Connecticut Department of Transportation

Administrative Head: Garrett T. Eucalitto, Commissioner

Deputy Commissioners: Karen Kitsis, Laoise King

Established: October 1, 1969

Statutory authority: p.a. 69-768

Central Office: 2800 Berlin Turnpike, Newington, CT 06111

Authorized number of full-time employees: 3,567

Recurring operating expenses: $719 million

Organizational Structure

- Bureau of Engineering and Construction (BEC)
- Bureau of Finance and Administration (BFA)
- Bureau of Highway Operations and Maintenance (BHOM)
- Bureau of Policy and Planning (BPP)
- Bureau of Public Transportation (BPT)
- Office of Commissioner
- Office of State Traffic Administration

Agency Mission

The mission of the Connecticut Department of Transportation (CTDOT) is to provide a safe and efficient intermodal transportation network that improves the quality of life and promotes economic vitality for the state and region.

Statutory Responsibility

The agency shall be responsible for all aspects of the planning, development, maintenance, and improvement of transportation in the state (Section 13b-3 CGS). The agency serves its customers by providing safe and efficient systems for the movement of people and goods within, to, or from the state, whether by highway, air, water, rail, or other means (Section 13b-2[9]).

Affirmative Action Policy

The Connecticut Department of Transportation is an Affirmative Action/Equal Opportunity Employer. It is the established policy of the CTDOT to assure equal opportunity and to implement affirmative action programs. All services and programs of the CTDOT are administered fairly and impartially, pursuant to the State Code of Fair Practices and all other relevant state and federal laws and regulations, including, but not limited to, CGS 46a-60, Title VI and VII of the Civil Rights Act of 1964, and the Americans with Disabilities Act. The CTDOT continues to work cooperatively with the Connecticut Commission on Human Rights and Opportunities and other state and federal compliance agencies in conducting various reviews and providing the requested information.

Public Service, Improvements/Achievements for Fiscal Year 2022-2023

The Bureau of Engineering and Construction

The Bureau of Engineering and Construction (BEC) develops and implements the multimodal capital program for Connecticut's transportation network. The program is delivered through efficient and innovative engineering and construction solutions with stakeholder input to improve public safety and mobility, enhance economic vitality, and improve community connectivity while preserving environmental and cultural resources.

To achieve its goals, the BEC is comprised of the Project Administration Unit, Office of Construction, and the Divisions of Traffic Engineering, Bridges, Facilities & Transit, Highway Design, and Rights of Way.

The Office of Construction consists of Construction Districts 1 through 5 and the Division of Construction Operations. The Office of Construction manages, directs, and coordinates all construction and support activities for capital construction projects assigned to the BEC. This includes ensuring compliance with safety standards, building codes, and other regulations during construction, while also managing project budgets, schedules, and overall resource allocation for construction projects.

The Division of Rights of Way is responsible for acquiring all property and property rights for the capital program. This includes obtaining land, easements, and rights-of-way needed for construction and infrastructure projects. An overview of the responsibilities and activities within the other units is provided below.

Project Administration Unit

The Project Administration Unit ensures that CTDOT's asset management plans, Americans with Disabilities Act (ADA) efforts, estimating, contract development, and advertising processes are in compliance with state and federal policies. Some of the group's accomplishments in terms of asset management and ADA Engineering Coordination are presented below.

Asset Management

Transportation Asset Management (TAM) principles and practices are now a central part of the CTDOT core strategy to address the condition and needs of Connecticut's transportation infrastructure. CTDOT continues to comply with all federal TAM requirements, including the June 30, 2023, submittal of TAM implementation documentation for the Federal Highway Administration (FHWA) Annual Transportation Asset Management Plan (TAMP) Consistency Review. The 2022 Highway TAMP was certified by FHWA in September 2022. The 2022 Public Transportation Asset Management Plan was submitted to the Federal Transit Administration (FTA) in September 2022.

The CTDOT Highway TAMP goes beyond the federal requirements and covers 11 CTDOT-maintained assets. These include bridges, pavements, traffic signals, signs, sign supports, pavement markings, highway buildings,

illumination, retaining walls, drainage culverts, and intelligent transportation systems. The Transit TAMP covers 6 transit assets including bus rolling stock, rail rolling stock, service vehicles, rail infrastructure, bus facilities, and rail facilities. Both TAMPs guide the CTDOT in its endeavor to deliver better asset performance.

Americans with Disabilities Act (ADA) Engineering Coordination

The Americans with Disabilities Act (ADA) Engineering Coordination Unit oversees the implementation and update of CTDOT's federally required ADA Transition Plan, reviews technical infeasibility of ADA implementation in design and construction projects, conducts public outreach, and addresses ADA related complaints in the State Right-Of-Way. This Unit maintains CTDOT's curb ramp inventory and compliance database for when ADA upgrades are required when roadway alterations occur on State routes.

Title II of the ADA requires all public agencies to ensure that their services, programs, and activities are accessible to persons with disabilities. Compliance includes conducting a self-evaluation of building facilities, rights-of-way facilities, and communications to identify any accessibility obstacles or issues that need to be addressed. In addition, public entities that employ 50 or more persons are required to:

- Designate an ADA Coordinator,
- Establish a grievance procedure to allow for prompt resolution of accessibility concerns,
- Establish a transition plan for taking the steps necessary to achieve compliance with the Americans with Disabilities Act, and
- Monitor implementation of the transition plan, and update the plan periodically as needed.

CTDOT has an established grievance procedure and three designated ADA Coordinators for employment, public transportation services, and public right of way engineering/facilities.

Division of Traffic Engineering

The Division of Traffic Engineering manages, directs, and coordinates traffic designs, studies, and investigations for State roadways. The Division's accomplishments with Traffic Safety Engineering and Traffic Signal and Sign Management are presented below.

