

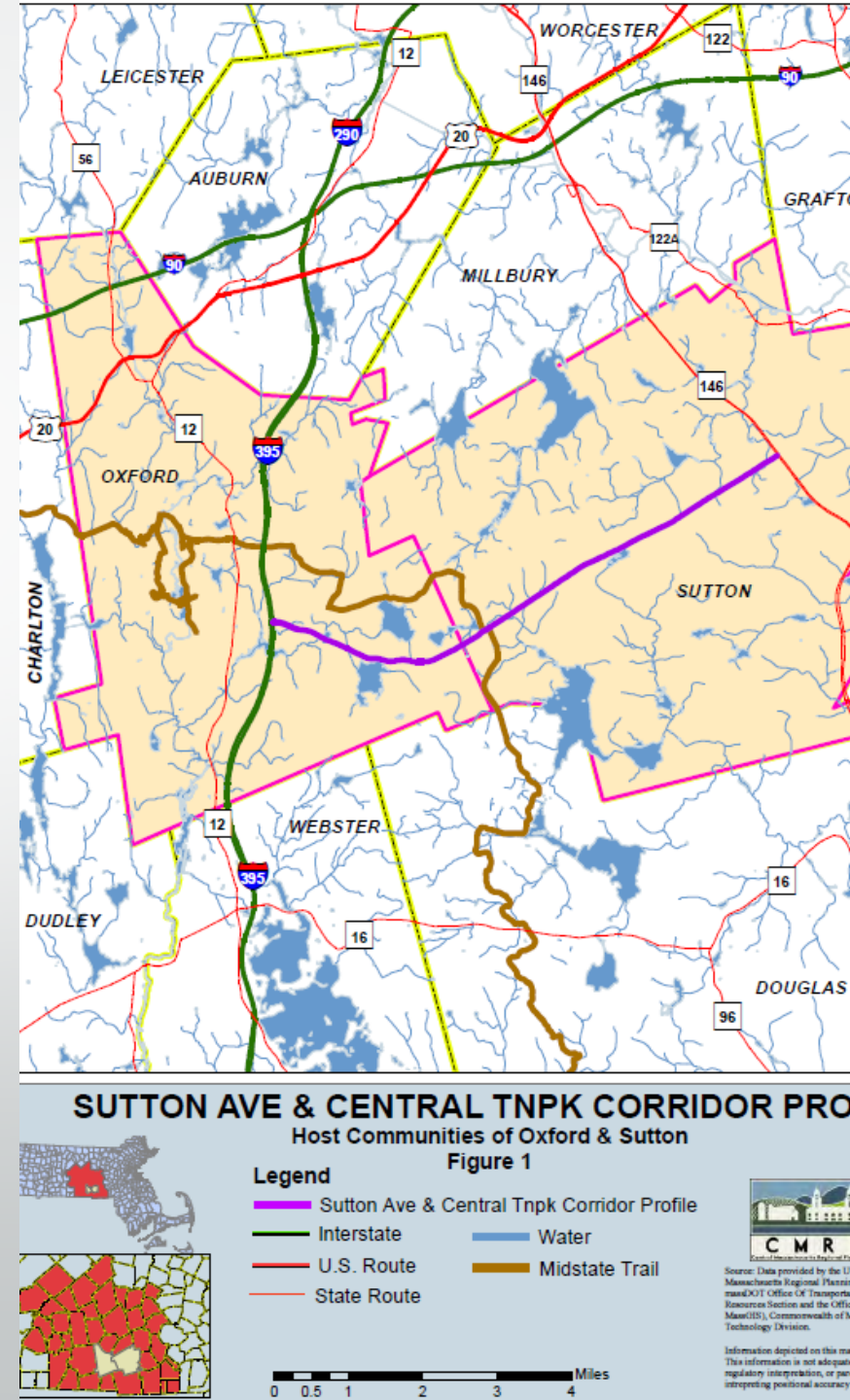
Sutton Avenue & Central Turnpike Corridor Profile & TIP Project Initiation

Town of Sutton
Select Board Meeting
January 2, 2024

CMRPC – Recent Work

- 2020/2021 – Travel Demand Model exercise for Aggregate site redevelopment – scenario planning
- 2021 - Traffic counts and analysis for the proposed Singletary Arms project (Burbank and Sibley Road Intersection)
- 2021/2022 – Central Turnpike Corridor Profile Study
- 2023 – Cumulative impacts on Rte. 146 due to recent/proposed land use development
- **Community Planning Assistance:** MBTA housing assistance, LID bylaw, MVP 2.0 Mumford river watershed, 3 town planning board meetings, GIS support

Sutton Avenue & Central Turnpike Corridor Profile



Chapter 1:

Introduction

Sutton Corridor Observations & Deficiencies

Central Turnpike / West Sutton Road

- Stop-sign controlled.
- Only one documented vehicle crash at this location.
- Pavement observed to be in “poor” condition. *Update:* this section of Central Turnpike has been repaved as of summer 2022.

Central Turnpike / Putnam Hill Road

- Four-way Stop-sign controlled.
- Pavement observed to be in “excellent” condition at intersection except for a small section on the eastbound approach.
- Town of Sutton Police station located at southeast corner of intersection.
- Only two documented vehicle crashes at this intersection.

