US-1 Multimodal Corridor Study

CONNECTING COMMUNITIES
In Palm Beach County

TPA Board Meeting
May 17, 2018
Purpose

Develop a comprehensive plan to identify **multimodal improvements** that increase safety and access for **all users** of the roadway and evaluate the potential for a premium express bus service.
US-1 Multimodal Corridor Study

In early 2017 the Palm Beach TPA kicked off a US-1 Multimodal Corridor Study to examine the potential for new express bus service as well as facilities to improve pedestrian and bicycle safety and connectivity along the corridor. The study encompassed the US-1 corridor in Palm Beach County from Camino Real in the City of Boca Raton to Indiantown Road in the Town of Jupiter. The project corridor is approximately 42 miles in length and runs north-south across 14 local municipalities. This effort included a kickoff outreach event and 6 months of public workshops and charrettes. The project also included a Health Impact Assessment (HIA) and a working group with local health partners to help inform the study’s recommendations and potential impacts to community health. This project is included in the Palm Beach TPA’s Priority Projects list for the Transportation Improvement Program (TIP).

The US-1 Multimodal Corridor Study draft documents are available under the "Project Documents" tab and at: www.PalmBeachTPA.org/US1

PROJECT STATS

Source: U.S. Census Bureau 2017-2019 5-Year Estimates; Robert Woods Johnson Foundation County Health Rankings

PROJECT TIMELINE

Social Media included Project Facebook Page and Instagram
Overview of Presentation

- Health Impact Assessment (HIA)
- Transit Assessment
- Roadway Assessment
What is a Health Impact Assessment?

• Brings together **scientific data, health expertise, and public input** to identify potential health effects of proposed regulations, projects, and programs

• Can help decision-makers **consider health** when making decisions

• Generates **recommendations** on how to improve a project or policy
US-1 HIA Process

- Collected Input:
  - HIA Working Group
  - Stakeholder Interviews
  - Charrettes/Workshops
  - Quality of Life Survey
  - Literature Review
  - Available Mapping Data
MIKE IN WEST PALM BEACH

Mike noted that bicycling would be much easier than driving and trying to find a parking space, especially when visiting restaurants and nightlife Clematis Street. In his opinion and perception, the absence of pedestrian safety features or dedicated bike lanes makes it tough to consider exclusively biking here. He has used the Trolley in the past and agrees it is convenient, but given the time savings of driving, Mike does not really consider using the fixed route system.

Pedro in Boynton Beach

Pedro is a certified nursing assistant (CNA) employed by Bethesda East Hospital in Boynton Beach. Each morning at 4:30 AM he walks, in the dark, to the West Palm Beach Intermodal Center from his home west of downtown. With the lack of pedestrian lighting on his path, he is very concerned for his personal safety and “feels [he] will be a target” for crime.

Pedro’s roundtrip journey to work takes a little over four hours each day. Because of his safety concerns, he sometimes rides Tri-Rail in the morning, however, he uses the bus on the return trip due to the cost. He usually purchases a weekly bus pass, but on the day he was interviewed his weekly pass had expired and he was forced to purchase a single pass because of personal financial issues. Pedro felt that the cost for a weekly pass was too much for a trip that would normally take about 20 minutes by car.
HIA Current Conditions
Health-Related Issues for US-1 Corridor Residents

**Hypertension Rate**
43%
(Higher than the County, State, and National averages)

**Diabetes-Related Issues**
14%
(Higher than the County, State, and National averages)

**Obesity-Related Issues**
30%
(Higher than the County, State, and National averages)
HIA Current Conditions
Physical-Related Issues for US-1 Corridor Residents

321 Bike/Ped Crashes
58% Pedestrian
42% Bicyclist

82% Bicycle Crashes in Areas with NO Bike Lane

15 Bike/Ped Fatalities
(100% at Night or at Dusk)
HIA Current Conditions
Physical-Related Issues for US-1 Corridor Residents

90% of Route 1 riders WALK to their Stop

50% ARE Transit Dependent

Highest Ridership Route in the County

65% of Route 1 riders do NOT transfer buses
HIA Integration

- Access to Health Care + Healthy Food
- Mental Health / Depression
- Chronic Illness (Diabetes, Hypertension, Asthma)
- Obesity
- Bike + Pedestrian Crash Rates
- Taxable Land Value

Complete Streets

Premium Transit
HIA Key Recommendations

Advance premium transit on US-1 by funding capital and operational costs for the service.

Implement Complete Street Solutions for the US-1 Corridor.

