# Thomas P. DiNapoli COMPTROLLER



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# OFFICE OF THE NEW YORK STATE COMPTROLLER

# DIVISION OF STATE GOVERNMENT ACCOUNTABILITY

## NEW YORK CITY DEPARTMENT OF BUILDINGS

# ELEVATOR INSPECTIONS AND TESTS

**Report 2007-N-9** 

#### **AUDIT OBJECTIVE**

Our objective was to determine whether the New York City Department of Buildings (Department) ensures that New York City elevators are inspected and tested as required, elevator inspectors are qualified, and complaints regarding potentially-unsafe elevators are responded to timely.

#### **AUDIT RESULTS - SUMMARY**

According to the Building Code, elevators in New York City have to be inspected and tested at least five times every two years. Most of these inspections are performed by either Department inspectors or private inspectors contracted by the Department, and the tests are performed by private inspectors hired by the property owners and approved by the Department. Inspectors have to meet certain qualification requirements, such as specified work experience or professional certification. According to Department records, during the 21-month period of July 1, 2005, through March 31, 2007, a total of 174,856 inspections and 134,537 tests were performed on 61,993 elevator devices.

We found that elevators are generally inspected and tested at least once a year. We also found that the Department achieved its goal of investigating 95 percent of emergency complaints within 1.5 business days. However, the Department is not always timely in its reinspections of elevators that are taken out of service because of serious safety defects. We also identified several instances in which the Department did not have documentation that elevator inspectors were qualified.

We identified 4 elevators that were neither inspected nor tested during our 21-month audit period. Department officials stated they did not inspect an elevator at a Manhattan

construction site because they believed it was not in service. However, the Department's records indicated that the elevator was in service. Department officials stated that one elevator had been identified with two device numbers, and they were unable to explain why the other two elevators had not been inspected or tested. The Department reported that it has since inspected three of the four elevators and will determine how they had avoided inspection and testing.

We also examined the inspections and tests that were performed on a random sample of 50 elevators to determine whether they were performed in accordance with certain requirements. We found that 28 of the inspections and tests were performed late, 7 were performed by inspectors who did not meet certain qualification requirements, and 19 had not been documented properly.

The Department is responsible for ensuring that all elevator inspectors meet certain qualification requirements. However. Department records confirmed that only 11 of the 50 inspectors in our random sample met all their qualification requirements. For example, no professional certification was on for inspector, 1 contracted examination results were not on file for 35 private inspectors who had to pass an elevator inspector examination. We noted that 1 of these inspectors performed 1,725 elevator tests during the 21-month period we reviewed.

When required elevator inspections and tests are not performed, are performed late, or are performed by inspectors who are not fully qualified, there is an increased risk that defective elevators may not be detected in a timely manner. In such instances, the safety of the public could be jeopardized.

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Our report contains seven recommendations for improving the Department's controls over elevator inspections and tests. Department officials generally agreed with our recommendations and have begun to take steps to implement them.

This report, dated January 2, 2009, is available on our website at: <a href="http://www.osc.state.ny.us">http://www.osc.state.ny.us</a>.

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#### **BACKGROUND**

The New York City Department of Buildings (Department) is responsible for ensuring the safe and lawful use of more than 950,000 buildings and properties. This responsibility includes the oversight of elevators and related devices such as escalators and lifts. Department records indicate that there are a total of 64,550 elevators and related devices in New York City. These devices are subject to various sections of the New York City Building Code (Building Code) and the Rules of the City of New York.

The Department enforces the laws and rules that set forth elevator safety standards. In doing so, it administers elevator inspection and testing schedules. An elevator inspection differs from an elevator test; an inspection is a visual examination of an elevator's parts, while a test involves actually running the parts to ascertain their condition.

In accordance with the Building Code, elevators in New York City are to be inspected and tested at least five times every two years. To implement this requirement, the Department requires elevators to be

inspected at least three times every two years and tested at least once a year. The Department has authorized the New York City Housing Authority to perform such inspections on buildings within its jurisdiction.

Elevator inspections are conducted by the Department, while elevator tests are conducted by private inspectors hired by the property owners for that purpose. The private inspectors must be licensed by the Department.

The Department employs a total of 45 elevator inspectors, who conduct inspections, observe safety tests, follow up on complaints, and perform other activities related to elevator safety. The Department also contracts with two private companies to perform elevator inspections on its behalf.

An elevator inspection may identify conditions that the Department considers "dangerous," such as badly-worn, defective, or damaged hoist cables; a defective brake assembly; or instances in which the only elevator in the building or building section is out of service. When such conditions occur, the inspector must notify the property owner who must then correct the violation.

