NEW HAVEN LINE TRAIN STATION VISUAL INSPECTION

SUMMARY REPORT



CONNECTICUT DEPARTMENT OF TRANSPORTATION January 2007



Prepared by the Office of Rail Bureau of Public Transportation

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Executive Summary

In the summer of 2006, Governor Jodi Rell directed the Connecticut Department of Transportation (Department) to inspect all New Haven Line (NHL) train stations. The Governor asked the Department to determine the condition of all the facilities and to develop a comprehensive program of repairs and improvements. The Governor noted that the Department would "make these common-sense improvements and make our rail lines an attractive option."



The Department's Office of Rail immediately gathered all available studies, reports and inspection records addressing station operations, maintenance and conditions. The Department followed up the data collection with a visual inspection of each NHL train station and the preparation of 36 individual Visual Inspection Reports. Based on the information gathered, observed and documented in these reports, the Department intends to develop a program of short-term station repairs and long-term facility improvements and upgrades.

In summary, the general condition of all NHL stations is good. Worn platforms, concrete stains, uneven walks, rusty catenary structures, peeling paint, meager amenities, trash, weathered metal surfaces and other unpleasant conditions contribute to the uninviting appearance of many stations. However, station facilities are structurally sound; the platforms are functional; canopies provide protection from the elements; the paths are negotiable; and fencing still discourages trespassers. While the stations may not rise to the aesthetic levels expected by patrons, they still provide a necessary gateway to commuter rail service in the State of Connecticut. Providing a basis for enhancing this service is the goal of these reports and resulting improvement projects.

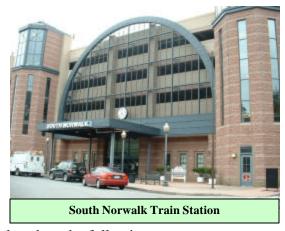
New Haven Line Train Stations

The New Haven Line in Connecticut includes the 19 main line stations from Greenwich to New Haven and the 17 stations along the New Canaan, Danbury and Waterbury Branches. The uniqueness of each facility is apparent to those who visit many or all of the 36 stations. Appearance and layout vary greatly from site to site. While urban transportation centers may overwhelm the first-time patron, the remote branch depot appears to be all but abandoned. Despite the diversity, each station shares the common design of providing the public with a gateway to the State's commuter rail services.



The State of Connecticut owns all but three of the 36 NHL stations. Ownership herein is described as having title to land, buildings, paths and/or parking lots that make up most or all of the station area. Municipalities own the Bridgeport and South Norwalk stations, while the

downtown Greenwich Train Station is privately owned. Through a number of operational agreements, the State has delegated the maintenance and operation of 24 stations to municipalities and their transit districts or parking authorities. The Department and its contract operators are responsible for the remaining 12 facilities. All station platforms are State-owned and located within the railroad right-of-way. The primary responsibility for maintaining the platforms and their canopies, shelters and illumination falls on a combination of Department, Metro-North and municipal agencies, and/or private parties. A



Parking lot ownership and operations are just

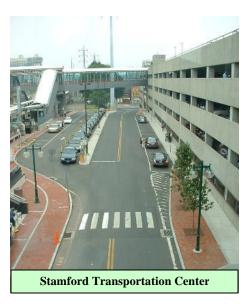
Station Responsibility Matrix has been developed and placed on the following page.



as diverse. The Department, municipalities and/or private parties own parking lots at nearly all the train stations. Department contractors, private companies, municipal agencies or transit districts manage parking operations. In addition, parking layout is as unique as the station building style. Several stations have parking garages. Others have one or two large surface parking areas. Most stations have a number of small lots spread about the area. The State Street Station provides no station parking. Parking arrangements are addressed in the individual Visual Inspection Report for each station.

In summary, the New Haven Line has a series of unique stations and structures in urban, suburban or rural settings, each having its own operational and maintenance requirements. The proposed Station Improvement Program will wade through this diversity and exercise a level of governance common to all stations consistent with the station's individuality.

It is the Department's goal to provide the support and amenities desired by our commuters as part of its rail commuter service. Platform accessibility, sound structures, good lighting, cleanliness, logical signage, marked entrances, informative kiosks, weather protected waiting areas, comfortable benches and ticket vending machines are some of the many reasonable concerns that commuters want addressed by the Department and municipalities.



Station Responsibility Matrix

		Sta	Pltfrm		Pltfrm	Sheltr	Pltfrm	Pltfrm		
NHL	Own	Mgr	Lights	Trash	Snow	Glaze	Canopy	Struct	Park	Remarks
State Street	CDOT	CDOT	CDOT	CDOT	CDOT		CDOT	CDOT		Operator: Demarco
New Haven	CDOT	NHPA	MN	MN	MN	NHPA	MN	MN	NHPA	New Haven Parking Authority
Milford	CDOT	MTD	Town	Town	Town	Town	Town	Town	MTD	Milford Transit District
Stratford	CDOT	Town	Town	Town	Town	Town	Town	Town	Town	Town handles all aspects
Bridgeport	Town	CDOT	CDOT	CDOT	CDOT	CDOT	CDOT	CDOT	CDOT	Transfer to State Pending
Fairfield	CDOT	Town	Town	Town	Town	Town	Town	Town	FPA	Fairfield Parking Authority
Southport	CDOT	Town	Town	Town	Town	Town	Town	Town	FPA	Fairfield Parking Authority
Green Farm	CDOT	Town	Town	Town	Town	Town	Town	Town	WPD	Westport Police Dept
Westport	CDOT	Town	Town	Town	Town	Town	Town	Town	WPD	Westport Police Dept
E Norwalk	CDOT	Town	MN	MN	MN	MN	MN	MN	LAZ	Dept. of Public Works
S Norwalk	Town	Town	MN	MN	MN	MN	MN	MN	LAZ	Dept. of Public Works
Rowayton	CDOT	Town	MN	MN	MN	MN	MN	MN	Town	Sixth Taxing District
Darien	CDOT	Town	Town	Town	Town	Town	Town	Town	Town	Town handles all aspects
Noroton	CDOT	Town	Town	Town	Town	Town	Town	Town	Town	Town handles all aspects
Stamford	CDOT	CDOT	MN	MN	MN	MN	MN	MN	CDOT	Operator: Fusco
Old Grnwch	CDOT	Town	Town	Town	Town	Town	Town	Town	Town	Town handles all aspects
Riverside	CDOT	Town	Town	Town	Town	Town	Town	Town	Town	Town handles all aspects
Cos Cob	CDOT	Town	Town	Town	Town	Town	Town	Town	Town	Town handles all aspects
Greenwich	Private	Private	MN	MN	MN		MN	MN	Private	CDOT owns platforms
New Canaan	CDOT	Town	Town	Town	Town	Town	Town	Town	Town	Town handles all aspects
Talmadge	CDOT	Town	MN	Town	Town	Town		Town	Town	Town handles all except lights
Springdale	CDOT	CDOT	MN	MN	MN	MN		MN	Town	Town handles parking only
Glen brook	CDOT	CDOT	MN	MN	MN	MN		MN	Town	Town handles parking only
Danbury	CDOT	Town	Town	Town	Town	Town	Town	Town	Town	Town handles all aspects
Bethel	CDOT	Town	Town	Town	Town	Town	Town	Town	Town	Town handles all aspects
W Redding	CDOT	Town	Town	Town	Town	Town	Town	Town	Town	Town handles all aspects
Branchville	CDOT	Town	MN	MN	Town	Town	Town	Town	Town	Town – parking & station bldg
Cannondale	CDOT	CDOT	MN	MN	Town	Town	Town	Town	Town	Town leases parking only
Wilton	CDOT	CDOT	MN	MN	MN		MN	MN	Town	Town leases parking only
Merritt 7	CDOT	CDOT	CDOT	MN	CDOT	CDOT	CDOT	CDOT	CDOT	
Waterbury	CDOT	CDOT	MN	MN	MN	CDOT	CDOT	CDOT	Town	Old RR Sta not used for trains
Naugatuck		CDOT	MN	MN	MN	CDOT		CDOT	Town	Old RR Sta not used for trains
Beacon Falls	CDOT	CDOT	MN	MN	MN	CDOT		CDOT	Town	Town maintains parking lot
Seymour	CDOT	CDOT	MN	MN	MN	CDOT		CDOT	Town	Branch platforms state owned
Ansonia	CDOT	CDOT	MN	MN	MN	CDOT	CDOT	CDOT	Town	Branch platforms state owned
Derby	CDOT	CDOT	MN	MN	MN	CDOT	CDOT	CDOT	VPA	Valley Planning Agency

