



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.





Bicycle & Pedestrian Crashes 2006-2012

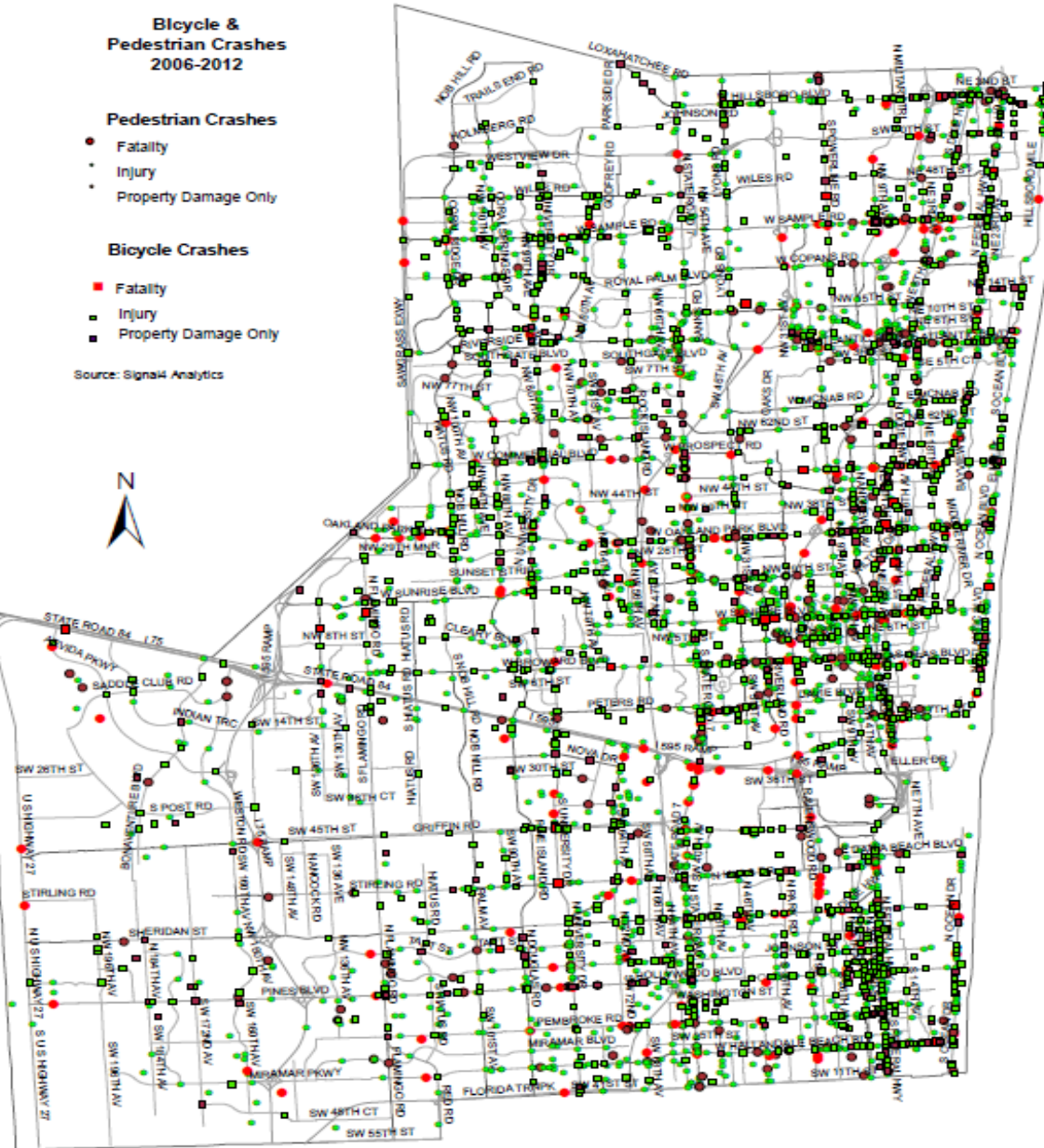
Pedestrian Crashes

- Fatality
- Injury
- Property Damage Only

Bicycle Crashes

- Fatality
- Injury
- Property Damage Only

Source: Signal4 Analytics



Prepared By: Broward County Highway Construction and Engineering.



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

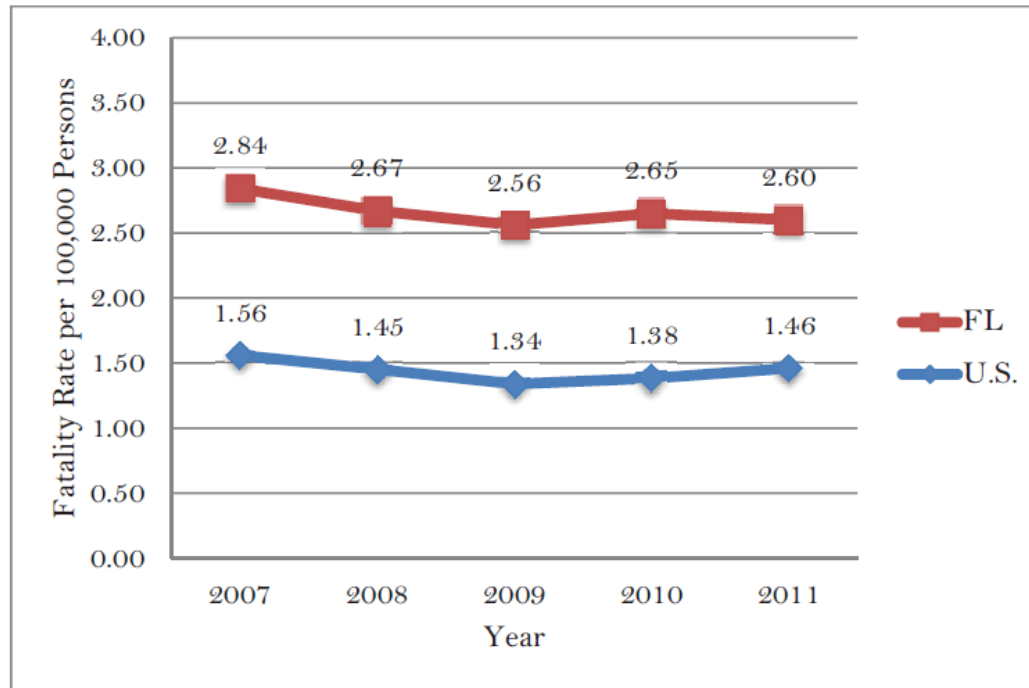


Figure 1-1. Pedestrian fatality rates per 100,000 persons.

Source: NHTSA FARS.



Florida Department of Transportation

National: Bike Fatalities 2007-2011

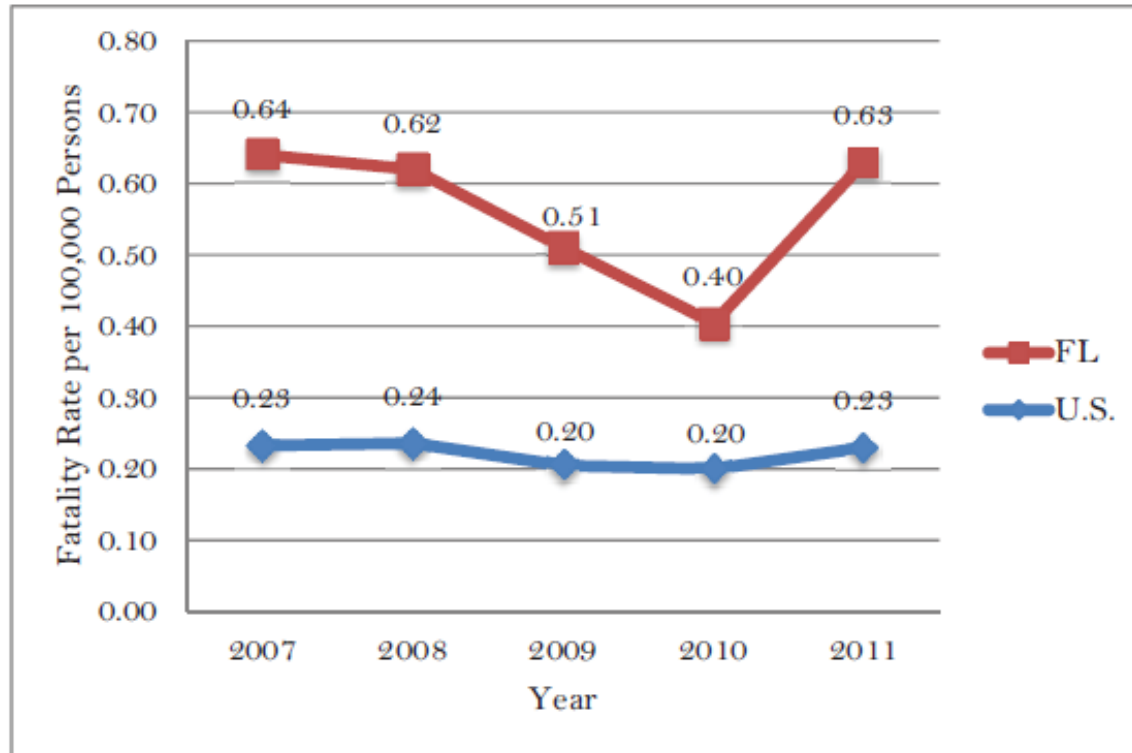


Figure 1-2. Bicycle fatality rates per 100,000 persons.

Source: NHTSA FARS.



Florida Department of Transportation

Florida: Types of Pedestrian Crashes

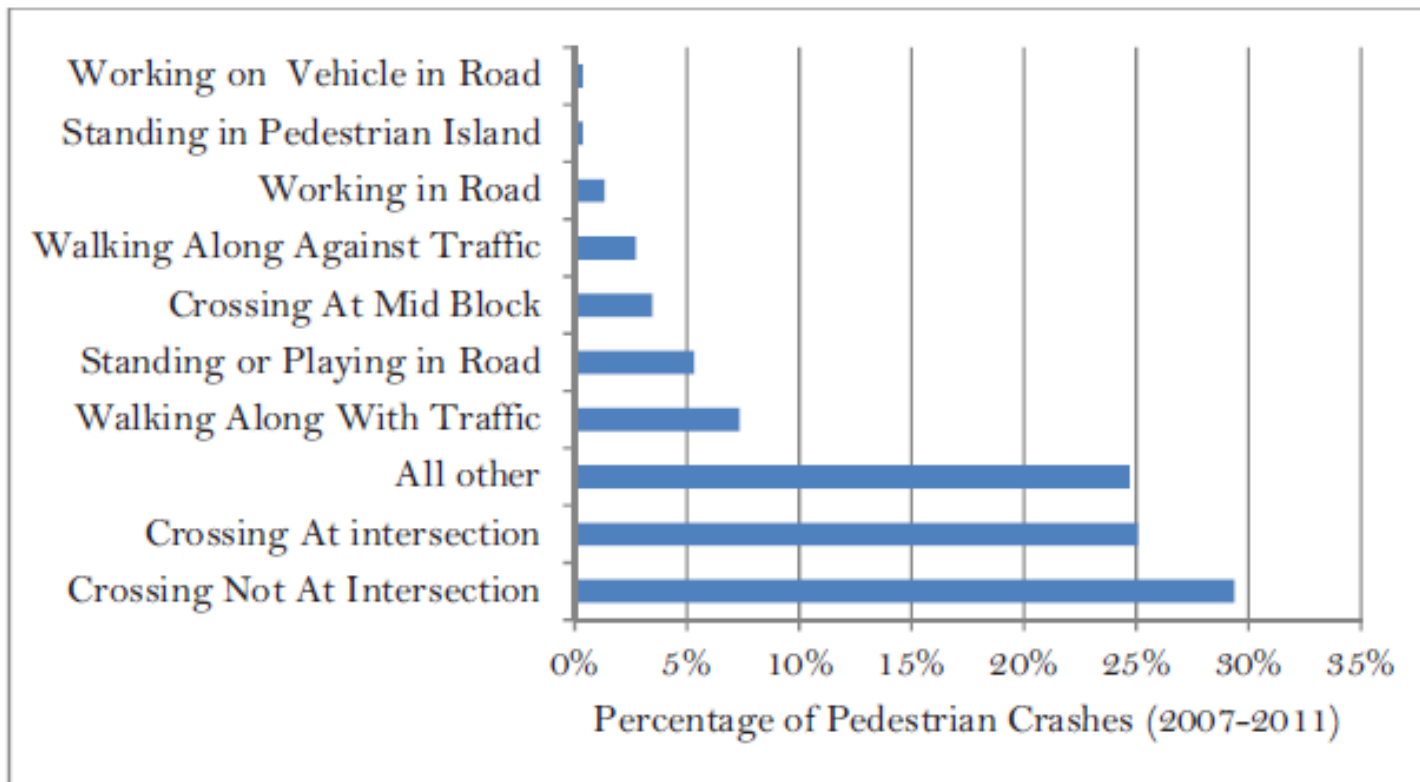


Figure 2-12. Statewide pedestrian crashes by pedestrian action.

Source: FDOT CAR System.

SAFETY DOESN'T HAPPEN BY ACCIDENT.



**WHETHER YOU'RE DRIVING OR WALKING—
PAY ATTENTION. READ THE SIGNS.
LEARN THE RULES.**

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

Funded by the Florida Department of Transportation

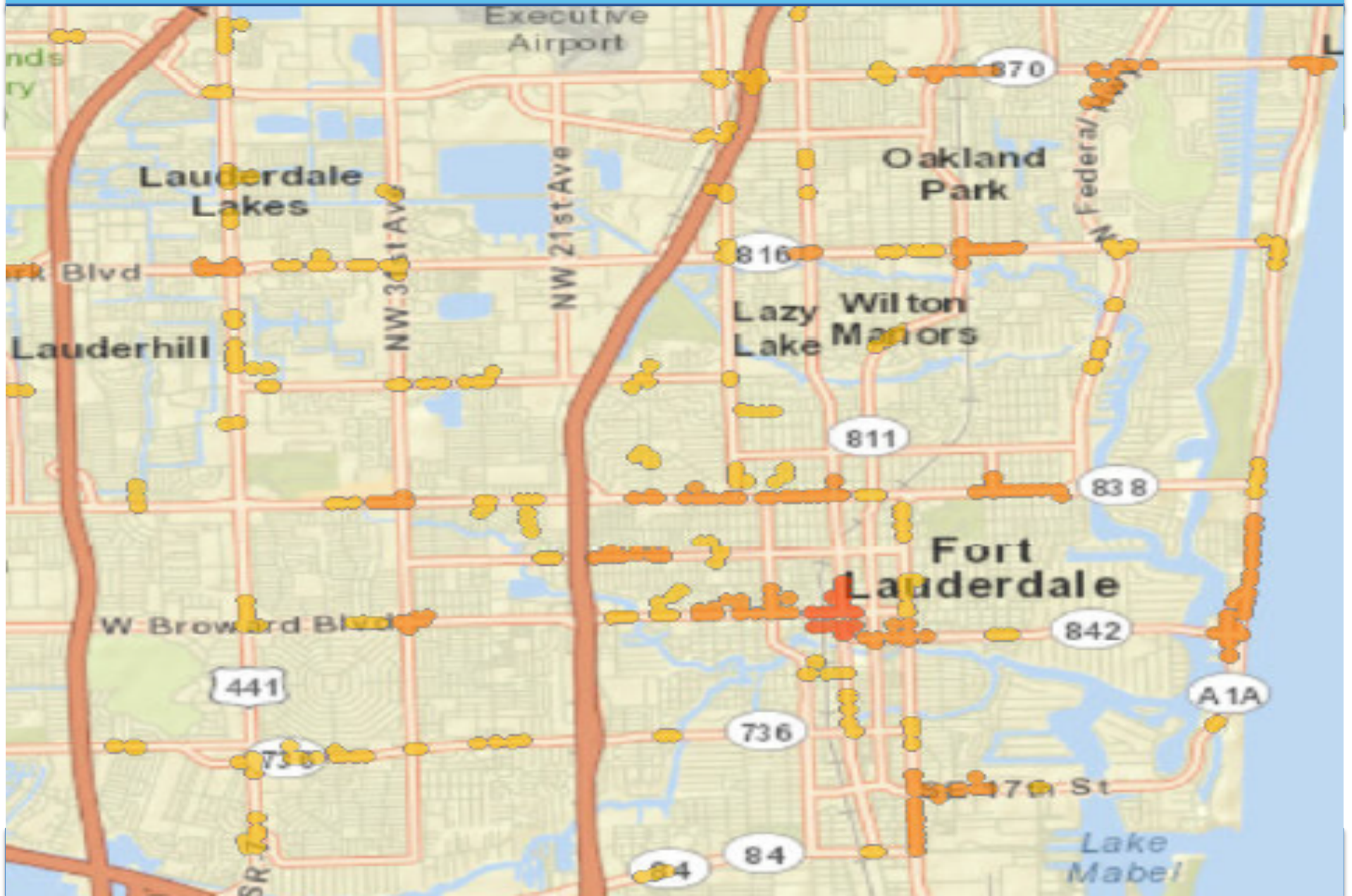
Joint FDOT, Broward County, MPO, Ft. Lauderdale

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)



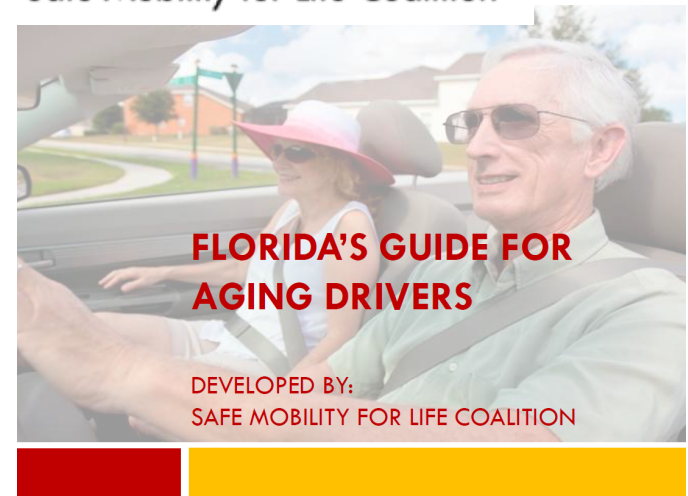
Birth to Retirement

- **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 >



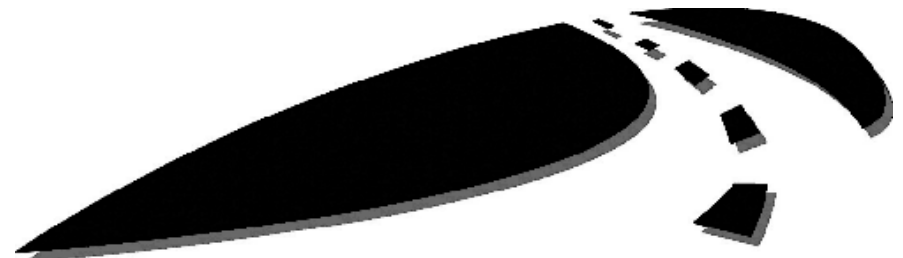
www.1800234ride.com

www.goschoolpool.com

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



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

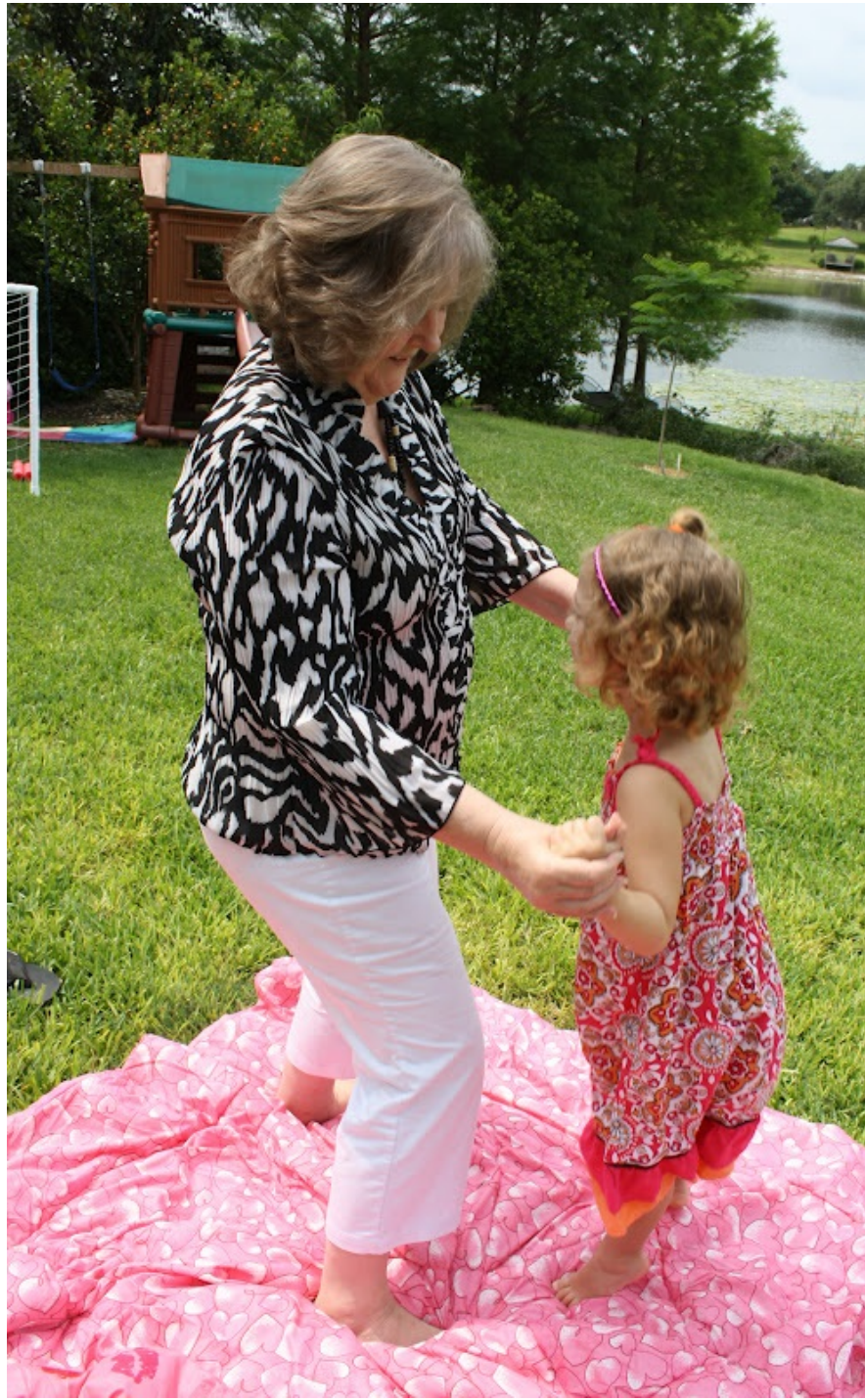
Panelist:

- 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[®]



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.







