

**FOREST
HILLS
IMPROVEMENT
INITIATIVES**



CITY OF BOSTON

Thomas M. Menino,
Mayor

Forest Hills Transportation Action Plan

April 30, 2008

Presented to:

The Forest Hills Community
Boston Transportation Department
Boston Redevelopment Authority

MBTA



*traffic solutions*SM

The logo for Traffic Solutions, featuring a green curved arrow pointing right above the text "traffic solutions" in a blue, lowercase, sans-serif font. A small "SM" trademark symbol is to the right of the text.

PLANNERS COLLABORATIVE

The logo for Planners Collaborative, consisting of a square with a blue border and a yellow center, set against a green background. Below the logo, the text "PLANNERS COLLABORATIVE" is written in a bold, green, uppercase, sans-serif font.

**FOREST
HILLS
IMPROVEMENT
INITIATIVES**

STUDY AREA



CITY OF BOSTON
Thomas M. Menino,
Mayor



AGENDA

- 1. Welcome and Brief Overview**
- 2. Community Needs and Vision**
- 3. Key Findings**
- 4. Transportation Action Plan – Final Draft**
 - Short Term Recommendations
 - Long Term Recommendations
- 5. Next Steps - Sequence and Strategies**
 - Funding
 - Implementation Strategies
- 6. Community Feedback**
- 7. Topic Station Reporting**
- 8. Overall Summary**

Community Vision & Needs

Emerging Principles:

- Reduce car dependency / minimize car traffic
- Smoother, safer flow for cars, pedestrians, bikes
- New uses to promote pedestrian, bike & T use
- Minimum parking necessary so new uses flourish
- Better pedestrian & bike crossings & connections

Specific Comments:

- *Improve connections to area open spaces*
- *Provide way finding signage*
- *Improve pedestrian crossing at Washington / New Washington St. intersection*
- *Activate area under the Arborway overpass*



CITY OF BOSTON

Thomas M. Menino,
Mayor

**FOREST
HILLS
IMPROVEMENT
INITIATIVES**

Process



CITY OF BOSTON

Thomas M. Menino,
Mayor

OUR TASKS



with



PLANNERS COLLABORATIVE

Improve transportation environment for all modes

- Inventory existing conditions
- Analyze data, Synchro-Model, Signal Phasing
- Generate Short-term, lower-cost improvement recommendations
- Generate Long-term recommendations that complement Community Vision

