



# BUS STOP DESIGN AND ACCESSIBILITY GUIDELINES

Memphis Urban Area MPO and Memphis Area Transit Authority



# OUTLINE

1. context
2. the future
3. the present
4. goals
5. process
6. outreach
7. guidelines
8. strategic investment
9. recommendations
10. next steps





# CONTEXT

- 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 pad on roadway

**APPROXIMATE COST:**  
\$15,000-\$30,000

**MODE:**  
Bus

**TYPICAL RIDERSHIP:**  
75-200+ daily passenger boardings

### TRANSIT STATION / SUPER STOP

**ADDITIONAL ELEMENTS:**  
Station signage  
Raised platform, level boarding  
Large shelter/seating  
Bicycle racks/parking  
Branding elements  
Distinctive design  
Off-board fare payment  
Newspaper vending machines

**APPROXIMATE COST:**  
\$100,000 - \$500,000

**MODE:**  
Bus, Bus Rapid Transit (BRT)

**TYPICAL RIDERSHIP:**  
300-1000+ daily passenger boardings

**EXAMPLE:**  
Cleveland's Rapid

### BUS TRANSIT CENTER

**ADDITIONAL ELEMENTS:**  
Lighting and security  
Touch receptacles  
Off-street bus bays  
Enclosed waiting area/restroom  
Park-and-Ride lot/garage  
Bicycle access/parking  
Kiss-and-Ride/Wait 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





# GOALS

- strategic planning
- process efficiency
- accessibility
- branding and service
- transit operations





