UNION SQ 🛛 🔾

Lechmere 💹

Charlestown Navy Yard

Science Park/West End 🔝



Commonwealth of Massachusetts Department of Public Utilities Rail Transit Safety Division

DPU State Safety Oversight MBTA Board Report December 13, 2023

Charles/ & MGH

Park St 😓

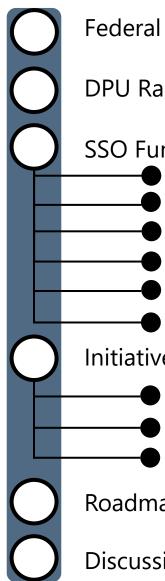
Long Wharf (South)

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Agenda

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DPU Rail Transit Safety Team

SSO Functions

On-Scene Response
 Events & Investigations
 Corrective Action Plans (CAPs)
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 Risk-Based Inspection (RBI) Program
 Triennial Audit

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DPU Rail Transit Safety is located above the South Station rail terminal in downtown Boston.

Federal Requirement for SSO

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Federal law requires a State Safety Oversight Program (SSOP) and Agency for rail transit systems.

There are thirty states – including Massachusetts – with rail transit systems required by 49 CFR Part 674 to have a Federal Transit Administration (FTA)-certified SSOP.

MBTA is the only rail transit system in Massachusetts that meets FTA's criteria for SSOP oversight.

Failure to have and maintain an effective SSOP in compliance with federal requirements risks both safety and FTA transit funding for the Commonwealth.



FTA's map of certified SSOPs across the country.

Photo credit: FTA

DPU Rail Transit Safety Team

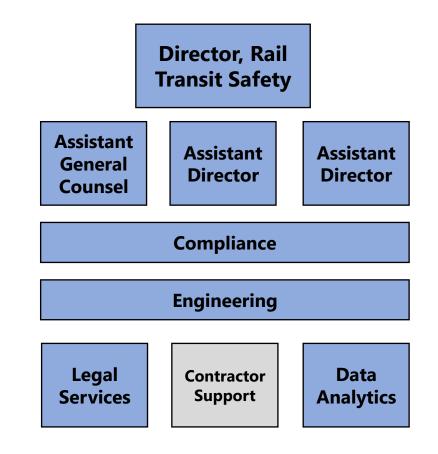
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Over the past 12 months, DPU has strengthened its focus on MBTA oversight as the Commonwealth's SSOA (State Safety Oversight Agency).

In December 2022, DPU created the Rail Transit Safety Division and hired our first Director of Rail Transit Safety. The Division has doubled in size from 9.5 team members in December 2022 to 18.5 team members as of today.

The Division now consists of:

- An experienced leadership team
- Compliance officers
- Engineering experts (track, signals, vehicles, power)
- Data analytics team
- Legal services
- Contractor support (as needed)



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On-Scene Response

DPU has "on call" engineers and compliance officers who respond to pages from MBTA Safety Department for certain types of events.

These event types include, but are not limited to:

- Derailments and "split switches"
- Life safety evacuations of railcars, trolleys, and stations
- Damage to third rail or overhead power
- Fire/smoke events
- Rail transit vehicle collisions
- Passenger, employee, or contractor serious injuries
- Fatalities

While on scene, DPU monitors the response by MBTA Safety along with items like personal protective equipment (PPE) compliance by all on-scene responders.



Photos from DPU's response to a Code 3 Derailment at the Riverside Yard in July 2023.

Photo credit: DPU

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Events and Investigations

DPU is active in safety events and MBTA Safety investigations.

Following a reportable event, DPU receives a digital "preliminary notification" from MBTA Safety and a final report once the MBTA investigation is complete. For certain types of safety events, the FTA and/or the NTSB may also be notified.

DPU reviews final reports and may reject them and require resubmission if a high threshold of quality and thoroughness is not achieved.

DPU also reviews some final reports with the FTA, as required by the September 14, 2023 FTA Immediate Action Letter.

