

# Rhode Island Bus Stop Design Guide

Community Meeting  
June 2016



- Welcome!
- Presentation
- Q&A on presentation
- Break-up
- Review bus stop design typologies
- Opportunity to
  - “Post-it” your comments
  - Ask questions
- Additional comments : [sherrill6@cox.net](mailto:sherrill6@cox.net)



# Project Team



**Randy Fixman**  
Project Coordinator



**Greg Nordin**  
Project Manager



**Amy Pettine**  
Project Director



**Sandra Clarey**  
Project Manager



**Natalie Raffol**  
Transportation Planner



**Pam Sherrill**  
Outreach Co-ordinator

*Pamela M. Sherrill*



# Presentation Outline

- Background
- Schedule
- Key considerations
- Design development
- Next steps



- PEEP!
- Improve accessibility
- Address safety concerns
- Enhance service operations
- Provide better passenger amenities
- Provide consistency in planning and design of bus stops
- Establish best practices to be followed
- Coherent, Rhode Island-specific guidelines
- Improve collaboration between RIPTA and RIDOT

# Project Schedule



## TASKS





# Bus Stop Design

Rhode Island Bus Stop Design Guide

## Key Considerations for Bus Stop Design

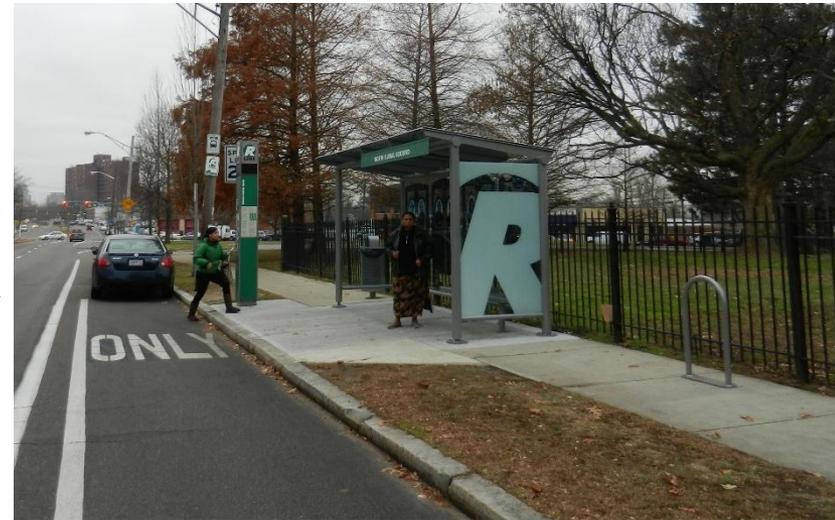
- Stop location & placement
- Bus stop configurations
- Parking
- Connectivity to bus stops
- Accessibility
- Amenities, schedules and maps
- Signage & striping
- Integration with bike facilities
- Bus priority



