

Massachusetts Bay Transportation Authority

Warehousing and Logistics Update

Fiscal and Management Control Board

March 25, 2019



OVERVIEW

- MANCON has successfully opened new warehouse in Stoughton and closed MBTA warehouses in Everett and Charlestown

- Bus/Rail maintenance is better with:
 - ❖ **98.9%** overnight part delivery
 - ❖ 2 hour emergency parts delivery 24x7x365
 - ❖ 89.4% accurate inventory

- Better performance than legacy system at lower cost

- When contractual KPIs are missed, penalties are assessed



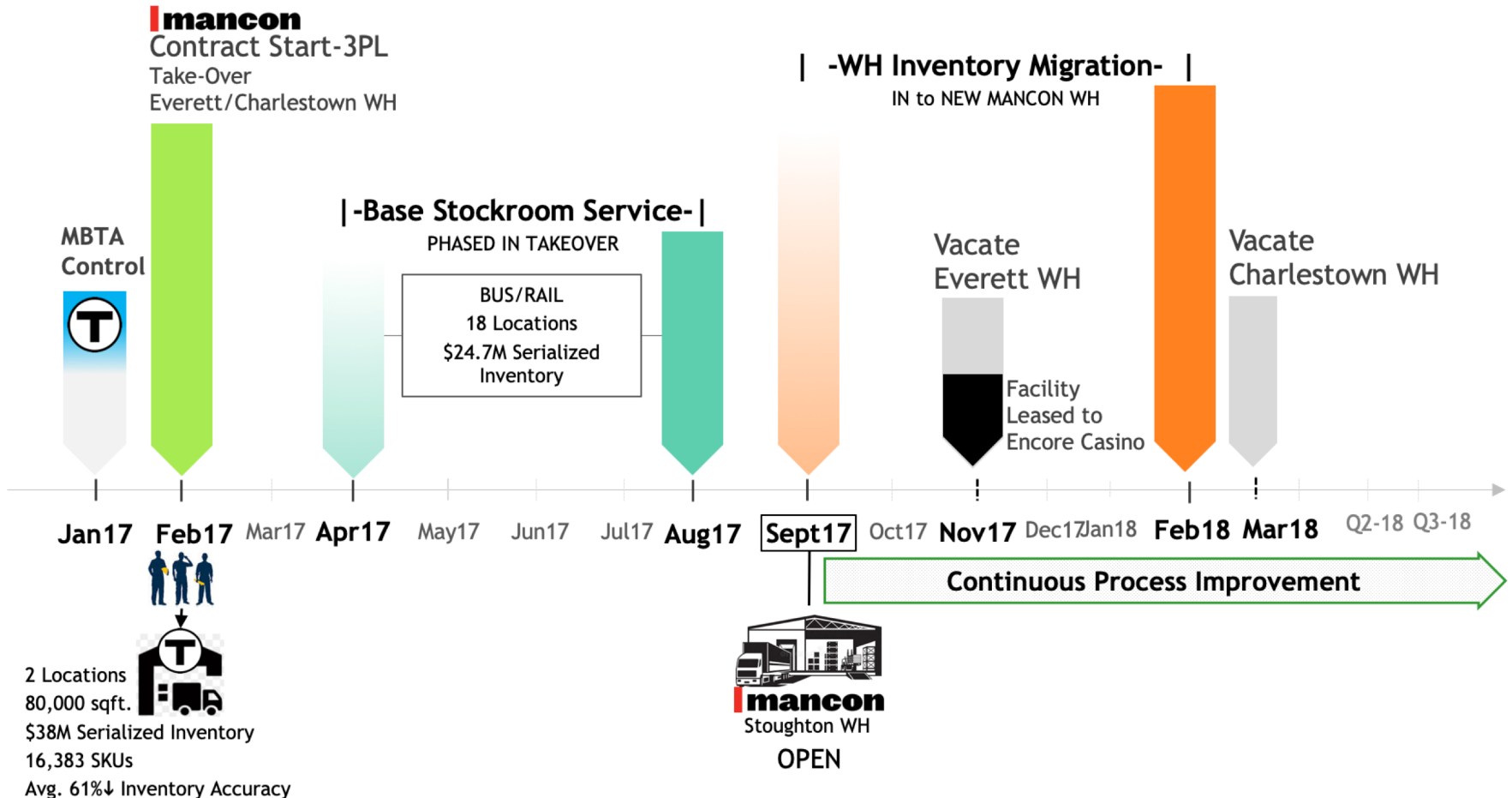
CONTRACT OVERVIEW

Service Provided:	Warehousing & Logistics of MBTA <u>Inventoried</u> (i.e. serialized) material as well as Spare Parts	
Scope:	<ul style="list-style-type: none"> 1 Main Warehouse ("Stoughton") 24x7x365 18 Base Locations/Stockrooms (Bus/Rail/E&M) <ul style="list-style-type: none"> ❖ Material Planner coverage @ Base Locations are staffed per MBTA requirements/business needs Emergency Delivery: 24x7x365 	
Contract Term:	Initial:	5 year [Feb2017-Jan2022]
	Options:	2 x 2 year [Feb2022-Jan2026]
	Total Term:	9 Year
Termination clause:	MBTA reserves the right to Terminate for Convenience - 30 day notice	

NOTE: Contractor is **NOT** responsible for **Purchasing MBTA Parts, Owning MBTA Parts** or **Controlling Inventory Levels**. Also, the RFP and subsequent award for Base Location Stockroom Material Planner coverage (staffing) does not require 24x7x365 coverage at any location.



