

Better **Bus** Project

Making transit
better together



About the MBTA Bus Service Network

- More than 1/3 of all MBTA trips are taken on buses.
- The MBTA's bus network consists of 175 routes that serve about 450,000 customers on a single weekday.
- Serving 50 communities, the bus network provides critical connections where our rail system does not go.

Overview of the MBTA Bus Network

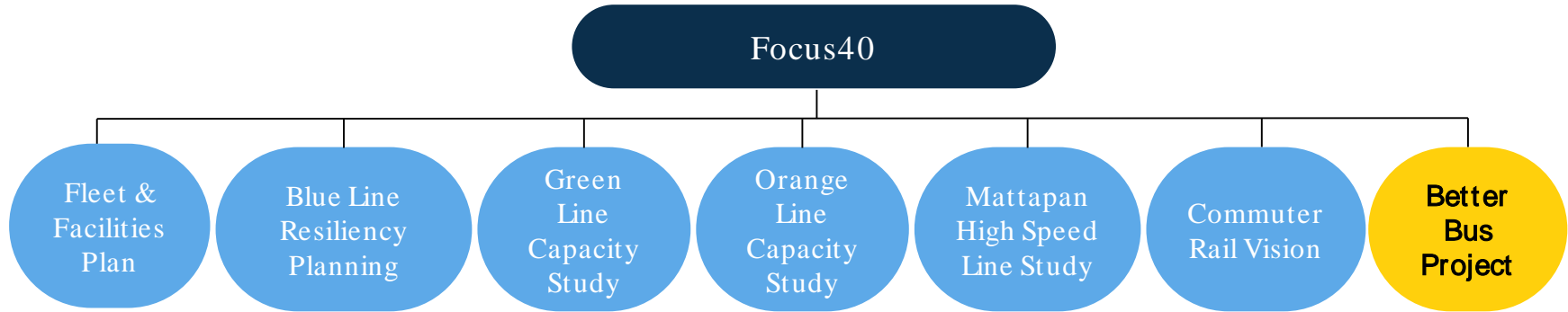
- 10 MBTA bus garages
- 175 directly-operated routes + 5 contracted-bus routes
- 1,100+ MBTA bus operators
- 1,500+ MBTA buses
- Approximately half of all bus trips include a transfer
- Types of bus routes:

446,700
daily bus riders

	% of Routes	% of Bus Ridership
Local bus routes (full weekday service)	73%	55%
Key bus routes (longer span, higher frequency)	11%	42%
Commuter bus routes (limited peak-direction trips, express bus routes)	24%	3%

MBTA Strategic Vision

Focus40: Meeting the Needs of the Region in 2040



About the Better Bus Project

Goal:

Understand the gap between today's bus service and the standards set by the January 2017 Service Delivery Policy.

Make recommendations to close the service gap that incorporates public engagement and municipal partnerships.



Evaluate the bus network against the January 2017 Service Delivery Policy.



Identify changes to each route to better serve our bus customers.



Outreach to communities, riders, and municipalities to identify their needs and concerns.

