

SDOT: Strategic Approach to Vehicle Bridge Maintenance is Warranted

PRESENTATION TO THE TRANSPORTATION & UTILITIES COMMITTEE
SEPTEMBER 16, 2020



Key Takeaways

- SDOT's bridge conditions are similar to other cities, but this is not good news
- SDOT meets bridge maintenance expenditure targets, but the amount budgeted is far below what is needed
- Accurate estimates of need and several other issues need to be addressed for SDOT to establish a strategic bridge preservation program



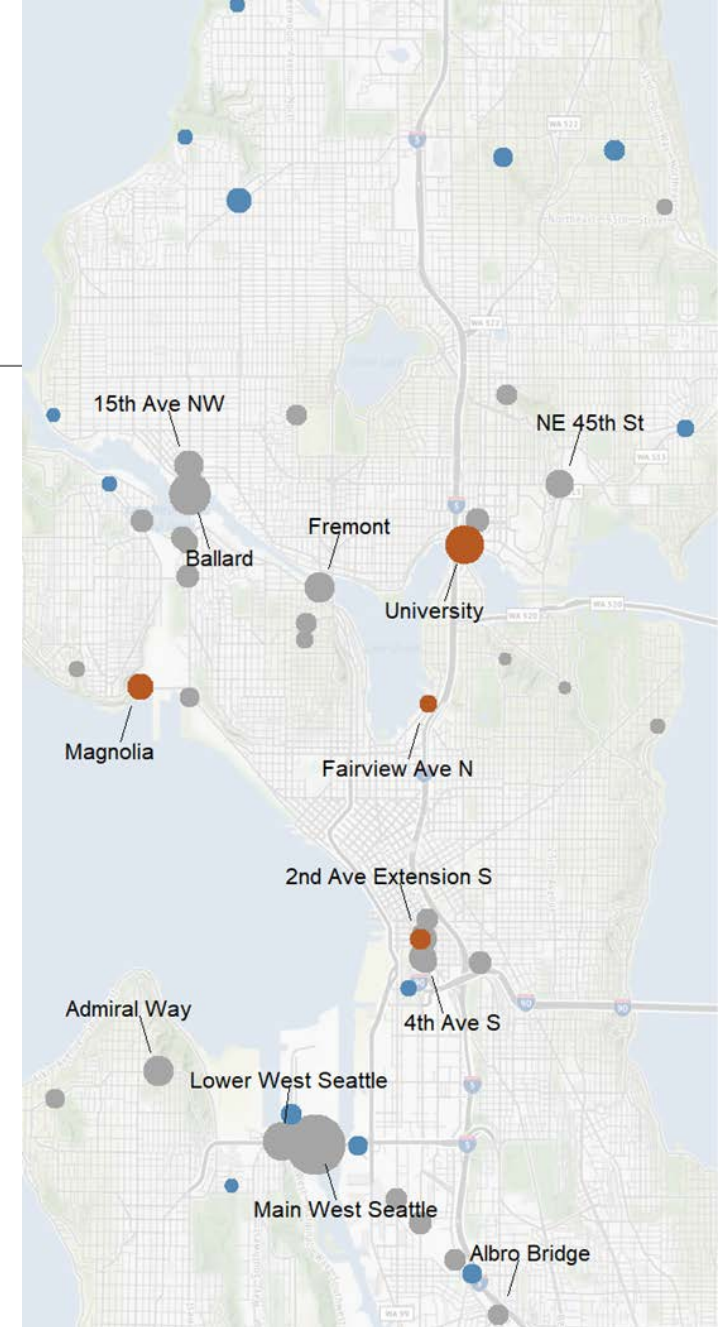
SDOT Bridges

We looked at 77 vehicle bridges that SDOT owns and maintains:

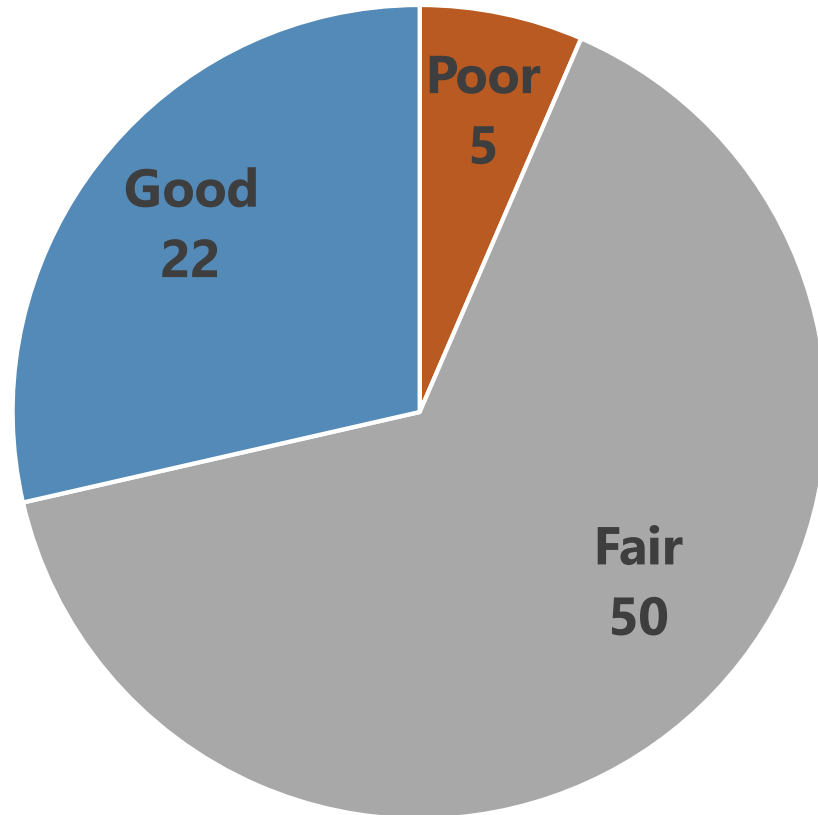
- 22 are in good condition
- 50 are in fair condition
- 5 are in poor condition

The five bridges in poor condition are:

- Fairview Ave N (in the process of being replaced)
- Magnolia
- 2nd Ave S Ext.
- University (counted as two bridges)



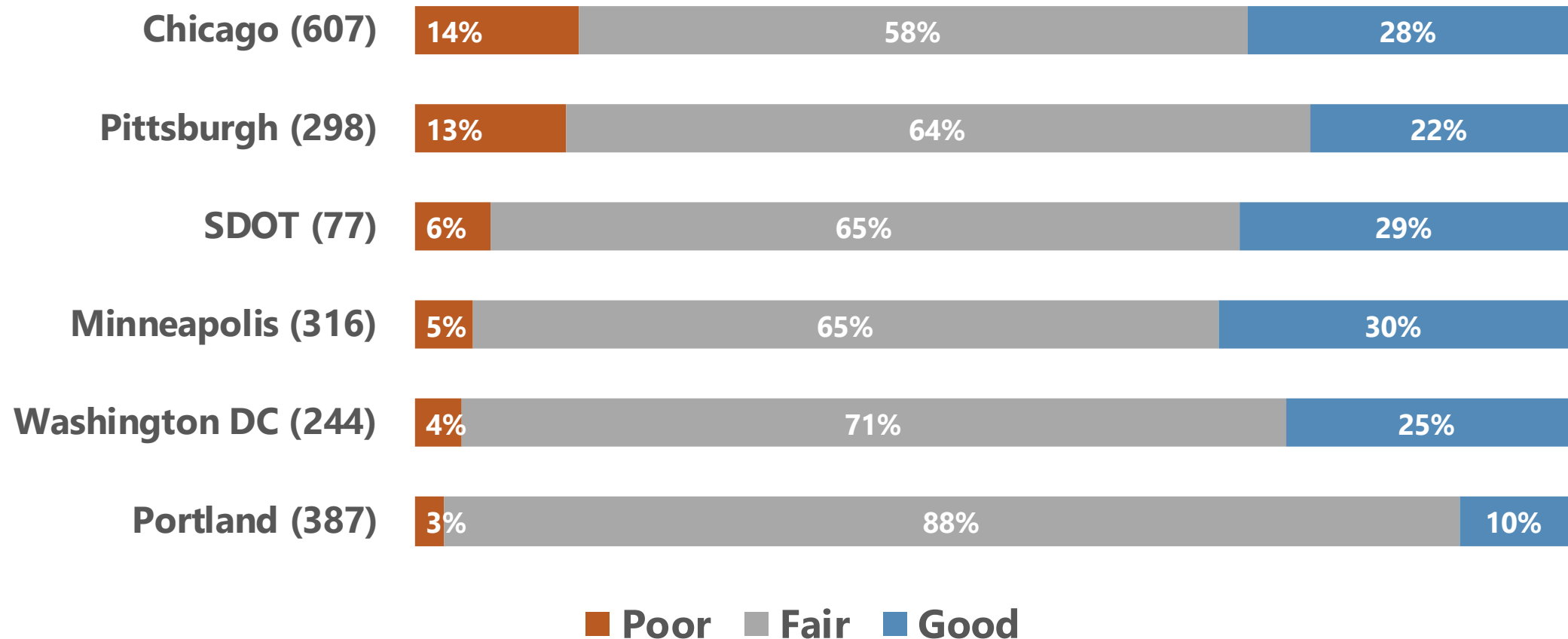
Most SDOT Vehicle Bridges are in Fair Condition



