





Working Group Meeting 2

February 26, 2019

Today's Agenda

Welcome5 min.

History of River Street
 20 min.

Review of input/themes
 15 min.

Existing Conditions Progress
 40 min.

Carl Barron Process Preview 15 min.

Questions & Comments10 min.

Next Steps5 min.

Please note: Doors open at 5:45pm, meeting starts at 6pm on the dot!



Welcome Back

Project Team

City Team

Jerry Friedman

Public Works

Tegin Teich

Community Development

Patrick Baxter

Traffic, Parking & Transportation

Consultant Team

- HDR Engineering
- Halvorson Design Partnership
- McMahon Associates
- Project for Public Spaces
- GEI Consultants
- BSI Engineering
- Feldman Land Surveyors



The Working Group

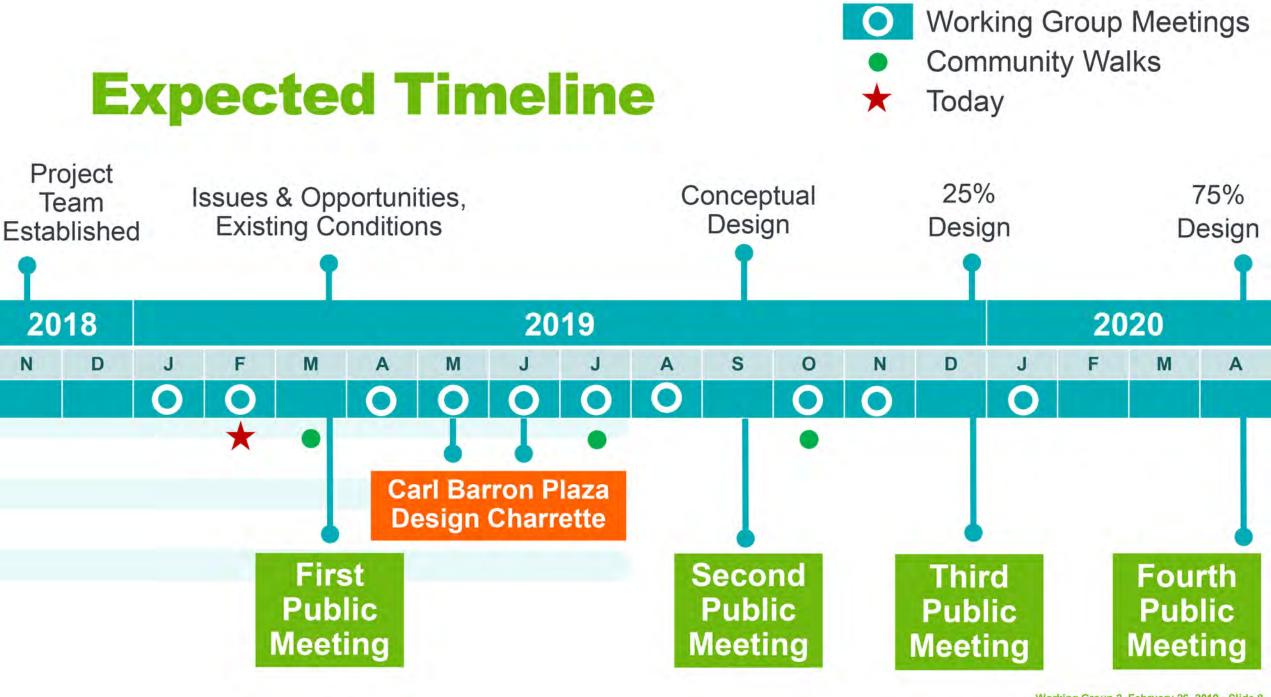
- Patrick Barrett
- Dan Beaulieu
- Seanna Berry
- Sai Boddupali
- Valerie Bonds
- Matthew Ciborowski
- Gabriel Cira
- Abby Duker
- Samuel Gebru

- Melissa Greene
- Kai Long
- Neil Rodriguez
- Randy Stern
- Andrew Tarsy
- Christopher Tassone
- Annie Tuan
- Olivia Turner



Project Limits Expanded



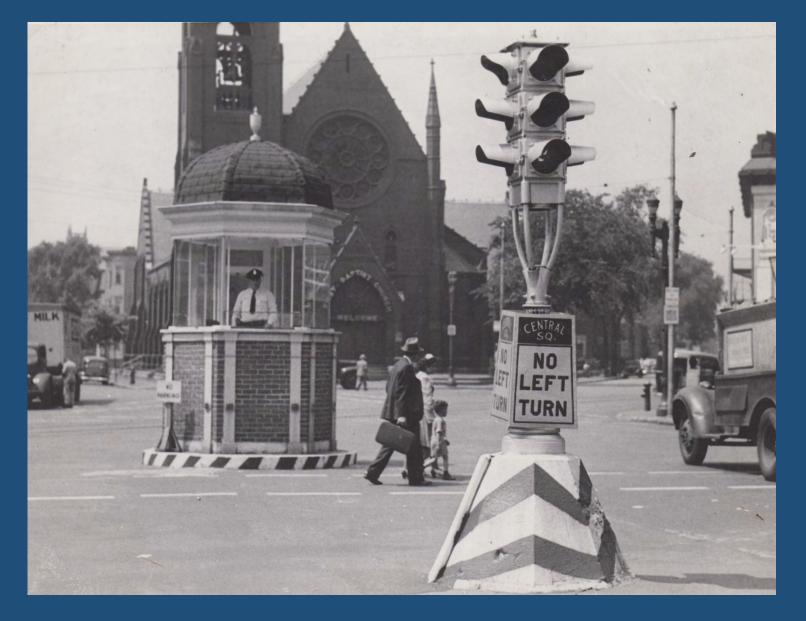


History of River Street

River Street

from Central Square to Memorial Drive

Cambridge Historical Commission February 26, 2019



Central Square, ca. 1950



Reconstructed plan of Cambridge and environs in the 17th century



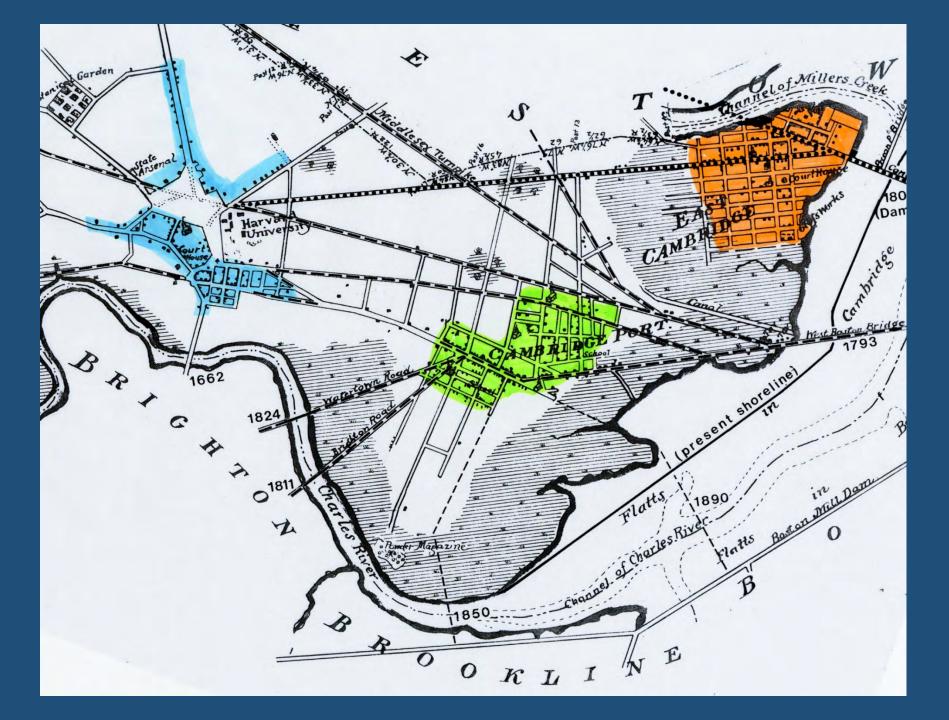
Cambridge roads in 1775



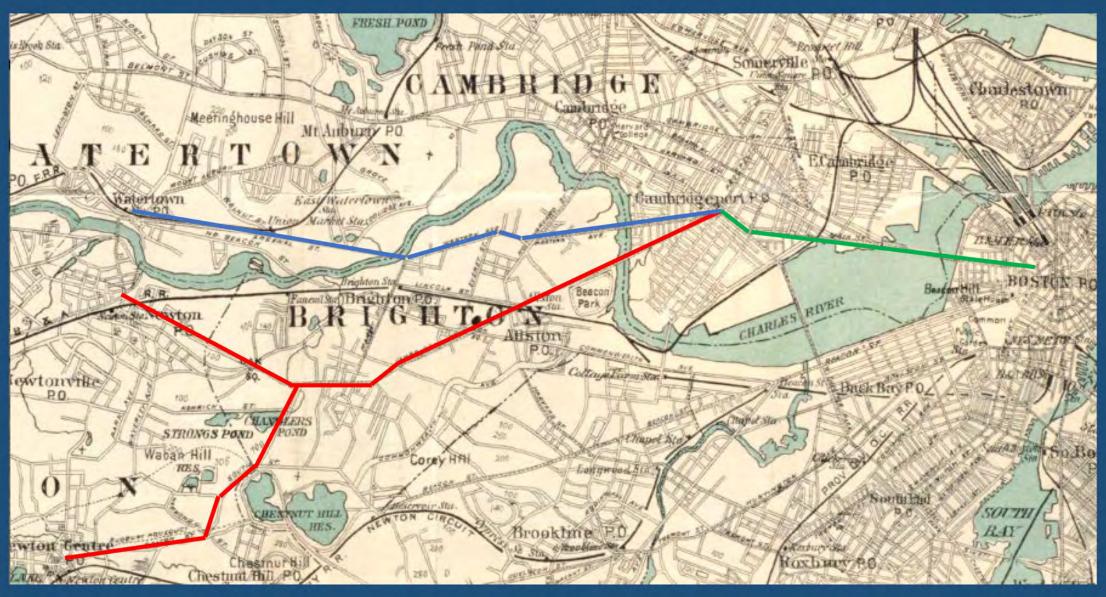
Cambridge roads in 1775



West Boston (Longfellow) Bridge, 1793



Bridges and Turnpikes, 1830



River Street (1811) and Western Avenue (1824) cachment areas George H. Walker & Co. "Map of the Roads of Wellesley and Vicinity", ca. 1894



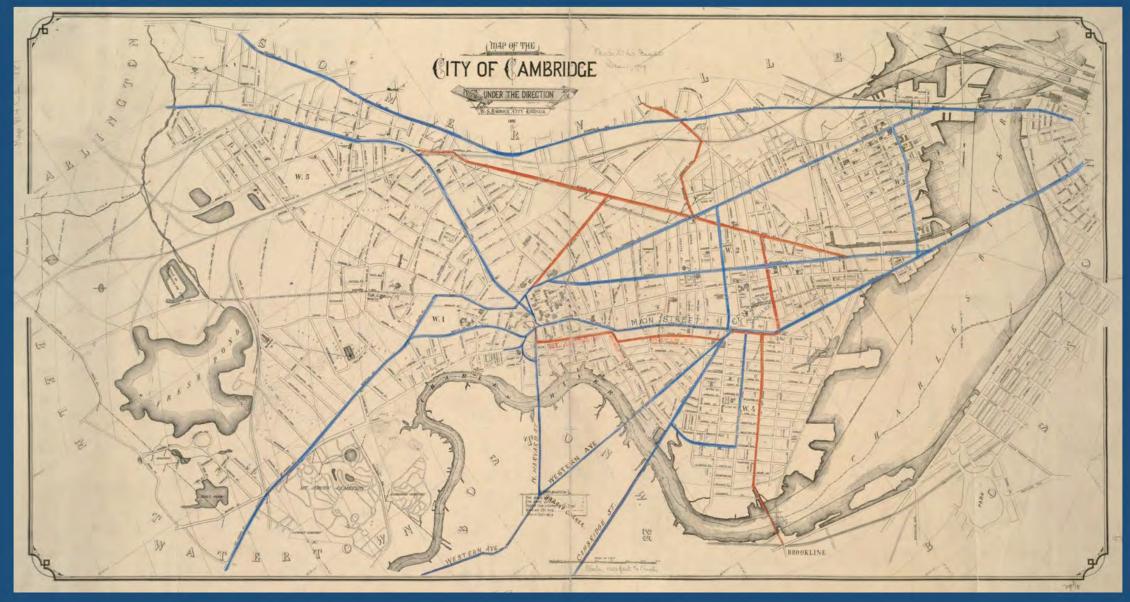
U.S. Coast Survey, *Boston Harbor,* 1857

as surveyed in 1847

sacred music, which was pursued with great zeal and spirit, good judgment and taste; and it was resolved, that as "music was the handmaid to devotion, no piece should be admitted, but of a character suited to the solemnity of the sanctuary, and to that holiness which becometh the house of God forever."

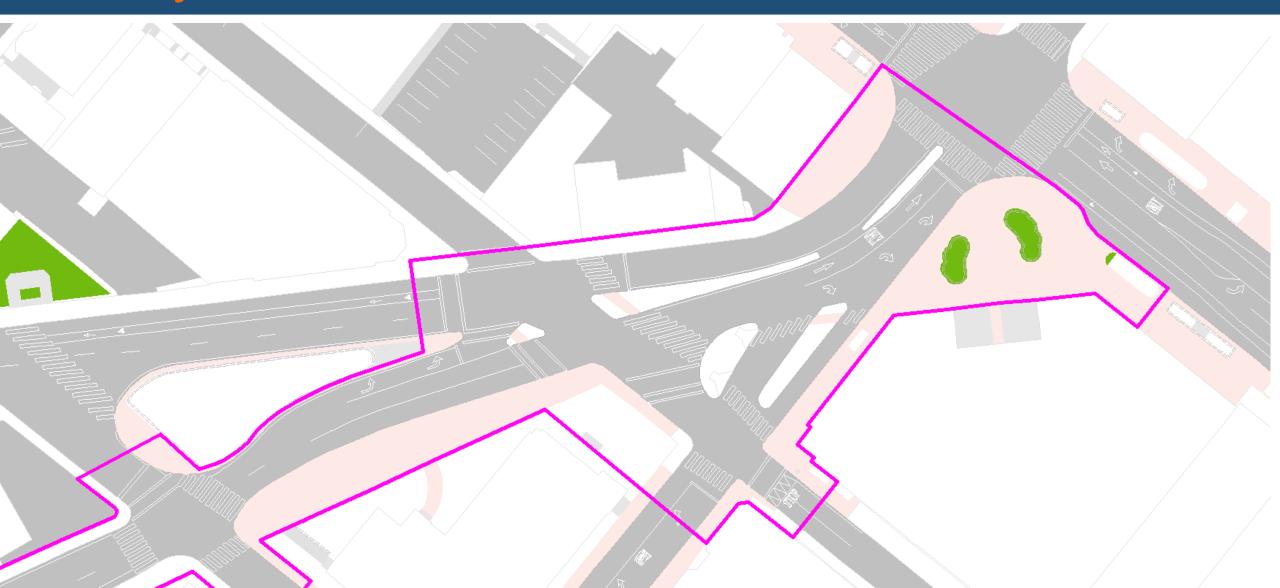
We were now terribly annoyed by the tidewaters, which would break through the dikes, or overflow sufficiently deep for a boat to ride with ease. Cellars and kitchens full, and every thing afloat. At one time the waters were four feet deep in the first story. The waters at the ebbing of the tide, would return as suddenly as they came, but the dampness would remain for a long time. Thinking our health would suffer if we remained, we determined to remove as quickly as possible, but upon making inquiry, found it was impossible to obtain a house, with the exception of the Phipps or Boardman house; and that being such an old castle, we thought it would not be advisable. But, upon reflection, as the bridge would soon be built, and, in the rear, a road cut through to the colleges, it would be far more pleasant and convenient; we therefore secured it.

