

Compensating Victims of Bridge Collapses Outside Minnesota

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Introduction

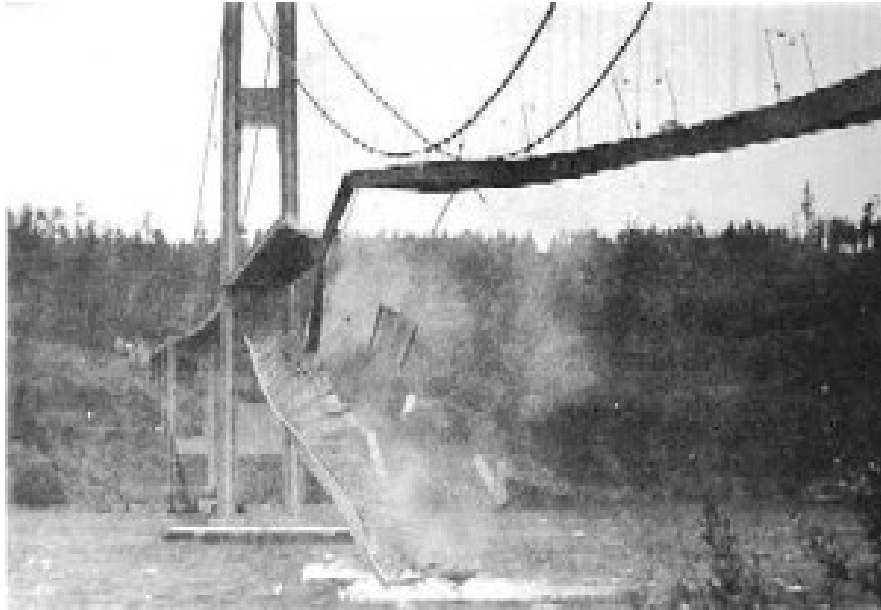
This paper describes how other states have compensated victims of bridge collapses that occurred before the Interstate 35W Bridge over the Mississippi River in Minneapolis collapsed on August 1, 2007. It includes bridges that collapsed in California, Connecticut, New York, Oklahoma, Tennessee, Washington, and West Virginia, from 1940 to 2002. The collapses and the state response to them are described in chronological order. They offer an interesting variety of approaches.

Because the tort claims law of each of these other states differs from Minnesota's, no other state's experience provides a complete template for how Minnesota should compensate victims of the I-35W Bridge collapse. Nevertheless, each bridge collapse outside Minnesota offers some insight into the problems that both the victims and the State will face in fashioning the appropriate method and amount of compensation.

A hypertext version of this paper, with hyperlinks to the sources that are in the public domain, is available on the Minnesota Senate's Web site at:

http://www.senate.leg.state.mn.us/departments/scr/treatise/Bridge_Collapse/bridge_collapses_outside_Minnesota.pdf

1. Tacoma Narrows Bridge - Washington - November 7, 1940



Tacoma Narrows Bridge in 1940, courtesy of SECRET, *Infamous Bridge Disasters* (visited Oct. 30, 2007) <<http://filebox.vt.edu/users/aschaeff/tacoma/tacoma.html>>.

The Tacoma Narrows Bridge in Tacoma, Washington, was completed on July 1, 1940. It was the longest suspension bridge of its time, spanning over 5,939 feet, with a center span of 2,800 feet. It was designed to be less expensive by being lighter. Unfortunately, the design caused the bridge to undulate in the wind, giving it the name “Galloping Gertie.” Anton J. Schaeffer, *The Tacoma Narrows Bridge Disaster* (visited Oct. 30, 2007)

<<http://filebox.vt.edu/users/aschaeff/tacoma/tacoma.html>>.

On November 7, 1940, only four months after opening, winds exceeding 40 mph caused the rhythmic rising and falling of the bridge deck to change to a two-wave twisting motion. The State closed the bridge. When it fell later that day, the only fatality was a dog trapped in a car on the bridge. *Id.* (video available at: <http://en.wikipedia.org/wiki/Tacoma_Narrows_Bridge>.)

