

**TECHNICAL APPENDIX**

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# 2050 Connections Brochure



# Overview

The Central Massachusetts Metropolitan Planning Organization (CMMPO) presents 2050 Connections, a comprehensive plan designed to address the transportation needs of the south/central Massachusetts planning region over the next 25 years. It emphasizes community engagement, performance-based planning, and financial sustainability for a connected and sustainable transportation system, fostering growth and enhancing quality of life.

# Vision

*CMMPO envisions a safe, efficient, and well-maintained multi-modal transportation system, integrating land use planning and economic development to improve people's lives.*

*CMMPO's vision for Central Massachusetts in 2050 is 40 well-connected, livable communities with reduced congestion, improved multi-modal mobility, and better air quality. Innovating transportation methods for seamless movement of people and goods between homes, jobs, and services.*

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# 2050 Connections

Long Range  
Transportation Plan  
for the  
Central  
Massachusetts  
Metropolitan Planning  
Organization

# 2050Connections Highlights



## Planning Areas, Modes, and Related Programmatic Areas

This chapter highlights the CMMPO's multi-modal transportation system, including current conditions and prioritized needs for each mode. It also covers key planning areas such as safety, congestion management, asset management, environmental planning, livability, and emerging technologies.



## Programs and Projects Prioritization

This chapter highlights data integration efforts and priority identification methods for the CMMPO's programmatic areas. It includes equity analysis, highway infrastructure improvements, and a summary of priorities for various transportation projects and initiatives.



## Financial Plan

This chapter focuses on the financial aspects of the plan, including funding scenarios, projected revenues and expenses for highway and transit projects, and summaries of funding sources. It emphasizes the importance of financial constraints and the effective utilization of available transportation funds.



## Air Quality and Greenhouse Gas Assessment

This final chapter addresses air quality conformity and greenhouse gas assessments, ensuring compliance with national standards and state requirements. It also includes an analysis of potential emissions impacts for major infrastructure projects, aligning with MassDOT's guidance.



## INTRODUCTION AND BACKGROUND

Overview of CMMPO's transportation vision, goals, and objectives, along with MassDOT's statewide plan "Beyond Mobility". It also covers the CMMPO's programmatic areas, federal and state guidance, and highlights public outreach and equity considerations.



## PLANNING CONSIDERATIONS AND RESOURCES

This chapter emphasizes public engagement efforts, including stakeholder meetings and outreach events. It summarizes the outcomes and equity considerations. It also covers performance measures, grant programs, MassDOT's statewide plans, and community priorities.



## TRANSPORTATION LINKAGES

This chapter explores transportation planning linkages, considering financial constraints and providing guidance. It presents population and employment projections, future planning scenarios, and linkages to CMRPC's IMAGINE 2050 effort, including Land Use, Economic Development, and Access to Essential Services.

## GOALS

- 1.Reduce Congestion and Improve Mobility for All Modes
- 2.Improve Safety and Security
- 3.Achieve a State of Good Repair
- 4.Increase Transportation Options and Promote Healthy Modes
- 5.Reduce Greenhouse Gas Emissions and Promote Sustainability
- 6.Ensure Equitable Transportation for All Populations
- 7.Enhance Economic Vitality and Freight Movement

Join us in building a sustainable, connected region with improved mobility and reduced congestion for all.





# Trasfondo

La Organización Metropolitana de Planificación de la región Central de Massachusetts (CMMPO, por sus siglas en Inglés) presenta 2050 Connections, un plan de transportación comprensivo diseñado para atender las necesidades de transportación de la región central de Massachusetts por los próximos 25 años. El plan enfatiza en la participación comunitaria, las medidas de desempeño del sistema de transportes y la sustentabilidad fiscal que apoye el crecimiento y mejore la calidad de vida de las personas en la región.

# Visión

*El CMMPO cree en un Sistema de transporte multimodal, Seguro, eficiente y bien mantenido en armonía con el uso de suelo y el desarrollo económico para mejorar la calidad de vida.*

*El CMMPO's visualiza una región de 40 comunidades en crecimiento, bien conectada y habitable, con menos congestión vehicular y una mejor calidad del aire. Modos de transporte saludables y creativos moverán a las personas de forma segura y eficiente y facilitaran el movimiento de bienes.*

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## Página web



# 2050 Connections

Plan de Transportación a Largo Plazo de la Organización Metropolitana de Planificación de la Región Central de Massachusetts



# 2050Connections



## Áreas de Planificación, Modos y Programas

Este capítulo incluye los modos de transporte y analiza las condiciones actuales, los datos y las necesidades. También incluye temas como seguridad, congestión vehicular, mantenimiento de la infraestructura, el medio ambiente y tecnologías emergentes.



## Prioridades de Programas y Proyectos

Explica el proceso de establecer prioridades y los métodos utilizados, incluyendo un análisis de equidad, medidas de desempeño, insumo comunitario y proyectos de impacto regional.



## Plan Económico

Este capítulo incluye los aspectos financieros del plan, incluyendo los escenarios financieros, ingresos y gastos proyectados para proyectos de autopistas y transporte público. Incluye un resumen de otros fondos disponibles en la región.



## Calidad del Aire y Evaluación de Gases de Efecto de Invernadero

Este capítulo incluye la evaluación y los aspectos de conformidad de la calidad del aire y asegura el cumplimiento con los requerimientos federales y estándares nacionales.



## Introducción y Trasfondo

Capítulo introductorio que presenta la visión del CMMPO, las metas y los objetivos del plan, e incluye información sobre el plan de MassDOT, "Beyond Mobility".



## Consideraciones de Planificación y Recursos

Para desarrollar el plan se tomaron en cuenta la información provista por los procesos participativos, las medidas de desempeño y aspectos de equidad. También se incluye un resumen de las políticas públicas y requerimientos provistos por MassDOT.



## Vínculos con la Transportación

Presenta las proyecciones de población y empleo que se utilizan en el análisis de escenarios. Además incluye una sección sobre IMAGINE 2050, el plan regional de CMRPC.

# METAS

1. Reducir la congestión y mejorar la movilidad
2. Mejorar la seguridad en el tránsito
3. Mantener el buen estado y funcionamiento de la infraestructura
4. Aumentar las opciones de transportes saludables
5. Reducir los gases de efecto de invernadero
6. Asegurar un sistema de transportación justo y equitativo
7. Mejorar la vitalidad económica y el movimiento de carga y acarreo

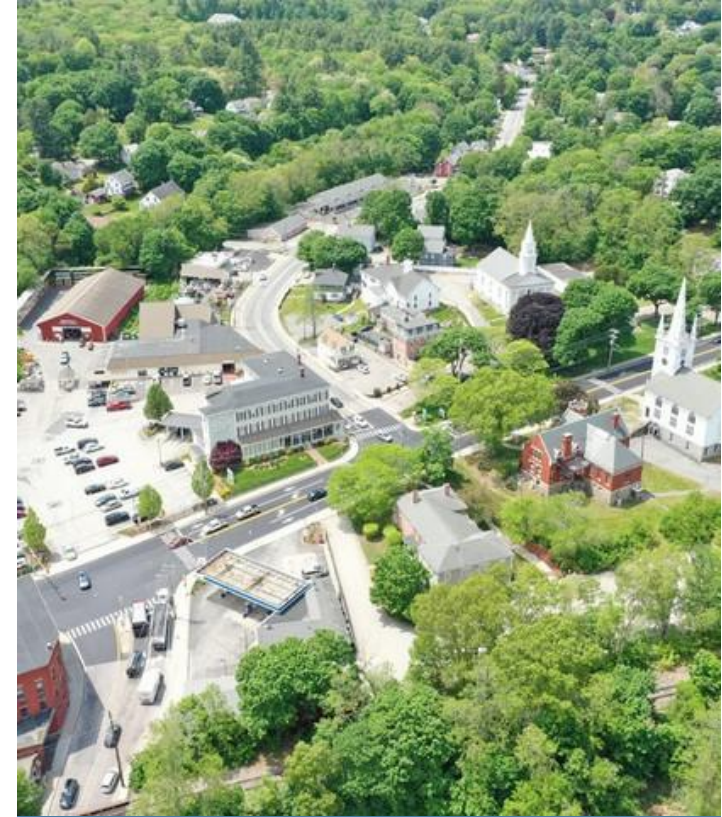
Trabajemos juntos para lograr una región sostenible, habitable, y conectada con opciones de movilidad y menos congestión vehicular.





# نظرة عامة

تقوم منظمة وسط ماساتشوستس للتخطيط الحضري (CMMPO) بتقديم 2050 إتصلاً، وهي خطة شاملة مصممة لتلبية إحتياجات النقل في منطقة التخطيط لجنوب/وسط ماساتشوستس على مدى السنوات الـ 25 المقبلة. وهي تؤكد على المشكلة المجتمعية، والتخطيط القائم على الأداء، والاستدامة المالية لنظام نقل متصل ومستدام مما يعزز النمو وتحسين جودة الحياة.



# رؤية

تتوخى CMMPO نظاماً للنقل متعدد الوسائط آمناً وفعالاً وحسن الصيانة، ليدمج تخطيط استخدام الأراضي والتنمية الاقتصادية لتحسين حياة الناس.

تتمثل رؤية CMMPO لوسط ماساتشوستس لعام 2050 في 40 مجتمعاً متصلاً جيداً وصالحاً للعيش مع تقليل الازدحام وتحسين التنقل متعدد الوسائط وتحسين جودة الهواء. ابتكار طرق النقل للتنقل السلس للأشخاص والسلع بين المنازل والوظائف والخدمات.

# 2050

# إتصالات

خطة النقل

طويلة المدى

لمنظمة

وسط ماساتشوستس

للتخطيط الحضري

# إتصل بنا

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موقع إلكتروني





# تسليط الضوء على 2050 إتصالات

## المقدمة

## والخلفية

نظرة عامة على رؤية وأهداف وغايات النقل لمنظمة CMMPO، جنباً إلى جنب مع خطة MassDOT على مستوى الولاية تحت عنوان «ما وراء التنقل - Beyond Mobility». كما يغطي المجالات البرامجية لمنظمة CMMPO والتوجيه الفيدرالي والولائي، ويسلط الضوء على توعية الجمهور وإعتبرات العدالة.

## تخطيط الإعتبرات

## والموارد

يركز هذا الفصل على جهود مشاركة الجمهور بما في ذلك إجتماعات أصحاب المصلحة وأنشطة التوعية. و يلخص النتائج وإعتبرات العدالة. كما يغطي مقاييس الأداء، و برامج المنح، و خطط MassDOT على مستوى الولاية وأولويات المجتمع.

## ترابط المواصلات

يستكشف هذا الفصل الروابط بين تخطيط النقل مع مراعاة القيود المالية وتقديم التوجيه. و يقدم توقعات السكان والعمالة، وسيناريوهات التخطيط المستقبلية، والروابط بجهود IMAGINE 2050 التي تبذلها الـ CMRPC، بما في ذلك إستخدام الأراضي، والتنمية الاقتصادية، والوصول إلى الخدمات الأساسية.

## مجالات التخطيط والأوضاع والمجالات

## البرامجية ذات الصلة



يسلط هذا الفصل الضوء على نظام النقل متعدد الوسائط التابع لـ CMMPO بما في ذلك الظروف الحالية والاحتياجات ذات الأولوية لكل وضع. كما يغطي مجالات التخطيط الرئيسية مثل السلامة وإدارة الازدحام وإدارة الأصول والتخطيط البيئي وقابلية العيش والتقنيات الناشئة.

## أولويات البرامج والمشاريع

يسلط هذا الفصل الضوء على نظام النقل متعدد الوسائط التابع لـ CMMPO بما في ذلك الظروف الحالية والاحتياجات ذات الأولوية لكل وضع. كما يغطي مجالات التخطيط الرئيسية مثل السلامة وإدارة الازدحام وإدارة الأصول والتخطيط البيئي وقابلية العيش والتقنيات الناشئة.

## الخطة المالية



يركز هذا الفصل على الجوانب المالية للخطة بما في ذلك سيناريوهات التمويل والإيرادات والنفقات المتوقعة لمشاريع الطرق السريعة والعبور وملخصات مصادر التمويل. ويؤكد على أهمية القيود المالية والإستخدام الفعال لأموال النقل المتاحة.

## جودة الهواء وتقييم الغازات المسببة

## للاحتباس الحراري

يتناول هذا الفصل الأخير مطابقة جودة الهواء وتقييمات غازات الاحتباس الحراري مما يضمن الامتثال للمعايير الوطنية ومتطلبات الدولة. كما يتضمن تحليلاً لتأثيرات الانبعاثات المحتملة لمشاريع البنية التحتية الكبرى بما يتماشى مع إرشادات MassDOT.

## الأهداف

1. الحد من الازدحام وتحسين التنقل لجميع الأوضاع
2. تحسين الأمن والسلامة
3. تحقيق حالة إصلاح جيدة
4. زيادة خيارات النقل وتعزيز الأوضاع الصحية
5. تقليل انبعاثات غازات الاحتباس الحراري وتعزيز الاستدامة
6. ضمان النقل العادل لجميع السكان
7. تعزيز الحيوية الاقتصادية وحركة الشحن

إنضم إلينا

في بناء منطقة مستدامة ومتصلة مع تحسين التنقل وتقليل الازدحام للجميع.





# 概述

马萨诸塞州中部大都市规划组织 (CMMPO) 提出了 2050

Connections (2050 交通)，这是一项旨在满足未来 25 年马萨诸塞州南部/中部规划区域交通需求的综合计划。它强调社区参与、基于绩效的规划和财务可持续性，以建立一个连通和可持续的交通系统，促进增长并提高生活质量。



# 愿景

CMMPO 设想了一个安全、高效和维护良好的多式联运系统，集土地利用规划和经济发展于一体，改善人民生活。

CMMPO 对马萨诸塞州中部的愿景是，到 2050 年，打造 40 个交通便利、宜居的社区，减少拥堵，改进多式联运交通，改善空气质量。多种创新交通方式，实现家庭、工作和服务之间人员和货物的无缝流动。



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# 2050

# Connections

马萨诸塞州中部大都市  
规划组织  
长期交通计划



# 2050 Connections

## (2050 交通) 亮点



### 简介和背景

概述 CMMPO 的交通愿景，目标和目的，以及 MassDOT 的全州计划 **Beyond Mobility**（超越交通）。它还涵盖了 CMMPO 的计划领域、联邦和州的指导意见，并强调了公共宣传和公平性方面的考虑因素。



### 规划考虑因素 和资源

本章强调公众参与工作，包括利益相关者会议和外展活动。它总结了成果和公平考虑因素。它还涵盖了绩效衡量标准、拨款计划、MassDOT 的全州计划和社区优先事项。



### 交通联系

本章探讨了交通规划之间的联系，考虑了财务限制并提供了指导。它介绍了人口和就业预测、未来规划方案以及与 CMRPC 的 **IMAGINE 2050** 工作的联系，包括土地利用、经济发展和获得基本服务。



### 规划区、模式和相关计划区域

本章重点介绍 CMMPO 的多式联运系统，包括每种模式的当前条件和优先需求。它还涵盖了关键规划领域，如安全、拥堵管理、资产管理、环境规划、宜居性和新兴技术。



### 计划和项目优先级

本章重点介绍 CMMPO 计划领域的数据整合工作和优先级确定方法。它包括公平性分析、高速公路基础设施的改善以及各种交通项目和举措的优先级摘要。



### 财务计划

本章重点介绍该计划的财务方面，包括供资方案、公路和交通项目的预计收入和支出以及资金来源摘要。它强调财政限制和有效利用可用交通资金的重要性。



### 空气质量与温室气体评估

最后一章涉及空气质量合格性和温室气体评估，确保符合国家标准和国家要求。它还包括对主要基础设施项目潜在排放影响的分析，与 MassDOT 的指导保持一致。



## 目标

1. 减少拥堵并提高所有交通模式
2. 提高安全性
3. 达到良好的维修状态
4. 增加交通选择，推广健康模式
5. 减少温室气体排放，促进可持续发展
6. 确保所有人口的公平交通
7. 增强经济活力和货运

加入我们，建设一个可持续的，  
互联区域，为所有人改善交通、减少拥堵。



# Aperçu

La Central Massachusetts Metropolitan Planning Organization (CMMPO) présente 2050 Connections, un plan global conçu pour répondre aux besoins de transport de la région de planification du sud et du centre du Massachusetts au cours des 25 prochaines années. Elle met l'accent sur l'engagement communautaire, la planification basée sur les performances et la viabilité financière pour un système de transport connecté et durable, favorisant la croissance et améliorant la qualité de vie.

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## Vision



La CMMPO envisage un système de transport multimodal sûr, efficace et bien entretenu, intégrant l'aménagement du territoire et le développement économique afin d'améliorer la vie des gens.

La vision de la CMMPO pour le Massachusetts du centre en 2050 comprend 40 communautés bien connectées où il fait bon vivre, avec une réduction des embouteillages, une amélioration de la mobilité multimodale et une meilleure qualité de l'air. Des moyens de transport innovants pour une circulation fluide des personnes et des marchandises entre les domiciles, les lieux de travail et les services.

# 2050 Connections

Plan de transport à  
grandes distances  
pour la  
Central  
Massachusetts  
Metropolitan Planning  
Organization





# Aspects essentiels de 2050 Connections



## Domaines de planification, modes de transport et domaines programmatiques connexes

Ce chapitre présente le système de transport multimodal de la CMMPO, y compris les conditions actuelles, ainsi que les besoins prioritaires pour chaque mode de transport. Il couvre également des domaines de planification clés tels que la sécurité, la gestion des embouteillages, la gestion des actifs, la planification environnementale, l'habitabilité et les technologies émergentes.



## Priorité des programmes et projets

Ce chapitre présente les efforts d'intégration des données et les méthodes d'identification des priorités pour les domaines programmatiques de la CMMPO. Il comprend une analyse de l'équité, des améliorations de l'infrastructure routière et un résumé des priorités pour divers projets et initiatives de transport.



## Plan financier

Ce chapitre se concentre sur les aspects financiers du plan, y compris les scénarios de financement, les recettes et les dépenses prévues pour les projets routiers et de transport en commun, et les résumés des sources de financement. Il souligne l'importance des contraintes financières et de l'utilisation efficace des fonds disponibles pour le transport.



## Évaluation de la qualité de l'air et des gaz à effet de serre

Ce dernier chapitre porte sur la conformité de la qualité de l'air et l'évaluation des gaz à effet de serre, en veillant au respect des normes nationales et des exigences de l'État. Il comprend également une analyse des incidences potentielles des émissions pour les grands projets d'infrastructure, conformément aux orientations de MassDOT.



## INTRODUCTION ET CONTEXTE

Aperçu de la vision, des buts et des objectifs de la CMMPO en matière de transport, ainsi que du plan de MassDOT « Beyond Mobility » à l'échelle de l'État. Il couvre également les domaines programmatiques de la CMMPO, les orientations fédérales et de l'État, et met l'accent sur la sensibilisation du public et les considérations d'équité.



## CONSIDÉRATIONS DE PLANIFICATION ET RESSOURCES

Ce chapitre met l'accent sur les efforts d'engagement du public, y compris les réunions des parties prenantes et les événements de sensibilisation. Il résume les résultats et les considérations d'équité. Il porte également sur les mesures de performance, les programmes de subvention, les plans de MassDOT au niveau de l'État et les priorités de la communauté.



## LIENS DE TRANSPORT

Ce chapitre explore les liens des plans de transport, en tenant compte des contraintes financières et en fournissant des orientations. Il présente les projections de population et d'emploi, les scénarios de planification future et les liens avec l'initiative IMAGINE 2050 de la CMRPC, y compris l'utilisation des terres, le développement économique et l'accès aux services essentiels.

# OBJECTIFS

1. Réduire les embouteillages et améliorer la mobilité pour tous les modes de transport
2. Améliorer la sécurité
3. Atteindre un état de bon fonctionnement
4. Augmenter les options de transport et promouvoir des modes de transport sains
5. Réduire les émissions de gaz à effet de serre et promouvoir la durabilité
6. Assurer un transport équitable pour toutes les populations
7. Améliorer la vitalité économique et l'acheminement des frets

Rejoignez-nous pour construire une région durable, connectée avec une mobilité améliorée et une réduction des embouteillages pour tous.





# Informacje ogólne

Organizacja Planowania Metropolitalnego Środkowego Massachusetts (CMMPO) przedstawia 2050 Connections, kompleksowy plan mający na celu zaspokojenie potrzeb transportowych południowo-środkowego regionu planowania Massachusetts w ciągu najbliższych 25 lat. Kładzie on nacisk na zaangażowanie społeczności, planowanie oparte na wynikach oraz stabilność finansową dla połączonego i zrównoważonego systemu transportu, wspierania rozwoju i poprawy jakości życia.

## Wizja

CMMPO przewiduje bezpieczny, wydajny i dobrze utrzymany multimodalny system transportowy, integrujący planowanie przestrzenne i rozwój gospodarczy w celu poprawy jakości życia.

Wizja CMMPO dla Centralnego Massachusetts w 2050 r. to 40 dobrze

skomunikowanych, przyjaznych mieszkańcom społeczności o zmniejszonym natężeniu ruchu, lepszej mobilności multi-modalnej oraz lepszej jakości powietrza.

Innowacyjne metody transportu zapewniające bezproblemowy przepływ osób i towarów między domami, miejscami pracy i usługami.

## Skontaktuj się z nami

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# 2050 Connections

Plan transportu dalekiego zasięgu dla Organizacji Planowania Metropolitalnego Środkowego Massachusetts

# 2050 Connections – podsumowanie



## WPROWADZENIE I KONTEKST

Przegląd wizji, celów i zadań transportowych CMMPO, a także ogólnostanowego planu MassDOT „Beyond Mobility”. Uwzględniono również obszary programowe CMMPO oraz wytyczne federalne i stanowe, a ponadto zwrócono szczególną uwagę na komunikację ze społecznościami oraz problemy związane z równością.



## PLANOWANIE I ZASOBY

W tym rozdziale podkreślono starania związane z angażowaniem społeczności, w tym spotkania z interesariuszami i wydarzenia informacyjne. Podsumowuje on osiągnięte rezultaty oraz kwestie związane z równością. Omówiono także miary efektywności, programy dotacji, ogólnostanowe plany MassDOT oraz priorytety społeczności.



## POWIĄZANIA TRANSPORTOWE

W tym rozdziale przeanalizowano powiązania planowania transportu, biorąc pod uwagę ograniczenia finansowe oraz przedstawiając wytyczne. Zaprezentowano tu prognozy dotyczące liczby ludności i zatrudnienia, przyszłe scenariusze planowania oraz powiązania z działaniami CMRPC IMAGINE 2050, w tym w zakresie użytkowania gruntów, rozwoju gospodarczego oraz dostępu do podstawowych usług.



## Obszary planowania, rodzaje transportu i powiązane obszary programowe

W tym rozdziale zwrócono szczególną uwagę na multimodalny system transportowy CMMPO, w tym aktualne warunki i priorytetowe potrzeby dla każdego z rodzajów transportu. Omówiono również kluczowe obszary planowania, takie jak bezpieczeństwo, zarządzanie zatorami, zarządzanie majątkiem, planowanie środowiskowe, komfort życia i nowe technologie.



## Priorytety programów i projektów

W tym rozdziale zwrócono uwagę na starania związane z integracją danych oraz metody identyfikacji priorytetów dla obszarów programowych CMMPO. Obejmuje on takie tematy, jak analiza równościowa, ulepszenia infrastruktury dróg publicznych oraz podsumowanie priorytetów dla różnych projektów i inicjatyw transportowych.



## Plan finansowy

Ten rozdział koncentruje się na finansowych aspektach planu, w tym scenariuszach finansowania oraz prognozowanych przychodach i wydatkach na projekty związane z głównymi drogami publicznymi i tranzytem, a ponadto podsumowuje źródła finansowania. Podkreśla on znaczenie ograniczeń finansowych oraz efektywnego wykorzystania dostępnych funduszy transportowych.



## Ocena jakości powietrza oraz emisji gazów cieplarnianych

Ostatni rozdział dotyczy oceny zgodności jakości powietrza i emisji gazów cieplarnianych z normami krajowymi i wymogami stanowymi oraz sposobów jej zapewniania. Zawiera on również zgodną z wytycznymi MassDOT analizę potencjalnego wpływu na emisje dużych projektów infrastrukturalnych.



## CELE

1. Zmniejszenie zatorów i poprawa mobilności dla wszystkich rodzajów transportu
2. Poprawa bezpieczeństwa
3. Osiągnięcie dobrego stanu technicznego
4. Zwiększenie dostępności różnych opcji transportowych oraz promocja zdrowych środków transportu
5. Zmniejszenie emisji gazów cieplarnianych i promowanie zrównoważonego rozwoju
6. Zapewnienie równości w dostępie do transportu dla wszystkich populacji
7. Zwiększenie żywotności gospodarczej i ruchu towarowego

Dołącz do nas w budowaniu zrównoważonego, połączonego regionu z lepszą mobilnością i zmniejszonym zagęszczeniem ruchu dla wszystkich.





# Sumário

A Central Massachusetts Metropolitan Planning Organization (CMMPO – *Organização de Planejamento Metropolitano Central de Massachusetts*) apresenta o 2050 Connections, um plano abrangente elaborado para abordar as necessidades de transporte da região de planejamento sul/central de Massachusetts durante os próximos 25 anos. Ela dá ênfase ao engajamento da comunidade, ao planejamento baseado no desempenho e à sustentabilidade financeira para um sistema de transporte conectado e sustentável, promovendo o crescimento e melhorando a qualidade de vida.

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## Visão

A CMMPO prevê um sistema de transporte multimodal seguro, eficiente e bem conservado, integrando o planejamento do uso do solo e o desenvolvimento econômico para melhorar as vidas das pessoas.

A visão da CMMPO para Massachusetts Central em 2050 consiste em 40 comunidades acolhedoras e bem conectadas com congestionamento reduzido, mobilidade multimodal aprimorada e melhor qualidade do ar. E a inovação dos métodos de transporte para o deslocamento uniforme de pessoas e mercadorias entre casa, trabalho e serviço.

# 2050 Connections

Plano de Transporte de Longa Distância para a Central Massachusetts Metropolitan Planning Organization

# Destaques do 2050 Connections



## Áreas de planejamento, modais e áreas programáticas relacionadas

Este capítulo ressalta o sistema de transporte multimodal da CMMPO, inclusive as atuais condições e necessidades prioritizadas para cada modal. Ele também cobre as principais áreas de planejamento como segurança, gerenciamento de congestionamento, gestão de ativos, planejamento ambiental, habitabilidade e tecnologias emergentes.



## Priorização de programas e projetos

Este capítulo ressalta os esforços de integração de dados e os métodos prioritários de identificação para as áreas programáticas da CMMPO. Ele inclui análise de patrimônio, melhorias na infraestrutura rodoviária e um resumo das prioridades para vários projetos e iniciativas de transporte.



## Plano financeiro

Este capítulo se concentra nos aspectos financeiros do plano, incluindo cenários de financiamento, receitas e despesas projetadas para projetos rodoviários e de trânsito, e resume as fontes de financiamento. Ele ressalta a importância das limitações financeiras e a utilização eficaz dos fundos de transporte disponíveis.



## Avaliação da qualidade do ar e das emissões dos gases do efeito estufa

Este capítulo final aborda a conformidade da qualidade do ar e as avaliações dos gases do efeito estufa, assegurando a observância de normas nacionais e requisitos estaduais. Ele também inclui uma análise dos impactos potenciais das emissões para os principais projetos de infraestrutura, alinhando-se com a orientação do MassDOT.



## INTRODUÇÃO E HISTÓRICO

Sumário da visão, metas e objetivos de transporte da CMMPO, junto com o plano "Beyond Mobility" [*Além da Mobilidade*] em todo o estado do MassDOT [*Dept. Transporte de Massachusetts*]. Ele também cobre áreas programáticas da CMMPO, orientação federal e estadual, e dá destaque a considerações de alcance público e equidade.



## CONSIDERAÇÕES E RECURSOS DO PLANEJAMENTO

Este capítulo ressalta os esforços do engajamento público, incluindo reuniões das partes interessadas e eventos de divulgação. Ele resume os resultados e as considerações de equidade. E também cobre medidas de desempenho, programas de subsídio, planos do MassDOT em todo o estado e prioridades da comunidade.



## LIGAÇÕES DE TRANSPORTE

Este capítulo explora as ligações do planejamento de transporte, levando em conta as limitações financeiras e fornecendo orientação. Ele apresenta projeções de população e emprego, futuros cenários de planejamento e ligações ao esforço IMAGINE 2050 da CMRPC, inclusive uso do solo, desenvolvimento econômico e acesso a serviços essenciais.



## OBJETIVOS

1. Reduzir o congestionamento e melhorar a mobilidade para todos os modais
2. Melhorar a segurança e a proteção
3. Obter um bom estado de conservação
4. Aumentar as opções de transporte e promover modais saudáveis
5. Reduzir as emissões de gases do efeito estufa e promover a sustentabilidade
6. Assegurar transporte justo para toda a população
7. Intensificar a vitalidade econômica e a movimentação do frete

Junte-se a nós na construção de uma região sustentável e conectada com mobilidade aprimorada e congestionamento reduzido para todos.





# Muhtasari

Shirika la Mipango ya Metropolitan ya Massachusetts (CMMPO) linawasilisha Viunganisho vya 2050, mpango wa kina ulioundwa kushughulikia mahitaji ya usafirishaji wa eneo la kupanga la kusini/kati la Massachusetts kwa muda wa miaka 25 ijayo. Inasisitiza ushirikishwaji wa jamii, upangaji wa msingi wa utendaji, na uendeleu wa kifedha kwa mfumo uliunganishwa na uendeleu wa usafirishaji, kukuza ukuaji na kuimarisha ubora wa maisha.

# Maono

CMMPO inatazamia kuwa na mfumo salama, bora na unaodumishwa vyema wa uchukuzi wa njia nyingi, kuunganisha mipango ya matumizi ya ardhi na maendeleo ya kiuchumi ili kuboresha maisha ya watu. Maono ya CMMPO kwa Massachusetts ya Kati mwaka wa 2050 ni jumuiya 40 zilizounganishwa vyema, zinazoweza kuishi na zilizopunguzwa msongamano, uhamaji ulioboreshwa wa njia nyingi na ubora bora wa hewa. Kubuni mbinu za usafiri za usafirishaji wa watu na bidhaa bila mshono kati ya nyumba, kazi na huduma.

# Wasiliana nasi

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## Tovuti



# Viunganisho vya 2050

Mpango wa Usafiri wa Masafa Marefu kwa Shirika la Mipango ya Metropolitan ya Kati ya Massachusetts



# Viunganisho vya 2050 Vivutio



## Maeneo ya Kupanga, Njia, na Maeneo Husika ya Kiprogramu

Sura hii inaangazia mfumo wa usafiri wa aina mbalimbali wa CMMPO, ikijumuisha hali ya sasa na mahitaji yaliyopewa kipaumbele kwa kila hali. Pia inashughulikia maeneo muhimu ya kupanga kama vile usalama, usimamizi wa msongamano, usimamizi wa mali, upangaji wa mazingira, uwezo wa kuishi, na teknolojia zinazoibuka.



## Uwekaji kipaumbele wa Mipango na Miradi

Sura hii inaangazia juhudi za ujumuishaji wa data na mbinu za utambuzi wa kipaumbele kwa maeneo ya programu ya CMMPO. Inajumuisha uchambuzi wa usawa, uboreshaji wa miundombinu ya barabara kuu, na muhtasari wa vipaumbele vya miradi na mipango mbalimbali ya usafiri.



## Mpango wa Fedha

Sura hii inaangazia vipengele vya kifedha vya mpango, ikiwa ni pamoja na hali ya ufadhili, makadirio ya mapato na gharama za miradi ya barabara kuu na za uchukuzi, na muhtasari wa vyanzo vya ufadhili. Inasisitiza umuhimu wa vikwazo vya kifedha na matumizi bora ya fedha zinazopatikana za usafiri.



## Tathmini ya Uboora wa Hewa na Gesi ya Joto

Sura hii ya mwisho inashughulikia ulinganifu wa ubora wa hewa na tathmini za gesi chafuzi, kuhakikisha utiifu wa viwango vya kitaifa na mahitaji ya serikali. Pia inajumuisha uchanganuzi wa athari zinazowezekana za uzalishaji kwa miradi mikubwa ya miundombinu, ikiambatana na mwongozo wa MassDOT.



## UTANGULIZI NA USULI

Muhtasari wa maono ya usafiri ya CMMPO, malengo, na malengo, pamoja na mpango wa jimbo zima wa MassDOT "Beyond Mobility". Pia inashughulikia maeneo ya kiprogramu ya CMMPO, mwongozo wa serikali na jimbo, na inaangazia masuala ya ufikiaji wa umma na usawa.



## KUZINGATIA MIPANGO NA RASILIMALI

Sura hii inasisitiza juhudi za kushirikisha umma, ikijumuisha mikutano ya washikadau na matukio ya kuwafikia. Inatoa muhtasari wa matokeo na mazingatio ya usawa. Pia inashughulikia hatua za utendaji, programu za ruzuku, mipango ya jimbo zima la MassDOT, na vipaumbele vya jamii.



## VIUNGO VYA USAFIRI

Sura hii inachunguza miunganisho ya upangaji wa usafiri, ikizingatia vikwazo vya kifedha na kutoa mwongozo. Inatoa makadirio ya idadi ya watu na ajira, matukio ya upangaji wa siku zijazo, na uhusiano na juhudi za CMRPC IMAGINE 2050, ikijumuisha Matumizi ya Ardhi, Maendeleo ya Kiuchumi, na Upatikanaji wa Huduma Muhimu.



# MALENGO

1. Kupunguza Msongamano na Kuboresha Uhamaji kwa Njia Zote
2. Kuboresha Usalama na Dhamana
3. Kufikia Hali ya Urekebishaji Mzuri
4. Kuongeza Chaguo za Usafiri na Kukuza Njia za Afya
5. Kupunguza Uzalishaji wa Gesi Joto na Kukuza Uendelevu
6. Kuhakikisha Usafiri Sawa kwa Watu Wote
7. Kuimarisha Uhai wa Kiuchumi na Mwendo wa Mizigo

Jiunge nasi katika kujenga eneo endelevu, lililounganishwa na uhamaji ulioboreshwa na kupunguza msongamano kwa wote.



# Sơ lược

Tổ chức Quy hoạch đô thị trung tâm Massachusetts (CMMPO) giới thiệu Connections 2050, một kế hoạch toàn diện được thiết kế để giải quyết nhu cầu vận chuyển của khu vực quy hoạch phía nam/trung tâm Massachusetts trong 25 năm tới. Kế hoạch nhấn mạnh sự tham gia của cộng đồng, lập kế hoạch dựa trên hiệu suất và tính bền vững về tài chính cho một hệ thống giao thông vận tải kết nối và bền vững, thúc đẩy tăng trưởng và nâng cao chất lượng cuộc sống.

# Tầm nhìn

*CMMPO hình dung ra một hệ thống giao thông đa phương thức an toàn, hiệu quả và được bảo trì tốt, tích hợp quy hoạch sử dụng đất và phát triển kinh tế để cải thiện cuộc sống của người dân.*

*Tầm nhìn của CMMPO về các cộng đồng đáng sống, được kết nối ở trung tâm với việc giảm tắc nghẽn, cải thiện khả năng di chuyển đa phương thức và chất lượng không khí tốt hơn. Đổi mới các phương thức vận chuyển để người và hàng hóa di chuyển dễ dàng cho các hộ gia đình, công việc và dịch vụ.*

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# 2050 Connections

Kế hoạch vận chuyển  
tầm xa của Tổ chức  
quy hoạch đô thị trung  
tâm Massachusetts





# Những điểm nổi bật của Kế hoạch Connections 2050



## Khu vực, Phương thức lập kế hoạch và Khu vực lập chương trình liên quan

Chương này nêu bật hệ thống vận tải đa phương thức của CMMPO, bao gồm các điều kiện hiện tại và nhu cầu ưu tiên cho từng phương thức. Đồng thời bao gồm các lĩnh vực quy hoạch chính như an toàn, kiểm soát tắc nghẽn, quản lý tài sản, quy hoạch môi trường, khả năng sinh sống và các công nghệ mới nổi.



## Ưu tiên Chương trình và Dự án

Chương này nêu bật các nỗ lực tích hợp dữ liệu và các phương pháp xác định ưu tiên cho các lĩnh vực lập chương trình của CMMPO. Bao gồm phân tích vốn chủ sở hữu, cải thiện cơ sở hạ tầng đường cao tốc và tóm tắt các ưu tiên cho các dự án và sáng kiến giao thông khác nhau.



## Kế hoạch tài chính

Chương này tập trung vào các khía cạnh tài chính của kế hoạch, bao gồm các kịch bản tài trợ, doanh thu và chi phí dự kiến cho các dự án đường cao tốc và quá cảnh, và tóm tắt các nguồn tài trợ. Kế hoạch nhấn mạnh tầm quan trọng của những hạn chế về tài chính và việc sử dụng hiệu quả các quỹ vận tải sẵn có.



## Đánh giá chất lượng không khí và khí nhà kính

Chương cuối cùng này đề cập đến các đánh giá phù hợp về chất lượng không khí và khí nhà kính, đảm bảo tuân thủ các tiêu chuẩn quốc gia và yêu cầu của tiểu bang. Kế hoạch cũng bao gồm phân tích về các tác động phát thải tiềm năng đối với các dự án cơ sở hạ tầng lớn, phù hợp với hướng dẫn của MassDOT.



## GIỚI THIỆU VÀ THÔNG TIN TỔNG QUÁT

Tổng quan về tầm nhìn, mục đích và mục tiêu giao thông vận tải của CMMPO, cùng với kế hoạch toàn tiểu bang của MassDOT "Hơn cả sự chuyển dịch". Kế hoạch cũng bao gồm các lĩnh vực lập chương trình của CMMPO, hướng dẫn của liên bang và tiểu bang, đồng thời nêu bật các cân nhắc về cách tiếp cận cộng đồng và công bằng.



## CÂN NHẮC TRONG VIỆC LẬP KẾ HOẠCH VÀ NGUỒN LỰC

Chương này nhấn mạnh các nỗ lực thu hút sự tham gia của cộng đồng, bao gồm các cuộc họp của các bên liên quan và các sự kiện tiếp cận cộng đồng. Chương này tóm tắt các kết quả và cân nhắc sự công bằng. Đồng thời bao gồm các biện pháp thực hiện, các chương trình tài trợ, các kế hoạch toàn tiểu bang của MassDOT và các ưu tiên của cộng đồng.



## KẾ NỐI VẬN CHUYỂN

Chương này tìm hiểu sự liên kết trong quy hoạch giao thông vận tải, xem xét các hạn chế về tài chính và cung cấp hướng dẫn. Phần này trình bày các dự báo về dân số và việc làm, các kịch bản lập kế hoạch trong tương lai và các liên kết với nỗ lực IMAGINE 2050 của CMRPC, bao gồm Sử dụng đất, Phát triển kinh tế và Tiếp cận các dịch vụ thiết yếu.

# MỤC TIÊU

1. Giảm tắc nghẽn và cải thiện tính linh động cho mọi phương thức
2. Cải thiện an toàn và an ninh
3. Đạt được trạng thái sửa chữa tốt
4. Tăng sự lựa chọn phương tiện giao thông và thúc đẩy các phương thức lành mạnh
5. Giảm phát thải khí nhà kính và thúc đẩy tính bền vững
6. Đảm bảo giao thông công bằng cho mọi người dân
7. Tăng cường sức khỏe của nền kinh tế và vận chuyển hàng hóa

Hãy tham gia cùng chúng tôi xây dựng một khu vực kết nối, bền vững với khả năng di chuyển được cải thiện và giảm tắc nghẽn cho tất cả mọi người.

# Population and Employment Projections

# Population and Employment Projections

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## Central Massachusetts Regionally Customized Methodology

Central Massachusetts Regionally Customized Socio-Economic Projections Prepared for the Central Massachusetts Metropolitan Planning Organization (CMMPO) by the Central Massachusetts Regional Planning Commission (CMRPC) June 2023.

### Introduction

In 2017 and 2018 the Massachusetts Department of Transportation (MassDOT) led a statewide effort supported by the Regional Planning Agencies (RPAs) in Massachusetts to develop an updated set of socioeconomic projections. The projections included population, household, and employment projections made for each of the planning regions in ten-year bands out to the horizon year of 2040. MassDOT contracted with the University of Massachusetts Donahue Institute (UMDI) and the Metropolitan Area Planning Council (MAPC) to complete the projections with the assistance of an advisory committee of regional and statewide stakeholders. UMDI's work focused on population and employment trends and projections while MAPC's work focused on housing growth and changes to the labor force. The CMRPC felt that these projections (Vintage 2018) accurately depicted a likely future scenario for the Central Massachusetts Region.

In 2021 MassDOT contracted with UMDI and MAPC to produce a new set of updated projections with a new horizon year of 2050 to aid in the development of the regional Long Range Transportation Plans (LRTPs) being developed across the state. The CMRPC felt that these projections (2022) did not necessarily reflect an accurate likely future scenario for the Central Massachusetts Region. The projections are made by calculating a regional control total for each region that caps the population setting a ceiling on growth. For the first time, the regional control totals for the Central Massachusetts region were projected to decline between ten-year bands. Additionally, the projections while using the most up-to-date data available are still being heavily impacted by the lingering effects of the COVID-19 pandemic such as immigration rates and death rates. Additionally, the 2022 projections do not assign the Worcester area a metric known as "the college fix" which helps account for areas with large college-aged populations even though the Worcester area has a substantial college population. The CMRPC felt it was important to illustrate a possible scenario with a more optimistic but in line with previous projections view of the region that could be used to aid in scenario planning.

The methodologies for the 2022 projections can be found at the following links:

- [Long-Term Population Projections for Massachusetts Municipalities and Regional Planning Areas Methodology](#)
- [Massachusetts State and Regional Employment Projections](#)
- MAPC Allocation Methodologies Placeholder (to be updated upon receipt)

### Methodology

To aid the CMMPO staff in scenario planning for the development of the 2024 LRTP and future transportation and land use planning efforts the CMRPC developed a set of regionally customized projections for the Central Massachusetts area.

Since the 2022 projections were a departure from previously realized growth shown in decennial census counts from 1920 – 2020 and past projections staff determined a more optimistic set of projections following past growth rates realized and projected would complement the official statewide projections. Staff calculated what the regional control total would be had the growth rates from the Vintage 2018 projections have been applied to the 2020 Census.

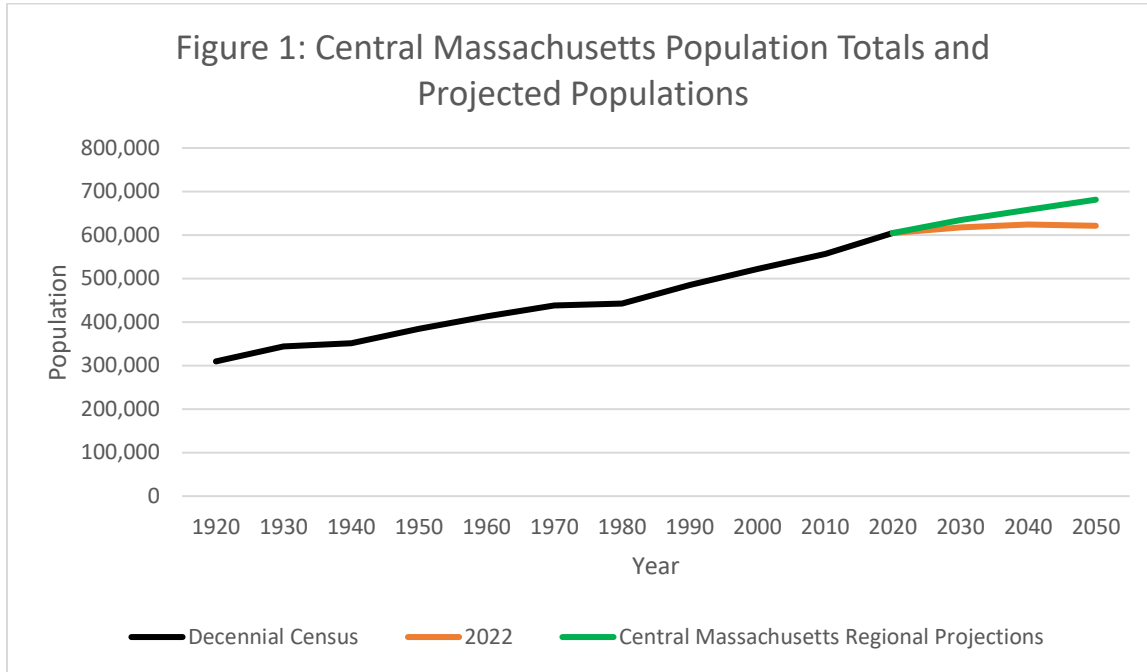


Table 1 lists the regional control totals for both the 2022 and the Central Massachusetts Regional Projections.

Year	2020	2030	2040	2050
2022	604,631	617,353	642,210	621,469
CMRPC Regional	604,631	634,271	657,750	681,229

The forecast year projections at the community level were prepared by re-scaling the 2022 community allocations prepared by MAPC to match the higher CMRPC control totals. Thus, the process considered how MAPC’s community forecasts reflected how growth in neighboring regions to CMRPC, impact growth in Central Massachusetts.

To account for group quarters population which was not fully considered in the MAPC allocation the CMRPC calculated the ratio of group quarters population to total population for each community in the Vintage 2018 projections for the horizon year 2040. This rate was then applied to each of the 2022 projections years to project the total population (household and group quarters) for each community in the CMRPC region.



# 2020-2050 Socio-Economic Projections in Massachusetts

CMRPC Staff Meeting  
6/7/2023

1

## NATIONAL POPULATION TRENDS

From July 1, 2020 to July 1, 2021, the U.S population grew by 0.1%, “the lowest rate since the nation’s founding.” The U.S. Census Bureau attributes the slow rate of growth to decreased net international migration, decreased fertility, and increased mortality due in part to the COVID-19 pandemic. (Source: UMass Donahue Institute, Response to questions from CMRPC dated September 8,2022)

- Growth in the U.S. is slowing overall
- Boomers are aging into high-mortality cohorts
- Millennials are passing out of high-fertility cohorts with no apparent “third wave” coming behind them.

2

# WHY IS MASSDOT MAKING PROJECTIONS?

- Federal regulation requires socioeconomic and population projections to guide the development of the LRTPs.
- Statewide projections are used to help inform the statewide travel demand model and other regional models
  - The statewide model is used to calculate Vehicle Miles Traveled, GHG emissions and congestion among others
- The Clean Air Act, Global Warming Solutions Act and others rely on information from the travel demand model to help determine compliance.

-MassDOT revisits these projections about every four years

To answer the basic questions:

- How many people will live in the CMMPO Region?
- Where will people live in the CMMPO Region?
- How many people will work in the CMMPO Region?
- Where will people work in the CMMPO Region?

To help inform the planning process:

- Identify growth areas
- Help establish travel/commuting patterns

3

# AGENCIES INVOLVED

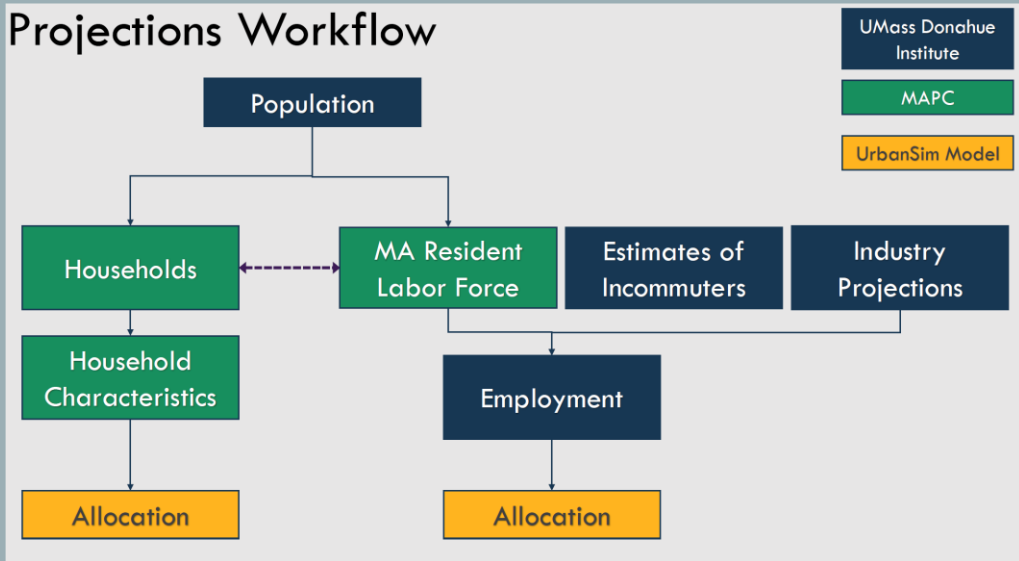


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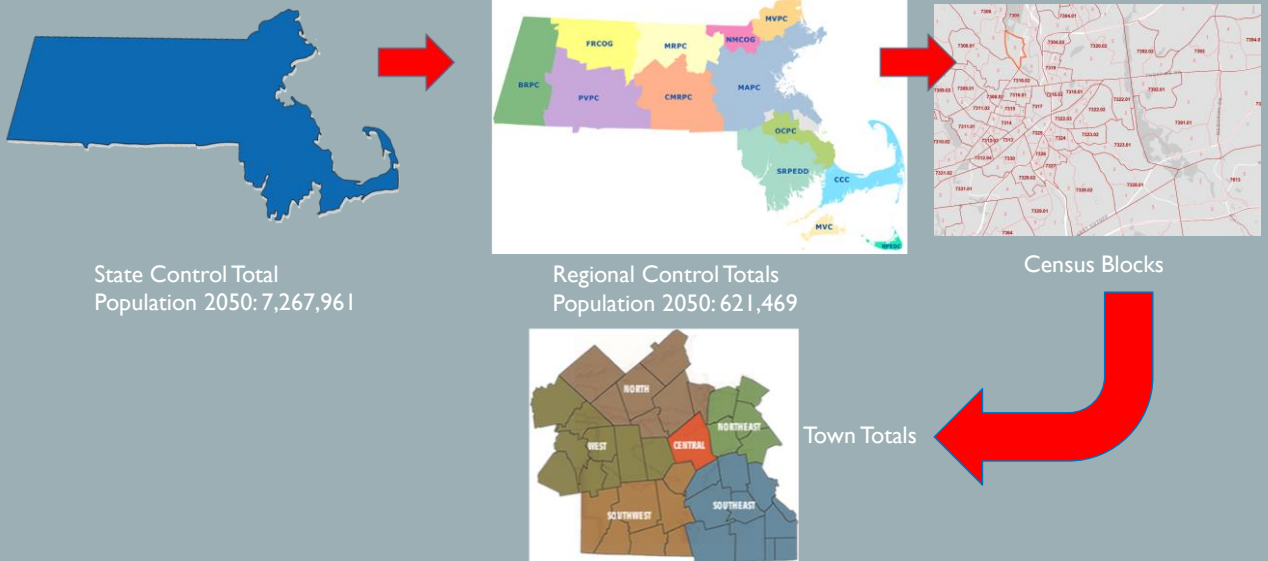
# WORKFLOW

## Projections Workflow



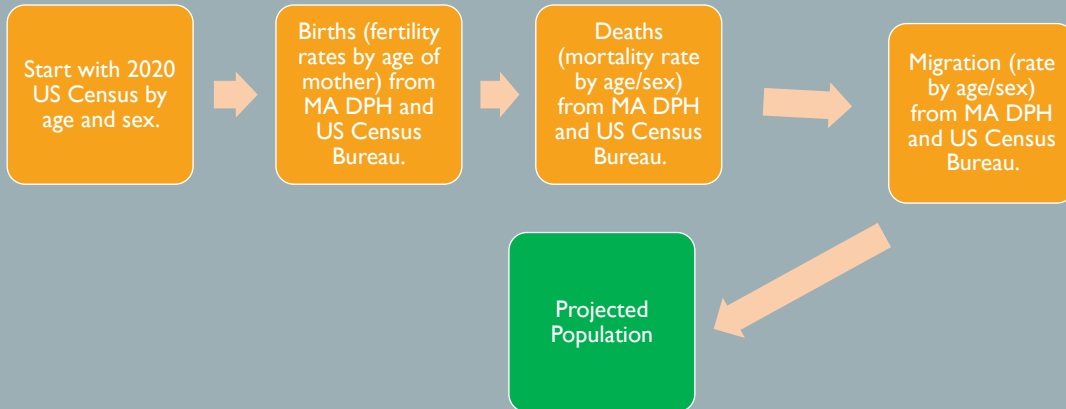
5

# HIERARCHY OF PROJECTIONS



6

## 2022 MASSDOT/UMDI POPULATION FORECASTING METHODOLOGY



7

## CMRPC REGIONAL PROJECTIONS

In the past the CMRPC region closely followed Statewide and Boston Region trends due to our proximity and intertwined population and employment pools.

Certain aspects of the projections should have been applied to the CMRPC region but were not

CMRPC staff has a more optimistic picture of the region than the data used is showing

Staff decided it would be appropriate to develop a second set of regionally customized projections

Due to time constraints staff needed a simple solution for new projections

**Solution: Apply previously computed absolute growth rates to new 2020 Census numbers.**

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# CMRPC FORECAST METHODOLOGY

CMRPC has more confidence in previous forecasting methodology.

**Better baseline numbers**

Absolute growth rate previously predicted in 2018 is more reasonable than UMDI's new methods.

Apply previously used absolute growth rate to new 2020 Census numbers. Then use the UrbanSim Allocation Percentages to allocate additional populations

The numbers are.....

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# POPULATION PROJECTION

MassDOT/UMDI methodology

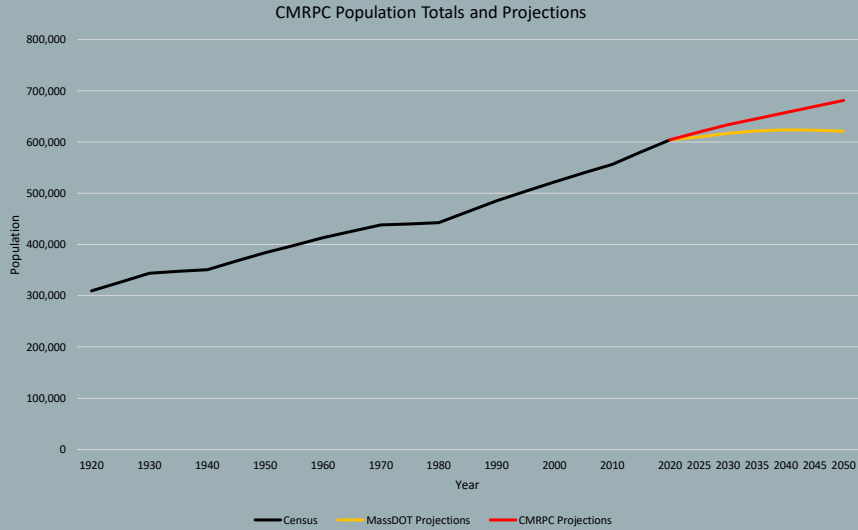
Year	2000 Census	2010 Census	2020 Census	2025 Projection	2030 Projection	2035 Projection	2040 Projection	2045 Projection	2050 Projection
MassDOT/UMDI	518,480	556,698	604,631	610,390	617,353	622,281	624,210	623,561	621,469

CMRPC regional methodology

Year	2000 Census	2010 Census	2020 Census	2025 Projection	2030 Projection	2035 Projection	2040 Projection	2045 Projection	2050 Projection
CMRPC region	518,480	556,698	604,631	619,451	634,271	646,011	657,750	669,490	681,229

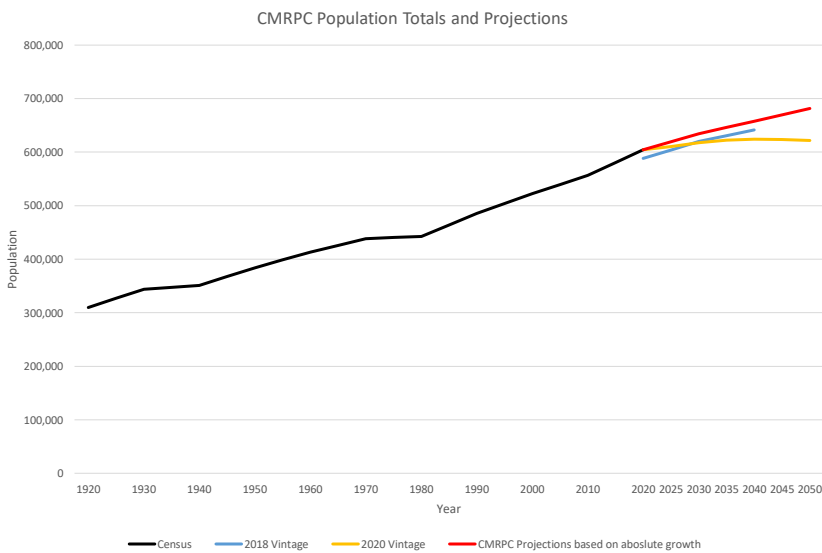
10

# MASSDOT/UMDI VS. CMRPC REGIONAL POPULATION PROJECTIONS



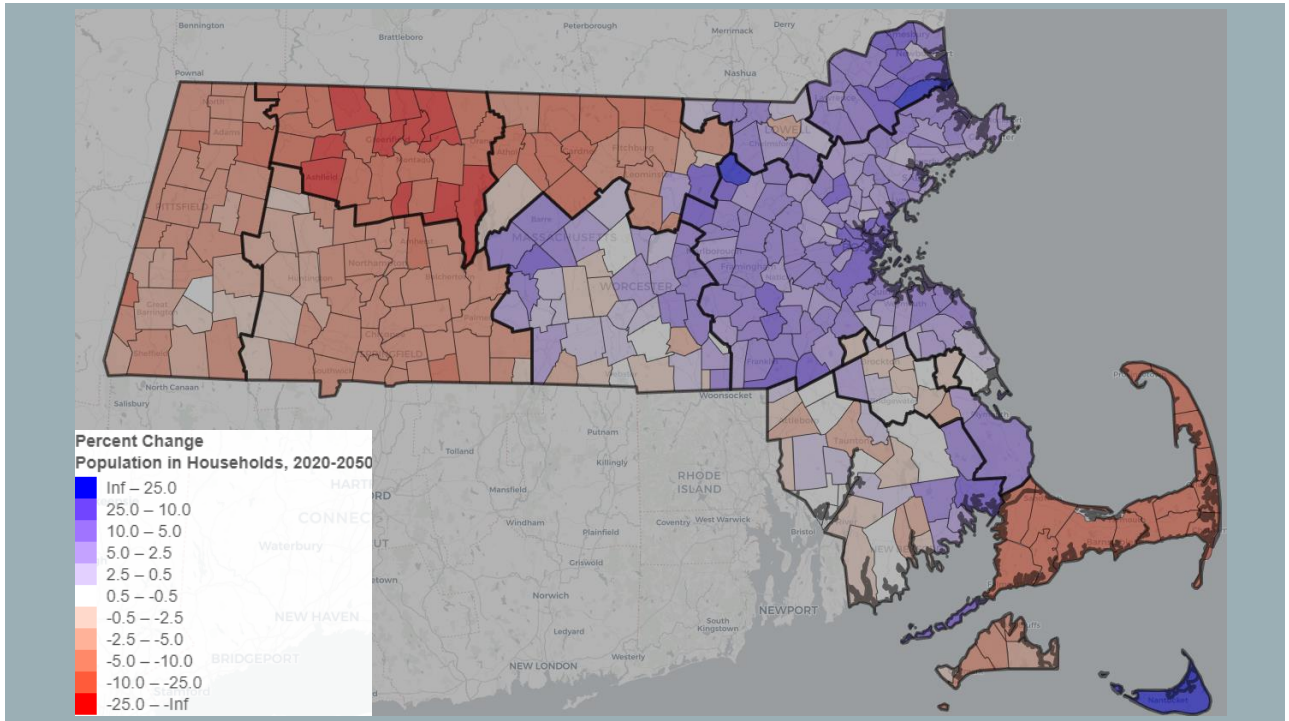
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## ANOTHER LOOK

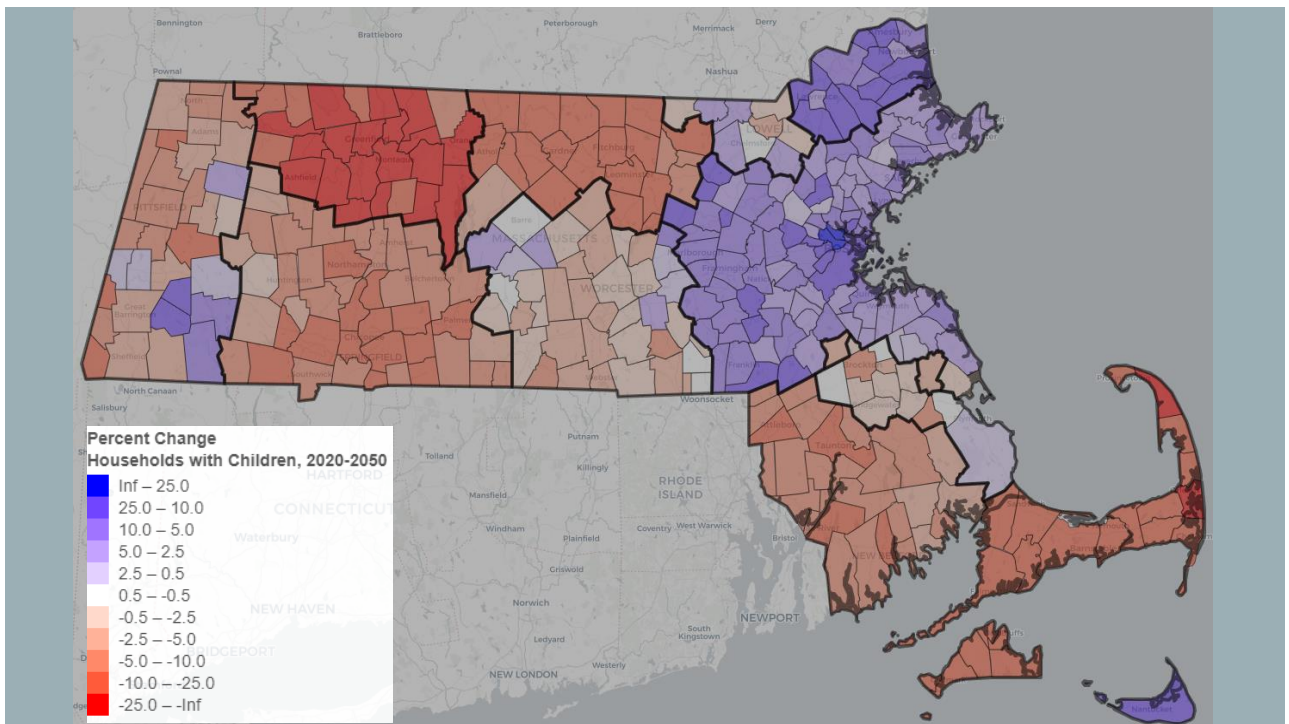


Year	MassDOT Projection	CMRPC Projection
2000 Census	518,480	
2010 Census	556,698	
2020 Census	604,631	
2030 Projection	617,353	634,271
2040 Projection	624,210	657,750
2050 Projection	621,469	681,229

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# EMPLOYMENT PROJECTIONS

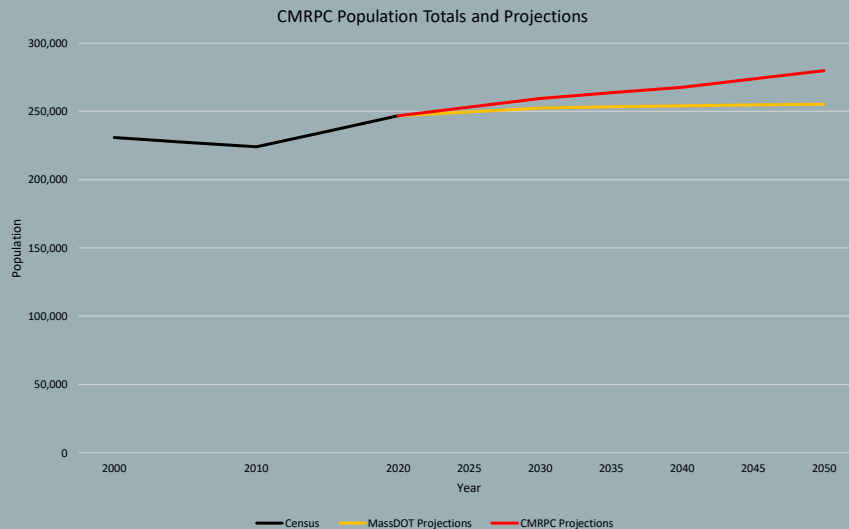
MassDOT/UMDI methodology

Year	Census 1990	Census 2000	Census 2010	Census 2020	MAPC 2030	MAPC 2040	MAPC 2050
MassDOT/UMDI Jobs	230,779	244,668	224,059	246,770	252,518	254,076	255,275

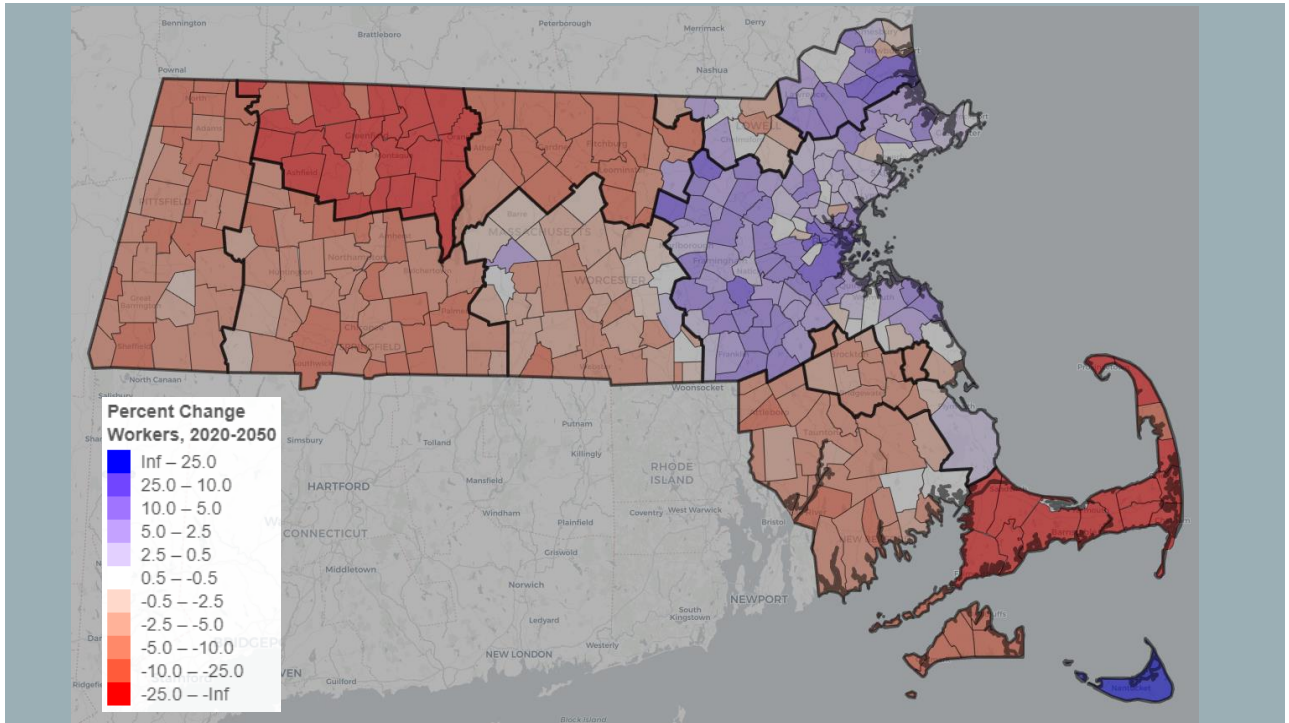
CMRPC regional methodology

Year	Census 1990	Census 2000	Census 2010	Census 2020	CMRPC 2030	CMRPC 2040	CMRPC 2050
CMRPC Regional Jobs	230,779	244,668	224,059	246,770	259,438	267,728	279,822

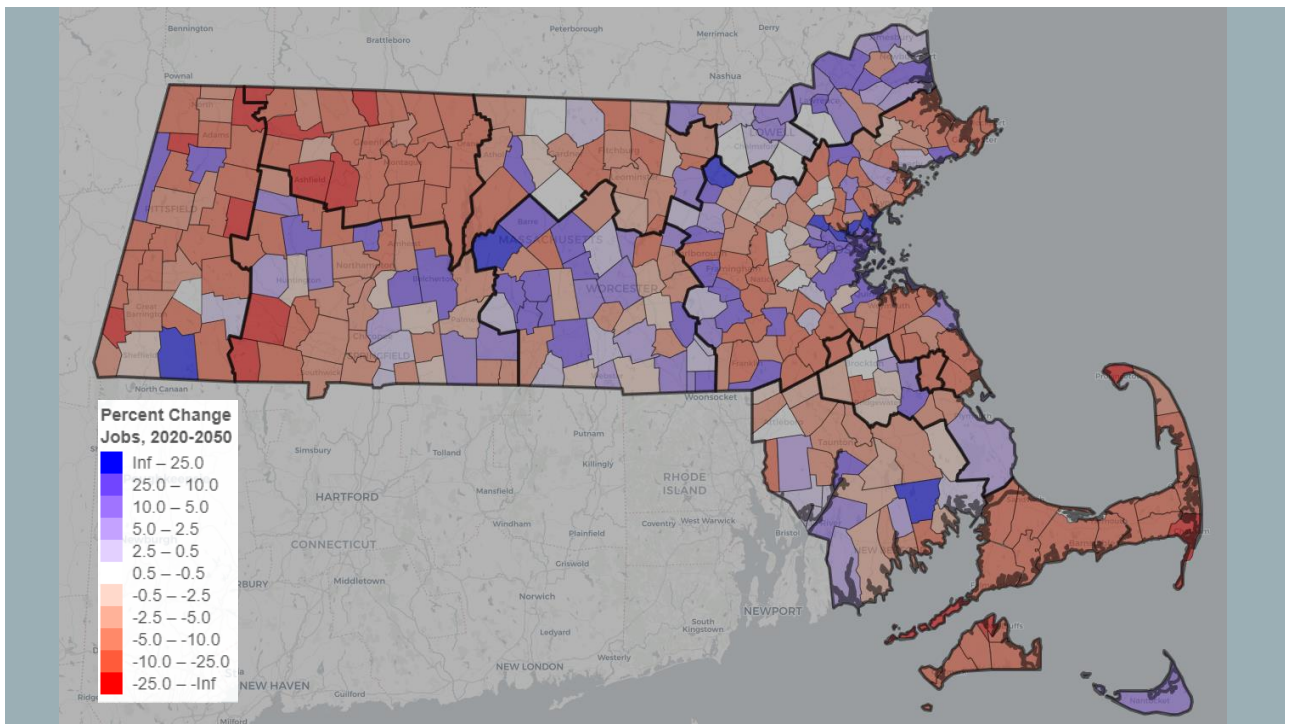
# MASSDOT/UMDI VS. CMRPC REGIONAL EMPLOYMENT PROJECTIONS







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# REGIONALLY CUSTOMIZED PROJECTIONS

CMRPC/CMMPO

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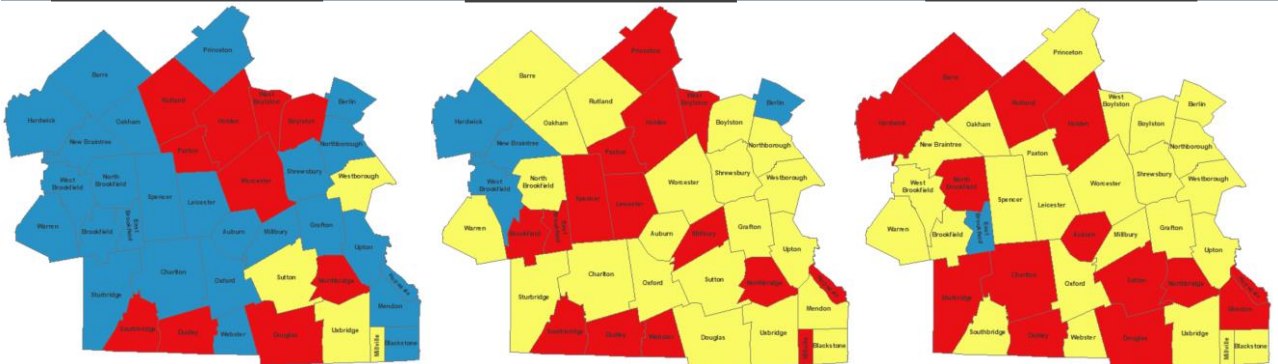
## POPULATION PROJECTION BY COMMUNITY



2020 - 2030

2030 - 2040

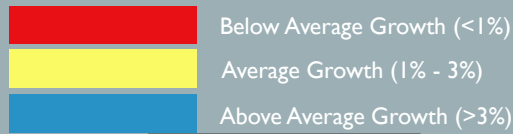
2040 - 2050



20



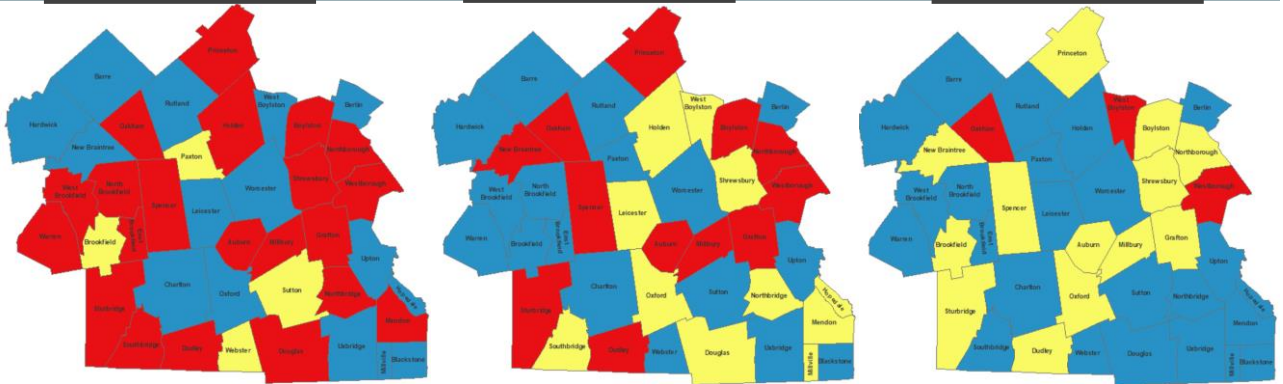
# EMPLOYMENT PROJECTION BY COMMUNITY



2020 - 2030

2030 - 2040

2040 - 2050



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## NEXT STEPS

- Input both the MassDOT and CMMPO projections into the CMRPC travel demand model for scenario planning.
- Utilize both MassDOT and CMMPO projections for scenario planning in the CMRPC regional plan.
- Form an internal CMRPC Socio-Economic working group to:
  - Continue to monitor local, regional and state datasets in preparation of future efforts
  - Develop tools to help our communities use the projections data
  - Make data more accessible to our communities (CMRPC community snapshots)

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## Population and Employment Projections

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### Travel Demand Scenarios

CMRPC Land Use	Total VMT		VMT with a VC ratio over 0.75	
	All Areas	EJ Plus Areas	All Areas	EJ Plus Areas
<b>2020</b>	15,679,915	8,512,825	6,888,752	3,810,631
<b>2030</b>	16,302,503	8,878,172	6,959,208	3,929,591
<b>2040</b>	16,791,642	9,151,446	7,353,047	4,168,729
<b>2050</b>	17,233,571	9,407,159	7,646,029	4,358,389

MassDOT Land Use	Total VMT		VMT with a VC ratio over 0.75	
	All Areas	EJ Plus Areas	All Areas	EJ Plus Areas
<b>2020</b>	15,679,915	8,512,825	6,888,752	3,810,631
<b>2030</b>	15,999,105	8,710,780	6,780,983	3,828,505
<b>2040</b>	16,205,793	8,825,797	6,910,354	3,887,004
<b>2050</b>	16,216,743	8,837,325	6,914,589	3,899,757

# Public Outreach



# PUBLIC OUTREACH PROCESS OVERVIEW



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### 1. Introduction

The Bipartisan Infrastructure Law (BIL), otherwise known as the Infrastructure Investment and Jobs Act, is the current transportation enabling regulation. This law will directly fund improvements for our nation's roads, bridges, rails and other modes of public transit and related infrastructure. The BIL emphasizes the importance of public involvement of all sectors and users in the transportation planning process. Thus, the endorsed FY2022 *CMMPO Public Participation Plan (PPP)* provides the framework for all public outreach activities performed by the Central Massachusetts Metropolitan Planning Organization (CMMPO) during the transportation planning process for the long range transportation plan, 2050 Connections.

The key requirements of the public participation process are an all-inclusive decision-making process and a proactive public involvement process that provide timely public notice, complete information, full access to decision making, and support early consultation in the development of metropolitan transportation plans and transportation improvement programs.

The long range transportation plan (LRTP), 2050 Connections, looks 20 years into the future and is updated every four years. The transportation planning process requires an extensive outreach effort. In addition to this, the CMMPO must comply with *the Public Participation Plan* elements and fundamentals contained in the Title 23, Section 450.316 of the Code of Federal Regulations (CFR), which expressly mention the following:

- *“Each metropolitan planning organization shall provide citizens, affected public agencies, representatives of public transportation employees, public ports, freight shippers, providers of freight transportation services, private providers of transportation (including intercity bus operators, employer-based commuting programs, such as a carpool program, vanpool program, transit benefit program, parking cash-out program, shuttle program, or telework program), representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties with a reasonable opportunity to comment on the transportation plan.”*

The CMMPO recognizes the importance of inclusivity and diversity in the public participation process to ensure the accessibility to all public events and activities, while tailoring them to the CMMPO region's characteristics (demographics, cultural, and social) and the specific needs of the region's vulnerable populations, as identified by the CMMPO's Regional Environmental Justice Plus (REJ+) threshold. **Please reference the Title VI page on the CMRPC website or the Notice of Rights included in the LRTP for more information.**

This Public Outreach Report details all the public outreach efforts used throughout the development of the region's LRTP, 2050 Connections. It also summarizes the myriad of activities and initiatives performed in accordance with the *CMMPO PPP*. **This report may be used to supplement the public outreach overview and process sections of the LRTP document.**

### 2. Overview of the Outreach Process

The public outreach and engagement process is multi-faceted and incorporates many different moving parts. The process is guided by one overarching goal: to engage and represent people of all backgrounds, demographics, and transportation-related needs. From formal stakeholder meetings and sub-regional infrastructure summits to social media posts and the countless insightful conversations that were had with community members, the CMRPC transportation staff worked hard to reach as many people as possible.

As previously mentioned, the LRTP looks 20 years into the future, with formal updates every four years after being released. Thus, it is crucial that the CMMPO identify needs from the “users” perspective: not only needs identified in the previous LRTP, but also throughout the outreach and research process of 2050 Connections. With that, the CMMPO may reproduce methodologies that were successful in the past and negate ones that were not. For example, one of these methodologies that has been successful is the use of a public survey, which is used to identify the needs and priorities of stakeholders, organizations, communities, and individuals from all six sub-regions.

Moreover, the introduction of performance measures in the transportation planning process has reframed the way federal emphasis areas are taken into consideration during the transportation planning process. Currently, performance measures represent a pillar of the decision-making process. The CMMPO believes that the performance management system should reflect the needs and priorities of the region. The feedback from the outreach process will provide a clear indication of the topics that should be strengthened, emphasized, or edited in the current performance management system.

In addition to this, the meaningful involvement from transportation-disadvantaged populations was a key element throughout the outreach process. Beyond the traditional stakeholders, CMRPC staff made an extensive effort to expand the stakeholder base given the regional demographics and characteristics. Once identified, outreach emails were sent, and phone calls were made to invite each organization to participate in this opportunity. CMRPC staff worked with the organizations to find the most suitable format to engage with the population they represent. As a result, in some cases staff attended community meetings, committee meetings, or set tables/pop-ups at public events. In the same fashion, the presentation was modified as needed and materials were distributed in different languages based on participants’ first language.

### 3. Structure and Formats

The LRTP outreach process is multi-faceted and complex. To better understand and manage all the efforts, three main work areas were identified: information, promotion, and participation/engagement. Moreover, public outreach efforts require clear and consistent representation throughout the process. For this purpose, multiple tools were developed and standardized for each of the three main work areas and are thoroughly detailed in this report. **Please note that in many cases, these three work areas overlap and are utilized within the other work areas.**



### 3.1 – Information

Providing extensive information related to public outreach is imperative to the LRTP. Examples of types of crucial information include what the plan is, why it's important, who the plan affects, who should participate in outreach, how information is used, and so on. Although the CMMPO has always made an extensive effort to engage the public, there will always be people that need an overview of the transportation planning process and its basic elements to understand why their feedback and participation is important. Providing all this information increases both the quality and the quantity of the feedback received.

#### *CMRPC Website and 2050 Connections Hubsite*

As in the past, the CMMPO relied on the CMRPC website as the major outlet for information. The website is continually updated with relevant information, including event notices on the calendar, the CMRPC bi-monthly newsletter, recordings of meetings, and details about various efforts such as the Transportation Improvement Program (TIP). On the left-hand side of the CMRPC website there is the tab for CMRPC's transportation department as well as the logos for both the CMMPO and 2050 Connections, which direct viewers to more information related to those topics. The 2050 Connections logo is embedded with a link that directs users to the 2050 Connections hubsite, a website created specifically to house all information related to the LRTP.

The 2050 Connections hubsite contains all information correlated with the LRTP, including interactive maps, a link to the public survey, and information related to the CMRPC's work with the different modes of transportation in the region as well as the different transportation planning areas. The planning areas, which are all addressed in the LRTP, include asset management, congestion mitigation, emerging technology, livability, safety, and the environment. Furthermore, the hubsite also addresses various programs and regional priorities, as well as other linkages to the LRTP, such as the CMRPC's Regional Plan, Imagine 2050. Finally, the 2050 Connections hubsite eventually housed the draft 2050 Connections document.

#### *Presentations*

CMRPC staff created many different presentations throughout the planning process of this LRTP. The transportation staff made a presentation that overviews 2050 Connections in its most basic elements so that people outside of the organization can refer to it throughout the public engagement process and get answers to common questions. This presentation was continuously modified to appeal to specific stakeholders and communities and was made available at all in-person meetings, such as the focus group at the Worcester Senior Center. Transportation staff also periodically updated the CMMPO on their progress with the LRTP, and for each update a presentation was made. Transportation staff worked in coordination with the CMRPC Regional Collaboration and Community Planning (RCCP) staff to create presentations for sub-regional infrastructure summits, where municipal employees from each region were invited to discuss all topics related to infrastructure.

## Materials for Meetings and Tabling Events

As part of the public outreach process for this plan, CMRPC transportation staff tabled at several public events and conducted many in-person and virtual meetings. At each event, staff provided all people with an equitable standard of engagement. The materials used to provide an equitable standard of engagement included 2050 Connections public survey flyers, which included links to the hubsite. Other available materials included printed copies of the survey, table displays that promoted local opportunities, printed copies of the LRTP presentation, a CMRPC tablecloth, and complimentary CMRPC pens and stickers.

For in-person meetings such as stakeholder meetings and sub-regional infrastructure summits, staff developed wayfinding signs, sign-in sheets, agendas, comment sheets, and a variety of maps for reference. All tabling materials were prepared ahead of time and ready to go in a cart that staff would bring to each event. For virtual meetings, CMRPC staff utilized materials for virtual public involvement described in the *Participation and Engagement* section of this report.

## 3.2 – Promotion

The promotion of the LRTP and its planning process required multiple points of communication and methods for elevating information. The CMRPC newsletter, survey flyers, tabling displays, social media posts, email blasts, and press releases were several of the tools used to promote information and opportunities to participate in the planning process and to provide feedback. Throughout this period, it was fundamental to have content regularly posted on all CMRPC social media platforms. However, considering not everyone uses social media or has access to the internet, the other means of promotion were crucial in terms of ensuring this information was reaching a variety of audiences.

### Flyers



2050 Connections Survey Flyers and MassDOT Meeting-in-a-Box Flyer

CMRPC transportation staff made flyers and table displays to promote the 2050 Connections public survey and other opportunities involved in the transportation planning process. The survey flyers were available in English and Spanish at all events as well as participating locations around the region, often accompanied by printed copies of the survey, also in English and Spanish. The survey flyers included a QR code and link to the online version of the survey. Although the survey flyers and printed copies of the survey were only available in English and Spanish, each offered a link to the 2050 Connections hubsite, which included information about Title VI Policy accommodations.

Flyers and table displays were also made for opportunities such as stakeholder meetings, public events, public hearings about projects and funding opportunities, MassDOT's Meeting-in-a-Box, as well as regional transportation options and opportunities. In addition to in-person events and participating locations such as libraries and senior centers, flyers were also distributed through social media and email blasts.

### *Email Blasts*

Email blasts were used to reach large groups of people to spread awareness about the LRTP and opportunities for public participation. These emails were most often used to invite recipients to schedule stakeholder meetings or a Meeting-in-a-Box (detailed in the *Participation and Engagement* section of this report), as well as to inquire about press releases, invite groups to public events or to take the survey, as well as to follow-up on events, meetings, and other opportunities. For example, an email blast was used to thank all survey respondents for their participation and to let them know where to find the survey results on the hubsite.

Email blasts were readily used to ask locations for their participation in the public survey, either by distributing the survey flyer within their organization's network or posting the flyer at their physical location. Examples of some of the groups that blasts were sent out to include local nonprofits, local businesses, NGOs, public libraries, town halls, senior centers, and Councils on Aging.

