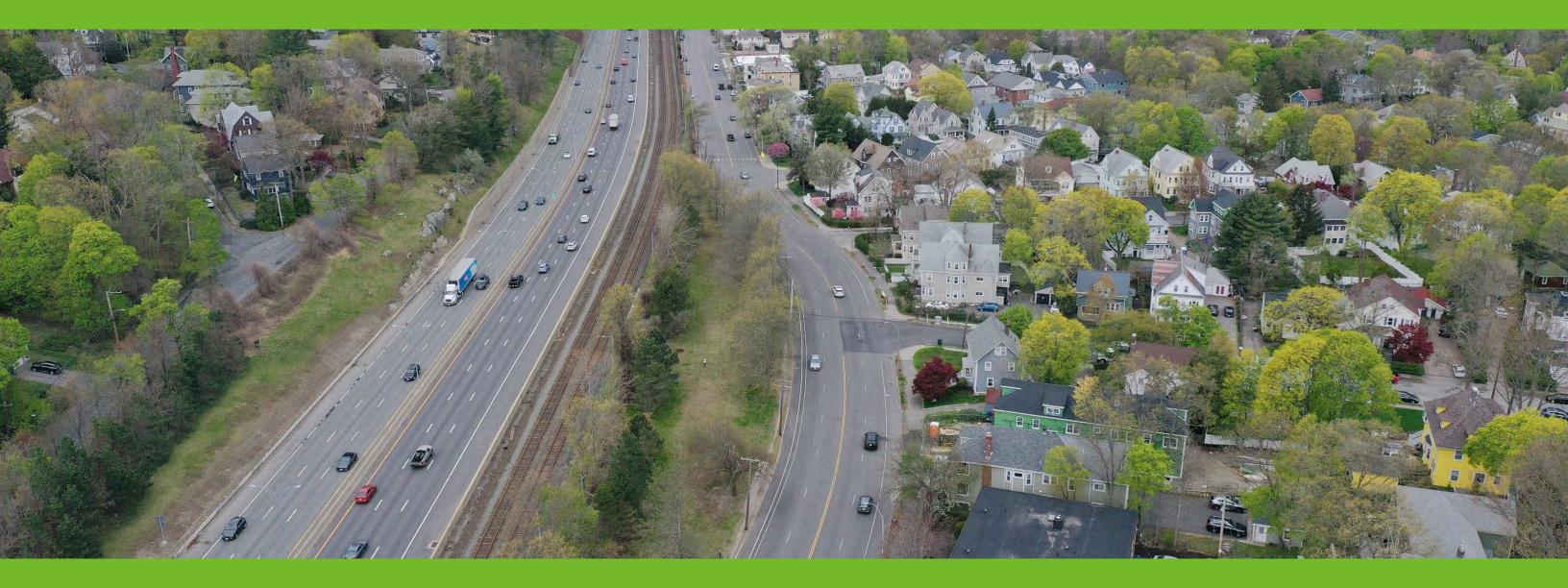
# Washington Street Redesign Project Introduction & Draft Conceptual Feedback



Presented to City of Newton November 30, 2023





Engineers + Planners

# HALVORSON Tighe&Bond STUDIO

# Agenda

# Project Overview

- Project History
- Project Limits
- Existing Conditions
- > Public Survey Themes
- Project Goals

# Design Features

- Draft Concept Designs
- Walker Off-Leash Dog Park

# Next Steps





# **Project Limits**





# **Pilot Scope**

#### Low-cost temporary materials

- Pavement markings
- Signage
- Planters, trees in pots, flexposts, etc.
- Limited use of curbed islands and pedestrian curb ramp improvements ۲

## Will not include

- Resurfacing the roadway
- Moving curb-line or significant sidewalk reconstruction ۲
- Significant intersection or traffic signal reconstruction
- Any significant drainage or utility impacts
- Any property takings



**Review Previous Washington Street Studies** 

Collect Existing Data (Winter - Spring 2023)

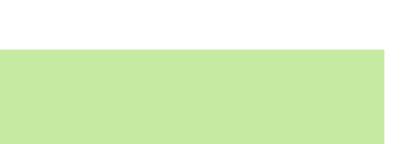
Site Walk with City Stakeholders (May 2023)

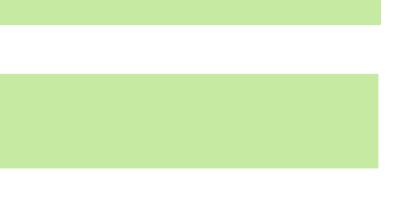
Public and Business Survey (May – June 2023)

Coordination with Mayor, Public Works, Project Working Group, and **Complete Streets Working Group** 

Coordination with Walker Off-Leash Dog Park and Historic Newton

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# **Project Team**

## **City of Newton**

- Planning and Development: Josh Ostroff, Barney Heath, and Olivia James ۲
- Mayor's Office: Jonathan Yeo
- Public Works: Nina Wang, David Koses, Isaac Prizant, and Adrian Ayala
- City Council: Susan Albright and Pam Wright
- Community: Mike Halle and John Pelletier ۲

### **Consultant Team**

- Howard Stein Hudson: Jessica Lizza and Emma Enteado ۲
- Neighborways Design: Jessica Mortell ۲
- Halvorson Tighe & Bond Studio: Bryan Jereb



# Where We Go From Here



# **Project Goals**

- Create a more safe, attractive, friendly, and welcoming environment for residents, visitors, and businesses
- Plan to achieve this by:
  - Creating a two- to three-lane roadway
  - Create pockets of space for trees, planters, and public art or historic signage
  - Provide separated bicycle lanes
  - Improve pedestrian connectivity and comfort
  - Screen chain link fence along I-90



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Severe Injury or Death, Brian for Traffic Safety, 2011



# **Existing Conditions**

12,190 vehicles per day (Feb. '23)

- Within range for 2-3 travel lanes
- Average speeds = 32-33 mph
- 85<sup>th</sup> percentile speed = 37 mph
- Posted speed = 35 mph

