AUDIT REPORT

CITY OF NEW YORK
OFFICE OF THE COMPTROLLER
BUREAU OF MANAGEMENT AUDIT
WILLIAM C. THOMPSON, JR., COMPTROLLER

Audit Report on New York City Transit's Maintenance and Repair of Subway Stations

MJ09-056A

September 22, 2009

THE CITY OF NEW YORK
OFFICE OF THE COMPTROLLER
1 CENTRE STREET
NEW YORK, N.Y. 10007-2341

WILLIAM C. THOMPSON, JR.
COMPTROLLER

To the Citizens of the City of New York

Ladies and Gentlemen:

In accordance with the Comptroller's responsibilities contained in Chapter 5, §93, of the New York City Charter, my office has examined the adequacy of New York City Transit's (NYCT) efforts to identify and repair defective conditions in commuter areas of its subway stations.

NYCT's Division of Station Operations is responsible for ensuring that all subway stations and station facilities are properly maintained in a clean, safe, and sanitary condition at all times. Audits such as this provide a means of ensuring that quality of life issues are appropriately addressed.

The results of the audit, which are presented in this report, have been discussed with NYCT officials, and their comments were considered in the preparation of this report.

I trust that this report contains information that is of interest to you. If you have any questions concerning this report, please e-mail my audit bureau at audit@comptroller.nyc.gov or telephone my office at 212-669-3747.

Very truly yours,

William C. Thompson, Jr.

Report: **MJ09-056A**

Filed: **September 22, 2009**

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AUDIT REPORT IN BRIEF

This audit assessed the adequacy of New York City Transit (NYCT) efforts to identify and repair defective conditions in commuter areas of its subway stations.

NYCT is the largest agency in the Metropolitan Transportation Authority (MTA) regional transportation network. It operates 27 subway lines consisting of nearly 6,500 subway cars that travel over 660 miles of track connecting 468 active stations throughout four of the five City boroughs. The subways serve an average of 4.5 million riders daily. In addition, NYCT operates bus service throughout the four boroughs and rail service on Staten Island. In Fiscal Year 2008, NYCT had more than 48,000 employees and an operating budget totaling $7.9 billion

NYCT's Division of Station Operations (Division of Stations) is responsible for ensuring that all subway stations and station facilities are properly maintained in a clean, safe, and sanitary condition at all times. The Division's Maintenance and Support Unit (MSU) operates eight maintenance shops that are directly responsible for maintaining the stations and related facilities within each of their geographic regions. In Fiscal Years 2008 and 2009, the shops employed a workforce of approximately 1,000 employees, including skilled-trade workers (i.e., electricians, ironworkers, masons, and carpenters) that are responsible for providing scheduled and unscheduled maintenance at stations throughout the subway system. In Fiscal Year 2008, exclusive of capital projects, NYCT spent approximately $144 million on station maintenance, of which the City reimbursed $81 million for the operation, maintenance, and use of the stations.

This audit focused on the Division of Stations' efforts to address unscheduled maintenance activities, particularly those related to reported defects (trouble calls) in areas of subway stations accessible to commuters.

Audit Findings and Conclusions

NYCT does not adequately inspect and repair defective conditions in commuter areas of the subway stations and does not adequately ensure that all existing defects are identified and reported to maintenance shops, and subsequently repaired. Consequently, defective conditions that constitute a danger to the public, including trip hazards and potential exposure to lead paint and asbestos, remain unrepaired for extended periods of time.

More than two-thirds (or 99) of the 144 defects we initially observed at the 50 sampled stations between November 6 and December 12, 2008, were not reported by NYCT station supervisors to the maintenance shops for follow-up. In addition, we found that NYCT lacks a clear standard for the frequency of station inspections, and it does not routinely use inspections reports or keep them on file.

Moreover, based on our review of 425 sampled trouble calls at the 50 stations, we found that when defective conditions are reported to the maintenance shops, they are not always repaired. Sixty-three (15%) of the defects associated with trouble calls that we observed at the sampled stations had not been repaired, despite being reported to the maintenance shops well over 60 days prior to our station inspections. Of greater concern was that the NYCT trouble-call database showed that some of the unrepaired conditions had been closed out as completed, when we observed that the conditions had, in fact, not been repaired.

While we noted that there are procedures governing how trouble calls are recorded, assigned, closed out, tracked, and reported, we found weaknesses in those procedures. Furthermore, NYCT lacks a modern, reliable computerized system to manage and assess maintenance activities and facilitate accurate record keeping, data collection, and analysis. Last, there is a general lack of accountability and supervisory review of maintenance work performed.

Audit Recommendations

To address these issues, we make 16 recommendations, among them that NYCT should:

- Ensure that station inspections are appropriately performed by station supervisors and that all observed defects are reported to the maintenance shops.

- Establish a minimum requirement for frequency of station inspections and include this requirement in the Station Supervisor Training Program Manual and other applicable operating procedures.

- Ensure that required inspection and frequency reports are used to evidence inspections and establish record maintenance requirements for such reports.

- Establish minimum requirements for supervisors to randomly review the work performed by maintenance personnel and to report on these observations. These reviews should be used as part of employee evaluations.

- Consult the Information Technology-Information Systems (IT-IS) department within the agency to discuss the weaknesses and needs of the MSU in tracking trouble calls.

NYCT Response

In their response, NYCT officials generally agreed with the audit's findings and recommendations.

INTRODUCTION

Background

The Metropolitan Transportation Authority (MTA) was created in 1965 to maintain and improve commuter transportation and related services within the Metropolitan Transportation Commuter District, which encompasses the City of New York as well as Dutchess, Nassau, Orange, Putnam, Rockland, Suffolk, and Westchester counties. In accordance with Article 5, Title 11, §1277, of the New York State Public Authorities Law, the local governments of New York City and its neighboring counties must reimburse the MTA for the cost of operating, maintaining, and using passenger stations within the district served by one or more of the MTA subsidiary or affiliated agencies.[1]

MTA New York City Transit (NYCT) is the largest agency in the MTA regional transportation network. It operates 27 subway lines consisting of nearly 6,500 subway cars that travel over 660 miles of track connecting 468 active stations throughout four of the five City boroughs. The subways serve an average of 4.5 million riders daily. In addition, NYCT operates bus service throughout the five boroughs and rail service on Staten Island.

In Fiscal Year 2008, NYCT had more than 48,000 employees and an operating budget totaling $7.9 billion. For the same year, exclusive of capital projects, NYCT spent approximately $144 million on station maintenance, of which the City reimbursed $81 million for the operation, maintenance, and use of the stations.

NYCT's Division of Station Operations (Division of Stations) is responsible for ensuring that all subway stations and station facilities are properly maintained in a clean, safe, and sanitary condition at all times. The Division's Maintenance and Support Unit (MSU) operates eight maintenance shops that are directly responsible for maintaining the stations and related facilities within each of their geographic regions. In Fiscal Years 2008 and 2009 the shops employed a workforce of approximately 1,000 employees, including skilled-trade workers (commonly referred to as maintainers) such as electricians, ironworkers, masons, and carpenters.

The maintenance shops are responsible for providing scheduled and unscheduled maintenance at stations throughout the subway system. Scheduled maintenance includes both preventive maintenance and planned projects. Unscheduled maintenance involves responding to trouble spots and defective conditions identified through station inspections and complaints received from the riding public and MTA employees. This audit focused on the Division of Stations' efforts to address unscheduled maintenance activities, particularly those related to reported defects (trouble calls) in areas of subway stations available to commuters.

Station supervisors are required to inspect each of the stations they oversee to assess general cleanliness and to detect trouble spots and potentially hazardous conditions that may

[1] The subsidiary or affiliated agencies are: MTA New York City Transit, Long Island Rail Road, Metro-North Railroad, Long Island Bus, MTA Bridges and Tunnels, MTA Bus Company, and MTA Capital Construction Company.

pose a risk to the riding public.[2] For each inspection, the station supervisors are to complete an inspection report that is forwarded to and kept on file by the Legal Liaison Unit, according to NYCT officials. If a defect is observed, the station supervisor is to notify the appropriate maintenance shop by telephone (for emergency conditions) or by fax (for non-emergency conditions). Generally, the station supervisor determines whether the condition is an emergency or routine trouble call. In addition, customer complaints regarding station conditions (and other matters) communicated to NYCT by phone, e-mail, and correspondence are to be channeled through the Customer Service center or the Division of Stations' Administration Unit and are to be subsequently forwarded to the appropriate maintenance shop for follow-up.

The clerk at each of the eight maintenance shops—generally a senior skilled tradesperson with field experience—receives the services calls, manually logs them, and assigns to each reported defect the next number in the sequence. At a later time the clerk will log the information pertaining to each reported defect or trouble call (e.g., report date, station number, location, and defect description) along with the skilled-trade maintenance group most likely needed to address the defect into a trouble-call database. The trouble-call database at each shop is unique to that shop and is used to record and track the status of reported defects handled by each respective shop. Trouble calls are prioritized according to defect type. "A-priority" trouble calls involve emergency conditions that pose a risk to safety or security, or hinder the flow of revenue collection. NYCT's goal is to repair or abate emergency conditions within 24 hours. "C-priority" trouble calls involve routine, non-emergency conditions, which NYCT aims to repair within 60 days.

At the start of each workday, the skilled-trade (maintenance) supervisors at each shop obtain a list of trouble calls for their groups' respective skilled trades. They review the list along with ongoing assignments and other scheduled work projects, prioritize the work, and delegate assignments to the maintenance crews. Depending on the nature of the trouble calls, prior to assigning a maintenance team, the supervisor may first visit a site to assess the skilled-trades personnel and materials needed to perform the repairs. The supervisor may also send maintainers to assess a condition.

The maintenance crews report to the crew supervisor the status of their work for each assigned trouble call (e.g., in-progress or completed). At the end of each day, the crew supervisor completes a "Payroll and Production Sheet" to document the work assignments of each crew member, the status of the repairs (e.g., completed or in-progress), and the attendance and hours worked of each crew member. The MSU's Fiscal Year 2008 budget, exclusive of cleaning, totaled $104.6 million, consisting of $97.5 million in total labor costs and $7.1 million in other than personal services costs.

Audit Objective

The objective of this audit was to determine the adequacy of NYCT efforts to identify and repair defective conditions in commuter areas of its subway stations.

[2] Cleaners assigned to the stations are responsible for station cleanliness.

Scope and Methodology

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions, based on our audit objectives. This audit was conducted in accordance with the audit responsibilities of the City Comptroller as set forth in Chapter 5, §93, of the New York City Charter.

The scope of our audit was July 1, 2007, through March 31, 2009. To accomplish our objective we performed the following procedures.

To gain an understanding of the MTA and the divisions and departments involved in the repair and maintenance of subway stations and of their general roles and responsibilities, we reviewed Articles 5, 9, and 11 of the New York State Public Authorities Law, departmental organization charts, service call flow diagrams, and various reports, publications, memoranda, and other relevant materials obtained from MTA and NYCT officials, the MTA Web site, and other sources.

Evaluation of Controls

To understand and evaluate the processes and controls over the identification, reporting, and repair of defective conditions in commuter areas of the subway stations, we interviewed various officials of the Division of Stations MSU. We also interviewed supervisory personnel and staff at the eight maintenance shops, as well as station supervisors and superintendents.

We reviewed available operating policies and procedures pertaining to the inspection, maintenance, and repair of subway stations. Where operating procedures were not available, to supplement our understanding we ascertained procedures through interviews with NYCT personnel and reviewed the following:

- "Station Supervisor Level One Training Manual" and the "Station Supervisor Refresher Training Program Manual" (both dated October 2006).
- Policy memorandum, "Reporting of Services Calls" (Bulletin Order Number ACSO-56-08, dated October 27, 2008).
- Memorandum of understanding between the Division of Stations and Division of Infrastructure-Maintenance of Way (effective January 1, 2003).

Where applicable, these documents were used as audit criteria, in addition to Articles 5, 9, and 11 of the New York State Public Authorities Law. We also used Comptroller's Directive #1, "Principles of Internal Control," for supplemental guidance.

To test adherence to stated policies and procedures and determine whether there was adequate supervisory oversight and segregation of duties, we conducted walkthroughs of the maintenance shops and accompanied work crews to assigned work sites. We also interviewed

skilled-trades supervisors and personnel. Further, we interviewed station superintendents and supervisors, accompanied and observed a station superintendent perform a station inspection, and examined samples of station inspection and maintenance records.

Data Reliability Tests

In the absence of a user manual and system documentation, to familiarize ourselves with the trouble-call database used by NYCT maintenance, we interviewed the manager of Engineering, Technical and Field Support (ETFS), the unit responsible for supporting and maintaining the database. With the assistance of the ETFS manager, we reviewed information recorded and tracked in the database and, on a limited basis, ascertained the general controls and support of the application.

We obtained a copy of the trouble-call database as of August 1, 2008, compiled by the ETFS manager from the versions of the database maintained at each of the eight maintenance shops and generated various queries to ascertain the database's functions, capabilities, and limitations.

To obtain reasonable assurance that our copy of the database accurately reflected data maintained by each maintenance shop, we obtained from five of the eight shops a copy of each shop's own database.[3] We randomly selected 10 trouble calls from each copy of the five shop databases and compared them to the copy of the compiled version. Further, to obtain reasonable assurance that the data in both the compiled and standalone versions of the databases reflected information recorded on source documents, we judgmentally selected 61 Payroll and Production Sheets from the eight maintenance shops for the week of May 11 through 17, 2008, reflecting a total of 245 assigned trouble calls. We traced information recorded on the forms (e.g., station number, station name, line, job site, job description, trouble-call number, and dates) to each shop's corresponding database to test for completeness and accuracy.

