U.S. roads, bridges are decaying despite stimulus influx

by Gary Stoller
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NEW FAIRFIELD, CONN. — As car after car is jolted by cracked asphalt on a less-than-1-mile stretch of road connecting Route 39 to the New York border, it becomes clear why state transportation officials grade the pavement of this winding western Connecticut road as being in poor condition.

Edges of the two-lane road — where a sign says Col. Henry Ludington passed by in 1777 to repel “British raiders” — are worn and recessed, allowing rainwater to pool.

Connecticut has the nation’s second-highest percentage of major roads — 48%, or 1,268 miles — with pavement in “poor” condition, and 25 other states have 20% or more in such condition, according to an exclusive analysis of the Federal Highway Administration’s (FHWA) most recent data by transportation research group TRIP and USA TODAY.

Indeed, just 38% of the pavement on roads stretching miles across the USA is in “good” condition, according to the analysis, while about one in 10 of the nation’s bridges are “structurally deficient.”

Roads with pavement in poor condition have “advanced deterioration” and typically require structural repair or replacement, according to the FHWA. Such roads, TRIP says, may have ruts, cracks and potholes that give millions of Americans rough rides that increase repair costs and fuel consumption.

The analysis concludes that the nation’s roadways — critical for moving people, goods and services — are in disrepair, and even states with mostly “good” roads have stretches of pavement, as well as bridges, that are in dire need of upgrades.

State, federal and local funding levels for road and bridge improvements are not adequate to meet the nation’s growing needs. About $85 billion is required annually to improve the condition of roads and bridges — nearly double what was spent in 2008, according to the Department of Transportation’s 2010 report to Congress.

And drivers across the USA are paying the price.

‘rippled like a washboard’

Route 9 in south-central New Jersey, which has stretches of pavement deemed to be in poor condition, is what suburban highway deterioration looks like.

Its original concrete slabs were laid in the 1930s, and numerous repaving projects over the concrete have since made its pavement resemble an old pair of blue jeans — still intact but patched and stitched together time and again.

Route 9’s busier sections take a daily beating of almost 80,000 vehicles, including commuter buses and large trucks not permitted on the Garden State Parkway north of Exit 105.

“It’s rippled like a washboard — you hydroplane when it’s wet,” says motorist Lloyd Stone of Manalapan.

The cumulative cost of these tattered roads isn’t just about dollars and cents. Though poor pavement conditions do cost consumers billions annually in vehicle repairs and operating costs, safety is undermined in the worst cases. Slower travel and delayed freight transportation can also increase costs for motorists and industries.

The TRIP/USA TODAY analysis, which looked at data for all roads eligible for federal highway funds, including interstates, highways and other major roads, shows a higher percentage of miles of pavement in poor condition in 2011 (21.4%) than in 2008 (20.7%).

Though the increase was slight, it is significant because the dip comes in the wake of $27 billion in federal stimulus money to improve roads and bridges. That jolt of funding from the American Recovery and Reinvestment Act of 2009 improved 42,000 miles of road and 2,700 bridges.

not designed for this

Kansas had the highest percentage — 52% — of miles of pavement in poor condition, with Connecticut following closely behind. Then came New Jersey, 45%; Hawaii, 39%; California, 37%; and Oklahoma, 36%.

Though most of Missouri’s miles of pavement — 57% — are in good condition, drivers in the Show-Me State had no trouble showing USA TODAY where the roads can test their patience.

Bob Bender of Lenexa, Kan., says he drives about every three months on Interstate 70 in Missouri between Kansas City and St. Louis, and that stretch “is in horrible shape.”

“One day I almost hit the potholes so hard that my vehicle actually went in the air,” he says. “I have had a lot of oil changes and flat tires all in one day. It’s dangerous.”

Missouri Department of Transportation spokesman Bob Brendel says Interstate 70 “needs to be rebuilt from the ground up because it has exceeded its design life.”
The highway, built in the 1950s, was designed to last 20 years. The original pavement underneath “is pretty much shot,” so each time the highway is resurfaced, “the treatments last a shorter period of time,” Brendel says.

Rebuilding the 200-mile stretch between Kansas City and St. Louis would cost $2 billion to $4 billion, and “that’s money we don’t have,” he says, echoing a refrain heard around the country.

