Watch Your Assets: Enterprise Asset Management for Facilities Professionals

MSBO Annual Conference, April 2024

Tim Ammon, Zonar Systems

Schools are a collection of assets

- Buildings
  - HVAC systems
  - Desks
  - Supplies
  - Electrical systems
  - Plumbing systems
  - Flooring
  - Cafeteria systems
  - Metal detectors
- Grounds
  - Athletic facilities
  - Roadways/access points
  - Parking facilities
  - Mowers
  - Construction equipment

- Transportation
  - Buses
  - Repair parts
  - Maintenance facilities
  - Safety vests/car seats
  - Fuel and fuel systems
  - Box trucks/pickups/sedans
- Technology
  - Computers
  - Software
  - Access points
  - Routers
  - Cables
  - Cameras

What is Enterprise Asset Management (EAM)?

- Evolution of inspection and maintenance-based management of assets that previously dominated
- Focused on assessing the ownership and maintenance of *all* physical and technical resources within an organization
- Lifecycle focused; maximize availability and minimize total cost of ownership
- Creates a strong connection between maintenance of systems and operating requirements that drive system requirements
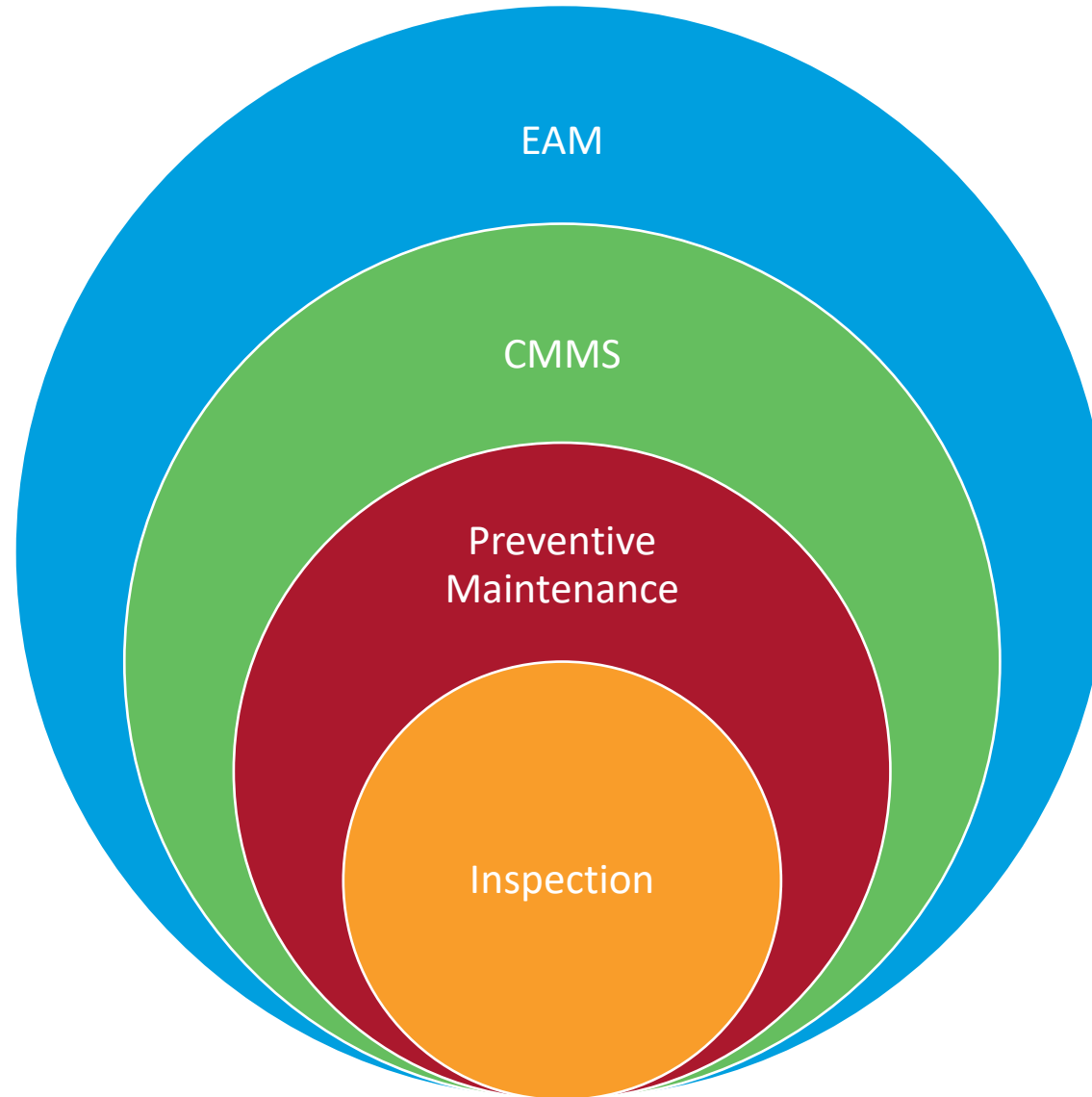
The Goals of EAM

