



LET'S GO CT!

Connecticut's

Bold Vision for a Transportation Future

FEBRUARY 2015





“It’s time for Connecticut to establish a collective vision for a best-in-class transportation system.”

GOV. DANIEL P. MALLOY



*Metro-North M8 en route to
New Haven*



Merritt Parkway south

THE TIME IS NOW.

Transportation is essential to everything we do, from connecting with family, friends, and loved ones to getting an education and earning a living.

GOVERNOR
DANNEL P. MALLOY



From the nation's oldest continuously running ferry service to one of New England's largest airports and the busiest commuter rail line in the nation, the Connecticut transportation system serves millions of travelers and moves millions of tons of freight by road, rail, air, ship and highway every year.

But that system is on the brink of breaking. An aging infrastructure, traffic congestion, and long-delayed planning have placed our economy and our quality of life at risk. We have more than 20,000 miles of public roadways, and half of these were built before 1962. Each year, drivers spend up to one work week just sitting in traffic, costing nearly \$1.6 billion in lost time and fuel, and \$2.6 billion in higher operating costs, fuel, and accidents caused by deficient, congested roads and bridges. And unrealized opportunities, such as rail and bus expansion across Connecticut and the re-establishment of direct transatlantic service at Bradley International Airport, have limited our ability to unlock pent up demand for economic growth that would produce jobs and attract businesses to the State.

The key to prosperity, security, and the highest possible quality of life for Connecticut and all those who visit us and do business with us every day is a best-in-class transportation infrastructure that is efficient, multimodal, resilient, and long-lasting—a transportation system that will deliver a solid return on investment and will serve the State, New England, and the Nation for decades to come. The people of Connecticut are smart. They know the reality. They know the opportunity. And they know the stakes are high.



Urban center, New Haven

Since 2013, *TransformCT*—a strategic planning program led by the Connecticut Department of Transportation—has been reaching out to residents and business leaders across the State to hear their ideas about current and future transportation needs. Here's what they want—and deserve:

- A comprehensive, long-term solution to fix the consequences of deferred maintenance of the transportation infrastructure
- Decreased congestion and increased mobility on our highways and transit systems
- Ability to attract and retain a young, high-quality workforce
- Ease of movement for people and goods
- Quality-of-life improvements through walkable, bikeable, sustainable communities and development around transportation centers
- Sustainable transportation systems with abundant choices
- Efficient and innovative implementation of transportation projects
- Vibrant, transportation-friendly urban centers that will grow the economy and attract business across the State
- Convenient and affordable access to high-quality air service covering a wide variety of national and international destinations

It is clear that making these kinds of advances will mean large infrastructure investments made over many years. It is equally clear that the cost of doing nothing is unacceptable. Transportation is the backbone of the State economy. A weak infrastructure will mean a weak Connecticut. This is not an option.



Our transportation infrastructure is aging.

Roadway inventory built before 1962

Built between 1962–1984

Built since 1984

10%



Bridge inspection
and repair

50%

40%

In the 2015 State of the State address, I outlined my long-term vision for Connecticut's transportation future. It is a bold vision with lofty goals, a courageous plan for a courageous State. And I'm proud to bring it to the people and the State Legislature to enlist their support.

This report outlines where we are today and where we need to be in the future, along with the goals we need to set, and actions we need to take.

First, we must secure the transportation funds we receive today for transportation only. Then we must make smart investments on our highest priority initiatives:

- Projects like new ramps to the Charter Oak Bridge in Hartford. This \$195 million investment will produce over \$860 million in economic output, produce 1,100 construction jobs, and over 200 jobs annually over the long term. In addition, the direct benefits—including improved safety, reduction of delays, shipping productivity, and environmental gains—exceed the estimated costs by a factor of 3.8.
- Programs such as Transit Oriented Development (TOD) along the New Haven Line, the Hartford Line, and the CTfastrak corridors that create vibrant, mixed-use developments that improve mobility and increase access to jobs and education.

I propose that Connecticut create a secure transportation “lock box” to ensure that every penny assigned to transportation will be spent on transportation only, now and until the job is done.

Let's get this investment strategy started today, beginning with the current two-year budget cycle. We can jump-start and expand transportation program investments with tangible projects that will deliver a near immediate return on investment, such as the expansion of I-84 in Danbury.

Let's move on rail station improvements and real-time information for the rail and transit system and realize the benefits to service delivery and reliability. Let's expand funding for city and municipal transportation projects where the need for upgrade efforts is great.

And finally, let's engage in a statewide collaborative dialogue about the breadth of our 30-year vision and the right mix of infrastructure projects and improvement programs.

If we unite in this effort, we will create the right strategy for Connecticut's transportation future. We will start building today for tomorrow. This is not my plan. It is Connecticut's transportation plan. And time is of the essence. We can't afford to wait any longer. We need to act now, together—and fast. Let's get there. Let's GO CT!



GOVERNOR
DANNEL P. MALLOY



1441

1441

CT fastrak

CONNECTICUT
2-1438
STATE WHEEL

nk

SEAT B
BACK
WHEELCHAIR

The Goals for Connecticut's Transportation Plan |

are nothing short of transformative. They constitute a best-in-class transportation system for the long term to be realized through a combination of ambitious statewide, corridor, and local projects across all transportation modes.

The goals include:

- The safest highway, rail, bus, aviation, bicycle and pedestrian systems in New England.
- Highway networks without bottlenecks or unnecessary and costly delays.
- Affordable, convenient, frequent, and reliable commuter bus and rail services.
- Frequent and fast rail service across Connecticut, with regional access to Boston, New York, and Philadelphia and intercity service to Washington, D.C., to the south and Montreal to the north.
- Convenient travel for all residents, such as those with special needs, including the elderly, people with disabilities, and those who are transit-dependent residents.
- A robust network of bicycle and pedestrian trails and sidewalks to add quality-of-life benefits and attract tourism.

(Left) CTfastrak Bus

- Smart, sustainable Transit Oriented Development (TOD) with easy access to jobs, education, and options for living car-free.
- Efficient freight rail and highway networks to deliver goods and products without wasteful and costly congestion, without bridge weight restrictions, and with expanded commercial parking at modern service plazas and rest areas.
- Vibrant deep-water ports for the import and export of goods and materials, contributing to a reduction in the freight truck demand on our interstate highways.
- A best-in-class international airport that is a hub for direct and connecting flights within the continental U.S. and to major cities in Europe, providing leisure travelers and businesses with convenient access to new destinations and an increasingly globalized economy.
- A new CTDOT that is committed to a new way to work with an efficient, highly skilled, collaborative, and diverse team of professionals devoted to: Safety, Customer Service, Communication, and Innovation. An organization of proud public servants recognized by all Connecticut stakeholders for integrity and the highest level of stewardship of the public resources with which it is entrusted, and that focuses on delivering projects on time and on budget.

*(Right) I-84 and I-291
Interchange, Manchester*





Con

Like a giant main street, our great network connects us to the world. It crosses our cities and villages, moves freight and goods, connects family, friends, and neighbors, links us to jobs, and joins our future to the global economy. It connects people to opportunity. A well functioning, modern transportation system is vital to our future prosperity.



The State of Our System - *What We've Accomplished* | *Over the past four years, CTDOT has met numerous challenges—to improve highway, bus and rail operations, efficiency and safety, expand its capital program, and accelerate project delivery.*

Connecticut's State highway system, with 3,734 miles of roads and 3,990 bridges and structures, has seen improved pavement and bridge conditions, while being challenged by the most severe snow storms and hurricanes in our State's history. Our urban and express bus systems carried almost 40 million passengers a year. Almost 1 million trips were served on the paratransit and dial-a-ride services across the State. The New Haven Line and Shore Line East served almost 40 million people annually. These services are the backbone of our State's multimodal transportation network, and are critical to the economy of our State and the mobility of our residents.

The State of Connecticut is currently making the largest capital investment in the State's history, including more than \$2 billion in active construction in New Haven, West Haven, Milford, Stratford and Norwalk along I-95.

In 2014, the Department put out to bid \$1.2 billion for new construction work, including the expansion of I-84 in Waterbury, one of the largest of the initiatives and a project long overdue. CTDOT is taking delivery of the last of 405 new, state-of-the-art, M8 rail cars for the New Haven Line and will soon open new facilities in the New Haven Rail Yard to maintain these new assets and ensure system reliability in the future.

Nearly \$1 billion in Federal and State funds have been pledged to replace the Walk Bridge on the New Haven Line and upgrade the Hartford Line and its stations. CTfastrak will begin operating in March 2015, and Transit Oriented Development opportunities along the route are already being realized.

The State also created the Connecticut Airport Authority (CAA), an independent, quasi-public agency, to own, operate, and develop Bradley International Airport and the State's five general aviation airports (Danielson, Groton-New London, Hartford-Brainard, Waterbury-Oxford, and Windham). The CAA has focused on enhancing our State aviation system and developing the service at Bradley International Airport. Passenger traffic increased 8.3% in 2014, and plans for major infrastructure improvements and promising discussions regarding the re-establishment of direct transatlantic service at Bradley International Airport are under way.

Current Conditions

Despite our best efforts in recent years to deliver reliable service, postponed investment has placed our infrastructure, economy, and quality of life at risk. From the need to replace aging rail bridges along the New Haven Line to expanding the State bus system and dredging our deep water ports, we have a duty to take action now. The cost of inaction is simply too high.

10%

State routes that are over capacity.

20%

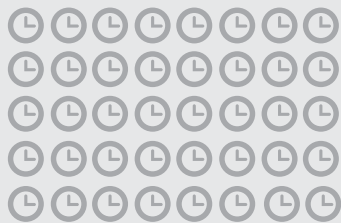
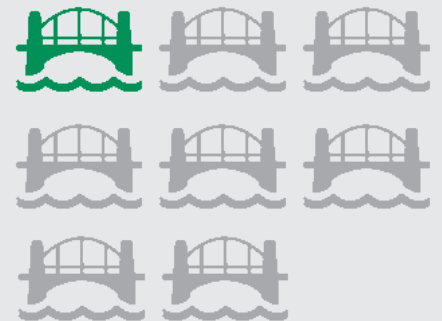
State routes that will be over capacity by 2035, if we maintain the transportation status quo.

40

Hours sitting in traffic every year for each driver in Connecticut due to congestion on the road, costing more than \$1.6B in lost time and fuel.

10%

of bridges in Connecticut are rated Poor.



50%

of all roads in Connecticut are in Poor or Fair condition.



\$1.6B

lost in time and wasted fuel due to congestion



42%

of businesses surveyed by the Connecticut Business and Industry Association believe that the State's road congestion restricts or limits the territory of their market.



