FTA STATE OF GOOD REPAIR ANNUAL ROUNDTABLE

Organizational Needs and Building Management Support for Asset Management Initiative

July 2012

Metropolitan Transit Authority of Harris County, Texas

Set the table

Organizational awareness

Gather support

Realize the value

New METRO Going Places

An Action Plan

Definition

- "state of good repair standard is when all capital assets are functioning at their ideal capacity and are within their design life"….

An Action Plan

How to Get to a State of Good Repair

1. Asset management;
2. Maintaining an agency's rolling stock and infrastructure as needed to meet a certain level of service);
3. Performing maintenance, repair, rehabilitation and renewal according to agency policy (e.g., replacing buses according to a set time interval);
4. Reducing or eliminating an agency's backlog of unmet capital needs; and
5. Establishing a life-cycle policy for system preservation, including maintenance, repair, rehabilitation, renewal and replacement activities, and modeling the application of the policy on physical assets.

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Starting at Top

- It is extremely important that you get "Executive Management" buy-in from the beginning.
- Must educate the Board !
- State the case !

Business Benefits

Reasons for Improving Asset Management

- FTA estimates that the U.S. transit agencies would need $78 billion to achieve a state-of-good repair
- Investment has been focused on expansion: 20 new light-, heavy-, and commuter-rail lines since 2000
- Investment decisions based on limited data/short-term focus
- Funding shortages/uncertainty encourage deferred maintenance
- Lack of integrated systems that support the strategic management of assets

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Asset Assessment Program

You can't manage assets unless you know what you've got and what condition they are in……

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Define "Asset Management"

- Transit Asset Management
  - A strategic and systematic process through which an organization procures, operates, maintains, rehabilitates, and replaces transit assets
  - To manage their performance, risks, and costs over their life cycle to provide cost-effective, reliable, and safe service to current and future customers

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Asset Management Core Concepts

Enterprise Management

- Refers to corporate management processes, activities and decisions that occur at the highest level of an organization and apply across all departments and business or service lines

Level of Service

- Defined service quality that the organization is expected to deliver and be measured against. Service levels usually relate to quality, quantity, reliability, responsiveness, sustainability, and cost. Applies at the enterprise (or corporate) level and for asset classes (e.g., buses and elevators).

Lifecycle Management

- The process of managing and maximizing the performance of an asset while minimizing its costs and risks throughout the course of its lifecycle

Performance Management

- The process of linking strategies, plans, operations, and budgets to critical business metrics of cost, reliability and safety

Customer-Centric Management

- Management approach that aligns performance with the customer experience to drive business success. This aligns enterprise management with customer-driven level of service metrics, such as on-time performance, convenience, vehicle cleanliness among others

Asset Management Framework Business Processes

Strategy & Implementation

Policy

- Outlines the scope & principles of AM
- Incorporates federal, state, local, industry, and agency AM goals and policies

Strategy

- Provides approach to addressing policy
- Includes goals, objectives, and performance expectations of AM

Business Planning

- Provides approach to addressing strategy
- Outlines AM roles & responsibilities, implementation approach, resources, & timeline

Cross-Asset

Capital Planning & Programming

- Optimizes how & when capital funds are expended
- Incorporates agency goals and assets' lifecycle management plans

O&M Budgeting

- Considers trade-offs between capital investments and deferred maintenance

Scenario Evaluation & Management

- Informs decision-making through forecasting tools and reliable asset cost and condition data

Asset Class-Specific Planning & Management

Inventory

- Provides repository for all asset data in an agreed-upon asset hierarchy that supports the AM strategy
- Requires established process for maintaining data

Condition Assessment & Performance Monitoring

- Outlines condition inspection and measurement approach for all asset classes
- Provides the link between asset condition & performance

Condition Assessment & Performance Monitoring

- Development of asset class-specific lifecycle management plans that consider maintenance, rehabilitation, disposal, etc..
- Ensure an asset's performance is maximized throughout its life while minimizing costs and risks

Policies & Procedures

- Asset Management touches nearly every major department within a transit agency.
- It is essential that policies and procedures (that support Agency business practices) be put in place <u>prior to implementation</u> and then tested against the operating system.

Policies & Procedures

- Must have agency-wide buy-in to comprehensive asset management policies and procedures.
- Policies and procedures must require full use of the Asset Management System.
- The system must be able meet the requirements of all stakeholders in order to ensure compliance.

Strong Core Team

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Develop a Plan

- Reflects a comprehensive understanding of the system and its condition, and the strategic direction of the system and agency;
- Supports the enhancement of the transit service to your customers while maintaining the overall condition of the basic infrastructure;
- Prioritizes expenditures so that there is a maximum return on investment; and
- Supports the transition of our system from one in a start up mode, to one in a renewal mode.

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Involve End-Users!

- **Establish a EAM Core Project Team"** with representatives from all functional, operational and other defined areas along with fleet maintenance operation. The core group will have the authority to make appropriate decisions regarding the implementation. The EAM Core Team will have complete knowledge (or the authority to solicit appropriate expertise from within your organization), and familiarity with your organization's operations and objectives. The role of the **EAM Core Project Team** is to communicate your organizations requirements to the Contractor, review proposed solutions, provide preliminary feedback for acceptance criteria, and establish project standards and controls. The participation and availability of the **"EAM Core Team"** is crucial to the overall success of the project.

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Tasks to be Accomplished

- Migrate all assets into one Trapeze-EAM database
- Identify and implement a strategy for continuing progress throughout your agency
  - By developing comprehensive asset data policies and procedures

Tasks to be Accomplished

- Revise current (or develop new) asset and project reports
  - Based on the requirements of Executive Management, Capital Programs, Department of Finance, Procurement & Contract Management, Risk Management, Facilities Maintenance, Bus and Rail Operations, and the needs of other departments and internal entities.
- Conduct a statistical sampling of assets for review
  - To confirm the asset attributes (estimated useful life (EUL), original cost, in-service date, priority/lifecycle and condition), assigned by agency staff.

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METRO'S Vision for Asset Management and SOGR

Implement a single METRO-wide system for condition-based asset replacement, using a consistent set of prioritization criteria.

Solid, accurate database

Provide a continuing flow of information for establishing the priority of capital initiatives properly aligned with METRO's Strategic Priorities.

Process for Asset Management Plan (AMP) to feed Capital Improvement Plan (CIP)

Establish a systematic program to prioritize and identify projects in the long-range Capital Improvement & Recapitalization Plan.

AMP → CIP

CIP decision-making tools

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