When a more "hazardous" condition is found, the inspector must issue a cease-use order to the property owner and tag the device as unsafe. A cease-use order directs the owner to take the elevator out of service. Such conditions include an unraveling or broken hoist, a non-operating emergency switch, or missing doors. Department policy requires a Department inspector to re-inspect the elevator before it is placed back into service to ensure that all repairs were completed properly. The cease-use tag may not be removed without prior Department approval.

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According to Department records, during the period of July 1, 2005, through March 31, 2007, a total of 174,856 elevator inspections and 134,537 elevator tests were performed. Department records also indicate that, during this period, nearly 18,700 complaints about elevators were received.

# AUDIT FINDINGS AND RECOMMENDATIONS

### Required Inspections and Tests

The Department maintains databases showing all the elevators subject to inspection and testing requirements, and all the inspections and tests that have been performed. We reviewed these databases and supporting Department documentation to determine whether all elevators were being inspected and tested.

We found that elevators were generally being inspected and tested at least once a year. However, some of the inspections and tests were performed late, some were performed by inspectors who did not meet certain qualification requirements, and some were not documented properly.

### Elevators Not Inspected or Tested

According to a Department database, there are 64,550 elevators and related devices in New York City. This includes 2,557 devices that were not active, had just been placed into service, or were not elevators, such as dumbwaiters and conveyor belts. The Department also has a database that shows the elevator inspections and tests that have been performed. We compared the two databases to determine whether there were any active elevators that had not been inspected or tested during the 21-month period of July 1, 2005, through March 31, 2007.

We identified four active elevators that were missing the required inspections and tests. Department officials stated that they did not inspect one Manhattan elevator because it was located at a construction site and was not in service. However, an inspection report indicated that, to be placed into service, the elevator had passed an initial inception test on May 12, 2004.

The Department was unable to explain why two of these elevators had not been inspected or tested during our 21-month audit period; it maintains that the fourth elevator had been identified with two device numbers. The Department reported that it inspected three of these elevators after our audit period ended.

We recommend the Department determine how the elevators could have avoided inspection and testing. Department officials responded that they will review their procedures to identify the causes of these lapses. (In its response to the draft report, Department officials indicated that private inspectors contracted by the Department did not gain access to perform the required inspections.)

# Inspections and Tests Not Performed or Documented as Required

During the period covered by our audit, the Department required elevators to be inspected at least three times every two years and be tested at least once a year. The inspections were to be performed by Department inspectors or private inspectors contracted by the Department. Both the Department inspectors and the contracted inspectors had to meet certain qualification requirements (e.g., specified work experience or professional certification).

The annual tests were to be performed by private inspectors hired by the property

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owners, and these inspectors had to meet certain qualification requirements. Both the inspections and the tests were to be documented. The inspections were to be documented by route sheets showing device number, location, inspector, and inspection results; and the tests were to be documented by written reports describing the results of the tests.

To determine whether the inspections and tests were being performed and documented in accordance with these requirements, we selected a sample of the elevators that were inspected or tested at least once during the 21-month period of July 1, 2005, through March 31, 2007. According to the Department's databases, there were 61,993 such elevator devices; we randomly selected 50 elevators for review. We then examined the written documentation (i.e., route sheets or test reports) supporting each inspection and test during the 21-month period.

Since each elevator had to be inspected at least 3 times every 2 years and tested at least once a year, we expected that the 50 elevators in our sample would have been inspected at least twice and tested at least once during the 21-month period we reviewed. Accordingly, we initially expected that a total of at least 100 inspections and 50 tests would have been performed for the 50 elevators during this period.

We had to modify these expectations when we learned that two of the elevators had been placed into service after July 1, 2005. Since 1 elevator was subject to only 1 annual test and 1 inspection during the 21-month review period, and the other elevator had just received an inspection to start operating in March 2007 and therefore was not yet subject to the annual test or the 2 inspections, we revised our totals and expected that at least 97 inspections and 49 tests would have been

performed for the 50 elevators during the 21-month period.

However we found that only 86 inspections and 43 tests had been performed. Nine elevators had been inspected just once and 1 not at all (it had only been tested) during the 21-month period. We identified 6 elevators that had not been tested at all during the period (all 6 had been inspected at least twice).

