Transportation for America

The Fix We're In For: The State of California's Bridges

TRANSPORTATION FOR AMERICA

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Overview

Out of 50 states and the District of Columbia, California ranks **18th worst nationally** in terms of the overall condition of the state's bridges. (1 being the worst, 51 being the best.)

Today, **one out of every eight** bridges that motorists in California cross each day are likely to be deteriorating to some degree; and **12.8 percent** of bridges statewide are rated "structurally deficient" according to government standards, compared to **11.5 percent** nationwide.

In 2008, California spent all of their available federal funds for bridge repair on that purpose. In 2008, California received **$500 million** in federal funds for bridge repair, and spent **$907 million** or **24.8 percent** of available federal transportation dollars on bridge repair and maintenance. (It's possible to spend more on bridge repair than a state received because of other federal programs that can be shifted or "flexed" into bridge repair.) That same year, the national average was **13 percent** of total funds spent on repair and rehabilitation of bridges.[1]

That same year, California spent **20.2 percent** of all federal funds on new capacity. The U.S. average is 30 percent.

Regardless of the amount of wear and tear experienced by a specific bridge, most bridges are designed to last roughly 50 years. The average age of bridges in the U.S. is **42 years old**. California's average is **44.4 years old**. The number of "structurally deficient" California bridges is virtually guaranteed to increase over time, as a wave of old bridges reach the end of their designed lives. More than 8,300 California bridges are now 50 years old or older. By 2030, that number could more than double to over 19,000 without substantial bridge replacement.

California would need **$323** from each licensed driver to address all the bridge needs identified in 2009.

[1] Ibid.

The National Picture

America's infrastructure is beginning to show its age. Our nation's roads, highways and bridges have increasingly received failing scores on maintenance and upkeep. The American Society of Civil Engineers has rated our country's overall infrastructure a "D" and our bridges a "C." For roads and highways, this manifests itself in rutted roadways, cracked pavement and abundant potholes, creating significant costs for drivers and businesses due to increased wear and tear on their vehicles. For the nation's bridges, lack of maintenance can result in the sudden closure of a critical transportation link or, far worse, a collapse that results in lost lives and a significant loss in regional economic productivity.

Despite billions of dollars in annual federal, state and local funds directed toward the maintenance of existing bridges, 69,223 bridges – representing more than 11 percent of total highway bridges – are classified as "structurally deficient," according to the Federal Highway Administration (FHWA.) "Structurally deficient" bridges require significant maintenance, rehabilitation or replacement. In addition, a number of bridges exceed their expected lifespan of 50 years. The average age of an American bridge is 42 years.

The maintenance backlog will only worsen as bridges age and costs rise. According to FHWA's 2009 statistics, $70.9 billion is needed to address the current backlog of deficient bridges.[2] This figure will likely increase as many of our most heavily traveled bridges – including those built more than 40 years ago as part of the Interstate System – near the end of their expected lifespan.

The good news is that some states have worked hard to address the problem and have seen their backlog of deficient bridges shrink in number. The bad news is that, critical as these efforts are, they are not nearly enough. Two key problems persist: (1) An absence of real incentives and assurances at the federal level that fixing aging bridges is a top funding priority; (2) Federal investment in fixing the nation's infrastructure is not currently tied to performance and accountability measures, leaving Americans no concrete assurances of progress. As bridges continue to age and fall into disrepair, our nation's policymakers must make a greater commitment to maintaining and repairing these crucial assets.

California's Bridge Backlog

Out of 50 states and the District of Columbia, California ranks 18th nationally in terms of the overall condition of the state's bridges. (1 being the worst, 51 being the best.)

[2] SAFETEA-LU Funding Tables, FY2009, Table 3, Part 1, "Weighted Needs", p.27, http://www.fhwa.dot.gov/safetealu/fy09comptables.pdf

Today, one out of every eight bridges that motorists in California cross each day are likely to be deteriorating to some degree; and 12.8 percent of bridges statewide are rated "structurally deficient" according to government standards, compared to 11.5 percent nationwide.

California is currently spending all of its federal bridge money on bridge repair. In 2008, California received $500 million in federal funds for bridge repair, and spent $907 million in all federal transportation funds. The higher figure is possible because of other federal programs that can be shifted or "flexed" into bridge repair. California spent 24.8 percent of all federal transportation dollars on bridge repair. The U.S. average is 13 percent.