# Bus Stop Design Elements

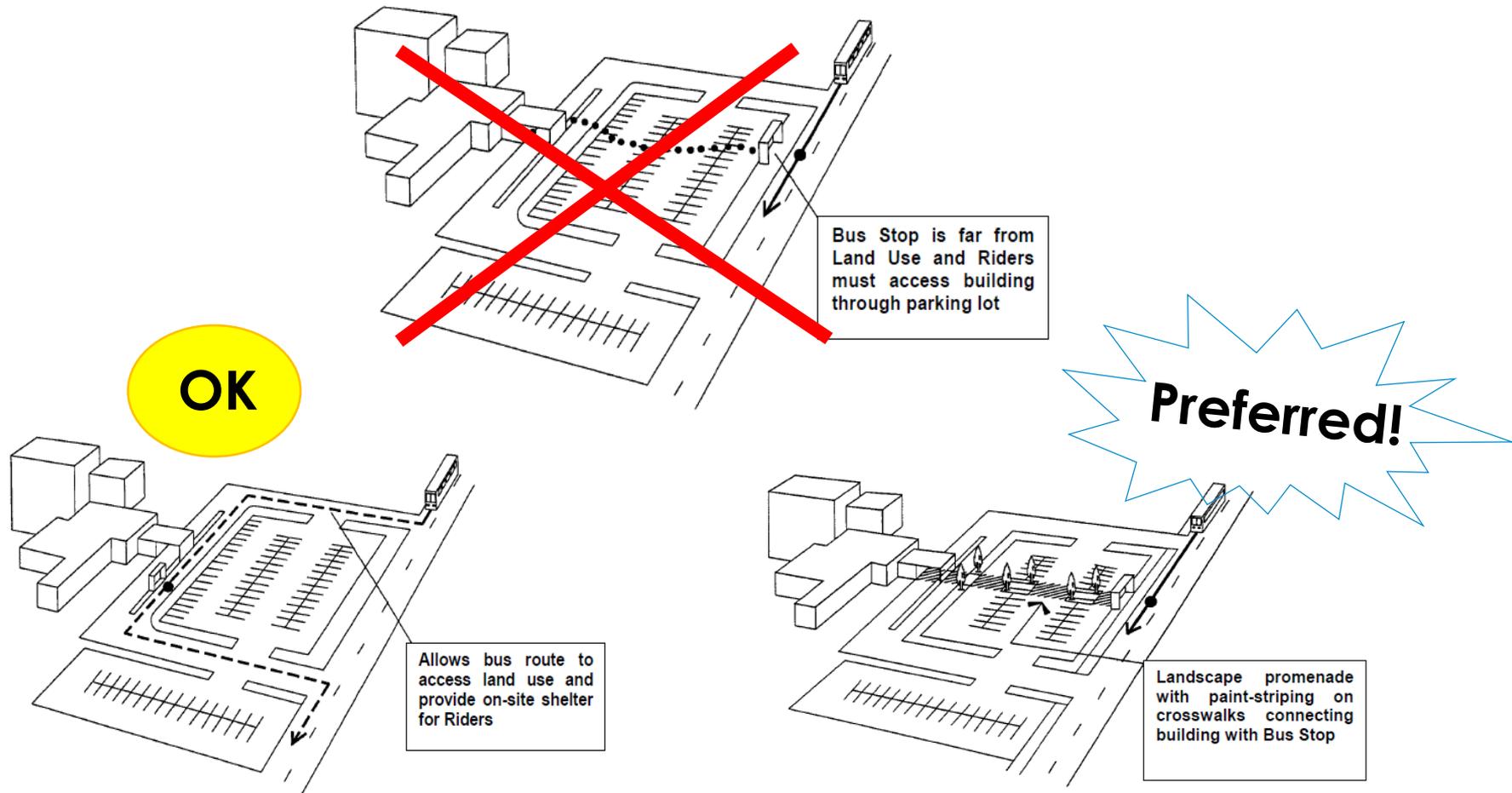
## Bus Stop Location

- Ridership
- Proximity to sensitive land uses
- Land use, density and connectivity
- Surrounding environment
- Safe and visible
- ADA and accessibility
- Potential to add amenities
- Parking impacts
- Distance to adjacent stops
- Multimodal impacts