In addition, several of the 86 inspections and 43 tests either were not documented or were not performed by fully-qualified inspectors, as follows:

- The Department was unable to provide the supporting route sheets for 4 of the 86 inspections. As a result, we have no assurance these four inspections were actually performed.
- The route sheets contain the name of the individual who performed the inspection. We reviewed the names on the 82 available route sheets and found that 6 of the inspections had been done by individuals who failed to meet certain qualification requirements. As a result, we only have assurance that 76 of the 97 required inspections were done by fully-qualified inspectors.
- The Department was unable to provide the written test reports for 15 of the 43 tests. As a result, we have no assurance that these 15 tests were actually performed.
- The test reports contain the name of the individual who performed the test. We reviewed the names on the 28 available test reports and found that 1 of the individuals had failed

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to meet certain qualification requirements, and thus was not fully-qualified to perform the test. As a result, we only have assurance that 27 of the 49 required elevator tests were done by fully-qualified inspectors.

Department officials stated that they will research the reasons for these oversights and will improve their procedures. Furthermore, they have agreed to also improve procedures relating to storing and assessing agency documents. (The issue of inspector qualifications is addressed in more detail later in this report in the section entitled *Inspector Credentials*.)

We also evaluated the timeliness of the inspections. Department officials stated that, during the period we reviewed, they attempted to schedule required inspections on an eight-month cycle. However, we found that the Department often did not achieve this goal.

Forty-eight of the elevators in our sample should have been inspected at least twice during the period we reviewed. We found that, for 28 of these devices, the second inspection was performed more than 8 months after the first inspection. For 2 elevators, the second inspection was performed more than 16 months after the first inspection. However, on average, the late second inspection was performed about 10 months after the first.

Department officials told us that the requirement to perform three inspections every two years was excessive. They noted that they expected the requirement to be reduced in the future.

When required elevator inspections and tests are not performed, are performed late, or are

performed by inspectors who are not fullyqualified, there is an increased risk that defective elevators will not be detected in a timely manner. In such instances, the safety of the public could be jeopardized.

#### Cease-Use Re-inspections

If an inspection reveals an imminently hazardous condition, a cease-use order will be issued to the property owner; and the elevator will be tagged as unsafe. The elevator cannot be placed back in service until it is reinspected and found to be safe. If there are no other elevators in that building, it is the Department's practice to conduct the reinspection within ten business days of the cease-use order. If there are others, it is the Department's practice to conduct the reinspection within 30 business days.

To determine whether the Department was meeting these time frames, we reviewed a sample of cease-use orders. According to Department records, there were 906 cease-use orders for active elevators during the 21-month period of July 1, 2005, through March 31, 2007. We randomly selected 20 of these cease-use orders and determined when each re-inspection had been performed. Eleven of the 20 cease-use orders related to buildings with just 1 elevator, while 9 related to buildings with more than 1 elevator.

We found that all 9 of the re-inspections at buildings with more than 1 elevator had been performed within 30 business days. However, 5 of the 11 re-inspections at buildings with just 1 elevator had not been performed within 10 business days. Rather, these 5 re-inspections had been performed between 18 and 181 business days after the issuance of the cease-use order. If the Department is not timely with its re-inspections, elevators can remain out of service for long periods, inconveniencing the

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building occupants. We recommend the Department improve the timeliness of its reinspection process.

#### **Recommendations**

- 1. Determine how the un-inspected elevators could have avoided the required inspections and testing. Institute procedures to prevent such lapses in the future.
- 2. Establish control procedures to ensure that elevator inspections and tests are performed on schedule and are fully documented.
- 3. Establish a system for ensuring that elevators taken out of service by cease-use orders in single-elevator buildings are reinspected in a timely manner.

## Inspector Credentials

Elevator inspections are performed by Department inspectors and private inspectors contracted by the Department, while elevator tests are performed by private inspectors hired by the property owners. Separate qualifications are required for each group of inspectors, as follows:

- Department inspectors must have at least six years of experience in the assembly, installation, repair, or design of elevators; or other specific elevator-related work. With a certain level of education, fewer than six years of experience can be accepted. They must also have had supervisory responsibilities in an inspection program for one year.
- Private inspectors contracted by the Department must have at least five

years of experience in construction, design, or supervision in a skilled trade regulated by the Department's Elevator Division; or experience as an elevator inspector or, experience in the repair and maintenance of elevators and related devices regulated by the Department of Buildings. They also must have a national Qualified Elevator Inspector (QEI) certificate issued by the American Society of Mechanical Engineers. Elevator inspection supervisors must meet additional requirements.

• Private inspectors hired by the property owners must have five years of experience in elevator assembly, installation, maintenance, repair, design, or inspection, within the seven years preceding the date of application. They must also demonstrate that they are familiar with the construction and maintenance of elevators. This requirement can be satisfied by obtaining a passing grade on the Department's elevator inspector examination.