Maguire Road

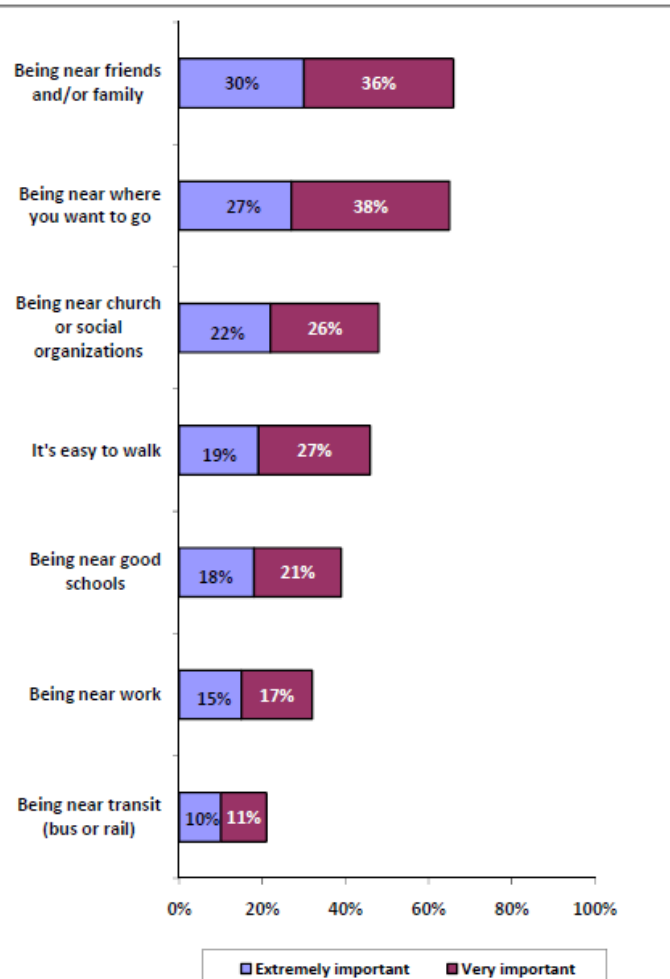


© 2013 Google

Google

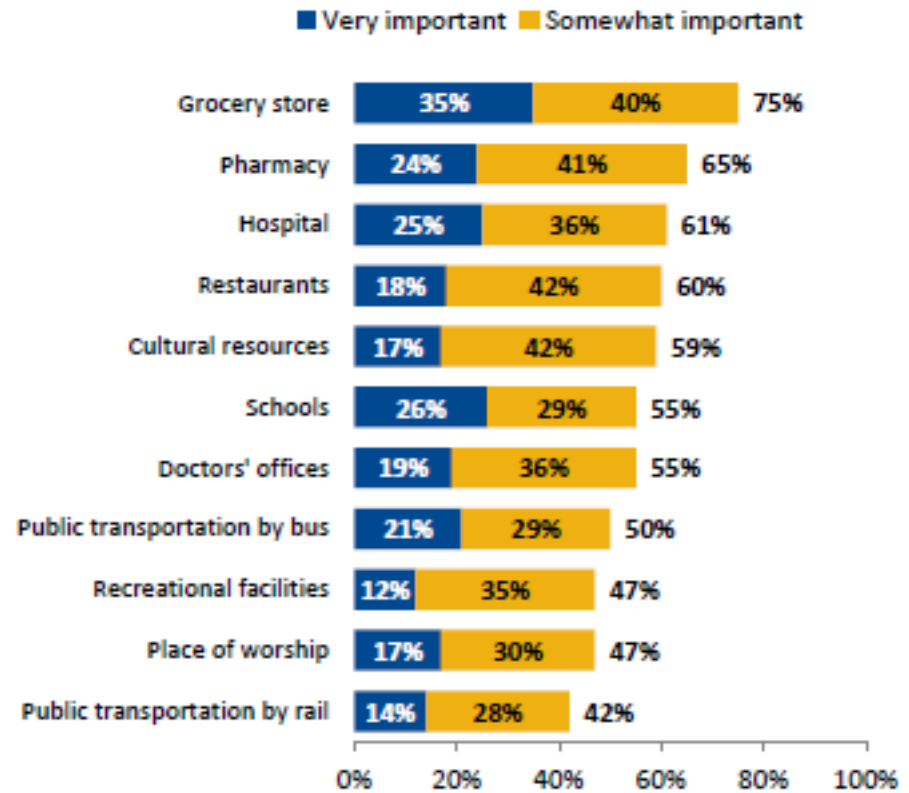
28°31'45.66" N 81°32'29.71" W elev 156 ft eye a

Importance of Community Aspects for Staying in One's Community (n=985)



Source: AARP
www.aarp.org

Importance of Walkability



Source: National Association of Realtors
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

\$2.00

POWERING OregonLive.com

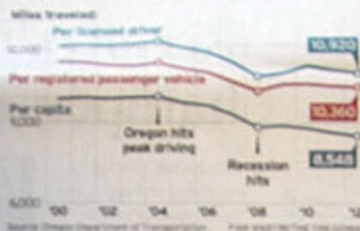
SEPTEMBER 15, 2013

Drivers ease off the gas in cultural shift

Rush hour is still a slog, but many motorists have adopted "driving light"

Peak driving in Oregon

Oregonians began driving less long before the recession.



Syria must gut arsenal publicly, experts say

Quick action would show compliance; otherwise Assad will face accusations of stalling, diplomats say

By WILLIAM J. BROAD
and DAVID E. SANGER
NEW YORK TIMES NEWS SERVICE

When Libya's Moammar Gadhafi had to convince the world 10 years ago that he was serious about giving up his chemical weapons, he dragged warheads and bombs into the desert and flattened them with bulldozers.

When Saddam Hussein, defeated in the Persian Gulf War of 1991, had to demonstrate that he was giving up his chemical arsenal, Iraqis protected by little more than tattered cloths over their faces poured some of the agents into ditches and set them on fire, to the shock of inspectors watching in heavy "moon suits."

Weapons experts and diplomats say that if Syria's President Bashar Assad is serious about complying with the landmark agreement announced Saturday in Geneva, he will have to take similarly dramatic steps to show he is complying.

Anything short of a quick and dirty demonstration of willingness they say, will be a sign that Assad seeking to drag out the process, betting that time is on his side as memories fade of the chemical weapon attack that is said to have killed more than 1,400 people in his country's civil war.

The benchmarks laid out in the Geneva agreement seek to capitalize on the momentum by imposing quick deadlines, including a requirement that Syria submit a complete list of its chemical weapons, storage and production facilities within a



DOUG BEHTEL/THE OREGONIAN

Rush-hour traffic crawls along eastbound U.S. 26 near Sylvan last week. Auto sales are rebounding and peak driving times are growing more nightmarish as the economy improves. But the latest traffic and demographic data show Oregonians are driving less overall, a trend that started four years before the recession hit in 2008 and is continuing even as the economy improves.

traffic-analytics leader Inrix. Last year the

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:

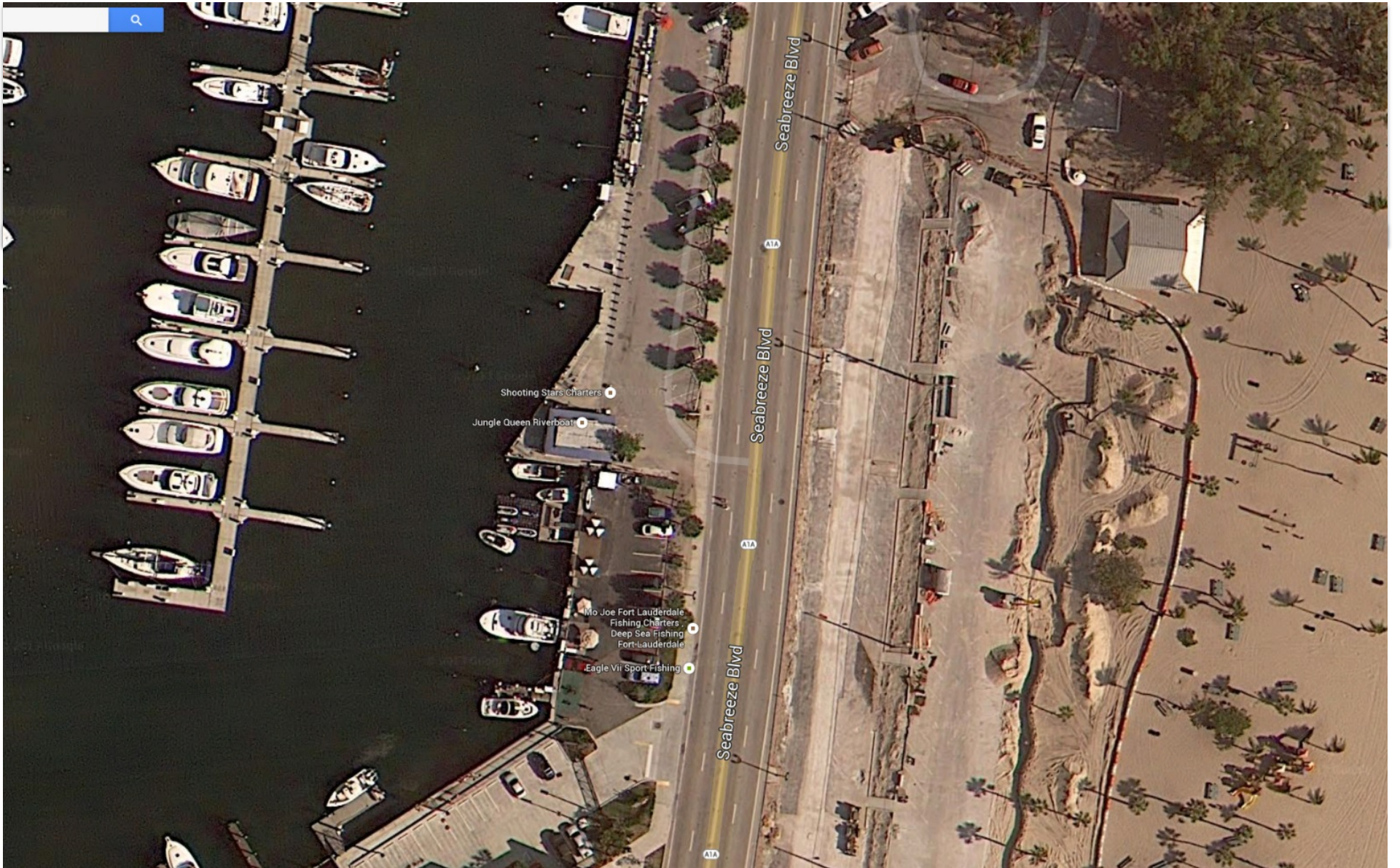
- Mark Mayfield

Presenter:

- Avery Pack, Principal, Republic Bike

republic 





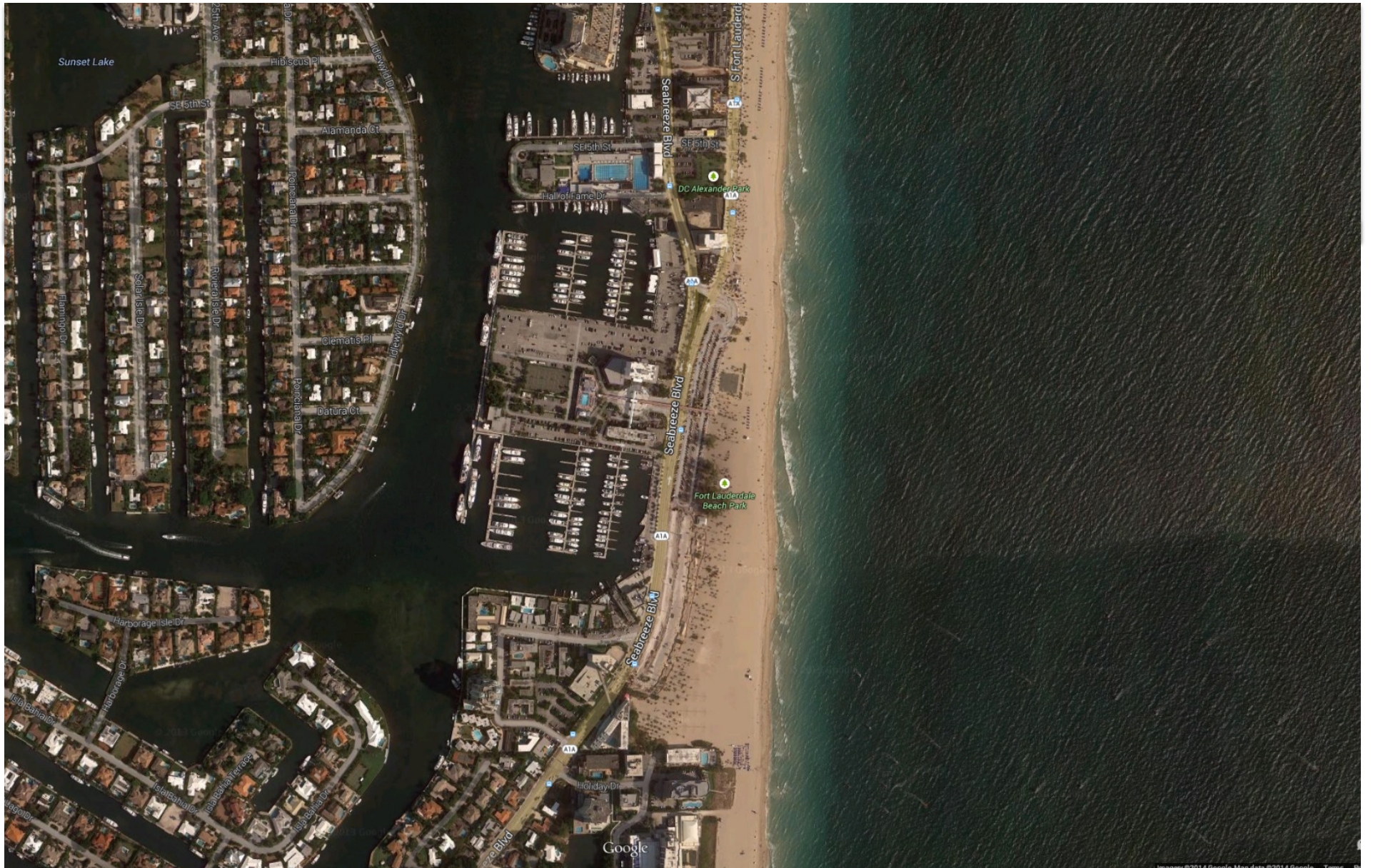
















Google

Imagery ©2014 Data SIO, NOAA, U.S. Navy, NGA, GEBCO; Landmarks ©2014 ESRI; Street View ©2014 Google







URBAN OUTFIT TERS



G
BY GUESS















 **CBS**







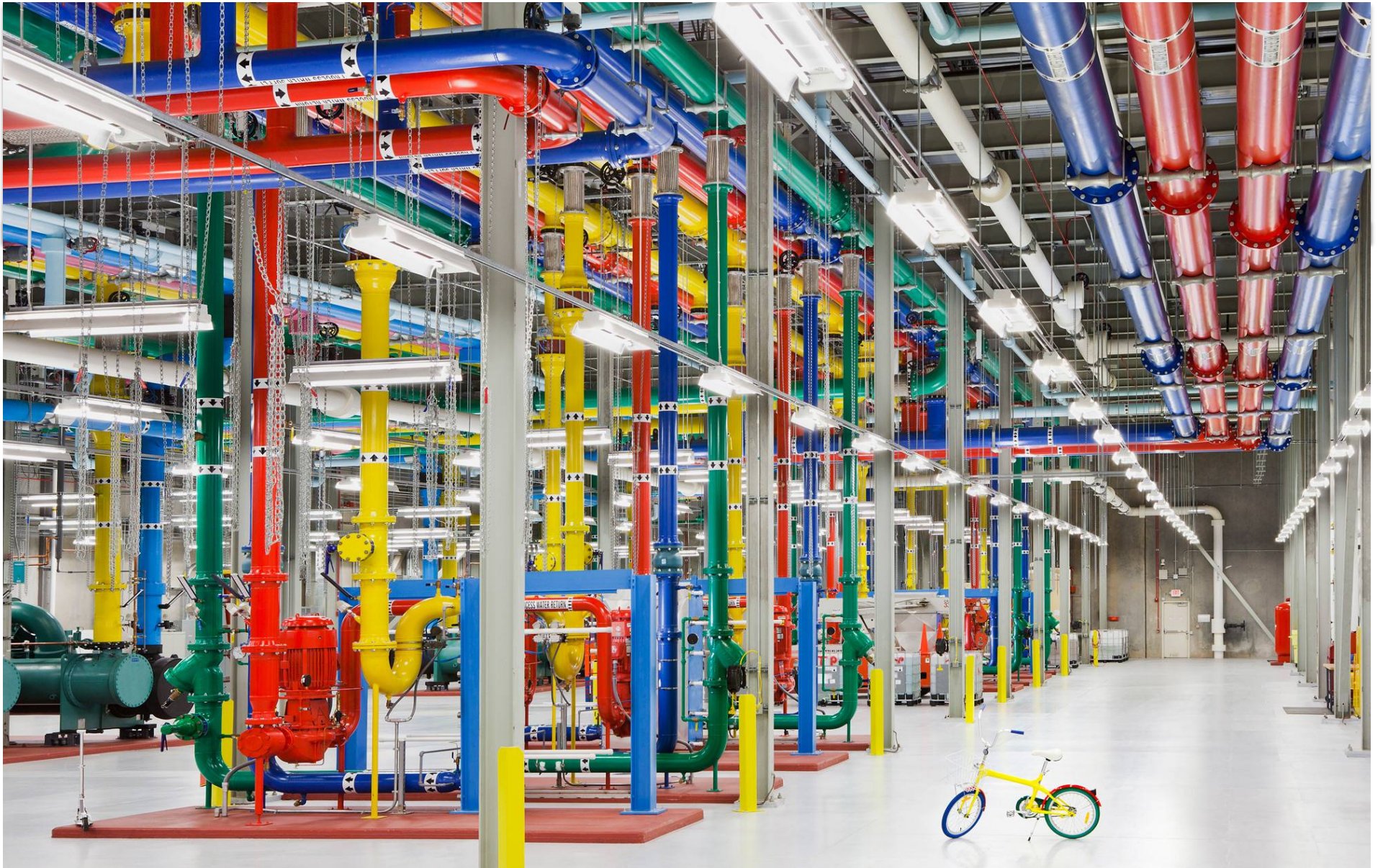


republic



 Computer History Museum































republic

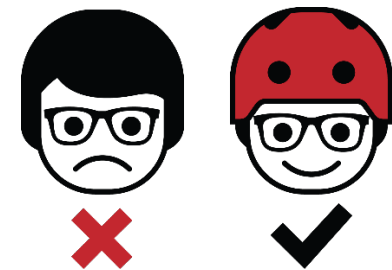
www.republicbike.com



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

- 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 Prevent Childhood Obesity
and Create Active Communities



