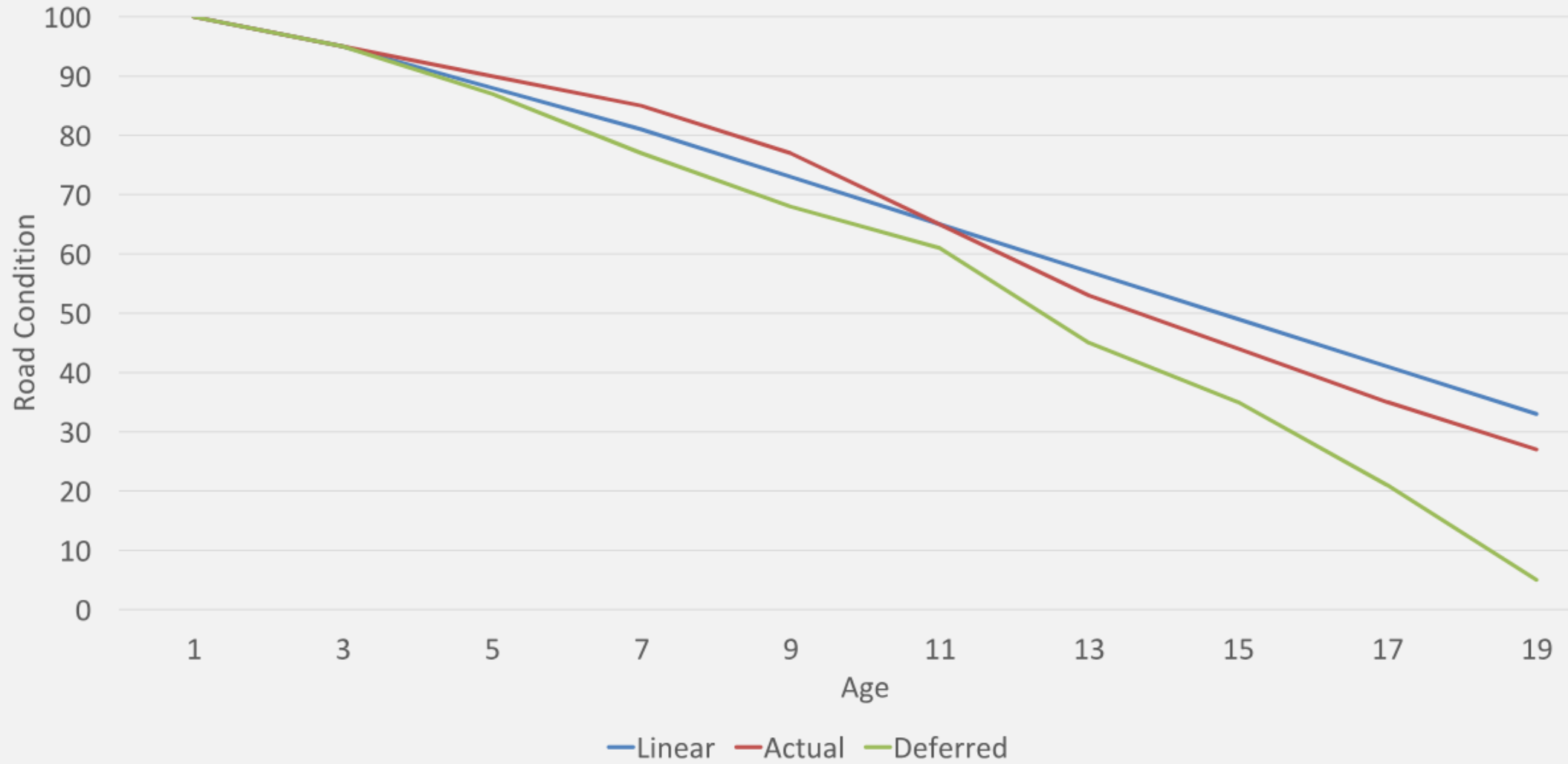


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University of Colorado Boulder

