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STATE OF NEW YORK
OFFICE OF THE STATE COMPTROLLER

October 22, 2025

Janno Lieber
Chairman and Chief Executive Officer
Metropolitan Transportation Authority
2 Broadway
New York, NY 10004

Re: Transforming Into Construction
& Development
Report 2023-S-49

Dear Mr. Lieber:

Pursuant to the State Comptroller's authority as set forth in Article X, Section 5 of the State Constitution and Section 2803 of the Public Authorities Law, we audited the Metropolitan Transportation Authority's (MTA) Construction & Development Company to determine whether the reorganization of MTA Capital Construction to the renamed MTA Construction & Development as part of transforming the MTA resulted in improved service levels for customers, process efficiencies, and cost reductions. The audit covered the period from January 2017 to February 2024.

Background

The MTA is North America's largest transportation network, serving a population of 15.3 million people across a 5,000-square-mile travel area surrounding New York City through Long Island, southeastern New York State, and Connecticut. The MTA network comprises the nation's largest bus fleet and more subway and commuter rail cars than all other U.S. transit systems combined. The MTA's operating agencies are New York City Transit (Transit), MTA Bus Company (MTA Bus), Long Island Rail Road (LIRR), Metro-North Railroad (Metro-North), and MTA Bridges and Tunnels (B&T). As of December 2023, MTA reported a total of 70,000 employees.

Section 1279-e(1)(a) of the Public Authorities Law, which became effective in April 2019, required the MTA to "develop and complete a personnel and reorganization plan" by June 30, 2019. Among other things, the plan would identify the common functions of the MTA's agencies "including, but not limited to the New York City Transit, the Long Island Rail Road, Metro North Commuter Railroad Company, MTA Capital Construction, MTA New York City Bus, Triborough Bridge and Tunnel Authority and the MTA Staten Island Railway in a manner consistent with the provisions of this section. Such plan shall identify common functions and assign, transfer, share or consolidate in whole or in part, such function between the authority and its subsidiaries."

The legislation required that the plan be submitted to the MTA Board no later than June 30, 2019. The plan was approved by the Board on July 24, 2019. After the plan was submitted, the Transformation consultant would have 90 days to incorporate any changes made into the

plan. According to the Transformation plan adopted by the MTA Board on July 24, 2019, “the MTA’s transformation seeks to change the fundamental ways in which the Agencies do business in order to drive improved service levels for the customers, process efficiencies and cost reductions.”

The “Post & Hire” process was used to fill high-level managerial positions in consolidated functions, through the posting of job vacancy notices and interviewing and selecting candidates to fill positions. The “Lift and Shift” process was used to move employees and tasks from one agency and place them in the newly consolidated function. These employees were not required to apply for positions in the consolidated function.

At the December 2019 Board Meeting, MTA Capital Construction was renamed and reorganized to Construction & Development Company (C&D). C&D comprises four departments: Planning, Development, Contracts, and Delivery. In addition, there is an administrative operations unit. C&D employs approximately 2,000 staff.

C&D departments collaborate to plan, develop, and deliver capital projects to the MTA’s operating agencies. Planning, Development, Contracts, and Delivery work together to identify project benefits and handover plans, and tailor contracting strategies to award and deliver projects most effectively.

Historically, the MTA’s Capital Program was delivered on an agency-by-agency basis, with each running its own capital division. MTA Capital Construction took on larger projects such as Eastside Access, Second Avenue Subway, and LIRR Third Track. C&D now has the responsibility of assembling and overseeing the Capital Program; planning, developing, and awarding projects; delivering said projects; and leveraging MTA assets to generate revenue for the agency.

C&D’s mission is to execute its capital program better, faster, and cheaper—from project conception to award all the way through construction and handover to its operating agency partners. According to C&D, this will be accomplished through improved estimate and cost forecasting, faster vendor payment, and reductions to change order and submittal processing times. The 2020–2024 MTA Capital Program was to parallel C&D’s mission.

Results of Audit

C&D officials advised that transformation was completed in June 2021 when approximately 2,000 employees were reassigned to C&D from the operating agencies. Although C&D provided evidence that it had been organizationally transformed, sufficient time has not passed to comprehensively assess if the change delivered capital projects faster, better, or cheaper, as was its plan. However, the data available was at times incomplete or insufficiently supported, and a definition of what constituted cost savings was not clearly defined and included some questionable items. When we requested documentation to support statements regarding completing projects faster and at lower costs, we were advised that it was still too soon to tell or that the changes, such as new capital project procedures, were still not in progress. The one change that C&D officials opined that was in place and effective was the introduction of the Project Chief Executive Officer.

Planning

The Planning department was created as part of the Transformation. Planning is responsible for creating the 20-year capital needs assessment for expansion projects, which is required by statute. Pre-transformation projects in the needs assessment were evaluated by teams in the operating agencies, with different timelines and weighting criteria. Post-transformation, Planning officials advised us they performed a comparative evaluation of the projects using consistent and comparable criteria and timelines.

To create this consistency, Planning employs a regional long-range planning team that uses a Regional Transit Forecasting Model (forecasting model). Prior to Transformation, this model was not used. Use of this forecasting model allows for a comparative evaluation of all potential expansion projects using metrics to standardize the handling of projects—improving consistency and comparability. The MTA Board and the Capital Program Review Board ultimately approve the projects for future capital programs.