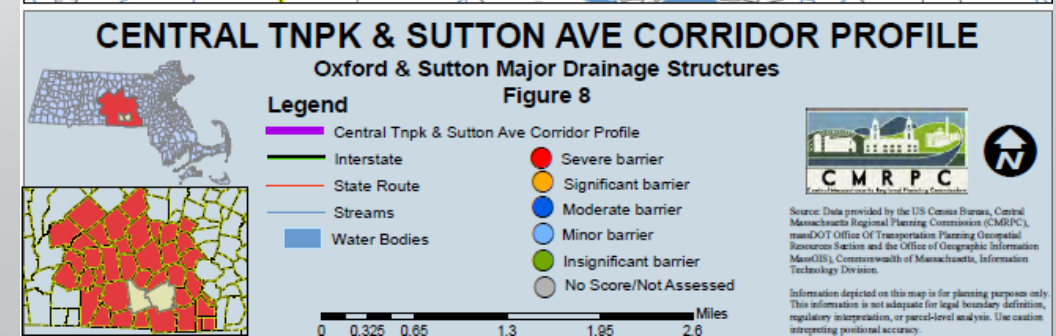
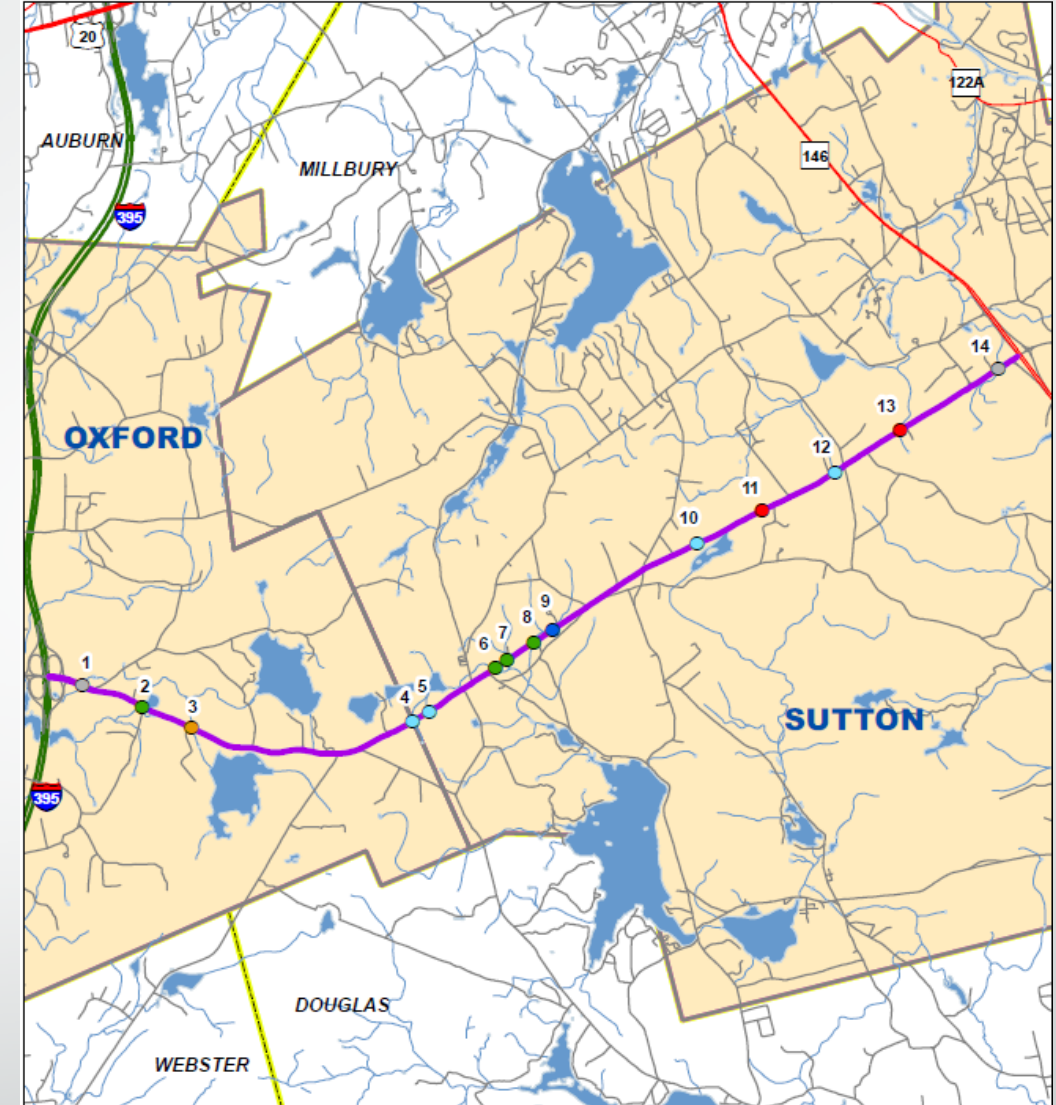
Central Turnpike / Purgatory Road

- Stop-sign controlled.
- No reported crashes at this intersection.
- Pavement observed to be in “excellent” condition.

- No pedestrian crosswalks across Central Turnpike.
- No adequate pedestrian or bicycle accommodations.
- Minimal width or no shoulders along the Central Turnpike study corridor. Vehicles unable to go around other turning vehicles.
- Pavement observed to be in “very poor” condition between Century Farm Road and Fuller Road. *Update:* since the pavement was analyzed in 2021, the “very poor”, “poor”, and “fair” sections were repaved.
- There is a large number of vehicle crashes with animals.
- Roadway is fairly narrow considering the significant number of observed large trucks.
- Two culverts along Central Turnpike identified as “severe” barriers to natural stream flow.
- Total of 49 crashes between 2018-2020, with one fatality.

