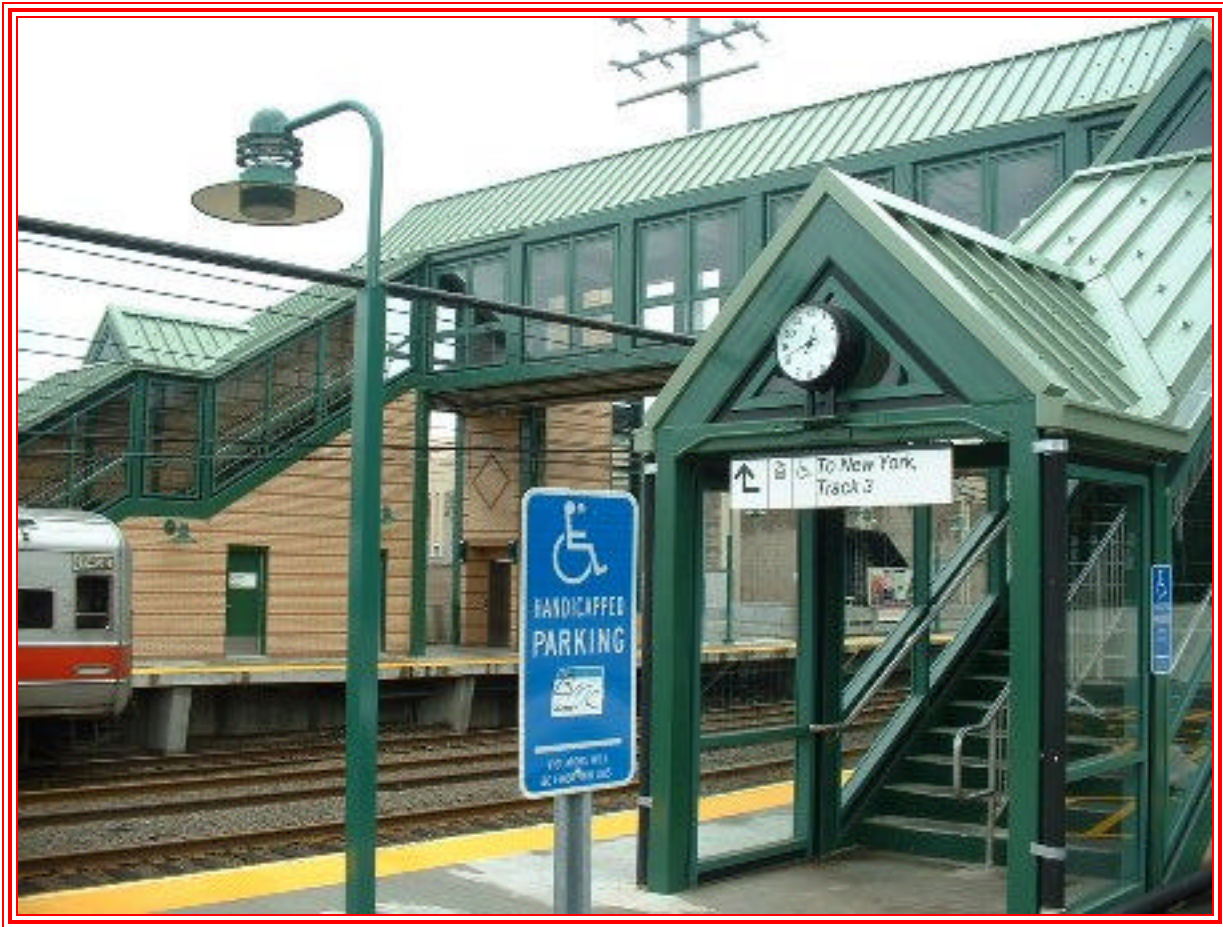


GREENWICH TRAIN STATION

VISUAL INSPECTION REPORT



January 2007



Prepared by the Bureau of Public Transportation
Connecticut Department of Transportation

Overview:

The Greenwich Train Station is located in the downtown business district. This privately owned and operated station was recently improved as part of a railroad catenary and bridge replacement project. The platforms were extended over Arch Street, new stair towers placed at the west end of the platform, and a new pedestrian bridge was installed as part of an ADA key station upgrade.

