



#### **US-1 Multimodal Corridor Study**



CONFECTINGCOMMUNITIES

In Palm Beach County

Section 3: Workshop & Open Studio Charrette

**Final Working Presentation** 

**July 2017** 





# **Project Corridor**







HIGHEST BUS RIDERSHIP





#### **Consultant Team**

- Kimley-Horn
- Kittelson & Associates, Inc.
- Treasure Coast Regional Planning Council







#### **Project Goals**

- Develop Multimodal Corridor Vision
- Create Implementable Plans
- Connect Pedestrian & Bicycle Facilities
- Upgrade & Expand Transit Service
- Consider Community Health, Safety & Economic Development



#### **Function**

- U.S. 1 is a "Main Connector" serving downtown areas in the eastern core of Palm Beach County
- U.S. 1 distributes people to businesses, neighborhoods, and important community destinations



# **Employment**

156,200

**Working Population** 

(Workers who live + who live & work + who commute into the corridor to work)

13% Of County Residents

19% Of County Jobs

**Employment and Residents** 

100 jobs

100 residents

Work Inflow / Outflow (1/2 mile of Study Corridor)

88,400

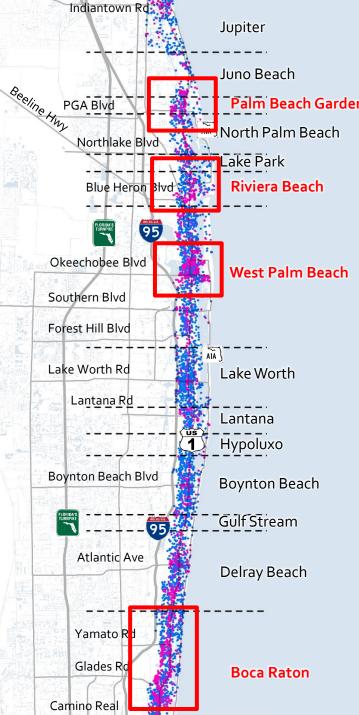
13,600

54,200

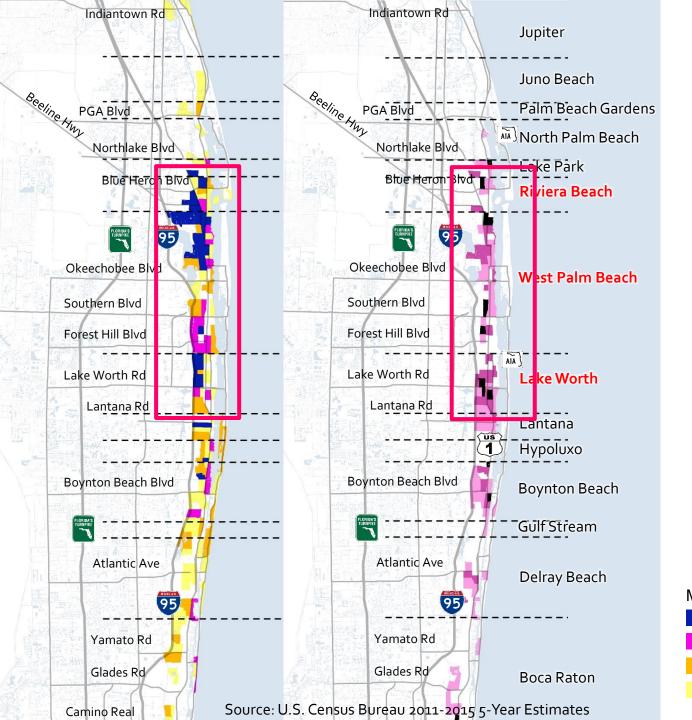
**Employees Coming into the Study Area to Work** 

Residents Live & Work in the Study Area

Residents Leaving the Study Area to Work



Source: LEHD, 2014; SERPM 7.061





## Income + Poverty

# Lake Worth West Palm Beach Riviera Beach

Lowest Incomes +
Most Households
Under the Poverty
Line

\$58,970

Palm Beach County Median Household Income

40% of biker commuters are classified in the poorest quartile (race and bike lanes)

Median Household Income

\$0 - \$ 26,945 (50% AMI)

\$26,946 - \$32,333 (60% AMI)

\$32,334 - \$43,111 (80% AMI)

\$43,112 - \$58,970 (100% AMI)

Households below the Poverty Line

0.29 (County Avg) – 1 / Acre

1.1 – 1.5 / Acre

1.6 – 10.5 / Acre

#### **Transit**

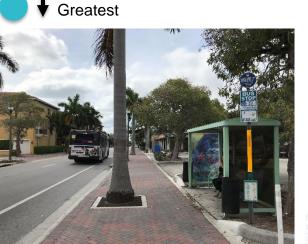
18 Routes

**8,600 Daily Riders** 

1/2 of Riders are Transit Dependent

Source: PalmTran, 2017





Transit Boardings + Alightings

Least



# Walking & Bicycling Facilities

Bicycle Lane Gap: Hypoluxo to North Palm Beach

Sidewalk Gap: Boynton Beach to Lantana (West Side)

**Walking and Bicycling Facilities** 

Bicycle Facility Gap

——— Sidewalk Gap







#### Walking & Bicycling Safety

2011-2016

#### **15** Fatalities

- 100% Occurred in Dark or Dusk
- 12 Pedestrian Fatalities
  - Concentrations in Lake Worth
     and West Palm Beach
- 3 Bicyclist Fatalities
  - Occurred in Boca Raton Between Glades Rd and Hidden Valley Blvd

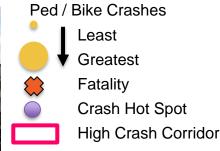
#### 321 Crashes

- 58% Involved a Pedestrian
- 42% Involved a Bicyclist
  - 82% of Bicyclist Crashes
    Occurred in Locations Without a
    Bike Lane
- Crash Concentrations in Lake
   Worth and West Palm Beach
   between Lantana Rd and Summit
   Blvd

