

NEW HAVEN UNION STATION

VISUAL INSPECTION REPORT



January 2007



Prepared by the Bureau of Public Transportation
Connecticut Department of Transportation

Overview:

New Haven’s Union Station is one of the busiest stations on the New Haven Line. It is located between downtown New Haven and the Long Wharf area. An 800-car garage and additional surface parking are provided for rail commuters. Intercity and regional buses as well as taxi service are available. This station is in good condition.



The historic Union Station was built in 1917. With the decline of passenger service in the middle 1900’s, the station was closed in 1954. In 1979, the Northeast Corridor Improvement Project began the process of restoring the station to its original splendor. Today, the waiting room looks magnificent. Its large, Italian-made Solari message board clacks away announcing train arrivals and departures, reminiscent of days long past. Offices above the station have been renovated for the Connecticut Department of Transportation, Amtrak, Metro-North and the New Haven Parking Authority.

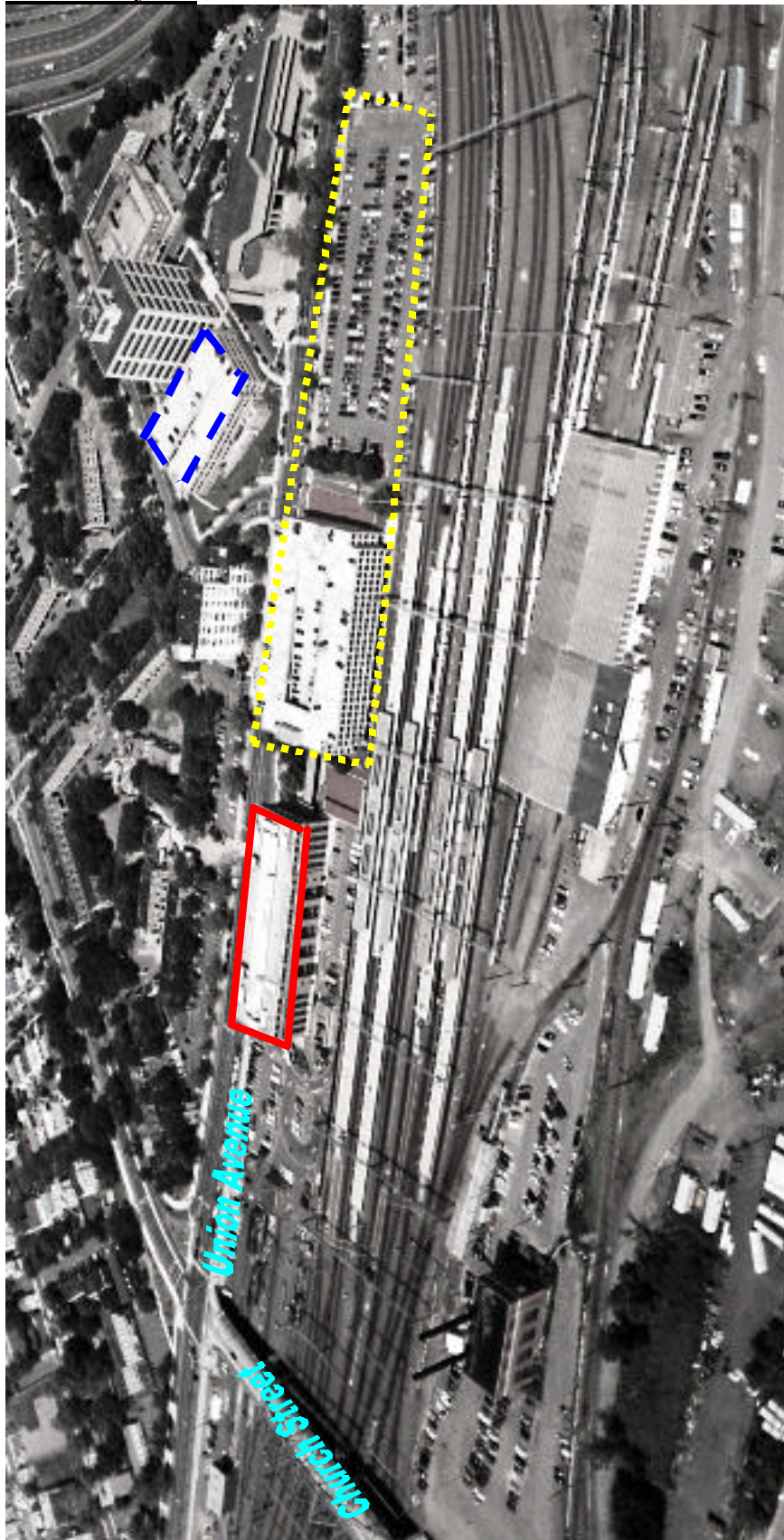
A tunnel to the four center island platforms was reconstructed as part of the renovation. Elevators, escalators and other amenities provide ADA access throughout the public areas of the station. The parking garage connects to the waiting room under a short, canopy-covered walkway. Additional surface parking is located beyond the garage. A private parking garage is located across the street. The south end of the station accommodates intercity bus service. Local buses and taxis utilize the front (Union Avenue) side of the facility. An employee parking lot lies behind the station building.

