

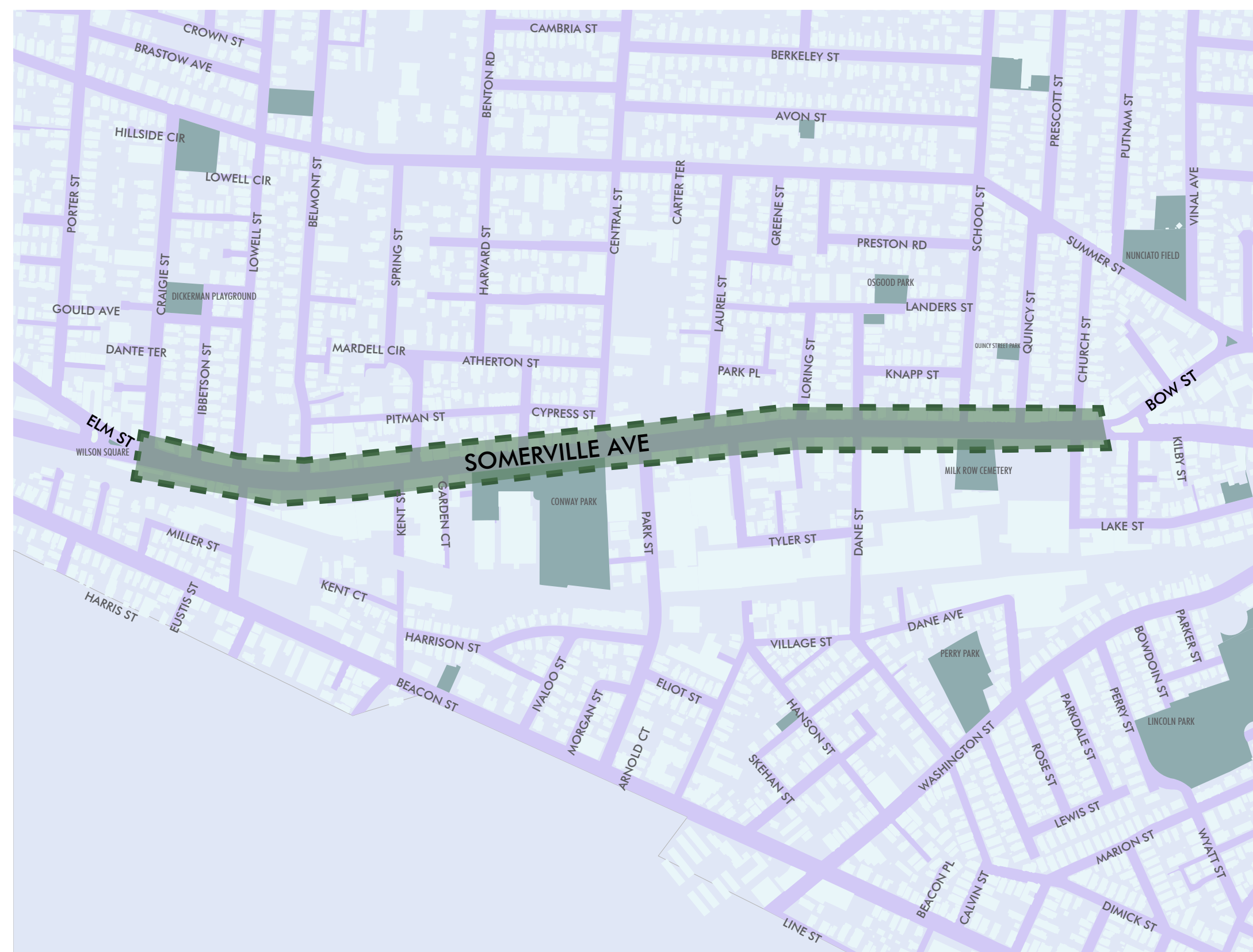
SOMERVILLE AVENUE QUICK BUILD SAFETY IMPROVEMENTS

PROJECT OVERVIEW



Where is the project?

Our project limits include Somerville Avenue between Elm Street and Bow Street. This area is home to the Somerville Fire Engine, Conway Park, many residences, local businesses and an important corridor connecting to public transit and job centers.



Project Area Map

Why Somerville Avenue?

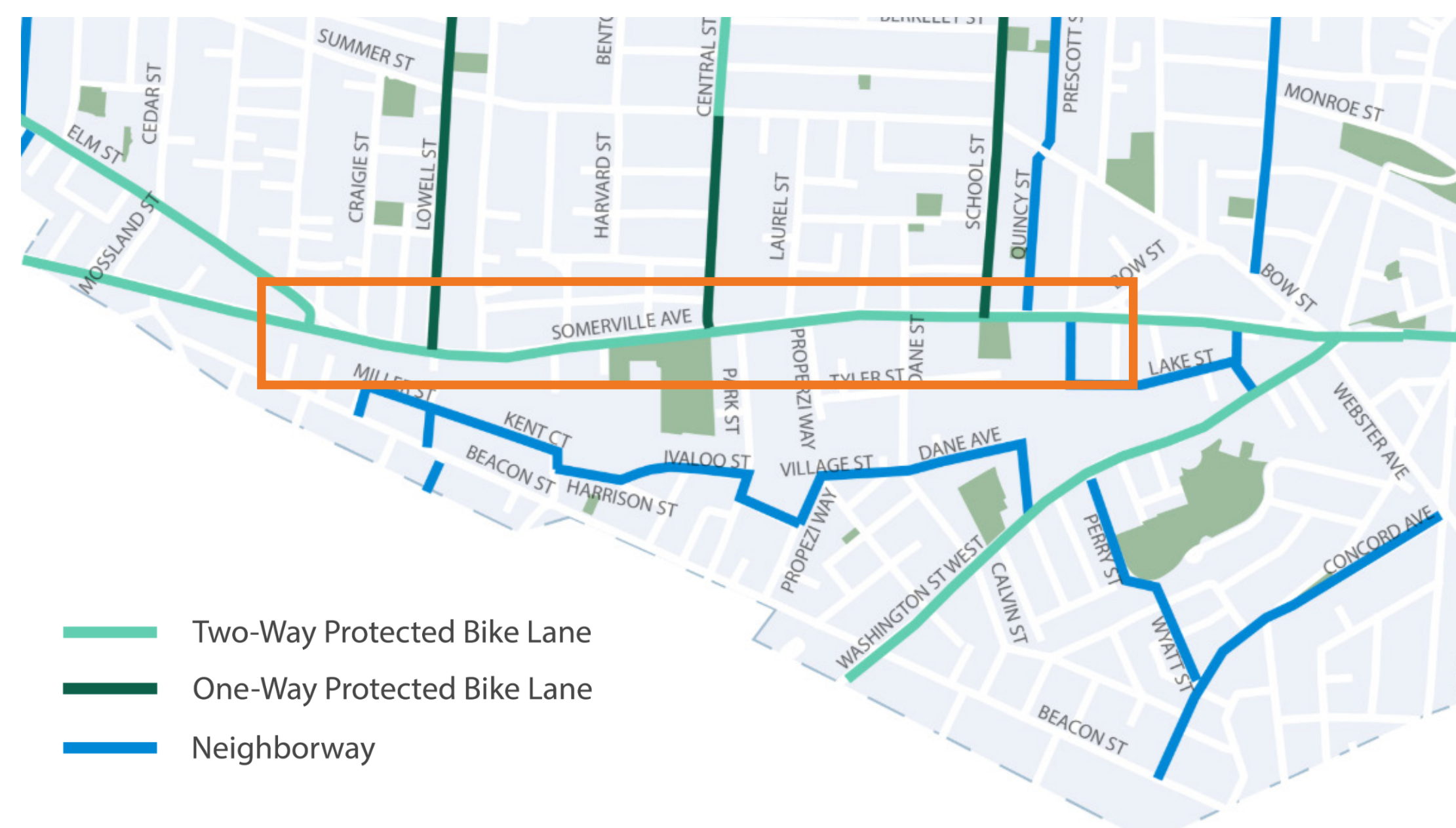
In the Somerville Bicycle Network Plan, we designated Somerville Avenue for protected bicycle lanes in both directions. Somerville Avenue is part of the Plan's Priority Network to be completed by 2030. The City's Safe Street Ordinance also requires the City to install no less than 3 miles of the priority network each year.

We are committed to protected bike lanes because they:

- increase safety, comfort, and access for people of all ages and abilities to bike
- Reduce crash/injury risk and potential conflicts between vehicles and people biking
- Eliminate the threat of "dooring" from parked vehicles
- Encourage slower speeds by visually narrowing the street.

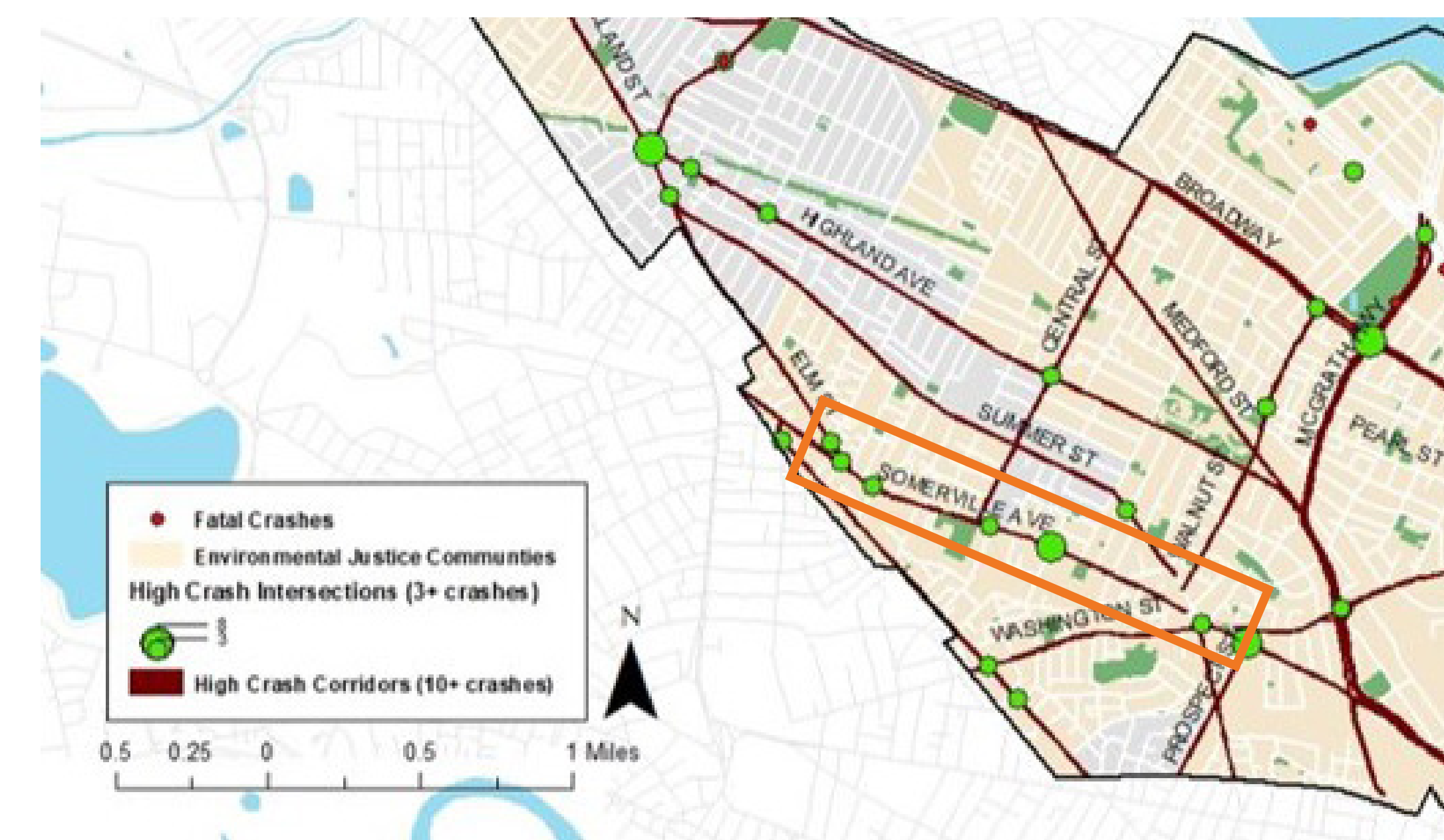
Somerville Avenue is street where we see high rates of crashes involving people biking, walking, and rolling. We tend to prioritize streets on our Bicycle and Pedestrian High Crash Network for safety improvements in alignment with our Vision Zero Action Plan. Vision Zero is our commitment to eliminate traffic fatalities and severe injuries on our streets. We work towards this goal through redesign projects, traffic calming interventions, educational efforts, and strategic enforcement activities.

