Spring Hill Sewer Separation

Community Meeting – Design Overview and Streetscape Workshop

Mayor Joseph A. Curtatone
Councilor Ben Ewen-Campen
Councilor Mark Niedergang

Feb 3rd, 2020

Introduction

What we're covering tonight

- Introductions
- Project overview
- Streetscape improvements
- Breakout activity
  - Central St (Somerville Ave to Highland Ave)
  - Highland Avenue (Central St to McGrath Hwy)
  - School Street (Somerville Ave to Highland Ave)
  - Summer Street (Belmont St to Bow St)
  - Sewer separation and infrastructure upgrades

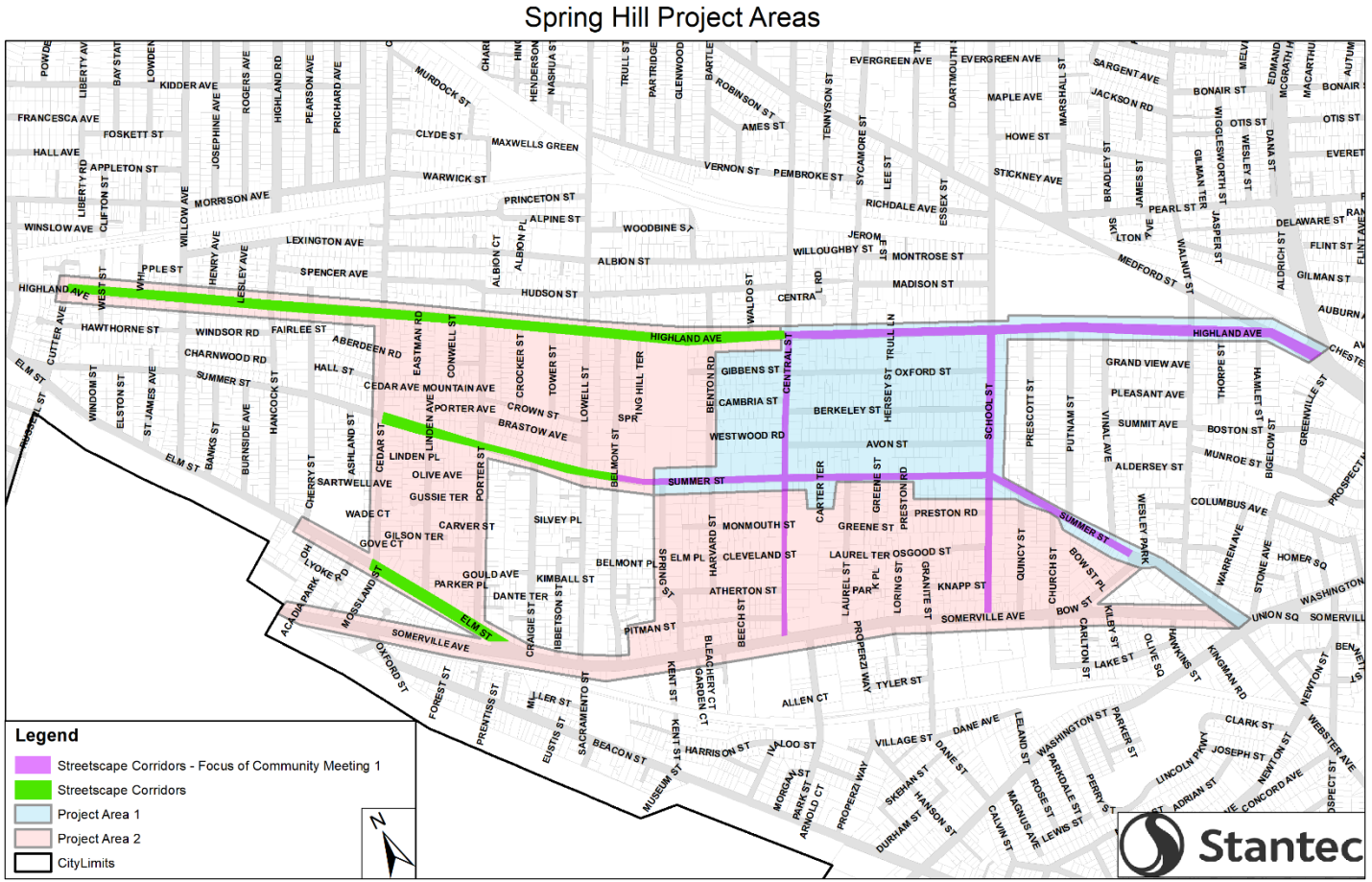
Project Guiding Principles and Goals

SOMERVISION2040

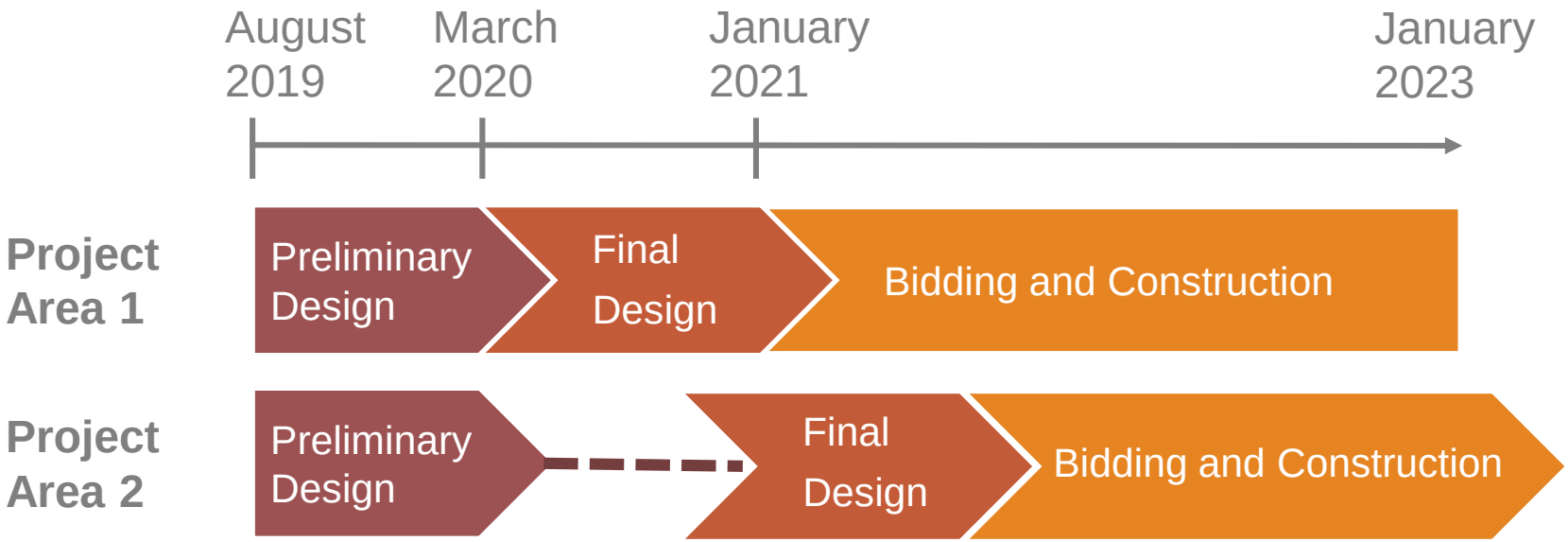
Sustainability • Diversity • Opportunity • Connectivity • Community

VISION ZERO SOMERVILLE

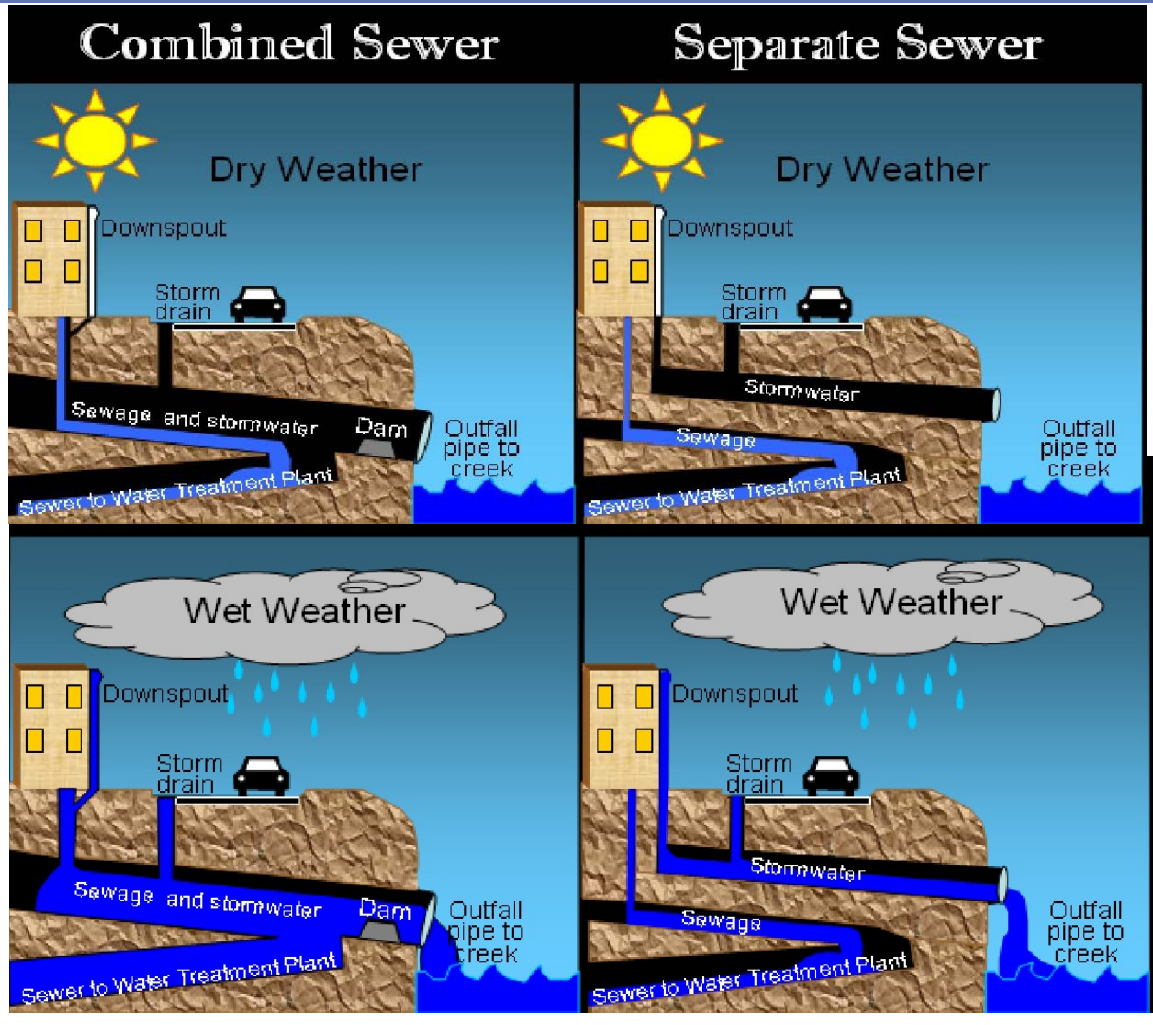
Project Limits



Schedule


August 2019
March 2020
January 2021
January 2023
Project Area 1
Preliminary Design
Final Design
Bidding and Construction
Project Area 2
Preliminary Design
Final Design
Bidding and Construction