# PROCESS

- 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

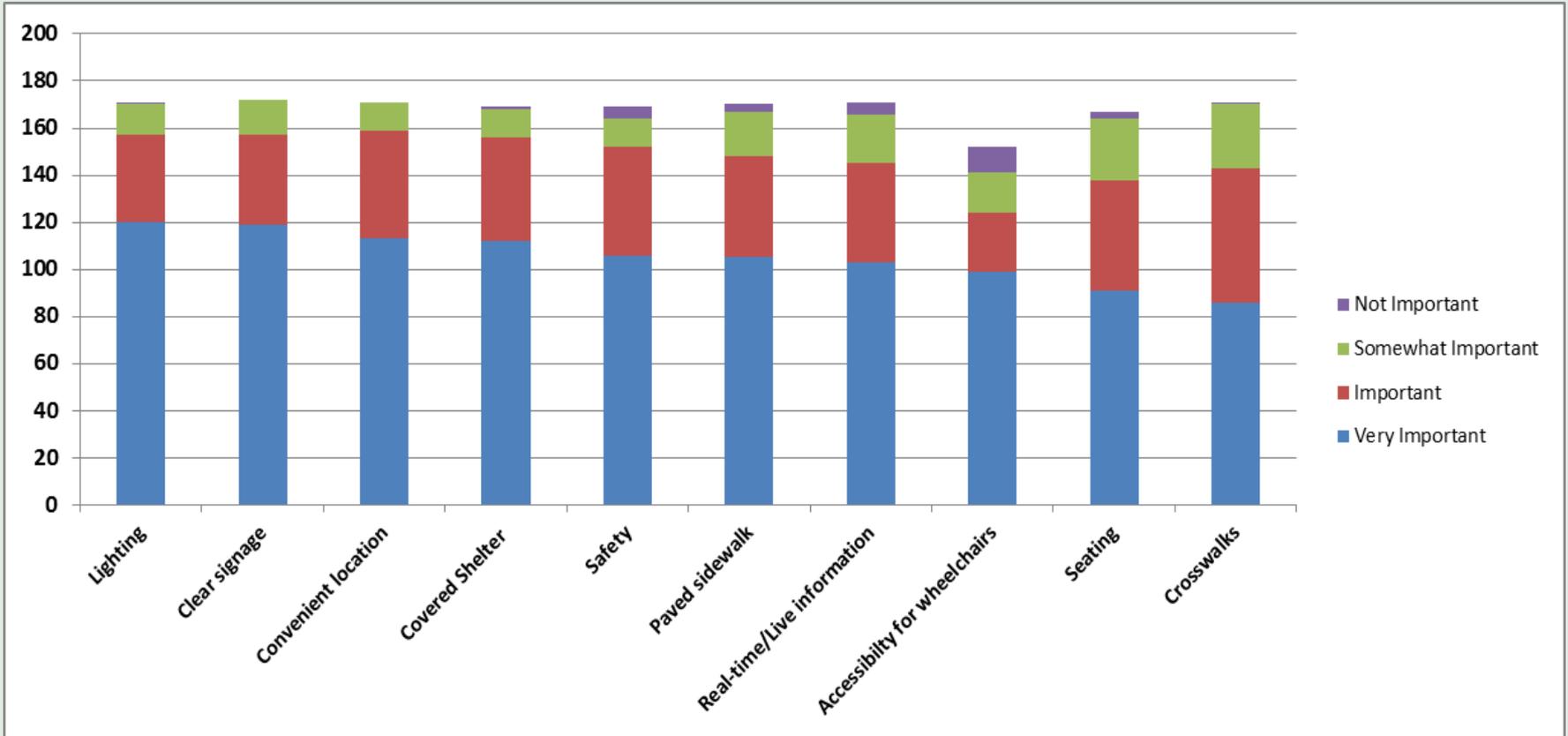


# OUTREACH





# PLEASE RATE THE FOLLOWING FEATURES ACCORDING TO THEIR IMPORTANCE (TOP 10)





# OUTREACH FINDINGS

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

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

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

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



# GUIDELINES: EXAMPLE SECTION

## 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.

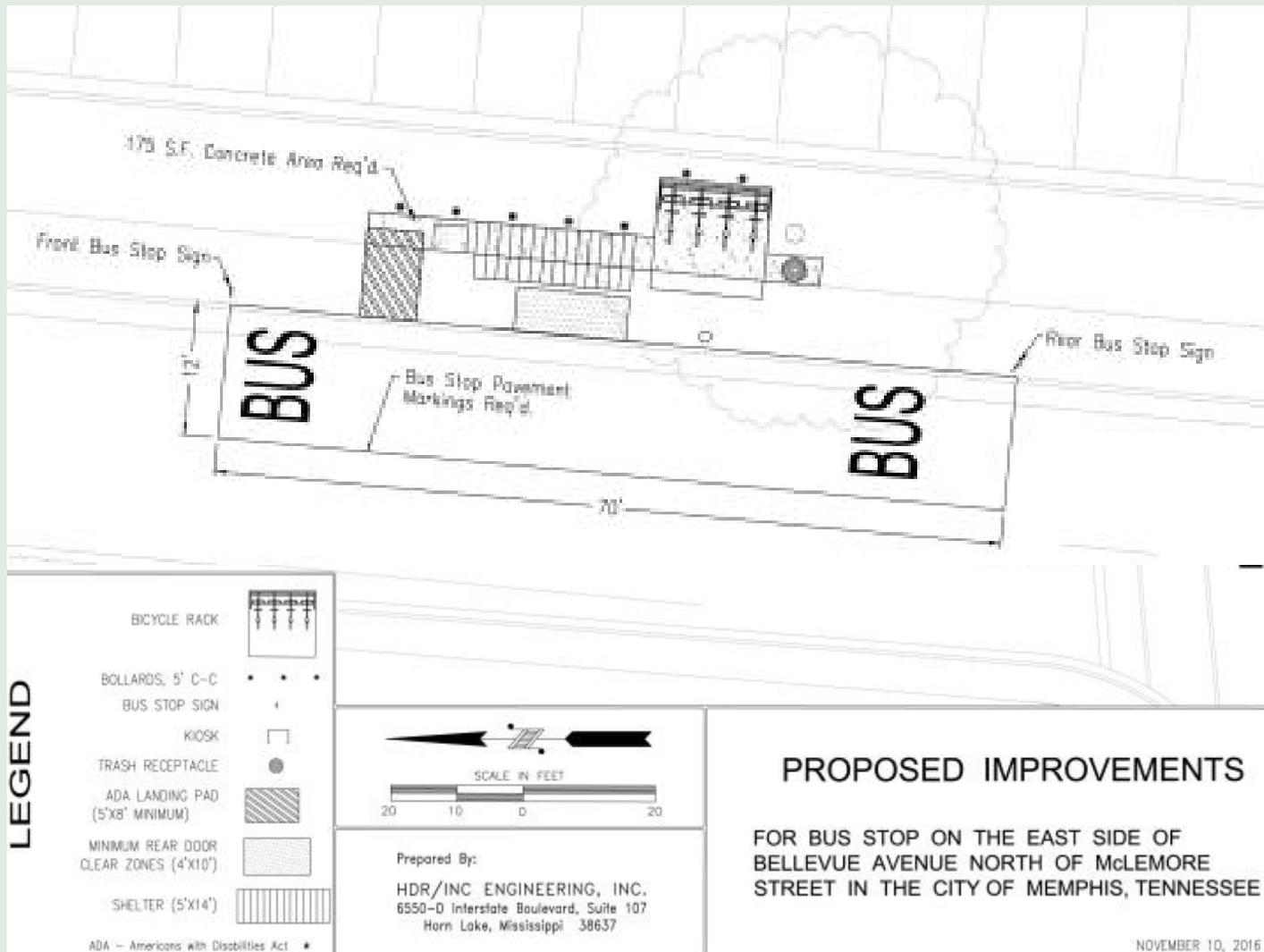


# GUIDELINES





# CONCEPTUAL PLANS





# STRATEGIC INVESTMENT

Figure 6-1 Recommended Scoring System for Basic Bus Stop Upgrade

Criteria for Basic Bus Stop Upgrade	Points Awarded
Passenger Activity – Sum of Weekday Boardings and Alightings	40 points if sum is greater than 50 30 points if sum is between 25-50
Existing Conditions	20 points if rated as 1 (Very Poor) 15 points if rated as 2 (Poor) 10 points if rated as 3 (Fair)
Significant Transfer Point	10 points
Minority and/or Low-Income Population	10 points if either minority or low-income population in the surrounding census block groups is greater than MATA service area average
Near Medical Facility or Significant Civic Building or Educational Institution (1/4 mile)	10 points
Part of corridor or neighborhood initiative to strengthen identity	10 points
<b>MAXIMUM POSSIBLE:</b>	<b>100 POINTS</b>



# BUS STOP ELEMENT RECOMMENDATIONS

	Landing Pad (5' W x 8' D)	Pavement Markings	Shelter	Basic Sign	Lighting	Bus Pad in Roadway	Info Screen or Kiosk	Fare Machine	Charging Station	Trash Receptacle	Protective Bollards	Art	Bicycle Parking
For all bus stops	X	X	X	X	X								
High-volume stops only (> 75 daily boardings)						X	X	X	X				
As needed										X	X	X	X



# 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



For more information, please contact: Jordan Smith [jordan.smith@memphistn.gov](mailto:jordan.smith@memphistn.gov) 901-576-7130