Although our evaluation of the trouble-call database found a number of weaknesses and raised concerns about the integrity and completeness of the data it contained, for the purpose of this audit, we determined that the database was sufficiently reliable for us to select trouble calls from the database for audit testing and to determine their repair status.

Selection of Sampled Trouble Calls and Inspection Reports

We randomly selected 50 of the 468 NYCT subway stations for audit tests: 26 stations in Brooklyn, 15 in Manhattan, 5 in Bronx, and 4 in Queens (as shown in the Appendix).

Using the trouble-call database, we identified a population of 39,892 trouble calls (including 33,949 "C-priority" or non-emergency calls and 5,943 "A-priority" or emergency calls) for the period July 1, 2007, through August 1, 2008. From this population, for each of the 50 sampled stations we judgmentally selected up to 10 trouble calls for defects (exclusive of lighting and graffiti) in areas available to commuters (i.e., stairs, station platforms, mezzanines).

[3] The clerks at three of the eight maintenance shops were not technically knowledgeable enough to provide us with a copy of their databases.

These trouble calls were selected based on our assessment that repairs performed could be readily verified through simple observation. (No distinction was made for A- or C-priority calls when selecting trouble calls.) Overall, we selected 425 trouble calls in commuter areas for observation at the 50 sampled stations, including 62 A-priority calls and 363 C-priority calls.

In addition, to ascertain the frequency and adequacy of station inspections performed by station supervisors, we requested to review all of the "Daily Station Inspection Reports" for 10 (20%) of the 50 sampled stations for the judgmentally selected week of May 12–16, 2008.

Evaluation of Efforts to Address Defective Conditions

Between November 6 and December 12, 2008, we visited the 50 sampled subway stations. Accompanied by either a station supervisor or superintendent, we toured the stations, attempted to find the defective conditions associated with the sampled trouble calls, determined through inspection whether those conditions had been repaired, and documented the results of our observations. When appropriate, we photographed conditions that we found not repaired, and shared our findings with NYCT officials for follow-up.

On the day of our visit to each station, apart from touring the stations accompanied by NYCT personnel, we independently inspected the stations to identify reportable defects in need of repair, based on conditions generally addressed by NYCT maintenance shops. We photographed many of the defective conditions that we observed.

To determine whether identified defects were reported by station supervisors to the maintenance shops and subsequently recorded in the trouble-call database, we obtained an updated copy of the trouble-call database for all eight maintenance shops, compiled by the EFTS manager as of December 22, 2008. After evaluating the database copy for completeness, we attempted to trace all identified defects to the trouble-call database to determine whether they had been reported to the shops. Subsequently, between February 9 and 13, 2009, we selected 27 stations for reinspection to determine whether the defects we identified at those stations had been repaired by NYCT maintenance personnel.

Using the trouble-call database, we assessed NYCT's timeliness in completing needed repairs. We calculated the time it took from the trouble-call report date for the maintenance shops to repair defective conditions and closeout (complete) the trouble calls. Further, we assessed whether established trouble-call performance goals were being met.

To determine whether customer complaints reported to either the MTA Customer Service center or the Administration Complaint and Correspondence unit (ACCU) automated complaint line were tracked and referred to the maintenance shops for follow-up, we selected 20 of the defects we identified at the stations that had not been repaired. Between February 19, 2009, and March 16, 2009, we placed calls to the MTA complaint numbers and reported the conditions. We reported 9 to the Customer Service center and 11 to the ACCU. Subsequently, we obtained copies of the customer complaint logs for February and March 2009, which included customer complaints placed by phone, e-mail, and correspondence, and determined whether the 20 complaints we called in were recorded in the logs.

The results of tests involving inspection reports and trouble calls were not selected in a manner to enable them to be projected to their respective populations. Nevertheless, the sample test results provided a reasonable basis for us to assess the adequacy of NYCT's efforts to identify, respond to, and repair reported defective conditions in commuter areas of the NYCT subway stations.

Discussion of Audit Results

The matters covered in this report were discussed with NYCT officials during and at the conclusion of this audit. A preliminary draft report was sent to NYCT officials and discussed at an exit conference held on June 12, 2009. On June 18, 2009 and July 31, 2009, NYCT officials submitted additional information for consideration. We reviewed that information and made slight modifications to the report as we deemed appropriate. On August 13, 2009, we submitted a draft report to NYCT officials with a request for comments. We received a written response from NYCT officials on September 8, 2009. In their response, NYCT officials stated: "[T]he City Comptroller made 16 recommendations. Subways has agreed to implement or has implemented all 16, and further believes that with the re-organization of the Department of Subways and the introduction of the Line General Managers program, improvements in internal processes and functions carried out under maintenance shops will be realized."

Even though NYCT officials generally agreed with all of the audit recommendations, we are concerned by the generality of their response and the overall lack of specific information as to how and when they plan to implement many of the recommendations. For example, to address weaknesses disclosed with the trouble-call database and performance reporting, NYCT responded that the related recommendations would be implemented "once a reliable computerized web-based tracking system program is procured or a Microsoft Access database is designed." Despite this assertion, NYCT's response provides no certainty of when or if, in fact, NYCT will procure or design a new database. Without certainty as to when and if a new trouble-call database will either be purchased or designed, we believe that misleading information about maintenance shops' performance and productivity outcomes will continue to be provided to management. At the very least, NYCT should seek assistance from the IT-IS department to modify its current database to ensure accuracy in performance reporting. Moreover, given the funds expended on maintenance, NYCT should quickly move to modernize its maintenance operations.

Additionally, we are concerned about the NYCT's optimistic belief that the Line General Manager program, as part of the reorganization of the Division of Subways, will remediate many of the problems found by this audit and result in overall improvements, particularly in the area of station maintenance. Despite our requests, NYCT failed to provide us with any detailed and documented information about the Line General Manager program. Consequently, we could not evaluate the effectiveness of the program as it pertains to station maintenance. Therefore, we have no assurance that the Line General Manager Program will improve the adequacy of NYCT's efforts to identify and repair defective conditions in commuter areas of its subway stations. The full text of the NYCT response is included as an addendum to this report.

FINDINGS AND RECOMMENDATIONS

NYCT does not adequately inspect and repair defective conditions in commuter areas of the subway stations and does not adequately ensure that all existing defects are identified and reported to maintenance shops, and subsequently repaired. Consequently, defective conditions that constitute a danger to the public, including trip hazards and potential exposure to lead paint and asbestos, remain unrepaired for extended periods of time.

More than two-thirds (or 99) of the 144 defects we initially observed at the 50 sampled stations between November 6 and December 12, 2008, were not reported by NYCT station supervisors to the maintenance shops for follow-up. In addition, we found that NYCT lacks a clear standard for the frequency of station inspections, and it does not routinely use inspections reports or keep them on file.

Moreover, based on our review of 425 sampled trouble calls at the 50 stations, we found that when defective conditions are reported to the maintenance shops, they are not always repaired. Sixty-three (15%) of the defects associated with trouble calls that we observed at the sampled stations had not been repaired, despite being reported to the maintenance shops well over 60 days prior to our station inspections. Of greater concern was that the NYCT trouble-call database showed that some of the unrepaired conditions had been closed out as completed, when we observed that the conditions had, in fact, not been repaired.

While we noted that there are procedures governing how trouble calls are recorded, assigned, closed out, tracked, and reported, we found weaknesses in those procedures. Furthermore, NYCT lacks a modern, reliable computerized system to manage and assess maintenance activities and facilitate accurate record keeping, data collection, and analysis. Last, there is a general lack of accountability and supervisory review of maintenance work performed.

These matters are discussed in the following sections of this report.

Results of Station Observations

During our visits to 50 sampled stations between November 6 and December 12, 2008, we performed two separate observations: (1) independent inspections of stations to identify reportable defects in need of repair for further tests and (2) inspections accompanied by NYCT personnel to determine the status of conditions associated with 425 sampled troubled calls. The results of these observations are discussed below.

Defects Identified during Independent Inspections

During our independent inspections of the 50 sampled stations, we identified 144 reportable defects at 42 stations. Upon comparing the results of our inspections to the December 22, 2008, copy of the trouble-call database that was generated after our inspections, we found that only 45 (31%) of the 144 defects were recorded in the database. The remaining 99 (69%) observed defects were not recorded in the trouble-call database because they apparently had not been reported to the maintenance shops for repair.

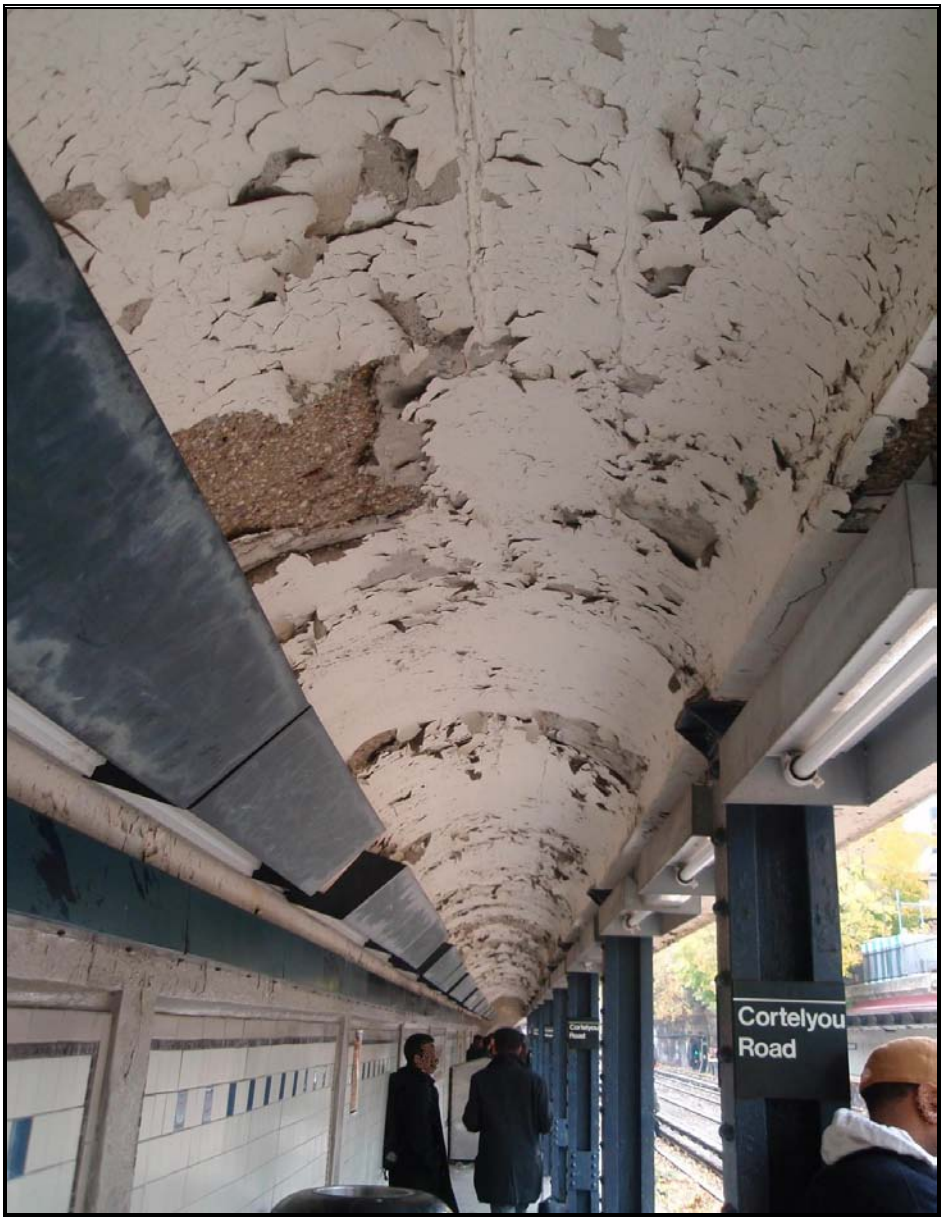
Between February 9 and 13, 2009, nearly 60 days after our initial inspections, we revisited 27 of the 42 sampled stations where we had observed defective conditions to determine whether the 100 defects we initially observed at these 27 stations had been repaired. (Only 29 of these 100 defects had appeared in the December 22, 2008 copy of the trouble-call database.) During our reinspections, we found that 54 (54%) of the 100 defects we initially observed at the 27 stations were not repaired.

These results indicate that there are numerous problems with station inspections, the identification of hazardous conditions, and the reporting of those conditions to the maintenance shops for repair.

As discussed below (and shown in Photographs #1 through #8), some of the conditions that we observed that posed potential hazards to the riding public included peeling paint and holes in station ceilings, holes in station platforms, water leaks, corroded metal wall panels on an elevated platform, and loose or warped rubbing boards (boards that fill the gap between the platform edge and the train door).