Transportation Action Plan

**FOREST
HILLS
IMPROVEMENT
INITIATIVES**

Findings

Traffic Flow

CONDITIONS AT PROJECT OUTSET, TRAFFIC



CITY OF BOSTON

Thomas M. Menino,
Mayor

FOREST HILLS IMPROVEMENT INITIATIVES

Findings

Traffic Flow



CITY OF BOSTON
Thomas M. Menino,
Mayor



AM Turning Movement Counts

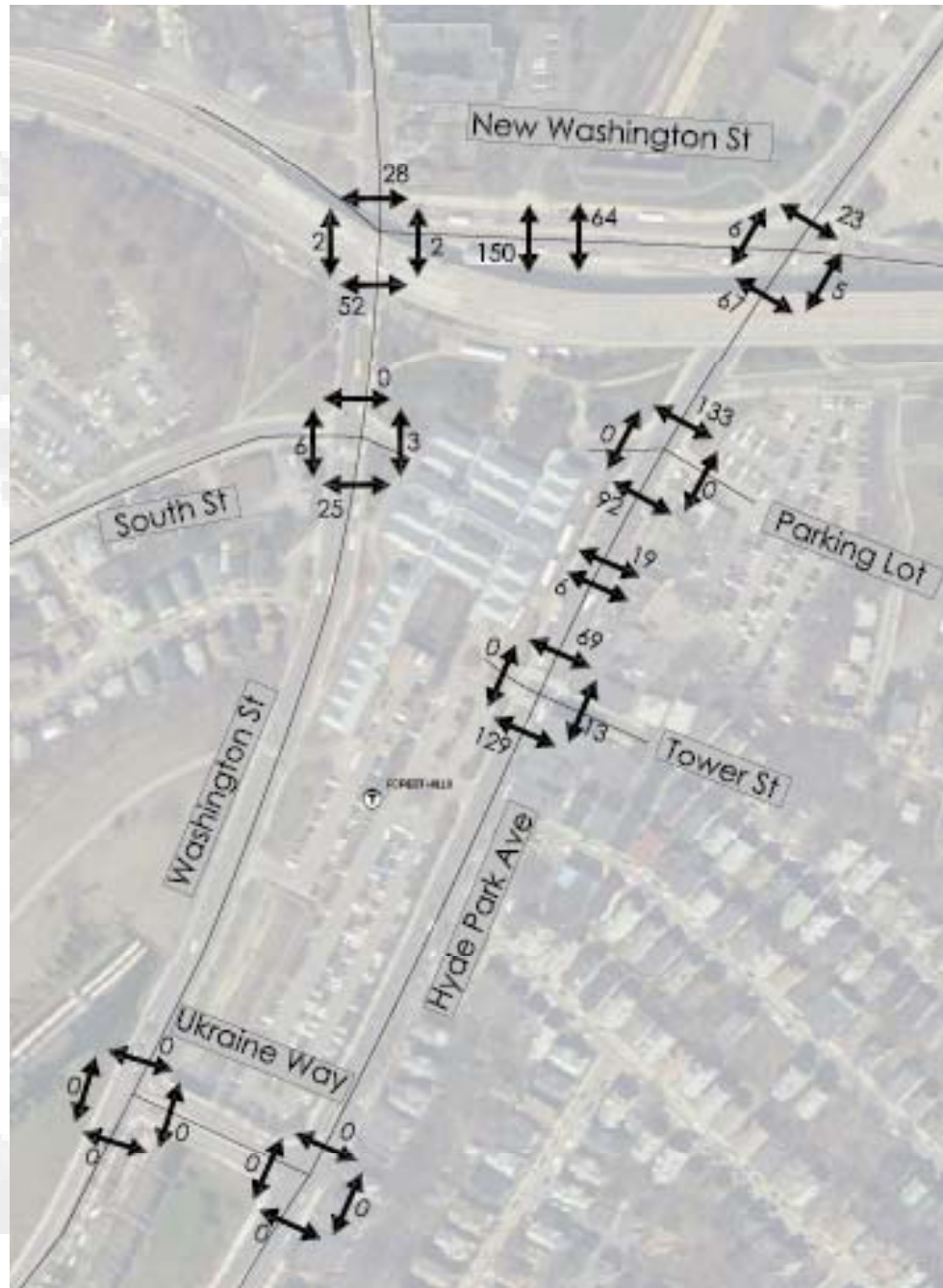
FOREST HILLS IMPROVEMENT INITIATIVES

Findings

Traffic Flow



CITY OF BOSTON
Thomas M. Menino,
Mayor



AM Pedestrian Volumes

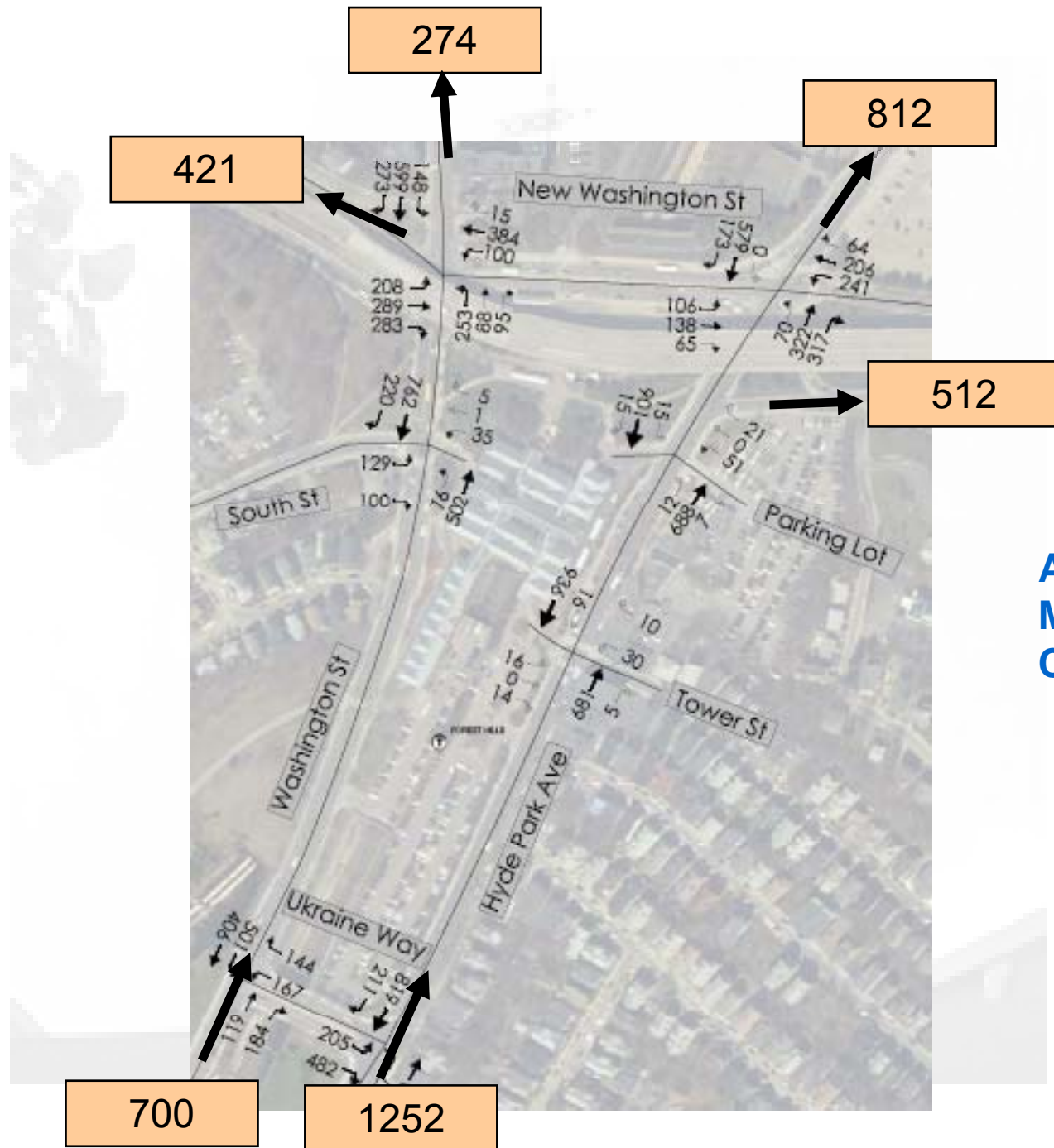
FOREST HILLS IMPROVEMENT INITIATIVES

Findings

Traffic Flow



CITY OF BOSTON
Thomas M. Menino,
Mayor



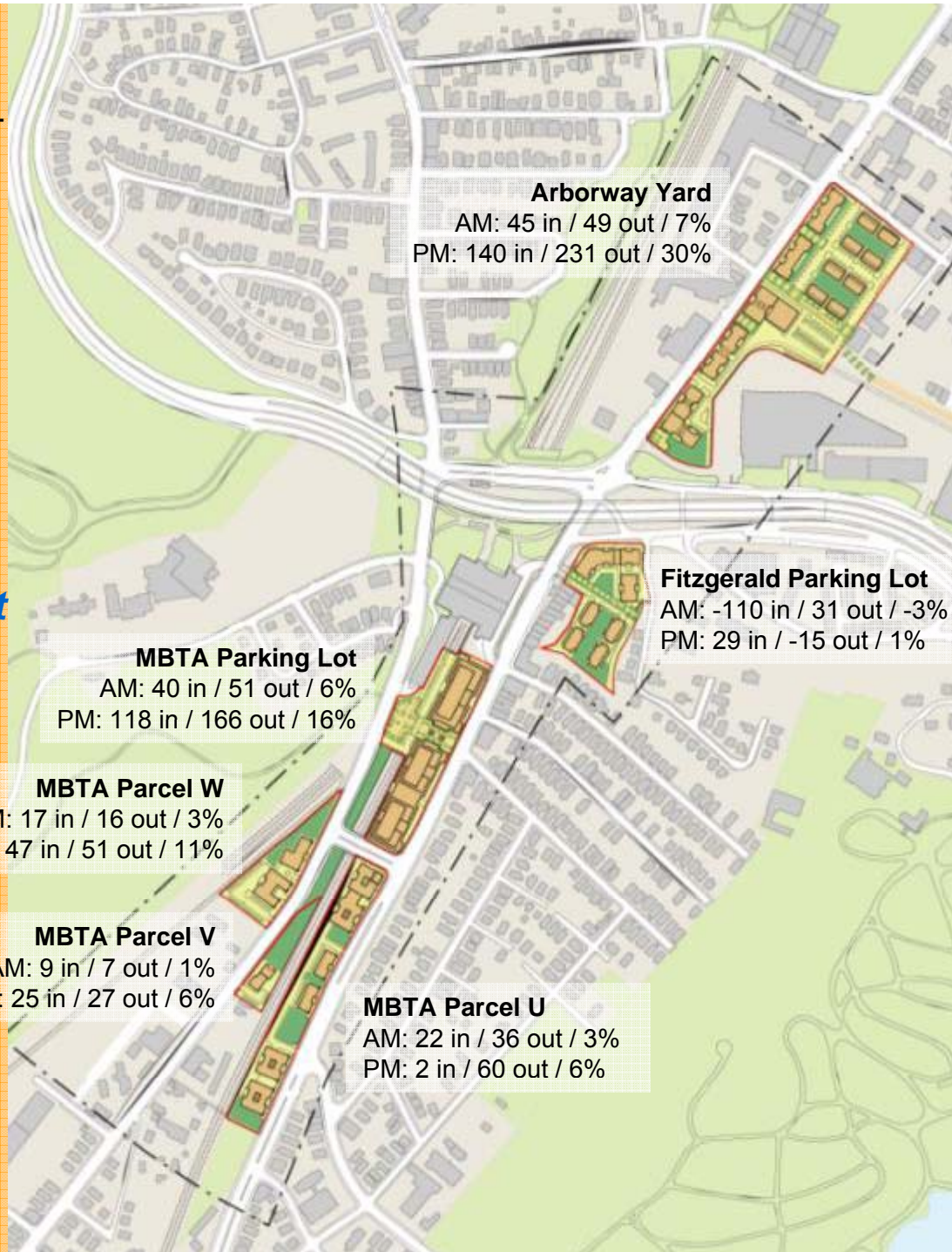
FOREST HILLS IMPROVEMENT INITIATIVES

Findings

New Development



CITY OF BOSTON
Thomas M. Menino,
Mayor



Transportation Impacts of New Development

- % = new trips relative to existing auto counts
- Approx. 50% of all new trips are by walking or biking

FOREST HILLS IMPROVEMENT INITIATIVES

Findings

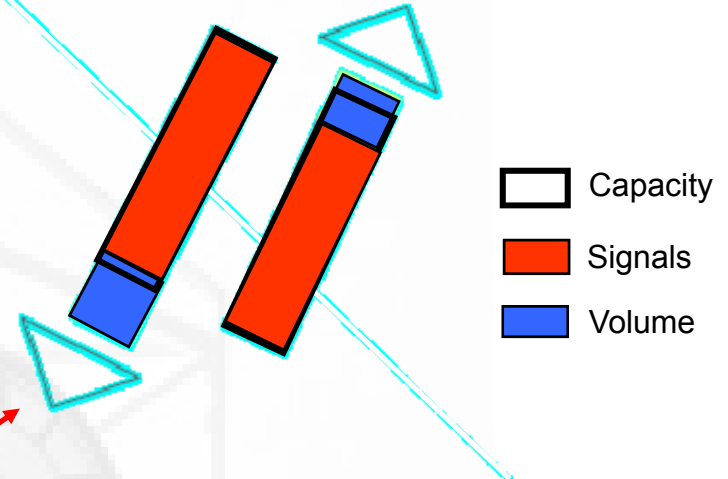
Signals



CITY OF BOSTON
Thomas M. Menino,
Mayor



Signal Timing At project outset



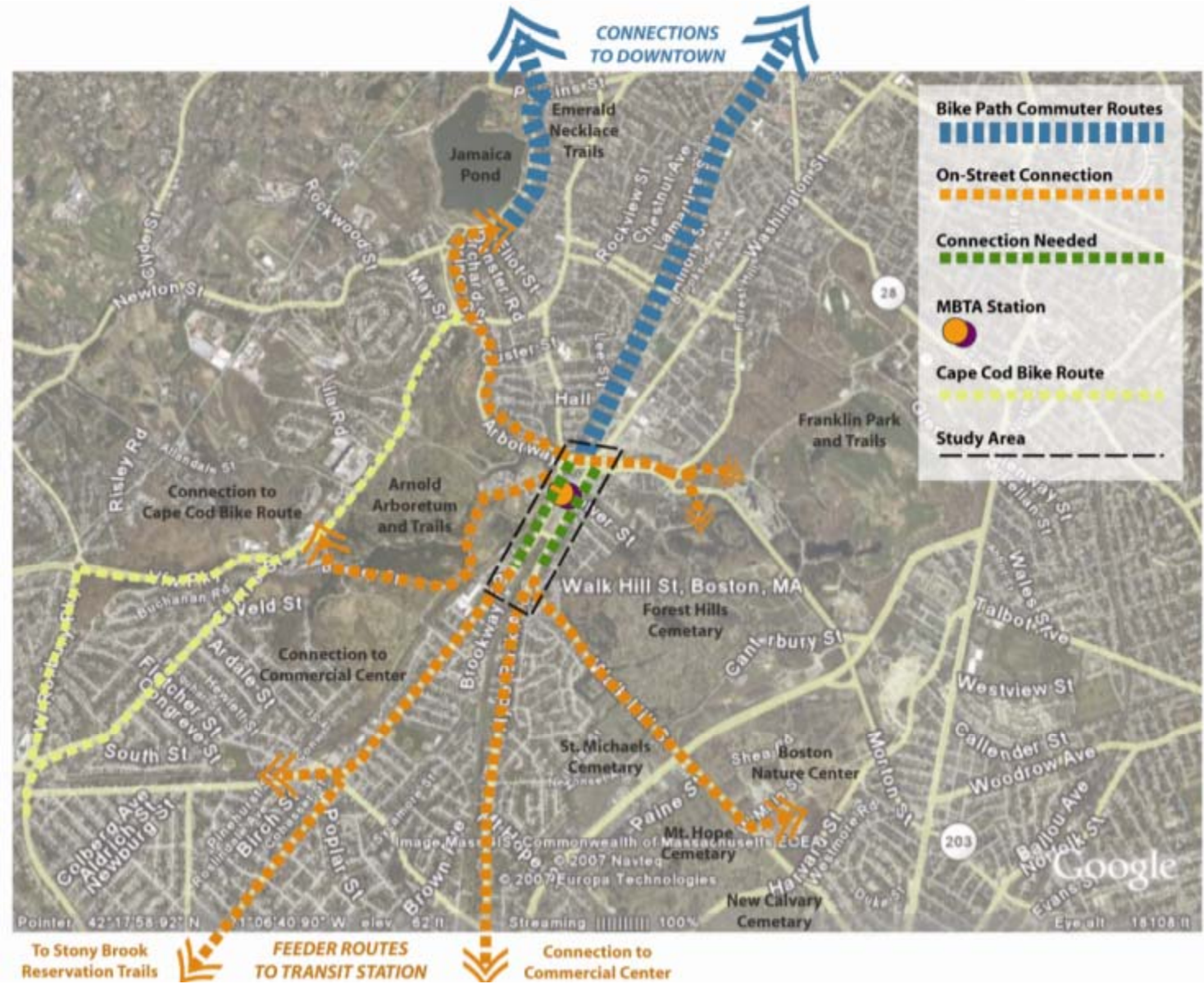
- Chance of Red encountering a red signal is 88%
- Leads to driver frustration and erratic pedestrian crossing behavior

**FOREST HILLS
IMPROVEMENT
INITIATIVES**

Findings

Bike network

Existing Bicycle Network



CITY OF BOSTON
Thomas M. Menino,
Mayor



TRANSPORTATION ACTION PLAN

Short Term Recommendations

- Signal Timing and Coordination
 - Underway by BTB
- Pavement Markings
- Signage
 - Regulatory, Way Finding
- Crosswalks
- Bicycles
- Cab Stands/Bus Drop-off