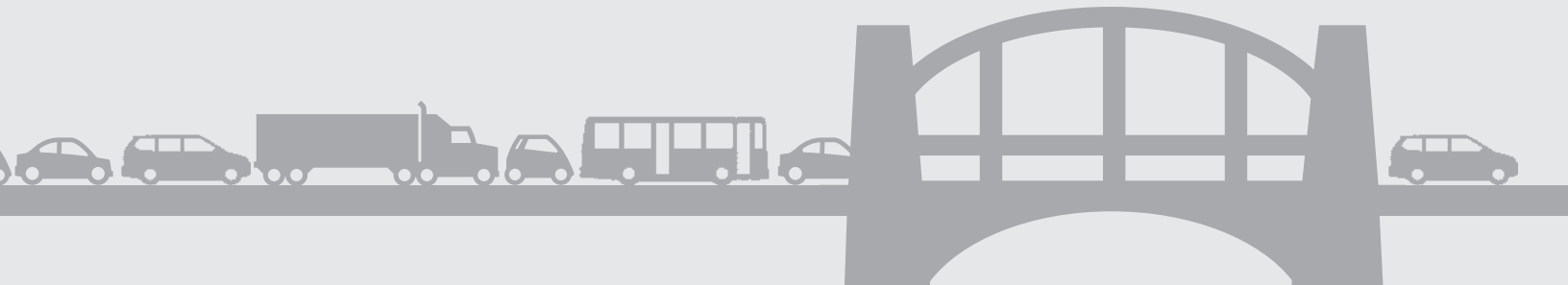
15%

of businesses surveyed have considered relocating because of regional transportation concerns.



\$2.6B

Higher operating costs, fuel, and accidents caused by deficient roads and bridges every year.



The New CTDOT | *At CTDOT, everyone from the Commissioner to engineers, planners, and system maintainers is setting the performance bar higher to provide what customers need in new ways to bring Connecticut's multimodal system into a best-in-class national model. A highly motivated workforce is deploying innovative systems to take up this once-in-a-lifetime challenge to make a difference—and make history—by shaping a better future for Connecticut.*

The CTDOT is preparing to take the lead to carry out the State's ambitious transportation plan, furthering its mission to provide a safe and efficient transportation network that improves the quality of life and promotes economic vitality for the State and the region. Over the past few years, the Department has embraced change

with a renewed sense of purpose and a commitment to seven core values of service and performance:

- Open communication with all stakeholders
- Best-in-class customer service
- Effective inter-agency and private-sector partnerships
- Process improvement
- Transparency
- Innovation
- Performance measured against goals

The Right Team

To realize the vision, CTDOT must have the right team and the right systems in place to be a transparent, responsive steward of taxpayer dollars while being flexible to address challenges in creative ways.

To deliver consistently high performance and quality on time, on budget—or better, CTDOT is building the capacity to design, build, operate, and maintain the statewide multimodal transportation system and is expanding partnerships and collaborations across State and local government as well as the private sector.

Innovation Saves Time and Money

Innovation will be the hallmark of success as the agency embraces process and project-delivery techniques that reduce the cost and time it takes to implement programs and minimize negative impacts to our customers. CTDOT successfully implemented Accelerated Bridge Construction (ABC) on a high-profile project to replace two bridges on I-84 in Southington over a single weekend in the summer of 2014. Pilot programs such as

Design-Build enable CTDOT to deliver high quality projects in a shorter time span at a competitive price. The agency's first Design-Build project is planned for a \$40 million bridge replacement project on Route 8 in Bridgeport. Other innovations include the use of procurement practices proven in private-sector contracting, such as Construction Manager at Risk and Construction Manager/General Contractor.



*(Right) Connecticut DOT
snow crews at work*

A Statewide Strategy | The State of Connecticut is pivotal in one of the largest regional economies in the world. Connecticut's exceptional academic, entrepreneurial, industrial and commercial workforce and strategic seaboard location between two of America's largest cities positions the State to capitalize on an ever-changing and increasingly competitive global marketplace. The connections to Boston and New York City, to the Greater New England and Mid-Atlantic States, and to the global economy are entirely dependent on Connecticut's ability to move people, goods and communication networks throughout the State safely and efficiently.

Connecticut's transportation plan is a transformative strategy to provide the transportation foundation for the future of Connecticut's economy. It requires the joining together of our urban cores, suburban communities, and rural counties into a single system that incorporates and maximizes all modes to convey people and goods cohesively and efficiently to enable economic growth and personal mobility. The system must be inter-connected, varied by mode, move efficiently and safely, and protect and enhance quality of life.

Connecticut is renowned in the northeast as the gateway to the rest of New England. It enjoys rural town squares and villages, farms and parkland, striking waterways, and the architecture and landscape of its colonial history. But it also features vibrant urban centers, such as Stamford, Bridgeport, New Haven, and Hartford.

*(Below) Bulkeley
Bridge, Hartford*



It is a vital hub along the eastern seaboard megalopolis and home to world-class financial, manufacturing, engineering and academic institutions. For the State to maintain its prominent status in education, commerce, and industry, and as a desirable place to live and raise a family, the transportation system must support these urban and rural communities, and connect to our neighboring states, regional and global economies, people, and services. This requires a multimodal system that is safe, reliable, and efficient.

The blend of development required to keep the State competitive on a regional, national, and global scale will rely on a transportation system designed to leverage the diversity among the various rural, urban, suburban, and coastal regions of the State. Additionally, the State's airports and deep-water ports that connect us to global markets must be continually enhanced and improved.

The strategy for Connecticut's Transportation Infrastructure Renewal Program will be executed in two stages. As detailed in the accompanying publication, the *5 Year Ramp-Up Plan*, the first stage will consist of immediate, short-term investments. The second, described in this report, looks forward 25 more years and will comprise the long-term, 30-year vision for Connecticut transportation. Both stages will include statewide investments and investments in each of the four State transportation corridors: New York to New Haven, New York to Hartford, New Haven-Hartford-Springfield, and Eastern Connecticut. All 30-year projects are itemized, statewide and by corridor, in the Appendix.