Own = Ownership of station building and immediate surroundings Sta Mgr = Station manager; Responsibility for station maintenance Pltfrm Struct = Platform structure maintenance responsibilities Sheltr Glaze = Shelter glazing or windows

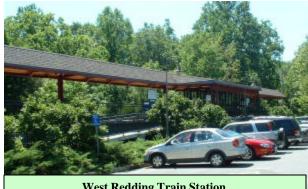
Snow = Snow Removal Park = Parking lot operations

General Condition of the Stations

As noted in the Executive Summary, the overall condition of the New Haven Line trains stations is good. This considers several factors such as the structural soundness, functionality and

safety. However, the inspection did confirm the complaints of the commuters relative to appearance, comfort and ease of movement about the facility.

Station layouts vary from quiet rural settings to busy downtown transportation centers. This can be confirmed by reviewing the maps included in each individual station report. The West Redding Train Station (pictured right) fits well into its rural setting surrounded by trees, a



West Redding Train Station



babbling brook and quiet country roads. The Stratford Train Station (left) sits in a suburban downtown location and touts a helicopter museum in the old eastbound station building. The sprawling Stamford Transportation Center (below) and New Haven's Union Station handle thousands of commuters each day through their parking garages and high-level center island platforms.

The condition of each station is as diverse as its setting. The Bethel Train Station has well maintained landscaping, which invokes a park-like setting for commuters (see cover photo). The recently constructed State Street Station in New Haven is a clean, low profile

facility, well suited for its surrounding urban environment. Some of the older stations along main

line and branches receive personal attention from concession operators who want to encourage continued patronage of their businesses. However, many stations have fallen into some level of disrepair requiring additional attention from their operators. Some issues common to many stations include peeling paint, litter, poor signage, weathered metal surfaces, outdated or missing amenities (benches, kiosks, bike racks, etc.), rust, graffiti, poor lighting, and deteriorated structure surfaces. These issues are detailed in the individual Visual Inspection Reports.

As noted earlier, it is necessary to visit only a few stations to realize that each station building is distinctive in appearance, ranging from 100+ year old historic depots to modern, efficient facilities. Waiting rooms occupy most station buildings. Many



Stamford Transportation Center

include coffee shops or concessions, which are open mainly during the morning peak hours. Most station bathrooms are in good condition with an occasional bad odor detected. However, only a few stations are fully accessible or Americans with Disabilities Act (ADA) compliant. To address the latter concern, the Department and Federal Transit Administration have assigned "key station" status to twelve facilities along the line. This is discussed later in this report.

Platforms range from small wooden platform boxes on bituminous pavement to 12-car center island platforms capable of boarding several trains at a time. The common main line configuration

is a 4 to 10-car high-level platform on either side of the tracks. For the most part, the high-level platforms along the main line have cracks, concrete spall, failing joints and stained surfaces. They may appear unpleasant but the platforms are structurally sound. Most of the aluminum railing is weathered with some bent panels and graffiti but it keeps patrons safe. Concrete stairs and ramps are cracked with corroded railing connections. These are constantly being repaired by station operators. However, the repairs seldom match the existing concrete, which degrades their appearance. Severely deteriorated stairs are closed to pedestrians. Many platform canopies require a coat of paint



and drainage repairs. Some canopies should be extended to provide additional protection for waiting commuters. Some stations need canopies. Lighting fixtures along the platforms vary from town to town. A few operators have recently replaced the lights, but most fixtures are old and performing well below their original specifications. While illumination levels exceed minimum code requirements at many locations, fixtures and connections are corroded.

The individual Visual Inspection Reports address the issues briefly discussed above along with some of the more obvious deficiencies discovered at each of the 36 NHL train stations. It is expected that these reports will justify the creation of a permanent program of station repairs, upgrades and improvements, which will encourage the traveling public to take better advantage of the Connecticut Commuter Rail Service.

AVAILABLE RESOURCES

The following resources have been reviewed, referenced, and incorporated into the observations and recommendations of this report:

Station Amenities Committee

Several years ago, the Connecticut Department of Transportation formed the Station Amenities Committee to provide recommendations for upgrading station amenities for the Shore Line East and New Haven Line commuter rail services. Many of these recommendations have been implemented at the new Shoreline East stations as well as the recent restorations of the historic New Canada Darion and Milford stations. Items such as new bandons trash container



Canaan, Darien and Milford stations. Items such as new benches, trash containers, signage, lights,

kiosks, safety railing and paint schemes have improved the overall appearance of the historic stations, while providing a pleasing functionality for users of the stations.

Connecticut Rail Station Governance Study (May 2005)

The following is a quote from the Introduction to the Connecticut Rail Station Governance Study (May 2005):

"The Connecticut Department of Transportation initiated the Connecticut Rail Station Governance Study in 2001 with the intention of evaluating the condition and operations of stations



and parking facilities on the New Haven Line and its three branches. The evaluation includes an inventory and documentation of existing facilities, a review of current governance practices, a review of governance practices (management/administration) at other commuter rail operations and a review of operating revenues and expenses. The purpose of this study is to gather information that can be used to guide CDOT in determining whether a change should be made in how the stations and parking facilities are governed. Any changes made to governance policy would be made to improve serviceability, financial effectiveness, and service quality. The mission statement for the study is: - To develop a Governance Policy and Financial Policy which improves current conditions and offers improved quality of service for our riders."

The Rail Governance Study team conducted a comprehensive review of most NHL train stations. As part of the Train Station Visual Inspection, the Department confirmed the Study's

observations and conclusions wherever possible. While many of the Study's simpler issues (pothole repairs, graffiti, peeled paint, missing light bulbs, etc.) have been addressed, the more complex problems (poor electrical systems, cracked concrete, rusted connections, etc.) remain. It is the objective of this report to reemphasize these deficiencies and provide a means for correcting them.