According to Mike Hoover, Senate Counsel for the State of Washington, there were no injuries and only minor damage to private property, which was covered by private insurance. The State, at that time, was still protected by sovereign immunity and there was no legislative action to compensate victims. The State had been scammed by insurance fraud, and had some difficulty collecting on its own insurance for property losses.

2. Silver Bridge - West Virginia - December 15, 1967



The Silver Bridge, courtesy of Mason County, WV, Web page, *Infamous Bridge Disasters* (visited Oct. 30, 2007) <<http://filebox.vt.edu/users/aschaeff/silver/silver.html>>.

The Silver Bridge was completed in 1928 across the Ohio River to connect Point Pleasant, West Virginia, with Gallipolis, Ohio. Its center span was 700 feet and the two side spans were 380 feet. “The bridge was of suspension design with ‘eyebars’ chained together instead of the conventional wire cables. These ‘eyebars’ were linked together with massive pins.” Anton J. Schaeffer, *The Point Pleasant/Silver Bridge Disaster* (visited Oct. 30, 2007) <<http://filebox.vt.edu/users/aschaeff/silver/silver.html>>.

At 5:00 PM on December 15, 1967, the Silver Bridge collapsed claiming 46 lives and injuring 9. The Christmas rush applied an extra load to the 39 year old bridge causing a cleavage fracture in one of the “eyebars”. This was followed by a ductile fracture near the pin. Unable to support the weight of the entire bridge, the south side chain also snapped. The structure only took about 1 minute to completely fall into the river below. An investigation, led by John Bennett, immediately followed the collapse of the Silver Bridge. The bridge was constructed of carbon steel, which tends to crack. Many cracks were found throughout the bridge among extensive corrosion. The failure resulted from stress corrosion and corrosion fatigue, two concepts which were not known in 1927. It was also found that the flaw could not have been detected, even by today's methods, unless the bridge was taken apart and tested. In addition to the investigation, “the federal government mandated the National Bridge Inspection Standards (NBIS). The new standards required periodic inspection of all the nation's bridges.”

Id. (citing *Collapse of U.S. 35 Highway Bridge, Point Pleasant, West Virginia, December 15, 1967*, NATIONAL TRANSPORTATION SAFETY BOARD, [HAR-71/01](#) (Aug. 26, 1971). Other citations omitted). See also *Silver Bridge*, WIKIPEDIA (visited Nov. 1, 2007) <http://en.wikipedia.org/wiki/Silver_Bridge>.

The bridge was owned by the Gallia County Ohio River Bridge Company, which operated it as a toll bridge until it was sold to the State of West Virginia in 1941. As a result of the collapse, 58 claims for wrongful death, personal injury, and property damage were filed against the West Virginia Department of Highways in the State Court of Claims. *Cantrell v. Dept of Highways*, 11 Ct. Cl. 110, 111-12 (W. Va. Ct. Cl. May 28, 1976). All were disallowed. As the court said:

We are of the firm opinion that the collapse of the Silver Bridge on the evening of December 15, 1967, could not have been anticipated or foreseen by the respondent in the exercise of reasonable care. The ultimate collapse was caused by a fracture of Eyebar 330 resulting from a phenomenon unknown to bridge engineers when the Silver Bridge was constructed in 1926 and unknown to bridge engineers on the date of its collapse.

11 Ct. Cl. at 134.

According to Randall Elkins, Counsel to the West Virginia Legislature, the victims' claims in federal court were also denied for lack of liability on the part of the State, and a resolution to investigate the collapse was introduced in the Legislature but defeated.

3. Mianus River Bridge - Connecticut - June 28, 1983

The Mianus River Bridge on Interstate 95 in Greenwich, Connecticut, was begun in 1954 and completed in 1959. *Zapata v. Burns*, 207 Conn. 496, 498, 542 A.2d 700, 702 (1988). It was a pin-and-hanger design, which linked 12 roadway sections together with steel rods held in place with pins. *Collapse of Thruway Bridge Recalls Connecticut Tragedy*, THE NEW YORK TIMES (Apr. 6, 1987)

<<http://query.nytimes.com/gst/fullpage.html?res=9B0DE4DB1138F935A35757C0A961948260>>.