Source: SignalFour Analytics, 2011 - 2016









## **Vehicle Access + Commuting**

#### **Highest Concentrations of Zero Car Households**

34% of Palm Beach residents have long daily commutes driving alone







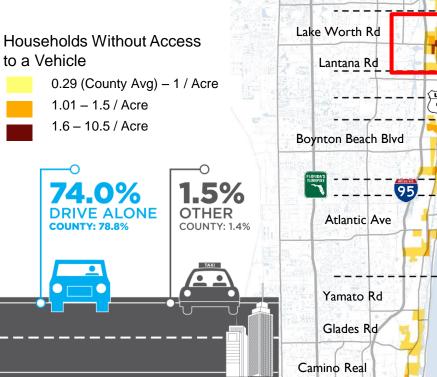


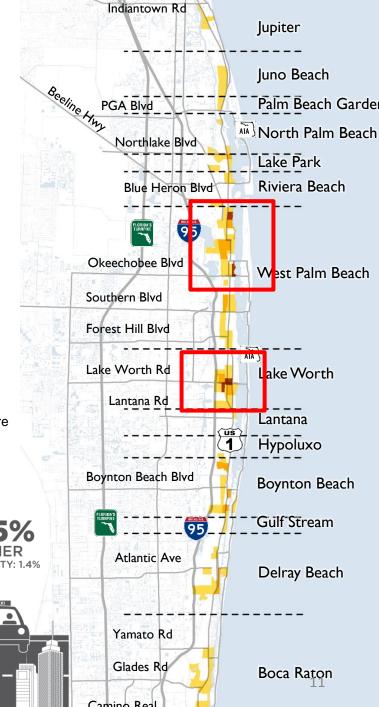
1.01 - 1.5 / Acre

1.6 - 10.5 / Acre

to a Vehicle







Jupiter

Iuno Beach

Lake Park

Riviera Beach

West Palm Beach

Lake Worth

Lantana

Hypoluxo

**Boynton Beach** 

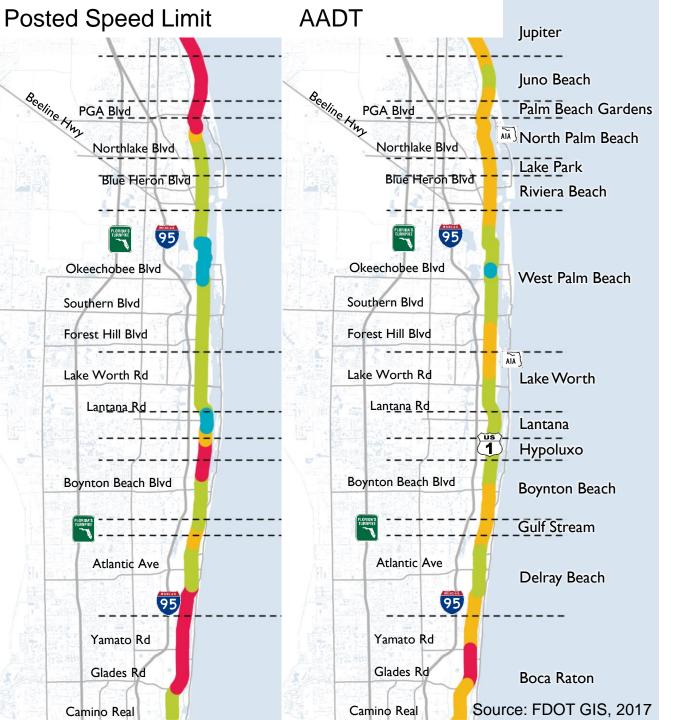
Gulf Stream

Delray Beach

Boca Raton

Palm Beach Gardens

Source: U.S. Census Bureau 2011-2015 5-Year Estimates





# Vehicular Speed + Volumes

- Posted Speed Limits Vary; Majority <= 35 MPH</li>
- Speeding Observed on Field Visits
- Moderate Traffic Volumes Throughout Most of the Corridor





#### **Corridor Needs + Goals**

- 1. Improve access to jobs and education
- 2. Improve access to health and community services
- 3. Improve multimodal mobility
- 4. Improve safety for pedestrians and cyclists
- 5. Support development / redevelopment along corridor





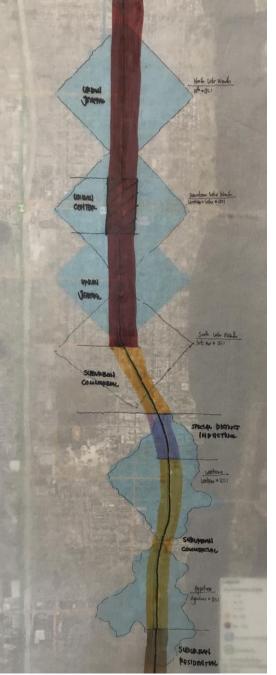






# **Project Corridor**

- Section 1: Boca Raton
- Section 2: Delray Beach, Boynton Beach
   & Gulf Stream
- Section 3: Hypoluxo, Lantana & Lake Worth
- Section 4: West Palm Beach
- Section 5: Riviera Beach, Lake Park & North Palm Beach
- Section 6: Juno Beach, Jupiter & Palm Beach Gardens



# What are the FDOT Context Classifications?



Section 3





# Upcoming Resurfacing Projects

- FY 19: US-1 from North of Hypoluxo
   Rd to Waterway Dr (FM# 437835-1)
- FY 19: Lantana Rd from I-95 to US-1 (FM# 2019009903)
- FY 21: Hypoluxo Rd from Military Trail to US-1 (FM# 2021009902)



#### Recap of Workshop/Open Studio Charrette

- Group Walking Tour/Activity
- Priority Pyramid
- Build-a-Street
- IntersectionDesign
- Site Locations for Transit Stops





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# **Priority Pyramid**







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Safety

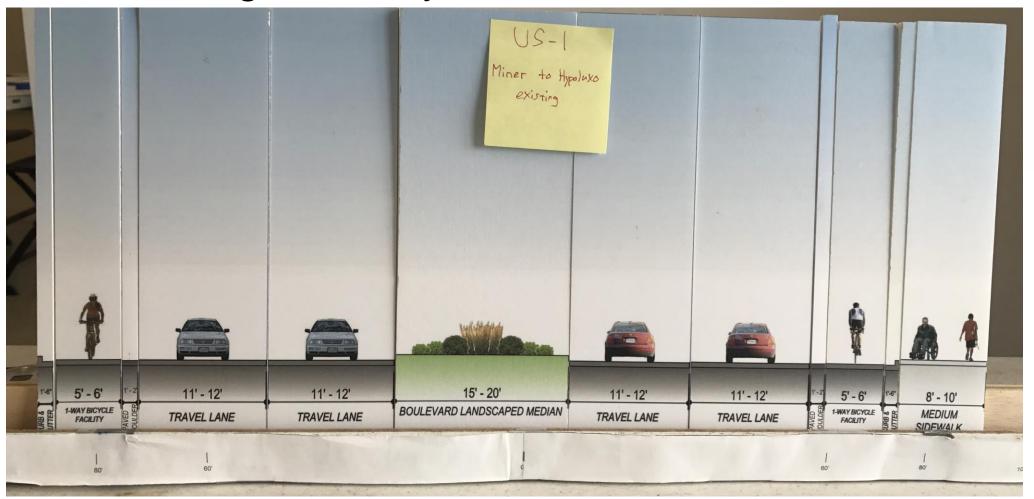


Economic Development/
"Placemaking"

