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# ALLSTON MULTIMODAL PROJECT

## Multimodal Local Street Network Working Group Meeting 1

August 22, 2024



# Today's Agenda

- House keeping
- Welcome/Introductions
- Working group purpose/goals
- Basis of current concept plans
- Current concept plans overview
- Open discussion and questions

# House Keeping

- Raise hand at any time during conversations to talk
  - *(prefer spoken comments over chat messages)*
- Discussions and decisions will be documented
- All perspectives will be considered
- The goal is to get feedback and have discussion that shapes local road design, not necessarily consensus

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# Welcome/Introductions



## Multimodal Local Street Network Working Group

- Chair: Corey O'Connor, MassDOT
  - Co-Chair: Matthew Petersen, City of Boston
- 
- MassDOT
  - City of Boston
  - MBTA
  - Core Working Group Members
  - Design Team

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# Working Group Structure



## Structure

- **Project Executives:**
  - Deciding Party, State Department/Agency
- **Meeting Leaders:**
  - Chair and Co-Chair, Deciding Party Affiliate
- **Partnering Party:**
  - Permitting Authority, City, University, Property Owner
- **Core Members:**
  - Max. 10 Task Force Members Representing Various Interests, Invited
  - All Feedback on Topics Routed Through Official Group Members
  - Suggestions from Task Force members are welcome

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The Project Executives (State) oversee the Task Force Meetings and the four Working Groups:

1. Throat Area/Charles River
  - Shoreline Treatment/ Parkland
  - Paul Dudley White Path
  - Commuter Impacts
2. **Multimodal Local Street Network (this WG)**
  - **Dedicated Bus Lanes**
  - **Sidewalks and Cycle Tracks**
  - **Travel/ Turning Lanes**
3. Multimodal Local Connections
  - Franklin Street Pedestrian Bridge
  - Agganis Pedestrian Bridge
  - South Side Buffer Path
4. Rail and Transit
  - Dedicated Bus Lanes
  - Sidewalks and Cycle Tracks
  - Travel/ Turning Lanes



# Working Groups: Purpose/goals



- This process helps MassDOT and the City of Boston understand priorities, concerns, desires, and goals for the road network
- FHWA controlling criteria will impose certain requirements on certain roads due to their impact on highway operations
- This working group's recommendations will inform and guide MassDOT and COB decision-making on local roadway design

# Working Groups: Purpose/goals cont.



## Purpose

- Focused discussion on design tasks and decision points
  - Structured reporting to Project Executives and Task Force
  - Timely communication to meet permit/ grant deadlines
  - Identifying prioritization of alternatives that have been presented, by September of 2024
- ❖ 15% design level needed to advance documentation and analysis for DEIS/ SDEIR filings



# Multimodal Local Street Network *Initial* Agenda



## Meetings:

- **Meeting 1: Working Group Goals and Project Background**  
8/22/2024, 3:00pm – 5:00pm
- **Meeting 2: Identifying & Supporting Key Desire Lines**  
9/5/2024, 3:00pm – 5:00pm
- **Meeting 3: Refining / Deconflicting the Desire Lines**  
9/12/2024, 3:00pm – 5:00pm
- **Meeting 4: Design Standards Street Network**  
9/19/2024, 3:00pm – 5:00pm
- **Meeting 5: Review, Refine, and Next Steps**  
9/26/2024, 3:00pm – 5:00pm

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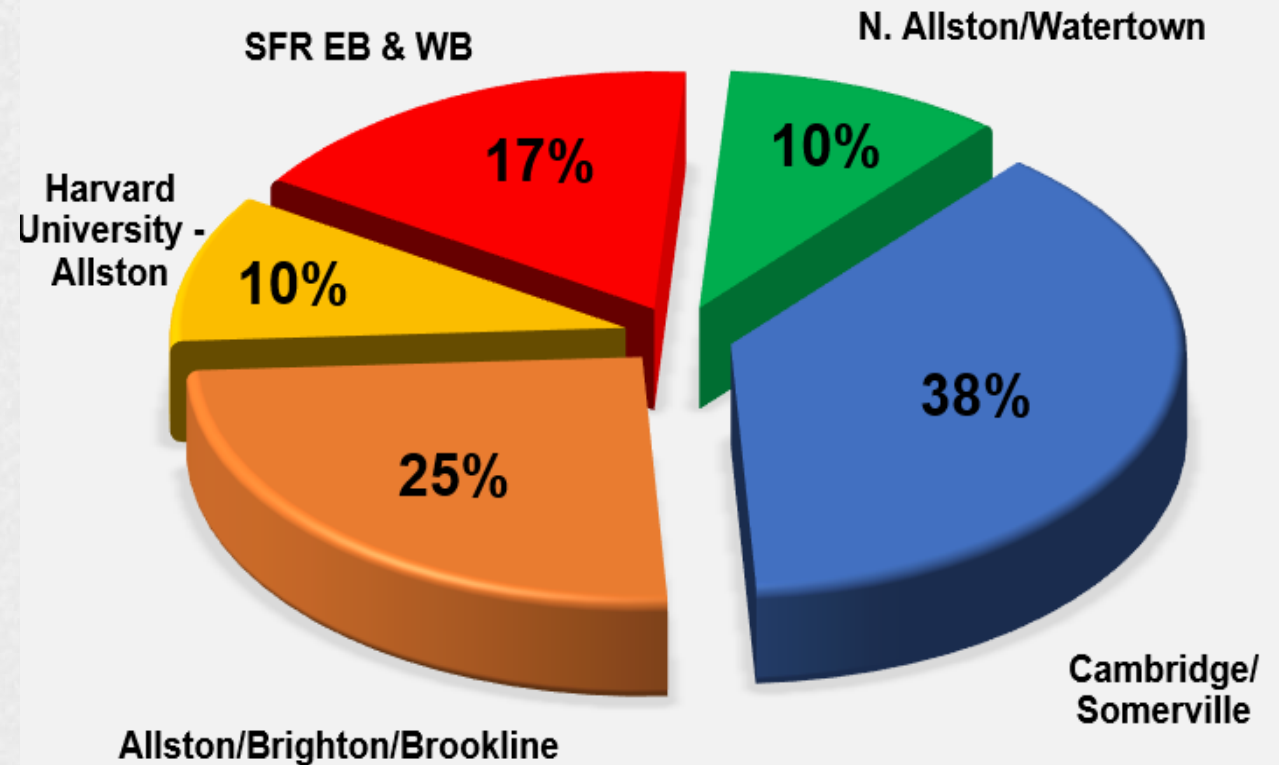
MULTIMODAL LOCAL STREET CONNECTIONS WORK

# Basic Interchange Traffic Data

## Distribution of Users

### Number of Users

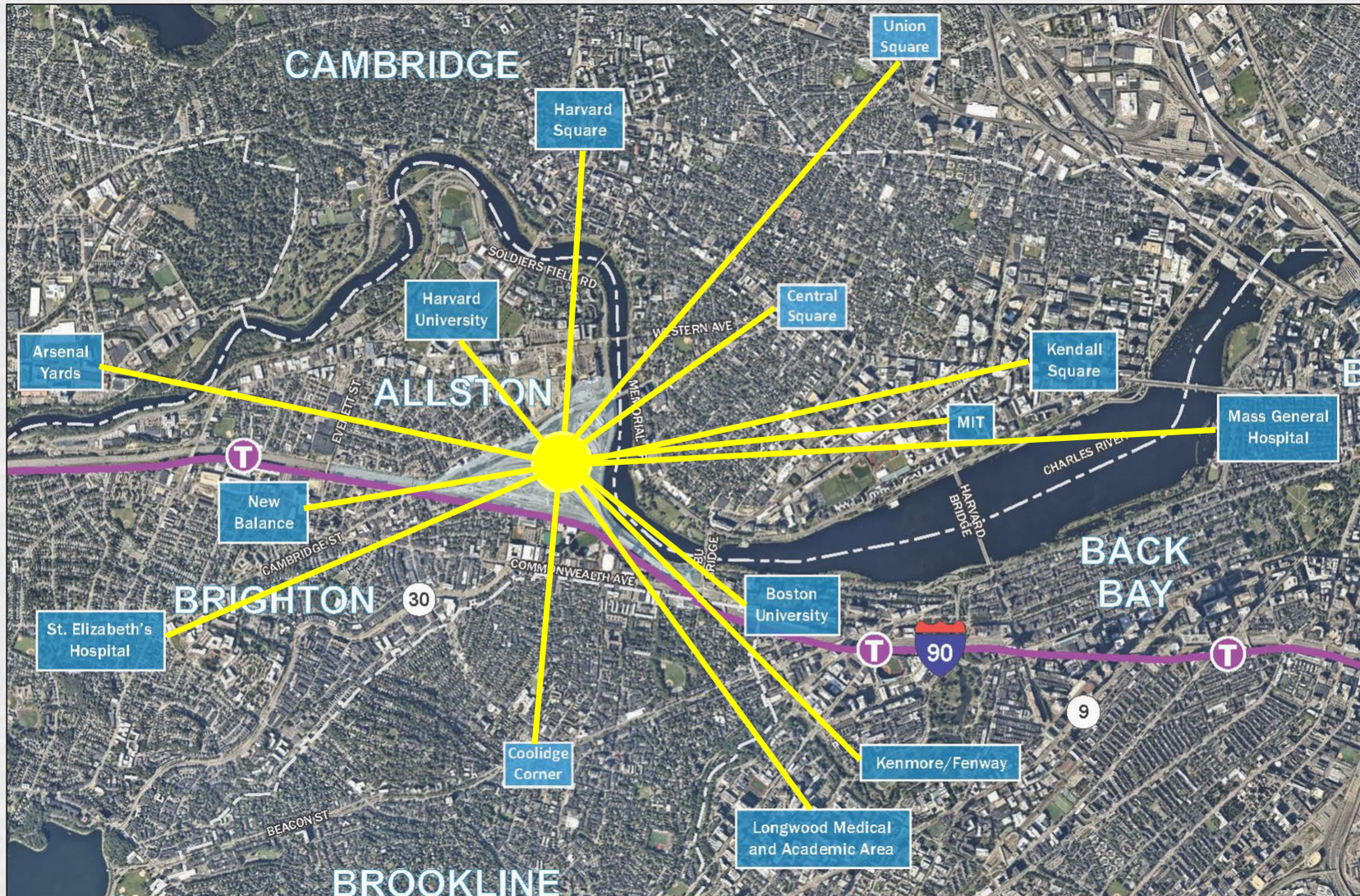
- Daily = 63,000
- AM Peak Hour = 4,500
- PM Peak Hour = 4,600



