



Florida Department of
TRANSPORTATION



FDOT Complete Streets Initiative

Presented to: 1000 Friends of Florida



SAFETY DOESN'T HAPPEN BY ACCIDENT.




**WHEN DRIVING, WALKING, OR BICYCLING...
PAY ATTENTION.
READ THE SIGNS.
LEARN THE RULES.**

AVOID DISTRACTIONS.   
 **STOP BEFORE TURNING RIGHT ON RED.**
 **USE THE SIDEWALK AND CROSSWALKS.**
 **BICYCLE PREDICTABLY, WITH TRAFFIC.**

Funded by the Florida Department of Transportation

AlertTodayFL www.AlertTodayFlorida.com AlertTodayFlorida

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.”

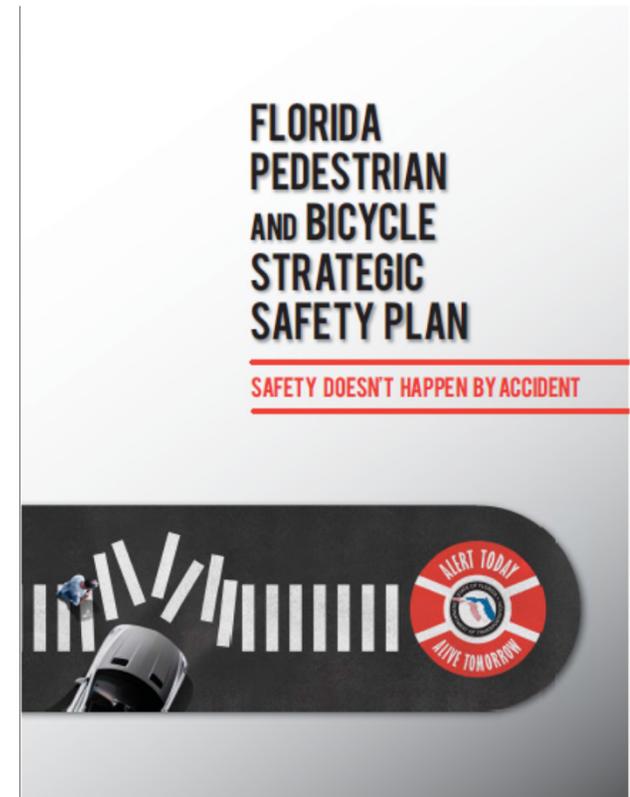


The Launch



- 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://alertytodayflorida.com/>





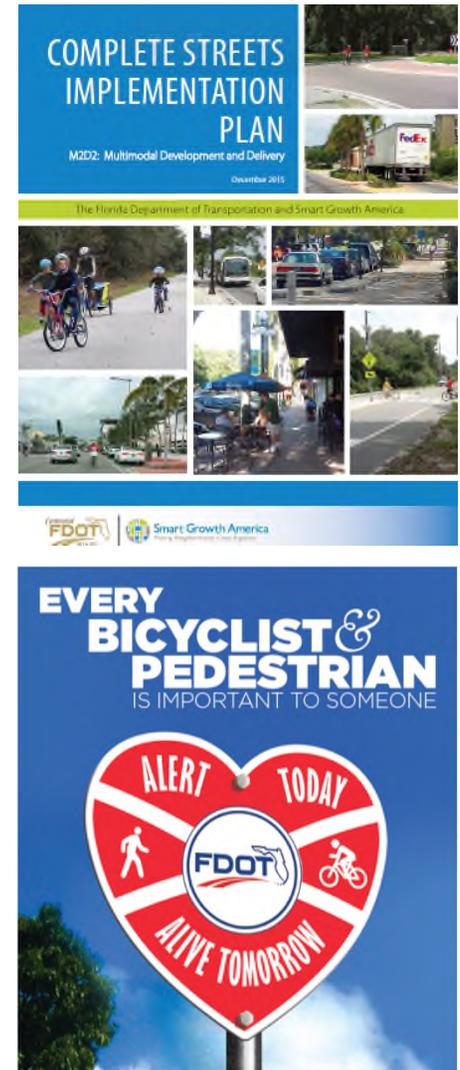
Driving the Culture Change

- 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)

