Connecticut Department of Transportation

Capital Plan

March 2023

Today's Agenda

- Agency Overview
- Transportation Documents & Priorities
- Capital Plan Overview
- Capital Program Funding
- Capital Projects and Programs

AGENCY OVERVIEW

Connecticut's Transportation System

State Maintained Routes & Roads
4,137 miles

All Public Roads
21,556 miles

The current East Coast Greenway route through Connecticut is ~200 miles

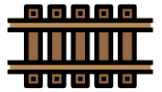
3.61 Million People

Ranked 6th in the U.S.Population Density
(DC, NJ, RI, PR, MA, CT)

289
(existing)
Multi-Use Trails

Major Bridges
60

69 miles



Class 1 Railroad Trackage

117 miles
of Inland Waterways

Freight Rail

628 Route Miles
(257 miles owned by State of CT)

Total Roadway Bridges & Structures

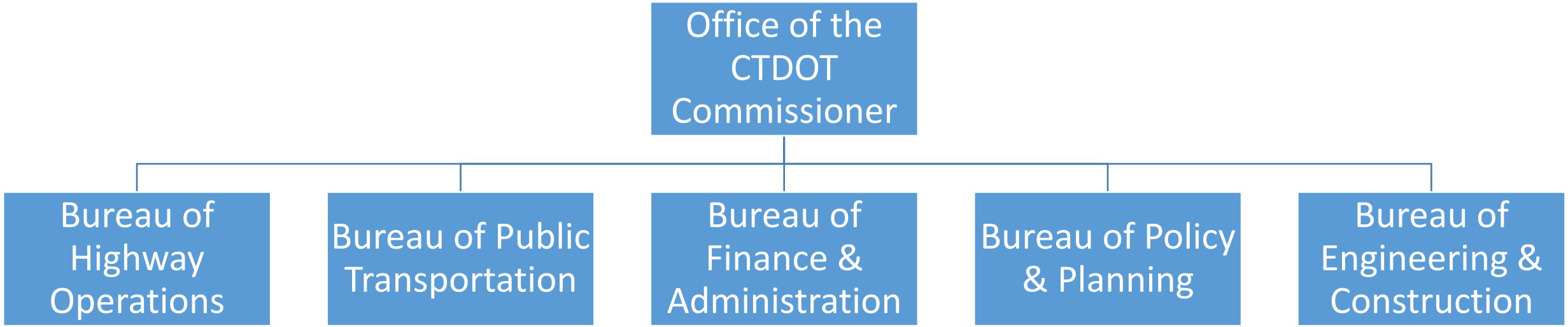
3
Active Deep Water Ports

Public Use Airports
(6 certified for air carrier operations)

Passenger Rail

234 Miles & 375 Turnouts

CTDOT Organization



DOT Organizational Updates

INTERGOVERNMENTAL AFFAIRS UNIT: Designated Department Liaison for the MPOs, COGs, and local officials and assists with the **coordination and dissemination of information** on various planning programs and documents.

POLICY DEVELOPMENT UNIT: Tracks and leads the review, analysis, and comment on state and federal actions and will ensure timely **fulfillment of federal planning requirements** and act as the lead in development, review and periodic updating of Department Policies.

GRANTS AND SOCIO-ECONOMIC UNIT: Prepares **grant applications** and conducts cost-benefit analyses.

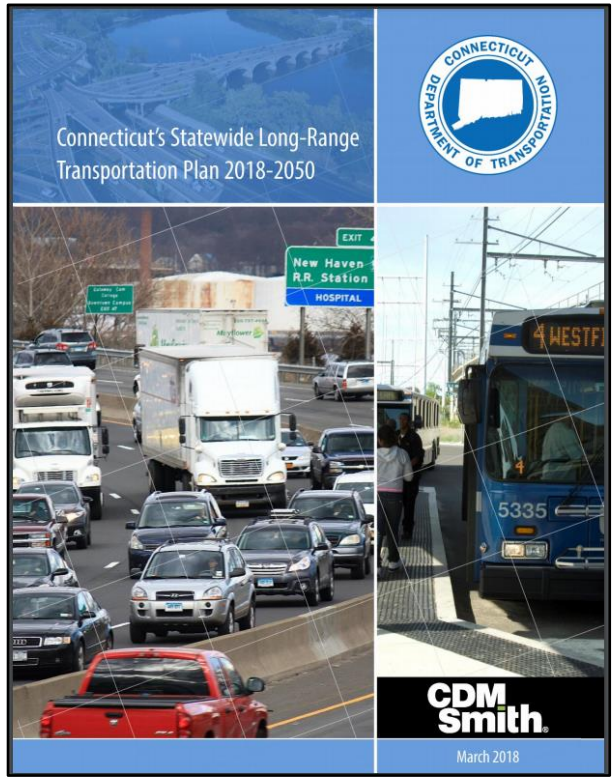
SUSTAINABILITY & RESILIENCY UNIT: Develops actionable plans to **increase the sustainability** of DOT's integrated multimodal transportation system.

CAPITAL PROGRAM MANAGEMENT UNIT: Develops and maintains **uniform processes** for planning and executing projects statewide to track progress, measure accomplishments, and manage resources.

TRANSPORTATION DOCUMENTS & PRIORITIES

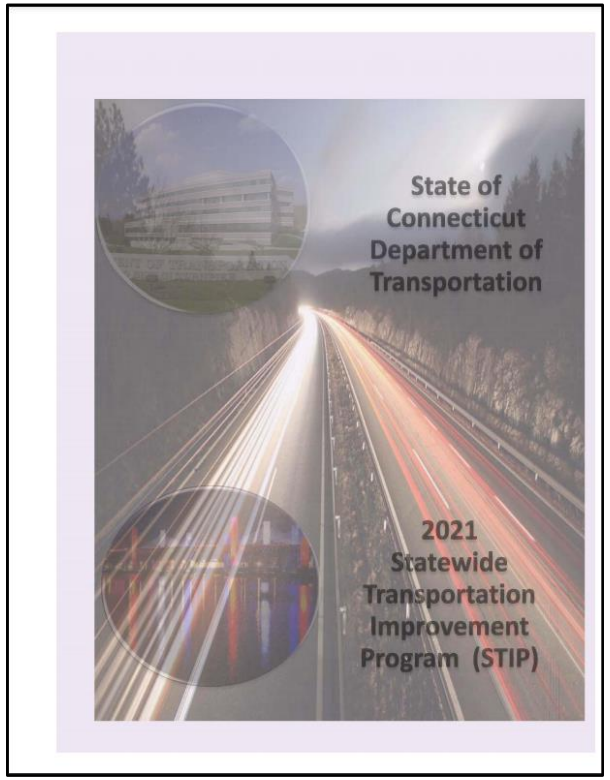
Transportation Documents – How They Fit Together

The Vision --> Where we want to Go



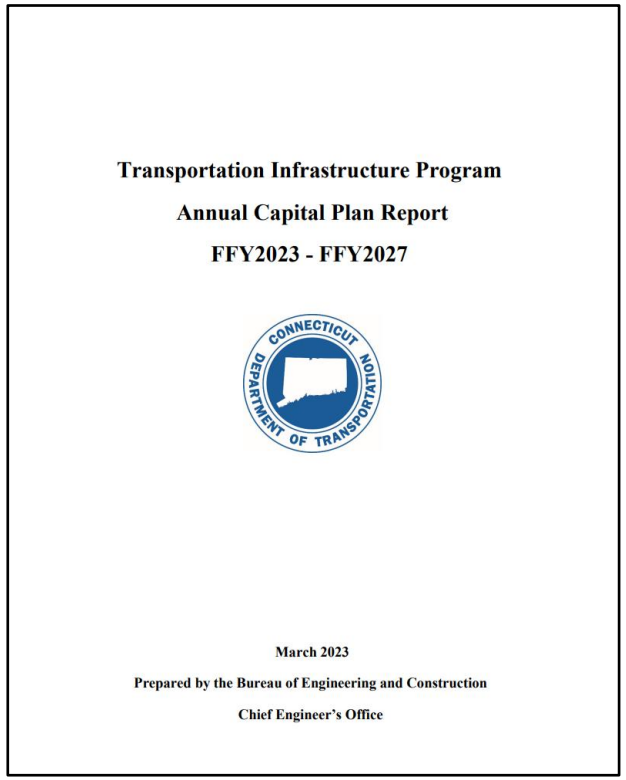
The Long-Range Transportation Plan is a policy document that serves as a framework for preparing future, project-specific transportation plans.

Project-Specific approval of the Federal portion



The Statewide Transportation Improvement Program (STIP) is a four-year financial document that lists all projects expected to be funded in those four years with Federal participation.

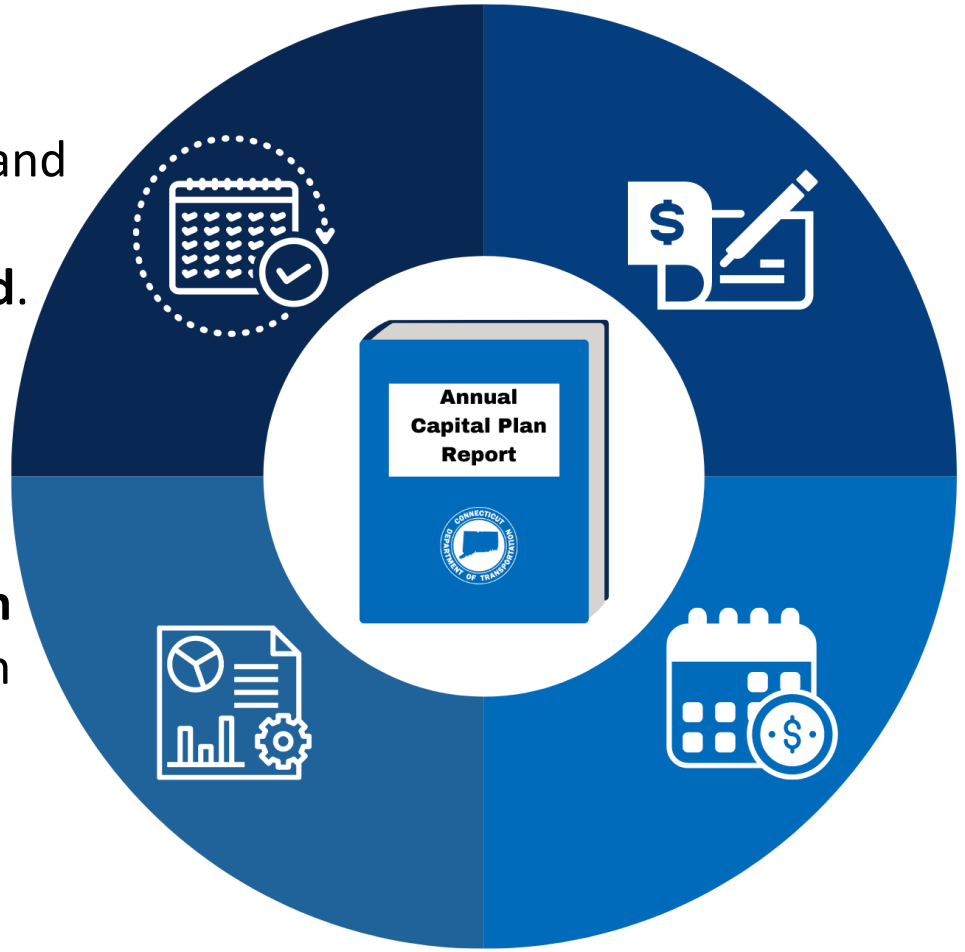
Recap and Look-Ahead: the Execution of the Plan