Photo by Gary Hack

**Business Performance in
Walkable Shopping Areas**



TECHNICAL REPORT
November 2013

Robert Wood Johnson Foundation



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

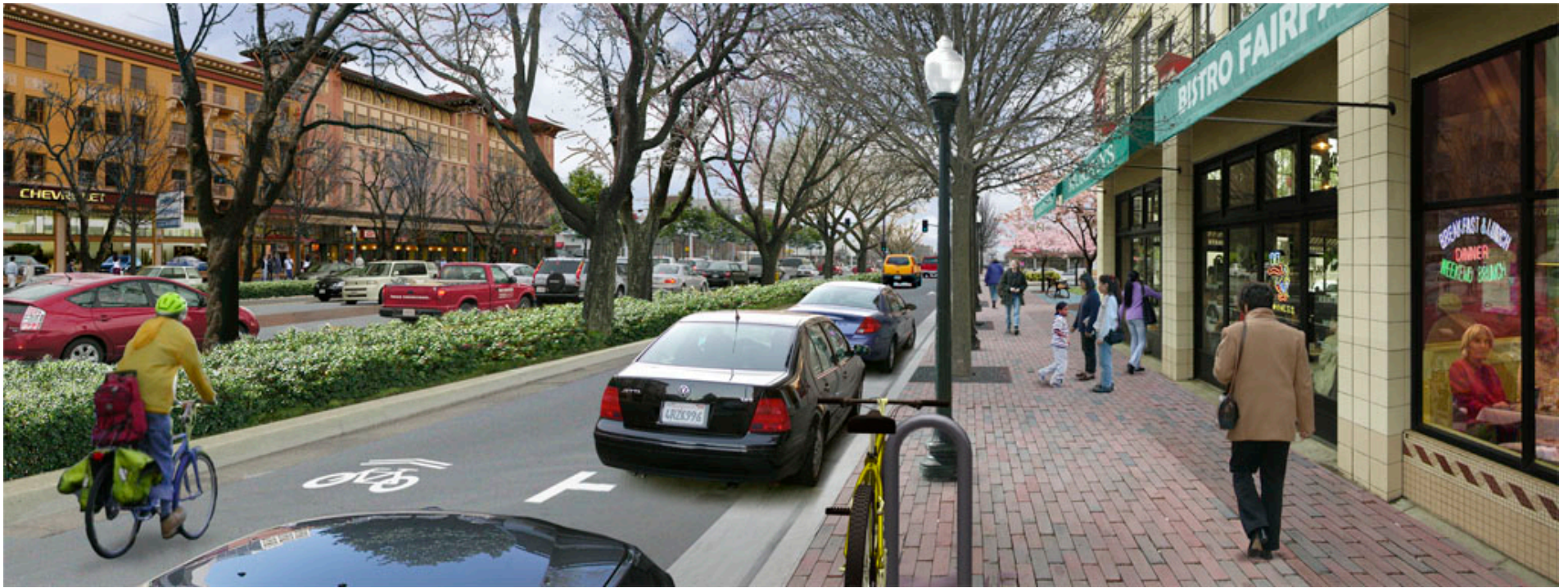
Fairfax, Virginia



New mixed use infill development,
public plaza

Urban Advantage

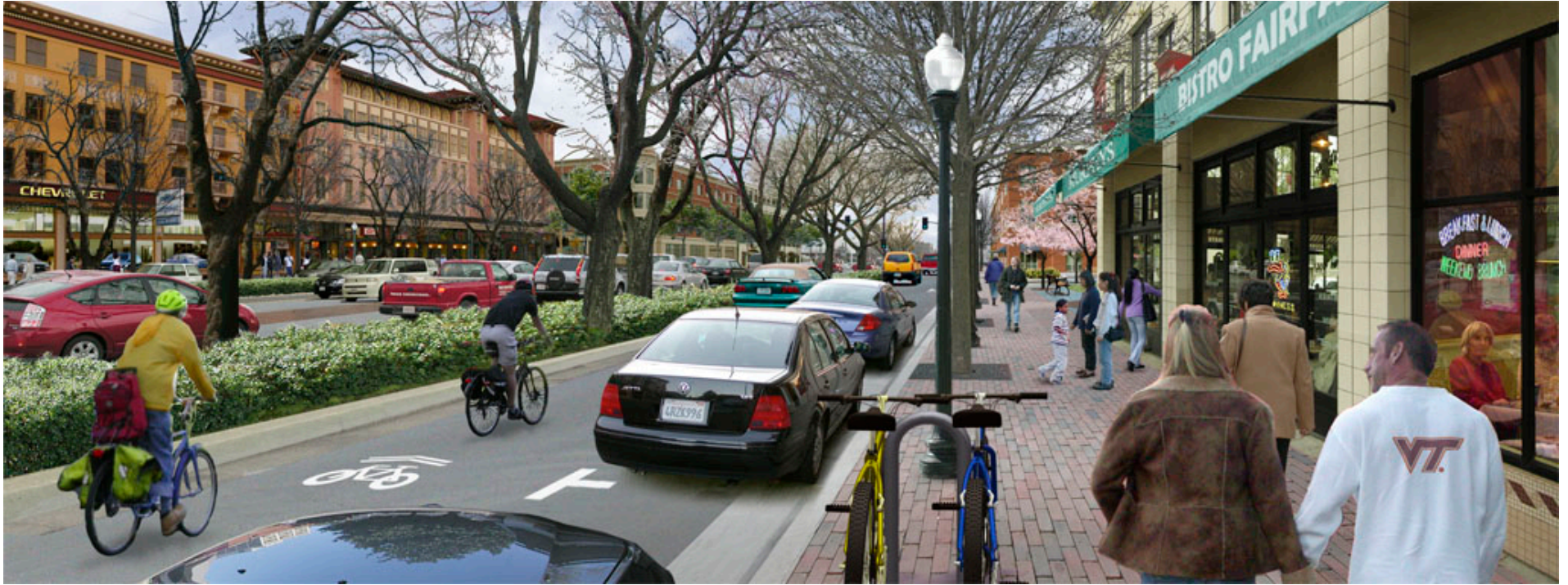
Fairfax, Virginia



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



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 to learn more!





2014

SAFE STREETS AWARD

Making Bike Lanes A Big Hit!





Not So Fast! Best Jurisdiction to Implement Traffic Calming Tactics





All Hail to the Broward Champion of Safe 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

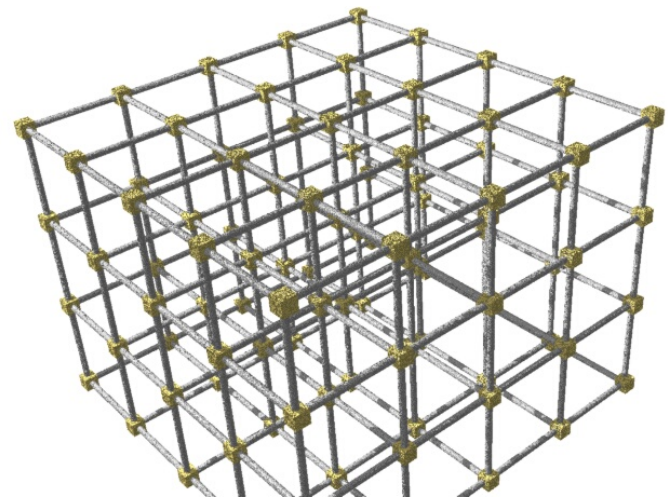
Agenda

- 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



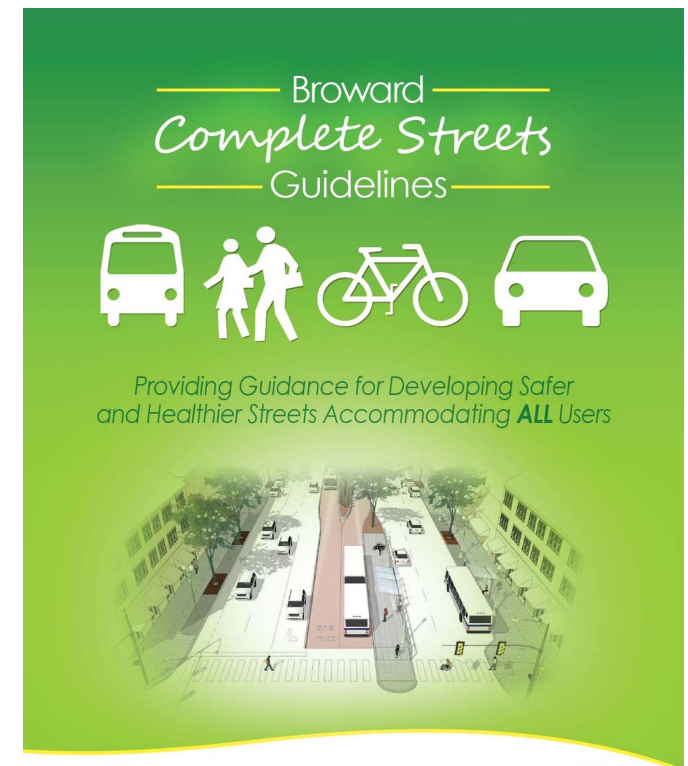
Florida State Statute 335.065

- 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



TOUCH **broward MPO** **Smart Growth** **UHP** **BRHPC**
Transforming Our Community's Health metropolitan planning organization PARTNERSHIP Urban Health Partnerships Broward Health's Center for Health Promotion

43429001.12

Prepared by **Kimley-Horn and Associates, Inc.**



Model Plan Framework

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



Broward Complete Streets Model Plan Framework

To facilitate the implementation of the Broward Complete Streets Guidelines, the Broward Complete Streets Initiative Technical Advisory Committee (TAC) created a "Model Plan Taskforce." Over the course of three months, this group developed a list of essential elements to include in the development of a Complete Streets Plan:

- Introduction
- An assessment of existing conditions and assets
- Forecast of future conditions
- Public Engagement
- Development of Goals/Objectives
- Implementation Plan
- Performance Measures
- Evaluation

Based on this outline and Taskforce guidance, UHP researched various online resources that can be used to provide an overview of a City's existing and forecasted conditions as well as an inventory of transportation-related infrastructure. These resources are categorized and listed by their Web address within the Planning Framework to help inform the City's planning efforts. Once a City has researched these resources and conducted a preliminary assessment, it can engage the public to help develop goals for Complete Streets.

From this public outreach city planners, will be able to identify key areas for Complete Streets investments and ultimately create a Complete Streets Plan. Ideally, all streets within a municipality will be considered "Complete," but with the creation of a Complete Streets Plan, cities can identify critical connections and corridors and prioritize investments.

This Policy Framework was designed to be malleable to address each jurisdiction's Complete Streets needs and priorities. Jurisdictions may adopt as many or as few of the components of this model as needed, depending on the goals of its residents and local leaders. For any questions or comments regarding this framework please visit www.BrowardCompleteStreets.org or email Complete Streets Program Manager Patrice Gillespie Smith at Patrice@UrbanHS.com.

Acknowledgements:

Broward Model Plan Framework Taskforce Members:

- Paul Carpenter, City of Coral Springs
- Rick Labinsky, City of Hallandale Beach
- Mark Horowitz, Broward County Highway Engineering Department
- Larry Hymowitz, FDOT, District 4
- Amanda Martinez, City of Deerfield Beach

Staff:

- Priscila Clawges, Broward MPO
- Ricardo Gutierrez, Broward MPO
- Buffy Sanders, Broward MPO
- Lauren Bello, UHP
- Patrice Gillespie Smith, UHP

We also appreciate the close review by the Broward MPO Complete Streets Technical Advisory Committee

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



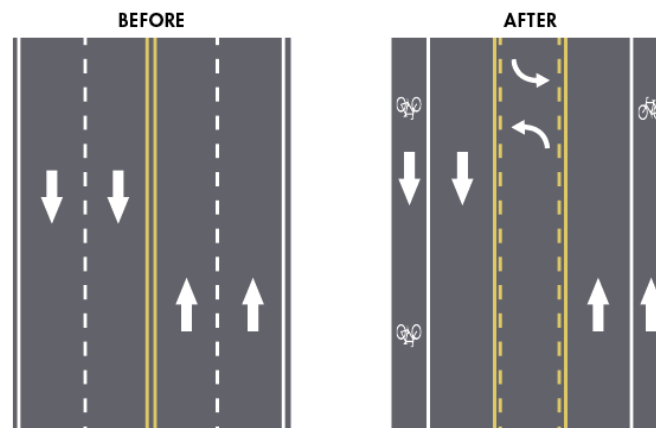
Context Sensitive Corridor Designation

- 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



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

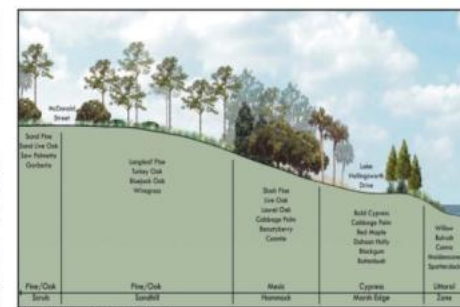


Image: KAI



Image: KAI

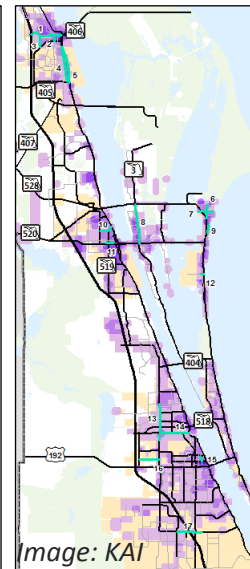


Image: KAI

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

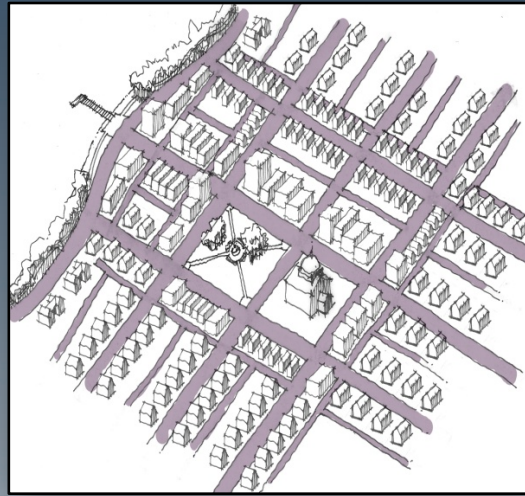
Understanding the Elements of
Community and Getting Prepared for
Complete Streets



Elements of a Community



Parks & Open Space Systems



Streets, Alleys, & Transit Network



Commercial & Mixed Uses



Mix of Residential Densities & Types



Institutional & Community Uses

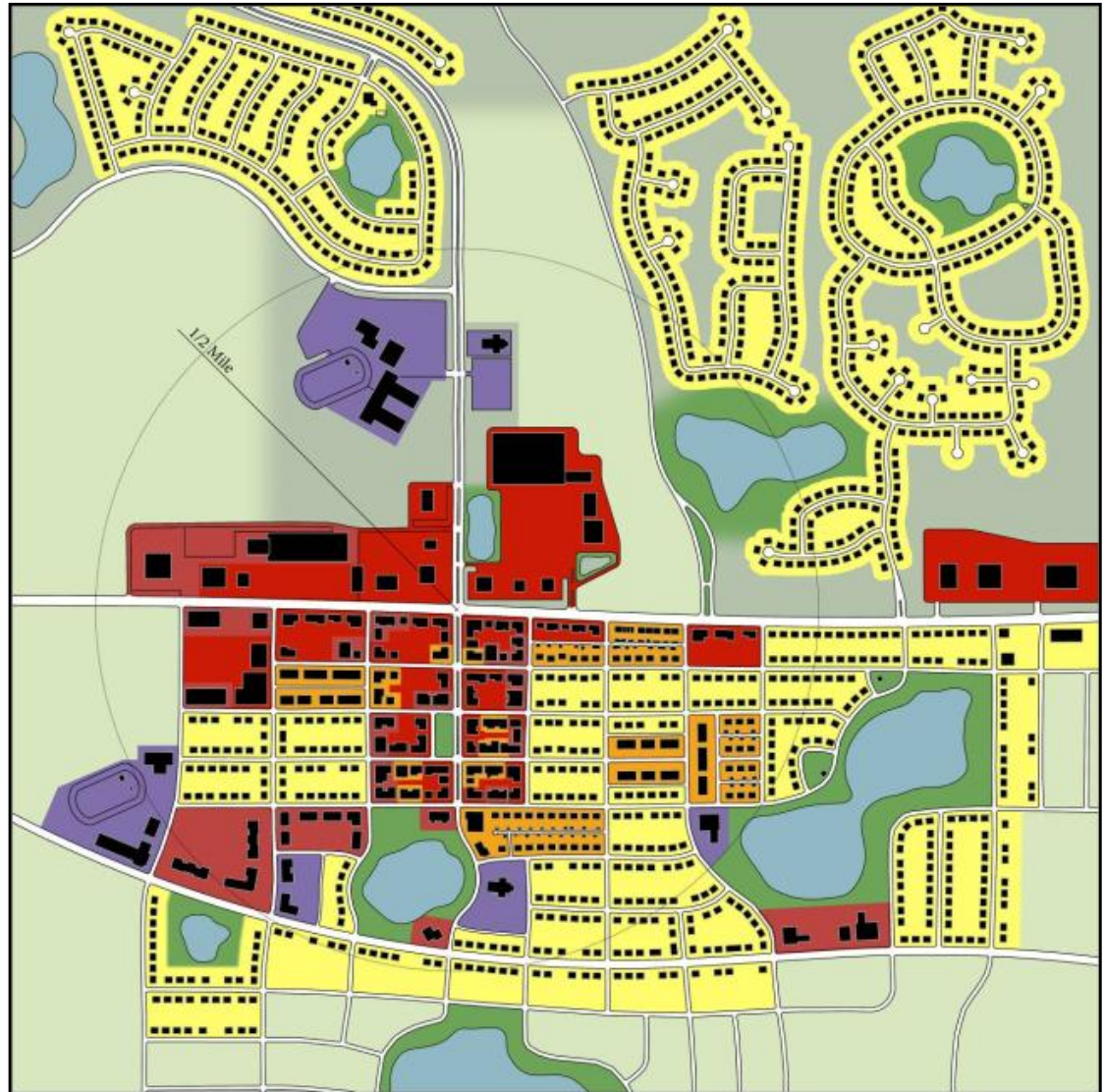


The Natural Environment

Understanding Land Use – Why It Matters to Streets

Why Land Use Matters

Development patterns within various land use and transportation contexts

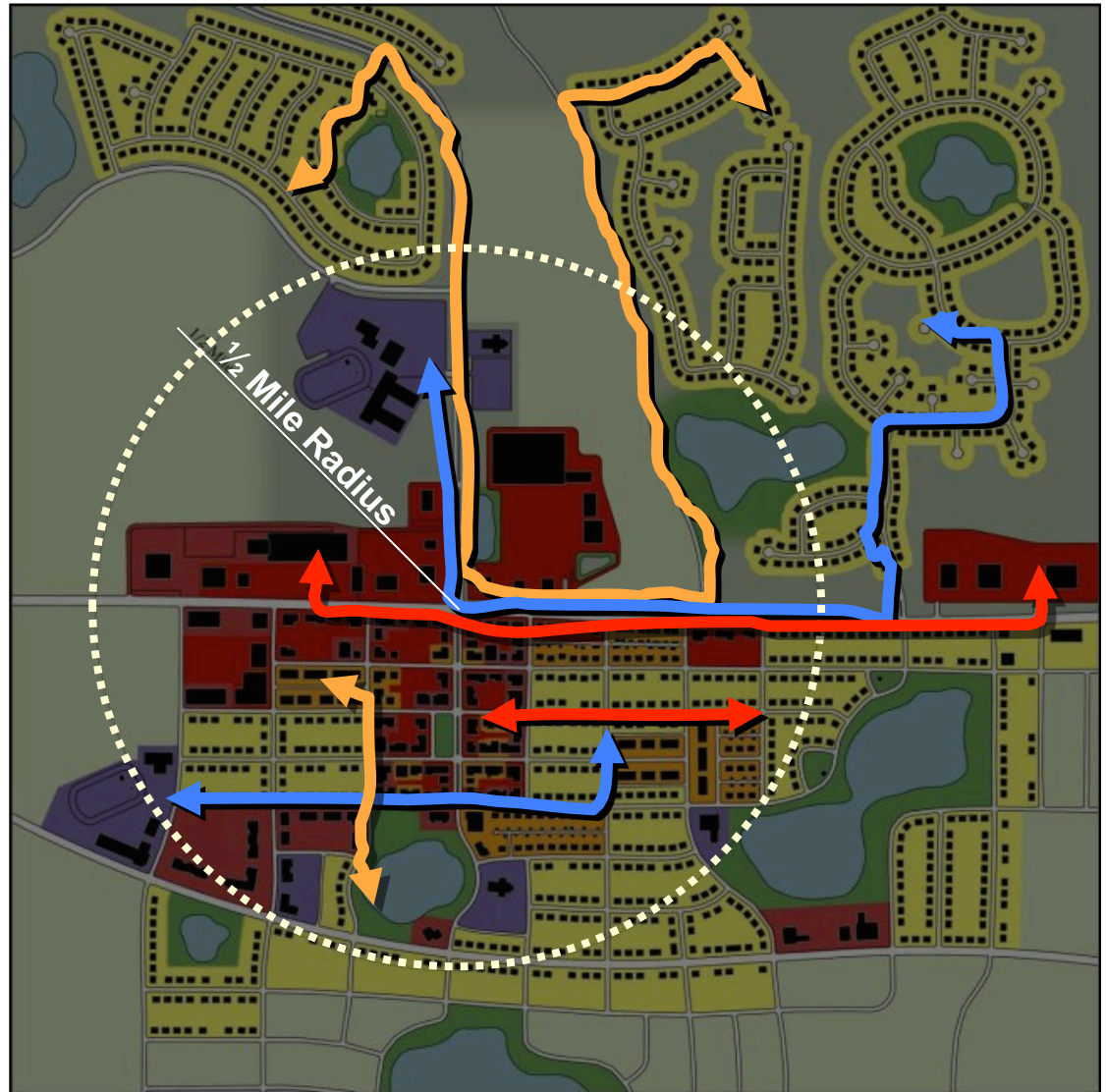


Understanding Land Use – Why It Matters to Streets

Why Land Use Matters

Transportation
Implications:

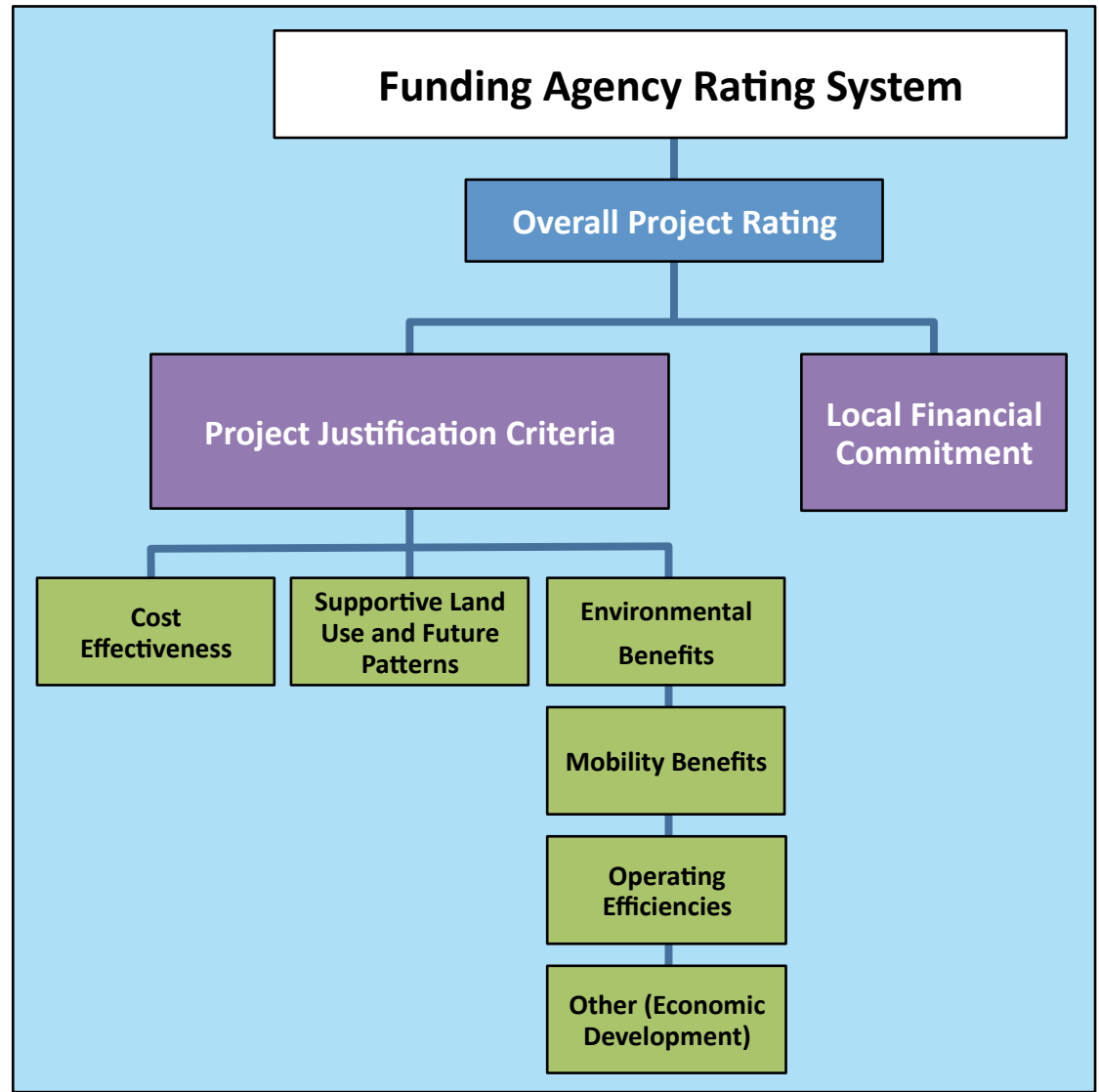
Connective vs.
Non-Connective



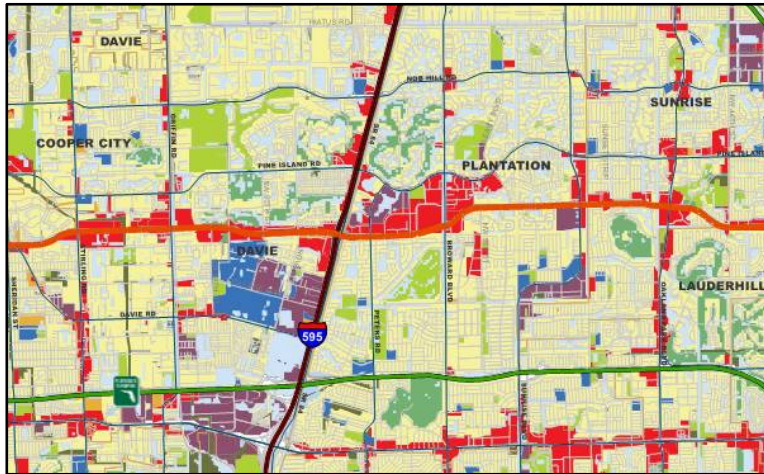
Understanding Land Use – Why It Matters to Streets

Why Land Use Matters

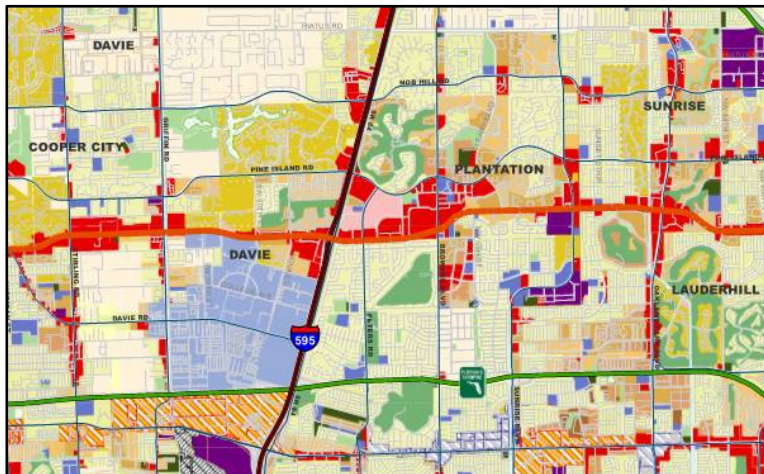
Transportation and Street Funding Today Depends on Land Use



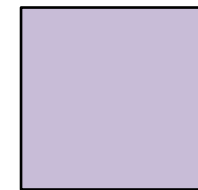
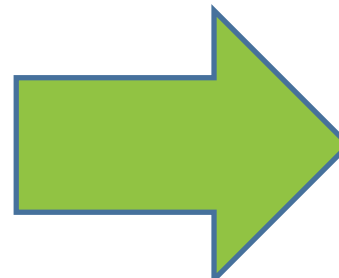
Understanding Land Use – Policy vs. Local Character Districts



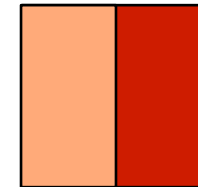
Existing Land Use



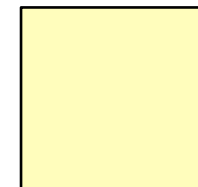
Future Land Use



Centers

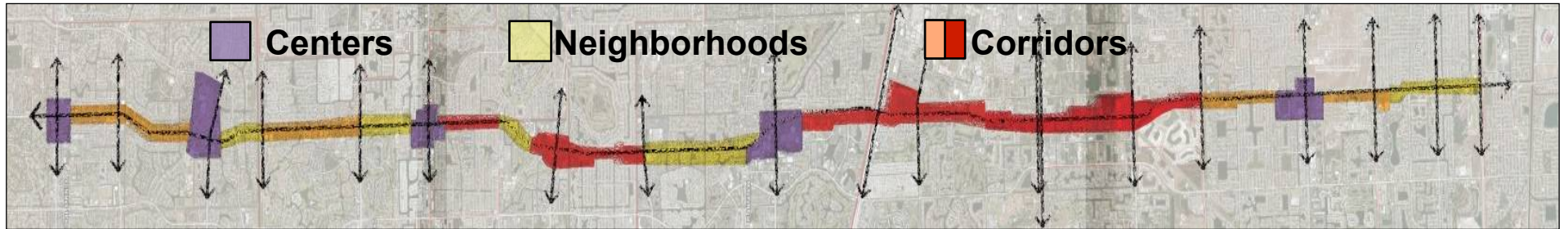


Corridors



Neighborhoods

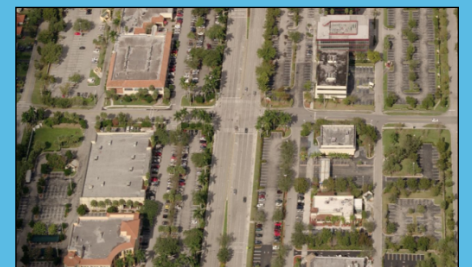
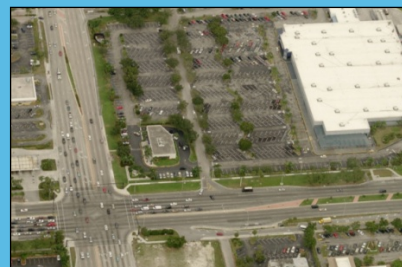
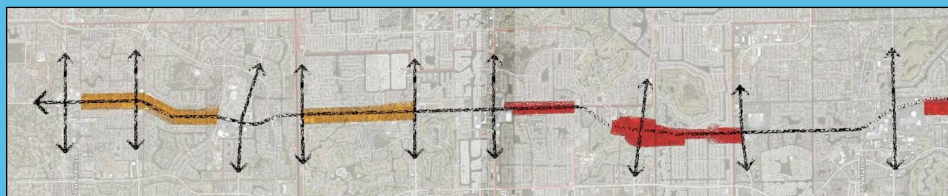
Understanding Land Use – Local Character Districts



Local Context: Centers



Local Context: Neighborhoods



Local Context: Corridors

Understanding Land Use – Redevelopment Potential

Jurisdictional Policy “Audit”

	Cooper City	Coral Springs
SETBACK (ROADWAY)		
Front Setback	Per the County's Trafficway plan 50'	Typically 65' from major roadways for parking, more for front of the building
PARKING REQUIREMENTS		
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
Yellow	≤ 1	88	39	14%
Green	1 - 3	59	98	35%
Cyan	> 3 - 5	12	47	16%
Dark Blue	> 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>Phase 1 Identify Locally Supported Opportunity Corridors</p>	<p>Create Long List of Candidate Projects</p>	<ol style="list-style-type: none"> 1. Find all eligible corridors (GIS Databases) 2. Identify Opportunity Corridors (FLU/Policy Review) 3. Local Support (Public Input)
<p>Phase 2 Feasibility Analysis</p>	<p>Identify Projects that can be implemented in the near term</p>	<ol style="list-style-type: none"> 1. Goals Supported by Municipality (Policy Review) 2. Timeline/Constructability (Field & Jurisdictional Review)
<p>Phase 3 Cost/Benefit Analysis</p>	<p>Prioritize Short List of Projects</p>	<ol style="list-style-type: none"> 1. Supportive Land Uses (FLU/Policy Review) 2. Timeline/Constructability (Field & Jurisdictional Review)



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

SHARE YOUR THOUGHTS

As a property owner or business owner on University Drive, your input is critical. We invite you to share your thoughts with us in several ways – log onto www.UniversityDriveImprovements.org; call us at (954) 653-5620; email us at EnR@BrowardMPO.org or Josselyn@Kittelson.com; or attend one of our Public Workshops.

Win a free iPad mini! Comments received by July 15, will be entered into a drawing for a free iPad mini!

Each of these Workshops will begin with an Open House where you can share ideas in small groups or one-on-one discussions and a short presentation and-answer session. Workshop Schedule:

- 5:00 - 6:00 PM **OPEN HOUSE** Gather and share information in small groups or one-on-one discussions
- 6:00 - 6:30 PM **PRESENTATION** Presentation of Study Details and Question/Answer Session
- 6:30 - 7:00 PM **OPEN HOUSE** Gather and share information in small groups or one-on-one discussions

WANT TO WIN AN IPAD MINI? HELP US IMPROVE UNIVERSITY DRIVE FOR A CHANCE TO WIN!

The University Drive Corridor is one of the most heavily traveled roadways in Broward County, moving tens of thousands of people each day. It was identified in the Broward Metropolitan Planning Organization's (MPO) the

University Drive Mobility Improvements Planning Study

The Challenge Help Us Improve University Drive!

The Broward MPO has launched a transportation and livability study for University Drive, one of Broward's most critical north-south corridors.

The study area centers on University Drive from Westview Drive in Coral Springs to Miami Gardens in Miami-Dade County. This study was funded by the Federal Transit Administration and is being conducted in partnership with the Florida Department of Transportation, Broward County Transit, Miami-Dade Transit, the South Florida Regional Transportation Authority and the Cities and Towns along the University Drive corridor.

The study will explore ways to increase travel options, manage traffic congestion and improve the quality of life along University Drive. The types of improvements this study will explore include:

- Enhancing the travel experience for all people;
- Improving the convenience and comfort of the transit service;
- Improving safety and comfort for cyclists and pedestrians; and
- Encouraging walkable and transit-friendly development.

ISSUES/OPPORTUNITIES

MAP YOUR THOUGHTS

TELL US HOW YOU USE UNIVERSITY DRIVE

STAY INVOLVED

For complaints, questions or concerns about civil rights or nondiscrimination, or for special requests under the Americans with Disabilities Act, please contact: Christopher Ryan, Public Information Officer/Title VI Coordinator, at (954) 676-0036 or ryan@browardmpo.org

www.UniversityDriveImprovements.org

¡AYÚDANOS A MEJORAR UNIVERSITY DRIVE!

954-653-5620

www.UniversityDriveImprovements.org

HELP US IMPROVE UNIVERSITY DRIVE

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broward MPO
metropolitan planning organization

Public Engagement Activities – Getting the Word Out!

Postcards | Mailers | Newspaper | E-Blasts

www.UniversityDriveImprovements.org

HELP US IMPROVE UNIVERSITY DRIVE

954-653-5620

www.UniversityDriveImprovements.org

¡AYÚDANOS A MEJORAR UNIVERSITY DRIVE!

954-653-5620

¡Gana un iPad mini! Comentarios recibidos antes del 15 de Julio del 2013 entrarán en un sorteo para recibir un iPad mini gratis!

Si desea presentar una queja, tiene alguna duda o inquietud acerca de los derechos civiles o nuestra política de no discriminación, o requiere asistencia especial según la Ley de Americanos con Impedimentos, por favor comuníquese con: Christopher Ryan, Oficial de Información Pública/Coordinador del Título VI, al (954) 876-0036, o enviando un correo electrónico a ryan@cibrowardmpo.org.

WANT TO WIN AN IPAD MINI? HELP US IMPROVE UNIVERSITY DRIVE FOR A CHANCE TO WIN!

The University Drive Corridor is one of the most heavily traveled roadways in Broward County, moving tens of thousands of people each day. It was identified in the Broward Metropolitan Planning Organization's (MPO) Long Range Transportation Plan as a premium transit corridor, and the MPO has launched a transportation and livability study to identify ways to improve it.

Share Your Thoughts!

Your input is critical in developing a plan for this important roadway. We invite you to share your ideas with us in several ways — log onto www.UniversityDriveImprovements.org, call the University Drive Hotline at (954) 653-5620, email us at Enr@BrowardMPO.org or Josselyn@KiteLemon.com or attend one of our Public Workshops.

Each workshop will begin with an Open House where you can gather information and share ideas in small groups or one-on-one discussions and will include a short presentation with a question-and-answer session.

June 25, 2013
Northwest Regional Library Auditorium
3151 North University Drive, Coral Springs, FL 33065

June 27, 2013
Lauderhill City Hall, Rooms 134.135
3151 North University Drive, Coral Springs, FL 33065

July 9, 2013
El Palacio Sports Hall, 5th Floor Ballroom
21485 NW 27 Avenue, Miami Gardens, FL 33056

Times: 5 p.m. to 7 p.m.
Presentation from 6 p.m. to 6:30 p.m.

WIN A FREE IPAD MINI - COMMENTS RECEIVED BY JULY 15, 2013 WILL BE ENTERED INTO A DRAWING FOR AN IPAD MINI.

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability or family status. Persons who require special accommodations under the American with Disabilities Act or persons who require translation services (free of charge) should contact Christopher Ryan, Public Information Officer/Title VI Coordinator at (954) 876-0033 or 0036 or ryan@cibrowardmpo.org at least seven days prior to the meeting. If hearing impaired, telephone 1-800-273-7545 (TDD).

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

University Drive Mobility Improvements Planning Study

Progress:

✓ The Challenge Help Us Improve University Drive!

WELCOME

The Broward MPO has launched a transportation and livability study for University Drive, one of Broward's most critical north-south corridors.

The study area centers on University Drive from Westview Drive in Coral Springs to Miami Gardens in Miami-Dade County. This study was funded by the Federal Transit Administration and is being conducted in partnership with the Florida Department of Transportation, Broward County Transit, Miami-Dade Transit, the South Florida Regional Transportation Authority and the Cities and Towns along the University Drive corridor.

DRIVE
MOVE PEOPLE · CREATE JOBS
STRENGTHEN COMMUNITIES

The study will explore ways to increase travel options, manage traffic congestion and improve the quality of life along University Drive. The types of improvements this study will explore include:

- Enhancing the travel experience for all people;
- Improving the convenience and comfort of the transit service;
- Improving safety and comfort for cyclists and pedestrians; and
- Encouraging walkable and transit-friendly development.

[Begin](#)

ISSUES/OPPORTUNITIES

MAP YOUR THOUGHTS

TELL US HOW YOU USE UNIVERSITY DRIVE

STAY INVOLVED

1 **2** **3** **4** **5**

About the MPO
Board & Committees

Commitment 2040
Get Involved

Planning
Public Involvement
Long Range

Programs
Transportation Improvement Program

Documents & Publications
Newsletters & Presentations

Projects & Studies
Broward Complete Streets Initiative

Regional Partnerships
Southeast Florida Transportation

Transportation Disadvantaged

Public Engagement Activities – Getting the Word Out!

Make it Interactive & Fun!

University Drive Mobility Improvements Planning Study

Progress:

WELCOME

ISSUES/OPPORTUNITIES

MAP YOUR THOUGHTS

TELL US HOW YOU USE UNIVERSITY DRIVE

STAY INVOLVED

Tell Us What Issues/Opportunities Are Most Important to You

Higher Priority ↑

Drag your top Issues/Opportunities above this line.

- More or wider sidewalks
- More travel choices
- Safer places to walk and bike
- More walkable places
- More predictable auto travel
- Better transit service
- More predictable transit travel
- Less automobile congestion
- More or better landscaping
- Stronger economic conditions
- More or wider bike lanes

Early discussions with local government leaders and business owners along University Drive and research indicate the following issues and opportunities in the University Drive Corridor.

Please identify the issue/opportunity that is most important to you by dragging them above the line at the top.

Add Issues/opportunities that you don't see on this list by clicking "Suggest Another Issue/Opportunity" at the bottom of the page.

Next

Suggest Another Issue

University Drive Mobility Improvements Planning Study

Progress:

WELCOME

ISSUES/OPPORTUNITIES

MAP YOUR THOUGHTS

TELL US HOW YOU USE UNIVERSITY DRIVE

STAY INVOLVED

Tell Us How You Use University Drive

Traveling

Transit Use

Destinations

How often do you travel on University Drive?
Choose...

How do you travel on University Drive?
Choose...

How much time do you usually spend traveling on University Drive?
Choose...

What time of day are you usually traveling on University Drive? (Please check all that apply.)

- 12:00 am – 6:00 am
- 6:00 am – 10:00 am
- 10:00 am – 3:00 pm
- 3:00 pm – 7:00 pm
- 7:00 pm – 12:00 am

Click or touch each question tab, then select the answer that best applies.

