



**Massachusetts Bay
Transportation Authority**

COO's Report to the Board

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Operations Guiding Principles



Modern Tools

Integrate state-of-the-art tools to equip employees to work safety and effectively.

Operator Turn-by-Turn Navigation, Light Rail Speed Monitoring



Clear Standards

Define, measure, and monitor for consistent, quality processes, behaviors, and results.

Operating Rules & Compliance



Innovative Training & Development

Introduce programs to foster confidence, competence, and continuous improvement.

External Dispatchers, Curriculum Modernization, Instructor Excellence, Frontline-Management Field Interactions

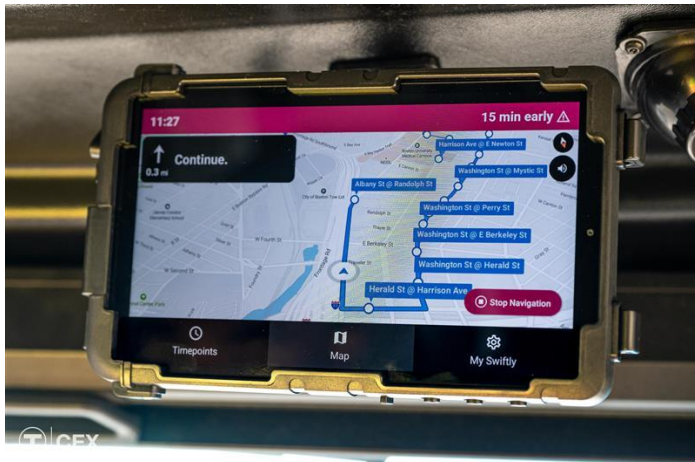


Denotes initiative associated with an FTA SMI finding response



Modern Tools: Operator Turn-by-Turn Navigation

Providing Operators real-time navigational support to enhance service for riders.



New Program – Turn-by-Turn Navigation

Piloted at Albany Garage
December '24-March '25.

- ✓ Collaborated with TID to install over 100 tablets with navigation software.
- ✓ Operators receive turn-by-turn directions.
- ✓ Received positive Operator feedback.

Planning **system-wide** rollout.

- ☐ Finalizing contract terms with vendor.
- ☐ Determining installation sequence and process for remaining vehicles.



Modern Tools: Light Rail Speed Monitoring

State-of-the-art tools are required for accurate, efficient Light Rail Speed monitoring.

Current Speed Monitoring Approach



LiDAR

- Light Rail Operations performs 2 LiDAR Observations per day on average.
- Safety conducts additional observations.
- Purchased 55 new LiDAR devices in 2024 (for use in multiple areas).



GPS

- Vehicles equipped with GPS devices that continuously track location and speed.
- Supervisors receive email when speed exceeds set threshold.

New GPS Device Pilot

Analysis showed inaccuracies in alerts from old GPS devices.

- While speed can be verified with vehicle data later, accurate, real-time data is critical to take appropriate action when possible violation occurs.
- Older GPS device speeds inconsistent with event recorder speeds within 3mph 67% of the time.

Tested new GPS devices in 2023 and installed 50 in Fall 2024.

- New devices detect overspeed events more quickly, greatly reduce false alerts, and show improved location accuracy.
- Currently working to install new GPS devices across all vehicles.

