



Willamette River Bridges Capital Improvement Plan

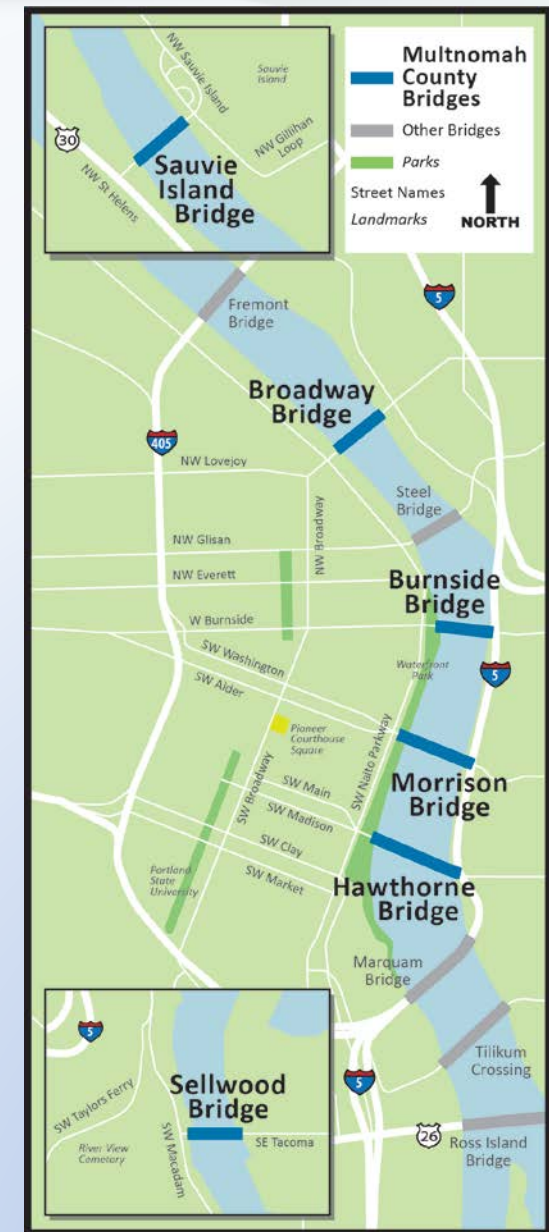
**Board of County Commissioners
February 12, 2015**

