ACTIVE TRANSPORTATION ADVISORY COMMITTEE

Memphis MPO
July 28, 2015
Agenda

- Welcome & Introductions
- Announcements and Briefings
- Midtown Alternatives Analysis Study
- FY 2015 Transportation Alternatives Program
- New Business
- Adjourn
Announcements and Briefings

• TDOT Multimodal Access Grant

• Livability 2040: Regional Transportation Plan

• Coordinated Human Services Transportation Plan
  • Public Survey: http://memphismpo.org/project/chstp

• Bus Stop Accessibility and Design Guidelines
Agenda

- Project Status
- Summary of Public Meetings
- Transit Modes/Costs Comparisons
- The Alignment Screening Process
- Preliminary Review of Alignments
  - Presentation
  - Group Discussion
- Next Steps
  - Environmental Analysis
  - Assessment of Development Potentials
Summary of Public Meetings

✓ Public Meeting Dates/Locations:
  ✓ July 29, 2014. Memphis Leadership Foundation (1548 Poplar Ave.)
  ✓ March 26, 2015. Crosstown Story Booth (438 N. Cleveland)
  ✓ July 16, 2015. Benjamin L. Hooks Central Library (3030 Poplar Ave.)

✓ Key Highlights:
  ✓ Key consideration is getting to and from employment.
  ✓ Balance new service/investments with basic needs of customers.
  ✓ Connect Madison Ave. trolley line to key destinations: Crosstown, Overton Square, Poplar Plaza, University District, Cooper-Young, and Southern.
  ✓ Consider effects of alternatives on travel times system wide.
## How Various Transit Modes Compare

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Bus Rapid Transit (Exclusive Lane)</th>
<th>Bus Rapid Transit (Shared Lane)</th>
<th>Streetcar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Cost per mile</td>
<td>$20-40 million</td>
<td>$3-10 million</td>
<td>$30-50 million</td>
</tr>
<tr>
<td>Capacity (seats/vehicle)</td>
<td>40-60</td>
<td>40-60</td>
<td>40-60</td>
</tr>
<tr>
<td>Service Range</td>
<td>Up to 20 miles</td>
<td>Up to 15 miles</td>
<td>Up to 7 miles</td>
</tr>
<tr>
<td>Impact on Land Use</td>
<td>Moderate</td>
<td>Limited</td>
<td>Strong</td>
</tr>
<tr>
<td>Station Spacing</td>
<td>¼ to 2 miles</td>
<td>¼ to 1 mile</td>
<td>¼ to ½ mile</td>
</tr>
<tr>
<td>Maximum Speed</td>
<td>35-55 mph</td>
<td>35-55 mph</td>
<td>Up to 45 mph</td>
</tr>
<tr>
<td>Average Speed</td>
<td>25-30 mph</td>
<td>15-25 mph</td>
<td>5-10 mph</td>
</tr>
<tr>
<td>Frequency of Service</td>
<td>5-15 minutes</td>
<td>5-15 minutes</td>
<td>5-15 minutes</td>
</tr>
<tr>
<td>Operating cost</td>
<td>$80-120/bus-hour</td>
<td>$80-120/bus-hour</td>
<td>$150-250/train-hour</td>
</tr>
<tr>
<td>Cost of vehicles</td>
<td>Low</td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>Life of Vehicle (years)</td>
<td>12</td>
<td>12</td>
<td>25</td>
</tr>
<tr>
<td>Residents + Jobs per acre</td>
<td>10 to 25</td>
<td>10 to 25</td>
<td>More than 40</td>
</tr>
</tbody>
</table>
Elements of Regular Bus Vs. BRT Systems

**REGULAR BUS**
- Typical Features
  - No special branding
  - Frequent stops
  - Wide range of stop facilities – from very basic to elaborate
  - Wide range of service frequencies – from very infrequent to very frequent
  - Wide range of service spans – from early morning to late night to only a few trips

**RAPID BUS**
- Typical Features
  - Special branding
  - Simple service design
  - Limited stops
  - Enhanced stops/stations
  - Frequent service (at least every 15 minutes)
  - Service from early morning to late night
  - Real-time passenger information
- Other Common Features
  - Unique vehicles, including high-capacity buses
  - Queue jump lanes
  - Transit signal priority
  - Off-board fare collection

**BUS RAPID TRANSIT (BRT)**
- Typical Features
  - Special branding
  - Simple service design
  - Limited stops
  - High quality stations
  - High-capacity buses
  - Exclusive bus lanes
  - Transit signal priority
  - Very frequent service (at least every 10 minutes)
  - Service from early morning to late night
  - Real-time passenger information
- Other Common Features
  - Unique vehicles
  - Level platform boarding
  - Off-board fare collection
PRELIMINARY REVIEW OF ALIGNMENTS - RESULTS
Goals & Objectives