N

MASSACHUSETTS

Montreal

NEW YORK

NEW YORK TO HARTFORD CORRIDOR

NEW YORK TO NEW HAVEN CORRIDOR

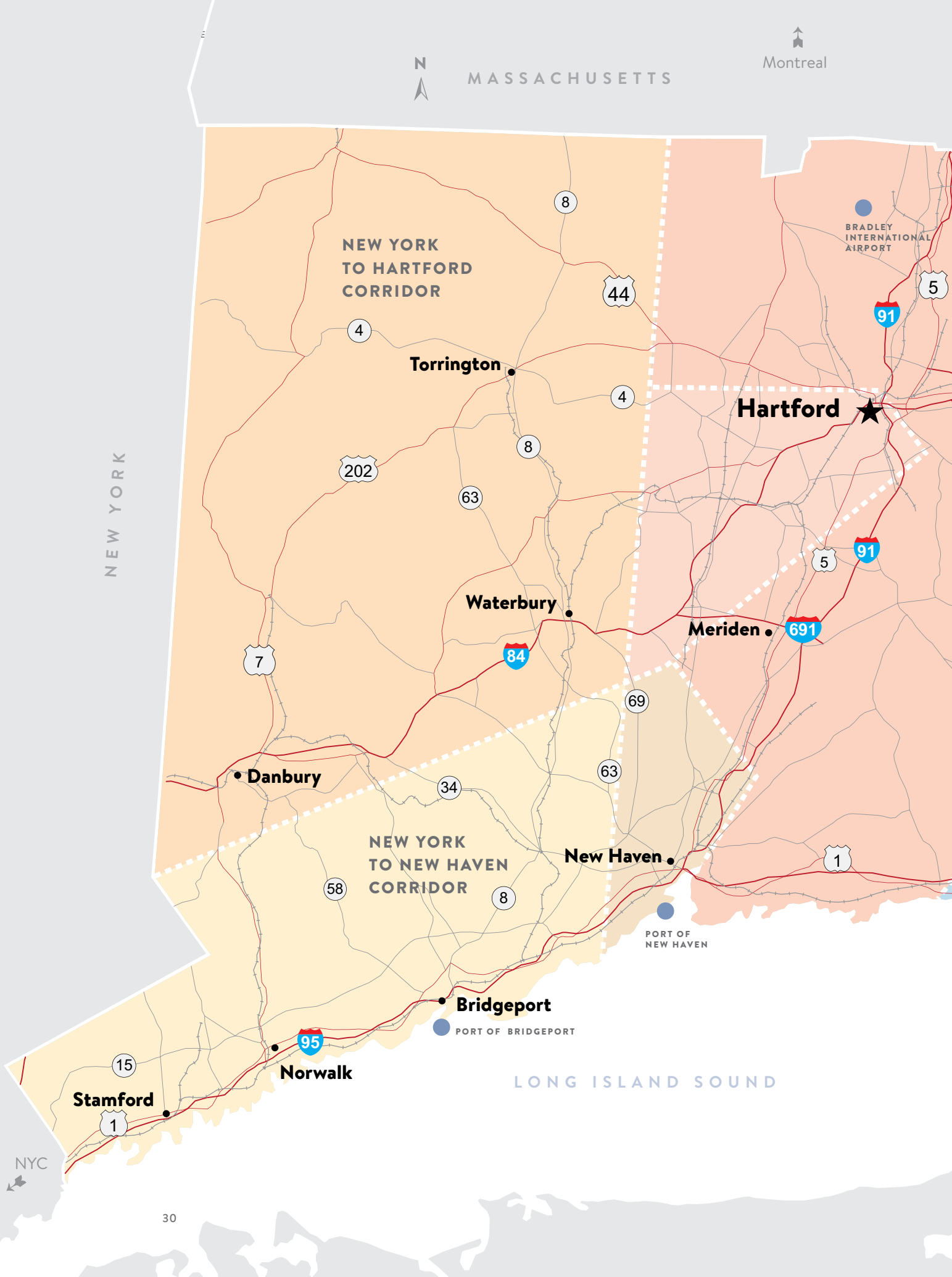
LONG ISLAND SOUND

BRADLEY INTERNATIONAL AIRPORT

PORT OF NEW HAVEN

PORT OF BRIDGEPORT

NYC

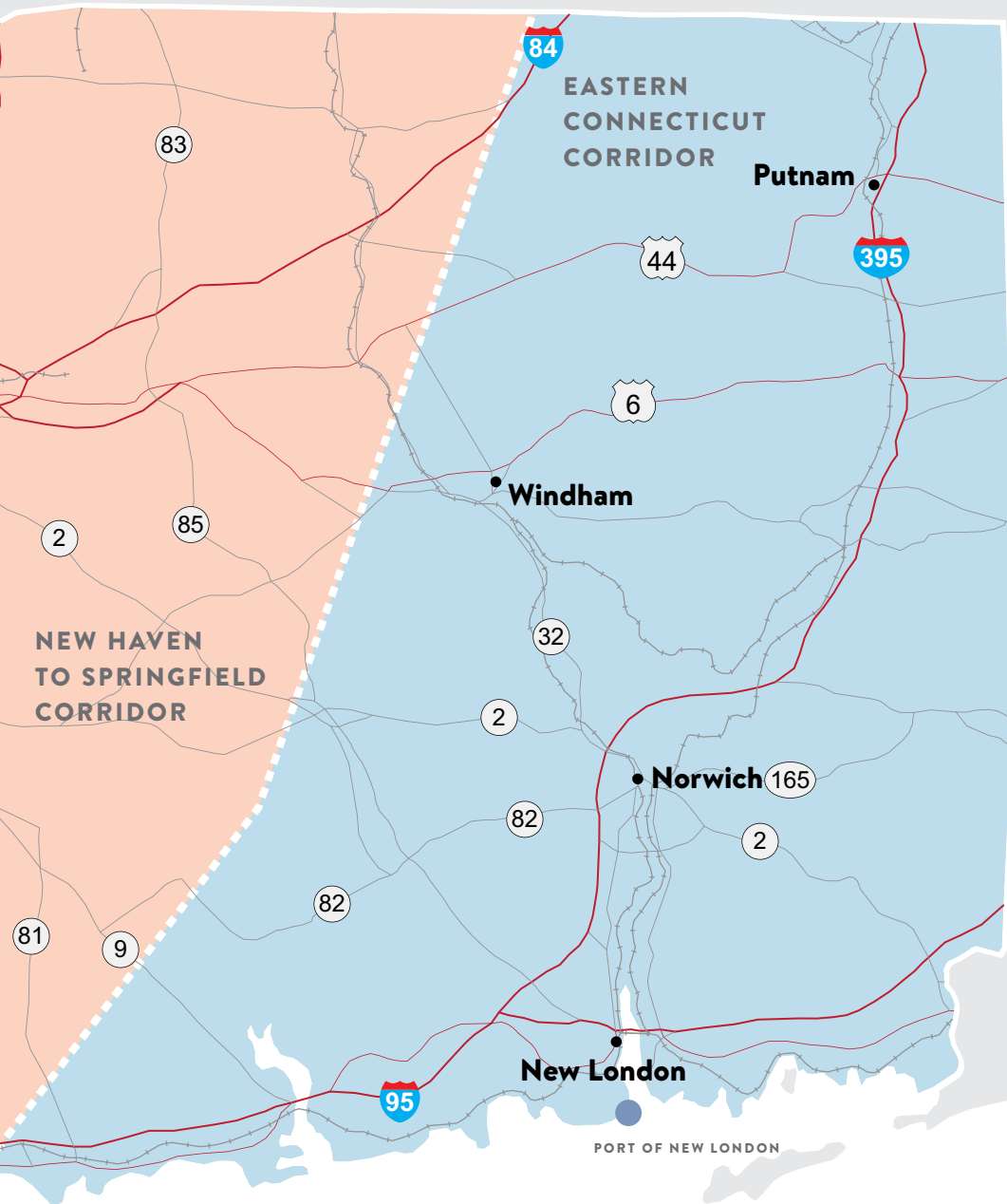


Palmer

Boston

Worcester

Springfield



RHODE ISLAND

Travel Corridors

BLOCK ISLAND SOUND

Statewide, Connecticut's Transportation Plan will require bold action in the following areas



HIGHWAY AND BRIDGES

- Upgrade all highways and bridges to be best-in-class
- Provide highway congestion relief and expand highway capacity (Widen I-95, I-84, and rebuild key interchanges)
- Rebuild and restore major viaducts on I-84 in Hartford and Waterbury
- Rebuild the West Rock Tunnel (Route 15)
- Remove the traffic bottleneck from I-91 to Charter Oak Bridge, Hartford
- Implement an Asset Management Program to optimize preservation activities and reduce immediate and long-term operating costs



RAIL AND RAIL FACILITIES

New Haven Line

- Expand high frequency, high capacity, fast service to/from New York City

- Expand station access through parking, bus, shuttle, bike, and pedestrian investments

Branch Lines (Waterbury, Danbury, and New Canaan lines)

- Expand/modernize with improved service, new equipment, upgraded stations, parking, and equipment storage

Shore Line East

- Full service to New London and New York City

Hartford Line

- Hartford Line service to Springfield, Boston, Montreal



BUS AND BUS FACILITIES

- Expand bus service 25%, providing residents in urbanized areas access to bus within half-mile of home
- Modernize State bus maintenance facilities
- Extend CTfastrak east, north, and south from Hartford
- Implement coastal express priority bus service in southwest Connecticut

- Integrate services, information, customer service statewide, including consolidated, coordinated paratransit services
- Coordinate state-of-the-art service and information delivery, i.e., real-time multi-modal information and smart card fare collection systems



AIRPORT

Bradley International Airport

- Establish Bradley as a major hub of national service with direct flights to major U.S. and international destinations
- Construct a major new Ground Transportation Center, including public parking spaces, a consolidated rental car facility, access to bus service, and potential future rail linkage, conveniently connected directly to the terminal
- Construct a new, state-of-the-art terminal to support expanded domestic and international service offerings to Europe and other locations overseas

- Establish new rail service (via the Hartford Line) and improve bus access to Bradley

General Aviation Airports

- Construct a new Customs Federal Inspection Services (FIS) facility at Waterbury-Oxford Airport to support international flight activity
- Implement substantially expanded private, commercial, and freight services at all of CAA’s airports by strengthening partnerships with important stakeholders and enhancing facilities to maximize each airport’s unique market and geographical strengths



PORT AND MARITIME

- New Port Authority with thriving freight, intermodal, commercial, and tourism portfolio
- Fully utilize land-side advantages of rail and highway linkages through renovation of piers, additional crane and warehousing infrastructure, and ongoing and regular maintenance dredging
- Port of New Haven rail connected to private terminals
- Significantly expand local maritime economy across CT



MUNICIPAL

- Increase the State’s investment in municipal roadway systems
- Increase the State’s investment in municipal bridges
- Create a municipal traffic signal replacement program
- Create an urban walkability or pedestrian improvement program
- Support Transit Oriented Development (TOD) at major transit stops to promote economic growth and community development
- Support Connecticut’s municipal airports and design ways to maximize business opportunities, enhance service offerings, and improve facilities



BIKE AND PEDESTRIAN

- Livable and walkable communities through Complete Streets policies, and context-sensitive designs that respect community values
- TOD in urban centers
- Complete gaps in the regional trail system
- Establish a program to support walkability and pedestrian urban centers



FREIGHT

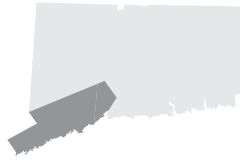
- Upgrade highway bridges to meet 100,000 lb national standard
- Expand overnight parking for trucks
- Fully-automated, wide and heavy loads-permitting system for trucks
- Upgraded freight rail lines, and at grade crossings across the State
- Rail facilities to 286,000 lb national standards in key rail corridors
- Increase modal connections through facility infrastructure enhancements and improvements to the New London, New Haven, and Bridgeport deep-water ports



DESIGN

- State-funded, streamlined design to deliver shovel-ready projects

The New York to New Haven Corridor Strategy



The New York-New Haven corridor is home to three of the State's largest cities (Stamford, Bridgeport, and New

Haven), interconnected by the busiest commuter rail line in the nation (The New Haven Line), and served by two major seaports, Bridgeport and New Haven. It is also our most congested corridor, which is restricting economic growth in the corridor and the State. Residents and businesses in the corridor have expressed a desire to enhance and improve travel within Connecticut and access to New York City. The nature and importance of this corridor requires a comprehensive, multimodal strategy to reduce congestion. We must not only restore our existing infrastructure but expand and enhance our highway, rail, and bus systems. We must also improve bike and pedestrian travel by making our streets more bike- and pedestrian-friendly and completing regional trails.

INVESTMENT HIGHLIGHTS

HIGHWAY

- Widen I-95 from NY to New Haven
- Replace the West Rock Tunnel
- Rebuild the West River Bridge
- Complete Rte 7 and Merritt Parkway/Rte 15 interchange

RAIL

New Haven Line (NHL)

- Restore rail infrastructure, including bridges, track, catenary
- Improve safety and reliability of service
- Expand and enhance service for more frequent and more express service
- Upgrade all 4 tracks to support high-frequency local service and express service
- Add and modernize stations
- Improve station access through parking expansion, bus connection, local shuttle service, and bike and pedestrian access
- Branch Lines: Upgrade to provide full commuter service on all lines

BUS

- Expand service 25% to enable access to bus service in urban areas

SEAPORT

- Maintain and deepen Bridgeport and New Haven harbors
- Rail improvements at New Haven

NEW YORK



202

63

8

7

84

Meriden

6

69

Danbury

63

34

New Haven

58

8

PORT OF NEW HAVEN

New Canaan

Bridgeport

PORT OF BRIDGEPORT

95

Norwalk

LONG ISLAND SOUND

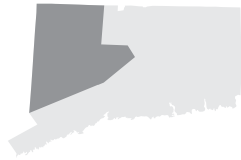
15

Stamford

1

NYC

The New York to Hartford Corridor Strategy



The New York to Hartford corridor is characterized in the west by the longest expanse of shared

border with New York. It includes a dynamic mix of densely populated urban and suburban communities along I-84 and rural townships in the north. The corridor links Connecticut to the national economy. It also links the Danbury, Waterbury, and Hartford economic regions. Essential to economic growth is a reduction in traffic congestion on I-84 by fixing major bottlenecks and restoring bridges and other infrastructure. Since the corridor is also tied to the Bridgeport-Stamford economic area, it is vital to improve rail and highway linkages to the New Haven Line (NHL) and I-95. The right strategy for this corridor will not only support economic growth and revitalization in cities but improve the quality of life in urban and rural areas by restoring State and local roads to a state of good repair and by providing transportation options that expand bus service, enhance bike and pedestrian travel, and support livable and walkable communities.

INVESTMENT HIGHLIGHTS

HIGHWAY

- I-84 in Hartford: Replace 50-year-old viaduct
- I-84 in Waterbury: Replace 50-year-old viaduct
- Replace Rte 8/I-84 interchange
- I-84 in Danbury: Fix bottleneck between Exits 3 and 8
- Provide continuous three lanes between Danbury and Waterbury

RAIL

- Danbury and Waterbury Branch Lines: Upgrade to provide full connectivity and service to NHL and coastal corridor
- Upgrade freight lines through all corridors
- Berlin to Waterbury rail freight upgrade

