

EVERSOURCE

**GREATER HARTFORD –
CENTRAL CONNECTICUT
RELIABILITY PROJECT**

*Serving the neighborhoods
where we work and live.*

AT EVERSOURCE, WE'RE ALWAYS WORKING TO SERVE YOU BETTER. A new, 3.7-mile, hybrid overhead and underground line will be constructed between our Newington Substation in Newington, Conn., and our Southwest Hartford Substation in Hartford.

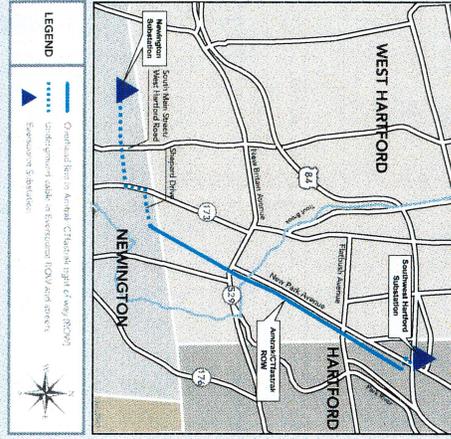
These improvements will strengthen our system so we can reliably serve electrical demand, in keeping with national and regional reliability standards. The project will also allow power to be redirected—north to south or south to north—during times of high customer demand, such as heat waves.

Construction will take place in portions of Newington, West Hartford, and Hartford. The new line will be located within Eversource's existing rights of way (power line corridors), under town streets and along the existing Amtrak rights of way. The project is expected to be in service by the end of 2019.

This work will not interrupt electric service to your property.

For more information about the **Greater Hartford – Central Connecticut Reliability Project**, send an email to TransmissionInfo@eversource.com, call 800-793-2202, or visit Eversource.com.

This poster is valid for 60 Eversource customers.



Greater Hartford – Central Connecticut Reliability Project
Project Route Map

EVERSOURCE
PO Box 270
Hartford, CT 06141-0270

Learn more about what you can expect during construction.

Project Facts:

- Route length:** Approximately 3.7 miles
- Line Location:** Newington, West Hartford and Hartford, Conn
- Line voltage:** 115,000-volt (115-kV) transmission line
- Substations:** Substation upgrades at Newington Substation in Newington and Southwest Hartford Substation in Hartford
- Siting review by:** The Connecticut Siting Council (CSC)

Schedule:

- Public Open Houses:** January 20, 2016, and April 27, 2017
- Application filing to the CSC:** June 7, 2017
- CSC Public Hearing:** August 22, 2017
- CSC approval issued:** February 1, 2018
- Start of construction (pending all necessary approvals):** Fourth Quarter 2018
- Estimated in-service date:** Late 2019

The new 115-kilovolt (115-kV) transmission line will be constructed in two segments: underground in Newington and Hartford, and overhead on new, single-pole structures along the Amtrak/CTfastrak corridor in Newington, West Hartford, and Hartford. During construction, you may notice an increase in truck traffic to support the delivery of equipment and materials to construction areas.

See poster inside! >>>

Underground

Underground transmission cable construction typically occurs in the following sequence:



<p>1. Vegetation Removal</p>	<p>2. Site Preparation</p>	<p>3. Manhole & Duct Bank Installation</p>	<p>4. Cable Installation & Splicing</p>
<p>In areas where a portion of the underground cable will be located outside of the roadway, vegetation may have to be removed for construction access as well as to establish a safe work area. The work area will look different after clearing the vegetation; however, native shrubs and ground cover will be allowed to grow back.</p>	<p>Before construction starts, the underground cable location will be surveyed and existing utilities will be marked out. For construction within or near streets, traffic control measures will be put in place to provide a safe working area.</p>	<p>After existing utilities are surveyed, manholes will be installed along the route. Manholes are pre-cast concrete vaults that are installed at specific intervals to allow crews to pull and splice the new cable. After restoration, there will be no visible evidence that a manhole is installed at the location other than the manhole lids visible in the street or within the right of way.</p>	<p>Once manholes are installed, the duct bank trench, which houses the electric cables, will be excavated, and conduits will be installed. The conduit is a protective tube that the electric cable will be pulled through. The trench will then be backfilled, usually with a cement mix called flowable fill, and may be topped with temporary pavement or topsoil.</p> <p>Cable installation and splicing takes place after the duct bank and manholes are installed. Pulling cable typically involves a reel of cable placed on a truck at one manhole, and crews pulling the cable from the next manhole along the route. The cable is then spliced together within the manholes. Cable splicing is a complex procedure requiring a controlled atmosphere, and is a continuous operation performed by qualified technicians. Splicing involves a splicing van, an air-conditioning unit, a dewatering pump, and a generator at each manhole location. Splicing typically lasts three to five days per manhole, working 24-hour shifts.</p>

5. Restoration

When all underground construction work is completed, we will restore the affected areas. In general, surface restoration is done to meet the pre-construction conditions.

For in-road construction, typically, a section of the pavement will be milled and paved during this process. Eversource will work directly with the affected municipalities on restoration of road surfaces. Where construction occurred in the shoulders of the roads or in off-road areas, the surface will be covered in a layer of topsoil and grass seed.

Overhead

Overhead transmission line construction will be done in several stages, some overlapping in time:



<p>1. Vegetation Removal</p>	<p>2. Site Preparation</p>	<p>3. Structure Installation</p>	<p>4. Conductor Installation</p>	<p>5. Restoration</p>
<p>Before construction can begin, the right of way must be surveyed and vegetation must be removed from the work areas to create a level, safe work area. For reliable system operation, tree species such as tall-growing maples, oaks and pines will be removed. The work area will look different after clearing the vegetation; however, native shrubs and ground cover will be allowed to grow back.</p>	<p>Construction vehicles and equipment will need access to each structure. The existing Amtrak access road and access points will be used as much as possible. Level work areas will be built around each structure to provide a stable site for large equipment such as drill rigs and cranes. Gravel may be added to existing access roads. Timber matting may be used to establish work areas and roads in environmentally sensitive areas like wetlands. Silt fencing and hay bales may also be used to protect the environment during construction.</p>	<p>The new transmission structures will be installed along the east side of the Amtrak right of way. Drill rigs will be used to drill foundations for each new structure. There are a few types of foundations that will be installed, depending on the location and topography, among other factors. "Direct-embed" foundations involve setting the base section of the structure in the hole, and then backfilling the hole with processed rock. For concrete</p>	<p>foundations, a steel rebar cage is placed in each hole and secured with concrete. Once the concrete cures, then the structure base is bolted to the foundation. The new steel structures are delivered to the work areas in sections. Cranes and/or bucket trucks are used to lift the structure sections and set them into position on the foundation. After the structure is set, it will be grouted and insulators will be installed on each arm.</p>	<p>Once the structures are set, the new conductor for the transmission line is installed. Each structure has temporary pulling blocks (pulleys) where the conductor will attach to the insulators. Conductor-pulling sites are set up at intervals along the right of way, and the conductor is pulled between these sites through the pulling blocks on each structure. At times a helicopter may be used to install the conductor. Once it is installed, the pulling blocks are removed and the conductor is secured into its final position.</p> <p>When construction is complete, disturbed areas will be restored. Native shrubs and ground cover can regrow. Environmental controls are removed after the area is stabilized. In areas that were previously landscaped, Eversource works with property owners to restore the area to its pre-construction condition. Before construction is complete, a project representative will visit affected property owners to develop property-specific restoration plans. These plans will require the final approval of both the property owner and Eversource.</p>

CONTACT INFORMATION

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