High Level Platform Visual Inspection & Inventory

The Connecticut Department of Transportation recently performed a visual inspection of high-level platforms at 19 New Haven main line stations from Greenwich to New



Haven. The inspections focused on the platform structures as well as canopies, railings, ramps,

and stairs. They also addressed electrical, ADA and other code compliance matters. The Department will complete its High Level Platform Visual Inspection & Inventory by November 2006. The report's findings will then be incorporated into the Station Improvement Program being established by the Department to address all station concerns. It should be noted that the Department is currently initiating a second phase of high-level platform inspections. This second phase will begin in early 2007. It will assess platform conditions at the remaining stations on the three branch lines.

Other Resources

- The Connecticut Department of Transportation has conducted various inspections and studies over recent years addressing concerns along the New Haven Line. The Department has received a Condition Assessment Report for the Stamford Transportation Center Parking Garage. It is still being evaluated. However, the assessment has confirmed the existence of significant structural issues in the 1984 facility. The Department will provide its recommendation for the repair and/or replacement of the facility soon after the completion of this Train Station Visual Inspection Report.
- The 1997 New Haven Line and Shore Line East Parking Inventory was referenced as part of the Train Station Visual Inspection. The inventory's parking statistics have been useful in determining station use trends over the past nine years. While parking demand and capacity issues are addressed in this Train Station Visual Inspection, the information still provides a basis for predicting future pedestrian movement about the station.
- The soon to be completed **Danbury Branch Electrification Feasibility Study** addresses alternatives for improving passenger service on the Danbury Branch of the New Haven Line. The Department plans to initiate a similar effort called the Waterbury and New Canaan Branch Lines Needs and Feasibility Study. This study will evaluate transit needs along these branches and recommend service improvements.
- Condition inspection and recommendation reports have been prepared for the Bridgeport Train Station, its parking garage and New Haven's Union Station. The Department is reviewing these recently submitted reports. Upon finalizing these reports, the Department will incorporate the report recommendations into the station improvement program.
- Contract plans, specifications and estimates were prepared for the Darien, Milford and Shoreline East train stations projects. These documents provide details for various station amenities placed at the facilities.
- The "Fix My Station" photo campaign conducted by the Connecticut Commuter Rail Council has made the Department aware of the specific concerns of the rail commuters. As part of this campaign, the council received many photos of concrete spall, inadequate platform edge warnings, unsightly trash, graffiti, missing bike racks and



poor lighting. They also alerted the Department to poorly placed newspaper boxes, peeling paint, surface rust, closed stairways, building damage, deformed railing, bird droppings, broken stairs, poor landscaping, and inadequate fencing. Although a response to each photo is not part of this Train Station Visual Inspection, council members should see most concerns addressed in the individual Visual Inspection Reports.

VISUAL INSPECTION CONSIDERATIONS

The individual inspection reports summarize the inspectors' observations at each of the 36 New Haven Main Line and branch line stations. The numerous items of interest observed at each station have been categorized into the subject headings noted below. Detailed observations are provided in the 36 individual Visual Inspection Reports.

1. Highway Access

The individual Visual Inspection Reports address access to stations from nearby highways and primary roads. The routes were evaluated for ease of movement and the placement of trailblazing signage. For the most part, the rail commuter can locate the appropriate exit off the nearest interstate. Upon leaving the highway, however, there are many opportunities to lose one's way due to missing trailblazing signage (pictured right) along the local roads. A suggested pictogram trailblazing sign is pictured below. The Department and municipalities can easily reduce confusion by placing these signs at the ends of the highway exit



ramps, at forks in the roads and at various other locations along the route. Even where access is a single direct route from the highway to the station, an occasional trailblazing sign along the street will confirm that the motorist is on the right path.



In urban areas, sign clutter makes it difficult to distinguish station trailblazing from other local signage. A well-placed pictogram in advance of these cluttered intersections is recommended. With many stations in close proximity to each other, the addition of the station name to the sign (pictured left) will help patrons find the desired station.

In general, very few locations provided highway directions to motorists leaving the station. The assumption appears to be that if patrons make it to the station, they can find their way back. This may not be so easy for the disorientated stranger trying to navigate downtown streets or rural roads back to the interstate. Reverse trailblazer signs should be provided from all station exits indicating the best route back to the nearest interstate or state highway.

2. Parking

This inspection effort does not address parking demand and capacity issues. Department, municipal and Metro-North planners are constantly reviewing these matters. Instead, the Visual Inspection Reports address access to and movement within the lots and general pavement condition concerns.

The responsibility for operating and managing station parking lots have been delegated to various public and private entities. Each Visual Inspection Report includes a map identifying parking areas and management responsibilities.

For the most part, finding the parking lot can be as difficult as finding the station. The use of distinguishable station entrance signs is rare. In the station, it can be equally difficult for a first-

time patron to find a daily parking space. This is more of a challenge at the larger urban and suburban stations, which have numerous lots spread about the area (Cos Cob) or large surface lots (Fairfield Train Station pictured at right).

Most stations reserve a vast majority of their spaces for permit holders. These are usually purchased from the parking lot operator. A smaller



number of daily parking spaces have been set aside for the occasional rider. Some of the branch line stations provide free parking on a first come, first served basis. The State Street Train Station has no station parking at all. No matter the parking arrangements, each station should prominently identify the location of daily spaces, parking fees and permit information, if applicable.



While many train stations have daily fee parking, finding an open space can be time consuming. This is even more exasperating if the scheduled train is quickly approaching the platform. Several stations have placed information signs near their entrances, which provide pertinent parking details (see photo to left). These signs are recommended for stations with one or two primary station entrances. For stations with numerous entrances and/or parking areas, signs describing local parking arrangements should be placed near the station building or platform. Apart from the parking information sign, it is important to conspicuously note the location of daily fee parking spaces through signage, line color or other easily recognizable scheme.

Daily parking arrangements vary among municipalities. Metered parking is used at several locations. Some locations have

employees or police officers place envelopes on visitor's windshields for mailing payments back to the operator. A few operators use electronic parking kiosks, which allow patrons to note the location of their vehicle and pay with a credit/debit card. Several parking lots and garages use station attendants.

The individual Visual Inspection Reports note observed concerns within parking areas. These may include pavement condition, illumination, fencing, railing, signage and ease of movement. In general, the busier parking areas are in good condition. It is felt that this reflects the relationship of good maintenance to an increase in demand. Some of the less occupied lots at the smaller stations have pavement cracks and potholes. Some line striping is faded or missing.

Illumination levels were not evaluated since all the station inspections were performed during daylight hours. However, a quick look at the placement of light fixtures revealed that further evaluation is required. Dated light fixtures, sporadically spaced light poles and overgrown tree limbs limit illumination levels in many remote areas of parking lots. Parking lot operators need to monitor illumination levels and perform appropriate maintenance repairs, as required. Meanwhile, it is recommended that the Department include an in-depth evaluation of illumination levels at all stations as part of the station improvement program.