On February 2nd, 1809, the Cambridgeport Meeting-house Corporation conveyed by agreement and indenture, the meeting-house, organ, bell, etc., to the Cambridgeport parish, at which time the corporation became extinct. From the time of the dedication of the house, in 1807, to 1809, divine service had been constantly performed, at the expense of the corporation. In March, an embargo was issued by authority, prohibiting all vessels from leaving the port. "Hard times" was now the universal cry.



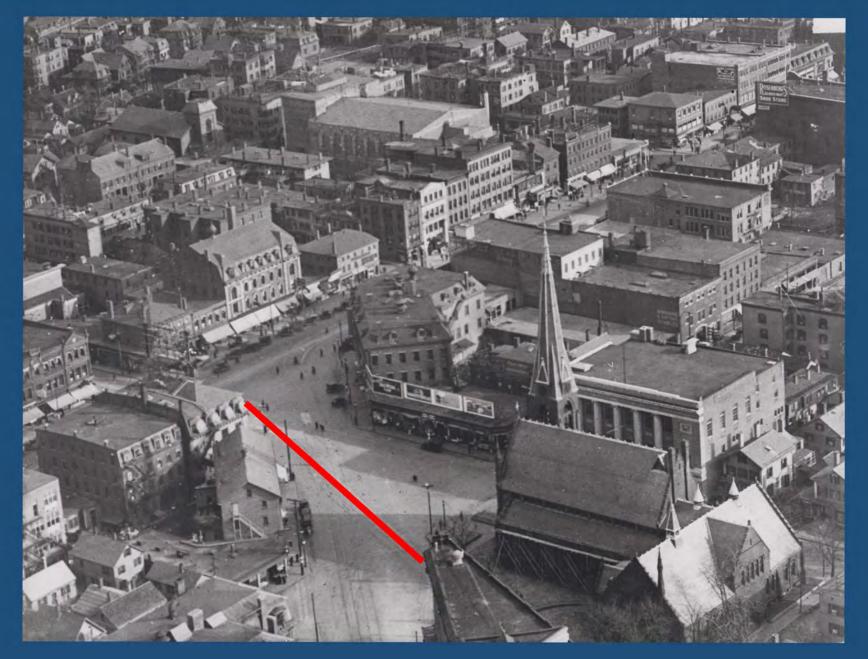
Cambridge Street Railways in 1881
blue = Cambridge Railroad red = Charles River Street Railway

Project Limits – Carl Barron Plaza

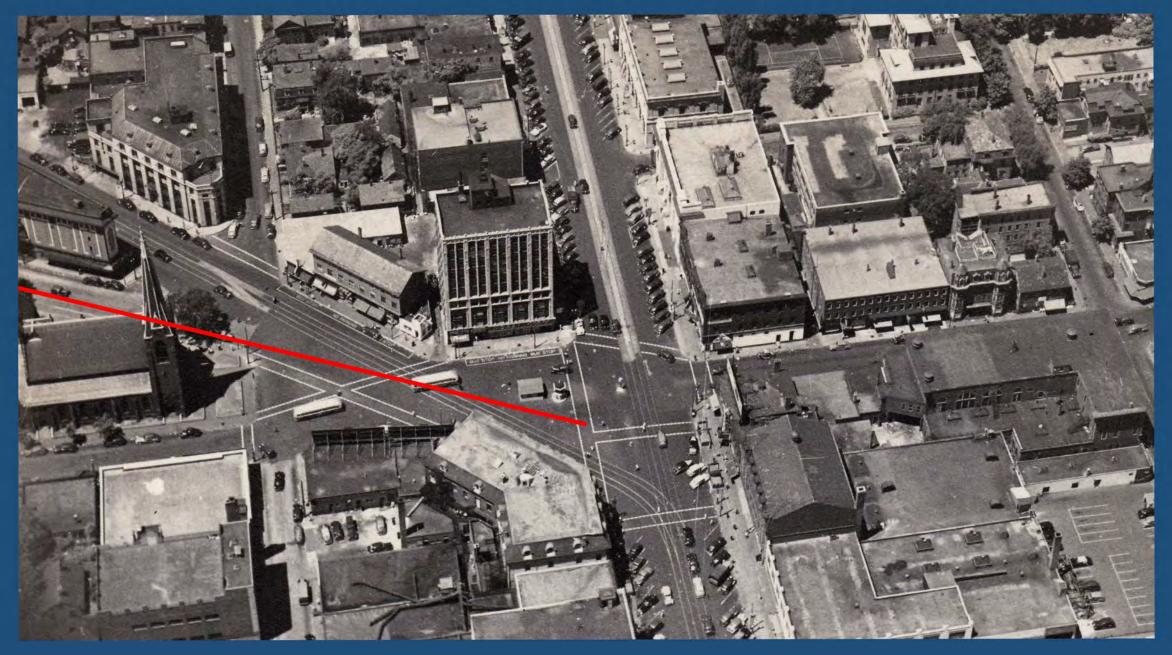




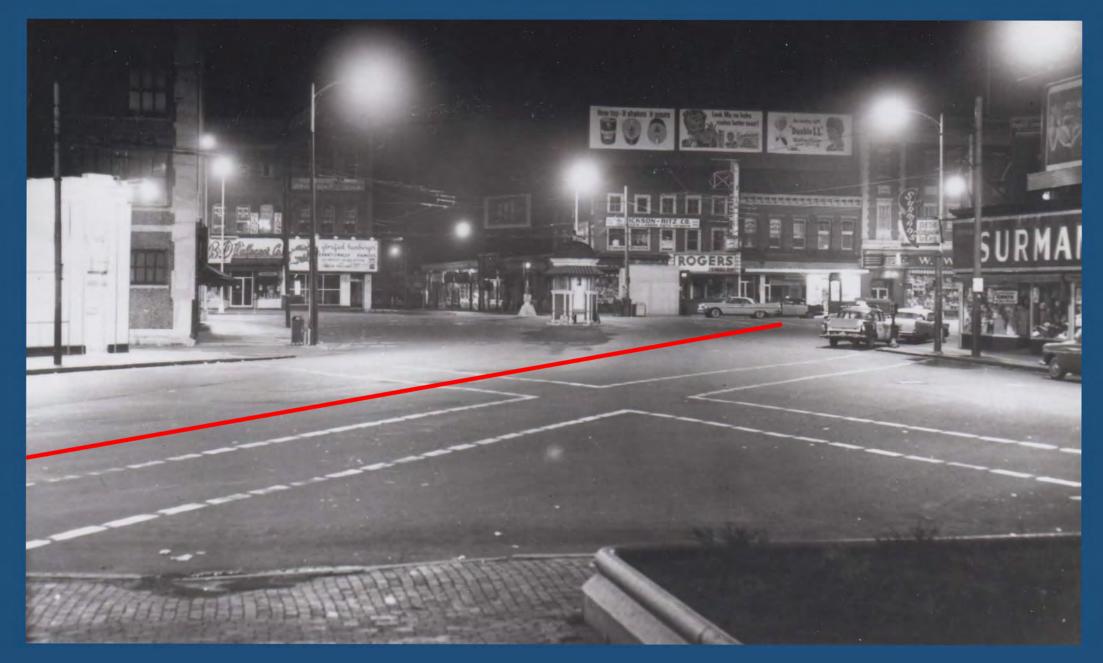
Central Square, 1854



Central Square, 1916



Central Square, 1946



Central Square, ca. 1958



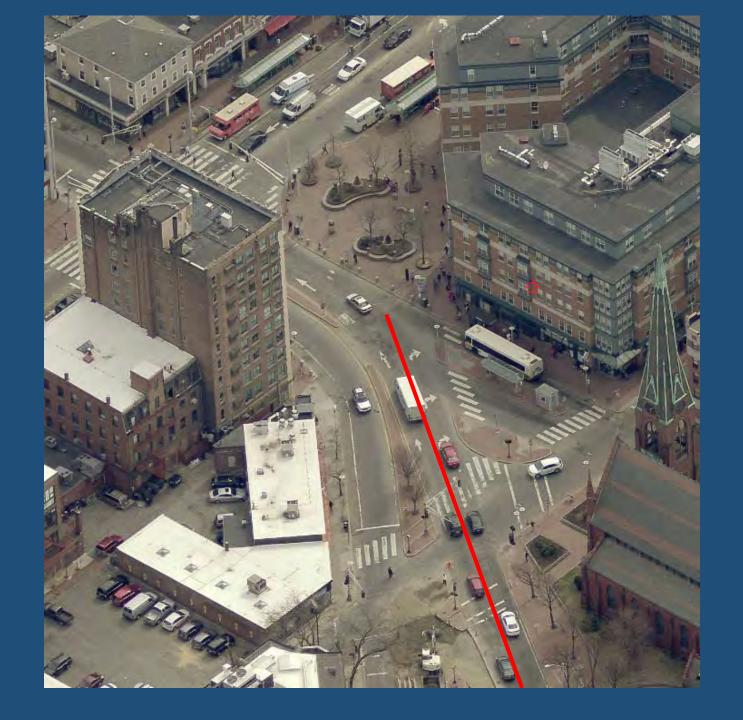
TREES IN CENTRAL SQUARE: - Pedestrians stare in wonderment at trees planted in heart of Central square as part of beautification program financed by city and federal funds. Like New York City, Cambridge will soon have its own "Central Park." Three maples and foundations for benches are shown in triangular plot, left foreground. At extreme right, sidewalk has been widened, trees have been planted and benches installed for weary shoppers. Traffic tower will eventually be removed. City's new "Mini Park" is conversation piece for miles around. (Photo by Ed Pacheco)

Cambridge Chronicle Nov. 7, 1968

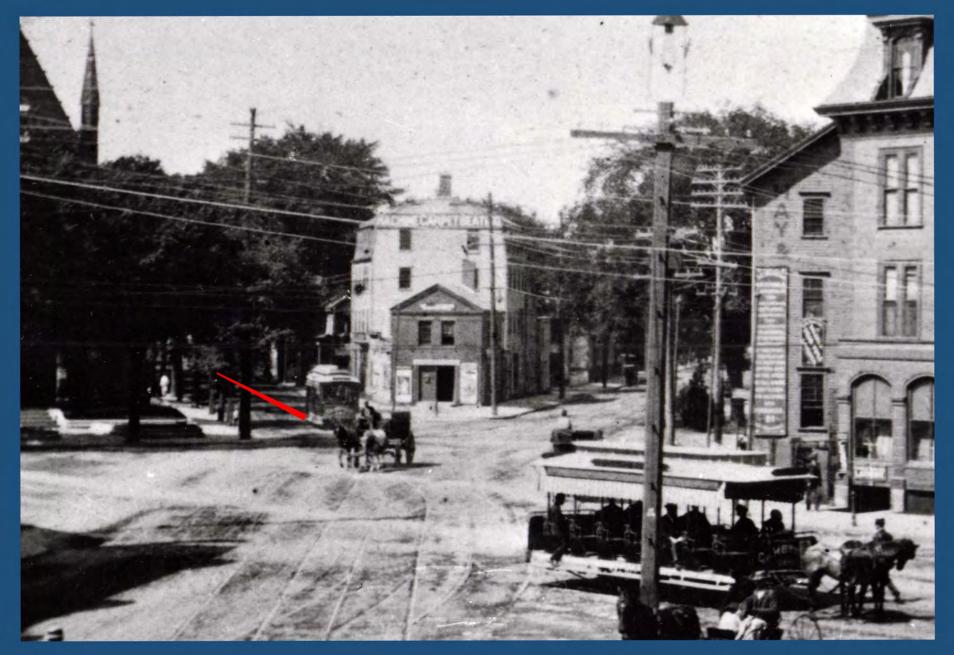




Central Square, 1989



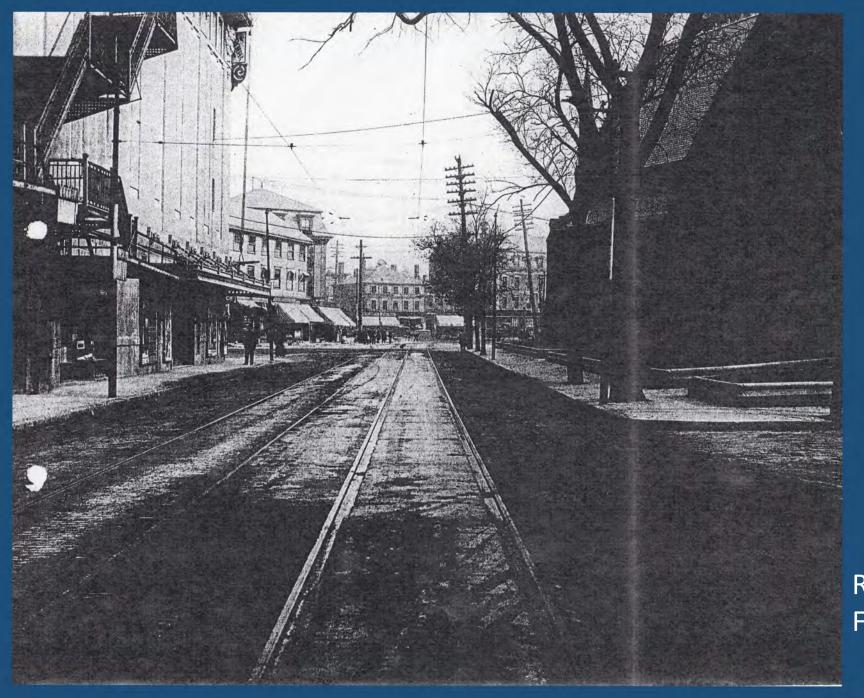
Central Square, 2014



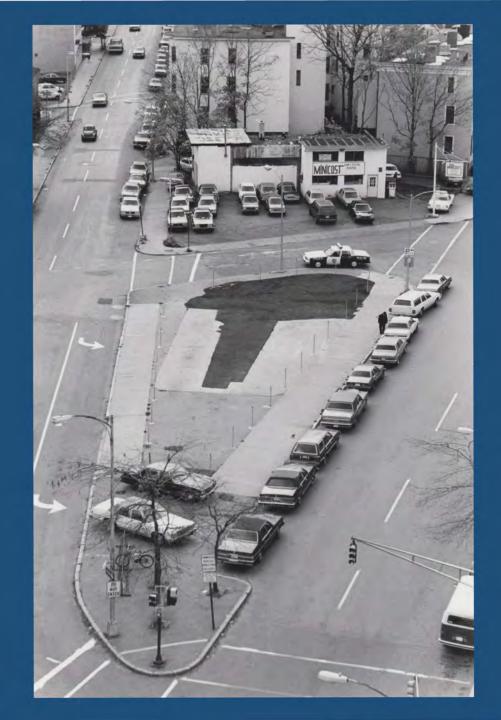
Central Square, ca. 1890



Olympia Theater (1910); razed 1954. Photo ca. 1954



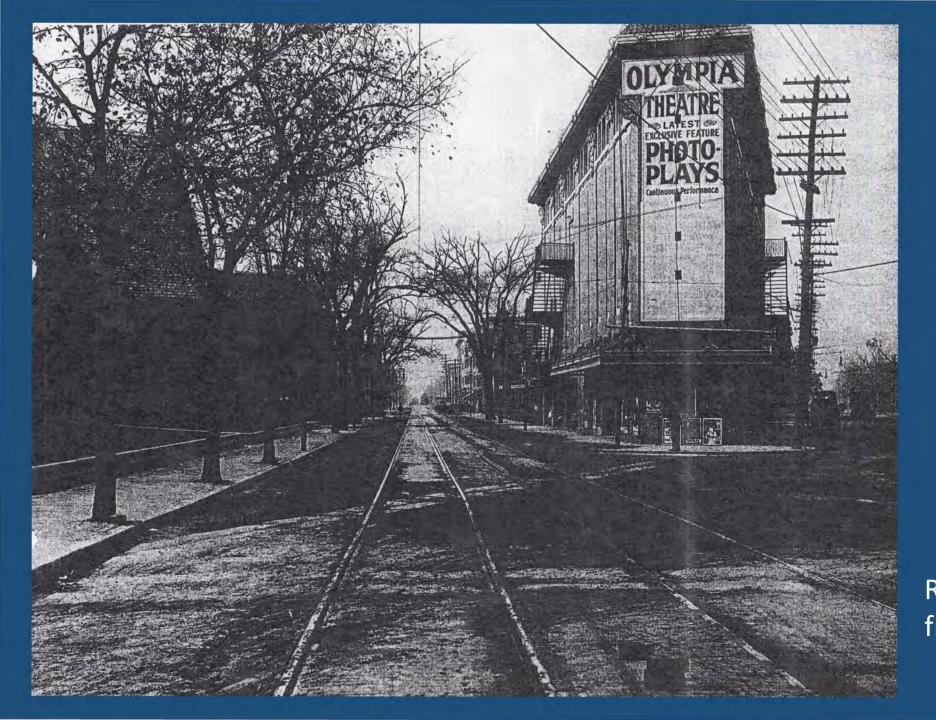
River Street looking north from Franklin Street, ca. 1925