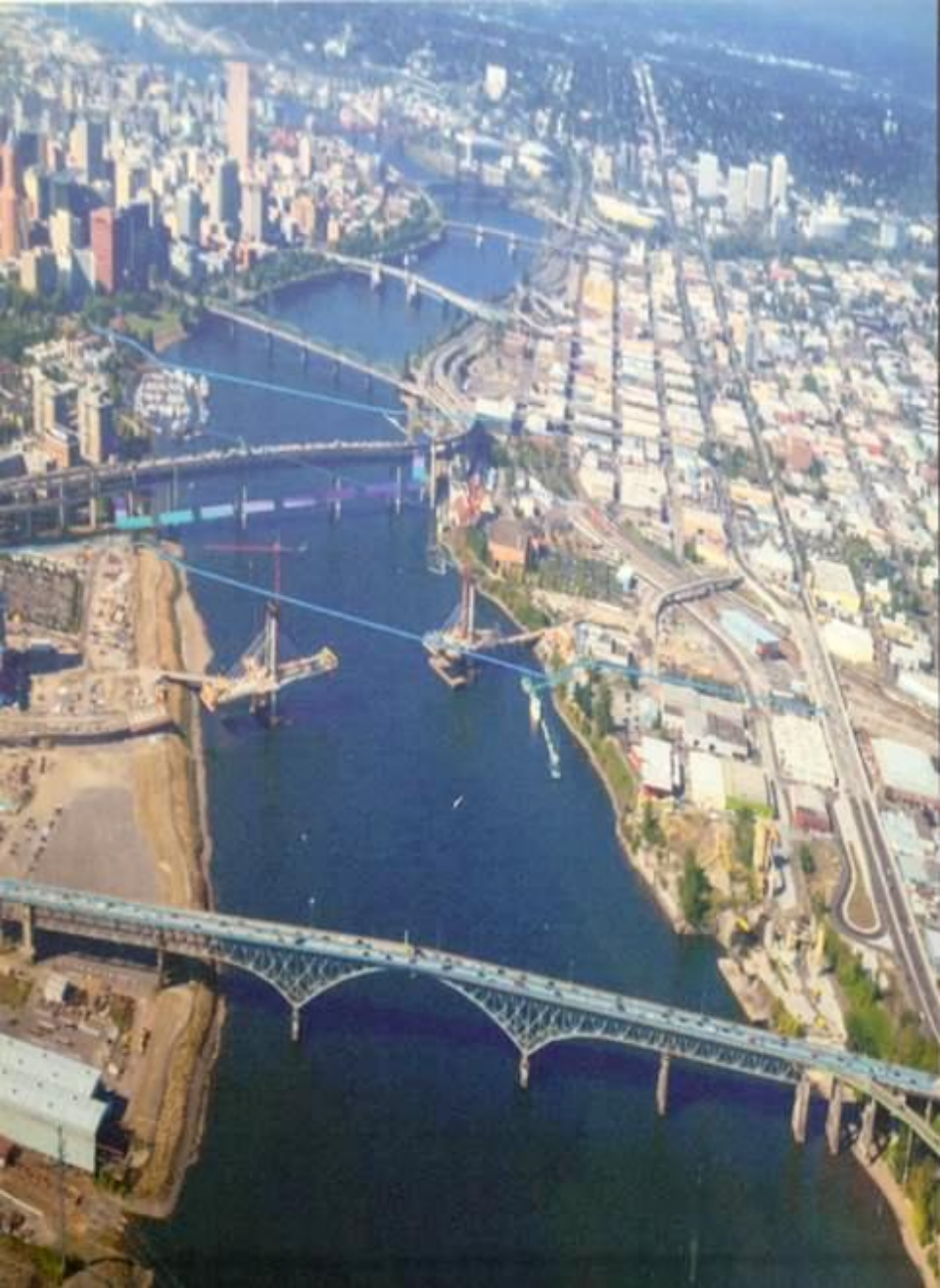
Agenda

- Purpose and Objectives
- Process
- Results
- Call to Action