Photograph 1

Peeling Paint and Loose and Cracked Ceiling Concrete
At the Cortelyou Road Station

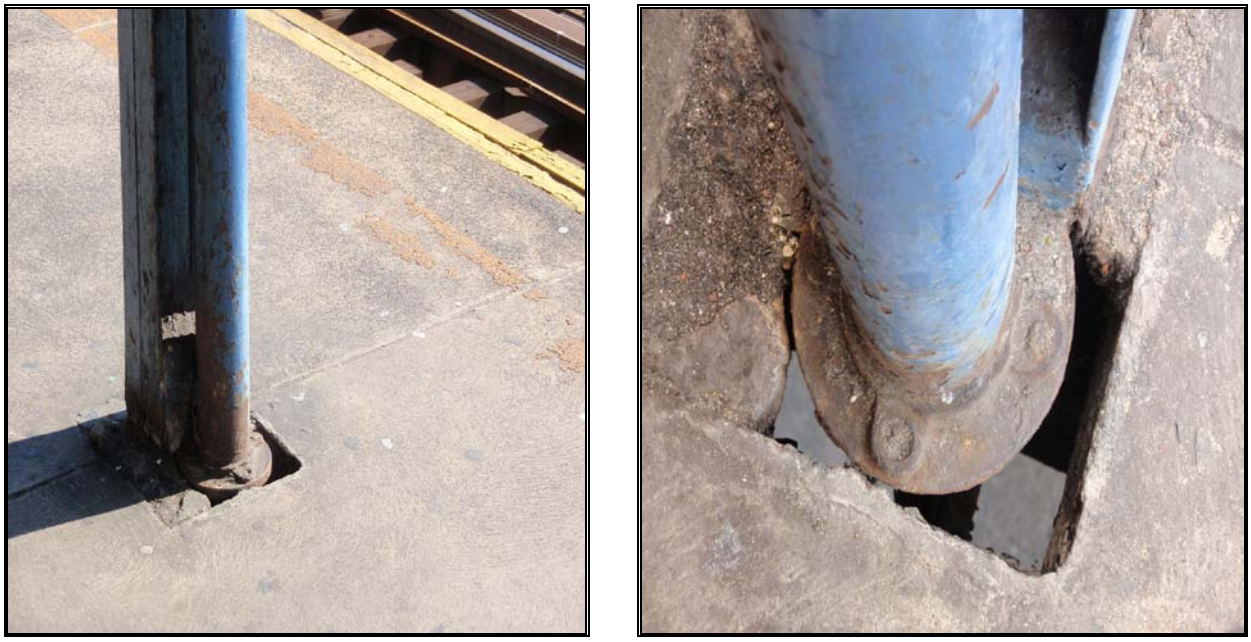


At the Cortelyou Road station of the Q line in Brooklyn (shown in Photograph 1 above), we observed peeling paint and patches of loose and cracked concrete or masonry along the ceiling of the northbound platform. We initially observed this condition on November 12, 2008. While there were trouble calls for the Cortelyou Road station reflected in the database, none of them were for the northbound platform ceiling. We conclude, therefore, that these conditions were not reported by the station supervisor to the maintenance shop for follow-up and repair.

In response, at the exit conference, NYCT officials contended that the ceiling conditions were not severe. Further, in their correspondence of June 18, 2009, NYCT officials asserted: "Station Maintenance inspected the Cortelyou Road Station and did not find loose spalling concrete on the platform canopies." However, they noted that the "peeling paint conditions will be addressed under a Capital Paint Program Project." On July 31, 2009, NYCT submitted supporting documentation reflecting that the Cortelyou Road station was one of ten stations recommended to NYCT's Capital Program Management on March 10, 2009, as "potential candidates" for 2010 Painting Projects. In addition, NYCT provided a master list of capital projects for the Cortelyou Road station that showed an anticipated contract award in 2010 for a "2010 Station Paint Program." However, neither of these documents sufficiently showed that the Cortelyou Road station is indeed scheduled for a paint project and when work is expected to begin. Additionally, in spite of NYCT's response, the ceiling was, in fact, spalling with loose masonry.

Photograph 2

Concrete Broken Away at Base of Drain Pipe at the Elder Ave Station



During our November 18, 2008, visit to the Elder Avenue station of the No. 6 line in the Bronx, we observed a hole in the elevated, southbound platform (shown in Photograph 2 above). The concrete around the base of a drain pipe was totally broken away, leaving a hole through which the street was visible. We found that the defect did not appear in the trouble-call database as of December 22, 2009, therefore, it apparently had not been reported by the station supervisor to the maintenance shop. When we revisited the Elder Avenue station on February 10, 2009, we observed that the defective condition had not been repaired. We conclude, therefore, that the condition continued to go unreported by the station supervisor.

In response to this condition, in their June 18, 2009, correspondence NYCT officials stated: "A service call for the missing gap fill around the drain pipe at the Elder Avenue Station 6 line was submitted as a 'C' Priority defect by Field Operations personnel on April 21, 2009 and repairs are slated for completion by June 21, 2009." On July 28, 2009, we revisited the Elder Avenue station and observed that the defective condition had been repaired.

Photograph 3

Loose Electrical Box Hanging from Wire at the 116th Street Station

At the 116 Street station of the A line in Manhattan, we observed an electrical box hanging from its feed cable on the north end of the southbound platform (shown in Photograph 3 above). We noted that the box was easily reachable by commuters. We initially observed this condition on November 24, 2008, and again during our re-inspection of the station on February 12, 2009. The condition was not reported as a trouble call to the maintenance shop by the station supervisor or reflected in the database. Therefore, the defective condition remained unrepaired.

At the exit conference and in their June 18, 2009, correspondence NYCT officials stated that the hanging box we observed was not an electrical box but "a hanging Telephone Terminal

Box which either belongs to Communications or Verizon." To address the matter, they stated that the condition was reported to the NYCT Communications Trouble Call Desk on March 23, 2009, for necessary repair. We revisited the station on June 23, 2009, and observed that the box had been affixed to the wall and the condition abated.

Photograph 4

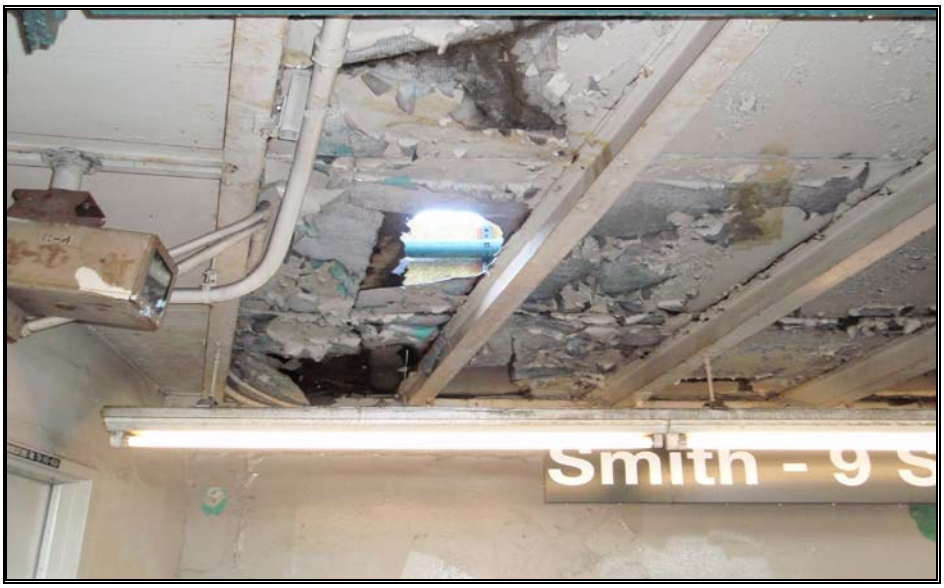
Missing Riser Tiles on Staircase at the 33rd Street Station

At the 33rd Street station of the No. 6 line in Manhattan, we observed that several riser tiles were missing from the staircase (S2/S9) to the street constituting a trip hazard to the public (shown in Photograph 4 above). We initially observed this defect on November 25, 2008. According to the trouble-call database of December 22, 2008, the station supervisor never reported this defect as a trouble call to the maintenance shop. During our reinspection on February 9, 2009, we found that the condition remained unrepaired.

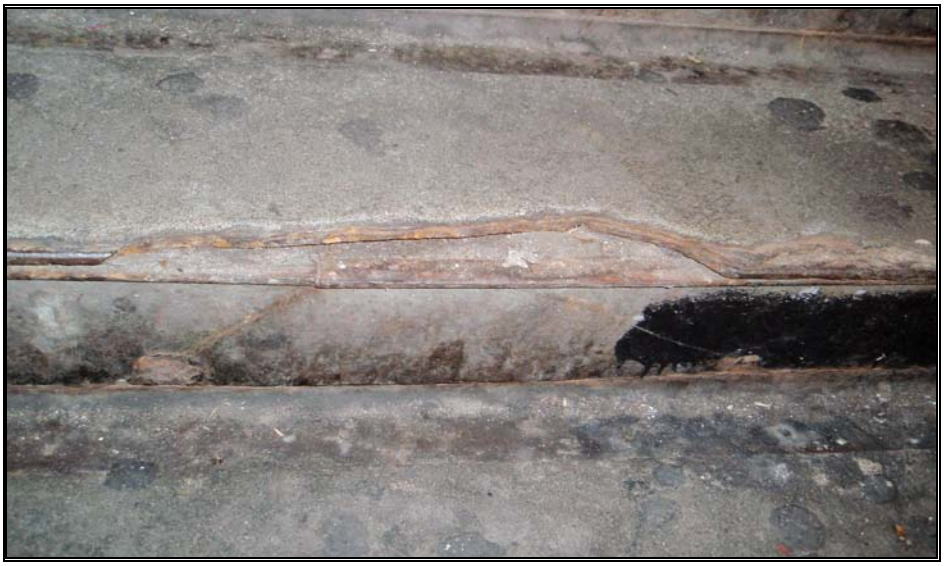
In their post-exit conference correspondence of June 18, 2009, NYCT officials said that Maintenance received two service calls related to the defects in the staircase, one on January 27, 2009, and one on February 25, 2009 (both after our initial observations). To address these defects, they stated that "Station Maintenance personnel repaired 2 [stair] treads; replaced wall tiles; made repairs to the floor; as well we also removed all loose riser tiles and replaced the missing riser tile with new once the tiles were procured on June 6, 2009 and all work was

completed as of June 10, 2009." We revisited the station on July 24, 2009, and observed that the staircase defects were repaired.

Photograph 5
Damaged Platform Ceiling at the Smith and 9th Streets Station



Photograph 6
Damaged Step Tread at the Smith and 9th Streets Station



During our November 25, 2008, visit to the Smith and 9th Streets Station of the F and G lines in Brooklyn, we observed several defects, including peeling paint, rust conditions, and, as shown in Photographs 5 and 6 above, a hole in the ceiling of the northbound platform and broken

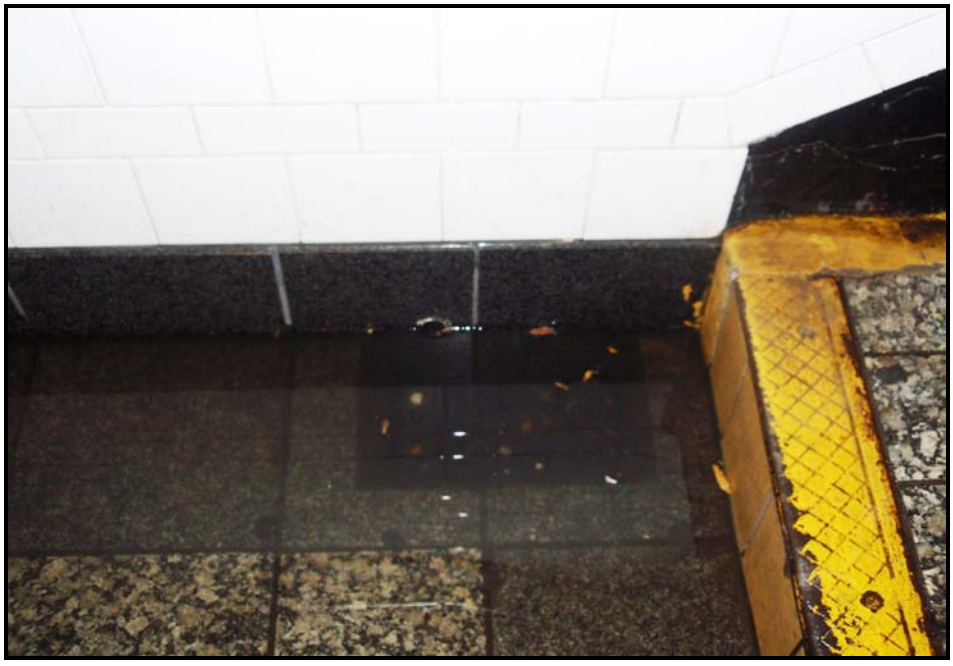
concrete on a stair tread on the mezzanine staircase. Neither of these conditions was reported by the station supervisor as trouble calls to the maintenance shop.

In their post-exit conference correspondence NYCT officials stated, "The platform canopy replacement project will have to be performed under a Capital Rehabilitation project due to the extensive repairs required and the asbestos and lead issues involved in this work." Further, regarding the stair defects (shown in Photograph 6 above), they stated, "Maintenance personnel have commenced with the ongoing repairs to the stair treads, which are slated for replacement under a future Capital Rehabilitation contract." We revisited the station on July 28, 2009, and observed that the defective stair tread had been repaired. However, the other conditions remained unchanged.

In support of their assertions about the future capital rehabilitation of the Smith and 9th Streets station, on July 31, 2009, NYCT submitted a project status report (dated July 28, 2009) that shows that the project design phases were completed as of April 28, 2008. However, the report also shows that the rehabilitation project status is deferred with no upcoming activities planned. In addition, NYCT provided a master list of capital projects for the station that showed an anticipated contract award date of April 2010. However, neither of these documents sufficiently showed when the Smith and 9th Streets station rehabilitation work is expected to begin.

