

# UNION SQUARE PLAZA & STREETScape PROJECT

## 25% DESIGN IDEAS AND VISION

### EXECUTIVE SUMMARY



City of Somerville  
Mayor's Office of Strategic Planning &  
Community Development

FOR MORE INFORMATION CHECK OUT

**SOMERVOICE:**

<https://bit.ly/UnionSquareRedesign>



## What is the Union Square Plaza and Streetscapes Project and Why is it Important?

### INTENT

The Union Square Plaza and Streetscape Project aims to create a new Union Square that focuses more on people than on vehicles. The project involves making decisions about public spaces and street design through a fair and inclusive community process that respects the diverse community of Union Square.

The 25% Design Ideas and Vision Plan (25% DIV) is the first step of the project. It documents the lengthy and comprehensive community engagement process and records the design recommendations made for each street and open space. At “25%,” basic design ideas are verified as technically feasible, a set of drawings is prepared to explore ideas with actual spatial dimensions and material qualities, and probable costs are estimated.

Subsequently, a technical consulting team will be hired to advance the design ideas to “100%” completion and prepare for construction.

The Union Square Plaza & Streetscape Project’s first phase and the 25% DIV, is a result of the Union Square Neighborhood Plan (USNP), completed in 2016. In anticipation of the Green Line Extension (GLX) and planned development, the USNP was

completed to gather and understand shared values, consider conceptual urban design ideas, and explore early cost estimating and construction phasing. The USNP allowed the City to plan for, responsibly budget for, and schedule construction projects over the next thirty years.

In 2019, the City hired an interdisciplinary consulting team of mobility, landscape architecture, engineering, and community outreach experts to complete the 25% DIV. The team, lead by Toole Design, implemented an equity-based community engagement strategy to hear the design ideas, and voices of under-represented groups living in the Union Square and validate the feasibility of all voiced ideas.

#### **What does 25% mean?**

*The 25% designation is given as a milestone marker in the project’s schedule. At 25%, basic design ideas are verified as technically feasible, and a set of drawings is prepared to explore ideas with actual spatial dimensions, material qualities, and costs. Subsequently, a technical consulting team will be hired to advance the design ideas to 100% completion and prepare for construction.*

#### **Union Square Plaza and Streetscape Project Area Limits:**

*Each street and open space inside the red-dashed lines were taken into consideration for renovation including:*

- Union Square Plaza
- Bow Street
- Somerville Avenue
- Warren Avenue
- Stone Avenue
- Sanborn Court
- Stone Place
- Washington Street
- Hawkins Street
- Webster Avenue
- Prospect Street
- Everett Street
- Emerson Street
- Newton Street



## What did we do and what did we hear?

### OUTREACH AND EQUITY



UNION SQUARE COMMUNITY DESIGN TEAM

Union Square is home to racially, ethnically, and socio-economically diverse residents, and a distinct mix of small and emerging businesses. Given that the Union Square Plaza and Streetscape Project will shape

the everyday experiences of residents and visitors alike, engaging people where they live, work, and play was fundamental to the community outreach for this project. In an area as large as Union Square, there are many who actively participate in

traditional public meetings and others who, for a myriad of reasons, are not able to. The 25% DIV outreach strategy worked to change that. It tried to bring all voices to the conversation by relying on the expertise and networks of neighborhood residents themselves. Eleven diverse community members, selected for their ability to be strong community leaders, active listeners, and collaborative partners, were hired to implement the outreach. They received outreach training, conducted research, and developed their own process and strategy to reach a diverse range of people. Naming themselves the Community Design Team (CDT), they ranged in age from 16 – 60+, spoke six different languages, and established the following outreach goals:

### CDT OUTREACH GOALS

**1. Empower traditionally left out residents** to engage their communities in the redesign of Union Square’s plaza and streetscapes.

- For the pre-design community process, the CDT utilized a “Participatory Action Research” (PAR) approach to understand the needs and desires of traditionally underrepresented groups in Somerville.

***What is Participatory Action Research (PAR)?***

*PAR is a framework for conducting research and generating knowledge centered on the belief that the communities affected the most should be the ones leading the research. PAR emphasizes participation and action by community members, and emphasizes collective brainstorming to try new ideas that are grounded in their own experiences and history.*

**2. Design creative engagement tools**

for both online and in-person engagement that help community members imagine and share new ideas for Union Square.

**3. Work with the larger design team and the City** of Somerville to ensure that community input is reflected in the plans for Union Square.

**4. Create in-person public-making opportunities that welcome Somerville resident - Villens - back into Union Square** in ways that are site-specific, joyful, and diverse, and that double as ways to inspire and share new ideas for the plaza and streetscapes like the What the Fluff Festival!

- Set the bar for civic engagement on public projects in Somerville, prototyping strategies and tools that the City can use for future community engagement.

## I joined the CDT to...



**Bedelyn**

...give voice to those that don't usually have a say



**Deha**

...be a part of the change in my community



**Flavia**

...represent the Black indocumented community



**Gleidson**

...make sure residents got to influence the future of Union Sq



**Kaptain**

...engage Nepalese community and learn from the CDT



**Emelyn**

...express reciprocity to my



**John**

...use my youth worker skills & create a platform for residents to use their voice



**Kiran**

...represent my community



**Yiyang**

...contribute my design experience where my family is growing



**Mike**

... to give voice to wide variety of residents and businesses on the future of Union Square.