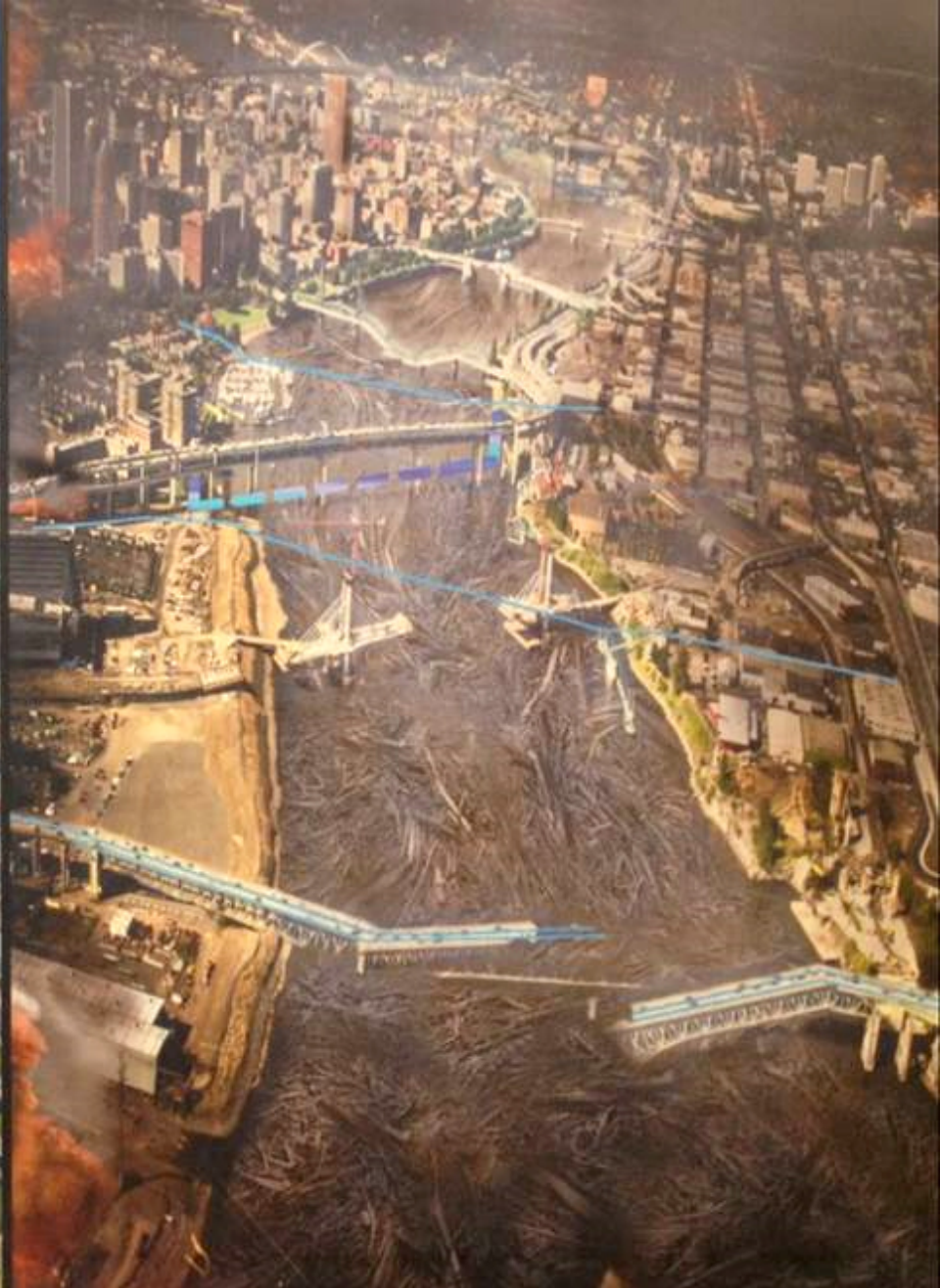
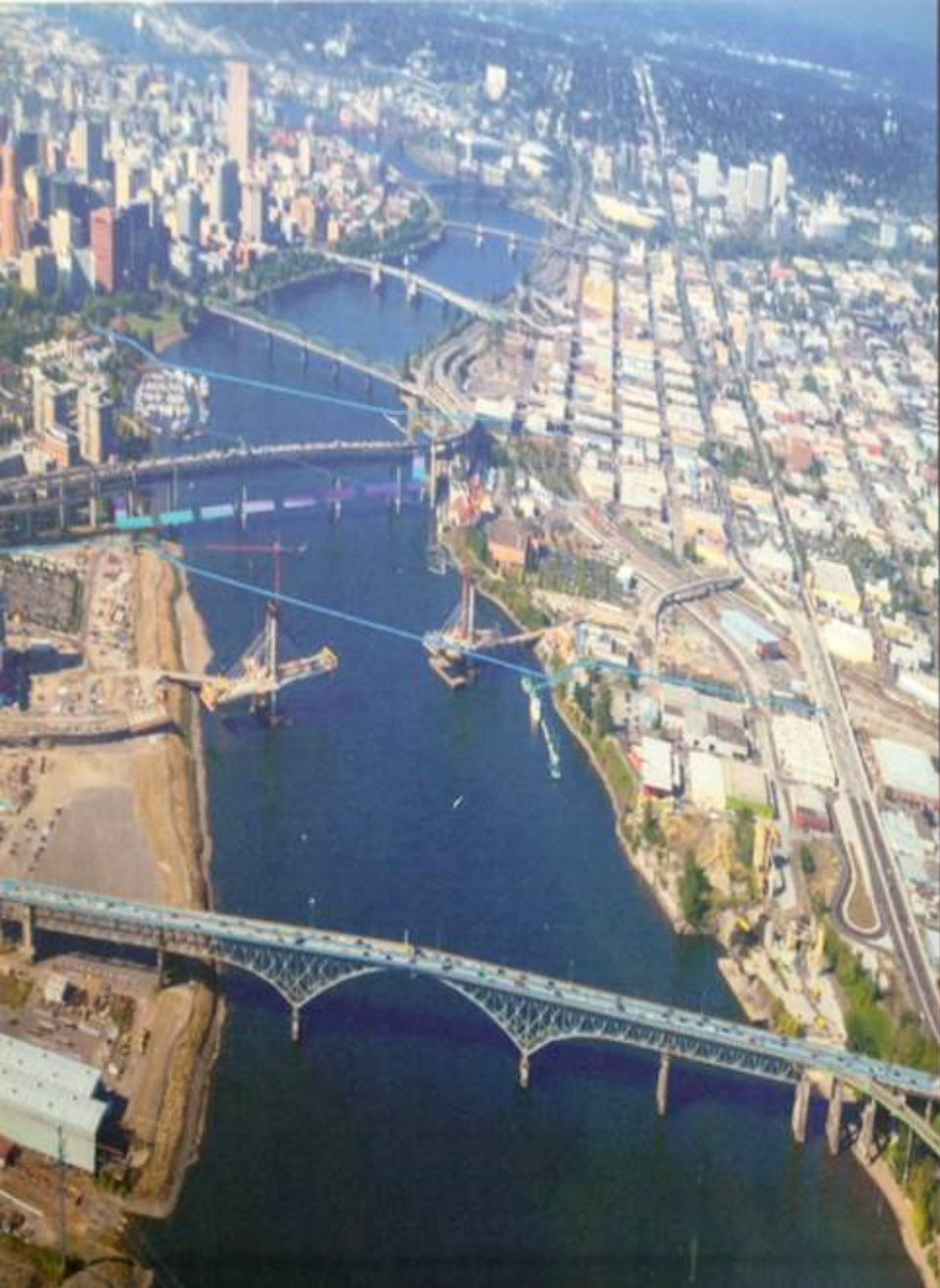
CIP Purpose

