



Charles D. Baker, Governor
Karyn E. Polito, Lieutenant Governor
Jamey Tesler, MassDOT Secretary & CEO
Steve Poftak, General Manager



December 12, 2022

Mr. Cameron Ricker
Chief Clerk
United States Senate Committee on Banking, Housing, and Urban Affairs
Subcommittee on Economic Policy
Cameron_Ricker@bank.ing.senate.gov
202.224.5587

Dear Mr. Ricker,

Following up on the request to complete the hearing record for the U.S. Senate Committee on Banking, Housing and Urban Affairs Subcommittee on Economic Policy, please find inline my responses (*italic, bold font*) to the questions posed October 14, 2022.

Sincerely,

Steve Poftak
MBTA General Manager

1. I'd like to ask about the workforce at MBTA. We know that some of these issues can be solved by increasing the number of employees and ensuring everyone is getting necessary rest and training. During the hearing it was mentioned that the MBTA is 1,500 to 2,000 employees short.
 - a. What sector of employee is needed for the MBTA? Is it train operators, safety professionals, Department of Public Utilities inspectors, or station managers?

New employees are needed to fill vacancies and newly identified roles across all major MBTA departments and functions, including operations, maintenance, safety, training, and support areas. The specific extent of these needs will be articulated as part of the staffing assessment performed in response to the FTA Safety Management Inspection. Note that Department of Public Utilities inspectors are not employed by the MBTA, and MBTA's operational needs are not directly constrained by Department of Public Utilities staffing levels.

- b. Is there any concern about the lack of pay and benefits for our MBTA staff? How does the pay and benefits compare to other stations?

The Workforce Assessment and Hiring Plan that we are completing as part of our SMI response will include a review of the MBTA's compensation and benefits compared to our peer agencies or other industries where our candidates may be looking.



- c. Beyond the MBTA, the MA DPU is the oversight body responsible for handling accidents along transportation.

DPU is responsible for oversight of MBTA’s compliance with external safety regulations and internal safety program requirements, extending to accident investigation as well as all other aspects of safety policy, safety risk management, safety assurance and safety promotion.

2. I want to address riders concern about safety on the T. I want to ensure that my constituents feel safe and confident about taking the T throughout their day.
 - a. What other, if any, delays are expected for the T in the upcoming year? Will there be another shutdown of a line or a portion of a line?

The MBTA’s maintenance and capital plans require significant ROW access to modernize the system and keep it in a state of good repair. Since the Orange Line surge, the MBTA has on occasion closed subway lines for one weekend at a time, or closed 2-3 hours early on weeknights, to carry out state-of-good repair operations. This practice will continue. The MBTA does not have plans to shut down entire subway lines at this time.

- b. Following up on Senator Markey’s question of future work, what other track maintenance is needed for the T to ensure a safe and enjoyable ride?
 - i. If none, what are the next wave of improvements on deck for the T?

MBTA puts speed restrictions in place to ensure the safety of the traveling public and its employees when any wear or defects are identified in the track infrastructure.

- ii. If there are more maintenance and changes necessary, how much time will be given to the community and government officials to adjust and change their schedule? I am worried that my constituents are surprised and shocked when changes and shutdowns occur, especially in situations where the T is the only way to get to work/school.

We understand the important role that the MBTA plays in moving people throughout the region. These types of disruptions are immensely inconvenient but necessary to bring the MBTA’s system into a state of good repair. Going forward the MBTA will make every attempt to provide the riding public with as much time as possible to plan for future disruptions.

3. During the hearing, there was much discussion from Mr. Johnson and Mayor Wu about “fare equity on the commuter rail system” and expanding “fare free bus pilot” and how these provisions would ease congestion throughout the MBTA and decrease traffic levels throughout our city. What are the plans to implement these programs to promote equity throughout the system?

