University Drive Mobility Improvements Planning Study

Public Workshop Presentation
June 25, 27 and July 9, 2013
Why We are Doing This Study

• University Drive has experienced steady growth over last 20+ years

• Identified as Premium Transit Corridor in 2035 Broward Transformation LRTP

• Served by Mobility Hubs identified in 2035 Plan

• Received a Transit Study Grant from the Federal Transit Administration (FTA) in 2011

www.UniversityDriveImprovements.org
Study Partners

1. Broward Metropolitan Planning Organization
2. Florida Department of Transportation
3. Federal Transit Administration
4. Broward County
5. Broward County Transit
6. Broward County Planning Council
7. South Florida Regional Planning Council
8. Miami-Dade Transit
9. City of Cooper City
10. City of Coral Springs
11. Town of Davie
12. City of Hollywood
13. City of Lauderhill
14. City of Margate
15. City of Miami Gardens
16. City of Miramar
17. City of Parkland
18. City of Pembroke Pines
19. City of Plantation
20. South Florida Education Center Transportation Management Association
21. City of Sunrise
22. City of Tamarac
Study Schedule

1. Existing Conditions Assessment and Conceptual Alternatives*
   - *Alternatives: Potential solutions that address the needs of the existing and future conditions along the University Drive Corridor

2. Public Engagement

3. Analysis of Conceptual Alternatives

4. Detailed Analysis of Alternatives and Selection of Preferred Alternative

www.UniversityDriveImprovements.org
Study Decision-Making Framework

Broward MPO Board

Broward MPO Project Manager and Study Team

Project Advisory Committee

Broward MPO Committees
Transportation Technical Working Group

Stakeholder Interviews
Public Workshops

Interactive Website
Online Tools

Stakeholders, Agencies,
and Interested Public

www.UniversityDriveImprovements.org
Study Evaluation Framework

1. Starting with all transit mode options, identify the most feasible premium transit modes for the corridor

2. Identify potential short-term Congestion Management Strategies and potential transit supportive areas / mobility hubs

3. Compare the Premium Transit Alternatives (No build and up to 3 Build Alternatives)

4. Select the Locally Preferred Alternative

www.UniversityDriveImprovements.org
Corridor Conditions – Land Use

www.UniversityDriveImprovements.org
Delay and Crash Synthesis

Crash Frequency (Total Crashes, 2007-2011)

Ranges of Delay (i.e. LOS)

Source: FDOT Crash Analysis Reporting System
Community Shuttles

Community Shuttle Routes

- Coral Springs Blue (CS1B)
- Coral Springs Green (CS1G)
- Davie Blue (DVB)
- Davie Green (DVG)
- SFEC/Tri-Rail Express (DVTR)
- Lauderhill 3 (LH3)
- Lauderhill 4 (LH4)
- Margate C (MG1C)
- Miramar Red (MM1R)
- Miramar Green-East (MMGE)
- Miramar Yellow (MMY)
- NSU Shuttle
- Plantation A (PLA)
- Plantation B (PLB)
- Pembroke Pines Blue-East (PPBE)
- Sunrise Rte 6 (SUNR)
- Sunrise Rte 7 (SUN7)

Sources: Broward County Transit, Nova Southeastern University

www.UniversityDriveImprovements.org
Purpose and Need

**Purpose:** Provide more and better travel choices and encourage walkable and transit-supportive development along the University Drive corridor.

**Needs:**

- **Improve Transit Travel**
  - Improve Level of Service
  - Increase Reliability
  - Improve Connectivity/Transfers

- **Improve Pedestrian Travel**
  - Provide a Complete Sidewalk Network Along and Immediately Parallel & Perpendicular to University Drive
  - Improve the Pedestrian Environment

- **Improve Bicycle Travel**
  - Provide a Complete Bicycle Network Along and Immediately Parallel to University Drive
  - Improve the Bicycling Environment
Purpose and Need

**Purpose:** Provide more and better travel choices and encourage walkable and transit-supportive development along the University Drive corridor.

