Asset Management…
The Hard Way

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Clark County – Where?
Clark County – Who?

- Population of about 500,000
- Fifth most populated in WA
- Third most populated in Portland Metro Area
- 200,000 commuters - 30% to Oregon (2014 RTC Update)
Circumstances

- No Formal Asset Group
- We Moved Forward On Our Own (2016)
- Michelle and I (2017)
- Ind. Asset People
Our Struggles

- Tracking true costs of activities related to an asset
- Budget authority and where effort takes place
- Maintenance vs. capital improvement or preservation
- Data transfer
- Data storage
- New regulations
- Performance Measures/Level of Service
How Are We Managing Our Assets Today?

• Spreadsheets
• Internal Databases
• Maintenance Management Systems
• PAVER
• FASTER
• GIS – Geographic Information Systems
• Outside Agency Software, i.e. bridges in Bridgeworks, roads in Mobility, etc.

• All kinds of separate systems, organized in silos
• Finance
• Operations
• Maintenance
• Engineering
• Customer Service
## What We Have in GIS

<table>
<thead>
<tr>
<th>Project</th>
<th>Status</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guardrail</td>
<td>Active</td>
<td>Need to add new from 2018</td>
</tr>
<tr>
<td>Road Signs</td>
<td>Active</td>
<td>Up to Date</td>
</tr>
<tr>
<td>ADA Ramps</td>
<td>Active</td>
<td>Up to Date</td>
</tr>
<tr>
<td>Sidewalk Inventory/Defects</td>
<td>Active</td>
<td>Up to Date</td>
</tr>
<tr>
<td>Stormwater</td>
<td>Active</td>
<td>Up to Date</td>
</tr>
<tr>
<td>Traffic Counts</td>
<td>Active</td>
<td>Need to start creating seasonal tables</td>
</tr>
<tr>
<td>Pavement Legends</td>
<td>Active</td>
<td>Currently collecting condition</td>
</tr>
<tr>
<td>Striping Machine</td>
<td>Active</td>
<td>AVL data. More detail?</td>
</tr>
<tr>
<td>Button Machine</td>
<td>Active</td>
<td>AVL data</td>
</tr>
<tr>
<td>Sidewalk Ranking Program</td>
<td>Active</td>
<td>Used for first time</td>
</tr>
<tr>
<td>Culverts</td>
<td>In development</td>
<td>Urban up to date. Rural being added</td>
</tr>
<tr>
<td>Medians</td>
<td>In Process</td>
<td>Planted areas complete. Need to add concrete areas</td>
</tr>
<tr>
<td>Bridges</td>
<td>Active</td>
<td>Need to add additional info</td>
</tr>
<tr>
<td>Parks</td>
<td>Active</td>
<td>Need updated data</td>
</tr>
</tbody>
</table>
## New Projects in GIS

<table>
<thead>
<tr>
<th>Project</th>
<th>Status</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fences</td>
<td>New Project</td>
<td></td>
</tr>
<tr>
<td>Walls</td>
<td>New Project</td>
<td></td>
</tr>
<tr>
<td>Pedestrian Railings</td>
<td>New Project</td>
<td></td>
</tr>
<tr>
<td>Railroad</td>
<td>New Project</td>
<td></td>
</tr>
<tr>
<td>Camp Bonneville</td>
<td>New Project</td>
<td></td>
</tr>
<tr>
<td>Signals</td>
<td>New Project</td>
<td>In Development</td>
</tr>
<tr>
<td>Street Lighting</td>
<td>New Project</td>
<td>In Development</td>
</tr>
<tr>
<td>ITS</td>
<td>New Project</td>
<td></td>
</tr>
<tr>
<td>Environmental</td>
<td>New Project</td>
<td></td>
</tr>
<tr>
<td>Legacy Lands</td>
<td>New Project</td>
<td></td>
</tr>
</tbody>
</table>
Eight Elements of Asset Management

- Large initial investment
  - Field and office resource activity
  - Work must integrate through hardware/software systems

- Condition Assessment

- Inventory

- Usage Data

- Cost Data

- Payroll and/or cost accounting system

- Available Information
  - Primarily ADT, population info

- Performance Measures

- Risk Assessment

- Replacement Model

- Level of Service (LOS)

- Procedures, metrics, business rules housed in your manuals and CMMS system
Short Term Goals

- Evaluate organization goals and objectives
- Create a road map
- Best practices-learn from others
- Find resources
- Asset Management Plan
Long Term Goals

- Assets
- Data collection
- Data use
- Risk of failure
- Replacement costs
- Level-of-Service criteria
- Repair, Rehab, or Replace
- Records
Implementing Asset Management is 50% how to do it, and 50% getting people to do it.
Guidelines

- Asset Management Policy
- Communication Plan
- Roles and responsibilities
- Org. structure (How do we work across silos?)
- Executive support and sponsorship
- A clear, agreed upon work plan
- Develop early and often case studies of wins
- Use change management techniques
- Make this a priority and a managed program (staffed, resourced, funded)
Organizational Chart

- Asset Management
Workforce

• Current
  • 2 Part-time (about 10-20 hrs/wk)
  • 1 Full-time (40 hrs/wk)

• Future Need (5 yrs)
  • Who and how many TBD
Asset Management Software

“Enterprise Asset Management” Solutions

IBM maximo
CityWide Asset Manager
Accela
vueworks.
SAP
lucity
elements XS
Trimble
Open Spatial
SEAMS
Sunflower Systems Asset Management Solutions
PowerPlan
MAINTSTAR
Asset iWorks
Spatial Wave
DECISION LENS
CityView
assetic
esri
Cityworks
FUTURA SYSTEMS INC.
MAINTENANCE CONNECTION
DECISION LENS
Cartegraph
IDS
AMERESCO
MILSOFT Utility Solutions
CartoPac
DAXeam
SEDARU
copperleaf
Autodesk
INFRATRACK
Optimatics
PLAN SMARTER
Oracle
tyler technologies
NOBEL SYSTEMS
artera
VODA
IFS
Innovyze

Image by David Totman
Any Questions???