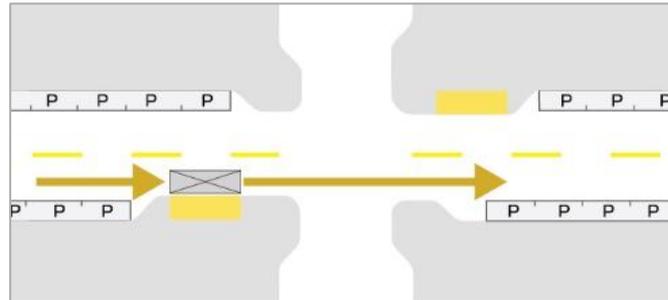
# Bus Stop Design Elements

## Bus Stop Location – Land use, density, and connectivity

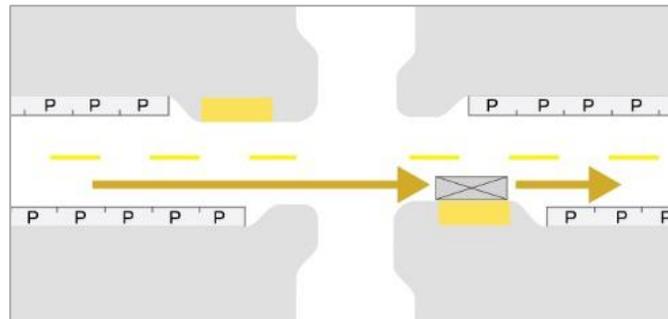


## Bus Stop Placement

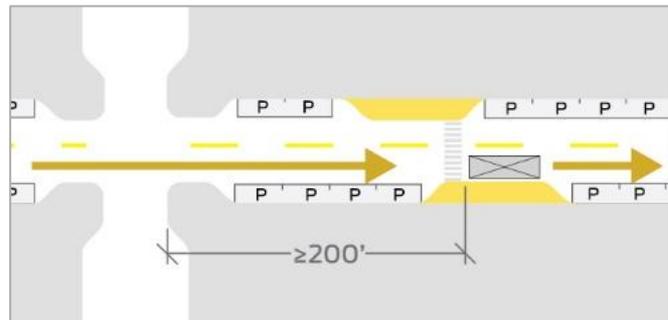
Near-side



Far-side



Mid-block

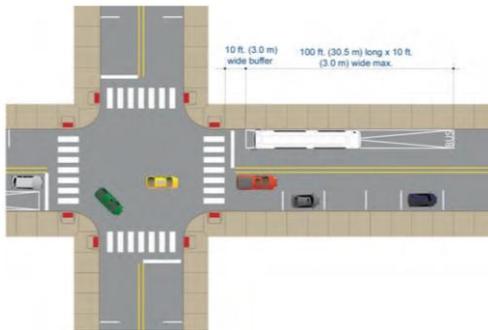


Source: NACTO Transit Street Design Guide

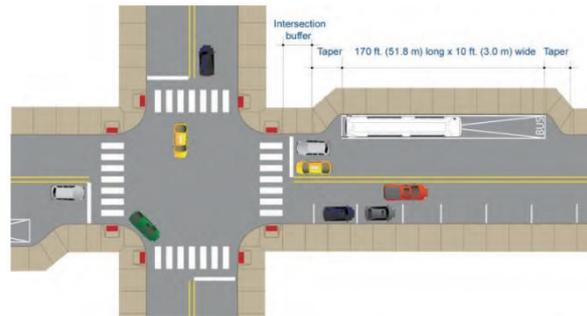
# Bus Stop Design Elements

## Bus Stop Configurations

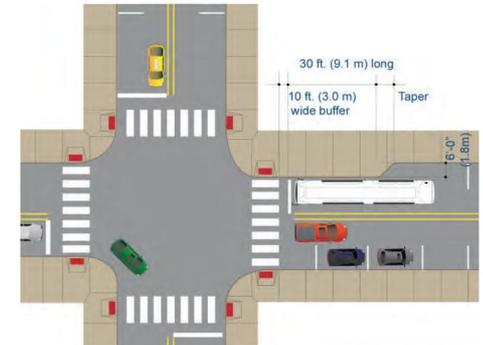
Curbside | Roadside |  
Shoulder



Bus Bay | Turnout |  
Cut Out | Pullout



Curb Extension |  
Bus Bulb | Bus Nub



# Bus Stop Design Elements

## Bus Stop Configurations – Curbside Stops



Near-side – 100 feet



Far-side – 60 feet



Mid-block – 120 feet

## Bus Stop Configurations – Bus Bays & Curb Extensions



Bus Bay – 120 feet



