FDOT's website following the launch of the Complete Streets Implementation initiative and compiled a list of more than 130 standards, manuals, procedures, policies, guides, reports and other documents available online. This list (available as a separate document) served as a starting point for identifying priority documents to revise. During the M2D2 workshop series, participants discussed a variety of barriers and gaps posed by existing documents and opportunities to modify those documents to enable Complete Streets outcomes, and began to identify a smaller subset of documents to focus on within the initial implementation process.

Following the workshops, the SGA project team conducted an evaluation of the documents and identified ten documents to prioritize for revision and one new document to develop based on how frequently specific documents came up during M2D2 workshop discussions, as well as the following considerations:

- The overall significance of the document in FDOT's planning and project development decision-making;
- The anticipated impact updating the document would have in enabling, or removing barriers to, Department-wide adoption of a Complete Streets approach; and
- The anticipated impact updating the document would have in addressing specific issues raised by the Implementation Team during the workshop series, as listed in Appendix B: Findings from the M2D2 workshops.

SGA presented this short list of eleven documents to the workshop participants in the Complete Streets Implementation Technical Memorandum discussed above, and received feedback on the list of proposed documents and general recommended revisions.

Developing the Complete Streets Implementation Plan

The draft framework in the Complete Streets Implementation Technical Memorandum served as the basis for development of this Implementation Plan, which outlines more detailed strategies FDOT can use to integrate a Complete Streets approach into the Department's practices moving forward. Following the fifth M2D2 workshop in August of 2015, SGA modified and expanded the recommendations in the technical memorandum to reflect feedback received from the Complete Streets Implementation Team. This included developing more detailed recommendations for each of the documents prioritized for revision and expanding other recommendations. Moving forward, FDOT will adopt this plan and use it to guide the implementation process over the coming years.

COMPLETE STREETS IMPLEMENTATION PLAN

This Complete Streets Implementation Plan lays the foundation for integrating a context-sensitive approach to decision-making into FDOT's practices during visioning, planning, programming, project development, design, operations, and maintenance that considers and balances the needs of all users of Florida's transportation network. This plan outlines a five-part framework for implementation, including the following broad tasks:

I. Revising guidance, standards, manuals, policies, and other documents

II. Updating decision-making processes

III. Modifying approaches for measuring performance

IV. Managing internal and external communication and collaboration during implementation

V. Providing ongoing education and training

Each of the following five sections of this plan provide specific implementation strategies and steps FDOT and the Department's partners can use to institutionalize a Complete Streets approach. These strategies and recommendations reflect the outcomes and findings from the first phase of this initiative, including discussions during the Multimodal Development and Delivery (M2D2) workshop series and additional feedback provided by FDOT's Complete Streets Implementation Team. The strategies in this plan provide a starting point to guide FDOT's Complete Streets implementation process moving forward, but will need to be revisited, refined, and expanded to include additional detail once the implementation process is underway.

I. Revising guidance, standards, manuals, policies, and other documents

Integrating a Complete Streets approach into the documents used to guide daily decisions across programs will be a crucial step in successfully aligning FDOT's practices with the objectives of the Complete Streets Policy. FDOT has a wealth of guidance and research in place already that can support Complete Streets implementation, but much of it has not yet been integrated directly into decision-making on a large scale because the core documents that influence planning, programming, project development, design, and operations on a daily basis do not reflect the findings.

This Complete Streets Implementation Plan recommends ten documents to prioritize for revision and one new document to develop during the implementation process based on discussions during the M2D2 workshop series. Integrating a context-sensitive approach into planning, design, and operations is a common theme across these recommendations. While these eleven documents

are not the only guides, standards, and manuals that will need to be updated in some way to incorporate a Complete Streets approach, prioritizing these documents during the implementation process provides a starting point for achieving early and significant results on a manageable scale.

This section of the Complete Streets Implementation Plan outlines considerations and steps for revising documents to incorporate a Complete Streets approach. Table II lists the eleven documents recommended for revision and summarizes the revisions recommended for each document. Detailed recommended revisions and updates for each document are provided in Appendix A.

Members of the Complete Streets Implementation Team also raised the need to incorporate Complete Streets considerations into FDOT's long-range strategic plans and visions at a policy level. FDOT is currently in the process of updating the Department's two major long-range plans, the Florida Transportation Plan (FTP) and the Strategic Intermodal System (SIS) Policy Plan, so these two documents have not been included among the eleven documents listed in Table II, but they are addressed in Section II. Updating decision-making processes.

Designate Document Revision Teams and Develop Detailed Scopes and Schedules for Each Document

A key early step during implementation will be identifying teams of staff within the responsible lead offices listed in Table II who will be tasked with championing and spearheading the update processes for each document. These teams will need to develop detailed scopes of work by expanding, refining, and modifying the recommended updates and revisions outlined in this Implementation Plan based on further analysis and feedback from appropriate internal programs and any relevant external partners and stakeholders, as discussed in Section IV. This scoping process should include a review of other existing FDOT documents and research, as well as national guidance on Complete Streets planning and design, to identify best practices that can be incorporated into FDOT's standards and guidance as appropriate.

The revision teams for each document will also need to refine the general timeframes proposed in this Implementation Plan by developing detailed schedules for revision, including specific milestones when internal and external stakeholders will be asked to review draft changes and provide input. For certain documents, FDOT may be able to make the revisions proposed in this Implementation Plan using existing timelines and processes for making routine updates, while other documents will require more extensive revision and stakeholder engagement processes. Revisions to the Plans Preparation Manual (PPM) will likely inform specific revisions to other documents, so FDOT should begin the scoping process for the PPM as soon as possible.

Update Other FDOT Documents Over Time to Incorporate Complete Streets

The documents listed in Table II have been identified as a high priority for revision to align with a Complete Streets approach, but FDOT will likely need to update a number of additional documents for consistency with these eleven priority documents. The revision teams for each document should conduct an initial scan of related manuals, procedures, standards, and guides that reference or refer to these eleven documents in a substantive way to generate a list of additional documents that will ultimately need to be updated themselves to reflect the changes.

Table II. Proposed List of Priority Documents to Revise

Document	Responsible Lead Office	Proposed Revision Timeframe	Primary Suggested Revision(s)
Manuals			
1. Plans Preparation Manual (PPM)	Office of Roadway Design	18 months	Revisions: • Integrate a context-based approach to project planning and design throughout the manual, including development of context-sensitive design criteria: – Provide guidance on selecting appropriate context descriptions – Provide guidance on choosing a design and control vehicle to fit the context – Modify overall approach for selecting design speed; use target speed • Throughout the PPM, incorporate more explicit discussion of how to consider, address, and balance the needs of all transportation system users based on context • Add language encouraging flexibility and reduce or remove the need for design variations • Update existing design standards and criteria for specific modes of travel as necessary to align with national Complete Streets best practices • Provide guidance on designing Complete Streets within the scope of Resurfacing, Restoration and Rehabilitation (RRR) projects
2. Uniform Standards for Design, Construction and Maintenance for Streets and Highways (Florida Greenbook)	Office of Roadway Design	18 months	Revisions: **Note: The Florida Greenbook is statutorily established, so the proposed revisions below will need to be considered and discussed within that context. The Florida Greenbook Advisory Committee will need to review and approve any revisions.** • Integrate a context-based approach to project planning and design throughout the manual, including development of context-sensitive design criteria • Throughout the Florida Greenbook, incorporate more explicit discussion of how to consider, address, and balance the needs of all transportation system users based on context • Update existing design standards and criteria for specific modes of travel as necessary to align with national Complete Streets best practices • Expand the discussion of achieving broad coordination and collaboration across partners during transportation project planning • Expand the discussion of the relationship between land use and transportation • Provide guidance on and encourage the use of Intelligent Transportation Systems (ITS), Transportation Demand Management (TDM), and other system management strategies
3. Efficient Transportation Decision Making Manual	Environmental Management Office	6 months – 1 year	Revisions: • Incorporate Complete Streets criteria into the Planning Screen and Programming Screen processes to inform decisions about advancing projects into cost feasible long-range plans and FDOT's Five Year Work Program • Add guidance on how information collected during ETDM informs identification of project context

Document	Responsible Lead Office	Proposed Revision Timeframe	Primary Suggested Revision(s)
4. Project Development and Environment (PD&E) Manual	Environmental Management Office	1 year – 18 months	Revisions: • Add guidance on identifying project context during scoping • Update discussions of developing Project Description, Purpose and Need, and Alternatives to discourage prescriptive definitions of project need and encourage innovative alternatives development • Expand the types of project effects evaluated during PD&E to encompass broader Complete Streets considerations • Add guidance on identifying initial design controls and criteria during PD&E that align with a project's context • Expand existing guidance on when and how project managers should communicate with and seek input from stakeholders throughout the PD&E process
5. Traffic Engineering Manual (TEM)	Traffic Engineering and Operations Office	6 months – 1 year	Revisions: • Address the role traffic engineering decisions play in enabling safe and convenient travel by different modes • Include context-sensitive criteria for installing signalization, signage, and pavement markings • Update guidance on signalization, signage, and pavement markings as appropriate to incorporate current national Complete Streets best practices
Standards			
6. Level of Service (LOS) Standards for the State Highway System	Systems Planning Office	6 months	Revisions: • Clarify that LOS should be one consideration of many during design decisions • Incorporate more flexibility and/or provide a framework for applying different LOS standards based on context • Consider rescinding the LOS standards. If they are not rescinded, add language stating that the policy will be carried out with regard to context, feasibility, and regard for community guidance
7. Strategic Intermodal System (SIS) Highway Component Standards and Criteria	Systems Planning Office	6 months – 1 year	Revisions: • Incorporate context-sensitive design standards for SIS roadways for cases when facilities run through downtowns, particularly regarding design speed • Update discussion of developing SIS Corridor Plans to incorporate consideration of all transportation modes and types of residents upfront
Handbooks/Guides			
8. Quality/Level of Service Handbook	Systems Planning Office	1 year	Revisions: • Expand the existing Q/LOS measures recommended for each travel mode to align with Complete Streets objectives and national best practices as appropriate • Consider expanding into a broader Complete Streets Performance Measurement Handbook

Document	Responsible Lead Office	Proposed Revision Timeframe	Primary Suggested Revision(s)
9. Intersection Design Guide	Office of Roadway Design	1 year	Revisions: • Incorporate national best practices and guidance in designing intersections for all transportation system users • Incorporate consideration of context into intersection design criteria
10. Practical Design Handbook	Office of Design	6 months	Revisions: • Update practical design framing to articulate how Complete Streets objectives fit within the approach • Revise the practical design checklist to remove prescriptive language. Consider removing the checklist altogether
Proposed New Document or Document Section			
11. Freight Roadway Design Considerations (NEW)	Office of Freight Logistics and Passenger Operations	1 year – 18 months	Recommended new guidance: • Update and expand District 7 draft Freight Roadway Design Considerations for statewide use OR • Integrate content – including the approach for identifying project context as well as specific freight design considerations – directly into the PPM, PD&E manual, and other documents as appropriate

FDOT can also establish processes for ensuring that future routine updates and substantial revisions to other documents – including documents that are not prioritized in this plan but play a major role in decision-making for specific programs – incorporate Complete Streets considerations and goals moving forward. This could involve incorporating reference to FDOT's Complete Streets Policy within existing procedures for updating specific documents, as well as providing education to staff responsible for making updates, leadership responsible for approving changes, and any document review or advisory committees. FDOT should also integrate consideration of Complete Streets into new manuals, guides, procedures, and policies developed in the future.

II. Updating decision-making processes

Implementing the Complete Streets Policy successfully through the document revisions outlined in Task I above will involve a shift in FDOT's decision-making processes and approaches. In addition to updating written guidance and procedures to align with the intent of the policy, this will mean changing how staff throughout the agency approach their jobs on a daily basis and shifting common perceptions about the parameters of FDOT's role as a transportation provider. While this type of Department-wide shift is challenging to achieve, it will be essential to ensuring that the updates made to FDOT's standards and manuals lead to meaningful changes in how the transportation system is planned, designed, built and operated.

This Implementation Plan outlines five broad recommendations for evaluating and modifying FDOT's current processes and decision-making approaches to implement the Complete Streets Policy. Each recommendation includes several implementation strategies to consider based on points and ideas raised by the Complete Streets Implementation Team.

The five broad recommendations below are not intended as sequential steps. FDOT will need to determine the appropriate order for addressing these strategies early in the implementation process by identifying legislative, programmatic and cultural considerations and barriers.

Integrate Complete Streets into FDOT's Long-Range Plans

FDOT is currently in the process of updating the Florida Transportation Plan (FTP) and Strategic Intermodal System (SIS) Policy Plan, which together establish the policy framework for the allocation of resources, including federal, state, and local transportation funding, and the roles and responsibilities for implementing defined goals and objectives. The FTP will affect how future transportation projects are selected, designed, engineered, coordinated with regional and community visions and development, aligned with the economic development and environmental stewardship policies, and prioritized for funding and other resources.

The SIS Policy Plan identifies policies for planning and implementing Florida's Strategic Intermodal System, the statewide high-priority network of transportation facilities critical to Florida's economic competitiveness. The goals and objectives articulated in these documents are broad, but help provide the basis for transportation decisions through a number of guiding documents and procedures, including FDOT's Program and Resource Plan and the Department's Work Program (budget), among others.

FDOT has developed a vision document as part of the FTP update with seven goals for the state transportation network, and will be working with stakeholders to develop implementation strategies for each of these goals and their associated objectives. The SGA project team recommends integrating Complete Streets in the updated FTP and SIS Policy Plan, as well as related documents that guide more specific decisions.

Implementation strategies to consider:

- Integrate Complete Streets into the new objectives and implementation strategies that FDOT is

developing for each of the seven goals in the updated FTP Vision;

- Integrate Complete Streets into the objectives within the updated SIS Policy Plan;
- Integrate Complete Streets into the next updates to FDOT's Freight Mobility and Trade Plan and other statewide modal plans as appropriate; and
- Integrate Complete Streets into related guidance on how to prioritize investments within specific programs.

Align Decision-Making Criteria with a Complete Streets Approach

In order to internalize a Complete Streets approach within FDOT's practices, the Department will need to evaluate whether the criteria and measures currently being used to inform decision-making at all levels – from strategic planning and visioning, to programming and project selection, to traffic engineering decisions and evaluation – align with the objectives of the Complete Streets Policy. In some cases, current decision-making criteria may be hindering a context-sensitive approach or restricting the ability of staff to make funding, planning, design, and operations decisions that support all types of travelers. Identifying and modifying these criteria will be a crucial step in successful implementation.

Implementation strategies to consider:

- Revisit statutes for local funding programs, work program instructions, and funding eligibility criteria to enable more Complete Streets projects;
- Update the measures used to evaluate District Office performance to encourage interpretations of rules and statutes that support context-sensitivity and flexibility in funding and design; and
- Identify other criteria and measures used to make decisions across the Department at all levels, examine whether those criteria align with desired Complete Streets goals, and modify those criteria as necessary.

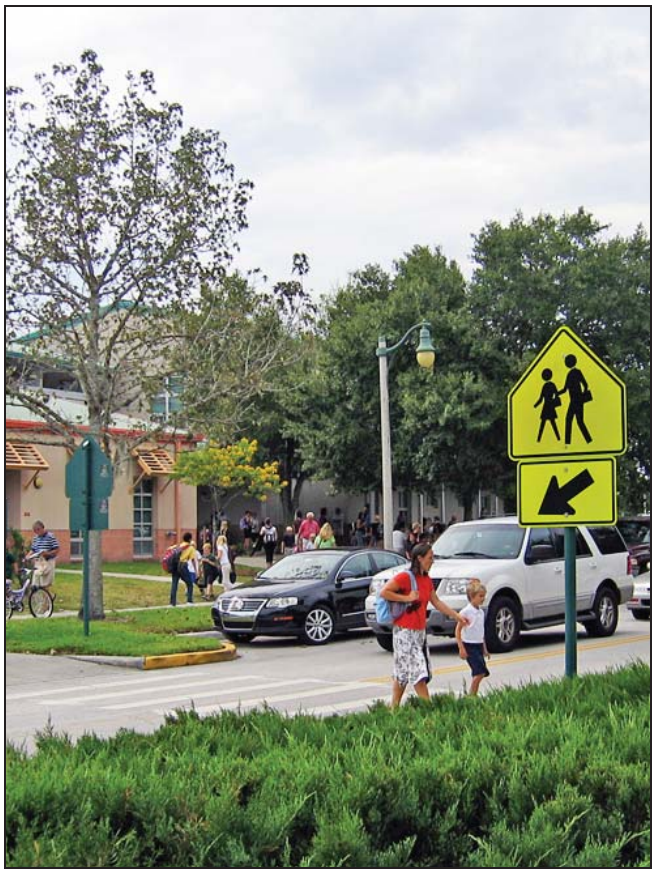
Change Decision-Making Culture

In addition to examining formal decision-making criteria, FDOT will also need to achieve a fundamental shift in decision-making culture across programs to successfully integrate a Complete Streets approach on a Department-wide level. The implementation strategies suggested include education, outreach, and incentives for adoption of a Complete Streets approach, including criteria for evaluating job performance and hiring staff. FDOT will also need to pass on Complete Streets values and approaches to the consultants engaged to work on FDOT projects.

Implementation strategies to consider:

- Formally declare Department-wide adoption of a Complete Streets approach as a major priority for the agency and devote staff time to achieving it;
- Engage a broad cross-section of staff, consultants, and appropriate external partners during the implementation process to ensure that they buy in to the approach (as described in greater detail in Section IV);
- Provide ongoing education and training to staff, consultants, and other external partners, (as described in greater detail in Section V);
- Host Complete Streets focused conferences and events, and build Complete Streets into the programs for existing conferences such as TRANSPLEX;

- Collect and publicize Complete Streets success stories from Florida and other places;
- Conduct return-on-investment analysis of Complete Streets projects and publicize the results;
- Encourage individual staff to exercise flexibility during funding and scoping decisions by empowering staff to take ownership over the decision-making process;
- Connect formal measures of job performance for District Secretaries, Directors, and other leadership and staff to Complete Streets outcomes;
- Include knowledge and adoption of a Complete Streets approach in the criteria used to hire new FDOT staff;
- Include knowledge and adoption of a Complete Streets approach in the criteria used to select consultants;
- Require that consultants demonstrate an understanding of Complete Streets concepts and context-sensitive design practices in proposals; and
- Require that consultants working with FDOT participate in Complete Streets training.