Olympia Theater site, ca. 1980

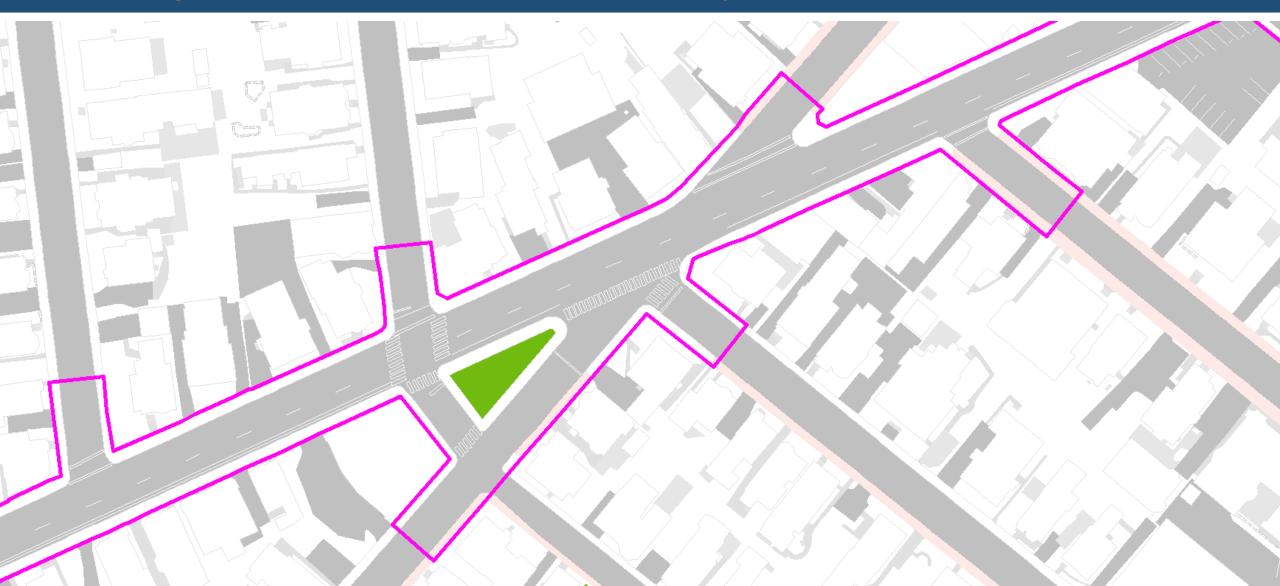


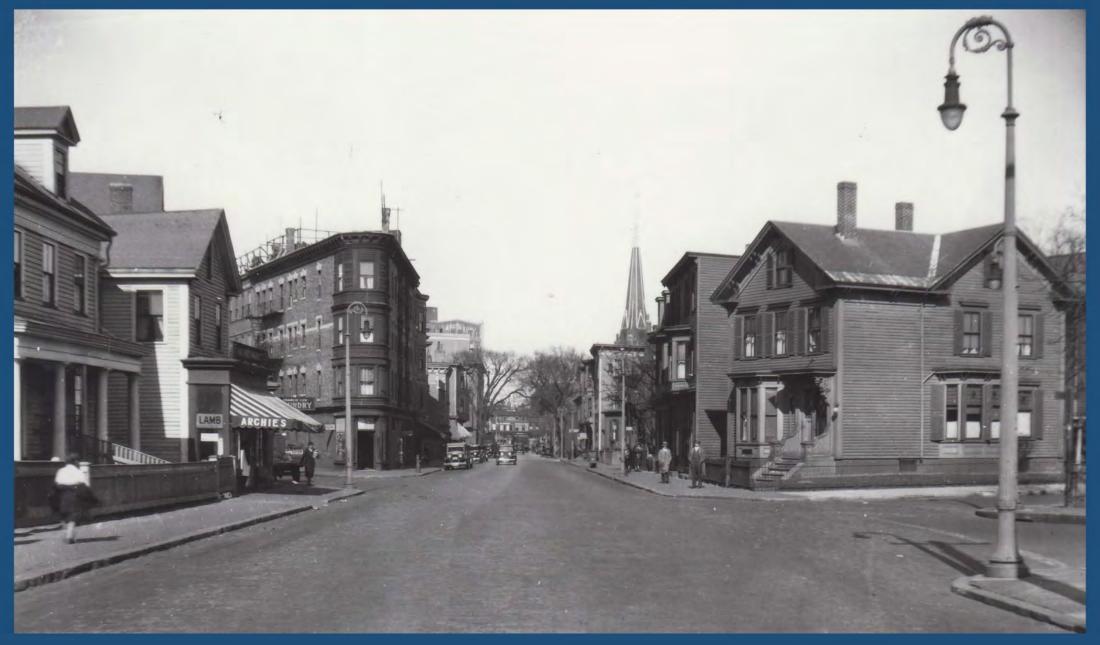
Olympia Theater site, 2014



River Street looking south from Green Street, ca, 1925

Project Limits – Tubman Square





River Street looking north at Pleasant Street, ca. 1933



Tubman Square, ca. 1950



123 River Street (1881), photo ca. 1900

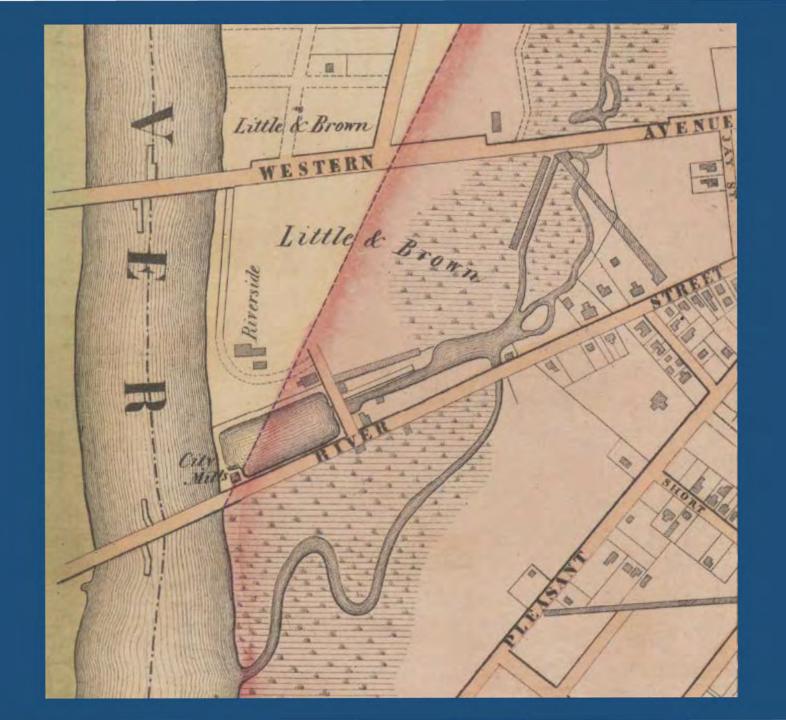


123 River Street, with former store added 1920

Project Limits – Hoyt Field and Riverside Press Park

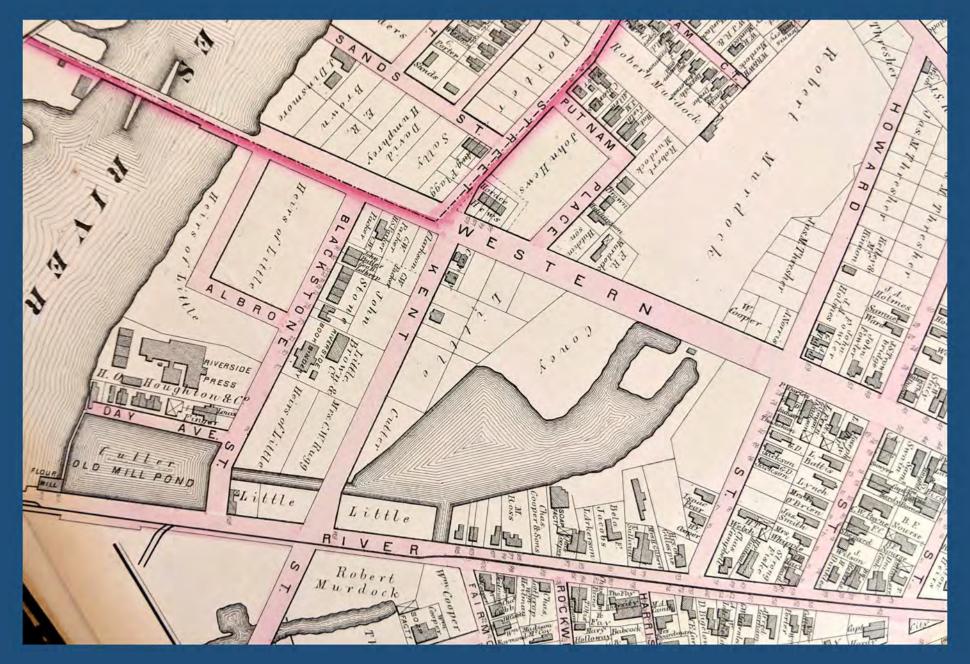


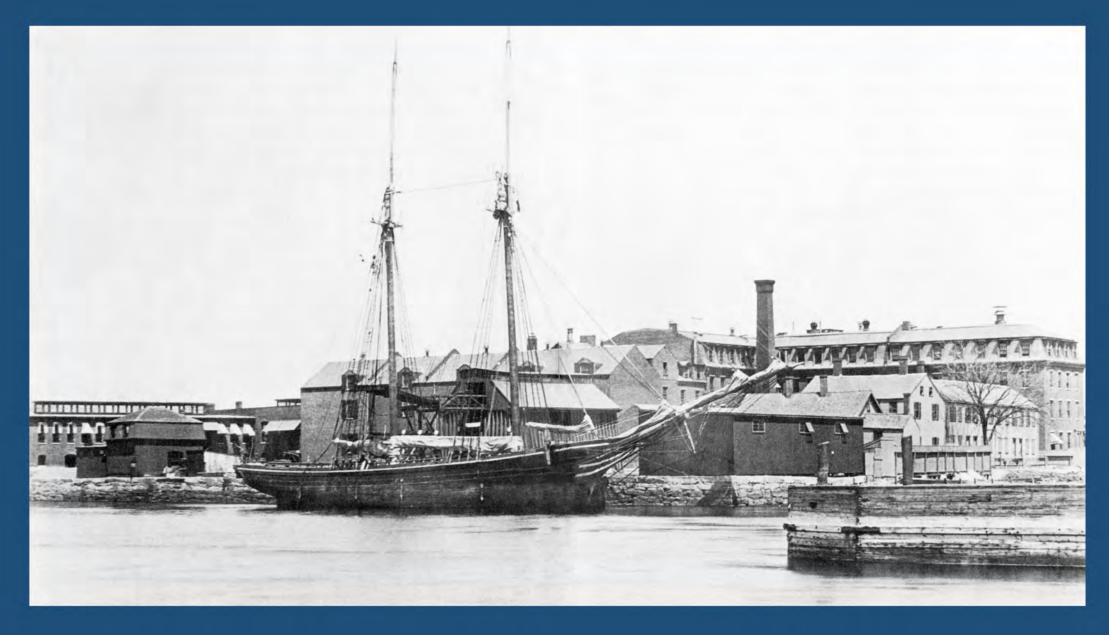




Henry F. Walling,
"Map of the City of
Cambridge ...
Massachusetts," 1854

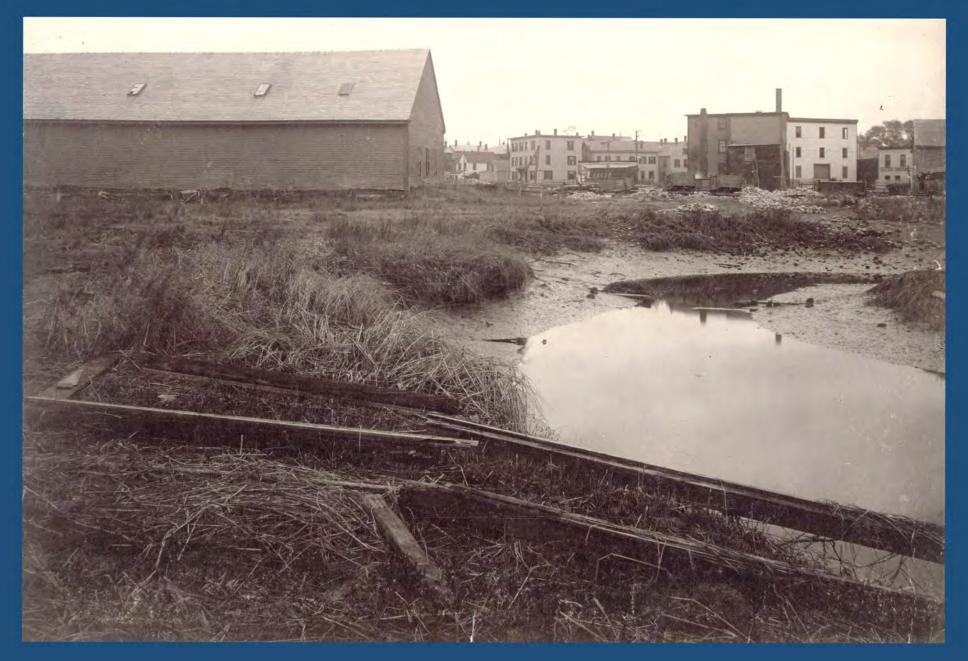
W.A. Mason, Plan of the Grist Mill Estate in Cambridgeport, 1853





A schooner at the Riverside Press wharf, ca. 1890, as seen from the River Street Bridge



