

Complete Streets Implementation in Florida

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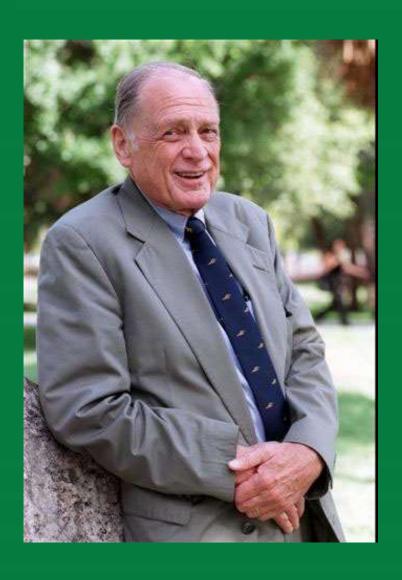
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- One of founders of 1000 Friends of Florida
- First Secretary of the FloridaDepartment of Community Affairs
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Presenters



Billy Hattaway, P.E., Florida Department of Transportation



- Secretary for District One of the FDOT
- Over 35 years of transportation and program management experience
- Champion for Secretary Ananth Prasad's Pedestrian and Bicycle Focused Initiative
- Chair of Bike/Walk Central Florida
- Author of the new Traditional Neighborhood Development Chapter and Handbook for the Florida Green Book

DeWayne Carver, AICP, Florida Department of Transportation

- Statewide Bicycle/Pedestrian Coordinator for FDOT
- Career includes state and local government experience
- Nine years in private consulting with Hall Planning & Engineering, Inc. (HPE), focusing on walkable thoroughfare design and bicycle/pedestrian planning
- HPE work also included traffic analysis, urban design, and roadway design
- Has worked in cities all over the US, as well as Canada, South America, the Caribbean, and Africa
- Graduate of the University of Tennessee, Knoxville, and the University of North Carolina at Chapel Hill, where he received a Master of Regional Planning degree

FDOT Complete Streets Initiative

Billy Hattaway, PE Florida Department of Transportation







FDOT Complete Streets Initiative

Presented to: 1000 Friends of Florida





Billy L. Hattaway, PE
District One Secretary



FDOT's Pedestrian Safety Initiative



- Dangerous by Design (2011, 2014)
- Orlando, Tampa, Jacksonville, Miami-Ft. Lauderdale
- Secretary Ananth Prasad... "Being #1 in pedestrian fatalities and serious injuries is NOT where Florida wants to be."

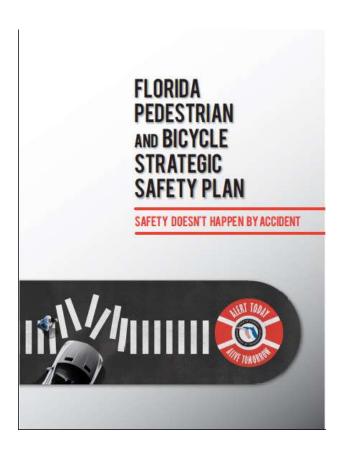


The Launch



- NHTSA panel of experts: assessed Bike/Pedestrian Safety.
- NHTSA conducted "Pedestrian 101" training for all focused initiative team members.
- Developed Florida Pedestrian and Bicycle Strategic Safety Plan
- Alert Today/Alive Tomorrow

http://alerttodayflorida.com/



Driving the Culture Change

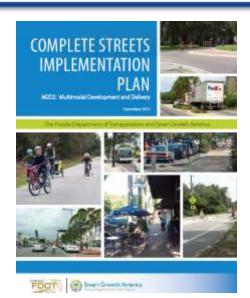


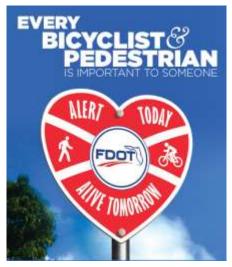
- Complete Streets Policy & Implementation
 - http://www.flcompletestreets.com/
- Context Based Bicycle/Pedestrian Facilities
 - http://www.dot.state.fl.us/rddesign/BikePed/Default.shtm
- Promotion of Modern Roundabouts
 - http://www.dot.state.fl.us/rddesign/Roundabouts/Default.shtm
- Guidance for Road Diets on State System
 - http://www.dot.state.fl.us/rddesign/CSI/Files/Lane-Elimination-Guide-Part2.pdf

Supporting the Culture Change



- Training FHWA Focus State
 - Developing Pedestrian Safety Action Plans
 - Conducting Road Safety Audits
 - Designing for Pedestrian Safety
 - Roundabout Design
- Complete Streets Handbook
- Engineering (Targeted)
- Education (Media Campaign)
- Enforcement (High Visibility)





