

August 9, 2022 | 6 p.m. | Zoom

## Garden Street Safety Improvement Project

#### Third Community Meeting

August 9, 2022 | City of Cambridge

#### Provide Feedback after the Presentation

 You will find information on how to give feedback at the end of the presentation

#### Cameras + Microphones

- Your camera is off
- We will enable your microphone only when you are speaking

#### We are Recording

We will post the recording of tonight's meeting on the project page

## cambridgema.gov/GardenStHuronMason

### Agenda

- Planning Background: Policies + Ordinances
- Planning Background: Separated Bike Lanes and the Bike Plan
- Project Overview
- Layout Concepts
  - Options 1, 2, and 3
- Schedule / Next Steps
- Questions + Feedback

### Project Schedule

#### Meetings/Timeline

May 24

**Community Meeting 1** 

July 12

**Community Meeting 2** 



Now

**Community Meeting 3** 

Mid-September

Community Meeting 4

Fall 2022

**Project Installation** 

#### Outreach

#### What we've done:

- Posters attached to signposts along street
- Individual notifications to major stakeholders including schools, houses of worship, etc.
- Update emails sent to city and project mailing lists
- Postcards mailed to all addresses within project area

#### What you can do:

- Sign up for the mailing list for the latest updates
- Sign up for the city's Daily Update emails
- Email or call the project manager directly
- Visit the project webpage below for the latest information

### cambridgema.gov/GardenStHuronMason

# Planning Background: Policies + Ordinances

### What drives our street design?

We design for people of all ages and abilities. This includes:

- People who may not have access to a car
- Safe and accessible facilities, including bike lanes, that can be used by a wide range of people

How we think about vehicle congestion and delay

- Moving people slowly is moving people safely
- We do not prioritize eliminating delay for people driving alone

Focus is on moving people and goods, not their vehicles

- Buses run less frequently than cars, but carry more people
- Cannot ignore access for trucks and local deliveries



### Street Design - Enforcement - Education

#### Street Design

- A Safe System is a human-centered approach to street design, engineered to prevent errors as much as possible and lessen the impacts of errors when they do occur.
- Shifts away from individual blame
- Keep road users safe by designing for the most vulnerable (i.e. people not in cars)
- Crash prevention is more effective than crash mitigation

#### **Enforcement and Education**

 Enforcement and Education are supplemental to proper street design, not a replacement

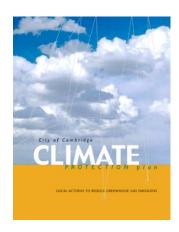
#### Example:

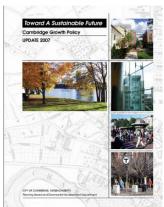
A momentary distraction can mean a driver doesn't see a cyclist or vice versa.

Providing separation between people in cars and people on bikes decreases the chance that a momentary distraction leads to a deadly crash.

## City Policies that Support Sustainable Transportation

- Vehicle Trip Reduction Ordinance
- Parking & Transportation
   Demand Ordinance
- Climate Protection Plan
- School Wellness Policy
- Envision Cambridge





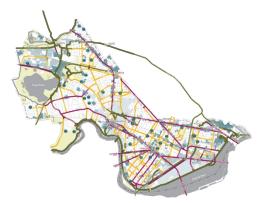
Complete Streets



Vision Zero



Cycling Safety Ordinance



# Cycling Safety Ordinance Overview

2019: City Council Passed the Cycling Safety Ordinance

 Requires construction of separated bike lanes when streets are being reconstructed as a part of the City's "Five-Year Plan for Streets and Sidewalks" and when they have been designated for "Greater Separation" in the Bicycle Network Vision

2020: City Council Passed Amendments to the Ordinance

- The amendments set ambitious requirements for the installation of approximately 25 miles of separated bike lanes within the next five to seven years.
- The location of these facilities is informed by both the Cambridge Bicycle Network Vision and specific requirements in the Ordinance.

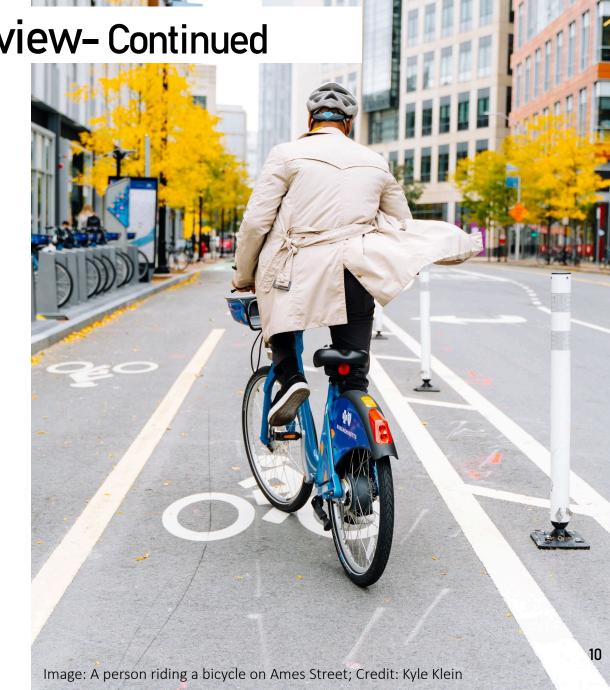


Cycling Safety Ordinance Overview-Continued

In general, the amendments to the Ordinance require the installation of separated bike lanes on:

- All of Massachusetts Ave;
- Garden St, eastbound from Huron Ave to Berkeley St, and westbound from Mason St to Huron Ave;
- Broadway from Quincy St to Hampshire St;
- Cambridge St from Oak St to Second St;
- Hampshire St from Amory St to Broadway; and
- 11.6 miles of separated bike lanes in other locations within the Bicycle Network Vision

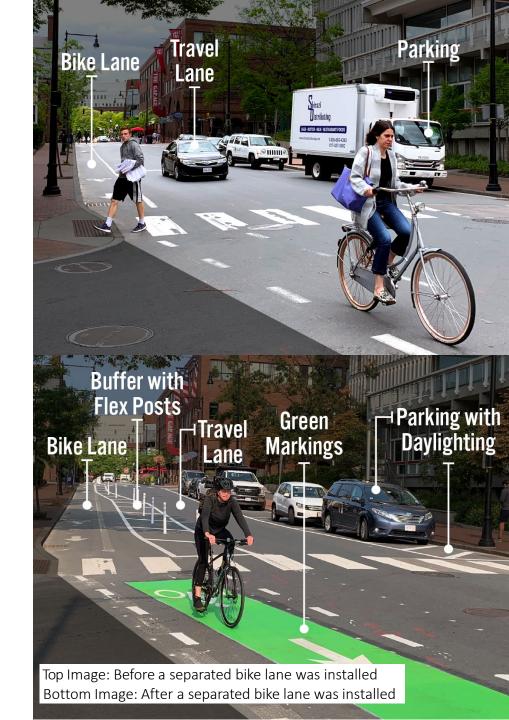
Learn more at cambridgema.gov/cycling-safety-ordinance



# Planning Background: Separated Bike Lanes and the Bike Plan

### Separated Bike Lane Benefits

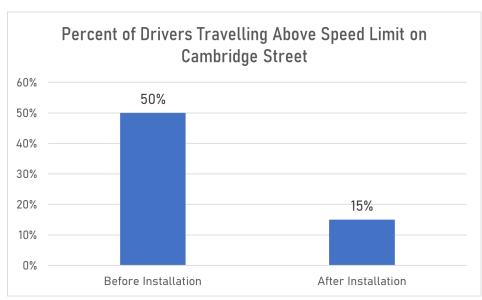
- Increases comfort and access for people of all ages and abilities
- Reduces crash and injury risk
- Eliminates threat of "dooring" from parked vehicles
- Reduces potential conflicts between vehicles and people biking
- Provides shorter crossing distance and increased separation from vehicles for people walking
- Encourages slower traffic speeds by visually narrowing the roadway width



### Separated Bike Lane Benefits- Continued

#### **Speed Reduction**

- Separated bike lane projects narrow the roadway for drivers, both physically and visually
- This lowers driver speeds, which increases overall safety
- Lower speeds are safer for all users, including people walking, driving, and biking
- Example: The Cambridge Street project (2017/2018) saw a reduction in overall speeds of about 25%