U.S. Department	Headquarters	1200 New Jersey Avenue, SE Washington, DC 20590	rkers 2023	- 1
of Transportation Federal Transit Administration		Washington, DC 20040	age 2	
SENT VIA EMAIL			rts	
September 14, 2023			to	ko 20
Mr. Phillip Eng General Manager Massachusetts Bay Transp	artistican Authority		of	g
10 Park Plaza Boston, MA 02116	aken ided	63		
Subject: Immediate Action		ds he		
Dear Mr. Eng:				- 1
As you know, the safety of p workers, is of paramount im Massachusetts Bay Transpor assessed during our 2022 Sa workers on the right of way	both	au rs dit		
On April 18, 2023, in respor with transit workers on the E to protect workers. Specific took specific identified actio Procedures and the developm	g hout	se ire ev e t		
Despite taking these actions, events, including two incide to report these near misses a Based on these incidents, FT exist such that there is a sub-	; 1 that)m ns		
FTA deems it necessary to o		/BTA must undertake immediately to	l the o	
requirements may result in s maintenance and inspection,	e I	0		
adequately protected from co Effective immediately, MBI	ures xe			
		-	ons	- 1
				- 1
the lo	ocations of all workers prior t	ering and Maintenance (E&M) supervisors are o commencing their shifts. This plan must be		
FTA	and DPU within 10 business	days from the date of this letter.		
		ik Stoothoff, Acting Chief Operating Officer, M		

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Corrective Action Plans (CAPs)

In response to safety events, hazards or other activities, MBTA may voluntarily adopt CAPs. DPU may also require MBTA to develop CAPs.

Each CAP is composed of one or more Corrective Actions with deadlines for completion.

As the SSOA, DPU monitors CAP compliance, including deadlines. If MBTA is unable to meet a deadline, an extension request must be sent to DPU for approval, explaining the reason an extension is needed. To close a Corrective Action or the entire CAP, MBTA must send a closure request with evidence of compliance to DPU for approval.

Once a CAP is closed, DPU monitors compliance and may require a new CAP if MBTA's actions are insufficient.



Standpipe at Tufts Station. Following a July 2023 standpipe event at Charles/MGH, a CAP was created by MBTA to inspect standpipes systemwide.

Photo credit: MBTA

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Field Observations

DPU is unique among SSOAs due to the significant amount of time spent out in the field. These field observations are a vital part of oversight work.

These observation types include, but are not limited to:

- Track walks
- Power system checks
- PPE and ROW access card checks
- Speed audits using LiDAR guns
- Station and carhouse/yard safety audits
- Operation Control Center (OCC) visits

As staffing has increased, DPU has in turn increased the number of field observations conducted. DPU has doubled its field observations in the second half of 2023 when compared to the first half of the year.



Safety materials posted at Orient Heights, photographed during a DPU field observation.

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*Fast Facts: Investigations and CAPs

In	Investigations			CAP Status	How do we track?	
62** oper investiga	า		51 estigations sed in 2023	22 currently open CAPs 23	 Regular meetings with MBTA Weekly Safety Meeting Monthly CAP Meeting with MBTA CAP owners 	
78 35			>50%***	CAPs closed in 2023	 Monthly Hazard Tracking Meeting 	
final	rejected		final	55 open actions (Within CAPS)	• Final report review meetings	
reports received	fina repo		reports are past due	34% open actions have missed due date	 with FTA per September IAL Internal status trackers MBTA-facing status reports 	

*Numbers current as of November 2023. **Includes investigations with a final report under review. ***Includes initial final report and requested resubmission(s).

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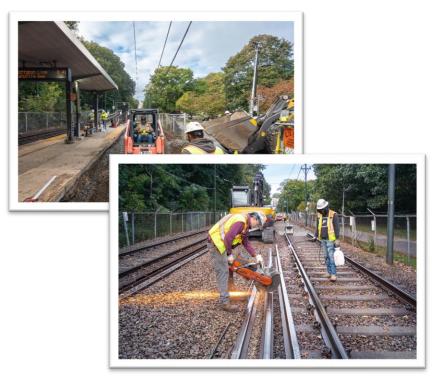
Diversion Monitoring

DPU is engaged in the oversight of MBTA employees and contractors during diversions as planned in the 2024 Track Infrastructure Improvement Plan.