3. Platforms, Canopies, Stairs and Ramps

A platform is a designated location where passengers board a train. Until the last halfcentury, most train platforms were ground level paved walkways that forced passengers to climb



several steps to board the train car. Sometimes a wooden crate provided a more comfortable first step. Several branch line stations still have these low-level platforms (pictured left). Other branch line stations use mid-level platforms between one to three feet high that permit easier access. Ho wever, these still require a step up to reach the floor of the train car. Both low- and mid-level platforms impede the boarding process. Main line and several branch line facilities have high-level platforms that permit direct and level entry into the rail car.

The recently completed High Level Platform Visual Inspection & Inventory provides a detailed evaluation of the 19 main line station platforms. The report evaluates the condition of platforms, canopies, railings, access ramps and stairs. The document also discusses electrical, ADA and code compliance issues. Common problems noted were concrete cracks and spall, failing joints, corroded railing connections, weathered railing, rusting canopies, failed canopy drainage and non-conforming stairs and ramps.



The station inspection team looked at all station platforms. They observed the general condition of platform surfaces, canopies, stairs, ramps and railings, confirming many of the observations documented in the Inspection & Inventory report. The individual Visual Inspection Reports note relevant platform and canopy observations gathered from site visits and prior reports. These will be incorporated into the Department's station improvement program.

4. Illumination

All station visits were conducted during daylight hours. Therefore, the inspection team could not properly assess the condition of light fixtures and illumination levels. However, the inspectors



did note the general positioning of light poles and area landscaping. For instance, most platforms have numerous fixtures spaced evenly along the platforms and under canopies. If operating properly, this should provide adequate illumination. At a few locations, tree branches obscure parking lights. Parking operators should trim back these limbs. Some paths and stairways appear to rely only on ambient light for illumination. There is no specific "Lighting" heading listed in the observations of the individual Station Inspection Reports. Instead, illumination concerns are included under the "Parking", "Platform", "Canopy" and other appropriate headings.

As part of the station improvement program, it is recommended that the Department evaluate illumination levels at all train stations. Substandard lighting on platforms, along paths and in parking areas can then be replaced or supplemented, as required.

5. Walkways and Paths

Within most stations, there are a series of walks and paths connecting parking areas and streets to the platforms. These may include ramps and stairs as necessary to facilitate pedestrian movement. Smaller branch stations have platforms on the trackside edge of their parking lots. Others facilities such as the New Canaan Train Station have parking lots distributed about the

downtown area where commuters use city sidewalks to approach the station. The nearby Talmadge Hill Train Station has a series of paths connecting several hillside lots. Main line stations have parking lots on both sides of the tracks, typically connected by a nearby street underpass, pedestrian overpass or tunnel.

One issue common to many stations is the lack of a defined path from the remote areas of the larger parking lots to the platforms. The Noroton Heights and downtown Fairfield stations have unusually large parking areas. A commuter who arrives after the morning peak must navigate through a quarter mile of parking aisles to reach the station platform. The long walk back to one's car can be more unnerving as other motorists rush by on their way home. This report recommends the installation of a raised walkway



between the parking lot and the tracks (see picture at right) with fencing/railing and post-mounted light fixtures between the walk and the tracks. The walk and fencing should be extended along the right-of-way at least two-thirds the length of the lot, serving several purposes. The walk will provide a defined illuminated path for pedestrians apart from the busy traffic aisles. In addition, the curb of the raised walk will act as a wheel stop, eliminating the need for highway guide railing

and minimizing fence damage. Finally, the contrast of the concrete with the recommended black fencing or railing will provide an architecturally pleasing theme consistent with the historic nature

of many of the New Haven Line train stations.



Walkway signage needs to be supplemented at many stations. In stations with remote parking areas or bus stops, it is important to inform the occasional or first-time user of the proper route to the platform. As one approaches the platforms, the availability of ticket machines, restrooms, platforms and ADA access should be clearly indicated. In addition, the route back to one's vehicle, local taxi stand or bus stop should be equally clear. More specific path related issues have been noted in the individual reports. However, it is suggested that paths in and around all stations be reviewed by consultants specializing in people movement.

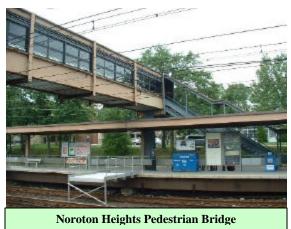
Many main line stations utilize local roads to move from platform to platform. At these stations, commuters need to cross the tracks at least once a day, no matter which side they park on. Many of these stations have bituminous walks leading to stairs, which connect to street sidewalks passing under the railroad. Some of the street level sidewalks have bituminous surfaces, which are separated from the roadway by plywood mounted on steel posts (pictured right). Others use more convention concrete sidewalks with adequate illumination. The most important consideration for station operators is to keep these paths illuminated and well maintained.

There are several safer ways to get from one side to the other. The Department recently completed work on a series of



Narrow Walk under Railroad Bridge with Plywood Barrier

ramps and stairs at the Milford Train Station, which provide ADA compliant access from one platform to the other without elevators. Several stations have pedestrian bridges or tunnels connecting the two platforms. Many of these structures provide ADA compliant access. The new



tunnel at the Westport Station and new pedestrian bridges at Greenwich and State Street (New Haven) are in good condition. The Noroton Heights pedestrian bridge (pictured left) is not compliant and needs a coat of paint. The old tunnel at the Westport Station is also non-compliant and damp.

The individual Visual Inspection Reports address path related issues such as uneven surfaces, poorly defined walks, crumbling stairways, overgrown vegetation, inadequate lighting and paths to nowhere.

6. Ticket Vending Machines



All main line stations have at least one ticket vending machine (TVM) on or just behind their westbound (inbound) platform. Some of the busier main line facilities have TVM's on both platforms. Some branch line stations also have TVM's. Eventually, the Department and Metro-North intend to install TVM's at all New Haven Line train stations. However, recognizing the expense and effort required to connect TVM's to the railroad communications network, commuter demand will govern the timing of the installations at some of the smaller branch facilities and on eastbound main line platforms.

Based on observations and complaints, the Department recommends that future TVM's be placed off the narrower platforms so as not to impede movement. In addition, they should be positioned out of direct sunlight to reduce glare on the screen.

7. Shelters

Most main line train stations have waiting rooms in buildings on the westbound side of the tracks. The eastbound platforms generally have thermoplastic or glass shelters for the protection of its commuters. Many branch line stations use similar shelters in lieu of station buildings and waiting rooms. These shelters typically provide patrons with relief from weather extremes as they wait for the train to arrive. Inspectors noted that many of the main line shelters were occupied during their midday visits.

In general, shelters are provided at locations where trains run infrequently. Eastbound service is minimal until the evening rush. At most



stations, it takes several minutes to walk from the westbound waiting room to the eastbound platform. This is longer than the one minute it takes a train to arrive, board its passengers and leave. Therefore, it is necessary to provide a weather-protected area for eastbound commuters. Branch line trains run less often than eastbound service so shelters are a necessity. Constant offshore breezes and the ever-changing New England weather also play a part in justifying the presence of a shelter.