As a result of email blasts, survey flyers and printed copies of the survey were available in ten different CMRPC communities and all six CMRPC sub-regions for a period of one to five months.

Participating locations included:

1. Beaman Memorial Public Library, West Boylston
2. Westborough Public Library
3. Leicester Public Library
4. Woods Memorial Public Library, Barre
5. West Boylston Senior Center
6. Westborough Council on Aging
7. Holden Senior Center
8. Friends of Worcester Senior Center
9. Shrewsbury Senior Center
10. Grafton Senior Center



11. Webster Senior Center
12. Main South Community Development Corporation, Worcester
13. Hands on Nature, Berlin
14. Earth Limited, Mendon

**Survey flyers and printed copies of the survey were also available at all in-person events and meetings, such as the sub-regional infrastructure summits and tabling events.**



### *Press Releases*

The transportation department reached out to many news outlets to inquire about getting an LRTP article published in their respective outlets. The Stonebridge Press released the 2050 Connections article through their seven papers in Massachusetts: The Spencer New Leader, Auburn News, Charlton Villager, Sturbridge Villager, Southbridge News, Webster Times, and the Blackstone Valley Tribune.

The Stonebridge Press also released a CMRPC infographic on two of their social media platforms: the "508local" Facebook page and the "Spencer New Leader" Facebook page.

*Clip from the Stonebridge Press*

### *CMRPC Bi-Monthly Newsletter*

In addition to the articles in the Stonebridge Press outlets, CMRPC transportation staff periodically released LRTP updates in the CMRPC Bi-Monthly newsletter, which has over 1,000 subscribers. These updates include more promotional plugs to the public survey, major highlights from meetings, events, survey responses and other public feedback. Furthermore, transportation staff released articles about topics such as proposed amendments to the TIP, Culvert Assessment Programs, and MicroProjects. All CMRPC newsletters are uploaded to the CMRPC website under the "About Us" tab once they are released to subscribers.



## CMRPC Newsletter December 2022

*CMRPC Newsletter Header*

### *Social Media*

Transportation staff utilized the CMRPC social media pages throughout the LRTP process. CMRPC has accounts on Facebook, Twitter, and Instagram each with a strong base following. Promotion of the LRTP on social media included many instances of offering the 2050 Connections public survey as an opportunity for engagement. These posts would include an infographic (as pictured below) with QR codes to connect viewers to the survey.

Social media posts were also made to invite viewers to public meetings and events, such as 2050 Connections public meetings, meetings regarding amendments to the CMMPO's TIP, and MassDOT's Virtual Design Public Hearings. Moreover, transportation staff made posts for programs such as Safe Routes to School (SRTS), MassTrails, the Federal Highway Administration's (FHWA) Protect Discretionary grants, as well as information about microprojects.



*2050 Connections Public Survey Infographic Examples*

### 3.3 – Participation and Engagement

Providing equitable standards for participation and engagement is crucial to this transportation planning process. This ensures that all interested people may have the chance to influence which

projects may be programmed for funding. The CMRPC promotional methods were geared to reach as many people as possible, and from there, the methods of participation invited all people, regardless of their needs. The CMRPC offers translation services and general assistance upon request for all methods of participation and engagement, which is promoted on the CMRPC website.

Also, staff consistently scheduled in-person stakeholder meetings and infrastructure summits in accessible buildings across the region and were physically present in all CMRPC sub-regions on multiple occasions. Lastly, staff always offered the alternative of scheduling virtual meetings, also known as opportunities for virtual public involvement, not only for groups, but for individuals who could not attend scheduled in-person meetings.

### *Virtual Public Involvement*

The phrase virtual public involvement (VPI) describes tools and materials used to engage the public, especially during virtual meetings. VPI tools and materials that CMRPC utilized for this transportation planning process include Zoom and Teams, their chat functions, their live poll and survey functions, “break-out rooms” for smaller group discussions, and Google’s interactive notetaking program, Jamboards.

The CMRPC transportation staff also utilized interactive maps as well as public surveys via the 2050 Connection hubsite. These tools allowed members of the public a variety of options in terms of ways they may participate. For example, for someone who may not be comfortable speaking during a virtual meeting, they may use the chat function or participate in an anonymous poll to voice their opinions. These tools were used for all types of virtual meetings, such as the CMRPC Quarterly Commission Meetings.

### *The Public Survey*

The CMRPC 2050 Connection survey was made using SurveyMonkey and was available both online and on paper at participating locations throughout the region, including tabling events, senior centers, and libraries, for a period of one to six months. The survey was available in both English and Spanish with additional translation services and general assistance available upon request. The survey was 41 questions and took respondents an average of eleven minutes to complete. After six months, 284 people took our survey and left a total of nearly 1,000 written comments.

The first two questions asked respondents which town they live in and if they were employed, which town they work in. Following those two questions, the survey questions were organized by overarching themes. The question themes were personal transportation behaviors, public transportation, bicycles, trails, pedestrian infrastructure, roadway congestion, electric vehicles, funding priorities, and then demographics.

Either because people were most interested in answering questions about personal transportation behaviors or because it was the first set of questions, this category received the highest



average response rate. When asked what is the first thing that comes to mind when thinking about transportation, 51.2% of respondents said public transportation. However, 68.5% of respondents said that their primary mode of transportation is driving alone in a personal vehicle.

In terms of bicycles, 53.6% of respondents said they do not have access to a bicycle, but 34.4% of respondents said they would be interested in a bike sharing program if it became available in their community. When asked what types of bicycle infrastructure and related facilities people want to see in the region, most respondents said clearly marked bike lanes or bike lanes separated from traffic, mainly in the City of Worcester.

When asked if they had visited a trail in the past year, 64.3% of respondents said they had. In the form of open-ended comments, many respondents expressed their interest in seeing more accessible trail options, not only for individuals with disabilities but also for people with limited transportation options. Increased access to trails could include trails along fixed transit routes and wide and level trails with appropriate signage.

The topic of public transportation received the second highest response rate. Although 51.6% of respondents said that they have used public transit within the past year, 45.9% of respondents said they use it rarely. Most respondents indicated that out of all local and statewide services, they use the WRTA and MBTA the most, with notable usage of Peter Pan buses, Greyhound buses and WRTA paratransit, as well.

When asked to rate the conditions of pedestrian infrastructure in their communities, respondents indicated that sidewalks, curb ramps and lighting are in the worst condition, and in some cases completely lacking. When asked what types of destinations are within 0.25 miles from respondent's homes, 46% of respondents said they live near a bus stop, 39.1% of respondents said they live near a park, playground, or recreational area, and 32.7% of respondents said they live near a supermarket or corner store. However, 29% of respondents said they do not live near any noteworthy destinations, and thus must rely on personal vehicles or have very limited access to resources.

Regarding the topic of roads and traffic congestion, respondents overall indicated that the City of Worcester must improve pavement conditions and implement strategies to reduce traffic congestion. Notably, roads in Worcester such as Mill Street, Salisbury Street, and Main Street, among other specific corridors, were mentioned in comments as needing attention in terms of pavement conditions. Additionally, respondents mentioned locations in other CMRPC communities that need pavement improvements, such as in Northborough, Mendon and Webster. Regarding traffic congestion, many respondents indicated that I-290 and routes MA-140 and MA-9 suffer severely from congestion.

Most survey respondents, 85.7%, said they do not have access to an electric vehicle. However, 43.5% of respondents said that they would be interested in utilizing an electric vehicle sharing service if it were available in their community. When asked where electric vehicle infrastructure should be implemented, people referenced more general locations such as gas stations, parking lots and garages, and grocery stores.

Finally, in reference to funding, most respondents prioritize improving pedestrian infrastructure, followed by reducing traffic congestion and increasing access to transit services, meaning ensuring reliability, affordability, and connectivity. Specifically, respondents were asked to rate a list of project types anywhere from one to ten, with one being their top priority and ten being their lowest priority. 31.2% of respondents said improving pedestrian infrastructure was their top priority, 20.7% of respondents said increasing transit service reliability was their top priority, and 14.5% of respondents said reducing vehicle crashes was their top priority. In terms of lowest priorities, 30.6% of respondents said expanding trail networks was their lowest priority.

With respect to the demographics of respondents, most of the survey respondents were White (73.3%) and between the ages of 65 and 74 (26.3%). However, these demographics relatively reflected that of the CMRPC region. Moreover, 5.7% of respondents were Hispanic or Latino, 5.7% were Black, and 12.4% preferred not to answer. Regarding age, 20% of respondents were between the ages of 55 and 64, 13.7% were between the ages of 45 and 54, and 13.2% were 75 years of age or older.



### 2050 Connections

#### 2050 Connections Survey

The Central Massachusetts Metropolitan Planning Organization (CMMPO) is requesting your cooperation to complete this survey about transportation in the region. Your answers will help guide the policies, plans and funding required for a sustainable transportation future in the region. Your information will be kept anonymous and confidential. You can skip the questions by clicking the Enter button.



*2050 Connections Public Survey Header*

#### *Traditional Stakeholders*

The stakeholders play a crucial role in guiding the LRTP and the projects that will be programmed for funding, as CMRPC staff continuously reviews stakeholder's comments and meeting notes to find shared priorities. Many of these stakeholder meetings occur on a regular monthly or bi-monthly basis and are almost always performed online. Remote meetings utilize tools of virtual public involvement, including the Teams or Zoom chat functions, Google Jamboards, and "breakout rooms" for smaller group discussions. The following is a list of the stakeholders for this LRTP:

1. CMMPO Advisory Committee
2. CMRPC Commission
3. MassDOT Districts 2 & 3 Offices
4. I-495 Metrowest Partnership

5. Worcester Regional Transit Authority (WRTA)
6. Transportation Planning Advisory Group (TPAG)
7. Town Managers, Administrators, Planners, and Select Boards
8. Regional Division of Public Works Personnel
9. New England Automotive Gateway (NEAG)
10. Central Transportation Planning Staff (CTPS)
11. Central Massachusetts Legislative Affairs Committee
12. The City of Worcester Department of Public Works and Parks
13. East Brookfield and Spencer Railroad
14. Western Massachusetts Passenger Rail Commission
15. MassBike
16. WalkBike Worcester

### *Non-Traditional Stakeholders*

Non-traditional stakeholders included many groups that work with transportation disadvantaged populations as outlined by the CMMPO's Regional Environmental Justice Plus (REJ+) threshold. These meetings utilized different formats and materials based on the organization's needs or requests, including the tools used for virtual public involvement described above as well as translation services and other accommodations, such as assistance in completing the 2050 Connections survey. These meetings were crucial to informing the LRTP priorities. The following is a list of the non-traditional stakeholders for this LRTP:

1. Main South Community Development Corporation
2. Green Hill Neighborhood Association
3. Worcester State University – Global Environmental Change Course
4. Regional Environmental Stakeholders Group
5. Latino Education Institute
6. Central Community Branch YMCA Worcester
7. RH White Construction Company
8. The City of Worcester Accessibility Commission
9. HNTB Consultants
10. Worcester Community Action Council
11. Greater Worcester Community Foundation
12. Friends of Worcester Senior Center
13. Massachusetts Healthy Aging Collaborative

### *MassDOT's Meeting-in-a-Box*

MassDOT's Meeting-in-a-Box was a joint effort between MassDOT's Districts 2 and 3 and CMRPC transportation staff to engage vulnerable populations, as outlined by the CMMPO REJ+ threshold, in the transportation planning process. These meetings were a final push to engage non-traditional stakeholders in the planning process for both CMRPC's 2050 Connections and MassDOT's statewide

plan, Beyond Mobility. In a short period of less than four months, CMRPC transportation staff were able to schedule three of these meetings, one in-person at the Friends of Worcester Senior Center, an accessible meeting location, and two online with the Greater Worcester Community Foundation (GWCF) and the Worcester Community Action Council (WCAC).

MassDOT OTP staff arranged seven additional Meeting-in-a-Box sessions, with groups from across the Commonwealth such as the Community Health Partnership of North Central Massachusetts (CHNA9) and the Western Mass Transit Advocacy Network (WMTAN).

### *Sub-Regional Infrastructure Meetings*

Sub-Regional Infrastructure Summits were a joint effort between CMRPC's transportation department and CMRPC's RCCP department. Summits were organized in the five CMRPC sub-regions as well as in Worcester; additionally, there were two virtual summits. The virtual summits utilized tools and materials of virtual public involvement, such as the chat function. One of the virtual summits focused on transportation, while the other virtual summits focused on all other municipal infrastructure. Town administrators, managers, DPW staff, and other municipal employees were invited to participate. These meetings generally lasted four hours and covered all topics related to municipal infrastructure, from roads, bridges, and culverts to internet connectivity, drinking water, and energy. Conversations and comments from these meetings carry the same weight as the feedback gathered from the survey, tabling events, and stakeholder meetings in that they impact potential projects and funding priorities.

These summits were held in person at participating locations in each sub-region. The following is a list of all eight infrastructure summits:

1. Central Sub-Region: MassDOT District 3 Headquarters, Worcester
2. Northeast Sub-Region: Forbes Municipal Building, Westborough
3. Southwest Sub-Region: Tri-Valley Elder Services, Dudley
4. North Sub-Region: West-Boylston Senior Center
5. Southeast Sub-Region: Grafton Police Department
6. West Sub-Region: North Brookfield Police Station
7. Transportation Virtual Summit: 10/20/22
8. Municipal/Regional Infrastructure Virtual Summit: 10/27/22



*Photos from the North and Northeast Sub-Regional Infrastructure Summits, Respectively*



### *Tabling & Pop-Up Events*

Tabling events were a unique opportunity for CMRPC Staff members to connect directly with community members in all six CMRPC sub-regions. Not only did tabling events help transportation staff spread the word about the 2050 Connections survey, but they allowed staff the distinctive opportunity to connect with more community members, individuals who may have never been exposed to CMRPC's work or transportation planning in general. With that, tabling events were not only an opportunity to promote information about the transportation planning process, but an opportunity for public participation and engagement. The connections that were made at tabling events either provided CMRPC with critical feedback from a transportation user's perspective or allowed staff to form working relationships with community members by inviting them to participate in other means of engagement. The following is a list of all the tabling events CMRPC staff attended as part of the outreach process for this LRTP:

1. Beaver Brook Farmers Market, Chandler Street, Worcester
2. Worcester Out-to-Lunch, Worcester Common
3. Westborough 4 Life, West Main Street
4. Worcester Street Art Festival, Park Ave
5. Green Hill Neighborhood Block Party, St. Bernard's Church in Worcester
6. Electric Vehicle Expo, Otis Street in Westborough
7. Apple Country Fair, Brookfield Town Common
8. Green Jobs Fair, Worcester State University
9. WRTA Hub at Union Station
10. Whole Kids 2023, Downtown Worcester



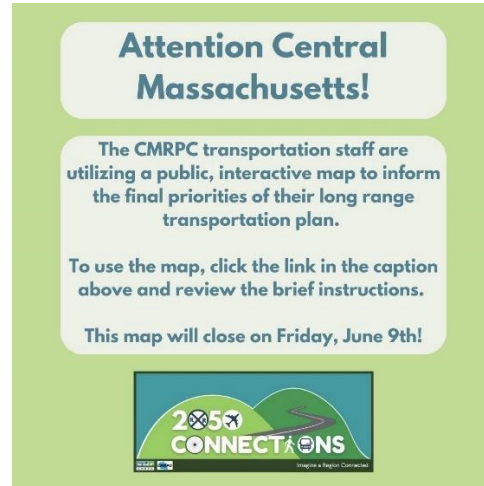
*Photos from the Worcester Out-to-Lunch and Apple Country Fair Events, Respectively*

### *Additional Public Meetings*

Following all of the outreach efforts detailed above, the CMRPC transportation staff drafted a list of priorities based on public comments, data collected, and related research. These priorities included potential studies, initiatives, and projects for each of the following categories: asset management, climate change and resiliency, active transportation, and system management and operations. Once

these priorities were completely drafted, the CMRPC transportation staff planned, coordinated, and hosted a hybrid public meeting on May 31<sup>st</sup>, 2023 to discuss these priorities and to narrow-down public opinions.

Although the five in-person attendees were able to vote for their top priorities by placing stickers on various poster boards, the other five online attendees, as well as members of the public who were not able to make the public meeting, were offered the opportunity of utilizing an online, interactive map. This interactive map remained open for ten days and was available on the 2050 Connections hubsite.



Priorities Public Meeting Flyer and Interactive Map Promotional Infographic, Respectively

Once the LRTP priorities were completely drafted, along with the rest of the document, the CMRPC transportation staff released the draft LRTP for public review and comments at the Wednesday, June 21<sup>st</sup> CMMPO meeting. This meeting marked the beginning of a public comment period, which included one final virtual public meeting on July 10<sup>th</sup> to discuss the draft and receive any final public comments, as well as discuss proposed TIP amendments.



Final 2050 Connections Public Meeting Flyer and Promotional Infographic, Respectively

### Performance Measures

As indicated in *the CMMPO Public Participation Plan*, public participation and associated outreach activities are often the most direct contact the public has with the CMMPO. The evaluation of the CMMPO's engagement efforts is key to the continued improvement and expansion of the opportunities the public has to engage with the CMMPO and the regional transportation planning process.

Recognizing that public participation is a process in itself, the measurements and metrics used to assess the effectiveness of any meaningful engagement should reflect each stage of that process. Accordingly, the measurements and metrics used in this section are grouped in three main areas that are geared to different stages of the process, ranging from the initial steps to inform the public to the multiple opportunities for involvement throughout the planning process.

The following sections include assessments related to the three categories of performance measures: observe, interact, and incorporate, as outlined in *the 2022 CMMPO Public Participation Plan*.

#### *Observe*

The *observe* performance measure refers to qualitative and quantitative assessments related to the number and type of outreach events, the number of participants, the types of responses collected, as well as relevant demographic information.

During the public outreach process for 2050 Connections, various types of events and meetings were coordinated. The types of events and meetings conducted included formal stakeholder meetings (both in-person and online), public tabling events, and sub-regional infrastructure summits. In total, the CMRPC transportation staff attended ten public tabling events, which offered the unique opportunity of having candid conversations about regional transportation systems with various types of users.

Additionally, the CMRPC transportation staff attended six in-person sub-regional infrastructure summits, as well as one virtual summit focused specifically on transportation infrastructure in the region. These specialized meetings gave CMRPC staff and municipal officials the chance to communicate about issues and collaborate regarding potential remediations. In total, 48 municipal employees and officials attended the in-person sub-regional infrastructure summits and signed-in on a sign-in sheet. However, there were a handful of participants who attended but did not sign-in, as well as a handful of participants who signed-in but were unable to stay for the duration of the summit. Also, there were roughly ten participants at each of the virtual summits, but many did not attend for the duration of the meeting. Nonetheless, the sub-regional infrastructures were a success, and the North sub-region was the most well-attended of them all, with at least twelve participants.

Furthermore, the CMRPC transportation staff participated in over thirty stakeholder meetings. These meetings were held online or in-person with both traditional and nontraditional stakeholders. Oftentimes, these stakeholder meetings included periodic, scheduled meetings with traditional

stakeholders, such as the CMMPO Advisory Committee. Notes from many of these meetings are included in *the 2050 Connections Technical Appendix*.

It may be estimated that well over 600 people were directly involved in the 2050 Connections public participation process. Plus, it may be estimated that the CMRPC transportation staff interacted with at least ten people at each of the ten public tabling events, totaling to at least 100 people from public events alone. Lastly, 284 people voiced their opinions on regional transportation planning by means of the 2050 Connections public survey and ten people attended the 2050 Connections Priorities Public Meeting in May 2023. Moreover, the 2050 Connections hubsite was available to the public throughout the development of the plan and the interactive priorities map received over 200 votes.

The 2050 Connections public survey was the only method of public participation that involved asking participants to disclose demographic information. A complete overview of the demographic information received from this survey can be found in the survey second of *the 2050 Connections Appendix*. Nonetheless, for the sake of these performance measures, it is worth noting that many survey respondents either skipped the demographic information questions or selected “prefer not to answer”. For example, when asked to disclose their race, 74 respondents skipped the question and 26 selected “prefer not to answer”. Then, 154 respondents selected “White”, twelve selected “Black or African American”, and twelve selected “Hispanic or Latino”. Additionally, seven selected “Asian or Asian American”, four selected “American Indian or Alaskan Native”, and three selected “another race”.

In terms of other types of demographic info, 54 respondents indicated that they were between the ages of 65 and 74, 41 indicated they were between the ages of 55 and 64, and 28 indicated they were between the ages of 45 and 54. Finally, 56 respondents specified that at least one person in their home has a physical or mental disability. All of this demographic data collected from the public survey aligns with the demographic data of the CMRPC region, as indicated by the CMMPO Population and Employment Projections.

Throughout the public outreach process for 2050 Connections, five CMRPC newsletters were released, each with a reference to the development of the planning document. As previously mentioned, all the CMRPC newsletters are posted to the CMRPC website after they are released to subscribers. Also, a 2050 Connections article was released in all seven outlets of the *Stonebridge Press*. This effort, including the publishing of an infographic on the two Facebook pages associated with the Stonebridge Press, cost the CMRPC \$672. As for tabling events, some of them required a fee. For example, the Apple Country Fair cost the CMRPC \$60, and the Worcester Street Art Festival (stART) cost the CMRPC \$100.

Related to social media, the CMRPC Facebook page has always been the most successful of all the CMRPC social media platforms. Although several posts related to the LRTP were made on the CMRPC Instagram and Twitter accounts, the posts made on the Facebook account received the most likes and shares. Additionally, it may be assumed that the posts made on the Facebook page received the most traction, as it has over 600 followers, the most of all three of the CMRPC social media



accounts. In total, eight posts directly related to the L RTP were made over the period of six months. In total, these posts received 18 additional shares.

Finally, the 2050 Connections public outreach efforts did involve a lot of travel for the CMRPC transportation staff. For staff to be compensated for the miles traveled for public outreach events as well as the wear and tear on personal vehicles, the CMRPC transportation staff would regularly charge mileage as a part of their weekly timesheets. This charge is determined by the number of miles, roundtrip, between the CMRPC office and the public outreach event destination. For example, several of the CMRPC transportation staff traveled to and from the sub-regional infrastructure summits; so, they would calculate the number of miles between the office and the destination in each sub-region and self-report on their travel sheet. The CMRPC transportation staff also traveled to the ten tabling events and many stakeholder meetings.

### *Interact*

The *interact* performance measure refers to the qualitative and quantitative assessments related to the delivery, understanding and clarity of the information shared during interactions with the public, and sentiments gathered related to participants' experiences.

The CMRPC transportation staff made a concerted effort to ensure that all public outreach opportunities were convenient for all the people involved. This includes informing the public or relevant groups of the participation opportunity well in advance, as well as offering the opportunity to meet either in-person or online. For in-person meetings, such as the sub-regional infrastructure summits, the CMRPC staff chose accessible locations often located within or directly outside the town's center. If these meetings were not held on the building's first floor, there would be an elevator available.

Additionally, the CMRPC transportation staff attempted to involve as many people as possible in the 2050 Connections public outreach process and the regional transportation planning process: from inviting all municipal officials and employees to the sub-regional infrastructure summits and providing ample information at tabling events, to sending out invitations for stakeholder meetings to local organizations and businesses and announcing any opportunities to participate at community gatherings and meetings.

The distribution of flyers was a major effort made to involve more people in this process, as the 2050 Connections public survey flyer was available at all infrastructure summits and all tabling events, as well as distributed to 14 local libraries, senior centers, and other facilities in each of the CMRPC sub-regions. The 2050 Connections general presentation was also available at summits, tabling events, and stakeholder meetings, and participants were always made aware of the 2050 Connections hubsite.

Overall, the CMRPC transportation staff received positive feedback and affirmations from members of the public and stakeholders alike. For example, at the end of each infrastructure summit, attendees received evaluation sheets and many mentioned that the summit was meaningful and productive. Oftentimes, people pointed out that they were glad we were trying to improve

transportation options and networks for the region, despite complaints they may have about current conditions. Also, in general, people reported satisfaction with the way the public outreach opportunities were conducted, giving all people the chance to voice their opinions. Nonetheless, the CMRPC transportation staff did receive more negative feedback regarding the public survey. Specifically, people commented that the survey was too long and took too much time. In fact, the survey only received a 63% completion rate, meaning out of the 11,644 individual questions asked (41 questions X 284 respondents), only 7,335.72 of them were answered.

### *Incorporate*

The *incorporate* performance measure refers to qualitative and quantitative assessments related to how the active participation influenced regional transportation planning, such as the established regional priorities and the allocated budget.

As a result of all the public outreach efforts detailed in this report, the CMRPC transportation staff developed a summary of needs for each of the five LRTP planning areas as well as all six of the modes included in 2050 Connections. Additionally, the CMRPC transportation staff developed an overall summary of needs, which incorporated previously identified needs and financial constraints, and directly informed the 2050 Connections priorities. These drafted priorities were presented at the hybrid public meeting, hosted on May 31<sup>st</sup>, 2023. The final comments of attendees were considered and incorporated into the final priorities included in the plan. These comments include the priorities indicated on the online, interactive map that was plugged at this meeting to virtual attendees as well as advertised on the CMRPC Facebook page and the 2050 Connection hubsite.

Overall, the CMRPC staff had more than adequate resources to carry out these public outreach efforts. The CMRPC transportation staff were able to prepare informative materials and involve over 500 people in this process. In order to involve more people in the public outreach process, the only resource that might significantly increase the number of participants is staffing capacity. Perhaps with more people, more stakeholder meetings may have been scheduled and more survey responses would be collected.

Every major phase of the 2050 Connections development effort had a public engagement component. From gathering information through surveys, interviews, and regional infrastructure summits, every opportunity provided staff with meaningful information, needs, and concerns that were taken into consideration along the data analysis. The financial plan included in 2050 Connections, one of the major components of the plan, takes into consideration the CMMPO's approach to how the regional discretionary targets should be invested in the region. The CMMPO had the opportunity to review potential funding options for the 2050 Connections effort. One of the options presented a similar pattern to the funds that were programmed on the TIP as part of the implementation process of the previous long-range transportation plan, while the second option considered the new trends and policy guidelines, the federal funding programs available under BIL, and the extensive list of needs identified throughout the outreach process. Moreover, besides the myriad of opportunities the public had to participate throughout the development of the plan, a special hybrid meeting was held where

participants had the opportunity to prioritize projects, studies, and initiatives in person and virtually on the interactive map available on the hubsite. The results of this process were included in the final priority list by programmatic area of the 2050 Connections.

### What We Found & Lessons Learned

The public outreach process for 2050 Connections included many time-tested and proven effective strategies. The following pages include a retrospective take of what worked well and what did not work so well, or at least as planned or expected. Where applicable, recommendations are provided.

#### *Information*

The CMRPC Website and the 2050 Connections hubsite were repeatedly referenced throughout the LRTP outreach process. Both websites are continually updated with new information, such as newly released newsletters, notices of public hearings, proposed or approved projects, as well as recordings of meetings such as the CMMPO Advisory Committee. Next, all the presentations made for the LRTP outreach process were extremely useful, as they provide a visual aid and written descriptions of the topics being discussed in each meeting so that attendees can follow along more easily. Moreover, both the website and presentations were useful as a supplement to all other tabling materials used throughout this process, which included promotional materials such as the 2050 Connections flyer and the public survey flyer. This was crucial in terms of providing stakeholders and community members with a variety of informational materials that may appeal more to their needs and interests.

#### *Promotion*

Promotion for 2050 Connections required a lot of time and effort, but based on the public feedback, it was well worth it. Flyers were the most frequently used method of distributing information and with that, perhaps the most successful. Providing an eye-catching visual with a thought-provoking phrase encouraged many people to begin conversations with staff at tabling events and meetings. Whether it was a flyer about the public survey or a table display asking community members about their thoughts about a specific topic, many people began dialogues with staff by pointing to a flyer and asking for more information.

Flyers were also a great way to disseminate information to participating locations around the region, places where people go to learn about what is going on in their communities and find ways to participate. Flyers were also well-responded to at meetings, infrastructure summits, and on social media. Moreover, Senior Centers, Councils on Aging, and local libraries were the most responsive location type to the email blasts that asked recipients to distribute the survey flyers.

With that in mind, email blasts were a somewhat successful means of promotion. Although the response rate to these emails were often low, the outcome of meaningful connections through email blasts was worth it. In the future, email blasts should consider even broader audiences, and there should be a systematic method for how early to send out an email blast before an opportunity, and

when to send a follow-up email when recipients fail to respond. Nonetheless, because of email blasts, many valuable connections were made with stakeholders, local organizations, groups, and businesses, as well as community members.

The CMRPC newsletter has always been a great way to reach people who care about improving the quality of life in the region. Not only is the newsletter a great way to update the public on the LRTP, but also a productive means of informing relevant personnel of funding opportunities, proposed or approved projects, and upcoming or successful events. Moreover, the 2050 Connections press release in the seven outlets of the Stonebridge Press was a major stride in reaching more towns in the CMRPC region. For updates to 2050 Connections and future LRTP's, planning and implementing a systematic process for reaching out to and following up with news outlets may prove to be an imperative promotional effort.

Finally, social media continues to be a critical tool for promotion of the transportation planning process. People, businesses, and organizations that are familiar with the CMRPC and use social media follow the CMRPC pages to receive regular updates as a supplement to the websites and newsletter. Some followers even help with social media promotion by sharing posts on their own platforms. In the future, it may be beneficial to enhance the promotion of the CMRPC's social media platforms. Moreover, it may be beneficial to increase the use of specific hashtags and other trends.

### *Participation and Engagement*

As outlined above, the 2050 Connections public survey was one of the most far-reaching methods of participation and engagement for this LRTP. With all the promotion that went into the survey itself, the desired outcome was that hundreds of people would complete it and that there would be representation from all CMRPC communities. However, we only received 284 responses with a completion rate of 63% and 32 out of the 40 communities in the region were represented. Moving forward, the CMRPC will not only consider ways to increase promotion and reach more people in each of the CMRPC communities, but also ensure that the public survey is briefer and more palatable.

For the sake of the survey's integrity and assuring all participants had similar experiences with it, the length of the survey was not altered after having been published. Perhaps in the future, with updates to 2050 Connections and future LRTP's, there should be two surveys offered, one that is short (ten questions or less) and relatively general, and one that is longer (but no longer than 30 questions) with more specific questions and opportunities to leave open-ended comments.

Similarly, sub-regional infrastructure summits and stakeholder meetings were both crucial in terms of providing CMRPC with important feedback. However, with the infrastructure summits, some were not very well attended despite sending out invites far in advance and meeting at locations in all six CMRPC sub-regions, as well as virtually. In fact, all in-person infrastructure summits had a turnout of fewer than twenty attendees, and at the Southwest and West sub-regional summits, fewer than ten.



On the other hand, many groups, businesses, and organizations scheduled stakeholder meetings. These conversations play a major part in determining the potential projects and funding priorities of the LRTP. Moving forward, the CMRPC will focus on streamlining their approach to all stakeholder meetings and continue incorporating their broadening network.

# 2050 Connections Public Comments

## 2050 Connections Public Comments

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### Summary of Comments by Planning Area

#### **Congestion Mitigation Programs:**

Congestion Mitigation has been a major topic of discussion across the region. The COVID-19 pandemic caused an increase in at-home deliveries of goods, and with that, an increased demand for freight trucks and distribution centers. As people are transitioning back to their pre-pandemic lifestyles and resulting driving habits, this demand for at-home deliveries has not subsided. In each of the CMRPC sub-regions, people are expressing extreme frustration with congestion, even on backroads, as freight trucks are increasingly utilizing emerging technology like Google Maps and Waze to avoid highway traffic.

Some specific locations that were mentioned as needing congestion mitigation were the I-290 and I-90 interchange in Auburn, the MA-9 and MA-135 interchange in Westborough, and the Boston Road and MA-146 interchange in Sutton. Also mentioned was MA-140 in Shrewsbury and Church Street in Northbridge.

In terms of potential planning studies, the public expressed the need for a congestion study on Main Street in Holden and the Stafford Street and Center Depot Road bottleneck in Charlton. Potential initiatives that were mentioned during the public participation efforts include congestion mitigation on US-20 in Auburn, specifically the one-lane sections, and the I-84 and I-90 interchange.

#### **Safety:**

Community members throughout the CMRPC region need increased safety measures for all modes of transportation, but mainly auto, pedestrian, and bicycling. Poor pavement conditions, a lack of signs, signals, and crosswalks lead to unwanted roadway incidents. To determine where improvements should be prioritized, CMRPC staff will continue to work with municipalities to assess their needs and identify opportunities for low-cost countermeasures and/or potential TIP projects in high-crash locations. Another common method for identifying priority improvements are road safety audits (RSAs). The new federal discretionary grant Safe Streets and Roads for All (SS4A), under the BIL, presents an opportunity to identify and address safety issues in the region in a systemic way.

Community members referenced various specific locations that are unsafe because of poor infrastructure and roadway conditions and that would benefit from planning studies. Examples of these locations include the intersection of Otis Street and MA-9 in Westborough, the ramp from West Main Street to MA-140 in Shrewsbury, downtown West Brookfield, and the

intersection of Route 122A and Pleasantdale Road in Rutland. Some of these locations completed RSAs and are developing new designs. Others are programmed on the TIP and are awaiting advertisement.

Other community members and municipal employees expressed an interest in facilitating grant funding such as Safe Routes to School and Safe Streets for All. Sutton, North Brookfield, East Brookfield, Spencer, and West Boylston all indicated needing funding for projects on and around school properties, namely for sidewalks, crosswalks, and sufficient signage. Southbridge, Charlton, and Dudley voiced an interest in securing SS4A funding to implement accommodations for vehicles, pedestrians, and bicyclists along specific roads.

Specific projects that were mentioned during the public participation efforts include downtown Paxton's intersection and improvements at Otis Street to safely access the MBTA Commuter Rail Station in Westborough.

### **Asset Management:**

Across the region, there is a need for a best practice guide and toolkit about gaining candidacy for funding. An example of why this is necessary is the TIP, for which FHWA and DOT enforce eligibility requirements, making it difficult for municipalities to facilitate funds when they need them most. This best practices guide and toolkit would outline all the requirements necessary for each funding source, so that towns would know the credentials they need to secure before applying for the funds. This guide could also include general best practices about managing funds for different planning areas, as community members and municipal employees from many towns in the CMRPC region admitted to having a lack of "people-power" or overall lack of funding.

Additionally, multiple communities in each CMRPC sub-region need culvert replacements. There is a potential for CMRPC to expand its reach in terms of culvert assessments, but also, to create a checklist for municipalities before securing an official culvert assessment. This way, CMRPC may prioritize which culverts to assess and secure funding for.

### **Emerging Technology:**

As previously mentioned in the freight section of the Modes of Transportation chapter and the Congestion Mitigation Program section of this chapter, traffic caused by freight is a major issue in the region. Emerging technology plays a major role in why this congestion is such an issue on both highways and state routes, as freight trucks use navigation systems such as Google Maps and Waze to determine their routes based on live traffic data. There is a need incorporate this emerging technology into planning studies and subsequent regional mapping tools to identify



the best suitable freight routes (exclusions) without impacting the distribution chain and logistics of freight movement, while safeguarding the livability of our town centers and villages.

Other emerging technology that is becoming increasingly relevant to transportation planning is, of course, electric-powered vehicles and EV charging stations. Although there seem to be plenty of EV charging stations in some areas, this type of infrastructure needs to reach even the most rural communities in the region, as more people may become interested in investing in an EV. Innovations related to Artificial Intelligence (AI) and Autonomous Vehicles (AVs) were also mentioned during the public outreach process. The efforts related to AV technology were favored due to its potential to improve the mobility and assist the independence of those that are visually impaired.

Potential initiatives as a result of these emerging technologies could involve infrastructure-to-vehicle technology and vehicle-to-vehicle technology. Moreover, there is an increasing interest in car-sharing programs, similar to *Zipcar*, and even EV car-sharing programs. This could be a potential initiative for communities or sub-regions that are identified as interested. The regulatory climate on how to deal with disruptors and how equity will be addressed as part of the deployment of new technologies were also mentioned by participants.

### **Environment:**

Across the region, community members and municipal employees are becoming increasingly concerned with the long-term impact that transportation behaviors and systems have on the environment. More and more people are looking to change their personal transportation behaviors, whether that means carpooling more often, using public transit, walking or biking to their destinations, or purchasing an electric vehicle if they can afford to.

Many people throughout the public outreach efforts mentioned being specifically concerned about outdated culverts, dilapidated bridges, and flooding risks, and the subsequent effects on nearby wildlife. Various communities specifically expressed needing updated culverts and bridges. CMRPC can perform culvert assessments for communities, but there is a potential need for municipal checklists to give CMRPC an idea of the condition of the culvert in question before an assessment. From there, there is also a potential for a best practices guide or toolkit for potential funding avenues, such as BIL discretionary grants, to help alleviate some of the stress on towns as they approach outdated culverts. Furthermore, NAACC training should be promoted to interested communities as a tool for better understanding the impact that transportation infrastructure has on local wildlife.

Examples of some of the specific roads that were mentioned as needing culvert assessments and potential repairs were Ravine Road and Central Turnpike in New Braintree, Route 31 in West Boylston and Paxton, Booth Road in Auburn. The Town of Holden is currently working on

updating a few culverts, but the costs are high, and funding is limited, making the process arduous. Also, the Town of West Boylston expressed the need for improved infrastructure for flood mitigation.

## 2050 Connections Public Comments

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### Summary of Comments by Mode

#### **Auto:**

During the *2050 Connections* public outreach efforts, auto was the most frequently mentioned mode of transportation. Many people throughout the region reported issues with chronic congestion, roadway and pavement conditions, intersection designs and related signage, and parking capacity. Out of all communities in the region, Worcester was most frequently mentioned as needing improved pavement conditions, increased signage, and congestion mitigation. Specific streets in Worcester that were mentioned include Mill Street, May Street, Belmont Street, Main Street, Park Avenue, and Highland Street. Major highways such as I-290, I-395, and I-84 were also mentioned as needing potential reconfiguring.

One major issue that was brought up repeatedly throughout the public outreach period was the effect that distribution centers and warehouses have on roadway congestion. Many people noticed that since the beginning of the pandemic, more distribution centers have been and are being constructed throughout the region, causing more freight and truck traffic. There is a potential need for a cumulative impact planning study of distribution centers, trucking routes, and the subsequent traffic, as well as the costs and benefits of implementing strategies to reduce this congestion. There is also a need for a potential parking study in both Uxbridge and North Brookfield.

Many different major projects were brought up in conversation throughout the public outreach period. Some of these projects are in-progress or completed, and some were just being proposed. Some examples include Route 20 in Shrewsbury, for which designs are due in June 2023, and the I-495 and Route 9 interchange, which MassDOT completed a study for in 2011 and identified several issues that need to be addressed along this corridor. Examples of major infrastructure projects that were proposed were congestion mitigation on the interchange at I-90 and I-84 to I-290 in Auburn and Charlton, as well as the replacement of the Vernon Street bridge over I-290 in Worcester.

Lastly, various initiatives are being considered as a result of the public outreach period for this LRTP. This includes facilitating both MassDOT program grants and BIL discretionary grants for issues such as the bottlenecks in Charlton or the gravel roads in Rutland.

#### **Transit:**

Throughout all the methods of public outreach for this LRTP, many people expressed the need for increased reliability on public transit. This means that people need more access to public

transit options, with more fixed routes and more stops, increasing connectivity across the region. Reliable public transit also involves standardized scheduling, with live updates to times posted at stops and online. A potential project mentioned by the stakeholders that could enhance transit reliability is the implementation of transit signal priority (TSP) in major corridors in the City of Worcester. Also, advocates mentioned their desire to extend the free fare due to its benefits to the community.

One potential major project that would increase connectivity across the region is the proposed East-West passenger rail, which would connect Boston to Worcester, Springfield, and Pittsfield. This project was repeatedly discussed throughout the public outreach period for this LRTP. Another potential remedy to this issue would be to expand regional bus networks to service more towns in each sub-region, such as expanding the Quaboag Connector to Barre and other nearby towns. Expanding regional transit services could also involve planning studies of more specific issues, such as transportation for older adults in rural communities, or a route analysis to serve the new Amazon facility at US-20 and MA-169.

Many people reported being dissatisfied with the way public transit works in and around Worcester, with the Hub being in the center of the city, forcing people to have to come into the city just to get back out. Also, there are limited affordable parking options around and in general, many people just need services within their own communities.

### **Bicycle and Pedestrian:**

Overall, people throughout the region communicated a need for increased sidewalks and multi-use pathways within and around town centers and adjacent corridors, as well as around schools. Specific corridors that were mentioned throughout the public outreach period as needing improved pedestrian and bicycle accommodations include Route 9 and Route 122, as well as Park Ave, Highland Street and Mill Street in Worcester. These issues could be remedied with Complete Streets projects or identifying high-priority areas in terms of accessibility and regional/local network connectivity.

There is a potential need for a planning study to determine the benefits of generating community specific network plans for bicyclists and pedestrians, such as the Shrewsbury Sidewalk Plan. There is also an interest in creating a toolkit or best practices guide for accessing state and federal funds for bicycle and pedestrian infrastructure. This would not have to be community specific but instead all-encompassing and applicable to all community types and networks. Another potential study would be identifying age-friendly pedestrian routes, to aid people in navigating accessible routes and to use it as an example for future improvements.

In terms of specific trail networks that were referenced throughout the public outreach period, many people mentioned filling in gaps in and increasing connections and access to the



Blackstone River Greenway, the Mass Central Rail Trail, Southern New England Trunkline Trail, and the Mid-State Trail. Related to bike-friendly initiatives, interested communities should have the opportunity to adopt E-Bike Pilot Programs, similar to MassBike's program in Worcester, as well as other bikesharing opportunities, as identified on the CMRPC Bikesharing Report.

### **Rail:**

The East-West Passenger Rail Project was frequently brought up throughout all methods of public outreach. This proposed project would run from Boston, through Worcester, and to Springfield and Pittsfield, with stops all along this corridor. MassDOT is conducting a study to examine the costs, benefits, and investments necessary to realize this project. MassDOT is also comparing these findings with up to six alternatives.

Other mentions of rail throughout all methods of public outreach included how changes to MBTA zoning laws will affect housing developments along routes. Also, there is interest in conducting a railroad worker's working conditions study, as well as a costs and benefits study of increasing the use of rail for transporting goods in the region.

### **Freight:**

As mentioned as a part of the auto section, many people throughout the region expressed the need for a potential study about freight behaviors and patterns, such as along the I-495 corridor. This study could potentially be the catalyst for the creation of a regional mapping tool focused on distribution centers, trucking routes, and resulting traffic patterns. This tool could help remediate the issue of freight trucks using backroads to avoid traffic on major highways, which subsequently causes increased traffic at intersections and access points in town centers and local roads. Also frequently mentioned throughout the public outreach period was the desire to incorporate emerging technology, such as Google Maps and Waze, into the potential regional mapping tool that focuses on freight patterns, as well as incorporating such technologies to address congestion peak hours and resulting delays.

Furthermore, there is a need for more access points between interstate, state routes and other major roadways so as to avoid on and off ramp congestion. Specifically, many people in the Southeast region mentioned that congestion along Route 146, through Douglas and into Rhode Island, has been a major issue for commuters, as well as Route 146 to Route 16.

Lastly, some potential projects were proposed during the public outreach period. Firstly, freight operators need increased parking options, as well as rest area facilities. Also, freight operators need at-grade crossing improvements, in various locations across the region. Improving working conditions for freight operators is essential as the use of freight is always expanding and plays a critical role in the region's economy.

### **Airport:**

There are several airports in the CMRPC region, including Worcester Regional Airport, Spencer Airport, the Southbridge Municipal Airport and the Tanner-Hiller Airport in Barre. Throughout the public outreach period, the Southbridge Municipal Airport was mentioned as needing repairs and reconstruction according to Federal Aviation Administration (FAA) regulations, as well as potential expansions to allow for larger jets. Also, the public demonstrated a desire for a pedestrian bridge that would connect the Tanner-Hiller Airport in Barre to the Mass Central Rail Trail. The Hopedale Industrial Park Airport was also mentioned as needing access improvements.

The Southbridge Municipal Airport, received \$7 million in 2021 from the Airport Improvement Program (API) for runway reconstruction and taxiway, as well as CARES funds and Airport Rescue Grants. Participants of the public outreach process mentioned the possibility of positioning this airport as a cargo airport, given its strategic location in the region and the presence of many distribution centers. Roadway improvements will be necessary to allow safe freight movement in and out of the airport. The access to the Worcester Regional Airport by way of the MA-56, was also mentioned during the outreach efforts.

## 2050 Connections Public Comments

### Comments from IMAGINE 2050 Outreach

Transportation Comments from IMAGINE 2050 Outreach
Need for mix of housing choices to address different housing needs- importance of location of housing options in regards to amenities (i.e. jobs, open and recreation space, destinations, healthcare services, goods, transportation, etc.)
MBTA Communities Policy will put pressure on communities with use of open space and natural resources, but we know that additional affordable housing is needed. Look at this in creative ways as more pressure begins from people moving west
Increase transit to all communities might help improve the environment
Aging in place- rely on public transportation for folks to be able to access amenities, recreation/open space, priority destinations (medical facilities, etc.)
Shrewsbury Project- town center district project (lead to more walkable places, access to public spaces, outdoor dining, etc.)
Better natural spaces, more separation between nature and businesses, more bike trails that are separated from the streets. Better sidewalks that extend into more neighborhoods.
Connecting kids and families in Worcester to the open space, recreation, farms, trails, water bodies, etc. in the surrounding towns. Completing bike trails/rail trails so they aren't so fragmented. More composting services offered in the region.
Public transportation to outdoor spaces
Affordability of energy, housing, transportation- building in equity to these systems
A robust investment in Rail Trail / Bike Trails to connect all Towns ( & Attractions ) in Central MA, complete with parking options & charging stations for e-bikes.
Attention to climate issues-- more local options to decrease transportation of goods and people, alternative energy, etc.
Eco-friendly, sustainable energy. public transportation. many public lands. extensive bike trails. support for local farmers and protection of precious farmable land. equality of schools among all communities, much less incarceration because of social safety net. speed limits enforced on roadways.
Expanded electric vehicle infrastructure
Tram or subway connection directly from Worcester Airport terminal to downtown Worcester. Increase in local production of food and energy for greater independence from fluctuations and risks in global markets.
Clean and sustainable public transportation
Expansion of public EV FastDC (aka Level 3) charging infrastructure to support EV adoption.
Manage Worcester growth by expanding public transportation, expanding housing to support workforce

## 2050 CONNECTIONS TECHNICAL APPENDIX

Transportation Comments from IMAGINE 2050 Outreach
More transit services to go with the housing/zoning requirement (MBTA communities)
Construction of housing near transportation
Impacts of new housing development on transportation infrastructure
A local medical center like reliant Medical Group In Holden. A local grocery store, more housing, better farms that sell local meat and vegetables. Additional nice path to walk or bike at.
Affordable mixed use housing, walkable areas. Easy public transportation
Also living local green economies! Better accessibility for everyone, such as sidewalk, bus and separated bicycle networks, jobs close to housing and an economy that depends on that, that is safer and more accessible particularly for children, elderly and socioeconomic statuses/income-levels.
An amended 40B - Comprehensive Permits (and revised local zoning for multifamily of all kinds) to prohibit car-oriented "big box residential" developments (i.e. large squares of units surrounded by oceans of parking lots) and to require walkable Traditional Neighborhood Development (TND) with "middle housing" of quadplexes through 8 and ten unit buildings.
Free and widespread transit, bike lanes, anything to reduce reliance on cars. Much more affordable housing and more diverse options. Improve conditions of housing.
Transit-oriented development with affordable-accessible housing in TOD zones.
Worcester airport rebound and East West Rail
Remote work might reduce increase capacity needs on transportation infrastructure
Transportation is a huge issue
all types of transportation
rail service to boston takes too long
invest in the roads
Need more funds for trails (maintenance and care) to increase quality of life (better way finding, accomodations, etc.)
Reducing the commute to work- which in turn would help infrastructure i.e. roads
Improve interconnectivity
Changes to transportation patterns into the future
Distribution facilities/traffic patterns impact on GHG due to changes to supply chain
Person transportation: cars?, transit, PODS, gas, electric, trolleys???
Incentivize people to use public transportation (ie free fare)
Re educate people to use public transportation
Making public transportation more expensive and less convenient
Shorten commute times around region (through public transportation or roads)
transportation to work needs to become more efficient
expand transportation industry to create new jobs
Improved multi-modal transportation opportunities across state boundaries
Lots more transit opportunities will provide more quitable opportunities across the region
More transit, more concentrated development, less large parking lots= less CO2 emissions from cars, less impervious surface, more room for nature to provide ecosystem services
More walkable developments and opportunities



## 2050 CONNECTIONS TECHNICAL APPENDIX

Transportation Comments from IMAGINE 2050 Outreach
Nexus between water supply, labor supply, transportation needs for farmers (or aspiring farmers)
Transportation for new jobs, efficient transportation into Worcester
Pedestrian and bike infrastructure
East/West rail-- will commuting still be prevalent?
Challenge of integrating and/or creating new or additional public transportation (so that it has some positive environmental (and socioeconomic) benefits)
People need more public transit and it would have positive impacts on the environment
Small towns are lacking transportation support for mass transit
Fund mass transit in rural communities
MBTA Communities requirement- equity for adjacent communities with no train stop
Will MBTA adjacent communities receive MBTA assessments for future services?
Understanding how protected/unprotected bike lane infrastructure impacts property values and rental costs. Different from city to city, neighborhood to neighborhood
Town supported ride sharing services
Continue WRTA free fares
Robust electrical network to support electrical vehicles
More public transportation
Need for equity in transportation! Expand transportation modes- public transit to more rural communities to move away from the need of personal vehicles (and for those that may not own a personal vehicle)
Economic development- inequitable economic development, highly concentrated along highway systems and public transportation systems- more rural communities (less connected) may feel the burden
Lack of transportation infrastructure limits access to jobs
Coordination between transportation infrastructure and transit to workforce connection
Need for broader regional government?
Utilize complete streets to encourage walking/biking
Ensure that our public transportation reflects the people using it
Park n rides and accessibility for freight truck drivers to sleep and maybe have food nearby
Impact of amazon facilities- more vehicles and traffic, driver safety, idling impacts to air quality
Impact of tolls on 146 to trucks and those trucks taking different routes
Everything west of Worcester is non-industrial development because of a lack of highways for trucks.
Invest in transportation new technologies
Rail line that runs from Worcester to Gardner, could be transit bringing students for Wachusett Regional, or transit to Worcester
Airport needs in Southbridge: Parts of Barefoot Road needs to be reconfigured for runway expansion, Highway access from I-90 would be useful
New economy of warehouse and transportation will be something to plan for by 2050 ( Lack of highway access may be holding Southbridge back from this economic opportunity)
Public transportation needs improvements - more options are needed, people need to get places other than work

## 2050 CONNECTIONS TECHNICAL APPENDIX

Transportation Comments from IMAGINE 2050 Outreach
Train access would be useful but other modes (like expansion of bus system) would also help
Create park and ride areas to encourage bus use
Piggy back on regional neighbors' transportation improvements (ex. bus service improvements in Webster could benefit Southbridge)
Public transportation should be free
Traffic concerns in Westborough
Distribution centers create truck traffic, land clearing, and could leave at any moment
Buses between towns around southbridge are very helpful
better sidewalks
public buses
buses connecting towns
more walkable
Expand transportation in rural/suburban communities
Expand access to healthcare facilities, especially in rural communities, so that owning a car is not a necessity for healthcare access
Transportation is the number one challenge for rural communities, especially for access to jobs and services
More contract vans for rides to work
Increase flights out of Worcester airport
Access to more travel by flight would enhance Central Massachusetts economy through more businesses and work
Hard to get in and out of Sturbridge
Streamline free public transportation for those with disabilities
Sidewalk infrastructure is necessary for those who walk to work
Same day delivery is creating challenges around traffic, warehousing, and impacts to local businesses
Transit/Transportation Access
Better public transportation and bicycle options.
Bikeable roads, shared use paths connecting towns, more bike infrastructure from bike lanes to separated bike lanes to sharrows to mixed use paths. Get serious about improving bikeability for ALL.
bus transportation and more jobs
European countries have invested in dedicated, interconnected and numbered bike routes
Expanded public transportation so people can either walk to work and shopping or take public transportation and reserve cars for special circumstances.
Free and accessible public transportation
Free Parking and more parking access. Less panhandlers.
Growth in people who live and work in the area.
I think there needs to be investment in MA transit which is not on your list.
I feel that the CMRPC region has an opportunity by 2050 to counter prevailing car-centric infrastructure and non-walkable infrastructure in the USA.

## 2050 CONNECTIONS TECHNICAL APPENDIX

Transportation Comments from IMAGINE 2050 Outreach
I imagine more walkable areas that expand into residential areas so that folks can walk to town centers more easily. I imagine more, higher quality restaurants and food options that utilize locally grown/produced foods.
I imagine that public transportation be available in all areas of Central Ma..
Improve roads and highways. The state highways are dangerous and over crowded. Taking away travel lanes on rte.20 was a huge mistake. I love riding bike trails but taking a travel lane away and making it a bike lane was ridiculous no one wants to ride a bike down a highway with cars traveling at 50 to 60 mph and no one does. The bike lane was a waste of money and would have been better spent expanding the bike trails we already have. Taking away the travel lane also causes major backups on rte. 20 in Charlton and Sturbridge and Brimfield. Route 20 also needs turning lanes especially for left hand turns.
Improved regional interconnectedness. We need to image a Central Massachusetts where you can easily get around the region without a car! More transit connections needed between constituent communities.
Improvement in our transportation system to accommodate business and housing development.
Invest in public transportation
More easily accessible public transportation.
More options for transportation. More WRTA routes in South Central Mass.
More public transportation options, including better commuter rail service.
more sidewalks or expansion of roads for biking and to encourage walking to downtown centers in small towns/cities
Need better highway access, and better public schools.
Needs roadways, Rt. 49 - bypass Holden
public transit!!!!!!!!!!!!!! credits for transit, fewer credits for parking lots. more community involvement programs, volunteering, etc
Public transportation
Public transportation
Public transportation covering Wachusett area
public transportation, supporting movement of all people.
quality education, vibrant towns, support for green transportation, preserved farm land and forests.
Regional public transportation, especially a train to New York City, via Providence.
Walkable communities. Local farmers markets. Being able to walk to places of business.
Walkable/Bikeable as well!
We need to grow our economy regionally and bring more people into the workforce. We can do this by increasing transportation to our western suburbs, permitting more growth, and creating workforce programming to engage our residents. We also need to look at our current codes and how they drive the cost of construction. The cost of construction is encouraging gentrification.
wider crosswalks and lessen truck traffic.
connecting the bike trails/pedestrian trails among the towns It looks like I could pick 6 - so I ranked them 1-6 but I agree with them all

## 2050 CONNECTIONS TECHNICAL APPENDIX

Transportation Comments from IMAGINE 2050 Outreach
I imagine policies and actions that support/incentivize and encourage mass transit, walkability and non-car travel.
I'd love investment into the cyclist infrastructure
less regulation by the DCR restricting land use in favor of "clean water" mountain biking is less impactful than logging but they allow that
More electric vehicles- school buses, public transportation, public safety
Public transportation
Also hard to pick - but public transit is greatly undervalued here. CONNECT MASS via TRAINS! north/south
For those who live west of Worcester it is a long difficult commute into the city center. There should be a east/west parkway built between route 2 and mass pike to accommodate all those in between.
Free WRTA
Geographic fairness is odd, I don't know if you mean as allocated by-person or by-area. I think by-area would not make sense because then most investments would go where most people aren't. Education should also tie into the rest, for example, education about access to healthy food, and education on getting involved with the local government. We also need better accessibility for everyone, such as sidewalk, bus and separated bicycle networks, and jobs close to housing, that is safer and more accessible particularly for children, elderly and socioeconomic statuses/income-levels.
Increased regional rail coverage and more stops on commuter rails.
management of route 146 truck traffic before more people get hurt.
Robust train system would be a godsend
There's should be more sidewalks in the area where people walk a lot.
Three key elements are interconnected: transportation to healthy food, access to healthcare, and access to healthy food... this one was difficult to prioritize because they are tied together.
While this category seems somewhat altruistic what we ranked as as 8 or better as imagined realities are key for our business (and I suspect) other business to thrive. We need better local mass transit so we can expand the pool of labor here. Right now without a car workers have a hard time getting to work.



# 2050 Connections Public Comments

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## Town of Charlton 2050 Connections Comments

### Comment Details:

Date: August 25<sup>th</sup>, 2022

Via: Email

Topic: 2050 Connections Draft Document & Regional Infrastructure

From: Town of Charlton's Town Administrator, Andrew Golas

To: CMRPC Transportation Project Manager, Yahaira Graxirena

### Comments:

- Just as a follow up to yesterday's infrastructure summit, here are some of the comments regarding the Charlton priorities. I hope this is helpful. Thank you
- MIP
- Route 20 (Rt 31 – Sturbridge) – Currently the Rt. 20 Corridor from Richardson's Corner – Rt. 12 in Auburn is identified for significant improvement between 2022- 2025. Additionally, the Sturbridge Road over Cady Brook Bridge is on the TIP for 2026. The current demand on Rt. 20 during peak traffic creates a significant backup where the roadway merges to one lane Eastbound to accommodate the width of the bridge. This is expected to become more of an issue with the opening of the Amazon Robotics Sortation Center. There is sufficient land for takings to accommodate a road widening sufficient to provide 2 ways in each direction and sufficient turning lane from Westbound to Rt. 169. This should be included in the overall plan of bridge replacement.
- Given the potential impact of commercial development along Rt. 20, the entirety of the corridor to Sturbridge should be further studied for improvement.
- Stafford Street – Stafford St. corridor contains of a number of high crash locations. The town engaged a corridor improvement study which recommended a number of pedestrian and MV safety improvements that could be made throughout the corridor. The recommended improvements should be considered as part of the long term plans.
- Pedestrian
- Auburn Mall Area – Incorrectly listed as a Town of Charlton project
- Main St – N. Main Street – Muggett Hill Pedestrian Network – The current pedestrian sidewalk network on Main Street is limited and in need of significant repair. Additionally, the existing network does not extend to areas that would be well served by a viable pedestrian network (Bay Path School, Maynard Field/Arts & Activities Council, CVS). The town negotiated the payment of \$1.5M as part of the community partnership agreement with Amazon to begin this work. Additional funding will most likely be needed to complete a full pedestrian network build-out.

- Transit
- Rt. 20 access to Rt-90 – Consideration should be given to a Masspike interchange in Charlton to alleviate congestion at the 84 interchange in Sturbridge and better serve growing distribution commerce
- E-W Rail Access – Currently the E-W rail feasibility identifies Palmer as the lone stop on the rail between Springfield & Worcester. The distance from Palmer to Springfield is approximately 18 miles which can be traveled by MV in 22 mins. Palmer is 36 Miles from Union Station in Worcester which is approximately a 50 min drive. It seems reasonable that a midpoint connector should be established to support the E-W rail network. Given the alignment of the existing railway. A Charlton stop would make sense as a “park & Ride” model.

## 2050 Connections Public Comments

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### Town of Northbridge 2050 Connections Comments

#### Comment Details:

Date: September 9<sup>th</sup>, 2022

Via: Email

Topic: 2050 Connections & Regional Infrastructure following CMRPC Quarterly Commission Meeting

From: Town of Northbridge Town Planner, Gary Bechtholdt

To: CMRPC Executive Director, Janet Pierce

#### Comments:

- For Northbridge -identified Route 122 (Providence Road), Plummers Corner & Church Street/Quaker Street for Question #1
  - RT 122 -the need to improve & repair roadway, drainage infrastructure & sidewalk.
  - As you likely know, portions of RT 122 is MassHighway & others Northbridge.
  - Stretches within Linwood area (MassHighway) are in need of attention; sidewalks & drainage structures, etc.
  - Northbridge, like the majority of CMRPC communities -adopted Complete Streets program initiative -we are currently working with design engineers on Linwood Avenue.
  - Plummers Corner -adjusting the traffic signal sequencing seems to improve LOS (a bit); roadway geometry at the intersection may remain an issue
  - Church Street/Quaker Street Intersection -main travelway during peak hours -to/from RT 495
  - Extending sidewalks from its current terminus on Church Street (extension from Plummers Corner) through to the DCR land -to do so would require improvements to crossing at historic Blackstone Canal (relatively narrow travelway)
- For Question #2 -suggested a comprehensive report be prepared for the entire layout of Route 122/Providence Road; identifying existing physical conditions of roadway, sidewalk, drainage infrastructure, etc. Prepared layout plans showing limit of Right-of-Way for the entirety of Route 122/Providence Road, locating sidewalk, drainage structures, culverts etc. The purpose of which is to identify needed and improvements & (re)design of roadway to include bike lanes, improved pedestrian sidewalk, etc.
- Would also look to have the Blackstone River Bikeway project advance in Northbridge -seems connection to Uxbridge could be accomplished via the DCR land through to Plummers Landing; that's where it becomes interesting, as the layout has not been formalized, conceptual layouts were discussed years ago; however not followed up; perhaps due to design/construction costs with multiple river crossing and/or conflicts with the rail.

- We did not get to Question #3.
- From a pure observer POV -participation at the meeting (as you likely know) appears to be representative of a small age-group and likely not a good demonstrative sample for other age populations...Perhaps the survey participation may help broaden this demographic.
- Lastly, to those wanting improved traffic access (roadway upgrades) for the more rural communities -suggest, be careful what you wish for.....as improved access to/from Worcester may result in unintended residential growth in those towns....
- If you or others would like to speak with me & others from Northbridge on this 2050 Connections -let me know.

# The Public Survey



# TAKE THE SURVEY!



The region's transportation plan acts as a blueprint that helps guide the prioritization and funding for transportation improvements in the region. The plan includes the following:

- ✓ Socio-economic Projections
- ✓ Transportation Improvements
- ✓ Major Infrastructure Projects
- ✓ Transit & Mobility
- ✓ Livability & Healthy Aging
- ✓ Climate Change & Resiliency

Public involvement, data and performance measures are at the core of the region's plan.

Sign up and stay updated! Join our email list about local opportunities to participate!.



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<http://www.cmrpc.org/2050connections>



# ¡LLENA EL CUESTIONARIO!



El plan regional de transportación a largo plazo es esencial para guiar el proceso de priorización de proyectos de transportación y la inversión de capital necesaria por los próximos 20 años.

El plan incluye lo siguiente:

- ✓ Proyecciones socio-económicas
- ✓ Mejoras a la infraestructura
- ✓ Proyectos de gran impacto regional
- ✓ Transporte público y movilidad
- ✓ Entornos habitables y caminables
- ✓ Cambio climático y resiliencia

La participación ciudadana es un aspecto esencial del plan regional.

¡Unéte a nuestra lista de correo electrónico para enterarte de como puedes participar en el proceso!



Conéctate:



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## 2050 Connections

### 2050 Connections Survey

**The Central Massachusetts Metropolitan Planning Organization (CMMPO) is requesting your cooperation to complete this survey about transportation in the region. Your answers will help guide the policies, plans and funding required for a sustainable transportation future in the region.**

**Your information will be kept anonymous and confidential. You can skip the questions by clicking the Enter button.**

\* 1. In which town/city do you reside? Please choose from the dropdown menu below. Type to filter faster.

Other (please specify)

\* 2. In which town/city do you work? Please choose from the dropdown menu below. Type to filter faster.

Other (please specify)

\* 3. What is the first thing that comes to mind when you think about transportation?

Roadway maintenance

Trails

Traffic safety

Public transportation

Freight

Congestion

Walking

None of the above

Biking

Other (please specify)

\* 4. What is your **PRIMARY** mode of transportation?

- In a vehicle: Drive alone
- In a vehicle: As a passenger
- Bicycle
- Walk and/or use mobility assistance device
- Bus
- Commuter rail
- Paratransit / Senior transportation
- Uber, Lyft or Taxi service

Other (please specify)

\* 5. If you didn't have access to your **PRIMARY** mode of transportation, how would you get around?

- Bike to my destination
- Walk to my destination
- Use public transportation (WRTA, MBTA)
- Call a taxi, Uber/Lyft
- Call a friend
- Would have to stay at home
- Other (please specify)

6. Do you want to use a different mode of transportation as your **PRIMARY** method of getting around?

- Yes
- No
- Not sure

7. If yes, which one?

- Walking
- Public transportation
- Bicycle
- Paratransit / Senior Transportation
- Public On-demand Transportation (phone app)
- Uber, Lyft or Taxi service
- Single vehicle
- Other (please specify)

8. Have you experienced any transportation - related difficulty during the past year? Check the list and select the answer that best fit your personal experience.

- There is no transit service available where I live.
- Can't go to school on my own.
- Gas is too expensive.
- Can't afford a car.
- Don't have a driver's license.
- There are no sidewalks or pedestrian facilities available.
- There are no bike lanes or bicycling facilities available.
- Need someone to help me.
- Limited days/time of service (transit, paratransit, senior transportation, etc.)
- Need to call or make a reservation in advance.
- N/A - I can travel freely without any difficulty.
- Uber, Lyft, and taxi services are too expensive

Other (please specify)



9. Have you experienced any difficulty getting where you need to go for any of the following purposes? You can choose more than one purpose.

- Trip to work
- Trip to school / college / training
- Trip to medical appointments
- Grocery shopping
- Running errands
- N/A - I can travel freely without any difficulty

Other (please specify)

## 2050 Connections

### Bicycle Infrastructure

10. Let's talk about bicycling in the region!

- Yes
- No

11. Do you have access to a bicycle?

- Yes
- No

12. If yes, approximately how often do you bike?

- Daily
- Once a week
- Several days a week
- Rarely
- Never

13. Would you use a bike sharing service if it is available? Bike sharing is a shared transportation service which allows bicycles to be publicly available for a nominal fee and provides an alternative for short trips as well as first and last mile connections to public transit.

- Yes
- No

14. Which type of bicycling facilities do you prefer? Choose only one.

- Clearly marked bicycle lanes
- Shared lane with buses
- Bicycle lane separated from traffic
- Off-road bicycle facilities
- On-road with vehicles
- None of the above

15. Where would you add / improve the bicycle infrastructure or facilities? Enter a location in the space provided below. Please be as specific as possible. Include name of the street and town.

## 2050 Connections

### Trails

16. Let's talk about trails!

- Yes
- No

17. Did you visit a trail this past year?

- Yes
- No
- Not sure

18. Do you know a location where a trail should be added or improved? Enter a location in the space provided below. Please be specific.

## 2050 Connections

### Public transportation

19. Let's talk about public transportation in the region!

- Yes
- No

20. Have you used public transportation in the last year?

- Yes
- No

21. If yes, please indicate the type of service you used. You can choose more than one.

- WRTA
- Community shuttle (available in Grafton, Northbridge, Webster, Dudley and Southbridge)
- WRTA - VIA (available in Westborough and Shrewsbury)
- WRTA Paratransit
- Council on Aging transportation services
- Elder Bus
- Ready Bus
- Quaboag Connector
- PVTA Amherst - Worcester
- MART Clinton - Worcester Commuter
- MBTA Commuter Rail
- Peter Pan / Greyhound bus line

Other (please specify)

22. Approximately, how often do you use public transportation?

- Daily
- Once a week
- Several days a week
- Rarely
- Never

## 2050 Connections

### Pedestrian Infrastructure

**Pedestrian infrastructure refers to sidewalks, crossings, signals, pavement markings, intersection designs, and other features that support the walking experience.**

23. Let's talk about pedestrian infrastructure!

- Yes
- No

24. How would you rate the condition of the pedestrian infrastructure in your town of residence?

	Excellent condition	Good condition	Regular condition	Bad condition	There is no pedestrian infrastructure available.
Sidewalks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Crosswalks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Curb ramps	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Signals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lighting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

25. If you walk a distance of 1/4 (0.25) mile from your residence, which of these destinations you will be able to access? Walking 0.25 miles is equivalent to walk about 5 minutes or close to 500 meters. Choose all that apply.

- Supermarket / corner store
- Pharmacy
- Doctor's office / clinic / hospital
- School / college
- Park / playground / recreational area
- Restaurant / cafeteria
- Bus stop
- Place of employment
- Shopping mall / stores
- None of the above

26. Where would you add / improve the pedestrian infrastructure? Enter a location in the space provided below.

## 2050 Connections

### Roads

27. Let's talk about roads and traffic congestion!

- Yes
- No

28. Please mention a location where roadway pavement should be improved. Enter a location in the space provided below. Please be specific. include street name and town.

29. Please indicate a location that suffers from traffic congestion in the space provided below. Enter a location in the space provided below. Please be specific. include street name and town.

## 2050 Connections

### EVs

30. Let's talk about electric vehicles!

Yes

No

31. Do you have access to a hybrid or an electric vehicle in your household?

Yes

No

32. If an electric car sharing service is made available in your town, would you use it? An electric car sharing is a shared transportation service which allows access to a publicly available vehicle for a nominal fee and provides an alternative for essential trips.

Yes

No

33. Please indicate a location where there should be an EV charging station. Please be specific.

## 2050 Connections

### Funding and Priorities

34. Let's talk about funding for transportation!

Yes

No



35. Before talking about funds, we need to know what your priorities are. Please rank 1 to 10 the following options in order of priority. Please enter 1 for your top priority and 10 for your lowest priority.

- Improve pedestrian safety (infrastructure, VisionZero policies, other countermeasures)
- Stormwater management / flood control / culvert replacements
- Reduce traffic congestion (roundabouts, updated and coordinated traffic signals)
- Transit service (reliability, affordability, expansion)
- Maintain pavement condition (rehabilitation and preservation)
- Reduce vehicle crashes that result in serious injuries and fatalities
- Expand the electric vehicle charging stations infrastructure in the region
- Expand the bicycle infrastructure in the region
- Accommodate freight needs (distribution centers, facilities, rest areas, delivery/loading zones)
- Expand trail network in the region.

\* 36. How would you distribute the transportation funds available in the region? Think about the priorities you just ranked. Try not to exceed 100%.

	10%	20%	30%	40%	50%
Roadway maintenance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public transportation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pedestrian infrastructure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bicycle infrastructure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reduce congestion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Traffic safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trail network	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Freight facilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Culvert replacements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Electric vehicle charging stations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2050 Connections

Demographics

The following questions are optional. Your answers will help us to improve our work.

37. What is your age group?

- |                                |                                     |
|--------------------------------|-------------------------------------|
| <input type="checkbox"/> 18-24 | <input type="checkbox"/> 55-64      |
| <input type="checkbox"/> 25-34 | <input type="checkbox"/> 65-74      |
| <input type="checkbox"/> 35-44 | <input type="checkbox"/> 75 or more |
| <input type="checkbox"/> 45-54 |                                     |

38. What is your race/ ethnicity?

- |  |  |
|--|--|
| <input type="checkbox"/> White                     | <input type="checkbox"/> American Indian or Alaska Native          |
| <input type="checkbox"/> Black or African American | <input type="checkbox"/> Native Hawaiian or other Pacific Islander |
| <input type="checkbox"/> Hispanic or Latino        | <input type="checkbox"/> Another race                              |
| <input type="checkbox"/> Asian or Asian American   | <input type="checkbox"/> Prefer not to answer                      |

39. Does anyone in your household has a special transportation need due to age or disability?

- Yes  
 No

## 2050 Connections

Thank you!

**Thanks for taking the time to complete this survey. Visit <https://cmrpc.org/2050connections> for more information about the plan, events and other ways to participate.**

40. If you will like more information about 2050 Connections and transportation planning in the region, please enter your email in the space provided below. Note: By providing your email information you are consenting to be added to CMRPC's emailing list.

41. Do you have any final remarks or comments that you will like to share with us? Use the space provided below.

Cuestionario "2050 Connections"

**La Organización Metropolitana de Planificación de la región Central de Massachusetts (CMMPO, por sus siglas en Inglés) solicita su cooperación para completar este cuestionario sobre diferentes aspectos relacionados con la transportación en la región. Su participación ayudará a definir la política pública, los planes y las subvenciones de fondos necesarios para alcanzar un futuro de transportación sustentable para la región. Su participación en este cuestionario es de forma anónima y toda información que usted provea permanecerá confidencial. Puede oprimir el botón de "Enter" si no desea contestar alguna de las preguntas que siguen a continuación.**

\* 1. ¿En qué pueblo o ciudad usted reside? Por favor escoja una de las opciones que se incluyen en el menú. Comience a escribir para filtrar las opciones más rápidamente.

Otro lugar

\* 2. ¿En qué pueblo o ciudad usted trabaja? Por favor escoja una de las opciones que se incluyen en el menú. Comience a escribir para filtrar las opciones más rápidamente.

Otro lugar

\* 3. ¿Cuándo usted piensa en transportación, qué es lo primero que le viene a la mente? Escoja sólo una contestación. No podrá continuar hasta que seleccione una de las alternativas.

- |  |   |
|--|---|
| <input type="checkbox"/> Mantenimiento de las carreteras | <input type="checkbox"/> Senderos naturales   |
| <input type="checkbox"/> Caminar                         | <input type="checkbox"/> Congestión vehicular |
| <input type="checkbox"/> Seguridad en el tránsito        | <input type="checkbox"/> Correr Bicicleta     |
| <input type="checkbox"/> Carga y acarreo                 | <input type="checkbox"/> Transporte público   |

Otra cosa

\* 4. ¿Cuál es su modo PRIMARIO de transportación? Escoja sólo una contestación. No podrá continuar hasta que seleccione una alternativa.

- En un vehículo: Viajo solo(a)
- En un vehículo: De pasajero(a)
- Bicicleta
- Camino y/o utilizo un dispositivo de movilidad
- Autobús
- Tren
- Transportación para adultos mayores
- Uber, Lyft o servicio de Taxi

Otro tipo de transporte

\* 5. ¿Si usted no tuviera acceso a su modo PRIMARIO de transportación, cómo hubiera podido viajar? Escoja sólo una opción. No podrá continuar hasta que seleccione una alternativa.

- Usaría la Bicicleta
- Caminaría a mi destino
- Utilizaría el transporte público (WRTA, MBTA)
- Llamaría a un amigo
- Llamaría a un Taxi, Uber of Lyft
- No hubiera podido salir a ningún lugar
- Otro

6. ¿A usted le gustaría utilizar un modo de transportación PRIMARIO diferente al que utiliza actualmente?

- Sí
- No
- No estoy seguro(a)

7. Si contestó que sí, indique cuál.

- Caminar
- Transporte público
- Usar la Bicicleta
- Transportación para adultos mayores
- Aplicación móvil para transporte público
- Uber, Lyft o servicio de Taxi
- Automóvil privado
- Otro

8. ¿Durante el pasado año, ha experimentado alguna dificultad relacionada con transportación? Chequee la lista provista y escoja las contestaciones que más reflejen su experiencia personal.

- No hay transporte público disponible donde vivo.
- No puedo ir a estudiar por mi cuenta, dependo de alguien que me lleve.
- La gasolina es muy cara.
- No tengo los recursos para comprar un vehículo.
- No tengo una licencia de conducir.
- No hay aceras ni cruzacalles adecuados para caminar de forma segura.
- No hay facilidades adecuadas para correr bicicleta de forma segura.
- Necesito que alguien me ayude.
- El transporte público es muy limitado (días y horas de servicio)
- Tengo que llamar o hacer reservaciones por adelantado.
- Uber, Lyft o el taxi son muy caros.
- N/A - Puedo viajar libremente sin ninguna dificultad.

Otro tipo de dificultad



9. ¿Ha experimentado alguna dificultad de transportación para llevar a cabo alguno de estos tipos de viaje? Puede escoger mas de una.

- Ir al trabajo
- Ir a la escuela/ universidad / entrenamientos
- Ir a las citas médicas / doctor
- Ir al mercado a comprar alimentos
- Hacer mandados / gestiones
- N/A - Puedo viajar libremente sin ninguna dificultad

Otro propósito

## 2050 Connections\_Español

### Infraestructura para Bicicletas

10. ¿Hablemos acerca de las facilidades para bicicletas en la región!

- Sí
- No

11. ¿Tiene acceso a una bicicleta?

- Sí
- No

12. Si contestó que sí, aproximadamente, ¿cuán frecuente utiliza la bicicleta?

- Diariamente
- Una vez a la semana
- Varias veces a la semana
- Rara vez
- Nunca

13. ¿De estar disponible, utilizaría un servicio público de bicicletas? El servicio de bicicletas públicas permite a las personas tener acceso a una bicicleta para hacer viajes cortos y conectar con el transporte público por un precio razonable.

- Sí
- No

14. ¿Qué tipo de facilidades para bicicletas usted prefiere? Seleccione una de las alternativas.

- Carril de bicicletas claramente demarcado en el pavimento.
- Carril de bicicletas separado del tráfico vehicular.
- Carril de bicicletas junto a los automóviles, sin demarcación en el pavimento.
- Carril de biciletas compartido con el autobús.
- Ciclovías en senderos naturales separados de la red de carreteras.

15. Mencione un lugar donde se deba añadir o mejorar la infraestructura para bicicletas. Incluya el nombre de la carretera y el pueblo. Recomendamos una constestación específica y detallada.

## 2050 Connections\_Español

### Senderos naturales

16. ¡Hablemos sobre senderos naturales!

- Sí
- No

17. ¿Ha visitado algún sendero natural durante el pasado año?

- Sí
- No
- No estoy seguro(a)

18. Mencione un lugar donde se deba añadir o mejorar un sendero natural. Recomendamos una constestación específica y detallada.

## 2050 Connections\_Español

### Transportación pública

19. ¡Hablemos sobre el transporte público en la región!

- Sí
- No

20. ¿Ha utilizado el transporte público durante el pasado año?

- Sí
- No

21. Si contestó que sí, por favor indique el tipo de transporte público que utilizó. Puede escoger más de uno.

- Autobuses de la WRTA
- WRTA Community Shuttle (disponible en Grafton, Northbridge, Webster, Dudley y Southbridge)
- WRTA - VIA (disponible en Westborough and Shrewsbury)
- WRTA Paratransit (van)
- Servicio de transportación de los "Council on Aging"
- Elder Bus
- Ready Bus
- Quaboag Connector
- PVRTA Amherst - Worcester
- MART Clinton - Worcester Commuter
- MBTA Commuter Rail
- Peter Pan / Greyhound Bus Line

Otro

22. Aproximadamente, ¿cuán frecuentemente usted utiliza el transporte público?

- Diariamente
- Una vez a la semana
- Varias veces a la semana
- Rara vez
- Nunca

## 2050 Connections\_Español

### Infraestructura para Peatones

**La infraestructura para peatones incluye las aceras y andenes, cruzacalles, señales, marcas en el pavimento, diseño de intersecciones y otros elementos que permiten caminar de forma segura.**

23. ¡Hablemos sobre la infraestructura para peatones.

- Sí
- No

24. ¿ Cómo calificaría la condición de las facilidades peatonales en su pueblo de residencia?

	Condición Excelente	Condición Buena	Condición Regular	Condición Mala	No hay facilidades peatonales disponibles.
Aceras	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cruzcalle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rampas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Señales	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Iluminación	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

25. Indique los lugares a los que usted tiene acceso al caminar 500 metros desde su lugar de residencia. Caminar 500 metros es equivalente a caminar 5 minutos o un cuarto de milla.

Marque todas las que aplique.

- SuperMercado / mercado de la comunidad
- Farmacia
- Oficina de doctor / clínica / hospital
- Escuela / Universidad
- Parque / área de juegos / área recreativa
- Restaurante / cafetería
- Parada de autobús
- Lugar de trabajo
- Tiendas de ropa, artículos del hogar, etc.
- Ninguna de las anteriores

26. Mencione un lugar donde se deba añadir o mejorar la infraestructura para peatones. Incluya nombre de la calle y el pueblo. Recomendamos una constestación específica y detallada.

## 2050 Connections\_Español

### Carreteras

27. ¡Hablemos sobre las carreteras y la congestión vehicular en la región!

- Sí
- No

28. Mencione un lugar donde se deba mejorar la condición del pavimento. Mencione un lugar donde se deba mejorar la condición del pavimento. Incluya nombre de la carretera y el pueblo. Recomendamos una constestación específica y detallada.

29. Mencione un lugar donde existe un problema de congestión vehicular. Incluya el nombre de la carretera y el pueblo. Recomendamos una constestación específica y detallada.

## 2050 Connections\_Español

### EVs

30. ¡Hablemos sobre los vehículos eléctricos!

Sí

No

31. ¿Tiene acceso a un vehículo eléctrico o híbrido en su hogar?

Sí

No

32. ¿De estar disponible, utilizaría un servicio de vehículos eléctricos comunitarios? El servicio de vehículos comunitarios permite a las personas tener acceso a un vehículo eléctrico para hacer viajes cortos por un precio razonable.

Sí

No

33. Mencione un lugar donde se deba añadir infraestructura para recargar los vehículos eléctricos. Recomendamos una constestación específica y detallada.

## 2050 Connections\_Español

### Financiamiento y Prioridades

34. ¡Hablemos sobre el financiamiento de la infraestructura de transportación!

Sí

No



35. Antes de hablar sobre el financiamiento a la infraestructura de transporte, necesitamos conocer sus prioridades. Enumere las siguientes opciones del 1 al 10 en orden de prioridad. Seleccione 1 para su mayor prioridad y 10 para la prioridad más baja.

- Mejorar la seguridad de los peatones (infraestructura, política pública de Visión Zero, otras estrategias).
- Manejo y control de aguas de escorrentías, control de inundaciones, reemplazo de alcantarillado.
- Reducir la congestión vehicular (rotondas, coordinación de las señales de tránsito).
- Servicio de transporte público (asequible y confiable, expansión).
- Mantener la calidad del pavimento (rehabilitación y preservación).
- Reducir los accidentes vehiculares que terminan en fatalidades y/o lesiones graves.
- Expandir la infraestructura para cargar vehículos eléctricos.
- Expandir la infraestructura de bicicletas en la región.
- Considerar las necesidades de carga y acarreo (centros de distribución, facilidades, áreas de descanso, zonas para entregas y de carga/descarga)
- Expandir la red de senderos naturales en la región.

\* 36. ¿Cómo distribuiría los fondos disponibles para transportación en la región? Recuerde las prioridades que seleccionó. Al contestar trate de no exceder el 100%.

	10%	20%	30%	40%	50%
Mantenimiento de las carreteras	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transporte público	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Infraestructura para peatones	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Infraestructura para bicicletas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reducir la congestión vehicular	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Seguridad en el tránsito	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Expandir la red de senderos naturales	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Facilidades de carga y acarreo	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mejoras al alcantarillado	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Estaciones de carga de vehículos eléctricos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Características Demográficas

**Las preguntas que siguen a continuación son opcionales.**

37. Indique su grupo de edad.

- |                                |                                     |
|--------------------------------|-------------------------------------|
| <input type="checkbox"/> 18-24 | <input type="checkbox"/> 55-64      |
| <input type="checkbox"/> 25-34 | <input type="checkbox"/> 65-74      |
| <input type="checkbox"/> 35-44 | <input type="checkbox"/> 75 o mayor |
| <input type="checkbox"/> 45-54 |                                     |

38. Indique su raza / etnia.

- |  |   |
|--|---|
| <input type="checkbox"/> Blanco(a)                                 | <input type="checkbox"/> Persona Nativa de Hawaii o de las Islas del Pacífico |
| <input type="checkbox"/> Negro(a) / Afro-Americano(a)              | <input type="checkbox"/> Hispano(a) o Latino(a)(x)                            |
| <input type="checkbox"/> Asiático(a)                               | <input type="checkbox"/> Otra raza / etnia                                    |
| <input type="checkbox"/> Asian or Asian American                   | <input type="checkbox"/> Prefiero no contestar                                |
| <input type="checkbox"/> Indo-Americano o Persona Nativa de Alaska |   |

39. ¿En su hogar, hay alguna persona que tenga una necesidad especial de transportación debido a la edad o discapacidad?

- Sí  
 No

¡Muchas gracias!

**Gracias por completar este cuestionario. Visite nuestra página en el internet: <https://cmrpc.org/2050connections> para más información sobre el plan regional de transportación a largo plazo "2050 Connections", eventos, actividades y otras formas para participar.**

40. Si desea recibir más información sobre el plan de transportación 2050 Connections por favor escriba su dirección de correo electrónico en el espacio que se provee abajo. Nota: Usted está proveyendo su consentimiento para ser incluido(a) en la lista de correo electrónico de CMRPC.

41. Puede utilizar el espacio que se provee a continuación para incluir cualquier comentario final que quiera compartir con nosotros.



# 2050 CONNECTIONS SURVEY RESULTS



**C M R P C**  
Central Massachusetts Regional Planning Commission

## At a Glance

The Central Massachusetts Regional Planning Commission (CMRPC) Transportation Staff asked the public to take a survey as part of the public engagement effort of the Long-Range Transportation Plan (LRTP).