<u>Cambridge Street Bicycle Safety Demonstration Project - CDD - City of Cambridge,</u>
<u>Massachusetts (cambridgema.gov)</u>



Image: Cambridge Street separated bike lane (2017)

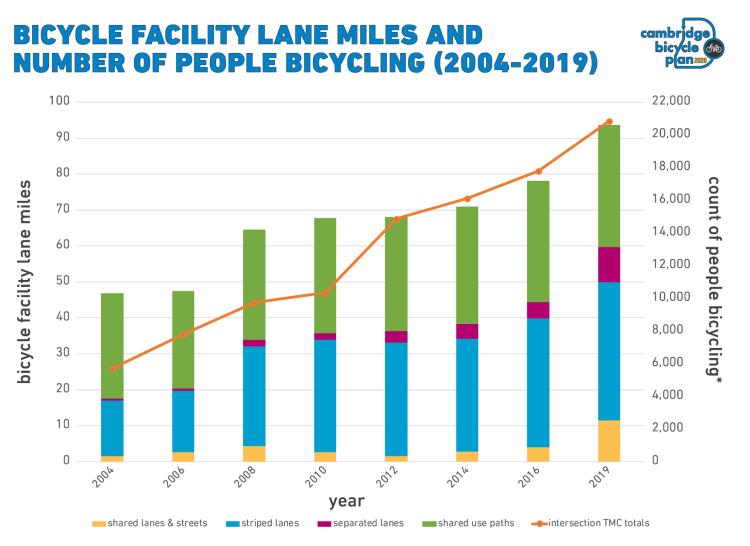
#### Separated Bike Lane Benefits- Continued

More people ride bicycles when we build more bicycle infrastructure.

A lack of safe and accessible routes and facilities for people of all ages and abilities prevents many people from biking.

As we've built more, we've enabled a wider variety of people to bike





## Cambridge Bicycle Plan

Vision from the Cambridge Bicycle Plan:

Cambridge will be a place where bicycling is equally available to everyone, all destinations can be reached by bike, and streets are designed to accommodate bicycling for people of all ages, abilities and identities.

A variety of barriers make it harder for people to choose to bicycle, even though they would like to. Creating safe and comfortable streets is a necessary condition to enable everyone to have this choice. This reflects the philosophy that people are at the center of transportation planning and design.



Garden Street in the Bicycle Plan

Garden Street from Huron Avenue to Mason Street is designated for "greater separation" to support people biking safely and comfortably.

#### Garden Street is a priority:

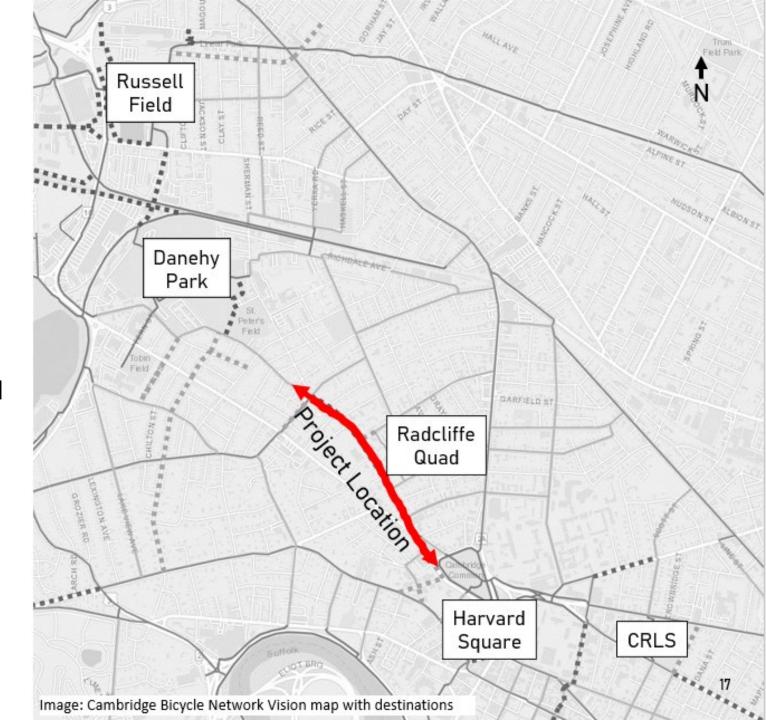
- Key East-West corridor that avoids busier streets like Concord Avenue
- Connects CRLS (high school) with sports facilities at Danehy Park and Russell Field
- Key route to/from Radcliffe Quad
- Connects residents and visitors to retail, jobs, parks, and squares

Learn more: cambridgema.gov/2020bikeplanupdate

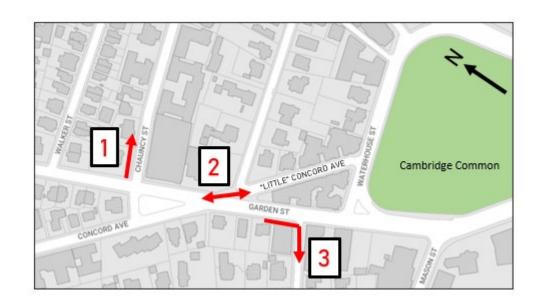


# **Key Connections**

- East-West corridor that avoids busier streets like Concord Avenue
- Connects CRLS (high school)
   with sports facilities at Danehy
   Park and Russell Field
- Key route to/from Radcliffe Quad
- Connects residents and visitors to retail, jobs, parks, and squares



## **Key Connections - Bicycle Routes**



Chauncy St/Arsenal Sq (towards Mass Ave)

"Little" Concord Avenue (East-West travel)

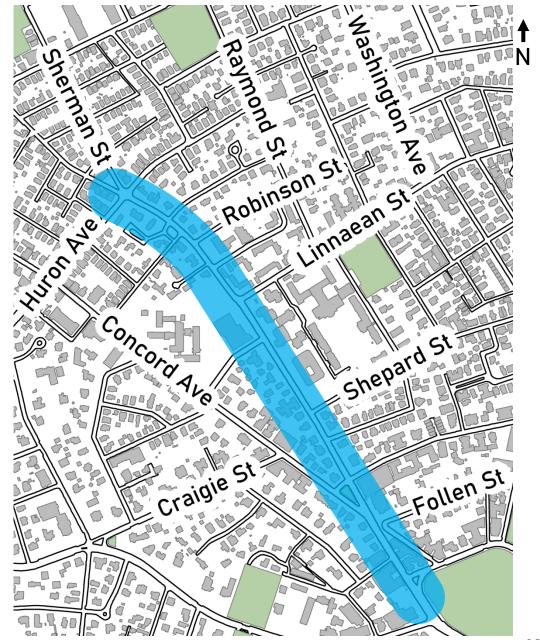
Berkeley St, Phillips Pl, and James St (to Harvard Sq)



# **Project Overview**

# **Project Area**

Garden St
Huron Avenue to Mason Street



## **Project Scope**



Install separated bike lanes



Improve crossing locations for people walking



Identify locations for curbside access (parking, loading)



Address safety at key intersections

# What is a quick-build project?

Quick-build projects allow us to make safety improvements more rapidly

Our quick-build toolbox includes:

- Pavement marking changes
- Installation of flex posts
- Changes to signage
- Some modifications to signal timing



Image: Cambridge Street Separated Bike Lane (2017)

# Layout Concepts

#### What We Heard

- Preference for one-way bike lanes on both sides instead of a two-way bike lane on one side
- Keep as much parking as possible
- Consider the needs of seniors
- Improve the crosswalks at Waterhouse Street (Sheraton) and at Shepard Street
- Consider making Garden Street a one-way to make space for parking
- Make the connection at Little Concord Avenue safer, including addressing visibility issues at Follen Street.
- Reduce cut through traffic
- Keep people on bikes off the sidewalks



### Design Considerations - Bike Lane Directionality

- Bike lane directionality (one-way vs two-way)
- Two-way bike lanes take up less roadway space, but aren't as intuitive as one-ways
- People driving expect people biking to be going in the same direction as them
- Drivers need to look in both directions before crossing two-way bike lanes
- Switching between a two-way bike lane on one side and one-way bike lanes on both sides is easier at a traffic signal



Image: A two-way separated bike lane on Brattle Street (2017)