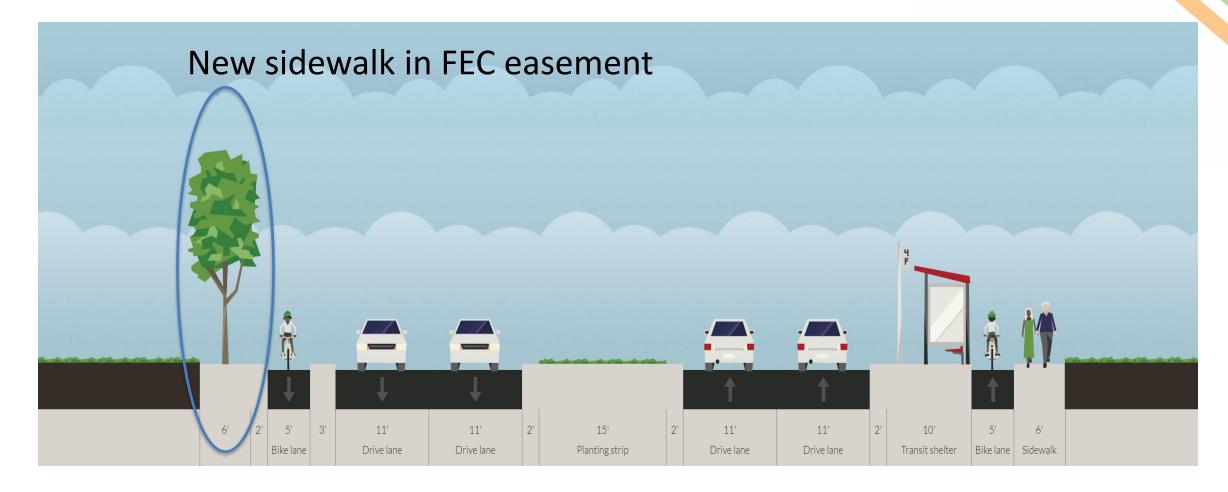


Added Mobility
Options

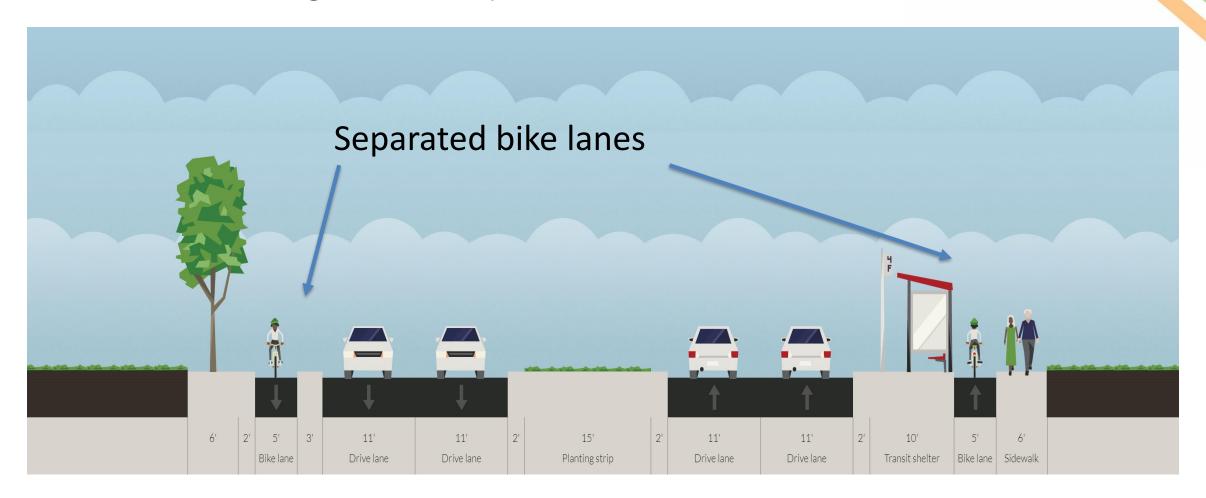












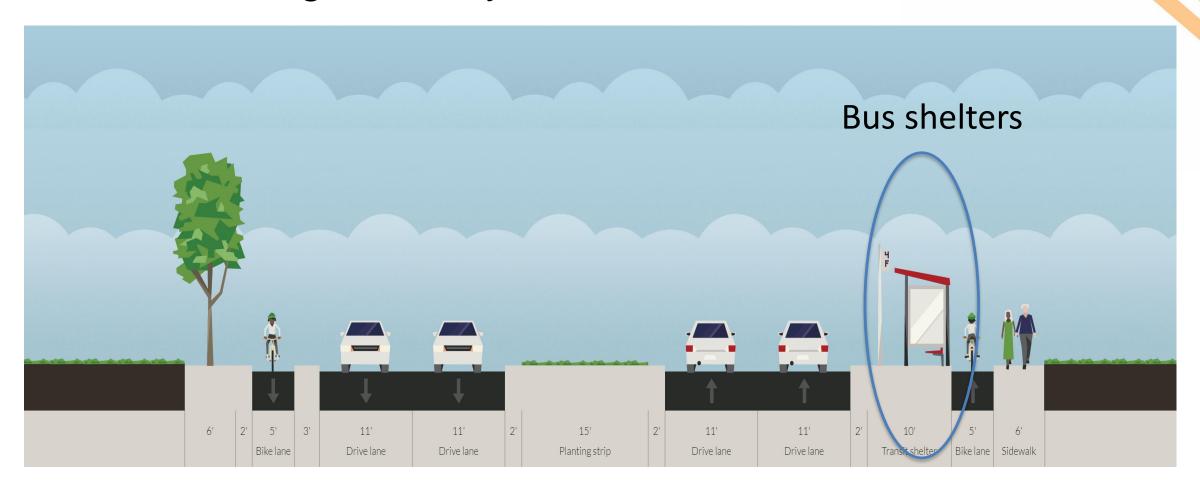


Separated Bike Lanes









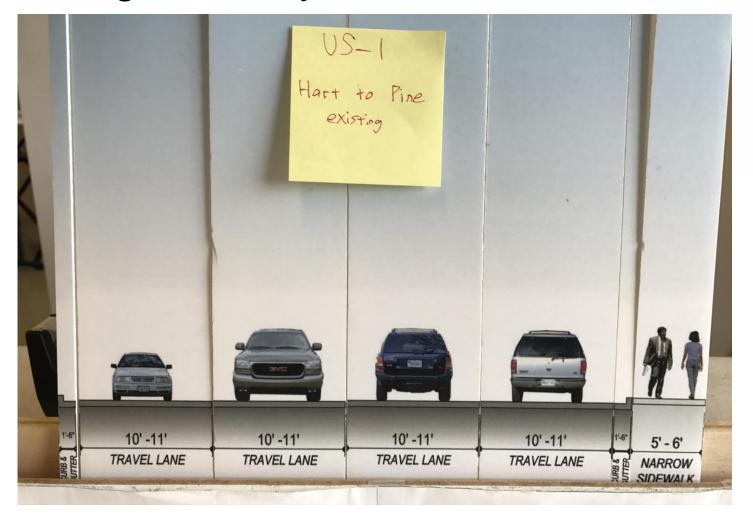