Somerville Avenue has not been slated to be reconstructed as part of the City's Pavement and Sidewalk Management Program so we pressed forward with developing a quick-build redesign proposal.



- Two-Way Protected Bike Lane
- One-Way Protected Bike Lane
- Neighborway

Somerville Bicycle Network Plan, Priority Network



City of Somerville High Crash Network Map, 2018 - 2022

What is included in the project?

We are planning to use quick-build materials such as paint, signs, flex posts, and traffic signal changes to improve safety in this area.

Definitely	Could be	Not Included
Protected bike lanes	Changes to parking regulations	Repaving street or repouring sidewalks
Some parking removal	Bus stop changes	Speed humps or raised crosswalks
Narrowing of travel lanes	Traffic signal timing changes	New crosswalks
Improved sight lines for crosswalks		Utility, lighting, or stormwater work
		Planters

What is the anticipated project timeline?

After completing community feedback through the summer and fall, we will use the input to help shape the final design in late fall/early winter. We aim to implement the project in summer 2027.



SOMERVILLE AVENUE QUICK BUILD SAFETY IMPROVEMENTS

COMMUNITY ENGAGEMENT ACTIVITIES AND FEEDBACK



Why and how did we engage community members?



Community Engagement Timeline

From May 20 to July 25, 2025, we worked to engage community members in the first phase for the Somerville Avenue Quick-Build Safety Improvements project. During this phase, we aimed to:

- promote awareness about the quick-build project (including the opportunities and limitations in a non-construction project)
- hear insight into how the street is used
- learn about community members' safety concerns
- gather feedback on ways to make it safer and more comfortable for all users, especially the most vulnerable, people walking, rolling, and biking.

We launched the project by broadcasting the project overview and virtual community meeting details in the Mobility Monthly Newsletter in May 2025, posting flyers on over 300 homes in the project area, and sending an email to City Alert subscribers within the project area. On June 9, we hosted the first virtual community meeting and followed this with three outreach pop-ups at major intersections in the project area to spread the word about the project and collect community member feedback on safety concerns and ideas. At the same time, we facilitated an online feedback survey and public input map and logged email and 311 comments we received. We presented at the June 26 Union Square Main Streets Monthly Business meeting to share information about the project and learn about the businesses' operational needs. We visited all the small businesses with storefronts along the project area and followed up with emails to businesses we had contact information for in late July. We wrapped up our outreach efforts in the first week of August. We estimate that we connected with over 490 people in these efforts.

To learn more about what we did and what we heard, please check out our Phase 1 Community Engagement Report, available at voice.somervillema.gov/somervilleavenue.

What did we learn in our outreach?

General

- We heard a lot of excitement about this quick-build project.
- Many shared that they travel through this area frequently to visit businesses and as a connection to other major roadways and destinations in Somerville and are hoping for it to become much safer.

Driveways

- Community members shared concerns with the high number of commercial driveways across the project area and how they interact with people using Somerville Avenue.
- Community members shared that cars stop outside the Cambria Hotel and block the bike lane and travel lane causing conflicts for bikes and cars going westbound.
- The crosswalks near the exit of Market Basket were mentioned to be dangerous for pedestrians exiting Market Basket as they create a conflict between exiting vehicles and eastbound and westbound traffic on Somerville Avenue.
- Community members shared their experience as pedestrians and people biking across the car wash as being uncomfortable and unpredictable.
- Community members described witnessing cars cutting through the Walgreens parking lot in order to skip the traffic signal at Park Street.

Pedestrian safety

- Overall, community members felt like key crosswalks in the desired path of travel were missing along the street.
- Some people shared that unsignalized crosswalks are often ignored by cars and requested more signage.

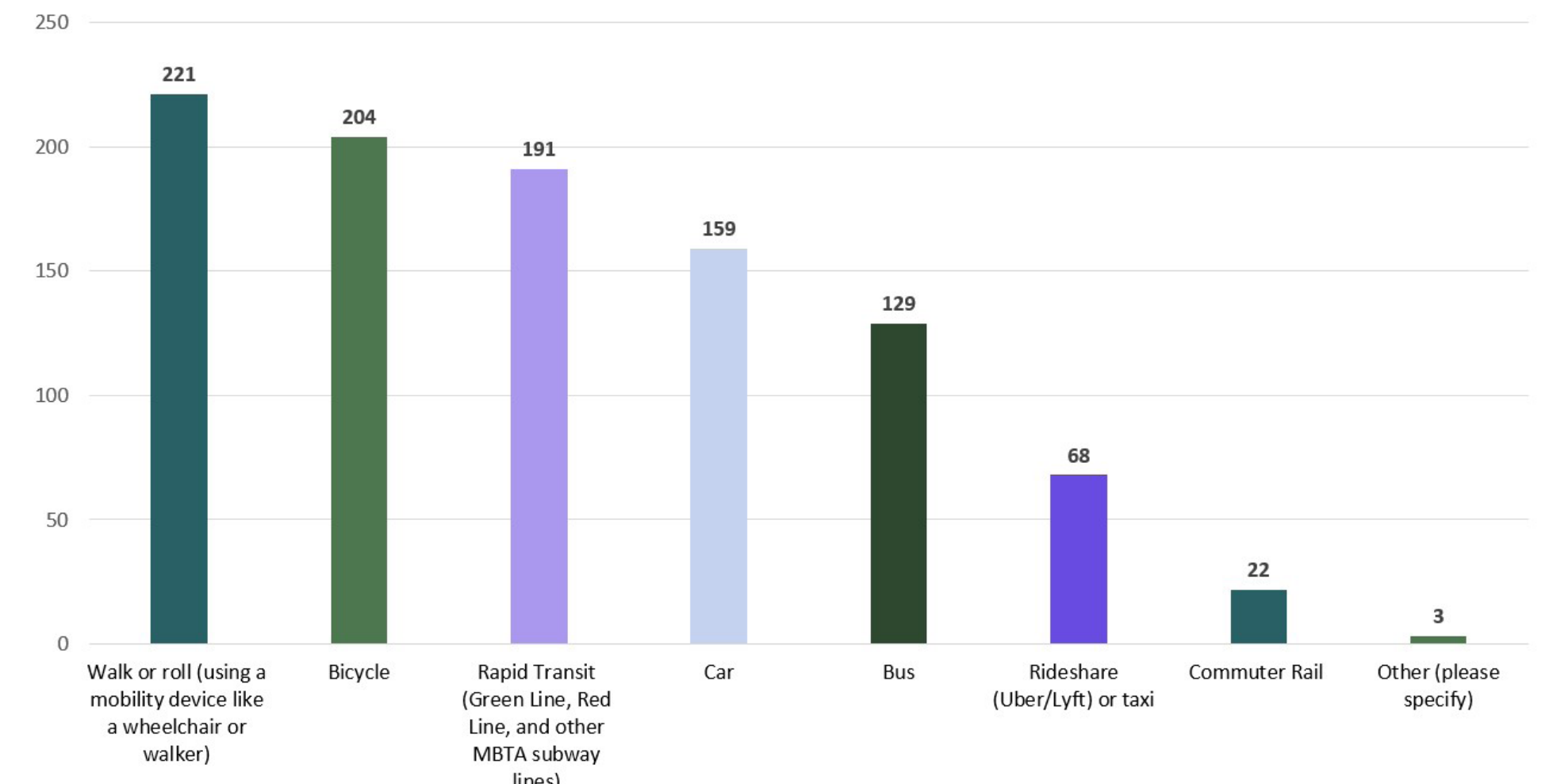
Bike safety

- People who bike shared that cars often park in bike lanes and there was a need for buffers to ensure that that doesn't happen.
- Some mentioned feeling unsafe when cars are turning onto side streets and that a significant buffer would help with that sense of safety.

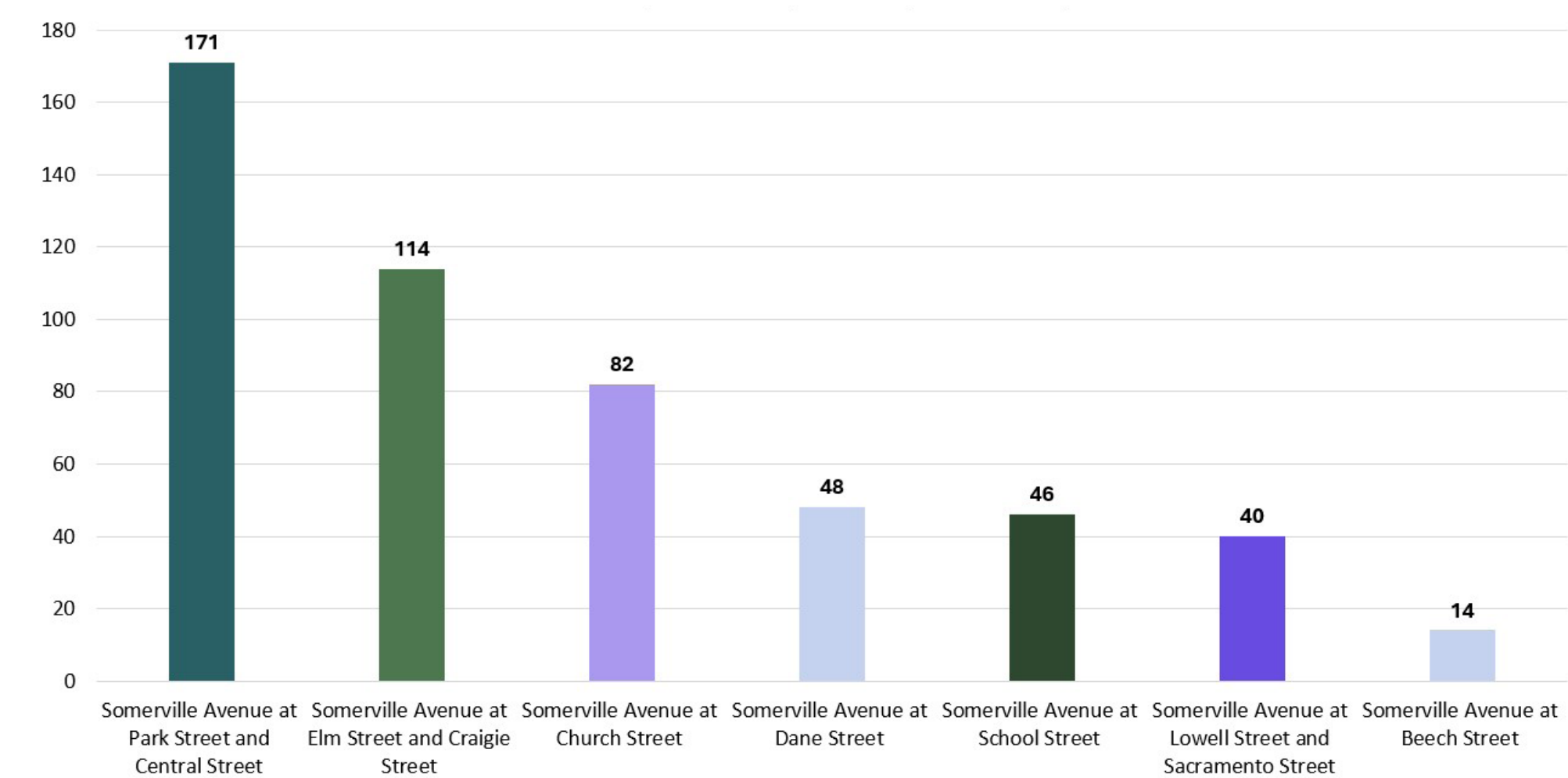
Traffic and Parking

- Overall community members felt that there are too many signalized intersections on Somerville Avenue.
- Some businesses shared that they are unable to find parking for their staff and customers on the street and requested that there be support for businesses to have adequate parking access.
- Community members mentioned the need for dedicated drop-off/pick-up zones for rideshare cars and delivery drivers as they currently block the bike lanes.