# **Bicycle Volumes (Oct. '23)**

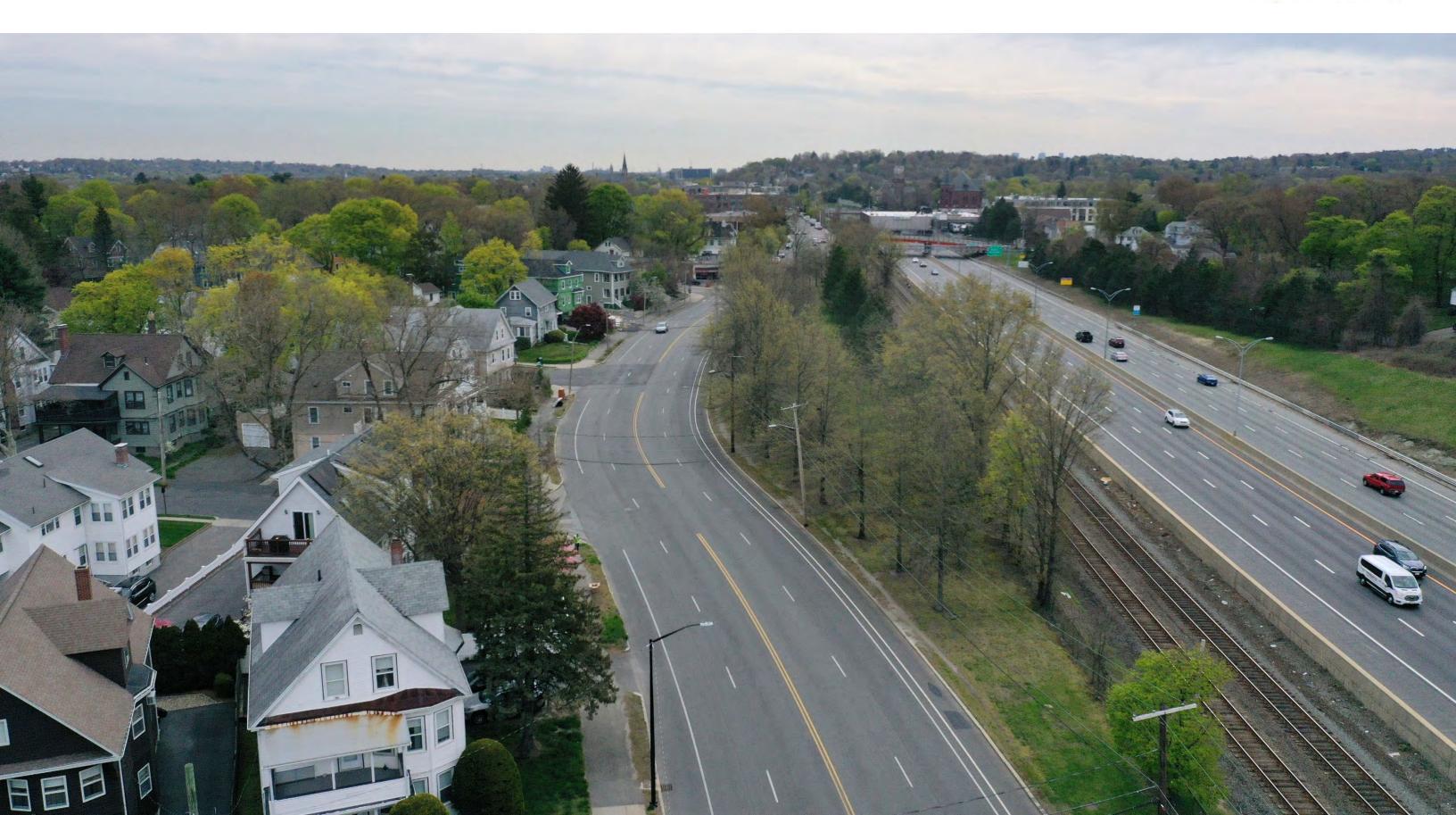
- 29 cyclists during peak hour
- 50% of bicyclists opt to ride on the sidewalk during peak hours

## **Pedestrian Volumes**

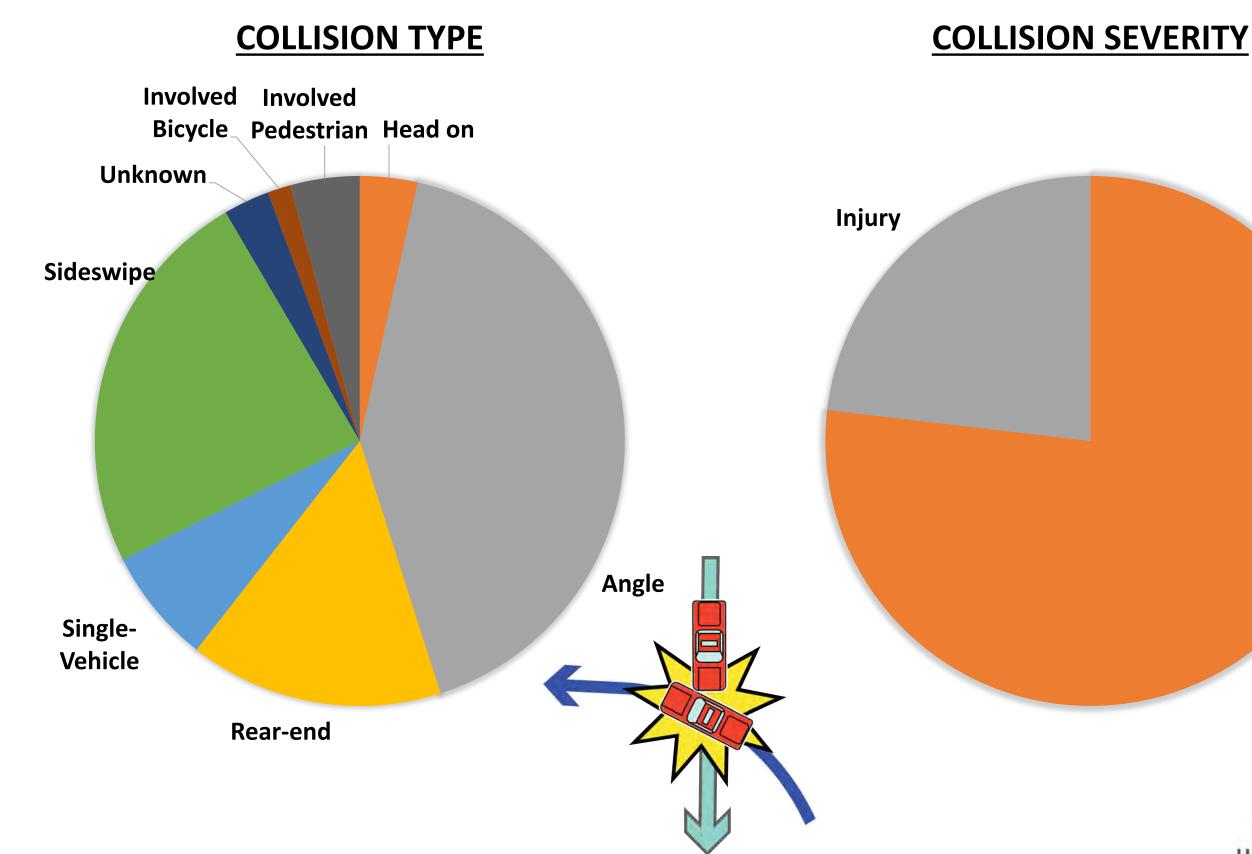
- Most crossing pedestrians cross at signals
- 5-24 people walking along
  Washington St during peak hours



# **Existing Conditions**



# **Existing Safety Trends (2015-2020)**



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Property Damage



# **Survey Theme: Speeding and Driver Behavior Concerns**



Source: FHWA's Achieving Multimodal Networks Applying Design Flexibility & Reducing Conflicts, 2016

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# **Survey Theme: Unattractive Roadway**



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# **Survey Theme: Traffic Congestion**