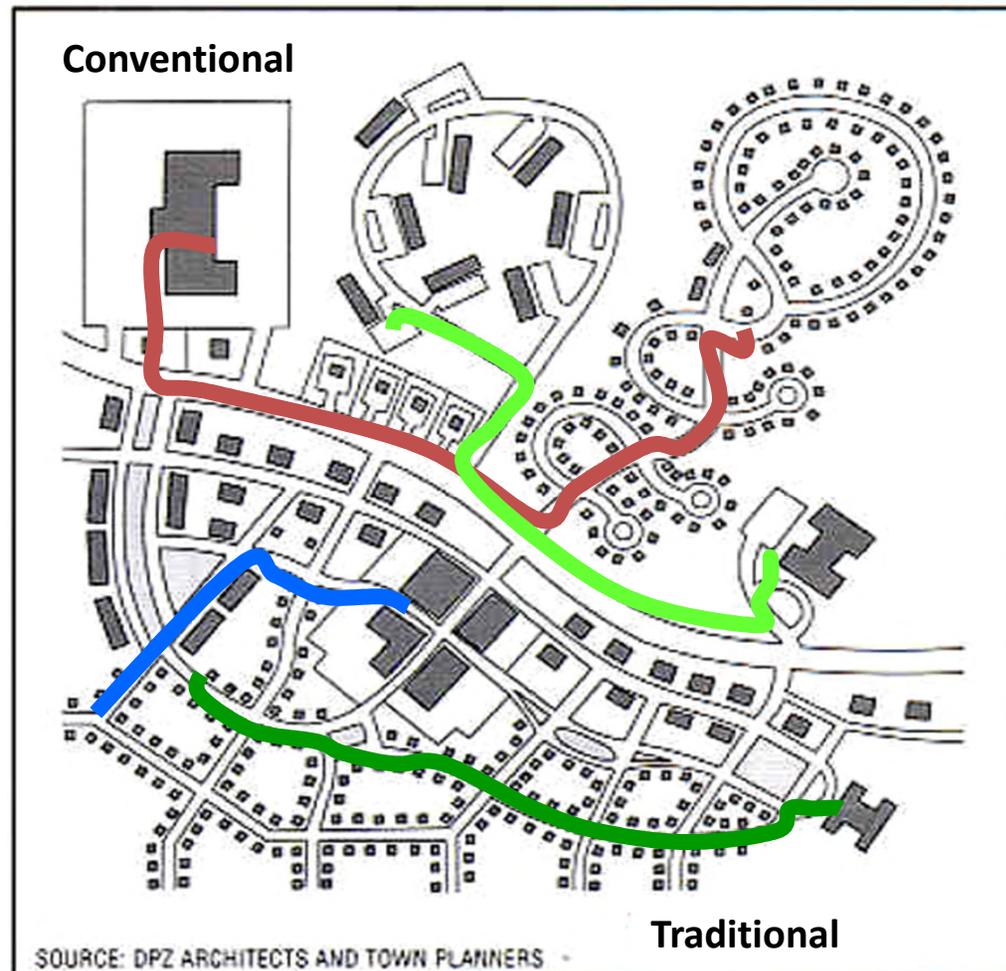


How We Got Here



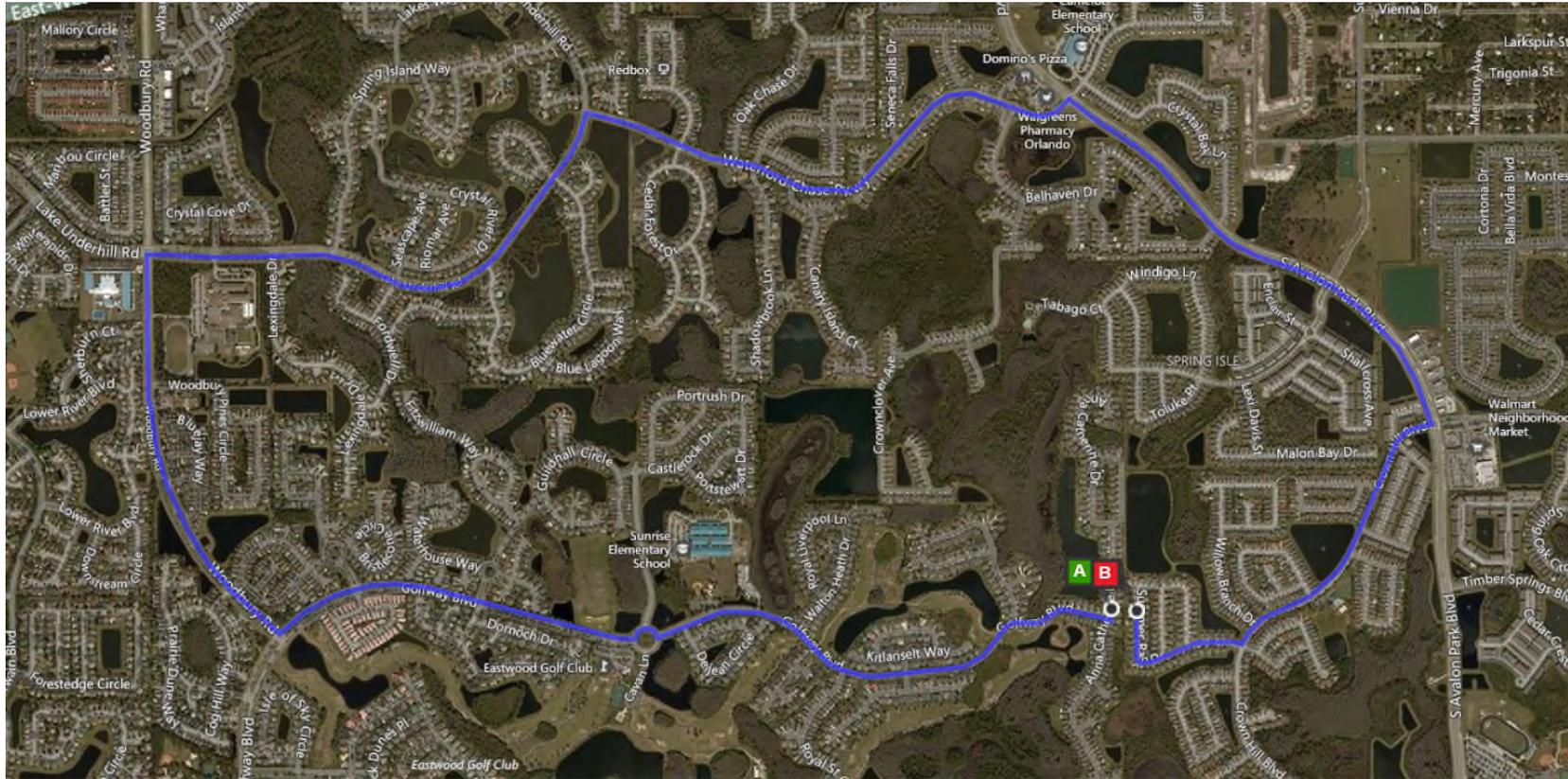
Fowler Ave, Tampa

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



Florida Department of Transportation

Land Development Regulations



Driver Expectation



Thomasville Rd, Tallahassee, FL



Driver Expectation





FHWA Proven Countermeasures



Roundabouts



Corridor Access Management



Backplates with Retroreflective Borders



