



# Complete Streets Design Guidelines







To provide County and municipal government practitioners and developers with design guidance to implement Complete Streets

Purpose



# Support



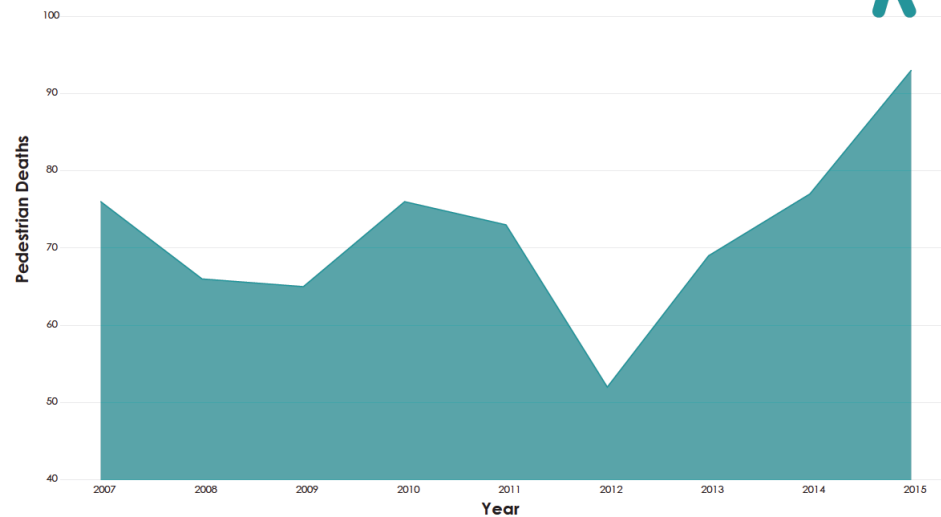




## Support

### Pedestrian Fatalities

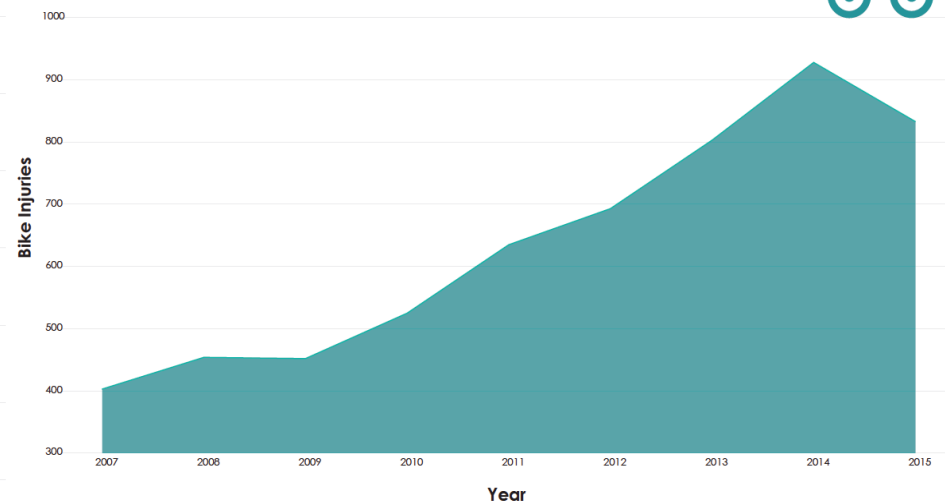
People Injured While Walking  
in Crashes with Motor Vehicles in Miami-Dade County  
2007-2015



Data: Florida DHSMV

### Bicyclist Injuries

People Injured While Biking  
in Crashes with Motor Vehicles in Miami-Dade County  
2007-2015



Data: Florida DHSMV



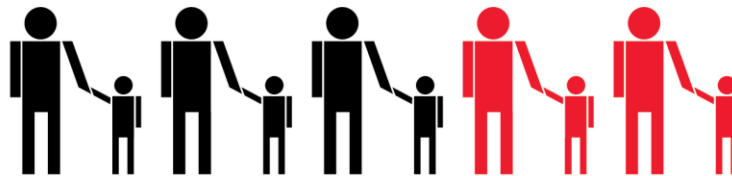
## Support

If hit by a person  
driving at:

% risk of person dying:



**10%**



**40%**



**80%**

FIGURE 2-1 FATALITY RATES BY IMPACT SPEED/MIAMI-DADE COMPLETE STREETS DESIGN GUIDELINES DRAFT

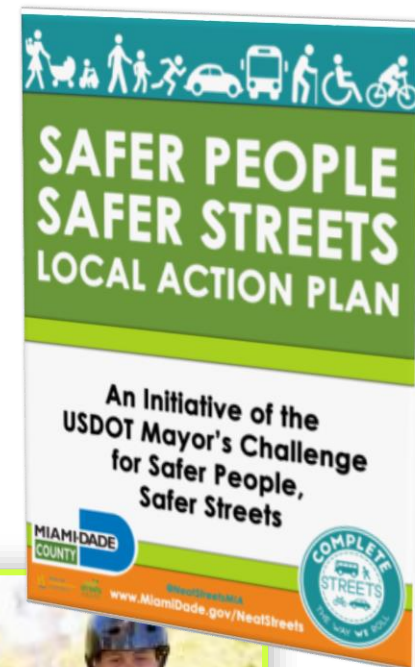


## Safer People, Safer Streets

**Vision:** A more livable Miami-Dade through the realization of healthier, safer streets accommodating all modes of transportation.

### Outcomes:

1. Measurable reduction in bicycle and pedestrian crashes countywide
2. Overall increase in bicycling, pedestrian and transit activity







## Outreach and Education





## SPSS Outcomes

- Specific action plan to guide implementation
- Commitment by all partners to focus on safety
- Winner of USDOT Award!!!!!!!!!!!!!!!!!!!! (September 16, 2016)
- **Complete Streets Design Guidelines are a direct outcome of the action plan**





## Complete Streets

- Designing for All Modes, All People, All Ages





## Complete Streets

- Examples in Miami-Dade



SW 27<sup>th</sup> Avenue - Before

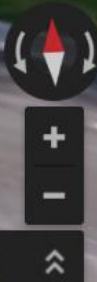
Google





## Complete Streets

- Examples in Miami-Dade



SW 27<sup>th</sup> Avenue - After

Google

# Complete Streets

- Examples in Miami-Dade



**Red Road – Before**



# Complete Streets

- Examples in Miami-Dade



**Red Road – After**



## Proactive Street Design

- Recognizes that the way we design our streets impacts the behavior of street users
  - **Safety of all users** as the fundamental theme
  - **Guide users** through physical and environmental cues
  - **Manage speed**
  - **Encourage** walking, bicycling, and public transit use
  - **Embrace the unique place** characteristics around the street







## Some of the Ways to Use Guidelines

- **As a template** for local jurisdictions to adopt and/or update their own engineering standards
- **As an engineering guide** to look up dimensions and criteria that provide for a Complete Streets approach
- **As a resource** for incorporating Complete Streets design guidance into roadway design projects
- **As a unifying theme** for incorporating Complete Streets elements into land development projects with a street design component
- **As a planning guide** for street typology

## Typology

- Complete Street designs should be context-sensitive
- A new set of Street Types and Land Use Types were developed to classify Miami-Dade's streets based on context and character
- Supplements the conventional functional classification system
- Recognizes that street types are not necessarily continuous along the entire length of a street





## Street Types

- Thoroughfare
- Feeder Road
- Civic Street
- Neighborhood Street
- Service Way
- Paseo

**TABLE 2-4 FEEDER ROAD CHARACTERISTICS**

<b>Typology Code</b>	FR
<b>Typology Name</b>	Feeder Road
<b>Description</b>	<ul style="list-style-type: none"> <li>■ Main roads</li> <li>■ Potential median</li> <li>■ Connects both urban centers and urban centers with neighborhoods</li> <li>■ Connects thoroughfares to civic streets</li> </ul>
<b>Through Lanes</b>	2-4
<b>Target Speed</b>	20-30 mph
<b>Block Length</b>	1/16 – 1/8 mile (300-660 ft)
<b>ADT (2-way)</b>	5-25k
<b>Flow</b>	1 or 2 way
<b>On-Street Parking</b>	Rare
<b>Examples</b>	<ul style="list-style-type: none"> <li>■ Miami Avenue</li> <li>■ W 60th Street</li> </ul>