Expand FDOT's Role as a Transportation Provider and Leader

Implementing a Complete Streets approach on a statewide level will require coordination and sustained leadership. During the M2D2 workshop series, members of the Complete Streets Implementation Team discussed the need to evaluate and potentially expand FDOT's core role as a transportation provider to meet the needs of a broader range of travelers. One major theme that emerged during these discussions was the question of how proactive, rather than reactionary, FDOT should be moving forward in working with other agencies and organizations at the state, regional, and local levels to implement Complete Streets. The implementation strategies below reflect these discussions.

Implementation strategies to consider:

- Continue to take a leadership role in promoting transit system development as an approach for expanding capacity, including identifying funding for transit, encouraging and facilitating the development of more regional transit plans, and potentially considering becoming an operator of transit in specific cases;
- Reframe FDOT's core responsibilities to include consideration of local travel as well as statewide and regional trips, recognizing that many automobile trips currently taken on state facilities are three miles or fewer;
- Collaborate more proactively with local governments in land use decision-making, including during visioning, comprehensive planning, development approval, and school siting; and
- Take a proactive role in initiating Complete Streets pilot projects in partnership with willing communities across the state.

Improve Communication Across FDOT Programs and with External Partners

During the M2D2 workshop series, participants pointed to decision-making 'silos' across FDOT programs and between FDOT and other agencies as a significant barrier to Complete Streets implementation. Many partners play a role in implementing Complete Streets, and without good communication, these players will end up working independently and even at odds with one another, rather than toward a common vision. The

Complete Streets Implementation Team discussed a number of approaches for improving coordination across relevant stakeholders, as outlined in the implementation strategies below.

Implementation strategies to consider:

- Communicate with metropolitan planning organizations and other local and regional agencies earlier during project planning so that they can coordinate their own related investments;
- Hire FDOT staff with urban planning backgrounds to support more collaborative work with local governments;
- Establish full-time staff positions dedicated to Complete Streets implementation and external partner engagement within each of the District Offices;
- Add Complete Streets implementation and external partner engagement to existing position descriptions; and
- Develop and maintain Complete Streets network plans and GIS layers that compile information from existing land use and transportation plans to identify gaps in network connectivity and aid coordination across programs and with other agencies.

III. Modifying approaches for measuring performance

Successfully integrating a Complete Streets approach into FDOT's practices in an impactful way will require aligning the Department's approaches for measuring performance at a variety of scales and levels with the goals of the Complete Streets Policy. This includes measures and criteria used to evaluate proposed future investments, the performance of individual transportation facilities, the performance of the network as a whole, and the general effectiveness of FDOT's programs.

During the M2D2 workshop series, members of the Complete Streets Implementation Team discussed the importance of more closely aligning how the Department measures success with how residents, businesses, and transportation system users measure success. Doing so will mean incorporating criteria into decision-making that evaluate the qualities people want from their transportation system – convenience, safety, comfort, access, reasonable travel times, low cost, and reliability – while also reflecting the broader role of the transportation network in contributing to regional competitiveness and quality of life.

A Complete Streets framework for measuring performance involves:

- Moving beyond measures of capacity and mobility toward measures of access based on context by assessing whether residents have safe, reliable, and affordable ways to reach important destinations such as employers, healthcare, schools, and other daily needs;
- Evaluating the quality of the travel experience for all modes of transportation as well as safety for all modes of transportation;
- Assessing the completeness of the transportation network for all modes of transportation, including transfers between modes; and
- Evaluating whether transportation investments are contributing to broader state and community goals articulated in planning documents such as those related to future growth and development, environmental protection, and health.

Table III. Types of Complete Streets Measures to Consider

Complete Streets Goal	Performance Measures to Consider	
Safety for All Transportation System Users	• Crashes, fatalities, and serious injuries by mode and type (counts and rates per capita or per Vehicle Mile Traveled) • Traveler surveys with safety ratings for different modes • Presence of adequate lighting • Number of violent and non-violent crimes • Crime Prevention through Environmental Design (CPTED)	
Access to Destinations	• Measures of travel time reliability and person delay on foot, on bicycles, on transit, and in vehicles • Combined household expenditures on housing and transportation as a percentage of household income • Emergency response times • Transit access, measured by percent of persons living within a set distance from transit stops • Walk Score, Bike Score, and Transit Score • Sidewalk continuity	• Bicycle facility continuity • Presence of pedestrian facilities in proximity to transit stops • Percentage of bus stops that are ADA-compliant • Percentage of children walking and bicycling to school • Number of residents using carpool and vanpool services • Number of residents with telecommuting options
Economic Competitiveness	**Measures of community economic vitality:** • Alignment of transportation projects with local and regional land use and economic development plans and visions • Level of private investment in adjacent properties • Changes in vacancy rates for adjacent properties • Changes in retail vibrancy (retail and restaurant sales, numbers of customers, etc.)	**Measures of market access:** • Connections between residential areas and employment opportunities • Access between major activity centers • Changes in freight tonnage
Environmental Sustainability	**Measures of transportation facility sustainability (outputs):** • Impervious surface area • Presence of vegetation • Energy efficiency of transportation facilities	**Measures of environmental degradation or preservation (outcomes):** • Air quality and emissions • Stormwater runoff • Land and habitat preservation
Public Health	• Rates of active transportation (ex. walking and biking trips as a portion of total trips in a community) • Rates of chronic disease • Exposure to contaminates • Travel time and reliability from residential areas to health facilities	
Social Equity	• Access to economic opportunities and other daily needs by gender, age, income, race, ethnicity, and disability status • Combined household expenditures on housing and transportation as a percentage of household income by gender, age, income, race, ethnicity, and disability status • Relative impact of other measures by gender, age, income, race, ethnicity, and disability status	
Quality of Life	**Measures of travel experience quality:** • Quality of automobile trips (pavement conditions, traveler survey results, etc.) • Quality of the transit experience (transit LOS, frequency of service, quality of accommodations for passengers at stops, accessibility of information for passengers, etc.) • Quality of the bicycle environment (bicycle LOS, width of facilities, pavement condition of bicycle facilities, presence of bicycle wayfinding, etc.) • Quality of the pedestrian environment (pedestrian LOS, sidewalk widths, sidewalk continuity, crossing distances and times, wait times at intersections, widths of medians, etc.)	**Measures of community vibrancy:** • Alignment with local and regional visions and plans • Support for local "place-making" efforts • Presence of shade, scenic views, seating, etc.

This section of the Complete Streets Implementation Plan outlines recommended strategies for integrating a Complete Streets approach into FDOT's performance measurement practices.

Develop New Complete Streets Performance Measures and Expand Existing Measures

A key step in the implementation process will be identifying performance measures that can help FDOT assess whether transportation investments are meeting the needs of all residents and achieving other Complete Streets goals at the project scale, corridor scale, and network scale. Different types of measures will be appropriate for each scale. Table III outlines a variety of measures to consider incorporating into FDOT's practices. Some of these measures assess outputs over which FDOT has direct control (such as the continuity of sidewalks along a corridor), while others measure outcomes – the ways in which projects contribute to changes in the broader environment (such as changes in walking rates along a corridor, or changes in chronic disease). Both types of measures can be valuable in evaluating success.

FDOT will not need to integrate all of the measures in Table III into its practices to successfully implement a Complete Streets approach. Rather, the Department should prioritize a group of measures to develop further based on identified goals and needs.

Addressing Gaps In Data

As participants during the M2D2 workshop series discussed, data needs and gaps will be among the largest hurdles to overcome in adopting new Complete Streets performance measures and will require staff time and resources to address. SGA recommends devoting resources to collecting this data during the Complete Streets implementation effort. Partnerships with other agencies, universities, and the private sector can also help FDOT compile the necessary data to enable Complete Streets performance measurement. These partnerships could include:

- Partnering with the University of South Florida's Center for Urban Transportation Research and other universities;
- Partnering with chambers of commerce, business improvement districts, and economic development councils to access data on community revitalization and economic development;
- Working with hospitals and departments of health to collect health-related data such as rates of obesity, asthma, and other diseases, as well as information on access to healthcare for community members;
- Using existing applications such as Walk Score, Bike Score, and Transit Score to evaluate the quality and connectivity of pedestrian, bicycle and transit networks on a site-specific and community scale; and
- Collecting survey data about traveler experience on an ongoing basis through the use of mobile phone applications and other technology. FDOT could also collect this type of traveler survey data before and after major projects.

Considering Both Quantitative and Qualitative Measures

While quantitative performance measures are useful tools in decision-making and can be especially valuable in making a strong case for investments to skeptical audiences, qualitative measures can often be equally effective in assessing whether FDOT's investments are achieving Complete Streets goals. For

example, Table III recommends measuring whether projects align with local and regional land use and economic development plans and community visions. This type of measure can get to the heart of whether investments are producing Complete Streets outcomes, and by relying on the professional judgment of FDOT staff in making subjective assessments, it can be integrated as a criteria in project selection and development decision-making quickly without the resources necessary to develop quantitative metrics and methodologies.

Develop Guidance And Methodologies for Complete Streets Performance Measurement

FDOT staff will need guidance, methodologies, and standard procedures to reference in measuring many of the types of impacts (Table III) during programming, alternatives analysis, design, and other decision-making. Some of the measures above will require developing new guidance, particularly those that address the broader economic, social, and environmental impacts of Complete Streets. This guidance could be housed within a new Complete Streets Performance Measurement Handbook or integrated into existing documents.

FDOT can also expand and build on existing tools in developing guidance for Complete Streets performance measurement, including:

Adapting the measures and methodologies in FDOT's Strategic Investment Tool to support Complete Streets performance measurement

FDOT's Strategic Investment Tool (SIT) informs the prioritization of SIS highway projects. The SIT provides a framework for evaluating how well proposed projects will contribute to the goals outlined in the FTP by scoring projects using a series of performance measures for each FTP goal, including 51 measures in total. FDOT's SIT Highway Component Measures Handbook outlines methodologies for each of the 51 measures.

While the SIT is designed to evaluate SIS highway projects, a number of the measures and methodologies could be adapted to support broader Complete Streets performance measurement and scoring during programming and project development. FDOT selected the 51 measures in the SIT based partially on availability of data, and has already carefully vetted the methodologies for each measure, so they could be applied to other decision-making processes relatively quickly. Using the SIT as a model could also be helpful in sharing information with the public about project tradeoffs and collecting feedback.

Expanding the existing Quality/Level of Service Handbook to include more Complete Streets performance measures

FDOT's Quality/Level of Service Handbook and accompanying software provide measures, methodologies, and tools for evaluating roadway capacity, quality of service, and level of service for different modes of travel to inform decision-making during planning. FDOT can use the measures in the Handbook to identify needed Complete Streets improvements on roadways, but should expand these measures to include other criteria that influence the quality of the travel experience for pedestrians, bicyclists, and transit riders, such as:

- Frequency of pedestrian crosswalks, crossing distances, presence of pedestrian refuge islands, etc.;
- Sidewalk continuity along the corridor and throughout the surrounding network;

- Sidewalk continuity near transit stops and proximity of pedestrian crossings near transit stops; and
- Presence of shade, adequate pedestrian-level street lighting, and visual interest along the corridor.

Expand the Role Complete Streets Performance Measures Play in Decision-Making

In addition to developing and providing guidance on the use of new and existing Complete Streets performance measures, FDOT should consider expanding or formalizing the role that Complete Streets performance measures play in influencing decisions during program development, planning, project selection, alternatives analysis, design, and operations. This could include:

Integrating more Complete Streets measures into the process for selecting SIS highway projects

FDOT devotes 75% of the state's discretionary transportation capacity funding to the SIS. As noted above, the SIT helps guide decisions about how to prioritize SIS projects by providing a framework for weighing tradeoffs between potential investments using measures tied to the goals in the FTP. As FDOT updates the goals, objectives, and strategies in the FTP and SIS Policy Plan to align more closely with Complete Streets objectives, the Department can also update and expand the measures within the SIT to place greater weight during project prioritization on whether investments will support Complete Streets goals. Given that the current SIS goals emphasize speed, there will need to be a restructuring of these goals during the implementation effort to provide some competitive advantage to complete streets.

Expanding the use of Complete Streets performance measures in project development decisions

FDOT's existing LOS standards place an implicit priority on vehicle capacity and speed during planning and project development, impacting decisions made at the network, corridor, and intersection scales. The Department's Quality/Level of Service Handbook recommends and provides guidance on measures for other modes of transportation that can be used for conceptual planning during project design scoping and alternatives analysis, but these measures are generally advisory.

SGA recommends integrating these and other Complete Streets measures described above more explicitly into FDOT's project development decision-making, particularly within the PPM and the PD&E Manual. This should include using Complete Streets measures during alternatives analysis for RRR projects to assess whether Complete Streets improvements such as reconfigurations and reallocations of lanes should be included in project scopes.

Aligning internal measures of effectiveness used to evaluate FDOT programs with Complete Streets objectives

Programs within FDOT are currently generally evaluated based on the efficiency of project delivery, which can create pressures to move projects forward quickly and on budget. Members of the Complete Streets Implementation Team discussed how these measures of effectiveness help perpetuate a one-size-fits-all approach to project development. Broadening the criteria used to evaluate FDOT programs will help enable the culture shift described in previous sections among management and staff.

FDOT can supplement the existing measures of effectiveness for programs with measures that assess and reward the use of innovation, creative problem solving, context-sensitivity, and attentiveness to the needs of all residents during the project development process. In addition to these process-related measures, FDOT should also assess project outcomes in evaluating the performance of the Department's programs.

Incorporating broader measures of effectiveness into program evaluation can be done without sacrificing efficiency in project planning or reversing the direction of current FDOT initiatives to improve project delivery, such as the State-Wide Acceleration and Transformation (SWAT) process. In many cases, considering a variety of innovative strategies to meet the identified project need and conducting comprehensive partner engagement upfront during project development can lead to a more streamlined project delivery process by reducing issues and conflicts that arise later in the design process. FDOT should adopt measures that evaluate both efficiency and context-sensitivity in project delivery.

Use performance measurement to help make the case for Complete Streets investments

Performance measures can be a powerful tool in conveying the benefits of Complete Streets projects to state legislators, local elected officials, and the public. By collecting and reporting information on the outcomes of Complete Streets investments, such as economic development, community revitalization, reductions in emissions, improved access to jobs and healthcare, and other benefits frequently associated with Complete Streets projects, FDOT can make the case for these types of investments in terms that decision-makers and the Department's customers care about.

Conducting before and after studies for projects and calculating return on investments analyses can help provide the data necessary to make a compelling case for Complete Streets investments. FDOT can compile success stories into performance reports and showcase them in flyers and brochures, potentially supplementing them with before and after pictures and testimonials from local businesses and residents.

IV. Managing Internal and External Communication and Collaboration During Implementation

FDOT staff and other partners will more readily understand and embrace a Complete Streets approach if they are meaningfully engaged during implementation. Inviting a variety of internal and external stakeholders to participate will also help ensure that the updated documents address the diverse needs of FDOT's partners and customers, while breaking down barriers in communication across FDOT programs and between FDOT and other stakeholders.

The Complete Streets Implementation Team has identified a variety of partners and stakeholders who should participate in the implementation process moving forward or be informed about the effort. Given the scale of the initiative, engaging these staff and external stakeholders in the appropriate way and at the appropriate time in the process will require a tiered outreach approach. Establishing clear roles and communicating them to stakeholders upfront will help to ensure that comprehensive outreach does not stall or delay progress during implementation.

This section of the Complete Streets Implementation Plan outlines key steps below for engaging and involving FDOT staff and other stakeholders throughout the implementation process. This general engagement approach can be used to develop more specific outreach and engagement plans for each document prioritized for revision.

Establish a Leadership Structure for Complete Streets Implementation

As a first step, FDOT should establish a leadership structure for the Complete Streets implementation process. FDOT can adapt and modify existing committees to lead and provide guidance during implementation, enabling the Department to launch the process more quickly than would otherwise be possible. The Complete Streets Implementation Team engaged during the first two phases of this initiative and the existing Bicycle and Pedestrian Partnership Council can together provide the foundation for

a steering committee to guide the effort moving forward. As appropriate, FDOT can also task other existing committees and groups with guiding specific aspects of the implementation process, such as performance measurement, training, and changing culture.

In addition to establishing a steering committee, this Implementation Plan recommends establishing a smaller core implementation management team tasked with overseeing and coordinating the day-to-day process of revising the prioritized documents, ideally with dedicated staff time allocated to the implementation effort. This core management team can be comprised of a subset of the steering committee discussed above.

Establish a Central Website for Sharing Information About the Process

FDOT can build on the existing Complete Streets Implementation page on the Department's website to provide a public-facing portal for sharing updates on progress throughout the implementation process. The website can serve as a central hub for resources and information about upcoming training, and can be used as a tool in collecting feedback from stakeholders during the implementation process as appropriate. The website should also house other educational and promotional materials such as brochures, flyers, and short videos.

Develop an Outreach and Engagement Framework for Implementation, Including Plans for Each Document as Appropriate

As discussed above, engaging the right staff and external stakeholders in the appropriate way and at the appropriate time during the implementation process will require a tiered approach. Table IV outlines a broad Complete Streets engagement framework, grouping stakeholders into 1) those that should be directly involved in the document updates, 2) those that should be engaged to provide input and feedback during the process, and 3) those that should be informed of progress throughout the initiative.

This broad engagement framework should guide the development of more specific stakeholder outreach and engagement plans for each document identified as a priority for revision. Each document will need input from different staff and partners during the update process, and those stakeholders will need to be engaged at different levels and points throughout the process. In many cases, the right stakeholders to engage will vary from district to district.

