



**NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594**

Office of Research and Engineering
Safety Studies and Statistical Analysis Division

March 12, 2008

Data Report

State-by-State Bridge Counts

A. ACCIDENT INFORMATION

LOCATION: Minneapolis, MN
DATE: August 1, 2007
CASE NR: HWY07MH024

B. SAFETY STUDIES AND STATISTICAL ANALYSIS DIVISION

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C. DETAILS OF THE ANALYSIS

The I-35W bridge is a steel deck truss bridge. As part of the investigation into its collapse, Safety Board staff sought to determine 1) the number of steel deck truss bridges in each state, and 2) the number of all truss bridges in each state.

On Wednesday, January 9, 2008, Safety Board staff received an e-mail from the Federal Highway Administration (FHWA) with two Microsoft Excel spreadsheets as attachments. The first spreadsheet¹ contained a list of 12,612 truss bridges. The second spreadsheet² contained a list of 466 steel deck truss bridges. The e-mail stated that the list was “assembled as part of the steel deck truss re-evaluation effort following the I-35 W bridge collapse.”

According to the e-mail, the spreadsheets were extracted from the December 31, 2007, National Bridge Inventory (NBI), a database containing information about approximately 600,000 United States bridges that is maintained by FHWA. The FHWA also cautioned that data from the December 31, 2007, version of the NBI would not match up with the data provided in the second spreadsheet since errors in data coding were identified during their evaluation process. According to the e-mail, the NBI data submittal due in April 2008 was expected to reflect the corrected data.³

Safety Board staff imported the spreadsheets provided by FHWA into the statistical software SPSS 16.0 and used that software to generate two tables. Table 1 depicts the number of steel deck truss bridges per state, and table 2 shows the number of all deck and thru truss bridges by state.

¹ Truss_12_07.xls

² Confirmed steel deck truss bridges for NTSB.XLS.

³ The e-mail also noted that there are 14 steel deck truss bridges owned by the U.S. Forest Service that had not yet been added to the list.

Table 1. Confirmed steel deck truss bridges as of December 31, 2007, by state. (Source data from the National Bridge Inventory were provided by the Federal Highway Administration on January 9, 2008.)

	State	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	ALABAMA	2	.4	.4	.4
	ALASKA	7	1.5	1.5	1.9
	ARIZONA	7	1.5	1.5	3.4
	ARKANSAS	11	2.4	2.4	5.8
	CALIFORNIA	50	10.7	10.7	16.5
	COLORADO	6	1.3	1.3	17.8
	CONNECTICUT	5	1.1	1.1	18.9
	DELAWARE	1	.2	.2	19.1
	GEORGIA	2	.4	.4	19.5
	HAWAII	2	.4	.4	20.0
	IDAHO	7	1.5	1.5	21.5
	ILLINOIS	17	3.6	3.6	25.1
	INDIANA	9	1.9	1.9	27.0
	IOWA	9	1.9	1.9	29.0
	KANSAS	13	2.8	2.8	31.8
	KENTUCKY	9	1.9	1.9	33.7
	LOUISIANA	2	.4	.4	34.1
	MAINE	6	1.3	1.3	35.4
	MARYLAND	9	1.9	1.9	37.3
	MASSACHUSETTS	18	3.9	3.9	41.2
	MICHIGAN	4	.9	.9	42.1
	MINNESOTA	4	.9	.9	42.9
	MISSOURI	4	.9	.9	43.8

MONTANA	9	1.9	1.9	45.7
NEBRASKA	2	.4	.4	46.1
NEVADA	1	.2	.2	46.4
NEW HAMPSHIRE	3	.6	.6	47.0
NEW JERSEY	8	1.7	1.7	48.7
NEW MEXICO	5	1.1	1.1	49.8
NEW YORK	32	6.9	6.9	56.7
NORTH CAROLINA	1	.2	.2	56.9
OHIO	16	3.4	3.4	60.3
OKLAHOMA	10	2.1	2.1	62.4
OREGON	37	7.9	7.9	70.4
PENNSYLVANIA	48	10.3	10.3	80.7
PUERTO RICO	2	.4	.4	81.1
SOUTH DAKOTA	2	.4	.4	81.5
TENNESSEE	6	1.3	1.3	82.8
TEXAS	8	1.7	1.7	84.5
UTAH	1	.2	.2	84.8
VERMONT	8	1.7	1.7	86.5
VIRGINIA	9	1.9	1.9	88.4
WASHINGTON	22	4.7	4.7	93.1
WEST VIRGINIA	15	3.2	3.2	96.4
WISCONSIN	14	3.0	3.0	99.4
WYOMING	3	.6	.6	100.0
Total	466	100.0	100.0	

Table 2. All truss bridges as of December 31, 2007 by state. (Source data from the National Bridge Inventory were provided by the Federal Highway Administration on January 9, 2008.)

	State	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	ALABAMA	116	.9	.9	.9
	ALASKA	59	.5	.5	1.4
	ARIZONA	32	.3	.3	1.6
	ARKANSAS	108	.9	.9	2.5
	CALIFORNIA	295	2.3	2.3	4.8
	COLORADO	96	.8	.8	5.6
	CONNECTICUT	36	.3	.3	5.9
	DELAWARE	8	.1	.1	5.9
	FLORIDA	53	.4	.4	6.4
	GEORGIA	33	.3	.3	6.6
	HAWAII	11	.1	.1	6.7
	IDAHO	104	.8	.8	7.5
	ILLINOIS	352	2.8	2.8	10.3
	INDIANA	491	3.9	3.9	14.2
	IOWA	1316	10.4	10.4	24.7
	KANSAS	675	5.4	5.4	30.0
	KENTUCKY	180	1.4	1.4	31.4
	LOUISIANA	52	.4	.4	31.9
	MAINE	69	.5	.5	32.4
	MARYLAND	97	.8	.8	33.2
	MASSACHUSETTS	107	.8	.8	34.0
	MICHIGAN	114	.9	.9	34.9
	MINNESOTA	165	1.3	1.3	36.2
	MISSISSIPPI	73	.6	.6	36.8

MISSOURI	1009	8.0	8.0	44.8
MONTANA	179	1.4	1.4	46.2
NEBRASKA	940	7.5	7.5	53.7
NEVADA	4	.0	.0	53.7
NEW HAMPSHIRE	66	.5	.5	54.2
NEW JERSEY	185	1.5	1.5	55.7
NEW MEXICO	45	.4	.4	56.1
NEW YORK	616	4.9	4.9	60.9
NORTH CAROLINA	48	.4	.4	61.3
NORTH DAKOTA	224	1.8	1.8	63.1
OHIO	1268	10.1	10.1	73.2
OKLAHOMA	836	6.6	6.6	79.8
OREGON	191	1.5	1.5	81.3
PENNSYLVANIA	706	5.6	5.6	86.9
PUERTO RICO	14	.1	.1	87.0
RHODE ISLAND	11	.1	.1	87.1
SOUTH CAROLINA	43	.3	.3	87.4
SOUTH DAKOTA	183	1.5	1.5	88.9
TENNESSEE	75	.6	.6	89.5
TEXAS	323	2.6	2.6	92.0
UTAH	19	.2	.2	92.2
VERMONT	143	1.1	1.1	93.3
VIRGINIA	170	1.3	1.3	94.7
WASHINGTON	207	1.6	1.6	96.3
WEST VIRGINIA	278	2.2	2.2	98.5
WISCONSIN	124	1.0	1.0	99.5
WYOMING	63	.5	.5	100.0
Total	12612	100.0	100.0	