

RIVER STREET RECONSTRUCTION



Project Overview

Much of River Street's infrastructure is old, deteriorating, and needs to be repaired, upgraded, or replaced. The River Street Reconstruction project is an opportunity to replace that aging infrastructure and also redesign the street to be more comfortable to walk and bike along, more reliable for buses, and better for our local businesses and residents.

You can engage and comment online at cambridgema.gov/riverstreet, at meetings, or when you see the River Street Reconstruction "R" logo at an event nearby or at an outdoor engagement day in Carl Barron Plaza.

Make a comment and make a difference!

The Working Group

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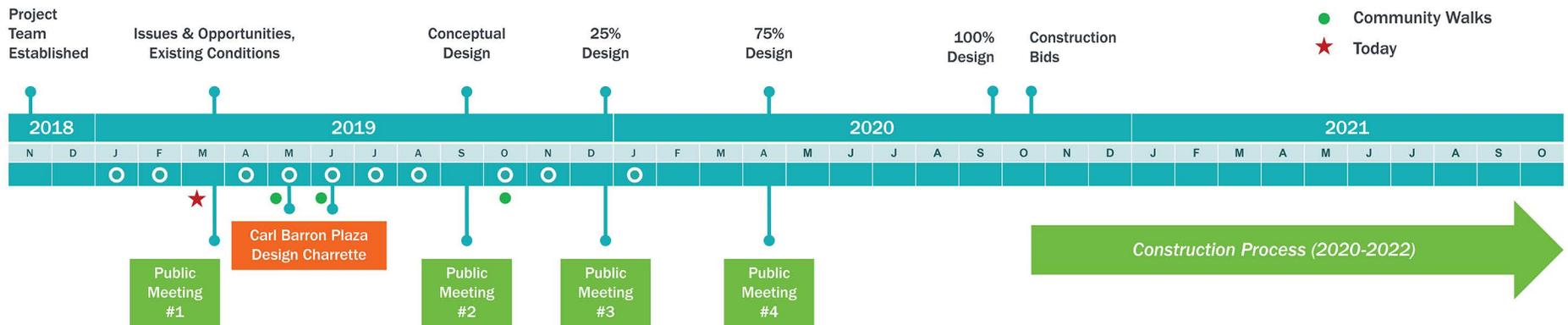
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Project Limits