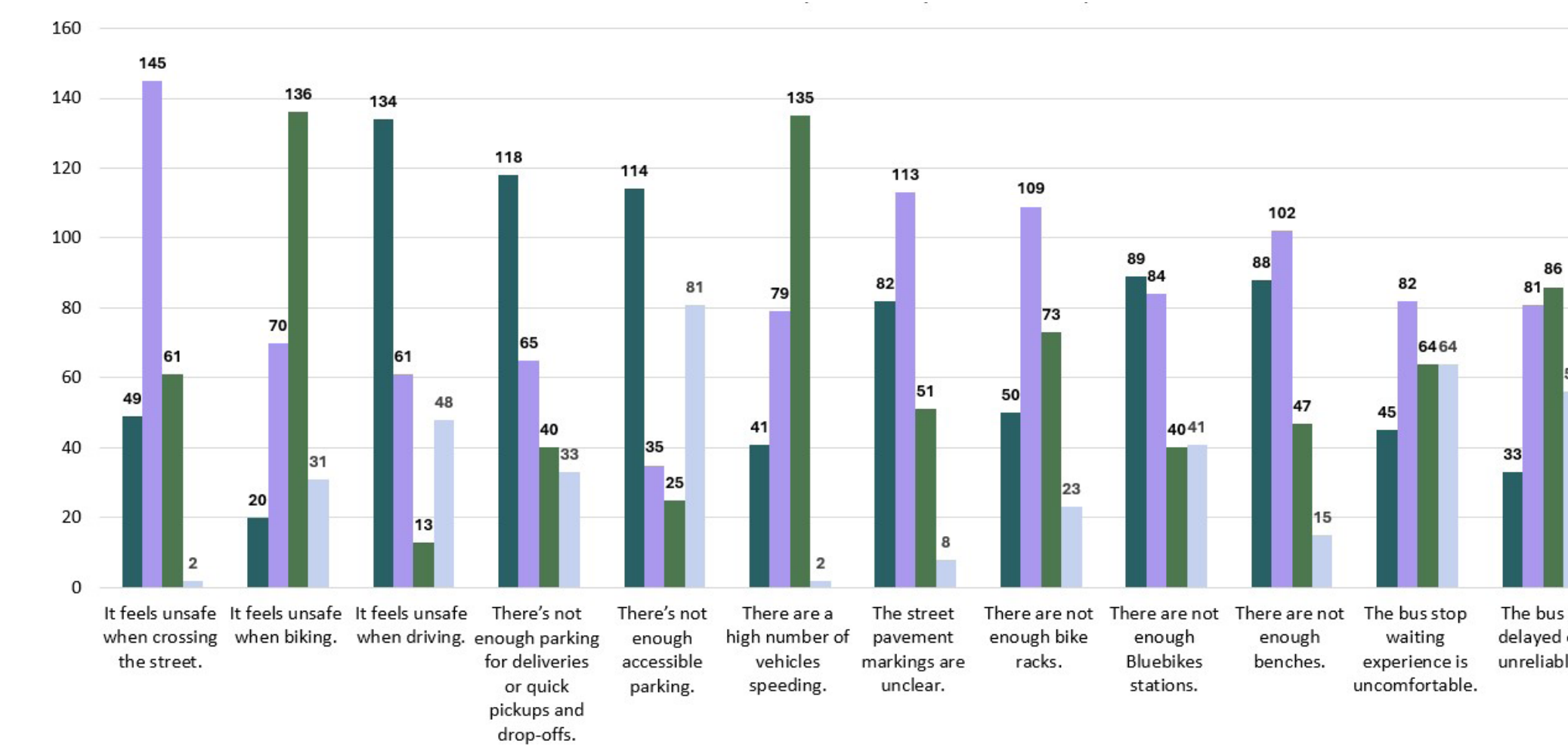
What are the ways you generally travel? Check all that apply. (Total responses: 257)



Which of the following intersections do you find the most unsafe or uncomfortable? Please select up to three. (Total responses: 231)



How concerned do you feel about the following along Somerville Avenue between Elm Street and Bow Street? (Total responses: 257)



SOMERVILLE AVENUE QUICK BUILD SAFETY IMPROVEMENTS

Bus Stops and Service



Existing Conditions

Somerville Avenue is an important and well utilized bus corridor currently serving two routes. Approximately 2,300 people per day used bus stops within the project area in Fall 2024. The bus stops with the most people using them are near Lowell Street, Central Street/Conway Park, and Market Basket.

There are two key challenges that exist with bus service on Somerville Avenue:

1. Bus stops are spaced close together, which results in the bus stopping frequently and contributes to delays in bus service.
2. Several bus stops are too short, which prevents the bus from being able to pull against the curb and creates accessibility hazards.



Proposed Changes

With this project, the City seeks to improve the experience, reliability, and accessibility of riding the bus on Somerville Avenue.

We propose to reduce the total number of bus stops on Somerville Avenue to decrease delay and create spacing between stops that aligns with the MBTA's recommended guidelines, while maintaining stops in the locations where people use them the most today.

Additionally, in the concept design all bus stops have been designed to allow the bus to pull against the curb. See the project Roll Plan for bus stop design details.



Above left and right: Existing and proposed bus stops within and abutting the project area

Improving Accessibility

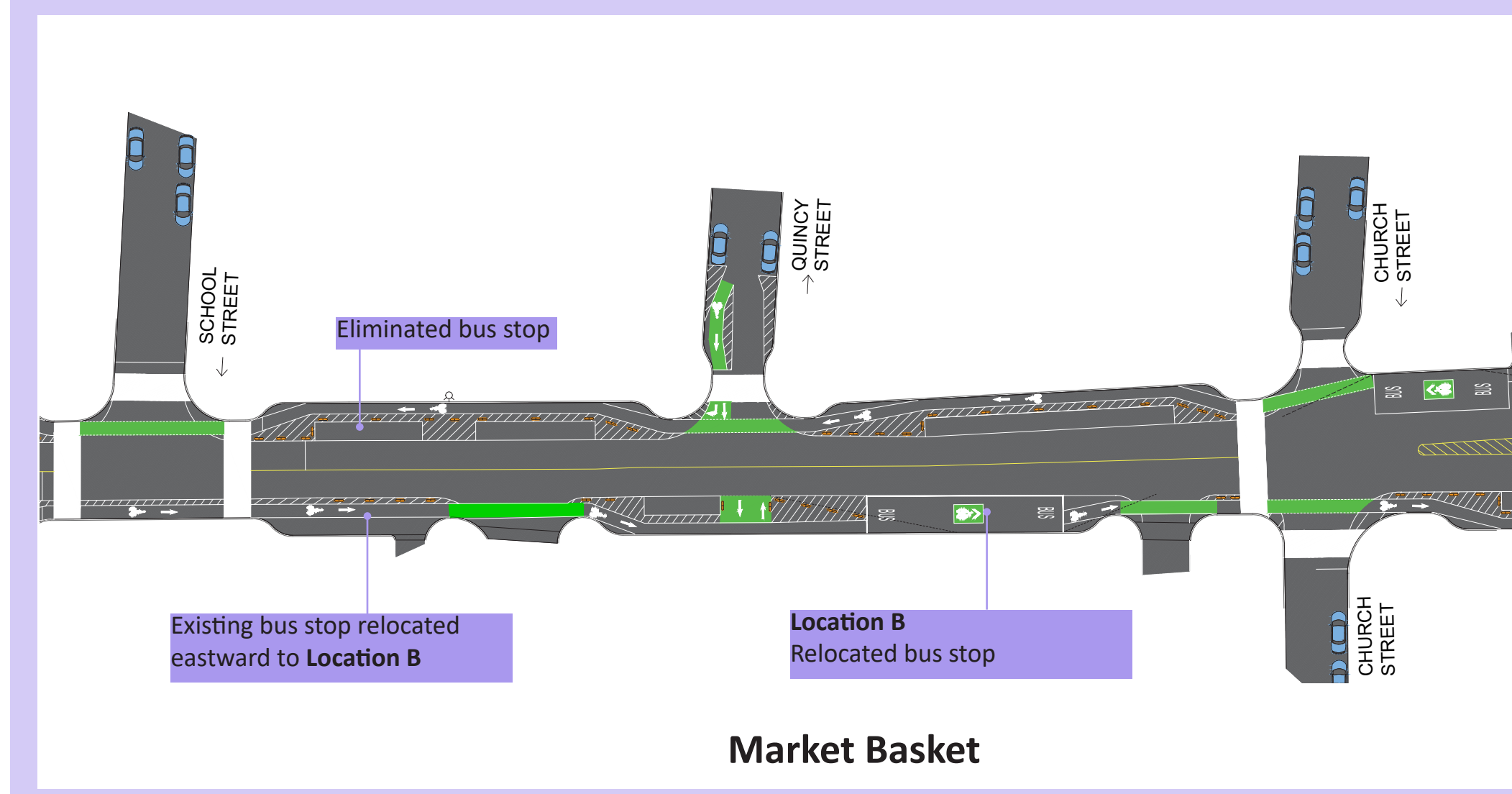
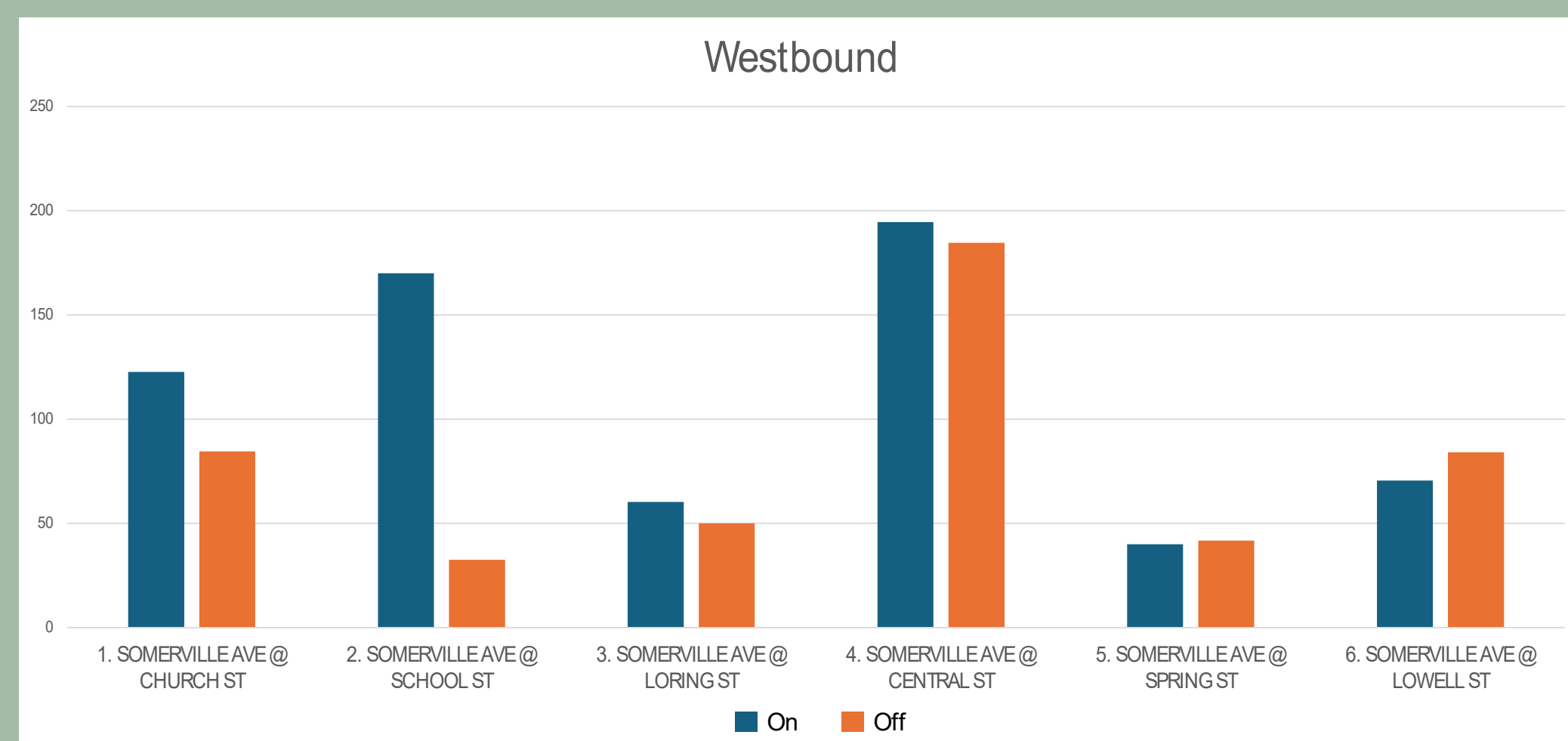
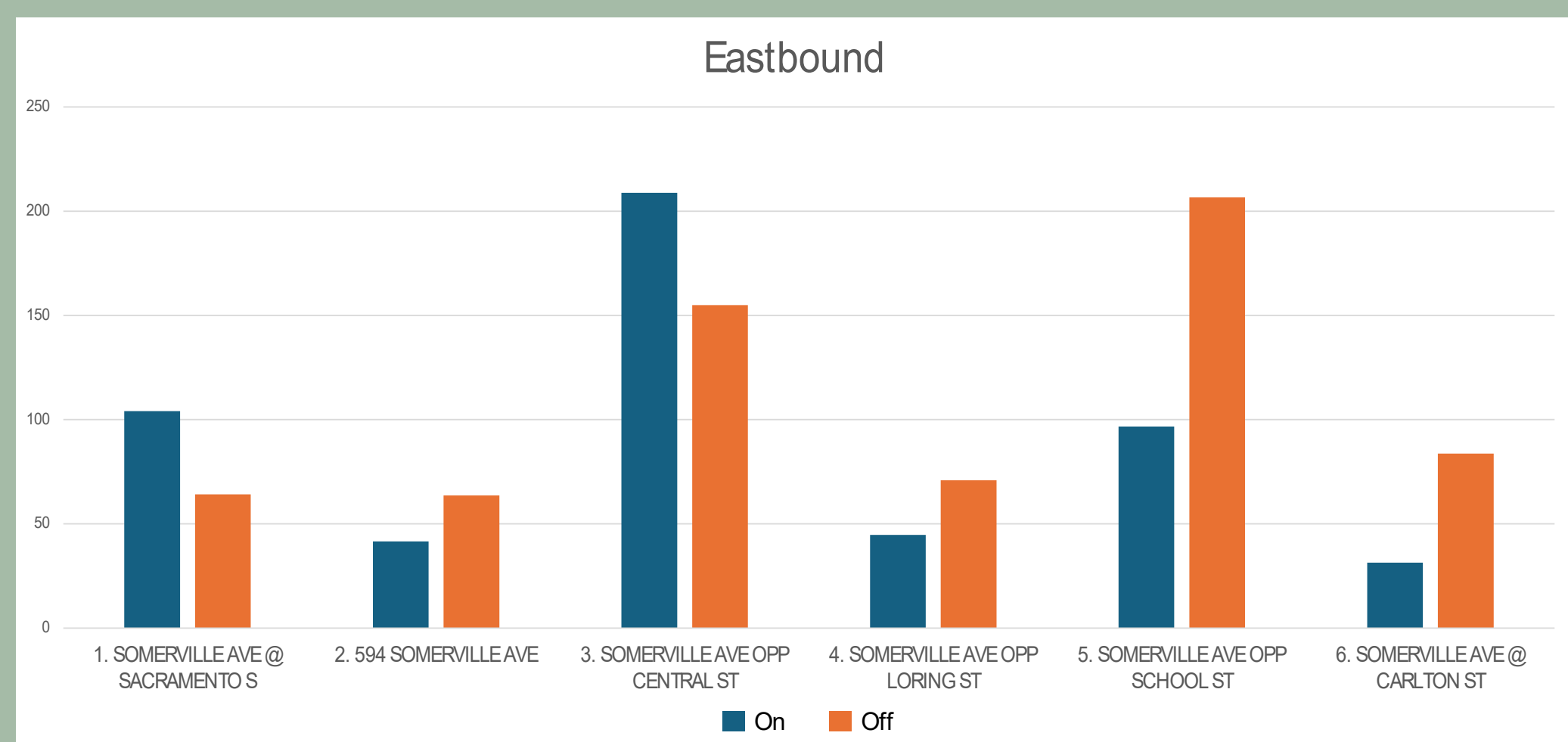
The Somerville Avenue opp School Street bus stop (outside Market Basket) is one of several stops that has accessibility issues today. In the stop's current location between two sidewalk bumpouts, the stop is too short for the bus to pull against the curb. This means that riders cannot step directly between the bus and sidewalk, and often must step onto the street. This longer step to and from the street can be difficult or hazardous for some riders.