**284 people responded to the 40 question survey; here is a glance at some of the feedback they gave...**

**Q: What is the first thing that comes to mind when you think of "transportation"?**

**A: 51.2% of people said public transportation**

**Q: Have you used public transportation this past year?**

**A: 51.6% of people said yes!**



**Q: Would you utilize a bike sharing service if it were available in your community?**

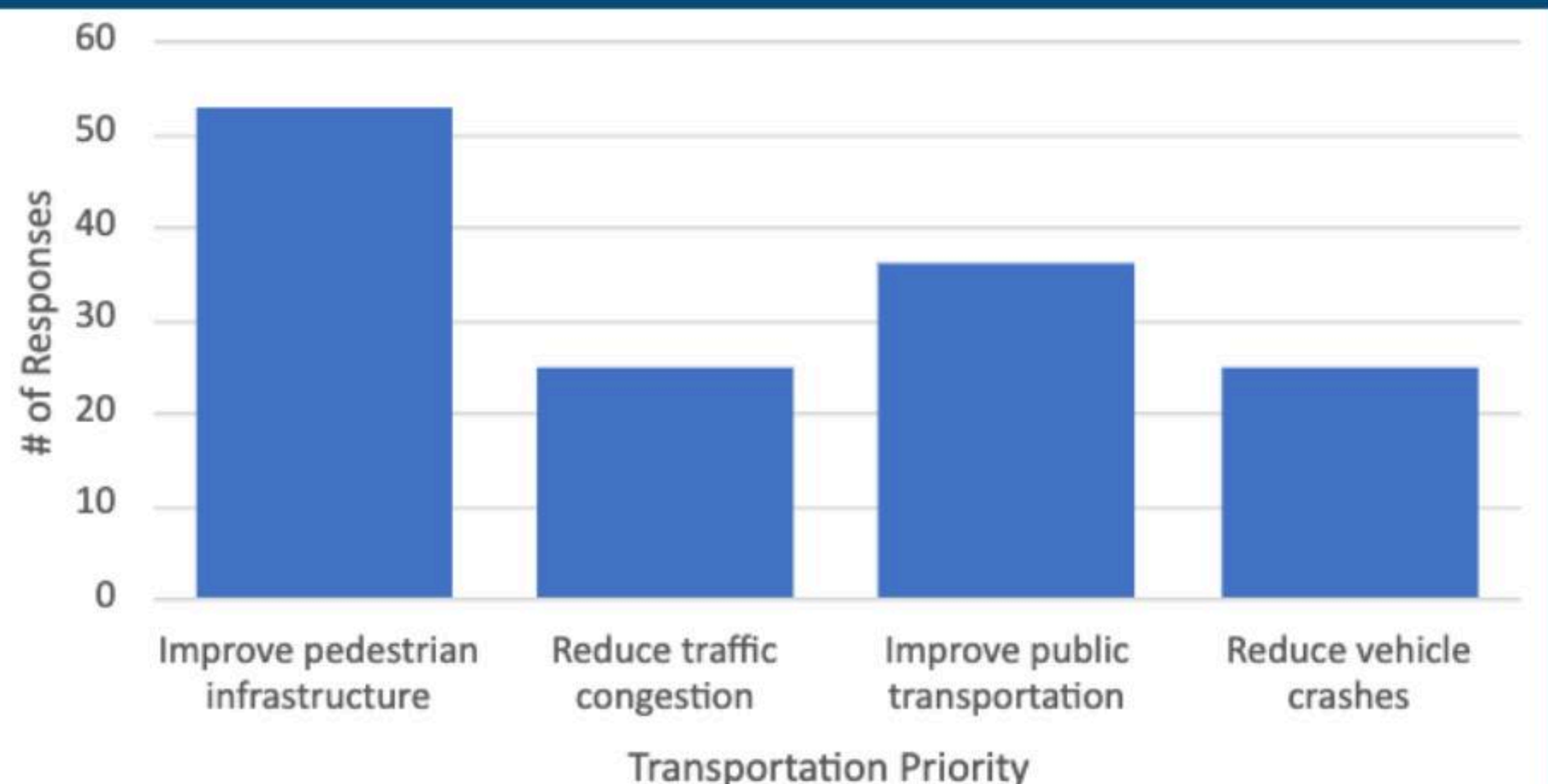
**A: 34.4% of people said yes**

--

**Q: Did you visit a walking or hiking trail this past year?**

**64.3% of people said yes**

**Q: Which transportation projects are your funding priorities?**



For more information about the LRTP visit the link below -

[HTTP://WWW.CMRPC.ORG/2050CONNECTIONS](http://www.cmrpc.org/2050connections)





1

## Outreach Methods

- Tabling at public events
- Targeted outreach to local businesses and organizations
- Stakeholder meetings
- Social media posts
- Press releases
- Sub-Regional Infrastructure Summits
- The Survey!

2





# Stakeholder Meetings



Worcester Senior Center



Worcester State University – Global Environmental Change Course



Environmental Stakeholders



Worcester Public Library



Southbridge Public Library



MassDOT Districts 2 & 3

5

## Social Media Posts

Are you passionate about public transit? Do you enjoy walking or biking trails? Do you find driving in a car every day? PLEASE TAKE OUR SURVEY!

The Central Massachusetts Regional Planning Commission is currently working on its Long-Range Transportation Plan and we need your help!

Follow the link in the caption above to our HubSite or scan the QR code below with your smart phone's camera to access the survey. Your responses will directly impact transportation planning in Worcester County.

English Spanish

### Transportation Survey!

There is still time to voice your opinion and share your experiences to impact transportation in your community!



Scan the QR code with your Smart Phone's camera or click the link above to go to our Long-Range Transportation Plan website and **fill out our survey!** Every response makes a difference. Thank you!

### TAKE THIS SURVEY AND IMPACT TRANSPORTATION IN YOUR REGION!

The Central Massachusetts Regional Planning Commission is currently conducting its Long-Range Transportation Plan which will impact Southern Worcester County for the next 25 years. Will you get involved and share your experience? Follow the link below or scan the QR code with your smart phone's camera to take the survey. The results will directly impact CMRPC's priorities and plans. Thank you!



<http://www.cmrpc.org/2050Connections>

6

# Press Releases

- A 2050 Connections article was published in each of the following news outlets:
- Spencer New Leader
- Auburn News
- Charlton Villager
- Sturbridge Villager
- Southbridge News
- Webster Times
- Blackstone Valley Tribune
- Coalition for a Healthy Greater Worcester
- **CMRPC Bi-Monthly Newsletter!**

**2050 Connections –  
What Are Your Transportation Goals  
for Southern Worcester County?**

The Central Massachusetts Regional Planning Commission (CMRPC) is working on their Long-Range Transportation Plan (LRTP), called 2050 Connections. This plan is updated every four years to reflect the transportation priorities of residents of Central Massachusetts. As part of the LRTP effort, a financial plan is developed which includes the major infrastructure projects that are candidates for federal funds.

August, September, and October were busy months for CMRPC staff. Between outreach events, regional infrastructure meetings and other methods of targeted outreach, the public participation portion of the LRTP has been quite a success. Nonetheless, we are still hoping to see survey responses roll in throughout the beginning of December. Our 2050 Connections survey can be found on the 2050 Connections Hubsite, <http://www.cmrpc.org/2050Connections>, under the "participate" tab, or on the CMRPC website under the "transportation" tab.

As a part of the public outreach portion of this LRTP, CMRPC staff tabled at many public events. One of the most recurring conversations concerning transportation that we had at these outreach events involved public transit. Regarding public transit, we recognize all the needs of older adults, young children and those living with disabilities and strive to represent them in our plan. CMRPC staff are constantly looking for ways in which we can help our residents, whether that is helping towns find the grants they need for infrastructure improvement or amplifying the voices of those who experience transportation related stressors. If you or someone you know would like to share their opinions and goals related to transportation in the region, we strongly recommend filling out our online survey or reaching out via Facebook, Instagram, or Twitter.

Moreover, CMRPC staff have been working together to meet with each town to discuss all topics related to infrastructure that could be incorporated into our LRTP. Specifically, we have met with town officials and infrastructure staff to learn more about their thoughts and experiences with transportation and related topics. Such topics include, but are not limited to, bus systems and bus stops, sidewalks and other pedestrian infrastructure, the East-West rail project, and electric vehicle charging stations. To learn more about these Sub-Regional Infrastructure Summits, please read the CMRPC October newsletter on the CMRPC website under "about us: CMRPC newsletters".

**Please consider filling out our survey to tell us what your transportation priorities are and how you envision the future of this region!**

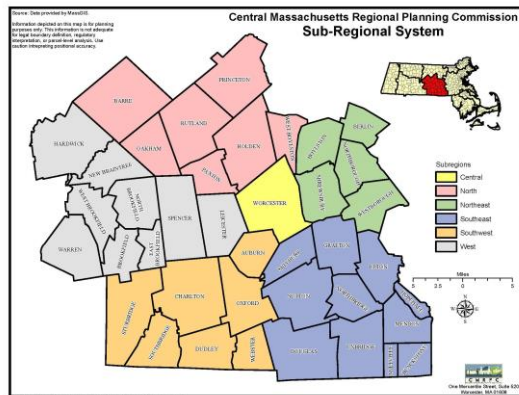
Please visit our Hubsite [CMRPC.org/2050Connections](http://www.cmrpc.org/2050Connections) for more information on the development of the LRTP. Additionally, please be sure to fill out the 2050 Connections survey on the Hubsite. Any other questions, please email [gjarvis@cmrpc.org](mailto:gjarvis@cmrpc.org) to speak with CMRPC's Public Outreach Coordinator.

# Sub-Regional Infrastructure Summits

## Regional Summit

### Locations:

- Northeast: Westborough
- Southeast: Grafton
- North: West Boylston
- West: Brookfield
- Southwest: Dudley
- Central: Worcester
- & 2 virtual summits!





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## Survey Results

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We received **284** completed surveys  
 &  
 Over **1,000** written comments!

## Demographics: Town of Residency

- Out of the 40 communities in the CMRPC region, 32 were represented in the survey

Worcester accounts for the majority of responses

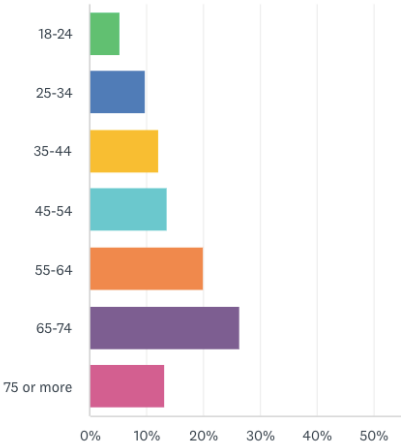


### Towns NOT Represented in survey

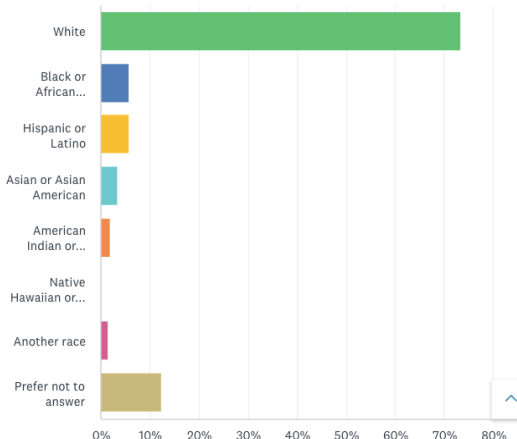
- East Brookfield
- West Brookfield
- North Brookfield
- Oakham
- Sturbridge
- Blackstone
- Upton
- Uxbridge

10

# Demographics: Age & Race



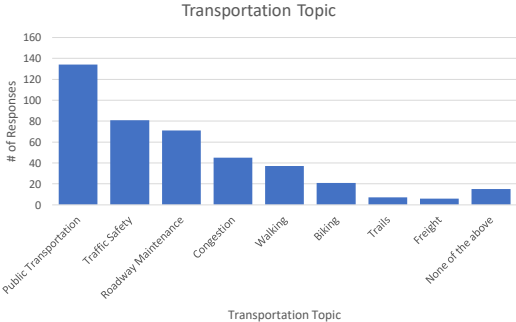
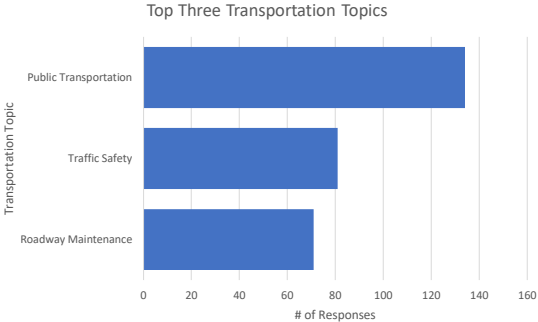
79 people skipped this question



74 people skipped this question

# Major Questions

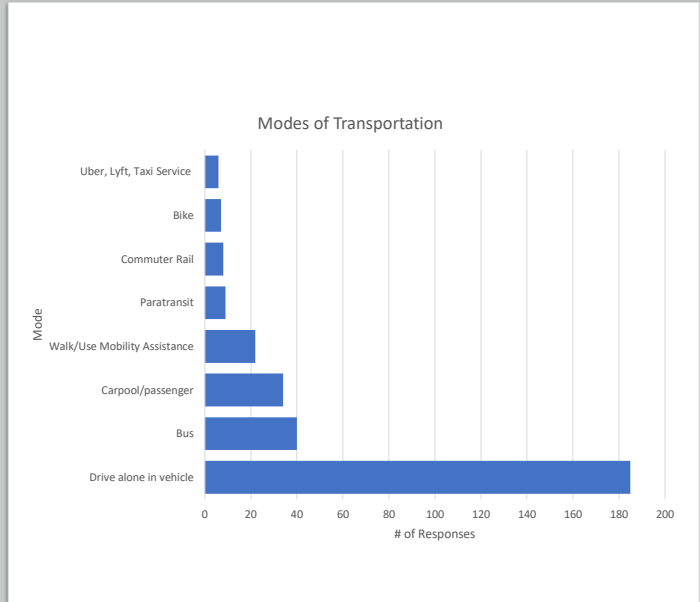
Q: What is the first thing that comes to mind when you think about transportation?



## Major Questions

Q: What is your primary mode of transportation?

**185** people responded "alone in a personal vehicle"



13

## Major Questions

- Q: If you didn't have access to your primary mode of transportation, how would you get around?
  - 87 people responded "use public transportation"
- Q: Do you want to use a different mode of transportation as your primary mode? If yes, which one?
  - 110 people responded "no" and then 78 people responded "public transportation"

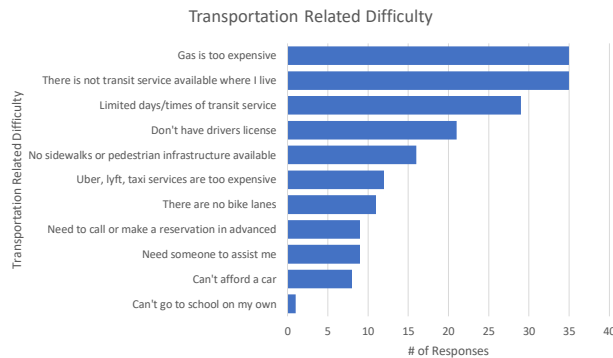
14



## Major Questions

Q: Have you experienced any transportation related difficulty during the past year?

- 59 people responded "N/A - can travel freely without difficulty"



15

## Major Questions

Q: Do you have access to a bicycle?

- **140 people said "no"!**

Q: Did you visit a trail this past year?

- **162 people said "yes"!**

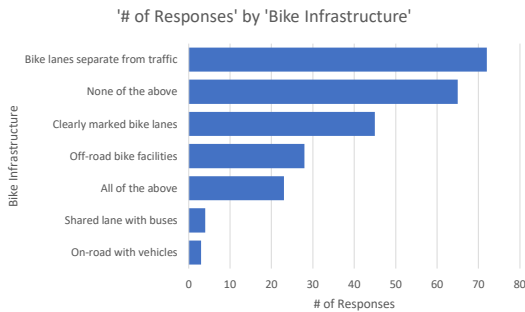
16

## Major Questions

Q: Would you use a bike sharing service if it were available to you?

- 34% of respondents answered "yes"

Q: What type of bicycle infrastructure do you prefer?



Q: Where would you add/improve bicycle infrastructure?

Responses in the form of open-ended comments include locations such as:

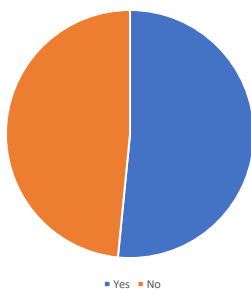
- Schools
- Train/public transit stations
- Libraries
- Grocery stores
- & many residential areas in the region

17

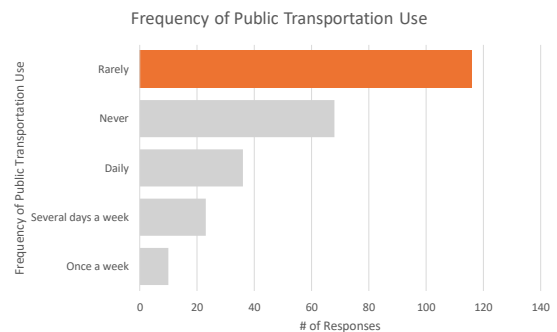
## Major Questions

Q: Have you used public transportation this past year?

Use of Public Transportation This Year



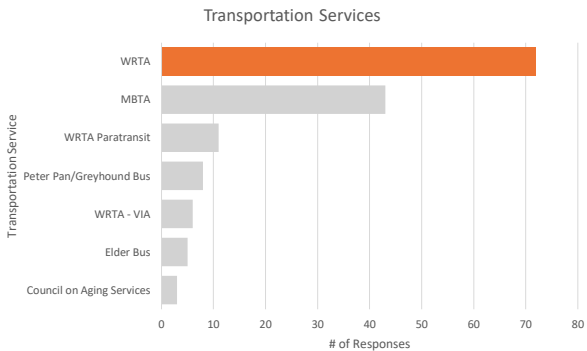
Q: How often do you use public transportation?



18

# Major Questions

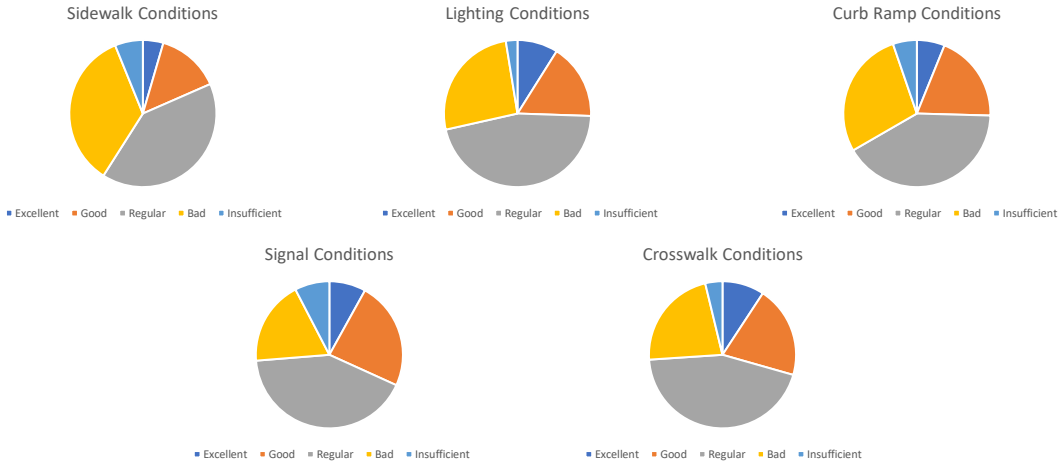
Q: Which transportation service do you use most frequently?



19

# Major Questions

Q: How do you rate pedestrian infrastructure?

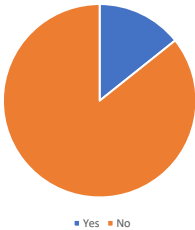


20

# Major Questions

Q: Do you have access to a hybrid or electric vehicle?

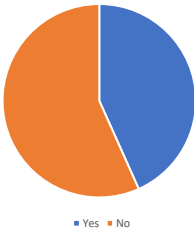
Access to Hybrid or Electric Vehicles



192 people answered "no"

Q: If an electric car sharing service is made available in your town, would you use it?

Interest in EV Car Sharing Service



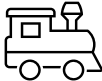
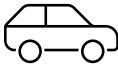
97 people answered "yes"

# Major Questions

Q: What are your transportation project priorities?

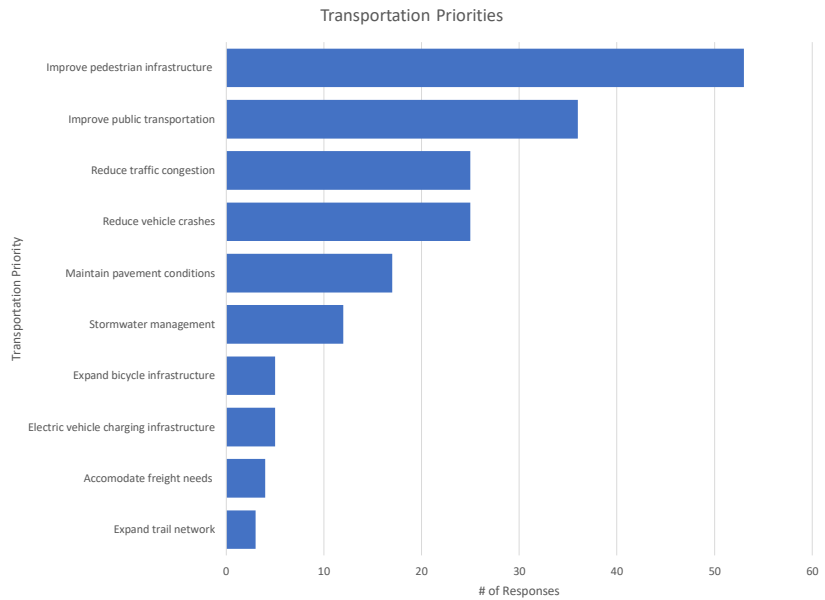
Regarding funding, we asked respondents to rate their priorities on a scale from 1 (top priority) to 10 (lowest priority) based on the following list of transportation infrastructure:

- Pedestrian infrastructure
- Stormwater management
- Congestion mitigation
- Public transportation
- Pavement conditions
- Strategies to reduce vehicle crashes
- Expand EV charging infrastructure
- Expand bicycle infrastructure
- Accommodate freight needs
- Expand trail network



**Results:**

- 53 people put *improving pedestrian infrastructure* as their top priority
- 36 people put *improving public transportation* as their top priority
- 25 people put *congestion mitigation* as their top priority
- 25 people put *strategies to reduce vehicle crashes* as their top priority



Thank you!

Any questions?



## 2050 Connections Public Survey Results

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Question 1: In which community do you reside?

¿En qué pueblo o ciudad usted reside?

Response	# of Responses	Percentage %
Auburn	6	2.21
Barre	1	0.37
Berlin	1	0.37
Blackstone	0	0
Boylston	1	0.37
Brookfield	4	1.47
Charlton	1	0.37
Douglas	3	1.1
Dudley	4	1.47
East Broofield	0	0
Grafton	3	1.1
Hardwick	7	2.57
Holden	7	2.57
Hopedale	1	0.37
Leicester	1	0.37
Mendon	2	0.74
Millbury	3	1.1
Millville	1	0.37
New Braintree	1	0.37
Northborough	12	4.41
Northbridge	1	0.37
North Brookfield	0	0
Oakham	0	0
Oxford	6	2.21
Paxton	1	0.37
Princeton	1	0.37
Rutland	3	1.1
Shrewsbury	6	2.21
Southbridge	5	1.84
Spencer	2	0.74
Sturbridge	0	0
Sutton	2	0.74
Upton	0	0
Uxbridge	0	0
Warren	2	0.74
Webster	3	1.1
Westborough	10	3.68

## 2050 CONNECTIONS TECHNICAL APPENDIX

Response	# of Responses	Percentage %
West Boylston	2	0.74
West Brookfield	0	0
Worcester	169	62.13
<b>Skipped</b>	<b>12</b>	<b>--</b>

Question 1 Comments
Worcester
Swansea
Neverland
Mansfield
Clinton
Hopkinton

## 2050 CONNECTIONS TECHNICAL APPENDIX

Question 2: In which community do you work?

¿En qué pueblo o ciudad usted trabaja?

Response	# of Responses	Percentage %
N/A, retired, unemployed	76	32.07
Auburn	2	0.84
Barre	0	0
Berlin	1	0.42
Blackstone	1	0.42
Boylston	1	0.42
Brookfield	0	0
Charlton	0	0
Douglas	2	0.84
Dudley	3	1.27
East Brookfield	0	0
Grafton	2	0.84
Hardwick	1	0.42
Holden	1	0.42
Hopedale	1	0.42
Leicester	0	0
Mendon	0	0
Millbury	1	0.42
Millville	0	0
New Braintree	1	0.42
Northborough	12	5.06
Northbridge	1	0.42
North Brookfield	0	0
Oakham	0	0
Oxford	2	0.84
Paxton	0	0
Princeton	0	0
Rutland	3	1.27
Shrewsbury	5	2.11
Southbridge	3	1.27
Spencer	0	0
Sturbridge	1	0.42
Sutton	1	0.42
Upton	0	0
Uxbridge	1	0.42
Warren	0	0
Webster	0	0
Westborough	4	1.69

## 2050 CONNECTIONS TECHNICAL APPENDIX

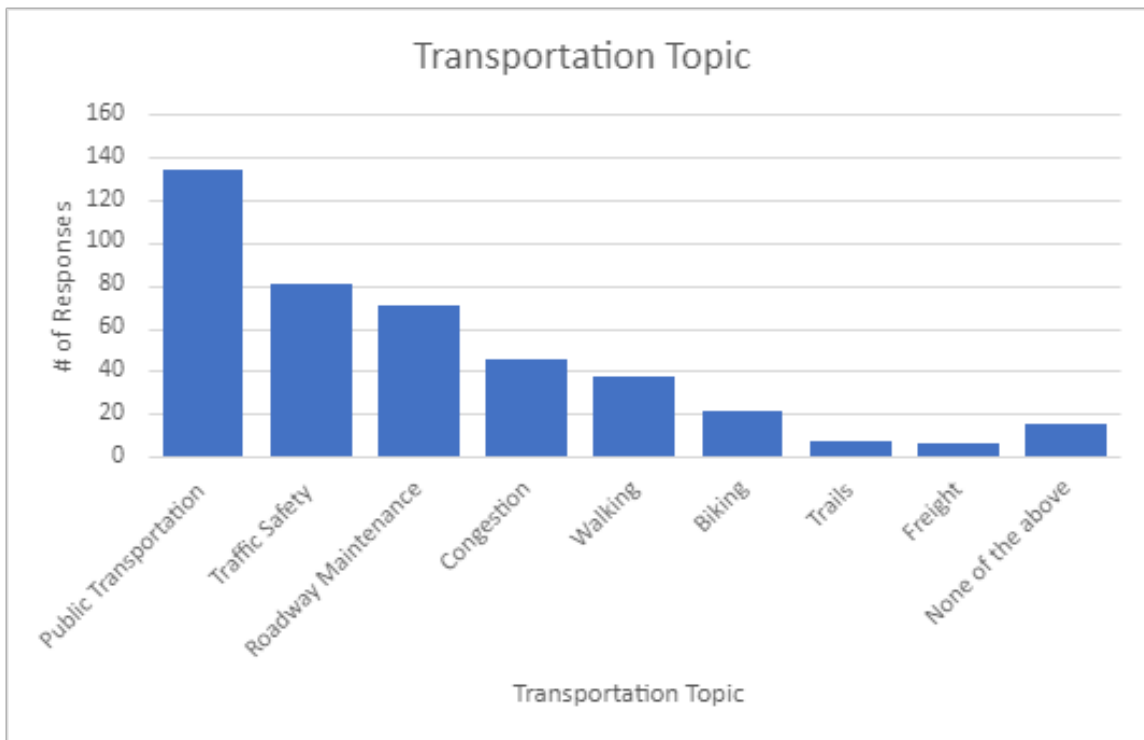
Response	# of Responses	Percentage %
West Boylston	1	0.42
West Brookfield	0	0
Worcester	110	46.41
<b>Skipped</b>	<b>47</b>	<b>--</b>

Question 2 Comments
Work from home
Retired <b>x17</b>
Primarily work from home, some commuting to Newton area
Cambridge
Boston <b>x2</b>
Cambridge
Any place that hires me
Don't work
Worcester
Retired disabled
And Statewide
Hudson
Unemployed
Amherst
Plainville
N/A
I don't work
All over
Hopkinton, MA
East Hartford, CT
Smithfield, RI
Travel to various locations across MA
Burlington, MA
Billerica
Leominster
No work
Natick

Question 3: What is the first thing that comes to mind when you think about transportation?

¿Cuándo usted piensa en transportación, qué es lo primero que le viene a la mente?

Response	# of Responses	Percentage %
None of the above	15	5.73
Public Transportation	134	51.15
Roadway Maintenance	71	27.1
Congestion	45	17.18
Walking	37	14.12
Biking	21	8.02
Freight	6	2.29
Trails	7	2.67
Traffic Safety	81	30.92
<b>Skipped</b>	<b>22</b>	<b>--</b>





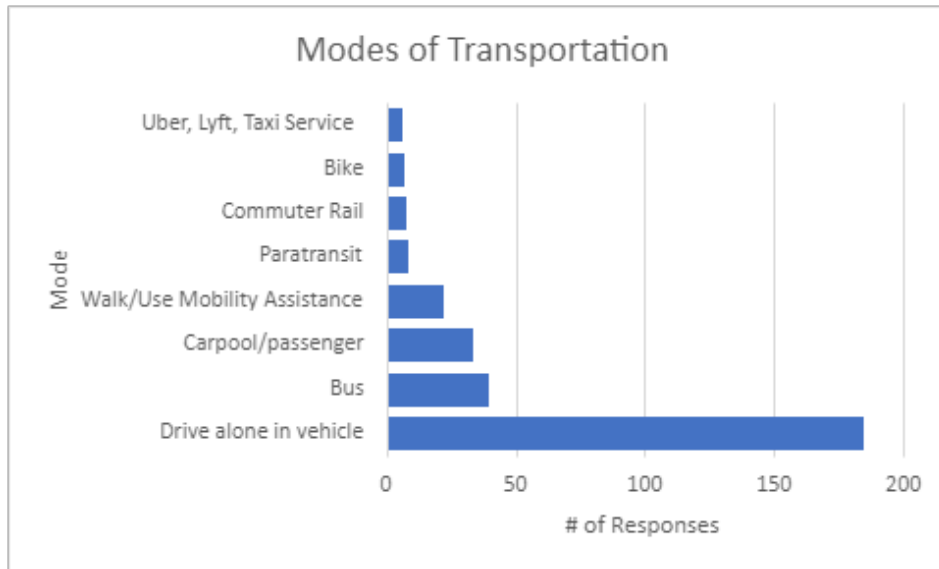
## 2050 CONNECTIONS TECHNICAL APPENDIX

Question 3 Comments
On time and reliable
All of the above
WRTA
Expensive and long
Sidewalks a mile around the school as children are walking. Allowing and building healthy towns
Distance to the closest bus stop
Electrification
Wish I had wings
Doesn't make sense to have big buses with person sitting there please it's important to have small buses with 8 person will be great, the City is losing a lot of money in big buses
Very difficult to obtain
Paratransit
Car, wheelchair van, WRTA
Availability of affordable public transit when I can no longer drive
Safe trip home from hospital or medical procedure
WRRTS
Handicap access options
Driving my car
Driving
Cars
Pollution
All of these
It's great that it's free
My car
Cars
No license
Commute time
Multi-use and congestion
Multi-use
Expansion of some roads, the Mass Pike for example lanes could be added to both east and west bound directions. Ramps could be redesigned and added
Decreasing ability to negotiate traffic
Driving a car

Question 4: What is your primary mode of transportation?

¿Cuál es su modo primario de transportación?

Response	# of Responses	Percentage %
Drive alone	185	68.52
Bus	40	14.81
Carpool/passenger	34	12.59
Walk/Use mobility assistance	22	8.15
Paratransit	9	3.33
Commuter rail	8	2.96
Bike	7	2.59
Uber, Lyft, Taxi	6	2.22
<b>Skipped</b>	<b>14</b>	<b>--</b>

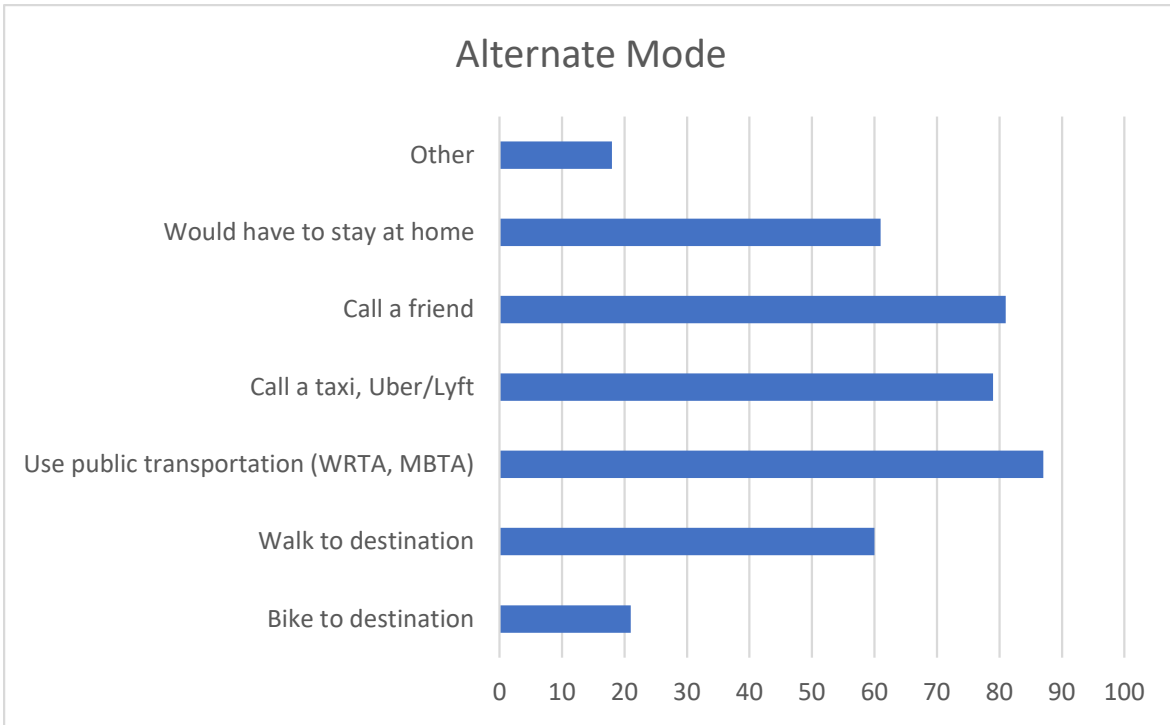


Question 4 Comments
Family
Find someone to carry me
The City is small needs 8 person "bans" driven to many places
Provided limited transportation due to low vision
Wheelchair van
Driving in vehicle: transporting others
I don't get around much
Or drive with another passenger
Walk
Electric scooter

Question 5: If you didn't have access to your primary mode of transportation, how would you get around?

¿Si usted no tuviera acceso a su modo primario de transportación, cómo hubiera podido viajar?

Response	# of Responses	Percentage %
Bike to destination	21	7.61
Walk to destination	60	21.74
Use public transportation	87	31.52
Call a taxi, Uber/Lyft	79	28.62
Call a friend	81	29.35
Stay home	61	22.1
Other	18	6.52
<b>Skipped</b>	<b>8</b>	<b>--</b>



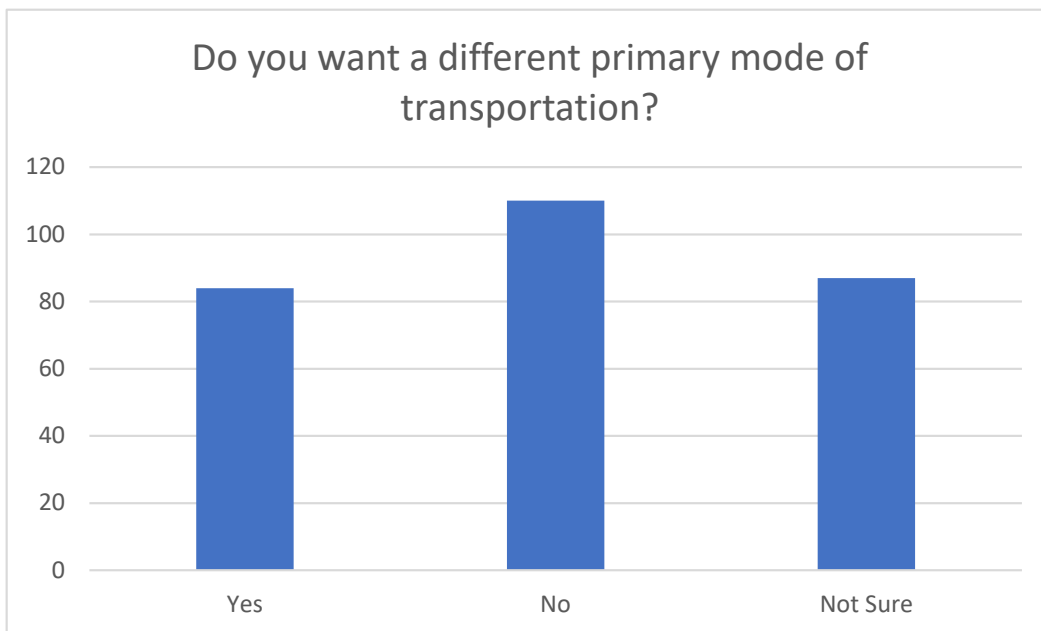
Question 5 Comments
Veteran/military transportation services
Would have to arrange a ride
Depends on where I'm going
Drive
Wait for flooding rains then swim
My son
Senior center transportation

Question 5 Comments
I would use public transit but no longer comes near my neighborhood (Salisbury St)
Uncertain as I have never been without
I always drive my own car
Puzzled??
Passenger in a vehicle driven by spouse
I would like to be able to use public transportation but none available near Worcester/Holden line
Hope that public transportation when I have medical needs
Have my husband drive me
My mom drives me
Combination of all
Electric scooter

Question 6: Do you want to use a different mode of transportation as your primary mode of transportation?

¿A usted le gustaría utilizar un modo de transportación primario diferente al que utiliza actualmente?

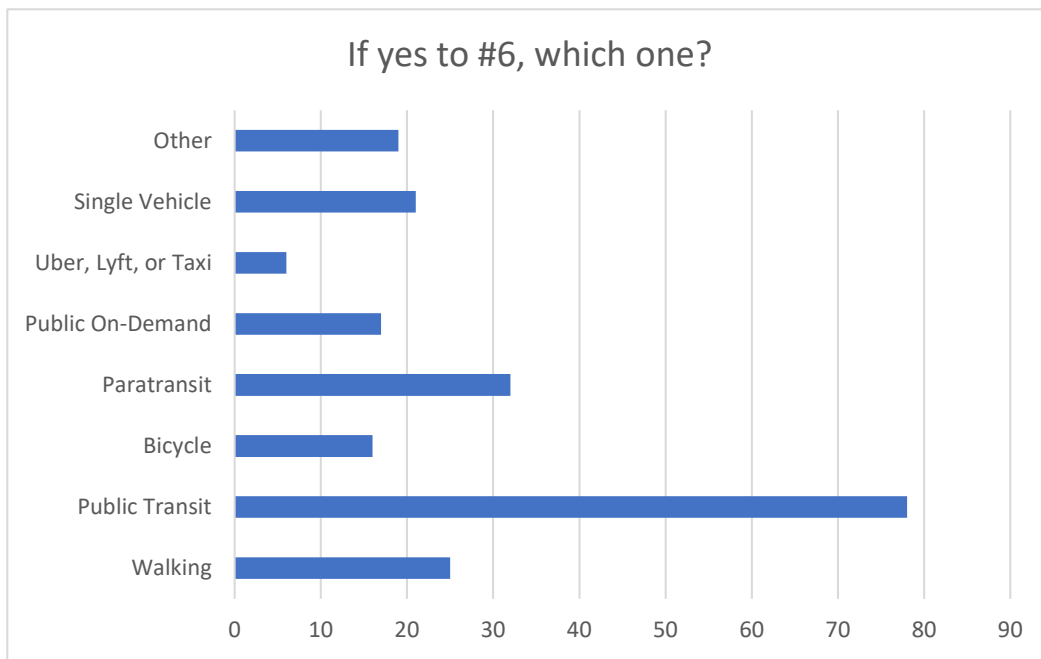
Response	# of Responses	Percentage %
Yes	84	30.32
No	110	39.71
Not sure	87	31.41
<b>Skipped</b>	<b>7</b>	<b>--</b>



Question 7: If you answered yes to #6, which one(s)?

Si contestó que sí a #6, indique cuál.

Response	# of Responses	Percentage %
Walking	25	11.68
Public Transit	78	36.45
Bicycle	16	7.48
Paratransit	32	14.95
Public On-Demand	17	7.94
Uber/Lyft or Taxi	6	2.8
Single Vehicle	21	9.81
Other	19	8.88
<b>Skipped</b>	<b>70</b>	--



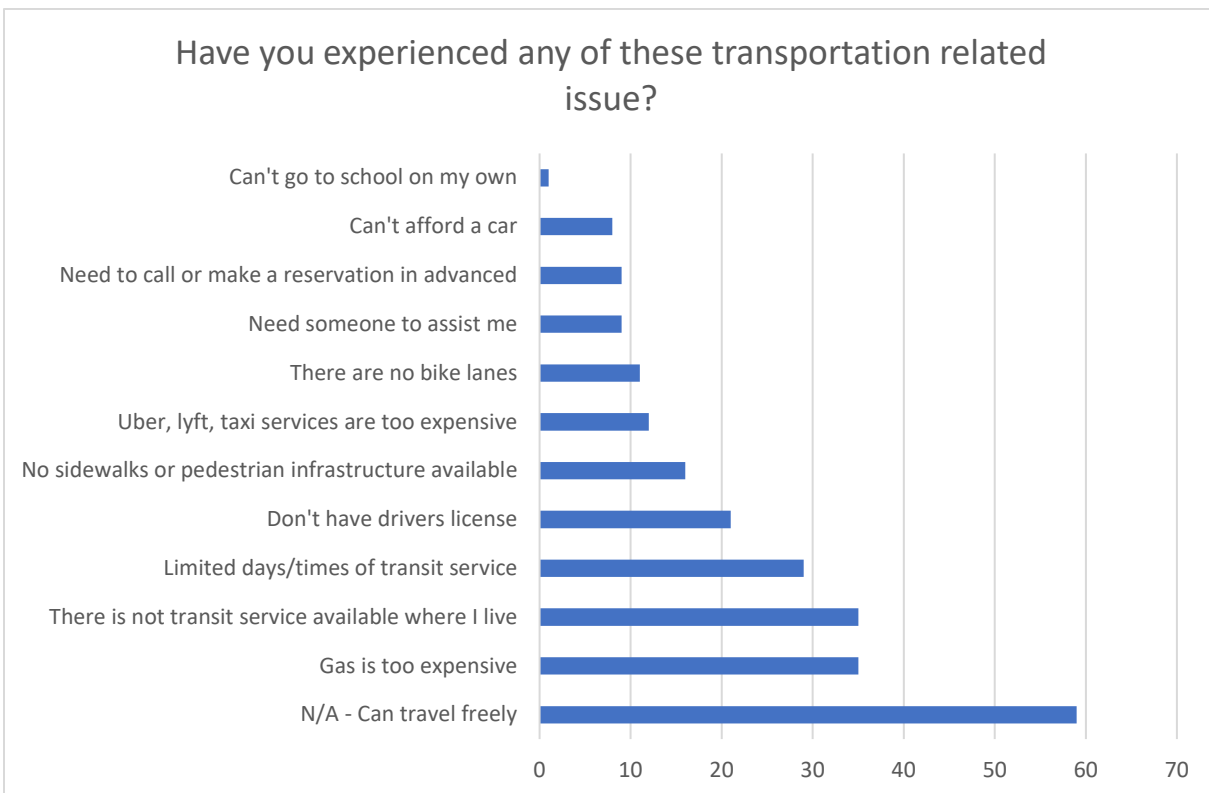


Question 7 Comments
N/A
Will use public transportation when I can't drive
Unsure of above based on where I live, probably still drive
I couldn't live here without a car
Walk upside down on my hands
I said no
No
None
Not sure
Scooter
It's great
Public transportation, uber, lyft, or taxi
walking, public transportation, bike
Walking and public transportation
Single vehicle
Not sure
Electric scooter/bike
Remote work; I don't want to commute myself nor ride gemy bus
I have resorted to all different ways

Question 8: Have you experienced any transportation related difficulties in the past year?

¿Durante el pasado año, ha experimentado alguna dificultad relacionada con transportación?

Response	# of Responses	Percentage %
Gas is too expensive	35	14.29
There is no transit service available where I live	35	14.29
Limited days/times of transit service	29	11.84
Don't have driver's license	21	8.57
No sidewalks or pedestrian infrastructure	16	6.53
Uber/Lyft/Taxi are too expensive	12	4.9
No bike lanes	11	4.49
Need someone to assist me	9	3.67
Need to call or make reservations in advanced	9	3.67
Can't afford a car	8	3.27
Can't go to school on my own	1	0.41
N/A	59	24.08
<b>Skipped</b>	<b>39</b>	<b>--</b>



## 2050 CONNECTIONS TECHNICAL APPENDIX

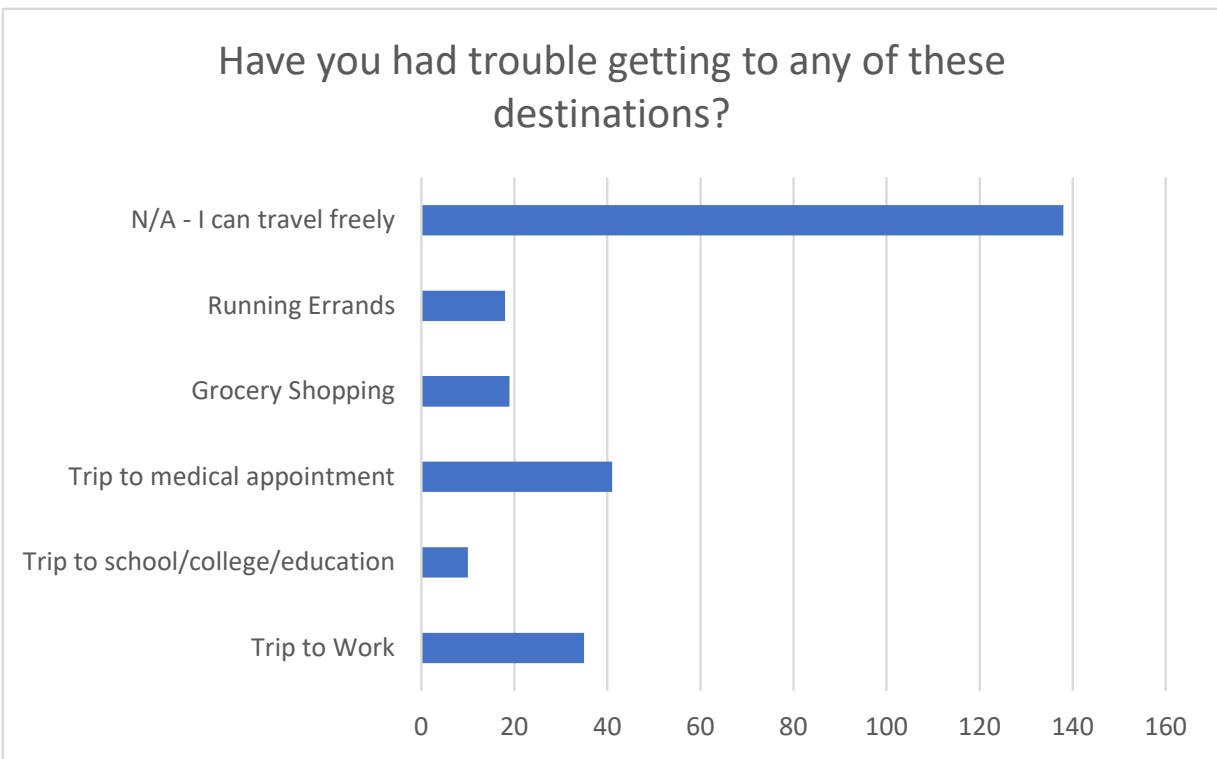
Question 8 Comments
Also, need to make a reservation in advanced and uber/lyft/taxi services are too expensive
N/A
Uber doesn't come as far as my neighborhood
Too much traffic and congestion
Transit unreliable
These are dangerous areas around the town center that are used by children and walkers that are not full sidewalks. Need to fulfill the healthy community promise
People on phones walking in to me
Need small 8 person "bans"
None of the above
Limited rides available
Mechanical problems with my car
Shoveling driveway
Bus does show up as scheduled on schedule
No problems
Weather permitting
Work to replace gas and water pipes, causing reduced lanes, etc.
I get winded walking and using steps
Was refused transportation when I had to broken wrists. Now I am getting a hip replacement and am going to need help
None
The WRTA buses sometimes don't show up on time
Also, limited days/times of service, uber/lyft are too expensive and need to call to make a reservation in advanced
Until this year I did not have a car on campus, making transport difficult
Also, not bus route that is reliable near my work
There is a transit service where I live, but not always to where I'd like to go
There are no sidewalk or pedestrian facilities available
It's great
Can't afford a car, uber/lyft/taxi services are too expensive, gas is too expensive
N/A, I can travel freely without difficulty
buses don't go everywhere i need to go (ecotarium/north high; mercy center); some runs are very infrequent
Don't have a drivers license, need to call or make reservations in advanced, can travel freely without difficulty
don't have drivers license but can travel freely
Limited days/time of service and uber, lyft and taxi as well
there are no bike lanes or biking facilities available and gas is too expensive
can't afford a car, don't have drivers license and gas is too expensive
car registration

Question 8 Comments
Commuter rail to worcester and bus to worcester state univ would take 1.5 hours instead of 0.5 hours to drive
and cannot afford a car or uber, lyft and taxi service
also can't afford a car
also - can't go to school on my own, can't afford a car, don't have drivers license, there are no sidewalks, limited day/time of service, uber/lyft too expensive
limited bike lanes
there are some bike lanes but a very limited number
Traffic congestion. Traffic seeking to avoid the Mass Pike and route 20 spilling out onto narrow neighborhood roads because of the inability of those roads to handle today's traffic. Both roads were designed 70- 80 years ago, and have not seen any real major upgrades.
Concerned re safety to walk or bike at night
Public transportation is limited on Hamilton St.

Question 9: Have you experienced any difficulty getting to any of the following destinations?

¿Ha experimentado alguna dificultad de transportación para llevar a cabo alguno de estos tipos de viaje?

Response	# of Responses	Percentage %
Trip to work	35	13.41
Trip to education	10	3.83
Trip to medical	41	15.71
Grocery Shopping	19	7.28
Running errands	18	6.9
N/A	138	52.87
<b>Skipped</b>	<b>23</b>	<b>--</b>



## 2050 CONNECTIONS TECHNICAL APPENDIX

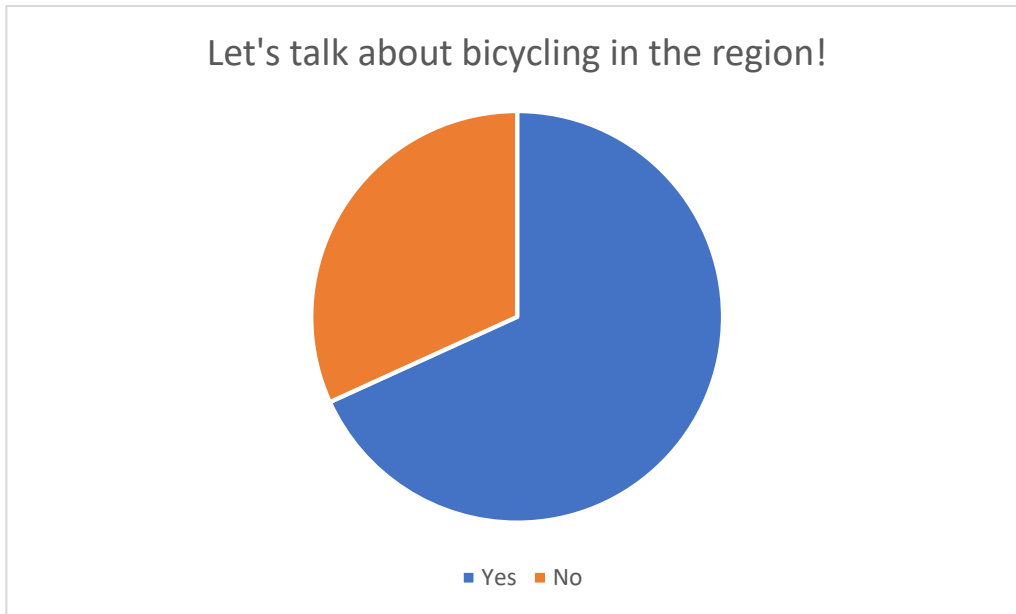
Question 9 Comments
Grocery shopping and running errands <b>x7</b>
Only for medical procedure where I would need a ride home (not allowed to drive)
Walking
Running errands <b>x2</b>
Visit with mistress
Need more access to transportation
No difficulties
But, I after to walk with walker
Medical, when I shouldn't drive myself, getting home from hospital, driving after being medicated with eye drops
Getting to an appointment ON TIME!
All of the above <b>x4</b>
Getting to Boston via MBTA
Trip to medical appointments, grocery shopping and running errands
Grocery shopping and trips to medical appointments
Trip to school, medical appointments and grocery shopping
Work, grocery and errands
Trip to school and work
Trip to grocery and trip to school
All of the above; need AA meeting daily
Trip to school, trip to medical appointment, grocery shopping, running errands
Going to Worcester can be a problem (medical appointments)
It doesn't let me click all of them



Question 10: Let's talk about bicycling in the region!

¡Hablemos acerca de las facilidades para bicicletas en la región!

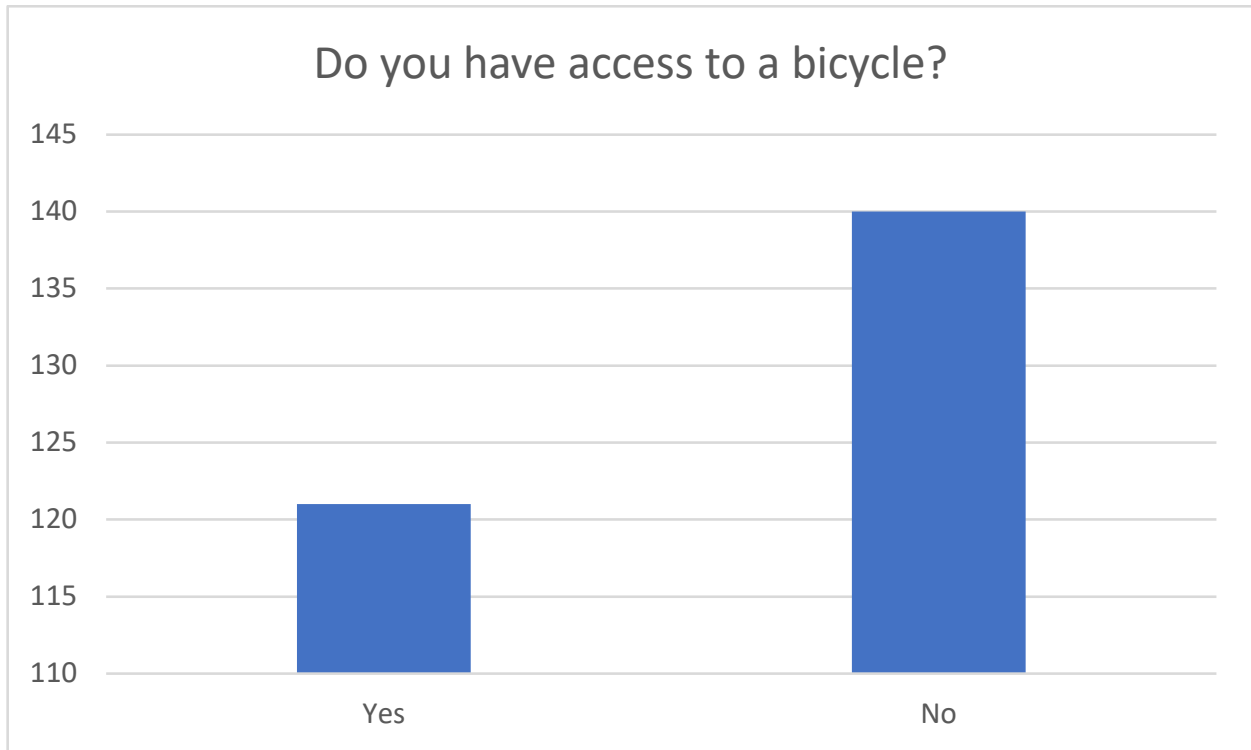
Response	# of Responses	Percentage %
Yes	178	68.46
No	83	31.92
<b>Skipped</b>	<b>24</b>	--



**Question 11: Do you have access to a bicycle?**

¿Tiene acceso a una bicicleta?

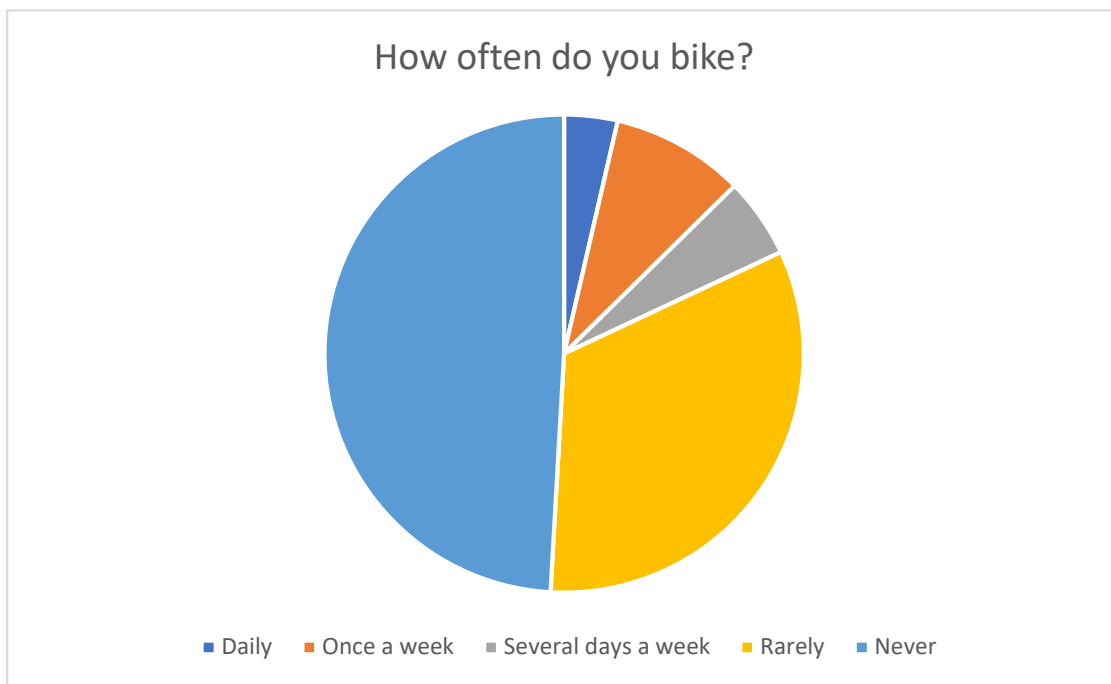
Response	# of Responses	Percentage %
Yes	121	46.36
No	140	53.64
<b>Skipped</b>	<b>23</b>	--



Question 12: If yes, approximately how often do you bike?

Si contestó que sí, aproximadamente, ¿cuán frecuente utiliza la bicicleta?

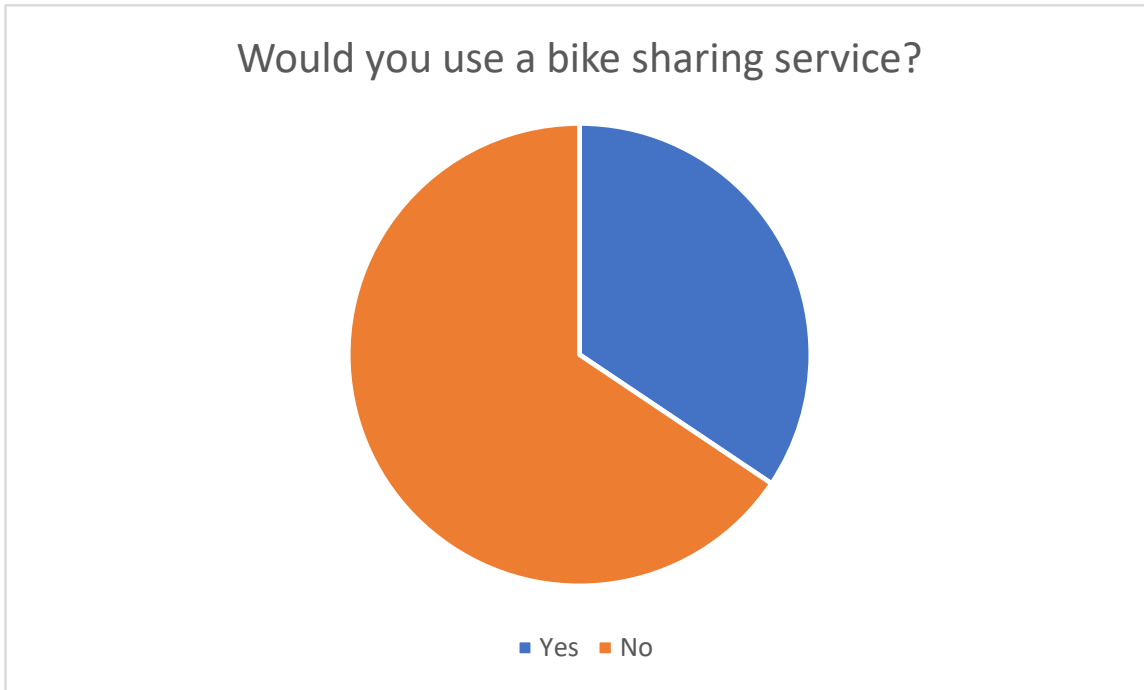
Response	# of Responses	Percentage %
Daily	8	3.64
Once a week	20	9.09
Several days a week	12	5.54
Rarely	73	33.18
Never	109	49.55
<b>Skipped</b>	<b>64</b>	<b>--</b>



Question 13: Would you use a bikesharing service if it were available?

¿De estar disponible, utilizaría un servicio público de bicicletas?

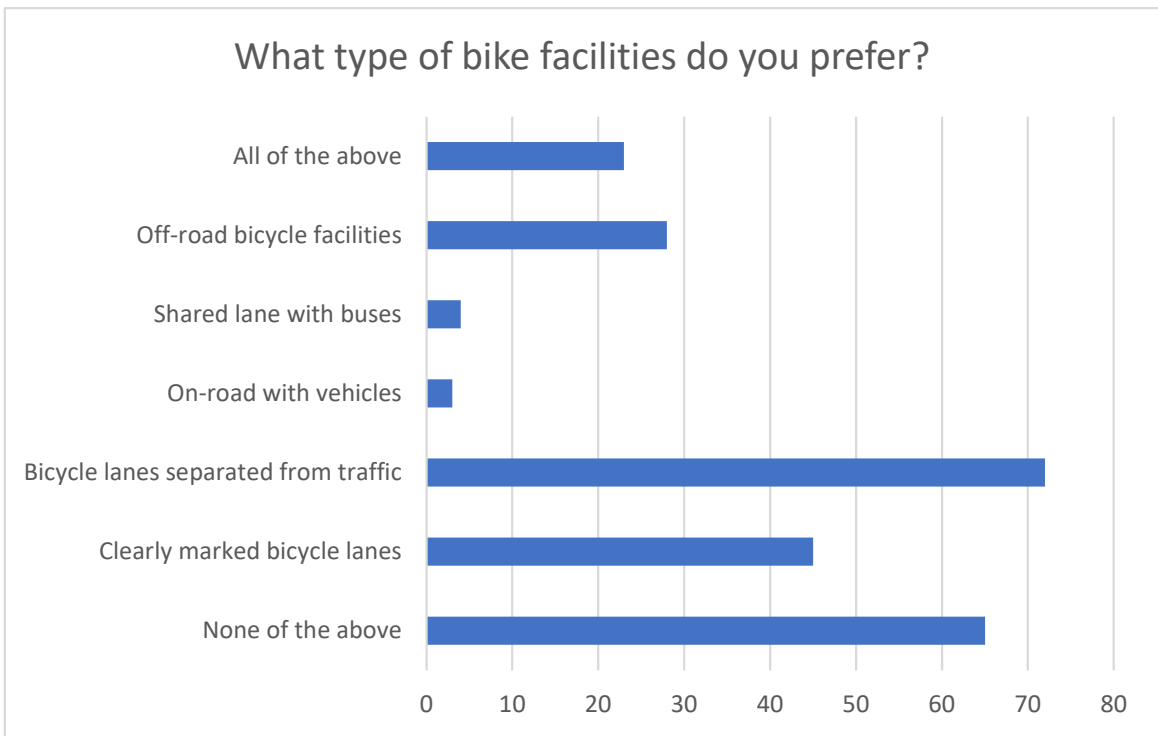
Response	# of Responses	Percentage %
Yes	85	34.41
No	162	65.59
<b>Skipped</b>	<b>37</b>	<b>--</b>



Question 14: Which type of bicycle facilities do you prefer?

¿Qué tipo de facilidades para bicicletas usted prefiere?

Response	# of Responses	Percentage %
None of the above	65	27.08
Clearly marked bike lanes	45	18.75
Bike lanes separate from traffic	72	30
On-road with vehicles	3	1.25
Shared lane with buses	4	1.67
Off-road bike facilities	28	11.67
All of the above	23	9.58
<b>Skipped</b>	<b>44</b>	<b>--</b>



**Question 15: Where would you add/improve bike facilities?**

**Mencione un lugar donde se deba añadir o mejorar la infraestructura para bicicletas. Incluya el nombre de la carretera y el pueblo. Recomendamos una constestación específica y detallada.**

Question 15 Responses
N/A x5
Main street, Crawford street, Davis street
Mendon would require significant roadway improvements markings to be bicycle friendly
Don't have particular location in mind
The central street bike path needs a bigger parking lot
Within the Mendon area; however, road safety would be a real issue as congestion, narrow roadways, etc. Off road bike paths would be ideal
I think bicycles should have separate lanes or not be on the road
Main street Northborough, in the downtown area
Hopedale
Extend the assabet rover rail trail
I would love to see the rail trail between central mass boroughs completed and potential biking ability on the aqueducts in Northborough and around Bartlett Pond
Downtown Northborough
Everywhere. Northorough has NO safe or denoted bike lanes in town
Route 9
Grafton street into Union Station/downtown Worcester
We are looking to do a multiuse trail on the aqueduct and hope to connect with a MA rail trail through Berlin
Ruggles street in Westborough
For children, bike access would be helpful
I live near Flagg street and Richmond street. Adding a lane on Pleasant street would increase my use of bicycling to get around
Main streets in Webster
Speed bumps on any road across city
Would be great if city could provide safe designated bike lanes on Worcester's major streets
Cambridge St and Southbridge St corner
I have no idea, I do not use a bicycle at all
Nowhere
I walk with a walker. I cannot use the bike currently due to extremely limited mobility
Bicycles are dangerous. Driver's are not careful
Have some bike areas to exercise with access to shopping areas, medical facilities. Use to have bus in my neighborhood, but now I need to walk 1.5 miles to get to a bus. If I had an electric bike I could use, I could get around much more easily.
Park ave and Salisbury street but fear streets "ate" too narrow and dangerous for bikers due to width and traffic



## 2050 CONNECTIONS TECHNICAL APPENDIX

Question 15 Responses
City hall, Worcester
Not at all
Kids ride bikes on sidewalks -- hazardous to themselves pedestrians - esp. those walking dogs
Not sure x2
Off road biking
Train station, library
Grove street Worcester
More "Nike" lanes
Blackstone valley trail
Shrewsbury street
Stafford St., Park Ave and Main street in Worcester
Don't know
Idk x2
Bicycle paths are the only place I ride; riding on the road with motor vehicles is not safe enough
I don't bike
Na
Pleasant St. and Highland St. Worcester
North lake ave. Worcester. constriction south of Natural History Rd. Why didn't the boneheads provide for bike/walking when they repaired the washed out section a few years ago?
Not sure because I never bike
Main South, Worcester, MA
Route 32 in Hardwick
West Boylston Street overpass in Worcester is impossible to cross safely and divides three neighborhoods while preventing access to supermarkets
Patrill hollow road Hardwick ma
Holden, MA main street and Highland (rt 31)
I would love biking lanes along Pleasant street, Flagg street, Holden street in Worcester. Would enable me to bike into work
Worcester, along major routes
Downtown areas especially Also May St. is scary because its so wind-y and only has sidewalk on one side
Aarat/Holden St
Down 9
Belmont street Worcester
Ramshorn rd., west Main street, dudley
All cardinal directions from downtown Worcester
The city of Worcester! With a focus in places like Kelly square area/canal district
West main, Airport road and Dudley Oxford Road
Route 12, Worcester, the entire length; dark & dangerous railroad underpasses separating the east & west sides of Worcester
Pleasant street in Worcester

## 2050 CONNECTIONS TECHNICAL APPENDIX

Question 15 Responses
Worcester allows parking on both sides of main streets. I wish one side were a traffic separated bike lane
Buses that run on time
Vernon street Worcester MA
Main street Worcester MA <b>x2</b>
Front street or Franklin street in WORcester mA
Lincoln street
Worcester - everywhere but Lake Ave & Mill street are prime for facilities Webster - Rt 12 and Cudworth Rd to Thompson Rd, Lake Ave
Bike lanes in cities like Boston, Cambridge, Somerville are risky - lane is in a different spot in different places and that seems unsafe
Worcester union station and workplace/campuses
Downtown area of Southbridge Mass
Worcester street
Pleasant street in Worcester
Beacon street, Worcester
Many roads in Brookfield don't have wide enough shoulder so I am very hesitant to bike around or have my kids bike to friends' houses because cars fly by with very little space. A dedicated lane or at least wider shoulders would make me more comfortable doing that for short trips around town.
Every road as big or bigger than June street
Worcester <b>x7</b>
?
Rutland - 122A, full distance; Worcester - Barre <b>x2</b>
Downtown Worcester
Add more e bikes in Worcester
No where
Central tree Rd, Rutland has no sidewalks and is a main road for approx 7 streets that dump traffic onto it. There is no way to get to my house from the center of town, Holden, or even to the strip mall nearby without riding or walking in the roadway
Blue bikes are a need, no car
More options to keep your bike locked and secure at places and businesses
Worcester, bicycle share
I believe that biking should be restricted from roads like Route 20 that have high volumes of traffic and do not have adequate space for a bike lane. Taking away a travel lane to add a bicycle lane like they did in Brimfield did nothing for traffic and in my opinion increased the chance for motor vehicle/bicycle accidents. A lot of money was spent for little to no use of the bike lane, money that could have been better spent.
Biking sucks due to the hills

## 2050 CONNECTIONS TECHNICAL APPENDIX

Question 15 Responses
Southbridge street corridor, Worcester
Too old to bike safely
Throughout Worcester there is a great need to increase safe capacity for biking and to implement designated bike lanes on major travel routes. Gold star Boulevard and West Boylston street where I work come to mind as major transit routes lacking bike safety
I am willing to bike on paved bike paths but I would never risk my life by biking in traffic among people who text and drive. Also, I can't bike to work due to dress code, but if I could work remote and stay close to home then I am willing to do errands on bike
Have helmet program for frequent fliers
Everywhere
The entirety of Worcester, the whole city "sucks" to cycle in
Blackstone trail to crompton park
Main Street Worcester from Webster Sq to downtown. Low car ownership in main south, low speeds on main street, and flat topography make it ideal
Are around UMass Memorial University Campus
I have been hit by a car on a bike, had one stolen, and a third low quality one basically fall apart. Even if I wanted to ride a bike any more I'm no longer strong enough to get up hills, especially with a backpack. Bike trails should NOT exclude pedestrians. It seems like lanes in the street are for experts and may be safer for walkers, but would scare me
Rt 62 and Rt 140 in Princeton and Sterling all throughout Worcester so one can travel safely
Places to lock your bike and leave it at bus stop, Leicester
Some areas in Worcester and in other towns they make bike lanes in vibrant colors, that would be great to see universally around the city
Chandler or Pleasant street
Mill street - this is NOT safe currently even with a "bike lane"
Everywhere in the city. We need protected bike lanes. I own a bike. I live in Quinsig village and work in the Greendale area. I would love 100% bike to work if I felt safe. I do not feel safe walking in my neighborhood. No job is worth risking my life over
PROVIDENCE ROAD
Salisbury street in Worcester. Especially by the schools and Assumption College
<b>Skipped: 159</b>

Question 16: Let's talk about trails!

¡Hablemos sobre senderos naturales!

Response	# of Responses	Percentage %
Yes	200	77.52
No	58	22.48
<b>Skipped</b>	<b>26</b>	<b>--</b>



Question 17: Have you used a trail in the last year?

¿Ha visitado algún sendero natural durante el pasado año?

Response	# of Responses	Percentage %
Yes	162	64.29
No	88	34.29
Not sure	3	1.19
<b>Skipped</b>	<b>32</b>	<b>--</b>



**Question 18: Do you know a location where a trail should be added or improved?**

**Mencione un lugar donde se deba añadir o mejorar un sendero natural. Recomendamos una constestación específica y detallada.**

Question 18 Responses
Each neighborhood or quadrant should have a trail
Enhance trails to Worcester County for handicapped people (wheelchairs, etc.)
N/A <b>x13</b>
Haywood ave or Providence St
No <b>x16</b>
Northborough has amazing trails and a great trails committee
Assabet in Marlborough near Boston Scientific
On the central street bike path, there are trails around it
Over the aquaduct in Northborough
Anything on the southern side of hopedale
Northborough along the existing aqueduct
the northborough trails are fantastic. would like pedestrian access to the aqueduct bridge and a rail trail completed between the boroughs for pedestrian and bike use
Boynton Park trails need signage and the parking lot needs an updated water drainage system. Over half the parking lot is covered in ice from water that drains off the field area on the opposite side of the parking lot from the road that goes into the park. Sandbags could block the water and drain it into the woods or creek.
Allen Street, Northborough
No. Northborough has a great trails committee
french river webster
nothing comes to mind presently
Connection of trails is important. The trails connecting Westborough and Northboro is as specific as I can be.
Johnson tunnel
Patch Pond trail
I have no interest in trails
No, I do not know <b>x2</b>
Moore State Park
I rented an electric bike when I was out of town, and was able to get around and see different places. I'm elderly, but the electric bike made it easy. Bike trails/ lanes and rental opportunities where there are no buses would be great.
Spruce St / Shrewsbury: Town's sidewalk plowing leaves berms and deep ruts that make walking to/from trail very hazardous
Continue bike path that goes to Millbury
Blackstone visitors center
I'm not sure <b>x2</b>
East side Worcester



## 2050 CONNECTIONS TECHNICAL APPENDIX

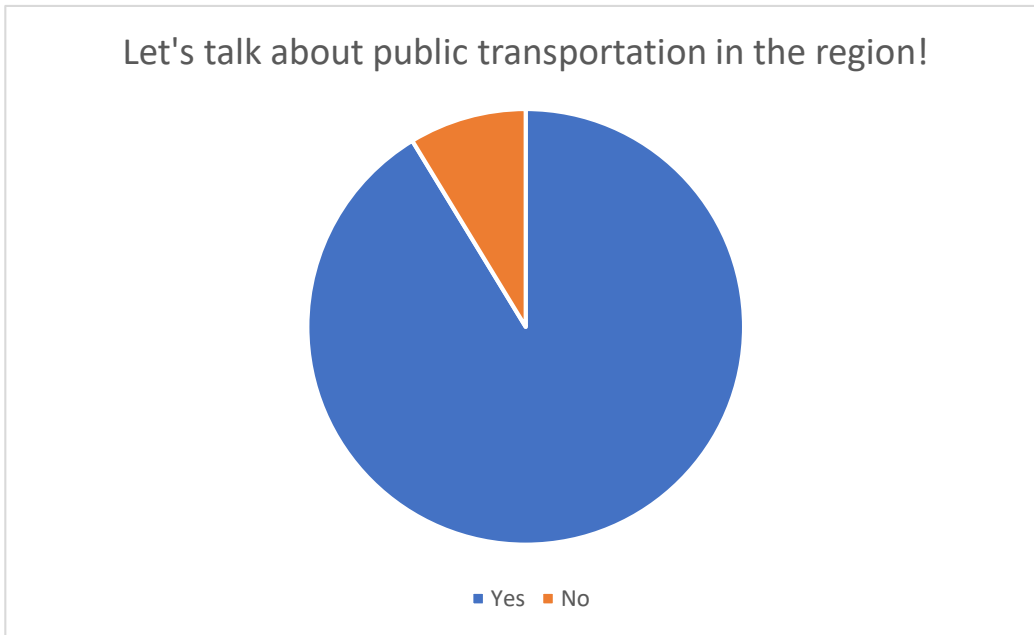
Question 18 Responses
No, I don't know of any needing work.
Cedar swamp areas
I would love to see a trail between Westborough and Northborough that connects to one in Sudbury.
Should complete the bike/walking trail from Worcester to the Blackstone rail trail down to R.I.
Safety around Smith pond near tatnuck square.
Blackstone Valley
From Wheelwright, MA to Barre.
Trail along river in Gilbertville
A trail needs to go around Indian make and include Dodge Park. Reconnecting foot and bicycle traffic across the west Boylston Street overpass from Burncoat and Greendale.
the trails i commonly use are well maintained and I know what organization to contact if there are problems (Mass Rail Trail or GWLT)
Hardwick
Wachusett Rail Trails
The State Forest in Douglas has a few trails that link to greater state trails, however that's not immediately apparent. I'd say improving the trails in that area and making it more obvious how connected they are would be a very interesting and valuable investment.
Better signage
Green Hill Park. All the trails in green hill park.
Baker Pond
Dudley Rail Trail
Like roads, trails need continual maintenance, but most of it falls upon volunteers with few resources. We need the equivalent of the former Civilian Conservation Corps
Link end of Four Town Greenway to MidState Trail on Leicester/Spencer line
IDK
yes
Park ave, Worcester MA
Route 146
Northboro multiuse trail to connect schools -downtown - neighborhoods
Not really
The rail trail through downtown Southbridge
Rail trail
Fitchburg bike trail
Not at this time
Newton Hill at Elm Park
Behind Ogara park in Spencer, MA
Tobias lane trail near Walmart (homeless live there)

Question 18 Responses
MCRT - needs to be finished between Glenwood and Wachusett - needs spur to Glenwood School - needs safe access from town center
Everywhere in Worcester Massachusetts
Trail to Shoppes at Blackstone
Belmont street
The Rail Trail in Rutland is not fully connected and while it may be a property ownership issue it completely disconnects the entire area from using the trail to access areas more easily
Worcester Greenhill Park. A trail between Belmont and Lincoln street
MRCT needs to be finished between Glenwood and Wachusett, needs spur to Glenwood School and needs safe access from town center.
Spencer snowbird. Nice but no tick control measures taken.
urban river corridors like Shoal Creek walk Austin TX.
cascade falls
None - I think Worcester trails are well maintained!
I visited the Millbury bike trail over a year ago but it was isolated and scary for a single woman. It didn't feel safe
Central Mass
I don't
Blackstone to Crompton
Connecting the Blackstone trail with Webster sq
Greater Worcester Land Trust does a great job
If you are talking about hiking type trails in parks I love them for fun and for short cuts. The danger is off road vehicles. Also, I've walked on some unofficial trails that do involve trespassing, but are the fastest ways to get places. Maybe these could be made public with a compromise to land or made unnecessary with pedestrian bridges, tunnels, etc.
Trails in Worcester connecting the UMASS campus and Biotech Park up into Green Hill Park's network of amazing trails
No, but more is best
blackstone valley bike trail
Worcester to Providence trail needs to be completed
<b>Skipped: 171</b>

Question 19: Let's talk about public transportation in the region?

¡Hablemos sobre el transporte público en la región!

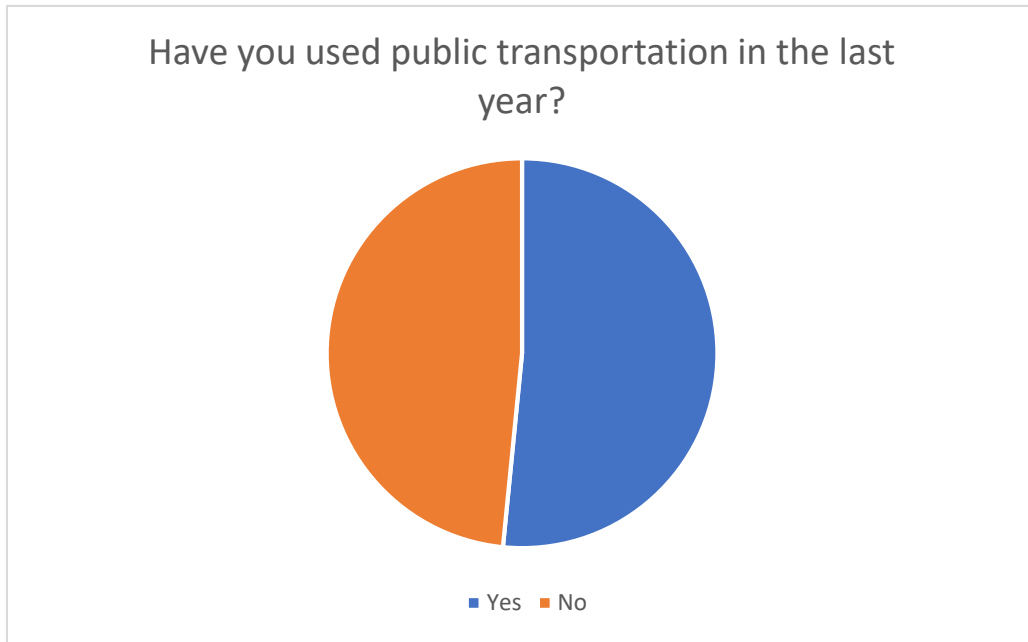
Response	# of Responses	Percentage %
Yes	231	91.3
No	22	8.7
<b>Skipped</b>	<b>31</b>	--



Question 20: Have you used public transportation in the past year?

¿Ha utilizado el transporte público durante el pasado año?

Response	# of Responses	Percentage %
Yes	132	51.56
No	124	48.44
<b>Skipped</b>	<b>28</b>	<b>--</b>

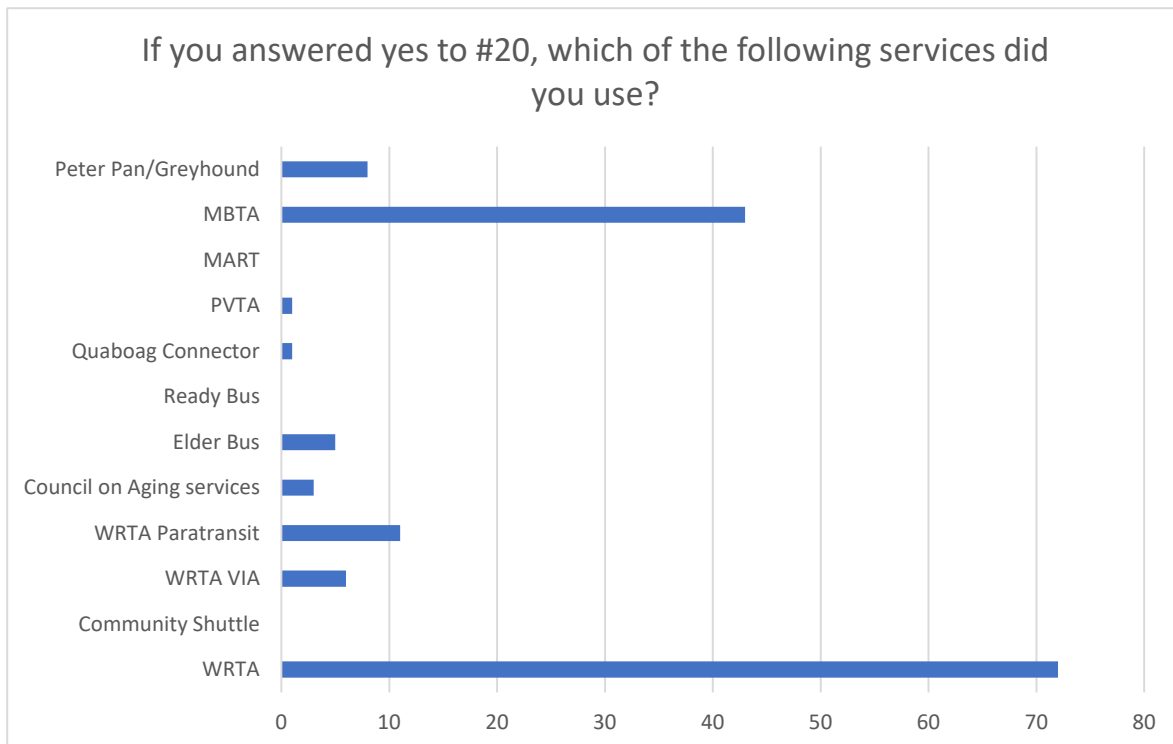


## 2050 CONNECTIONS TECHNICAL APPENDIX

Question 21: If you answered yes to #20, please indicate which service you used.

Si contestó que sí, por favor indique el tipo de transporte público que utilizó. Puede escoger más de uno.