A 100-foot section of the deck of its eastbound span collapsed at 1:30 a.m. on June 28, 1983, killing three people and seriously injuring three when their vehicles fell with the deck into the Mianus River 70 feet below. *Mianus River Bridge*, WIKIPEDIA (visited Oct. 30, 2007) <http://en.wikipedia.org/wiki/Mianus_River_Bridge>.

The collapse was caused by the failure of two pin and hanger assemblies that held the deck in place on the outer side of the bridge. The hanger on the inside part of the expansion joint at the southeast corner was forced from the pin that was holding it, and the load was shifted to the only other pin in the joint. The problem was caused by rust formation within the bearing on the pin, exerting a tremendous force on the hanger. The extra load on the remaining pin started a fatigue crack at a sharp corner on the pin. It failed catastrophically and the deck was then supported at just three corners.

When two heavy trucks and a car entered the section, the remaining expansion joint failed and the deck crashed into the river below. The ensuing investigation cited corrosion from water buildup due to inadequate drainage as a cause. The highway drains had been deliberately blocked during road mending some 10 years before, and

water leaked down through the pin bearings, causing them to rust. The outer bearings were safety-critical and non-redundant, a design flaw of this particular type of structure. The bearings were difficult to inspect close-up, although traces of rust could be seen near the affected bearings.

The incident was also blamed on inadequate inspection resources in the state of Connecticut. At the time of the disaster, the state had just 12 engineers, working in pairs, assigned to inspect 3,425 bridges. The collapse came despite the nationwide inspection procedures brought about by the collapse of the Silver Bridge in West Virginia in December 1967.

Id. (citing *Collapse of a Suspended Span of Inter- state Route 95 Highway Bridge over the Mianus River, Greenwich, Connecticut, June 28, 1983*, NATIONAL TRANSPORTATION SAFETY BOARD, [HAR-84/03](#) (July 19, 1984)).

According to Jim Fazzalero, Principal Analyst for the Connecticut General Assembly, suits on behalf of the six victims were brought in state court under CONN. GEN. STAT. § 13a-144, which authorizes any person to sue the State for damages due to the negligent failure of the Commissioner of Transportation to properly repair a highway, bridge, or sidewalk. The Connecticut statute does not limit the dollar amount of an award, which is paid from appropriations for highway repair. The State settled with representatives of the three victims who were killed, paying them a total of \$6 million. It also settled with the three victims who were seriously injured for an unknown amount.

After the settlements, the State asserted a subrogated claim against the architectural firm that had designed the bridge. A jury rejected the State's claim, apparently finding that the bridge had been designed according to the state of the art at the time it was built. *Engineers' Firm Cleared by Jury in Fall of Bridge*, THE NEW YORK TIMES (Aug. 15, 1986) <<http://select.nytimes.com/search/restricted/article?res=F50710FB345F0C768DDDA10894DE484D81>>. Suits by the plaintiffs against the bridge designer had previously been dismissed as barred by CONN. GEN. STAT. § 52-584a, which requires a suit against an architect or engineer to be commenced within seven years after substantial completion of construction. *Zapata v. Burns*, 207 Conn. 496, 542 A.2d 700 (1988).

4. Schoharie Creek Bridge - New York - April 5, 1987

The New York State Thruway bridge over Schoharie Creek near Amsterdam, New York, was completed in 1954. Its piers were designed with heavy rocks, called riprap, placed around their footings, both underneath and on top of the stream bed, within steel sheeting left in place. In construction, which was carried out with unusual speed so it could be completed before the incumbent governor left office, the riprap was not placed underneath the surface and the steel sheeting was not left in place. *Construction Shortcuts Caused Fatal Bridge Collapse, Panel Says*, THE NEW YORK TIMES (Dec. 4, 1987) <<http://query.nytimes.com/gst/fullpage.html?res=9B0DE0DC1F30F937A35751C1A961948260>>.