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# West station node connections





# Federal Highway Administration (FHWA) Policy on “Access to the Interstate System”



## Policy Requirement No. 1

An operational and safety analysis has concluded that **the proposed change in access does not have a significant adverse impact on the safety and operation of the Interstate facility** (which includes mainline lanes, existing, new, or modified ramps, ramp intersections with crossroad) **or on the local street network based on both the current and the planned future traffic projections.** The analysis should, particularly in urbanized areas, include at least the first adjacent existing or proposed interchange on either side of the proposed change in access (23 CFR 625.2(a), 655.603(d) and 771.111(f)). The crossroads and the local street network, to at least the first major intersection on either side of the proposed change in access, should be included in this analysis to the extent necessary to fully evaluate the safety and operational impacts that the proposed change in access and other transportation improvements may have on the local street network (23 CFR 625.2(a) and 655.603(d)). Requests for a proposed change in access should include a description and assessment of the impacts and **ability of the proposed changes to safely and efficiently collect, distribute, and accommodate traffic on the Interstate facility, ramps, intersection of ramps with crossroad, and local street network** (23 CFR 625.2(a) and 655.603(d)). Each request should also include a conceptual plan of the type and location of the signs proposed to support each design alternative (23 U.S.C. 109(d) and 23 CFR 655.603(d)).

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# Federal Highway Administration (FHWA) Policy on “Access to the Interstate System” (cont.)



## Policy Requirement No. 2

The proposed access connects to a public road only and will provide for all traffic movements. Less than “full interchanges” may be considered on a case-by-case basis for applications requiring special access, such as managed lanes (e.g., transit, HOVs, HOT lanes) or park and ride lots. The proposed access will be designed to meet or exceed current standards (23 CFR 625.2(a), 625.4(a)(2), and 655.603(d)). In rare instances where all basic movements are not provided by the proposed design, the report should include a full-interchange option with a comparison of the operational and safety analyses to the partial-interchange option. The report should also include the mitigation proposed to compensate for the missing movements, including wayfinding signage, impacts on local intersections, mitigation of driver expectation leading to wrong-way movements on ramps, etc. The report should describe whether future provision of a full interchange is precluded by the proposed design.

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# Traffic Operational/Design Goals

## Local Streets

- Contain queues within the block
- Turn restrictions
- Control right turns at signals

## I-90 Ramps

- Contain queues within the ramps

## I-90 Mainline

- Safe & Efficient Operations

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# CTPS Modeling Process – Inputs

## **Socio-Economic Data (Land Use Assumptions)**

- Study Area and Region
- Population/Households
- Employment

## **Transit**

- Infrastructure Improvements (West Station)
- Service Improvements (Commuter Rail, Shuttle Buses)

## **Pedestrian/Bicycle**

- Infrastructure Improvements
- Connectivity Improvements

## **Roadway**

- Interchange Improvements

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# CTPS Modeling Process – Outputs

## **Trip Generation (Study Area)**

## **Mode Shares (Study Area)**

- Transit, Non-Motorized (Walk/Bike), Auto

## **Transit**

- Ridership data (Commuter Rail, Shuttle Buses, MBTA Bus Routes)
- West Station (Boardings)

## **Roadway**

- Traffic volumes



# CTPS Modeling Process –

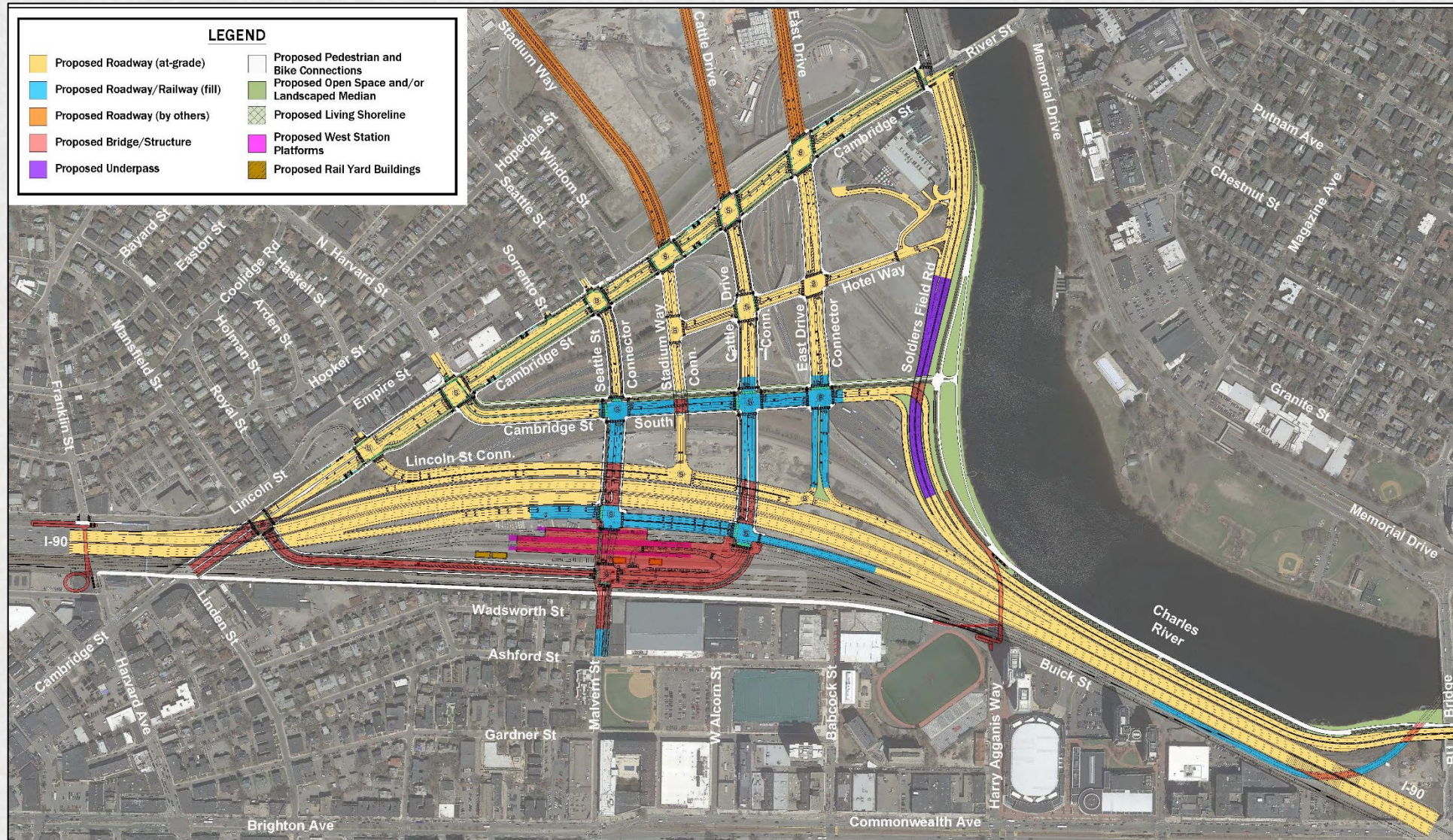
## Study Area Traffic Analysis Zones (TAZs)