In developing detailed outreach plans, the staff or teams leading the update process for each document should address the following considerations, discussed in greater detail below:

- Which stakeholders to involve during the implementation process
- Roles during implementation
- When to involve stakeholders during the implementation process
- How to communicate with stakeholders during implementation

Determine Which Stakeholders to Involve During the Implementation Process

During the M2D2 workshop series, the Complete Streets Implementation Team identified the following categories of stakeholders to involve in implementation, either in leading aspects of the

Table IV. Tiers of Stakeholder Involvement During Complete Streets Implementation

Tier of Involvement	Participants	Role
Tier 1: Conducting updates to FDOT documents		
Complete Streets Implementation Management Team	Core group of FDOT staff representing a cross-section of appropriate offices, ideally with dedicated staff time allocated to the implementation effort	• Oversee the process for revising the identified documents • Manage revision teams for each document and coordinate across teams
Document Revision Teams	Teams of FDOT staff within the appropriate office for each identified document	• Conduct the necessary updates to each document under leadership of the Management Team
Tier 2: Engaged		
Complete Streets Partner Steering Committee	Group of internal and external stakeholders representing relevant agencies and organizations – could evolve from the existing Complete Streets Implementation Team and/or the existing Bicycle and Pedestrian Partnership Council	• Meet periodically throughout the Complete Streets implementation process to discuss progress and provide feedback on the overall direction of the initiative • Provide diverse expertise and perspectives • Represent and communicate back to constituents about the initiative • Could include sub-committees for specific aspects of the implementation process, such as performance measurement, training, and changing culture
Internal review committees for each document	Broad representation of relevant staff from the District and Central Offices, possibly including consultants	• Provide direction and feedback at key points throughout the update processes for each document
External Reviewers or Advisory Committees as appropriate for specific documents	Representatives from relevant agencies and organizations invited by FDOT to provide feedback – would choose whether or not to participate (or at what level to participate) based on interest and time commitment involved	• Provide direction and feedback at key points throughout the update processes for each document • Represent and communicate back to constituents about the update
Tier 3: Informed		
FDOT executive oversight	Appropriate representation from FDOT leadership	• Receive periodic updates on progress and make course-corrections as needed • Approve the revised documents
Broad decision-maker and stakeholder outreach	Comprehensive representation from the categories of internal and external stakeholders listed below, and others as appropriate	• Receive periodic updates on the initiative and/or individual document revisions and provide feedback as appropriate • Could be reached through a combination of presentations and webinars, targeted outreach, and updates during standing meetings

process, providing feedback at key milestones throughout the process (engaged), or receiving updates on progress and sharing those updates with other constituents (informed). These stakeholders should be included during general outreach about the Complete Streets implementation effort as appropriate, and should be considered during the development of specific outreach plans for each document prioritized for revision. The appropriate stakeholders to engage and inform will likely vary substantially from document to document, as will the role these stakeholders should play in the process.

1. **FDOT staff:** representing a cross-section of programs within the seven District Offices, the Turnpike Enterprise, and Central Office;
2. **Consultants:** engaged to work on FDOT projects;
3. **Federal agencies:** including the Federal Highway Administration and other appropriate agencies such as the Federal Transit Administration and the Federal Railroad Administration;
4. **Other state agencies:** including the Florida Department of Health, Department of Economic Opportunity, and others as appropriate;
5. **Florida chapters of professional and trade organizations:** including the Florida Section of the Institute of Transportation Engineers, the Congress for New Urbanism, the Urban Land Institute, the Florida Institute of Consulting Engineers (FSITE), the America Society of Civil Engineers, the American Planning Association, the American Society of Landscape Architects, and others as appropriate;
6. **Regional planning organizations:** including Metropolitan Planning Organizations (MPOs), Transportation Planning Organizations (TPOs), Regional Planning Councils (RPCs), and others as appropriate;
7. **City and county governments:** including local elected officials, planners, engineers, representatives from local public works departments, and others as appropriate;
8. **Modal partner agencies and organizations:** including transit agencies and other transit partners, freight handlers, bike share providers, bicycle/pedestrian advocacy organizations, and other agencies and organizations as appropriate;
9. **Public health partners:** such as local public health departments, the Center for Disease Control, advocacy organizations, and other organizations as appropriate;
10. **Economic development partners:** such as Chambers of Commerce, the Florida Economic Development Council, the Rural Economic Development Initiative, regional economic development corporations, Visit Florida, and other organizations as appropriate;
11. **Mobility partners:** such as Commuter Assistance Program Managers, the Commission for the Transportation Disadvantaged, and other organizations as appropriate;
12. **Universities:** throughout the state, including planning and engineering programs;
13. **State legislators:** and legislative aides as appropriate; and
14. **Other partners and customers around the state, including:**
    - Community members
    - Advocacy groups and non-profits such as AARP
    - Law enforcement and emergency management representatives from around the state
    - Land owners, business owners, major employers, and schools in Florida communities around the state
    - Real estate developers
    - Utility providers
    - Others as appropriate

Define Stakeholder Roles During Implementation

While achieving broad buy-in during implementation will be crucial, a large-scale partner outreach process carries the potential to delay or impede the momentum of implementation if stakeholders are not given clear roles to play in the process. To prevent this, the teams leading the document updates will need to define and clearly communicate the parameters of stakeholders' roles and levels of involvement by identifying:

- Who should provide input upfront as the team develops a detailed scope for the document update;
- Who should review and provide feedback on proposed changes after initial revisions have taken place;

- Who should provide input on specific sections of the document based on expertise, and who (if anyone) should be asked to review the full revised document;
- Who will approve the updates to the document; and
- Whether specific stakeholders will be asked to endorse updates to the document or simply provide feedback.

Determine When to Involve Stakeholders During Implementation

The teams leading the updates for each document will also need to identify key milestones during the revision timeline when specific stakeholders should be engaged to provide feedback or informed of progress. These milestones should be compiled into an outreach schedule for each document that will be reviewed by the steering committee and core implementation management team. The outreach schedules can be based on existing processes for updating each document as appropriate, and they will likely vary substantially from document to document based on the scale of the revisions, the types of stakeholders identified to participate, and the rounds of input or review deemed appropriate by the document revision team.

Determine How to Communicate With Stakeholders During Implementation

FDOT has a variety of outreach structures and tools in place that can assist in collecting feedback from stakeholders engaged in the revision process for each document and disseminating information and updates on progress to other partners who will need to be informed. The appropriate outreach methods will vary from document to document, but the teams leading the update process for each document can consider:

- Developing pages on FDOT's website dedicated to the revision process for specific documents, which could be accessed from the central Complete Streets Implementation page and could be used to provide updates on progress and collect feedback if appropriate;
- Using existing committees and coalitions focused on issues related to Complete Streets to collect feedback from key stakeholders and disseminate updates about the process to broader groups of constituents;
- Delegating responsibility to provide updates and collect feedback on specific aspects of the implementation process to the appropriate programs within Central Office and the District Offices (for example, engaging the Public Transit Office to take the lead in communicating with transit agencies);
- Enlisting the help of RPCs, MPOs, or the League of Cities to provide updates to and collect feedback from cities and counties;
- Using quarterly cross-district functional team meetings and other standing meetings as venues for providing updates on the process and soliciting feedback;
- Using web-based tools to distribute drafts of updates and collect feedback; and
- Using the annual Design Training Expo, TRANSPLEX Conference, and other major conferences and events to share information about the Complete Streets implementation process.

V. Providing Ongoing Education and Training

Incorporating a Complete Streets approach into FDOT's practices will require a broad culture change within the Department. Once FDOT has updated the identified documents and procedures, providing ongoing education and training for staff and consultants working on FDOT projects will help create an internal culture in which considering and meeting the needs of all transportation system users is a core part of the Department's mission. Conducting ongoing training will also provide a variety of additional benefits, including:

- Ensuring that the changes to specific documents are interpreted correctly and the documents are used effectively throughout the Department;
- Helping to support broad adoption of a context-sensitive planning and design approach and prevent a "one-size-fits-all" interpretation of Complete Streets; and
- Helping to improve coordination between FDOT programs and external partners in working toward a common Complete Streets vision.

This section of the Complete Streets Implementation Plan establishes a framework for providing ongoing training to FDOT staff, consultants, and partners and conducting education for other stakeholders.

Determine Which Audiences to Target in Developing Training

FDOT's Complete Streets training program should be designed to have a broad reach within the seven District Offices, the Turnpike Enterprise, and the Central Office. Establishing a dedicated section of FDOT's website with information about upcoming Complete Streets training opportunities can help encourage broad participation. The Department may also want to consider making certain training mandatory for specific program staff, recently hired staff, or consultants engaged to work on FDOT projects.

While the appropriate people to include in training will likely vary from program to program and district to district, it may be useful to provide tailored training to specific audiences such as:

- Directors in the seven District Offices and the Turnpike Enterprise;
- Project managers and administrators (staff and consultants);
- Planners and Environmental Management Office staff;
- Design engineers;
- Traffic operations;
- District bicycle and pedestrian coordinators;
- District bicycle and pedestrian safety specialists;
- District MPO and local government liaisons;
- Transit planners;
- Other staff as appropriate; and
- Consultants engaged regularly.

In addition, FDOT can consider providing training and education to other external stakeholders who partner with the Department in planning and designing transportation projects, rely on FDOT standards and manuals in their own practices, or make local and regional land use decisions that impact the viability of traveling by different modes in their communities.

Develop a Complete Streets Training Framework

FDOT can deliver training on Complete Streets in a combination of formats, including in-person workshops, webinars, and Computer Based Training (CBT) courses available online. Table V outlines a recommended framework for a new Complete Streets training program that builds on the Department's existing training practices and includes a variety of audiences.

In addition to the training framework outlined in Table V, a number of existing events and training processes can help provide additional opportunities to educate FDOT staff, consultants, and other partners about Complete Streets. FDOT can consider:

- Incorporating Complete Streets training into the annual Design Training Expo, TRANSPLEX Conference, and other conferences and events with a wide reach;
- Incorporating new Complete Streets training sessions for the District Offices into Central Office training plans as they are updated;
- Building Complete Streets-related curriculum into the Office of Roadway Design's regular Design Update Training, and the Engineering Academy webinar series;

Table V. Complete Streets Training Program Framework

Training	Purpose	Attendees	Format and Duration
1. Staff and Consultant Complete Streets Overview			
Introductory Video: "My Role in Complete Streets"	Provide staff and consultants with a concise and interactive overview of FDOT's Complete Streets goals, the benefits of Complete Streets, FDOT's context-sensitive approach, and broad implications for decision-making.	Consider making mandatory for all staff and consultants	10 to 20-minute video
2. Workshop Courses			
FDOT Leadership Workshop	Facilitate a policy-level discussion about FDOT's Complete Streets vision, roles, and implications for decision-making, and build executive- and management-level support for the approach.	Management and executive staff, Public Information Offices, liaisons, and others as appropriate	½ or 1-day workshop, repeated as necessary
Complete Streets Planning and Project Development	Provide an overview of how to support Complete Streets within the planning and PD&E processes, including: • Funding and eligibility • Project prioritization • Forecasting and modeling • Performance measurement • Working with partners • Land use considerations • Common assumptions during project development that can hinder context-sensitive design	FDOT planning, PD&E, multimodal, transportation statistics, work program management, and corridor planning staff, and others as appropriate.	2-day training, repeated periodically
Complete Streets Design	Provide training on how to take a context-sensitive Complete Streets approach to design: • Complete Streets design principles • Considerations for each mode • The role of land use • Working with partners • Practical design considerations • Complete Streets for RRR projects • Resources and best practices	FDOT project management, design, traffic operations, and construction staff and other audiences as appropriate. Consultants working on FDOT projects should also be required to participate as appropriate.	2-day training, repeated periodically
Complete Streets Operations and Maintenance	Provide an overview of the role of operations and maintenance in supporting Complete Streets, including: • Pavement markings, signalization, and signage • Transit operations • Maintenance of traffic considerations	FDOT traffic operations, traffic design, maintenance, safety, and construction staff, consultants, and other audiences as appropriate	1-day training, repeated periodically
3. Computer Based Training (CBT) Courses			
Topic-Specific Training Modules	Provide staff and consultants with an in-depth understanding of specific documents, travel modes, and other subject areas as appropriate through interactive modules that can be completed on-demand.	Designed for FDOT staff and consultants. Could also be used by external partners as appropriate.	30 – 90 minutes per module

Training	Purpose		Attendees	Format and Duration
4. Public Education and Outreach Tools				
Complete Streets Speakers Bureau Training	Empower staff with diverse backgrounds and expertise to be Complete Streets "messengers" and champions in communicating with external partners. Provide outreach tools and materials (in person and online) such as: • Brochures and flyers	• Stock PowerPoint presentations that can be tailored and adapted • Success stories from Florida communities and other states • Talking points about public health and economic benefits • Return on investment data and other compelling statistics	Public Information Offices, liaisons, and other staff as appropriate.	½ or 1-day training
Complete Streets Public Presentations	Provide interested partners and the public with a basic overview of Complete Streets and FDOT's implementation initiative – could develop one standard presentation that can be adapted for use throughout the state.		Local elected officials, non-profits, advocacy groups, members of the general public, etc.	1 to 1.5-hour presentation conducted as a webinar and at public meetings as appropriate
5. Complete Streets Training for Regional and Local Agencies				
Partner Training: "Working with FDOT to Support Complete Streets"	Provide city and county staff with an understanding of the benefits of Complete Streets and the ways they can support context-sensitive design through their own land use and development decisions. Provide opportunities for discussion with FDOT District Office staff about key challenges – could be adapted from existing tools such as the Mobility Review Guide and Multimodal Best Practices Guide training.		FDOT District planning and design staff, city and county planners and engineers, public health organizations, and other partners as appropriate.	1-day workshops, repeated periodically with different cities and counties
Off-the-shelf training curriculum for local and regional agencies	Provide ready-to-use training materials that local and regional partners can access online and tailor to their needs for use with their staff, partners, and the public.		MPOs, TPOs, RPCs, city and county planners and engineers, public health organizations, and other partners as appropriate.	Develop curriculum for several ½ or 1-day workshops for specific topics

- Using the existing Multimodal Best Practices Guide and Mobility Review Guide and training course to educate local governments about Complete Streets;
- Using the existing Accessing Transit training course to educate transit agency staff about Complete Streets;
- Partnering with universities to develop Compete Streets curriculum for planning and engineering students;
- Partnering with the FSITE to integrate Complete Streets into existing training programs; and
- Including basic education on the Complete Streets approach during standing coordination meetings with consultants, such as the quarterly consultant management meetings.

TIMELINE AND WORK PLAN FOR IMPLEMENTATION

This section of the Complete Streets Implementation Plan proposes a timeline for the implementation process. Incorporating a Complete Streets approach into FDOT's practices on a department-wide scale is a significant undertaking, so it will be important to establish milestones for the implementation effort and a process for monitoring progress to keep the initiative on track.

Developing an approach for monitoring progress should include:

- Identifying key milestones, such as dates by which all document revision scopes will need to be submitted to implementation leadership;
- Developing structures for collecting information on progress and achievements internally within the Department, such as having the District Offices provide periodic updates to Central Office, and having document revision teams provide periodic updates to implementation leadership; and
- Establishing an approach for tracking progress internally and reporting on progress and successes externally over time, such as through an annual report.

Table VI outlines a proposed two-year timeline and process for the Complete Streets implementation initiative, concluding in December of 2017. The final phase of implementation outlined in Table VI begins in January 2018 and involves identifying any necessary next steps to continue to implement the Complete Streets Policy moving forward. Some phases within the proposed timeline include separate subsections for each of the five broad implementation tasks outlined in this plan. The timeframes for these phases are approximate, and will likely vary from document to document and task to task. FDOT should refine these timeframes after launching the implementation process.