Why is everything crumbling? A Washington Case Study



Degradation



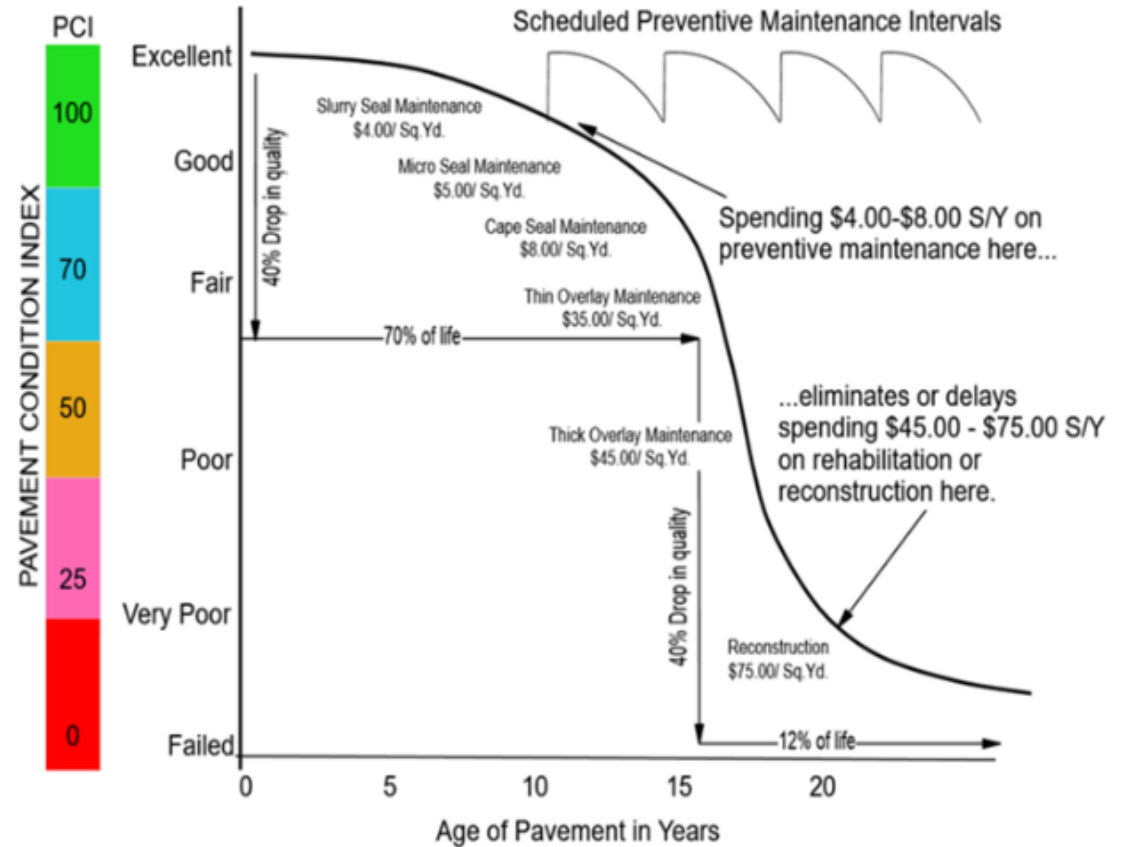
Washington Roads Case

- Time Frame
 - Current Maintenance Deficit: The current maintenance deficit is based on the current road inventory, age of the road where available, and condition of the road.