On March 24, 2022, the MBTA Board approved changes that will expand our products for reduced fare riders and simplify tariff rules. Changes include:

- ***Permanent 5-Day FlexPasses on Commuter Rail.***



- ***Lower pricing for 1-Day LinkPasses.***
 - ***A new 7-Day LinkPass for reduced fare riders.***
 - ***Expanding Reduced Fare Monthly Passes to all modes.***
 - ***Second transfers on bus and subway and transfers between Express Buses.***
- These changes went into effect by July 1, 2022.***

4. The MBTA is taking steps to improve its hiring process for bus drivers and dispatchers, including by establishing signing and referral bonuses, partnering with the Registry of Motor Vehicles (RMV) to speed up review of applicants' driving records, investing \$20 million in its hiring team and covering all fees associated with earning a Class B CDL license.
- a. In addition to these steps, how is the MBTA planning on funding more competitive salaries to attract and retain talent among bus drivers? (***Compound answer below.***)
 - b. What additional flexibilities could the MBTA offer to bus drivers and dispatchers to attract and retain talent? (***Compound answer below.***)

Additional options for attracting and retaining talent are being explored for a variety of MBTA roles, including bus operators and dispatchers, as a part of the ongoing response to the FTA Safety Management Inspection.

5. The MBTA is competing with private entities seeking applicants with CDLs, which include other bus companies, Amazon, and UPS.
- a. What do private entities offer to prospective hires that the MBTA currently is not offering to applicants?

There are several significant differences that distinguish MBTA positions requiring a CDL from other bus companies and private companies including Amazon and UPS. MBTA's riders depend on the availability of peak service levels in the morning and evening to support commuting; unlike private distribution services, which make deliveries on fixed and continuous shifts, this need requires MBTA to make use of split shifts to ensure adequate coverage. Private trucking CDL operators carry freight and are not required to perform customer service duties, an essential part of MBTA's service delivery performed by its operators which requires additional training and skill in comparison to other roles requiring a CDL. These essential aspects of MBTA's service may make operational roles less attractive to certain individuals but are fundamental constraints on MBTA's ability to offer similar working conditions to other public or private sector roles requiring a CDL.

- b. How can the MBTA close those gaps to effectively compete with the private sector, aside from hiring bonuses and good pay?

As part of its SMI response to the FTA, the workforce assessment that the MBTA is currently undergoing will include an analysis of workforce flexibility and other incentives for prospective candidates.



6. If approved, how would the MBTA effectively use the \$10 million proposed by the governor to create a dedicated training academy? How would the MBTA redirect talent from existing vocation programs and trade schools?

MBTA departments including Vehicle Maintenance have already begun exploring process changes to training programs to build and sustain a talent pipeline between vocational programs/trade schools and the MBTA. Solutions include development of new job classifications designed to allow vocational school or community college graduates to apply, completing programs of classroom instruction and shop floor guided training before being granted the opportunity to pass entrance and licensing exams, and interviews for full-time, independent positions.

7. FTA has stated that the decision to shut down the orange line came entirely from the T. Is that correct?
 - a. What was the basic reasoning behind the shutdown then?

Yes, it is correct that the T made the decision to shut down the Orange Line for 30 days to perform construction activities and accelerate maintenance work; allow for adjacent construction projects to progress with the advantage of not restoring train service each day; and to give the MBTA the ability to manage the critical Heavy Rail Dispatcher staffing shortage.

The reasoning for the 30-day shutdown of the Orange Line was to offer improved work efficiency to perform several crucial initiatives that would improve the safety and reliability of Orange Line service. There were several factors that informed the MBTA's decision, including the urgency of needed work, breadth of work across the entire length of the Orange Line, and combined efficiency gained by performing the work simultaneously.

The MBTA had a pre-existing planned 30-day shutdown for the month of August to conduct construction investment into the North Wellington Yard interlocking and signal system upgrades from Wellington to Oak Grove. This work required a service diversion from Oak Grove to Wellington stations.