The Capital Plan Update Report is to inform the Department's stakeholders about the past year's program and outline the plan for the upcoming year.

What is CTDOT's Capital Plan?

Annual report prepared by CTDOT to inform stakeholders and outline the capital investments **for the upcoming 5-year period**.



Details a comprehensive **financial summary** of **Capital Program expenditures.**

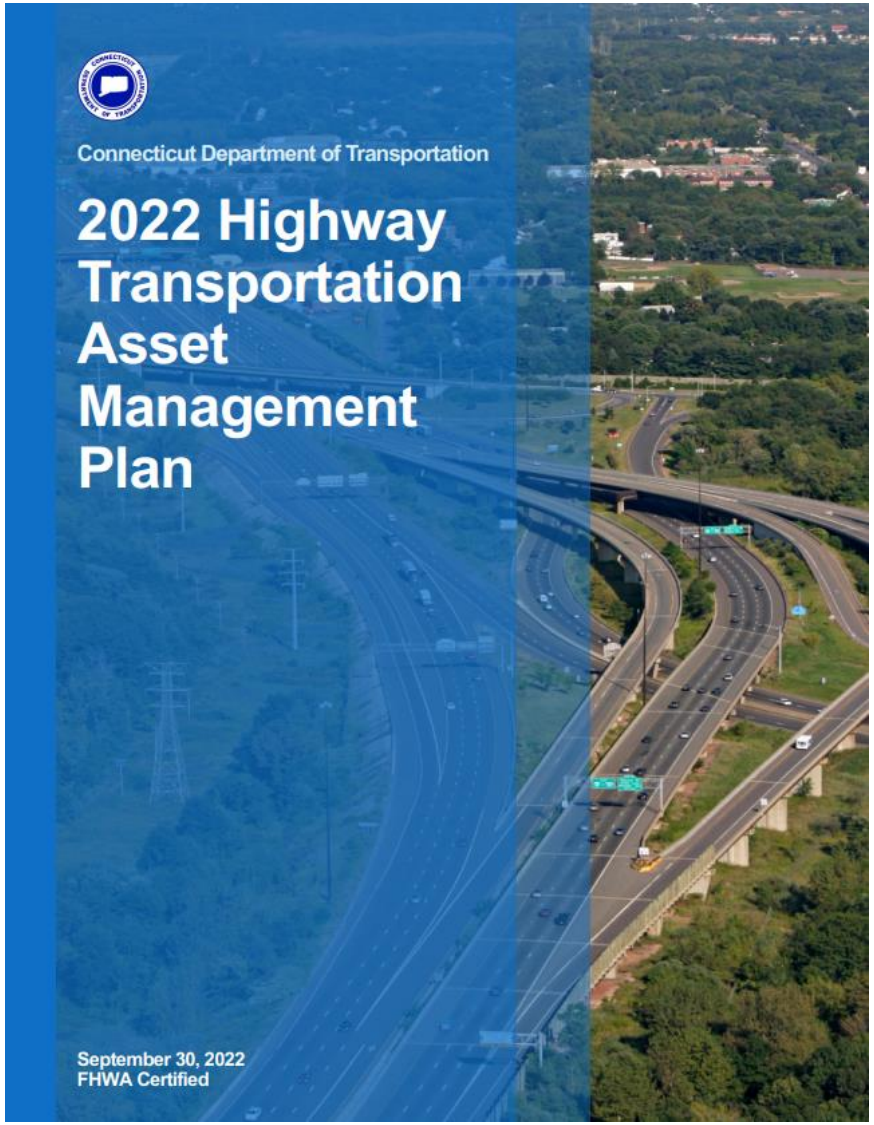
Describes the Department's **plan to address** critical transportation **needs and current challenges.**

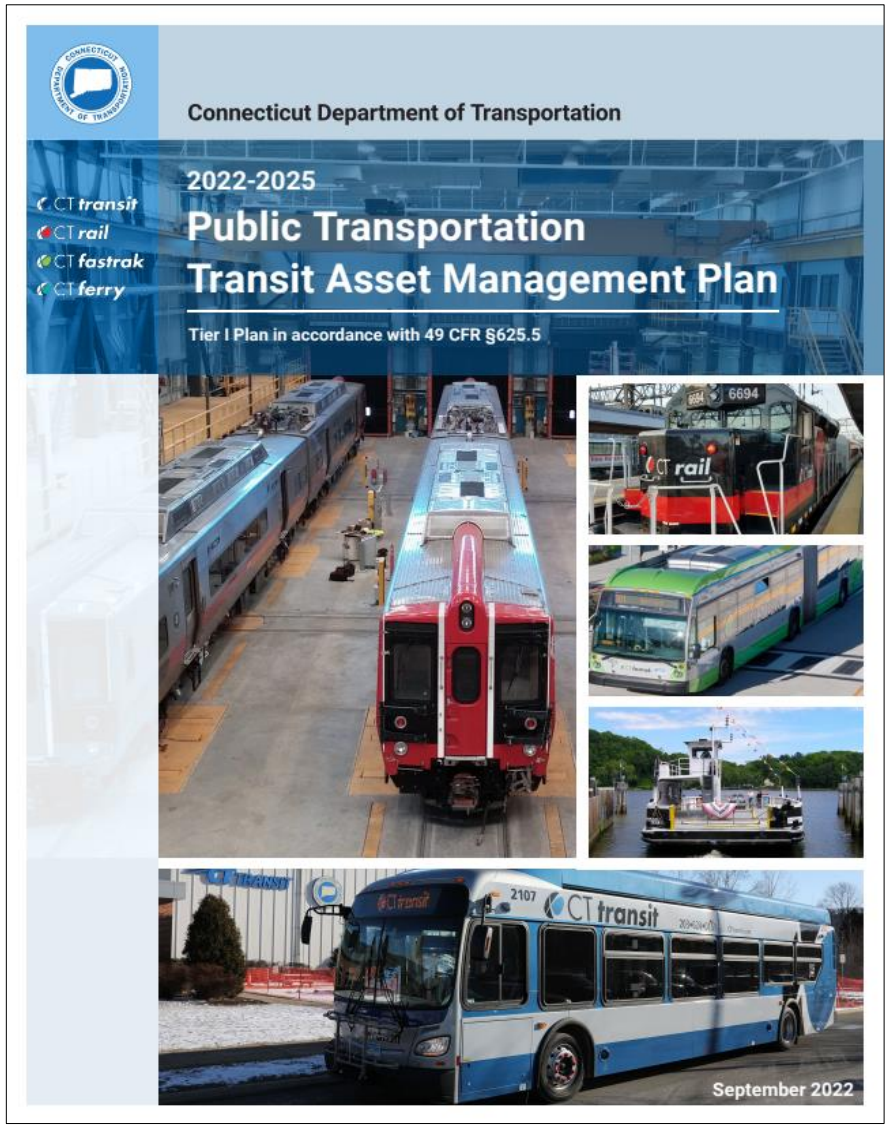
Data presented in the report is based on the **Federal Fiscal Year**: October 1 - September 30.