Photograph 7

Clogged Drain and Water Ponding at the Bottom of Staircase at the Atlantic Avenue Station



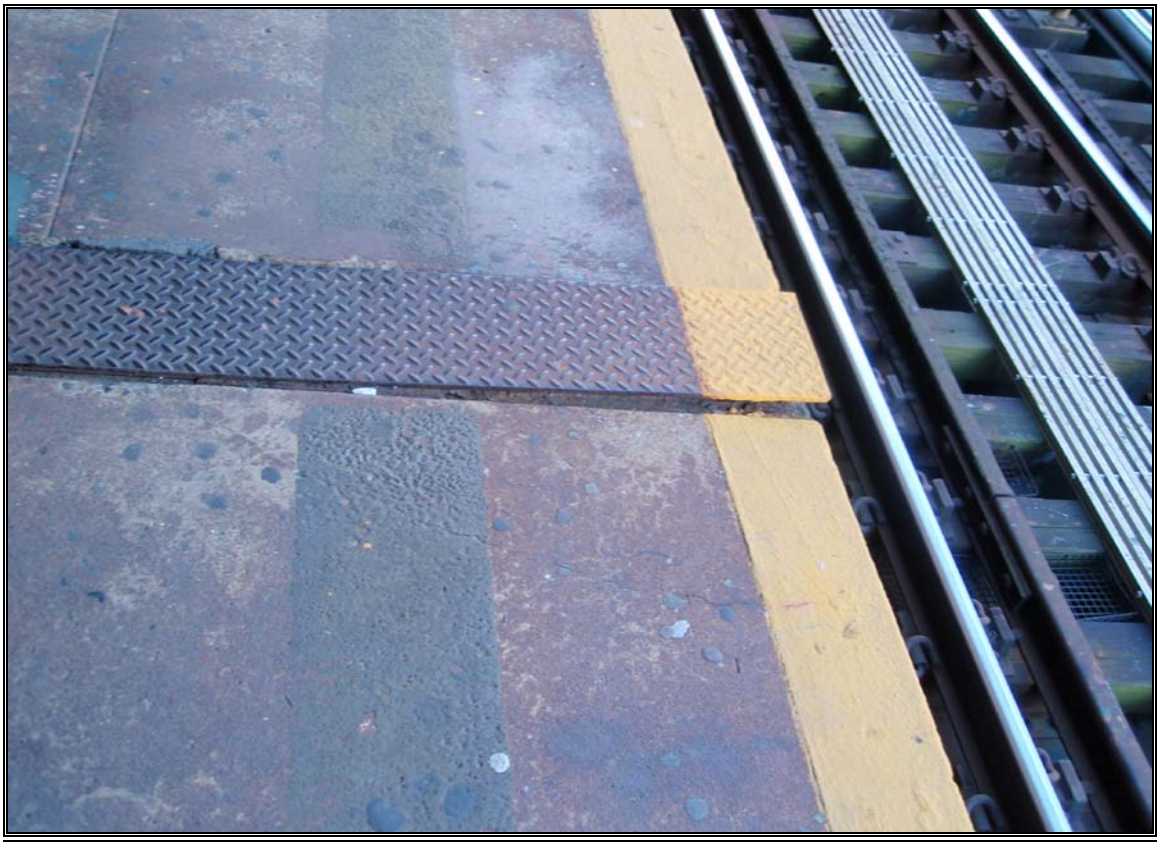
On November 13, 2008, we visited the Atlantic Avenue station of the B and Q lines in Brooklyn and observed water ponding at the bottom of the M1A stairway resulting from a

clogged drain. This did not appear in the trouble-call database. Therefore, the condition had not been reported by the station supervisor to the maintenance shop for repair.

In response to this condition, in their June 18, 2009, correspondence NYCT officials stated, "Maintenance personnel completed the clean-out of stairway M1A drain at the Atlantic Avenue Station BQ on May 30, 2009, eliminating the ponding water condition." We revisited the station on July 27, 2009, and determined that the condition had been abated. We found that even though it had rained heavily the evening prior to our revisit, there was no evidence of water ponding or moisture on the platform tiles around the drain.

Photograph 8

Raised Expansion Plate on Elevated Platform
At the 111th Street-Greenwood Avenue Station



On November 20, 2008, we visited the 111th Street-Greenwood Avenue station of the A line in Queens where we observed that the expansion plates on both northbound and southbound platforms were raised and uneven, creating trip hazards for commuters (see Photograph 8 above). We noted that the condition was reported as a trouble call on November 5, 2008, and was reflected in the trouble-call database as completed on November 22, 2008. However, when we revisited the station on February 9, 2009, we observed that this condition had, in fact, not been repaired. The trip hazard remained.

Despite a trouble call for this condition having been recorded in the database, in their June 18, 2009 correspondence, NYCT officials asserted that Station Maintenance did not receive a service call for this defect. In addition, they stated that a service call was submitted on May 28, 2009, to the Division of Infrastructure-Maintenance of Way to address the uneven expansion plate condition. Subsequently, on June 23, 2009, we revisited the station and observed that the expansion plate condition was not abated. According to additional information submitted by NYCT on July 31, 2009, the repairs to the expansion plates were completed on July 30, 2009. Subsequently, we revisited the station on August 4, 2009, and observed that all of the expansion plates on both platforms were level and the trip hazards abated.

As illustrated in Photographs 1 through 8 above, we observed various defects at 42 of the 50 sampled stations, many of which posed potential hazards to the riding public. Even though NYCT took action to address some of those defective conditions after we made them known, the fact remains that most of the conditions that we observed had not been identified through a station inspection and subsequently reported to maintenance shops for repair within a period of at least 60 days prior to our visits.

At the exit conference held on June 12, 2009, and in subsequent correspondence submitted to us on June 15, June 18, and July 28, 2009, NYCT officials gave reasons why many of the conditions that we observed at the stations had either not been reported or repaired.

With respect to unreported, observed defects, NYCT officials stated, "Station Maintenance has no control over the initial inception of a customer complaint or defect complaint." However, they also asserted that station supervisors do not report certain conditions because those conditions either cannot be remedied by the maintenance shops or are the responsibility of another division. For example, NYCT officials asserted that peeling paint conditions, such as those we observed at the Cortelyou Ave Station (shown in Photograph 1 above), would not be reported to the MSU because the conditions are too big and the MSU lacks the resources or expertise to perform the work.

They added that according to the NYCT "Lead Particulate Management Policy Instruction" (provided to us on June 15, 2009), all paint used throughout the subway system is assumed to contain lead, and all paint chip waste is considered hazardous waste, requiring special handling as set forth in the policy. Therefore, according to these same officials, peeling paint conditions, as well as other more extensive conditions—such as those observed at the Smith and 9th St. Station (shown in Photograph 5 above) that according to NYCT officials' correspondence involve asbestos and lead issues—are addressed by outside contractors under the Capital Paint Program or by a capital rehabilitation project. Even though NYCT submitted supporting documentation to show that: (1) the Cortelyou Road station was recommended and slated for a capital paint project sometime in 2010, and (2) the Smith and 9th Streets station was scheduled for a future capital rehabilitation, none of the documentation indicated when the work on either project was expected to begin.

In addition, NYCT officials stated that the Division of Infrastructure, Maintenance of Way (MOW) not the MSU is responsible for handling certain defects that involve steel, such as

the uneven expansion plates observed at the 111th Street-Greenwood Avenue (shown in Photograph 8 above).

Regarding defects that we found unrepaired on our follow-up visits, NYCT officials contended that the 60-day repair timeframe for C-priority trouble calls has been extended because of the Platform Edge Repair (rubbing board replacement) Initiative, which is slated for completion by December 31, 2009. In their July 31, 2009, correspondence, NYCT added that repairs under the platform edge repair initiative are considered A-priority, necessitating the "pushing out" of the scheduled 60-day window for 'C-priority defects. However, they provided no documentation to support the platform edge initiative or the extension of C-priority repair time. Instead they stated, "the 60-day 'C' Priority [time] window will continue to be impacted until those identified Priority 'A' platform edges are completed by December 31, 2009."

While we recognize the difficulties posed by certain conditions and changing priorities, NYCT nevertheless needs to make a concerted effort to address imminent hazards until a more permanent repair can be performed in the future through the Capital Paint Program or a capital rehabilitation project. Such a concerted effort is especially important since according to NYCT officials, only about 10 stations with the most severe paint conditions are scheduled to be addressed each year through the Capital Paint Program. Further, NYCT officials noted that capital projects had to be pushed back because of budgetary problems, making abatements of imminent hazards even more urgent. Therefore, pending actual rehabilitation in the future, defective conditions that remain unrepaired will only deteriorate, grow worse over time, and increase the risk of potential harm to the riding public.

Despite the statements by NYCT officials regarding the status of the conditions we identified and their handling of them, the fact remains that significant problems exist in the station inspection process (discussed in greater detail later in this report). When defective conditions are either not identified or reported based on a station inspection, NYCT management and the riding public have no assurance that necessary repairs will be made and that potentially hazardous situations will be promptly abated.

Status of Reported Defects on Accompanied Inspections

During our accompanied walkthroughs of the 50 sampled stations between November 6 and December 12, 2008, we found the defects associated with 399 of our 425 sampled trouble calls that were reported to the maintenance shops for repair. Neither we nor the station supervisors could find the defects associated with the remaining 26 sampled trouble calls since their locations were not clearly identified in the trouble call database.

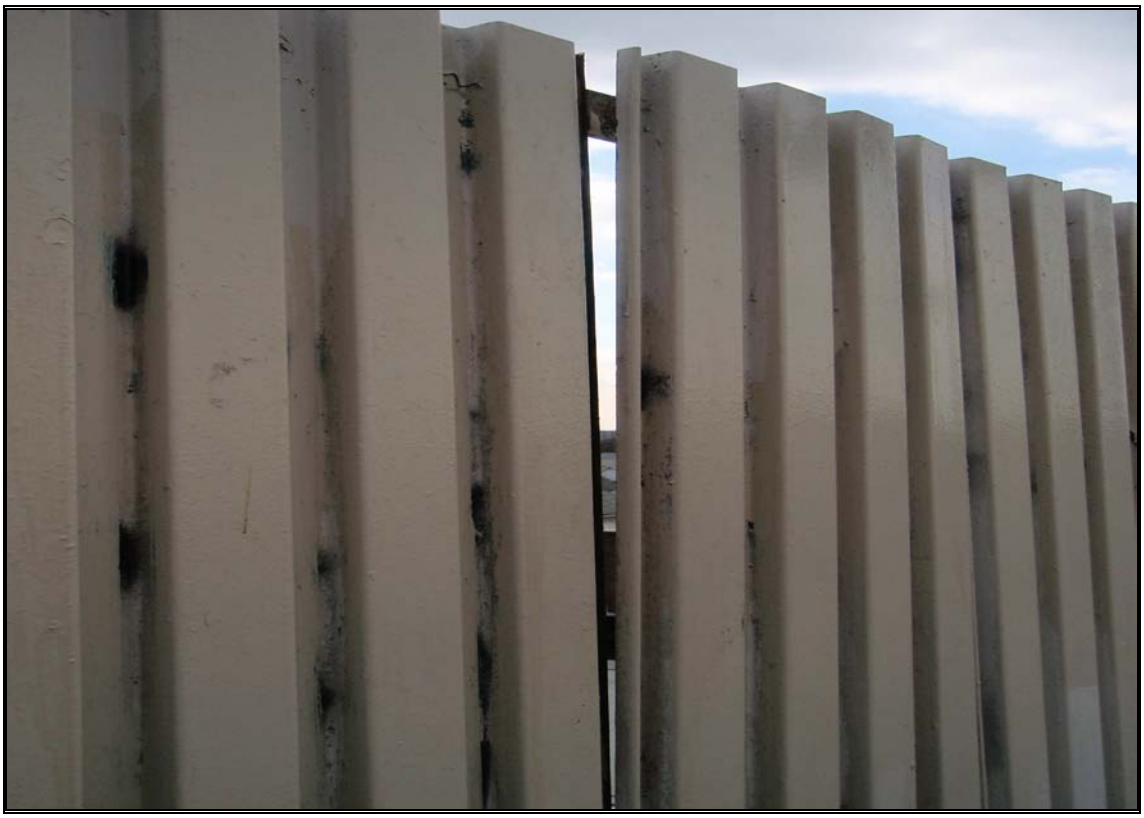
Of the 399 sampled defects that we were able to find, we observed that 63 (15%) had not been repaired, despite being reported to the maintenance shops well over 60 days prior to the dates of our station observations. For these 63 trouble calls, an average of 48 days (ranging from 7 to 167 days) had elapsed from the date the calls were recorded in the trouble-call database by the maintenance shops. Overall 10 (16%) of these 63 trouble calls exceeded the NYCT 60-day performance period for responding to C-priority (routine) trouble calls.

Although we observed that the 63 defects from our sample of trouble calls remained unrepaired, 42 (67%) of those defects were closed out as having been completed by the maintenance shops. (Overall, 311 of the 399 sampled trouble calls were closed out as completed.) This is particularly troubling since by our own observations the 42 defects were not repaired. Indeed, in our opinion, many of them posed a potential hazard to the riding public. For example, we observed loose or damaged rubbing boards, gaps between the platform edge and the rubbing boards attached to them, broken platform concrete, missing floor tiles, and loose stairs and handrails.

We shared our findings with NYCT officials for follow-up. Subsequently, NYCT officials had maintenance personnel reinspect the conditions and provided us with responses regarding each of the 42 unrepaired conditions that had been closed out. Some of these conditions (shown in Photographs #9 through #14) along with NYCT responses are discussed below.