Methodology

Guidance for Methods

- Follow standard degradation curve
- Use maintenance that keeps road on the maintenance curve
- Preserve design life
- Use typical maintenance costs



Washington Summary

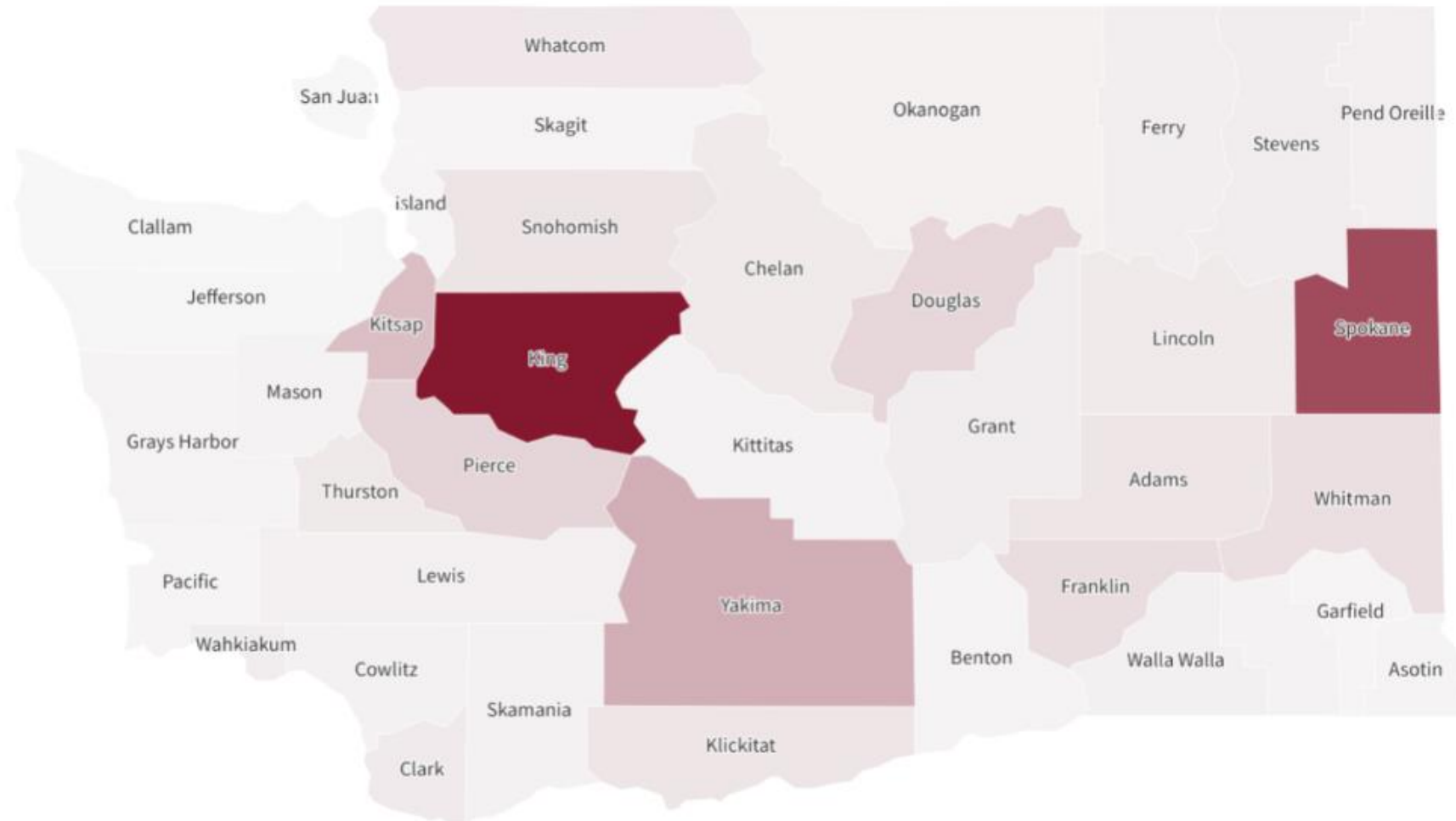
- In this Study
 - 25,137 State Lane Miles
 - 49,017 County Lane Miles
 - 4,283 City Lane Miles
 - Seattle, Tacoma, Renton, Spokane Valley
- Total Current Deferred Maintenance: \$5.1 Billion
- Est. Annual Maintenance Deficit: \$57 Million (2022)

