



Metropolitan Transportation Authority

State of New York

October 6, 2017

Honorable Ydanis Rodriguez
New York City Council
Chair, Committee on Transportation
250 Broadway, Suite 1763
New York, NY 10007

Honorable Helen Rosenthal
New York City Council
Chair, Committee on Contracts
250 Broadway, Suite 1744
New York, NY 10007

Re: MTA Construction Costs

Dear Councilmembers Rodriguez and Rosenthal:

Thank you for your letter regarding construction costs incurred by the MTA. I agree that understanding cost drivers can help us better plan and carry out our programs. Towards that end, as part of the MTA's agenda of continual improvement in capital project delivery, we are constantly monitoring national and international best practices, looking to incorporate ideas that make sense to apply here, constantly self-evaluating, and constantly pursuing ways to improve efficiency. The MTA's new executive team of Ronnie Hakim, Pat Foye and Janno Lieber, are laser-focused on the task.

You are correct to recognize that there are unique challenges that contribute to high construction costs in New York City in general, and for MTA projects in particular. A number of these factors impact many builders in New York City, not just the MTA. For example:

- The relative age of New York City's utilities often requires added investments when we encounter them in the course of construction. The MTA not only bears the full costs of all utility relocations, but also pays for upgrades in order to bring those utilities to current industry standards, as well as the utility's support costs to monitor and inspect the work. Additionally, because of the high density issues in New York City, projects often are required to relocate underground utilities multiple times, thereby adding an even greater level of complexity and cost to the project.

The agencies of the MTA

MTA New York City Transit
MTA Long Island Rail Road

MTA Metro-North Railroad
MTA Bridges and Tunnels

MTA Capital Construction
MTA Bus Company

- Hidden structural conditions requiring attention are unfortunately not uncommon in an aging system and in a city full of aging and historic buildings. Likewise the need to deal with (a) fragile older buildings that require costly structural shoring (which happened often during construction of the Second Avenue Subway), or (b) with historic buildings that require special investments (like the \$70 million-plus Corbin Building renovation at the Fulton Transit Center).
- The tremendous volume of construction activity city-wide and regionally – especially since Super-Storm Sandy -- and the limited pool of contractors for large, complex projects inevitably affects the bidding environment and, ultimately, cost.
- The cost of land acquisition, on average, in high density areas is generally much greater than elsewhere – a huge problem for expansion projects.
- Performing capital work while maintaining 24/7 transit operations. Paris, London, Tokyo and most other cities' systems do not operate around the clock, 365 days a year. Nearly half of NYC Transit's capital program (48%) takes place on the active right of way, which has an impact on support costs for safety and operations.
- High ridership makes our system a great investment – but it also imposes additional expense. For example, our new stations need to be larger and equipped with more escalators, elevators, exits and fire protection capacity in order to meet applicable codes and operational standards.
- Our high standards for safety, security, resiliency, and – equally important -- for mitigating environmental impacts can affect cost. The Second Avenue Subway project created an entire network of “muck houses” at sidewalk level in order to encapsulate dust and contain noise impacts to neighbors.
- The density of areas in which the MTA capital projects take place (110,000 people per square mile, in the case of the Second Avenue Subway) necessitates special measures to keep streets and sidewalks open for vehicular and pedestrian traffic. This obviously limits key logistics activities like the delivery and storage of equipment and materials. For example, in order to avoid street level impacts in Midtown Manhattan, the East Side Access project has been forced to move materials and equipment through underground tunnels from Queens.

- Workforce factors, such as union labor and shortages of skilled labor, and health care costs that are typically covered by general welfare programs in foreign jurisdictions, are significant project cost drivers.
- Policies that greatly benefit the general public in New York, such as strict environmental and safety regulations, and an aggressive and successful program to expand contracts with minority, women, and service-disabled veteran-owned businesses, also drive project costs in ways that may not be comparable to other cities and countries.

All of these factors are being examined so that we extract “lessons learned,” refine our estimates and reduce costs for future work. But in the meantime we are taking affirmative steps to manage costs going forward:

- Early and extensive investigation of underground utility, geotechnical and building conditions, to plan optimal strategies for advance utility relocations, and for avoiding schedule and budget-busting surprises.
- Maximum use of “Design-Build” and “Best Value” procurement approaches. These reduce cost and schedule and take advantage of private sector know-how and market incentives.
- Project specifications are undergoing a more focused and practical review of scope elements with the goal of simplifying work and reducing the expensive customization of equipment wherever possible.
- Negotiating project-specific labor agreements, where appropriate, to secure more favorable work rules that can reduce construction costs and, potentially, long-term maintenance costs.
- Early and consistent community engagement to understand priorities for mitigating construction impacts, and head off community concerns that can trigger delays. This will facilitate a more balanced consideration of the tradeoff between high levels of restriction and lower construction costs with shorter durations.
- More systematic and aggressive management of construction contracts to prevent change orders – or, where they are necessary, to act timely and avoid delays.

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- Setting in motion the international Genius Transit Challenge competition, with the express purpose of identifying new ways to upgrade signals, subway cars and communications systems quickly and more cost effectively. The competition received over 400 entries and is on track to select winners by year end.
- Creation of a new Chief Development Officer position, located in the newly formed Office of the Chairman, to oversee MTA mega-projects and also to spearhead implementation of private sector construction management tools and strategies.

Thank you again for your interest in and support of the MTA Capital Program. We look forward to working with you.

Sincerely yours,



Joseph J. Lhota

cc: Veronique Hakim
Patrick Foye
Janno Lieber