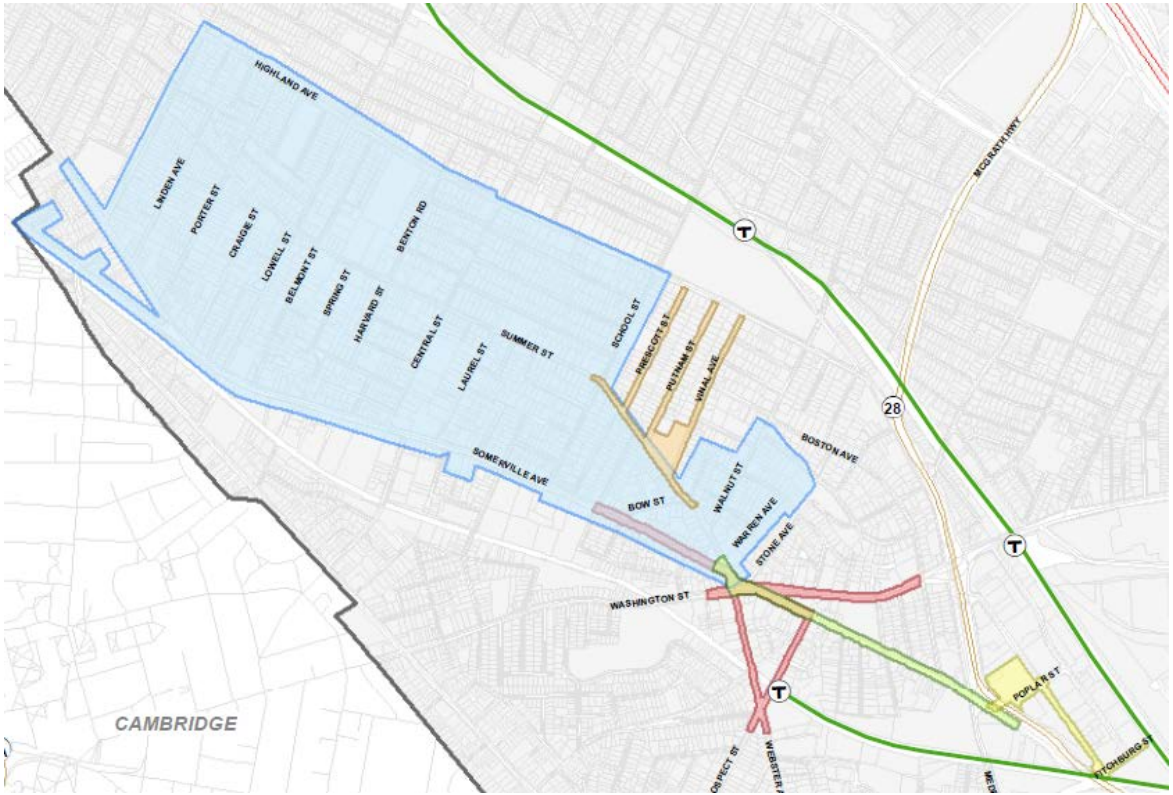
Storm drains, sanitary sewers and combined systems



Solving existing system deficiencies

Requires suite of targeted control measures

Union Square Program locus



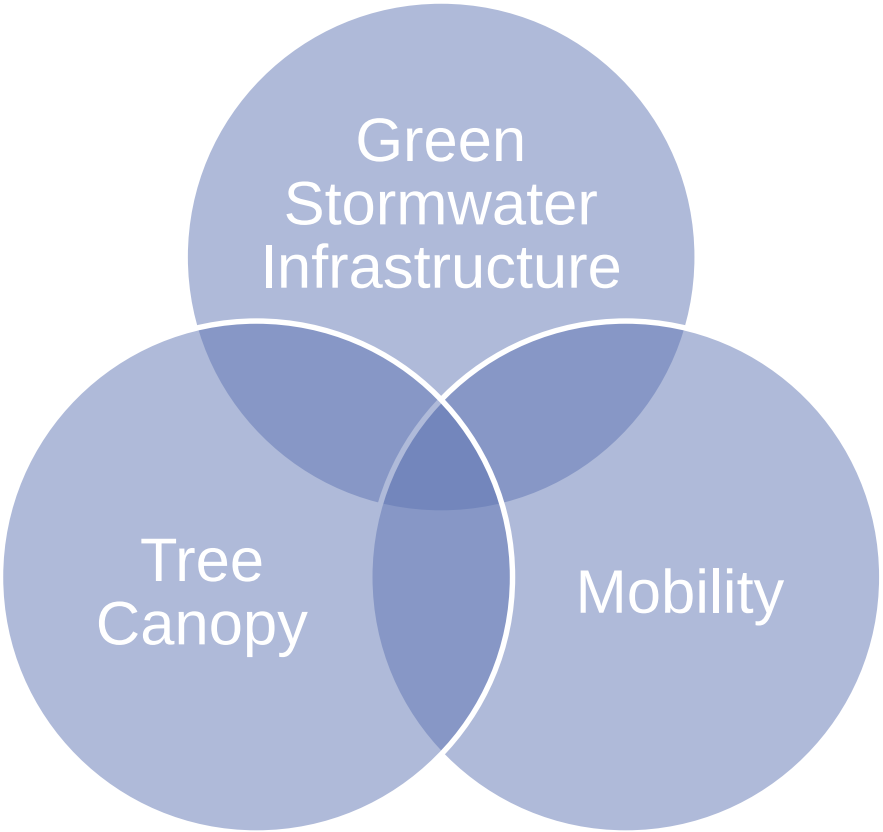
- Somerville Ave Utility & Streetscape Improvements (Multiple Types)
- Nunziato Stormwater Storage (Sewer)
- Poplar Street Stormwater Pump Station (Sewer)
- Spring Hill Sewer Separation (Sewer)
- Union Square Streetscape & Plaza (Streetscape)