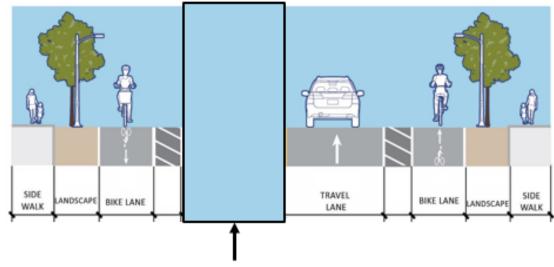
Image: A one-way separated bike lane on Mt Auburn Street (2020)

### Design Considerations- Trade-offs

- Parking and Loading
- Most buildings have driveways in the western end of the project near Huron Avenue
- There are many residents without driveways in the eastern end of project near Waterhouse Street
- The eastern end also has businesses, houses of worship, and schools that use short term parking

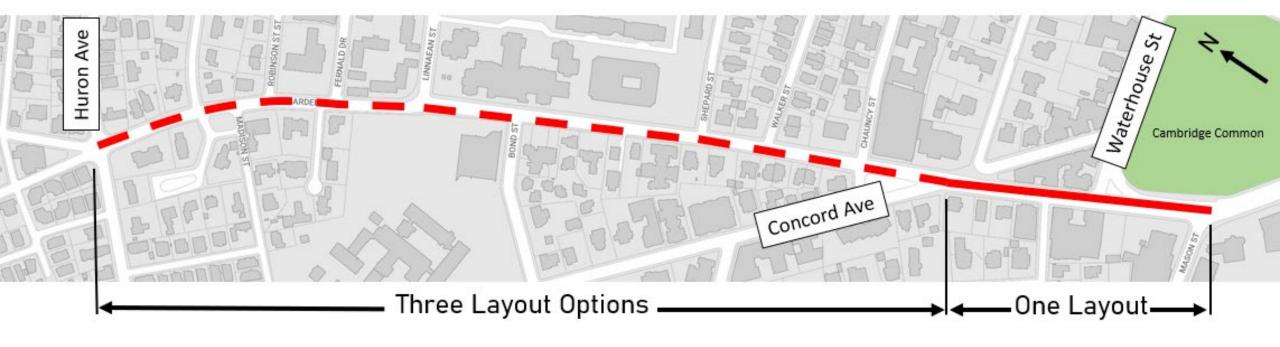
#### Street Network (one-ways for vehicles)

- Making Garden Street a one-way can reduce total traffic volumes
- Extra space could become parking
- Need to consider neighborhood circulation, including shuttles
- Impacts could extend beyond project area



Trade-off: Travel lane or parking lane?

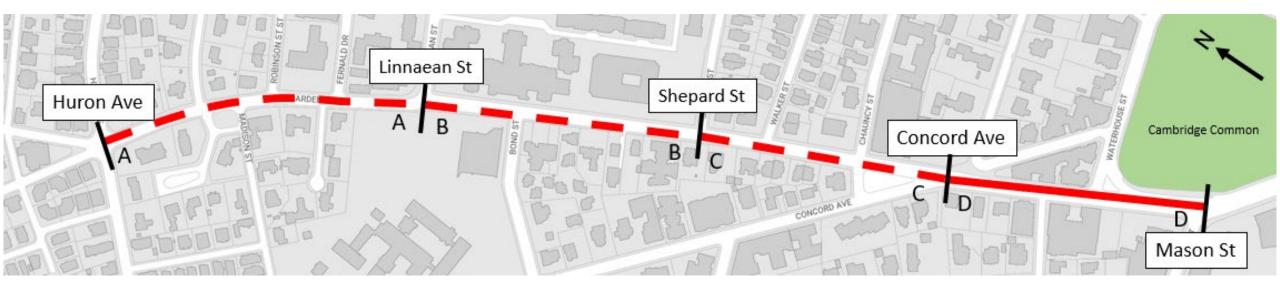
## Layout Concepts



Based on community feedback and the constraints of the roadway, we created three layout options for the area between Huron Avenue and Concord Avenue.

We have one preferred layout for the area between Concord Avenue and Mason Street.

### Layout Concepts- Project Sections



To compare options, the project was separated into four sections.

Sections A, B, and C have three layout options while Section D only has the one preferred layout.

#### **Section Key**

- A. Huron Avenue to Linnaean Street
- B. Linnaean Street to Shepard Street
- C. Shepard Street to Concord Avenue
- D. Concord Avenue to Mason Street

### Layout Concepts- Overview of Options

Sections A, B, and C (Huron Avenue to Concord Avenue)

#### Option 1

- Two-way vehicle traffic
- Two-way separated bike lane on the south side

#### Option 2

- Two-way vehicle traffic (Huron Avenue Shepard Street)
- One-way vehicle traffic eastbound (Shepard Street Concord Avenue)
- Two-way separated bike lane on the south side (Huron Avenue Linnaean Street)
- One-way separated bike lanes on both sides (Linnaean Street Concord Avenue)

#### Option 3

- One-way vehicle traffic eastbound
- One-way separated bike lanes on both sides

#### Section D (Concord Avenue to Mason Street)

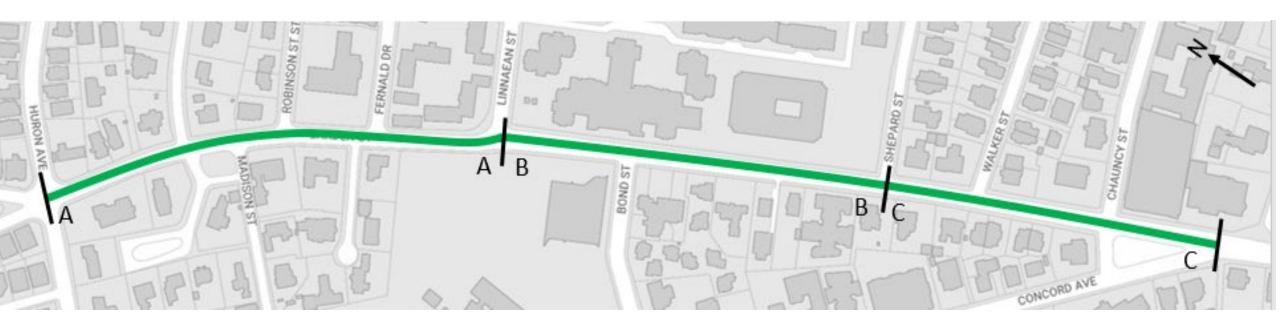
- Two-way vehicle traffic
- One-way separated bike lanes on both sides\*

\*Eastbound separated bike lane to Berkeley Street only

# Layout Concepts- Overview of Options

Option 1	Section A Huron to Linnaean	Section B Linnaean to Shepard	Section C Shepard to Concord	Section D Concord to Mason
Biking	Two-way (south side)			One-way (both sides)
Driving	Two-way travel			
Option 2				
Biking	Two-way (south side)		One-way (both sides)	
Driving	Two-way travel		One-way travel (EB)	Two-way travel
Option 3				
Biking	One-way (both sides)			
Driving	One-way travel (EB)		Two-way travel	

Option 1	Section A	Section B	Section C		
Biking	Two-way (south side)				
Driving	Two-way travel				



#### Option 1

- Two-way vehicle traffic
- Two-way separated bike lane on the south side

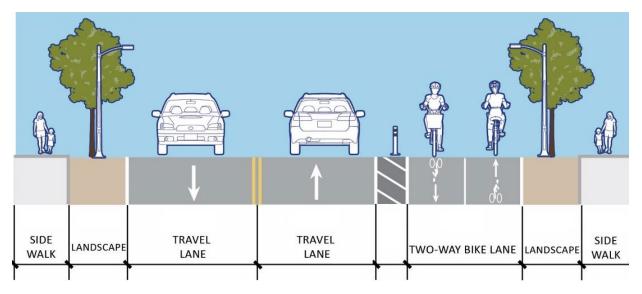
#### Section A: Huron Avenue to Linnaean Street

#### Direction of travel

- Two-way separated bike lane on the south side of the street
- Two-way travel for vehicles

#### Considerations

- Fewer cross streets and driveways in this section, especially on the south side
- Safe, easy entry and exit at traffic signals at both the Huron Avenue and Linnaean Street ends of the section