Response	# of Responses	Percentage %
WRTA	72	48
Community Shuttle	0	0
WRTA VIA	6	4
WRTA Paratransit	11	7.33
COA Services	3	2
Elder Bus	5	3.33
Ready Bus	0	0
Quaboag Connector	1	0.67
PVTA	1	0.67
MART	0	0
MBTA	43	28.67
Greyhound/Peter Pan Bus	8	5.33
<b>Skipped</b>	<b>134</b>	<b>--</b>



## 2050 CONNECTIONS TECHNICAL APPENDIX

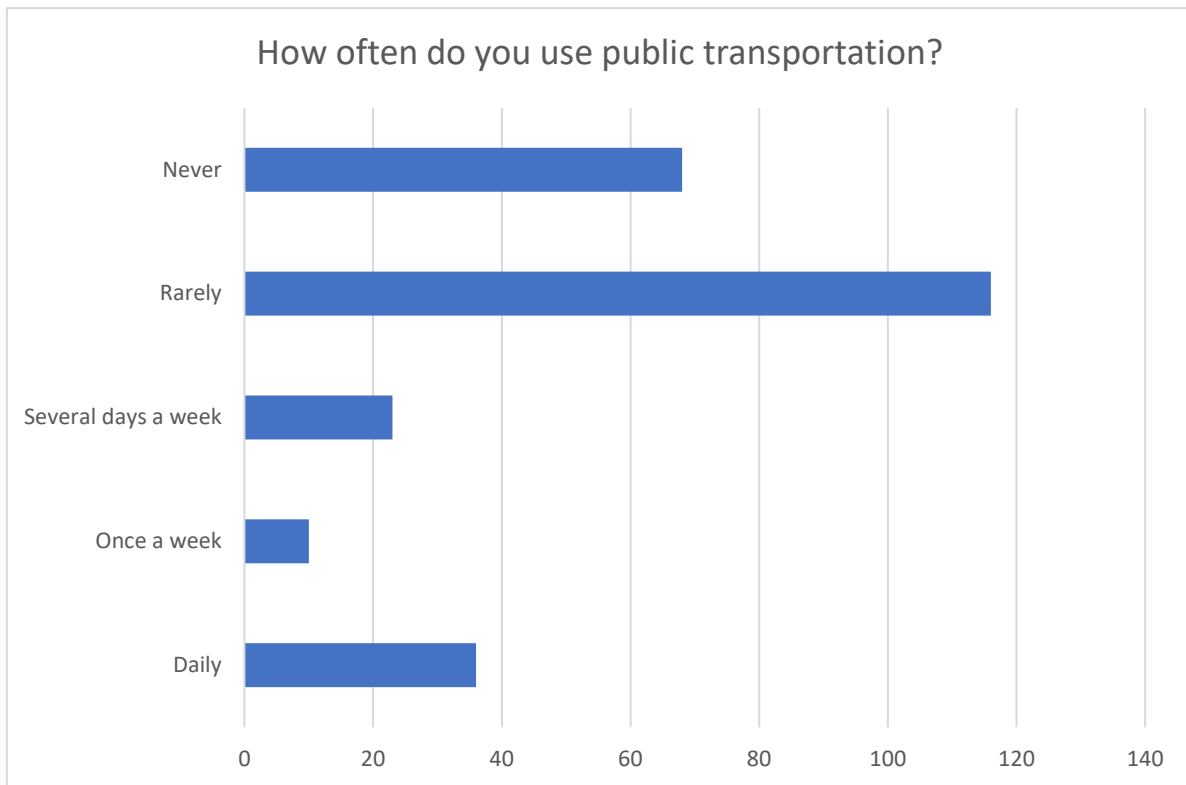
Question 21 Comments
Local service
Also, MART Clinton, MBTA commuter rail and peter pan/greyhound bus
N/A x6
Safeway
also, WRTA paratransit and elder bus
also, council on aging transportation services
logan express
hitchhiking
Logan express Framingham
None of the above x2
T
Shuttle this will be an excellent solution
WRTA bus to Spencer
Am Track
None x6
Not familiar
Safeway
I have not used it, but WRTA if I needed to. I am on a busline.
do not use
Also, MBTA Commuter Rail
WRTA and MBTA
Your form fails to allow more than 1. I use WRTA, PVTA, MART, MBTA
WRTA and MBTA COMMUTER Line it won't let me check both
You can't actually choose more than one, your form is broken MBTA & WRTA
WRTA paratransit also
MBTA Clinton, MBTA commuter rail
MBTA commuter rail and WRTA
WRTA and commuter rail
Ready Bus, MBTA commuter rail, peter pan
Community shuttle and WRTA
MBTA Clinton, MBTA commuter rail and WRTA
Peter pan and MBTA commuter rail
MBTA commuter rail and WRTA
Mbta subway. Logan express
also MBTA commuter rail
bay area train
MBTA commuter rail and WRTA
also peter pan bus
and MBTA commuter rail
and MBTA commuter rail
and WRTA and T
None after covid



Question 22: Approximately how often do you use public transportation?

Aproximadamente, ¿cuán frecuentemente usted utiliza el transporte público?

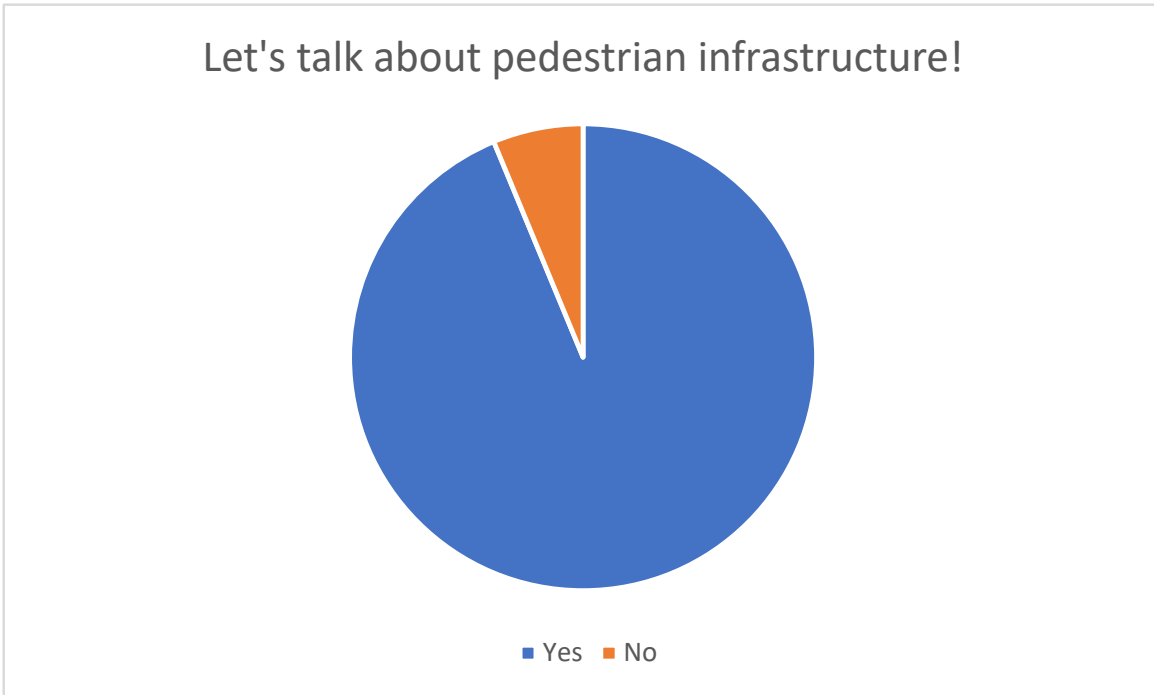
Response	# of Responses	Percentage %
Daily	36	14.23
Once a week	10	3.95
Several days a week	23	9.09
Rarely	116	45.85
Never	68	26.88
<b>Skipped</b>	<b>31</b>	<b>--</b>



Question 23: Let's talk about pedestrian infrastructure!

¡Hablemos sobre la infraestructura para peatones!

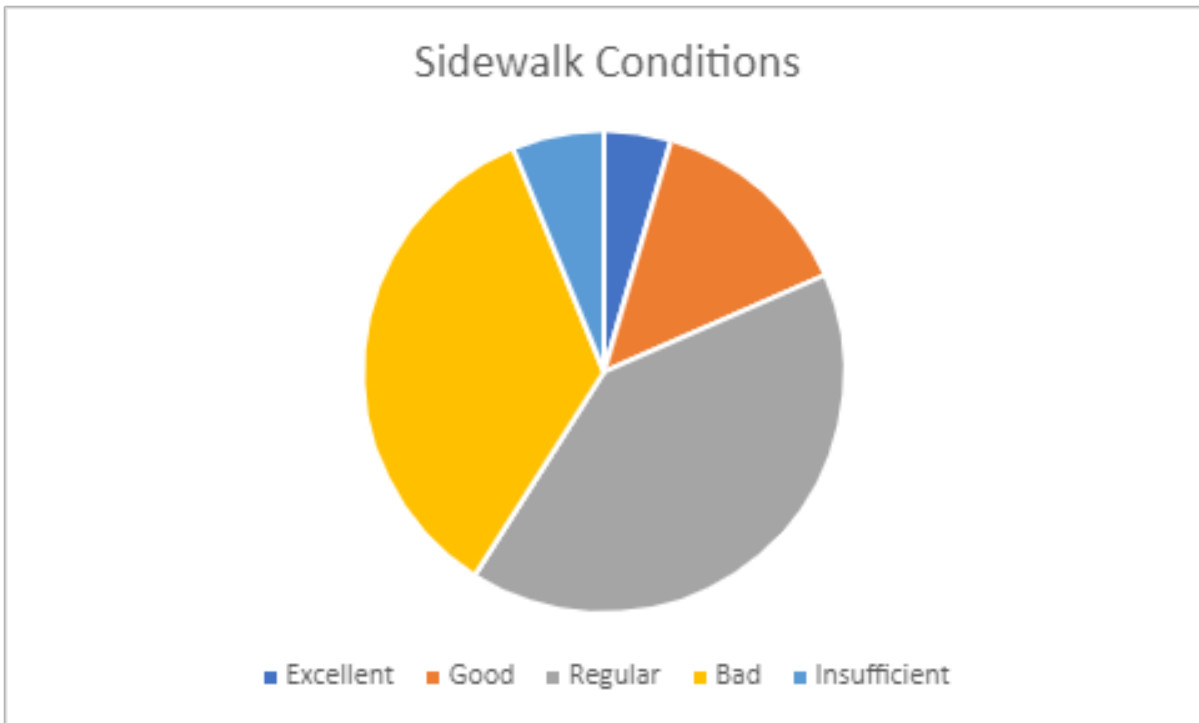
Response	# of Responses	Percentage %
Yes	225	93.75
No	15	6.25
<b>Skipped</b>	<b>44</b>	<b>--</b>



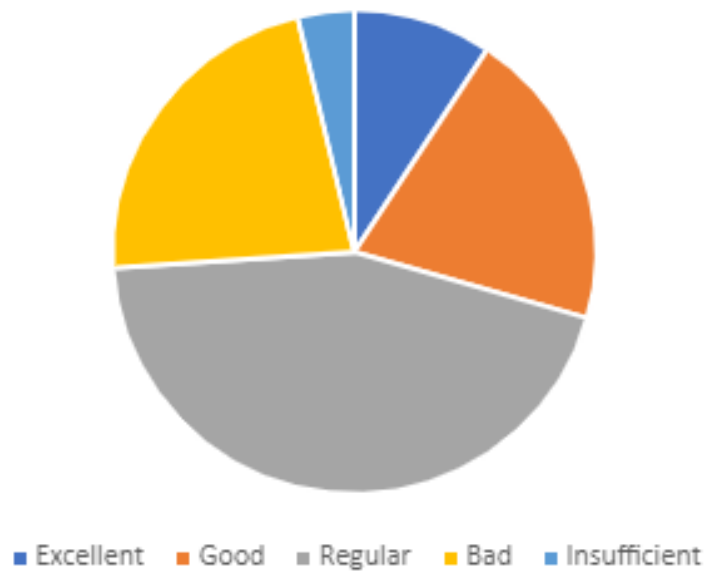
Question 24: How would you rate the conditions of pedestrian infrastructure in your town of residence?

¿ Cómo calificaría la condición de las facilidades peatonales en su pueblo de residencia?

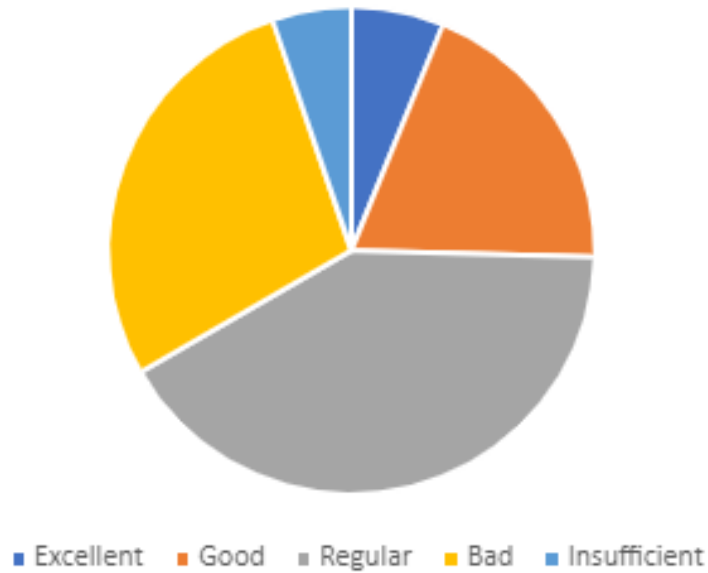
Infrastructure Type	Excellent	Good	Regular	Bad	None
Sidewalk	11/4.51%	34/13.93%	99/40.57%	85/34.84%	15/6.15%
Crosswalk	22/9.24%	48/20.17%	106/44.54%	53/22.27%	9/3.78%
Curb Ramp	14/6.14%	44/19.30%	94/41.23%	64/28.07%	12/5.26%
Signal	19/8.05%	56/23.73%	99/41.95%	44/18.64%	18/7.63%
Lighting	21/8.94%	39/16.6%	108/45.96%	61/25.96%	6/2.55%
<b>Skipped</b>	<b>38</b>	--	--	--	--



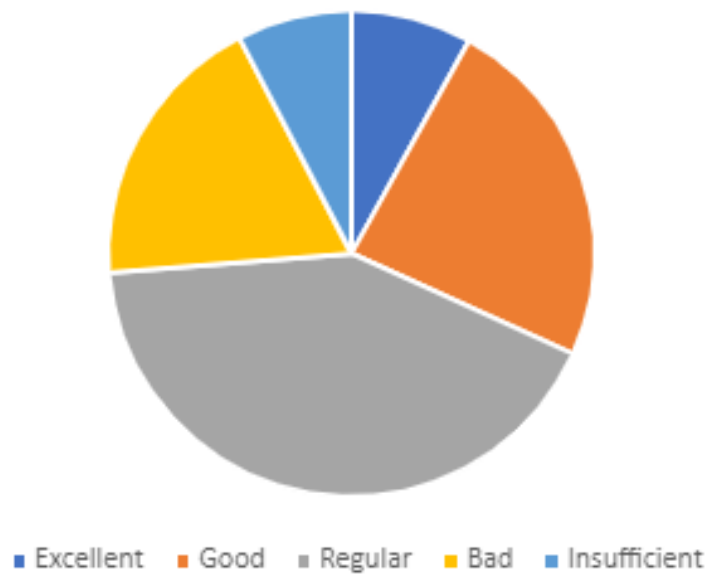
### Crosswalk Conditions



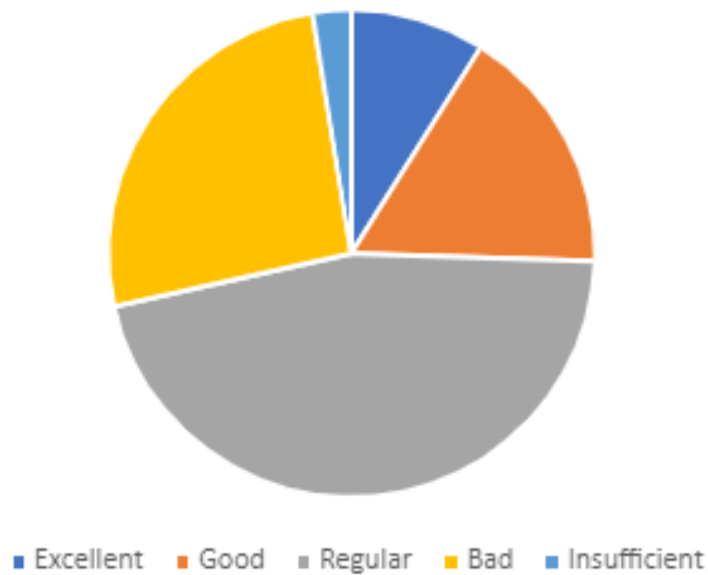
### Curb Ramp Conditions



Signal Conditions



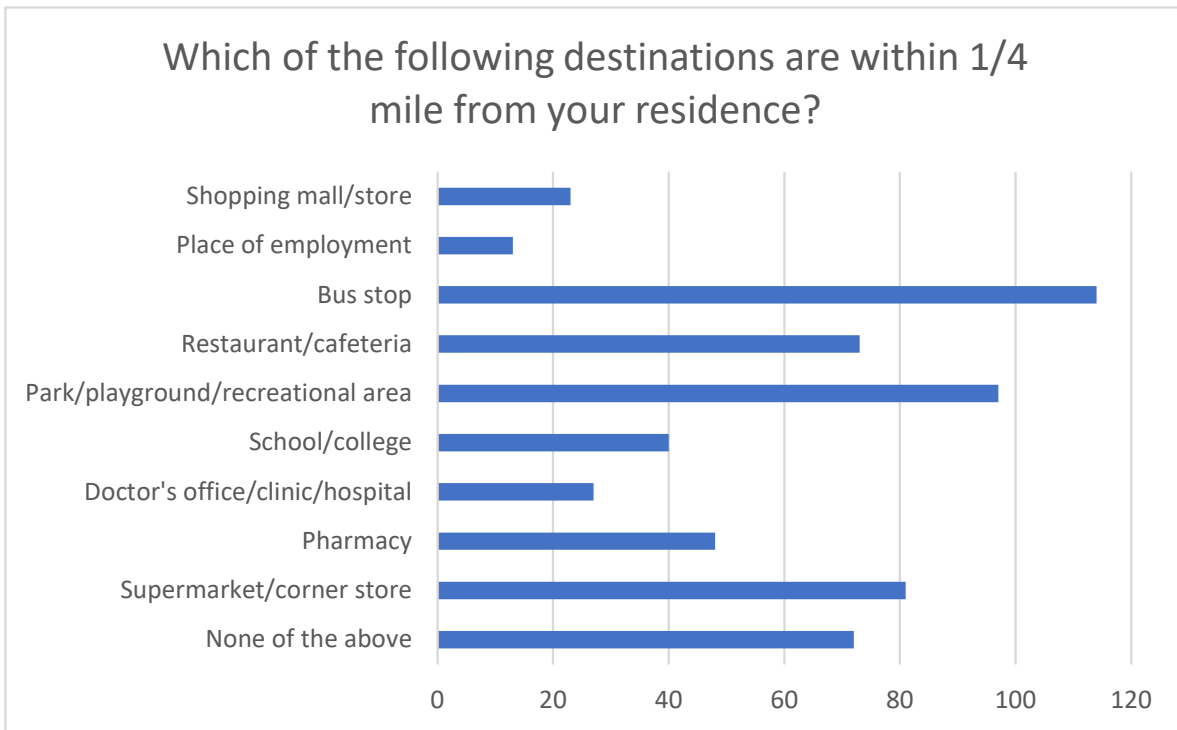
Lighting Conditions



Question 25: If you walk a distance of ¼ (0.25) mile from your residence, which types of destinations do you encounter?

Indique los lugares a los que usted tiene acceso al caminar 500 metros desde su lugar de residencia.

Destination Type	# of Responses	Percentage %
None of the above	72	29.03
Supermarket/market	81	32.66
Pharmacy	48	19.35
Medical office	27	10.89
School/college	40	16.13
Park/playground/recreation	97	39.11
Restaurant/cafeteria	73	29.44
Bus stop	114	45.97
Place of employment	13	5.24
Shopping mall/store	23	9.27
<b>Skipped</b>	<b>36</b>	<b>--</b>



**Question 26: Where would you add/improve pedestrian infrastructure?**

**Mencione un lugar donde se deba añadir o mejorar la infraestructura para peatones. Incluya nombre de la calle y el pueblo. Recomendamos una constestación específica y detallada.**

Question 26 Responses
Worcester streets and sidewalks should be monitored for updates and repairs
Sunderland Road to Graft Street; there are kids, mothers with strollers, older folks coming back from Stop & Shop and no sidewalks, and the road is winding and we are unable to see around the corners as the road is winding. There have been accidents before and the leaves are not trimmed. it's very scary.
Blind people need your help! Worcester County blind people are of "all ages"
Grafton St, Sunderland Rd
Worcester Public Library, Mechanics Hall, Tuckerman Hall night life cass locations
curb ramps
Rt. 9 @ North/South Quinsigamond Ave
N/A x3
Sidewalks in rural areas
Crawford street, Church Street, Davis Street, Main Street, Ridge Road, Bartlett Street, Northborough
All over Mendon.
Grove St Worcester needs crosswalk painted at oak barbell tavern
Throughout downtown
We need sidewalks extended to other roads and areas In town. The only sidewalks are on central and 122. Both streets are limited with sidewalks
Downtown Northborough
I would add more sidewalks all over Northborough
There's NO pedestrian infrastructure on the south side of town. It's dangerous
Add sidewalks to maple st in Northborough so kids can walk to Peaslee elementary and high school kids can walk to school safely as well as drive safer
Northborough
The entire town needs to redo or add sidewalks
Sidewalks on Brigham Road
All throughout town-this has been a 25 year ask!
Chandler Street
Near the high school. There are some side streets that need sidewalks
Ruggles street in Westborough, Westborough downtown must solve the problem of traffic especially by big trucks. Generally speaking our downtown is not pedestrian friendly.
Extend the side walk on Brigham Hill going into Grafton Center. The sudewalk stops on right side and there is a curve in the road that does not allow cars to see crossers. Or pls think as children and seniors walk to church school and to town events



## 2050 CONNECTIONS TECHNICAL APPENDIX

Question 26 Responses
Westbrook Road and Saxon Road have inconsistent sidewalks
thompson road webster
Need more sidewalks in Westboro
Red light district for common nightwalkers
Street crossings
There is a need for side walks
Many places in the City does not have side walk we have to walk in the street
I have no idea
West Maine Street Sutton Road
Improve
There are no sidewalks on my street. The roads are in horrible condition with alot of potholes. This makes walking with a walker VERY difficult. if not impossible.
w.boylston st area
don't know
Webster Square
None of the above
Better job of clearing snow/ice from sidewalks in winter
Newton Square
Otis street, westbough
Salisbury Street
Flagg St
West Boylston Street
Walks
Plantation St Worcester
Better sidewalks
Shovel along Pleasant St in Worcester where it is a sta tree e highway
Auburn sidewalks
Sunderland road
Streets and sidewalks
Sidewalk needs improvement
Not sure x5
Lighting on side streets is marginal at best.
Side streets need help. Lots of old trees have buckled sidewalks and made them unsafe
Colby ave in worcester
Salisbury street worcester
Bus stop at corner of Route 56 and 122
Rte. 122A Worcester to Holden
Sidewalks x2
Shore Drive, Millbrook St., Anywhere people walk and their are no sidewalks!

## 2050 CONNECTIONS TECHNICAL APPENDIX

Question 26 Responses
I don't spend time or money at the new polar Park Green Street area because it's too chaotic to walk.
It is well known that up and down pleasant Street almost no one stops for pedestrians in the crosswalks. I would love both of these improved
Main South, Worcester, MA
The yellow plastic squares on the sidewalk ramps are breaking and coming loose from the base creating a hazard.
Lincoln street, chandler street, Main Street
Buss loop by Chester Street
Sunderland under railroad bridge and MA 20; Sunderland and Lake Ave; Stafford Street; overgrown, no lighting, narrow sidewalk
Actually, I think Holden has pretty good pedestrian infrastructure. It would be nice to have a sidewalk on both sides of Shrewsbury Street, though.
Hardwick
Holden, MA There are sidewalks and pedestrian infrastructure in the center of town and what is there is pretty average. Once outside the center, the roads are narrow with little to no shoulder and cars drive fast! I cannot walk safely on the street I live on to get to a walkable area, I need to walk on neighbor's lawns
May St only has one sidewalk and its a scary road
Brattle St, Holden St
Flag Street
Bailey Street and Mower Street Worcester MA
every street should have sidewalks
On both side of Lyman and on Ruffles past high school
Slow traffic
Downtown, along rt30 east esp from uhlmans to Hastings
All streets in Worcester In dense areas like bell hill especially on Belmont St
airport road, dudley
a sidewalk on either side of Brattle Street in Worcester
Along rt 122a, better under bridge sidewalks on Hammond, Cambridge, and Southbridge streets
North St, Douglas MA
Airport Road, Dudley Oxford Road, Dudley Hill Road and West Main Street
Sidewalks available on all streets and all maintained and nothing blocking access to people with mobility issues
Sidewalks citywide are often in poor condition, obstructed by overgrowth, low tree branches, trash, and parked cars. If drivers faced the same sort of obstacle course, they'd scream bloody murder. But pedestrians are supposed to grin and bear it.
We need to invest in sidewalks and bikelanes and not just motor vehicle infrastructure
keep it free
Fruit and Sever Street
Shrewsbury street

## 2050 CONNECTIONS TECHNICAL APPENDIX

Question 26 Responses
Main street, Chandler street, Belmont street
Add Cudworth Road, Thompson Road, Old Worcester Road - Webster
More side lanes
Downrown traffic unsafe for pedestrians. Middle school empties and kids crossing rt 20 is perilous.
In the neighborhoods around the hospital
Downtown core area
more buses/times
Downtown worcester
Worcester <b>x4</b>
The section on rt 148 between lake road and molasses hill rd is narrow and hilly making it dangerous to walk on. I avoid that and drive my car if I need to go that way.
Kelly Square
Pedestrian transportation is the most basic/accessible mode, this must be the #1 priority, everything should be built around with walking in mind. Then bike, then everything else
Cambridge street
Rt 56 full distance <b>x2</b>
Grocery stores on shrewsbury st
None
Central Tree Rd, Rutland has zero bike lanes or sidewalks and is incredibly dangerous to walk or drive on
Spencer center
Most of Worcester including affordable housing
any street without at least one continuous sidewalk. Example, Upland Street from Greenwood Street to Manor Rd, Auburn
West boylston st worcester
Lighting in Hardwick Center
Worcester. Costs a fortune to park there. If I can't park, I can't walk there
The End of Providence Street near Super Walmart.
The entire city of Worcester, legit it's all terrible. I guess Salisbury st corridor if I had to add a single example. It's hostile to pedestrians yet is a residential neighborhood
Vernon Hill Food Dessert
Improve lighting and safety for crosswalks on Cambridge st in Worcester
Mill street Worcester
Around Belmont Hill(UMASS area), main street,
Everywhere! By the way, the only reason I'm within 1/4 mile is because I paid extra for a place to live near the bus stop.
from School up to the center of town of Princeton so up along Rt 62 and then all along Rt 31 from Post Office Place toward the Center of Town
Downtown Worcester has recently been done, the rest of Worcester needs lots of TLC

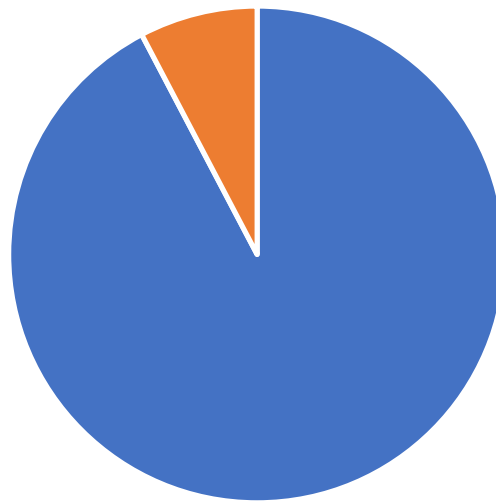
Question 26 Responses
We need safer streets period. There are times when cars are going way too fast, blow past me when I am at a sidewalk
everywhere in the city besides the west side / downtown / elm park area. quinsig village to kelly square to downtown should be safe, shaded and away from cars. not an easy walk
PROVIDENCE ROAD
<b>Skipped: 145</b>

Question 27: Let's talk about roads and traffic congestion!

¡Hablemos sobre las carreteras y la congestión vehicular en la región!

Response	# of Responses	Percentage %
Yes	216	92.31
No	18	7.69
<b>Skipped</b>	<b>50</b>	<b>--</b>

Let's talk about roads and traffic congestion!



■ Yes ■ No

## 2050 CONNECTIONS TECHNICAL APPENDIX

**Question 28: Please mention a location where roadway conditions could be improved.**

**Mencione un lugar donde se deba mejorar la condición del pavimento.**

Question 28 Responses
N/A x5
salisbury street and forest street need traffic lights
massasoit road
Worcester x9
main circle 01545
Frybeck ave shrewsbury
Main Street Northborough. Too many uncorrinated lights
All over Mendon. Hartford Ave Josph Rd Edward Rd, Lyman Rd Westborough
Lincoln street has very bad drainage and pavement issues. A car or truck can easily get pulled off the road by the soft curbs and the degrading pavement.
Cape Road as well as Route 140 in Mendon, Hopedale, Bellingham areas
Ball street northborough
River St Northborough
neck hill rd hopedale/mendon
Hudson/Route 20 area Northboro
Lyman St Northborough/Westborough, Cedar Hill in Northborough/Marlborough
Maple Street
All throughout Northboro
Going toward Grafton near overpass a drain clogs and frequently floods,
Winifred Road near Midland Road has dangeroud dips and bumps
Route 395 and 290 from webster to worcester
All main drags USA
May St Worcester
Nonquit st Worcester
Mill Street Worceeter
Vernon Hill has been recently been given much needed attention.
Brimaninville Roundabout
I have no idea
Mill Street, Worcester
On Calumet Ave. So many potholes.
road beyond O"connors pub headedt toward w. boylston
Holden St, Worcester
Webster Square and Park Ave
Worcester - beginning of Southbridge St. in front of the Hanover Theater
Byron street in Worcester MA 01606
May St going near the hospital
May Street
None x3

## 2050 CONNECTIONS TECHNICAL APPENDIX

Question 28 Responses
Gold star Blvd
Burncoat Street
Federal Hill Road & Depot Road, Oxford, MA
Durant St, Worcester
Franklin St East at Harrington Way
Warner Ave. Worcester MA
Salisbury st
Most of the city has issues
Stafford Street in Worcester
Highland st
Rt. 290
Mill street
Salisbury Street
Flanders Road westborough
Sunderland Road, Worcester, MA
West boylston street
Fox st worcester
Mill st worcester
Streets between granite st and providence st
many unpaved (gravel) streets would be improved with a program of simple grading. Could use street sweepings for fill
Birchwood Road Paxton MA
Lots of improvement going on right now which is a plus (but also ties up traffic). Gold Star Blvd., Park Ave., Grove St., Worcester, MA
Park Ave, Worcester
Piehl ave Worcester, other various side streets
Beaver Brook parkway across from Big Y main Street
Goldthwaite Road, Worcester, MA
Rt. 19 Warren
New Braintree RD Hardwick
Southbridge street near Hanover theater
West Boylston Street overpass is a barrier
All of state and town roads could use some improvement
Patrill hollow road Hardwick ma
<p>Wallace St., Dixon Ave. Worcester: I used to live on the Dixon Ave. hill off of Lincoln St., and the pavement was so awful that it destroyed my car. The plowing each winter was also horrible and I was often stranded when I needed to work during snow storms. Sprague Lane, Minerva St. Ivy St. Worcester: the pavement is horrible and I have had a horrible time making U-turns on Massasoit Rd because of the conditions of these roads.</p>



## 2050 CONNECTIONS TECHNICAL APPENDIX

Question 28 Responses
Right behind the building with the Root and Press, off of Chandler street, is a small, narrow street that has the HUGEST potholes, I'm always worried my Corolla won't make it through. City = Worcester.
trick question? specific areas on my commute are Holden, Highland St; Worcester, Chandler St
Hamill Rd and May St in Worcester are potholey and bumpy and ruins cars. Also there are streets by Bancroft Tower that are literally just dirt
Most streets in Worcester need improvement
Holden St, Worcester
Mill Street Worcester MA
Rockrimmon Way
Pleasant Street (Tatnuck) to Park Ave, May ST (Pleasant to Park Ave), Salisbury Street, Park Ave (Institute- Grove Street))
Not sure x3
Route 16 Douglas
Belmont st
Main St east from Worcester/Leicester line to Webster Square
All streets labeled "private/ dangerous", Main Street after Park Ave on rt 9 west, Beacon St,
North St Douglas MA
Hamilton street, Southbridge
Dudley Oxford Road, Dudley MA
Anywhere in Main South
Worcester: Mill Street, Willard Avenue, Annisquam, Pleasant Street near intersection with Chandler/Olean
Highland Street, Worcester, between Park Ave. & West Street. May Street, Worcester, west of Lovell Street. Most streets in Worcester.
Swan Ave, Dawson Road, Glendale Ave, Breeze Drive, etc etc etc
Route 122 North
All
Pleasant street @ intersection with Peidmont, there is a hole in the road
Main
Lincoln street
Everywhere
Southbridge Street (under RRx by Quinsig Ave)
Cambridge Street
Worcester side streets
West Street Hamilton Street dresser Street and South Street
Foster street
Salisbury Green
Route 9 Brookfield
Gay Road
Park ave

## 2050 CONNECTIONS TECHNICAL APPENDIX

Question 28 Responses
Not my town but there is a section of road through Barre (williamsville rd I believe) that is just terrible and has been for many years.
most roads, like Highland
Town owned roads
Cambridge street, shelter needs good sidewalk for safety of children
Dana Road Oxford
Ravine Road New Braintree
Central Tree Rd, Rutland has pavement issues that seem to be affected by washouts in certain areas and is warping in many others. It does force vehicles to drive a little slower but with how narrow the road is, it causes vehicles to have to cross into oncoming traffic lanes in some areas to prevent vehicle damage
Urban areas in the city.
Worcester roads Vernon Hill area
Virtually any road in Southbridge. Route 20 from the Brim field town line to Route 169. I am very concerned about future traffic in that section especially with the amount of development going on there ( Amazon,Cold storage units ,etc)
Hardwick rd, from rte 32 to rte 67 Hardwick and New Braintree, MA
EVERYWHERE it's 3rd world out here
Moreland and Flagg Streets
Webster St at the railroad bridge near Fremont Street Worcester
Westfield st Worcester, Beaver st Worcester, most side streets off park Ave and main st in worcester
Highland street
Side roads
Briar Lane, Worcester until West Boylston line
Chandler St
Spencer and the Brookfield. Like driving offroad, the roads are so bad there
So many pot hole that could damage cars and prevent snow removal.
cambridge street, there's pot holes
Mooreland st
Endicott Street
Mill st worcester
Woodland St Worcester
Route 290 west in Worcester around 3pm
We need speed bumps.
sorry not sure where
Route 9 leicester into webster sq is an embarrassment
Main St Worcester (far west side)
greendale area, brooks st rockdale west boylston st
Old Westboro Rd. , Grafton

## 2050 CONNECTIONS TECHNICAL APPENDIX

**Question 29: Please indicate a location that suffers from traffic congestion.**

**Mencione un lugar donde existe un problema de congestión vehicular. Incluya el nombre de la carretera y el pueblo. Recomendamos una constestación específica y detallada.**

Question 29 Responses
N/A x3
Worcester x3
Park ave, salisbury street to webster square
Shrewsbury center - route 140 @ Main Street + Grafton Street
Center town
south street; center of town is terrible
Main Street Northborough
Mendon Hartford and Rte 140, Providence and Rte 16 Bellingham 495 and 126, Bellingham 140 and 126 Bellingham Center
Light on front st at union station
Downtown Northborough, too many streets intersecting in one small area.
Central street is plagued by semi trucks and tractor trailers. They are too big for the road and MUST cross the center line to drive down the road. There is a sharp turn I. The road on Central Street. The trucks must leave their own lane and blindly enter half of the lane of oncoming traffic. Tractor trailers have hit vehicles head on since the road was redone. The road is no longer safe.
davis st northborough
Cape Road and Route 140----so many semis, road congestion....
Downtown Northborough
Main St Northborough, downtown
The traffic coming from the Amazon facility through town is unsafe!
Intersection of Rt 140 and Hartford ave in hopedale AND Rt 16/Hopedale St Hopedale
Hudson/Route 20 area Northboro
The center of town in Northborough. Timing of lights needs to be fixed. Causes major backups that are unnecessary
Downtown Northborough
Westborough downtown Main street, South street, Milk street
West Main and Main downtown. The 4 traffic lights have never been timed correctly since their installations in downtown Northboro!
Pleasant Street inbound is congested in the am and outbound in the pm rush hours
College Square Worcester
West Main St in Westboro
LA freeway
kelley square
Nonquit st at Lake ave
Rte 9 Boston Turnpike Shrewsbury;
Making left hand turns on Cambridge St. and Southbridge St. With a very short walk light. Very Dangerous getting to church.
I have no idea

## 2050 CONNECTIONS TECHNICAL APPENDIX

Question 29 Responses
146 Millbury
Pleasant Street at Tatnuck Square and Salisbury and Parj Avenue intersection
Burncoat St eastbound between High School and Millbrook Worcester. Also, Burncoat Exit off 290 cars go across Burncoat from L hand turn only lane endangering middle lane cars also turning left lane
Pleasant Street at Tatnuck Square and Salisbury and Parj Avenue intersection
Almost anywhere on Rt. 9.
Park Avenue
Newton Square, Tatnuck Square
Intersection of Highland St. becoming Belmont St, Worcester's Lincoln Square. Coming downhill on Highland, 2 lanes are now reserved for left turns onto Lincoln St. at the traffic light, causing the single land reserved for all other traffic to back up all the way up the hill and across the intersection of Highland and Harvard. Please return it to 2 lanes for through and right-turning traffic and only one for left-turning.
Agatha street Worcester MA 01604
Park avenue,worcester
Highland Street—Dougherty HS
Rte 135 at circle, westbough, where meets route 30
Salisbury St & Park Ave intersection
Lincoln st at Belmont
West Boylston Worcester
Plantation St going to Belmont st Worcester. Shrewsbury st to Belmont St. east to Shrewsbury Ma.
Pleasant and Main. Park Ave from May to Salsbury st Highland at Lincoln st
Grafton Street Worcester MA
Leo's way dangerous to get out on Shrewsbury st
Tstnuck Square
Everywhere
Billings Square rotary, it's terrible
intersection of Stafford and James streets
Tatnuck square
Rt290, Worcester
Flanders Rd westborough
Vernon Street
Grove street
Main Street, Westborough
Lincoln st Worcester
Pleasant st from park Ave to Chandler 3:30 to 5: 30
Rte. 290 westbound after 3 PM
Fork in roads Salisbury and Forest
Tatnuck Square Worcester MA
I290, Park Ave., Worcester
Washington Sq, some off ramps on Rte 290 & 190
Lincoln Street, Worcester, MA

## 2050 CONNECTIONS TECHNICAL APPENDIX

Question 29 Responses
Highland St Worcester
Main Street Gilbertville
Route 290 west bound in Worcester.
Stafford Street; think about removable speed humps
West Boylston Street
Pleasant Street flag Street Moreland Street Salisbury Street with all the construction and traffic lights that don't seem to help
Lincoln street
None
Grafton St. and Massasoit Road in Worcester are extremely over-congested, especially when schools are in session. I wish that school drop-off could happen off of the main traffic areas, as children and parents frequently walk alongside or into busy traffic.
Flagg street/Salisbury Street intersection in Worcester
Holden, Main St (122a)
290 Entering Worcester
Worcester- Park Ave intersection by Price Chopper and Elm Park
Holden St/Brattle St, Worcester between 5:30AM to 9:00AM
Mill/Chandler, Park Ave/Highland, Park Ave/Pleasant
Chandler Street intersection of Park Ave
rt 290, east and westbound, webster square, Lincoln Street, the peanut/Vernon Street
Chandler St. Worcester
Lyman and main street
Main Street Holden
North Street Bridge, Douglas
Downtown rotary
Highland st
Holden main Street
anywhere road/utility repairs are occurring
290 through Worcester
RT 16 through East Douglas
Past exit 17 on 290
West Man Street
Grafton Street and Pleasant St
Highland Street, Worcester, Park Ave., Worcester, Tatnuck Square, Worcester, Salisbury Street, Worcester, Main Street, Worcester, just about every major avenue in Worcester at some time during the day.
Kelly Square
Mill Street/Main Street/Cambridge Street/Webster Street intersection in Worcester
1060 Main street Worcester
Main
All

## 2050 CONNECTIONS TECHNICAL APPENDIX

Question 29 Responses
not sure
Lincoln Street
Belmont Street
Left off the 395 off ramp exit 3 & Rt 16 and left put of cudworth at Rt. 16 - webster
Rt 495 and Rt 290 interchange
Hamilton st
The intersection of hook Street Central Street and Foster Street
Lincoln Street to Main/Grove
Sturbridge Route 20
Main and Summer, North Brookfield
?
Pleasant Street.
Not in Brookfield but taking the Mass pike into and out of Boston can be a nightmare
traffic light timing in Chandler, intersection at Lincoln and highland
Rotaries
cambridge street/southbridge street
Park Ave worcester
Holden Main street/122A - there should be a turn lane
Grafton street
Everywhere in Worcester Massachusetts
Kelly Square
Main Street oxford
122a/56 Rutland
Wachusett Regional High School has incredible traffic congestion for multiple hours a day during the school year but due to increased population in the area, the entire Route 122A from Holden through Rutland has multiple congestion spots that add 15-30 minutes to daily trips depending on time of day
Spencer Route 9
Downtown.
Rt 290 Rt 140 Rt 190 into and out of Worcester rush hours
Holden, Main Street/122A - there should be a turn lane
Mass Pike, Route 20 . You ask to be specific but it is to hard, It 20 should be revamped all the way to 146.
290. Not just rush hour or construction problems. Flow is not giid.
Tatnuck Sq
Knox Street at Webster St Worcester
Main st Worcester, Park Ave Worcester
Highland street
Barre Rd. near postoffice
Belmont and lincoln
Turning onto Lake Ave North from Plantation Street - left turn lane often backs up considerably during peak travel times, as does traffic on Lake Ave North
Tatnuck Square. Widen the road back to what it used to be!

## 2050 CONNECTIONS TECHNICAL APPENDIX

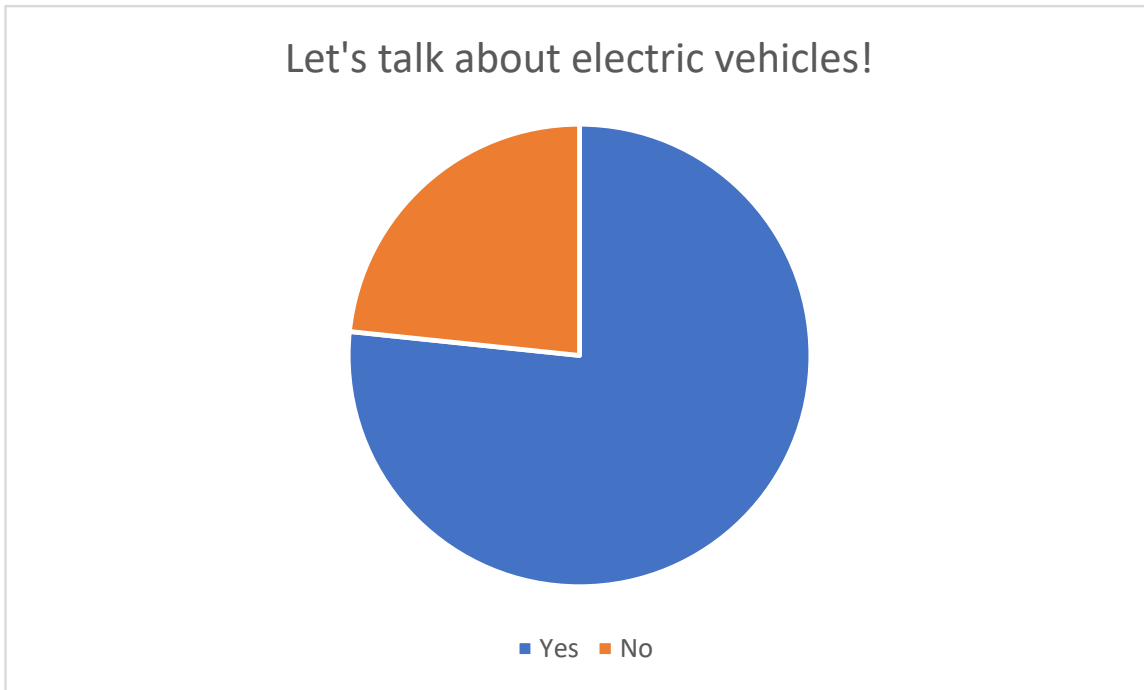
Question 29 Responses
Worcester courthouse. Costs 15 bucks just to park and drop off papers, worcedter court charges \$50 for efile, so how are low income folks supposed to participate in any government at all? So we dont.
Webster square area.
cambridge street
Pleasant st in Worcester from Richmond to Chandler
146 and Vernon Hill
From the intersection of I 190 and I 290, down to Rt 20
Kelly sq, worcester, game day
rotary at Grafton/Hamilton Sts Worcester
I 290 in Worcester so often is slowed and backed up
webster square main to cambridge st
Intersection of Grafton and Hamilton Streets, Kelly Square, Water St. Chandler St (all the way from Downtown to WSU)
Salisbury Street, Worcester
Rte. 30 at Rte. 140 at Waterville St., Grafton
I-290
Rte. 30 at Rte. 140 at Waterville St., Grafton
Pleasant street



Question 30: Let's talk about electric vehicles!

¡Hablemos sobre los vehículos eléctricos!

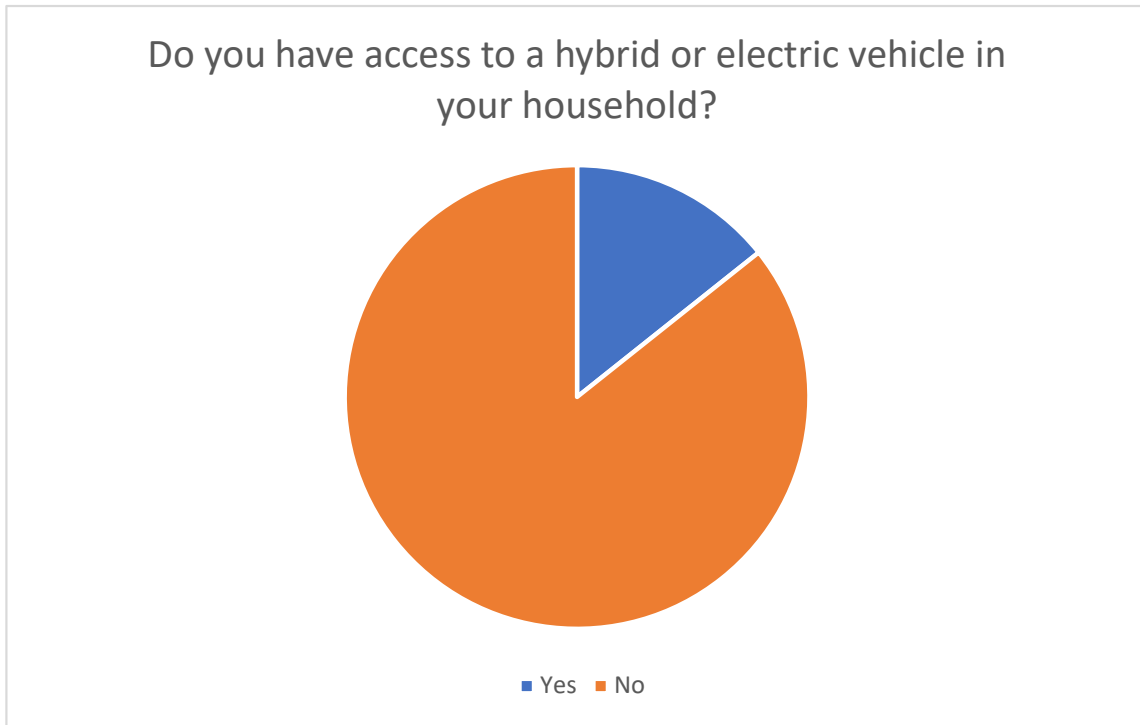
Response	# of Responses	Percentage %
Yes	174	76.65
No	53	23.35
<b>Skipped</b>	<b>57</b>	--



Question 31: Do you have access to a hybrid or electric vehicle in your household?

¿Tiene acceso a un vehículo eléctrico o híbrido en su hogar?

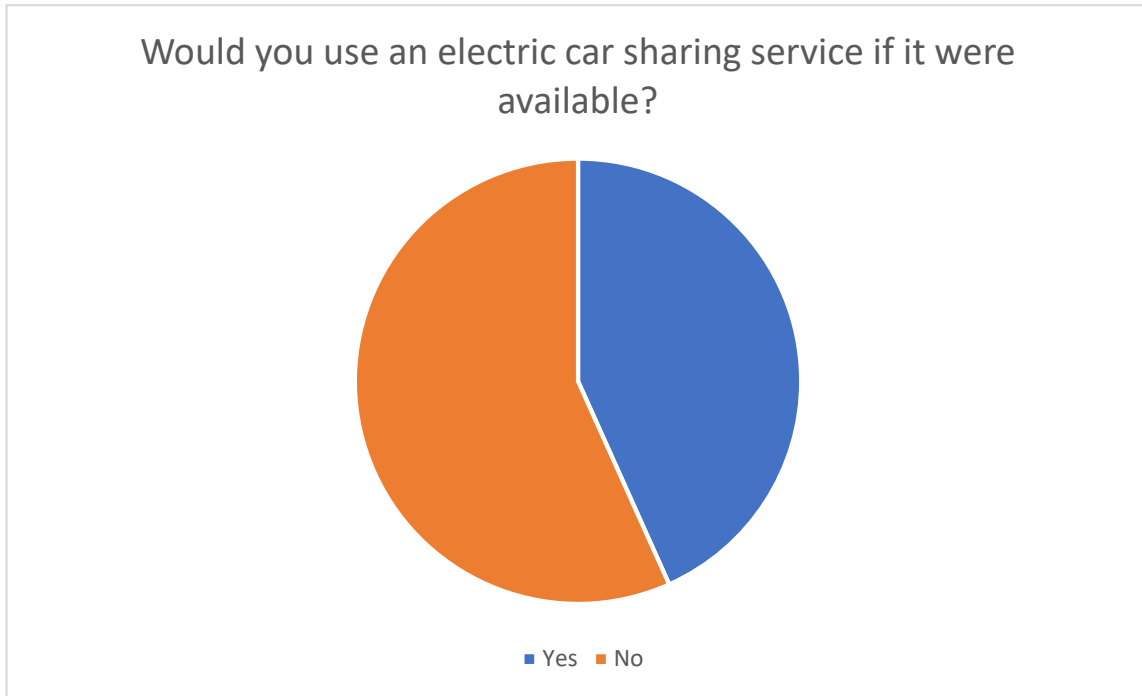
Response	# of Responses	Percentage %
Yes	32	14.29
No	192	85.71
<b>Skipped</b>	<b>60</b>	<b>--</b>



Question 32: If an electric car sharing service were available in your town, would you use it?

¿De estar disponible, utilizaría un servicio de vehículos eléctricos comunitarios?

Response	# of Responses	Percentage %
Yes	97	43.5
No	127	56.95
<b>Skipped</b>	<b>61</b>	<b>--</b>



## 2050 CONNECTIONS TECHNICAL APPENDIX

**Question 33: Please indicate a location where there should be an EV charging station.**

**Mencione un lugar donde se deba añadir infraestructura para recargar los vehículos eléctricos.**

**Recomendamos una constestación específica y detallada.**

Question 33 Responses
Malls and lots that are electrified and secure
In going to St Vincent's Hospital
Every "place" where a gas/oil/wood/coal station used to be
Polar Park
Stop and Shop on Grafton St
already available
highway garage
All neighborhoods in Mendon
Already plenty around
The bike path parking lot on central street
Northborough library
Center of town in northborough, Algonquin regional high school
All Gas stations
Ellsworth McAfee park Northboro
Intersection of Richmond St and Pleasant St
Worcester Road Webster (formerly location of KMart and Shaws)
Downtown (Main St.) Westboro
We have one at Perkins South Shopping Plaza. I do not see people using it.
Firehouse
I have no idea where one could be
Billy Pond Millbury off Ove West Main street
West side of Worcester
Unknown as I do not have one.
Greendale YMCA
parking lot by 9 Congress St. It's private but we'd be willing to share with Neighborhood Association.
West side of Worcester
Any supper market
At every town parking lot and shopping center
Trolley yard plaza
Downtown
Private property
Oxford Community Center
White city
Worcester state university
Sunderland road in Worcester
We'll lit parking lots
All supermarkets, Dr.'s, jobs, etc

## 2050 CONNECTIONS TECHNICAL APPENDIX

Question 33 Responses
every grocery store
City hall
Every gas station with more than 2 pumps.
Supermarket parking lots
Pleasant Street/park avenue
Electric vehicle drivers should have a CURRENT license!
For my convenience, at the Shaw's Market on West Boylston, St., Worcester
At strip malls in various parts of Worcester
Highland St Park Ave
everywhere!!!!
Main South, Worcester, MA
Gilbertvill
Shore Park, Worcester
At every gas station
gas stations in general. Holden, MA the town lot behind the library and Big Y in Holden
Every gas station, grocery stores
Every supermarket
EV charging stations should be at all major intersections.
Lyman street -,down town
Everywhere
town hall, dudley
Nowhere, the infrastructure is not ready!
All gas stations, public buildings should be required to have an EV charging station
Unsure
Dudley Town Hall and Park and Shop Plaza, Shepherd Hill HS
A solar powered charging station should be pepped throughout the city
Grocery Stores
everywhere
Webster Square Plaza, Worcester & Tatnuck Square Plaza & Lincoln Square Plaza
City hall
Lincoln street
Worcester Public Library; Webster douglas forest trail head; Webster Municipal lots and Memorial Park; Market Basket in Oxford; Worcester Green Hill Park;
Rt 495 and West Main St Hopkinton (price chopper)
Northboro munal lot
I have no idea
Town lot
Saint Johns
Town Hall and High School
Main St and Summer, North Brookfield
by fire station
Downtown worcester

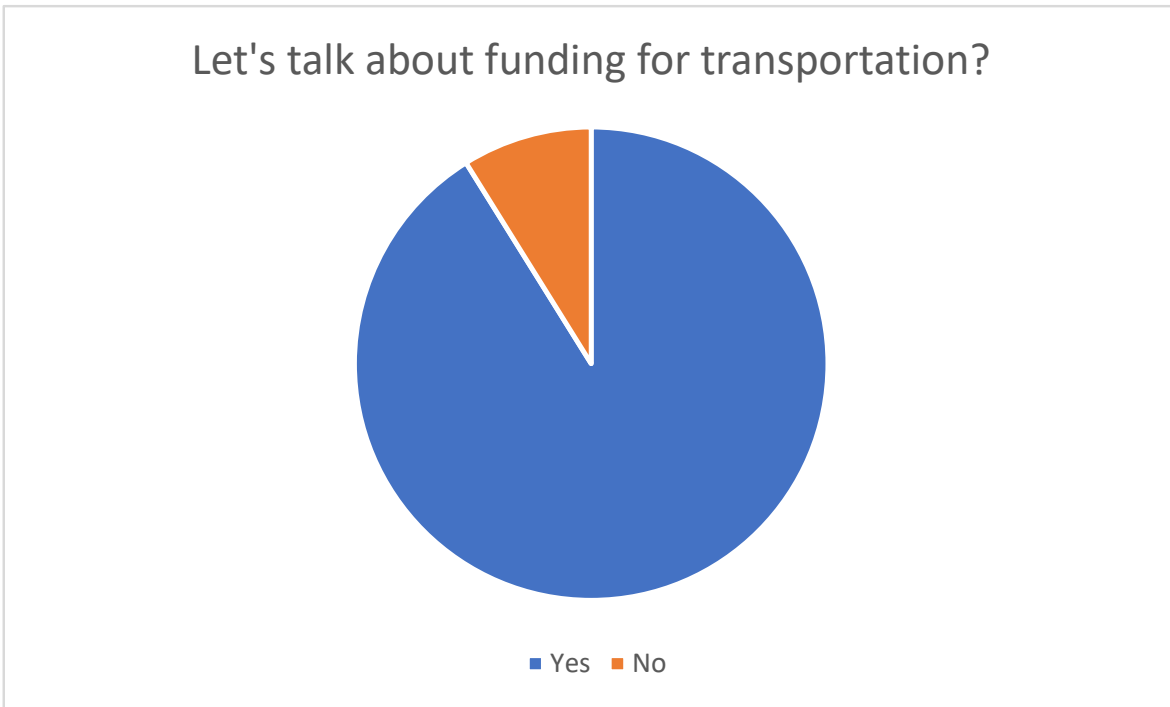
## 2050 CONNECTIONS TECHNICAL APPENDIX

Question 33 Responses
Worcester x3
Everywhere. Would like one in the center of Brookfield (maybe the police station or fire department or near town hall) as I know people with EVs and they've had to park in other towns to charge.
public parking at Elm Park/worcester common/most public parks
Rutland Community Hall
In every neighborhood in Worcester Massachusetts
At every gas station
The center of Rutland, at the library represents a natural spot for people in the more rural towns to pickup and drop off an EV for daily needs
North Brookfield
All shopping centers with gas stations. Walmart Millbury, Lincoln Plaza
Rutland Community Hall
Spencer center
Park Ave worcester
All sides of the city for easy access
Everywhere
don't. The wealthy suburbs. Regular people can't afford those things, not with local housing costs
near merging highways
Senior Center?
Tatnuck SQ shopping plaza lot in Worcester
Public Parking locations, grocery stores
Every parking lot, every public building
University Park
in absolutely every town and throughout the City of Worcester
Realistically, all over the city
i've seen enough ev stations
Library branches
<b>Skipped: 167</b>

Question 34: Let's talk about funding for transportation!

¡Hablemos sobre el financiamiento de la infraestructura de transportación!

Response	# of Responses	Percentage %
Yes	185	91.13
No	18	8.87
<b>Skipped</b>	<b>167</b>	--



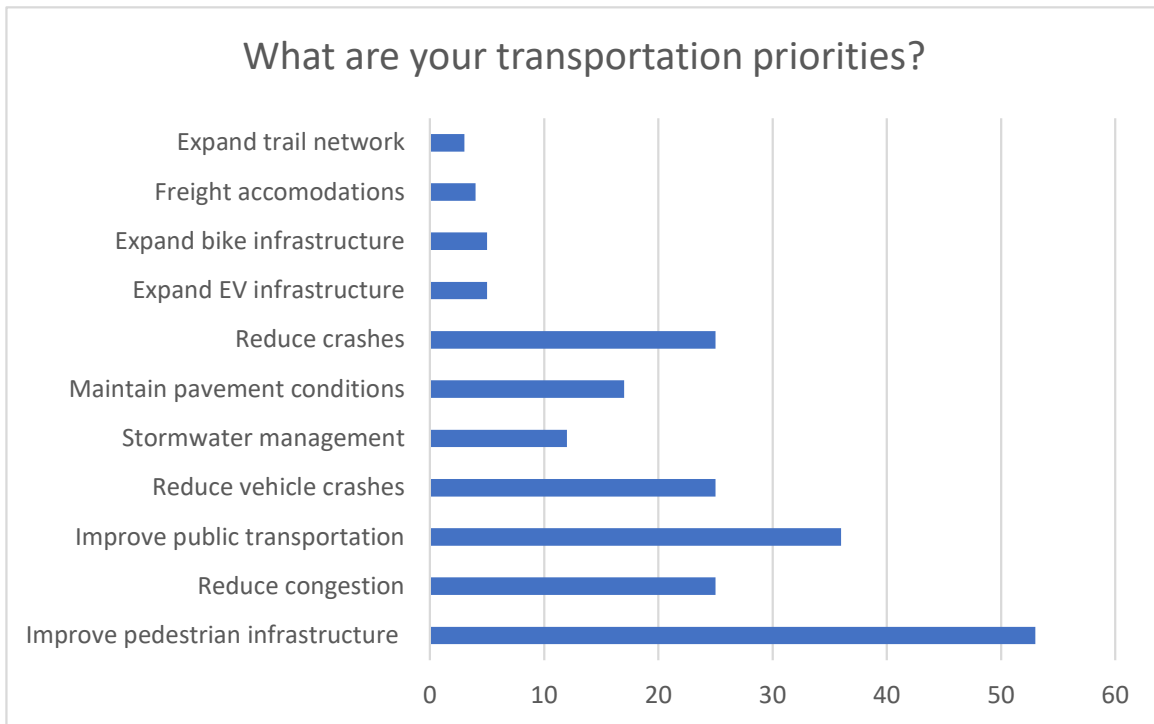


## 2050 CONNECTIONS TECHNICAL APPENDIX

**Question 35: Before discussing funds, we need to know your transportation priorities. Please rank each of the following options from one to ten with one being your priority.**

**Antes de hablar sobre el financiamiento a la infraestructura de transporte, necesitamos conocer sus prioridades. Enumere las siguientes opciones del 1 al 10 en orden de prioridad. Seleccione 1 para su mayor prioridad y 10 para la prioridad más baja.**

#1 Priority	# of Responses	Percentage %
Pedestrian infrastructure	53	31.18
Stormwater management	12	7.14
Reduce traffic congestion	25	14.45
Transit services	36	20.69
Maintain pavement	17	9.83
Reduce vehicle crashes	25	14.45
Expand EV infrastructure	5	2.86
Bike infrastructure	6	2.92
Freight infrastructure	4	2.29
Expand trail network	3	1.73
<b>Skipped</b>	<b>98</b>	<b>--</b>



## 2050 CONNECTIONS TECHNICAL APPENDIX

Question 36: How would you distribute the transportation funds available in the region?

¿Cómo distribuiría los fondos disponibles para transportación en la región?

Priority	10% of Funds	20% of Funds	30% of Funds	40% of Funds	50% of Funds
Roadway maintenance	44/25.58%	52/30.23%	28/16.28%	20/11.63%	28/16.28%
Public transportation	38/23.03%	47/28.48%	26/15.76%	18/10.91%	36/21.82%
Pedestrian infrastructure	50/30.49%	66/40.24%	26/15.85%	7/4.27%	15/9.15%
Bicycle infrastructure	84/64.62%	19/14.62%	12/9.23%	5/3.85%	10/7.69%
Reduce congestion	61/47.29%	27/20.93%	15/11.63%	10/7.75%	16/12.4%
Traffic safety	50/31.85%	57/36.31%	19/12.10%	9/5.73%	22/14.01%
Trail network	81/68.07%	19/15.97%	11/9.24%	3/2.52%	5/4.2%
Freight facilities	69/76.67%	10/11.11%	6/6.67%	3/3.33%	2/2.22%
Culvert replacements	72/67.92%	16/15.09%	14/13.21%	1/0.94%	3/2.83%
EV charging stations	82/71.3%	13/11.30%	9/7.83%	4/3.48%	7/6.09%
<b>Skipped</b>	<b>85</b>	--	--	--	--

Priority	Total Weight
Roadway maintenance	2.63
Public transportation	2.8
Pedestrian infrastructure	2.21
Bicycle infrastructure	1.75
Reduce congestion	2.17
Traffic safety	2.34
Trail network	1.59
Freight facilities	1.43
Culvert replacements	1.56
EV charging stations	1.62

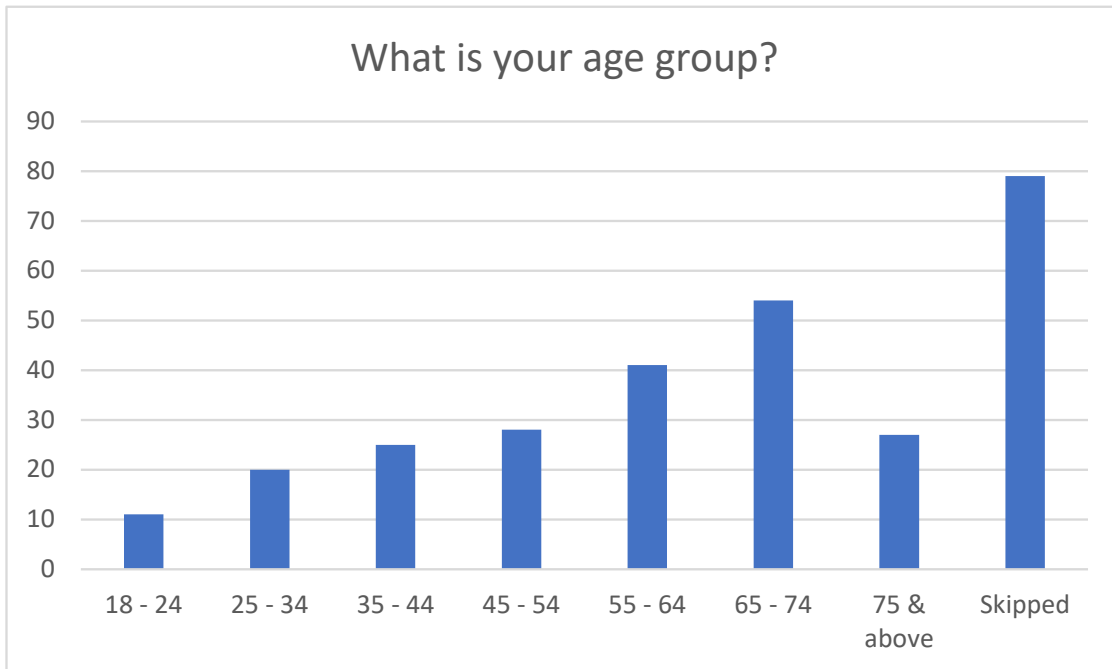
Question 36 Comments
Resume "elevated rails" (2 way) in every town/city/state; connect planes, trains, buses; would save money and connect many people
NO freight facilities---too congested now
Pay cyclists
That was difficult to prioritize and stay within the 100 percent goal
Access to more frequent reliable transportation for disabled
Seriously?!
Don't know
I suggest a bypass lane for trucks around the bridge on Cambridge St. and Hammond St. his would require minimal changes to preexisting roadways. You could charge an additional toll

Question 36 Comments
I think that many of these goals are interrelated; for example, improving pedestrian and bicycle conditions will relate closely to traffic safety and reducing congestion.
Traffic safety/ freight facilities/ bicycle infrastructure/ reduce congestion 5%
This question asks not to exceed 100 but offers 10 expected responses, all of which have a minimum of 10% if we want to keep it under 100%
freight 5% and culvert 5%
N/A
this person also put traffic safety and culvert replacements at 40%, reduce congestion, freight facilities and EV charging at 30% and bike infrastructure and trail network at 20%
they also marked EV charging stations as 50% and all others as 30%
Charging stations should be added by private enterprise. If road maintenance and reduced congestion solutions are pursued safety to should also increase.

Question 37: What is your age group?

Indique su grupo de edad.

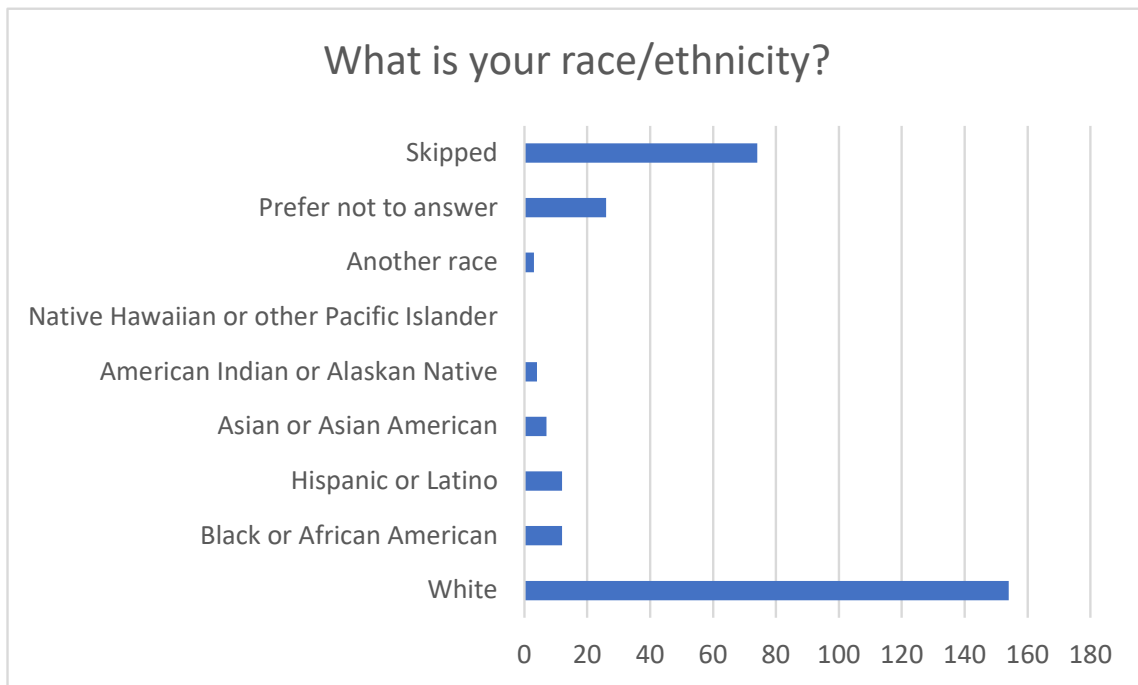
Age Group	# of Responses	Percentage %
18 - 24	11	5.37
25 - 34	20	9.76
35 - 44	25	12.2
45 - 54	28	13.66
55 - 64	41	20
65 - 74	54	26.34
75 & older	27	13.17
<b>Skipped</b>	<b>79</b>	<b>--</b>



**Question 38: What is your race/ethnicity?**

Indique su raza/etnia.

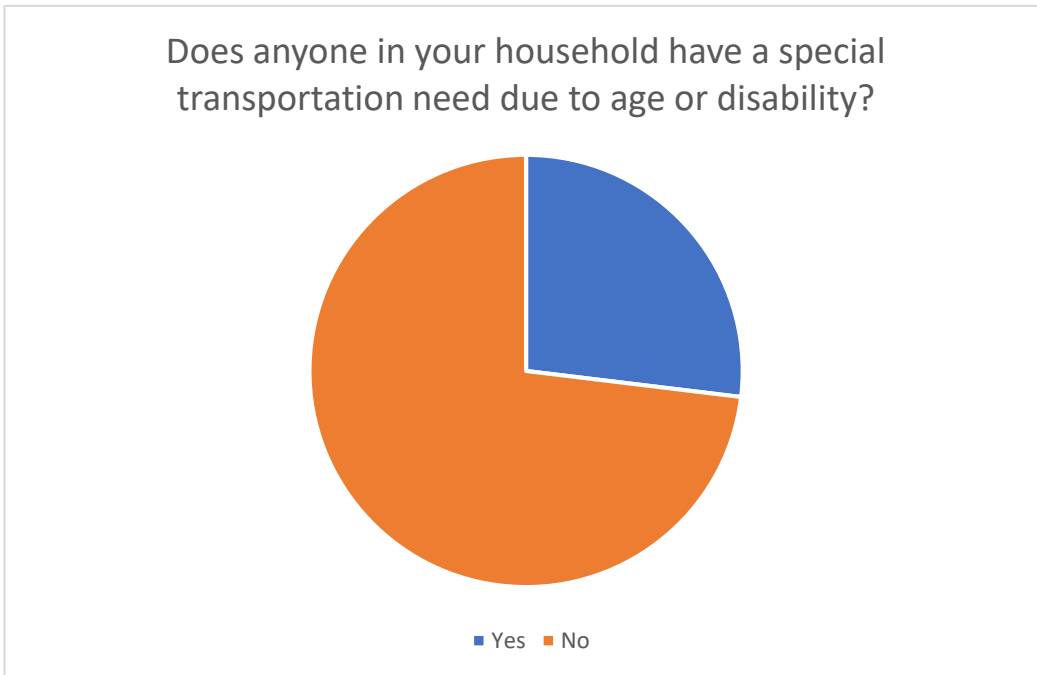
Race or Ethnicity	# of Responses	Percentage %
Prefer not to answer	26	12.38
Other race/ethnicity	3	1.43
Native Hawaiian or other Pacific Islander	0	0
American Indian or Alaskan Native	4	1.9
Asian or Asian American	7	3.33
Hispanic or Latino	12	5.71
Black or African American	12	5.71
White	154	73.33
<b>Skipped</b>	<b>74</b>	<b>--</b>



Question 39: Does anyone in your household have a special transportation need due to age or disability?

¿En su hogar, hay alguna persona que tenga una necesidad especial de transportación debido a la edad o discapacidad?

Response	# of Responses	Percentage %
Yes	56	26.92
No	152	73.08
<b>Skipped</b>	<b>76</b>	--



**Question 40: If you would like more information about 2050 Connection, please leave your email address.**

**Si desea recibir más información sobre el plan de transportación 2050 Connections por favor escriba su dirección de correo electrónico en el espacio que se provee abajo.**

**Question 40 Responses**

58 people left their emails



**Question 41: Do you have any final remarks about 2050 Connections, this survey, or transportation in the region?**

**Puede utilizar el espacio que se provee a continuación para incluir cualquier comentario final que quiera compartir con nosotros.**

Question 41 Responses
Regarding question #35: trash is on every culvert; to mitigate congestion, create elevated rail network (2 way) across north america; elevated rails could also eliminate need for individual vehicles
timely pick-ups and drop-offs
We are drowning in warehouses existing, to be built and proposed. Impacts have to move from a town by town assessment to a regional assessment.
The center of Shrewsbury has gone from pedestrian infrastructure friendly to war zone. With the increase of traffic - truck and regular - (UPS and Boylston facility) going to the library is a challenge. Not to mention emergency vehicles trying to get through. Children walk from the Middle School at a high traffic time to stores and library. It's only a matter of time before there's a tragedy.
I need the buses to come on time they have a lack of drivers in the wrtta and that means missing appointments or rescheduleing them. I can't drive so I really depend on the bus.
Millville needs significant support and funding for road repairs and storm water management. We have no public transportation. We need to have accessible public transport to and from Boston and Providence. Franklin is the nearest train station and the lot is always full. We have land and room for access to the train line, but we need a train station either in Millville or uxbridge.
The amount of distribution center traffic and safety issues in the area is disastrous
Make the Northborough Amazon drivers follow the rules! No driving through town!
The town of Northboro is failing in all of its transportation categories. It needs a full assessment bypassing the town administrator and his staff. Presently, It is a race to the bottom !
I support a wide railway transportation system across Massachusetts. I would readily use train service from Webster to Boston.
I would gladly use public transportation if there was a bus stop closer to my home. I have to walk 15 to 20 minutes to get to a stop.
Hurry up.Make it quick.
Nonquit st is a very busy street on the north side abutting the state/city property. Not maintained for all the trees that need to be trimmed that are very big and overhang the street which has plenty traffic as a cross st from Coburn Ave to Lake Avenue. School, business ,Private Autos are not controlled even tho' we have about 13 children on it, a blind man, and walkers, strollers with babies all on this VERY busy street. At corner of Lake ave it is a blind entrance to Lake ave and property to Skating Rink and across street to State Park which also has traffic with football and track and beach and joggers on walk path and picnic tables. Plus construction equipment also stored on street. Please help and improve this would be quiet street with sooooo many issues. Thank you

## 2050 CONNECTIONS TECHNICAL APPENDIX

Question 41 Responses
The City does a remarkable job handling snow events. They should be commended.
Gas prices are to high.
Maintenance of all Worcester streets and sidewalks should be a main priority.
Actually, I think Worcester does fairly well on this. Congestion on 290 has gotten difficult, but there is not much the city can do about that. It's far less than many other communities. I think the Kelly Square peanut is an improvement. I was stuck taking the bus a year ago and I found it to be pretty good. The buses were never over crowded and often had very few passengers. I think the WRTA should do a study to determine when they could send a smaller bus on a given route.
I work with blind and low-vision individuals, and unreliable public transportation hinders participation and connection for my patrons. It is essential to improve pedestrian conditions and public transit options for folks who cannot drive due to a disability. Central MA is a wonderful place to live, but it is far too dependent on cars to get around and this excludes many from participating fully in daily activities.
Getting around central mass any other way than by car is challenging. This is a policy failure. Worcester as the second largest city in New England can and should do better!
There needs to a lot be more secure bike racks in the city in shopping areas and other areas.
The priority ranking and % of funding questions are difficulty to answer meaningfully in the abstract, especially for those not versed in the costs of such things.
for question 14, all of the above. also, transportation is a lifeline
There should be a raffle prize associated with this survey to make it's long nature less onerous
I appreciate the chance to voice my opinions on these matters
please add bike sharing service in worcester
Not in my home but my Father has a disability
Free buses help the community get around there town
I have no idea what zero vision is and I hope Bill Gates and or World Economic Forum is not connected to this as #ichangetheworld I VodounVi Dzifah
It's not an easy task to try to manage the needs of all the Central Mass communities with the limited funds that will be available but there are a few communities, Rutland & Holden specifically that are gateways to many areas that will continue to grow over the next few decades and will need this infrastructure even if they haven't had a large need for it in the past.
If I can use more than 1 answer let me check more than 1 thing. If you ask about discussing a topic and I check "no" don't ask me about it.
Not to be cynical but why does east west traffic ( mass pike ) pay for north south (ex. 128,93)? I travel to many other states (we camp ) and I noticed that they seem to do a lot more to expand and improve their roads, especially the toll roads
Maintenance is a must.
fix the pot holes
The question about allocating resources w/ percentages was ridiculous. 10 resources and you're asked not to exceed 100% so it's impossible to put anything above 10%.
Massachusetts needs to pass a law for Regional Funding Initiatives

Question 41 Responses

A lot of places in the city are blocked by trains, highways, even large businesses with fences around them.

This makes it difficult to get to places that are actually close together.

We need more busses, more frequent, more places, more hours.

It is unlikely that drivers will switch to busses.

What should be done is convince current riders that they can live with busses and not use all their savings for a future car. Rents and prices are getting out of control, and it is harder and harder to find a place to live near a frequent bus.

This survey is too long!

glad you are looking at this

get rid of 290!!! it has fragmented and ruined our city. neighborhoods need to be more connected and walkable.

1/3 of worcester residents don't own cars yet we're reduced to infrequent bus stops.

(i appreciate the free fare but not reliable for someone with a job i need to be on time for)

i'm sick of cars everywhere and speeding. no enforcement of traffic laws

enabled dangerous and deadly drivers who CONTINUE to drive.

# Presentations



# 2050 CONNECTIONS

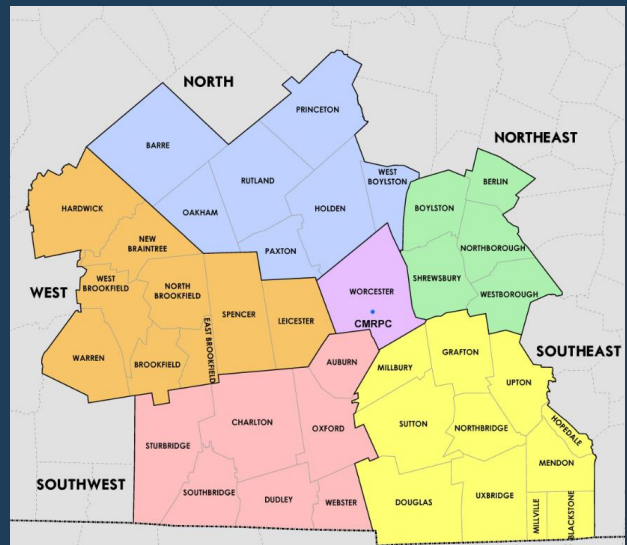
IMAGINE A REGION CONNECTED

1

## The CMMPO

### By Sub-region

Since 1976 the CMMPO's role is to plan transportation projects in the region, and program federal funds for highway, transit, bridges, trails, bicycles and pedestrian infrastructure.



MassDOT

CMRPC

WRTA

Sub-regions

2

# 2050 Connections



The region's long-range  
transportation plan

What is the purpose of the L RTP?

The purpose of the L RTP is to identify the multi-modal transportation needs and priorities of the southern central Massachusetts region.

MPO's must create a plan every four years.

The span of 2050 Connections covers 25 years.

3

## MODES



Freight



Transit



Non-Motorized



Highways



Airports

Existing Conditions  
Current Challenges or Issues  
Vision for the Future  
Identified Needs and Priorities

4

# PLANNING AREAS

- 1 Safety Planning
- 2 Congestion Management
- 3 Asset Management
- 4 Environment
- 5 Emerging Technologies

6

## HOW TO PARTICIPATE?



Surveys



Community Events



Interviews



Regional Workshops

13





## Group Discussion

- What is the most pressing ISSUE / CHALLENGE related to transportation today?
- Do you have a transportation project, service or study you would like to pursue if the financial resources become available?
- Do you know any best practice or example that we should look at / explore for our region?
- What is your Transportation BIG idea?

14

# Thank You

[WWW.CMRPC.ORG/2050CONNECTIONS](http://WWW.CMRPC.ORG/2050CONNECTIONS)

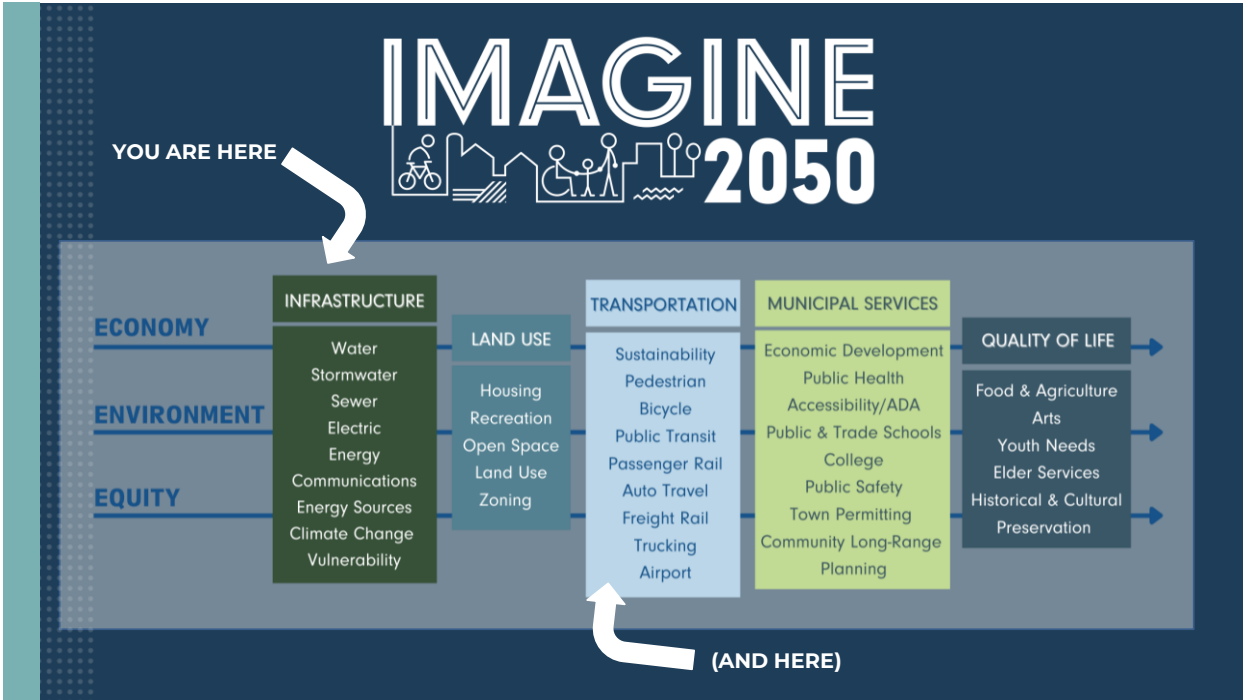
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#2050 CONNECTIONS

15






3




## EEA Infrastructure Plan


For more information contact: Kerrie Salwa  
ksalwa@cmrpc.org



Address key infrastructure gaps



Conduct a regional analysis study to assess the capacity of regional systems



Plan for future resiliency, economic growth potential, and shifting settlement patterns

4

# 2050 Connections

The region's long-range  
transportation plan



What is the purpose of the L RTP?

The purpose of the L RTP is to identify the multi-modal transportation needs and priorities of the southern central Massachusetts region.

MPO's must create a plan every four years.

The span of 2050 Connections covers 25 years.

## HOW THE L RTP IS DEVELOPED?



### PLANNING

Many factors are taken into consideration:  
Management Systems  
Performance Measures  
Land Use  
Economic Development



### PARTICIPANTS

Public-at-large  
Planners and Town Officials  
Interest Groups  
Organizations  
MassDOT, FHWA, FTA



### IMPLEMENTATION

Future work related to the studies, initiatives and projects identified in the plan within the region's financial constraints.

