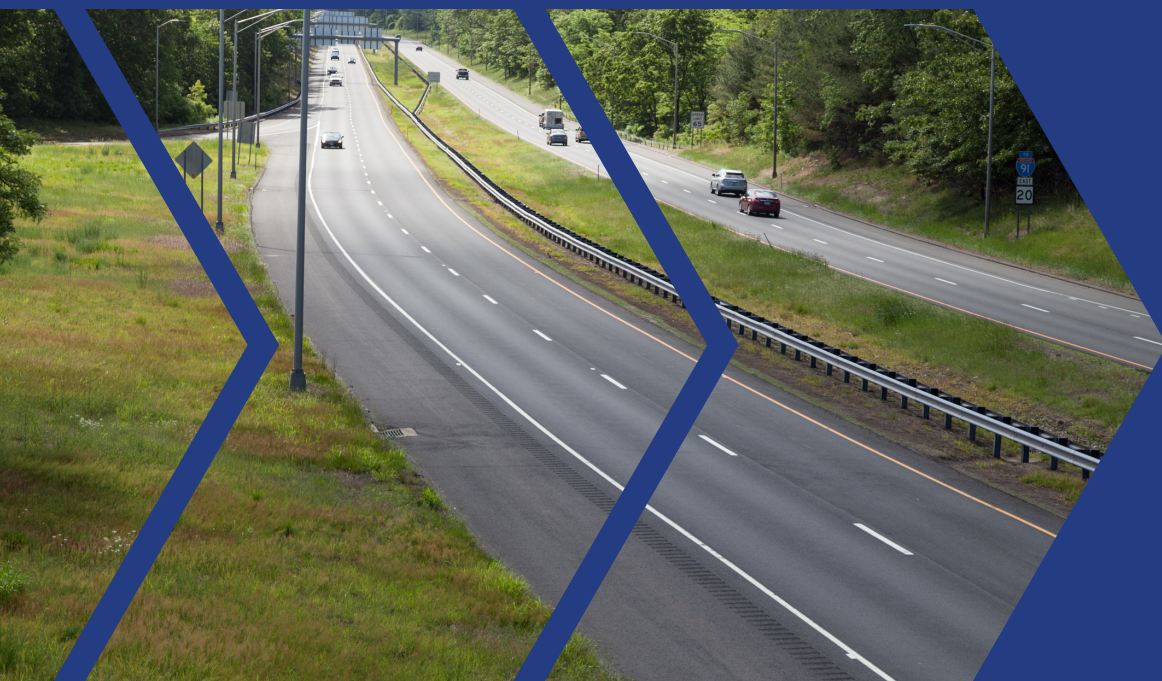


Executive Summary

Metropolitan Transportation Plan

Long Range Transportation Plan for the Capitol Region, 2023-2050





Prepared in cooperation with the Connecticut Department of Transportation and U.S. Department of Transportation's Federal Highway Administration and Federal Transit Administration. The opinions, findings, and conclusions expressed in this publication are those of the Capitol Region Council of Governments and do not necessarily reflect the official views or policies of the Connecticut Department of Transportation and/or the U.S. Department of Transportation.

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Introduction

As the designated Metropolitan Planning Organization (MPO) for the Greater Hartford Metro area, the Capitol Region Council of Governments (CRCOG) has prepared an update of its Metropolitan Transportation Plan (MTP). This document is one of three interrelated planning efforts that CRCOG has developed to help prepare for the region's future. The other planning documents are the region's Plan of Conservation and Development (POCD) and the Comprehensive Economic Development Strategy (CEDS). Taken together, these plans outline a future that focuses on CRCOG's communities, its people and its businesses, and a transportation system that will meet CRCOG's overall objective of creating a more vibrant, green, connected, and competitive region. The effective date of this plan is April 26, 2023.