### CDT OUTREACH CONTINUED:

The CDT engaged over 1,140 people during the course of the project. Their outreach strategy focused on “popping up” where people were already gathered, engaging people with Magnet Boards, Imagination Boards, Mix & Match tools, holding focus groups, soliciting comments on a Vision Board, and asking participants to vote with tokens or stickers on different design ideas. Additionally, the CDT had numerous face-to-face conversations during their pop-ups while people made buttons, silkscreen printed on bags or t-shirts, played games, tried local international food, danced, or were entertained by BIPOC and local artists. The CDT’s creative strategies broadened the conversation while inspiring residents with new uses of the public realm.

Working alongside the CDT, City Staff also led engagement efforts to hear directly from abutting residents, businesses, City Committees and key stakeholders like Union Square Main Streets, and the Union Square Neighborhood Council. City Staff engaged over 50 businesses by going door-to-door, conducted a business needs survey, collected over 73 comments from abutting residents during two pop-up events, and received memos from key stakeholders and committees.

## The CDT held the following basic beliefs:

- *Everyone is a teacher and a learner.*
- *We all bring critical knowledge, tools, and experiences to this project.*
- *We have all the (tools, knowledge, wisdom) we need, but we're still down for learning new tricks.*
- *We don't have all the answers or even all the questions.*
- *We will make mistakes, and we will learn from them.*
- *We will listen for what (and who) we hear and don't hear. We will look for what (and who) we see and don't see.*
- *We will radically welcome the public into our process and into Union Square.*
- *We are committed to sharing the results and skills that we learn along the way back to our communities and the public.*
- *Our work is grounded in our beliefs in spatial justice, and the rights of all people to be, thrive, express and connect in space.*
- *Create a comfortable space / environment for everyone to be able to produce valuable product.*
- *We respect and consider contradicting ideas to our own.*

## KEY FINDINGS

### Union Square needs more:



**Amenities** - public art, public restrooms, seating and café style seating, shade and play



**Climate Forward Improvements** - trees and plants, green space, green stormwater infrastructure



**Public Space** - a larger plaza for events, places to hang out, an identity for Union Square that is representative of the diverse community and businesses, and better maintenance of its public space

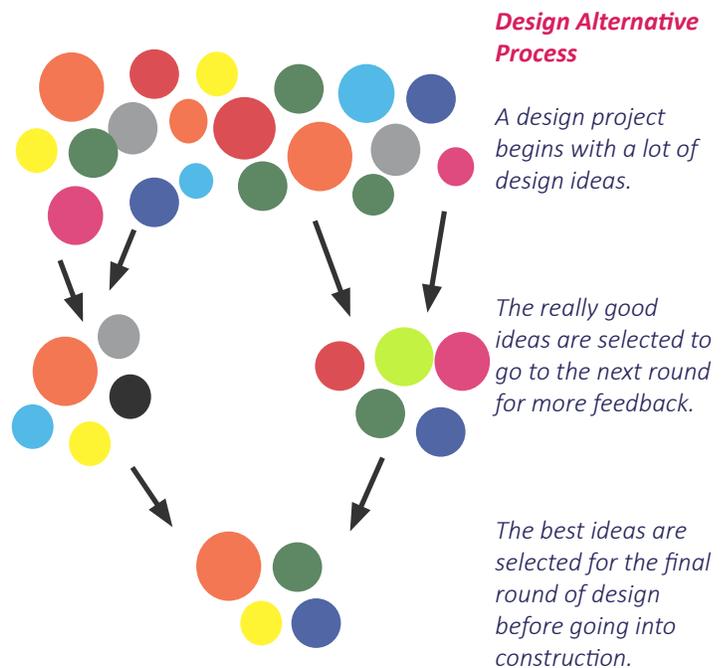


**Mobility Improvements** - crosswalks and safe pedestrian space, better bus and green line access, protected bike infrastructure, traffic calming and intersection improvements

## How Does Community Feedback Turn Into Design Ideas?

### PROCESS

Working together, the CDT, the Toole Design team, and City Staff collected, organized, and analyzed all the early public feedback. From this information, they set goals to guide any design ideas. Next, the Toole Design team prepared drawings of several design idea alternatives for the entire project area that reflected those guiding principles. At various stages of the Toole Design team's work, the CDT collected additional community feedback and advised on the design ideas by using their outreach data to validate one design idea over another. It is common for design projects to start with a lot of different design ideas that get clarified and refined into a single set of recommendations. On this project we are calling the single set of recommendations the 25% Design Ideas and Vision (DIV).