WAREHOUSE & LOGISTICS – ONBOARDING TIMELINE

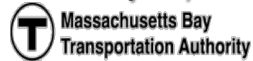




Warehousing and Logistics Improvements over MBTA Legacy Operations cont.

Everett Warehouse

February 1, 2017



Stoughton Warehouse

March 20, 2019



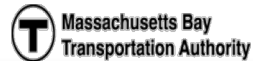
Notable Procedure Changes

- ✓ Improved Receiving, Inspection and staging processes
- ✓ Implemented LEAN 5S methodologies
- ✓ Standardized Material Distribution to Base Locations



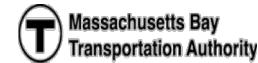
Warehousing and Logistics Improvements over MBTA Legacy Operations

Where we WERE - 2017



- Inaccurate Inventory (**61%↓**)
 - *Severe lack of Process and Procedures*
- Slow Parts delivery: **68+ hours**
- No ownership of Obsolete Inventory
- Main Warehouse Coverage: **8 hours x 5 days**
- Poor Warehouse Organization
- Little to No Consistent Reporting
- 2hr Emergency Deliveries not supported

Where we ARE - 2019



mancon

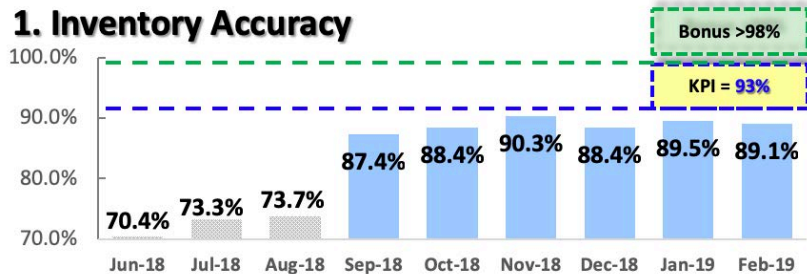
- + Inventory Accuracy: Q4 2018 avg **89.4%↑**
 - *Consistent Daily Cycle-Count Program*
- + Parts delivery: Q4 2018 avg **98.9%↑ overnight**
- + Improved Obsolete Identification & Disposition Plan
 - *\$3.2M dispositioned CY2018*
- + Main Warehouse Coverage: **24x7x365**
- + Improved Warehouse Organization / LEAN 5S
- + Greatly Enhanced Reporting Capability
 - *Weekly Supply Chain Review*
- + 2hr Emergency Deliveries: **24x7x365**