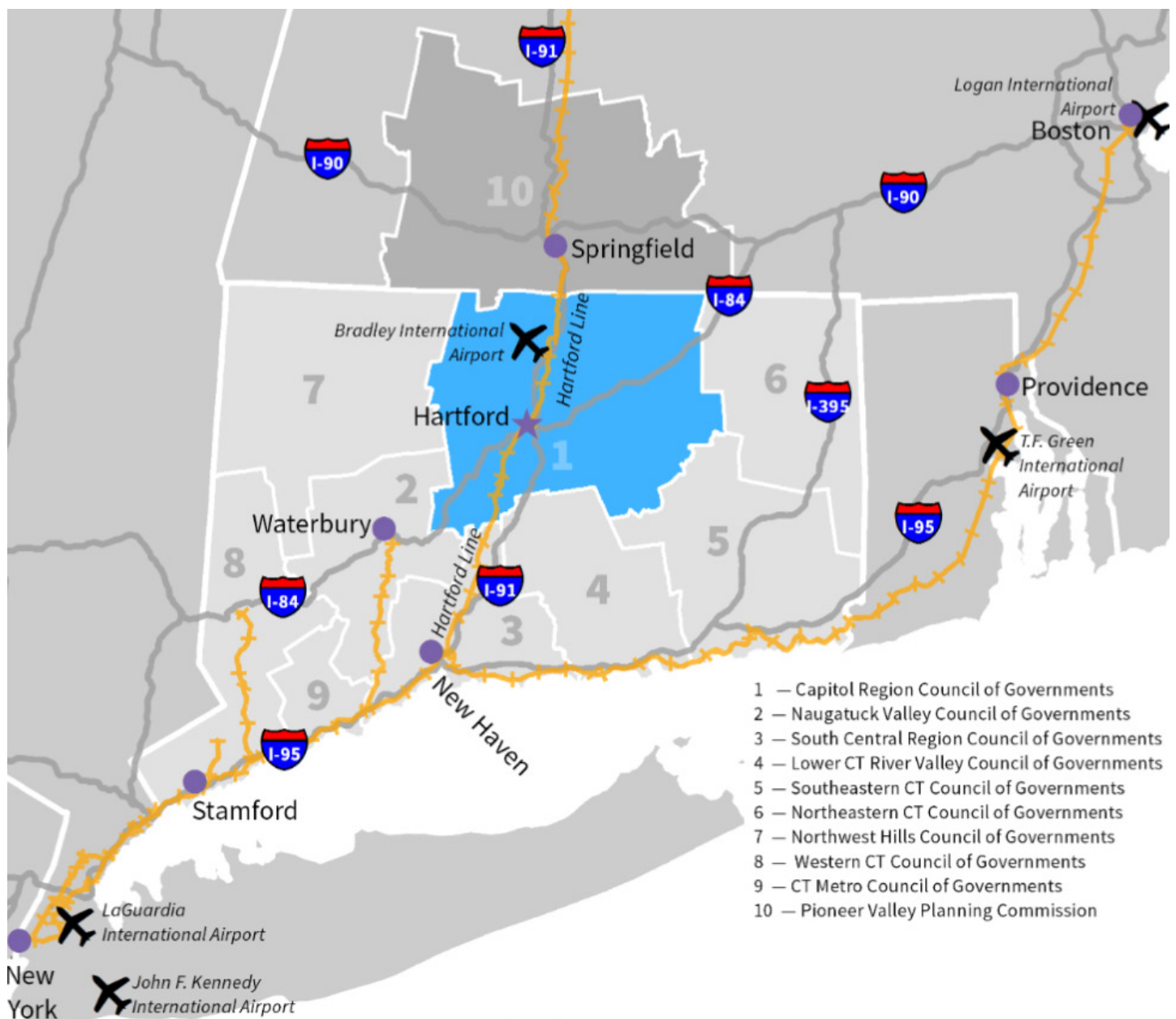


Photo by Carl Talley

A key component of the MTP planning process is a robust and inclusive public involvement process throughout preparation of the plan. CRCOG hosted a series of virtual public meetings and collected feedback through an online survey to gain input from individuals who live and work in CRCOG's 38 member communities. This comprehensive process enabled CRCOG

to identify priority projects and develop a fiscally constrained plan to move towards implementation over the 27-year planning horizon. CRCOG's context within the Northeast transportation system is shown in Figure 1.

Figure 1 — **CRCOG Northeast Regional Context Map**



What is a Metropolitan Transportation Plan?

The MTP is the plan that identifies how the Capitol Region will manage and operate a multimodal transportation system to meet the region's economic, transportation, development, and sustainability goals between now and 2050 – a long range planning timeframe in a fiscally constrained environment as required by federal law.

Key Considerations

Prioritization

The plan recognizes that there are multiple and sometimes competing priorities to consider in the development of a fiscally constrained plan. These include both the need to maintain existing transportation assets, and the recognition that congestion, capacity issues, as well as economic and population changes will require expanding mobility options in the future.

Modest Revenue Growth

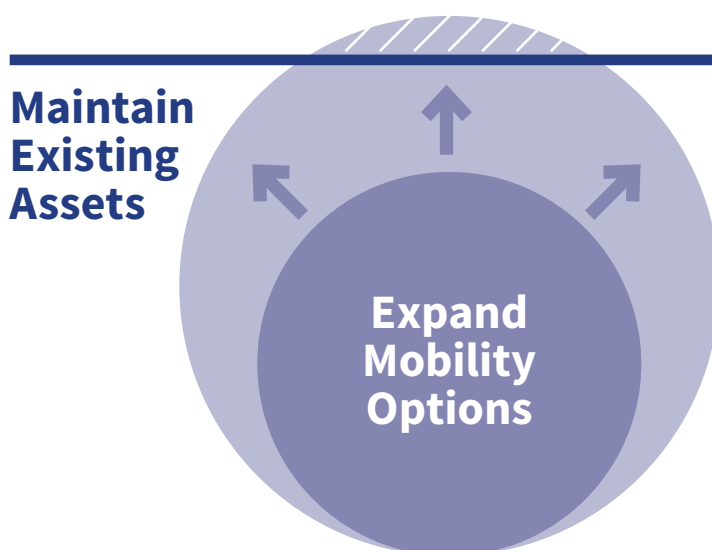
Employment and population data for the CROCOG region reveal a region that has been relatively flat in terms of population growth and economic development. The absence of robust economic growth in the Greater Hartford economy makes it more difficult to raise new revenues and limits the potential for value capture financing methods.

Environment

This plan aims to both reduce transportation-related greenhouse gas emissions (mitigation) and to prepare transportation systems for climate events such as flooding and extreme heat (adaptation). The plan promotes investments in public transportation, the implementation of strategies such as transit-oriented development (TOD), the use of alternate fuels, development of municipal complete streets policies, and other multimodal opportunities that would reduce reliance on single occupancy vehicles.

Environmental Justice

CROCOG is committed to fully integrating the principles of environmental justice into all of its transportation planning programs and activities. A key consideration in the development of this MTP update is the knowledge that our underserved populations have been disproportionately impacted by prior transportation investments. Notices for meetings related to this MTP were translated into Spanish and Polish, and



translation services were available at all public meetings. CRCOG is committed to updating our equity assessment methodologies to ensure that projects identified in this plan do not cause disproportionate adverse impacts to underserved populations and that these populations receive a proportionate share of project benefits.

Demographic Trends

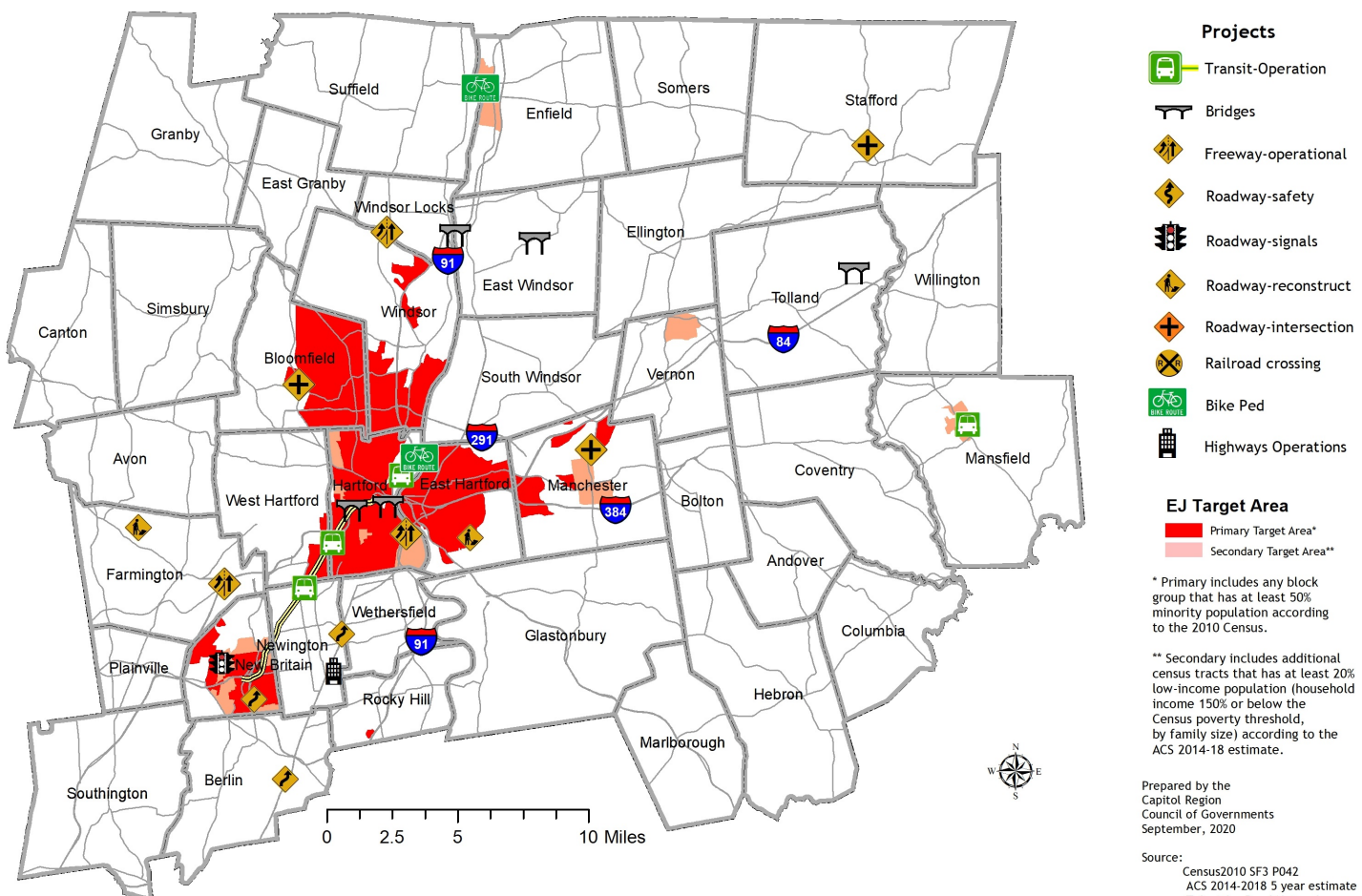
While CRCOG's projected annual population growth rate is the highest of any region in the state, it is fairly modest at approximately 0.3% per year, or 9.9% from 2019 to 2050.