Twenty-nine projects were evaluated for the 2025–2044 20-Year Needs Assessment. We selected four projects for review and requested supporting documentation to determine if they were evaluated as stated by C&D. The results of the forecasting model were, however, not retained.

We also requested documentation to support the professional services costs such as engineers, designers, and lawyers for the four projects, which totaled \$2.2 billion. The documentation provided showed professional services ranged between 12% and 22% of the total project cost. C&D officials stated that these costs may fluctuate depending on the scope of the project and the amount of in-house staffing available. However, we did not receive documentation to support the percentages or the costs themselves.

Development

Another new department within C&D is Development. Its goals include improving efficiency and effectiveness, reallocating risk (from the MTA to the contractor), scaling up projects, and completing prior projects. Development works to accomplish these goals by employing methods such as bundling and value engineering.

Development bundles projects to drive down costs and increase efficiency. Although this practice existed prior to Transformation, Development is bundling more projects when it is convenient to do so. Bundling is the combination of a number of smaller projects into one larger one, either based on similarity of projects or geography (e.g., bundling several smaller projects at one yard or group of stations). C&D claims bundling related contracts improves economies of scale and reduces agency costs.

Development analyzed the awarded bundled and unbundled projects in the Transit capital program to illustrate how bundling has enabled C&D to deliver a much larger volume of work. The bundling analysis consisted of 376 projects, of which 80 were bundled. We reviewed five of the bundled projects. For two, the budgeted construction amounts or the number of projects in the project status reports did not match the bundling analysis; for one, the number of projects did not match; and for another, the construction amounts did not match.

C&D officials explained that for the project where construction amounts did not match, two of the bundled projects did not have construction budgets when the bundling analysis

was initially performed and were not subsequently added to the analysis. However, for such analyses, C&D should ensure the data used is complete and accurate before placing reliance on it.

Development also uses value engineering. Value engineering reviews the project scope to determine whether projects can be done in a different way that would save either money or time. The practice of value engineering existed prior to Transformation but was not formalized and standardized until Transformation. Development has established a team to conduct value engineering efforts with the Delivery department. We requested specific documentation on a project that was mentioned as an example of value engineering. Officials reported an estimated \$12 million in savings for a project involving the relocation of elevators and stairs. The documentation provided included station sketches and two construction cost comparisons. However, the estimated \$12 million in savings was not supported by the documentation provided.

While Development manages the MTA 2020–2024 Capital Program, it has not issued new or updated policies and procedures since the Transformation. C&D officials stated that the Development department and C&D continue to draft new policies and review and update current policies as needs arise. However, no drafts or reviews of current policies were provided to us.

Contracts

Contracts' functions did not change during Transformation; however, it expanded to cover capital construction for all MTA operating agencies. Planning and Development inform Contracts which projects will be completed, and Contracts creates the appropriate biddable contract or design-build documents.

The MTA 2020–2024 Capital Program asserts that by combining responsibility for both design and construction into one group, and then letting the resulting contracts, the MTA is shortening project schedules, identifying potential issues earlier, increasing accountability, and better sharing risk with contractors and, as a result, projects are delivered faster, better, and cheaper. Contracts officials, however, stated it was too soon to demonstrate any realized savings. However, they did cite an increase in the number of bidders as a positive result of Transformation. Officials claim that an increase in the number of bidders gives them better competition and pricing. Pre-transformation data, however, is not available to support this.

To implement this strategy, C&D changed the life cycle of capital projects, including moving from majority Design-Bid-Build projects to Design-Build projects. When asked how beneficial this change is in shortening project schedules, Contracts officials advised that they could not provide data because "it is too soon into the new contracts." C&D also issued two new procedures to the MTA agencies: Change Management for Design-Bid-Build Contracts in October 2023 and Change Management for Design-Build Contracts in February 2021.

Another initiative C&D officials stated they implemented was to reduce the number of change orders. However, when we requested documentation to support their statement, officials advised that they do not have any documentation to demonstrate the reduction in change orders, and that it is too soon to provide meaningful data on change orders for most contracts issued post-transformation.

Additionally, prior to Transformation, each MTA agency was responsible for procuring and managing its own projects, and each agency had its own contractual specifications and design requirements. Post-transformation, C&D procures and manages all capital program

projects and has developed specifications and Project Requirements and Design Criteria (Requirements) for the Design-Bid-Build projects and Design-Build projects, respectively.

Officials stated the criteria are no longer based on individual project specifications but on contractors' performance obligations. We reviewed three Requirements documents prepared by MTA agencies and one prepared by Contracts. Both pre- and post-transformation, the Requirements contain provisions for changes to the contract and material specifications, such as material brands; however, we found limited changes. There are no written procedures for writing Requirements.

Contracts also employ A+B contract bidding to achieve time savings. A+B is a competitive bidding process that takes into account both cost (A) and schedule (B) when evaluating bids.

Officials provided four examples of time saved. In one example, the successful bidder indicated they could complete the work in only 45% of the time estimated by the MTA. We requested documentation to support the bidders' number of days and the estimates to complete the project. Officials advised, "Bidders are not required to provide schedules or backup with their bids, just the number of days that they are bidding." However, we were later advised that the apparent successful bidder must provide a work schedule to support their bid 3 days after submitting the bid. This document is reviewed by the project delivery team, followed by a qualification hearing where C&D officials can ask questions of the contractor.