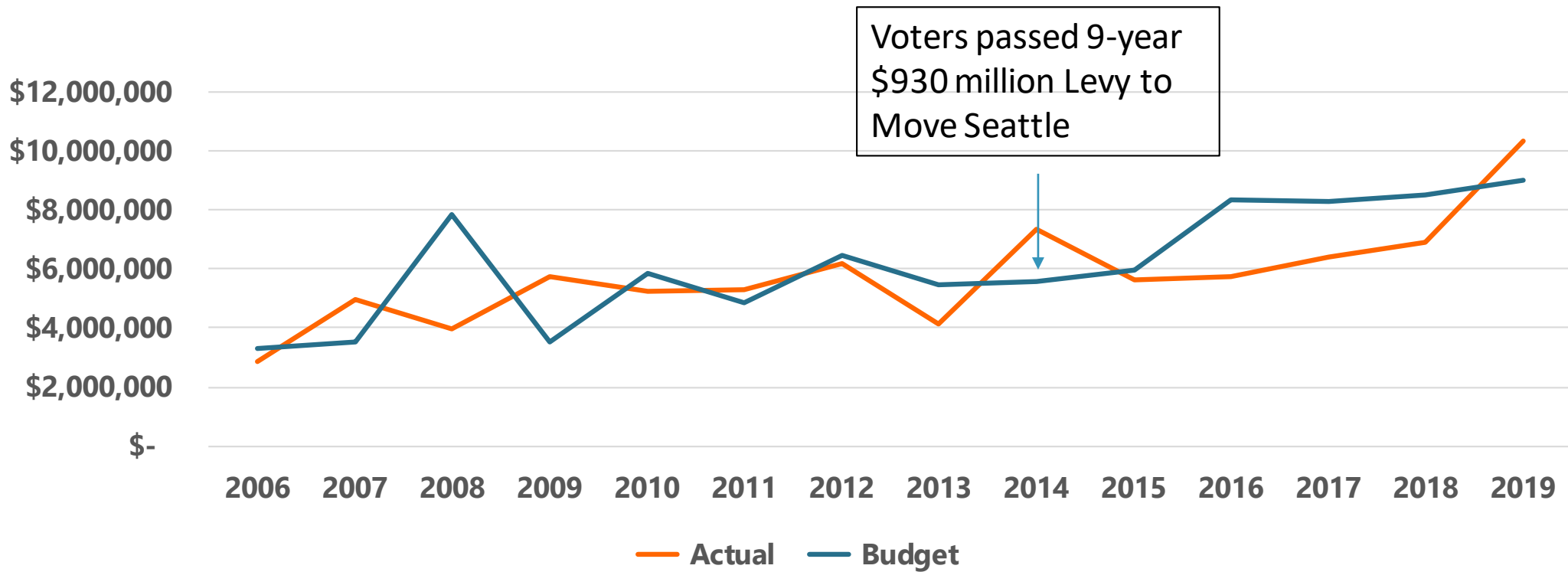
Increased maintenance investments needed to prevent bridges in good or fair condition from deteriorating, especially given the age of many Seattle bridges