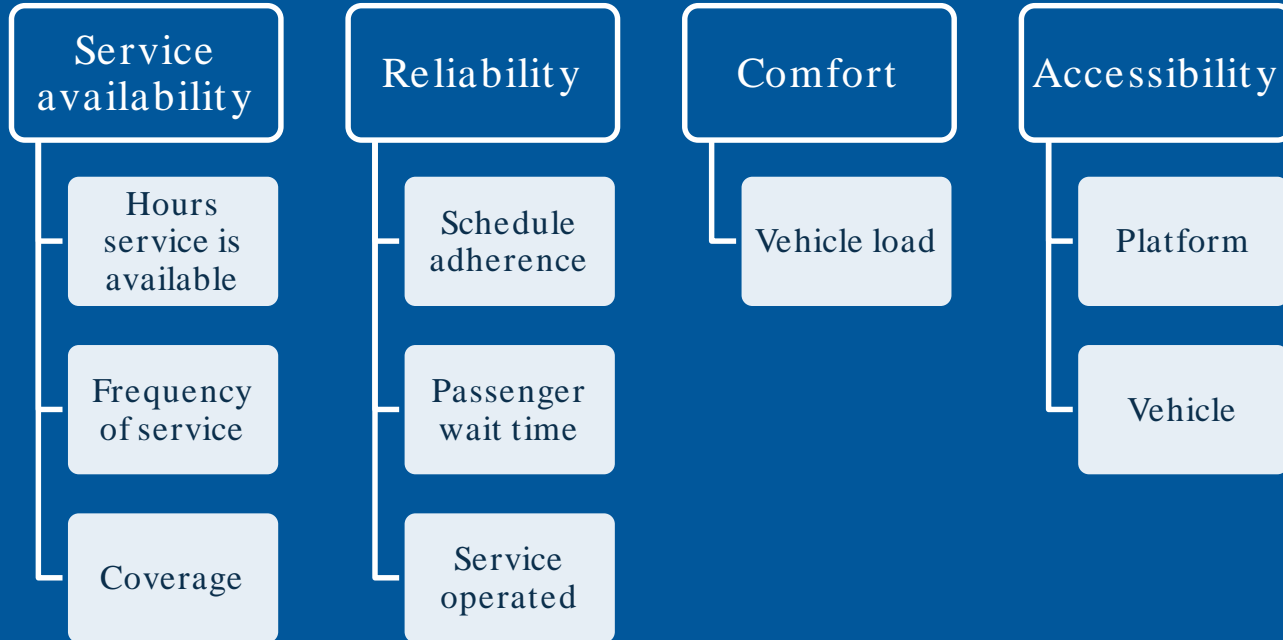


Develop plans and recommendations.



Begin to implement capital improvements in 2018 and service recommendations in 2019

Service Delivery Policy – Objectives and Standards



Service Delivery Policy – Objectives and Standards

	Key Bus Routes/Silver Line (18 Total)	Other Routes (141 Total)
Reliability	9 below target	128 below target
Frequency	1 below target	67 below target
Span of Service	2 below target	55 below target
Comfort	3 below target	8 below target

“More than a third of all MBTA trips are taken on buses. But an aging bus fleet, insufficient maintenance facilities, congested roads, and other problems – some of them beyond the MBTA’s control – means that these 446,700 daily riders, many of them of lower income and dependent upon bus service, frequently do not receive the service that they deserve or that would meet the MBTA’s own standards.” *Focus40 State of the System Report, Bus.*

Potential Changes

Service changes

Hours and frequency of service

Operational changes

Dispatching buses and improved MBTA procedures

Capital investments

Additional buses and supporting infrastructure

Partnerships with municipalities

Implement street changes that improve service



Potential Benefits

Buses will show up on schedule

People get to work faster

Less crowded on buses

Easy to understand routes

Resources are spent more efficiently

Balancing Service Trade-offs

USE OF RESOURCES	Fix operational issues (reliability, missed trips, etc)	↔	Provide more service
IMPROVE & EXPAND	Provide more service on existing routes	↔	Expand to new areas
FREQUENCY & HOURS	Provide more frequent service for shorter hours	↔	Provide less frequent service for longer hours
DAYS OF SERVICE	Provide less weekday service; more weekend service	↔	Provide more weekday service; less weekend service
DIRECTNESS	Provide faster, more direct service but with longer walks to stops	↔	Provide slower, less direct service but with shorter walks to stops
STOP SPACING	Provide faster service with fewer stops but with longer walks to stops	↔	Provide slower service with many stops but shorter walks to stops
FREQUENCY & COVERAGE	Provide more widely spaced routes that operate more frequently	↔	Provide more closely spaced routes that operate less frequently

Cambridge Service Concepts Received

- Cambridge TAC Service Plan Concepts
- Cambridge Strategic Transit Plan
- Kendall Square Mobility Square Task Force Concepts

Improving bus service with municipal partnerships

What the MBTA can help with:

Buses, bus stop placement guidelines and management, bus schedules, fare payment structure

What municipalities can help with:

Streets, signals, parking, curb management, sidewalk space, intersections, enforcement



Partnership Examples to Improve Bus Speed and Reliability

Bus Operations tools

- Stop Relocation
- Stop Consolidation
- Route Design

Infrastructure tools

- Turn Radius Improvements
- Bus Bulbs
- Roadway Channelization/ Signage

Traffic Control tools

- Transit Signal Priority
- Lane Restriction/Exemption
- Queue Jumps

Transit Lane tools

- Curbside bus lane
- Queue bypass (short bus lane)
- Center bus lane



2017 King County Metro S&R Guidelines and Strategies

Public Engagement Plan (Spring 2018)

Website
Feedback
www.mbta.com/betterbus

Transit Talks
Meeting with stakeholder groups

Street Teams
One-on-one engagement at stations

Regional Public
Meetings
Large public meetings

Municipal Engagement
Staff-to-staff engagement and council presentations on request

Regional Public Meetings

Location	Hub	Date	Time of Meeting
Bruce C. Boling Municipal Building	Dudley Square	Wednesday, May 23	5:00 PM – 7:30 PM
Cambridge Rindge & Latin	Harvard Square	Wednesday, May 30	6:00 PM – 8:00 PM
Jamaica Plain Branch Library	Forest Hills	Thursday, May 31	6:00 PM – 8:00 PM
North Quincy High School	Quincy	Monday, June 4	6:30 PM – 8:30 PM
North Shore Community College	Lynn	Wednesday, June 6	6:00 PM – 8:00 PM
Holiday Inn Boston - Bunker Hill	Sullivan Square	Thursday, June 7	6:00 PM – 8:00 PM