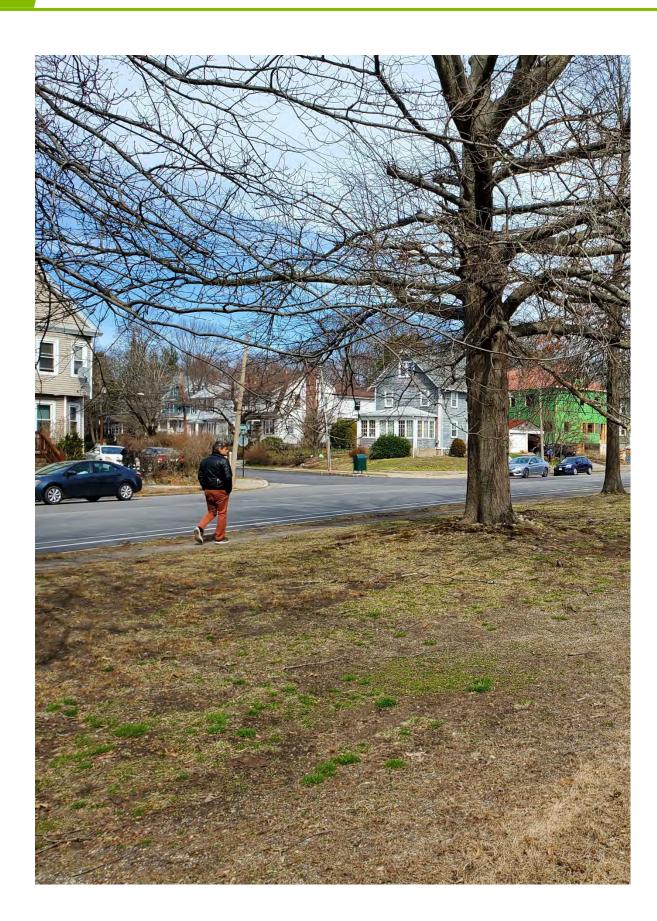
Washington Street at Chestnut Street

Washington Street at Lowell Avenue





# **Survey Theme: Uncomfortable Pedestrian Conditions**

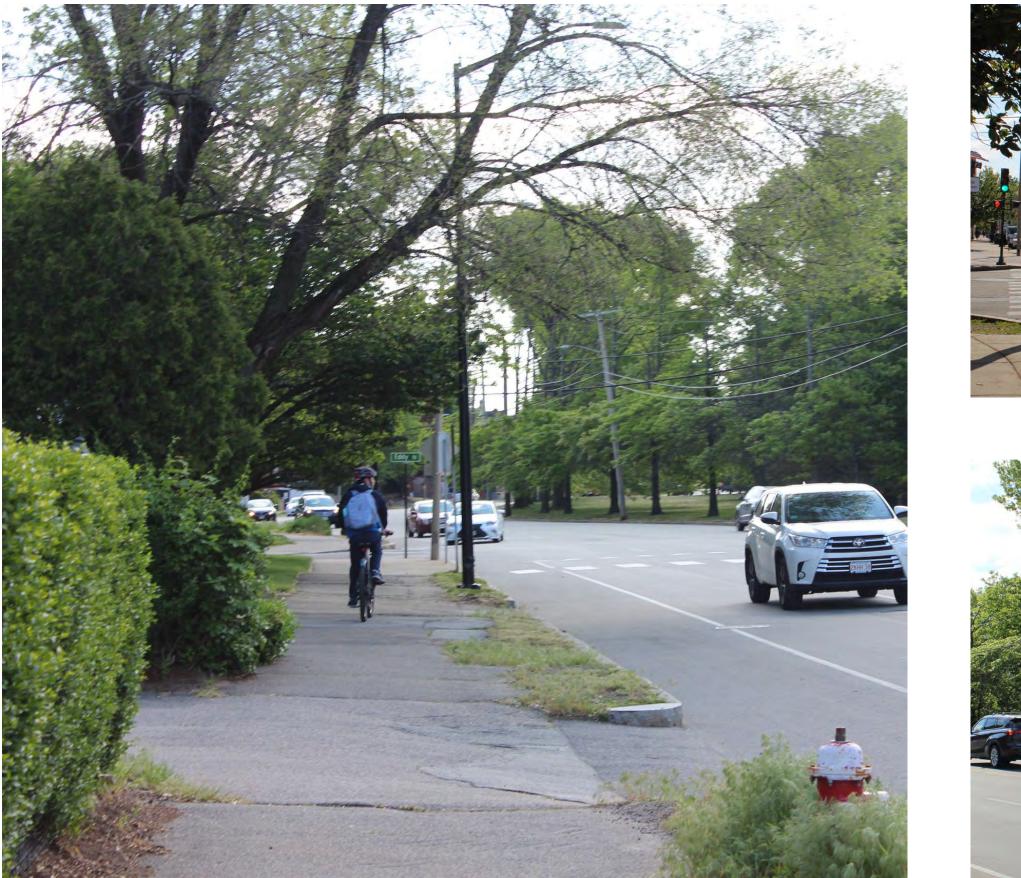






# **Survey Theme: Lack of Bicycle Facilities**

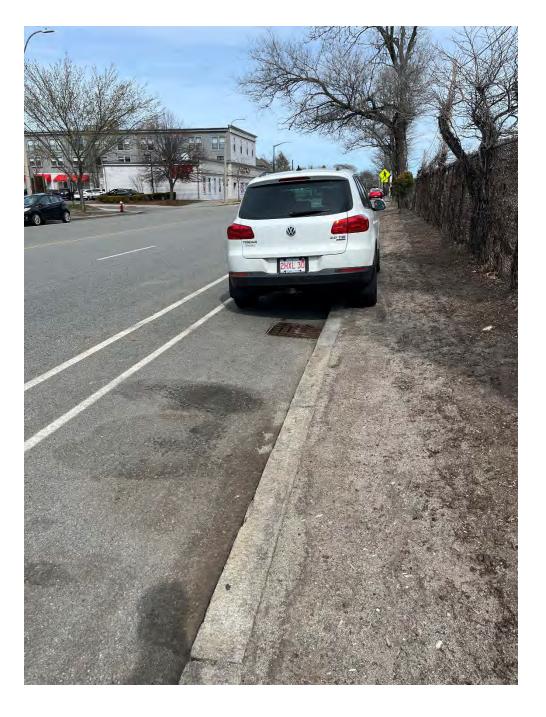








# **Survey Theme from Businesses: Parking**



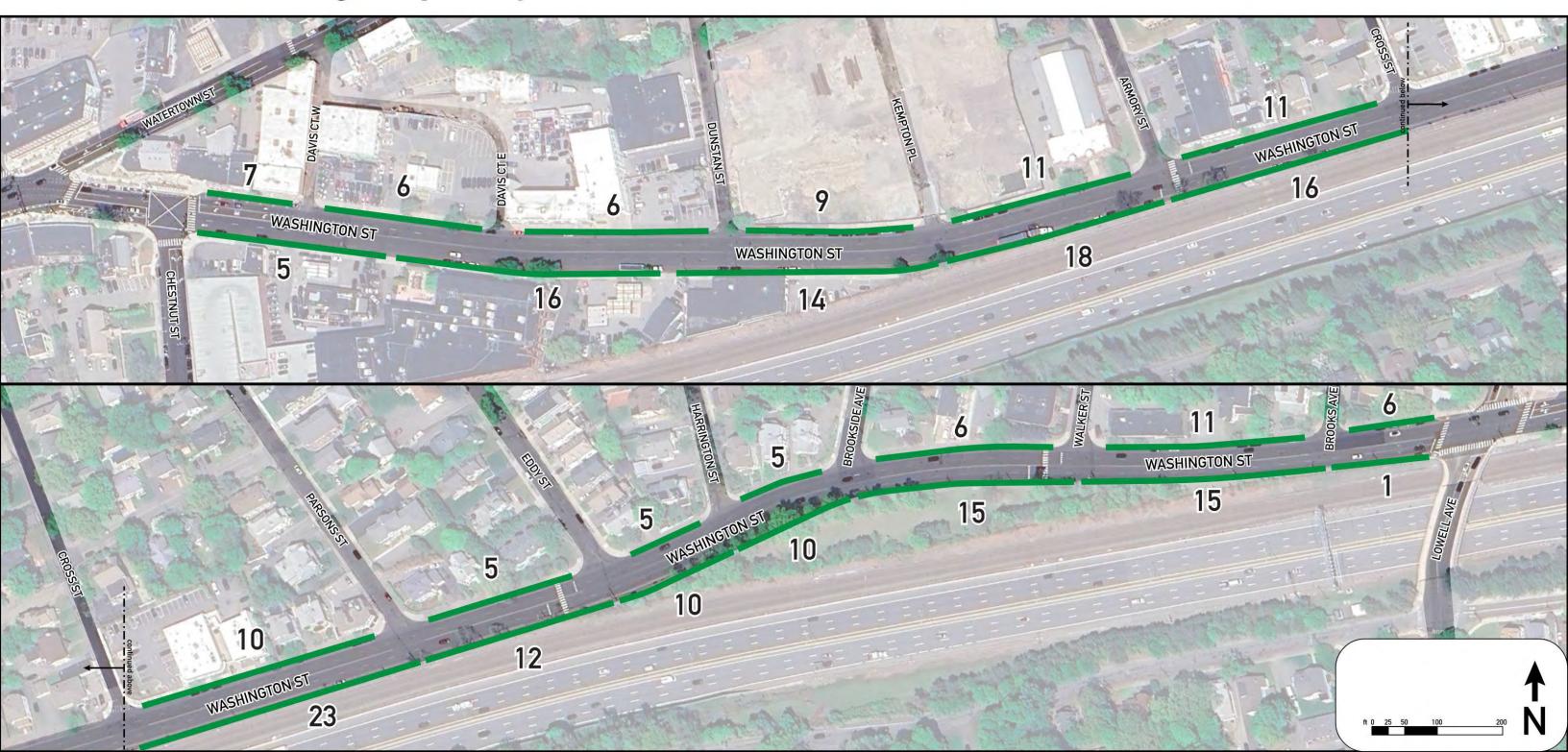


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# Washington Street Current Parking Capacity



