KEY BUS ROUTE IMPROVEMENT PROJECT

ROUTE 39

February 3, 2010
Curley School
493 Centre Street

AGENDA

• Introduction and Background
• Route 39 Objectives
• Recommendations
• Next Steps
• “Next Bus” Countdown Presentation
• Q & A
Bus Route 39

- Second highest ridership of all MBTA bus routes
  - Over 14,000 riders per day
- Buses run every 6 minutes during rush hour
  - Trip time 30-38 minutes
- One of the MBTA’s key bus routes
- 5 mile long route (approx.)

Project Background

- State Implementation Plan Commitment
- Initial improvement recommendations
  - Public Meeting – February 2008
- Federal stimulus funding
  - Opportunity for implementation
- Key Bus Route Improvement Project
Current Effort

- Citizens Working Group assembled in 2008
- 7 meetings between March and December 2009
- Received federal stimulus funding
- Ongoing coordination
  - Centre/South Street Transportation Action Plan

Stimulus Funding

- American Recovery and Reinvestment Act (ARRA)
- Funds Capital Improvements
- MassDOT focused on Buses
  - $8 million dedicated to Bus Key Routes
- Opportunity to implement now
  - Route 39 is the first of 15 key routes
Objectives

• Improve Bus Service
  – Less bus bunching = Greater reliability
  – Fewer delays = Shorter trip times

Objectives

• Accessibility
  – Faster boarding
  – Easier bus access for all
Objectives

- Integration of Transit and Streetscape
  - Passenger comfort & convenience
    - Shelters, benches & bike racks
  - Customer Information
    - Signs & schedules

Challenges to Good Transit

- Access difficult for seniors and persons with disabilities; stops blocked by parked cars
- Many bus stops without shelters and other amenities
- Traffic congestion and double parking
- Traffic signals often not optimized or coordinated
- Placement and number of bus stops result in longer trip times
Recommendations

- Service Enhancements
- Improved Accessibility
- Added Passenger Comfort & Convenience
- Clear Customer Information
- Traffic Signal Improvements
- Optimized Bus Stop Locations
- New Downtown Routing

Service Enhancements

- All buses have GPS systems
  - Facilitates better service management
- Centralized bus route supervision
- Development of intervention strategies
Service Enhancements

• Pilot program will equip inspectors on six key bus routes with handheld devices capable of monitoring CAD/AVL route ladders in real-time
• Objective is to improve service reliability by providing valuable, timely information to personnel in a position to take action
• Inspectors will begin using devices in March 2010

Service Enhancements

• Driver Training
  – Four times each day, MBTA Inspectors conduct a corridor check to identify cars illegally parked in bus stops. The Bus Dispatcher passes this information along to the MBTA Transit Police for their action.
  – All bus operators are currently going through a two-day training class on customer courtesy.
  – All buses provided with maps showing route-specific information
Improved Accessibility

- Stops will be clear, visible, and the appropriate size
  - All bus doors must open at curb
  - Prevent cars from parking in stops
  - “Mark” key bus stops
- Required Stop Location Conditions
  - Regular Spacing
  - Appropriate sidewalk width
  - Near crosswalks

Added Passenger Comfort & Convenience

- Install shelters where possible
  - Weather protection, seating, comfort
- New street furniture
  - Shelters, benches, trash barrels, bicycle racks
Clear Customer Information

- Sign upgrades
- Schedules at stops
- Maps on buses
- Neighborhood maps
- Next bus countdown system

Traffic Signal Improvements

- Signal optimization
  - Timing and phasing changes
  - Benefit buses and general traffic
- Transit signal priority potential
  - CTPS – Huntington Avenue
- Bus stop locations
  - Relocated to improve operations
- Speed up bus service
  - Decrease in bus delay at intersections
Optimized Bus Stop Locations

• Stop spacing
  – National and MBTA Standards 4-7 stops/mile (750 to 1320 ft)
    • More than 20 of the Route 39 bus stops are within 300 - 600 feet of another stop.
  
• Adequate length for 60’ buses
  – Most stops must be made longer

Optimized Bus Stop Locations

• Boarding count disparity
Optimized Bus Stop Locations

- Accessibility, service, comfort, spacing
- Parking impacts
  - Regain parking at consolidated stops
- Reduced “stop & go” experience for riders
  - Decreased bus delay
- Reduced weaving
  - Enhance bicycle & pedestrian safety

Optimized Bus Stop Locations

- Additional factors considered
  - Regular spacing
  - Ridership
  - Traffic signal improvements
  - Sidewalk width
  - Accessibility
  - Adjacent land use
  - Parking
  - Key shelter locations
Segment 1: Centre/ South St

- Consolidate to
  - Pond Street
  - St John Street
  - Sedgewick Street
- Ongoing coordination at Monument Square

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St John Street consolidation
- Parley Avenue and Lester Place

Existing Parley Avenue (Inbound)
Existing Lester Place (Inbound)
Improved Reliability • Faster Service • Passenger Amenities

Segment 1: Centre/ South St

• Sidewalk widening at bus stops
  – St John Street
  – Roseway Street
  – Seaverns Avenue

• Shelter opportunities
  – Roseway St
  – 545 Centre St
  – Saint John St
  – Seaverns Ave
  – Sedgewick St
Segment 2: S. Huntington Ave.

