We investigate water damage.

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## TWI Report #2 - The Fake News About Falling Bridges

By: Steve Willie

#### FICTION:

Que up the falling bridges! The infrastructure in the United States is falling down from old age. Nobody is to blame....it is just too old. Please give us more money. Everyone needs to open up their wallets much wider this time.

#### **FACT:**

Our infrastructure is mostly failing from day-one defects and subsequent damage. Until public works officials correctly attribute the failures to day-one defects and subsequent damage, there will be no changes in behavior. The same problems will continue, and the taxpayers will continue to pay the consequences of it.

## **FAKE INFRASTRUCTURE NEWS**

Almost every story about failing infrastructure in the news media these days mentions the age of the infrastructure instead of the actual factors leading to the failure. We have all seen this story many times before. The four-step process goes like this:

- Newsflash: INFRASTRUCTURE FALLS DOWN!
- 2. Public works officials, politicians, and the news media all get together and blame the failure on aging infrastructure.
- 3. Months later, the official investigation concludes that the failure was not caused by aging infrastructure after all.
- 4. Public works officials, politicians, and the news media never admit they were wrong about their previous statements.

Most of these fake news stories say nothing about day-one defects and subsequent damage, which together are responsible for more infrastructure defects and failures than age, as the following examples will suggest.

If you are a public works official and you hear or read a story about the infrastructure you manage, then you should say something. If you know the truth and fail to offer the truth about this important issue, then you may have compromised your credibility.

### I-35W BRIDGE COLLAPSE - FAKE NEWS

At 6:05 pm on August 1, 2007, the I-35W Bridge in Minneapolis collapsed into the Mississippi River killing 13 people. A structure supposedly designed to last at least 50-75 years failed in only 40 years. Other reports have thoroughly exposed the incompetence of the organization and personnel at the Minnesota Department of Transportation (MNDOT) leading directly to the failure. But it was only a matter of days until the media and officials began the predictable speeches and articles about aging infrastructure. Here are some examples:

Here is Representative Phyllis Kahn
 (DFL) District 59B Minneapolis, in a 2007
 House Floor Special Session pleading for
 more money because of the I-35W Bridge
 collapse: "....we didn't put the adequate
 amount of money into our transportation



department". According to Phyllis Kahn, the only causes of the I-35W tragedy were insufficient money and the Governor himself. Was there even a single person at MNDOT who corrected her error when she associated the I-35W failure with a lack of funding?

- From the Wall Street Journal on August 4, 2007 ("Lost Highways" graphic): "The bridge collapse in Minnesota underscores what civil engineers have been warning about for years – the nation's aging infrastructure is in need of repairs."
- From the Agfax Website on August 1, 2017: "The 10-year anniversary of the horrific I-35W bridge collapse is a stark reminder of the critical need to repair the country's aging infrastructure – sooner rather than later."
- From the NPR Website on August 1, 2017: "The bridge collapse sparked immediate calls in Minnesota and across the country to invest big in repairing and replacing the nation's aging and crumbling infrastructure."

Yes, the news media still failed to identify the correct reasons for failure even <u>ten years</u> after the event.

Here is the actual cause of the failure from the executive summary of the National Transportation Safety Board's Accident Report from November, 2008:

"The National Transportation Safety Board determines that the probable cause of the

collapse of the I-35W bridge in Minneapolis, Minnesota, was the inadequate load capacity, due to a design error by Sverdrup & Parcel and Associates, Inc. of the gusset plates at the U10 nodes, which failed under a combination of (1) substantial increases in the weight of the bridge, which resulted from previous bridge modifications, and (2) the traffic and concentrated construction loads on the bridge on the day of the collapse."

Is there any relationship at all between claims by the media, politicians, and actual facts? They seem to be talking about two different bridges. I recommend reading the entire NTSB report to fully understand the depth of incompetence at MNDOT and their consultants.

The design error in the NTSB report refers to gusset plates which were only about half the thickness required at the time the bridge was designed. One gusset plate was so overstressed that it began to bow and warp years earlier, before the bridge was over-loaded. MNDOT personnel photographed it and then did nothing about it. MNDOT then allowed a construction contractor to store heavy materials on the bridge deck when they should have known that it was both egregiously underdesigned and severely over-loaded. The temporary construction loads included 570,000 pounds of sand, gravel, and construction equipment being stored on the bridge at the time of collapse.

# I-5 BRIDGE OVER SKAGIT RIVER COLLAPSE - FAKE NEWS

At 7:05 pm on May 23, 2013, the I-5 Bridge over the Skagit River in Washington State collapsed into the river below. Fortunately there were no deaths from this failure. However, there were



numerous lies in the media, such as the following:

- Article in USA Today on May 24, 2013 titled: "Bridge Collapse Shines Light on Aging Infrastructure".
- From The Hill on May 24, 2013: "The collapse of a bridge in Washington State late Thursday shows the need for Congress to approve more transportation funding...." And "The collapse of the I-5 bridge over the Skagit River in Washington State serves as another urgent reminder the America's aging infrastructure was built, at best, for another era...."
- Paula Hammond (Ex-WSDOT Secretary of Transportation) in Crosscut on May 23, 2013: "It serves as a good reminder how fragile our aging infrastructure is."
- The World Socialist Website on May 25, 2013: "The Skagit River Bridge Collapse: Another example of Decaying Infrastructure".

Here is the actual cause of the failure from the executive summary of the National Transportation Safety Board's Accident Report from July, 2014:

"The National Transportation Safety Board determines that the probable cause of the Interstate 5 Skagit River Bridge span collapse was a strike to the bridge structure by an oversize combination vehicle that failed to travel in a lane with adequate overhead clearance due to deficiencies in the interdependent system of safeguards for oversize load movements. These deficiencies included (1) insufficient route

planning by Mullen Trucking LP and the oversize combination vehicle driver; (2) failure of the certified pilot/escort vehicle driver to perform required duties and to communicate potential hazards, due in part to distraction caused by cell phone use; and (3) inadequate evaluation of oversize load permit requests and no provision of low-clearance warning signs in advance of the bridge by the Washington State Department of Transportation."

Those who do not drive through Washington State would not have noticed the number of bridges in that state which had no advance warning of low vertical clearance prior to the I-5 Skagit River Bridge failure. This includes the I-5 Skagit Bridge itself. Shortly after this incident, WSDOT installed hundreds of additional vertical clearance warning signs on highways all over the State, including the Skagit River Bridge. There could not be a more obvious admission of guilt. I recommend reading the entire NTSB report to fully understand the incompetence at WSDOT.

The message being sent to Washington State taxpayers is: "we wasted your money so give us some more of it."

Both the I-5 and I-35W bridge tragedies were caused by either day-one defects or subsequent damage. Neither failure was caused by aging infrastructure or a lack of funding. This industry has wasted billions of dollars on defective infrastructure and then damaged it after construction. This trend continues today. There are no signs that the lies of aging infrastructure will be reversed any time soon. What are the chances that the problem will be solved when public officials have not even correctly identified the problem?





### **ABOUT THE AUTHOR**

Steve Willie is a Civil Engineer with over 30 years of experience designing, inspecting, and repairing public works infrastructure in the western USA, beginning at the City of Los Angeles Department of Transportation in 1987.

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