- Action plan for 2015-2034
- Maintain County's bridge investment
- Provide safe and reliable connections
- Prepare for expected earthquakes





Artist Rendering of Portland in 2013 (Pre-CSZ Event)



Artist Rendering of Portland in 2013 (Pre- & Post-CSZ Event)

Regional Seismic Threat

- 37% Probability of a Magnitude 8+ Cascadia Subduction Zone earthquake in the next 50 years
- Large scale fatalities and injuries
- Billions in economic loss
- Time to act is NOW!



Source: Vincent/Wang presentation to BCC on 10/21/14

County Bridge Seismic Vulnerabilities

- Downtown bridges are highly vulnerable to major earthquakes
- Seismic retrofitting is possible, but very expensive
- Burnside Bridge is a designated Lifeline Route over the Willamette River



Burnside Bridge



Source: Cannon/Drahota presentation to BCC on 11/6/14

Summary of Results

- 53 capital projects in 20 years
- Preservation and maintenance- \$650M
- Seismic Resiliency- \$650M
- Priority for Burnside Bridge
- Need to start now!



Project Objectives

- Collaborative decision process
 - Rational programming basis
 - Stakeholder input
 - Values-driven selection criteria
- Comprehensive technical assessment
 - Determine current bridge condition
 - Assess life cycle and capital needs
 - Identify projects and costs



Next Steps

By June 2015:

- Publish draft Bridge CIP for public comment
- Conduct final stakeholder outreach
- Finalize Bridge CIP
- Integrate Bridge CIP into County Transportation CIP



Project Context

Considered the following:

- Unconstrained needs
- Prioritized projects
- Iconic / historic status
- Preserve county bridge investment



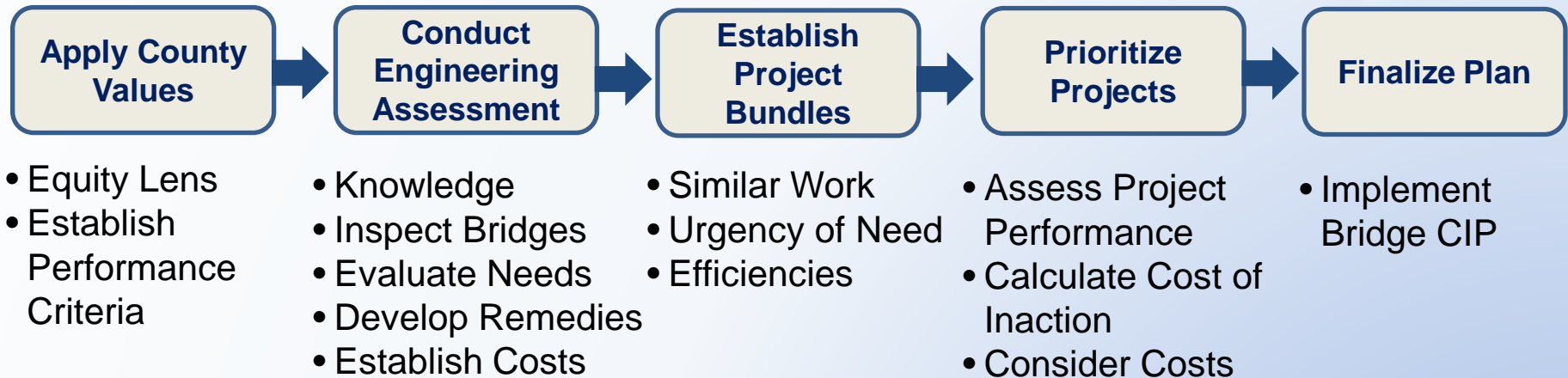
Bridge CIP Development Process

Stakeholder
Summit #1
Spring 2014

Stakeholder Engagement

Stakeholder
Summit #2
Winter 2015

Continual Stakeholder Outreach



Applying County Values in the Bridge CIP

- Inform project development criteria
- Model for applying the Equity Lens
 - People, Place, Process, Power, and Purpose
 - Develop broad criteria
 - Openly engage stakeholders
 - Consider needs of all multi-modal user groups
 - Deliver future projects with equity in mind toward creating small business capacity-building opportunities

Stakeholder Engagement

- Stakeholders
 - Partner agencies
 - Stakeholder organizations
 - General public
- Engagement Methods
 - 30 one-on-one stakeholder meetings
 - 2 Summit Meetings
 - Project website
 - Resulted in 10 CIP projects

Public/Partner Agency Input Themes

Very grateful for the opportunity to contribute!

- Maintain bridge serviceability as lifeline routes
- Improve multi-modal connections
- Accommodate future bridgehead development
- Maintain coordination with other Agency's CIPs
- Provide better lighting for safety and aesthetics

Conduct Engineering Assessment

Assess existing conditions:

- Bridge inspections & operational tests
- Interviews with County staff
- Stakeholder input

