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February 15, 2018

The Honorable Senator Tim Kapucian
Senate Transportation Committee Chair
State Capital Building
1007 E Grand Avenue
Des Moines, Iowa 50319

The Honorable Representative Gary Carlson
House Transportation Committee Chair
State Capital Building
1007 E Grand Avenue
Des Moines, Iowa 50319

Mr. Glen Dickinson
Director, Legislative Services Agency
Ground Floor, State Capital Building
Des Moines, IA 50319

Re: Annual County Structurally Deficient Bridges Summary Report for FY 2017

All,

Pursuant to Iowa Code 307.32, the Iowa Department of Transportation, Office of Local Systems, respectfully submits the attached Annual Report of Structurally Deficient Bridges for work accomplished during the State fiscal year (FY) 2017. Contained within the report is "A Guide to the County Structurally Deficient Bridges Summary Report", which provides background information, definitions and other information related to the report.

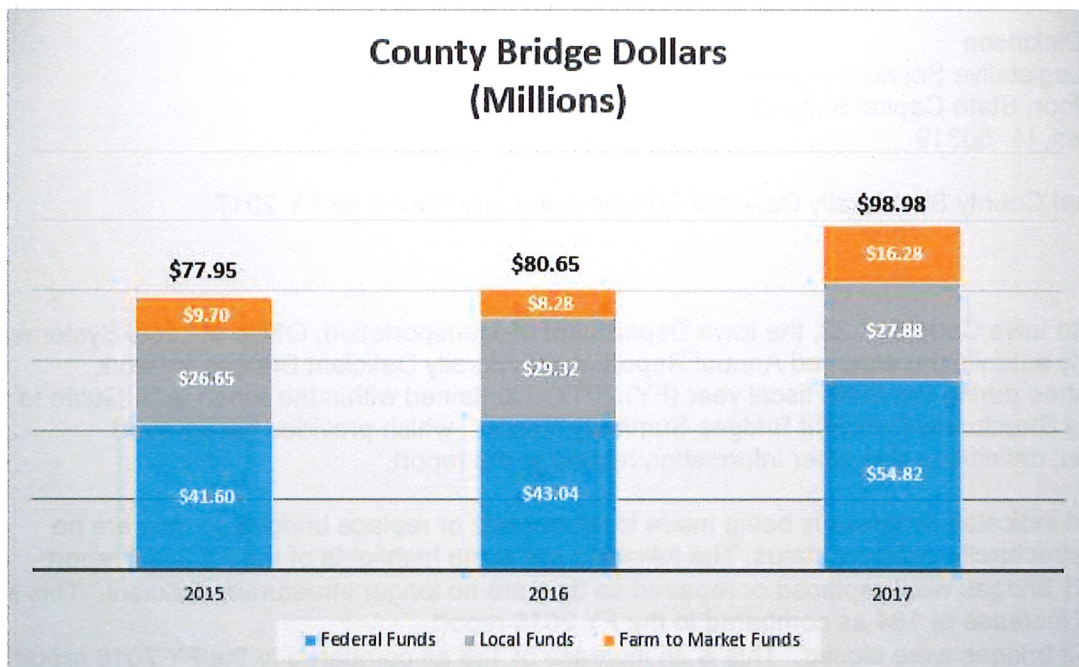
This report indicates progress is being made to rehabilitate or replace bridges so they are no longer in structurally deficient status. The following are some highlights of the FY 2017 report:

- 461 bridges were replaced or repaired so they are no longer structurally deficient. This is an increase of 184 as compared to the FY 2016 report.
- 342 bridges were closed. This is an increase of 186 as compared to the FY 2016 report.

Closed bridges may reflect a location that no longer serves a significant connection within the county or has very low traffic volumes. Counties do a good job of prioritizing the replacement of their bridges on roads that have the most traffic or serve as critical links for local economic generators, but even so, some bridges must be closed due to insufficient funds to repair or replace them.

- Of the 342 bridges reported as closed, 154 are planned for replacement or repairs. This is an increase of 109 as compared to the FY 2016 report. This indicates the counties have significantly more replacement or repair projects under development as compared to a year ago.

The progress noted above is likely due to the increased spending on bridges by counties. The chart below shows the total amounts invested by counties for bridge replacements or repairs from 2015-2017. The increases in spending are likely a result of the state fuel tax increase enacted in 2015. The additional revenues also provided additional match money, which helped counties more effectively leverage the Federal funds available to them.



Finally, you may notice that the figures shown in the attached report are different than the advance copy of the report that was provided by Iowa DOT staff at your committee meetings. Subsequent to those meetings, we discovered some discrepancies in the process used to collect this data from the counties that resulted in some under-reporting of the actual progress made by counties. Those discrepancies have been resolved so that future reports will not have a similar problem.

If you have questions about specific bridges, please contact the County Engineer in the appropriate county. If you have any questions about the report, please contact me at the phone number or e-mail shown above.