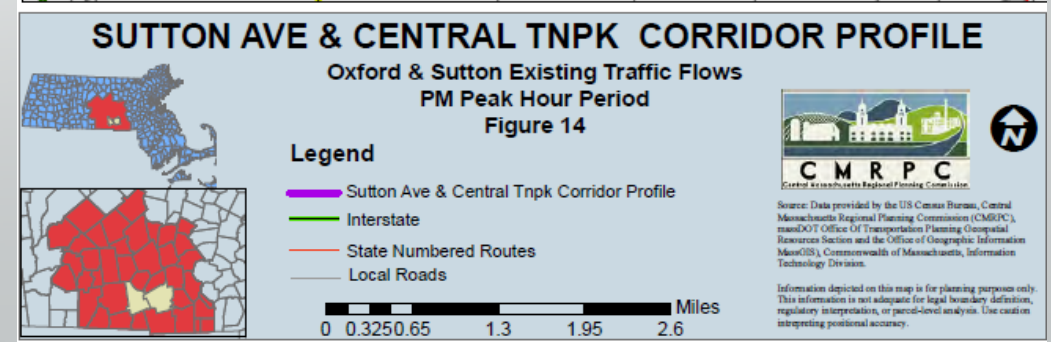
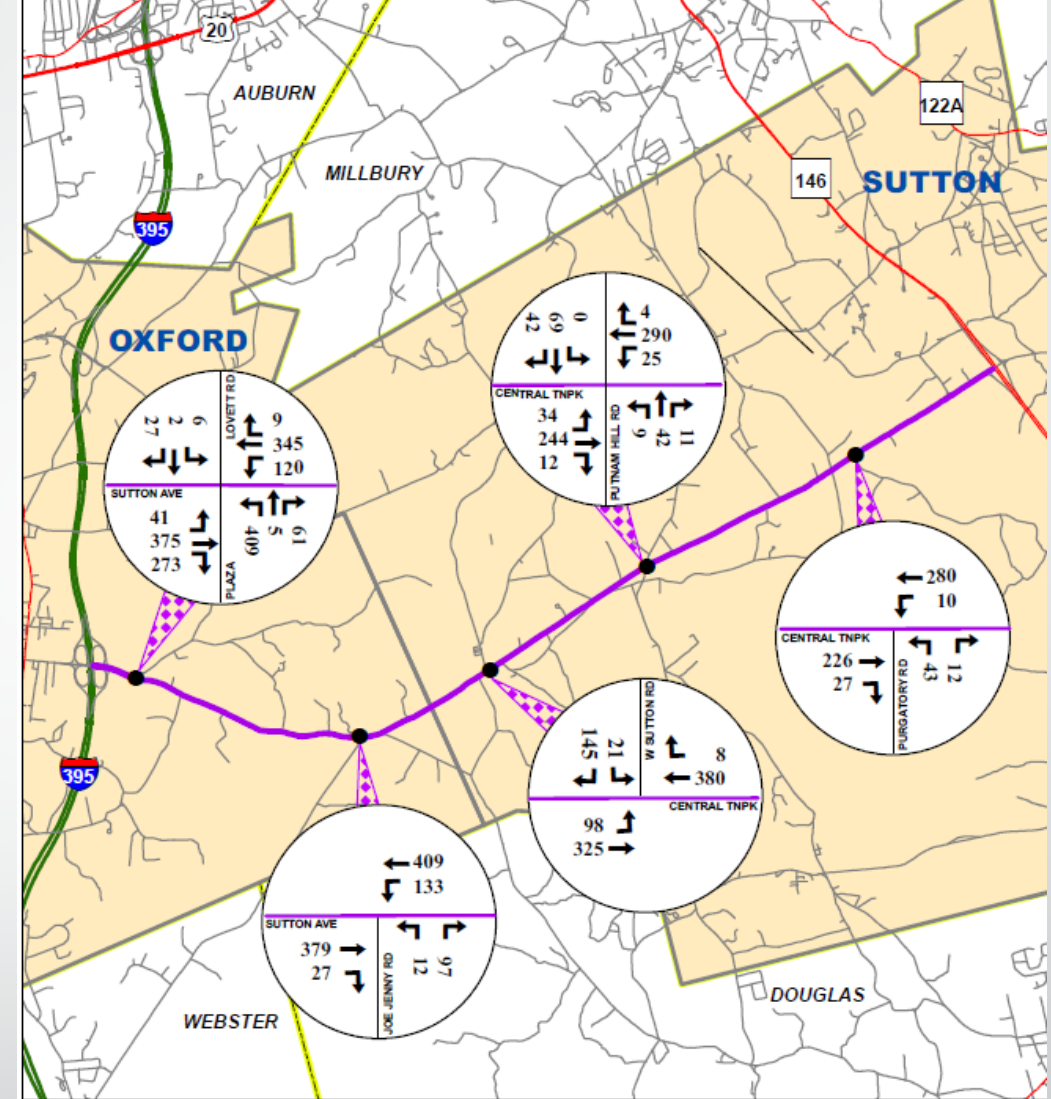
Chapter 2: Environs

- Natural Environment
 - Impaired Waterways & Wellhead Protection Areas
 - Vernal Pools & Wetlands
 - Flood Zones
- Culverts



Chapter 3: Congestion Management Process (CMP)

- Traffic Volumes (48-hour counts)
- Travel Time & Delay (7am-9am, 4pm-6m)
- Turning Movement Counts (TMCs) – Existing & Projected (7am-9am, 4pm-6pm)
- Heavy Vehicle % at Focus Intersections
- Intersection Peak Hour Level of Service (LOS)



Chapter 4: Safety

- Crash Data Summary

Table 10
Summary of Reported Crashes
On Central Turnpike Corridor in the Town of Sutton
January 1, 2018 - December 31, 2020

Crash Severity		
	Number	Percent
Property Damage Only	39	79.6%
Non-Fatal Injury	8	16.3%
Fatal Injury	1	2.0%
Unkown	1	2.0%
Total	49	100.0%

Manner of Collision		
	Number	Percent
Angle	9	18.4%
Rear-end	6	12.2%
Head-on	2	4.1%
Single vehicle crash	31	63.3%
Unknown	1	2.0%
Total	49	100.0%