Next

University Drive Mobility Improvements Planning Study

Progress:

WELCOME

ISSUES/OPPORTUNITIES

MAP YOUR THOUGHTS

TELL US HOW YOU USE UNIVERSITY DRIVE

STAY INVOLVED

ISSUES/OPPORTUNITIES

Show us where you see these issues/opportunities

Drag icons onto the map to tell us where you would like to see changes or improvements. Use the "+/-" button to the right to zoom in and out.

- Stronger economic conditions
- More travel choices
- More walkable places
- Better transit service
- Safer places to walk and bike
- More or wider sidewalks
- More or wider bike lanes
- Less automobile congestion
- More predictable auto travel
- More or better landscaping
- More predictable transit travel

Next

University Drive Mobility Improvements Planning Study

Progress:

WELCOME

ISSUES/OPPORTUNITIES

MAP YOUR THOUGHTS

TELL US HOW YOU USE UNIVERSITY DRIVE

STAY INVOLVED

Please tell us about yourself

Tell us about yourself

Name:

Street (name and number):

City:

State:

Phone Number: Email:

Home ZIP code: Work/School ZIP code (if applicable):

Community role: Age: Gender:

Comment:

Submit

Privacy Policy

Powered by MetroQuest

Thank you for your participation. Your comments will help us develop improvements for University Drive that meet your needs. Stay involved - next round we'll ask for your feedback on the set of potential improvements. You can participate and stay in touch via our website or by phone.

By web: Continue to visit www.UniversityDriveImprovements.org to learn more about the project and to stay up-to-date on project activities

By phone: Call 954-653-5620 to leave your comments and/or questions about the project

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



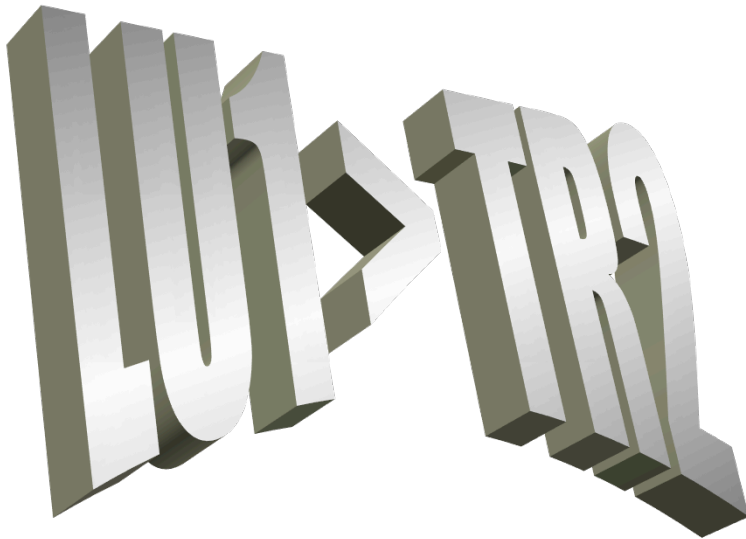
Laying the Ground Work for Complete Streets

- 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

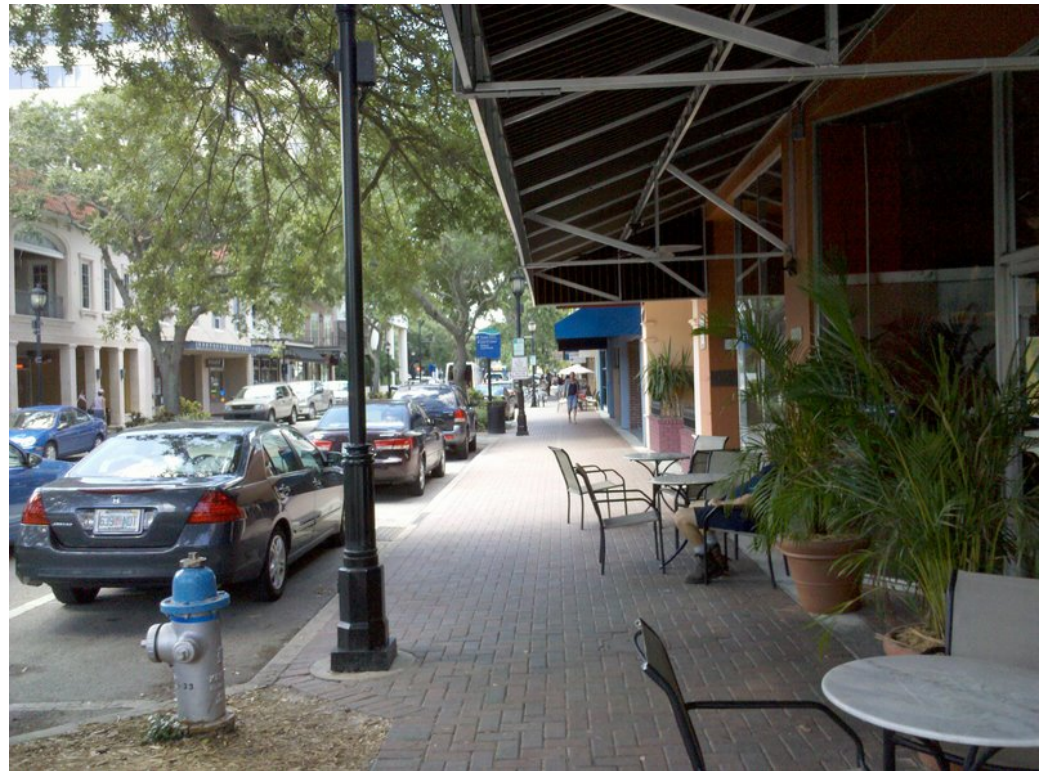


Plan the Land Use First THEN the Transportation

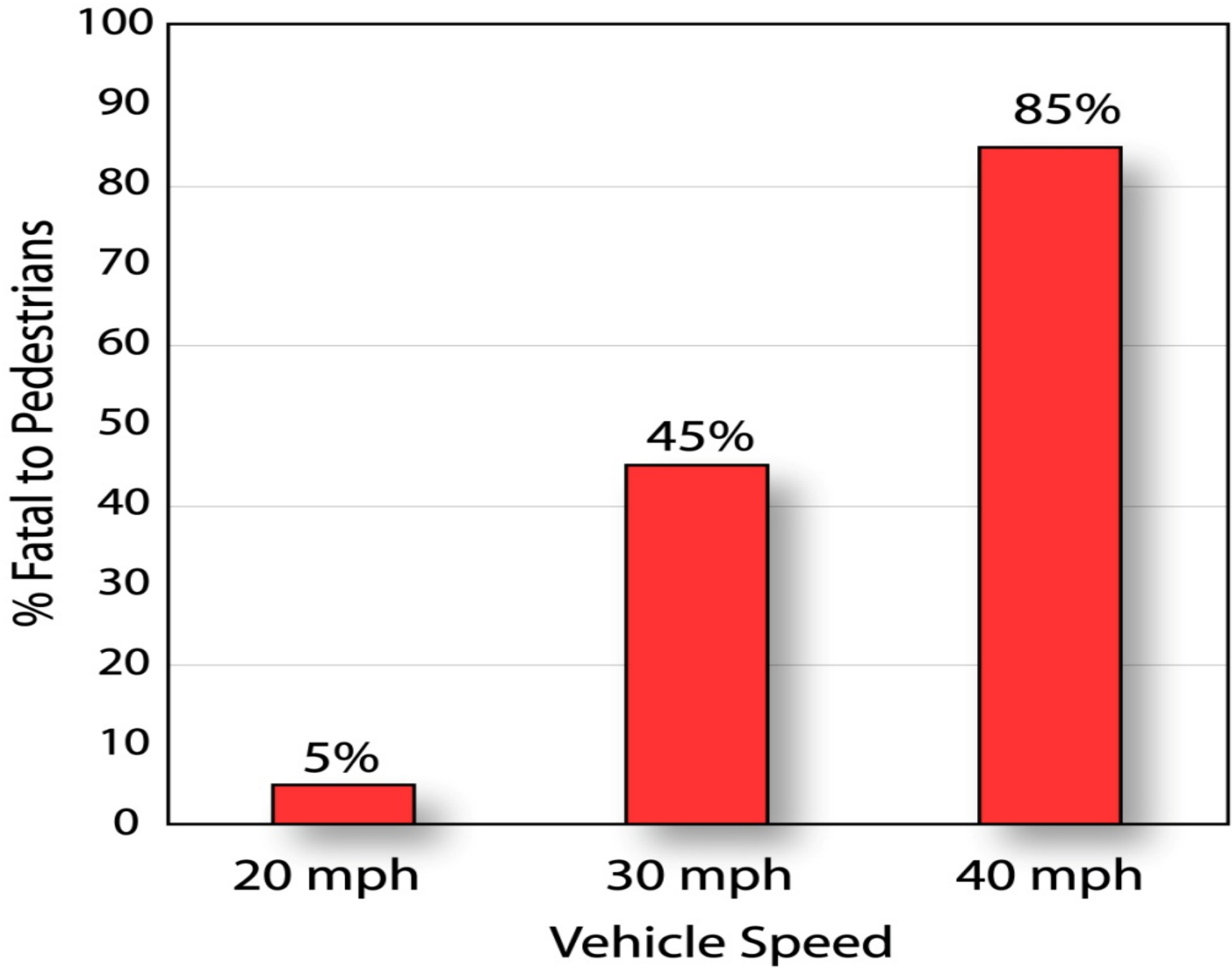


Top 10 Walkability Factors – Urban Form

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



T1



T2



T3



T4



T5



T6

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 Corridor Techniques

TECHNIQUE	FIHS/SIS		SHS URBAN	SHS RURAL	NON-SHS
	LIMITED ACCESS	CONTROLLED ACCESS			
Improved location, oversized or redundant directional signs	A	A	M	M	M
Use of route markings/ signing for historical and cultural resources	M	A	A	A	A
Increased use of variable message signing	A	A	M	M	M
Landscaping	M	M	M	M	M
Sidewalks or wider sidewalks	NA	M	A	M	M
Street furniture	NA	M	M	M	M
Bicycle lanes	NA	M	M	M	M
Shared Use Paths	NA	M	M	M	M
Conversion to/from one-way street pairs	NA	M	M	NA	M
Alternative paving materials	NA	NA	M	NA	M
Pedestrian signals, midblock crossings, median refuge areas	NA	M	A	M	M
Parking modifications or restoration	NA	NA	M	M	M
Safety and personal security amenities	M	M	M	M	M
Street mall	NA	NA	NA	NA	M

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

Exhibit 21-A Corridor Techniques

TECHNIQUE	FIHS/SIS		SHS URBAN	SHS RURAL	NON-SHS
	LIMITED ACCESS	CONTROLLED ACCESS			
Improved location, oversized or redundant directional signs	A	A	M	M	M
Use of route markings/ signing for historical and cultural resources	M	A	A	A	A
Increased use of variable message signing	A	A	M	M	M
Landscaping	M	M	M	M	M
Sidewalks or wider sidewalks	NA	M	A	M	M
Street furniture	NA	M	M	M	M
Bicycle lanes	NA	M	M	M	M
Shared Use Paths	NA	M	M	M	M
Conversion to/from one-way street pairs	NA	M	M	NA	M
Alternative paving materials	NA	NA	M	NA	M
Pedestrian signals, midblock crossings, median refuge areas	NA	M	A	M	M
Parking modifications or restoration	NA	NA	M	M	M
Safety and personal security amenities	M	M	M	M	M
Street mall	NA	NA	NA	NA	M

- A "Appropriate"--Techniques which should be included on all TDLC projects unless there are compelling reasons not to do so.
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Exhibit 21-A Corridor Techniques

TECHNIQUE	FIHS/SIS		SHS URBAN	SHS RURAL	NON-SHS
	LIMITED ACCESS	CONTROLLED ACCESS			
Improved location, oversized or redundant directional signs	A	A	M	M	M
Use of route markings/ signing for historical and cultural resources	M	A	A	A	A
Increased use of variable message signing	A	A	M	M	M
Landscaping	M	M	M	M	M
Sidewalks or wider sidewalks	NA	M	A	M	M
Street furniture	NA	M	M	M	M
Bicycle lanes	NA	M	M	M	M
Shared Use Paths	NA	M	M	M	M
Conversion to/from one-way street pairs	NA	M	M	NA	M
Alternative paving materials	NA	NA	M	NA	M
Pedestrian signals, midblock crossings, median refuge areas	NA	M	A	M	M
Parking modifications or restoration	NA	NA	M	M	M
Safety and personal security amenities	M	M	M	M	M
Street mall	NA	NA	NA	NA	M

- A "Appropriate"--Techniques which should be included on all TDLC projects unless there are compelling reasons not to do so.
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Exhibit 21-A Corridor Techniques

TECHNIQUE	FIHS/SIS		SHS URBAN	SHS RURAL	NON-SHS
	LIMITED ACCESS	CONTROLLED ACCESS			
Improved location, oversized or redundant directional signs	A	A	M	M	M
Use of route markings/ signing for historical and cultural resources	M	A	A	A	A
Increased use of variable message signing	A	A	M	M	M
Landscaping	M	M	M	M	M
Sidewalks or wider sidewalks	NA	M	A	M	M
Street furniture	NA	M	M	M	M
Bicycle lanes	NA	M	M	M	M
Shared Use Paths	NA	M	M	M	M
Conversion to/from one-way street pairs	NA	M	M	NA	M
Alternative paving materials	NA	NA	M	NA	M
Pedestrian signals, midblock crossings, median refuge areas	NA	M	A	M	M
Parking modifications or restoration	NA	NA	M	M	M
Safety and personal security amenities	M	M	M	M	M
Street mall	NA	NA	NA	NA	M

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

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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



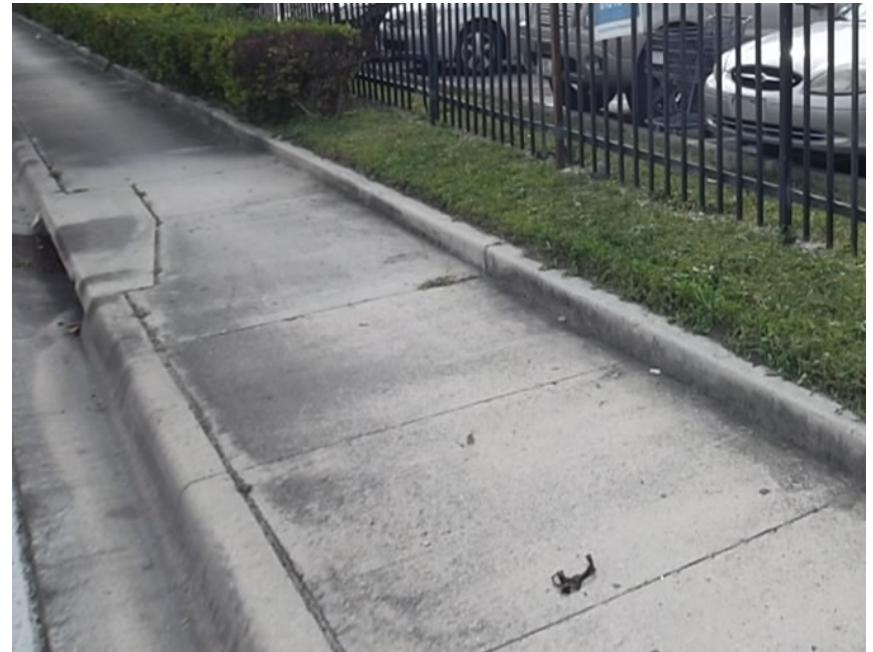
Edge of ROW to Edge of ROW

Requires reconstructions of:

- Curb and Gutter
- Sidewalks
- Drainage

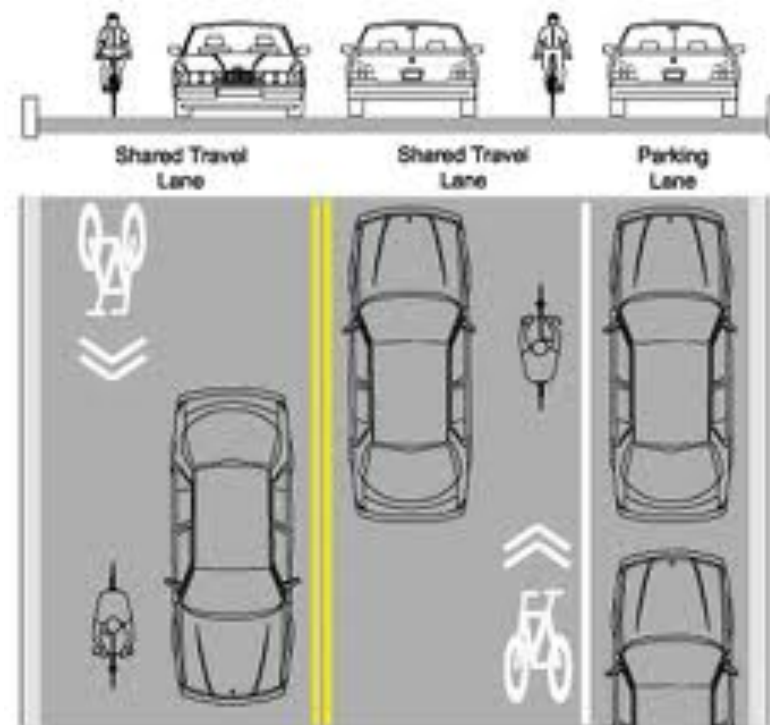
Estimated Cost –

- \$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

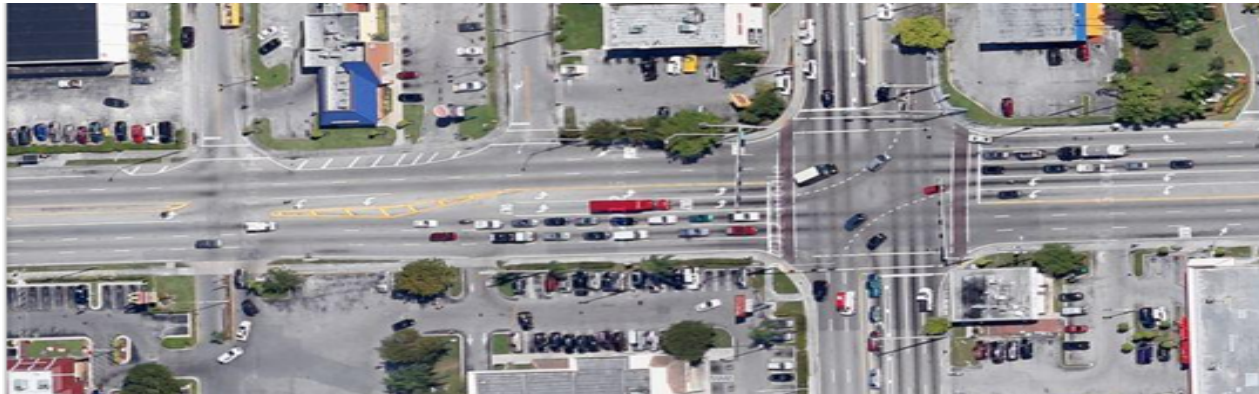
- Ease of Implementation
- Low capital cost
- Part of 3R project



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

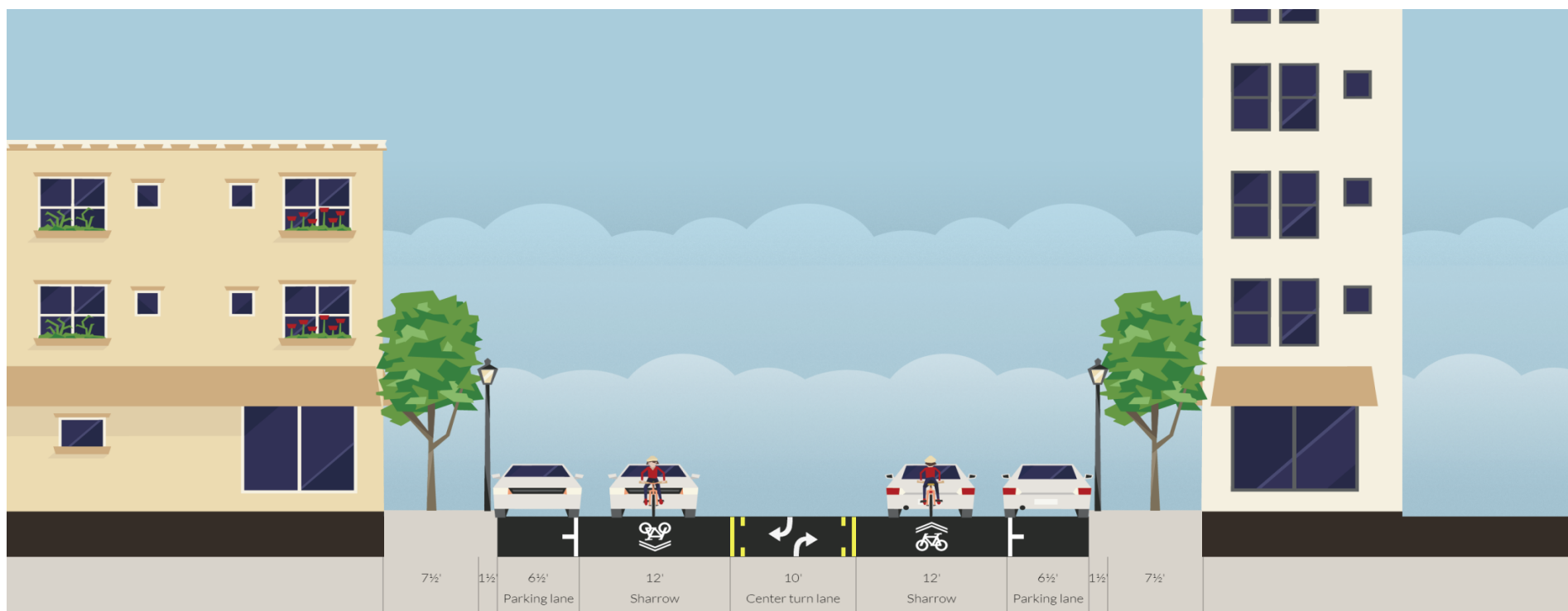
- Balanced traffic: bicycle, transit, & pedestrian
- If limited right-of-way
 - Emphasize one mode with secondary treatment to others.
 - Impact on traffic Level of Service