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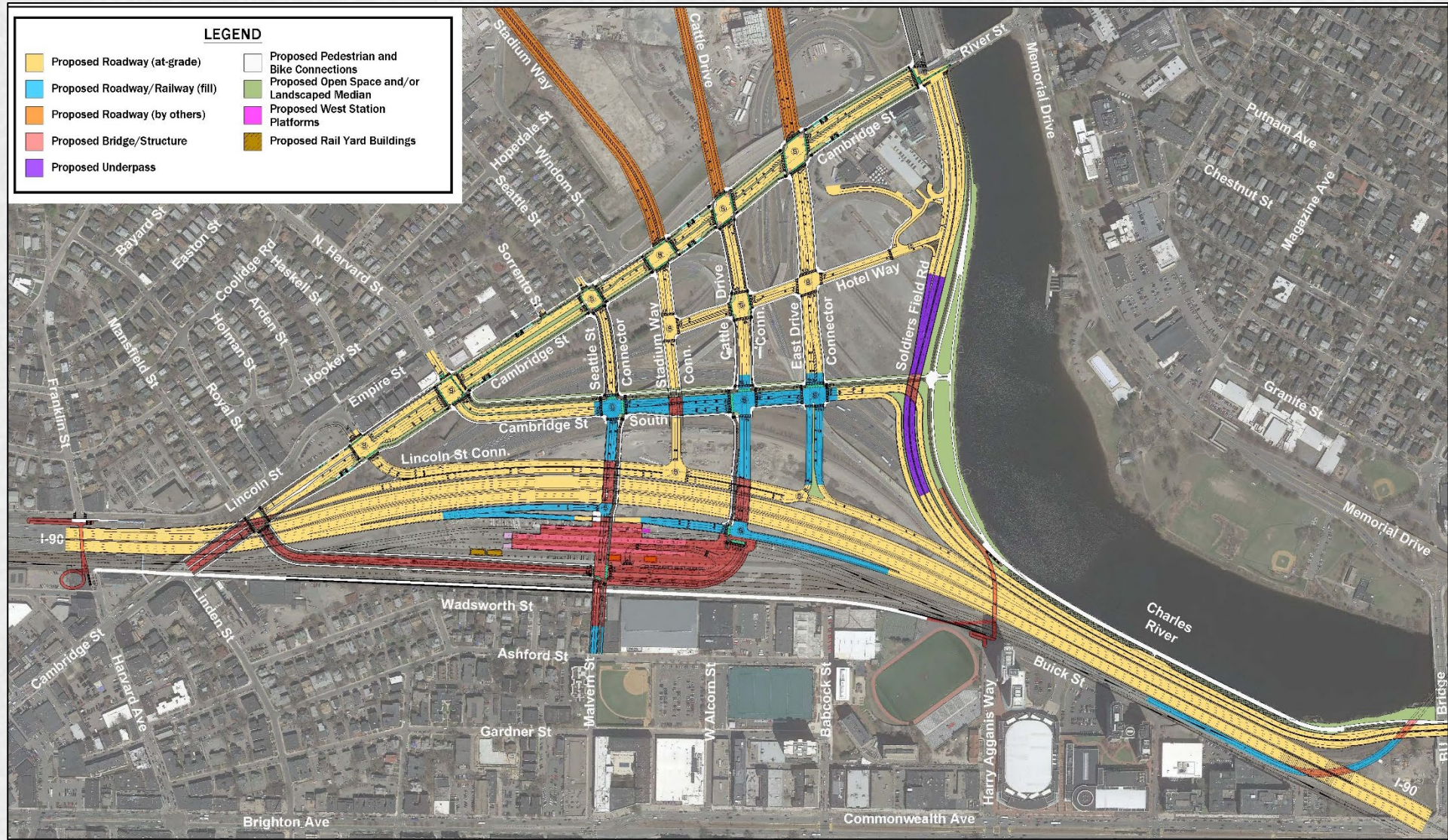


