



NEW YORK CITY COMPTROLLER  
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**Audit Report on the Compliance  
of the Mayor's Office of  
Management and Budget's  
Asset Information Management  
System Reports with City  
Charter Requirements**

**FM23-070A | March 15, 2024**





THE CITY OF NEW YORK  
OFFICE OF THE COMPTROLLER  
BRAD LANDER

March 15, 2024

To the Residents of the City of New York,

My office has conducted an audit of the Mayor's Office of Management and Budget's (OMB) Asset Information Management System Executive Summary (AIMS Report, or Report) to determine whether it accurately reflects the City's major capital plant maintenance costs needed to preserve the structural integrity of assets, and whether it meets the requirements of the City Charter. We conduct audits such as this to identify areas for improvement and make recommendations to mitigate identified risks.

The audit found that the AIMS Report as it is currently prepared does not provide an accurate assessment of the costs of maintaining the structural integrity of the City's major assets. The audit found considerable fluctuations in estimated costs from one AIMS Report to the next and difficulty in tracking capital projects and estimated costs in AIMS to actual capital projects and contractual costs. OMB has adopted a surface survey methodology that limits the assessment of the asset's condition, which inherently reduces the reliability and accuracy of the cost estimate. Further, the lack of policies and procedures related to the survey process results in an inconsistent survey methodology, raising questions about the accuracy of the assessments.

The audit also found instances of inaccurate asset inventories and many other issues that collectively call the reliability and utility of the Report into question. Lastly, the audit found that the current approach followed by OMB differs in meaningful ways from the original arrangements contemplated under the Charter.

To address these findings, the audit recommends that OMB overhaul the AIMS Report process to ensure it provides an accurate assessment of the cost of preserving the structural integrity of the City's major capital assets, and an accurate estimate of associated costs, so that it is a useful budgetary tool.

The results of the audit have been discussed with OMB officials, and their comments have been considered in preparing this report. OMB's complete written response is attached to this report. If you have any questions concerning this report, please email my Audit Bureau at [audit@comptroller.nyc.gov](mailto:audit@comptroller.nyc.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "B. Lander".

Brad Lander

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# Audit Impact

## Summary of Findings

The audit found that the Asset Information Management System Executive Summary (AIMS Report, or Report), as it is currently prepared, does not provide an accurate assessment of the costs of maintaining the structural integrity of the major capital assets of the City of New York.<sup>1</sup>

The audit found considerable fluctuations in estimated costs from one AIMS Report to the next and difficulty in tracking capital projects and estimated costs in AIMS to actual capital projects and contractual costs. The Mayor's Office of Management and Budget (OMB) has adopted a surface survey methodology that limits the assessment of the asset's condition, which inherently reduces the reliability and accuracy of the cost estimate.<sup>2</sup> Further, the lack of policies and procedures related to the survey process results in an inconsistent survey methodology, raising questions about the accuracy of the assessments.

The audit also found instances of inaccurate asset inventories; covered assets being excluded or, conversely, non-covered assets being included in reports; and many other issues that collectively call the reliability and utility of the Report into question. Lastly, the audit found that the current approach followed by OMB differs in meaningful ways from the original arrangements contemplated under the Charter.

## Intended Benefits

The audit identifies a need for the AIMS Report to be improved to ensure that New York City knows the true cost of maintaining the City's major capital assets in a state of good repair.

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<sup>1</sup> In this report, assets refer to capital assets which are resources owned by the City and used for the present and future benefit of the public. Capital assets include all land, buildings, and other elements of the City's infrastructure, e.g. public schools, libraries, streets, sewers, etc. All capital assets funded by the City or related entities have a required minimum useful life and a minimum cost threshold.

<sup>2</sup> Surface surveys do not examine conditions under water, below ground, or behind walls.

# Introduction

## Background

### Charter Mandates

The New York City Charter (Charter) requires the head of each agency to submit to the Mayor the following information for each “major portion of the capital plant,” for which the agency is responsible:

- the date of the original acquisition or construction, the original cost and useful life, the current replacement cost and remaining useful life, categorized by project type;<sup>3</sup>
- an agency capital plant inventory which presents, for each asset, an update of the above information as well as an assessment of each asset’s condition and a schedule, by year, of maintenance activities;<sup>4</sup> and
- updates to ensure the inventory, condition assessments and maintenance schedules are “complete, current and accurate.”<sup>5</sup>

The Charter defines each “major portion of the capital plant” as public infrastructural asset owned and controlled by the City with an original or replacement value of at least \$10 million dollars and a useful life of at least 10 years, as well as any other capital asset of the City designated by the Mayor.<sup>6</sup>

The Charter specifies that maintenance schedules and amendments to schedules must be prepared or reviewed by professional engineers or architects registered in the State of New York. These professionals must provide their written opinions concerning the “reasonableness and sufficiency” of activities listed in such schedules for “maintaining” the assets, as well as their recommendations, if any, for changes to the schedules. The Charter stipulates that their opinions and recommendations “shall be based upon commonly used standards for acceptable levels of maintenance, the performance and other specifications [for which the assets] were designed, and such other engineering or architectural standards as may be appropriate.”<sup>7</sup>

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<sup>3</sup> New York City Charter, Chapter 49, Section 1110-a(b).

<sup>4</sup> Ibid, Section 1110-a(c).

<sup>5</sup> Ibid.

<sup>6</sup> Ibid, Section 1110-a(a)(2).

<sup>7</sup> Ibid, Section 1110-a(d).

The Charter further requires the Mayor to transmit copies of each agency’s capital plant inventories, and all related amendments, to the City Council, the City Comptroller, and the City Planning Commission, and to store such information centrally so that it is accessible to these officials, the agencies involved, and other interested parties.<sup>8</sup>

The Mayor must also submit cost estimates for the coming fiscal year—and for the successive three fiscal years, by agency and project type, and within project type, by personal services (PS) and other than personal services (OTPS)—of the costs “necessary to maintain all major portions of the capital plant.” Cost estimates must be prepared or reviewed by professional engineers or architects who must provide, in writing, their opinions as to the “reasonableness” of the estimates, whether the estimates have been “logically derived” from the maintenance schedules prepared by agency heads, and their recommendations, if any, for changes in such estimates.<sup>9</sup>

The Charter defines “maintenance” and “maintain” as those activities necessary to keep the asset “in good repair so as to preserve its structural integrity and to prevent its deterioration.”<sup>10</sup>

The Charter requires that both agency heads and the Mayor’s Office meet the conditions of their respective mandates no later than October 1 each year.

## The Current Process

In 1989, OMB assumed overall responsibility for meeting the obligations conferred by the Charter on agency heads and the Mayor by preparing the annual AIMS Report.

OMB sends City agencies a letter twice a year requesting an inventory update. In most cases, agencies do not submit maintenance schedules. Maintenance schedules are only submitted by the agencies listed in the table below, for a subset of their respective assets. These assets are considered critical and referred to as “special assets.” They are not surveyed as part of the AIMS Report process; estimated needs are updated yearly based on the agency’s Ten-Year Capital Strategy and contract information that is made available to OMB.

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<sup>8</sup> Ibid, Section 1110-a(e).

<sup>9</sup> Ibid, Section 1110-a(f).

<sup>10</sup> Ibid, Section 1110-a(a)(1).

**Table: Special Assets by Agency**

Agency	Special Assets
Department of Transportation	Four East River Bridges Street and Arterial System Street Lighting System Traffic Signal System Ferries
Parks Department <sup>11</sup>	Underground Utilities
Department of Correction	Rikers Island Underground Utilities
Fire Department	Fireboats

In most cases, maintenance schedules are prepared by an external consultant and a unit within the Department of Design and Construction (DDC) established for this purpose, based on asset surveys that they also conduct. Surveys are conducted for approximately 25% of the assets each year; it takes four years for all covered assets to be surveyed. At the exit conference, OMB officials indicated that if the surveyors identify a potentially unsafe condition during a survey, a Hazardous Condition Report or an Area of Concern Report is used to notify the agency. In this instance, the agency is responsible for addressing the condition and notifying OMB when it has been remedied.<sup>12</sup>

OMB uses maintenance schedules that derive from surveys to estimate costs needed to maintain assets included in the Report. This is done using software that was developed by the contractors and the OMB team managing this process. Surveyors enter identified conditions in the application, including descriptions, the extent of damage, size of the affected area, and the estimated timeframe for completing needed maintenance. The resulting data are used to estimate costs for each condition assessed, using material unit costs and various multipliers set by OMB.

The external consultant hired by OMB and the DDC unit established to support the Report process provide the written opinions that must be included in the maintenance schedules and the cost estimates. These are then submitted as “individual asset packages” to each agency head for review and sign-off.