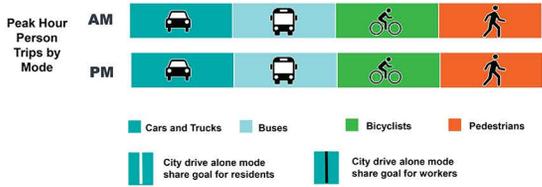


Expected Timeline

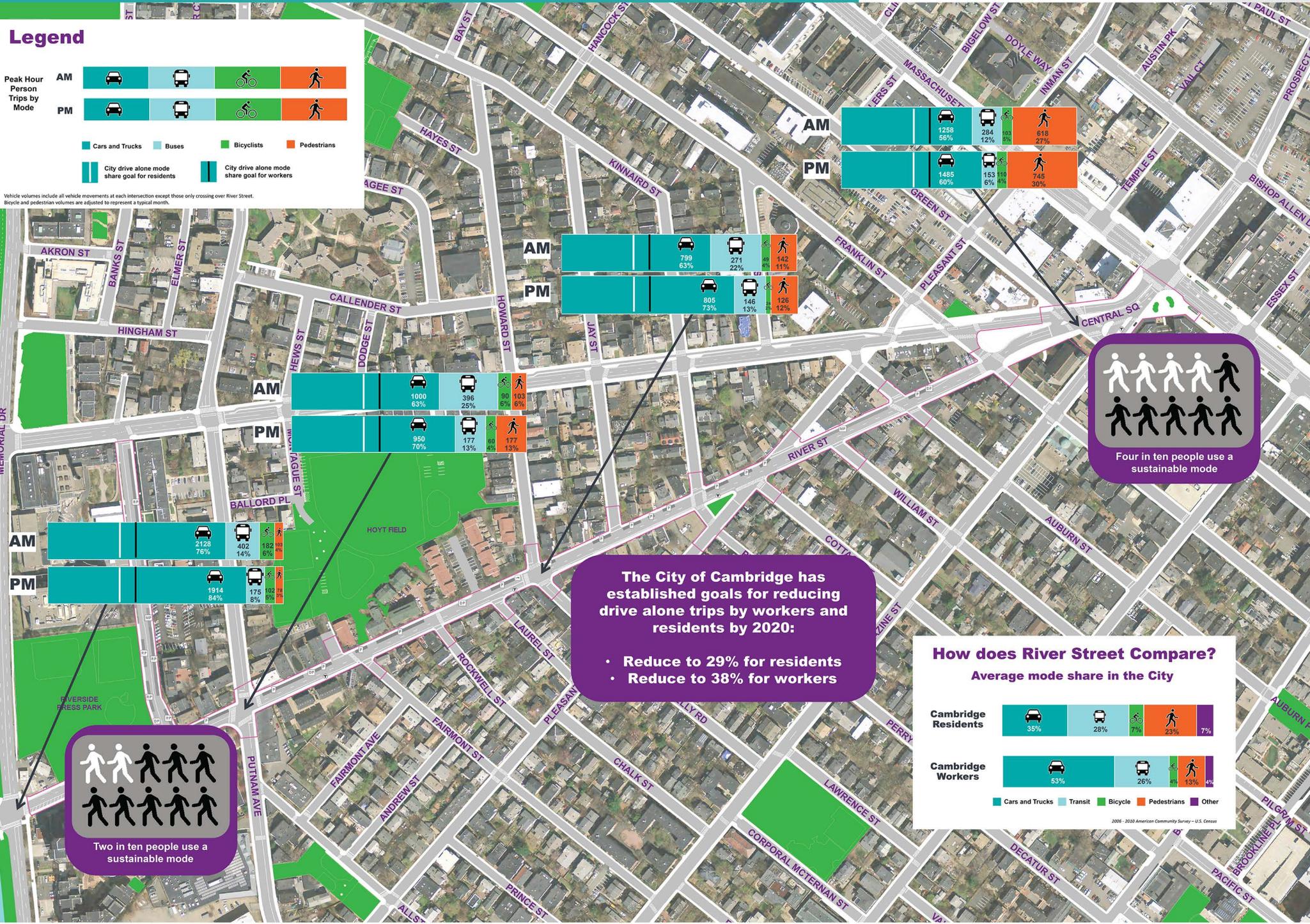


HOW PEOPLE USE RIVER STREET TODAY

Legend



Vehicle volumes include all vehicle movements at each intersection except those only crossing over River Street. Bicycle and pedestrian volumes are adjusted to represent a typical month.

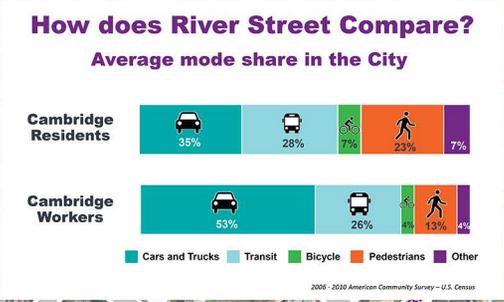


The City of Cambridge has established goals for reducing drive alone trips by workers and residents by 2020:

- Reduce to 29% for residents
- Reduce to 38% for workers

Four in ten people use a sustainable mode

Two in ten people use a sustainable mode



CURBSIDE USE

- Parking spaces in the River Street neighborhood are heavily used (71%-91%) throughout the day and overnight.
- Parking spaces directly on River Street reached 94% occupied at 8:00 PM.



13 metered spaces are over 90% full at 6PM and 8PM

Unregulated Spaces are heavily occupied all day, peaking at noon and in the evening