BUS

- Expand service 25%
- Expand CTfastrak east of the Connecticut River

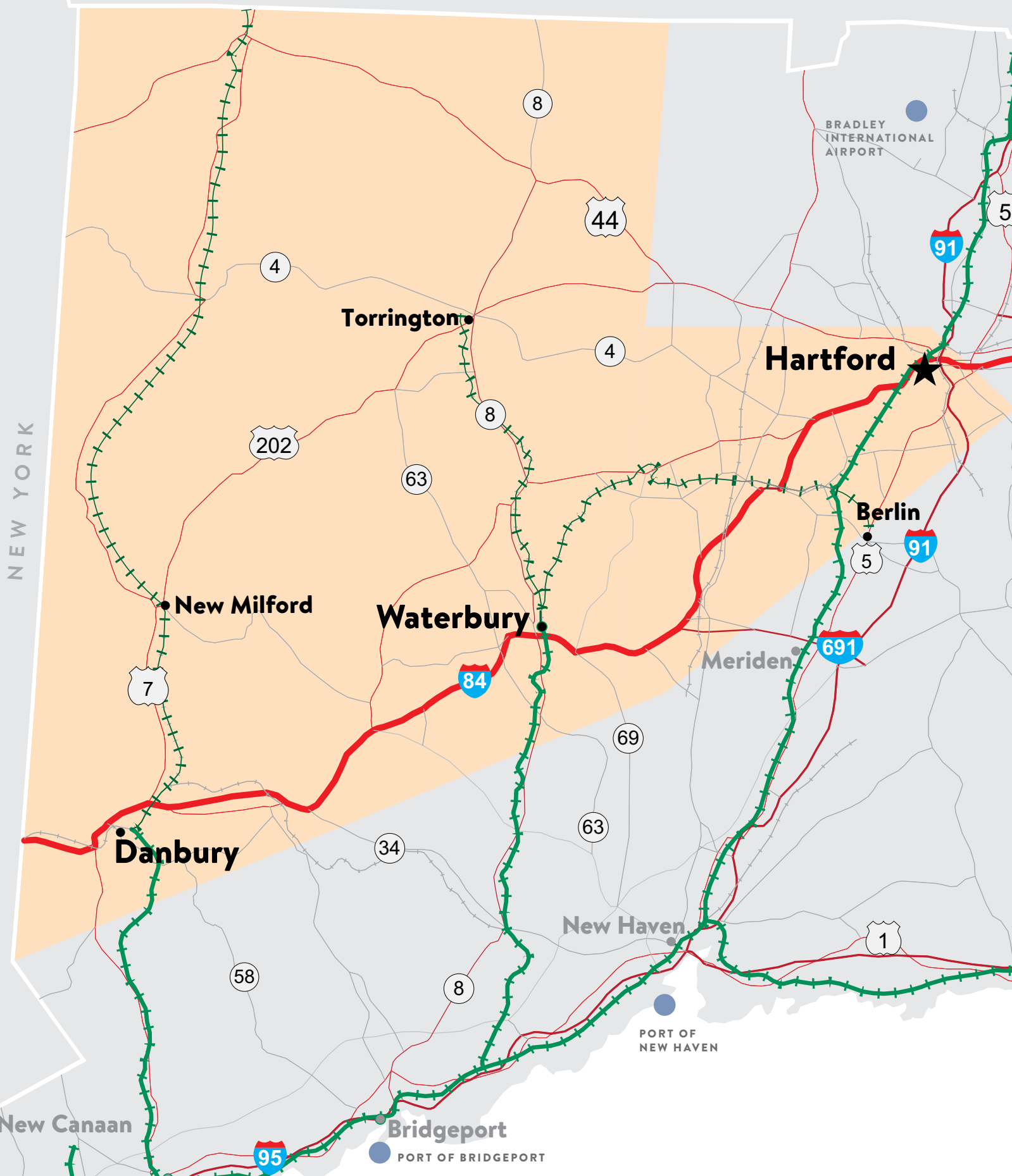
AIRPORT

- Establish a Customs Federal Inspection Services (FIS) facility at Waterbury-Oxford Airport to support private and charter business flights to and from international destinations



MASSACHUSETTS

Montreal



NEW YORK

New Canaan

Bridgeport
PORT OF BRIDGEPORT

PORT OF
NEW HAVEN

BRADLEY
INTERNATIONAL
AIRPORT

The New Haven-Hartford-Springfield Corridor Strategy



This north-south corridor includes two of the most populous cities in the State, Hartford, the State Capital, and New Haven, the busiest port between Boston and New York, and one of New England's largest airports, Bradley International Airport. A best-in-class transportation network will transform this corridor into Connecticut's main street to the world via New Haven's deep-water port, a rail connection southeast to New York and north to Montreal and Boston, and a revitalized international aviation hub with flight connections to Europe and beyond.

INVESTMENT HIGHLIGHTS

HIGHWAY

- I-91 at Charter Oak Bridge: Eliminate bottleneck and improve safety
- Route 9 in Middletown: Reconfigure interchanges at Route 9 and Routes 17 and 66
- I-91 north of downtown Hartford: Implement congestion management options
- I-84 east of downtown Hartford: Implement congestion management options
- Route 2 in East Hartford: Reduce congestion, improve safety and connections to Rentschler development area

RAIL

Hartford Line

- Rebuild and double-track New Haven to Hartford
- Service to Springfield, with connections to NY, Boston, and Montreal
- New or improved stations
- Start operations in 2016 with service from New Haven to Springfield
- Rebuild and double-track north of Hartford

BUS

- Expand service 25%
- Expand CTfastrak east of the Connecticut River and north

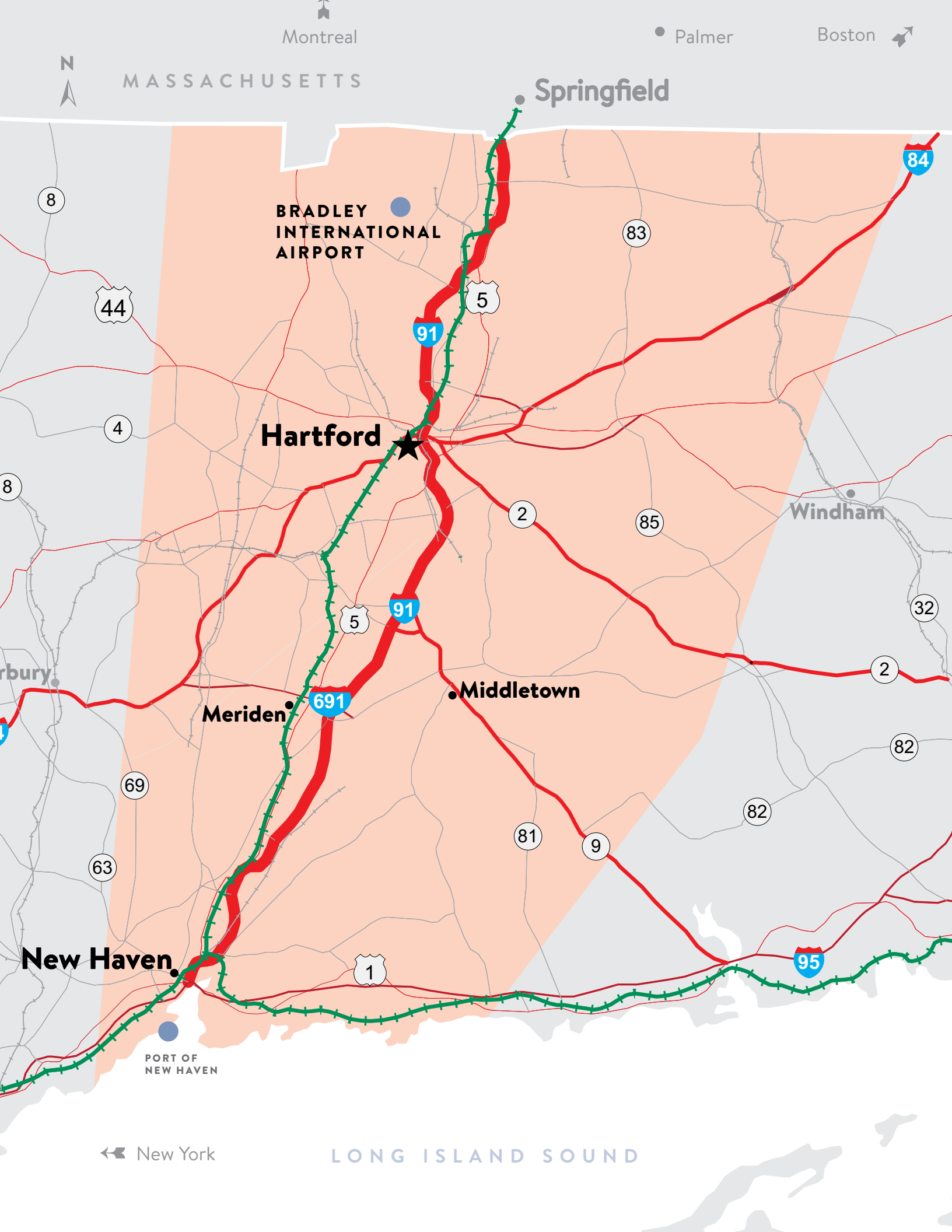
AIRPORT

Bradley International

- Construct a new Ground Transportation Center connected directly to the terminal facilities, including a consolidated rental car facility, public parking spaces, and linkage to bus service and potential future rail connectivity
- Re-establish direct transatlantic service to new getaways and business centers in major European cities
- Construct a new, state-of-the-art terminal to allow for expanded domestic and international service capacity
- Rehabilitate the main taxiway system serving the airport's runways and terminal

SEAPORT

- Maintain and deepen New Haven harbor
- Rail yard improvements at Port of New Haven



Montreal

Palmer

Boston

MASSACHUSETTS

Springfield

BRADLEY
INTERNATIONAL
AIRPORT

Hartford

Windham

Middletown

Meriden

New Haven

PORT OF
NEW HAVEN

New York

LONG ISLAND SOUND

The Eastern Connecticut Corridor Strategy



Eastern Connecticut borders on Massachusetts in the north and Rhode Island in the east. The corridor includes a significant manufacturing sector dominated by General Dynamics Electric Boat in Groton and a large tourism industry anchored by Mystic Seaport, Mystic Aquarium, major casinos, and coastal recreation.

The strategy for this region reflects its less urbanized nature and the importance of tourism and manufacturing. It focuses on making major improvements to I-95, and calls for improvements to other highways and to passenger rail service on the Shore Line East (SLE), freight rail lines on the New England Central Railroad (NECR), the Providence and Worcester line (P&W), and the Port of New London. As elsewhere in Connecticut, economic growth, urban revitalization, and improved quality of life in urban and rural areas will depend on multimodal solutions to restore all roads to a state of good repair, provide more travel options for everyone, and enhance bike and pedestrian travel.

INVESTMENT HIGHLIGHTS

HIGHWAY

- I-95: Rehabilitate Gold Star Bridge
- I-95: Third lane added between Baldwin Bridge and Gold Star Bridge
- I-95: Reconfigure and improve the I-95/I-395 interchange
- I-95: Widen to three lanes to Rhode Island
- Route 11: Construct expressway from Salem to Waterford/East Lyme
- Route 2A: Safety and capacity improvements to Mohegan-Pequot Bridge

RAIL

Shore Line East

- Complete program to replace existing stations with new modern stations

- Upgrade power delivery systems for electric powered trains
- Build Niantic station
- New platform for New London station
- Replace Connecticut River Rail Bridge

BUS

- Expand service 25%

SEAPORT

New London

- Maintain and deepen harbor
- State Pier improvements
- Rail service extended onto State Pier