“On April 5, 1987, two spans of the . . . bridge fell about 80 feet into the rain-swollen creek after pier 3, which partially supported the spans, collapsed. Ninety minutes after the initial collapse,

pier 2 and a third span collapsed. Four passenger cars and one tractor-semitrailer plunged into the creek, and 10 persons were fatally injured.” *Collapse of New York Thruway (I-90) Bridge over the Schoharie Creek, Near Amsterdam, New York, April 5, 1987*, NATIONAL TRANSPORTATION SAFETY BOARD, HAR-88/02 (Apr. 29, 1988). Video of the second collapse at: <http://en.wikipedia.org/wiki/Schoharie_Creek>.

A report by the State Disaster Preparedness Commission found that a consultant’s recommendation that the riprap be repaired was apparently ignored by the Thruway Authority when it authorized repairs to the bridge in 1981. The last inspection of the bridge, in 1986, had listed the condition of the piers as “unknown.” The December 1987 report of the Disaster Preparedness Commission concluded that both ambiguous plans, not properly interpreted by the contractor, and inadequate inspection and maintenance had contributed to the collapse. *Construction Shortcuts Caused Fatal Bridge Collapse, Panel Says*, THE NEW YORK TIMES (Dec. 4, 1987) <<http://query.nytimes.com/gst/fullpage.html?res=9B0DE0DC1F30F937A35751C1A961948260>>.

The NTSB report concluded:

The National Transportation Safety Board determines that the probable cause of the collapse of the Schoharie Creek Bridge was the failure of the New York State Thruway Authority to maintain adequate riprap around the bridge piers, which led to severe erosion in the soil beneath the spread footings. Contributing to the accident were ambiguous plans and specifications used for construction of the bridge, an inadequate NYSTA bridge inspection program, and inadequate oversight by the New York State Department of Transportation and the Federal Highway Administration. Contributing to the severity of the accident was the lack of structural redundancy in the bridge.

HAR-88/02 (Apr. 29, 1988).

Representatives of the ten decedents sued the New York State Thruway Authority in the State Court of Claims, under the [Court of Claims Act](#) § 8, which waives sovereign immunity without imposing a dollar limit, and the [Public Authorities Law](#), § 361-b, which gives the Court of Claims jurisdiction over claims against the Thruway Authority. According to Charles Randall, Chief Assistant Counsel for the Authority, two of the claims were dismissed because they were not properly filed and the remaining eight claims were settled by the Authority, without admitting liability, for a total cost of about \$3 million. The settlements provided less money for deceased persons, who had no dependents or heirs, and for the elderly, who had little or nothing in the way of lost earnings. Heirs of decedents who were in their prime earning years generally received structured settlements that included annuities to replace the annual loss of earnings. Money for the settlements came from the Authority’s budget.

After the settlements, the Authority sued the bridge designer and contractor for failure to properly supervise and complete the construction in accordance with the drawings. According to Mr. Randall, New York’s three-year statute of limitations on torts and six-year statute of limitations on contracts had long since run out, but the contract with the engineering consultants required them to indemnify the Authority for any claims they might have to pay, and the statute of limitations for

fraud by the contractor was one year from the time the fraud was discovered, so the Authority was able to settle with them for \$600,000.

5. Hatchie River Bridge - Tennessee - April 1, 1989

The U.S. Route 51 Bridge over the Hatchie River near Covington, Tennessee, was constructed in 1936. It was 4,201 feet long, a concrete nonredundant design, with timber piles that were originally buried and not designed to be in water. The piles became exposed as the river channel moved over the years. This problem was noted by inspectors beginning in 1979, but nothing was done to correct it. *Tennessee is Faulted in Collapse of Bridge*, THE NEW YORK TIMES (June 6, 1990)

<<http://query.nytimes.com/gst/fullpage.html?res=9C0CE2D6143BF935A35755C0A966958260>>.

