Pedestrian Safety In Orlando

A Local Perspective

CITY OF ORLANDO

ORLANDO HISTORY

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ORLANDO HISTORY

- Fort Gatlin established 1838
- Originally named Jernigan after 1st permanent settler
- Changed to Orlando in 1856
- Incorporated in 1875 – 85 residents

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Intersection of Pine St and Orange Ave - 1885

Eola Park - 1915

ORLANDO NOW

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ORLANDO NOW

- Land Area in 2017 – 118.50 square miles
- Population in 2017 – 279,133
- Orlando's population has grown by over 93,000 since 2000 – a 50% increase!
- Orlando International Airport surpassed 72 million passengers 2017

- Amway Center
- Dr. Phillips Performing Art Center
- UCF / Valencia Downtown Campus within Creative Village
- Camping World Stadium
- Orlando City Soccer

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ORLANDO NOW

- 116 City Parks
- 360 miles of urban trails, bike lanes & signed routes
- 37 miles of new sidewalk through Orlando Walks
- SunRail – stress-free commuting since 2014
- LYMMO – downtown circulator since 1997
- Bike beltway in progress
- Bikeshare

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Mayor Dyer's Key Priorities

- **Keep our community safe**
- Generate high paying jobs
- **Become one of the most sustainable cities in America**
- **Provide mobility and transportation options**
- Create a city for everyone
- End homelessness

Transportation 2040 Goals

- >50% of daily trips by carpool, transit, bicycle, or walking
- Double miles of “complete streets” (38 mi)
- 100% reduction of pedestrian & bike fatalities

DANGEROUS BY DESIGN

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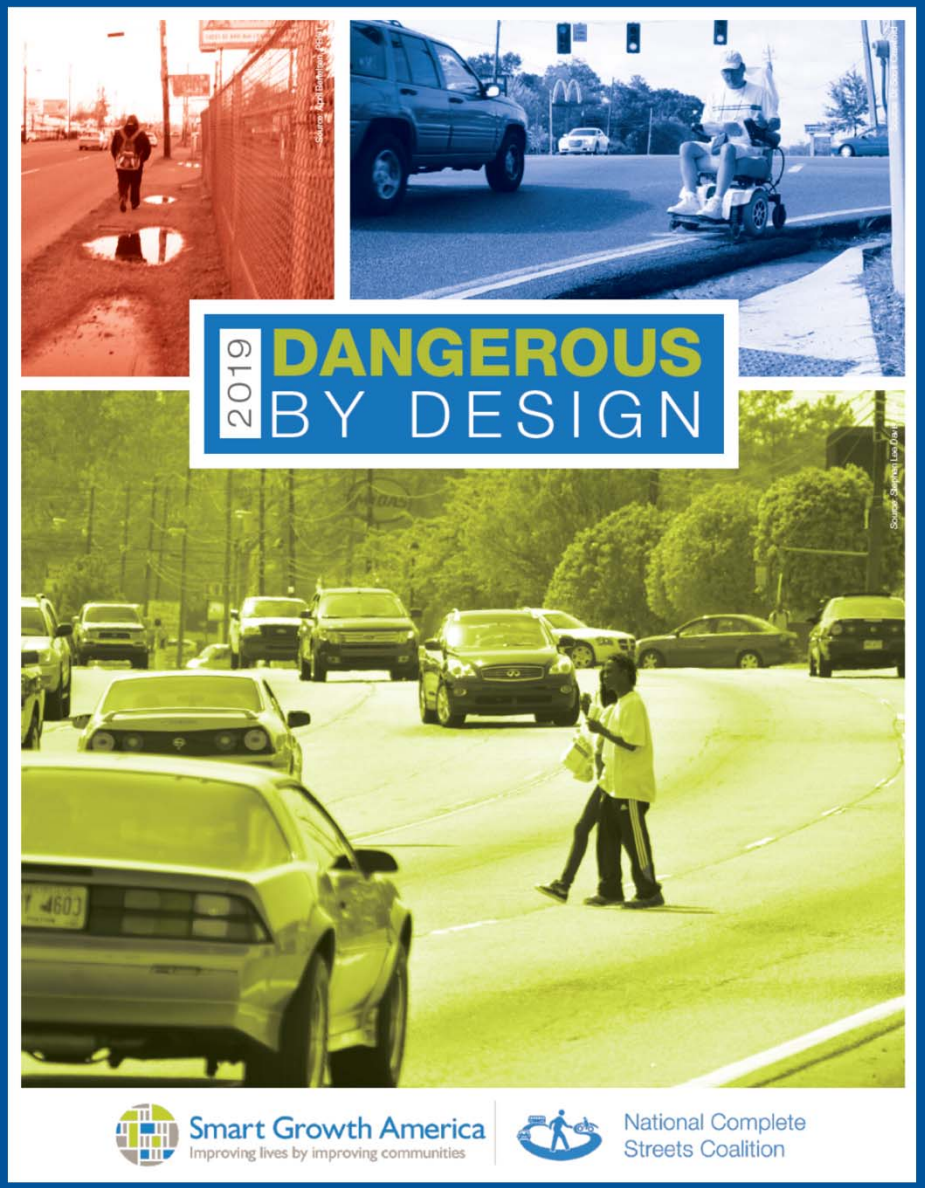
DANGEROUS BY DESIGN



