



**Massachusetts Bay
Transportation Authority**

ROW Access Considerations Overview

Agenda

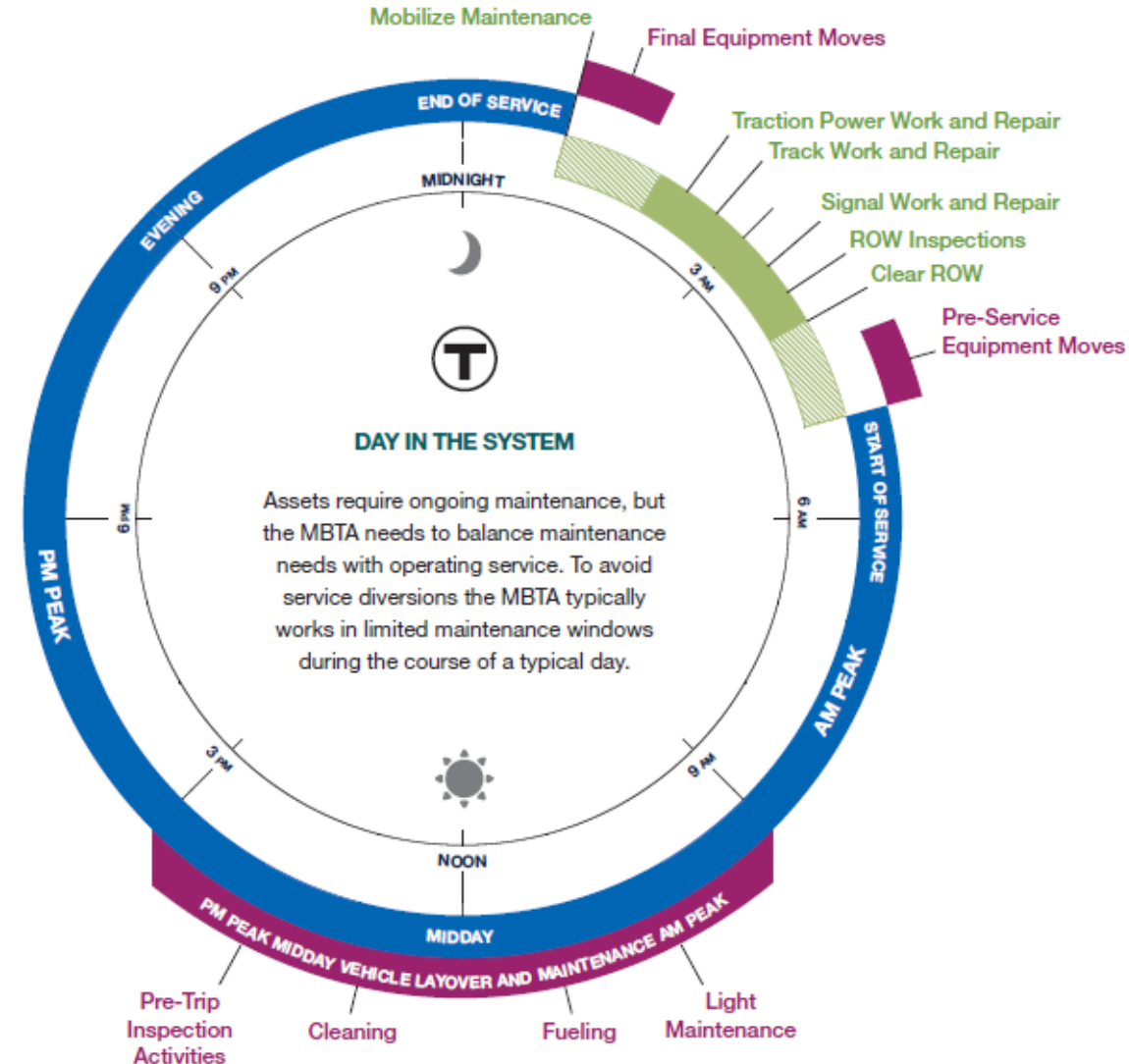
- Overview of MBTA operations
- Types of ROW Access
- ROW Access Request Process
- Day Order Access
- Night Order Access
- Diversion Access