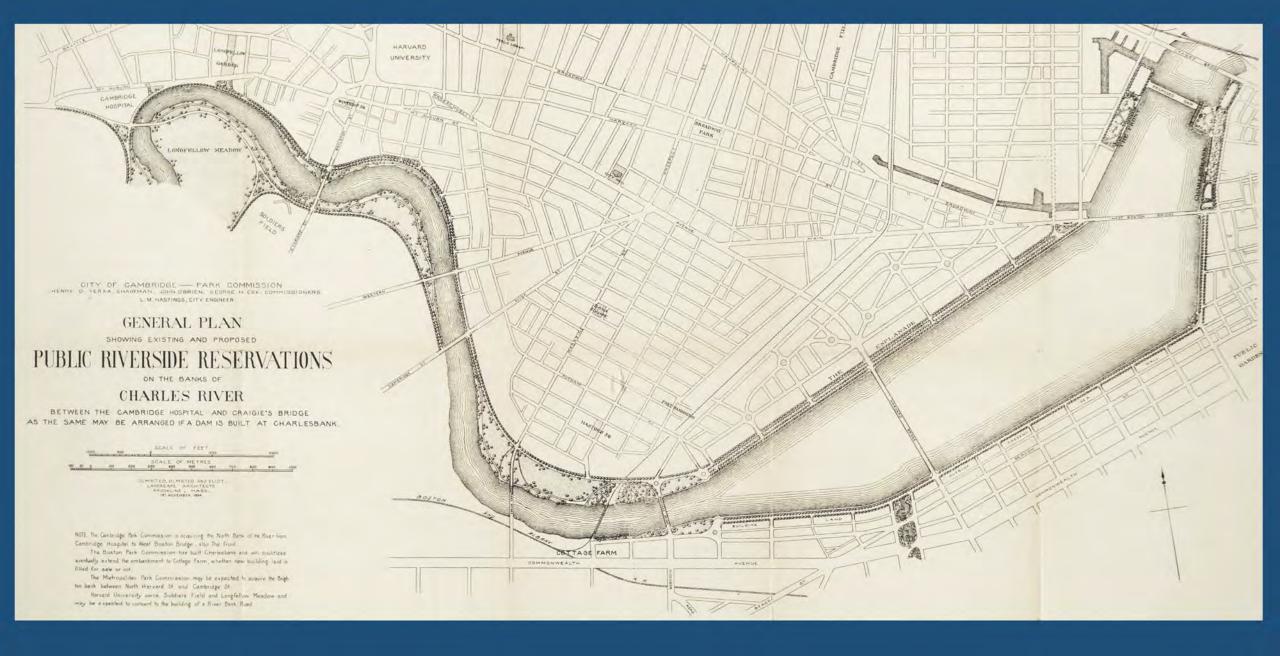


Natural outlet of the millpond creek, ca. 1895

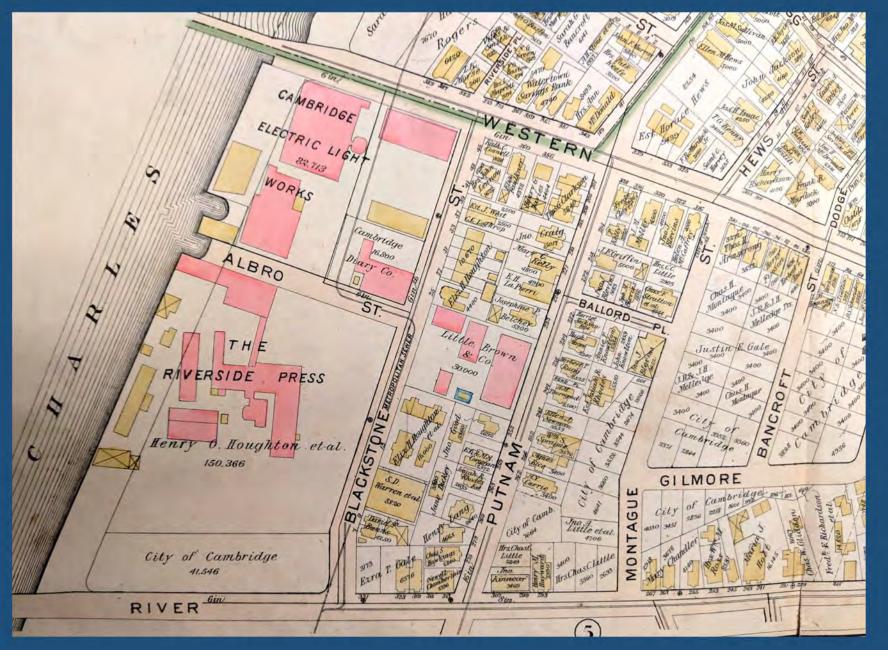


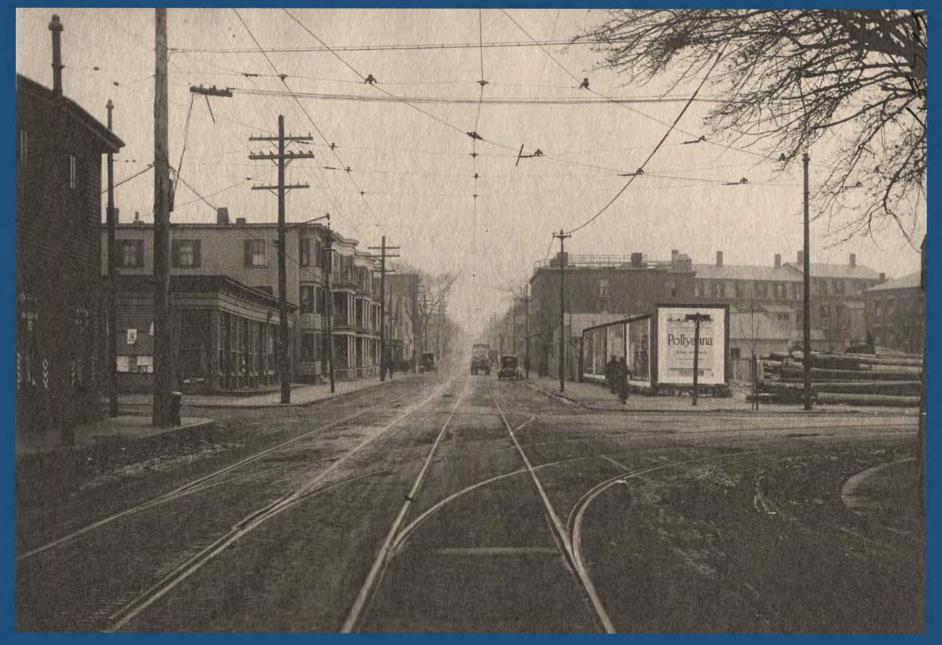
River Street Carbarns, ca. 1895

current site of CVS and Whole Foods



Charles Eliot's plan for public reservations on both banks the Charles River, 1894

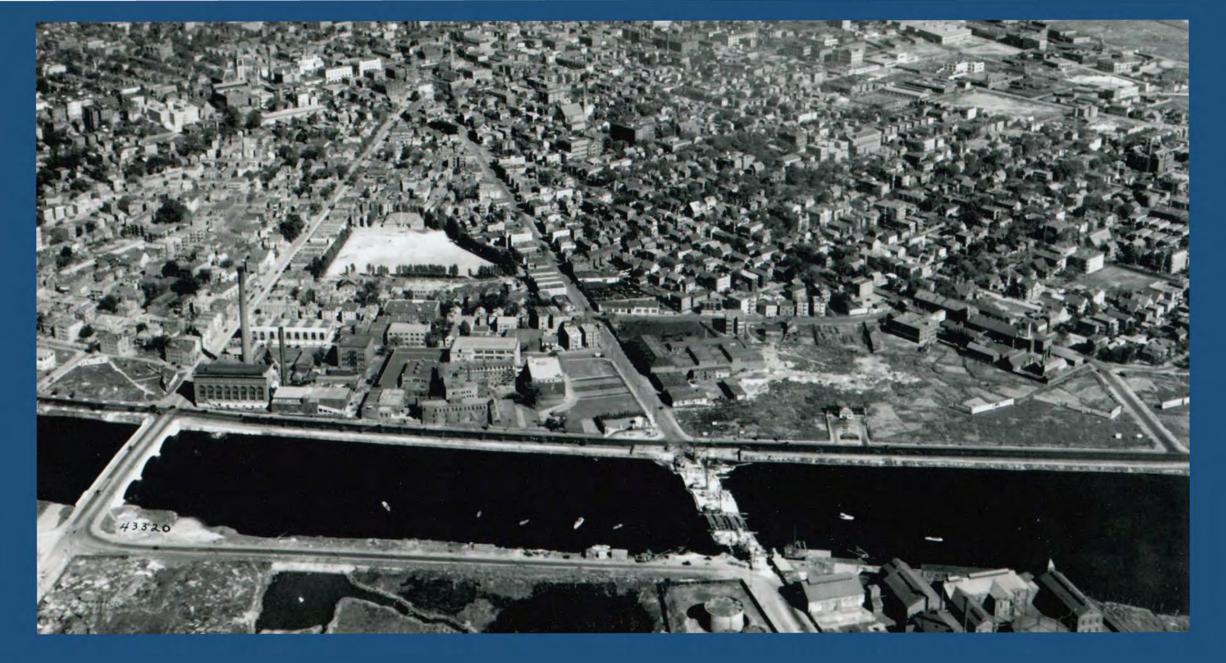




River Street looking toward Central Square from Putnam Avenue, ca. 1920



Victory Diner, 360 River Street (site of Rite-Aid store), 1948 traffic is two-way until 1964









Central Square, ca. 1915

Review of input & emerging themes

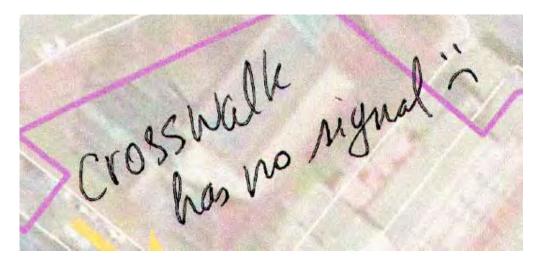
Summary of Themes We Heard

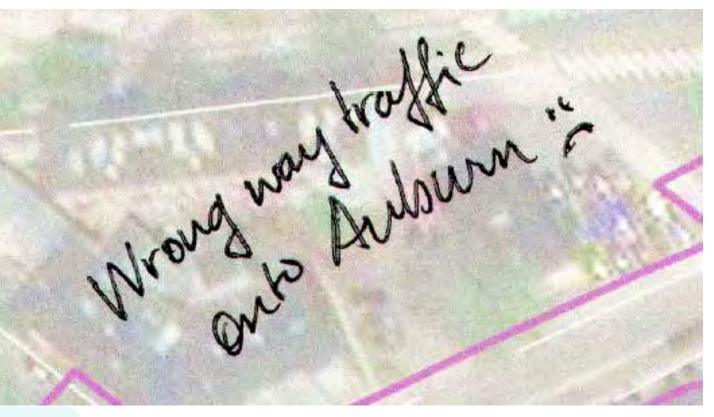
- Safety / Calm
- Accessibility
- Public space enhancements
- Supporting businesses
- Efficient transportation



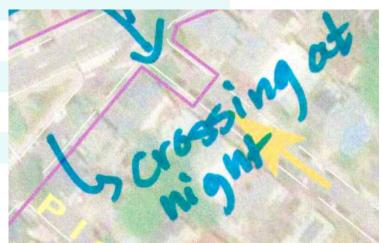


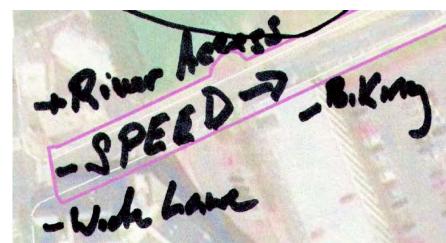
Safety & Calm



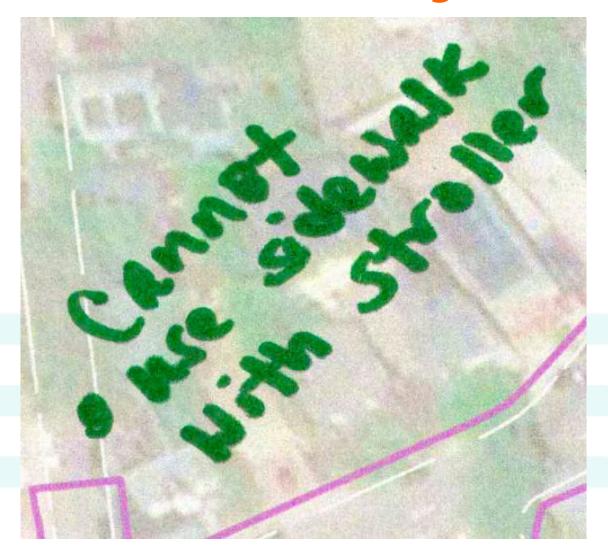








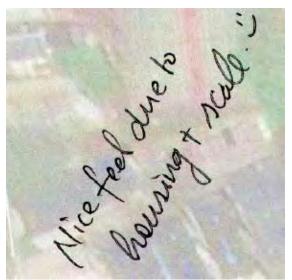
Accessibility

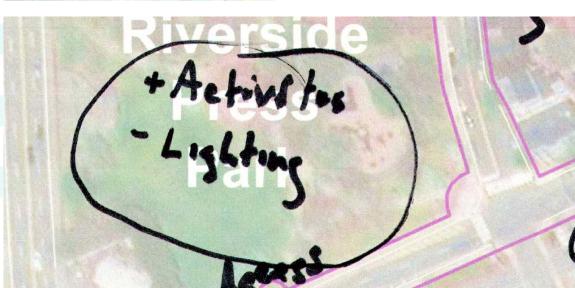




Public Space Enhancements



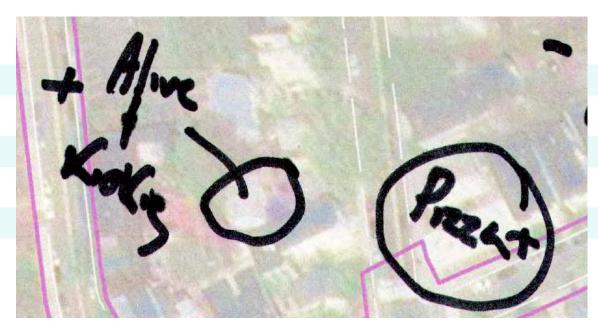






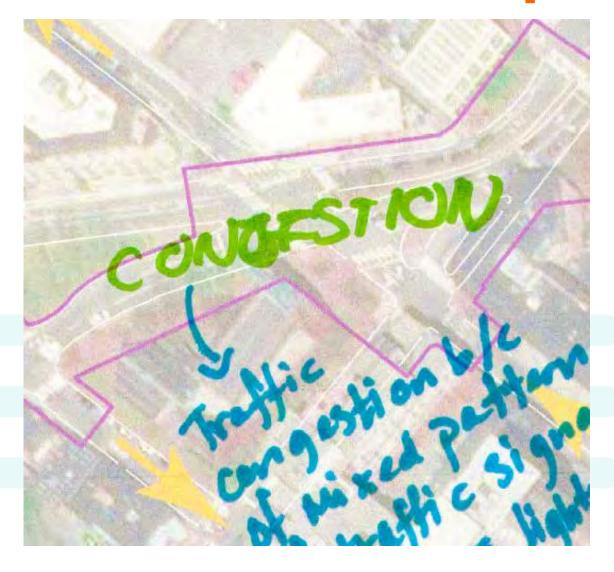
Supporting Businesses

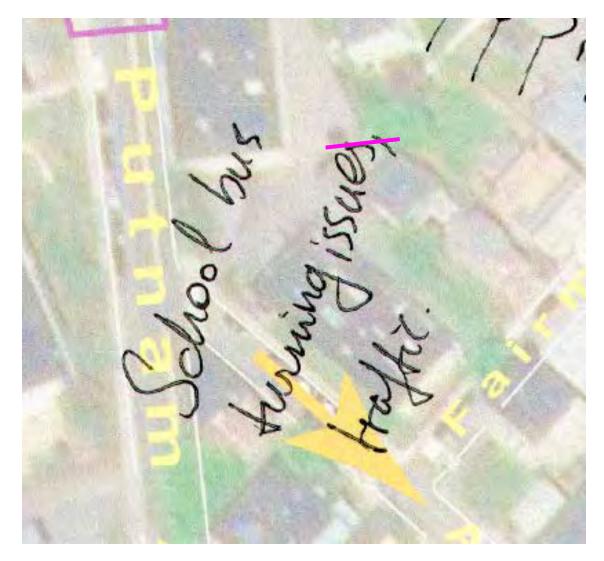






Efficient Transportation





Sample Envision Cambridge Citywide Goals

CLIMATE AND ENVIRONMENT

• Climate Change Preparedness: Protect the lives and livelihoods of the Cambridge community from the impacts of climate change

COMMUNITY WELLBEING

 Sense of Belonging: Strengthen our social connections and provide a safe and welcoming community

URBAN FORM

 Open Space: Create a connected network of high-quality open spaces that links all residents to local and regional natural assets, provides a range of activities and experiences, is inclusive of all people, and encourages social connections

ECONOMIC DEVELOPMENT

 Great Commercial Districts: Preserve and enhance the distinctive character of Cambridge's commercial districts, especially its major squares and mixed-use corridors

MOBILITY

- Reliability and Efficiency: Ensure people and goods can reliably move within Cambridge and around the region, and encourage space-efficient transportation choices like walking, biking, transit, and carpooling.
- Safe and Active Transportation: Eliminate traffic fatalities and serious injuries while encouraging active living and improving comfort for people of all ages and abilities

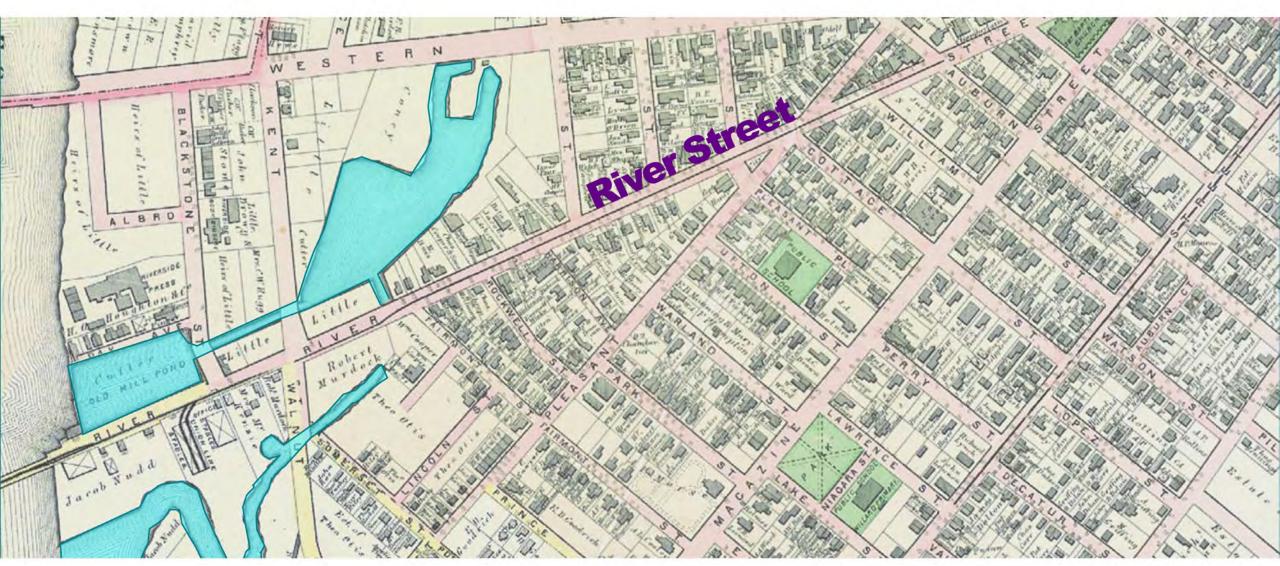
Existing Conditions Progress

River Street is a.....

