

Complete Streets


Florida Department of Transportation

presented to
Design Expo 2015

presented by
**DeWayne Carver, AICP
State Bicycle/Pedestrian Coordinator
FDOT Roadway Design Office**



Complete Streets



Florida Department of Transportation

RICK SCOTT
GOVERNOR

405 Suwannee Street
Tallahassee, FL 32399-0400

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.


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

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FOOT

Local Government Interest....

- Local governments are adopting “complete streets”
- We work there too
- Lead, follow, or get out of the way



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FOOT

Complete Streets

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

FOOT

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
- ✓ **Fourth Workshop June 3 & 4**
 - Modal Integrations and Tradeoffs
- » **Develop CS Work Plan**
 - Draft Document mid-August
 - Workshop 5 to review draft
 - Final Document mid-September
- » **Implementation**
 - Manual Revisions Completed - TBD
 - Training through 2016



FOOT

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

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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 |
| ● 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 | | |



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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
• Alexandria Davis-Shaw	City Engineer	City of Sarasota
• Tara McCue	Regional Planning	ECFRPC
• Margaret Kubilins	FHWA Pedestrian Safety	VHB



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Why Active Transportation?

- **“Sitting is the new smoking”**
- **Economic Development**
- **Current FTP Goals**
- **New FDOT Complete Streets Policy**
- **State Safety Office**
- **Pedestrian/Bicycle Safety Coalition**
- **Pedestrian/Bicycle Policy Council**
- **Interagency Interest**
 - » DOH
 - » Law Enforcement
 - » DHSMV
 - » Local Governments







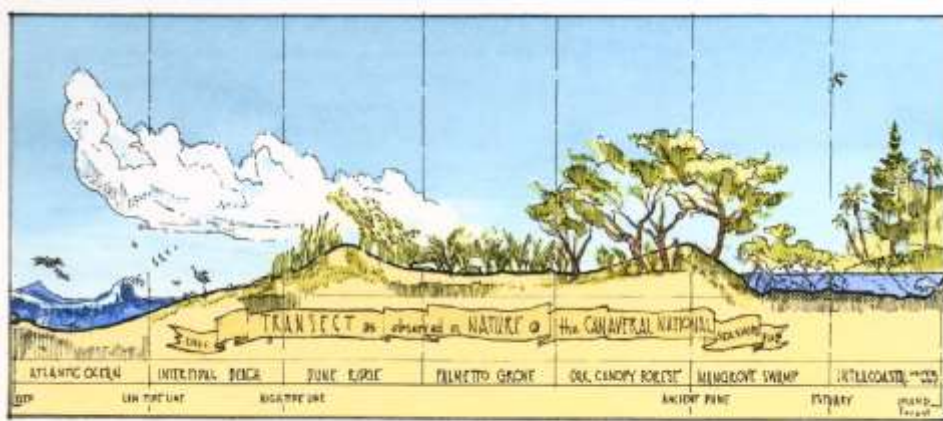
SR 50 in Sumter County



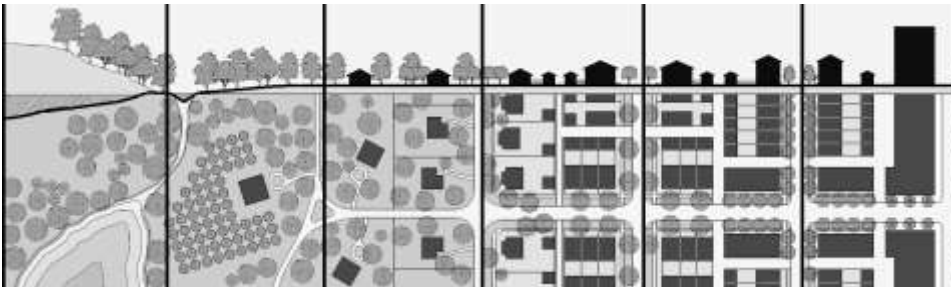




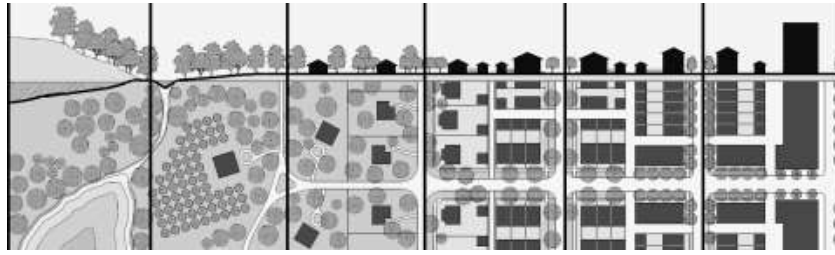
LOU > TRQ



Title: A natural Transect Illustration
Source: James Wassell



ZHA, Inc.



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Least
Walkable
(least
urban)



Most
Walkable
(most
urban)











Context-based design is not new....

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



On State roads....

