

## McGrath Boulevard Project

The project will remove the elevated overpass on McGrath Highway (Route 28) and replace it with a ground-level road.

Project No. 607981 | August 2024



### **Table of Contents**

Introduction	3
Project Area	5
Concept Design	10
Concept Map	31
Next Steps	52





## Introduction

Removing the McCarthy Overpass has been a long-time desire for Somerville residents and has had continued support from the City of Somerville.

The McGrath Boulevard Project aligns with the community's desire for a street-level multimodal boulevard and modernizes the roadway for all users.



**Renderings of the concept design**: Washington Street intersection (left); Somerville Avenue intersection (right)



## **Project Background**

#### 2011 - 2013

The McCarthy Overpass was identified as nearing the end of its useful life and in need of replacement. The MassDOT study titled "Grounding McGrath" (2013) recommended removing the overpass and replacing it with a street-level multimodal boulevard.

#### 2015 - 2018

MassDOT convened the McGrath Boulevard Project Development Working Group to develop a consensus-driven concept design for the new street-level boulevard. The project was included in the Boston Metropolitan Planning Organization (MPO) Destination 2040 Long Range Transportation Plan for Federal Fiscal Years (FFY) 2025-2030, as it aligns with regional goals for safety, system preservation and modernization, capacity management and mobility, transportation equity, clean air and sustainable communities, and economic vitality.

#### 2021 - present

MassDOT is currently preparing the 25% design. The project has received \$20 million of both federal and state construction funding starting in 2027. The total project cost of approximately \$100 million is anticipated to be funded over four years (2027-2030). To learn more about the project's funding sources, timeline and alignment with regional transportation goals, review the <u>Boston</u>
<u>Region MPO's FFY 2024-2028</u>
<u>Transportation Improvement Program (TIP).</u>



## **Project Area**

The project focuses on the segment of McGrath Highway between Third Street in Cambridge to the south and Broadway in Somerville to the north.



## **Project Area**

It is adjacent to several Somerville neighborhoods, including East Somerville, Union Square, Brickbottom, Winter Hill, and Prospect Hill.



## **Project Area**

Removing the overpass will help reconnect these neighborhoods by improving multimodal connections through the project area.



### **McGrath Boulevard Project**

### **Project Goals**

- Safety improvements to support Vision Zero objectives
- Improve neighborhood connections to nearby amenities
- Resilient infrastructure to face our changing climate
- Improves pedestrian and bicycle conditions and comfort

### **Reasons for the Project**

- McCarthy Viaduct overpass is structurally deficient
- McGrath Highway is overbuilt for the number of vehicles that need to use it
- Accessibility standards not met along the corridor



### **McGrath Boulevard Project**

#### Benefits of a multimodal corridor

- Creates opportunities to shift new development trips to sustainable modes
- Supports the citywide goal for 75% of work-related trips by non-car modes by 2040, as detailed in the <u>Somervision2040 Comprehensive Plan</u>
- Takes full advantage of the project's proximity to the MBTA Green Line Extension and the Somerville Community Path

The McGrath Highway is a critical part of the regional transportation system, and this project presents opportunity to re-assess the corridor ensuring safe and efficient access for all users.



## Concept Design Design Process

MassDOT convened the McGrath Boulevard Project Development Working Group to inform and advise the agency with local knowledge, and to help develop the concept design. The Working Group included a wide range of perspectives, including representatives from community-based organizations, public agencies, elected officials, and other local stakeholders.

With support from the Working Group, the project team analyzed various build alternatives including potential cross-sections and intersection configurations. The Working Group also provided guidance on green space allocation, pedestrian and bike connectivity, and the overall vision for the new McGrath Boulevard.







### **Preferred Alternative**

Through the consensus-driven concept design process, MassDOT developed the design referred to as the "Preferred Alternative". This design includes the following key elements:

- The McCarthy Overpass is removed, and McGrath Highway is transformed into a street-level boulevard
- One travel lane in both northbound and southbound directions is removed
- Separated and buffered bike lanes are installed both northbound and southbound
- The design also includes improved pedestrian and bike connections, including a new at-grade crossing made possible by the removal of the overpass.