Bike lanes behind bus shelters

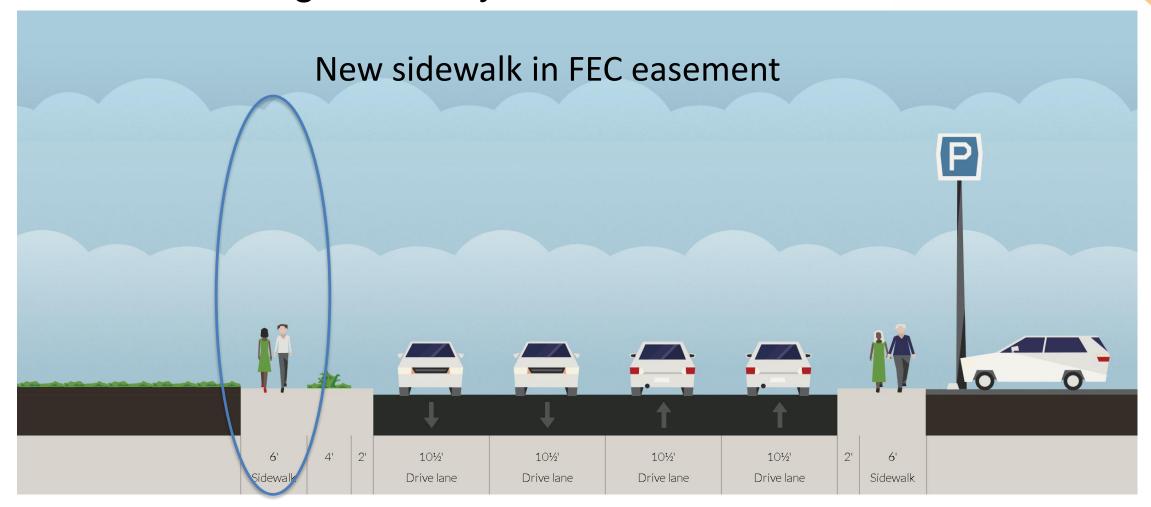




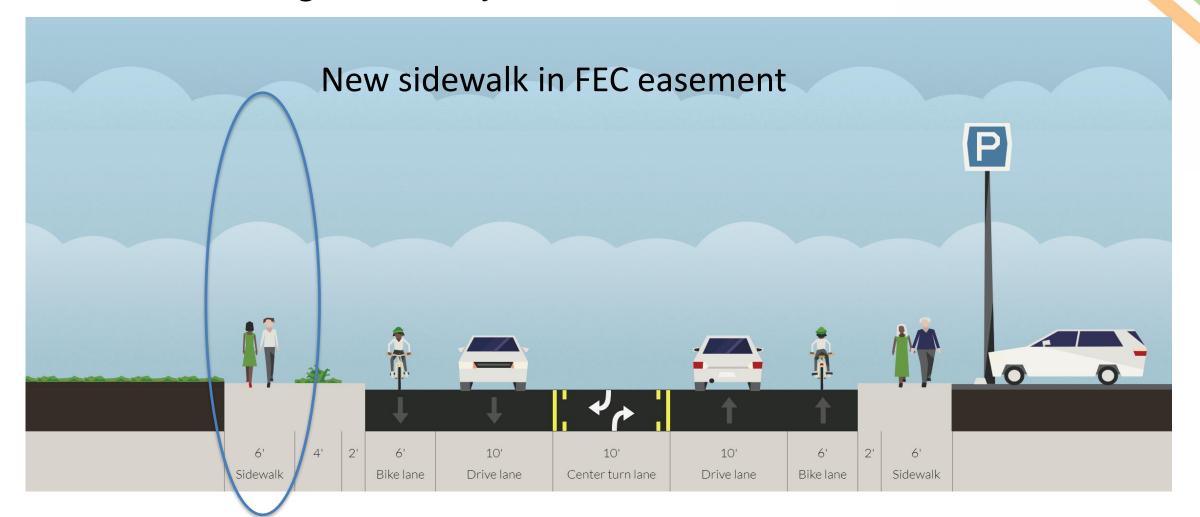




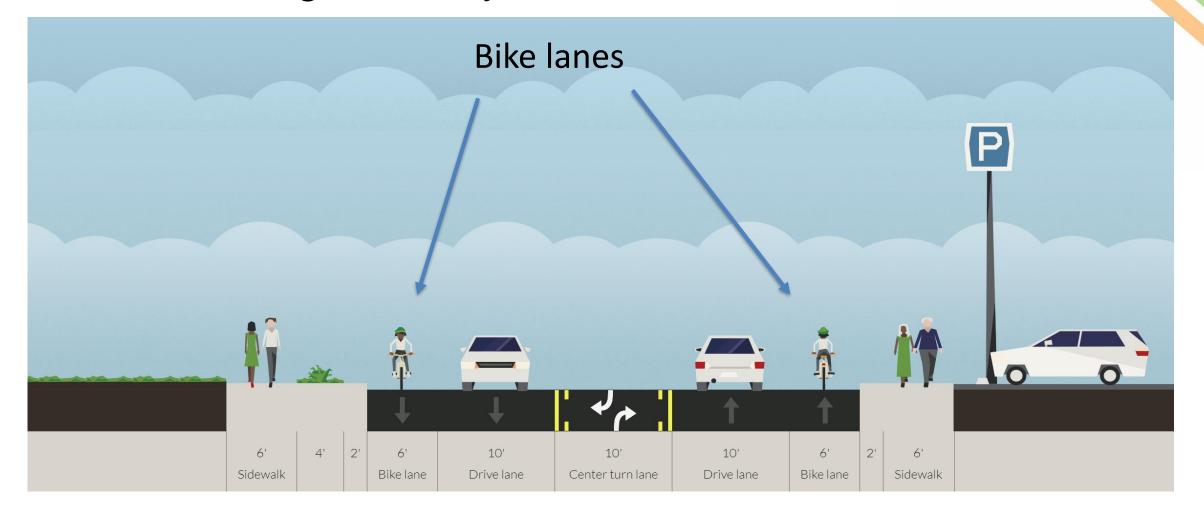






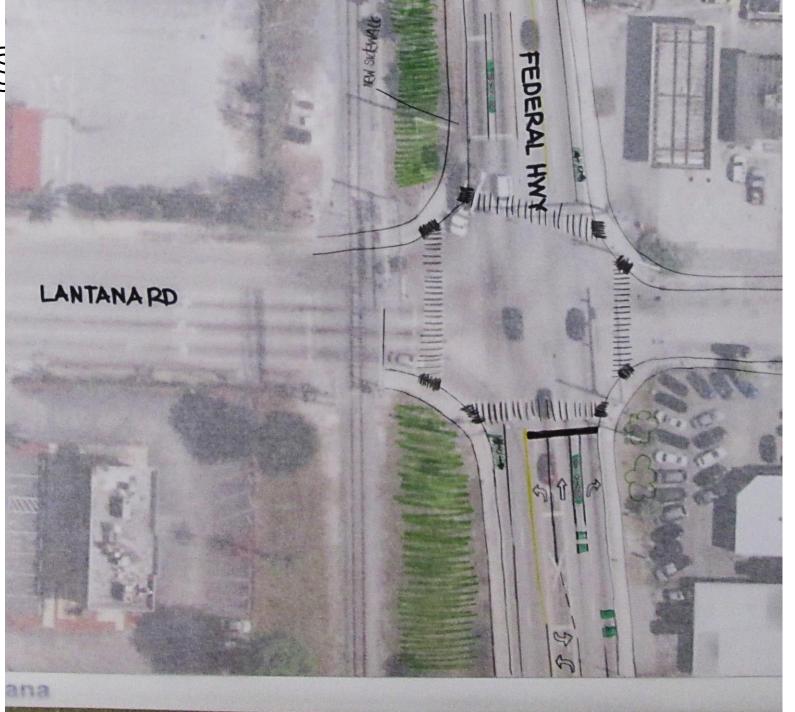