C&D considers the difference a savings because the difference can be reallocated within the C&D budget to advance other projects. Delivery department officials stated there was \$101 million in savings on A+B contracts in 2022, which is an average of 9%. However, the supporting documentation on savings with A+B contracts was not provided and the procedures for creating an estimate for costs or schedules have not changed from prior to Transformation. There is no written policy or procedure for scheduling or transparency about what the MTA is considering cost savings.

Delivery

C&D Delivery officials stated one of the main benefits of C&D Transformation was the introduction of the Project Chief Executive Officer (PCEO). The PCEO for each project is empowered to make project decisions and is accountable for the project's budget and schedule. PCEO decisions affecting scope, budget, and schedule can only be overruled or amended by the MTA C&D Chief Development Officer.

Officials advised that prior to Transformation, the risks of project non-completion were very low because they used Design-Bid-Build projects. Such projects have a lower risk because 100% of the design is given to contractors. Design-Build projects have much higher risks because only 30% of the design is given. According to Delivery officials, risk factor analysis is important for Design-Build projects.

Before, risk factor analysis was a task-based procedure. Now projects are intentionally designed in such a way that de-risks the projects.

Delivery developed a new procedure to reduce risks. Under this new policy, Delivery prepares a report that addresses the agency requirement and constraints, scope of work, schedule, cost estimates, project management plan, and risk mitigation. Officials advised that the PCEO now identifies and addresses the project risk, and the estimates include the risk.

Delivery does not have a procedure to include the risk estimate in the bid price; however, it is being developed.

Officials advised that once the contract is awarded, the operating agency is responsible for the changes they requested. To account for user requirement changes, a new baseline policy requires that all user requirements be accounted for and reported in the project baselines.

Cost estimates include the estimated risk. Delivery anticipates 70% of project cost estimates are at or below the bid price; 30% of projects will exceed the contractor's bid. A detailed procedure lays out the necessary steps taken in the instance when the cost estimate exceeds the bid. C&D does a bid analysis to resolve the difference between the bid and the estimate. If the difference cannot be resolved, C&D will either accept the bid or rebid.

We inquired about the improved estimate and cost forecasting and faster vendor payment. Officials advised that vendor payment time did not change. Change order and submittal processing time inquiries remained unanswered.

Recommendations

1. Prepare documentation to support the Transformation of C&D improved efficiency and saved time and money. The documentation should include interim reports as the information about projects at milestones becomes available.
2. Formalize procedures to the new processes that have been established since reorganization of C&D, including but not limited to, bid estimates and schedules.
3. Promptly develop new and continued practices into procedures and document them.

Audit Scope, Objective, and Methodology

The objective of our audit was to determine whether the reorganization of MTA Capital Construction to the renamed MTA Construction & Development as part of transforming the MTA resulted in improved service levels for customers, process efficiencies, and cost reductions. The audit covered the period from January 2017 to February 2024.

To accomplish our objective and assess the related internal controls, we interviewed C&D management and staff responsible for the development of the 20-Year Needs Assessment, Capital Program, contracts, and delivery of projects for the MTA. In addition, we reviewed applicable laws, regulations, procedures, and guidelines.

We used a non-statistical sampling approach to provide conclusions on our audit objective and to test internal controls and compliance. We selected judgmental samples. However, because we used a non-statistical sampling approach for our tests, we cannot project the results to the respective populations. Our samples, some of which are discussed in detail in the body of our report, include:

- Four judgmental samples of proposed capital projects from the 20-Year Needs Assessment Comparative Evaluation selected to examine documentation to support the conclusions reached in the new comparative evaluation. Projects were selected based on dollars and time savings.

- A sample of five out of 80 bundled projects were judgmentally selected from an analysis performed and provided by C&D Development. The analysis included 376 total projects. The selection was based on budget amounts ranging from highest to lowest and the number of bundles. All five projects are in their construction phase and found in the 2022 tracker. The analysis included the Project Status Report and task-level data queries containing project identifiers and attribute data (e.g., project/task description, business unit, PCEO, and delivery method), schedule milestones, and budget information. The five sampled projects consisted of four projects in C&D Stations and one in C&D Signals and Train Controls.

We obtained the data used to select our samples by interviewing officials knowledgeable about the system and tracing to and from source data and determined it was sufficiently reliable for the purposes of our audit objective.

Statutory Requirements

Authority

This audit was performed pursuant to the State Comptroller's authority as set forth in Article X, Section 5 of the State Constitution and Section 2803 of the Public Authorities Law.

We conducted our performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

In addition to being the State Auditor, the Comptroller performs certain other constitutionally and statutorily mandated duties as the chief fiscal officer of New York State, including some duties on behalf of public authorities. For the MTA, these include reporting the MTA as a discrete component unit in the State's financial statements and approving selected contracts. These duties could be considered management functions for purposes of evaluating organizational independence under generally accepted government auditing standards. In our professional judgment, these duties do not affect our ability to conduct this independent audit of the MTA's oversight and administration of transforming into Construction & Development.

Reporting Requirements

We provided a draft copy of this report to MTA officials for their review and comment. We considered their comments in preparing this report, and their comments are included in their entirety at the end of this report. Our response to certain MTA comments are included as State Comptroller's Comments. In response to our draft report, MTA officials claimed significant accomplishments, such as savings of hundreds of millions of dollars, early capital project completion, and improved process efficiencies. However, these results could not be validated, as sufficient data was not available. In addition, the MTA's response that the recommendations have already been implemented—such as over 100 policies, procedures, guidelines, and standards—cannot be verified, as support was not provided to the auditors during fieldwork.