The MBTA had recently experienced two emergency closures of the Orange and Green lines in the Haymarket area. These emergency closures were due to a major construction accident involving the partial collapse, and ensuing structural condition of the Government Center Garage. While the Government Center garage is a privately owned structure undergoing private redevelopment, the building is positioned directly above the tunnels for the Orange and Green lines and the private redevelopment project required that no trains be running and no public traffic be in or around the station in order to conduct critical demolition work. This work required a service diversion from North Station to Back Bay (and simultaneously North Station to Lechmere/Union Square on the Green Line).

The MBTA had received Special Directive 22-4 from the FTA which required the MBTA to expedite planned repairs to the curved track segments in the Tufts Medical Center and Back Bay



portions of the line. This work required service diversion from Tufts Medical Center to Ruggles. Note, with respect to the above, the work required service suspension from Oak Grove to Ruggles (15 of the 20 orange line stations).

Furthermore, the MBTA was managing a critical shortage of heavy rail control center dispatchers, that limited our ability to simultaneously dispatch train service and implement track access to construction and maintenance crews until additional staff could be hired. By suspending Orange Line service, the MBTA was able to shift staff resources to manage the Red and Blue heavy rail lines and the MBTA administrative departments were afforded the 30 days to accelerate dispatcher hiring and training, as well as to retrain staff who had previously performed Heavy Rail dispatch duties.

The MBTA's efforts to secure alternative bus service providers informed the MBTA that our only opportunity to secure the quantity of buses needed to transport the Orange Line ridership could be provided through the middle of September.

b. Where did the timeline of 30 days come from?

The 30-day timeline needed to fit into the opportunity window between other major project diversions and needs, particularly ATC work on North Side commuter rail (an FRA mandate that couldn't be delayed).

c. Where did the 5 years of work come from?

If all the work had occurred at night, it would have taken more than 5 years to perform the work.

d. Given that the work is ongoing in years, how significant was the backlog?

The backlog for the work that was completed was 5-years' worth of overnight work. However, there is and will always be some work as maintenance is an ongoing process.

e. If the backlog was 5 years or greater, would you it be fair to say that all riders have been receiving subpar and unsafe service for at least the last 5 years?

No. That would not be fair to say. Maintenance is a continuous cycle and does not equate to subpar or unsafe service. A 5-year backlog is the length of time that the work would take to complete if it is performed solely during overnight hours.

f. Given that the work remains ongoing with speed restrictions in place, why did the MBTA open up the T after 30 days? (***Compound answer below.***)

i. Would it have not made more sense to keep it closed down to finish the work?

ii. Do you consider it a mistake to have reopened the Orange Line when you did, given that the



service restrictions remain and the work is still ongoing?

No. The MBTA needed to be cognizant of bussing restrictions as well as the impact to other projects/diversions throughout the entire MBTA network. The planned work was completed and was safe to reopen. Additional work is preventative to ensure continued reliability and state of good repair.

- g. How can you say you are not certain when the work will be finished if you could make the decision to reopen the T? Said another way, how did you have enough information to decide that the Orange line should be open at that juncture and work should continue, but don't have enough information to determine when the work will be completed?

The scheduled work was completed, and the work was safety certified. It was safe to open and reduce impact on the riders and municipalities. Work performed outside of a full-shutdown scenario is restricted to overnight hours where productivity is vastly reduced, due to the time required to power down, power up, bring in necessary resources, store resources, etc.

8. In the FTA report it states that the “MBTA reported that, due to the challenges and uncertainties of the COVID-19 public health emergency, they have not completed action to address previous findings regarding the need to assess staffing needs for operations and maintenance. Nevertheless, during this same period MBTA aggressively moved forward with its \$2billion per -year capital program, supported largely by existing and overtime resources from the agency’s operations and maintenance departments and contractors. In January 2022, MBTA’s leadership team and Board of Directors took the unprecedented step of transferring an additional \$500 million from the MBTA’s operating budget to its capital budget.”
- a. Can you explain the reasoning behind this?

Capital work modernizes the system and brings it into a state of good repair. The \$500M included almost entirely safety-related projects.

- b. In hindsight was this a mistake?