The qualifications for Department inspectors are stated in the Department's elevator inspector position announcements. The qualifications for private inspectors contracted by the Department are stated in the contracts. The qualifications for private inspectors hired by the property owners are stated in the Rules of the City of New York. In addition, the Department performs background checks for all elevator inspectors.

According to Department records, during the 21-month period of July 1, 2005, through March 31, 2007, there were a total of 934 elevator inspectors (45 at the Department, 115

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employed by the Department's 2 contractors, and 774 who could be hired by property owners to perform elevator safety tests). To determine whether these inspectors met their qualification requirements, we randomly selected 50 of the 934 inspectors and verified their credentials, which were to be evaluated and documented by the Department.

Specifically, we reviewed Department files containing job applications, background check reports, examination scores, QEI certificates, and documentation that the Department had confirmed the inspectors' experience. Our sample consisted of 2 Department inspectors, 5 contracted inspectors, and 43 private inspectors who could be hired by property owners.

We found that the Department had evidence of background checks for all 50 inspectors. However, the Department had complete documentation that only 11 of the 50 inspectors met all of the qualification requirements. For the remaining 39, the Department did not have sufficient evidence that they met the requirements to be an elevator inspector.

The remaining 39 did not meet at least 1 of the requirements, as follows:

• For three inspectors (the two Department inspectors and one private inspector), there was no documentation showing that the experience requirements had been met. Department officials acknowledged that the two Department inspectors lacked the required supervisory experience, but stated that it was not a significant omission because the individuals had never had any supervisory responsibilities.

- For one of the five contracted inspectors in our sample, there was no documentation showing that he had the required QEI certificate issued by the American Society of Mechanical Engineers.
- For 35 private inspectors, Department files contained neither examination results nor any other documents substantiating that these individuals were familiar with the construction and maintenance of elevators. In addition, for 11 of these inspectors, there was no documentation showing that the experience requirements had been met.

Elevator inspectors who perform inspections or elevator tests, but lack the proper credentials, place the public at risk. We note that 1 of the inspectors who lacked certain credentials had performed a total of 1,725 elevator tests during the 21 months we reviewed.

#### Recommendations

- 4. Ensure that all elevator inspectors meet all qualification requirements.
- 5. Recommendation deleted.

## *Investigation of Complaints*

Complaints about elevators are categorized according to the danger level of the condition involved. The complaints may be categorized as Priority A (emergency) or Priority B (non-emergency). Examples of Priority A complaints include elevator or floor access doors not closing properly, elevator door sensors not working, elevators stopping between floors, and elevators shaking or jerking. Examples of Priority B complaints

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include elevators that do not stop on certain floors, elevators that are out of service, and elevator buttons that do not function.

The complaints are investigated by Department inspectors. According to Department policy, if an elevator is the subject of a complaint, it should be added to the inspection route schedule and inspected. It is the Department's goal, as stated in the New York City Mayor's Management Reports, to respond to 95 percent of Priority A complaints within 1.5 business days and to respond to 70 percent of Priority B complaints within 40 business days.

According to the Department's complaint database, the Department achieved these goals for the 21-month period of July 1, 2005, through March 31, 2007. It showed that 372 of the 18,686 complaints received during this period were Priority A complaints. The database indicated that 357 of these 372 complaints (96 percent) were addressed within 1.5 business days.

We note that, in 2 of these 15 late complaint investigations, the inspector issued the property owner a citation for violating a City safety ordinance. In 1 instance (which took 13 business days to respond to), a citation was issued for an elevator that shook and made noise. In the other instance (which took 10 business days to respond to), a citation was issued for an elevator with doors that remained ajar while in motion. Further, we note that because the Department's goal is established based on business days - not calendar days - depending upon when the complaint is received, the complaint may remain without investigation for longer than 1.5 calendar days. When calculated based on calendar days, we found that 336 complaints (90.3 percent) were investigated within 1.5 days.

Department officials maintain that 11 of the 15 late Priority A complaints were not actually Priority A complaints. According to the officials, the complaints were initially categorized incorrectly. The chief on duty determined that the complaints were not actual elevator emergencies; however, no one had downgraded them from Priority A to Priority B on the database. We note that the priority designations in the complaint database should be accurate.

To verify the accuracy of the inspection dates recorded on the complaint database, we selected two samples of Priority A complaints and compared the inspection dates recorded on the database with the dates recorded on the inspection route sheets for those inspections. We judgmentally selected 26 of the 357 timely inspections for 1 sample, and selected 3 of the 15 untimely inspections for the other sample.

