



# City of Hollywood Welcomes You!

*Safe Streets Summit 2014*  
*Friday, January 31, 9:30AM*

**Moderator:**

•Greg Stuart, Executive Director, Broward MPO

**Presenters:**

•Commissioner Richard Blattner,  
*City of Hollywood*  
*Chair of the Broward Metropolitan Planning Organization*



# Human Toll of Car Oriented Streets: What Can We Do to Increase Safety?

*Safe Streets Summit 2014: Plenary Session  
Friday, January 31, 9:45-10:30*

**Moderator:**

- Mark Mayfield

**Presenter**

- Lt. Larry Akers, Broward Sheriff's Office

**Presenter and Panelist:**

- Secretary James Wolfe, Florida Department of Transportation District 4
- Commissioner Kristin Jacobs, Broward County
- Teina Phillips, Program Manager TOUCH



# Overall Motor Vehicle Incidents

- ↓ Motor vehicle fatality rate in Broward County  
*from 173 in 2012 to 168 in 2013*  
*BSO investigated 15 cases in 2012 VS 11 in 2013*
- ↑ Lives saved in 2013 throughout Southeast Florida  
*21 lives compared to the previous year*
- ↑ Statewide lives were saved  
*2395 lives were lost in 2012 compared to 2310 in 2013*  
*85 saved*



# Motor Vehicle Fatality Cases in BSO Jurisdiction

## ↑ Pedestrian Cases

*2013 BSO investigated 17 versus 11 in 2012*

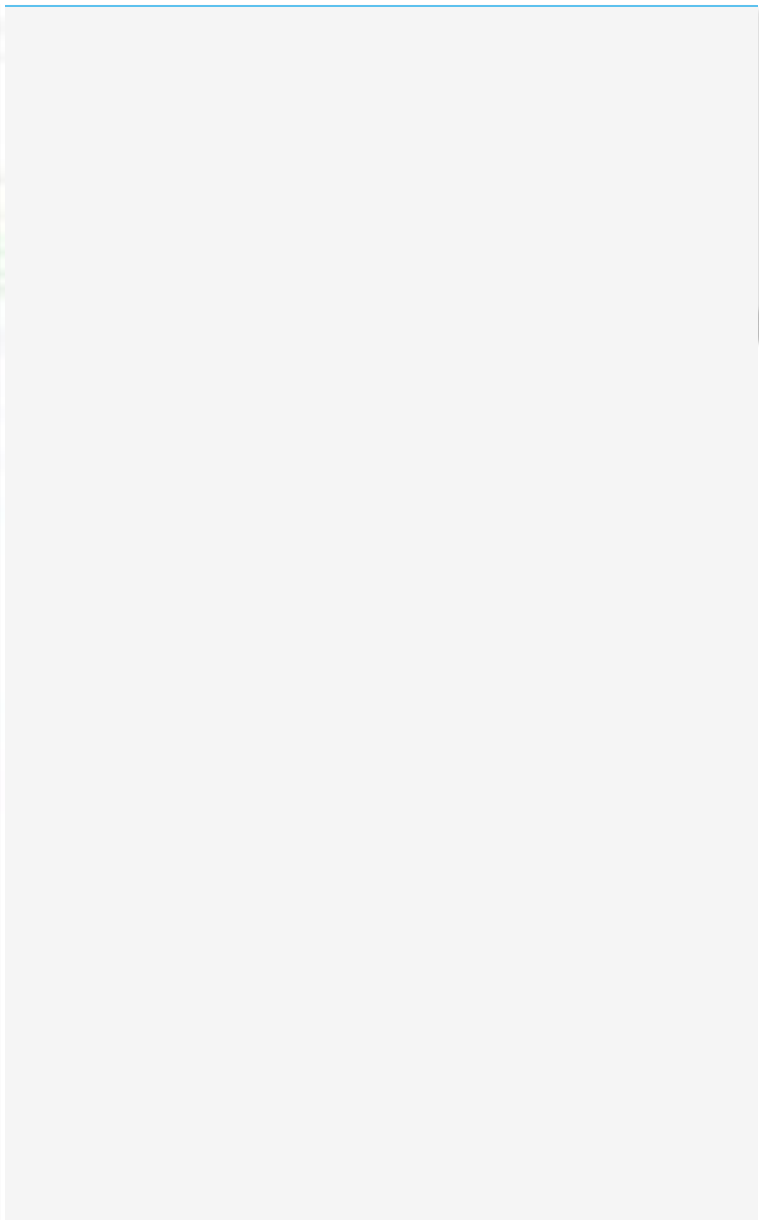
## ↑ Bicycle Cases

*2013 investigated 7 versus 3 in 2012*

- These numbers reflect the cases investigated by the Sheriff's Office only not the overall county.
- Based on data from 2004 to 2008 regarding fatal and injury crashes Broward ranks high in pedestrian, bicycle, speed and overall fatal and injury crashes.







LET'S  **BROWARD**  
 COMPLETE STREETS

# BSO Response

- The Sheriff's Office utilizes educational and enforcement efforts in an attempt to reduce incidents throughout the county. Deputies use handouts, talking with drivers, pedestrians and bicyclists to inform them of current traffic laws and safe practices.
- Utilize available grant funding to enhance efforts in education and assist in the funding of extra staffing to saturate the affected areas in an attempt to reduce overall crashes and improve safety.





Florida Department of  
**TRANSPORTATION**

**Safe Streets Summit  
Pedestrian/Bicycle Safety Focused  
Initiative**

**Jim Wolfe, PE  
District Secretary, FDOT District 4**

# National: Pedestrian Fatalities 2007-2011

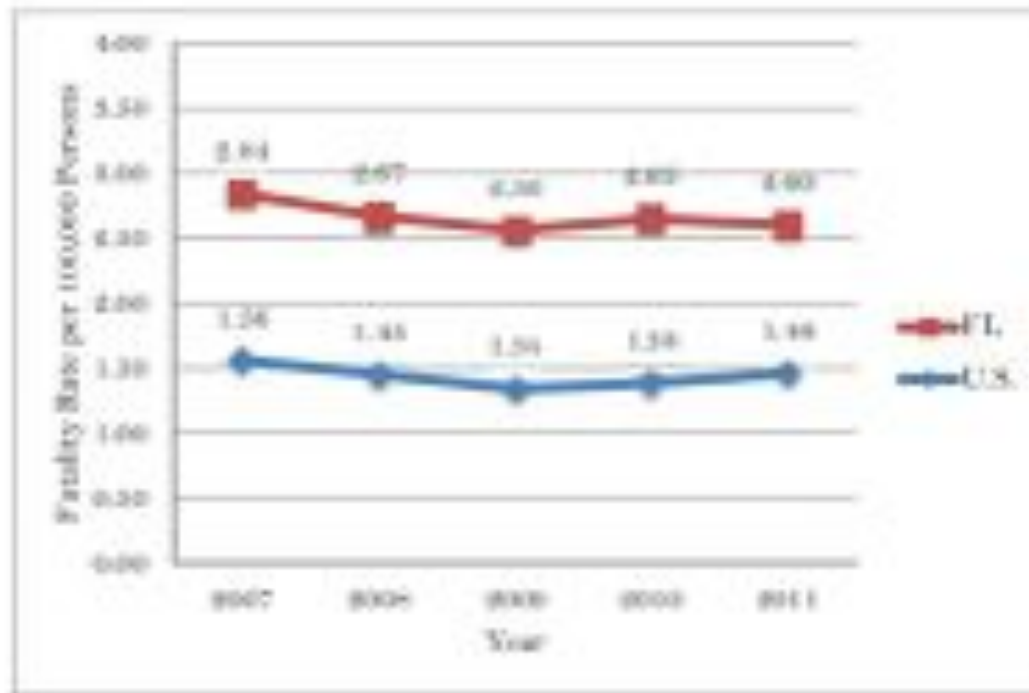


Figure 1-1. Pedestrian fatality rates per 100,000 persons.

Source: FHWA (2012)

# National: Bike Fatalities 2007-2011

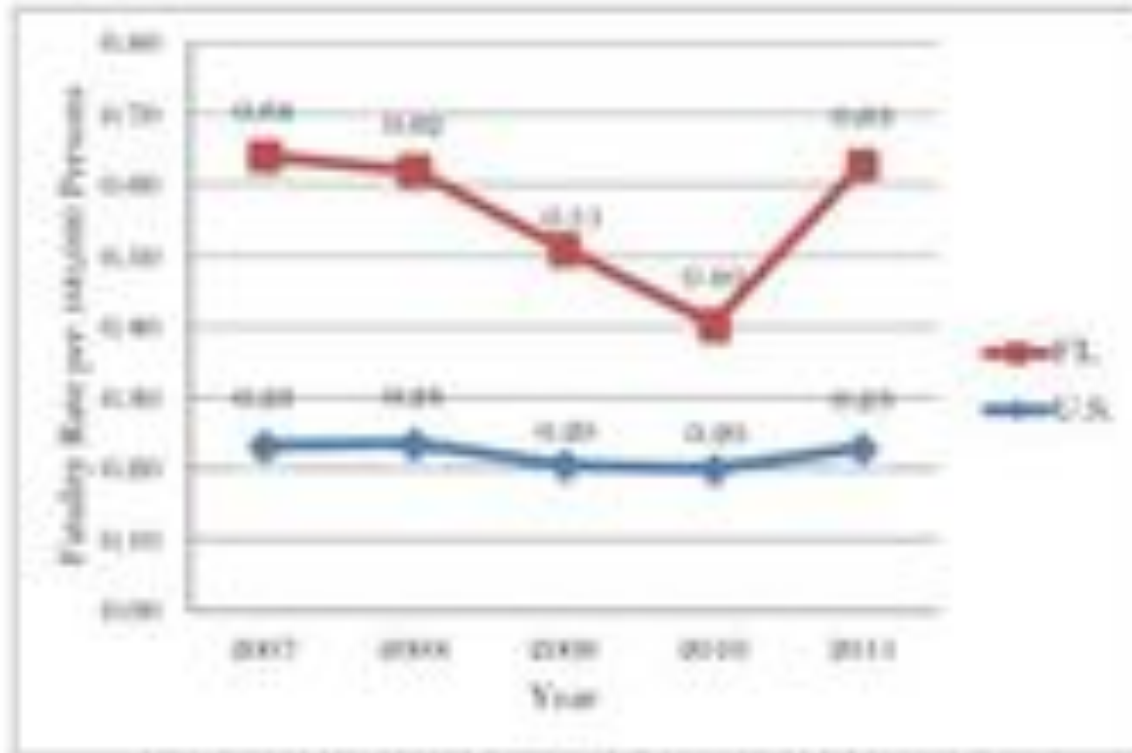


Figure 1-8. Bicycle fatality rates per 100,000 persons.

Source: AASHTO (2011)

# Florida: Types of Pedestrian Crashes

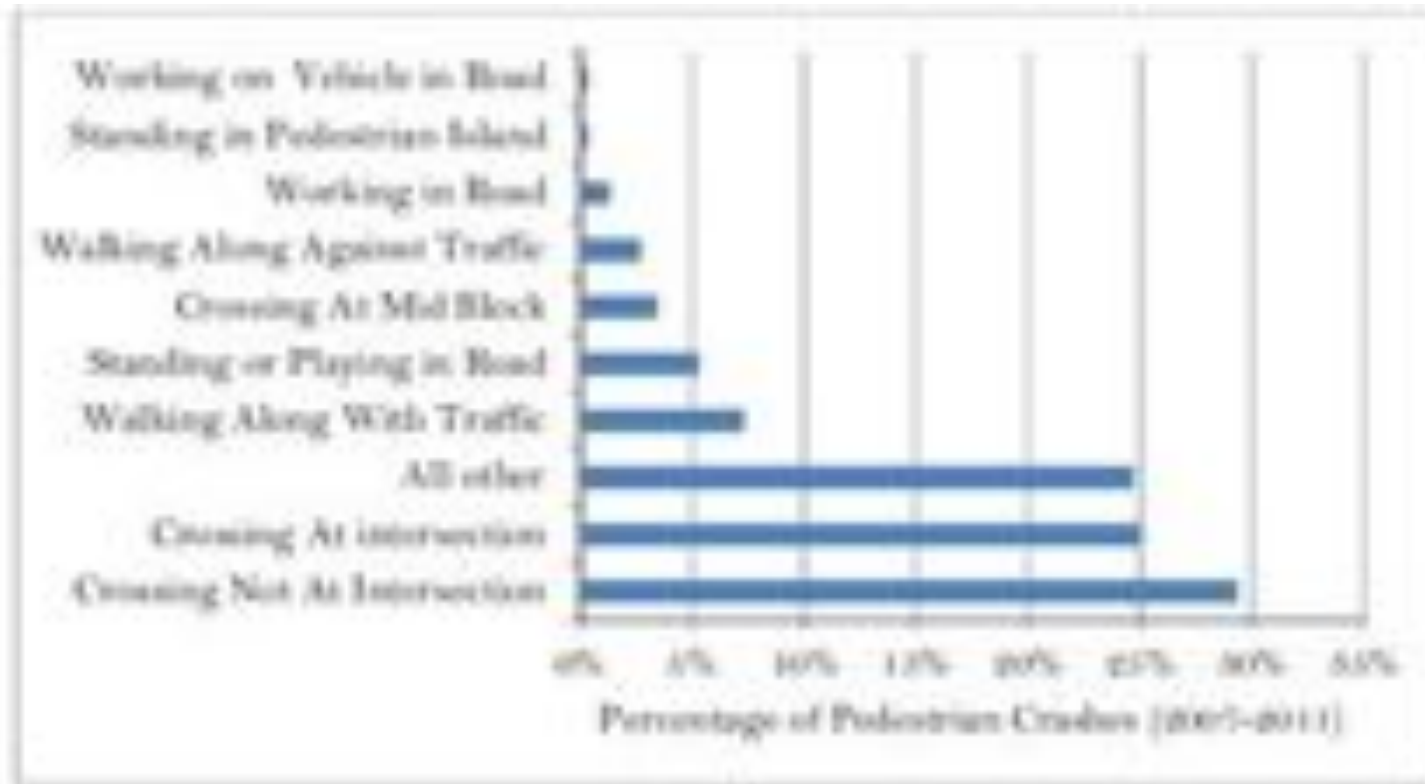


Figure 2-12. Statewide pedestrian crashes by pedestrian action.