# 3L Realignment Interchange Alternative





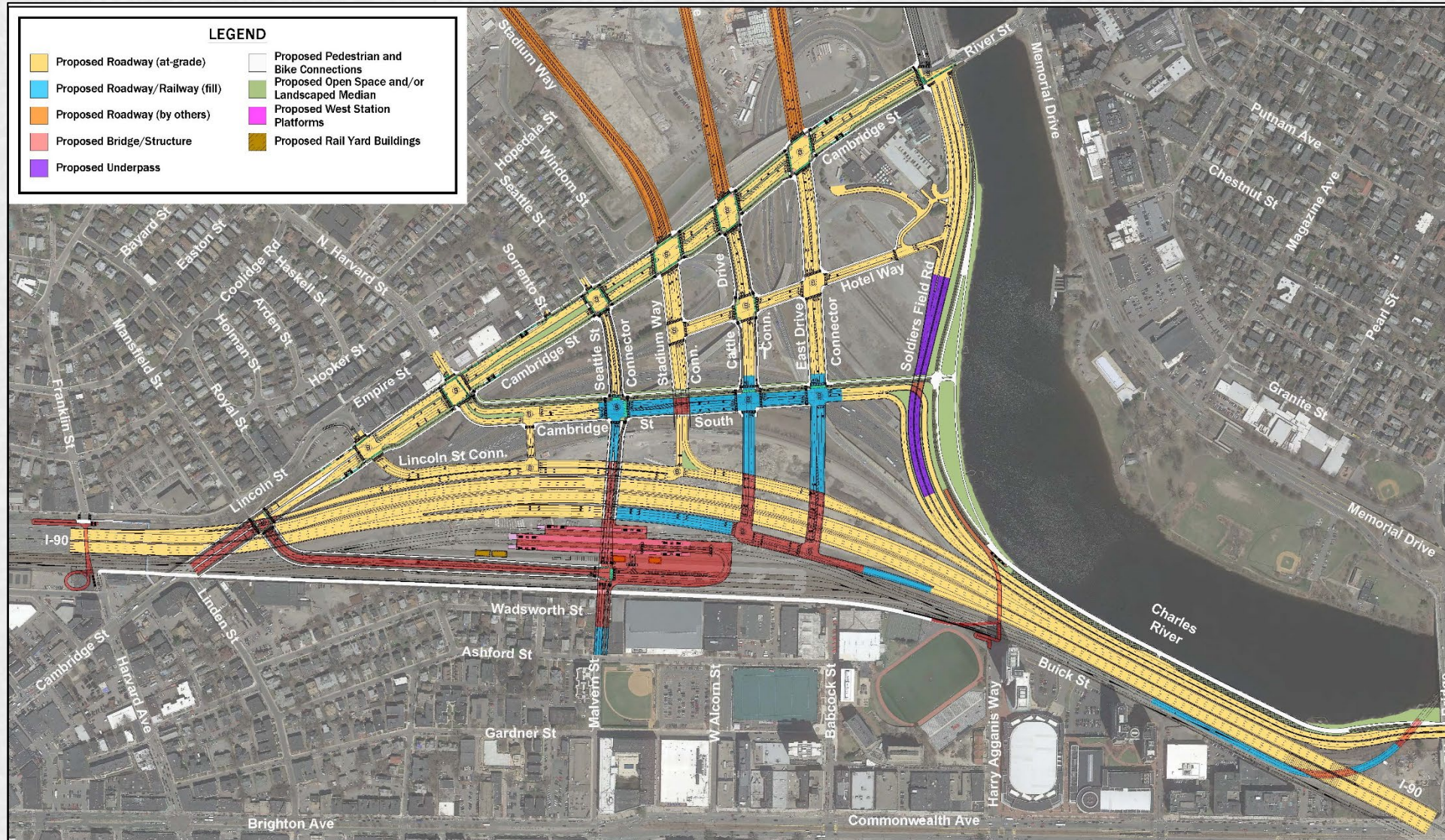
# 3L Modified Interchange Alternative



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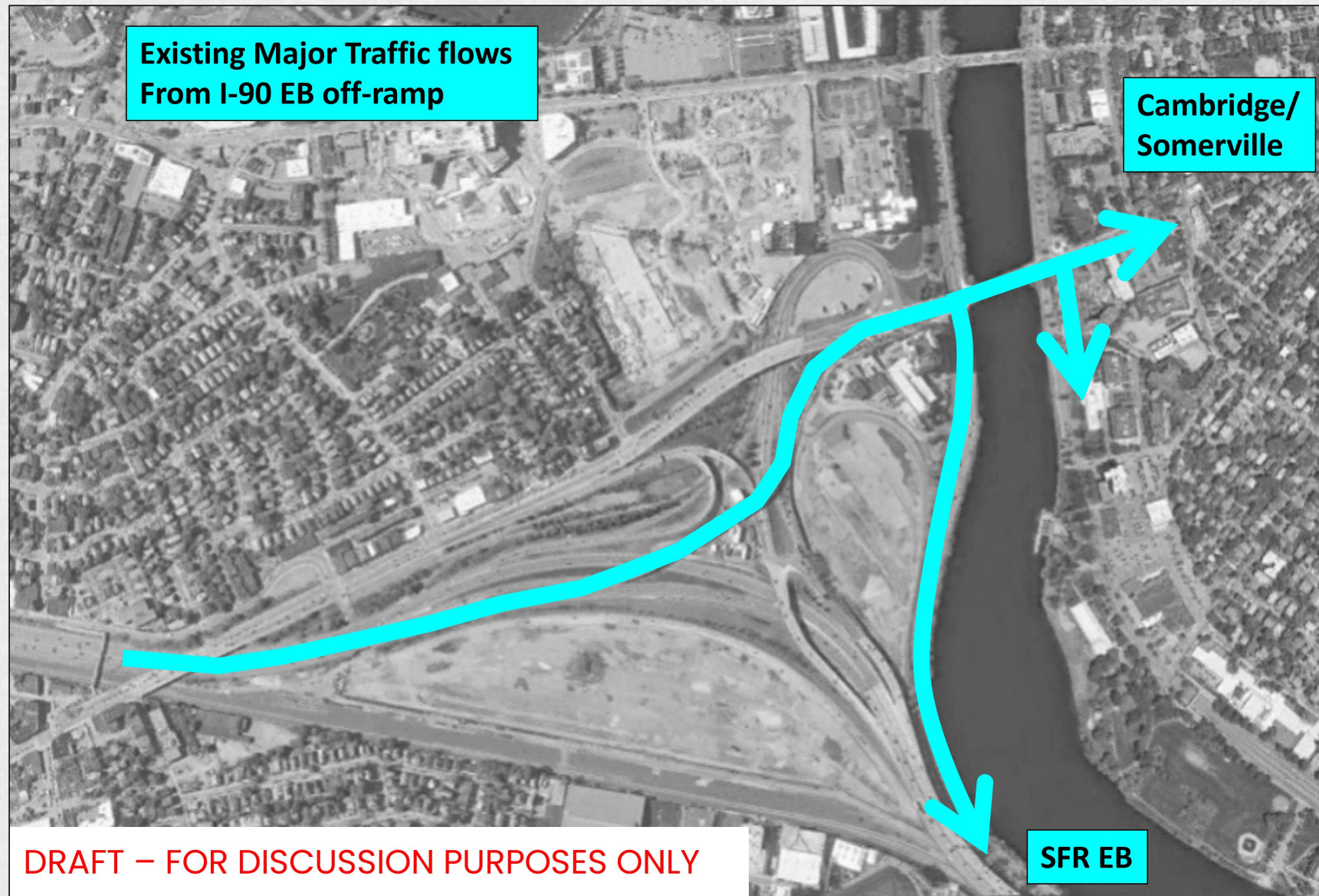
# 3 Bridge Interchange Alternative



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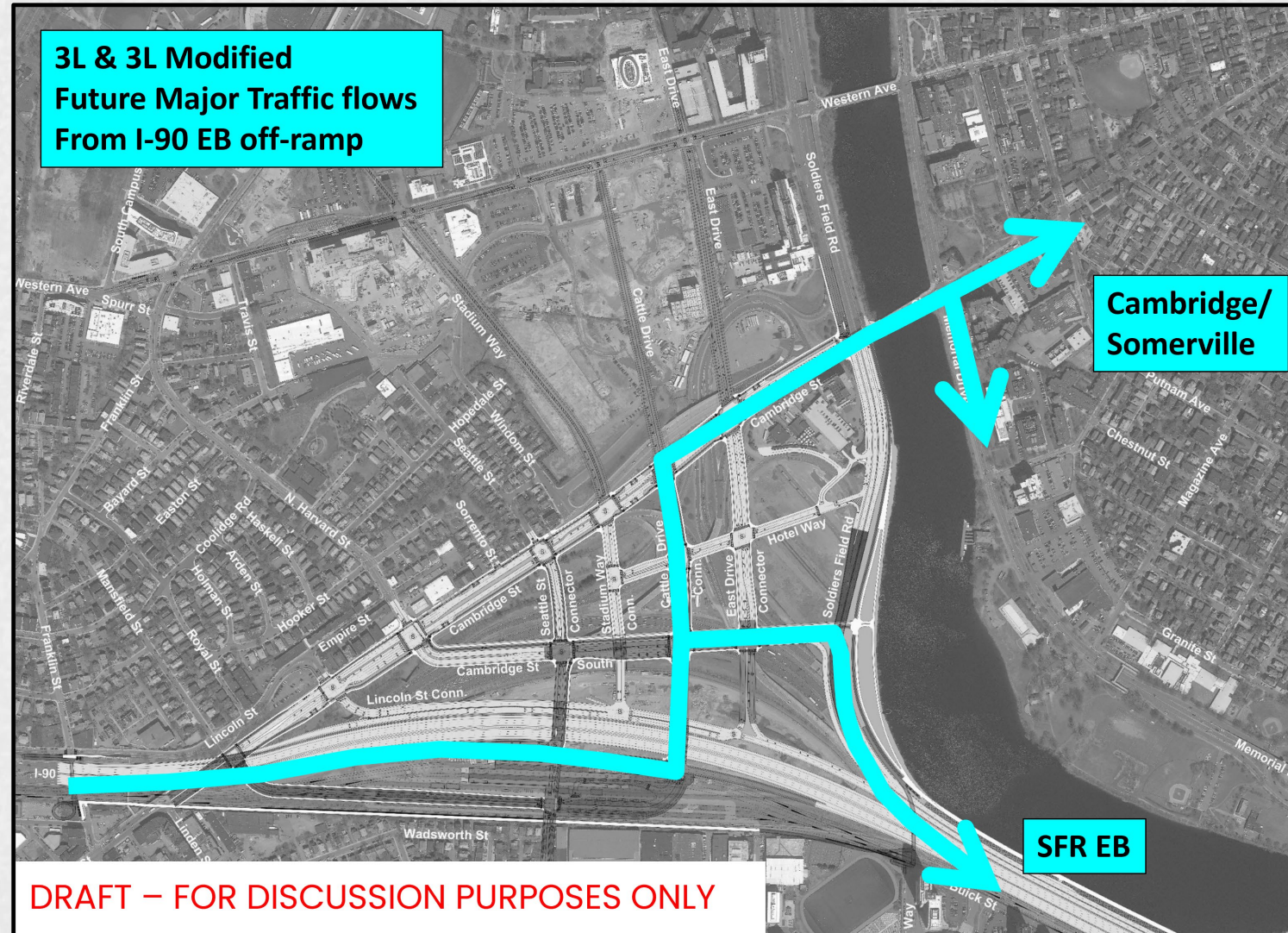