#### **Existing Condition** Looking south from Washington Street





#### **Concept Design**

#### Looking south from Washington Street





#### MCGRATH BOULEVARD PROJECT

#### **Existing Condition** Looking north at the Somerville Avenue intersection





#### **Concept Design** Looking north at the Somerville Avenue intersection





#### **Roadway Reallocation**

#### Looking north near Otis Street





#### **MCGRATH BOULEVARD PROJECT**

**Key Design** 

Transform highway into a boulevard





#### **Improvements for pedestrians**

In addition to providing new pedestrian connections across McGrath Highway, the project will significantly improve sidewalk and crosswalk conditions along the new boulevard.

Pedestrian Level of Service (LOS) is used to measure the overall conditions of the pedestrian facilities within the corridor with letter grades ranging from A (most pedestrian-friendly) to F (least pedestrian-friendly). Pedestrian LOS is based on a number of factors, including sidewalk width and condition, separation from the travel lane, lighting, shade from trees, and turning conflicts with cars.





## Existing pedestrian conditions

Current pedestrian conditions range from LOS C to LOS E, due to poor sidewalk conditions, minimal separation from the travel lane, and lack of exclusive pedestrian signal phasing at some intersections, among other factors.



Pedestrian Level of Service (LOS)



## Future pedestrian conditions

The project will substantially improve the pedestrian experience, with future conditions ranging from **LOS A to LOS B**. With new and improved sidewalks, expanded buffers from the travel lane, improved lighting, additional shade from trees, and reduced conflicts with turning vehicles, McGrath Boulevard will be a significiantly more pedestrianfriendly roadway.



Pedestrian Level of Service (LOS)



# New and improved pedestrian crossings

Improvements to pedestrian conditions and new infrastructure will enable easier pedestrian access across McGrath Boulevard, re-connecting neighborhoods that are currently divided by the overpass.





#### **Improvements for bikes**

New and improved bicycle infrastructure, including separated bike lanes, will improve biking conditions and safety along the roadway while enabling connections between neighborhoods and transit hubs.

**Bicycle Level of Traffic Stress (LTS)** is used to measure overall bicycle conditions and comfort within the corridor. The LTS score is based on several factors, including conditions of bike facilities, separation from general purpose traffic, traffic volumes, and vehicle speeds. Bicycle LTS ranges from LTS 1 (suitable for all ages and abilities) to LTS 4 (suitable only for the most experienced bike riders).





# Existing bicycle conditions

McGrath Highway currently has no bike lanes, resulting in a rating of LTS 4 along the entire corridor. The LTS 4 rating discourages most potential users from biking, as it is only suitable for the most experienced bike riders.



Bicycle Level of Traffic Stress (LTS)



# Future bicycle conditions

With new and improved bike infrastructure, the majority of the corridor will be rated LTS 1 or LTS 2, which is suitable for most potential bike riders, as separation from the general purpose lane will increase biking comfort for all ages and abilities.



Bicycle Level of Traffic Stress (LTS)



### **Bicycle connections**

Separated and buffered bike lanes along McGrath Boulevard will provide a critical North to South link in the regional network of bike facilities.





#### **Improvements for transit**

The design will integrate existing and future transit services, improve bus stop conditions, and facilitate bicycle and pedestrian connections to transit.

The design will include floating bus stops to provide improved transit service while accommodating bikes and pedestrians and will enable multimodal connections to the MBTA Green Line Extension.

Additional transit enhancements, such as dedicated bus lanes, were evaluated for the length of the McGrath Boulevard corridor, but measurable benefits were ultimately not realized.

Please visit the MBTA's Bus Network Redesign website for more information on upcoming changes to bus service in the project area.



Example of a floating bus stop on Commonwealth Avenue in Boston



## **Concept Map**

Explore elements of the concept design on the following pages.

Please note that the illustration is a preliminary design concept and is subject to change as the design continues to be refined.



- Boulevard
- **Bridge Area**
- Proposed Bike Improvements
- Proposed Walkway / Plaza Area
- **Existing Walkway**
- Proposed Hardscape Area
- Proposed Landscape Area
- Proposed Bus Stop/Lane
- Proposed Bus Loading Area
- **Existing Community Path**



#### **Connections to Foss Park**

The design facilitates safer pedestrian and bicycle connections to Foss Park.