Improved Administration

Increased Productivity

EAM

Reduced Total Cost of Ownership

Reduced Risk Exposure
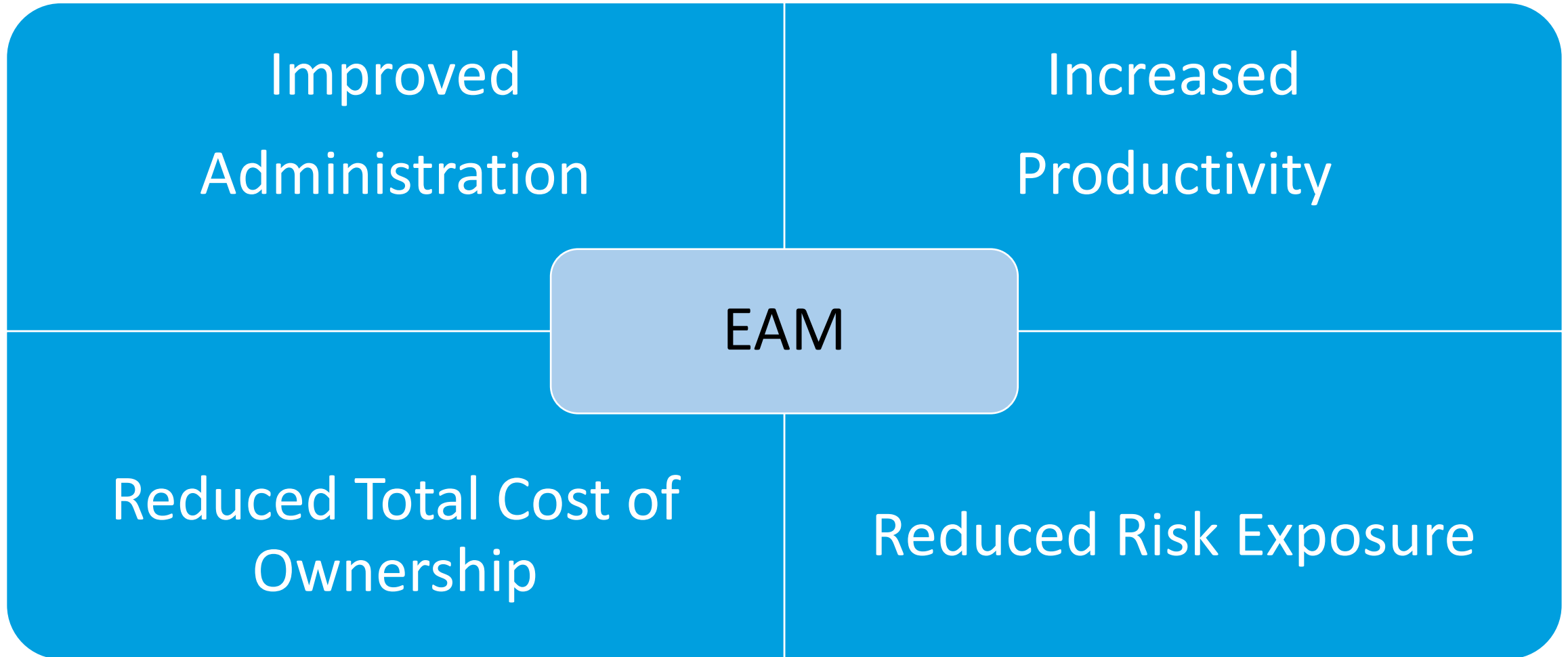
Why is EAM Useful for Facilities and Operations Managers?

- Centralize information on all assets of each type
- Manage aging assets and infrastructure
- Consolidate operational applications
- Monitor asset use/compare across locations
- Improve asset utilization/reduce life-cycle costs
- Increase staff productivity and skill development
- Support capital budget planning and operational budget development
- Reduce risk and compliance concerns

The Differences Between EAM and CMMS

Transitioning from CMMS to EAM

Scope Analysis

- What do you need the system to do
- Who needs to access the information (internal and external)
- How will you use the information?
- Who will manage the system?
- How will you pay for it?