Within 180 days after the final release of this report, as required by Section 170 of the Executive Law, the Chairman of the Metropolitan Transportation Authority shall report to the Governor, the State Comptroller, and the leaders of the Legislature and fiscal committees advising what steps were taken to implement the recommendations contained herein, and where the recommendations were not implemented, the reasons why.

Major contributors to this report were Robert Mehrhoff, Marsha Millington, Danielle Marciano, Natalia Khanoukhova, and Jeffrey Louissaint.

We wish to thank the management and staff of the Metropolitan Transportation Authority for the courtesies and cooperation extended to our auditors during this audit.

Very truly yours,

Carmen Maldonado
Audit Director

cc: M. Murray, Metropolitan Transportation Authority
D. Jurgens, Metropolitan Transportation Authority

Agency Comments and State Comptroller's Comments

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New York, NY 10004
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Janno Lieber
Chairman and Chief Executive Officer



Metropolitan Transportation Authority

State of New York

May 30, 2025

VIA E-MAIL

Ms. Carmen Maldonado
Audit Director
The Office of the State Comptroller
Division of State Government Accountability
59 Maiden Lane, 21st Floor
New York, NY 10038

Re: Draft Report #2023-S-49 (Transforming into Construction and Development)

Dear Ms. Maldonado:

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

I have attached for your information the comments of Jamie Torres-Springer, President, MTA Construction and Development.

Sincerely,

A handwritten signature in black ink, appearing to read "Janno Lieber".

Janno Lieber

c: Laura Wiles, MTA Chief of Staff
Monica Murray, Auditor General, MTA Audit Services

The agencies of the MTA

MTA New York City Transit
MTA Long Island Rail Road

MTA Metro-North Railroad
MTA Bridges and Tunnels

MTA Construction & Development
MTA Bus Company



May 29, 2025

VIA ELECTRONIC MAIL

Janno Lieber
Chair and Chief Executive Officer
Metropolitan Transportation Authority
2 Broadway, 20th Floor
New York, New York 10004

**Re: Response to the Office of the New York State Comptroller Draft
Audit Report 2023-S-49: Transforming into Construction and Development**

Dear Chair Lieber:

MTA Construction and Development Company ("MTA C&D") is in receipt of the Office of the New York State Comptroller's (the "OSC") draft audit report number 2023-S-49, entitled Transforming into Construction and Development (the "Report").

As an initial matter, we appreciate the OSC's recognition that MTA C&D has transformed. Although this agency has only been in existence for five years, in that very short period of time we've been able to significantly change the way MTA projects are delivered to its riders. Among other things, we've been able to save the MTA over \$3 billion in capital program costs, made enormous strides in reliability, accessibility, resilience and sustainability, and have achieved the fastest, cheapest and most effective capital project delivery in MTA history. And we don't plan to slow down anytime soon – MTA C&D's next strategic plan is just as ambitious, focusing on important initiatives that will continue to benefit the public, such as delivering the largest state of good repair investment in MTA history, with a focus on improving and rebuilding the existing public transit system and advancing long-range planning.

As the OSC points out in its Report, MTA C&D did not exist prior to transformation. Indeed, this agency was created in December 2019 as part of the restructuring of the way the MTA's capital program is managed. Before MTA C&D was created, management of the MTA's capital program resided with each of the operating agencies - each agency independently managing the portion of the program that impacted its own operations. Post-transformation, the capital program was centralized under the umbrella of MTA C&D, which took the management responsibility away from the MTA operating agencies and became the sole agency responsible for the planning, development, procurement and delivery of the entire program.

The operational and process challenges to create this new organization seemed almost insurmountable – MTA C&D had to reorganize approximately 1,800 employees into a new agency, with a new business structure, and to develop new business practices. In addition, the job requirements and responsibilities for this new agency had to be re-envisioned within the applicable guidelines. And MTA C&D had to do all of this during an MTA-wide hiring freeze.

Perhaps even more impressive is the fact that this occurred while the entire world was at a standstill due to the COVID-19 pandemic and most infrastructure and construction projects came to a grinding halt. MTA C&D, an agency still in its infancy and having been in existence for only months at the time the pandemic hit, was able to rise above these challenges and keep the MTA's capital projects moving forward in a safe and efficient manner. The agency worked hard to award \$5.4 billion in new contracts in 2020, and continued its construction work to ensure that the MTA's 2020-2024 \$55 billion capital plan would be delivered for the benefit of New Yorkers.

Remarkably, not only did this newly formed agency keep the capital projects moving, it also changed the MTA's longstanding business processes to modernize the way the capital program is managed. Indeed, MTA C&D implemented reforms at every stage of the construction project life cycle by developing better planning, development, contracting, delivery and management standards. For example, new cost saving measures were implemented, such as upfront scoping and value engineering, enhanced oversight and management of force account costs, and reformed insurance and procurement changes to increase competition for contract awards. The agency also accelerated the delivery of projects and reduced customer impacts by strategically planning and bundling work by geography and project type to create efficiencies, by expanding the use of "A+B" bidding to incentivize construction schedule reductions and by incorporating new technologies into our program management.

State Comptroller's Comment – Other than agreeing that several reforms were implemented, we did not assess this information as part of the audit, as either the information was not previously provided by the MTA and thus there was no opportunity for auditors to validate the information, or the data was not available at the time of the audit to validate the calculations.