Source: FDOT CAR System

**SAFETY DOESN'T HAPPEN BY ACCIDENT.**



**WHETHER YOU'RE DRIVING OR WALKING—  
PAY ATTENTION. HEAR THE SOUNDS.  
LEARN THE RULES.**

**ALWAYS USE THE SHOULDER.  
STOP BEFORE TURNING RIGHT ON RED.  
LOOK BEFORE CROSSING.  
YIELD TO PEDESTRIANS.**

Florida Department of Transportation



# Joint FDOT, Broward County, MPO, Ft. Lauderdale

Rollout of Alert Today Alive Tomorrow January 12, 2012



Florida Department of Transportation



# District 4: Where are Ped Crashes Recurring



# Birth to Retirement



- 1969 - 48% of students walk or bike to school
- 2012 - less than 13% walk or bike to school
- Since 1945, the number of schools declined 70% while average school size grew 127 to 653 students

\* National Household Travel Survey

# South Florida Commuter Services - Youth & School Outreach

- Art Contest (1,100 entries - all Broward)
- 800 Students walk to school day
- 300 Students bike to school day
- 8,000 Students 2013 Reasons to Pool, walk, bike to school
- Alert Today/Alive Tomorrow – Flyers to 50,000 students, 11,000 school pool database
- 3-Ft Tradeshow display (all Broward County)



# Birth to Retirement

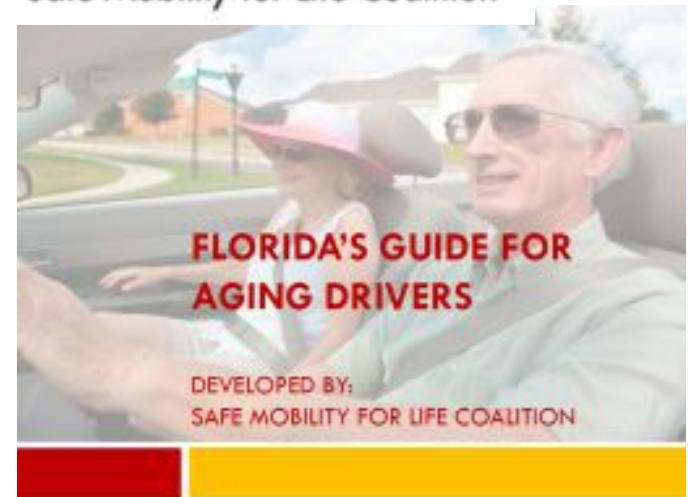
- **In the three year period from 2008 to 2010:**
  - More pedestrians ages 65+ were fatally injured in pedestrian crashes than any other group
  - This group was followed by pedestrians ages 45-54
  - The largest overall increase in pedestrian fatalities was among pedestrians ages 65+ which increased 11 percent from 2008 to 2010





# Elderly Population Outreach

- FDOT Safe Mobility for Life Coalition
- Aging Road User Strategic Safety Plan
- Alternative Transportation Database helps seniors find transportation





### Commuter Options

Vanpooling >

Park & Ride >

Transit >

Savings Calculator >

Bicycling >

Colleges & Universities >



[www.1800234ride.com](http://www.1800234ride.com)

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

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

# PARTICIPATE: Community Traffic Safety Team

- Consists of community partners in law enforcement, government, and special interest groups
- Meets monthly in each county
- Anyone can participate



**YOUR TRAFFIC  
SAFETY TEAM**

Florida Department of Transportation

[carmen.pullins@dot.state.fl.us](mailto:carmen.pullins@dot.state.fl.us)



Florida Department of Transportation



# From Birth to Retirement: Creating Lifelong Communities that Empower Independence Beyond the Car

*Safe Streets Summit 2014: Plenary Session*  
*Friday, January 31, 10:30-11:15*

**Moderator:**

- Mark Mayfield

**Presenter:**

- Kelly Morphy, WALC Institute

**Panelist:**

- Secretary James Wolfe, Florida Department of Transportation District 4
- Dr. Paula Thaqi, Director of Broward Department of Health
- Andrea Crawford, Director YMCA of Broward



























  
Walkable and Livable  
Communities Institute

**AARP**<sup>®</sup>





# The needs of seniors

- Many of us will outlive our ability to drive by 7 to 11 years
- Four million seniors stay home daily because they lack transportation
- 15.5 million seniors live in places without public transportation
- Seniors are over-represented in intersection fatalities by a factor of more than two-to-one.
- Older Americans are at great risk for rapidly declining health and social isolation once they lose the ability to travel on their own.
- AARP: The 65+ population is projected to double from 40.2 million in 2010 to 88.5 million in 2050.



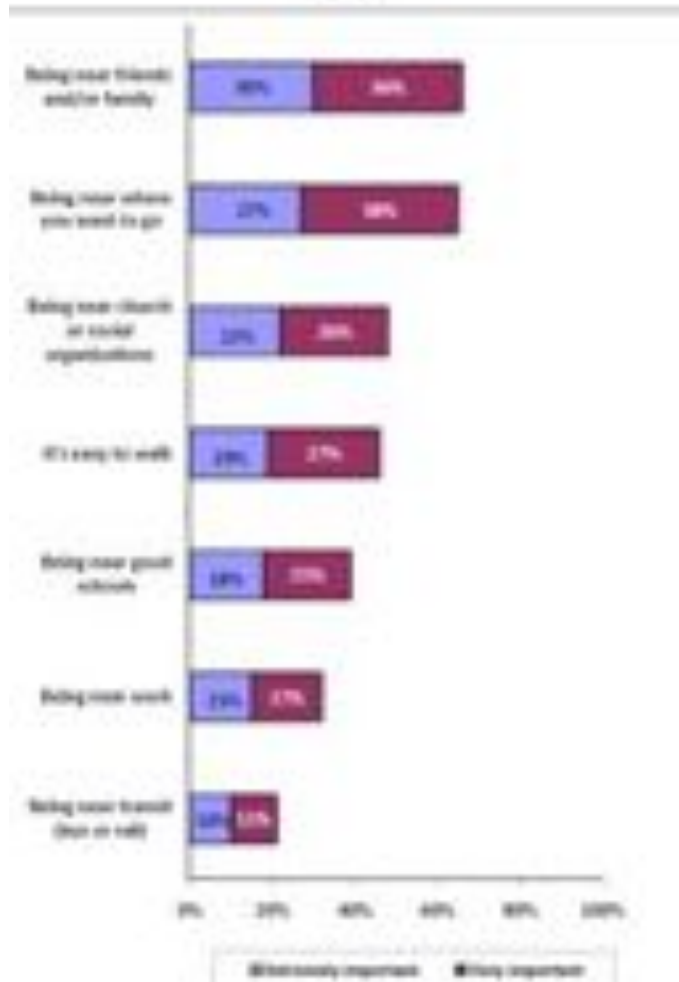








Importance of Community Aspects for Staying in One's Community (n=582)



Source: AARP  
[www.aarp.org](http://www.aarp.org)

Importance of Walkability



Source: National Association of Realtors  
[www.realtor.org](http://www.realtor.org)

# Changing trends

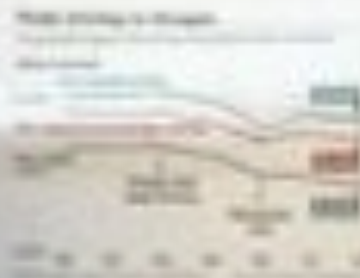


- About half of Millennials would choose Internet access over a car
- Drivers license rates among young adults are the lowest they've been in decades
- Millennials choose where to live before finding a job.
  - 64% looked for a job after they chose the city where to live

# The Sunday Oregonian

## Drivers ease off the gas in cultural shift

State lawmakers still a long way from passing legislation to adopt "idling light"



## Syria must get arsenal publicly, experts say

U.S. House panel says Syria must get arsenal publicly, experts say

By [Name] and [Name]

WASHINGTON — A House panel of lawmakers on Tuesday called for the Syrian government to publicly disclose its chemical weapons arsenal, a move that experts say is essential for the U.S. to determine whether to take military action.

The House panel, led by Rep. Henry Hyde (R-Ill.), said the Syrian government must provide a detailed list of its chemical weapons, including the types of weapons, the locations of the weapons, and the names of the people who are in charge of the weapons.

The panel also said that the Syrian government must provide evidence that it has destroyed its chemical weapons arsenal. The panel said that the Syrian government must provide evidence that it has destroyed all of its chemical weapons, and that it has destroyed all of the facilities that were used to produce chemical weapons.

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# Local economies





**Let's fill our beakers of solutions with the things we value**









# Meet the Needs of Seniors and We Meet the Needs of All





# The Business of Biking: Why it is Savvy to Invest in Bike Facilities?

*Safe Streets Summit 2014: Key Note  
Friday, January 31, 11:15-11:45*

**Moderator:**

- Mark Mayfield

**Presenter:**

- Avery Pack, Principal, Republic Bike

republic 



































# URBAN OUTFIT TERS





















 **CBS**











 Computer History Museum













































# republic

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



[www.facebook.com/republicbike](http://www.facebook.com/republicbike)



@republicbike





# The Return on Investing in Complete Streets

*Safe Streets Summit 2014: Plenary Session*  
*Friday, January 31, 11:45-12:30*

**Moderator:**

- Mark Mayfield

**Presenter:**

- Gary Hack,  
Professor of Urban Design  
University of Pennsylvania

**Additional Panelist:**

- Greg Stuart, Executive Director, MPO
- Roy Rogers, Principal, Roy Rogers Associates
- Jim Carras, Principal, Carras Investments
- Dewayne Carver, Statewide Bike/Ped Coordinator, FDOT
- Avery Pack, Principal, Republic Bike & Citizens Bike





# Walkable Shopping Areas

- **Some Basic Facts:**

- Active living is the best antidote for obesity
- We've built our urban areas to minimize walking and cycling
- Young people are driving less
- Many older people want to drive less
- Increased walking requires destinations
- We need to design new urbanization better and retrofit what exists



# Walk Score

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

- Measures proximity based on walking routes to destinations such as grocery stores, schools, parks, restaurants and retail shops; Range - 0 to 100

**90 – 100**

## **Walkers Paradise**

*Daily errands do not require a car*

**70 – 89**

## **Very Walkable**

*Most errands can be accomplished on foot*

**50 – 69**

## **Somewhat Walkable**

*Some errands can be accomplished on foot*

**25 – 49**

## **Car-Dependent**

*Most errands require a car*

**0 – 24**

## **Car-Dependent**

*Almost all errands require a car*





Los Olas Blvd Walk Score 92 Transit Score 59





Old Main St, Bradenton    Walk Score 88    Transit Score 36



Baldwin Park, Orlando Walk Score 72





US 441/FL 7      Walk Score 22



# Business Performance in Walkable Areas

Active Living Research  
Using Evidence to Increase Childhood Obesity  
and Chronic Disease Prevention



Business Performance in  
Walkable Shopping Areas

TECHNICAL REPORT  
SUMMER 2013

Broward County  
Department of Transportation



# What We Know About Walkable Commercial Areas

1. Up to 66% of the public would like to live in walkable neighborhoods with shops, restaurants and community institutions. (Saelens et al 2003)
2. There is a shortage of such housing. Housing in above average Walk Score areas commands premiums of \$4,000-34,000. (Cortright 2009)