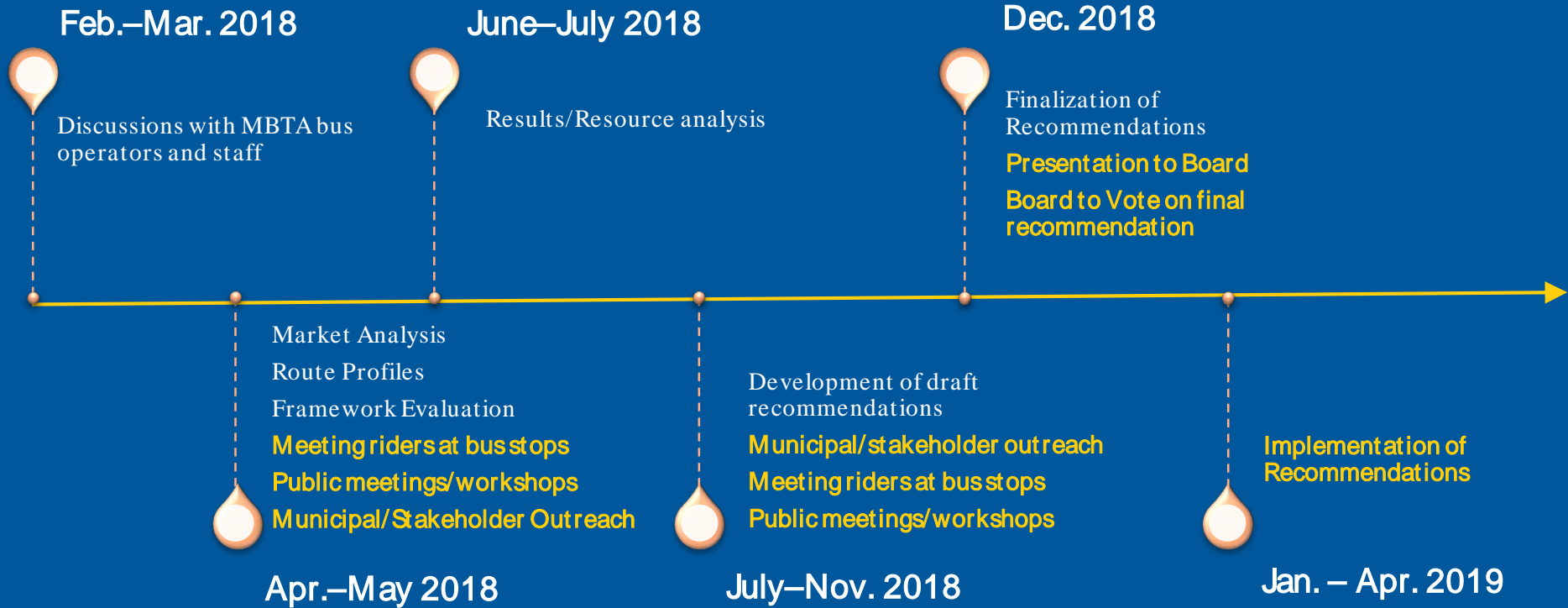
Online and in-Person Feedback Form

Website: www.mbtta.com/betterbus

Meetings & Street Teams



Project Schedule

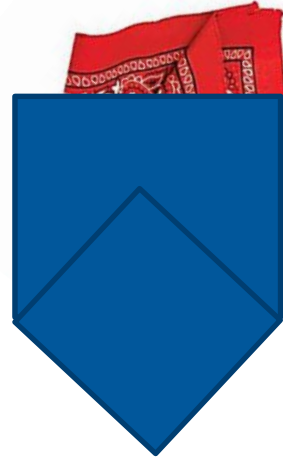


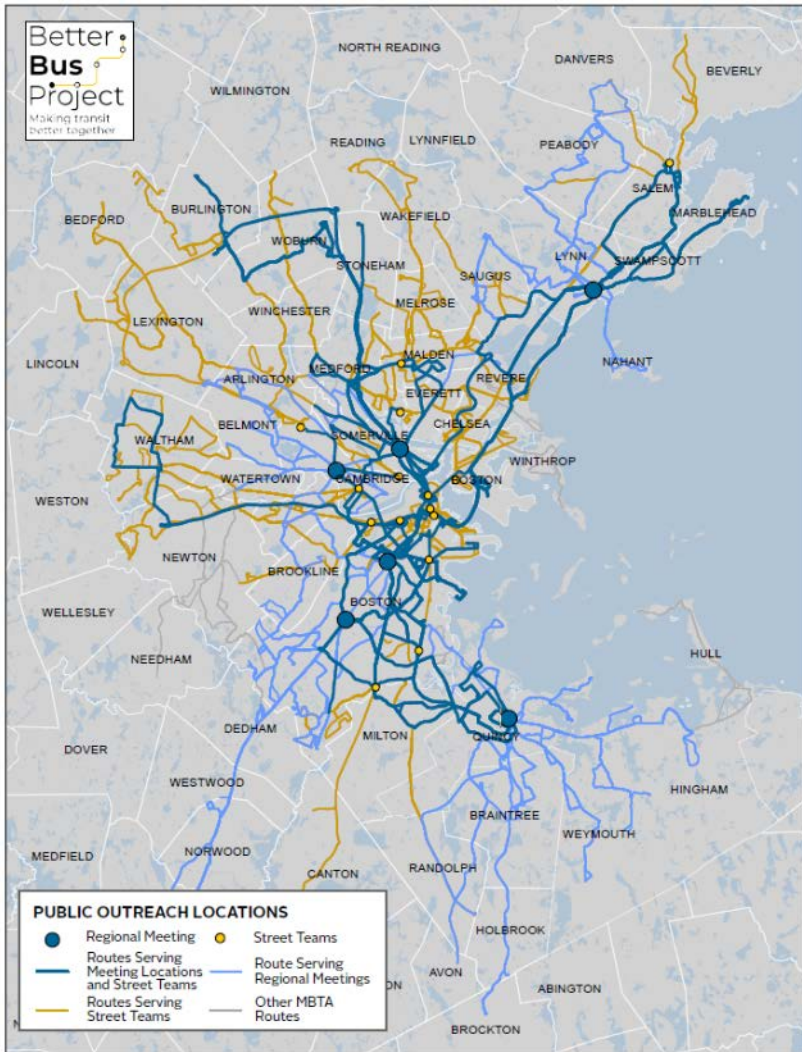


We want your input!

- What do you consider to be the greatest bus issues/challenges for the *entire* MBTA service area?
- What do you consider to be the greatest bus issues/challenges for your employees, customers, clients, organization, etc.?
- What bus services do you consider to be the most effective and why?
- What bus services do you consider to be the least effective and why?
- Are there particular geographic areas where bus service needs to be improved?

Backpocket Slides





Routes Served by In-Person Outreach Activities

Community meetings and Street Teams cover:

- 95% of all bus routes
- 49 of 50 Communities
- 408,256 out of 414,340 (avg. weekly riders)

Other system-wide outreach:

- Webpage
- Transit Talks
- Ads on buses
- Other Marketing

Plan for Accessible Transit Infrastructure (PATI)

Construction of bus stop improvements

- \$7.6 Million obtained for construction
- Identified highest priority stops
- Commenced design at 120 bus stops; construction scheduled to commence Spring 2018



New Pavement Markings



Before



After

New Sidewalks



New and Improved Bus Stop Signage



New Bus Ramp Landing Pads

Plan for Accessible Transit Infrastructure (PATI) Surveyed 7,685 Stops in 50 Municipalities