Redesigning the sub surface

- Sewer rehabilitation (separation and conveyance benefits)
- Water main upgrades
- Coordination with gas main, other utility upgrades

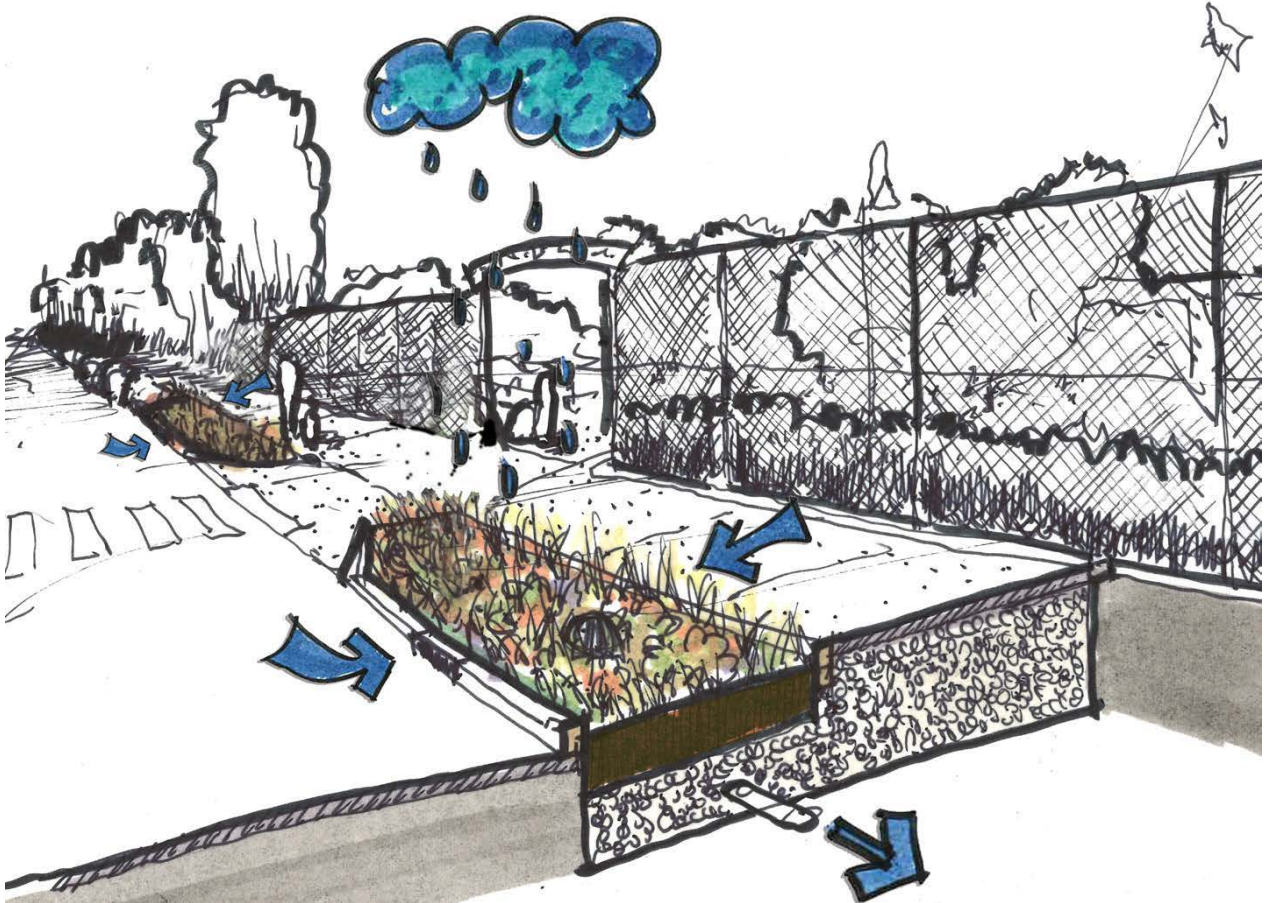
Streetscape Improvements

Streetscape Factors



Green Stormwater Infrastructure (GSI)