- Reports by Smart Growth America - 2011, 2014, 2016, and 2019
- Number of pedestrians killed continue to increase nationwide
- 49,340 pedestrians killed between 2008 and 2017
- https://smartgrowthamerica.org/dangerous-by-design/

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DANGEROUS BY DESIGN

- Reports 2011, 2014, 2016, and 2019
- 8 of Top 10 in Florida
- PDI based on pedestrian deaths per 100,000 and percentage walking trips
- PDI increased from 2016

2019 Rank	Metro Area	Pedestrian Deaths (2008-2017)	2019 Pedestrian Danger Index
1	Orlando-Kissimmee-Sanford, FL	656	313.3
2	Deltona-Daytona Beach-Ormond Beach, FL	212	265.4
3	Palm Bay-Melbourne-Titusville, FL	165	245
4	North Port-Sarasota-Bradenton, FL	194	234.6
5	Lakeland-Winter Haven, FL	162	230.9
6	Jacksonville, FL	419	226.2
7	Bakersfield, CA	247	217.7
8	Cape Coral-Fort Myers, FL	148	217
9	Tampa-St. Petersburg-Clearwater, FL	900	204.7
10	Jackson, MS	111	192

SAFETY INITIATIVES

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SAFETY INITIATIVES

- Vision Zero
- Partnerships
- Projects & more
- Other considerations

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VISION ZERO

Orlando's Vision Zero Mission is to eliminate traffic deaths and serious injuries within the City by 2040.

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VISION ZERO ORLANDO

VISION ZERO

VISION ZERO ORLANDO

- No traffic death is acceptable
- Safe roadways and safe speeds for prevention
- Data driven approach
- Foundation to continually improve safety of the City's transportation system

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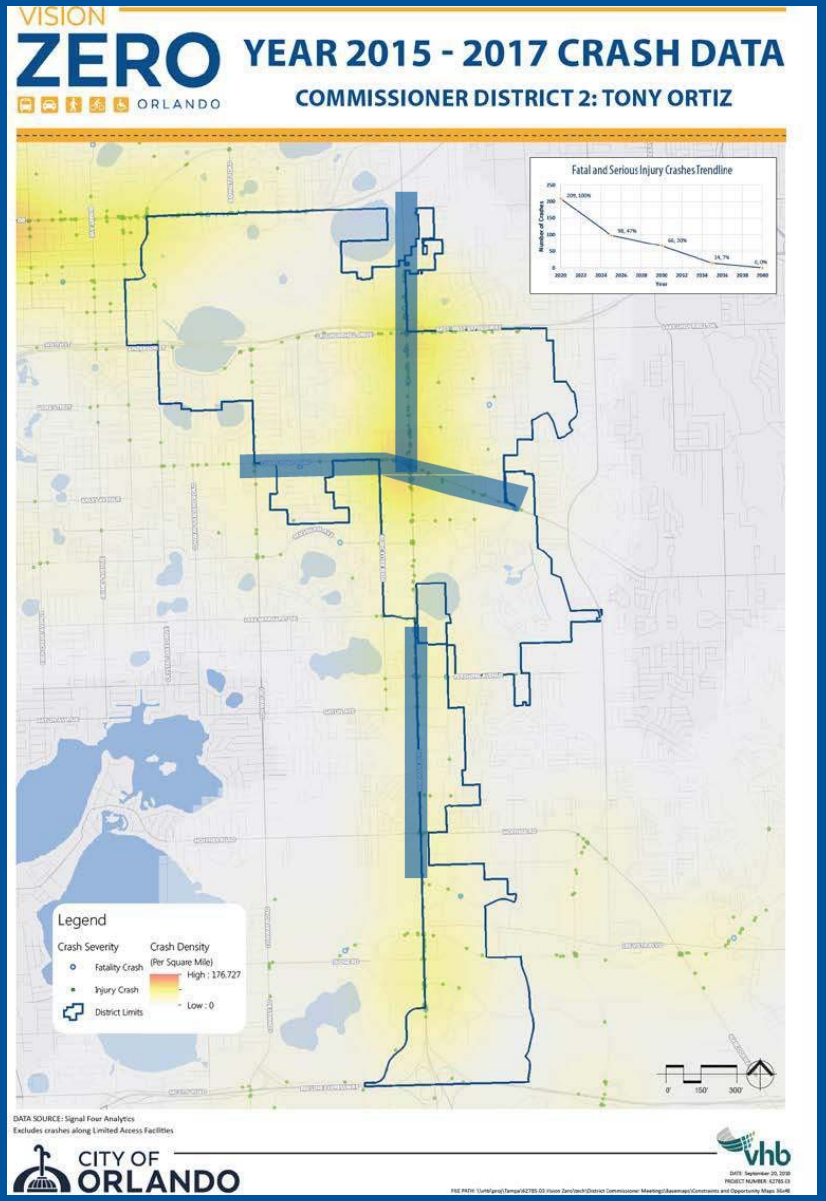
Framework: Goals, Objectives, Action Strategies and Performance Metrics for Action Plan