MBTA Operations – Right of Way Access

Many maintenance and construction activities require right of way (ROW) access to be successful. However, daily operations leaves limited time for daily access. The following factors are primary considerations for types of access needed:

- Scope of Work (time required, ability to return infrastructure to service)
- Level of protection required (power on/off, flag persons, safe work site considerations)
- Resources required (MBTA operations support)
- Customer Impact



Types of ROW Access

There are 4 primary types of ROW access:

ROW Access Type	Definition	Considerations
Diversion	An interruption to regular revenue service or yard operations to enable maintenance or capital work to occur.	<ul style="list-style-type: none">• Customer disruption• Cost (alternative service, communications, etc.)• Duration and Limits
Piggyback Work	Gaining access to the ROW during a diversion owned by another entity.	<ul style="list-style-type: none">• Must align with existing scheduled diversions• Limited work scopes/areas depending on diversion owner
Day Order (Revenue)	Gaining access to the ROW during revenue service hours (generally 5AM – 1AM)	<ul style="list-style-type: none">• Work must be safely performed while trains are running
Night Order (Non-Revenue)	Gaining access to the ROW overnight after revenue service has ended (generally 1AM – 5AM)	<ul style="list-style-type: none">• Limited time due to service hours• Infrastructure must be returned to service daily• Limited support resources due to operating needs



ROW Access Request Process

ROW Access types have different timelines and requesting processed depending on level of effort, resource availability, and coordination.

Diversion (exc. Commuter Rail)	Piggyback	Day Orders	Night Orders
<ul style="list-style-type: none">• Diversion request must be approved by Diversion Approval Board• Approval deadlines a minimum of 6 weeks in advance of work start for most diversions, over 10 weeks for surges, 2 weeks for storage tracks and limited Yard outages.• Significant coordination and planning required up to 4-6 months in advance.	<ul style="list-style-type: none">• Request must align with diversion owner scope• Deadlines 1-2 weeks in advance of work start• Dependent on primary diversion work	<ul style="list-style-type: none">• Work site hazard assessment must be completed prior to submitting a request• Request must be submitted 5 days in advance of work start• Subject to resource availability	<ul style="list-style-type: none">• Work site hazard assessment must be completed prior to submitting a request• Request must be submitted 5 days in advance of work start• Subject to resource availability



Day Order Access



• **Work Hours**

Values are representative for illustrative purposes only, and service time and work time will vary based on the project.

Day order access is appropriate for capital or maintenance work occurring in stations or adjacent to the ROW that does not interfere with service.

- Scope must not interfere with service or customer access to stations, platforms, etc. (inspections, facility maintenance, access to electrical comm rooms, etc.)
- Work site hazard assessment must be completed to determine appropriate protections for work site.
- Resource Constrained: resources are generally available, but are not guaranteed
 - Requires MBTA power, track, signal, and equipment operators to facilitate work
 - Subject to MBTA ROW access rules and procedures



Night Order Access



Values are representative for illustrative purposes only, and service time and work time will vary based on the project.

Night order access is appropriate for capital or maintenance work that requires access to the MBTA tracks, but allows for all infrastructure to be returned to service daily.