GREEN CARPET

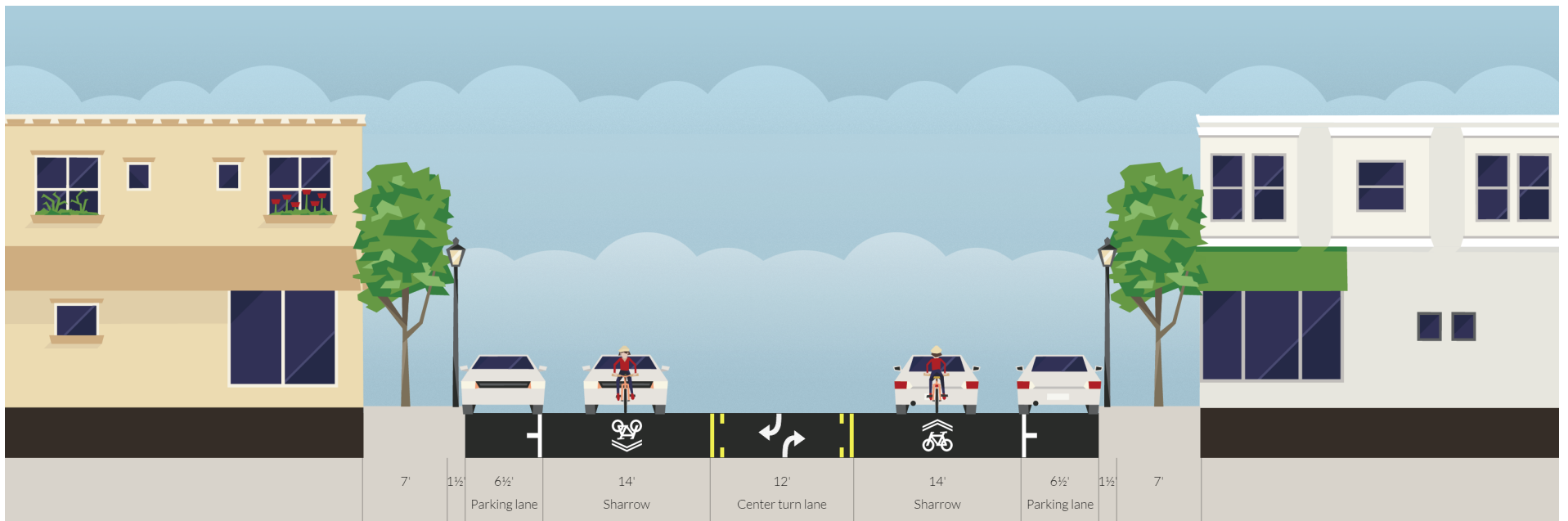
What Fits In ROW?

- 50 foot Curb to Curb



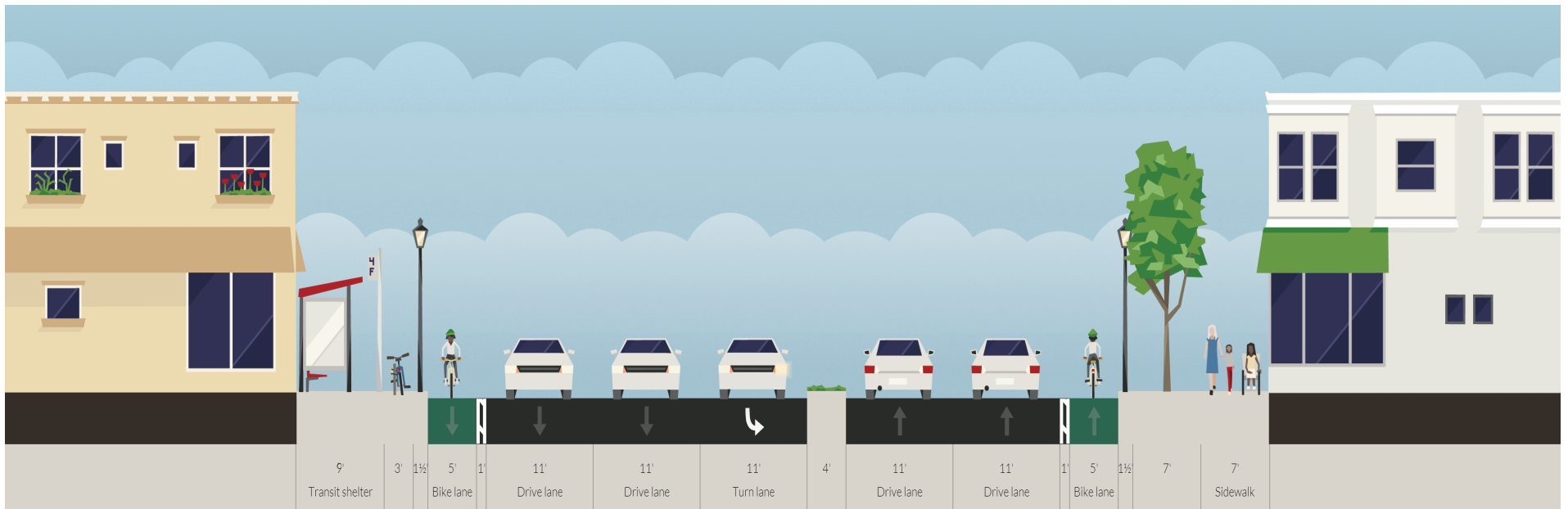
What Fits in ROW?

- 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

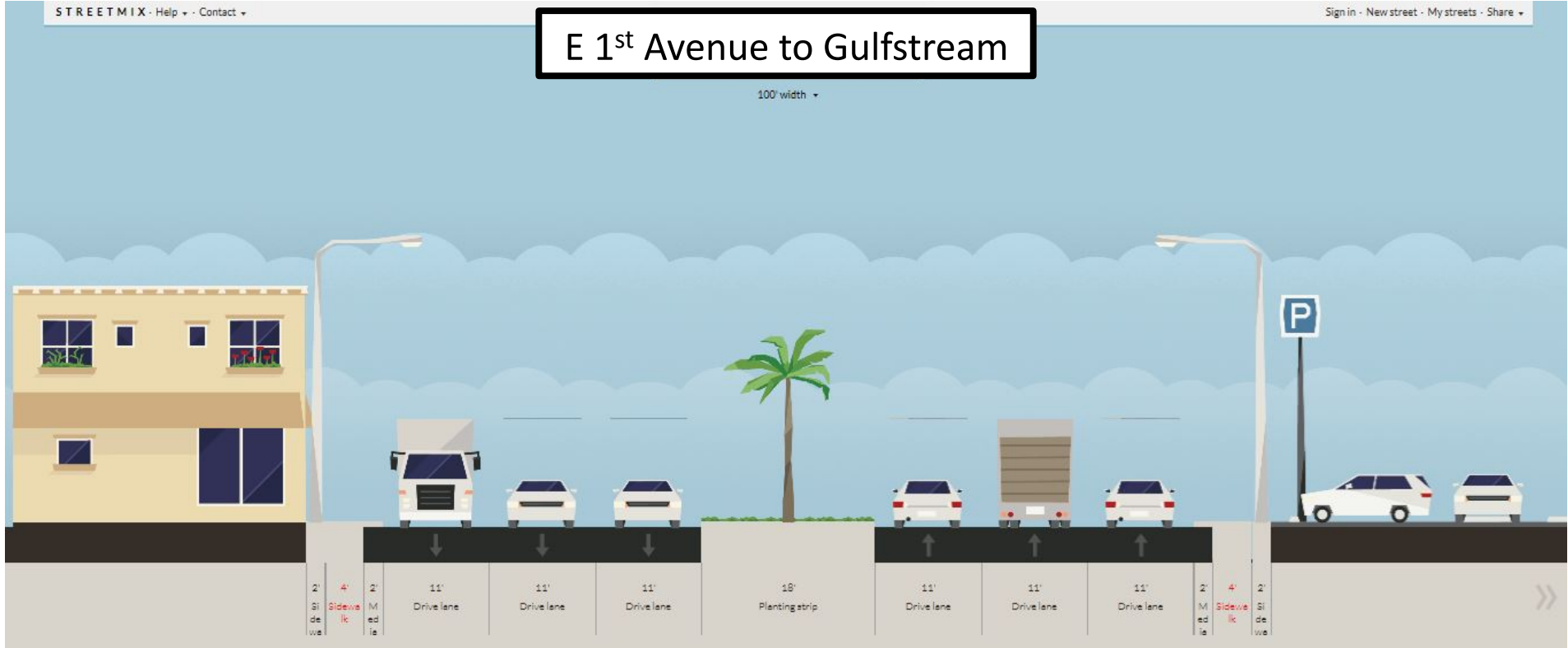


Dania Beach

- 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 nd Ave	6 LD	16,400	55,300
East of Gulfstream Rd	4 LD	15,800	36,700