As of 2010, California had 24,542 highway bridges: 12,287 of them owned by the state; 11,710 owned by local counties, cities and towns; and 545 owned by other entities, such as private business and federal agencies.[3] Ownership of a particular bridge matters because it often determines which jurisdiction is responsible for maintenance and repair. Table 1 shows the number and average annual daily traffic[4] on California's bridges.

What Qualifies a Bridge as "Structurally Deficient?"

Federal law requires states to inspect all bridges 20 feet or longer at least every two years. Bridges in "very good" condition may go four years between inspections, while those rated "structurally deficient" must be inspected every year.

Highway bridges have three components: 1) the **superstructure**, which supports the deck; 2) the **substructure**, which uses the ground to support the superstructure; and 3) the **deck**, which is the top surface of the bridge that cars, trucks and people cross. During inspection, each of these bridge features is given a rating between 0 and 9, with 9 signifying the best condition. Federal guidelines classify bridges as "**structurally deficient"** if one of the 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.[1] If a bridge is rated "structurally deficient," the bridge requires significant maintenance, rehabilitation or replacement. A state may restrict heavy vehicle traffic, conduct immediate repairs to allow unrestricted use or close the bridge to traffic until repairs can be completed.

*Sources: Federal Highway Administration. "Non-Regulatory Supplement." U.S. Department of Transportation. http://www.fhwa.dot.gov/legsregs/directives/fapg/0650dsup.htm#N_2_*
Federal Highway Administration. "Conditions & Performance." U.S. Department of Transportation, 2006.

[3] In this analysis, we use only highway bridges, since that is all that the National Bridge Inspection Program requires states to report in the National Bridge Inventory. Limited data is available for pedestrian bridges
[4] Average amount of traffic that crosses over the bridge each day.

Table 1: Overview of California Bridge Statistics

	State system	Local system	Other	**Structurally deficient**	**Total**
Number of bridges	12,287	11,710	545	**3,135**	**24,542**
Bridge average annual daily traffic	554,856,500	71,139,241	946,988	**82,647,465**	**626,942,729**

Rural bridges often provide crucial access to jobs and medical services for residents in sparsely populated areas. Urban bridges, on the other hand, carry high volumes of traffic to and within regional economic centers. Most bridges in the National Highway System are in rural areas, but urban bridges carry more traffic. Nationally, rural bridges account for 77 percent of all bridges. However, the 23 percent of bridges in urban areas carry almost three-quarters of all national bridge traffic.[5]

Between 1992 and 2010, the number of vehicles traveling across structurally deficient bridges on a daily basis was virtually unchanged (-2 percent), despite billions of dollars spent annually on bridge construction and repair.[6] An increasing number of American individuals and businesses rely on bridges 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.

Drivers in California are regularly traveling across heavily trafficked bridges with "poor" ratings — bridges that could become dangerous or closed without repair. Table 2 lists the most heavily used structurally deficient bridges throughout California, ranked by average annual daily traffic (ADT) counts.

[5] Research and Innovative Technology Administration. Highway Bridges in the United States — An Overview. http://www.bts.gov/publications/special_reports_and_issue_briefs/special_report/2007_09_19/html/entire.html
[6] T4 America's Analysis of FHWA's National Bridge Inventory Data. http://www.fhwa.dot.gov/bridge/britab.cfm.

Table 2: California's Structurally Deficient Bridges with Highest Traffic Volumes

Rank	County	Bridge Facility	Crosses Feature	Proximity to	Average annual daily traffic
1	Los Angeles County	INTERSTATE 10	NORMANDIE AVE	07-LA-010-R13.3-LA	321,000
2	Los Angeles County	INTERSTATE 10	BUDLONG AVENUE	07-LA-010-R13.54-LA	304,000
3	Los Angeles County	I 10 & RAMPS	16 CITY STREETS	07-LA-010-16.54-LA	304,000
4	Los Angeles County	I 10	I 110	07-LA-010-14.75-LA	304,000
5	Los Angeles County	I 10 & RAMPS	11 CITY STREETS	07-LA-010-15.5-LA	304,000
6	Los Angeles County	I 10 & RAMPS	LOS ANGELES RIVER	07-LA-010-17.54-LA	304,000
7	Los Angeles County	I 10 & RAMPS	3 CONN, & 8 CITY STREET	07-LA-010-14.88-LA	304,000
8	Los Angeles County	I 605	I 5 & CONNECTOR RAMPS	07-LA-605-R9.55-SFSP	297,600
9	Los Angeles County	I 405	UP RR,PICO,EXPOSITION	07-LA-405-29.85-LA	296,000
10	Orange County	ROUTE 5	ROUTE 55	12-ORA-005-30.26-TUS	293,000