## GOALS AND GUIDING PRINCIPLES - PUBLIC SPACE

The Union Square Streetscape and Plaza Project will advance Somerville’s goals of increasing public open space acreage and will establish a public open space vision for Union Square. The public open spaces designed as part of this project will fit into a dense and strategically programmed network of parks, squares, playgrounds, gardens, pocket parks, and other types of civic spaces to accommodate

different needs. Union Square will be reestablished as the cultural heart of Somerville. Based on the guiding principles below, the redesigned plaza and streetscapes must provide lively public spaces that are infused with neighborhood culture and identity, support events and festivals, and be inviting for everyone. The goals of 25% DIV public open spaces are:

1. Repurpose underutilized streets as new plazas and shared streets to increase public open space from approximately 0.56 acres today to approximately 1.9 acres. (When combined with civic spaces produced through private development, Union Square is projected to gain close to 4 acres of new public open space!)
2. Respond to a changing climate and prioritize sustainability in public spaces by designing for a high percentage of urban tree canopy, planting areas, and green infrastructure to maximize ecosystem services benefits.
3. Design public space as part of an interconnected network that links different parts of the neighborhood with a cohesive and unique identity.
4. Empower residents and businesses to shape, improve, and enjoy public spaces to congregate, play, and relax in.
5. Consider the needs of elders and people with disabilities in public space, paying particular attention to providing comfortable travel ways and seating.
6. Explore opportunities for low-cost, interim or temporary pilot projects to create new open space.
7. Enhance the quality of public life by creating short and long-term opportunities for activation and programming that is inviting to all.
8. Support artists and reinforce the importance of their role in shaping neighborhood identity by including site-specific art in the public spaces in Union Square.
9. Design a welcoming gateway or gateways to Union Square.

**Idea 1** (Somerville Ave. keeps car traffic)



**Idea 2** (Bus Transitway)



### **Design Alternative Process**

*A design example from the March 21 Digital Community Meeting where participants were asked to give feedback on two possible design ideas for the Union Square Plaza and Somerville Avenue between Webster Avenue and Prospect Street. Participants discussed observations, differences, preferences, and concerns with both Idea 1 and Idea 2.*

## GOALS AND GUIDING PRINCIPLES

### MOBILITY

The Union Square Plaza and Streetscape Project is an opportunity to reimagine mobility in Union Square by treating streets as essential civic spaces and rebalancing space to prioritize people walking, biking, and taking transit over vehicles. Designing Union Square’s streets around this principle

improves safety and accessibility for all users, supports public life across the square’s open spaces and commercial areas, and reinforces the existing mobility culture of the neighborhood. The goals that led the mobility work are:

1. Prioritize the needs of people walking, biking, and taking transit using a “Complete Streets” approach to design, protecting vulnerable road users and making streets safer and more pleasant for people of all ages and abilities.
2. Reduce vehicle miles traveled (VMT) and the overall space dedicated to personal vehicles, and make sustainable transportation choices like walking, biking, and taking transit an easier choice.
3. Ensure that all bus stops are accessible, safe, and comfortable for all users.
4. Advance efforts set forth in the Union Square Neighborhood plan to cultivate Union Square’s streets as civic spaces by converting Somerville Avenue to 2-way and designing Bow Street as a shared street environment.
5. Introduce visual cues and traffic calming in and around Union Square to slow vehicle speeds and create a safer and more welcoming environment for all modes of travel.
6. Integrate bikeshare into the public realm and street design.
7. Facilitate easy access to open spaces, especially across streets and intersections which may function as barriers.
8. Promote sustainable mobility as an asset for commercial development and expanding small business’ customer base.

**Idea 1** (Bow Street keeps car traffic)



**Idea 2** (Bow Street for pedestrians only)



**Design Alternative Process**

*A design example from the March 21 Digital Community Meeting where participants were asked to give feedback on two possible design ideas for the Bow Street. Participants discussed observations, differences, preferences, and concerns with both Idea 1 and Idea 2.*

