Implementing Complete Streets in Florida

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- We educate, advocate and negotiate to protect Florida’s high quality of life.
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Check out our Legislative Webpage!

Available at: www.1000friendsofflorida.org/2018-florida-legislative-session-custom/

This site is:

- Includes what passed and failed
- Includes Growth Management, Transportation and Conservation Legislation
- Includes links to the bills
Presenters
DeWayne Carver, AICP

- Florida Department of Transportation’s Complete Streets Program Manager.
- Manages the Department’s transition to context-based design, also known as “Complete Streets”, working with various offices throughout the department.
- Provides technical assistance based on his prior experience with walkable thoroughfare design, form-based coding, and city and regional planning.
- Prior to coming to FDOT, worked in the private and public sectors in real estate development, planning, transit, and university research.
- Master of Regional Planning Degree from the University of North Carolina, Chapel Hill, and a Bachelor of Arts degree from the University of Tennessee, Knoxville.
- Lives in Tallahassee, FL with his wife and children.
Billy Hattaway, P.E.

- Transportation Director for the City of Orlando
- Bachelor’s degree in Civil Engineering Technology from Wentworth Institute of Technology and MBA from Florida State University
- Former champion for both the Florida Department of Transportation’s Pedestrian and Bicycle Focused and Complete Streets Implementation Initiatives to improve pedestrian and bicyclist safety and comfort in the state of Florida.
- Also the Chair for Bike/Walk Central Florida, a non-profit organization dedicated to safety for pedestrians and bicyclists
- Professional experience includes transportation planning, street design, safety and traffic analysis for a wide variety of transportation projects including redevelopment, transit oriented development and master plan charrette projects to create walkable, bike and transit friendly communities
- Was recognized by Governing Magazine as a 2014 Public Official of the Year, and by the Florida Chapter of the Congress for the New Urbanism with the John Nolen award for his leadership on the Department’s bicycle/pedestrian safety and Complete Streets initiatives
DeWayne Carver, AICP
State Complete Streets Program Manager
Florida Department of Transportation
COMPLETE STREETS AND LOCAL GOVERNMENT

DeWayne Carver, AICP
State Complete Streets Program Manager
FDOT Roadway Design Office
FDOT Complete Streets Policy

- 100+ yrs. – select typical section elements based on needed capacity and urban/rural designation.
- 15 years ago “Context Sensitive Solutions” debuted.
- Transportation Design for Livable Communities
- Safety, Economic Development, Quality of Life

Policy adopted in Sept 2014
• FDOH State Health Improvement Plan
  o “Chronic diseases are largely preventable by engaging in healthy behaviors.”
  o “Most health care related costs in the U.S. are associated with chronic disease conditions.
  o “$147–$210 billion: Current per year health care cost estimates in the U.S. due to obesity. Obesity is one of the biggest drivers of preventable chronic diseases and health care costs.”
  o 20% of cancers are caused by being overweight and obese—often a result of unhealthy eating and lack of physical activity.”

FDOT Context Classification

- Defines Approach, Process, Expectations, Best Practices
- Complete description of context classifications

www.FLcompletestreets.com
Final manual posted November 1, 2017
Implementation date January 1, 2018.
Replaces Plans Preparation Manual
LAND USE & TRANSPORTATION STORY
Fundamentally, FDOT’s Complete Streets Approach is about linking land use & transportation decisions/investments.
It is about putting the right street in the right place.
What are the FDOT Context Classifications?