Photograph 9

Loose Wall Panel on Elevated Platform at the 88th Street-Boyd Street Station



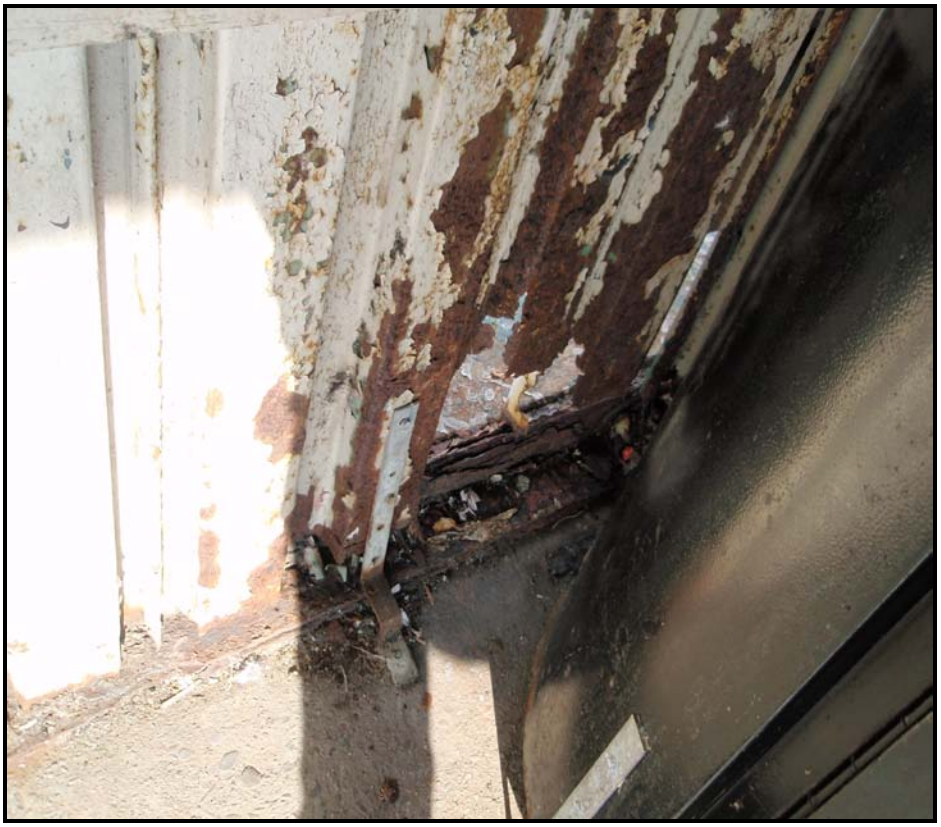
On June 20, 2008, sampled trouble call #6254587 was generated by the database for a loose metal wall panel at the south end section of the southbound platform at the 88th Street-Boyd Street station of the A line in Queens. According to the database, this call was closed out as completed on July 12, 2008. However, during our visit to the station on November 20, 2008, as shown in Photograph 9 above, we observed that the condition was not repaired. The top part of the metal wall panel remained loose and unsecured.

In response to our reported observations, NYCT officials stated that their maintenance personnel had found the panel to be secured. Since NYCT did not indicate when maintenance personnel made this observation, we do not know whether this condition was repaired subsequent to our report of the defect. Nevertheless, our observation of November 20, 2008, clearly indicated that the trouble call was closed out even though the condition was not repaired at that time.

In their June 18, 2009 correspondence, NYCT officials stated, "Station Maintenance completed the necessary repairs to secure the Q-panel [wall panel] at the 88th Street-Boyd Street Station on April 17, 2009." During our revisit of the station on July 28, 2009, we observed that repairs had been completed and the defect abated.

Photograph 10

Eight-Inch Hole in Metal Wall Panel of Elevated Platform
At the 111th Street-Greenwood Ave, Station



On June 18, 2008, sampled trouble call #6254234 was generated by the database for an 8-inch hole in a metal wall panel on the south end section of the northbound platform at the 111th Street-Greenwood Avenue station of the A line in Queens. According to the trouble-call database this call was closed out as completed on July 5, 2008. However, during our visit to the station on November 20, 2008, as shown in Photograph 10 above, we observed that the condition was not repaired. The base of the metal wall panel was rusted through leaving a large hole.

In response, NYCT officials stated that the metal wall "panel was inspected and secured; however, the hole needs to be repaired." NYCT's response is troubling, especially since it verified that the hole in the metal wall panel remained in disrepair nearly 10 months after being reported on May 21, 2008, and was closed out on July 5, 2008.

Subsequently, in their June 18, 2009, correspondence NYCT officials reported that "Station Maintenance completed the necessary repairs to the Q-panel at the 111th Street-Greenwood Ave Station as of April 17, 2009." On June 23, 2009, we revisited the station and observed that the defect was abated. The hole was covered with a metal plate.

Photograph 11

Loose Stair Handrail at the 71st Street Station

On June 2, 2008, sampled trouble call #6402012 was generated by the database for a loose stair handrail at the E9 northbound stairway at the 71st Street station of the D and M lines in Brooklyn. According to the trouble-call database, this call was closed out as completed on June 2, 2008. However, during our visit to the station on December 12, 2008, as shown in Photograph 11 above, we observed that the condition was not repaired. The handrail was not only loose but also unsecured.

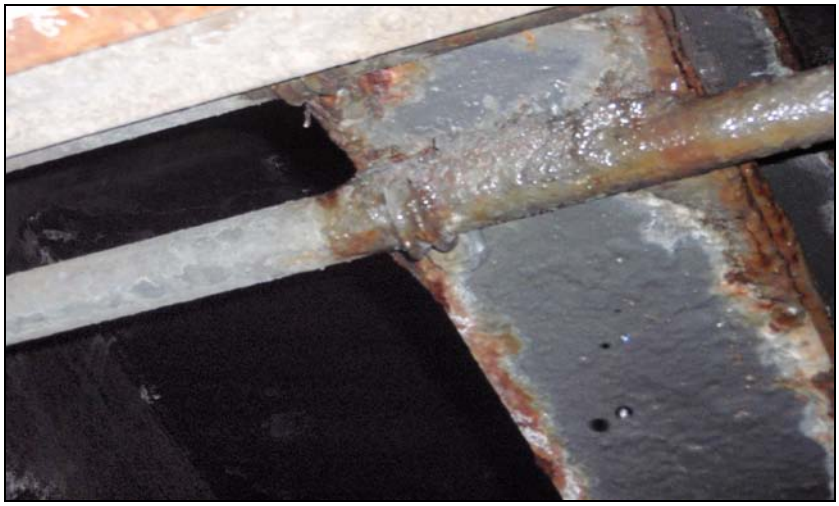
In response, NYCT officials stated that loose stairway handrails are subject to recurrence. However, they added that upon the reinspection on March 4, 2009, the loose handrail condition that we identified was corrected under a new trouble call. While handrail problems may reoccur,

in this case it took nearly three months after our station inspection for a NYCT maintenance shop to address the defect.

In their correspondence of June 18, 2009, NYCT officials reported that "Station Maintenance completed the necessary repairs to the handrail support bracket as of May 25, 2009." Subsequently, on June 23, 2009, we revisited the station and verified that the defective handrail condition was repaired.

Photograph 12

Water Leak and Ponding at the Bergen Street Station



On November 15, 2007, sampled trouble call #6346020 was generated for water ponding on the edge of the southbound platform of the Bergen Street station of the 2 and 3 lines in Brooklyn. According to the trouble call-database, this call was closed out as completed on November 15, 2007. However, during our visit to the station on December 3, 2008, as shown in

the Photograph 12 above, we observed that the condition was not repaired. We observed water ponding on the platform edge caused by an overhead leak.

In response, NYCT officials stated that maintenance personnel inspected the site on November 15, 2007, and found no water conditions. Therefore, the trouble call was closed. NYCT officials also stated that the condition was reinspected on March 5, 2009, (subsequent to our inspection) when a leak was found and a new trouble call was generated to correct this condition.

In response to the observed conditions, in their correspondence of June 18, 2009, NYCT officials stated, "INVESTIGATION OF REPAIRS PENDING, due to the requirement of a General Order in order to perform the maintenance work to replace the worn vent drain pipe which crosses the track area." On July 27, 2009, we revisited the station and observed that repairs were not completed. In subsequent correspondence of July 31, 2009, NYCT asserted that "this project is on hold until a General Order is secured," however, they gave no indication as to when this would occur.

Photograph 13

Litter Can without Security Lock at the 86th Street Station

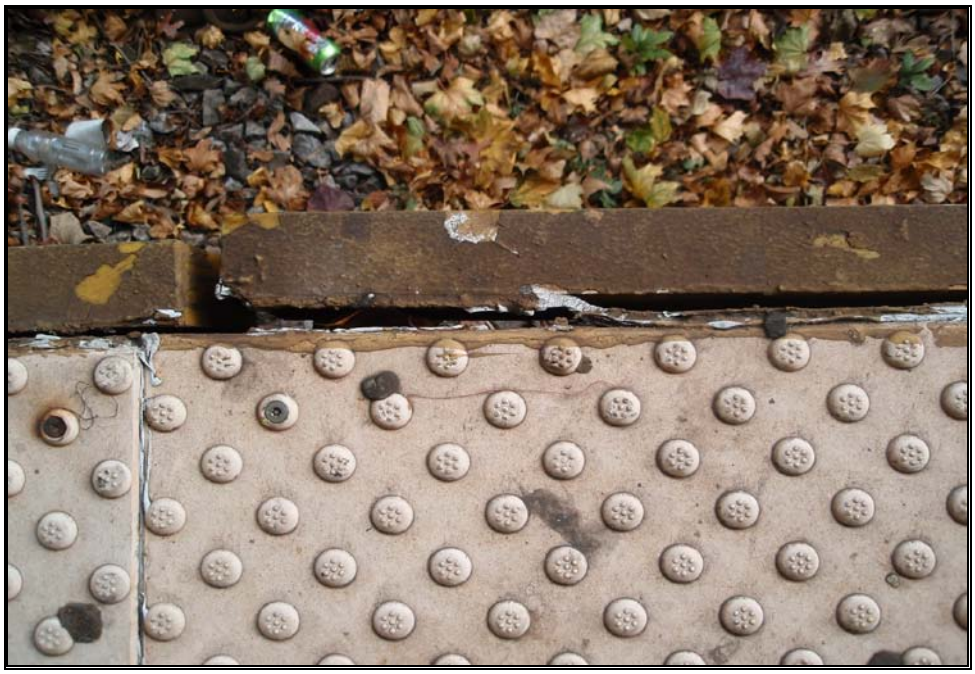
On February 3, 2008, sampled trouble call #5190249 was generated for a missing lock on a litter can at the southbound platform of the 86th Street station of the 4, 5, and 6 lines in Manhattan. According to the trouble-call database, this call was closed out as completed on February 13, 2008. However, during our visit to the station on December 4, 2008, as shown in Photograph 13 above, we observed that the condition was not repaired. The trash can still lacked a security lock. This is of concern, since according to NYCT officials, loose objects such as benches and litter containers are A-priority conditions because they can be thrown onto the tracks by vandals.

In response to our observation and based on NYCT's subsequent follow-up in March 2009, NYCT officials stated that "the hasp and staple [lock] securing the can was damaged due to vandalism." They added that two additional trouble calls were received on December 4, 2008, (the date of our inspection) and December 5, 2008, and that repairs were in progress to replace the locks on 11 litter containers throughout the station.

In their June 18, 2009, correspondence, NYCT officials stated, "Station Maintenance personnel attached a chain with padlock." Subsequently, on June 23, 2009, we revisited the station and observed that the litter can was secured.

Photograph 14

Loose Rubbing Board at Edge of Platform at the Cortelyou Road Station



On April 8, 2008, sampled trouble call #6401505 was generated for a loose rubbing board on the edge of the southbound platform of the Cortelyou Road station of the Q line in Brooklyn. According to the trouble-call database, this condition was not repaired. During our visit to the station on November 12, 2008, as shown in Photograph 14 above, we observed that the condition had indeed not been repaired. Since rubbing boards fill the gap between the platform edge and the train door, a loose, unsecured, or dislodged rubbing board poses a hazard to the riding public.

In their June 18, 2009, correspondence NYCT officials asserted, "The repairs to the rubbing boards were completed on May 21, 2009." Subsequently, on June 23, 2009, we revisited the station and found that the condition was indeed repaired.

The discrepancies we noted in the repair status of trouble calls reported as completed but not yet repaired are indicative of the weaknesses we found existing in NYCT maintenance shop

operating procedures. These weaknesses include lack of universal standards and operating procedures, and problems with the database, which are discussed in later sections of this report.

By allowing trouble calls to be closed out as completed when defects remain unrepaired can result in further deterioration of the conditions and can increase the risk of harm or injury to the riding public. Further, it leads to inaccuracies in reporting of maintenance shop performance to senior management and external stakeholders.

Weaknesses in Station Inspections

Station Inspections Not Adequately Performed

Our independent inspections of 50 sample subway stations between November 6 and December 12, 2008, disclosed that station supervisors did not adequately inspect stations or identify and report potentially hazardous conditions to the maintenance shops. This may be in part due to the lack of a clear understanding by station supervisors of the conditions that should be reported, as well as a lack of sufficient supervision. Nevertheless, since inspections were not adequately performed, there is no assurance that all potential hazards are communicated to the maintenance shops and scheduled for repair.

According to the Station Supervisor Training Program Manual, Station Supervisors are required when performing station inspections to "check for general and major cleaning, lighting safety hazards, and structural defects" in stairways platforms and mezzanines. Also for outside areas supervisors must check for "cleanliness, safety hazards, and any infringement upon Transit property." Overall, "corrective action must be taken and written/verbal reports submitted for any and all of the conditions that are found to be unsatisfactory."

According to NYCT officials, the station supervisors report defects identified during an inspection either by phone or fax to their regional maintenance shops. To prevent redundancies in reporting defects to the maintenance shops, before calling in an observed defect, supervisors are expected to review earlier inspection reports to determine whether the defect in question was previously reported.

During our independent inspections of the 50 sampled stations, we identified 144 reportable defects at 42 stations. Only 45 (31%) of those 144 reportable defects were recorded in the December 22, 2008, copy of the trouble-call database. The remaining 99 (69%) defects did not appear in the database. Therefore, station supervisors did not identify or report these defects to the maintenance shops for repair.

Our reinspections of the 100 defects that we had identified at 27 stations between February 9 and 13, 2009, disclosed that more than half of those defects were not repaired. Overall, we found that while 46 (46%) of the 100 defects had been repaired, 54 (54%) others remained unrepaired, 60 days or more after we originally observed the defects. These results again substantiate our conclusion that station supervisors are not adequately inspecting stations, identifying defects, and communicating them to maintenance shops for repair.