County Deferred Maintenance

Total Lane-Miles	Total Deferred Maintenance	Total "Poor" Condition Lane-Miles	Deferred Cost for "Poor" Condition	Total "Fair" Condition Lane-Miles	Deferred Cost for "Fair" Condition	Total "Good" Condition Lane-Miles	Deferred Cost for "Good" Condition	Total "Very Good" Lane-Miles
49,017	\$1.99 Billion	5,868	\$1.44 Billion	10,444	\$436 Million	14,026	\$114 Million	18,679

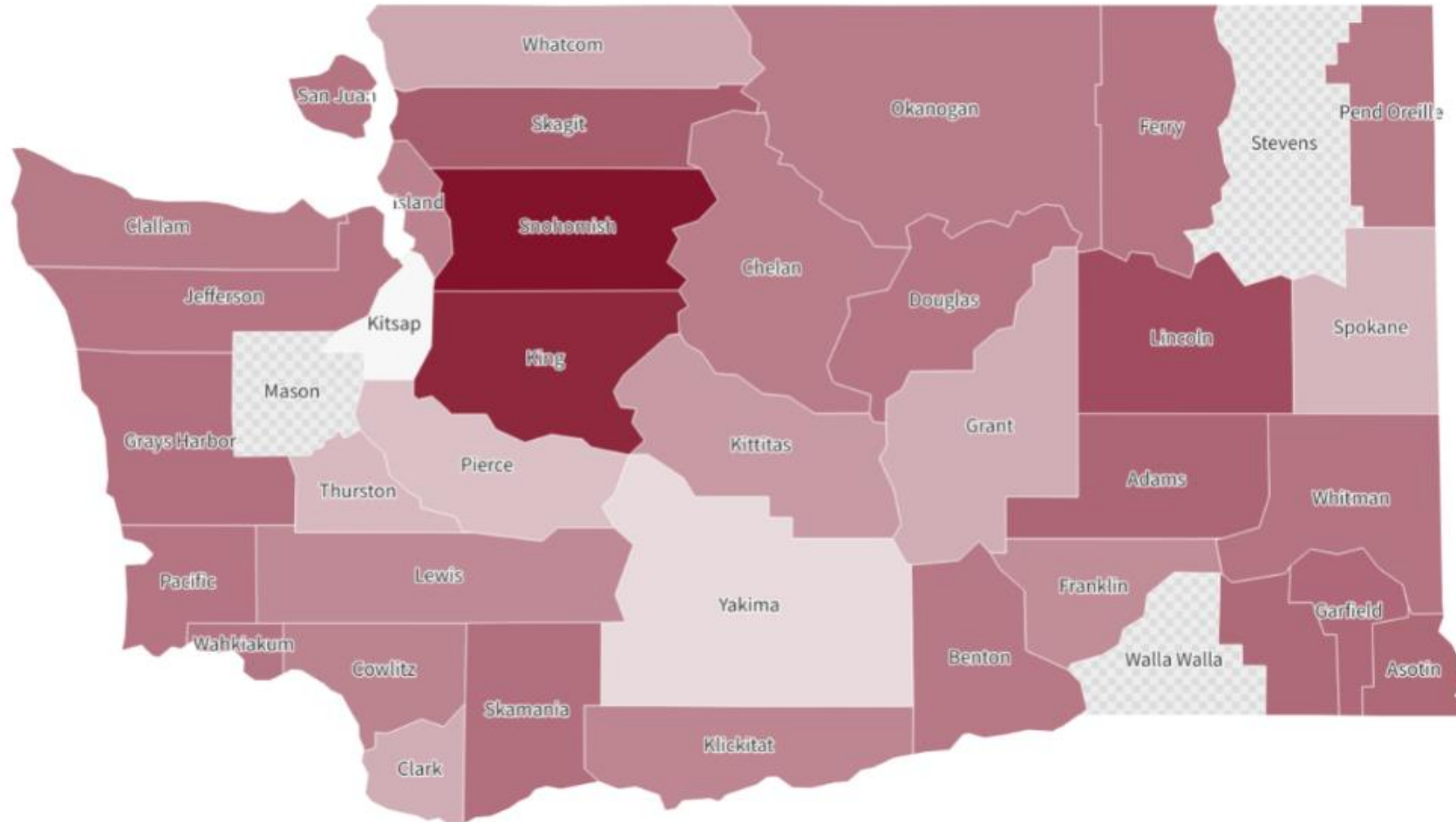