400 Totten Pond Rd., Waltham

Examples of
Inaccessible
Stops



Granite St @ Brookline St., Cambridge

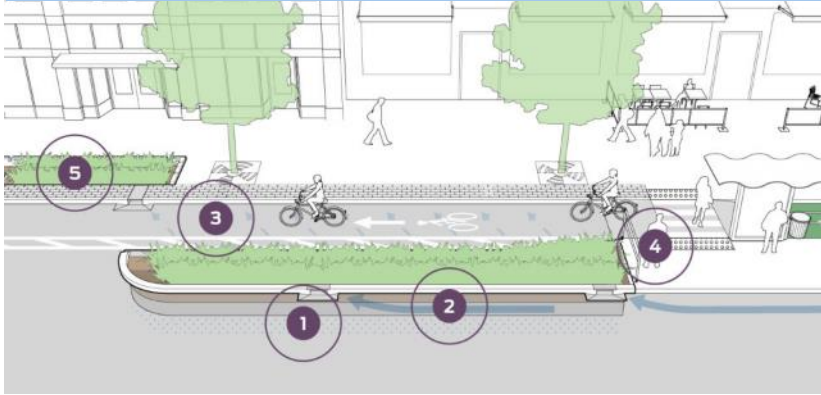


Beacon St. opposite Walnut St., Beacon Hill/ Boston



Charles Park Rd. @ Rivermoor St., West Roxbury

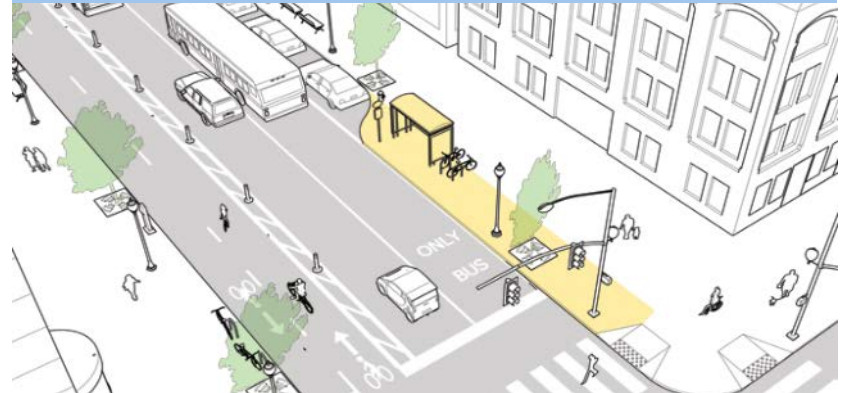
Floating Island



Seattle Bus Island

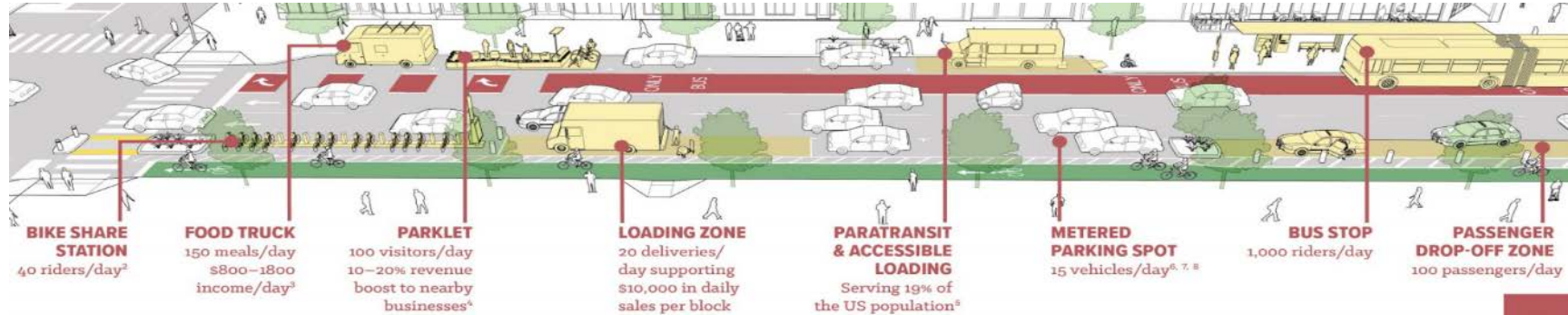


Bus Stop Bulb

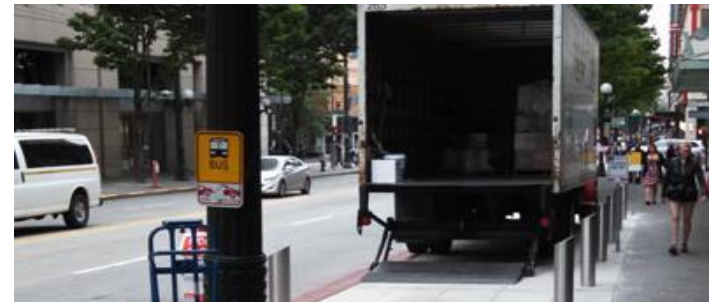


Infrastructure Tools