Traffic Safety Engineering

The BEC is continuing its effort to improve safety and drive down the number of fatalities and serious injuries for all road users on Connecticut's roadways. This effort is detailed in Connecticut's Strategic Highway Safety Plan (SHSP). The SHSP brings together all Connecticut safety stakeholders to collaborate on safety efforts and leverage resources. The current SHSP was approved in May 2022, and a SHSP Implementation Plan is being developed to help prioritize and deploy the strategies that were identified.

CTDOT submitted an implementation plan for the Highway Safety Improvement Program in June 2023 to FHWA. The plan contains a list of programs and projects to be initiated in the Federal Fiscal Year 2024. These are intended to reduce severe and fatal injury crashes on Connecticut's public roadways.

The BEC's Highway Safety Program focuses on implementing systemic transportation safety improvements. These projects focus on providing safety improvements over the entire transportation network while providing the highest safety benefit for every dollar spent. Systemic safety improvements included:

- Centerline rumble strip program,
- Rectangular rapid flash beacons initiative on all public roads,
- Horizontal curve signing project on all public roads,
- High friction surface treatment program,
- A statewide clearance interval retiming project on municipally owned traffic signals,
- Pedestrian improvements at signalized locations, and

- Pedestrian signing and pavement marking project on all public roads.

The Railway-Highway Crossing Safety Program provides improvements at railroad crossings and upgrades of traffic control signals with railroad pre-emption at adjacent intersections.

Wrong-way crashes have increased in the state over the past few years. Although they are a small percentage of overall crashes, they have a more significant potential for severe and multiple injuries. In response to these increasing occurrences, CTDOT tested traffic signal detection equipment to activate flashers on signs when a wrong-way driver entered the wrong side of the ramp in Danbury. This technology is being deployed at 16 additional high-risk locations throughout the state. This project was funded by Special Act 20-1 and began construction in early 2023. The project's scope has been revised to include notification to CTDOT's Highway Operations Center and Connecticut State Police of a wrong-way vehicle detector activation. Additional projects to install wrong-way detection with notification at 113 high-risk ramps throughout the state will be in construction in 2024 and 2025. CTDOT is also reviewing additional strategies to address wrong-way crashes which could be implemented in the near future.

Traffic Signal and Sign Management

Traffic signal projects are being completed continually to improve operational efficiency and replace outdated equipment. Under these projects, equipment will be updated to current design practices utilizing the latest standards and guidance from the Manual on Uniform Traffic Control Devices, including adding accessible pedestrian signal equipment where applicable. Each year approximately 60 locations receive complete equipment replacement. Additionally, 150 locations receive spot safety improvements, including removal of nighttime flashing operation, installation of advanced detection methods, enhancement of pedestrian crossing indications, and connection through cellular modems to a central office.

CTDOT continues efforts to replace signs on limited-access roadways in the state that have surpassed their practical service life. Multiple limited-access sign replacement projects are currently in design and construction. Some of these projects are using a geographic information system to improve asset management life cycle tracking and inventory through design, construction, and inspection.

Division of Highway Design

The Division of Highway Design manages, directs, and coordinates all design activities for highways in accordance with state and federal requirements. The Division also oversees the administration of contracts with consulting engineers and towns for the design of highway and bridge improvements on state highways and town roads. An overview of the Local Transportation Capital Improvement Program (LOTCIP), Complete Streets and Active Transportation efforts, and some of the major highway projects underway in planning, design, and construction are presented below.

Local Transportation Capital Improvement Program (LOTCIP)

The BEC oversees the LOTCIP program which allows municipalities to perform capital improvements on locally-owned roadways that qualify for the Federal Surface Transportation Block Grant–Urban (STBG-U). LOTCIP also allows the portion of Federal STBG-U monies historically dedicated to improvements on municipally owned facilities to be utilized by the CTDOT for eligible activities, predominantly on state-owned assets.

Since November 2013, when LOTCIP was first implemented, the BEC has worked with the regional Councils of Governments (COGs) to issue funding commitments for 269 endorsed municipal projects representing approximately $595 million in construction. In SFY 2023, $72 million in LOTCIP-funded construction projects were awarded, with $202 million currently programmed to be awarded in SFY 2024.

Complete Streets and Active Transportation

CTDOT is committed to providing facilities that are accessible to all users in accordance with all state and federal regulations. The agency is creating a Complete Streets Policy that will provide suitable accommodations for pedestrian, bicyclists, and transit users on CTDOT projects. Additionally, the BEC continues to manage a more flexible approach to funding bicycle, pedestrian, and trail projects to close some of the existing gaps in the statewide trail network. Toward this goal, the BEC is facilitating the completion of a network of inter-connected, statewide trails under the Multi-Use Trail Implementation Plan. The goal is to establish clear priorities to close the most critical gaps and create long continuous portions of the statewide trail network. Additionally, CTDOT continues to execute the Federal Transportation Alternatives Program. This program was recently expanded under the Infrastructure Investment and Jobs Act (IIJA) and CTDOT has completed a solicitation for projects to be funded under the new criteria.

Planning and Environment Linkages (PEL) Studies

PEL studies represent a collaborative and integrated approach to transportation decision-making that considers environmental, community, and economic goals early in the transportation planning process. A PEL study uses the information, analysis, and products developed during planning to inform the environmental review process. This list of PEL studies currently underway at some of the major congestion locations across the state include:

- I-84 / Route 8 Interchange in Waterbury (estimated completion in 2023)
- I-84 in Danbury (estimated completion in 2023)
- Greater Hartford Mobility Study (estimated completion in 2023)
- I-95 from Branford to Rhode Island State Line (estimated completion in 2023)
- I-95 Exits 7-9 including Bridge No. 00032 in Stamford (estimated completion in 2024)
- I-95 from New York State Line to Exit 7 in Greenwich (estimated completion in 2025)
- I-95 Exits 19-27A in Fairfield and Bridgeport (estimated completion in 2025)

Major Projects in Design

- Route 9 in Middletown. Series of projects to support removing two traffic signals from the expressway. Supporting projects began in 2019 and construction is expected to continue through 2030.
- Route 85 in Salem and Montville. Corridor improvements to provide consistent shoulder widths, improve sightlines, provide left-turn lanes, and replace deficient bridges. Construction is estimated to start in 2024.
- I-91/I-691/Route 15 Interchange in Meriden. Three separate projects to reduce congestion, improve operations, and address safety concerns. One project will be delivered using the Design-Build method. Construction is estimated to start in 2024.
- Route 82 in Norwich. Safety improvement project to reduce the number and severity of crashes. Construction is estimated to start in 2026.