## Land Use Types

- Urban Center
- Urban
- Residential Suburban
- Suburban
- Commercial/Mixed-Use
- Institutional
- Industrial
- Parks and Open Space
- Agriculture and Natural

TABLE 2-17 URBAN CENTER  
CHARACTERISTICS

Typology Code	UC
Typology Name	Urban Center
Characteristics	<ul style="list-style-type: none"><li>■ Moderate to high intensity unified areas</li><li>■ Concentration of different urban functions</li><li>■ Range from larger downtowns to urban centers</li><li>■ Include business, employment, civic, and/or high- or moderate-density residential</li></ul>
Typical Zoning Designations	
Typical Buildings	Buildings are tall and dense. Wide sidewalks provide space for both through movement and gathering/café space. Buildings abut the sidewalk.
Examples	<ul style="list-style-type: none"><li>■ Downtown Miami</li><li>■ Dadeland</li><li>■ Brickell</li></ul>





## Cross-Section Elements

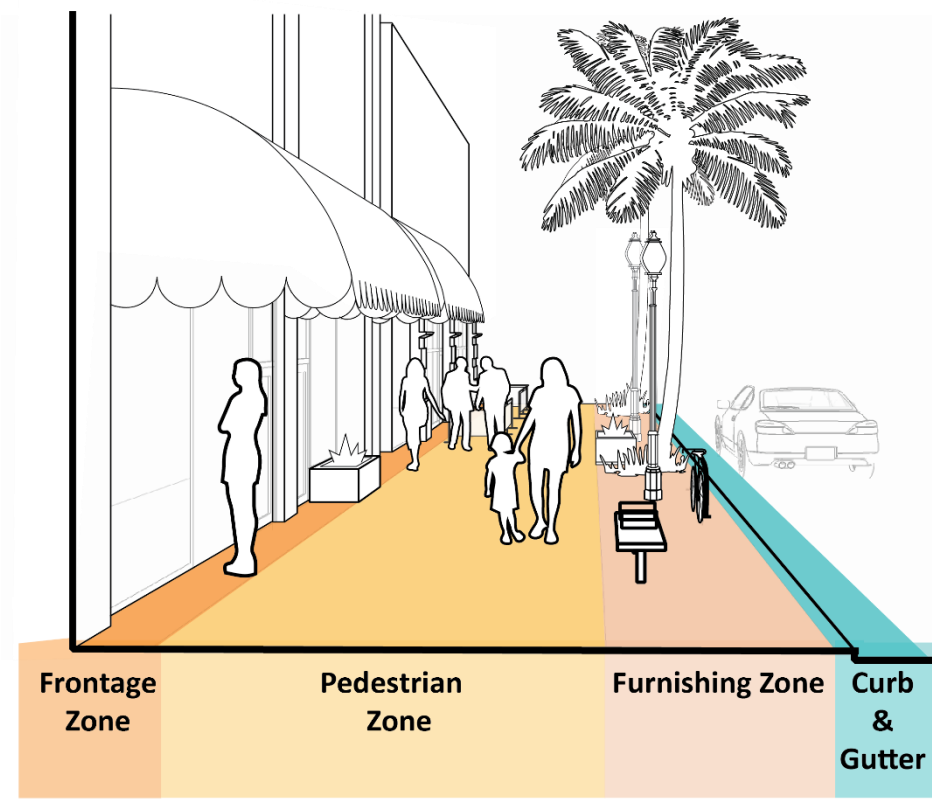


Figure 2-1 Cross-section elements



## Sidewalks

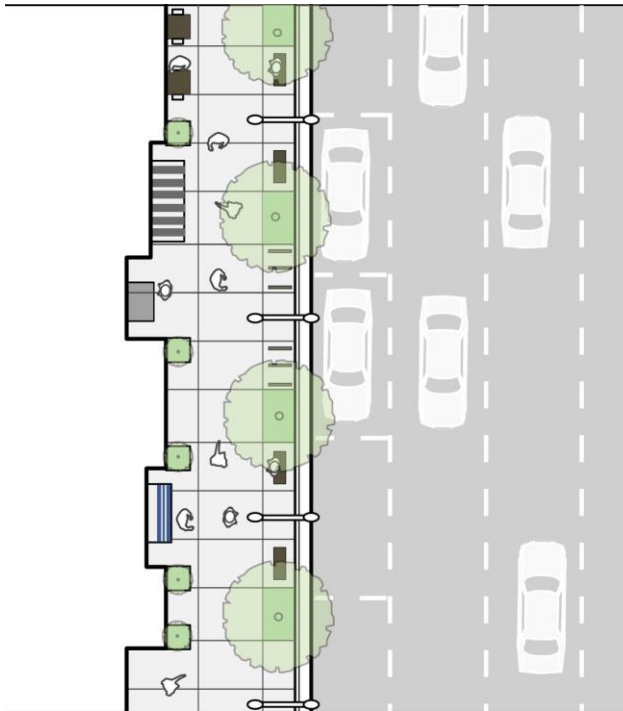
- Dimensions for each zone by Street Typology and Land Use
- Tree Spacing
- Lighting Spacing



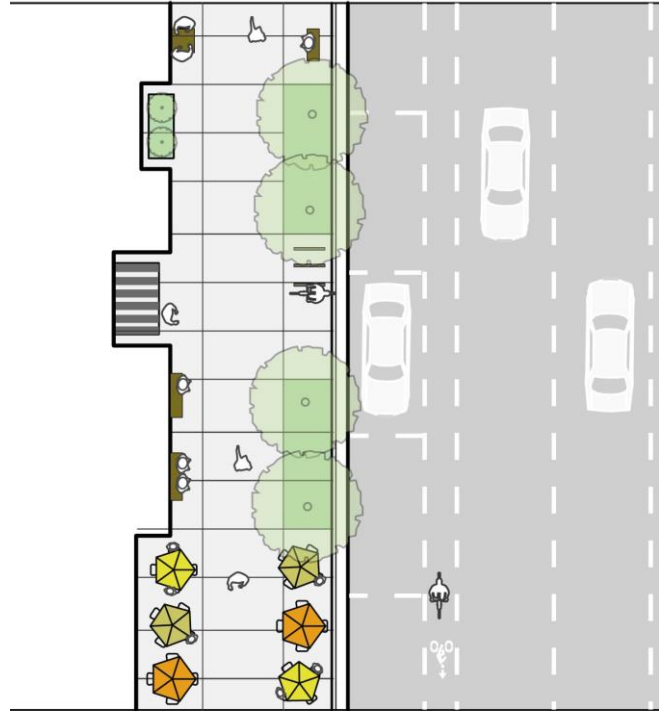




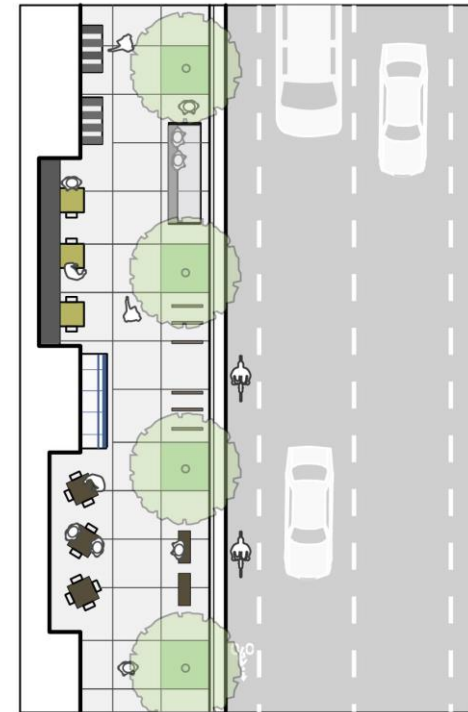
## Sidewalks



Civic Street in a Mixed-Use Context



Feeder Road in an Urban Center Context



Thoroughfare in a Mixed-Use Context



## Traveled Way – Lane Widths

TABLE 4-2 RECOMMENDED LANE  
WIDTHS BY LANE TYPE

Lane Type	Recommended Width
Through Lane	10'
Bus/Truck Lane	11'
Turn Lane	10'
Parking Lane	8'