Total Deferred Maintenance

\$900,000  \$500,000,000

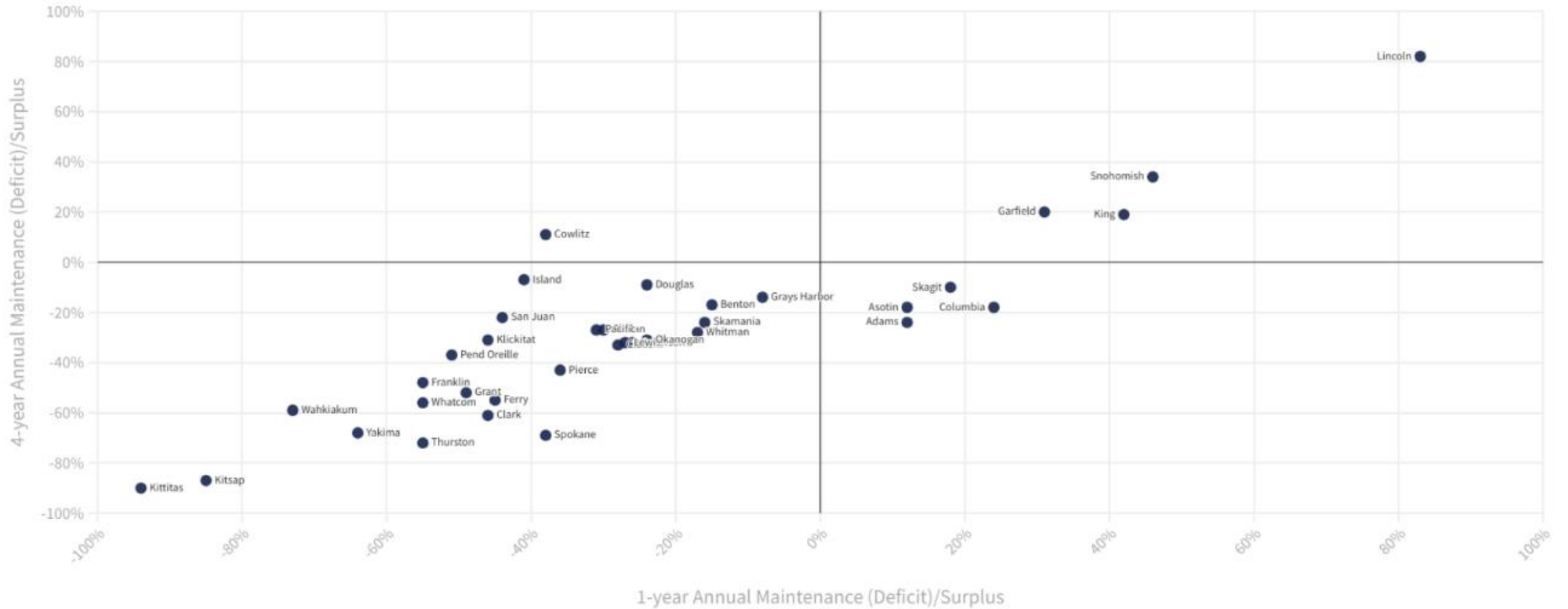


Maintenance (Deficit)/Surplus

-\$11,000,000  \$7,000,000



Percent 1 Year vs 4 Year



Infrastructure Warning Areas

Bridges

Water Systems

Power Systems

Public Buildings

Summary

- Deferred maintenance is NOT linear
- Staying even does not catch up
 - The deficit will keep growing

Thank you

Questions?

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