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<sup>11</sup> The AIMS Report states that “Underground Utilities” and “Streets and Roads in Parks” are Special Assets and surveyed by the Parks Department. During the exit conference, OMB officials stated that the “Streets and Roads in Parks” were mistakenly reported under Parks Department as Special Assets and should be removed. Then, in its written response, OMB noted that the Parks Department does not submit data for underground utilities and that “needs are derived from quantity takeoffs of utility lines, from construction drawings and field counts of lamps, and consultant roadway surveys.” These explanations are reflective of the inaccuracy of information included in the Reports.

<sup>12</sup> Upon request, OMB provided 10 reports that were subsequently reviewed by the audit team.

If OMB decides it will not survey an asset (“non-surveyed assets”), it estimates the maintenance costs based on the average cost of maintenance schedules for all surveyed assets within the same agency.

The annual AIMS Report is submitted by the Mayor to the City Council, the City Comptroller, and the City Planning Commission. OMB also produces an AIMS Agency Reconciliation document, which compares the estimated costs in the AIMS Report with the planned capital and expense programs reported by the agencies.

In the Fiscal Year 2023 AIMS Report, OMB reported 5,093 assets (including 4,326 surveyed-assets, 734 non-surveyed assets, and 33 special assets) within the City’s capital plant, with estimated capital repairs, replacements, and major maintenance costs of \$14.1 billion and \$14.4 billion for FY2024–2027 and FY2028–2033, respectively.<sup>13</sup> The annual cost of producing the AIMS Report is approximately \$4 million.<sup>14</sup>

## Objectives

The objectives of this audit were to determine whether OMB’s AIMS Reports accurately reflect the City’s major capital plant maintenance costs needed to preserve the structural integrity of assets, and whether they meet the requirements of the City Charter.

## Discussion of Audit Results with OMB

The matters covered in this report were discussed with OMB officials during and at the conclusion of this audit. An Exit Conference Summary was sent to OMB and discussed with OMB officials at an exit conference held on December 6, 2023. On January 17, 2024, we submitted a Draft Report to OMB with a request for written comments. We received a written response from OMB on February 7, 2024. In its response, OMB generally agreed with the audit’s recommendation to overhaul its AIMS Report process. Specifically, OMB generally agreed with seven (#1a, #1b, #1f, #1g, #1h, #1i, #1j), partially agreed with one (#1c), disagreed with one (#1e), and did not directly address one sub-recommendation (#1d).

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<sup>13</sup> Per the AIMS Report, an asset generally corresponds one-to-one with a unique structure. In certain instances, an initial asset is defined as an organizational unit that provides a common service (considered a “campus setting” by OMB) but consists of numerous individual structures as sub-assets.

<sup>14</sup> The cost calculated by the auditors included the OMB and DDC personnel costs and the consultant survey costs for the production of the FY 2024 AIMS Report.

OMB's written response has been fully considered and, where relevant, changes and comments have been added to the report.

The full text of OMB's response is included as an addendum to this report.

# Detailed Findings

The audit found that the AIMS Report as it is currently prepared does not communicate to the Mayor or other stakeholders the true cost of present and future capital costs of maintaining the structural integrity of the major assets of the City of New York. There does not appear to be a correlation between the estimates of cost provided in the AIMS Report and actual costs once projects are planned.

Moreover, the auditors found areas of concern related to inconsistencies in the survey process, considerable fluctuations in estimated costs from one AIMS Report to the next, and difficulty in tracking capital projects and estimated costs in AIMS to actual capital projects and contractual costs.

OMB has adopted a surface survey methodology on a sample basis that potentially limits the assessment of the asset's condition and does not evaluate the additional cost when the surface conditions indicate a need for deeper review. Specifically, asset surveys conducted by the external consultant and DDC are limited to what can be observed without the use of scaffolding, rigging, or climbing into areas not readily accessible.<sup>15</sup>

Further, the lack of policies and procedures related to the survey process results in inconsistent survey methodology that may affect the accuracy of the assessments. OMB has directed surveys to exclude a review of conditions that are below the surface, below water, and behind walls, even if such conditions are crucial to assessing the structural integrity of the assets under review and even when surface conditions show evidence of problems that are inaccessible.<sup>16</sup>

The auditors also found instances of inaccurate asset inventories and covered assets being excluded or, conversely, non-covered assets being included in reports; and many other issues that collectively call the reliability and utility of the Report into question.

The audit also found that the current approach followed by OMB differs in meaningful ways from the original arrangements contemplated under the Charter. Whereas the Charter contemplates a bifurcated process in which agency heads and the Mayor have separate roles and responsibilities, OMB has assumed responsibility for, and control of, both. In its response, OMB “strongly disagrees” with this assessment and refers to the Charter that allows the same licensed professionals who work on condition surveys for agencies to also work on cost estimating. The

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<sup>15</sup> This phrase comes from the waiver language included by the external consultant and DDC when preparing or reviewing maintenance schedules and providing the written opinions as required by the Charter.

<sup>16</sup> The auditors' review of a sample of Hazardous Condition Reports and Area of Concern Reports found that the conditions were readily identifiable by a surface review and did not require a deeper review.

audit does not characterize OMB's practices as non-compliant with the Charter but rather underscores OMB's control over both the survey and cost estimation processes.

The Charter does make a distinction between tasks performed by agencies and those performed by OMB (the Mayor's Office). If this distinction had been preserved, OMB's role would be limited to estimating costs after agencies charged with preserving the assets had determined the extent of needed maintenance and repair. This would be a more transparent process, and one which would reduce the risk that the totality of needed maintenance and repair is underestimated.

## **AIMS Report's Accuracy is Questionable**

The auditors conducted observations and tests to assess the overall reliability of the AIMS Report. The auditors found that surveys were inconsistent and incomplete and that estimates in the Reports bore little relationship to planned costs once projects were approved to proceed. The auditors also found instances of significant and unexplained variances of condition and cost estimates—for the same assets that appeared in successive Reports—as well as calculation errors and inaccurate asset counts and inventories.

These issues are discussed in more detail below.

## **The Estimated Need in the Report Is Not Predictive of Planned Projects Costs**

To assess the accuracy of the cost estimates contained in the AIMS Report, the auditors reviewed project estimates in older Reports and compared them to the actual cost of maintaining and repairing the same assets when approval to proceed was granted. This was done in conjunction with engineering auditors.

This review found that, in many instances, a comparison was simply not possible. This was because the maintenance and repairs and associated costs in the Reports bore no relationship to associated projects that were approved to start, either in the scope of planned work or project costs. In others, the auditors found the AIMS Report did not reflect the actual repairs, replacements, and major maintenance costs for projects that were later begun.

For example, the auditors attempted to trace costs using the FY2023 Calculation Detail Reports for more than 10 assets with approved work following an estimate of need and associated costs in prior AIMS Reports. It was not possible to trace the actual expenditures to a cost estimate provided in the AIMS Report for a variety of reasons, including that descriptions of planned work, scope of contracted work, and reports of expenditures did not coincide with estimated need in prior reports.

In one case in which a comparison was possible, the Riverside Park Bridge W79th Street Traffic Circle (Riverside Park Bridge project), the auditors found the cost estimates in the FY2021 AIMS Report approximately \$74 million below the planned cost of the project once it went to bid.

Based on surveys of components of the Riverside Park Bridge project, conducted mostly between August 2015 and July 2018, the FY2021 AIMS Report contained a total capital cost estimate of approximately \$76 million to complete the project. According to the Report, this cost was to be incurred between FY2022–2025 and FY2026–2031 to maintain associated asset components of the Riverside Park Bridge project (appearing in the Reports as Asset #214, #14217 through #14222, #14224, #14225, #14241 through #14245, and #14250). Based on bids received in August 2020, the actual cost of rehabilitating the Riverside Park Bridge project was approved by OMB for \$149.9 million.<sup>17</sup>

The auditors reviewed the estimate of need and cost of the numbered assets in each AIMS Report issued between FY2016 and FY2023 (reflecting the cost estimates following the three most recent surveys) and determined that the underestimate was largely due to the decision not to survey conditions that were deemed not readily accessible, and the questionable calculation of estimated costs. Generally, the surveys and estimates for this project did not include inaccessible items, such as footings, pavement base, and piles.

In its response, OMB “questions the methods of the Audit in comparing the bid cost of fully scoped construction projects to the individual asset costs for restoration of state-of-good-repair estimated by AIMS.” As noted by OMB, each AIMS Report states that there are methodology constraints and inherent limitations in the level of accuracy possible at the detailed asset and component level. Therefore, the actual cost for a project may vary substantially from the amount estimated in the AIMS Report when a detailed scope of work and cost estimate is completed. However, the project discussed in this audit demonstrates the significant cost difference between the estimated amount and the actual cost of the project items, which, in fact, calls into question the reliability of the estimation methodology used for the AIMS Report.