How We Got Here

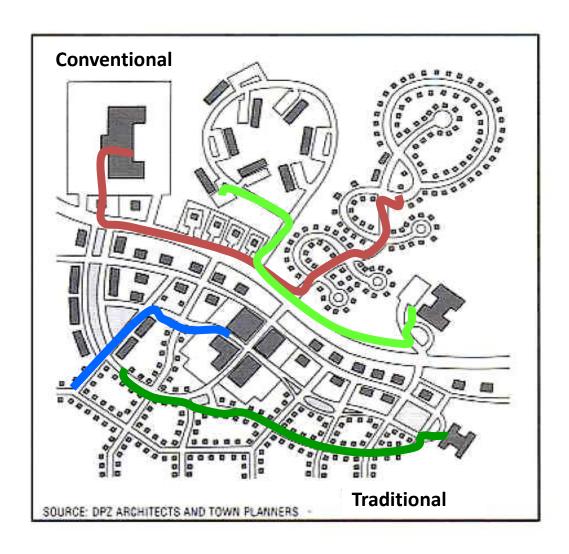




Fowler Ave, Tampa

Land Development Patterns





Land Development Patterns





1585 Anna Catherine Dr, Eastwood Park, Orange County, FL 13415 Summer Rain Dr, Avalon Park, Orange County, FL

7.1 mile drive, yet only 70' apart

Land Development Regulations





Driver Expectation





Thomasville Rd, Tallahassee, FL

Driver Expectation





FHWA Proven Countermeasures









Backplates with Retroreflective Borders



Strips and Stripes on Two-Lane Roads



Enhanced Delineation and Friction for Horizontal Curves



Safety Edge_{SM}



Medians and
Pedestrian Crossing
Islands in Urban and
Suburban Areas



Pedestrian Hybrid Beacon



Road Diet

Modern Roundabouts/Road Diets





Gaines St., Tallahassee, FL

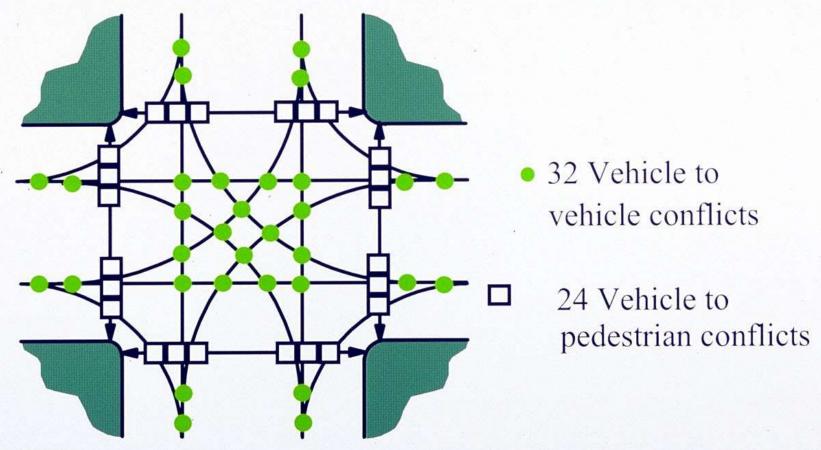
Modern Roundabouts/Road Diets





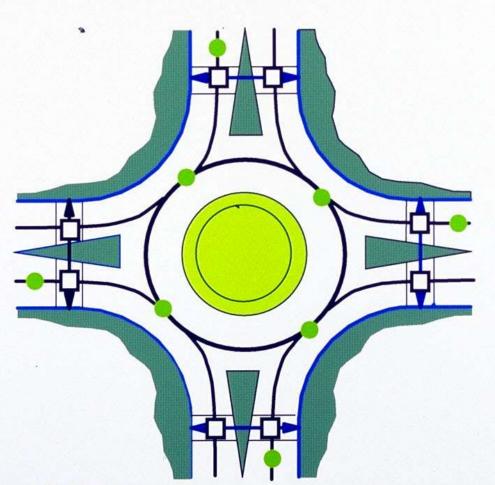
Gaines St., Tallahassee, FL

Conflicts At a Four-Way Interection



Walkable Communities, Inc. Burden and Wallwork, P. E.

Conflicts At Roundabouts



- 8 Vehicle to vehicle conflicts
- 8 Vehicle to pedestrian conflicts

Walkable Communities, Inc. Burden and Wallwork. P. E.

Modern Roundabouts/Road Diets



Roundabouts are a proven safety solution

- 90 % decrease in the fatal crash rate;
- 35 % decrease in the total crash rate;
- 76 % decrease in serious injuries;
- Cost less to operate
- 75% more efficient than signals

Mid-Block Crossings





California

Rectangular Rapid Flashing Beacon (RRFB)





St. Petersburg, FL

Pedestrian Hybrid Beacon (HAWK)

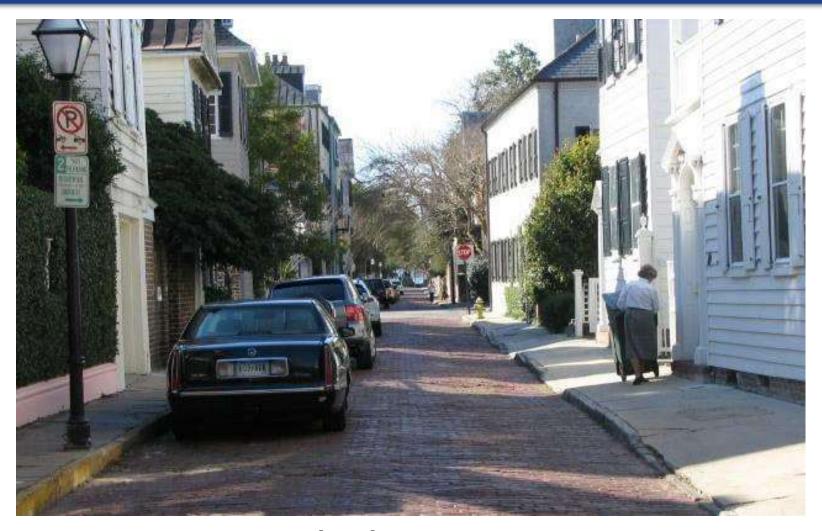




St. Petersburg, FL

Lane Width





Charleston, SC

Lane Width

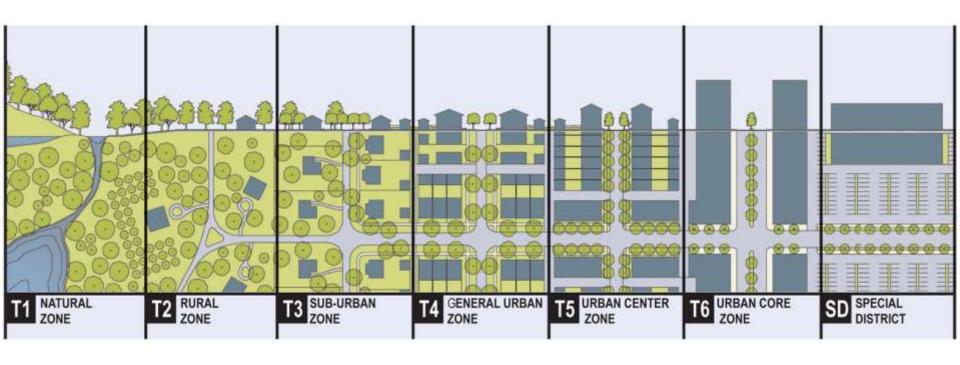


- The normal range of design lane width is 9-12'.
- Lane widths substantially less than 12 feet are considered adequate for a wide range of volume, speed and other conditions.
- There is less direct evidence of a safety benefit associated with wider lanes in urban areas.