Curb Management

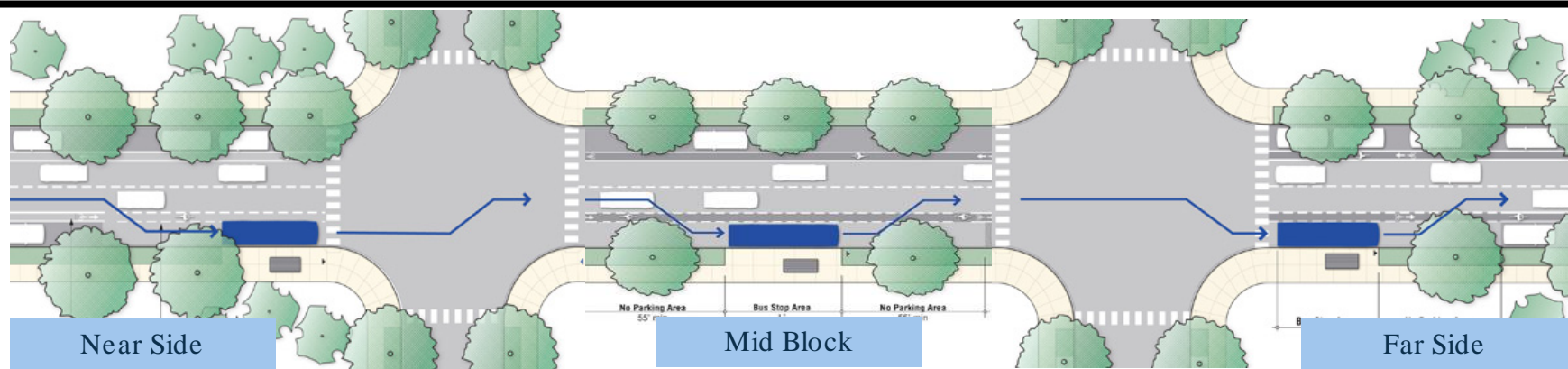


Above, Curb Management Impacts

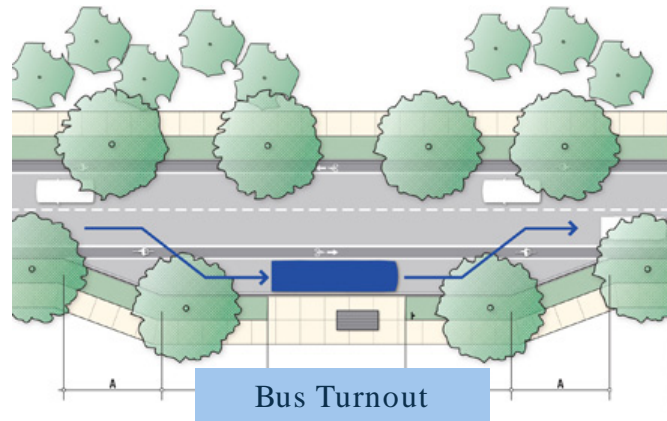


King County Flex Bus Stop & Loading Zone

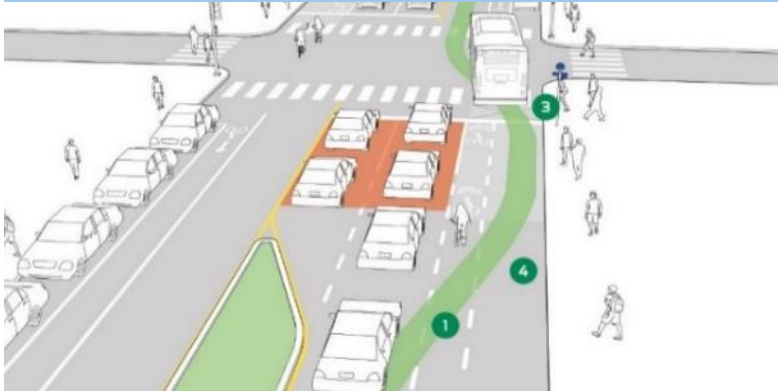
Right, Curb Management Impacts



Bus Stop Placement



Queue Jump



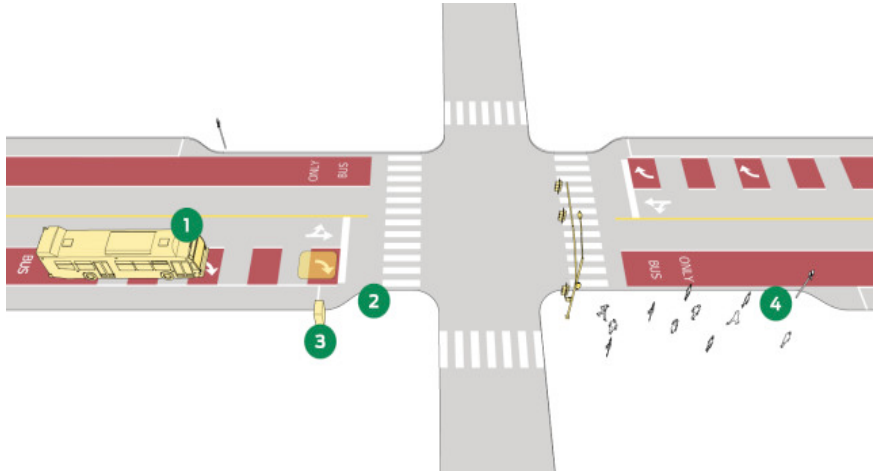
MTA Queue Jump Manhattan



Queue Jumps



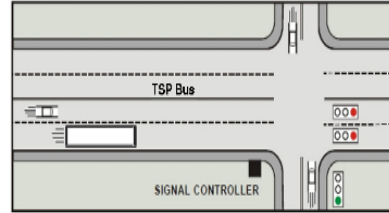
Bellingham, WA Queue Jump with Transit Signal