Type of Collision		
	Number	Percent
Collision with a motor vehicle in traffic	17	34.7%
Collision with animal - deer	16	32.7%
Collision with fixed object	7	14.3%
Collision with ditch, embankment or guardrail	8	16.3%
Unknown	1	2.0%
Total	49	100.0%

Locations with the highest number of crashes	
	Number
Central Turnpike / Uxbridge Road	9
Central Turnpike / Alana Drive	5
Central Turnpike / Mendon Road	3

Road Surface Condition		
	Number	Percent
Dry	36	73.5%
Wet	6	12.2%
Snow/Ice	6	12.2%
Unknown	1	2.0%
Total	49	100.0%

Time of Day		
	Number	Percent
Before 7 AM	6	12.2%
7 AM - 10 AM	6	12.2%
10 AM - 12 PM	5	10.2%
12 PM - 4 PM	14	28.6%
4 PM - 6 PM	7	14.3%
6 PM - 9 PM	8	16.3%
After 9 PM	3	6.1%
Total	49	100.0%

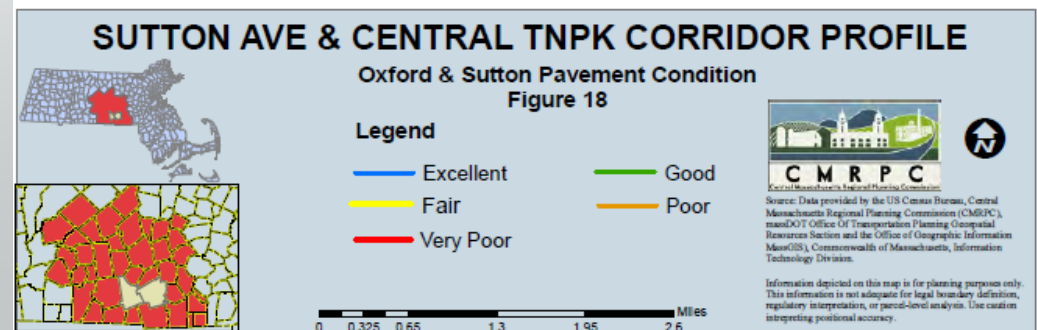
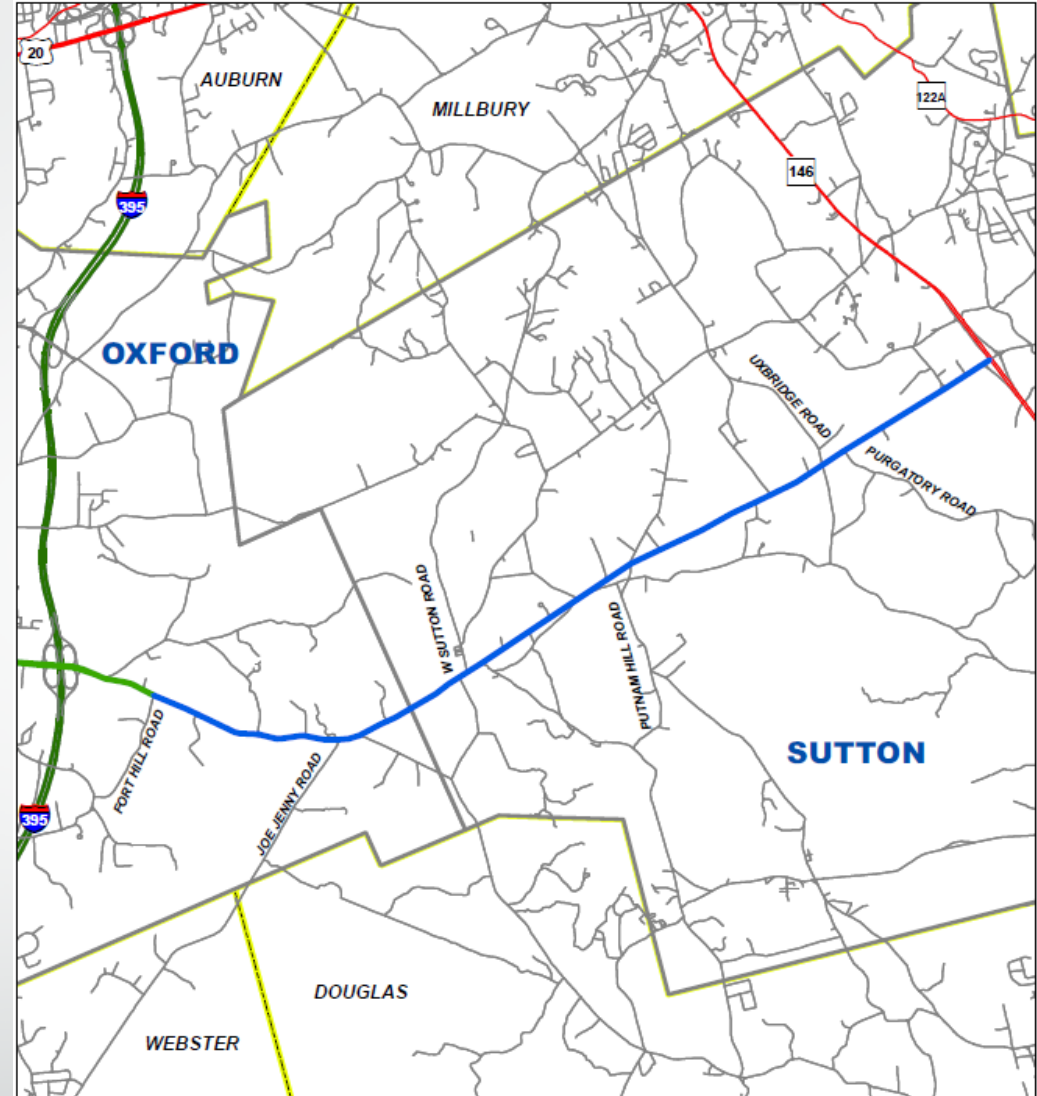
Light Conditions		
	Number	Percent
Daylight	28	57.1%
Dark	17	34.7%
Dawn/Dusk	3	6.1%
Unknown	1	2.0%
Total	49	100.0%