# THE PROCESS

## PUBLIC OUTREACH

Approach, methods and tools used to engage the public

## PERFORMANCE MANAGEMENT

Presentation of national and regional goals and their relationship with Federal and regional metrics

## EQUITY CONSIDERATIONS

Geographic equity and the region's demographic characteristics

## FEDERAL, STATE & COMMUNITY

BIL, Beyond Mobility, Master Plans and locally identified priorities

7

# PROJECTIONS



POPULATION PROJECTIONS



EMPLOYMENT PROJECTIONS



FUTURE GROWTH PROJECTIONS

8

# TRANSPORTATION MODES



Freight



Transit



Non-Motorized



Highways



Airports

Existing Conditions  
 Current Challenges or Issues  
 Vision for the Future  
 Identified Needs and Priorities



- 2023-27 TIP
- About \$25M annually
- Corridor Profiles
- Major Infrastructure Projects
- Accommodation for all users

- Freight Accommodation Assessment Study
- Rest areas and truck parking
- Bottlenecks on highways
- Freight railroads
- Freight Corridors
- Distribution Centers



- WRTA Fixed Route
- WRTA Paratransit Service
- WRTA VIA On-demand
- Elder Bus
- Ready Bus
- Council on Aging
- Quaboag Connector

- Regional Pedestrian Plan
- Regional Bicycle Plan
- Bicycle Compatibility Index
- Bike Sharing Study
- Microprojects
- Complete Streets
- Trails



Check the CMRPC Multi-Modal Hub:  
<https://sites.google.com/view/cmrpcbikeblog/home>

# PLANNING AREAS

- 1 Safety Planning
- 2 Congestion Management
- 3 Asset Management
- 4 Environment
- 5 Emerging Technologies

## Safety

- Pedestrian and Bicycle Safety
- Crash data
- Road Safety Audits
- Safe Routes to School
- Highway Improvement Safety Program (HSIP)

Top Crash Locations among the Top 200 Statewide (2017-2019)

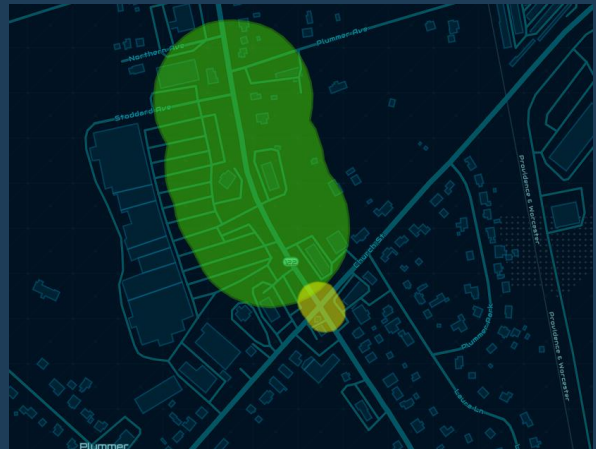
**Charlton:** Stafford Street / Center Depot Road

Top Crash Location for bridge strikes (30)

**Westborough:** West Main Street

Top Pedestrian & Top Bicycle Crash Clusters

**Worcester:** Main Street / Chandler Street



MassDOT Online Crash Portal:  
<https://apps.impact.dot.state.ma.us/cdp/dashboard-view/26>

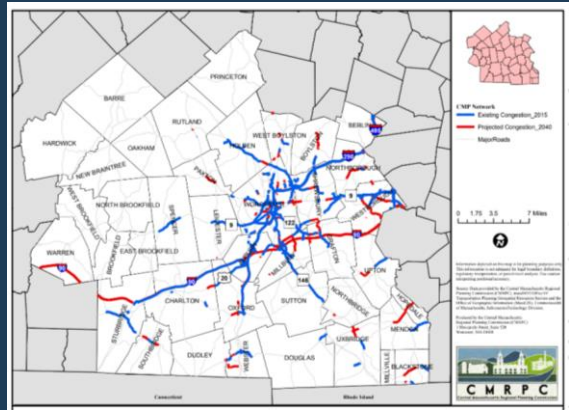


# Congestion

- Congestion Management Process (CMP)
- Data collection: travel time and delays
- List of critical intersections
- Park -N - Ride database and utilization rate
- Transit on-time performance
- Travel Demand Model
  - to identify bottlenecks in the region
  - to project future congested locations

## TOP 5 CRITICAL INTERSECTIONS (DELAYS)

- #1 Millbury – Route 122 / Mass Pike
- #2 Worcester – Foster St / Francis J. McGrath/Franklin St / Green St
- #3 Shrewsbury – Route 140 / Main Street
- #4 Westborough – Route 9 / Lyman Street (FYI - this ranking was before the TIP improvement project, the analysis after improvements is not yet completed)
- #5 Auburn – Route 12 / Swanson Rd / Brotherton Way

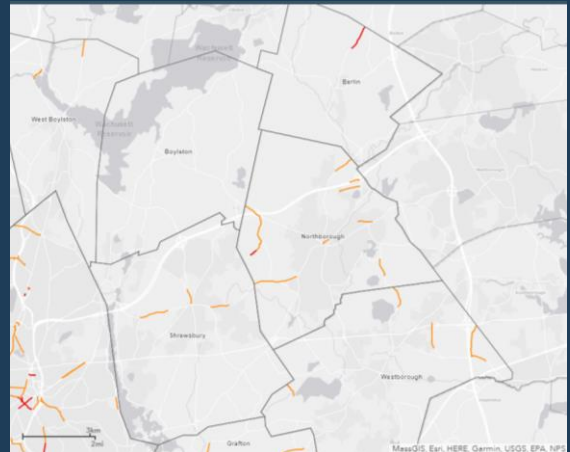


# Asset Management

- Data collection
- Pavement condition
- Sidewalk condition
- Traffic counts
- Turning movement counts
- Data available on the online dashboard

- Westborough:** Parking Study (2019)
- Shrewsbury:** Sidewalk Plan (2022)
- Douglas:** Traffic Signal Warrant Analysis (2022)
- Shrewsbury:** MA-140 Corridor Profile Study
- Berlin:** MA-62 Corridor Profile Study

Poor (Orange) and Very Poor (Red) Pavement Condition



## Resiliency

- Climate change means more heavy rain downpours and flash flooding
- More than 5 thousand culverts in the region
- Culvert Assessments to identify degree of barrier to waterways
- Integral piece of roadway infrastructure
- Online culvert dashboard

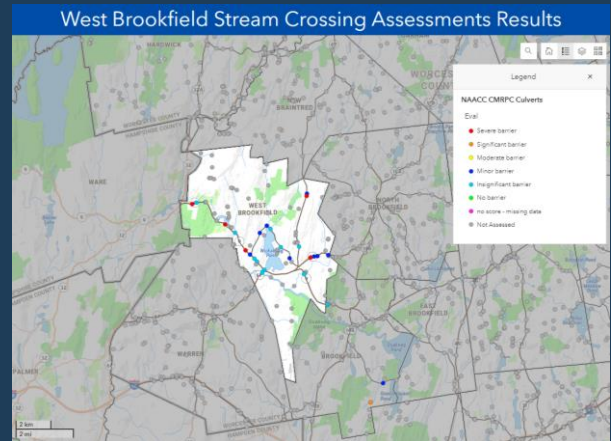
**Berlin:** Double culvert at Randall Road and West St.

**Westborough:** Bowman Lane culvert replacement in design

**Sutton:** Two culverts with significant barrier status

**Upton:** Culvert Replacement Milford St. (2026 TIP over \$1M)

**West Brookfield:** Stream Crossing Assessments



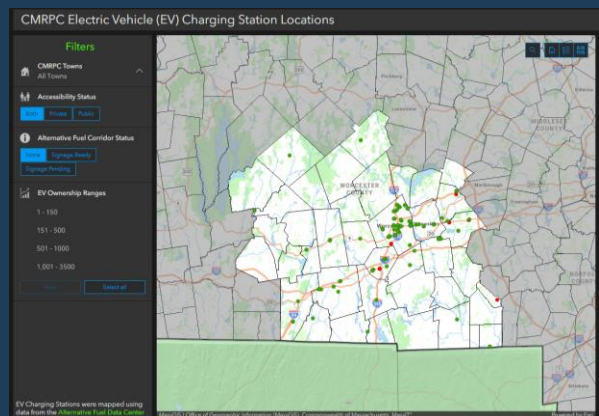
15

## Decarbonization

- Massachusetts 2050 Decarbonization Roadmap
- Electric Vehicle Charging Stations – multiple opportunities and grant programs
- New type of infrastructure
  - Total of 142 charging station in the CMRPC region
  - Locations where charging stations are needed.
- Online EV charging station dashboard

Most of the communities have one or more charging stations.

Major concerns related to the capacity of the grid to sustain the future demand in peak hours.

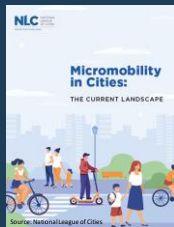
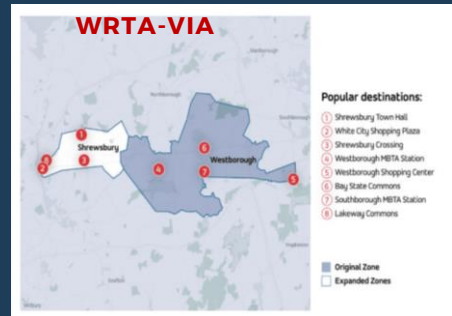


16

# Emerging Technologies

Technology has changed the way we interact with transportation.

Transportation planning has been experiencing a transition from an auto-centric approach to a human-centered transportation network.



Mobility Hubs are the transfer stations of the future. They combine access to transit, micromobility, car-sharing and bike-sharing services, EV charging stations, kiosks with real time information, wayfinding information, among other amenities. Perfect scale for community Transit Oriented Development (TOD).

# 2023-2027 TIP

<p><b>North</b></p> <p>5 Projects \$26,439,417 M</p>	<p><b>Southwest</b></p> <p>18 Projects \$188,015,744 M</p>
<p><b>Northeast</b></p> <p>2 Projects \$22,202,113 M</p>	<p><b>Southeast</b></p> <p>15 Projects \$87,202,755 M</p>
<p><b>West</b></p> <p>7 Projects \$42,702,954 M</p>	<p><b>Central</b></p> <p>8 Projects \$66,976,803 M</p>

- A total of 143 TIP projects, advertised and programmed, between 2012 and 2027, 96 projects located in EJ areas.
- From 2012 to 2027, there are 11 communities that had no target projects, 8 communities with no statewide projects, and 3 communities had neither target nor statewide projects.
- The Northeast Subregion had the fewest number of target projects with a total of 3.
- Federal-aid target funds programmed by the CMMPO since 2012: Over \$290 M
- Statewide funds applied to the region since 2012: \$582 M (approx)

## Funds Awarded in the Region

### Complete Streets

20 Communities with approved/completed projects

Investment of \$6.5M since 2018

### MassTrails

CMRPC & 8 communities  
17 projects funded

Investment of \$1.8M since 2019

### Shared Streets

25 communities  
47 projects funded

Investment of \$5.2M since 2019

### MassWorks

10 Communities  
12 Projects

Investment of \$19.6M since 2018

### DER's Culvert

7 active projects  
2 projects using ARPA funds

### Green Communities

Awarded \$3.4M  
20 communities  
2021 & 2022

19



## REGIONAL SUMMITS

6 subregions  
24 of towns represented  
48 of Town's representatives  
Individual conversations with Worcester, Uxbridge, Boylston  
Rutland (scheduled for Nov. 1)

20

## Major Highlights

Grafton, MA



WHAT  
WE'VE  
HEARD?

North Brookfield, MA



Westborough, MA



Dudley, MA



West Boylston, MA



21

## Jamboard Session



### Open Mic Discussion

- 1) What is the most pressing **ISSUE** or **CHALLENGE** related to transportation today?
- 2) Do you have a transportation **project, service** or **study** that you would like to pursue if the financial resources become available?
- 3) What is your Transportation **BIG Idea**?

22

## Funding Opportunities

### BIL

National Electric Vehicle Infrastructure

PROTECT (Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation Program)

Safe Streets for All

Reconnecting Communities

Rural Surface Transportation Grant Program

Charging and Fueling Infrastructure Grants

Congestion Relief Program

National Culvert Removal, Replacement, and Restoration Grants

Advanced Transportation Technologies and Innovative Mobility Deployment

For more information: [https://www.fhwa.dot.gov/bipartisan-infrastructure-law/grant\\_programs.cfm](https://www.fhwa.dot.gov/bipartisan-infrastructure-law/grant_programs.cfm)

23

## MA Funding Opportunities

### MassDOT

Complete Streets Program

Shared Streets and Spaces

Local Bottleneck Reduction Program

Community Transit Program

### MassDEP

Mass EVIP: Fleet electrification

DC Fast Charging: EV charging stations for public use

Multi-unit Dwelling & Educational Campus Charging

Workplace & Fleet Charging (workplaces with at least 15 employees on site)

### MA DCR

MassTrails

Massachusetts Clean Energy Center

Accelerating Clean Transportation for All (ACT 4 All)

Executive Office of Public Safety and Security

Municipal Road Safety Grant Program –

available to municipal Police Departments

State Agency Traffic Safety Grant – to reduce crashes, injuries and fatalities

Car Seat Distribution Program

24



## MORE OPPORTUNITIES TO PARTICIPATE



Surveys



Community  
Events



Interviews



Regional  
Workshops

25

# Thank You

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TAKE THE SURVEY!



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#2050 CONNECTIONS

26





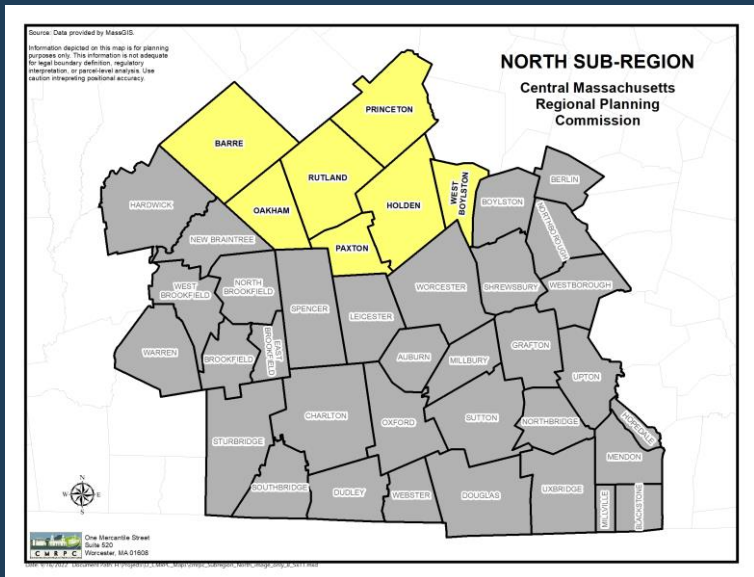
# REGIONAL INFRASTRUCTURE SUMMIT

North Subregion

1

## North Subregion

Barre  
Holden  
Oakham  
Paxton  
Princeton  
Rutland  
West Boylston



2

# Past Planning Efforts North Subregion

## Walkability

CMRPC Regional Pedestrian Plan  
 Mass Central Rail Trail  
 Neighborhood Safe Assessment in Holden

## Bicycle

CMRPC Regional Bicycle Plan  
 Bicycle Compatibility Index  
 CMRPC Bike Sharing Study

## CMRPC Dashboard

Culverts  
 Electric Vehicle Charging Stations  
 Pavement Condition  
 Sidewalk Condition

## 2023- 2027 TIP Projects

5 projects programmed, \$26.4M  
 Corridor Profile Studies

## Transit

WRTA Fixed-route  
 WRTA Community Shuttles  
 COAs Van Operations

## Complete Streets

3 approved projects  
 3 approved prioritization plan

# Safety

- Pedestrian and Bicycle Safety
- Crash data
- Road Safety Audits
- Safe Routes to School
- Highway Improvement Safety Program (HSIP)
- We work closely with communities to identify and address safety issues.

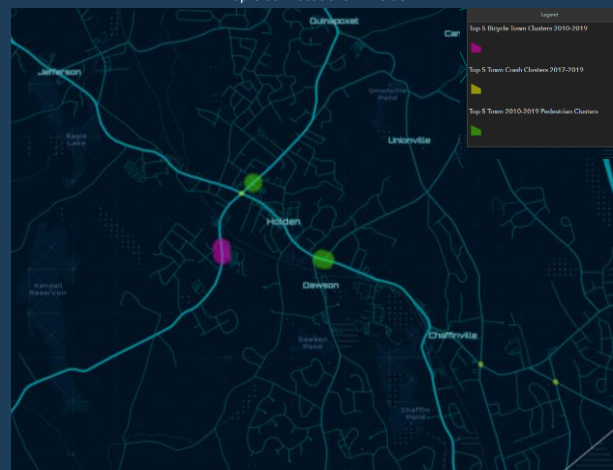
### Pedestrian Crash Clusters

Holden: Highland Street  
 Holden: Main Street / Malden Street  
 Rutland: Main Street / Maple Avenue

### Bicycle Crash Clusters

Holden: Reservoir Street (MA-31)

Top Crash Locations in Holden



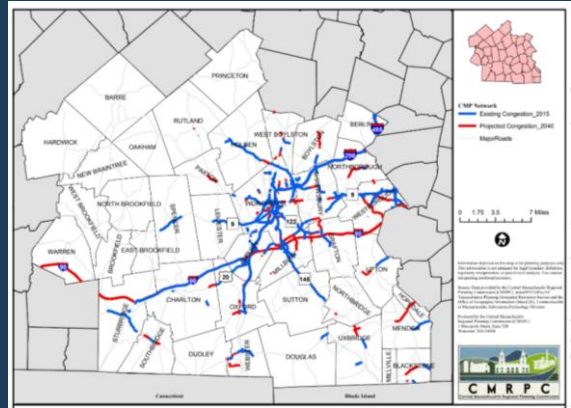
MassDOT Online Crash Portal:  
<https://apps.impact.dot.state.ma.us/cdp/dashboard-view/26>

# Congestion

- Congestion Management Process (CMP)
- Data collection: travel time and delays
- List of critical intersections
- Park –N – Ride database and utilization rate
- Transit on-time performance
- Travel Demand Model
  - to identify bottlenecks in the region
  - to project future congested locations

Among the Top intersections with significant peak hour delay in the CMRPC region:

**#15 Holden – Shrewsbury St / Doyle Road / Mount View Drive**

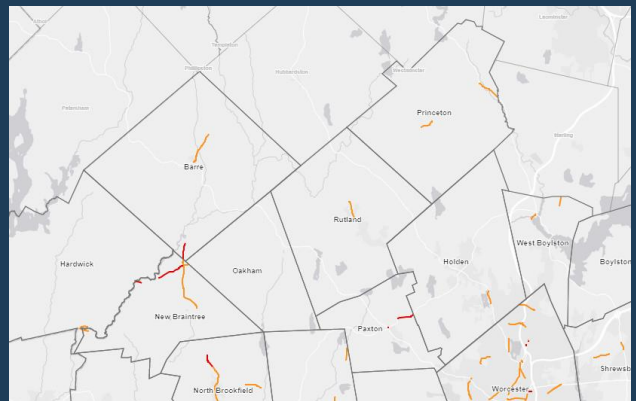


# Asset Management

- Data collection
- Pavement condition
- Sidewalk condition
- Traffic counts
- Turning movement counts
- Data available on the online dashboard

**West Boylston – Route 140 Corridor Profile (2018)  
Highway Freight Accommodation Study**

Poor (Orange) and Very Poor (Red) Pavement Condition

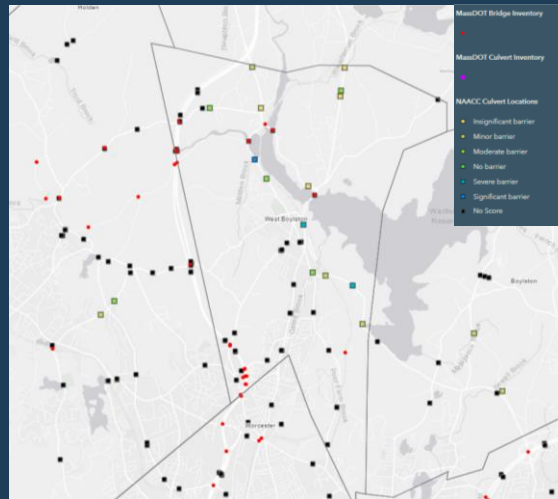


## Resiliency

- Climate change means more heavy rain downpours and flash flooding
- More than 5 thousand culverts in the region
- Culvert Assessments to identify degree of barrier to waterways
- Integral piece of roadway infrastructure
- Online culvert dashboard

Majority of the culverts in the North sub-region have not been assessed.

**West Boylston:** Two culverts with severe barrier status (teal) and one with significant barrier status (blue)

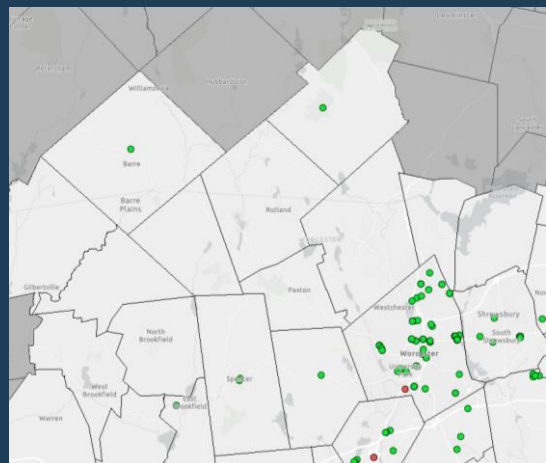


7

## Decarbonization

- Massachusetts 2050 Decarbonization Roadmap
- Electric Vehicle Charging Stations – multiple opportunities and grant programs
- New type of infrastructure
  - Total of 164 charging station in the CMRPC region
  - Locations where charging stations are needed.
- Online EV charging station dashboard

Among all the CMRPC region, the North subregion, has the least amount of charging stations.



8



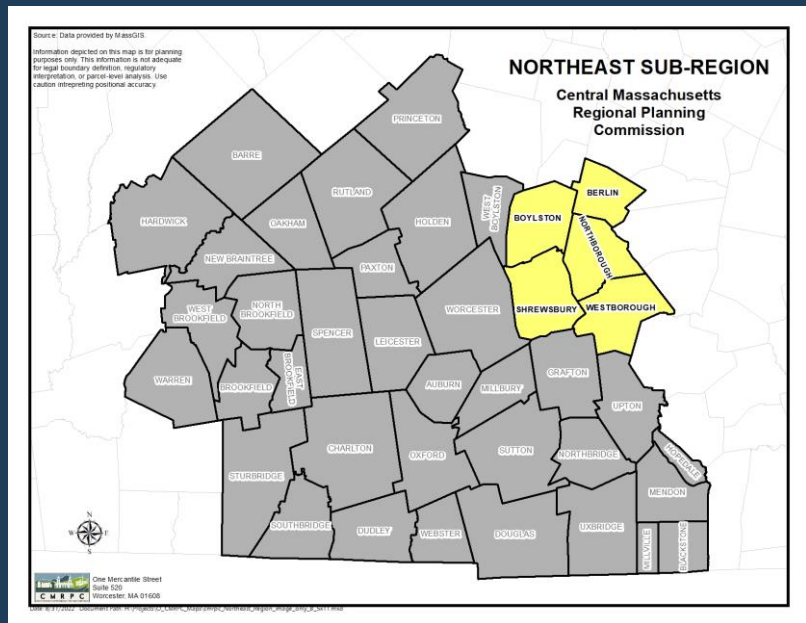
# REGIONAL INFRASTRUCTURE SUMMIT

Northeast Subregion

1

## Northeast Subregion

- Berlin
- Boylston
- Northborough
- Shrewsbury
- Westborough



2

# Past Planning Efforts Northeast Subregion

## Walkability

CMRPC Regional Pedestrian Plan  
 Shrewsbury Sidewalk Plan  
 Northborough Bartlett Street Walk Audit

## Bicycle

CMRPC Regional Bicycle Plan  
 Bicycle Compatibility Index  
 CMRPC Bike Sharing Study

## CMRPC Dashboard

Culverts  
 Electric Vehicle Charging Stations  
 Pavement Condition  
 Sidewalk Condition

## 2023- 2027 TIP Projects

2 Projects in Shrewsbury

## Transit

MBTA Commuter Rail  
 VIA WRTA On-Demand  
 WRTA Fixed-route  
 COAs Van Operations

## Complete Streets

3 approved prioritization plan  
 1 approved policy

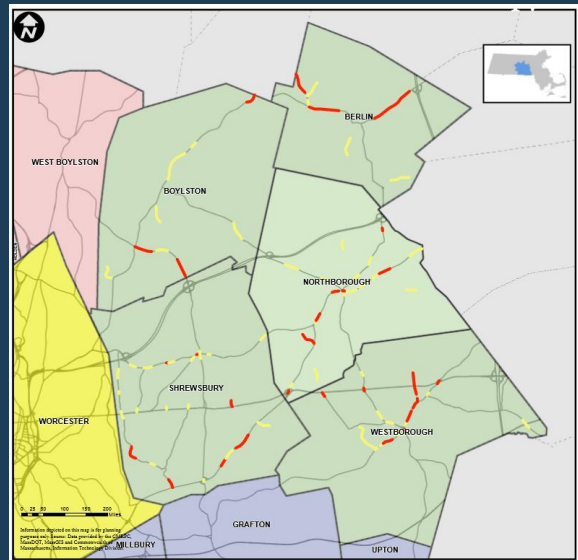
# Safety

- Pedestrian and Bicycle Safety
- Crash data
- Road Safety Audits
- Safe Routes to School
- Highway Improvement Safety Program (HSIP)
- We work closely with communities to identify and address safety issues.

Several crash locations within the Top 5% (red on the map to the right)

**Westborough:** West Main Street – Top Crash Location for bridge strikes (30)

**Northborough:** Bartlett Street Post Occupancy Study & Walk Audit





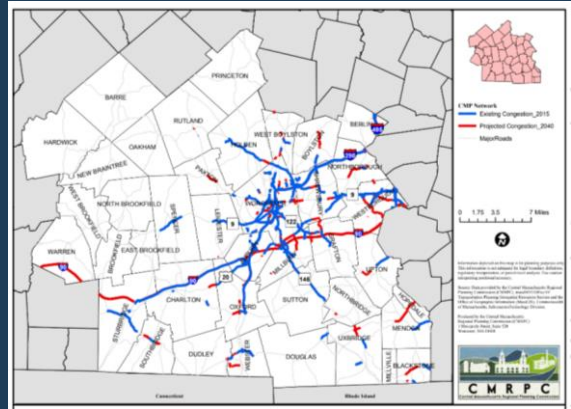
# Congestion

- Congestion Management Process (CMP)
- Data collection: travel time and delays
- List of critical intersections
- Park –N – Ride database and utilization rate
- Transit on-time performance
- Travel Demand Model
  - to identify bottlenecks in the region
  - to project future congested locations

Among the Top 10 intersections with significant peak hour delay in the CMRPC region:

**#3 Shrewsbury – Route 140 / Main Street**

**#4 Westborough – Route 9 / Lyman Street** (FYI - this ranking was before the TIP improvement project, the analysis after improvements is not yet completed)

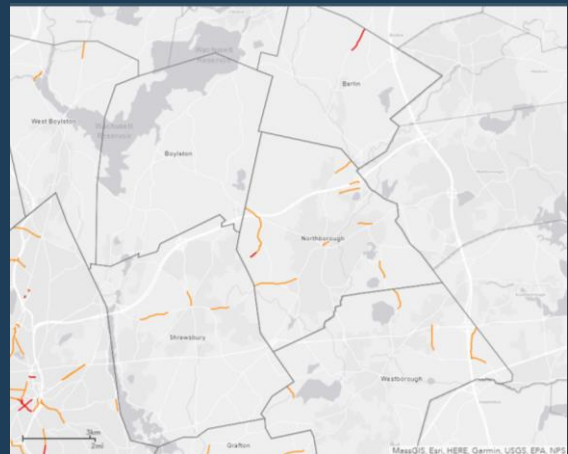


# Asset Management

- Data collection
- Pavement condition
- Sidewalk condition
- Traffic counts
- Turning movement counts
- Data available on the online dashboard

- Westborough** Parking Study (2019)
- Shrewsbury** Sidewalk Plan (2022)
- Shrewsbury** MA-140 Corridor Profile Study
- Berlin** MA-62 Corridor Profile Study

Poor (Orange) and Very Poor (Red) Pavement Condition





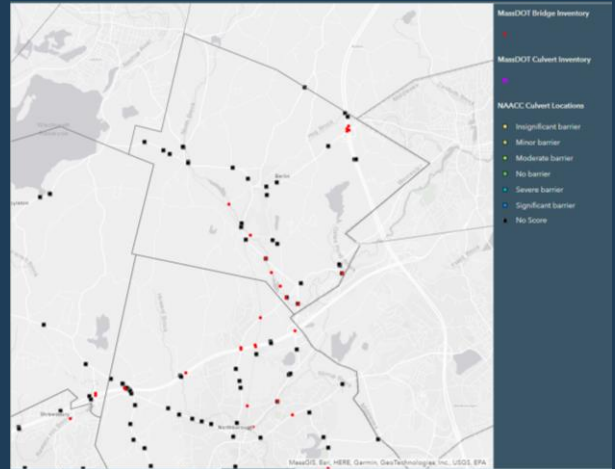
## Resiliency

- Climate change means more heavy rain downpours and flash flooding
- More than 5 thousand culverts in the region
- Culvert Assessments to identify degree of barrier to waterways
- Integral piece of roadway infrastructure
- Online culvert dashboard

Majority of the culverts in the Southeast sub-region have not been assessed.

**Berlin:** Double culvert at Randall Road and West Street

**Westborough:** Bowman Lane culvert replacement in design

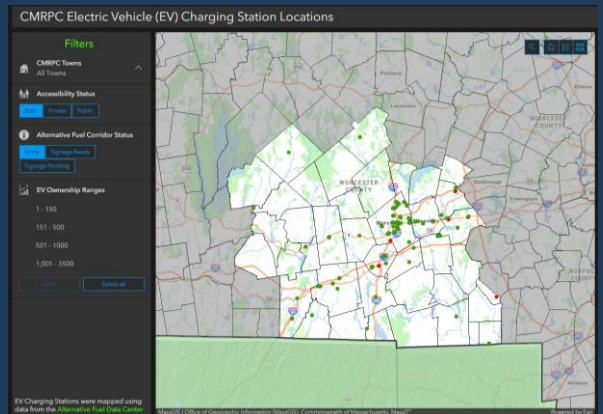


7

## Decarbonization

- Massachusetts 2050 Decarbonization Roadmap
- Electric Vehicle Charging Stations – multiple opportunities and grant programs
- New type of infrastructure
  - Total of 142 charging station in the CMRPC region
  - Locations where charging stations are needed.
- Online EV charging station dashboard

In the Northeast subregion, except for Boylston and Berlin, all the communities have one or more charging stations, particularly along the Route 9 corridor.



8



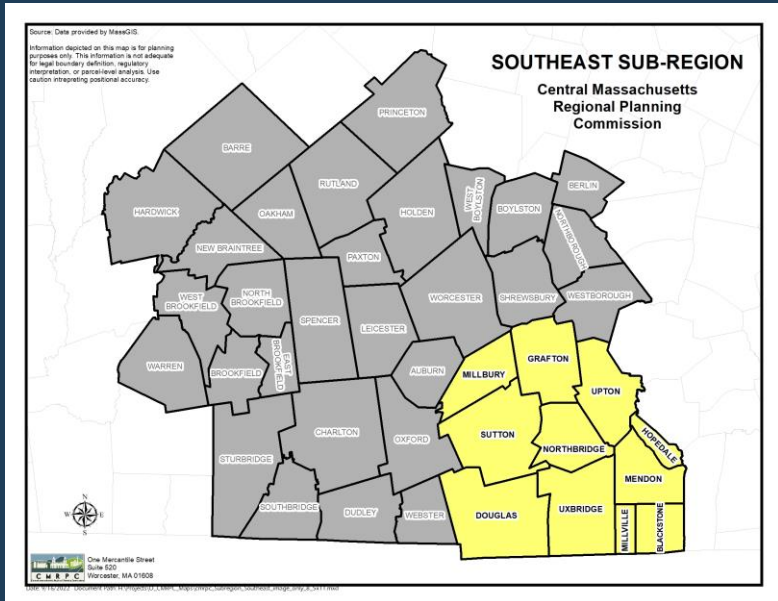
# REGIONAL INFRASTRUCTURE SUMMIT

Southeast Subregion

1

## Southeast Subregion

- Blackstone
- Grafton
- Douglas
- Millbury
- Uxbridge
- Sutton
- Millville
- Hopedale
- Upton
- Northbridge
- Mendon



2

## Past Planning Efforts Southeast Subregion

### Walkability

CMRPC Regional Pedestrian Plan  
 Blackstone Valley Corridor  
 Southern New England Trunkline Trail (SNETT)

### Bicycle

CMRPC Regional Bicycle Plan  
 Bicycle Compatibility Index  
 CMRPC Bike Sharing Study

### CMRPC Dashboard

Culverts  
 Electric Vehicle Charging Stations  
 Pavement Condition  
 Sidewalk Condition

### 2023- 2027 TIP Projects

15 projects programmed, \$87M  
 Corridor Profile Studies

### Transit

MBTA Commuter Rail  
 WRTA Fixed-route  
 COAs Van Operations

### Complete Streets

6 approved projects  
 3 approved prioritization plan  
 1 approved policy

3

## Safety

- Pedestrian and Bicycle Safety
- Crash data
- Road Safety Audits
- Safe Routes to School
- Highway Improvement Safety Program (HSIP)
- We work closely with communities to identify and address safety issues.

Several crash cluster locations

**Northbridge:** MA-122 / Church Street

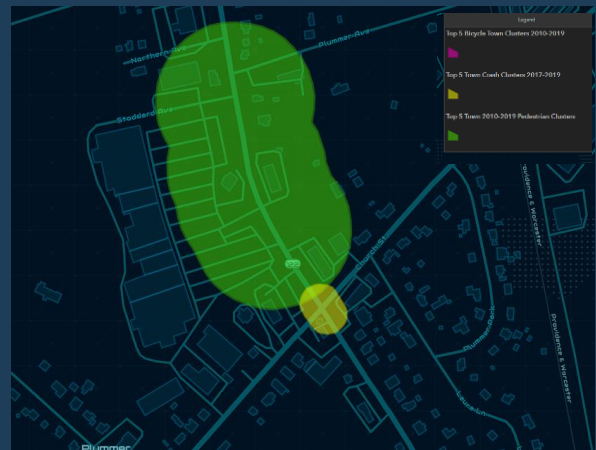
**Northbridge:** Providence Road / Sutton Street

**Uxbridge:** MA-16 / Main Street

**Douglas:** MA-16 / Main Street

**Blackstone:** Summer Street / Blackstone Street

**Millville:** Central Street / Bow Street



MassDOT Online Crash Portal:  
<https://apps.impact.dot.state.ma.us/cdp/dashboard-view/26>

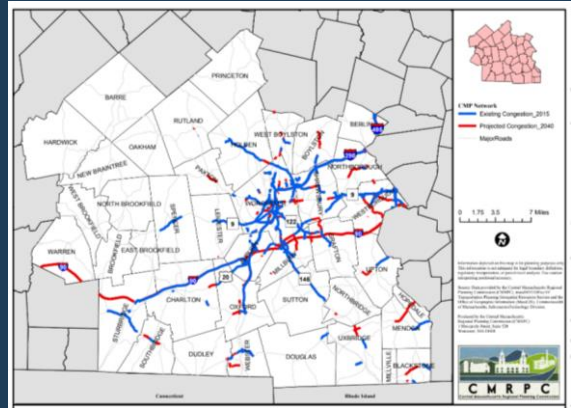
4

# Congestion

- Congestion Management Process (CMP)
- Data collection: travel time and delays
- List of critical intersections
- Park –N – Ride database and utilization rate
- Transit on-time performance
- Travel Demand Model
  - to identify bottlenecks in the region
  - to project future congested locations

Among the Top 10 intersections with significant peak hour delay in the CMRPC region:

- #1 Millbury – Route 122 / Mass Pike
- #7 Mendon – Route 140 / Hartford Avenue
- #8 Millbury – Main Street / McCracken Road / Route 146 SB Ramp / Shoppes

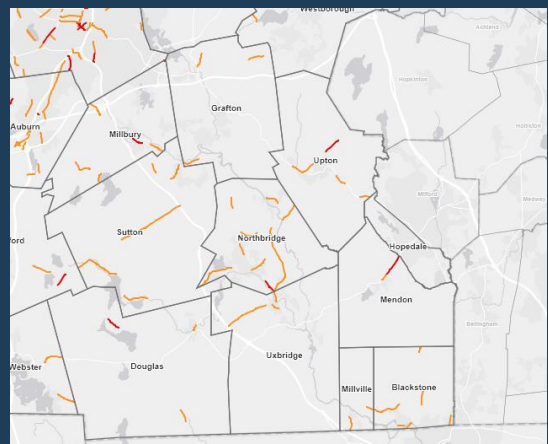


# Asset Management

- Data collection
- Pavement condition
- Sidewalk condition
- Traffic counts
- Turning movement counts
- Data available on the online dashboard

- Sutton – Traffic Study
- Sutton/Oxford – Central Turnpike Corridor Profile Study
- Douglas – Traffic Signal Warrant Analysis

Poor (Orange) and Very Poor (Red) Pavement Condition



## Resiliency

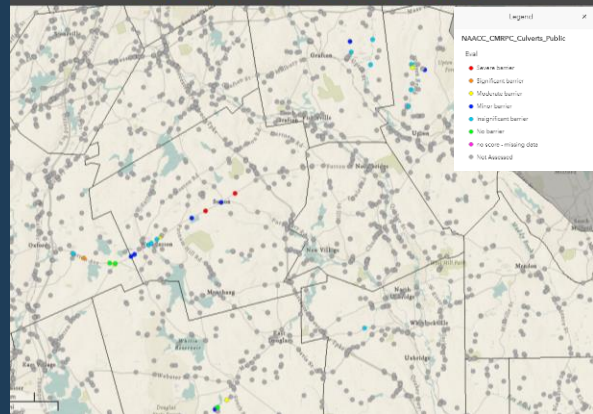
- Climate change means more heavy rain downpours and flash flooding
- More than 5 thousand culverts in the region
- Culvert Assessments to identify degree of barrier to waterways
- Integral piece of roadway infrastructure
- Online culvert dashboard

Majority of the culverts in the Southeast sub-region have not been assessed.

**Sutton:** Two culverts with significant barrier status

**Upton:** Culvert Replacement Milford St. (2026 TIPO over \$1M

## CMRPC CULVERTS

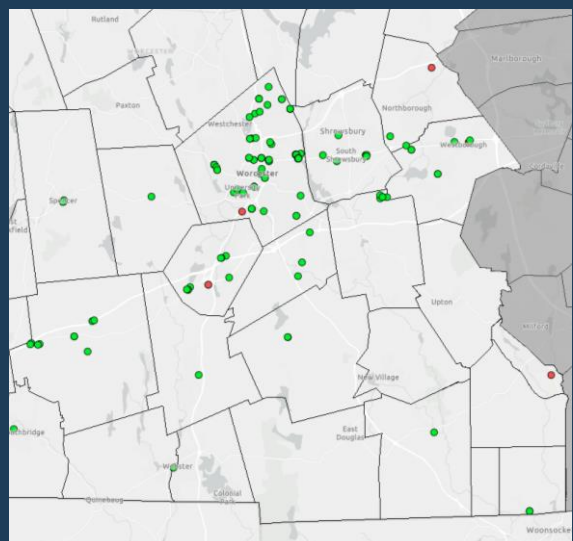


7

## Decarbonization

- Massachusetts 2050 Decarbonization Roadmap
- Electric Vehicle Charging Stations – multiple opportunities and grant programs
- New type of infrastructure
  - Total of 164 charging station in the CMRPC region
  - Locations where charging stations are needed.
- Online EV charging station dashboard

In the Southeast subregion, only few communities have one or more charging stations.



8



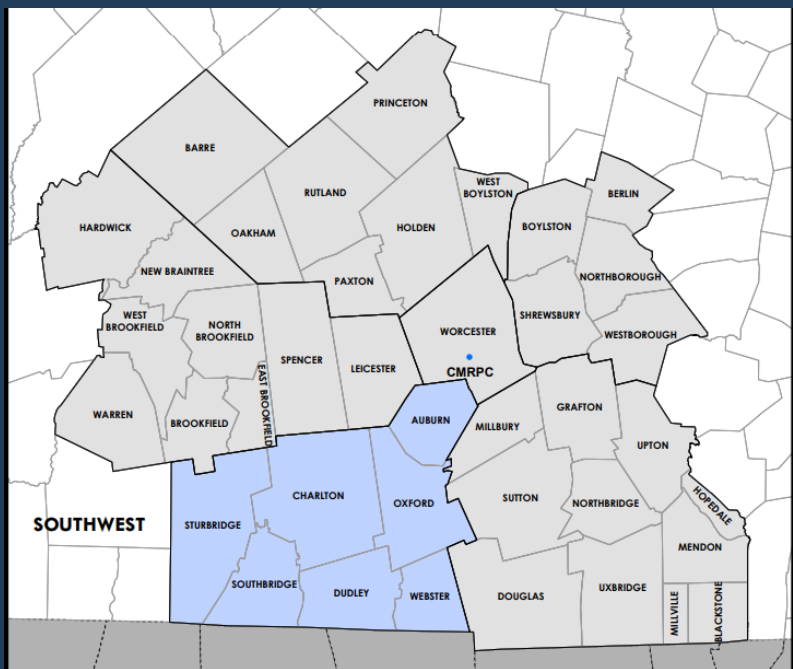
# REGIONAL INFRASTRUCTURE SUMMIT

Southwest Subregion

1

## Southwest Subregion

- Auburn
- Charlton
- Dudley
- Oxford
- Southbridge
- Sturbridge
- Webster



2



# Past Planning Efforts Southwest Subregion

## Walkability

Regional Pedestrian Plan  
Southbridge- Walkable  
Community Workshop

## Bikability

Regional Bicycle Plan  
Bicycle Compatibility Index  
Bike Sharing Study

## CMRPC Dashboard

Culverts  
Electric Vehicle Charging  
Stations  
Pavement Condition  
Sidewalk Condition

## 2023- 2027 TIP Projects

16 Projects Completed

## Complete Streets

5 approved project  
1 approved prioritization  
plan  
1 approved policy

# Safety

- Pedestrian and Bicycle Safety
- Crash data
- Road Safety Audits
- Safe Routes to School
- Highway Improvement Safety Program (HSIP)
- We work closely with communities to identify and address safety issues.

## Top 5% Crash Locations (2017-2019)

Charlton (277 EPDO): Stafford Street / Center Depot Road (Top 200 at the State level)

Sturbridge (239 EPDO): Route 49 / Putnam Road

Sturbridge (193 EPDO): Charlton Road / US20

Charlton (192 EPDO): Worcester Road (US20) / Brookfield Road (MA-31)

Charlton (189 EPDO): Worcester Road (US20) / Southbridge Road

Auburn (187 EPDO): Washington Street (US20) / Millbury Street

## Top 5% Pedestrian Crash Locations (2010-2019)

Southbridge (151 EPDO): Main Street (MA-131) / Central Street

Charlton (64 EPDO): Worcester Road (US20) / Stafford Street

Oxford (63 EPDO): Main Street (MA-12) / Charlton Street

Oxford (63 EPDO): Main Street (MA-12) / Fairlawn Avenue

## Top 5% Bicycle Crash Locations (2010-2019)

Southbridge (64 EPDO): Main Street (MA-131) / West Street

Webster (63 EPDO): East Main Street (MA-12) / Slater Street

\*EPDO refers to Equivalent Property Damage Only. It is a method defined in the ASHTO Highway Safety Manual that "assigns weighting factors to crashes by severity to develop a combined frequency and severity score per site." The EPDO is calculated by MassDOT.



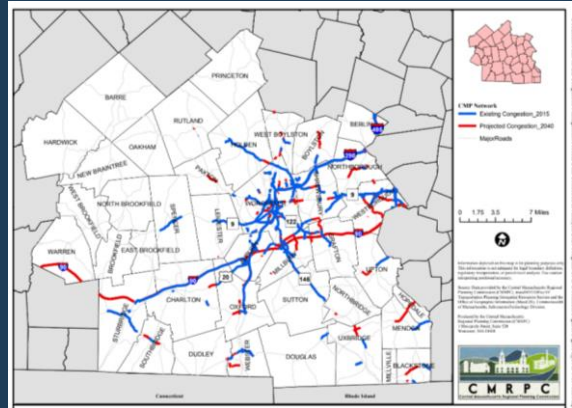
## Congestion

- Congestion Management Process (CMP)
- Data collection: travel time and delays
- List of critical intersections
- Park –N – Ride database and utilization rate
- Transit on-time performance
- Travel Demand Model
  - to identify bottlenecks in the region
  - to project future congested locations

Among the Top 10 intersections with significant peak hour delay in the CMRPC region:

#5 Auburn - intersection MA-12 / Swanson Road / Brotherton Way

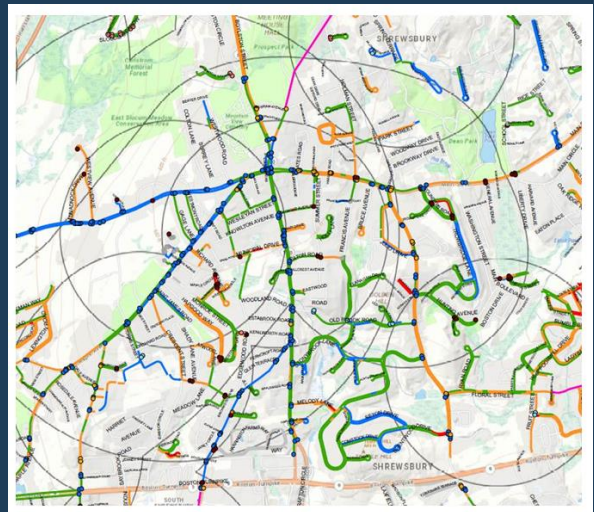
#9 Webster - intersection of I-395 NB ramps / Route 16 / Sutton Road (#9). A new intersection design is in development for Webster.



5

## Asset Management

- Data collection
- Pavement condition
- Sidewalk condition
- Traffic counts
- Turning movement counts
- Data available on the online dashboard



6

## Resiliency

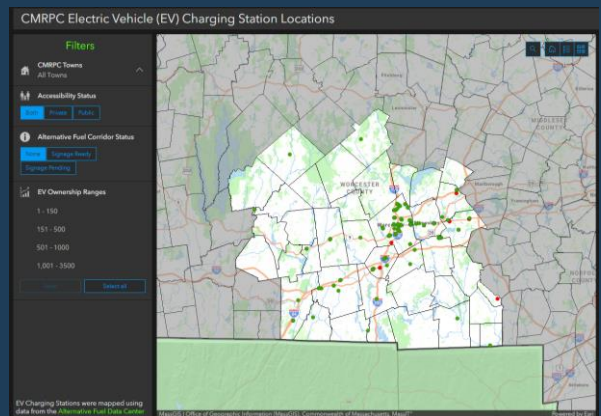
- Climate change means more heavy rain downpours and flash flooding
- More than 5 thousand culverts in the region
- Culvert Assessments to identify degree of barrier to waterways
- Integral piece of roadway infrastructure
- Online culvert dashboard



7

## Decarbonization

- Massachusetts 2050 Decarbonization Roadmap
- Electric Vehicle Charging Stations – multiple opportunities and grant programs
- New type of infrastructure
  - Total of 142 charging station in the CMRPC region
  - Locations where charging stations are needed.
- Online EV charging station dashboard



In the Southwest subregion, except for Dudley, all the communities have one or more charging stations.

8



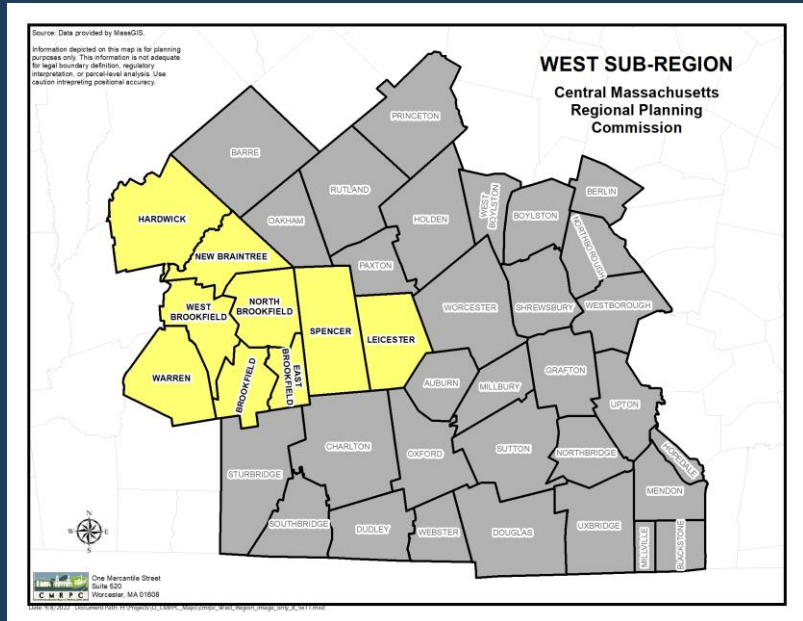
# REGIONAL INFRASTRUCTURE SUMMIT

West Subregion

1

## West Subregion

Hardwick  
 Warren  
 New Braintree  
 North Brookfield  
 Leicester  
 East Brookfield  
 Spencer  
 Brookfield  
 West Brookfield



2



- 7 projects on the 2023-27 TIP
- About \$25M annually
- Corridor Profiles
- Major Infrastructure Projects
- Accommodation for all users

- Freight Accommodation Assessment Study
- Rest areas and truck parking
- Bottlenecks on highways
- Freight railroads
- Freight Corridors



- WRTA Fixed Route
- WRTA Paratransit Service
- Elder Bus
- Ready Bus
- Council on Aging
- Quaboag Connector

- Regional Pedestrian Plan
- Regional Bicycle Plan
- Bicycle Compatibility Index
- Bike Sharing Study
- Microprojects
- Complete Streets
- Trails

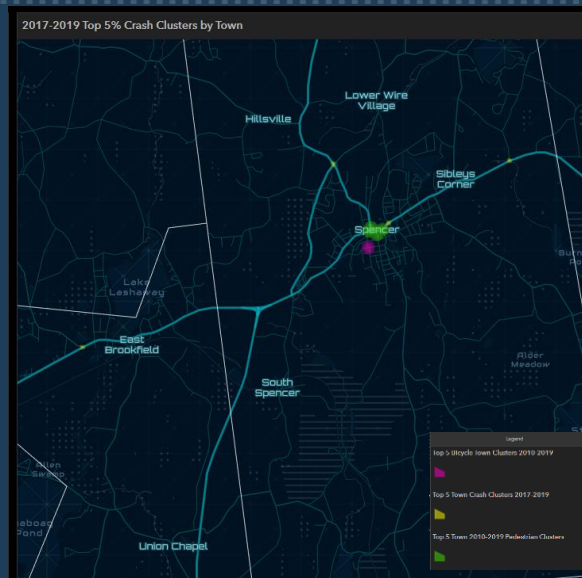


Check the CMRPC Multi-Modal Hub:  
<https://sites.google.com/view/cmrpcbikeblog/home>

3

## Safety

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- Road Safety Audits
- Safe Routes to School
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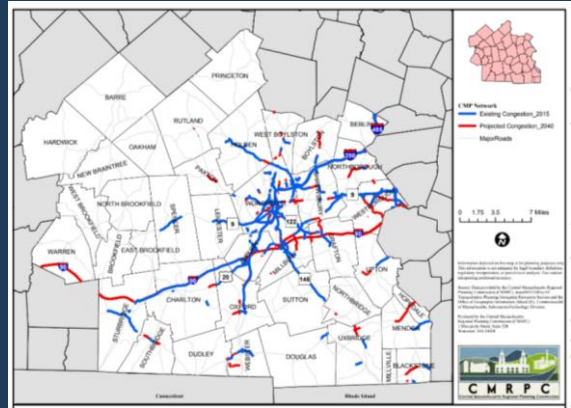
MassDOT Impact – Crash Online Portal

4

# Congestion

- Congestion Management Process (CMP)
- Data collection: travel time and delays
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Spencer and Leicester are experiencing delays at major intersections with MA-9.

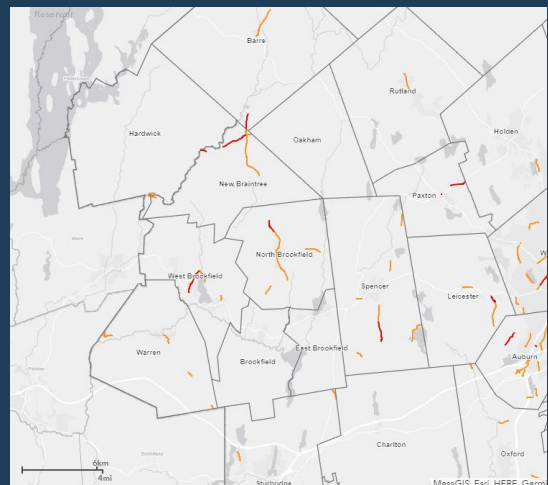


# Asset Management

- Data collection
- Pavement condition
- Sidewalk condition
- Traffic counts
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- Data available on the online dashboard

Asset management data can support Complete Streets Prioritization Plans.

Poor (Orange) and Very Poor (Red) Pavement Condition

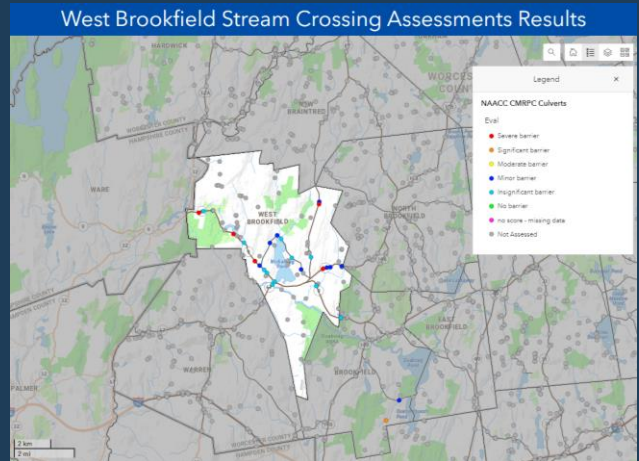




## Resiliency

- Climate change means more heavy rain downpours and flash flooding
- More than 5 thousand culverts in the region
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- Online culvert dashboard

West Brookfield Stream Crossing Assessments  
Several culverts with severe barriers to aquatic connectivity.

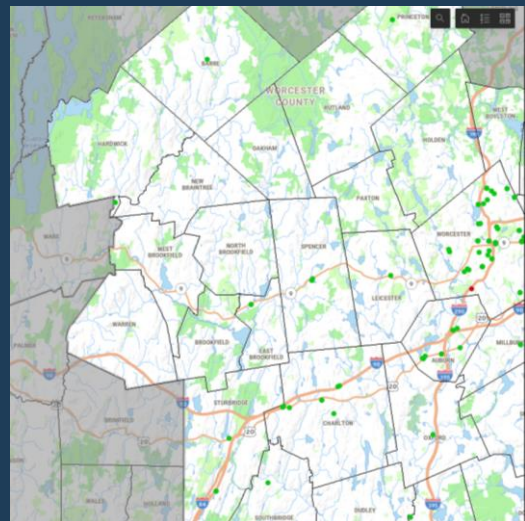


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## Decarbonization

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- Online EV charging station dashboard

In the West subregion, there are very few locations with EV charging stations, particularly along the Route 9 corridor and public facilities.

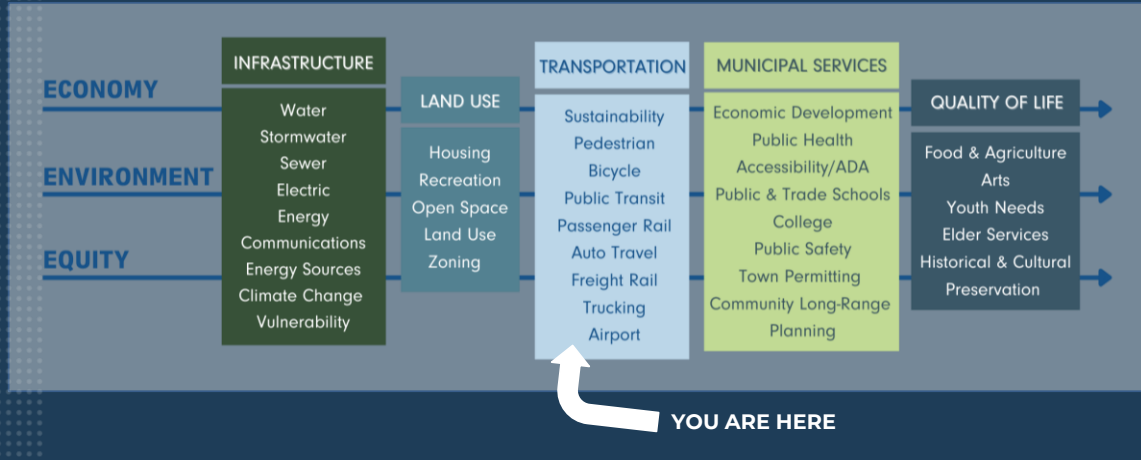


8





# IMAGINE 2050



3

## 2050 Connections

The region's long-range transportation plan



What is the purpose of the LRTP?

The purpose of the LRTP is to identify the multi-modal transportation needs and priorities of the southern central Massachusetts region.

MPO's must create a plan every four years.

The span of 2050 Connections covers 25 years.

4

# HOW THE LRTP IS DEVELOPED?



## PLANNING

Many factors are taken into consideration:  
Management Systems  
Performance Measures  
Land Use  
Economic Development



## PARTICIPANTS

Public-at-large  
Planners and Town Officials  
Interest Groups  
Organizations  
MassDOT, FHWA, FTA



## IMPLEMENTATION

Future work related to the studies, initiatives and projects identified in the plan within the region's financial constraints.

5

# THE PROCESS

## PUBLIC OUTREACH

Approach, methods and tools used to engage the public

## PERFORMANCE MANAGEMENT

Presentation of national and regional goals and their relationship with Federal and regional metrics

## EQUITY CONSIDERATIONS

Geographic equity and the region's demographic characteristics

## FEDERAL, STATE & COMMUNITY

BIL, Beyond Mobility, Master Plans and locally identified priorities

6

# PROJECTIONS



POPULATION  
PROJECTIONS



EMPLOYMENT  
PROJECTIONS



FUTURE GROWTH  
PROJECTIONS

# From Plan to Projects

## L RTP

- 25 Year Regional Vision
- CMMPO Document Integrating All Transportation Modes
- Adheres to Federal Legislation, State Regulations, and Regional Goals
- Supports State and Regional Performance Management Goals

## PROJECT SCREENING

- **Environmental Consultation Analysis** including GIS Analysis
- MassDOT MapIT Tool
- Performance-Based Planning Assessment of Candidate Projects

## TIP

CMMPO Advisory and Other Committees Consider Proposed Highway/Transit Listings – Make Recommendations to CMMPO

## TRANSPORTATION MODES



Freight



Transit



Non-Motorized



Highways



Airports

Existing Conditions  
Current Challenges or Issues  
Vision for the Future  
Identified Needs and Priorities

## PLANNING AREAS

1

Safety Planning

2

Congestion Management

3

Asset Management

4

Emerging Technologies

5

Environment

## Safety

- Pedestrian and Bicycle Safety
- Crash data
- Road Safety Audits & Walk Audits
- Safe Routes to School
- Highway Improvement Safety Program (HSIP)

**Top Crash Locations among the Top 200 Statewide (2017-2019)**

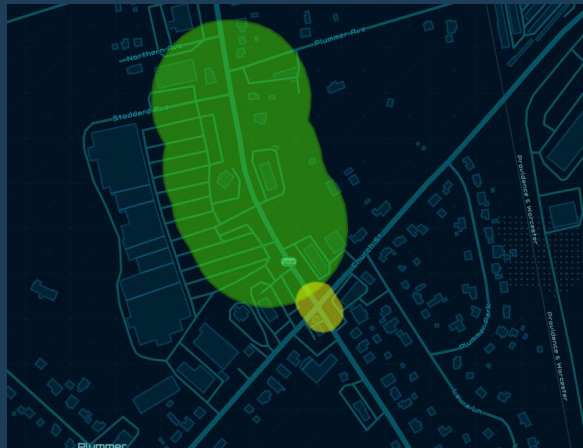
**Charlton:** Stafford Street / Center Depot Road

**Top Crash Location for bridge strikes (30)**

**Westborough:** West Main Street

**Top Pedestrian & Top Bicycle Crash Clusters**

**Worcester:** Main Street / Chandler Street



MassDOT Online Crash Portal:  
<https://apps.impact.dot.state.ma.us/cdp/dashboard-view/26>

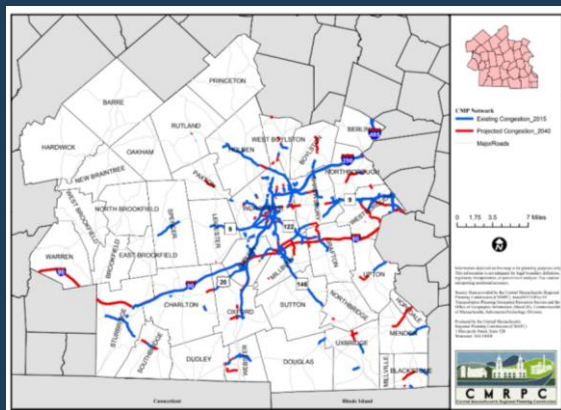
11

## Congestion

- Congestion Management Process (CMP)
- Data collection: travel time and delays
- List of critical intersections
- Park –N – Ride database and utilization rate
- Transit on-time performance
- Travel Demand Model
  - to identify bottlenecks in the region
  - to project future congested locations

### TOP 5 CRITICAL INTERSECTIONS (DELAYS)

- #1 Millbury – Route 122 / Mass Pike
- #2 Worcester – Foster St / Francis J. McGrath/Franklin St / Green St
- #3 Shrewsbury – Route 140 / Main Street
- #4 Westborough – Route 9 / Lyman Street (FYI - this ranking was before the TIP improvement project, the analysis after improvements is not yet completed)
- #5 Auburn – Route 12 / Swanson Rd / Brotherton Way



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# Asset Management

- Data collection
- Pavement condition
- Sidewalk condition
- Traffic counts
- Turning movement counts
- Data available on the online dashboard

**Westborough:** Parking Study (2019)  
**Shrewsbury:** Sidewalk Plan (2022)  
**Douglas:** Traffic Signal Warrant Analysis (2022)  
**Shrewsbury:** MA-140 Corridor Profile Study  
**Berlin:** MA-62 Corridor Profile Study

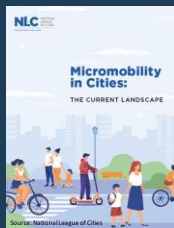
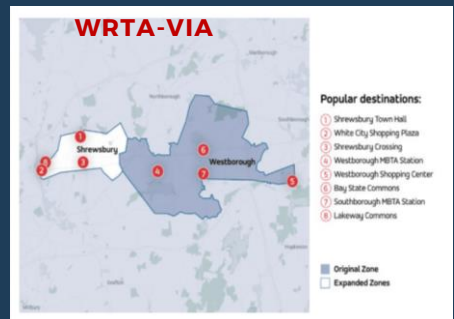
Poor (Orange) and Very Poor (Red) Pavement Condition



# Emerging Technologies

Technology has changed the way we interact with transportation.

Transportation planning has been experiencing a transition from an auto-centric approach to a human-centered transportation network.



Mobility Hubs are the transfer stations of the future. They combine access to transit, micromobility, car-sharing and bike-sharing services, EV charging stations, kiosks with real time information, wayfinding information, among other amenities. Perfect scale for community Transit Oriented Development (TOD).





## Climate Change

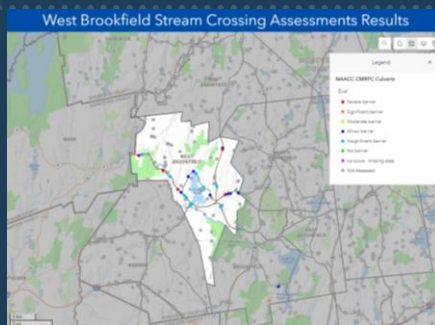
- Climate change means:
  - More heavy rain downpours and flash flooding
  - Increased temperatures affecting pavement condition
  - Increased culvert vulnerability to failure during storm events
- Vehicles Miles Traveled (VMT) – trending upwards, more pressure on maintaining culverts and replacing them with better designed, climate resilient crossings



17

## Culverts

- In 2019, CMRPC started its Regional Culvert Assessment Program
- 5,000+ culverts in CMRPC region, of which about 1,800 along federal-aid eligible roadways
- Culverts assessed using protocols set by the North Atlantic Aquatic Connectivity Collaborative (NAACC)
- Culverts assessed to identify degree of barrier to barrier to waterways, fish, and wildlife.
- To date, staff have assessed about 70 culverts in West Brookfield, Berlin, Oxford, Sutton, Sturbridge, Warren, and Shrewsbury.
- Staff have created numerous ArcGIS maps, ArcGIS Online dashboards, as well as an ArcGIS Online Hubpage.



- [Link to Culvert Dashboard](#)
- [Link to Culvert Hubsite](#)



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## Stormwater Management

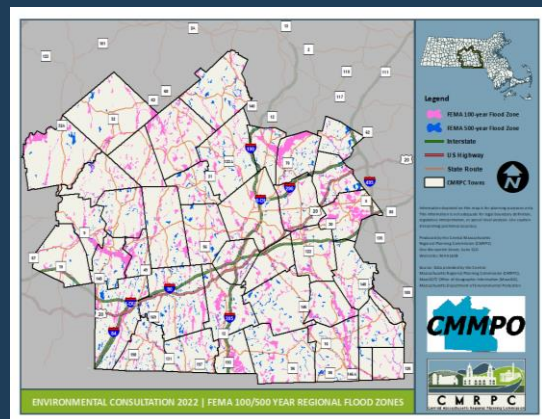
- Stormwater has a wide range of adverse impacts affecting public health, ecosystems, transportation, and economic activities.
- Impervious surfaces, such as paved roads, prevent water from soaking into the ground, which becomes stormwater.
- Stormwater can impact transportation infrastructure, cause flooding and erosion, and disturb habitat, among others.
- In 2018, CMRPC developed a Toolkit to integrate Nature Based Solutions (NBS) to address stormwater management.



19

## Environmental Consultation

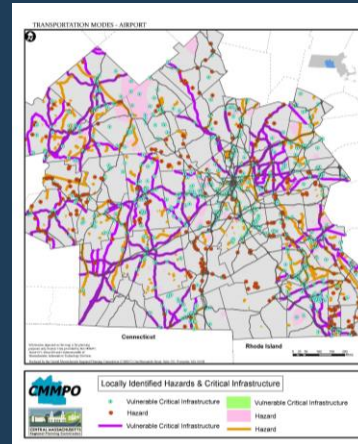
- Annual meeting hosted by CMRPC to discuss a range of environmental activities and issues associated with the TIP and LRTP.
- State and local environmental stakeholders invited to attend.
- Early coordination encouraged when developing projects
- Various ArcGIS environmental data layers available from DCR, DEP, NHESP, and others when developing transportation projects.
- The Massachusetts Project Intake Tool (MaPIT), a web-based application, designed to help both State and municipalities initiate projects.



20

# Hazard Mitigation & Municipal Vulnerability Preparedness (MVP)

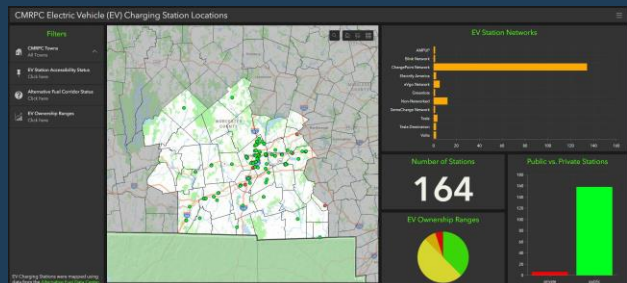
- MVP Grant Program was created in 2017 to identify climate hazards, assess vulnerabilities, and develop action plans to improve climate change resilience.
- Communities become eligible for grant funding when they complete the grant process and are designated an MVP Community.
- CMRPC continues to assist communities with their MVP process and plans.



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# Decarbonization

- Massachusetts 2050 Decarbonization Roadmap
- Electric Vehicle Charging Stations – multiple opportunities and grant programs
- Total of 164 charging station in the CMRPC region (FHWA Alternative Fuels Data Center)
- Staff have developed an Air Quality Module that focuses on EV charging infrastructure and grant opportunities.
- Working with towns to identify potential future locations for EV charging stations.
- Staff have developed numerous ArcGIS maps and an ArcGIS Online dashboard.



Link to EV Dashboard - <https://www.arcgis.com/apps/dashboards/3d7c4b184e824a97889b5f129c15af50>

Most of the communities have one or more charging stations. Major concerns related to the capacity of the grid to sustain the future demand in peak hours.

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# Congestion Mitigation and Air Quality

Approved transportation improvement projects in the last 5 years funded with CMAQ funds

PROJECT ID#	Project	Location	Approval Date	TIP Year	CMAQ Approved Funds	Total Funds	Type	VOC Savings (kg/per year)	NOx Savings (kg/per year)	CO Savings (kg/per year)
605740	Winthrop/Providence/Vernon/ Granite St Improvements	Worcester	3/29/16	2017	\$1,305,638	\$3,853,939	Traffic Flow	20.6	54.8	242.7
603251	Holden St/Drummond Ave/Shore Dr Intersection Improvements	Worcester	3/29/16	2017	\$2,705,655	\$2,705,655	Traffic Flow	135.2	360.2	1596.5
602740	Main St Resurfacing	Shrewsbury	11/10/16	2017	\$2,000,000	\$6,278,484	Traffic Flow	158.3	158.9	1963.5
606206	Charlton St Reconstruction	Oxford	11/10/16	2017	\$1,000,000	\$5,722,150	Traffic Flow	0.1	0.4	5.7
606125	High St/Hopkinton Rd Reconstruction	Upton	4/4/18	2019	\$3,411,395	\$6,386,655	Traffic Flow	23.4	22.6	331.5
	WRTA Demand Resonse Rideshare Service Pilot	Westborough	3/4/20	2021	\$632,032	\$632,032	New Service	3.3	6.1	107.7
608778	Route 20 Reconstruction	Charlton/Oxford	1/22/21	2022	\$3,586,719	\$74,197,812	Traffic Flow	13.6	32.3	643.3
602659	Downtown Improvements	Southbridge	4/26/21	2024	\$2,000,000	\$4,418,779	Bike & Ped	0.4	1.1	27.5
608873	Meadow Road Rehabilitation	Spencer	4/26/21	2023	\$2,500,000	\$9,164,351	Bike & Ped	0.2	0.6	15.5
<b>Total Funds</b>					\$19,141,439	\$113,359,857	<b>Total Savings</b>	355.1	637.0	4933.9

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# CMAQ Eligible Project Types & Activities

CMAQ Project Types	FHWA CMAQ Eligible Activities
Travel Demand Management/Rideshare	<ul style="list-style-type: none"> <li>• Rideshare Programs</li> <li>• Park and Ride</li> <li>• Employee Transit Benefits</li> <li>• Carsharing</li> <li>• Bikesharing</li> <li>• Education and Outreach</li> </ul>
Congestion Reduction and Traffic Flow Improvements	<ul style="list-style-type: none"> <li>• Incident Management</li> <li>• Intersection Improvements</li> <li>• Signal Improvements</li> <li>• Roundabouts</li> </ul>
Transit Improvements	<ul style="list-style-type: none"> <li>• Transit Service Expansion</li> <li>• Park and Ride</li> <li>• Employee Transit Benefits</li> </ul>
Freight Intermodal Projects	<ul style="list-style-type: none"> <li>• Intermodal Freight Facilities and Programs</li> <li>• Truck Stop Electrification</li> <li>• Heavy Vehicle Engine Replacements</li> </ul>
Pedestrian Bicycle	<ul style="list-style-type: none"> <li>• Pedestrian and Bicycle Paths (that are not solely for recreation)</li> <li>• Bikesharing</li> </ul>
Alternate Fuel and Clean Vehicle	<ul style="list-style-type: none"> <li>• Heavy Vehicle Engine Replacements</li> <li>• Diesel Retrofit Technologies</li> <li>• Extreme-Temperature Cold-Start Technologies</li> <li>• Dust Mitigation</li> <li>• Natural Gas Re-Fueling Infrastructure</li> <li>• Electric Vehicle Charging Stations</li> </ul>



24

## Funding Sources

### Bipartisan Infrastructure Law (BIL)

#### Climate Change and Resilience Funding Opportunities:

- Carbon Reduction Program
- PROTECT Grants (formula and discretionary)
- Charging and Fueling Infrastructure
- National Electric Vehicle Formula Program
- Congestion Relief Program
- Other Climate and Resilience Provisions

### Statewide Funding Programs

- **MassDOT:** Complete Streets, Local Bottleneck Reduction Program, Community Transit Program
- **MassDEP:** Mass EVIP: Fleet Electrification, Workplace & Fleet Charging, Multi-Unit Dwelling & Educational Campus Charging
- **MA DCR:** MassTrails
- **DER:** Culvert Replacement Program
- **Massachusetts Clean Energy Center:** Accelerating Clean Transportation for All (ACT 4 All)

For more information: [https://www.fhwa.dot.gov/bipartisan-infrastructure-law/grant\\_programs.cfm](https://www.fhwa.dot.gov/bipartisan-infrastructure-law/grant_programs.cfm)

25

## Open Discussion

What is the most pressing environmental **ISSUE** or **CHALLENGE** related to transportation today?

26

## Open Discussion

Which environmental **project, service or study** would you like to pursue to improve transportation if the financial resources become available?

27

## Open Discussion

What is your Transportation-related  
Environmental **BIG Idea**?

28

## CMRPC Legislative Affairs Forum: Trails



### Trails

**Tuesday, December 6, 2022**  
**9:00 AM to 11:00 AM**

MA Fisheries & Wildlife Headquarters  
1 Rabbit Hill Road  
Westborough, MA 01581

Join fellow community leaders and legislators at CMRPC's Legislative Affairs Forum. Learn about and discuss the benefits, goals, and difficulties of creating and sustaining a robust pedestrian and bicycle trail system here in Central Massachusetts.

\*Requires reservation

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## MORE OPPORTUNITIES TO PARTICIPATE



Surveys



Community  
Events



Interviews



Regional  
Workshops

30



**Thank You**

**WWW.CMRPC.ORG/2050CONNECTIONS**

**TAKE THE SURVEY!**



FOLLOW US ON SOCIAL MEDIA



**#2050 CONNECTIONS**



# 2050 CONNECTIONS

Financial Scenarios

1

## Regional Targets

Estimates until 2050

Estimated funds provided by MassDOT and allocated in 5-year bands.

\*Note: 2% increase per year calculated after 2045

Year Bands	Total Available Funding
2024-2025	\$ 52,397,899
2026-2030	\$ 154,432,094
2031-2035	\$ 174,436,471
2036-2040	\$ 194,518,660
2041-2045	\$ 213,832,411
2046-2050*	\$ 235,849,508
	<b>\$ 1,025,467,044</b>

2

# Regional Targets

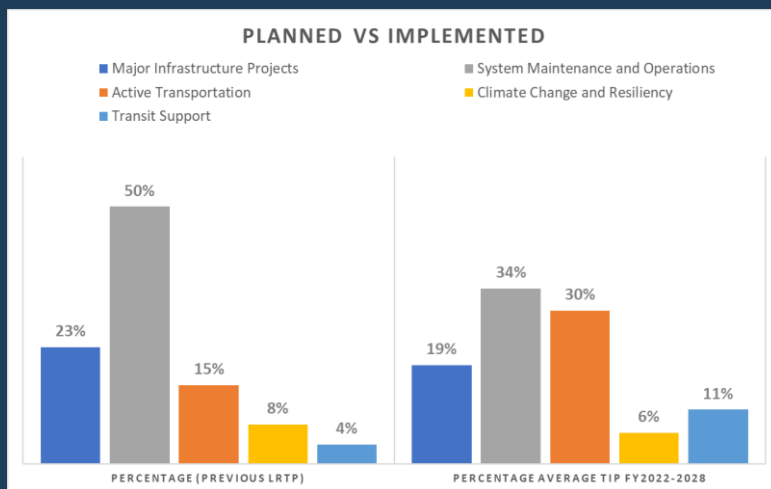
## By Programmatic Area

Programmatic Area	Percentage (Previous LRTP)	Dollars (Previous LRTP)	Average Percentage TIP FY2022-2028	Average Dollars TIP FY2022-2028
Major Infrastructure Projects	22.80%	\$ 233,806,486	19.30%	\$ 197,915,139
System Maintenance and Operations	50.20%	\$ 514,784,456	34.27%	\$ 351,427,556
Active Transportation	15.40%	\$ 157,921,925	29.87%	\$ 306,307,006
Climate Change and Resiliency	7.70%	\$ 78,960,962	6.00%	\$ 61,528,023
Transit Support	3.80%	\$ 38,967,748	10.57%	\$ 108,391,867
		<b>\$ 1,024,441,577</b>		<b>\$ 1,025,569,590</b>

3

# Regional Targets

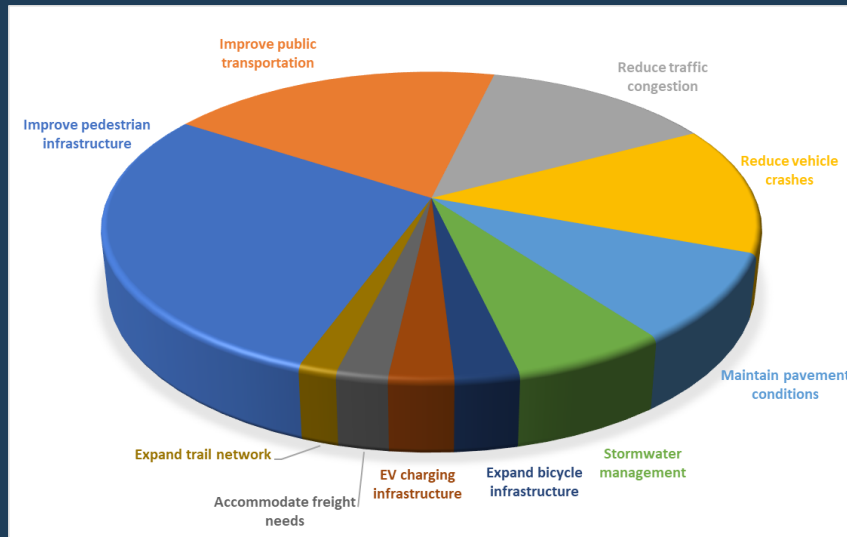
## By Programmatic Area



4

# Transportation Priorities

## Survey Results



5

# Transportation Priorities

## Data Management Systems

\$ 1,025,467,044

20%

### Asset Management

\$47M for full reconstruction (17.3 miles)

\$80M for structural improvements (74.4 miles)

10%

### Resiliency

Aprox. \$100M to replace 100 culverts

26%

### Complete Streets

Estimate of \$256M for planned projects in approved Prioritization Plans

6

# Regional Targets

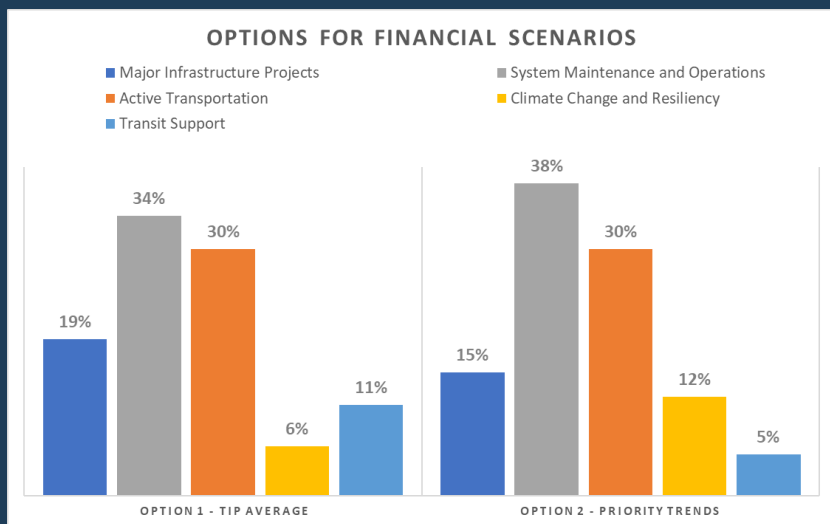
## By Programmatic Area

Programmatic Area	Percentage (Previous LRTP)	Average Percentage TIP FY2022-2028	OPTION 1	OPTION 2*
Major Infrastructure Projects	22.80%	19.30%	19.00%	15.00%
System Maintenance and Operations	50.20%	34.27%	34.00%	38.00%
Active Transportation	15.40%	29.87%	30.00%	30.00%
Climate Change and Resiliency	7.70%	6.00%	6.00%	12.00%
Transit Support	3.80%	10.57%	11.00%	5.00%

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# Options

## By Programmatic Area



8

# Thank You

[WWW.CMRPC.ORG/2050CONNECTIONS](http://WWW.CMRPC.ORG/2050CONNECTIONS)

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#2050 CONNECTIONS



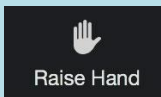
# 2050 CONNECTIONS

Priorities Hybrid Public Meeting  
1 Mercantile Street  
Paul Revere Room  
May 31, 2023

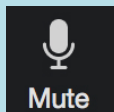
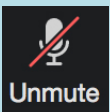
1



## Members of the Public:



Please utilize the **'Raise Hand'** feature to be called upon to speak. Once staff acknowledges your turn to speak, you can unmute yourself. Please state your name and organization or city/town.



If you have any technical difficulty, contact Adam Wriggins at [awriggins@cmrpc.org](mailto:awriggins@cmrpc.org) or by phone: (508) 459-3340.



2





## Open Meeting Law

This meeting will be recorded by CMRPC. By continuing with this virtual meeting, you are consenting to participate in a recorded event. The meeting recording and chat transcript will be saved and used for data capturing purposes.

If you do not feel comfortable being recorded, you may turn off your camera and/or mute your microphone or leave the meeting. We will be sharing these slides and links in a follow up email.

Thank you for your participation.

3



## Ground Rules:

- No need to be on screen! If you wish to talk, please turn on your camera.
- Add your name, pronouns, organization or town to your Zoom description.
- Use the chat as a valid/equal communication tool for topics related to the meeting.
- Be present and be an active listener.
- Speak slow and clear.
- Try not to interrupt other people when talking or attempt to speak over them.
- We will open the floor for questions at the end of the presentation.
- Spell out acronyms.
- We reserve the right to remove any disruptions/disruptor from the meeting space.

4



## What to do in case of Zoom-Bombing:

The meeting host will do its best to remove any disruptions from the meeting. That includes audio, video or screen sharing contents.

In the case the meeting is disconnected, the meeting host will reestablish the meeting settings and you will need to join the meeting one more time.

If the disruption still persists after reconnecting, staff will close the meeting permanently and will send out a follow-up email with new instructions or a later meeting date to continue the public event.

Thanks for your understanding.



# 2050 CONNECTIONS

Public Meeting  
1 Mercantile Street  
Paul Revere Room  
May 31, 2023

# AGENDA

- Welcome and Introductions
- 2050 Connections Overview
- Public Outreach Results
- Financial Considerations
- Summary of Regional Transportation Needs
- Regional Transportation Priorities

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# 2050 CONNECTIONS

● OVERVIEW

8



# 2050 Connections

The region's long-range  
transportation plan



What is the purpose of the L RTP?

The purpose of the L RTP is to identify the multi-modal transportation needs and priorities of the southern central Massachusetts region.

MPO's must create a plan every four years.

The span of 2050 Connections covers 25 years.

## HOW THE L RTP IS DEVELOPED?



### PLANNING

Many factors are taken into consideration:  
Management Systems  
Performance Measures  
Land Use  
Economic Development



### PARTICIPANTS

Public-at-large  
Planners and Town Officials  
Interest Groups  
Organizations  
MassDOT, FHWA, FTA



### IMPLEMENTATION

Future work related to the studies, initiatives and projects identified in the plan within the region's financial constraints.

# PROJECTIONS



## POPULATION PROJECTIONS



## EMPLOYMENT PROJECTIONS



## FUTURE GROWTH

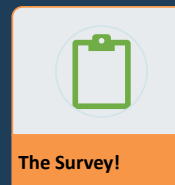
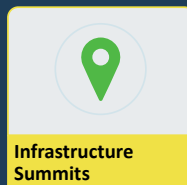
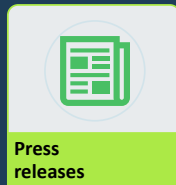
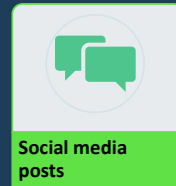
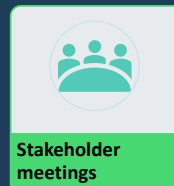
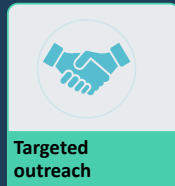
If the region experiences a slow growth, by 2050 the population will increase from **604,631 (2020)** to **621,469 inhabitants** (MassDOT Projections for the region by 2050).  
If growth continues at the same pace as previous years, population can reach the **681,229 inhabitants** in the region by 2050 (CMRPC estimates).



# 2050 CONNECTIONS

## PUBLIC OUTREACH RESULTS

## Outreach Methods



15

## Tabling at Public Events

- Beaver Brook Farmers Market
- Worcester Out-to-Lunch
- Westborough 4 Life
- Worcester Street Art Festival
- Green Hill Neighborhood Block Party
- Electric Vehicle Expo
- Apple Country Fair



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# Sub-Regional Meetings

- Dudley
- Grafton
- North Brookfield
- Westborough
- West Boylston
- Worcester



# Survey – Major Highlights

- Flyers at participating location across the region
- Versions in English and Spanish
- 284 completed surveys and more than 1,000 comments
- 32 out of 40 communities were represented
- Majority drive alone, but if they didn't had access to their vehicles, they will use public transit.
- Most people don't have access to a bicycle.
- The majority mentioned they visited a trail in the last year.
- If available, about 34% will use a bike-sharing service, and 48% will use an electric car sharing service.
- Overall, pedestrian infrastructure was rated in regular condition.