Curb Extension – 30+ feet

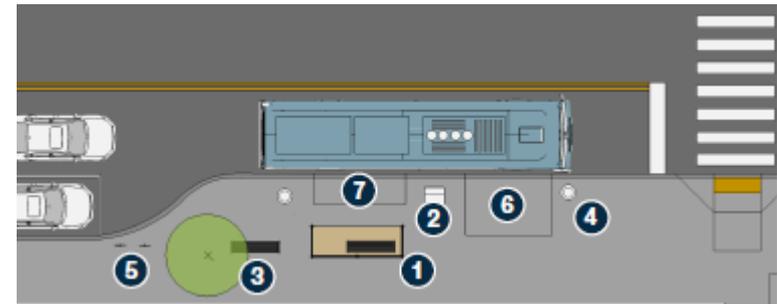
# Bus Stop Design Elements

## Parking

- Impacts vary depending on
  - Bus stop placement
  - Bus stop configuration

Bus stop placement/ configuration	# parking spaces = to bus stop length
Near-side	5
Far-side	3
Mid-block	6
Bus Bay	6
Curb Extension	2-3

- Minimize impacts
- Define curbside space
  - Striping & signage



# Bus Stop Design Elements

## Connectivity to Bus Stops

Bad



Good



Bad



Good



# Bus Stop Design Elements

## Accessibility

- ADA landing area
- ADA path of travel to amenities
- Clear zone at back door
- Bus doors open to curb
- Crosswalk/connection to stop pair

Bad



Bad



Good



# Bus Stop Design Elements

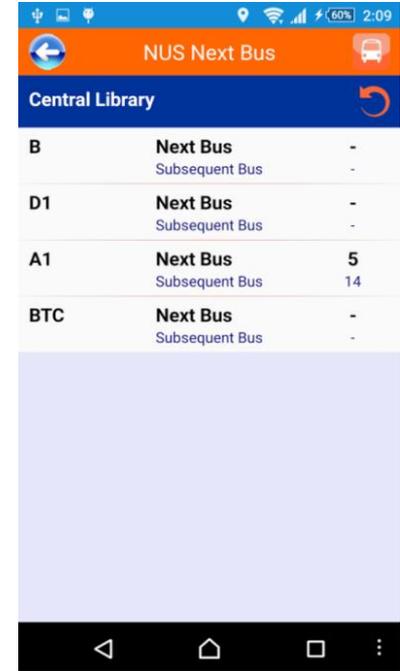
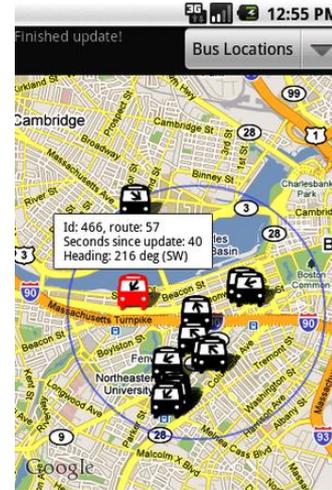
## Amenities