Weather Conditions		
	Number	Percent
Clear	32	65.3%
Cloudy	5	10.2%
Rain	4	8.2%
Snow	7	14.3%
Unknown	1	2.0%
Total	49	100.0%

Month of the Year		
	Number	Percent
January	4	8.2%
February	4	8.2%
March	4	8.2%
April	4	8.2%
May	3	6.1%
June	3	6.1%
July	6	12.2%
August	4	8.2%
September	2	4.1%
October	5	10.2%
November	3	6.1%
December	7	14.3%
Total	49	100.0%

Chapter 5: Pavement

- Pavement Condition



Chapter 6:

Bridges

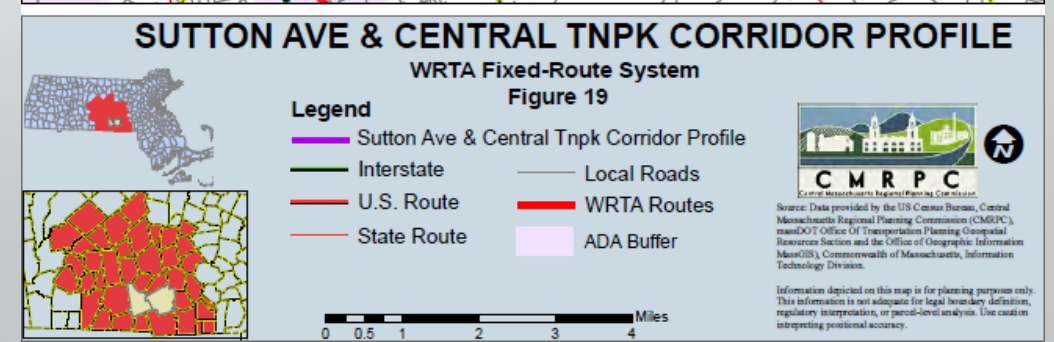
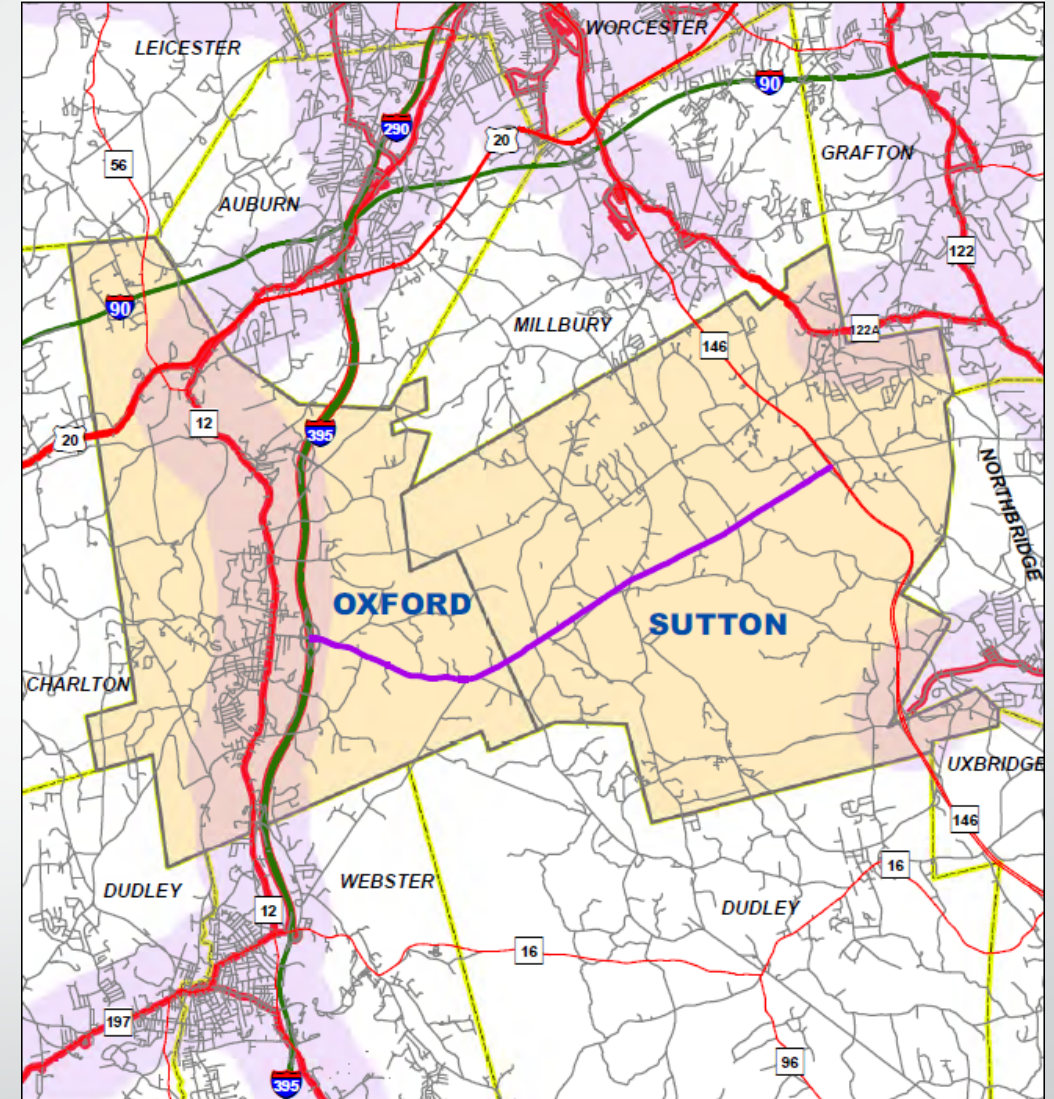
Table 15