Highway access to the station is simple, being located just north of Exit 3 off Interstate 95. Finding a daily parking space is more time consuming due to high ridership demand and the number of remote parking lots.

The new pedestrian bridge, elevators and Arch Street stair towers are in good shape. However, some of the older facilities are weathered or rusted. Old rusty catenary towers rise out of the platform next to the new green and tan pedestrian bridge. New concrete walls border broken concrete walks. Freshly painted canopy supports sit side by side with rusted supports.

Various amenities have been placed around the station for the benefit of the commuters. Benches, shelters, trash cans, tactile warning strips, clocks, etc. are all new and functional.

**Maintenance Responsibilities:**

Owner:	Private
Operator:	Private
Platform Lights:	Metro-North
Trash:	Metro-North
Snow Removal:	Metro-North
Shelter Glazing:	Metro-North
Platform Canopy:	Metro-North
Platform Structure:	Metro-North
Parking:	Private

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 28, 2006:

Highway Access – The Greenwich Train Station is easily accessible from Interstate 95, Exit 3. The highway exit has the appropriate signage. A few trailblazing signs are needed on the local streets to improve access. The only station sign is on the Railroad Avenue side of the station building.

Parking – Parking is privately operated and spread throughout the area.

Platforms – The platforms are a combination of new and old. The platforms near Arch Street and the pedestrian overpass were recently constructed. The remaining platforms are older and in poor to very good condition according to the High Level Platform Visual Inspection Report. Foundations, joints and the eastbound ramp need attention. The aluminum railing is in good condition for the most part, with some deformed or rusted elements requiring attention. The tactile warning strip is new with only some minor damage. The platform inspection report notes non-compliant ADA code issues on and around the platforms that need to be addressed. Other than the shelters obscuring platform lights directly above, illumination levels exceed minimum standards. The steel pipe railing along the taxi stand is broken and several railing fixtures are loose. Metro-North cables hang low over the platform. In one instance, they hang below a post-mounted light fixture. The old lattice catenary structures are rusted, staining everything around and under them.

Canopy – The two eastbound canopies and the westbound canopy are all in satisfactory condition but have minor deterioration on their columns and bases. Some canopy drainage components need attention.

Walks/Paths – Pedestrians can access the Greenwich Train Station by sidewalk, stairs, ramps, elevator and driveway. Many of the approaches to eastbound ramps and stairs are deteriorated and cracked. This includes the paths along the old low-level concrete and bituminous platforms. Curbing is broken along Greenwich Plaza. Some areas of the old platform are accessible from the defined paths, but lead nowhere. These areas detract from the overall potential of the facility. On the plus side, some patrons use these areas for storing their bicycles. The new Arch Street stair towers look good. However, water ponding is already evident on several landings.

Ticket Vending Machine (TVM) – TVM's can be found on both platforms

Shelter – There are several shelters on the new platform extension over Arch Street. They are in good condition. All four shelters obscure post mounted light fixtures and appear to be close to the edge of the platform. Their location could force passing pedestrians to walk on the tactile warning strip.

Station Building – The station building has been constructed as a storefront on Railroad Avenue. From the street, one can climb stairs or take an elevator up to the platform level. Ticket windows, benches, vending, phones and rest rooms are available inside the building. Signage for the rest rooms could be improved. The building appears to be in good shape and functional.

Taxi Stand and Bus Access – There is a taxi stand behind the eastbound platform. Buses can access either side of the station.

Signage – Platform signage is good. Signs along the paths to and from the station are less obvious.

Fences – There are few fences around the station. Most separation is accomplished with railing and concrete walls, which are in general good condition.

Litter – There is some track level trash, but overall the station is relatively clean.

Americans with Disabilities Act (ADA) Access – Greenwich station is an ADA accessible key station. Recent construction has improved access in and around this busy station. However, the High Level Platform Visual Inspection Report has noted several non-compliant issues that need to be addressed.