Across the tracks from the station is the New Haven Rail Yard, which is in the middle of a multimillion-dollar reconstruction.

Maintenance Responsibilities:

Owner:	CDOT
Operator:	New Haven Parking Authority
Platform Lights:	Metro-North
Trash:	Metro-North
Snow Removal:	Metro-North
Shelter Glazing:	New Haven Parking Authority
Platform Canopy:	Metro-North
Platform Structure:	Metro-North
Parking:	New Haven Parking Authority

Station Layout:



- Station Building
- State-Owned Parking Area
- Municipality-Owned Parking Area
- Privately-Owned Parking Area

Train Station Visual Inspection Parameters:

The Connecticut Department of Transportation (Department) recently inspected all 36 New Haven Line train stations to assess their appearance, safety, means of access and overall condition. Observations have been noted in an inspection report prepared for each station. The findings of these individual reports will be used to develop a Station Improvement Program. Initially, maintenance issues will be passed along to responsible parties for resolution. Soon after, a series of improvement projects will be recommended, followed by a long-term program of maintenance repairs and capital improvements.

The following station components were reviewed as part of the visual inspection process:

- **Highway Access** – While traveling to each station, inspectors observed the placement of trailblazing signage. In addition, they assessed the ease of locating appropriate station parking and drop-off areas. Typically, a green highway sign has been placed in advance of the proper exit for a particular train station. This sign notes the name of the station and commuter service operator. However, trailblazing signage at ramp termini or on secondary routes is typically missing or indistinguishable amid the clutter of other signs. Primary routes from the major roadways to each station need to be established and prominently identified. Conversely, trailblazing the return route is also required.
- **Parking** – This station reports cover signage, illumination and pavement condition issues within station parking areas. The Department and municipalities will address parking capacity and demand matters separate from this report.
- **Platforms** – Each station report details observations related to the general condition of the platforms, stairs, ramps, handrails and railings. The reports also incorporate the comments and recommendations of the Department's Connecticut Rail Station Governance Study - May 2005 (Governance Study) and High Level Platform Visual Inspection & Inventory. The latter inspection effort addresses only main line stations. The Department will inspect branch line platforms and canopies in the second phase of the high-level platform inspection program and incorporate the findings into future improvement projects
- **Canopies** – Each station report details observations relative to the general condition of any canopies located at the station. As noted under the Platform heading above, other studies have been referenced in presenting the findings for this component of the station.
- **Illumination** – The observations noted in each station report do not include a specific heading for illumination. Field visits occurred during daylight hours, thus inspectors could not assess the effectiveness of illumination in parking areas, along paths or on the platforms. Comments have been included in other headings relative to the number of fixtures, location and assumed coverage. This station report incorporates the comments of the Governance Study, where appropriate. However, the reports generally recommend that any first phase of station improvement include an evaluation of illumination levels in all areas of the stations and upgrade light fixtures, as necessary.