The region's projection for employment growth significantly exceeds population growth, with 0.62% growth in the number of jobs per year, or 19% growth by 2050. The region is currently a net importer of employees, and with projected trends the region's transportation network will experience the stressors of becoming an even greater net employee importer.

Primary Areas of Focus

- **Mobility and Access:** Identify key transportation investments and strategies to meet long-term (through 2050) access and mobility needs for the CRCOG region

Figure 2 — Transportation Improvement Projects in Environmental Justice Areas



- **Performance-based Planning:** Incorporate a performance-based, data-driven process for selecting and implementing investments using criteria such as: safety, congestion, and infrastructure quality
- **Innovative Funding:** Identify innovative funding mechanisms to help finance the region's important transportation priorities
- **Fiscally Constrained Priorities:** Develop a fiscally constrained implementation plan for the region's priority transportation projects
- **Sustainability:** Ensure consistency of investments, projects, and implementation with the region's focus on sustainable long-term economic and environmentally conscious development
- **Safety:** Utilize studies and data to identify projects that would improve the safety, health,

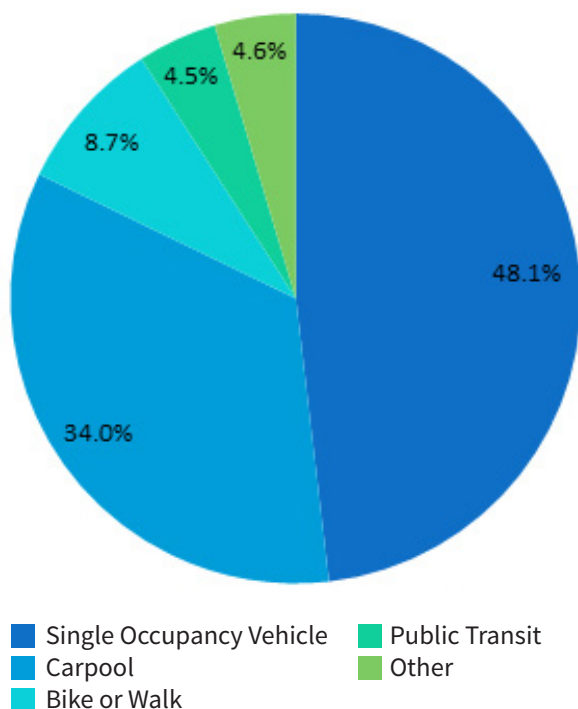
and wellbeing of all users of the region's transportation system

- **Equity:** Identify focus areas for the just distribution of benefits and impacts from all long-term transportation projects across the region's various communities and stakeholders

Elements of the Transportation System

CRCOG's MTP is focused on improving the transportation system's effectiveness at getting people and goods from place to place within the CRCOG region, as well as connecting to and from places outside of the region. While the automobile remains the dominant transportation mode, CRCOG's commitment to environmental sustainability, and shifting preferences in travel and development patterns, necessitate a more holistic approach that improves and integrates all modes of transportation to improve mobility and access.

Figure 3 — Mode Share within CRCOG Region



Source: CT Statewide Transportation Study.

Transit and Rail

While the private automobile remains the dominant mode of travel in the CRCOG region, transit and rail services have continued to improve and take on greater importance. These services include local and express bus service, commuter and intercity rail service, bus rapid transit (BRT), paratransit services provided for the elderly and persons with disabilities, and rideshare services provided by Transportation Network Companies (TNCs).

The MTP focuses on transit and passenger rail options – two modes that have undergone major improvements through more than \$1.5 billion in investment over the last decade.

Transit services play an important role in meeting the travel needs of individuals who live and work in the Capitol Region. Transit ridership was significantly impacted by the COVID-19 pandemic, as quarantine measures decreased overall travel and choice riders opted out of using transit and instead shifted to traveling alone. Ridership has, however, begun rebounding. The local bus system in Hartford has surpassed pre-pandemic ridership levels, in part due to the Connecticut Department of Transportation’s (CTDOT) fare-free policy, which ended in March 2023. Other services have not yet returned to pre-pandemic levels, likely due to the demographics of their riders and the fact that many employers have continued to offer remote or hybrid working arrangements.

While transit is a small part of much larger transportation system, it is a critical component and there is a continuing need

for improvement. CRCOG has increasingly sought to place more emphasis on transit improvements as a way to improve mobility for those who rely on transit, to provide viable travel choices for everyone, and to reduce congestion and emissions. CTDOT, in partnership with CRCOG, implemented CTfastrak BRT service in 2015 and commuter rail service on the CTrail Hartford Line in 2018. The local bus service and paratransit services provide important connections to these transit assets.

Key Projects

The region’s transit services need continued investment and service planning to improve the experience for existing riders and to continue to attract new customers. CRCOG believes that the implementation of the following projects will ensure that the Capitol Region remains on the path to being competitive with other transit-rich metropolitan areas in the Northeast.