We are confident that this action was the best choice, given resource timing and the need to perform safety-critical projects.

9. In the Boston Herald on 10/3/22 it stated that: “It’s going to cost an extra \$1 billion to fund Orange and Red Line infrastructure improvements, MBTA officials said, beyond the \$1.6 billion already earmarked in its capital investment plan.” In light of the previous quote from the FTA report about the transferring of funds and the aggressive capital spending, would you say again knowing the additional needs that it was a mistake?
- a. Can you explain how this additional billion dollar figure came to be? What will the money go towards?



The capital investments programmed are to bring the Red and Orange Lines into states of good repair. Maintenance and repair work is always ongoing.

- b. How did you miss the billion dollars when projecting evaluations previously?

The \$1B was not missed. We have a known, significant capital backlog. The CIP and operating maintenance budgets are fiscally constrained and do not/have not met the full investment needs.

10. In the Globe Article on the Orange Line from 10/7/22, it states that MBTA had replaced 400 Cologne egg fasteners but still had around 200 more before you can reach a top speed of travel between Tufts Medical and Back Bay. Was there 50% more work required on this than had been predicted/assumed?
- a. If yes, why did the T resume Orange Line operations before completing the additional work? (*Compound answer below.*)
- i. Additionally, if yes, that seems like a significant underestimate. How did the MBTA miss that originally and why did it fail to share the extra work needed with its partners and the public? (*Compound answer below.*)
- b. If no, why did the T resume Orange Line operations before completing the work it anticipated needing to do? (*Compound answer below.*)

Yes, there was more work to replace the fasteners than originally anticipated. It is important to note that the key objective of the task was to replace the running rails due to worn rail conditions to increase the speed from the restricted 10 mph. The worn rails were replaced as intended and are supported on Cologne Egg fasteners. We replaced 386 fasteners. Then the speed restriction was raised to 18 mph. The quantity and level of effort required to remove and re-install new fasteners was discovered to be more complex due to the methodology of the original 1980's-era construction, necessitating significantly more extensive concrete slab work than originally anticipated. In order to mitigate accelerated degradation of the rails and new fasteners (due to the curvature of the tracks), the line speed will remain at 18 mph until an additional ~140 Cologne Egg replacements are completed.

The MBTA was able to resume service on the Orange Line safely and within the 30-day period that was announced.

11. Can we acknowledge that ridership was down significantly from March 2020 and ridership remains below what it was at that point?

Yes, ridership decreased significantly during March of 2020, and it has not fully rebounded. However, some services have rebounded better than others.

- a. Was there ever any consideration of doing significant maintenance work at that point, as it would have disrupted the commutes of far few riders and perhaps produced safer rides from that point on? (*Compound answer below.*)



- b. If yes and you did not undertake the work, why did you not? (*Compound answer below.*)
 - i. And do you consider that a mistake? (*Compound answer below.*)
- c. If no, in hindsight was that a mistake? (*Compound answer below.*)

Preparations to complete expanded maintenance work on the system began not long after trends in ridership through 2020 became evident. However, MBTA's response to the COVID-19 pandemic was and remains the most significant safety-related activity to protect riders and employees performed in March 2020 and the immediate months following. The pandemic had a profound effect on transit systems nationwide during this period: in one example, New York's MTA suffered at least 118 employee deaths between March and July of 2020 alone. MBTA's efforts to protect its staff and riders and avert the catastrophic effects of COVID-19 required a full mobilization of both management and frontline staff to evaluate, procure, distribute, and deploy Personal Protective Equipment, update policies, procedures, and health guidance for employees, roll out technical solutions to enable remote work for select roles, evaluate and manage impacts on service, and communicate key changes to riders and other stakeholders. The absence of an effective COVID-19 vaccine, social distancing requirements, travel bans imposed by Massachusetts and other states, supply chain impacts on PPE and other essential equipment, and other factors restricted the Authority's ability to act on changes in ridership patterns until later in the pandemic.