These changes have resulted in a stronger, more effective capital program, as demonstrated by MTA C&D's post-transformation track record. Since 2020, bids from third-party contractors seeking to work on MTA C&D projects have come in at an average of 6% below MTA C&D internal cost estimates, resulting in an overall bid savings of \$1.1 billion. We've also seen significant savings in capital program support costs. For example, our newly implemented reforms to the way we procure project insurance have resulted in approximately \$400 million in savings compared to market trends in 2022 and 2023. And, on top of that, MTA C&D's innovation and accountability measures have saved more than \$750 million on projects once construction starts.

MTA C&D has also sped up the pace of capital construction work and is delivering capital projects on a faster schedule than before transformation. Importantly, shortening the project schedule not only helps get the finished product to the transit riders quicker, but it also reduces project costs because MTA staff, consultant, and contractor forces don't need to stay mobilized for the full original timeframe of the project. To this end, since 2021, MTA C&D has achieved an average schedule reduction of approximately five months on new contract awards compared to the agency's internal time estimates. Highlights of these savings include a 51-month schedule savings for Phases 1 and 2 of the Park Avenue Viaduct Rehabilitation, a 14-month schedule savings for

structural repairs on the Eastern Parkway subway line and an 8-month schedule savings for rehabilitation of the upper-level approach decks at Verrazzano Narrows Bridge. And, in addition to delivering projects faster than before, MTA C&D has also significantly scaled up its capacity to deliver more capital program work, tripling the number of ADA accessibility projects in construction (delivering more ADA stations in the past five years than the previous ten years combined) and achieving a record-setting \$11.4 billion in annual commitments in 2022.

Given the lifecycle of capital projects, it's still too soon to see the full extent of the benefits of this transformation, but what we have seen to date has clearly exceeded expectations. In the past five years, this new MTA C&D organization has been more effective and efficient in managing the MTA's capital program and the delivery of its capital projects better, faster, and cheaper than before. And this agency will not stop improving just because it has achieved these successes. We are committed to future continuous improvement and cost savings for the next capital plan and all future ones.

That said, below are MTA C&D's responses to the findings and recommendations contained in the Report.

RESPONSE TO OSC FINDINGS

Planning

As the Report recognizes, MTA C&D's Planning Department is a new group that was created as part of the transformation. By integrating the capital planning function across the MTA agencies, this department has modernized the way planning is performed for the MTA's capital projects. Indeed, the Planning Department's utilization of smarter designs and more proactive planning has resulted in savings of \$750 million before MTA C&D construction projects even began the procurement process. One way the department has been able to achieve this success is by drawing upon industry best practices and by looking holistically at the bus, rail and subway networks to better understand the needs, constraints and opportunities and leverage those networks through targeted improvements. Most notably, ridership estimates and travel time savings have been better calculated using the Planning Department's innovative regional transit forecasting model (the "RTFM"). This RTFM has helped improve consistency and comparability within the planning process by relying upon specific equity, capacity, sustainability and geographic distribution metrics. These metrics are analyzed through a comparative evaluation process to help evaluate potential expansion projects for prioritization. Costs are also considered and are derived using uniform standards for construction elements and the Federal Transit Administration's published cost categories.

Through these new processes, the Planning Department has been instrumental in helping the MTA better prioritize and meet critical goals, be they sustaining capital investment within the MTA transportation network or meeting the needs of climate change. And MTA C&D has been able to advance long term strategic planning priorities, such as resilience efforts on the Hudson line, subway heat mitigation and major infrastructure projects, such as the Grand Central Artery and the Harlem Line Station Reconstruction.

This department is also responsible for creating the MTA's 20-year capital needs assessment. To this end, the OSC selected four future projects from the MTA's 2025-2055 20-Year-Needs Assessment to audit for the Report. Each of those projects is included in the RTFM and was discussed with OSC staff during the audit meetings. To ensure that a complete understanding of the process was conveyed, senior MTA C&D Planning Department staff met with the OSC team and explained how these four projects were evaluated and gave a PowerPoint presentation to better illustrate the comparative evaluation process. The department staff also provided project objectives, evaluation results and findings for each of the four projects. In its Report, the OSC finds that the RTFM results for the four projects were not retained by MTA C&D. That finding is incorrect. The information is retained by this agency and was provided to the OSC via email on January 26, 2024. In addition, MTA C&D has extended an offer for OSC representatives to visit our office and watch a run of the RTFM from beginning to end for the four projects, including a showing of how the information is retained. That offer was not accepted and remains open.

State Comptroller's Comment – Documentation to support that the RTFM was used to create the projects in the 20-Year Needs Assessment Expansion was not retained. While the MTA offered to run the program again and recreate the documentation, the request was for the original documentation that supported the results when the projects were first evaluated, and that information was not available.

The Report also states that the OSC requested documentation from the Planning Department to support its estimated professional services costs (e.g., engineer, designer, third party utility and insurance costs) for the four selected projects, and that this information was not provided.

State Comptroller's Comment – Documentation to support the professional services costs was not provided.