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## **Total Parking Spaces: 253**

# Washington Street Current Parking Peak Use



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## Total Parking Demand: 79/253 (31%)

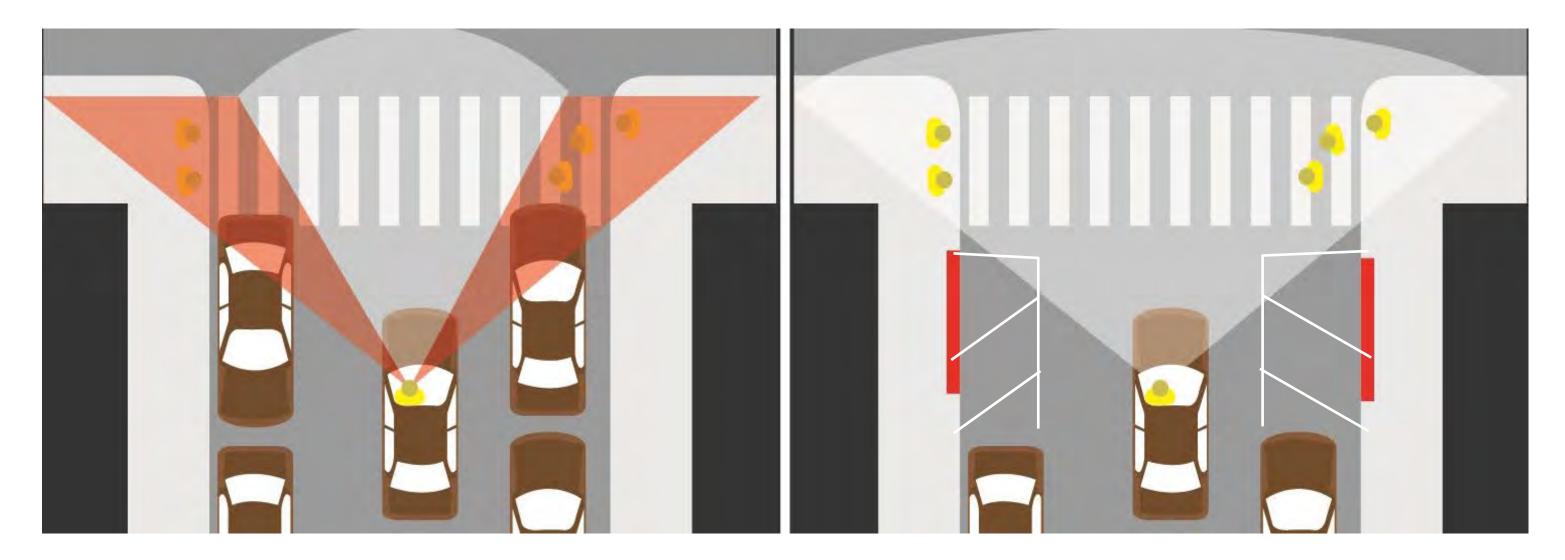


# **Design Features**



# **Intersection and Crosswalk Safety**

- Restrict parking on approach to crossings and intersections to improve sightlines
- Helps to enforce City laws no parking within 20' of intersections/on crosswalks



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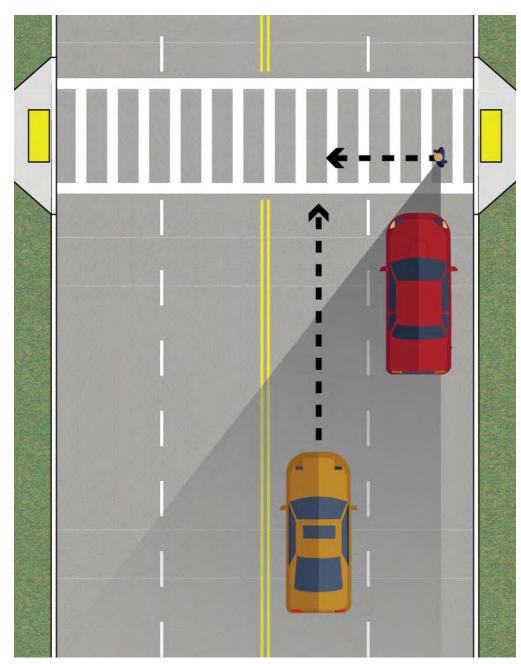


# **Potential Pedestrian Safety Improvements**





# **Potential Pedestrian Safety Improvements**



Reducing to two travel lanes at crosswalks reduces the potential for multiple threat crashes



Example: Staged crosswalk with refuge island



# **Potential Environment and Aesthetics Improvements**

Trees in planters

24

- Meadow mix and low plantings
- Opportunity for public art
- Chain link fence screening
  - Subject to negotiation with MassDOT and MBTA





Acoustifence screening along I-90 fence

Trees in planters

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## Meadow mix and low plantings

# **Potential Bicycle Safety Improvements**



One-way Separated Bike Lanes on North Side of West Newton Square





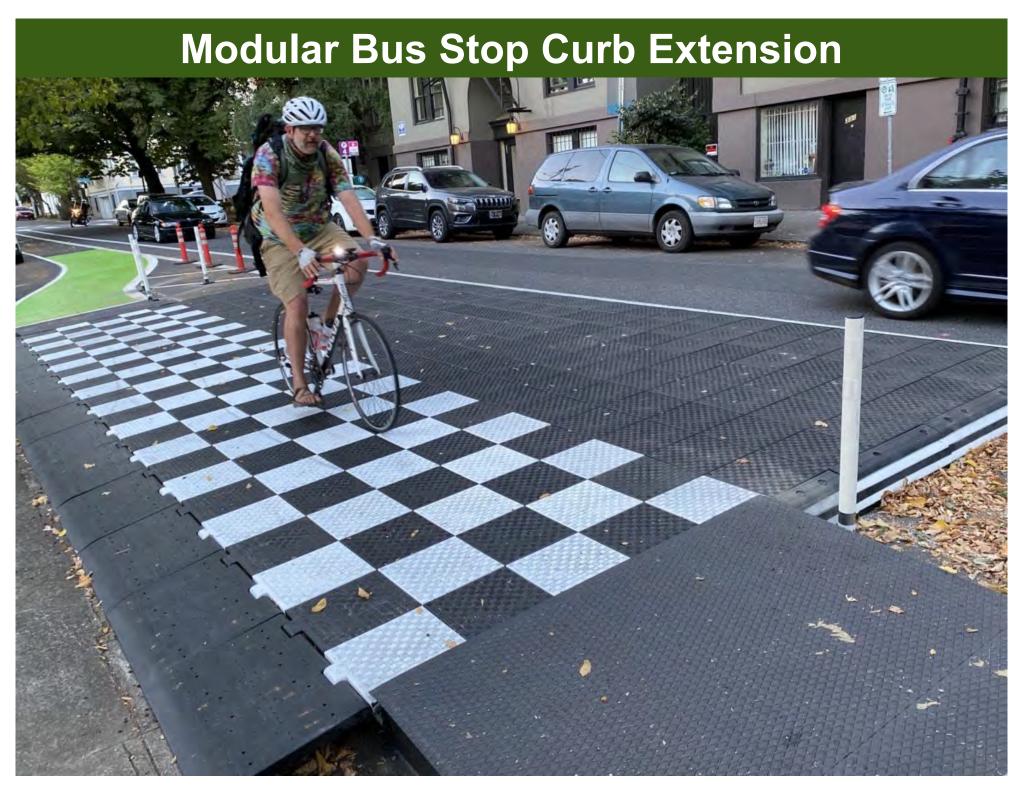
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## Two-way Separated Bicycle Lanes, Cambridge, MA