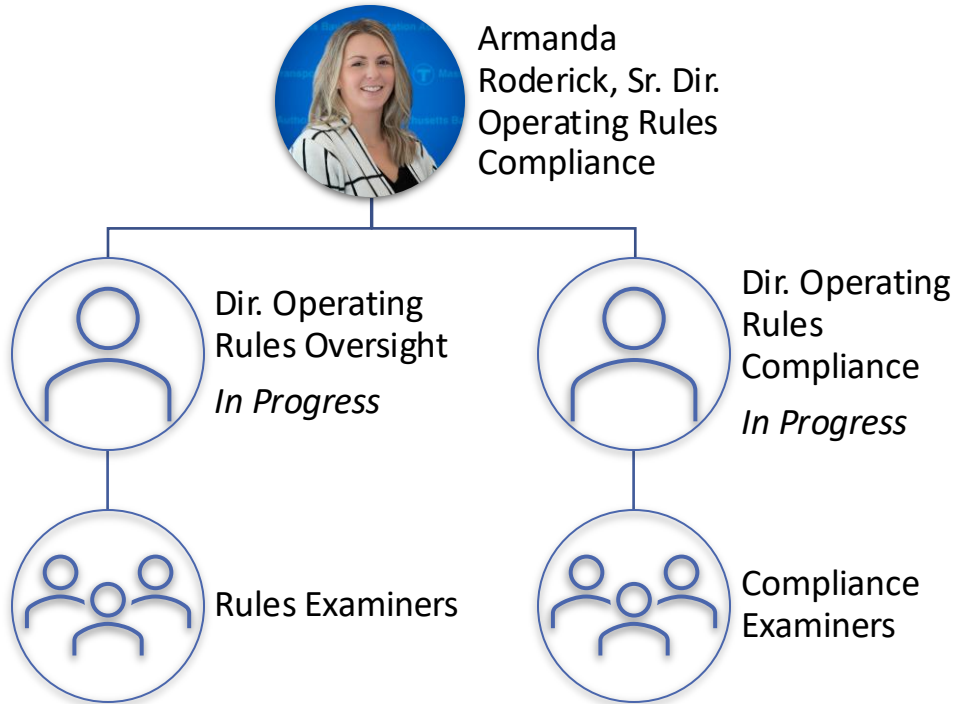


Clear Standards: Operating Rules and Compliance



New Operating Rules & Compliance team centralizes rules governance and compliance monitoring and assessment, collaborates across Operations and with Safety, and provides new levels of frontline support.

Department Structure



Department Goals

- ☐ Centralize rules governance.
- ☐ Cultivate culture of accountability and continuous improvement.
- ☐ Implement proactive approach to mitigate violations.
- ☐ Provide clear, consistent, consumable rules and procedures.
- ☐ Strengthen rules understanding and compliance.
- ☐ Monitor and assess compliance.



Clear Standards: Operating Rules and Compliance

★ Rules Oversight team ensures that rules and procedures are clear, consistent, and consumable.

Dir. Operating Rules Oversight

- Has **full ownership of documentation** related to rule information, changes, updates, and **communication** to frontline.
- Works with **Training** to ensure rule changes are implemented into curriculum.
- Works with **Safety** to understand incidents that may require rule changes.
- Works with **Rules Compliance** to mitigate issues with rule competency.

Rules Examiners – Dept. Specific

- Serve as **field liaisons** to answer questions and clarify rules.
- Perform frontline operating rules **qualification checks**.
- Analyze rules vs. performance and **provide feedback** related to issues with rules and opportunities for clarification or modification.

Rulebook Current State	Rulebook(s) Target State
No centralized governance or document control	Set schedules and standards to govern frequent, consistent review and changes
Limited to Heavy Rail, Light Rail, Bus	Include OCC, Vehicle Maintenance, Engineering & Maintenance
One lengthy rulebook	Audience-specific rulebooks
Includes procedural information	Separate procedure manuals

Clear Standards: Operating Rules and Compliance



Rules Compliance team will manage the Operational Testing & Inspection Program (OTIP).

Audits Specific to Rules

- Rules Compliance develops audits linked to specific rules in each operating department or discipline.
- Audit-specific forms reflect actual operating practices.
- Procedure documents outline process for audit, requirements, and criteria.

Testing Officers in Each Discipline

- Testing Officers conduct audits.
- Assigned quotas with autonomy to perform at their own discretion.
- Encourages positive reinforcement to provide frontline feedback.
- New coachable events for less punitive approach and greater opportunity to mitigate violations.

Accurate Compliance Data Output

- Process standardization creates accurate and actionable data output.
- Data is tracked monthly.
- OTIP Compliance Committee meets regularly to review data and discuss opportunities for improvement.



Clear Standards: Operating Rules and Compliance

★ The Rules Compliance uses feedback and data to identify issues with rules interpretation or application.

Dir. Operating Rules Compliance

- Manages **OTIP**.
- Works with **Rules Oversight** to ensure tests and inspections are in line with current rules and adjust if necessary.
- Works with **Safety** to understand violations and incidents that may warrant changes to compliance testing.
- Works with **Training** and **Rules Oversight** to ensure training incorporates compliance needs.