This is also incorrect. MTA C&D provided support for the estimated \$2.2 billion in professional services cost savings in emails sent on January 12, 2024 and March 19, 2024 (which included an explanation of professional service fee estimates and cost sheets for the four projects) and April 25, 2024 (which included an explanation of the consultant design cost component of the professional services costs). That said, and as noted in the documents that we previously provided, when estimating costs for professional services on future projects, the Planning Department employs a comparative analysis process where it looks at the professional services costs associated with past construction projects of a similar nature, and employs a consistent set of assumptions in connection with its analysis to support a fair comparison across all projects. We also note that many of our projects are funded by the federal government, so these professional services numbers have been developed over time with that funding partner to ensure they accurately reflect the costs that we expect will be incurred.

Development

The Development Department is another new department within this transformed MTA organization. Since its creation, this group has been working to improve the efficiency and effectiveness of the capital program by incorporating more modern processes into the development of a capital project. One of these techniques is project bundling. Among its many benefits, packaging construction work into bundles allows the agency to lever economies of scale and

geography within our contracts and to minimize disruptions to MTA customers. By combining work into fewer track outages and ensuring that we're performing as much work as possible whenever we take a portion of our tracks out of service, MTA C&D has been able to maximize productivity, optimize resources and reduce costs. And the data shows that bundling works. For example, in the year before transformation began, the MTA operating agencies performed \$1 billion in station improvements by performing work that was scattered across twenty contracts. By contrast, in 2023, as a result of increased bundling, MTA C&D was able to perform 40% more work with half the number of contracts.

Value engineering has also proven to be an effective post-transformation tool for MTA C&D. The agency's increased reliance on value engineering has helped MTA C&D better identify the most effective ways to manage projects at a reduced cost, while maintaining quality and without sacrificing the functionality of the final product. For example, value engineering was used for the design of the ADA direct-to-platform elevator at the Woodhaven Boulevard subway station. Utilizing this tool allowed MTA C&D to design elevators that rise directly from the street to the elevated platform level, avoiding a complicated mezzanine level connection that would have been less convenient for customers. This value engineering design innovation resulted in savings of \$40 million from the initial cost estimate and had increased benefits to MTA customers by bringing ADA accessibility directly from the subway to a busy commercial area.

In connection with its review of the post-transformation activities of the Development Department, the OSC sampled five out of the eighty projects successfully bundled by MTA C&D in 2023. The Report found that for two of the five samples, the budgeted construction amounts from a project status report electronic system ("PSR System") did not match the budget cell included in an internal MTA C&D bundling analysis Excel spreadsheet (the "Excel Spreadsheet") – more specifically, the OSC found that for one sample, the number of projects did not match on the PSR System and Excel Spreadsheet, and for another sample, the construction amounts did not match. Notably, the reason for the discrepancy on those two samples is not due to inaccuracies in the project data. Instead, the discrepancy has to do with the timing in which the PSR System and Excel Spreadsheet were pulled and provided to the OSC, and the fact that the two documents were created for different purposes. More specifically, the Excel Spreadsheet was an accurate snapshot of only the *construction budget* for projects at the time that the document was created. It is not a document that is updated; it was only used for a limited purpose. Conversely, the PSR System is an active electronic database where the information is consistently updated to reflect the changes to the project as it progresses. Because of its extensive use, the PSR system includes the *budget for all phases of the project* (i.e., the pre-design budget, design budget, construction budget and reserve budget).

With the correct background on the nature of these two documents, it is easier to understand why the number of bundled projects on the Excel Spreadsheet and PSR System printouts provided to the OSC do not match –because when the Excel Spreadsheet was prepared, the project sampled by the OSC was not yet assigned a construction budget.

As for the Report's finding of a discrepancy between the construction budget amounts in the Excel Spreadsheet and PSR System, there is also a logical reason for that difference. The Excel Spreadsheet states that it only includes the amount budgeted for the construction phase of the project (i.e., the cell at issue is intentionally called "Construction Budget"), while the PSR System cell states that it includes the budget for all phases of the project (the cell is intentionally called "Current Budget by Phase" and includes a dollar value breakdown for pre-design budget, design budget, construction budget and reserve budget). Since the PSR System includes the budget for all four phases of the projects sampled, it would naturally be higher. Further, in reviewing the

construction budget cell of the Excel Spreadsheet for the sampled projects, the dollar value in that cell matches the construction budget line in the PSR System “Current Budget by Phase” section for the correlating time period.

With respect to the Report’s finding that the OSC did not receive value engineering documentation that demonstrates the estimated \$12 million in savings for one of MTA C&D’s construction projects, there also seems to be some confusion. As the OSC is aware, MTA C&D had two separate value-engineered projects with similar names. The OSC asked for value engineering documentation for one of these projects, but in providing the requested information, MTA C&D believed that the OSC was inquiring about the other one. To this end, MTA C&D did provide proof of approximately \$12M in value engineering savings for the project that it believed the OSC was inquiring about, which consisted of an estimated \$10 million savings in contract costs and six months savings of construction time from a reduced size of the elevator entrance vestibules, and an estimated \$2 million more in savings from a shift in the stair location that eliminated third-party costs associated with utility relocation. With respect to the value-engineered project that the OSC was actually inquiring about and is referring to in the Report, we subsequently advised the OSC of the misunderstanding and that our value engineering is not yet complete for that project because the project is still in the preliminary design phase and the work has not yet been procured, so the agency’s savings have not yet been realized and there is not yet any estimated savings documentation to produce.

State Comptroller’s Comment – We cannot support the MTA having a demonstrated cost savings of \$12 million due to value engineering because, ultimately, no support was provided.