## What are the 25% Design Ideas and Vision Recommendations?

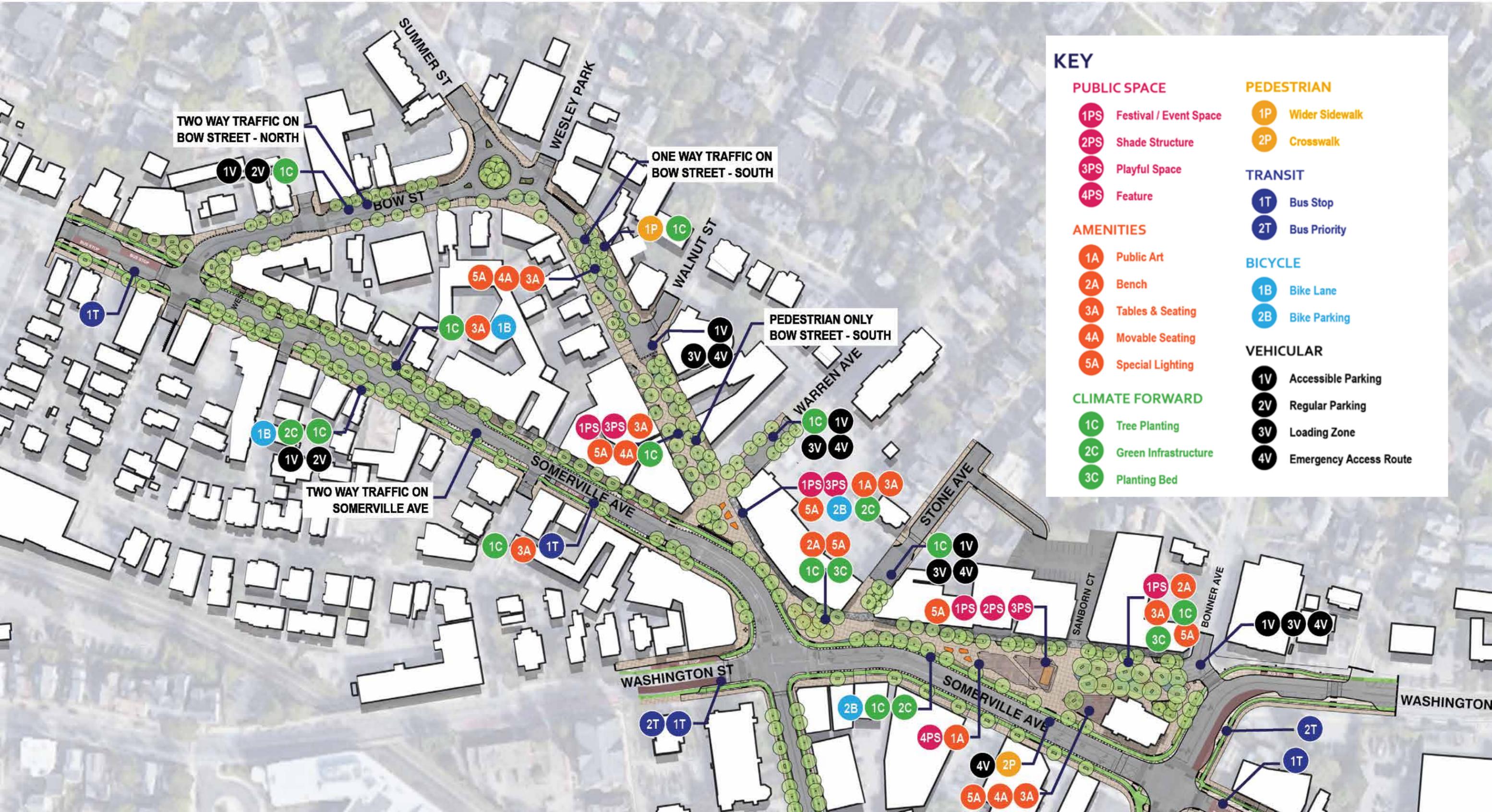
The following pages are a set of illustrations to show and describe the conclusion of the design alternatives process. The conclusion, called the 25% Design Ideas and Vision (25% DIV), is the community, and City Staff supported design ideas and vision that will be further detailed and implemented at each location. Each street and

public space in the project area includes specific recommendations and illustrations that highlight the following design categories: public space, amenities, climate forward, pedestrian, transit, bicycle, vehicular.

- **Project Area North** Illustrative Plan p. 10
- **Project Area South** Illustrative Plan p. 12
- **Vision for Public Spaces and Plaza** Illustrative Plan p.14
- **Union Square Plaza** Illustrative Info Sheet p. 15
- **Vision for Streets and Transportation** Illustrative Plan p. 16
- **Bow Street**
  - Between Walnut Street & Warren Avenue Illustrative Info Sheet p. 17
  - Between Wesley Park & Walnut Street Illustrative Plan p. 18
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  - Between Bow Street and Webster Avenue Illustrative Plan p. 20
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# 25% DESIGN IDEAS AND VISION PLAN

## PROJECT AREA NORTH



### KEY

#### PUBLIC SPACE

- 1PS Festival / Event Space
- 2PS Shade Structure
- 3PS Playful Space
- 4PS Feature

#### AMENITIES

- 1A Public Art
- 2A Bench
- 3A Tables & Seating
- 4A Movable Seating
- 5A Special Lighting

#### CLIMATE FORWARD

- 1C Tree Planting
- 2C Green Infrastructure
- 3C Planting Bed

#### PEDESTRIAN

- 1P Wider Sidewalk
- 2P Crosswalk

#### TRANSIT

- 1T Bus Stop
- 2T Bus Priority

#### BICYCLE

- 1B Bike Lane
- 2B Bike Parking

#### VEHICULAR

- 1V Accessible Parking
- 2V Regular Parking
- 3V Loading Zone
- 4V Emergency Access Route



# 25% DESIGN IDEAS AND VISION PLAN

## PROJECT AREA SOUTH



FUTURE CONNECTIONS VIA PRIVATE DEVELOPMENT

PROTECTED BIKE LANES ON WEBSTER AVENUE

BUS PRIORITIZATION ON PROSPECT STREET

PERPENDICULAR CONNECTION OF WEBSTER AT PROSPECT REVISED SIGNAL TIMING



## VISION FOR PLAZA AND PUBLIC SPACES

Recommendations for all public spaces in the project area.