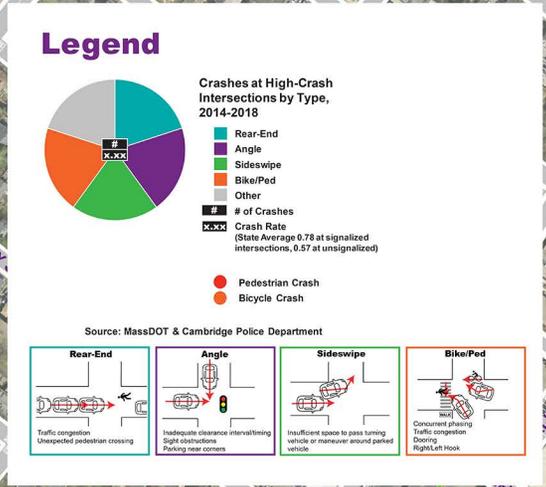
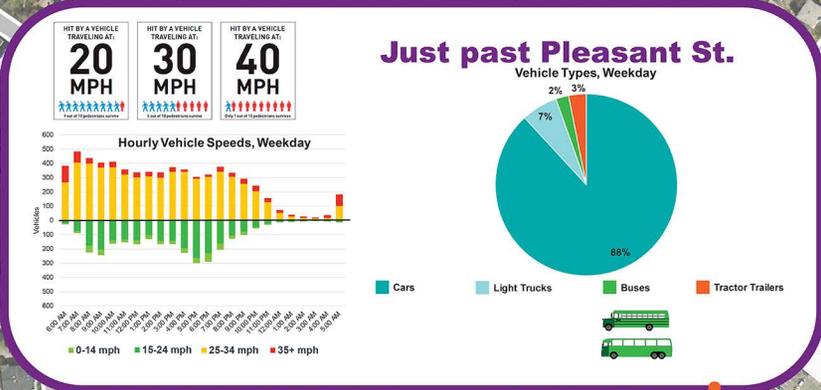
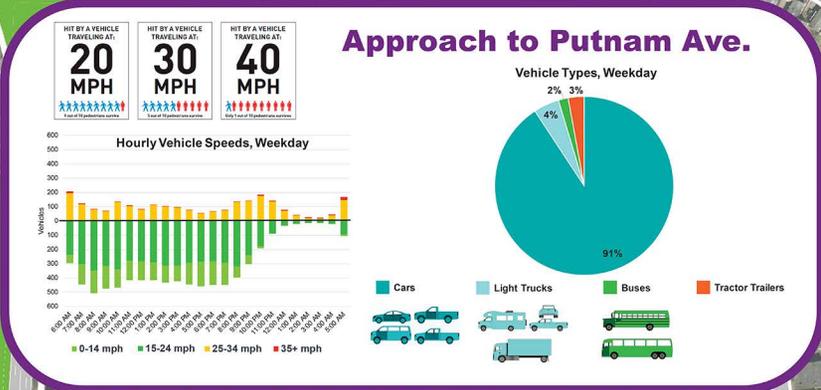
Legend

- Unregulated
- Meter
- Disability
- Loading
- Tow Zone
- MBTA Bus Stop



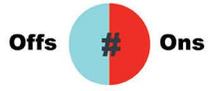
Flexible Toolbox for Curbside Uses		
Function	Definition	Examples of Uses
Access for commerce	Goods and services reach their customers	Commercial vehicle loading, truck loading
Access for People	Arrivals, transfers between modes	Bus stops, bike parking, curb bumpouts, pick up/drop off, short-term parking, taxi zones
Activation	Offers vibrant social spaces	Food truck parking, seating, parklets and streeteries, 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.

MULTIMODAL SAFETY

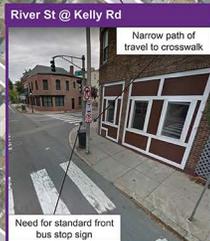
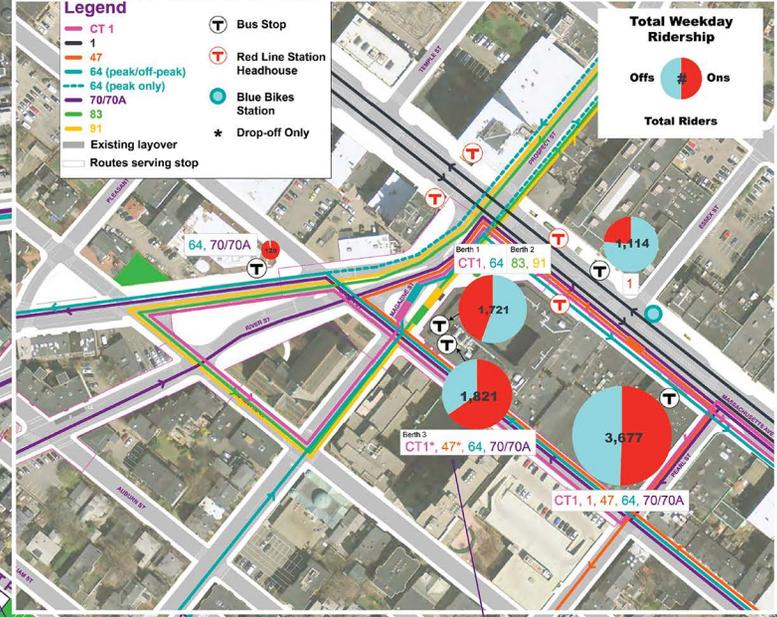
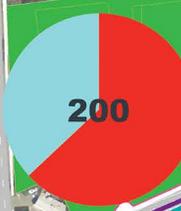
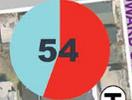
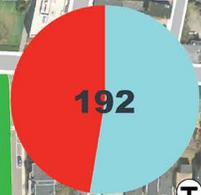