About 8:15 p.m. on April 1, 1989, an 85.5-foot section of the bridge fell about 20 feet into the 24-foot deep rain-swollen river after two pile-supported column bents supporting three bridge spans collapsed. Witness reports and physical evidence indicated that the southern column bent and the two spans that it supported fell quickly, causing four passenger cars and one tractor-semitrailer to plunge into the river. The adjacent column bent and the span that it was supporting then collapsed on top of the vehicles. The river had apparently been at flood stage since November 1988. All eight vehicle occupants died as a result of the collapse. *Collapse of the Northbound U.S. Route 51 Bridge Spans over the Hatchie River near Covington, Tennessee April 1, 1989*, NATIONAL TRANSPORTATION SAFETY BOARD, HAR-90/01 (June 5, 1990).

Tennessee governmental entities are generally immune from suit. TENN. CODE § 29-20-201. An exception is provided for defective highways, TENN. CODE § 29-20-203, or other structures, TENN. CODE § 29-20-204, but only if the governmental entity has constructive or actual notice of the defect.

The Tennessee Claims Commission is authorized to pay claims resulting from the negligence of state employees in failing to properly design, construct, or maintain state highways and bridges, TENN. CODE § 9-8-307(a)(1)(I), up to \$300,000 per person and \$1,000,000 per occurrence. TENN. CODE § 9-8-307(e). Claims approved by the commission are paid from an open appropriation from the general fund to the risk management fund. TENN. CODE § 9-8-109.

According to Anne Adams, Director of Claims, the Commission paid \$393,750 to the heirs of four of the deceased victims and \$59,000 in personal injury and property damage claims by three other victims, for a total of \$1,634,000. Ms. Adams was unable to determine by what authority the Commission paid more than the \$300,000 limit for each person and the \$1 million limit for this incident. The Tennessee Court of Appeals has ruled that the \$300,000 limit does not apply to post-judgment interest, *Austin v. Tenn.*, 831 S.W.2d 789 (Tenn. App. 1991), so perhaps that explains the overage, though it seems a bit high. According to Ellen Tewes, Director of Legal Services to the Tennessee General Assembly, a bill to remove the \$1 million limit for all incidents was introduced in the 1991 session and passed the Senate but failed in the House.

6. San Francisco-Oakland Bay Bridge and Cypress Structure - California - October 17, 1989

The San Francisco-Oakland Bay Bridge opened for traffic on November 12, 1936, six months before the Golden Gate Bridge. It carries Interstate 80 across San Francisco Bay. It is one of the busiest bridges in the United States, carrying approximately 280,000 vehicles per day. The bridge consists of two major spans connecting each shore with Yerba Buena Island, located midbay. The span between Yerba Buena Island and Oakland consists of a double-tower cantilever span, five medium-span truss bridges, and a 14-section truss causeway. *San Francisco-Oakland Bay Bridge*, WIKIPEDIA (visited Nov. 1, 2007)

<http://en.wikipedia.org/wiki/San_Francisco-Oakland_Bay_Bridge>.

At 5:04 p.m. on October 17, 1989, just before the start of a World Series baseball game, the Loma Prieta earthquake caused a 50-foot section of the upper deck of the eastern truss portion of the bridge to collapse onto the deck below, indirectly causing one death (some people claim this was actually due to misdirection of traffic by the California Highway Patrol). *Id.*; *Cypress Freeway Replacement Project*, FEDERAL HIGHWAY ADMINISTRATION (visited Nov. 1, 2007)

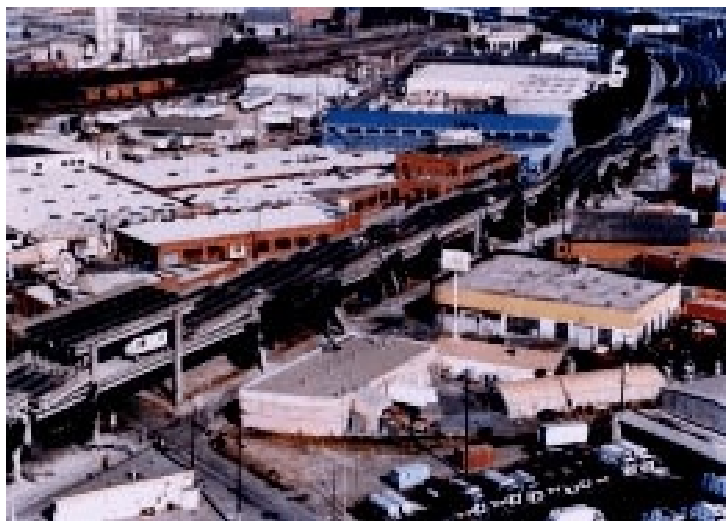
<<http://www.fhwa.dot.gov/environment/justice/case/case5.htm>>.