GOAL 1: ADOPT A SAFE SYSTEMS APPROACH IN ROADWAY DESIGN, OPERATIONS, AND MAINTENANCE

OBJECTIVE	**Objective 1.A.**			**Objective 1.B.**				**Objective 1.C.**		
	Identify and implement proven countermeasures to address crash types that most often lead to fatalities and serious injuries in Orlando			Prioritize sites where systemic safety treatments should be implemented and implement the countermeasures/interventions				Modify the land development code and/or policies to include safe multimodal accommodations, specifically target speeds		
ACTION STRATEGY	Over the course of 5 years, build a toolbox of targeted countermeasures and/or interventions applicable to recorded crash types	Provide staff training on the implementation of countermeasures identified in the toolbox	Implement identified countermeasures and/or intervention strategies identified in the toolbox	Develop priority site selection criteria that 1) awards additional points for investments in block groups with transportation disadvantaged populations; and 2) identifies where immediate improvements can be made at low to modest cost	Develop annual list of priority sites for implementation of countermeasures or interventions based on the results of the selection criteria and process	Map priority sites and investments	Implement countermeasures and interventions at identified priority sites	Work to enact policy changes that support safety improvements being at identified priority sites (i.e. no right turn on red, speed reductions, LOS reductions)	Review and identify street design guidelines and policies requiring modification to incorporate safe multimodal accommodations	Update land development regulations to support safe access and circulation
PERFORMANCE METRIC	Completed/Not Completed	100% of staff trained in applying countermeasures or interventions	# of times a countermeasure or intervention is implemented	Completed/Not Completed	% change in reported crashes at priority sites	Completed/Not Completed	# of priority sites improved	# of priority sites improved	Completed/Not Completed	Completed/Not Completed

Crash Data

- **349 total crashes**
- **Semoran North**
  - 119 crashes
  - 34% of all crashes
- **Curry Ford**
  - 89 crashes
  - 25% of all crashes
- **Semoran South**
  - 69 crashes
  - 20% of all crashes



Orlando's Vision Zero Goals

- Adopt a safe systems approach in roadway design, operation and maintenance

- Increase everyone's understanding of the leading causes of crashes resulting in fatalities and serious injuries

- Support law enforcement efforts to eliminate behaviors leading to fatal and serious injury crashes

- Demonstrate continuous progress toward Vision Zero

- Improve access and travel time to Level 1 Trauma Center and other hospitals

- Prioritize investments and programs in communities of concern

Best Foot Forward

PARTNERSHIPS

- Started by Bike/Walk Central Florida
- Community-wide Coalition to save lives
- Engineering, Education, Enforcement *and Evaluation*

Best Foot Forward
for pedestrian safety
YIELD

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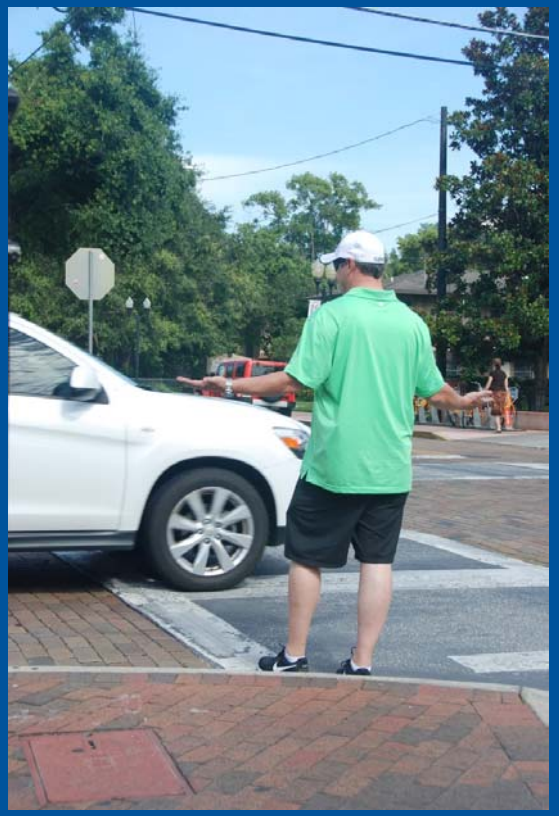
Best Foot Forward