Capital Program Priorities

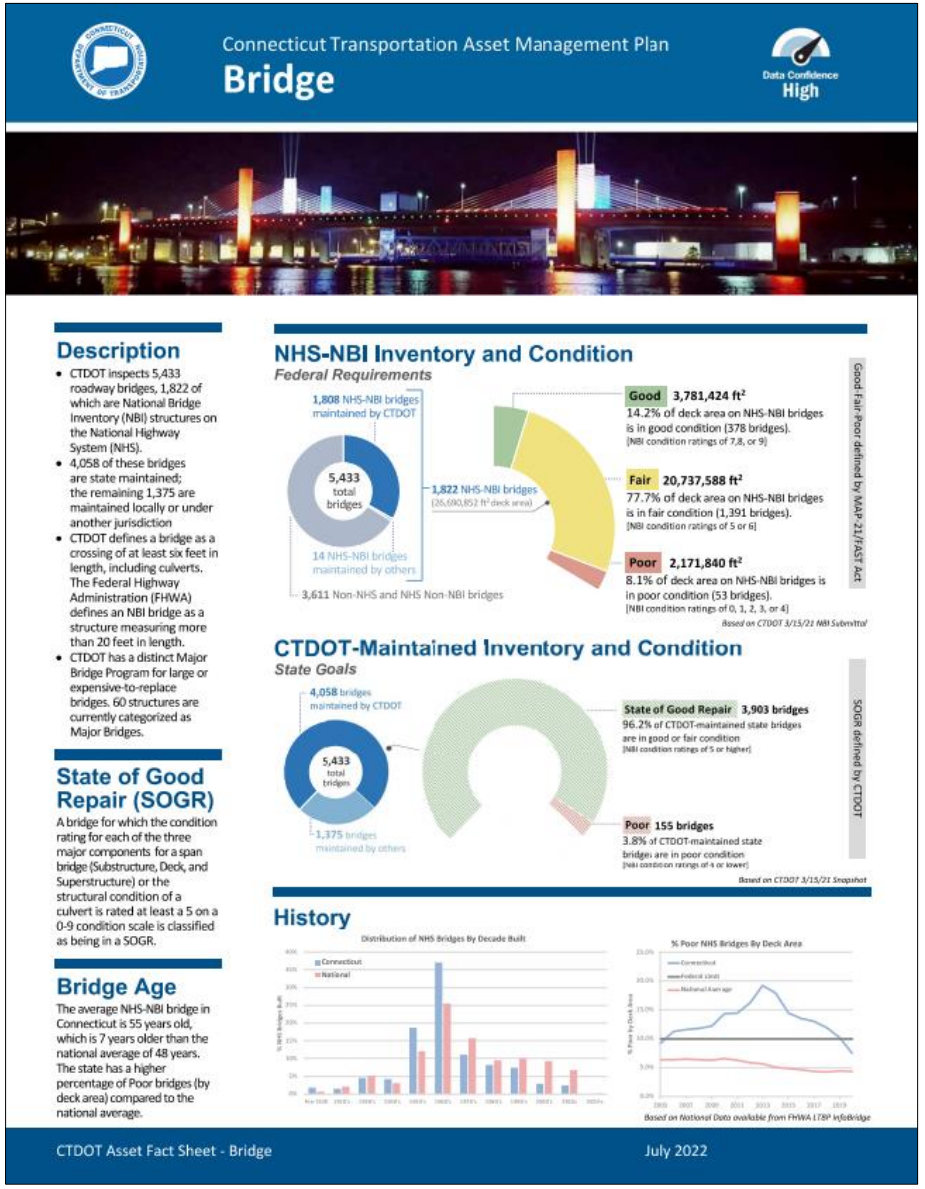
- Safety
- State of Good Repair (SOGR)
- Address congestion
- Address rail and bus travel times
- Active transportation considerations
- Major programs and initiatives

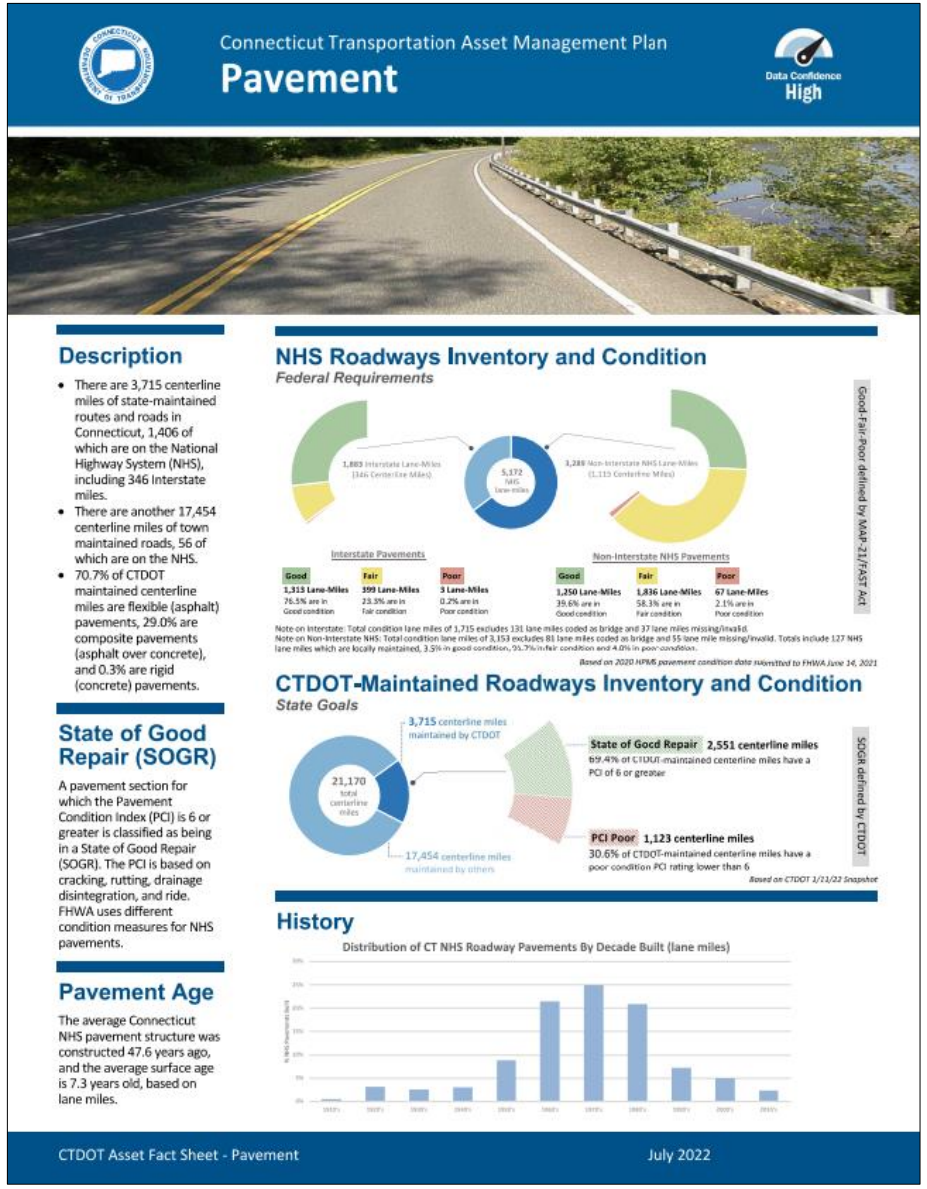
Transportation Asset Management





Asset Fact Sheets



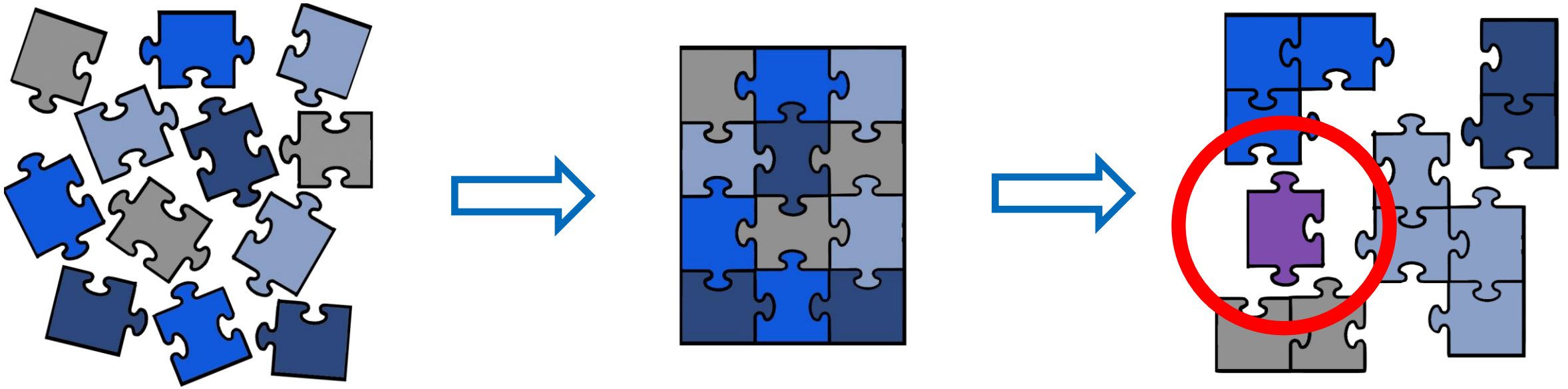


Planning Studies for Targeted Improvements

Identify Needs and Goals

Define the Program

Implement the Strategy



A new approach to planning studies results in a transparent, comprehensive, and actionable plan that identifies priority, cost, timeline, and benefit to the State of Connecticut.

CTDOT Resources available on CT.gov/DOT

Capital Plan Report & Project List	Transportation Infrastructure Capital Plans
Advertising Schedule of Projects	Capital Services - Programming and Scheduling (ct.gov)
Asset Management Plans	Asset Management Group (ct.gov)
Active Projects Map & Open Data Portal	CTDOT Open Data (arcgis.com)

Connecticut DOT Active Projects Dashboard

A Service of CTDOT Open Data

All Active Projects | Capital Projects | Maintenance Projects | LOTCIP Projects

CTDOT All Active Projects

Capital Project Search
Enter Project Number...

Maintenance Project Search
Enter Project Number...

LOTCIP Project Search
Enter Project Number...

Welcome to the **CTDOT Active Projects Dashboard**!

This Dashboard displays updated CTDOT Project data. To find a project, navigate on the interactive map, search using the **Project Search** widgets at the top right, or select a project from the **Project List**. Selecting a project from the Map or the List will display that project's details in the **Attribute Pop-up.**