- A** Increase open space by converting parking lot into additional plaza space with new trees, space for outdoor dining and events like the farmers market.
- B** Renovate existing plaza to include new trees, shade structure, outdoor art, green stormwater infrastructure (GSI), lighting and electric for events, water feature.
- C** Increase open space by eliminating right turn only lane (slip-lane) to Bow Street and turn it into additional plaza space. The project will increase the open space from .37 acres to 1.14 acres.
- D** Prohibit cars on Bow Street between Walnut Street and Warren Avenue and renovate the space to include new trees, outdoor dining, lighting, seating areas.
- F** Preserve existing trees and increase sidewalk areas for outdoor dining.
- E** Increase sidewalk areas for outdoor dining and seating areas with new trees.
- G** Increase sidewalk space to allow outdoor dining, seating areas, preserve existing trees as well as adding new trees.
- H** Plant new trees.
- I** Coordinate with private development to maximize new open space and new trees.

# UNION SQUARE PLAZA

Expand Plaza Limits.



The 25% DIV includes the following design ideas:

## PUBLIC SPACE

- Close the right-turn lane, or slip-lane, to Bow Street and convert both the slip-lane and traffic island into plaza space. This will increase the open space from .37 acres to 1.14 acres.
- Remove the existing parking spaces in the parking lot and renovate the space to allow outdoor dining with Fire Department access only.
- Dead-end Stone Avenue and Warren Avenue with Fire Department access only.
- Design the plaza layout to allow various sizes of events:
  - Centrally located stage and shade structure with integrated event infrastructure like power.
  - Event tent spacing that can integrate with the spacing between trees for events like the farmers market and Fluff Fest.
  - Three gathering areas to create zones for different event types or just hanging out.
  - Provide accessible pavement surfaces and transitions to allow equitable access to the whole plaza.

- 1PS** Festival / Event Space
- 2PS** Shade Structure
- 3PS** Playful Space
- 4PS** Water Feature

## AMENITIES

- Integrate site-specific art into furniture and pavement surfaces.
- Provide a variety of seating styles like benches, cafe tables and chairs, lounge-type seating, and seating in both sun and shade.

- 1A** Public Art
- 2A** Bench
- 3A** Tables & Seating
- 4A** Movable Seating
- 5A** Special Lighting

## CLIMATE FORWARD

- Increase tree quantity by at least 36%.
- Green stormwater infrastructure (GSI) to extend the Somerville Avenue Utility and Streetscape Infrastructure (SAUSI) project.
- Larger areas with native plants in stormwater infiltration basins.
- Incorporate bosques of trees at newly dead-ended streets.
- Low-water use cooling spray or splash feature.

- 1C** Tree Planting
- 2C** Green Infrastructure
- 3C** Planting Bed

## BOW STREET Between Walnut St. and Warren Ave

Convert to a pedestrian-only space and function as an extension of Union Square Plaza



The 25% DIV includes the following design ideas:

### PUBLIC SPACE

- Convert .31 acres of roadway into an extension of the Union Square Plaza.
- Underground overhead utility lines to maximize flexibility.

1PS Festival / Event Space

### AMENITIES

- Integrate site-specific art into furniture and pavement surfaces.
- Design the layout to allow flexible spaces for outdoor dining.
- Install unique, pedestrian scale lighting for nighttime activity.

1A Public Art

5A Special Lighting

4A Movable Seating

### PEDESTRIAN

- Curbless street for maximum pedestrian prioritization.
- Amenities and pavement to create space for emergency access and pedestrian-only areas.
- Accessibility to be incorporated into final design.

1P Wider Sidewalk

### TRANSIT

- Busses will not be permitted to drive in this area.

### BICYCLE

- Riding a bicycle is not permitted in this area.
- Bicyclists to use protected bicycle lanes on Somerville Ave and shared street on Bow St (West) or must dismount and walk through the space.

### VEHICULAR

- Regular vehicular traffic is not permitted in this area.
- Design to allow for emergency vehicle access
- Commercial and USPS deliveries have dedicated loading areas at Walnut, Warren, and Stone. Final design might accommodate access during off-pedestrian hours.

## VISION FOR STREETS AND TRANSPORTATION

Recommendations for all streets in the project area.



- A** Reconfigure intersection for two-way traffic, create plaza spaces, and shorten pedestrian crossing distances.
- B** Convert to two-way traffic on a curbless street with protected bicycle lanes. Sidewalk and vehicular spaces to be arranged to slow traffic and include outdoor dining, accessible parking, loading/unloading, and urban trees.
- C** Relocate bus stops to support high-frequency buses and avoid bus stop detours during plaza events.
- D** Reconfigure street to prioritize pedestrians and protected bicycle lanes.
- E** Reconfigure street to prioritize pedestrian access to the Green Line station and faster bus service to and from Union Square.
- F** Redesign intersection to provide shorter crossings for pedestrians, improved travel for buses, and safe connections for bicycles.
- G** Pedestrian-only space to extend Union Square Plaza.
- H** Street shared by pedestrians, bicyclists, and drivers going one-way from Summer St. to Walnut St.
- I** Traffic circle to preserve trees and slow down vehicles.
- J** Street shared by pedestrians, bicyclists, and drivers going one-way from Somerville Ave. to Summer St.