# Existing Major Traffic Flows from I-90 EB Off-Ramp





# 3L & 3L Modified Future Major Traffic Flows from I-90 EB Off-Ramp



3L & 3L Modified  
Future Major Traffic flows  
From I-90 EB off-ramp

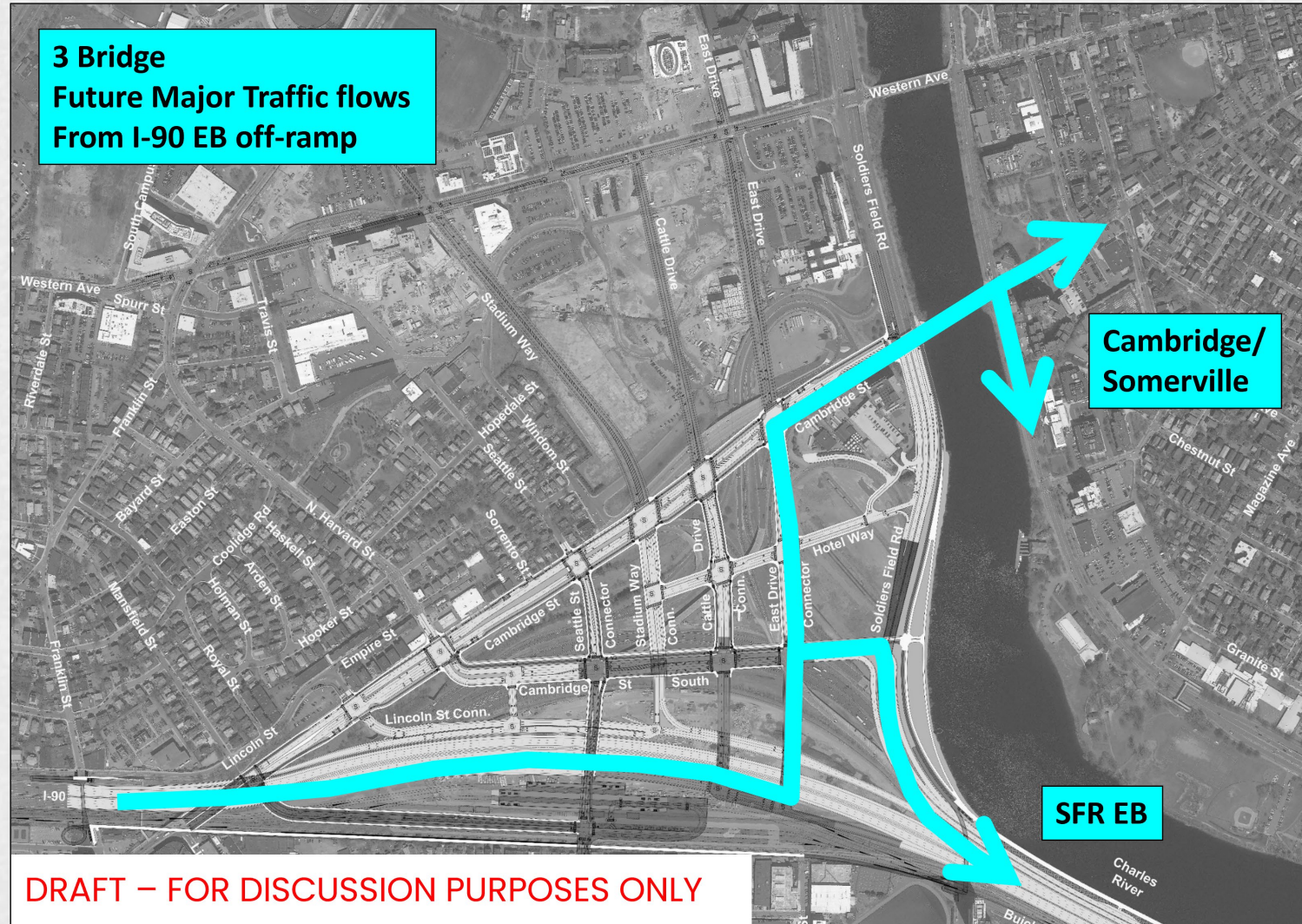
Cambridge/  
Somerville

SFR EB

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# 3 Bridge Future Major Traffic Flows from I-90 EB Off-Ramp