Major Projects in Construction

- Route 2 Resurfacing, Bridge Rehabilitation, and Safety Improvements in East Hartford. Construction began in 2021 and is scheduled to be completed in 2024.
- Route 15 (Merritt Parkway) Corridor Improvements in Norwalk and Westport. Construction began in 2022 and is scheduled to be completed in 2024.
- I-95 Resurfacing, Bridge Rehabilitation, and Median Reconstruction in Norwalk and Westport. Construction began in 2022 and is scheduled to be completed in 2024.
- I-95 Interchange Improvements at Exit 74 in East Lyme. Construction began in 2023 and is scheduled to be completed in 2027.

Division of Bridges

The Division of Bridges is committed to achieving and maintaining established bridge performance targets documented in the CTDOT TAMP. The BEC continued to inspect and inventory the structural condition of more than 5,000 bridges, 1,800 overhead sign supports, and 900 traffic signal mast arm supports. The TAMP aims to systematically and strategically identify and plan treatments throughout a bridge's lifecycle to achieve and sustain a state of good repair.

Under IIJA, additional funds have been set aside in the bridge formula program for municipally owned bridges to cover 100 percent of the design, rights of way, and construction costs. Recognizing the need to maximize federal transportation funding while maintaining equity for all communities, CTDOT will provide the 20 percent construction funding match for these bridge projects under the Surface Transportation Block Grant Program. This will prevent conflict between communities receiving 100 percent federal funding and communities receiving funding that would require a local match.

Some of the major bridge projects underway in design and construction are presented below.

Major Projects in Design

- I-95 Bridge Rehabilitation over Metro-North Railroad and Route 122/745 (First Avenue) in West Haven. This project will be delivered using the Design-Build method. Construction is estimated to start in 2023.
- Route 130 (Stratford Avenue) Lift Bridge Rehabilitation over the Pequonnock River in Bridgeport. Construction is estimated to start in 2024.
- I-91 Dutch Point Viaduct Rehabilitation over Connecticut Southern Railroad and City Streets in Hartford. This project will be delivered using the Design-Build method. Construction is estimated to start in 2024.
- I-84 Aetna Viaduct Rehabilitation over Amtrak Railroad, CTfastrak Busway, and City Streets in Hartford. Construction is estimated to start in 2026.
- I-95 P.T. Barnum Bridge Rehabilitation over the Pequonnock River in Bridgeport. Construction is estimated to start in 2026.
- I-291 Bissell Bridge Rehabilitation over the Connecticut River. Construction is estimated to start in 2026.

Major Projects in Construction

- I-84 Rochambeau Bridge Rehabilitation over the Housatonic River in Newtown and Southbury. Construction began in 2020 and is scheduled to be completed in 2023.
- I-91 Dexter Coffin Bridge Rehabilitation over the Connecticut River in Windsor and East Windsor. Construction began in 2022 and is scheduled to be completed in 2024.
- Route 82 Swing Bridge Rehabilitation over the Connecticut River in Haddam and East Haddam. Construction began in 2022 and is scheduled to be completed in 2025.
- I-95 Northbound Gold Star Memorial Bridge Rehabilitation over the Thames River in Groton and New London. The first of two projects to rehabilitate the bridge began in 2022 and future phases will continue through 2027.

Division of Facilities and Transit

The Division of Facilities and Transit oversees the BEC's environmental compliance efforts, design of new and renovated transportation facilities, pavements, utilities, evaluates of new highway products, and maintains the architecture, engineering, and construction software applications. Some of the major facilities and transit projects underway in design and construction are presented below.

Major Projects in Design

- New District 1 Headquarters, Materials Testing Lab, Signal Lab, Bridge Safety, and Sign Shop in Rocky Hill. The project will use the Construction Manager at Risk delivery method. Construction is estimated to start in 2025.

Major Projects in Construction

- New Repair and Maintenance Facility in Putnam. Construction began in 2021 and is expected to be completed in 2024.
- New Maintenance Facility in New Milford. Construction began in 2022 and is expected to be completed in 2023.
- New Bridge, Signs and Markings Facility in Torrington. Construction began in 2022 and is expected to be completed in 2024.
- New Maintenance, Signs and Markings Facility in East Hartford. Construction began in 2022 and is expected to be completed in 2025.
- Electric Vehicle Charging Stations Installation at the Maintenance Facility in Hartford. Construction began in 2023 and is expected to be completed in 2023.
- Electric Vehicle Charging Stations Installation at the Districts 2, 3 and 4 Main Offices. Construction began in 2023 and is expected to be completed in 2024.

The Bureau of Finance and Administration

The Bureau of Finance and Administration (BFA) is responsible for the following functions within the CTDOT: finance, operations, support, external audits, contract compliance, contracts, and agreements. The BFA provides the financial, fiscal, and support services necessary for developing and implementing the CTDOT's programs. In addition, BFA administers fuel distribution for most state agencies and oversees the operation of the 23 service plazas on the Governor John Davis Lodge Turnpike and the Merritt and Wilbur Cross Parkways.

The 2022-2023 year posed some operational challenges in the BFA; however, despite historic levels of retirements, the BFA met the financial support and facility management demands of CTDOT. Necessary business functions continued to facilitate the full scope of operations at CTDOT.

The BFA processed a high volume of financial transactions during 2022 – 2023 that resulted in CTDOT's operations, engineering, and construction projects continuing without interruption. Additionally, all BFA functions continued at an average pace, including the development and passage of a biennial budget, participation in the continued development and publication of the five-year capital plan, and a State Treasurer's Office bond sale that ensures highway and public transportation projects will continue as planned for the upcoming 12 months.