- **CTrail Hartford Line Improvements:** CRCOG supports upgrades to the CTrail Hartford Line infrastructure between Windsor and

Table 1 – **Frequency and Coverage Goals**

Frequency Goals	Coverage Goals
High ridership	Ensure that everyone has access to transit
Lower public subsidy	Provide lifeline services to those who don’t have access to a personal vehicle
Reduced environmental impact through lower vehicle miles travelled	Provide access to those with severe needs. “lifeline” service
Promotes transit oriented development	Political equity

Springfield, MA, including reinstating the full double-tracked rail alignment, removing height restrictions, and increasing weight limits to accommodate 286,000-pound cars. CRCOG also encourages the funding, design, and construction of CTrail Hartford Line stations in Newington, West Hartford, and Windsor, and staff will continue to monitor progress of ongoing station projects in Windsor Locks and Enfield. CRCOG will also continue to support efforts in Massachusetts to develop the East-West connection between Boston, Springfield, and Albany and coordinate service plans to provide seamless connections between Hartford, Springfield, and Boston.

- **Expansion of CTfastrak:** CTDOT conducted a study in 2016 to explore the expansion of bus rapid transit service east of Hartford. An initial phase recommended by this effort was completed in 2017 with expanded hours of service for local bus service and the creation of the Route 913 express bus between Hartford, Buckland Hills, and UConn. Future potential phases would implement BRT service along Silver Lane and/or Burnside Avenue in East Hartford. CRCOG supports advancement of this second phase.
- **Transit Priority Corridors for Hartford/East Hartford:** CRCOG supports the implementation of capital improvements along six high-frequency transit corridors described in the 2022 Transit Priority Corridors Study, including transit signal priority, stop consolidation, and enhanced passenger amenities. The corridors recommended for such improvements include

Albany Avenue, Farmington Avenue, Franklin Avenue, Main Street, and Park Street in Hartford as well as Burnside Avenue in East Hartford.

- **Local Improvements:** CRCOG supports improvement to the local bus system by working with CTDOT, CTtransit, Windham Region Transit District (WRTD), and municipalities to implement the routing recommendations and capital improvements recommended in CRCOG's Comprehensive Service Analysis (CSA) for both the Hartford (2017) and New Britain/Bristol (2018) Divisions of CTtransit as well as CRCOG's Eastern Gateways Study (2018).

Highway System

The vast majority of the region's people and freight travel along the roadway network which consists of a hierarchy of road types, including freeways, major non-freeway roadways (arterials), collectors, and local roadways. In 2021, the region's roadways experienced annual vehicle-miles traveled (VMT) of approximately 8.4 billion. This figure represents an approximately 7% reduction from 2018 levels that preceded the COVID-19 pandemic, when regional VMT was determined to be just over 9 billion. Based on Connecticut Department of Labor population projections, CRCOG's travel demand model predicts that VMT will increase 14.5% in the region by 2050, or just under 0.5% annually. CRCOG has adopted an approach that prioritizes managing existing freeway and arterial facilities to improve safety and reduce congestion. The strategies and actions for addressing issues relating to highway safety and congestion can generally be grouped into the following categories:

- Safety Management Program

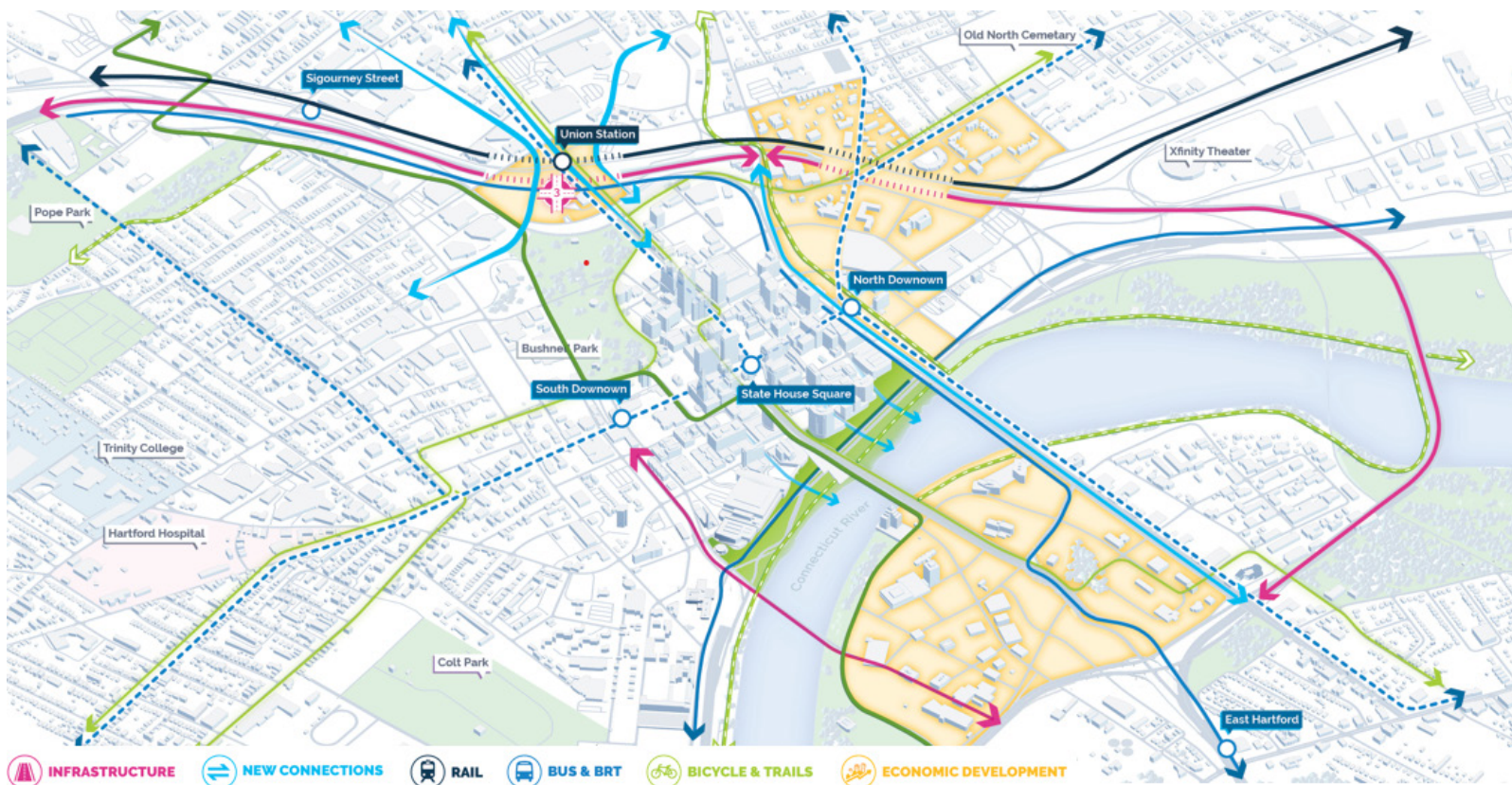
- Congestion Management Process
- Traffic Incident Management
- Intelligent Transportation Systems
- Freeway Improvements
- Arterial Improvements
- Bridge Infrastructure Improvements
- Municipal Road Management
- Transportation Demand Management