- Extensive public & media outreach
- High visibility, targeted enforcement



Best Foot Forward
for pedestrian safety

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BFF – Tracking Yielding

PARTNERSHIPS

2018		Crosswalk Details				Enforcement		Yield Rates							
CITY OF ORLANDO	No. Years	Posted Speed (mph)	2016 Crashes	2017 Crashes	2018 Crashes	Warnings since 2012	Citations since 2012	2012 AVG	2013 AVG	2014 AVG	2015 AVG	2016 AVG	2017 AVG	2018 AVG	2012-2018 AVG
E. Rollins St. & Camden Rd	7	30	4	8	7	108	20	40%	69%	43%	54%	53%	55%	58%	53%
Virginia Dr & Urban Trail	4	30	8	10	11	10	16		38%	55%			79%	85%	64%
Lake Underhill Rd & Palmer St	6	35		2	3	60	56		19%	36%	49%	81%	69%	62%	53%
Edgewater Dr & Shady Lane Dr	5	30	9	11	8	66	56			26%	25%		53%	70%	44%
N. Summerlin Ave & Washington St (Thornton Park)	1	25		23	15	0	3							85%	85%
Metrowest Boulevard & Eagle's Nest Elementary	1	25		4	4	1	1							42%	42%
Mills Ave & E. Harding St	1	25		3	10	5	1							51%	51%
Columbia St & Kuhl Ave (Orlando Health)	1	25		14	15	2	8							45%	45%
Pine Street, East Rosalind Ave (302 E. Pine Street)	1	25		22	18	2	2							84%	84%
Upper Park Rd & Oak St (Baldwin Park-Glenridge Middle)	1	25		1	0	0	0							93%	93%

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http://bikewalkcentralflorida.org

PILOT PROJECTS

Safe Streets Academy

- Created by National Complete Streets Coalition
- Orlando was one of three cities chosen in 2017
- Technical assistance provided through Smart Growth America
- Curry Ford Demonstration Project (2018)

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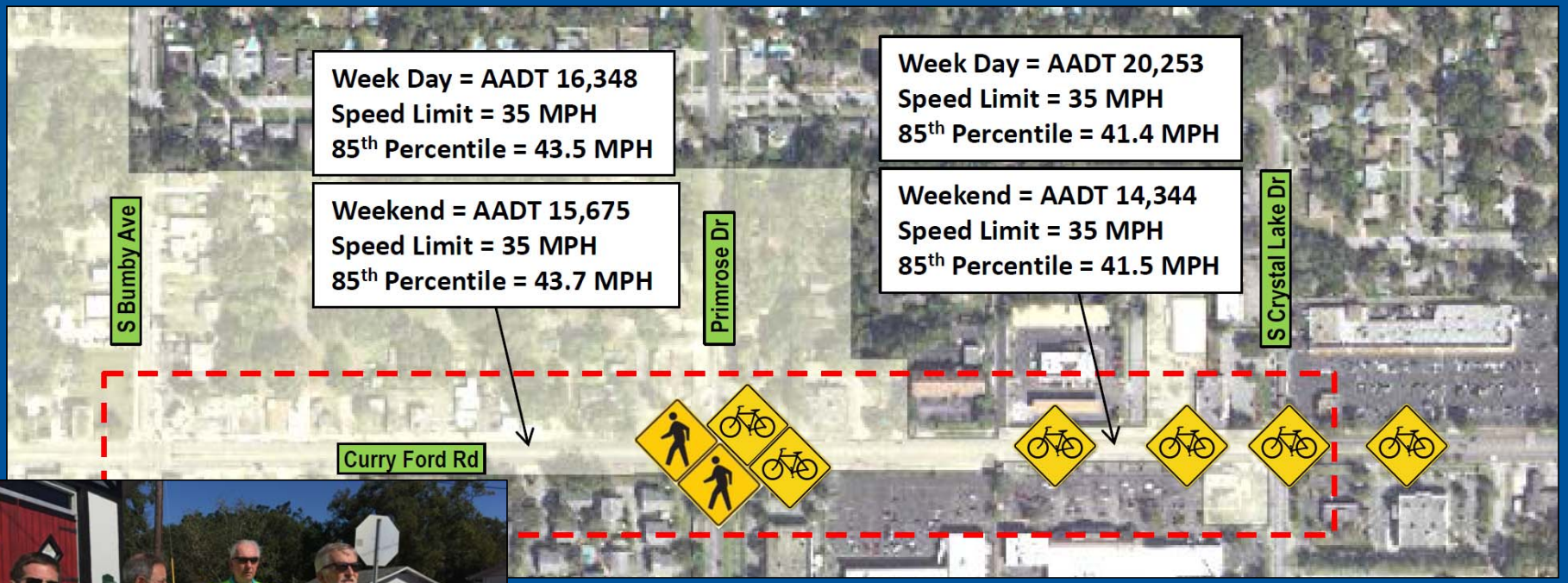
Safe Streets Academy