When the bus is not able to pull against the curb, this also means that the bus is not able to properly deploy the front door ramp in the bus stop, which creates an accessibility barrier for riders who need or want to use the ramp to get on and off the bus.



In the concept design, we propose to relocate this stop approximately 250 feet to the east in the space between the Market Basket driveways. In this new location we are able to create a bus stop that is long enough for the bus to pull against the curb and keep the stop close to Market Basket.

Average Daily Bus Stop Utilization (Weekday & Weekend), Fall 2024



SOMERVILLE AVENUE QUICK BUILD SAFETY IMPROVEMENTS

ON-STREET PARKING



Existing Conditions

Today, there are approximately 117 on-street parking spaces on Somerville Avenue between Elm Street and Bow Street. The majority of these spaces are regulated as two-hour parking except by permit. There are also a small number of metered parking spaces, loading zones, and 15-minute parking spaces. There are currently no accessible parking spaces located within the project area.

The on-street parking layout on Somerville Avenue currently changes per block. On some there is parking on both sides of the street, on some parking on one side of the street, and on some there is no parking on either side of the street.

How Will the Project Impact On-Street Parking?

The project will result in a reduction in the number of on-street parking spaces on Somerville. The changes to on-street parking are the result of needing to use more space on the street to create protected bike lanes and make bus stops more accessible.

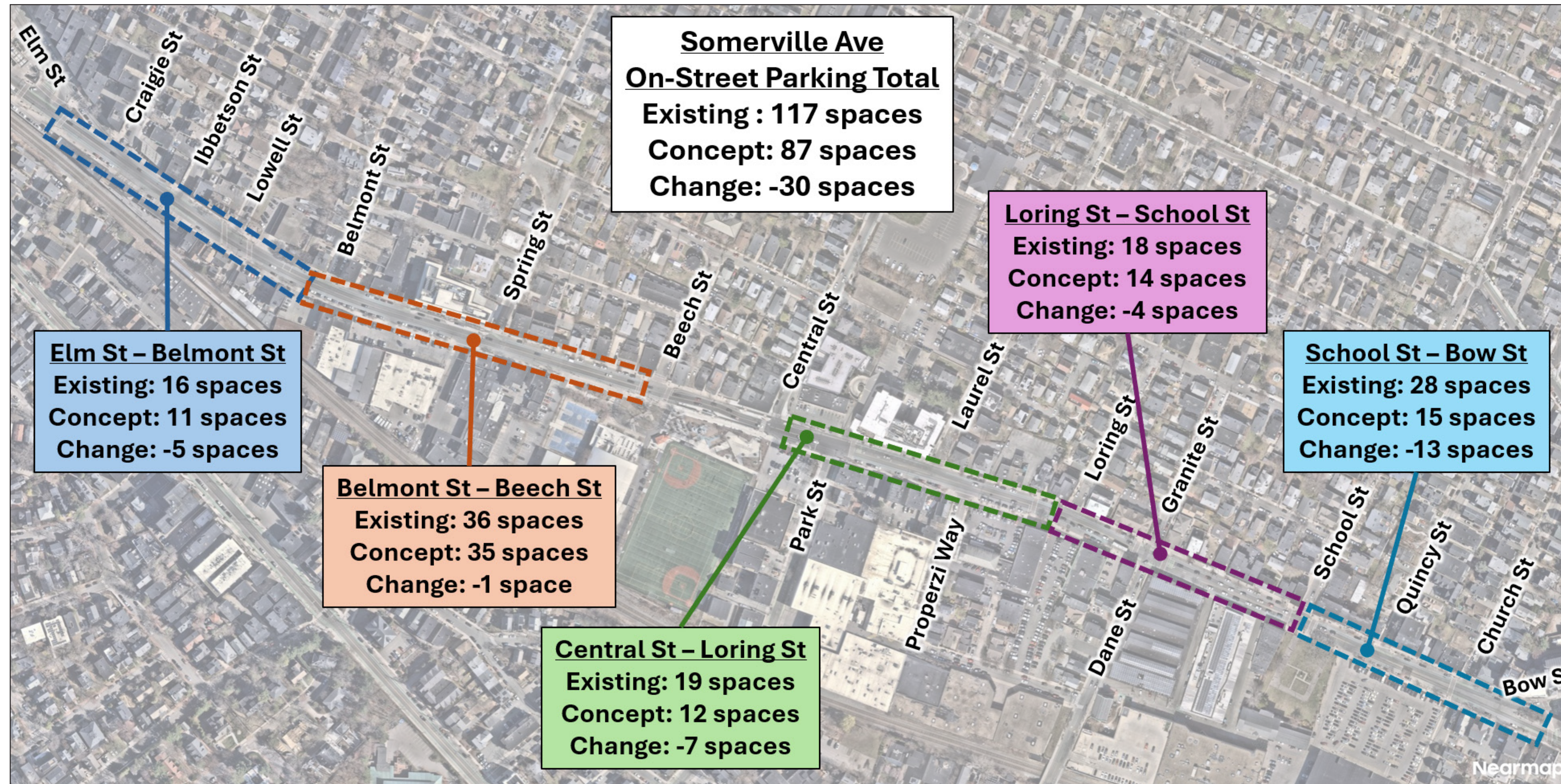
In the Concept Design, there are approximately 87 on-street parking spaces, which is 30 fewer spaces than exist today. The majority of parking reduction is anticipated to be in the eastern half of the project, due to greater space constraints. See the Roll Plan for more details on where on-street parking is proposed in the Concept Design.

Opportunity to Update Parking Regulations

The characteristics and parking demands of each block of Somerville Avenue are different. As part of the next stage of this project, we have the opportunity to evaluate existing parking regulations and make changes that reflect community and business feedback and priority parking needs.

What kinds of parking do you want more of on Somerville Avenue?

- Free two-hour parking except by permit
- Free short-term parking
- Paid meter parking
- Accessible parking
- Other



On-street parking spaces on Somerville Avenue in the existing condition and Concept Design

Neighborway Gateways

We are evaluating the opportunity to create two new Neighborways as part of this project, on Laurel Street and Quincy Street. Neighborways are low-stress and high comfort residential streets for people to walk, roll, and bike on. Two-way bike travel is always allowed on Neighborways, even if the street is only one-way for motor vehicle travel.

For Neighborways with one-way motor vehicle travel, we implement “Gateway” treatments at each major intersection, with a short bike lane. This provides greater separation between people driving and people biking in the opposite direction and reduces the potential for conflicts at intersections, where visibility is often more challenging. A Gateway treatment sometimes requires the removal of one or two parking spaces on the residential street.



Conceptual Neighborway Gateway treatments on both ends of Laurel Street

SOMERVILLE AVENUE QUICK BUILD SAFETY IMPROVEMENTS

SIGNALIZED INTERSECTION - LOWELL STREET



Existing Conditions

What we heard

- Request to add a pedestrian signal across Lowell Street.
- Timing for pedestrian signal and traffic signals need to be balanced.
- Right of way confusion when vehicles are turning left or right onto Lowell Street from Somerville Avenue.

Existing Signal Timing and Phasing*

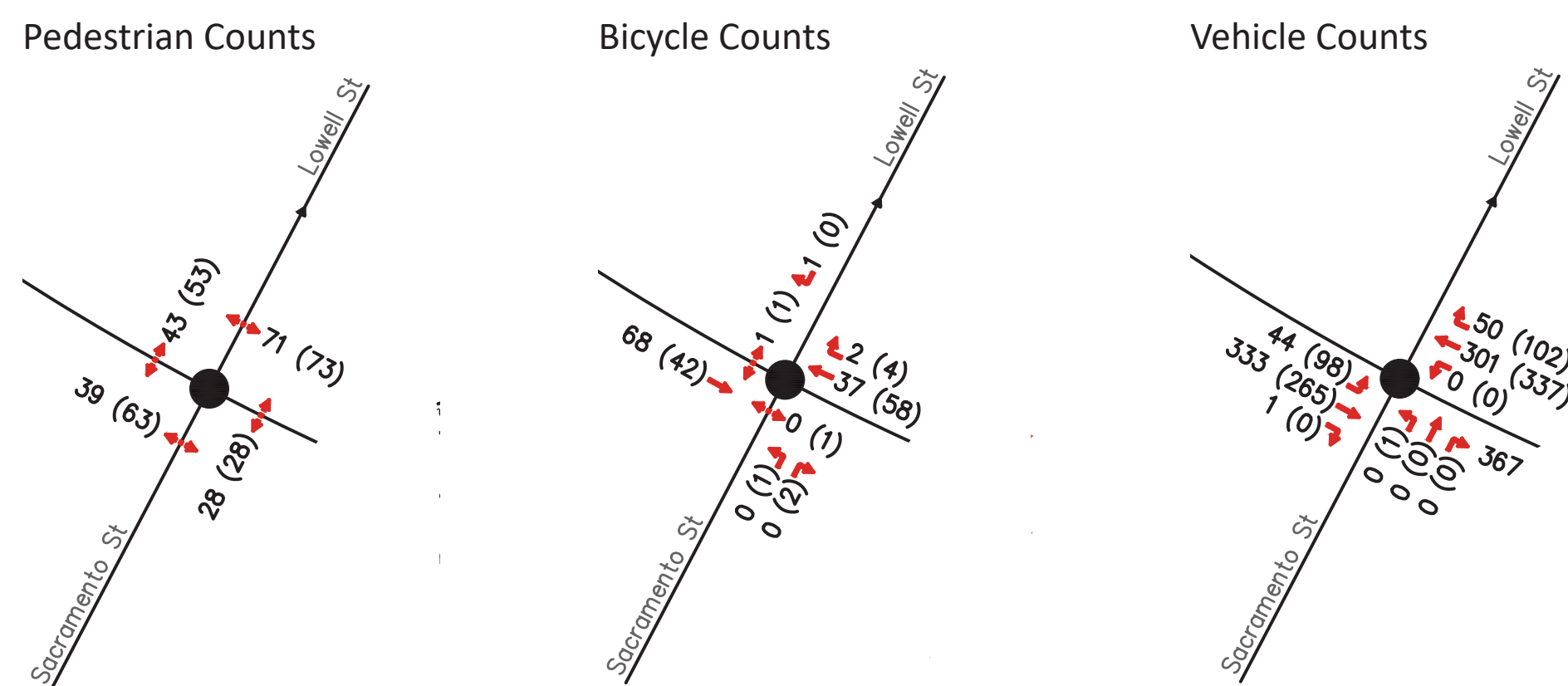
- Very few cars exit Sacramento Street, but a green light comes up at every cycle.
- Drivers use the bus lane when heading eastbound to get around cars waiting to turn left onto Lowell Street, effectively creating a left turning lane.
- Pedestrians have a green light automatically at every cycle and do not have to push a button.