Worcester

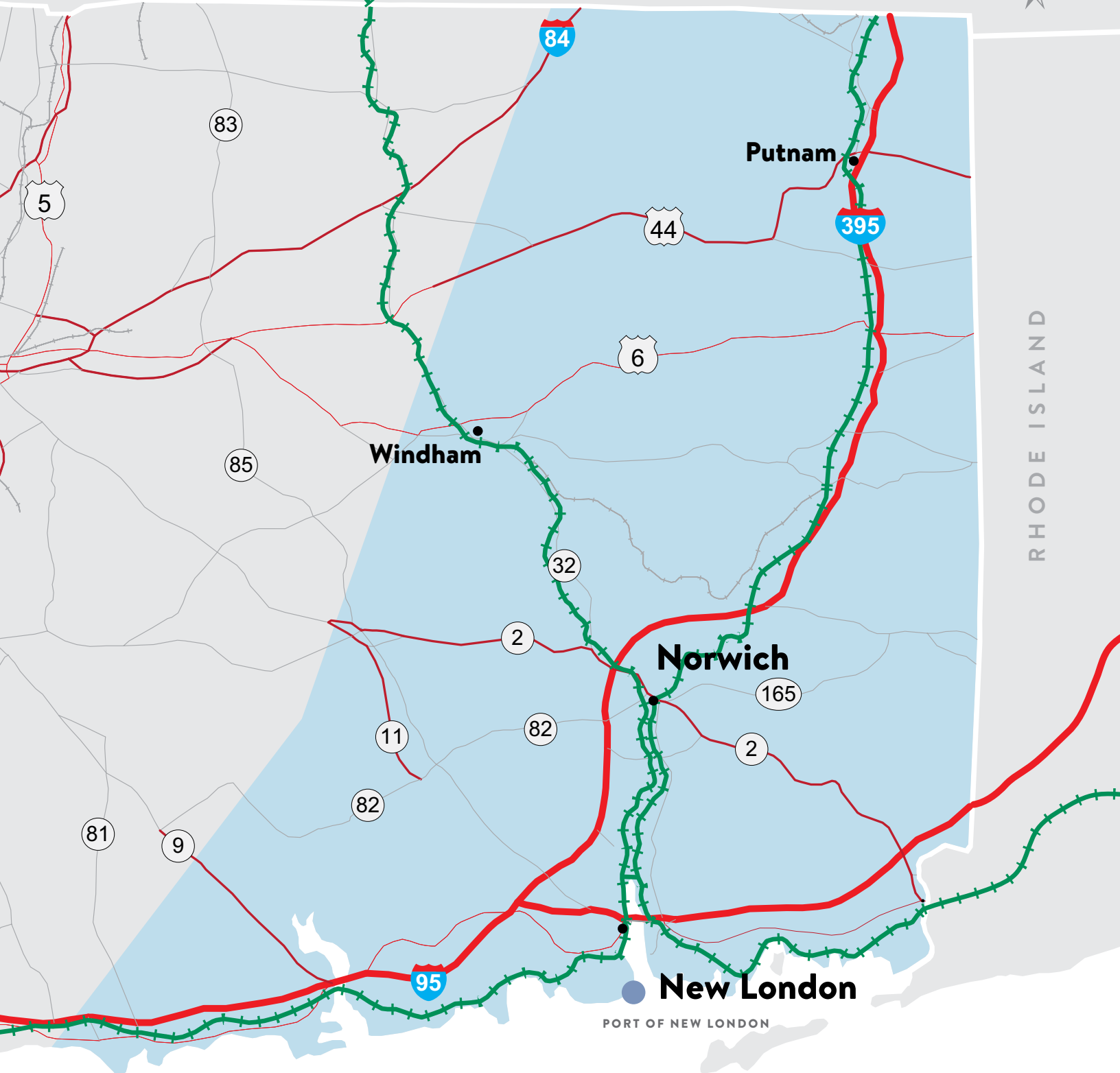
Boston

MASSACHUSETTS



Springfield

Palmer




RHODE ISLAND

PORT OF NEW LONDON

BLOCK ISLAND SOUND

A photograph of a man with a grey beard and bald head, wearing a light-colored polo shirt, sitting in the driver's seat of a vehicle. He is looking towards the camera with a slight smile. The interior of the vehicle is visible, including the dashboard and a camera mounted on the ceiling. The background shows green foliage through the window.

Forv



Everyone in Connecticut must be able to travel quickly and easily so they have access to the widest choice in where to work and live. Today, too many people in Connecticut have too few options for how to get around—and as a result, there are more cars crowding our roads, emitting more pollution, and keeping us dependent on foreign oil.

ward

The Challenges Ahead | A major expansion in transportation infrastructure investment will require careful planning and execution. The process must start with a commitment to ensure that all revenues, existing and future, for that expansion come with a “lock box.” It will also require a phased implementation strategy that will allow and promote growth of the engineering and construction industries in Connecticut.

Changes will be needed to effectuate alternative project delivery methods such as Public-Private-Partnerships (P3s), Design-Build, and Construction Manager contracting. Operations’ service contracts must employ performance metrics that ensure stakeholder needs are met. CTDOT must have the organizational capabilities to deliver high-quality service and accelerated decision-making and program delivery. Continued partnerships and collaboration with other State, local, and private entities will be an essential element of future success.

What's Next

To take smart, swift action toward building a best-in-class transportation system and delivering economic growth, a sustainable environment, and a high quality of life in Connecticut, we must work together to set the right priorities. Connecticut's Transportation Plan must be strong, because it will be the foundation of a transportation architecture that millions will depend on for generations to come. Connecticut's elected leadership and all stakeholders—from residents and businesses, to tourism and the transportation industry—must be part of the enterprise.

The publication of this report and the accompanying *5 Year Ramp-Up Plan* will serve as the springboard for public forums as well as legislative and executive decision making across Connecticut. In the months to come, CTDOT will launch a “Let's GO CT!” public engagement effort, including workshops and town halls in each of the State's four transportation corridors, eventually culminating in a statewide Transportation Summit. The goal is clear: Bring together a broad swath of stakeholders to collect input and ideas from every corner of the State—crossing boundaries, communities, and modes to bring Connecticut's Transportation Plan to fruition.



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New Haven Train Station

Appendix A – Programs and Projects

Capital Costs Summary (2013 Dollars) *

Region/Corridor	Cost
Statewide	\$45,271,000,000
New York to New Haven	\$29,540,200,000
New York to Hartford	\$14,296,000,000
New Haven to Springfield (MA)	\$5,585,000,000
Eastern Connecticut	\$5,611,000,000
Total	\$100,303,200,000

* Excludes 5-Year Capital Plan projects (2015-2019)

Cost By Project Type*

Mode	Cost
Highway	\$30,797,000,000
Bridge	\$35,680,000,000
Bus	\$2,800,000,000
Rail	\$21,820,200,000
Bike-Pedestrian	\$780,000,000
Freight	\$1,250,000,000
Maritime	\$711,000,000
Aviation	\$1,465,000,000
Design	\$5,000,000,000
Total	\$100,303,200,000

* Excludes 5-Year Capital Plan projects (2015-2019)



STATEWIDE	\$45,271,000,000
Highway	\$15,465,000,000
Preservation & Safety	\$15,465,000,000
HIGHWAY NEEDS - PAVEMENT	\$5,425,000,000
Funding needed to maintain state of good repair and achieve 0% poor roads on all State-maintained roadways. This number represents pavement costs and not total project costs.	
HIGHWAY NEEDS - ANCILLARY ASSETS	\$8,565,000,000
Funding needed to maintain state of good repair of ancillary assets on State maintained roadways such as guardrail, lighting, signs, signals, etc. Excludes costs for major projects listed.	
SAFETY IMPROVEMENTS ON STATE HIGHWAY NETWORK	\$50,000,000
Fund safety improvements in addition to the safety improvements that are part of every project the Department undertakes.	
INTELLIGENT TRANSPORTATION SYSTEMS (ITS)	\$50,000,000
Project combines two Federal-State initiatives that use Intelligent Transportation Systems technology to promote the safe and legal movement of commercial vehicle traffic within our State and across the Nation. Through an automated system, both initiatives seek to improve highway safety by rewarding safe motor carriers, penalizing unsafe carriers and removing unsafe commercial vehicles from the roadways.	
ANNUAL FUNDING FOR MUNICIPAL TRAFFIC SIGNAL PROGRAM (MUTSP)	\$250,000,000
The Municipal Traffic Signal Enhancement Program will be funded at a level of \$10 M per year. This is a new program proposed to assist local communities in upgrading, modernizing and improving traffic signal systems and signalized intersections in the municipalities, bringing them in conformance with the current MUTSP.	
LOCAL TRANSPORTATION CAPITAL IMPROVEMENTS PROGRAM (LOTICIP)	\$1,125,000,000
This project will increase the LOTICIP from a current funding level of \$45 M per year to an annual value of \$90 M per year. This program is established to support projects in Connecticut's municipalities.	

Bridge	\$19,200,000,000
Preservation	\$19,200,000,000
BRIDGE NEEDS	\$18,700,000,000
<p>Funding needed to reach and maintain less than 10% structurally deficient bridges statewide (by deck area) within 20 years. This cost includes all bridges within the State, both State-maintained and locally-maintained bridges that are over 20 feet in length and located on a public road. The cost includes only the rehab or replacement of the bridge elements and excludes other related project components and costs. The cost to rehab and/or replace the individual bridges listed in this document has been removed from this cost and is represented in those individual project costs.</p>	
LOCAL BRIDGE PROGRAM	\$500,000,000
<p>Increase the State-funded local bridge program from \$10 M per year to \$20 M per year for 25 years. As a result of a new round of inspections of municipal bridges with spans less than 20 feet (most of which have not been inspected for more than 20 years), it is anticipated that there will be a significant increase in the need for rehabilitation projects on local bridges. In addition, a substantial increase in the number and speed of delivery of Federal local bridge projects is anticipated as a result of a new pilot program where project design phases are managed and funded by the Department under 80% Federal and 20% State funds in lieu of the standard program with projects design phases funded 80% Federal, 20% local, and managed by the municipalities. Construction phases will continue to be funded under 80% Federal and 20% local and managed by the municipalities.</p>	
Bus	\$2,575,000,000
Preservation	\$2,000,000,000
CAPITAL ASSETS MIDLIFE OVERHAUL	\$200,000,000
<p>Critical systems replacement of existing capital assets including CTTransit and transit district equipment, rolling stock, infrastructure, and facilities. Maintaining the State's bus network system in state of good repair is essential for delivering safe and reliable transit service to millions of daily riders and one of State's highest priorities. These funds exclude midlife overhaul of CTfastrak capital assets, which are included separately in this document.</p>	
FLEET REPLACEMENT	\$1,400,000,000
<p>Life cycle replacements of CTTransit bus fleet systemwide and transit districts fleet statewide. Replacements include new fleet with Clean Diesel-Electric Hybrid or other green technology. Newer buses will lead to significant gains in efficiency including fuel economy and lower emissions.</p>	
MAINTENANCE FACILITY IMPROVEMENTS	\$400,000,000
<p>Significant improvements and replacements of bus maintenance facilities statewide including CTTransit facilities and regional/local transit facilities. In order to meet the growing transportation demands of the State, expansion of existing facilities is necessary to sustain a growing and dynamic fleet of vehicles.</p>	

Enhancement	\$575,000,000
<p>UNIFY OPERATIONS AND TRANSIT PLANNING</p> <p>Consolidated bus service plan to unify operations and scheduling between local bus systems and statewide systems including ADA and non-profit services.</p>	\$5,000,000
<p>BUS SYSTEM EXPANSION IN URBAN AREAS</p> <p>Expand existing fixed-route bus service by 25% by extending routes and expanding the frequency and convenience of bus service where demand is greatest. Add crosstown routes where needed, consolidate and simplify routes, add late night and weekend service, enhance service between growing transit-dependent populations in the inner-ring suburbs and growing suburban employment corridors. Also, institute real-time multimodal scheduling information, enable off-board fare payment and smart cards that can be used on all transit systems regardless of jurisdiction.</p>	\$265,000,000
<p>FEEDER BUS ROUTES</p> <p>Provide new bus service routes to existing and new rail stations including connections with express bus routes between cities and town centers.</p>	\$40,000,000
<p>BUS TRANSIT/PARATRANSIT SERVICES</p> <p>Coordinate improvements in paratransit services for the elderly and disabled through a comprehensive statewide service system.</p>	\$145,000,000
<p>TRANSIT AUTHORITY GRANTS</p> <p>Provide additional funding and grants to support an increase in service by special service providers throughout the State. Increase existing grants by 25% to transit authorities for bus purchases serving elderly and disabled riders.</p>	\$25,000,000
<p>INTERCITY EXPRESS BUS SERVICES</p> <p>Provide new express bus routes between key cities and town centers. Includes bus lanes in high-volume corridors with traffic signal priority including new routes and expanded hours on current routes.</p>	\$95,000,000
Rail	\$25,000,000
Preservation	\$25,000,000
<p>RAILWAY-HIGHWAY GRADE CROSSING PROGRAM (RHGCP)</p> <p>Continue state funding of RHGCP at current levels of \$1 M per year. This program renews grade crossing surfaces that are failing due to age. It pays for the improvement of approximately 3 - 4 grade crossings per year.</p>	\$25,000,000

Bike and Pedestrian	\$780,000,000
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Preservation	\$30,000,000
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MAINTAIN REGIONAL TRAIL SYSTEM	\$30,000,000
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The purpose of this program is to help maintain state of good repair of the statewide regional trail network by funding \$1.2 M per year for 25 years for trail maintenance. The program will leverage other funding sources for trail construction. It will help address a longstanding issue of deferred maintenance as many towns don't have specialized equipment necessary for routine maintenance. The program will support the current system of ADA accessible trail miles as well as the Department of Energy and Environmental Protection (DEEP) trail maintenance efforts.