## Street-Level Shared Use Path, Shirley, NY

# **Bus Stop Accessibility**

- Provide compliant bus platforms
- Provide nearby opportunities to cross Washington Street



Modular Floating Bus Stop with Bike Lane Behind, Portland, OR



# **Design Alternatives**



Proposed roadway and pedestrian improvements with:

- Concept 1: One-way Separated Bike Lanes
- Concept 2: North Side Two-way Separated Bike Lanes
- Concept 3: South Side Shared Use Path
- Concept 4: Boulevard with South Side Shared Use Path

All concepts include a two-way left-turn lane between Chestnut Street and Dunstan Street



# **Existing Condition: Facing East on Washington St** at Davis Court

29



# **Concept 1 – One-way Separated Bicycle Lanes**



# Engineers + Planners THE ROCKPORT GROU

# **Existing Condition: Facing East on Washington St** at Armory St

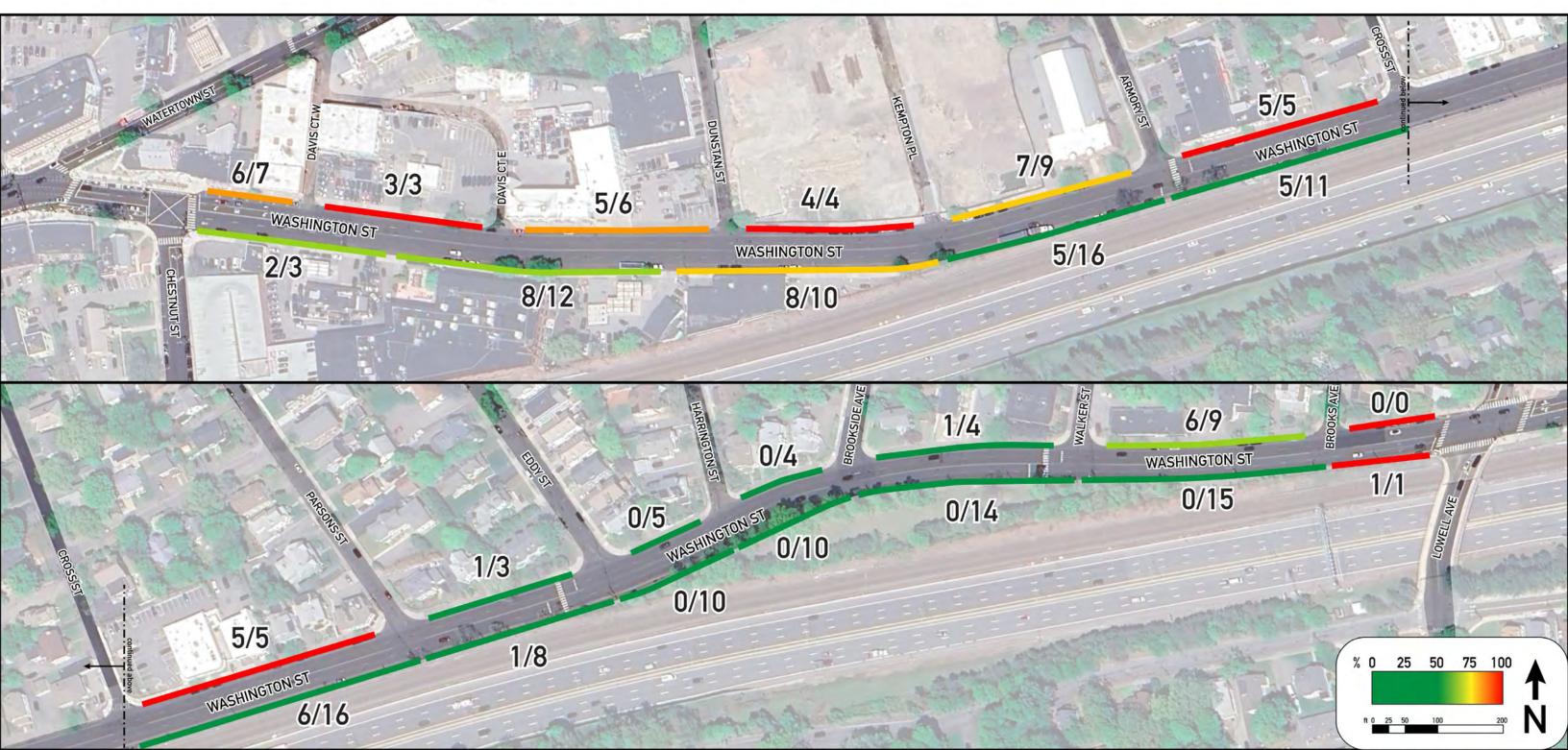
31



# **Concept 1: One-way Separated Bicycle Lanes**



# Concept 1 (One-way Separated Bicycle Lanes) Projected Peak Parking Demand — Reallocated



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## Total Parking Demand: 79/190 (42%)