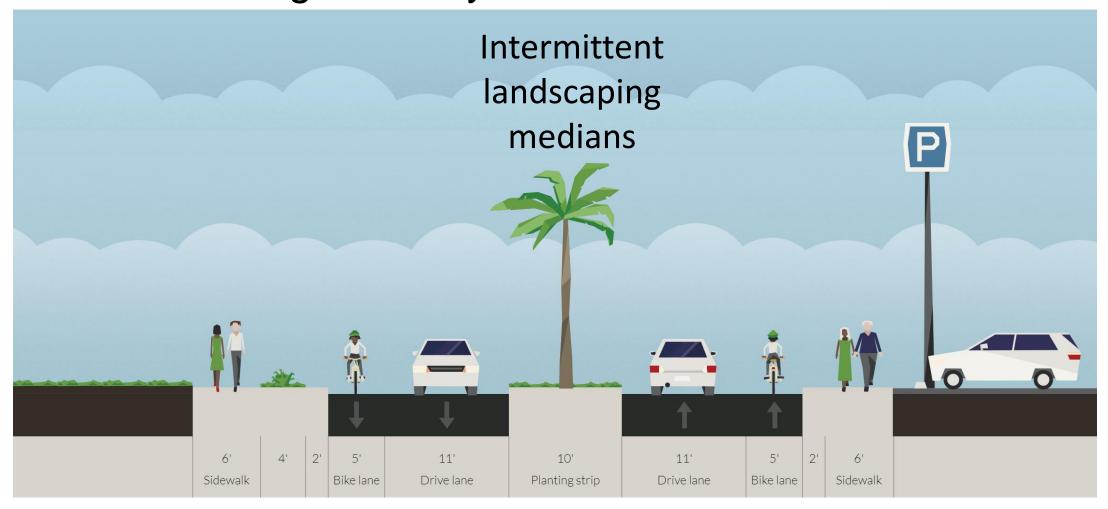


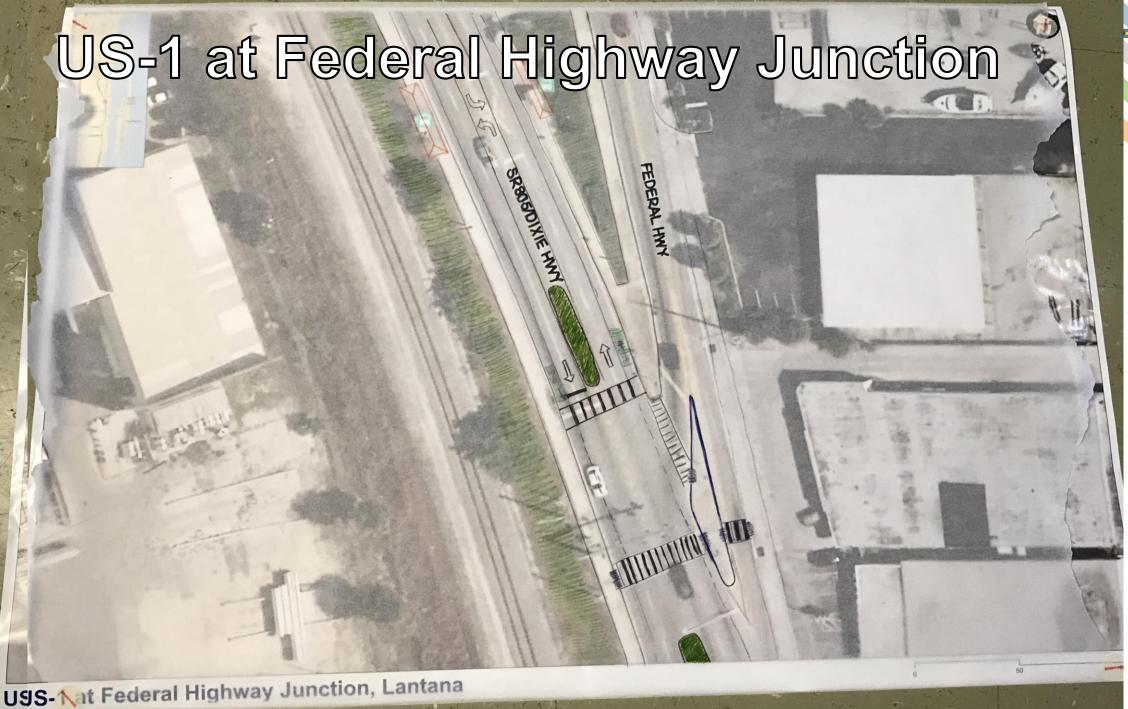








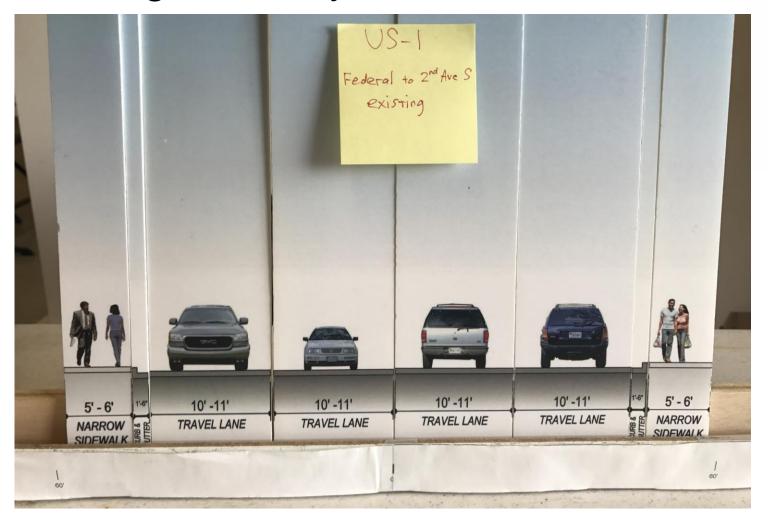






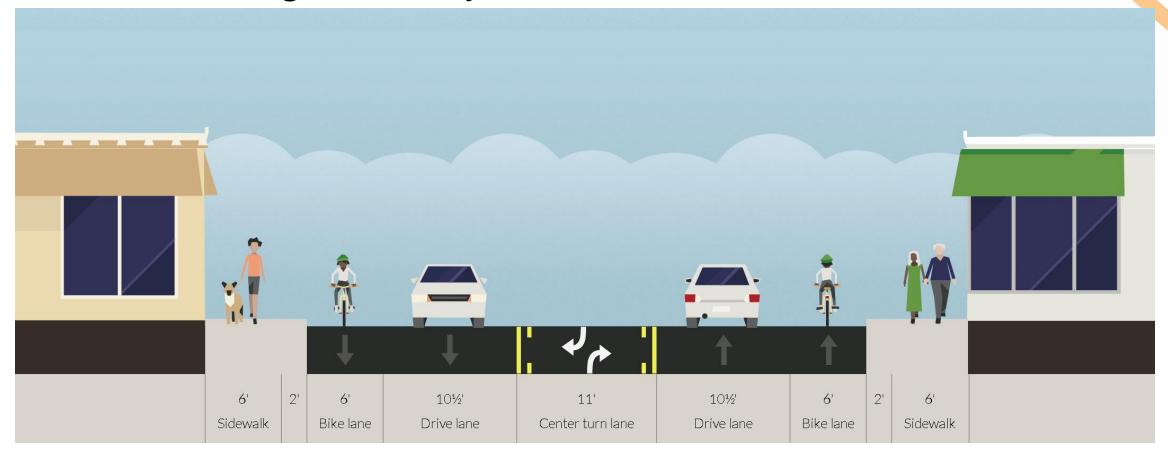


#### South of 2 Ave S & North of 2 Ave N





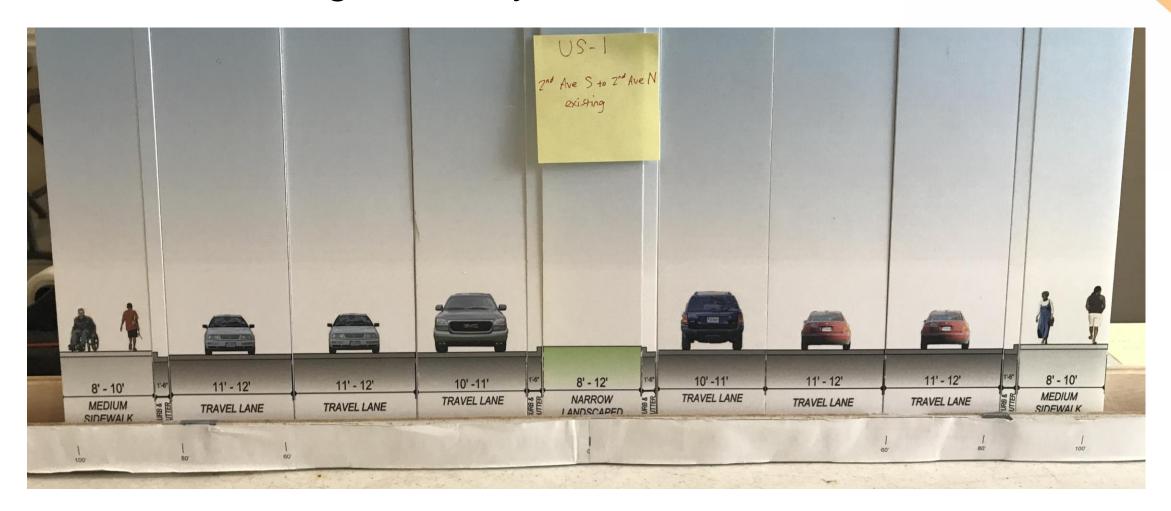
#### S of 2<sup>nd</sup> Ave S & N of 2<sup>nd</sup> Ave N





## **Downtown Lake Worth**

105 feet of Right-of-Way







## **Enhanced Transit**

Two to three doors for quicker loading and unloading.