Longitudinal Rumble Strips and Stripes on Two-Lane Roads



Enhanced Delineation and Friction for Horizontal Curves



Safety EdgesSM



Medians and Pedestrian Crossing Islands in Urban and Suburban Areas



Pedestrian Hybrid Beacon



Road Diet



Modern Roundabouts/Road Diets



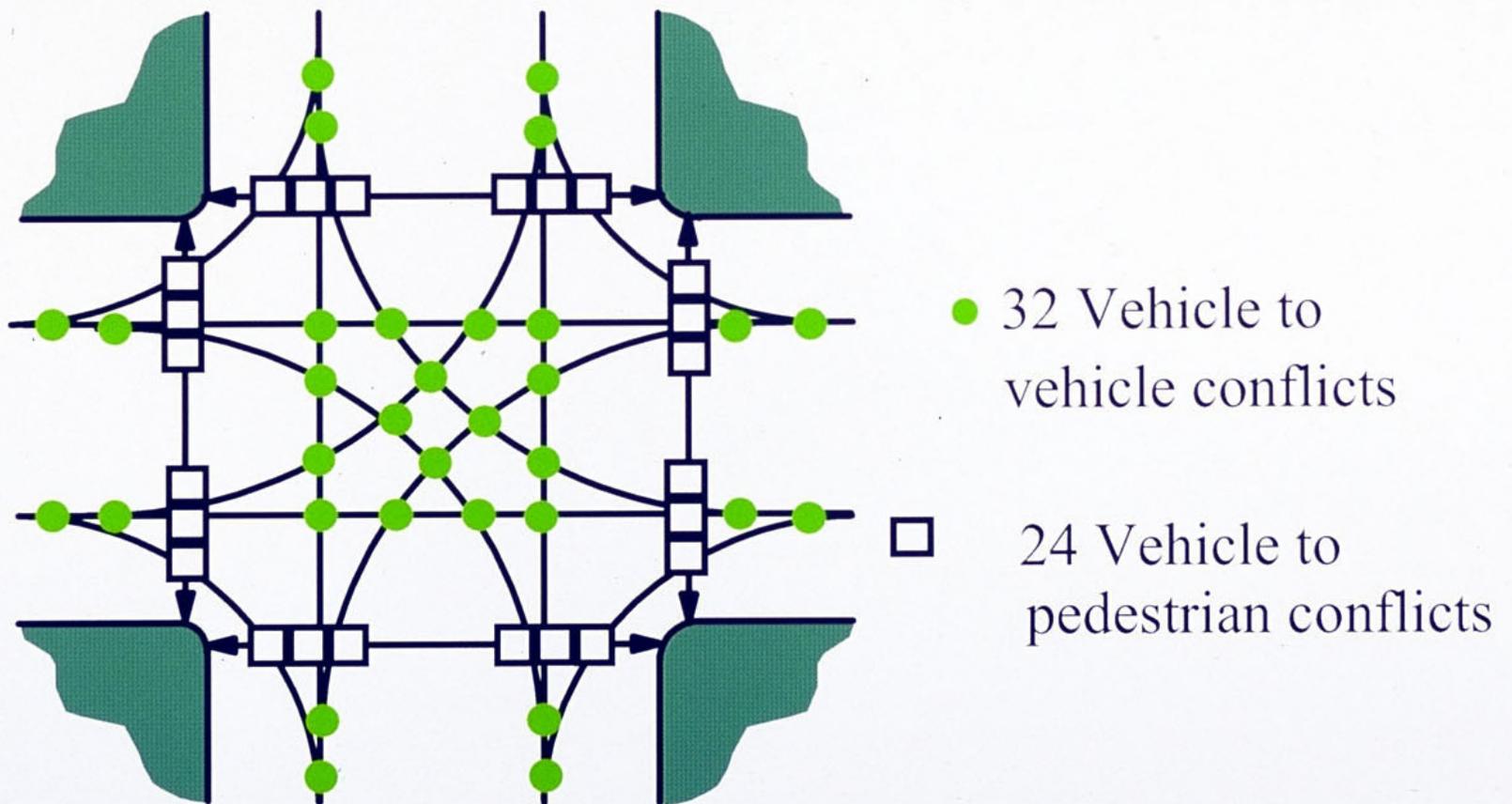
Gaines St., Tallahassee, FL

Modern Roundabouts/Road Diets

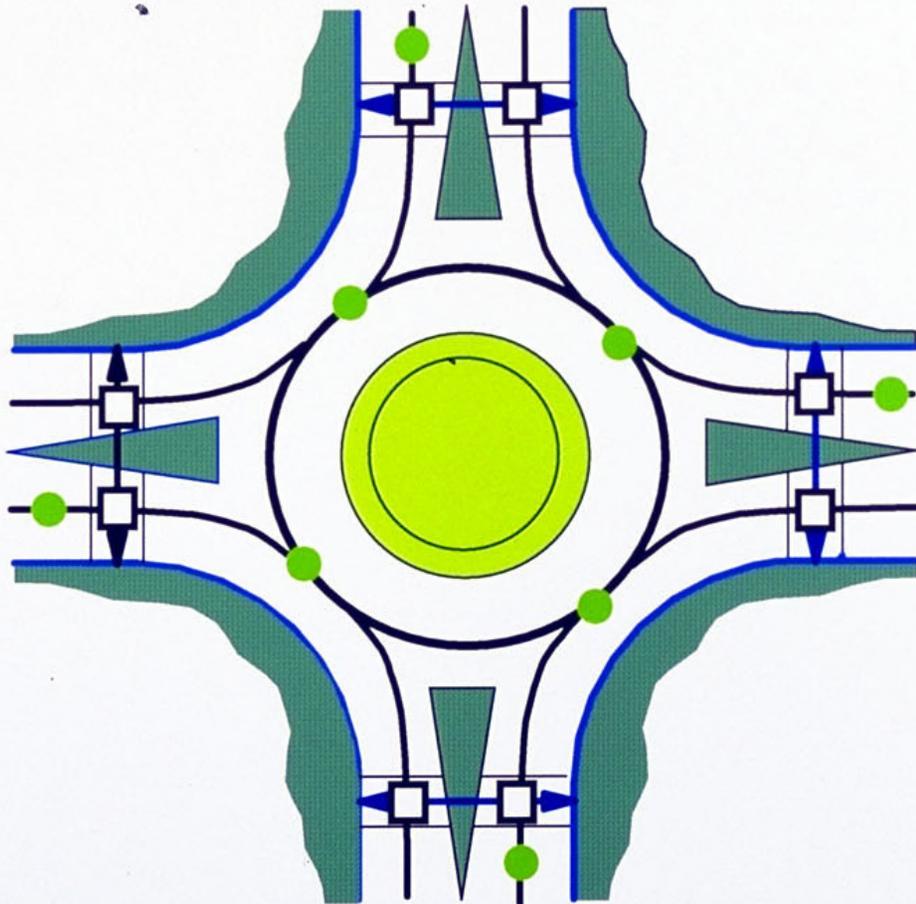


