



Transit Asset Management Best Practices Inventory and Conditional Assessment

CTA – Fall Conference
November 16, 2016

Goals & Objectives

- Educate ourselves
 - FTA TAM Requirements
- How does LBT meet the TAM requirements?
 - LBT - Asset Management 101 – Creating a Baseline
- Steps for an Agency to meet FTA requirements?
 - TAM Plan
 - Initial TAM Targets

FTA Rule – TAM Plan Elements

1. Inventory of Capital Assets
 2. Condition Assessment
 3. Decision Support Tools
 4. Investment Prioritization
-

All Providers

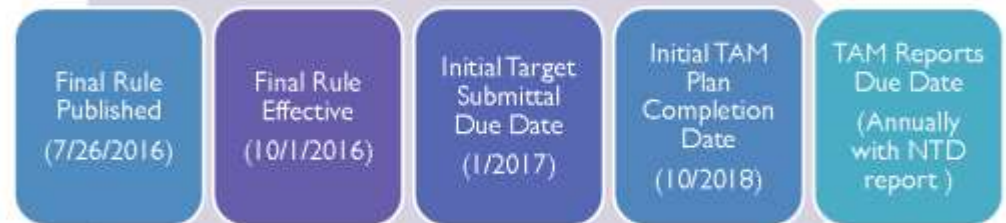
5. TAM and SGR Policy
6. Implementation Strategy
7. List of Key Annual Activities
8. Identification of Resources
9. Evaluation Plan