- Maintain
  - Back of Hill
  - VA Hospital
  - Bynner Street
- Relocate
  - Perkins Street Inbound to farside

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Improved Reliability • Faster Service • Passenger Amenities
Segment 2: S. Huntington Ave.

- Shelter opportunities
  - Perkins Street (Inbound)
  - Riverway (Outbound)

Segment 3: Huntington Ave.

- Relocate to farside
  - Louis Prang
- Ongoing coordination
  - MASCO
  - Mission Hill Health Center

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Segment 3: Huntington Ave.

- Fenwood Rd to Wigglesworth St

Segment 3: Huntington Ave.

- Shelter opportunities
  - 677 Huntington Ave
  - Louis Prang
  - Opera Place
  - 360 Huntington Ave
Segment 4: Downtown

- Questions/Issues
  - Most important stops?
  - Priority destinations
    - Copley
    - Back Bay
    - MCCA
  - Routing options
Improved Reliability • Faster Service • Passenger Amenities

Downtown Routing
Alternative 1

Downtown Routing
Alternative 2
Wrap Up Summary

• Faster and more reliable service
  – Bus stop consolidation
  – Traffic signal optimization
  – Transit signal priority
• Improved accessibility for all
  – Lengthen bus stops
• Added passenger comfort and convenience
  – Installing bus shelters, benches, bike racks and trash barrels
  – Installing bus stop signs and schedules
  – Widening of sidewalks at bus stops

Schedule and Next Steps

• Spring 2010
  – Engineering of bus stop improvements
  – Design plans available to public
  – Back Bay meetings
  – Federal stimulus fund dispersed
  – Ongoing coordination and review with the City
• Summer 2010
  – Construction and implementation
UNLOCKING REAL-TIME

Joshua Robin
Massachusetts Department of Transportation

WHY IS IT SO EASY TO FIND WEATHER AND TRAFFIC REPORTS...
BUT SO HARD TO FIND OUT WHEN THE NEXT 39 BUS WILL COME?

TWO THEORIES
THEORY #1 – NO DEMAND

Where is the %*$&&%$ 39?
THEORY #2 – NO SUPPLY

SO, WHAT’S DIFFERENT?
TRAFFIC AND WEATHER INFORMATION ARE “OPEN”

AS A RESULT, DRIVERS HAVE LOTS OF CHOICES
TRANSIT INFORMATION WAS “CLOSED”

T RIDERS HAD JUST ONE CHOICE FOR MBTA INFORMATION: THE T
SO, WE DECIDED TO MAKE MBTA INFORMATION OPEN

IN SEPTEMBER 2009, THE MBTA MADE BASIC TRIP PLANNING DATA OPEN
BY NOVEMBER, THERE WERE 6 INNOVATIVE APPLICATIONS BUILT WITH MBTA DATA
GREAT, BUT WHEN IS THE NEXT BUS ACTUALLY GOING TO SHOW UP? I WANT REAL-TIME INFORMATION!

TRADITIONAL MODEL

First, (1) Countdown Signs
Then, (2) Web and Phone Distribution
Then, Maybe, (3) Share with Others
WHAT IF WE RE-THOUGHT THIS?

COULD WE MAKE BUS LOCATION INFORMATION
AS EASY FOR OUR RIDERS TO FIND AS THE CURRENT TEMPERATURE?

IMPOSSIBLE, RIGHT?
ON NOVEMBER 14th, AS PART OF A TRIAL PROGRAM, THE MBTA RELEASED A REAL-TIME DATA FEED FOR 39 BUS AND FOUR OTHER MBTA BUS LINES.

WITHIN ONE HOUR...
WITHIN ONE HOUR...

A developer integrated the trial data into Google Earth to show the real-time locations of the buses:

![Google Earth screenshot](image)

WITHIN TWO DAYS...

A developer integrated the trial data into a free, easily-accessible web page, where T riders can track the buses from any internet-accessible computer:

![Web page screenshot](image)

http://mbta-bus.appspot.com
WITHIN ONE WEEK...

A developer built a desktop application that displays the countdown information for the rider’s favorite stop:

http://www.wirelust.com

WITHIN TWO WEEKS...

A developer built a simple web application that displays the bus countdown information without the need for a map:

http://www.clickteam.info/davidn/mbta/mtabuses.php
WITHIN ONE MONTH...

A developer built an LED sign that shows real-time bus countdown information on Centre Street in Jamaica Plain:

WITHIN FIVE WEEKS...

A developer built iPhone and Android apps that integrate the real-time trial data. The apps cost just 99 cents:
WITHIN SEVEN WEEKS...

A developer built a system that delivers the real-time data to any phone, mobile or landline:

*Try if for yourself by dialing 617-213-0911
Use stop code (0330) or (0085)

WITHIN EIGHT WEEKS...

A developer built a system that delivers the real-time data by text message to any mobile phone:

Message:

*Try if for yourself by texting 617.299.6591
this message: bus: 39: 51391
WITHIN EIGHT WEEKS

Developers launched more apps included free applications:

JUST LAST WEEK....

THE MBTA LAUNCHED THE T-TRACKER ON MBTA.COM:
MassDOT Developers Page Beta

Welcome to the BETA version of the MassDOT Developers Page. The information and links found here are meant to serve as resources for developers interested in working with real-time and static transportation data made available by the Executive Office of Transportation and its family of agencies.

MassDOT's Relationship With Developers

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