Key Projects

The highways that run through Hartford, the economic engine of the Capitol Region, continue to see high levels of personal automobile and freight traffic that far exceed the volumes they were designed for. Major

chokepoints on these highways significantly slow traffic, affecting economic productivity and polluting the air as vehicles idle. The region's major highway deficiencies are currently being studied under the umbrella of the Greater Hartford Mobility Study (GHMS), launched in 2020 by CTDOT. This study is being advanced as a Planning and Environmental Linkage (PEL) and along with studying highways is also taking a comprehensive look at all surface transportation issues and opportunities in the Greater Hartford area. This includes a reassessment of the projects below which are designed to mitigate congestion at freeway chokepoints. Proposals to lower the Hartford I-84 viaduct and reconfigure the I-84/I-91 Interchange would also drastically improve the urban fabric of Hartford, connecting neighborhoods and

Figure 4 — Greater Hartford Mobility Study



Source: Greater Hartford Mobility Study.

opening up developable land. These projects have the potential to greatly improve the quality of life for Capitol Region residents.

I-84 Hartford Project and I-84/I-91 Interchange

I-84 Hartford Project: The state is currently exploring how to replace the aging viaduct that runs through the center of Hartford as its structural integrity grows increasingly unsound. Community interest in how the viaduct structure gets rebuilt gave rise to a CRCOG I-84 Viaduct Study, completed in 2010. An Environmental Impact Statement (EIS) was subsequently embarked upon but was postponed in 2019. In its place, the Greater Hartford Mobility Study PEL was initiated to take a more comprehensive look at this and other potential area investments. CRCOG has been participating in the PEL process and anticipates assisting with implementation of its recommendations.

I-84/I-91 Interchange: I-84 carries three lanes in each direction east and west of Hartford's urban core. The highway, however, is limited to two lanes in each direction at the I-91 interchange and over the Bulkeley Bridge, causing considerable congestion. In 2016, CTDOT launched the I-84/I-91 Interchange Study. Similar to the I-84 Hartford Study, this study was halted and incorporated into the Greater Hartford Mobility Study PEL. One potential solution involves relocation of I-84 and the I-84/I-91 Interchange to the north. This option appears to create significant opportunities associated with the potential repurposing of portions of the

current I-84 corridor in Hartford and East Hartford, along with the simplifying of the current I-84/Route 2 interchange in East Hartford. CRCOG has been participating in the PEL process and anticipates assisting with implementation of its recommendations.

I-91 North ramp to Charter Oak Bridge

The single-lane ramp from I-91 northbound to the Charter Oak Bridge and Route 15 eastbound had experienced persistent congestion and had been routinely included in the American Transportation Research Institute's top 100 truck bottleneck routes in the country. The installation of a new two-lane ramp was completed shortly before this MTP was finalized. The improvements seem to have resolved the major safety and congestion issues at this location, however CRCOG and CTDOT will be monitoring the results of these improvements over the next few years.

Vision Zero Efforts

CRCOG participated in the State's Vision Zero subcommittees on Equity, Enforcement, Education, and Engineering. CRCOG endeavors to continue these efforts and explore meaningful ways to assist our communities in reversing the upward trend of fatalities and serious injuries. These efforts include updating CRCOG's Regional Transportation Safety Plan with recent data and with the results of CRCOG's Regional Roundabout Screening Study.

Complete Streets

CRCOG, like many other regions in the country, continues to recognize the value of complete streets, connected trail networks, and increasing access to safe active transportation options such as walking, bicycling, scooters, and other forms of personal and/or shared micromobility options.

The COVID-19 pandemic, while globally catastrophic, brought about a renewed interest in walking and bicycling as many people turned to the outdoors for physical and mental relief. More and more every day, we recognize the importance of physical activity on our long-term health – even just 30 minutes

of walking per day (more is recommended) can decrease risk of cardiovascular disease and lower blood pressure – but also that access to these healthy options needs to be equitable, inclusive, and safe. Safety is paramount, particularly as the national trend of roadway fatalities continues to increase, recently reaching a forty-year high. This is particularly concerning for our most vulnerable users; just between 2021 and 2022, bicyclist and pedestrian fatalities increased by 42% in Connecticut.

In 2021, CRCOG adopted a regional Complete Street Plan that was a significant update to previous efforts which had focused heavily on off-road trails. This plan promotes the integration of all modes of transportation across the entire street network, into every transportation project. This effort identified a regional complete streets network and resulted in the creation of a regional Complete Streets Policy that CRCOG utilizes to guide transportation funding.