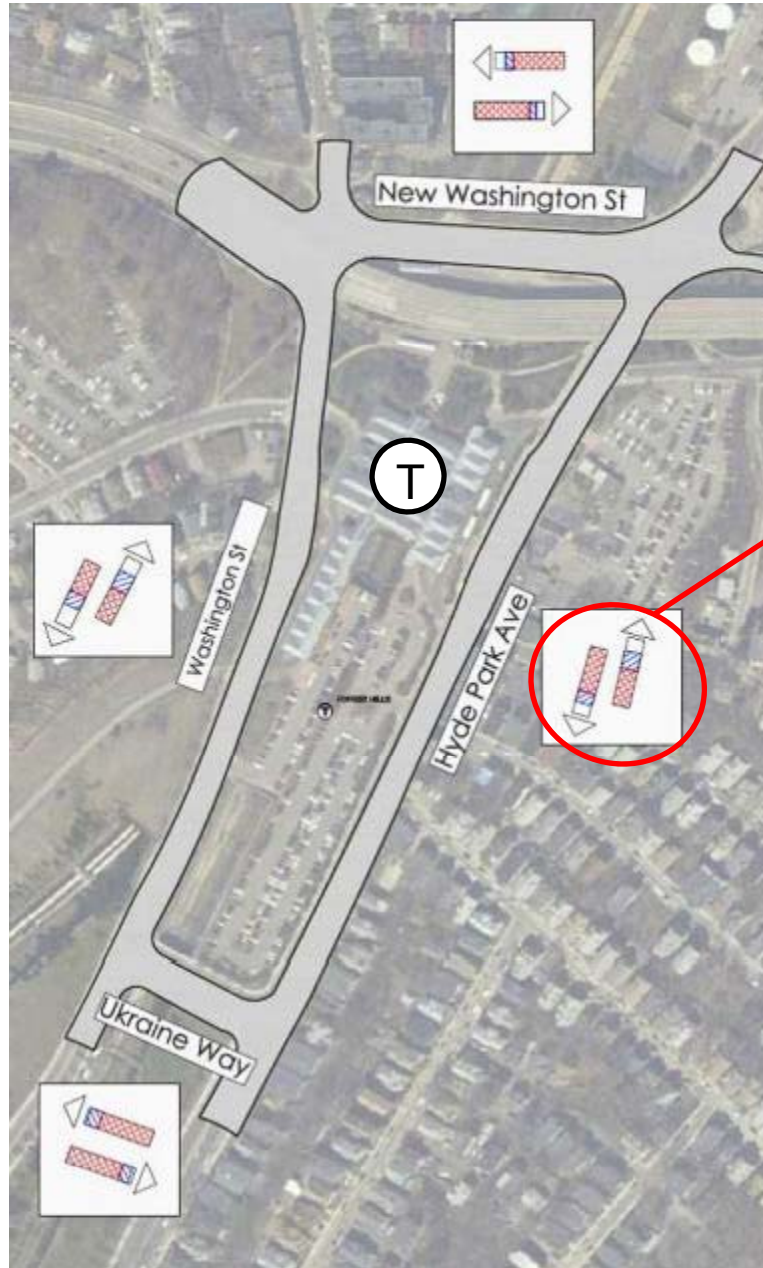
FOREST HILLS IMPROVEMENT INITIATIVES

Findings

Signal Coordination

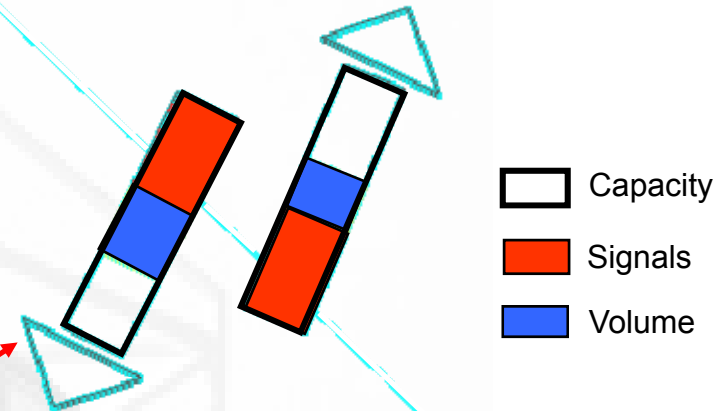


CITY OF BOSTON
Thomas M. Menino,
Mayor



Signal Timing

COORDINATED SIGNALS – Impact on efficiency

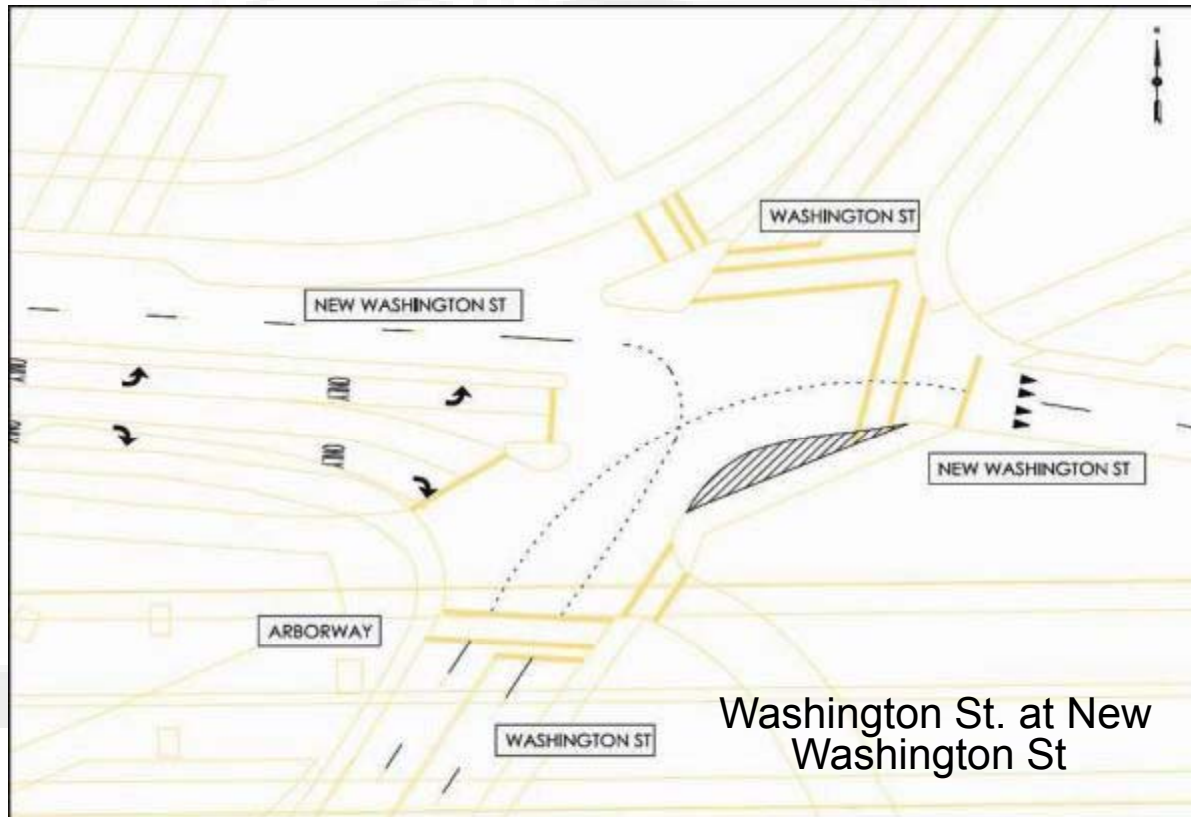


Two Lanes in each direction

- Reduce time spent in the corridor
- Improved driver and pedestrian behavior
- **Chance of Red is reduced from 88% to less than 50%**
- Capacity Surplus is 34%

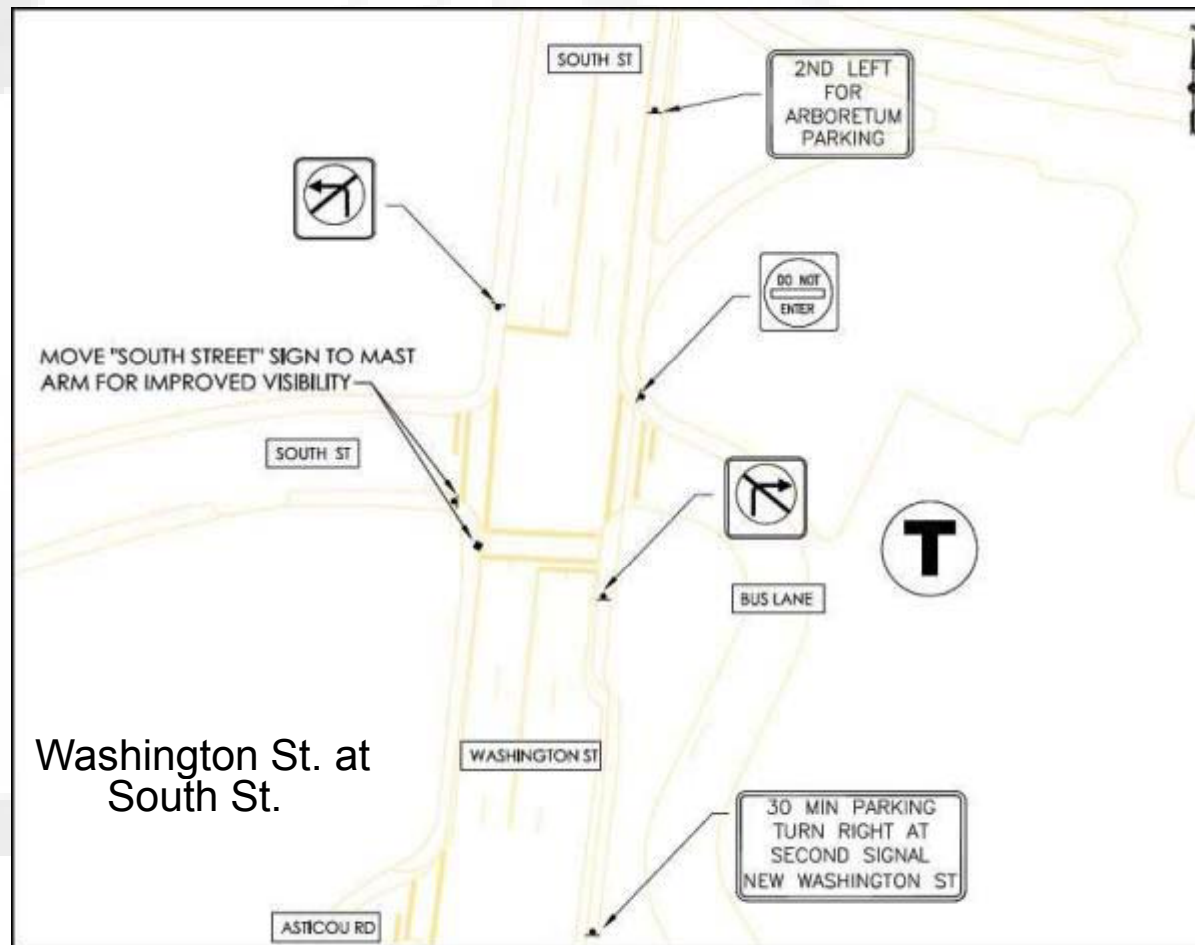
Pavement Markings

- Lane line extensions should be added
 - Provide guidance for left-turning drivers
- Maintain existing pavement markings
- Additional legends (e.g., RIGHT TURN ONLY) should be added to address extended queues.
- Gore areas should be added
 - Provide guidance to drivers
 - Reduce overall dimensions to the intersection to guide turning drivers.



Signage

- “Do Not Enter” and “No Left/Right Turn” in advance of the intersection
 - inform drivers of the turning restrictions
- Way-finding signs
 - direct drivers to available parking on New Washington St.
- Signs should be relocated for improved visibility.



Crosswalks

- Maintain all crosswalks
 - All should be similar to other crosswalks (e.g., ladder type) surrounding Forest Hills.