Tier 1 Providers Only

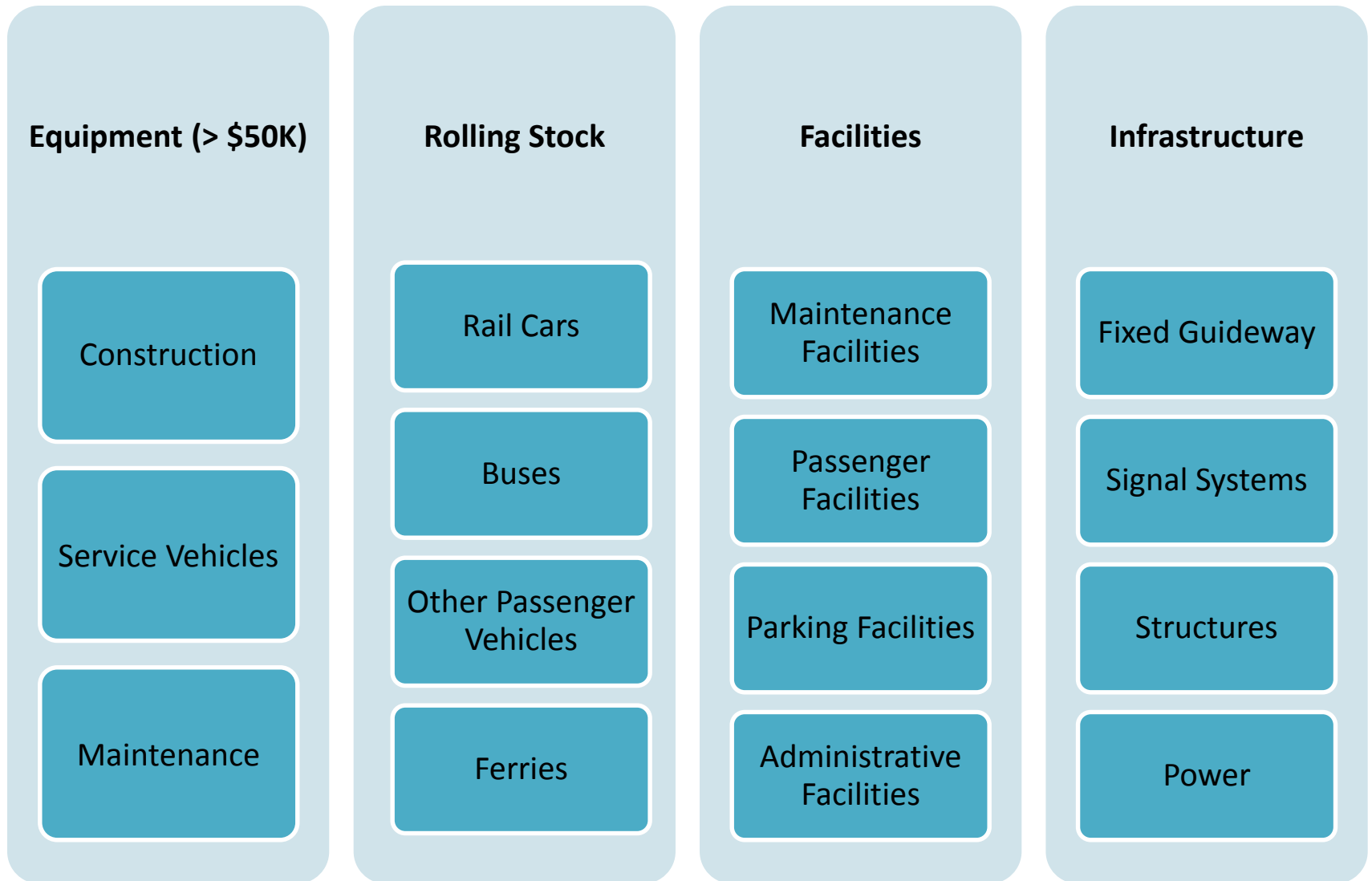
Rail
Or
>= 101 Vehicles

TAM Time Frame

- Plans would be updated in their entirety at least every 4 years
 - Coincide with relevant (Statewide) Transportation Improvement Program
 - Cover at least 4 years
 - Should be amended during the horizon period when there is a significant change
- Initial Targets – have not established reporting system – may just send to MPO (January 2017)
- Initial TAM Plans completed no later than 2 years after effective date (October 2018)
- TAM Reports to NTD – date undetermined



1. Inventory – FTA Asset Class Hierarchy



1. Inventory - LBT Asset Class Hierarchy

Equipment (> \$50K)

Non-Revenue
Service Vehicles

Maintenance
Equipment
(Bus Wash, Lifts, etc...)

Bldg Equipment /
Systems
(HVAC, Electrical, &
Plumbing)

Bus Technology
(Farebox, APC, Video
Surveillance)

Rolling Stock

Buses
(Active Revenue,
Contingency, Charter)

Paratransit

Ferries

Facilities

LBT1

LBT2

TVIC

Stations
(EGI -Transit Gallery,
Wardlow, Del Amo,
Artesia)

Other Bus Stops
(per FTA excludes
shelters)

~~Infrastructure~~

LBT Asset:

1. >\$10k
2. Requires PM
3. Critical to Ops

1. Inventory of Capital Assets

- Rolling Stock (Buses, Paratransit, Ferries)
 - Fleet is listed as revenue / non-revenue
 - Each Series of buses are in an EGI (2200s, 1600s)
- Facilities – Properties and Bus Stops
 - Each property is listed (LBT1, LBT2, TVIC)
 - Within property – Bldg/Site; Area; Rooms
 - Bus Stops – listed individually with 5 Sub-assets fitted
 - Sub Components – Shelters, Lighting, Artwork, Transmart, Kiosk
 - Stop Amenities – benches, signage, bike rack, etc...
 - Transit Gallery – need to setup as an EGI/Productive Unit
 - Have ADA, landscaping, and artwork plans attached
- Facilities Equipment
 - Each piece of facilities equipment is an asset and fitted to bldg., area, or room within spreadsheet – need to reconcile in Ellipse
 - Systems are coded by Component Code (Electrical, Plumbing etc...)
 - Service Vehicles are part of RS, but listed as non-revenue

Asset Information – contained in Ellipse



Asset Class
(hierarchy, groups,
sub-component)



Assessment
(condition, risk,
likelihood of
failure)

Equipment Description
(equip no, location,
status, owner,)

Name-Plate
(make, model,
statistics, serial #s
etc...)



Age
(date of install, estimated
useful life, warranty)



2. Condition Assessment objectives

- Periodic ‘snapshot’ of asset condition (e.g., Visible Defects, Component Deterioration)
- Asset Condition – age of asset relative to its design life & risk to organization
 - Residual life – time to next “intervention” grouped A – D (10yrs+, 5-10, 1-5, & <1)
 - Residual Risk (functional concerns) / criticality code
 - Condition Code (periodic snapshot)
- Measured against condition improvement benchmarks & help create a plan of rehab/replacement