Sutton Avenue & Central Turnpike Bridges

Host Community	MassDOT Bridge #	Facility Name (Over)	Facility Name (Under)	Year Built/ or Rebuilt	Structurally Deficient
Oxford	O-06-035	Sutton Avenue	Interstate 395	1973	No
Sutton	S-33-014	Central Turnpike	Route 146	1982	No

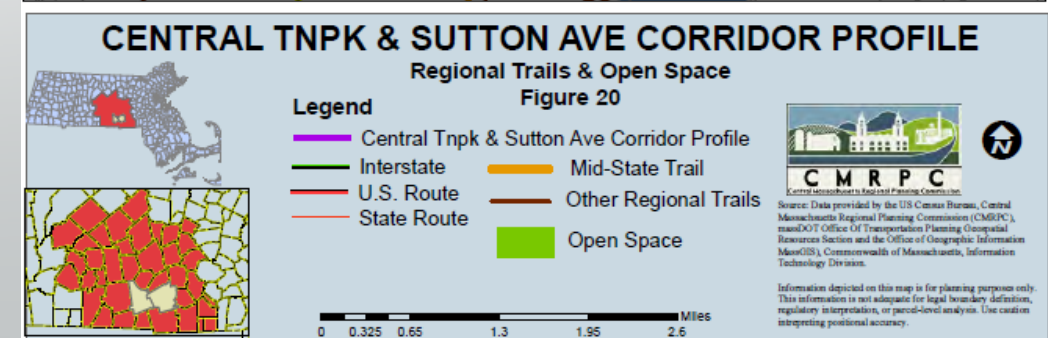
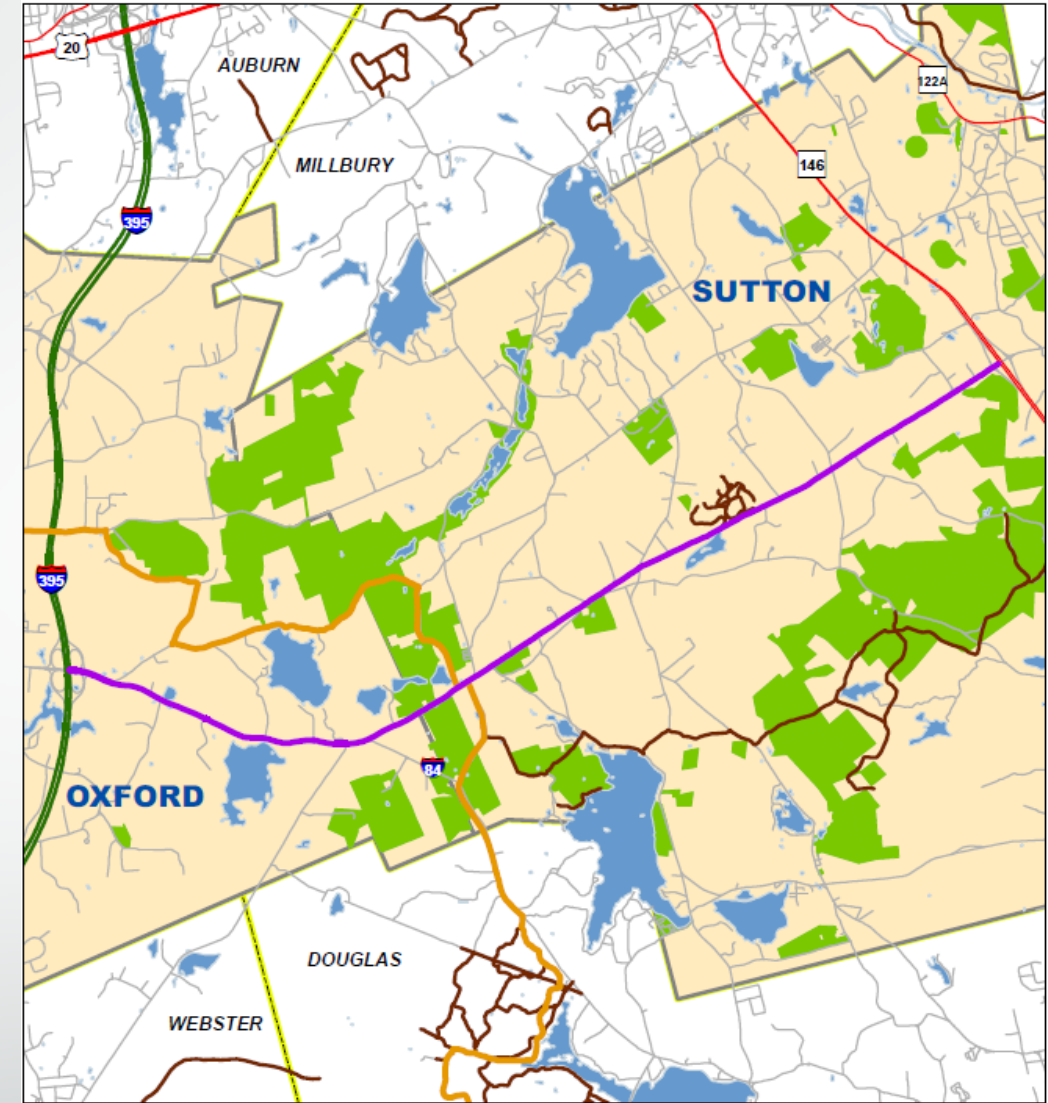
Chapter 7: Public Transportation