In Federal fiscal year 2022, the Infrastructure Investment and Jobs Act (IIJA), or the Bipartisan Infrastructure Law (BIL), reauthorized surface transportation funding for five years, 2022-2026. CTDOT expects to receive over $5.4 billion during this timeframe, which will continue to support legacy programs for highways, bus transit, and rail. New programs are being implemented to repair, replace, or rehabilitate bridges, support development of electric vehicle charging programs, enhance carbon reduction strategies, and add resiliency to our infrastructure from weather and natural disasters.

Under IIJA/BIL, a robust competitive grant program has been implemented by USDOT. CTDOT is carefully considering each Notice of Funding Opportunity (NOFO) for eligibility and applicability. Both CTDOT and municipalities are aggressively pursuing these opportunities and achieving positive results. Significant efforts have been invested in NOFOs related to special funds for the Northeast Corridor (NEC). Due to Connecticut's

geographic location between the key cities of New York and Boston, expectations are high, and awards will contribute to improving critical components of the NEC infrastructure.

In addition to successfully programming the increased funding provided under IIJA/BIL, CTDOT has positioned itself to request additional obligation limitation (OL) through the Federal Highway Administration (FHWA) redistribution process. Every year, FHWA redistributes excess OL to states based on their ability to obligate funds that would otherwise carry forward to the next year. Through this process, additional funds can be obligated which increases the size of the annual program. On July 19, 2023, CTDOT submitted an unprecedented request for $103 million of additional obligation limitation. This far exceeds prior years, and if successful, would be double the FY 2022 award, and result in a cumulative expansion of the FHWA program in CT by $514 million over the past 10 years. The FY 2023 award announcement is expected September 1, 2023, just 3 weeks prior to closing the federal fiscal year.

CTDOT also benefitted from utilizing Coronavirus Aid, Relief, and Economic Security Act (CARES Act), American Rescue Plan Act of 2021 (ARPA) and Coronavirus Response and Relief Supplemental Appropriation Act (CRRSAA) funding that offset farebox revenue losses due to reduced ridership on our bus and rail systems due to the pandemic. An excess of $289 million for the year was used to cover increased subsidy payments due to this lost revenue.

The Bureau of Highway Operations and Maintenance

The Bureau of Highway Operations and Maintenance (BHOM) provided roadway and roadside maintenance to 5,682 two-lane miles of roadway and provided snow removal and other roadway maintenance services to 20 state agencies. With respect to snow and ice control, there were 6 winter storms which required the use of 88,144 tons of sodium chloride and 218,066 gallons of liquid magnesium chloride applied by 634 state trucks assisted by 230 contracted trucks for plowing purposes only. Maintenance of existing roadways included resurfacing 266 two lane miles of vendor-applied bituminous concrete overlay. In addition, 6,585 linear feet of drainage pipe was installed, a total of 661 drainage structures were installed or replaced, and 34 pipes were relined statewide. During the past year, maintenance repairs were performed on 1,069 of the 4,127 state-maintained bridges through the combined efforts of CTDOT personnel and contractors. The BHOM addressed 91,468 trees for safety and roadside maintenance. Other roadside safety improvements included 121 sections of guiderail upgrades and 463 ADA ramp installations and improvements. The BHOM created 10,438 Call Before You Dig (CBYD) tickets and trained 1,153 new or existing employees in various safety programs. It should be noted that the BHOM established a Training Supervisor position and continues to establish a specialized unit specific to the Maintenance training needs of our employees.

<u>Traffic Service Unit</u>
This unit installed 2,456 miles of centerline and lane lines; erected 798 new traffic regulatory, warning, and directional signs; renewed or removed 4,791 existing signs; continued maintenance of 3,338 traffic signals and 1,299 miles of highway illumination; installed 20 new traffic signals, 100 signal revisions and installed 208 traffic signal vehicle detection cameras.

The BHOM installed wrong way countermeasure consisting of signage and lighting to 18 separate interstate off ramps.

<u>Rocky Hill Sign Shop</u>
The Rocky Hill Sign Shop produced 1,568 signs for Traffic Engineering, 7,558 signs for Highway Maintenance, and 4,094 miscellaneous signs for various facilities and State agencies.

<u>Special Services Units</u>

The Special Services Units reviewed 6,507 encroachment permit applications and issued 5,066 highway encroachment permits. The Oversize/Overweight Vehicle Permit Unit collected $4,090,123 for the issuance of 86,415 oversize/overweight permit trips, 2,638 annual permits, 120 radioactive permits, and 34 industrial permits.

Operations Centers

The Operations Centers responded to a total of 4,757 reported incidents on the state's limited access highway system. The Newington and Bridgeport Operations Centers monitor 363 highway cameras and operate 146 variable message signs. CTDOT's computerized traffic control signal systems include a total of 991 traffic signals on 58 major arterials in 59 municipalities. CTDOT's Connecticut Highway Assistance Motorist Patrol (CHAMP) Program sponsored by GEICO provided highway assistance to 7,298 motorists along the I-95 corridor from the New York State line to the Rhode Island State line. In the Danbury to greater Hartford area, the CHAMP Program assisted 6,939 motorists.

CTDOT continues implementation of an advanced technology system project to support and enhance the management of roads during the winter snow season, referred to as Integrated Mobile Observations (IMO). CTDOT snowplow vehicles are equipped with the sensors monitor vehicle location, road and air temperature and spreader controller system data. Software then analyzes this data, along with atmospheric information, and provides recommendations to BHOM managers and supervisors on how to respond to weather events most effectively. This includes the optimal use of roadway anti-icing chemicals. The computer software also provides future pavement condition forecasts so that CTDOT personnel can better plan for winter storm response including the pre-treatment of roads. Additional benefits of the IMO system include better fleet and route management, the ability to provide better traveler information to the public and more efficient application of road salt.

The Department received a grant from FHWA for Accelerated Innovation Deployment (AID) demonstration program to support this initiative. A total of 285 snowplow vehicles have been outfitted this far. An additional 80 trucks will be added later this year, resulting in a total of 365 trucks completed for the 2023/2024 winter season.