Compliance Examiners – Dept. Specific

- Serve as **field liaison** for clarifications related to OTIP.
- Perform **Tests and Inspections**.
- Analyze compliance against OTIP procedures performed by Testing Officers and **provide feedback** related to issues or opportunities for clarification or modification with compliance procedures.

Compliance Data to Drive Improvements

OTIP Data
*Audits Linked to
Rules*

Safety Data
*Incidents, Accidents,
Violations,
Investigations*

**Training
Modifications**

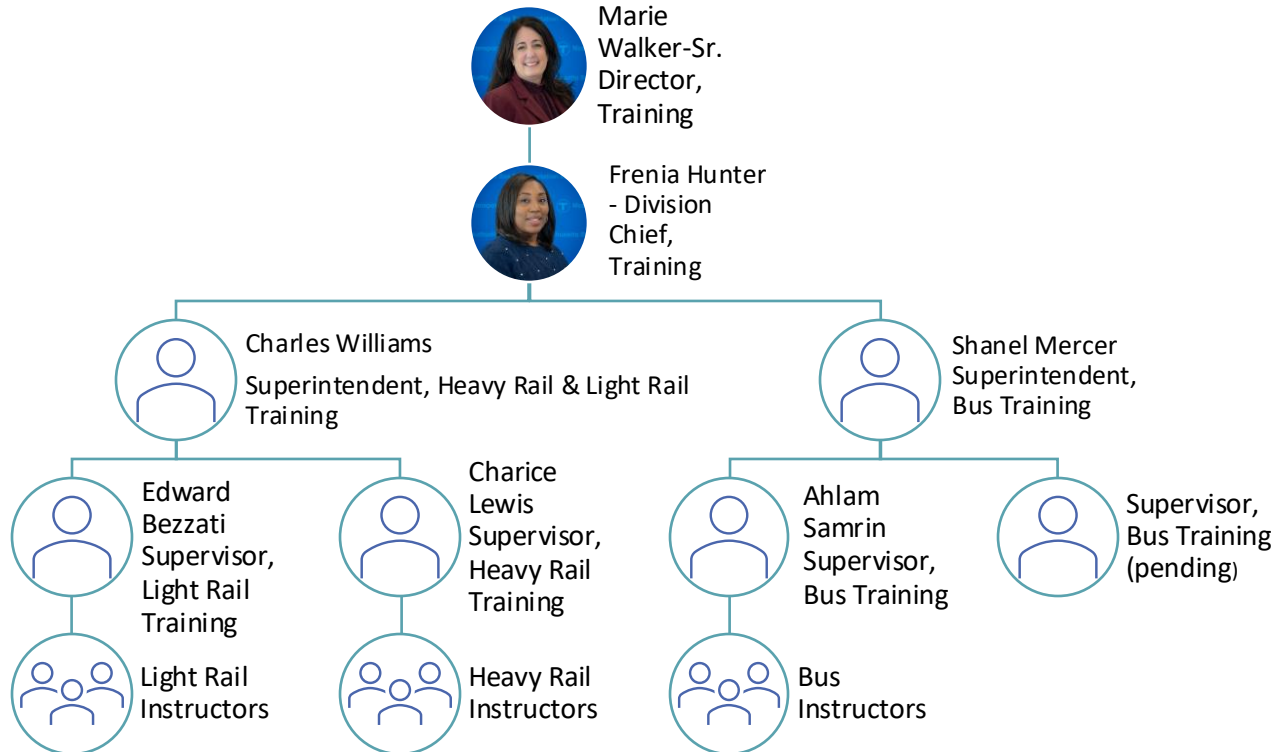
**Rule
Modifications**



Innovative Training & Development: Operations Training Department

Creating Operations training programs and experiences that build sustainable employee competence and continuously improve performance.

Department Structure



Operations Training Overview

- Heavy Rail, Light Rail, and Bus Training Schools train frontline new hires.
- Training also manages transportation role-based promotional certifications, recertifications, and specialized certifications (e.g., ROW).
- Collaborates with other departments (e.g., OCC, Engineering & Maintenance) on role-based trainings as required.