	Phase A	Phase B	Phase D
Overall Cycle Length (PM):	83 seconds		
	Vehicles and bicycles go eastbound and westbound on Somerville Avenue	Pedestrians cross Somerville Avenue	Vehicles and bicycles exit Sacramento Street
Phase Length (PM)	37 seconds	29 seconds	17 seconds

Legend

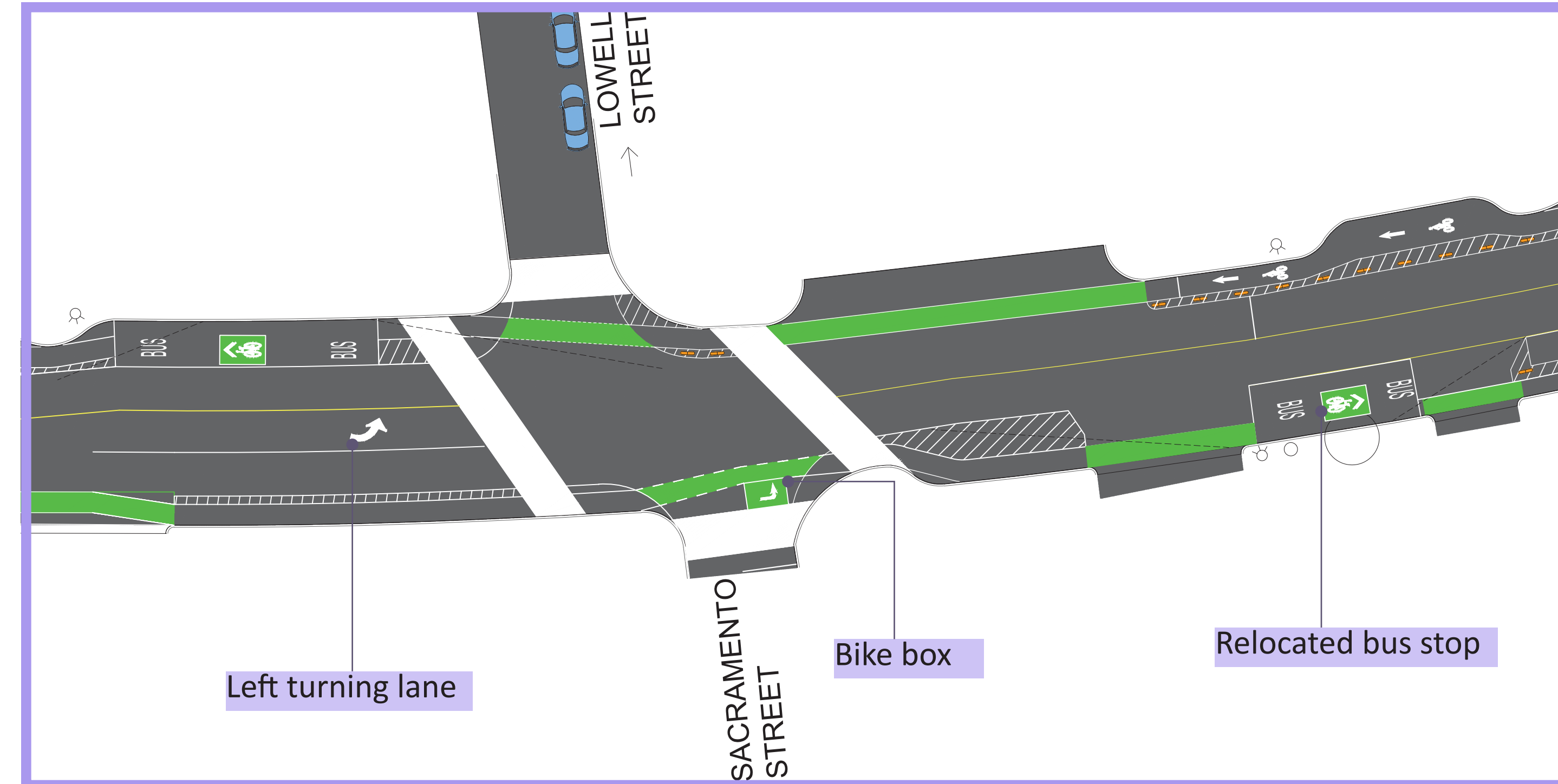
- Vehicle and bicyclist movement
- Vehicle movement
- Bicyclist movement
- Pedestrian movement
- Dashed line indicates move has to yield to oncoming traffic

Traffic Counts - AM (PM) Peak Hours



* More detailed information about signalized intersections/locations along Somerville Avenue can be found (after 6/15) on the project web page

Proposed Changes



Concept plan for Somerville Avenue at Lowell Street.

Proposed Signal Timing and Phasing*

	Phase A	Phase B	Phase C	Phase D
Overall Cycle Length:	90 seconds			
	Green for all vehicles eastbound and left onto Lowell Street Cyclist heading left onto Lowell Street will proceed to bike box and wait for Sacramento Street green light The left turn lane will only turn green when a car is detected	Green for all vehicles eastbound Red for vehicles turning left onto Lowell Street Cyclist heading left onto Lowell Street will proceed to bike box and wait for Sacramento Street green light	Green for pedestrians crossing Somerville Avenue	Green for drivers and bicyclists heading out of Sacramento Street
Phase Length (PM)	13 seconds	40 seconds	26 seconds	11 seconds

Pros and Cons of Proposed Design and Traffic Signal Changes

PROS	CONS	Difference between automatic pedestrian green light (recall) and having to push the button to get a green light
Adding a left turn lane and a dedicated phase for eastbound traffic to turn left onto Lowell Street avoids back up towards Elm Street and decreases delays.	Slightly increased cycle length	Automatic green light + does not require any action. - pedestrians on average have to wait longer for green lights to come on + easier to coordinate with adjacent signalized intersections for better vehicular and bus flow along the corridor.
Detecting vehicles and bicycles for Sacramento Street traffic and for left turn lane increases time for eastbound and westbound Somerville Avenue traffic.	Increased time for bicyclists going eastbound and turning left into Lowell Street have to do so in two Phases (A and D)	Pushing the button + requires action from pedestrians - but on average decreases the time to wait for green light - adds complexity to and potential delays in coordination with adjacent signalized intersections
Less Conflicts: • Bicyclist traveling eastbound can turn onto Lowell Street without conflicts with Somerville Avenue vehicular traffic. • Bicyclists and drivers can travel westbound without need to watch out for eastbound traffic turning left into Lowell Street		

- We propose for eastbound traffic on Somerville Avenue to add a left turning lane. The bus stop will be moved east of Sacramento Street. This way we can avoid traffic backing up on Somerville Avenue when cars wait to turn onto Lowell Street.
- We are aiming to add detection for Sacramento Street (both for vehicles and bicyclists) to avoid delays when nobody is exiting.
- We are adding a bike box on Sacramento Street to allow cyclists approaching the intersection from the west on Somerville Avenue to turn left onto Lowell Street without conflicting Somerville Avenue traffic.
- For safer pedestrian crossings on Lowell Street we propose to either add a pedestrian light or add a blinking yellow light for drivers either coming from the east or west and turning into Lowell to warn them of crossing pedestrians.
- We could also change the current condition where the pedestrian phase comes up automatically at every cycle to require pedestrians to push the button for a green light see Pros and Cons.

Share your thoughts

What do you like or not about the proposed changes?

In particular, do you prefer to push a button or have the pedestrian phase come automatically with every cycle?

- I prefer to push button to have pedestrian green come up (most times a shorter wait)
- I prefer pedestrian green comes up automatically

Did we miss anything?

SOMERVILLE AVENUE QUICK BUILD SAFETY IMPROVEMENTS

SIGNALIZED INTERSECTION - BEECH STREET



Existing Conditions

What we heard

- Beech Street green phase is too long.
- Unsafe conditions for all modes when vehicles leave Veterans Rink.
- Some voices want to signal to be removed, some asked to leave the signal.
- Traffic westbound can back up all the way into Central Street/Park Street intersection.

Existing Signal Timing and Phasing*

- Beech Street signal is often green without cars exiting.
- Pedestrians get a green light automatically at every cycle.
- Signal at Park Street intersection is not coordinated with Beech Street signal.

	Phase A	Phase B	Phase D
Overall Cycle Length (PM):	103 seconds		
	<ul style="list-style-type: none"> Vehicles and bicycles go eastbound and westbound on Somerville Avenue 	<ul style="list-style-type: none"> Pedestrians cross Somerville Avenue 	<ul style="list-style-type: none"> Vehicles and bicycles exit Sacramento Street
	<ul style="list-style-type: none"> Pedestrians can cross Rink exit unsignalized at any time (existing conditions) 		
Phase Length (PM)	50 seconds	23 seconds	30 seconds

Legend

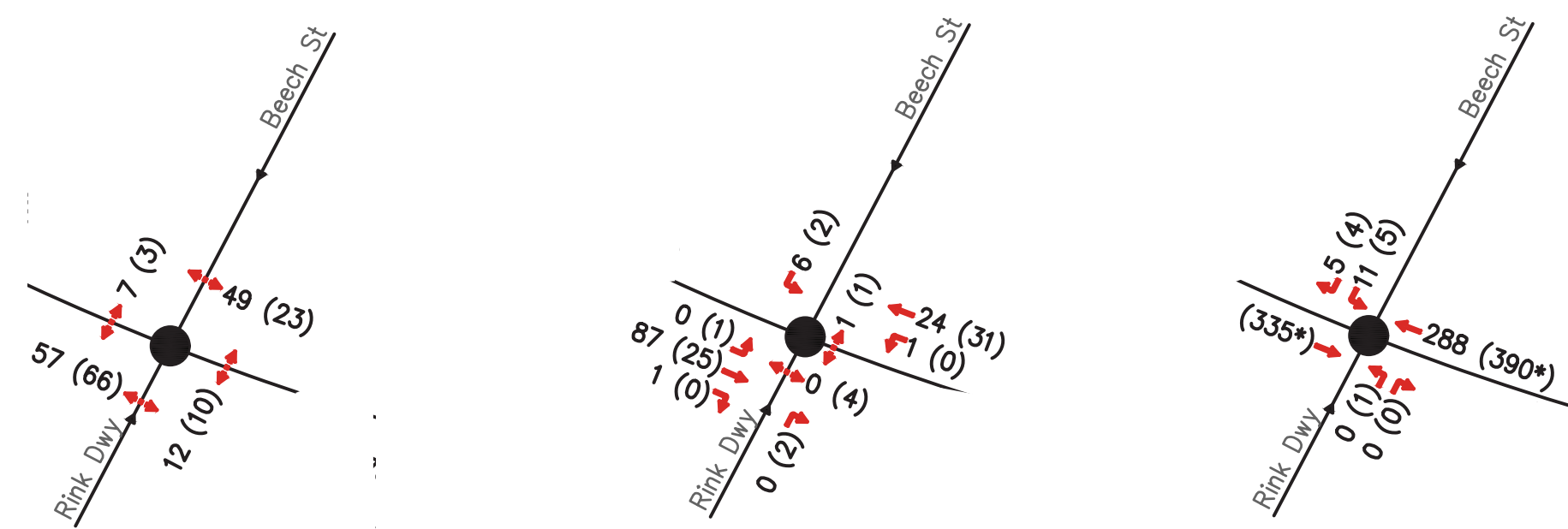
- Vehicle and bicyclist movement
- Vehicle movement
- Bicyclist movement
- Pedestrian movement
- Dashed line indicates move has to yield to oncoming traffic