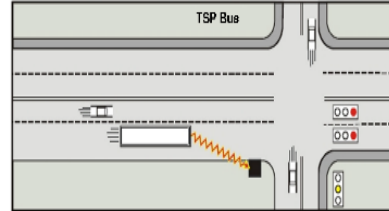
Transit Signal Priority

RED TRUNCATION

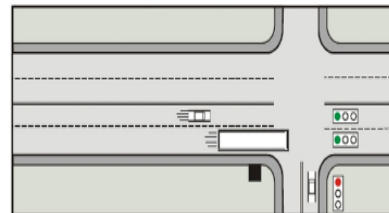
Bus approaches red signal



Signal controller detects bus; terminates side street green phase early

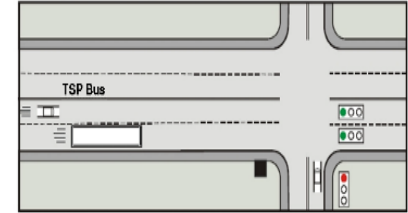


Bus proceeds on green signal

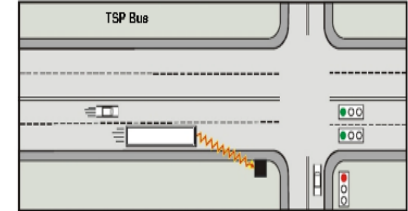


GREEN EXTENSION

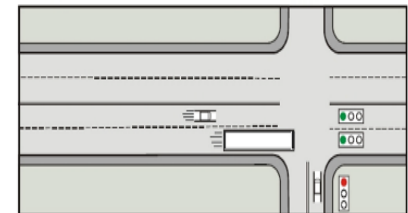
Bus approaches green signal



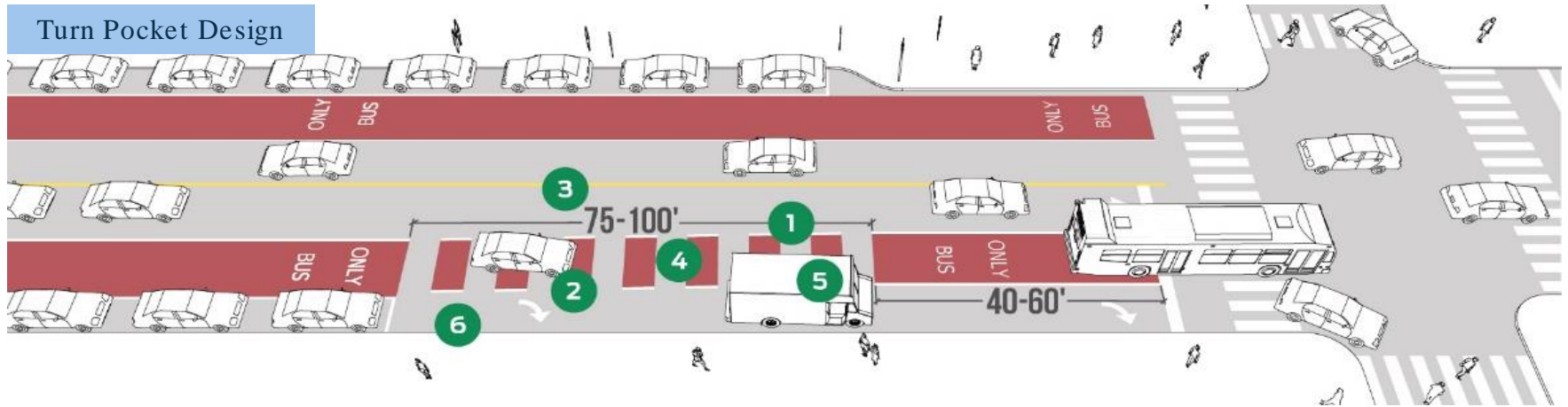
Signal controller detects bus; extends current green phase



Bus proceeds on extended green signal



Turn Pocket Design



Turn Pockets



San Francisco



Las Vegas

San Francisco Turn Restrictions



Turn- Movement Restrictions



1st Avenue, New York City (NYC DOT)