**Needs:**

- Improve Automobile Travel
  - Improve Level of Service
  - Increase Reliability

- Improve Safety for All Users
  - Decrease Pedestrian Crashes
  - Decrease Bicycle Crashes
  - Decrease Auto Crashes

- Encourage Walkable and Transit-Supportive Development
  - Strengthen Economic Vitality
Step 1 Evaluation

- Identify a range of viable modal alternatives that will best meet the mobility needs and overall objectives of the University Drive Corridor

- Focus on near to mid-term solutions (10 years)
Local/City Bus

- 40 to 75 passengers per vehicle
- Fixed-route and fixed schedule
- Stops every 500 feet to 1 mile, most common spacing is 1,000 to 1,200 feet
- Generally a mix of federal and local funding
Enhanced Bus

- Branded Service
- Up to 120 passengers per vehicle
- Runs in mixed-traffic
- Fewer stops; farther apart
- Longer routes, connecting city centers to smaller suburban centers
- May have enhanced stations
- May have transit signal priority
- Typically have strong branding and image
- Regular buses or larger buses
- Peak periods or all-day service

Albuquerque Rapid Ride Red Line
Bus Rapid Transit

- Some portion in exclusive lanes and some in mixed traffic
- Station spacing dependent on land use
- Enhanced stations
- Enhanced ticketing
- Transit signal priority
- Modern vehicle design, but rubber tire vehicles
- Route length varies
Modern Street Car

- Exclusive Lanes or mixed traffic
- Runs on embedded steel rail tracks
- Typical station spacing is between ½ mile to 1 mile
- Historic trolleys or modern street car
- Short segments, typically less than 5 miles within urban core and neighborhoods
- Typically slower in speeds than LRT, but Modern Streetcars are faster than historic streetcar

Ft Lauderdale Wave Streetcar

Portland Streetcar

www.UniversityDriveImprovements.org
### Screening Matrix

<table>
<thead>
<tr>
<th>Step 1 Screening Criteria</th>
<th>Evaluation Rating</th>
<th>Local/ City Bus</th>
<th>Enhanced Bus</th>
<th>Bus Rapid Transit</th>
<th>Modern Streetcar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population and Employment Density¹</td>
<td>Density to support transit mode (Yes/No)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Average Trip Length</td>
<td>Does mode serve trip length (Yes/No)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Peak Hour Ridership¹</td>
<td>Ridership supports mode (Yes/No)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Capital Costs</td>
<td>Low (less than $5m/mi)</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>Medium ($5-25m/mi)</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium/ High</td>
</tr>
<tr>
<td></td>
<td>High (greater than $25m/mi)</td>
<td>Low</td>
<td>High</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Costs</td>
<td>Low (less than $10/rev-mi)</td>
<td>Low</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>Medium ($10-20/rev-mi)</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>High (greater than $20/rev-mi)</td>
<td>Low</td>
<td>High</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Right-of-Way Impacts</td>
<td>Need for additional right-of-way (low, medium, high)</td>
<td>Low</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>Potential Economic Development Impact</td>
<td>Potential to enhance economic activity (low, medium, high)</td>
<td>Low</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>Potential Environmental Impacts</td>
<td>Anticipated environmental impacts (low, medium, high)</td>
<td>Low</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>Requirement to be Elevated</td>
<td>Does the mode need to be elevated (Yes/No)</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Screening Results</td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Note:** Light Rail, Commuter Rail, Heavy Rail, Monorail / People Mover, and High Speed Rail Transit Modes were deleted due to low population and employment densities, high capital costs, high operating costs, and high ROW impacts.  
1. Considers existing and potential future conditions

www.UniversityDriveImprovements.org
Step 1 Recommendation

Based on existing and anticipated future conditions, the **most viable transit modes recommended for further study** include:

– Local/City Bus
– Enhanced Bus
– Bus Rapid Transit
– Modern Streetcar
Questions?
Please Tell Us What You Think

1. At Table Sessions
2. Online at the Stations
3. On Comment Forms