PILOT PROJECTS

- Curry Ford Road chosen based on pedestrian & bicycle crashes, traffic volumes, and vehicle speeds



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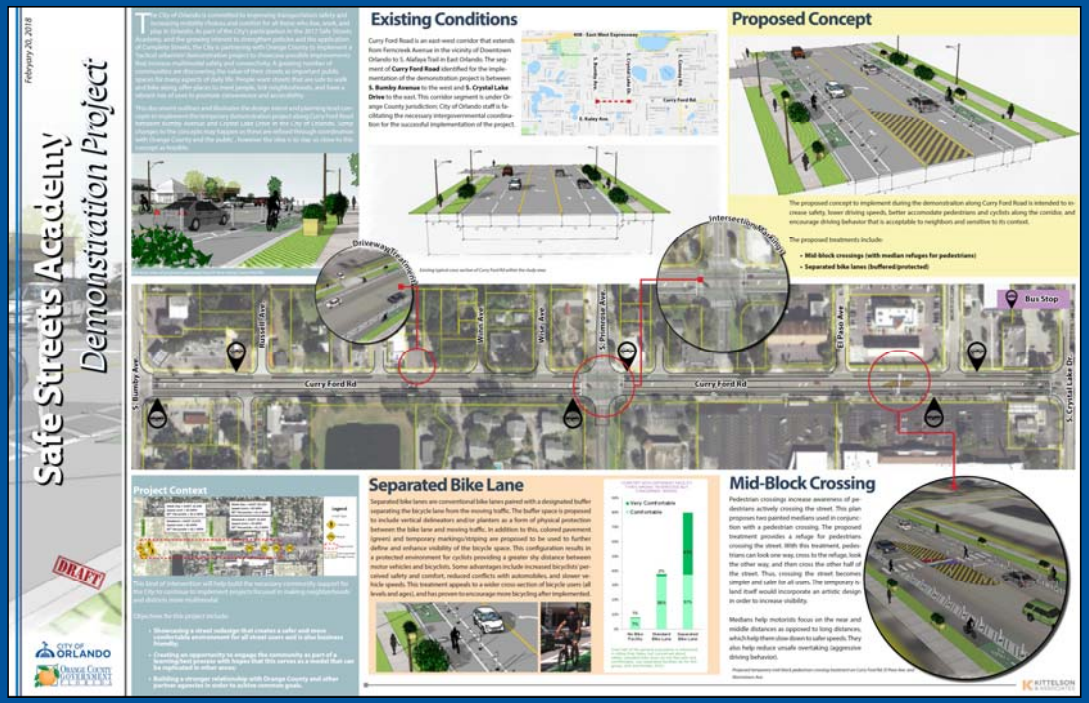
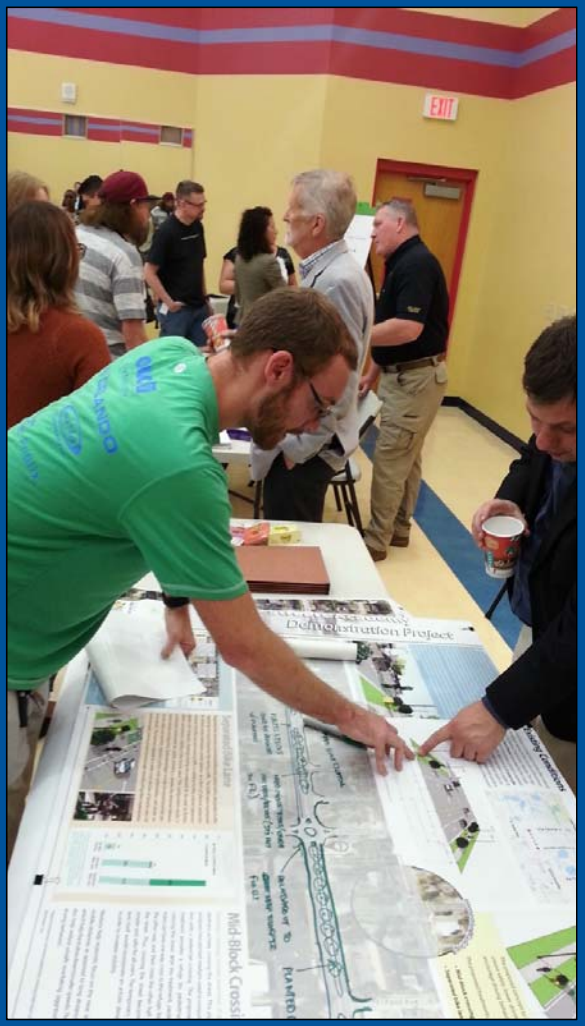
PILOT PROJECTS

SSA – Community Outreach





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SSA – Concept to Installation