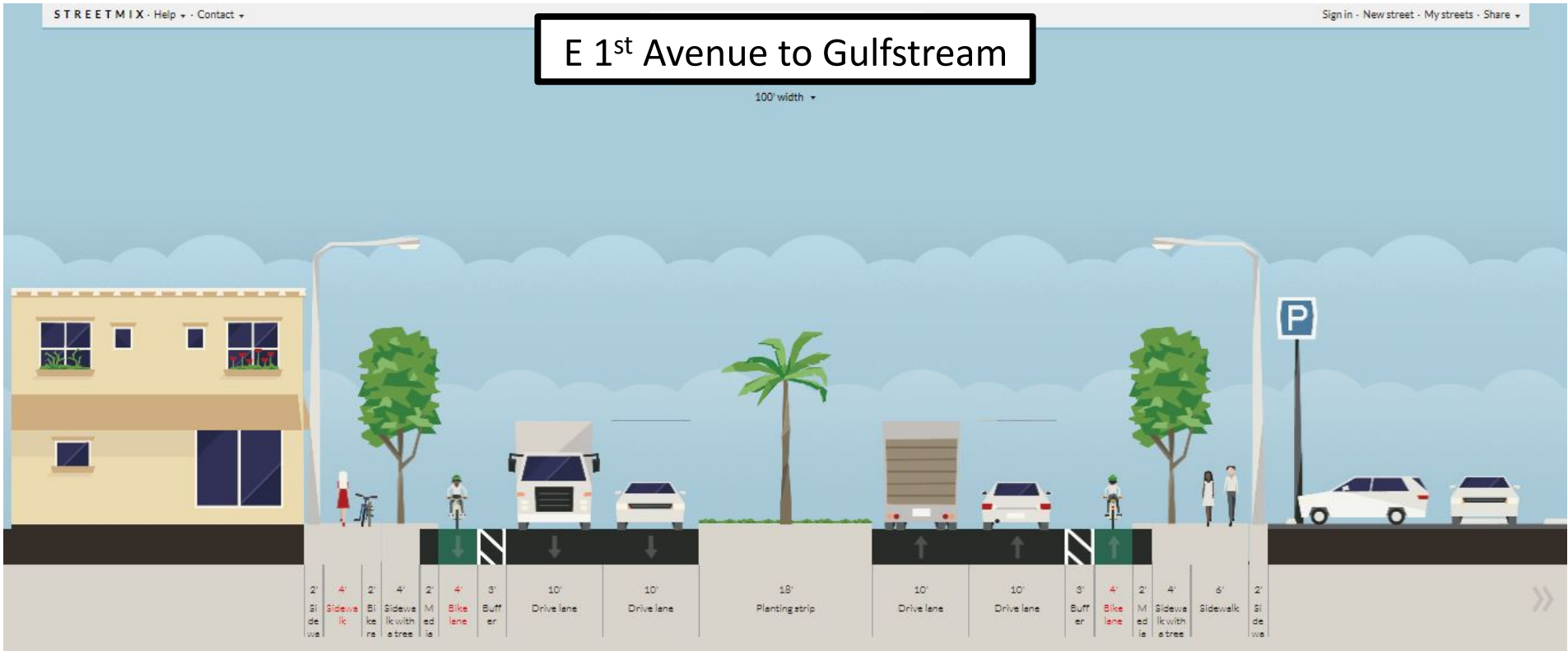
Dania Beach Boulevard



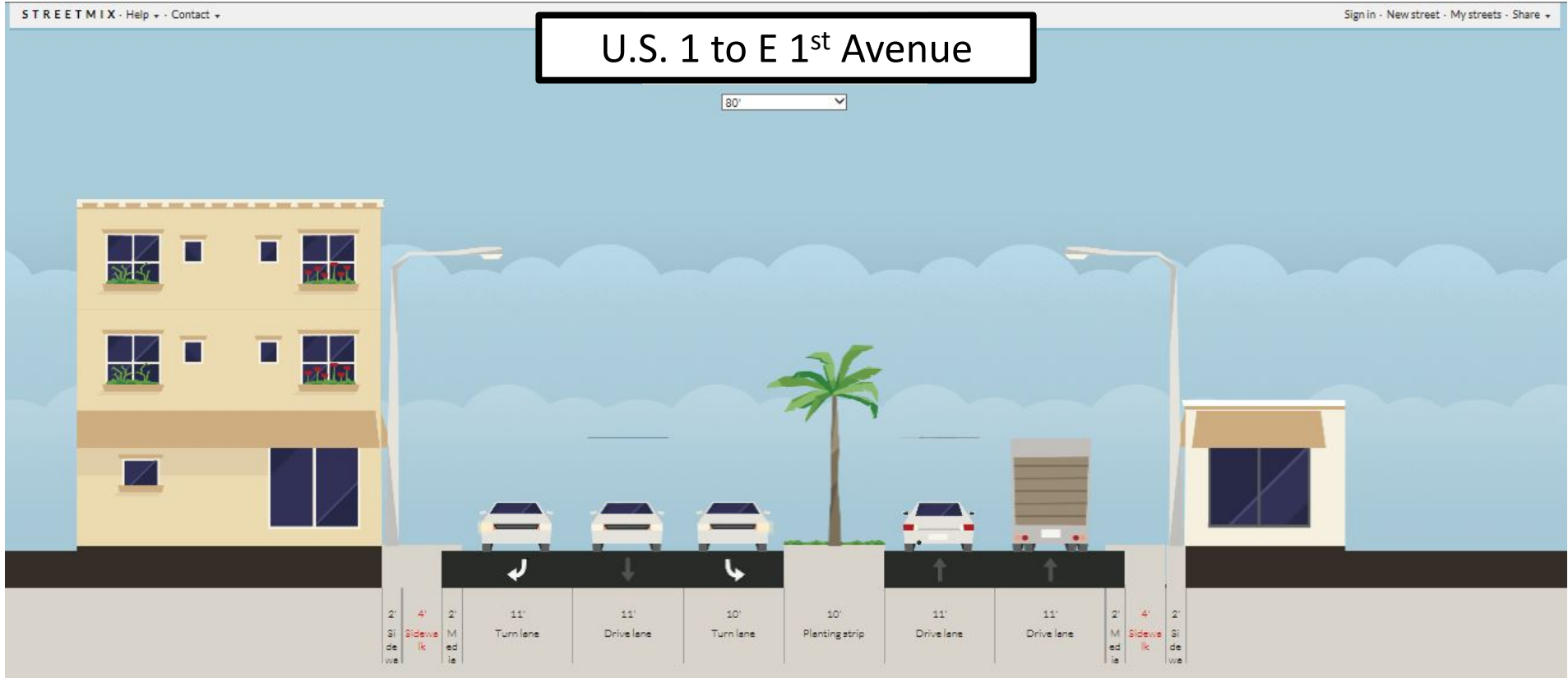
- Segment 2 – Existing



Dania Beach Boulevard



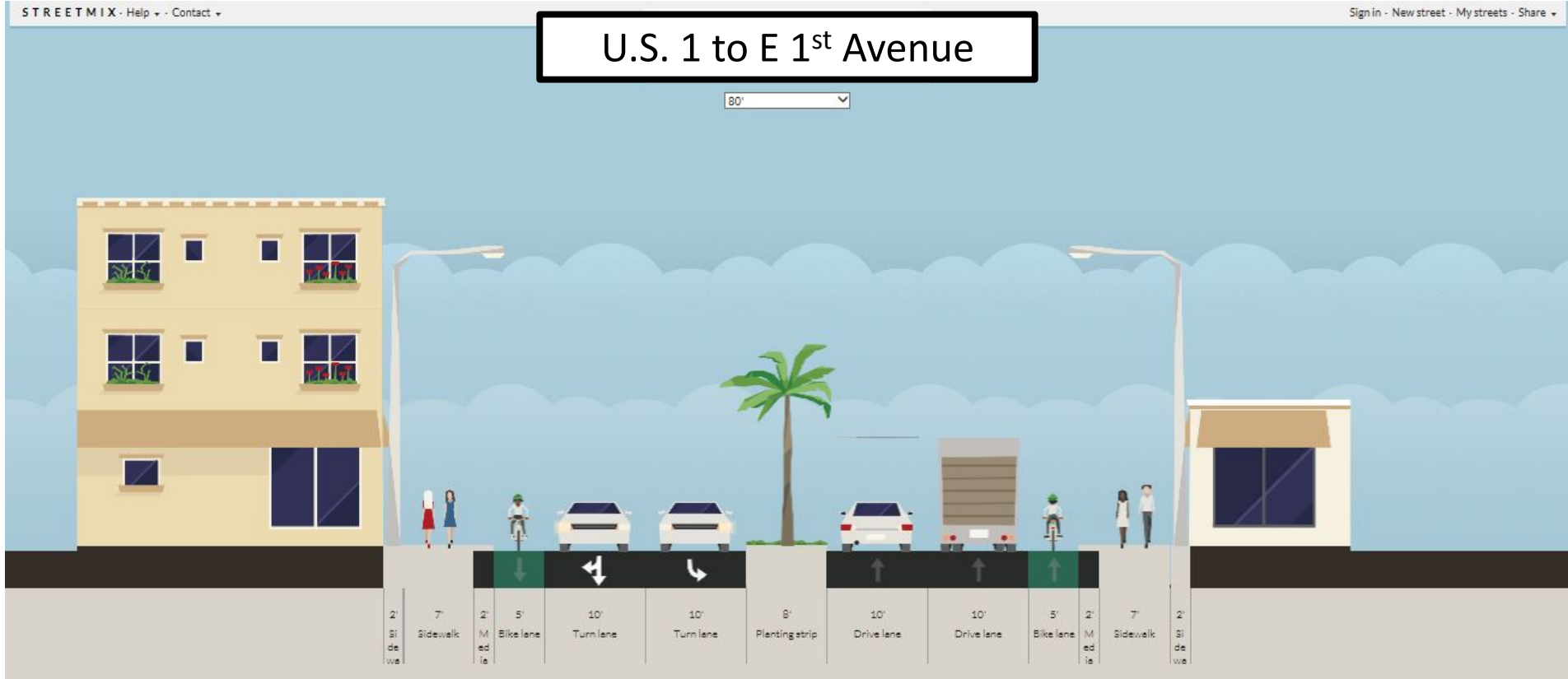
Dania Beach Boulevard



- Segment 1 – Existing



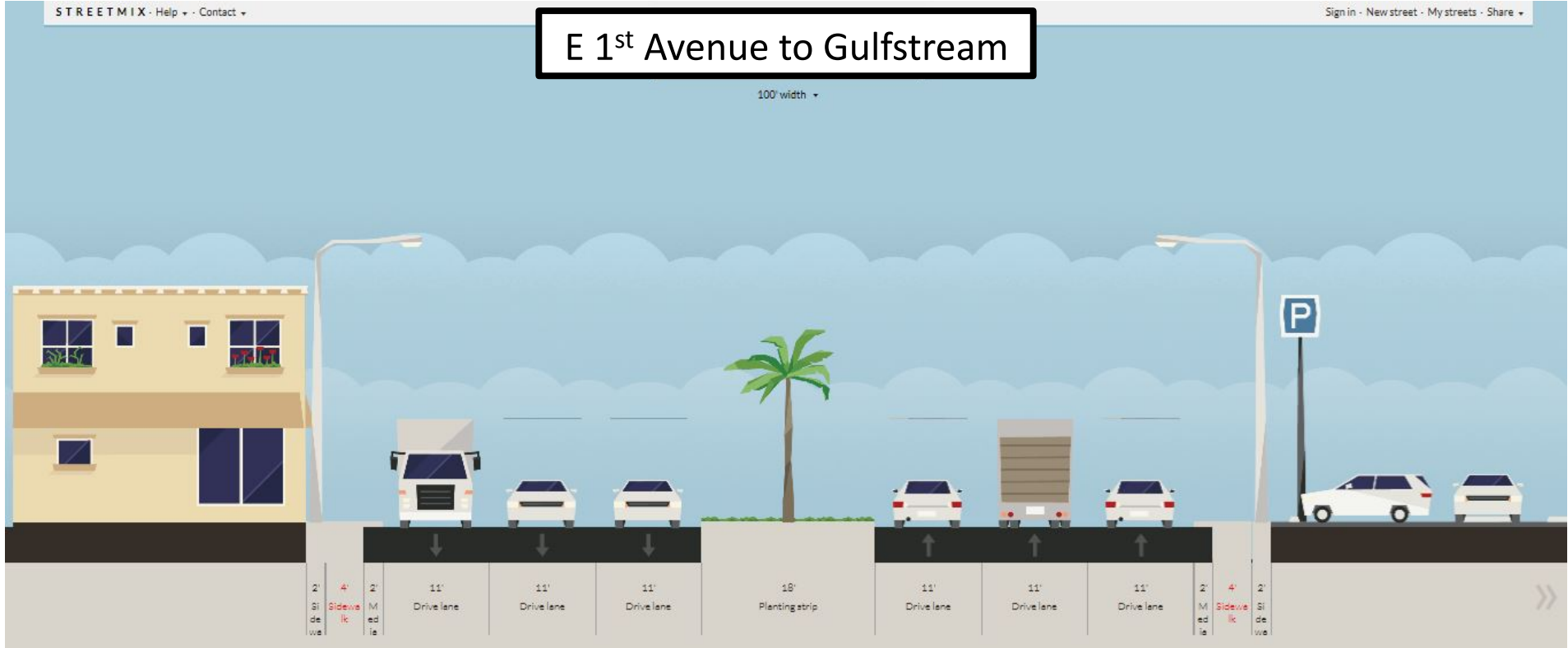
Dania Beach Boulevard



- Segment 1 – Future Scenario



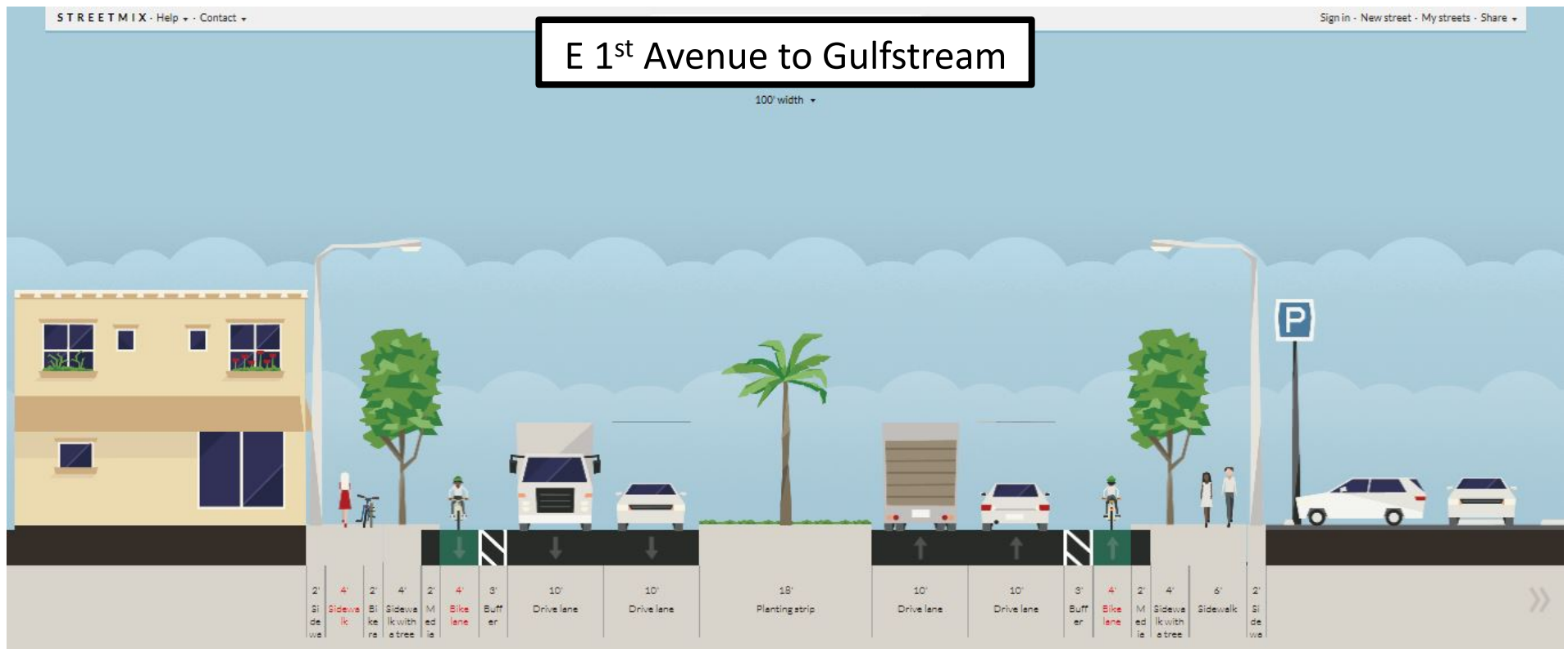
Dania Beach Boulevard



- Segment 2 – Existing



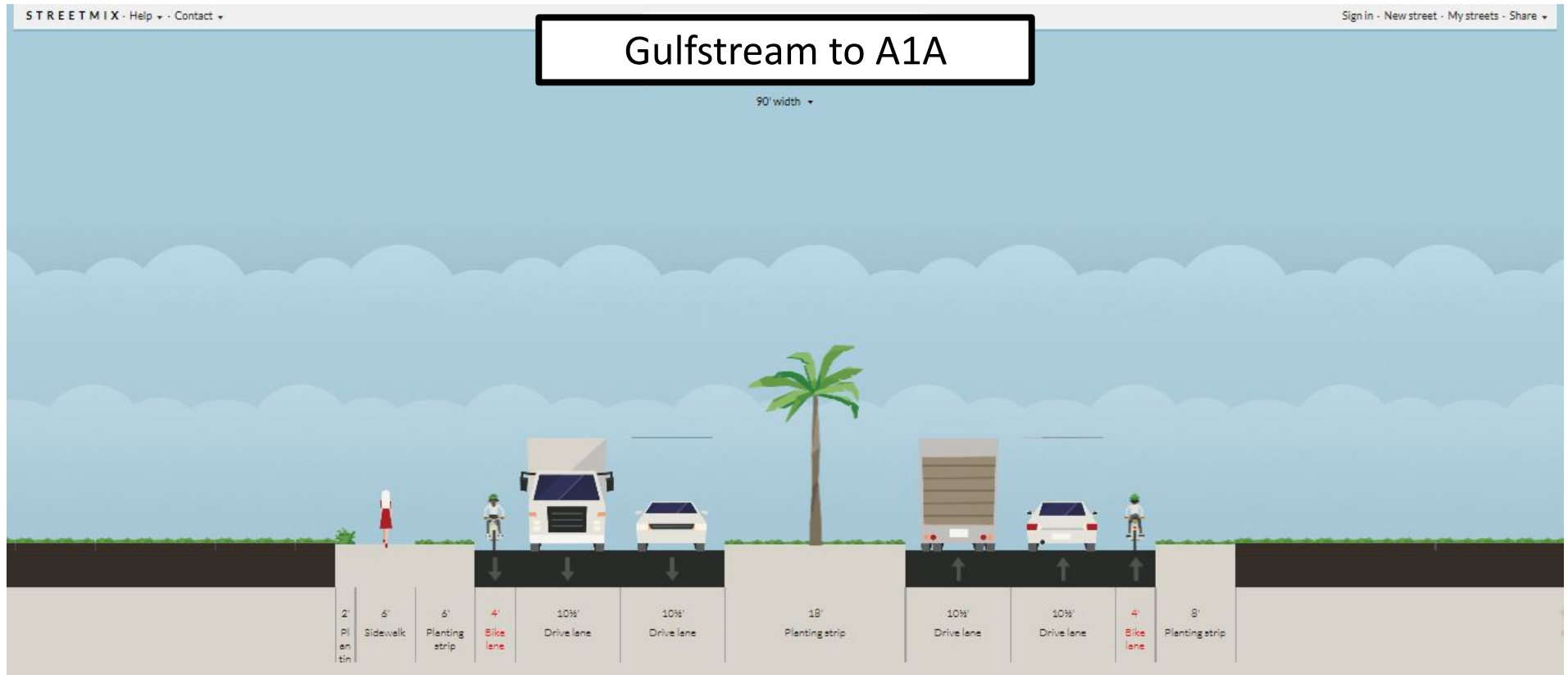
Dania Beach Boulevard



- Segment 2 – Future Scenario



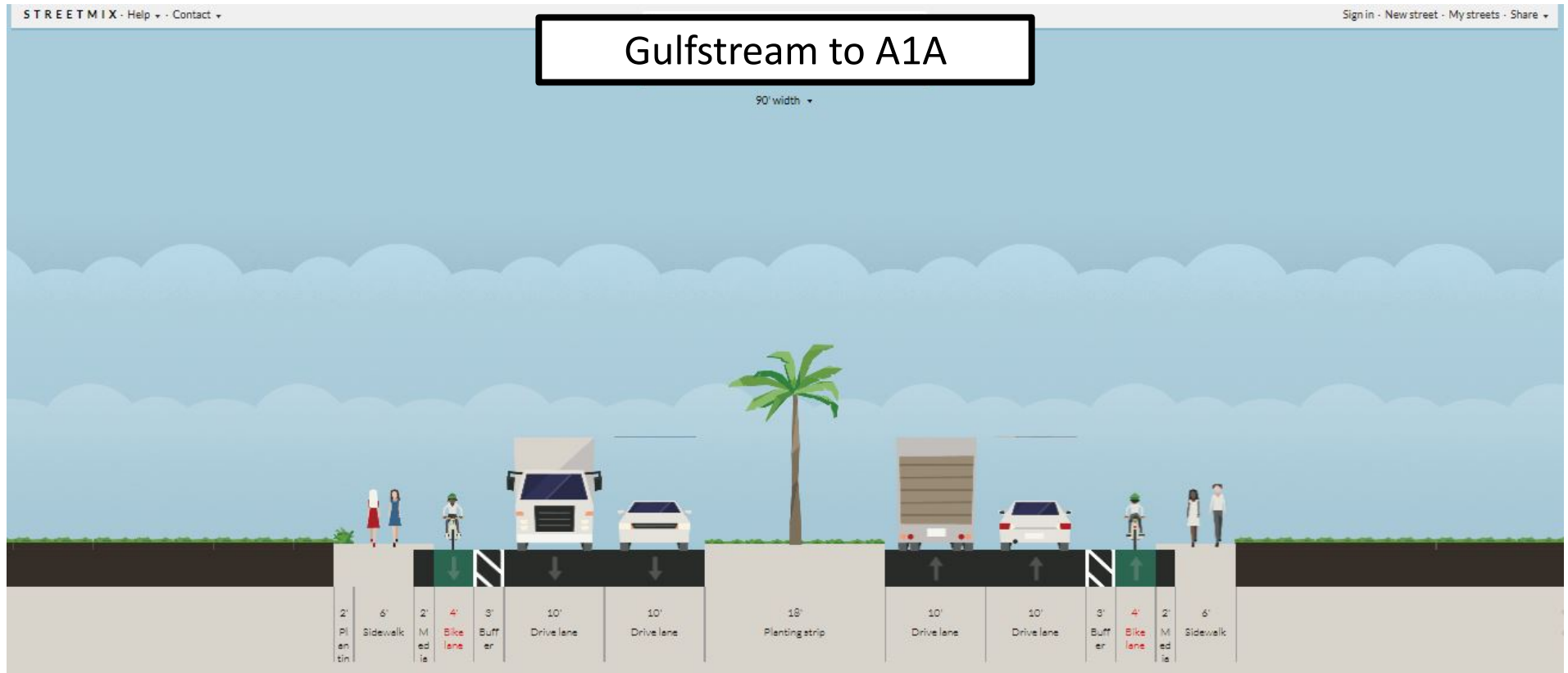
Dania Beach Boulevard



- Segment 3 – Existing



Dania Beach Boulevard



- Segment 3 – Future Scenario

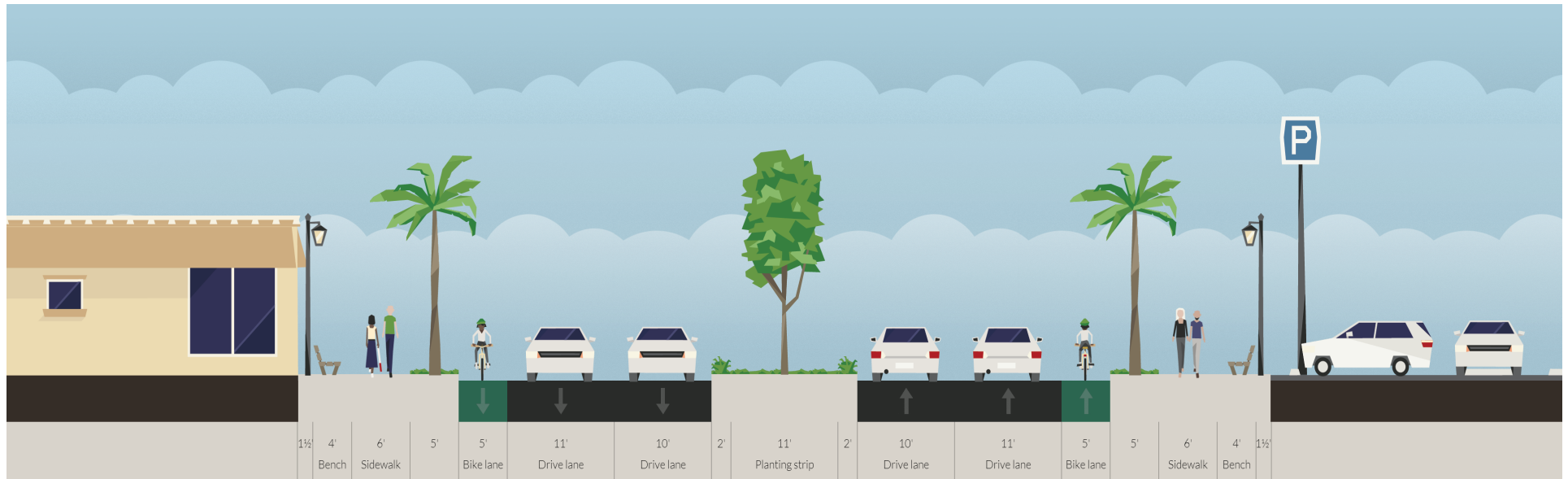


Prospect Rd

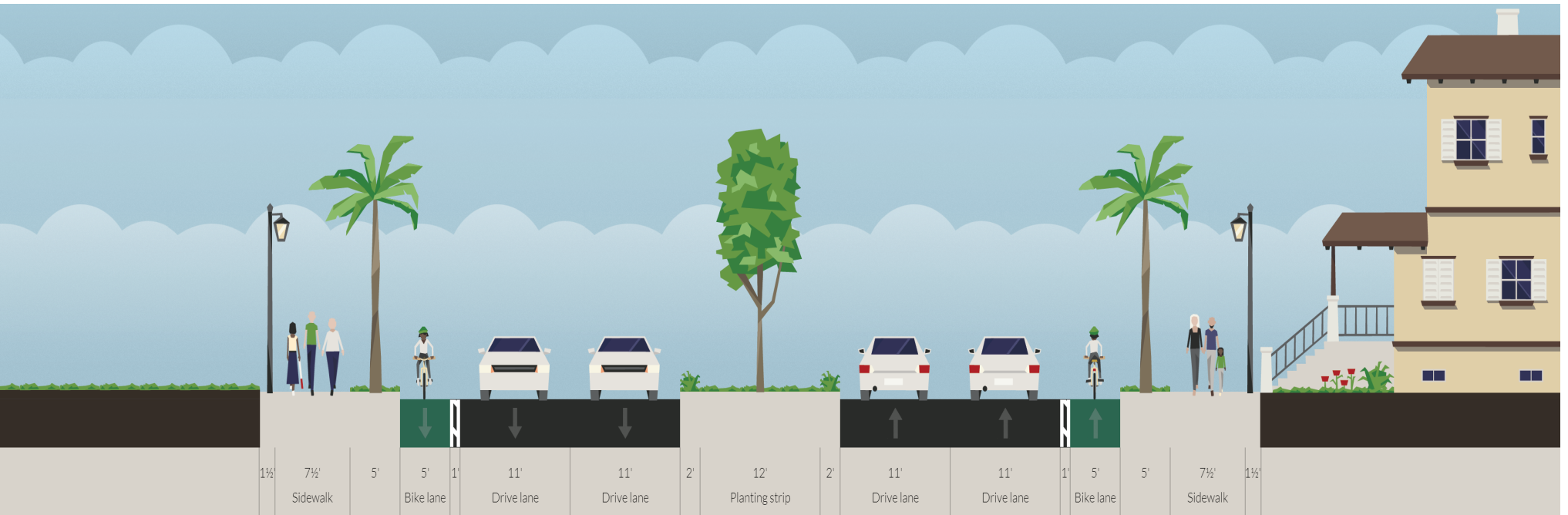
- County Arterial
- 35 MPH
- 100' of available ROW (100' in Trafficways Plan)