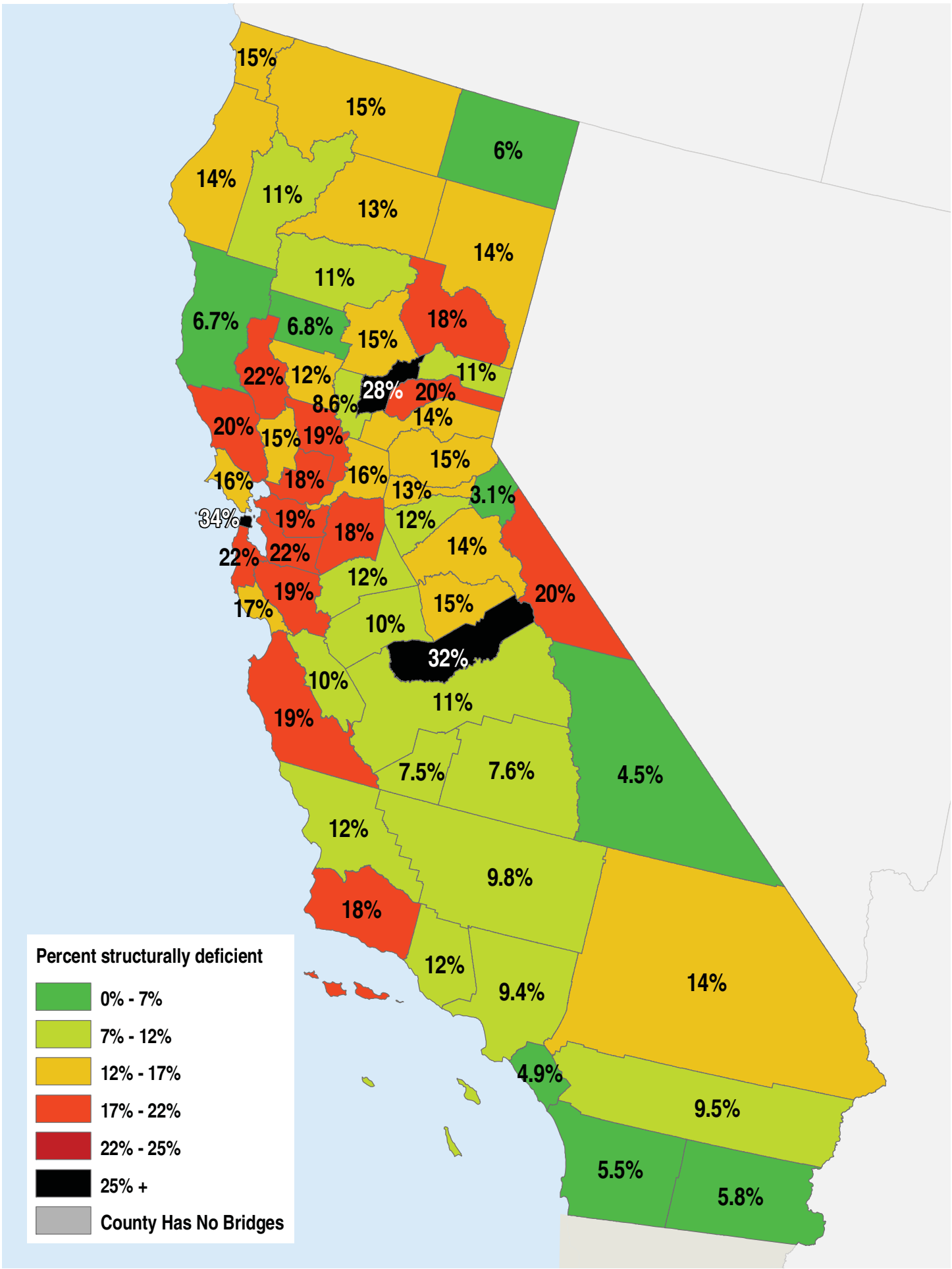
California has 32 out of 58 counties where the average bridge condition is worse than the statewide average. Table 3 reveals the five counties with the best and worst average bridge conditions. In Figure A, counties are shaded based on their overall percentage of "structurally deficient" bridges. Although smaller or more rural counties have fewer bridges than more populated counties, this measurement allows for cross-comparison between counties of various sizes.