## Traveled Way – Transit & Bicycle Facilities

TABLE 4-3 RECOMMENDED BIKE  
FACILITY DIMENSIONS

Element	Recommended		Minimum	
	Lane	Buffer	Lane	Buffer
Cycle Track	7'	3' (next to parked cars)	5'	3' (next to parked cars)
Two-way Cycle Track	12'	3' (next to parked cars)	8'	3' (next to parked cars)
Raised Cycle Track	6.5'	1' (for vertical element) 3' (next to parked cars)	5'	1' (for vertical element) 3' (next to parked cars)
Buffered Bike Lane	4'	3'	4' 4"	20"
Bike Lane	6'	n/a	4'	n/a
Contra-Flow Bike Lane	6'	3'	5'	6"



TABLE 4-4 RECOMMENDED TRANSIT  
FACILITY DIMENSIONS

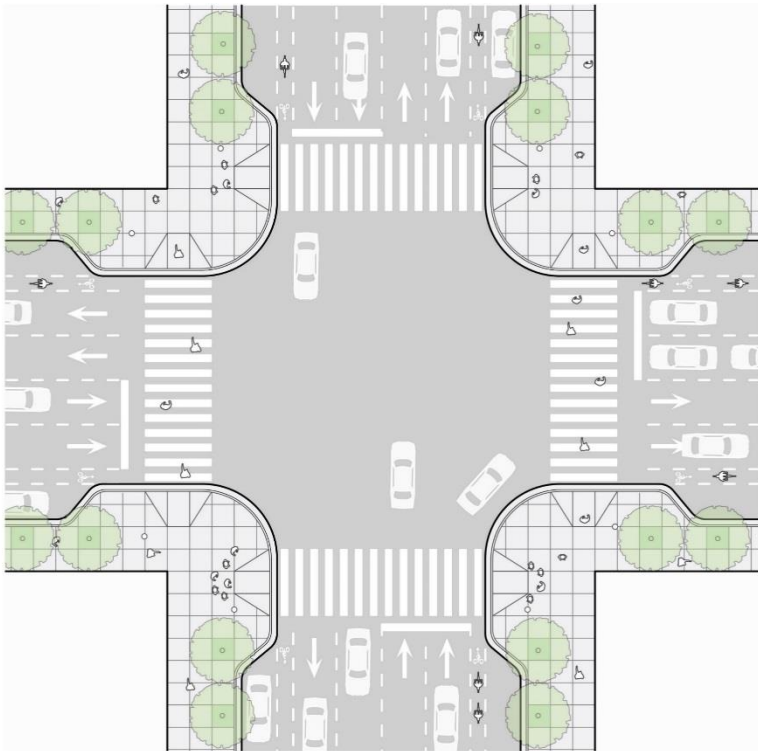
Lane Type	Minimum Recommended Width
Curb Lane	11'
Offset Lane (bulb-out stations)	10'
Dedicated Median lane	11'
Combined Bike/Bus Lane	12'