Traffic Counts - AM (PM) Peak Hours

Pedestrian Counts

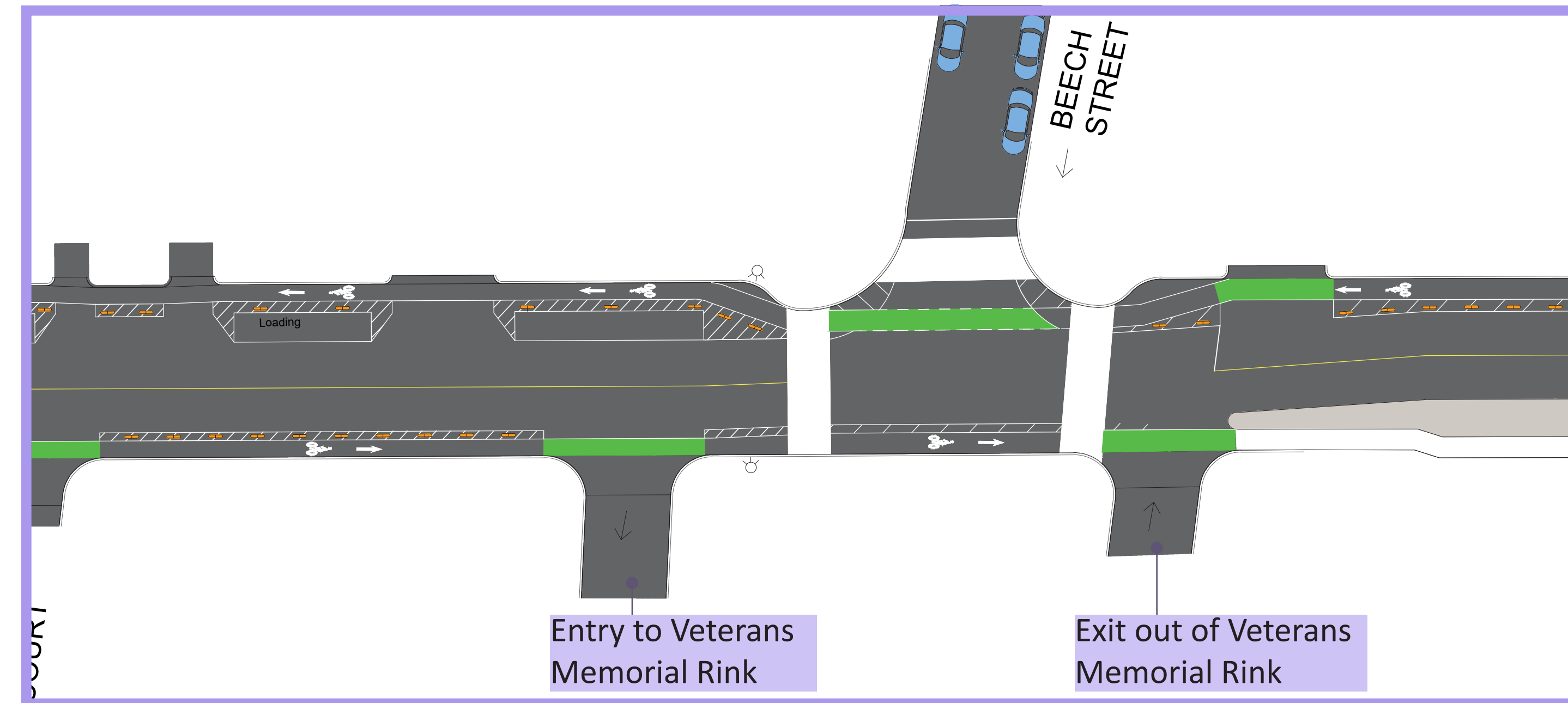
Bicycle Counts

Vehicle Counts



* More detailed information about signalized intersections/locations along Somerville Avenue can be found (after 6/15) on the project web page

Proposed Changes



Concept plan for Somerville Avenue at Beech Street.

Proposed Signal Timing and Phasing*

OPTION A Signalized Driveway

	Phase A	Phase B	Phase C	Phase D
Overall Cycle Length:	100 seconds			
	<ul style="list-style-type: none"> Green for vehicles, cyclists, pedestrians eastbound and westbound on Somerville Avenue 	<ul style="list-style-type: none"> Green for all pedestrian crossings 	<ul style="list-style-type: none"> Green for vehicles and cyclists exiting Beech Street 	<ul style="list-style-type: none"> Green for vehicles and cyclists exiting Rink driveway
Phase Length (PM)	54 seconds	20 seconds	15 seconds	11 seconds

Phase C and Phase D should only turn green when vehicles or bicyclists are detected. This results in shorter cycle length, i.e. less waiting for green for Phase A and Phase B.

Proposed Signal Timing and Phasing*

OPTION B Right-Out Only Driveway

	Phase A	Phase B	Phase C
Overall Cycle Length:	100 seconds		
	<ul style="list-style-type: none"> Green for vehicles, cyclists, pedestrians eastbound and westbound on Somerville Avenue 	<ul style="list-style-type: none"> Green for all pedestrian crossings 	<ul style="list-style-type: none"> Green for vehicles and cyclists exiting Beech Street
	<ul style="list-style-type: none"> Pedestrians can cross Rink exit unsignalized at any time (existing conditions) 		
Phase Length (PM)	67 seconds	20 seconds	13 seconds

Phase C should only turn green when vehicles or bicyclists are detected. This results in shorter cycle length, i.e. less waiting for green for Phase A and Phase B.

- We propose two options to improve safety for everybody and to lessen conflicts.
- Option A - Signalized Driveway: The Rink driveway gets a signal that only turns green when a vehicle or bicycle is detected - see Proposed Signal Timing and Phasing
- Option B - Right-Out Only Driveway: Vehicles and bicyclists can only turn right out of the driveway.

Pros and Cons

Option A - Signalized Driveway

- Pros:
- Addresses pedestrian conflicts at driveway
 - Clarifies operations for vehicles existing driveway and eliminates conflicts with Somerville Avenue traffic.
- Cons:
- Signal work required

Option B - Right-Out Driveway

- Pros:
- More time for Somerville Avenue eastbound and westbound traffic for all modes.
- Cons:
- Some vehicles might still take a left turn out of the driveway
 - Increases left turns to Central Avenue northbound to then head westbound for drivers who wanted to turn left onto Somerville Avenue.

Share your thoughts

What do you like or not about the proposed changes?

In particular, do you prefer Option A (Signalized Driveway) or Option B (Right-Out Only) driveway?

Did we miss anything?

SOMERVILLE AVENUE QUICK BUILD SAFETY IMPROVEMENTS

SIGNALIZED INTERSECTION - PARK STREET

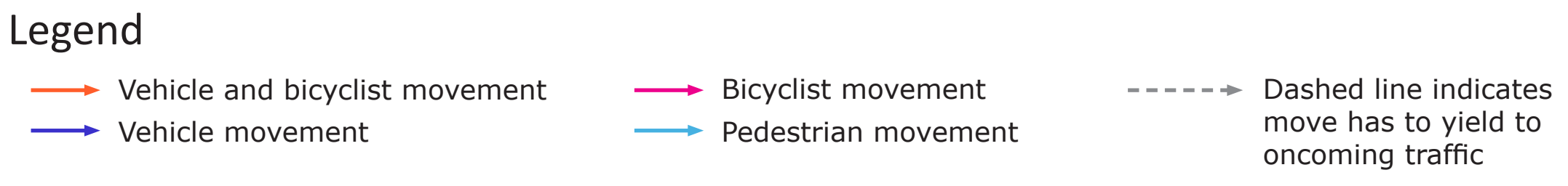
Existing Conditions

- What we heard**
- Request to remove the right-turn lane to Park Street.
 - Request to tighten the crosswalk across Park Street.
 - Confusion about whether the driveway is signalized too.
 - Heavy traffic from Somerville Avenue and Park Street across the street heading to Central Street. Vehicles are speeding and creating conflict with bike traffic heading Westbound on Somerville Avenue.
 - Request to create a safe way for people biking to turn onto Park Street from Somerville Avenue.
 - Pedestrians do not feel safe with cyclists approaching from every direction.

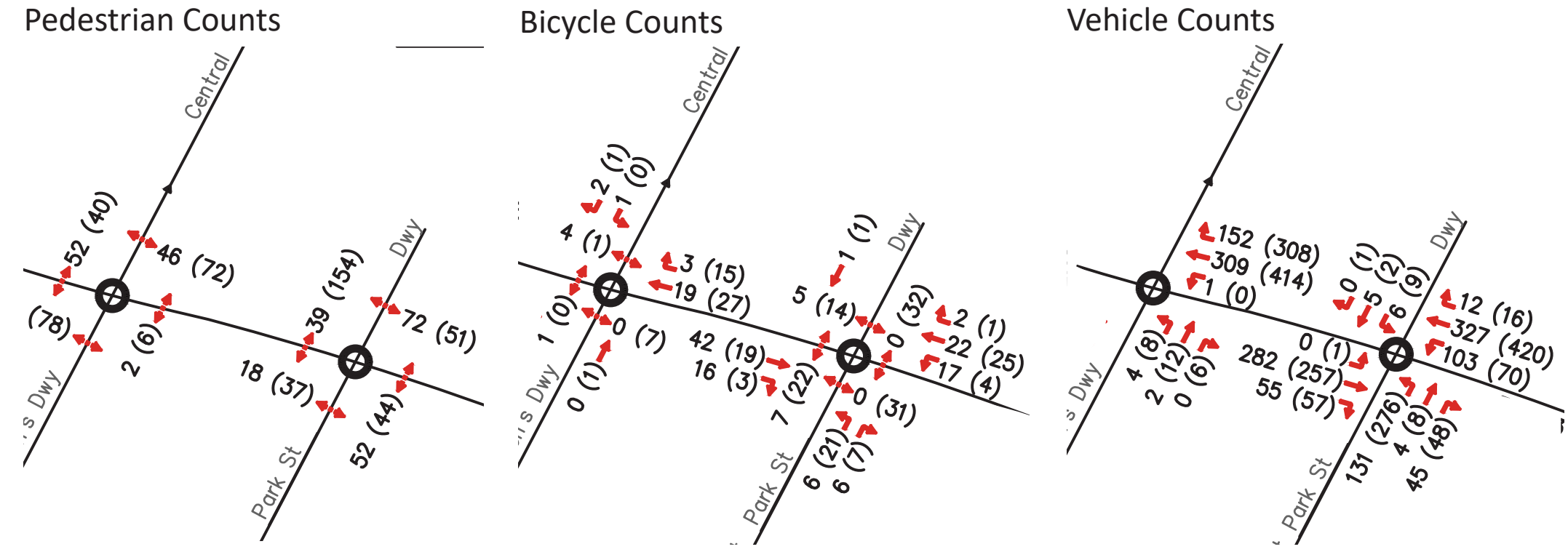
Existing Signal Timing and Phasing*

- Park Street traffic in the afternoon can back up all the way to railroad tracks and beyond.
- Cyclists use pedestrian phase.