SDOT's Bridge Portfolio is Similar to Other Jurisdictions



SDOT Spends Most of What it Budgets for Bridge Maintenance

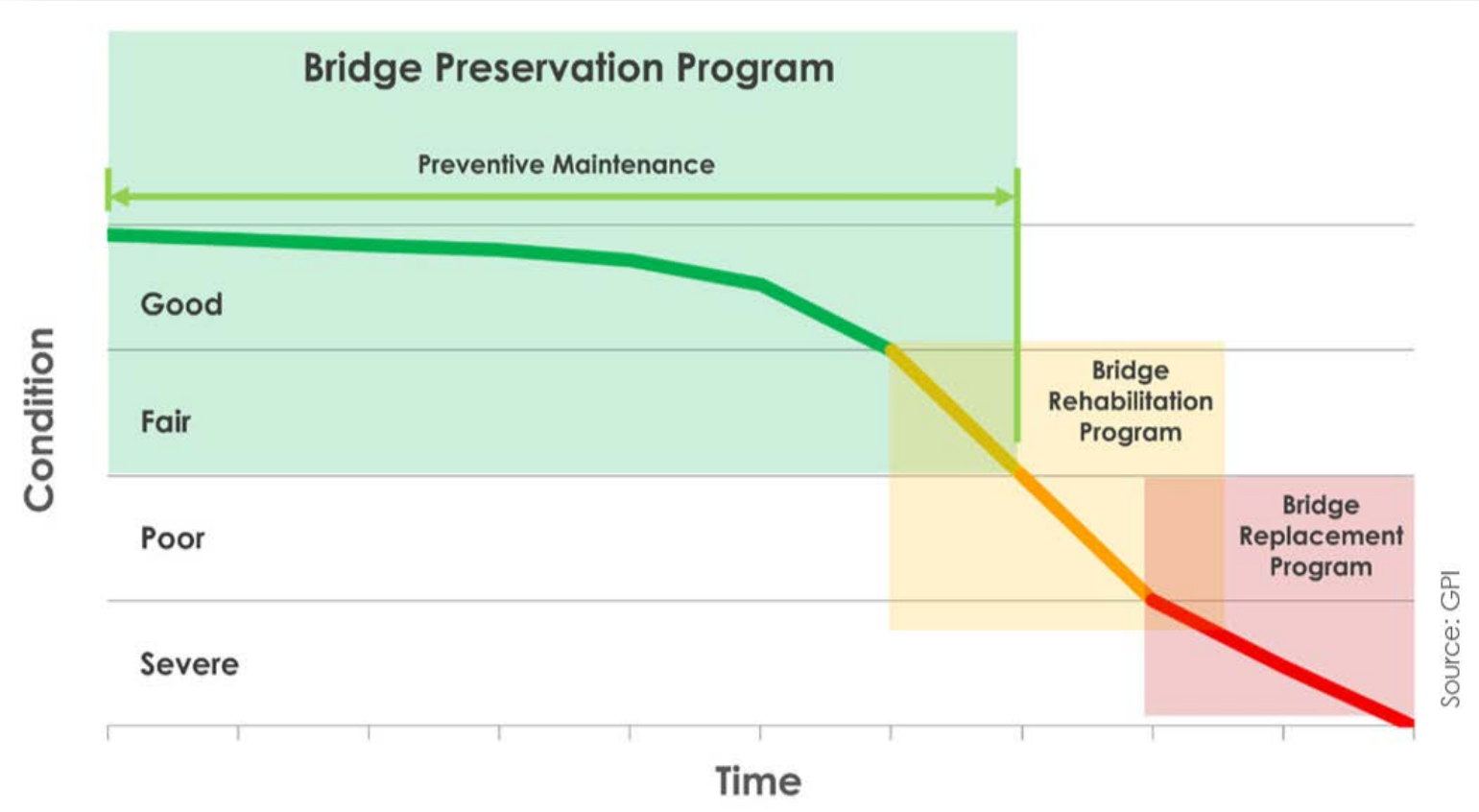


SDOT Estimates More Funding is Needed

- To maintain bridges in a state of good repair, SDOT estimates they should spend 1 to 3 percent of total replacement cost
- In 2018, the replacement value for all SDOT bridges over 60 years old was estimated to be \$3.4 billion
- At 1 percent, that's a minimum of \$34 million per year
- Average annual spending on bridge maintenance for the last 14 years was \$6.6 million



1. Planning Needed to Close the Gap



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Updated estimates of **how long bridges should last** is the foundation of a proactive bridge preservation program.