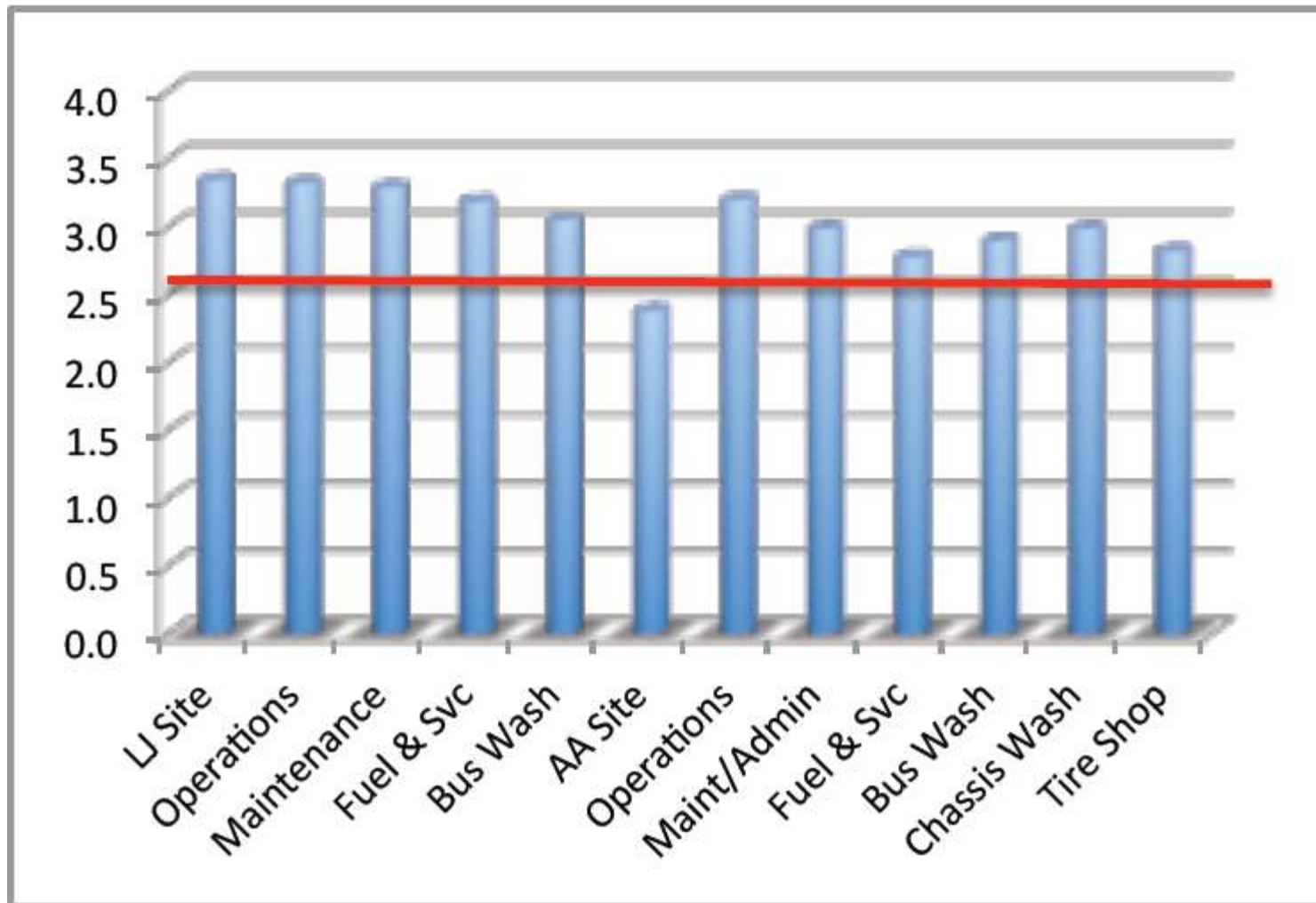
How can you get a Condition Assessment

- LBT Hired Jorgenson Associates for Facility Inventory and Condition Assessment
 - Inventory (asset info, hierarchy, install date, useful life, replacement value)
 - Criticality / Condition Assessment recorded
 - Engineering drawings, vendor data & asset related documents readily available
- LBT places in spec of buses – for OEM to do condition assessment of buses in end of year 1 and 3
- LBT hired Fuel Solutions to do condition assessment of CNG station after four years of operation
- LBT developing Tool to do regular condition assessment of facilities and bus stops

2. LBT Asset Condition

- Buses – do not have a defined method, but can easily do as part of PM and create a score
 - Service Vehicles – have life, can also follow scoring
 - Bus Equipment / Technology – would need to create
- Facilities & Facility Equipment – completed in 2014
 - Condition Composite Score of 3.2 (needs to exceed 2.5)
 - Facility Condition Index of 7.8%, (“Fair”), Deferred Maintenance /Current Replacement Value (less than 10%)
 - Current O&M, Projects, and Capital Funding at $\approx 1.4\%$ of CRV will not keep up with funding need – Shortfall is Approximately \$33.0 MM @ Year 7 Planning Horizon
- Stops
 - Condition Composite score can be calculated

LBT SGR Evaluation – Facilities (2014)



Calculated using the TERM model; Asset Age, Asset Condition, Asset Performance and level of Maintenance using condition level 1 to 5

Implementing TAM at BBB

- Get a solid understanding of TAM
 - Go to FTA website – look at webcasts
 - Read the FTA guideline
 - Talk to others (agencies, vendors etc...)
- Educate your Agency
 - Present to your executive committee
 - Present to your subordinate team
- Baseline – document what you do today and how does it fit the TAM requirement
 - What are you missing?
 - What is critical?
- Develop a Plan with Targets



Thank You!

*Ready for Asset Management
at the Big Blue Bus*



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