During diversions, DPU joins safety briefings and is in the field observing construction activities to ensure the work is conducted in a safe manner.

During the summer 2023 Green Line diversion, DPU observed MBTA contractors out of compliance with MBTA's PPE requirements. DPU informed MBTA Safety and the contractors were brought into compliance.

During the fall 2023 Red Line diversion, DPU observed no PPE issues with MBTA's contractors during the 200+ field activities it conducted.



MBTA contractors complete track work during the fall 2023 Red Line diversion.

Photo credit: MBTA

Initiatives & Activities of Note

FTA Response

DPU has worked diligently to address FTA's concerns expressed during the SMI and through special directives (SDs) issued to MBTA and to DPU.

As of December 2023, FTA has closed multiple SDs issued to DPU and has expressed confidence in the progress that the DPU is making.

In 2022, DPU also appeared before the Massachusetts Legislature's Joint Committee on Transportation, as well as offered testimony to Senator Warren and Senator Markey regarding the DPU's response to FTA's concerns. DPU has been in touch with federal and state legislators in fall 2023 to provide additional information. "Over the last year, FTA has observed significant gains in the capacity and capability of DPU as oversight agency for MBTA. FTA greatly appreciates your efforts."

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Joe DeLorenzo, FTA Associate Administrator for Transit Safety and Oversight and Chief Safety Officer August 2023

Initiatives & Activities of Note

Risk-Based Inspection (RBI) Program

In October 2022, FTA issued special directives to all SSOAs to develop and implement risk-based inspection (RBI) programs as required by the Bipartisan Infrastructure Law.

DPU is diligently working to implement its RBI program pursuant to the FTA's directive. FTA has expressed that DPU's RBI program development is among the most promising it has seen so far from SSOAs in the country.

Last month, DPU was invited by FTA to present the Massachusetts RBI program to other SSOAs at the FTA Joint SSO and RTA Workshop in St. Louis, Missouri.

DPU is on track to submit its RBI program to FTA for approval ahead of the deadline in 2024.



Track walkers on the Green Line in March 2023.

Photo credit: DPU

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Initiatives & Activities of Note

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Triennial Audit

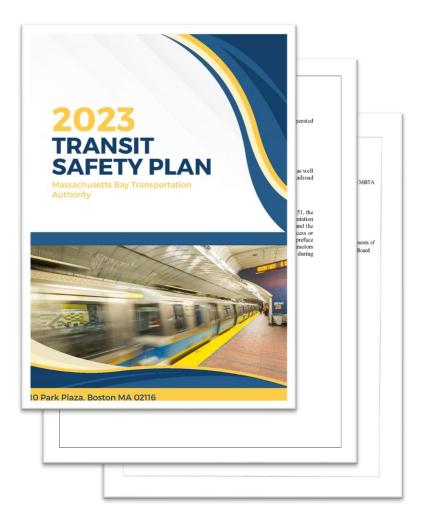
SSOAs like DPU are required by the FTA to audit the RTAs that they oversee every 3 years.

DPU's triennial audit of the MBTA is currently underway.

In October 2023, DPU and its contractor Vital Assurance completed a series of interviews with MBTA personnel on a series of 12 topics including the Agency Safety Plan, rules compliance, training, and communications.

A series of follow up field activities was completed earlier this month.

A final audit report will be presented to MBTA in 2024.



DPU will continue to have the safe operation of the MBTA and the safety of its riders and employees as its top priority.

DPU will maintain a staffing level appropriate for overseeing a system with the age, size, and complexity of the MBTA.

DPU will continue to grow its ability to use data to make decisions, with the goal of detecting and addressing safety risks before they become safety events.

DPU will work to become more transparent with its oversight work, so the public understands what DPU is doing to sustain and enhance MBTA safety.

Overall, DPU remains committed to being the SSOA that the Commonwealth deserves.



DPU observed a safety exercise held by MBTA along with local police and fire officials in November 2023.

Photo credit: DPU

Discussion / Q&A

Thank you!

The division can be found online at https://www.mass.gov/orgs/rail-transit-safety-division