Traffic Incident Management Team

The Traffic Incident Management team (TIM team) has held 47 trainings from July 2022 to July 2023. The team has trained 1,321 first responders on the techniques of operating safely on Connecticut's roads and to work towards quick clearance, and safe operating position when incidents occur. In this period, TIM team has trained 279 Law Enforcement, 403 Fire Fighters, 71 Tow Operators, 82 EMS, 349 DOT/Public Works, and 137 classified as other such as dispatch, emergency management, CERT teams. The TIM team currently has 47 trainings scheduled through the rest of 2023.

The Bureau of Policy and Planning

The Bureau of Policy and Planning (BPP) collects critical data, conducts planning studies, and performs associated activities to support the safe, accessible and effective movement of people and goods for all modes of transportation. Within this Bureau, data collection, documentation, analyses, as well as necessary federal and state approvals are developed and sought for all proposed projects in support of project delivery. The BPP is responsible for numerous federal and state mandates and compliance and interacts with Legislative and Congressional members and staff, as well as nationally recognized transportation organizations on various transportation bills.

A re-organization of the BPP occurred this past year which represents an effort to better align units and offices with their function, to find efficiencies and increase accountability. Notable changes in structure recently put in

place include: Creation of a Chief Data Officer position, leading the Enterprise-GIS unit as a stand-alone office; Creation of an Office of Policy & Intergovernmental Affairs, with a new dedicated Policy Director, leading the Intergovernmental Affairs Unit (formerly the Council of Governments (COG) coordination unit), a recently developed Grants and Socio-Economic Unit, and a newly formed Policy Development Unit; Transfer of the Performance Management and Trip and Traffic Analysis units to Program Development and Forecasting; Creation of a stand-alone Cultural Resources Unit, separating it out from the previous Cultural Resources and Environmental Documentation Unit, while maintaining Environmental Documents as a stand-alone unit.

Roadway Information Systems Office

This office provides critical data collection and management. These efforts support federally mandated reporting and analysis, as well as support State statute requirements and program apportionments. These data collection systems produce critical data outputs utilized to understand current conditions, estimate future travel demands; identify current and future capacity deficiencies; complete transportation studies and designs as well as increase access and transparency of data used in decision making.

Roadway Inventory Unit

The Roadway Inventory Unit continues to utilize software to update and improve the digitized road network, which encompasses over 21,000 miles of state and local public roadways. This geospatial road network supports asset and data integration and acts as a backbone to the Transportation Enterprise Data (TED) geospatial development effort. The Roadway Inventory Unit is primarily focused on the Highway Performance Monitoring System (HPMS) and Model Inventory of Roadway Elements (MIRE) federal mandates.

Traffic Monitoring Unit

This unit maintains the state's traffic counting program, which was pivotal in tracking the return of traffic volumes during the COVID-19 pandemic and continues to evolve in its collection techniques to capture quality data in an efficient manner that is safer for CTDOT personnel and offers minimal disruptions for the traveling public. Data is readily available on the CTDOT's Open Data platform and is valuable in safety analysis, project planning, and economic development.

Photolog Unit

This unit maintains the Photolog Automated Roadway Analyzer (ARAN) Pavement Data Collection and Processing technologies and utilizes high-definition cameras to collect annual street level images of the state highway system. Collected pavement imagery is used to calculate pavement conditions around the state, enabling CTDOT to target preservation and improvements more effectively.

Enterprise GIS (EGIS) Unit

The GIS unit, led by the Chief Data Officer, aids internal and external stakeholders in collecting, managing, and making available geospatial data for a wide variety of visualization, integration, and analysis purposes. EGIS identifies and streamlines data workflows, creates collection applications, and integrates data into the Enterprise systems where they can be accessed. EGIS also manages the Department's geospatial Open Data platform and provides analysis tools, visualizations, and narratives.

Intergovernmental Affairs Unit (IGA)

Within the Office of Policy & Intergovernmental Affairs, the IGA unit, formerly known as the COG Coordination unit, is the designated CTDOT Liaison for the Metropolitan Planning Organizations (MPO), COGs, and local officials regarding planning efforts, and ensures that the planning process is conducted in accordance with federal laws and regulations. The IGA unit solicits the MPOs/COGs for project proposals under the Congestion Mitigation Air Quality (CMAQ) program, the Transportation Alternatives program, and the corridor study initiative.

Grants and Socio-Economic Unit

A new Grants and Socio-Economic Unit has been developed and is responsible for leading federal, multi-modal grant initiatives within CTDOT. This unit leads grant initiatives and is pivotal in disseminating information, providing grant guidance and support to staff, community partners, and working with other agencies; assessing transportation projects for program eligibility and potential; managing the preparation, drafting, and submission of project grant proposals; and assisting in post-award coordination. With many upcoming funding prospects tied to equity and rebuilding of jobs and communities, this unit facilitates the varied needs in securing funds, as well as applying them to the projects and programs which will bring the most benefit to our State.

Policy Unit

The newly formed Policy Unit leads the review, analysis, and comment on federal actions, including, but not limited to federal laws, regulations, Notices of Proposed Rulemakings (NPRM), notices of Requests for Information or Comments on federal policy, policy changes, guidance, and pilot programs. This unit tracks and ensures timely fulfillment of federal planning requirements and acts as the lead in development, review and periodic updating of Department Policies, as well as coordinates and responds to Congressional requests. The unit is the lead liaison with U.S. DOT and other federal agencies and participates in regional and national organizations.

Statewide Transportation Improvement Program (STIP)

Within the Program Development and Forecasting Office, the Statewide STIP unit develops, maintains, and coordinates MPOs and USDOT approval of the STIP and periodic revisions. The STIP is a 4-year planning document that lists all projects to be funded with Federal Highway and Federal Transit funds. The STIP is fiscally constrained and updated monthly. The STIP unit also calculates and allocates estimated Federal Authorization funds to Connecticut's eight MPOs and two Rural COGs for Metropolitan Transportation Plan planning purposes. The STIP unit also develops, maintains, and updates the CTDOT's Public Involvement Process document.