# 2050 CONNECTIONS

## FINANCIAL CONSIDERATIONS

19

## Funding Opportunities

### Bipartisan Infrastructure Law (BIL)

- Safe Streets For All
- Complete Streets
- Reconnecting Communities

### Climate Change and Resilience:

- Carbon Reduction Program
- PROTECT Grants (formula and discretionary)
- Charging and Fueling Infrastructure

### Statewide Funding Programs

- **MassDOT:** Complete Streets, Local Bottleneck Reduction Program, Community Transit Program
- **MassDEP:** Mass EVIP: Fleet Electrification, Workplace & Fleet Charging, Multi-Unit Dwelling & Educational Campus Charging
- **MA DCR:** MassTrails
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- **Massachusetts Clean Energy Center:** Accelerating Clean Transportation for All (ACT 4 All)

For more information: [https://www.fhwa.dot.gov/bipartisan-infrastructure-law/grant\\_programs.cfm](https://www.fhwa.dot.gov/bipartisan-infrastructure-law/grant_programs.cfm)

20

## Funds Awarded in the Region

### Safe Streets 4 All

2 communities  
Worcester & Southbridge  
Safety Action Plans

\$260,000 awarded in 2023

### Complete Streets

20 Communities with  
approved/completed projects

Investment of \$6.5M since  
2018

### Shared Streets

25 communities  
47 projects funded

Investment of \$5.2M since  
2019

### MassTrails

CMRPC & 8 communities  
17 projects funded

Investment of \$1.8M since  
2019

### MassWorks

10 Communities  
12 Projects

Investment of \$19.6M since  
2018

### DER's Culvert

7 active projects  
2 projects using ARPA  
funds

### Green Communities

Awarded \$3.4M  
20 communities  
2021 & 2022

## 2023-2027 Transportation Improvement Program

### North

5 Projects  
\$26,439,417 M

### Southwest

18 Projects  
\$188,015,744 M

### Northeast

2 Projects  
\$22,202,113 M

### Southeast

15 Projects  
\$87,202,755 M

### West

7 Projects  
\$42,702,954 M

### Central

8 Projects  
\$66,976,803 M

- A total of 143 TIP projects, advertised and programmed, between 2012 and 2027, 96 projects located in EJ areas.
- From 2012 to 2027, 11 communities had no target projects, 8 communities with no statewide projects, and 3 communities had neither target nor statewide projects.
- The Northeast Subregion had the fewest number of target projects with a total of 3.
- Federal-aid target funds programmed by the CMMPO since 2012: Over \$290 M
- Statewide funds applied to the region since 2012: \$582 M (approx)

# Regional Targets

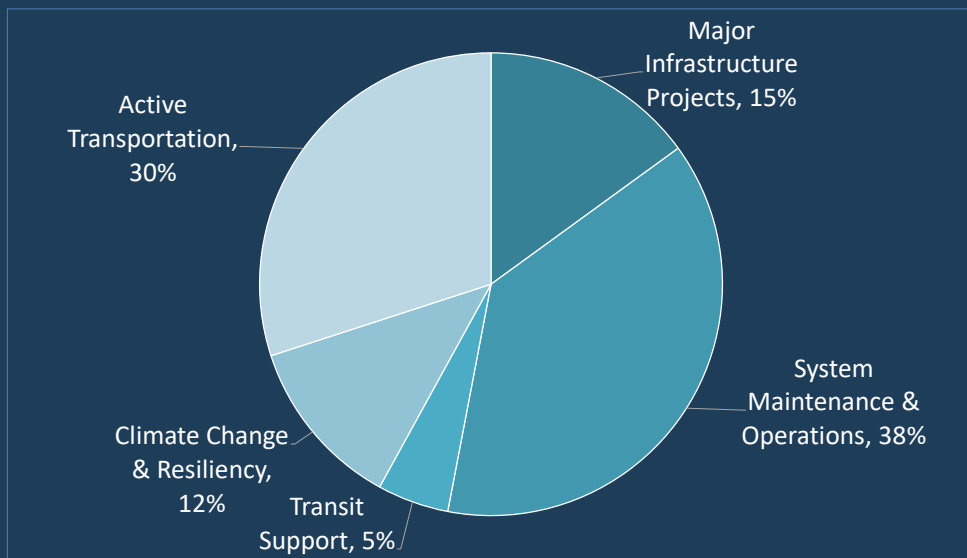
Estimates until 2050

Estimated funds provided by MassDOT and allocated in 5-year bands.

\*Note: 2% increase per year calculated after 2045

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2036-2040	\$ 194,518,660
2041-2045	\$ 213,832,411
2046-2050*	\$ 235,849,508
	<b>\$ 1,025,467,044</b>

# Financial Plan





# 2050 CONNECTIONS

## REGIONAL TRANSPORTATION NEEDS

## Identifying Regional Needs

- Modal Plan
- BIL + MicroProjects Survey
- Travel Demand Model
- Data Integration
- Equity Analysis
- Public Engagement Results
- Regional Workshops
- Green-house Gas Savings



Studies

Initiatives

Projects

## TRANSPORTATION MODES



Freight



Transit



Non-Motorized



Highways



Airports

Existing Conditions  
Current Challenges or Issues  
Vision for the Future  
Identified Needs

## PLANNING AREAS

1

Safety Planning

2

Congestion Management

3

Asset Management

4

Environment

5

Emerging Technologies



- US-20 Corridor
- Congestion in I-90/I-84
- Issues with stormwater
- MA-122 interchange with US-20 (Grafton Street)
- Accommodation for all users
- Culvert replacements

- Freight Accommodation Assessment Study
- Rest areas and truck parking
- Bottlenecks on highways
- Freight railroads
- Freight Corridors
- Distribution Centers



- WRTA Fixed Route
- Paratransit Service
- On-demand transit
- Rural towns with limited service
- Some communities don't have transit service
- East-West Rail

- Lack of sidewalks to access schools and parks
- Bike Sharing & infrastructure
- Complete Streets
- High crash locations
- Gaps in trails
- Regional trails plan



Check the CMRPC Multi-Modal Hub:  
<https://sites.google.com/view/cmrcbikeblog/home>



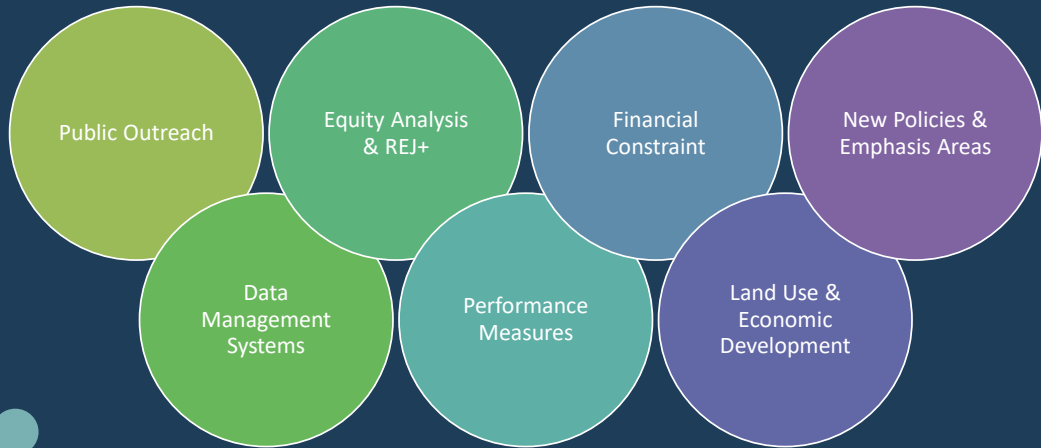
# 2050 CONNECTIONS

## REGIONAL TRANSPORTATION PRIORITIES



# Priorities

## Considerations



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# Transportation Priorities

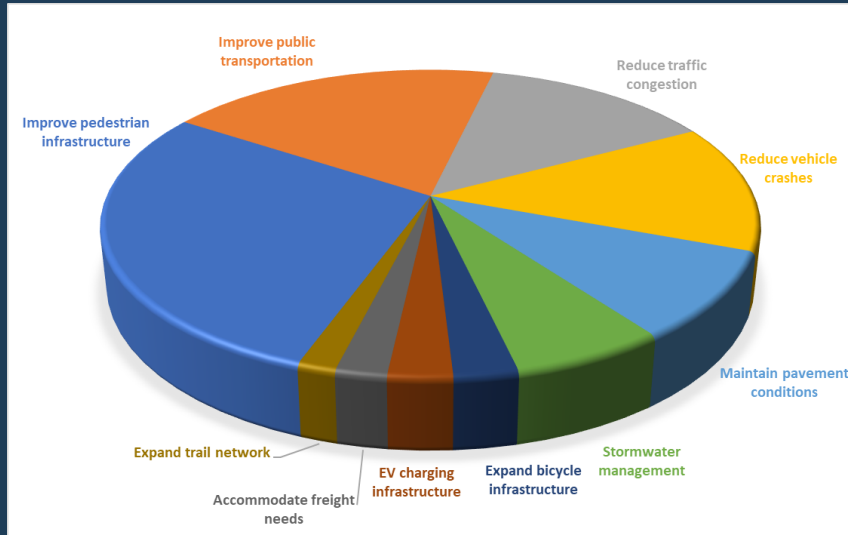
## Data Management Systems



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# Transportation Priorities

## Survey Results



# PROGRAMMATIC AREAS



MAJOR  
INFRASTRUCTURE  
PROJECTS



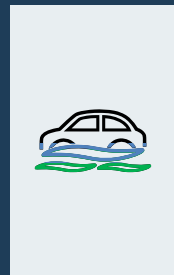
SYSTEM  
MAINTENANCE &  
OPERATIONS



ACTIVE  
TRANSPORTATION



TRANSIT  
SUPPORT



CLIMATE CHANGE  
& RESILIENCY

# Completed Projects

## By Programmatic Area

Major Infrastructure  
Projects

System Maintenance &  
Operations

Transit Support

Active Transportation

Climate Change &  
Resiliency

Kelley Square Reconstruction

TIP Project: Route 122A in Grafton  
(Main St from Providence Rd to Sutton TL)

Late night services and increased frequencies in high  
ridership routes

Blackstone River Bikeway Segment #7 in Worcester:  
(Madison St & Francis J. McGrath Boulevard)

West Brookfield - Culvert assessments

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# In-Progress

## By Programmatic Area

Major Infrastructure  
Projects

System Maintenance &  
Operations

Transit Support

Active Transportation

Climate Change &  
Resiliency

Charlton / Oxford: US-20 Corridor Improvements &  
West Brookfield: Route 9 Improvements Phase I & II

TIP Projects in Chandler Street Corridor  
(Main St to Park Ave: safety, congestion & pavement)

Shrewsbury & Westborough: VIA On-demand transit

SRTS in Grafton (Millbury St)

TIP Project Upton: Culvert Reconstruction

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# Major Infrastructure Projects



MAJOR  
INFRASTRUCTURE  
PROJECTS

- 2023 to 2025** US Route 20 reconstruction, Charlton/Oxford **AND** Route 9 widening, West Brookfield, Phases 1&2
- 2026 to 2030** US Route 20/Route 122 (Grafton St) interchange reconstruction, Worcester
- 2031 to 2035** Route 122 (Vernon St) bridge replacement over I-290
- 2036 to 2040** I-495/Route 9 interchange reconstruction, braided ramps, Westborough/Southborough
- 2041 to 2045** Route 146/New Boston Road new grade-separated Interchange, Sutton
- 2046 to 2050** Route 9/Route 135 interchange replacement, Westborough

# System Maintenance & Operations



SYSTEM  
MAINTENANCE &  
OPERATIONS

## Safety

- Worcester – Belmont Street
- Webster – Douglas Rd / Gore Rd
- Southbridge – Sandersdale Rd

## Congestion

- Worcester – Park Ave
- Shrewsbury – MA-140
- Charlton – Stafford Street / Center Depot Road

## Pavement

- Southbridge – West Street
- Auburn – South Street

# Active Transportation



ACTIVE  
TRANSPORTATION

## Trails

Westborough – BWALT

Sutton – Blackstone Rive Greenway segment

## Pedestrian

West Brookfield Downtown

Regionwide – Safe Routes to School

Charlton – Stafford Street / Center Depot Road

## Bicycle

Worcester – Main Street, Park Ave, Mill Street

Webster – East Main Street

# Transit Support



TRANSIT  
SUPPORT

## Commuter Rail

Worcester – Springfield

## WRTA

Worcester – Transit Signal Priority

Regionwide – Improve bus stops and surroundings

Fleet electrification

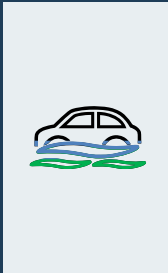
## Community transit

On-demand rural transit service (Quaboag & Quabbin Regions)

Transportation for older adults

Transportation for Veterans

# Climate Change & Resiliency



CLIMATE CHANGE  
& RESILIENCY

## Culverts

Warren – Keyes Road

Paxton – MA-31

Millbury – Carleton Road

New Braintree – Ravine Road

Berlin – Double culvert on Randall Road & West Street

## Decarbonization

Regionwide – EV charging stations

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# Questions?

[WWW.CMRPC.ORG/2050CONNECTIONS](http://WWW.CMRPC.ORG/2050CONNECTIONS)

#2050 CONNECTIONS

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## Group Exercise

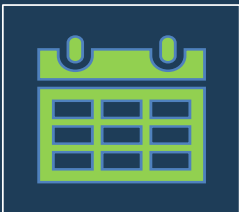
Online visit:

[Priorities Dashboard](#)

or use the chat to enter your top priorities.

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## Stay Involved!



### Participate

CMMPO meets the 3<sup>rd</sup> week of every month  
CMMPO Advisory meets the 4<sup>th</sup> week of every month



### Committees and Work Groups

Connect with CMRPC staff to participate in many committees and working groups created to address multiple topics



### Articulate the needs of your community

Complete surveys and send your comments. We read them all!



### Spread the word

Be a Community Ambassador and share the goods news about everything related to transportation!

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# Thank You

[WWW.CMRPC.ORG/2050CONNECTIONS](http://WWW.CMRPC.ORG/2050CONNECTIONS)

FOLLOW US ON SOCIAL MEDIA



#2050 CONNECTIONS



# 2050 CONNECTIONS

June 21, 2023, CMMPO Meeting

1

## Table of Contents

1. Introduction



2

# 2050 CONNECTIONS

## PLANNING CONSIDERATIONS

2. Background



3

# 2050 CONNECTIONS

3. Linkages



## FUTURE GROWTH

If the region experiences a slow growth, by 2050 the population will increase from **604,631 (2020)** to **621,469 inhabitants** (MassDOT Projections for the region by 2050).

If growth continues at the same pace as previous years, population can reach the **681,229 inhabitants** in the region by 2050 (CMRPC estimates).

4

# 2050 CONNECTIONS

4. Planning Areas, Modes and Related Programmatic Areas



Freight



Transit



Non-Motorized



Highways



Airports

5

# 2050 CONNECTIONS

4. Planning Areas, Modes and Related Programmatic Areas

**1** Safety Planning

**2** Congestion Management

**3** Asset Management

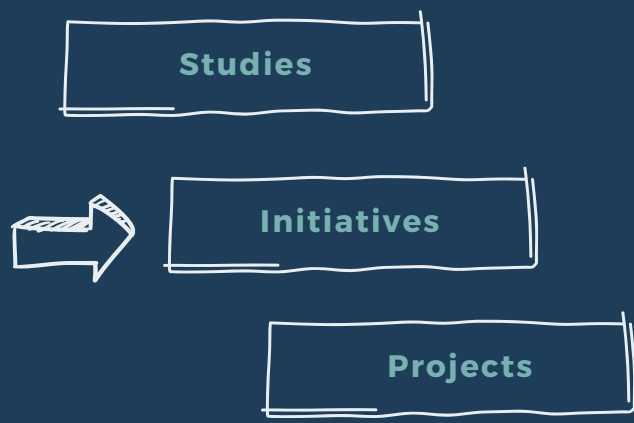
**4** Environment

**5** Emerging Technologies

6

# Identifying Regional Needs & Priorities

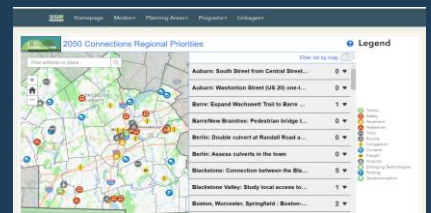
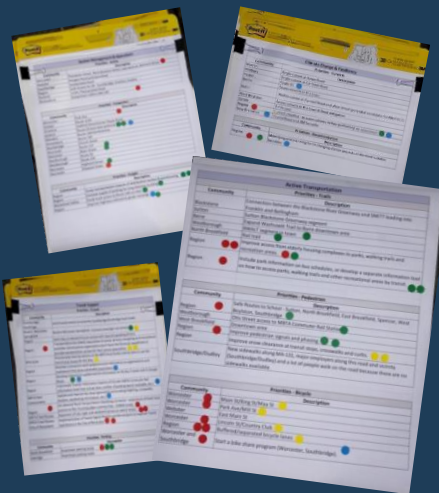
Public Engagement  
 Regional Workshops  
 Modal Plans  
 BIL + MicroProjects Survey  
 Travel Demand Model  
 Data Integration  
 Equity Analysis  
 Green-house Gas Savings



7

# 2050 CONNECTIONS

5. Programs and Prioritization



8

# PROGRAMMATIC AREAS



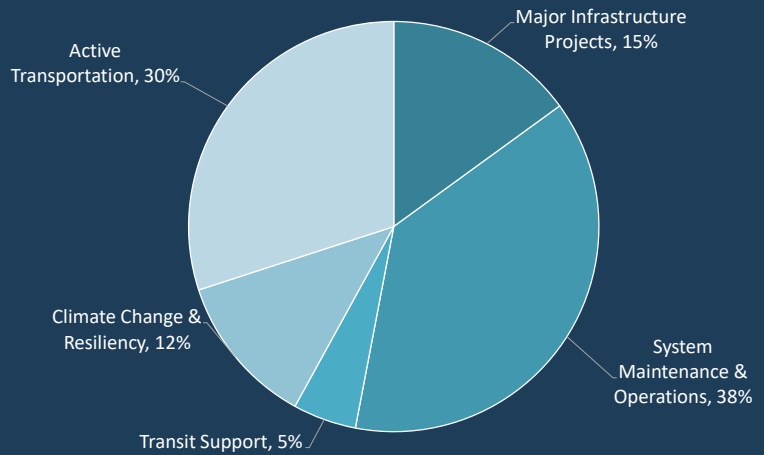
9

# 2050 CONNECTIONS

6. Financial Plan

## Regional Targets (Estimates until 2050)

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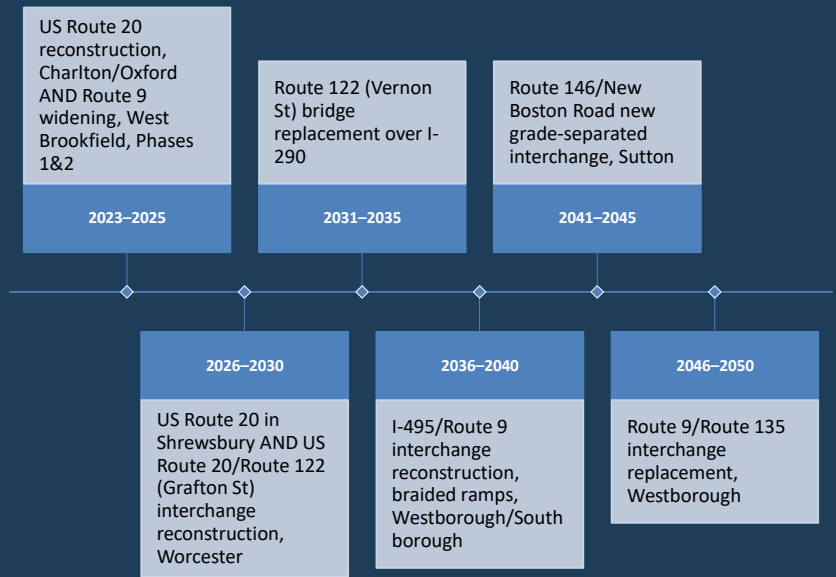


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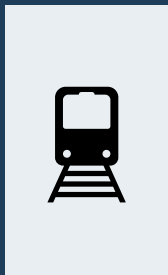
# Major Infrastructure Projects



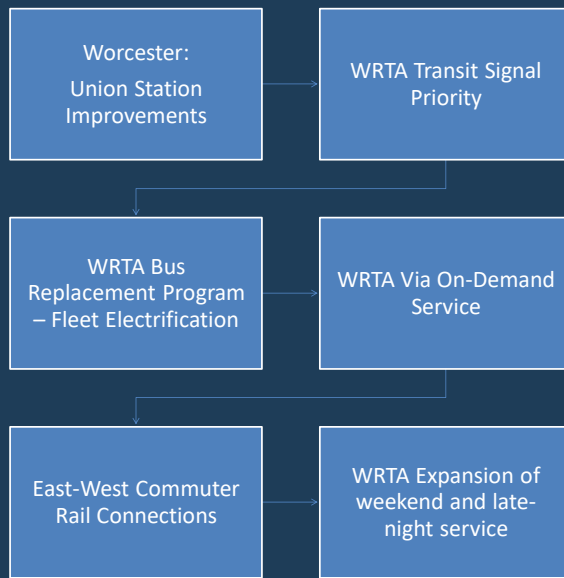
MAJOR INFRASTRUCTURE PROJECTS



# Major Transit Projects



MAJOR TRANSIT PROJECTS





# 2050 CONNECTIONS

7. Air Quality and GHG Assessments

Massachusetts Statewide Aggregate CO<sub>2</sub> Estimated Emissions Impacts from Transportation (all emissions in tons per summer day)

Year	CO <sub>2</sub> Action Emissions	CO <sub>2</sub> Base Emissions	Difference (Action – Base)
2019	75,113.6	75,113.6	n/a
2050	53,772.5	53,781.4	-8.9

# Thank You

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#2050 CONNECTIONS



# 2050 CONNECTIONS

Draft 2050 Connections  
Public Meeting July 10, 2023  
5:00 PM

1

## Table of Contents

1. Introduction



2

# 2050 CONNECTIONS

## PLANNING CONSIDERATIONS

2. Background



# 2050 CONNECTIONS

3. Linkages



## FUTURE GROWTH

If the region experiences a slow growth, by 2050 the population will increase from **604,631 (2020)** to **621,469 inhabitants** (MassDOT Projections for the region by 2050).

If growth continues at the same pace as previous years, population can reach the **681,229 inhabitants** in the region by 2050 (CMRPC estimates).

# 2050 CONNECTIONS

4. Planning Areas, Modes and Related Programmatic Areas



Freight



Transit



Non-Motorized



Highways



Airports

# 2050 CONNECTIONS

4. Planning Areas, Modes and Related Programmatic Areas



Safety Planning



Congestion Management



Asset Management



Environment



Emerging Technologies

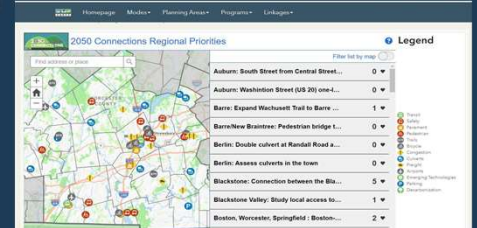
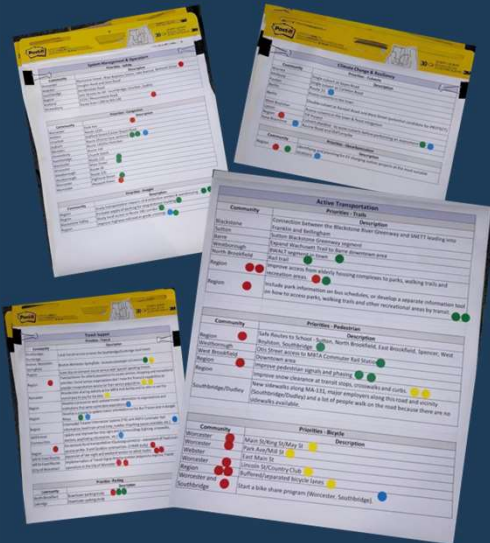
# Identifying Regional Needs & Priorities

Public Engagement  
 Regional Workshops  
 Modal Plans  
 BIL + MicroProjects Survey  
 Travel Demand Model  
 Data Integration  
 Equity Analysis  
 Green-house Gas Savings

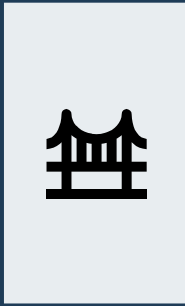


# 2050 CONNECTIONS

5. Programs and Prioritization



# PROGRAMMATIC AREAS



MAJOR  
INFRASTRUCTURE  
PROJECTS



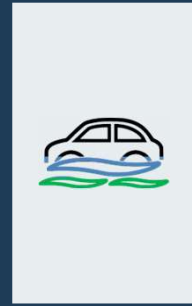
SYSTEM  
MAINTENANCE &  
OPERATIONS



ACTIVE  
TRANSPORTATION



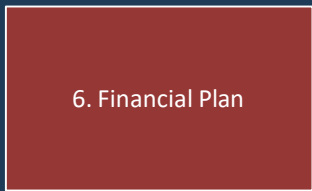
TRANSIT  
SUPPORT



CLIMATE CHANGE  
& RESILIENCY

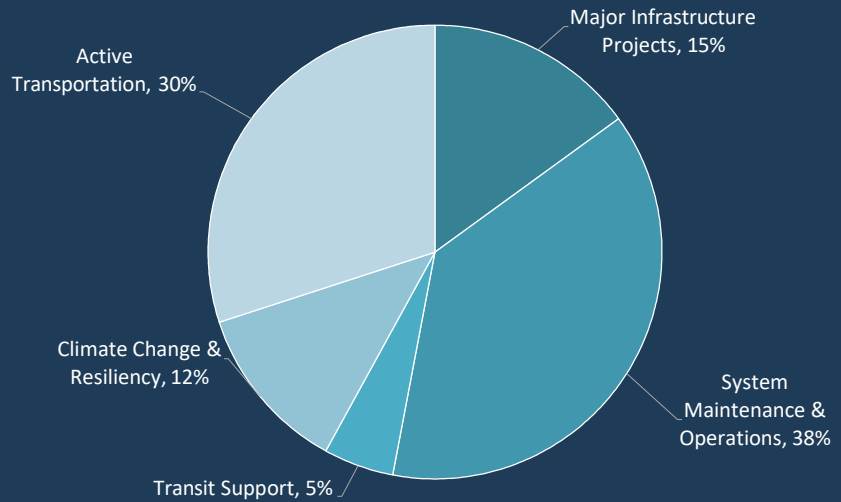
9

# 2050 CONNECTIONS



## Regional Targets (Estimates until 2050)

Year Bands	Total Expected Funding
2024-2025	\$ 52,397,899
2026-2030	\$ 154,432,094
2031-2035	\$ 174,436,471
2036-2040	\$ 194,518,660
2041-2045	\$ 213,832,411
2046-2050*	\$ 235,849,508
	<b>\$ 1,025,467,044</b>

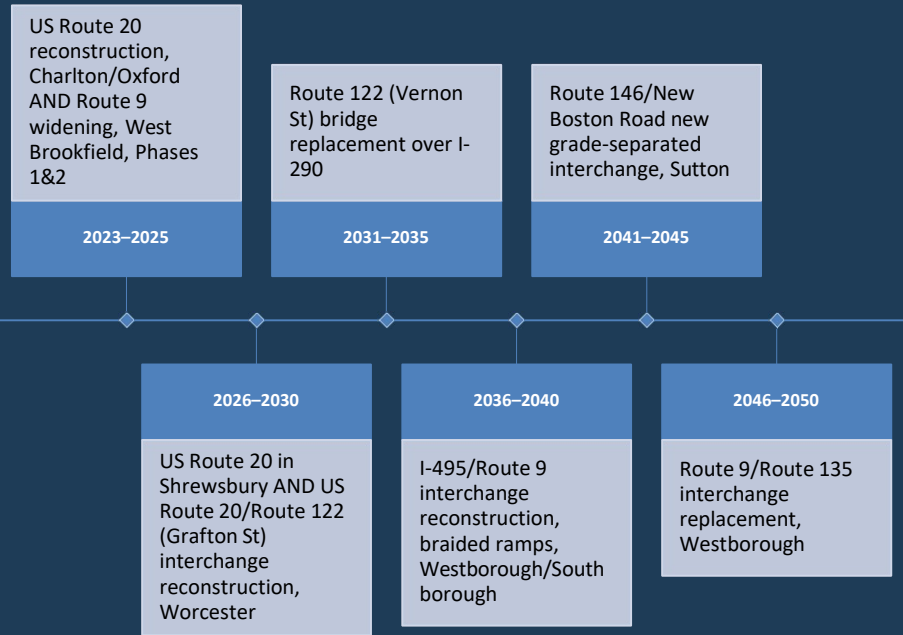


10

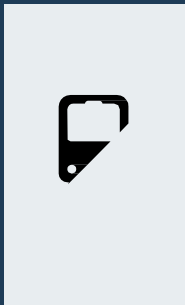
# Major Infrastructure Projects



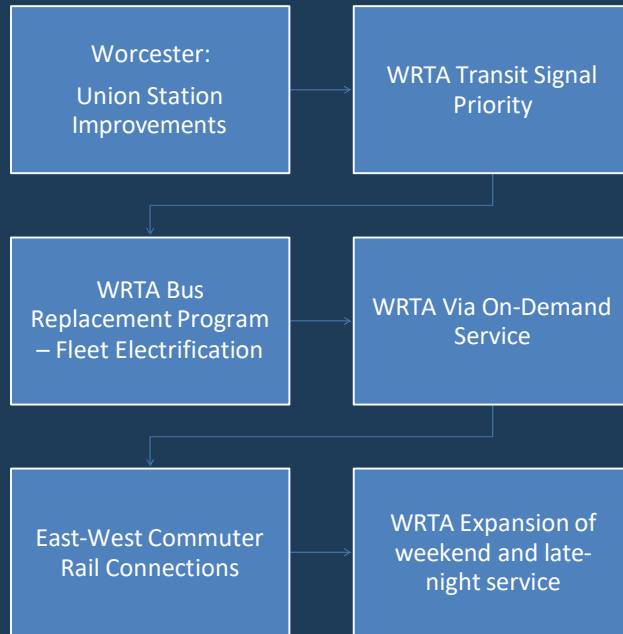
MAJOR INFRASTRUCTURE PROJECTS



# Major Transit Projects



MAJOR TRANSIT PROJECTS





# 2050 CONNECTIONS

7. Air Quality and GHG Assessments

Massachusetts Statewide Aggregate CO<sub>2</sub> Estimated Emissions Impacts from Transportation (all emissions in tons per summer day)

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2050	53,772.5	53,781.4	-8.9

# Thank You

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#2050 CONNECTIONS





# Phase I Engagement Results

October 3, 2022

*massDOT*  
Massachusetts Department of Transportation

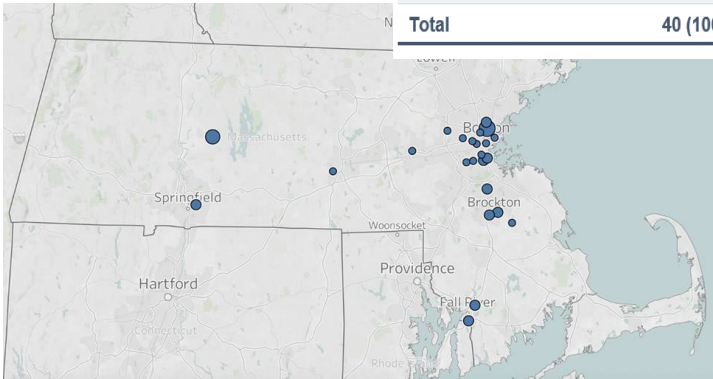
1

## Phase 1 Focus Groups & Interviews

2

## Reference Slide: Focus Groups

Participants came from 25 zip codes and various backgrounds of race/ethnicity, age, and income



Age group (years)	N (%)
18 to 21	1 (2.5%)
22 to 34	16 (40.0%)
35 to 44	13 (32.5%)
45 to 64	9 (22.5%)
65 or older	1 (2.5%)
<b>Total</b>	<b>40 (100%)</b>

Study group	N (%)
Less than \$14,500	2 (5.0%)
\$14,500 to \$28,999	7 (17.5%)
\$29,000 to \$43,499	4 (10.0%)
\$43,500 to \$57,999	4 (10.0%)
\$58,000 to \$75,999	3 (7.5%)
\$152,000 or more	4 (10.0%)
No answer	16 (40.0%)
<b>Total</b>	<b>40 (100%)</b>

Study group	N (%)
Black community	7 (17.5%)
Spanish-speaking	7 (17.5%)
Mandarin-speaking	3 (7.5%)
Vietnamese speaking	3 (7.5%)
Haitian creole	11 (27.5%)
Portuguese-speaking	9 (22.5%)
<b>Total</b>	<b>40 (100%)</b>

3

## Focus Groups

### Trends

- 56% reported driving a private vehicle as their primary mode choice
- 86% changed travel behavior due to COVID-19

### Values

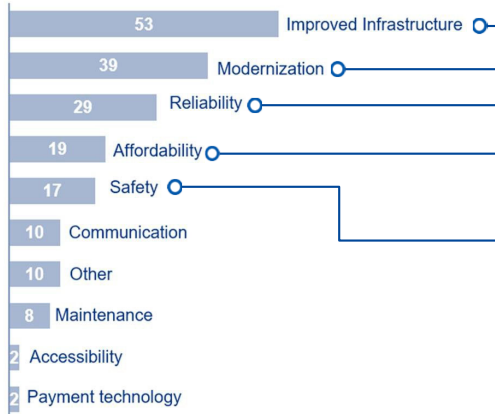
- High value on **convenience** and **affordability**.
- Felt public transit to be **unreliable** and **less safe** than other modes.



4

# Focus Groups

Figure 3 Key Future Changes for Massachusetts' Transportation System (Qualitative Themes)



## Stakeholders value a...

- well-maintained** system
- modern** system that embraces **technology**
- a **dependable** and **growing** system
- economical** and **resilient** system that prevents personal costs of time and money
- safe** system that ensures personal well-being and protection



# Phase 1 Survey Results



## Phase 1 Survey Respondents

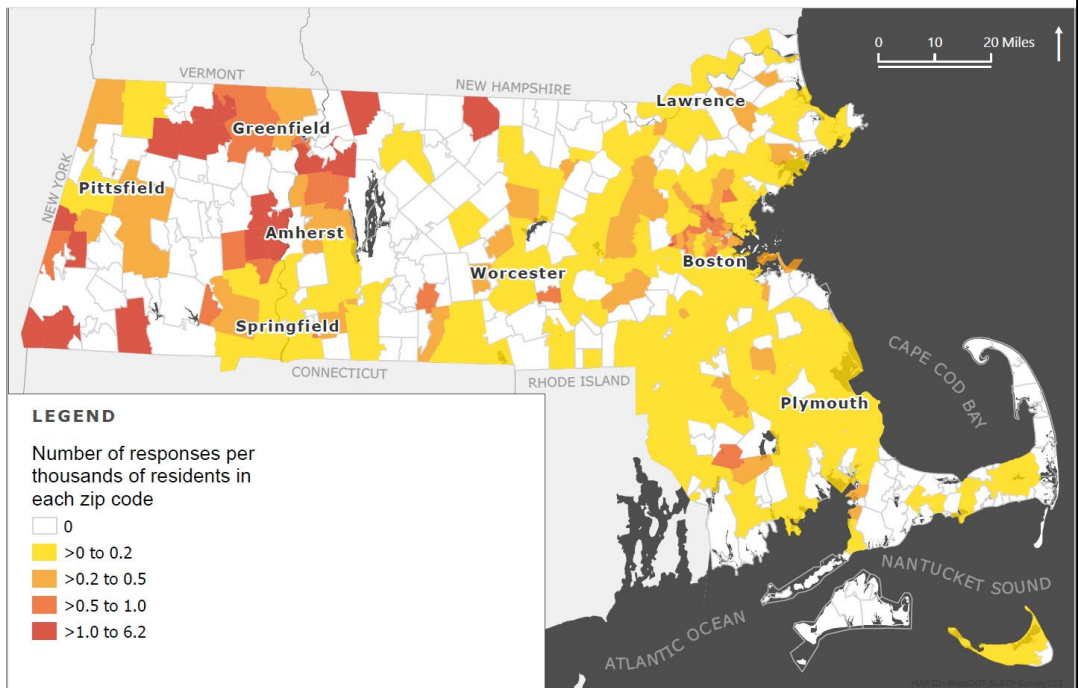
- 1,107 responses through July 31, 2022
- 5 (0.5%) foreign language (4 Spanish; 1 French)
- 36 (3.25%) rural
- 146 (13%) from 65+
- 121 (11%) respondents of color
- 60 (5.4%) responses from individuals in households earning less than \$29k a year



### Respondent Locations

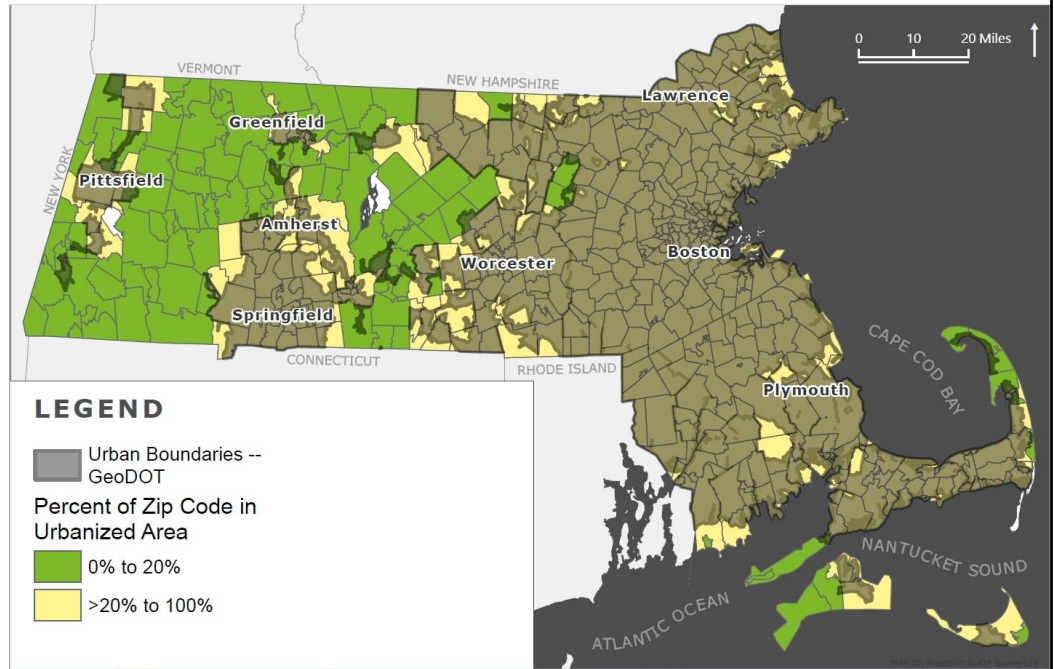
Responses from 291 of 535 (54%) of active zip codes in Massachusetts

N = 1,107



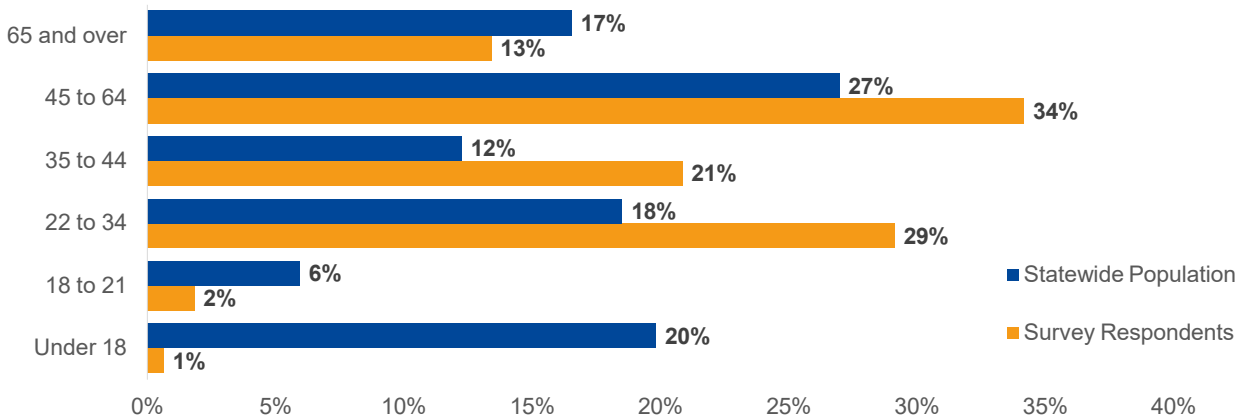
## Rural Respondents

36 responses from less urbanized zip codes (yellow)



9

## Phase 1 Survey Respondents Age

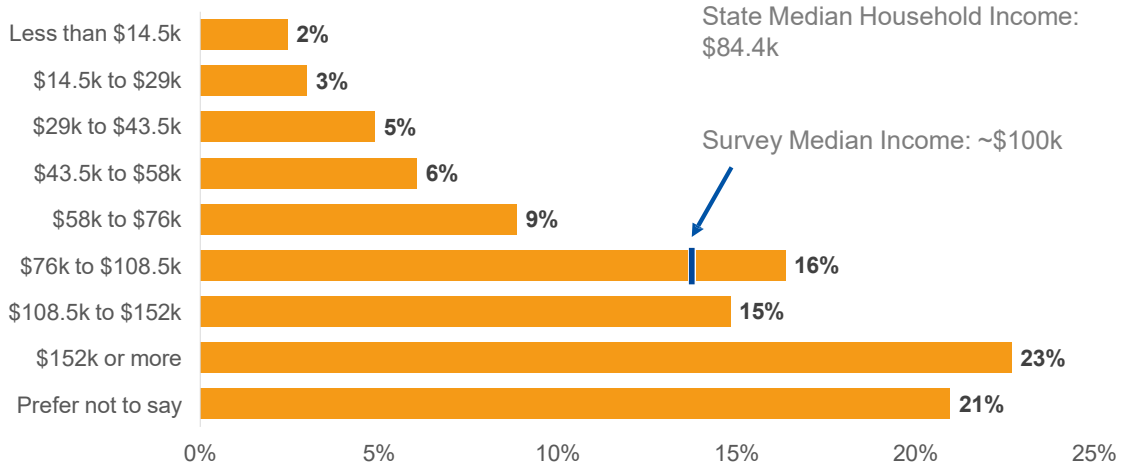


N = 1,089



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## Phase 1 Survey Respondents Household Income

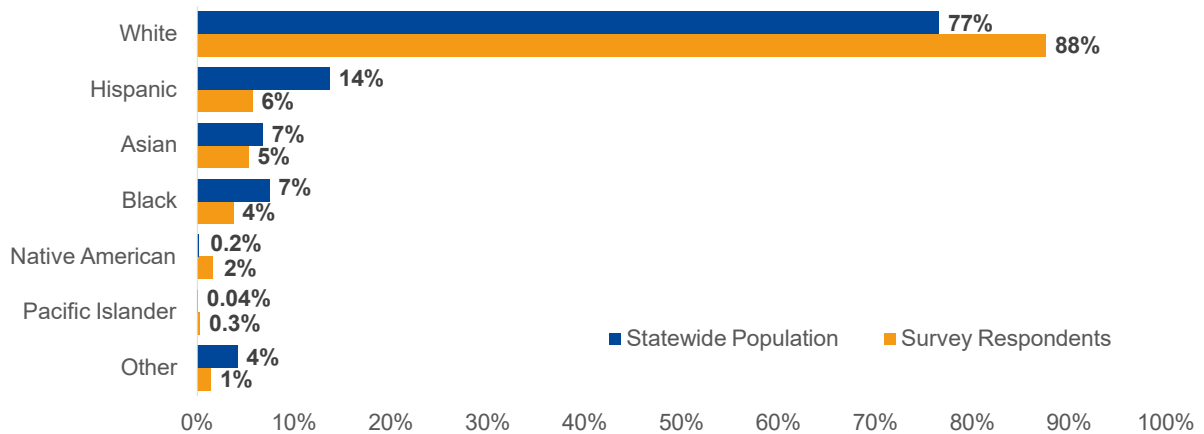


N = 1,089



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## Phase 1 Survey Respondents Race/Ethnicity



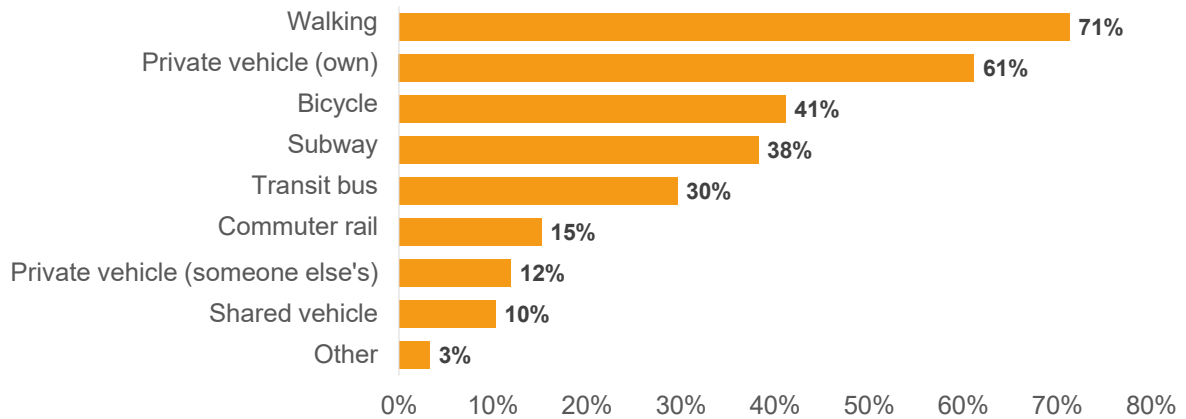
N = 1,089



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## Phase 1 Survey Respondents

### Transport modes used in typical week



N = 1,107



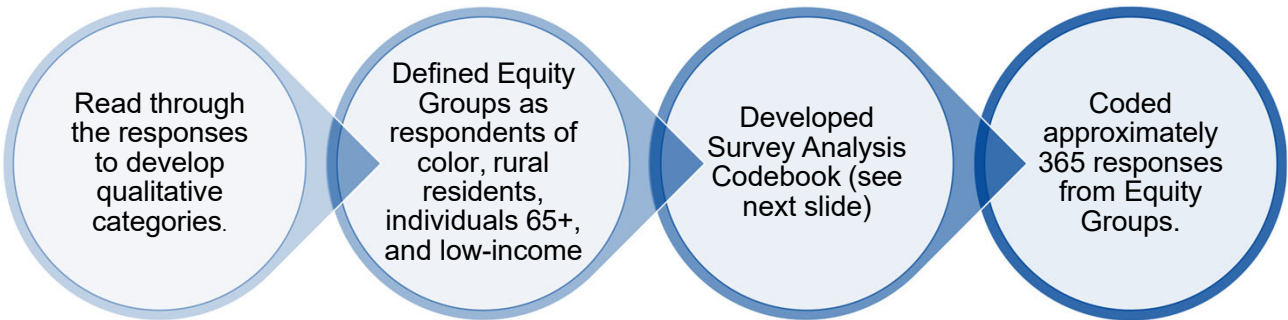
13

13

## Open-ended Responses

14

## Reference Slide: Survey Analysis Methodology Process and Assumptions



## Reference Slide - Coding Explanations

Code	Example Comment
<b>User Experience</b> Clean, convenient, legible, modern, comfortable, uncrowded	<i>"The machine in the station is unbearable for the Elderly that can't read or write and understand the English."</i>
<b>Land Use</b> Parking, transit infrastructure improvements	<i>"Develop more live, work, play districts. Reduce the area for parking. Establish zones for shared, self-driving vehicles."</i>
<b>Safety</b> Safety, safety in relation to bike/ped	<i>"I live in a place where on a bad traffic day, biking takes less time than driving. So, I'd like to see more safe bike paths and lock facilities around the city as an alternative to driving."</i>
<b>Efficient</b> Speed, time (delays), unimposing, financially responsible	<i>"Provide maximum transportation to as many people as possible with minimum inconvenience to non-users."</i>
<b>Equitable</b> Geographically, rural, ADA	<i>"There is subsidized to free depending on income and mobility needs transportation for all ages to work, errands, medical appointments, and school. Rural Mass. will be connected to all cities and towns."</i>
<b>Expansion</b> Time, rural, transit	<i>"Get me to doctors appts and where I need to go. I would go [to] more places might [I] not have to leave so early."</i>
<b>State of Good Repair</b> General, pavement, transit, bike/ped	<i>"Safe streets &amp; or sidewalks for walking jogging and biking even in winter. An MBTA train that doesn't break down."</i>





## Question 2 – by Transport Mode

### Three key qualities that describe your ideal future transportation system?

Equity Groups, Open Ended Question (% is portion of group that selected value category)

Value Category	Bike	Subway	Bus	Rail	Walk	Private Vehicle
Reliability	36%	48%	49%	40%	36%	32%
Safety	36%	32%	27%	29%	28%	26%
Frequent	29%	37%	30%	29%	29%	22%
User Experience	24%	34%	16%	27%	29%	30%
Affordable	24%	26%	21%	18%	29%	29%
Connected	21%	21%	22%	22%	22%	16%
Accessibility	15%	19%	19%	13%	23%	24%
Multimodal	27%	13%	10%	18%	19%	17%
Efficient	13%	23%	19%	13%	14%	17%
Expansion	13%	12%	5%	22%	14%	16%
Sustainable	20%	10%	7%	7%	17%	19%
Equitable	12%	8%	6%	9%	12%	13%
State of Good Repair	8%	12%	6%	11%	9%	11%
Car Free	14%	2%	5%	9%	9%	10%
Flexibility	8%	2%	4%	11%	4%	3%
Intelligent	5%	5%	4%	2%	6%	7%
Resilient	5%	3%	2%	4%	3%	5%
Land Use	4%	2%	2%	0%	5%	6%
Unimposing	1%	1%	1%	2%	2%	2%
N	98	129	113	45	236	243

**Reliability** was a key quality of the future transportation system, especially among transit riders.

**User Experience, Frequency,** and **Safety** were more frequently mentioned.



## Question 3

### What does a great transportation system do for you?

All Respondents, Open Ended Question



#### Common Phrases

- “Gets me where I need to go”
- “Provides access to major metropolitan areas”
- “Lets me get to work”
- “Safe walking and biking”
- “Reasonable amount of time”
- “Without needing a car”
- “Improves quality of life”
- “I want to feel safe”
- “Gives me options”



## Question 3 – by Equity Group

### What does a great transport system do for you?

Equity Groups, Open Ended Question  
 (% is portion of group that selected value category)

Value Category	Low Income	Over 65	POC	Rural
User Experience	35%	27%	36%	33%
Expansion	28%	27%	16%	50%
Reliability	35%	29%	45%	11%
Efficient	17%	26%	22%	50%
Connected	30%	27%	21%	33%
Accessibility	17%	25%	20%	31%
Affordable	20%	18%	28%	19%
Safety	13%	25%	31%	8%
Frequent	15%	18%	30%	14%
Equitable	22%	18%	8%	22%
Car Free	15%	25%	6%	14%
Multimodal	22%	18%	10%	8%
Sustainability	12%	18%	9%	11%
Land Use	0.1	3%	9%	11%
State of Good Repair	5%	9%	8%	0%
Intelligent	5%	5%	6%	3%
Flexibility	2%	3%	3%	8%
Resilient	5%	2%	2%	0%
Unimposing	0	3%	0%	0%
N	60	142	121	36

Rural respondents value **System Expansion** and **Efficiency** more than other groups

All respondents value **User Experience, Connectivity, Reliability, and Efficiency**

Few votes for **Flexibility, State of Good Repair, Resilience, Intelligent transport, Unimposing**



## Question 3 – by Transport Mode

### What does a great transport system do for you?

Equity Groups, Open Ended Question  
 (% is portion of group that selected value category)

Value Category	Bike	Subway	Bus	Rail	Walk	Private Vehicle
User Experience	36%	32%	42%	48%	35%	30%
Reliability	31%	37%	38%	36%	31%	29%
Efficient	33%	38%	33%	25%	32%	35%
Expansion	36%	29%	27%	32%	35%	33%
Connected	30%	27%	29%	25%	31%	28%
Car Free	30%	29%	24%	20%	28%	23%
Safety	31%	25%	24%	25%	26%	23%
Accessibility	21%	23%	27%	14%	26%	23%
Equitable	23%	18%	21%	25%	20%	22%
Multimodal	34%	15%	17%	16%	23%	21%
Frequent	21%	19%	16%	16%	17%	15%
Affordable	14%	12%	14%	23%	19%	17%
Sustainable	20%	12%	10%	7%	15%	15%
State of Good Repair	4%	9%	8%	18%	6%	10%
Intelligent	8%	8%	10%	11%	6%	6%
Land Use	9%	7%	11%	2%	9%	6%
Flexibility	3%	2%	3%	5%	2%	3%
Resilient	2%	3%	3%	5%	2%	3%
Unimposing	0%	2%	2%	5%	2%	2%
N	97	128	113	44	236	239

Private vehicle and Walking respondents value **System Expansion** and **Efficiency** more than other groups

Bus and Rail respondents value **User Experience** and **Reliability** more than other groups

**Multimodal** valued by Bike riders and **Affordable** and **State of good Repair** valued by Rail riders



## Public Comments

### What we've heard from "Emails to Beyond Mobility"

**Values:** Safety especially for non-motorized users; modernization; accessibility; efficiency; expansion; fiscal stewardship

**Geographies:** Bike route from Jamaica Plain to Cambridge; Route 6 in Wellfleet; South Coast Rail improvements and integration into the existing commuter rail; Cape Cod Canal area

*"If this could be turned into a one-way street for cars with two-way protected bike lane it would make a huge difference in improving access and safety so more people could commute by bike."*

*"One of the major problems with mass transportation in and around Boston, is the "hub and spoke" system, where most CR and MBTA lines feed into a central area, with transfers made to destinations further out on a different line. This increases the volume of people within the hub, and increases the risk of any interruption of service, resulting in massive delays and inconvenience."*



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## Key Themes

### Open Ended Questions

- Respondents indicated an interest in **core functions** of a transportation system: connectivity, reliability, efficiency, and user experience. Affordability and safety also priorities across groups.
- **Rural respondents** differ in priorities, valuing system expansion, efficiency, and transit accessibility more than other equity groups
- Fewer votes for more **technical** or "**nice to have**" ideas: flexibility, state of good repair, resilience, intelligent transport, unimposing (minimum inconvenience to non-users), and supportive land uses
- Respondents recognize that transportation is a **pathway to opportunity** (e.g., access to jobs, services, and other cultures and communities). By providing options of how they move, it improves their quality of life and the quality of the places around them.



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## Question 4

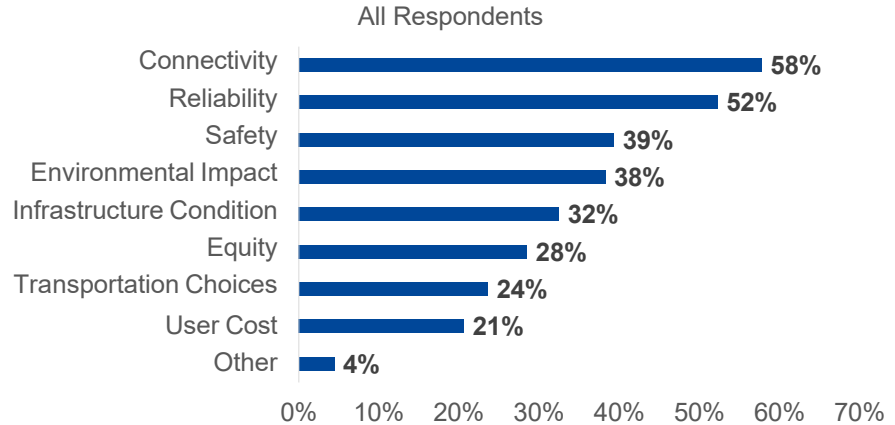
### Aspects you would like to see *improved or changed*

All Respondents, Multiple Choice Question

#### Connectivity & Coverage:

Connections to the places people need to go.

**Reliability:** Limited unexpected delays and predictable travel times.



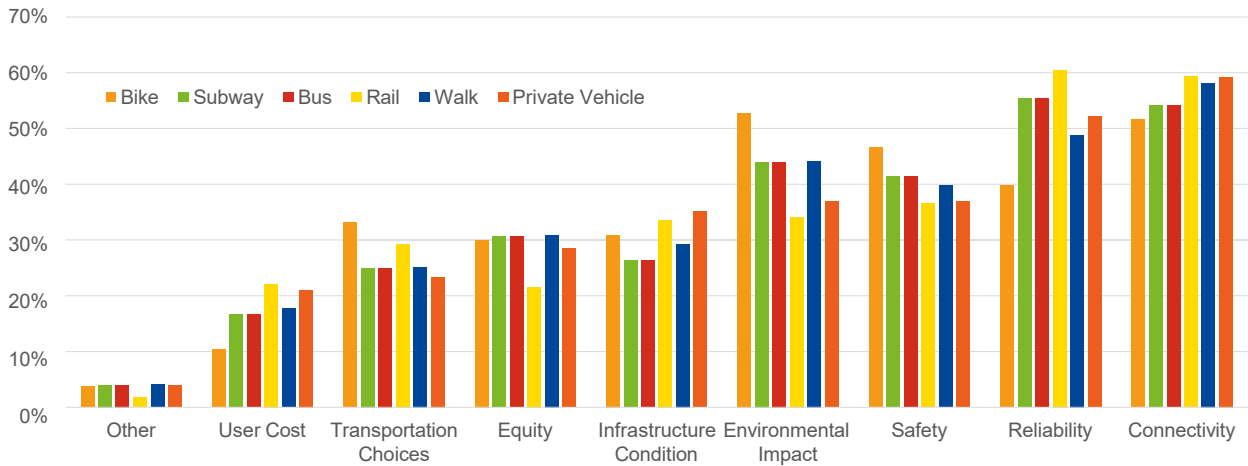
N = 1,107



## Question 4 – by Transportation Mode

### Aspects you would like to see *improved or changed*

All Respondents, Multiple Choice Question

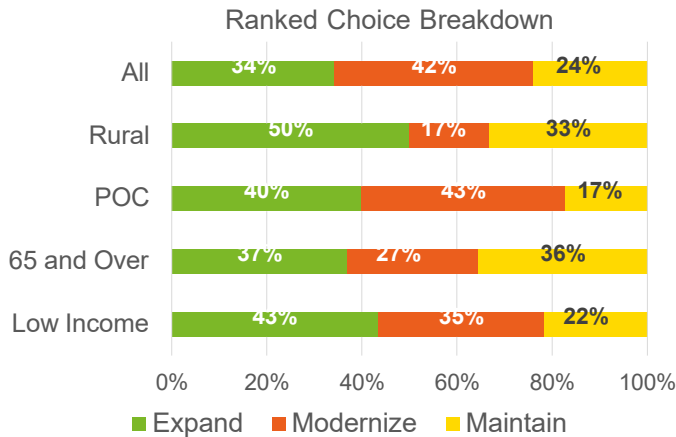


N = 1,107



## Question 5

Which of the following is most important to you?



N = 1,107

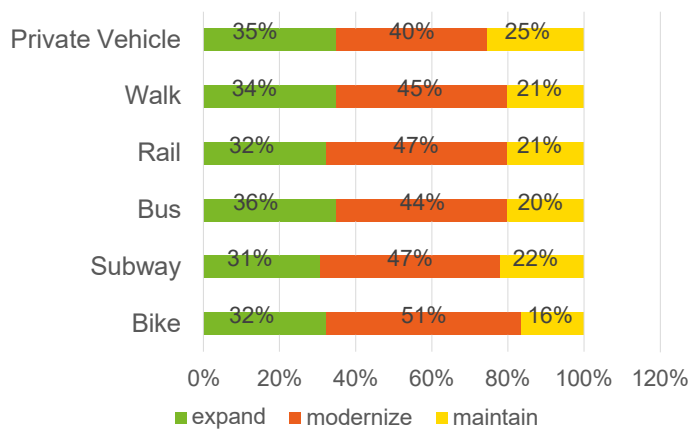
- Among all respondents, preference for a more **modern** system.
- Rural, low-income, and 65+ respondents most want to see **system expansion**.
- **Maintenance** most valued among rural and 65+ respondents.
- Respondents of color most valued **modernization**.



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## Question 5 – by Transportation Mode

Which of the following is most important to you?



N = 1,107

- Less variability across Transport Modes than across Equity groups
- Bus and Private Vehicle want to see **system expansion**.
- **Maintenance** most valued among Private Vehicle and Subway Riders
- Bike, Subway, and Rail riders most valued **modernization**.



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# Specific User Concerns

- Fare User Experience
- East-West Connections
- Direct Accessibility
- Quality of Life

"Difficult to find locations where you can purchase a Charlie card." (Non-equity group)

"Public transit does not go directly between my origin and destinations, requires long waiting times and transfers." (POC)

"No connection between eastern and western parts of the state." (Rural)

"Help me achieve my economic and all-around well-being goals." (Low income)

"East-west rail connection from Springfield to Boston." (65+)

"No viable East West rail service." (65+)

"Machines often out of order." (Low income)

"There aren't many safe choices. There is no convenient/fast transit to my job." (Non-equity group)

"The bus/train/transit system is too infrequent, not reliable and too indirect, taking too much time compared to the alternative (driving or Uber /Lyft)." (65+)

"Only 1 place to get a senior Charlie card." (65+)

"It gives me access to opportunity." (POC)



# Reference Slide: Additional User Concerns

**Fare User Experience**

- "Charlie cards that don't expire or no cards at all!"
- "Being able to charge your Charlie card in the bus/pay by phone/credit card"
- "If I forget to load my Charlie card there is not an easy way to remedy that issue."

**East-West Connections**

- "East/west commuter rail"
- "East-west easy access"
- "I'd like to see greater transit access throughout Eastern Mass, plus long-distance rail to Western Mass (or maybe even all New England, including CT, NH, VT, ME, RI)."
- "Regional rail east to west would be great."
- "Allow me and my kids to travel from Greenfield in Western Mass. to major cities in eastern MA and other points east of us."

**Direct Accessibility**

- "Direct foot traffic to small businesses, building strong and pleasant communities I want to live in."
- "It's too far of a walk to/from some bus stops, the indirect routes take a long time in transit."
- "More direct bus lines. More direct train lines!"
- "Not always having a direct way to get where I need to go via transit, biking or walking."

**Quality of Life**

- "Gives people across the region the opportunity to combine transit and active transportation modes to lead more physically active and healthier lives."
- "Helps me to get to my job everyday, especially in the winter"
- "Enables me more job flexibility (I can take a role that requires me to be in an office anywhere in the greater Boston area)."





# Summary of Findings

Equity Groups

## Equity Group Priorities

(Greater than 25% of subgroup mentioned)

Respondent Type	Reliability	Accessibility	User Experience	Affordability	Connectivity	Safety	Efficiency	Frequency	Expansion
Low Income	●		●		●				●
Older Pop. (65+)	●		●		●		●		●
People of Color (POC)	●		●	●		●		●	
Rural		●	●		●		●		●



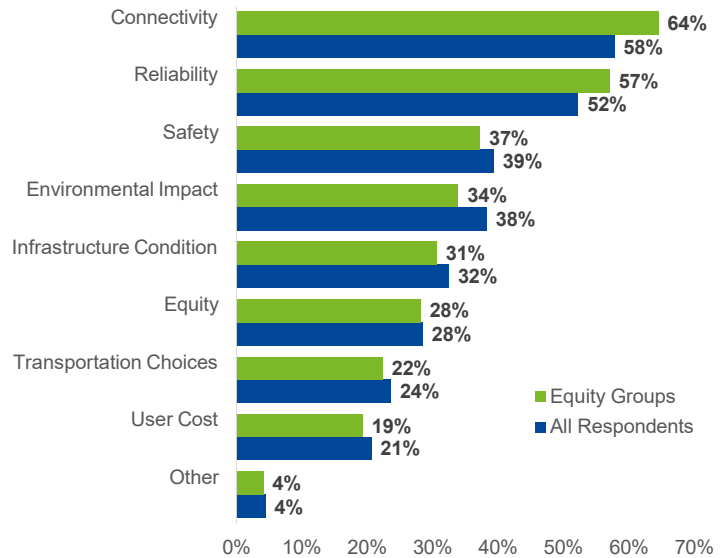
## Values - Summary

Respondents chose **Connectivity**, **Reliability**, **Safety**, and a **Modernized User Experience** as their top values for the future transportation system.

Equity populations generally **aligned** with these values

Equity populations selected **Connectivity** and **Reliability** in higher numbers than all respondents.

Equity populations **safety** and **environmental impact** in lower numbers than all respondents.



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Thank you!



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## Long Range Transportation Plan: 2050 Connections

### Potential Major Infrastructure (MI) Project Options

#### Option A:

2023 to 2025	Route 20 reconstruction, Charlton/Oxford (#602659) <b>AND</b> Route 9 widening, West Brookfield, Phases 1&2 (#606517 & #609049)
2026 to 2030	Route 122 (Vernon St) bridge replacement over I-290 (No PRC#) <b>AND</b> State-funded US Route 20 reconstruction, Shrewsbury (#610825)
2031 to 2035	I-495/Route 9 interchange reconstruction, braided ramps, Westborough/Southborough (#607701)
2036 to 2040	Route 146/New Boston Road new grade-separated interchange, Sutton (No PRC#)
2041 to 2045	US Route 20/Route 122 (Grafton St) interchange reconstruction, Worcester (#603516)
2046 to 2050	US Route 20 consistent four-lane cross-section, Auburn (No PRC#)

#### Option B:

2023 to 2025	US Route 20, Charlton/Oxford (#602659) <b>AND</b> Route 9 widening, West Brookfield Phases 1&2 (#606517 & #609049)
2026 to 2030	Route 122 (Vernon St) bridge replacement over I-290 (No PRC#) <b>AND</b> State-funded US Route 20 reconstruction, Shrewsbury (#610825)
2031 to 2035	I-495/Route 9 interchange reconstruction, braided ramps, Westborough/Southborough (#607701)
2036 to 2040	US Route 20/Route 122 (Grafton St) interchange reconstruction, Worcester (#603516)
2041 to 2045	Route 146/New Boston Road new grade-separated interchange, Sutton (No PRC#)
2046 to 2050	US Route 20/Route 9 interchange replacement, Northborough (No PRC#) <b>OR</b> Route 9/Route 135 interchange replacement, Westborough (No PRC#)

#### Option D3:

2023 to 2025	US Route 20 reconstruction, Charlton/Oxford (#602659) <b>AND</b> Route 9 widening, West Brookfield, Phases 1&2 (#606517 & #609049)
2026 to 2030	US Route 20/Route 122 (Grafton St) interchange reconstruction, Worcester (#603516) <b>AND</b> State-funded US Route 20 reconstruction, Shrewsbury (#610825)
2031 to 2035	Route 122 (Vernon St) bridge replacement over I-290 (No PRC#)
2036 to 2040	I-495/Route 9 interchange reconstruction, braided ramps, Westborough/Southborough (#607701)
2041 to 2045	Route 146/New Boston Road new grade-separated Interchange, Sutton (No PRC#)
2046 to 2050	US Route 20/Route 9 interchange replacement, Northborough (No PRC#) <b>OR</b> Route 9/Route 135 interchange replacement, Westborough (No PRC#)

# Stakeholder Meeting Notes

## 2050 Connections Stakeholder Meeting Notes

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### Stakeholder: The 495/MetroWest Partnership, *Leaders for Regional Prosperity*

#### Meeting Details:

Date: September 20, 2022

Location: Virtual

Topic: 2050 Connections & the 495/MetroWest Partnership Updates

Attendance: Rydant (CMRPC), Krishnan (CMRPC), Palitsch (495), Thompson (495)

#### Meeting Notes:

- The discussion was prefaced by SK with discussion about the socio-economic projections being handed down by MassDOT's contractor the Donohue Institute, that are a subject of debate. Jason noted the past challenges presented by Donohue-produced figures. The Mass Builds site maintained by MAPC was noted. Rich also provided a listing of modal projects that could be considered subregional priorities and highlighted in the next LRTP. *Following the meeting, the CMRPC staff forwarded the Partnership the 2050 Connections survey for their subsequent distribution to their full membership*
- SK provided an introduction to the new LRTP, noting the 2050 horizon year as opposed to 2040 (current plan). She mentioned warehousing & distribution and how that has changed/evolved with the pandemic.
- Rich reviewed the development schedule for the LRTP, with CMMPO endorsement anticipated in July of 2023. Opportunities to follow up on various subject matter after the meeting. Plenty of opportunity for involvement moving forward. The Partnership is a member of the CMMPO Advisory Committee that typically meets on a monthly basis. The common subset of CMRPC and Partnership communities was noted.
- Major infrastructure efforts listed by Rich to simulate the discussion:
  - I-495 @ I-90 MassPike (poised for construction)
  - I-495 @ State Route 9 (conceptual improvement plan, funding needs to be identified)
  - I-495 southbound to I-290 westbound ramp improvement (poised for construction)
  - Route 9/Route 135 interchange reconstruction, substandard geometry
  - Route 9/US 20 interchange reconstruction, narrow bridge cross-section for Route 20, nearing 100 years in age.
  - Westborough Center and the truck traffic from the garbage removal company.
  - MBTA Commuter Rail service in the area
  - Shuttle services
  - EV proliferation

- Bicycle and Pedestrian facility progression
- Regional trails such as the proposed/planned Boston-Worcester Air Line Trail (BWALT)
- Nightmares are from 2014 and should be updated but the major projects that are mentioned continue to be priorities. Some progress has been made. Jason noted that the reconstruction of I-495/I-90 MassPike interchange will soon begin. Similarly, I-495 southbound to I-290 westbound is poised for implementation. Further, US Route 20 improvements are moving forward, particularly in Shrewsbury.
- The “Big Whale”: Jason noted that I-495/Route 9 interchange needs to follow after the reconstruction of I-495 @ I-90 MassPike. The wheel needs to start squeaking so that project can follow on the tail of the MassPike interchange reconstruction.
- The Partnership is watching the Allston I-90 straightening project carefully and plans to participate in a “Mitigation Group” being formed for the project. The project has multi-modal impacts to people and freight as well as Cumberland Farms, a member of the Partnership. The preservation and improvement of transit service is important when this project is being implemented.
- The Partnership’s Strategic Plan is from 2008 and needs to be updated. This is a current topic of discussion among the Partnership leadership and Transportation Committee chairs from the public and private sectors. The Partnership wishes to define their vision for passenger rail, public transit (WRTA & MWRTA) and demand responsive service as examples. North-south transit doesn’t currently exist to serve, as an example, the Route 85 corridor in MetroWest.
- We should be preparing now for the resurgence of MBTA Commuter Rail in an attempt to avoid, deal with the problems that were prevalent during pre-pandemic conditions, such as parking. Jeremy noted that GATRA had eliminated some fixed route transit service and replaced it with demand responsive service. He questioned how does demand responsive service work effectively and efficiently, noting some examples from LA and Seattle.
- Jason noted that the 495 Partnership was asked to serve on two statewide Commissions, 1) the Commission to investigate mobility pricing and transit fare structures in an attempt to reduce congestion (and increase mid-day passenger rail ridership) as well as 2) the Commission for East-West Passenger rail to determine how it will be setup and run. What entity will be responsible for the business of running the trains? The MBTA, Amtrak, another newly established managerial group?? Stakeholder feedback will be important to both of these newly established Commissions.
- It was noted that James Nee is the administrator of the MWRTA and was a former member of the WRTA Advisory Board. Mr. Nee and Mr. Lipka, WRTA Administrator plan to meet and speak further regarding further interaction between the two transit providers. There is the potential to include the future vision and any known details for interaction between the WRTA and the MWRTA in the new LRTP. SK commented that the VIA service has been very successful and that demand-response times are in the vicinity of 15-17 minutes. It is a good suburban model for others to potentially emulate.
- SK noted the increasing importance of regional trail networks. Trails have been gaining more attention in the communities of Berlin, Northborough, Shrewsbury and Westborough. The

BWALT effort has been ongoing and the town of Westborough has completed a feasibility study. Where will the trail connect on either end to the adjoining communities of, say, Shrewsbury and Southborough.

- Jason noted the quality-of-life aspects associated with the existing and envisioned bicycle and pedestrian facilities. State bond bill discussion ensued with the Berlin example for \$500K for development of that community's segment of the Central Mass Trail.
- Jeremy noted the need for "service centers" along the long-distance trails if they are to be used for commuting, utilitarian trips. Places where a flat tire can be repaired. Other examples exist elsewhere in the nation.

# 2050 Connections Stakeholder Meeting Notes

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## Stakeholder: Central Transportation Planning Staff (CTPS)

### Meeting Details:

Date: September 22, 2022

Location: Virtual

Topic: Passenger and Freight Rail activities in the region

Attendance: Rydant (CMRPC), Sandy Johnson (CTPS)

### Meeting Notes:

- Sandy initially requested to speak earlier in the week as his colleague Jonathan Church had suggested he contact Rich Rydant to talk freight planning activities in the CMRPC region. He is considering various freight activities for the 2024 UPWP. Perhaps CMRPC and CTPS can conduct some type of study looking at trucking and truck parking along the I-495 beltway. He thought that the 495/MetroWest Partnership is interested in and would lend support to such a potential effort. Rich and Sandy will continue to periodically communicate determine what type of effort has the potential to proceed in the future program year. Rich notes that this could potentially blend with the Southeast subregion highway freight accommodation assessment study that will be pending in the future.
- The truck parking supply for long-distance truckers was discussed as well as the (possibly) near completion of the statewide MassDOT truck parking study that OTP is leading with contact person Makala Niles. It will be interesting to see where their analysis has led and where potential new parking could be located and constructed, potentially with the use of federal funds designated for this purpose through the BIL.
- Last-mile delivery and the proliferation of warehousing (Amazon and others) in the greater region was also discussed. Rich noted that at a recent statewide Transportation Program Manager's meeting the discussion occurred that perhaps the regions could compile the data concerning such developments in their respective areas so that the situation (traffic generation, popular local routes, safety, etc.) can be examined in a comprehensive manner on a statewide basis. Perhaps something can proceed in a joint fashion through the Manager's Group in coordination with MassDOT OTP.
- Sandy also asked for a contact at CSX. After the call, through email Rich provided Sandy with contact Maurice O'Connell, a regional vice president for CSX.

# 2050 Connections Stakeholder Meeting Notes

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## Stakeholder: Legislative Affairs Forum

### Meeting Details:

Date: December 6th, 2022

Location: MassWildlife Headquarters, Westborough, MA

Topic: Transportation, Active Transportation, the East-West Rail Project

Attendance: Melad (CMRPC), Robichaud (CMRPC), Graxirena (CMRPC), Gemperline (CMRPC), Pierce (CMRPC), Settles (CMRPC), Jarvis (CRMPC), Rydant (CMRPC), Krasnecky (CMRPC)

### Meeting Notes:

- Andrew Golas introduces Yahaira and Rich
- Opens the floor to guests to speak on transportation infrastructure and how that affects the local economy
- Senator Eric Lesser introduces himself and discusses how rail has impacted Worcester
  - Explain why we need the EW rail
    - Affects communities across various counties and cities
    - The single biggest problem in the state currently is housing insecurity
    - This project would create thousands of new housing units that are accessible, walkable and convenient
    - Would take thousands of cars across the roads; Pioneer Valley is currently one of the worst places in the country for asthma
    - Job opportunities EW creates
    - Not having this rail exacerbates the racial equity issues in this state; connecting these three cities could help close the racial wealth gap
    - There is funding in the Biden Infrastructure program!
    - Overall, we need high-level, focused engagement
- Tim Murray discussing commuter rail and freight rail
  - Congratulates Senator Lessor on EW rail progress
  - Transportation transforms cities; Fordham, CT for example
  - He worked with Congressman McGovern to expand from 6 commuter rails to over 20 rails
  - Another example, how Union Station was transformed
  - Increasing amount of affordable housing in Worcester
- Rich
  - Commends Senator and Tim
  - Commuter rail in Worcester constantly growing and improving



- Center platform undergoing construction to accommodate a wider variety of passengers
  - EW is the missing link as both Worcester County and Pioneer valley improve but are not connected
  - MassDOT leading statewide long range transportation plan, Beyond Mobility
    - Under development, seeking input
    - EW rail should be mentioned among competing means
  - Some projects we are doing on the regional level
    - Imagine 2050 built upon three Es
    - 2050 Connections multi-modal document
- Yahaira
  - Mentions there are many initiatives going on right now
  - Goes through 2050 Connections presentation
    - Overview of timeline
      - June 2023 draft release for public comments
    - Strategy
      - Planning, actors and implementation
    - The structure
      - i.e. - major infra projects, such as EW rail
    - Public involvement
      - We want to move away from consulting and get to a place where our communities are our partners
    - Major elements for document
      - Multiple sources of data to determine priorities
      - Regional workshops
      - Survey
      - Scenarios
      - TD populations
      - Virtual public involvement
- Congressman Jim McGovern
  - Thanks to CMRPC
  - Worcester is constantly improving
  - These conversations help us envision what we can do in the absence of funding
  - Biden's infrastructure bill is the single largest investment in public transit since Amtrack
    - We can utilize a new corridor development program
    - The language can enable DOT to have passenger rail takeoff
    - This is an opportunity to SOLVE problems... we have the money
  - Overriding message: to meet the moment, we must work in unison
    - Supporter of EW rail
- Andrew Golas and moving on to Q&A
  - The need to establish rail authority should be the first step

- What type of progress has been made to establish something like this?
  - Congressman McGovern mentions that he and Congressman Neil and some members of Western Mass legislative delegation had a meeting with Governor Baker to discuss the topic of a rail authority
    - We need to apply for this funding, with or without the official authority
    - Whoever the next Governor is, needs to hit the ground running, as we are competing for funding with other states
- Senator Eric Lesser
  - Official rail authority is the way Massot prefers for us to apply for the money, but it is not the only way
    - Massot could apply for the funds on their own
    - Our calendar is up against the July 31 deadline, with some push back from legislators
    - We need a “double-tracking” effort
      - Efforts from legislative authorities to get this group set up
      - At the same time, we need to work collaboratively with MassDOT to get application out for the Bipartisan Infrastructure bill
    - Many states have a type of rail authority for applying for funding, but many do not
- Congressman McGovern
  - Thanks Senator Lesser for advocacy for EW rail
  - The money is in it, we need to ASK FOR IT
- Andrew Golas
  - Do we foresee expanding EW rail with a Charlie system or other infrastructure to connect even more towns that do not have direct access?
    - Rich answers – examples such as shuttle service in Westboro that brings people to commuter rail funded by WRTA (Worcester Regional Transit Authority); happening elsewhere for the MBTA (Massachusetts Bay Transportation Authority)
  - Are there plans in the works to continue expanding programs adjacent to expanding regional transportation efforts, such as bike trail system?
    - Sen. Lesser – absolutely; many of these projects are eligible for the AARPA money
      - We are also increasing environmental/sustainability project budgets
    - Lesser has experience connecting bike infrastructure in Western mass
    - CPA (Community Preservation Act) funds city and towns
  - Tim Murray
    - Has experience working with local authorities to improve bike paths in Blackstone valley and surrounding areas
    - How the private sector can complement the public sector work
- McGovern

- Massachusetts is getting \$12 billion, aside from other funding we can apply for that is available nationwide
  - We need to set aside at least \$1 billion for this rail project
- Disappointed that we have not completed Blackstone Valley bikeway
  - This infra money and ARPA money needs to be used here, as well
- Andrew Golas
  - Elephant in the room question – say we apply for the money now, what is the timeline for establishing the EW rail
    - Murray – we need to be methodical between rail, freight, walkable/bikeable infra
    - McGovern – time is of the essence; we need to ASK for this money, we cannot wait
    - Lesser – authority is a red herring, focus needs to be on application
  - Impacts of zoning on this project?
    - Yahaira - The idea of transportation related development is that the stations become nodes for connection and development
      - Zoning will affect people from housing to businesses
    - Murray – recently out in Palmer, huge opportunity for development there
      - Union station is again an example of the importance of this revitalization
    - Lesser – yes, we need to incorporate zoning in EW rail planning
      - Many of the stops are already properly zoned
        - For example, Springfield
- Andrew Golas
  - Can individual communities apply for these nationwide funds?
    - Murray – that does not make sense, we need economies of scale
    - Yahaira – these are for major projects, but will affect individual communities
- Thanks, and adjourned

# 2050 Connections Stakeholder Meeting Notes

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## Stakeholder: East Brookfield and Spencer Railroad & NEAG

### Meeting Details:

Date: November 9<sup>th</sup>, 2022

Location: NEAG, Spencer, MA

Topic: Current & Future Site Operations

Attendance: Rydant (CMRPC), George Bell (NEAG), Kory Bryant (Railroad Manager)

### Meeting Notes:

- Rail giant CSX essentially requires that the EB&S RR needs to react to and be ready to receive trains of automotive carriers, sometimes late in the day, and quickly unload them and continue to get ready to return the empties the next day-essentially every day. CSX lack of true railroad freight schedule lamented.
- Major railroads will refuse certain freight through high pricing. In turn, the trucking industry will move the materials but this adds to the large and growing number of trucks on the nation's major highways.
- Rich went over a listing of nearby major highway projects that could impact the operations of the NEAG, mostly in a positive manner through increased safety and resiliency.
- Route 31 bridges (little NEAG site traffic turns north to Meadow Road & Route 31 to eventually get to I-190 through Holden in West Boylston (at the Sterling town line) destined for points north).
- Current and proposed future MassDOT Route 49 safety improvements discussed, including proposed mid-point roundabout at Putnam Road intersection.
- New modern roundabout at Route 9 and Route 49 expected to vastly improve safety at that location, greatly decreasing travel speeds through traffic calming measures.
- Route 9 repaving forthcoming in both Spencer and East Brookfield as well.
- Route 20 improvement work, both current and potential future, along the length of the highway between Auburn and Charlton and particularly Sturbridge discussed.
- Pan Am absorption in CSX. Not sure what will happen to future year distribution patterns. \$100 million needed (at least) to get notorious Pan Am trackage up to snuff. Rich mentioned the track work being conducted in the Sterling-Clinton-Lancaster area to increase train speeds while also safe guarding the Wachusett Reservoir property and adjacent watershed properties with the installation of continuous welded rail and other improvements.
- National railroad strike potential and railroad worker working conditions discussed. Railroad strike could happen due to harsh working conditions, health care concerns, and long times away from home and family.

- The incredibly high cost of new vehicles was lamented. Cars, trucks and SUVs requiring large payments of say \$1000 per month for 8 years as an example??
- Only small percentage of Electric Vehicles (EV) handled by the NEAG at this point compared to traditional combustion engine vehicles. Around 5%, certainly less than 10%.
- The producers have, at this time, numerous newly manufactured vehicles to ship. So many need to be moved to market, once they are complete and get their necessary computer chips for example.
- As such, the NEAG freight yard is as busy as ever, receiving 80-100 loaded railcars on the daily arriving trains, with no defined CSX schedule. Trains travel from the heartland where most vehicle manufacturing resides.
- Concerning the EJ community, the RR and the NEAG attempt to hire personnel from the immediate surrounding towns. Rich mentioned that Spencer has a defined EJ community. Long hours on a tough job, people need to take marijuana tests to meet the safety requirements of federal law and that has been a challenge as some people won't give it up to work there. However, at the end of the shift workers could be home with the family and not far away as is the case with other railroad jobs. Some EB&S RR staff hired away after getting all the training at the EB&S RR, taken by the big railroads CSX and GW. Perhaps there are more opportunities and larger pay but likely workers will be away from home more often.
- Mass Central RR steady, quiet; no resurrection of the North Brookfield branch anticipated as had been the case with earlier DB.

## 2050 Connections Stakeholder Meeting Notes

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### Stakeholder: General Public

#### Meeting Details:

Date: July 10<sup>th</sup>, 2023

Location: Virtual

Topic: 2050 Connections Draft Document & TIP (2023 – 2028) Amendment #8

Attendance: Krasnecky (CMRPC), Rydant (CMRPC), Krishnan (CMRPC), Graxirena (CMRPC), Jarvis (CMRPC), Ann Sullivan (MassDOT), Roberto Echevarria (RI Division of Statewide Planning), Liza Farr (RI Division of Statewide Planning), Senator Michael Moore, Scott Delaney

#### Meeting Notes:

- Meeting begins at 5:04pm, Kevin welcomes all and explains the purpose of meeting today (LRTP and TIP)
- Reviews the proposed TIP amendment regarding the addition of the Community Transit Grant Program (FTA 5310) vehicle awards
  - Five awards
  - Will affect WRTA, Uxbridge, and Millville; includes acquiring replacement vans for WRTA
- Kevin passes it over to Yahaira for a LRTP presentation
  - Reviews each chapter of the LRTP
    - Introduction
    - Background – scenario planning, planning factors, emphasis areas, resources
    - Linkages – how transportation effects the region; how the region effects transportation; reference to the CMRPC Regional Plan, IMAGINE 2050
    - Planning areas, modes and related programmatic areas
      - Overview of modes and planning areas
    - Program and Projects Priorities – how these turn in to studies, initiatives, and projects; overview of previous public meeting; overview of programmatic areas
    - Financial plan – breakdown by five programmatic areas: system management and operations, transit support, climate change and resiliency, active transportation, major infrastructure projects
    - Air quality and Greenhouse Gas Assessment
  - Plugs participants to website where draft chapters are
- No public comments were made
- Sujatha plugs next MPO meeting (July 19) and end of public comment meeting (July 12)

# 2050 Connections Stakeholder Meeting Notes

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## Stakeholder: HNTB Consultants

### Meeting Details:

Date: September 21, 2022

Location: Virtual

Topic: Passenger and Freight Rail activities in the region

Attendance: Rydant (CMRPC), Dennis Coffey (HNTB)

### Meeting Notes:

- CSX making \$100's of millions in improvements along the Pan Am network. Continuous welded rail being installed along the Worcester to Ayer mainline in vicinity of the Wachusett watershed. RJ Corman railroad contractors on the job. Some guardrail being installed in other places near the reservoir. MWRA had pointed out the need for additional safety precautions around the reservoir.
- Check out the CSX application for the Pan Am merger. It has an appendix that details the operations of CSX before and after the acquisition. NS freight will be going through Clinton in the future.
- Relayed the G&W, P&W recent interaction and learning about the number of trains on the mainline between Worcester and Providence on a weekly basis, about 20. Average train lengths estimated at 20-30 railcars on average. Based on inquires to both the GU RR's John DeWaele and ICI's Steve Cotrone. G&W Chris Guzzi had passed me to two others on staff that were inattentive to the request, that RAR later estimated.
- Governance of the East – West Passenger Rail initiative needs to be decided by the new Commission that was established as part of the recently passed state transportation bond bill. An excellent example is Northern New England Passenger Rail Association between Boston and Portland, Maine and beyond. The same will hold true concerning governance for the Northern Tier. It was suggested that a regional entity control such governance for the different lines, rather than a number of duplicate groups-that would perhaps be optimal but difficult to achieve. MassDOT would rather permit and oversee such service, as opposed to owning it. The costs can be covered by the selected operating authority. Also, Amtrak is essentially the only operator that can deal effectively with CSX (and NS) in regards to major initiatives.
- Rich talked about the “B” word. Billions. The high cost of passenger rail and need for long-term planning, infrastructure improvements, safety, equipment and operations. Major undertakings that need federal monies. The NNERI study was mentioned and the \$1-\$2-\$3 billion options-estimates that are now a number of years old. New service will take time to establish and will not likely initially serve all intermediary stops (although there being future potential).