Gaines St., Tallahassee, FL

Conflicts At a Four-Way Intersection



Conflicts At Roundabouts



● 8 Vehicle to vehicle conflicts

□ 8 Vehicle to pedestrian conflicts

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

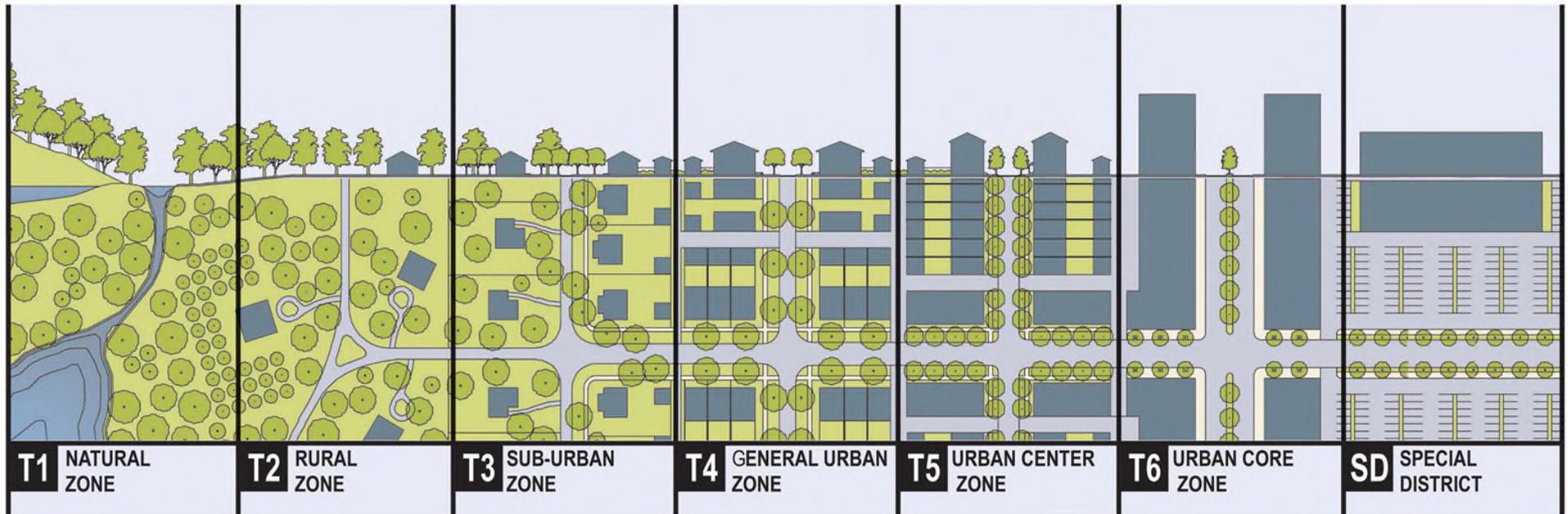


Lane Width

- 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.

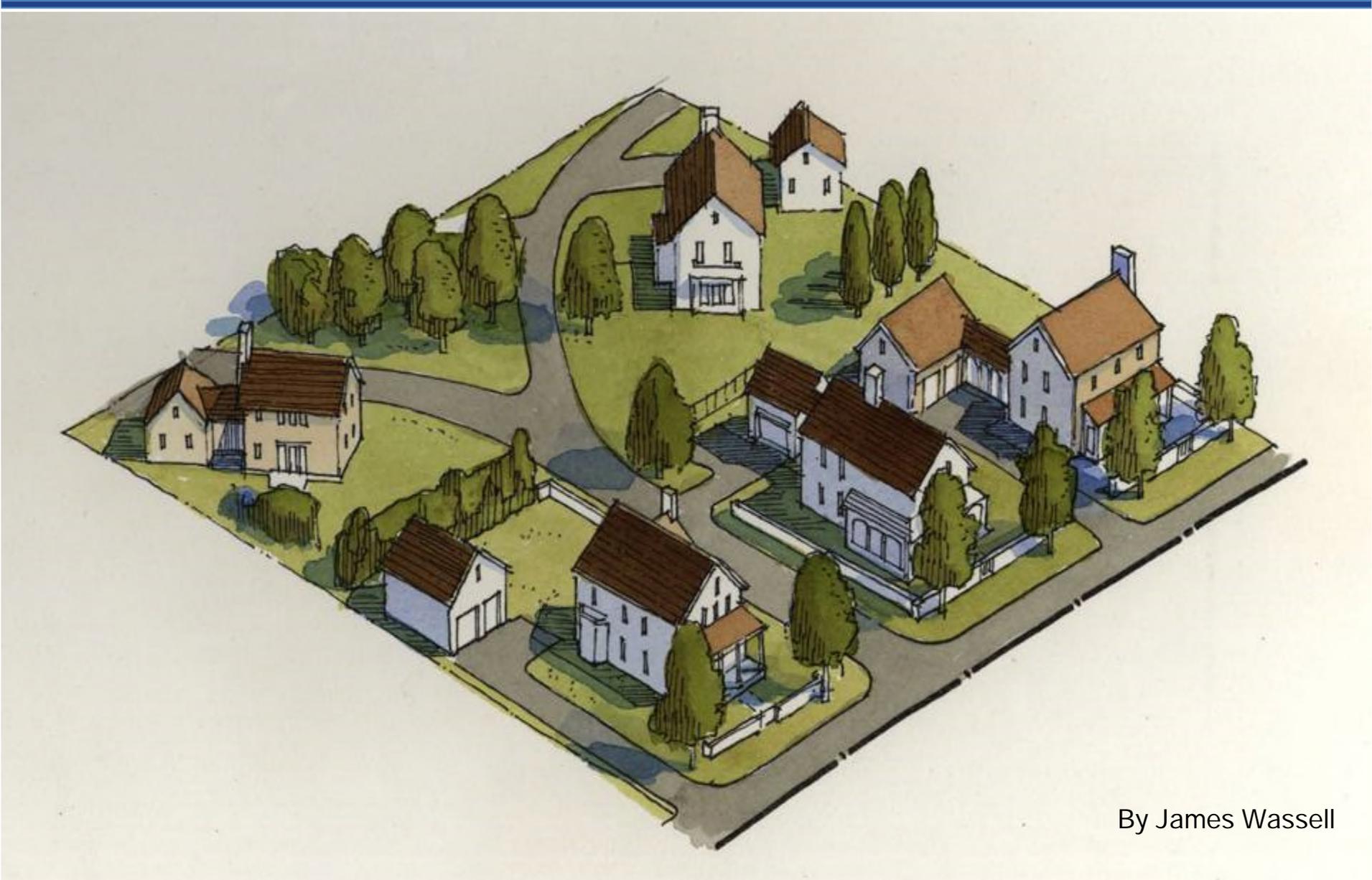
AASHTO - A Guide for Achieving Flexibility In Highway Design

