



Florida Department of  
**TRANSPORTATION**

# Complete Streets

*Florida Department of Transportation*

*presented to*

## Safer People, Safer Streets Meeting

*presented by*

**Zakary Lata, PE**  
**Bicycle/Pedestrian Coordinator**  
**FDOT District 6**



# Complete Streets



## *Florida Department of Transportation*

RICK SCOTT  
GOVERNOR

605 Suwannee Street  
Tallahassee, FL 32399-0450

ANANTH PRASAD, P.E.  
SECRETARY

### **POLICY**

Effective: September 17, 2014

Office: Design Director

Topic No.: 000-625-017-a

## **COMPLETE STREETS**

It is the goal of the Department of Transportation to implement a policy that promotes safety, quality of life, and economic development in Florida. To implement this policy, 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
- Motorists
- Transit riders
- Freight handlers
- Pedestrians

The Department specifically recognizes Complete Streets are context-sensitive and require transportation system design that considers local land development patterns and built form. The Department will coordinate with local governments, Metropolitan Planning Organizations, transportation agencies and the public, as needed to provide Complete Streets on the State Highway System, including the Strategic Intermodal System.

This ***Complete Streets Policy*** will be integrated into the Department's internal manuals, guidelines and related documents governing the planning, design, construction and operation of transportation facilities.

A handwritten signature in black ink, appearing to read "Ananth Prasad", is written over a horizontal line.

Ananth Prasad, P.E.  
Secretary

# Complete Streets



- Policy adopted in Sept 2014
- Requires “context-appropriate complete streets”
- Promotes economic development
- Addresses our safety problem with pedestrians and cyclists
- Lets FDOT “right size” our streets to fit their contexts
- Promotes more cost-effective solutions to transportation issues



# Complete Streets

- **Multidisciplinary Team**
- **Revision of manuals and guidance to incorporate context based design**
- **Implementation, Guidance & Training in approximately a year**



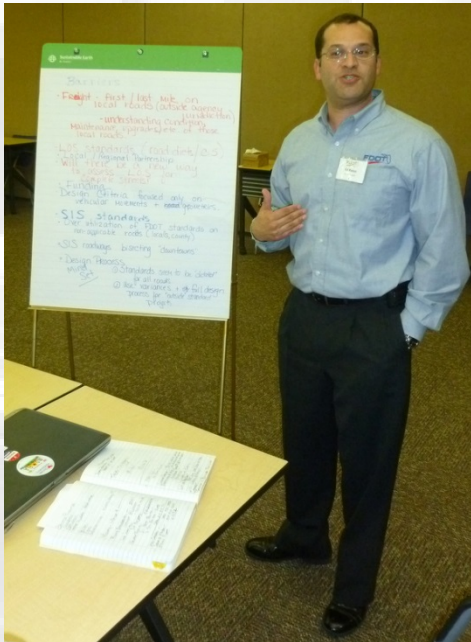
# Implementation Plan



- ✓ **Kick off February 16, 2015**
- ✓ **First Workshop - March 10**
  - Transportation and Land Use
- ✓ **Second Workshop - April 7 & 8**
  - Active Transportation
  - Public Transportation
- ✓ **Third Workshop May 13 & 14**
  - Intelligent Transportation Systems (ITS)
  - Transportation Demand Management (TDM)
  - Freight Logistics
- ✓ **Develop CS Work Plan**
  - Draft Document mid-August
  - Workshop 5 to review draft
  - Final Document mid-September
- ✓ **Fourth Workshop June 3 & 4**
  - Modal Integrations and Tradeoffs
- » **Implementation**
  - Manual Revisions Completed - TBD
  - Training through 2016