- Five-lane section reduced to three-lane with buffered bike lanes and midblock crossing

SSA – Concept to Installation

WITHOUT PROJECT

WITH PROJECT

PILOT PROJECTS

SSA – Bike/Ped Safety Fair

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PILOT PROJECTS

SSA – Outcomes

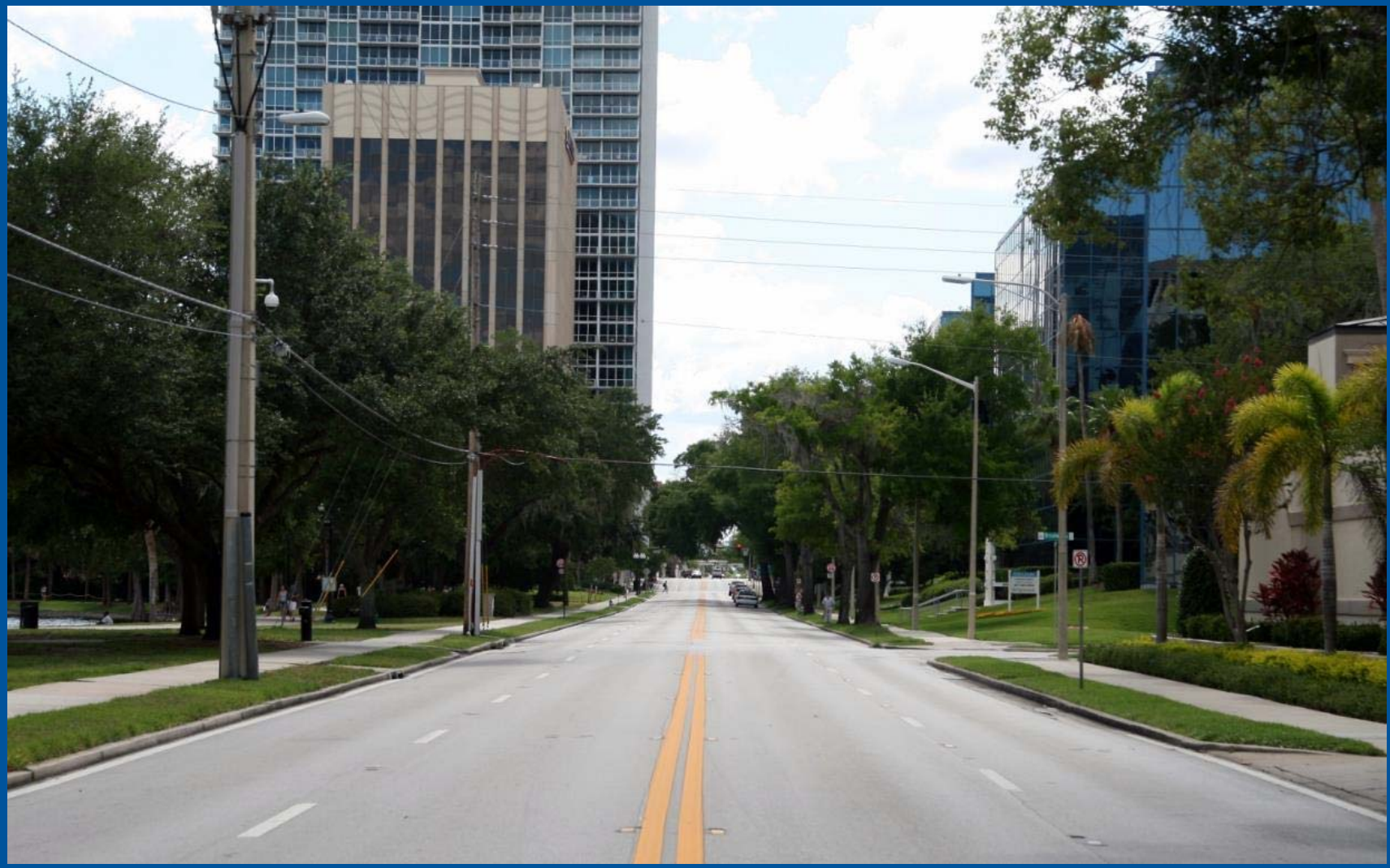
- Pedestrians used midblock, yield rates 55%
- Speeds reduced (off-peak)
- Strong public input

Location	Before/After	% Vehicles Speeding			Speed		
		All day	Overnight (7 PM-7 AM)	Midday (9 AM-4 PM)	15th %ile	50th %ile	85th %ile
Curry Ford Rd east of Bumby Ave	Before	70%	71%	39%	31.7	37.6	43.5
	With Project	41%	46%	22%	25.6	33.1	39.3
	Change	**-42%**	**-35%**	**-42%**	**-19%**	**-12%**	**-10%**
Curry Ford Rd east of Primrose Dr	Before	50%	53%	25%	27.9	34.8	41.4
	With Project	18%	25%	7%	20.1	28.2	35.2
	Change	**-63%**	**-53%**	**-74%**	**-28%**	**-19%**	**-15%**
Demonstration Area Average	Before	59%	61%	35%	29.8	36.2	42.5
	With Project	28%	34%	18%	22.9	30.6	37.3
	Change	**-53%**	**-44%**	**-47%**	**-23%**	**-15%**	**-12%**

