

**CONNECTICUT DEPARTMENT OF TRANSPORTATION
ROUTE 10 CTSS REPLACEMENT
TOWN OF CHESHIRE
STATE PROJECT NO. 0025-0150**

1. Project Description

The project limits on Route 10 are from Cook Hill Road (Int. No. 025-201) to Industrial Avenue (Int. No. 025-236). This project will provide full replacement of the traffic signal equipment and new fiber optic interconnect at fourteen (14) intersections and partial or minor upgrades at five (5) intersections along Route 10 corridor. The replacement of the CTSS communications system will establish reliable fiber optic communication connections between the signalized intersections with wireless communications back to the CTDOT's Newington Administration building and will allow for the implementation of advanced technologies to monitor traffic and reduce travel times. Specifically, the CTSS Components of the project will entail:

- Advanced traffic signal controllers to provide updated traffic signal and data collection functionality.
- Fiber optic interconnect among all project intersections to provide reliable, high bandwidth communications.
- Upgraded wireless communications back to the CTDOT's central traffic signal control software.

Traffic signal equipment/components such as span poles/mast arms, signal heads, signage, pre-emption, and detection will be upgraded to the latest standards. Where applicable, pedestrian control features will be upgraded or installed to include accessible pedestrian signals (APS) with pushbuttons and countdown signal heads. The project also incorporates (as needed) construction/reconstruction of curb ramps, blended transitions, sidewalk extensions, landing areas, detectable warning surfaces, realignment of skewed crosswalk pavement markings and associated adjustments to stop bars and detection zones, review of signal timings (including clearance intervals, pedestrian timings, and coordination information where applicable). All work will be designed to stay within the limits of the existing right-of-way where possible. However, construction and/or permanent easements may be needed for signal appurtenances and/or sidewalk ramps.

2. Purpose and Need

This purpose of this project is to replace the aging traffic signal infrastructure along the Route 10 corridor in the Town of Cheshire, as needed for a state of good repair, by replacing the existing Computerized Traffic Signal System (CTSS).

3. Scope of Work

The replacement of outdated traffic signal infrastructure to CTSS infrastructure along Route 10 will implement proven transportation systems and technologies that would largely benefit Connecticut. These transportation systems and technologies include:

- Advanced traffic signal controllers to provide updated traffic signal and data collection functionality.
- Upgraded traffic signal detection, using non-intrusive sensors to provide additional detection and visual capabilities.
- Fiber optic interconnect among all project intersections to provide reliable, high bandwidth communications
- Upgraded wireless communications back to the CTDOT's central traffic signal control software.
- Pedestrian safety enhancements throughout the corridor.
- Installation of new traffic signal infrastructure to replace infrastructure that has surpassed its life expectancy. New signal infrastructure will meet current MUTCD standards.
- Automated Traffic Signal Performance Measures (ATSPM)

Benefits from the improvements and technology include increased mobility, safety, reduced fuel consumption and congestion, and enhanced performance measures reporting capabilities.

TOWN	INT. NO.	INTERSECTION DESCRIPTION
Cheshire	025-201	Route 10 at Cook Hill Road
Cheshire	025-222	Route 10 at Everybody's Shop Center
Cheshire	025-231	Route 10 at Cheshire Shop Center
Cheshire	025-202*	Route 10 at Route 42
Cheshire	025-224	Route 10 at Higgins Drive
Cheshire	025-220*	Route 10 at High School Drive
Cheshire	025-219	Route 10 at Lanyon Drive
Cheshire	025-226*	Route 10 at Cornwall Avenue
Cheshire	025-203	Route 10 at Route 68, Route 70, and Academy Road
Cheshire	025-204	Route 10 at Route 68, Route 70, and Main Street
Cheshire	025-225*	Route 10 at Maplecroft Shop Center
Cheshire	025-238	Route 10 at Stop & Shop
Cheshire	025-235	Route 10 at Hinman Street
Cheshire	025-217	Route 10 at Weeks Road
Cheshire	025-211	Route 10 at Maple Avenue
Cheshire	025-212	Route 10 at Country Club Road
Cheshire	025-233	Route 10 at Jarvis Street
Cheshire	025-218*	Route 10 at Creamery Road
Cheshire	025-236	Route 10 at Industrial Avenue

*Partial Upgrade

August 22, 2024

4. Location Plan

