Broward Boulevard Transit Corridor Workshop

February 5, 2010
9:00 AM – 12:30 PM
FDOT District IV Auditorium
Workshop Agenda

9:00 AM – 9:15 AM  – Welcome/Introductions
9:15 AM – 10:00 AM  – Study Background & Corridor Characteristics
10:00 AM – 10:30 AM  – Streetcar Presentation
10:30 AM – 10:40 AM  – Break
10:40 AM – 11:10 AM  – Bus Rapid Transit (BRT) Presentation
11:10 AM – 11:40 AM  – Transit Signal Priority Presentation
11:40 AM – 12:20 PM  – Group Discussion
12:20 PM – 12:30 PM  – Next Steps/Project Timeline
12:30 PM  – Adjourn
Objectives of Workshop

• Provide a brief overview on prior and on-going studies that affect the corridor
• Discuss transit and roadway characteristics of the Broward Boulevard Corridor
• Present information regarding transit technologies (Streetcar, BRT, Enhanced Bus) and applications similar to the Broward Boulevard corridor
• Facilitate a discussion about technologies applicable for Broward Blvd., funding opportunities and agency coordination
• Discuss Next Steps and Action Plan for Transit on Broward Blvd.
Broward Blvd. Corridor Transit Master Plan

• The South Florida Regional Transportation Authority (SFRTA) is partnering with Broward County Transit (BCT), the Broward Metropolitan Planning Organization (MPO), and the Florida Department of Transportation (FDOT) District 4 to study transit options for the Broward Boulevard corridor.

• Identified in Broward 2035 LRTP as one of the Premium Transit pilot projects
Purpose of Study

• Identify and evaluate near-term and longer-term transit improvements along Broward Boulevard Corridor
• Examine feasibility of transit connections to Tri-Rail, Central Broward Terminal and proposed Downtown Ft. Lauderdale Streetcar (The Wave)
• Develop a Broward Boulevard Transit Master Plan that will recommend long-term transit improvements within the corridor with emphasis on what can be implemented in the near-term.
Study Limits
Roadway & Traffic Characteristics

• Broward Blvd Study Corridor:
  – US 441 (SR 7) to US 1 (SR 5)
  – 4 miles
  – 6 lanes divided urban typical section
  – 19 existing traffic signals
  – Tri-Rail station located just west of I-95
  – Central Broward Bus Terminal at FEC RR
Directional Peaking Characteristics (2008)
Signal Locations & Phases

# of Phases: 4 3 2
Existing Arterial LOS (2005)
Future Arterial LOS (2030)
Transit Characteristics

- **Broward Blvd Study Corridor:**
  - Broward County Transit (BCT)
    - Routes 9, 22 and 81 local bus
    - Transfer stop to 441 Breeze limited stop service
    - 14 additional bus routes at the BCT Central Terminal
  - Tri-Rail commuter rail (West Palm Beach to Miami)
    - Ft. Lauderdale Station located just west of I-95
  - SFRTA Shuttle Bus Service
  - TMA Sun Trolley Route
  - Amtrak passenger rail (New York, Orlando, Tampa and Miami)
Transit Coverage

Legend
- Broward County Transit Bus
- Tri-Rail
- SFRTA & TMA Shuttle Bus Service
- BCT Transit Centers
- Tri-Rail Station
## Bus Service in the Corridor

<table>
<thead>
<tr>
<th>Transit Operator</th>
<th>Bus Route</th>
<th>Limits</th>
<th>Service Frequency</th>
<th>Average Weekday Ridership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broward County Transit (BCT)</td>
<td>Route 9</td>
<td>Young Circle to Broward Central Terminal</td>
<td>Peak: 45 min; Off-Peak: 45 min; Weekend: 60 min</td>
<td>2,224</td>
</tr>
<tr>
<td>Broward County Transit (BCT)</td>
<td>Route 22</td>
<td>Sawgrass Mills Mall to Broward Central Terminal</td>
<td>Peak: 15 min; Off-Peak: 30/60 min; Weekend: 30/45 min</td>
<td>4,571</td>
</tr>
<tr>
<td>Broward County Transit (BCT)</td>
<td>Route 81</td>
<td>Broward Central Terminal to N.W. 44 St. &amp; Inverrary Blvd.</td>
<td>Peak: 30 min; Off-Peak: 60 min; Weekend: 30/60 min</td>
<td>2,637</td>
</tr>
<tr>
<td>SFRTA</td>
<td>Downtown Fort Lauderdale (FL1)</td>
<td>Ft. Lauderdale Tri-Rail Station to Broward Central Terminal</td>
<td>Peak: 20-30 min</td>
<td>Off-Peak: 60 min; Weekend: N/A</td>
</tr>
</tbody>
</table>

- **Transfers -** 18/441 Breeze at SR 7, Tri-Rail, Sun Trolley Shuttle and connecting 14 additional bus routes at the BCT Central terminal
- **Segment has high PPH from recent COA**
Boarding Activity along Broward Blvd.
Alighting Activity along Broward Blvd.
Rail Service in the Corridor