The Department provided the inspection route sheets for 11 of the 26 timely complaint inspections and for 1 of the 3 untimely complaint inspections, and the dates on these route sheets agreed with the dates on the database. However, because the Department could not locate the route sheets for the other 15 timely, and the other 2 untimely, complaint inspections, we have no assurance the dates recorded in the database for these inspections are accurate.

We recommend the Department improve its filing practices for its inspection route sheets to better ensure that the sheets are accessible. Department officials agreed that their procedures for storing and accessing inspection route sheets could be improved and they are working to develop a new process.

We also reviewed the timeliness of the Department's response to Priority B complaints. We randomly selected 5 such

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complaints from the 21-month period of July 1, 2005, through March 31, 2007, and reviewed the complaint database to determine whether the complaints had been addressed within 40 business days. We found that all five complaints were addressed within that time frame.

#### Recommendations

- 6. Continue taking steps to improve the timeliness of the Department's response to Priority A complaints.
- 7. Ensure that the priority designations in the complaint database are accurate.
- 8. Improve the filing practices for inspection route sheets to ensure that the sheets are maintained in an accessible manner.

#### AUDIT SCOPE AND METHODOLOGY

We conducted our audit in accordance with generally accepted government auditing standards. We audited the Department's controls over elevator safety for the period of July 1, 2005, through March 31, 2007. To accomplish our objective, we met with Department officials to confirm and enhance our understanding of the process used to hire and assign inspectors and conduct elevator inspections and tests. We reviewed selected excerpts of the Building Code, the Rules of the City of New York, and Local Law 48 of We also examined Department 1991. databases related to elevator activities. verify the accuracy of certain information recorded on the databases (information indicating that a device was not subject to elevator inspection and testing requirements because it had been demolished, or was inactive, or was an escalator, lift, or other such device), we visited the reported sites for a sample of these devices to observe their actual status.

In addition to being the State Auditor, the Comptroller performs certain constitutionally and statutorily mandated duties as the chief fiscal officer of New York State. These include operating the State's accounting system; preparing the State's financial statements; and approving State contracts, refunds, and other payments. In addition, the Comptroller appoints members to certain boards, commissions, and public authorities, some of whom have minority These duties may voting rights. considered management functions organizational purposes of evaluating generally independence under accepted government auditing standards. In our opinion, these functions do not affect our ability to conduct independent audits of program performance.

As is our practice, we notified Department officials at the outset of the audit that we would request a representation letter in which agency management provides assurances, to the best of their knowledge, concerning the relevance, accuracy, and competence of the evidence provided to the auditors during the course of the audit. The representation letter is intended to confirm oral presentations made to the auditors and to reduce the likelihood of misunderstandings. Agency officials normally use the representation letter to assert that, to the best of their knowledge, all relevant financial and programmatic records and related data have been provided to the auditors. They affirm either that the agency has complied with all laws, rules, and regulations applicable to its operations that would have a significant effect on the operating practices being audited, or that any exceptions have been disclosed to the auditors. However, officials at the New York City Mayor's Office of Operations have informed us that, as a matter of policy, mayoral agency officials do not provide representation letters in connection with our

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audits. As a result, we lack assurance from Department officials that all relevant information was provided to us during the audit.

#### **AUTHORITY**

The audit was performed pursuant to the State Comptroller's authority as set forth in Article V, Section 1, of the State Constitution and Article III of the General Municipal Law.

### REPORTING REQUIREMENTS

A draft copy of this report was provided to Department officials for their review and comment. Their comments were considered in preparing this report, and are included as Appendix A. Department officials generally agreed with our recommendations and indicated they have begun to make the necessary changes. Appendix B contains State Comptroller comments that address selected matters contained in the Department's response.

Within 90 days after final release of this report, we request that the Commissioner of the New York City Department of Buildings report to the State Comptroller advising what steps were taken to implement the recommendations contained herein, and where recommendations were not implemented, the reasons therefor.

#### CONTRIBUTORS TO THE REPORT

Major contributors to this report include Frank Houston, Cindi Frieder, Gene Brenenson, Jeremy Mack, Jean-Renel Estime, Mary McManus, Dino Jean-Pierre, Adele Banks, and Dana Newhouse.

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#### **APPENDIX A - AUDITEE RESPONSE**



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June 10, 2008

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#### RE: Elevator Inspections and Tests (2007-N-9)

Dear Ms. Frieder:

Thank you for the opportunity to respond to the recommendations of the above mentioned final audit report. We generally agreed with all of your recommendations, and have begun to make the necessary improvements to our existing procedures to be more efficient in the area of document management and record keeping; credentials for DOB elevator inspectors; and the timeliness of re-inspections. We view your input as assistance in advancing our commitment to providing quality public service while maximizing our resource utilization.