- **Painting** – As with illumination, the station inspection reports address painting issues under the appropriate headings.
- **Walks and Paths** – This station inspection report makes note of paved paths between parking areas, streets and station platforms. Where appropriate, general observations of the condition of the paths, vegetation, lighting, signage and stairways along the paths have been included.
- **Ticket Vending Machine (TVM)** – Metro-North has placed TVM's at most high volume stations. Where appropriate, this station report notes current locations. The Department and Metro-North plan to install at least one full service TVM at all main line and branch line stations. They will accomplish each of these installations based on ridership demands and funding availability.
- **Shelter** – Many platforms have shelters in lieu of adjacent waiting areas in station buildings. Typical Plexiglas or glass shelters protect waiting commuters from the elements. Many of these structures are similar to curbside shelters found along local bus routes. If appropriate, this report notes the location and general condition of platform shelters. It also addressed the need for new or additional protective structures.
- **Station Building** – The typical New Haven Line station building is a historic structure with a waiting room, rest room, and ticket office. Some have a coffee shop and/or newsstand. Where appropriate, observations have been incorporated into the station reports. Where station buildings were closed at the time of site visit, applicable findings of the Governance Study have been included in the report.
- **Taxi Stands and Bus Stops** – Taxis can physically access most station areas with the exception of parking garages and gated lots. Several stations have designated taxi stands. However, roadway geometry may limit bus access to most train stations. Stations with narrow parking aisles, tight turns or dead ends can accommodate bus patrons by placing bus stops on nearby streets. This report notes general taxi and bus accessibility issues.
- **Variable Message Sign (VMS)** – Every New Haven Line station has an audio PA system consisting of the typical “steel can” speaker or horn. The inspectors did not assess the regularity, audio levels or content of public announcements. These matters will continue to be addressed by the Department and station operators. Variable message signs or VMS provide a visual backup to audio announcements. These signs not only assist the hearing challenged. They also provide necessary train information over the din of large stations, nearby construction activities or noisy rail equipment. Currently, Metro-North is installing VMS at the designated “key” stations listed in the ADA section below. The Department and Metro-North intend to address visual messaging needs at all stations based on ridership demands and funding availability.

- **Signage** – This heading includes general observations of signs placed on platforms, along paths and in other areas of the station. Inspectors attempted to look at the signage as a first time or infrequent user. Their observations are noted in this report. In addition to observations noted within this topic, signage issues are addressed under the Highway Access and Parking headings.
- **Fence** – Nearly every station uses metal fencing beyond the platform ends to restrict unauthorized access to the tracks. Fencing has also been installed to secure parking areas, demarcate private property or cordon off potentially hazardous areas. Most locations employ a chain link fence, although occasional ornamental steel, cast iron or wood fences can be found. The condition of station fencing has been noted in this report.
- **Litter** – Litter may be the most conspicuous distraction at train stations. Patrons appreciate a well-maintained facility. For this report, inspectors have noted the general appearance of the station including areas under and behind platforms, along paths, around station buildings and in parking lots. It should be noted that these comments are depict the station condition only for the day of the site visit. It is assumed that station operators and Metro-North will continue to maintain the train stations to the high standards of the rail commuters.
- **Americans with Disabilities Act (ADA) Access:** The New Haven Line has its origins in the 19th Century, so many of the stations do not conform to the current ADA standards. Due to funding limitations, the Department cannot upgrade all New Haven Line stations at this time. Therefore, State and federal agencies have incorporated a “key station” upgrade program for twelve of the stations (Greenwich, Stamford, Darien, South Norwalk, Westport, Bridgeport, Milford, New Haven, New Canaan, Danbury, Waterbury, and the proposed Fairfield Metro Station). The remaining facilities will be upgraded over time. Meanwhile, the Department will continue to incorporate code compliant materials and practices into all of its current and planned station upgrades and improvements.
- **Amenities** –This inspection report addresses the inspectors’ observations of amenities placed around the stations. These may include items such as benches, trash cans, platform and stair railings, entrance signs, kiosks, vending areas, bike racks, station color schemes, clocks and light fixtures.
- **General Remarks** – General comments may be included at the conclusion of each observation report to address those matters that do not fall within the criteria of the above list of headings.