Amenities (See Appendix A Photos)

- Kiosk: None, but station building and platform has information centers.
- Exterior Paint Theme: Green, tan and brown.
- Vending: Vending machines and newspaper boxes on platforms and in the station building.
- Benches: Aluminum, wood and steel benches have been placed inside and out.
- Railings: A mix of new and old aluminum and steel railings.
- Light Fixtures: A combination of new and old lighting that provides sufficient lighting along the platform.
- Trash: A combination of green steel trash cans near the stair towers, modern aluminum receptacles in the station building and blue recycling bins on the platforms.
- Bicycle Rack: Several bike racks are available for storage. Several secluded areas of the old bituminous low-level platform are also used by bicyclists.
- Platform Clock: The new pedestrian overpass has clocks at its entrances.

General Remarks – The Greenwich Train Station suffers from a dual personality. The combination of the newly constructed features with the old weathered elements makes for a poor first impression. The operator needs to spruce up the older sections of the station to minimize the distraction of these areas from the recently added and architecturally pleasing structures.

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:

- Add trailblazing signage along the exit ramps and approach roadways.
- Add a small (banner type) station sign to the Railroad Avenue station entrance and any other publicly accessible entrance to the station. If Greenwich Plaza is a public way, provide appropriate station signage to passenger drops and parking.
- Paint the old canopy supports.
- Repair concrete and bituminous walks, ramps and stairs, especially on the eastbound side.
- Provide additional rest room signage inside the station.
- Improve signage to daily parking areas.
- Relocate the railroad's sagging signal cables.
- Paint the catenary structures (Metro-North).
- Repair canopy drainage.
- Clean up, landscape or otherwise address the old low-level platform surfaces behind the high-level platform. A layer of gravel might improve the appearance in areas where the surface cannot be broken up.
- Remove all newspaper boxes and vending machines away from the main platforms and primary access points. The area to the west of the station building entrance is a good location for most of the vending. However, several boxes encroach on the entryway.
- Eliminate ponding from Arch Street stair tower landings.
- Remove track level litter.

Amenity Upgrades:

- Replace all platform benches with steel mesh benches. The ground level benches at Arch Street are good.
- Paint all older surfaces with colors consistent with the green and tan theme established by the new construction.
- As old light fixtures fail, replace them with fixtures consistent with the new theme.
- Replace and add trash containers consistent with trash cans used on Arch Street.
- Add bike racks to areas currently being used for bike storage. Repair these areas consistent with the overall station theme.

Governance Improvements:

- Implement repair recommendations of the High Level Platform Visual Inspection Report.
- Replace all platform, stair, ramp and walkway railing with black or green railing.
- Replace brown concrete wall along taxi stand with a raised sidewalk and black railing.
- If structurally feasible, replace other low walls with raised concrete walks and black railing.
- Address ADA non-compliant issues noted in the High Level Platform Visual Inspection Report.
- Add post mounted lights along paths, ramps and bike rack areas.
- Evaluate lighting in and around the station, adding themed fixtures, where necessary.
- Consider constructing platform level shelters for vending over the dead space behind the platforms.
- Provide permanent protection for the mesh-wrapped catenary support near the Arch Street end of the platform.

Major Capital Improvements:

- None at this time

--- End of Narrative ---

APPENDIX A

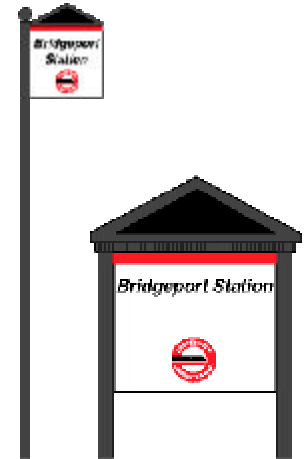
Examples of Amenities



Pole Mounted Lights



Kiosk (Historic)



Signs (Contemporary)



Bench (Contemporary) and Railing



Vending Shelter



Trash Can (Black preferred)



Typical Trailblazing Sign