Chestnut Hill, Philadelphia

Walk Score 88

Transit Score 55





Chestnut Hill, Philadelphia

Walk Score 88

Transit Score 55

# What We Know About Walkable Commercial Areas Cont.

3. Retail and office rents in high Walk Score areas (80) average 54% higher than in low Walk Score areas (20). (Pivo and Fisher 2010)
4. Density matters. People living in areas with 21 or more dwellings per acre are more likely to walk to destinations in their neighborhood than those at lower densities (Moudon et al 2006)



Wicker Park – Bucktown, Chicago Walk Score 88



# What We Know About Walkable Commercial Areas Cont.

5. Areas with walk in traffic attract 3 to 4 times more shoppers and more shops and shoppers than drive-to areas. (Boarnet et al 2011)



Wicker Park/Bucktown, Chicago      Walk Score 90      Transit Score 71



Wicker Park/Bucktown, Chicago

Walk Score 90

Transit Score





Wicker Park/Bucktown, Chicago

Walk Score 90

Transit Score 71

# What We Know About Walkable Commercial Areas Cont.

6. Slowing traffic and increasing pedestrian amenities can result in improved business. (Lodi California – up 30%)



School Street, Lodi California      Walk Score 86



# What We Know About Walkable Commercial Areas Cont.

7. Creating bicycle lanes and parking areas can result in more business. (Valencia Street, San Francisco – 37% of merchants report business is up)





Valencia Street, San Francisco Walk Score 95



Kentlands, Gaithersburg Maryland

Large Format  
Stores

Office, Restaurants  
Boutiques, Entertainment

Main Street – Apartments  
Local Services, Local Shops

Kentlands, Gaithersburg MD Walk Score = 82





Kentlands, Gaithersburg MD Walk Score 82



Kentlands, Gaithersburg MD Walk Score 82





Kentlands, Gaithersburg MD Walk Score 82





West Oakland Park Blvd    Walk Score 41    Transit Score 40

# Fairfax, Virginia



Existing conditions

*Urban Advantage*

# Fairfax, Virginia



Converting to boulevard with slow multi-use travel lanes, new sidewalk, trees, street lamps, bike racks

*Urban Advantage*



# Fairfax, Virginia



New mixed use infill development,  
public plaza

*Urban Advantage*

# Fairfax, Virginia



Further infill development

*Urban Advantage*

# Fairfax, Virginia



More infill development at intersection

*Urban Advantage*



# Thank you

- Resource:  
<http://activelivingresearch.org/business-performance-walkable-shopping-areas>



# Lunch Time!

- Bon appétit
- Mingle
- And get ready for...
  - Safe Streets Awards
  - Walking Audit Opportunities
  - Speak Up Broward

*Afternoon technical session to follow from at 1:30*





It's time for the people of Broward to speak up about how we get around today - and how we want to get around tomorrow.

What would you say?

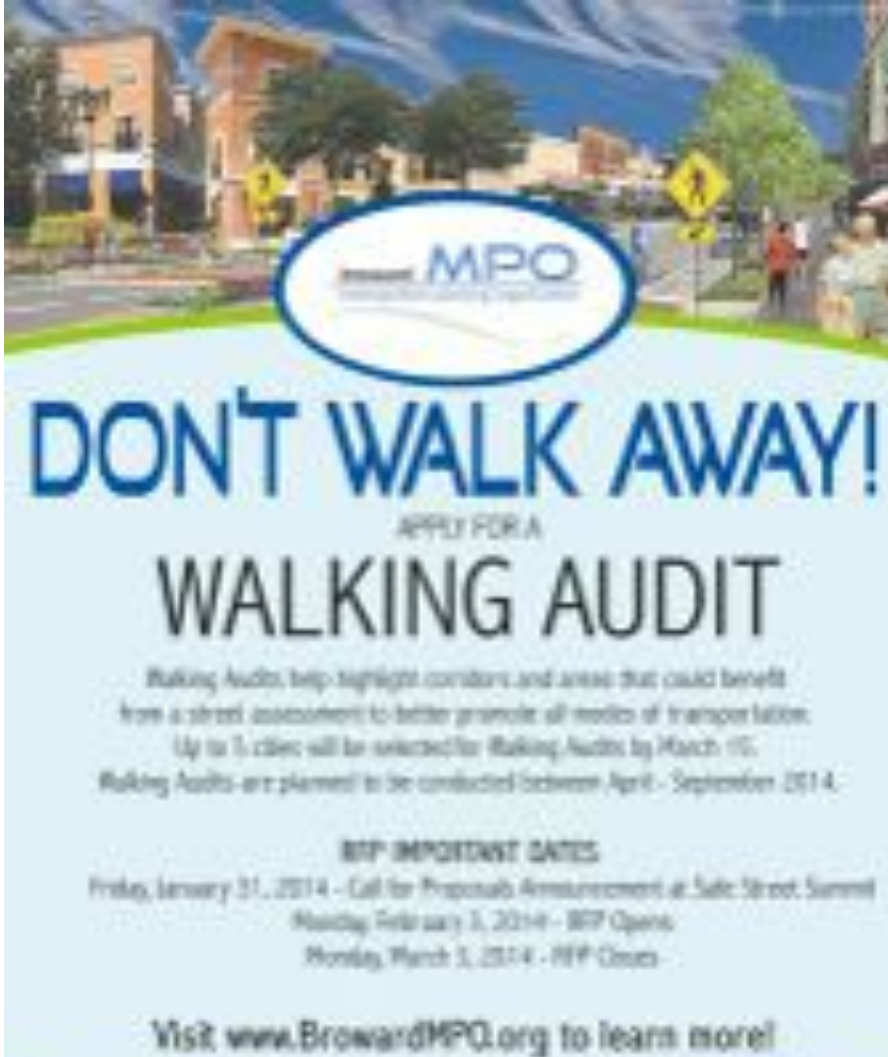
To learn more visit:

<http://www.browardmpo.org/projects-studies/speak-up-broward>





# Walking Audits



**broward MPO**  
metropolitan planning organization

## DON'T WALK AWAY!

APPLY FOR A  
**WALKING AUDIT**

Walking Audits help highlight corridors and areas that could benefit from a street assessment to better promote all modes of transportation. Up to 5 cities will be selected for Walking Audits by March 15. Walking Audits are planned to be conducted between April - September 2014.

**RFP IMPORTANT DATES**  
Friday, January 31, 2014 - Call for Proposals Announcement at Safe Street Summit  
Monday, February 3, 2014 - RFP Opens  
Monday, March 3, 2014 - RFP Closes

Visit [www.BrowardMPO.org](http://www.BrowardMPO.org) to learn more!





**2014**

**SAFE STREETS AWARD**

***Making Bike Lanes A Big Hit!***

LET'S   
**GO BROWARD**  
COMPLETE STREETS



**2014**

**SAFE STREETS AWARD**

*Not So Fast! Best Jurisdiction to Implement Traffic Calming Tactics*







**2014**

**SAFE STREETS AWARD**

***All Hail to the Broward Champion of Safe Streets***

LET'S   
GO **BROWARD**  
COMPLETE STREETS



# Inception to Implementation: Making Complete Streets a Reality

*Safe Streets Summit 2014: Technical Session  
Friday, January 31, 1:30 PM -4:00 PM*

**Moderator:**

- Anamarie Garces, Urban Health Partnerships

**Presenters:**

- Stewart Robertson, Kimley-Horn and Associates
- Jessica Josselyn, Kittelson and Associates
- DeWayne Carver, FDOT Roadway Design Office
- Larry Foutz, HNTB

# Agenda

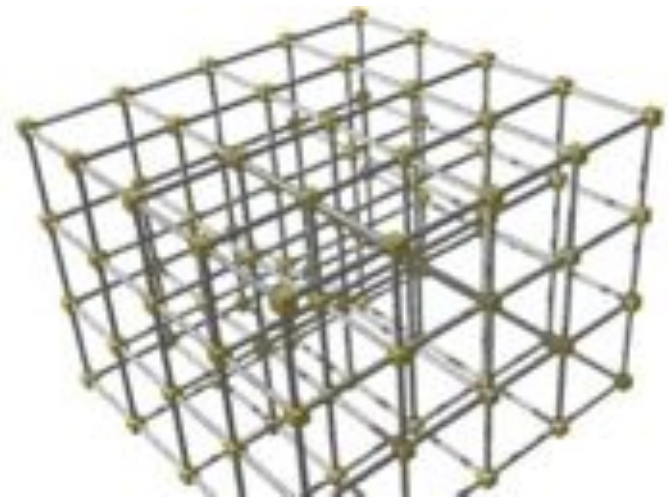
- Complete Streets Framework
- Understanding Local Context
- Laying the Groundwork
- Putting it All Together
- Go For It!





# Complete Streets Framework

Stewart Robertson,  
Kimley-Horn



# Why Complete Streets?

- Complete Streets benefit your community

- Capacity
- Equity
- Public Health
- Safety
- Sustainability



- A wide range of interests are aligning for safer, healthier streets!

# Framework Overview

- USDOT Policy Statement
- Florida State Statutes
- Broward
  - Design Guidelines
  - Multimodal Level of Service
  - Model Plan Framework
  - Complete Streets Corridor designation
  - Context Sensitive Corridor designation





# USDOT Policy Statement

- Walking and bicycling are equal with other transportation modes
- Ensure convenient choices for people of all ages and abilities
- Go beyond minimum design standards within a context sensitive solution
- Collect data on walking and bicycling trips
- Maintain sidewalks and shared use paths with the same vigor that roadways are maintained
- Improve non-motorized transportation during maintenance projects



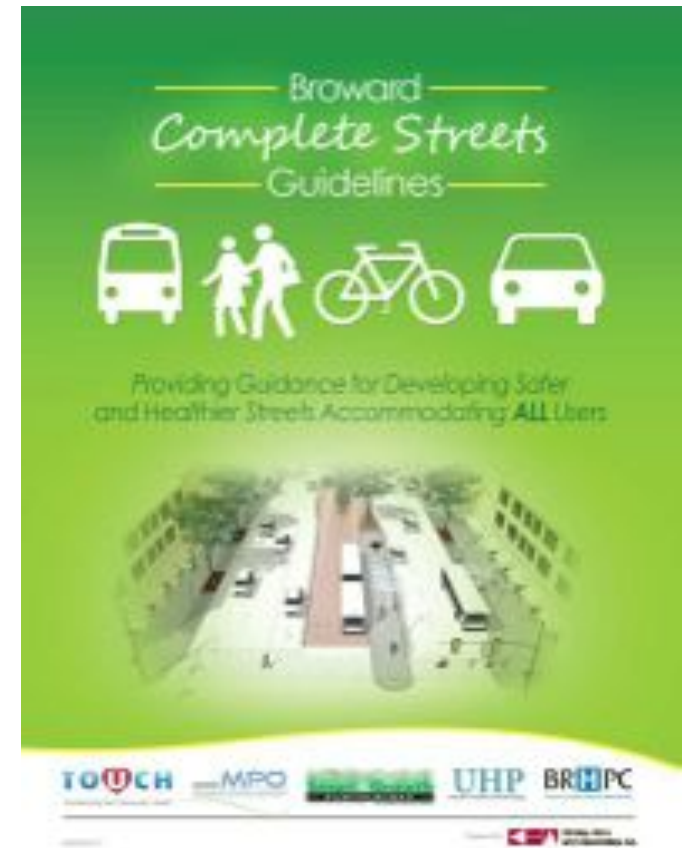
# Florida State Statute 335.065

- Florida State Statute 335.065 – Bicycle and Pedestrian Ways along State Roads (excerpts)
  - Full Consideration
    - (1)(a) **Bicycle and pedestrian ways shall be given full consideration** in the planning and development of transportation facilities, including the incorporation of such ways into state, regional, and local transportation plans and programs. Bicycle and pedestrian ways shall be established in conjunction with the construction, reconstruction, or other change of any state transportation facility, and special emphasis shall be given to projects in or within 1 mile of an urban area.
  - Provides only three possible exceptions for not incorporating



# Broward Complete Streets Design Guidelines

- Endorsed by MPO Board in July 2012
- Provides an established set of guidelines to support local governments seeking to accommodate all travel modes on their streets
- Consistency with design guidelines can support funding pursuits





# Model Plan Framework

- Provides guidance to assist jurisdictions to adopt a Complete Streets Plan
- Designed to be malleable for each jurisdiction



# Multimodal Level of Service

- Establishes an evaluation method for pedestrian, bicycle, and transit modes comparable to the traditional LOS model for automobiles
- MMLOS Demo Project completed during Broward Complete Streets initiative, Phase II