Sincerely,



Eric D. Cowles, P.E.
Secondary Roads Engineer
Office of Local Systems

CC: Mitch Dillavou, PE, Director, Highway Division
Charlie Purcell, PE, Director, Project Delivery Bureau
John Selmer, Director, Strategic Performance Division
Stu Anderson, Director, Planning, Programming and Modal Division Director
Donna Buchwald, PE, Director, Office of Local Systems
Susan Fenton, State Legislative Liaison

County Structurally Deficient Bridges Summary Report - Fiscal Year 2017

In accordance with Iowa Code 309.22A, this report details the manner in which counties use their road use tax funds to replace or repair structurally deficient bridges.

County	Beginning Status Carry over and newly designated SD			Structures taken off SD status Bridges removed from structurally deficient status; restored to full legal load capacity				Structures that remained in SD status at end of year						Structure Removed Sold Demolished Abandoned No longer NBIS	
	Carried over from prior FY	Became SD during prior FY	Total SD at start of this FY	via Replacement	via Major Rehabilitation	via Light Rehabilitation	Total Restored	In Service (Open) - Still SD			Out of Service (Closed)				Total SD Remaining
								Partial Rehabilitation	Programmed for Replace or Rehab	Not Yet Programmed	Closed: Plan to Replace	Closed: Programmed to Replace	Closed: Not Likely to Reopen		
Adair	65		65	10			10		4	46			5	55	
Adams	60	1	61		4		4	1	3	52	1			57	
Allamakee	19		19			1	1		5	12			1	18	
Appanoose	53	3	56	6			6		8	39	1		2	50	
Audubon	45	1	46	6	5		11	2	6	21	2		4	35	
Benton	55	5	60	6			6		30	22		1		54	
Black Hawk	22	3	25	7		1	8		10	7	1			17	
Boone	47	1	48	4	1		5		9	32			2	43	
Bremer	47	1	48	3			3		10	34	1			45	
Buchanan	41	5	46	16	2		18	6	12	8		2		28	
Buena Vista	25		25	2			2		7	13	3			23	
Butler	44	6	50	4			4	1	22	22			1	46	
Calhoun	18	7	25				0		11	12	1		1	25	
Carroll	16	2	18	5			5		5	8				13	
Cass	63	1	64	1	3		4		17	40	1	1	1	60	
Cedar	71	9	80	7			7	3	14	52	2		2	73	
Cerro Gordo	30		30	3			3		10	17				27	
Cherokee	74	4	78	5			5		3	60	9		1	73	
Chickasaw	32	15	47	6			6		4	36			1	41	
Clarke	42	2	44	4			4		8	24	5	3		40	
Clay	21	4	25	3			3		11	11				22	
Clayton	45		45	7			7		12	26				38	
Clinton	11		11	1			1		3	5			2	10	
Crawford	66	4	70	6			6		21	42	1			64	
Dallas	21	5	26	1			1		10	13			2	25	
Davis	82	6	88	13	5		18	1	6	54	5	4		70	
Decatur	57	15	72	5	1		6		11	50	5			66	
Delaware	15		15	1			1		2	11	1			14	
Des Moines	25	5	30	2			2		11	14	2	1		28	
Dickinson	7	2	9				0		2	7				9	
Dubuque	49	23	72	14			14		2	51	3		2	58	
Emmet	19	1	20				0		1	17			2	20	
Fayette	40	8	48	3			3	5	5	33	2			45	
Floyd	23	4	27	3			3		4	19			1	24	
Franklin	39	2	41	4			4		11	24			2	37	
Fremont	35	2	37	2			2		4	29	2			35	
Greene	16		16		1		1	2	4	7	2			15	
Grundy	48		48	2			2		17	27	2			46	
Guthrie	79	3	82	7	1		8		6	66	1			74	
Hamilton	26	2	28	4			4		6	17			1	24	
Hancock	38	1	39	1			1		10	27	1			38	
Hardin	37	4	41	5			5		13	20	3			36	
Harrison	52	2	54	1	1		2		12	38	2			52	
Henry	25	3	28	3			3	1	3	18			3	25	
Howard	47	5	52	1			1		13	29	3	3	3	51	
Humboldt	15	1	16	2			2		5	9				14	
Ia	20	2	22				0		12	10				22	
Iowa	31	3	34	5			5		8	15	4		2	29	
Jackson	28	19	47	4			4		7	36			2	43	
Jasper	119	7	126	7			7		22	85	10	2		119	
Jefferson	46	1	47	7			7		21	18	1			40	
Johnson	35		35	3			3	1	7	18	1		5	32	
Jones	14	2	16	2	1		3		6	5			2	13	
Keokuk	50		50	8	3		11	10	11	14		2	2	39	
Kossuth	25	11	36	5			5		16	11			2	29	2
Lee	23		23				0		5	18				23	
Linn	20		20	5	1		6		2	12				14	
Louis	12	2	14				0	2	1	10			1	14	
Lucas	73		73				0		6	61	6			73	
Lyon	69	1	70	11			11	5	11	35	7	1		59	
Madison	65	3	68	1	5		6		12	44	1	4	1	62	
Mahaska	42	3	45	6	2		8		3	26	8			37	
Marion	52	6	58	5	3	3	11		15	29			2	47	
Marshall	101	1	102	2			2		19	78	1	1	1	100	
Mills	42	2	44	5			5		5	33	1			39	
Mitchell	32	1	33	3			3	1	4	21	3	1		30	
Monona	47	7	54	4			4		13	27	4	6		50	
Monroe	51		51	5	2		7		6	36			2	44	
Montgomery	51	6	57	3			3		8	43	3			54	
Muscatine	22	6	28				0		9	17			2	28	
O'Brien	20	1	21	3			3		4	14				18	
Osceola	2		2				0			2				2	
Page	55	2	57	3			3		7	45	2			54	
Palo Alto	28		28	2			2		1	25				26	
Plymouth	126	3	129	5			5		38	86				124	
Pocahontas	48	1	49	6	4		10	1	5	24		1	8	39	
Polk	23	2	25	1			1		9	15				24	
Pottawattamie	73	1	74	8			8		32	28	6			66	
Poweshiek	69	2	71	4			4		8	54			5	67	
Ringgold	105	1	106		1		1		7	86	5	1	5	104	
Sac	54	1	55	5			5		21	25	1	1	2	50	
Scott	9	2	11	3			3		8					8	
Shelby	38	2	40	4	1		5		13	21		1		35	