Bicycles

Add bike racks near existing businesses

Explore opportunities to provide safe bicycle storage at MBTA Station, consider:

- Collaborate with Station Businesses e.g. “Coffee, Juice and Bike Storage”
- Bike Lockers / “Bicycle Station”



Provide
Safe
Storage for
Bicycles



Cab Stands

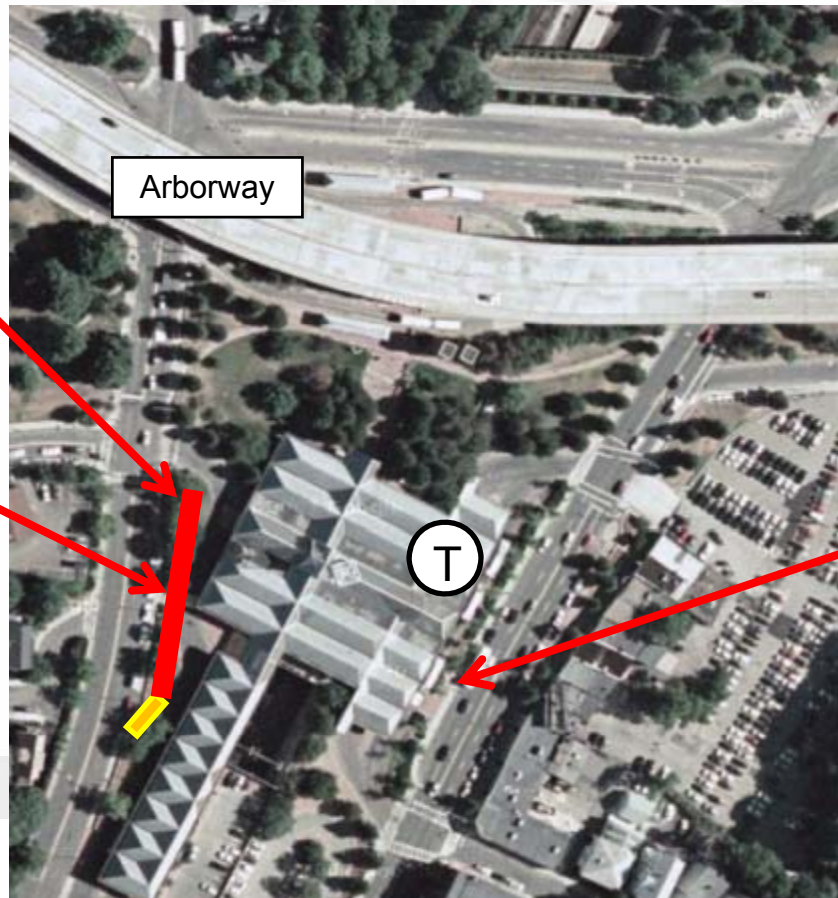
Adequately sized cab stands exist

- Provide signage in station to all cab stands.
- Cab stands should be enforced regularly.
- Cab stand on Washington St should be moved behind the pick-up/drop-off lane

Enforce Cab Stand Regulations

Move Cab Stand Behind Pick-Up/Drop-Off

Encourage Cabbies to use East side of the Station



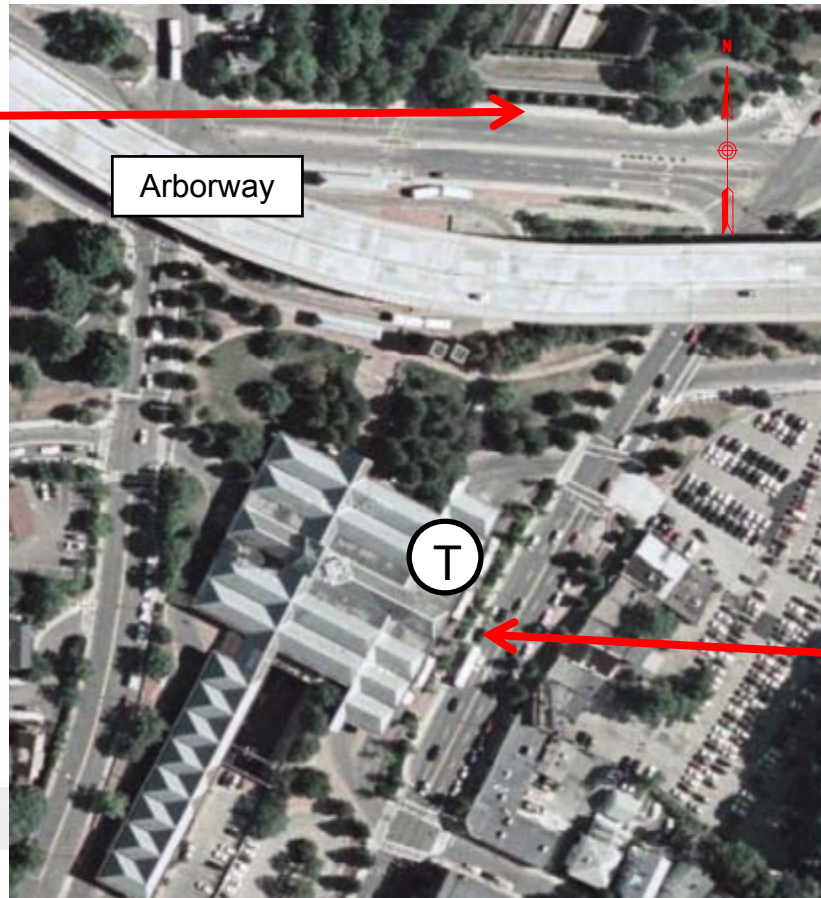
School Busses

Busses should pull into curb recesses while picking up students.

- Use the existing pick-up drop-off areas on Hyde Park Ave.
- Share the underutilized cab stand on New Washington St.

Transportation Action Plan

Share cab
stand with
busses.



Enforce
pick-up
drop-off use.



LONG TERM RECOMMENDATIONS

- Traffic Circulation
- Intersection Geometry
- Bicycle Improvements - Paths & Lanes
- Casey Overpass
- Pedestrian Accessibility
- Streetscape



CITY OF BOSTON

Thomas M. Menino,
Mayor

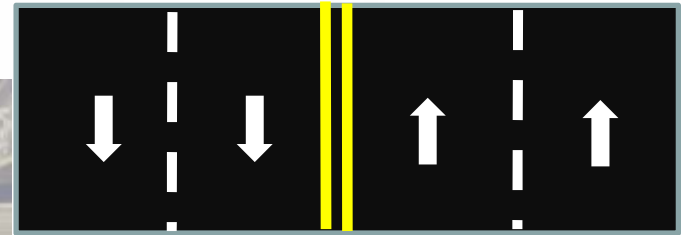
**FOREST
HILLS
IMPROVEMENT
INITIATIVES**

**Transportation
Action
Plan**

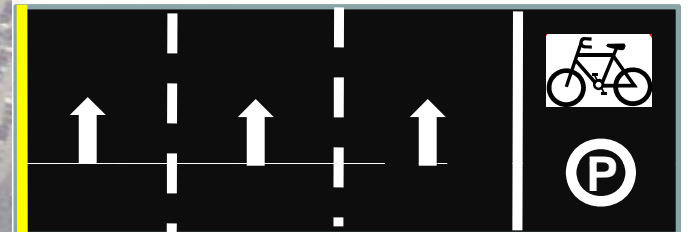


CITY OF BOSTON
Thomas M. Menino,
Mayor

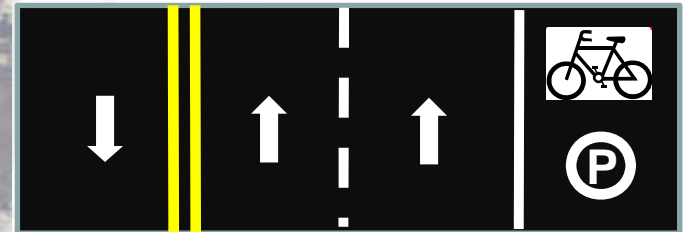
LONG-TERM IMPROVEMENTS: Traffic Circulation



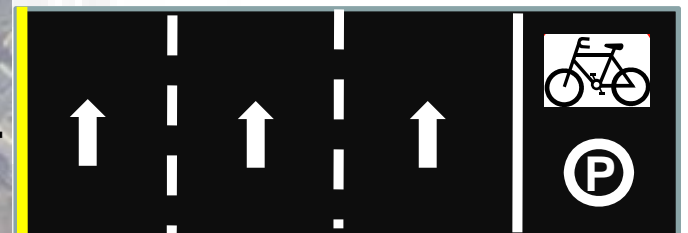
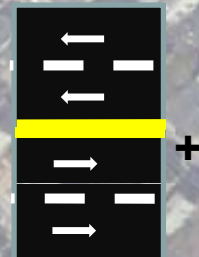
Existing conditions



One-way traffic (cw & ccw)