# Complete Streets Corridor Designation

- Initiated by Broward County as a way of establishing the new minimum engineering standards for streets and roadways
- County is working to amend the Land Development Code and Minimum Engineering Standards to incorporate Complete Streets concept





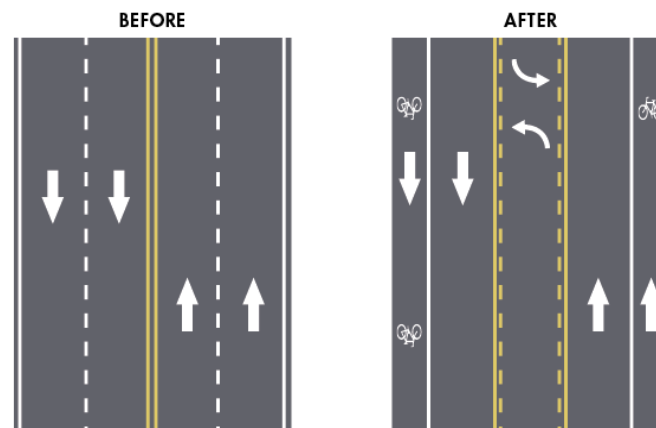
# Context Sensitive Corridor Designation

- Broward County Planning Council designation used to apply Complete Streets design elements to Broward County “Trafficways” corridors
  - Makes a “Trafficway” eligible to utilize alternative design standards appropriate for compact urbanized corridors
- Adopted in 2009
- County is currently waiving the amendment fee for the Context Sensitive Corridor designation for a limited period of time



# Primary Tools for Street Redesign

- Bike Lanes
- Multi-Use Trails/Shared Use Paths
- Cycle Tracks
- Good Sidewalk Design
- Crosswalks
- Curb Extensions/Bulb-outs
- Median Islands/Refuges
- Lighting
- On-Street Parking
- Shading/Trees
- Bus Shelters
- Road Diets



# Common Themes

- Some common themes that we have heard during the Broward Complete Streets Initiative
  - Need more frequent crosswalks
  - Need enhanced bicycle facilities to attract a broader range of users
  - Need more comfortable bus stops
  - Need slower speeds on many streets
  - Need wider sidewalks that include landscaping/furniture zones buffering the street





# Understanding the Local Context

Jessica Josselyn, Kittelson  
Associates, Inc.



# Preparing for Complete Streets

## Understanding the Local Context

### Overview

#### – Visioning

- 8 Guiding Principles for Successful Communities
- Aligning Leadership Goals through Process (The 3-D Approach)

#### – Inventory the Context

- Understanding the Elements of Community
- Understanding the Relationship Between Land Use and Transportation

#### – Public Engagement Activities

- Engaging the Local Community & Local Stakeholders
- Getting the Word Out!
- Engaging the Local Governing Agencies





# Visioning

Guiding Principles and Aligning  
Leadership Goals through a Process  
Approach



# Visioning – 8 Guiding Principles for Successful Communities



**“Strengthen Neighborhoods”**  
*Connect Neighborhoods with  
Street Network*



**“Make Places”**  
*Leverage the Public Infrastructure (Streets) to  
Create Place*



**“Re-Stitch the Community”**  
*Connect Streets and Make  
Walkable Blocks*



**“Promote Environmental Stewardship”**  
*Use the Street Network as Green Infrastructure*



**“Leverage Local Assets”**  
*Connect Streets, Trails, etc. to  
Important Community Assets*



**“Align the Visions”**  
*Bring the Public, the  
Leadership, and Governing  
Agencies to the Table*



**“Balance Regional & Local Needs”**  
*Encourage Connections within  
and outside the Community*



**“Create an Implementable Plan”**  
*Ensure Feasibility with Market  
Analysis, Physical Synthesis,  
and Informed Consensus*

# Visioning – A Process Approach

## The “3-D” Approach

### DREAM

Understanding the problems & envisioning the solution

### DREAM

- Advisory committees
- Public involvement
- Stakeholder interviews

### PURPOSE

To understand issues & identify opportunities early to focus the project



Park Avenue – Winter Park, FL (Photo Credit: KAI)



Jax Beach Redevelopment (G/KA)



SR50 Visioning (KAI)

# Visioning – A Process Approach

## The “3-D” Approach

### DISCOVER

Research, Analysis, &  
Synthesis

### DISCOVER

- Mapping Analysis/Synthesis
- Market Analysis
- Public Interaction

### PURPOSE

Develop a basis of the physical, cultural, & market realities of the potential Complete Street areas



Photo: KAI



Image: KAI



Image: KAI



Image: KAI



# Visioning – A Process Approach

## The “3-D” Approach

### DISCUSSION

Interaction with client,  
public, advisory  
committee, evaluation,  
reflection

### DISCUSSION

- Public & Advisory Meetings
- Testing & Refining Ideas
- Implementation Strategies

### PURPOSE

To involve people at the local  
level thereby ensuring a  
buildable, fundable, &  
consensus-driven vision





# Inventory the Context

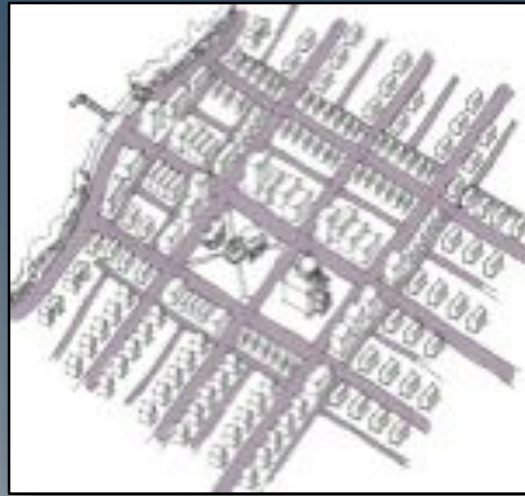
Understanding the Elements of  
Community and Getting Prepared for  
Complete Streets



# Elements of a Community



**Parks & Open Space Systems**



**Streets, Alleys, & Transit Network**



**Commercial & Mixed Uses**



**Mix of Residential Densities & Types**



**Institutional & Community Uses**



**The Natural Environment**



# Understanding Land Use – Why It Matters to Streets

## Why Land Use Matters

Development patterns within various land use and transportation contexts

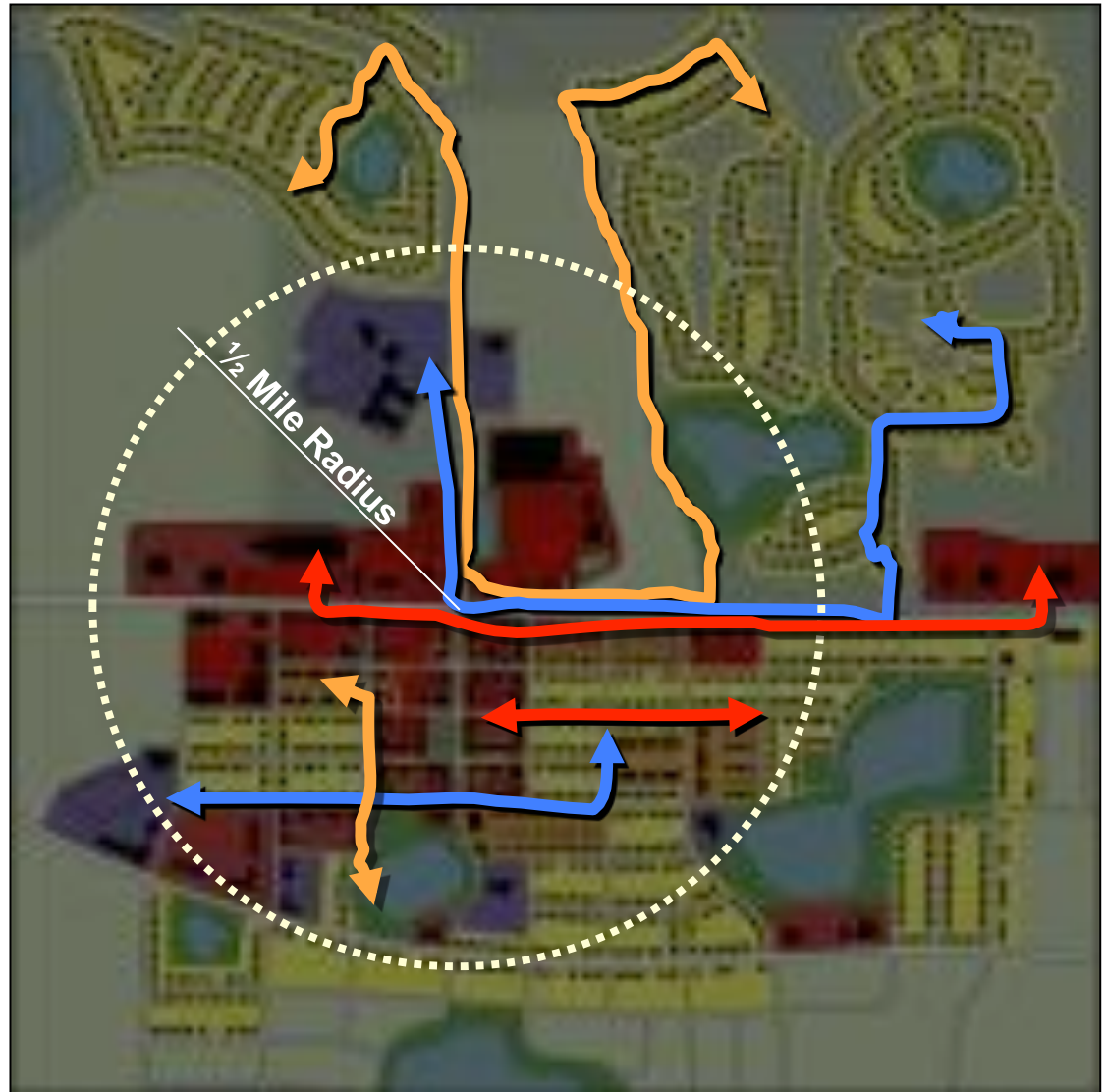


# Understanding Land Use – Why It Matters to Streets

## Why Land Use Matters

Transportation  
Implications:

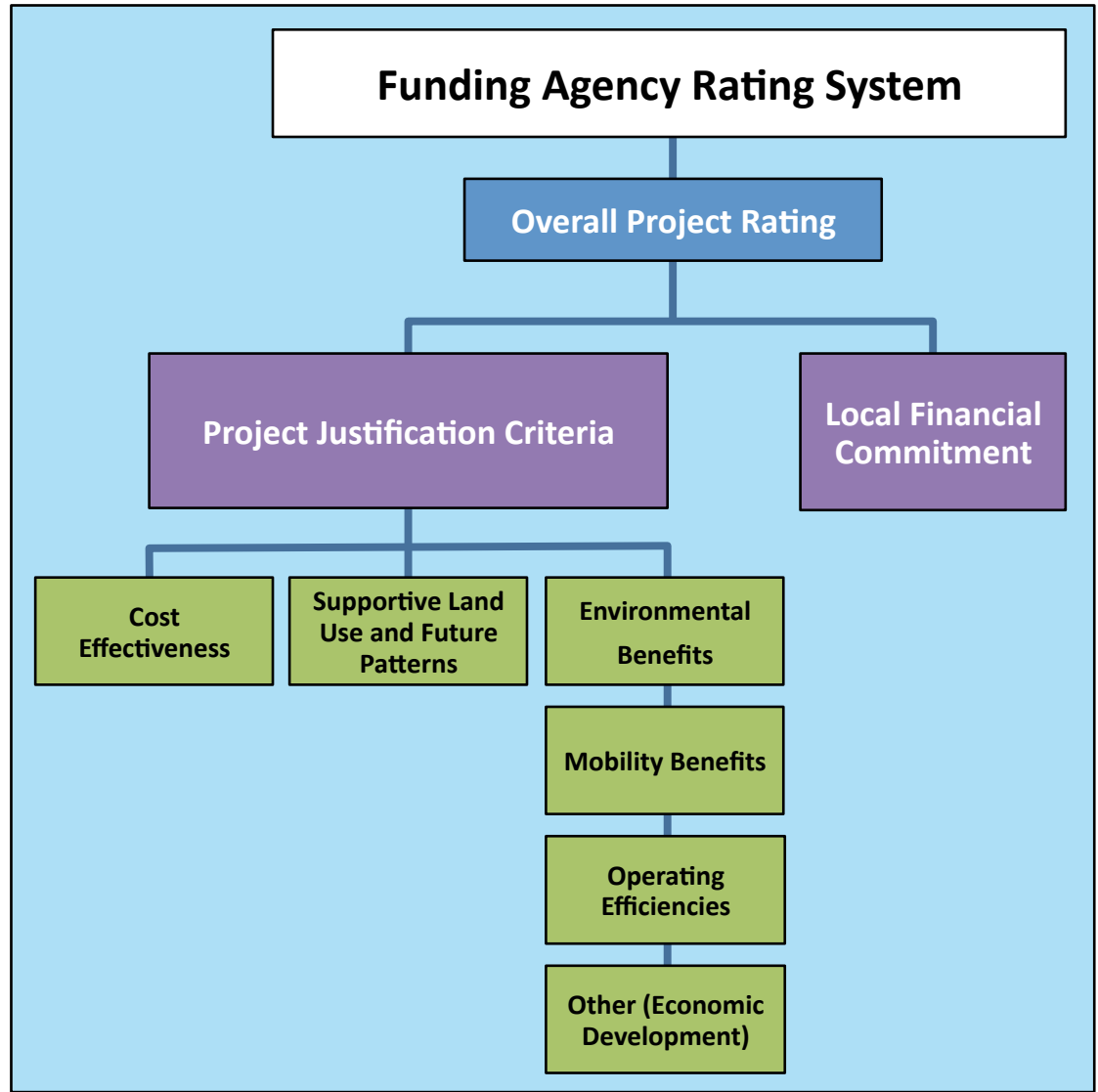
Connective vs.  
Non-Connective



# Understanding Land Use – Why It Matters to Streets

## Why Land Use Matters

Transportation and Street Funding Today Depends on Land Use





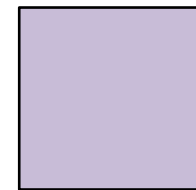
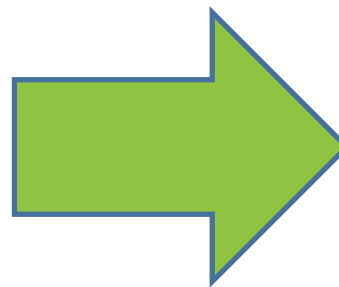
# Understanding Land Use – Policy vs. Local Character Districts