- Definition
- City Goals
- Co-benefits



Stormwater Planter

- Benefits
- Design Considerations
- Installation and Cost

City of Portland

Philadelphia Water Department

Bumpout/ Curb Extension

Philadelphia Water Department

Arlington, MA

Cambridge, MA

Tree Canopy

- Urban Forestry guiding principles and goals
  - Proactively manage and expand the City's public tree canopy
  - Harness maximum ecosystem services in order to:
    - reduce and prevent air and water pollution
    - cool temperatures and decrease energy demands
    - support wildlife habitat
    - increase value of businesses and residences
    - contribute to safer streets

Areas of Tree Concentration

SPRING HILL TREE EVALUATION
PHASE 1 AND MOBILITY STREETS - MAP 2

JANUARY 2020

HATCH

Mobility In and Around Spring Hill

High School/
Central Hill

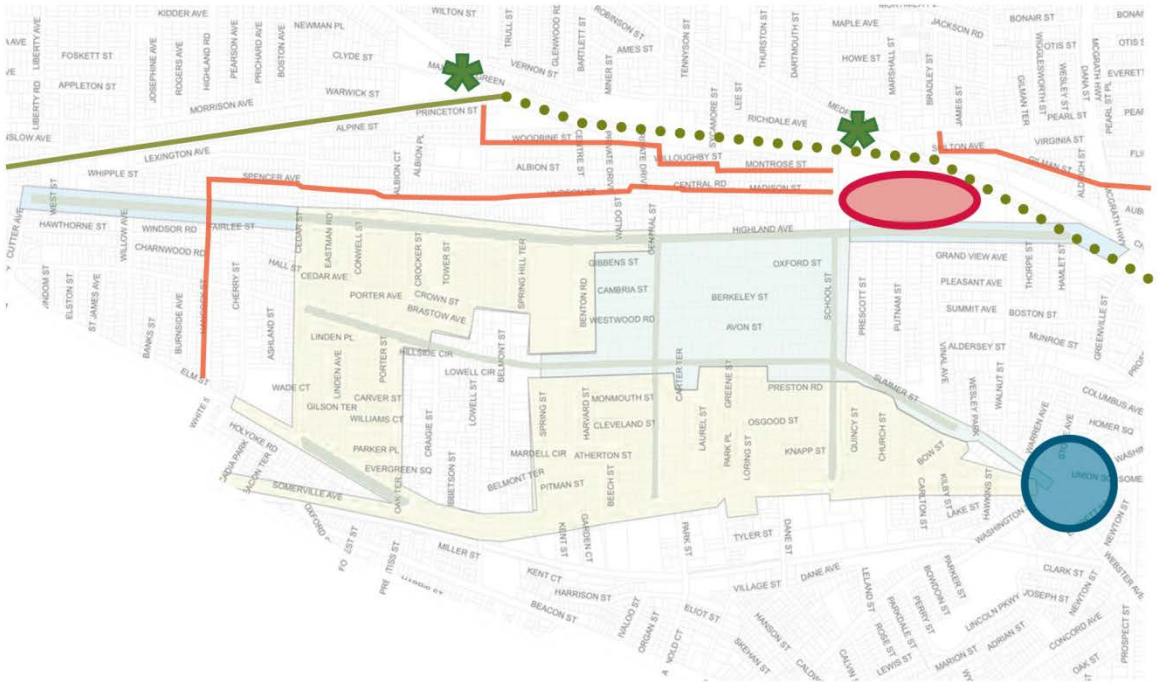
Union Square
Plaza

GLX Stations

Community