San Francisco-Oakland Bay Bridge Collapse, WIKIPEDIA (visited Nov. 1, 2007)

<http://en.wikipedia.org/wiki/San_Francisco-Oakland_Bay_Bridge>.

The same earthquake caused the collapse of the Nimitz Freeway Cypress Structure in West Oakland.



Cypress Structure Collapse, FEDERAL HIGHWAY ADMINISTRATION (visited Nov. 1, 2007) <<http://www.fhwa.dot.gov/environment/ejustice/case/case5.htm>>.

The Nimitz Freeway, Interstate 880, was built in the 1950s to connect southern Alameda County to Oakland’s industrial waterfront and downtown San Francisco. Forty-two people died when concrete pillars supporting the upper section of the double-deck freeway, known as the Cypress Structure, buckled and the entire structure collapsed, destroying a 1¼-mile section of the freeway. *Cypress Freeway Replacement Project*, FEDERAL HIGHWAY ADMINISTRATION (visited Nov. 1, 2007) <<http://www.fhwa.dot.gov/environment/ejustice/case/case5.htm>>.

Within 20 days after the collapse of the Bay Bridge and the Cypress Structure, in response to a request from the Governor and the Legislature that the Attorney General draft appropriate legislation, California enacted a special law to compensate the victims, CAL. GOV. CODE §§ 997-997.6. *News Release*, Daniel E. Lundgren, Atty. Gen. (June 25, 1992). Section 997 declared the intent of the Legislature to pay the claims “without regard to legal liability, fault, or responsibility, and without the necessity of litigation” Section 997.1 directed victims to file their claims with what was then known as the State Board of Control (now called the Victim Compensation and Government Claims Board) no later than April 18, 1990, and made filing a claim a condition precedent to filing a suit in state court for the same losses. Section 997.2 made victims eligible for an emergency payment of \$50,000 to a dependent minor for the death of a parent, \$25,000 to a parent for the death of a dependent minor, and similar amounts to other claimants in similar circumstances, with a maximum of \$200,000 for the members of one immediate family. It required the Board to offer a complete settlement to each claimant within six months after filing the claim, with any emergency payments deducted from the final amount and the total amount treated as an offset to any amount recovered in a court action, which could proceed once the claim had been settled by the Board. It prohibited an attorney from accepting a fee to represent a claimant seeking emergency relief without a finding by a court of “exceptional circumstances.” Section 997.5 created a separate fund in the state treasury to account for the claims paid.

According to James M. Schiavenza, Senior Assistant Attorney General, the 43 deaths and 156 injuries caused by the Bay Bridge and Cypress Structure collapses resulted in 412 claims being filed with the Board. The Board, with the advice of Darrel L. Doke, then Senior Assistant Deputy Attorney General, and Mr. Schiavenza, developed detailed procedures <http://www.senate.leg.state.mn.us/departments/scr/treatise/bridge_collapse/CA_bridge_claim_procedures.pdf> for handling the volume of claims. The Board retained the services of a claims adjusting firm to assist with evaluating the claims, a retired superior court judge to serve as facilitator in settlement negotiations between the claimants and CalTrans (the California Department of Transportation), and insurance brokers experienced in the settlement of death and injury cases through the use of annuities to arrange structured settlements. The Board sent out application forms to all claimants. It rejected 75 claims as either fraudulent (people who were not on the bridge or structure) or outside the scope of the act. The Legislature appropriated \$110 million to cover all claims, and all but two were settled by the Board without litigation, for a total cost of about \$71 million. *News Release*, Daniel E. Lundgren, Atty. Gen. (June 25, 1992). Two claimants refused the Board's offer and went to court, but eventually settled before trial. Funding for the settlements came from a temporary sales tax surcharge of 0.25 percent for 13 months. *State ADR Program Speeds Settlement of Quake Claims*, Joanne Wojcik, BUSINESS INSURANCE (June 29, 1992). All claims were disposed of less than three years after the collapses. Mr. Schiavenza believes almost everyone was satisfied with the process and its results. He and Mr. Doke have prepared and distributed continuing legal education materials <http://www.senate.leg.state.mn.us/departments/scr/treatise/Bridge_Collapse/CA_bridge_claim_workshop.pdf> to help guide other attorneys in handling similar claims from future disasters.