Table 3: Counties in California With Worst Average Bridge Conditions

County	# of Highway Bridges	# of Structurally Deficient Bridges	**% Structurally Deficient**
San Francisco County	116	40	**34.5%**
Madera County	229	74	**32.3%**
Yuba County	127	35	**27.6%**
Lake County	120	26	**21.7%**
Alameda County	601	130	**21.6%**

Table 3: Counties in California With Best Average Bridge Conditions

County	# of Highway Bridges	# of Structurally Deficient Bridges	**% Structurally Deficient**
Imperial County	428	25	**5.8%**
San Diego County	1442	79	**5.5%**
Orange County	1115	55	**4.9%**
Inyo County	67	3	**4.5%**
Alpine County	32	1	**3.1%**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County Has No Bridges

Earthquakes and California bridges

California bridges have to stand up to threats far beyond just the constant load of cars and trucks. San Diego County in Southern California has nine bridges in danger of collapsing in the event of a strong earthquake.

One of the structures in the worst condition – the structurally deficient Torrey Pines Bridge – finally received funding late last year to be seismically retrofitted. Once construction is complete, the 77-year-old bridge will be able to withstand a magnitude 7 earthquake for at least 50 years.

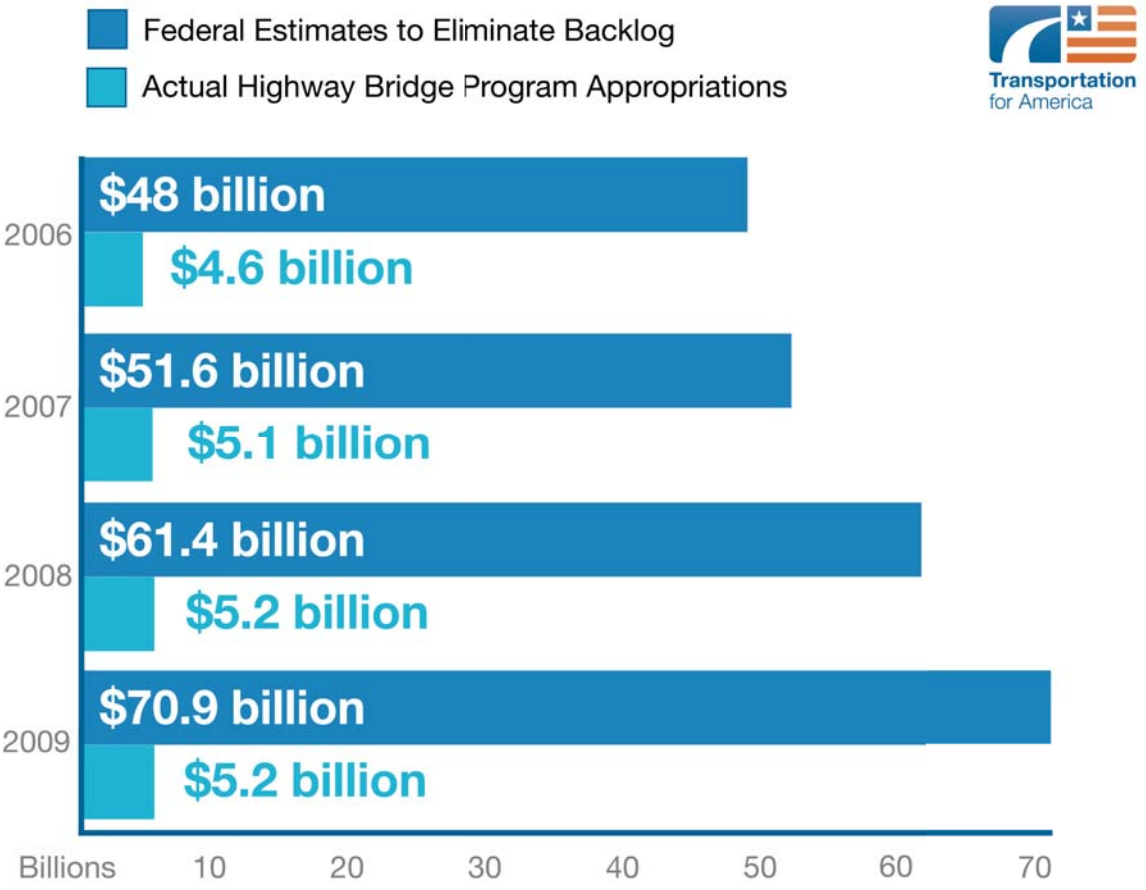
Other local bridges identified as severely earthquake vulnerable by Caltrans (the California Department of Transportation) include the Cabrillo Bridge over State Route 163; Georgia Street Bridge in the City of San Diego; the Willow Street Bridge in Chula Vista; and the Highway 101 Bridge over the San Elijo Lagoon in Encinitas.