# **Existing Condition: Facing East on Washington St** at Davis Court

34



# **Concept 2: North Side Two-way Separated Bicycle Lane**





# **Existing Condition: Facing East on Washington St** at Armory St

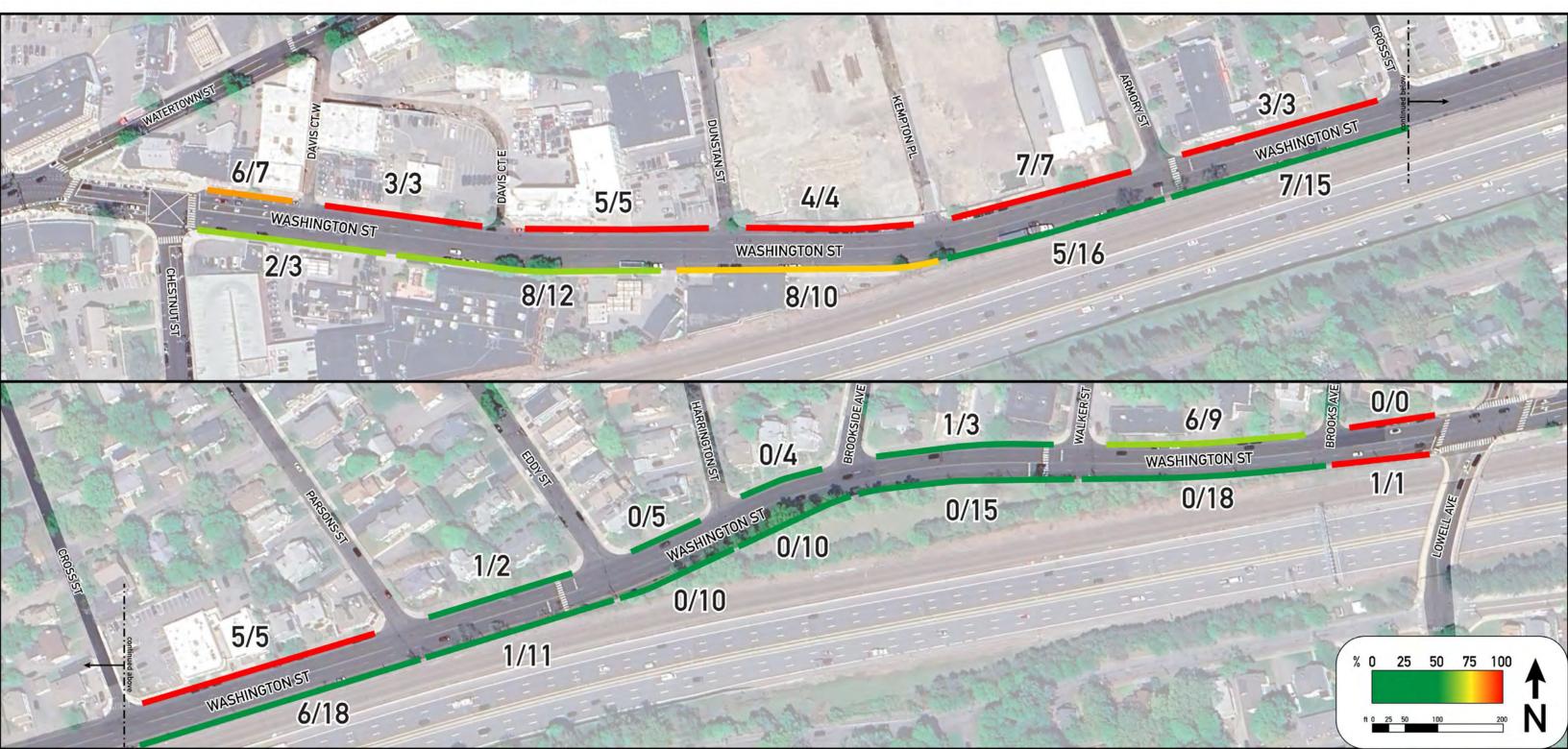
36



# **Concept 2: North Side Two-way Separated Bicycle Lane**



# Concept 2 (North Side Two-way Separated Bicycle Lanes) Project Peak Parking Demand - Reallocated



#### Engineers + Planners

## Total Parking Demand: 79/196 (40%)

# **Existing Condition: Facing East on Washington St** at Davis Court



# **Concept 3: South Side Two-way Shared Use Path**





# **Existing Condition: Facing East on Washington St** at Armory St

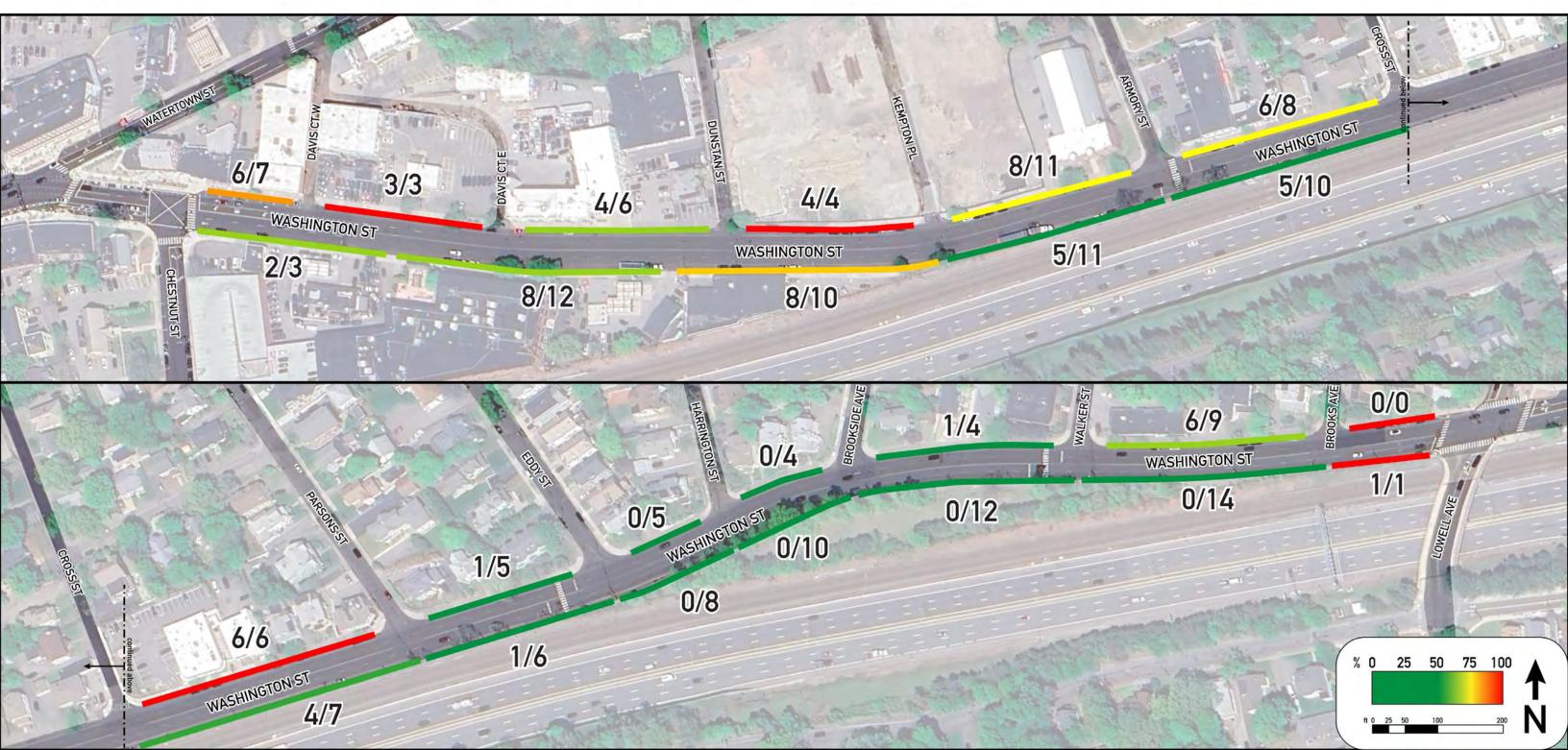
41



# **Concept 3: South Side Two-way Shared Use Path**



# Concept 3 (South Side Two-way Shared Use Path) Projected Peak Parking Demand — Reallocated



#### Engineers + Planners

## Total Parking Demand: 79/176 (45%)

# **Existing Condition: Facing East on Washington St** at Davis Court

**4**4



# **Concept 4: South Side Two-way Shared Use Path**





# **Existing Condition: Facing East on Washington St** at Armory St

46