Three lanes, two-way traffic



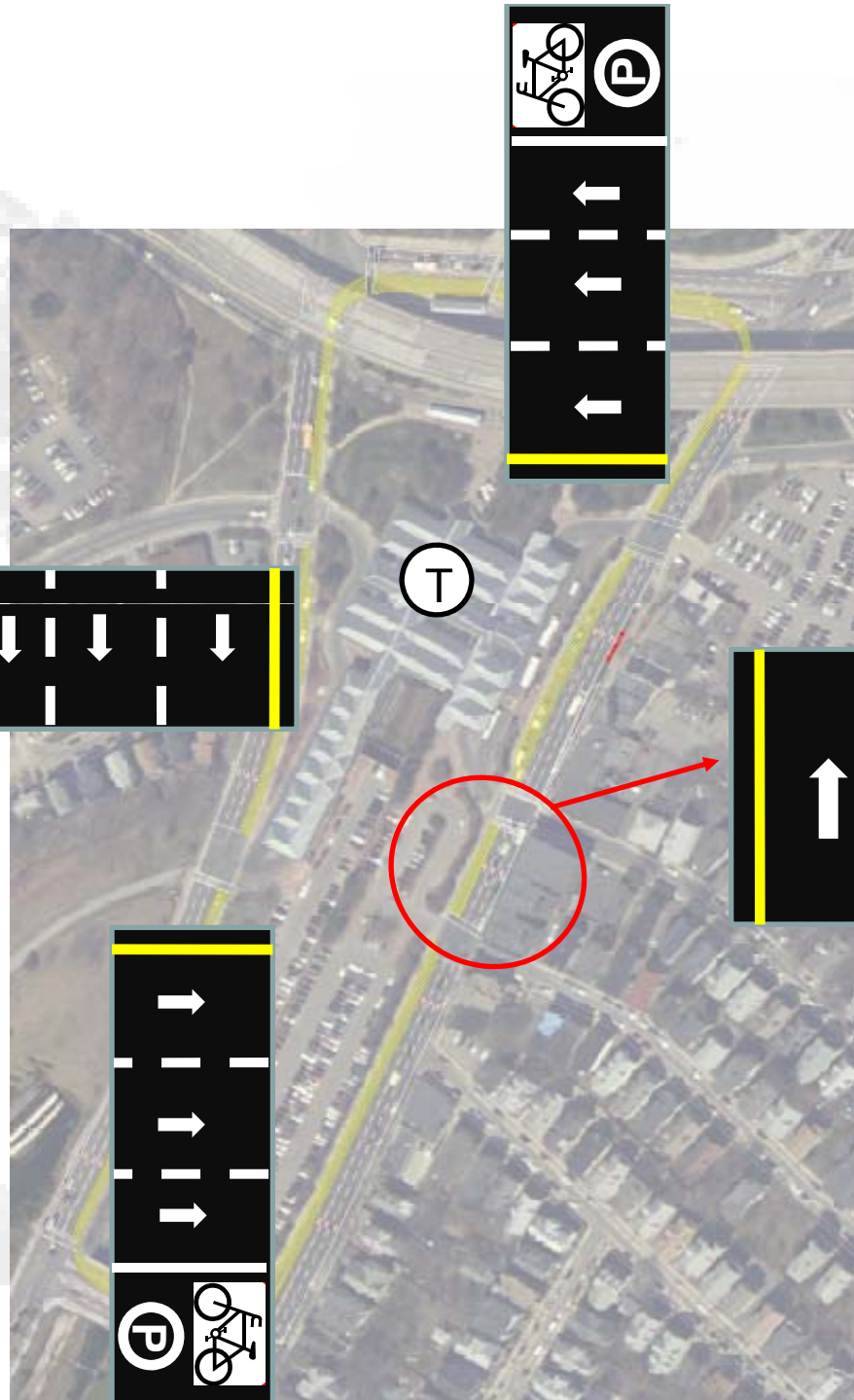
Combination of lane configurations

FOREST HILLS IMPROVEMENT INITIATIVES

Transportation Action Plan



CITY OF BOSTON
Thomas M. Menino,
Mayor



LONG-TERM IMPROVEMENTS

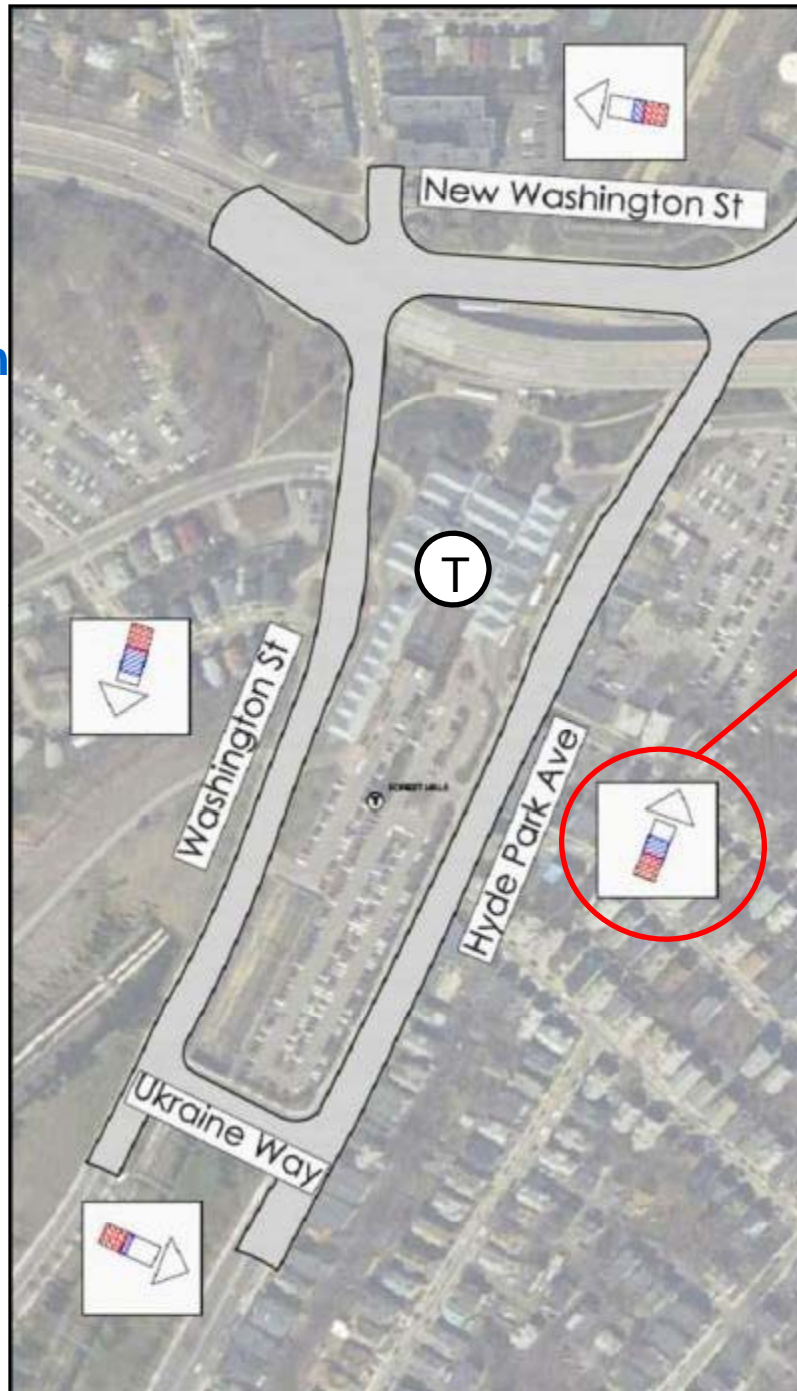
**One-way circulation
Entire loop – Counter
Clockwise**