Most of the aluminum-framed shelters like the one pictured on the previous page are weathered or rusted. This detracts from the overall appearance of the station. Much of the plastic glazing has been scratched from years of vandalism and numerous attempts to remove graffiti. Most of the shelters are trash free, but concrete stains and dull finishes give them an unkempt look. Lighting levels were not assessed during these daytime visits, but many shelters have been positioned to block overhead lighting.

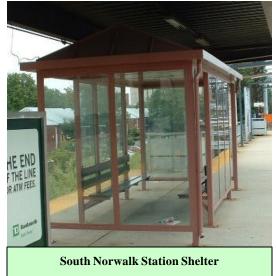
Shelters range in size from small 6' by 12' thermoplastic structures to 8' by 25' waiting areas. The typical main line shelter has been installed on a lateral extension of the high-level platform. This is generally a section of concrete (referred to as a "tee section") placed parallel to the main platform. The shelter extension usually shares space on the extension with newspaper boxes, soda machines or electrical cabinets. Stairs and/or ramps provide access to nearby parking lots.

Suggested Platform Shelter

As noted above, most of the shelters

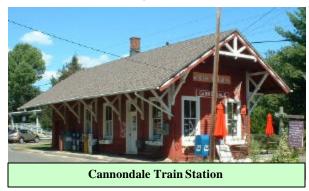
are aging poorly. All shelters should be systematically replaced by more permanent and visually pleasing structures. The West Redding shelter (below left) is a good example of desirable protection for commuters at some of the branch line depots and main line stations. However, even the more conventional shelter located under a canopy at the South Norwalk Train Station (below right) can provide needed protection from the elements while enhancing the overall appearance of the station. Another suggested type of shelter is sketched above. This replacement sports the black and white color scheme of the New Haven Line and fits into the desired architectural style of many stations.





8. The Diversity of New Haven Line Station Buildings











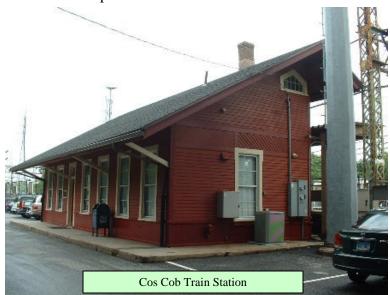






9. Station Buildings, Waiting Rooms and Concession Areas

When one thinks of trains, steam locomotives and old station buildings come to mind. There are no more steam engines pulling commuter trains but many of the old station buildings are still in service. The station buildings are used for more than ticket purchases. Most buildings have waiting rooms and bathroom facilities. Many have concessions such as coffee shops or newspaper stands. Dry cleaning services cleaning are offered at a few of the stations. Southport shares its waiting room with an art gallery. New Haven's Union Station has several eateries and the Stamford Transportation Center has a mall.



Many of the old station buildings have been demolished over the years. Bridgeport, South Norwalk, Stamford have replaced their historic structures with modern facilities. However, most of the remaining historic structures have been nicely restored, the most recent being at the Milford and Darien stations. Several eastbound station buildings have been leased to businesses such as restaurants and taxi companies. These unique and mostly historic structures provide a theme for each station.

The previous page is just a sampling of the variety of structures encountered along the New Haven Line today.

As noted above, many of the main line station buildings have coffee shops and/or newsstands, which usually remain open only for the morning rush. Most buildings have waiting

areas with the old-fashioned bench seating (pictured right). Many stations have staffed Metro-North ticket windows in addition to ticket vending machines. Several have Amtrak ticket sellers. The presence of a person at the ticket window can be somewhat reassuring to a first time user.

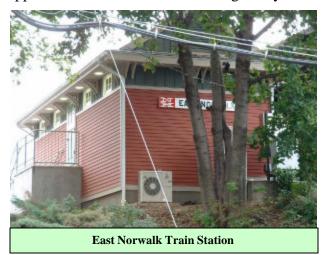
Station buildings appear to be in good shape except for some peeling paint and missing roof gutters. Since many of the buildings close immediately after the morning rush, inspectors were unable to observe conditions inside those facilities. Those that were open were found neat and functional. Some bathrooms had



odors and only a few are fully ADA compliant. However, it is apparent that the station operators are dutifully performing the necessary housekeeping. Most stations do not conspicuously post

their hours of operation, which is inconvenient for off-peak riders. These closed buildings deny access to shelter, information and rest rooms.

The Individual Train Station Inspection Reports discuss the general condition and appearance of each station building. They also include pertinent comments from the Connecticut



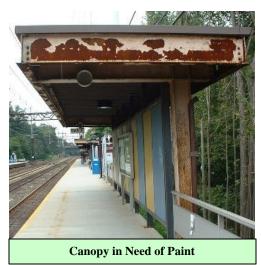
Rail Station Governance Study. However, station operators should review the Governance Study for more detailed information about deficiencies found at their station.

The Department wants to retain the distinct style of each station. It is not the intent of the proposed station improvement program to provide a cookie cutter makeover for older train stations. Rather, the Department feels these station improvements can be accomplished while preserving the unique character of the facility.

The neighborhood feel of stations is not reserved for the older facilities. New stations are being constructed with input from communities and commuters. For instance, the new Shoreline East train stations were built with community concerns in mind. Consequently, these new facilities fit well into their respective neighborhoods, while providing uniform amenities and services for all our commuters. The planned facilities at Fairfield Metro, West Haven and Orange will also be designed and constructed in accordance with local, state and commuter needs.

10. Paint

The individual Visual Inspection Reports note various station surfaces that need a coat of paint. New England weather is hard on painted steel (see picture at right). However, applying this needed coat of paint is not easy. Federal roadway worker rules demand that any work activity within 25 feet of New Haven Line tracks be coordinated with Metro-North. Therefore, painters accessing platforms, railings, canopies, shelters and trackside building surfaces need railroad protection. Environmental compliance demands the safe and proper preparation of the surface. Historical considerations may



also influence the color and texture of the surface covering. Specific paint issues are discussed under appropriate observation headings in the individual station Visual Inspection Reports. When repainting, colors should be consistent with the overall theme of the station. In lieu of any general theme, the Department recommends canopies, railing and other amenities the red, black and white colors similar to other Connecticut Commuter Rail facilities. To support required trackside activities, a Department railroad account should be established.

11. Taxi Stands and Bus Access

The Individual Station Inspection reports do not address routing or availability issues relative to buses and taxis. Instead, this category addresses the presence of bus and taxi activity and issues of vehicle accessibility.



In general, all stations have taxi access. Cabs drive through adjacent parking areas or wait at nearby taxi stands if access to parking lots is controlled. Some of the larger stations have installed dedicated telephones for taxi service. Others have signs posting taxi company telephone numbers. Buses might find it difficult to maneuver through most of the station lots due to narrow aisles, tight corners and dead ends. Several stations have

designated bus stops immediately adjacent to the platforms but in most cases, buses can stop on nearby streets. Few stations provide any indication of a nearby bus route or connecting service. Station operators should review their bus connection capabilities. If appropriate, they should then provide information signage for first-time users.