<table>
<thead>
<tr>
<th>Transit Operator</th>
<th>Rail Line</th>
<th>Station</th>
<th>Service Frequency</th>
<th>Average Weekday Ridership</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFRTA</td>
<td>Tri-Rail</td>
<td>Ft. Lauderdale</td>
<td>Peak: 20-40 min; Off-Peak: 60 min; Weekend: 120 min</td>
<td>870</td>
</tr>
<tr>
<td>Amtrak</td>
<td>Silver Meteor</td>
<td>Ft. Lauderdale</td>
<td>1 inbound/1 outbound trains daily for each line</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>Silver Star</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Transfers – BCT Routes 9, 22 & 81 and SFRTA Shuttle Bus (Downtown Fort Lauderdale - FL 1)
- Additional Amtrak service anticipated in the coming years
Prior and On-Going Studies

- Broward MPO 2030 Long Range Transportation Plan (LRTP)
- Broward County Transit Comprehensive Operational Analysis (COA)
- SFRTA Strategic Regional Transit Plan
- The Wave – DDA Downtown Streetcar
- Central Broward East-West Transit Analysis
- I-595 Express
- I-95 Express
- I-95 Mobility Study/Business Plan
- BRT Applications in Broward County
- Transportation System Management and Operations (TSM&O) and Transit Signal Priority (TSP)
- Broward Boulevard Corridor Planning Study
- Fort Lauderdale Downtown Master Plan
- Transit Housing Oriented Redevelopment (THOR)
Broward MPO 2035 LRTP

- Heavy Transit emphasis for MPO Priorities
- Broward Blvd (SR 7 to Downtown) identified as one of the Premium High Capacity Transit corridors
- Focus on Mobility Hub Concepts
  - Tri-Rail Station at Broward Blvd. Gateway Hub
  - Central Bus Terminal on Broward Blvd. a Gateway Hub
  - Community Hub on Broward Blvd. at SR 7/US 441
Broward County Transit COA

- Multi-faceted study, first of its kind for BC Transit
- One component examined corridors for BRT or rapid bus service.
- Broward Blvd (SR 7 to Downtown) statistics available to team
SFRTA Strategic Regional Transit Plan

- Regional evaluation of numerous transit corridors
- LRT on Broward Blvd (SR 7 to Downtown segment) performed very well
  - Best “rider per mile” numbers in entire region, also among best “cost per trip” and “subsidy per trip” results
  - SR 7 to downtown has 40% of CBEW ridership at approx. 20% of total project cost
The Wave – DDA Downtown Streetcar

• 2.7 mile streetcar system
• Funding plan in place
• Working through the FTA Small Starts process
• Anticipated to be the region’s next new rail project (projected opening date of July 2013)
• Partnership between Downtown Development Authority, FDOT, City of Ft. Lauderdale, and Broward County
Central Broward East West Transit Analysis

- Lead by FDOT D4 (Jacobs)
- Study the development of a premium transit service in Central Broward County.
- 20+ mile LRT or BRT system under consideration
- FLL to Downtown to Sawgrass Mills
- Imminent road capacity expansion of I-595 has changed study dynamics
- Both alignments currently being examined include the Broward Blvd SR 7 to Downtown segment
- Is projected to add thousands of riders per day to Tri-Rail ridership

Schedule
September 2008 – October 2011
I-595 Express

- Road capacity, managed lanes, and express bus service
- Some express bus routes will serve the Broward Blvd study corridor
- Will run during road construction as mitigation
- Post construction, will utilize the new managed lanes

Schedule
March 2009 – Spring 2014
I-95 Express

- Alternative lower-cost investments to traditional highway construction to address congestion on I-95 (Miami-Dade County).
  - Express HOT (High Occupancy Toll) lanes
  - Ramp signaling
  - ExpressBus Rapid Transit - Broward Blvd. to Downtown Miami began January 2010
- Phase II – Golden Glades to I-595
  - Managed lanes from Broward Park and Ride coming in future

Schedule
February 2008 – Spring 2010
I-95 Mobility Study/Business Plan

- Lead by FDOT D4 (RS&H)
- Study to improve transportation (roadway, bus and rail) in Broward County between US 441 and Atlantic Ocean
- Identify hot spots for each transportation mode for heavily used corridors
BRT Applications in Broward County

- Lead by FDOT D4 (Kittelison & Assoc.)
- Performed a BRT systems options review/inventory
- Presenting information regarding BRT characteristics, costs, funding applications in U.S.