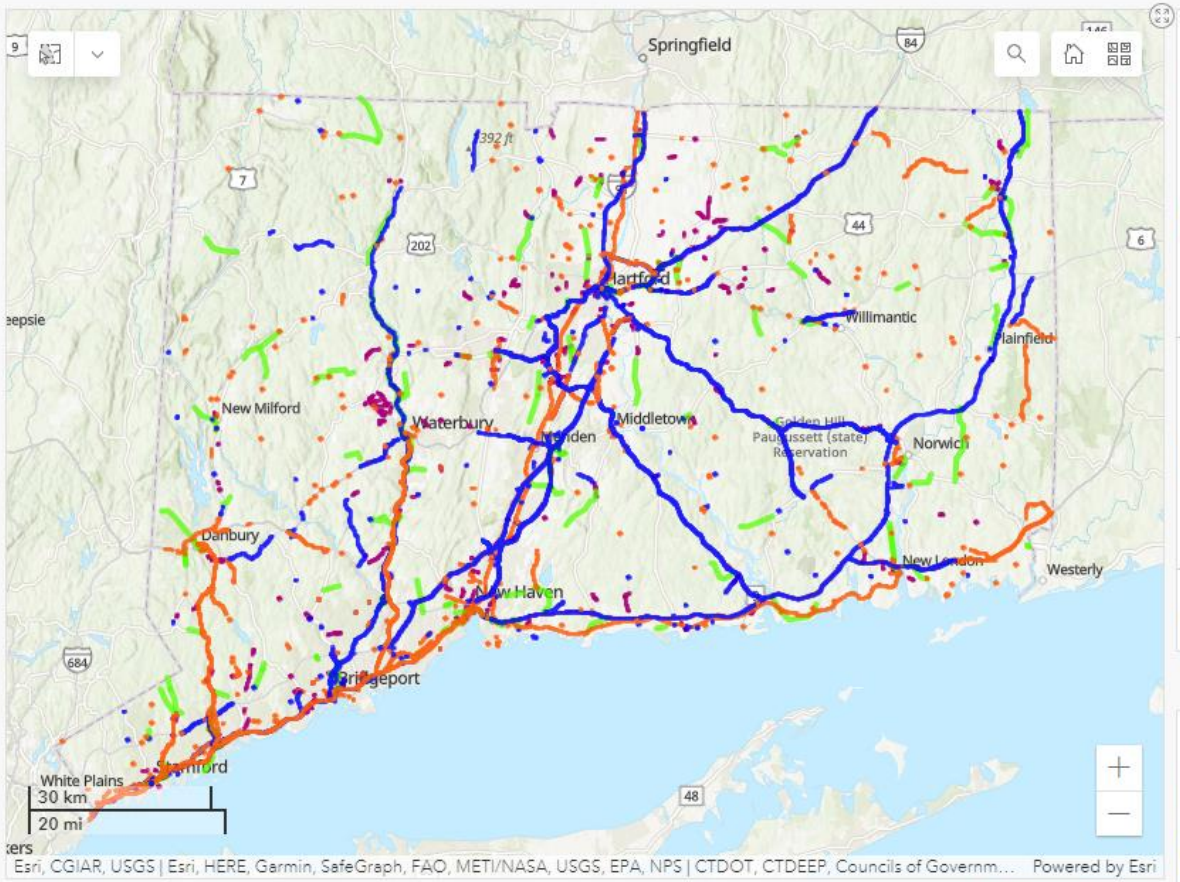
Project Lists are for Capital, Maintenance, and LOTCIP Projects. To view these categories individually, navigate to the corresponding tab at the top of the page.

The **Map Zoom by Town** selector zooms into a specific town.

Map Zoom by Town:

Search...

- Enter Town Name...
- Andover
- Ansonia
- Ashford
- Avon
- Barkhamsted



Project List

Project Number	Project Title
0001-0106	Replacement of Bridge #04583 which carries Bunker Hill Road over Hop River in Andover. No added capacity. This project will be administered under the FLBP Design Managed by State Program.
0001-0108	Replacement of Bridge #04582 which carries Long Hill Road over Hop River in Andover. No added capacity. This project will be administered under the FLBP Design Managed by State Program.
0002-0130	Upgrade drainage along CT Route 334, reconstruct drainage outlet, and

Capital Proj.

Map Legend

Capital Projects
- *Pre-Construction Phase*
- *Construction Phase*

Maintenance Projects

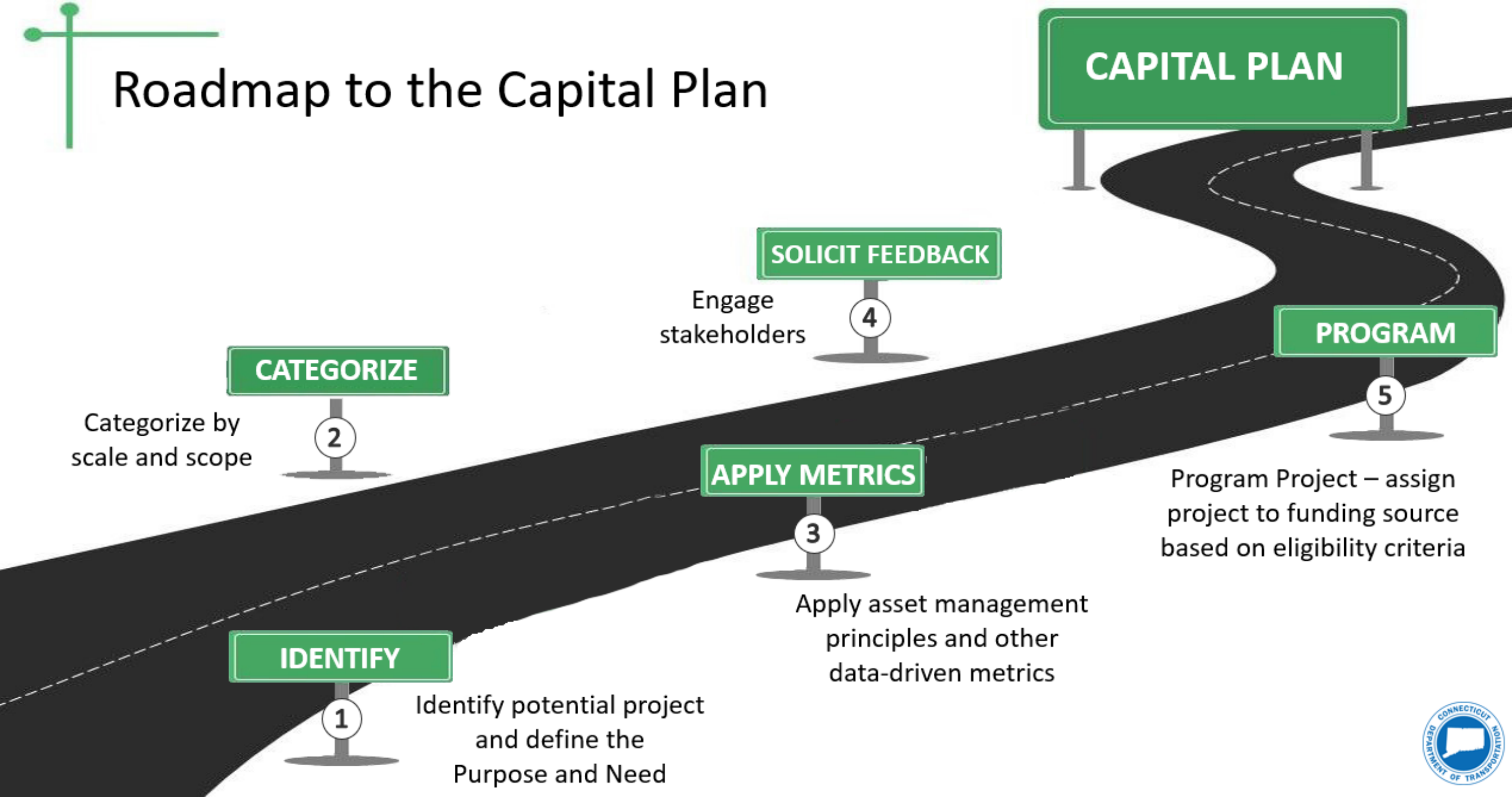
LOTCIP Projects

Pre-Construction	Construction	Total Active Capital	Total Active Maintenance	Total Active LOTCIP
445	198	643	121	173

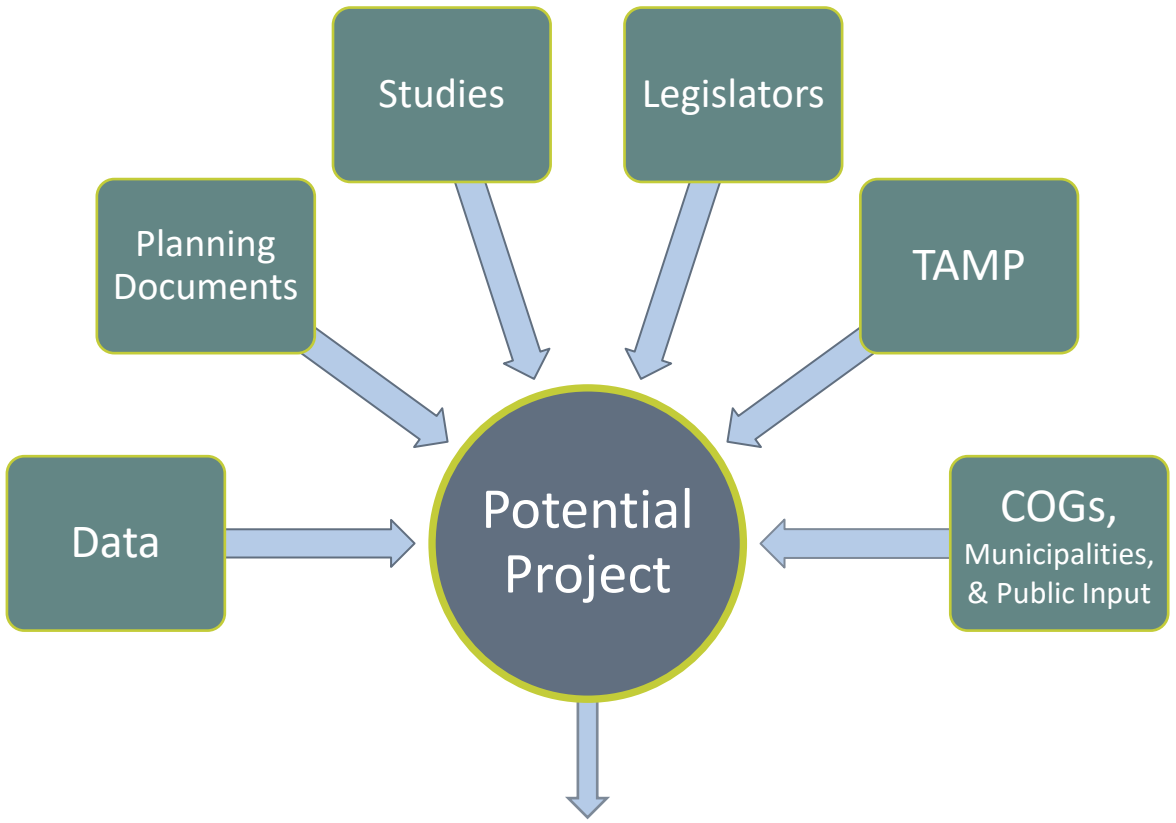
esri A Story Map

CAPITAL PLAN OVERVIEW

Roadmap to the Capital Plan



Road Map to the Capital Plan



Define

Purpose and Need

Step 1: Identify

Potential projects and initiatives are identified from many sources:

- Statewide or Regional Planning Documents
- Corridor/Feasibility Studies
- Federal Regulations and Mandates
- Councils of Government (COGs), Municipalities, & Public Input
- Legislator Requests
- Data-Driven Analysis
  - **High Crash Rates**
  - **Congestion**
  - **State of Good Repair**
  - **Sub-Standard Geometrics**

Road Map to the Capital Plan

What is a *PURPOSE AND NEED* Statement?