7. Little Red River Pedestrian Bridge - Arkansas - October 29, 1989

The Swinging Bridge over the Little Red River in the city of Heber Springs, Cleburne County, Arkansas, was constructed in 1912. It was a single-lane wood-decked bridge, 550 feet long and suspended by steel cables about 50 feet above the river. *Investigators Look for Clues in Fatal Collapse of Bridge*, THE NEW YORK TIMES, (Oct. 30, 1989) <<http://query.nytimes.com/gst/fullpage.html?res=950DE0D9113CF933A05753C1A96F948260>>. It was closed to vehicles in 1972. *Five Killed and One Missing as Bridge Falls into an Arkansas River*, THE NEW YORK TIMES, (Oct. 29, 1989) <<http://query.nytimes.com/gst/fullpage.html?res=950DE4D9113AF93AA15753C1A96F948260>>. It was common for pedestrians to swing the bridge. There were no signs warning against doing so or giving a load limit. *Investigators Look for Clues, supra*.

On October 29, 1989, after a crowd of 30 to 50 people had been rocking the bridge, the cable on the upstream side broke. The bridge first fell to one side, then the other cable broke, and the whole thing came down. *Five Killed, supra*. Five people were killed and 18 injured. *Investigators Look for Clues, supra*.

The State of Arkansas is constitutionally immune from suit in state court. [ARK. CONST.](#) art. 5, § 20. The Arkansas State Claims Commission has jurisdiction over all claims against the State. [ARK. CODE](#) § 19-10-204. Political subdivisions are immune from suit except to the extent they may be covered by liability insurance. [ARK. CODE](#) § 21-9-301.

According to Ray Howard, staff attorney in the Arkansas Bureau of Legislative Research, and Norman L. Hodges, Director of the Claims Commission, the bridge was owned by the county, so any recovery by victims of the collapse would have been under the county's liability insurance policy, if any.

8. I-40 Bridge Near Webbers Falls - Oklahoma - May 26, 2002



I-40 Bridge, May 31, 2002, WIKIPEDIA (visited Nov. 2, 2007)
<http://en.wikipedia.org/wiki/The_I-40_Bridge_Disaster>.

The Interstate Highway 40 bridge over the Arkansas River near Webbers Falls, Oklahoma, was 1,988 feet long and carried an estimated 20,000 vehicles per day. *Divers Find Three Victims from Bridge Collapse*, CNN.COM (May 27, 2002)

<<http://archives.cnn.com/2002/US/05/26/barge.bridge/>>.

About 0745, on May 26, 2002, the towboat Robert Y. Love, pushing two empty asphalt tank barges, was traveling northbound on the McClellan-Kerr Arkansas River Navigation System. As the tow approached the . . . bridge . . ., it veered off course and rammed a pier The impact collapsed a 503-foot section of the bridge, which fell into the river and onto the barges below. According to witnesses, highway traffic continued to drive into the void in the bridge created by the collapsed spans. When traffic stopped, eight passenger vehicles and three truck tractor-semitrailer combinations had fallen into the river or onto the collapsed portions of the bridge. The accident resulted in 14 fatalities and 5 injuries

The National Transportation Safety Board determines that the probable cause of the . . . collision . . . and . . . subsequent collapse was the captain's loss of consciousness, possibly as the result of an unforeseeable abnormal heart rhythm.