Path Extension

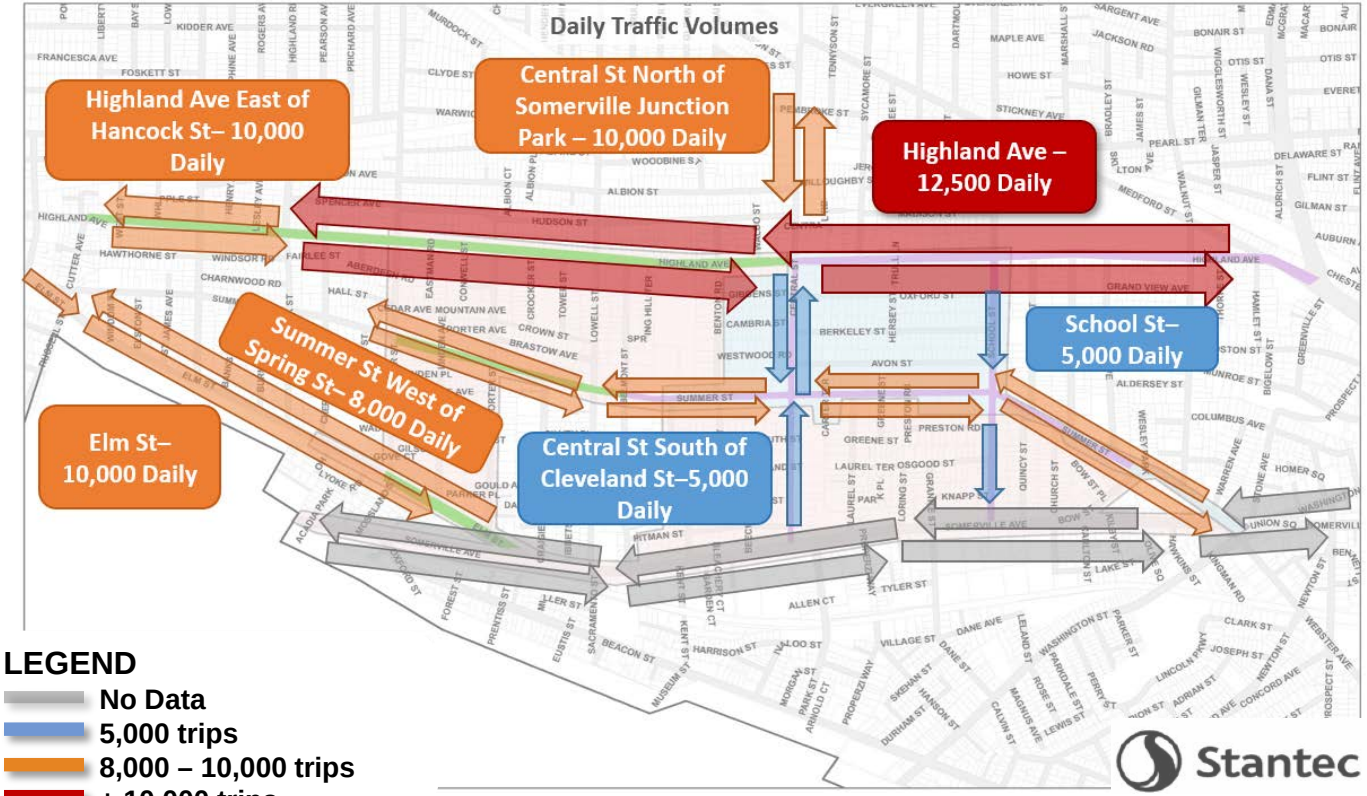
Community
Path Existing

Existing
Neighborways
Planned to expand/
enhance

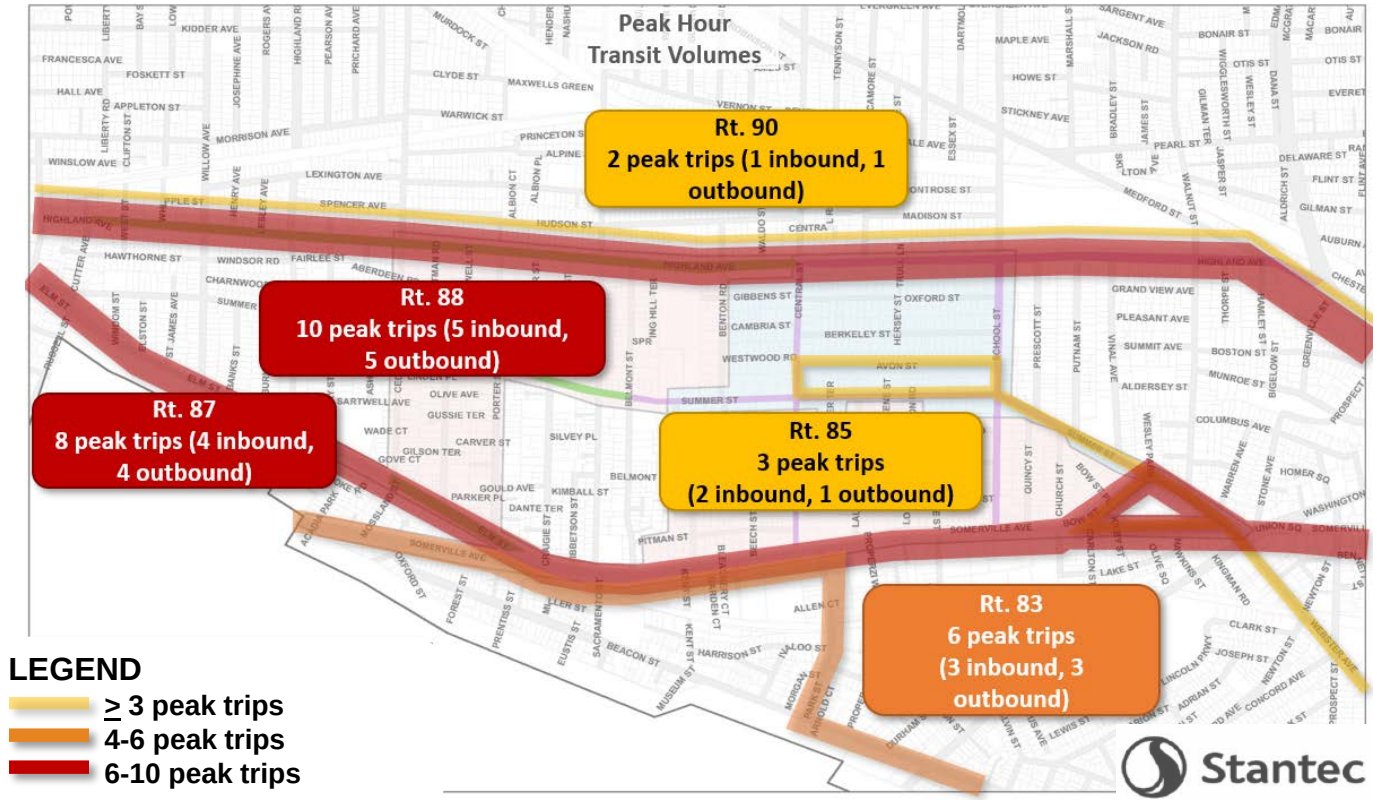


Existing Bike Facilities - *Mobility*

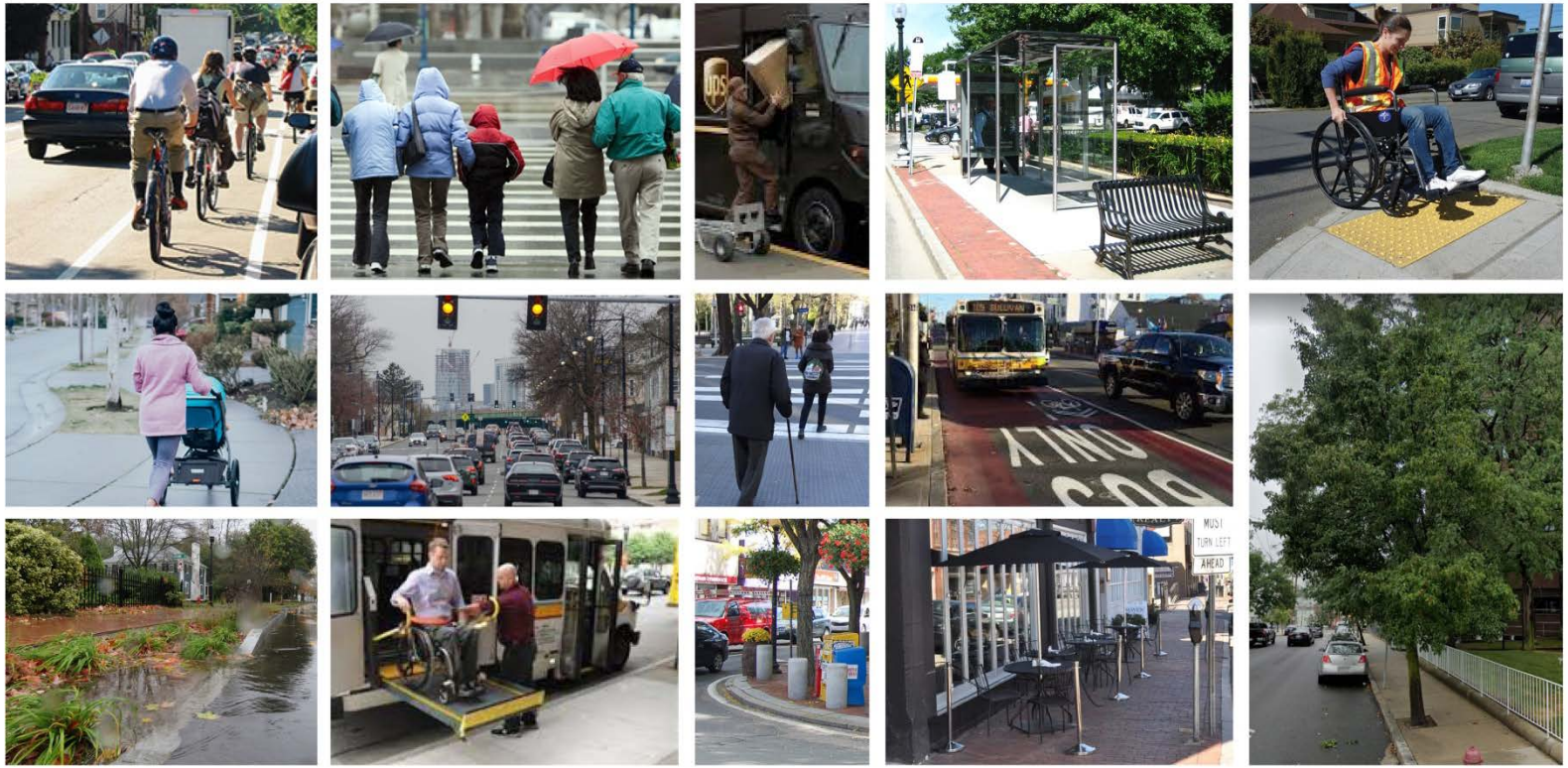
Existing Traffic Volumes - *Mobility*



Existing Peak Hour Transit Volumes - *Mobility*

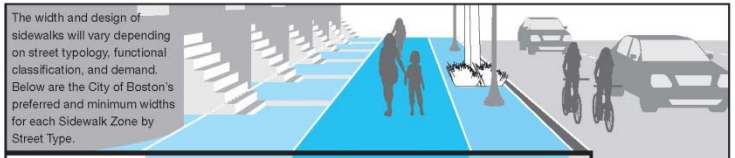


Sharing the Road – *Things to Consider*



Sharing the Road – *Things to Consider*

Preferred and Minimum Widths for Sidewalk Zones

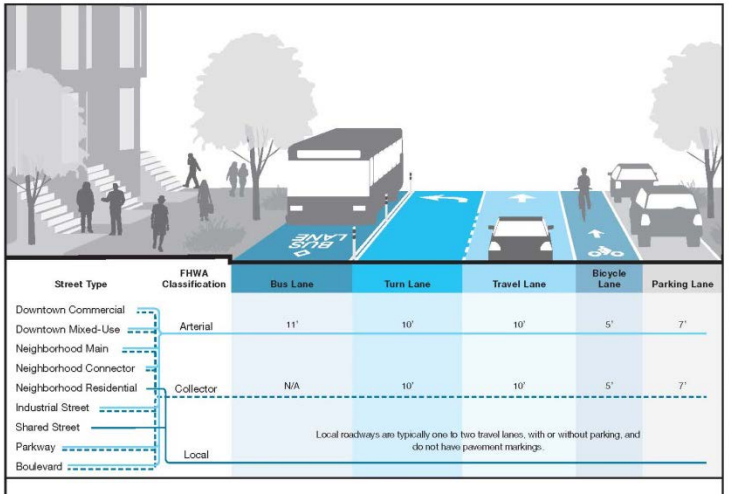


Street Type	Frontage Zone		Pedestrian Zone*		Greenscape/ Furnishing Zone		Curb Zone	Total Width	
	Preferred	Minimum	Preferred	Minimum	Preferred	Minimum		Preferred	Minimum
Downtown Commercial	2'	0'	12'	8'	6'	1'-6"	6"	20'-6"	10'
Downtown Mixed-Use	2'	0'	10'	8'	6'	1'-6"	6"	18'-6"	10'
Neighborhood Main	2'	0'	8'	5'	6'	1'-6"	6"	16'-6"	7'