The Department of Buildings wants to ensure your safety every time you travel in an elevator, escalator or moving walk. The Department oversees the safe operation and inspection of approximately 61,000 elevators throughout the City of New York. The average elevator makes roughly 500 trips a day, with 29 million daily elevator trips citywide. Elevators are one of the safest modes of transportation. The chance of an accident is 1 in 12 million, as reported by The Elevator World Vertical Transportation Industry File.

As your report indicates, the objective of the State of New York Office of the State Comptroller was to determine whether the New York City Department of Buildings ensures that New York City elevators are inspected and tested as required, elevator inspectors are qualified, and complaints regarding potentially-unsafe elevators are responded to in a timely manner. The audit resulted in eight (8) recommendations made by the State Comptroller's Office.

Below is the Department's response to the specific eight (8) recommendations, as well as clarifying comments in references to points that were addressed in your report.

#### Clarifying comments:

#### A. Scope

During your 21-month audit period you identified four (4) active elevators that were neither inspected nor tested. Perhaps it should be mentioned that of the 61,993 elevator devices inspected, only 0.0065% (4), were not inspected or tested during the 21-month audit period.

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safety service integrity

\* See State Comptroller Comments, page 18

\* Comment 1

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#### B. Investigation of Complaints

Response Time: The report indicated that you found 44, or 12 percent, of Priority "A" complaints, analyzed by the audit team, were not responded to within 1-1/2 calendar days. According to your report, we achieved an overall response rate of 88 percent during your scope period, vs. our target of 95 percent. However, the target should be based upon business days, as defined in the Mayor's MMR.

C. Complaints Analysis

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We reviewed these 44 complaints and found the following:

- 23 of the complaints were received by 311 after 3:30PM or on the weekends. Therefore, they
  were automatically routed to our Emergency Response Team (ERT). The ERT inspectors did
  not respond to them based upon assessment indicating a non-emergency, and referred them to the
  Elevator Division. In every case, the Elevator Division responded to the complaint on the same
  day it arrived in the Elevator Division and therefore met the 1.5 business days' target.
- Like all complaints, 15 complaints were reviewed and researched in BIS when they arrived in the Elevator Division, according to our triage process. Based on the results of that review, the chief on duty at the time decided that the complaint was not, in fact, an emergency, but rather a "B" type complaint. (For example, one involved a dumbwaiter shaft that the caller felt needed sealing; another addressed an escalator that the caller felt wasn't functioning properly). Our standard procedure in this situation is that the chief directs a clerical staff member to change the priority code from "A" to "B", to reflect the lower urgency level. In these 15 cases, this did not occur, and the complaints incorrectly remain in BIS as Priority "A" complaints. Therefore, these 15 should not be included in the "A" complaint response time calculation.
- 4 of the complaints were not elevator complaints (one involved a private house, one concerned a hole in the ceiling, and one location simply had no elevator device on record with DOB) or had an incorrect address. As above, the complaints were reviewed and researched when they arrived in the Elevator Division. Based on the results of that review, the chief on duty at the time made the decision to schedule the inspections according to the "B" complaint priority status. Again, as above, the priority level should have been changed from "A" to "B" when that decision was made. Therefore, these 4 should not be included in the "A" complaint response time calculation.
- The final 2 complaints show a data discrepancy that we cannot resolve. Complaint 3217502 (involving an escalator) shows in BIS as being received and inspected on 3/02/07, though your spreadsheet shows its receipt date as 2/25/07. Complaint 1187806 shows in BIS as being received and inspected on 3/05/07, though your spreadsheet shows a receipt date of 3/03/07. Until reconciled, these 2 complaints should not be included in the "A" complaint response time calculation.
- After this analysis, using the correct target information of business days for <u>23</u>, and eliminating <u>21</u> "B" or irreconcilable complaints, the actual response time would meet target.

safety service integrity

\* See State Comptroller Comments, page 18

Comment 2

Comment 2

Comment 3

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#### Responses to Recommendations

Recommendation 1: Determine how the un-inspected elevators could have avoided the required

inspections and testing. Institute procedures to prevent such lapses in the future.

Agency Response:

The private inspectors contracted by the Department did not gain access to the building in order to perform the required inspection and testing. Since contractual inspectors are paid per device, they only document actual inspections. As per contract, no access is documented only on 2<sup>nd</sup> attempt by contractual inspectors. In an upcoming contract, the department will address documentation of <u>all</u> no access by contractual inspectors. Inspectors hired by the Department of Buildings documents all no access situations.