Robinson Street

- FDOT/City of Orlando Joint Project
- Road Diet
- Underground Utilities
- Design FY 20/21
- Construction FY 22/23

Robinson St - Existing



ROAD DIET

Robinson St – Concepts

Central Business District

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FDOT

ROAD DIET

Robinson St – Concepts

Lake Eola District

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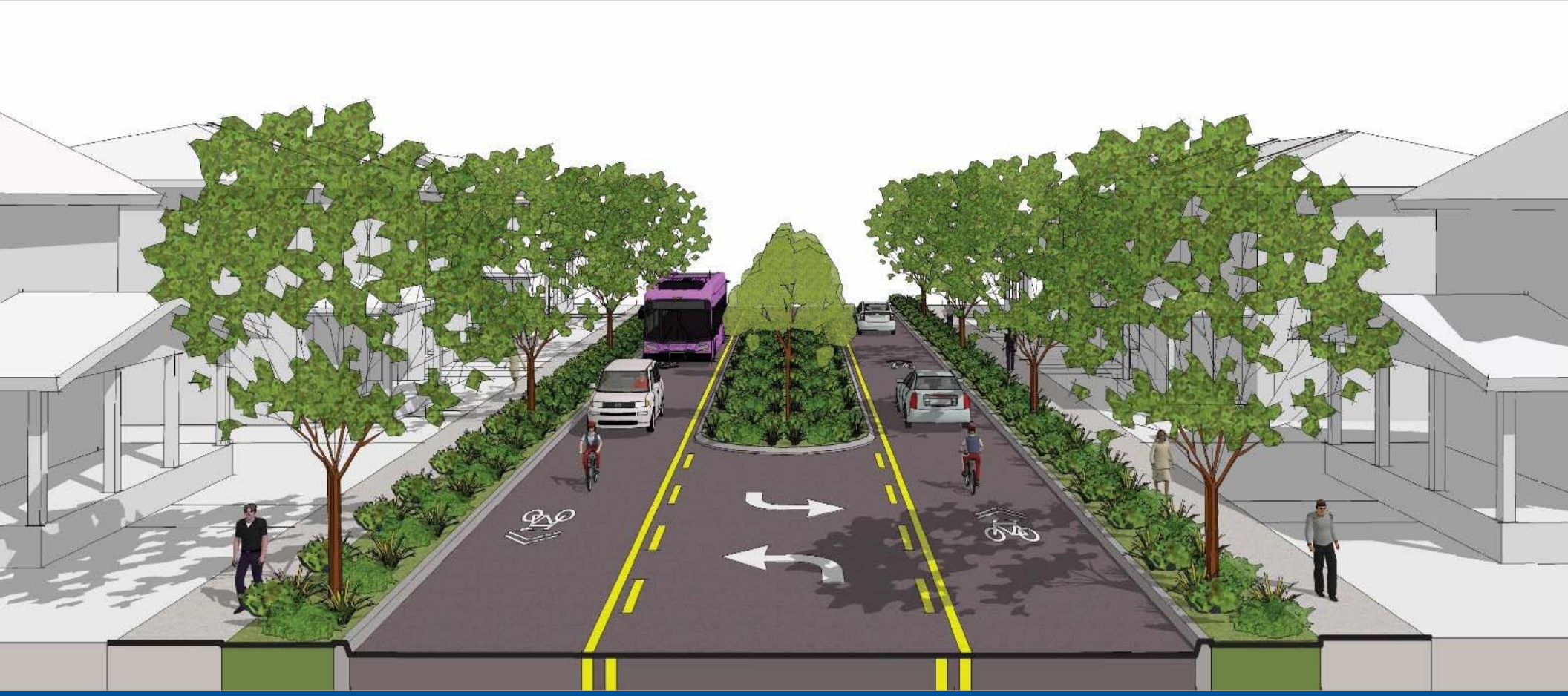
ROAD DIET