RECOMMENDATIONS:

Update the estimated useful life of bridges;
use the data to plan for maintenance work and lifecycle costs; and
close the maintenance funding gap.



2. Address Compliance Risk

SDOT risks being out of compliance with federal regulators

RECOMMENDATION:
Take immediate steps to resolve all the issues identified in the 2019 Federal Highway Administration review.

Federal Register / Vol. 69, No. 239 / Tuesday, December 14, 2004 / Rules and Regulations 74419

FOR FURTHER INFORMATION CONTACT: Lonnie W. Luther, Center for Veterinary Medicine (HFV-104), Food and Drug Administration, 7519 Standish Pl., Rockville, MD 20855, 301-827-8549, e-mail: Lonnie.luther@fda.gov.

SUPPLEMENTARY INFORMATION: Phoenix Scientific, Inc., 3915 South 48th St. Ter., St. Joseph, MO 64503, filed ANADA 200-382 for veterinary prescription use of Furosemide Syrup 1% in dogs by oral administration for treatment of edema associated with cardiac insufficiency and acute noninflammatory tissue edema. Phoenix Scientific's Furosemide Syrup 1% is approved as a generic copy of Intervet, Inc.'s LASIX (furosemide) Syrup 1%, approved under NADA 102-380. The ANADA is approved as of November 18, 2004, and the regulations are amended in 21 CFR 520.1010 to reflect the approval. The basis of approval is discussed in the freedom of information summary.

In accordance with the freedom of information provisions of 21 CFR part 20 and 21 CFR 514.11(e)(2)(ii), a summary of safety and effectiveness data and information submitted to support approval of this application may be seen in the Division of Dockets Management (HFA-305), Food and Drug Administration, 5630 Fishers Lane, rm. 1061, Rockville, MD 20852, between 9 a.m. and 4 p.m., Monday through Friday.

FDA has determined under 21 CFR 25.33(a)(1) that this action is of a type that does not individually or cumulatively have a significant effect on the human environment. Therefore, neither an environmental assessment nor an environmental impact statement is required.

This rule does not meet the definition of "rule" in 5 U.S.C. 804(3)(A) because it is a rule of "particular applicability."

§ 520.1010 Furosemide.
* * * * *
(b) * * *
(4) No. 059130 for use of syrup in paragraph (a)(4) of this section for conditions of use in paragraph (d)(2)(i) and (d)(2)(ii)(A) of this section.
* * * * *

Dated: December 6, 2004.
Stephen F. Sundlof,
Director, Center for Veterinary Medicine.
[FR Doc. 04-27291 Filed 12-13-04; 8:45 am]
BILLING CODE 4160-01-S

DEPARTMENT OF TRANSPORTATION
Federal Highway Administration
23 CFR Part 650
[FHWA Docket No. FHWA-2001-8954]
RIN 2125-AE86

National Bridge Inspection Standards
AGENCY: Federal Highway Administration (FHWA), DOT.
ACTION: Final rule.

SUMMARY: The FHWA is revising its regulation on the National Bridge Inspection Standards (NBIS). This action is necessary to address perceived ambiguities in the NBIS that have been identified since the last update to the regulation in 1988. The changes clarify the NBIS language that is vague or ambiguous; reorganizes the NBIS into a more logical sequence; and makes the regulation easier to read and understand, not only by the inspector in the field, but also by those administering the highway bridge inspection programs at the State or Federal agency level.

Government Printing Office's Electronic Bulletin Board Service at (202) 512-1661. Internet users may also reach the Office of the Federal Register's home page at: <http://www.archives.gov> and the Government Printing Office's Web page at: <http://www.access.gpo.gov/nara>.