- WRTA Bus Service
- Transportation Network Companies (TNCs) Rideshare Data



Chapter 8: Other Modes

- Complete Streets
- Bicycling
- Pedestrians Facilities
- Trails



Chapter 9:

Overall Corridor Findings

- Focus Intersections
- Roadway Segments
- Performance Management



Chapter 10:

Suggested Improvement Options

CORRIDOR-WIDE SUGGESTED IMPROVEMENTS

- Trim trees and other vegetation that block the view of the traffic control signs and signals.
- Update worn and faded traffic control signs and periodically conduct sign maintenance.
- Upgrade worn and faded pavement markings.
- Assess condition of existing signage for tourist attractions. Add additional signage if needed.
- Install pedestrian crosswalks across the study corridor as needed.
- Upgrade or install new guard rails along the study corridor.
- Consider ITS applications along the study corridor.
- Consider improvements for bicycle & pedestrian accommodations. Add sidewalks where needed and widen roadway for bicycle safety.
- Maintain pavement in good condition. Conduct periodic maintenance. Improve any remaining road segments not newly paved.
- Monitor existing drainage structures and conduct periodic inspections.

Sutton Suggested Improvements

Central Turnpike / West Sutton Road

- Based on the current observed conditions there are no recommendations for this intersection at this time.

Central Turnpike / Putnam Hill Road

- There is a small section of pavement on the eastbound approach that should be repaired because of shoving and rutting of the pavement

Central Turnpike / Purgatory Road

- Based on the current observed conditions there are no recommendations for this intersection at this time.

Other Central Turnpike Locations

- If repair is not feasible, replace the two (2) identified severe barrier culverts. One is located just west of Fuller Road and the second is located just west of Alana Drive.

Jake-Brake Law

- It is unlawful for a driver of any motor vehicle to use, or to operate or to cause to be used or operated, at any time or on any street or road over which the town has jurisdiction, any mechanical exhaust or decompression device which results in the practice known as “engine-braking” or commonly known as “jake-braking”
- The town recently approved a local ordinance restricting the use of “jake-break” on local roads.

Truck Exclusion

- The restriction of heavy commercial vehicles from a specific roadway shall be reviewed and approved by MassDOT.
- A suitable alternate route must be available and must have an effective width and pavement structure which can safely accommodate the additional truck traffic.
- MassDOT criteria for potential truck exclusion must be satisfied.

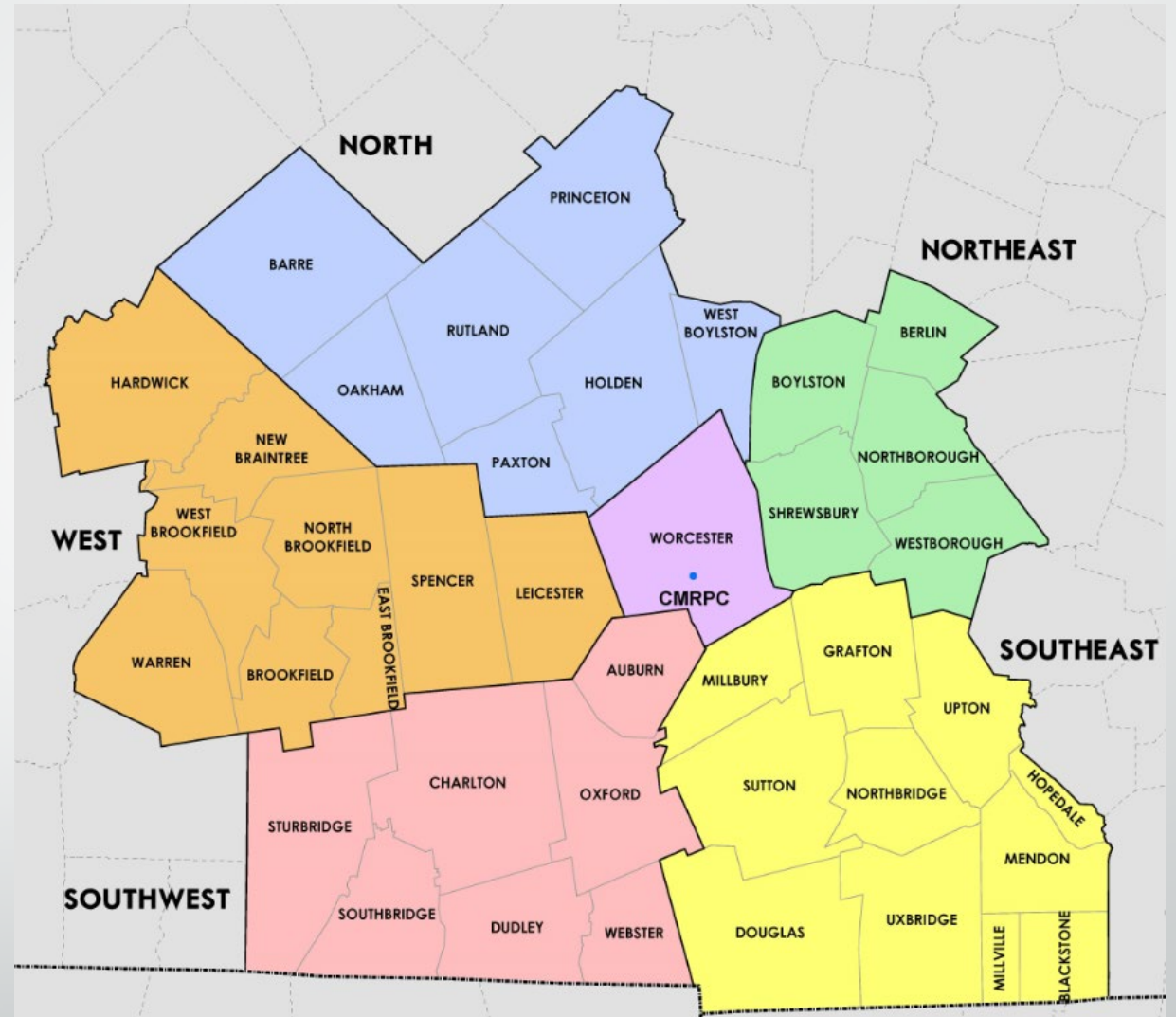


Central Mass Metropolitan
Planning Organization
(CMMPO) Southeast
Subregion Representative &
Alternate