"**Purpose**" can be defined as the reason to conduct the project

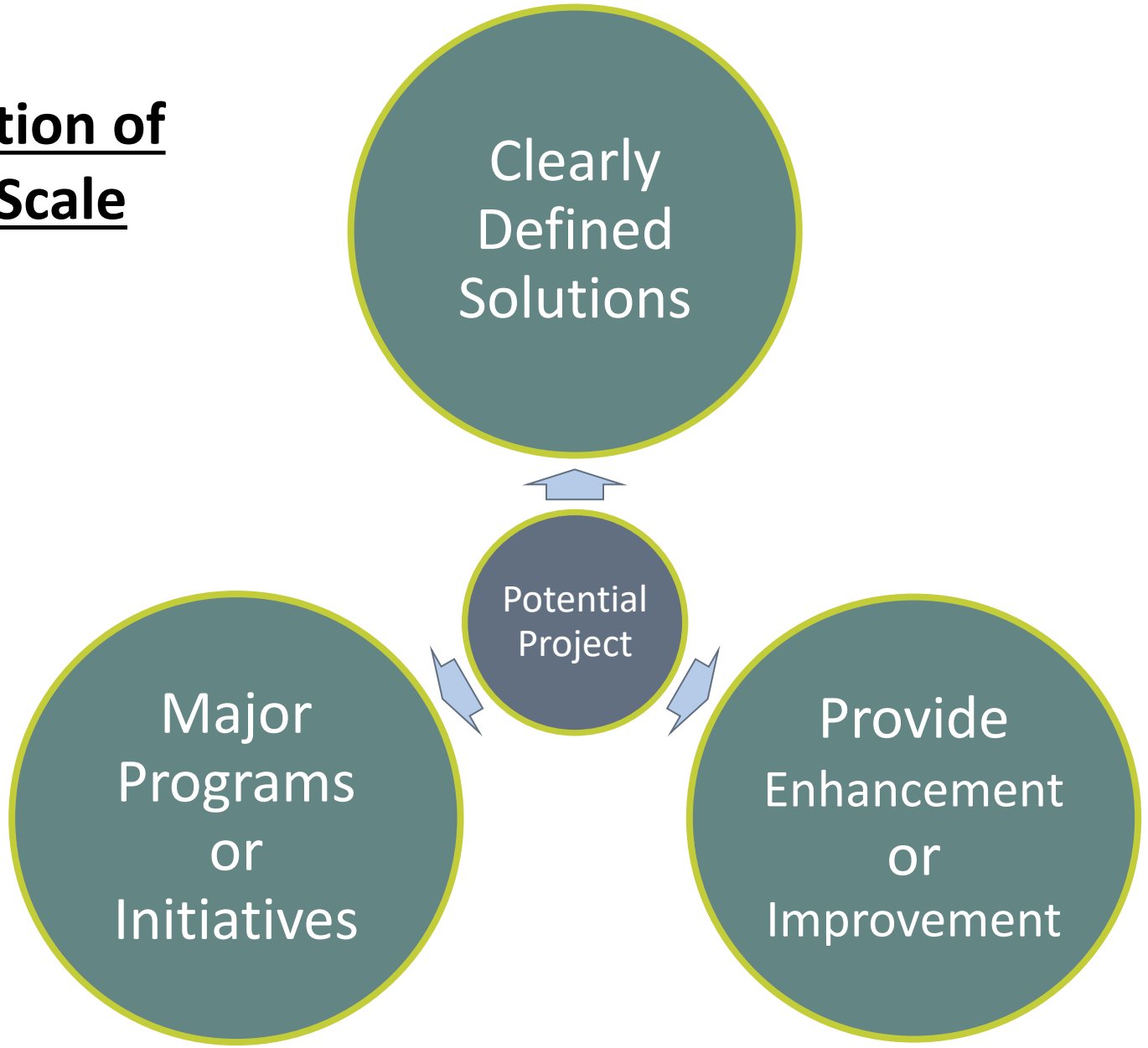
e.g.: The *purpose* of the project is to reduce congestion and improve mobility at the intersection of Town Road and Main Street

"**Need**" can be defined as the identification of deficiencies of the project supported by facts or data

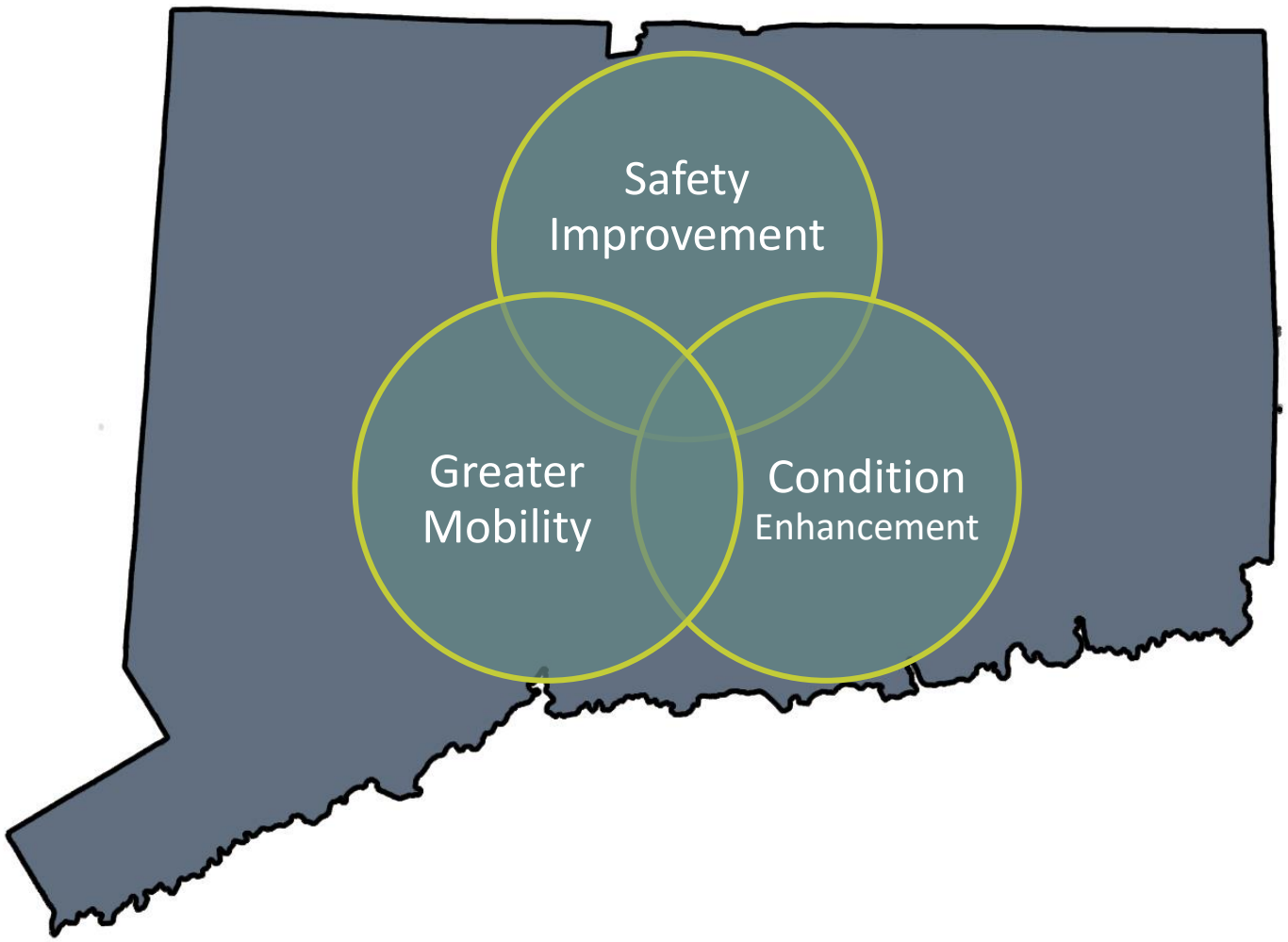
e.g. This project is *needed* because the capacity of the intersection of Town Road and Main Street is inadequate to meet current and future traffic volumes, resulting in congestion, reduced mobility and Level of Service D on this stretch of highway.

Road Map to the Capital Plan

Step 2: Categorization of Project by Scale and Scope



Road Map to the Capital Plan



Step 3: Apply Metrics

The overarching goals of the Department define the metrics by which each project is measured, but quantification of those metrics differs by project type and mode.