Schedule
2009/2010
TSM&O and TSP

- Broward County is leading ATMS Phase I project, which includes Broward Blvd. between I-95 and SR 7/US 441.
- FTT Opticom will be used for the Transit Signal Priority (TSP) element of ATMS, using a system of pre-emption similar to what is used by the Fire Department.
- FDOT D4 (Kimley Horn) is leading a Traffic Signalization Management Operations (TSM&O) plan for TSP on Broward Blvd.
Broward Boulevard Corridor Planning Study

- Lead by FDOT D4 (Glatting Jackson)
- Redevelopment and revitalization plan for Broward Boulevard Corridor incorporating transit investments
Transit Housing Oriented Redevelopment (THOR)

- Lead by Broward MPO
- Protect existing residential neighborhoods by directing growth to adjacent transit corridors of Broward Boulevard and US 441/State Road 7.
- Recommendations include:
  - Land use plan amendments
  - Zoning and design guidelines
  - Economic development
  - Housing
  - Transportation
Fort Lauderdale Downtown Master Plan

- Serves as a guide for development projects and sets forth the City’s vision for the future of Downtown Fort Lauderdale.
- Downtown’s potential and provides a blueprint for creating an active urban center with a variety of public spaces and transportation options as well as a mix of uses, including housing, shopping, employment and entertainment opportunities.
Stakeholder Interviews

- Gauge interest, collect data, identify issues and discuss concerns of regional agencies relative to possible transit improvements in the Broward Boulevard Corridor.

<table>
<thead>
<tr>
<th>Date</th>
<th>Agency</th>
<th>Representatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 11, 2010</td>
<td>FDOT D4</td>
<td>Amie Goddeau, Mark Plass, Melissa Ackert, Traffic Ops.</td>
</tr>
<tr>
<td>January 12, 2010</td>
<td>BCT</td>
<td>Barney McCoy, John Ramos &amp; Jonathan Roberson</td>
</tr>
<tr>
<td>January 12, 2010</td>
<td>FDOT D4</td>
<td>Amie Goddeau, Jeff Weidner, Jeremy Mullings, PL&amp;EM</td>
</tr>
<tr>
<td>January 13, 2010</td>
<td>Broward MPO</td>
<td>Osama Al-Asckhar, Lina Kulikowski, Enrique Zelaya, James Cromar, Charlene Burke</td>
</tr>
<tr>
<td>January 27, 2010</td>
<td>City of Ft. Laud.</td>
<td>Renee Cross, Jenni Morejon, Wayne Jessup</td>
</tr>
<tr>
<td>February 2, 2010</td>
<td>Ft. Laud. DDA</td>
<td>Chris Wren, Elizabeth Van Zandt</td>
</tr>
</tbody>
</table>
Stakeholder Interviews

• Positive reaction from all stakeholders to interagency approach
• All funding opportunities need to be evaluated
• Operations Costs programming needs to be discussed
• Openness to innovative Transportation Planning
• Looking for a successful demonstration project
• Reversible or Managed Lanes to be considered
• Parallel Corridors (NE/NW 2nd Street) to be considered
Converting travel lane to transit only lane on the table
Downtown parking policies are critical and could impact success of service
Should try to incorporate “next bus” information technology
Use of visualization tools is key to the next study phase
Some land use designation changes will likely happen in time for transit implementation
$26 million for overhaul of BCT’s Broward Central Terminal will be available in FY 14-15
Stakeholder Interviews

- New COA data will be critical to the Broward Blvd study effort
- Important that both the Broward Blvd and Oakland Park Blvd advance concurrently
- Concern about increasing BCT’s operating costs
- BCT Western Regional Terminal might be a better study area boundary
- Broward Blvd bus routes see jumps in rush hour ridership
- BCT TDP is a good resource for Master Plan
- Seeking 8 rapid bus corridors in county over the next 10 years
Stakeholder Interviews

• “L-shaped” routes (without transfers) are key to attracting choice riders
• Tons of past studies have been conducted on Broward Blvd
• Public support is more challenging west of 27th or 31st Ave
• Consider traffic impacts to Sistrunk, Sunrise, and Davie Blvd if you take a lane on Broward Blvd.
• Salvation Army owns multiple parcels and is a receptive redevelopment partner
• 595 Express bus service is happening in short term
Stakeholder Interviews

- Broward Blvd and Oakland Park Blvd are the two highest priority TSMO & ATMS corridors
- BCT buses already equipped with TSP readers
- Don’t want to see a short-term bus solution preclude a longer-term rail solution
- Strong civic need for a good transit connection to downtown
- Desire for a better urban design character on Broward Blvd throughout downtown
Stakeholder Interviews

• Utilize the design guidelines in the Fort Lauderdale Downtown Master Plan
• Recommend reaching out to elected officials during this early study phase
• Full public involvement effort needed in the next study phase
• Need really good transit service before you can alter downtown parking policy
• Concern about BRT not sparking the same level of positive redevelopment as rail
Stakeholder Interviews

- The connection from Tri-Rail to Downtown Ft Lauderdale is critical
- Streetcar from Downtown to Tri-Rail could be an extension of The Wave, feeding into the existing Wave.
- NW/NE 2nd Street could be an effective parallel transit corridor
- There are 40,000 weekday workers in Downtown Ft Lauderdale
- See value of an east-west transit connection to the US 1 Breeze
QUESTIONS?