# Implementation Team - Districts



- **District 1**

- » Billy Hattaway
- » LK Nandam
- » Ed Ponce
- » Chris Zeigler

- **District 2**

- » Doreen Joyner-Howard
- » Jerry Ausher

- **District 3**

- » William Barber
- » Jared Perdue

- **District 4**

- » Richard Creed
- » Jennifer Fierman

- **District 5**

- » Susanne Hertz
- » Michael Sanders

- **District 6**

- » Zak Lata
- » Daniel Iglesias

- **District 7**

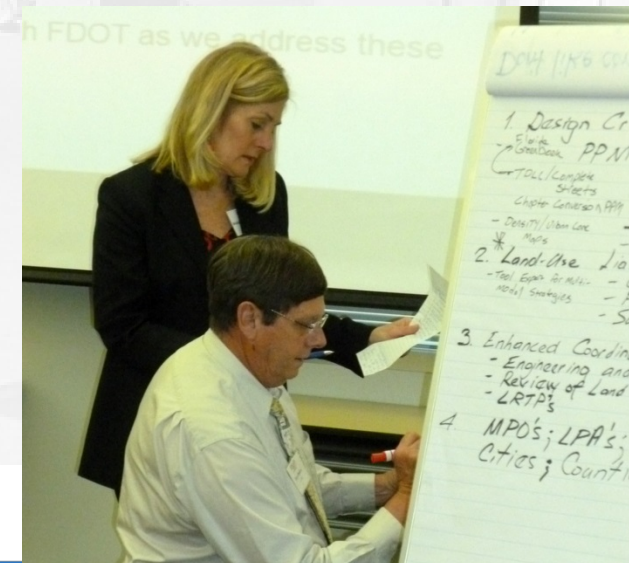
- » Benson Stephen
- » Ron Chin

- **Turnpike**

- » Erin Yao

# Implementation Team - CO

● Catherine Bradley	PD&E	● Keith Robbins	Alternate for Rickey Fitzgerald
● Rusty Ennemoser	PD&E	● Paul Hiers	Roadway Design
● Jeff Caster	Landscape Architects	● MaryAnne Koos	Special Projects Coordinator/RDO
● Fred Heery	Traffic Operations	● DeWayne Carver	State Bicycle/Pedestrian Coordinator
● Angela Wilhelm	Traffic Operations	● Jeremy Fletcher	RDO QA
● Kurt Lieblong	RDO Practical Design	● Michael Shepard	SRDE
● Diane Quigley	Transit		
● Dean Perkins	ADA		
● Melanie Weaver Carr	Policy Planning		
● Maria Cahill	Policy Planning		
● Gary Sokolow	Access Mgt/Systems Planning		
● Joseph Santos	State Safety Office		
● Rickey Fitzgerald	State Freight Coordinator		



# Implementation Team – Industry/Local Government

• Victor Dover	Urban Design	CNU
• Jim Harriott	Alachua County	Alachua County
• Kim Delaney	Urban Design/Planning	TCRPC
• Michael Dorweiler	Hillsborough Co Public Works	FL ITE
• Robert Agrusa	Operations	FL ITE
• Phillip Bello	FHWA	FHWA
• Alexandra Davis-Shaw	City Engineer	City of Sarasota
• Tara McCue	Regional Planning	ECFRPC
• Margaret Kubilins	FHWA Pedestrian Safety	VHB





# Context-based design is not new....

- **PPM Chapter 21-Transportation Design for Livable Communities**
- **ITE/CNU Recommended Practice: Designing Walkable Urban Thoroughfares**
- **FWHA Road Diet Guide and Functional Classification Guide**
- **NACTO Guides**
- **Florida Greenbook – Chapter 19**
- **FDOT TND Handbook**

# On State roads....

Topic #625-000-007  
Plans Preparation Manual, Volume 1 - English

January 1, 2013  
Revised – January 1, 2015

## Chapter 21

### Transportation Design for Livable Communities

21.1	General .....	21-1
21.2	Planning .....	21-2
21.3	Application.....	21-3
21.4	Techniques.....	21-4
21.5	Design Criteria .....	21-5
21.5.1	Design Speed .....	21-5
21.5.2	Number of Lanes .....	21-5
21.5.3	Lane Widths .....	21-5
21.5.4	Horizontal Alignment.....	21-6
21.5.5	Medians .....	21-6
21.5.6	Lateral Offset .....	21-6
21.5.7	Intersections.....	21-9
21.5.8	Lighting .....	21-9
21.5.9	Traffic Control .....	21-9
21.5.10	Landscaping.....	21-9
21.5.11	Parking.....	21-10
21.5.12	Alternative Roadway Paving Treatments .....	21-10
21.5.13	Conversion to/from One-Way Street Pairs .....	21-10
21.6	Pedestrian and Bicycle Considerations.....	21-11
21.6.1	Sidewalks .....	21-11
21.6.2	Crosswalks.....	21-11
21.6.3	Curb Extensions (Bulb-Outs) .....	21-11
21.6.4	Personal Security and Safety Amenities .....	21-12
21.6.5	Bicycle Facilities.....	21-12
21.7	Transit-Systems and Amenities .....	21-12