Moreover, as stated above, the AIMS Report did not reflect the actual repairs, replacements, and major maintenance costs for projects that were later considered necessary. In the survey of Asset #14220, for example, 20% of two “types” of a bridge “superstructure,” were deemed inaccessible to the survey team starting in FY2017.<sup>18</sup> Corresponding cost estimates for these items showed wide variances in the AIMS Reports issued between FY2016 and FY2021, even though the conditions assessed changed very little. Specifically, for one of the two types, the estimated cost

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<sup>17</sup> The work for this project started in May 2021. Upon completion, the total cost may be much higher.

<sup>18</sup> Each Type (e.g., materials such as plaster or concrete) accounts for a percentage of the total area of each Component (e.g., ceiling).

changed from \$84,500 in FY2016 to \$366,600 in FY2021, an increase of 334% ( $[\$366,600 - \$84,500] / \$84,500$ ) even though the size of the area affected had decreased by 0.4% over the same period.<sup>19</sup> For the second type, the estimated cost changed from \$11,000 in FY2016 to \$19,100 in FY2021, an increase of 74% ( $[\$19,100 - \$11,000] / \$11,000$ ) while the size of the area affected increased by only a net of 4.4%.<sup>20</sup> At the exit conference, OMB officials attributed these variances to the percentage of the degree of repair. However, this is not persuasive given that, based on the information provided, the percentage of the degree of repair dropped from 10% to 5% for one type and from 10% to 2% for the second type while the cost estimate increased.

The auditors' review of cost estimates to maintain and repair another component of the project, Asset #14219—the rotunda at the foot of W79th Street—found significant fluctuations in Reports issued for the FY2021–2023 period. OMB variously reported cost estimates of \$50.1 million and \$1.2 million in FY2021 and FY2023 Reports for the asset described as Concrete Encased Steel of the Pier Columns.

The cost estimate for the very same condition dropped, without explanation, by \$48,975,900 ( $\$50,126,400 - \$1,150,500$ ) in FY2023. This was based on a survey dated October 15, 2020. This represented a decrease of 98% ( $[\$50,126,400 - \$1,150,500] / \$50,126,400$ ), even though the percentage of area affected increased from 10% to 15%. Subsequent to the exit conference, OMB noted the same degree of repair for both years and provided additional explanation; however, because of a system impediment they were unable to submit substantiating evidence.

OMB insists that the estimates of cost contained in the AIMS Report are not intended for budget planning. However, the Charter requires the development of schedules of activities that are “reasonable and sufficient” to preserve the covered capital assets in good repair, and mandates that these are used to “logically derive” the estimated cost of completing those activities.<sup>21</sup> Whether or not OMB chooses to call this a budgetary exercise, it seems clear that it was established to inform capital planning and associated budgetary processes.

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<sup>19</sup> For FY2016 and FY2021, per the AIMS Reports, the percentage of total area changed from 10% to 80% and the percentage of area affected changed from 20% to 2%, resulting a net decrease in area affected by 0.4% ( $[(80\% \times 2\%) - (10\% \times 20\%)]$ ).

<sup>20</sup> For FY2016 and FY2021, per the AIMS Reports, the percentage of total area changed from 10% to 80% and the percentage of area affected changed from 20% to 8%, resulting a net increase in area affected by 4.4% ( $[(80\% \times 8\%) - (10\% \times 20\%)]$ ).

<sup>21</sup> Ibid, Section 1110-a(f).

## Estimated Costs of Assessed Conditions Are Limited by Surface Reviews

OMB has adopted a survey methodology which limits the assessment of the condition of assets, which inherently limits the reliability and accuracy of the cost estimate. According to certifications prepared by consultant and DDC surveyors, surveys are conducted based on observed conditions of a sample of each building facility or an asset's major system components, agency records, examined reports, statements of agency/facility employees, and the results of the last observations. Components not readily observable or accessible by surveyors are not assessed. Although, according to OMB, a visual surface survey is standard industry practice, it does not have policies and procedures in place to identify when a deeper review is needed and a clear set of actions to be taken.

The assessments are accompanied by a written waiver from the engineers and architects opining on condition assessment and maintenance schedules, which reads as follows:

This certificate is based on a limited visual survey of representative areas of the assets without the use of scaffolding, rigging, or climbing into areas not readily accessible. It does not express or imply analysis or verification of the load carrying capacity of any structure or a structure's present condition's conformance with any laws or building codes and does not include survey for purposes of NY Administrative Code Title 27, Article 6, Section 27-129.

For these facilities, this certificate recognizes the limitations inherent in basing the rehabilitation costs on the results of visual surveys [. . .] without inclusion of probing and other means of testing. The certification further recognizes that subsequent detailed surveys and detailed design of rehabilitation work may result in significantly different cost estimates for a facility asset or a component thereof.

As the surveys form the basis of maintenance schedules which are then used to estimate cost, the risk exists that conditions, pending deeper review, that are critically needed to preserve the structural integrity of assets are not identified or considered when estimating cost. The waiver related to estimated costs similarly limits the reliability of the cost estimate for planning purposes.

In its response, OMB claims that the audit "fails to consider that surveying below surfaces and behind walls mainly entails the use of destructive methods which negatively impact structural integrity and are counter to the program." However, at no time does the audit suggest any destructive practices but highlights the importance of policies and procedures to identify when a deeper review is needed and a clear set of actions to be taken. Auditors also note that there are evaluation methods available that do not cause damage to asset structures. For example, the

condition of concrete-encased steel of the bridge superstructure for the Riverside Park Bridge project can be assessed without causing damage to the structure.

OMB also claims in its response to this finding that “the consultant surveyors, or those from DDC, are instructed to notify OMB in writing with supporting photos within 24 hours of observing hazardous conditions. These are then submitted to the owner agency by the very next business day for remedial action.” The auditors reviewed 10 Hazardous Condition Reports or Area of Concern Reports provided by OMB and found, firstly, that 5 of the 10 hazardous conditions were not reported within 24 hours by the surveyors as claimed by OMB—4 of the 10 had still not been shared with the agency by the next business day—and secondly, this is not responsive to the concern that OMB’s limited survey process potentially misses structural defects that should be included in future planning. All 10 reports identified conditions found following a surface review, by which time they were deemed hazardous and in need of urgent attention.

## Inconsistent Survey Practices

The auditors noted that the surveying practices varied between contractors and DDC surveyors. During an observation conducted at three waterfront assets and six buildings, the auditors saw consultants measuring areas affected when conditions needing repair were observed; however, DDC surveyors took no measurements and did not visit all floors of a building during the survey (according to OMB officials, surveys are conducted on sampled floors only).

The auditors also noticed variations in the amount of time DDC surveyors spent surveying different assets, ranging from 20 minutes to inspect a 6,164 square-foot Fire Department (FDNY) facility, to 36 minutes to inspect a 105,000 sq. ft. elementary school. Notably, there were also 16 conditions identified in prior surveys for 3 of the 6 buildings visited by the auditors that DDC surveyors did not follow up on.

OMB officials explained that surveyors interview the custodial and/or facility staff regarding any deficiencies or recent work before and during the survey of buildings and are escorted through the building by personnel with intimate knowledge of the building.

There are no written policies and procedures in place to govern the survey process. While OMB officials claim that the “Benchmark for Surveys” document attached to the AIMS consultant contract provides guidance, the benchmark does not establish a survey methodology to be followed. It only indicates the types of work covered by the consultant contract cost, such as data input, review of condition reports, and data transfer. Similarly, there is no survey contract or a Memorandum of Understanding with DDC to define the scope and methodology of surveys. Providing written procedures for surveyors to follow is the best way to ensure surveys are being conducted consistently.

The lack of established guidelines results in varied survey methodologies and outcomes, and inconsistent, incomplete, and unsubstantiated condition assessments.

## Unreported Conditions and Unsupported Assessments

The audit found numerous conditions that went unreported in earlier surveys, as well as conditions reported in prior surveys that were not observed during the auditors' site visits.

The auditors conducted observations at 10 sampled assets between January and August 2023, which were last surveyed between December 2021 and June 2022, and found conditions that were not reported in the earlier surveys. Specifically, auditors identified 57 unreported structural-integrity-related conditions, ranging from 1 to 18 per asset, including historical delamination, cracks, and split damage at the door entrance of a DOT facility, and steel lintel corrosion and damaged stucco at a FDNY facility. Auditors also observed issues with four unreported material "types" for 2 of the 10 assets.

Because these conditions were not reported in the prior surveys, there is no way to know whether they were pre-existing or newly developed. Auditors are particularly concerned that four years may pass until new conditions are identified and reported, and that the age of unreported pre-existing conditions may be unknown. As a result, conditions may not be corrected timely, and repair costs may be understated. Because OMB operates on a four-year survey cycle, it is possible that the agency will continue to work with underestimated costs for the next three fiscal years.