FOREST HILLS IMPROVEMENT INITIATIVES

Transportation Action Plan



CITY OF BOSTON
Thomas M. Menino,
Mayor



-  Capacity
-  Signals
-  Volume

Three lanes in one direction

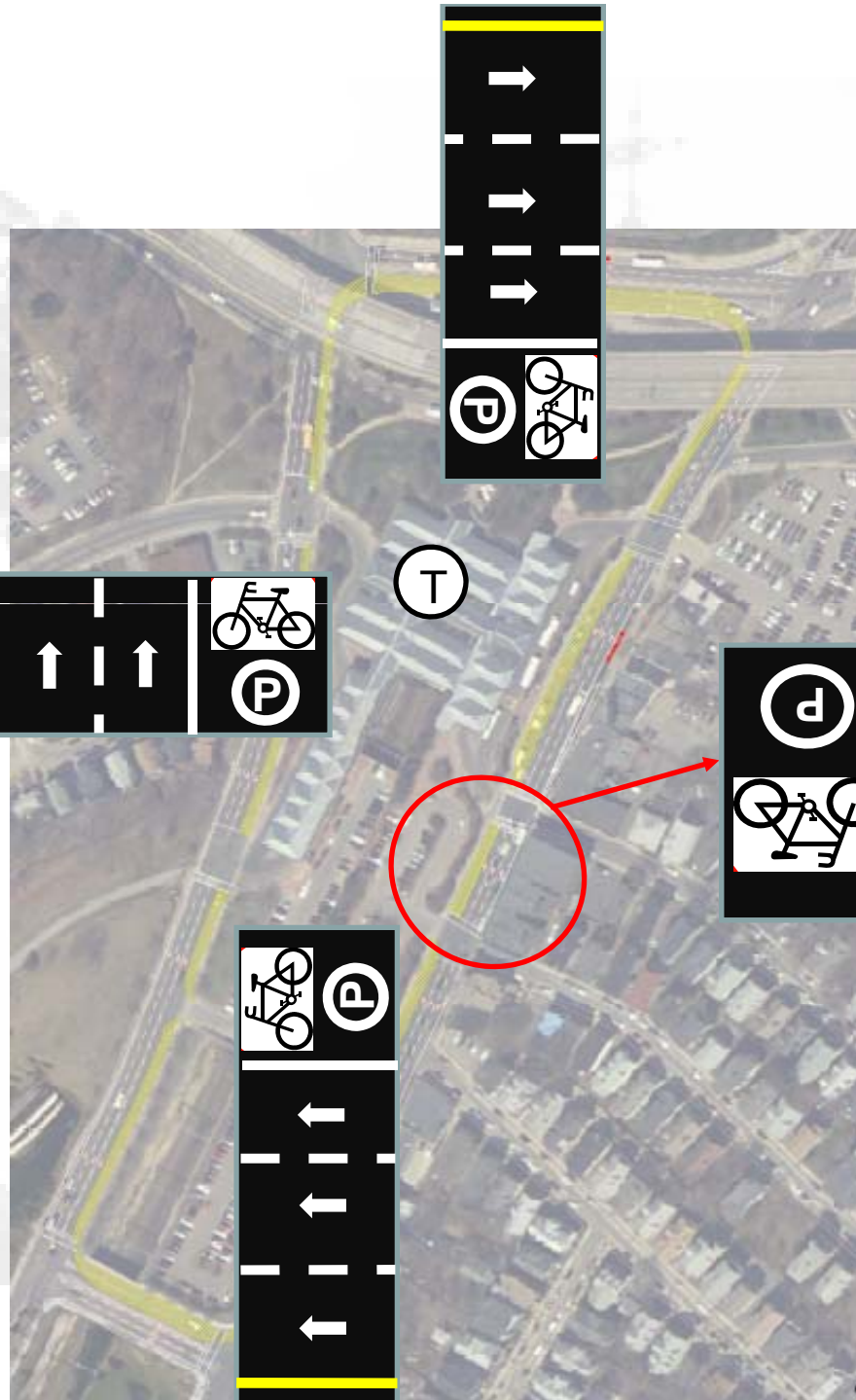
**ONE-WAY LOOP –
Impact on efficiency**

**FOREST
HILLS
IMPROVEMENT
INITIATIVES**

**Transportation
Action
Plan**



CITY OF BOSTON
Thomas M. Menino,
Mayor

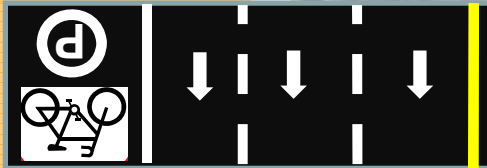


**LONG-TERM
IMPROVEMENTS**

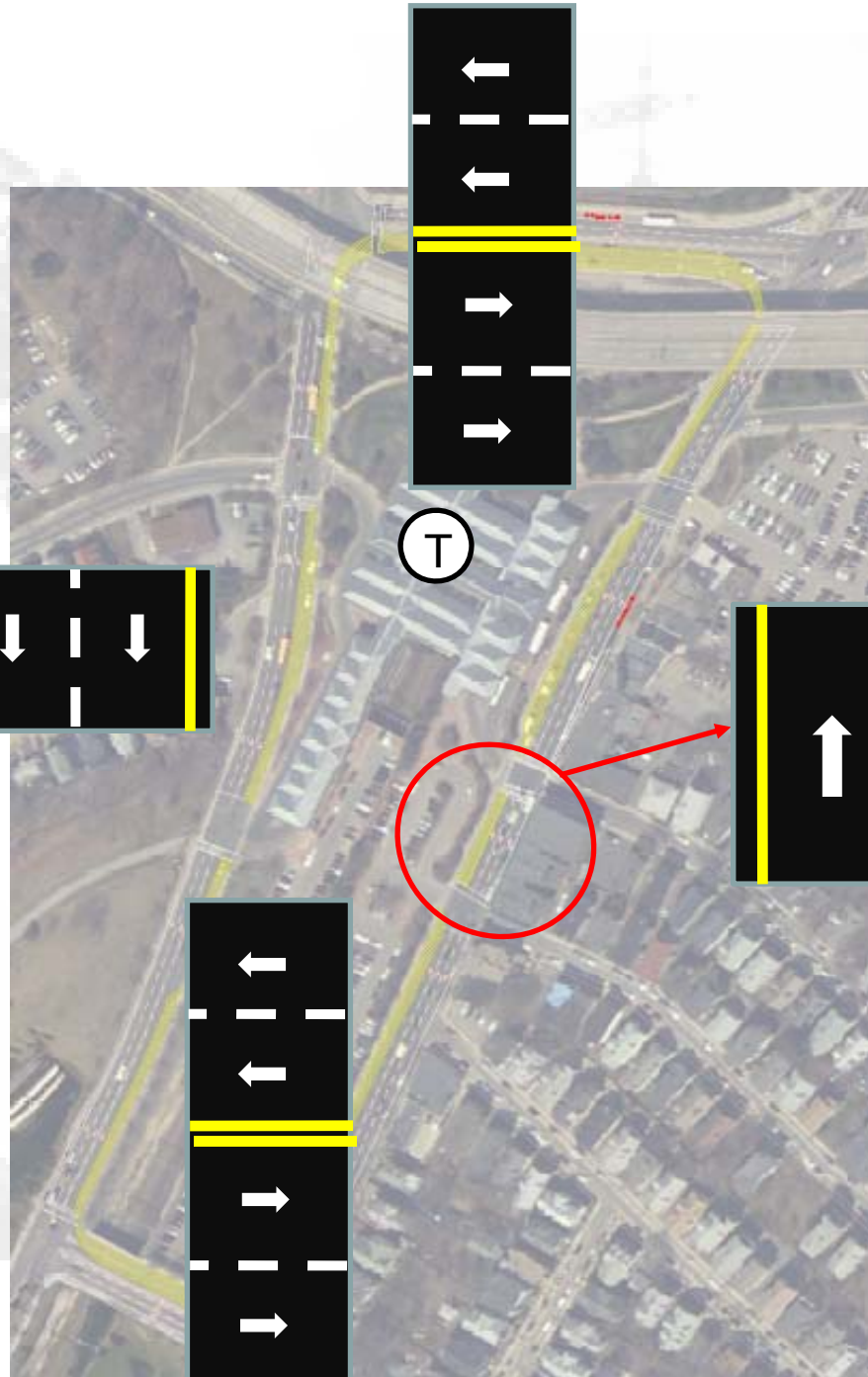
**One-way circulation
Entire loop -
Clockwise**

**FOREST
HILLS
IMPROVEMENT
INITIATIVES**

**Transportation
Action
Plan**



CITY OF BOSTON
Thomas M. Menino,
Mayor

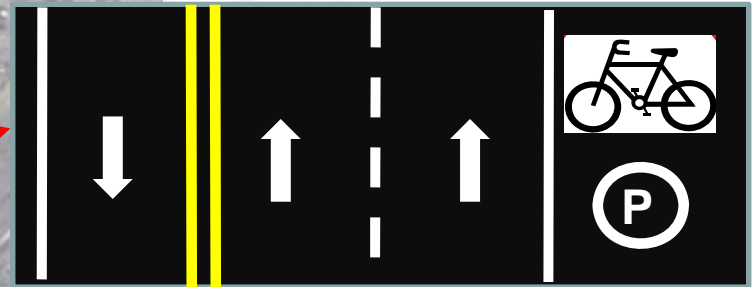
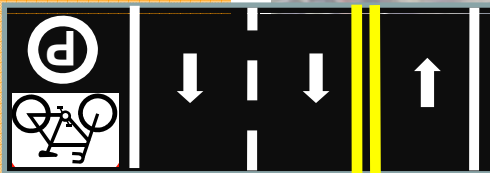


**LONG-TERM
IMPROVEMENTS**

**Partial One-way
Circulation**

**FOREST
HILLS
IMPROVEMENT
INITIATIVES**

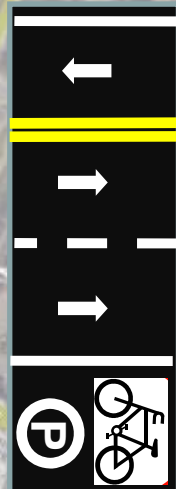
**Transportation
Action
Plan**



**LONG-TERM
IMPROVEMENTS**



CITY OF BOSTON
Thomas M. Menino,
Mayor



**Three lanes in one
direction - split**

LONG-TERM IMPROVEMENTS: Traffic Circulation Summary

Lane Reduction Strategy:

- Lane available for additional usage
- Bike, Pedestrian, and Parking Improvements

Concerns for Future Study:

- MBTA Bus Operation
- Travel Times
- Convenience
- Capacity



CITY OF BOSTON

Thomas M. Menino,
Mayor

**FOREST
HILLS
IMPROVEMENT
INITIATIVES**

**Transportation
Action
Plan**

Complete Streets



CITY OF BOSTON
Thomas M. Menino,
Mayor

LONG-TERM IMPROVEMENTS: Traffic Circulation - Roadway Widths



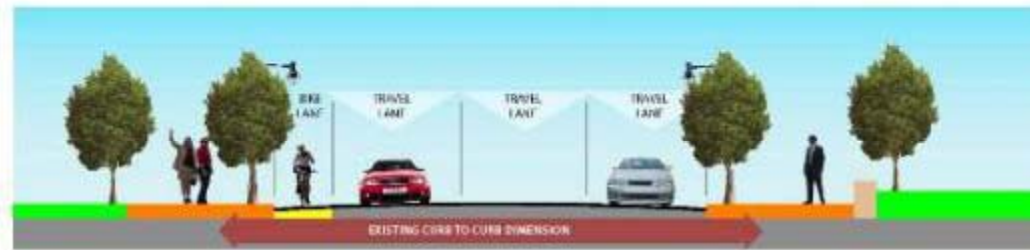
Existing

WASHINGTON STREET

Three Lane Options: Parking, Bikes on-street, bikes off-street



**Parking and
Bike Lane**



**Wide
Sidewalk and
Bike Lane**



**Off-Street
Bike Path**

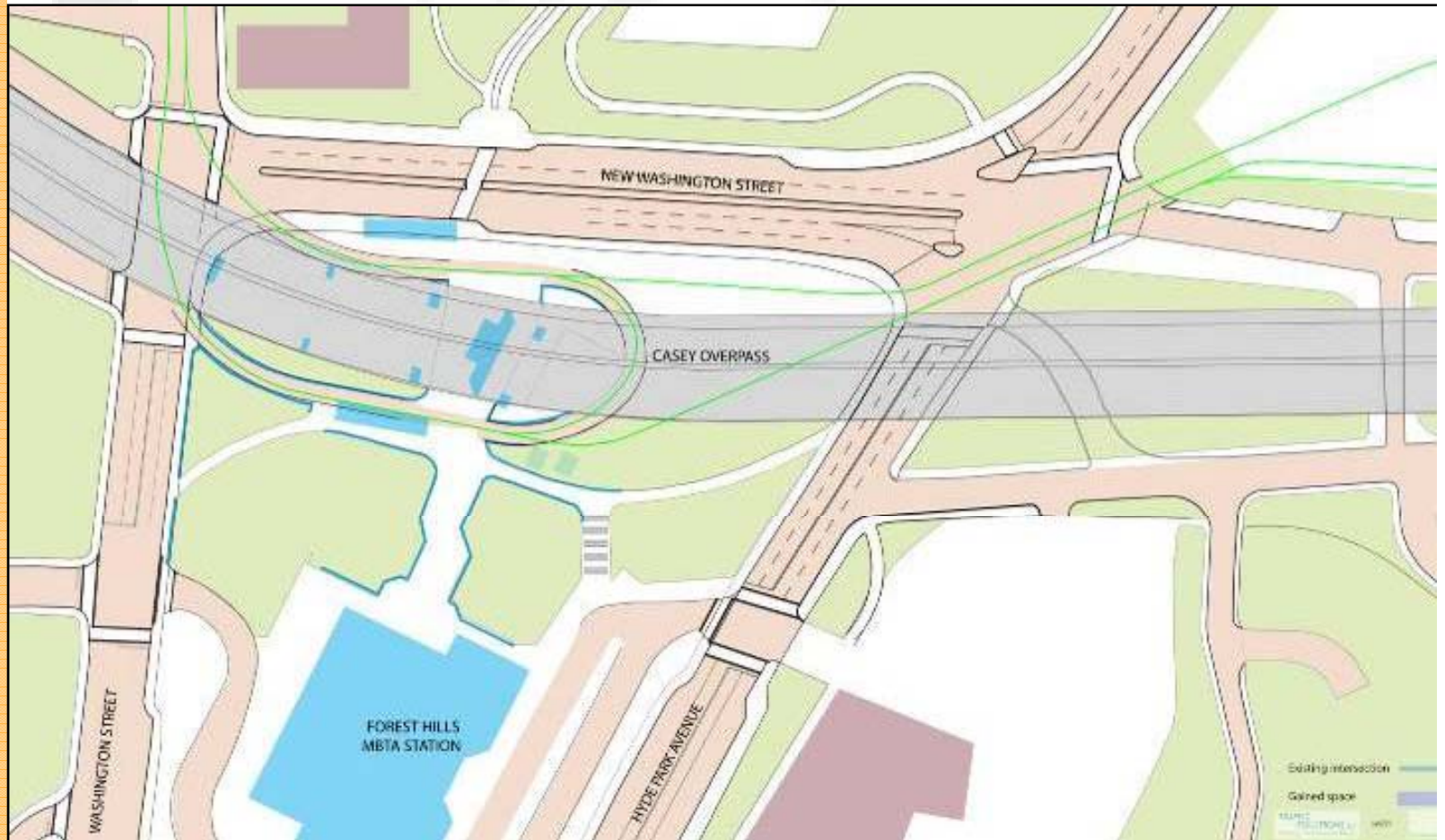
**FOREST
HILLS
IMPROVEMENT
INITIATIVES**

**Transportation
Action
Plan**

LONG-TERM IMPROVEMENTS: Intersection Geometry

WASHINGTON AT NEW WASHINGTON

Existing Conditions



CITY OF BOSTON

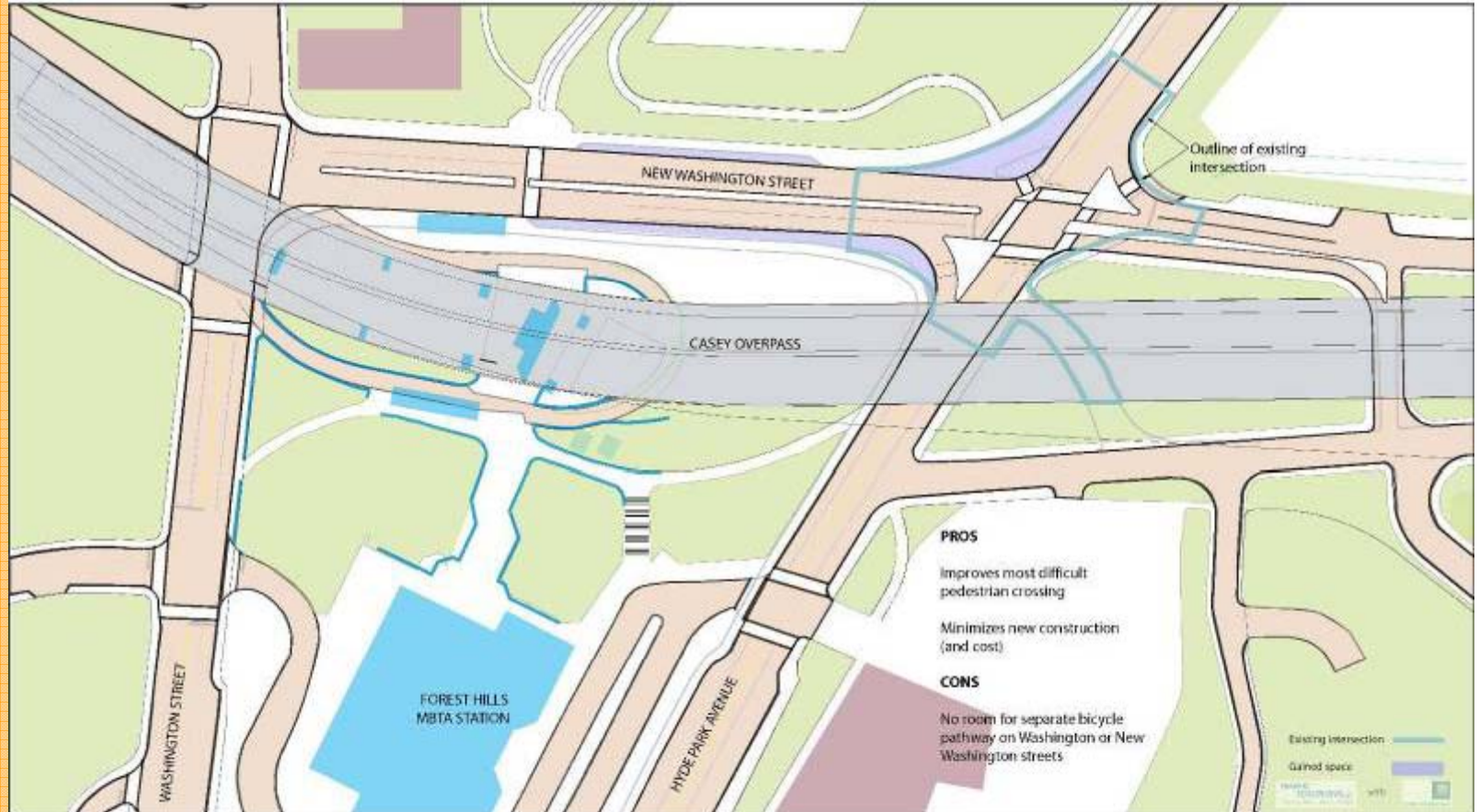
Thomas M. Menino,
Mayor

**FOREST
HILLS
IMPROVEMENT
INITIATIVES**

**Transportation
Action
Plan**

LONG-TERM IMPROVEMENTS: Intersection Geometry

WASHINGTON AT NEW WASHINGTON Two-way traffic – current alignment, reduced intersection