Primary Metrics:

- Increase Mobility for All Users
- Improve Safety Across All Modes
- Maintain or Enhance Condition of Assets

Other Factors and Considerations:

- Freight Movement Around the State
- Economic Development
- Community Input and Involvement

Road Map to the Capital Plan

Step 4: Solicit Feedback

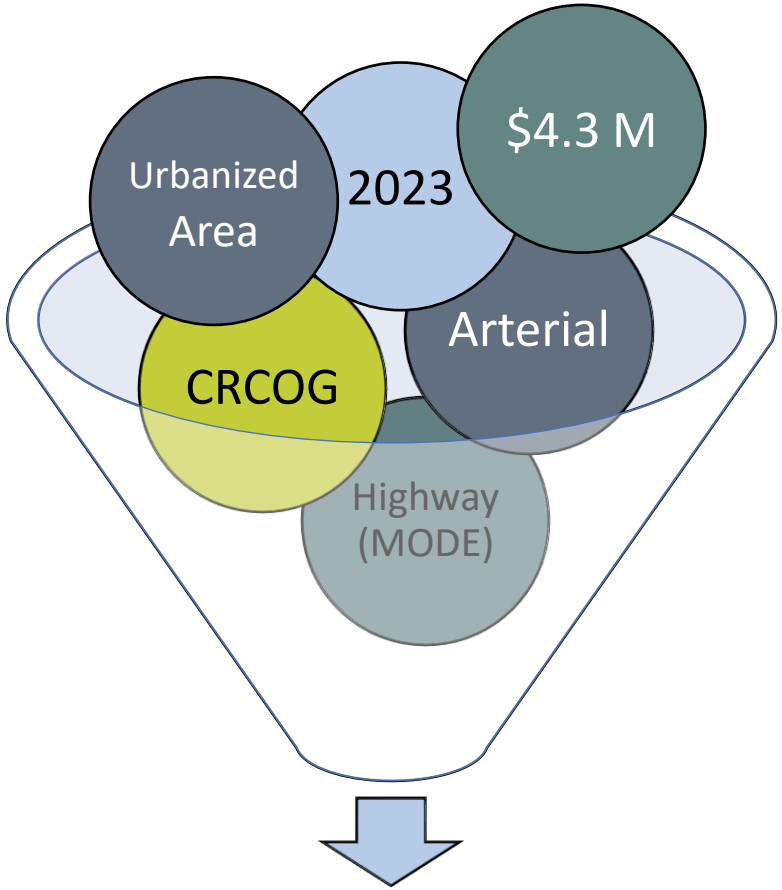
Department Regularly Engages with COGs

- Monthly Coordination Meetings
- STIP/TIP Requests
- Coordination and Planning Meetings

Development of Capital Plan includes Coordination

1. Information is prepared for inclusion in the Draft Capital Plan
2. Public meeting is held to engage stakeholders and solicit feedback
3. Draft Capital Plan Project List is distributed to COGs for comment
4. Department addresses/replies to comments
5. Final version of Capital Plan is prepared
6. Capital Plan is Published

Road Map to the Capital Plan



Assign Funding Source(s)

Step 5: Program

What does it mean to "Program" a project?

To program is to assign a specific funding source to the estimated costs of a project, drawing down from the anticipated available funding in the year of expenditure.

What are the challenges to Programming?

Each funding source or "bucket" has different eligibility requirements

- Mode
- Scope of Work
- Geographic area within the State (MPO)
- Urban vs Rural Characterization
- Cost of Project vs Available Funding in Program
- Functional Classification of the Roadway

CAPITAL PROGRAM FUNDING

Overview of USDOT Federal Formula Funding

FHWA	Yearly Total	Program Size Relative to 2021 Program	Increase over 2021 Program
2021	$ 549,841,415		
2022	$ 788,243,862	143%	$ 238,402,447
2023	$ 801,552,715	146%	$ 251,711,300
2024	$ 815,127,746	148%	$ 265,286,331
2025	$ 828,974,277	151%	$ 279,132,862
2026	$ 843,097,737	153%	$ 293,256,322

FTA	Yearly Total	Program Size Relative to 2021 Program	Increase over 2021 Program
2021	$ 200,684,201		
2022	$ 249,586,741	124%	$ 48,902,540
2023	$ 254,675,083	127%	$ 53,990,882
2024	$ 261,505,210	130%	$ 60,821,009
2025	$ 267,029,567	133%	$ 66,345,366
2026	$ 273,990,153	137%	$ 73,305,952

FHWA + FTA Formula Funding	Grand Total by Year	Program Size Relative to 2021 Program	Increase over 2021 Program
2021	$ 750,525,616		
2022	$ 1,037,830,603	138%	$ 287,304,987
2023	$ 1,056,227,798	141%	$ 305,702,182
2024	$ 1,076,632,956	143%	$ 326,107,340
2025	$ 1,096,003,844	146%	$ 345,478,228
2026	$ 1,117,087,890	149%	$ 366,562,274

Note: These values do not include matching State funds.

Timeline of Federal Legislation and Guidance

Infrastructure Investment and Jobs Act (IIJA) / Bipartisan Infrastructure Law (BIL)
November 15, 2021
Authorizes the transportation program for five years (FFY22-26), subject to annual appropriations

FY22 Appropriations
March 13, 2022
Provides funding to federal agencies to implement IIJA policy and programs

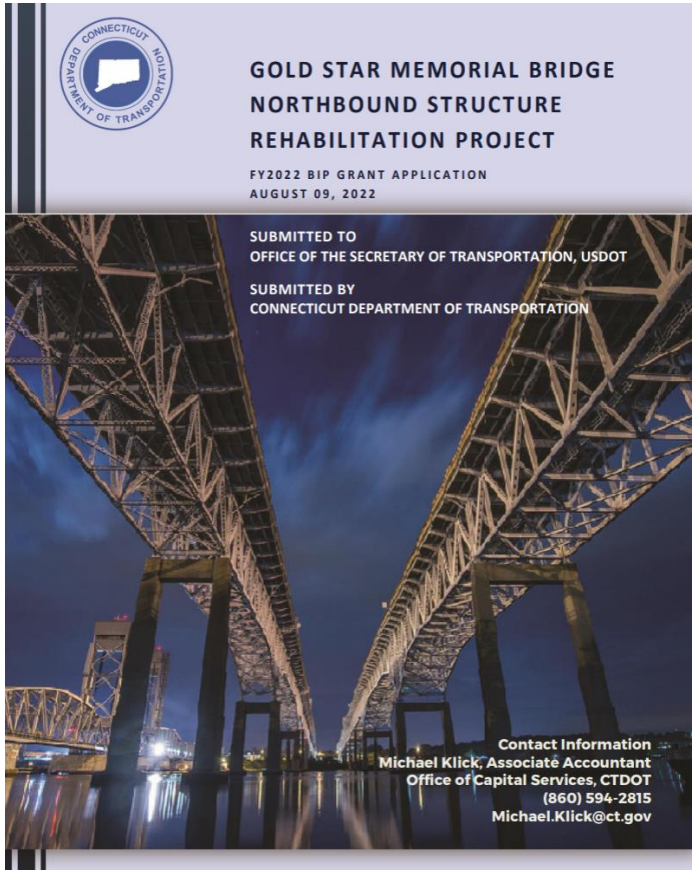
Notice of Funding Opportunities (NOFOs)
Released incrementally
USDOT releases guidance and requirements for applying to available discretionary grant programs

FY23 Appropriations
Passed December 2022
Provides funding to federal agencies to implement IIJA policy and programs

Discretionary Federal Grants Status

SUCCESSFUL APPLICATIONS - $231.2 million in FY22

Amount Awarded	Project	Grant Program
$20 million	New Haven Line Power Program	FRA – 2022 State of Good Repair Grant Program
$20.4 million	Modernization of the SEAT Garage in Norwich, CT	FTA – Buses & Bus Facilities Grant Program
$1 million	Planning & Environmental Linkages Study for Bridge No. 32 on I-95 in Stamford	FHWA – Bridge Investment Program – Planning
$29.6 million	Ansonia, Beacon Falls, & Seymour Train Stations	FTA - All Stations Accessibility Program (ASAP)
$158.2 million	Gold Star Memorial Bridge Northbound Structure Rehabilitation Project	FHWA – Bridge Investment Program – Large Bridge
$2 million	Connecticut Integrated Transit Mobility Project (CT-ITMP)	OST – Strengthening Mobility and Revolutionizing Transportation (SMART) – Phase 1 Planning Grant Program



Discretionary Federal Grants - FRA

Federal-State Partnership for Intercity Passenger Rail Program – Northeast Corridor (FSP-NEC)

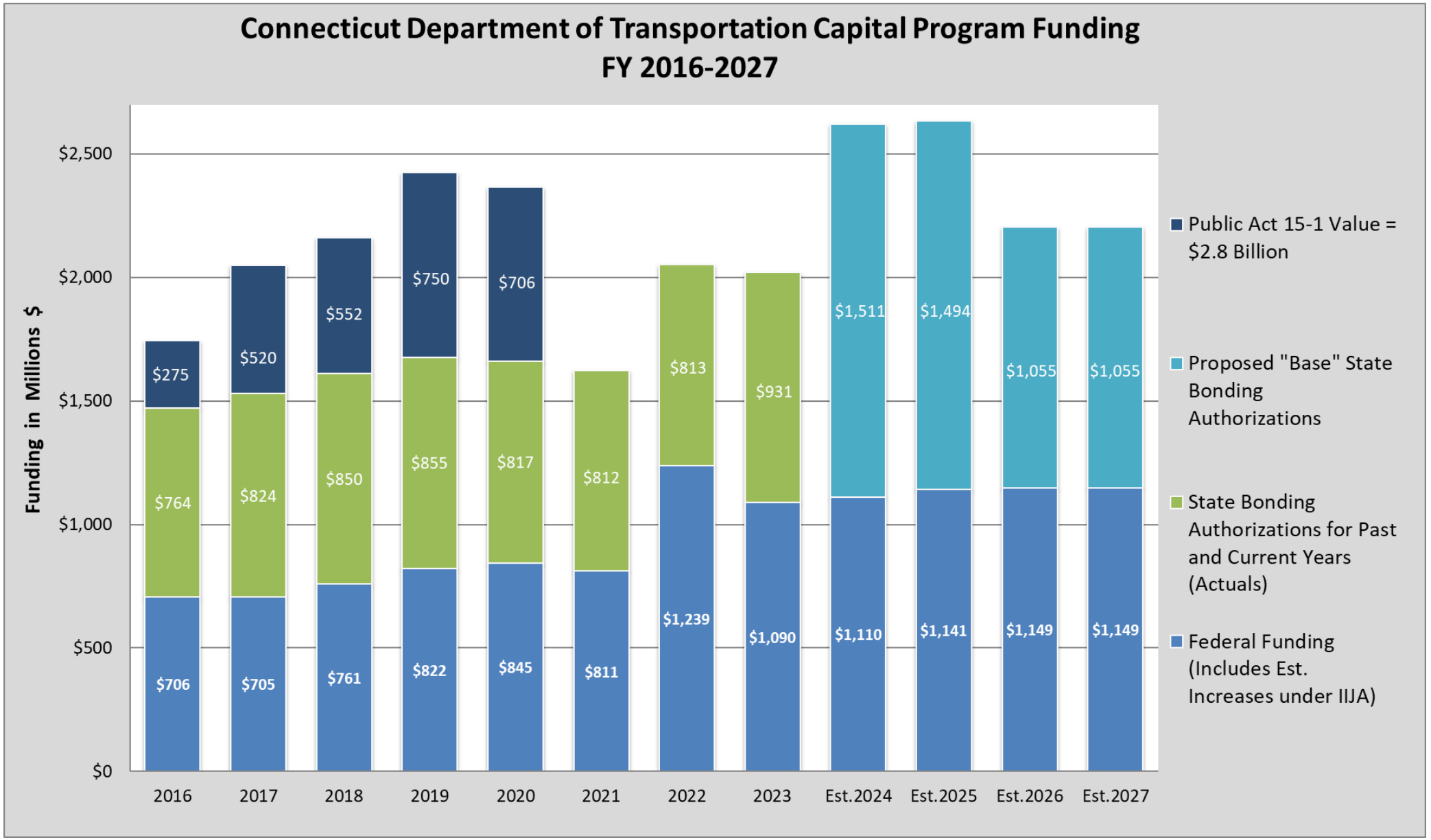
Program provides Federal funding opportunity to improve intercity passenger rail infrastructure by funding projects that reduce the state of good repair backlog, improve performance, and expand intercity passenger rail service.