The auditors also found that 62 conditions, which had been previously reported for 9 of the 10 sampled assets, were no longer observable. However, only half of the conditions were substantiated by pictures documenting the last survey. While it is possible conditions were corrected, the absence of photographs to document the original condition of 31 of the 62 items means there is no evidence to support such a conclusion.

Finally, the audit found that surveyors do not consistently calculate the percentage of an affected area based on actual measurements and total square footage. Instead, surveyors estimate percentages based on their observations and professional experience, before entering them into the Surveyor's Application. There is no information regarding the total square footage of any Components or Types in the Surveyor's Application for reference.

The auditors observed the consultant surveyors using measuring tools during survey which allowed for a more precise assessment of the area affected. DDC surveyors were observed without such tools. For surveyors working without measuring tools or pictures showing existing and previously reported conditions, it is difficult to see how observational estimates of affected areas could be substantiated.

The auditors believe that these deficiencies in the survey process can be traced to OMB's lack of guidelines and documentation standards that align with industry best practices.

## Proration of Estimated Costs of Special Assets Incorrect

According to OMB, the AIMS group is supposed to prorate the costs reported by agencies for special assets evenly, over the period covered by AIMS Reports. For example, the AIMS group should have evenly prorated the \$316 million reported by DOT as the cost of repairs to the Queensboro Bridge for the period July 2018 through October 2022, over 52 months.

According to OMB's stated methodology, the prorated amounts should have been approximately \$73 million for each of FY2019–2022 (12 months each fiscal year), and approximately \$24 million for FY2023 (four months). OMB should have reported in its FY2021 AIMS Report an approximate total of \$97 million (\$73 million for FY2022 plus \$24 million for FY2023) for the Queensboro Bridge.

Instead, the repairs, replacements, and major maintenance costs for the four East River bridges were overstated by approximately \$344 million, \$139 million, and \$112 million in FY2021, FY2022, and FY2023, respectively. During a meeting held on April 18, 2023, OMB officials attributed this to human error.

## Assets Not Timely Added or Returned to the Capital Plant Inventory

The auditors found that OMB did not timely add certain assets to the City's major portion of the capital plant inventory during the audit scope period. Specifically, 507 (63%) of the total 803 bridges and vehicular tunnels listed by DOT were excluded and 5 (71%) of 7 new schools reported by DOE were excluded from the FY2023 AIMS Report.

The auditors also reviewed 33 assets that were listed as excluded from AIMS reporting to determine whether they were properly excluded from the survey process. Because adequate evidence supporting the exclusion of five of the assets was not provided, auditors visited all five. The auditors found that two of the five were in fact operational and should therefore have been returned to the inventory. During the observation, the auditors found two additional assets that were not included in the AIMS Report, as follows:

- the East 91st Street bridge leading to the Department of Sanitation's (DSNY) Marine Transfer Station has been in use since March 2019, but has not been added to the AIMS Report, as confirmed at a meeting with OMB officials on April 18, 2023; and
- the DSNY Section Station 63 has been in use for at least five years but had not been added to the inventory list as of May 1, 2023.

OMB officials stated that they did not follow up on the status of assets that were temporarily excluded, and that the agency had not informed them of these assets' status. OMB officials also

attributed these lapses to delays in obtaining construction drawings and verifying City ownership, and to agencies not submitting timely updates related to their inventory changes.

In its response, OMB stated “[t]he Audit was conducted without any consideration for the statistical significance of single assets being included or excluded from the inventory, with 99.9% accuracy being described as ‘inaccurate’ across their review of tens of thousands of data points.” OMB is obfuscating the number of assets in this finding. The auditors reviewed the 33 assets listed in the AIMS Report as being excluded to determine whether these assets were justifiably excluded and not the “tens of thousands of data points” reported in the AIMS Report. Moreover, the auditors’ observation of five assets found that two (40%) were unjustifiably excluded plus another two assets not even considered or listed. In addition, the auditors’ review of DOT’s Bridges and Tunnels Report found that 63% were not included in the FY2023 AIMS Report.

## Assets Improperly Included in the Capital Plant Inventory

The auditors’ review of 30 non-surveyed assets that measured over 5,300 sq. ft. identified four assets (13%) that were improperly included in the capital plant inventory.<sup>22</sup> Specifically:

- two non-City-owned U.S. Coast Guard properties used by the Police Department (NYPD) were included upon the agency’s request, and
- two non-structural open spaces within the zoos at Prospect Park and Flushing Meadows Corona Park were improperly included under the Parks Department (DPR).

Similarly, assets that had been transferred to other agencies (“transferred out”) or demolished were not removed from the capital plant inventory. For example, two DOT bridges were either transferred to New York State DOT or demolished prior to 2020, yet OMB was not informed by DOT until February 24, 2023.

The City Charter requires reporting only on City-owned capital plants.<sup>23</sup> Inclusion of non-City-owned assets results in an inaccurate inventory and skews the number of reported City assets.

## Incorrect Asset Counts in the AIMS Reports

According to the AIMS Report, an “asset” generally corresponds to a single, unique structure and has an individual Program Number. In certain instances, an initial asset is defined as an

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<sup>22</sup> For non-surveyed assets, OMB estimates the maintenance costs based on the average cost of maintenance schedules for all surveyed assets within the same agency.

<sup>23</sup> Ibid, Section 1110-a(a)(2).

organizational unit that provides a common service but consists of numerous individual structures, called “sub-assets.” For example, Bellevue Hospital is categorized and numbered as an asset, and its individual buildings are considered sub-assets under NYC Health + Hospitals (H+H). This means that Bellevue Hospital should be reported as one asset that consists of eight sub-assets.

However, the AIMS Report states that “actual surveying, costing and reporting always occur at the sub-asset level.” OMB reports sub-assets as assets in AIMS Reports. Specifically, in the FY2023 AIMS Report, OMB counted 5,093 sub-assets as assets.<sup>24</sup> The auditors determined that OMB’s asset presentation practice resulted in inaccurate asset counts.

Further, the auditors determined whether the reported 5,093 assets met the City Charter’s \$10 million threshold. The auditors noted that OMB reported assets in “campus settings” (e.g., hospitals, parks), and the costs of each structure (sub-asset) within the campus were added to meet the \$10 million threshold. However, the City Charter does not define a campus setting as a criterion. As a result, the auditors found that 1,456 sub-assets under the \$10 million replacement cost threshold should not have been included in the capital inventory list. This included 311 architectural assets (at least 119 with a square footage of less than 2,000), 645 non-surveyed assets (464 of which have a square footage of less than 2,000, including 34 sheds), and 500 retaining walls (at least 149 are perimeter walls).

OMB should not have reported any sub-assets, and conversely, should have reported 3,637 assets (that individually exceeded the \$10 million threshold) in FY2023. By including unqualified items, OMB unnecessarily stretched the survey cycle to four years and unnecessarily incurred related survey expenses for 811 of the 1,456 sub-assets. In addition, inaccuracies in capital plant inventory resulted in misstated replacement, repair, and major maintenance cost estimates.

At the exit conference, OMB officials stated that according to the Charter, the Mayor has discretion to add new assets to the City’s inventory.<sup>25</sup> However, there is no justification as to why certain assets are included as opposed to others. In a similar vein, it is unclear why H+H assets are reported in AIMS, whereas the Department of Environmental Protection’s (DEP) assets leased to the Water Board are excluded, while both are public benefit corporations. It should be noted that the replacement of DEP’s failing sewer components alone for FY2024–2033—a cost of \$1.35 billion—was determined not to be reportable in AIMS. OMB was unable to provide any documentation supporting the Mayor’s designation or the rationale for including or excluding assets from the AIMS Report.

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<sup>24</sup> Using the AIMS Report’s definition of an asset and grouping the individual Program Numbers, the auditors determined and confirmed with OMB that there were 2,545 assets for FY2023. Of those assets, 2,155 were individual assets with one sub-asset each and 390 had 2,938 sub-assets, for a total of 5,093 sub-assets.

<sup>25</sup> Ibid, Section 1110-a(a)(2).

In its response, OMB stated “[r]egarding the exclusion of the assets of public benefit corporations, this was the design of the Charter. The first report following the 1989 Charter revision states that only the assets of the Health and Hospitals Corporation would be included as an exception.” However, no further evidence or justification was provided to support this statement.

Of similar concern is OMB’s decision to survey elements that were not directly related to an asset’s structural integrity.<sup>26</sup> Based on site observations of 10 sampled assets, the auditors found that OMB’s FY2023 surveys included 12 such items—vinyl tiles, carpet, acoustic tiles, and folding partitions. OMB officials consider these elements to be structural because they are needed for sound dampening within a building and are also considered protective elements intended to prevent structural deterioration. However, the audit found that these elements are unrelated to structural integrity. In its response, OMB took exception to this finding; however, the auditors find no basis for altering the finding.