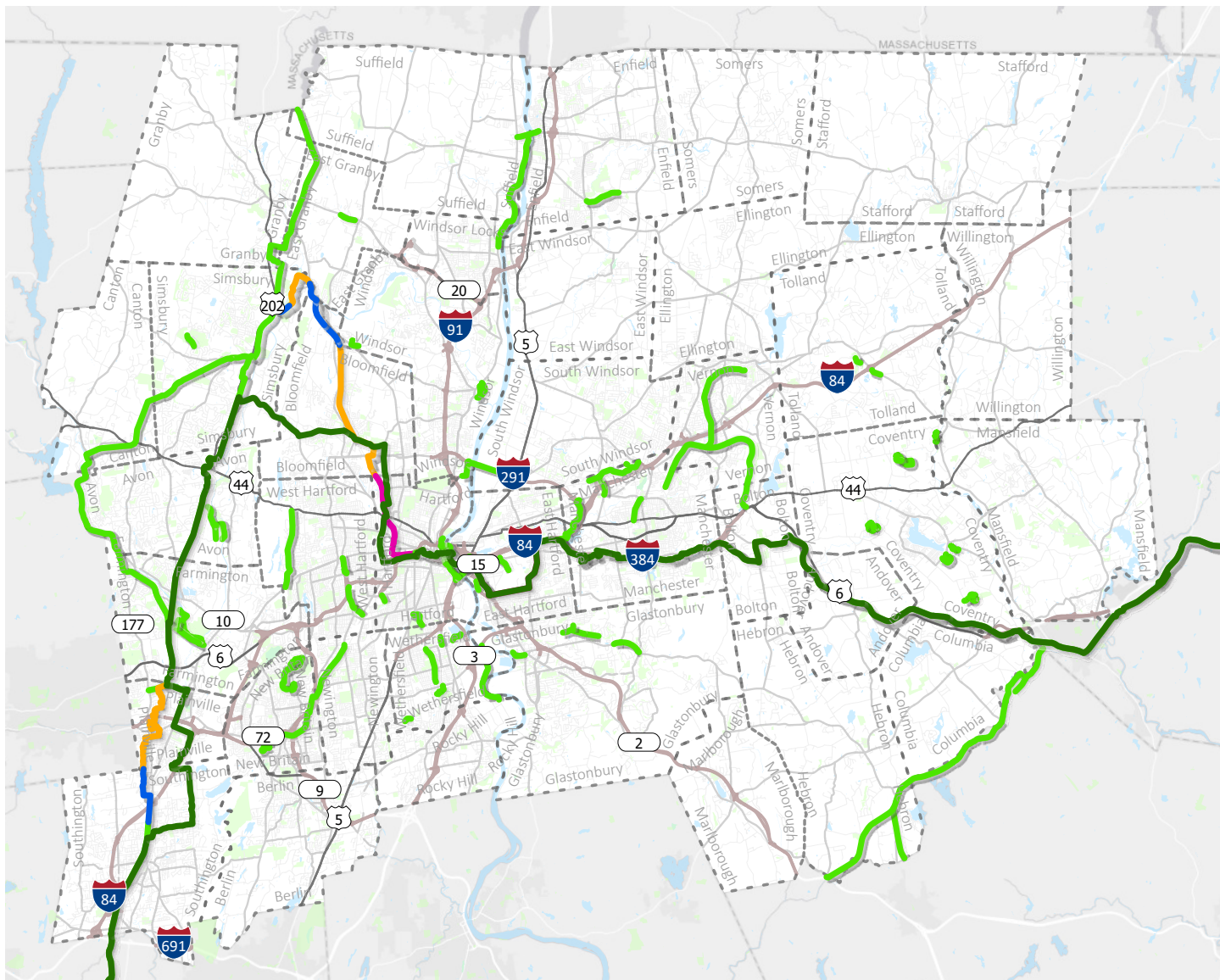
Figure 5 — **Demonstration project in New Britain**



Key Projects

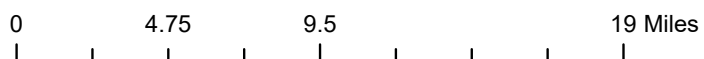
CRCOG is making major strides in improving active transportation facilities, but there is still a long way to go to realize a connected, regional network. This network should serve not only as a recreational option but also as a legitimate transportation alternative to encourage mode shift in a region whose primary greenhouse gas emissions sector is transportation. The continued

Figure 6 — Multi-use Trails



Trail Status

- Official East Coast Greenway
- Funded
- Study
- Concept
- Complete



commitment to closing the final gaps of the East Coast Greenway in the region and to implementing CRCOG's Complete Streets Plan will strengthen the network of these facilities and provide a path forward.

- **East Coast Greenway:** Closing gaps in the region's existing multi-use path system continues to be a priority. In some cases, closure of small gaps can have large payoffs by creating large, connected, comfortable bicycle access for new riders. CRCOG secured a \$16 million RAISE (Rebuilding American Infrastructure with Sustainability and Equity) grant to close trail gaps in Plainville and New Britain. CRCOG has also initiated the Capitol Region East Coast Greenway Study to identify the final, preferred off-road alternative for the remaining, approximately 12-mile gap located in Bloomfield, Hartford, and East Hartford as well as a small connection in Simsbury. This study is intended to seamlessly transition from the planning phase to design and construction.
- **Complete Streets and Regional Trail Network Prioritization:** Building off of the prior efforts of 2020, CRCOG will be undertaking a prioritization effort of the identified network to focus on the next routes of regional significance.

Ground Access to Airports

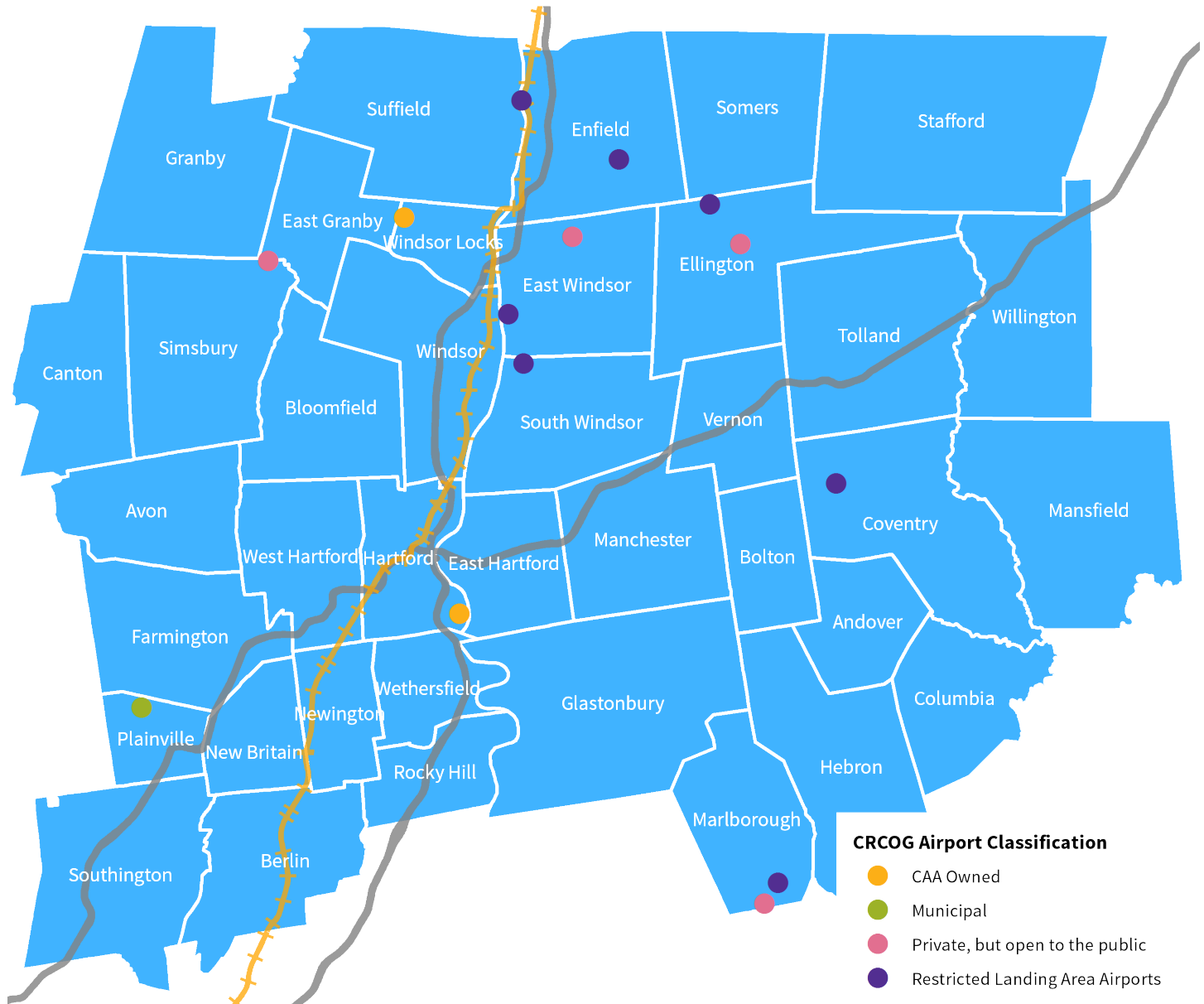
Within the CRCOG region there are 14 airports, including Bradley International Airport (Bradley), two commercial reliever airports