# Bus Stop Design Elements

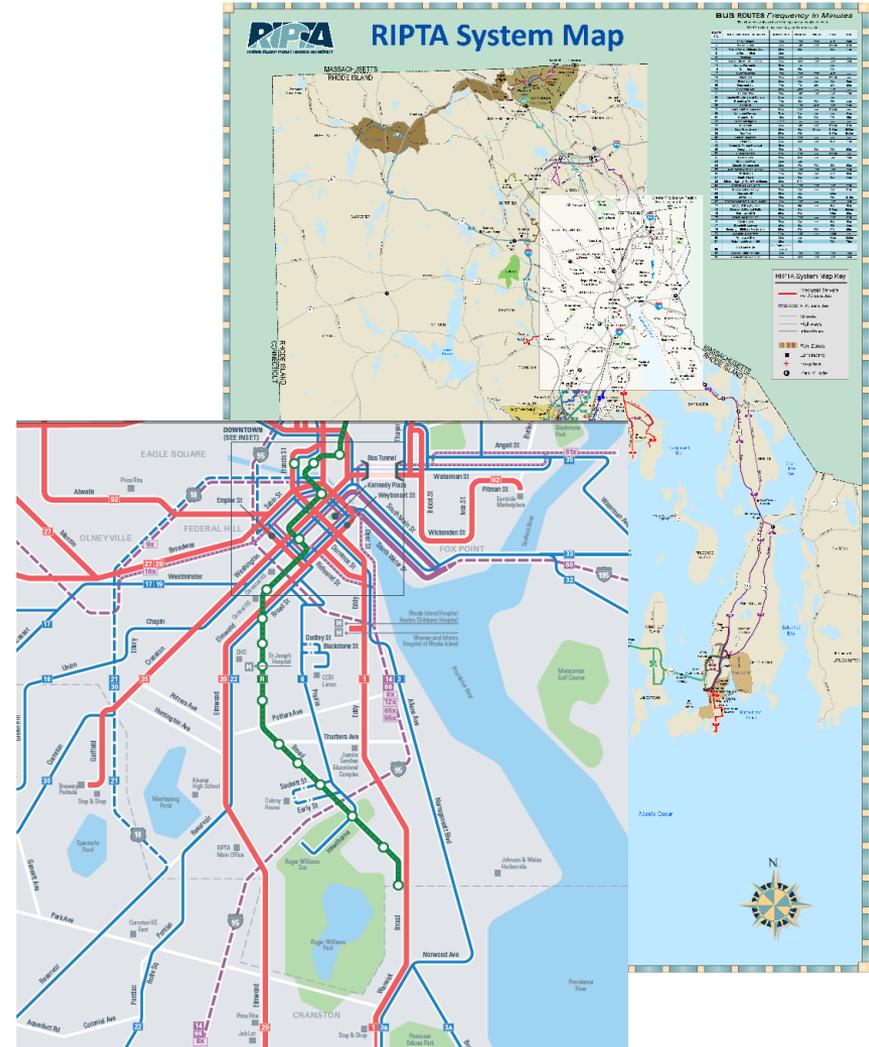
## Schedules

Traditional postings vs. real time technology



# Bus Stop Design Elements

## Maps



# Bus Stop Design Elements

## Signage

- Stop identity
- Customer service information
- Marketing/branding
- Delineate parking limits



# Bus Stop Design Elements

## Striping

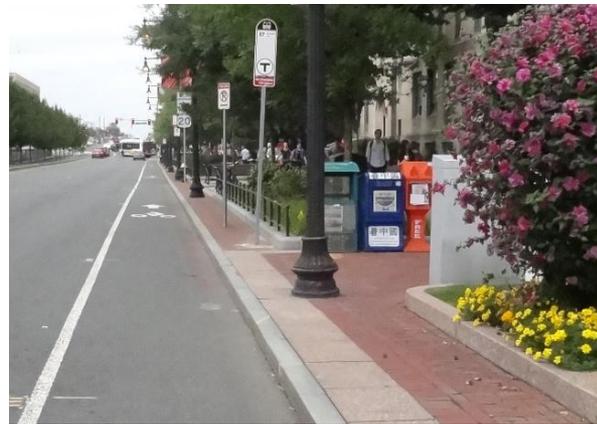
- Delineates the bus stop
- Helps prevent illegal parking
- Adjust when bus stop interacts with bike facilities



# Bus Stop Design Elements

## Integration with Bike Facilities

- Bike lane - adjacent to bus stop
- Bike lane - through a bus stop
- Bike lane - behind a bus stop
- Bike parking
- Bike share