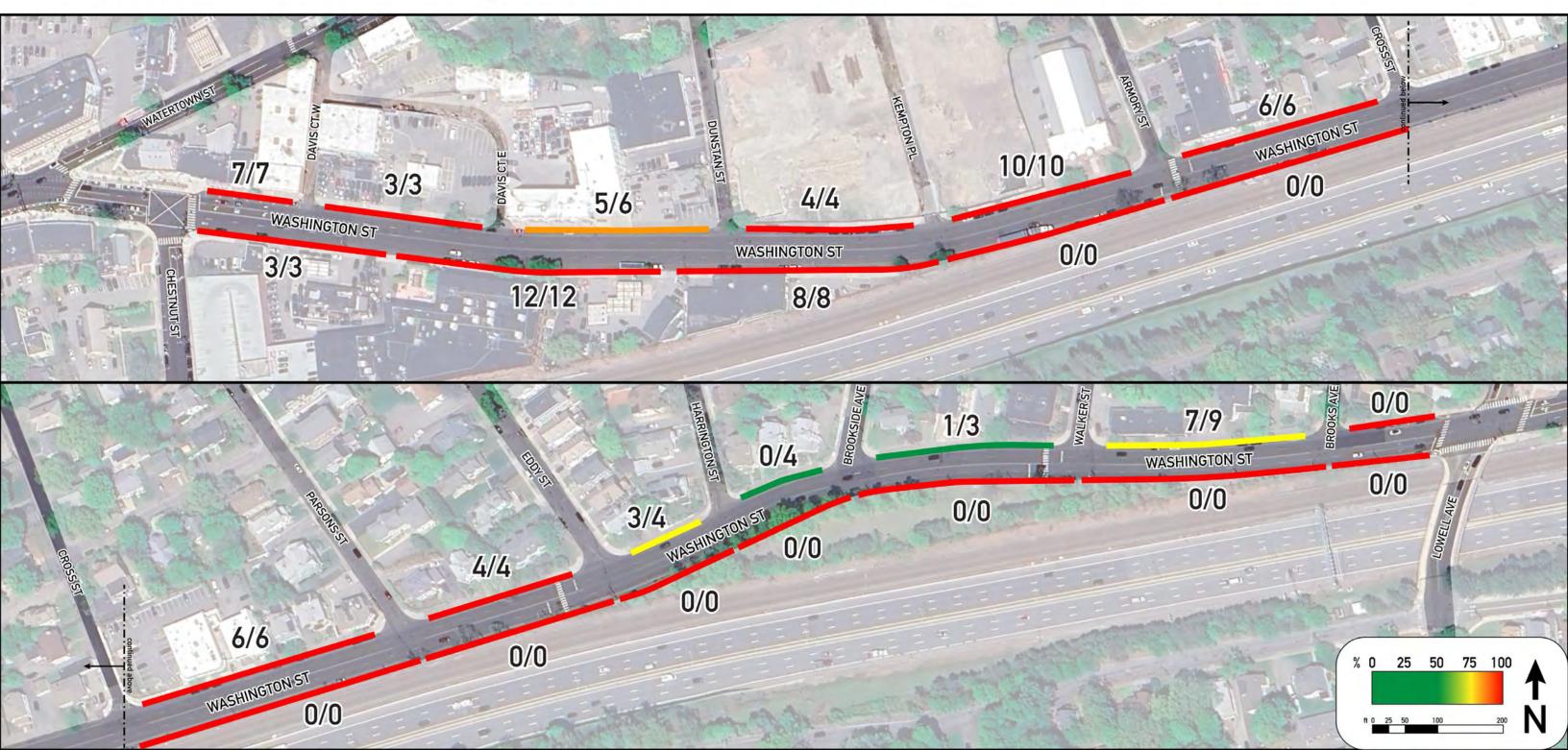


# **Concept 4: Boulevard with Two-way Shared Use Path**





# Concept 4 (Boulevard with Two-way Shared Use Path) Projected Peak Parking Demand — Reallocated

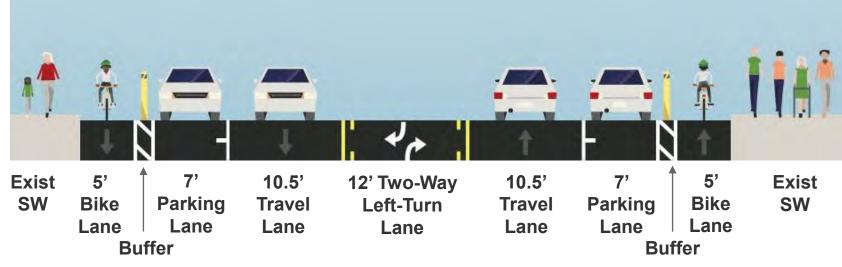


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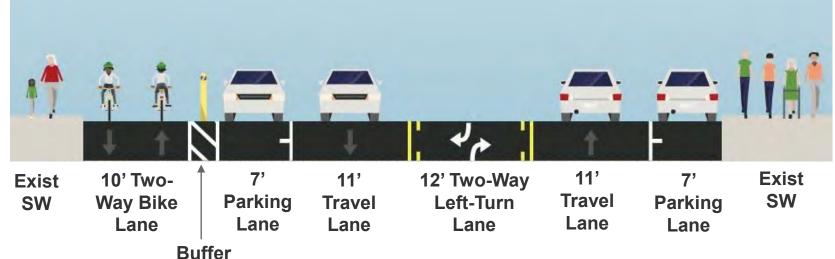
## Total Parking Demand: 79/89 (89%)

# **Concepts Summary: Between Chestnut St and Armory St**

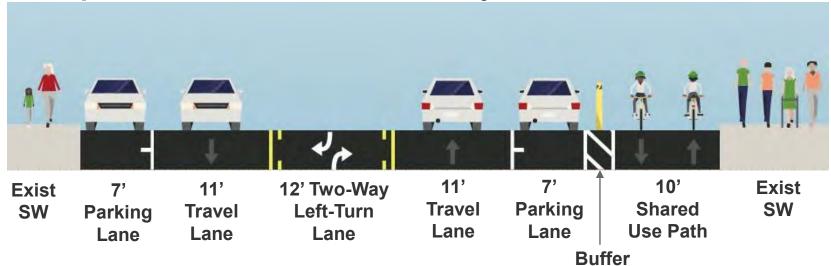
## **Concept 1: One-way Separated Bicycle Lanes**



Concept 2: North Side Two-way Separated Bicycle Lane



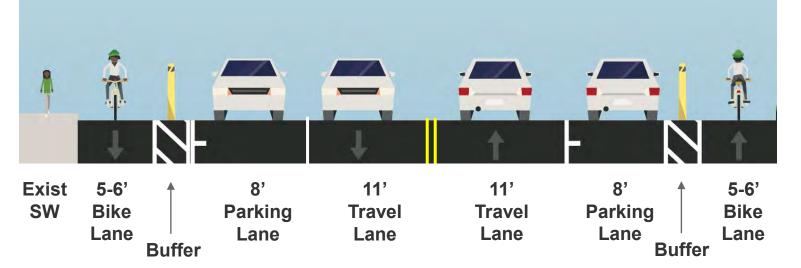
Concepts 3 and 4: South Side Two-way Shared Use Path



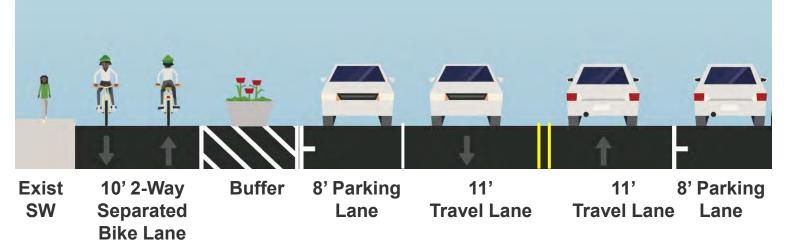


# **Concepts Summary: between Armory St & Lowell Ave**

## **Concept 1: One-way Separated Bicycle Lanes**



#### **Concept 2: North Side Two-way Separated Bicycle Lane**



## **Concept 4: Boulevard with South Side Two-way Shared Use Path**



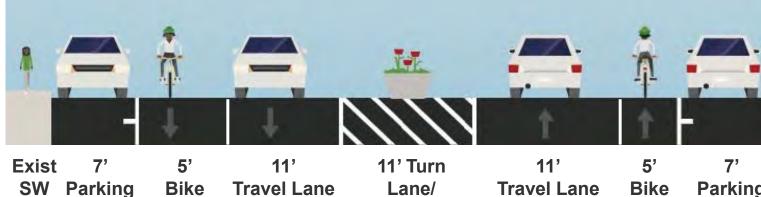
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S	SW	Parking	Travel	Та
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Lane