More substantial stations with shelters. seating, and public art; and spaced farther apart than regular bus (1 to 2 miles).

Off-board ticketing allows riders to purchase tickets before boarding. Without needing to pay the driver, riders can board the bus more quickly through any of several doors.

Electric-diesel hybrid systems can cut emissions and noise. Bike racks could be included either on the front of the bus or inside the bus. Access to free wi-fi and power outlets for riders. Most bus rapid transit systems feature a slightly modern and sleek exterior design. Use signal priority to hold a green light long enough for the bus to get through the intersection or change a red a bus approaches. Buses could arrive Signs at bus stops can show every 10 minutes real-time arrival information. during peak times. Curb-level boarding ensures the

> height of the curb at the bus stop matches the bus floor for easy

boarding for all users.

light to green more quickly as

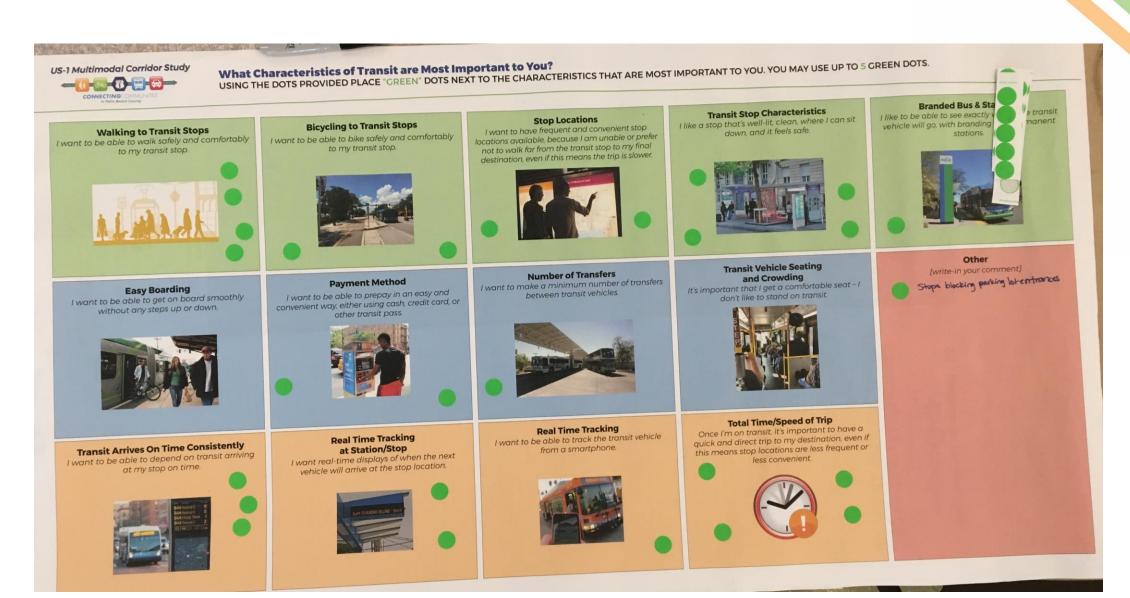
Source: An adaptation of The Wall Street Journal Building a Better Bus illustration.