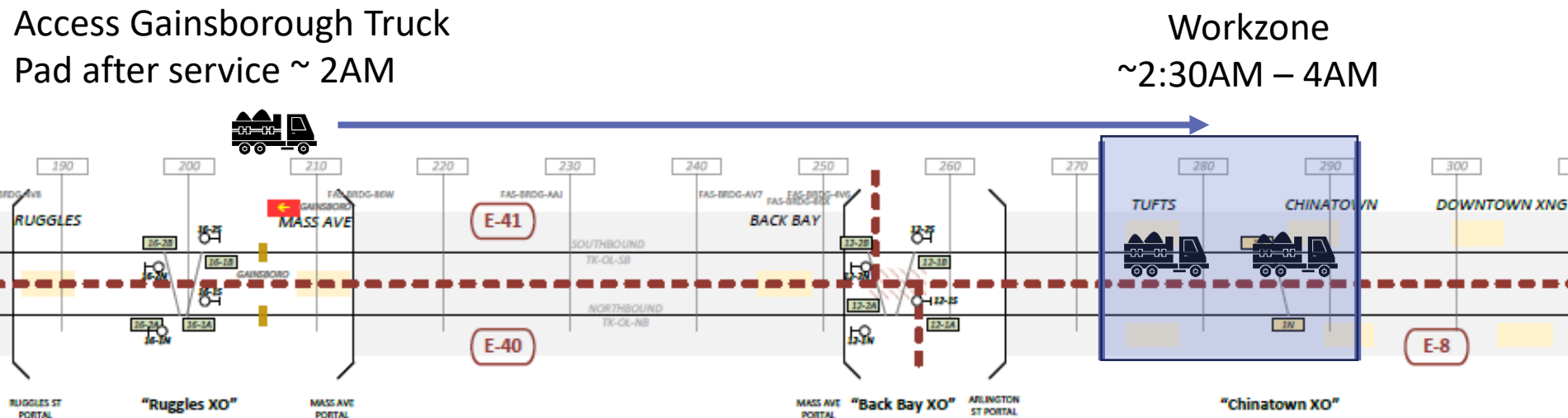
- Limited work time (~2 hours per night)
- Limited access points for hi-rail equipment (truck pad locations)
- Resource Constrained: unlikely to be provided long duration of consecutive nights due to competing resource needs
 - Requires MBTA power, track, signal, and equipment operators to facilitate work
 - Subject to MBTA ROW access rules and procedures



Night Order Scenario

Scenario: Contractor with **two hi-rail vehicles** to perform track work between **Tufts Medical Center Station** and **Chinatown Station**

1. ROW Access Request Form submitted (at least 5 days in advance)
 - MBTA resources requested: 2 Motorpersons, ~10 power linepersons, 2 flagpersons
2. Deconflicting conversations occur based on resource availability, location-based conflicts, etc.
 - Work is given a preliminary scheduled date (it may take several ROW Access Request Form submissions to receive approval)
3. Resources are hired and assigned
4. Work is executed



Diversions: Programmatic Structure

Diversion Planning

- Starts 4-6 months from the anticipated diversion work start date.
- Kick-off: consultation with RDPI. Purpose: preparation and finalization of a diversion request. End: Approval by the Diversion Approval Board. For Surges: Approval by the GM.
- **Key Teams: RDPI, E&M, Construction Logistics, Alternative Service, Customer Comms, Rail Ops**

Diversion Readiness

- Starts 4 weeks from the anticipated diversion work start date.
- Kick-off: approved DAB request. Purpose: readiness to start the diversion work. End: Implementation of the Special Order(s).
- **Key Teams: RDPI, E&M, Construction Logistics, Alternative Service, Customer Comms, Rails Ops.**

Diversion Execution

- Starts with the implementation of Special Order(s).
- Kick-off: diversion start. Purpose: completion of work. End: Cancellation of the Special Order(s).
- **Key Teams: Construction Logistics, E&M, Select Third Parties (Construction Crews, Contracted Bus)**

Diversion Evaluation

- Starts with the cancellation of Special Order(s).
- Kick-off: diversion end. Purpose: continuous improvement and lessons learned from each diversion.
- **Key Teams: RDPI, OPMI, Operations Lean Team**



Diversions: Planning and Readiness

Diversion Types

Common Diversions:

- Early Access (typically starts at 20:30-21:00)
 - Weekend
- Yard Only (inc. Storage Track/Siding)
 - Station By-Pass.

Rare Diversions:

- Surge
- Weekday
- 3rd Party Training
- Emergency Training Drill

Key Diversion Planning and Readiness Teams*

RDPI:

- Understanding the work requirements, work scope, and work location
 - Prioritizing other diversions and outages
- Coordinating with the relevant internal and external stakeholders to ensure diversion success (inc. approvals)

Construction Logistics:

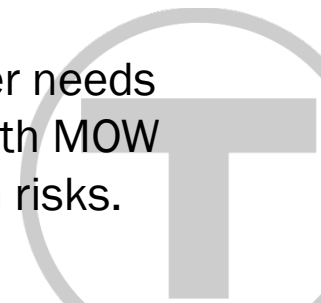
- Key SME on diversion feasibility and configuration
- Lead on any subsequent piggybacking activities

Alternative Service Planning:

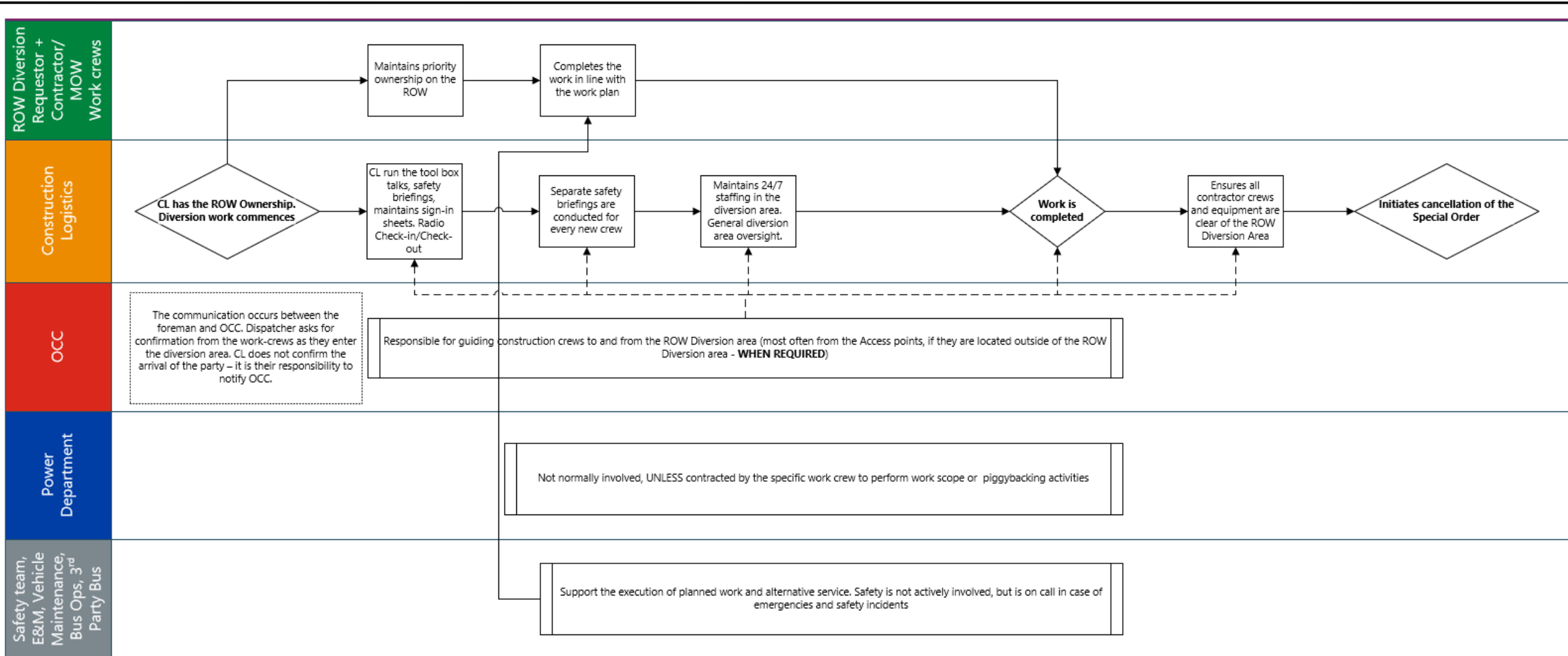
- Planning shuttle route and estimating vehicle resources
 - Enhancing existing fixed route service
- Hiring private contracted shuttle buses and accessibility vans

Engineering and Maintenance:

- Understanding and evaluating the power needs (procedures + linemen), coordination with MOW
 - Highlighting any resource or execution risks.



Diversions: Execution



Example: Alternative Service Planning for a Diversion

Outage: RL May
Surge Dates: 5/2-10
Location: Andrew



Requests:

- Outbound shuttle requires curb space on Dorchester Ave between Humboldt Place and Dexter St
 - All 2 hr. parking spaces from 549 Dot Ave to Humboldt Pl to be used, no metered spaces
- Blue Bike station (553 Dot Ave) to be relocated
 - A police detail at the Andrew Station busway will help facilitate inbound shuttles making a left turn on to Dorchester Avenue from the busway
- MBTA requesting TPD detail from 5/2 to 5/10
- Requesting City of Boston post no parking signage on 4/30 and remove signage on 5/11
- Requesting Boston permanently relocate Blue Bike station