Background
The FHWA bridge inspection program regulations were developed as a result of the Federal-Aid Highway Act of 1968 (Pub. L. 90-495, 82 Stat. 815) that required the Secretary of Transportation to establish NBIS to ensure the safety of the traveling public.
The 1968 Federal-Aid Highway Act directed the States to maintain an inventory of Federal-aid highway system bridges. The Federal-Aid Highway Act of 1970 (Pub. L. 91-605, 84 Stat. 1713) limited the NBIS to bridges on the Federal-aid highway system. The Surface Transportation Assistance Act of 1978 (Pub. L. 95-599, 92 Stat. 2689) extended NBIS requirements to bridges greater than 20 feet on all public roads. The Surface Transportation and Uniform Relocation Assistance Act of 1987 (Pub. L. 100-17, 101 Stat. 132) expanded the scope of bridge inspection programs to include special inspection procedures for fracture critical members and underwater inspection.
The FHWA published an advance notice of proposed rulemaking (ANPRM) on September 26, 2001, (66 FR 49154) to solicit comments on whether to revise its regulation on the NBIS. The majority of commenters to the ANPRM recommended that the FHWA revise the NBIS regulation.
Discussion of Comments Received to the Notice of Proposed Rulemaking (NPRM)



3. Hidden Cost of Reimbursable Work

Some SDOT bridge maintenance work is **not** on SDOT bridges.



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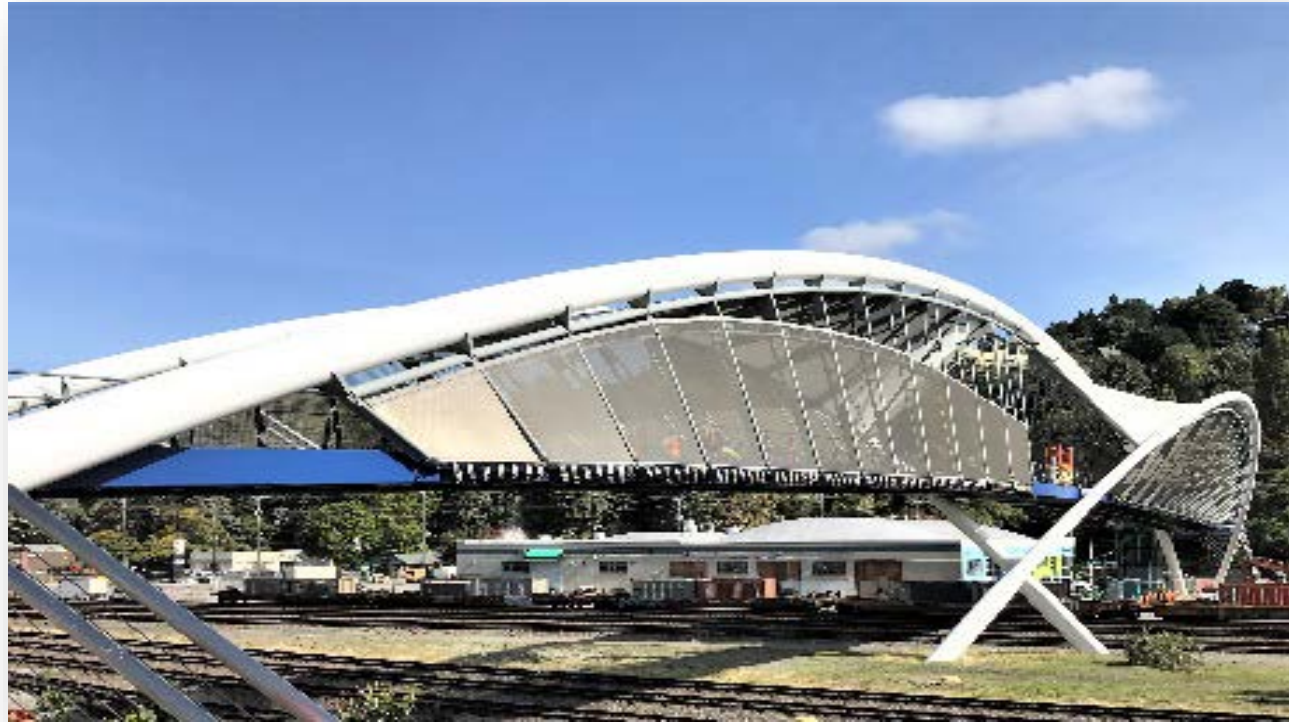
- 1) reduces **amount** of work done on Seattle bridges, and
- 2) changes **type** of work done on Seattle bridges