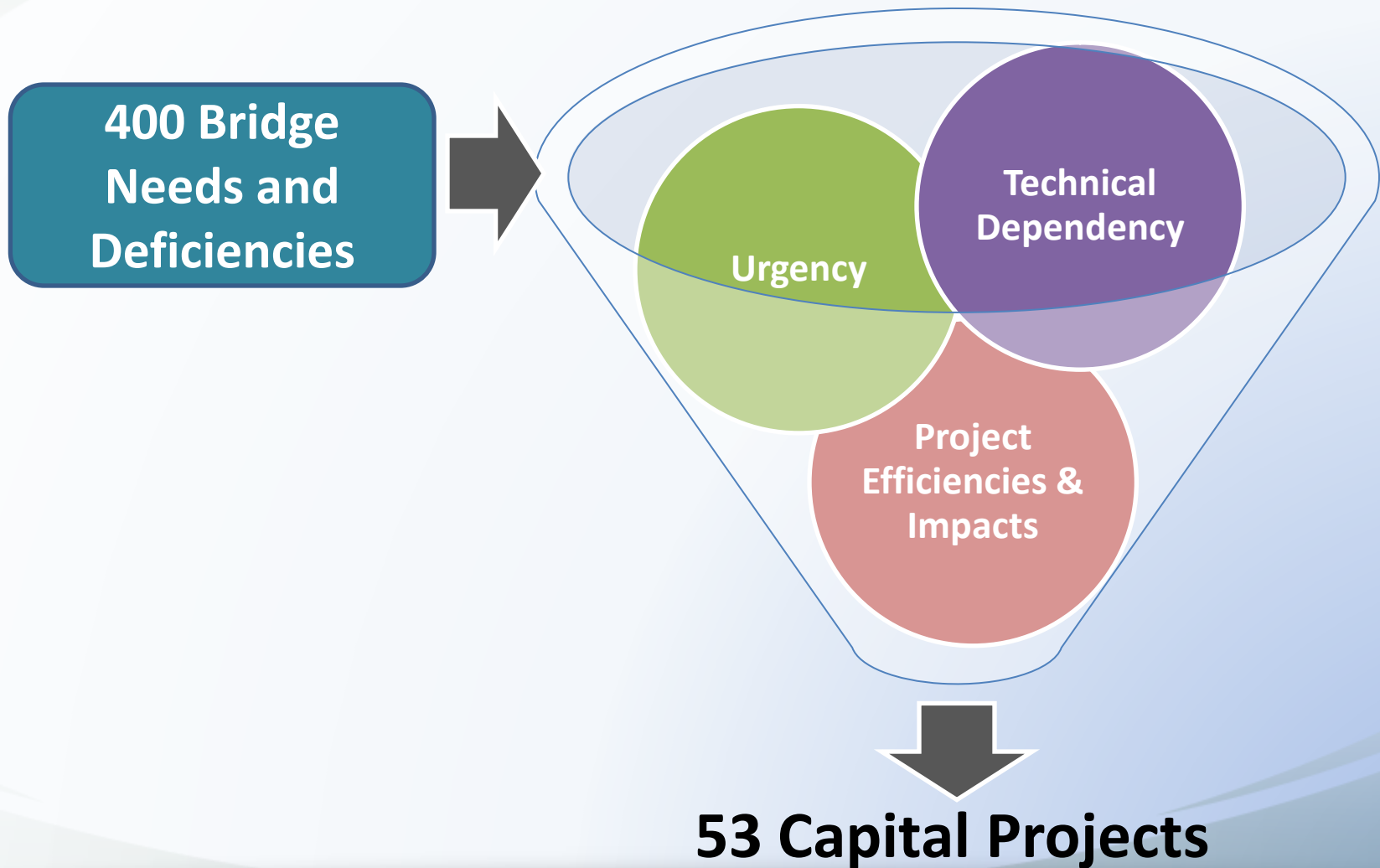


Forecast 20 year needs:

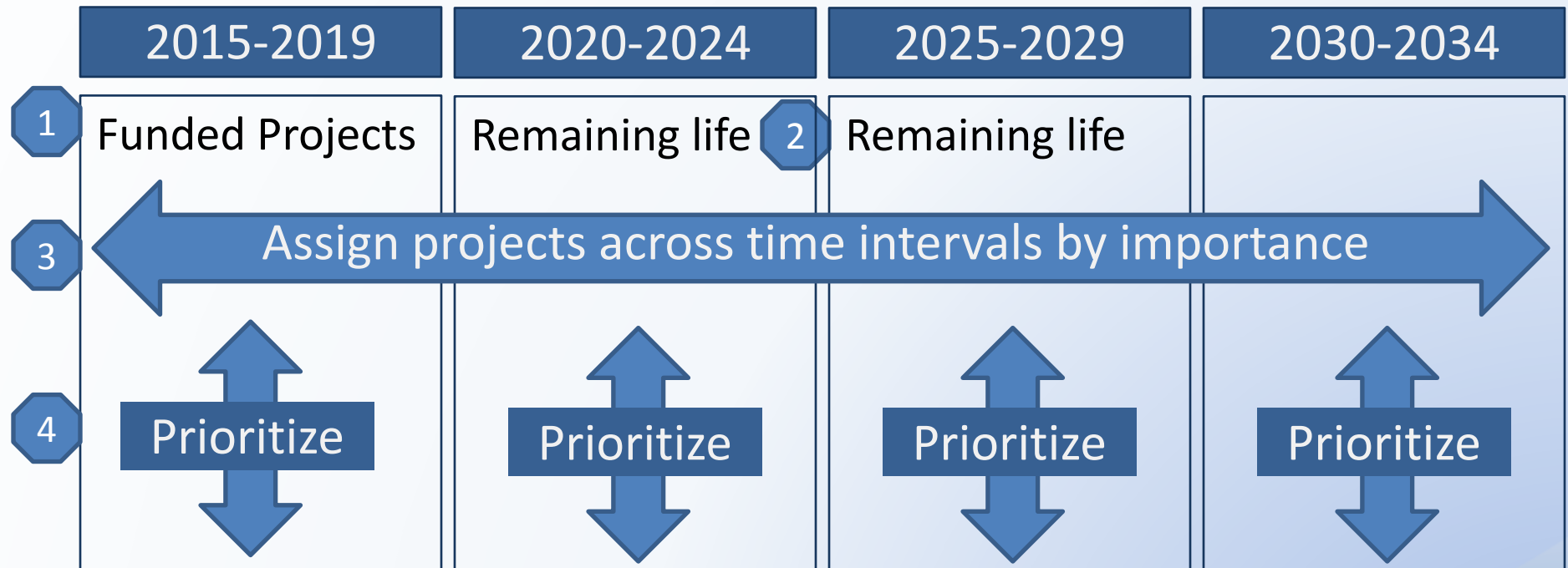
- Historical information
- Lessons learned
- Life cycle performance assessment