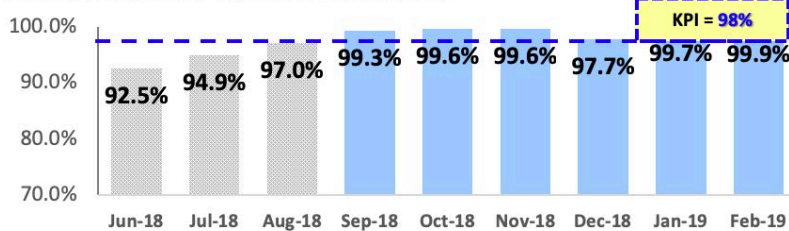
Contractual KPI Performance Measurement and Accountability

KPI PERFORMANCE

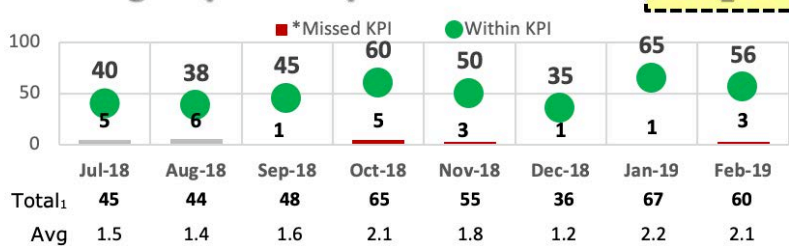
1. Inventory Accuracy



2. Scheduled Parts Deliveries



3. Emergency Delivery



BACKGROUND

3 Contractual KPIs

Performance expectations critical to maintaining an accurate inventory and timely delivery of parts.

Definition

- Inventory Accuracy:** system of record vs. physical inventory counts.
- Scheduled Deliveries:** parts requested today must be delivered overnight and received in system of record by 10am ("Pick to Receipt")
- Emergency Delivery:** urgent parts requests delivered within 2 hours of receiving request

Vendor Performance Management

- Measured on a monthly basis and submitted to vendor via Performance Dashboard & official Notification Letter
- Quarterly Business Reviews are consistently held with contractor Leadership and internal stakeholders
- Significant performance improvement month over month within all three measurements
- Penalties have been assessed for missing KPI Targets

¹Total Deliveries include Vendor disputed deliveries where Vendor missed the 2hr window however, the MBTA accepted the reason for the late delivery