Enhancement	\$750,000,000
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PEDESTRIAN AND BICYCLE IMPROVEMENTS IN URBAN CENTERS	\$250,000,000
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This program funded at \$10 M per year for 25 years will help construct sidewalks and on and off-road bike improvements in the State's urban centers making them more walkable, livable, and safe. This program will improve safety of non-motorized users and will focus on areas that have an existing density of non-motorists. The focus will be on creating networks of bicycle and pedestrian mobility and access. This investment supports transit last mile connectivity.

COMPLETE GAPS IN THE STATEWIDE REGIONAL TRAIL NETWORK	\$250,000,000
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This program funded at \$10 M per year for 25 years allows for the strategic infill of the State's prioritized trail network including the spine of the East Coast Greenway and major regional trail systems. Completing gaps in the statewide and regional trail system enhances opportunities for recreation as well as providing transportation options for non-motorists, increasing their access to employment as well as to other urban, suburban, and residential areas.

CONSTRUCT RECREATIONAL TRAIL ALONG ROUTE 15 (MERRITT PARKWAY)	\$250,000,000
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Construction of a multi-use trail along the scenic Merritt Parkway to accommodate non-motorized transportation.

Freight	\$1,250,000,000
Preservation	\$750,000,000
RAIL FREIGHT NETWORK	\$750,000,000
Establish annual funding program to maintain state of good repair across statewide rail freight network, including rights-of-way, bridges and structures, at-grade rail crossings, culverts and special projects.	
Enhancement	\$500,000,000
NEW TRUCK REST AREAS	\$500,000,000
Construction of new truck rest area facilities to address statewide truck parking shortage, providing safe and ample parking to meet demand.	
Maritime	\$711,000,000
Preservation	\$231,000,000
NEW LONDON THAMES RIVER DREDGING	\$11,000,000
Authorized depth of Thames River Federal Navigation Project (FNP) is 35 feet though United States Navy (USN) maintains most of channel at 40 feet. Project will provide consistent FNP leading into State Pier Facility of 40+ feet.	
PORT OF NEW LONDON/STATE PIER REPAIRS	\$40,000,000
State Pier repairs and minor improvements such as dock levelers, LED lighting, etc.	
PORT OF BRIDGEPORT DREDGING	\$54,000,000
Project would remove shoaling and thus return the authorized depth of the Federal Navigation Project (FNP) to 35 feet.	
HARBOR MAINTENANCE	\$125,000,000
Maintenance dredging of small to mid-size ports and harbors at \$5 M per year for 25 years. This investment will ensure the on-going economic viability and allow for safe passage of vessels.	
ROCKY HILL-GLASTONBURY FERRY MAINTENANCE DREDGING	\$1,000,000
Remove sediment from ferry landings on both sides of the CT River.	

Enhancement	\$480,000,000
FERRY IMPROVEMENTS	\$50,000,000
Rehab and replacement of existing vessels, tugs/barges, docks, piles, etc.	
PORT OF NEW HAVEN IMPROVEMENTS	\$130,000,000
Includes completion of rail link to terminals, additional trackage and sidings, and deepening of channel.	
PORT OF NEW LONDON/STATE PIER IMPROVEMENTS	\$300,000,000
Port of New London/State Pier infrastructure improvements including relocation of access roads, renovation to the piers, improvements to the bulkheads, paving of storage areas, and the construction of a new warehouse. State Pier Strategic Infrastructure Improvement project deepens all berths, realigns entrance gate, removes hillock improves rail access to piers. East and West wharves repaired/replaced at Phase 4 and 6 respectfully. Purchase of specialized cargo handling equipment and investments to incentivize private infrastructure investments.	
Airports	\$265,000,000
Preservation	\$265,000,000
GENERAL AVIATION AIRPORTS	\$140,000,000
Capital improvements to State-owned General Aviation airports including Danielson, Groton-New London, Hartford-Brainard, Waterbury-Oxford and Windham airports. Major components of the program consist of purchasing specialized airport equipment, runway and taxiway rehabilitations, safety area improvements, including remediating obstruction conflicts, and the modernization of lighting systems and navigational aids.	
MUNICIPAL AIRPORT PROGRAM	\$125,000,000
Fund Municipal Airport Program improvements at Tweed-New Haven, Bridgeport Sikorsky, Meriden, Robertson and Danbury airports. Major components of the program include residential sound insulation, pavement and ramp rehabilitations, obstruction removal, and the purchase of airfield equipment.	
STATE FUNDED DESIGN	\$5,000,000,000
Expedite project design and create shovel-ready projects.	

Note: All costs are in 2013 Dollars



NEW YORK TO NEW HAVEN**\$29,540,200,000****Highway****\$10,060,000,000****Enhancement****\$10,060,000,000****OPERATIONALLY IMPROVE ROUTE 8****\$500,000,000**

Operational enhancements to the Route 8 corridor in Naugatuck Valley to address congestion. Include additional safety features, wider shoulders, longer and enhanced on and off-ramp geometrics and acceleration lanes, as well as operational lanes to improve operational safety along a portion of this corridor.

RECONSTRUCT ROUTE 7 FROM GRIST MILL ROAD TO ROUTE 33**\$40,000,000**

The reconstruction of existing Route 7 from Grist Mill Road in Norwalk to the intersection of Route 7 and Route 33 in Wilton will incorporate the expansion of the existing two-lane roadway to a four-lane facility, including safety improvements, geometric and operational enhancements at intersections, and appropriate left-turn lanes at critical intersections thereby enhancing safety and capacity.

SUPER 7**\$300,000,000**

Extension of Route 7 Expressway in Norwalk north to interchange of Route 7 and Route 33 in Wilton.

RECONSTRUCT AND RECONFIGURE INTERCHANGE BETWEEN ROUTE 7 AND ROUTE 15 (MERRITT PARKWAY)**\$200,000,000**

Reconstruction and reconfiguration of the interchange between Route 7 and Route 15 (Merritt Parkway) will incorporate final ramp connections to and from the east and to and from the west with enhancements to the existing old Route 7 interchange area with the Merritt Parkway. Additional geometric improvements will accommodate traffic volumes which currently cause a high degree of congestion and delays at signalized intersections. These upgrades will improve operational capacity, assist in the reduction of emissions, and provide a higher quality of service to the local commercial and supporting development areas.

WIDEN I-95 FROM NY STATE LINE TO STAMFORD**\$1,660,000,000**

These projects include the construction of an additional operational lane in each direction along I-95 from the NY State border to Stamford. This highly congested corridor constructed in the early 1950s has outgrown its ability to serve the region and current operations present significant congestion and safety issues. The projects will enhance vehicular capacity, increase operational safety, and provide a significant benefit to the economic environment, as well as the ability of the coastal route to support tourism and recreation.

WIDEN I-95 FROM STAMFORD TO BRIDGEPORT **\$4,085,000,000**

These projects include the construction of an additional operational lane in each direction along I-95 from Stamford to Bridgeport. This highly congested corridor constructed in the early 1950s has outgrown its ability to serve the region and current operations present significant congestion and safety issues. The projects will enhance vehicular capacity, increase operational safety, and provide a significant benefit to the economic environment, as well as the ability of the coastal route to support tourism and recreation.

WIDEN I-95 FROM BRIDGEPORT TO MILFORD CONNECTOR **\$1,930,000,000**

These projects include the construction of an additional operational lane in each direction along I-95 from the Bridgeport to Milford Connector. This highly congested corridor constructed in the early 1950s has outgrown its ability to serve the region and current operations present significant congestion and safety issues. The projects will enhance vehicular capacity, increase operational safety, and provide a significant benefit to the economic environment, as well as the ability of the coastal route to support tourism and recreation.

WIDEN I-95 FROM MILFORD CONNECTOR TO NEW HAVEN **\$1,325,000,000**

These projects include the construction of an additional operational lane in each direction along I-95 from the Milford Connector to New Haven. This highly congested corridor constructed in the early 1950s has outgrown its ability to serve the region and current operations present significant congestion and safety issues. The projects will enhance vehicular capacity, increase operational safety, and provide a significant benefit to the economic environment, as well as the ability of the coastal route to support tourism and recreation.

RECONSTRUCT AND RECONFIGURE EXIT 59 ON ROUTE 15 (WILBUR CROSS PARKWAY) **\$20,000,000**

The reconstruction and reconfiguration of the existing Exit 59 interchange in New Haven/Woodbridge on Route 15 (Wilbur Cross Parkway), addressing an area which has substandard geometry.

Bridge	\$850,000,000
Preservation	\$360,000,000

REHAB AND REPAIR COMMODORE HULL BRIDGE ON ROUTE 8 **\$35,000,000**

This bridge, 1,600 feet in length, carries Route 8 over the Housatonic River and Route 110 in Shelton and Derby. Constructed in 1951, its structures have a failing paint system, resulting in section loss to some steel members. This project will include abrasively blasting clean all of the superstructure steel and applying a protective paint coating system, to protect the structural steel from corrosion.

REHAB WEST ROCK TUNNEL ON ROUTE 15 IN WOODBRIDGE **\$235,000,000**

Built in 1949, this 1/4 mile twin tunnel conveys the Wilbur Cross Parkway under the West Rock Ridge. It requires constant maintenance due to its poor condition and hazards created by falling concrete, ice, and poor illumination. Rehabilitation will use innovative means to maintain traffic flow during construction and to shorten the duration of construction.

REPLACE STEVENSON DAM BRIDGE ON ROUTE 34 **\$90,000,000**

Replacement of this bridge that carries Route 34 over the Housatonic River in the Towns of Oxford and Monroe will address substandard, deteriorating conditions and improve road geometry which contributes to vehicular operational problems.

Enhancement **\$490,000,000****OPERATIONAL LANE IMPROVEMENTS ON I-95 BETWEEN EXITS 8 AND 10** **\$490,000,000**

This project will provide a speed change lane on I-95 northbound from Exit 8 in Stamford to Exit 10 in Darien. This project will also include the replacement of a bridge over the New Haven Line (NHL), which is in poor condition and is one of the most constrictive bridges on I-95 between New Haven and the New York State line. The creation of speed change lanes in this area will improve operations and improve capacity to reduce congestion.