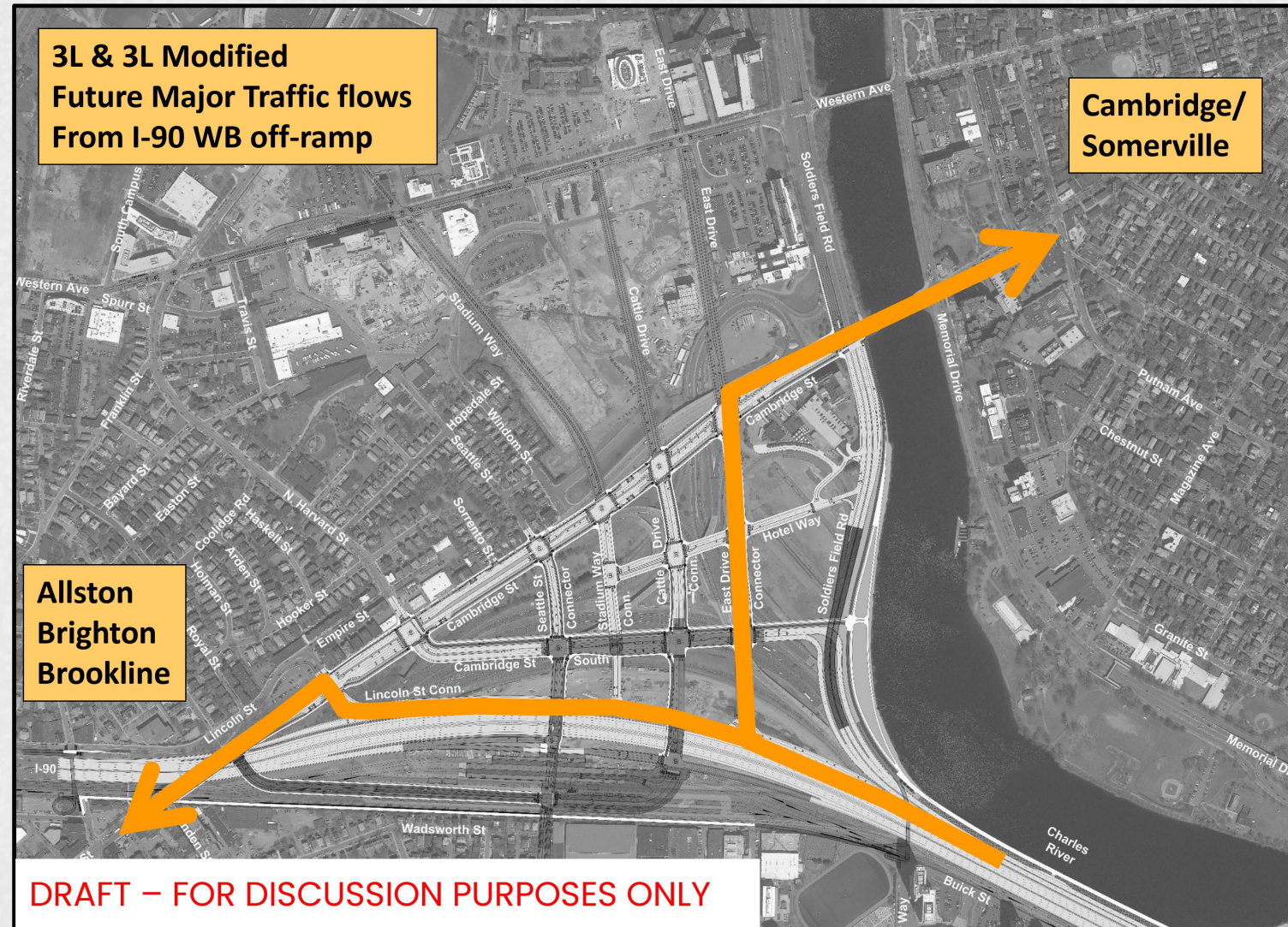


# Existing Major Traffic Flows from I-90 WB Off-Ramp



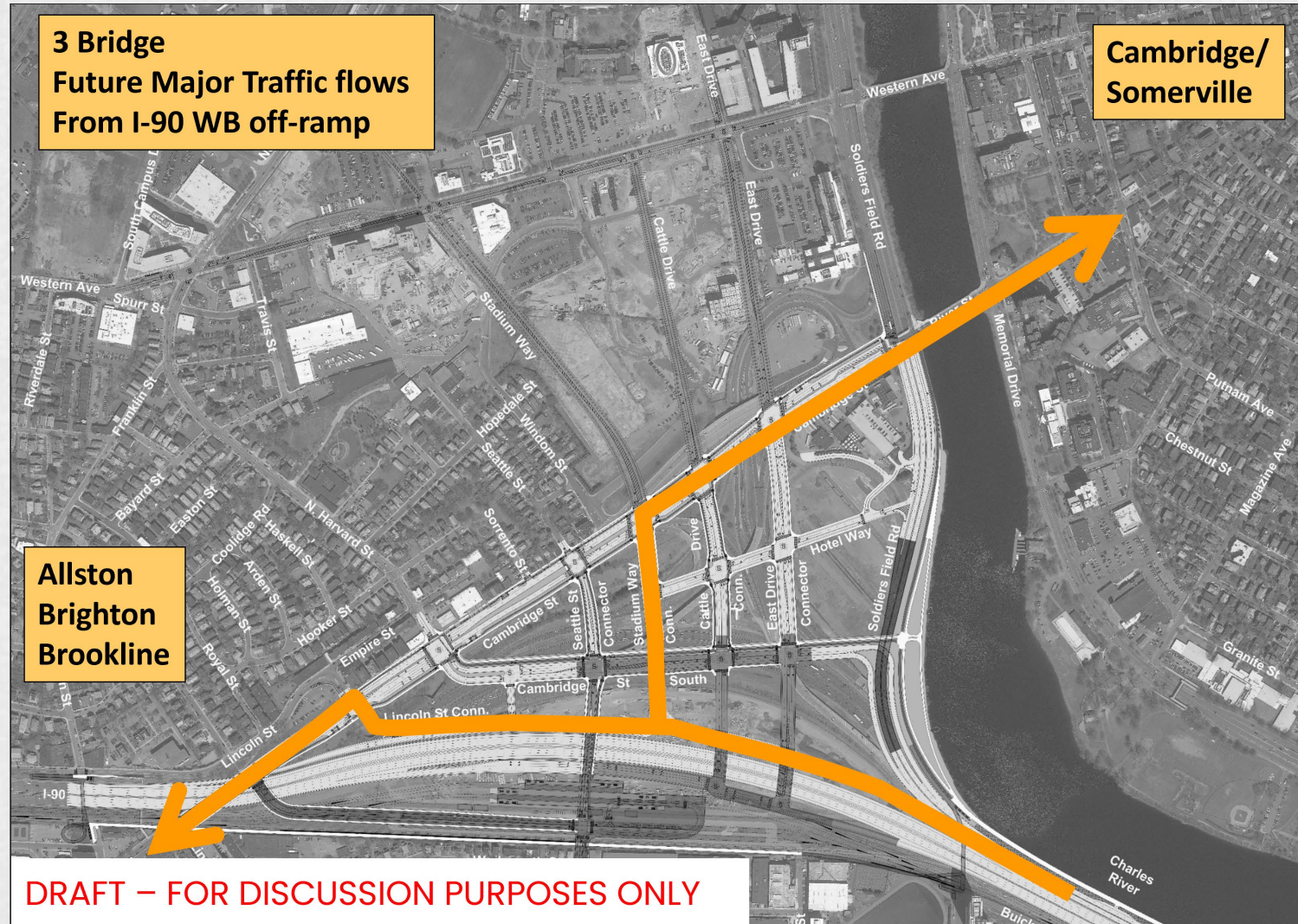


# 3L & 3L Modified Future Major Traffic Flows from I-90 WB Off-Ramp





# 3 Bridge Future Major Traffic Flows from I-90 WB Off-Ramp



**3 Bridge  
Future Major Traffic flows  
From I-90 WB off-ramp**

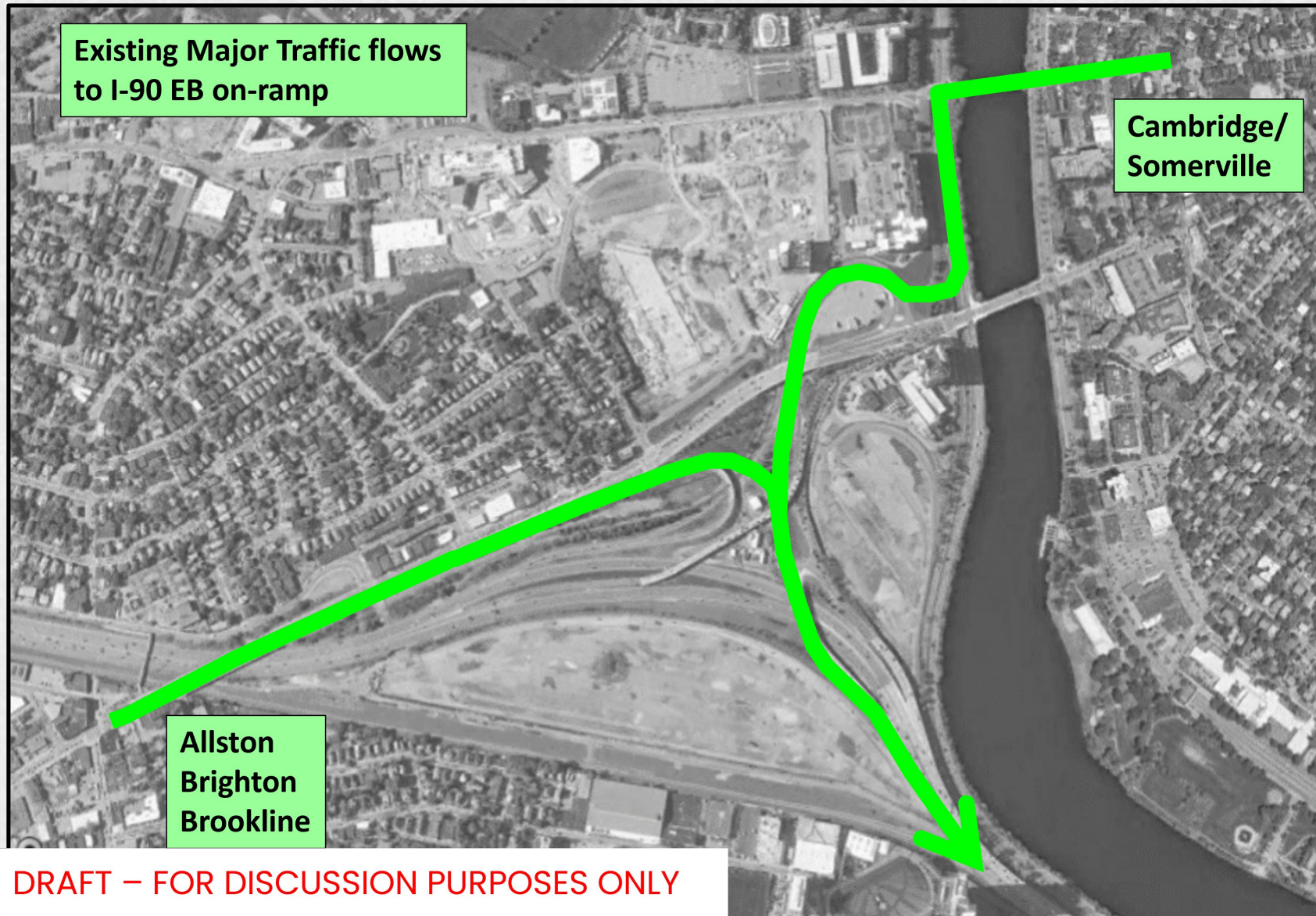
**Cambridge/  
Somerville**

**Allston  
Brighton  
Brookline**

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# Existing Major Traffic Flows to I-90 EB On-Ramp



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# 3 Bridge Future Major Traffic Flows to I-90 EB On-Ramp