Define the Context



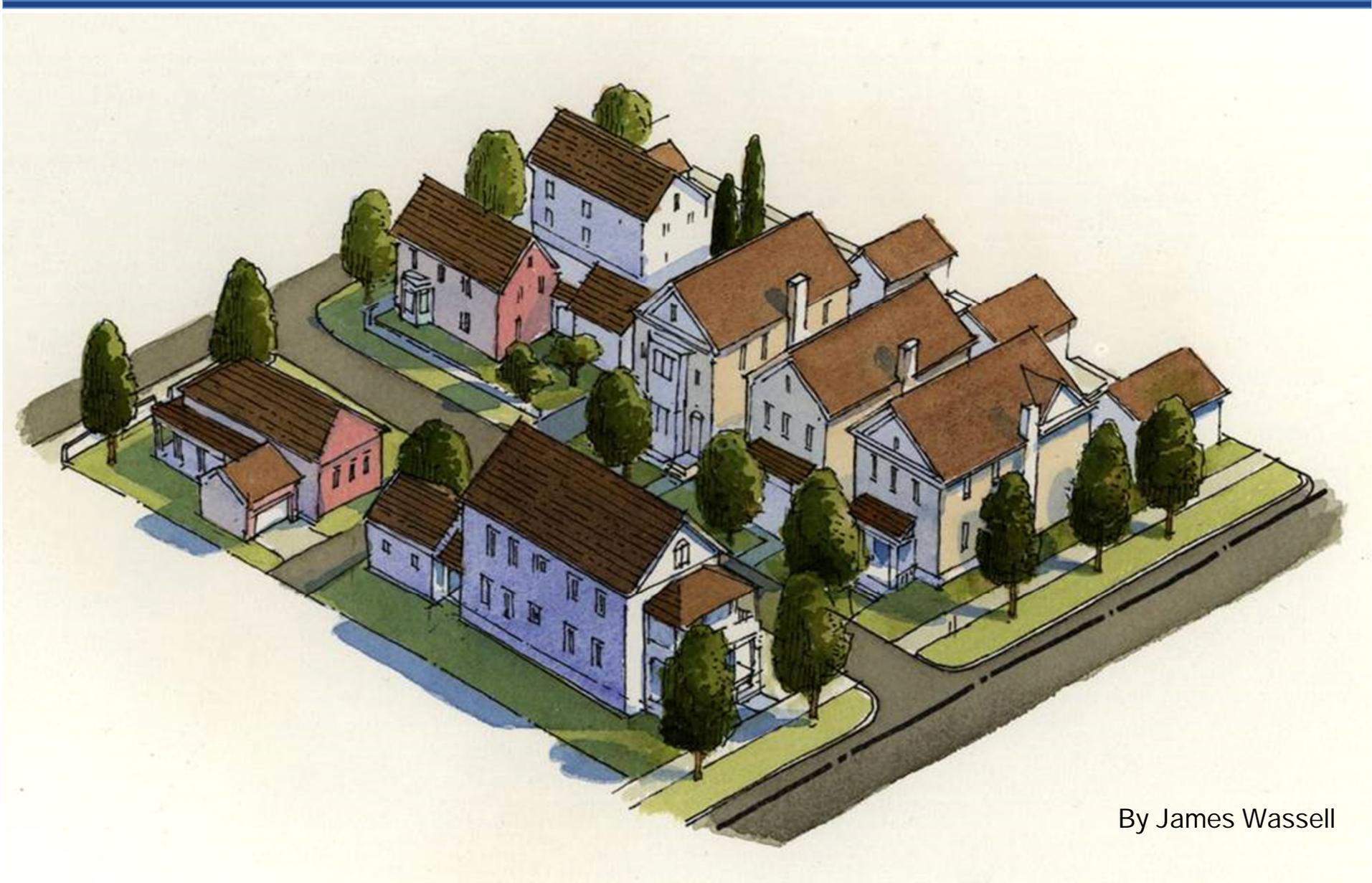
Transect Zones, Smart Code

T-3 Suburban



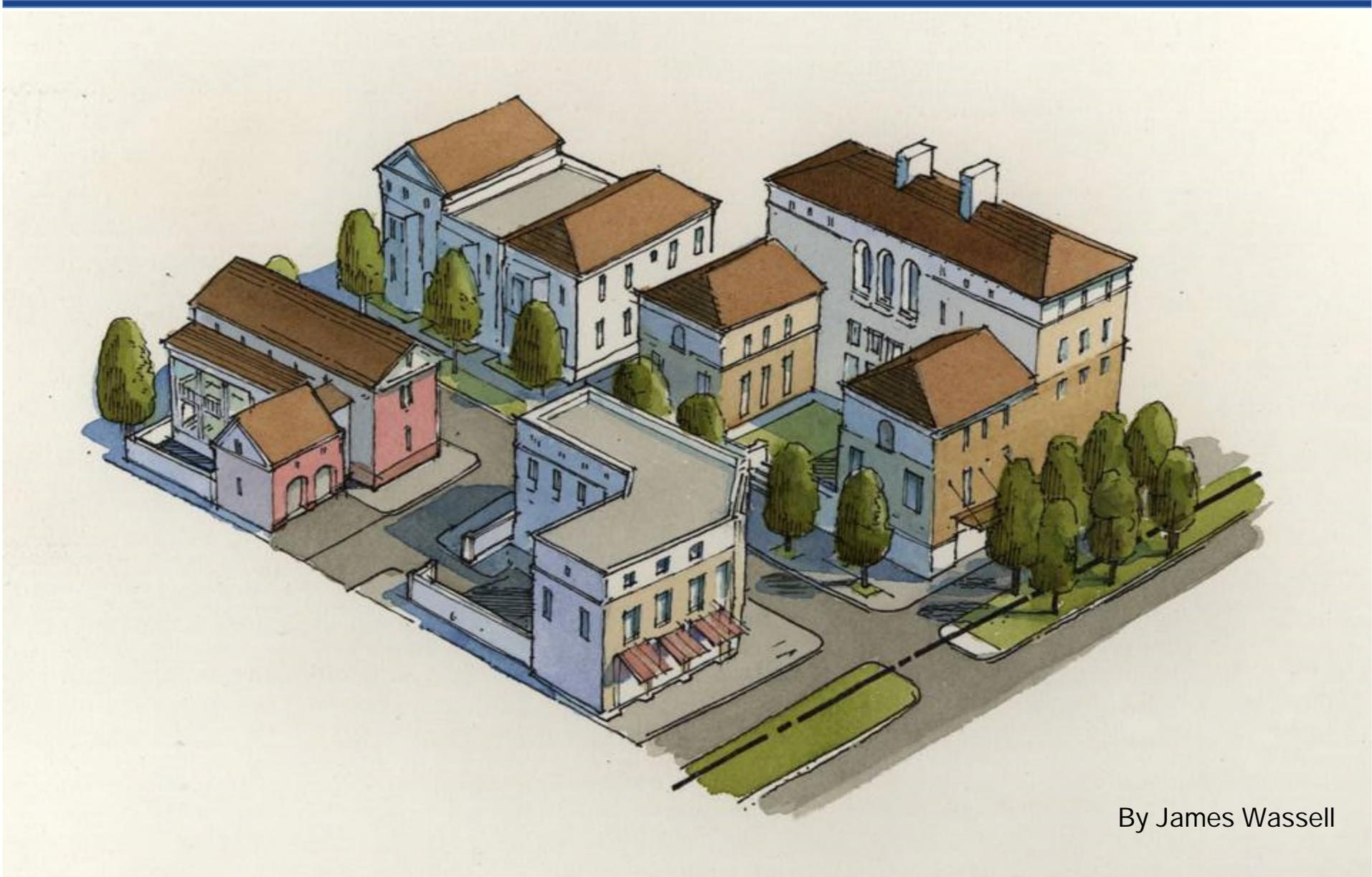
By James Wassell

T-4 General Urban



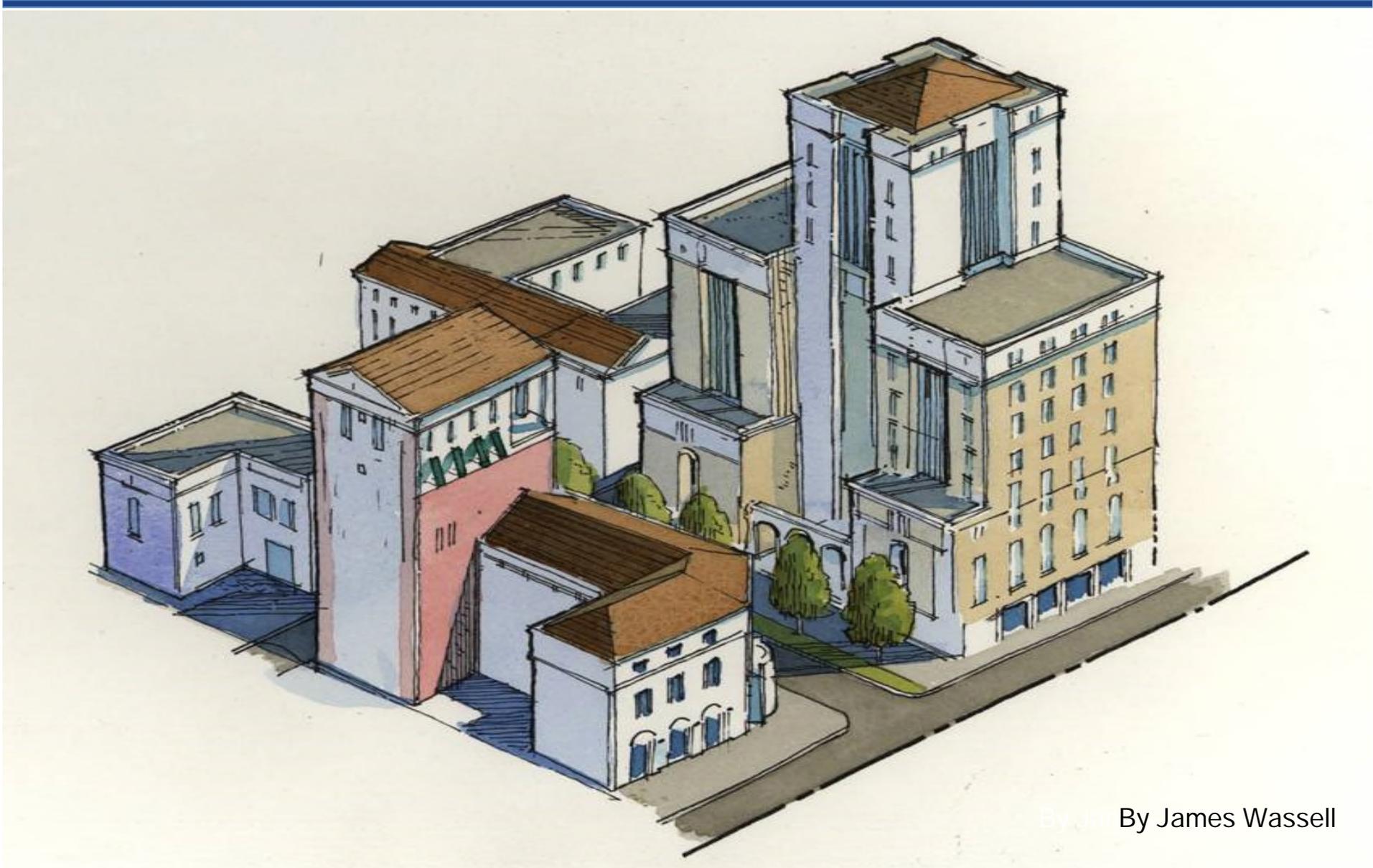
By James Wassell

T-5 Urban Center



By James Wassell

T-6 Urban Core



By Jar By James Wassell

Baldwin Park, Orlando, FL



- 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



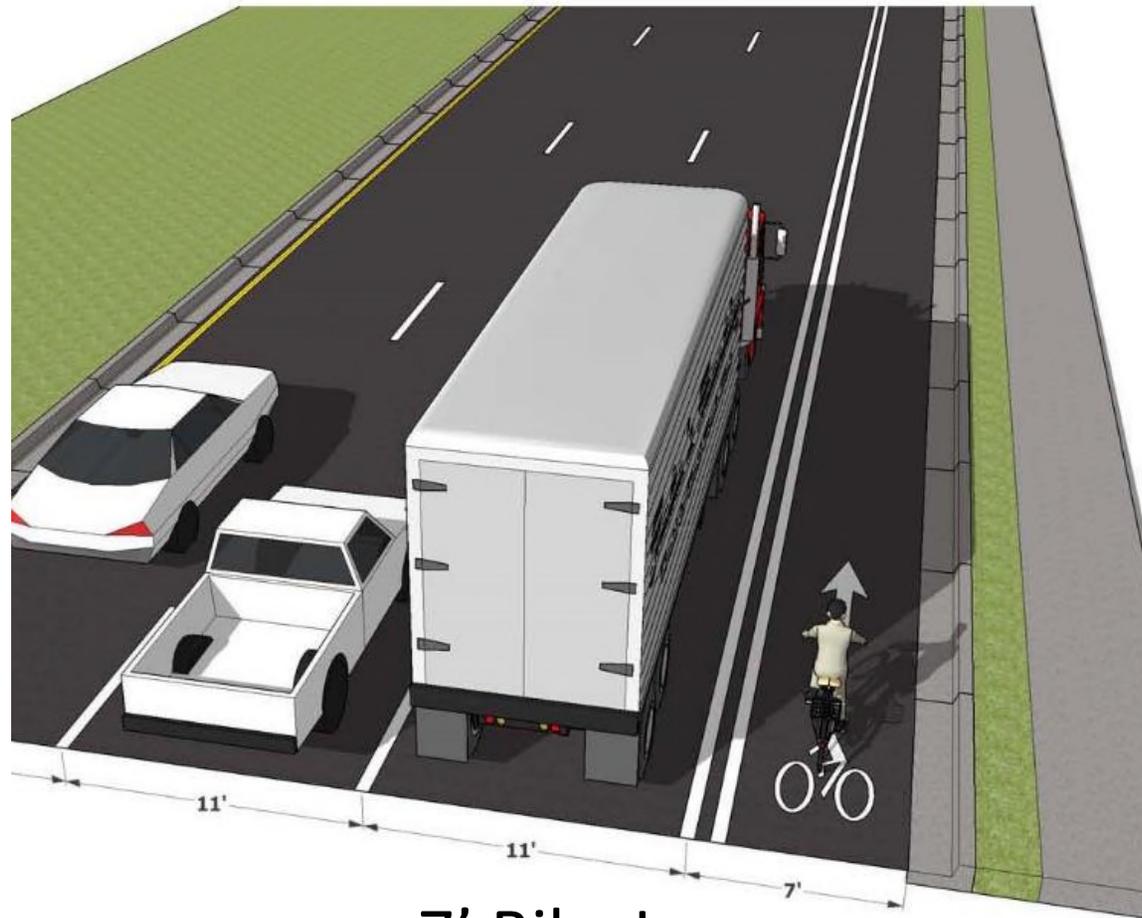
Winter Park, FL

Shared Travel Lane



Winter Park, FL

7' Buffered Bike Lane



7' Bike Lane

Side Path



Orlando, FL

Multi-Use Trail



Baldwin Park, FL

Making a Street Complete



Woodville Hwy, Woodville, 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

Making a Street Complete



Making a Street Complete



Making a Street Complete



Making a Street Complete



Making a Street Complete



Making a Street Complete



Making a Street Complete



Making a Street Complete



Making a Street Complete



Making a Street Complete





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



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 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
- Transit riders

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



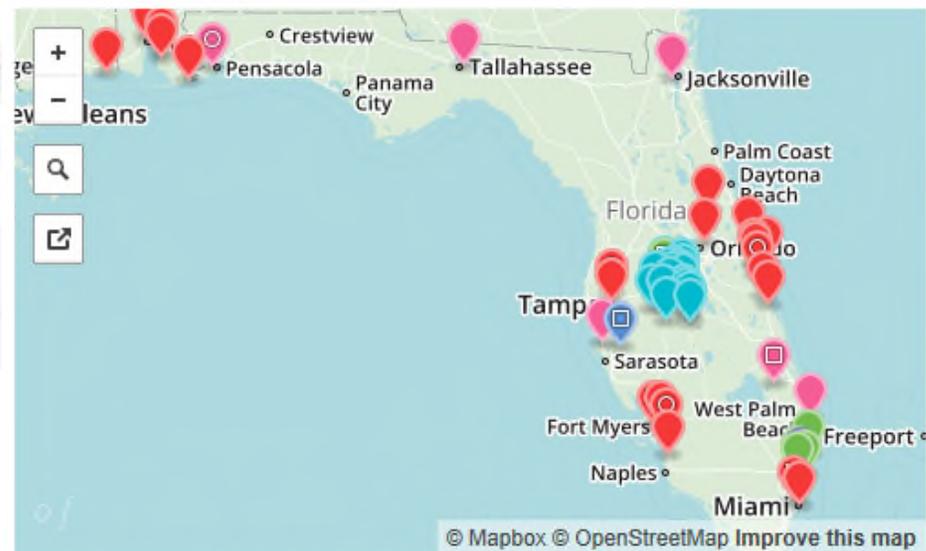
- Policy adopted in Sept 2014
- Requires “context-appropriate complete streets”
- Promotes economic development
- Addresses our safety problem with pedestrians and cyclists
- Lets FDOT “right size” our streets to fit their contexts
- Promotes more cost-effective solutions to transportation issues



