



**Massachusetts Bay
Transportation Authority**

Maintenance of Way

MOW Department

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Douglas Connett, Chief of Infrastructure

MBTA Maintenance of Way Department

Douglas Connett - Chief - Introduction

John (Jody) Ray – Senior Director - Introduction



MBTA Maintenance of Way Department

294 Current Employees (281 Active)

Budgeted 2024 Positions = 372



162 miles of active track

Over 600 switches



MBTA Maintenance of Way Department

- Provide Safe Service
 - ❖ Multilayer inspection Process- Personnel / Technology
 - ❖ Prioritization of Non-Conformities
 - ❖ Wrench Time – Scheduling Planning
- Ensure Safety of workforce
 - ❖ Roadway Worker – Industry Best Practices
 - ❖ Development – Training Mentoring
 - ❖ Best Practices – Means and Methodologies, Tools and Equipment
- Partnership with Safety
 - ❖ MBTA Safety, MassDOT Safety, FTA, DPU, Unions
 - ❖ Continuous Improvement



KEY AREAS IDENTIFIED FOR ENHANCEMENT

Resources

Attract strong leadership, achieve required staffing, procure equipment, tools and technology to effectively maintain the infrastructure

Training

Benchmark current training curriculum; update initial track inspection training program; establish recertification and field assessments for track inspection roles

Standards & SOPs

Review and update track standards, maintenance practices and SOPs to ensure industry best practices are being employed

Quality

Ensure consistent quality and accountability at all levels of Maintenance of Way

Work Management

Develop tools to effectively plan and execute maintenance and capital trackwork and track progress versus schedule.

- *Through the development of the Strategic Plan and recent evaluations, gaps were identified in MOW Division resources, training, track standards and SOPs, quality, and work management practices.*



MBTA Maintenance of Way Department

- **Building on Current Initiatives and Activities**
 - ❖ Enhanced inspection training
 - ❖ Work Planning and Management
 - ❖ Key Performance indicator Dash Boards
 - ❖ Equipment and Support Vehicles
 - ❖ Asset Management Program
 - ❖ Electronic Devices (Pads, Phones)
 - ❖ Compliance Accountability
- **Utilize Reports and Data – Streamline Decision Making**
 - ❖ Internal and External Reports



MBTA Maintenance of Way Department

- **Enhance and Improve**
- Access to Right of Way
 - ❖ Material Lay down and Equipment Set on Areas
 - ❖ Siding Yard Storage Capacities
- **Technologies**
 - ❖ Right of Way Tie Scanning
 - ❖ Right of Way Thermal Imaging – Power Delivery System
 - ❖ Right of Way Rail Eddy Imaging – Head Running Rail
 - ❖ Right of Way System Video – Data and permanent Record
 - ❖ Equipment Cameras – Safe Operation Equipment
 - ❖ Shunting Systems – Indication Protection
 - ❖ Small Tool Battery Systems – Safe Efficient



MBTA Maintenance of Way Department

- **Enhance and Improve - Short Term - Long Term**
 - ❖ Third rail cover and gauge
 - ❖ Materials – Adhesion pads, Composite IJs, Concrete/Composite/FFU ties
- **Heavy Equipment – Short Term - Long Term**
 - ❖ Outside Equipment Availability
 - ❖ Tampers
 - ❖ Rail Cars
 - ❖ Flats Skid mounting equipment
 - ❖ Vacuums
 - ❖ Tie Inserters



MBTA Maintenance of Way Department

- **Opportunities**
 - ❖ **Piggybacking**
 - ❖ **Perform other maintenance activities**
 - ❖ **Improved scopes of Work - Include Cleaning Spare Rails Future Needs**
 - ❖ **Increase Renewal Opportunities**
 - ❖ **Adopt new standards and Designs**
 - ❖ **Bundle Programs – Signal, Station other work**
 - ❖ **Create and expand Programs – Thermite, Component Replacement**
 - ❖ **Systematic approach to Inspections Programs – Reduce impact increase efficiency**



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❖ Questions