Travel Demand/Air Quality Modeling Unit

This unit maintains the statewide travel demand model which utilizes socio-economic and demographic data to estimate travel demand. The Travel Demand/Air Quality Modeling Unit analyzes and prepares demographic data for utilization in the Statewide Travel Demand Model and participates in the development and preparation of alternative analysis for proposed transit and highway projects. It prepares and analyzes air quality emission reduction benefits for regional projects submitted for the CMAQ program and conducts project and regional level transportation air quality conformity analysis. The unit conducts detailed analysis of air quality emission reductions utilizing EPA required software and participates in the development of motor vehicle emission budgets for various nonattainment areas within the State per pollutant; and reviews project plans to determine air quality conformity determination status. This unit also prepares boundary adjustments to Federal Aid Urban Areas and to Census Tracts and block groups for the Census Bureau's Participant Statistical Areas Program.

Performance Management Unit

This unit implements the transportation performance management requirements of federal law, including reporting and setting targets for national performance measures. This unit coordinates with MPOs in national performance target setting. The unit publishes performance measures and targets on its webpage and is also developing a Project Prioritization methodology for performance-based planning and programming.

Trip and Traffic Analysis Unit

This unit reviews traffic counts for Major Traffic Generator (new development) submittals for the Office of the State Traffic Administration; develops traffic projections for state transportation projects; and provides public access to this traffic count data via Google Earth.

Highway Safety Office (HSO)

The HSO develops the Triennial Highway Safety Plan and the Annual Highway Safety Report, which ensures compliance with CTDOT policies, National Highway Traffic Safety Administration (NHTSA) guidelines, and relevant federal laws and regulations. These measures are taken to reduce injuries and fatalities on Connecticut roadways. The enforcement-based program areas include: Impaired Driving, Distracted Driving, Occupant Protection, and Speed and Aggressive Driving. Additional program areas are Child Passenger Safety, Motorcyclist Safety, Non-Motorized Safety, Police Traffic Services, Traffic Records, and Racial Profiling. The HSO also coordinates the Connecticut Drug Recognition Expert program. The HSO undertakes educational campaigns through community-based organizations as well as media.

The HSO is responsible for collecting and analyzing crash data for all municipal and state police agencies. This data is tracked with the Fatality Analysis Reporting System (FARS) as well as the Connecticut Crash Data Repository. The HSO partners with the Connecticut Transportation Safety Research Center at the University of Connecticut on the following projects for driver behavior: Cannabis use study (green lab training), police officer traffic safety training; statewide crash data and traffic safety related data linkage project; fatal and serious injury black box downloads; and collection and analysis of driver toxicology information.

Research Program Unit

Within the Office of Strategic Planning, the Research Program Unit administers the Federal Highway Administration-funded research program to assist all bureaus.

Statewide Planning Unit

This unit prepares the state's long-range transportation plan, which includes four goal areas of economic growth, deliverability, quality of life, and sustainability and is also responsible for the multi-modal Statewide Freight Plan, which focuses on economic competitiveness, efficiency, safety, and environmental factors. This unit also develops strategic plans and studies regarding congestion reduction, project-financing alternatives, corridor needs and deficiency studies, and assists the Bureau of Public Transportation with required studies, such as the Statewide Rail Plan. This unit also leads planning for Transit-Oriented Development.

Project Coordination Unit

This unit assists with implementing CTDOT's Complete Streets Policy. Complete Streets is an approach to provide safe access for all transportation users (pedestrians, bicyclists, transit users, and vehicle operators) via a comprehensive, integrated, and connected multi-modal network of transportation options. The Unit is responsible for managing the development of the Active Transportation Plan and to aid in implementation of the recommendations with a goal to improve safety, connections, and accessibility. The unit performs pedestrian and bicycle design reviews and develops project concepts. This unit administers the Community Connectivity Grant Program (CCGP), to improve conditions for walking and bicycling within community centers by providing municipalities with construction funding and oversight for targeted infrastructure improvements. This unit has also implemented the new Transportation Rural Improvement Program (TRIP) program, with the first solicitation taking place this year.

Environmental Documentation Unit

The Office of Environmental Planning (OEP) Environmental Documentation Unit provides oversight and support for required National and Connecticut Environmental Policy Act (NEPA / CEPA) implementation and proper documentation for all CTDOT activities. All projects are screened for the appropriate level of documentation under NEPA and CEPA and continues to seek out efficiencies in process.

Cultural Resource Management Unit

This unit ensures projects are screened and comply with Section 106 of the National Historic Preservation Act and updates and maintains a Historic Bridge Inventory for bridges statewide.

OEP is the lead liaison with various state and federal regulatory agencies such as the U.S. Army Corps of Engineers, U.S. Environmental Protection Agency and the Connecticut Department of Energy and Environmental Protection regarding water and natural resources issues. The Environmental Permitting Unit obtains the necessary federal and state water resource permits required for all CTDOT initiated projects, and ensures projects properly avoid, minimize, and mitigate for potential impacts to regulated resources.

Natural Resource Planning Unit
This unit is responsible for coordination efforts and compliance under the Endangered Species Act with the U.S. Fish and Wildlife Service and National Marine Fisheries for federally funded projects.

Environmental Resource Compliance Unit
Responsibilities in the Environmental Resource Compliance unit include inspections of active state-controlled construction sites and maintenance projects to ensure compliance with permit conditions, state and federal laws and regulations, and CTDOT Best Management Practices. This unit is also the lead for developing mapping for the statewide stormwater system in accordance with the General Permit for the Discharge of Stormwater from CTDOT Separate Stormwater Sewer Systems (MS4 Permit). The Compliance team is responsible for noise analysis, compliance, and responses to noise complaints. This unit has created a noise barrier wall inventory for use in asset management and has finalized noise barrier wall specifications and guidance documents. A Type II Statewide Noise Study is nearing completion and will be utilized to develop a Type II Noise Program.