Establish Bridge CIP Projects



Prioritize Projects



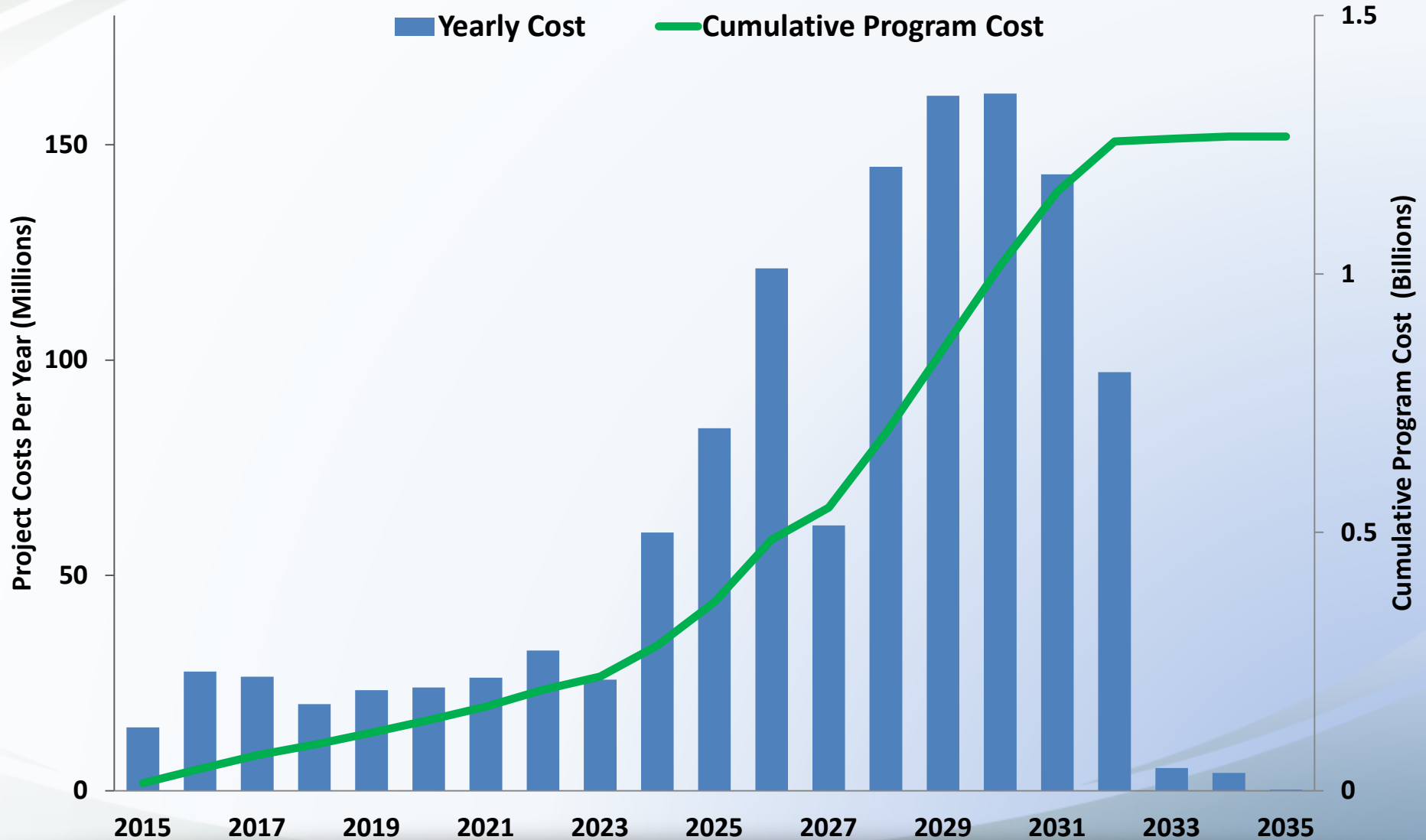
Cost-Benefit Prioritization

Factors that drive a project's priority:

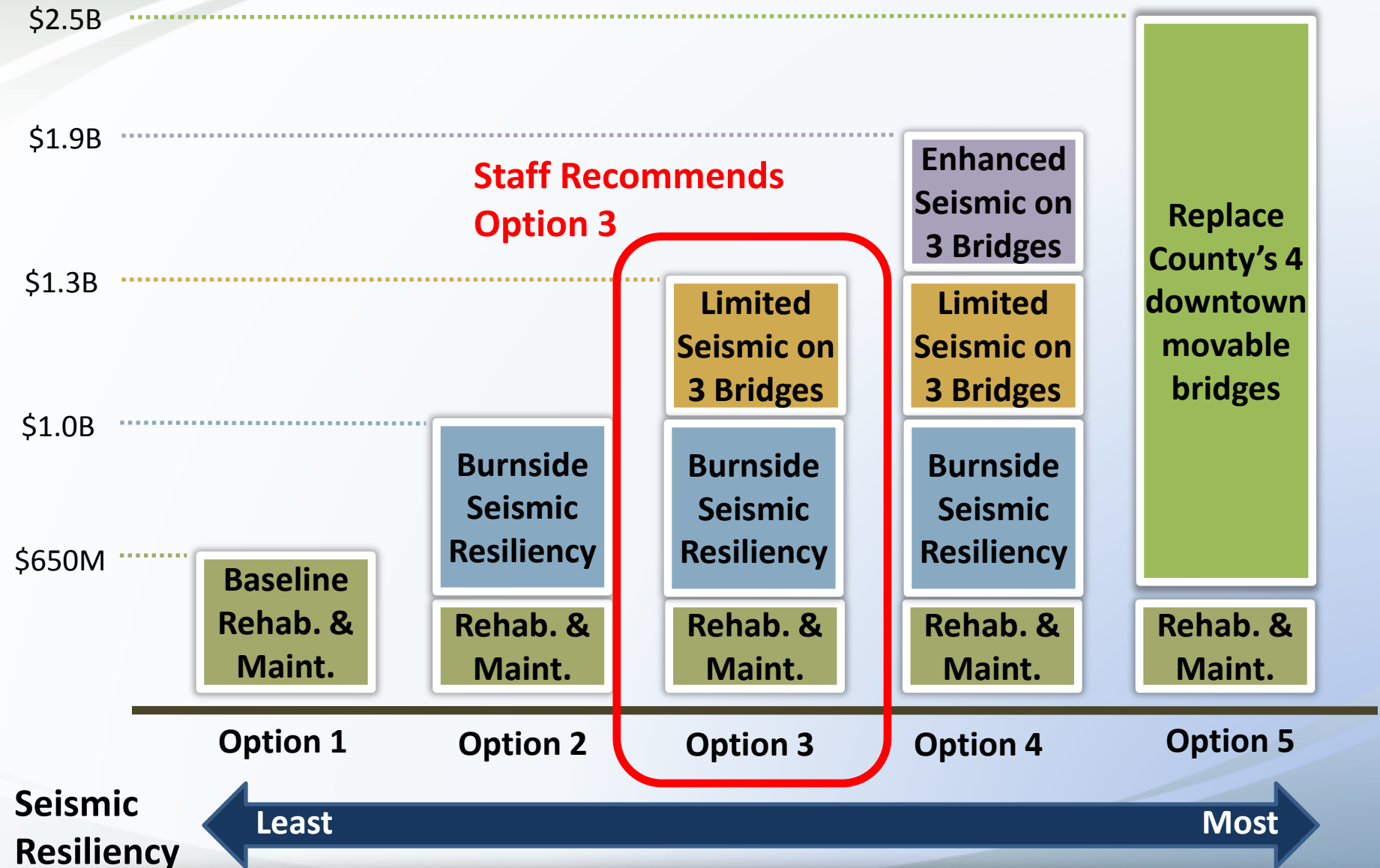
- Urgency
- Consequence of inaction
- Alignment with County values
- Cost
- Available funding