- 12. Can you provide a full accounting of what the cost of the work to the Commonwealth? (*For all parts of Question 12, please reference Attachment A.*)
 - a. How much did the shuttle bus contract cost?
 - i. What was the original estimate for this?
 - b. How much money overtime did the work require?
 - i. What was the original estimate for this?
 - c. How much did the additional communications, in all forms, outreach, ambassadors, fare changes, signage, etc. cost to explain the changes to the passengers' commute?
 - i. What was the original estimate for this?
 - d. How much tax revenue do you believe the Commonwealth businesses lost over this period?

We do not know.

- e. How much did ridership decline during this period?

We are able to estimate that the MBTA retained about 60% of typical Orange Line ridership during the surge. For the ridership that remained, about 15-20% of usual passengers switched to another MBTA mode (Commuter Rail or bus) and the other 40-45% utilized the shuttles. Please note that these are estimates and subject to revision as we get more data.

- 13. Where were the biggest budgetary surprises?
 - a. What if any parts of the work ended up costing more? (*Compound answer below.*)
 - b. Where did the Commonwealth save money? (*Compound answer below.*)

Contractors realize a 40% or more productivity increase with full access during a diversion compared



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to night work.

14. What do you anticipate the total cost to the Commonwealth being to get the system to optimal safety and service as outlined by the FTA?

15.

As of this moment we do not have a full estimate of what the total cost will be to the Commonwealth.

December 12, 2022

Mr. Matthew Nelson
Chair
Massachusetts Department of Public Utilities

Dear Mr. Nelson:

Thank you for testifying before the United States Senate Committee on Banking, Housing, and Urban Affairs Subcommittee on Economic Policy on October 14, 2022, at the hearing entitled, “Economic Impacts of Inadequate Transit Maintenance and Oversight: Examining Management Failures at the Massachusetts Bay Transportation Authority and the Massachusetts Department of Public Utilities.”

In order to complete the hearing record, we would appreciate your answers to the enclosed questions by December 12, 2022. When formatting your response, please repeat the question, then your answer, single spacing both question and answer. Please do not use all capitals.

Send your reply to Mr. Cameron Ricker, the Committee’s Chief Clerk. He will transmit copies to the appropriate offices, including the Committee’s publications office. Due to current procedures regarding Senate mail, it is recommended that you send replies via e-mail in a Microsoft Word or PDF attachment to Cameron_Ricker@banking.senate.gov.

If you have any questions about this letter, please contact Mr. Ricker at (202) 224-5587.

Sincerely,

Sherrod Brown
Chairman

SB/cr

Subcommittee on Economic Policy
“Economic Impacts of Inadequate Transit Maintenance and Oversight: Examining Management Failures at the Massachusetts Bay Transportation Authority and the Massachusetts Department of Public Utilities.”
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Questions for Mr. Matthew Nelson, Chair, Massachusetts Department of Public Utilities, from Chair Elizabeth Warren:

1. What changes has the DPU made to ensure proper oversight of the MBTA? Should these changes still in progress to reach optimal performance, what is the timeline to a full strength DPU?

Answer.

“What changes has the DPU made to ensure proper oversight of the MBTA? Should these changes still [be] in progress to reach optimal performance, what is the timeline to a full strength DPU?”

The Department of Public Utilities (“DPU”) has taken action to enhance the DPU’s oversight of the safety management practices of the Massachusetts Bay Transportation Authority (“MBTA”), both prior to and in response to the Federal Transit Administration’s (“FTA”) 2022 Final Report on the Safety Management Inspection (“SMI”) of the MBTA and the DPU.

Throughout my tenure as Chair, the DPU has been working with the FTA to shift to a more proactive approach to safety oversight. Historically, the DPU’s approach to safety oversight concentrated on accident investigation and determination of the root cause of an accident after it occurred. In recent years, the DPU Rail Transit Division is working toward a more proactive approach to identify hazards and risks before they occur, while also remaining vigilant to the function of root cause analysis. Similarly, the MBTA is implementing a more proactive approach to safety through the MBTA Safety Management System.