Requirements Analysis

- Identify existing system strengths, weaknesses and integration capabilities.
- Identify the functional requirements in each functional area.
- Create scoring rubrics for functionality and cost that are comparable across solicitations?

Usability Analysis

- Assess UI, UX across stakeholders.
- Evaluate integrations across existing systems.
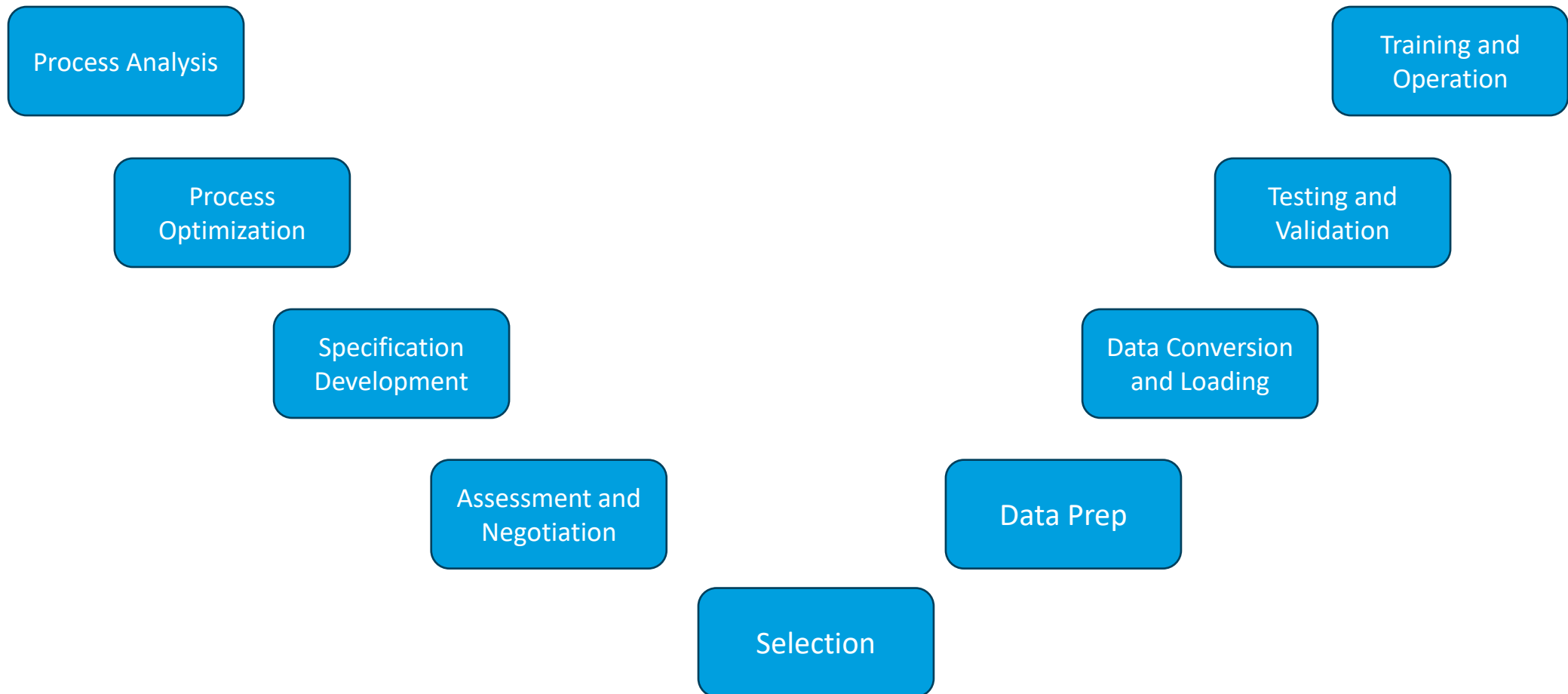- Evaluate reporting, data extract, and visualization capabilities.