# 2050 Connections Stakeholder Meeting Notes

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## Stakeholder: General Public

### Meeting Details:

Date: May 31<sup>st</sup>, 2023

Location: Unum Building, Worcester

Topic: 2050 Connections Priorities

Attendance: Krishnan (CMRPC), Graxirena (CMRPC), Gemperline (CMRPC), Wriggins (CMRPC), Jarvis (CMRPC), Rydant (CMRPC), Krasnecky (CMRPC), Sangkagalo (CMRPC), Mellis (CMRPC), Ann Sullivan (MassDOT), Blaine Bershad (Sterling DPW), Alex Salcedo (MassBike), JoAnne Clarke (AARP), Brandon Avery (North Brookfield Planning Board), Daniel Shur (Westborough), Jared Grigg (Spencer), Joe Bellil, Councilor Adams (Worcester)

### Meeting Notes:

- After the presentation, Yahaira opens the floor to comments and questions
- Joanne (AARP Rep & Age-Friendly Advocate), mentions that she did not see any references to local walk audits in the presentation or the list of priorities
  - She affirms that walk audits provide crucial information related to accessibility, especially for those with disabilities
  - Specifically mentions Grove St and Lincoln St walk audit
  - Mentions that Sandy (A?), Meg Coffin, Stephanie Wick (AARP), and Liz Myska are all interested in continued participation in walk audits
  - (Yahaira mentions CMRPC's work with walk audits and Liz Myska & that accessibility is on our radar)
- Joanne also mentions she is concerned with electrification considering the rising cost of electricity
- Joanne also mentions being displeased with local transit's accessibility for folks with disabilities
- Brandon (N. Brookfield) discusses how the LRTP's plans are very broad, but that needs for small towns such as N. Brookfield are very specific
  - He references needing experts to come to town to assess issues that local officials do not have the capacity to work with
  - Also mentions frustration with local and regional officials "coming and going" too often, causing a revolving door effect in terms of working relationships
- Daniel (Westborough) asks if CMRPC recommends funding sources to towns for projects even if CMRPC does not have the capacity to facilitate them on the town's behalf or if the town/project needs immediate funding
  - (Sujatha explains difference between initiatives vs. Projects)



- Daniel also mentions that he works on the MP Implementation Team in Westborough and understands how all these projects progress slowly; he references constantly needed to updating zoning and that the public wants it all to be done overnight
- Joanne asks about ARPA funding availability
- Daniel mentions that Westborough is looking for some traffic counting, specifically on local bottlenecks
  - He also asks if CMRPC incorporates emerging technology into these traffic counts (Sujatha explains we do not have software engineers but that it is on our radar)
- Blaine (Via Zoom, Sterling DPW) asks about CMRPC's coordination process with other towns and the region at large; references wanting to see more "regional exploration"
  - Blaine also mentions that Sterling is in the process of updating undersize culverts
  - Mentions some frustrating with the state and sees a need for increased streamlining of both statewide and regional plans
  - (Sujatha discusses coordination with other regions and state; also references importance of active transportation and transit in the wake of covid in response to a previous comment)
- Jared (Spencer Rep) asks what has the biggest weight in determining the LRTP priorities
  - (Yahaira responds to this question explaining it is a combination of the many factors we overview in the presentation)
- Joanne, a user of mobility assistance (walker), mentions not feeling comfortable using transit/the bus since it is hard to get on/off bus and stops are in precarious locations and walking great distances is uncomfortable
  - She lives off of Burncoat St in Worcester
- Yahaira then explains interactive activity to attendees and attendees participate for 20 minutes or so
- Alex (MassBike) advocate for an increased focus on bicycle infrastructure
- Yahaira invites attendees to MPO meetings and explains a bit about MPO Advisory Board
  - Both Joanne and Jared mention an interest in attending
  - Yahaira also mentions June 21<sup>st</sup> release of draft document
- Alex discusses how the e-bike program has changed her perspective on transportation and allowed for a new level of freedom
  - She is noticing positive changes in the City in terms of bike and ped infrastructure
  - Wishes to continue working with CMRPC
- Joanne promotes AARP walk and bike audit forms
- Baline notes that this meeting was uplifting

# 2050 Connections Stakeholder Meeting Notes

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## Stakeholder: MassBike

### Meeting Details:

Date: Fall 2022

Location: Virtual

Topic: Active Transportation

Attendance: Graxirena (CMRPC), Jarvis (CMRPC), Salcedo (MassBike)

### Meeting Notes:

- What are the existing conditions/status of transportation in the City?
  - Limited bicycle accommodations
  - Good examples of areas to bike in the city:
    - Canal District
    - Lake Avenue & around Quinsigamond Lake
  - E-Bike pilot exposing vulnerable areas in the city that need better accommodations
  - Neighborhood streets lend themselves as better avenues for bike riding
- What are some current challenges/issues with transportation? (1-2)
  - Areas of concern identified through e-bike pilot:
    - MA-9
      - Shrewsbury near White City
      - Belmont Street
    - Highland Street
    - Some roads in the city are very wide and/or have multiple lanes that could be better utilized:
      - Mill Street
      - Portions of Park Ave
      - MA-122: east-west connection to the City and rural communities in western part of region
  - Downtown is disconnected and hard to navigate as a bicyclist
    - I-290 and rail road overpasses create pinch points near downtown where separated facilities between bikes and cars may not be possible
    - Need to channel bike activity in one or two locations and use heavy signage to make it safer to use
- What is your vision for the future? (What projects, programs, or initiatives should be considered that would help bring this vision to life?)

- There needs to be a focus to finish the regional trail network while also seizing opportunities as resurfacing & other road projects are happening on-road
  - Prioritize low-hanging fruit connections in and out of the city (bridge to Shrewsbury)
  - City-wide bike parking
  - Focus multi-modal connections to job centers (business districts, schools, etc.)
- Given reasonably anticipated funding (public and private) what are the identified priorities for the future given financial constraints?
  - Policy or ordinance for new developments/developers to comply with city Complete Streets policy (bike/ped accommodations)
  - Public education about the importance of multi-modal infrastructure and land acquisition for trails and bike lanes
  - City-wide bike parking
  - Building out the bike network in the City of Worcester and surrounding communities (on and off road)

# 2050 Connections Stakeholder Meeting Notes

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## Stakeholder: MassDOT Highway Division Districts #2 & #3 & MassDOT Office of Transportation Planning (OTP)

### Meeting Details:

Date: November 15<sup>th</sup>, 2022

Location: Virtual

Topic: 2050 Connections

Attendance: Rydant (CMRPC), Graxirena (CMRPC), Krasnecky (CMRPC), Krishnan (CMRPC), Amaral (MassDOT), Lorion (MassDOT), Sullivan (MassDOT), Bradbury (MassDOT), Klem (MassDOT OTP), Krevat (MassDOT OTP)

### Meeting Notes:

- Sujatha provided an overview for the meeting, particularly targeting MassDOT priorities as there are numerous identified needs from both the recent public process and earlier LRTP efforts. CMMPO staff is looking to verify MI projects in the current plan and what time parameters they may either remain or must move due to financial constraint.
- Long-awaited New Braintree project for Ravine Road and Central Turnpike should be advertised 5/20/23. Two design paths, one roadway and another for the project's two major culverts. April 2023 PS&E anticipated D-2 staff indicated.
- Ann Sullivan noted that the town of Princeton did contact District #3 regarding a possible project on the northern part of Route 140 towards Westminster. The current design they discussed would likely not move forward. As for the Blackstone Bikeway project, District #3 has not received any updates from DCR regarding the redesigning of the project according to MassDOT guidelines. In regards to the Route 9 (Phase III) project in West Brookfield, Daryl Amaral said there is no status update and the project does not currently have an advertising date. Sujatha noted that the town was not awarded a MassWorks grant for funding the design of the project.
- Ann Sullivan indicated that 25% design for Route 20 in Shrewsbury is due 6/2023. At that time more will be known concerning the estimated cost as compared to the monies available on the TIP. FY 2026 programming seems adequate, at least at this time.
- Sujatha and Rich inquired about the status of the I-495 Interchange with Route 9. A known priority, when will funding be identified? Barry Lorion commented that it will be dictated/based on the condition of the bridges and when in fact they will need to be replaced. Not beyond the conceptual plan ("braided ramps") that was included in the earlier planning study (*RAR had participated on the technical advisory group established for that study effort*). It will be determined if the 2025-2029 band is still reasonable for this MI project.

- It was generally agreed that the “super” signalized intersection of Route 146 and Boston Road in Sutton will in fact reach a point where volumes will overwhelm the signal, thus necessitating the need for grade separation that has long been envisioned for this location, the last traffic signal on the Massachusetts stretch of the roadway. RI is currently working to eliminate the last signal in that state along Route 146 in North Smithfield. In calendar 2023, Barry indicated that MassDOT will have a consultant conduct a planning study on that segment of Route 146 to determine the likely future year timing for grade separation.
- Continuing to look at the MI bands from the current LRTP, US Route 20 through Charlton City was brought up and the lane drop that contributes to congested conditions at this location, especially when the MassPike has issues and traffic diverts to the essentially parallel US Route 20 corridor. Barry indicated that widening of the Pike between I-84 and I-290/I-395 is *not* an item of discussion at this time. Improvements can be made at the Auburn interchange from I-290 westbound to I-90 westbound where five lanes drop to three and can lead to miles of congestion.
- MassDOT is having a consultant look at the section of US Route 20 between Route 49 and I-84 interchange. One would anticipate a set of suggested recommendations from such an effort. Back to Charlton City, perhaps traffic signal modification as lane reassignments could alleviate congestion through that bottleneck.
- In Northborough, the bridge condition at the US Route 20/Route 9 interchange will similarly dictate when that structure should be replaced. It won’t be replaced simply due to existing (and documented) capacity constraints. Elsewhere, D-3 hasn’t been approached by Westborough about the Route 9/Route 135 interchange. In Worcester, the interchange of US Route 20 with Route 122 has been a long-awaited project (redesigns were considered as early as 2003) that will need to be addressed. The site is constrained and would require fairly significant land takings. This would provide for an improved four-lane cross-section for Route 20 and alleviate reoccurring flooding. The proximity of the MBTA bridge is also an identified, significant constraint. The project will be costly as well, in the tens of millions of dollars.
- D-3 is interested in the segment of Route 9 in Shrewsbury and Westborough and what future improvements may be warranted. Not so concerned about the remaining two lane segments of US Route 20 in Auburn. Major project commencing in Oxford/Charlton on US Route 20. The “missing link” on Route 20, that segment which hasn’t received a lot of attention in comparison to others, is the segment between Route 169 and Route 49 where a number of tremendous warehouses are being built and will eventually come on-line generating huge truck volumes. Sujatha had commented that still other warehouses are closing in different places, so that the overall trip distribution will continue to both grow and shift. Sujatha mentioned, in response to inquiry from Ann, that it would likely be an OTP-led effort with the regions participating to assess the overall impacts from the distribution centers on a statewide basis - the respective trip generation and distribution. Impacts could then be assessed and mitigation solutions formularized. Sujatha mentioned the work CMRPC staff conducted for Northborough officials to assess the impacts of an Amazon warehouse in that host community in the Bartlett Street area of town.

# 2050 Connections Stakeholder Meeting Notes

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## Stakeholder: Regional Environmental Stakeholders

### Meeting Details:

Date: November 18, 2022

Location: Virtual

Topic: Regional Sustainability for Transportation Planning and 2050 Connections

Attendance: Rydant (CMRPC), Graxirena (CMRPC), Blais (CMRPC), Krasnecky (CMRPC), Jarvis (CMRPC), Phil Gott (Town of Princeton, Environmental Action Committee), Christine Tosti (WRTA User, Advocate for Individuals with Disabilities), JoAnne Kasper-Dunne (MassDEP)

### Meeting Notes:

- On the morning of Friday, November 18<sup>th</sup>, five CMRPC Transportation staff members met with three Environmental Stakeholders to discuss the Long-Range Transportation Plan (LRTP) and ways to make the plan more sustainable and overall, more environmentally conscious. The transportation staff members in attendance included Yahaira Graxirena, Rich Rydant, Kevin Krasnecky, Zachary Blais, and Greer Jarvis. The Environmental Stakeholders in attendance included Massachusetts DEP's JoAnne Kasper-Dunne, the town of Princeton's Environmental Action Committee's Phil Gott, and former Regional Environmental Council's staff member Christine Tosti.
- At 10:05 a.m., attendees of this virtual zoom meeting conducted round-robin introductions, which was promptly followed by the CMRPC's LRTP presentation. CMRPC's Rich Rydant led everyone through a brief overview of the CMRPC's work and relevant region, as well as our two long-range projects that are currently in the works, Imagine 2050 and the LRTP, 2050 Connections. Moreover, Rydant went into more detail about the purpose and development of 2050 Connections.
- Next in the presentation, Yahaira Graxirena overviewed the different modes of transportation and planning areas that are taken into consideration under the LRTP. Graxirena went into further detail about each of the five designated planning areas: safety planning, congestion management, asset management, emerging technologies, and environmental planning.
- Before 10:30 a.m., Zack Blais began presenting about the work CMRPC does to address climate change. Specifically, Blais outlined how changing weather patterns, like rising temperatures and heavy rain, affect our roadways. Blais then highlighted some of the work that is done to combat these challenges, like CMRPC's Culvert Assessment Program and other methods for stormwater management, environmental consultation, and the MVP (Municipal Vulnerability Preparedness) Grant Programs. Blais also mentioned CMRPC's decarbonization efforts, especially through the implementation of electric vehicle charging stations.

- Finally, Kevin Krasnecky presented information about the Transportation Improvement Program (TIP), the funding program that specifically addresses Congestion Mitigation and Air Quality (CMAQ). Krasnecky overviewed the projects from the past five years that CMRPC has helped obtain funding for through the TIP and how communities may become eligible for this type of funding. Furthermore, Krasnecky summarized the other funding sources for environmentally related transportation projects, such as the Bipartisan Infrastructure Law (BIL) and Statewide funding programs, like MassDOT's Complete Streets.
- At 10:45 a.m., CMRPC Transportation Staff concluded their presentation and began the open discussion portion of the meeting. Greer Jarvis asked the stakeholders three different questions to prompt a variety of conversations and potential feedback. The first question Jarvis asked attendees was "what is the most pressing environmental issue or challenge related to transportation today?" To this question, Christine Tosti replied that as a frequent user of the WRTA, she does not think that the way the buses come in, park, and depart from the station is very efficient. She said that she finds herself watching buses loop around the station various times just to pull into a spot that had already been available. JoAnne Kasper-Dunne added that there is a lack of connectivity across the region in terms of public transit, and that if we really want people to give up their cars, we must make it convenient for them to do so. Later, Phil Gott mentioned that inconsistent transit schedules in different communities throughout the region further deters ridership.
- Moreover, Kasper-Dunne mentioned that sidewalks where she lives in West Boylston have been destroyed through the process of sewer maintenance, and that she notices unsuitable sidewalks in other communities, as well. Tosti added to this discussion that poor sidewalk conditions make them inaccessible to wheelchair users and others who live with disabilities. Furthermore, these attendees would like to see vast infrastructure improvements, specifically for pedestrians, bus stops, and even the internet. Phil Gott mentioned that publicly accessible electric bicycles would be beneficial in his town, Princeton, and potentially many other communities, as well as investing in more modern internet infrastructure.
- The next question Jarvis posed to the group was "Do you have an environmental project, service or study that you would like to pursue to improve transportation if the financial resources became available?" In response to this question, Gott brought up the point that his town, Princeton, does not have enough people or time to carry-out the requirements for some of the available funding opportunities, such as Green Communities and MVP. In fact, when pursuing the MVP funding for Princeton, the project management costs exceeded the cost of the entire project. He would like to see these opportunities become even more accessible, especially for smaller communities like Princeton.
- Tosti circled back to the original question and mentioned she is interested in how much people are benefiting from the fare-free WRTA and how much that has changed its ridership. Krasnecky responded to this question, saying ridership has gone back up to pre-pandemic level. Tosti also mentioned she would love to see more electric buses with the WRTA.
- Kasper-Dunne brought up the point that although decarbonization is important, people are not going to be interested in coming into Worcester if there is nowhere to park. Gott mentioned

that he noticed there is only parking available in downtown Worcester, and that parking is arduous surrounding downtown. Gott believes this has a negative impact on bus ridership, as people would rather park on the outside of the city and bus in than vice versa.

- Lastly, Jarvis asked attendees “what is your transportation-related environmental big idea?” To this, Kasper-Dunne promptly responded that she would like to see trains used more to transport people as well as goods. Gott echoed this statement, saying rail is the most efficient method of transportation, when the rail is loaded to capacity. Tosti added that she would like to see service animals be more accommodated for on public transit, as unwelcoming transit employees deter a lot of riders who use public transit as their main mode of transportation.
- At 11:07 a.m., the open discussion wrapped up and CMRPC staff thanked their stakeholders. The stakeholders were also invited to attend the CMRPC Legislative Affairs Forum on December 6<sup>th</sup> to talk specifically about trails.



# 2050 Connections Stakeholder Meeting Notes

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## Stakeholder: RH White Construction Company

### Meeting Details:

Date: July 27, 2022

Location: Virtual

Topic: Regional Economic Development & Transportation Planning

Attendance: Rydant (CMRPC), Pierce (CMRPC), Salwa (CMRPC), Devaney (RH White), Towle (RH White), McCarthy (RH White)

### Meeting Notes:

- Jim McCarthy is president and CEO of the RH White Company. He began the meeting noting the company's attention to safety-on the job and at the home, etc. Use of seat belts being an example. Another, taking proper precautions when working in extreme heat.
- Considered a "discovery meeting as they meet with other agencies in the greater region. This is the fourth generation that is running the company presently. They are looking out so that the company last another 100 years by evolving for the needs of the customer. They are interested in what infrastructure needs that they can help implement in the coming years.
- Staff emphasized that the CMMPO's LRTP looks well into the future: 25 years plus. Earlier LRTPs sought improvements for the US Route 20 corridor (Auburn, Charlton, Oxford, Shrewsbury) that are now being implemented over 40 years later. CMRPC staff also provided a brief overview of the CMMPO purpose and structure.
- Kerrie spoke on a range of topics and Janet Pierce noted the Municipal Vulnerability Preparedness (MVP) program and the need for the communities to identify and prioritized needs for resiliency, etc. The proliferation of EVs was also mentioned and the CMRPC "dashboard" regarding same was noted.
- Rich noted the "Highway Freight Accommodation Assessment" study series that staff has embarked on and continues to conduct throughout the region in a systematic manner. Two are complete and another is pending at this time. Parking for large commercial vehicles is a concern that needs to be addressed in this consuming part of the nation.
- Freight rail was also mentioned. RH White had worked with the Grafton & Upton Railroad to construct an intermodal facility for the railroad as summarized on one of the attached "Project Sheets". Rich noted that CSX plans \$100's of millions of improvements along the recently acquired Pan Am Railways network in Massachusetts, New Hampshire, New York and Maine.
- **RICH R:** Perhaps seeking an update of the 2015-ish review of industrial sites that could be serviced by CSX last-mile delivery services, based out of the Worcester Franklin Street Intermodal Facility. This earlier effort received funding from the WRCC with the oversight of

both Director Pierce and Chamber President Tim Murray. *(An envisioned phase 2 was never pursued due to funding constraints.)*

# 2050 Connections Stakeholder Meeting Notes

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## Stakeholder: Town of Rutland Select Board

### Meeting Details:

Date: November 1<sup>st</sup>, 2022

Location: Town Library, Rutland, MA

Topic: Transportation & Regional Infrastructure

Attendance: Rydant (CMRPC), Trevor (CMRPC), Pierce (CMRPC), Rutland Select Board members, other town officials and employees

### Meeting Notes:

- Concerns about safety on most state, or MassDOT maintained highways, particularly the intersection of Route 122A and Pleasantdale Road.
- Noted were the number and length of gravel roads - ten miles - in Rutland and the northern part of the region and the associated impact on transportation policy - ***not listed in the presentation***. The gravel roads are used by school buses.
- Concerns about the lack of EV charging stations in Rutland and the resulting impacts on sustainability and resiliency towards future local energy policy. Range anxiety was raised as a concern. Where will the charging stations be installed? Businesses, farms, Rail Trail parking areas??
- Recurring mention of the non-existence of the once envisioned Route 49 extension between Spencer and Gardner, which may have resulted in a lack of interconnectivity between the rural small towns in this part of the planning region. Large trucks use the secondary roads seeking more direct routing.
- Town engineer Joe Buckley indicated that MassDOT is slow to respond to town concerns on the state-owned and maintained highways in the community. Further, the town, as indicated by Joe Buckley, has a number of hired consultants conducting different tasks and providing a range of services to the town. RSA at Route 122A/Pleasantdale Road mentioned.
- A major infrastructure concern that probably needs more discussion is the eventual maximum capacity of the sewer line from Rutland through Holden and into Worcester. It will reach maximum capacity eventually and the relationship between the town and the city is tense when it comes to sewer issues and the overall capacity of the regional sewage treatment plant.
- Rich went through the presentation of the LRTP and asked the Board members to identify any needs and/or programs that had not been mentioned and/or would be a local priority for consideration in the development of the LRTP document.

- Perhaps public transit shuttle service from Rutland to events in the city of Worcester (example of the Canal District) would be beneficial for a range of reasons. Look into the potential for Micro-transit to Worcester.
- Rail trail implementation and growth in usage in the area was noted. (Long-term investment of time and labor by the Wachusett Greenways group.)
- Route 56 TIP project mentioned, need for signal at Route 122A/Route 56 southern intersection lamented. Perhaps opportunity for future modern roundabout. Staff looked at northern Route 122A/Route 56 intersection a number of years ago. Flashing beacon reinstalled at that time. Still location of concern of local officials due to the restricted sight distance due to highway grades at the top of the hill.

# 2050 Connections Stakeholder Meeting Notes

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## Stakeholder: WalkBike Worcester

### Meeting Details:

Date: Fall 2022

Location: Virtual

Topic: Active Transportation & 2050 Connections

Attendance: Graxirena (CMRPC), Jarvis (CMRPC), Karin Valentine Goins (WalkBike)

### Meeting Notes:

- Concerns about safety on most state, or MassDOT maintained highways, particularly the intersection of Route 122A and Pleasantdale Road.
- Noted were the number and length of gravel roads - ten miles - in Rutland and the northern part of the region and the associated impact on transportation policy - ***not listed in the presentation.*** The gravel roads are used by school buses.
- Concerns about the lack of EV charging stations in Rutland and the resulting impacts on sustainability and resiliency towards future local energy policy. Range anxiety was raised as a concern. Where will the charging stations be installed? Businesses, farms, Rail Trail parking areas??
- Recurring mention of the non-existence of the once envisioned Route 49 extension between Spencer and Gardner, which may have resulted in a lack of interconnectivity between the rural small towns in this part of the planning region. Large trucks use the secondary roads seeking more direct routing.
- Town engineer Joe Buckley indicated that MassDOT is slow to respond to town concerns on the state-owned and maintained highways in the community. Further, the town, as indicated by Joe Buckley, has a number of hired consultants conducting different tasks and providing a range of services to the town. RSA at Route 122A/Pleasantdale Road mentioned.
- A major infrastructure concern that probably needs more discussion is the eventual maximum capacity of the sewer line from Rutland through Holden and into Worcester. It will reach maximum capacity eventually and the relationship between the town and the city is tense when it comes to sewer issues and the overall capacity of the regional sewage treatment plant.
- Rich went through the presentation of the LRTP and asked the Board members to identify any needs and/or programs that had not been mentioned and/or would be a local priority for consideration in the development of the LRTP document.
- Perhaps public transit shuttle service from Rutland to events in the city of Worcester (example of the Canal District) would be beneficial for a range of reasons. Look into the potential for Micro-transit to Worcester.

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# 2050 Connections Stakeholder Meeting Notes

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## Stakeholder: Worcester Accessibility Commission

### Meeting Details:

Date: Fall 2022

Location: Virtual

Topic: Accessibility & 2050 Connections

Attendance: Graxirena (CMRPC), Worcester Accessibility Commission Members

### Meeting Notes:

- What are the existing conditions/status of accessible transportation in the City? Are there areas that represent good examples of ADA compliance? What areas are the worst?
  - WRTA notoriously late
  - No paratransit transfers between RTA's (i.e., between WRTA and MWRTA)
  - Accessibility applications (Blind Access & TAP Access) are a barrier for transit users including for use of the MBTA train, and transferring between RTA's
  - Multiple applications for each RTA
  - Poor sidewalks throughout the City
  - Chandler Street to Park Ave
  - Lacks walkability (dichotomy between drivers & walkers – not safe for pedestrians)
  - Inconsistency in the pedestrian network and pedestrian facilities (HAWK, RRFB's – some don't work or do not have sound, etc.)
- What are some current challenges/issues with transportation accessibility? (1-2)
  - Need 1 paratransit application for the entire state, for all transportation
  - Universal transportation car similar to a handicap placard that can be transferable between RTA's and transit modes
  - Greater security presence on T
  - Need for a statewide transportation service with no boundaries that better accommodates ADA needs
  - Home health aides would benefit from a transportation voucher to get to their clients especially when public transportation is not available.
  - Traveling by air is difficult for people with disabilities. Airports and airlines need to be more sensitive to the needs.
- What is your vision for the future? (What projects, programs, or initiatives should be considered that would help bring this vision to life?)
  - RIDE (Gloucester -> Brockton)
  - Continue fare-free in WRTA

- Phoenix Arizona walkability & smart growth for a connected a walkable environment (example)
- Given reasonably anticipated funding (public and private) what are the identified priorities for the future given financial constraints?
- Restructuring of the RTA's
- Statewide comprehensive transit network that greater ADA accommodations



# 2050 Connections Stakeholder Meeting Notes

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## Stakeholder: Worcester Department of Public Works & Parks

### Meeting Details:

Date: August 5<sup>th</sup>, 2022

Location: Worcester DPW Conference Room

Topic: Infrastructure & 2050 Connections, TIP, and other regional efforts

Attendance: Rydant (CMRPC), Graxirena (CMRPC), Krishnan (CMRPC), Krasnecky (CMRPC), Salwa (CMRPC), Jay Fink (City of Worcester), Steve Rolle (City of Worcester), and other municipal officials

### Meeting Notes:

- SK covered regional partnerships and efforts. It was noted that Steve Rolle will lead the City's new Mobility & Transportation Department.
- The underway Worcester City Master Plan effort was noted along with the currently underway MassDOT "Beyond Mobility" statewide transportation plan development effort. Equity noted as an integral part of the long-range planning process.
- Rich read off a listing of communities in the region that have either pending or potential TIP projects that the CMMPO could consider for programming during the next TIP funding round. He encouraged the city to consider potential TIP projects that could both utilize available, increased future year funding but also fill potential voids of unencumbered funding in earlier years if the city has the ability to move rapidly. The Route 12 example in Auburn when Bill was town engineer was referenced.
- Mill Street multi-faceted effort envisioned. Roadway narrowing for traffic calming and the construction of a parallel multi-use pathway within the existing, wide right-of-way. Lengthy section of roadway, would be costly project.
- Rich also mentioned if there are any potential study corridors in the city where a Corridor Profile style study could be useful, with the Southbridge Street effort being referenced.
- The City's new Mobility & Transportation Department will work in planning, project development, and parking.
- CMRPC can broker a meeting with MassDOT and the City of Worcester twice a year to go over the status of projects.
- Potential trail connectivity with the established Wachusett Greenways network to the north.
- The following potential projects were noted by the group:
  - Mill Street corridor – new concept for developing the area, pavement reconstruction, green infrastructure, recreation & open space, and bicycle lanes.
  - US Route 20 in Worcester – potential Major Infrastructure project.

- Vernon Street bridge replacement over I-290. The BIL-generated Reconnecting Communities effort was noted and the city is ready to participate in potentially gaining federal design dollars for this critical linkage.
- Safety issues were noted involving vehicle crashes at Southbridge Street and the Worcester Fire Department Station; also, vehicle crashes along Lake Avenue adjacent to UMass and Lake Quinsigamond.

# 2050 Connections Stakeholder Meeting Notes

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## Stakeholder: General Public

### Meeting Details:

Date: October 5<sup>th</sup>, 2022

Location: WRTA Hub at Union Station

Topic: Public Transit & 2050 Connections

Attendance: Rydant (CMRPC), Sangkagalo (CMRPC), Mellis (CMRPC)

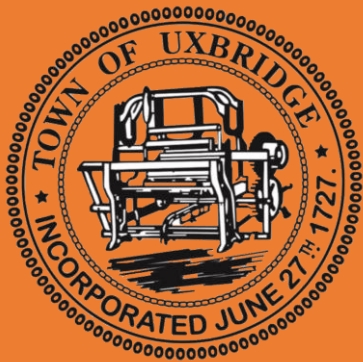
### Meeting Notes:

- A number of persons took the paper survey and said they would drop it off at the customer service desk when complete-Nahrin will check with Nick B to see if any had been subsequently turned in.
- Person approached indicated only use service once a week and indicated that it has been “fine” for the limited usage.
- Man took an English language paper survey.
- Person scanned the English language survey code.
- Person took a Spanish language paper survey.
- Person suggested that people would pay 50 cents a ride for a cleaner and safer bus system. The buses are not hygienic and are dirty. In 12 years as a rider this person has observed much on the system. Usually, no trouble with the drivers or other passengers. The Hub has throw up and is unclean. Bacteria was mentioned. New users don’t appear to be as respectful of the buses.
- I have sat in pee a number of times.
- “No Complains,” said this person.
- The 26 is on time. The operator will drive by you frequently. 23 & 26 both drive by me, especially on Sundays (a person with disabilities and in a motorized wheelchair). By no charging a fare, “riff raff” now ride the buses. *(Editor: When asked where he was bypassed, staff suspected in the area of Hahnemann Hospital.)*
- Person took the paper survey in the English language.
- When asked how to improve the bus service, this person indicated “no comment”.
- Opiate addict overdoses in the Hub bathrooms, now closed as is the inside waiting area. The WRTA has a challenge with the potential for death, vandalism, and over all Hub safety. There are no camaras in the Hub area. The police are over at Union Station, not here at the Hub. There are cameras on the buses that could be viewed if there is an incident but it appears that may often not be the case when something happens. Bus 12 was given as an example.
- Same person continued, the starter in the booth is of little help. There are arguments between the drivers and the customers. The drivers will “blow right by you”. The recordings could be

used as evidence. Leadership should realize that the service is for the customers. (*Editor: RAR recollected FTA training video that focused on calming tense customers and situations beyond driver & passenger control*). The driver's job is to serve the customers. What are the applicable laws? Worcester calls itself a city but it is just "Big Town". Homelessness is a problem. There must be 1200-1300 persons camping in a tent city off of Lincoln Street. You don't hear about that. They build a stadium for \$33 million that can only be used 8 months of the year. The city has to pay all the maintenance and the electricity. Communication is key. Stadium versus homelessness. Net of Compassion service in the city noted and complimented. The officials need to be embarrassed on TV to bring about change. Teen pregnancy was also mentioned in some context. (*Editor: Talked for about 15 minutes at least.*)

- Bus cancellations noted as an issue by this person. Route 56 (?) mentioned. Middle of day, Chandler Street and back. One bus should be along that stretch instead of 5 or 6 buses all bunched up inefficiently.
- This person wanted a clean bathroom available at the Hub. The person wanted the cops to arrive when called. They also wanted face masks available in the bathrooms (if open) or elsewhere as they think that masks will again be mandatory on transit with another COVID outbreak.
- "Can the drivers wait for the passengers to be seated before taking off at 100 MPH??"
- Stabbing on bus on Route 26. Route 23 also mentioned. The drivers miss stops on these routes. The person in a wheelchair indicated that they essentially can't move quickly.
- "One needs to use the Union Station bathrooms that are a walk back and forth and then one risks missing the bus and then having to wait for 30-40 minutes in the cold with a child. Ridiculous."
- Too many persons "hanging out" at the Hub.
- Better indoor waiting facilities are necessary.
- Drivers "slam the door and drive by" waiting passengers.
- Staff observed a man plodding through the Hub indicating that the driver "took off". He yelled profanities that he was upset (PO-ed), the "F-ing WRTA" and the at the "busses suck". Later returning, surprising calm, he told staff that the buses need to run every 15 minutes in the city for the service to be meaningful and used more.
- Drivers will not wait at the stop even if they see you in the mirror struggling to get to the bus and motioning/waving to please wait.
- Route 14 operator accused of driving by waiting passenger at bus stop indicated by this person.
- This person indicated that they would like the service kept free but they should also hire more drivers.
- Why (*was it observed by this person that there*) were three (3) buses stacked up on Burncoat Street?? (*Editor: Headways and interlined routes were noted to this person.*) This woman indicated that there are discrepancies between the printed schedules and the actual timing of bus service-sometimes they don't match.
- The climate control in the buses should be sensitive to the prevailing weather-often times too hot in the buses.

- Person liked fare free service and asked when that will end. *(Editor: Next June 2023 perhaps.)*
- The interlined fixed bus routes along Worcester's South Main Street were noted. In the middle of the winter and then say there is a blizzard. "Management sucks." No one can find out the location of where Bus 10 is?? Turned out that it was broken down. The send another one- "can't do that" was the response. What is the alternative when a bus is cancelled and passengers are waiting for a bus that isn't going to show up??
- The technology in electronic communications should allow the drivers to speak with the dispatchers and address/answer customer inquiries. Has the vehicle broken down? When will another be along?
- This person indicated buses queued at the Hub and there being no drivers to operate them. How many people are assigned to customer service was questioned?? Management and workers??
- Lack of seating at the Hub is problematic.
- Hub is "now isolated". No Dunkin Donuts no more. They vacated and left dangerous hanging wires where they were located. When the bathrooms were open, they would close at 8 PM. Service goes until 11 PM? It's cold outside. The Hub has an internal waiting room that is locked- a shelter that can't be used. This person worked food service on the Southbridge finger route. 5 AM to 12 PM. Poor schedule in order to work a full shift.



**TOWN OF UXBRIDGE**

**September 13, 2022**

# **TRANSPORTATION ROUNDTABLE FINDINGS REPORT**

**EDCP**  
Version 1.1

# TRANSPORTATION ROUNDTABLE FINDINGS REPORT

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## OVERVIEW

On Tuesday September 13, 2022 a Roundtable meeting involving all Town Department Heads and staff members of the Central Massachusetts Regional Planning Commission (CMRPC) was held. The people that participated included:

### Town

Michael Baldassarre Schools	Tom Dion Fire	Jessica Messer Treasurer/Collector
Matthew Bobola Accountant	Joe Fitzpatrick Building	Ken O'Brien Assessor
Carl Bradshaw Veterans Services	Michael Gallerani EDCP	Emily Petro Conservation
Bruce Burak Facilities	Erin Hightower Health	Chris Powloka Library
Timothy Burke Police	Paul Hutnak DPW	Benn Sherman DPW

### CMRPC

Yahaira Graxirena	Janet Pierce	Richard Rydant
Sujatha Krishnan	Faye Rhault	Trish Settles
Connie Mellis	Connor Robichaud	

The Roundtable served as the precursor for a Regional Transportation and Infrastructure Planning meeting scheduled for Thursday September 27, 2022. The meeting, to be hosted by the staff of CMRC (many of whom participated in the subject Roundtable) will shape the agenda for State and Federal funding programs.

The following Findings report will speak to the discussions and observations from the Roundtable. They are in no particular order, and have been segregated according to function (Senior Services, infrastructure, local transportation, etc).

# TRANSPORTATION ROUNDTABLE FINDINGS REPORT

## TRANSPORTATION

### *COMMUNITY TRANSPORTATION*

There is a need for an inter-modal transportation hub that can service the needs of seniors, youth, Veterans, and others with limited transportation options. Such a hub would offer EV charging stations, bike racks and lockers, shared bikes, access to the proposed bike trail and in close proximity to Main Street.

Ideally a portion of the proposed Municipal Campus parking area could be designated as well as in the core Main Street area (21 South Main, the would be former Senior center, or the Public Library).

### *EV CHARGING STATIONS*

MA Dot continues to develop regulations; CMRPC will keep the Town informed of regulations and subsequent changes.

Research needs to be conducted regarding local bylaws that govern public access EV Stations.

The Town will draft a policy and procedure regarding the siting of EV Stations at public buildings and as part of public (Town-owned) parking areas.

### *SENIOR SERVICES*

Senior Center/Council on Aging needs to develop a strategy for expanding transportation services, especially for individuals with disabilities. The Town's age 55 plus population is projected to continue to grow, reaching 70% by mid-century (2050). In comparison, the national average (of 55 +) is projected (in 2050) to be 27%.

### *VETERANS*

There is a need for transportation services for Veterans to and from medical appointments in Worcester. The Town of Blackstone is seeking a similar service – the possibility for a regional approach exists. Tri-Valley provides mobility management for the towns of Grafton, Hopedale, Mendon and Blackstone.

UPDATE: Veterans Services Director Carl Bradshaw, confirmed with Tri-Valley that they will provide transportation to Uxbridge Veterans. Under the new contract with DVS, they have contracted with two companies to provide the transportation.



# TRANSPORTATION ROUNDTABLE FINDINGS REPORT

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## *SCHOOLS*

Safe Routes to Schools – a sidewalk program must be developed and enforced.

Vendetti Transportation is under contract agreement with the Uxbridge Public Schools To provide student transportation.

What is needed to transport students from UHS to the Public Library each day (or designated days)?

The lack of sidewalks along Quaker Highway are an issue. A serious accident involving a UHS student occurred during the past year.

A traffic bottleneck occurs during morning and afternoon in the rea of UHS. In addition, the school traffic needs to be addressed in the Emergency Evacuation Plan.

A question was raised about the possibility of developing a helipad at the High School for Emergency Medical Services. The current logistics precludes such development.

The emergency egress and public safety access at UHS scenario was raised. CMRPC will work with the School Department and Public Safety to develop a strategy for the development of a roadway at the rear of the property that can provide for students and staff egress as well as emergency vehicle access.

## *BIKE TRAIL*

CMRPC will provide data that is needed to create an overview and strategy for the proposed Bike Trail. It is suggested that Bob Contursi reach out to Dani at CMRPC to coordinate.

## *BIKE LANES*

There is an ongoing issue with the North Main Street Bike Lanes, specifically in the area of Hannaford's. Collisions have occurred.

## *TRUCK TRAFFIC*

The growing volume of large commercial truck traffic, particularly along the Main Street corridor is an issue. The impacts on traffic, noise, and the overall sense of place of Main Street, particularly the core area needs to be addressed.

- GPS companies are routing trucks through the Main Street; alternative routes do exist.
- Trucks have an issue at the North and South Main Streets intersection with Douglas Street due to the offset.

# TRANSPORTATION ROUNDTABLE FINDINGS REPORT

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- The truck traffic data (for Uxbridge) needs to be reviewed.
- Tolls in Rhode Island are resulting in trucks seeking alternative routes that bring them through Uxbridge.

A few days after this meeting, the Rhode Island tolls were handed a staggering defeat in Federal Court. According to an article in the Providence Journal dated Sept 21, 2022, the system was essentially ruled as unconstitutional. RIDOT has covered all of the signage near the toll systems. The incentive for trucks to jump off Route 146 to avoid tolls has been removed.

- The level of truck traffic and the trucks queuing up on Route 146 has become problematic.

The Uxbridge Police Department addressed the situation by requesting that the weigh station be opened for the trucks in order to relieve the pressure and unsafe conditions.

- There is no facilities or amenities (rest rooms, food, etc.) for truck drivers.

## ***TRAFFIC (IN GENERAL)***

There is an increase in traffic of all types due to the new normal following the pandemic. Route 146 is especially heavily travelled.

## ***MUNICIPAL FLEET***

The Town needs to develop a strategy to transition the Town vehicle fleet to all or near-all electric by a time certain.

The Town's Inspectional Services (particularly the Board of Health) needs a dedicated vehicle to move equipment and supplies.

## ***RAILROAD***

Explore the possibilities of the rail to Providence be used as a "commuter" rail. Currently the rail is used three times per day.

## ***GENERAL***

There is a need for all abilities transportation for people to get to and from medical facilities and clinics.

# TRANSPORTATION ROUNDTABLE FINDINGS REPORT

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## ***REGIONAL TRANSPORTATION MEETING***

Uxbridge could host a regional transportation for the Blackstone Valley communities in order to explore potential collaborations, inter-community transportation systems, strategies for EV stations, and the ongoing and growing issue of truck traffic.

Congressman McGovern and the State delegation, as well as MA Dot will be invited to participate.

## ***TRANSPORTATION SURVEY***

The Town may conduct a survey of local residents to gauge the interest in a local transportation system/service, as well as seeking input regarding other transportation related matters. A tax bill (December) insert will serve to inform residents and direct them to the survey, which will be available electronically.

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## INFRASTRUCTURE

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### ***BLACKSTONE PEDESTRIAN BRIDGE***

Estimated cost: \$10 million.

Status: Design phase

Agency: DCR

Issues: Trail should be included in the SCORP.

- Right-of-way

- Preferred alignment (need to commit to an alignment/feasibility that is not along the railroad line.

### ***FEMA – PDM (PRE DISASTER MITIGATION GRANT)***

Reach out to FEMA –Region 1 to discuss how Uxbridge can qualify for PDM support.

The Pre-Disaster Mitigation (PDM) Grant program makes federal funds available to state, local, tribal and territorial governments to plan for and implement sustainable cost-effective measures designed to reduce the risk to individuals and property from future natural hazards, while also reducing reliance on federal funding from future disasters. The program is authorized by Section 203 of the [Stafford Act](#).

# TRANSPORTATION ROUNDTABLE FINDINGS REPORT

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## ***EMERGENCY ACCESS***

Conduct a survey to determine what roads and bridges pose a restriction for adequate public safety response.

Develop a strategy for the needed improvements to eliminate vulnerabilities.

## ***SHOVEL READY PROJECTS***

Request a regional discussion about grants and other funding for shovel ready projects.

## ***BROADBAND***

Mass Broadband Institute (MBI) has monies available to help communities improve broadband.

MBI's mission is to make affordable high-speed Internet available to all homes, businesses, schools, libraries, medical facilities, government offices, and other public places across the Commonwealth.

The Commonwealth created the MBI as a division of the MassTech Collaborative when signing the Broadband Act into law in August 2008.

## ***PARKING***

Desire for a parking study parking study in the core are of Main Street (similar to the Westborough study) and a sidewalk plan (similar to Shrewsbury).

EDCP will work with CMRPC to determine if the execution of a parking study can be funded by the 2023 round of DLTA funding that becomes available in January.

## ***LIBRARY***

Determine feasibility of an expansion of the public Library that can address the parking and accessibility issues.

## ***BI-PARTISAN INFRASTRUCTURE LAW (BIL)***

Is the Sutton Street Culvert Project an eligible project?

Are planned road projects eligible?



# **Sub-Regional Infrastructure Notes**

# Sub-Regional Infrastructure Summit Notes

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## North Sub-Regional Infrastructure Summit

### Meeting Details:

Date: October 6<sup>th</sup>, 2022

Location: West Boylston Senior Center

Topic: Regional Infrastructure, IMAGINE 2050 & 2050 Connections

Attendance: CMRPC staff & North Sub-Region officials: John Fitch (WBMLP), Sean McKeon (Princeton Light Department), Otto Lies (Holden), Kevin Duffy (WB DPW), Paul Osterberg (WB DPW), Travis Thibault (Paxton DPW), Philip Gott (Princeton), Isabel McCauley (Holden DPW), Tara Rendeau (Paxton Light), Jennifer Warren (West Boylston), Patrick Wood (Holden DPW)

### Meeting Notes:

- Town of Holden
  - Needs sidewalk improvements based on ADA standards near Main St, Wachusett St, Shrewsbury St & Malden St
  - Various culverts in need of repair
  - Interested in increased public rail
  - Major concern with congestion, especially along Main St; residents use Main St to get to I-290, but they need another route; the CMRPC helped with TIP project on Shrewsbury St; Highland St needs work
- Town of Paxton
  - Complete Streets prioritization plan recently approved
  - Major concern with intersection in the town center which has a high crash rate; interested in this being added to the TIP
  - Interested in relining culverts but does not want to shut down roads
- Town of Princeton
  - Project management requirements for MVP, Green Communities, etc. is costly & finding leads for plans is difficult; do not have town planner or town facilities manager
  - Interested in increased public rail
  - Major concern with how to plan for 2050 and implement the LRTP; frustrated with state regulations posing obstacles
- Town of West Boylston
  - Potential TIP along Woodland St: two major intersections have no sidewalks; this is near a park and EJ community; need increased maintenance of sidewalks in neighborhoods
  - Major concern is securing funds to repair culverts; specifically, bridge on Prescott St/Rt 31; bridge/culvert repair needed near Senior Center

# Sub-Regional Infrastructure Summit Notes

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## Northeast Sub-Regional Infrastructure Summit

### Meeting Details:

Date: September 8<sup>th</sup>, 2022

Location: Forbes Municipal Building, Westborough, MA

Topic: Regional Infrastructure, IMAGINE 2050 & 2050 Connections

Attendance: CMRPC staff & Northeast Sub-Region officials; Jeff Howland (Shrewsbury), Chris Payant (Westborough), Joe Boccadoro (Westborough), Patrick Collins (Shrewsbury), Jackie Pratt (Shrewsbury), Kristi Williams (Westborough), Fred Litchfield (Northborough)

### Meeting Notes:

- Thanks, welcome & introductions
- RCCP staff discuss the Regional Plan, IMAGINE 2050
  - How this plan is developed; purpose of planning for gaps in funding; past plans
  - Explains why regional/municipal infrastructure is crucial to this plan and the three core themes of economy, environment, and equity
- Transportation staff introduce the LRTP, 2050 Connections
  - How regional and municipal infrastructure are crucial to the LRTP
  - Areas of concern include connectivity, accessibility, and safety
  - Discusses the Transportation Improvement Program (TIP)
  - Discusses other funding/grant programs available
  - Discussed decarbonization, resiliency, and emerging technologies
- Question asked about the timeline of both plans
- Comment made about the importance of the commuter rail in Westborough
- Town of Westborough
  - Frustration with weak trails committee and disjointed trails network; for example, some trails cross private property and users are not aware ahead of time
- Regional trend (Towns of Westborough, Northborough, Shrewsbury)
  - Increased trail and bike trail mapping
  - Discussion of top crash locations and potential remediations
  - Contentious discussion regarding bike lanes; disagreement over whether segregated bike lanes are best or regular bike line directly along sidewalks
  - Major concern with how the use of emerging technology is affecting traffic patterns and congestions; specifically, freight trucks are using backroads more often, causing congestion within each community

## Sub-Regional Infrastructure Summit Notes

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### Southeast Sub-Regional Infrastructure Summit

#### Meeting Details:

Date: September 22, 2022

Location: Grafton Police Station

Topic: Regional Infrastructure, IMAGINE 2050 & 2050 Connections

Attendance: CMRPC staff & Southeast Sub-Region Benn Sherman (Uxbridge), Michael Gallerani (Uxbridge), David Butler (Hopedale), Gary Nelson (Millbury), Robert Sullivan (Douglas Waste/Sewer), Bob Minarik (Douglas), Matt Benoit (Douglas), Joe Laydon (Upton), Jen Hager (Sutton), Chris McGoldrik (Grafton)

#### Meeting Notes:

- Town of Douglas
  - Major concern with the new warehouse on rt 146 and how increased freight trucks will impact congestion; also, because of RI tolls, trucks cross through Douglas and Sutton
- Town of Grafton
  - Noted that the MBTA zoning laws, new housing near train station is being considered
- Town of Millbury
  - Potential interest in Via pilot program
  - Has been repaving roads using chapter 90 funds
  - Mentions WRTA routes should be expanded
  - Increasing the number of multifamily units in downtown area; anticipating more to come with MBTA zoning laws; also anticipating influx of residents
  - Major concern with warehouses and resulting congestion, especially along Rt 146
- Town of Sutton
  - Concerns regarding warehousing and resulting congestion along Rt 146 in Southeast subregion; they specifically noted that more traffic lights are necessary
  - Interested in seeing the completion of the gap in Blackstone River Parkway, the section between Millbury and Uxbridge
  - Needs more sidewalks, especially around town center, industrial parks and school; interested in Safe Routes to School
  - Interested in increasing the use of rail for freight purposes as congestion mitigation
- Town of Upton
  - In the process of reconstructing town center with roundabout and pavement improvements



- Interested in potential traffic study for route 146 to determine cumulative impacts of emerging technologies and warehouses, and to consider congestion mitigation
  - Also interested in the completion of Blackstone River Parkway gap
- Town of Uxbridge
  - Major concern with warehouses/distribution centers and emerging technologies impact on congestion

## Sub-Regional Infrastructure Summit Notes

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### Southwest Sub-Regional Infrastructure Summit

#### Meeting Details:

Date: August 24<sup>th</sup>, 2022

Location: Tri-Valley Elder Services, Dudley, MA

Topic: Regional Infrastructure, IMAGINE 2050 & 2050 Connections

Attendance: CMRPC staff & Southwest Sub-Region officials: George Patting (Dudley), Heather Blakely (Sturbridge), Peter Boria (Charlton), Andrew goals (Charlton), Adam Menard (Auburn), Peg Dean (Southbridge)

#### Meeting Notes:

- Town of Auburn
  - TIP potential for the reconfiguring of 290, 395, and 84 interchange
  - Frustration with Rt 20 as it narrows down to 1 lane, there are high crash volumes, and additional distribution center with worsening congestion
- Town of Charlton
  - Interested in increased electric vehicle charging stations
  - Interested in SS4A funding for Stafford St/Center Depot Rd due to its high crash volumes & results from community compact grant study
  - Potential need for additional exit off of 90; traffic is worst during Mass Pike peak traffic
  - Potential collaboration between Amazon and WRTA for fixed route along 169; also, potential for WRTA bus stop along 31 off of 169 and 20
- Town of Dudley
  - Applying for SS4A for Stafford St corridor
- Town of Southbridge
  - Interested in SS4A for Hamilton St redesign
  - Currently working on the town Master Plan
  - Expanding airport to allow for larger jets
  - Interested in increased warehouse economy and highway access
  - Flagstops are not effective
  - Interested in additional rest stops in the area to accommodate truck drivers
  - Interested in promoting the WRTA fixed-route shuttle between Southbridge and Webster
- Town of Sturbridge
  - Interested in getting the 84 interchange on the TIP

- Interested in increased promotion of transit options as well as addition of fixed-route to distribution center and Southbridge
- Interested in increased EV charging stations
- Major concern with 84 & 90 interchange as it effects both Southbridge and Charlton
- Major concern with trucking capacity, trucks are parking everywhere

# Sub-Regional Infrastructure Summit Notes

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## West Sub-Regional Infrastructure Summit

### Meeting Details:

Date: September 15<sup>th</sup>, 2022

Location: North Brookfield Police Station

Topic: Regional Infrastructure, IMAGINE 2050 & 2050 Connections

Attendance: CMRPC staff & West sub-region officials: Jim Nyberg (Sewer Department), Lauren Vivier (Spencer), Brandon Avery (Planning Board), Bill King (Planning Board), Brooke Canda (Board of Selectmen), Kathy Landry (North Brookfield Water)

### Meeting Notes:

- Town of North Brookfield
  - Concerned about reconstruction of Rt 9 and how that would affect rail trail crossing at Elm St as they just painted crosswalk and put up mirrors
  - Noted the need for curb cuts along sidewalks with trail crossings as well as need for increased signage
  - Major concern is insufficient transportation options for students within certain radius of school; students grades 4 & up are now required to walk to school; mentioned interest in SRTS
  - In need of parking improvements, especially in congested downtown; potential parking study
  - Concerned with the pollution, noise pollution, speeding, and roadway damage caused by freight trucks
- Town of Spencer
  - East Brookfield and Spencer both voted to approve new high school project; anticipate influx of students & need increased sidewalks and crosswalks
  - Wire Village needs sidewalks
  - Bus stops need shelters and more streamlined maintenance; also need sidewalks to these shelters
- Town of West Brookfield
  - Recently completed SRTS requirements; now distributing bike safety kits and discussing bike and pedestrian safety with students
  - Interested in walk audits
- Town of East Brookfield
  - The flats could be a potential location for commuter rail station
  - Also interested in pursuing SRTS due to new high school project & expected influx

# Sub-Regional Infrastructure Summit Notes

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## Virtual Infrastructure Summit – Transportation Focus

### Meeting Details:

Date: October 20<sup>th</sup>, 2022

Location: Virtual

Topic: Regional Infrastructure, IMAGINE 2050 & 2050 Connections

Attendance: CMRPC staff & regional municipal officials/employees/general public

### Meeting Notes:

- Roundtable discussion
  - Q1) Most pressing need in your community
    - Congestion on the mass pike and spillover to route 20
    - The danger of the new types of congestion, I.e., freight
    - Stop for EW rail in Brookfield area
      - Public transit in this area is suffering and the elderly need help
    - Implementation of traffic calming infrastructure design
    - Truck traffic on backroads of cars trying to get around traffic on highway
    - The cost of modernizing the whole system
    - Pedestrian safety epidemic
  - Q2) Do you have a transportation project, study or service that you would like to pursue if the financial resources become available?
    - Spencer & Sturbridge bike and ped trails should be linked with regional network
      - Need inter-town connection of trails
    - Spencer, better pavement mixes and infra
    - Smaller towns struggle with all projects
      - Is there a service where CMRPC could walk them through it
  - Q3) What is your transportation big idea?
    - Micro-mobility is going to keep expanding, we need more flexible ways to include them in the streetscape
      - Heather asks about hovercrafts
    - Sujatha comments about airport in New Braintree and the possibility of amazon using air-service delivery
      - Lanes for self-driving cars
    - Charging stations at gas stations
      - Training sessions; mobility as a service
- Discussion of next steps, resources & funding opportunities, and promotion of LRTP survey

# MassDOT Meeting-in-a-Box Notes

# MassDOT Meeting-in-a-Box Notes

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## Stakeholder: Greater Worcester Community Foundation

### Meeting Details:

Date: January 20<sup>th</sup>, 2022

Location: Virtual

Topic: 2050 Connections & Beyond Mobility

Attendance: Graxirena (CMRPC), Jarvis (CMRPC), Jonathon Cohen (GWCF)

### Meeting Notes:

- What is the most pressing issue/challenge related to transportation today?
  - Public transportation in general; but his specific lens is that he wants it to be possible for low-income people to have mobility (i.e., medical appointments, access to social and governmental services)
  - Worcester public transit is too slow and doesn't get people close enough to their destinations
  - You must come into the city to use transit to get out of the city
  - Would be great to access arts and culture, but low-income priorities are most important
- Do you have a transportation project, service or study you would like to pursue if the financial resources became available?
  - How WRTA is handling the fare free is BAD; they seem to have no interest in public feedback and input. Jonathon thinks WRTA needs to do better in terms of public engagement and service; there needs to be collective wisdom and approaches/best practices
    - He would like to study how it works and how it can be improved
  - Massachusetts is not easily influenced by other systems
- Do you know any best practice or example that we should look at/explore for our region?
  - Point-to-point
  - Fare-free
  - Ownership and jurisdiction of bus stops; how is nobody responsible for shoveling bus-stops?!
- Are there any types of destinations that need better transportation connections?
  - Transit needs to be around centers of activities (necessity or recreational)
  - There needs to be options for bypassing Worcester
  - Bike paths are not always connected
  - Blackstone Heritage Corridor has great paths but then people still must use main roads, which increases accidents

- Signage, lighting, enforcement
- Veterans ink has signage that says no parking, but people still park there
- Need more paint on the road to indicate lanes and rules
- Intrigued by train work, doubling tracks, statewide lines; but if it is so hard to get to trains stations in the first place, they need to address that first
- Not enough park and ride areas, especially between Fitchburg and Worcester
- Which types of improvements are most important for the state to spend funding on?
  - Meaningful transit connectivity between different modes; ease of vehicular access to main hubs, which will increase ridership; signage, road care, lighting
- Which metrics should be priorities when funding transportation projects?
  - Equity and fairness
  - Connectivity and coverage
  - Reliability
  - Environmental impact
  - Condition of physical infrastructure
  - Safety – Jonathon says this should always be top priority
  - User cost
- If you could design a transportation system that would meet all your needs, what would it include? Dream BIG
  - Point-to-point transit connectivity; a lot more paint; rural areas and small towns are isolated; bike paths and sidewalks are inconsistent, so people NEED cars
- Yahaira asks about grants regarding transportation at the foundation
  - Jonathon says the foundation does not specify transportation as something they want to hear about
  - Before fare-free, there was a nonprofit that made a deal with WRTA for more affordable passes and gave passes to organizations to give out, as well as uber passes
  - Several organizations that advocate for point-to-point
  - They got CDGB money to get trucks to transport food to people
- Jonathon asks which sectors involve the most transportation discussion
  - Yahaira explains some of the different projects, such as Healthy Aging, Economic Development
- Jonathon asks about CMRPC's organizational approach
  - Yahaira explains that highway department is reorganizing and deals with many different modes, such as trails, bike & ped
  - Jonathon mentions that people should consider light rail
  - Yahaira mentions that Boston is considering bus only lanes



# MassDOT Meeting-in-a-Box Notes

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## Stakeholder: Worcester Community Action Council

### Meeting Details:

Date: February 8<sup>th</sup>, 2022

Location: Virtual

Topic: 2050 Connections & Beyond Mobility

Attendance: Graxirena (CMRPC), Jarvis (CMRPC), WCAC Senior Management Team

### Meeting Notes:

- What is the most pressing issue/challenge related to transportation today?
  - Access and affordability
  - Public transit schedules
  - Transit routes being limited (and even shrinking)
  - Increasing safety, especially at transit stops where there is no shelter or sidewalks and people are waiting on the street
  - People are unable to access services, resources and opportunities because public transit is not reliable or easily accessible
  - People from outside of Worcester must come to downtown (to the Hub) to access locations also outside of Worcester
  - Community demographics, for EV car sharing that necessitates people being able to afford (money and time) getting a driver's license
  - Ensuring access to vital services like medical appointments, childcare services, major places of work
  - They mention people who use their programs having a hard time accessing early-education for their children
    - Specifically, the Palmer and Southbridge areas
- Do you have a transportation project, service or study you would like to pursue if the financial resources become available?
  - High speed rail to Boston and surrounding towns (we mentioned East West Rail)
  - They asked about micro-transit
  - They mention electric vehicles as a potential project, service and study and are exploring program options within their own organization with EV4the future (potential collaboration opportunity)
- Are there any types of destinations that need better transportation connections?
  - Access to downtown and transit hubs from all neighborhoods
    - A circle loop around downtown and the entire City

- Rural areas struggle with attaining/maintaining fixed routes
- They ask about on demand transit services and micro transit and if those opportunities could be more readily utilized for populations other than older adults and people with disabilities
- They ask about workforce transit options and how funding is programmed for that
  - They ask about this being extended to individual businesses or corporations that employ large amounts of people
  - Yahaira mentions MassDEP Rideshare Program
- Which metrics should be priorities when funding transportation projects?
  - Regional connectivity, access and affordability is their priority
    - User cost is the priority for this group. Transit affordability is very important and they will like to see WRTA continue with the free fare for the long term.
- Final questions and comments
- There used to be a service available where people could schedule a one-on-one “lesson” so to speak for how to use local transit services
  - We are connecting them with WRTA Travel Trainer
- There needs to be better promotion of available services

# MassDOT Meeting-in-a-Box Notes

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## Stakeholder: Focus Group at Worcester Senior Center

### Meeting Details:

Date: November 4<sup>th</sup>, 2022

Location: Friends of Worcester Senior Center

Topic: 2050 Connections & Beyond Mobility

Attendance: Graxirena (CMRPC), Rhault (CMRPC), Jarvis (CMRPC), Fuccione (Massachusetts Healthy Aging Collaborative)

### Meeting Notes:

- James from Healthy Aging does introduction
- Yahaira does introduction about CMRPC, LRTP and Beyond Mobility
- Amelia from Millbury, not enough public transit, or paratransit services
- Florence from Auburn, uses WRTA
  - Small van/paratransit
  - Drivers are friendly
- Dorothy from Worcester (left meeting early), had positive experience with WRTA to go shopping
- Liz (from?) sometimes uses paratransit on Accessibility Advisory Committee
- Yahaira asks about positive experiences people have had with transportation services in the region and what are the key features to improve on our roadways?
  - Liz, bike and ped, ADA, pavement, little considerations like how green strips between bike lanes and sidewalks cause an obstruction for those with disabilities
  - Amelia and Florence both mention that their daughters drive them to the senior center and that they do not walk around alone much
  - James mentions issues with snow and extreme weather in the winter
- Yahaira asks about what improvements could be made to transit specifically?
  - Liz uses paratransit and walks around sometimes, mentions that paratransit is an arduous process and not reliable
    - She teaches visually impaired groups how to deal with transit and walking around stations themselves
    - Mentions that Charlie cards are discounted for elderly and free for those with disabilities
    - Mentions that being dependent on other people for transportation has a negative effect on your mental health
    - Her experience with paratransit is often stressful. Describes having to call 24 hours in advanced, does not know until only a couple of hours before that it is

confirmed, must know exact address of destination, there is a 20-minute window for the drivers to arrive in but if rider is not present exactly when they arrive, they will take off in 5 minutes, drivers do not always help or interact, no paratransit on holidays

- Ubers/Lyfts are not appealing because they are not accessible and are expensive
- Yahaira asks what additional transportation projects people would like to see get funding
  - Liz, autonomous vehicle services
  - Amelia wants to transit from Millbury to Worcester Senior Center (very few lines stop at the senior center)
  - People want to see senior centers and libraries as hubs where transportation services connect and overlap
  - There is extremely limited public transit outside of Worcester
- Yahaira asks what locations do people want connections to be made in their local transportation services?
  - Senior center and libraries
  - DCR (Department of Conservation and Recreation) state parks/trails in general
    - Liz was contacted by the DCR and Universal Access Program to see if her and her group wanted to go hiking, they arranged transportation and shared what their experience is like using trails as someone with vision impairment
  - Boylston Botanical Gardens
  - Theaters
- Yahaira asks which metrics should be used as priorities when determining how to distribute funding?
  - RELIABILITY
  - CONNECTIVITY & COVERAGE
  - Cost
- Yahaira asks what people's dream transportation system would look like?
  - Public transportation across the county!
  - Public AV/EV/Bike/Paratransit services

# Meeting-in-a-box Summary

Summary, analysis, and key takeaways

March 2023

1



Objective

Focus Groups Conducted

Main themes :

- Connectivity and Equity
- Efficiency, Reliability, and Quality of Transportation
- Infrastructure Investment and Operations
- Building Organizational Capacity

Key Takeaways

2

## Objective

Hear specifically from communities and groups whose perspectives we want to ensure are captured as part of development of the Long Range Plan.

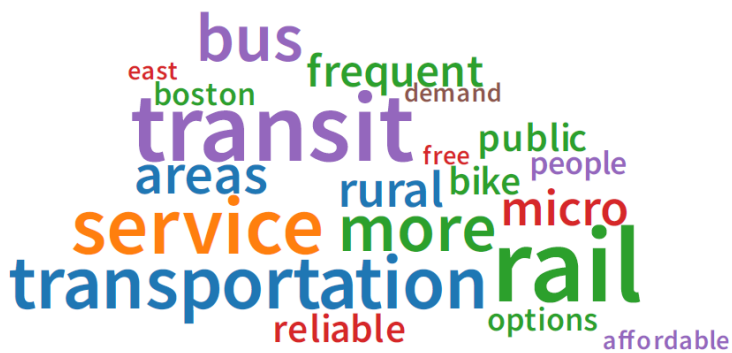
Rail trail networks that connect to transit stations, essential services, and regional hubs.

Prioritize planning from the pedestrian perspective.

High speed, reliable, and frequent, east-west rail in MA.



If you could design a transportation system to meet all your needs, what would it include? Dream big...



## Focus Groups

Focus Group	Meeting Date
Berkshire MPO & Transportation Advisory Committee	December 20, 2022
Amherst Transportation Committee	January 3, 2023
Western Mass Transit Advocacy Network	January 12, 2023
Greater Worcester Community Foundation	January 20, 2023
Outer Cape Focus Group	January 26, 2023
SRPEDD Focus Group	January 27, 2023
Worcester Community Action Council	February 8, 2023
Health Equity Partnership of North Central Massachusetts (CHNA9)	February 16, 2023
Berkshire Regional Coordinating Council on Transportation	March 6, 2023



## Main Themes

# Connectivity and Equity

## What We Heard:

- Transit stops and stations lack sufficient bicycle and pedestrian accommodations
- Mobility needs differ significantly across the state – on demand transit and micro-transit are realistic solutions to support mobility in Western Mass now
- Passenger rail service for the entire state
- Individuals who cannot drive lack sufficient and affordable options to reach health care services
- State airports are only accessible by automobile
- Rural communities lack meaningful transportation options to reach cities and other activity centers
- Wayfinding signs, painted paths, and directories must increase at transit stations to connect people to key destinations
- Lack of affordable housing is forcing people away from existing transit networks and increasing reliance on automobiles

## Survey Results:

- 26.92% of participants feel pedestrian and bicycle connections are a top funding priority
- 26.32% want better connections to Jobs
- 21.03% feel connectivity and coverage must be prioritized when funding projects
- 20.57% want better connections to health care services

Survey results (n=56)

# Improved Transit Experience

## What We Heard:

- Western RTAs cater their service to universities which leaves residents with unreliable transit during school breaks
- Expand evening transit services
- RTAs should consider vans during periods of low ridership to cut costs
- Expand RTA bus fleets and improve accommodations to support users of all ages and abilities
- Bus shelters at all stops to encourage year-round ridership
- Rural transit hubs require riders to come downtown to access transit connections to destinations outside the city

## Survey Results:

- 18.28% of participants feel community shuttle services are necessary to improve the transit network locally and regionally
- When asked to design a transportation system that would meet all your needs, 25% of participants referenced micro-transit
- 19.71% feel more frequent bus service is the most important feature to improve on the transit network

Survey results (n=56)



# Infrastructure Investment and Operations

## What We Heard:

- Prioritize intersection safety projects and Intelligent Transportation Systems (ITS)
- Better first/last-mile connections for existing and any new transit services
- Improvements to local roads and bridges do not have to be part of major projects: potholes, road lines, and sign improvements are needed intermittently
- Climate resilient infrastructure must be incorporated in every project to prepare for sea level rise, flooding, and other extreme weather
- Bus only lanes connecting to transit hubs and major activity centers

## Survey Results:

- 51.28% of participants think transit improvements are the most important funding priority for the state
- 20.4% feel the most important feature to improve on roadways are pedestrian and bicycle infrastructure
- 17.31% feel more bus-only lanes are a priority

Survey results (n=56)

9

# Building Organizational Capacity

## What We Heard:

- Municipalities often lack the capacity to maintain new infrastructure as part of Complete Streets projects and other MassDOT investments.
- New Chapter 90 formula and additional funding is needed to help communities take advantage of grant opportunities
- Additional RTA staff to operate community shuttle services that would get people to, from, and around major activity centers
- Increase vehicle capacity so caregivers can be transported with patients to appointments
- RTAs must provide more opportunities for public input and improve communication of available services and changes

Establish an Office of Rural Planning within MassDOT – similar to DPH's Office of Rural Health – staffed with people who live and have experience navigating transportation in these regions.

We need to focus more of our resources on people with fewer resources - can't get a job if you don't have transportation, can't buy a car if you don't have a job. Likewise, older adults can't get medical care if they can't work out transportation issues.

Sidewalk snow removal and funding for building snow removal operations at the local level. MassDOT can assist with funding and capacity building and partner with local communities to address MassDOT owned sidewalks.

Survey results (n=56)

10

## Key Takeaways

11

## Key Takeaways

- Individuals that lack the ability to drive face many barriers, including access to affordable transportation alternatives. Availability of options is the greatest barrier, followed by cost. Some services also lack appropriate features to support various needs and abilities.
- Dedicated services to access critical destinations across the state, especially jobs, child care and medical facilities, does not exist. This greatly limits where people can live and age affordably. Micro-transit has support statewide and can play a role in resolving these issues today.
- Rural populations that lack transit infrastructure view the transition to electric vehicles in their communities as critical to meeting climate and sustainability goals.
- Municipalities across the state struggle to stay on top of funding opportunities and require dedicated assistance from MassDOT for planning studies, grant writing, and project development. Chapter 90 funding is not enough to support these needs.
- Rural populations feel isolated and without sufficient transportation options due to lack of transit service and incomplete bicycle and pedestrian networks.

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Thank you!

# **Flyers & Social Media Infographics**



The region's transportation plan acts as a blueprint that helps guide the prioritization and funding for transportation improvements in the region. The plan includes the following:

- ✓ Socio-economic Projections
- ✓ Transportation Improvements
- ✓ Major Infrastructure Projects
- ✓ Transit & Mobility
- ✓ Livability & Healthy Aging
- ✓ Climate Change & Resiliency

Public involvement, data and performance measures are at the core of the region's plan. Sign up and stay updated! Join our email list about local opportunities to participate!

Follow us:





# Central Massachusetts Regional Planning Commission (CMRPC)

Follow us on Facebook & LinkedIn @Central Massachusetts  
Regional Planning Commission

Instagram @CentralMassPlanning

Twitter @CentralMassRPC



Scan to visit the 2050  
Connections Hubsite!



Scan to visit the CMRPC  
Website!



# Central Massachusetts Regional Planning Commission (CMRPC)

Follow us on Facebook & LinkedIn @Central Massachusetts Regional Planning Commission



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Scan to visit our Long Range Transportation Plan Website



Scan to visit our Regional Plan's Website!







# 2050 CONNECTIONS PUBLIC MEETING

Please mark your calendar and attend this public meeting to discuss the development of the Central Massachusetts long range transportation plan (LRTP), 2050 Connections.

- ✓ **WHEN:** Wednesday, May 31st, 2023 at 5:00 PM
- ✓ **WHERE:** UNUM Building, Paul Revere Room, 1st Floor, One Mercantile Street, Worcester, MA
- ✓ **VIA ZOOM:** <https://us02web.zoom.us/j/89638038171?pwd=L2ZqY2pNeHh1UkVpdEh3NVUzTlxudz09>  
Meeting ID: 896 3803 8171; Passcode: 828355

For more information:

- 📞 508-756-7717
- 🌐 [www.cmrpc.org/2050Connections](http://www.cmrpc.org/2050Connections)







The Central Massachusetts Regional Planning  
Commission Presents:

# MEETING-IN-A-BOX

Please consider taking part in this  
community engagement effort  
where community groups,  
residents and stakeholders can  
learn more about CMRPC and  
MassDOT projects.

Please contact [ygraxirena@cmrpc.org](mailto:ygraxirena@cmrpc.org) for more  
information or to schedule a meeting

Central Massachusetts Metropolitan Planning  
Organization (CMMPO)

# VIRTUAL PUBLIC MEETING

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Please join the CMMPO staff on July 10th, at 5pm, to discuss:

- The proposed 2023 - 2028 Transportation Improvement Program (TIP) Amendment #8
  - The draft Long Range Transportation Plan, 2050 Connections
- 

Please visit the 2050 Connections Hubsite to review the draft 2050 Connections plan as well as the hubsite's calendar to find the Zoom link for this meeting.

Please visit  
[www.cmrpc.org/2050connections](http://www.cmrpc.org/2050connections)





**The Central Massachusetts Metropolitan Planning Commission  
(CMMPO)**

# **Virtual Public Meeting**

**Please join the CMMPO staff on July 10th, at 5pm, to  
discuss:**

- **The proposed 2023 - 2028 Transportation Improvement Program (TIP) Amendment #8**
- **The draft Long Range Transportation Plan (LRTP), 2050 Connections**



**Please visit the link below to  
access the draft LRTP as well  
as this meeting's Zoom link.**



# Attention Central Massachusetts!

The CMRPC transportation staff are utilizing a public, interactive map to inform the final priorities of their long range transportation plan.

To use the map, click the link in the caption above and review the brief instructions.

This map will close on Friday, June 9th!





# TAKE THIS SURVEY AND IMPACT TRANSPORTATION IN YOUR REGION!

The Central Massachusetts Regional Planning Commission is conducting its Long-Range Transportation Plan which will effect Southern Worcester County for the next 25 years.

Will you get involved and share your experience?

Follow the link below or scan the QR code with your smart phone's camera to take the survey. The results will directly impact CMRPC's priorities and plans. Thank you!



Spanish



English



<http://www.cmrpc.org/2050Connections>





**Are you passionate about public transit? Do you enjoy walking or biking trails? Do you find yourself in a car every day? PLEASE TAKE OUR SURVEY!**



The Central Massachusetts Regional Planning Commission is currently working on its Long-Range Transportation Plan, and we need *your help!*

*Follow the link in the caption above to our Hubsite or scan the QR code below with your smart phone's camera to access our survey.*

*Your responses will directly impact transportation planning in Worcester County.*



English



Spanish

# Environmental Consultation



# 2023 ENVIRONMENTAL CONSULTATION

Agenda of the Environmental Consultation Meeting of the Central Massachusetts Metropolitan Planning Organization (CMMPO)

## I. WELCOME AND INTRODUCTIONS

## II. ENVIRONMENTAL CONSULTATION OVERVIEW

## III. TIP PROJECT SCREENING AND SELECTION

- **Example Project:** FFY 2024 Webster TIP Project (Project ID: 608433) – Intersection Improvements at I-395 Ramps at Route 16 and Sutton Road
- Congestion Mitigation Air Quality (CMAQ)

## IV. LONG RANGE TRANSPORTATION PLAN (LRTP) PROGRAM DEVELOPMENT: 2050 CONNECTIONS

- Document Overview
- Environmental Planning Chapter
  - Electric Vehicles (EV's)
  - Stormwater Management – Culverts
  - Municipal Vulnerability Preparedness (MVP) Program – Vulnerabilities

## V. UNIFIED PLANNING WORK PROGRAM (UPWP)

- Task 3.8: Climate Change – Resiliency, Sustainability, Vulnerability
  - Update on CMRPC Culvert Training and Assessment Results

## VI. ADJOURNMENT

# ZOOM DETAILS

### Link:

<https://us02web.zoom.us/j/83718752467?pwd=Rjk4QzZ1K21PekhLVXk5bllrNWRBZz09>

**Meeting ID:** 837 1875 2467

**Password:** 148314

### Dial by your location:

- +1 301 715 8592 US (Washington DC)
- +1 646 558 8656 US (New York)
- +1 312 626 6799 US (Chicago)



**Location:** Virtual



**Date:** Thursday, April 6, 2023



**Time:** 10:00 AM

# WHAT IS AN ENVIRONMENTAL CONSULTATION?

According to US Department of Transportation (DOT) guidance, an Environmental Consultation is a discussion of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the metropolitan transportation plan, 2050 Connections. The discussion shall be developed via consultation with Federal, State, and Tribal land management, wildlife, and regulatory agencies.

**Environmental** means mitigation activities, strategies, policies, programs, actions, and activities that, over time, will serve to avoid, minimize or compensate for (by replacing or providing substitute resources) the impacts to or disruption of elements of the human and natural environment associated with the implementation of a long-range statewide transportation plan or metropolitan transportation plan. The human and natural environment includes, for example, neighborhoods and communities, homes and businesses, cultural resources, parks and recreation areas, wetlands and water resources, forested and other natural areas, agricultural areas, endangered and threatened species, and the ambient air. The environmental mitigation strategies and activities are intended to be regional in scope.

**Consultation** means that one or more parties confer with other identified parties in accordance with an established process and, prior to taking action(s), considers the views of the other parties and periodically informs them about action(s) taken. *(This definition does not apply to the “consultation” performed by the States and the MPOs in comparing the long-range statewide transportation plan and the metropolitan transportation plan, respectively, to State and Tribal conservation plans or maps or inventories of natural or historic resources).*

Further, the CMMPO shall consult, as appropriate, with State and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation concerning the development of the transportation plan. The consultation shall involve, as appropriate:

- Comparison of transportation plans with State conservation plans or maps, if available; or
- Comparison of transportation plans to inventories of natural or historic resources, if available.

---

*CMRPC meetings are conducted in accessible locations and materials can be provided in accessible formats upon request at least three (3) business days prior to the meeting. Interpreter requests must be made at least fourteen (14) business days before the meeting. If you need special accommodations, please contact the CMRPC at: (508) 459-3312, or [rryant@cmrpc.org](mailto:rryant@cmrpc.org).*

*The CMRPC fully complies with Title VI of the Civil Rights Act of 1964 and related statutes and regulations in all programs and activities. The CMRPC does not discriminate on the basis of race, color, national origin, English proficiency, income, religious creed, ancestry, disability, age, gender, sexual orientation, military service, or gender identity or expression. Any person who believes himself/herself or any specific class of persons have been subjected to discrimination prohibited by Title VI or related statutes or regulations may, himself/herself or via a representative, file a complaint with the CMRPC. A complaint must be filed no later than 30 calendar days after the date on which the person believes the discrimination occurred.*

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2023

# CMMPO & CMRPC ENVIRONMENTAL CONSULTATION

*Integrating LRTP development & project selection within the constraints of the natural environment*



1

2023

## AGENDA



### Welcome & Introductions Environmental Consultation

#### Overview TIP Project Screening & Selection

- Example Project: FFY 2024 Webster TIP Project (Project ID: 608433) – Intersection Improvements at I-395 Ramps at Route 16 and Sutton Road
- Congestion Mitigation Air Quality (CMAQ)

#### Long Range Transportation Plan (LRTP) Program Development: 2050 Connections

- Document Overview
- Environmental Planning Chapter
  - Electric Vehicles (EV's)
  - Stormwater Management – Culverts
  - Municipal Vulnerability Preparedness (MVP) Program – Vulnerabilities

#### Unified Planning Work Program (UPWP)

- Task 3.8: Climate Change – Resiliency, Sustainability, Vulnerability
  - Update on CMRPC Culvert Training and Assessment Results

#### Adjournment

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2023

# ENVIRONMENTAL CONSULTATION PROCESS



## Early Coordination

- Develop strategies to discuss environmental aspects of LRTP and TIP with stakeholders and public (i.e., Environmental Consultation)



## Environmental Resource Analysis

- Review environmental, cultural, and community resources and data
- Create candidate project location maps



## Mitigation

- Understand affected environment and assess transportation impacts throughout project development
- Minimize impacts from project by limiting degree/magnitude of the action and its implementation (i.e., rehabilitate affected environment as part of project)



## Consultation

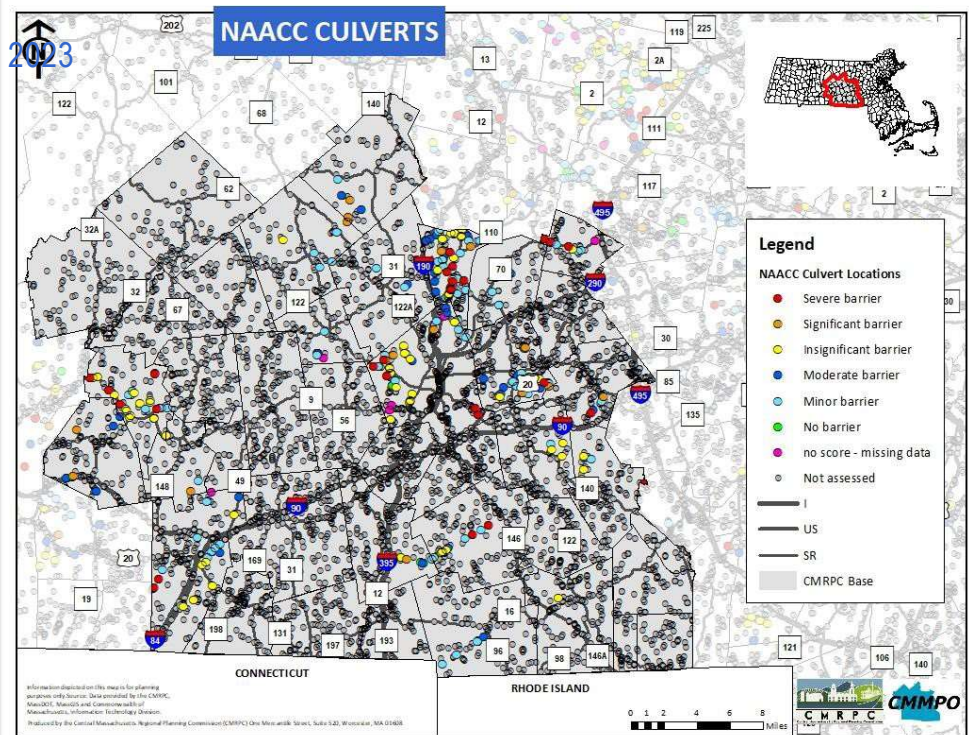
- MPO's consult with regulatory agencies responsible for natural resources, environmental protection, and historic conservation concerning development of transportation plans
- Includes a discussion of potential mitigation activities



## Planning Integration

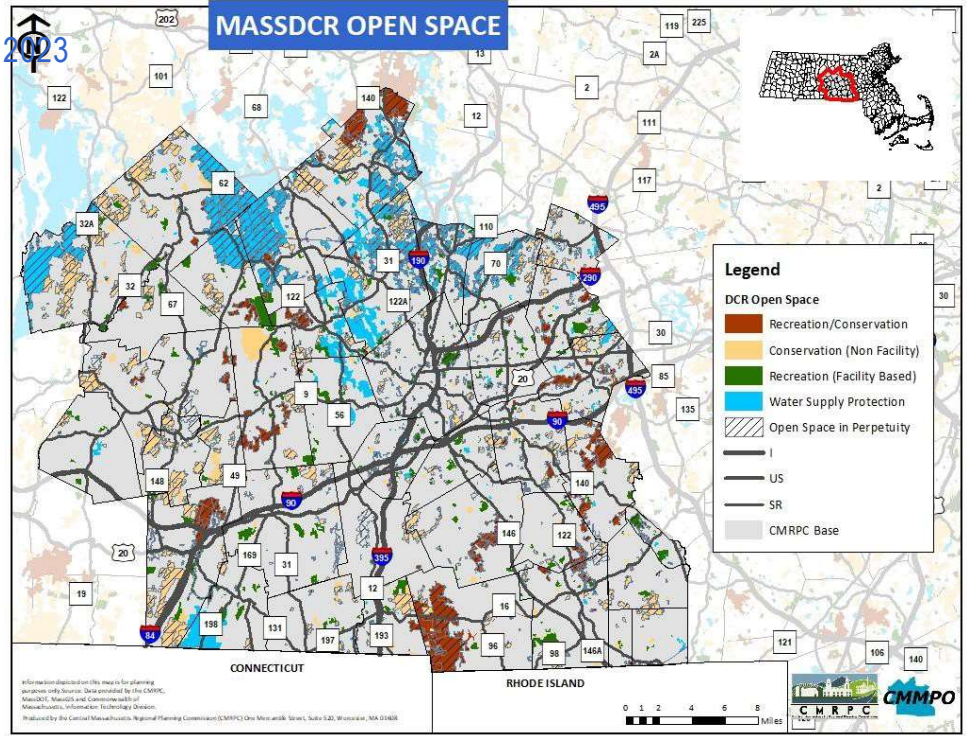
- Use feedback from consultations, LRTP, TIP public outreach to select/program transportation projects, policies, and initiatives to minimize environmental impacts

# ENVIRONMENTAL CONSULTATION PROCESS

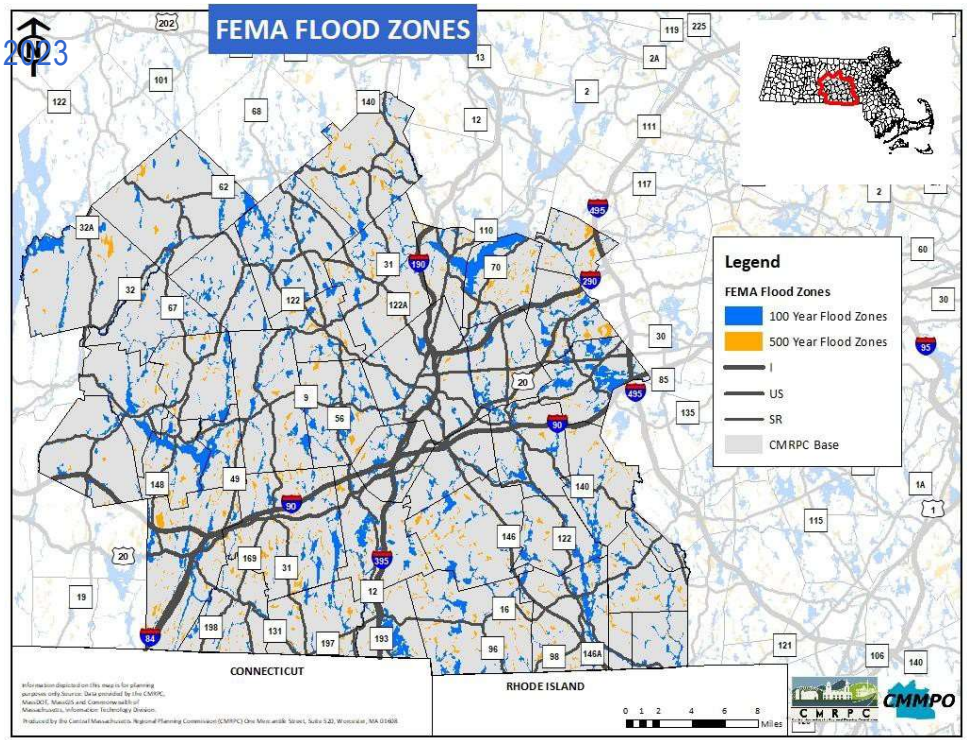




# ENVIRONMENTAL CONSULTATION PROCESS

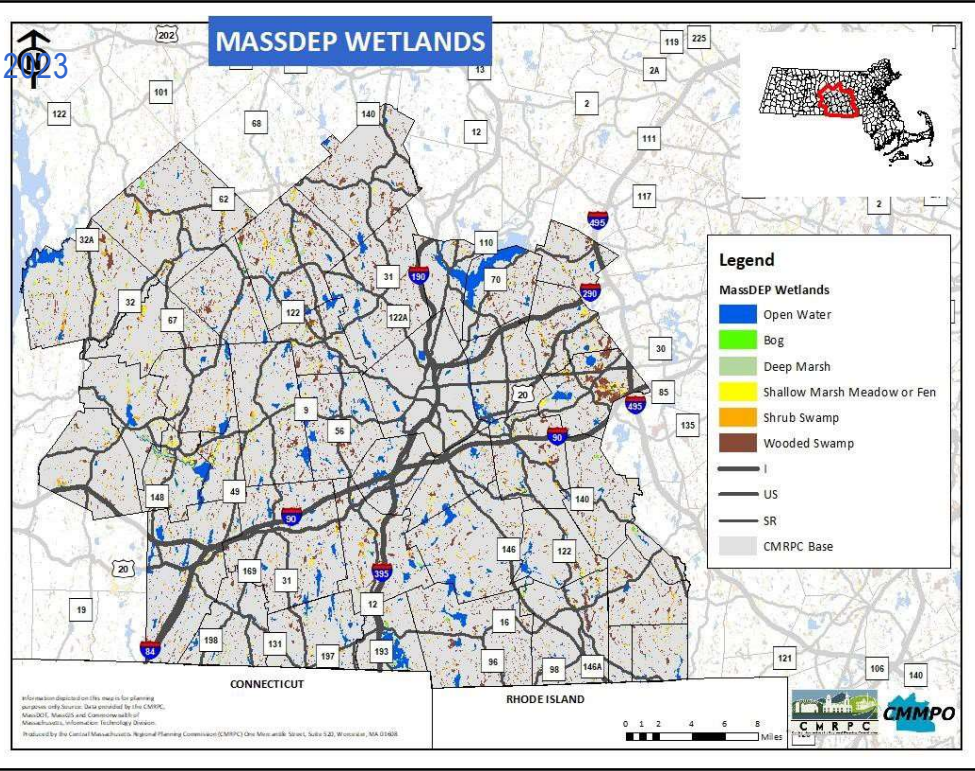


# ENVIRONMENTAL CONSULTATION PROCESS

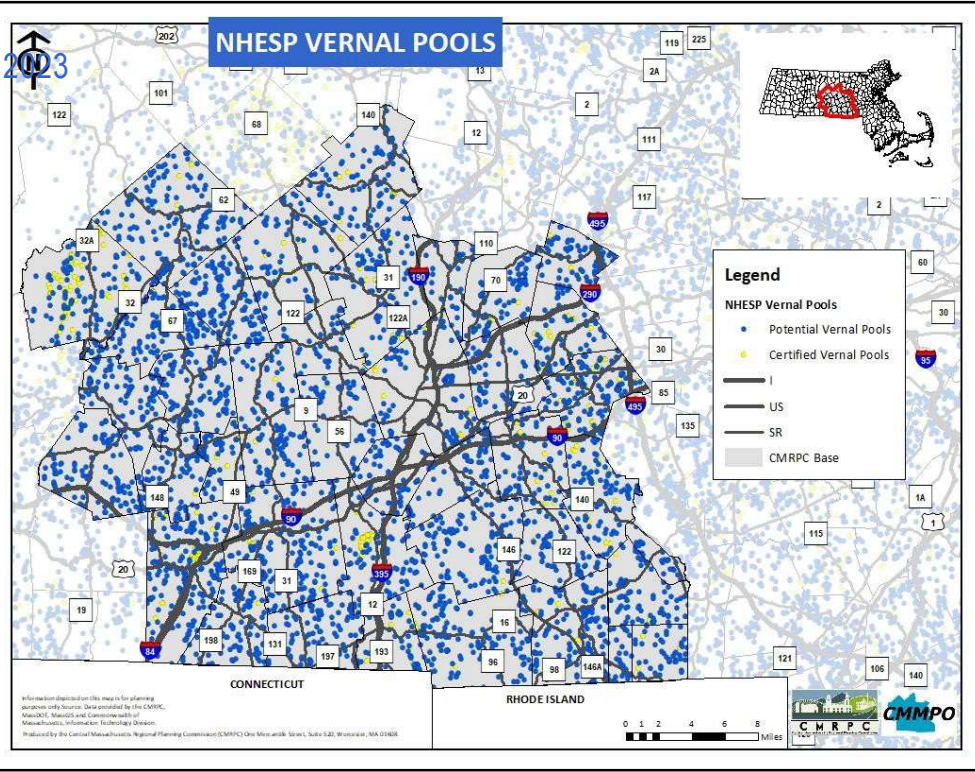




# ENVIRONMENTAL CONSULTATION PROCESS



# ENVIRONMENTAL CONSULTATION PROCESS



2023

# MASSACHUSETTS PROJECT INTAKE TOOL (MAPIT)



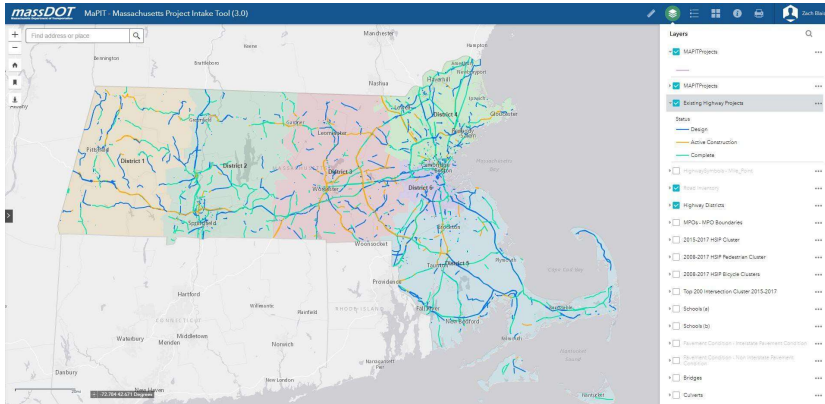
## MaPIT

The Massachusetts Department of Transportation (MassDOT) initiates new project proponents through a 3-step process using their online tool, MaPIT:

1. **Project Need** – project proponent identifies project needs
2. **Project Initiation** – project proponent works with MassDOT to define scope, costs, timeline, impacts, and responsibilities
3. **Project Review Committee** – MassDOT submits projects to the Project Review Committee for approval

A GeoDOT account is needed to use MaPIT and initiate new project proponents.