As part of the FTA’s 2022 Report on the SMI of the MBTA and the DPU, the FTA issued Special Directives requiring the DPU and the MBTA to take certain actions to address the FTA’s findings. The Special Directives required the DPU to, among other things, review and oversee the implementation of the MBTA’s Corrective Action Plans (“CAPs”), which are step-by-step plans of actions developed to achieve the resolution of identified problems. The Special Directives also direct the DPU to submit CAPs to the FTA describing how the DPU will monitor the MBTA’s CAPs, and to provide more robust oversight of the MBTA, including through the timely resolution of all MBTA CAPs.

In response to the 2022 Report on the SMI of the MBTA and the DPU, the DPU has worked with the FTA to identify MBTA-required actions and ensure that the MBTA’s CAPs are sufficient and properly executed. The DPU has been conducting timely review of the MBTA’s CAPs and submitting our review to the FTA. The DPU has also created Inspection and Verification Plans for each MBTA Corrective Action and sent copies to the FTA. In addition, the DPU has submitted to the FTA a CAP that responds to the issues that FTA directed DPU to address.

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The DPU has also increased the number of full-time employees that work on rail safety oversight beyond previous levels, and we are working to hire additional staff. DPU targets 18 full time employees dedicated to rail safety oversight. In addition to a Director of Transportation and a Program Manager, the DPU currently has six full time employees dedicated to rail safety. This number is higher than it has been in the past, prior to the FTA’s 2019 triennial audit of the DPU.

More recently, following the FTA’s 2022 triennial audit of the DPU, the DPU will conduct a workload assessment to determine the right compliment of staff and resources required to ensure effective oversight of MBTA’s Safety program. Already the DPU has created two new positions, a Director of Rail Oversight, and an Assistant Director. The DPU is also working to fill four vacant positions, including the positions of Public Utilities Engineer, Auditor, Compliance Officer, and Assistant General Counsel. Although identifying individuals with rail safety expertise is challenging, the DPU is actively reaching out to rail safety programs across the country, attending job fairs, listing postings with state universities and other forums, and working internally and with other government entities to enhance visibility of our postings. We have seen recent progress in our hiring efforts, and are currently fielding applicants, conducting interviews, and making offers. The DPU is also continuing efforts to engage a consulting firm to bring additional field staff on board to augment DPU Rail Transit staffing.

The DPU is working to expand its resources to conduct more field work and auditing of the MBTA to provide further oversight and verify that the MBTA is carrying out the FTA’s directives. The DPU’s increased field and auditing work includes weekly unannounced visits to the MBTA Operations Control Center to ensure that MBTA employees are not working excessive hours, that there is appropriate coverage, and to verify sufficient internal documentation and tracking materials. This work also includes weekly visits to yards and car houses to verify safe working conditions, the implementation of new yard procedures, and ensuring that the MBTA conducts a pre-trip “circle check” on each vehicle before they go into service. The Rail Transit staff also conducted extensive monitoring of the Orange Line “surge” through conducting field visits, attending multiple meetings, and attending on site Safety Briefings.

The DPU is internally reviewing our policies and procedures, including updating staff’s technical training plans and automating the DPU’s process for verification of MBTA completed actions. The DPU is working closely with the FTA to develop additional notification and action procedures in order to ensure that any safety issue that the DPU flags is implemented in a timely manner and that the MBTA makes thorough changes to avoid ongoing safety concerns. We are reviewing and updating processes and thresholds for using existing enforcement authority to ensure timely resolution of MBTA required actions and will not hesitate to take enforcement actions if there are areas of non-compliance.

The safe delivery of services utilizing the public way is a core function of the DPU. Consumer protection is also at the core of the DPU’s mission. To fulfill its core mission, DPU employs

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subject matter experts in safety, as well as subject matter experts in other disciplines, including engineering, economics, and regulatory compliance. The DPU consistently utilizes an interdisciplinary team to ensure the safety of the public, including MBTA riders.