Bus **\$40,000,000****Enhancement** **\$40,000,000****NEW BUS RAPID TRANSIT (BRT)-LIKE BUS SERVICE BETWEEN BRIDGEPORT AND STAMFORD** **\$20,000,000**

Buses that will use general travel or exclusive bus lanes in high-volume corridors with traffic signal priority to connect major destinations.

NEW BUS RAPID TRANSIT (BRT)-LIKE BUS SERVICE BETWEEN STRATFORD AND BRIDGEPORT **\$10,000,000**

Buses that will use general travel or exclusive bus lanes in high-volume corridors with traffic signal priority to connect major destinations.

NEW BUS RAPID TRANSIT (BRT)-LIKE BUS SERVICE IN GREATER NEW HAVEN AREA **\$10,000,000**

Buses that will use general travel or exclusive bus lanes in high-volume corridors with traffic signal priority to connect major destinations.

Rail **\$18,590,200,000****Preservation** **\$13,210,200,000****ELECTRIC FLEET MIDLIFE OVERHAUL** **\$200,000,000**

Critical systems replacement of existing electric fleet on New Haven Line (NHL) to maintain state of good repair, Connecticut's share.

ELECTRIC FLEET REPLACEMENT	\$1,250,000,000
Future life-cycle replacement of existing electric fleet for use on New Haven Line (NHL), Connecticut’s share.	
DIESEL FLEET REPLACEMENT	\$300,000,000
Replace existing diesel locomotives and coaches for use on New Haven Line (NHL).	
MAINTENANCE FACILITY AND YARD IMPROVEMENTS	\$1,460,000,000
Rehab and improve existing rail maintenance facilities and yards on New Haven Line (NHL), including New Haven, Bridgeport and Stamford (finish catenary replacement).	
COMMUNICATIONS AND SIGNAL UPGRADES	\$1,120,200,000
Upgrade rail communications and signals on New Haven Line (NHL) to reach state of good repair. Upgrades include positive train control (PTC), network infrastructure upgrades, communication and signal system replacements and rail communications and signal improvements for mainline and branch lines.	
CATENARY REPLACEMENTS AND POWER UPGRADES	\$700,000,000
Life-cycle replacement of superstructures and wiring (includes substations) due to age and condition. Danbury Dock Yard is also included.	
FIXED RAIL BRIDGES - STATE OF GOOD REPAIR	\$2,175,000,000
Rehab and or replace all fixed rail bridges on New Haven Line (NHL) to attain state of good repair. This includes all fixed rail bridges on mainline and branch lines.	
MOVABLE RAIL BRIDGES - STATE OF GOOD REPAIR	\$2,825,000,000
Rehab and or replace all movable rail bridges on New Haven Line (NHL) to attain state of good repair.	
RAIL TRACK PROGRAM	\$1,680,000,000
Improvements and upgrades to existing tracks on New Haven Line (NHL) including concrete tie repair, interlocking, drainage, track, ties, rail and road bed.	
EXISTING STATION AND PARKING IMPROVEMENTS	\$1,500,000,000
Improvements and upgrades to existing stations and parking on New Haven Line (NHL), including mainline and branch line improvements.	
Enhancement	\$5,380,000,000
ELECTRIC FLEET EXPANSION	\$265,000,000
Expansion of existing electric fleet for use on New Haven Line (NHL).	
DIESEL FLEET EXPANSION	\$230,000,000
Expansion of existing diesel locomotives and coaches for use on New Haven Line (NHL), including mainline and branch lines.	
NEW RAIL MAINTENANCE FACILITIES AND YARDS ON BRANCH LINES	\$100,000,000
Construction of new rail maintenance facilities and yards on New Haven Line (NHL) branch lines will allow for expanded branch line rail service to and from mainline.	

NEW RAIL MAINTENANCE FACILITY AND YARD FOR INTERCITY RAIL SERVICE **\$500,000,000**

A new intercity maintenance facility and storage yard in New Haven will allow for the expansion of existing inter-city rail service to and from Washington, DC.

NEW CANAAN BRANCH LINE IMPROVEMENTS **\$45,000,000**

Significant improvements on New Canaan branch line service between Darien and New Canaan to increase frequency and enhance service to and from mainline. Improvements include Springdale siding, platform, and station improvements.

ELECTRIFY DANBURY BRANCH LINE **\$400,000,000**

Electrification of existing Danbury branch line service between South Norwalk and Danbury would allow for extended one-seat ride service on New Haven Line (NHL).

EXTEND RAIL SERVICE FROM DANBURY TO NEW MILFORD **\$450,000,000**

This includes all of the estimated capital costs associated with extending rail service from Danbury to New Milford without electrification.

ELECTRIFY EXTENDED RAIL SERVICE FROM DANBURY TO NEW MILFORD **\$540,000,000**

This includes just the estimated electrification costs associated with extending rail service from Danbury to New Milford.

WATERBURY BRANCH LINE IMPROVEMENTS **\$350,000,000**

Improvements to Waterbury branch line service between Bridgeport and Waterbury to increase frequency and enhance service to and from mainline. Improvements include completion of signalization, grade crossings, sidings, and station improvements.

TRACK IMPROVEMENTS BETWEEN MILFORD AND NEW HAVEN **\$300,000,000**

Restore four-track capacity between Milford and New Haven to increase capacity and enhance service on New Haven Line (NHL).

FULL CAPACITY NEW HAVEN LINE SERVICE **\$2,000,000,000**

Realign Connecticut's existing tracks and stations between New Haven and New York to provide significant frequency and speed enhancements on New Haven Line (NHL). This project would result in a two-track local and two-track express service on the mainline, with center island platforms at key locations between New Haven and New York. It includes communications and signal enhancements.

NEW STATIONS AND PARKING **\$200,000,000**

Construction of new stations and parking on New Haven Line (NHL). Includes construction of new stations in Bridgeport (Barnum), Orange, and a new parking garage in New Haven with pedestrian connections.

Note: All costs are in 2013 dollars.



I-84 and Route 8
Viaduct, Waterbury
(Mixmaster)

NEW YORK TO HARTFORD**\$14,296,000,000****Highway****\$1,686,000,000****Enhancement****\$1,686,000,000****RECONSTRUCTION OF I-84 INTERCHANGE AT ROUTE 4 AND ROUTE 6 IN FARMINGTON****\$130,000,000**

The reconstruction of I-84 in the Route 4 and Route 6 area in Farmington will incorporate additional operational and safety improvements amongst interchanges in order to provide improved access to Connecticut Route 9. Recommendations to be incorporated include the removal of the on and off ramps to Connecticut Route 4 from I-84 mainline. Access will be provided through a local collector distributor roadway. A new eastbound portion of I-84 will be constructed to carry three lanes of traffic and eliminate the right lane drop to Connecticut Route 9. A direct connection from Connecticut Route 4 and Route 9 southbound will be provided. These improvements will provide better connections to all State routes and enhance operational safety.

WIDEN I-84 FROM NY STATE LINE TO DANBURY EXIT 3**\$150,000,000**

Widening of I-84 from the NY State Line to Danbury Exit 3, with the addition of one operational lane. I-84 is heavily traveled by commercial vehicles and is a major freight corridor utilized by many of the interstate trucking routes and these improvements will provide a higher level of service for commercial operations and improved safety for all motorists increasing capacity from 2 to 3 lanes.

WIDEN I-84 FROM DANBURY EXIT 3 TO EXIT 8**\$640,000,000**

Widening of I-84 in Danbury between Exit 3 and Exit 8, with the addition of one operational lane. I-84 is heavily traveled by commercial vehicles and is a major freight corridor utilized by many of the interstate trucking routes and these improvements will provide a higher level of service for commercial operations and improved safety for all motorists increasing capacity from 3 to 4 lanes.

WIDEN I-84 FROM DANBURY EXIT 8 TO WATERBURY EXIT 18**\$720,000,000**

Widening of I-84 from Danbury Exit 8 to Waterbury Exit 18, with the addition of one operational lane. I-84 is heavily traveled by commercial vehicles and is a major freight corridor utilized by many of the interstate trucking routes and these improvements will provide a higher level of service for commercial operations and improved safety for all motorists increasing capacity from 2 to 3 lanes.

CONSTRUCT OPERATIONAL LANE ON I-84 BETWEEN EXITS 40 & 42 IN WEST HARTFORD**\$46,000,000**

The section of I-84 between Exits 40 and 42 has been identified as having significant substandard roadway cross section to accommodate the current vehicular volumes and also exhibits a significant operational safety issue. The cross section will be improved through the addition of auxiliary lanes to be constructed on I-84 eastbound between New Britain Avenue and South Main Street and I-84 westbound between Park Road and Ridgewood Road to increase capacity and relieve congestion and improve operational safety.

Bridge	\$12,335,000,000
Preservation	\$12,335,000,000
REPLACE I-84 VIADUCT, HARTFORD	\$5,270,000,000
<p>This project will replace the I-84 viaduct (originally built between 1965 and 1967) in downtown Hartford. Known as the “Aetna Viaduct,” this one-mile long series of structures carrying 8 to 10 lanes of I-84, requires attention due to deterioration. The urban setting, critical constraints and complexities of the area require the extension of work beyond the existing viaduct limits in order to improve the transportation infrastructure while lessening the highway’s impact on surrounding neighborhoods and improving community cohesion, livability, and the economic vitality of Hartford.</p>	
REPLACE I-84 MIXMASTER, WATERBURY	\$7,065,000,000
<p>This interchange, built between 1965 and 1967, requires rehabilitation or replacement of substantial bridge structures and highway ramp improvements to expand capacity, correct operational deficiencies, and enhance safety. Of the numerous structures that form the interchange, the most significant are I-84 EB (3,766 ft.), I-84 WB (2,461 ft.), Route 8 NB (2,634 ft.) and Route 8 SB (1,589 ft.). The I-84/Route 8 interchange is unique in Connecticut as I-84 is double-decked as it crosses Route 8 and the Naugatuck River. Route 8 is also double-decked just south of I-84.</p>	
Bus	\$75,000,000
Preservation	\$75,000,000
CTFASTRAK STATE OF GOOD REPAIR	\$75,000,000
<p>Critical systems replacement and mid-life improvements to CTfastrak assets such as rolling stock and stations, etc. The purpose of this investment is to maintain future state of good repair of this new bus rapid service.</p>	
Rail	\$200,000,000
Enhancement	\$200,000,000
BERLIN-WATERBURY RAIL IMPROVEMENTS	\$200,000,000
<p>Upgrade existing freight rail line (includes track, bridges, and Terryville tunnel). Preserve option for future passenger rail service.</p>	

Note: All costs are in 2013 dollars.



Hartford skyline

NEW HAVEN TO SPRINGFIELD

\$5,585,000,000

Highway

\$515,000,000

Enhancement

\$515,000,000

**OPERATIONAL AND SAFETY IMPROVEMENTS AT ROUTE 9/
ROUTE 17 ON-RAMP**

\$30,000,000

Improve Route 9 northbound on-ramp from Route 7, which will incorporate an additional acceleration lane and taper distances to enhance safety and reduce accidents in this area.