Legend

Total Weekday Boardings and Alightings



Total # of Riders



TRANSPORTATION CONDITIONS



Buses

Bus routes on River Street carry almost 3,000* riders per day through Central Square. Most people are getting on and off the bus in Central Square or on other parts of the route.

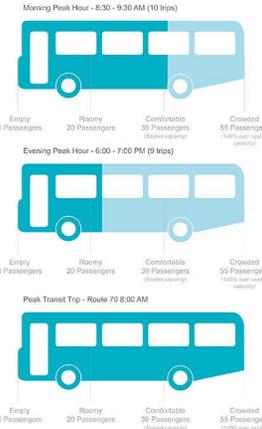
More people use bus routes on River Street in the morning peak, traveling towards Central Square.

*Total daily load out at River St Opp Blackstone



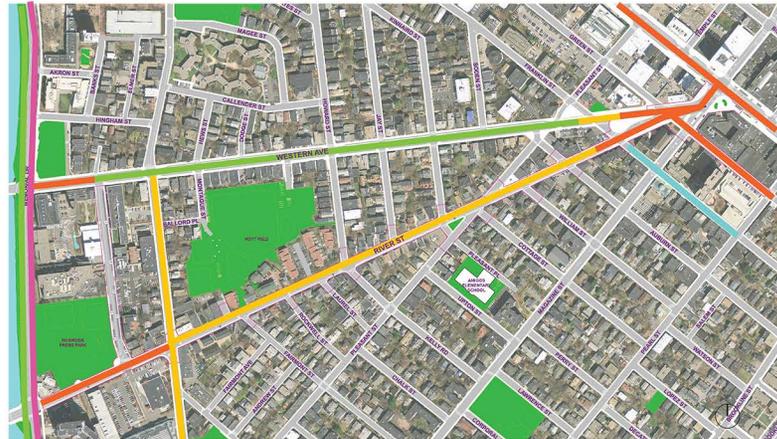
Street segments recorded with the most bus delay and reliability issues in the Cambridge

Typical Number of Passengers Per Bus on River Street



The ends of the River Street corridor present the most challenges for every mode of transportation:

- Bus riders experience the most delay
- Bicyclists have the lowest level of comfort
- Drivers wait in the longest queues and congestion
- Pedestrians cross against the most traffic creating higher chances for conflict



Bikes



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 a BLC 3 or worse

River Street is currently a BLC 3 and 4, well below the City's goal

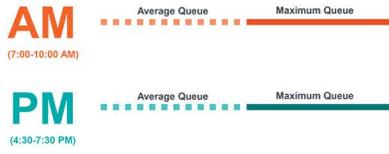


Like River Street, the image to the left shows a narrow bike lane that leaves the biker exposed to on-coming traffic. This type of facility represents a BLC 3 based on traffic volume, vehicle speeds and the number of travel lanes.