Overall, the audit found issues with discretionary decisions to selectively include or exclude assets from the AIMS process and Report. Although the Mayor has the authority to make such decisions, OMB provided no documentation to show how or when such decisions were made. To include things that are easily replaceable at relatively low cost, while simultaneously ignoring sewer components requiring an expenditure of \$1.35 billion, is hard to reconcile with the primary purpose of the Report and with the City’s need to understand the full cost of preserving the structural integrity of its major capital assets. OMB potentially diverted resources that could have been used to survey for structural integrity, to items that are not structural, causing superfluous cost estimates.

## Assets Inappropriately Excluded from the Survey Process

Of 5,093 total assets reported in the FY2023 AIMS Report, 4,326 were assets expected to be surveyed during the FY 2021–2024 survey cycle. Of the total, 734 were classed by OMB as non-surveyed assets and 33 were classed as special assets.

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<sup>26</sup> Condition assessment and cost estimation are done by “Discipline/System/Component/Type.” The “Discipline” includes architecture, electrical, mechanical, bridge; a “System” includes the exterior/interior of a structure, heating, plumbing, etc. A “Component” includes windows, roofs, floors, sanitary piping, etc., and the “Type” includes masonry (brick), vinyl tile, steel, copper, etc.

The auditors noted that 17 of the 734 assets classed as “non-surveyed” assets were buildings spread over 5,300 sq. ft. that fell within the Charter definition of assets. All 17 buildings should have been surveyed to assess their structural conditions, as follows:<sup>27</sup>

- 10 assets currently in use that have not been surveyed since 1992, including an administration building at Flushing Meadows Corona Park under DPR and Building G-1 at the New York City Terminal Market under the Department of Small Business Services (SBS);
- three new assets added as far back as 2016 that have never been surveyed, including the Lamantina Ambassador Center at Bronx Zoo under the Department of Cultural Affairs (DCLA); and
- four unused assets located in an historical landmark district that have never been surveyed, including a former residence at Fort Totten under FDNY.

## The Charter Process and OMB’s Process Differ in Meaningful Ways

The process outlined in the Charter requires agencies to provide updated asset inventories and prepare maintenance schedules of activities that are necessary to maintaining assets in a state of good repair. It also requires the schedules to be reviewed by engineers or architects who must verify in writing that the activities listed in the schedules are reasonable and sufficient to maintain the relevant portion of the capital plant in good repair, to preserve its structural integrity, and to prevent deterioration. They must also make recommendations for change if needed.

The Charter requires these schedules to be shared with the Mayor, who must transmit them to the City Council, the Comptroller, and City Planning officials.

The Charter requires that these schedules be used to estimate costs. These estimates must be supported by written opinions from engineers or architects that verify the estimates are reasonable and “logically derived” from the maintenance schedules prepared by agencies. They must also make recommendations for change if needed.

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<sup>27</sup> Auditors determined whether a building meets the Charter criteria of \$10 million by multiplying its square footage by the replacement cost of \$1,900/sq. ft. provided by OMB officials. A building measuring at least 5,300 sq. ft. would meet this criterion. These 17 buildings exceed 5,300 sq. ft.

The Charter requires that maintenance schedules and cost estimates be prepared annually, based on current and accurate inventories prepared by agencies, no later than October 1, and that cost estimates include a breakdown of PS and OTPS costs, within project type.

This is not what occurs under the process established and used by OMB since 1989.

OMB argues that this process is consistent with the Charter, and that the sign off by agency heads on the packets that they prepare satisfies the Charter requirements. However, there is a meaningful distinction between agencies preparing lists of maintenance activities needed to preserve the structural integrity of assets—which they are responsible for preserving—and OMB preparing the cost estimates, versus OMB both overseeing the assessment of need and estimating its cost.

The ways in which the OMB process differs from the process stipulated in the Charter are discussed in more detail, below.

## Agencies' Role Diminished in the Current Process

Aside from asset inventories which are prepared twice a year, and maintenance schedules prepared for “special assets,” agencies play little role in assessing the maintenance needs of the assets which they are responsible for maintaining in good repair.

Under the process currently followed, the consultant and DDC assess maintenance needs, prepare the required maintenance schedules, and provide the required written opinions, while acting under the direction of OMB. OMB uses these to prepare cost estimates, which are then reviewed by the same engineers or architects who prepared the maintenance schedules, and who must also opine on whether the cost estimates are reasonable, and whether they have been “logically derived from [the] maintenance schedules.”

Although OMB claims that the process is collaborative, there is an inherent tension between establishing the true need for repair and maintenance and budgetary constraints, and the Charter process which assigns the assessment of need and estimating of costs to different parties establishes a system of segregated duties that would minimize the risk that needs are underestimated to reduce cost estimates.

While budgetary constraints are real, City officials should be able to see the full scope of what agencies believe is needed to maintain the structural integrity of the City's assets and to prevent their deterioration, as well as what this would realistically cost. This is necessary for effective capital planning.

The process provided for in the Charter would allow both agencies and the Mayor's Office to fulfill their obligations with side-by-side reports (even if compiled into one report). If there are

discrepancies in viewpoint, these would be visible to the City Council, the Comptroller, City Planning officials, and arguably to taxpayers and others impacted by budgetary decisions.

## Some Agencies Are Critical of OMB's Survey Process

Some agencies have been critical of the process adopted by OMB. For example, both the Department of Transportation (DOT) and the Department of Education (DOE) expressed written disagreement with OMB's survey methodology.<sup>28</sup>

In its approval letter for FY2022, DOT disagreed with OMB's "limited methodology" stating that it "restrict[s] the certifications solely to 'the observed condition of a sample of the major system components' of each asset."

In letters submitted in response to FY2021 and FY2022 AIMS Report submissions from OMB, the School Construction Authority (SCA) agreed to sign off on related submissions from OMB with the following caveat added:

The AIMS Report data represents a small percentage of more comprehensive inspection data utilized by the School Construction Authority (SCA) in assessing capital planning priorities. The AIMS Report offers supplemental inspection data as an additional reference but does not claim to represent the full context of capital needs in New York City public schools.

DOT and DOE are the agencies with the highest reported repairs, replacements, and major maintenance costs of all City agencies, and in both cases, they clearly expressed concern with the survey process adopted by OMB. Both were prepared to state so in writing.

## Other Issues and Challenges

### Cost Estimates Not Broken Down

The City Charter requires cost estimates to be broken down by agency and project type, and—within each project type—by PS and OTPS.<sup>29</sup> However, OMB does not categorize these cost estimates by PS and OTPS in the AIMS Reports. Absent these breakdowns, AIMS users are not informed of the actual labor, material, and overhead costs likely to be incurred to correct the reported conditions.

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<sup>28</sup> Objections were raised by agency officials who have since departed the agencies.

<sup>29</sup> Ibid, Section 1110-a(f).

## AIMS Reporting Is Chronically Late

The auditors also found that the AIMS Report was submitted between 60 to 112 days late, in FYs 2021, 2022, and 2023. In fact, reports have been submitted late every year since 2004.

The budget process in New York City is an annual process and includes decisions on capital spending that impact the capacity of agencies to complete the activities considered necessary to protect the City's assets. The New York State budget is completed each year between January and February. Charter language which establishes annual need assessments and cost estimates, and a production date in October, are consistent with City and State budget processes.<sup>30</sup>

## Maintenance Schedules and Cost Estimates Not Based on Annually Assessed Conditions

OMB prepares maintenance schedules and cost estimates based on the 25% of assets surveyed for the year. For the remaining 75% of the assets, they use maintenance schedules and cost estimates established at the time of prior surveys and the cost estimates are then escalated for inflation.

This means that updated asset conditions, maintenance schedules, and cost estimates are only received by the City Council, the Comptroller, and City Planning officials for a quarter of assets covered by the Charter mandate each year. It also means that assets are only assessed for the purpose of identifying maintenance needs and estimated associated costs once in four years. This increases the risk that conditions that must be addressed are not timely identified.

The auditors note in this respect that the certifications accompanying written opinions from engineers and architects are only valid for between two and four years, so in some instances their validity has expired before the assessment or cost estimate are published.

## Number of Covered Assets Increases Each Year

According to OMB officials, an increasing number of assets that fall within the \$10 million replacement cost threshold are being added to the major portion of the capital plant inventory each year. This stems from the fact that the threshold set in the Charter has not been re-evaluated since it was established in 1988.

The City should consider ways to manage this challenge.

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<sup>30</sup> Ibid, Section 1110-a(f).

# Recommendations

To address the abovementioned findings, the auditors propose that OMB:

1. Overhaul the AIMS Report process to ensure that it provides an accurate assessment of the cost of preserving the structural integrity of the City's major capital assets, and an accurate estimate of associated costs, so that it is a useful budgetary tool, by:

- a. Revisiting the process established in 1989 and consulting with stakeholders, including agencies charged with preserving major assets, to consider what is needed to deliver an accurate and predictive Report.