[Request a GeoDOT Account](#)



2023

# PROJECT SCREENING



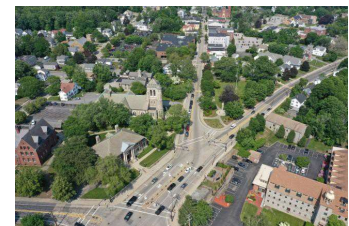
## Long Range Transportation Plan (LRTP)

A 25-year regional vision that integrates all transportation modes adhering to and supporting federal, state, and regional legislation goals and performance management goals.



## Project Screening

Performance-based planning assessment of candidate projects (i.e., Environmental Consultation GIS Analysis).



## Transportation Improvement Program (TIP)

Central Massachusetts Municipal Planning Organization (CMMPO) and other Committees consider proposed TIP highway/transit project listings and make recommendations to the CMMPO.





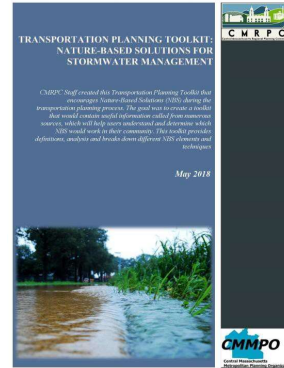
2023

# CMRPC RESOURCES



## Technical Grant Writing Support

## Nature-Based Solutions: Stormwater Management Toolkit



## NAACC Culvert Assessments



## Data Collection Programs

2023

# TIP PROJECT SCREENING AND SELECTION



## FFY 2024 Webster TIP Project (Project ID: 608433)

Intersection Improvements at I-395 Ramps at Route 16 and Sutton Road

### Project Details

- Project Limits: I-395 NB and SB ramps at Route 16 interchanges
- Project Cost: Estimated at about \$14.945 million
- Currently at 75% design
- Currently programmed for the FFY 2024 TIP
- Project will be funded by CMAQ, STBG, and Statewide HSIP funds



### Existing Conditions

- Known crash history – identified HSIP crash cluster within project area
- Congestion – listed as congested locations in the CMP
- Lack of adequate facilities for pedestrians and bicyclists
- Poor sidewalks
- Poor drainage

### Potential Improvements

- Installation of traffic signals or roundabouts at both intersections
- Resurfacing and geometric improvements
- Bicycle and pedestrian improvements (be consistent with Complete Streets goals)
- Modify the bridge slope paving for sidewalks
- Environmental work for drainage modifications and upgrades, as well as replacement or extension of the Mill Brook sluiceway
- Upgrade signs and pavement markings

2023

## FFY 2024 Webster TIP Project (Project ID: 608433)

Intersection Improvements at I-395 Ramps at Route 16 and Sutton Road

TIP PROJECT  
SCREENING AND  
SELECTION



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2023

## FFY 2024 Webster TIP Project (Project ID: 608433)

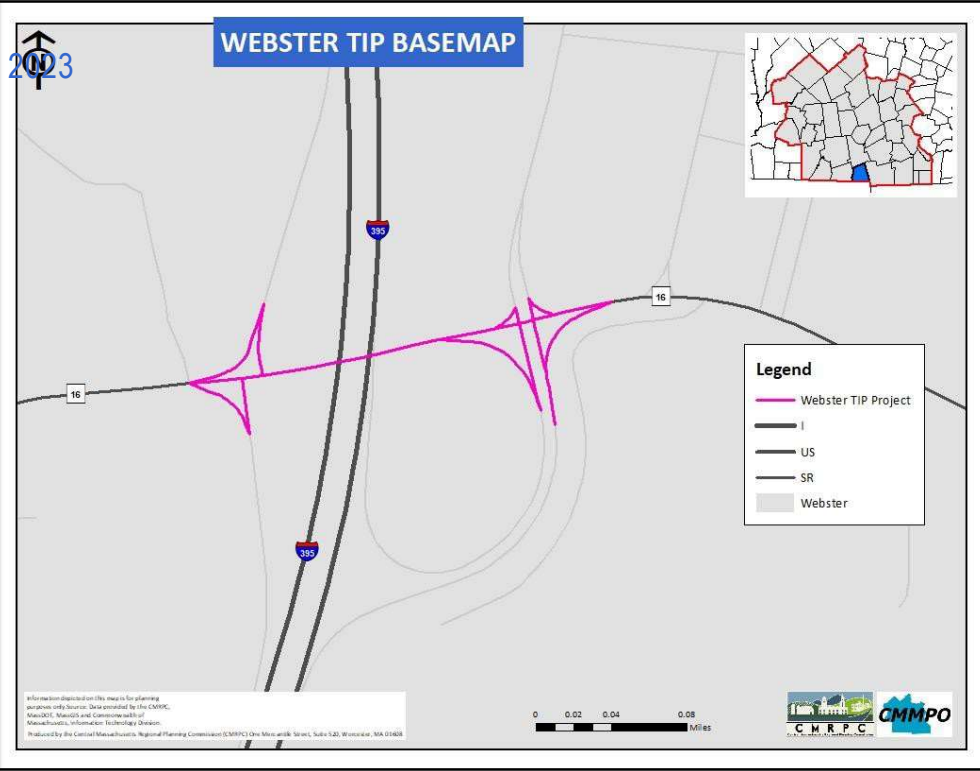
Intersection Improvements at I-395 Ramps at Route 16 and Sutton Road

TIP PROJECT  
SCREENING AND  
SELECTION

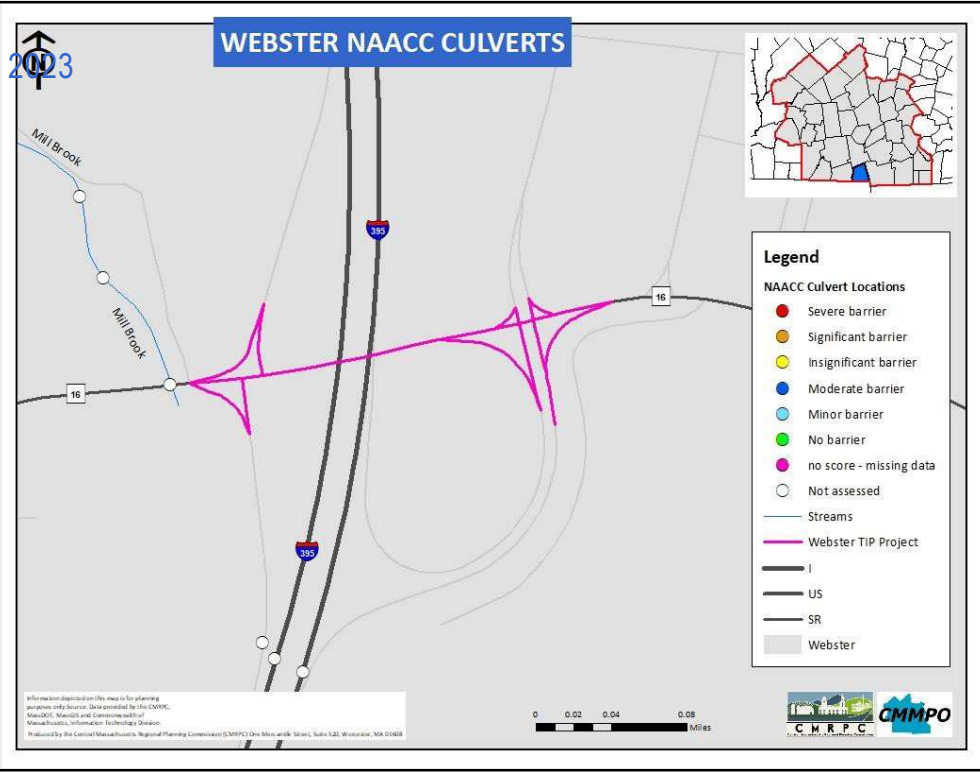


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# TIP PROJECT SCREENING AND SELECTION

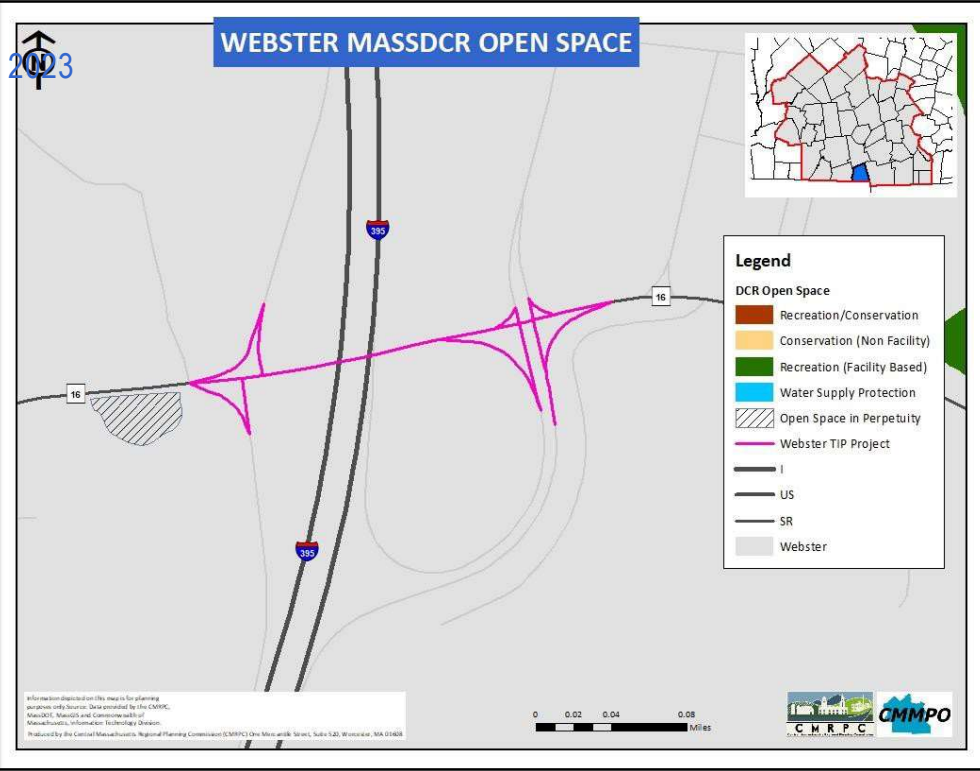


# TIP PROJECT SCREENING AND SELECTION

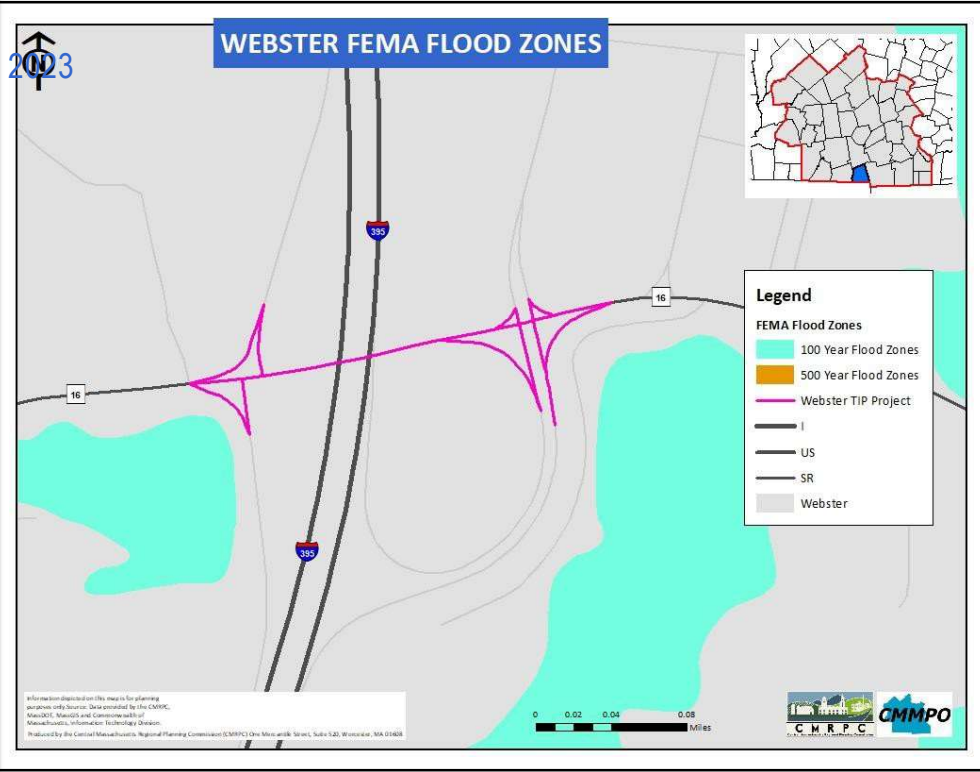




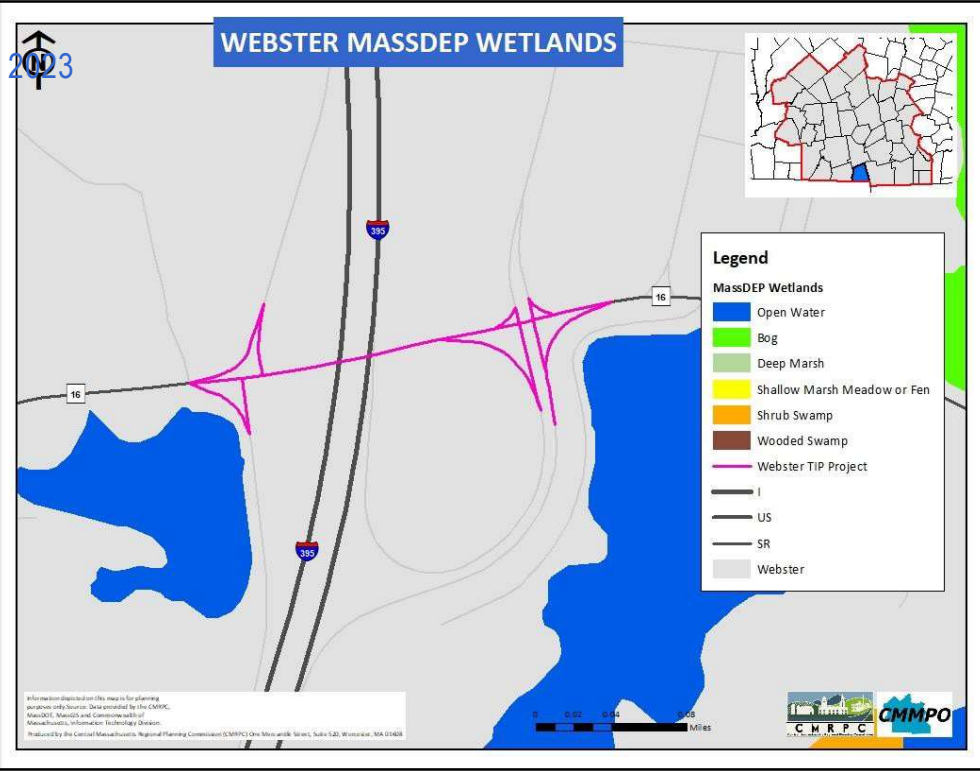
# TIP PROJECT SCREENING AND SELECTION



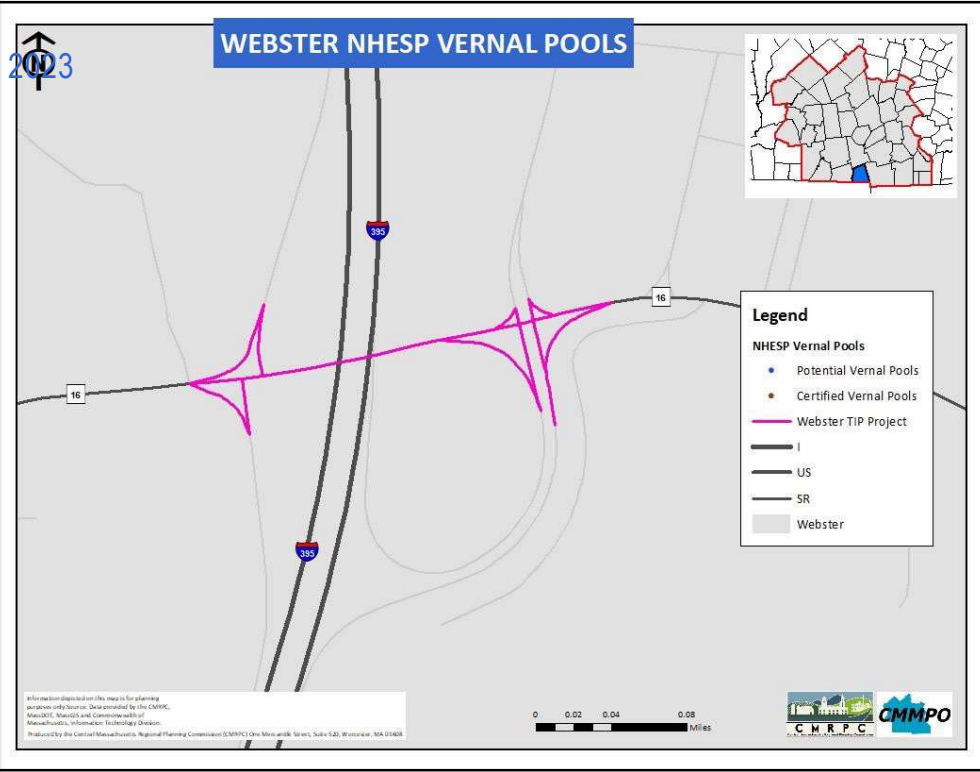
# TIP PROJECT SCREENING AND SELECTION



# TIP PROJECT SCREENING AND SELECTION



# TIP PROJECT SCREENING AND SELECTION



2023

### CMAQ Project Types/Activities

CMAQ Project Types	FHWA CMAQ Eligible Activities
Travel Demand Management/Rideshare	<ul style="list-style-type: none"> <li>Rideshare Programs</li> <li>Park and Ride</li> <li>Employee Transit Benefits</li> <li>Carpooling</li> <li>Bikesharing</li> <li>Education and Outreach</li> </ul>
Congestion Reduction and Traffic Flow Improvements	<ul style="list-style-type: none"> <li>Incident Management</li> <li>Intersection Improvements</li> <li>Signal Improvements</li> <li>Roundabouts</li> </ul>
Transit Improvements	<ul style="list-style-type: none"> <li>Transit Service Expansion</li> <li>Park and Ride</li> <li>Employee Transit Benefits</li> </ul>
Freight Intermodal Projects	<ul style="list-style-type: none"> <li>Intermodal Freight Facilities and Programs</li> <li>Truck Stop Electrification</li> <li>Heavy Vehicle Engine Replacements</li> </ul>
Pedestrian Bicycle	<ul style="list-style-type: none"> <li>Pedestrian and Bicycle Paths (that are not solely for recreation)</li> <li>Bikesharing</li> </ul>
Alternate Fuel and Clean Vehicle	<ul style="list-style-type: none"> <li>Heavy Vehicle Engine Replacements</li> <li>Diesel Retrofit Technologies</li> <li>Extreme-Temperature Cold-Start Technologies</li> <li>Dust Mitigation</li> <li>Natural Gas Re-Fueling Infrastructure</li> <li>Electric Vehicle Charging Stations</li> </ul>



Previously Approved CMAQ Projects

## CONGESTION MITIGATION AIR QUALITY (CMAQ)



PROJECT ID#	Project	Location	Approval Date	TIP Year	CMAQ Approved Funds	Total Funds	Type	VOC Savings (kg/yr)	NOx Savings (kg/yr)	CO Savings (kg/yr)		
605740	Wintthrop/Providence/Vernon/Granite St Improvements	Worcester	3/29/16	2017	\$1,305,638	\$3,853,939	Traffic Flow	20.6	54.8	242.7		
603251	Holden St/Drummond Ave/Shore Dr Intersection Improvements	Worcester	3/29/16	2017	\$2,705,655	\$2,705,655	Traffic Flow	135.2	360.2	1596.5		
602740	Main St Resurfacing	Shrewsbury	11/10/16	2017	\$2,000,000	\$6,278,484	Traffic Flow	158.3	158.9	1963.5		
606206	Charlton St Reconstruction	Oxford	11/10/16	2017	\$1,000,000	\$5,722,150	Traffic Flow	0.1	0.4	5.7		
606125	High St/Hopkinton Rd Reconstruction	Upton	4/4/18	2019	\$3,411,395	\$6,386,655	Traffic Flow	23.4	22.6	331.5		
	WRTA Demand Response Rideshare Service Pilot	Westborough	3/14/20	2021	\$632,032	\$632,032	New Service	3.3	6.1	107.7		
608778	Route 20 Reconstruction	Charlton/Oxford	1/22/21	2022	\$3,586,719	\$74,997,812	Traffic Flow	13.6	22.3	142.3		
602059	Downtown Improvements	Southbridge	4/26/21	2024	\$2,000,000	\$4,418,779	Bike & Ped	0.4	1.1	27.5		
608873	Meadow Road Rehabilitation	Spencer	4/26/21	2023	\$2,300,000	\$9,164,351	Bike & Ped	0.2	0.6	15.5		
609218	Shrewsbury St & Doyle Rd Pavement Rehabilitation	Holden	4/27/22	2023	\$4,000,000	\$10,542,121	Bike/Ped & Traffic Flow	53.77	127.3	2534.9		
608433	1395 & Route 16 Intersection Improvements	Webster	3/13/23	2024	\$2,000,000	\$14,995,008	Traffic Flow	42.59	24.83	385.91		
	MicroProject: Quabong Connector New Hybrid Van	Ware	3/13/23	2024	\$75,000	\$75,000	New Bus	9.79	71.52	376.95		
	MicroProject: Transit Media & Communications Campaign	Southbridge	3/13/23	2024	\$20,000	\$20,000	Education	-	-	-		
<b>Total Funds</b>								<b>Total VOC Savings</b>	<b>Total NOx Savings</b>	<b>Total CO Savings</b>		
								\$25,236,439	\$138,991,986	461.25	860.7	8231.66



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## 2050 Connections

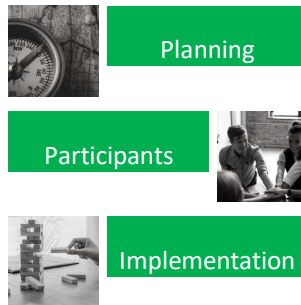
### Document Overview

- o The region's long-range transportation plan (LRTP)
- o What is the purpose of an LRTP?
  - Identify the multi-modal transportation needs and priorities of the southern central Massachusetts region
  - Metropolitan Planning Organizations (MPOs) must create a plan every four years
  - 2050 Connections covers a 25-year timeframe



## LRTP PROGRAM DEVELOPMENT: 2050 CONNECTIONS

### How is the LRTP developed?



### What is the planning process?



2023

# L RTP PROGRAM DEVELOPMENT: 2050 CONNECTIONS



## 2050 Connections

### Document Overview (CONTINUED)



### What projections are considered in the plan?



Population



Employment



Future Growth

### Transportation Modes



Freight



Transit



Non-Motorized



Highways



Airports

### Planning Areas



Safety Planning



Congestion Management



Asset Management



Emerging Technologies



Environment

Existing Conditions | Current Challenges | Vision for Future | Needs & Priorities

2023

# L RTP PROGRAM DEVELOPMENT: 2050 CONNECTIONS



## Environmental Planning Chapters

### Electric Vehicles (EVs)

- o Transportation makes up majority of GHG out of any economic sector in nation and the Commonwealth (42%)
- o Transition to EVs can help reduce emissions from the transportation sector, combat the climate crisis, and improve air quality and public health
- o Build-out of EV charging infrastructure is necessary to support the widespread adoption of EVs



- o Efforts are being made at both the national and state level to support the build-out of EV charging infrastructure:

- BIL – NEVI Program and Charging & Fueling Infrastructure (CFI) Grant Programs (\$7.5 billion)
- Extension of Alternative Fuel Corridor (AFC) Grant Program
- Massachusetts 2050 Decarbonization Roadmap
- MassDOT NEVI Plan (\$63.5 million FY 2022 to FY 2026)



2023

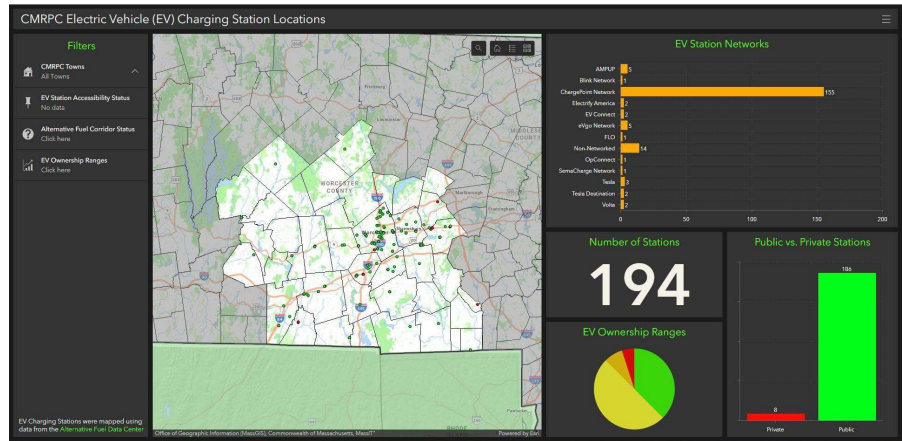
# L RTP PROGRAM DEVELOPMENT: 2050 CONNECTIONS



## Environmental Planning Chapters

### Electric Vehicles (EVs) (CONTINUED)

- o CMMPO EV Charging Work
  - CMMPO Air Quality Module
  - CMMPO ArcGIS EV Charging Dashboard
  - CMMPO Community Officials EV Charging Survey
- o CMMPO future EV charging infrastructure work in the region



2023

# L RTP PROGRAM DEVELOPMENT: 2050 CONNECTIONS



## Environmental Planning Chapters

### Stormwater Management – Culverts

- o North Atlantic Aquatic Connectivity Collaborative (NAACC)
  - Developed unified protocol, data form, scoring system, and database to identify culverts that are problematic from an aquatic connectivity perspective
  - MassDER partners with NAACC to provide training
- o 5,000 culverts in CMMPO region
- o Many culverts are more than 50 years ago, nearing end of life-stage, becoming increasingly vulnerable to failure
- o Culverts play a vital role for both transportation and river systems
  - Maintain connections
  - Protect infrastructure and property from flood and storm damage
  - Affect the stream continuity for aquatic organism passage and movement of wildlife
- o Massachusetts Stream Crossing Standards – ensure that culverts can handle high water flows, preserve natural stream channel, maintain wildlife passage, sustain stream continuity, and avoid failure during storms and rainfall events
  - Standards are required for Culvert Replacement Municipal Assistance (CRMA) Grant funding
  - Wetlands Protection Act require the Standards to be met for all new crossings



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# L RTP PROGRAM DEVELOPMENT: 2050 CONNECTIONS

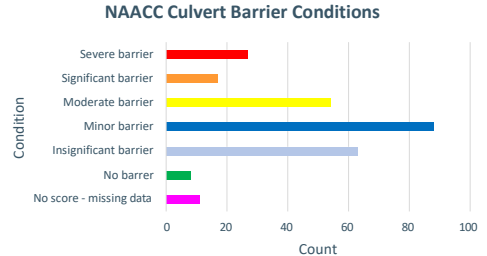


## Environmental Planning Chapters

### Stormwater Management – Culverts (CONTINUED)

o Current NAACC Culvert Barrier Conditions in the CMMPO region

- Severe barrier – 27
- Significant barrier – 17
- Moderate barrier – 54
- Minor barrier – 88
- Insignificant barrier – 63
- No barrier – 8



o CMMPO work

- Assessments (more information on upcoming slides)
- ArcGIS work to house data
  - ArcGIS Culvert Assessment Program Hub
  - ArcGIS Culvert Assessment Dashboard
  - Multiple available ArcGIS Online maps & layers

o Funding Opportunities

- TIP
- CRMA Grant Program
- Municipal Vulnerability Preparedness (MVP) Program
- National Culvert Removal, Replacement, & Restoration Grant Program

2023

# L RTP PROGRAM DEVELOPMENT: 2050 CONNECTIONS



## Environmental Planning Chapters

### Municipal Vulnerability Preparedness (MVP) Program

- o Provides support for communities to identify hazards, assess vulnerabilities, & develop action plans to improve resilience to climate change
- o Complete MVP Planning Process to become designated as MVP Community
  - Provides funding to assess vulnerabilities and prepare for climate change impacts, build community resilience, and receive designation as MVP Community
- o MVP Action Grants
  - Open to communities after completed MVP Planning process
  - Provides funding in community priorities that build resilience (i.e., green infrastructure projects)
- o Almost all communities in CMMPO region have MVP designation
- o Several communities in CMMPO have received MVP Action Grants: Mendon, Uxbridge, Northbridge, Millbury, Auburn, Worcester, Holden, Charlton, & Spencer
- o Click the button below to visit the MVP website dashboard to view more information regarding MVP Planning and Action Grants in the region!

[EOEAA Climate Grant Viewer](#)



2023

# UNIFIED PLANNING WORK PROGRAM (UPWP)



## Task 3.8: Climate Change – Resiliency, Sustainability, Vulnerability

### Update on 2022 Culvert Training and Assessments

#### 2022 Culvert Training

- Summer 2022: Trained 2 staff members, 4 individuals in the region
  - 1 Shrewsbury staff, 1 individual from Blackstone Watershed Collaborative, 2 college students
  - Individual from Blackstone Watershed Collaborative was gaining more training to become a L1 Coordinator (she would help complete training requirements for the 2 college students)

#### Culvert Assessments

- Assessed culverts in Sturbridge, Warren, Shrewsbury, and Brookfield (25 total)
  - Sturbridge (10)
  - Shrewsbury (9)
  - Warren (5)
  - Brookfield (1)
- 2023 Goals
  - Sturbridge (finish culverts)
  - Berlin
  - Boylston
  - NAACC training as needed



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2023

# ADJOURNMENT



## Thank you!

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## CENTRAL MASSACHUSETTS METROPOLITAN PLANNING ORGANIZATION

The minutes of the Environmental Consultation meeting held Thursday, April 6, 2023. This meeting was held virtually using Zoom.

- **Guests:**

1. Stella Jordan, Boston MPO
2. Jim Larkin, NECCOG
3. Brian Pigeon, Worcester Planning
4. Delia Fey, NECCOG
5. Dennis Lipka, WRTA Administrator
6. Kevin Duffy, West Boylston DPW Director
7. Lauren Vivier, Spencer Planning
8. Doug Alward, Shrewsbury
9. Joanna Paquin, Auburn DPW Director
10. Ann Sullivan, MassDOT District #3
11. Stephanie Covino, Blackstone Watershed
12. Sarah Bradbury, MassDOT District #3
13. Tracey Coppellotti, MassDOT District #3
14. Chris Klem, MassDOT Office of Transportation Planning

- **CMRPC Staff Present:**

1. Rich Rydant, Transportation Project Manager
2. Sujatha Krishnan, Deputy Director
3. Adam Wriggins, Assistant Transportation Planner
4. Kevin Krasnecky, Transportation Project Manager
5. Zack Blais, Associate Transportation Planner
6. Trish Settles, Deputy Director
7. Greer Jarvis, Assistant Transportation Planner

The CMMPO fully complies with Title VI of the Civil Rights Act of 1964 and related statutes and regulations in all programs and activities. The CMMPO does not discriminate on the basis of race, color, national origin, English proficiency, income, religious creed, ancestry, disability, age, gender, sexual orientation, military service, or gender identity or expression. Any person who believes himself/herself or any specific class of persons have been subjected to discrimination prohibited by Title VI or related statutes or regulations may, himself/herself or via a representative, file a complaint with the CMMPO. A complaint must be filed no later than 180 calendar days after the date on which the person believes the discrimination occurred.

### **Agenda Item #1 – Welcome & Around the Room Introductions**

Rich Rydant welcomed everyone to the Environmental Consultation meeting. Introductions were made by the transportation staff and those attending the meeting. A brief summary of the agenda was also given.

### **Agenda Item #2 – Environmental Consultation Overview**

Zack Blais began by explaining the purpose of the environmental consultation process. Mr. Blais described various maps that are an important element of the consultation process. The maps included: regional culverts (NAACC); DCR (open space, conservation, and water supply areas); FEMA flood zones (100 and 500 year) DEP (wetlands); and NHESP (vernal pools and priority habitats of rare species).

Mr. Blais then talked about the Massachusetts Project Intake Tool (MaPIT). This tool is used to initiate and develop a new TIP project. Similar to the previously mentioned environmental maps, MaPIT provides the numerous data layers that project proponents use to determine potential challenges for the proposed projects. Next, Mr. Rydant talked about project screening and selection and how all projects start in the Long-Range Transportation Plan (LRTP), which is a 25-year planning document. Projects are then screened using the MassDOT MaPIT tool and once approved they are assessed using the Performance-Based scoring criteria. Potential projects are then considered by the CMMPO for TIP programming. Additionally, Mr. Rydant mentioned other available CMRPC resources that communities can use for their environmental concerns. These include technical grant writing support, a stormwater management toolkit, culvert assessments, and various data collection programs.

### **Agenda Item #3 – TIP Project Screening and Selection**

- **Example Project:** FFY 2024 Webster TIP Project (Project ID: 608433) – Intersection Improvements at I-395 Ramps at Route 16 and Sutton Road

Mr. Rydant began by describing the details of the Webster TIP project. The project cost is estimated at \$14.945 million. The project is currently at 75% design and programmed in FFY 2024. Funding for the project will come from CMAQ, STBG, and Statewide HSIP funds. Mr. Rydant also summarized the existing conditions at the project location. These include poor drainage, poor sidewalks, a lack of adequate facilities for pedestrians and bicyclists, congestion (listed as congested location in the CMP), and it is a known high crash location (identified HSIP crash cluster within project area).

Mr. Rydant explained that potential improvements to the intersection as part of the project include the installation of traffic signals or roundabouts, resurfacing, bicycle and pedestrian improvements, sidewalk improvements, environmental work for drainage modifications, replacement or extension of the Mill Brook sluiceway, and upgrade of signs and pavement markings. Mr. Rydant showed several images of the project location to show the current issues being described, and showed several maps using the previously mentioned environmental layers.

- Congestion Mitigation and Air Quality (CMAQ)

Kevin Krasnecky explained that CMAQ is a TIP funding source used for projects that are expected to improve air quality and reduce harmful gases. Mr. Krasnecky noted the type of projects and eligible activities that are appropriate for this program. Some of these include Bikesharing, roundabouts, transit

service expansion, truck stop electrification, pedestrian and bicycle paths, and electric vehicle (EV) charging stations. Next, Mr. Krasnecky summarized a table showing the previous seven years of TIP projects that were approved for CMAQ funds. Mr. Krasnecky noted that over \$25 million in funds were awarded for the 13 approved projects in the CMMPO region. The VOC, NOx, and CO savings were also shown for each project in kilograms per year.

#### **Agenda Item #4 – Long Range Transportation Plan (LRTP) Program Development: 2050 Connections**

- Document Overview

Mr. Rydant explained that *2050 Connections* is the CMMPO region's LRTP. The purpose of an LRTP is to identify the multi-modal transportation needs and priorities of the CMMPO region. Metropolitan Planning Organizations (MPOs) must create a plan every four years, and *2050 Connections* covers a 25-year timeframe. Mr. Rydant also briefly explained the LRTP development and planning process.

Mr. Rydant noted that *2050 Connections* considers three projections in the plan: population, employment, and future growth. Mr. Rydant also briefly explained the five transportation modes and five planning areas that are included in the plan. The transportation modes are freight, transit, non-motorized, highways, and airports. Each mode summarizes the existing conditions, current challenges, visions for the future, and needs and priorities. The planning areas are safety planning, congestion management, asset management, emerging technologies, and environment.

- Environmental Planning Chapter

- Electric Vehicles (EV)

Mr. Blais briefly reviewed the EV section of the Environmental Planning Chapter of *2050 Connections*. This section highlights the growing trend of emissions that transportation contributes and how the transition to EVs can help reduce emissions and improve air quality and public health. In order to support the widespread growth of EV ownership a sustainable EV charging infrastructure is necessary. Mr. Blais explained that efforts are already being made to do this at both the national and state level, and this section reviews ways the CMMPO are working to support these efforts now and into the future.

- Stormwater Management – Culverts

Mr. Blais briefly reviewed the culvert section of the Environmental Planning Chapter of *2050 Connections*. This section highlights the overwhelming number of culverts in the CMMPO region and how many of them are becoming increasingly vulnerable to failure, especially during frequent rainstorms and severe weather events. Mr. Blais explained that CMMPO staff have been working with the North Atlantic Aquatic Connectivity Collaborative (NAACC) to identify, assess, and score culverts based on their impact on aquatic/wildlife and stream continuity. These results can help identify culverts that are at risk of flood and storm damage. Mr. Blais reviewed current results of NAACC culvert assessments in the region and other CMMPO work that has been completed, as well as funding opportunities that can be used to repair or replace vulnerable culverts.

- Municipal Vulnerability Preparedness (MVP) Program – Vulnerabilities

Mr. Blais briefly reviewed the MVP Program section of the Environmental Planning Chapter of *2050 Connections*. This section provides an overview of the MVP Program, which provides support for communities to identify hazards, assess vulnerabilities, and develop action plans to improve resilience to climate change. Communities must complete an MVP Planning Process to become designated as an MVP Community, which gives them access to apply for MVP Action Grants to receive funding to use for projects that build resilience. Mr. Blais mentioned that almost all communities in the CMMPO region have MVP designation and several communities have received MVP Action Grants.

#### **Agenda Item #5 – Unified Planning Work Program (UPWP)**

- Task 3.8: Climate Change – Resiliency, Sustainability, Vulnerability
  - Update on CMRPC Culvert Training and Assessment Results

Mr. Blais provided a brief overview of the CMRPC Culvert Assessment Program training and assessments. In Summer 2022, two CMRPC staff members and four individuals from the region were trained to become NAACC Lead Observers and allows them the ability to assess culverts using NAACC protocols. One individual completed NAACC Level 1 (L1) Coordinator training, which provides the ability to provide training to other interested individuals.

Mr. Blais updated the group that staff have recently assessed culverts in Sturbridge, Warren, Shrewsbury, and Brookfield, totaling 25 culvert assessments. For 2023, staff aims to finish all culvert assessments along federal-aid eligible roads in Sturbridge, and then begin culvert assessments along federal-aid eligible roads in Berlin and possibly Boylston. NAACC training will also be provided as needed.

#### **Agenda Item #6 – Adjournment**

Jim Larkin asked if staff are involved with assisting the towns with MS4 Program. Sujatha Krishnan replied that that would be with the CMRPC RCCP staff. Trish Settles provided some more details on how the RCCP staff refers the towns to the Central Mass Stormwater Coalition.

There were no other comments or questions.

Rich Rydant thanked everyone for attending and adjourned the meeting at 11:20 PM.



# Public Transit



## Massachusetts Bay Transportation Authority

# Worcester Union Station Accessibility and Infrastructure Improvements

Public Meeting

May 27, 2020

Virtual Meeting – 5:30 PM

Maribel Kelly, MBTA Sr. Project Manager

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Worcester Union Station Accessibility and Infrastructure Improvements

## Public Meeting amid COVID-19 circumstances

In light of the ongoing COVID-19 coronavirus outbreak, Governor Baker issued an emergency order on March 12, 2020, allowing public bodies greater flexibility in utilizing technology in the conduct of meetings under the Open Meeting Law. The MBTA greatly values the participation of its citizens in the public meeting process, but given the current circumstances and recommendations at both the state and federal levels to limit or avoid public gatherings, including Governor Baker's ban on gatherings of more than 25 people (later revised to 10 people), together with the present closure of public buildings to the public, the MBTA has decided to implement the "remote participation" procedures. The virtual webinar is part of that effort.

2

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## Notification of Recording

- This meeting will be recorded and the Massachusetts Bay Transportation Authority (MBTA) may choose to retain and distribute the video, still images, audio, and/or the chat transcript.
- Attendees will be muted and video will be turned off upon entry.
- By continuing with this virtual meeting, you are consenting to participate in a recorded event.
- The recordings and chat transcript will be considered a public record.
- If you do not feel comfortable being recorded, please turn off your camera and/or mute your microphone, or leave the meeting.

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## Virtual Meeting Best Practices

- The question and answer portion will take place at the end of this presentation.
- If you have any questions during the webinar, you may submit them in zoom's Q&A box, located at the bottom of your zoom window.
- If you are attending via phone, you can ask a question by dialing \*9. This will put you in a queue and the moderator will call out the last 4 digits of your phone number when it is your turn.
- This meeting presentation is currently available to view on the project's website, [www.mbta.com/UnionStation](http://www.mbta.com/UnionStation).
- The entirety of this webinar recording will be posted to the project's website upon the conclusion of the presentation.
- Questions can also be submitted to [unionstation@mbta.com](mailto:unionstation@mbta.com) at any time during this project's duration.

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## Agenda

- Team Introduction
- Project Goals
- Project Overview
  - Purpose and Need
  - Project Benefits
  - Existing Station Layout
  - Proposed Station Layout
- Environmental Considerations
- Project Schedule
- Construction Phasing
- Q&A



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Worcester Union Station Accessibility and Infrastructure Improvements

## Team Introductions

### MBTA

- Deputy Chief, Capital Delivery  
Commuter Rail Programs
- Sr. Director of Commuter Rail
- Sr. Project Manager

Nazanin Mossahebi  
Anthony DeDominicis  
Maribel Kelly

### Panelists – Project Team

- MBTA Sr. Project Manager
- HDR Project Manager
- HDR Sr. Architect
- HDR Architect
- HDR Engineer

Maribel Kelly  
Eric DiVirgilio  
Michael Baskin  
Christopher Smee  
Kevin Slattery

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## Project Goals

- Accessibility
- Safety
- Operational Flexibility
- Sustainability
- Resiliency



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Worcester Union Station Accessibility and Infrastructure Improvements

## Project Overview– Purpose, Needs & Benefits

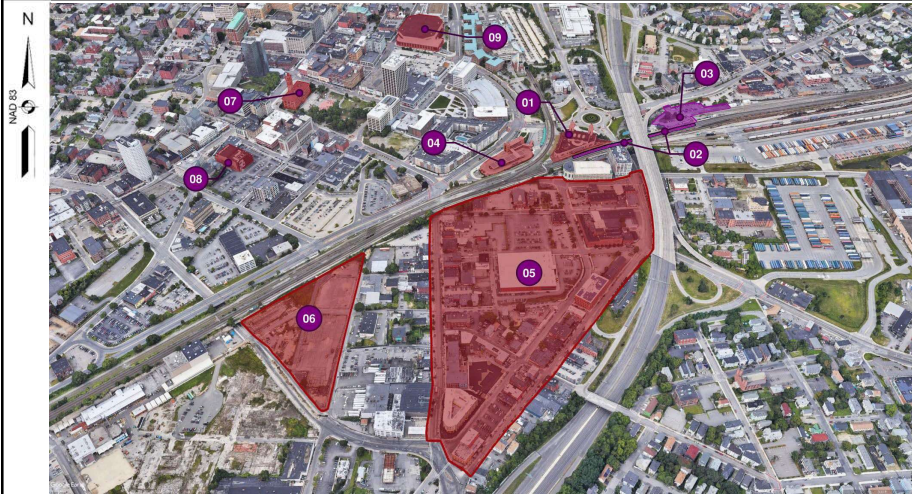
- Implement **ADA upgrades** to fulfill code compliance requirements.
- Increase passenger and overall **system safety** - Improved lighting, clear site lines, security cameras.
- Improve **reliability** and **resilience** - Center island high level platform to allow two trains sets simultaneous access to the platform and the addition of a crossover.
- Increase **capacity** and **operational reliability, flexibility** and **resiliency** for both MBTA and Amtrak services in the near and long-terms.
- **Reduce** station life cycle maintenance costs and **lower** energy consumption.

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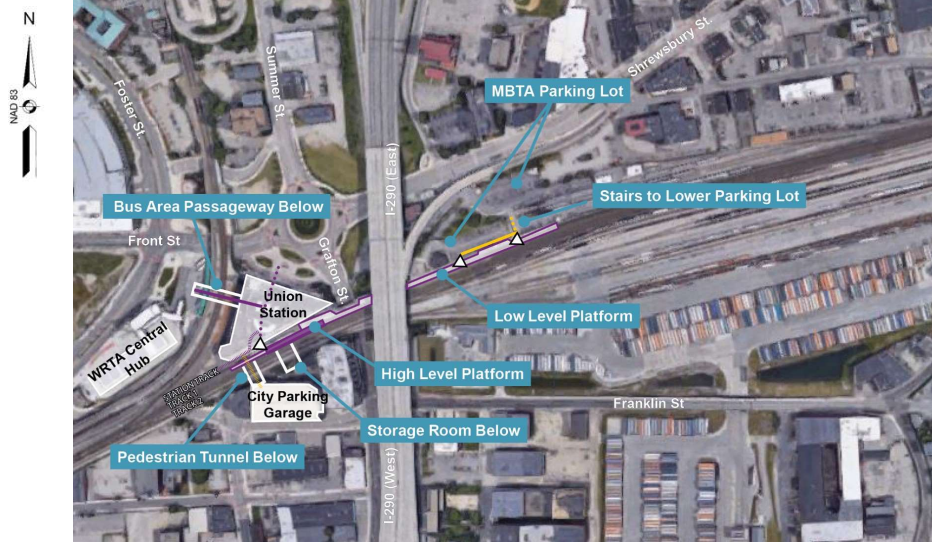
## Project Overview – Project Area Map



### LEGEND:

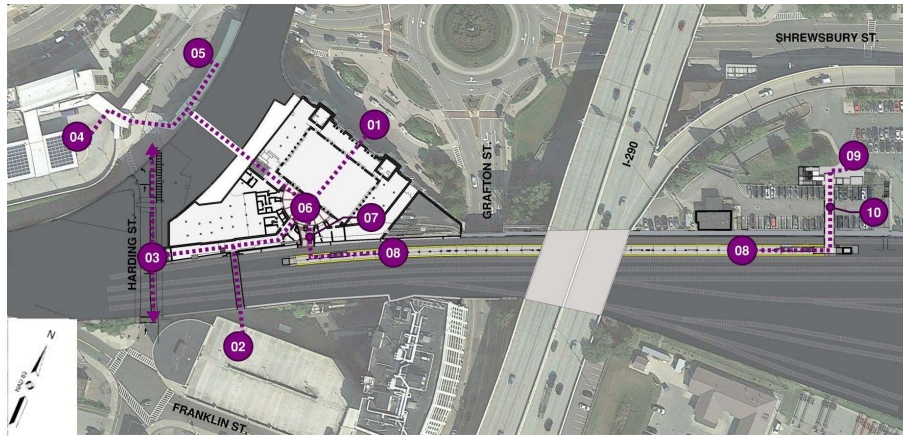
1. Union Station
2. New Center Island Platform
3. MBTA East Parking Lot
4. WRTA Bus Facility
5. Canal District
6. Baseball Stadium Site
7. City Hall
8. Hanover Theatre
9. DCU Center

## Project Overview – Project Station Layout





## Project Overview – Station Access



### LEGEND:

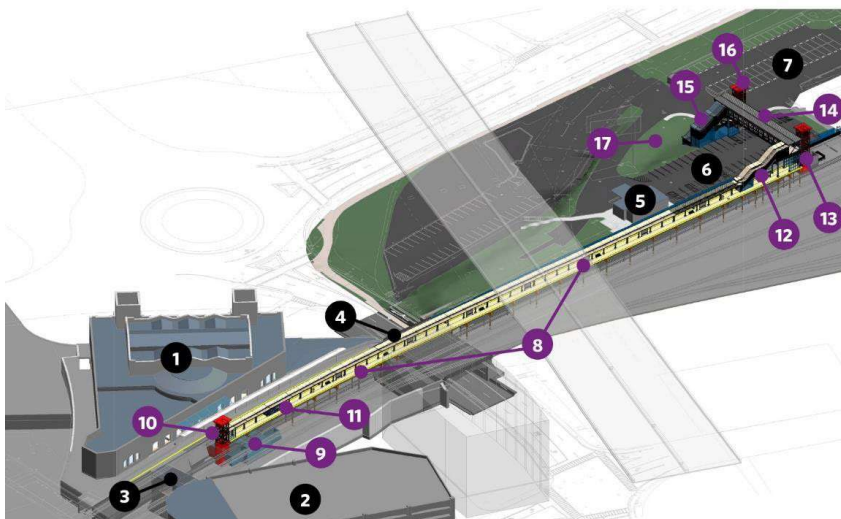
1. Front Entrance / Drop-Off
2. Union Station Garage
3. Harding Street Entrance / Taxi & Ride Share Area
4. WRTA Bus Station
5. Inter-City Bus Bays
6. Rotunda (Convergence Point within the Station Building)
7. Platform Access Corridor (Ticketing Located Here)
8. New Center Island Platform
9. East Passenger Drop-Off\*
10. Pedestrian Bridge (Ticketing Located Here)

\* This is currently being coordinated between MBTA and WRA

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## Project Overview – Overall 3D View at Station



### EXISTING FEATURES:

1. Union Station Building
2. Union Station Parking Garage
3. Pedestrian Tunnel to Parking Garage
4. Grafton St. Bridge
5. Keolis Building
6. MBTA Upper Parking Lot
7. MBTA Lower Parking Lot

### PROPOSED FEATURES:

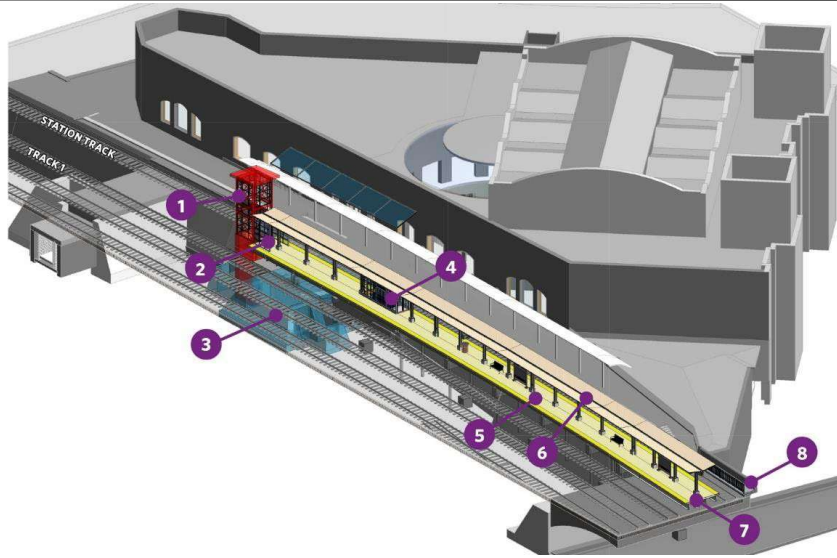
8. Center Island Platform
9. Platform Access Corridor (Below)
10. Elevator #1
11. Stair #1
12. Stair #2
13. Elevator #2
14. Pedestrian Bridge
15. Stair #3
16. Elevator #3
17. Rainwater Retention Area

12

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## Project Overview – West End 3D View



### KEY FEATURES:

1. Elevator #1
2. Elevator Lobby at Platform
3. Platform Access Corridor (Below)
4. Stair #1 w/ Enclosure
5. Center Island Platform
6. Continuous Canopy
7. Platform Spans Over Grafton St. Bridge
8. Accessible Walkway

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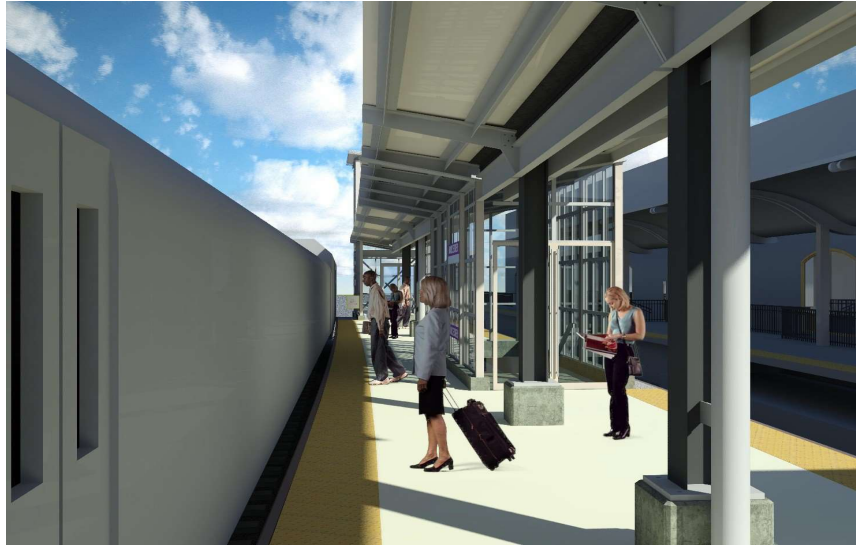
## Project Overview – Rendering from Garage Roof



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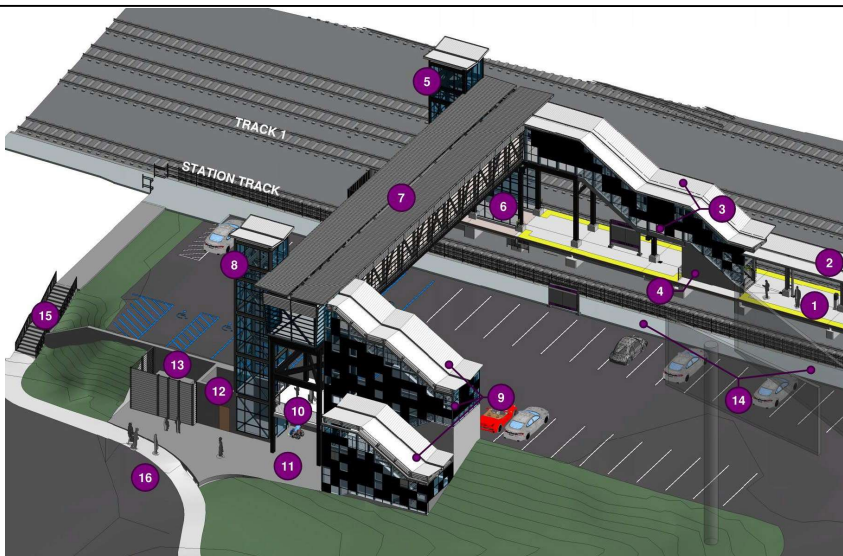
## Project Overview – Rendering at West End from Platform



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## Project Overview – East End 3D View



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### KEY FEATURES:

1. Center Island Platform
2. Continuous Canopy
3. Stair #2 w/ Roof & Screening
4. Storage Room Below Stairs
5. Elevator #2
6. Elevator Lobby
7. Pedestrian Bridge
8. Elevator #3
9. Stair #3 w/ Roof & Screening
10. Upper Landing
11. Lower Landing / Plaza
12. EMR #3
13. Backup Generator & Enclosure
14. Accessible Walkway w/ Fence
15. Existing Concrete Stair
16. East Passenger Drop-Off

## Project Overview – Rendering at East End from Platform



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## Project Overview - Rendering from Upper Parking Lot



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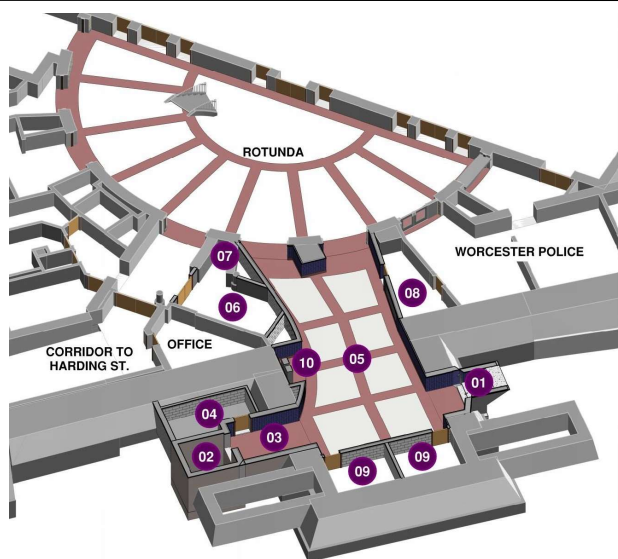
## Project Overview – Rendering from Lower Parking Lot



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## Project Overview – Platform Access from Union Station



### KEY FEATURES:

1. Stair #1
2. Elevator #1
3. Elevator Lobby
4. Elevator #1 Machine Rm.
5. Platform Access Corridor
6. Mechanical Rm.
7. Exist. 3<sup>rd</sup> Party Comm. Equipment
8. Police Access Vestibule
9. MBTA Offices
10. Ticketing Alcove

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## Station Design Update- Rendering from Rotunda



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## Station Design Update- Rendering from Platform Access Corridor



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## Environmental Conditions

- Environmental conditions:
  - No adverse effect on historic properties
  - Ongoing Coordination with FTA, Worcester Historical Commission and Massachusetts Historic Commission (MHC)
  - Soil management requirements evaluated; routine for railroad ROW soils
- Environmental improvements:
  - Storm water treatment and management improvements.
  - LED lighting to minimize energy consumption.

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Worcester Union Station Accessibility and Infrastructure Improvements

## Project Schedule

MILESTONE	SCHEDULE
30% Submission	July 2019
75% Submission	November 2019
100% PS&E	Anticipated - June 2020 Actual - April 2020
Bid Phase	August 2020 - October 2020*
Notice to Proceed (NTP) Construction	November 2020
Project Completed	Fall 2022

\* Pending Construction Funding





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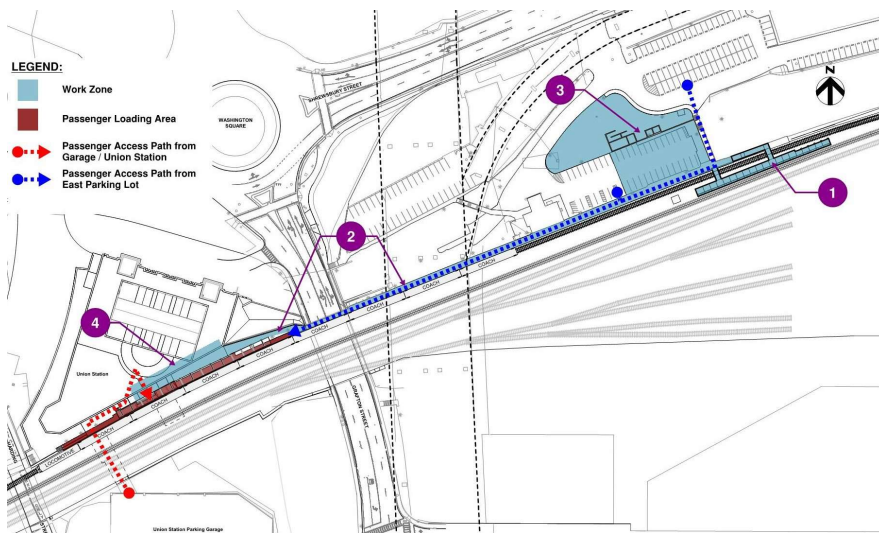
24

# Construction Phasing

## Construction Phasing – Phase 1 (Approx. Duration: 4 Months)

**LEGEND:**

-  Work Zone
-  Passenger Loading Area
-  Passenger Access Path from Garage / Union Station
-  Passenger Access Path from East Parking Lot



### Passenger Access:

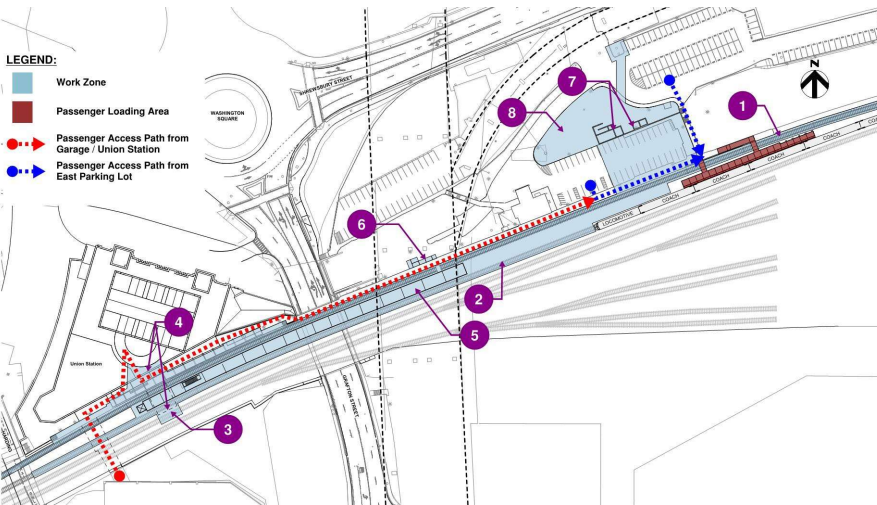
- No change to passenger access.
- Existing high-level platform remains in service

### Construction Activities:

1. Construct temporary platform, ramp, and stairs east of proposed platform.
2. Convert existing low level platform into code compliant accessible walkway and install fence.
3. Begin work for new Retaining Wall, Electrical and Comm. Rooms at East Parking Lot.
4. Begin demolition inside Union Station.



## Construction Phasing – Phase 2 (Approx. Duration: 12 Months)



### Passenger Access:

- Passenger loading is relocated to the temporary platform.
- The temporary platform will be accessed from the accessible walkway via stairs and a ramp.
- All trains will board from Track 1, with access to the 1st 4 cars.

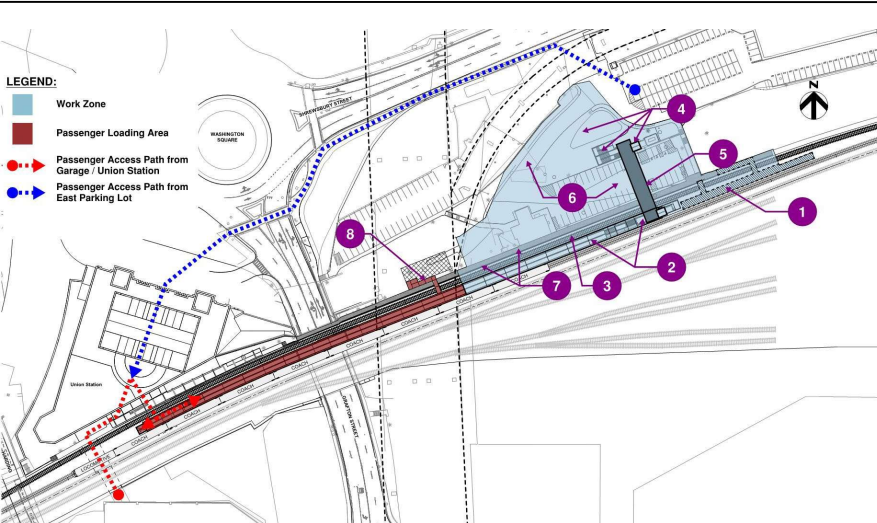
### Construction Activities:

1. Station Track is taken out of service to adjust profile.
2. Replace Track 1 in segments during non-revenue hours.
3. Portion of Track 2 is taken out of service to apply waterproofing.
4. Continue work within the station building.
5. Install micro piles and construct the west side of the platform.
6. Construct temporary ramp at the east end of the newly constructed portion of the platform.
7. Complete the electrical and comms. rooms at the east end.
8. Complete parking plaza and greenway area.

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## Construction Phasing – Phase 3 (Approx. Duration: 9 Months)



### Passenger Access:

- Passenger loading is relocated to the west half of the new platform.
- The west half of the new platform will be accessed through the Union Station Building.
- All trains will board from Track 1, with access to up to 6 cars.
- All accessible parking is relocated to the parking garage.

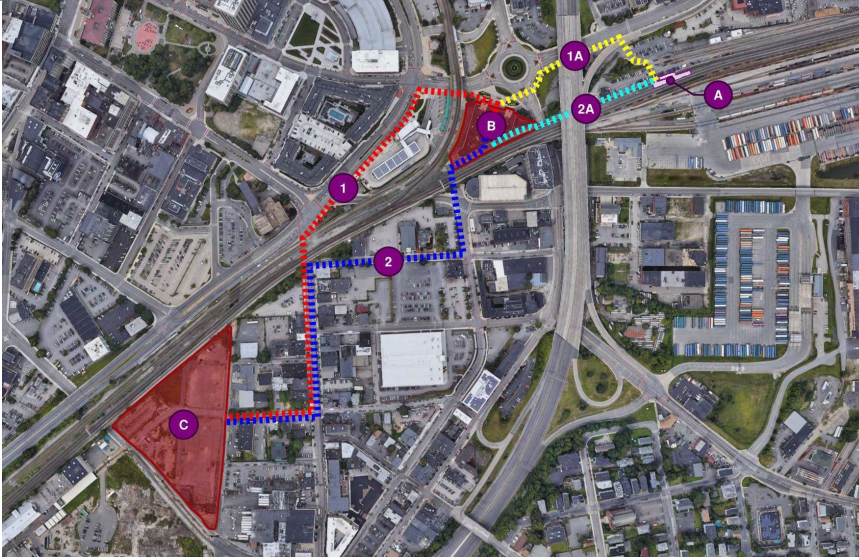
### Construction Activities:

1. Demolish temporary platform, ramp, and stairs.
2. Construct the east end of the platform.
3. Replace eastern section of Station Track.
4. Construct the North Stairs and Elevator.
5. Construct the pedestrian bridge.
6. Resurface and stripe exist. parking lots & driveway.
7. Provide permanent accessible walkway and fencing.
8. Secondary egress from west half of platform via ramp & area of rescue assistance.

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## Access to Polar Park During Construction



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### Destination Points:

- A. Temporary Platform
- B. Union Station Building
- C. Baseball Stadium Site

### Walking Routes:

#### From Union Station:

- 1. 0.5 Miles / Approx. 10 Min.
- 2. 0.4 Miles / Approx. 9 Min.

#### From Temporary Platform:

- 1A: Adds 0.2 Miles / 5 Min.
- Total: 0.7 Miles / 15 Min.

- 2A: Adds 0.15 Miles / 4 Min.
- Total: 0.65 Miles / 14 Min.

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## Questions & Answers

- Please share only one question or comment at a time.
- To ask a question via phone, dial \*9 and the moderator will call out the last 4 digits of your phone number and unmute your audio when it is your turn.
- Use the “Q&A” button to submit a typed question or comment at any point during the meeting.
- Press the “Raise Hand” button to share your question or comment verbally.
  - After you raise your hand, wait for the moderator to recognize and unmute you before speaking.
  - After you share your question or comment, we will lower your hand and you will be muted to allow the team to respond and provide opportunities for others to participate.



You may also submit your questions or comments if we run out of time, after the meeting, to the project email address: [unionstation@mbta.com](mailto:unionstation@mbta.com) or visit [www.mbta.com/UnionStation](http://www.mbta.com/UnionStation) for more information.

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## For More Information On This Project

Visit the Project Website

[www.mbta.com/UnionStation](http://www.mbta.com/UnionStation)

Public and Stakeholders can sign up for email updates from project on website.

Project Email

[UnionStation@mbta.com](mailto:UnionStation@mbta.com)

THANK YOU!



# Additional Materials

## Additional Materials

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### Listing of Acronyms

ABP:	Accelerated Bridge Program
AC	Advanced Construction
ADA:	Americans with Disabilities Act of 1990
BIL:	Bipartisan Infrastructure Law
BMS:	Bridge Management System
CAAA:	Clean Air Act Amendments
CIP:	Capital Investment Plan
CMAQ:	Congestion Mitigation Air Quality
CMMPO:	Central Massachusetts Metropolitan Planning Organization
CMP:	Congestion Management Process
CMRPC:	Central Massachusetts Regional Planning Commission
CO:	Carbon Monoxide
CO2:	Carbon Dioxide
CRP:	Carbon Reduction Program
CRRSAA:	Coronavirus Response & Relief Supplemental Appropriations Act
CY:	Calendar Year
DCR:	Department of Conservation and Recreation
DEP:	Department of Environmental Protection
DOD:	Department of Defense
DOT:	Department of Transportation
EJ:	Environmental Justice
EPA:	Environmental Protection Agency
EPDO:	Equivalent Property Damage Only
eSTIP:	Electronic STIP
EV:	Electric Vehicles
FAST ACT	Fixing America's Surface Transportation Act
FFY	Federal Fiscal Year
FHWA:	Federal Highway Administration
FLMA:	Federal Land Management Agency
FRA:	Federal Railroad Administration
FTA:	Federal Transit Administration
FY:	Fiscal Year
GANS:	Grant Anticipation Notes
GHG	Greenhouse Gas
GIS:	Geographic Information System
GWSA:	Global Warming Solutions Act
HIP:	Highway Infrastructure Program
HPMS:	Highway Performance Monitoring System
HPP:	High Priority Project

## 2050 CONNECTIONS TECHNICAL APPENDIX

HSIP:	Highway Safety Improvement Program
IJA:	Infrastructure Investment and Jobs Act
IM:	Interstate Maintenance
IRI:	International Roughness Index
ITS:	Intelligent Transportation Systems
LEP:	Limited English Proficiency
LOTTR:	Level of Travel Time Reliability
LRTP:	Long Range Transportation Plan
MaPIT:	Massachusetts Project Intake Tool
MAP-21:	Moving Ahead for Progress in the 21 <sup>st</sup> Century Act
MARPA:	Massachusetts Association of Regional Planning Agencies
MARTA:	Massachusetts Association of Regional Transit Authorities
MassDOT:	Massachusetts Department of Transportation
MBTA:	Massachusetts Bay Transportation Authority
MOU:	Memorandum of Understanding
MPO:	Metropolitan Planning Organization
MVP:	Municipal Vulnerability Preparedness
NAAQS:	National Ambient Air Quality Standards
NBIS:	National Bridge Inventory Standards
NBS:	Nature-Based Solutions
NEVI:	National Electric Vehicle Infrastructure
NFA:	Non Federal-Aid
NGBP:	Next Generation Bridge Program
NHFP:	National Highway Freight Program
NHPP:	National Highway Performance Program
NHS:	National Highway System
NOx:	Any of the Oxides of Nitrogen
NPMRDS:	National Performance Management Research Dataset
NTD:	National Transit Database
ODCR:	Office of Diversity and Civil Rights
O <sub>3</sub> :	Ozone
OTP:	Office of Transportation Planning
PBPP:	Performance-Based Planning & Programming
PDA:	Priority Development Area
PEA:	Planning Emphasis Area
PEL:	Planning & Environmental Linkages
PHED:	Peak Hour Excessive Delay
PL:	Metropolitan Planning funds (federal)
PM:	Performance Measures
PMS:	Pavement Management System
PPP:	Public Participation Program
PRC:	Project Review Committee
PROTECT:	Promoting Resilient Operations for Transformative, Efficient, & Cost Saving Transportation

## 2050 CONNECTIONS TECHNICAL APPENDIX

PSI:	Pavement Serviceability Index
PTASP:	Public Transportation Agency Safety Plan
RITIS:	Regional Integrated Transportation Information System
ROW:	Right Of Way
RPA:	Regional Planning Agency
RSA:	Roadway Safety Audit
RTA:	Regional Transit Authority
RTACAP	Regional Transit Authority Capitol Assistance
RTP:	Regional Transportation Plan
SD:	Structurally Deficient
SGR:	State of Good Repair
SHSP	Strategic Highway Safety Plan
SIP:	State Implementation Plan (for Air Quality)
SMS:	Safety Management System
SOV:	Single Occupancy Vehicle
SRTS	Safe Routes to School
STIP:	State Transportation Improvement Program
STBG:	Surface Transportation Block Grant Program
TAM:	Transit Asset Management Plan
TAMP:	Transportation Asset Management Plan (Highway)
TAP:	Transportation Alternative Program
TDC:	Transportation Development Credits
TEC:	Transportation Evaluation Criteria
TERM:	Transit Economic Requirements Model
TFPCC	Total Federal Participating Construction Cost
TIP:	Transportation Improvement Program
Title VI	Title VI of the Civil Rights Act of 1964
TTTR:	Truck Travel Time Reliability
ULB:	Useful Life Benchmark
UPWP:	Unified Planning Work Program
UZA:	Urbanized Area
VMT:	Vehicle Miles of Travel
VOC:	Volatile Organic Compounds
WRTA:	Worcester Regional Transit Authority
YOE:	Year of Expenditure
3C:	Continuing, Cooperative & Comprehensive (planning process)



### Partner Agencies

The Long-Range Transportation Plan (LRTP), 2050 Connections is the product of a comprehensive, continuous, and cooperative effort to improve and sustain the transportation systems of the Central Massachusetts Region. The decisions and priorities established within are derived and shaped through outreach to and input from local officials, the CMMPO, the Worcester Regional Transit Authority (WRTA), the Central Massachusetts Regional Planning Commission (CMRPC), the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the MassDOT OTP, the MassDOT Highway Division and any and all interested individuals, organizations and stakeholders in the public at large. Throughout the development and decision-making process, all individuals in the region are strongly encouraged to participate in the transportation planning process, voice any opinions or concerns and help shape and guide the development of this document.

## Additional Materials

### 2050 Connections Comment Checklist from MassDOT OTP

MPO Liaison LRTP Review Checklist					
Completeness					
ID			Review Item	Comments	Reference
A1	✓	*	Table of Contents is accurate and internally-linked.	N/A	✓ -- for use in column B
A2		*	Document has no broken links.		✗ -- for use in column B
A3		*	<b>MPO self certification statement is included.</b>	Please include the MPO self certification endorsement sheet for signature.	
A4	✓	*	<b>GHG certification is included.</b>		
A5	✓	*	<b>Air Quality Conformity statement is included.</b>		
A6		*	Document has no text or image placeholders.	Please make sure Technical Appendix is available online after MPO endorsement. Please make sure figures throughout Chapter 4 are incorporated into final version.	
A7	✓	*	Charts, tables, and maps are legible and properly annotated.		
A8	✓	*	Document passes an accessible check.		
A9	✓	*	Document is available in relevant languages per the MPO's Title VI Plan.		
A10	✓	*	List of MPO members is current.		
A11	✓	*	Signatory sheet is included and accurate. Update Gina Fiandaca as Secretary/CEO of MassDOT.		

## 2050 CONNECTIONS TECHNICAL APPENDIX

A12		*	Acronyms and partner agency lists are up to date.	Please consider including an acronyms and partner agency list in the appendix. This can be copied directly from the list in the TIP & UPWP.	
Narrative					
ID			Review Item	Comments	Reference
B1	✓	*	RTP outlines MPO institutional organization.		
B2	✓	*	RTP links to BIL planning emphasis areas.		<a href="https://www.transit.dot.gov/regulations-and-programs/transportation-planning/2021-planning-emphasis-areas">https://www.transit.dot.gov/regulations-and-programs/transportation-planning/2021-planning-emphasis-areas</a>
B3	✓	*	RTP references the TIP and the UPWP.		
B4		*	RTP narrative is concise and reader-friendly.		
B5	✓	*	RTP discusses evaluation scoring.		
B6	✓	*	RTP includes project scoring table.		
B7	✓	*	RTP describes public participation process.		
B8	✓	*	RTP references projects that are considered to be regionally significant. <b>If RTP lists "regionally significant" projects in a financially constrained manner, please notify the Manager of MPO Activities.</b>		
B9	✓	*	RTP describes funding sources accurately and notes new funding sources in BIL.	Please consider including the following link in the appendix, or perhaps in the 'Federal Programs' section of Chapter 2, so the audience has full information on the non-discretionary programs in BIL.	<a href="https://www.fhwa.dot.gov/specialfunding/">https://www.fhwa.dot.gov/specialfunding/</a>

## 2050 CONNECTIONS TECHNICAL APPENDIX

B10	✓	*	RTP is comprehensible to the general public.	<p>Please consider addressing the following potential minor errors/typos:</p> <ul style="list-style-type: none"> <li>- Ch 6, in the 'Projected Revenue' subsection on page 7, the third sentence of the first paragraph describes state funding revenues but introduces them as federal revenues. Please confirm whether the sources describes are for state or federal funds.</li> <li>On the same page, in the last paragrah, it is noted that "After 2045, the regional targets include a projected 2% increase per year." Should this be 2025?</li> </ul>	
B11	✓	*	RTP vision, goals, and objectives are clearly stated, and discuss the influence of public feedback and participation.		
B12	✓	*	RTP discusses coordination and collaboration with regional and state agencies that contributed to document development.		
B13	✓	*	RTP outlines reference and coordination with other regional planning efforts and MassDOT statewide plans. This includes all modes of transportation and also economic development,		<a href="https://www.mass.gov/statewide-plans">https://www.mass.gov/statewide-plans</a>

## 2050 CONNECTIONS TECHNICAL APPENDIX

			housing coordination, recreation, etc.		
Performance Measurement					
ID			Review Item	Comments	Reference
C1	✓	*	RTP includes discussion of target-setting process.		
C2	✓	*	RTP references relevant Transit Asset Management (TAM) Plans and includes all TAM Plan targets.		<a href="https://www.transit.dot.gov/TAM/TAMPlans">https://www.transit.dot.gov/TAM/TAMPlans</a>
C3	✓	*	RTP references relevant Public Transportation Agency Safety Plans (PTASPs) and includes all PTASP targets		<a href="https://www.transit.dot.gov/PTASP">https://www.transit.dot.gov/PTASP</a>
C4	✓	*	RTP includes current adopted performance targets.		PM1, PM2, PM3, TAM, and any regionally-derived targets
C5	✓	*	RTP discusses relationship between performance targets and project selection.		
C6	✓		Discussion on performance measures compares regional data to statewide data where available.		
C7	✓	*	Future projects and studies under consideration outline beneficiaries at the local, regional, state, and inter-state level as appropriate.		
C8	✓		Transit-related efforts are specific.		
C9	✓	*	Includes a discussion on performance-based planning.		
C10	✓	*	Includes a discussion of efforts to update to any congestion mitigation planning.		Required for TMA MPOs if current CMP is out of date.
C11	✓		If previous priorities, projects, or studies have not advanced, please		

## 2050 CONNECTIONS TECHNICAL APPENDIX

			discuss challenges and potential solutions.		
Project Listing and Program Development					
ID			Review Item	Comments	Reference
D1	✓	*	Financial projections align with MassDOT guidance.		
	✓		If the LRTP establishes or updates programs, there is a clear linkage to the TIP (e.g. X% of funds spent on Complete Streets, X% of Safety, etc.)		
D2	✓	*	If projects are listed, they use MassDOT ProjectInfo TFPCs.		
D3	✓	*	If projects are listed, they use MassDOT ProjectInfo description.		
Impact Analysis					
ID			Review Item	Comments	Reference
E2		*	GHG analysis is available for all (and only) funded projects.	N/A	
E3		*	All projects are appropriately labeled as qualitative or quantitative.	N/A	
E4		*	Transit projects have been analyzed for GHG.	N/A	
E5	✓	*	Past and current TIP projects have been analyzed for geographic equity, including a relevant table of programming by municipality.		
E6	✓	*	Past and current TIP projects have been analyzed for social equity.		
E7	✓	*	Social equity analysis considers Title VI / language access.		
E8	✓	*	Social equity analysis considers EJ populations, including both federal and state definitions.		
E9	✓	*	Equity analysis includes a narrative to accompany any figures.		

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E10		*	RTP includes a geographic equity distribution table showing location of 2024-2028 TIP projects and 2018–2022 and current UPWP-funded studies by municipality and number of tasks.	N/A	
E11		*	RTP includes a social equity distribution table of 2024-2028 TIP projects and 2018-2022 and current UPWP funded-studies considering language access and EJ populations.	N/A	
E12	✓	*	Public involvement and comment are explicitly documented and in line with MPO's Public Participation Plan.		