A Collection of Planets in an EAM Universe
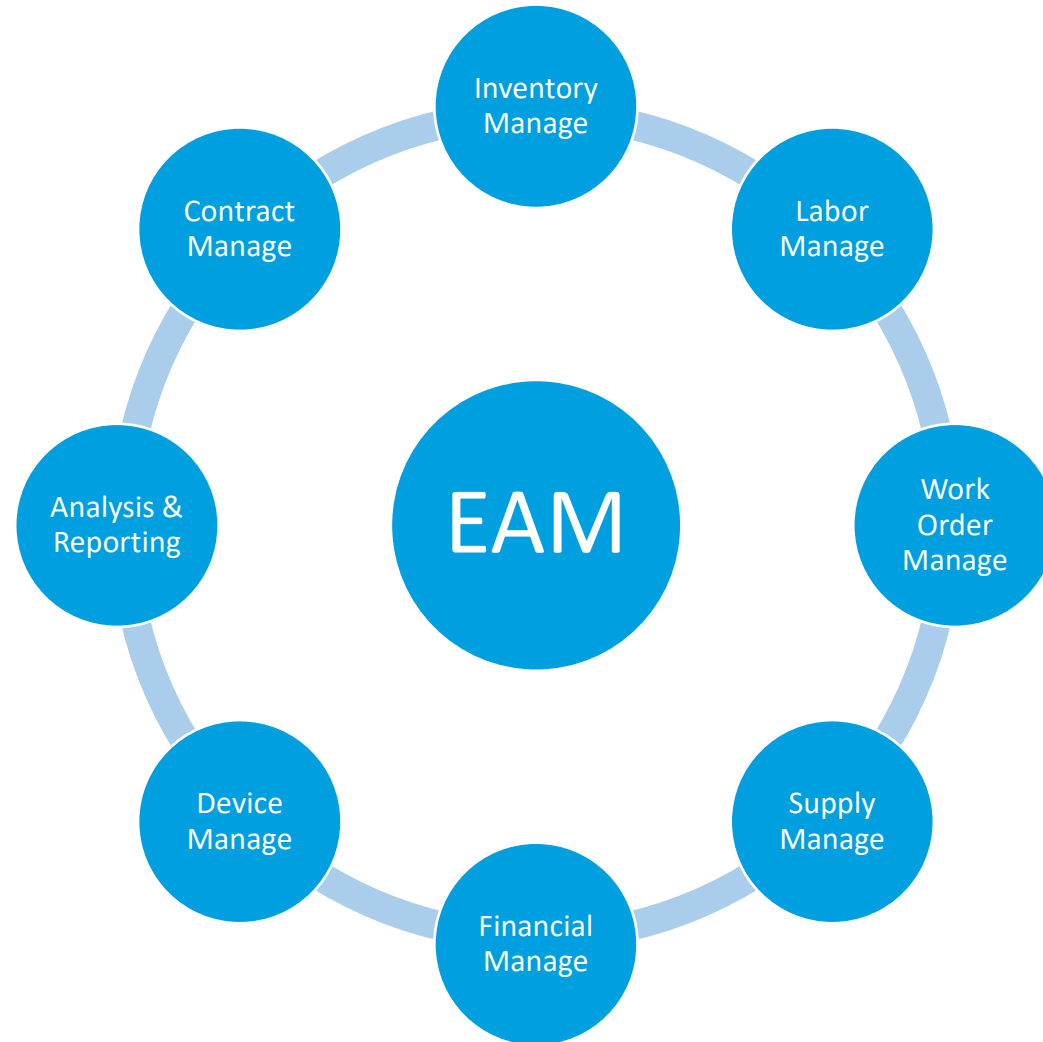
How to Successfully Navigate to Using EAM

