

Hartford Line Year One Report





June 17, 2019

Message from the Commissioner

The Connecticut Department of Transportation (CTDOT) is pleased to report on the progress of the Hartford Line and the first year of train service.

Hartford Line service was launched in June 2018 to provide faster and more frequent rail service between New Haven, Hartford and Springfield. The new service has averaged nearly 51,000 passengers per month and Hartford Line ridership is on track to exceed 630,000 passenger trips in its first full year of operations.

Further, riders have responded positively when asked for their feedback about the service. Overall customer satisfaction is high with 87.6 percent of riders reported being satisfied with their Hartford Line experience.

These impressive ridership numbers are only part of the success story of the Hartford Line. The Hartford Line has spurred \$430 million in transit-oriented development in Wallingford, Meriden, Berlin, Windsor, and Windsor Locks. These new residential and commercial developments, combined with convenient rail service, help to connect communities and generate economic growth while providing a strategic link to travel corridors and markets within and beyond the region.

The Hartford Line is providing a reliable, quality service to the entire New Haven, Hartford, and Springfield corridor. Visit hartfordline.com and click on "Quick Facts" to learn more about the impacts the Hartford Line has had in the region.

Joseph Giulietti

Commissioner
Connecticut Department of Transportation

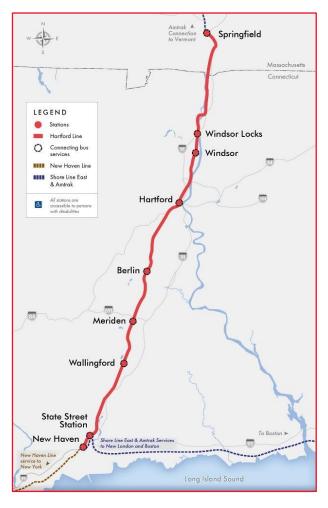


What is the Hartford Line?

The Hartford Line is a sixty-two-mile groundbreaking intercity high-speed rail service between New Haven, Hartford and Springfield, MA, serving nine stations. Hartford Line service is delivered by a mix of Amtrak-operated trains and CTrail Hartford Line trains operated by CTDOT's service provider, Transit America Service Inc./Alternate Concepts Inc. (TASI/ACI), a joint venture.

With new infrastructure improvements, the Hartford Line now reaches maximum speeds of 110 mph, which has reduced the 90-minute travel time between New Haven, Connecticut and Springfield, Massachusetts to as little as 80 minutes. Along with Hartford Line partners Amtrak and TASI/ACI, CTDOT is providing a reliable, quality service to the entire New Haven, Hartford, and Springfield corridor.

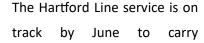
Hartford Line service provides convenient connections to New Haven Line service to New York City, Amtrak Northeast Corridor rail services and Shore Line East to/from New London.

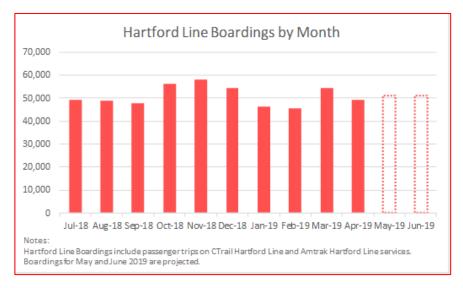


Operations & Performance

Ridership

From July 2018 through April 2019, ridership on the Hartford Line has averaged 51,000 passengers per month, with 2,000 boardings on a typical weekday. The highest weekday ridership was 3,500 boardings on the Wednesday before Thanksgiving.





approximately 634,000 riders in the first year. This compares favorably with ridership projections for the line; it was estimated that the Hartford Line would carry approximately 583,500 riders in the first year.

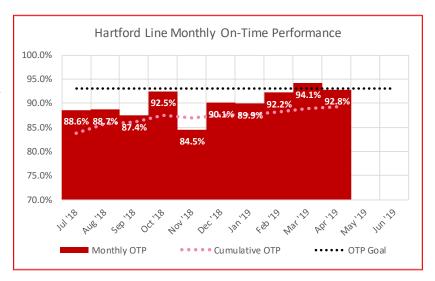
Expenses and Revenues

Hartford Line service is provided by two service providers, TASI/ACI and Amtrak. The expenses for these services include, but are not limited to, labor, fuel, rail car lease payments, locomotive and rail car maintenance, station maintenance, snow removal, and ticket vending machine maintenance and support. The expenses do not include one-time mobilization costs to initiate service. First year actual budget numbers will be reported in September 2019.

