



Asset Management Program Overview

Engineering & Operations Committee
Item 6a
April 8, 2019

Asset Management Levels

“Asset management is a systematic process of developing, operating, maintaining, upgrading, and disposing of assets cost effectively”



Increasing Maturity

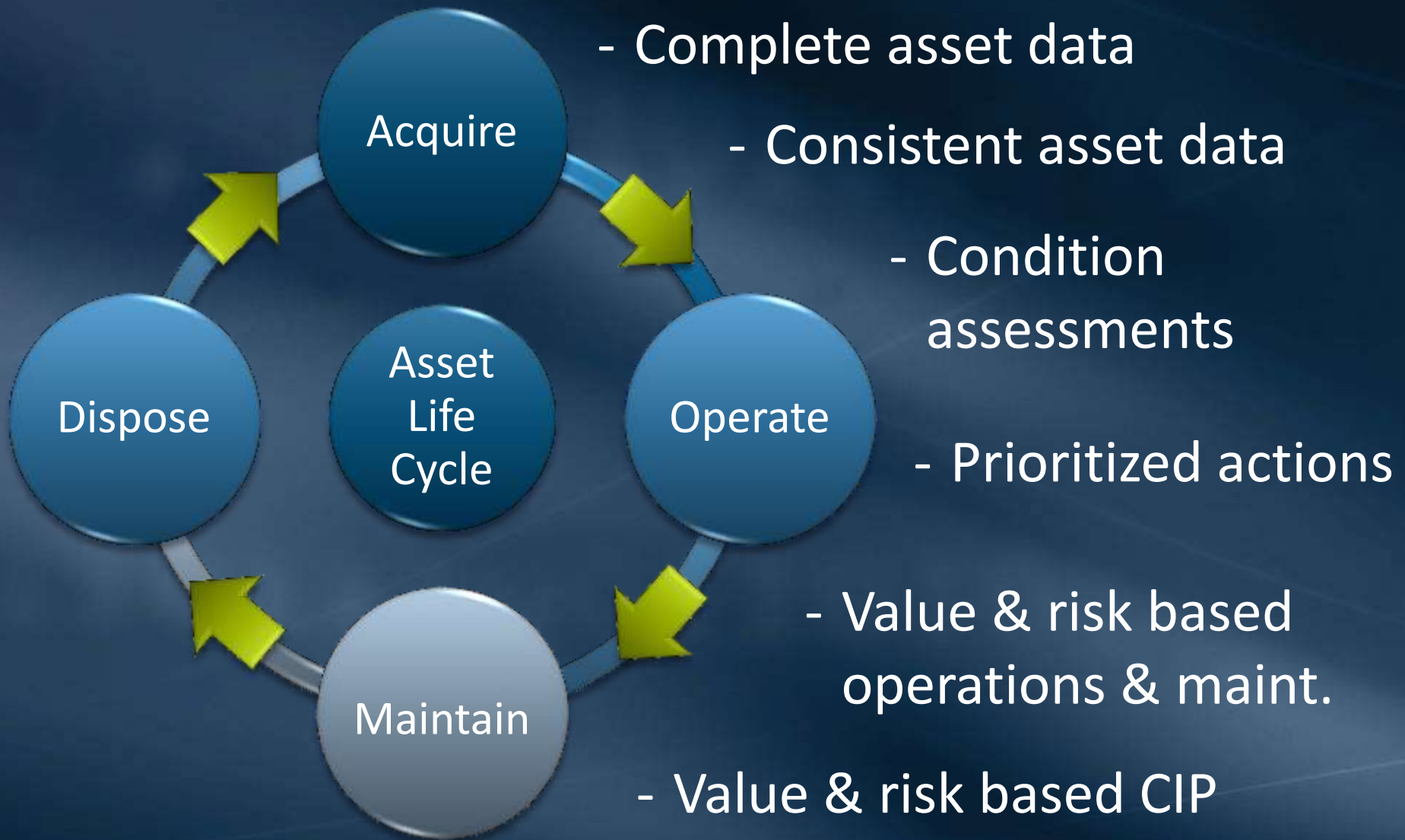
Replace or overhaul when it breaks

Evaluate replacement or overhaul options **based on value** when it breaks

Anticipate a replacement or overhaul **based on value and risk** using assessments, diagnostics and trending

Set aside funding in anticipation of a replacement or overhaul based on value and risk using assessments, diagnostics and trending

Asset Management Process



Metropolitan's Comprehensive Reliability Approach

System Reliability

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graph TD; SR[System Reliability] --> WS[Water Supply]; SR --> SC[System Capacity]; SR --> IR[Infrastructure Reliability]; SR --> SF[System Flexibility]; SR --> ER[Emergency Response];
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**Water
Supply**