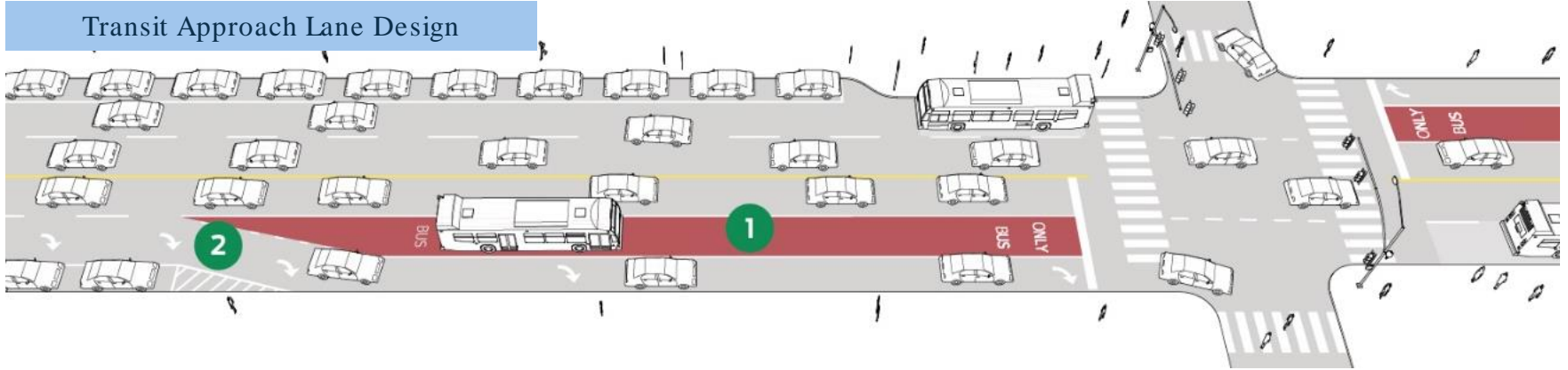


Dedicated Bus Lane



Washington Street, Boston

Transit Approach Lane Design



Transit Approach Lane



San Francisco Approach Lane – Stockton Street

15 Proposed Street Team Locations

<u>Proposed Street Team Location</u>	<u>Ridership</u>	<u>Routes Served</u>	<u>OTP < 70%</u>	<u>No Auto Availability > 25%</u>	<u>% Low Income > 25%</u>	<u>% Minority > 25%</u>	<u>Always Able to Understand English < 90%</u>	<u>% Seniors (65+) > 15%</u>
Alewife	6,098	7	4	2	2	2	0	2
Ashmont	40,288	11	7	8	9	9	1	0
Andrew	19,774	7	5	5	2	5	0	0
Central	30,439	8	5	7	6	7	1	0
Copley	35,879	10	5	5	2	6	0	0
Downtown*	30,059	13	10	4	4	9	1	0
Haymarket	62,775	17	12	12	14	10	2	1
Kenmore	26,896	7	4	6	5	5	0	0
Lechmere	12,285	4	1	4	1	2	0	0
Malden Center	23,841	13	12	10	11	7	2	0
Mattapan	33,561	9	6	8	8	8	1	0
Maverick	14,718	5	1	4	4	4	4	2
Salem Station	5,349	6	5	6	6	4	2	0
South Station	29,267	9	4	2	8	7	2	0
Wellington	16,909	9	8	8	8	7	2	2

*Possible locations include: Federal St. @ Franklin St., Otis St. @ Summer St., and Pearl St. @ Congress St.

Note: All numbers in these columns reflect number of routes with ridership of these characteristics based on the CTPS Systemwide Passenger Survey.

Proposed Community Meeting Locations

<u>Community Meeting Target Area</u>	<u>Ridership</u>	<u>Routes Served</u>	<u>OTP < 70%*</u>	<u>No Auto Availability > 25%*</u>	<u>% Low Income > 25%*</u>	<u>% Minority > 25%*</u>	<u>Always Able to Understand English < 90%*</u>	<u>% Seniors (65+) > 15%*</u>
Dudley Square	97,251	18	10	13	12	14	1	0
Forest Hills	55,709	17	12	14	14	17	2	1
Harvard Square	57,095	13	6	9	7	10	1	5
Lynn	11,937	12	11	7	8	10	4	3
Quincy Center	19,116	16	14	16	16	14	5	3
Sullivan Square	34,372	12	12	10	8	5	2	0

*All numbers in these columns reflect number of routes with ridership of these characteristics based on the CTPS Systemwide Passenger Survey.

Routes Not Currently Served by Street Teams or Community Meetings

<u>Routes Not Currently Served</u>	<u>Ridership</u>	<u>OTP < 70%</u>	<u>No Auto Availability > 25%</u>	<u>% Low Income > 25%</u>	<u>% Minority > 25%</u>	<u>Always Able to Understand English < 90%</u>	<u>% Seniors (65+) > 15%</u>
8	6,084	5	8	7	7	1	3

Routes not currently served include: 43 – Ruggles Station-Park and Tremont Streets; 52 – Dedham Mall-Watertown Yard; 59 – Needham Junction-Watertown Square; 85 – Spring Hill-Kendall MIT Station; 94 – Medford Square-Davis Square Station; 119 – Northgate Shopping Center-Beachmont Station; 201 – Fields Corner Station-Fields Corner Station; 202 – Fields Corner Station-Fields Corner Station