- **ENHANCE**
  - Make Midtown Corridor transit service more compelling

- **CONNECT**
  - Connect neighborhoods and improve local circulation

- **DEVELOP**
  - Support local and regional economic development goals

- **THRIVE**
  - Strengthen Midtown Corridor neighborhoods and business areas

- **SUSTAIN**
  - Create an environment that will be sustainable over the long term
<table>
<thead>
<tr>
<th>Alignment</th>
<th>Overall Rating</th>
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</thead>
<tbody>
<tr>
<td>2 Binghampton via North Parkway</td>
<td>🚷 POOR</td>
</tr>
<tr>
<td>4 Binghampton via Poplar and Summer</td>
<td>🚷 FAIR</td>
</tr>
<tr>
<td>6 Airport via Poplar and East Pkwy</td>
<td>☑️ GOOD</td>
</tr>
<tr>
<td>7 Germantown via Poplar</td>
<td>☑️ BEST</td>
</tr>
<tr>
<td>8 U of M via Poplar, Cooper, and Union</td>
<td>☑️ BEST</td>
</tr>
<tr>
<td>9 Fairgrounds via Madison</td>
<td>☑️ GOOD</td>
</tr>
<tr>
<td>10 U of M via Union, Cooper and Poplar</td>
<td>🚷 FAIR</td>
</tr>
<tr>
<td><strong>11 U of M via Union and Poplar</strong></td>
<td>☑️ BEST</td>
</tr>
<tr>
<td>12 U of M via Union, Cooper, Young, and Central</td>
<td>🚷 FAIR</td>
</tr>
<tr>
<td>13 U of M via Lamar and Southern</td>
<td>🚷 FAIR</td>
</tr>
<tr>
<td>14 U of M via Lamar and Park</td>
<td>🚷 FAIR</td>
</tr>
<tr>
<td>15 AWTC via Lamar</td>
<td>🚷 FAIR</td>
</tr>
<tr>
<td>16 Airport via Lamar</td>
<td>🚷 POOR</td>
</tr>
<tr>
<td>22 Graceland</td>
<td>🚷 FAIR</td>
</tr>
<tr>
<td>23 Elvis Presley, Cleveland, Watkins Crosstown</td>
<td>☑️ GOOD</td>
</tr>
<tr>
<td>26 U of M via Union, Cooper, and Central</td>
<td>☑️ GOOD</td>
</tr>
</tbody>
</table>
Tier-1 Screening Results

- 16 of initial 26 alignments were evaluated in Tier 1
- **Seven** recommended for detailed analysis (Tier 2):
  - 6 Airport via Poplar and East Pkwy
  - 7 Germantown via Poplar
  - 8 U of M via Poplar, Cooper, and Union
  - 9 Fairgrounds via Madison
  - 11 U of M via Union and Poplar
  - 23 Elvis Presley, Cleveland, Watkins Crosstown
  - 26 U of M via Union, Cooper, and Central
Alternative 6: Airport via Poplar and East Pkwy

- Serves Medical District, Christian Brothers University, Fairgrounds, Liberty Bowl, and the Airport
- Connections to other destinations from Airways Transit Center including airport area employment
Alternative 7: Germantown via Poplar and U of M

- Serves MATA’s highest ridership corridor
- Strong community and stakeholder support
- Serves Medical District, Overton Park, Central Library, U of M
- High population, employment, and services along route
**Alternative 8: U of M via Poplar, Cooper, and Union**

- Similar to Alternative 7 but
  - Serves Overton Square
  - Less direct
- High existing ridership on existing routes
- High population and employment and services along route
Alternative 9: Fairgrounds via Madison

- Extends Madison Streetcar to Fairgrounds
- Serves Overton Square, Christian Brothers University, and Fairgrounds
- High population and employment densities
- Relatively high existing ridership
Alternative 11: U of M via Union and Poplar

- Serves Medical District, Southwest Tennessee Community College, Central Library, and U of M
- High existing ridership
- High population and employment and services along route
Alternative 23: Elvis Presley, Watkins, Cleveland

- One of MATA’s two highest ridership corridors
- Serves Crosstown, Methodist University Hospital, Graceland and planned development
- Provides important transfer opportunities to other lines compared to other alternatives
Alternative 26: U of M via Union and Central

- Serves Medical District, Southwest Tennessee Community College, Christian Brothers University, Fairgrounds, and U of M
- High number of population and employment density
What’s Next In The Process?