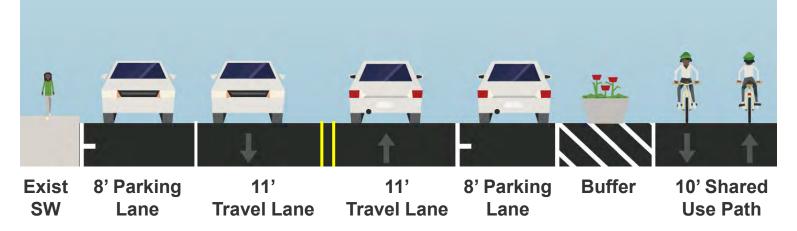
Lane

#### actical ledian

#### **Concept 4A: Boulevard with Standard Bicycle Lanes**



## **Concept 3: South Side Two-way Shared Use Path**



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urn Lane/

11' Travel Lane

**Buffer** 

10' Shared Use Path

**Tactical** Median

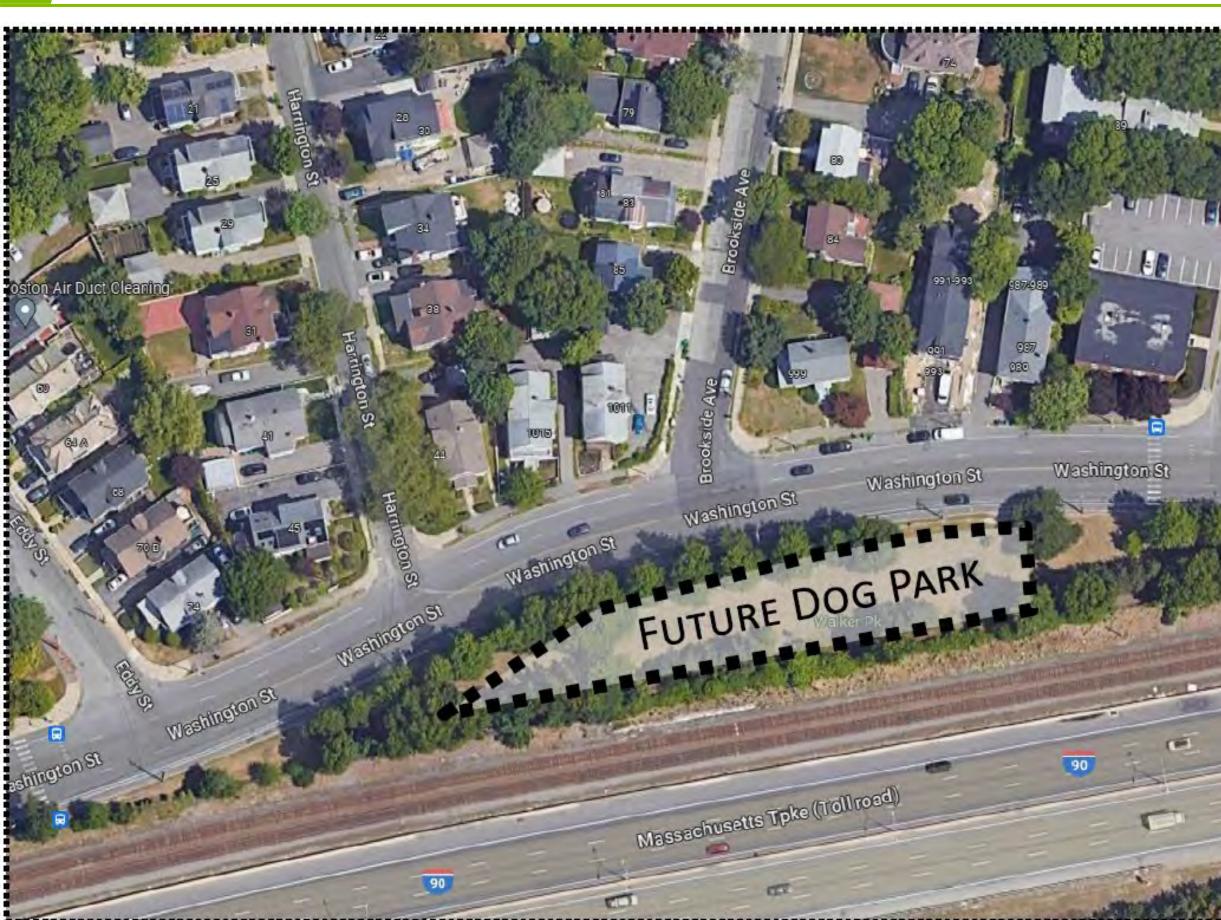
Lane

Parking Lane



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# Walker Park Off-Leash Dog Park



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J K Hair

Washington St

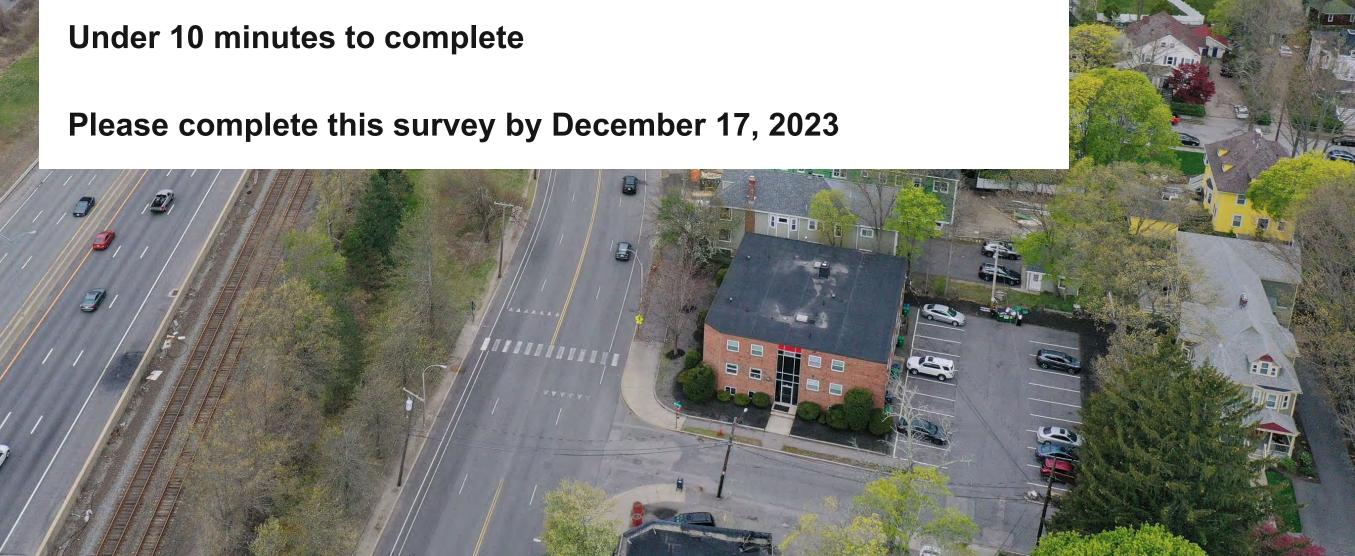
Washington St

Alpha Cleaner

# Washington Street Pilot Design Survey

We need your input! Please share your preferred design choice and possible concerns using the survey below:

https://www.newtonma.gov/washingtonstreet





# Where We Go From Here







Comments and Feedback Email: <u>WashingtonStreet@NewtonMA.gov</u>

Ð

Project Website: <u>https://www.newtonma.gov/washingtonstreet</u>



# **Concept Evaluation**

	1-Way SBL* (Each Side)	2-Way SBL* (North)	2-Way SUP* (South)
Reduce Vehicle Speeds	$\checkmark$	$\checkmark$	$\checkmark$
Provide Left-turn Pockets at Streets	$\checkmark$		$\checkmark$
Minimize Parking Loss	$\checkmark$	$\checkmark$	$\checkmark$
Add pedestrian access to south side of road			$\checkmark$
Maximize pedestrian safety and visibility (Crossing Islands)	$\checkmark$	$\checkmark$	$\checkmark$
Provide Separated Bike Facilities	$\checkmark$	$\checkmark$	$\checkmark$
Easeful Transitions for Bicyclists at Pilot Limits	$\checkmark$		
Bicycle Access to Neighborhood/Businesses on Each Side of Roadway	$\checkmark$	$\checkmark$	
Minimize Conflicts across Bike Facilities			$\checkmark$
Add Plantings/Greenscape	$\checkmark$	$\checkmark$	$\checkmark$
Pedestrian Access adjacent to Parking			$\checkmark$
Accessibility			$\checkmark$
Key:			

= Meets Objective

SBL= Separated Bike Lane, SUP = Shared Use Path



# **Bike Treatments Matrix of Strengths and Challenges**

	1-Way Separated Bike Lanes	2-Way North Side Separated Bike Lanes
Separation from travel and parking lanes		$\checkmark$
Attracts users of all levels and comforts		$\checkmark$
Resolves pedestrian gap along south side		
Minimize Conflict Points at driveways/side streets		
Direct Bicycle Access to Neighborhood/Businesses on Each Side of Roadway		$\checkmark$
Easeful Transitions for Bicyclists at Pilot Limits	$\checkmark$	
Separation between walkers and bikers		$\checkmark$

Key:

56

= Meets Objective 



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