Observations – August 31, 2006:

Highway Access – New Haven’s Union Station is located between the City’s downtown area and Long Wharf. The station entrance is on Union Avenue and is easily accessed from Route 34 or the new Church Street Extension that passes over the rail yard. Additional trailblazing signage should be considered along both routes.

Parking – Parking is accommodated by the adjacent 800 car parking garage. Additional surface parking is available just beyond the garage. The garage is about 20 years old. Its condition appears to be good, but additional structural inspections should be performed on a regular basis to address potential concerns with this aging facility. The main exit from the garage has very restricted sight distance for oncoming cars and sidewalk pedestrians.

Platforms & Tunnel – The four center platforms are accessed by tunnel from the waiting room. Elevators, escalators and stairs provide access from the waiting room to the tunnel. Each platform is accessed by elevators and stairs. Lighting levels appeared to be sufficient. However, rust is prevalent on many light bases with some rotting through. The rub rails are rotted in several places and need a coat of paint. There are several tripping hazards (old light bases, light base bolts, conduit, etc.) that need to be eliminated. Power feeds to several platform vending machines does not meet electrical code. The gates at the ends of the platforms are left open. The gate at the south end of the easternmost platform is too small for the opening, which should be corrected. Ramps at the ends of the platforms should have tactile warning sections placed at the bottom edges.

The tunnel is well light. It has a modern, contoured metal siding. Although the condition of the concrete behind the metal sheathing was not accessible, previous inspections have noted drainage issues, which are to be addressed by a project currently in design. There is evidence of water leakage at the base of a few stairways. The railing along one of the stairways has pulled apart from its connection. Several kick panels are pulling away from the stair risers.

Canopy – Canopies are in good shape, although a coat of paint is needed here and there. Many canopy lights are damaged and/or rusted requiring repair or replacement. Many drainage fixtures suffer from rust and peeling paint. A few pipes are rotted through.

Walks/Paths – Public paths are limited to the canopy connection to the garage and city streets, all of which are in good condition. Employee paths extend beyond ends of all platforms. Additional signage and/or warnings may be required to avoid public encroachment.

Ticket Vending Machine (TVM) – TVM’s are located in the main station waiting room.

Shelter – Each stairway and elevator to the platforms affords shelter from the elements.

Station Building – As noted above, the 1917 station building was given a major rehabilitation in the 1980’s. Additional improvements have been made to the magnificently restored building since. The Waiting Room is spacious with plenty of seating. Ticket offices, concessions and train offices occupy its perimeter. The Solari message board informs passengers of arrival and departure time changes, and it provides special messages when required. Bathrooms are clean and accessible.

Bus Access & Taxi Stand – Intercity buses are available off the south end of the waiting room. Local buses and taxis wait just outside the front doors.

Signage – Signage in and around the station and platforms is adequate. However, ADA needs are to be addressed by a communications upgrade project currently in design.

Fences – The black chain link fencing between the back employee lot and the tracks was recently replaced. Gates and fencing at the ends of the platforms are in good condition. However, as noted above, one of the gates is too small for the opening.

Litter – All areas of Union Station are relatively clean with only an occasional piece of paper out of place. It appears that the station operator and railroad keep up with the housekeeping, including graffiti removal. Blue recycling bins are spread out on all the platforms.

Americans with Disabilities Act (ADA) Access – Under a project currently in design, the station's public address will be upgraded and variable message signs placed at appropriate locations along the platforms, tunnel and waiting room.