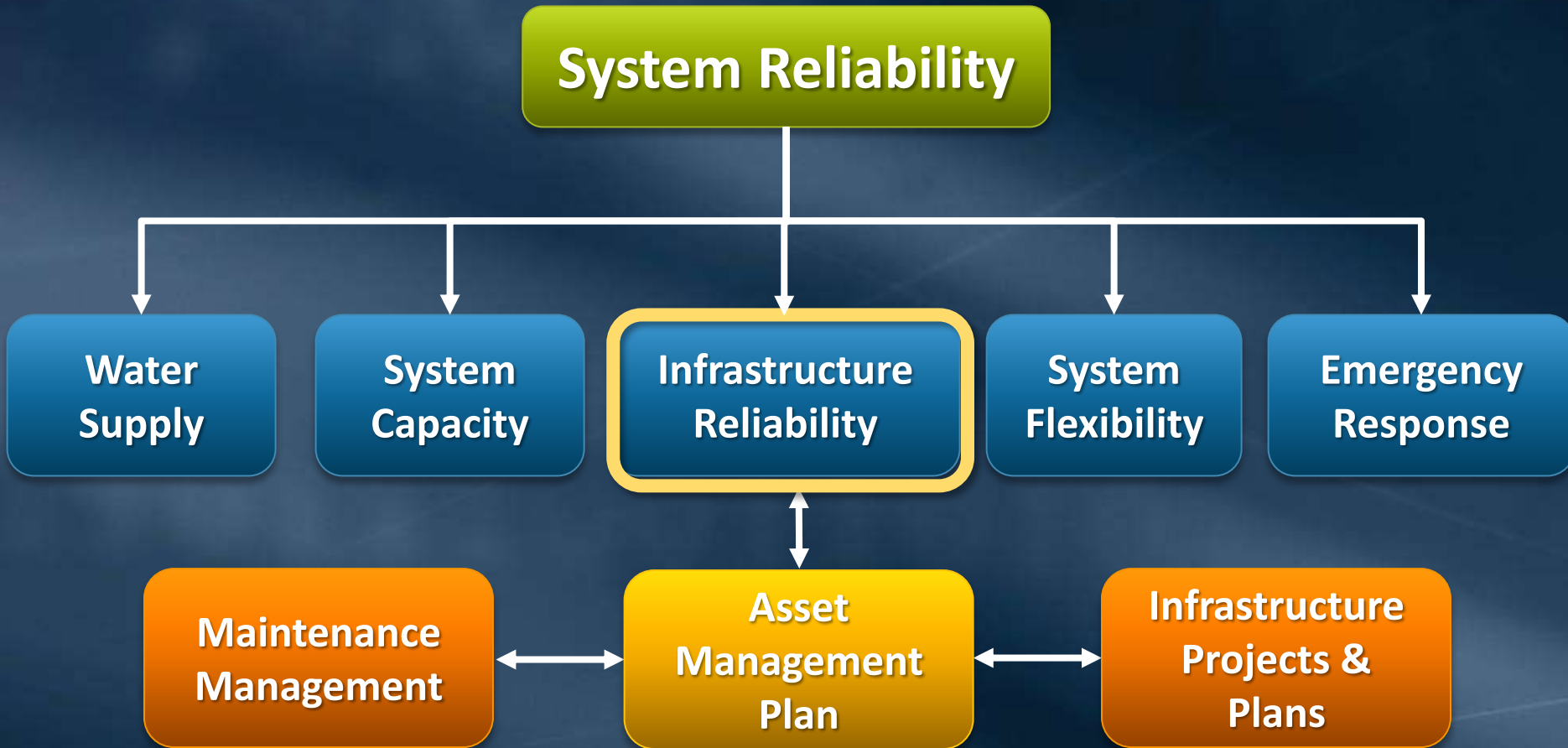
**System
Capacity**

**Infrastructure
Reliability**

**System
Flexibility**

**Emergency
Response**

Metropolitan's Comprehensive Reliability Approach



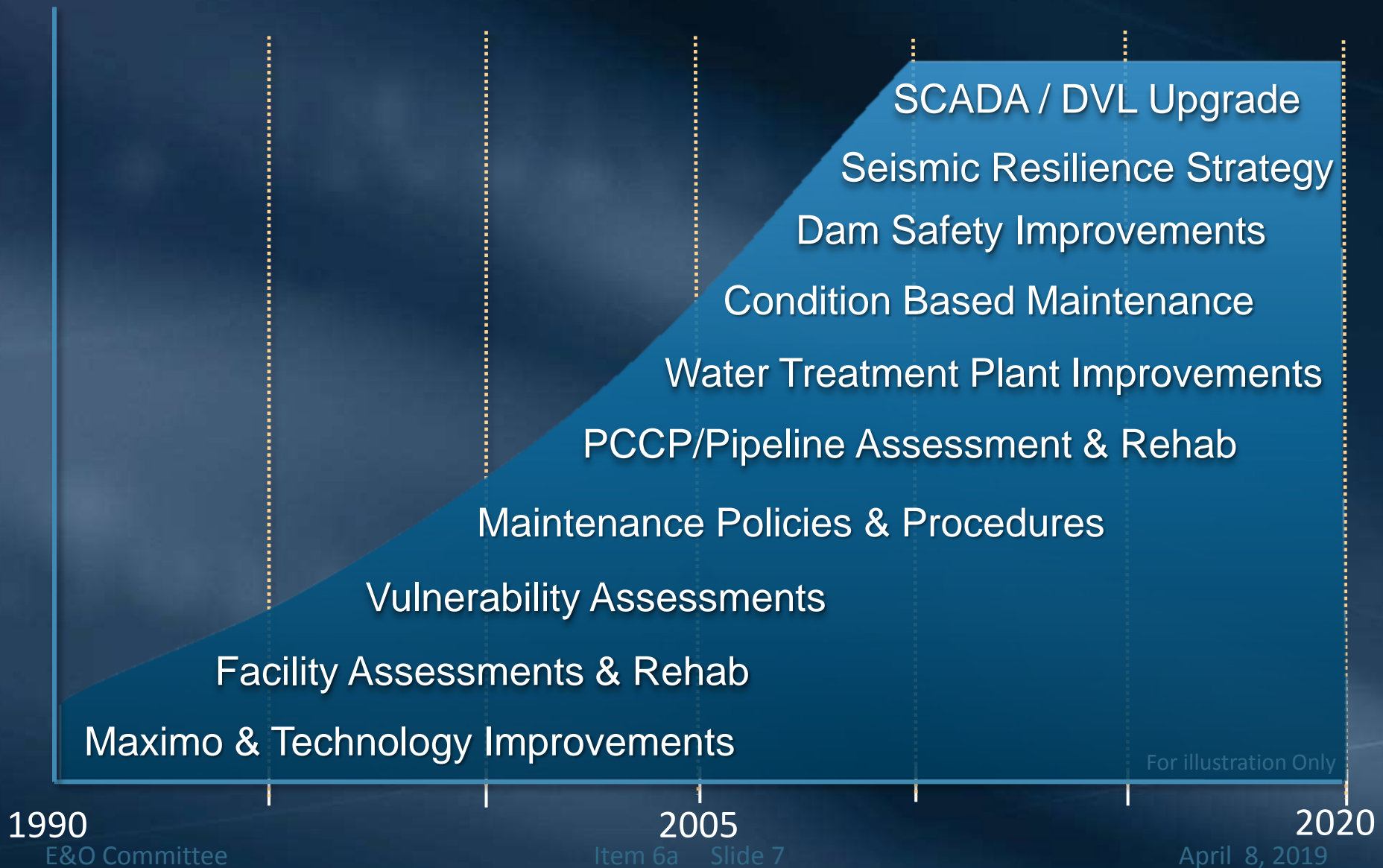
Significant Programs Underway

- Maintenance Management Program
 - Condition Based Maintenance Program
 - Fleet vehicle & corrosion condition indexes
- PCCP Rehabilitation Program
 - Consistent condition and criticality assessments
 - Programmatic approach
- Seismic Resilience Strategy
 - Identified critical assets and prioritized assessments
 - Systematic approach to seismic upgrades



Infrastructure Reliability

Comprehensive Actions



Need for Comprehensive Asset Management Plan

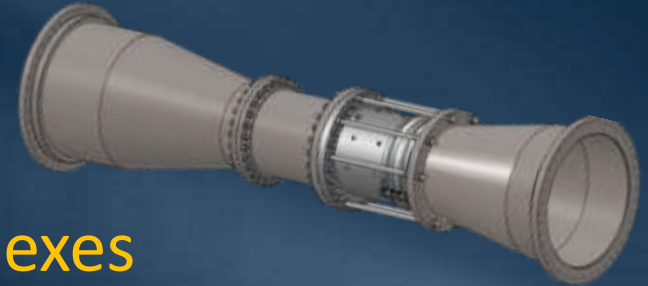
- Integrate efforts of multiple groups within Metropolitan
- Enhance longer term visibility for the CIP
 - Larger number of R&R projects
 - Resource needs and shutdown planning
- Expand use of asset data for better planning
 - Increased data accessibility
 - New technologies to capture current conditions
- Complement existing reliability initiatives

Asset Management Plan Development

- Review and engage other organizations
 - Complementary implementations
- Refine asset management goals for Metropolitan
 - Both short- and long-term goals
- Develop a focused asset management pilot project
- Develop a draft Asset Management Plan
- Seek expert advice in key areas

Industry Engagement & Pilot Project

- Engage outside organizations
 - Clean 17 agencies survey
 - AWWA participation
 - Member agency workshops
- Billing Meter Pilot Project
 - Evaluate lifecycle information
 - Develop condition & criticality indexes
 - Develop new processes as needed



Implementation Schedule



Major Task



Milestone



Board Update

Next Steps

- Complete industry review
 - Garner best practices and innovative ideas
- Advertise RFQ for professional services
 - Engage industry experts as needed
- Complete billing meter pilot project
 - Develop best practices going forward
- Initiate draft Asset Management Plan development
- Provide periodic Board updates