V-Modeling for Implementation

Process Analysis

Process Optimization

Specification Development

Assessment and Negotiation

Selection

Data Prep

Data Conversion and Loading

Testing and Validation

Training and Operation

A Possible Way of Measuring Success

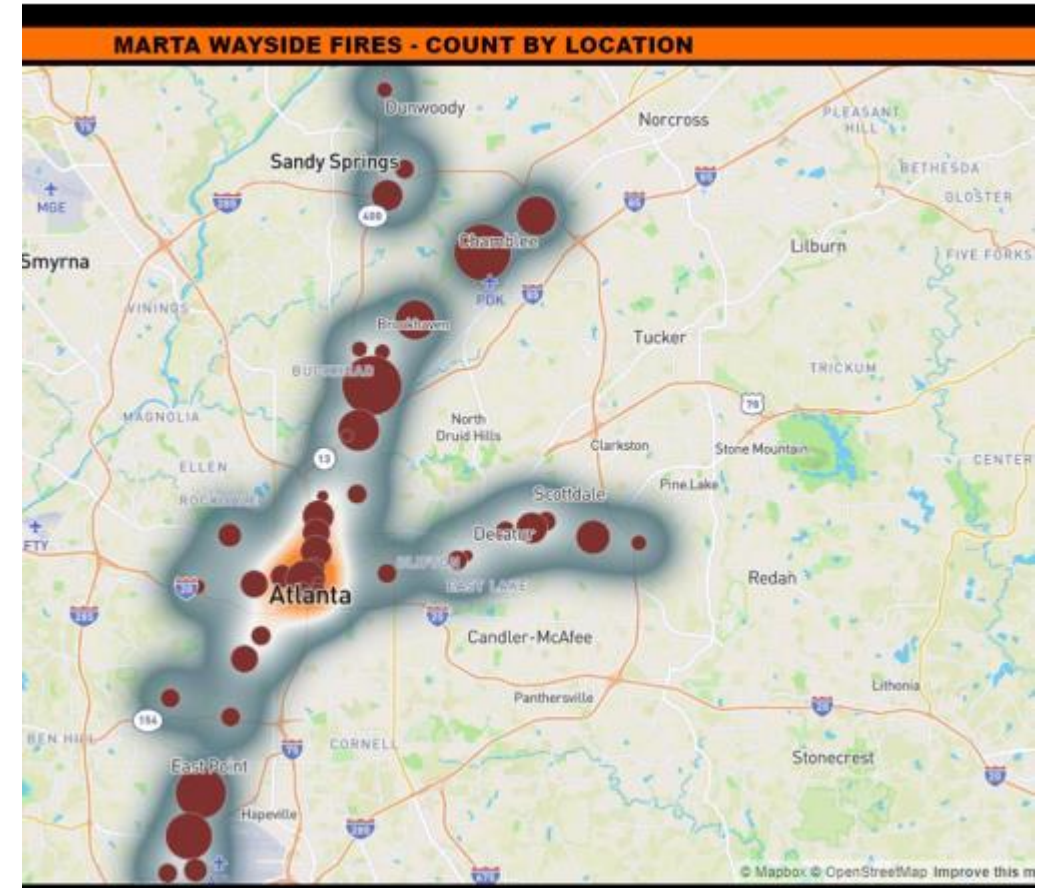| Financial	Customer/Stakeholder
• Cost per unit (students/building/equipment/etc.) • Capital replacement backlog • Inventory usage/levels • Personnel cost proportions	• Inbound repair requests • Average turnaround time by repair type • Time to notice of completion • Satisfaction rating
Processes	**People**
• Mean time to repair • Mean time between failure • Preventive maintenance compliance • Planned vs. Unplanned maintenance events • Maintenance event backlog	• Labor productivity (how many hours) • Labor efficiency (how many useful hours) • Absenteeism • Vacancies (unavailable capacity) • Supervisory ratios

MARTA Wayside Fires: A Case Study for EAM

A Case Study in EAM

- Trash in and around MARTA stations was causing a significant number of fires resulting in delays and unsafe conditions
- Requirements analysis indicated a need for a more comprehensive approach to litter management
- Required equipment inventories, financial analysis, contract analysis and revisions to operating practices
- A major new process effort was focused on expanded and verified inspections of wayside sites

MARTA WAYSIDE FIRES - COUNT BY LOCATION

Integrating multiple systems through inspections


```
                OTHER
Zone 5: CONCOURSE
        Components:
                DE-LITER
                SWEEP STEPS
                REMOVE TRASH
                CLEAN TRASH CAN
                REMOVE SPILL SPO.
                GUM/GRAFFITI
                REMOVE STICKERS
                MOP NEAR BASE WALL
                MOP BY TRASH CAN
                INCOMPLETE TASK
                OTHER
Zone 6: BUS LOOP
        Components:
                DE-LITER
                SWEEP STEPS
                REMOVE TRASH
                CLEAN TRASH CAN
                REMOVE SPILL SPOT
                GUM/GRAFFITI
                REMOVE STICKERS
                MOP NEAR BASE WALL
                MOP BY TRASH CAN
                INCOMPLETE TASK
                OTHER
```

Questions?

ZONAR®

Key Considerations for EAM Success

- Define your capabilities to address scope and timing options

- Define capabilities of existing systems to determine gaps of data and functionality

- Recognize the key differences between CMMS and EAM

- Create a scoring structure that is comparable across options

- Focus on data consumption to back into integration and reporting requirements

Contact Information

Tim Ammon, General Manager

Zonar Systems

Email: tim.ammon@zonarsystems.com

Office: 206-774-1609
Cell: 856-952-0460

ZONAR®

Thank you.

ZONAR®