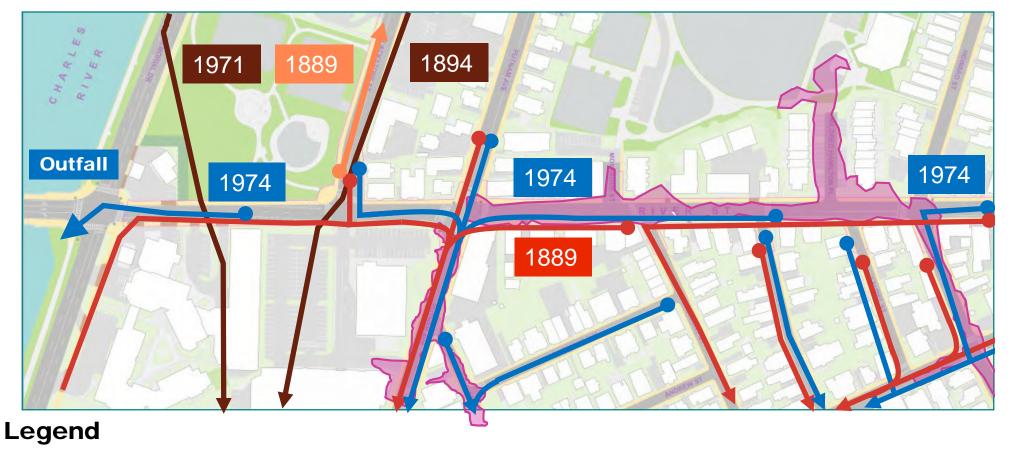
- Infrastructure spine and
- Regional roadway and
- Neighborhood street and
- Retail district and
- Place to be and
- Front yard.



River Street Bounded by Water (1880)



Existing Sewer/Stormwater -- West

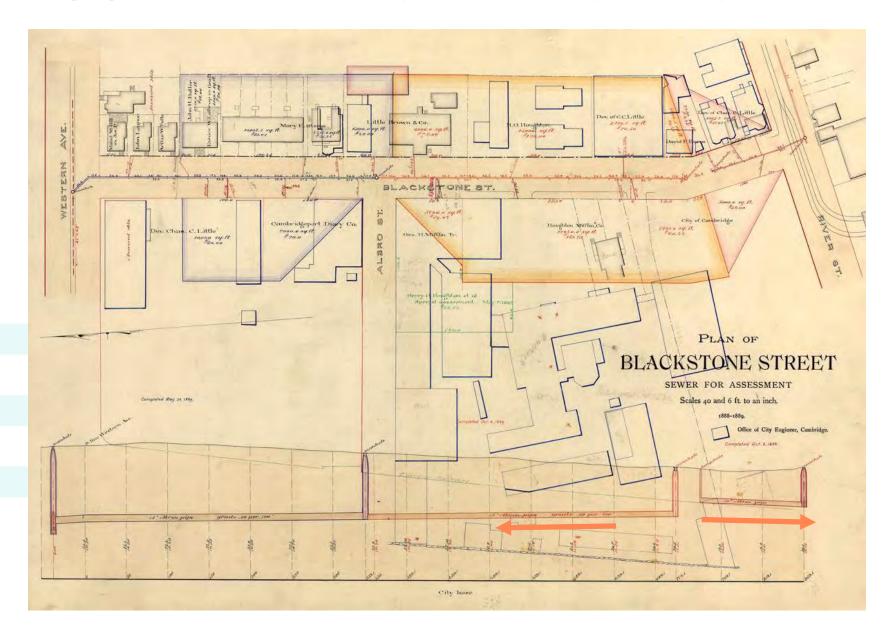


Stormwater
Sewer
Combined Sewer
MWRA Sewer
100 Year Precipitation Flood

Limits – Present Day Conditions

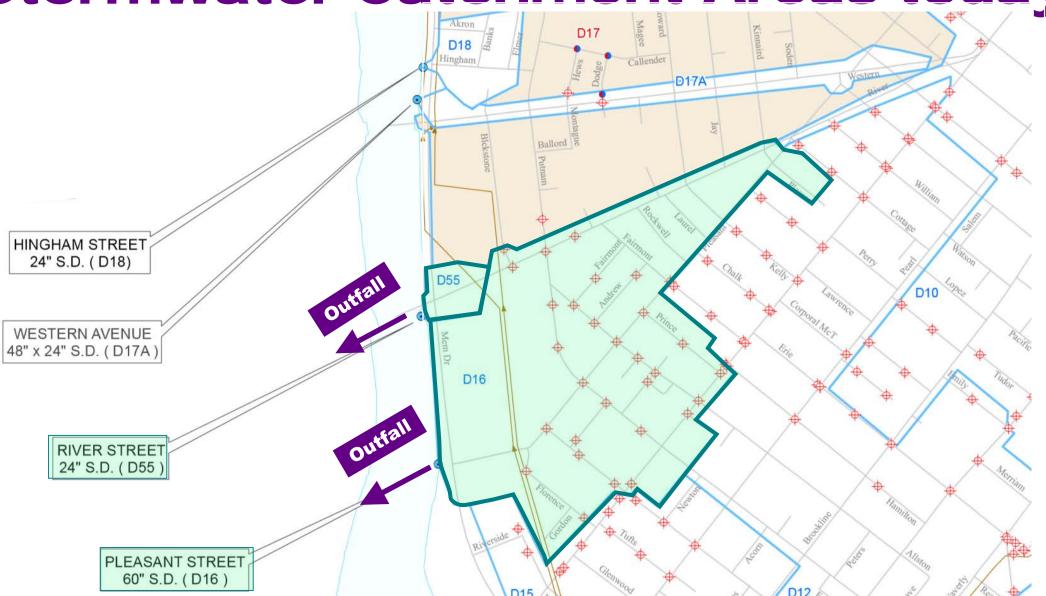
- Separate combined sewer systems
- Reduce flooding
- Investigate and upgrade where needed

1889 Blackstone Street Sewer

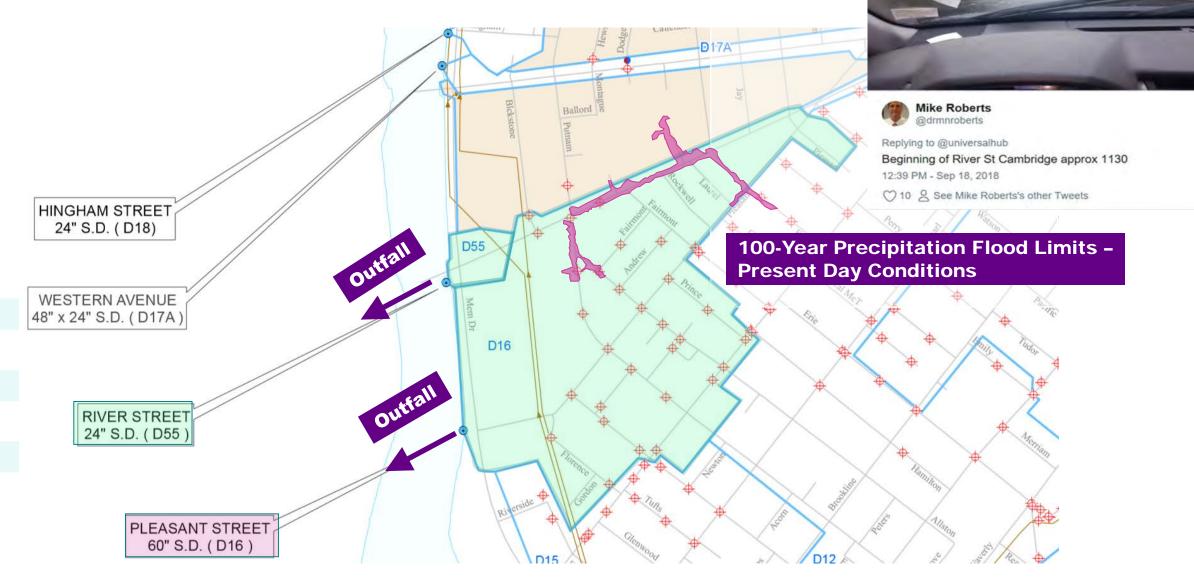




Stormwater Catchment Areas today



100-Year Precipitation

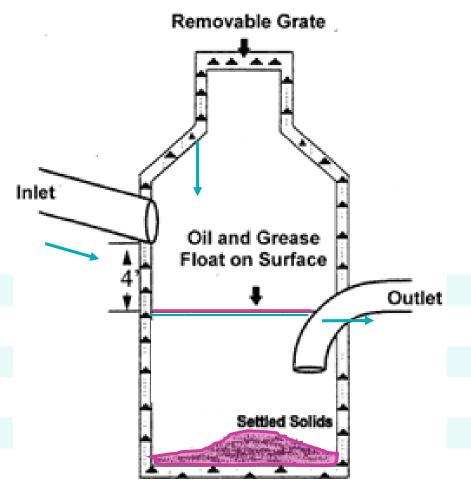


Ponding





Water Quality Issue: Existing Catch Basins Lack Sumps

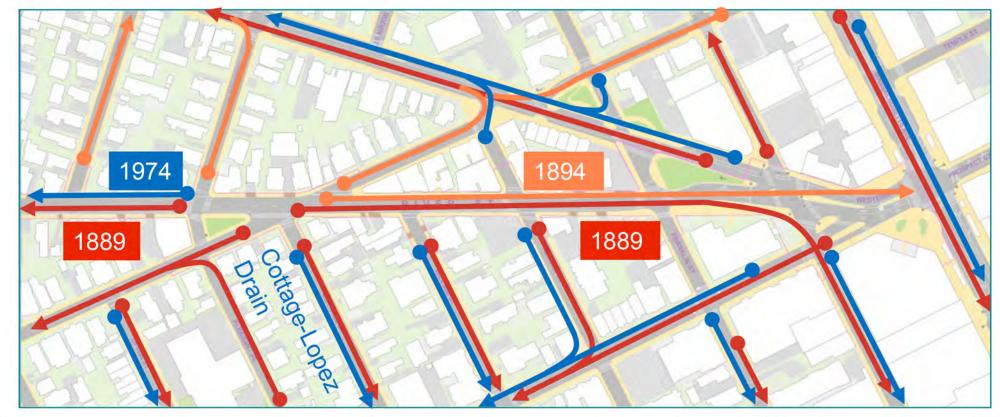


Stormwater Pipes and Manholes Installed in 1974 -5TA. 0+00D NEW S.D.M.H. W/CAST-IN-PLACE BASE CONNECT EXIST. PIPES RIVER 0+95 D NEW S.D.M.H. Boston E Boston 6 REMOVE EXIST. L.H. & REPLACE WITH A NEW. SMH **Existing Catch** REMOVE EXIST. **Basins Not Replaced** 15"S.D.

Modern Deep Sump Catch Basin



Existing Sewer/Stormwater -- East



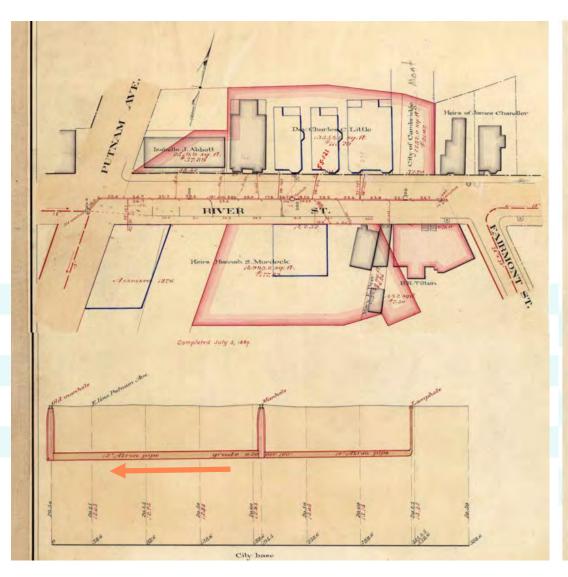
Legend

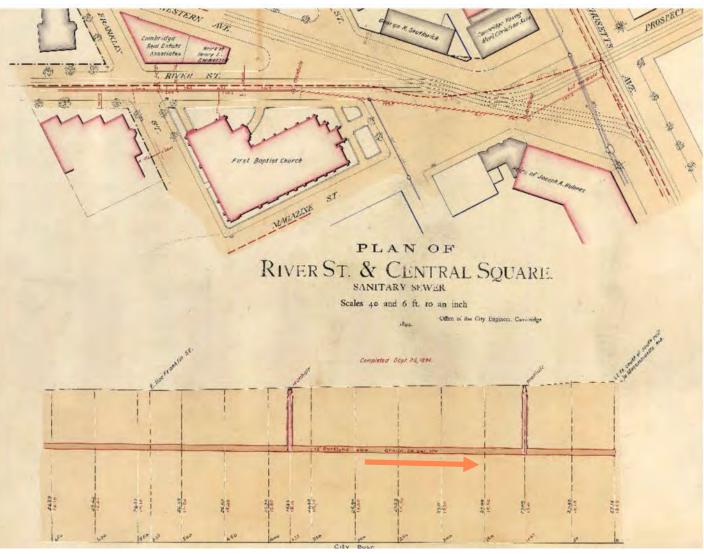
Stormwater
Sewer
Combined Sewer

 Separate combined sewer systems and route to upgraded Cottage-Lopez Drain

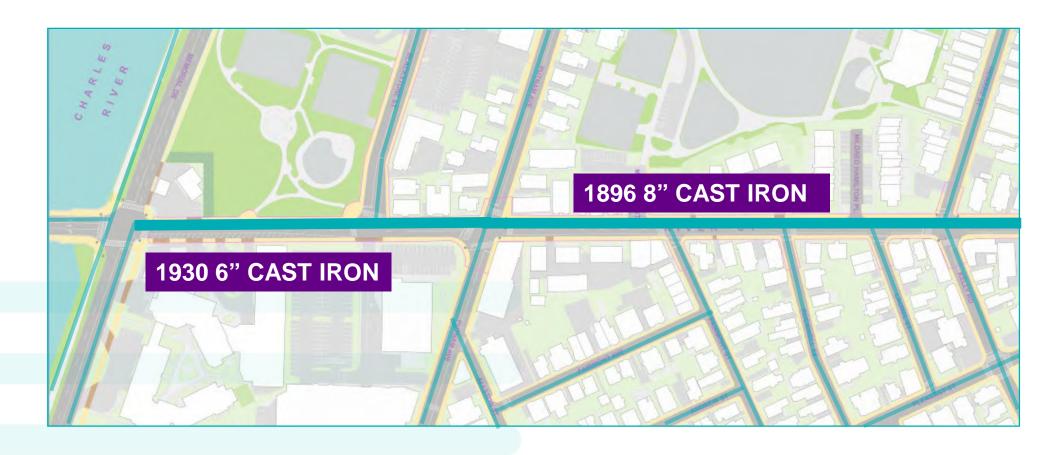
- Reduce flooding
- Investigate and upgrade where needed