Sustainability and Resiliency Unit
This unit is responsible for fulfilling the goals and requirements called for in Governor's Executive Orders (EO) #1, #3, and #21-3. This office is responsible for interpreting and implementing the numerous sustainability and resiliency programs released under the Bipartisan Infrastructure Law, including National Electric Vehicle Infrastructure: Carbon Reduction; and the Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) Programs.

The Bureau of Public Transportation

The Bureau of Public Transportation (BPT) offers services through a broad-based network of bus, rail, rideshare and paratransit transportation facilities and services. Utilizing revenue, bonding and federal funding, the bureau acquires, maintains in a state of good repair, and overhauls, as necessary, the rolling stock used for bus and rail operations; designs, constructs and maintains improvements to existing and new public transportation facilities; and directs the statutory regulation of motorbus, taxi, livery, intrastate household goods, transportation network and railroad entities. The bureau also directs the operation, management and development of the Connecticut River ferries.

Railroad Operations
Some of the major accomplishments of our Railroad Operations are presented below.

- Accepted three additional P40 locomotives from the overhaul program and returned them to service (9 of 12).
- Released Request for Proposals for 60 New Rail Cars, received, reviewed, and rated proposals, negotiated Contract terms with highest rated proposer.
- Agreed to terms with Metro-North Railroad on a procurement for Siemen's Dual-Mode Locomotives to support future branch-line rail service for Waterbury and Danbury.
- Added two Amtrak Northeast Regional trains to the Hartford Line schedule on June 5, 2023, increasing direct one-seat ride train service to NY Penn Station from Hartford.

- Completed Federal Railroad Administration (FRA) required rail safety training drill on Saturday, April 22, 2023, in Old Saybrook, CT.
- Completed FRA required rail safety training drill on Saturday, July 22, 2023, in Meriden, CT.

The BPT's Capital, Construction and MOW divisions, under Railroad Operations, have embarked on a transformative journey to enhance the state's rail infrastructure and elevate the quality of transportation services for its citizens. Some of the major accomplishments these divisions are presented below.

- Initiated the first of a program of projects called "TIME" (Track Improvement and Mobility Enhancement) with the goal of improving conditions along the New Haven Line (NHL) in order to allow for increased train speeds and shorten passenger trip times. "TIME-1" covers the East Bridgeport to Stratford section of the NHL.
- Initiated a Feasibility Study on the NHL for the section of track that includes the Saugatuck Movable Bridge looking at the possible conversion from a movable to a fixed bridge to allow for increased reliability and allow for greater train speeds.
- Initiated a project on the Waterbury Branch to replace all the low-level station platforms to high-level heated platforms with canopies to promote more efficient service and improve customer experience.
- Initiated a study for the feasibility of electrifying the Danbury Branch, Waterbury Branch and the Hartford Lines.
- Completed a study of Network Connectivity along the New Haven Mainline, New Canaan Branch, and Shore Line East.
- Began design for Phase 1 of the NHL Power Program.
- Began design for the final phase of the Network Infrastructure Improvements Program (Phase 4) along the NHL and its branch lines.
- Completed track and signal upgrades at Devon to safely improve travel time on and off the Waterbury Line

Customer Experience Unit

At the forefront of redefining the public transportation experience, the Customer Experience (CX) unit, within the CTDOT BPT, spearheaded a range of innovative initiatives aimed at revolutionizing transit services and fostering seamless, customer-centric journeys for all.

Some of the major accomplishments the CX unit are presented below.

- CX unit Launched first-ever Action Plan that outlines programs, policies, and investments to improve bus and rail services for all of Connecticut. The Action Plan is the culmination of a yearlong engagement effort with transit customers, community stakeholders, service providers, and transit employees. The plan can be found at: https://www.transitcx.com/action-plan/. The effort received a first-place award from the American Public Transportation Association (APTA) for the best comprehensive marketing and communications campaign highlighting transit needs.
- CTDOT was awarded a $2 million Strengthening Mobility and Revolutionizing Transportation (SMART) planning grant for the Connecticut Integrated Transit Mobility Project (CT-ITMP). This project will develop a statewide roadmap and solution to make public transportation equitable, easier to use, cost-effective and a preferred method of travel for Connecticut residents and visitors. CT-ITMP will develop a plan to create a seamless, multimodal statewide public transit system that will allow customers to use their own credit, debit, or prepaid card or a payment-enabled device to pay their fares without contact and where all transit information can be accessed through a Unified Mobility App (UMA), providing a one stop shop for all things mobility. The CX unit kicked of the project with the USDOT on June 8, 2023.

- BPT launched a one-year free subscription to Transit Royale, an upgrade to the popular mobile app, Transit. Transit is a free mobile app that helps public transportation users plan and track their bus and train trips using schedule information and real-time vehicle location, where available. The CX team continues to work closely with the bus and rail teams to integrate bus and rail services into the app and just recently integrated UConn's HuskyGo shuttles into the app.
- The unit kicked-off the Unified Fare Project to identify ways to make transit fares in Connecticut simpler and more equitable, as well as to increase transit ridership. The goal is to have a coordinated statewide bus fare policy and structure to create a seamless and unified system. Coordination will be focused on improving transit travel throughout the state, making travel between bus service areas and providers seamless. This project will include all CTtransit Divisions as well as all Transit Districts. Rail fares and how rail customers interact with bus services statewide will be evaluated during this project.
- A Service and Fare Equity (SAFE) analysis is under development for upcoming proposed bus and rail service and fare changes. SAFE analyses are used to identify any disparate impacts and disproportionate burdens on minority and low-income riders that may be caused by proposed service and fare changes. SAFE also includes essential outreach, public hearings and a comment period to get public feedback on the proposed changes.

<u>Office of Transit and Ridesharing</u>

Driving forward sustainable and accessible transportation solutions, the Office of Transit and Ridesharing within the BPT is dedicated to shaping a modern and user-centered transit landscape for the state's residents and visitors. Before the COVID-19 pandemic, bus services managed by the BPT provided approximately 36.9 million passenger trips annually in Connecticut. In SFT 2023 Bus services provide approximately 38.2 million passenger trips, about 3.5% higher than pre-pandemic levels. Buses operated fare-free for 9 months of the SFY 2023 year.