Existing Land Use



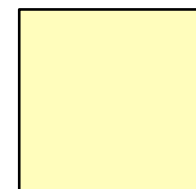
Future Land Use



**Centers**

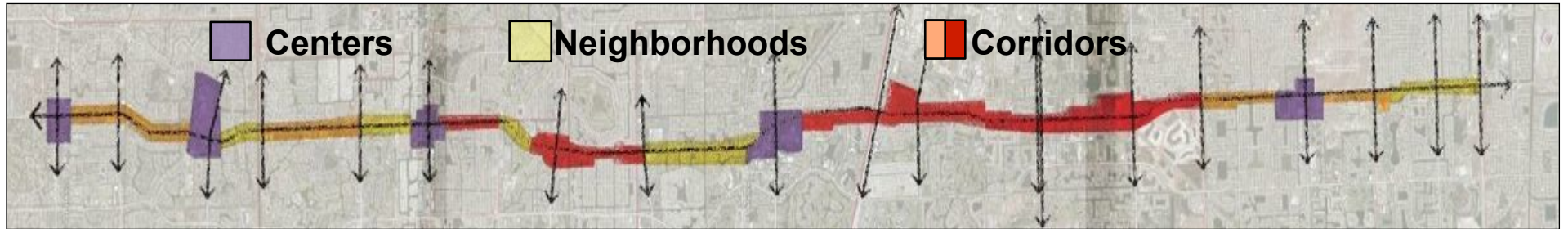


**Corridors**



**Neighborhoods**

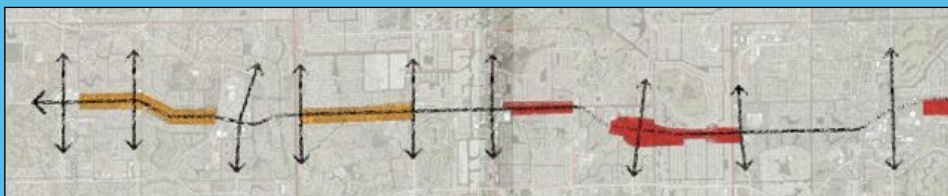
# Understanding Land Use – Local Character Districts



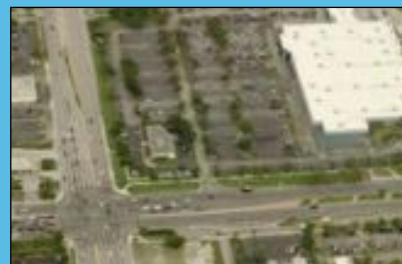
**Local Context: Centers**



**Local Context: Neighborhoods**



**Local Context: Corridors**



# Understanding Land Use – Redevelopment Potential

## Jurisdictional Policy “Audit”

	Cooper City	Coral Springs
<b>SETBACK (ROADWAY)</b>		
Front Setback	Per the County's Trafficway plan 50'	Typically 65' from major roadways for parking, more for front of the building
<b>PARKING REQUIREMENTS</b>		
Min/Max Standards	Sec. 25-3, Off-street Parking required(g) minimum parking requirements are by land use	Sec. 250816 Amount of off-street parking sets min. standards
Location	No Requirements	The city has deed restrictions along major roadways for surface parking which are 65' from the property line.
On street	No Requirements	The code doesn't address, however the Urban and Landscape Standards provide dimensions but do not address if on-street parking can count towards meeting the parking requirements. Sec. 25081 size and character of required parking (2) parallel parking is permitted but may not count towards the required parking spaces, just supplemental. Engineering standards, pg 30 only recognize off-street parking
Shared	No Requirements	Art.VIII, Off street parking, loading (l) shopping centers with a GFLA of 40k or more owned by a single entity or subject to a cross access/cross parking agreements, may petition the city commission for approval of shared parking. The City's Urban Design guidelines also include provisions for shared parking-pg. 35
Bicycle	Sec. 23-92.1 bicycle racks, requires a non-residential develop to include the location of bicycle racks appropriate in size to serve the non-vehicular needs of the proposed development, but doesn't provide standards to meet.	Development order for the Downtown CRA-(s) provide on-site bicycle storage facilities, along with consideration for shower facilities



## Example: University Drive thru Coral Springs

	Size (AC)	# of Parcels	Total AC	% of Total
	≤ 1	88	39	14%
	1 - 3	59	98	35%
	> 3 - 5	12	47	16%
	> 5	11	99	35%

### Existing Policies:

- Commercial Land Use
- Coral Springs Standards
  - *B2/B3 Business and General Commercial*
  - *65' setbacks*
  - *Lack pedestrian & vehicular access*
  - *Non-residential & Multi-family Architectural Standards*



# Space Coast TPO Complete Streets – Best Practice Example



## Project Overview

Create a County-Wide Screening Process for Potential Complete Streets Projects that would receive \$18 million for construction over the next 3 years

## Overall Eligibility Requirements

Complete Street Policy Should Be Adopted

Improvements Should Address at Least 3 (or more) Modes of Transportation

Collector/Arterial Roadways Could Be Eligible for FTA Funding (Don't Include)

The Sponsoring Jurisdiction is Local Agency Program (LAP) Certified by FDOT

Public Support is Required

## Screening Process

Phase	Purpose	Actions
<p><b>Phase 1</b> Identify Locally Supported Opportunity Corridors</p>	<p>Create Long List of Candidate Projects</p>	<ol style="list-style-type: none"> <li>1. Find all eligible corridors (GIS Databases)</li> <li>2. Identify Opportunity Corridors (FLU/Policy Review)</li> <li>3. Local Support (Public Input)</li> </ol>
<p><b>Phase 2</b> Feasibility Analysis</p>	<p>Identify Projects that can be implemented in the near term</p>	<ol style="list-style-type: none"> <li>1. Goals Supported by Municipality (Policy Review)</li> <li>2. Timeline/Constructability (Field &amp; Jurisdictional Review)</li> </ol>
<p><b>Phase 3</b> Cost/Benefit Analysis</p>	<p>Prioritize Short List of Projects</p>	<ol style="list-style-type: none"> <li>1. Supportive Land Uses (FLU/Policy Review)</li> <li>2. Timeline/Constructability (Field &amp; Jurisdictional Review)</li> </ol>



# Public Engagement Activities

Engaging the Local Community, Local Stakeholders, and the Local Governing Agencies

# Public Engagement Activities – Generating Local Support

## Getting the Word Out

- Postcards
- Mailer/Flier
- Newspaper
- E-blasts

## Engagement Tools

- Project Website - Online Engagement Tool
- Public Workshops
- Project Hotline / Email





# Public Engagement Activities – Getting the Word Out!

## Postcards | Mailers | Newspaper | E-Blasts



City Buses & Shuttles

City Halls

Other Municipal  
Buildings

Utility Bill Mailers

Libraries

YMCA's

Senior Center's

Newspaper Ad's

Some Private Retailers  
(Whole Foods Market or  
Starbucks)

Mailer – 500' Radius from  
Centerline of Potential  
Complete Street

# Public Engagement Activities – Getting the Word Out!

## Social Media & Project Websites



# Public Engagement Activities – Getting the Word Out!

## Make it Interactive & Fun!





# Public Engagement Activities

## Public Meetings, Social Media & Websites: *Lessons Learned*

### Website Interaction

- Over 450 Visitors to website
- 123 Registered Users & Completed Quantitative Questions
- 62 Left Comments (Qualitative Questions)

### Public Workshops (Live)

- 1st Workshop: 8 public members
- 2nd Workshop: 4 public members
- 3rd Workshop: 4 public members
- Total: 16 public members
- 21 Comment Forms were collected during the workshops (including those that did not sign-in, but mailed or left forms)

# Public Engagement Activities

## Engaging the Local Governing Agencies *Who Else Needs to Be "On-Board?"*

- Adjacent Municipalities (Partnering)
- Broward County Agencies
  - Transit
  - Traffic Engineering Division
  - Planning Council
  - Planning
  - Public Works
- Broward Metropolitan Planning Organization
- South Florida Regional Planning Council
- Florida Department of Transportation
- South Florida Regional Transportation Authority



# Laying the Ground Work for Complete Streets

- Only about 50% of a complete street is within the ROW
- What happens outside the ROW determines final levels of “completeness”
- FDOT only deals with the ROW
- Local governments rule their own destiny outside the ROW

DeWayne Carver, FDOT Roadway Design Office





# Plan the Land Use First THEN the Transportation

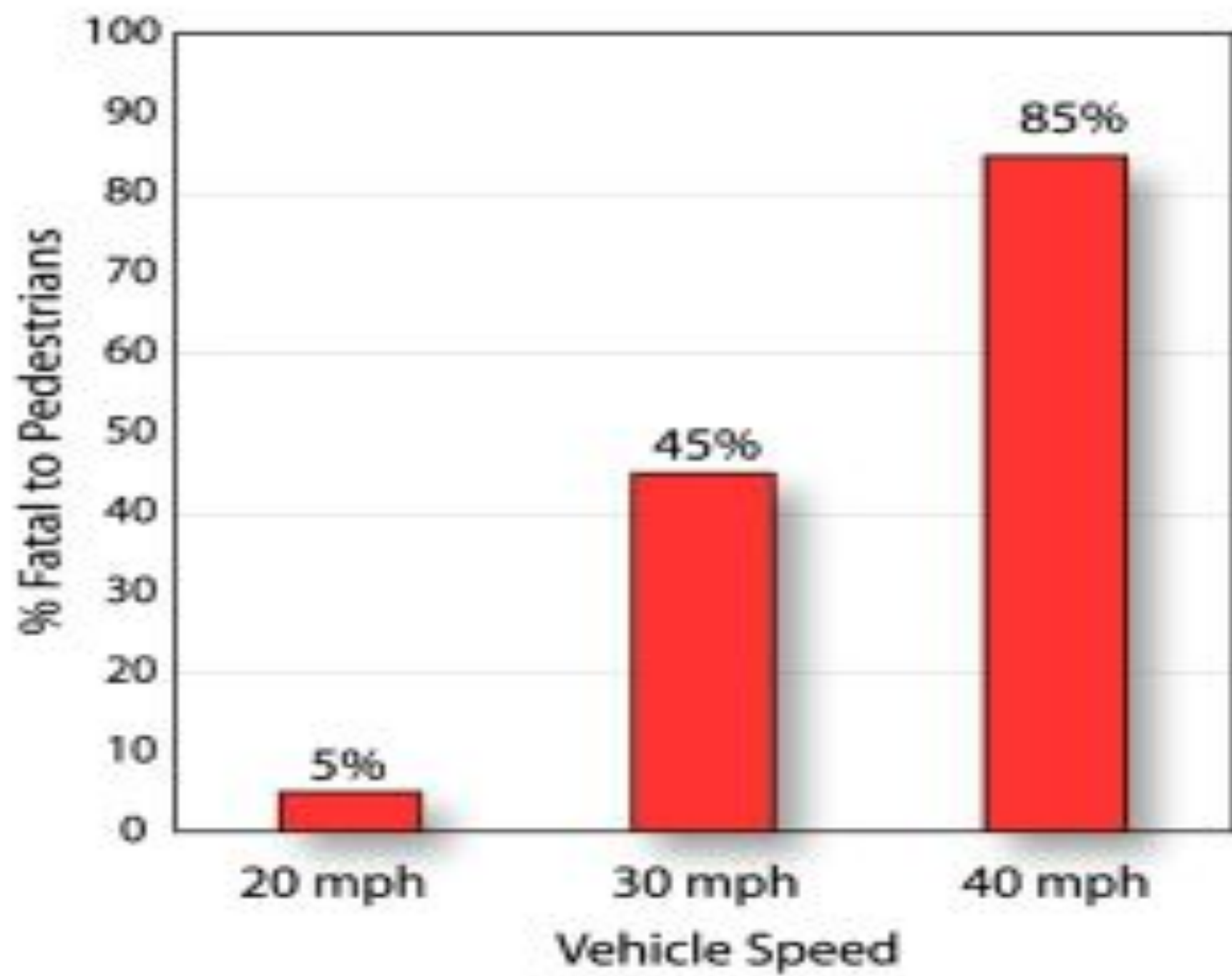


# Top 10 Walkability Factors – Urban Form

10. Narrow Streets
9. Street Trees
8. Traffic Volumes
7. Sidewalks
6. Interconnected Streets
5. On Street Parking
4. Lower Traffic Speeds
3. Mixed Land Use
2. Buildings Fronting St.
1. Small Block Size!