12. Signage

The use of signage in and around New Haven Line train stations is not consistent. Daily commuters have few problems moving about the station. They are aware of the layout of the property, the location of their permit parking spaces, normal operating hours, train schedules, rest room availability, and track assignments. In addition, these frequent riders already have their train tickets. In contrast, first time users may find it difficult to locate the station, legal parking spaces, the correct platform and their way back home. It is strongly recommended that



the Department, municipalities and station operators review signing requirements, sign placement and message content at each station. This should be accomplished with the first time or infrequent user in mind.

Trailblazing – Trailblazing signs guide motorists to a specific destination. In general, the Department and municipalities need to review the placement of trailblazing signage for each of the 36 train stations. This matter is discussed under the "Highway Access" category on Page 10.

Parking – Station parking areas vary from small lots to multi-level structures. No matter the size, the first-time user should be provided with enough information to know where to legally park



for the day. A well-placed parking information sign near the main entrance and in-lot directional signs should satisfy this need. This matter is further discussed under the "Parking" heading above.

Station Building – Where one is present, the station building is the heart of the train facility. A first-time user or infrequent visitor will usually head toward the building looking for schedule, fare and general train information. However, many station buildings close after the morning or evening rush. Even when the doors are locked, trains continue to run.

Therefore, commuters still need train and

ticket information. The placement of a kiosk near the building can provide most of the needed information.

Other information should be posted near the main entrance of the building such as waiting room/coffee shop hours, emergency telephone numbers, the location alternate rest room facilities and ticket vending information.



Information signs inside most stations should be kept to a minimum to preserve the historical significance of the structures. Signage around the station must be placed with care to avoid redundant or conflicting messages. Operators must also avoid the overuse of signs at any particular location, which could camouflage the more important messages.

Platform – For the most part, platform signage has been kept to a minimum. Main line platforms have their advertising posters and Metro-North signs note pertinent ticket information. However, platform exits are signed inconsistently, if at all. At some locations, the way to opposing platforms may not be obvious to the first-time user. Tactile signs and other ADA signage issues have not been addressed at most stations. As noted above, all appropriate parties need to review, supplement, reduce and/or update signage as part of the upcoming station improvement program.

13. Public Address (PA) and Variable Message Sign (VMS) Systems

All stations were observed to have PA systems, as evidenced by the silver "cans" (pictured below) or horns mounted to light poles and canopies. However, the frequency and content of

public announcements were not assessed. Nor were audio levels evaluated around the platforms. We recommend that the Department and station operators continue to handle PA issues through operator and commuter feedback.

Variable message sign or VMS systems are being installed at ADA accessible key stations (see ADA heading) along the New Haven Line in Connecticut. The new signs will be linked to PA announcements to provide commuters with both audio and visual notification of train arrival



provide commuters with both audio and visual notification of train arrivals, track assignments and

emergency information. As of October 2006, VMS systems had been placed at Danbury and New Canaan with installation underway at the South Norwalk and Darien train stations. It is the Department's goal to install a VMS system at all train stations. This will be accomplished as funding becomes available and as need warrants.



TRAIN STATION

14. Fencing

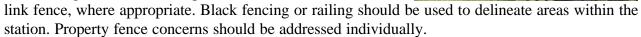


Nearly every station uses fencing beyond the ends of its platforms to restrict unauthorized access. It has also been installed to secure parking areas, demarcate private property or cordon off potentially hazardous areas. Most locations employ chain link fence. Coated chain link fencing, ornamental steel and cast iron railing, guide rail and wire and stockade fence are some fencing alternatives.

Nearly all the station fencing is functional although much of the chain link material is discolored, rusted, broken

and/or weathered similar to the fence pictured to the left. Fence posts are deformed. A few gate locks are missing or latches are broken. Much of the old cast iron and steel railing found at several stations is severely corroded.

It is recommended that the deformed, broken and rusted fence along the tracks be replaced with black coated chain



New fencing and railing installed at Bethel, Branchville, Milford, Stratford and Beacon Falls has improved the overall appearance of the stations. Detailed fencing issues are discussed in the individual station Visual Inspection Reports.

15. Litter

Most stations visited were tidy with regard to controlling litter. It is apparent that that most station operators provide adequate housekeeping in spite of the varying levels of disrepair among the components of the station. In the picture to the right, one can see a weathered highway guardrail, cracked bituminous

and and weeds around this platform

pavement, peeling paint, a concrete wall, a telephone pole and weeds around this platform.

However, there is no trash on the ground or no graffiti on the wall. The few exceptions to this litter-free scenario are noted in the individual station Visual Inspection Reports.

Graffiti is a common problem at many stations. Shelter glazing or windows have been impacted the most. There has been a diligent effort to keep up with graffiti removal, although much of the shelter glazing is scratched beyond repair. Problem areas are noted in the individual Visual Inspection Reports.

A longer-term solution is required to discourage the "graffitist" and to provide a surface not easily defaced or one that can be easily cleaned. The station improvement program should research vandalism prevention tactics around the nation and recommend a graffiti resistant system for shelters and other station surfaces.

16. Americans with Disabilities Act (ADA) Access

The New Haven Line has its origins in the 19th Century. Therefore, many of the stations do not conform to the Americans with Disabilities Act (ADA). It is important to note that the Department has been exempted from a need to upgrade the entire system to current ADA standards. Instead, the Department assigned key station status to twelve stations, which have been or are in the process of being upgraded to provide code level ADA access. These stations are New Haven, Milford, Bridgeport, Westport,



South Norwalk, Darien, Stamford, Greenwich, New Canaan, Danbury, and Waterbury. The twelfth station is the proposed Fairfield Metro Train Station, which has replaced Fairfield on the list of key stations.

While key station status has allowed for a concentration of ADA upgrades at a few stations, it is the intent of the Department to gradually bring all facilities up to code. The Department will utilize code compliant materials and practices as repairs and upgrades are made under the station improvement program. While a particular station may not be a completely ADA accessible upon completing the repairs, it will be that much closer to the Department's goal of full compliance.

In general, ADA code non-compliance issues can be found at all stations. They range from the inability to move comfortably between platforms to a lack of tactile signs on the platforms. Additional information has been documented in the Governance Study reports and the High Level Platform Visual Inspection and Inventory. As individual station issues are addressed, improvements will be implemented in accordance with the current ADA code.

17. Station Amenities

For routine morning commuters who arrive at the platform just as the train pulls into the station and boards, station amenities likely play a minor role in their overall trip. However, to the first time patron, the proper placement of these same amenities might result in a more pleasant experience, encouraging the user to plan another excursion. Conversely, the lack of amenities could ruin one's day.

What are amenities? The dictionary describes these as "features that, when taken together, make a place such as a hotel or resort attractive to guests or customers." Train station



amenities include signage indicating the presence of the station, the location of parking spaces, platform designations and the way back home. They include restored station buildings, pleasant landscaping, effective illumination and a kiosk providing pertinent transit information. Other



amenities include comfortable benches, convenient trash receptacles, weather-resistant shelters and secure bicycle racks. Ticket vending machines, soda machines and newspaper boxes provide some benefit to patrons. Throw in an old-fashioned platform clock and safe railings on the platforms, stairs and ramps and the patron will likely have an enjoyable trip.

