2016 State of the Infrastructure Report

May 3, 2016
City Council Workshop Presentation
Infrastructure outreach?

- **Central to Modern Life:** Public Works and the services they provide are fundamental to our modern life, health and safety.

- **Make the invisible, visible:** While we can see some surficial infrastructure, the majority of infrastructure that makes up these public works are largely invisible or not fully understood by the public.

- **Re-imagination and Renewal:** Raise public understanding and appreciation of public works and the efforts that are taking place to renew and reimagine the role of public works in daily life.
Agenda - Information

• System overview
• Concepts and trends
• 2015 accomplishments and 2016 initiatives
• Future Challenges
Where we’ve been

<table>
<thead>
<tr>
<th>What we said</th>
<th>What we did</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Planning for growth (2014 State of the Utilities)</td>
<td>• Identified funding, kickoff planning for sanitary and stormwater</td>
</tr>
<tr>
<td>• Integrated project decision making (2015 state of the streets)</td>
<td>• Finalized Living Streets policy and network plans, target highest priority</td>
</tr>
<tr>
<td>• Aging infrastructure, trend data, asset management approach (2015 state of</td>
<td>• Technology hardware investment, mobile applications, citizen request</td>
</tr>
<tr>
<td>the utilities)</td>
<td>application</td>
</tr>
</tbody>
</table>

System Overview

• Road miles
  163.46 local
  40.85 state aid
  22.69 trunk highway and county
  227 Total, 204.31 Subtotal local controlled

• 2015 Rehab miles (% of local system)
  8.47 reconstruct (4.1%)
  *4.05 overlay (2.0%)
  *4.49 sealcoat (2.2%)
  *7605 pothole repairs (37/mile)

* Revised from numbers presented in memo
System Overview

- System miles, (2015 additions, % growth)
  77.0 Sidewalk (3.0 new, 3.9%)
  37.0 Bike lane (0.5 new, 1.35%)
  162.5 Storm and sump drain (1.94 new, 1.2%)

- Utility miles (2015 rehab, % rehab)
  197.2 Sanitary (4.09, 2.1%)
  223.7 Water (1.38, 0.6%)
Concepts and Trends

CONCEPT - Constuction and Nth Cycle Replacement Costs (2015 Dollars & 5 Year CIP Interval)

- Build-out
- Infrastructure Dividends
- Commitment to Reinvest
- Maintenance Generation
Concepts and Trends

CONCEPT - Cohort Asset Value / Replacement Cycles

- C3 Cumulative Value
- C2 Cumulative Value
- C1 Cumulative Value
- C0 Cumulative Value

Graph showing cohort asset value over time.
Concepts and Trends
Concepts and Trends

• Aging infrastructure:
  Catching up on road rehab, new funding request for new pavement preventative maintenance
  Longer life span, replacement ramping up, combination of condition assessment and age proxy
• Demand growth with large lot commercial changing to mixed use
• Increased customer service expectation
  Living streets storm and multimodal, project communications
• Weather dependent industry
  In house water and sanitary trending down, irrigation trending up.
2015 Accomplishments

- Great weather year / catch up on projects delayed by 2014 flood work
- Residential redevelopment and right of way management permit reviews, inspection and enforcement
- Agency partnerships, cooperative agreements and grant funding
- Responsive customer service and communications to ease construction impacts
2015 Accomplishments

• Replaced 750 traffic signs
• Installed 2nd Art Wrap
• Repaired 54 water service leaks and 19 water main breaks
• Completed a full leak survey of the watermain system
2016 Initiatives

• Southdale Tower Rehab
• SCADA radio upgrades
• Complete generator RICE compliance retro fit of 6 generators on Xcel peak load control program
• Further our use of technology to increase efficiency and responsiveness of our parks and public works staff.
Future Challenges

• Street Maintenance
• Bridges
• GIS and Asset Management
• Living Street Implementation
Streets Deferred Maintenance

- Level of Service
- PCI Goal
- More Frequent Recons = More Assessments
Streets Deferred Maintenance

- Budget deficit for the maintenance program
  Discussion for local streets only
  In range of $200,000 to $300,000 per year

- Funding Options
  More general fund revenues
  Increasing franchise fees
  Street Improvement Districts (requires legislative action)
Bridge Maintenance & Recon

- Bridge ‘anything’ is expensive
- Multi-Modal options lacking with current layouts
- Create gaps in our systems – bike / ped
- Maintenance vs. reconstruction
- CIP projects
GIS and Asset Management

- GTG Study
- Currently small wins on the utility side
- Just touching the surface of what can be done

Rebecca Foster, Ross Bintner and Public Works
GIS and Asset Management

• Infrastructure dashboard – Current project
• CCTV – sanitary sewer inspection records – “hot spots”
• Data Quality – Challenges
  Building the tool – only as good as the data
  Collecting data and verifying data – staff & interns, limited
  Be the last to research an issue
  continuous improvement
Living Streets

• Represents an increase in service level
  Public Outreach – Arden, Morningside White Oaks, Birchcrest
• Multi-Modal Transportation Options
  Sidewalks
  Bike lanes
• Green infrastructure
  Storm water treatment
  Aesthetics
• Are we on track?

www.EdinaMN.gov
Living Streets - Challenges

• Increase in service level
• Modi-Modal transportation options
  Sidewalks – Plowing expectations
  Bike lanes – Pavement markings maintenance
• Green infrastructure
  Storm water treatment – Outside Rate Study
  Aesthetics (Landscaping) – Funding / Maintenance

• Are we on track considering maintenance?
Summary – Infrastructure

- Quality of Life, Health & Safety, and Transportation
- Edina is the city of choice.
- Sound public infrastructure
  With future challenges as system ages

Thank you for your time and input!