Access to Jobs and Education

Access to Health and Community Services

Economic Development

Bicycle and Pedestrian Safety
ROUTE 1
Highest Ridership in the County
Gardens Mall to Boca Raton
1,922,272 Riders per Year
The BOLT Limited-Stop Service

TRIPS ON ROUTE 1
50%
Between Riviera Beach and Boynton Beach
75%
Of Trips are 15 miles or less
Transit Recommendations

PTX Yellow – Phase 1
(Riviera Beach to Boynton Beach)

• New “Palm Tran Express (PTX)” service
• 19 miles – 19 station pairs
• Operates in mixed traffic
• 10-minute frequency for Express Service
• Operates during:
  • 4 Hrs Morning/Afternoon Peak Period
  • 1 Hr Late Night Run
• Serves the Highest Existing Ridership and Greatest Concentration of Transit-Dependent Riders
Transit Recommendations

PTX Yellow – Phase 1
(Riviera Beach to Boynton Beach)

Compared to The Bolt Service

- 75,000 Additional Riders per Year
- 17% Increase in Households and Jobs Locations that have access to Transit
- Within a 10-Minute Walk: 24 Schools, 90 Healthcare Facilities
Transit Recommendations

PTX Blue – Phase 2
(Boynton Beach to Boca Raton)

- Southern extension of PTX Yellow
- 14 additional miles – 11 more station pairs
- Operates in mixed traffic
- 20-minute frequency
- Existing Route 1 still at 30-min frequency
- Operates during:
  - 4 Hrs Morning/Afternoon Peak Period
  - 1 Hr Late Night Run
- Captures Additional High Concentration of Households and Jobs
Transit Recommendations

PTX Green – Phase 3
(Boynton Beach to Boca Raton)

- Northern extension of PTX Yellow
- 9 additional miles – 12 more station pairs
- Operates in mixed traffic
- 20-minute frequency
- Existing Route 1 still at 30-min frequency
- Operates during:
  - 4 Hrs Morning/Afternoon Peak Period
  - 1 Hr Late Night Run
- **Full US-1 Express Transit Service**
Transit Recommendations

PTX Yellow + PTX Blue + PTX Green
(City of Boca Raton to Town of Jupiter)

Compared to “The Bolt” current limited stop service:

229,000 Additional Riders per Year

45 Schools

217 Healthcare Facilities

138% Increase in Households and Jobs Locations that have access to Transit

Within a 10-Minute Walk
Transit Station Design

- Solar Panels (Self-Powering)
- Branded Shelter Design
- Off-Board Ticketing (Smartphone Integration)
- Branded Wayfinding Signage
- Level Boarding (raised 14”-15” above roadway)
- Real-Time Arrival Information
- Pedestrian-Scale Lighting, Site Furnishings, WiFi, etc.
- Bicycle Racks and/or Bikeshare
Level Boarding
TOD Opportunity Sites
Transit-Oriented Development

42 Station Areas
Examined Potential Development Scenarios around PTX Stations

- Redevelop Blocks into Mixed-Income, Higher Density Residential adjacent to Transit
- New Park Space for PTX Station
- New Linear Park on 13th to Connect Transit Areas
- Consider New Alleyways for Redevelopment
- Smaller Lot, Infill, Mixed-Income Residential Neighborhood with Park Space
- Pedestrian Connection to FAU
- Fronting Mixed-Use Buildings with Alleys
- Fronting Mixed-Use, transitioning to Residential Towards Existing Neighborhood
- Multi-Lane Roundabout at Realigned NE 20th St and US-1
- Strip Mall Redeveloped into Walkable Town Center with New Streets and Intersections
- Green Space for Transit Station
- New Connections to James Rutherford Park
- Redevelopment Occurs incrementally, Transition Existing Parking Aisles to New Streets and Parking Lots to New Blocks
Roadway

- Typical Sections

**Ocean Drive to Indiantown Road**

Roll Plot No. 60-68

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**Existing**

120 feet of right-of-way

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**Proposed**

120 feet of right-of-way

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**EDOT Context Classification:** C1-Natural & C3-Suburban

**Existing Speed Limit:** 45 mph

**Length:** 5.4 miles

**Proposed Recommendations:** Shoulder widening with separated bicycle lanes, add furnishing zones with street trees
Roadway

- Continuous Plan View
US-1 @ Lake Ave
Proposed
Project Documents

- Coffee Book
- Report
- Appendix A: Health Impact Assessment (HIA)
- Appendix B: Transit
- Appendix C: Roadway
- Continuous Roll Plots of Roadway Concept Design
Project Documents

- Coffee Book
  - High level findings
Project Documents

- Report
  - Detailed analysis
Next Steps for Roadway

- FDOT Design Feasibility FY20
- FDOT Detailed Design FY22-23
- Lane Repurposing Projects also require:
  - Traffic study
  - Stakeholder outreach
  - Local support resolution
Next Steps for Transit

- Palm Tran Perform Detailed Analysis
- Palm Tran Pursue Capital Funding
TPA Board Actions

- Endorse conceptual recommendations
- Endorse priority tier system for roadway projects
- Direct staff to work with FDOT and local governments to fund Tier 1 road projects in TIP
- Ask Palm Tran to confirm transit recommendations and pursue funding to implement PTX Yellow