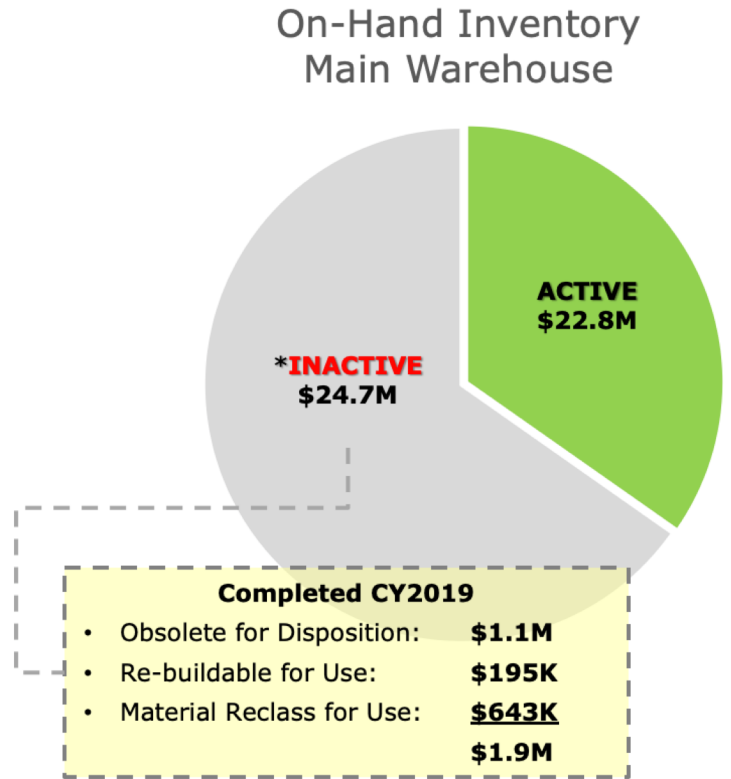
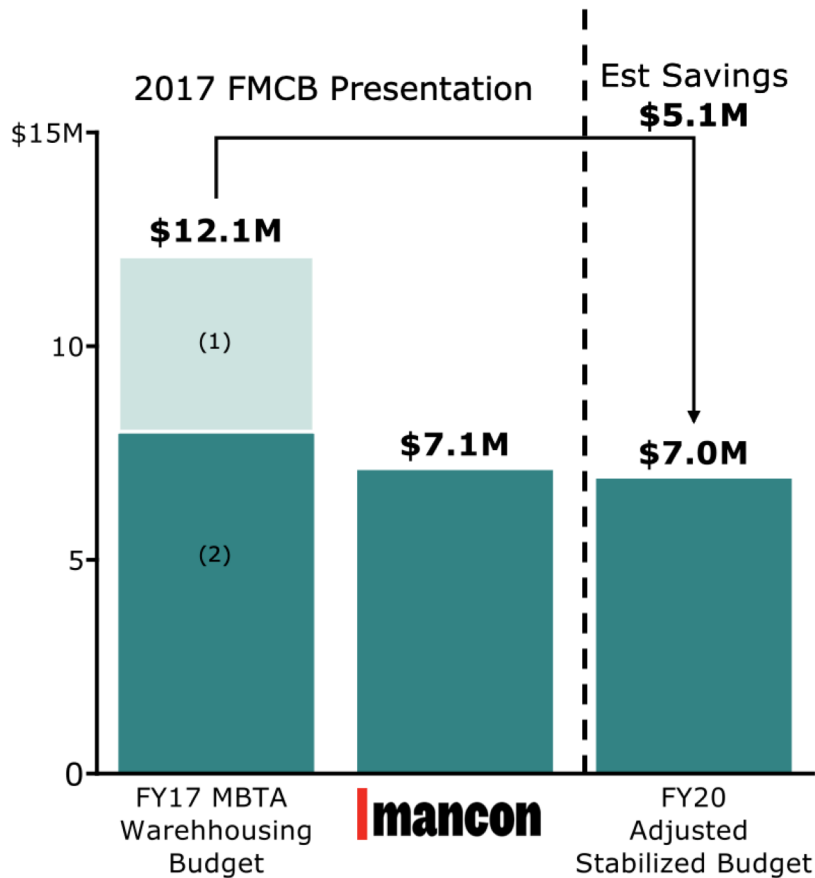
*deliveries where the 2hr window was missed and disputes were not accepted



Financials

Warehousing & Logistics Operating

INVENTORY



*Material with No-Use >24 Months

(1) \$4.1M in calculated cost pertaining to: Retiree Healthcare, Pension Cost and Mechanic Productivity [as presented to the FMCB in January 2017]
 (2) FY17 budget includes executive and management costs, utilities, supplies, services, materials



Continue to drive operational insight and process improvements through Data Analytics

1. Maintain Minimum /Maximum Inventory Levels at Garages
2. Continuously improve the obsolescence process with Operations and Procurement input
3. Develop processes surrounding fleet material management throughout lifecycle of Assets
4. Develop analytical reviews of backordered material for better Inventory planning
5. Improve internal MBTA processes at Base Locations to eliminate potential for “workarounds”
6. Implement new Stockroom Security upgrades to ensure personnel follow processes for material acquisition