Comment 4

Recommendation 2: Establish control procedures to ensure that elevator inspections and tests are performed on schedule and are fully documented.

Agency Response: The Department has implemented procedures for more efficient documentation

and retrieval process. Only supervisor and administrative staff now have access to folders containing inspection reports, appointments, route sheets and test results. This will minimize misplacement of documents. In addition, a quality assurance program was created to establish higher standards of inspection

integrity and to provide enhanced training.

Recommendation 3: Establish a system for ensuring that elevators taken out of service by cease-use orders in single-elevator buildings are re-inspected in a timely manner.

Agency Response: The Department agrees and will strengthen its efforts in this area. Four (4) cease-use orders were issued from December 2005 to March 2006, and one (1) was

issued in March 2007.

The Elevator Division has since adopted new procedures to respond to these situations more urgently. Elevators are re-inspected after ten (10) days if no calls are received from owner or Elevator Company requesting re-inspection. The ten day re-inspection process was put into practice by the Department as a safety and service provided to the public. There is also proposed legislation to issue Environmental Control Board (ECB) violations carrying penalties of \$1,000 per day, for each day that an elevator in a single elevator building remains out of service. As a consequence, if the violation is not addressed, it could quickly amount to tens of thousands of dollars. This proposed legislation would provide a strong incentive for the owners of elevators to proactively maintain elevators and

avoid such penalties.

NYC.gov/buildings safety service integrity

\* See State Comptroller Comments, page 18

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Recommendation 4: Ensure that all elevator inspectors meet all qualification requirements.

Agency Response:

All DOB inspectors fulfill required qualification. Prior to 2002, elevator inspectors were not required to pass an examination. Instead, licenses were issued based on the results of interviews given by the Department. Therefore, credentials for inspectors that were hired or contracted prior to 2002 may differ from inspectors that were hired within the past six years.

DOB Associate Inspectors (Elevator) Level II, and Associate Inspectors (Elevator) Level I must be qualified in the following areas:

- Six years of satisfactory experience in the actual assembly, installation, repair
  or design of elevators, or as an elevator machinist with elevator manufacturers
  of recognized standing or as a maintenance worker covering the various
  standard makes of elevators, at least one year of which must be in a
  responsible supervisory capacity in an inspection program of the type
  described above; or
- Four years of experience as described in "1" above, at least one year of which
  must have been in a supervisory capacity, and two years of education in an
  accredited college or technical school in courses in or directly related to
  repair, installation or design of elevators, or education towards a baccalaureate
  degree in a related field of Engineering or Engineering Technology; or
- At least one year of experience as described in "1" above, which must have been in a supervisory capacity, and an approved five year apprenticeship program in elevator inspection; or
- Completion of three years of apprenticeship in elevator inspection and either
  three years of experience as described in "1" above; or one year of experience
  as described in "1" above and two years of education as described in "2"
  above. However, all candidates must have one year of supervisory experience.
- Education and/or experience which is equivalent to "1", "2", "3", or "4" above. However, all candidates must have one year of supervisory experience as described in "1" above.

The DOB Elevator Inspector is qualified in all areas above, with the exception of supervisory requirements or supervisory roles.

While the Department hires some (DOB) inspectors in a supervisory title, but without the supervisory experience, they do not perform supervisory responsibilities. Therefore, we believe that the impact of this finding is minimal.

The Department offers the following training to all DOB inspectors:

- Qualified Elevator Inspector Training Program (QEI)
- National Association Amusement Ride Safety Organization (NAARSO). All amusement ride inspectors have attended NARRSO training program
- Monthly in-house training and review sessions

As it pertains to private inspectors contracted by the Department, Elevator Inspectors shall have five years experience consisting of one of the following:

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\* See State Comptroller Comments, page 18

Comment 5

\* Comment 6

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- Experience in construction, design or supervision as a journeyman in a skilled trade currently regulated by the New York City Department of Buildings' Elevator Division; or
- Experience as an elevator inspector; or
- Experience in the construction, maintenance, and repair of elevators and related devices currently regulated by the New York City Department of Buildings' Elevator Division.

Private Elevator Inspection Supervisors shall have a demonstrated aptitude for leadership, administration and management, the qualifications of paragraph 1, above, and shall meet one of the following educational or experience requirements:

- Five years experience as an elevator inspector, two years of which must have been supervising elevator inspections; or
- Four years experience as an elevator inspector, and a diploma or certificate of successful completion from a technical-vocational school (including high school) in an equivalent field; or
- Three years experience as an elevator inspector and a bachelor's degree in an equivalent field; or
- Two years experience as an elevator inspector and a bachelor's degree in engineering from an accredited school in an equivalent field.