**OMB Response:** OMB agreed with this recommendation.

- b. Revising the cost estimating methodology used to account for restrictions placed on surveys of inaccessible assets.

**OMB Response:** OMB generally agreed with this recommendation, indicating it "will investigate how this can be accomplished."

- c. Standardizing the survey process and provide written procedures to ensure consistent and adequate assessments, and accurate reporting of asset conditions.

**OMB Response:** OMB partially agreed with this recommendation, stating that "[w]hile the survey process is standardized and regularly reconciled between the survey groups, further documentation will be pursued."

**Auditor Comment:** The auditors are pleased that OMB recognizes the importance of pursuing adequate documentation and urge OMB to consider implementing written procedures to standardize the survey process.

- d. Developing standard guidance concerning the asset count, including criteria for determining which assets are included or excluded from the survey reporting process, and including a process for updating the inventory on a regular cycle to ensure that new assets are timely added, temporarily excluded assets are expeditiously returned to the asset count, non-City assets and open spaces are excluded, and inaccuracies in the inventory are timely identified and fixed.

**OMB Response:** OMB did not directly address this recommendation but stated that "methods for improving documentation will be further studied."

- e. Reporting individual buildings, bulkheads, piers, etc. as assets whenever each structure meets the Charter's threshold amount, instead of combining them in a campus setting to meet the threshold.

**OMB Response:** OMB disagreed with this recommendation, stating that “[a]ll surveyed assets in AIMS are independent structures and are reported as such.”

**Auditor Comment:** The auditors continue to urge OMB to exclude those ineligible structures from the inventory list and discontinue the survey of sheds, buildings of less than 2,000 sq. ft., and small non-structural perimeter walls that do not meet the \$10 million threshold as required by the Charter.

- f. Developing a process for documenting, in writing, when assets that do not meet the Charter’s criteria are included in the AIMS survey process.

**OMB Response:** OMB agreed with this recommendation.

- g. Ensuring timely completion of maintenance schedules and cost estimates, and their submission to City Council, the Comptroller, and City Planning officials.

**OMB Response:** OMB generally agreed with this recommendation, stating “adjustments are being made to improve [their] ability to meet the October 1 timeline.”

- h. Ensuring the accuracy of the special assets cost proration.

**OMB Response:** OMB agreed with this recommendation.

- i. Reporting the cost by personal services and other than personal services as required.

**OMB Response:** OMB generally agreed with this recommendation, stating “OMB is evaluating this for future inclusion.”

- j. Consulting with agencies and other stakeholders to address the challenge presented by ever-increasing numbers of assets that must be assessed to comply with Charter requirements.

**OMB Response:** OMB agreed with this recommendation.

## Recommendations Follow-up

Follow-up will be conducted periodically to determine the implementation status of each recommendation contained in this report. Agency reported status updates are included in the Audit Recommendations Tracker available here: <https://comptroller.nyc.gov/services/for-the-public/audit/audit-recommendations-tracker/>

# Scope and Methodology

We conducted this performance audit in accordance with Generally Accepted Government Auditing Standards (GAGAS). GAGAS requires 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 within the context of our audit objective(s). 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 this audit was Fiscal Year 2021 through Fiscal Year 2024.

To obtain an understanding of the laws, policies and procedures that govern OMB's reporting on the maintenance needs for the City's major portion of capital plant, auditors reviewed and, where applicable, used as criteria the following documents:

- Charter Chapter 49 Section 1110-a;
- Charter Revision Commission Report Volumes 1 and 2 (December 1986 – November 1988);
- Former State Comptroller Edward V. Regan's article: "Holding Government Officials Accountable for Infrastructure Maintenance;"
- AIMS Business Rules; and
- AIMS Survey Program User Guide.

To obtain an understanding of OMB's internal controls over its AIMS compilation and reporting processes, auditors conducted walkthrough meetings with the AIMS officials. Auditors also conducted nine site observations with the consultant and DDC surveyors to obtain an understanding of the survey process. Auditors documented their understanding through memos, flowcharts, and OMB's confirmations.

To determine the accuracy and completeness of the reported AIMS capital plant inventory, auditors reviewed the Assets List for FY2023 that included a total of 5,156 asset numbers to identify any duplicates, gaps and excluded asset numbers. Auditors reviewed related AIMS records, performed site observations with Engineer auditors, and conducted internet research to verify whether those unreported numbers were properly deleted or excluded. To ascertain any unreported items, auditors compared the Assets List with the asset change forms submitted by agencies for FY2023, and reviewed OMB's reconciliation of DOT's bridges and tunnels report for 2020, the most recent report at the time of the auditors' review, with the DOT bridge inventory reported in the FY2023 AIMS Report. Auditors also reconciled the asset counts from the Assets List to Table A of the FY2023 AIMS Report to identify any discrepancies. In addition, auditors

assessed whether each reported capital plant inventory asset has an original or replacement cost of at least \$10 million. Based on the “asset” and “sub-asset” definitions provided in the AIMS Report, auditors assessed whether OMB properly presented the City’s capital plant inventory.

To determine whether the asset conditions were adequately assessed and reported, auditors:

- judgmentally sampled 10 asset numbers that measured approximately 50,000 sq. ft. from each of the 10 agencies with the most reported asset numbers from the Assets List for FY2023. The auditors then conducted independent site visits with an Engineer auditor in January, February, and August 2023 to assess current asset conditions and to verify the accuracy and completeness of the conditions last surveyed during December 2021 and June 2022. The auditors verified those conditions that could no longer be observed with the pictures taken from the prior surveys;
- evaluated the methodology cited in the Engineer Certifications from the consultant and DDC;
- evaluated the agencies’ comments regarding the AIMS survey methodology and results;
- evaluated OMB’s exclusions of certain structural integrity related items from surveys, i.e., components not readily observable or accessible by field engineers, and potential pier and bulkhead repairs that can only be determined by underwater surveys;
- evaluated OMB’s inclusions of non-structural integrity related items in surveys, e.g., vinyl tiles, carpet, acoustic tiles, folding partitions, etc.; and
- evaluated OMB’s exclusions of assets measured at or over 5,300 sq. ft. from surveys.

To determine whether OMB ensured the surveys were completed within the annual survey cycle, (i.e., September and June), auditors summarized the last survey dates for each asset noted in the Assets List for FY2023. Based on the survey information from the Assets List for FY2023 and the Survey Lists for FY2024, auditors determined whether all accessible assets that were previously surveyed were covered in the current four-year survey cycle, i.e., FY2021–2024.

To determine whether OMB properly reported the estimated costs for the City’s major portion of the capital plant, auditors verified the calculation based on the formulas and cost estimators developed within AIMS by OMB’s engineers and architect for Asset #57, the only unused building among the 10 sampled asset numbers. Auditors also assessed the reasonableness of the methodology used by the surveyors to determine the percentages of area affected and the percentages of degree repair applied by OMB for cost estimation in AIMS. For the special systems/assets, auditors reviewed all the submissions from agencies for FY2021, the first year of the audit scope, and compared them with the amounts reported in the FY2021 AIMS Report. Further, based on discrepancies identified, auditors also reviewed DOT’s submissions for the four

East River Bridges for FY2022 and FY2023 and compared them with the amounts reported in the FY2022 and FY2023 AIMS Reports. In addition, auditors ascertained whether the AIMS reported the cost estimates by PS and OTPS as required by the Charter. Auditors also compared the AIMS Reports with the City's Ten-Year Capital Strategy for FY2022–2031 and FY2024–2033 to ascertain any major discrepancies in the reported state of good repair costs. Further, auditors compared the estimated costs for Assets #214, #14217 through #14222, #14224, #14225, #14241 through #14245, and #14250 (the asset components of the Riverside Park Bridge project) from the AIMS reports with the related contract documents to identify any major discrepancies. This bridge rehabilitation project was judgmentally selected because it had been severely delayed.

To determine whether the AIMS Report was submitted prior to October 1 of each year, to the City Council, City Planning Commission, and the Comptroller, auditors reviewed the Mayor's dated memo enclosed in the AIMS Report for FY2021–2023, as well as the historical information posted online for FY2004–2020. To determine whether the surveys were timely completed by June each fiscal year, auditors summarized the completion dates of the surveys conducted for FY2021–2023. Auditors also reviewed OMB's agency report packages submitted to and the approvals obtained from agencies for FY2021–2023.

In addition, auditors calculated the current value of the \$10 million replacement cost threshold set in 1988 based on the yearly inflation rates from 1989 through 2023 and assessed whether this threshold should be adjusted accordingly.

The results of the above tests, while not projectable to their respective populations, provided a reasonable basis for auditors to evaluate and support their findings and conclusions regarding whether OMB properly reported the maintenance needs for the City's major portion of capital plant to preserve their structural integrity in accordance with the Charter requirements.