- C1 - Natural
- C2 - Rural
- C2T - Rural Town
- C3R - Suburban Residential
- C3C - Suburban Commercial
- C4 - Urban General
- C5 - Urban Center
- C6 - Urban Core
RELATIONSHIP TO FDOT DESIGN MANUAL

• On-street parking – may be acceptable in C2T, C4, C5, and C6 if supported by codes and regulations
• Bulb-outs – not required, but may be applied in appropriate contexts
• Street Trees – not required, but lower speeds permit closer placement to face of curb. Clear sight triangles still apply.
• Sidewalks – 6’ standard width, but wider in C5 and C6 where possible
• Application of FDM criteria also influenced by plans, codes, and regulations
RELATIONSHIP TO RRR

- RRR projects have a very short time frame (3 years or less)
- Criteria in FDM will be used to the extent possible
- Will not move curb or buy ROW
- Get ready for RRR – start early with your own planning
- Support RRR with other project funding (goes with)
- We may have to miss opportunities on early/current projects
WHO DETERMINES CONTEXT CLASSIFICATION?

• District Staff
  o District can assign staff to oversee context classification evaluation
  o Multiple offices/groups should be involved
  o On projects where FDOT currently coordinates with local governments, FDOT should continue to coordinate with local governments to calibrate context classification
  o Local form-based codes and zoning can be used to inform FDOT’s context classification determination

• Final determination is made by FDOT
WHERE DOES FDOT LOOK TO UNDERSTAND COMMUNITY VISION?
WHAT TO BRING TO CONTEXT CLASSIFICATION DISCUSSIONS

• Clear vision based on:
  • Recently permitted development projects
  • Programmed infrastructure plans for new local streets, bike and pedestrian facilities
  • Adopted plans vetted through community discussion
  • Land development code
  • Public participation process

• Familiarity with FDOT Context Classification system and design criteria
• An open mind!
Questions

www.FLcompletestreets.com

DeWayne Carver, AICP
dewayne.carver@dot.state.fl.us
“Complete Streets and Local Government”

Billy L. Hattaway, P.E. Transportation Director
Florida’s Challenges with Safety:

- Dangerous by Design 2016
  - 8 of top 10 in Florida
  - Total Crashes: 395,813 15% increase (2014-2016)
  - Injuries: 254,166 11% increase
  - Fatalities: 3,178 27% increase
  - Pedestrian Fatalities: 667 10% increase
  - Bicyclist Fatalities: 140 3% increase
How We Got Here

Fowler Ave, Tampa
Land Development Patterns

SOURCE: DPZ ARCHITECTS AND TOWN PLANNERS -
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 Patterns
The Implications of Speed

Hit by a vehicle traveling at 20 MPH: 9 out of 10 pedestrians survive.

Hit by a vehicle traveling at 30 MPH: 5 out of 10 pedestrians survive.

Hit by a vehicle traveling at 40 MPH: only 1 out of 10 pedestrians survives.
Roundabouts vs Traffic Circles
Roundabouts/Road Diets

- Roundabout Benefits
  - ~ 90% reduction in fatalities
  - ~ 76% reduction in injuries
  - ~ 35% reduction in all crashes
  - 75% More Efficient (less delay)
  - Maintenance and operations (no signals)

- Road Diet Benefits
  - 40-50% less crashes
Vehicle Conflicts

8 Conflict Points

32 Conflict Points
Pedestrian/Vehicle Conflicts

- 8 Conflict Points
  - Crossing (8)

- 16 Conflict Points
  - Crossing (16)
Remember to yield at all entrances. Traffic in the circle has the right-of-way.

Bike Lane Ends Here
Bicyclists have two options:
1. Merge with traffic and circulate as a vehicle
2. Mount the sidewalk and use crosswalks
Modern Roundabout/Road Diets
Orlando: A History of Leadership

- 1,100 Acres
- 250 Acres of Lakes
- **32 Street Connections**
- 18,000 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

Baldwin Park
Orlando: A History of Leadership

Central Avenue
Orlando: A History of Leadership

Central Avenue
City of Orlando’s Safety Initiatives

• Bike/Walk Central Florida
  • Best Foot Forward ($60,000/year)

• Vision Zero Network
  • Vision Zero Action Plan
  • Focus on High Crash Corridors/City/County/State

• National Complete Streets Coalition
  • Safe Streets Academy

• Street Network/Land Development Initiative
Orlando Stops:

- Reduction in Right Angle Crashes of over 65%.
- Reduction in all crashes of 11%.
- Tickets issued by OPD officers
- Dedication of fines directly to safety improvements for pedestrian/bike and other transportation safety efforts
Orlando Walks Sidewalk Program: targets priority areas: schools, parks, bus routes, shopping, and SunRail Stations. Completed 47 miles of sidewalk connections.