To address our findings, at the exit conference on June 12, 2009, and in subsequent correspondence of June 15 and 18, 2009, NYCT officials asserted that station supervisors do not report certain conditions, such as peeling paint and defects involving steel or iron. They indicated that this is an unofficial policy "understood" by the station supervisors. This assertion concerns us since it conflicts directly with defect reporting requirements presented in the NYCT station supervisor training manuals as well as with representations made by the many station supervisors we spoke with during our visits to the 50 sampled stations. The most troubling issue raised by NYCT officials' assertion is that if indeed there is a common understanding that station supervisors are not to report certain conditions, potentially hazardous conditions will go unreported, remain unaddressed, and continue to deteriorate.

In response to our request for clarification about who is responsible for identifying and reporting station conditions, NYCT officials stated that "Station Supervisors inspect, investigate, and report all station conditions." However, they also noted that NYCT officials are made aware of peeling paint and iron defects "through Capital Programs, Capital Program Management, and Budget, consultant structural surveys; Subways Infrastructure Engineering structural inspections and station condition assessments." However, many of these surveys may not be conducted frequently enough to ensure that all defective conditions that could pose potentially hazardous to the riding public are identified, reported, and addressed promptly. For example, we found that the consultant structural surveys and the Subway Infrastructure Engineering structural inspections were performed at least one year apart.

Without ensuring that stations are adequately inspected, and defects are identified and reported to the appropriate responsibility center there is no assurance that all defective conditions will be reported to and subsequently repaired.

Location of Reported Defects Not Adequately Identified

The NYCT Station Supervisor Training Program Manual states that station supervisors should use various station markers and landmarks to identify the location of defects when reporting them to the maintenance shops. However, we found that the locations of defects are not always clearly identified.

Of the 425 sample trouble calls we attempted to inspect during our visits to the 50 sampled stations between November 6 and December 12, 1008, even though accompanied by station personnel, we were unable to find the defects associated with 26 of the sampled trouble calls because there was insufficient location information. We found that 18 of these 26 calls were reported as completed in the trouble-call database.

Further, similar to the 26 trouble calls in our sample, we observed several entries in the trouble-call database with incomplete defect location information. However, due to limitations of the database, we were unable to determine the number of trouble calls that had incomplete defect location information similar to the 26 in our sample.

Without ensuring that the location of each defect is clearly identified when they are reported to maintenance shops, there is no assurance that those defects will be repaired.

Inconsistencies Regarding the Frequency And Reporting of Station Inspections

NYCT lacks a clear standard regarding the frequency with which subway stations must be inspected. Further, NYCT lacked sufficient evidence to show that station inspections are performed with any regularity and consistency.

The Station Supervisor Training Program Manual states that station supervisors are "responsible during their tour for the proper condition of all stations and property." It also states that "supervisors will inspect all stations in their zone(s)," including stairways platforms, mezzanines, and outside areas to "check for general and major cleaning, lighting safety hazards, and structural defects . . . or infringement on Transit property."

While the manual establishes that station supervisors must perform station inspections, it is unclear about how frequently station inspections are to be performed and how inspections are to be documented and reported by station supervisors.

Regarding the frequency of station inspections, we found that there is no clear consensus among NYCT officials about how frequently station inspections are to be performed. For example, at one meeting, a NYCT official asserted that inspections must be performed daily. In part, this was corroborated by the requirement that station supervisors complete a form entitled, "Daily Station Inspection Report" to document station inspections. However, the same official later told us that station supervisors must inspect stations once every other day; another official said that stations are inspected once a week; another told us that supervisors must inspect a certain number of their assigned stations each day; and another asserted that the frequency with which stations must be inspected is left up to the line manager to decide, based on need.

At the exit conference, NYCT officials agreed that there was a lack of clarity in the required frequency of station inspections. However, they asserted that even though station inspections are performed daily throughout the system, all stations are not inspected daily. They added that all 468 stations are inspected at least once every 48 to 72 hours, with some larger stations being inspected more frequently. We found this explanation ambiguous. It reinforced our conclusion that NYCT lacks a clear standard regarding the frequency with which subway stations must be inspected.

Regarding the documenting of inspections, while not specified in the training manual, according to NYCT officials, station supervisors must complete a Daily Station Inspection Report for each inspection performed. The form is preprinted and provides space for the supervisors to write their name and identification number, the date and time of an inspection, and the station number and name. The form also includes a list of common inspection areas and a rating gauge for each of those areas for supervisors to use during the station inspection. To prevent duplication in reporting defects to the maintenance shops, before calling in an observed defect supervisors are expected to review earlier inspection reports to determine whether the defect in question was previously reported. According to NYCT officials, these daily inspection reports form the basis for reporting trouble calls to the maintenance shops and are sent to the Legal Liaison unit for storage.

Contrary to what we were told by various NYCT employees throughout the audit, at the exit conference on June 12, 2009, NYCT officials asserted that station supervisors record the results of their station inspections, including observed station defects, onto a "Supervisory Log and Station Inspection Report." Further, they stated that this form, not the Daily Station inspection report (as we were previously told), is the legal record of station inspections. Despite NYCT assertions, we relied on the Daily Inspection Reports (source documentation) in performing our assessment. These daily reports, in conjunction with the "Supervisor Activity Report," serves as a legal record for a supervisor to record time spent, work locations, and activities performed throughout the day, and are filed with the NYCT Legal Liaison unit.

Although we observed that some station supervisors do not consistently use the inspection reports to record their station inspections, to ascertain the frequency of station inspections and the consistency of reporting those inspections, we requested to review all inspection reports for 10 of the 50 sampled stations for the week of May 12–16, 2008. The NYCT Legal Unit provided us with a total of 11 inspection reports it had on file for the requested period. Of these 11 inspection reports, we noted that there was one inspection report for each of seven stations, two reports for each of two stations, and no report for one other station.

In addition, according to the training manual, until February 15, 2007, station supervisors were required to complete "Station Inspection Frequency Reports" to record the dates of their station inspections during each month. However, according to a February 15, 2007 NYCT guideline update, the inspection frequency reports were no longer required, but rather optional: "superintendents may choose to continue maintaining frequency charts in their respective zones." In another turnabout of procedure, at a meeting on March 26, 2009, NYCT officials stated that the inspection frequency reports were once again required; however, they provided no evidence to substantiate this assertion.

Overall, the NYCT did not have sufficient evidence to show and support that station inspections were consistently performed or performed with sufficient, regular frequency to ensure that potentially hazardous conditions were identified and reported to the maintenance shops for repairs.

There must be effective communication between station supervisors and maintenance shops if the shops are to appropriately respond to and repair station defects. Without a clearly established requirement for station inspections there is no assurance station supervisors are regularly performing inspections and that defective conditions are being identified and ultimately repaired.

Recommendations

NYCT should:

1. Ensure that station inspections are appropriately performed by station supervisors and that all observed defects are reported to the maintenance shops.

NYCT Response: NYCT generally agreed, stating: "A bulletin is in preparation to emphasize supervisor's responsibilities when conducting through station inspections. It will be distributed to all station and maintenance supervisors. In addition, Workforce Development has been provided with instructional materials commensurate with our plans to ensure supervisors are fully knowledgeable of the proper procedures when performing station inspections and identifying station defects. Station Supervisors will continue to be assigned to a two-day refresher training so proficiency can be maintained."

2. Require station superintendents to spot check station supervisor inspections.

NYCT Response: NYCT generally agreed, stating: "Managers will continue to periodically perform in-depth station inspections with supervisors to ensure that inspections are thorough and defects are reported correctly. Superintendents are also responsible for reviewing and signing off on supervisory logs to ensure accuracy of information."

3. Instruct station supervisors to use appropriate station and platform markers to clearly identify the location of defects.

NYCT Response: NYCT generally agreed, stating: "Station Supervisors will be reinstructed on procedures for reporting service call defects, utilizing location identification markers to improve identification of defect locations."

4. Establish a minimum requirement for frequency of station inspections and include this requirement in the Station Supervisor Training Program Manual and other applicable operating procedures.

NYCT Response: NYCT generally agreed, stating: "Based on the current number of station supervisors under the new Line General Managers Program, we will commit to 72 hours as a minimum frequency for station inspections. This minimum frequency will be reflected in the Station Supervisor Training Program Manual as well as in all other applicable operation procedures."

5. Ensure that required inspection and frequency reports are used to evidence inspections and establish record maintenance requirements for such reports.

NYCT Response: NYCT generally agreed, stating: "Under the new Line General Managers Program, the Assistant General Manager, Customer Service, will be responsible for assuring the timely submittal of Station Supervisory logs to ensure that the 72-hour frequency of station inspections is adhered to. We will further explore the use of the Station Inspection Frequency Reports and the implementation and use of the PDA to evidence inspections and record maintenance required for such reports."

Auditor Comment: During the audit we requested project plans, organizational plans, and other information relevant to the new Line General Manager Program. However, NYCT either did not have available or did not provide the requested information.

Therefore, we were precluded from assessing the effectiveness of the program as it pertains to station maintenance.

6. Require that station and maintenance officials meet to discuss, identify, and design more efficient means of communicating.

NYCT Response: NYCT generally agreed, stating: "Under the new Line General Managers Program, weekly meetings are conducted on each line between operations and maintenance personnel to discuss the needs of the line and to prioritize these needs. In addition, we are currently piloting an electronic means of communicating and sharing information with the implementation and use of a PDA."

Auditor Comment: Refer to auditor comment to recommendation #5.

Weaknesses in Maintenance Shops' Efforts

Lack of Accountability and Supervisory Review of Maintenance Work Performed

Although not formally promulgated in an operating procedures manual, NYCT maintenance shops have procedures governing how trouble calls are recorded, assigned, closed out, tracked, and reported. However, we noted weaknesses in those procedures that compromise NYCT's efficiency, create a lack of accountability, and raise concerns over the accuracy of how trouble calls are logged, tracked, and reported.

The New York State Public Authorities Law (Article 9, Title 8, §2930-§2931) requires public authorities to establish and maintain a system of internal controls "designed to provide reasonable assurance that the organization will achieve its objective and mission," which include "promoting the effectiveness and efficiency of operations; ensuring compliance with applicable laws and regulations; and encouraging adherence to prescribed managerial policies."

NYCT maintenance shops do not use a work ticket system to assign, track, and document work performed in response to trouble calls. Instead, the process in use is rather informal. According to NYCT personnel, at the beginning of each day, shop supervisors obtain a list of open trouble calls for the respective skilled trade groups (e.g., electricians, carpenters, etc.), which is generated from the trouble-call database by the shop clerk. Based on the priority of calls and projects already in process, the supervisor will orally assign trouble calls to maintenance personnel and record these assignments on a "Daily Assignment Sheet."

In general, maintenance teams are responsible for inspecting the reported defect, assessing what repairs, if any, are required, obtaining necessary materials, and performing the repairs. Some trouble calls may be assessed as not requiring repairs. Periodically throughout the day, maintenance teams must call into the shop to report their location to the shop clerk. At the end of each day, maintenance personnel return to the shop where they orally report the status of each assignment (e.g., in progress or completed) to their supervisor.

Subsequently, the maintenance supervisor completes a daily Payroll and Production Sheet upon which the names of maintenance workers in his or her group, their attendance and work hours for the day, along with their work assignments (e.g., trouble calls) and the status of each assignment (e.g., in progress or completed) are recorded. A copy of the form is sent to the payroll department, another to the shop clerk, and one copy is retained by the supervisor. Our review of 61 Payroll and Production Sheets for the week of May 11–17, 2008, substantiated the procedure and provided reasonable assurance that it is consistently followed.

According to NYCT maintenance shop officials, when a trouble call is completed, the maintenance supervisor fills out and signs a closeout form (or similarly designed document) listing the completed trouble call numbers and completion dates. The form is used to inform the shop clerks to closeout completed trouble calls in the database, whereupon they enter the date of completion. While we observed that the closeout forms were used as stated, since none of the shops had the closeout forms for the sampled trouble calls noted as completed in the database, there was insufficient evidence to confirm that those sampled trouble calls were appropriately closed out, according to the stated procedure. According to maintenance shop personnel, the closeout forms are retained for only a short period of time, then discarded. However, as a supplement, the Payroll and Production Sheets can at least be used to support the completion of specific trouble calls.

While these procedures provide a baseline for assigning, tracking, and reporting on maintenance shop efforts to address trouble calls, we noted significant weaknesses. For example, since maintenance workers are not required to complete documentation (i.e., work tickets) attesting to work performed and completed on assigned trouble calls, there is a lack of accountability over the work performed. This weakness is further compounded by the lack of formal standards establishing a minimum level of supervisory review of maintenance personnel's work to confirm that repairs are indeed completed and performed appropriately.

Some of the shop supervisors with whom we met asserted that they sample or "spot-check" completed trouble calls and inspect the repairs. However, none of the supervisors provided evidence to support this assertion since they are not required to do so. Therefore, there was no evidence to show supervisory follow-up of repairs reported as completed by crew personnel. This lack of documentation is of particular concern, considering that 42 of the sampled trouble calls that we observed during our station visits remained in disrepair even though they were closed out as completed in the trouble call database.

Accountability and supervisory review are fundamental to an effective internal control system and provide management and other stakeholders with assurance about the adequacy and completeness of employee work performance. Without providing for adequate employee accountability and supervisory monitoring, NYCT management cannot be certain that trouble calls repairs are appropriately completed.

Recommendations

NYCT should:

7. Consider implementing the use of a work ticket system or a like kind of system requiring maintainers to report and attest to work performed.

NYCT Response: NYCT generally agreed, stating: "NYCT Station Maintenance will seek the funding to procure a reliable computerized web-based tracking program to manage and assess maintenance activities, and facilitate accurate record keeping, data collection and analysis to meet our operating needs."