According to San Diego News10, local officials have been rebuffed in their request for funding due to tight budgets in both the state capital of Sacramento and Washington, DC.

Sources: http://www.10news.com/news/25639412/detail.html
http://www.signonsandiego.com/uniontrib/20070803/news_1n3safety.html
http://www.signonsandiego.com/news/2010/oct/20/retrofit-planned-torrey-pines-bridge/

Congress created the Federal Highway Bridge Program to fix and replace deficient bridges throughout the country, yet current funding is insufficient to keep up with the rapid deterioration rate of U.S. bridges. Figure B compares the size of the bridge program from 2006 through 2009 with FHWA estimates of the sums needed to catch up on the current backlog of repairs. While appropriations have increased by $650 million, bridge needs over the same time period have increased by $22.8 *billion*.

Figure B: Bridge Repair Funding Levels Versus FHWA Needs Estimate

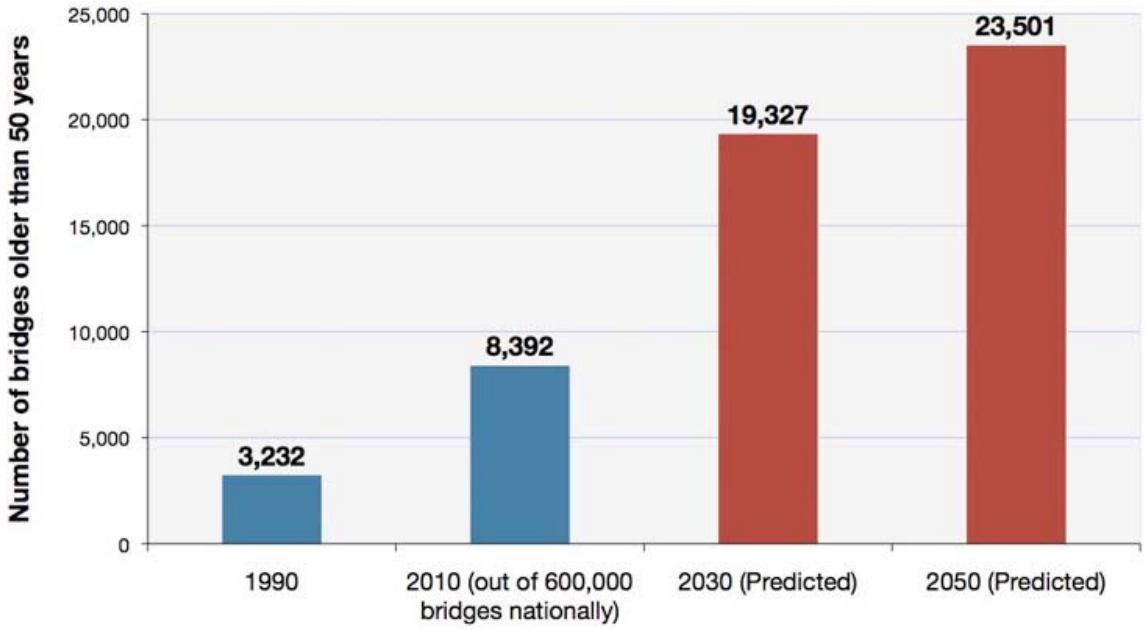


The Cost of Aging Bridges

Regardless of the amount of wear and tear experienced by a specific bridge, most bridges are designed to last roughly 50 years. The average age of bridges in the U.S. is 42 years old. California's average is 44.4 years old. The number of "structurally deficient" bridges is virtually guaranteed to increase over time, as a wave of old bridges reach the end of their designed lives. Nationally, more than 185,000 highway bridges (out of 600,000 total) are now 50 years old or older. By 2030, that number could double without substantial bridge replacement, and it has the potential to triple by 2050. With one in five bridges built over 50 years ago, almost half of all the nation's bridges may require major structural investments within the next 15 years.[7]

[7] *Bridging the Gap: Restoring and Rebuilding the Nation's Bridges*. American Association of State Highway and Transportation Officials. July 2008. http://roughroads.transportation.org/

Figure C: California Bridges over 50 Years Old



The Tension Between Fixing the Old and Building the New

In 2008, California spent all of their available federal funds for bridge repair on that purpose. In 2008, California received **$500 million** in federal funds for bridge repair, and spent **$907 million** or **24.8 percent** of available federal transportation dollars on bridge repair and maintenance. (It's possible to spend more on bridge repair than a state received because of other federal programs that can be shifted or "flexed" into bridge repair.) That same year, the national average was **13 percent** of total funds spent on repair and rehabilitation of bridges.[8]

That same year, California spent **20.2 percent** of all federal funds on new capacity. The U.S. average is 30 percent.