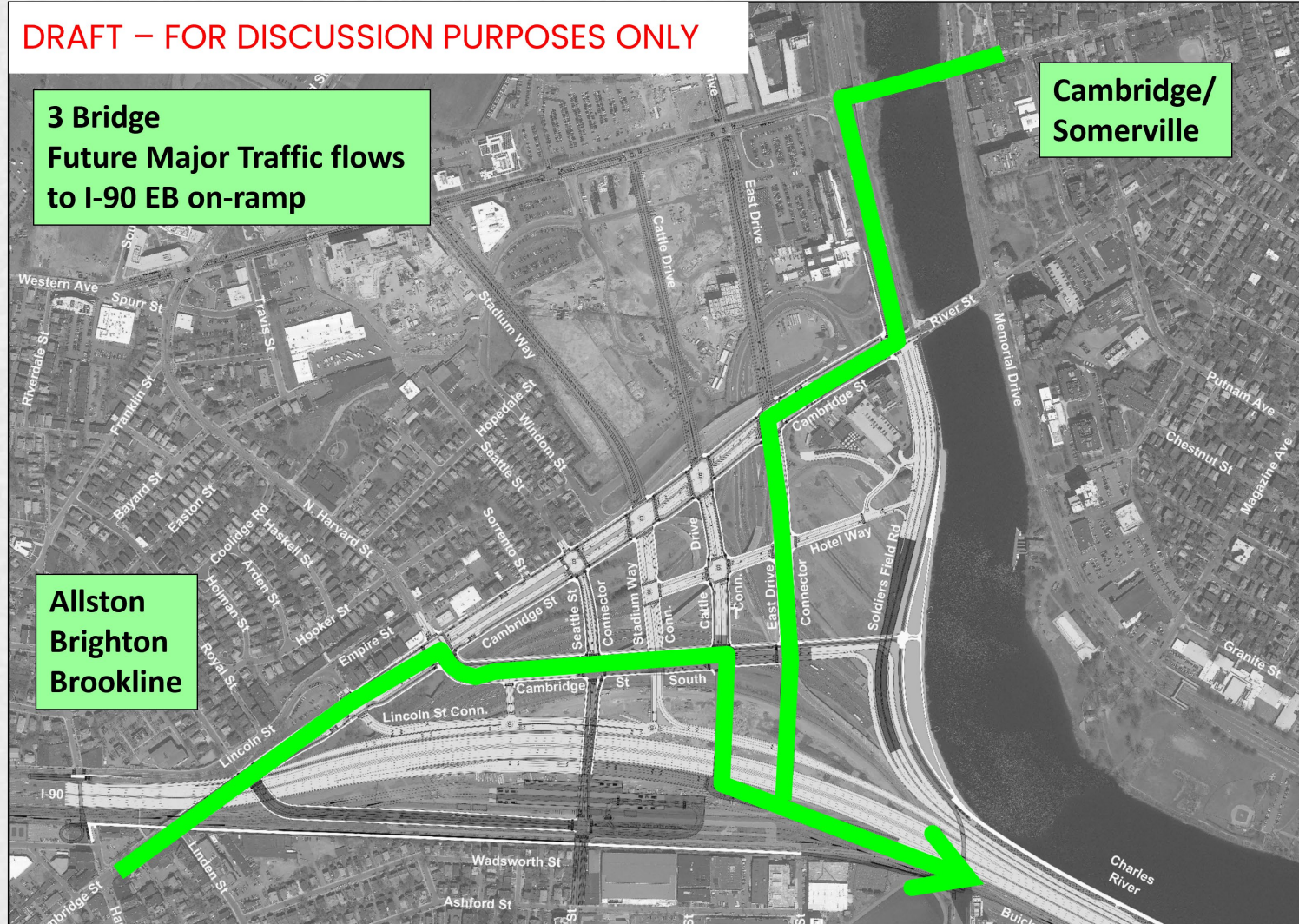


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3 Bridge  
Future Major Traffic flows  
to I-90 EB on-ramp

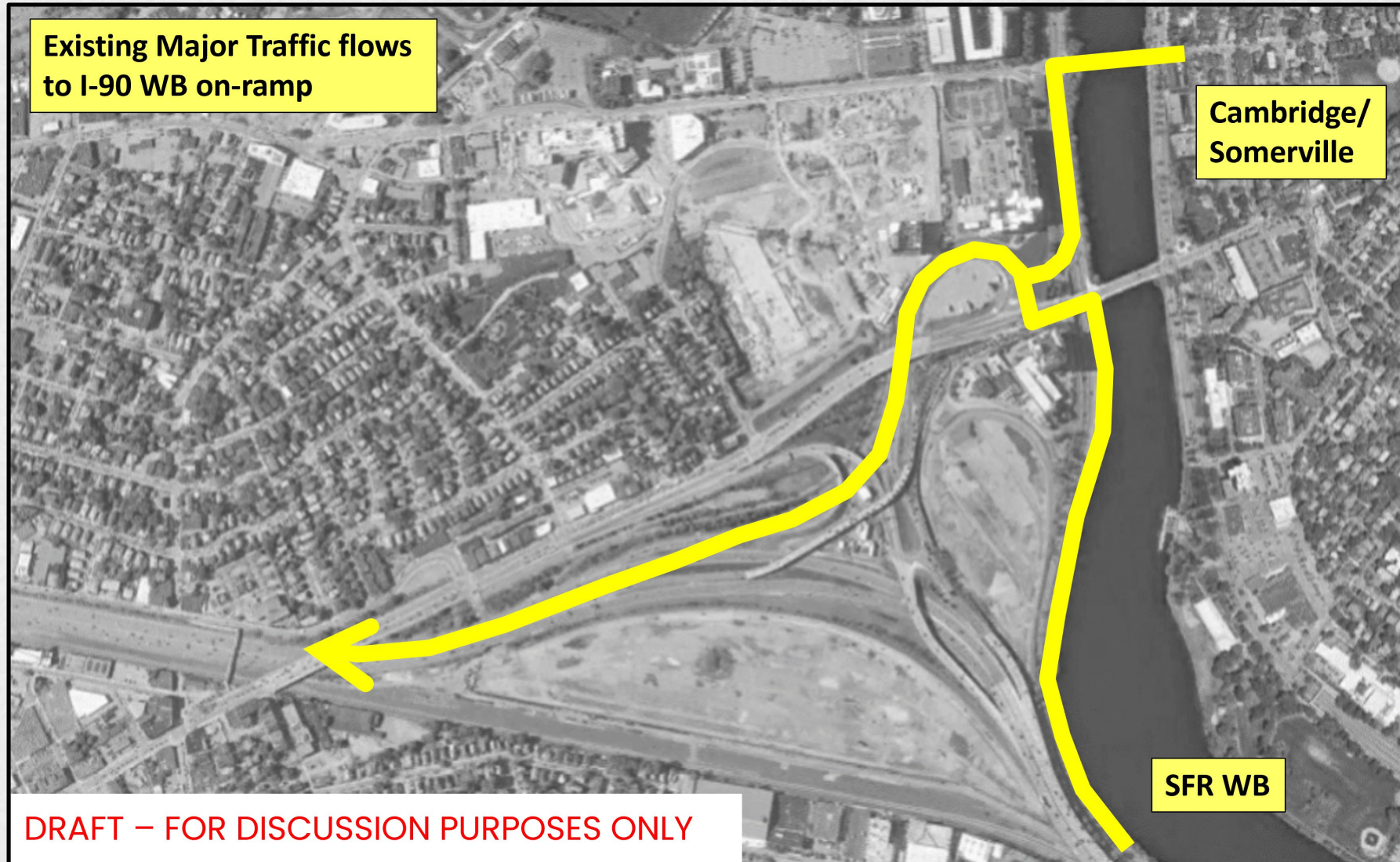
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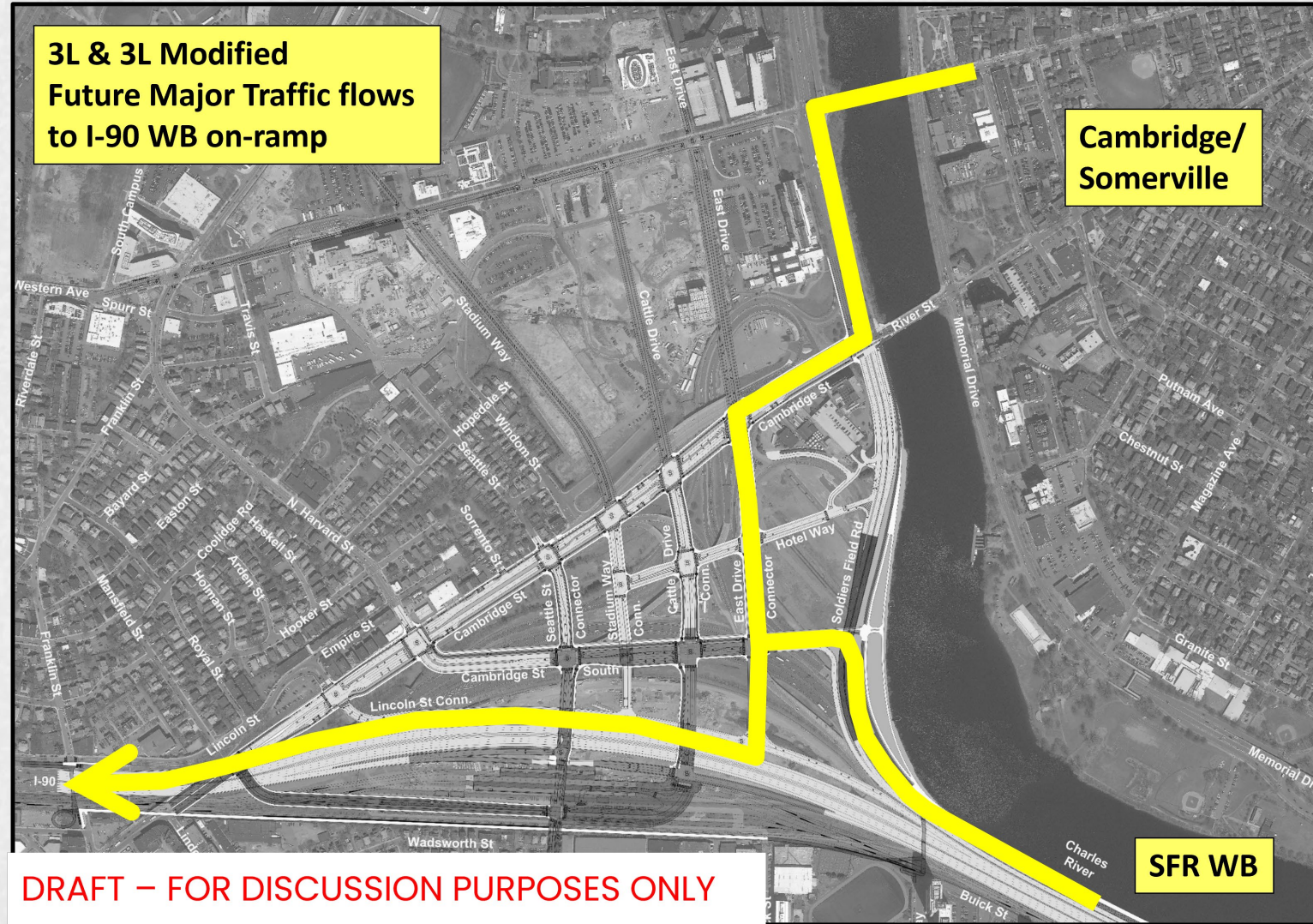