Between Huron Ave and Linnaean Street (looking eastbound)

Section A: Huron Avenue to Linnaean Street



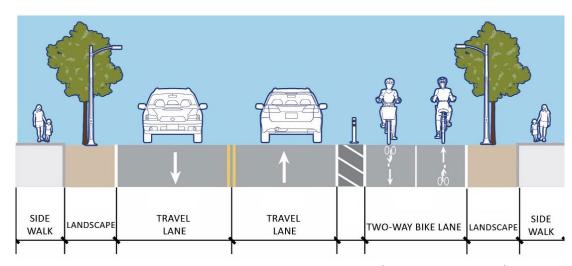
Sections B&C: Linnaean Street to Concord Avenue

#### Direction of travel

- Two-way separated bike lane on the south side of the street
- Two-way travel for vehicles

#### Considerations

- Easy, predictable movements at Linnaean Street traffic signal- people biking continue straight
- Less direct access for people biking to destinations on the other side of the street
- Most destinations on north side, but north side has more conflict points at side streets



Between Linnaean Street and Concord Avenue (looking eastbound)

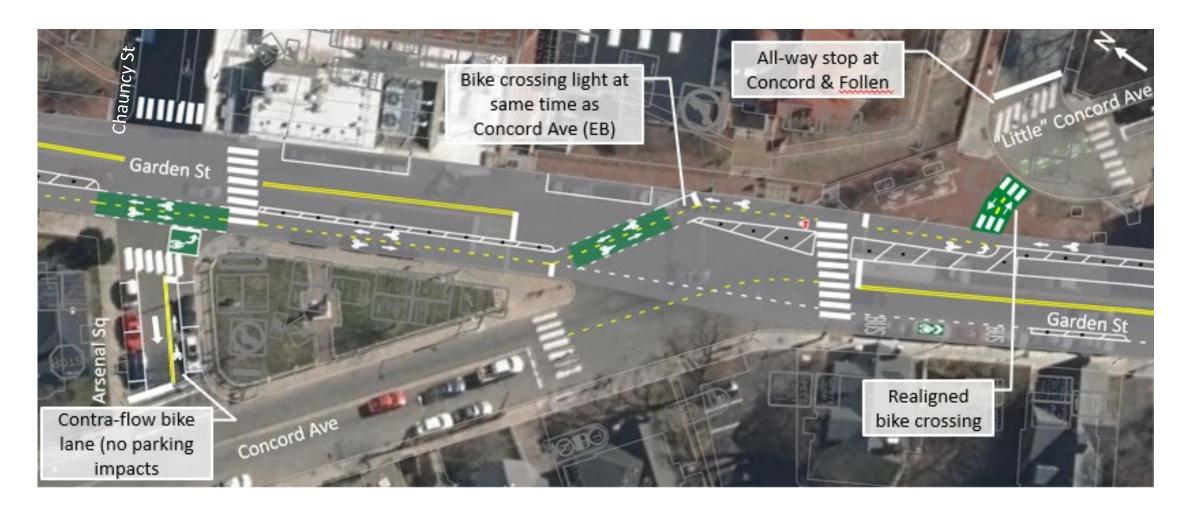
Sections B&C: Linnaean Street to Concord Avenue to Preday to Marker 18 and 19 a

#### Parking Impacts

_	1	Existing	Option 1
#	Permit Parking	67	8
	Loading Zone	1	0
	Unrestricted	5	0
	Total	73	8

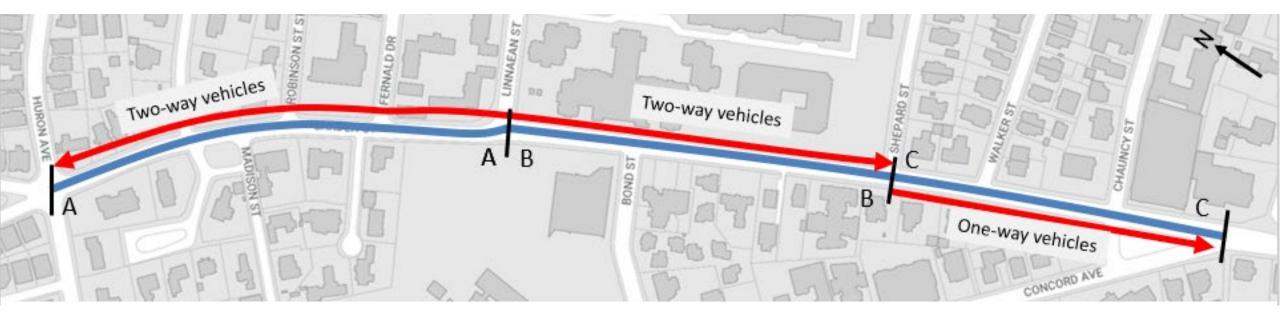
Based on community feedback, we would make the 5 unrestricted spaces permit parking instead

Intersection of Garden Street and Concord Avenue



Option 2	Section A	Section B	Section C
Biking	Two-way (south side)	One-way (	both sides)
Driving	Two-way	travel	One-way travel (EB)

### Overview



### Option 2

- Two-way vehicle traffic (Huron Avenue Shepard Street)
- One-way vehicle traffic eastbound (Shepard Street Concord Avenue)
- Two-way separated bike lane (south side) (Huron Avenue Linnaean Street)
- One-way separated bike lanes (both sides) (Linnaean Street Concord Avenue)

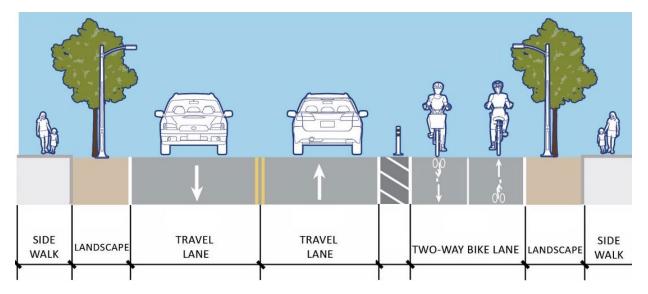
### Section A: Huron Avenue to Linnaean Street

### Direction of travel

- Two-way separated bike lane on the south side of the street
- Two-way travel for vehicles

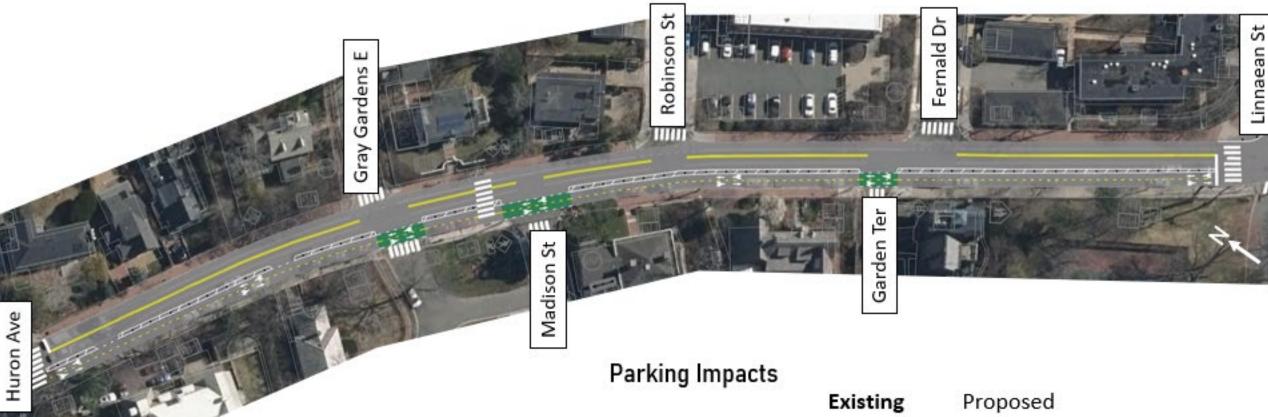
### Considerations

- Fewer cross streets and driveways in this section, especially on the south side
- Safe, easy entry and exit at traffic signals at both the Huron Avenue and Linnaean Street ends of the section



Between Huron Ave and Linnaean Street (looking eastbound)

Section A: Huron Avenue to Linnaean Street



Total

Permit Parking

26

26

0

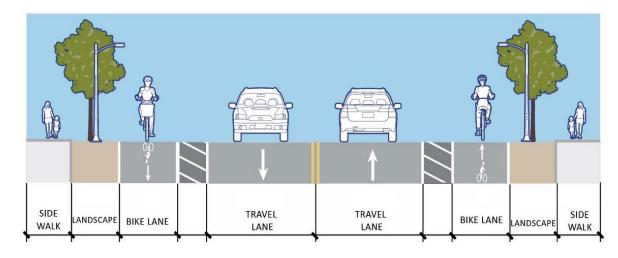
### Section B: Linnaean Street to Shepard Street

### Direction of travel

- One-way separated bike lanes on both sides of the street
- Two-way travel for vehicles

### Considerations

- Safe transition at Linnaean Street traffic signal for people biking to/from the two-way lane in Section A
- Better access to destinations on both sides of the street
- Predictable interactions for people biking and driving at side streets and driveways



Between Linnaean Street and Shepard Street (looking eastbound)

Section B: Linnaean Street to Shepard Street



### Parking Impacts (Linnaean St to Shepard St)

	Existing	Option 2
Permit Parking	49	0
Loading Zone	1	0
Total	50	0

All parking and loading would need to be removed from this area of Section B.