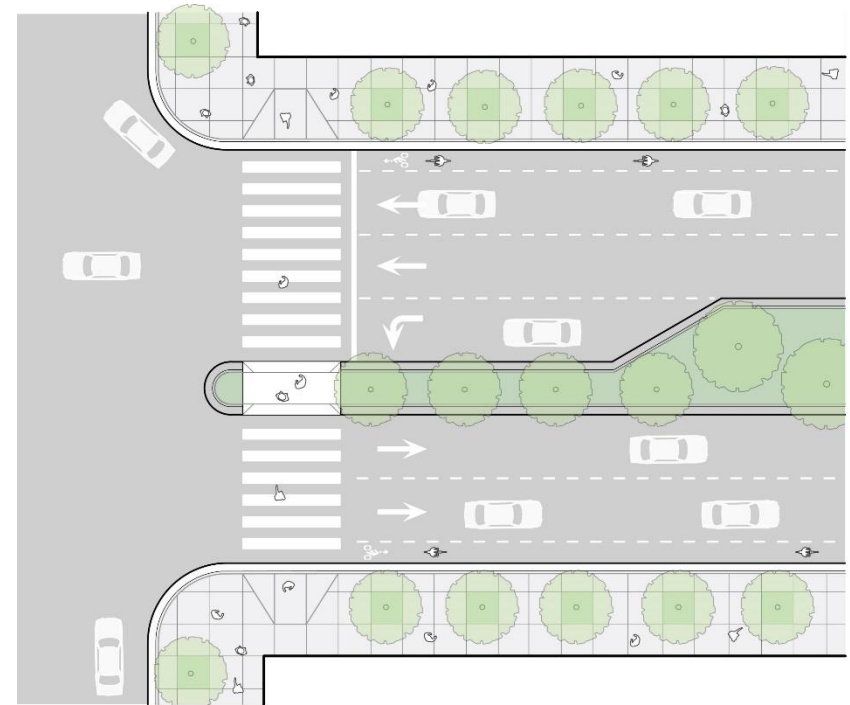


## Intersections

- Intersections should be efficient for all users



INTERSECTION WITH CURB EXTENSIONS



MEDIAN NOSE / PEDESTRIAN REFUGE





## Intersections

- Curb radius design should be context specific

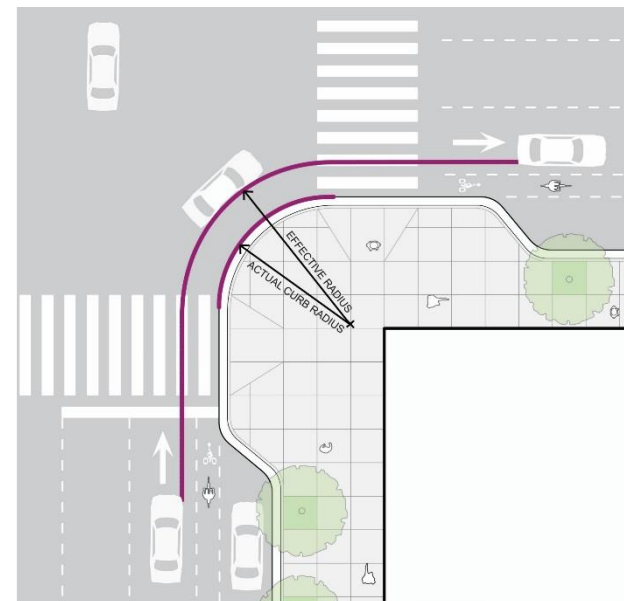
TABLE 5-1 RECOMMENDED CURB RADII

	Land Use Context	Actual Curb Radius	Effective Curb Radius (the vehicular path) <sup>(2)</sup>
Minimum <sup>(1)</sup>	All intersection corners without vehicle turns	5'	N/A
	UC, UR	5'	10'
	RS, MC, I, P	15'	20'
	IN, AN	30'	35'
Maximum	All intersection corners without vehicle turns	5'	N/A
	UC, UR	20'	25' <sup>(3)</sup>
	RS, MC, I, P <sup>(4)</sup>	30'	35'
	IN, AN <sup>(5)</sup>	45'	50'

Notes:

(1) Minimum is generally desirable except where circumstances warrant a wider curb radii.

(2) Bicycle lanes and parking lanes may increase the effective curb radius.



EFFECTIVE VS ACTUAL CURB RADII



## Intersections

- Intersections can be calmed







## Next Steps

- Guidelines were submitted to FDOH to meet grant requirements – End of January 2017
- County prepares to adopt – February-April 2017
- Municipalities prepare to adopt and/or tailor to their own communities – Spring 2017

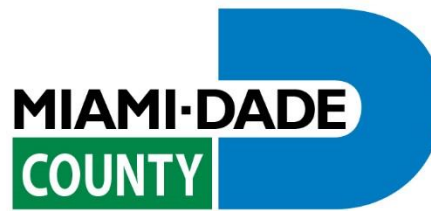
[www.neatstreetsmiami.com](http://www.neatstreetsmiami.com)



Thank you!



# Complete Streets Design Guidelines



Kimley»Horn