# Local Government Check List

- Form based code
- School siting requirements
  - Traffic concurrency - RESCINDED
  - Minimum facility size – RESCINDED
- TOD
- Corridors and activity centers



Transect Illustration by DPZ, Inc.

# School Board Policy

## FACTS

- 1969 - 48% of students walk or bike to school
- 2009 - less than 13% walk or bike to school
- Since 1945, the number of schools declined 70% while average school size grew from 127 to 653 students
- Most Effective Elementary School Size = 300-400 students

Orange County  
Elementary Schools ~ 1,000 Students



# FDOT Checklist

- The Ice Cream Shoppe
- Greenbook Chapter 19
- TND Handbook
- TDLC Chapter 21
- Contest Sensitive Solutions
- Flexibility in Highway Design
- Design Exceptions and Variations



# Chapter 19/Handbook

- Adopt the latest version!
- Specific to TND, but you probably already have a lot of TND by its definitions
- May be FDOT's tie-in to complete streets
- TND Handbook is the companion volume





# PPM Chapter 21

- Transportation Design for Livable Communities
- Complete Streets before complete streets was cool
- Provides for “complete” features including:
  - Narrower lanes (down to 10’ in some situations)
  - On street parking
  - Shorter curb radii



# TDLC (cont.)

- Also provides for:
  - Revised horizontal clearance
  - One-way to two-way street conversion
  - Bulb outs
- Being revised now to provide additional complete streets options

### Exhibit 21.A. Control Techniques

TECHNIQUE	TRUCKS		SPB URBANS	SPB RURAL	NON- SPB
	LIMITED ACCESS	CONTROLLED ACCESS			
Improved location, orientation or redundant directional signs	A	A	SB	SB	SB
Clear of route markings/ signing for historical and cultural resources	SB	A	A	A	A
Increased use of variable message signing	A	A	SB	SB	SB
Landscaping	SB	SB	SB	SB	SB
Subways or underpasses	SA	SB	A	SB	SB
Street furniture	SA	SB	SB	SB	SB
Bicycle lanes	SA	SB	SB	SB	SB
Shared Use Paths	SA	SB	SB	SB	SB
Conversion of from one-way street paths	SA	SB	SB	SA	SB
Alternative paving materials	SA	SA	SB	SA	SB
Pedestrian signals, midblock crossings, median refuge areas	SA	SB	A	SB	SB
Parking modifications or relocation	SA	SA	SB	SB	SB
Safety and personal security amenities	SB	SB	SB	SB	SB
Street wall	SA	SA	SA	SA	SB

- A "Appropriate" - Techniques which should be included on all TCEC projects unless there are compelling reasons not to do so.
- SB "May be Appropriate" - Techniques which should be employed, but need be evaluated relative to context of the particular project.
- SA "Not Appropriate" - Techniques which need not be considered for TCEC projects.

### Exhibit 21.6. Control Techniques

TECHNIQUE	TRUCKS		SMB URBANS	SMB RURAL	NON- SMB
	LIMITED ACCESS	CONTROLLED ACCESS			
Improved location, orientation or redundant directional signs	A	A	SB	SB	SB
Clear all route markings/signing for technical and cultural restoration	SB	A	A	A	A
Increased use of variable message signing	A	A	SB	SB	SB
Landscaping	SB	SB	SB	SB	SB
Subways or water subways	NA	SB	A	SB	SB
Street furniture	NA	SB	SB	SB	SB
Bicycle lanes	NA	SB	SB	SB	SB
Shared Use Paths	NA	SB	SB	SB	SB
Conversion of from one-way street paths	NA	SB	SB	NA	SB
Alternative paving materials	NA	SB	SB	SB	SB
Pedestrian signals, midblock crossings, median refuge areas	NA	SB	A	SB	SB
Parking modifications or reorganization	NA	SB	SB	SB	SB
Safety and personal security amenities	SB	SB	SB	SB	SB
Street wall	NA	NA	NA	NA	SB

- A "Appropriate" - Techniques which should be included in all TCEC projects unless there are compelling reasons not to do so.
- SB "May be Appropriate" - Techniques which should be employed, but need be evaluated relative to context of the particular project.
- NA "Not Appropriate" - Techniques which need not be considered for TCEC projects.



### Exhibit 21.6. Control Techniques

TECHNIQUE	THREAT		SHE LIMITED	SHE BUREAU	NON-SHE
	LIMITED ACCESS	CONTROLLED ACCESS			
Improved location, orientation or redundant directional signs	A	A	SE	SE	SE
Use of route markings/signage for historical and cultural resources	SE	A	A	A	A
Increased use of variable message signage	A	A	SE	SE	SE
Landscaping	SE	SE	SE	SE	SE
Subways or water subways	NA	SE	A	SE	SE
Street furniture	NA	SE	SE	SE	SE
Bicycle lanes	NA	SE	SE	SE	SE
Shared Use Paths	NA	SE	SE	SE	SE
Conversion of two-way street paths	NA	SE	SE	NA	SE
Alternative paving materials	NA	NA	SE	NA	SE
Pedestrian signals, reduced crossings, median refuge areas	NA	SE	A	SE	SE
Parking modifications or reorganization	NA	NA	SE	SE	SE
Safety and personal security provisions	SE	SE	SE	SE	SE
Street wall	NA	NA	NA	NA	SE

- A "Appropriate" - Techniques which should be included on all TCEC projects unless there are compelling reasons not to do so.
- SE "May be Appropriate" - Techniques which should be employed, but need be evaluated relative to context of the particular project.
- NA "Not Appropriate" - Techniques which need not be considered for TCEC projects.

### Exhibit 21.6. Control Techniques

TECHNIQUE	TRUCKS		SMB URBAN	SMB RURAL	NON-SMB
	LIMITED ACCESS	UNCONTROLLED ACCESS			
Improved location, orientation or redundant directional signs	A	A	SB	SB	SB
Clear of route markings/signing for technical and cultural resources	SB	A	A	A	A
Increased use of variable message signing	A	A	SB	SB	SB
Landscaping	SB	SB	SB	SB	SB
Subways or underpasses	NA	SB	A	SB	SB
Street furniture	NA	SB	SB	SB	SB
Bicycle lanes	NA	SB	SB	SB	SB
Shared Use Paths	NA	SB	SB	SB	SB
Conversion of from one-way street paths	NA	SB	SB	NA	SB
Alternative paving materials	NA	NA	SB	NA	SB
Pedestrian signals, midblock crossings, median refuge areas	NA	SB	A	SB	SB
Parking modifications or relocation	NA	NA	SB	SB	SB
Safety and personal security measures	SB	SB	SB	SB	SB
Street wall	NA	NA	NA	NA	SB

- A "Appropriate" - Techniques which should be included in all TCEC projects unless there are compelling reasons not to do so.
- SB "May be Appropriate" - Techniques which should be employed, but need be evaluated relative to context of the particular project.
- NA "Not Appropriate" - Techniques which need not be considered for TCEC projects.

# CSS/Flexibility in Design

- Provide options for lower design speeds, narrower lanes, and other critical criteria
- Ok to go ABOVE the minimums for sidewalk width
- Ok to go BELOW 12' for lane widths
- Problem is knowing *where* FDOT can do it
- You can help by saying where you *want* it
- FDOT has more work to do, but not starting from zero





# Putting it All Together

Larry Foutz

[lfoutz@hntb.com](mailto:lfoutz@hntb.com)

HNTB





# Primary Decision

Edge of Right-of-Way to Edge of Right-of-Way?

OR

Face of Curb to Face of Curb?



# Edge of ROW to Edge of ROW

- Offers opportunities to locate transit shelters
- Helps correct ADA access issues
- More attractive landscaping and shade
- More pedestrian options



# Edge of ROW to Edge of ROW

Requires reconstructions of:

- Curb and Gutter
- Sidewalks
- Drainage

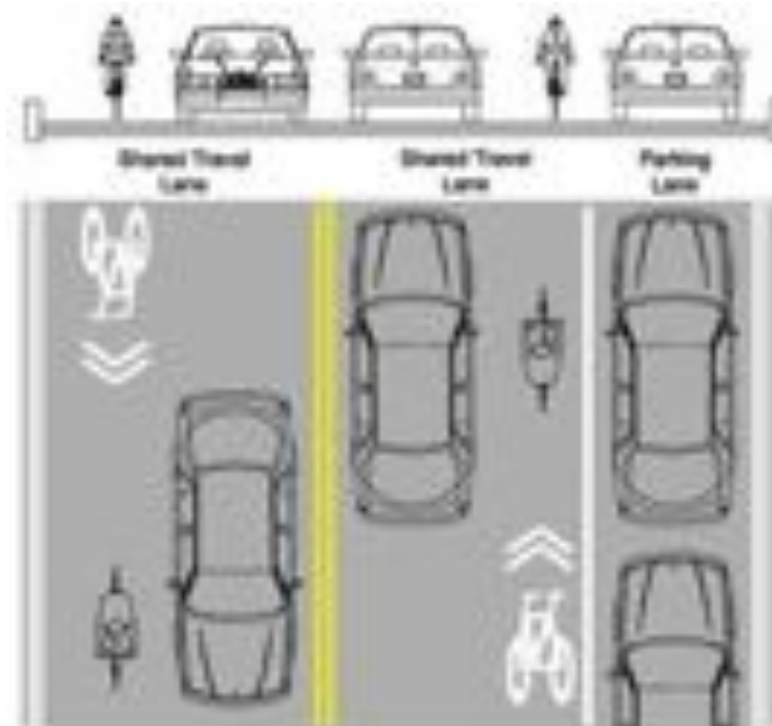
Estimated Cost –

- \$2.5 million/mile
- For both sides of street



# Face of Curb to Face of Curb

- Relies on Road Diet Solutions
- Bike Lane Opportunities
- Transit Improvements Opportunities
- Use Sharrows
- Think bulbouts





# Face of Curb to Face of Curb

- Ease of Implementation
- Low capital cost
- Part of 3R project



# Next Step

Look at entire corridor

- Does the ROW width change?
- Does the paved width change?
- Does the number of lanes change?