Additionally, contractual inspectors with supervisory roles are accredited by the American Society of Mechanical Engineers (ASME) in accordance with the requirements of American National Standard Institute. Certification is enforced.

Comment

Recommendation 5: Improve communication among the units responsible for verifying elevator inspectors' qualifications to ensure that all required documentation is maintained.

Comment

Comment

9

Agency Response:

The Department disagrees. We do not understand this conclusion, nor does your report provide any evidence for it. If you have found an example where miscommunication led to the loss of documents, we would appreciate receiving the details of that instance so we can conduct research into it.

Recommendation 6: Take steps to improve the timeliness of the Department's response to Priority A complaints.

The New York City Mayor's Management Report sets a target that the Agency Response:

Department should respond to 95 percent of Priority A complaints within 1.5 business days. The Elevator Unit usually responds to all complaints within that

time frame.

All Priority "A" complaints received after 3:30 p.m., or on the weekends, are automatically routed to our Emergency Response Team (ERT). The ERT team reviews and determines the urgency of the complaint. In case(s) of hazardous conditions, ERT communicates with an elevator inspection manager who will

respond to the complaint.

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\* See State Comptroller Comments, page 18

Report 2007-N-9 Page 16 of 18 Whenever a complaint is received by the Elevator Division, based on the results of the review by the chief on duty, it will be decided whether or not the complaint is in fact, an emergency. The chief schedules each complaint for inspection according to the emergency status. Therefore, a priority "A" complaint that was registered by 311 may be downgraded after review to a priority "B".

In June 2007, the Department instituted a pilot evening/weekend standby coverage by elevator staff. We will also review the results of this pilot to ensure that it is effective. Additionally, the elevator division will work with ERT to improve procedures by which ERT receives, reviews, and responds to elevator complaints, as well as the process for referring the complaints to the Elevator Division efficiently.

Recommendation 7: Ensure that the priority designations in the complaint database are accurate.

Agency Response:

The Department agrees, however, we do not have authority over the agency (311) that documents initial complaints from private citizens.

If a complaint category is downgraded by the Chief, the Deputy

Director/Administrators performs a quality control check to be sure changes are

Director/Administrators performs a quality control check to be sure changes are made, and are accurate, in the database. As your report and our response indicates, 19 of the downgraded "A" complaints did not get recoded as "B" as they should have. This led to an incorrect calculation of Priority "A" response time as discussed in the clarifying comments.

Recommendation 8: Improve the filing practices for inspection route sheets to ensure that the sheets are maintained in an accessible manner.

Agency Response:

The Department agrees and will continue to enhance its efforts in this area. Since January, 2008, the Department has proactively placed restriction or access on all files. Any file that is removed from the designated area is signed for at check-out and upon return. This minimizes file misplacement.

Thanks you, once again, for giving us the opportunity to respond to the draft report. We look forward to receiving your final version.

Robert LiMandri Acting Commissioner

cc: Marilyn King Festa

George Davis, III Richard Bernard Kerry Castro

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### APPENDIX B - STATE COMPTROLLER COMMENTS ON AUDITEE RESPONSE

- 1. The final report contains seven recommendations. Recommendation #5 has been deleted in response to the Department's reply to the draft report.
- 2. The report has been revised to reflect information in the Department's response to the draft report.
- 3. Department officials did not provide documentation evidencing that a decision had in fact been made to downgrade the priority of these complaints.
- 4. The critical issue is that the elevators were not inspected and tested as required. Also, the Department did not provide documentation of attempts by either Department inspectors or private inspectors hired by the Department, to inspect these elevators. The Department's response states that this documentation is required of Department inspectors in all no access situations – and is required of private contracted inspectors bv Department on the 2<sup>nd</sup> attempt at The Department's response does not address how the elevators avoided testing, which is conducted by the private inspectors hired by the property owners.

- 5. Our sample included two Department inspectors. Our findings regarding these two Department inspectors were that there was no documentation showing they met the requirement for supervisory experience a fact acknowledged by the Department. We do not assert that these two inspectors lacked an examination requirement.
- 6. The Department should ensure that employees meet the qualifications requirements for the positions they hold.
- 7. The Department's contract for elevator inspectors requires all inspectors to be certified it makes no distinction between supervisory and nonsupervisory inspectors.
- 8. The report has been revised and the related recommendation has been deleted.
- 9. Recommendation #6 was revised in response to the Department's reply to the draft report.

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