# Appendix

## List of 57 Architectural Conditions Not Reflected in FY2023 Surveys

Count	Agency	Asset #	Discipline	System	Component	Type	Unreported Conditions and Projected Fail Dates (per Audit Engineer)
1	NYPD	13448	Architecture	Exterior	Exterior Walls	Metal Coiling Doors	Corroded roll-up gate at the secondary entry (2-4 years)
2	NYPD	13448	Architecture	Interior	Floors	Ceramic Tile	Broken tiles - in the office area (Now)
3	DOT	15363	Architecture	Exterior	Exterior Walls	Masonry: Granite	Historical delamination and cracks, and splits damage at door entrance (4+ years)
4	DOT	15363	Architecture	Exterior	Exterior Walls	Masonry: Granite	Cracks in masonry from freeze thaw (4+ years)
5	DOT	15363	Architecture	Interior	Floors	Cast in Place Concrete	Stain from water/chemical, clean and resurface, and worn traffic surface (2-4 years)
6	DOT	15363	Architecture	Interior	Floors	Ceramic Tile	Damaged ceramic tile (0-2 years)
7	DSNY	4518	Architecture	Interior	Exterior Walls	Concrete Masonry Unit	Exterior masonry at bulkhead - corrosion at lintel causing displacement and damaged sill (Now)
8	DSNY	4518	Architecture	Interior	Windows	Aluminum	Broken glass and damaged hardware - first floor (Now)
9	DSNY	4518	Architecture	Interior	Floors	Ceramic Tile	Damaged ceramic tiles at 2nd floor showers (Now)
10	DSNY	4518	Architecture	Interior	Ceilings	Exposed Struc: Steel	Structural steel - Missing fireproofing at flange of steel - garage (2-4 years)
11	FDNY	4438	Architecture	Exterior	Exterior Walls	Concrete Masonry Unit	Corrosion at steel lintel causing damage to stucco (Now)
12	DPR	181	Architecture	Exterior	Exterior Walls	Stucco Cement	Loading area - Gaps at building base causing water infiltration, waterproof/caulk (Now)
13	DPR	181	Architecture	Exterior	Exterior Walls	Stucco Cement	Crack at corner potential source of water infiltration, caulk (Now)
14	DPR	181	Architecture	Exterior	Exterior Walls	Window Wall	4th floor broken seal in glazing (Now) - should say 3rd floor
15	DPR	181	Architecture	Exterior	Exterior Walls	Metal panels for roof enclosure	Missing metal panels at the roof enclosure room (0-2 years)
16	DPR	181	Architecture	Exterior	Windows	Steel	3rd floor - 4th floor broken glazing, replace (Now)
17	DPR	181	Architecture	Exterior	Roof	Modified Bitumen	Ponding on building top roof & over enclosure room (2-4 years)
18	DPR	181	Architecture	Exterior	Roof	Paver: Asphalt	Westside and borders, plant growth, upheaval, missing and damaged area, worn surface (Now)
19	DPR	181	Architecture	Exterior	Roof	Concrete paver	Repair and restore (Now)
20	DPR	181	Architecture	Exterior	Roof	Roof eaves	4th floor roof eave (0-2 year)
21	DPR	181	Architecture	Interior	Floors	Cast in Place Concrete	Concrete spalls, 1st floor kitchen (Now)
22	DPR	181	Architecture	Interior	Floors	Traffic Topping	2nd floor service area, worn and damage, replace (Now)
23	DPR	181	Architecture	Interior	Floors	Wood	Wood flooring damage at service area, repair (Now)
24	DPR	181	Architecture	Interior	Interior Walls	Concrete Masonry Unit	Basement CMU damaged, provide protection (Now)
25	DPR	181	Architecture	Interior	Interior Walls	Concrete Masonry Unit	Interior Stair - Concrete Block Wall damage and cracking, repair (Now)
26	DPR	181	Architecture	Interior	Ceilings	Exposed Struc: Steel	1st Floor mechanical room - Missing fireproofing (Now)
27	DPR	181	Architecture	Interior	Ceiling	Exposed Structural: Steel	Damaged and missing fireproofing at diagonal bracing, stair headers and spandrel beams (Now)
28	CUNY	2078	Architecture	Exterior	Soffits	Cast in Place Concrete	1st floor NW extension, dislodge fascia (Now)
29	DSBS	2128	Architecture	Exterior	Exterior Walls	Concrete Masonry Unit	Step cracks (2-4 years)
30	DSBS	2128	Architecture	Interior	Interior Walls	Plaster	Water penetrating from above exterior stairs and wall (Now)
31	H+H	57	Architecture	Exterior	Parapets	Masonry: Limestone	Limestone coping caulking deterioration (Now)
32	H+H	57	Architecture	Site Enclosure	Free Standing Walls	Masonry: Brick	Open joint, perimeter (Now)
33	DOE	1082	Architecture	Exterior	Exterior Walls	Masonry: Brick	Mortar and caulking deterioration on east facade (2-4 years)
34	DOE	1082	Architecture	Exterior	Exterior Walls	Masonry: Brick	Outside of kitchen, holes and deteriorating caulking allowing moisture penetration (Now)
35	DOE	1082	Architecture	Exterior	Parapets	Masonry: Brick	Mortar loss & slight bulging of brick (2-4 years)
36	DOE	1082	Architecture	Interior	Floors	Ceramic Tile	Bathroom, small damaged areas (Now)
37	DOE	1082	Architecture	Interior	Interior Walls	Ceramic Tile	Bathrooms & kitchen, damaged tiles and replacement (Now)
38	DOE	1082	Architecture	Interior	Interior Walls	SGFT/Glazed Masonry	Cracked units (Now)
39	DOE	1082	Architecture	Interior	Ceilings	Plaster	Source of water penetration, Rm 319 (Now)
40	DCLA	2368	Architecture	Exterior	Exterior Walls	Metal Panel	Metal Panel at base of building loose (Now)
41	DCLA	2368	Architecture	Exterior	Exterior Walls	Metal Panel	Open joint, potential source of water infiltration (Now)
42	DCLA	2368	Architecture	Exterior	Exterior Walls	Metal Panel	Metal panels and windows, south facade, fail weatherstrip and caulking (Now)
43	DCLA	2368	Architecture	Exterior	Exterior Walls	Granite Panels	Granite with deteriorating joints, west facade (Now)
44	DCLA	2368	Architecture	Exterior	Exterior Walls	Window Wall	Southwest corner, inefficient, damaged sun film (Now) and broken panes
45	DCLA	2368	Architecture	Exterior	Windows	Aluminum	Glazing, north wing, deteriorating caulking (2-4 years)
46	DCLA	2368	Architecture	Exterior	Windows	Aluminum	Loose caulking, west facade (Now)
47	DCLA	2368	Architecture	Exterior	Parapets	Metal Panel	Metal Coping, temporary patch (Now)
48	DCLA	2368	Architecture	Exterior	Roof	Built-Up (BUR)	South wing, base flashing damaged, plant growth, blisters, spongy, sparce gravel, roof leaks (Now, repair - 20%)
49	DCLA	2368	Architecture	Exterior	Roof	Rubber Roof	North wing, Rubber roof, wrinkles, roof leaks, staining, base flashing, seams deterioration (0-2 years, repair 10%)
50	DCLA	2368	Architecture	Exterior	Roof	Built-Up (BUR)	Traffic Pavers, North wing, broken (Now)
51	DCLA	2368	Architecture	Exterior	Roof	Built-Up (BUR)	Canopy, west facade, structural frame corrosion (0-2 years)
52	DCLA	2368	Architecture	Interior	Floors	Terrazzo	2nd floor hallway, cracks (Now)
53	DCLA	2368	Architecture	Interior	Floors	Wood	Gallery, water damage (0-2 years)
54	DCLA	2368	Architecture	Interior	Interior Walls	Plaster	South wing, basement window jam, damaged from moisture (Now)
55	DCLA	2368	Architecture	Interior	Ceilings	Plaster	Ladies' bathroom at exit, 3rd floor hallway & basement, moisture penetration from exterior wall damaged (Now) -- 20 SF
56	DCLA	2368	Architecture	Interior	Ceilings	Plaster	Men's bathroom at exit, 3rd floor hallway & basement, moisture penetration from exterior wall damaged (Now)--- 70SF
57	DCLA	2368	Architecture	Exterior	Exterior Walls	Window Wall	Southwest corner, two panels with broken seals and one cracked angle panel (Now)
Four unreported "Types"							



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February 7, 2024

Ms. Hayes-Chaffe  
Deputy Comptroller for Audit  
Office of the Comptroller  
1 Centre Street, Rm 1100, New York, NY 10007-2341

**Re: Draft Audit Report on the Compliance of the Mayor's Office of Management and Budget's Asset Information Management System Reports with City Charter Requirements (FM23-070A)**

Dear Ms. Hayes-Chaffe:

The Mayor's Office of Management and Budget (OMB) has reviewed the draft audit report from the New York City Comptroller (NYCC) on Compliance of the Asset Information System Reports with City Charter Requirements (the "Audit"). OMB appreciates the opportunity to respond to the findings and recommendations of the draft audit report.