A functional rail commuter service needs safe equipment, reliable ontime performance and a sound infrastructure. However, the little things keep the customer coming back. Many stations lack simple amenities, which are needed to provide for the comfort of peak and off peak riders.

As noted earlier in this report, the Department formed a committee to

establish standard amenities for Connecticut train stations. Many of their recommendations have

been implemented at the new Shoreline East stations, as well as in Darien, Milford, Westport, Waterbury and New Haven. It is the Department's goal to provide all the basic amenities at all the New Haven Line stations.

Due to the diversity of the architecture involved, it is obvious that no one theme can dominate all 36 New Haven Line stations, nor is this desired. However, a commonality in the amenities and services provided for commuters utilizing an urban transportation center or a simple train stop is desirable. It is the intent of the Department to upgrade certain



station amenities in the short term. Benches, trash cans, and kiosks should lead these upgrades. Vending shelters, illumination and railing replacement issues may be addressed in later phases of the station improvement program.

The following subject headings discuss several amenities that should be placed at all stations:

Kiosks and Information



Most NHL train stations have a current Metro-North train schedule posted on the side of the station building or in a shelter. These schedules are mounted in glass cases. Some stations have bus information posted on nearby light poles. Bulletin boards are also available at a few stations. However, most stations have no distinct location for displaying basic train and local information. Kiosks placed in strategic locations can properly welcome and inform rail patrons.

The Amenities Committee recommends a kiosk design (pictured left) that provides a recognizable location for the posting of pertinent train and local



information. The Waterbury Station has installed a Committee recommended kiosk next to the platform (pictured right). It has bus information on one side and transit alternatives posted on the other. The State Street Station has a four-sided kiosk that has an original design consistent with the style of the station. This location has train schedules for Shore Line East and Metro-North services. It also has a map of the city and a public telephone.

The Department recommends that each branch line station provide a kiosk for commuters. Main line stations should have a kiosk behind both platforms. The kiosk should provide bus connection details or indicate the lack of available bus service. It should note the availability of taxi or shuttle service with appropriate telephone numbers. If the station has a downtown location, an area map would be helpful. Other information should be considered such as station building hours, rest room availability, local attractions and a telephone number to report problems.

Station Color Scheme

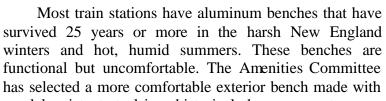
The New Haven Line has red, green, beige, yellow and gray wooden historical buildings to name a few. It also has older stucco and brick buildings along with modern concrete and steel structures. In keeping with the uniqueness of each facility, it is not the intent of this report to recommend a change of character for the train stations. There is no desire to



implement a system wide paint scheme. Instead, the Department recommends a commonality of amenities and services within these uniquely individual stations.

The Department has determined that the red, black and white colors of the Connecticut Commuter Rail should have a prominent role in the station theme, where practical. The recommendations for amenities include black fence/railing, red and/or black platform signs, black trash cans, black benches, red trim where possible, white or pink concrete or red brick. Station entry signs and kiosks should have a modern red, black and white design or a historical layout comparable to the established theme of the station.

Benches

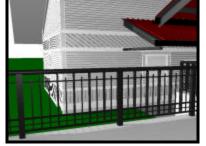




vandal-resistant steel in a historical theme or contemporary mesh. Black is the color of choice for most benches located in the shade. Other colors should be consistent with the color scheme of the station. The committee has also recommended a historical looking interior bench. The Department recommends replacing all exterior benches over the next year or so. This includes the installation of additional benches, where warranted.

Railings

Most platform, stair and ramp railing is aluminum. Over the years, the railing has become broken, weathered and deformed. In addition, the aluminum panels have become a poster board for graffiti. The Amenities Committee recommends the replacement of these aluminum panels



with black steel railing similar to the one pictured to the right. This railing is sturdy, clean looking and resistant to vandalism. The Department intends to place this type of railing at the rear of all existing and proposed platforms as well as along stairs, ramps and walks to and from the platforms. When paired with raised concrete walk, the black railing also provides a clean separation between parking areas and the train tracks.

Light Fixtures

The Department and municipalities need to further evaluate illumination in and around all the stations. This should be accomplished by lighting experts. When new lights are warranted, the fixtures need to provide code compliant lighting levels and an appearance consistent with the theme of the station. The Department recommends the use of post or pole-mounted light fixtures along all station



walkways. Platform lights should be compatible fixtures mounted on posts or under the canopy. Lights inside station buildings and shelters should be consistent with the architecture of the structure. Parking illumination must be bright and cover all areas of the lot. High-mast fixtures should be shielded or directed away from residential areas.

Trash and Recycling Containers



One common component of all New Haven Line train stations is the blue Recycling Center container. The bin has compartments for trash, newspapers, bottles and cans. When one considers the number of newspapers and beverages consumed on a typical trip from the city, it can be understood why these recycling centers are needed.

In addition to the recycling bin, it is important to locate an adequate number of trash cans on the platforms, at platform entrances and along station paths. The trash receptacle pictured to the left is preferred for its rodent

resistant design and its black color. Other receptacles with a steel mesh exterior have a nice appearance, but they may provide rodents easier entry, if there is no cover.

Bicycle Racks & Lockers

The use of bicycles and bike racks/lockers varies greatly. The Westport and Fairfield train stations have a good number of bicycle users. Locations without racks have bicycles locked to various station fixtures such as fences, signs and light poles. The individual Visual Inspection Reports address bicycle use, where it was observed.





It is recommended that all stations provide bicycle racks at accessible and convenient locations near the platforms. The bike racks will accommodate those who currently ride to work and encourage others to join the fun.

The use of bicycle lockers (pictured right) has been discussed more frequently since the events of September 11, 2001. Security

demands that the view inside of containers and facilities be unobstructed especially in the immediate vicinity of the platforms and tracks. This argument favors the installation of conventional bicycle racks, but conflicts with riders who want to keep their



bicycles from the view of thieves and out of the weather. To accommodate the concerns of both parties, manufacturers have designed lockers that use windows and secure screening. At this time, the Department does not have a stated policy to address the use of bike lockers at train stations.

Platform and Station Clocks



In this day of cell phones, personal digital assistants (PDA) and a variety of other timepieces, it may be hard to understand why a clock is needed at stations. Train service is time dependent and train engineers pride themselves on keeping trains on schedule. Station clocks keep patrons on the correct "train time". The new variable message signs being installed at certain stations will provide accurate date and time information. The Department will eventually install these signs at all stations. Until then, analog clocks should be installed inside all station buildings and on all platforms. These can be post-mounted (right), mounted on building walls or hung from canopies. For the latter, it is desired that operators refrain from clocks with beer or other advertisements on them.

STATION IMPROVEMENT PROGRAM

At the urging of the Governor, the Department is establishing a program of repairs, upgrades and improvements to improve the appearance, safety, and functionality of all 36 New Haven Line Stations. The individual station Visual Inspection Reports provide a list of repairs, upgrades and improvements for each location. These lists are not all inclusive but they should provide the owner and operators with an idea of what the commuters are looking for in their train stations.