**The 25% DIV includes the following design ideas for all Union Square Streets:**

**PUBLIC SPACE**

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- Improved sidewalks and added amenities to enhance public spaces.
- Design the layout to allow flexible spaces for outdoor dining.
- Private development must include adequate space for activities like outdoor dining

**AMENITIES**

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- Distribute seating options along sidewalks
- Integrate site-specific art into furniture and pavement surfaces.
- Design the layout to allow flexible spaces for outdoor dining.
- Install unique, pedestrian scale lighting for nighttime activity.

**CLIMATE FORWARD**

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- Add trees on sidewalk to increase tree quantity by at least 36%.
- Incorporate Green stormwater infrastructure (GSI) whenever possible

## **BOW STREET** Between Wesley Park and Walnut Street

Convert to a shared street that is one-way southbound.



The 25% DIV includes the following design ideas:

### **PEDESTRIAN**

- Curbless street, special pavement, and curvy layout slow traffic and indicate pedestrian priority.
- Clearly defined areas for pedestrians and for emergency access
- Accessibility to be incorporated into final design.



**Pedestrian  
Priority**

### **TRANSIT**

- Busses will not be permitted to drive in this area.

### **BICYCLE**

- Bicycle traffic to share space with vehicular traffic.

### **VEHICULAR**

- Traffic calming to reduce speeds.
- Changes in street circulation on a neighborhood scale to prevent cut-through traffic and reduce traffic volume. Access to private properties to be maintained.
- Limited parking to be accommodated in final design.
- Design to include long-term, short-term, and accessible parking, as well as loading/unloading zones.



**One-Way , Curbless  
Shared Street**

## **BOW STREET** Between Somerville Avenue and Summer Street

Convert to a two-way shared street.



The 25% DIV includes the following design ideas:

### **PEDESTRIAN**

- Curbless street, special pavement, and curvy layout slow traffic and indicate pedestrian priority.
- Clearly defined areas for pedestrians and for emergency access
- Accessibility to be incorporated into final design. Accessibility to be incorporated into final design.

**1P** Pedestrian Priority

### **TRANSIT**

- Design will accommodate bus traffic in the short term with the goal to eventually phase-out bus service on Bow Street.

**1T** Accommodate Short Term Bus

### **BICYCLE**

- Bicycle traffic to share space with vehicular traffic.

### **VEHICULAR**

- Traffic calming to reduce speeds.
- Changes in street circulation on a neighborhood scale to prevent cut-through traffic and reduce traffic volume. Access to private properties to be maintained.
- Design to include long-term, short-term, and accessible parking, as well as loading/unloading zones.

**1V** Two-Way, Shared Street

## SOMERVILLE AVENUE Between Bow Street and Webster Avenue

Convert to a two-way curbless street.



The 25% DIV includes the following design ideas:

### PEDESTRIAN

- Furniture zones, bicycle lanes, and planted buffers to create separation from traffic and improve pedestrian experiences on the plaza and sidewalk. Furniture and buffers to be adjustable to support outdoor dining
- Raised crosswalks at all sidestreets for safer and more accessible crossings.



**1P** Raised Crosswalk



**2P** Furniture Zone

### TRANSIT

- Improved Bus stops.



**1T** Bus Stop

### BICYCLE

- Separated bike lanes in both directions to provide safe rides along Somerville Avenue, a street with higher traffic volumes.



**1B** Bicycle Lane

### VEHICULAR

- Two-way vehicular traffic to allow for direct travel through Union Square in both directions.
- Traffic calming to slow down traffic including: alternating parking isles, creating a slightly curvy road alignment (or chicane), and a curb-less design to indicate pedestrian priority areas.
- Curbless street to slow traffic and indicate pedestrian priority.
- Design to include long-term, short-term, and accessible parking, as well as loading/unloading zones.



**1V** Two-Way, Curbless Street

## SOMERVILLE AVENUE Between Webster Avenue and Prospect Street

Convert to a two-way curbless street. The design supports closure of this section for larger events.



The 25% DIV includes the following design ideas:

### PEDESTRIAN

- Furniture zones, bicycle lanes, and planted buffers to create separation from traffic and improve pedestrian experiences on the plaza and sidewalk. Furniture and buffers to be adjustable to support events with roadway closure.
- Curb-less street allows access throughout the street during events. Accessibility to be incorporated into final design.



### TRANSIT

- Bus stops placed outside of this section of Somerville Avenue in order to minimize noise and air pollution from high-frequency busses, and avoid bus stop detours during events with roadway closures.

### BICYCLE

- Separated bike lanes in both directions are proposed to provide safe rides along Somerville Ave, a street with higher traffic volumes.



### VEHICULAR

- Curbless street to slow traffic and indicate pedestrian priority.
- Design to include long-term, short-term, and accessible parking, as well as loading/unloading zones.



## PROSPECT STREET Between Webster Avenue and Somerville Avenue

A transit and pedestrian priority street to improve access to the Green Line station and to improve bus service to and through Union Square.



The 25% DIV includes the following design ideas:

### PEDESTRIAN

- Widen sidewalks wherever possible.
- Raised crosswalk at Bennet Court to connect to Green Line station and slow

1P Wider Sidewalk

2P Raised Crossing

### TRANSIT

- Bus lanes (or queue jumps) at Somerville Ave and Webster St to allow busses to move faster through these intersections west of Carlton Street/Bow Street.