Though we need to continue expanding our transportation system, the safety and preservation of existing bridges and roads must be a higher priority for our long-term economic competitiveness and fiscal sustainability.

[8] Ibid.

Fixing Them First: Florida's Success Story

By prioritizing repair and maintenance of their existing bridges and setting repair performance standards, Florida's bridges are some of the safest and highest-rated in the country. Florida has the second lowest percentage of poorly rated bridges of any state in the U.S: only 290 out of 11,899 total bridges, or 2.4 percent, are classified as structurally deficient.

How has Florida managed this? Preserving existing infrastructure is one of three core principles of the Florida Department of Transportation (FDOT), which is committed to protecting state investments. *Preservation is defined as:* ensuring that 80 percent of the pavement on the State Highway System meets department standards and that 90 percent of department-maintained bridges meet department standards.

In order to meet these targets, maintenance, repair and replacement projects receive funds before all other projects. The state uses data and analytical tools to determine the amount of funding that will be necessary to meet the department repair standards.

In addition, Florida has a specific state initiative to replace and repair bridges. The State Maintenance Office develops an annual list of bridges to be replaced with funds from the State Bridge Replacement Program, while the State Bridge Repair Program is used to take care of periodic maintenance and specified rehabilitation activities. Each district receives funding based on its portion of the total state bridge inventory and then also uses a computer program to prioritize and manage repair.

Florida's practices of prioritizing repair and maintenance, tracking repair needs, and setting measurable goals for success have helped the state have some of the best roads and bridges in the country.

States Can't Keep Up Without Federal Support

Bridges provide crucial access between regions and cities, linking workers to jobs, goods to markets and people to essential services. According to the FHWA, transportation agencies would need $70.9 billion to overcome the current backlog of deficient bridges.[9] This investment would be money well spent, as poor bridge conditions have major implications for traveler safety, mobility and economic activity.

Allowing roads and bridges to slip into disrepair ultimately costs state and local governments billions more than the cost of regular, timely repair. Over a 25-year period, deferring maintenance of bridges and highways can cost three times as much as preventative repairs. The backlog also increases safety risks, hinders economic prosperity and significantly burdens taxpayers. Preservation efforts can also extend the expected service life of a road for an additional 18 years, preventing the need for major reconstruction or replacement.[10] It is imperative that California maximize precious tax dollars by extending the useful service life of roads and bridges before major rehabilitation or replacement is required.

In addition to the safety imperative, investing in the construction, expansion and repair of our nation's transportation infrastructure creates jobs while laying the foundation for long-term economic prosperity. Repair work on roads and bridges generates 16 percent more jobs than new bridge and road construction.[11]

For all these reasons, Congress repeatedly has declared the condition and safety of our bridges to be of national significance. However, the current federal program is not designed to ensure that transportation agencies have enough money and accountability to get the job done.

[9] SAFETEA-LU Funding Tables, FY2009, Table 3, Part 1, "Weighted Needs", p.27. http://www.fhwa.dot.gov/safetealu/fy09comptables.pdf
[10] American Association of State Highway and Transportation Officials. *Bridging the Gap: Restoring and Rebuilding the Nation's Bridges*. July 2008. http://roughroads.transportation.org/
[11] Smart Growth for America. *The Best Stimulus for The Money. www.smartgrowthamerica.org/**stimulus**.html*

The Consequences of Deferred Maintenance

Neglecting bridge repair and maintenance won't just cost more money down the road — the consequences can be far more immediate and disastrous. Deferred maintenance can result in crippling delays if a vital artery is closed, or even worse, if lives are put in danger as aging bridges become unsafe and at risk for collapse.

Crown Point Bridge Closing

On October 16, 2009, the Champlain/Crown Point bridge linking New York and Vermont was closed without warning. An inspection performed on the bridge as part of a rehabilitation or replacement process, set to start in 2012, revealed that two of the bridge's support piers were not structurally sound. The bridge was a vital economic connection between the states, carrying about 3,500 cars across each day. Thousands of daily commuters now have to drive about 100 miles out of their way to another bridge or pay at least $8 a trip for a ferry. A month later, officials in Vermont and New York announced that the bridge was beyond repair and would have to be demolished. Jim Bonnie, with the New York Department of Transportation, told NPR, "We set aside about $30 million a year for our bridge program, but we need on the order of $100 million to maintain our 830 bridges. So, it's just an epidemic."