# **Transit Characteristics**

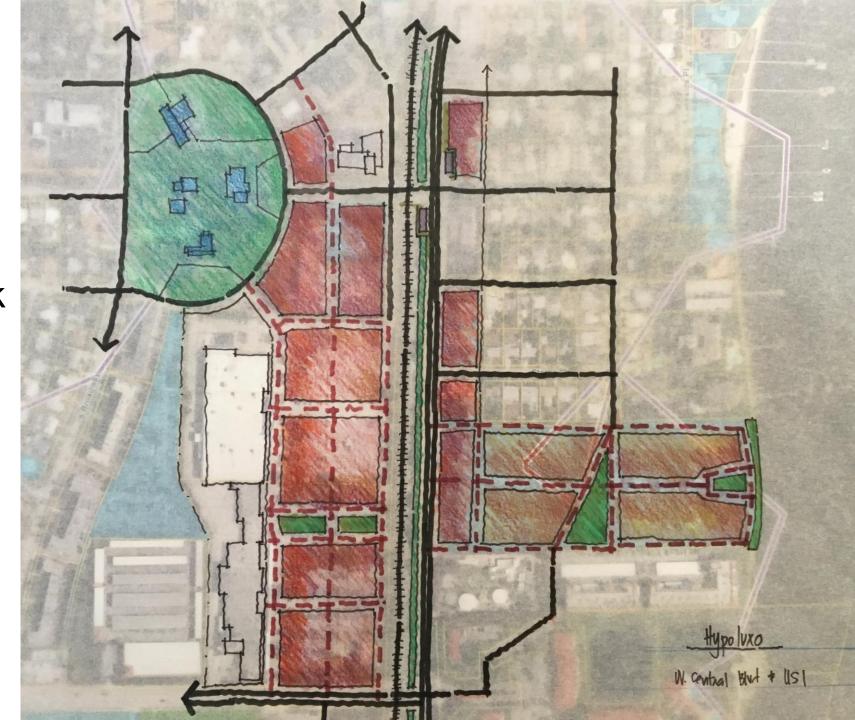




## Lantana

W. Central Blvd & US 1

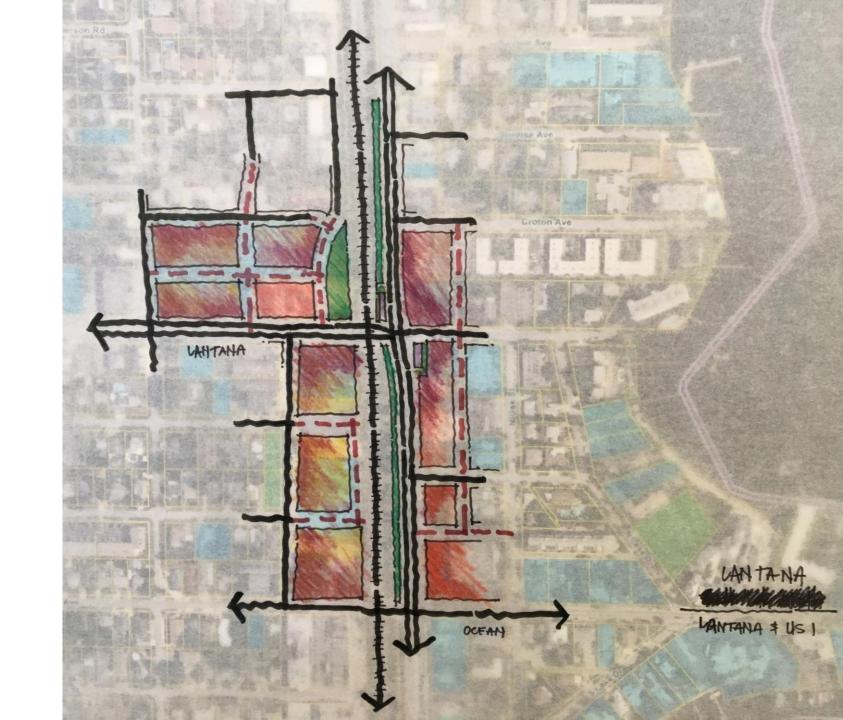
- Connect to TownCenter
- Reconnect Network
- Introduce Green Space
- Locate Stops in Existing Space; Improve Cross-Connectivity
- Be Context Sensitive



## Lantana

Lantana & US 1

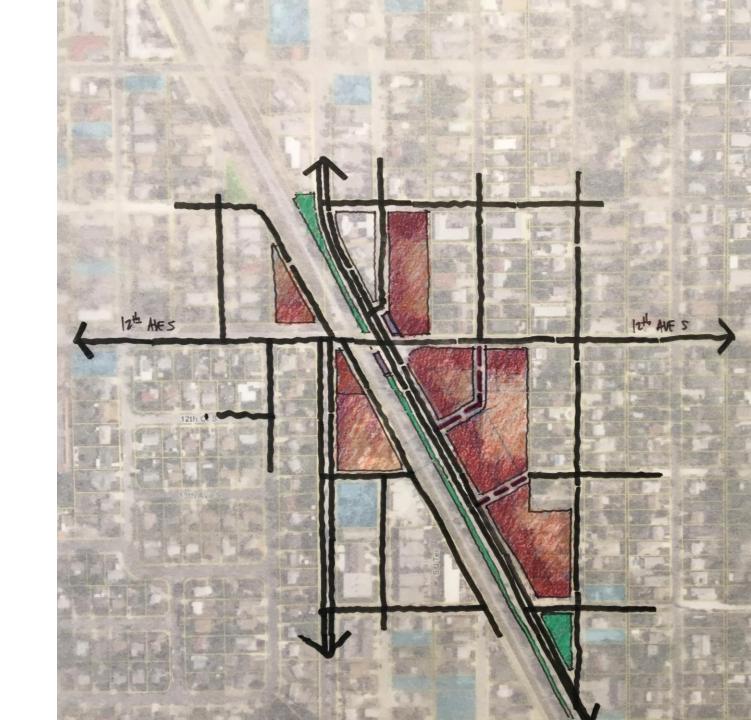
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## **Lake Worth**

12th Ave S & US 1

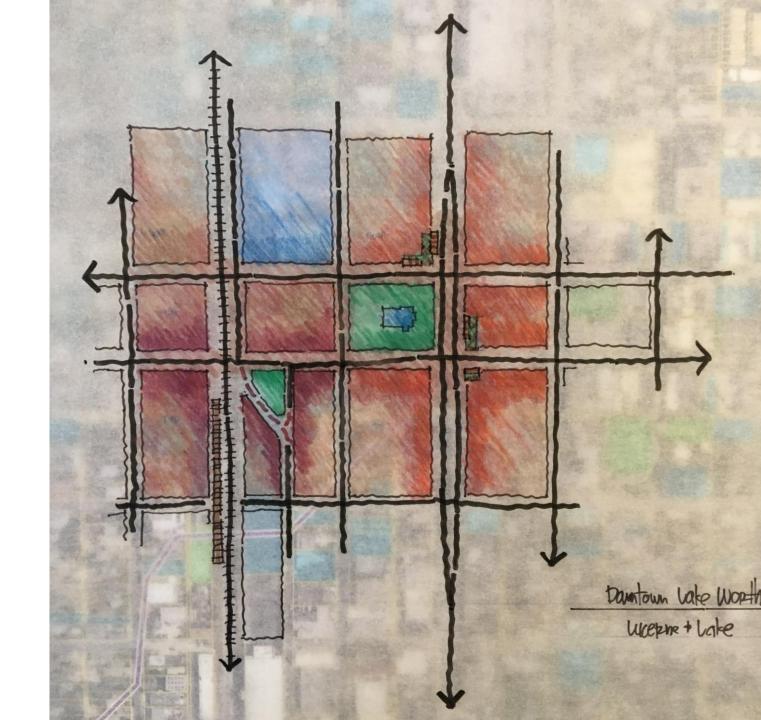
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## **Lake Worth**

Lucerne/Lake & US 1

- Connect to TownCenter
- Reconnect Network
- Introduce Green Space
- Locate Stops in Existing Space; Improve Cross-Connectivity
- Be Context Sensitive









### Schedule

We are Here **Spring** Winter **Spring** Summer -Fall 2017 2018 2017 2018 **OUTREACH REPORT** RESEARCH **OUTREACH** 

## Stay Tuned – Get Involved

- US1PBCorridorStudy.com
- Facebook.com/US1PBCorridorStudy
- #US1PBCorridorStudy
- @US1PBCorridorStudy
- Quality of Life and Transit Survey

### **US-1 Multimodal Corridor Study**





### US-1 MULTIMODAL CORRIDOR STUDY

The Palm Beach Metropolitan Planning Organization (MPO) is conducting a US-1 Multimodal Corridor Study to connect pedestrian and bicycle facilities as well as upgrade and expand existing transit service along US-1 in Palm Beach County from Camino Real in Boca Raton to Indiantown Road in Juniter.

### PROJECT STATS - Click to view full stats



### PROJECT TIMELINE



#### **EVENTS** - Click to view all events

05.06.17 - Kickoff Outreach Event
05.13.17 - Section 1 Workshop
06.24.17 - Section 2 workshop
07.22.17 - Section 3 workshop
08.26.17 - Section 4 workshop



### COMMENT MAP - Click to leave comment