RECOMMENDATION:

Reduce reimbursable project workload unrelated to SDOT bridge maintenance.



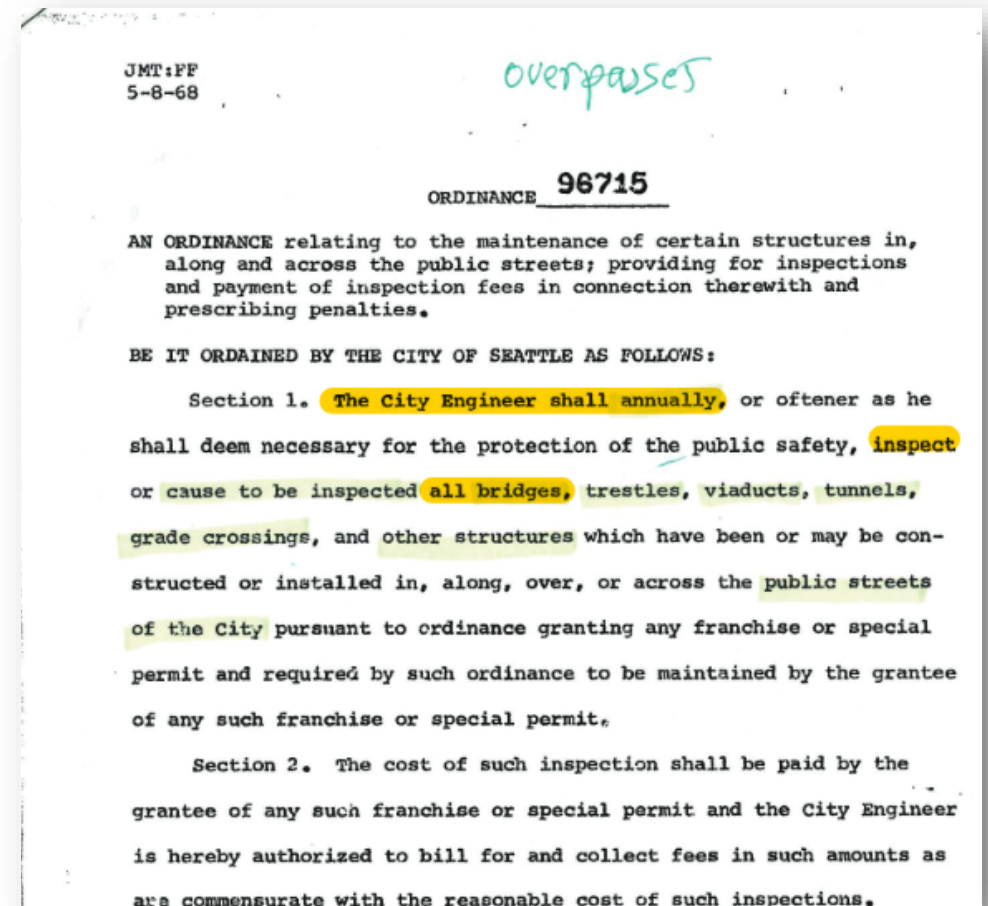
4. Revise Oversight of Private Bridges



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Historic ordinance from **more than 50 years ago** creates duplicative work and takes 0.5 FTE of SDOT inspection capacity each year.

RECOMMENDATION:
SDOT should develop draft legislation to replace Ordinance 96715.



Key Takeaway Summary and Conclusion

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Acknowledgements and Questions

We appreciate SDOT's cooperation and assistance

A copy of our report can be found on our website at:

<https://www.seattle.gov/cityauditor/reports>

Questions?