Table VI. Recommended Timeline for Complete Streets Implementation

Phase I: Finalize and adopt FDOT's Complete Streets Implementation Plan
Proposed timeframe: By January 1, 2016

Work to be accomplished:

- Collect and incorporate feedback on the draft Complete Streets Implementation Plan from the Implementation Team and other stakeholders as appropriate
- Finalize and adopt Complete Streets Implementation Plan

Phase 2: Launch implementation process
Proposed timeframe: Ongoing through February 2016

Work to be accomplished:

- Establish a leadership structure for Complete Streets Implementation
- Establish a central website for sharing information about the process with FDOT staff and the public
- Establish any necessary sub-committees to guide specific aspects of implementation
- Identify and engage teams of staff to lead the update process for each document prioritized for revision
- Establish a process for monitoring progress throughout implementation
- Integrate Complete Streets into current updates to the FTP and SIS Policy Plan based on the timing for those updates

Phase 3: Detailed scoping
Proposed timeframe: March 2016 – June 2016

I. Revising guidance, standards, manuals, policies, and other documents

Work to be accomplished by each document revision team:

- Develop a detailed scope of work for revising the document:
  - Review relevant FDOT research and national best practices as appropriate
  - Develop an outline for revisions
  - Develop a detailed revision schedule, including key milestones for collecting feedback from partners and stakeholders
  - Submit detailed scopes to the Complete Streets implementation leadership for feedback and approval
- Identify other related manuals, procedures, guides, and standards that will ultimately need to be updated themselves to reflect the changes
- Develop a detailed stakeholder engagement plan, as appropriate:
  - Identify internal staff and external stakeholders who should be engaged to provide feedback at key milestones throughout the revision process
  - Identify internal staff and external stakeholders who should be informed that revisions are happening and receive periodic updates on progress
  - Establish clear roles for all stakeholders
  - Determine how to communicate with stakeholders during implementation

II. Updating decision-making processes

Work to be accomplished:

- Review and evaluate the recommended strategies in this plan to identify those that should be prioritized
- Determine an appropriate schedule and sequential order for these strategies based on legislative, statutory, programmatic and cultural considerations and barriers
- Designate staff and teams to lead specific aspects as appropriate

III. Modifying approaches for measuring performance

Work to be accomplished:

- Review national guidance, resources, and approaches from other states as appropriate
- Identify and prioritize Complete Streets performance measures to develop further to inform decision-making and/or help make the case for Complete Streets investments
- Identify any major data gaps that will need to be addressed
- Designate staff and teams to lead specific aspects of performance measure development as appropriate

IV: Managing internal and external communication and collaboration during implementation

Work to be accomplished:

- Develop a detailed outreach plan and schedule for communicating with appropriate staff and partners at key milestones during implementation
- Develop a schedule of existing conferences, events, and meetings that can be used as forums for disseminating information about the implementation process and collecting feedback

V. Providing ongoing education and training

Work to be accomplished:

- Develop a detailed Complete Streets training plan
- Identify staff or teams to lead the development of specific training courses and workshops
- Establish a timeline for developing and rolling out different pieces of the overall training program
- Identify and engage internal and external partners who will be involved in developing or reviewing the training curriculum for specific workshops and modules
- Develop a schedule of existing conferences, events, and meetings that can be used as forums for Complete Streets training

Phase 4: Update documents and practices
Proposed timeframe: July 2016 – December 2017

I. Revising guidance, standards, manuals, policies, and other documents (timeframes will vary by document)

Work to be accomplished:

- Develop first drafts of revised documents or document sections and review with appropriate internal and external stakeholders
- Revise draft documents and review with internal and external stakeholders again as needed
- Finalize and adopt the revised documents

II. Updating decision-making processes

Work to be accomplished:

- Modify any specific decision-making processes, procedures, and criteria identified as a priority during scoping
- Implement strategies to change decision-making culture and improve coordination with partners on an ongoing basis

III. Modifying approaches for measuring performance

Work to be accomplished:

- Develop guidance and methodologies for all identified Complete Streets performance measures
- Integrate new measures into specific decision-making processes as appropriate, such as programming and project selection, project development, and internal evaluation of FDOT programs
- Conduct before and after studies for specific projects to develop a library of case studies

IV. Managing internal and external communication and collaboration during implementation

Work to be accomplished:

- Engage staff and other partners to provide input on the process as appropriate
- Provide periodic updates to staff and other partners on progress as appropriate

V. Providing ongoing education and training

Work to be accomplished:

- Develop curriculum for workshops and training, starting with those not dependent on specific document revisions
- Develop appropriate training and education materials
- Deliver training courses and workshops on an ongoing basis as needed

Phase 5: Evaluate accomplishments and determine next steps
Proposed timeframe: January 2018 - ongoing

Work to be accomplished:

- Continue to deliver training, workshops, and education on an ongoing basis as needed
- Assess overall progress during the Complete Streets implementation process
- Measure and publicize changes in FDOT's practices, such as impacts on types of projects funded and built
- Measure and publicize outcomes, such as mode shifts, changes in travel volumes for specific modes, changes in pedestrian and bicycle fatalities, and any broader impacts on economic development, public health, etc.
- Identify any gaps and determine whether additional steps are needed to continue to integrate a Complete Streets approach into FDOT's practices

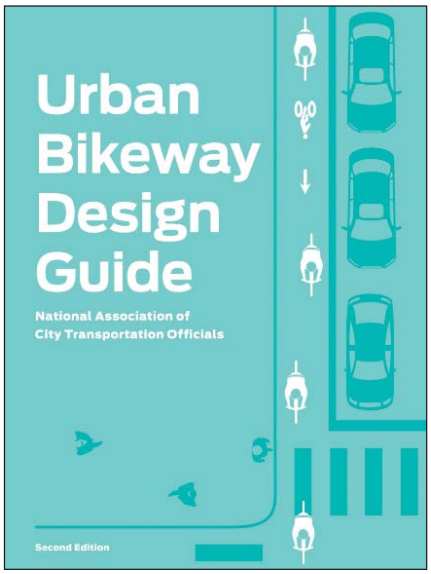
APPENDIX A – DETAILED RECOMMENDED DOCUMENT REVISIONS

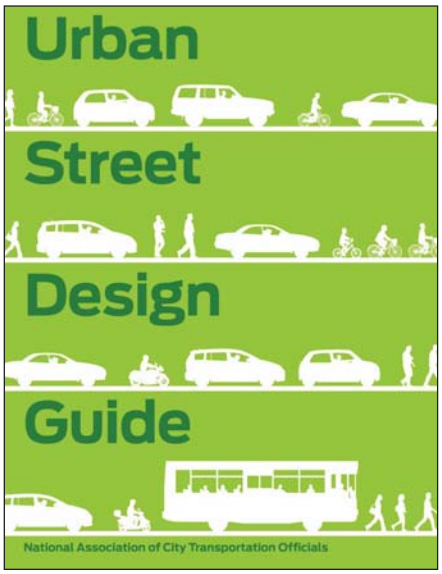
This appendix outlines detailed recommended revisions for the eleven documents identified as a priority in this Implementation Plan. The SGA project team developed these recommendations based on the outcomes of the Multimodal Development and Delivery (M2D2) workshop series and revised them based on feedback from the Complete Streets Implementation Team. These recommendations are intended to serve as a starting point as FDOT initiates the Complete Streets implementation process, and should be revisited, modified, and developed further as the process moves forward. Integrating a context-sensitive approach into planning, design, and operations is a common theme across these recommendations.

The following series of tables recommend revisions broken up by document chapter or subsection where appropriate. Each table also lists the FDOT office responsible for updates to the document and suggests an approximate revision timeframe. The chapters and subsections listed in Table A-1 have been categorized as follows based on the identified primary action(s) needed:

- **Revise** – The chapter or subsection needs revision to align with the Department's Complete Streets Policy and a context-sensitive approach to decision-making;
- **Augment** – The chapter or subsection is missing key guidance or considerations and needs to be augmented to better align with the Department's Complete Streets Policy and a context-sensitive approach to decision-making;
- **New** – There is a new chapter or subsection needed to address a key gap or barrier identified during the M2D2 workshop series; and
- **Remove** – The chapter or subsection should be removed and/or integrated into other chapters.

The SGA project team recommends reviewing the latest versions of the following national standards and guidelines during the update process for each document to identify Complete Streets best practices that can be integrated into FDOT's guidance and standards as appropriate.





- AASHTO. (2014). *Guide for Geometric Design of Transit Facilities.* https://bookstore.transportation.org/item_details.aspx?id=2215.
- AASHTO. (2012). *Guide for Planning, Designing, and Operating Pedestrian Facilities.* https://bookstore.transportation.org/collection_detail.aspx?ID=116.
- AASHTO. (2004). *Guide for the Development of Bicycle Facilities.* https://bookstore.transportation.org/item_details.aspx?id=119.
- National Association of City Transportation Officials. (2013). *Urban Street Design Guide.* http://nacto.org/usdg.
- National Association of City Transportation Officials. (2014). *Urban Bikeway Design Guide.* http://nacto.org/cities-for-cycling/design-guide.
- Institute of Transportation Engineers. (2010). *Designing Walkable Urban Thoroughfares: a context sensitive approach.* http://www.ite.org/css/online/index.html.
- FHWA. *Bicycle Facilities and the Manual on Uniform Traffic Control Devices.* http://www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/mutcd.

For additional Complete Streets resources and best practices from other states, view the National Complete Streets Coalition's website: http://www.smartgrowthamerica.org/complete-streets/implementation.

1. Plans Preparation Manual (PPM)

The Complete Streets Implementation Team identified the Plans Preparation Manual (PPM) as a major priority for revision during the M2D2 workshop series. The PPM establishes geometric and other design criteria and procedures for new construction projects and Resurfacing, Restoration and Rehabilitation (RRR) projects. While portions of the PPM currently align with a Complete Streets approach – particularly within Chapter 21: Transportation Design for Livable Communities – much of the criteria in the current PPM encourage design decisions that prioritize safe, high-speed vehicular movement. Deviations from the minimum design criteria established in the PPM require approval through FDOT's design variation process.

During the M2D2 workshop series, the Complete Streets Implementation Team discussed a need to integrate a more context-sensitive approach into the PPM. A number of national resources, including the ITE manual, Designing Walkable Urban Thoroughfares: A context-sensitive approach,[1] provide guidance for establishing a context-based decision-making framework for project development through the use of transects, "context zones," street typologies (ex. freeway, rural highway, boulevard, avenue, etc.) and other approaches that allow a project designer to account for a transportation facility's role within the surrounding environment as well as its functional classification.

Integrating a context-based design approach throughout the PPM will mean revising and reframing a number of chapters within Volume I. Other documents updated during the Complete Streets implementation process should be revised to align with the approach outlined in the PPM and reference the PPM as appropriate. SGA recommends that the revised PPM include the following broad components:

- A framework for identifying project context: FDOT can adopt an approach similar to those outlined in national guidance documents, such as the use of context zones and street typologies, to define a roadway's relationship to the surrounding environment. FDOT can also consider expanding and adapting the framework in District 7's Draft Freight Roadway Design Criteria, which involves designating areas in the District as one of four contexts through a "Freight Activity and Land Use Compatibility Analysis."
- Guidance on how to select context-sensitive design criteria: The revised PPM will need to provide guidance for project design teams on how to use the identified context for a project to select design criteria and standards, develop cross-sections, and weigh tradeoffs between the needs of different types of transportation system users.

1 Institute of Transportation Engineers. (2010). *Designing Walkable Urban Thoroughfares: a Context Sensitive Approach.* http://library.ite.org/pub/e1cff43c-2354-d714-51d9-d82b39d4dbad

Table A-1. Plans Preparation Manual (PPM)

Document Section	Need	Description of Recommended Revision(s)
Responsible lead office: Office of Roadway Design *Approximate proposed revision timeframe: 18 months*		
Volume I – Establishes geometric and other design criteria and procedures for FDOT projects.		
Introduction	Revise	Provide a policy framework for making design decisions, including: • Introducing the concepts of Complete Streets and context sensitive design • Describing the need to design roadways for all users of the transportation network
Context-Based Design	New	Add a new chapter establishing a framework for making context-sensitive decisions during project development. This chapter should: • Provide guidance on how to identify project context through the use of context zones, street typologies, or other parameters identified by the implementation team • Discuss engineer liability and empower staff to use flexibility in design This section can also list design principles to consider during decision-making based on the Complete Streets Policy and other policy priorities, such as: • Enabling safe, convenient and comfortable travel for all residents • Improving network connectivity for all modes and addressing gaps • Focusing on providing access to key destinations • Aligning project designs with the goals articulated in state, regional, and local plans
Chapter 1: Design Controls	Revise/ Augment	Emphasize the importance of identifying design controls that align with a project's context, differentiating between controls that fall outside the project team's ability to influence and those that the project team can select. The SGA project team also recommends the following revisions to specific sections within this chapter: <u>Section 1.2: Traffic</u> • Add discussion of travel volumes for all modes • Discuss how land use decisions and overall network connectivity impact traffic and travel volumes <u>Section 1.3: Capacity and Level of Service</u> • Discuss the concept of "person capacity" and the need to balance vehicle capacity needs with the needs of other travel modes • Expand the discussion of Level of Service to include quality and level of service performance measures for other modes <u>Section 1.4: Roadway Functional and System Classification</u> • Clarify that functional classification is one aspect of project context, but should be supplemented by consideration of surrounding land use and the role of the transportation facility in the community <u>Section 1.9: Design Speed</u> • Recommend the use of target speed (the speed you intend drivers to travel) to select design speed • Discuss tradeoffs to consider in selecting design speed based on context, such as the role of vehicle speed in: – Crash severity – Sight distance – Implications for lane widths – Design of separated facilities <u>Section 1.12: Design Vehicle</u> • Include guidance on using a context-sensitive approach to select the appropriate: – Design vehicle – should be a frequent user of the facility, used to determine minimum turning radii – Control vehicle – the largest vehicle the facility can safely accommodate • Discuss contexts in which it may be appropriate to identify a non-motorized traveler as the primary "design vehicle"

Document Section	Need	Description of Recommended Revision(s)	
Chapter 2: Design Geometrics and Criteria	Revise/ Augment	Revise this chapter to: • Provide guidance on how to select appropriate design criteria based on context • Discuss tradeoffs to consider in selecting project design criteria and developing cross-sections within limited R/W, including: – Lane widths and allocations based on design vehicle, travel volumes for all modes, design speed, pedestrian crossing distances, etc. – Median widths and types based on design speeds, pedestrian crossing distances, etc. – Shoulder widths based on surrounding land uses, vehicle speeds, bicycle volumes, etc. – Sidewalk widths based on surrounding land uses, pedestrian volumes and demand, etc. – Bicycle facility types and widths	• Revise the following specific sections to address the needs of all modes: – 2.1: Lanes – 2.2: Medians – 2.3: Shoulders – 2.6: Grades – 2.12: Bridge railings and separations – 2.13: Intersections – 2.15: Lighting Criteria – 2.16: High-Speed Urban and Suburban Arterial Highways
Chapter 3: Earthwork	N/A	No specific issues identified.	
Chapter 4: Roadside Safety	Revise/ Augment	Provide additional guidance on addressing roadside safety for all modes of transportation.	
Chapter 5: Utilities	N/A	No specific issues identified.	
Chapter 6: Railroad Crossings	Revise	Revise this chapter to explicitly address all users in designing rail crossings. This may include discussion of how and whether to accommodate sidewalks and bicycle lanes where appropriate.	
Chapter 7: Traffic and ITS Design	Revise/ Augment	Revise this chapter to: • Discuss how to select traffic and ITS design features based on context • Reference the Traffic Engineering Manual for guidance on Complete Streets signalization treatments.	

Document Section	Need	Description of Recommended Revision(s)
Chapter 8: Pedestrian, Bicycle, and Transit Facilities	Revise/ Augment	Revise this chapter to include guidance on how to select and design appropriate pedestrian, bicycle, and transit facilities based on identified project context. Consider establishing a separate chapter dedicated to each mode. For bicycle facilities: • Discuss basic bicyclist needs in terms of network connectivity and safety, convenience and comfort of travel • Expand and update existing guidance on negotiating bicycle traffic through potential conflict areas • Expand/add criteria for specific bicycle facility types, such as: – Bicycle lanes of different types – Cycle tracks – Sharrows – Advisory bike lanes – Bike boxes and signalization at intersections – Paved shoulders – Designated bicycle routes – Shared use paths – Others as appropriate For pedestrian facilities: • Discuss basic needs of pedestrians in terms of network connectivity and safety, convenience and comfort of travel • Expand guidance on sidewalk design, including integration of sidewalk zones (as described in the Florida Greenbook, Chapter 19: Traditional Neighborhood Development) • Outline criteria for specific pedestrian treatments such as: – Pedestrian islands – Curb extensions – Pedestrian signalization – Crosswalks and midblock crossings For public transit facilities: • Discuss basic needs in terms of network connectivity and safety, convenience and comfort of travel: safe loading and unloading of passengers, safe access into and out of travel lanes, safe pedestrian connections to transit stops, reliable service/headways, etc. • Expand and update existing guidance on negotiating transit vehicles through potential conflict areas
NEW Chapter: Freight Design Considerations	New	Consider adding a new chapter with roadway design considerations for freight vehicles, referencing and incorporating the contents of the Draft Freight Roadway Design Considerations as appropriate. Provide a discussion of: • Basic needs in terms of safety, convenience and comfort of travel: fast cross-state travel, efficient pickups and deliveries, etc. • Guidance on how to balance freight roadway design needs with the needs of other users based on context
NEW Chapter: On-Street Parking Design Considerations	New	Add new chapter that: • Provides design guidance for installation of on-street parking in appropriate contexts • Discusses the benefits of on-street parking when used in appropriate contexts, including: – Economic development benefits from enabling drivers to park and access shops, restaurants, etc. – Positive impacts on driver behavior, such as reductions in travel speed in urban areas – Safety benefits from separation of pedestrians and bicycle lanes from traffic
Chapter 9: Landscape and Community Features	N/A	No specific issues identified. Revise this chapter as appropriate to reflect a context-based design approach.
Chapter 10: Transportation Management Plan	Augment	Expand existing guidance on how to accommodate pedestrians, bicycles, and transit vehicles in a Transportation Management Plan.
Chapter 11: Stormwater Pollution Prevention Plan	N/A	No specific issues identified.

Document Section	Need	Description of Recommended Revision(s)
Chapter 12: Right of Way	N/A	No specific issues identified.
Chapters 13-20: Engineering Design Process chapters	Revise/ Augment	Revise Chapters 13-20 to: • Outline a context-based approach for: – Developing project objectives, scope of work, and schedule – Identifying initial design controls and standards – Identifying preliminary geometry, grades, and cross sections – Developing the final engineering design • Discuss Complete Streets-related performance measures and criteria that should be used to develop project design controls and standards (see Task III within this Plan) • State that consultants should be selected based on knowledge of Complete Streets design practices and adoption of a context-sensitive approach • Add a detailed discussion of when and how state and local partner agencies, other stakeholders, and the public should be engaged during the engineering design process
Chapter 21: Transportation Design for Livable Communities	Revise/ Remove	Consider integrating the contents of this chapter into other chapters of the PPM – providing a separate chapter dedicated to design criteria for livable communities can perpetuate interpretations that this is the exception to the standard approach.
Chapter 22: Lump-Sum Project Guidelines	N/A	No specific issues identified.
Chapter 23: Design Exceptions and Design Variations	Revise	Revise this chapter as appropriate to reflect and align with the context-based design approach outlined in prior chapters. This could include: • Adding language encouraging flexibility in design and the use of engineering judgment in applying innovative approaches to meet the project need within the identified context • Relaxing or reducing the requirements for approval of design variations based on the context-sensitive design criteria included in other chapters
Chapter 24: Federal Aid Project Certification	N/A	No specific issues identified.
Chapter 25: Design Criteria for Resurfacing, Restoration and Rehabilitation (RRR) of Streets and Highways	Revise/ Augment	Revise this chapter to: • Provide guidance on and criteria for designing RRR projects to fit the project context • Integrate consideration of all modes into the RRR design process by: – Providing guidance on criteria such as current travel volumes, demand, and presence of network gaps for all modes that should be used to develop RRR project scopes – Listing types of Complete Streets improvements that should be considered during RRR projects, such as restriping to change lane widths and allocations, adding bike facilities, adding curb extensions, etc. • Add a discussion of the need to communicate with MPOs, local agencies, and other partners early in and throughout the RRR project development process so that these partners can coordinate their own related improvements
Chapter 26: Bridge Project Development	Revise/ Augment	Revise this chapter to: • Require consideration of current and future needs for all modes in bridge design • Describe the importance of accommodating all users, including a discussion of how providing safe pedestrian and bicycle facilities on bridges can connect destinations and significantly improve access and network connectivity • Address the interrelationships between bicycle, pedestrian and vehicle accommodation on bridges, and provide guidance on how to negotiate those needs in limited space

Document Section	Need	Description of Recommended Revision(s)
Chapter 27: Hydraulic Data and Agency Permits	N/A	No specific issues identified.
Chapter 28: Shop and Erection Drawings	N/A	No specific issues identified.
Chapter 29: Structural Supports for Signs, Luminaires, and Traffic Signals	N/A	No specific issues identified. Revise this chapter as appropriate to reflect a context-based design approach.
Chapter 30: Retaining Walls	N/A	No specific issues identified. Revise this chapter as appropriate to reflect a context-based design approach.
Chapter 31: Geosynthetic Design	N/A	No specific issues identified. Revise this chapter as appropriate to reflect a context-based design approach.
Chapter 32: Noise Barriers	N/A	No specific issues identified. Revise this chapter as appropriate to reflect a context-based design approach.
Chapter 33: Reinforced Concrete Box and Three-Sided Culverts	N/A	No specific issues identified. Revise this chapter as appropriate to reflect a context-based design approach.
Volume II – Outlines requirements for the preparation and assembly of contract plans		
All chapters	Revise	Revise these chapters as appropriate to align with the changes made to Volume I.

2. Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways ("Florida Greenbook")

The Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways (known as the "Florida Greenbook") provides standards and criteria for the design, construction, and maintenance of public roadways off of the state highway and federal aid systems, for use by local agencies. Many of the design standards and criteria in the current Florida Greenbook reflect or reference AASHTO guidelines and standards.

The SGA project team recommends the following broad changes to the Florida Greenbook based on discussions during the M2D2 workshop series. Many of these revisions align closely with those recommended for the Plans Preparation Manual:

- Integrate a context-sensitive approach to project planning and design throughout the Florida Greenbook;

- Integrate the approach and contents of Florida Greenbook Chapter 19: Traditional Neighborhood Development into other chapters as appropriate;
- Incorporate more explicit discussion of how to consider, address, and balance the needs of all transportation system users based on context throughout the manual;
- Update existing design standards and criteria for specific modes of travel as necessary to align with national Complete Streets best practices;
- Expand the discussion of achieving broad coordination and collaboration across partners during transportation project planning;
- Expand the discussion of the relationship between land use and transportation; and
- Provide guidance on and encouraging the use of ITS, TDM, and other system management strategies.

The Florida Greenbook is statutorily established, which carries implications for the process required to make any of the revisions recommended in Table A-2. A Florida Greenbook Advisory Committee made up of professional engineers from each of the seven districts must approve all revisions to the manual. The recommended updates outlined below will need to be considered and discussed by the Advisory Committee within the context of current Florida Statute and Administrative Code. In some cases, changes to existing statutes and rules may be necessary to enable specific revisions.

Table A-2. Florida Greenbook

Document Section	Need	Description of Recommended Revision(s)	
Responsible lead office. Office of Roadway Design *Approximate proposed revision timeframe. 18 months*			
Introduction	Revise/ Augment	Revise this chapter to: • Introduce the concept of context-sensitive design and explain the benefits of the approach • Encourage the use of flexibility and engineer judgment in design • Add reference to FDOT's Complete Streets Policy and describe the need to design roadways for all users of the transportation network	
Chapter 1. Planning	Revise/ Augment	This section can also list design principles to consider during decision-making based on the Complete Streets Policy and other policy priorities, such as: • Enabling safe, convenient and comfortable travel for all residents • Improving network connectivity for all modes, and addressing gaps in connections between modes • Focusing on providing access to destinations • Aligning project designs with the goals articulated in state, regional, and local plans	Revise this chapter to outline a context-based transportation project development process. This can include: • Providing guidance on selecting design criteria based on context • Adding a discussion of the importance of comprehensive stakeholder engagement during the planning process

Document Section	Need	Description of Recommended Revision(s)
NEW Chapter. Coordinating with partners during planning and project development	New	Add new chapter (or expand Chapter 1. Planning) providing detailed guidance on coordinating with partners during transportation planning and project development, including: • A discussion of the role of collaboration and community participation in a context-sensitive approach to planning • An overview of the types of partners that transportation planners and engineers should engage during project development, and how/when those partners should be engaged • An overview of how transportation planners can participate in other local planning processes to support Complete Streets such as land use planning and development decisions This chapter can also include a section discussing FDOT's PD&E process for state highway projects and the points at which local governments and the public are involved in determining the multimodal improvements which meet community needs and address the specific travel characteristics of the area.
Chapter 2. Land Development	Revise/ Augment	Provide a discussion of the importance of coordination between land use and transportation planning to enable efficient use of public resources and support state and community goals. Incorporate content from the "Traditional Neighborhood Development" chapter as appropriate. This should include: • Emphasizing the role local land use plans, regulations, and development decisions play. – Enabling or hindering the development of transportation facilities that are safe, comfortable, and convenient for all users and modes – Impacting the costs of delivering transportation facilities to serve new developments • Emphasizing the role transportation decisions play : – Shaping community growth and development patterns – Supporting or hindering downtown revitalization and community economic vitality • Providing a detailed discussion of how access management decisions impact Complete Streets
NEW Chapter. System Management Considerations	New	Add new chapter recommending and providing guidance on the use of system management strategies to address safety and capacity needs. This can include: • A discussion of the benefits of evaluating system management alternatives during project planning, including potentially meeting identified project needs at lower costs than would be possible through construction or reconstruction • An overview of multimodal Intelligent Transportation Systems (ITS) tools and strategies that can be used to improve the safety and efficiency of the transportation network for all users • An overview of Transportation Demand Management (TDM) strategies that can be used to reduce demand on local transportation networks

Document Section	Need	Description of Recommended Revision(s)	
Chapter 3. Geometric Design	Revise/ Augment	Section A. Introduction • Recommend the use of context-sensitive design criteria to balance competing objectives for transportation facilities Section B. Objectives • Revise and expand the objectives outlined in this section to include: – Meeting the needs of all residents and transportation modes – Developing context-sensitive transportation facilities – Supporting the goals in local, regional, and state long-range plans Section C.1. Design Speed • Add language encouraging the use of target speed to select design speed • Discuss tradeoffs to consider in selecting design speed based on context, including the role of vehicle speed in: – Crash severity – Sight distances – Implications for lane widths – Community resident willingness to bike and walk on the facility Section C.2. Design Vehicle • Include guidance on using a context-sensitive approach to select the appropriate: – Design vehicle – should be a frequent user of the facility and determines minimum turning radii – Control vehicle – the largest vehicle the facility can safely accommodate • Discuss contexts in which it may be appropriate to identify a non-motorized traveler as the primary "design vehicle"	Section C.5. Vertical Alignment • Include guidance on how grades can impact the operations and safety of non-motorized users Section C.7. Cross Section Elements • Provide guidance on selecting cross-section elements based on context • Recommend the practice of designing from the "outside in" to make the best use of limited R/W • Discuss the types of tradeoffs involved in making decisions about allocations of R/W, including those pertaining to: – Lane widths and allocations based on design vehicle, travel volumes for all modes, design speed, pedestrian crossing distances, etc. – Sidewalk widths based on surrounding land uses, pedestrian volumes and demand, etc. – Shoulder widths based on surrounding land uses, vehicle speeds, bicycle volumes, etc. – Median widths and types based on design speeds, pedestrian crossing distances, etc. – Bicycle facility types and widths Section C.9. Intersection Design • Update the design criteria in this chapter as appropriate to align with revisions made to FDOT's Intersection Design Guide, including: – Incorporation of a context-based design approach – Incorporation of appropriate national best practices and guidance in designing intersections for all transportation system users Section C.11. Reconstruction • Revise and expand the list of priorities that should be considered during reconstruction to include: – Addressing gaps in pedestrian and bicycle networks – Reallocating existing R/W to better meet the needs of all modes and address specific identified issues or community goals
Chapter 4. Roadside Design	Revise/ Augment	Revise this chapter to: • Provide guidance on aligning roadside design with surrounding context • Where appropriate, expand the discussion of roadside obstacles to consider and address the safety and convenience needs of all modes of travel	
Chapter 5. Pavement Design and Construction	Augment	Add a discussion of the use of bicycle-friendly drainage treatments for shoulders in appropriate contexts.	

Document Section	Need	Description of Recommended Revision(s)
Chapter 6. Roadway Lighting	Revise/ Augment	As appropriate, expand the discussion of selecting lighting treatments for vehicles and pedestrians based on context.
Chapter 7. Rail-Highway Grade Crossings	Revise/ Augment	Revise this chapter to explicitly address all users in designing rail crossings. This may include discussion of how and whether to accommodate sidewalks and bicycle lanes where appropriate.
Chapter 8. Pedestrian Facilities	Revise/ Augment	Expand this chapter to include a broader discussion of how to meet the needs of pedestrian travelers in a variety of contexts, including urban areas (incorporating content from the current "Traditional Neighborhood Development" chapter as appropriate). This can include: • Discussing basic pedestrian needs in terms of network connectivity and safety, convenience and comfort of travel • Discussing how to select pedestrian treatments based on context • Expanding guidance on sidewalk design, including integration of sidewalk zones into design • Including guidance for specific pedestrian treatments, such as: – Pedestrian islands – Curb extensions – Pedestrian signalization – Crosswalks and midblock crossings – Others as appropriate
Chapters 9. Bicycle Facilities	Revise/ Augment	Expand this chapter to include a broader discussion of how to meet the needs of bicyclists in a variety of contexts, including urban areas (incorporating content from the current "Traditional Neighborhood Development" chapter as appropriate). This can include: • Discussing basic bicyclist needs in terms of network connectivity and safety, convenience and comfort of travel • Discussing how to select bicycle treatments based on context • Expanding and updating existing guidance on negotiating bicycle traffic through potential conflict areas • Including/expanding guidance and typical sections for bicycle facility types, such as. – Bicycle lanes of different types – Cycle tracks – Sharrows – Advisory bike lanes – Bike boxes and signalization at intersections – Paved shoulders – Shared use paths – Others as appropriate
Chapter 10. Maintenance and Resurfacing	Revise/ Augment	Revise this chapter to: • Address pedestrian, bicycle, and transit facilities in the development of maintenance procedures • Encourage and include guidance on considering Complete Streets improvements – such as restriping and reallocation of R/W – as a component of resurfacing projects when appropriate based on context
Chapter 11. Work Zone Safety	Revise/ Augment	Revise and expand this chapter to provide guidance on determining what modes need to be served in work zone control and how to design those elements in operation plans and traffic control plans. In particular, this chapter should include more discussion of how to identify and address bicyclist and transit needs in work zones and traffic control planning.

Document Section	Need	Description of Recommended Revision(s)
Chapter 12. Construction	N/A	No specific issues identified.
Chapter 13. Public Transit	Revise/ Augment	Expand this chapter to include a broader discussion of how to meet the needs of transit providers and riders in a variety of contexts, including urban areas (incorporating content from the current "Traditional Neighborhood Development" chapter as appropriate). This can include: • Discussing basic needs in terms of network connectivity and safety, convenience and comfort of travel. • Safe loading and unloading of passengers, safe access into and out of travel lanes, reliable service/ headways, etc. • Adding a discussion of the importance of a complete pedestrian network surrounding transit facilities, including pedestrian crosswalks in close proximity to transit stops
Chapter 14. Design Exceptions	Revise/ Augment	Revise this chapter as appropriate to reflect and align with the context-based design approach outlined in prior chapters. This could include: • Adding language encouraging flexibility in design and the use of engineering judgment in applying innovative approaches • Potentially relaxing or reducing the requirements for approval of design exceptions based on the context-sensitive design criteria included in revised Chapter 3. Geometric Design
Chapter 15. Traffic Calming	N/A	No specific issues identified.
Chapter 16. Residential Street Design	Revise/ Augment	Revise and reframe this section as appropriate to include an expanded discussion of residential street network design, including the importance of network connectivity for all modes. This can include: • Emphasizing that residential street design should provide safe and convenient access to nearby destinations by walking, bicycling, and transit as appropriate based on context • Highlighting the importance of safe and direct pedestrian and bicycle access to specific destinations such as schools and transit stops
Chapter 17. Bridges and Other Structures	Revise/ Augment	Revise this chapter to: • Require consideration of current and future needs for all modes in bridge design • Describe the importance of accommodating all users, including a discussion of how providing safe pedestrian and bicycle facilities on bridges can connect destinations and significantly improve access and network connectivity • Address the interrelationships between bicycle, pedestrian and vehicle accommodation on bridges, and provide guidance on how to negotiate those needs in limited space, potentially including typical sections
Chapter 18. Signing and Marking	Revise/ Augment	Update and expand this chapter to include guidance on determining when to install signage and markings for bicyclists, pedestrians, transit vehicles, and other users as appropriate based on context. This could include: • Pedestrian and bicycle crossing signs at mid-block crossings, trail crossings, etc. • Bicycle route wayfinding signs and other bicycle signage • Pedestrian wayfinding signs • Colored bicycle facilities • Colored dedicated transit lanes • Shared lane markings • Bicycle boxes at intersections • Pavement markings for designated bicycle routes • Dashed bicycle lanes/advisory bicycle lanes • Other Complete Streets signage and pavement marking treatments as appropriate

Document Section	Need	Description of Recommended Revision(s)
Chapter 19. Traditional Neighborhood Development	Revise/ Remove	Consider integrating the contents of this chapter into other chapters of the Florida Greenbook as part of a framework for making project decisions based on context – providing a separate chapter dedicated to roadway design for traditional neighborhood development can perpetuate interpretations that this is the exception to the standard approach.
Chapter 20. Drainage	N/A	No specific issues identified.

3. Efficient Transportation Decision-Making Manual

During the M2D2 workshop series, members of the Complete Streets Implementation Team discussed the need to incorporate consideration of all transportation system users earlier and throughout the project development process, including during planning, programming, scoping, identification of Purpose and Need, alternatives analysis, design, and operations. The Implementation Team also discussed the need to incorporate a context-based approach to decision-making throughout project development.

The SGA project team recommends revising both the Efficient Transportation Decision Making (ETDM) Manual and Project Development and Environment (PD&E) Manual described in the following section of this appendix – which together provide procedures and documentation requirements to guide project delivery from planning through the NEPA process – to incorporate a context-based approach to decision-making and address the needs of all users. SGA recommends the following broad modifications to the ETDM Manual, which applies to the planning phase of transportation project delivery:

- Incorporate Complete Streets criteria into the Planning Screen process and subsequent Programming Screen process during ETDM to inform decisions about how and whether to advance projects into the cost feasible elements of FDOT and MPO Long Range Transportation Plans and FDOT's Five Year Work Program; and
- Add guidance on how the information collected and analyzed during the Planning Screen and Programming Screen processes informs the identification of project context, which serves as the basis for future decisions made during project development and design.

In addition to the detailed recommendations outlined in Table A-3, FDOT can consider working to integrate relevant Complete Streets data into the online Environmental Screening Tool (EST) used to inform project review during the EDTM process. This could include:

- Data on transportation affordability in a community;
- Data on access to employment;
- Data on gaps in network connectivity for different modes; and
- Data on current travel volumes and travel demand for different modes.

Table A-3. Efficient Transportation Decision-Making Manual

Document Section	Need	Recommended Revision(s)
Responsible lead office. Environmental Management Office *Approximate proposed revision timeframe. 6 months – 1 year*		
Chapter 1. Introduction	Revise/ Augment	Add language to this chapter stating that the information collected during the ETDM Planning Screen and Programming Screen processes helps to inform the identification of project context, which serves as the basis for future decisions made during project development and design.
Chapter 2. ETDM Process	Revise/ Augment	Revise this chapter as appropriate to reflect the changes made to Chapters 3-5 below.
Chapter 3. Planning Screen	Revise/ Augment	Incorporate Complete Streets criteria into the Planning Screen process to inform decisions about how/whether to advance projects into the cost feasible elements of Long Range Transportation Plans. This could be done by expanding the "Mobility" portion of the Sociocultural Effects Evaluation to include impacts such as: • Affordability of transportation in the community • Accessibility of transportation in the community for older residents and people with disabilities • Availability of transportation options that promote physical activity • Transportation-related barriers to accessing daily needs such as employment, schools, grocery stores, and healthcare • Barriers to taking transit in the community • Gaps in network connectivity for different modes that are dividing or impeding travel between neighborhoods and activity centers • Demand for walking, bicycling, and transit in the community
Chapter 4. Programming Screen	Revise/ Augment	Incorporate Complete Streets criteria into the Programming Screen Process to inform decisions about how/ whether to advance projects into the FDOT Five Year Work Program. This could be done by expanding the "Mobility" portion of the Sociocultural Effects Evaluation to include impacts such as: • Affordability of transportation in the community • Accessibility of transportation in the community for older residents and people with disabilities • Availability of transportation options that promote physical activity • Transportation-related barriers to accessing daily needs such as employment, schools, grocery stores, and healthcare • Barriers to taking transit in the community • Gaps in network connectivity for different modes that are dividing or impeding travel between neighborhoods and activity centers • Demand for walking, bicycling, and transit in the community
Chapter 5. Advancing to Project Development and Environment (PD&E)	Revise/ Augment	Add language to this chapter stating that the information collected during the ETDM process supports the PD&E Study by helping to inform the identification of project context.
Chapter 6. Data Management	N/A	No specific issues identified.