AASHTO - A Guide for Achieving Flexibility In Highway Design

Define the Context

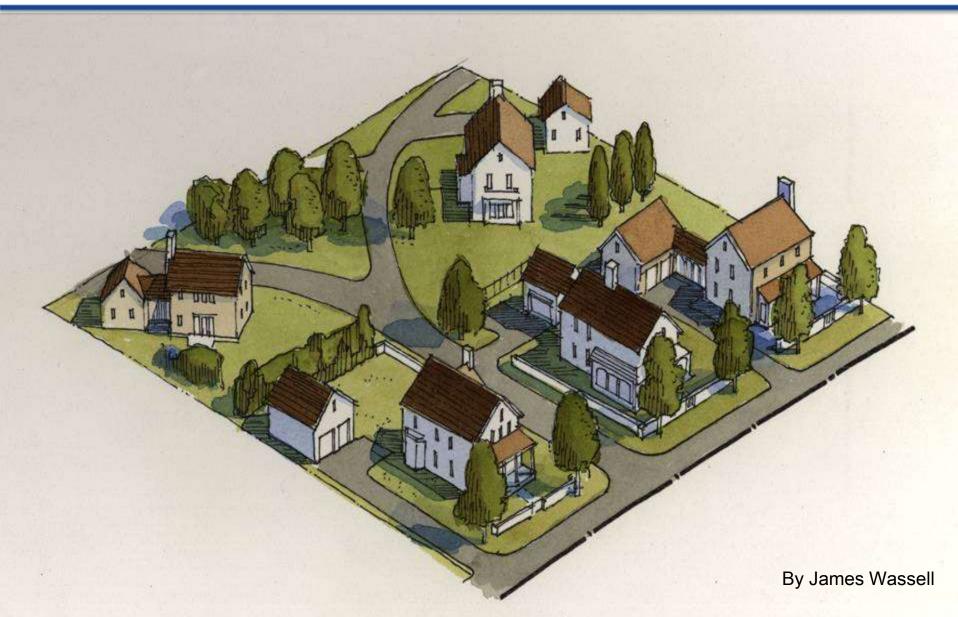




Transect Zones, Smart Code

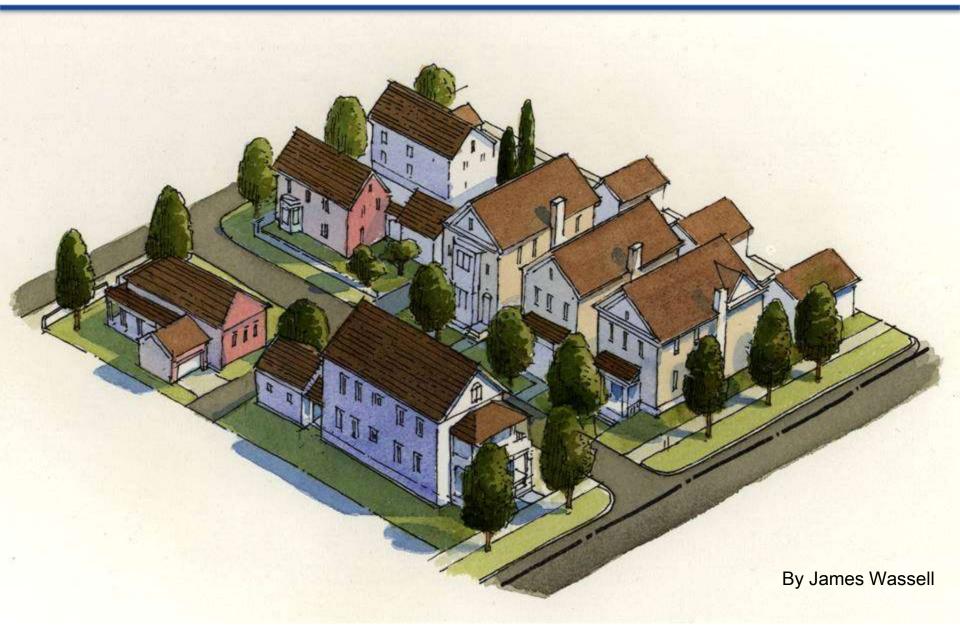
T-3 Suburban





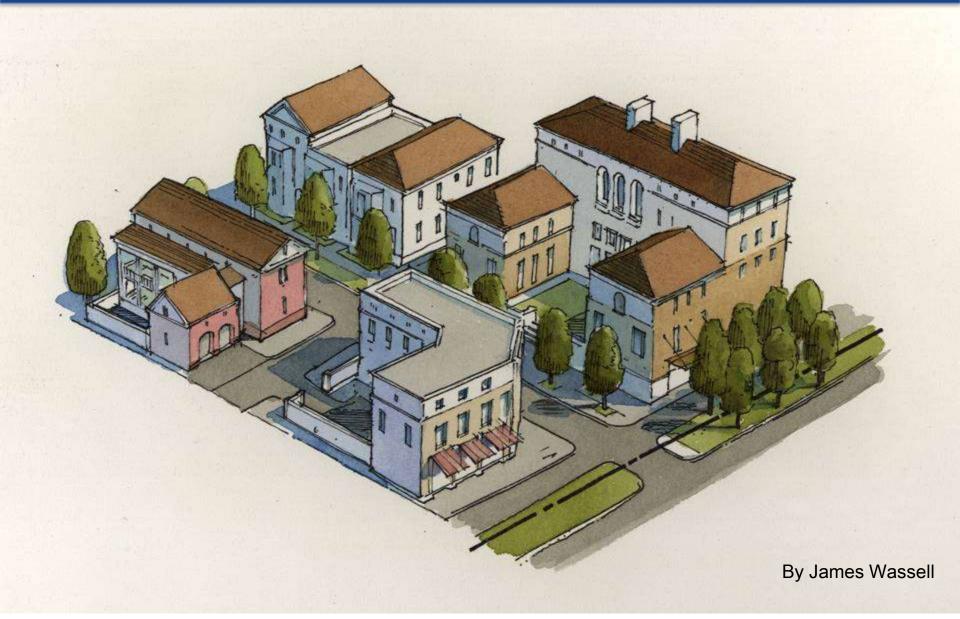
T-4 General Urban





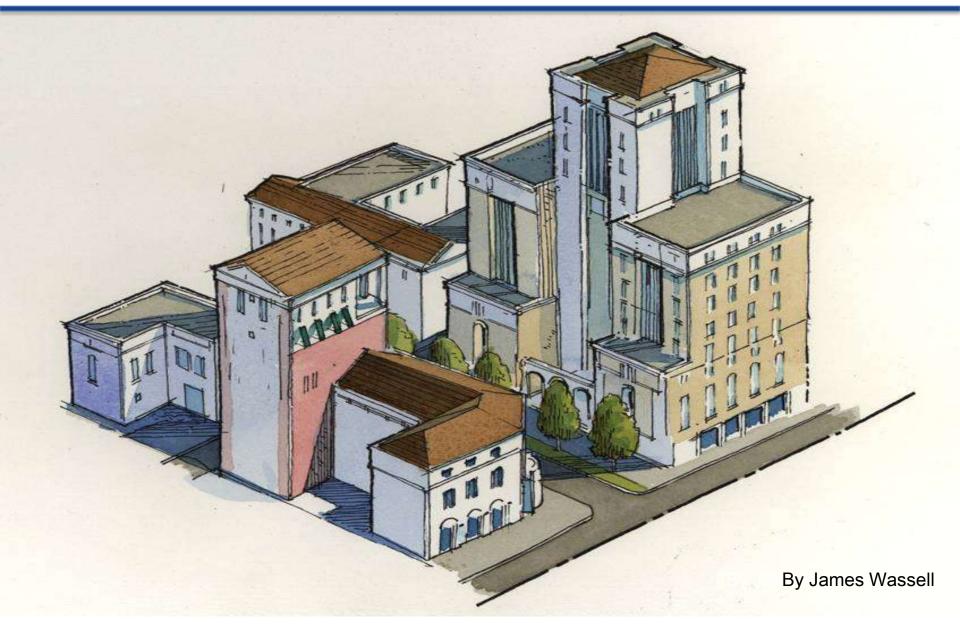
T-5 Urban Center





T-6 Urban Core



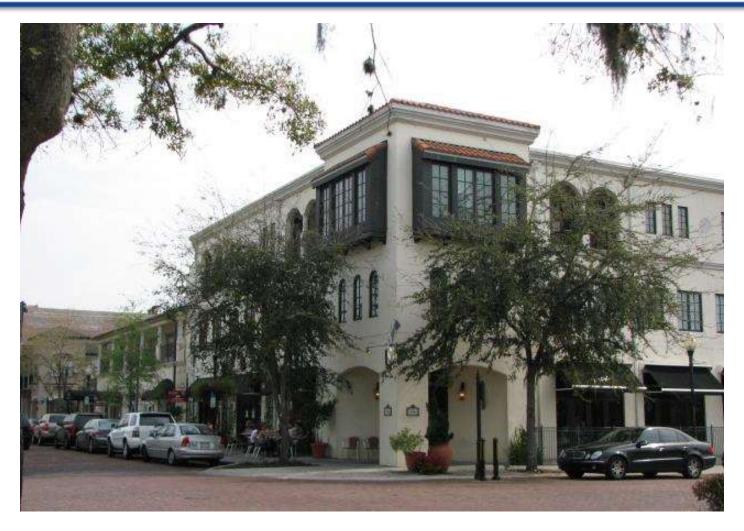




- 1,100 Acres
- 250 Acres of Lakes
- 32 Street Connections
- 14,000 Residents
- 125 Businesses
- Mixed Use
- Publix, CVS
- 20 Neighborhood Parks
- "A" Rated Schools
- 50 miles of Trails
- Single Family
- Town Homes
- Apartments
- Condominiums
- Live/Work

Mixed Use Development





New York Ave, Winter Park, FL

Context Based Bike Facilities



DRAFT Concepts:

- Context/Speed/Volume Based
- Low Speed/Volume Shared Travel Lanes
- Moderate Speed/Volume Bike Lanes (7' Standard)
 - New Construction
 - Retrofit Projects
- Higher Speed/Volume Multi-use Paths (10' Standard)

Existing Bike Lane





Winter Park, FL

Shared Travel Lane

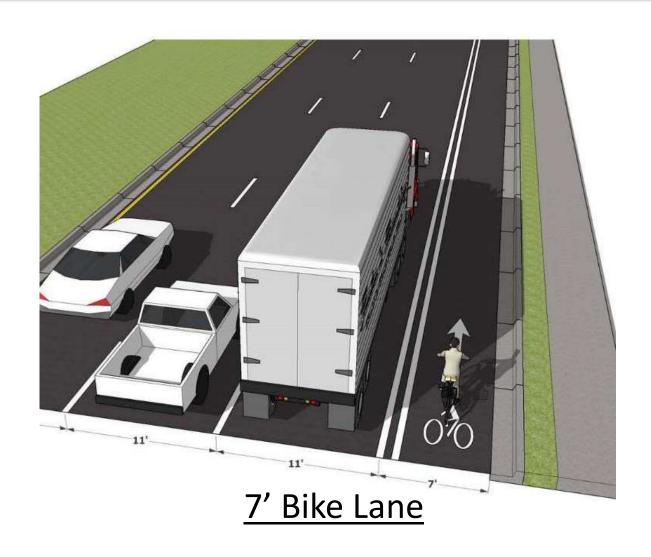




Winter Park, FL

7' Buffered Bike Lane





Side Path





Orlando, FL

Multi-Use Trail





Baldwin Park, FL

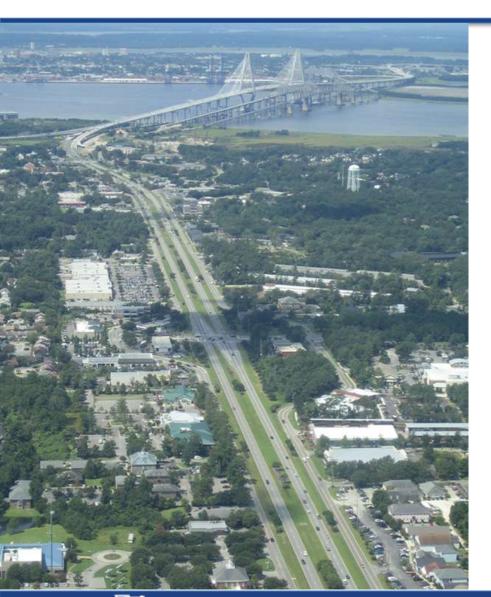






Johnnie Dodds Blvd, Mt. Pleasant, SC





- Citizen/Business Funded
- Created Counter Proposal
- 200' ROW
- Interchanges Proposed
- Two Way Frontage Roads
- Business Failing
- Road Divided Community
- Commuter Corridor
- Proposed Roundabout Intersections













































QUESTIONS??