A1A in Stuart, FL

Table 6.4 Design Parameters for Walkable Urban Thoroughfares (continued)

Thoroughfare Design Parameters for Walkable Mixed-Use Areas									
	General Urban (C-4)			Urban Center/Core (C-5/6)					
	Commercial			Residential			Commercial		
	Boulevard [1]	Avenue	Street	Boulevard [1]	Avenue	Street	Boulevard [1]	Avenue	Street
Context									
Building Orientation (entrance orientation)	front	front	front	front	front	front	front	front	front
Maximum Setback [2]	0 ft.	0 ft.	0 ft.	10 ft.	10 ft.	10 ft.	0 ft.	0 ft.	0 ft.
Off-Street Parking Access/Location	rear, side	rear, side	rear, side	rear	rear	rear, side	rear	rear	rear, side
Streetside									
Recommended Streetside Width [3]	19 ft.	16 ft.	16 ft.	21.5 ft.	19.5 ft.	16 ft.	21.5 ft.	19.5 ft.	16 ft.
Minimum sidewalk (throughway) width	8 ft.	6 ft.	6 ft.	10 ft.	9 ft.	6 ft.	10 ft.	9 ft.	6 ft.
Pedestrian Buffers (planting strip exclusive of travel way width) [3]	7 ft. tree well	6 ft. tree well	6 ft. tree well	7 ft. tree well	6 ft. tree well	6 ft. tree well	7 ft. tree well	6 ft. tree well	6 ft. tree well
Street Lighting	For all thoroughfares in all context zones, intersection safety lighting, basic street lighting, and pedestrian-scaled lighting is recommended. See Chapter 8 (Streetside Design Guidelines) and Chapter 10 (Intersection Design Guidelines).								
Traveled Way									
Target Speed (mph)	25–35	25–30 [4]	25	25–35	25–30	25	25–35	25–30 [4]	25
Number of Through Lanes [5]	4–6	2–4	2–4	4–6	2–4	2–4	4–6	2–4	2–4
Lane Width [6]	10–12 ft.	10–11 ft.	10–11 ft.	10–11 ft.	10–11 ft.	10–11 ft.	10–11 ft.	10–11 ft.	10–11 ft.
Parallel On-Street Parking Width [7]	8'	7–8 ft.	7–8 ft.	7 ft.	7 ft.	7 ft.	8 ft.	8 ft.	7–8 ft.
Min. Combined Parking/Bike Lane Width	13 ft.	13 ft.	13 ft.	13 ft.	13 ft.	13 ft.	13 ft.	13 ft.	13 ft.
Horizontal Radius (per AASHTO) [8]	200–510 ft.	200–330 ft.	200 ft.	200–510 ft.	200–330 ft.	200 ft.	200–510 ft.	200–330 ft.	200 ft.
Vertical Alignment	Use AASHTO minimums as a target, but consider combinations of horizontal and vertical per AASHTO Green Book.								
Medians [9]	4–18 ft.	Optional 4–18 ft.	None	4–18 ft.	Optional 4–16 ft.	None	4–18 ft.	Optional 4–18 ft.	None
Bike Lanes (min./preferred width)	5 ft. / 6 ft.	5 ft. / 6 ft.	5 ft. / 6 ft.	5 ft. / 6 ft.	5 ft. / 6 ft.	5 ft. / 6 ft.	5 ft. / 6 ft.	5 ft. / 6 ft.	5 ft. / 6 ft.
Access Management [10]	High	Low–Moderate	Low–Moderate	Moderate	Low–Moderate	Low–Moderate	High	Low–Moderate	Low–Moderate
Typical Traffic Volume Range (ADT) [11]	15,000–50,000	1,500–30,000	1,000–15,000	15,000–30,000	1,500–20,000	500–5,000	15,000–40,000	1,500–30,000	1,000–15,000
Intersections									
Roundabout [12]	Consider urban single-lane roundabouts at intersections on avenues with less than 20,000 entering vehicles per day, and urban double-lane roundabouts at intersections on boulevards and avenues with less than 40,000 entering vehicles per day.								
Curb Return Radii/Curb Extensions and Other Design Elements	Refer to Chapter 10 (Intersection Design Guidelines)								