1T Bus Only Lane

### BICYCLE

- No bike lanes proposed in between Webster and Newton Streets in order to allow transit-priority. Due to narrow right-of-way constraints, this street cannot accommodate all modes.
- Two-way protected bicycle lane between Newton St and Somerville Ave will connect Newton St (proposed to be a low volume/low speed residential connection – Neighborway) to the protected bicycle lanes on Somerville Ave and Washington Street.

1B Two-Way Bicycle Lane

### VEHICULAR

- Two-way vehicular traffic.
- No parking.

## WEBSTER AVENUE Between Washington Street and Prospect Street

Primary connection for many bicyclists seeking to access the Union Square Plaza, in combination with Newton St to access Union Square station, or to ride through Union Square.



The 25% DIV includes the following design ideas:

### PEDESTRIAN

- Raised crosswalks at all sidestreets for safer and more accessible crossings.
- Reconfigured intersection at Newton Street (West side) to shorten the crossing distance, improve accessibility, and safety.
- Mid-block raised crosswalk to provide safer access to Prospect Hill Academy and slow traffic



### TRANSIT

- Final design to ensure bus service is not interrupted during events that close off Somerville Ave between Webster Ave and Prospect St

### BICYCLE

- Separated bike lanes in both directions are proposed to provide safe rides along Webster Ave, a street with higher traffic volumes



### VEHICULAR

- Two-way vehicular traffic.
- No parking.

## INTERSECTION - PROSPECT STREET AND WEBSTER AVENUE

The redesign of the intersection at Prospect St and Webster Ave consists of safer and shorter crossings for pedestrians, improved timing for buses along Prospect St, and safe connections for people riding bicycles.



### The 25% DIV includes the following design ideas:

- 1 Reconfiguration to intersect Prospect Street at a perpendicular angle and create shorter crossing distances.
  - 2 Signal upgrades to support safe and timely movement through the intersection for all: pedestrians, MBTA buses, people riding bikes, and vehicles.
  - 3 Bus-only lanes both northbound and southbound on Prospect Street to allow for improved bus timing along Prospect Street
- Bicycle lanes along Prospect Street to provide safe connections between Webster Ave north and south and between Webster Ave and the proposed Neighborway on Concord Ave.

## INTERSECTION - BOW STREET AND SOMERVILLE AVENUE

The proposed intersection at Bow St and Somerville Ave eliminates the middle island creating more public space and shorter and safer crossings.



### The 25% DIV includes the following design ideas:

- 1 Intersection to accommodate two-way traffic on Bow Street.
  - Bow Street intersects Somerville at a perpendicular angle to slow cars entering or exiting Bow Street, and create shorter crossing distances.
- 2 Large curb extension along the east side of Bow St to provide space for outdoor dining, seating, and trees.
  - Bicycle movements along Somerville Ave and in and out of Bow St to be included in final design.

## INTERSECTION - BOW STREET AND SUMMER STREET

The proposed intersection at Bow St and Summer St introduces a roundabout that supports the changing traffic patterns on Bow St, slows traffic, and preserves the majority of the existing trees.



### The 25% DIV includes the following design ideas:

- 1 Intersection to accommodate two-way traffic on Bow Street west of the intersection, and one-way change from westbound to eastbound on Bow Street east of the intersection.
  - 2 Access to Wesley Park is integrated into the roundabout traffic flow.
  - 3 Crosswalks in all direction to provide safe crossings.
- Truck aprons and mountable islands to direct traffic in and out of the roundabout are mountable to ensure access for emergency vehicles.