Secretary Boxold..."Addressing the issue of bicycle and pedestrian safety requires a comprehensive approach. We have to change the way we design and engineer our roads, we have to improve our education efforts, and clarify our traffic laws."

Billy L. Hattaway, P.E. billy.hattaway@dot.state.fl.us

Complete Streets Implementation

DeWayne Carver, AICP Florida Department of Transportation





Complete Streets

Florida Department of Transportation

presented to

1000 Friends of Florida

presented by



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



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 contextsensitive 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 "contextappropriate 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 costeffective solutions to transportation issues

Local Government Interest....

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



Key: Blue: Laws & Ordinances | Red: Resolutions | Yellow: Tax Ordinances | Purple: Internal Policies or Executive Orders | Magenta: Plans | Green: Design Manuals or Guides | Turquoise: Policies Adopted by Elected Boards

COMPLETE STREETS IMPLEMENTATION PLAN

M2D2: Multimodal Development and Delivery

December 2015



The Florida Department of Transportation and Smart Growth America











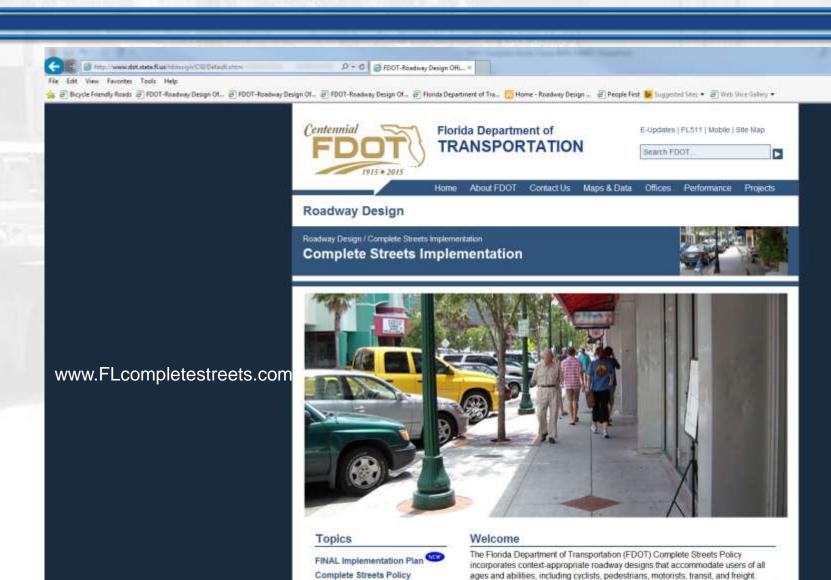






- Prepared by SmartGrowth America working with FDOT
- It's a road map, not a vehicle!
- Each office is responsible for its own part

Complete Streets Website



EDOT recognized 21st Century demographics, business practices and develope



Complete Streets Implementation Plan

Five-part implementation framework:

- I. Revising guidance, standards, manuals, policies, and other documents
- II. Updating decision-making processes
- III. Modify approaches for measuring performance
- IV. Managing internal and external communication and collaboration during implementation
- V. Providing ongoing education and training

Parts proceed in parallel, not successively

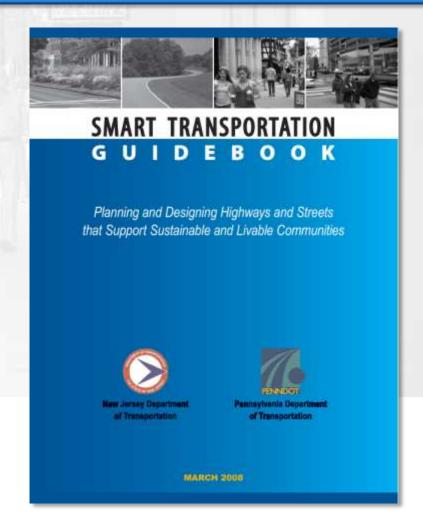
Sample Handbooks....

FLORIDA DEPARTMENT OF TRANSPORTATION District 5

MULTI-MODAL CORRIDOR PLANNING GUIDEBOOK

Version 1 | August, 2013





Target Timeline pp. 28-29 (subject to updates!)

- Phase 1 finalize and adopt plan Jan. 2016
- Phase 2 Launch Implementation Process through Feb.
 2016
- Phase 3 Detailed Scoping June 2016
- Phase 4 Update Documents and Practices Dec. 2017
- Phase 5 Evaluate and Determine Next Steps Jan.
 2018/Ongoing
- Subject to reality as we proceed!

What's next?

