# CONNECTICUT Department of Transportation Bureau of Highway Operations



No Boundaries – Ann Arbor, Michigan 2016 Richard Reagan, Transportation Maintenance Manager, District 1

### **Bureau of Highway Operations**

#### Mission

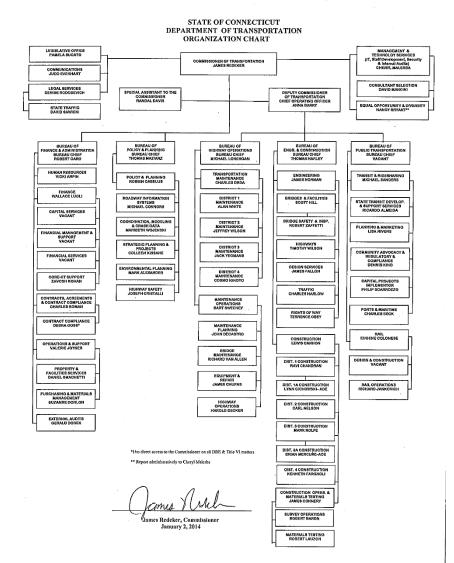
The Mission of the Bureau of Highway Operations is to maintain the State's Highway and Bridge systems in a safe, efficient manner balanced with the needs of the Motoring Public. Our dedicated staff will utilize Best Practices and High Standards to achieve an optimal level of service to the Highway and Bridge systems, which include Snow and Ice Control, Incident Management, and Oversize/Overweight Vehicle Permitting.

### Governor Dannel P. Malloy Commissioner James P. Redeker





#### **Organizational Chart**



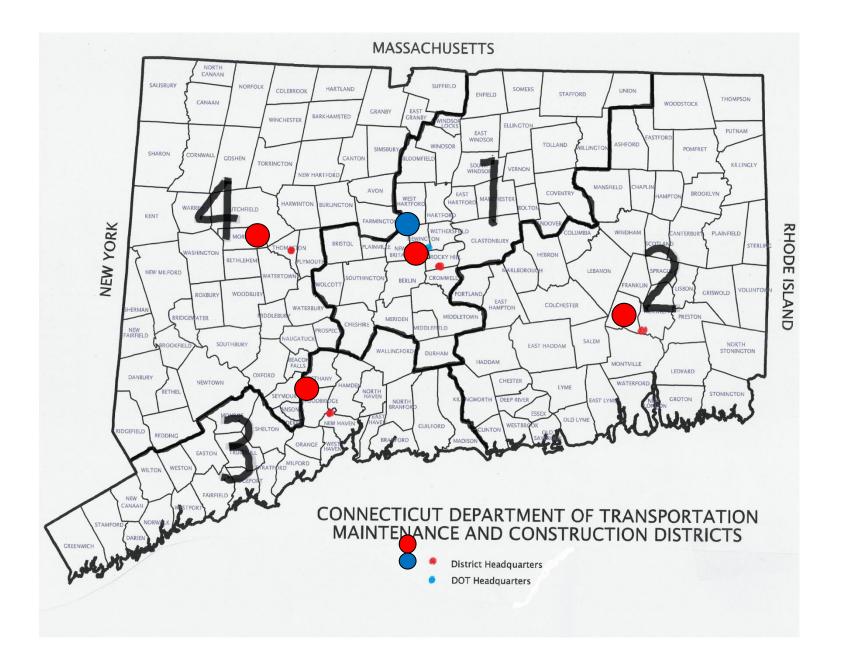
# **Organizational Chart**

- Commissioner
- Dept. Commissioner
- Bureau Chief
- Administrator
- (1)Staff / (4)District Directors
- Section Managers
- General Supervisors



# **CTDOT Maintenance**

- 4 District Offices with 2 sections in each dist.
- Responsible for maintaining 10,800 lane miles of roadway and 4009 bridges
- 48 Maintenance Garages not including Bridge, Repair, or specialty crews
- 88 Salt Storage Locations
- 2 Highway Operations Centers Newington, Bridgeport
- Over 1,100 employee workforce at full callout