Robinson St – Concepts



Neighborhood District

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ROAD DIET

Robinson St – Concepts

Milk District

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Complete Streets

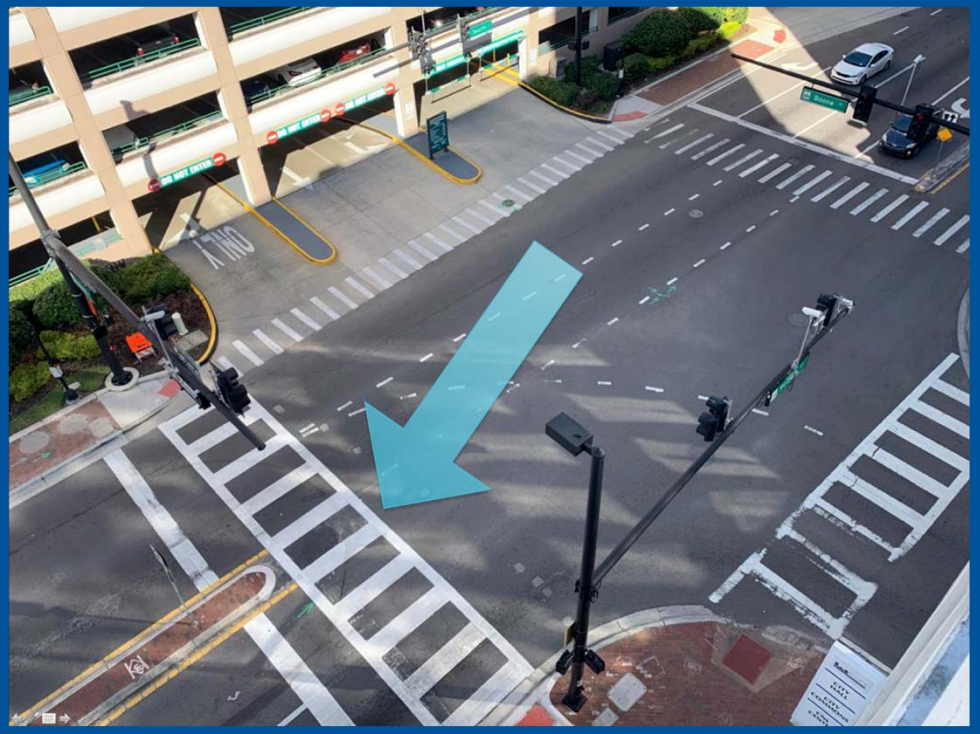
- Context is key to livability
- Safe access for all users and all abilities
- Improve equity, safety, and public health
- Look for opportunities to install elements

Give pedestrians more consideration

- Don’t favor signal progression over pedestrian safety
- Long cycle lengths are not good for pedestrian safety
- Try seeing transportation from perspectives of all user types

More considerations

- Don’t allow dual right turns on red
- Signalize or remove free flow right turns
- Put crosswalks on all legs of a signalized intersection



Promote walkability

HOW CAN WE IMPROVE

- Increase sidewalk and trail connectivity
- Base sidewalk widths on context
- Use smart land development codes and patterns
- Promote street connectivity

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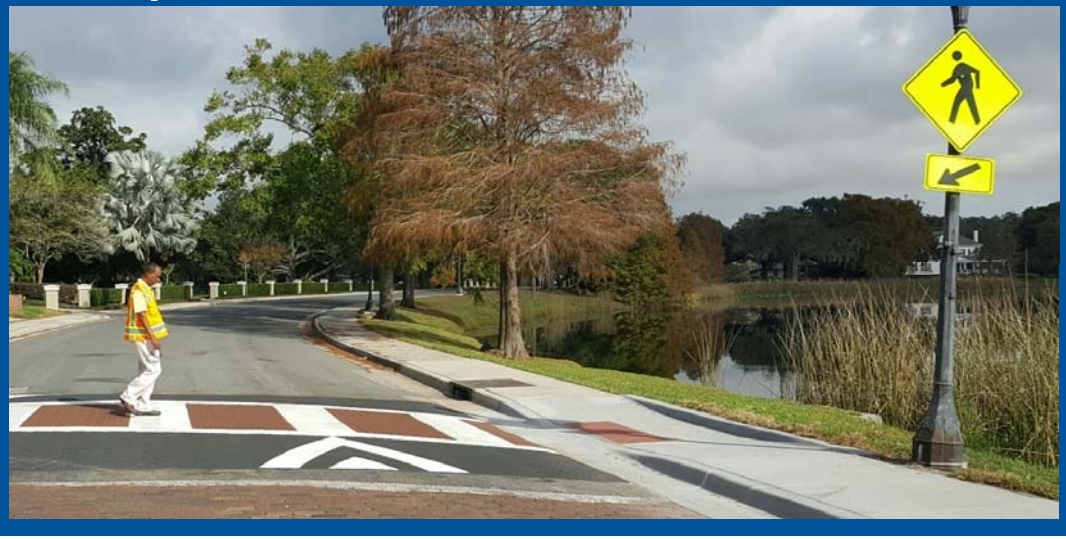
HOW CAN WE IMPROVE

Speed is critical

- Lower speeds to increase comfort, reduce crash severity
- Street design & development patterns to promote lower speeds
- Try different tools to address speeding concerns
- Formalize speed management plan for consistent application



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Walk Orlando!

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