The City's agencies are charged with maintaining the many thousands of physical assets that make up the capital plant. City Charter section 1110-a was established to ensure that the extent of needed maintenance and the associated state-of-good-repair costs are regularly considered in development of the City's budget. In 1989, OMB was designated to help City agencies and the Mayor meet the new requirements of this Charter section through coordination and management of the process. OMB and external consultants developed the Asset Information Management System (AIMS) to facilitate the data management required to output the Charter-mandated Reports each year. Concessions were made within the Charter for the difficulty of accomplishing this task: while agencies must maintain the entirety of the assets within their portfolio, the Charter focuses on a smaller subset, the "major portion of the capital plant", and narrows its scope to structural stability. Given the 20 disparate agencies covered, it is a practical necessity to use external consultants to survey assets with consistent methods, to aggregate data from all of the surveys, and to use that aggregated data to generate cost estimates; all of this requires a central entity to manage the effort. OMB's facilitation of this process ensures consistency across all agencies, allowing stakeholders to compare needs. Since the Mayor is required to transmit this large amount of data to stakeholders, it is most efficient and effective for a Mayoral office to facilitate the production of a cohesive report. OMB strongly disagrees with the Audit's stated opinion that City Charter section 1110-a "*contemplates a bifurcated process in which agency heads and the Mayor have separate roles and responsibilities, [whereas] OMB has assumed responsibility for, and control of, both.*" The

Charter section in question explicitly allows the same licensed professionals who work on condition surveys for agencies to also work on cost estimating, which contradicts that these roles are “bifurcated” by design.

OMB appreciates that the NYCC recognizes the importance of the AIMS Reports to the management of City assets. Although the review examined the process in close detail, it also contains fundamental misunderstandings of the Charter, of professional survey practice, and of the scope and scale of the work performed by the agencies, by DDC, and by OMB and its consultants. The Audit was conducted without any consideration for the statistical significance of single assets being included or excluded from the inventory, with 99.9% accuracy being described as “inaccurate” across their review of tens of thousands of data points. In reality, while perfection is not achievable, it is always the goal, so OMB strives to always be improving this process.

- As a point of clarification of the “*Table: Special Assets by Agency*”, the Parks Department does not submit data for underground utilities. The needs are derived from quantity takeoffs of utility lines, from construction drawings and field counts of lamps, and consultant roadway surveys.
- OMB wishes to clarify the Audit’s finding that “*OMB has directed surveys to exclude a review of conditions that are below the surface, below water, and behind walls, even if such conditions are crucial to assessing the structural integrity of the assets under review and even when surface conditions show evidence of problems that are inaccessible.*” This fails to consider that surveying below surfaces and behind walls mainly entails the use of destructive methods which negatively impact structural integrity and are counter to the program. It also fails to note that the consultant surveyors, or those from DDC, are instructed to notify OMB in writing with supporting photos within 24 hours of observing hazardous conditions. These are then submitted to the owner agency by the very next business day for remedial action. We again iterate that one of the selection criteria for AIMS surveyors is a minimum of 5 years relevant field experience in identifying defects and signs of deficiencies in their respective disciplines.
- OMB questions the methods of the Audit in comparing the bid cost of fully scoped construction projects to the individual asset costs for restoration of state-of-good-repair estimated by AIMS, and using this as a measure of accuracy. The Charter has a scope limited to structural stability, excluding many other factors that would affect costs. Each AIMS Report states that it is a “broad, unconstrained analysis of a subset of general needs. . . . Due to the complexity of the analysis, the large scale of the [AIMS] project, the amount of estimation required, and the necessary methodology constraints, there are inherent limitations in the level of accuracy possible at the detailed asset and component level. In this context it should be noted that the actual cost for a project may vary substantially from the amount estimated in this report when a detailed scope of work and cost estimate is completed.” Nevertheless, this Audit chose the construction bid costs of one of the most complex structures in Manhattan, the W. 79<sup>th</sup> Street Bridges over Riverside Park, for its lone cost comparison. OMB was told at the exit conference that this was chosen due to the extensive delays of the construction project affording the Auditors time to compare AIMS surveys with it. These delays were caused by the unique complexity of this particular site, making it a poor choice as a representative

comparison. OMB also believes this section displays a fundamental misunderstanding of the differences between general survey estimated costs and construction bid costs. Survey costs represent a single point in time within the limited scope of the Charter requirement. Bid costs follow an extensive process over years of combining relevant scope items that likely are not within the scope of this Charter section or that follow very different priorities, followed by exploratory testing and data-gathering, research, iterative design that includes many phases of review and revision by several parties, and are subject to market conditions at the time of bid. OMB informed the Auditors of the imprecision of their use of this scale for measure. There also seems to be a fundamental misunderstanding of engineering, as seen by the comment, *“the underestimate was largely due to the decision not to survey conditions that were deemed not readily accessible.”* The conditions in question were that the steel being surveyed was encased within a concrete structural member and was not “accessible” without destroying the member, something surely not desired by the agency planning construction. If this Audit’s Findings were followed, the concrete encasement over this steel would be destroyed every year.

- OMB disputes the comment that components that *“prevent structural deterioration”* are *“unrelated to structural integrity”*. But even putting aside that questionable assertion, as the audit report states on page 3, maintenance is defined in the City Charter as those activities necessary to keep the asset *“in good repair so as to preserve its structural integrity and prevent its deterioration.”* Therefore, surveying these components is within the requirements of the Charter. Regarding the exclusion of the assets of public benefit corporations, this was the design of the Charter. The first report following the 1989 Charter revision states that only the assets of the Health and Hospitals Corporation would be included as an exception.

## **Recommendations**

*1. Revisiting the process established in 1989 and consulting with stakeholders, including agencies charged with preserving major assets, to consider what is needed to deliver an accurate and predictive Report.*

Response: OMB accepts this recommendation and will consult with the relevant parties.

*b. Revising the cost estimating methodology used to account for restrictions placed on surveys of inaccessible assets.*

Response: OMB will investigate how this could be accomplished.

*c. Standardizing the survey process and provide written procedures to ensure consistent and adequate assessments, and accurate reporting of asset conditions.*

Response: OMB partially accepts this recommendation. While the survey process is standardized and regularly reconciled between the survey groups, further documentation will be pursued.

*d. Developing standard guidance concerning the asset count, including criteria for determining which assets are included or excluded from the survey reporting process, and including a*

*process for updating the inventory on a regular cycle to ensure that new assets are timely added, temporarily excluded assets are expeditiously returned to the asset count, non-City assets and open spaces are excluded, and to ensure inaccuracies in the inventory are timely identified and fixed.*

Response: While OMB has existing processes for updating the inventory multiple times per year, methods for improving documentation will be further studied.

*e. Reporting individual buildings, bulkheads, piers, etc. as assets whenever each structure meets the Charter's threshold amount, instead of combining them in a campus setting.*

Response: OMB disagrees with this recommendation. All surveyed assets in AIMS are independent structures and are reported as such. The Audit team latched onto an erroneous view of AIMS usage of "campus setting" and the assets which share a "program number" due to proximity and membership in a single entity, e.g., Bronx Community College with 38 distinct assets, 35 of which are surveyed. Despite numerous discussions explaining this concept, the Audit team has insisted on retaining the assumption that assets which in a "campus setting" are combined. Assets within a "campus setting" generally share common utilities, are public facing and subject to high civilian usage. It is necessary that the state of repair of these be assessed to protect the users and the City, and to fulfil the Charter mandate.

*f. Developing a process for documenting, in writing, when assets do not meet the Charter's criteria are included in the AIMS survey process.*

Response: OMB accepts this recommendation.

*g. Ensuring timely completion of maintenance schedules, cost estimates, and their submission to City Council, the Comptroller and City Planning officials.*

Response: While OMB cannot reasonably ensure that every agency will always complete these steps on time, adjustments are being made to improve our ability to meet the October 1 timeline.

*h. Ensuring the accuracy of the special assets cost proration.*

Response: OMB has adjusted the process to have this step performed by the agency to reduce the chance of human error on OMB's end.

*i. Reporting the cost by personal services and other than personal service as required.*

Response: OMB is evaluating this for future inclusion.

*j. Consulting with agencies and other stakeholders to address the challenge presented by ever-increasing numbers of assets that must be assessed to comply with Charter requirements.*

Response: OMB accepts this recommendation.

Sincerely,

A handwritten signature in black ink, appearing to read 'Travis Godsoe', written in a cursive style.

Travis Godsoe,  
Assistant Director

Cc:

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