# Existing Major Traffic Flows to I-90 WB On-Ramp





# 3L & 3L Modified Future Major Traffic Flows to I-90 WB On-Ramp

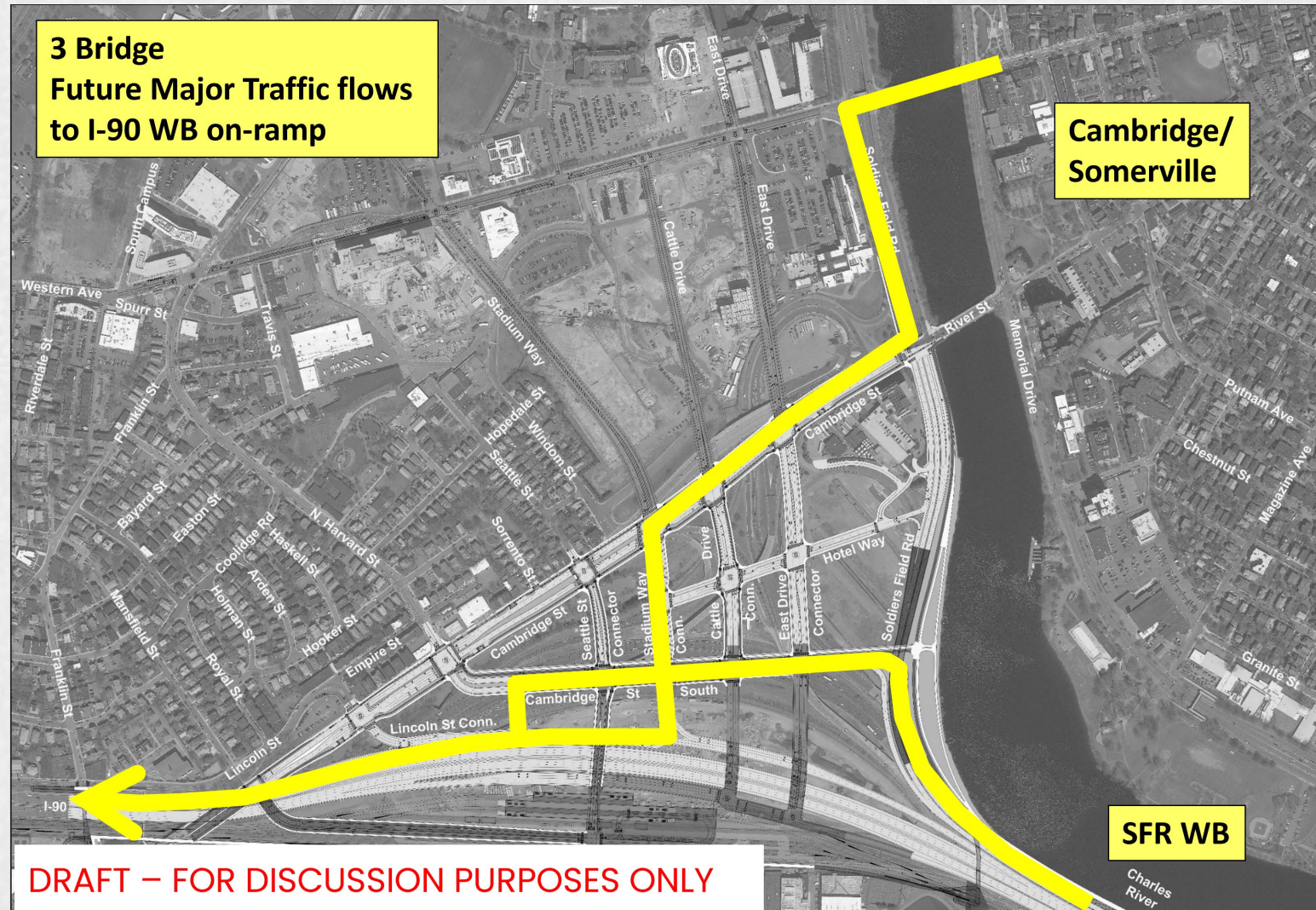


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SFR WB

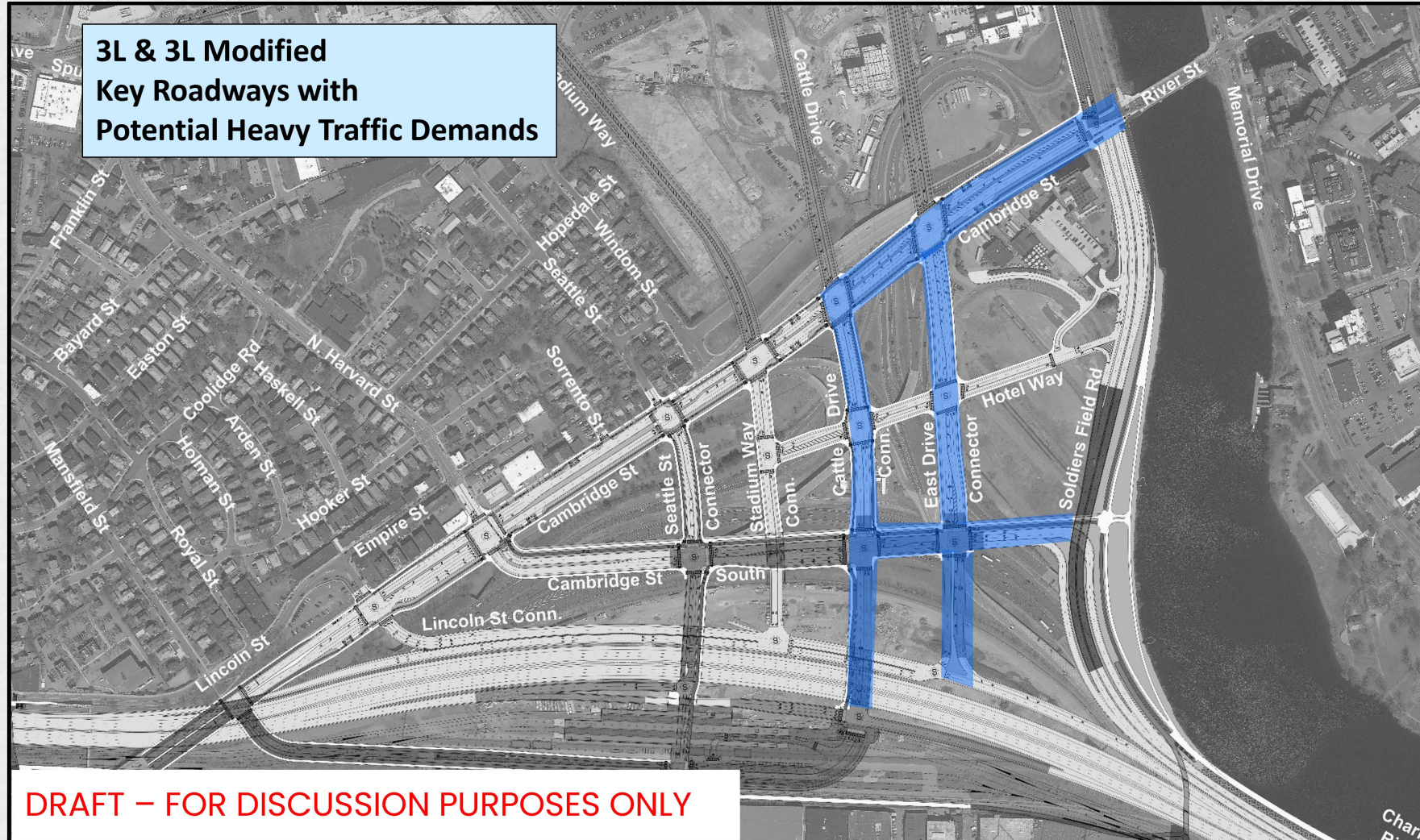


# 3 Bridge Future Major Traffic Flows to I-90 WB On-Ramp





# 3L & 3L Modified Key Roadways with Potential Heavy Traffic Demands



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# 3 Bridge Key Roadways with Potential Heavy Traffic Demands