Local Government Interest....

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

Interactive Map of Regional and Local Policies



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!
- Provides a "common vision" for the various offices
- Each office is responsible for its own part



Complete Streets Website

The screenshot shows a web browser window displaying the FDOT website. The browser's address bar shows the URL <http://www.dot.state.fl.us/rddesign/CSI/Default.shtm>. The website header includes the FDOT logo with the text "Centennial FDOT 1915 ★ 2015" and "Florida Department of TRANSPORTATION". A search bar is located to the right of the logo. The navigation menu includes links for Home, About FDOT, Contact Us, Maps & Data, Offices, Performance, and Projects. The main content area is titled "Roadway Design" and "Complete Streets Implementation". A large image shows a city street with a sidewalk, trees, and parked cars. Below the image, there are sections for "Topics" and "Welcome".

www.FLcompletestreets.com

Topics

FINAL Implementation Plan NEW!
Complete Streets Policy

Welcome

The Florida Department of Transportation (FDOT) Complete Streets Policy incorporates context-appropriate roadway designs that accommodate users of all ages and abilities, including cyclists, pedestrians, motorists, transit, and freight. FDOT recognizes 21st Century demographics, business practices and development.

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



SMART TRANSPORTATION GUIDEBOOK

*Planning and Designing Highways and Streets
that Support Sustainable and Livable Communities*