U.S. Towboat Robert Y. Love Collision With Interstate 40 Highway Bridge Near Webbers Falls, Oklahoma, May 26, 2002, NATIONAL TRANSPORTATION SAFETY BOARD, [HAR-04/05](#) (Aug. 31, 2004). The NTSB also noted that the captain had slept less than ten hours in the two days before the accident. *Oklahoma Sues in Barge's Crash into Bridge*, THE NEW YORK TIMES (June 6, 2002) <<http://query.nytimes.com/gst/fullpage.html?res=9C0DE2DC163DF935A35755C0A9649C8B63>>.

According to Norman Hill, General Counsel for the Oklahoma Department of Transportation, no tort claims were filed against the State because of its low limits of \$175,000 per person and \$1,000,000 per occurrence. OKLA. STAT. § 51-154. Victims of the collapse sued the barge company and reached a confidential settlement out of court. *Settlement in Bridge Collapse*, THE NEW YORK TIMES (May 23, 2003) <<http://query.nytimes.com/gst/fullpage.html?res=9C06E6DE1731F930A15756C0A9659C8B63>>. The State of Oklahoma sued the barge company to recover the cost of repairing the bridge and settled for \$4.5 million, which covered all its costs not paid by the federal government. *Settlement Reached in I-40 Bridge Suit*, press release by W.A. Drew Edmonson, Atty Gen. (May 18, 2004).

Conclusion

These several incidents illustrate how varied have been the state responses to past bridge collapses, depending both on the cause of the collapse and on the state's particular law on state tort liability.

In Oklahoma, where a bridge collapsed because it was hit by a barge, both the victims and the State sued the barge company, which settled the claims out of court. In Washington, where a bridge was badly designed but the State was protected by sovereign immunity, the nonstate damage was all covered by private insurance. In Arkansas, any claims were limited to the amount of liability insurance, if any, carried by the county that owned the bridge. In West Virginia, where a bridge collapsed without warning, all 58 claims for wrongful death, personal injury, and property damage were denied by the Court of Claims because the collapse could not have been foreseen in the exercise of reasonable care.

Tennessee has a state Claims Commission with tort liability limits that are the same as Minnesota's current limits, but somehow the Commission paid 60 percent more for the incident than the limit seemed to allow. In Connecticut and New York, where there is no limit on state tort liability, the State settled with the victims and heirs of deceased victims; New York recovered from the bridge designer and contractor part of the money it had paid out. California has no limit on the amount of state tort liability, and it has a claims board to settle claims immediately without going to court, but it also enacted a special law to pay claims without admitting liability and to provide emergency compensation to victims while their claims were pending before the board.

In fashioning the appropriate method and amount of compensation to pay to victims of the of the I-35W Bridge collapse, Minnesota can learn from each of them.

Bridge Collapse Web Sites

List of Bridge Disasters, WIKIPEDIA (visited Nov. 6, 2007)

http://en.wikipedia.org/wiki/List_of_bridge_disasters

Bridge Disasters, THE NEW YORK TIMES (visited Nov. 6, 2007)

http://topics.nytimes.com/top/reference/timestopics/subjects/b/bridges_and_tunnels/bridge_disasters/index.html

Bridge Failures + Engineering Disasters, UNIVERSITY OF WISCONSIN COLLEGE OF ENGINEERING, WENDT LIBRARY BLOG (Aug. 3, 2007)

<http://wendt-library.blogspot.com/2007/08/bridge-failures-engineering-disasters.html>

Highway Accidents, NATIONAL TRANSPORTATION SAFETY BOARD (visited Nov. 6, 2007)

http://www.nts.gov/Publictn/H_Acc.htm

Interstate 35W Bridge Collapse, MINNESOTA DEPARTMENT OF TRANSPORTATION (visited Nov. 6, 2007)

<http://www.dot.state.mn.us/i35wbridge/index.html>

After the I-35W Collapse, STARTRIBUNE.COM (visited Nov. 6, 2007)

<http://www.startribune.com/bridge/>