Finally, we note that the Report’s finding that the Development Department has not issued any updated policies and procedures since the transformation is also inaccurate. The Development Department, and MTA C&D as a whole, continue to draft new policies, and review and update the current policies, as appropriate. That being said, policies and procedures are not strictly departmental. Indeed, the work of the Development Department, which is responsible for program development and management of the entire MTA agency-wide capital program, is governed by policies that were created by other departments within the MTA organization, such as the capital eligibility procedure, procurement procedures and project baseline procedures. To this end, over 100 new policies, procedures, directives, guidelines and standards applicable to MTA C&D have been created since the transformation.

State Comptroller’s Comment – While the response mentions over 100 policies, procedures, guidelines, etc., we cannot validate this information, as this information was not provided to the auditors.

Contracts

With respect to the Report’s findings relating to MTA C&D’s Contracts Department, we remind you that the number of construction contracts that this Department handles has dramatically changed as a result of the transformation, increasing from just a handful of megaprojects a year to over 100 projects a year. We also remind you that this means that the Contracts Department handles the procurement for all construction and consultant contracts for the MTA’s capital projects (a task which, pre-transformation, was spread out throughout the operating agencies), which is a herculean lift. To procure these contracts faster, better and cheaper than before, the

Contracts Department has implemented new strategies and procedures aimed at modernizing the procurement process and at increasing competition for these procurements. This has proven successful, even at a time when other transportation agencies are not seeing similar levels of interest.

Although it may be too soon to show the full extent of the post-transformation project savings and efficiencies, such as those associated with the agency's new increased focus on design-build procurements, these savings can certainly be seen on a smaller scale by looking at the savings through the lens of the individual projects. To demonstrate these savings, MTA C&D provided the OSC with four examples of post-transformation bids that achieved time savings and efficiencies with reduced service outages, and explained how these benefits directly equate to cost savings. In addition, backup documentation was provided (including copies of the schedule from which the savings were calculated), and the schedulers and the estimators who worked on each of the contracts were interviewed by the OSC to provide a detailed explanation of the savings and efficiencies (and also provided backup documentation to support those explanations).

State Comptroller's Comment – The conclusion as stated is correct, “too soon to show... ”

That being said, the Report states that MTA C&D did not provide the OSC with copies of project schedules that the OSC believed bidders submitted in connection with their bid. The reason that MTA C&D did not provide this information is that bidders do not submit schedules or other backup to support the number of construction days they are bidding when they submit their bid. Indeed, it is not until the bidder has been deemed to be the lowest responsive bidder and selected as a prospective contract awardee that this information is requested and provided. Once a bidder is selected for the proposed award, they are given three days to submit a schedule and proof that they can get the work done within the time that they have proposed. If they are unable to provide that information, then they are disqualified, and the next lowest responsive bidder is requested to provide this information. Notably, MTA C&D does not award the contract to the bidder until the bidder is deemed to be qualified and the schedule and backup information are vetted and approved by MTA C&D staff to ensure that it complies with the contract requirements.

Separately, the Contracts Department has other examples of changes made that create contract efficiencies and savings. One such example is that the Contracts Department is routinely updating its contract documents to better incentivize contractors to reduce contract costs. These updated changes include the introduction of a new neutral dispute resolution provision and a new utility relocation risk-sharing provision, which caps utility relocation costs for the design builder at a set amount. Now, the MTA shares the risk with the contractor for utility work that could not have been anticipated. Other changes to the contract documents include updates to the Project Requirements and Design Criteria (“PRDC”) used for design build contracts. Notably, while based on a standard format developed by MTA C&D, PRDCs for every contract are different and are tailored to specific contract needs. As a result of contractual changes such as these, MTA C&D is seeing increased competition and innovation, along with financial savings. All of this information was provided to the OSC but either not understood or ignored in the Report.

Another advantage to using more design-build contracts that we explained to the OSC, is that because the design and construction are performed by the design builder, the number of change orders that MTA C&D expects to see will be reduced. That is because, for the most part, for design-build contracts the risk for design errors or omissions is shifted to the design builder. For

example, the number of change orders issued on the LIRR Mainline Expansion project, a design-build contract with a value of more than \$1.8 billion, had only 125 change orders on it. In contrast, the MTA's Fulton Center project, a design-bid-build project with an original contract value of \$175 million, had 444 change orders. Similarly, MTA C&Ds ADA Package 1, a design build contract with a value of over \$149 million had only 21 change orders, while two of the design-bid-build contracts in support of Second Ave Subway Phase 1 project, with original contract values of \$324,600,000 and \$258,353,000 respectively, had 336 and 401 change orders, respectively. While it is too soon to see the full extent of the Contracts Department's post-transformation changed contracts and processes, these examples are indicative of the direction that this department is trending. While it is too soon to provide change order data for many of the design-build contracts issued post transformation, for the reason explained above, there is no doubt that we will continue to see less change orders in design-build contracts than on similarly complex design-bid-build contracts.

Delivery

MTA C&D's Delivery Department has fully transformed the way the MTA delivers its construction projects. This newly created group has added innovation and accountability to project delivery, challenging the old way of doing business at the MTA and resulting in savings of more than \$750 million on capital construction projects once the construction starts. Creating an empowered Project Chief Executive Officer ("PCEO") title has been one of the key components of this change.