Hartford Line Estimated Annual Budget	
	State Fiscal Year 2019
	(July 2018-June 2019)
Expenses	\$43.9 million
Revenue	\$7.2 million
Subsidy (federal & state)	\$36.7 million

On-Time Performance

On-Time Performance (OTP) is the primary measure of reliability for a passenger rail service. CTDOT has established a goal of 93% OTP for the Hartford Line. CTrail Hartford Line OTP is defined as trips arriving at their destination no more than 5 minutes and 59 seconds after the scheduled time. Amtrak, because many of their trains travel longer



distances outside of the Hartford Line corridor and are sometimes held for connections to other Amtrak trains, defines OTP as trips arriving at their destination no more than 10 minutes after the scheduled time.

The figure above represents OTP for the Hartford Line on a monthly basis from the beginning of service in July 2018 through April 2019. The OTP calculations include all trips on the Hartford Line, both CTrail and Amtrak. The Hartford Line achieved OTP in the 80-90% range for the first several months of service and has seen recent improvement in service reliability. Cumulative OTP from July 2018 through April 2019 was 89%.

Passenger Experience & Customer Satisfaction

Hartford Line customers were surveyed in mid-November 2018 to determine satisfaction with the service and equipment, customer demographics, travel patterns, and identify areas of improvement. The following are key findings from the survey:



The busiest Hartford Line train stations were New Haven Union (41.0%), Hartford (25.5%) and Springfield (10.1%).

A "one-way" ticket (70.7%) was the most frequently purchased ticket. Riders reported using a "U-Pass CT" (13.9%) or a "monthly pass" (13.7%). More than four-inten riders purchased their ticket at a CTrail ticket vending machine (44.8%), while more than one-third utilized either the Amtrak website (22.1%) or Amtrak mobile app (11.3%) to purchase their ticket.

Nearly one-half of riders (46.0%) utilized the Hartford Line for a "social / recreational" use. Business-related needs also accounted

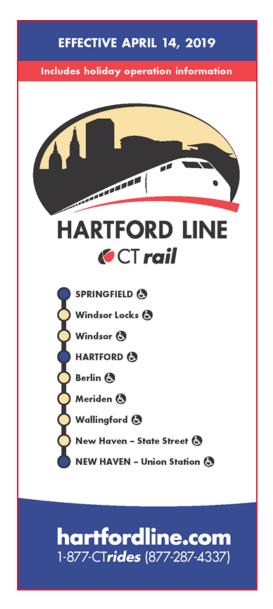
for nearly four-out-of-ten trips, as riders also used the line for their "commute to from work" (25.4%) or for "business" (14.3%).

More than 80.0% of all riders reported being satisfied with each of seven (7) characteristics related to the train they rode. The primary drivers of satisfaction were the "availability of seating" (92.0%), "lighting inside the train" (89.7%) and "air conditioning / heating" (88.4%). Riders were highly satisfied with the Hartford Line's customer service, as 91.3% reported being satisfied with the "on board staff". Lagging was rider satisfaction with respect to "Twitter: @HLAlerts" (74.0%).

Overall satisfaction with the service quality was high, as all five (5) characteristics rated received a satisfaction score of at least 90.0%, led by the "on board ticket collection" (94.3%) and "courtesy of crew" (93.5%). A strong majority of riders (87.6%) reported being satisfied overall. Less than 5.0% of riders reported dissatisfaction.

The survey also asked riders which passenger amenities they would like to see added to the Hartford Line; the top-rated amenities of importance to riders were tied to information/technology and the ability to stay connected and up-to-date. Riders prioritized the importance of "power outlets to charge electronic devices" (92.3%), "real-time Information on platform" (92.3%), "real-time arrival information on mobile device" (90.1%) and "Wi-Fi" (88.7%). Riders preferred digital mediums as the primary sources for gathering information on the Hartford Line's service schedule, or to be notified of service alerts. Nearly two-thirds of riders (63.9%) would look to the "website" for service schedule Information while 46.6% would utilize "text / SMS message" as a means of receiving service alerts.

Importantly, the vast majority of riders (94.4%) are either "very likely" or "likely" to recommend the Hartford Line.



System Elements

Train Equipment



CTrail Hartford Line trains use Messerschmitt - Bolkow - Blohm (MBB) trainsets leased from the Massachusetts Bay Transit Authority (MBTA). CTrail Hartford Line trains are powered by CTDOT-owned GP40 locomotives, which are also used in Shore Line East service. The trainsets and locomotives are maintained by Amtrak, as part of the Shore Line East contract, and operated by TASI/ACI under the Hartford Line Service Provider agreement. The equipment has performed well in the first year of operation with no major failures or other maintenance issues.

To improve the customer experience, CTDOT has been pursuing two upgrades to onboard amenities on the MBB coaches: bicycle racks and ADA-accessible restrooms.