# Concept for Corridor

- Balanced traffic: bicycle, transit, & pedestrian
- If limited right-of-way
  - Emphasize one mode with secondary treatment to others.
  - Impact on traffic Level of Service



# What Fits In ROW?

- 50 foot Curb to Curb





# What Fits in ROW?

- 60 foot Curb to Curb



# What Fits in ROW?

- 75 foot Curb to curb



# Other Elements

1. Remember transitions
2. Bus interaction with Bike Lanes
3. Manage right turns
4. Coordinate with FDOT and Public Works
5. Understand impact on Level of Service

# Questions





# Go For It!

- Break out into groups
- Review parameters
- Discuss design as a group
- Select section
- Apply on Streetmix
- Upload your image & share



# Dania Beach

- State Arterial
- 40 MPH
- 100' available ROW – US-1 to Gulfstream Rd (110' ROW in Trafficways plan)
- 90' available ROW – Gulfstream Rd to A1A (100' in Trafficways Plan)

Segment	# Lanes	2012 ADT	Capacity
E of US 1	4 LD	20,000	36,700
E of NE 2 <sup>nd</sup> Ave	6 LD	16,400	55,300
East of Gulfstream Rd	4 LD	15,800	36,700

# Dania Beach Boulevard

E 1<sup>st</sup> Avenue to Gulfstream



- Segment 2 – Existing



# Dania Beach Boulevard

E 1<sup>st</sup> Avenue to Gulfstream





# Dania Beach Boulevard

U.S. 1 to E 1<sup>st</sup> Avenue



- Segment 1 – Existing



# Dania Beach Boulevard

U.S. 1 to E 1<sup>st</sup> Avenue



- Segment 1 – Future Scenario



# Dania Beach Boulevard

E 1<sup>st</sup> Avenue to Gulfstream



- Segment 2 – Existing



# Dania Beach Boulevard

E 1<sup>st</sup> Avenue to Gulfstream



- Segment 2 – Future Scenario





# Dania Beach Boulevard

Gulfstream to A1A



- Segment 3 – Existing



# Dania Beach Boulevard

Gulfstream to A1A



- Segment 3 – Future Scenario



# Prospect Rd

- County Arterial
- 35 MPH
- 100' of available ROW (100' in Trafficways Plan)

Segment	# Lanes	2012 ADT	Capacity
At 3 <sup>rd</sup> Avenue (Commercial)	6 LD	25,500	50,300
At 12 <sup>th</sup> Avenue (Residential)	4 LD	33,500	50,300

# Prospect Road at 3<sup>rd</sup> Avenue





# Prospect Road at NW 12<sup>th</sup> Avenue

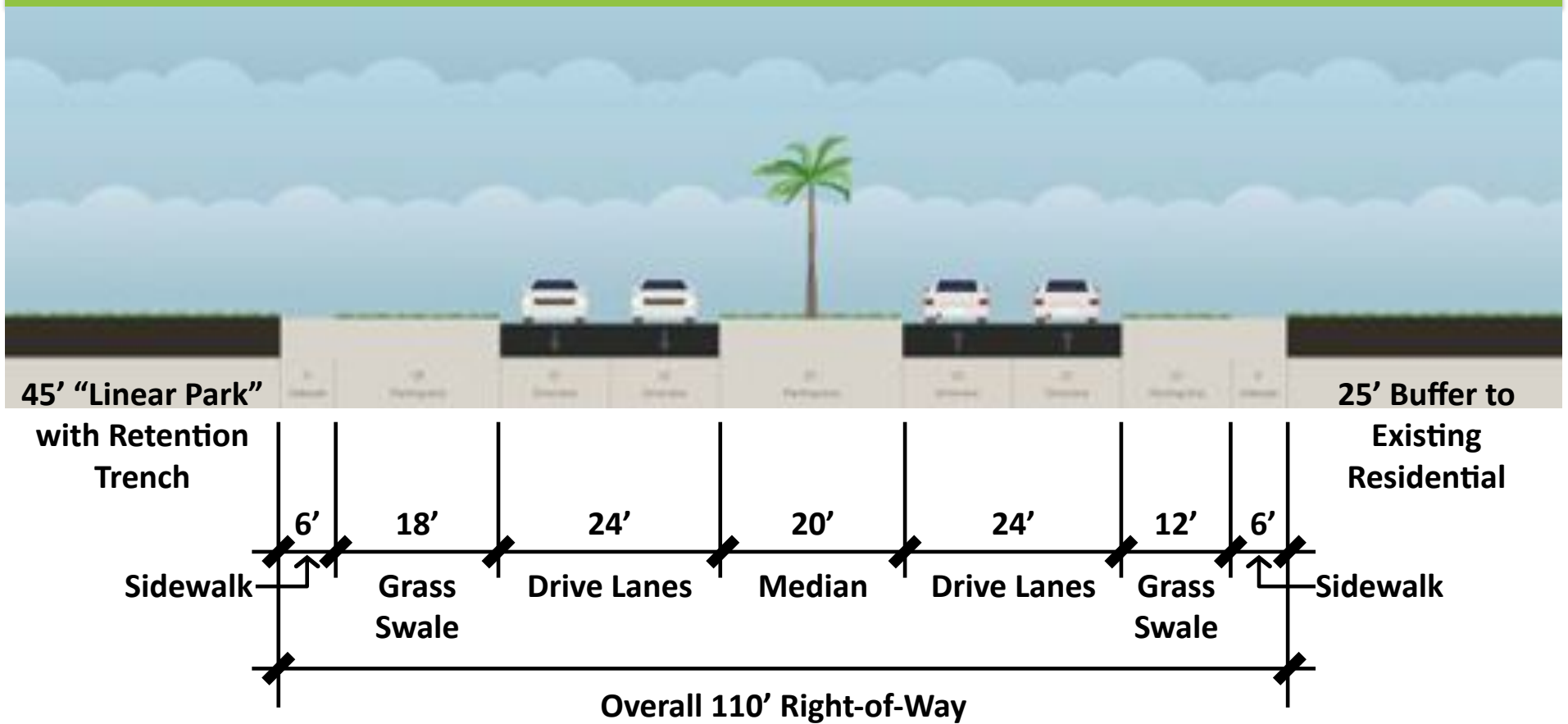


# University Drive

- Municipal Arterial
- 40MPH
- 110' available ROW (200' ROW in Trafficways plan) Linear Park from south of Wiles Rd to North of NW 40 St on west side.

Segment	# Lanes	2012 ADT	Capacity
NW 40 ST to Wiles Rd	4 LD	34,000	33,200
Sample Rd to NW 40 <sup>th</sup> St	6 LD	33,500	50,300

# Existing

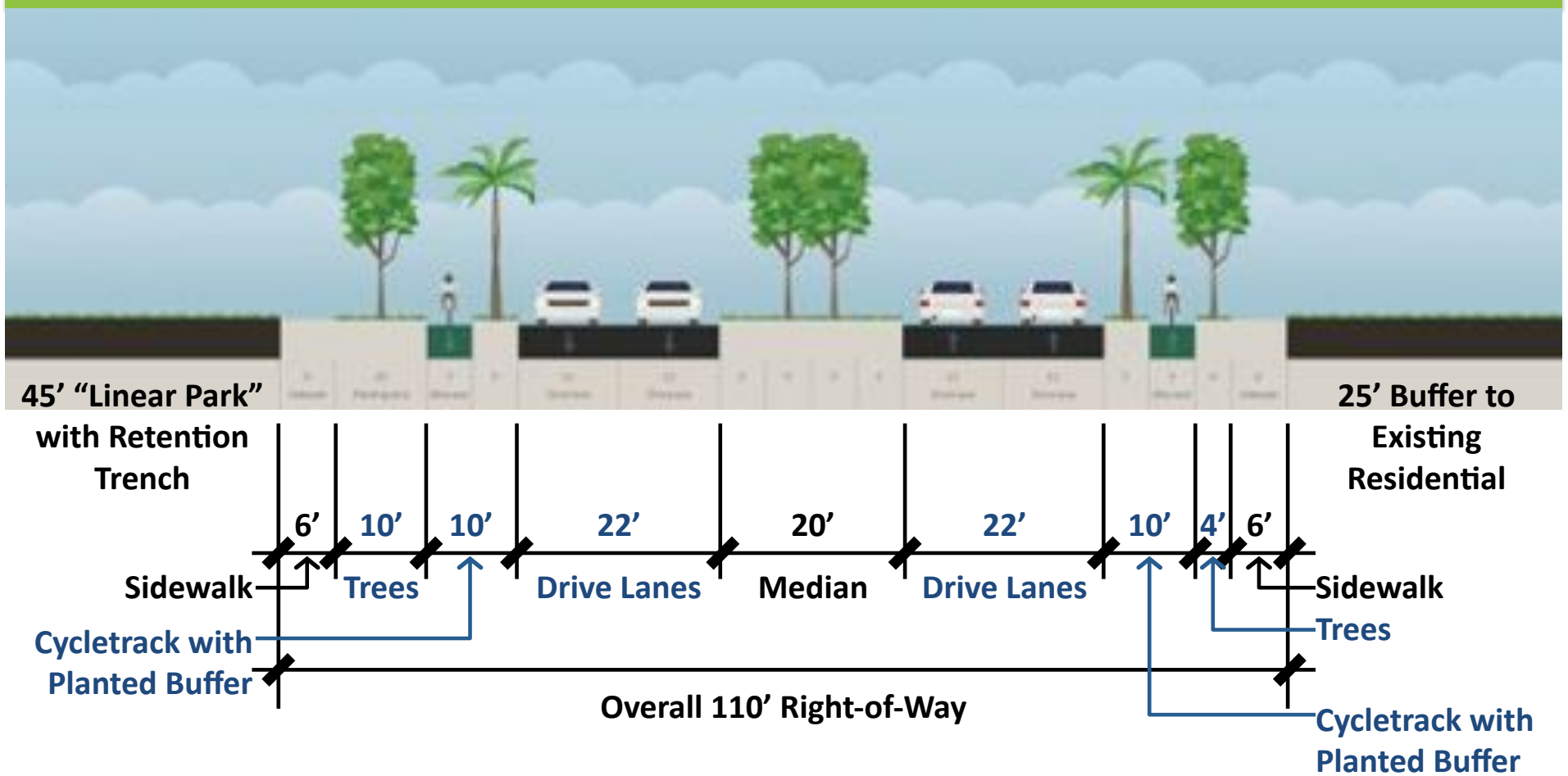


## Information

- 4 Lanes (Divided)
- AADT: 34,000
- Capacity: 33,200

**University Drive** *(Swale, No Curb)*  
*(NW 40<sup>th</sup> St to Wiles Rd)*

# Future



## Information

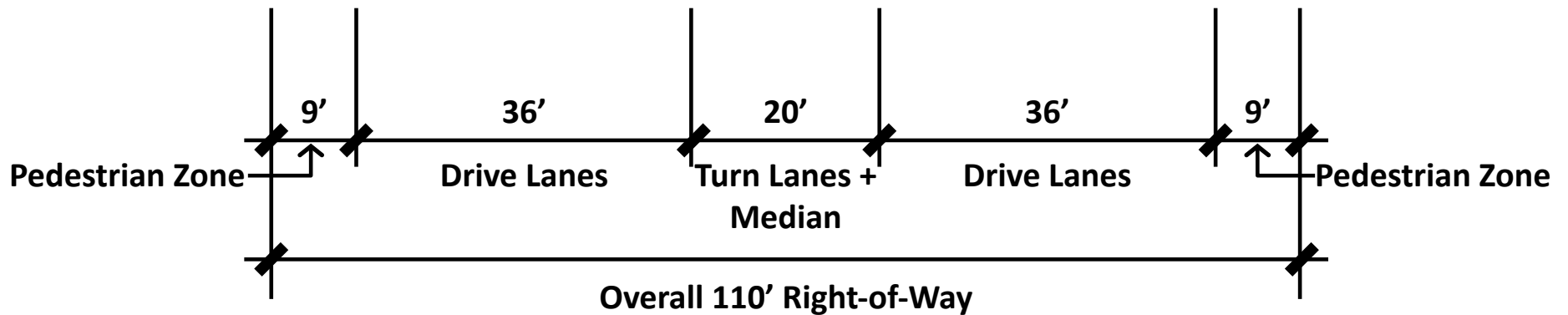
- 4 Lanes (Divided)
- AADT: 32,300\*
- Capacity: 33,200

**University Drive** (Swale, No Curb)  
(NW 40<sup>th</sup> St to Wiles Rd)

\*New & Safer Cycletrack has encouraged more people to take bikes to work resulting in a 5% reduction of the AADT.