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

Prospect Road at 3rd Avenue



Prospect Road at NW 12th Avenue

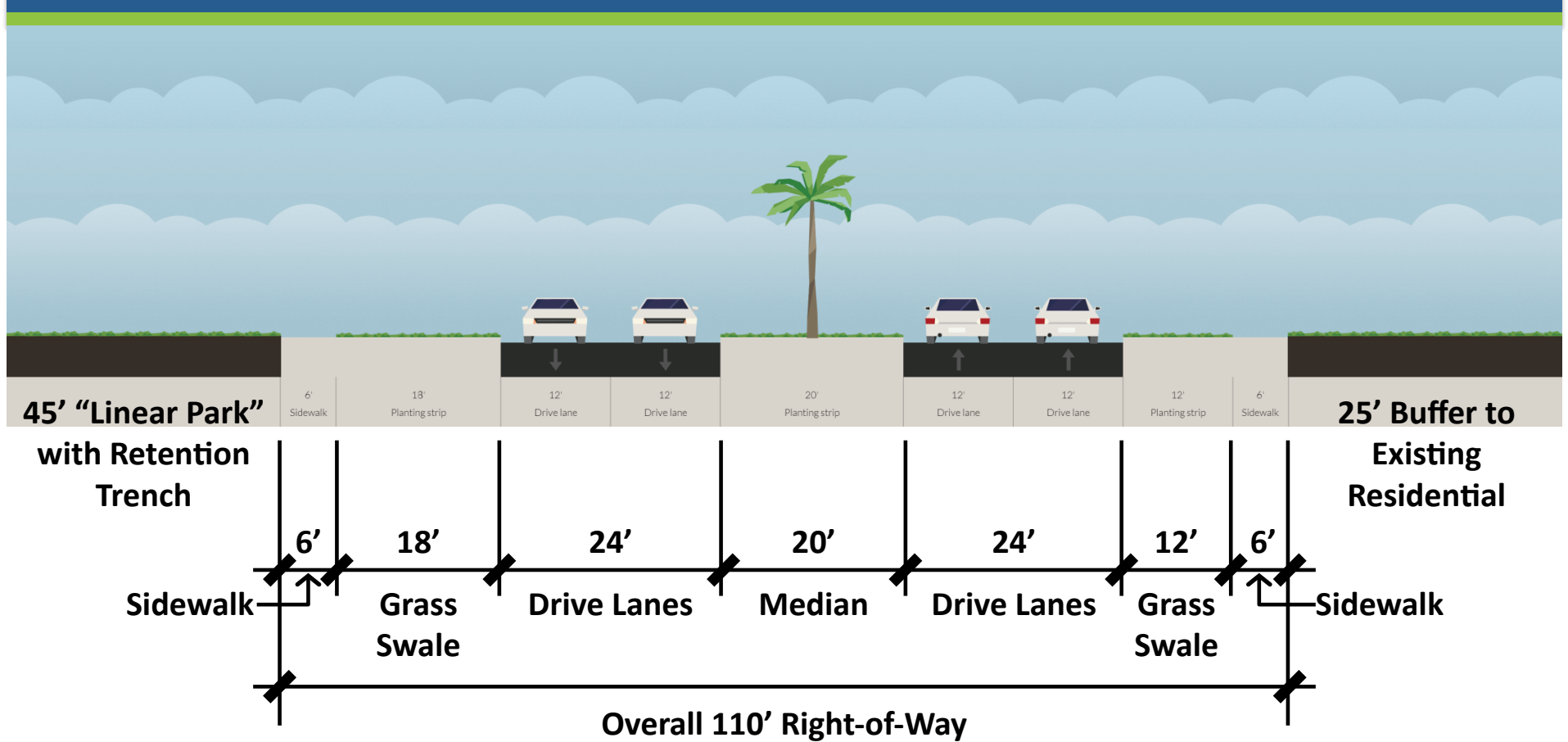


University Drive

- 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 th St	6 LD	33,500	50,300

Existing

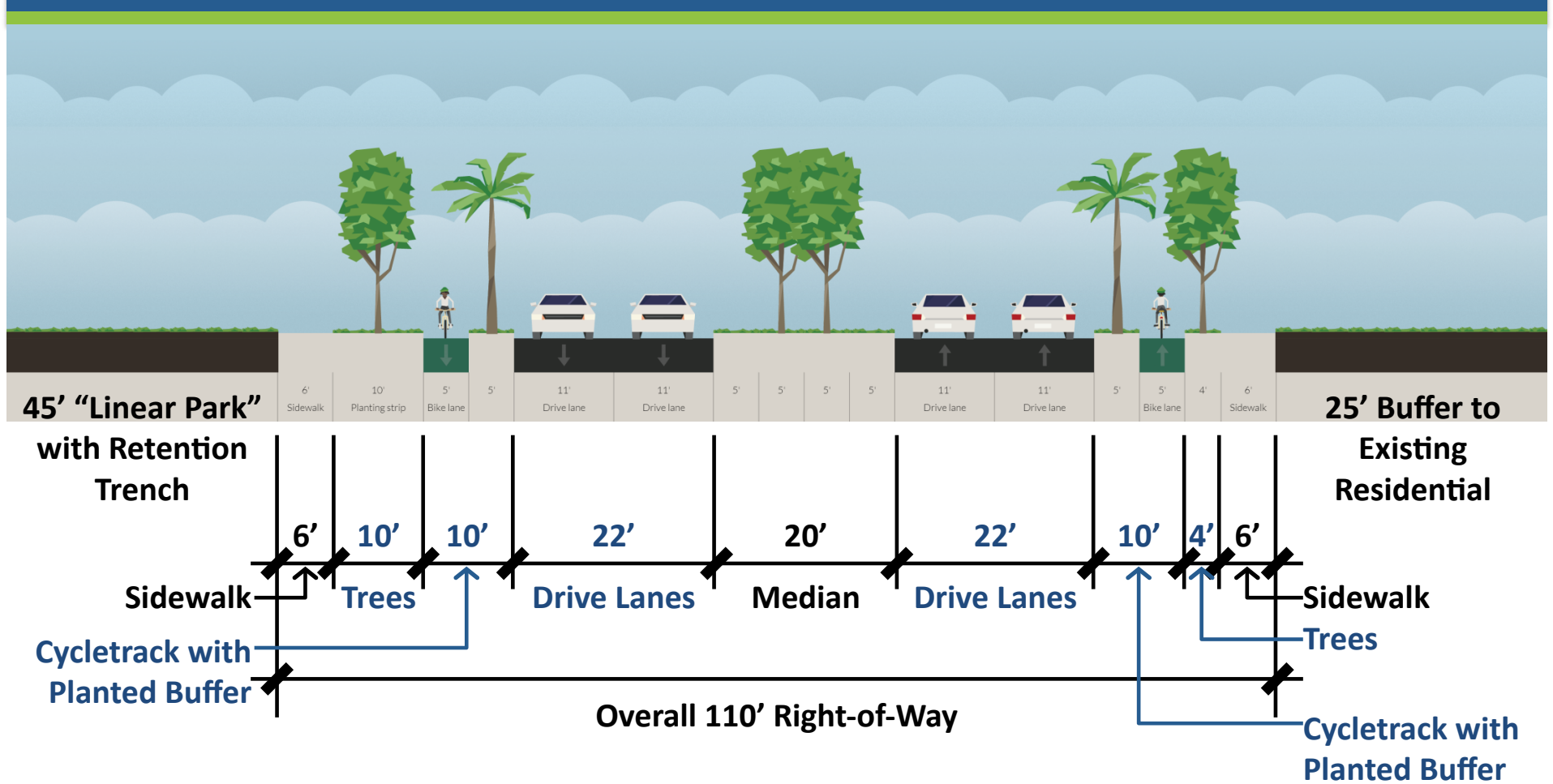


Information

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

University Drive (Swale, No Curb)
(NW 40th St to Wiles Rd)

Future



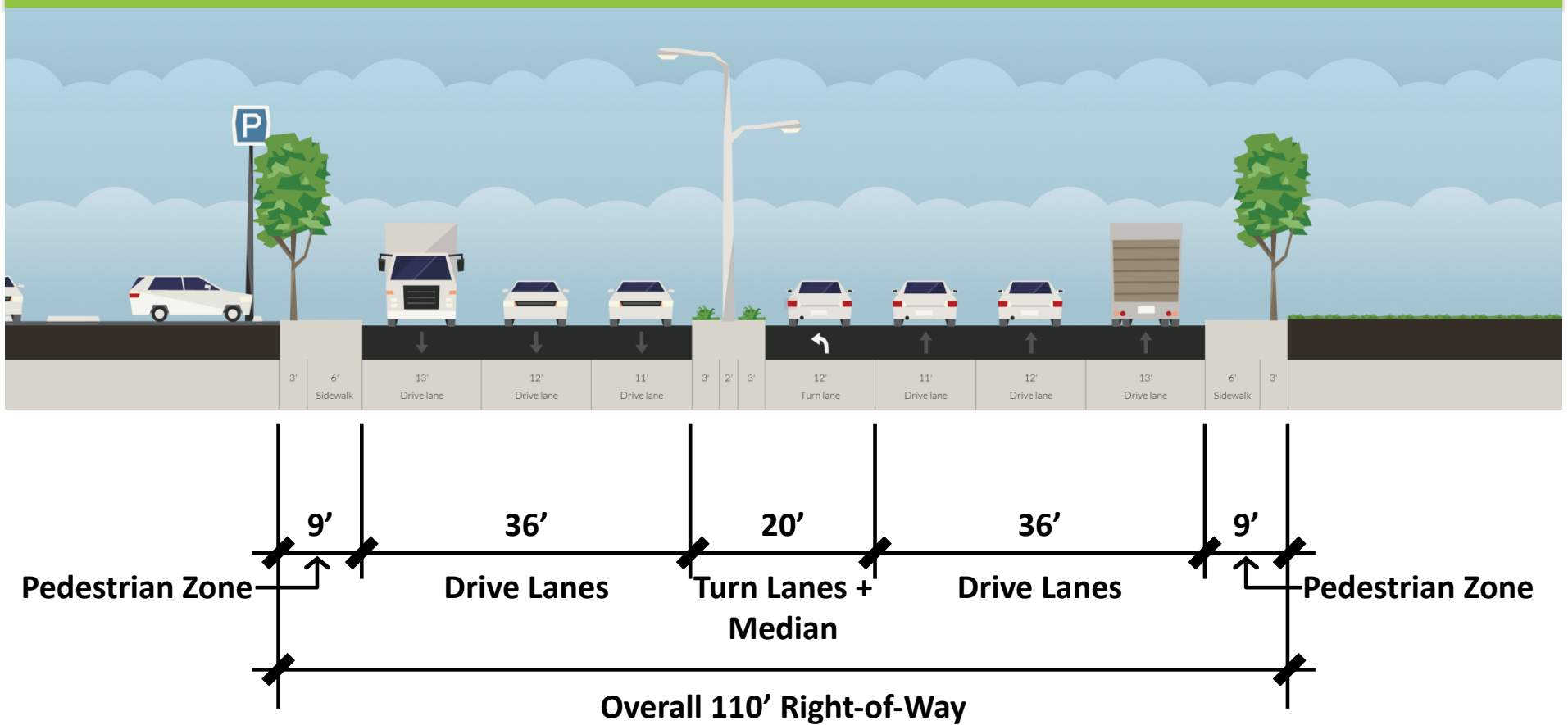
Information

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

University Drive *(Swale, No Curb)*
(NW 40th 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

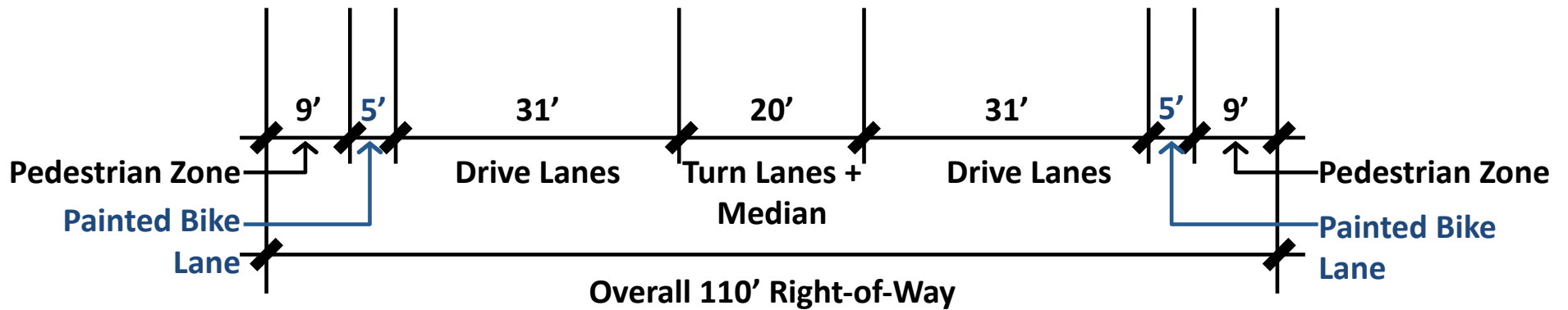


Information

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

University Drive *(Curb + Gutter)*
(Sample Rd to NW 40th St)

Proposed Section—Keep the Curb/Lane

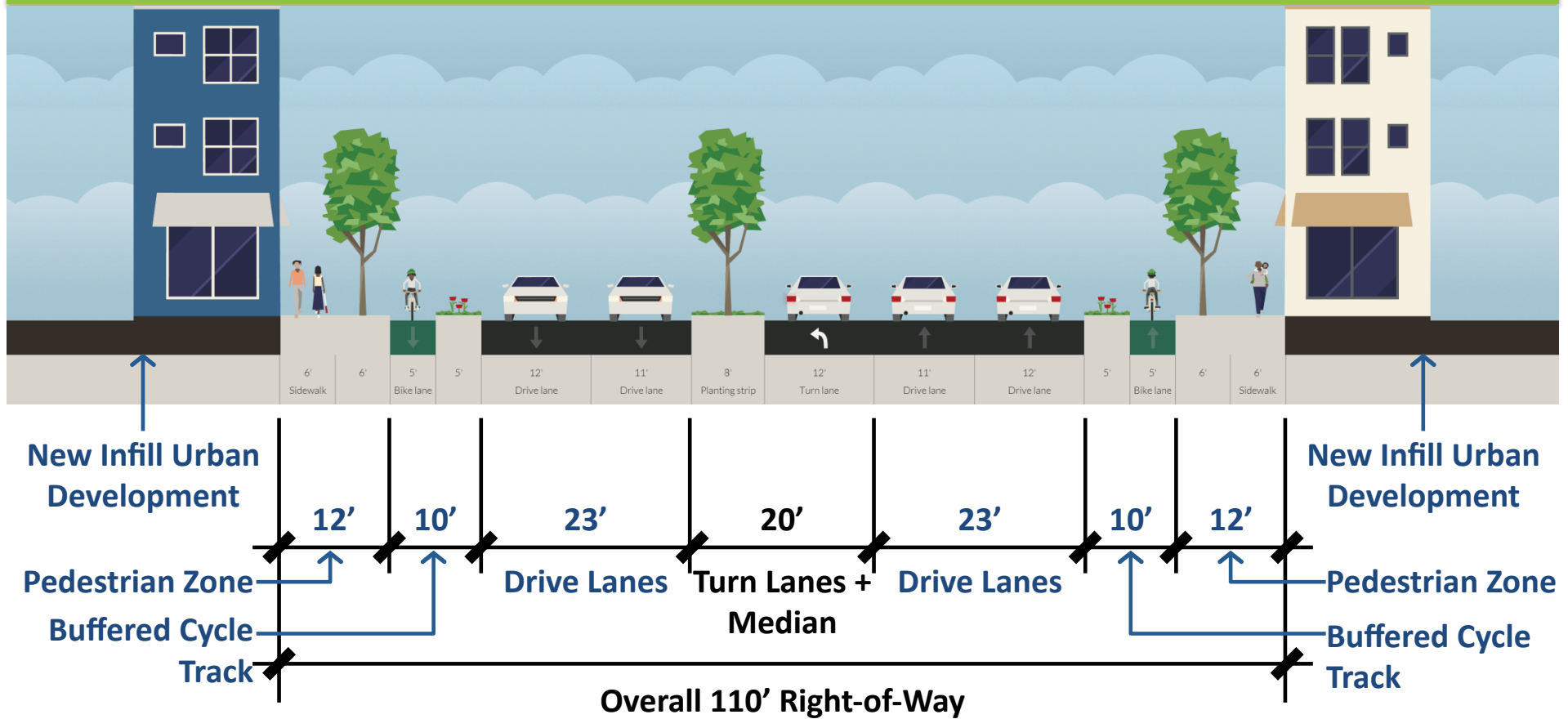


Information

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

University Drive (Curb + Gutter)
 (Sample Rd to NW 40th St)

Proposed Section—Change Curb/Lane



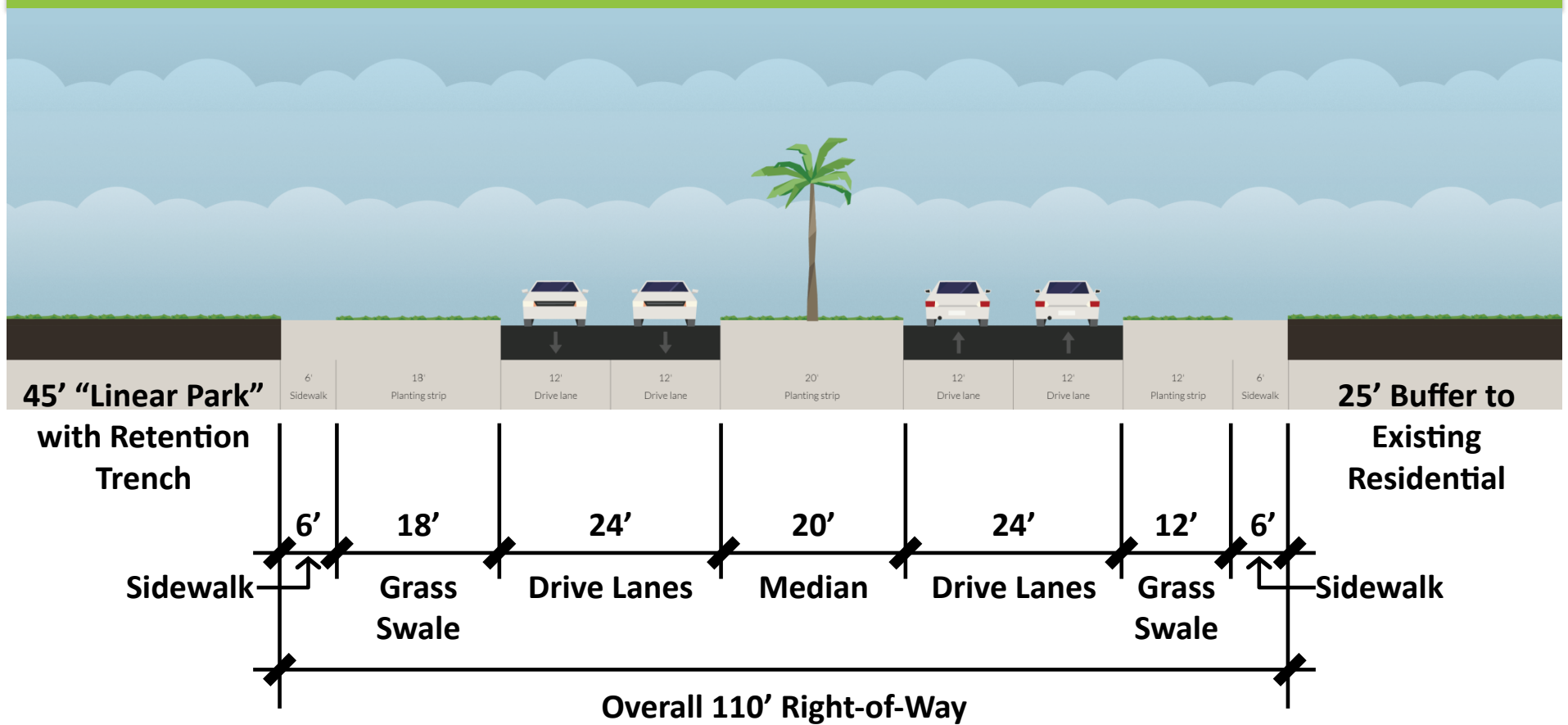
Information

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

University Drive (Curb + Gutter)
 (Sample Rd to NW 40th St)

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

Existing Section

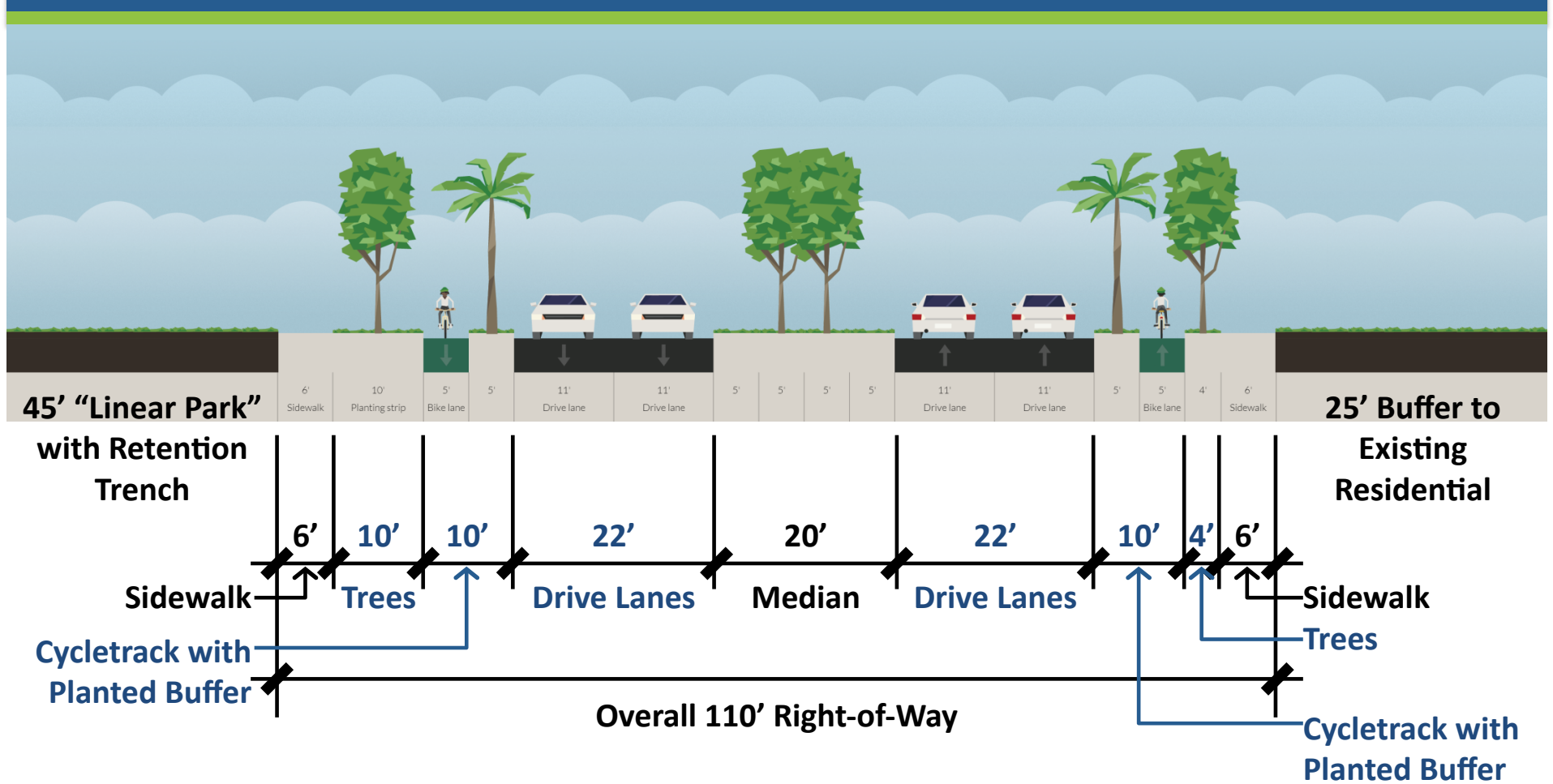


Information

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

University Drive (Swale, No Curb)
(NW 40th St to Wiles Rd)

Proposed Section



Information

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

University Drive (Swale, No Curb)
 (NW 40th 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