	Phase A	Phase B	Phase C	Phase D
Overall Cycle Length (PM): 109 seconds				
	Vehicles and bicycles go westbound on Somerville Avenue.	Vehicles and bicycles go eastbound and westbound on Somerville Avenue.	Pedestrians cross Somerville Avenue and Park Street.	Vehicles and bicycles leaving Driveway and Park Street.
Phase Length (PM)	29 seconds	21 seconds	28	31 seconds

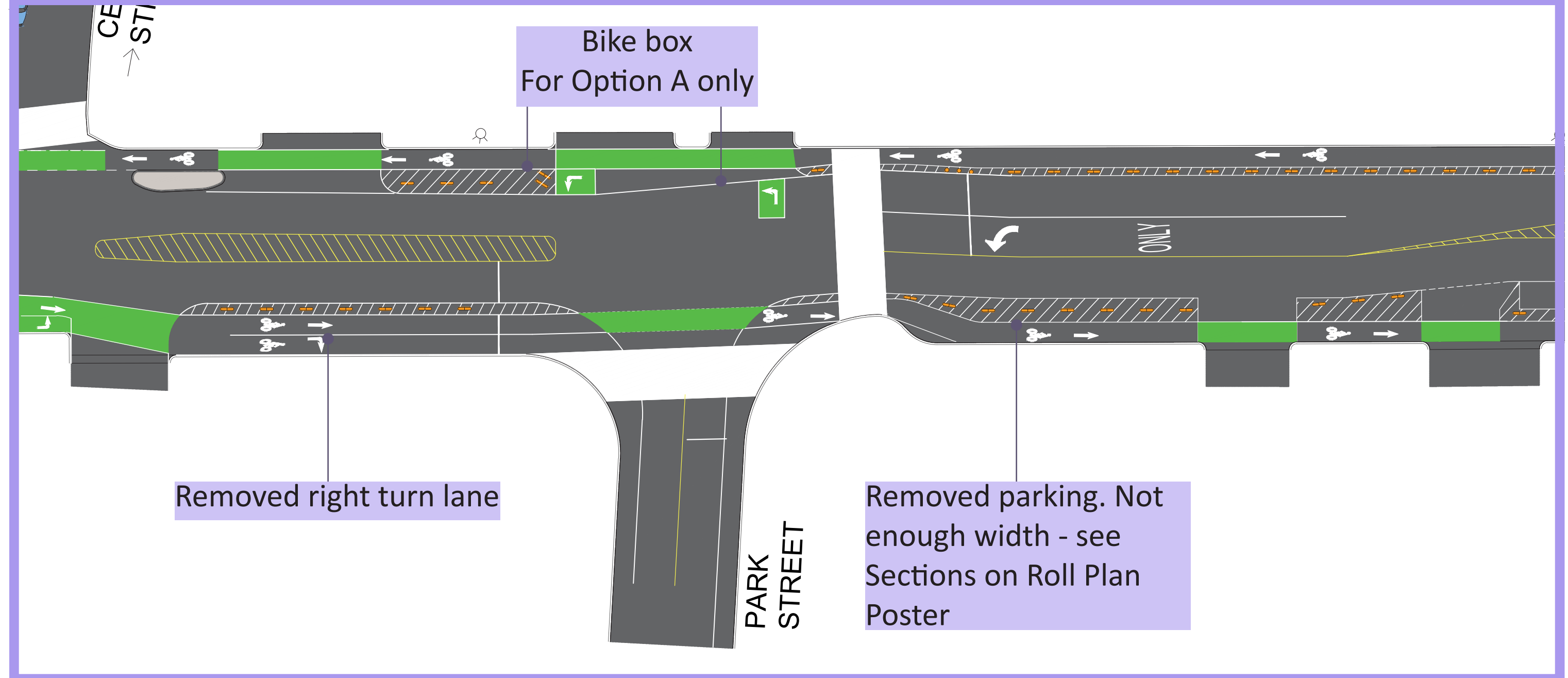


Traffic Counts - AM (PM) Peak Hours



* More detailed information about signalized intersections/locations along Somerville Avenue can be found (after 6/15) on the project web page

Proposed Changes



Concept plan for Somerville Avenue at Park Street.

We propose (for both options) to separate the Driveway green phase from the Park Street green phase to prevent the existing confusion. This phase would only turn green when a car or bicycle is being detected.

OPTION A - Two Stage

For safer left turns for cyclists from Park Street onto Somerville Avenue and from Somerville Avenue westbound onto Park street, we propose to add bike boxes to allow cyclists to wait and use two phases (A and C).

- PROS:**
- Safer left turns for cyclists without adding bicycle signals.
 - Only one additional phase to achieve better intersection operations allowing for less back up at Park Street.

- CONS:**
- Longer left turn moves for cyclists since they need to use two phases.
 - Eastbound traveling cyclists are in conflict with right turning vehicles at Park Street.
 - Cyclist waiting in the driveway bike box and heading to Park Street are in conflict with right turning vehicles out of Driveway.

OPTION B - Vehicle Separation

We propose to completely separate vehicle traffic from pedestrians and cyclists. Cyclists and pedestrians share two phases - Phase A and D

- PROS:**
- No conflict between vehicles and pedestrians.
 - No conflict between vehicles and cyclists.

- CONS:**
- Cyclists will have to yield to pedestrians for left and right turning moves.
 - Cyclists will have to wait when vehicles go, likely resulting in non-compliance.
 - Increase in cycle length and waiting times.
 - Separate bicycle signals are needed.

Proposed Signal Timing and Phasing*

OPTION A - Two Stage

	Phase A	Phase B	Phase C	Phase D	Phase E
Overall Cycle Length: 120 seconds					
	Green for vehicles and cyclists eastbound and westbound Cyclist heading left onto Park Street will proceed to bike box and wait for Driveway green light Green for pedestrians crossing driveway	Green for vehicles and cyclists westbound only Cyclist heading left onto Park Street will proceed to bike box and wait for Driveway green light (Phase C) Green for pedestrians crossing driveway	Green for vehicles leaving driveway and cyclists crossing Somerville Avenue into Park Street Only when cyclist or vehicle is detected	Green for drivers and cyclists leaving Park Street	Green for pedestrians crossing Somerville Avenue and Park Street
Phase Length (PM)	34 seconds	11 seconds	20 seconds	33 seconds	22 seconds

Proposed Signal Timing and Phasing*

OPTION B - Vehicle Separation

	Phase A	Phase B	Phase C	Phase D	Phase E	Phase F
Overall Cycle Length: 123 seconds						
	Green for cyclists eastbound and westbound Green for pedestrians crossing driveway and Park Street	Green for vehicles westbound only	Green for vehicles westbound and eastbound	Green cyclists leaving Park Street Green for pedestrians crossing Somerville Avenue	Green for vehicles leaving driveway Only when vehicle is detected	Green for vehicles leaving Park Street
Phase Length (PM)	20 seconds	11 seconds	26 seconds	25 seconds	10 seconds	31 seconds

Share your thoughts

What do you like or not about the proposed changes?

In particular, do you prefer Option A (Two Stage) or Option B (Vehicle Separation)?

Did we miss anything?

SOMERVILLE AVENUE QUICK BUILD SAFETY IMPROVEMENTS

SIGNALIZED INTERSECTION - DANE STREET AND GRANITE STREET

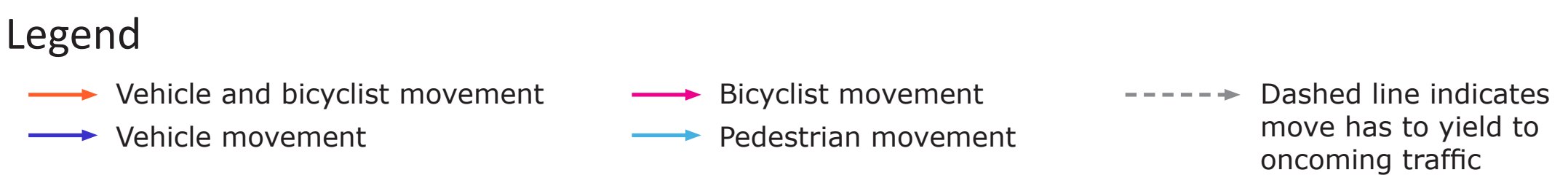
Existing Conditions

- What we heard**
- Busy left turn traffic from Somerville Avenue to Dane Street.
 - Cyclists would like a safe way to turn left from Somerville Avenue to Dane Street.
 - Vehicles were observed turning right on red from eastbound Somerville Avenue and northbound Dane Street despite 'No Turn on Red' signage.
 - Some pedestrians were observed crossing Granite Street and Dane Street when the signal was red for pedestrians.

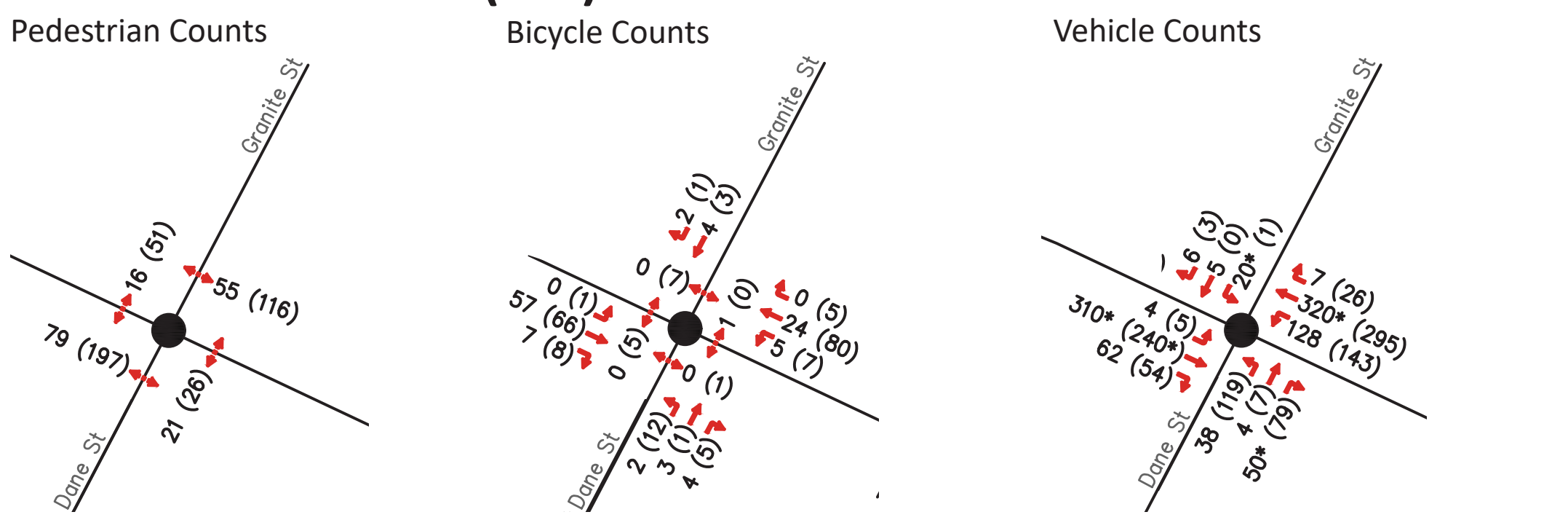
Existing Signal Timing and Phasing*

- Sometimes traffic from St Anthony signal backs up to Dane Street and Granite Street

	Phase A	Phase B	Phase C	Phase D
Overall Cycle Length (PM):	104 seconds			
	Vehicles and bicyclists go westbound on Somerville Avenue.	Vehicles and bicyclists go eastbound and westbound on Somerville Avenue.	Pedestrians cross Somerville Avenue and Granite Street and Dane Street.	Vehicles and bicyclists go northbound on Dane Street and southbound on Granite Street
Phase Length (PM)	14 seconds	45 seconds	25 seconds	20 seconds