Neighborhood Connector	2'	0'	8'	5' (4')*	5'	1'-6"	6"	15'-6"	7'
Neighborhood Residential	2'	0'	5'	5' (4')*	4'	1'-6"	6"	11'-6"	7'
Industrial Street	2'	0'	5'	5' (4')*	4'	1'-6"	6"	11'-6"	7'
Shared Street	2'	0'	Varies	5' (4')*	N/A	N/A	N/A	Varies	Varies
Parkway	N/A	N/A	6'	5'	10'	5'	6"	16'-6"	10'-6"
Boulevard	2'	0'	6'	5'	10'	5'	6"	18'-6"	11'-6"

Notes

* 5' is the preferred minimum width of the Pedestrian Zone in the City of Boston. The Americans with Disabilities Act (ADA) minimum 4' wide Pedestrian Zone can be applied using engineering judgement when retrofitting 7' wide existing sidewalks where widening is not feasible.

Minimum Widths for Roadway Lanes



From Boston Complete Streets Guidelines

Possible Improvements

Bike Improvements

- *Raised cycle track (one- or two-way)*
- *Buffered / parking-protected street-level cycle track (one- or two-way)*
- *“Copenhagen” style half-raised bike lane*

Bus Improvements

- *Transit-friendly lane (minimum 11’)*