- Roadway Design Office preparing scope for Plans Preparation Manual update
- Internal workshops in Central Office
- Some districts doing workshops
- Statewide Implementation Team will continue
- Monthly meetings w/Secretary Hattaway will continue
- Regular briefings to Executive Team will continue

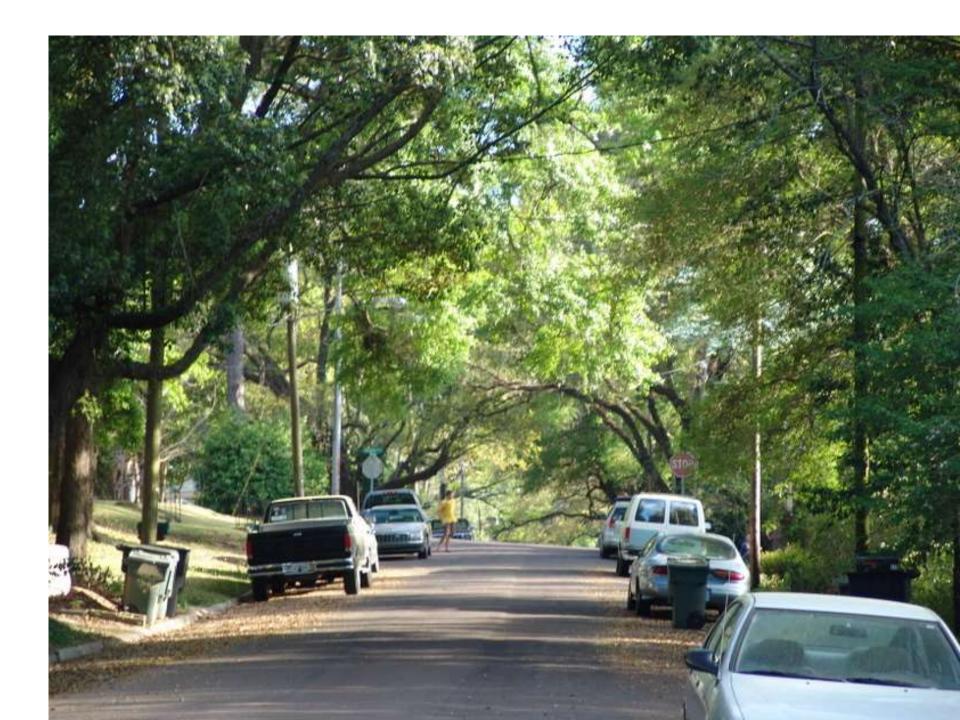


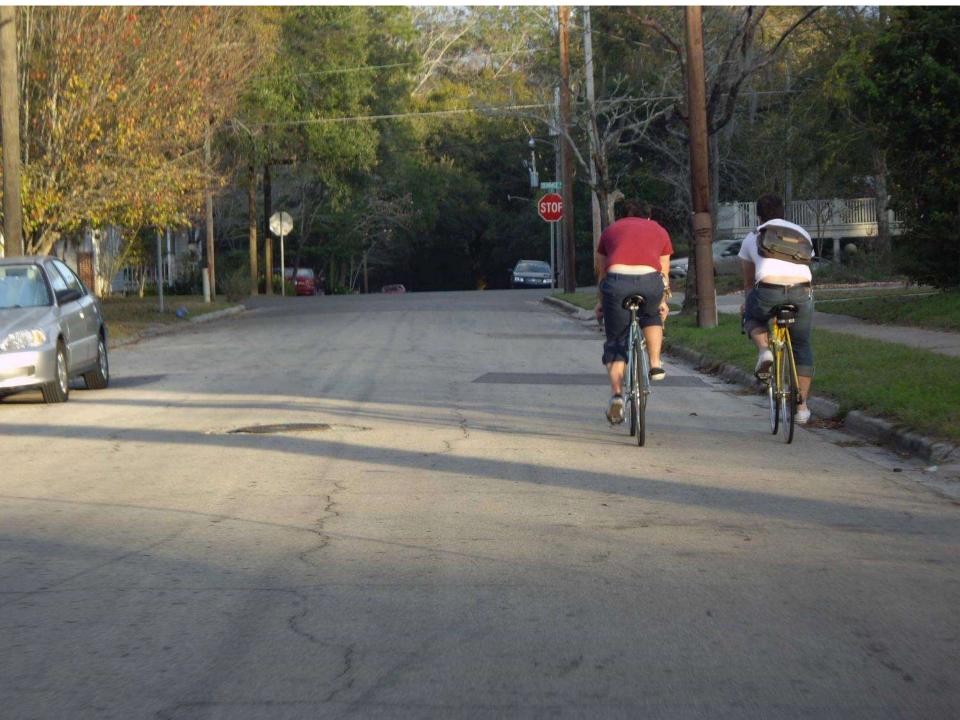