New Jersey Department
of Transportation



Pennsylvania Department
of Transportation

MARCH 2008

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**





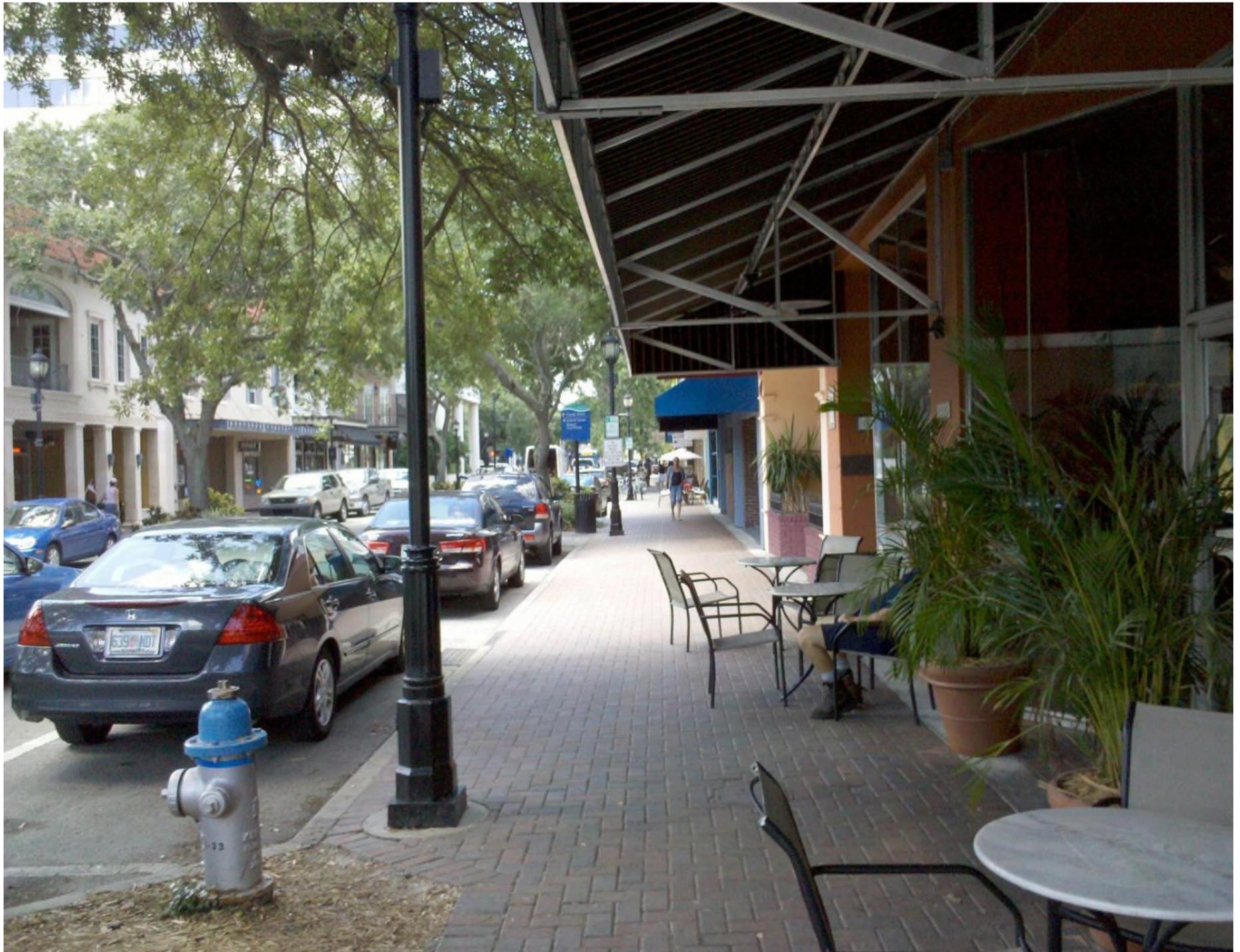




SR 50 in Sumter County





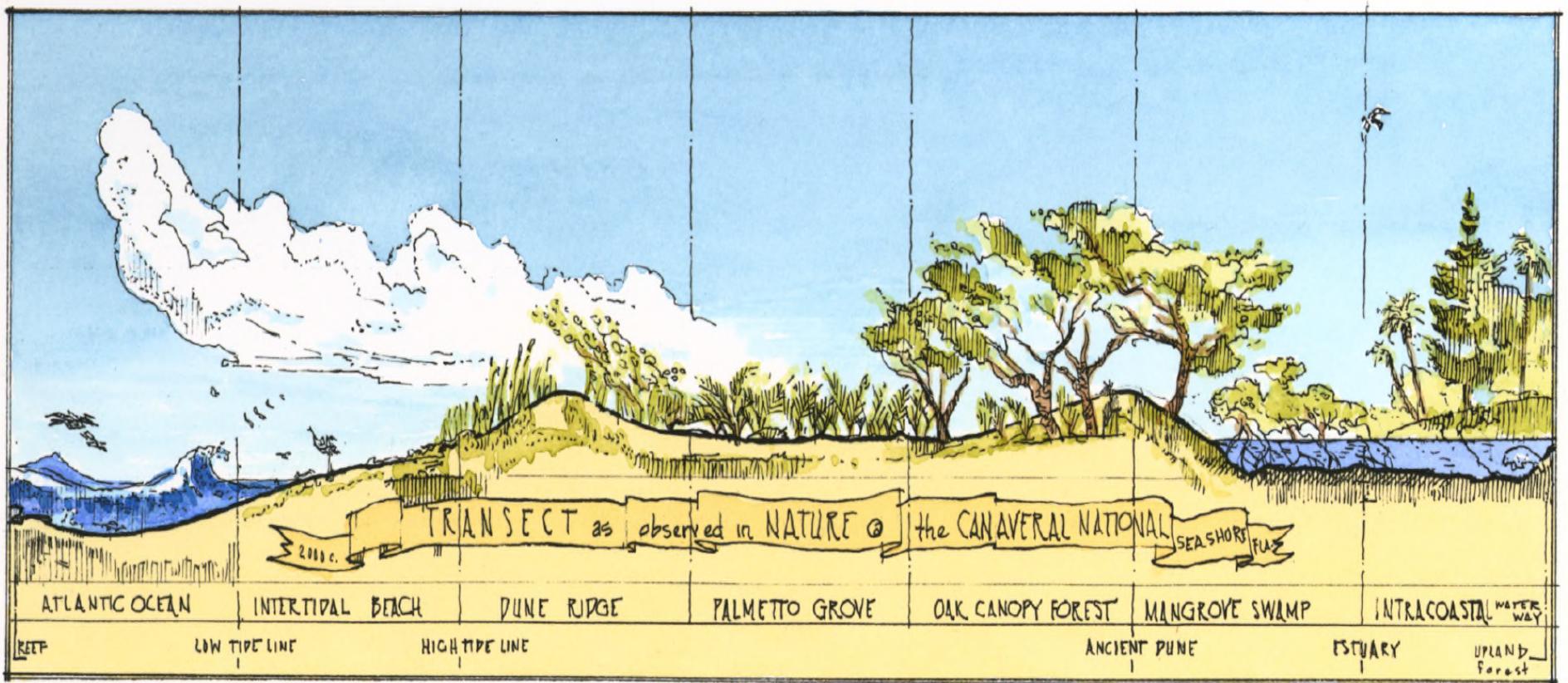






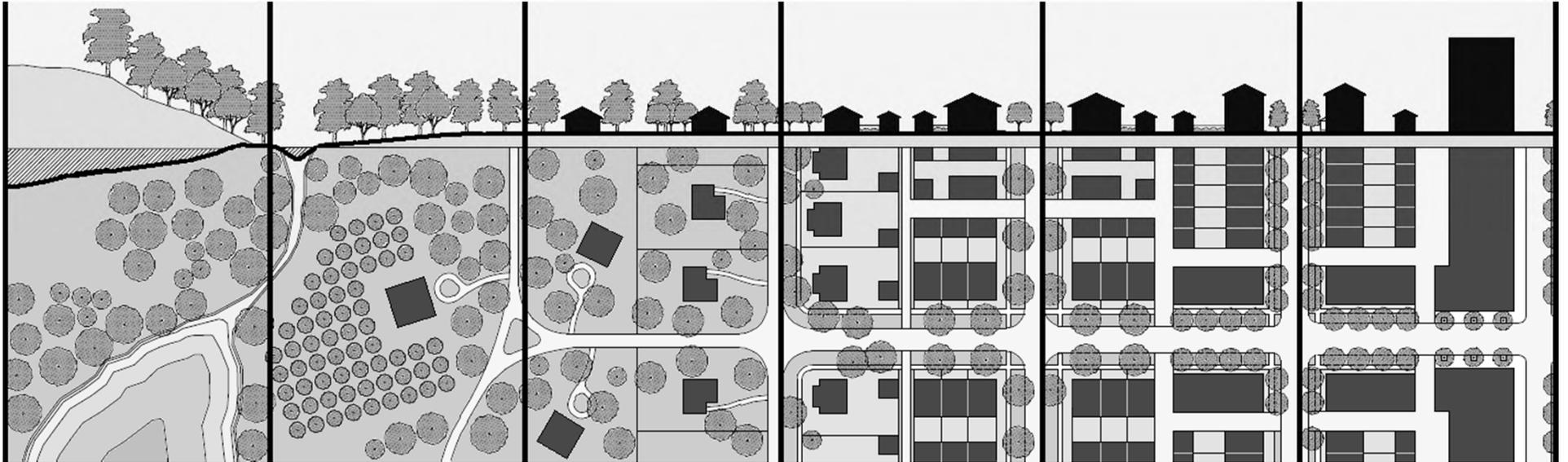


WU > TRQ

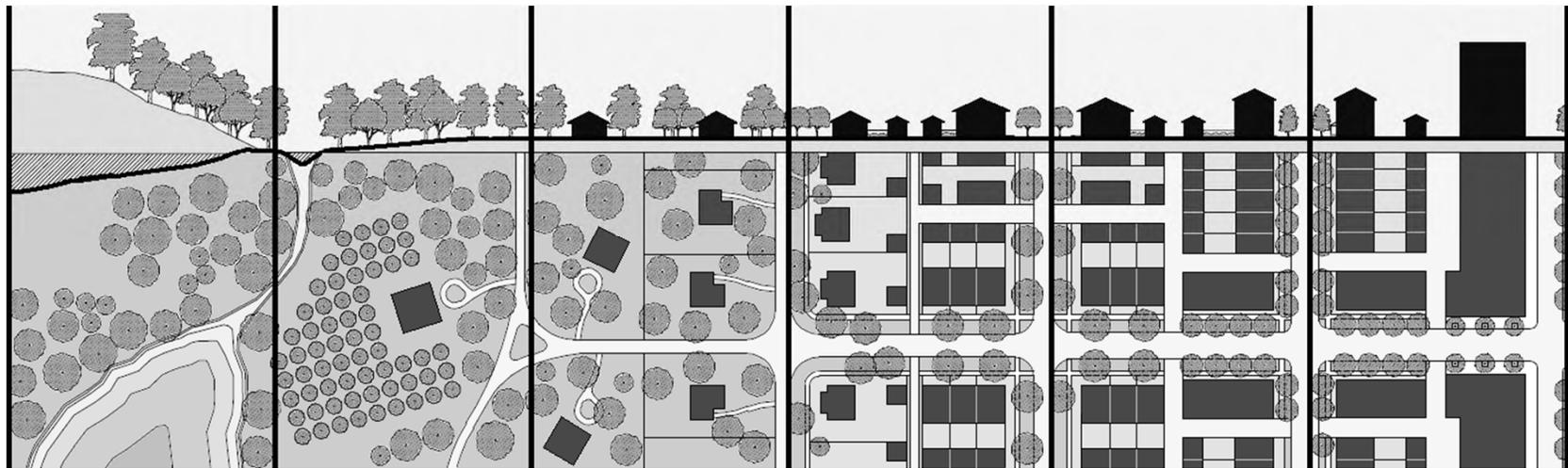


Title: A natural Transect Illustration

Source: James Wassell



ZHA, Inc.



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Least
Walkable
(least
urban)



Most
Walkable
(most
urban)

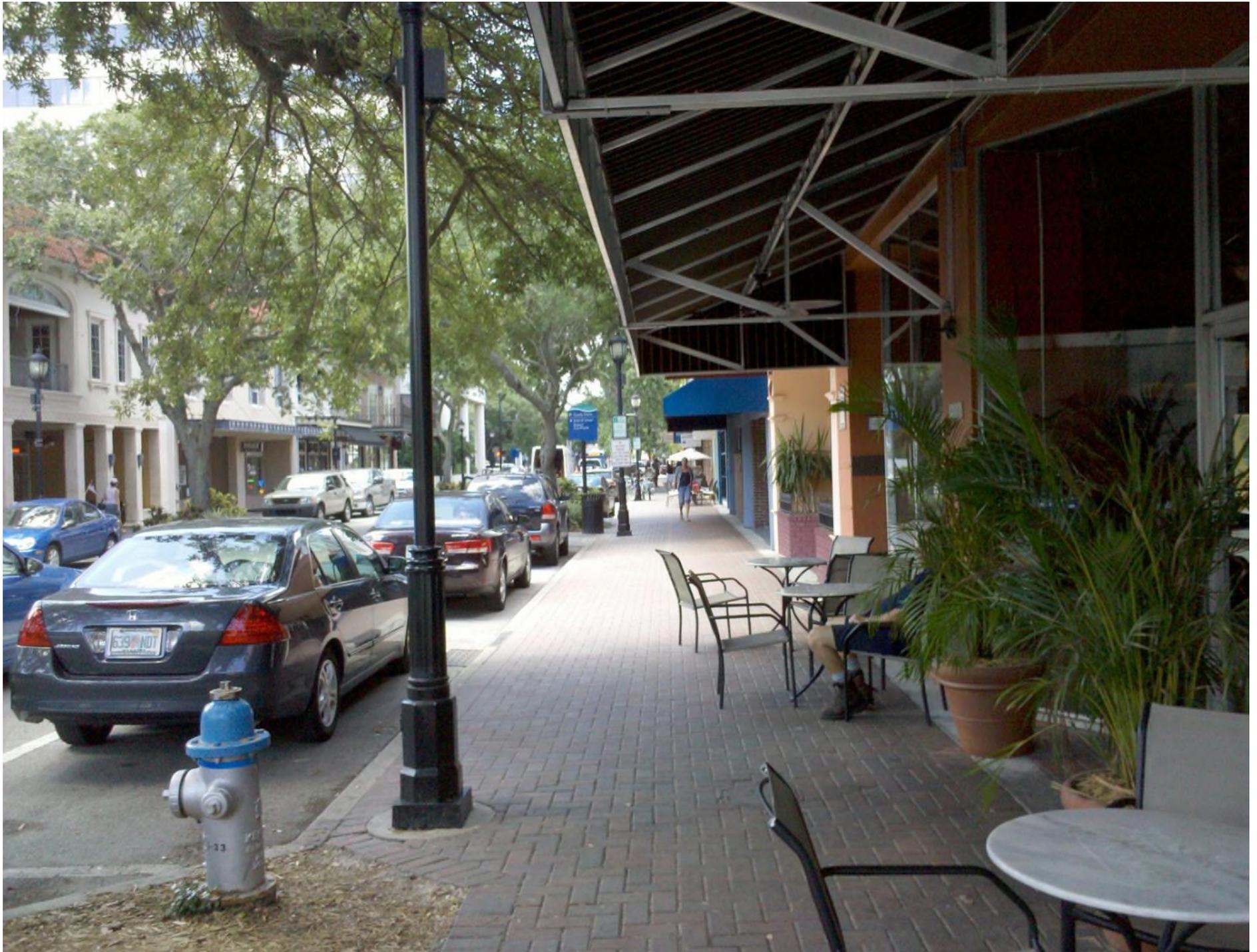




SR 50 in Sumter County











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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Transportation Design for Livable Communities

21-1



A1A in Stuart, FL

On local roads - 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

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Hollywood Blvd,
 Hollywood FL

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

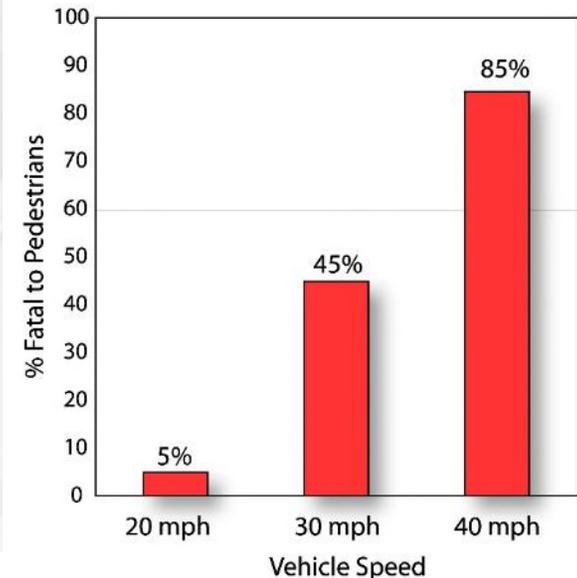
The application of design speed for TND communities is philosophically different than for conventional transportation and CSD communities. Traditionally, the approach for setting design speed was to use as high a design speed as practical.

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:

1. Has a compact, pedestrian-oriented scale that can be traversed in a five to ten-minute walk from center to edge.
2. 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.
3. 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.
4. Has building designs that emphasize higher intensities, narrow street frontages, connectivity of sidewalks and paths, and transit stops to promote pedestrian activity and accessibility.
5. 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.
6. 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.
7. 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.
8. Integrates at least ten percent of the developed area for nonresidential and civic uses, as well as open spaces.
9. 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.
10. 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.

Madonna Stella
STUDIO
Gallery • Studio • Destruction

Office Of Roadway Design
Tallahassee, FL



TRADITIONAL NEIGHBORHOOD DEVELOPMENT HANDBOOK

STATE OF FLORIDA
DEPARTMENT OF
TRANSPORTATION



2011

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