Four categories of improvements have been listed in each report. These include Maintenance Repairs, Amenity Upgrades, Governance Improvements and Major Capital Improvements described below.

Maintenance Repairs

Under the heading of Maintenance Repairs, each report lists a number of tasks that need to be addressed by the station operator. These include housekeeping, rust removal, paint touch-up, minor concrete repairs, graffiti removal, railing repairs, broken lights, storm damage, sign replacement, landscaping and other normal maintenance activities. These repairs can be accomplished, with minimal design input, by maintainers, tradesmen or the operators themselves.

The Department will pass along the specifics of these repairs to the responsible agency. The agency will be expected to accomplish the repair in a reasonable amount of time. The cost of the repair will be borne by the responsible agency in accordance with applicable agreements or understandings.

Amenity Upgrades

The Department has accepted the responsibility for coordinating the upgrade of amenities at the New Haven Line Train Stations. As it is the Department's commuter rail service, it is in their best interest to assure the desired commonality from station to station.

Through the power of bulk purchasing, the Department can keep upgrade costs to a minimum. Most of the amenities should be ordered at one time or in phases. The materials should then be distributed to station operators, Department maintainers or railroad forces for installation.

Station trailblazing signs could be supplied using the Department's sign shop and installed by local and state highway maintainers. Department personnel or the station operator can install entrance signs and station kiosks. Removing vending machines and newspaper boxes from the platforms and paths will be the responsibility of platform maintainer or station operator.

It is important to note that the installation of amenities must include the proper bonding or grounding of the items to the railroad electrical system.

Governance Improvements

Tasks listed under the Governance Improvements heading are more complex, likely requiring detailed design plans and a contract bid package. The improvements are also more expensive than the simple maintenance repairs or amenity upgrades. Therefore, the Department, station operators and Metro-North personnel will review, categorize, and prioritize the findings listed under this category. In addition, they will include the findings of the High Level Platform Visual Inspection Report and the Connecticut Rail Governance Study. Consequently, the Department will create a series of projects to implement the repairs, upgrades and improvements needed to bring the New Haven Line Commuter Rail Service up to commuters' expectations. Vendors and contractors may be employed to accomplish these improvements.

Governance Improvements involve tasks that require the preparation of design plans and a contract bid package. These improvements may include railing replacement, sidewalk installation, light fixture replacement, platform/canopy repairs, tactile edge installation, major concrete repairs, signage reviews, and ADA upgrades.

Major Capital Improvements

Finally, the Department anticipates that a number of major capital improvements may result from a comprehensive review of this report's findings. 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, those may demand major capital solutions. The recently completed Danbury Branch Feasibility Study and similar reports planned for the New

Canaan and Waterbury Branches may generate other capital improvements at these branch line stations.

Whether a new garage or structure expansion, platform or canopy extension, highway construction or similar capital improvements, the Department will coordinate all aspects of these projects.

COST CONSIDERATIONS

As a follow up to this report, the Department will prepare a cost estimate for each category of repairs. Together with operational considerations, the cost estimate will be the basis for a priority list of repairs to be performed over the next several years.

SUMMARY AND RECOMMENDATIONS

The overall condition of the New Haven Line train stations is good, but there are many issues requiring attention. The summary table on the following pages provides a synopsis of the recommended improvements for each of the 36 train stations. These recommendations incorporate the findings of the recent inspection site visits, as well as, the resources noted at the beginning of this Summary Report. Resources include the Connecticut Rail Station Governance Study, the High Level Platform Visual Inspection & Inventory, the report of the Station Amenities Committee and recent construction projects. In cooperation with the various municipalities, the Department will establish a station improvement program, which will include four phases of station related tasks: maintenance repairs, amenity upgrades, governance improvements, and major capital improvements.

The Department should direct station operators to perform the Maintenance Repairs listed in the appropriate individual station report, upon its release. Municipal operators will need to arrange for repairs to their stations with Department oversight. State operated facilities will be repaired under the terms of existing contracts or agreements. The Department may also utilize its own agency personnel.

Amenity Upgrades should begin soon after the release of this report. Using on-call consultants, the Department can generate the necessary purchase and installation contracts for various amenities such as benches, signs, kiosks, trash cans, bike racks and station clocks. The Department should begin this process as soon as funding becomes available.

The more complex Governance Improvements will involve the preparation of plans, specifications and estimates (PS&E) for each station or a group of stations. Department on-call consultants can also prepare these contract packages, although municipal involvement will be considered. The process of hiring the consultant should start upon the release of this report. The development of the scope of work, fee negotiations and design process will take a minimum of one year to complete. Historical, environmental and railroad considerations may extend this

process, hence the need to begin the process as soon as possible. It is anticipated that actual construction might begin in 2009.

Major Capital Improvements are items that require advanced planning and design and are expensive to implement. They require several years of design development, rights-of-way acquisition, and environmental permitting just to get to the contract bid stage. The Department needs to program dedicated funding years in advance. Construction must be coordinated with major projects currently planned in the area and with the Metro-North Railroad. The Department has initiated efforts to replace a parking garage, construct a new garage, build several new stations, extend various station platforms and install new platform canopies. As funding is programmed, other projects will be initiated.

The Department will assemble a more comprehensive station improvement program upon the final release of this report to the public.

SUMMARY MATRIX

Matrix Key:

Owner – Entity that owns most of the station area and buildings.

Ops – Party responsible for operating and maintaining the station.

Kiosk – Stand providing transit related and local information for commuters.

Vending & News Boxes – Various newspaper boxes and vending machines found around most station platforms.

Benches – Seating provided on platforms and in station buildings.

Trash Receptacle – All stations have the familiar blue recycling centers. Other trash can styles vary by location.

Bike Rack – Bicycle racks should be installed when warranted by demand.

TVM - Ticket Vending Machines are located at all main line and several branch line stations.

Clock – Analog station clock recommended for all platforms.

Signs – Department to further review and upgrade trailblazing, station entrances and platform signs.

Parking – Notes planned capital projects, parking layout and pavement (pvmt) condition.

Platforms, Stairs, Ramps – Most high-level platform foundations, joints, surfaces, and railing base plates need repairs. "Catenary" refers to rusted catenary structures in or behind the platforms. "Tactile edge" refers to the need to install a yellow tactile warning strip along platform edge. Other issues noted.

Canopies – Addresses canopy issues and the need for new canopies or canopy extensions/replacements.

Paths – Paths and walks between parking areas and platforms. Many bituminous (bit) walks cracked, uneven.

Railing – Most of the familiar aluminum platform railing is weathered, deformed or broken.

Fence – Chain link (CL) fence used between parking areas and tracks; Includes steel, cast iron and wood fences.

Lighting – Illumination levels to be evaluated. Post-mounted lights are recommended for all paths.

Station Building - Observations limited since most stations closed during time of site visit.

Shelters – Structures provided for protection from weather.

Litter – Track level and general station litter and graffiti.

ADA – General Americans with Disabilities Act (ADA) issues.

General – General comments that address items no covered under the other categories.