1889 River Street Sewer





Water Supply System -- West



Water Line



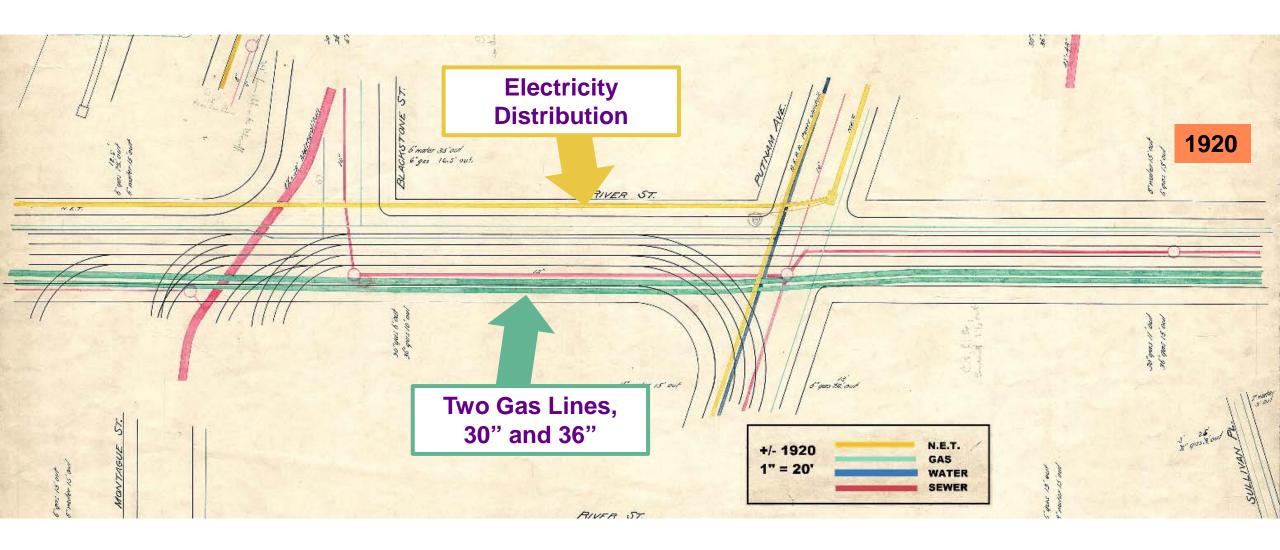
Water Supply System - East



Water Line



Gas & Electric



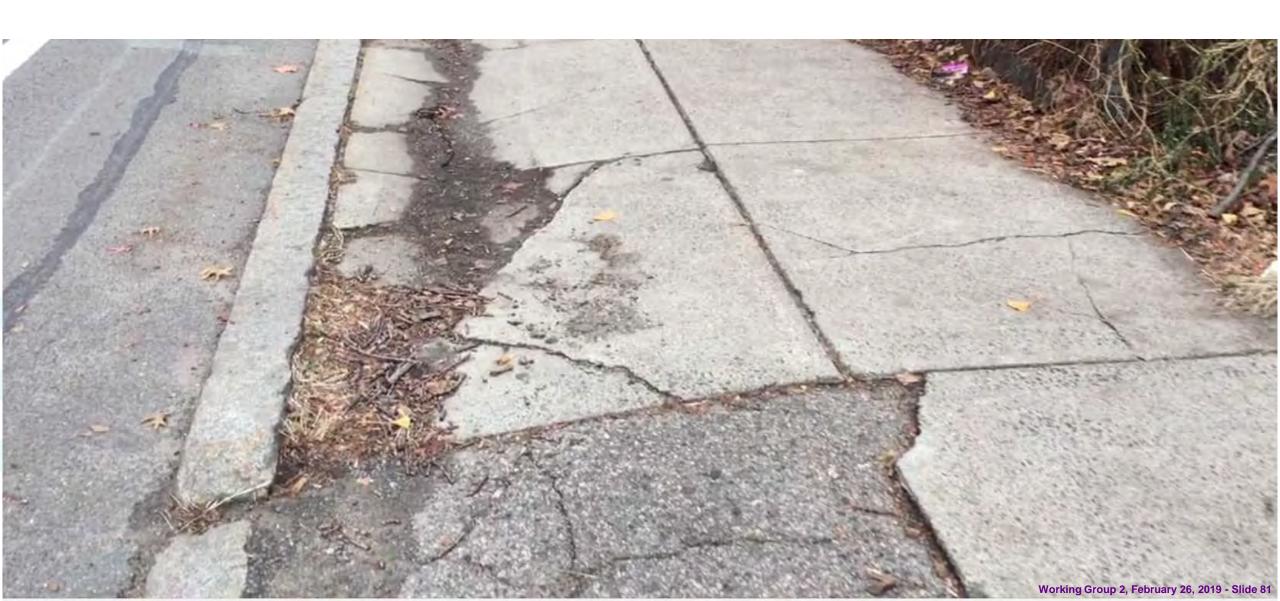
Accessibility & Crossing Issues



Roadway Damage



Sidewalk Damage



Brick Damage & Empty Tree Pits



Tree Roots Lifting Sidewalks



Existing Street Lighting





Tree Evaluation -- West













Good



Fair



Poor



Dead



Private Property Trees



Tree Evaluation -- East













Good



Fair



Poor



Dead



Private Property Trees



Tree Summary Data

QTY.	SCIENTIFIC NAME	COMMON NAME	
6	Acer platanoides	Norway Maple	
1	Acer rubrum	Red Maple	
1	Celtis occidentalis	Hackberry	
1	Eucommia ulmoides	Hardy Rubber Tree	
1	Fraxinus americana	White Ash	
9	Fraxinus pennsylvanica	Green Ash	
3	Ginkgo biloba	Maidenhair Tree	
1	Gleditsia triacanthos	Honeylocust	
4	Koelreuteria paniculata	Golden Rain Tree	
12	Platanus acerifolia 'Bloodgood'	London Plane	
5	Malus cultivar Dwarf Variety	Crabapple Cultivar	
2	Malus sp.	Crabapple Species	
1	Quercus bicolor	Swamp White Oak	
4	Quercus palustris	Pin Oak	
1	Tilia americana	American Linden	
27	Tilia cordata	Littleleaf Linden	
1	Ulmus americana 'Valley Forge'	Valley Forge Elm	
6	Ulmus 'Patriot'	Patriot Elm	
6	Ulmus 'Homestead	Homestead Elm	
5	Zelkova serrata	Japanese Zelkova	
97	Total Trees 20 Types		

TREE CONDITION	QUANTITY
GOOD	54
FAIR	34
POOR	9
DEAD	1
TOTAL LIVE TREES	97





















Urban Design Conditions -- West LEGEND







Urban Design Conditions -- East

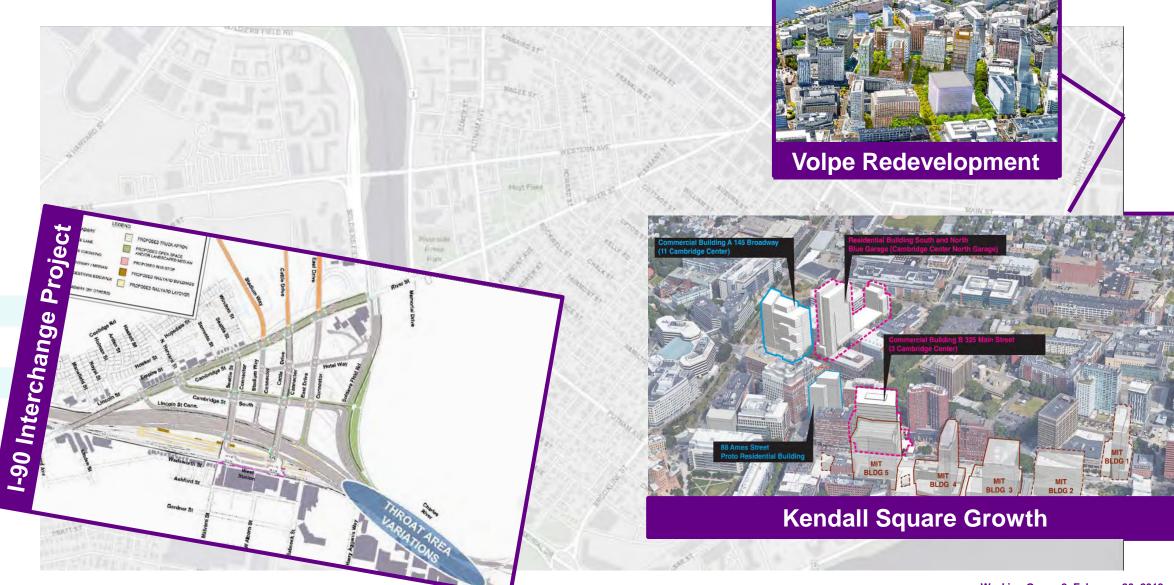


LEGEND





Regional Context



Typical Existing Cross Section



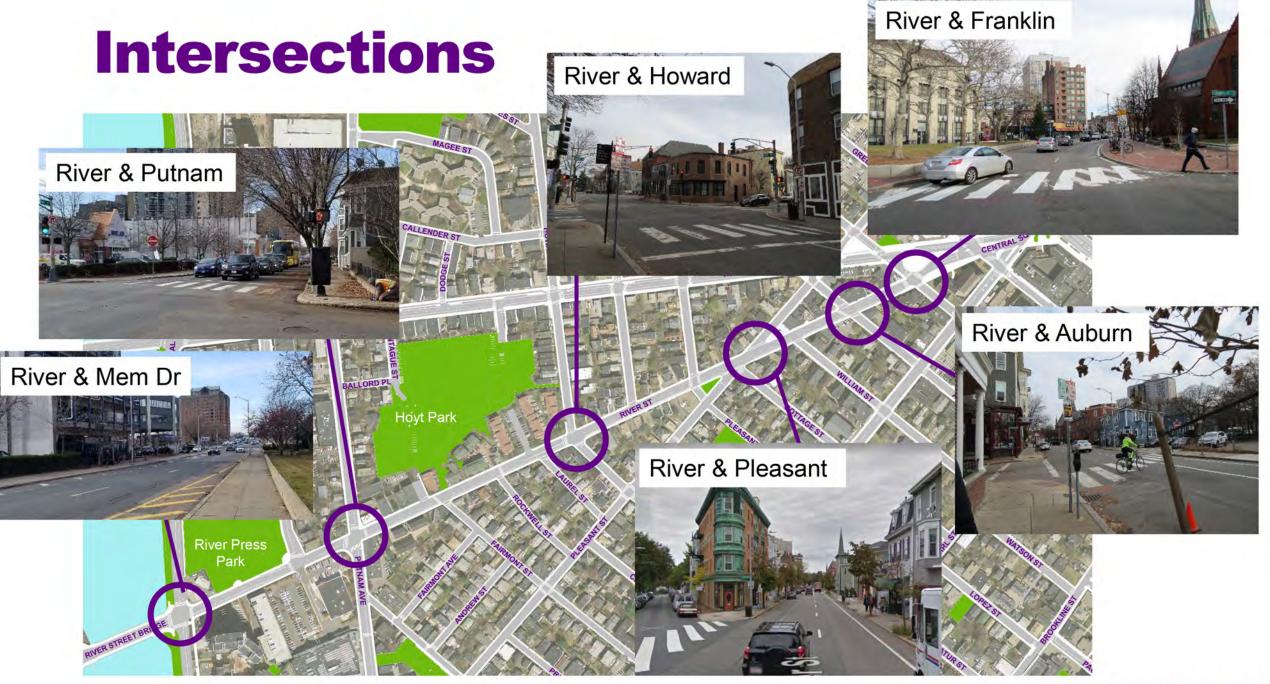
Sidewalk

Furnishing Zone

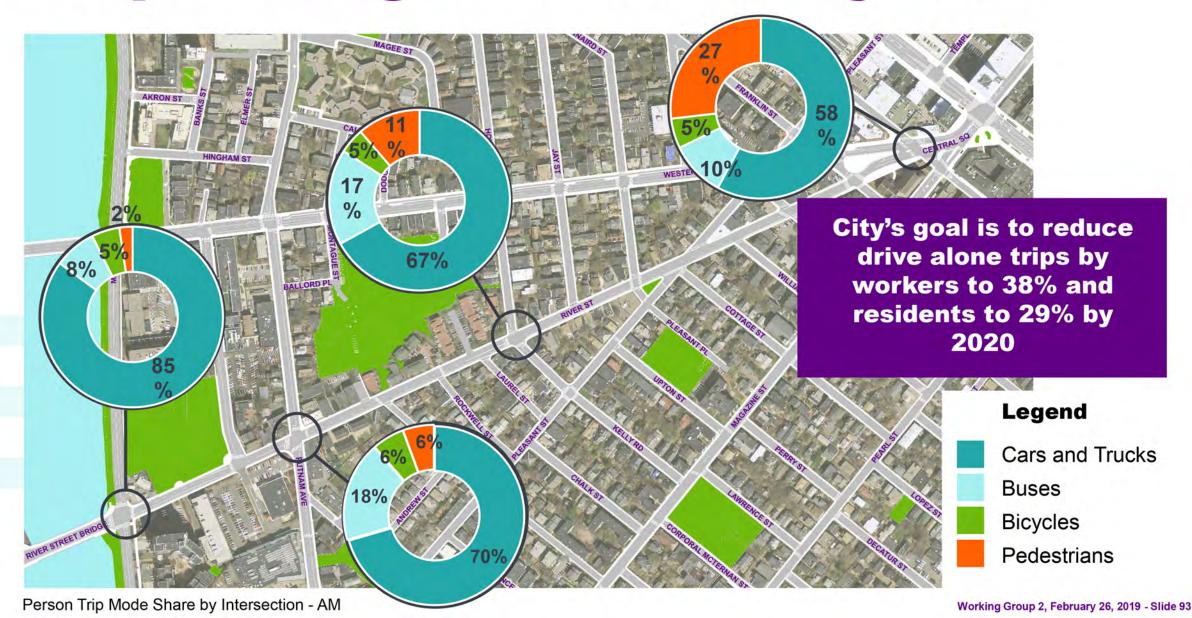
Bike Lane Travel Lane

Travel Lane/ Curbside Space Furnishing Zone

Sidewalk



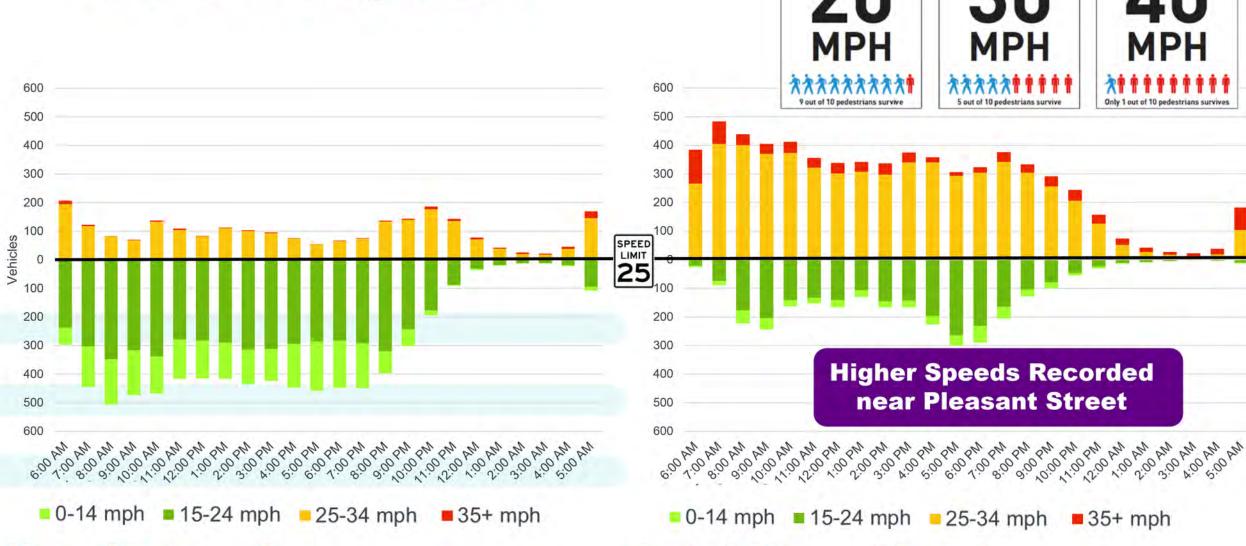
People Using River St. Today - AM



People Using River St. Today - PM



Vehicle Speeds



West of Putnam Avenue

East of Pleasant Street

HIT BY A VEHICLE

TRAVELING AT:

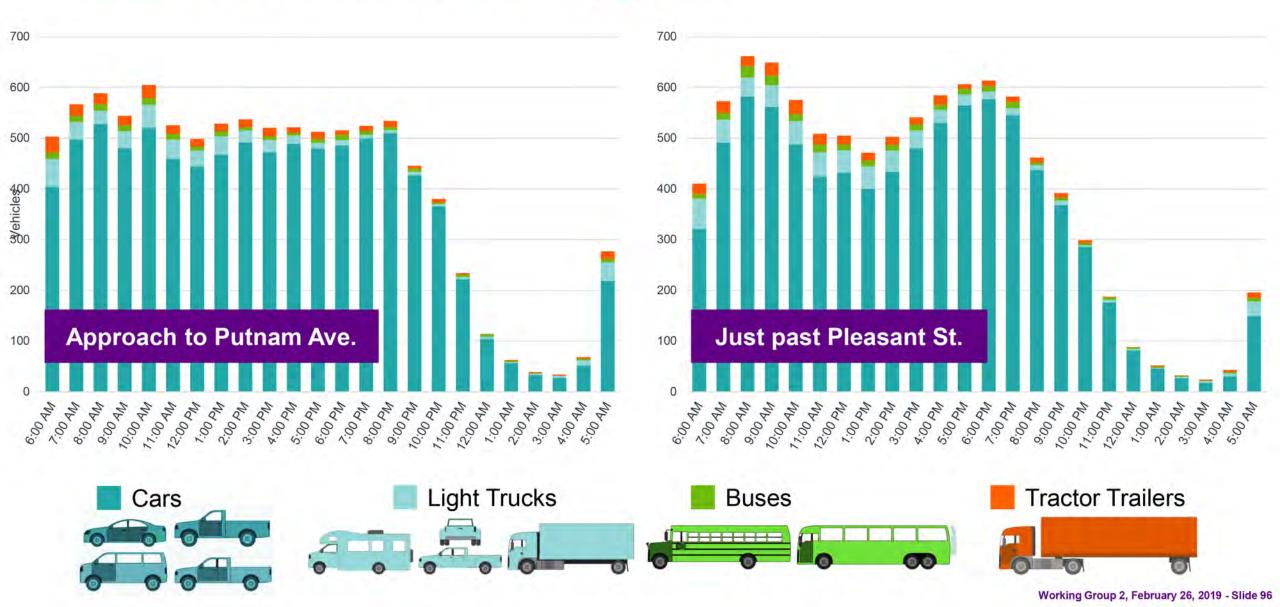
HIT BY A VEHICLE

TRAVELING AT:

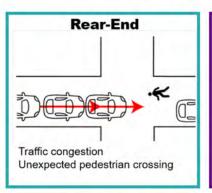
HIT BY A VEHICLE

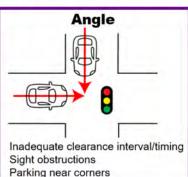
TRAVELING AT:

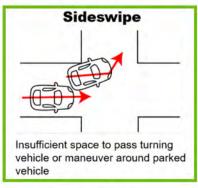
Hourly Vehicle Types



Crash Type



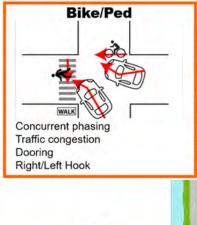


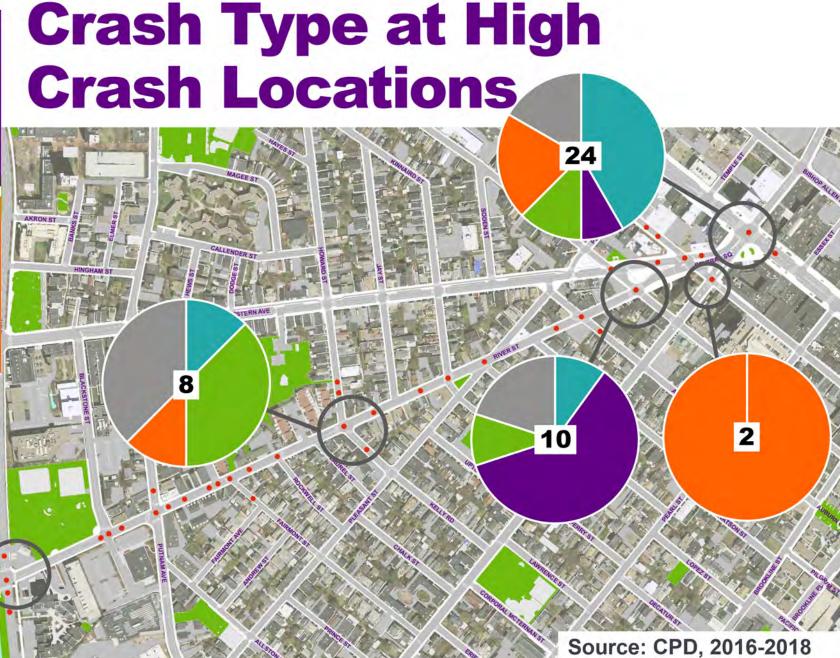




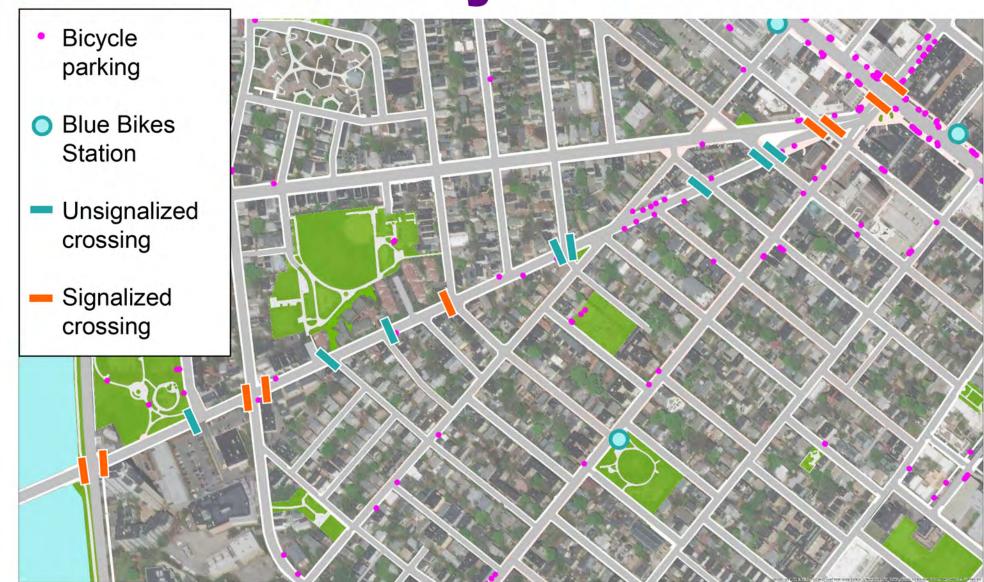
16







Pedestrian & Bicycle Amenities



Bicycle Level of Comfort

People have varying levels of tolerance for traffic stress created by **volume**, **speed**, **proximity of adjacent traffic and on-street parking**.

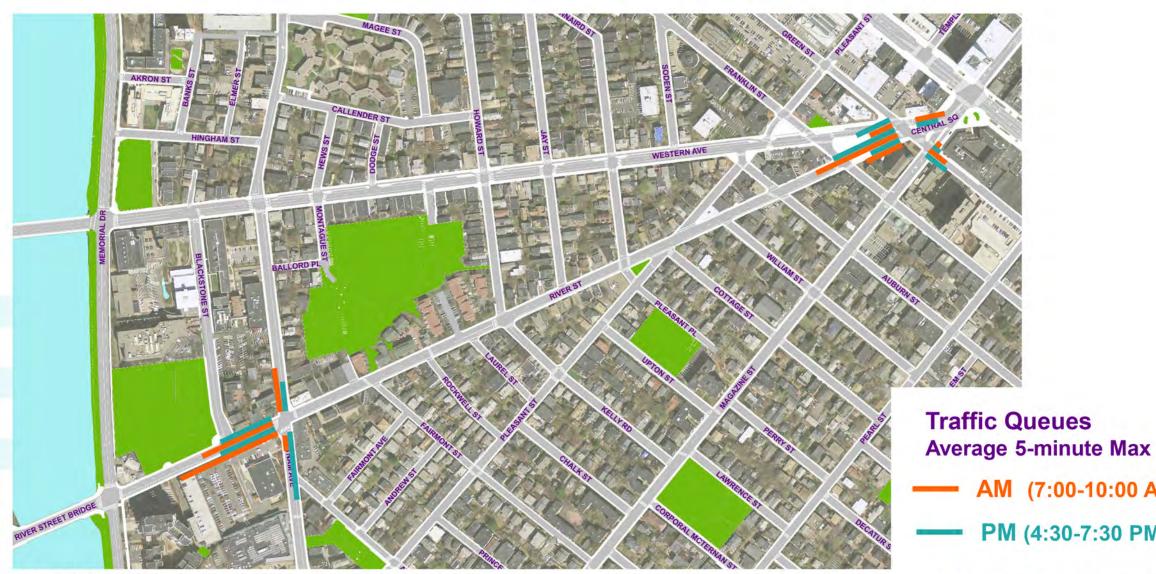
This can be measured as a "Bicycle Level of Comfort" (BLC)

- An all-ages and ability network has BLC of 1 or 2
- Facilities with BLC 1 or 2 are generally safest
- River Street is currently BLC 3 or worse





Vehicle Operations

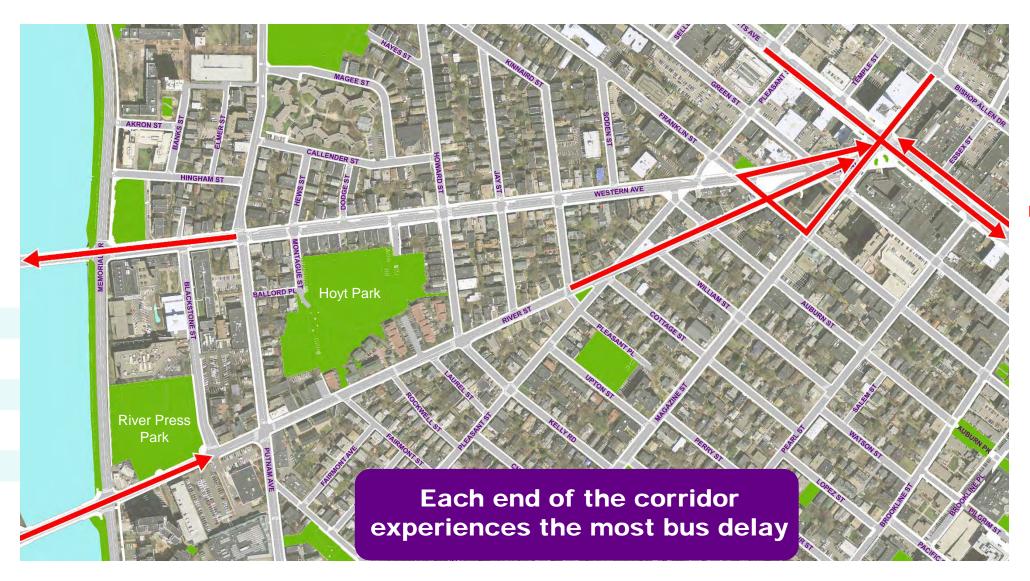


AM and PM traffic queues for all vehicles

AM (7:00-10:00 AM)

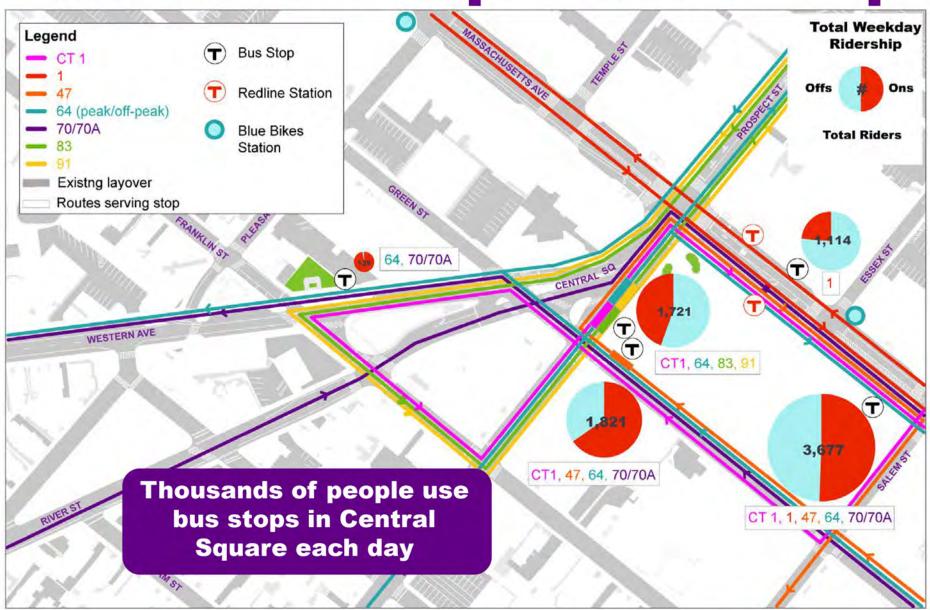
PM (4:30-7:30 PM)

Transit Operations

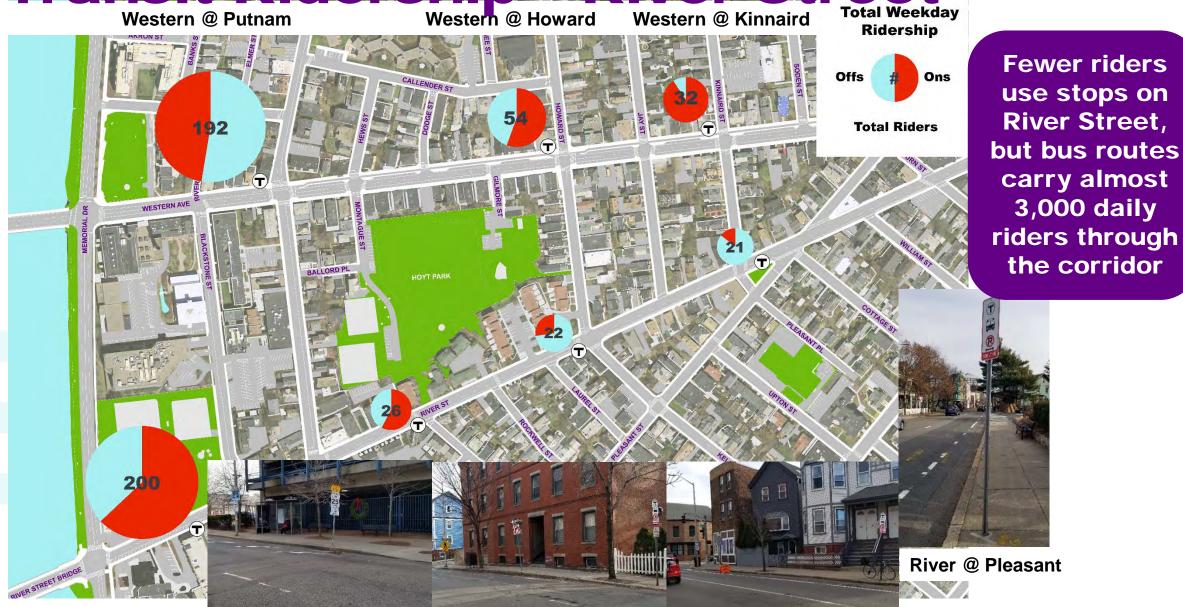


Street segments recorded with the most bus delay and reliability issues in the City

Transit Ridership - Central Square



Transit Ridership - River Street Western @ Putnam Western @ Howard Western @ Kinnaird Ridership



River Opp Blackstone

River @ Fairmont

River @ Kelly

Curbside Space - Flexible Toolbox

Function	Definition	Examples of Uses
Access for commerce	Goods and services reach their customers	Commercial vehicle loading, truck loading
Access for People	Arrivals, transfers between modes	Bus stops, bike parking, curb bumpouts, pick up/drop off, short-term parking, taxi zones
Activation	Offers vibrant social spaces	Food truck parking, seating, parklets and streateries, public art, street festivals
Greening	Enhances aesthetics and environmental health	Plantings, rain gardens, bio-swales, green infrastructure
Mobility	Moves People & Goods	Sidewalks, bus lanes, bike lanes, travel lanes, turning lanes
Storage (less than 24-hour)	Provides storage for vehicles and equipment	Bus layover, private vehicle parking, reserved spaces (police, govt., etc), construction needs.