**RECONFIGURE INTERCHANGES OF ROUTE 9/ROUTE 66 AND
ROUTE 9/ROUTE 17**

\$390,000,000

Reconfigure interchanges with Route 9 and Route 17 and 66 in Middletown to incorporate direct connections between the Arrigoni Bridge and Route 9, eliminating the existing at-grade signalized intersection on Route 9, which is currently the cause of significant congestion and a number of major accidents. These improvements will enhance operational safety and provide enhanced air quality resulting from the removal of the signalized intersections.

**OPERATIONAL IMPROVEMENTS ON I-91 AT I-691/
ROUTE 15 INTERCHANGE**

\$88,000,000

Enhancements of the northbound and southbound I-91 area in Meriden between Exit 15 and Exit 20, incorporating an additional operational lane in each direction to allow for smoother transition of the northbound on-ramp and elimination of the continual queued right lane condition on southbound on I-91 as a result of the Wilbur Cross Parkway Route 15 off-ramp configuration. These improvements will provide a higher level of operations along this section of I-91 as well as enhanced safety to reduce accidents.

HARTFORD AREA CAPACITY IMPROVEMENTS

\$7,000,000

Implement high-capacity improvements to mainline operations in this area, including geometric improvements that will enhance operations in this area.

Bridge	\$2,295,000,000
Preservation	\$295,000,000
REPLACE PUTNAM BRIDGE ON ROUTE 3 OVER CONNECTICUT RIVER	\$295,000,000
<p>Project will replace the 2,400 foot long, four-lane bridge carrying Route 3 over the Connecticut River between Wethersfield and Glastonbury. Constructed in 1959, the structure has been subject to multiple rehabilitation projects and emergency repairs and continues to be a maintenance liability. Due to substandard shoulder widths, maintenance efforts or emergency response results in a major impact to traffic. This is a major river crossing and provides traffic relief to the other major river crossings in Hartford and Middletown. The replacement structure will minimize maintenance needs, improve safety and traffic flow and provide relief on other river crossings. In addition, a 6-foot sidewalk will be added creating a much needed pedestrian river crossing.</p>	
Enhancement	\$2,000,000,000
ADDITIONAL BRIDGE CROSSING OVER CONNECTICUT RIVER	\$2,000,000,000
<p>In addition to the Arrigoni bridge, a new major bridge will be built over the Connecticut River in the Middletown area to alleviate congestion. This option will require a considerable amount of new road construction, including a new interchange at Route 9, reconfiguration of the existing interchanges on Route 9 in Middletown, and construction of connecting roads on the Portland side, and major right-of-way purchases.</p>	
Rail	\$1,575,000,000
Preservation	\$705,000,000
DIESEL FLEET REPLACEMENT	\$325,000, 000
<p>Future life-cycle replacement of Hartford Line Fleet.</p>	
MAINTENANCE FACILITY AND YARD IMPROVEMENTS	\$50,000,000
<p>Upgrade and maintain state of good repair of existing rail maintenance facility in New Haven to service Hartford Line and Shore Line East (SLE), including facility improvements to accommodate longer locomotives.</p>	
REHABILITATION OF CONNECTICUT RIVER RAILROAD BRIDGE	\$80,000,000
<p>This bridge is located over the Connecticut River between Windsor Locks and Enfield. Major rehabilitation and replacement of the center span is needed due to age and condition. Improvements will allow for higher load ratings and increased speeds.</p>	
EXISTING STATIONS AND PARKING IMPROVEMENTS	\$250,000,000
<p>Improvements and upgrades to existing stations and parking on Hartford Line to maintain state of good repair.</p>	

Enhancement	\$870,000,000
DIESEL FLEET EXPANSION	\$120,000,000
Expand diesel fleet to accommodate increase in future service on Hartford Line from 17 round trips per day to 25 round trips per day.	
TRACK IMPROVEMENTS	\$500,000,000
Hartford Line improvements from Windsor to Springfield; includes double-tracking. This improvement would allow for increased rail service from 17 round trips per day to 25 round trips per day.	
NEW STATIONS ON HARTFORD LINE	\$250,000,000
Construction of new stations and parking on the Hartford Line. Proposed locations include North Haven, Hamden, Newington, West Hartford, Windsor, Windsor Locks, and Enfield.	
Airports	\$1,200,000,000
Enhancement	\$1,200,000,000
IMPROVEMENTS TO BRADLEY INTERNATIONAL AIRPORT	\$1,200,000,000
Realign airport's roadway system to include a new roundabout entrance; construction of a ground transportation center which includes a consolidated rental car facility, public parking and transit center; construction of new 19-gate terminal to be completed in 2 phases; Master Plan Update; pavement rehabilitations to the main taxiway system serving the airport's runways and terminal, and the purchase of specialized airport vehicles for maintenance and Airport Rescue and Firefighting Operations.	

Note: All costs are in 2013 dollars.



EASTERN CONNECTICUT **\$5,611,000,000****Highway** **\$3,071,000,000****Preservation & Safety** **\$145,000,000****OPERATIONS AND SAFETY IMPROVEMENTS – I-84/ROUTE 2 INTERCHANGE** **\$5,000,000**

Reconfigure existing lane arrangements and improve safety markings, guide rails, and highway geometry.

OPERATIONS AND SAFETY IMPROVEMENTS – ROUTE 2/ROUTE 17 INTERCHANGE **\$100,000,000**

Modify Route 2 and 17 exit ramps for improved operational safety and continuity of through lanes, and additional safety improvements to guide rails, pavement, signing, and lighting.

OPERATIONS AND SAFETY IMPROVEMENTS – ROUTE 2 BETWEEN EXITS 3 AND 5 **\$40,000,000**

Enhance traffic operations and improve safety characteristics on Route 2 between Exits 3 and 5. Install new median barrier, drainage, and guide rails; resurface with concrete-based pavement reconstruction, and construct an eastbound auxiliary lane with exit enhancements.

Enhancement **\$2,926,000,000****CONSTRUCTION OF ROUTE 11 EXPRESSWAY FROM SALEM TO WATERFORD/EAST LYME (EXCLUDING I-95/ROUTE 11 INTERCHANGE)** **\$700,000,000**

Extension of existing section of the Route 11 Expressway from its current terminus in Salem to I-95 to I-95/I-395 interchange.

INFRASTRUCTURE IMPROVEMENTS FOR ECONOMIC DEVELOPMENT - RENTSCHLER FIELD AREA **\$10,000,000**

Improve East Hartford local roads in I-84/Route 2 area to support future economic development at Rentschler Field, and increasing demand by Goodwin College for additional access.

WIDEN I-95 FROM BALDWIN BRIDGE TO GOLD STAR BRIDGE (INCLUDING NEW I-395 / ROUTE 11 INTERCHANGE) **\$1,200,000,000**

Widening initiative for I-95 from Gold Star Bridge to the Rhode Island State Line, includes the addition of an operational lane along this section. The existing corridor serves many of the intra-State and inter-State recreational and tourist areas. The widening will provide additional capacity, enhanced safety, and access throughout the corridor.

WIDEN I-95 FROM BRANFORD TO BALDWIN BRIDGE **\$720,000,000**

Widen I-95 from Branford to Old Saybrook from 2 to 3 operational lanes in each direction. Will provide additional capacity, enhanced safety, and improved access throughout the corridor.

WIDEN I-95 FROM GOLD STAR BRIDGE TO RHODE ISLAND STATE LINE **\$290,000,000**

Widen I-95 from Groton to Rhode Island State Line from 2 to 3 operational lanes in each direction. Will provide additional capacity, enhanced safety, and improved access throughout the corridor.

HARTFORD AREA CAPACITY IMPROVEMENTS **\$6,000,000**

Implement high capacity improvements to mainline operations in this area including geometric improvements that will improve operations in this area.

Bridge **\$1,000,000,000**

Preservation **\$900,000,000**

REPLACE GOLD STAR BRIDGE (NORTHBOUND ONLY) – I-95 OVER THAMES RIVER **\$900,000,000**

Replace 5,931 foot long deck truss bridge carrying 5 travel lanes in New London/Groton. Widened in 1975 but a significant amount of the original 1943 superstructure and substructure was retained and requires replacement.

Enhancement **\$100,000,000**

SAFETY AND CAPACITY IMPROVEMENTS AT MOHEGAN-PEQUOT BRIDGE - ROUTE 2A OVER THAMES RIVER **\$100,000,000**

Improve safety, relieve traffic congestion, and provide better access to development around casinos as part of Route 2/2A/32 corridor improvements in Montville/Preston. Widen Route 2A from 1 to 2 lanes in each direction from Interchange 2 to Route 12.

Bus **\$110,000,000**

Enhancement **\$110,000,000**

BUILD BUS RAPID TRANSIT (BRT) LINE – HARTFORD & EAST **\$100,000,000**

Extend CTfastrak Bus Rapid Transit (BRT) service eastward from Downtown Hartford to Vernon. Build new stations in East Hartford, Manchester, Buckland, and Vernon.

BUILD BUS RAPID TRANSIT (BRT) LINE – NEW LONDON TO NORWICH **\$10,000,000**

Build Bus Rapid Transit (BRT) service using exclusive bus lanes and traffic signal priority between New London and Norwich.

Rail	\$1,430,000,000
Preservation	\$610,000,000
ELECTRIC FLEET MIDLIFE OVERHAUL	\$20,000,000
Critical systems replacement to maintain state of good repair of recently purchased M8 cars for use on Shore Line East (SLE).	
ELECTRIC FLEET REPLACEMENT	\$120,000,000
Future life-cycle replacement of recently purchased M8 cars for use on Shore Line East (SLE).	
REPLACEMENT OF CONNECTICUT RIVER RAILROAD BRIDGE	\$220,000,000
Replacement of the Amtrak moveable bridge in Old Saybrook. This project will allow for increased load ratings, greater reliability, and higher speeds for both Shore Line East (SLE) commuter rail and Amtrak inter-city regional rail service.	
EXISTING STATION AND PARKING IMPROVEMENTS	\$250,000,000
Improvements and upgrades to existing stations and parking to maintain state of good repair.	
Enhancement	\$820,000,000
ELECTRIC FLEET EXPANSION	\$40,000,000
Purchase of additional M8 cars for future expansion of Shore Line East (SLE) service, allowing for more one-seat rides to and from New Haven Line (NHL) and New York.	
SHORE LINE EAST (SLE) IMPROVEMENTS	\$250,000,000
New sidings in Waterford, new interlocking in Clinton, and new lay-over facility in New London. These improvements will allow for greater flexibility and increased capacity of SLE service and Amtrak inter-city regional rail service.	
CATENARY IMPROVEMENTS AND POWER UPGRADES	\$100,000,000
Enhance capacity of Shore Line East (SLE) service to New York by upgrading Amtrak's existing catenary system and power.	
NEW STATION IN NIANTIC	\$30,000,000
Construction of new station and parking on Shore Line East (SLE) in Niantic.	
EXTEND RAIL SERVICE TO RHODE ISLAND	\$200,000,000
Includes estimated capital costs to extend Shore Line East (SLE) rail service from New London to Westerly, Rhode Island.	
FREIGHT RAIL IMPROVEMENTS IN EASTERN CONNECTICUT	\$200,000,000
Includes estimated capital costs to improve the existing NECR and P&W rail freight lines in Eastern Connecticut from New London north to Massachusetts, preserving options for future passenger rail service. Improvements include tracks, bridges, sidings and grade crossings.	

Note: All costs are in 2013 dollars.



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The State of Connecticut's

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FEBRUARY 2015