As the Report recognizes, the Delivery Department now assigns a PCEO to each construction project. That PCEO is fully responsible for ensuring that their project stays on budget and schedule, and that the contractor complies with the contract terms. The PCEO is also entrusted to make all decisions for their project the same way the head of a department would, cutting out the bureaucratic red tape that often delays decisions, leads to inefficiencies and limits the potential and capabilities of employees. This heightened level of accountability on the part of the PCEO has proven value, with post-transformation projects being delivered faster and cheaper than before.

Further, as the Report also notes, the Delivery Department has developed procedures to reduce risks on its projects. This includes procedures that better define roles and responsibilities and that incorporate risk factors into the project estimate, and procedures that allow for the inclusion of this risk estimate in the bid price. Under these new procedures, MTA C&D's internal cost estimators have been able to better refine their estimate calculations by accounting for engineering contingencies based on the complexity, design progress and delivery method of the particular project.

With respect to the Report's finding that MTA C&D's transformation did not reduce the time the agency takes to pay its vendors, we remind you that a reduction in time to issue payments to vendors was never a transformation goal because MTA C&D already pays its vendors timely. As you are aware, the agency is bound by, and compliant with, the vendor prompt payment provisions set forth in New York State Finance Law Section 179-f (the "Statute"). The timeframe for payments to vendors under this Statute is a very reasonable 30 days from the MTA's receipt of a properly submitted invoice from the vendors (which is, notably, in line with most private sector

invoice payment standards), and a shorter 15-day time period for its qualified small business vendors.

Finally, with respect to the Report's statement that change orders and submittal processing time questions remain unanswered by the Delivery Department, we note that MTA C&D answered all known questions on this issue. We also provided the OSC with a copy of the agency's new change order procedures that were introduced post-transformation, and meeting minutes from MTA C&D Business Unit Change Committee ("BUCC") meetings to demonstrate the effect these new procedures have on the timing of change order processing. Of particular relevance here is the fact that the updated procedures introduced several mechanisms that accelerate MTA C&D's change order processing time. The addition of the BUCC is a key part of that change. The BUCC requires the key stakeholders from MTA C&D's Delivery, Development, and Contracts Departments to meet to discuss change orders that require cross-departmental processing. This allows for faster processing times and a quicker determination as to whether a proposed change order has merit. The BUCC meeting minutes that were provided demonstrate that requiring these key stakeholders to review the merits of the change order in a group meeting is more efficient because it forces them to share their opinions and concerns and to reach a resolution. This is vastly different than the pre-transformation process, where key stakeholders were brought in at the end of the process and the people who were reviewing the requests would do so individually in their own silo without discussion, creating longer lag times.

State Comptroller's Comment – We acknowledge that there is a new change order procedure. However, documents to support faster processing of change orders were not provided.

RESPONSE TO RECOMMENDATIONS

Recommendation No. 1:

Prepare documentation to support the transformation of C&D improved efficiency and saved time and money. The documentation should include interim reports as the information about projects at milestones becomes available.

MTA Response to Recommendation No. 1:

MTA C&D acknowledges this recommendation and notes that the agency is already documenting its improved efficiency, cost and time savings. Indeed, MTA C&D has complied with the 2019 amendments to Public Authorities Law Section 1279-e and all actions it has taken have been consistent with the stated purpose of that legislation. In addition, the MTA's public facing "Capital Program Dashboard" is updated quarterly and offers both a macro-level and project-specific view on progress towards the capital program, including original and current budget and schedule. And the MTA also issues numerous public reports and resources to increase the transparency of the capital program, including: (i) the "Monthly Commitment and Completions Report," which details project performance against goals for project awards and substantial completion; (ii) the "MTA C&D's Year in Review and Strategic Plan," which is published annually; and (iii) the "MTA Traffic Light Report," which is issued quarterly and provides an update on the schedule, cost, and scope of each active project using key performance indicators, along with commentary for any projects that risk falling behind in schedule or experience cost growth or significant scope changes. All this information is available on the MTA's public website: www.mta.info.

Recommendation No. 2:

Formalize procedures to the new processes that have been established since reorganization of C&D, including but not limited to bid estimates and schedules.

MTA Response to Recommendation No. 2:

MTA C&D acknowledges this recommendation and notes that it has already developed these new processes. To date, over 100 new policies, procedures, guidelines and standards applicable to MTA C&D have been created, including MTA C&D Baseline Procedure 23-05, which addresses cost estimates and schedules, MTA C&D Directive 22-07 – Change Order Estimates, which addresses estimates, and MTA C&D Directive 23-07 – Use of Enterprise P6 Cloud Scheduling Tool, which addresses schedules. As the agency constantly works to refine its processes and procedures, it will continue to draft and issue new policies and policy updates.

In addition, MTA C&D has created a dedicated procedures group within our Office of Corporate Performance. This group will continue to create and disseminate procedures as they are identified to be needed and will prioritize accordingly.

Recommendation No. 3:

Promptly develop new and continued practices into procedures and document them.

MTA Response to Recommendation No. 3:

MTA C&D acknowledges this recommendation and notes that it is already doing so. We refer the OSC to our response to Recommendation 2 above.

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We appreciate the OSC's work and their consideration of this response in issuing a final report. In the interim, should they need any additional information or have any questions, they should reach out to the designated agency contacts handling this audit.

Very truly yours,



Jamie Torres-Springer
MTA C&D President

cc: Evan M. Eisland, MTA C&D Executive Vice-President and General Counsel
Diane M. Nardi, MTA C&D Senior Vice-President and Deputy General Counsel
Mark Roche, MTA C&D Deputy Chief Development Officer - Delivery
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