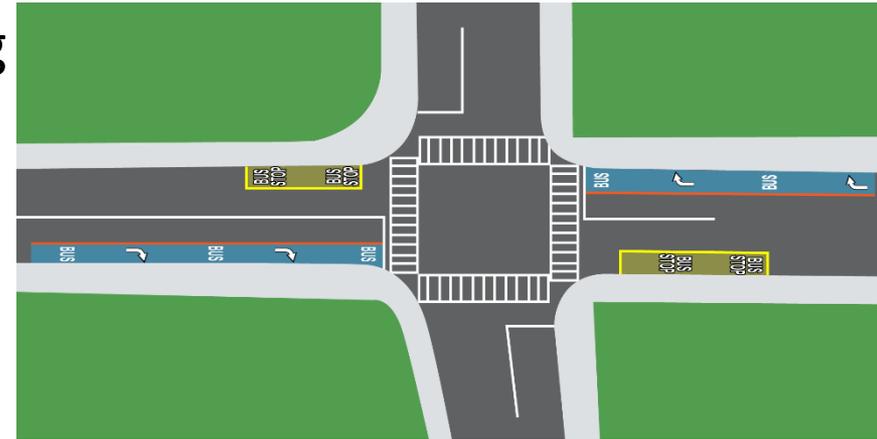


NACTO Urban Street Design Guide

# Bus Stop Design Elements

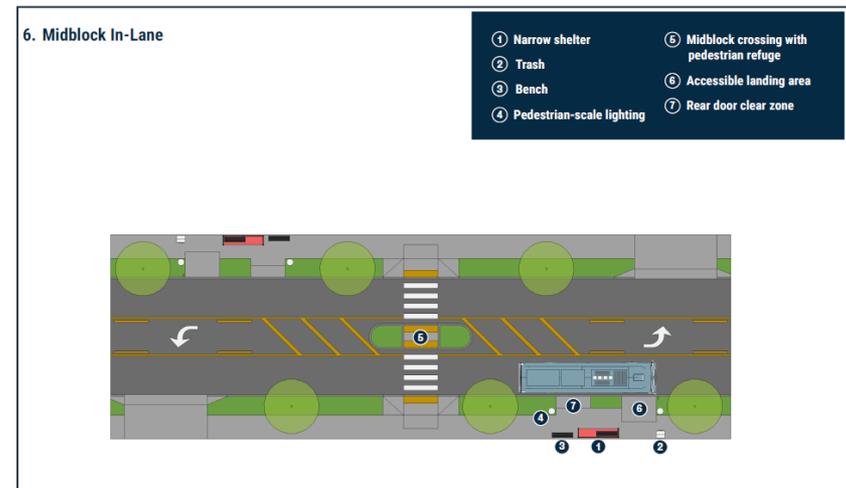
## Bus Priority

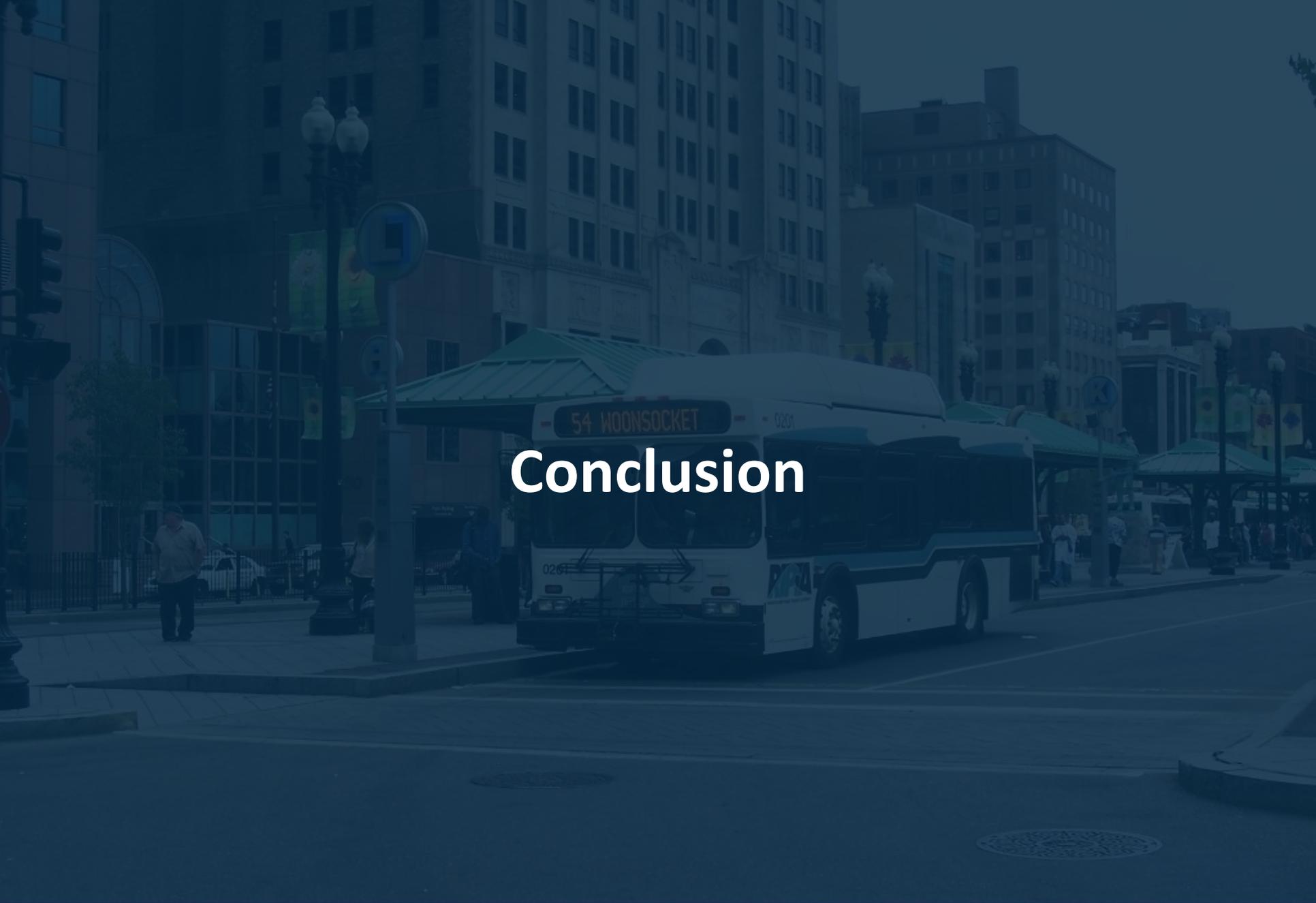
- Traffic signal coordination/timing
- Transit signal priority
- Bus queue jump lane
- Bus lane
  - Exclusive
  - Shared with bikes



Source: Boston Transportation Department

- Urban/suburban/rural context
- Different roadway lane configurations
- Varying abutting land uses
- ADA compliance
- Pedestrian facilities
- Integration of bus stop amenities
- Bus priority measures
- Bus-bike interaction
- Types of bicycle facilities





# Conclusion

- Complete community meetings
- Receive comments on draft typologies
- Revise typologies
- Complete draft bus stop design guide
- Finalize bus stop design guide
- Present to RIPTA Board of Directors and RIDOT Chief Engineer for adoption

- Thank you
- Meeting materials on project website:  
[www.ripta.com/rhode-island-bus-stop-design-guide](http://www.ripta.com/rhode-island-bus-stop-design-guide)
- Contact details:
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  - [Pam Sherrill : sherrill6@cox.net](mailto:sherrill6@cox.net)
  - (Comments to Pam by **Friday, July 15, 2016**)
- Questions/comments