4. Project Development and Environment (PD&E) Manual

As noted in the previous section of this appendix, members of the Complete Streets Implementation Team discussed a need to incorporate a context-based approach to decision-making and consideration of all transportation system users earlier and throughout the project development process. Workshop participants identified FDOT's Project Development and Environment (PD&E) Manual as a key document to revise during implementation.

The manual outlines procedures and documentation requirements for the PD&E phase of project development, which includes scoping and development of a project definition, identification of Purpose and Need, evaluation of different project and corridor alternatives, assessment of environmental impacts including sociocultural effects, and identification of initial design controls and standards. Recommended revisions to the manual include:

- Adding guidance on how to begin to identify and define project context during scoping;
- Updating the discussions of Project Description, Purpose and Need, and Alternatives in the manual to discourage overly prescriptive definitions of project need and encourage innovative alternatives development;
- Expanding the types of project effects evaluated during PD&E to encompass broader Complete Streets considerations;
- Adding guidance on identifying initial design controls and criteria during PD&E that align with a project's context; and
- Expanding existing guidance on when and how project managers should communicate with and seek input from different types of stakeholders throughout the PD&E process, including providing guidance on how to structure public meetings and other outreach to foster collaborative decision-making.

Table A-4. Project Development and Environment (PD&E) Manual

Document Section	Need	Recommended Revision(s)
Responsible lead office. Environmental Management Office *Approximate proposed revision timeframe. 1 year – 18 months*		
Part 1. Process and Guidelines of PD&E Manual		
Chapter 1. Process and Administration	N/A	No specific issues identified. This chapter should be revised as appropriate to align with other updated chapters.
Chapter 2. Environmental Class of Action Determination	N/A	No specific issues identified.
Chapter 3. Preliminary Environmental Discussion and Advanced Notification	Revise	Revise this chapter as appropriate to reflect updates made to chapters within Part 2, particularly: • Chapter 4. Project Description and Purpose and Need • Chapter 6. Alternatives • Chapter 9. Sociocultural Effects Evaluation

Document Section	Need	Recommended Revision(s)	
Chapter 4. **Project Development Process and Engineering Considerations**	Revise/ Augment	Incorporate a context-sensitive approach to project development that considers the needs of all transportation system users upfront. This can include the following changes to the descriptions of PD&E procedures: Project Scoping • Provide guidance on how to begin to identify and define project context during scoping using the framework outlined in the PPM, such as by identifying thoroughfare type and context zone • State the need to consider all modes of transportation upfront during project scoping Purpose and Need • Emphasize that a project purpose should be stated in terms of the identified problem the project will address, rather than the anticipated solution, in order to avoid prematurely restricting the alternatives considered • Add a detailed discussion of how to work with local and regional agencies and other partners during PD&E Alternatives Analysis • Encourage development of innovative, multimodal project alternatives • Encourage looking at the surrounding network to identify potential solutions to meet the identified need	Preliminary Design Considerations • Emphasize the importance of identifying design controls and criteria that align with a project's context • Discuss tradeoffs to consider in balancing the needs of different users within the project design, particularly regarding initial identification of: – Target speed – Design vehicle and control vehicle – Lane widths and allocations • Require collection of data on current and future travel volumes and capacity for all modes • Make other revisions as appropriate to align with the updated PPM Add a more detailed discussion of the importance of engaging a variety of partners throughout the project development process to: • Ensure that projects meet community needs • Help prevent conflicts late in the project development process and keep projects on schedule and on budget
Chapter 5. **Type 2 Categorical Exclusions**	Revise	Revise this chapter as appropriate to reflect updates made to chapters within Part 2, particularly: • Chapter 4. Project Description and Purpose and Need • Chapter 9. Sociocultural Effects Evaluation	
Chapter 6. **Environmental Assessment**	N/A	No specific issues identified.	
Chapter 7. **Finding of No Significant Impact**	N/A	No specific issues identified.	
Chapter 8. **Draft Environmental Impact Statement**	N/A	No specific issues identified.	
Chapter 9. **Final Environmental Impact Statement**	N/A	No specific issues identified.	
Chapter 10. **Non-Federal Projects**	N/A	No specific issues identified.	

Document Section	Need	Recommended Revision(s)
Chapter 11. Public Involvement	Revise/ Augment	Revise and expand this chapter as appropriate to: • Emphasize the importance of structuring scoping meetings, kick-off meetings, and other public meetings throughout the project development process to be interactive and participatory • Recommend the use of charettes and other collaborative public planning sessions • Provide more detailed guidance on when and how project managers should communicate with and seek input from different types of stakeholders throughout the process, during the transition to design
Chapter 12. Environmental Permits	N/A	No specific issues identified.
Chapter 13. Reevaluation Package	N/A	No specific issues identified.
Chapter 14. Federal Transit Administration (FTA) Environmental Process	N/A	No specific issues identified.
Part 2. Analysis and Documentation		
Chapter 1. Document Format and Table of Contents	N/A	No specific issues identified.
Chapter 2. Cover Page	N/A	No specific issues identified.
Chapter 3. EIS Summary/ FONSI	N/A	No specific issues identified. This chapter should be revised as appropriate to align with other updated chapters.
Chapter 4. Project Description and Purpose and Need	Revise/ Augment	Revise the discussion of how to develop a project description and purpose and need in this chapter to reflect a context-sensitive approach that considers the needs of all transportation system users upfront. Project Description • State that the Project Description should include a discussion of the project context using the framework outlined in the PPM • State that the Project Description should briefly but explicitly address how/whether each mode fits within the project concept Purpose and Need • Emphasize that the project purpose should be stated in terms of the identified problem the project will address, rather than the anticipated solution, in order to avoid prematurely restricting the alternatives considered
Chapter 5	NA	N/A. Chapter removed

Document Section	Need	Recommended Revision(s)
Chapter 6. Alternatives	Revise/ Augment	Revise the discussion of how to develop and evaluate project alternatives in this chapter to incorporate a context-sensitive approach that considers the needs of all transportation system users upfront. The SGA project team recommends considering the following revisions. <u>For the Alternative Corridor Evaluation (ACE) process:</u> • State that the Methodology Memorandum (MM) developed for each project should include criteria to evaluate proposed corridors that address: – How/whether the project concept aligns with the surrounding context for each corridor – Anticipated impact on future development patterns, and alignment with local and regional land use and economic development plans – Anticipated impact on reducing gaps in network connectivity for each transportation mode • Encourage involvement of a variety of stakeholders in developing the methodologies and criteria for evaluating each corridor alternative <u>For the Alternatives Evaluation During PD&E:</u> • Encourage development of innovative, multimodal project alternatives • Encourage taking a network approach to identify potential solutions to meet the identified need • Consider removing separate reference to "Multimodal Alternatives" and integrating multimodal requirements and considerations into the discussion of the "Build Alternative(s)" • Include impacts on safety, convenience and comfort of travel, and network connectivity for all modes among the advantages and disadvantages that should be considered for each alterative
Chapter 7. Affected Environment	Revise	As appropriate, update and/or reframe the overview of and requirements for the "Affected Environment" section of the Environmental Impact Study to align with the framework for identifying project context included in the revised PPM.
Chapter 8. Environmental Consequences or Impacts	N/A	No specific issues identified. This chapter should be revised as appropriate to align with other updated chapters.
Chapter 9. Sociocultural Effects Evaluation	Revise/ Augment	Expand this chapter as appropriate to include evaluation of a broader range of impacts on the role multimodal transportation plays in the community, such as: • Affordability of transportation in the community • Accessibility of transportation in the community for older residents and people with disabilities • Availability of transportation options that promote physical activity • Transportation-related barriers to accessing daily needs such as employment, schools, grocery stores, and healthcare • Barriers to taking transit in the community • Gaps in network connectivity for different modes that are dividing or impeding travel between neighborhoods and activity centers • Demand for walking, bicycling, and transit in the community
Chapter 10. Utilities and Railroads	N/A	No specific issues identified.
Chapter 11. Essential Fish Habitat	N/A	No specific issues identified.
Chapter 12. Archaeological and Historical Resources	N/A	No specific issues identified.

Document Section	Need	Recommended Revision(s)
Chapter 13. Section 4(f) Evaluation	N/A	No specific issues identified.
Chapter 14. Pedestrian and Bicycle Facilities	Revise	Revise this chapter as appropriate to align with the context-based design criteria included in the revised PPM.
15. Aesthetic Effects	N/A	No specific issues identified.
Chapter 16. Air Quality Analysis	N/A	No specific issues identified.
Chapter 17. Noise	N/A	No specific issues identified.
Chapter 18. Wetlands and Other Surface Water	N/A	No specific issues identified.
Chapter 19. Aquatic Preserves	N/A	No specific issues identified.
Chapter 20. Water Quality	N/A	No specific issues identified.
Chapter 21. Outstanding Florida Waters	N/A	No specific issues identified.
Chapter 22. Contamination Impacts	N/A	No specific issues identified.
Chapter 23. Wild and Scenic Rivers	N/A	No specific issues identified.
Chapter 24. Floodplains	N/A	No specific issues identified.
Chapter 25. Coastal Zone Consistency	N/A	No specific issues identified.
Chapter 26. Coastal Barrier Resources	N/A	No specific issues identified.
Chapter 27. Wildlife and Habitat Impacts	N/A	No specific issues identified.
Chapter 28. Farmlands	N/A	No specific issues identified.
Chapter 29. Scenic Highways	N/A	No specific issues identified.
Chapter 30. Construction Impacts	Revise	Revise this chapter to state that this document should address impacts on traffic maintenance and detour routing for motorists, pedestrians, bicyclists, transit, and trucks as appropriate.

Document Section	Need	Recommended Revision(s)
Chapter 31. Comments and Coordination	N/A	No specific issues identified.
Chapter 32. Commitments and Recommendations	N/A	No specific issues identified.
Chapter 33. List of Preparers	N/A	No specific issues identified.
Chapter 34. List of Agencies, Organizations, and Persons	N/A	No specific issues identified.
Chapter 35. Index	N/A	No specific issues identified.
Chapter 36. Appendix	N/A	No specific issues identified.

5. Traffic Engineering Manual

FDOT's Traffic Engineering Manual provides traffic engineering standards and guidelines for use on state highways, including guidance for signs, signalization, pavement markings, and specialized operational techniques. The SGA project team recommends updating the manual to 1) address the role traffic engineering decisions play in enabling safe and convenient travel by different modes, 2) provide strategies traffic engineers can use to meet the needs of different users, and 3) include context-sensitive criteria for installing signs, signalization, and markings.

SGA also recommends expanding the existing guidance for signalization, signage, and pavement markings in the manual to incorporate relevant innovative treatments and Complete Streets best practices from around the country, referencing current national guidance as appropriate. Note that some of the recommended additions listed in Table A-5 include treatments that are classified as experimental in the current MUTCD and would require FHWA approval to implement.

FDOT's Manual on Uniform Traffic Studies (MUTS) can also be updated to inform decisions about whether to use treatments listed in Table A-5 at specific intersections. This could include development of standards for bicycle and transit volume studies.

Table A-5. Traffic Engineering Manual

Document Section	Need	Recommended Revision(s)
Responsible lead office. Traffic Engineering and Operations Office *Approximate proposed revision timeframe. 6 months – 1 year*		
Chapter 1. Procedure	N/A	No specific issues identified.
Chapter 2. Signs	Revise/ Augment	Revise this chapter to. • Change current references to "motorist safety" to safety for all roadway users where appropriate • Add guidance for installing: – Bicycle route wayfinding signs and other bicycle signage permitted in the MUTCD on state facilities – Other Complete Streets signage as appropriate Consider expanding current installation criteria for Pedestrian Crossing Signs and Bicycle and Shared Use Path (Trail) Crossing Symbol Signs as appropriate.

Document Section	Need	Recommended Revision(s)
Chapter 3. Signals	Revise/ Augment	Revise this chapter to: • Change current references to "motorist safety" to safety for all roadway users where appropriate • Include context-sensitive criteria for installing mid-block pedestrian crossings: – Emphasize achieving a well-connected pedestrian network – Revise minimum levels of pedestrian demand based on context • As appropriate, add guidance on and criteria for installing: – Bicycle signal faces – User-activated or automated active warning beacons for pedestrian and bicycle crossing at signalized and unsignalized intersections – Bicycle and pedestrian hybrid beacons – Other Complete Streets signalization treatments • Add guidance on making decisions about traffic signal timing and progressions based on context: – Discuss the role of signal progression and cycle lengths in influencing traveler behavior for different modes – Recommend aligning signal timing with the desired target speed for the facility (ex. encourage slower speeds in urban contexts) – Recommend and provide guidance on using signal priority tools as appropriate based on context, including: ◦ Leading pedestrian intervals ◦ Synchronized signals for bicycles ◦ Transit priority signals
Chapter 4. Markings	Revise/ Augment	Revise this chapter to add guidance and criteria as appropriate for installing: • Pavement markings for designated bicycle routes • Other Complete Streets pavement marking treatments
Chapter 5. Specialized Operational Topics	N/A	No specific issues identified.
Chapter 6. Safe Mobility for Life Program	N/A	No specific issues identified.
Chapter 7. Technology	**N/A**	No specific issues identified.

6. Level of Service Standards for the State Highway System

Members of the Complete Streets Implementation Team noted that FDOT's existing Level of Service (LOS) standards pose a barrier to meeting the needs of all transportation system users by placing an implicit priority on vehicle capacity and speed during planning, design, traffic engineering and operations, impacting decisions made at the network, corridor, and intersection scales. While achieving a high level of service is a primary objective for certain transportation facilities, in other cases it may be secondary to other considerations based on context and may even hinder community goals for the facility, such as supporting economic revitalization of town centers and main streets.

The SGA project team recommends modifying the standards to be context-sensitive by relaxing them in certain circumstances or developing multiple standards to apply to different locations and times of day. FDOT can also consider rescinding the LOS standards altogether to enable a more context-sensitive approach to project selection and development.

Table A-6. Level of Service Standards for the State Highway System

Document Section	Need	Recommended Revision(s)
Responsible lead office: Systems Planning Office *Approximate proposed revision timeframe: 6 months*		
Full document	Revise/ Remove	Modify this policy to include more flexible, context-based LOS standards: • Clarify that LOS should be one consideration of many during design decisions • Consider relaxing the standards or providing a matrix of standards for different contexts. These standards could reflect factors such as: – Time of day (ex. peak vs. off-peak travel conditions) – Location and surrounding land use or context zone • Consider developing LOS standards for other modes of travel Consider rescinding the LOS standards altogether to enable a more context-sensitive approach to project selection and development.

7. Strategic Intermodal System (SIS) Highway Component Standards and Criteria

Members of the Complete Streets Implementation Team identified the existing design standards for the State Strategic Intermodal System (SIS) as a barrier to Complete Streets in locations where SIS facilities run through town centers. The standards are intended to facilitate high-speed statewide and regional vehicular travel, which can make it difficult to design projects that support the needs of residents walking and bicycling and can sometimes conflict with community desires and goals for the roadway.

The SGA project team recommends incorporating context-based design criteria into the SIS Highway Components Standards and Criteria to enable FDOT project teams to consider and balance the need for efficient statewide and regional vehicular travel with the needs of other users and feedback from local stakeholders on a project-by-project basis. In particular, SGA recommends relaxing the minimum design speed requirements for SIS facilities.

Table A-7. Strategic Intermodal System (SIS) Highway Component Standards and Criteria

Document Section	Need	Recommended Revision(s)
Responsible lead office: Systems Planning Office *Approximate proposed revision timeframe: 6 months – 1 year*		
1. The Strategic Intermodal System	N/A	No specific issues identified.
2. SIS Highway Component Standards and Criteria	Revise/ Augment	Revise this chapter to: • Add language stating that SIS facilities should be designed using context-sensitive criteria based on the approach in the PPM • Add discussion of the need to balance tradeoffs between high-speed statewide travel and local community needs when SIS facilities run through downtowns • Provide guidance on selecting an appropriate design speed based on context, including recommending lower design speeds in urban areas
3. Individual SIS Corridor Plans	Revise/ Augment	Add language stating that the needs of all transportation system users – including motorists, freight handlers, transit vehicles, bicycles, and pedestrians – must be considered upfront during the development of SIS Master Plans and Action Plans
4. Training	N/A	No specific issues identified.
5. Forms	N/A	No specific issues identified.

8. Quality/Level of Service (Q/LOS) Handbook

FDOT's Quality/Level of Service (Q/LOS) Handbook and accompanying software provide measures, methodologies, and tools for evaluating roadway capacity, quality of service, and level of service for different modes of travel. FDOT engineers and planners use the handbook to inform decision-making during generalized long-term planning and conceptual planning in project alternatives analysis and design.

The SGA project team recommends expanding the handbook to include a broader range of Complete Streets performance measures FDOT staff can use in evaluating existing transportation facilities, including additional measures for assessing the quality of the travel experience for pedestrians, bicyclists, and transit riders. Developing and providing guidance for these measures will enable FDOT planners and engineers to better identify issues and gaps to address on existing roadways and weigh tradeoffs during planning and project development.

FDOT can also consider expanding the Q/LOS Handbook into a broader performance measurement handbook by developing and including measures that assess the role of the transportation network in contributing to goals such as regional economic competitiveness, environmental sustainability, public health, social equity, and community vitality.

A complete street should have sufficient facilities to serve all users, including adequate sidewalk width.

Table A-8. Quality/Level of Service Handbook

Document Section	Need	Recommended Revision(s)
Responsible lead office: Systems Planning Office *Approximate proposed revision timeframe: 1 year*		
Full document	Revise/ Augment	Expand the existing guidance for "Traffic Variables" within the handbook to include methodologies for determining travel volume and demand for pedestrians, bicyclists, transit vehicles, and trucks. Expand the existing guidance on "Multimodal Variables" within the handbook to include a broader range of measures for assessing the quality of the travel experience for pedestrians, bicyclists, and transit riders. This could include measures for: • Vehicle speeds adjacent to bicycle and pedestrian facilities • Frequency of pedestrian crosswalks, crossing distances, presence of pedestrian refuge islands, etc. • Sidewalk continuity along the corridor and throughout the surrounding network • Sidewalk continuity near transit stops and proximity of pedestrian crossings near transit stops • Presence of shade, adequate street lighting, and visual interest along the corridor Consider developing and integrating broader measures and associated methodologies for predicting the impacts of the transportation facilities on economic competitiveness, environmental sustainability, public health, social equity, and community vitality (see Table III within this plan for suggested types of measures).