• Source:  
ITE/CNU  
Designing  
Walkable  
Urban  
Thoroughfares

**Table 5.** Regional Arterial Design Matrix (NJDOT & PennDOT, 2008)

	Regional Arterial	Rural	Suburban Neighborhood	Suburban Corridor	Suburban Center	Town/Village Neighborhood	Town/Village Center	Urban Core
Roadway	Lane Width	11' to 12'	11' to 12' (14' to 15' outside lane if no shoulder or bike lane)	11' to 12' (14' to 15' outside lane if no shoulder or bike lane)	11' to 12' (14' outside lane if no shoulder or bike lane)	10' to 12' (14' outside lane if not shoulder or bike lane)	10' to 12' (14' outside lane if not shoulder or bike lane)	10' to 12' (14' outside lane if not shoulder or bike lane)
	Paved Shoulder Width	8' to 10'	8' to 10'	8' to 12'	4' to 6' (if no parking or bike lane)	4' to 6' (if no parking or bike lane)	4' to 6' (if no parking or bike lane)	4' to 6' (if no parking or bike lane)
	Parking Lane	NA	NA	NA	8' parallel	8' parallel; see 7.2 for angled	8' parallel; see 7.2 for angled	8' parallel
	Bike Lane	NA	5' to 6' (if no shoulder)	6' (if no shoulder)	5' to 6'	5' to 6'	5' to 6'	5' to 6'
	Curb Return	30' to 50'	25' to 35'	30' to 50'	25' to 50'	15' to 40'	15' to 40'	15' to 40'
	Number of Travel Lanes	2 to 6	2 to 6	4 to 6	4 to 6	2 to 4	2 to 4	2 to 6
Roadside	Clear Sidewalk Width	NA	5'	5' to 6'	5' to 6'	6' to 8'	6' to 10'	6' to 12'
	Buffer	NA	6'+	6' to 10'	4' to 6'	4' to 6'	4' to 6'	4' to 6'
	Shy Distance	NA	NA	NA	0' to 2'	0' to 2'	2'	2'
	Total Sidewalk Width	NA	5'	5' to 6'	9' to 14'	10' to 16'	12' to 18'	12' to 20'
Speed	Desired Operating Speed (mph)	45-55	35-40	35-55	30-35	30-35	30-35	30-35

From:  
FHWA  
Road Diet  
Guide



# Florida Greenbook



Topic # 625-000-015  
Manual of Uniform Minimum Standards  
for Design, Construction and Maintenance  
for Streets and Highways

May - 2011

## CHAPTER 19

### TRADITIONAL NEIGHBORHOOD DEVELOPMENT

A	INTRODUCTION .....	19-1
B	APPLICATION .....	19-2
C	PLANNING CRITERIA .....	19-3
C.1	LAND USE .....	19-3
C.2	NETWORKS .....	19-3
D	OBJECTIVES .....	19-6
E	DESIGN ELEMENTS .....	19-8
E.1	Design Controls .....	19-8
E.1.a	Design Speed .....	19-8
E.1.b	Movement Types .....	19-8
E.1.c	Design Vehicles .....	19-9
E.2	Sight Distance .....	19-10
E.2.a	Stopping Sight Distance .....	19-10
E.2.b	Passing Sight Distance .....	19-10
E.2.c	Intersection Sight Distance .....	19-10
E.3	Horizontal Alignment .....	19-11
E.3.a	Minimum Centerline Radius .....	19-11
E.3.b	Minimum Curb Return Radius .....	19-11
E.4	Vertical Alignment .....	19-11
E.5	Cross Section Elements .....	19-11
E.5.a	Introduction .....	19-11
E.5.b	Lane Width .....	19-12
E.5.c	Medians .....	19-13
E.5.d	Turn Lanes .....	19-14



Hollywood Blvd,  
Hollywood FL

# Tips and Tricks

- **A good scope makes life much easier**
  - » Think vertically at initial scoping
  - » Engage all stake holders at the very beginning
  - » Break down the “silos of excellence”
- **Look at what’s already in place**
  - » We actually have ample design guidance out there
  - » What’s lacking is political will and intent
  - » Good scoping helps
- **The Vision Thing**
  - » The Vision sets the direction
  - » Have a good plan in place

# Questions?



<http://www.dot.state.fl.us/rddesign/CSI/Default.shtm>

Zakary Lata  
Zakary.Lata@dot.state.fl.us  
(305) 470-5308