Pedestrian Crossing Enhancement Program: 3 rectangular rapid flashing beacon (RRFB’s) pedestrian crossings installed. Experiencing driver yield rates of up to 45%.
Midblock Crossings
Rectangular Rapid Flashing Beacons (RRFB)
High intensity Activated crossWalk “Beacon” (HAWK)
State and Local Partnership Context Classification System

C1  C2  C2T  C3R  C3C  C4  C5  C6
## Design Speed

<table>
<thead>
<tr>
<th>Context Classification</th>
<th>Allowable Design Speed Range (mph)</th>
</tr>
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<tbody>
<tr>
<td><strong>FDM</strong></td>
<td></td>
</tr>
<tr>
<td>C1 Natural</td>
<td>55-70</td>
</tr>
<tr>
<td>C2 Rural</td>
<td>55-70</td>
</tr>
<tr>
<td>C2T Rural Town</td>
<td>25-45</td>
</tr>
<tr>
<td>C3 Suburban</td>
<td>35-55</td>
</tr>
<tr>
<td>C4 Urban General</td>
<td>30-45</td>
</tr>
<tr>
<td>C5 Urban Center</td>
<td>25-35</td>
</tr>
<tr>
<td>C6 Urban Core</td>
<td>25-30</td>
</tr>
</tbody>
</table>

FDM – Florida Design Manual
## Lanes Widths for Travel Lanes

<table>
<thead>
<tr>
<th>Context Classification</th>
<th>Minimum Lane Widths (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FDM</strong></td>
<td></td>
</tr>
<tr>
<td>C1 Natural</td>
<td>12</td>
</tr>
<tr>
<td>C2 Rural</td>
<td>12</td>
</tr>
<tr>
<td>C2T Rural Town</td>
<td>11</td>
</tr>
<tr>
<td>C3 Suburban</td>
<td>10</td>
</tr>
<tr>
<td>C4 Urban General</td>
<td>10</td>
</tr>
<tr>
<td>C5 Urban Center</td>
<td>10</td>
</tr>
<tr>
<td>C6 Urban Core</td>
<td>10</td>
</tr>
</tbody>
</table>

25-35 mph
# Sidewalk Widths

<table>
<thead>
<tr>
<th>Context Classification</th>
<th>Standard Sidewalk Widths</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDM</td>
<td></td>
</tr>
<tr>
<td>C1 Natural</td>
<td>8 feet</td>
</tr>
<tr>
<td>C2 Rural</td>
<td>6 feet</td>
</tr>
<tr>
<td>C2T Rural Town</td>
<td>8 feet</td>
</tr>
<tr>
<td>C3 Suburban</td>
<td>6 feet</td>
</tr>
<tr>
<td>C4 Urban General</td>
<td>8 feet</td>
</tr>
<tr>
<td>C5 Urban Center</td>
<td>10 feet</td>
</tr>
<tr>
<td>C6 Urban Core</td>
<td>12 feet</td>
</tr>
</tbody>
</table>
City of Orlando’s Future Initiatives

- Context Classification of City Corridors
- Conversion of One-Way Streets
- Increased Use of Modern Roundabouts
- Expansion of Cycle Tracks/Trails
- Integrated Land Use/Corridor Studies
Robinson Street Corridor Study
Central Business District – Concept Development

Alternative 1B
Lake Eola District – Concept Development

Alternative 1B
Neighborhood District – Concept Development

Alternative 1
Milk District – Concept Development

Alternative 2B
Making a Street Complete
QUESTIONS?

Billy L. Hattaway, P.E. Transportation Director
billy.hattaway@cityoforlando.net
Questions and Answers
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