Prioritization Results

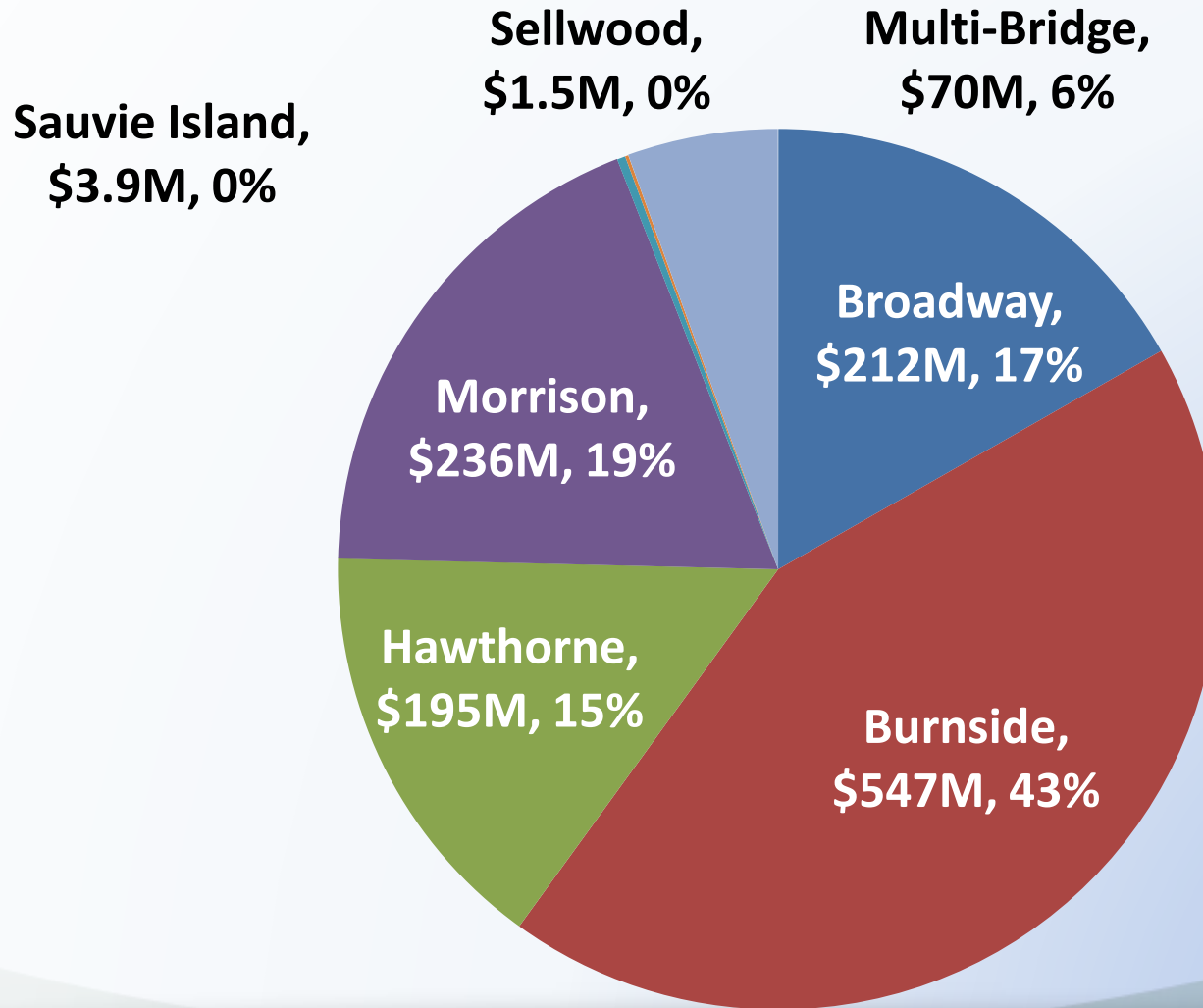
Cumulative Cost Curve



Seismic Investment Options



Results by Bridge



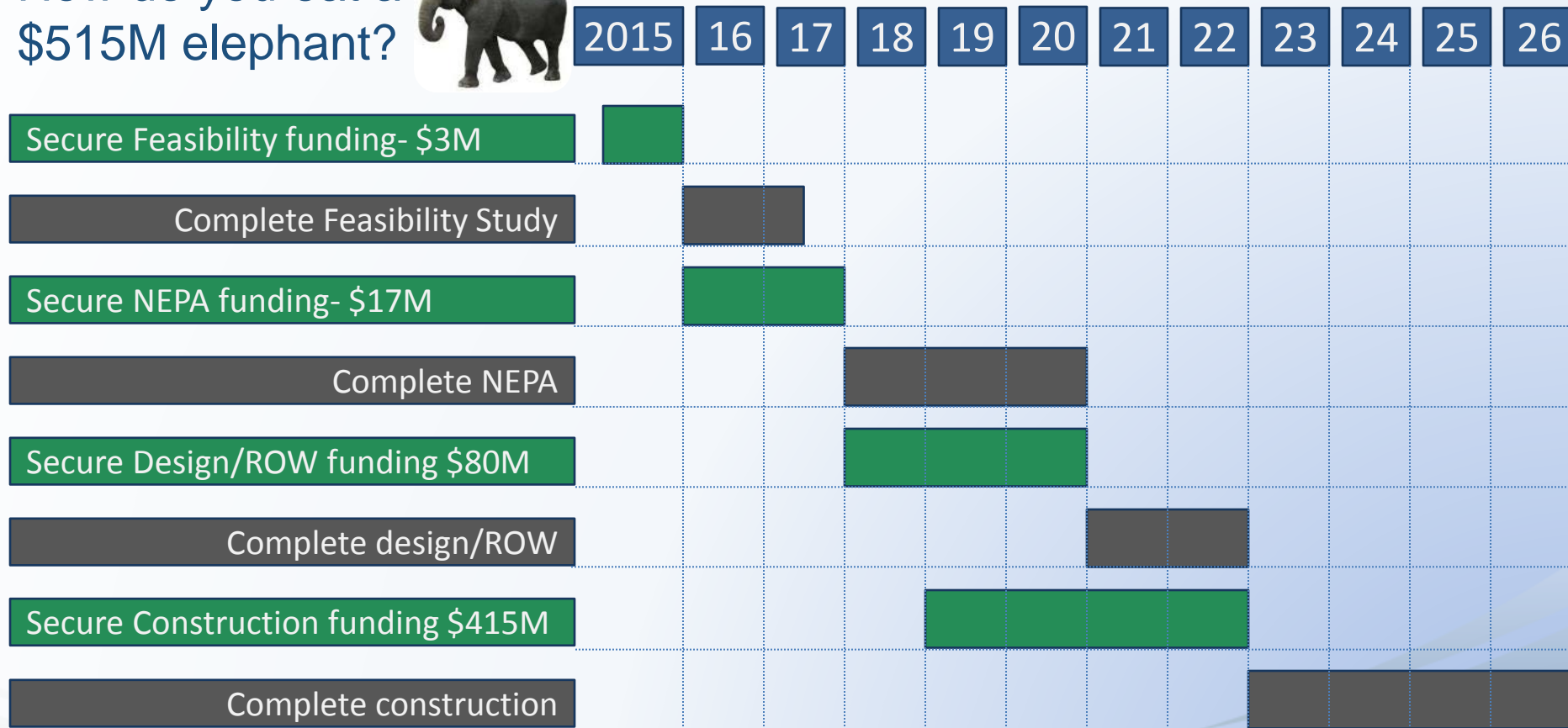
Project Highlights

Top 6 projects:

- Burnside Seismic Resiliency / Feasibility Study (2015)
- Broadway Paint Project (2015)
- Burnside Rehabilitation (2016)
- Broadway Rail Wheel Replacement (2016)
- Burnside Seismic Resiliency – NEPA Phase (2017)
- Morrison Paint and Structural Rehabilitation (2017)

Burnside Seismic Resiliency

How do you eat a \$515M elephant?



Call to Action

Bridges are vital to community:

- 200,000 daily crossings
- Economic vitality
- Community connectivity

CIP is action plan for:

- Safe and reliable bridges
- Seismic resiliency



Needed Now

- Secure funding
- Start Burnside feasibility study in 2015



Questions