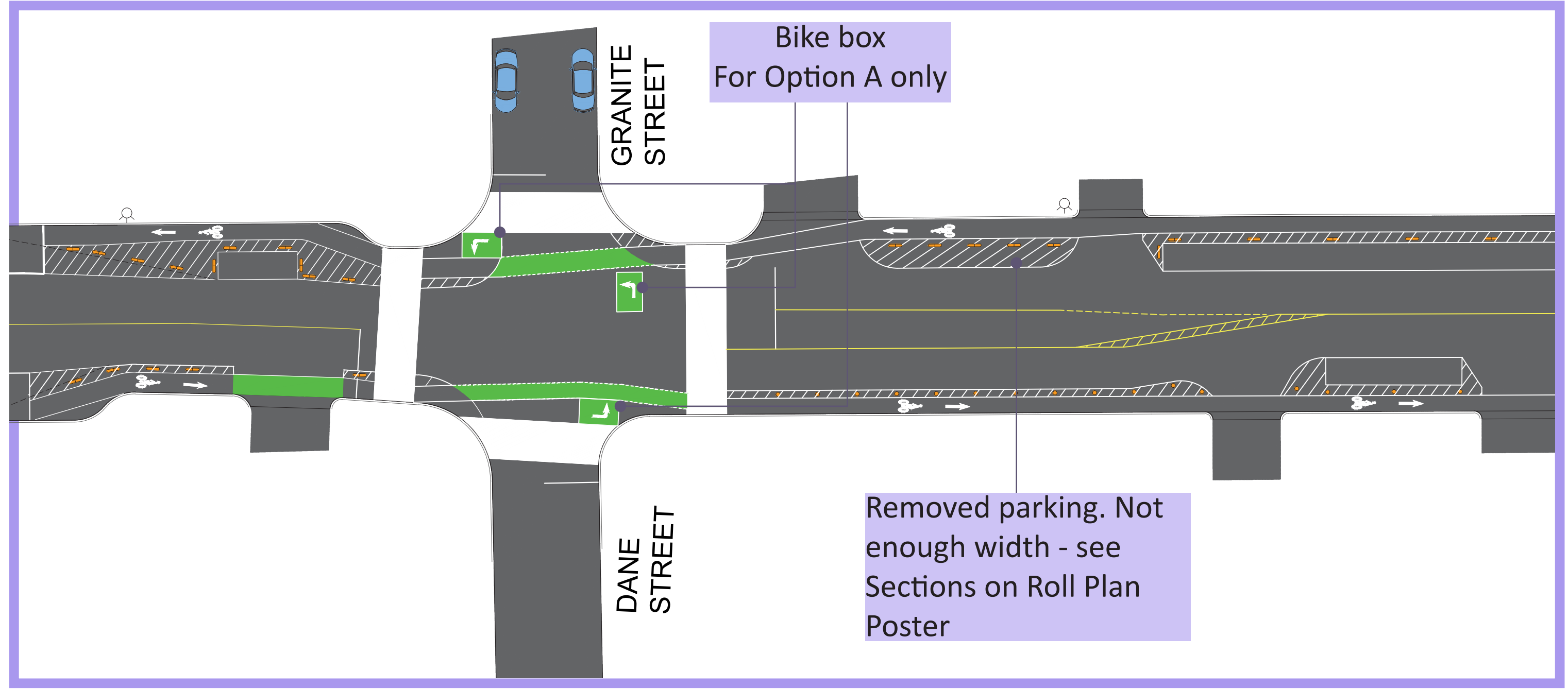


Traffic Counts - AM (PM) Peak Hours



* More detailed information about signalized intersections/locations along Somerville Avenue can be found (after 6/15) on the project web page

Proposed Changes



Concept plan for Somerville Avenue at Dane Street and Granite Street.

OPTION A - Two Stage

For safer left turns for cyclists from Somerville Avenue onto Granite Street or Dane Street and the left turn from Dane Street onto Somerville Avenue, we propose to add bike boxes to allow cyclists to wait and use two phases. We also propose to have two phases for the northbound and southbound moves. Green for traffic out of Granite Street will only come up if a car or bicycle is detected. Pedestrians are allowed to cross Dane street and Granite Street at the same time as traffic goes eastbound and westbound on Somerville Avenue

- PROS:**
- Safer left turns for cyclists without adding bicycle signals.
 - Only one additional phase to achieve better intersection operations.
 - Safer for traffic out of Dane Street and Granite Street.
 - Longer times for pedestrians to cross Dane Street and Granite Street since they can go at more than one phase.
- CONS:**
- Longer left turn moves for cyclists since they need to use two phases.

- Conflicts between cyclists going straight and vehicles turning right remain in four locations.
- Cyclist waiting in bike boxes are in conflict with right turning vehicles.
- Cyclists will have to yield to pedestrians for right turning moves.
- Vehicles turning right onto Dane Street and Granite Street will have to watch for Pedestrians crossing.

OPTION B - Vehicle Separation

We propose to completely separate vehicle traffic from pedestrians and cyclists. Cyclists and pedestrians share two phases - Phase A and D.

- PROS:**
- No conflict between vehicles and pedestrians.
 - No conflict between vehicles and cyclists.
- CONS:**
- Cyclists will have to yield to pedestrians for left and right turning moves.
 - Cyclists will have to wait when vehicles go, likely resulting in non-compliance.
 - Increase in cycle length and waiting times.
 - Separate bicycle signals are needed.

Proposed Signal Timing and Phasing*

OPTION A - Two Stage

	Phase A	Phase B	Phase C	Phase D	Phase E
Overall Cycle Length:	100 seconds				
	• Green for vehicles and cyclists eastbound and westbound • Cyclist heading left onto Dane Street or Granite Street will proceed to bike box and wait for Phase C or D green light • Green for pedestrians crossing Granite Street and Dane Street	• Green for vehicles and cyclists westbound only • Cyclist heading left onto Dane Street will proceed to bike box and wait for Phase C green light • Green for pedestrians crossing Granite Street and Dane Street	• Green for vehicles leaving Granite Street and cyclists crossing Somerville Avenue into Park Street • Cyclist heading left onto Somerville Avenue will proceed to bike box and wait for Phase A green light • Only when cyclist or vehicle is detected	• Green for drivers and cyclists leaving Dane Street • Cyclist heading left onto Somerville Avenue will proceed to bike box and wait for Phase A and B green light	• Green for pedestrians crossing Somerville Avenue, Granite Street, and Dane Street
Phase Length (PM)	29 seconds	15 seconds	15 seconds	21 seconds	22 seconds

Proposed Signal Timing and Phasing*

OPTION B - Vehicle Separation

	Phase A	Phase B	Phase C	Phase D	Phase E
Overall Cycle Length:	120 seconds				
	• Green for cyclists eastbound and westbound • Green for pedestrians crossing driveway and Park Street	• Green for vehicles westbound only	• Green for vehicles westbound and eastbound	• Green cyclists leaving Park Street • Green for pedestrians crossing Somerville Avenue	• Green for vehicles leaving driveway • Only when vehicle is detected
Phase Length (PM)	27 seconds	11 seconds	32 seconds	24 seconds	26 seconds

Share your thoughts

What do you like or not about the proposed changes?

In particular, do you prefer Option A (Two Stage) or Option B (Vehicle Separation)?

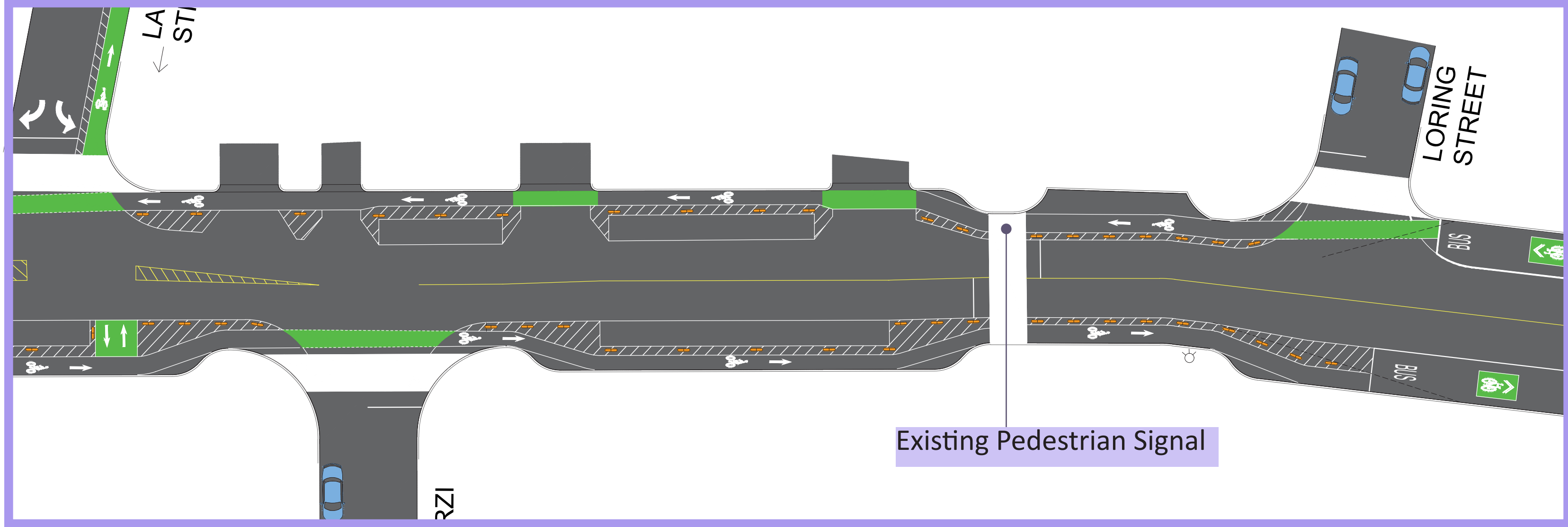
Did we miss anything?

SOMERVILLE AVENUE QUICK BUILD SAFETY IMPROVEMENTS

SIGNALIZED INTERSECTION - ST ANTHONY AND SCHOOL STREET



ST. ANTHONY



Concept plan for Somerville Avenue at St. Anthony Crossing

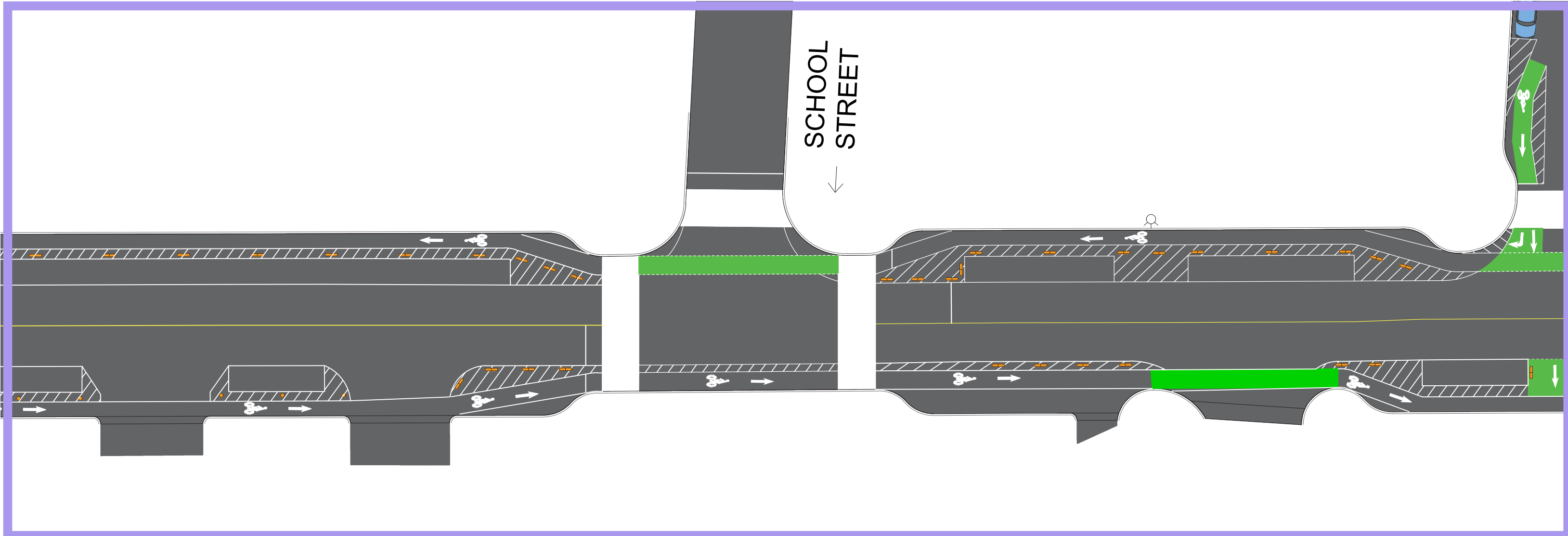
- We are not proposing any major signal changes.
- We will coordinate this signal with adjacent signalized intersections.
- We could also change the current condition where the pedestrian phase comes up automatically at every cycle to require pedestrians to push the button for a green light.
- Pros and Cons of automatic pedestrian green light (recall) and having to push the button to get a green light
 - Automatic green light
 - + does not require any action.
 - pedestrians on average have to wait longer for green lights to come on
 - + easier to coordinate with adjacent signalized intersections for better vehicular and bus flow along the corridor.
- Pros and Cons of having to push the button to get a green light
 - + requires action from pedestrians
 - but on average decreases the time to wait for green light
 - adds complexity to and potential delays in coordination with adjacent signalized intersections

Share your thoughts
 Do you prefer to push a button or have the pedestrian phase come automatically with every cycle?

- I prefer to push button to have pedestrian green come up (most times a shorter wait)
- I prefer pedestrian green comes up automatically

Did we miss anything?

SCHOOL STREET



Concept plan for Somerville Avenue at School Street

- We are not proposing any major signal changes.
- We will coordinate this signal with adjacent signalized intersections.
- We will add green for pedestrians across School Street when Somerville Avenue traffic has green.

Share your thoughts
 Did we miss anything?