Enterprise Asset Management (EAM) Project

Presentation for

Public Works - E&CP/Project Implementation Division
May 20, 2015
Agenda

- The Infrastructure Problem
- Asset Management – The EAM Program
- The Software Solution/Tool – The EAM Project
  - Status
  - The Proposed EAM Software Solution
How Big is the Problem?
How Big is the Problem?

The City owns and maintains a large and complex network of infrastructure assets valued at over $9.7 billion.
How Big is the Problem?

Currently, many disparate and outdated departmental systems and no effective approach for managing these assets

Aging and deteriorating assets

Backlog of deferred maintenance and capital projects
How Big is the Problem?

The Multi-Year Capital Plan

<table>
<thead>
<tr>
<th>$ in millions</th>
<th>FY 2016</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Needs</td>
<td>$632.1</td>
<td>$805.8</td>
<td>$733.9</td>
<td>$808.9</td>
<td>$892.4</td>
<td>$3,873.1</td>
</tr>
<tr>
<td>Funding</td>
<td>425.3</td>
<td>528.7</td>
<td>359.0</td>
<td>348.8</td>
<td>501.9</td>
<td>2,163.8</td>
</tr>
<tr>
<td>Gap</td>
<td>$206.7</td>
<td>$277.1</td>
<td>$374.9</td>
<td>$460.1</td>
<td>$390.5</td>
<td>$1,709.3</td>
</tr>
</tbody>
</table>

The bottom line...

We need a strategy to effectively manage our infrastructure assets
What is Asset Management?

It is a best practice for managing infrastructure capital assets to minimize the total cost of owning and operating them while delivering the desired service levels.
What is Asset Management?

Provides a mechanism to answer critical questions

- What is the condition of our assets?
- What is the required sustainable level of service?
- Which assets are critical to sustained operations?
- What are our best maintenance and capital investment strategies?
- What is our best long-term funding strategy?
The EAM Program

EAM Program
(Office of the DCOO, Infra/Public Works)

- Condition Assessments
- Departmental AM Efforts
- AM Strategy, Policy, and Plans
- Other AM-related efforts (e.g., setting Service Level Standards)

EAM Project (Software Solution/Tool)
Why an Enterprise Asset Management (EAM) Solution/System?

A software tool is critical to implementing Asset Management, given the

- Large number of City assets
- Complex and significant amount of information that must be collected and analyzed
- Need to optimize the City’s limited funds
EAM - The Optimal Choice

The City chose to implement the SAP EAM solution because it

- Enables participating departments to integrate with existing SAP applications in the City
- Leverages existing investments in SAP
- Meets the City’s asset management capability needs
How are Other Governments and Utilities Managing Their Infrastructure Assets?

- Large U.S. cities have implemented/are implementing an EAM System (Phoenix, San Francisco, San Jose, Seattle)
- Other cities, utilities, and organizations in the San Diego region have implemented/are implementing an EAM System
How are Other Governments and Utilities Managing Their Infrastructure Assets?

- Sempra
- MTS
- Port Authority
- Chula Vista
- Coronado
- Poway
How will the EAM Solution address the City’s challenges?

- Street Sweeping
- Refuse Collection
- Water mains
- Pavement contracts
- Street Lights
- Pothole repair
- Storm Drain Maintenance
SAP EAM coordinates Work Processes, Planning, and Work Execution
The City’s EAM Project

• Citywide strategic initiative
• Core Team established
• SAP consultants on board early in project and provided preliminary recommendation for solution and scope
• Budget and schedule developed
• Working with City departments to develop an implementation strategy
# The City’s EAM Project

<table>
<thead>
<tr>
<th>Phase 1 – Participating Departments</th>
<th>Phase 1 – Impacted Departments</th>
<th>Future Phases</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Department of Information Technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Wireless Technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Public Utilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Public Works</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Facilities Division</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Publishing Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Transportation &amp; Storm Water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Environmental Services??</td>
<td>• Development Services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Financial Management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Office of the Comptroller</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Purchasing &amp; Contracting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Office of the Treasurer</td>
<td>Met with Staff</td>
</tr>
<tr>
<td></td>
<td><strong>Ongoing Coordination</strong></td>
<td>- Fire-Rescue (Equipment)</td>
</tr>
<tr>
<td></td>
<td>• Open Data</td>
<td>- Park &amp; Recreation</td>
</tr>
<tr>
<td></td>
<td>• GIS</td>
<td>Pending Meetings</td>
</tr>
<tr>
<td></td>
<td>• CRM/311 and Code Compliance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Docs Management</td>
<td>- Library</td>
</tr>
<tr>
<td></td>
<td>• Condition Assessments</td>
<td>- Police</td>
</tr>
<tr>
<td></td>
<td>• DSD PTS Replacement</td>
<td>- Public Works</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Fleet Services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Real Estate Assets</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Property Management</td>
</tr>
</tbody>
</table>
The SAP EAM Solution
Asset-Based Infrastructure Planning

- Asset Accounting
- Maintenance Management
- GIS
- Asset-Based Analysis, Planning, and Prioritization
- Budgeting
- Project Portfolio Management
- Projects

Requests for new infrastructure projects
+ Non-asset based project requests
Systems for Asset-Based Infrastructure Planning

- Finance - Asset Accounting
- Plant Maintenance (Core EAM Module)
- ArcGIS: Geographic Information System
- Riva AMP: Asset-based Analysis and Prioritization
- Portfolio and Project Management
- Public Budget Formulation
- Project Systems
- Primavera P6

Integration flows include:
- Project Requests for New Infrastructure + Non-asset based project requests
- Budgeting
- Maintenance Management

Attachment 1