Note: Map concept shown is preliminary as of February 2024.

#### Pedestrian bridge at Otis Street

The existing pedestrian bridge is not accessible to all users and will be replaced with a street-level crosswalk. Structural elements of the bridge containing artwork will likely remain at the Cremin Playground.







#### At-grade crossing for both pedestrians and bikes

The pedestrian bridge will be replaced with a crossing with appropriate traffic control, enabling walking and biking connections across the boulevard.







30

## Two-way separated bike path

Two-way separated bike paths will be provided along the majority of the corridor where space allows.







### Virginia Street at McGrath

Revised access with McGrath Boulevard at select side streets (Virginia, Otis, and Bonair) to separate local and regional traffic.







32

# One-way bike lane southbound

A one-way bike lane will be installed along the west side of McGrath between Medford Street and Pearl Street in addition to the two-way bike path on the east side.







### Lowell Line bridge

Currently undergoing emergency repairs with long-term rehabilitation to be programmed.











# Improved crossings along corridor

Updated crossings will improve conditions for people walking and biking across and along McGrath.





#### New crossing at Cross Street

To overcome the vertical challenge and provide a pedestrian crossing of McGrath at Cross Street, the design includes two crosswalks with a median sidewalk.












## Floating bus stops

Bus stops will be designed to improve transit operations and amenities for bus riders while retaining protected space for bike lanes.







## **Planted median**

Planted medians will be included where width allows along the corridor.



Image source: Environmental Management, Inc

Note: Map concept shown is preliminary as of February 2024.



## Pedestrian/bike facilities connecting to the Somerville Community Path extension

Bike lanes and sidewalks will connect McGrath to the Somerville Community Path extension at the East Somerville Station.



Note: Map concept shown is preliminary as of February 2024.



## Washington Street intersection improvement

A conventional intersection design at Washington Street simplifies the intersection and provides safety improvements for all modes.







## **Poplar Street pump station**

The design will coordinate with the ongoing development of the Poplar Street Pump Station.



Image source: City of Somerville





## Multimodal connections to Union Square Station

Bike and pedestrian improvements will facilitate safe connections to the new Union Square Station.







# Removing barriers to Brickbottom

Improvements will enable better walking and biking connections to Brickbottom and potential future development near East Somerville Station.



Image source: Brickbottom Neighborhood Plan Draft (June 2024)

Note: Map concept shown is preliminary as of February 2024.



# New and ongoing development

The design of the boulevard will require coordination with development adjacent to the corridor, including 200 McGrath.



Image source: Stantec, via the Cambridge Day



## Coordination with the Squires Bridge Replacement Project

The McGrath Boulevard project will coordinate with MassDOT's Squires Bridge Replacement project (#612634), which is currently at the Project Scoping phase.





Note: Map concept shown is preliminary as of February 2024.







#### One-way separated bike lanes on both sides

One-way bike lanes will be included between Rufo Road and Third Street.



Image source: National Association of City Transportation Officials (NACTO)



## Connections to Cambridge

The design will connect to existing multimodal facilities in Cambridge, providing access to the new Lechmere Station and the North Point neighborhood.







# **Next steps**



#### Ongoing

#### **Continue Outreach:**

Stakeholders, **Environmental Justice** neighborhoods, Somerville, Cambridge



#### 2025-2028

Final Design: Complete Environmental Review, 75% Design, 100% Design, Complete ROW, Prepare Bid Package



**Summer 2024** 

25% Design: Project Coordination, Traffic Analysis, RSAs, Plan **Development**, Environmental **Review, Preliminary ROW** 



Fall/Winter 2024

**Public Information Meeting:** project updates and public feedback



**Begins 2028** 

#### **Construction:**

Advertisement, Bid **Review**, Select Contractor, Notice to Proceed

#### **Questions or comments?**

Contact massdotmajorprojects@dot.state.ma.us



**Spring 2025 Design Public Hearing:** Present full 25% level design