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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/Corridor (C-5/6)		
	Commercial			Residential			Commercial		
	Right-of-Way (ft)	Arterial	Street	Right-of-Way (ft)	Arterial	Street	Right-of-Way (ft)	Arterial	Street
Clearance									
Building Overhang (exterior overhang)	from	from	from	from	from	from	from	from	from
Maximum Sidewalk (ft)	3 ft	3 ft	2 ft	10 ft	10 ft	10 ft	3 ft	3 ft	3 ft
Off-Street Parking/Access/Entrance	see table	see table	see table	see	see	see table	see	see	see table
Clearance									
Recommended Clearance (ft)	14 ft	14 ft	14 ft	21 ft	21 ft	14 ft	21 ft	21 ft	14 ft
Minimum Sidewalk (throughway) width	5 ft	5 ft	5 ft	10 ft	10 ft	5 ft	10 ft	10 ft	5 ft
Pedestrian Buffer (sidewalk) width of travel way width (ft)	7 ft, 3-in. wall	5 ft, 3-in. wall	5 ft, 3-in. wall	7 ft, 3-in. wall	7 ft, 3-in. wall	5 ft, 3-in. wall	7 ft, 3-in. wall	7 ft, 3-in. wall	5 ft, 3-in. wall
Street Lighting	See all thoroughfares in all context zones. The outdoor street lighting (post, street lighting, and pedestrian-level lighting) is recommended. See Chapter 8: Streetlight Design Guidelines and Chapter 10: Intersection Design Guidelines.								
Travel Way									
Target Speed (mph)	25-35	25-35(40)	25	25-35	25-35	25	25-35	25-35(40)	25
Number of Through Lanes (N)	3-4	2-4	2-4	4-6	2-4	2-4	4-6	2-4	2-4
Lane Width (ft)	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 (MOP) (ft)	0	0-2 ft	0-2 ft	0	0	0	0	0	0-2 ft
Min. Combined Throughway Lane Width	10 ft	10 ft	10 ft	10 ft	10 ft	10 ft	10 ft	10 ft	10 ft
Horizontal Radius (per AASHTO) (ft)	200-500 ft	200-200 ft	200 ft	200-500 ft	200-500 ft	200 ft	200-500 ft	200-500 ft	200 ft
Vertical Alignment	See AASHTO minimums at a signal, but consider combination of horizontal and vertical per AASHTO Green Book.								
Median (ft)	4-10 ft	Optional 4-10 ft	None	4-10 ft	Optional 4-10 ft	None	4-10 ft	Optional 4-10 ft	None
Bike Lanes (see preferred width)	5 ft, 4 ft	5 ft, 4 ft	5 ft, 4 ft	5 ft, 4 ft	5 ft, 4 ft	5 ft, 4 ft	5 ft, 4 ft	5 ft, 4 ft	5 ft, 4 ft
Access Management (ft)	High	Low-Medium	Low-Medium	Medium	Low-Medium	Low-Medium	High	Low-Medium	Low-Medium
Typical Traffic Volume Range (ADT) (1)	10,000-30,000	1,000-30,000	1,000-15,000	10,000-30,000	1,000-30,000	500-3,000	10,000-40,000	1,000-30,000	1,000-15,000
Intersections									
Roundabout (ft)	Consider single-lane roundabout at intersections or access with less than 20,000 entering vehicles per day, and other double-lane roundabout intersections or roundabouts with less than 40,000 entering vehicles per day.								
Curb Return (ft) at Intersections and Other Design Elements	Refer to Chapter 10: Intersection Design Guidelines.								



Source: ITE/CNU Designing Walkable Urban Thoroughfares

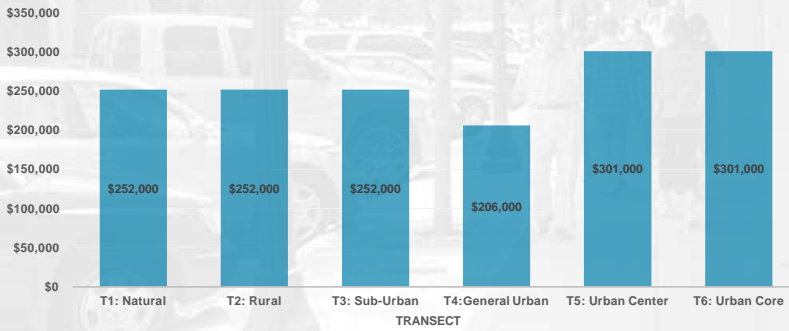


Table 5. Regional Arterial Design Matrix (NCDOT & PennDOT, 2008)

	Regional Arterial	Rural	Suburban Neighborhood	Suburban Corridor	Suburban Center	Town/Village Neighborhood	Town/Village Center	Urban Core
Right-of-Way	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	6' to 10'	6' to 10'	6' 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	if parallel	if parallel, see 7.2 for angled	if parallel, see 7.2 for angled	if 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
Shoulder	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'	6' to 8'	4' to 8'	4' to 6'
	Sight Distance	NA	NA	NA	0' to 2'	0' to 2'	2'	2'
	Total Sidewalk Width	NA	5'	5' to 6'	6' to 14'	10' to 16'	12' to 18'	12' to 30'
Speed	Desired Operating Speed (mph)	45-55	35-40	35-55	30-35	30-35	30-35	30-35

From: FHWA Road Diet Guide

Figure 3-1: Average Trail Cost Per Mile By Transect



• Source: DRAFT FDOT Multiuse Trails Cost and Funding



Florida Greenbook



Hollywood Blvd,
Hollywood FL

Topic #100-000011
Manual of Uniform Standards
for Design, Construction and Maintenance
for Streets and Highways
May 2011

CHAPTER 19

TRADITIONAL NEIGHBORHOOD DEVELOPMENT

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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>

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