This area of Section B would remain a two-way street for people driving

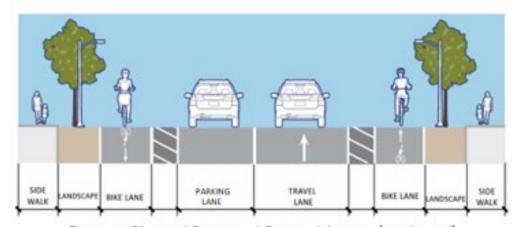
Section C: Shepard Street to Concord Avenue

### Direction of travel

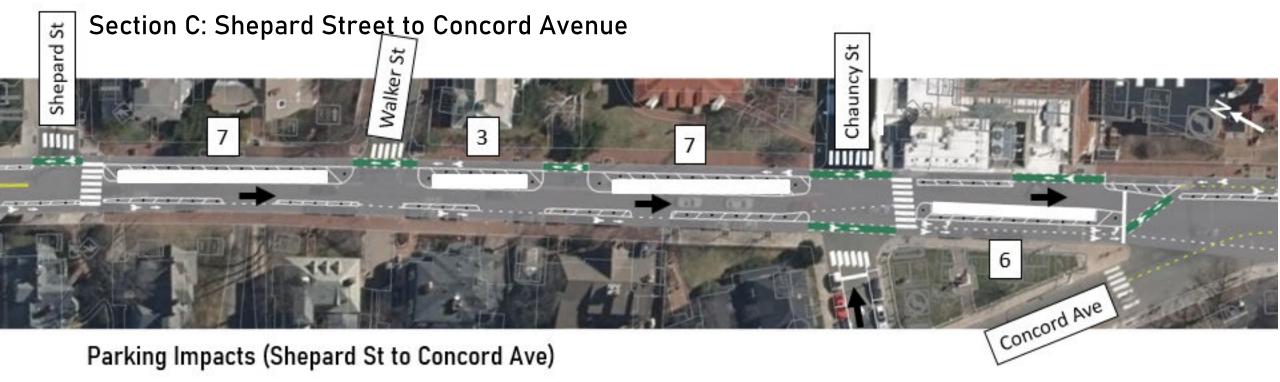
- One-way separated bike lanes on both sides of the street
- One-way travel eastbound for vehicles

#### Considerations

- Better access when biking to destinations on both sides of the street
- Predictable interactions for people biking and driving at side streets and driveways
- Making the street a one-way for vehicles provides space for parking
- Fewer conflicts between people walking and driving at Shepard Street crosswalk



Between Shepard Street and Concord Avenue (eastbound)



	1	Existing	Option 2
#	Permit Parking	18	23
ė i	Loading Zone	1	0
	Unrestricted	5	0
	Total	24	23

Option 2 results in an increase in permit parking in Section C.

Section C would be one-way eastbound towards Harvard Square for people driving.

Section C: Shepard Street to Concord Avenue

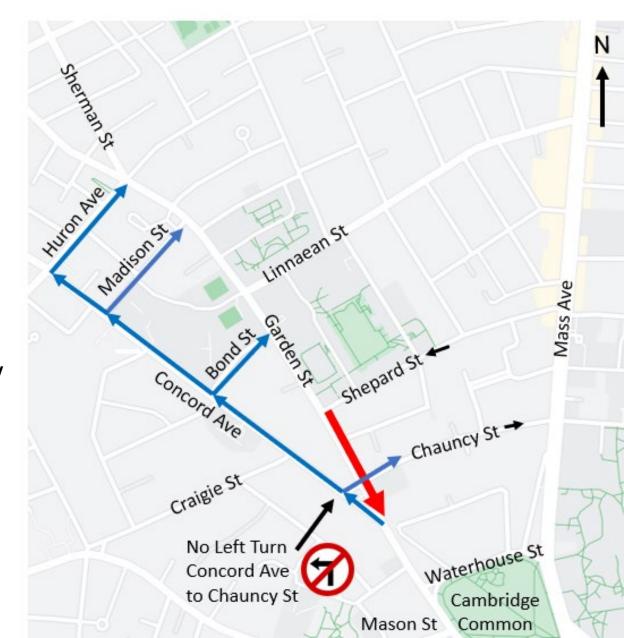
Compared to a longer one-way conversion, making Garden Street a one-way eastbound for vehicles between Shepard Street and Concord Avenue does the following:

- Reduces the impact on surrounding streets
- Lowers the volume of cut through traffic while still allowing local circulation
  - Residents, visitors, and shuttle routes
- Prioritizes keeping parking in an area where many residents don't have driveways
- Addresses a pinch point that could have required a two-way bike lane on one side
- Note: Arsenal Sq changes direction to maintain access to Chauncy St

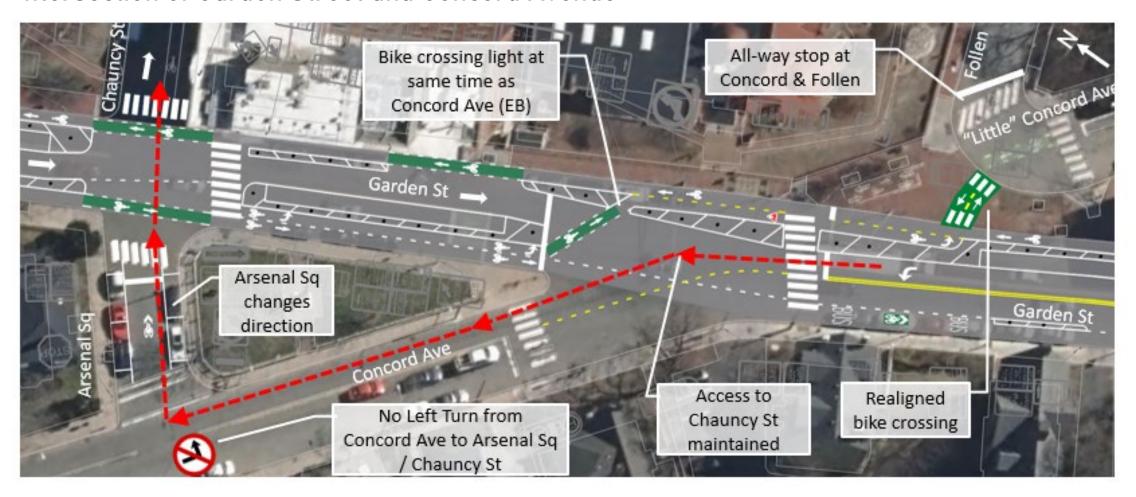
Section C: Shepard Street to Concord Avenue

Compared to a longer one-way conversion, making Garden Street a one-way eastbound for vehicles between Shepard Street and Concord Avenue does the following:

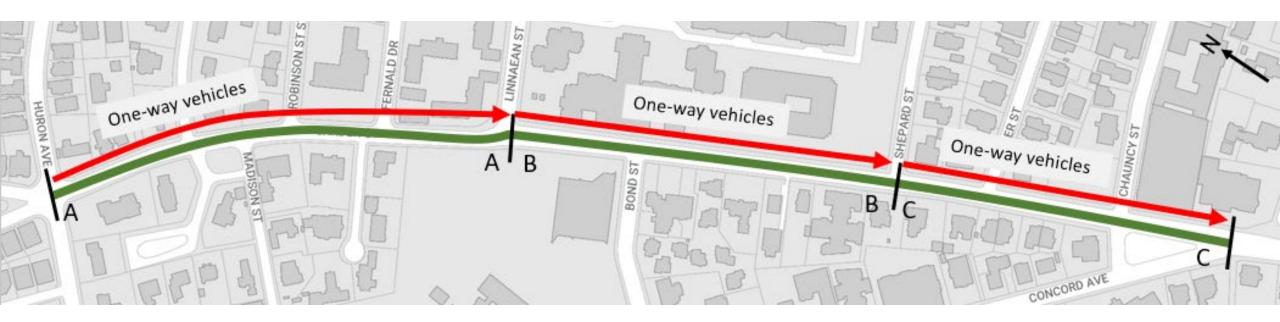
- Reduces the impact on surrounding streets
- Lowers the volume of cut through traffic while still allowing local circulation
  - Residents, visitors, and shuttle routes
- Prioritizes keeping parking in an area where many residents don't have driveways
- Addresses a pinch point that could have required a two-way bike lane on one side
- Note: Arsenal Sq changes direction to maintain access to Chauncy St



Intersection of Garden Street and Concord Avenue



Option 3	Section A	Section B	Section C
Biking	(	One-way (both sides)	
Driving		One-way travel (EB)	



### Option 3

- One-way vehicle traffic eastbound
- One-way separated bike lanes (both sides)

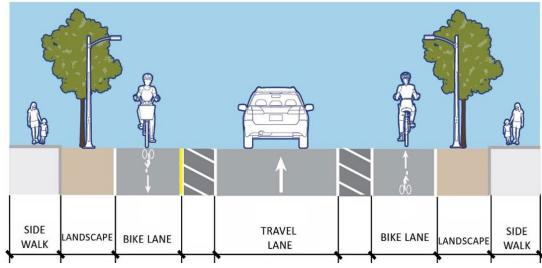
### Section A: Huron Avenue to Linnaean Street

### Direction of travel

- One-way separated bike lanes on both sides of the street
- One-way travel eastbound for vehicles

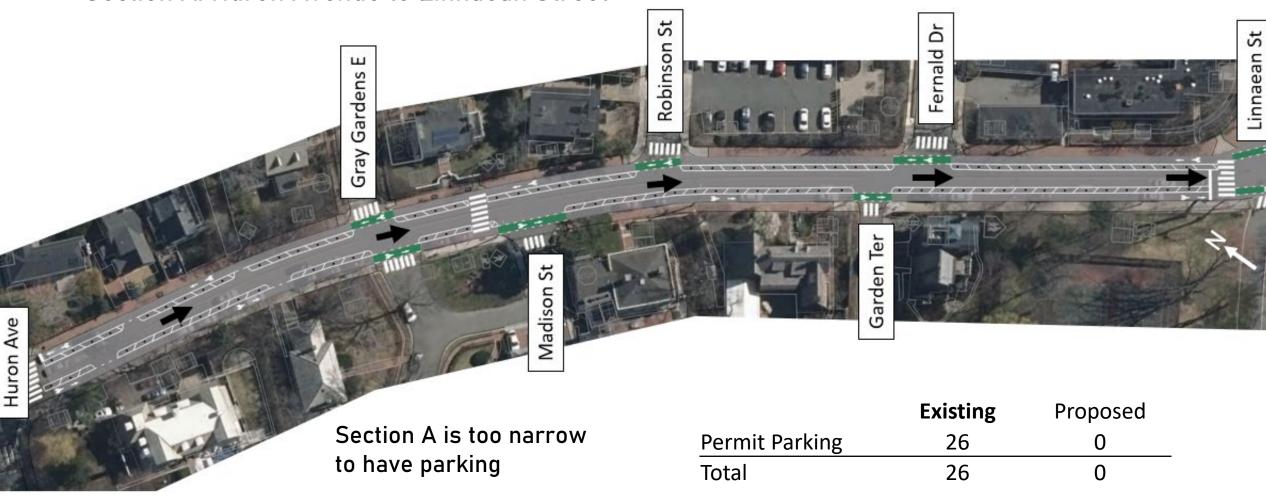
### Considerations

- Better access when biking to destinations on both sides of the street
- Predictable interactions for people biking and driving at side streets and driveways
- One-way streets can reduce total traffic volumes
- Reducing vehicle volumes on Garden Street west of Huron Avenue, aligns with goals in the Bicycle Network Vision Plan.



Between Huron Ave and Linnaean Street (looking eastbound)

Section A: Huron Avenue to Linnaean Street



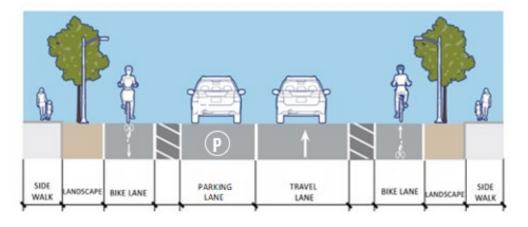
Section B: Linnaean Street to Shepard Street

### Direction of travel

- One-way separated bike lanes on both sides of the street
- One-way travel eastbound for vehicles

### Considerations

- Better access when biking to destinations on both sides of the street
- Predictable interactions for people biking and driving at side streets and driveways
- Making the street one-way for vehicles provides space for parking. Parking on the north side maximizes the number of spaces.
- Parking can be on the south side near Shepard Street to be closer to residential buildings
- Changing the side of parking can slow speeds



Between Linnaean Street and Shepard Street (looking eastbound) (The parking will be on the right side near Shepard Street)

Section B: Linnaean Street to Shepard Street



Parking Impacts (Linnaean St to Shepard St)

	Existing	Option 3
# Permit Parking	49	31
Loading Zone	1	1
Total	50	32

Option 3 removes 18 permit parking spaces in Section B.

North side parking maximizes the number of spaces. Some parking is on the south side near Shepard Street, including a loading zone, to help slow traffic, improve sightlines at the intersection, and be closer to homes.

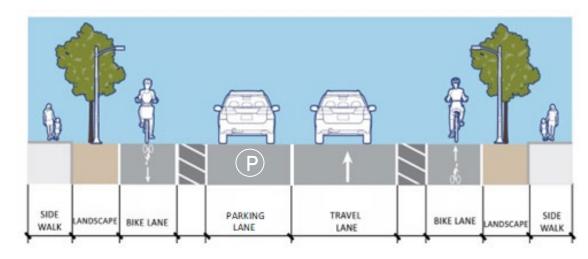
Section C: Shepard Street to Concord Avenue

### Direction of travel

- One-way separated bike lanes on both sides of the street
- One-way travel eastbound for vehicles

#### Considerations

- Better access when biking to destinations on both sides of the street
- Predictable interactions for people biking and driving at side streets and driveways
- Making the street a one-way for vehicles provides space for parking. Parking on the north side maximizes the number of spaces.
- Fewer conflicts between people walking and driving at the Shepard Street crosswalk



Between Shepard Street and Concord Avenue (looking eastbound)

Section C: Shepard Street to Concord Avenue hepard anncy Concord Ave

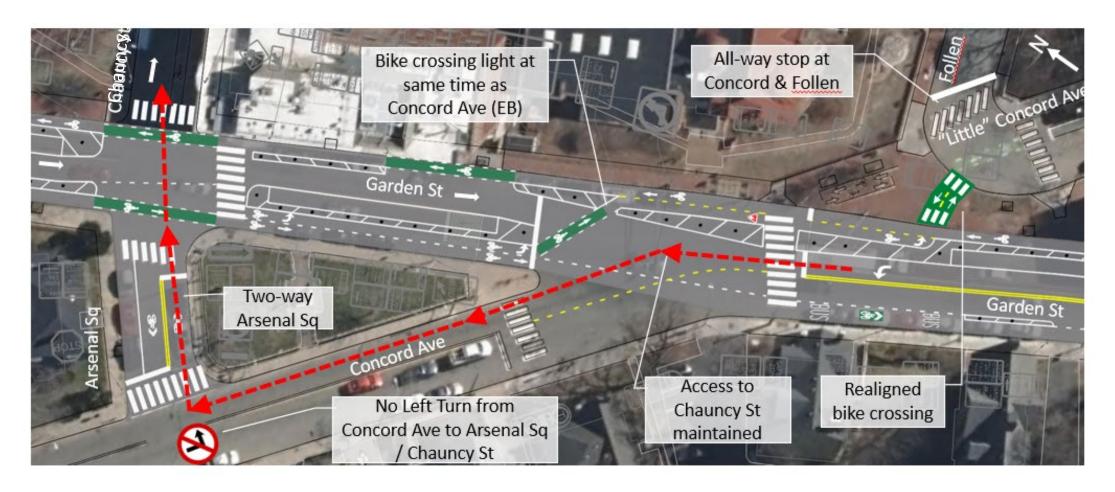
Parking Impacts (She	pard St to Concord Ave)
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	Existing	Option 2
# Permit Parking	18	21
Loading Zone	1	0
Unrestricted	5	0
Total	24	21

Option 3 results in an increase in permit parking in Section C.