Innovative Training & Development: OCC External Dispatcher Hiring

★ MBTA opened Heavy Rail Dispatcher position to external candidates for the first time in September 2024.

Background

- Historically, Heavy Rail Dispatchers were required to have 3+ years of MBTA Motorperson experience.
- Candidate pool overlapped with Heavy Rail positions, resulting in limited pipeline and inability to release Dispatchers that had been promoted in a timely manner.

External Posting Preparation

- Culmination of nearly 2 years of efforts to ensure we could expand Dispatcher applicant pool without sacrificing safety.
- Posting includes preferred experience in transit, transit dispatch, or other industry dispatch.
- New Heavy Rail Foundations Training developed to kick off 20-week external Dispatcher training program and introduce trainees to MBTA heavy rail environment.
- Supporting initiatives included improved OCC training program, dedicated OCC instructors, and increased Supervisory capacity.

External Dispatcher Hiring Status

- Winter Cohort: 8 in training
- Summer Cohort: 6 scheduled
- Fall Cohort: posting forthcoming

Current trainees' experience includes air traffic control, police dispatch, railroad dispatch, and Navy regional emergency response dispatch.



Innovative Training & Development: Training Modernization

Updating curriculums and providing training development for the Instructors that teach them.



Curriculum Modernization

Establishing **frameworks, blueprints, and formats** for all Operations training to ensure trainings are defined, structured, and repeatable.

Completed

- ✓ Internal Dispatcher
- ✓ External Dispatcher-*new*

Up Next

- ☐ HR, LR, Bus Technical
- ☐ RWP
- ☐ Recertifications

Instructor Excellence

Training hosted an Instructor Excellence Workshop this winter to deepen Instructors' understanding of **adult learning techniques** and provide **training development**.

- ✓ **91 Instructors Participated**

Based on positive feedback, Training is planning another workshop in the future.



Instructor Excellence Workshop



Innovative Training & Development: Frontline-Manager Field Interactions

Providing new opportunities for positive, proactive, and frequent touchpoints between frontline staff and management.

New Program - Bus Operator Coaching

Operators receive **constructive feedback in a non-punitive context** from Supervisors on scheduled trips. Supervisors gain **insight into Operators' daily experiences**.

- **Data-driven selection:** tenure, collision incidents, harsh events in past 3 months.
- **Feedback on:** service quality, passenger interactions, potential safety hazards.

- ✓ Started as LSS Green Belt project.
- ✓ Southampton pilot.
- ✓ **System-wide in February;** 17 sessions per week.



New Classification - Rail Field Supervisors

Field Supervisors increase frontline **communication and engagement**, partner to identify and **resolve service and safety issues**, and conduct **compliance audits** (among other duties).

- Open to **experienced employees** in Inspector, Instructor, or Yardmaster classifications.

- ✓ Hired **5 Light Rail Field Supervisors** this Winter.
- ✓ Hiring for first **Heavy Rail Field Supervisors** later this year.



A New Way of Doing Business: Delivering Meaningful Results

Investing in the workforce and increasing efficiencies will continue to yield substantial benefits to riders.

Heavy Rail & Light Rail

- ✓ Increase in actual average weekday trips across all lines from Jan. '24 to Jan. '25 (Heavy Rail: 29%, Light Rail 15%).

Bus

- ✓ Significant service updates to six bus routes and introduction of four new frequent bus routes.
- ✓ Increased the active Bus Operator headcount by 200.

Commuter Rail

- ✓ Accessibility improvements (e.g., Beverly Depot, Wellesley Square).
- ✓ Approval to bring battery-electric train service to Fairmount Commuter Rail Line.

Ferry

- ✓ Separating Quincy and Winthrop services and pulling in Lynn service.
- ✓ Fleet expansion.

The RIDE

- ✓ Increased on-time performance from a low of 85% in 2023 to 93% in Dec. '24.
- ✓ Transportation Management Software award to “Spare.”



Celebrating Massachusetts: Independence and Innovations

MBTA joins in the Massachusetts 250 celebration of the 250th Anniversary of the Revolutionary War.



The MBTA is proud play a role in connecting Commonwealth residents and visitors to **MA250** events, exhibits, special tours, programs, and festivals across the state throughout 2025-2026.

