

THE FIX WE'RE IN FOR: The State of Oregon's Bridges 2015



Transportation
for America

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This report was written by Stephen Lee Davis, Deputy Communications Director, from data analysis undertaken by Michelle Ernst on behalf of T4America. Edits provided by David Goldberg, Communications Director, and Dan Levine, Policy Associate. Design and layout by Stephen Lee Davis.

About the data. The data in this report comes from the U.S. Federal Highway Administration's (FHWA) National Bridge Inventory. The NBI consists of federally-required data, collected by each state throughout the year and then reported to the FHWA each year. It is released early in the following year. This data is from 2014, released in early 2015 by FHWA. All data is publicly-available from FHWA sets: <http://www.fhwa.dot.gov/bridge/deficient.cfm>

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Oregon's deficient bridges: How will we pay to repair them?

Every day, millions of people from all walks of life in Oregon cities, towns and rural areas travel over one of the state's 8,052 bridges — essentially any structure longer than 20 feet that carries vehicle traffic. These bridges carry commuters through and within our cities, move people from town to town, help farmers bring their goods to market, and get freight from A to B each and every day.

But today, far too many of these bridges are rated structurally deficient — bridges in urgent need of repair or replacement. Oregon today has **439 structurally deficient bridges**, representing **5.5 percent of the state's 8052 bridges**. Those 439 bridges represent a looming crisis for the state.

The average age of these sub-par bridges is **55 years** — over the typical design life of 50 years and 14 years older than the average age of all Oregon bridges (41 years old). More than **one in twelve Oregon bridges were built before 1948** — which means more than 680 bridges are older than the Korean War and creation of Medicare.

Oregon drivers collectively took close to 533 million trips over deficient bridges in 2014, nearly twice the total of 269 million in 2000. That's more than 1.4 million trips per day or over 1,000 trips every minute taken over deficient Oregon bridges in 2014.

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Oregon bridges aren't getting any younger



Average bridge age: 41 years

Average designed lifespan: 50 years

Average age of structurally deficient bridges: 55 years



The structurally deficient Steel Bridge in Portland, Oregon, is a critical link for freight rail, passenger rail, light rail, vehicle traffic and those on foot or bike

680+ OR bridges are older than the Korean War and creation of Medicare.

What does “structurally deficient” mean?

Highway bridges have three primary components: 1) the deck, which is the surface of the bridge that cars, trucks and people contact — the pavement, typically; 2) the superstructure, which consists of the components that support the deck; and 3) the substructure, which is where the bridge contacts the ground. Each of these bridge features is given a rating between 0 and 9 when inspected, with 9 signifying the best condition. Federal guidelines classify bridges as “structurally deficient” if one of these three key components is rated at 4 or less (poor or worse), meaning engineers have identified a major defect in its support structure or its deck. (There are a handful of other criteria that can result in a deficient grade, but for the majority of deficient bridges, one of these three primary components rates a 4 or below.) Federal law requires states to inspect all bridges 20 feet or longer at least every two years, though states typically inspect structurally deficient bridges far more often.

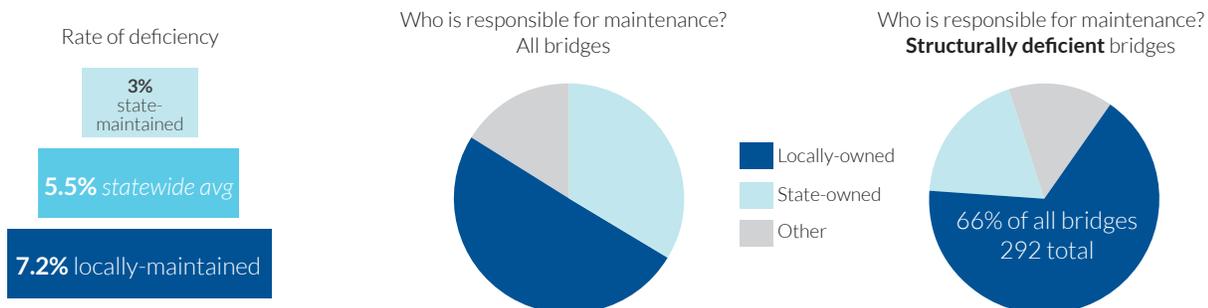
Oregonians and Oregon businesses rely on bridges each day that are subject to closure or weight restriction if increased maintenance and reconstruction are not undertaken — a potentially crippling impact on personal travel and freight movement.

Who will pay the tab?

The funds to repair bridges come mostly from gas taxes at the federal and state levels, from property or other taxes at the local level, and state and local bonding. The \$1.3 billion Oregon Transportation Investment Act III (OTIA III) program, passed in 2003, repaired many critical structurally deficient bridges. But it did so by selling bonds that the state now must pay off with current revenues, reducing the funding available to repair other aging bridges today that the program did not address.

