BUS STOP DESIGN AND ACCESSIBILITY GUIDELINES

Memphis Urban Area MPO and Memphis Area Transit Authority
1. context
2. the future
3. the present
4. goals
5. process
6. outreach
7. guidelines
8. strategic investment
9. recommendations
10. next steps
- public interest
- regional planning capability of MPO
- MPO access to regional partners
- continuation of MATA SRTP
THE FUTURE
THE FUTURE

Bus Stop and Transit Station Types

**BASIC BUS STOP**
- Elements: Bus stop sign, Paved boarding area, Shelter/seating, Sidewalk connection, Street lighting, Pavement markings
- Approximate Cost: Without shelter $1,000-$10,000, With shelter $10,000-$20,000
- Mode: Bus
- Typical Ridership: Less than 75 daily passenger boardings

**HIGH VOLUME BUS STOP**
- Additional Elements: Real-time display, Bus path on roadway
- Approximate Cost: $15,000-$35,000
- Mode: Bus
- Typical Ridership: 75-300+ daily passenger boardings

**TRANSIT STATION / SUPER STOP**
- Additional Elements: Station signage, Reserved platform/level boarding, Large shelter/seating, Bicycle racks/parking, Branding elements, Distinctive design, Off-board fare payment, Newspaper vending machines
- Approximate Cost: $500,000 - $900,000
- Mode: Bus, Bus Rapid Transit (BRT)
- Typical Ridership: 200-1000+ daily passenger boardings
- Example: Cleveland/Popular

**BUS TRANSIT CENTER**
- Additional Elements: Lighting and Security, Trash receptacles, Off-street bus bays, Enclosed waiting areas/restrooms, Park-and-Ride lot/program, Bike access/bike parking, Keo and Ride/lost facilities, Enhanced passenger amenities, Information/Commuter Center
- Approximate Cost: $5 million-$50 million
- Mode: Bus, Bus Rapid Transit (BRT)
- Typical Ridership: 1000+ daily passenger boardings
- Example: American Way Transit Center
THE PRESENT
THE PRESENT
GOALS

- strategic planning
- process efficiency
- accessibility
- branding and service
- transit operations
reviewed: 8 local plans and studies

surveyed (on-site): existing bus stops and conditions

classified: 4,463 MATA bus stops
  - Trip Volume
  - Land Use
  - Type of Bus Route served
  - Roadway Characteristics
  - Transfer Activity

produced:
  - best practices/design guidelines
  - implementation plan & cost estimation
  - conceptual site plans and diagrams for each stop type
OUTREACH

Build a Bus Stop

Do you want to help us design better bus stops? The feedback collected through this game will guide our efforts.

Here’s how to play:
1. You get to build a bus stop, but you can’t “spend” over $100.
2. Assume that the bus stop has a clear, accessible ADA requirements are met.
3. Select the bus stop features most important to you.

All of the materials are free. The cost is up to you, but remember not to spend more than $100. We’ll help you track your progress!
PLEASE RATE THE FOLLOWING FEATURES ACCORDING TO THEIR IMPORTANCE (TOP 10)
OUTREACH FINDINGS

- **Build a Bus Stop Game**
  - Trash Cans
  - Lighting
  - Shelters

- **Bus Stop Public Survey**
  - Shelters
  - Lighting
  - Clear Signage
  - Benches/Seating
  - Trash Cans

- **MCIL Meeting**
  - Lighting
  - Clear Signage
    - Standard Sign Poles
    - Standard MATA Signs

- **Stakeholder Meeting**
  - Defined Standards
  - Bus Stop Database
  - Conceptual Level Drawings
  - Multiple Bus Stop Types
Lighting

Adequate lighting is important for passenger comfort and security as well as for visibility of waiting passengers to the bus and other oncoming traffic, particularly at night and during inclement weather. Almost all bus stops are served after dark and should be located where they will be illuminated at night, preferably from an overhead street light. If that is not possible, lighting should be installed at the stop, either via mounted lights or within shelters (Figure 4-14). When possible, efforts should be made to reduce the presence of shadows and dark enclosures in and around the bus stop.

Figure 4-14 Examples of Bus Stop Lighting (Fairfax, VA and Unknown)

Once bus stop lighting is installed, it is important to ensure that all bus stop lights work. Since customers may not always report lighting issues, MATA should conduct an evening audit of bus stops at least annually to ensure that bus stop lights are working properly. This can be done with a quick drive-by inspection and reporting of problem stops.

Bicycle Parking and Repair

Bicycle racks help provide an additional way for passengers to access bus service (Figure 4-15). Bike racks can range from basic designs to complex shapes that act as a type of public art.
<table>
<thead>
<tr>
<th>Criteria for Basic Bus Stop Upgrade</th>
<th>Points Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger Activity – Sum of Weekday Boardings and Alightings</td>
<td>40 points if sum is greater than 50</td>
</tr>
<tr>
<td></td>
<td>30 points if sum is between 25-50</td>
</tr>
<tr>
<td>Existing Conditions</td>
<td>20 points if rated as 1 (Very Poor)</td>
</tr>
<tr>
<td></td>
<td>15 points if rated as 2 (Poor)</td>
</tr>
<tr>
<td></td>
<td>10 points if rated as 3 (Fair)</td>
</tr>
<tr>
<td>Significant Transfer Point</td>
<td>10 points</td>
</tr>
<tr>
<td>Minority and/or Low-Income Population</td>
<td>10 points if either minority or low-income population in the surrounding census</td>
</tr>
<tr>
<td></td>
<td>block groups is greater than MATA service area average</td>
</tr>
<tr>
<td>Near Medical Facility or Significant Civic Building or Educational Institution (1/4 mile)</td>
<td>10 points</td>
</tr>
<tr>
<td>Part of corridor or neighborhood initiative to strengthen identity</td>
<td>10 points</td>
</tr>
<tr>
<td>MAXIMUM POSSIBLE:</td>
<td>100 POINTS</td>
</tr>
</tbody>
</table>
# Bus Stop Element Recommendations

<table>
<thead>
<tr>
<th>Element</th>
<th>For all bus stops</th>
<th>High-volume stops only (&gt; 75 daily boardings)</th>
<th>As needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landing Pad (5' W x 8' D)</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Pavement Markings</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shelter</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Sign</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lighting</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bus Pad in Roadway</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Info Screen or Kiosk</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fare Machine</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charging Station</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trash Receptacle</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Protective Bollards</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Art</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bicycle Parking</td>
<td></td>
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</tbody>
</table>
RECOMMENDATIONS

- full bus stop inventory
- remove problematic stops
- stop consolidation
- long-term phased stop improvement program ($67 million)
NEXT STEPS

- incorporate guidelines across agencies
- make improvements as funds are available based on the prioritization criteria
- MPO support the initiative and use the study to guide future RTPs and TIPs