Projects located on the NEC and identified in FRA's NEC Project Inventory will be evaluated and selected for an award based on its discretionary grant application.

The Department submitted 13 grant applications:

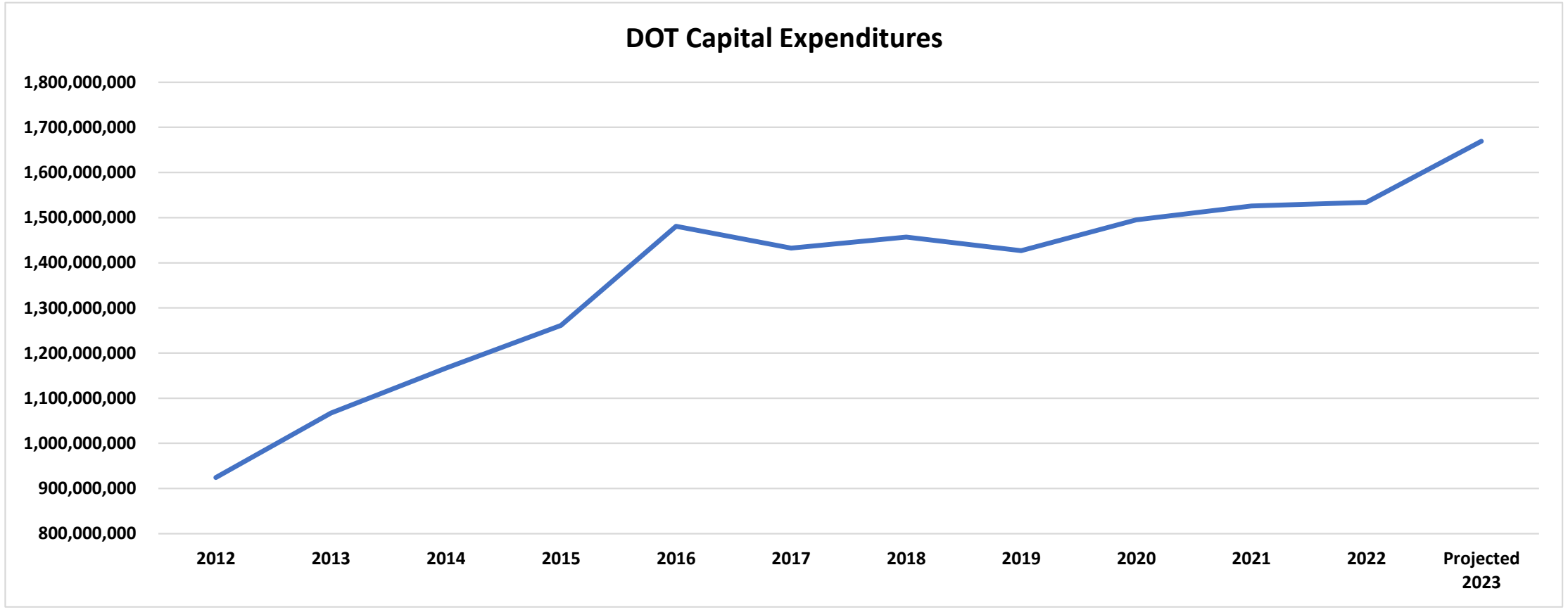
Walk Bridge Replacement · Saugatuck River Bridge Replacement · Devon Bridge Replacement · Devon Bridge Interim Repairs · Cos Cob Bridge Replacement · TIME-1 · TIME-5 · NHL Power Improvement Program · New Haven Line Network Infrastructure Upgrade · NHL Station Replacement Program (New Haven) · Stamford Station Improvements · Hartford Line Rail Program: Double Track (Phase 3B) · Hartford Station Relocation – GHMS

Available Funding



DOT Capital Expenditures

11 Year Total Growth of: 62.87%
Average Annual Growth rate of: 5.72%



Excluding rolling-stock equipment purchases.

CAPITAL PROJECTS & PROGRAMS

Traffic Safety

SAFETY PLANNING

- Vision Zero
- Highway Safety Improvement Program – Implementation Plan
- Strategic Highway Safety Plan
- Vulnerable Road Users Assessment

SAFETY PARTNERSHIPS

- Safety Circuit Rider Program
- Traffic Signal Circuit Rider Program
- Connecticut Transportation Safety Center

CONNECTICUT
ROAD TO SAVING LIVES

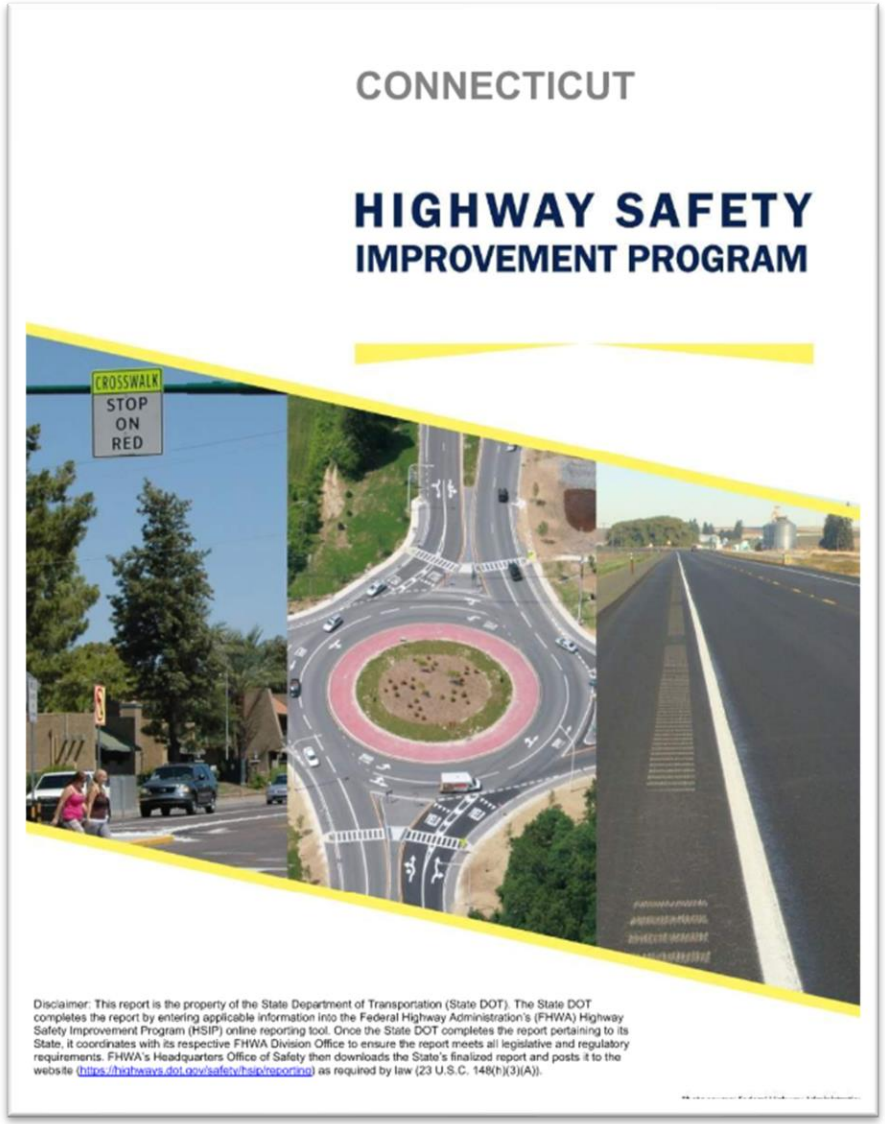
Traffic Safety Funding

FEDERAL SAFETY PROJECT FUNDING

- Highway Safety Improvement Program: **$38 million**
  - Capital improvements
  - Educational programming
  - Enforcement support
- Section 154: **$12 million**
  - Capital Improvements
  - Planning Studies
  - Enforcement support
- Railway-Highway Crossings: **$1.4 million**
  - Rail Grade Crossing Improvements

WRONG WAY DRIVING

- State bond funding to install Wrong Way Detection Systems: **$20 million**



Active Transportation

COMPLETE STREETS

- Transportation Alternatives Set-Aside Program in FY22: **$14 million**
- SFY22 projects that included elements for pedestrians or cyclists: **61 projects totaling $41.1 million**
- Annual budget used to create and enhance walkways, bikeways, and pedestrian improvements: **3.75%**
- New State program used for short-term complete streets projects: **$5 million per year**

COMMUNITY CONNECTIVITY GRANT PROGRAM

- Construction funding for local initiatives: **$38 million in past 4 years**
- Anticipated award funding for FY23 and FY24: **$12 million per year**

ADA COMPLIANCE

- SFY22 funding to install ADA curb ramps and sidewalks in conjunction with the Department's Maintenance Resurfacing Program: **$3.28 million**

New Formula Fund for Bridges

BRIDGE FORMULA PROGRAM (BFP)

- CT received $121.2 million in FY22 and FY23 and expects to receive **$605.8 million over 5 years**
- BFP Program provides funding for highway bridge replacement, rehabilitation, preservation, protection, and construction projects on public roads, with a focus on asset management
- BFP funding is distributed by a statutory formula based on the relative costs of replacing all highway bridges classified in poor and fair condition in a State

New Climate and Resilience Formula Programs

NATIONAL ELECTRIC VEHICLE INFRASTRUCTURE PROGRAM (NEVI)

$53 million over five years

- Allows the state to build out CT's publicly accessible charging stations for the national EV charging network on highway corridors and in communities
- USDOT approved CT's NEVI Plan in September 2022

CARBON REDUCTION PROGRAM

$79 million over five years, suballocated to regions

- Requires CTDOT to develop a carbon reduction strategy in consultation with COGs to identify projects and strategies tailored to reduce carbon dioxide emissions from on-road sources.