SR 50 in Sumter County



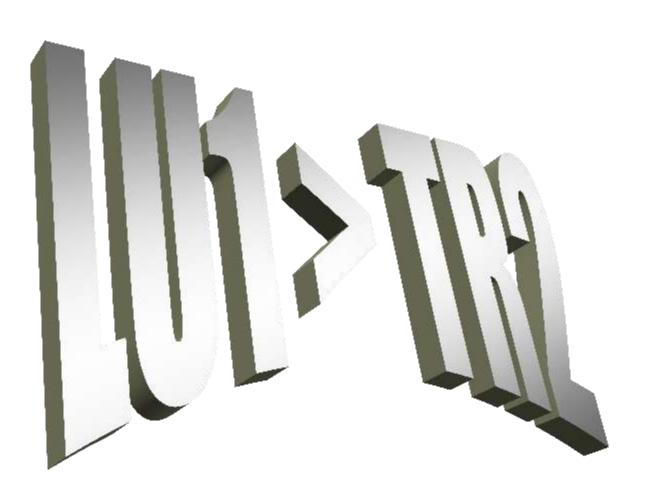


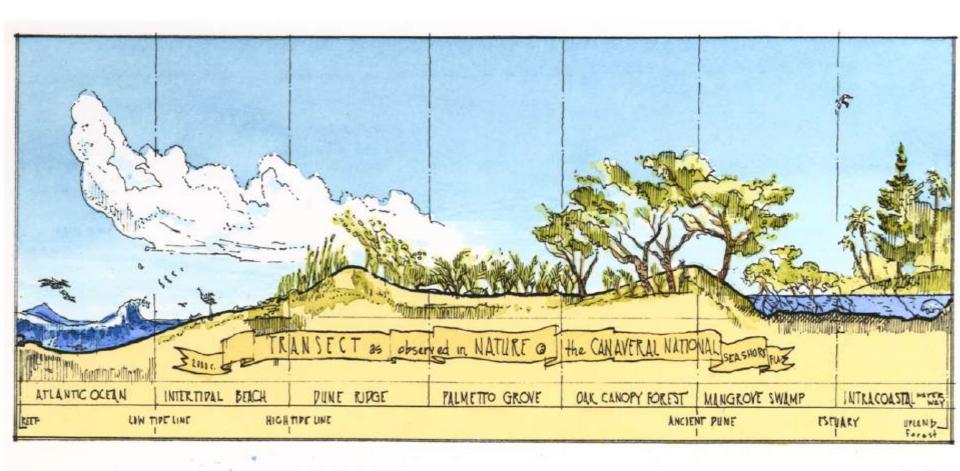










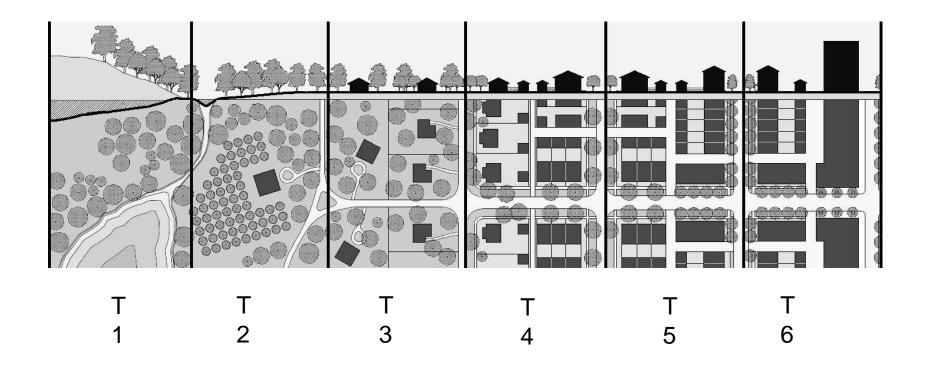


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ZHA, Inc.

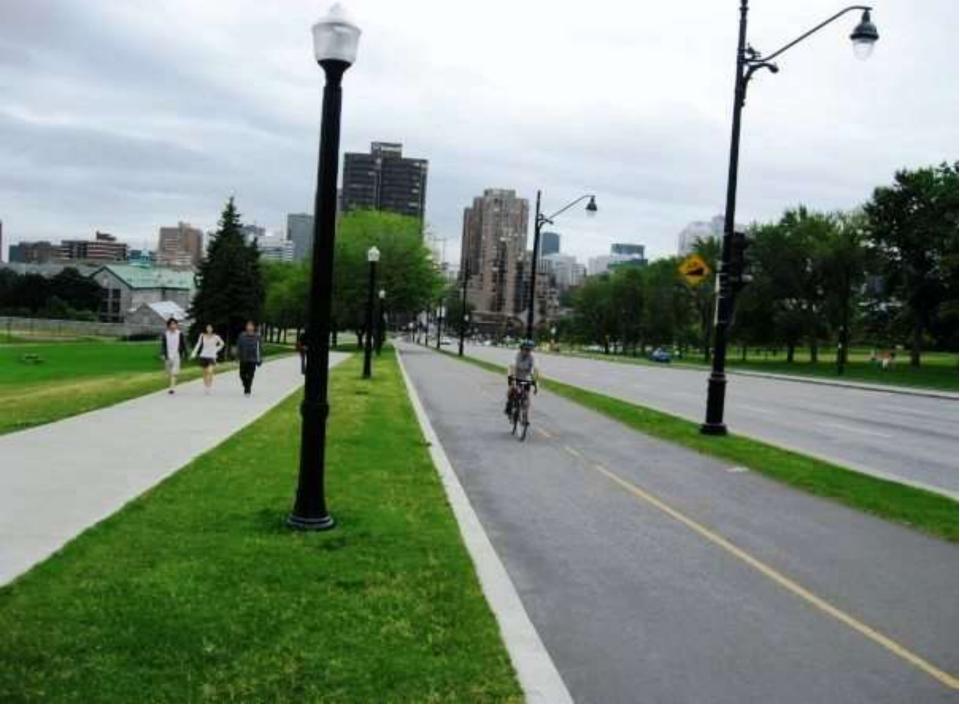


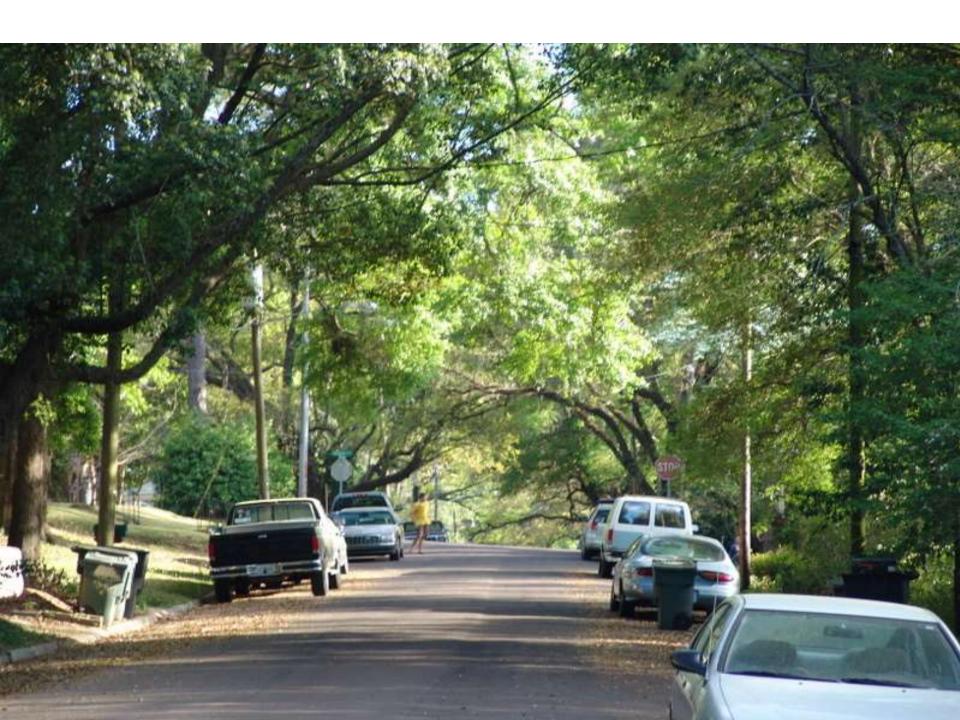






SR 50 in Sumter County











A local approach to provide Complete Streets....