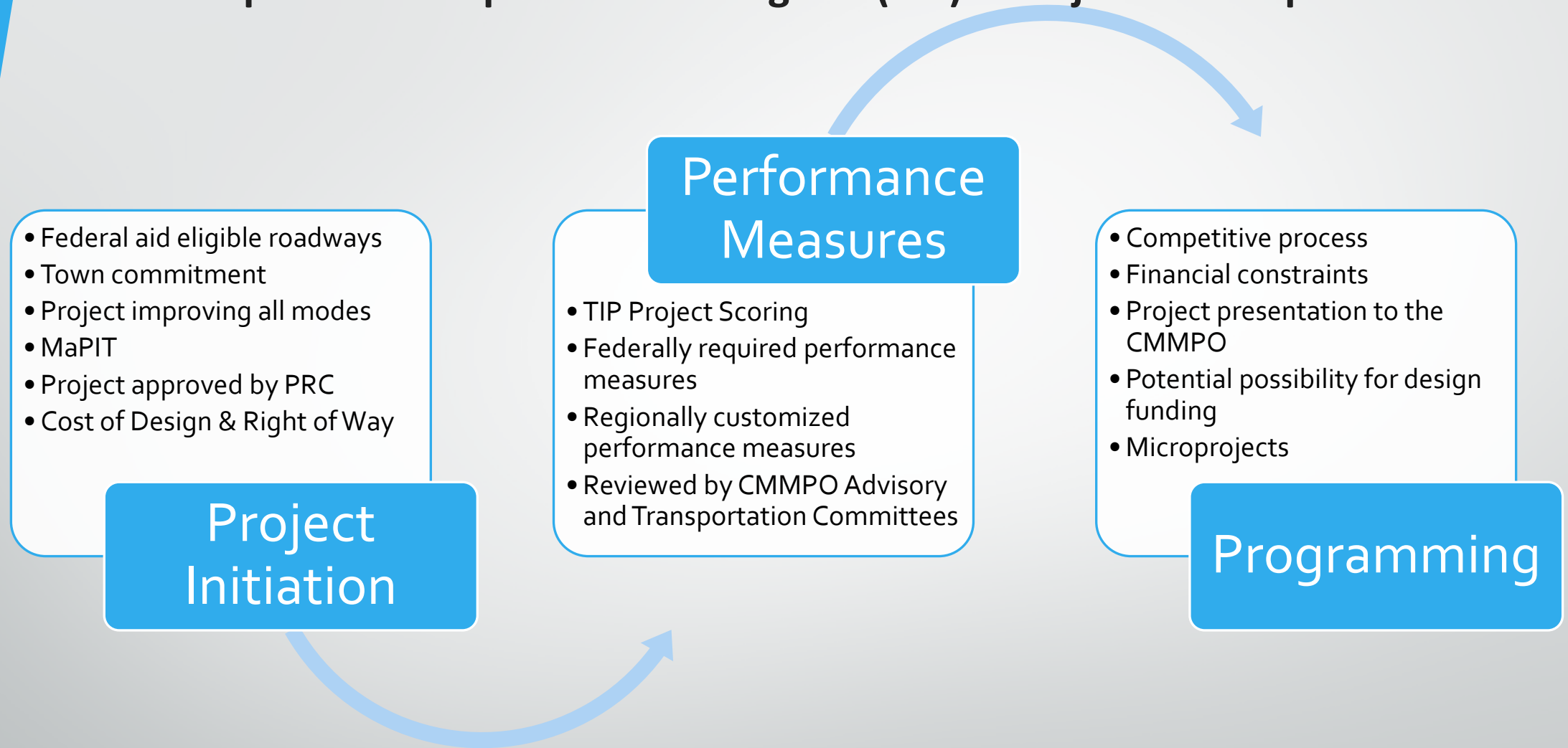
Jesse Limanek (Sutton)

&

Ann Marie Foley (Grafton)



Transportation Improvement Program (TIP) – Project Development



Amount of funding available to the communities per year: \$25M ~ \$31M

Timeframe from Project Initiation to Advertisement: ~6 years



SOUTHEAST SUBREGION TARGET PROJECTS

PROGRAMMED

- **Uxbridge** – Reconstruction of S. Main St. (Rt 122)
- **Upton** – Route 140 Culvert Replacement
- **Northbridge** – Intersection Improvements at Rt 122/Sutton St/School St/Upton St
- **Uxbridge** – Rehabilitation of Route 16 (Douglas St)

SUPPLEMENTAL

- **None**

PAST/CURRENT PROJECTS

- **Millbury** – Reconstruction of McCracken Rd/Greenwood St (2022)
- **Grafton** – Reclamation of Main Street (2021)
- **Upton** – Reconstruction of Hartford Ave N/High St (2020)
- **Uxbridge** – Reconstruction of North Main St (2019)
- **Upton** – Reconstruction of High St/Hopkinton Rd (2019)



Thank you!

Questions??