# **Primary Responsibilities**

- Roadway Maintenance
- Bridge Maintenance
- Snow and Ice Control and Removal
- Pavement Management and Preservation
- Rest Area Operations
- Champ Program
- Highway Operations Centers
- Support Services



# **Roadway Maintenance**

- Pavement Repair
- Drainage Maintenance & Repair
- Tree Trimming and Removal \*
- Mowing and Vegetation Control
- Fence and Delineation Maintenance



# Average Yearly Accomplishments

- 8,000 Tons Hand Patching
- 6,500 Catch Basins Cleaned
- 60,000 Trees Removed/Trimmed
- 50,000 Swath Miles Mowed
- 15,000 Miles Swept





#### **Tree Management**

The Connecticut Department of Transportation (CTDOT) is responsible for the maintenance of all state-owned roads and highways in Connecticut and it is the Department's primary mission to keep the infrastructure safe for motorists as well as efficient for the movement of people, goods and commerce. To this end, it is the Department's responsibility to prune, trim or remove dead, dying, decaying or otherwise compromised trees and vegetation in the state-owned right-of-way, such as the shoulder area and center-median of highways, roadways and ramps. The CTDOT employs tree wardens in each of their four districts who report to a State Licensed Arborist. These employees are experts in identifying potentially hazardous trees and establishing tree management priorities along state roadways.







## **Bridge Maintenance**

CONNDOT maintains over 4,000 bridges and inspects all bridges at least once every two years. Replacement, rehabilitation, preventive maintenance and routine maintenance all help to maximize the life of the bridge.







# **TYPICAL WORK PERFORMED**

- Response to Bridge Safety Inspections
- Road Hazards
- Bridge Hits
- Preventative Maintenance (Joint Repair)
- "Snow fighters" during winter weather
- Overhead Sign Structures

#### **Preventative Maintenance**

#### (1<sup>st</sup> priority- Joints, joints, joints...)





## Snow and Ice Control and Removal

- 634 State Owned Plow Trucks
- 200+ Contractor Plow Trucks
- 100 Misc. Pieces of Heavy Equipment (Pay Loaders, Snow Blowers, Road Graders)





### Snow and Ice



Key Snow & Ice Components (To Goal of Safe and Passable Roads)

- Pre Treating of Roads (Salt Brine)
- Pre Wetting of Materials During Application
- Accountability and Control of Material Use (Both Salt and Liquid Magnesium)
- Timely and Efficient Communications
- Utilize Available Technologies and Equipment





#### Pavement Management: VIP Program (Vendor In Place)

Current Status Report for 2016 VIP list planned miles 306.71 STATUS REPORT for: 2015 VIP lists Complete miles as 333.24 2014 VIP lists Complete miles as 304.64 2013 VIP lists Complete miles as 246.61 2012 VIP lists Complete miles as 216.94 2011 VIP lists Complete miles as 266.38





# Paving "Hot Spots"

- Proper/Complete Drainage Prep Work
- Neat and Consistent Milled Surface
- Clean Surface (Well Swept)
- Proper Tack Application
- Continuous Paving "Train"
- Wedge Joint Application
- Proper Compaction (CORE's)

# **Rest Area Operations**

- 7 Staffed Rest Areas
- Previous to October 1, 2016 Staffed 24/7/365
- Changed to Single 8 Hr. Shift Per Day 9/30/16
- Balancing Needs & Convenience of Public with Staffing and Financial Reality
- More Changes to Come?





Champ Program (Service Patrol)



- 15 Service Patrol Vehicles
- Providing service from 8 designated locations
- 30 Service Patrol Drivers (also perform snow removal duties during winter weather)
- 2 Shifts Per Day (5am-12:30pm and 12pm-7:30pm)
- Goal of assisting motorist with various issues and reporting and assistance of traffic incidents

# **Highway Operations Centers**

- Over 326 traffic cameras and 134 VMS boards
- Provide 24/7 operational support for Statewide traffic incident management services.
- Provide 24/7 operational response to State and local police requests for DOT assistance, including traffic signal repair, damaged State equipment, etc.