Two permit parking spaces are removed on Arsenal Square to make it a two-way street to maintain neighborhood vehicular circulation.

### Intersection of Garden Street at Concord Avenue



# Option 3 Analysis One-way Impacts

One-way Impacts

To understand the impacts of making Garden Street oneway, we analyzed how people currently use the corridor.

- Gathered anonymized data from smartphones and navigation devices to provide insight on travel patterns and trends
- Data represents a portion of trips and is scaled with real traffic counts to quantify impacts
- Tells us the most common areas people go after traveling along Garden Street heading westbound
- Can help us anticipate where rerouted trips could go if Garden Street were one-way

The detailed analysis slides will be posted on the project website after the meeting



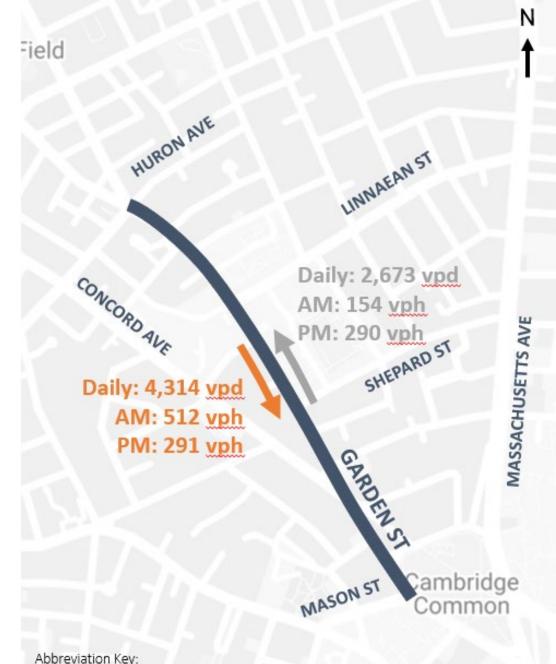
Image: Map showing a selection of affected routes

One-way Impacts

Traffic counts performed on Tuesday, June 14, 2022. Approximately 7,000 vehicles per day use Garden Street in the project area.

- A significant percentage of vehicle traffic is headed eastbound, making westbound the preferred direction to reroute
- Peak hour trips represent the maximum number of vehicles per hour that would need to be rerouted

Garden Street Peak Hour Veh	icle Traffic (veh	icles per hour)
	Westbound	Eastbound
Morning (8-9 A.M.)	154	512
Evening (4:30-5:30 P.M.)	290	291



Vehicles per day (vpd)

Vehicles per hour (vph)

### One-way Impacts

Data shows most trips from Garden Street near Concord Avenue (red box) pass through and go beyond these locations (green boxes)

	Morning Pe	ak (7-9 A.M.)	Evening Pea	k (4-6 P.M.)
Destination	% of WB Traffic	Vehicles per hour	% of WB Traffic	Vehicles per hour
Alpine Street	1%	1	3%	7
Cedar Street	9%	14	3%	9
Concord Street	1%	2	3%	9
Field Street	3%	5	4%	12
Linnaean Street	23%	35	5%	14
Raymond Street	5%	7	3%	10
Rindge Avenue	4%	6	1%	3
Route 2	0%	0	22%	64
Sherman Street	35%	54	13%	36
Walker Street	3%	5	3%	8

data set on project website for locations shown on the map, but not in the table.

CAMBRIDGEPARK DR SHERMAN ST WALDEN ST EB Danehy Park Lusitania Field **HURON AVE EB** FIELD ST RAYMOND ST **ALPINE ST** LINNAEAN ST CONCORD AVE WALDEN ST WB WALKER ST **HURON AVE WB BOND ST** Harvard University Note: The table above shows destinations with the highest percentages only. See full Garden Street Origin Harvard Yard City of Cambridge | Garden Street Safety Improvement Project Destinations charles River Harvard (7)

CONCORD TPK

(ROUTE 2)

(3)

ALEWIFE BROOK **PKWY** 

Magnolia Park

N

CEDAR ST

RINDGE AVE

One-way Impacts

Peak hour trips represent the maximum number of vehicles per hour that would need to be rerouted.

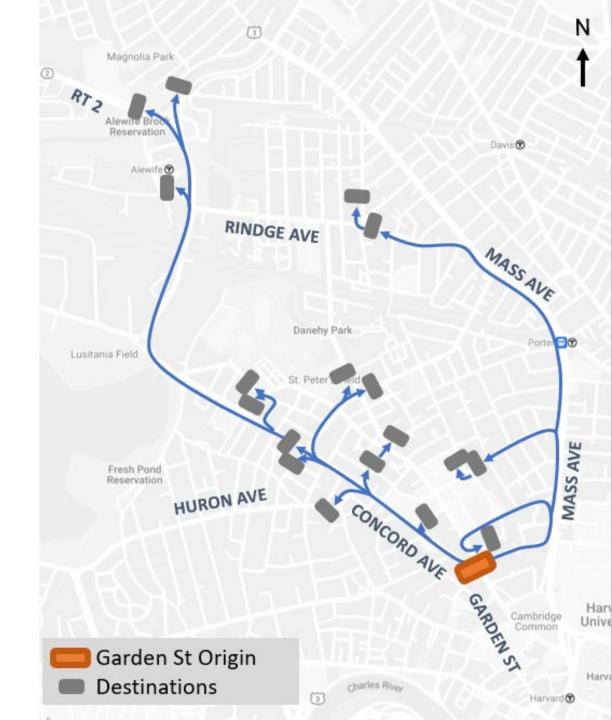
Concord Ave peak hour impacts\*

- Morning: 64 vehicles per hour (1 extra per min.)
- Evening: 143 vehicles per hour (2 extra per min.)

Massachusetts Ave peak hour impacts\*

- Morning: 67 vehicles per hour (1 extra per min.)
- Evening: 44 vehicles per hour (<1 extra per min.)</li>

Longer regional trips may avoid the Garden Street area altogether, decreasing these impacts



<sup>\*</sup>Approximate values

One-way Impacts

85% of morning peak trips and 64% of evening peak trips were to destinations outside the project area (passed through a green box).

Approx. 23 (A.M.) and 104 (P.M.) vehicle trips per hour did not match to outside destinations (green boxes) and are likely local trips on or along Garden Street. They could use the local street network to get to their destination.