Keeping Missouri’s roads in good condition will be a challenge, Brendel says, because maintenance costs continue to rise while gas tax revenue to fund maintenance is diminishing as people drive less and use more fuel-efficient vehicles.

Neighboring Kansas has a much higher overall percentage of pavement in poor condition because many of the state’s secondary roads are in disrepair. Yet its major roads and interstate highways — which carry the bulk of traffic — are better off, with only 6% in poor condition.

“If one looks at vehicle miles traveled, our roads are not considered poor,” says Kansas Department of Transportation spokesman Steve Swartz.

Jerry Younger, the department’s deputy secretary and the state’s transportation engineer, says Kansas doesn’t have the financial resources to improve secondary roads and — like many other states — must focus on improving the most-traveled ones.

The Federal Highway Administration says the picture of America’s roadways is rosier than the one painted by the USA TODAY analysis. The agency says the debate should focus on giving more weight to roads with more traffic.

Using such a measure, the FHWA says its data show that the share of travel occurring on roads in good condition improved from 46% in 2008 to 48% in 2011. Yet, like the TRIP/USA TODAY analysis, the FHWA analysis shows that the percentage of travel occurring on roads in poor condition increased slightly from 15% in 2008 to 15.3% in 2011.

The agency says the higher percentage of travel occurring on pavements in good condition in 2011 can partly be attributed to the stimulus, but transportation experts see that funding as a mere Band-Aid. “Considering the size of the overall investment need, the Recovery Act was more of a temporary relief than a long-term solution,” says Tony Dorsey, a spokesman for AASHTO, which represents state highway and transportation departments.

U.S. BRIDGES FALLING DOWN

Many bridges are also withering. About 11% of the nation’s bridges are “structurally deficient,” and about 14% are “functionally obsolete,” the analysis of FHWA data for bridges 20 feet or longer shows.

In five states — Pennsylvania, Iowa, Oklahoma, Rhode Island and South Dakota — at least 20% of bridges are structurally deficient or require “significant maintenance, rehabilitation or replacement,” according to the American Society of Civil Engineers. These structures must be inspected at least every year because “critical load-carrying elements” were found in poor condition.

A bridge is classified as functionally obsolete if its design is outdated. It may have lower load-carrying capacity, narrower shoulders or less clearance underneath than bridges built to current standards.

The FHWA says the terms “structurally deficient” or “functionally obsolete” are not a reflection of a bridge’s safety, and immediate action is taken if inspectors find an unsafe one.

The Sherman Minton Bridge, which spans the Ohio River between Indiana and Kentucky, was ordered closed by Indiana Gov. Mitch Daniels in 2011 after it was found unsafe, the FHWA says. It has since been repaired and reopened.

In May, a bridge classified as functionally obsolete — the Interstate 5 bridge over the Skagit River in Washington — collapsed after a truck struck a girder. No one died or was seriously injured. The National Transportation Safety Board (NTSB) is investigating the cause.

A USA TODAY review of news media reports since 1989 found 10 other bridge collapses that resulted in injuries or fatalities or were investigated by the NTSB.

The most striking bridge collapse occurred in August 2007 when the Interstate 35W bridge over the Mississippi River in Minneapolis collapsed during the evening rush hour, killing 13 people and injuring 145.

The NTSB said the probable cause was a design error. Contributing factors cited by the agency included inadequate design review and inspections by federal and state transportation officials.

Transportation for America, a Washington-based policy organization, reports that the average age of a bridge in America is 42 years, and more than 200 million trips are taken daily across deficient bridges in the nation’s 102 largest metropolitan areas.

THE COST OF A POTHOLE

These creaky bridges and pock-marked roads are testing the patience of drivers.

Kevin Korterud of New Albany, Ohio, saw firsthand what a bad road can do while traveling with his family between Chicago and Indianapolis this past spring.

While heading south on Interstate 65, his car hit “a massive pothole.” The impact was so hard a general warning light came on, and a front fog light blew out, he says.

“I swerved into the left lane, and, if I had hit the pothole head-on, we could have gone out of control,” recalls Korterud, who spent $37 to replace the broken light. “On the side of the road was a poor chap with a new Audi who suffered a tire burst — and likely a cracked rim — after I suspect, hitting the pothole head-on.”

Contributing: Larry Higgs, Asbury Park Press