9. Intersection Design Guide

FDOT's Intersection Design Guide provides guidance for new construction and major reconstruction of at-grade intersections on the State Highway System. The recommended revisions outlined in Table A-9 generally fall within two categories:

- Revisions to incorporate a context-based approach into design decisions that is consistent with the approach included in the revised PPM; and
- Revisions to incorporate guidance on specific pedestrian, bicycle, and transit design features and treatments that are not addressed in the current guide.

Intersections need to serve the demands of all users.

Table A-9. Intersection Design Guide

Document Section	Need	Recommended Revision(s)	
Responsible lead office: Office of Roadway Design *Approximate proposed revision timeframe: 1 year*			
Chapter 1. Introduction	Revise/ Augment	Add guidance on identifying design standards and criteria for a project based on context, as described in the PPM.	
Chapter 2. Intersection Design Concepts	Revise/ Augment	Section 2.1 Intersection Characteristics • Consider adding: – Features of the surrounding network, such as level of network completeness for different modes – Proximity of transit stops – Transit volumes and truck volumes – Bicycle features and signalization – Future land use plans Section 2.3. Estimation of Capacity • Discuss intersection "person capacity" and the need to balance vehicle capacity needs with the needs of other travel modes • Expand the discussion of Level of Service to include quality and level of service performance measures for other modes	Section 2.4. Intersection Delay • Add discussion of delay for pedestrians and bicyclists to the existing discussion of motorist delay Section 2.5.1. Requirements and Constraints of Roadway Users • Expand the existing description of cyclist characteristics to include a discussion of variations in bicyclist experience and confidence levels • Expand the existing description of pedestrian characteristics to include a discussion of the impacts of crossing distances and vehicle speeds

Document Section	Need	Recommended Revision(s)
Chapter 3. Geometric Design	Revise/ Augment	Section 3.2. Intersection types • Update and reframe this section to align with the context-based approach within the revised PPM Section 3.3. Design Speeds • Recommend the use of target speed to identify design speed Section 3.4. Design Vehicles • Include guidance on using a context-sensitive approach to select the appropriate: – Design vehicle – should be a frequent user of the facility and determines the minimum required turning radii – Control vehicle – the largest vehicle the facility can safely accommodate • Discuss contexts in which it may be appropriate to identify a non-motorized traveler as the primary "design vehicle" Section 3.5. Pedestrian Traffic • Update this section as appropriate to align with revised Chapter 8 of the PPM Section 3.6. Bicycle Traffic • Update this section as appropriate to align with revised Chapter 8 of the PPM Section 3.9. Cross-section Elements • Modify this section to state that criteria for vehicle lane, shoulder, and median widths and other features should be determined based on project context, as described in the PPM • Add discussion of the use of curb extensions in intersection design based on context 3.12. Auxiliary Lanes • Add discussion of the tradeoffs between the benefits of auxiliary lanes (ex. accommodating turning vehicles, increasing capacity, etc.) and the costs (ex. longer pedestrian crossing distances, etc.) 3.13. Turning Roadways • Add discussion of the tradeoffs posed by free flow right turn lanes, including impacts for pedestrians
Chapter 4. Signalization	Revise/ Augment	Revise this chapter as appropriate to: • Align with the revised Traffic Engineering Manual • Include guidance on making decisions about signalization based on context: – Discuss the role of signal progression and cycle lengths in influencing traveler behavior for different modes – Recommend timing signals to the desired target speed for the facility (ex. encourage slower speeds in urban contexts) – Recommend and provide guidance on using signal priority tools as appropriate based on context, including: ◦ Leading pedestrian intervals ◦ Bicycle signal faces ◦ Synchronized signals for bicycles ◦ Transit priority signals ◦ User-activated or automated active warning beacons for pedestrian and bicycle crossing
Chapter 5. Signs and Markings	Revise/ Augment	Revise this chapter as appropriate to: • Align with the revised Traffic Engineering Manual • Include guidance on the use of Complete Streets signs and pavement markings in intersection design, such as: – Colored bicycle facilities – Colored dedicated transit lanes – Shared lane markings – Bicycle boxes – Pavement markings for designated bicycle routes – Dashed bicycle lanes/advisory bicycle lanes – Other Complete Streets pavement marking treatments

Document Section	Need	Recommended Revision(s)
Chapter 6. Objects and Amenities	Revise/ Augment	Section 6.5. On-Street Parking • Expand and reframe the discussion of on-street parking to include the benefits it can provide in appropriate contexts, such as: – Economic development benefits caused by enabling drivers to park and access nearby shops, restaurants, etc. on foot in urban areas and downtown main streets – Positive impacts on driver behavior, such as reductions in travel speed in urban areas – Safety benefits that can arise from separation of pedestrians from traffic, separation of bicycle lanes from traffic, etc. Section 6.6. Public Transit Facilities • Discuss "person capacity" and the tradeoffs between motorist throughput and transit vehicle throughput
Chapter 7. Roundabouts	Revise/ Augment	Provide specific guidance on how bicyclists, pedestrians, trucks, and transit vehicles should be accommodated in roundabout design based on context

10. Practical Design Handbook

FDOT's Practical Design Handbook outlines an approach for maximizing the value of limited funds by focusing resources for each project on improvements that will provide the greatest return on investment. FDOT's practical design framework includes 1) developing project scopes based only on the core needs of a project by separating the project elements necessary to meet the Purpose and Need from other "wants," and 2) using design flexibility and innovative approaches to meet the identified need at lower cost.

While the Practical Design approach outlined in the Handbook is context-sensitive and aligns well with Complete Streets goals, Complete Streets Implementation Team members discussed a need to address common interpretations of the approach among FDOT staff that encourage elimination of pedestrian, bicycle and transit design features from projects. Defining a project purpose narrowly under Practical Design can lead to the conclusion that improvements addressing the safety and mobility needs of all users should be excluded from project scopes as "amenities" – beneficial to include when funds are available but not necessary to meet the core project need. By contrast, considering all users upfront in project development can advance the goals of practical design by enabling identification of innovative solutions for meeting project safety and capacity needs at relatively low cost, such as restriping and reallocating lane configurations, transportation demand management strategies, and other system management solutions.

The SGA project team recommends addressing this issue within the Practical Design Handbook by clarifying how Complete Streets investments fit within the practical design approach, further emphasizing the role of context-sensitivity in practical design, encouraging careful definition of the project purpose to avoid narrowing scoping options prematurely, and reducing or removing prescriptive language about the types of design elements that are appropriate and inappropriate in practical design.

Table A-10. Practical Design Handbook

Document Section	Need	Recommended Revision(s)
Responsible lead office: Office of Roadway Design *Approximate proposed revision timeframe: 6 months*		
Introduction	Revise	Add a discussion of the importance of addressing the needs of all transportation system users as a part of the practical design approach.
Chapter 1. The Practical Design Approach	Revise	Revise this chapter to: • Discuss the importance of defining a project need in terms of all transportation system users and keeping the definition broad enough to allow for innovative alternatives development • Explicitly discuss how Complete Streets investments can support the objectives of the practical design approach in many cases by helping to meet identified safety- and capacity-related needs at relatively low cost
Chapter 2. RRR Projects	Revise	Revise this chapter as appropriate to: • Align with revised Plans Preparation Manual Chapter 25: Design Criteria for Resurfacing, Restoration and Rehabilitation (RRR) of Streets and Highways • Encourage consideration of Complete Streets improvements during RRR projects, such as restriping to change lane widths and allocations, addition of bike facilities, addition of curb extensions, etc.
Appendix A. RRR Best Practices	Revise	Revise the checklist in this section to encourage flexibility, including potentially removing or reframing the "Items Not to Be Included" section to reduce prescriptive connotations. Consider removing the checklist altogether.
Appendix B. Preliminary Project Report (D7 Sample)	N/A	No specific issues identified.

11. Freight Roadway Design Considerations (NEW)

During the M2D2 Workshop Series, members of the Complete Streets Implementation Team discussed the challenge of balancing freight roadway design needs with the needs of other users in urban contexts where those needs often conflict. District 7's existing Draft Freight Roadway Design Considerations document addresses this challenge by establishing a framework for a "Freight Activity and Land Use Compatibility Analysis," an approach for identifying context by designating areas throughout the district as either: 1) Low Activity Areas, 2) Freight Oriented Areas, 3) Community Oriented Areas, or 4) Diverse Activity Areas that share characteristics with both community oriented and freight oriented areas.

Based on the outcomes of the M2D2 workshop series, the SGA project team recommends adapting and modifying District 7's Draft Freight Roadway Design Considerations – including the approach for identifying context as well as the specific design guidance included – for use on a statewide scale. This could take the form of either a statewide guidance document modeled after District 7's guidance or integration of the key elements directly into the PPM and other appropriate existing documents.

Table A-11. Freight Roadway Design Considerations

Document Section	Need	Recommended Revision(s)
Responsible lead office: Office of Freight Logistics and Passenger Operations *Approximate proposed timeframe for development: 1 year – 18 months*		
Full document	New document, or new section of existing document	Consider the following two options: 1. Develop a new guidance document with state freight roadway design considerations by updating and expanding District 7's Draft Freight Roadway Design Considerations for statewide use. This new guidance document could include: – A framework for making context-based design decisions by designating "Low Activity Areas," "Freight Oriented Areas," "Community Oriented Areas," and "Diverse Activity Areas" – Design guidance and criteria for each area-type; or 2. Integrate the approach and content of District 7's existing draft Freight Roadway Design Considerations directly into the PPM, PD&E manual, and other appropriate documents

APPENDIX B – FINDINGS FROM THE M2D2 WORKSHOP SERIES

During the M2D2 workshop series, the Complete Streets Implementation Team identified a variety of issues, considerations, and opportunities to address to integrate a Complete Streets approach into the Department's practices and better meet the needs of all users of the transportation network. SGA presented a summary of the considerations identified by the group during the two-day Multimodal Integration and Tradeoffs workshop on June 1-2. Discussions during the June workshop led to the identification of several additional considerations and opportunities. These considerations provided the basis for the development of the implementation framework outlined in this Plan.

This appendix includes a list of the major issues identified during the M2D2 workshops, grouped as follows:

1. FDOT organizational structure
2. Planning, programming, and project scoping
3. Design practices
4. Management and operations
5. Funding
6. Performance measurement
7. Defining FDOT's role in implementing Complete Streets and working with partners
8. Changing the culture, communicating about Complete Streets, and building leadership

The comments provided below reflect the content of the discussions and indicate the range and depth of recommendations, and do not necessarily reflect current or future Department policies or positions. Some comments may not be within FDOT's ability or may be longer-term issues, but they are provided here as a record of the discussions and their outcomes.

1. FDOT Organizational Structure

Considerations and opportunities

- Reduce silos across FDOT programs to improve communication and enable working toward a common Complete Streets vision
- Find the right balance between a centralized and decentralized approach to implementation across the seven districts – encourage sensitivity to context, but reduce variation in interpretation of policies

- Build on existing FDOT stakeholder engagement processes used during regular document updates to ensure broad buy-in during the implementation effort
- Build on existing training processes to educate internal staff and external partners about a Complete Streets approach

2. Planning, Programming, and Project Scoping

Considerations and opportunities

- Revisit measures of effectiveness and goals used to prioritize projects in the Long Range Transportation Plan (ex. economic development needs rather than capacity needs)
- Engage in integrated corridor planning in partnership with local and regional governments
- Get broad stakeholder buy-in during planning to help sustain corridor visions through changes in political leadership
- Take a network approach to Complete Streets – design individual projects to fit the context, but make the network work for all users
- Consider solutions outside the project corridor to meet identified needs that cannot be addressed on the facility in question
- Educate FDOT staff about the programming process for greater transparency
- Identify stakeholder needs/concerns earlier in and throughout the project development process
- Engage design engineers during initial project development
- Identify ways to address the needs of all users within RRR project scopes
- Incorporate consideration of ITS and TDM strategies into project development and related documents
- Look beyond peak period travel conditions to make project decisions
- Investigate whether forecasting models used in decision-making are overestimating demand

3. Design Practices

Considerations and opportunities

- Incorporate a more context-sensitive approach into design practices, and provide guidance on considering context (ex. transects for land use, freight activity, etc.)
- Build more flexibility into FDOT design standards
- Improve staff awareness of the flexibility already available in FDOT and national standards
- Create design standards that respond to context, such that narrower lane widths (11' and 10') meet the standards in the appropriate contexts
- Create a culture that encourages the use of design variations to meet context-appropriate design goals, and incorporate commonly-processed design variations into the standards themselves
- Discourage use of FDOT standards in inappropriate contexts (ex. for local roads)
- Modify standards for SIS facilities to allow more design flexibility when facilities are located in urban areas.
- Choose design and control vehicles to fit individual project contexts
- Implement the concept of target speed, where the design speed is selected to match the desired travel speed for the corridor
- Develop guidance on accommodating the last mile of freight deliveries in urban/main street contexts while preserving walkability and quality of the built environment.
- Design from the outside in to make the best use of limited right-of-way
- Develop more guidance for choosing the right bicycle facility for the context
- Look at low-cost, temporary improvements like re-striping
- Change "lane elimination" terminology to reduce negative connotations
- Clarify how Complete Streets objectives fit within the "practical design" approach for RRR projects to discourage misinterpretations of the concept
- Consider modifying bus stop placement guidance to prevent or discourage transit riders from crossing the street mid-block

4. Management and Operations

Considerations and opportunities

- Build on current approaches and identify new strategies for using ITS applications on FDOT's arterial network to improve safety for all users
- Update FDOT policies on the use of multimodal ITS
- Proactively provide FDOT data to third party mobile phone application developers
- Establish partnerships to implement multimodal ITS (ex. with transit agencies, bike share, etc.)
- Collect better real-time and historic data to inform multimodal system management
- Promote TDM more actively as an option during project planning and construction

5. Funding

Considerations and opportunities

- Evaluate FDOT's work program for opportunities to better support all users
- Align criteria used to allocate funding with the Complete Streets Policy
- Look at the return on investment of Complete Streets projects to help make the case
- Explore public/private partnerships and joint funding

6. Performance Measurement

Considerations and opportunities

- Evaluate the role of current measures of performance (ex. LOS) that encourage prioritization of vehicle capacity and speed
- Give performance measures for other travel modes an explicit role in decision-making

- Consider incorporating measures of person throughput and/or access to destinations
- Make the case for Complete Streets in terms that FDOT management, staff, and other partners statewide care about; tie the goals of Complete Streets to FDOT's Mission and Vision, and develop performance measures for assessing impacts on economic development, public health, livability, etc.

7. Defining FDOT's Role and Working with Partners

Considerations and opportunities

- Incorporate a Complete Streets approach throughout the Florida Green Book – the Traditional Neighborhood Development chapter currently feels like the exception
- Work with local governments, MPOs, transit agencies, etc. to ensure that their decisions do not work at odds with Complete Streets objectives
- Take a leadership role in promoting transit network development as a tool for building capacity, and consider becoming a long-term operator of transit
- Find local governments willing to partner on Complete Streets pilot projects and use those partnerships to demonstrate success
- Provide education to local and regional decision-makers as plans get developed
- Participate collaboratively in local land use planning, zoning, and development processes
- Communicate with MPOs earlier as they develop priorities, and partner to deliver projects
- Engage stakeholders earlier in RRR projects so they have time to coordinate their own related improvements. Consider extending the RRR project development timeline
- Use FDOT policies and investments to incentivize local development decisions that support Complete Streets
- Address pressures to quickly approve new development at the local level, which can pose

Freight movement is a critical part of a Complete Street in most contexts.

barriers to consideration of long-term regional implications

- Proactively communicate with a variety of local partners during project development – local agencies often contain silos, and representatives working with FDOT don't always speak effectively for all stakeholders
- Host "Planning Listening Sessions" to bring planning agencies together to discuss their wish lists and generate a project list everyone can work from (D6 model)
- Build comprehensive GIS layer(s) of corridor plans, town plans, redevelopment plans, etc. to inform planning and project decisions (D4 model)

8. Changing the Culture, Communicating about Complete Streets, and Building Leadership

Considerations and opportunities

- Cultivate Complete Streets champions among FDOT leadership and project managers, and promote Complete Streets in working with other partners throughout the state.
- Emphasize that Complete Streets is an approach for meeting the needs of all users, including bicycles and pedestrians, but also freight, transit, motorists, etc.
- Be a convener and facilitator in bringing in all stakeholders during decision-making
- Address the perception that FDOT's primary role is to provide for statewide travel only, and that Complete Streets is a "local issue"
- Provide Complete Streets workshops and training for the FDOT districts
- Make sure FDOT's Complete Streets goals are conveyed to consultants
- Discourage interpretation of Complete Streets as a one-size-fits-all approach among staff and consultants – encourage context-sensitivity
- Share the economic benefits of Complete Streets and success stories from other places
- Publicize FDOT's work on Complete Streets; tell the story

- Help FDOT staff experience biking and walking firsthand to build awareness
- Work with engineering schools to modify curriculum to include Complete Streets and context-sensitive design
- Address the perception among some partners in local and regional agencies that FDOT is the "Department of No"

Miami-Dade County – Complete Streets Implementation Plan

A complete streets policy is a commitment that all future transportation projects will take into account the needs of everyone using the road. Implementation of that policy is where the work truly begins. The day-to-day decisions a transportation agency and community leaders make in funding, planning, design, maintenance, and operations should be aligned with the goals of the adopted policy.

Next Steps Moving Forward

There are a host of activities that are needed to take place when implementing a complete streets policy to fully and consistently consider the safety of all users. Each of these activities has immediate, mid-term, and long-term actions required to successfully translate policy into action.