- PPM Chapter 21-Transportation Design for Livable Communities
- ITE/CNU Recommended Practice: Designing Walkable Urban Thoroughfares
- SmartCode
- 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

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Transnor	tation Design fo	ar Livable Communities	21.i



A1A in Stuart, FL

On local roads - Florida Greenbook



Hollywood Blvd, Hollywood FL 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

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В	APPLICATION						
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Ch 19 Guidance for lower design speeds...

E DESIGN ELEMENTS

The criteria provided in this chapter shall require the approval of the maintaining authority's designated Professional Engineer representative with project oversight or general compliance responsibilities.

The criteria provided in this chapter are generally in agreement with AASHTO guidelines with a special emphasis on urban, low-speed environments. Design elements within TND projects not meeting the requirements of this chapter are subject to the requirements for Design Exceptions found in Chapter 14 of this manual.

E.1 Design Controls

E.1.a Design Speed

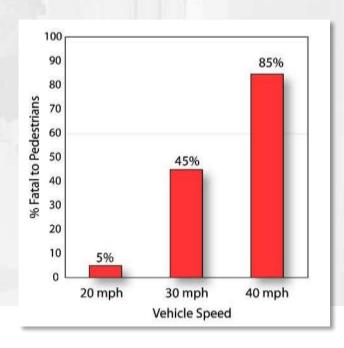
The application of design speed for TND communities is philosophically different than for conventional transportation and CSD communities. Traditionally, the approach for setting design speed was to use as high a design speed as practical.

In contrast to this approach, the goal for TND communities is to establish a design speed that creates a safer and more comfortable environment for pedestrians and bicyclists, and is appropriate for the surrounding context.

Design speeds of 20 to 35 mph are desirable for TND streets. Alleys and narrow roadways intended to function as shared spaces may have design speeds as low as 10 mph.

E.1.b Movement Types

Movement types are used to describe the expected driver experience on a given thoroughfare, and the design speed for pedestrian safety and mobility established for each of these movement types. They are also



Where does Ch. 19 apply?

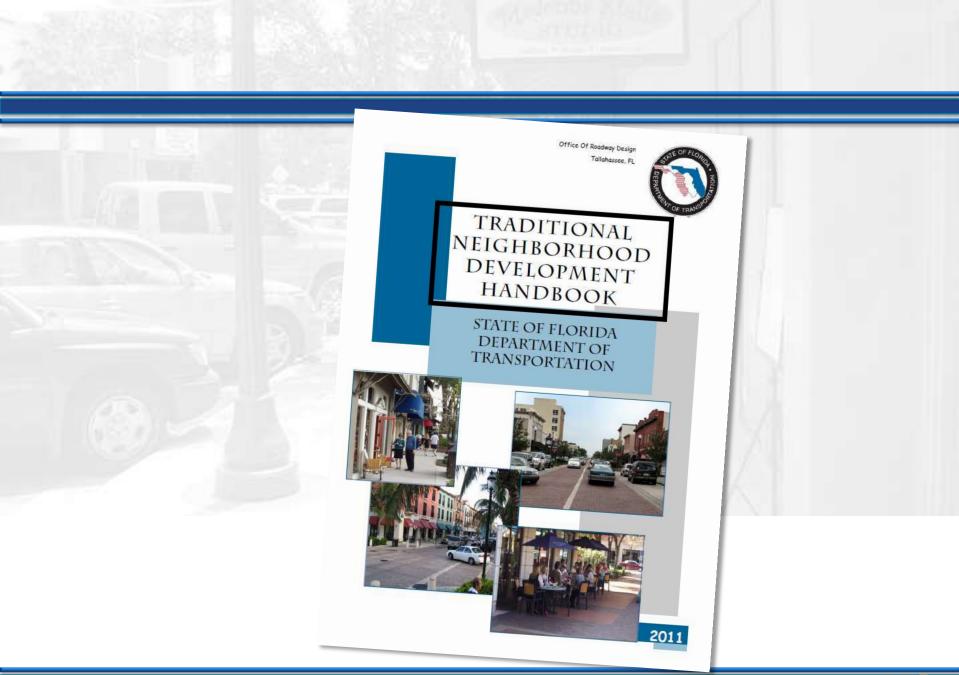


B APPLICATION

A project or community plan may be considered a TND when at least the first seven of the following principles are included:

- Has a compact, pedestrian-oriented scale that can be traversed in a five to ten-minute walk from center to edge.
- Is designed with low speed, low volume, interconnected streets with short block lengths, 150 to 500 feet, and cul-de-sacs only where no alternatives exist. Cul-de-sacs, if necessary, should have walkway and bicycle connections to other sidewalks and streets to provide connectivity within and to adjacent neighborhoods.
- Orients buildings at the back of sidewalk, or close to the street with off-street parking located to the side or back of buildings, as not to interfere with pedestrian activity.
- Has building designs that emphasize higher intensities, narrow street frontages, connectivity of sidewalks and paths, and transit stops to promote pedestrian activity and accessibility.
- Incorporates a continuous bike and pedestrian network with wider sidewalks in commercial, civic, and core areas, but at a minimum has sidewalks at least five feet wide on both sides of the street. Accommodates pedestrians with short street crossings, which may include mid-block crossings, bulb-outs, raised crosswalks, specialty pavers, or pavement markings.
- Uses on-street parking adjacent to the sidewalk to calm traffic, and offers diverse parking options, but planned so that it does not obstruct access to transit stops.
- Varies residential densities, lot sizes, and housing types, while maintaining an average net density of at least eight dwelling units per acre, and higher density in the center.
- Integrates at least ten percent of the developed area for nonresidential and civic uses, as well as open spaces.
- Has only the minimum right of way necessary for the street, median, planting strips, sidewalks, utilities, and maintenance that are appropriate to the adjacent land uses and building types.
- Locates arterial highways, major collector roads, and other high-volume corridors at the edge of the TND and not through the TND.

The design criteria in this chapter shall only be applicable within the area defined as TND.



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 "cylinders 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



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