(Robertson Field and Hartford-Brainard Airport), four public use airports, and seven restricted landing areas (RLAs). The primary focus of the MTP is surface transportation/ground access to the region's primary airport, Bradley. This includes both passenger and freight (rail and truck) movement into and out of this regional transportation hub.

Bradley currently enjoys good roadway access and convenient parking, however, there is limited transit access. Two bus routes provide service to Bradley. The Bradley Flyer (CTtransit Route 30/30X) provides semi-express bus service from downtown Hartford including stops at Union Station, the Connecticut Convention Center, and the Poquonock Park and Ride Lot in Windsor. CTtransit Route 24, which was introduced in 2021, is a crosstown route that operates between the Windsor Rail Station, Bradley, and the Windsor Locks Rail Station on weekdays. Route 24 also serves nearby park and ride lots where connections are available with CTtransit local, limited stop, and express routes serving many surrounding communities including Hartford, East Windsor, and Enfield. This route ensures that a bus connection to and from Bradley is provided at the Windsor Locks Rail Station with all CTrail and Amtrak trains to/from Springfield and points north.

A \$210 million Ground Transportation Center opened at Bradley in 2022, and this facility offers access to car rental companies, an additional 900 public parking spaces, and nearby access to public transportation. It was

Figure 7 — CRCOG Regional Airports



anticipated that the airport's bus stop would be relocated to this facility. However, due to unforeseen circumstances, the CTtransit bus stop at Bradley did not move to the Ground Transportation Center as previously planned. Buses continue to pick up and drop off at Terminal A on the lower level.

In addition to passenger access to the airport, there are also significant freight access needs. Currently, Bradley has approximately 3.3 million square feet dedicated to cargo operations around the airport. Bolstered by the COVID-19 pandemic, there has been a shift in consumer buying trends as more consumers make the switch to online shopping. Currently, Bradley has approximately 3.3 million square feet dedicated to cargo operations around the airport. As a result, Bradley's cargo footprint is expected to continue to grow in the coming years, and additional facilities around the airport could more than double.

Key Projects

With its central location and proximity to major highways and rail lines, Bradley International Airport is a regional transportation and cargo hub whose economic potential has yet to be maximized. CRCOG believes that the implementation of the following projects would help to enhance Bradley's role within the Region.

- **Bradley Flyer improvements:** Extending the Bradley Flyer to New Britain along CTfastrak and rebranding the route could attract more choice riders coming from areas around the

guideway.

- **Improved Roadway Access:** As part of the Route 20 Corridor Study, CRCOG will identify roadway access options for Bradley. CRCOG will also continue to support the implementation of roadway improvement recommendations from the Bradley Master Plan.
- **Integration of Bus Service into the Ground Transportation Center:** CRCOG will encourage CTDOT, the Connecticut Airport Authority (CAA), and CTtransit to work together to relocate the bus stop from Terminal A to the Ground Transportation Center as originally envisioned. This will offer a more seamless, multimodal experience for passengers.
- **Continue to Improve Air Cargo Capabilities and Services:** CRCOG will continue to support efforts to consolidate cargo at Bradley and support development plans for the growth of cargo. CRCOG encourages the evaluation of making Bradley a true multimodal freight facility by improving rail freight access and developing support facilities for trucking. Improving Bradley's air cargo capabilities and services would make it an attractive alternative to New York and Boston airports that are experiencing increasing ground and air congestion.

Freight

The tonnage of freight moving to, from, and within the region is projected to increase 0.95% annually between 2019 and 2040, and the

value of these goods is projected to increase 1.9% annually. About 40% of truck traffic in the region is through traffic, and inbound freight exceeds outbound freight by a 75% margin. Input from stakeholders in the region identified the following issues and deficiencies that need to be addressed in order to further improve freight transport in the region:

- The regional highway system has significant truck bottlenecks.
- Rail facilities have constraints that limit expansion.
- Truck parking and service facilities are lacking.
- A shortage of trailer storage space and scheduling difficulties are present at Bradely Airport.
- An e-commerce boom has led to an increase in the need for warehousing and short-haul trucking services.

Key projects and studies

Freight facilities in the Capitol Region have not been maintained to keep up the industry. CRCOG believes the following projects and studies are imperative to ensure the Capitol Region remains a hub in the Northeast for this growing industry.

- Identify improvement opportunities for the I-84/I-91 interchange.
- Undertake a regional warehousing and land use planning study.
- Support CTDOT's statewide truck parking study, which is anticipated to begin in 2023 and help identify expansion opportunities and other potential improvements to the region's

facilities.

- Address constraints to expanding rail service, including upgrading rail lines to 286,000-pound weight capacity, addressing clearance limitations, and reconstructing the Windsor Locks-Enfield rail bridge over the Connecticut River.

New and Emerging Technologies

New Technologies and Innovations

Transportation in the 21st century is undergoing a major transformation which is dominated by the following trends: vehicle electrification, connected and autonomous vehicles (CVs/Avs), micromobility, and shared mobility. Underlying these trends is the concept of smart cities. To ensure that these new technologies best serve the residents of the Capitol Region,

Figure 8 — Trucks parked at Willington Truck Stop



Photo by Carl Talley

Photo by Carl Talley

CRCOG will focus on the following:

- **Identifying Priority Areas for Infrastructure:**

There is a need to identify priority locations to deploy technologies to support electric vehicles (EVs), CVs, and AVs to best meet the CRCOG region's specific needs through advance planning, pilot projects, and infrastructure investments. CTDOT has also released Phase One of its National Electric Vehicle Infrastructure (NEVI) plan to implement fast charging stations spaced within 50 miles along identified major highway corridors and located within a mile of an interchange. Pending more guidance regarding NEVI Phase Two requirements, CRCOG is envisioning undertaking a regional EV study in the coming years to complement

CTDOT's NEVI plans.