Bicycle Racks

The CTrail Hartford Line service has seen great interest and usage from the bicycling community from the very early days of operation. Bicycles were initially allowed on-board during off-peak hours only.

CTDOT has worked collaboratively with bicycle advocates to retrofit rail cars with bicycle racks. Each rail car accommodates four bicycles, allowing for up to twelve bicycles on each train. Through the end of May 2019, CTrail Hartford Line trains transported 1,356 customers with bicycles.

ADA Restrooms

The MBB coaches used in CTrail Hartford Line service were built in the late 1980's, before the Americans with Disabilities Act. When they were built, they were constructed to the latest industry guidelines.

Although the rail car doorways and aisles are accessible to persons with mobility impairments, the onboard restrooms are not. CTDOT and TASI/ACI have contracted with a vendor to retrofit restrooms to make them fully compliant with current ADA regulations. The first two rail cars with modified restrooms are expected to join the CTrail Hartford Line fleet in late June 2019. By the end of this retrofit program, every available restroom on CTrail Hartford Line trains will be accessible.

Stations and Parking

TASI/ACI is also responsible for managing and maintaining the three CTDOT-owned stations at Wallingford, Meriden and Berlin as well as providing maintenance services at the high-level platform in Hartford. Station maintenance activities in the first year of operation have been comprehensive. TASI/ACI is also responsible for assisting CTDOT in managing the installation and maintenance of several new station systems along the Hartford Line, including an electronic Passenger Train Information System and power and communications services for ticket vending machines.

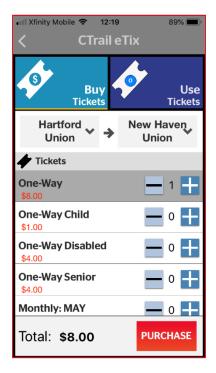


In addition to station maintenance, TASI/ACI is responsible for three parking facilities at Wallingford, Meriden, and Berlin. This includes maintenance, management of the parking payment equipment, and collecting revenue for CTDOT. The facilities at all three stations provide ample parking for Hartford Line customers, including daily users and monthly permit holders, at a low cost of \$2 per day or \$20 per month. Parking remains available at Wallingford, Meriden and Berlin stations.

Ticket Vending Machines and Electronic Ticket Sales

CTDOT contracts with Trapeze Group for the installation, maintenance, and management of the nineteen CTrail Ticket Vending Machine (TVMs) on the Hartford Line, as well as revenue collection from the TVMs. The TVMs have performed well, with TVM in-service availability across the system averaging 97%, exceeding the up-time goal of 96% in nearly every month.





Trapeze is also contracted for the development of electronic fare payment options for CTrail. While passengers can purchase CTrail tickets at TVMs at each station, CTDOT is working towards making the purchase of tickets even easier using the latest technologies. Working with Trapeze, CTDOT is developing a mobile application - CTrail eTix that will allow customers to purchase single tickets and passes, as well as daily parking at Berlin and Wallingford, from their smart phones for all Hartford Line and Short Line East trains. When the app is rolled out, conductors will initially visually inspect mobile tickets and in the future move to scanning tickets via a handheld device. Additionally, in the next phase, the electronic fare program will be expanded to include Apple Pay and Google Pay functionality.

In May 2019, the CT*rail* eTix Pilot began with a select group of regular Hartford Line customers being provided with the pilot version of the app to begin using and testing the app's functionality. The feedback of regular rail riders will be critical in refining the final version of the app for wide distribution later in 2019.

Station Area Developments

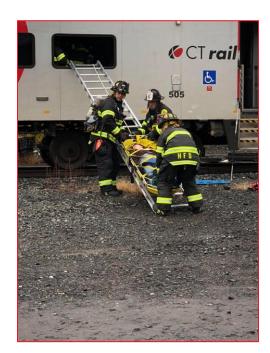
A key benefit of the Hartford Line and the new stations in the towns along the corridor is the encouragement of new residential and commercial development focused around the stations. This Transit Oriented Development (TOD) consists of mixed-use (residential & commercial) developments in a walkable environment allowing residents, employees, and shoppers the opportunity to conduct their daily business using the Hartford Line. Direct investment around Hartford Line stations is at least \$430 million. The following bullets describe some of the developments at Hartford Line stations:

- Meriden, a key station stop along the Hartford Line, is an emerging transit center and an early transit-oriented development (TOD) success story. The City's TOD program seeks to transform the half-mile area around it into a vibrant neighborhood that includes new residential and commercial development, public spaces and improved access to public transportation. Several other projects are completed or underway, including construction of three, mixed-use TOD projects that include 295 new residential units and 31,000 square feet of commercial space, a 273-space parking garage, a 14-acre town green, and demolition of the Mills public housing project and the former Record Journal building. Ongoing public and private investment in Meriden's TOD projects exceeds \$150 million.
- Wallingford completed a TOD Plan that features shifting existing industrial development to the
 north, freeing up space for mixed-use and retail development in the downtown. The existing
 Parker Place apartment complex near the station offers a precedent for TOD and is expanding 200
 units. The Town is also making efforts to encourage and support TOD by creating a new Town
 Center zoning district and reducing off street parking requirements.
- **Berlin** is seeking to improve accessibility between Depot Crossing, a mixed-use development on Farmington Avenue and the new station. The Town is advancing several redevelopment opportunities near the station, while maintaining the existing character of the area.
- Windsor, capitalizing on a "charrette" held in 2013, the town obtained local input before it began working on development of a new residential complex now called "Windsor Station Apartments". This new construction, which opened in 2017, is directly adjacent to the historic Windsor train station. The \$23 million project contains 130 apartments and is almost 100% tenant occupied.
- Windsor Locks completed a TOD Plan that outlined potential development sequencing options in conjunction with infrastructure improvements and local regulatory changes. The Town also secured State funding to complete pre-development site work and complementary roadway improvements near the future station. Montgomery Mills is a former mill that has been adaptively redeveloped into 160 residential units that will help create a transit town center along Main Street.

Economic Development along the Hartford Line

The addition of CTrail Hartford Line accomplished more than just improving commuting in the area. It has invigorated development activity around the Hartford Line stations. Over the past few years, an estimated \$430 million has been invested in new development.

Approximately 1,400 residential units and 242,000 square feet of commercial and office space have been constructed or are being designed. These new transit-oriented developments serve as places where people can live, shop, eat and have fun, with easy access to commute by rail.



Safety and Security

Emergency Drill

On November 3, 2018, CTDOT organized a full-scale Passenger Train Emergency Simulation (Drill). The Drill simulated a collision between a CTrail Hartford Line train and a Connecticut Southern freight train. The Drill involved TASI/ACI, Amtrak, City of Hartford Fire & Police Departments, TSA, FBI, and State Police.

The purpose of the Drill was to test the emergency response for train crews, dispatchers, first responders and public information officers called to handle a passenger train emergency involving a train collision.

Operation Lifesaver

Operation Lifesaver is a non-profit national public safety education and awareness program dedicated to reducing collisions, fatalities and injuries at grade crossings and trespassing on or near railroad tracks. CTDOT administers this program in Connecticut.

In anticipation of the start of CTrail Hartford Line service, Operation Lifesaver began an outreach program targeting fifteen communities along the rail line. The program contacted school districts and municipal agencies (government, police, fire, and public works) and provided information about the Operation Lifesaver program. Operation Lifesaver also conducted community outreach at various fairs and events throughout Connecticut. Some of these events included the Durham Fair, Celebrate Wallingford, Meriden Daffodil Festival, The Big E and Department of Motor Vehicle monthly events.

From January 2018 to present, 20,720 people have received the Operation Lifesaver awareness training. This breaks down to 18,985 K-8 students, 311 driver education students and 581 adults. Operation Lifesaver attended 121 events and had direct contact with approximately 37,653 people. They also attended train station opening events for Wallingford, Meriden and Berlin as well as CTrail opening day June 13, 2018.

CTDOT Operation Lifesaver continues to do railroad safety outreach, partnering with Metro-North, Connecticut State Department of Education and the Department of Motor Vehicles.



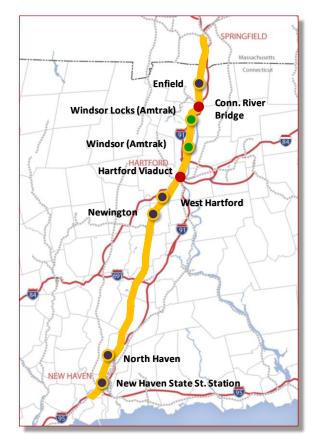
Future Investment Opportunities

Prior to the initiation of CTrail Hartford Line service, CTDOT made numerous capital improvements on the Hartford Line, these included twenty-seven miles of new double track, two miles of passing sidings, five new interlockings and a second platform at Windsor Station.

CTDOT has identified future Hartford Line capital projects that will provide even greater connectivity to passengers and more frequency of service along the entire corridor.

These projects include:

- Completing double track installation between Windsor and Enfield to allow for additional trips
- Reconstruction of the Windsor and Windsor Locks stations
- Construction of new stations at North Haven, Newington, West Hartford, and Enfield
- Reconstruction of the Hartford Viaduct and the Connecticut River Bridge in Windsor



More information about these and other future capital projects is available on the New Haven-Hartford-Springfield Program website: http://www.nhhsrail.com