Traffic

Average & Maximum Queues



Based on field measurements of vehicle queues

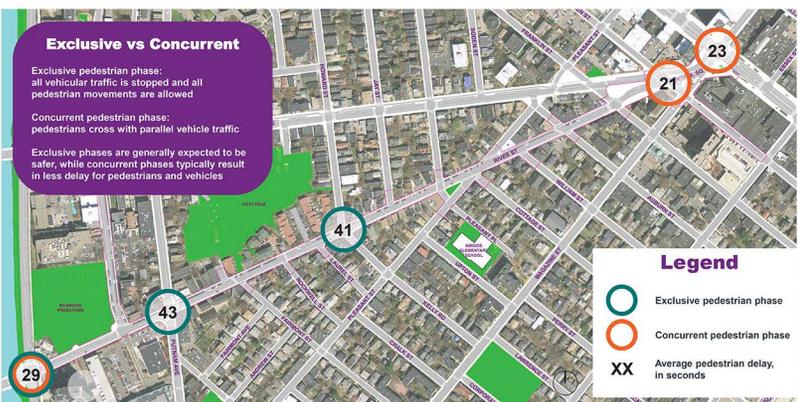
Pedestrians

Exclusive vs Concurrent

Exclusive pedestrian phase: all vehicular traffic is stopped and all pedestrian movements are allowed

Concurrent pedestrian phase: pedestrians cross with parallel vehicle traffic

Exclusive phases are generally expected to be safer, while concurrent phases typically result in less delay for pedestrians and vehicles