- **Interoperability and integration:** Several new and emerging technology trends are occurring concurrently. Even as private companies advance their own technologies and services, CRCOG and the region's local governments have a role to play in fostering an interoperable and integrated transportation system that puts people's needs first.
- **Incentives/disincentives (VMT, ZOV, and Congestion):** CRCOG will assist in developing strategies to incentivize behavior that contributes to a more sustainable, efficient transportation system and disincentivize behavior that creates the opposite outcome. Several policy options exist for this, including congestion or cordon pricing, vehicle mile traveled pricing, or fees for zero occupancy trips and discounts for higher-occupancy shared trips.
- **Supporting Infrastructure for Micro-mobility:** According to the US Department of Energy, more than 50% of vehicle trips in 2021 were less than three miles. Shifting some of these trips to bikes or scooters could help reduce

Figure 9 — Electric Vehicle 'Juice Bar'



Figure 10 — Trip planning App



congestion and transportation related emissions. The proliferation of micromobility devices provides an opportunity to rethink street design and consider what the complete street of the future may look like, and where and how they can be safely integrated to maximize travelers' choices.

In the fall of 2022, CRCOG completed a Regional Micromobility Feasibility Study in which the viability of a multi-jurisdictional micromobility system expanding out from the City of Hartford was studied. The vision of this study was to provide residents and visitors of all incomes and physical abilities a way to travel in a convenient and sustainable manner that benefits both the environment and personal health. CRCOG will continue to work with its member communities to expand this service across the region.

Figure 11 — Greater Hartford Transit District Bus



Transportation Performance Management

CRCOG supports CTDOT's statewide performance targets and has developed this MTP using a performance-based approach. Performance-based planning – using measures of transportation performance to track progress towards adopted performance targets – can effectively link regional and statewide transportation policy goals and objectives to investments by offering a means of prioritizing them based on their impact on the transportation system. The following performance targets and measures have aided CRCOG in the development of this MTP and will guide future planning:

- **Safety Measures:** CRCOG uses the state's safety targets when determining the impact of traffic crashes on the region's roads. Annual safety targets are now set based on historical crash data using a variety of methods, whereas the measures used to determine progress are generally based on moving five-year averages. There are currently five safety targets and corresponding measures: number of fatalities, fatality rate per 100 million VMT, number of serious injuries, serious injury rate per 100 million VMT, and number of non-motorized fatalities and serious injuries. There has been an alarming increase in the number of fatalities and serious injuries since the COVID-19 pandemic began, in part because of increased speeding and reckless driving by motorists as well as diminished traffic enforcement. With the exception

of transit, this disturbing trend has been observed for all modes, including vehicle passengers, pedestrians, cyclists, and motorcyclists.

- **Infrastructure Conditions Measures:** CRCOG also supports statewide targets related to the condition of highway pavement and bridges in the region. Infrastructure targets and measures directly reflect the quantity of assets being in either “good” or “poor” condition, while a third, middle condition known as “fair” also exists. In general, bridge and pavement conditions in the region measured better than the 2022 targets, which were originally set in 2018. Although there was an increase in infrastructure downgraded from “good” to “fair” condition, the proportion of infrastructure rated in “poor” condition decreased sharply. The sharp decrease in bridges in “poor” condition was mainly associated with recent repairs made to the I-84 viaduct structure in Hartford.
- **National Highway System Performance, Freight and CMAQ:** There are six targets and corresponding measures for evaluating the performance of the national highway

network within the state and region, including: general travel time reliability for both Interstates and Non-Interstate US highways, truck travel time reliability, peak-hour excessive delay (a measure of congestion), percentage of non-single-occupancy vehicles, and measure of the atmospheric pollutants (VOC, NOx, PM2.5, etc.). The COVID-19 pandemic saw a decrease in traffic volumes which improved performance in these six target areas. However, traffic volumes have largely returned to their previous levels and system performance is trending back to pre-COVID-19 levels.

- **Transit Asset Management and Transit Safety:** As CRCOG does not operate transit services, it reports on evaluations from the region’s public transit agencies (the Greater Hartford Transit District, CTrail, CTtransit, and others) on the condition of their vehicles, rolling stock, infrastructure, and facilities. The MTP includes relevant statistics collected directly by these agencies.

CRCOG’s Role in Project Implementation

CRCOG plays a major role in selecting projects for implementation, however, implementation is typically the responsibility of the state or municipality, depending on the project. As the Capitol Region’s MPO, CRCOG is the region’s transportation planning agency, working closely with the state and municipalities to identify needs and solutions through planning studies. CRCOG also controls various federal and state funding sources, with the authority to select the projects that receive funding and approve the state’s use of federal funds.

Special Emphasis Areas

Special Emphasis Areas consist of topics that, though they don't align with other major CRCOG initiatives, are still a significant part of CRCOG Transportation Planning program. These include Transportation Security; MPO Coordination; Air Quality – Transportation Policy; and Transportation Demand Management Policy.

Financial Component

Prioritized Investments and Available Revenue Sources

The main sources of transportation funding in the CRCOG region are the state's Special Transportation Fund (STF), the Federal Highway Administration (FHWA), and the Federal Transit Administration (FTA). Any transportation project receiving FHWA or FTA funds must be included in the rolling four-year Transportation Improvement Program (TIP) developed and adopted by CRCOG. The TIP also includes additional details regarding these agencies' various funding programs.

With growing availability of federal funding through the Infrastructure Investment and Jobs Act (IIJA), the state's five-year plan's capital expenditures are anticipated to exceed \$2 billion annually, of which approximately 54% is expected from federal sources and 46% from state sources. This is a reversal of consistent state share increase trends that recently resulted in state capital investments exceeding federal investments.

However, the current federal share is still far less than experienced in the late 20th century when federal funding accounted for 70-80% of CTDOT's capital program.

MTP Investment Plan

This MTP outlines a plan for major investments for surface transportation modes within the CRCOG region through 2050. In general, the plan outlines investments in three categories: highway capital projects (including improvements for bridges, bicycles, and pedestrians), transit capital projects, and operations and maintenance services.

Diversification of funding and financing

Traditional funding sources, while obviously critical, can fall short of the region's long-term needs and reinforce short-term thinking and strategies. CRCOG believes that long-term transportation planning in the Capitol Region can be bolstered by new and innovative financing strategies, of which five are identified for further exploration:

- Debt financing through the federal TIFIA and RRIF loan programs
- State legislation enabling regional transportation sales tax referenda
- Joint development at rail and bus rapid transit stations
- District value capture strategies, including tax increment financing
- Public-private partnerships to deliver specific transportation projects or components