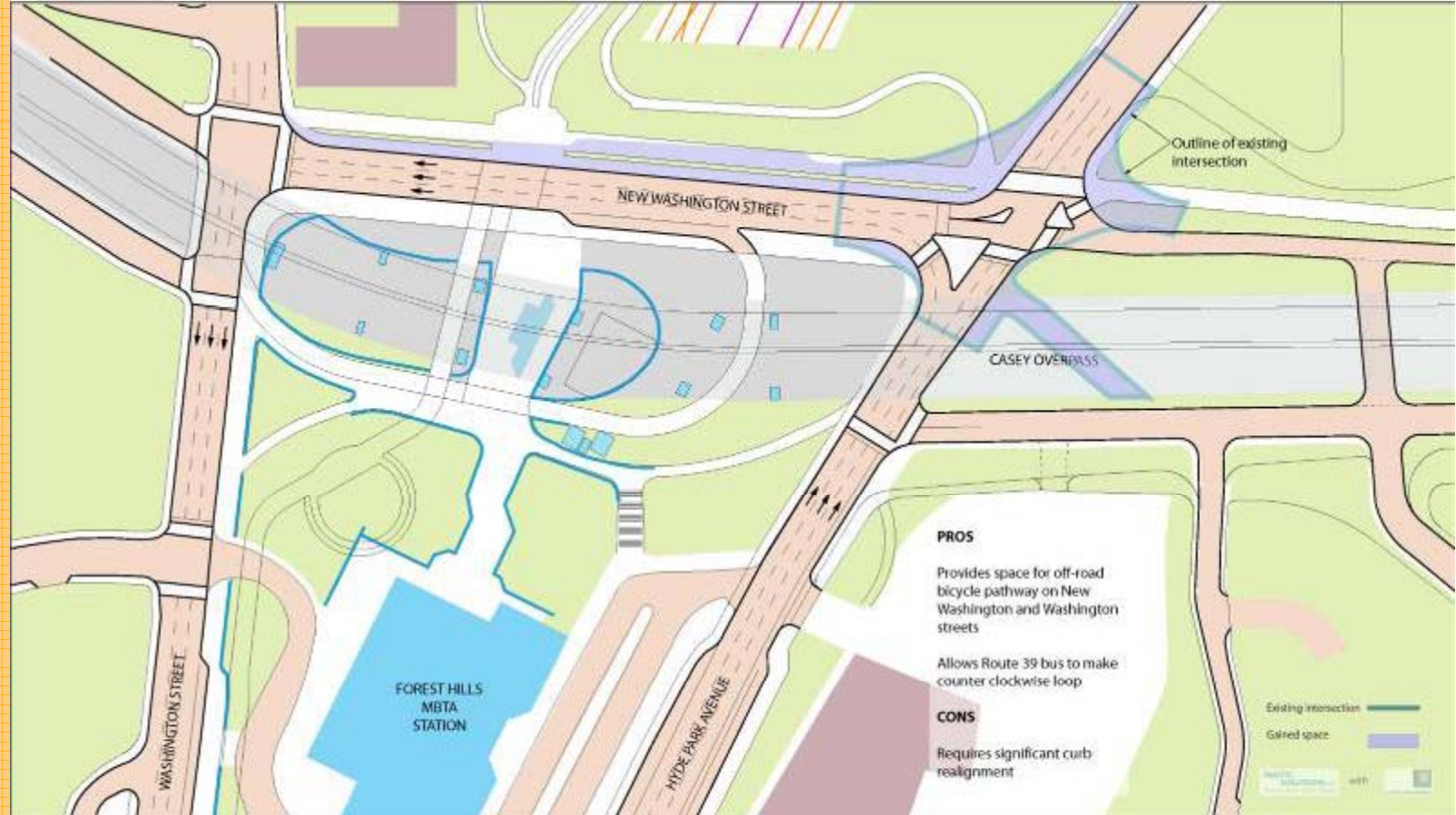


CITY OF BOSTON
Thomas M. Menino,
Mayor

LONG-TERM IMPROVEMENTS: Intersection Geometry

WASHINGTON AT NEW WASHINGTON

One-way traffic – revised alignment



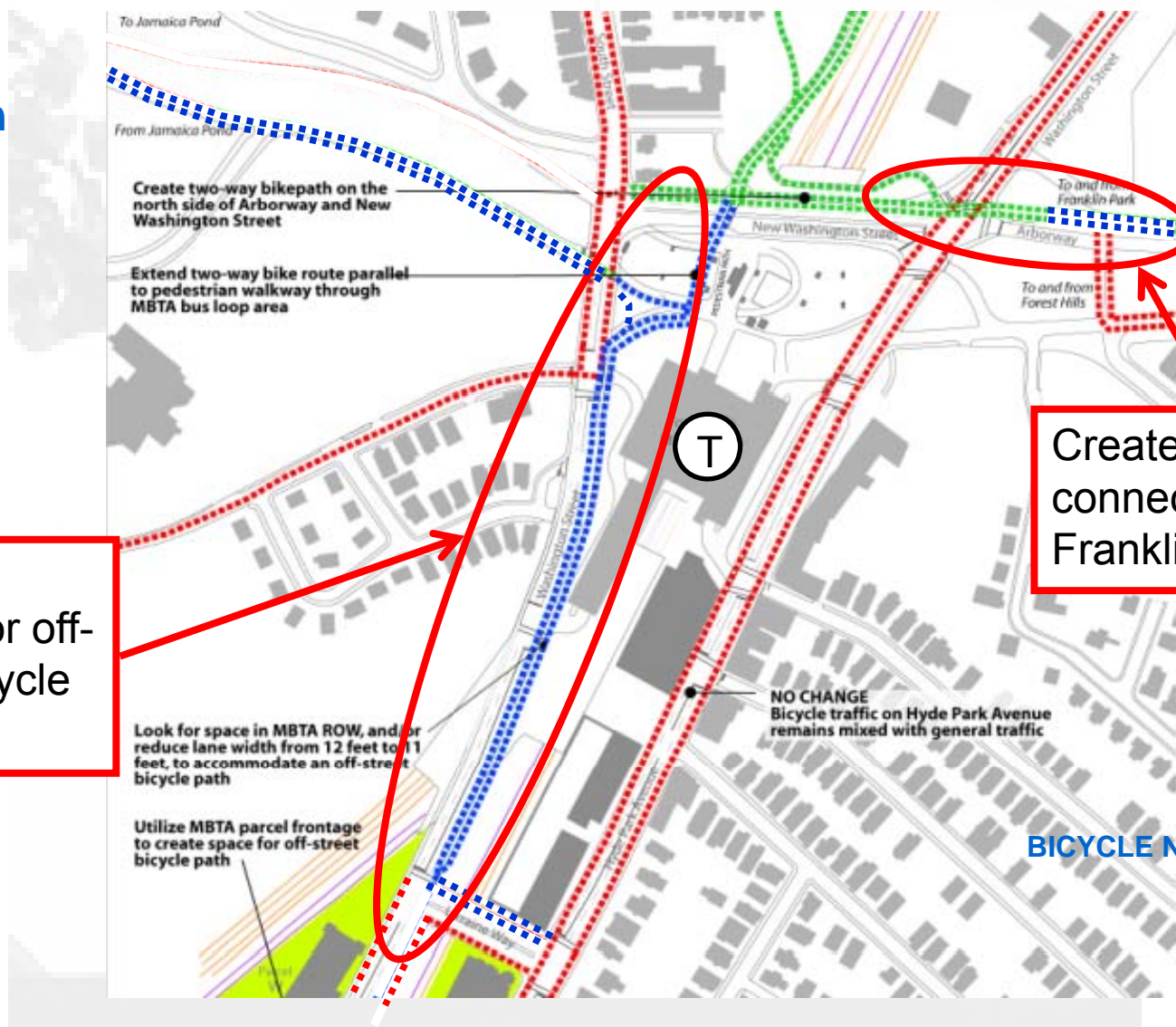
CITY OF BOSTON
Thomas M. Menino,
Mayor

FOREST HILLS IMPROVEMENT INITIATIVES

Transportation Action Plan

Add links to strengthen the city-wide bicycle network

LONG-TERM IMPROVEMENTS: Bike Path



Explore options for off-street bicycle link

Create off-street connection to Franklin Park



CITY OF BOSTON
Thomas M. Menino,
Mayor

FOREST HILLS IMPROVEMENT INITIATIVES

LONG-TERM IMPROVEMENTS: Casey Overpass

View toward station

Brighten underside of viaduct at plaza area with architectural treatment and/or lighting

Explore options for treatment of supports, including art



Create separate path for bicyclists

Replace brick surface with high-quality concrete at path of highest volume

Transportation Action Plan



CITY OF BOSTON
Thomas M. Menino,
Mayor

**FOREST
HILLS
IMPROVEMENT
INITIATIVES**

LONG-TERM IMPROVEMENTS: Station Entrance



**Transportation
Action
Plan**



CITY OF BOSTON
Thomas M. Menino,
Mayor



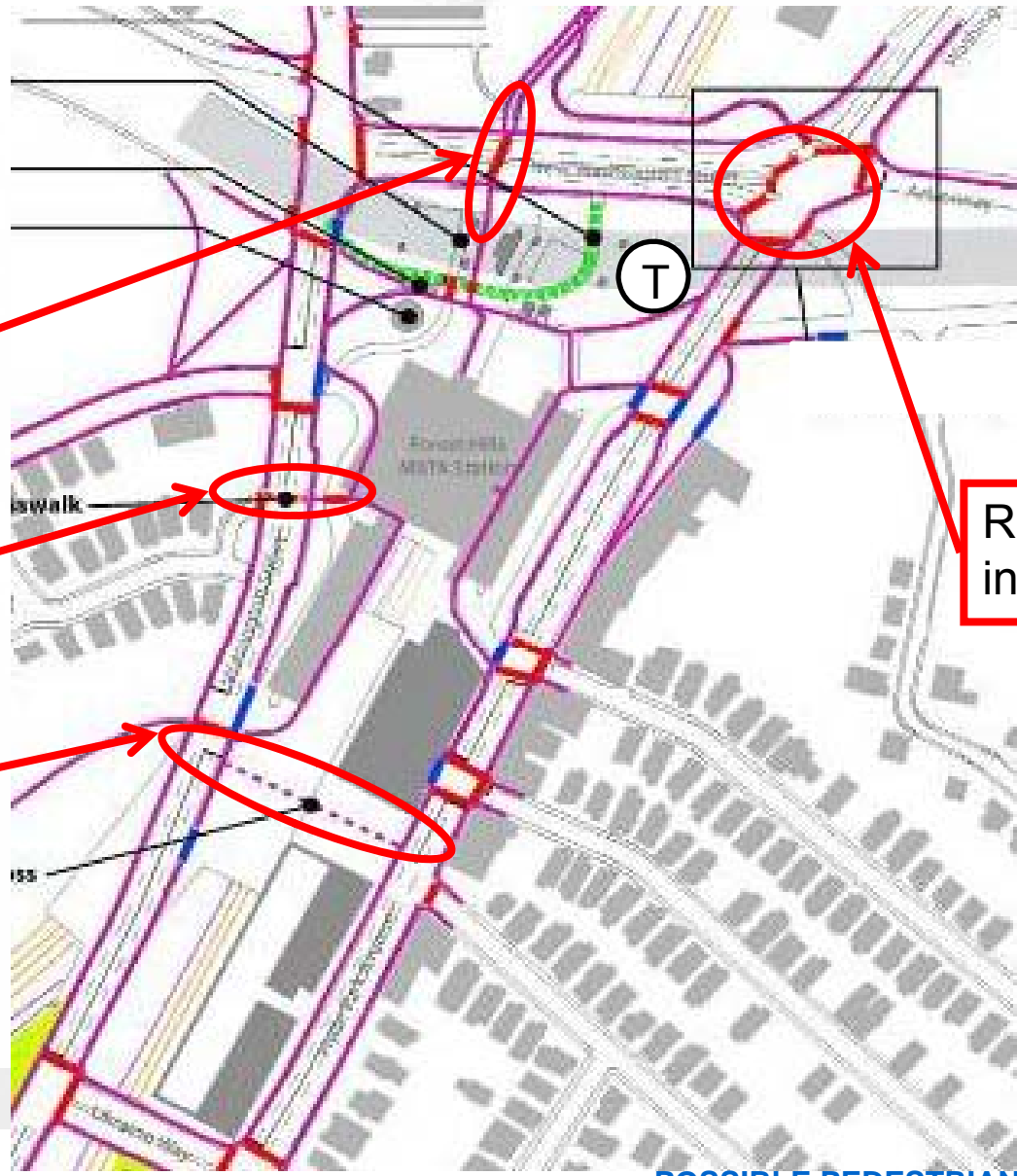
**FOREST HILLS
IMPROVEMENT
INITIATIVES
Transportation
Action
Plan**

LONG-TERM IMPROVEMENTS: Pedestrian Circulation

Separate pedestrians and bicyclists

Potential new crosswalk

Mid-parcel pedestrian connection



Reconfigure intersection



CITY OF BOSTON
Thomas M. Menino,
Mayor

POSSIBLE PEDESTRIAN IMPROVEMENTS

**FOREST
HILLS
IMPROVEMENT
INITIATIVES**

LONG-TERM IMPROVEMENTS: Streetscape Palate Elements

Primary

Secondary



Street lights

Street trees

Signs

Furniture

Sidewalk paving

Crosswalks

Roadway paving

Art



CITY OF BOSTON
Thomas M. Menino,
Mayor

**FOREST
HILLS
IMPROVEMENT
INITIATIVES**

LONG-TERM IMPROVEMENTS: Lighting



Convert light-colored shoebox fixtures to dark, which are the dominant type of fixture

Maintain pendant fixtures along Hyde Park Avenue

Transportation Action Plan



CITY OF BOSTON

Thomas M. Menino,
Mayor

**FOREST
HILLS
IMPROVEMENT
INITIATIVES**

LONG-TERM IMPROVEMENTS: Street Furniture



- Select to accompany primary elements (private improvements of the public way)
- Artist may design as alternative



**FOREST
HILLS
IMPROVEMENT
INITIATIVES**

*It's called
Forest Hills
for a reason*

**Transportation
Action
Plan**



CITY OF BOSTON

Thomas M. Menino,
Mayor

SHORT-TERM IMPROVEMENTS: Street Trees



Mature street trees reflect the abundant vegetation of the area



Replace missing street trees

**FOREST
HILLS
IMPROVEMENT
INITIATIVES**

SHORT/LONG-TERM IMPROVEMENTS: Sidewalks



Replace broken pavement and unit pavers with high-quality concrete sidewalks (SHORT).

Include feature strip where width permits (LONG).

Provide curb bump-outs at pedestrian crossings (LONG).



**Transportation
Action
Plan**



CITY OF BOSTON

Thomas M. Menino,
Mayor

SUMMARY – Short-Term Recommendations

Items in the Transportation Action Plan are relatively straightforward and easily implemented:

- Signal Timing and Coordination
 - Traffic will flow smoothly and safely
 - Pedestrians will understand the traffic pattern and cross accordingly
- Pavement Markings & Signage
 - Improve safety and promote sense of place
- Regional Improvements
 - Station access will improve for all users
 - Prevent vehicles from blocking roadways



CITY OF BOSTON

Thomas M. Menino,
Mayor

SUMMARY – Long-Term Recommendations

Traffic Circulation / Lane conversion improvements are more complex to design and implement – yet create an opportunity for placemaking, integrating:

- Pedestrians & Sidewalks
- Cyclists Paths and Lanes
- On-street Parking
- Green Space

Need to be further analyzed to ensure that impacts are minimized:

- MBTA
- Travel Times
- Convenience



CITY OF BOSTON

Thomas M. Menino,
Mayor

Next Steps – Strategy & Sequence

Funding Strategy – Planning / Engineering

- Finalize Long Term Recommendations to 25% Construction Documents - combined development project contributions and BRA / BTD / State funds

Funding Strategy - Implementation

- Short Term Recommendations – BTD / City of Boston
- Long Term Recommendations – combined development project improvements and City of Boston / State projects

Sequencing

- Planning and Engineering work to follow sale of MBTA parcels development project planning
- Implementation of improvements to coincide with development project construction



CITY OF BOSTON

Thomas M. Menino,
Mayor

**FOREST
HILLS
IMPROVEMENT
INITIATIVES**



CITY OF BOSTON

Thomas M. Menino,
Mayor



**FOREST
HILLS
IMPROVEMENT
INITIATIVES**

Next Steps – Sequence & Strategy

Milestone	Implementation Action
FHII Plan Issued June 2008	<ul style="list-style-type: none"> ▪ Short Term Improvements (TAP) Implemented ▪ Set Scope for next phase District Wide Transportation & Streetscape Improvements Engineering Plan
ITB / Developer Designation	<ul style="list-style-type: none"> ▪ Funding of next phase District Wide Transportation & Streetscape Engineering Plan
Preliminary Project Planning	<ul style="list-style-type: none"> ▪ Begin next phase District Wide Transportation & Streetscape Planning ▪ Finalize Long Term Improvements Recommendations ▪ 25% Construction Documents for Finalized Improvements
Project Permitting & BTDA TAPA	<ul style="list-style-type: none"> ▪ Set District Wide and Project Specific Transportation & Streetscape Implementation Strategy
With Development Project Construction	<ul style="list-style-type: none"> ▪ District wide and project associated Transportation & Streetscape Improvements are implemented with Construction of Development Projects.



CITY OF BOSTON

Thomas M. Menino,
Mayor