Amenities (See Appendix A Photos)

- Kiosk: The station waiting room has nearly everything need to disseminate information to the passengers.
- Exterior Paint Theme: The brick exterior of the station building is in good condition. The color of the platforms is light blue.
- Vending: The station waiting room and tunnel have several fast food outlets, as well as vending machines. There is also news and candy shop on the main level. Each platform has soda and candy machines.
- Benches: The waiting room has adequate seating. The tunnel and platforms have none.
- Railings: Most railings are found on the ramps at the end of the platforms. These are showing some rust at their base connections.
- Light Fixtures: Many platform and canopy lights fixtures are rusted, bent or broken.
- Trash: Blue recycling bins are spread out on all the platforms.
- Bicycle Rack: Bike racks can be found behind the northeast corner of the parking garage near the attendant's booth.
- Platform Clock: There are no clocks on the platforms.

General Remarks – New Haven's Union Station is a beautifully restored facility that provides for the needs of area commuters. It has transit connections to local, regional and distant destinations. Most elements requiring attention are being included in upcoming projects.

Recommended Repairs, Upgrades and Improvements:

At the urging of the Governor, the Department is establishing a program of repairs, upgrades and improvements to better the appearance, safety, and functionality of all 36 New Haven Line Stations. As a first step, the Department will continue to pass along all maintenance concerns to station operators for their immediate attention. The next step will be to have the Department and station operators upgrade station amenities. These might include benches, kiosks, railing, light fixtures, trash cans, bike racks, clocks and other common station elements. When funding becomes available, the Department will initiate a project to commence the upgrade of amenities at the stations.

With the cooperation of municipalities and Metro-North, the Department will review, categorize, and prioritize the findings listed under the Station Governance heading below. In addition, the recommendations of the High Level Platform Visual Inspection Report and the Connecticut Rail Governance Study will be considered. The resulting priority listing will include a number of projects to accomplish the repairs, upgrades and improvements needed to bring the New Haven Line Commuter Rail Service up to the commuters' expectations.

Finally, the Department anticipates that a number of major capital improvements may result from a comprehensive review of the findings of these station inspection reports. These might include the installation or extension of high-level platforms and canopies, the replacement or addition of shelters, and major ADA improvements. As noted earlier, the Department and individual municipalities will address parking issues separate from this report. However, these too may demand major capital investments. Finally, the recently completed Danbury Branch Feasibility Study and similar reports planned for the New Canaan and Waterbury Branches could lead to other capital improvements at some of the branch line stations.

The findings of this Visual Inspection Report and recommended solutions for station repairs, upgrades and improvements are listed below:

Maintenance Repairs:

- Repair and/or replace broken and rusted light fixtures.
- Repair, replace and/or cover rusted light post bases.
- Eliminate platform tripping hazards.
- Repair loose stairway kick panels.
- Fix loose handrail along platform stairs.
- Determine source of platform stairway water leaks and repair if necessary.
- Eliminate non-code conforming conduit connections to platform vending machines.
- Review practice of leaving gates open at the ends of the platforms.
- Paint canopies
- Repair and paint drainage pipes/fixtures.
- Repair and repaint platform edge wooden rub rail (Metro-North).
- Replace undersized gate at south end of easternmost platform (Metro-North).

Amenity Upgrades:

- Consider placing benches on the platforms.
- If the railing on platform ramps has to be replaced, use black railings.
- Replace light fixtures with period theme fixtures.
- Considered adding trash cans at the west end of the tunnel.
- Place clocks on the platforms.

Governance Improvements:

- Improve and supplement trailblazing signage to and from the station.
- Place tactile warning sections at bottom of ramps.
- Place Braille warnings at platform ends. Install other Braille signage.

Major Capital Improvements:

- Improve main garage entrance/exit sight distance.
- Upgrade station building to code.
- Rehabilitate tunnel.
- Upgrade PA system and install variable message signs.
- Refurbish station building elevators.

-- END OF NARRATIVE --



Union Station - South Tunnel Tube

APPENDIX A



Pole Mounted Lights



Bench (Contemporary) and Railing



Trash Can (Black preferred)



Typical Trailblazing Sign



Solari Train Information Board



Broken Canopy Lights



Rust Light Pole Base



Power Feed Hanging from Canopy



Gap in Platform Gate