URBAN DESIGN CONDITIONS - West



CAR CENTRIC GATEWAY

RIVER STREET BRIDGE



MULTIPLE CURB CUTS

MOBIL GAS STATION



LOCAL BUSINESS

RIVERSIDE CAFE & BAR



PEDESTRIAN CONNECTION

HOYT FIELD



OPEN SPACE

TUBMAN PARK



OPEN SPACE

RIVERSIDE PRESS PARK



CAR CENTRIC EDGE

RITE AID



LOCAL BUSINESS

COAST CAFE



LANDMARK

CITY FIRE STATION



VACANT BUILDING

FORMER RIVER GODS

URBAN DESIGN CONDITIONS - East



CORNER OF PLEASANT ST & RIVER ST



PARKING LOT



GREAT EASTERN TRADING



ENTERPRISE RENTAL CAR



ANDALA CAFE



FIRST BAPTIST CHURCH



VFW PARK



MBTA BUSWAY



WEST VIEW OF RIVER STREET

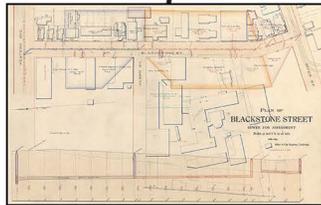


CARL BARRON PLAZA

INFRASTRUCTURE CONDITIONS - West



PAVEMENT SURFACE DAMAGE



SEWER RECORD DRAWING



WATER PONDING



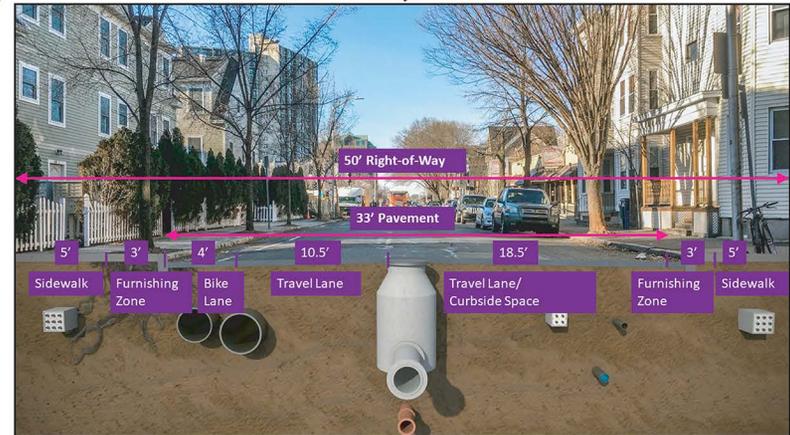
SIDEWALK DETERIORATION



HISTORIC STREETCAR LINE

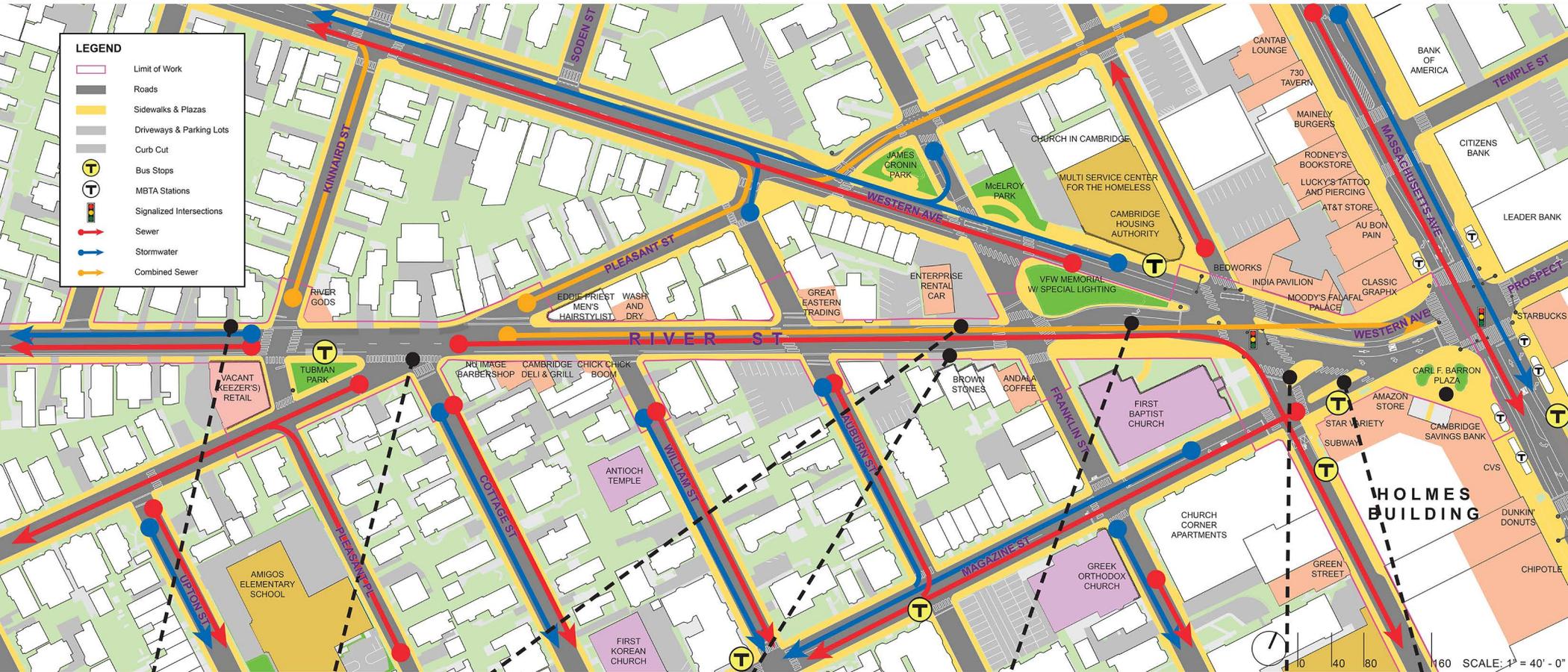


SIDEWALK TREE ROOT DAMAGE



EXISTING CROSS SECTION - LOOKING TOWARD MEMORIAL DRIVE

INFRASTRUCTURE CONDITIONS - East



SIDEWALK DAMAGE



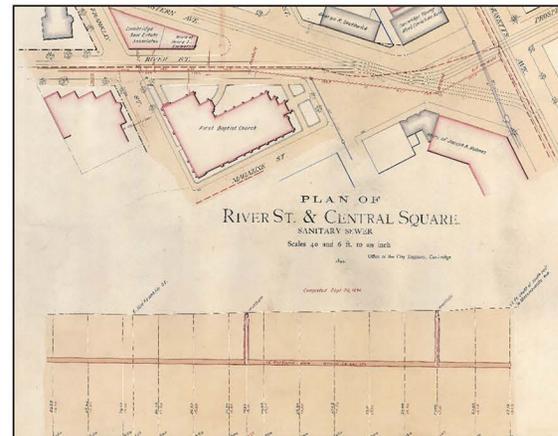
NONCOMPLIANT DRIVEWAY



PAVEMENT DETERIORATION



SIDEWALK DAMAGE



SEWER RECORD DRAWING



EMPTY TREE PITS



NONCOMPLIANT RAMP