### Summary:

WB Garden Street Volume	A.M. Peak (vph)	P.M. Peak (vph)
Existing (from traffic count)	154	290
Rerouted along Concord Avenue	64	143
Rerouted along Massachusetts Avenue	67	44
Remaining local street network	23	104

vph = vehicles per hour

Longer regional trips may avoid the Garden Street area altogether, decreasing these impacts

# Layout Concepts- Section D

Section D: Concord Avenue to Mason Street



### Section D

- Two-way vehicle traffic
- One-way separated bike lanes (both sides)\*

<sup>\*</sup>Eastbound separated bike lane to Berkeley Street only

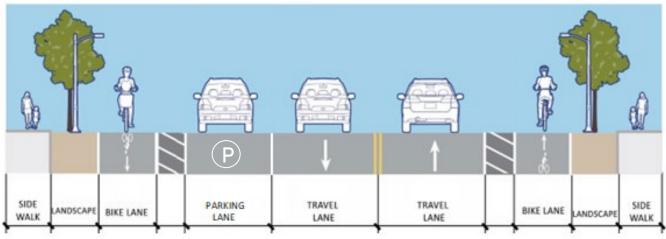
# Layout Concepts- Section D

Section D: Concord Avenue to Mason Street

### Preferred layout

One-way separated bike lanes on both sides of the street

- Westbound: Mason Street to Concord Avenue
- Eastbound: Concord Avenue to Berkeley Street



Concord Avenue to Berkeley Street (looking eastbound)

### **Key features**

- Parking and loading areas kept on the north side of the street between Concord Avenue and Waterhouse Street
- No changes to parking and loading on the south side of the street between Berkeley Street and Mason Street
- Road markings at Waterhouse Street to slow right turns from Garden Street

# Layout Concepts- Section D

Section D: Concord Avenue to Mason Street

	777	Little C	oncord Ave	8		
Concord Ave					LOADING	rkeley St

Existing Proposed
-------------------

Be

		LAISTING	110p030
#	Permit Parking	19	13
	Loading	1	1
	Pick up/drop off	3	3
	Accessible/Disability	3	5
	1 Hour	2	2
	Taxi	6	3

No changes in this area between Berkeley Street and Mason Street

Waterhouse St

Mason (

## Layout Concepts- Parking Impacts Summary

### **Permit Parking**

	Section A Huron to Linnaean		Section B Linnaean to Shepard		Section C Shepard to Concord		Section D Concord to Mason		Overall		
	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Change
Option 1	26	0	49	3	18	5	19	13	112	21	-91
Option 2	26	0	49	0	18	23	19	13	112	36	-76
Option 3	26	0	49	31	18	21	19	13	112	65	-47

For all options, a significant amount of permit parking can be maintained closer to Harvard Square.

	Shepard St to Waterhouse St (C&D)					
	Existing	Proposed	Change			
Option 1	37	18	-19			
Option 2	37	36	-1			
Option 3	37	34	-3			

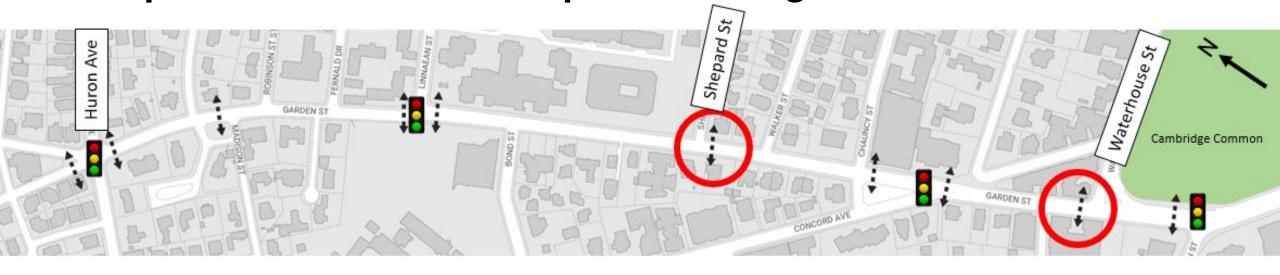


## Layout Concepts- Parking Impacts Summary

### Other Parking and Loading

- All three options increase the number of accessible/disability spaces in Section D from 3 to 5
  - 2 spaces kept at First Church in Cambridge
  - 1 space relocated to Berkeley Street at the accessible ramp to the building
  - 2 new spaces along the curb on the north side of Waterhouse Street at Garden Street
- No changes to parking and loading between Berkeley Street and Mason Street (Sheraton Hotel, First Church in Cambridge)
- No changes to side street parking, except the accessible/disability spaces

Improvements for People Walking



Waterhouse and Shepard Street crosswalks were most often mentioned as needing improvement

- At Waterhouse Street, we plan to install a rectangular rapid flashing beacon (RRFB) as part of this project.
- At Shepard Street, we plan to add the second crosswalk across
  Garden Street or move the crosswalk to the other corner to improve
  visibility as part of an upcoming DPW reconstruction project (FY23).
- At all crosswalks, we will be improving sightlines, shortening crossing distances, and making improvements to pedestrian signal phasing.

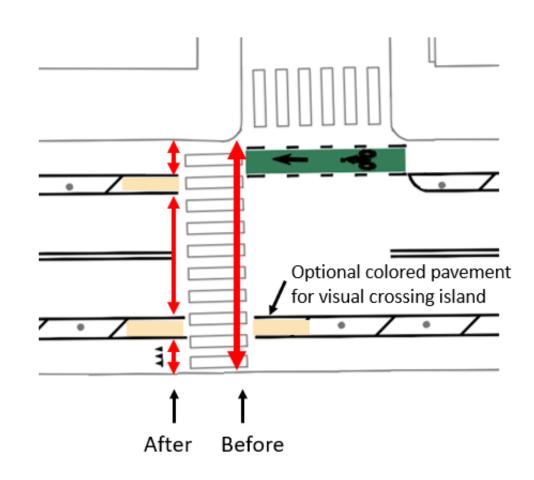


Photo: RRFB on Albany Street at Portland Street

# Improvements for People Walking- Continued

Separated bicycle lanes improve safety for people walking

- Shorter crossing distances
- Better sightlines
- Each potential conflict can be handled separately (i.e., cross bike lane, then vehicle lanes)
- Visually narrows the roadway for drivers, encouraging lower speeds and higher yielding rates.



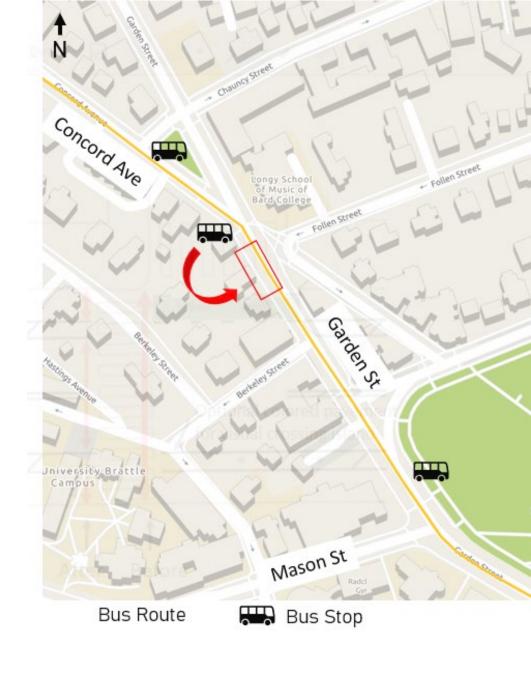
# Improvements for Transit

#### MBTA routes

- Bus routes 74, 75, and 78 use Garden Street between Concord Avenue and Mason Street
- We propose to move the bus stop at Garden St and Concord Ave south of the crosswalk across Garden Street
  - The MBTA requested a new location for this stop to improve visibility for bus drivers
  - No additional parking impacts

### Shuttle routes

 We are coordinating with both Harvard and Lesley about any potential changes to street directions



# Schedule / Next Steps

## Project Schedule

### Meetings/Timeline

May 24

**Community Meeting 1** 

July 12

**Community Meeting 2** 



Now

Community Meeting 3

Mid-September

**Community Meeting 4** 

Fall 2022

**Project Installation** 

### Outreach

#### What we've done:

- Posters attached to signposts along street
- Individual notifications to major stakeholders including schools, houses of worship, etc.
- Update emails sent to city and project mailing lists
- Postcards mailed to all addresses within project area

### What you can do:

- Sign up for the mailing list for the latest updates
- Sign up for the city's Daily Update emails
- Email or call the project manager directly
- Visit the project webpage below for the latest information

## cambridgema.gov/GardenStHuronMason

## **Questions + Feedback**

### Feedback

- We will take comment in the order hands are raised
  - If calling in, dial \*9 to raise your hand / \*6 to unmute
- Additional questions can be asked using the Q+A function
- In order to allow everyone to speak, please try to limit your time to 1 minute
- Approximately every 15 minutes, we will provide answers to questions
- The meeting is scheduled to end at 8:00 p.m.
- You may also contact the project manager directly to provide written or verbal feedback

### **Contact Information**

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# cambridgema.gov/GardenStHuronMason