- *Bus pull-out*
- *In-lane / floating bus stop*

Walking Improvements

- *Curb extensions (bump-outs)*
- *Raised crossings*
- *Crossing island*
- *Multi-use sidewalk*

Traffic Improvements

- *Shared street markings (sharrows)*
- *Curb extensions (bump-outs)*
- *Parking / Travel chicane*

Street Design Elements

Street Design Elements

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Street Design Elements

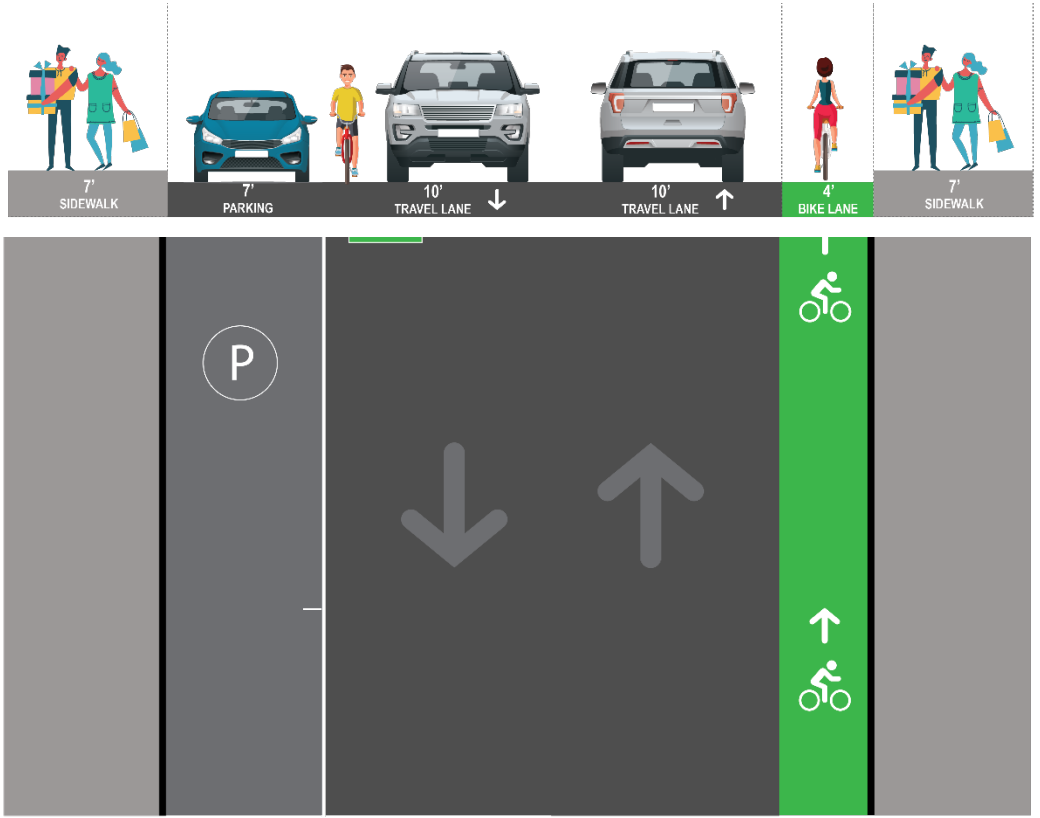
Break Out Activities

Breakout Session

1. Streets needs and wants
   - What isn’t working on this street? What improvements could it use?
2. Function of the street
   - To which users is this street oriented? Should it change?
3. Potential street changes
   - Is the current cross-section of this street meeting its desired function? What changes can we make?

Existing Cross Sections

Summer Street, Belmont Street to Bow Street



Questions