8. Establish minimum requirement for supervisors to randomly review the work performed by maintenance personnel and to report on these observations. These reviews should be used as part of employee evaluations.

NYCT Response: NYCT generally agreed, stating: "Maintenance Managers will establish a minimum requirement for supervision to randomly review the work performed by maintenance personnel and generate reports to reflect the work reviewed."

Customer Complaints Are Not Being Properly Logged

Our evaluation of defects reported to either the MTA Customer Service center or the ACCU's automated complaint line disclosed that customer complaints about station defects are not appropriately handled, tracked, and referred to the maintenance shops for follow-up.

According to NYCT officials, all customer complaints of station defects received by phone, e-mail, and written correspondence are forwarded to the MSU, where they are logged, disseminated, and distributed to the appropriate area. Complaints pertaining to station defects are referred to the appropriate maintenance shop for follow-up. A shop supervisor will evaluate the reported defect and if the defect is confirmed and warrants repair, it is recorded in the trouble-call database, which generates a trouble call.

However, of the 20 defects we reported by telephone to MTA Customer Service center and the ACCU between February 19 and March 16, 2009, only four (20%) of the reported complaints were recorded in the MSU's log. The other 16 (80%) complaints were not logged. Therefore, these conditions were not appropriately forwarded to the maintenance shops for follow-up. It should be noted that when we reported these complaints, no confirmation or reference number was provided to the caller.

Recommendations

NYCT should:

9. Review and strengthen the procedures for documenting and communicating customer complaints about station defects that are placed with either the Customer

Service center or the ACCU's automated line to the maintenance shops to ensure that all complaints are followed up.

NYCT Response: NYCT generally agreed, stating: "Under the new Line General Managers Program, all customer complaints are the responsibility of the Line Managers, and will be investigated, addressed and responded to, in coordination with the Department of Subways Administration Correspondence Unit."

Auditor Comment: Refer to auditor comment under recommendation #5.

10. Consider establishing a process for providing confirmation or reference numbers to each incoming complaint to provide for better tracking and follow-up.

NYCT Response: NYCT generally agreed, stating: "NYC Transit's Department of Corporate Communication is working with Line General Managers instituting policy to ensure all customer complaints are accurately logged and disseminated."

Inadequate Controls for the Trouble-Call Database

NYCT lacks a reliable computerized system to manage and measure maintenance activities and facilitate accurate record keeping, data collection, and analysis. Our review disclosed that the trouble-call database lacks sufficient data-entry controls (i.e., edit checks). Further, it lacks ongoing monitoring functions and exception-reporting capabilities.[4]

According to the Federal Transit Administration of the U.S. Department of Transportation,[5] "computerized maintenance and materials management systems have been installed at many transit agencies around the country. These systems have extensive functionality and have been employed to realize efficiencies and reduce costs."

The trouble-call database used by NYCT maintenance shops to record and track trouble calls is primarily a stand-alone application developed in Microsoft Access. Because of the basic design of the database, it lacks adequate controls and has inherent deficiencies that raise concerns over the reliability, completeness, and accuracy of trouble-call data. These weaknesses are discussed below.

The eight maintenance shops are assigned responsibility center (RC) codes. The RC code in conjunction with a sequentially assigned number make up a unique number assigned to each trouble call. Our review of the database disclosed that the trouble call number is assigned manually and then entered into the database. While the database appears to prevent the same number from being entered twice, there is no control to ensure that numbers are assigned consecutively. In addition, we noted that entry controls, such as edit checks, are not present to

[4] Exception reporting is designed to call attention to abnormal events, anomalies or errors in data and related hardware or software processes that fall outside of predetermined parameters and require follow-up or investigation.

[5] U.S. Department of Transportation, Federal Transit Administration, "Transit State of Good Repair, Beginning the Dialogue." October 2008 (pg 33).

prevent the entry of inappropriate or incorrect data. For example, of the 33,949 records for C-priority trouble calls reviewed for the audit scope period of July 1, 2007, through August 1, 2008, 210 records had inappropriate dates. Specifically, for 110 entries, the trouble call date of completion preceded the start date, and for 100 other entries the date of completion was a date after August 1, 2008, the last date of trouble calls in the database copy provided to us. Many of these errors could have been prevented if appropriate edit checks were built into the database.

We identified other anomalies, including gaps in the sequential numbering of trouble call numbers. Although missing trouble-call numbers can be attributed to improper entry of dates, they can also occur because of inappropriate deletions. Overall, for the audit scope period, we identified 703 instances of trouble-call numbers that were out of sequence. We also found 2,976 entries where the trouble-call numbers were not consecutively ordered in line with the report dates, indicating that data may have been manipulated. For example, we noted that trouble call #5200012 was dated December 11, 2007, whereas the consecutive trouble call #5200013 was dated November 4, 2007, 37 days earlier. In another example, trouble call #5438485 was dated April 25, 2008, whereas trouble call #5457961, later in numerical sequence, had a report date of March 13, 2008, 43 days earlier. Since the database does not have an ongoing monitoring function or exception-reporting capability, records could be inappropriately modified or deleted without detection.

Our evaluation also reflected that pertinent trouble-call data is not consistently recorded in the database. For example, we noted 29 records without a job location and another 9 records without details of the reported defects.

On the whole, these weaknesses raised concerns about the reliability, completeness, and accuracy of trouble-call data logged and tracked through the trouble-call database. Further concerns were raised over the reliability and accuracy of performance statistics generated from the trouble-call database and reported to management and external stakeholders (discussed later).

In addition to these weaknesses, we noted a lack of standardization in defect descriptions, such as the use of defect condition codes for similar conditions types (e.g., 001 rubbing board, 002 cracked tile, 003 broken stair tread, etc.) or the use of condition codes to gauge the severity and breadth of the defective condition reported. Therefore, the database fails to provide important analysis functions that would allow management to identify stations with frequent defects and identify trends so that resources could be more effectively allocated to problem areas.

When we discussed this matter with NYCT officials, they acknowledged that the trouble-call database has weaknesses. Further, they discussed possibilities for replacing the system, but had no firm plans in place to do so, citing budgetary constraints. However, during our interviews, NYCT officials asserted that NYCT has information technology (IT) expertise in-house capable of developing an improved system. If this is the case, considering the budget constraints faced by the MTA, it would be cost efficient for the agency to use internal talent and skills to modify the current trouble-call database or to consult its IT professionals about developing a more reliable and robust system capable of providing senior management with purposeful information.

Recommendations

NYCT should:

11. Consult the Information Technology-Information Systems (IT-IS) department within the agency to discuss the weaknesses and needs of the MSU in tracking trouble calls.

NYCT Response: NYCT generally agreed, stating: "NYC Transit's Station Maintenance will seek the funding to procure a reliable computerized web-based tracking system program to manage and assess maintenance activities, and facilitate accurate record keeping, data collection, and analysis to meet our operating needs. In the interim, we will seek assistance from MTA NYCT Information Technology-Information Systems (IT-IS) department for assistance in generating a Microsoft Access database to enhance our current tracking of trouble calls."

12. Request that IT-IS assign a programmer knowledgeable in MS Access software to help redesign the database to meet the needs of the department as well as to add needed input controls, security controls, and other elements to provide greater accuracy and integrity for information tracked and reported by the database.

NYCT Response: NYCT generally agreed, stating: "NYCT Station Maintenance will seek provisions from MTA NYCT Information Technology-Information Systems (IT-IS) department of a software specialist to design a database to meet our current tracking of trouble call needs."

Weaknesses in Performance Reports

Since monthly reports are generated from the trouble-call database covering the maintenance shops' performance in addressing trouble calls, the reports posed concerns regarding their accuracy.

NYCT has established goals for measuring maintenance shop performance in responding to trouble calls. Specifically, the Division of Stations' goal is to repair 95 percent of all A-priority (emergency) calls within 24 hours and 75 percent of all C-priority (routine) calls within 60 days. Each month, the ETFS manager accesses a copy of the data from each maintenance shops' trouble-call database, compiles the data into one file, and generates performance statistics for management to measure the performance of each shop in meeting these stated goals. We reviewed the management reports for the months of July 2007 through February 2009 and found that the reports generally show that the shops are meeting or exceeding stated performance goals.

The trouble-call database shows a date of completion when a trouble call is closed out. Accordingly, a "completed" trouble call may mean that the reported defect was repaired or was inspected and no work was performed. However, the database does not distinguish between these conditions. Clearly, there is a problem in using the trouble-call database to compile

performance statistics because NYCT performance goals are stated in terms of "repairs," not the number of trouble calls to which maintenance shops responded.

Further, the weaknesses disclosed with the trouble-call database and other reported weaknesses posed concerns about performance information reported to management and other stakeholders. Specifically, we found inaccurate information in the trouble-call data that may materially skew reported performance statistics and give management a false impression that station defects are efficiently addressed. For example, we found:

- 42 (10%) of 425 sampled trouble calls that were not repaired were reported as completed in the database.
- 26 (6%) of 425 sampled trouble calls were not found.
- 99 (69%) of 144 of the defects we observed were not reported to the maintenance shops and did not appear in the database.
- 210 (0.6%) of the 33,949 C-priority trouble-call records in the database had inappropriate dates, including 110 entries for which the trouble call date of completion preceded the report, and 100 other entries with completion dates after August 1, 2008—the last date of trouble calls in the database copy provided to us.
- 703 gaps in the consecutive sequence of trouble numbers.
- 2,976 entries whose trouble-call numbers were not consecutively ordered in line with the report dates.
- 16 (80%) of 20 complaints that we called in were not logged in the MSU log and were therefore most likely not reported in the database.
- Other anomalies, including trouble calls in the database with locations or conditions either omitted or incomplete. These trouble calls may have been closed without any repairs being performed.

In addition, during interviews, maintenance shop personnel told us that trouble calls can be deleted in the database. We were also told that when trouble calls are nearly 60 days old and not yet repaired, the call may be closed out and a new trouble call opened for the same defect.

We learned that the performance data presented in the monthly management reports is used by external firms and relied upon by other stakeholders. For instance, we found NYCT maintenance performance statistics that were presented in reports issued by Hill International, the independent engineer contracted by MTA to investigate and render a certificate by an independent engineer on NYCT inspection, maintenance, repair programs for rolling stock and each category of infrastructure. The annual engineer's certification is required by section 611 of the General Resolution adopted by the MTA Board on March 26, 2002, authorizing Transportation Revenue Obligations by which the MTA issues bonds and notes to finance the NYCT capital program. According to the reports issued by Hill International for MTA's 2006 and 2007 fiscal years, the performance measures reported were derived from NYCT's Maintenance and Support Goals Summary Reports, reviewed as part of Hill's certification process.

Based on the fact that external stakeholders rely on performance data, especially in relation to capital project funding, MTA and NYCT must ensure that reported performance statistics related to A- and C-Priority trouble calls are fairly reported.

Recommendations

NYCT should:

13. Restate trouble-call performance goals more accurately in terms of being "closed" or "responded to" instead of the misleading terms of "repair" currently used.

NYCT Response: NYCT generally agreed, stating: "NYCT Station Maintenance will restate trouble-call performance goals more accurately in terms of a defect ticket being 'closed' or 'responded to' to replace the current utilized term of being 'closed', once a reliable computerized web-based tracking system program is procured or a Microsoft Access database is designed, in order to enhance our current tracking of trouble calls."

Auditor Comment: Without certainty as to when and if a new trouble-call database will either be purchased or designed, we are concerned that misleading information about maintenance shops' performance and productivity outcomes will continue to be provided to management. Until a final decision is made about how to proceed, NYCT needs to take appropriate action, such as seeking the assistance of the IT-IS department to modify its current database to ensure accuracy in performance reporting.

14. If performance goals must be stated in terms of "repairs," then add a completion code column in the trouble-call database and establish completion codes (i.e., "repaired," "inspected," "no defect found," etc.) to be used when closing out a trouble call to indicate the actions taken by maintenance personnel in response to the trouble call.

NYCT Response: NYCT generally agreed, stating: "NYCT Station Maintenance will restate trouble-call performance goals more descriptively to include a completion code column in the trouble –call database to indicate why the ticket is closed (i.e., "repaired," "inspected," "no defect found," etc.), once a reliable computerized web-based tracking system program is procured or a Microsoft Access database is designed, in order to enhance our current tracking of trouble calls."

Auditor Comment: Refer to auditor comment under recommendation #13.

15. Use only those closed trouble calls with a "repair" indicator or completion code, when running database queries to generate monthly performance reports for management.

NYCT Response: NYCT generally agreed, stating: "NYCT Station Maintenance will utilize only those closed-trouble-calls with a "repair" indicator or completion code, when running database queries to generate monthly performance reports for management, once

a reliable computerized web-based tracking system program is procured or a Microsoft Access database is designed, in order to enhance our current tracking of trouble calls."

Auditor Comment: Refer to auditor comment under recommendation #13.

Lack of Formal Operating Procedures

Our review disclosed that NYCT lacks complete operating procedures for station supervisors and lacks formal operating procedures for activities carried out by maintenance shops.

The New York State Public Authorities Law (Article 9, Title 8, §2930-§2931) requires public authorities to establish and maintain a system of internal controls "designed to provide reasonable assurance that the organization will achieve its objective and mission." In addition, Article 9 requires public authorities to make available to each employee "a clear and concise statement of . . . applicable managerial policies and standards with which he or she is expected to comply."

Comptroller's Directive #1 states: "Internal control activities . . . are, basically, the policies, procedures, techniques, and mechanisms used to enforce management's direction. They must be an integral part of an agency's planning, implementing, review and accountability for stewardship of its resources is vital to its achieving the desired results." The directive also states that management administrative policies or operating manuals should be communicated to appropriate personnel and periodically reviewed and updated as needed.