Additional highlights from the Office of Transit and Ridesharing are below.

- Continued development of a statewide bus stop enhancement program to create a turnkey program for improving bus stops. Enhancements will include benches, shelters, lighting, real-time bus arrival information, accessibility improvements, and more. First installations are expected for Spring 2024.
- Began the development of a statewide initiative to support each transit service provider to offer on-line trip planning and real-time bus arrival information.
- Conducted Customer Satisfaction Survey on all CTtransit routes. The Customer Satisfaction Survey is used to collect demographic and rider characteristics for the transit system as a whole, to better understand customer journeys and to collect information related to customer satisfaction. The data is used to analyze service and fare changes and address operational changes to improve customer satisfaction.
- The Federal Transit Administration Title VI Program update is in progress. The program update takes place every three years and includes an analysis of all routes in CTtransit Hartford and New Haven divisions to determine whether a there is a disparate impact in how bus service is provided for low-income and minority riders when compared with non low-income and non-minority riders.
- Released Section 5310 (Enhanced Mobility of Seniors and Individuals with Disabilities Program) FFY 2022 Application for Operating projects including public transportation services and alternatives beyond those required by the ADA, designed to assist individuals with disabilities and seniors.
- Introduced the ***Transit is a Trip*** marketing campaign to bring back customers to public transportation in the wake of pandemic ridership losses. The creative assets were designed to show that using transit can be an enjoyable experience and is a comfortable, relaxing way to travel in Connecticut. This is an ongoing multi-media campaign, including broadcast and streaming television spots, digital display banners, radio and streaming audio, social media ads, bus exterior advertising and highway billboards.

- Continued a third year of the ***ParkConneCT*** summer program through a partnership between CTDOT and the CT Department of Energy and Environmental Protection, identifying and enhancing transit connections to Connecticut State parks to promote seasonal employment and recreational activity. Service was expanded to cover the Juneteenth holiday and marketing planning was expanded to collect feedback from customer satisfaction surveys and pop-up events in the parks to help identify improvements in future program years.
- The ***Drive Less Connecticut Climate Challenge*** event occurred in May, asking the public to drive less to reduce emissions that cause climate change. Participants qualified for gift card drawings based on the number of trips recorded on eligible modes. The event resulted in over 374,000 pounds of emissions prevented by eliminating 26,866 car trips and 432,000 vehicle miles.
- Successfully procured administrative services for Statewide Insurance Consortium Program, Drug and Alcohol Testing Program and Rural Transit Assistance Program.
- Procured a telematics software that will be instrumental in providing active information about Battery Electric Bus fleet as they are in revenue service.
- Exercised remaining options on existing contract for production and delivery of 49 Battery Electric Buses to be deployed in various locations of the state.
- Published a successful request for proposal for the next Battery Electric bus contract that will have options for up to 142 Battery Electric Buses.
- Began procurement for the second phase of 12 real-time bus arrival information signs for large-scale implementation statewide to further demonstrate the capabilities of real-time, on-street bus stop signs. The initiative will provide improved stop information for bus passengers by displaying route maps, "next bus" information, and service alerts.
- Released a formal solicitation seeking proposals from eligible qualified applicants to develop and operate on-demand micro transit service. This on demand service is to be operated as part of a micro transit pilot program as authorized by Public Act 22-40 (Pilot).
- Fleet inspection program was launched to provide oversight for the State-owned, contractor-operated bus fleet. The program will aid in ensuring that federally funded equipment remains in a state of good repair as well as provide oversight of contractor maintenance activity.
- Established the *Mystery Rider* program for CTtransit branded buses for staff from the Office of Transit and Ridesharing to experience what our customers experience. While riding, Mystery Riders respond to questions about fare payment, seat availability, and bus stop cleanliness, among others. The goals of the program are to ensure quality service and customer experience. Results from the *Mystery Rider* surveys aid in identifying and resolving potential customer complaints and in improving performance throughout the CTtransit system.
- Currently we are undergoing a state-wide upgrade of our facilities to support our electrification of the transit fleet. We are in various stages of planning, design, and construction, and are on-track to achieve our 30% goal by 2030 and 100% by 2035.
- Acquired a property in Torrington for the Northwest Transit District operation. Currently we are repurposing the space to be operational and are in the planning stages for electrification upgrades for a future fleet of all-electric paratransit vans.
- Starting the design phase of the 11-mile MOVE New Haven BRT program in that will be made up of (2) corridors and offering 18 on-street stops.
- The Automated Driver Systems (ADS) bus program is currently in the development phase, and we are currently working out logistics for testing and deployment.
- We have an active RFP for the procurement of 400+ bus shelters as a part of a state-wide shelter program to provide upgrades to our aged shelters and uniformity across the state.
- Transitioned management of the CTtransit Hartford, New Haven and Stamford Divisions to RATP Dev after a nationwide selection process.

- Coordinated with Estuary Transit District and Middletown Area Transit for the official merging of their systems into one district which has been rebranded as River Valley Transit.
- Assisted Windham Region Transit District in the merger with the Husky GO on campus bus system at the University of Connecticut Storrs campus.
- Continued participation in the CT Department of Veteran's Affairs Annual Stand Down Event by coordinating the provision of transportation to the five statewide locations by transit operators.

Ferries

The CTDOT's endeavors within its ferry operations include the implementation of new passenger tickets to streamline cash handling and ensure accurate payment confirmation. Additionally, the *CTferry* brand has undergone a refreshing transformation, accompanied by a new uniform design that incorporates high-visibility materials to prioritize crew safety.

An important achievement in the realm of maritime progress, the Cumberland tugboat has been repowered with a state-of-the-art clean diesel tier 3 engine, reflecting the CTDOT's commitment to environmentally responsible and efficient ferry operations.