PROMOTING RESILIENT OPERATIONS FOR TRANSFORMATIVE, EFFICIENT, AND COST-SAVING TRANSPORTATION (PROTECT) PROGRAM

$90 million over five years

- Will help make transportation assets in CT more resilient to weather and natural disasters and allow our state to rapidly recover/continue operations

Projects and Programs in the Capital Plan

PUBLIC TRANSPORTATION

Service Improvements

- CT*transit Move New Haven* Infrastructure Improvements Phase 1
- New Haven Line Speed Improvements, TIME-1
- Hartford Line Double-Tracking

Equipment Purchases

- New coaches for rail fleet
- Bus Replacements (electric)
- Final M8 Deliveries

Station and Facility Improvements

- New Haven Line – Darien Station Improvements
- EV Charging Stations Program
- Bus Stop and Shelter Modernization, Statewide
- New Haven Line Signal Improvements
- New Haven Union Station Campus Improvements
- Waterbury Line Station Improvements

Projects and Programs in the Capital Plan

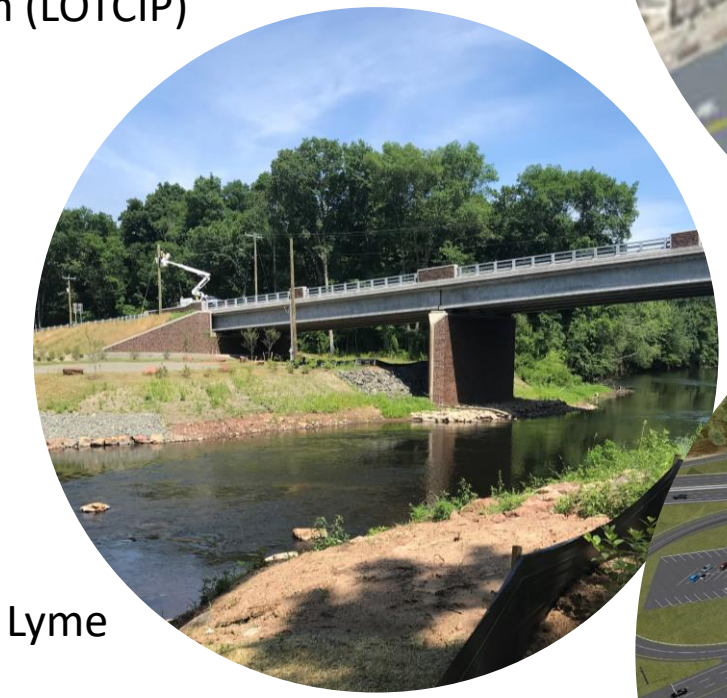
HIGHWAY/BRIDGE

Annual Programs

- Capital Resurfacing Program, Statewide
- General Asset SOGR Programmatic Improvements
- Local Transportation Capital Improvement Program (LOTCIP)
- Community Connectivity Grant Program
- ADA Transition Plan
- Congestion Mitigation and Air Quality (CMAQ) Improvement Program
- Highway Safety Improvement Program (HSIP)

Projects

- I-91/I-691/Route 15 Interchange, Meriden
- I-95 Goldstar Bridge, New London
- I-84 Interchange 17 Improvements, Middlebury
- I-95 at Route 161 Interchange Improvements, East Lyme
- Route 9 Traffic Signal Removal, Middletown
- Roundabouts at CT 178 & Wintonbury Ave, Bloomfield
- Hop River State Park Trail, Columbia & Coventry



New Haven Rail Improvements

STATION IMPROVEMENTS: *$198 million*

- **Platform rehabilitation and improvements:** Extend platforms, add a new canopy system, and bring platforms into a state of good repair and comply with ADA and building code standards
- **Pedestrian enhancements:** Replace and or rehabilitate the pedestrian bridge, elevator and stair tower, and center island platform at State Street Station.
- **West Lot Intermodal Center:** Construct a new intermodal transportation center to accommodate vehicle parking, motor vehicle circulation and safety, including improving accessibility for pedestrians, cyclists, and public transit riders via transportation network companies (TNC), public bus routes, and shuttles
- **Interior Station Improvements:** Modernized customer waiting areas, enhanced ticketing & customer information, increased public restroom capacity on multiple levels, unified wayfinding system, and additional retail and concession opportunities

RAIL YARD IMPROVEMENTS: $*125 million*

- **Car Shop**: complete rehabilitation of all interior and exterior features of the shop except for the steel frame, building foundations, and electrical room.
- **Diesel Shop**: rehabilitation of the shop as needed to improve the efficiency of the operations and the working conditions for the personnel.
- **Wheel Mill Facility**: replace the existing facility (constructed in the 1950's) to meet current building codes and safety requirements and meet the operational needs for maintaining the rail fleet.

Stamford Transportation Center Improvements

STATION RENOVATION/MASTER PLAN: *$297 million*

All facets of the passenger experience at the STC will be improved, including:

- Reimagined Station Place, with pick-up/drop-off areas organized by mode
- New pedestrian plaza, improved paths of travel and connectivity
- Modernized customer waiting areas with enhanced ticketing & customer information
- Increased public restroom capacity on multiple levels
- Unified wayfinding system
- Additional retail and concession opportunities
- Motor vehicle circulation and safety, including entering the STC via transportation network companies (TNC) and shuttles
- Accessibility improvements for pedestrians, cyclists, and public transit riders

MAINTENANCE OF EQUIPMENT AND CAR WASH FACILITIES: *$163 million*

- Renovations to allow for more efficient use of the facility, minimize extensive maintenance requirements, and to meet current ADA and building code requirements

Greater Hartford Mobility Study

STUDY GOALS

- Improve the movement of people and goods
- Increase transportation options, accessibility, reliability, and safety
- Accommodate future needs and emerging technologies
- Prioritize social equity
- Minimize environmental impacts

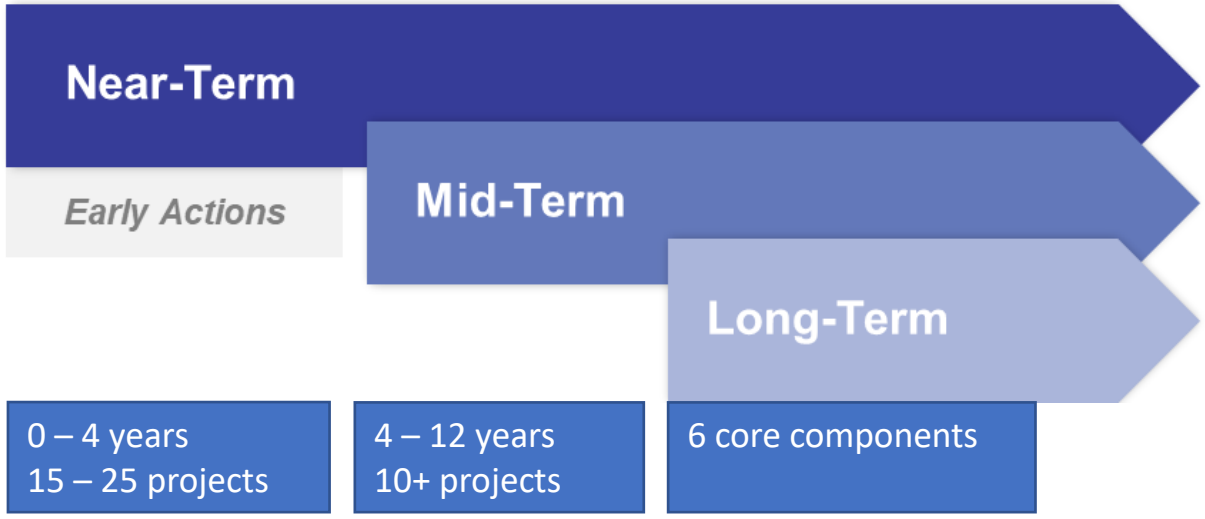
SUMMARY OF NEEDS IN REGION

- Infrastructure issues
- Congestion in Study Core
- Lack of transit competitiveness
- Safer and more reliable multimodal options

STUDY OUTCOMES & NEXT STEPS

- Links transportation planning and environmental/community concerns
- Identification of a regional set of early action projects to advance with an implementation plan
- Streamline NEPA process

IMPLEMENTATION SCHEDULE



Future Capital Improvements

I-84 Danbury Project

7

EASTERN CONNECTICUT INTERSTATE 95 Branford to Rhode Island

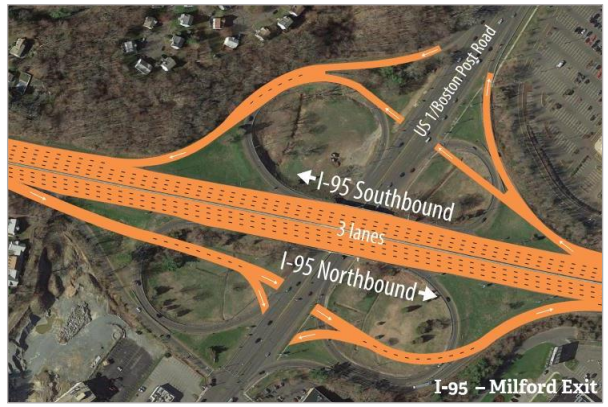
84 new mix

MOVE NEW HAVEN Transit Mobility Study

TIME FOR CT

GREATER HARTFORD MOBILITY STUDY

CT transit



CONNECTICUT DEPARTMENT OF TRANSPORTATION

Thank You!

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