# **Highway Operations Centers**

- Dispatch Connecticut Highway Assistance Motorist Patrols (CHAMP) vehicles that respond to vehicle breakdowns and incidents on the State's limited access highway system.
- Operate and control the Intelligent Transportation System (ITS) infrastructure on Connecticut highways.





# **Support Services**

- Equipment Repair
- Electrical
- Signs and Markings



# **Equipment Repair**



- 13 Repair Facilities
- 181 Employees
- 2.5 Million Annual Repair Budget
- 12 Million Average Equipment Purchase Budget (Varies by year)





# Electrical

- Highway Illumination Maintenance and Repair
- Traffic Signal Repair and Revisions
- Traffic Signal Loop Repair
- CBYD Mark Outs





# Signs and Markings

- Long Line Painting
- Hand Painting



Pre Marking of New Pavements







# CT fastrak

#### **CTfastrak**

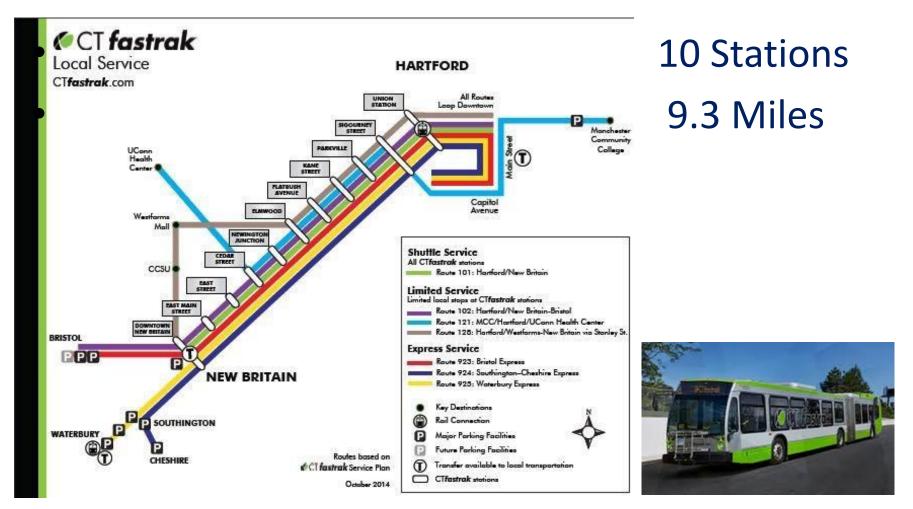
CTfastrak is Connecticut's first Bus Rapid Transit system. It is a system of bus routes that utilize a bus-only roadway for all or a portion of your trip. CTfastrak routes are integrated with the CTtransit system, making it easy to connect, transfer and pay your fare.

The CTfastrak system provides direct service to and from Waterbury, Cheshire, Southington, Bristol, Plainville, New Britain, Newington, West Hartford, Hartford and Manchester with routes that take advantage of the bus-only CTfastrak roadway. The CTfastrak system provides a one-seat, no-transfer ride to many major regional employment, shopping and healthcare destinations as well as connections to the New Haven Line-Waterbury branch rail in Waterbury and Amtrak service in Hartford.





# CT fastrak



# CT fastrak

- Grade-separated right-of-way
- Frequent, high-capacity service that results in passenger waits of less than 10 minutes during peak periods
- High-quality vehicles that are easy to board and provide a quiet, clean and comfortable to ride
- Pre-paid fare collection to minimize boarding delays
- Integrated fare systems, allowing free or discounted transfers between routes
- High quality bus stations with Transit Oriented Development (TOD) in nearby areas
- Integration with pedestrian and bicycle facilities, taxi services, intercity bus, rail transit and other transportation services
- Excellent customer service
- Effective security for transit users and pedestrians.

#### CONNDOT