Creating and Adopting Complete Streets Policies and Regulations

Existing development regulations, area plans, and zoning codes need to be updated and adopted to incorporate complete street policies so that County-funded projects provide improved multimodal mobility. The Miami-Dade Zoning Codes, Miami 21, and the Comprehensive Development Master Plan must act as the foundation that reflects the current best practices for implementing complete streets. The toolkit from this manual should be integrated into the standard development practices and policies required by these documents. Federal and state statutes and regulations should mirror local standards supporting complete streets so comprehensive and consistent street designs that provide safety for all road users are implemented.

Clearly Defined Street Planning Process

Simplifying the process in which complete streets are implemented increases the ability for public agencies to build safer streets. This process should be transparent and take into account a number of factors such as the street's classification, current and future adjacent land uses, current mode split, and others. Incorporating complete streets into the development process should spell out any new requirements for developers and property owners. These changes can encourage planning and zoning boards to become stewards of the complete streets implementation process.

Provide Training for Engineers, Staff, and Planners

It is vital to provide ongoing support and training to transportation professionals, other relevant agency staff, community leaders, and the general public so that they understand the complete streets approach, the new processes and partnerships it requires, and the potential new outcomes from the transportation system. Training helps to ensure the continuity and commitment for the complete streets planning and road design process, because many engineers and planners are not familiar with the complete streets ideology. Providing workshops, seminars, or other training sessions will educate staff so they become advocates and understand what is needed for implementing complete streets.

Project Prioritization

When first implementing a complete streets policy, it is often best to aim for the "low-hanging fruit" first. Low hanging fruit usually comes in the form of coordinating with other projects, such as RRR (resurfacing-restoration-rehabilitation road) projects, neighborhood master plans, projects that provide better access to schools or activity centers, and improved ADA accessibility. Implementing complete street enhancements as a part of other projects can help to prioritize projects based on the amount of collaboration with other agencies. Proven success

stories can help overcome doubt and skepticism while building a broad-based coalition of support for complete streets.

Complete streets projects should be included in the State Transportation Improvement Program (STIP), Miami-Dade County Transportation Improvement Program (TIP), Long Range Transportation Plan (LRTP), and the Capital Improvements Program (CIP) to help facilitate the coordination and prioritization process.

Secure Funding Sources
There are some federal programs that can offer funding for complete streets such as the Transportation Alternatives Program or Safe Routes to School funding, depending on the type(s) of improvements proposed. Another innovative way to implement these improvements is by requiring local developers to include complete street elements in their developments, which would require amending the permitting process. Overall, securing funding sources will mostly depend on the jurisdiction of the roadway and whether it is maintained by the state, county, or city. Public-private partnerships can also be organized to advocate and fund complete street improvements without regards to jurisdictional boundaries.

Inter-departmental Coordination
In order to minimize expenditures, it is essential to coordinate different projects when implementing complete streets. Fiscal responsibility can be achieved through interdepartmental coordination by identifying potential funding sources before projects are initiated. Inter-departmental coordination should be an on-going process that also helps to improve the communication between the various agencies. Combining different projects can help lower the total cost of implementation such as coordinating with major repaving/restriping projects, sewer and storm water drainage repairs, or with public or private utilities projects.

Just recently, FDOT completed a RRR project on Red Road that was able to include pedestrian, bicycle, transit, and vehicular enhancements that improved mobility and safety pictured above. Similar roadway projects for the future should coordinate with complete street efforts and incorporate complete streets improvements whenever possible.

Performance Evaluation
Measuring and monitoring the success of complete streets provides the opportunity for the local government to calibrate the program so that its performance may be enhanced within the context it is implemented. There are several performance measures that can monitor the effectiveness of a complete streets program such as routinely measuring the total miles of on-street bicycle routes, linear feet of new pedestrian accommodations, the number of new street trees, etc.

Transit ridership and land use changes are important to take note of as well. It is also helpful to perform a pedestrian and bicycle count before and after the implementation of any Complete Streets improvement. Recording the volumes, speeds, and number of crashes for vehicular traffic before and after the improvements is also beneficial.

MEMORANDUM

Agenda Item No. 11(A)(3)

TO:	Honorable Chairwoman Rebeca Sosa and Members, Board of County Commissioners	**DATE:**	November 5, 2014
FROM:	R. A. Cuevas, Jr. County Attorney	**SUBJECT:**	Resolution directing the Mayor to develop, in coordination with the Florida Department of Transportation, the Metropolitan Planning Organization, and other applicable entities, a plan for implementation of a "Complete Streets" Program for Miami-Dade County

A substitute was presented and forwarded to the BCC with a favorable recommendation at the 10-14-14 Infrastructure & Capital Improvements Committee. This substitute differs from the original in that the reference to certain Miami-Dade County departments has been updated; schools and parks have been added as examples of additional points from which walking will be made safer through the implementation of a "Complete Streets" program; and the reference to Miami-Dade County Metropolitan Planning Organization's Long Range Transportation Plan has been clarified.

The accompanying resolution was prepared and placed on the agenda at the request of Prime Sponsor Commissioner Jose "Pepe" Diaz, and Co-Sponsors Commissioner Dennis C. Moss and Commissioner Juan C. Zapata.

R. A. Cuevas, Jr.
County Attorney

RAC/lmp

MEMORANDUM
(Revised)

TO: Honorable Chairwoman Rebeca Sosa
and Members, Board of County Commissioners

DATE: November 5, 2014

FROM: R. A. Cuevas, Jr.
County Attorney

SUBJECT: Agenda Item No. 11(A)(3)

Please note any items checked.

_____ **"3-Day Rule" for committees applicable if raised**

_____ **6 weeks required between first reading and public hearing**

_____ **4 weeks notification to municipal officials required prior to public hearing**

_____ **Decreases revenues or increases expenditures without balancing budget**

_____ **Budget required**

_____ **Statement of fiscal impact required**

_____ **Ordinance creating a new board requires detailed County Mayor's report for public hearing**

_____ **No committee review**

_____ **Applicable legislation requires more than a majority vote (i.e., 2/3's ____, 3/5's ____, unanimous _____) to approve**

_____ **Current information regarding funding source, index code and available balance, and available capacity (if debt is contemplated) required**

Approved _____ Mayor
Veto _____
Override _____

Agenda Item No. 11(A)(3)
11-5-14

RESOLUTION NO. _____

RESOLUTION DIRECTING THE MAYOR OR DESIGNEE TO DEVELOP, IN COORDINATION WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION, THE METROPOLITAN PLANNING ORGANIZATION, AND OTHER APPLICABLE ENTITIES, A PLAN FOR IMPLEMENTATION OF A "COMPLETE STREETS" PROGRAM FOR MIAMI-DADE COUNTY

WHEREAS, ensuring that Miami-Dade County's roadways, rights-of-way, and transportation corridors are safe for all users, of all ages and abilities, is an important public policy; and

WHEREAS, Miami-Dade County has one of the highest pedestrian and bicyclist crash rates in the United States; and

WHEREAS, initiatives designed to make walking, biking, and transit use safer and more convenient offer the potential for a healthier citizenry, cleaner air, reduced traffic congestion, more livable neighborhoods, less reliance on fossil fuels and imported sources of energy, and more efficient use of road space and resources; and

WHEREAS, the term "Complete Streets" refers to roadways, rights-of-way, and transportation corridors that are designed and operated to enable safe access for all users (including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities) by:

- making it easier for them to cross the street, bicycle to and from work, and walk to restaurants, shops, and other area establishments;

- making it safer for them to walk to and from >>schools, parks,<<[1] bus stops and train stations;
- accommodating their mobility needs in a safe, integrated, holistic, context-specific, and mutually-supportive manner; and

WHEREAS, a "Complete Streets" Program could among other things:

- contribute to the development of green infrastructure;
- improve pedestrian and biker safety;
- increase transportation options;
- reduce congestion;
- reduce reliance on carbon fuels, thereby reducing greenhouse gas emissions;
- improve air quality;
- improve community health;
- enhance community aesthetics;
- augment economic growth;
- create more livable communities by emphasizing critical elements of walkability, including shade, aesthetically pleasing walkways, and buffers from automobile traffic;
- contribute to the development of a connected and complete transportation network that will reduce hazards and improve safety for pedestrians and cyclists, especially vulnerable elements of the population, who may be unable to operate a motor vehicle, such as young children, the elderly, and the physically disabled; and

[1] The differences between the substitute and the original item are indicated as follows: Words stricken through and/or [[double bracketed]] shall be deleted, words underscored and/or >>double arrowed<< are added.

- support a more livable and sustainable community for persons of all ages and abilities; and

WHEREAS, many communities throughout the United States and the State of Florida are either in the process of implementing, or have already implemented, "Complete Streets" Programs, including Broward County, as recently reported in the Sun-Sentinel and Miami-Herald newspapers; and

WHEREAS, the Florida Department of Transportation has adopted "Complete Streets" style standards as part of its Roadway Design Criteria, and has incorporated transportation design guidelines for livable communities in both the Plans Preparation Manual and the Florida Greenbook; and

WHEREAS, Section 335.065, Florida Statutes, states that bicycle and pedestrian ways shall be established in conjunction with the new construction, reconstruction, resurfacing, restoration, rehabilitation, traffic operating intersection improvements, or other change of any state transportation facility, and special emphasis shall be given to projects in or within one mile of an urban area; and

WHEREAS, the Miami-Dade Comprehensive Development Master Plan, Objective TE-4, provides that Miami-Dade County shall develop, by 2015, a "Complete Streets" Program to be considered in the design and construction of new transportation corridors and the reconstruction of existing corridors, wherever feasible; and

WHEREAS, the Miami-Dade Comprehensive Development Master Plan, Policy TE-4A and Policy TC-3C, provides that Miami-Dade County shall develop, by 2015, a "Complete Streets" Program that will be sensitive to the needs of the users of all modes of transportation, including bicyclists and pedestrians, and shall include the following components:

- street typology based on land use context due to how a roadway passing through different land uses will vary in character;
- hierarchy of street types and designs;
- Provision of sidewalks and bicycle facilities;
- adequate landscaping and street furniture;
- bus lanes and transit facilities;
- improved aesthetics and design for the safety of all users, including vulnerable populations, such as children and seniors; and

WHEREAS, a "Complete Streets" Program would further the goals, objectives and policies of the Miami-Dade Comprehensive Development Master Plan, including Objective TE-4 and Policies TE-4A and TC-3C; and

WHEREAS, a "Complete Streets" Program also would further the principles in the Miami-Dade Parks and Open Space System Master Plan; the guidelines and principles in the County's Urban Design Manuals; the policies of the GreenPrint Sustainability Plan; and the Miami-Dade County Metropolitan Planning Organization's Long Range Transportation Plan >>and Transportation Improvement Program<<; and

WHEREAS, the Miami-Dade County Metropolitan Planning Organization is in the process of conducting a "Complete Streets" Case Study involving three corridors, with the goal of developing a "Complete Streets" Manual for implementation within the County; and

WHEREAS, for the benefit of the County's residents and the many visitors who use its roadways, sidewalks, and public transit systems each year, a plan for the implementation of a "Complete Streets" Program in Miami-Dade County should be developed as a coordinated effort between the Miami-Dade County Department of >>Regulatory and Economic Resources<<

[[~~Planning and Zoning~~]], Office of Sustainability, Public Works >>and Waste Management<< Department, Parks>>,<< [[~~and~~]] Recreation >>and Open Spaces<< Department, and Transit Department, >>or their successors,<< as well as the Florida Department of Transportation, the Miami-Dade Expressway Authority, the Metropolitan Planning Organization, municipalities in Miami-Dade County, and other applicable entities,

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF MIAMI-DADE COUNTY, FLORIDA, that:

Section 1. This Board directs the Mayor or designee to develop, in coordination with the Florida Department of Transportation, the Metropolitan Planning Organization, and other applicable entities, a plan for Board approval to implement a "Complete Streets" Program in Miami-Dade County that adheres to the principle that all persons of all ages and abilities who travel by automobile, motorcycle, public transit, bicycle, or walking are equal legitimate users of roadways and shall be provided safe access, in a context-specific manner, to transportation corridors, roadways, and public rights-of-way in the County.

Section 2. In developing a plan for implementing a "Complete Streets" Program, the Mayor or designee shall endeavor to:

- balance the needs of pedestrians, bicyclists, public transit users, and car drivers with important community values, such as fiscal constraint, public safety, environmental protection, and historic preservation;
- incorporate the "Complete Streets" principles into an interdisciplinary, integrative, multimodal transportation policy with implementation guidelines;
- incorporate innovative and context-sensitive design standards for developing "Complete Streets" that accommodate all user needs;

- incorporate the "Complete Streets" >>guidelines<< [[~~concept~~]], wherever feasible, into all planning, design, approval, and implementation processes for any construction, reconstruction, retrofit, maintenance, alteration, or repair of streets, bridges, or other portions of the transportation network, including pavement resurfacing, restriping, and signalization operations, if the safety and convenience of users can be improved within the scope of the work;
- direct all appropriate departments to incorporate the "Complete Streets" concept into routine aspects of planning, design, construction and operations; to approach every transportation project and program as an opportunity to improve public streets and the transportation network for all users; to work in coordination with other departments, agencies, and jurisdictions to achieve "Complete Streets" principles; and when applicable, to assess and pursue changes to regulations, plans, and programs needed for implementation;
- encourage other entities and agencies with transportation jurisdiction in and around Miami-Dade County to similarly adopt and implement "Complete Street" principles for their own projects and plans;
- seek public involvement and promotion of "Complete Street" principles, in coordination with partnering entities, agencies, and organizations, to provide public awareness for the transportation, quality of life, public safety, and health benefits of the "Complete Streets" Program.

Ordinance No. 14-65. In addition, the Mayor or designee shall provide to the Board status reports regarding the "Complete Streets" implementation plan within 90 days of the effective date of this resolution and on a quarterly basis thereafter until such time as the final plan is presented to the Board for approval. The Mayor or designee shall place such status reports on applicable agendas of the Board pursuant to Ordinance No. 14-65.

The Prime Sponsor of the foregoing resolution is Commissioner Jose "Pepe" Diaz, and the Co-Sponsors are Commissioner Dennis C. Moss and Commissioner Juan C. Zapata. It was offered by Commissioner , who moved its adoption. The motion was seconded by Commissioner and upon being put to a vote, the vote was as follows:

Rebeca Sosa, Chairwoman
Lynda Bell, Vice Chair

Bruno A. Barreiro	Esteban L. Bovo, Jr.
Jose "Pepe" Diaz	Audrey M. Edmonson
Sally A. Heyman	Barbara J. Jordan
Jean Monestime	Dennis C. Moss
Sen. Javier D. Souto	Xavier L. Suarez
Juan C. Zapata	

The Chairperson thereupon declared the resolution duly passed and adopted this 5th day of November, 2014. This resolution shall become effective ten (10) days after the date of its adoption unless vetoed by the Mayor, and if vetoed, shall become effective only upon an override by this Board.

MIAMI-DADE COUNTY, FLORIDA
BY ITS BOARD OF
COUNTY COMMISSIONERS

HARVEY RUVIN, CLERK

By:_____
Deputy Clerk

Approved by County Attorney as
to form and legal sufficiency.

James Eddie Kirtley

City of North Miami Beach
17011 NE 19 Avenue
North Miami Beach, FL 33162
305-947-7581
www.citynmb.com

MEMORANDUM

Print

TO: Mayor and City Council

FROM: Ana M. Garcia, City Manager, ICMA-CM

VIA:

DATE: Tuesday, November 15, 2016

RE: Annexation Update (Ana Garcia, City Manager)

BACKGROUND ANALYSIS:

RECOMMENDATION:

FISCAL/BUDGETARY IMPACT:

ATTACHMENTS:
None

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MEMORANDUM

Print

TO:	Mayor and City Council
FROM:	Pamela L. Latimore, CMC, City Clerk
VIA:	
DATE:	Tuesday, November 15, 2016
RE:	Special Election Update (Pamela L. Latimore City Clerk)
BACKGROUND ANALYSIS:	On November 8, 2016 the City of North Miami Beach held a Special Election containing 10 Charter Ammendments. Posted are the unofficial results of the Election. The Official Certification will be done on November 18th 2016.
RECOMMENDATION:	
FISCAL/BUDGETARY IMPACT:	

ATTACHMENTS:
Special Eection Results

North Miami Beach Election Results Nov. 8, 2016

Posted: 2:35 PM, November 08, 2016

LIVE ELECTION RESULTS

Select Race

North Miami Beach Question New City Charter

100% of Precincts Reporting (11/11)

	Votes	Split
✓ Yes	7,608	63%
No	4,424	36%

North Miami Beach Question City Council Meetings

100% of Precincts Reporting (11/11)

	Votes	Split
✓ Yes	6,450	53%
No	5,591	46%

North Miami Beach Question City Manager Hiring

100% of Precincts Reporting (11/11)

	Votes	Split
✓ Yes	7,896	63%
No	4,583	36%

North Miami Beach Question City Attorney & Clerk

100% of Precincts Reporting (11/11)

	Votes	Split
✓ Yes	7,034	61%
No	4,346	38%

North Miami Beach Question Election Date Change

100% of Precincts Reporting (11/11)

	Votes	Split

	Votes	Split
✓ Yes	6,456	52%
No	5,736	47%

North Miami Beach Question Term Limits

100% of Precincts Reporting (11/11)

	Votes	Split
✓ Yes	7,866	63%
No	4,490	36%

North Miami Beach Question Civil Service

100% of Precincts Reporting (11/11)

	Votes	Split
✓ No	6,320	55%
Yes	5,036	44%

North Miami Beach Question Election Returns

100% of Precincts Reporting (11/11)

	Votes	Split
✓ Yes	6,250	54%
No	5,172	45%

North Miami Beach Question City Council Quorum

100% of Precincts Reporting (11/11)

	Votes	Split
✓ No	6,213	53%
Yes	5,372	46%

North Miami Beach Question City Council Renaming

100% of Precincts Reporting (11/11)

	Votes	Split
✓ Yes	6,150	52%
No	5,613	47%