As discussed in earlier sections of this report, we identified deficiencies in the Station Supervisors Training Program Manuals, which formed the basis of operating procedures followed by station supervisors. For example, the manual lacked specifics pertaining to the frequency with which stations inspections are to be performed, the use and retention of daily inspection reports, and clear communication of defects to maintenance shops. In addition, we noted that although the maintenance shops have baseline procedures in place, they are not promulgated in an operating procedures manual for use of the maintenance shops.

Formal, written operating procedures can help to ensure that every person involved in a process understands the tasks that are to be accomplished and the acceptable methods to be used in performing those tasks. They also provide an effective mechanism for training and evaluating the performance of staff in their duties. By not maintaining comprehensive, written operating procedures, NYCT management cannot be certain that operating policies and procedures are properly communicated and consistently followed. Also, there is no assurance that new personnel have adequate guidance in carrying out their assigned duties.

Recommendation

NYCT should:

16. Develop a comprehensive policies and procedures manual that addresses all internal processes and functions carried out by the station supervisors and maintenance shops and distribute the manual to appropriate personnel. The manual should be updated periodically to address newly implemented or revised procedures.

NYCT Response: NYCT generally agreed, stating: "NYCT Transit's Departments of Subways and Workforce Development have commenced with the development of a comprehensive, procedures manual and associated training to address all internal processes and functions carried out by station supervisors. Once generated, a revised 'MTA – New York City Transit, Department of Subways, Station Supervisory Training Manual/Instruction' will be distributed to all appropriate personnel and will be updated periodically as deemed necessary to address newly implemented or revised procedures. With the re-organization of the NYC Transit's Department of Subways, introducing the Line General Managers program, the development of new comprehensive procedures manual will continue to be explored in order to address all internal processes and functions carried out under maintenance shops."

Appendix

50 Sampled NYCT Stations Observed by Auditors

Count	NYCT Station #	Station Name	Borough
1	214	182nd-183rd St	Bronx
2	420	219th St	Bronx
3	425	Bronx Park East	Bronx
4	369	Elder Ave	Bronx
5	421	Gun Hill Road	Bronx
6	64	71st St	Brooklyn
7	37	77th St	Brooklyn
8	40	Atlantic Ave	Brooklyn
9	339	Bergen St	Brooklyn
10	357	Beverly Road	Brooklyn
11	142	Botanic Gardens	Brooklyn
12	286	Broadway	Brooklyn
13	131	Bushwick Ave	Brooklyn
14	356	Church Ave	Brooklyn
15	177	Clinton-Washington	Brooklyn
16	46	Cortelyou Rd	Brooklyn
17	127	Dekalb Ave	Brooklyn
18	98	Flushing Ave	Brooklyn
19	178	Franklin Ave	Brooklyn
20	242	Ft. Hamilton Parkway	Brooklyn
21	95	Gates Ave	Brooklyn
22	96	Kosciusko St	Brooklyn
23	285	Metropolitan Ave	Brooklyn
24	88	Norwood Ave	Brooklyn
25	343	Nostrand Ave	Brooklyn
26	56	Ocean Parkway	Brooklyn
27	27	Pacific St	Brooklyn
28	350	Pennsylvania Ave	Brooklyn
29	241	Prospect Pk-15th St	Brooklyn
30	238	Smith-9th St	Brooklyn
31	57	W. 8th St	Brooklyn
32	154	116th St	Manhattan
33	151	145th St	Manhattan
34	150	155th St	Manhattan
35	148	168th St	Manhattan
36	143	207th St	Manhattan
37	403	33rd St	Manhattan
38	162	50th St	Manhattan
39	315	59th St (at 7th Ave)	Manhattan
40	400	59th St-Lexington Ave	Manhattan
41	223	63rd St	Manhattan
42	397	86th St-Lexington Ave	Manhattan
43	172	Broadway-Nassau	Manhattan
44	469	Grand Central	Manhattan
45	406	Union Square	Manhattan
46	171	World Trade Center	Manhattan
47	194	111th St.	Queens
48	3	30th Ave-Grand Ave	Queens
49	191	88th St	Queens
50	83	Woodhaven Blvd	Queens

347 Madison Avenue
New York, NY 10017-3739
212 878-7200 Tel
212 878-7030 Fax

H. Dale Hemmerdinger
Chairman

Metropolitan Transportation Authority
State of New York

September 2, 2009

Mr. John Graham, Deputy Comptroller
The City of New York Office of the Comptroller
Executive Offices
1 Centre Street
New York, NY 10007-2341

Re: MTA New York City Transit's Efforts to Maintain and Repair Subway Stations #MJ09-056A

Dear Mr. Graham:

This is in reply to your letter requesting a response to the above-referenced draft audit report.

I have attached for your information the comments of Mr. Howard H. Roberts, Jr., President, MTA New York City Transit, which address your report.

Sincerely,

Attachment

Memorandum

Metropolitan Transportation Authority
State of New York

Date August 28, 2009

To Helena E. Williams, Interim Executive Director & CEO

From Michael J. Fucilli, MTA Auditor General

Re **Response to New York City Comptroller's Final Audit Report #MJ09-056A MTA New York City Transit's Efforts to Maintain and Repair Subway Stations**

The attached response to the above-captioned audit is for review. This audit focused on Subways' Division of Stations' efforts to address unscheduled maintenance activities, particularly those related to reported defects (trouble calls) in areas of subway stations available to commuters.

The City Comptroller concluded that Transit's efforts to inspect and repair these defective conditions do not adequately ensure that all existing defects are identified and reported to maintenance shops, and subsequently repaired. About two-thirds of the defects observed by the auditors were not reported by station supervisors to the maintenance shops for follow-up. In addition, the report concluded that Transit lacks a clear standard for the frequency of station inspections, and does not routinely use inspection reports or keep them on file. The audit also found that 15% of the defects reported with trouble calls had not been repaired; the trouble call database showed unrepaired conditions closed out as completed; and Transit lacks a reliable computerized system to manage station maintenance activities. To address these issues, the City Comptroller made 16 recommendations. Subways has agreed to implement or has implemented all 16, and further believes that with the re-organization of the Department of Subways and the introduction of the Line General Managers program, improvements in internal processes and functions carried out under maintenance shops will be realized.

If the attached response is acceptable, please forward to the Chairman for his review and signature. The approved response should be returned to me by **September 2, 2009** for distribution.

To assist with your review, a copy of the draft report is also attached.

MF:km
Attachments

C: H. Hemmerdinger

H. E. Williams
okay for
Dale to sign
9/2/09

Memorandum

New York City Transit

Date August 27, 2009

To H. Dale Hemmerdinger, Chairman, Metropolitan Transportation Authority

From Howard H. Roberts, Jr., President, MTA New York City Transit

Re **Draft Audit Report on New York City Transit's Efforts to Maintain and Repair Subway Stations - MJ09-056A (HHR #08180911)**

This is in support of your response to the Office of the Comptroller's audit report on "New York City Transit's Efforts to Maintain and Repair Subway Stations." The audit findings and recommendations focused on the Division of Station Operations efforts to address unscheduled maintenance activities, particularly those related to reported defects (trouble calls) in areas of subway stations available to commuters; and, an audit objective to determine the adequacy of NYCT efforts to identify and repair defective conditions in commuter areas of its subway stations.

Audit Recommendations

NYCT should:

1. *Ensure that station inspections are appropriately performed by station supervisors and that all observed defects are reported to the maintenance shops.*

   A bulletin is in preparation to emphasize supervisors' responsibilities when conducting thorough station inspections. It will be distributed to all station and maintenance supervisors. In addition, Workforce Development has been provided with instructional materials commensurate with our plans to ensure supervisors are fully knowledgeable of the proper procedures when performing station inspections and identifying station defects. Station Supervisors will continue to be assigned to a two-day refresher training so proficiency can be maintained.

2. *Require station superintendents to spot check station supervisor inspections.*

   Managers will continue to periodically perform in-depth station inspections with supervisors to ensure the inspections are thorough and defects are reported correctly. Superintendents are also responsible for reviewing and signing off on supervisory logs to ensure accuracy of information.

3. *Instruct station supervisors to use appropriate station and platform markers to clearly identify the location of defects.*
   Station Supervisors will be reinstructed on procedures for reporting service call defects, utilizing location identification markers to improve identification of defect locations.

4. *Establish a minimum requirement for frequency of station inspections and include this in the Station Supervisor Training Program Manual and other applicable operation procedures.*
   Based on the current number of Station Supervisors under the new Line General Managers Program, we will commit to 72 hours as a minimum frequency for station inspections. This minimum frequency will be reflected in the Station Supervisor Training Program Manual as well as in all other applicable operation procedures.

5. *Ensure that required inspection and frequency reports are used to evidence inspections and establish record maintenance requirements for such reports.*
   Under the new Line General Managers Program, the Assistant General Manager, Customer Service, will be responsible for assuring the timely submittal of Station Supervisory logs to ensure that the 72-hour frequency of station inspections is adhered to. We will further explore the use of the Station Inspection Frequency Reports and the implementation and use of the PDA to evidence inspections and record maintenance requirements for such reports.

6. *Require that station and maintenance officials meet to discuss, identify, and design more efficient means of communicating.*
   Under the new Line General Managers Program, weekly meetings are conducted on each line between operations and maintenance personnel to discuss the needs of the line and to prioritize these needs. In addition, we are currently piloting an electronic means of communicating and sharing information with the implementation and use of a PDA.

7. *Consider implementing the use of a work ticket system or a like kind of system requiring maintainers to report and attest to work performed.*
   NYCT Station Maintenance will seek the funding to procure a reliable computerized web-based tracking system program to manage and assess maintenance activities, and facilitate accurate record keeping, data collection, and analysis to meet our operating needs.

8. *Establish minimum requirement for supervisors to randomly review the work performed by maintenance personnel and report on these observations. These reviews should be used as part of employee evaluations.*
   Maintenance Managers will establish a minimum requirement for supervision to randomly review the work performed by maintenance personnel and generate reports to reflect the work reviewed.

9. *Review and strengthen the procedures for documenting and communicating customer complaints about station defects that are placed with either the Customer Care Center or the Division of Station's automated line to the maintenance shops to ensure that all complaints are followed up.*
   Under the new Line General Managers Program, all customer complaints are the responsibility of the Line General Managers, and will be investigated, addressed and responded to, in coordination with the Department of Subways Administration Correspondence Unit.

10. *Consider establishing a process for providing confirmation or reference numbers to each incoming complaint to provide for better tracking and follow-up.*
    NYC Transit's Department of Corporate Communications is working with Line General Mangers instituting policy to ensure all customer complaints are accurately logged and disseminated.

11. *Consult the Information Technology-Information Systems (IT-IS) department within the agency to discuss the weaknesses and needs of the MSU in tracking trouble calls.*
    NYC Transit's Station Maintenance will seek the funding to procure a reliable computerized web-based tracking system program to manage and assess maintenance activities, and facilitate accurate record keeping, data collection, and analysis to meet our operating needs. In the interim, we will seek assistance from MTA NYCT Information Technology-Information Systems (IT-IS) department for assistance in generating a Microsoft Access database to enhance our current tracking of trouble calls.

12. *Request that IT-IS assign a programmer knowledgeable in MS Access software to help redesign the database to meet the needs of the department as well as to add needed input controls, security controls, and other elements to provide greater accuracy and integrity for information tracked and reported by the database.*
    NYCT Station Maintenance will seek provision from MTA NYCT Information Technology-Information Systems (IT-IS) department of a software specialist to design a database to meet our current tracking of trouble calls needs.

13. *Restate trouble-call performance goals more accurately in terms of being "closed" or "responded to" instead of the misleading terms of "repair" currently used.*
    NYCT Station Maintenance will restate trouble-call performance goals more accurately in terms of a defect ticket being "closed" or "responded to" to replace the currently utilized term of being "closed", once a reliable computerized web-based tracking system program is procured or a Microsoft Access database is designed, in order to enhance our current tracking of trouble calls.

14. *If performance goals must be stated in terms of "repairs", then add a completion code column in the trouble-call database and establish completion codes (i.e., "repaired", "inspected", "no defect found", etc.) to be used when closing out a trouble call to indicate the actions taken by maintenance personnel in response to the trouble call.*
    NYCT Station Maintenance will restate trouble-call performance goals more descriptively to include a completion code column in the trouble-call database to indicate a reason why the ticket is closed (i.e.: "repaired", "inspected", "no defect found", etc.), once a reliable computerized web-based tracking system program is procured or a Microsoft Access database is designed, in order to enhance our current tracking of trouble calls.

15. *Use only those closed trouble calls with a "repair" indicator or completion code, when running database queries to generate monthly performance reports for management.*
    NYCT Station Maintenance will utilize only those closed trouble-calls with a "repair" indicator or completion code, when running database queries to generate monthly performance reports for management, once a reliable computerized web-based tracking system program is procured or a Microsoft Access database is designed, to enhance our current tracking of trouble calls.

16. *Develop a comprehensive policies and procedures manual that addresses all internal processes and functions carried out by the station supervisors and maintenance shops and distribute the manual to appropriate personnel. The manual should be updated periodically to address newly implemented or revised procedures.*

    NYC Transit's Departments of Subways and Workforce Development have commenced with the development of a comprehensive procedure manual and associated training to address all internal processes and functions carried out by station supervisors. Once generated, a revised "MTA - New York City Transit, Department of Subways, Station Supervisory Training Manual/Instruction" will be distributed to all appropriate personnel and will be

updated periodically as deemed necessary to address newly implemented or revised procedures.

With the re-organization of NYC Transit's Department of Subways, introducing the Line General Managers program, the development of a new comprehensive procedures manual will continue to be explored in order to addresses all internal processes and functions carried out under maintenance shops.

cc: S.A. Feil
P.J. Fleuranges