Federal dollars are flat or falling; the federal tax has lost about a third of its value to inflation since it was last raised in 1993. The situation is worse at the local level. No federal money is dedicated to repairing local bridges — and the federal contributions that once helped address the backlog are shrinking.

Over 66 percent (292 total) of the state’s 439 deficient bridges are locally-maintained



A portion of Oregon state gas tax revenues do flow to local governments — 30 percent to counties and 20 percent to cities — but that money is flexible and with a range of pressing local needs, these jurisdictions have to make difficult decisions with those funds.

Ownership of a bridge usually determines who is responsible for funding repairs, regular maintenance or replacement. Of the 8052 bridges in Oregon, only 2,723 (33.8 percent) are maintained by the state. 4,032 (50.1 percent) are maintained by localities or counties.

7.2 percent of those 4,032 locally-maintained bridges are structurally deficient, significantly higher than the state's average rate of **5.5 percent**. And a staggering **66.5 percent (292 total)** of Oregon's 439 deficient bridges are maintained by local entities.

Why are locally owned bridges faring worse?

In MAP-21, the current federal transportation law, Congress reduced access to dedicated funding for the repair of most locally-owned bridges. Although these bridges account for nearly 90 percent of all deficient bridges nationally, all dedicated federal bridge repair money now goes toward the ten percent of deficient bridges on the National Highway System (which do, admittedly, carry far more traffic each day.)

These locally-owned bridges provide essential links, and those who use them also deserve to be safe. Given the budget woes of so many local governments, there is little prospect of reducing the repair backlog absent federal or state assistance. As it stands now, however, these bridges are forced to compete with all other local priorities such as health care and public safety. At the state level, these bridges are often at the mercy of the budgeting process, and unless the state's overall transportation budget grows through an increase in the gas tax or other funding sources, the condition of these bridges is unlikely to markedly improve in the coming years.

Have things gotten better in Oregon?

Oregon has indeed improved the number of deficient bridges overall since 1992, but that rate of repair was almost three times slower from 2010-2014 than the rate from 1992-1996. The state lowered their total number of deficient bridges by just 24 over the last four years, compared to 63 from 1992-1996.

As state and federal funding sources either shrink or lose their value, the state is facing a growing gap in its capacity to repair or replace the thousands of bridges soon nearing the end of their designed lifespans. This is coming as federal support becomes less and less certain.

The absence of adequate funding could return us to the early 1990s, when more than one in five U.S. highway bridges was structurally deficient. That situation prompted creation of a federal bridge program that was eliminated in 2012, despite its success in significantly reducing deficient bridges. Now, with federal funding flat or falling, the state and, in particular, local governments are faced with a growing share of the burden.

County data: see the table at the end of the report for a summary of data broken up by county.

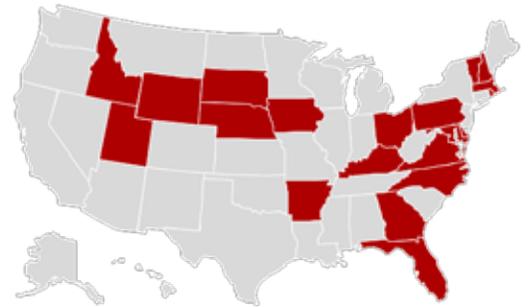
RECOMMENDATIONS

1) Increase federal and state funding for transportation investments

Current spending levels are precarious and inadequate in the face of declining gas tax revenues, inflation and improved vehicle fuel efficiency. In order to bring our rapidly aging infrastructure up to a state of good repair, we need an increase in the dedicated revenues for surface transportation programs at the state and federal levels, including funding bridge repair. The state should raise new revenues for transportation.

Congress also needs to do its part. 20 states have raised their own transportation revenues since 2012, and Congress needs to reward their efforts by fulfilling the historic federal role as a trusted partner in transportation investment.¹ The nation's highway trust fund is teetering on the edge of insolvency, and Congress should mirror the decisive courage of the leaders in these

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20 states and raise new stable revenues to end the uncertainty surrounding the federal transportation program that's limped from one short term extension to another and staved off insolvency only through creative accounting gimmicks. Doing so would allow the State of Oregon and local officials to better address their needs, including the repair of a backlog of structurally deficient bridges.

2) Prioritize repair and maintenance

Each new road, bridge or lane-mile also incurs a financial liability that will require resources for decades to come. We must adequately account for the full life-cycle cost of our transportation investments and prioritize the repair and basic maintenance of the system to ensure future generations are granted safe and efficient mobility options.

Between 2009 and 2011, the latest year with available data, all U.S. states collectively spent \$20.4 billion annually to build new roadways and add lanes to existing roads, and just \$16.5 billion annually repairing and preserving existing roads and bridges. In Oregon, out of the \$252 million on average spent annually on road expansion and repair from 2009-2011, 63 percent (\$159 million) went toward repair and maintenance. As the state raises new revenue for transportation, they should also ensure the system is adequately maintained by prioritizing repair with any new funding.