Minneapolis' I-35W Collapse

On August 1, 2007, the I-35W bridge in Minneapolis, Minnesota abruptly failed, falling into the Mississippi River, killing 13 people and injuring 145. Following the incident, the National Transportation Safety Board (NTSB) undertook a year-long investigation to determine the cause of the collapse. Though the "structurally deficient" bridge was being inspected every year, the NTSB found that the bridge design was flawed; its gusset plates were undersized and not meant to support the kind of loads the bridge was carrying. The cause of the collapse, in the NTSB's opinion, was the increased weight of the bridge itself due to previous modifications, and the concentrated weight of construction materials present on the deck of the bridge on the day of the collapse.

Recommendations

As our nation's bridges continue to age Congress needs to provide states with increased resources to repair and rebuild them. As the chart earlier in this report shows, the federal transportation program currently provides only a fraction of the necessary funds for maintenance and repair. Although a number of states are making repair of existing assets a priority, more support from the federal government is essential. The nation's bridges are aging and traffic demands are increasing. Though the size of the federal program has increased by 14 percent between 2006 and 2009, state-level needs increased by 47 percent.

Congress also needs to take steps to make sure that funds sent to states for bridge repair are used only for that purpose. Today states can transfer bridge funds for other purposes – even if they have bridges that are in need of repair. These funds should only be used for other purposes if the state's bridges are in a state of good repair. In addition, states should be given the flexibility to develop long-term programs that focus on both keeping bridges in good condition and fixing or replacing bridges that are deficient. Even in instances where it is more cost-effective to perform regular repair on a bridge to prevent it from becoming deficient, the current federal program only allows states to fix a bridge that is structurally deficient with a low sufficiency rating.

Some states across the country are already taking the right steps to repair their infrastructure. These best practices could serve as a model for other states and work with an improved federal program to fix our nation's bridges. Michigan, for example, has greatly increased the ratio of spending on routine maintenance and pavement preservation vis-à-vis capacity increases and/or new roads by attempting to meet a goal of 95 percent of freeways and 85 percent of non-freeways in good condition by 2007, a goal established by Michigan's State Transportation Commission in 1997. The Florida Department of Transportation is bound by state statute that lists preservation as the first of three "prevailing principles," and sets maintenance standards for pavement and bridges.

When our aging bridges are replaced, they must be designed to provide safe access for all who need to use them, whether they are in vehicles, on foot or bicycle, or using public transit.

Conclusion

We cannot continue to ignore our transportation network's vital maintenance needs. The costs of current practices are well known, as roads and bridges continue to display the effects of wear and age, suffering the results of underinvestment. Without a change in both spending levels and overall priorities, California would need $323 from each driver to fix all of the structurally deficient bridges. As our bridges continue to age – more than 60 percent of all bridges will be past their useful life in 2030 – this figure will only grow.

Preserving California's existing transportation system is crucial to ensuring regional prosperity, safety and a higher quality of life. The economic and social cost of neglect is simply too high. It is time for our policymakers to shore up our infrastructure and ensure Americans get the most bang for our transportation buck.

Appendix A: California Counties, Ranked by Percentage of Structurally Deficient Bridges

County	Number of bridges	Number of structurally deficient bridges	**Percentage of bridges that are structurally deficient**	Bridge average annual daily traffic	Average annual daily traffic on SD bridges
San Francisco County	116	40	**34.50%**	7,342,078	2,569,899
Madera County	229	74	**32.30%**	962,094	236,410
Yuba County	127	35	**27.60%**	459,152	96,321
Lake County	120	26	**21.70%**	287,215	41,588
Alameda County	601	130	**21.60%**	31,758,856	5,608,117
San Mateo County	344	74	**21.50%**	13,505,720	3,064,075
Nevada County	127	26	**20.50%**	1,119,134	156,465
Sonoma County	601	121	**20.10%**	7,210,505	737,485
Mono County	45	9	**20.00%**	161,217	28,032
Santa Clara County	939	182	**19.40%**	31,154,409	5,804,761
Monterey County	359	69	**19.20%**	3,564,164	678,993
Contra Costa County	560	105	**18.80%**	17,657,230	3,241,193