## **What are the next steps?**

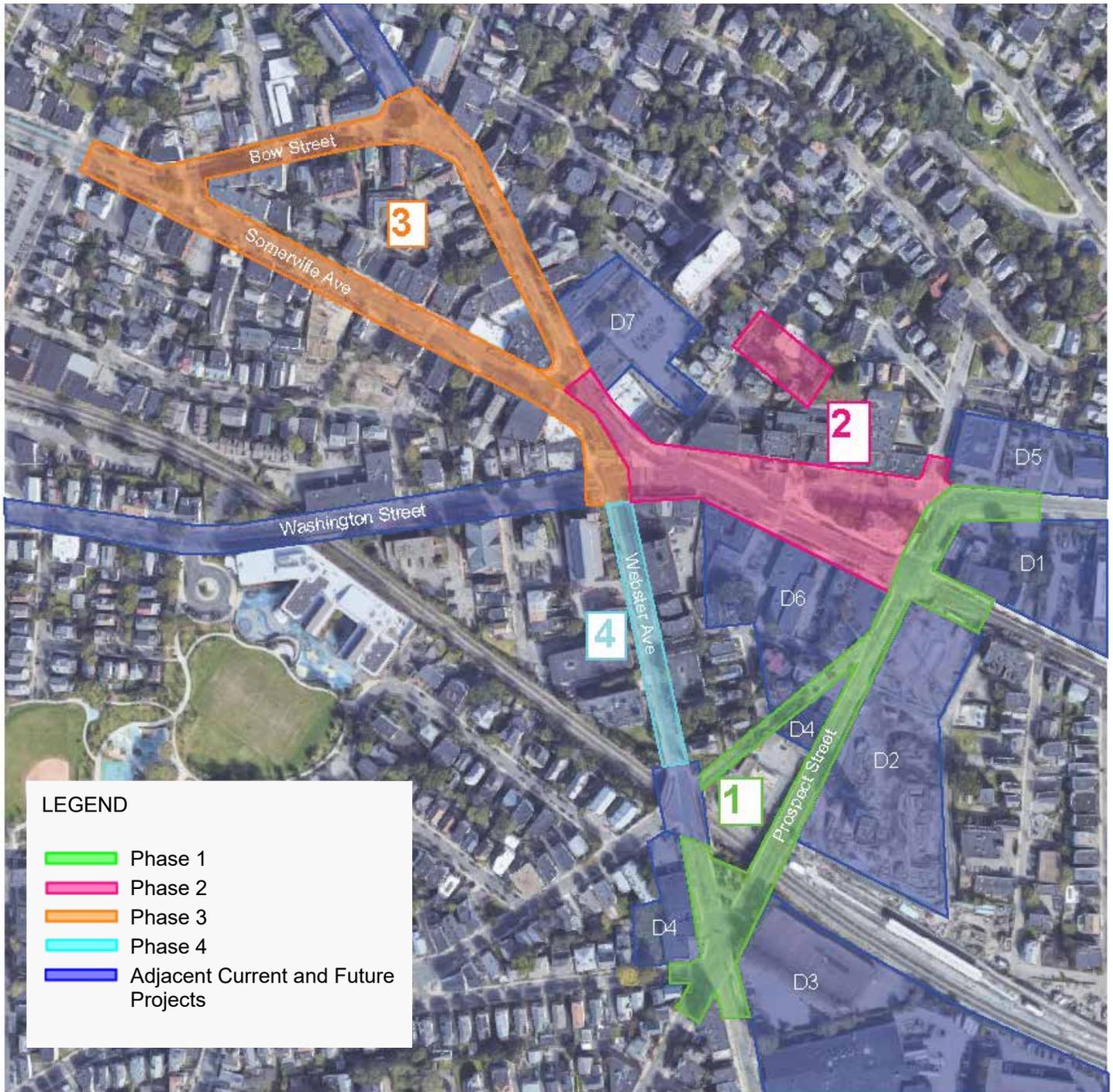
### **PHASING**

The proposed 25% DIV can be broken up into four phases. Both the City's priorities for implementation as well as coordination with private development and State Agencies (MassDOT, MBTA) were taken into consideration. Each phase requires additional technical design prior to being scheduled for construction. Design and implementation of each phase will depend on availability of funding. The current Capital Investment Plan's (CIP 2023) proposed funding will allow the City to start work on Phase 1 by the end of this year.

In order to advance the 25% DIV to 100% design the City must:

- Hire design/engineering experts to prepare 100% design.
- Refine the ideas and finalize the street configuration, the look and feel of the public places such as plaza and sidewalks, and the location and materials of street elements such as benches and trees. The resulting 100% design will be the base for construction.
- Undergo a traffic analysis to understand the impact of the proposed changes in traffic patterns especially on surrounding neighborhoods.
- Evaluate parking and loading needs that is coordinated with the City's parking study.
- Evaluate if there are any pilot project opportunities or ways to test out design ideas prior to construction.
- Evaluate project areas that were not included in the 25% DIV such as:
  - Sanborn Court improvements.
  - Detailed design of Neighborways on Newton, Everett, and Emerson Streets.
  - Washington Street north of Somerville Avenue.
- Continue to coordinate this project with private development proposals in Union Square.

## PHASING DIAGRAM



### PHASE 1

#### Prospect Street, Webster Avenue south of Newton Street, and Newton Street

- Construction of east side of Prospect Street to follow completion of D2 construction and the raising of grades along the Prospect Street bridge as part of D3 construction.
- Consideration should be given to maintaining access to the intersection of Newton Street and Prospect Street rather than closing it off to vehicle traffic as shown in the 25% design plans to facilitate future construction of the adjacent D4 and D6 parcels.
- Further design and coordination are required to determine layout of bicycle connections to the MBTA Union Square subway station and bus stop locations on Somerville Ave east of Prospect Street.

### PHASE 2

#### Main Union Square Plaza and Somerville Avenue between Webster Avenue and Prospect Street

- Reconstruction of Stone Place, including connection to Sanborn Court, must occur prior to removing access to Sanborn Court from the main plaza parking lot.
- Stone Ave must be converted to a two-way, dead-end street with through access to the main plaza for emergency vehicles only.
- Vehicle access to Bow Street must be maintained.
- The intersection of Somerville Ave and Webster Street will require temporary traffic signal installation and roadway layout modifications as part of the Bow Street slip lane removal.

### PHASE 3

#### Bow Street and Somerville Avenue between Bow Street and Washington Street at Webster Avenue

- Conversion of Bow Street west and Somerville Ave to two-way prior to construction of Bow Street east.
- Warren Ave must be converted into a dead end, reserved for emergency access to Bow Street plaza only.

### PHASE 4

#### Webster Avenue north of Newton Street

- Webster Ave bridge reconstruction must be completed prior to this phase of work.