Oregon road maintenance vs repair spending, annual average 2009-2011



From Repair Priorities 2014, Smart Growth America.

¹ For more information on the trend of states moving to raise new transportation revenue, please visit T4America's home for resources on this issue: <http://t4america.org/maps-tools/state-transportation-funding>

3) Improve transparency and accountability by measuring performance

Transportation dollars must be tied to tangible performance and accountability measures to give citizens concrete assurances of progress; that the investments made led to the positive outcomes promised.

Demonstrating that money is well spent is key to restoring taxpayer confidence and building their support for any potential increase in revenues. Moving to a performance-based system for evaluating projects — a process already begun by the state — with clear, measurable metrics should be part and parcel of any new revenues raised for transportation.

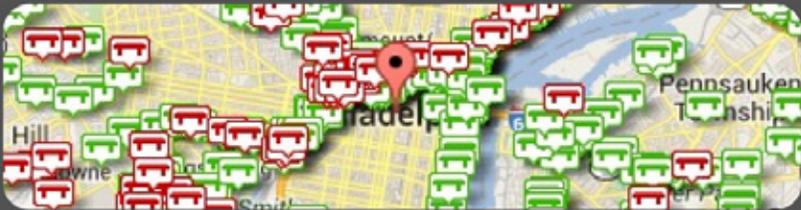
4) Give local communities more access to transportation dollars

Regardless of who “owns” the transportation asset, mayors and other local elected leaders are the ones who face the music from citizens when bridges need repair, when mounting congestion makes commutes unpredictable, and when families can’t safely walk their kids to school — yet those same leaders are too often left out of the discussions over what gets built and where. That needs to change.

A bill currently before Congress, [the Innovation in Surface Transportation Act](#), would create a small competitive grant program in each state where local communities could apply and win federal funding directly on the merits of their project, decided by a panel made up of state and local officials — giving them a voice in the process.¹

In Oregon, this bill could act as a backstop to ensure local jurisdictions continue to access federal funds through the existing “Enhance” program and other safety programs.

DO YOU DRIVE ON DEFICIENT BRIDGES?
Find the structurally deficient bridges
in your area with our interactive map:



t4america.org/maps-tools/bridges

¹ Read more on the Innovation in Surface Transportation Act here. <http://t4america.org/2015/03/18/senators-and-reps-respond-to-locals-please-introduce-bill-to-steer-more-money-to-local-transportation-needs/>

Summary county-level data

Ranked by percentage structurally deficient

County	Percent structurally deficient	Total bridges	Number deficient	Avg. age of deficient bridges	Percent of deficient bridges locally-owned	Total built before 1948
Linn County	15.1%	556	84	47	95.2%	34
Clatsop County	11.6%	147	17	62	70.6%	28
Lake County	11.4%	88	10	54	0.0%	-
Yamhill County	9.6%	136	13	51	84.6%	11
Sherman County	8.9%	45	4	60	50.0%	7
Crook County	7.9%	76	6	57	33.3%	4
Umatilla County	7.3%	329	24	58	83.3%	28
Wasco County	7.1%	154	11	60	54.5%	27
Tillamook County	6.7%	194	13	48	76.9%	35
Marion County	6.5%	369	24	57	83.3%	44
Grant County	6.4%	141	9	40	55.6%	9
Columbia County	6.3%	126	8	66	62.5%	17
Josephine County	6.3%	222	14	49	42.9%	22
Lincoln County	6.2%	178	11	53	72.7%	24
Curry County	5.9%	102	6	48	50.0%	8
Baker County	5.9%	187	11	52	72.7%	11
Jefferson County	5.9%	68	4	60	75.0%	7
Gilliam County	5.6%	36	2	52	100.0%	1
Harney County	5.4%	129	7	49	57.1%	4
Multnomah County	4.7%	473	22	82	40.9%	97
Polk County	4.5%	156	7	56	85.7%	16
Jackson County	4.4%	385	17	54	23.5%	28
Morrow County	4.3%	69	3	59	100.0%	7
Douglas County	4.3%	676	29	49	72.4%	31
Hood River County	4.1%	73	3	57	33.3%	6
Klamath County	4.1%	244	10	51	40.0%	8
Wallowa County	3.6%	111	4	61	75.0%	8
Deschutes County	3.5%	144	5	56	100.0%	4
Wheeler County	3.1%	32	1	84	100.0%	3
Lane County	2.8%	983	28	58	28.6%	52
Washington County	2.6%	311	8	63	50.0%	25
Coos County	2.5%	240	6	55	33.3%	8
Clackamas County	2.3%	350	8	69	75.0%	32
Malheur County	2.2%	181	4	52	75.0%	12
Union County	1.9%	156	3	77	66.7%	13
Benton County	1.6%	185	3	71	100.0%	18