Existing Curbside Uses



Parking



Tow Zone



Bus Stop



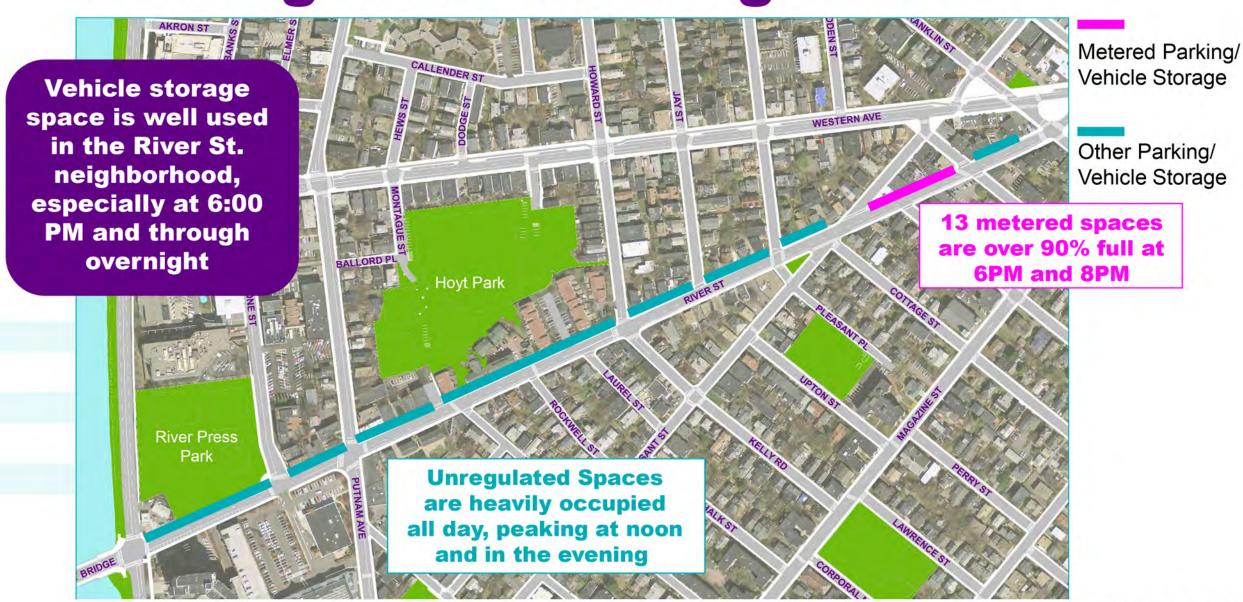
Bike Lane



Loading Zone

Diverse uses compete for curbside space

Parking/Vehicle Storage



Carl Barron Process Preview

Goals CARL BARRON CHARRETTE

Develop understanding of the existing conditions of Carl Barron Plaza and surrounding areas--its assets and challenges, and the opportunities associated with the plaza.

Ensure that the community understands the overall process

Hear the community's thoughts, ideas and concerns about the future of Carl Barron Plaza.

Gather ideas for programming and physical improvements to the plaza.

Collaborate with community organizations and local businesses on proposed changes to the space, and its programming and management in the short and long term.

Existing Conditions (March - April) CARL BARRON CHARRETTE

Activity Mapping: To understand how people are interacting with the space in its current form.

Stakeholder Interviews and Interest Groups: To dive deeper into key assets and challenges associated with the space we will interview individuals and interest groups, including (but not limited to)

- Business owners
- Youth Groups
- Cultural Organizations
- Local advocates
- Building managers
- Service providers

Phase I (May TBD)

CARL BARRON CHARRETTE: OPEN HOUSE

An interactive exhibit inside or outside for the public and invitees with three key elements:

Information Sharing: 2-3 Boards and materials about 'why are we here and what is the goal of the River Street/Carl Barron Plaza project?' Key information re. River Street.

Reporting Back: 2 -3 Boards summarizing the information gathered thus far on existing conditions at Carl Barron Plaza with the help of diagrams and key statistics.

Soliciting Input: 2-3 broad activities to gauge people's perception of the current space and their needs.

Games and food trucks











Working Group 2, February 26, 2019 - Slide 112

Phase II (Thurs. June 20 and Sat. June 22) CARL BARRON CHARRETTE

A multi-day charrette to generate ideas for the space led by Project for Public Spaces -

Placemaking Workshop: typical agenda includes

- Introductions (if less than 40)
- Overview of the workshop and introduction to placemaking presentation
- Breakout Groups
 - o On-site Place Game
 - o Brainstorm
 - Report back
- Closeout and next steps



Working Group 2, February 26, 2019 - Slide 114

Phase II (Sun., June 23?) CARL BARRON CHARRETTE

Outdoor Day of engagement: To (quickly) solicit input from people in the space who may not be available for the full workshop. Sample questions:

What types of uses would encourage you to spend time in the space?

What types of public amenities will make this space more usable for you and your family/friends?

One thing you love about the space?

One thing you would like to see improved?

Additional Interviews and Interest Groups





Questions and Comments?

Next Steps

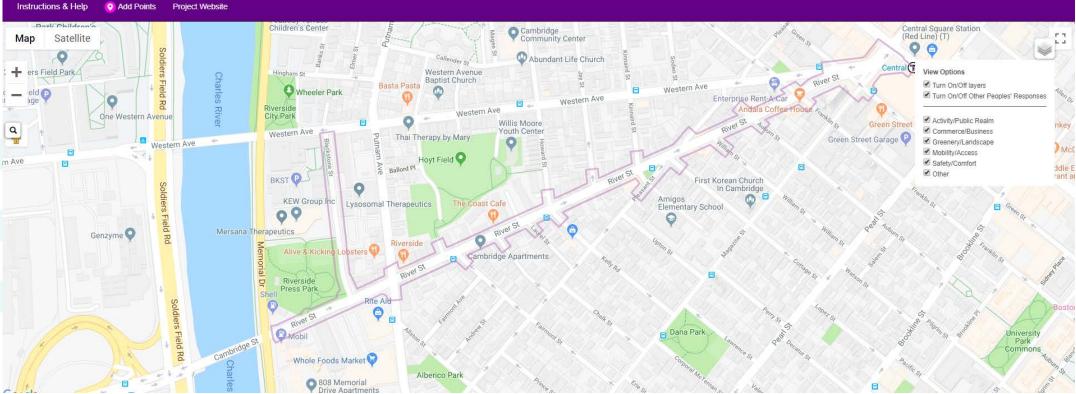
Project Wikimap



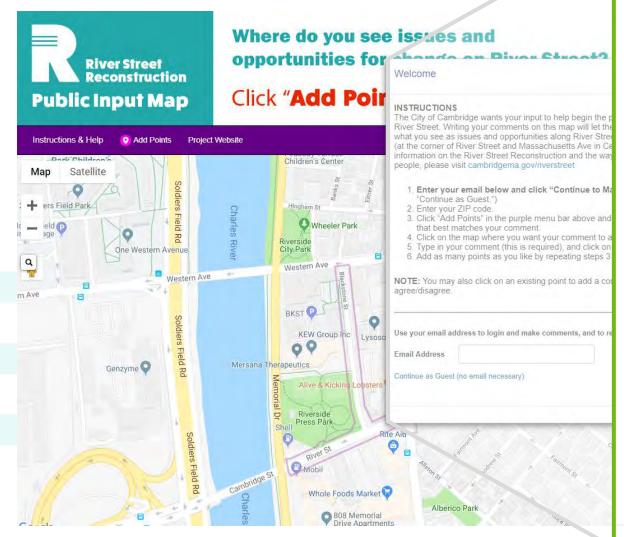
Where do you see issues and opportunities for change on River Street?

Click "Add Points" to add to the map.





Project Wikimap



Welcome

INSTRUCTIONS

The City of Cambridge wants your input to help begin the process of redesigning River Street. Writing your comments on this map will let the City's project team know what you see as issues and opportunities along River Street and in Carl Barron Plaza (at the corner of River Street and Massachusetts Ave in Central Square). For more information on the River Street Reconstruction and the ways the City is engaging people, please visit cambridgema.gov/riverstreet

- Enter your email below and click "Continue to Map." (You may also "Continue as Guest.")
- 2. Enter your ZIP code.
- Click "Add Points" in the purple menu bar above and then select they point type that best matches your comment.
- 4. Click on the map where you want your comment to appear.
- 5. Type in your comment (this is required), and click on "Submit."
- 6. Add as many points as you like by repeating steps 3 to 5.

NOTE: You may also click on an existing point to add a comment and/or agree/disagree.

Use your email address to login and make comments, and to receive project notifications.

Email Address

Continue To Map

Continue as Guest (no email necessary)

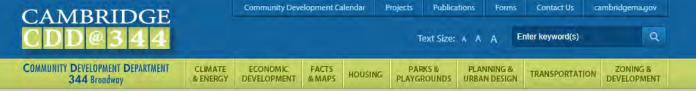
Project Wikimap Add Points Where do you see issues and Select point type and then place on map. handa an Divar Ch opportunities for **River Street** Activity/Public Realm - Streets, sidewalks, parks and plazas when used for anything Reconstruction Add Points 223 other than transportation (e.g. resting, eating, playing, viewing art, dancing, festivals, Click "Add Poil **Public Input Map** etc.) Select point type and then place on map. Activity/Public Realm - Streets, sidewa other than transportation (e.g. resting, e. Commerce/Business - Anything related to local businesses and their needs (e.g. Instructions & Help Add Points Project Website loading zones, short-term parking, outdoor dining, etc.) Commerce/Business - Anything relate Children's Center loading zones, short-term parking, outdo Satellite Map Greenery/Landscape - Anything that grows or helps things grow (e.g. trees, rain Greenery/Landscape - Anything that gregardens, bio-swales, green infrastructure gardens, bio-swales, green infrastructure, etc.) ers Field Park Mobility/Access - Transportation (by foo accessing transportation (parking, board Wheeler Park eld P crossing a street, etc.) Mobility/Access - Transportation (by foot, by wheel, by transit, by app, etc.), and Riverside City Park accessing transportation (parking, boarding/de-boarding, accessing a sidewalk, Safety/Comfort - Anything related to sa transportation safety, personal safety, or a crossing a street, etc.) Western Ave Western Ave Other - Everything else! ern Ave Safety/Comfort - Anything related to safety from any perspective, including BKST D transportation safety, personal safety, or otherwise. KEW Group Inc Lysosoma, Therapeutics 00 Other - Everything else! Mersana Therapeutics Genzyme O Riverside Press Park 0 Dana Park

Whole Foods Market

808 Memorial

Alberico Park

Comment Form Live



CDD > Projects > River Street Reconstruction

River Street Reconstruction

The River Street Reconstruction project will upgrade the sanitary sewer, stormwater and water subsurface infrastructure while developing a new surface design for River Street, the bus terminal area at River and Magazine Streets near Central Square, and Carl Barron Plaza. The project aims to create a streetscape design that meets the needs of all the various users and in a way that engages the local community, contributes to overall enhancement of the neighborhood, and meets the City's goals related to infrastructure, transportation, and urban design.

The concurrent design of Carl Barron Plaza, the significant open space at the heart of Central Square will include consideration of public art, fixed and/or unfixed furniture, access, plantings, and landscaping. The design must also consider the complexity of transportation needs related to the bus bays adjacent to the Plaza and people moving through the plaza.

The community outreach and design processes will occur throughout 2019 and into early 2020. Construction is anticipated to begin in Spring 2020.

To sign up for email updates on this project, please click here.

To provide comments and feedback on this project, please use this form.

The Latest	Schedule	Description	Community Process	Documents	Contact

February 2019

The second River Street Reconstruction Working Group meeting will be held on Tuesday, February 26th from 6:00-8:00pm at the Manning Apartments, 1st Floor Community Room, 237 Franklin Street. At this meeting, City and project team staff will provide a history of the project area, present existing conditions in the context of project themes that will inform the design, and provide an overview of the Carl Barron Plaza charrette process anticipated in the spring. The meeting announcement and the draft meeting agenda are now available.

January 2019





Click the Map to Explore Cambridge

A 5-STAR Community and National Leader in Sustainability



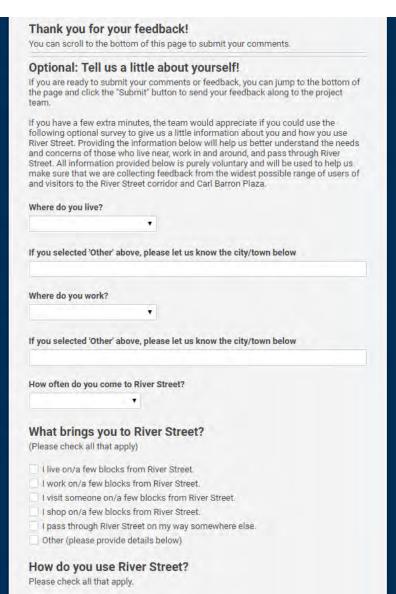
Comment Form Live



Let's talk about the River Street Reconstruction project! The River Street Reconstruction Project will upgrade sanitary sewer, stormwater and Water subsurface infrastructure, while developing a new surface design for River Street, the bus terminal area at River and Magazine Streets near Central Square, and Carl Barron Plaza. The project aims to create a streetscape design that meets the needs of all users in a way that engages the local community, contributes to the overall enhancement of the neighborhood, and meets the City's goals related to infrastructure, transportation, and To learn more about the project and and sign up for email updates, visit: http://www.cambridgema.gov/riverstreet To share your thoughts about the project, please use the form below. You can get information about how we use the data we collect by viewing the City of Cambridge privacy statement at: https://www.cambridgema.gov/privacystatement Name * What is the issue you would like to bring to the attention of the River Street Reconstruction Project team? (max 4000 characters) If you would like someone to follow up with you on your comment, please provide your email address. Thank you for your feedback! You can scroll to the bottom of this page to submit your comments.

Optional: Tell us a little about yourself!

Comment Form Live



Upcoming Public Meeting

Tuesday, March 26

Possible agenda topics:

- Brief presentation on project scope, schedule, policies, themes
- Displays of existing conditions data
- Collect public input on likes/dislikes, existing conditions, themes/goals



Next Working Group Meeting

Tuesday, April 23

Possible agenda topics:

- Public input and goals
- Most critical challenges in existing conditions
- Toolbox of design options
- Update on Carl Barron Plaza charrette process