# Existing Section

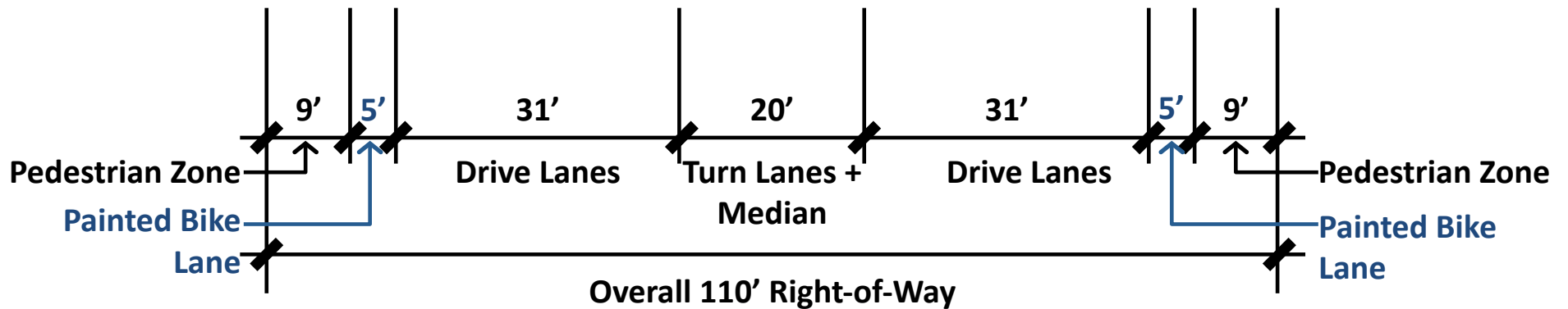


## Information

- 6 Lanes (Divided)
- AADT: 33,500
- Capacity: 50,300

**University Drive** (*Curb + Gutter*)  
(*Sample Rd to NW 40<sup>th</sup> St*)

# Proposed Section—Keep the Curb/Lane

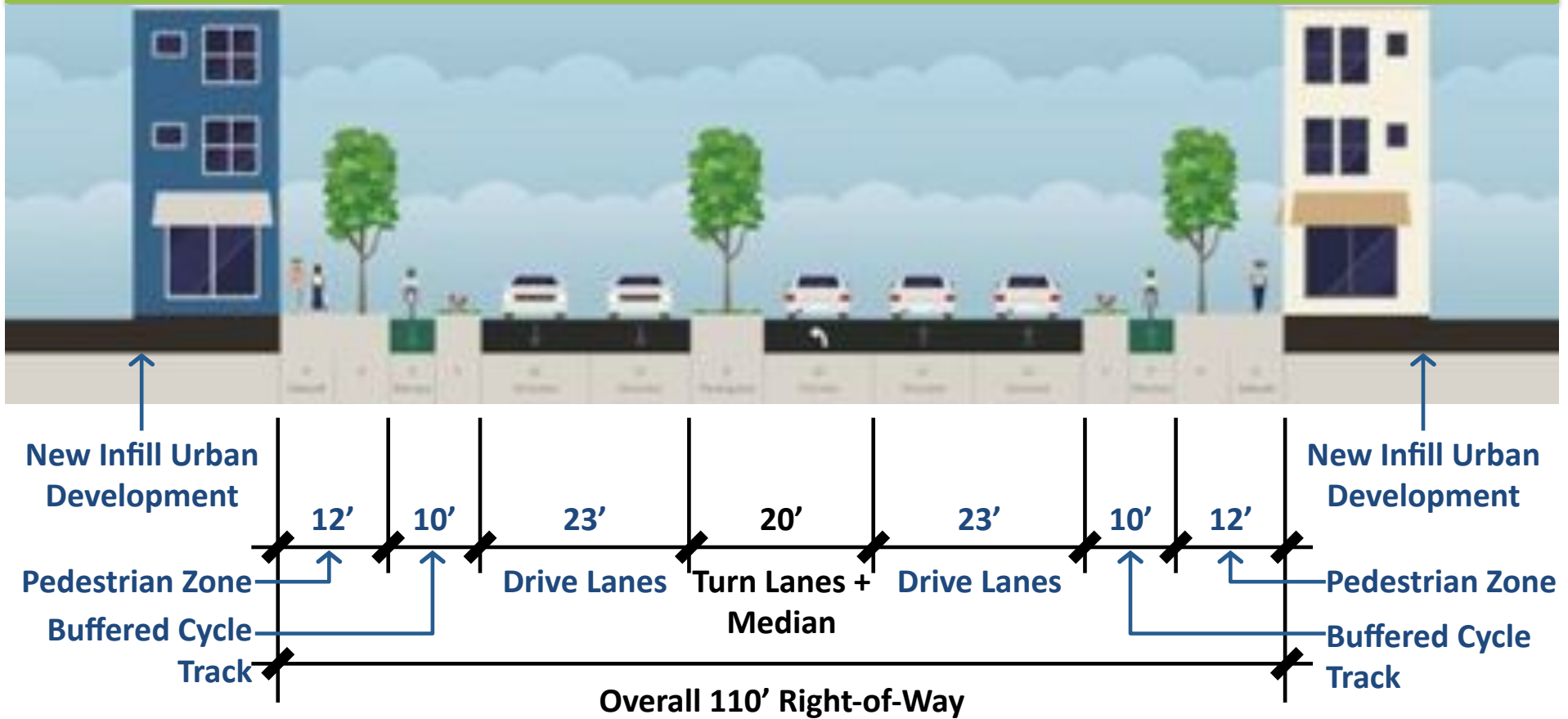


## Information

- 6 Lanes (Divided)
- AADT: 33,500
- Capacity: 50,300

**University Drive** *(Curb + Gutter)*  
*(Sample Rd to NW 40<sup>th</sup> St)*

# Proposed Section—Change Curb/Lane



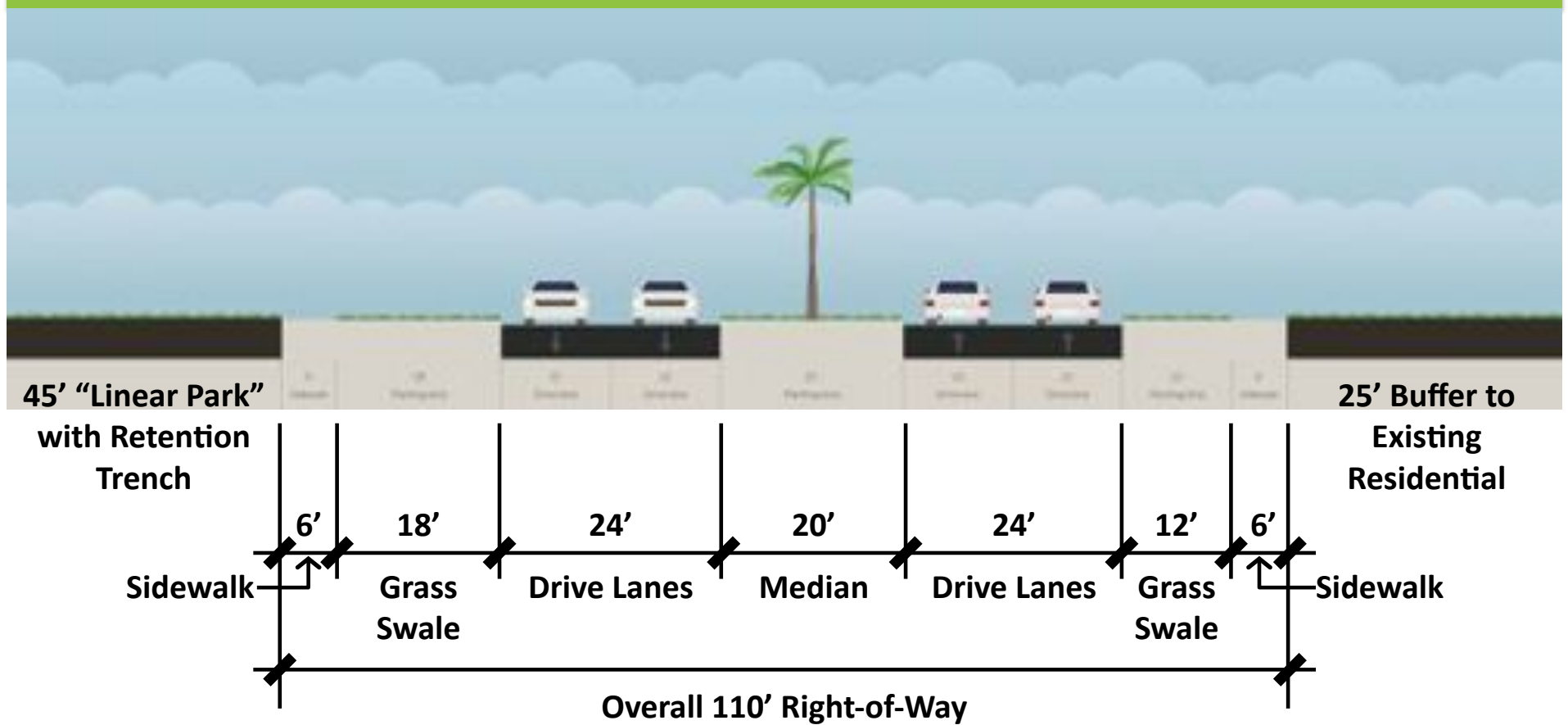
## Information

- 4 Lanes (Divided)
- AADT: 30,000\*
- Capacity: 33,200

**University Drive** (Curb + Gutter)  
*(Sample Rd to NW 40<sup>th</sup> St)*

\*New Infill Urban Redevelopment has included a network of connected streets resulting in a 10% reduction of the AADT.

# Existing Section



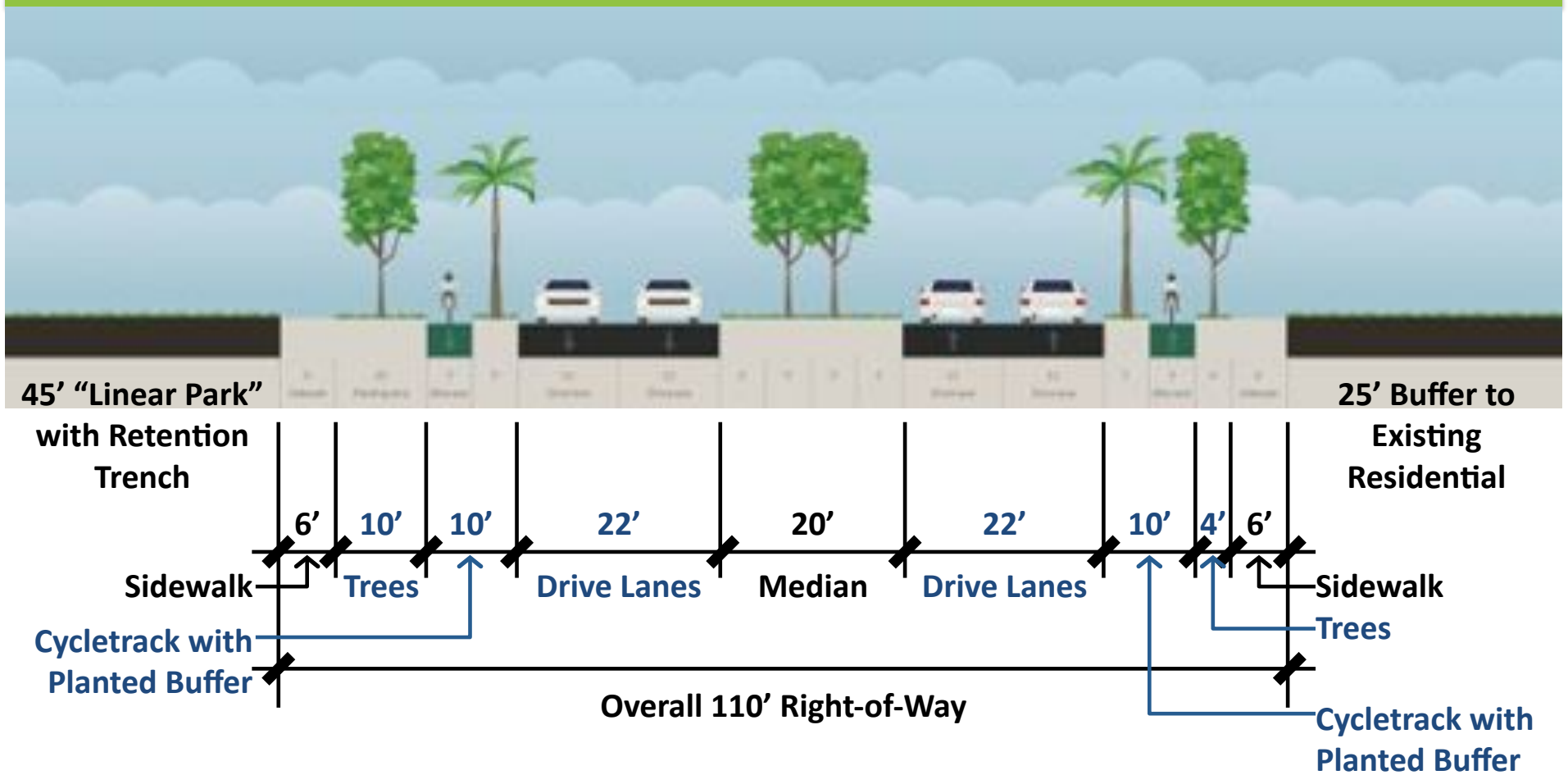
## Information

- 4 Lanes (Divided)
- AADT: 34,000
- Capacity: 33,200

**University Drive** (Swale, No Curb)  
(NW 40<sup>th</sup> St to Wiles Rd)



# Proposed Section



## Information

- 4 Lanes (Divided)
- AADT: 32,300\*
- Capacity: 33,200

**University Drive** (Swale, No Curb)  
 (NW 40<sup>th</sup> St to Wiles Rd)

\*New & Safer Cycletrack has encouraged more people to take bikes to work resulting in a 5% reduction of the AADT.

# Thank you!

- Please take survey
- Obtain AICP Credits
- Visit: [www.BrowardMPO.org](http://www.BrowardMPO.org)