County	Number of bridges	Number of structurally deficient bridges	**Percentage of bridges that are structurally deficient**	Bridge average annual daily traffic	Average annual daily traffic on SD bridges
Yolo County	274	51	**18.60%**	2,677,157	599,794
Plumas County	133	24	**18.00%**	116,736	13,014
Santa Barbara County	405	73	**18.00%**	5,683,159	1,219,267
San Joaquin County	640	115	**18.00%**	10,705,223	2,453,016
Solano County	346	61	**17.60%**	5,943,964	1,323,766
Santa Cruz County	185	31	**16.80%**	3,132,363	474,470
Sacramento County	622	97	**15.60%**	17,055,247	3,929,105
Marin County	199	31	**15.60%**	4,608,454	1,117,587
Napa County	150	23	**15.30%**	1,166,964	80,153
Amador County	59	9	**15.30%**	184,232	31,971
Butte County	426	63	**14.80%**	2,169,241	349,029
Siskiyou County	362	53	**14.60%**	891,748	125,126
Del Norte County	89	13	**14.60%**	161,934	6,464
Mariposa County	103	15	**14.60%**	136,069	3,535
San Bernardino County	1366	195	**14.30%**	40,080,737	2,352,762
Humboldt County	386	55	**14.20%**	1,306,279	201,092
Tuolumne County	101	14	**13.90%**	319,350	10,118
Placer County	306	42	**13.70%**	3,707,738	456,110
Lassen County	103	14	**13.60%**	172,223	16,660
Shasta County	476	64	**13.40%**	2,642,941	313,835
El Dorado County	168	21	**12.50%**	1,375,778	150,862
Colusa County	209	26	**12.40%**	749,305	95,125
San Luis Obispo County	368	44	**12.00%**	3,427,297	416,837
Calaveras County	102	12	**11.80%**	216,150	13,717

County	Number of bridges	Number of structurally deficient bridges	**Percentage of bridges that are structurally deficient**	Bridge average annual daily traffic	Average annual daily traffic on SD bridges
Ventura County	485	57	**11.80%**	11,382,218	1,050,590
Stanislaus County	382	44	**11.50%**	2,956,280	222,872
Fresno County	881	101	**11.50%**	7,951,493	1,192,214
Sierra County	55	6	**10.90%**	37,360	3,675
Tehama County	451	49	**10.90%**	1,490,988	176,166
Trinity County	171	18	**10.50%**	90,067	9,261
Merced County	496	50	**10.10%**	3,216,527	276,098
San Benito County	70	7	**10.00%**	558,400	101,790
Kern County	621	61	**9.80%**	8,928,116	832,601
Riverside County	1058	101	**9.50%**	23,757,010	2,667,348
Los Angeles County	3523	331	**9.40%**	228,879,439	31,614,312
Sutter County	116	10	**8.60%**	379,964	20,116
Tulare County	592	45	**7.60%**	2,395,335	214,886
Kings County	160	12	**7.50%**	486,021	56,390
Glenn County	237	16	**6.80%**	431,665	1,362
Mendocino County	329	22	**6.70%**	1,282,807	82,946
Modoc County	84	5	**6.00%**	49,293	3,610
Imperial County	428	25	**5.80%**	1,790,830	61,678
San Diego County	1442	79	**5.50%**	48,503,990	3,481,176
Orange County	1115	55	**4.90%**	58,268,594	2,560,400
Inyo County	67	3	**4.50%**	236,666	730
Alpine County	32	1	**3.10%**	35,203	490

The Fix We're In For: The State of California's Bridges

This report was written by Lilly Shoup, Nick Donohue and Marisa Lang with additional contributions from Tanya Mejia, Sean Barry, David Goldberg and Stephen Lee Davis for Transportation for America. Andrew Amey provided invaluable assistance compiling and analyzing the National Bridge Inventory data and Greg Vernon provided the GIS work. Our thanks to the U.S. DOT and FHWA for their cooperation.

About Transportation for America

TRANSPORTATION FOR AMERICA (T4 America) is the largest, most diverse coalition working on transportation reform today. We believe it is time for a bold new vision — transportation that guarantees our freedom to move however we choose and leads to a stronger economy, greater energy security, cleaner environment and healthier America. We're calling for more responsible investment of our federal tax dollars to create a safer, cleaner, smarter transportation system that works for everyone.

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American Public Health Association (APHA)
Apollo Alliance
LOCUS: Responsible Real Estate Developers and Investors
National Association of City Transportation Officials
National Association of Realtors
National Housing Conference
Natural Resources Defense Council
PolicyLink
Rails-to-Trails Conservancy
The Surface Transportation Policy Partnership
Transit for Livable Communities (Minn.)
U.S. Public Interest Research Group