Environmental Scan of Alternatives – Summer 2015

Assessment of Development Potentials – Summer 2015

Tier-2 Evaluation of Alignments – Fall 2015

Recommend a Locally Preferred Alternative – Spring 2016
FY 2015 TRANSPORTATION ALTERNATIVES PROGRAM

ATAC Meeting July 28, 2015
TAP Background

• Authorized by MAP-21 legislation as a funding source for pedestrian, bicycle, and transit-access projects

• Provides greater flexibility to states on distribution of funding

• Provides dedicated funding to large metropolitan areas for active transportation projects
Project Evaluation & Selection

- Qualitative Assessment by ATAC ← THIS WEEK
- Quantitative Scoring by MPO Staff
  - Application of scoring criteria previously adopted by ATAC
  - Criteria categories:
    - Benefits to Active Transportation
    - Safety and Security
    - Multimodal
    - Land Use
    - System Preservation
    - Environmental Preservation and EJ
    - Network Continuity
    - Cost Effectiveness
    - Economic Opportunity
    - Congestion and Air Quality
    - Local Funding Overmatch
- Qualitative Assessment by MPO Staff
- Final selection reviewed by ATAC and ETC, and approved by TPB
Funding Distribution

**TENNESSEE**

Available: $1,000,000

Total Requested for 5 Projects: $2,090,000

**Difference:** $1,090,000

Distribution Options:
- Fully fund 2-3 projects
- OR
- Partially fund 3-4 projects

**MISSISSIPPI**

Available: $170,000

Total Requested for 2 Projects: $230,000

**Difference:** $60,000

Distribution Options:
- Fully fund 1 project
- OR
- Fully fund 1 project & partially fund 1 project
Scoring Criteria

ATAC will perform qualitative evaluation of each project to address how well each project:

- Provides safe traveling options for pedestrians and bicyclists (up to 5 points),
- Provides opportunities for physical activity among users throughout the transportation system (up to 5 points),
- Increases connectivity among a mixture of land uses (up to 5 points), and
- Provides last-mile connectivity for users of public transportation (up to 5 points).
APPLICATIONS FROM MS
Hernando Square Pedestrian Improvements

Hernando, MS

Project Length: 0.3 miles
Funds Requested: $60,000

- Pedestrian Crosswalks
- Advance pedestrian crossing signs
- Sidewalk retrofit for ADA compliance
- Pedestrian crosswalk signals
Hwy. 305 (Cockrum Road) Landscaping & Sidewalk Improvements

Olive Branch, MS

Project Length: 1.25 miles
Funds Requested: $170,000

- New sidewalk
- Planting of trees and sod behind the sidewalk
APPLICATIONS FROM TN
Chiswood St. Pedestrian Safety

Memphis, TN

Project Length: 0.35 miles
Funds Requested: $600,000

- Reconstruction of sidewalk for ADA compliance
- New curb ramps at all intersections
- Raised crosswalks
- Curb extensions
- High-visibility crosswalks
- Signage
- Bike lanes
Macon Road Sidewalk Improvements

Memphis, TN

Project Length: 0.33 miles
Funds Requested: $646,000

- New sidewalks
- Installation of curb ramps
- Enhance crosswalk markings
- Geometric improvements to the intersection of Macon and Mullins Station
Wellons Ave. Sidewalk Improvements

Memphis, TN

Project Length: 0.50 miles
Funds Requested: $376,000

- New sidewalks
- Sidewalk repairs
- New curb ramps and stop lines
Westmont St. Sidewalk Improvements

Memphis, TN

Project Length: 0.30 miles
Funds Requested: $268,000

- New sidewalk
- Curb ramps
- Crosswalks and stop lines
- High-visibility crosswalk
- Signage
Shelby Farms Greenline West Expansion

Shelby County

Project Length: 0.50 miles
Funds Requested: $200,000

- Shared-use path
- New trailhead connection
- Trail safety signage
- Security cameras
- Benches
- Native plantings
- Removal of invasive plant species
- Bike/ped automatic counters
- Future connection to Greenline Bridge
Timeline

June 2015
- Applications Accepted
  June 8 through July 17

July 2015
- ATAC Scoring Begins July 28

Aug 2015
- ATAC Scores Due Aug 4
- MPO Scoring and Ranking

Sept 2015
- Project Review by TDOT & MDOT
  Sep 1 – Oct 7

Oct 2015
- Project Selection

Nov 2015
- Projects Selection Approval
  Vote by ETC and TPB

ETC – June 4
ATAC – July 28
ETC – Aug 6
TPB – June 25
ATAC – Oct 28
ETC – Nov 5
TPB – Aug 27
TPB – Nov 19
Next Steps

• LIVABILITY 2040: Regional Transportation Plan
  • Completion of draft plan in August/September

• CHSTP
  • Survey closes this Friday, July 31

• Bus Stop Accessibility and Design Guidelines
  • Selection of consultant in September

• Midtown AA Study
  • Tier 2 Evaluation in the Fall

• FY 2015 TAP
  • Scores due by 4:00 PM on Tuesday, August 4, 2015

• New Business
2015 ATAC Meeting Calendar

• Next Meeting
  • October 28, 2015

• Meeting Location
  Benjamin L. Hooks Central Library
  3030 Poplar Avenue, Memphis
  Conference Room A