County Structurally Deficient Bridges Summary Report - Fiscal Year 2017

In accordance with Iowa Code 309.22A, this report details the manner in which counties use their road use tax funds to replace or repair structurally deficient bridges.

County	Beginning Status Carry over and newly designated SD			Structures taken off SD status Bridges removed from structurally deficient status: restored to full legal load capacity				Structures that remained in SD status at end of year						Structure Removed Sold Demolished Abandoned No longer NBIS	
	Carried over from prior FY	Became SD during prior FY	Total SD at start of this FY	via Replacement	via Major Rehabilitation	via Light Rehabilitation	Total Restored	In Service (Open) - Still SD			Out of Service (Closed)				Total SD Remaining
								Partial Rehabilitation	Programmed for Replace or Rehab	Not Yet Programmed	Closed: Plan to Replace	Closed: Programmed to Replace	Closed: Not Likely to Reopen		
Sioux	14	1	15	1			1		9	4				1	14
Story	58		58	5			5		14	37	1		1	1	53
Tama	110	11	121	2			2	3	5	96	4	1	10	119	
Taylor	87	9	96	3			3		5	69	4		15	93	
Union	54	6	60	2			2		11	36	8		3	58	
Van Buren	59		59	2			2		10	42			5	57	
Wapello	51	2	53	13	1		14		13	16	1	1	8	39	
Warren	69	5	74	5	2		7		20	39	4		4	67	
Washington	38	3	41	1	1		2		14	22	3			39	
Wayne	49	1	50	5			5		18	23	1		3	45	
Webster	51	3	54	14			14		29	11				40	
Winneshago	25	6	31	11			11		17	3				20	
Winneshiek	75	5	80	5			5	1	11	53		6	4	75	
Woodbury	83		83	11			11		26	42	2	1	1	72	
Worth	22		22	2			2	1	4	14			1	20	
Wright	37	5	42	2			2		12	24			4	40	
Totals	4409	325	4734	405	51	5	461	47	1003	2879	154	46	142	4271	2

Structures to account for:

Restored:

Still open:

Closed:

Closed:

Total:

A Guide to the County Structurally Deficient Bridges Summary Report

Prepared by the Iowa Department of Transportation
February 15, 2018

Background

Counties are required to inspect all bridges biannually for structural integrity and overall condition. Some counties inspect all bridges every other year while others inspect roughly one-half of their bridges each year.

In accordance with Iowa Code 309.22A, this report summarizes the manner in which counties used their road use tax funds to replace or repair structurally deficient bridges. Each year the county engineers submit this information to the Iowa DOT as part of the county annual report of road and bridge expenditures required by Iowa Code 309.22. Additional more detailed information is available from the Iowa DOT upon request.

What's a "structurally deficient" (SD) bridge?

This classification does not mean a bridge is unsafe. SD bridges can safely remain in service (open to vehicular traffic) but often must be posted for weight limits that are less than the maximum allowed by law.

A bridge is classified as SD when significant load carrying elements are found to be in poor or worse condition due to deterioration and/or damage, or the adequacy of the waterway opening provided by the bridge is determined to be extremely insufficient to the point of causing intolerable traffic interruptions. This classification is determined based on the latest bridge inspection data and criteria prescribed by the National Bridge Inspection Standards (NBIS) published by the Federal Highway Administration (FHWA).

What do each of the columns of this report mean?

Beginning Status – This section shows how the starting total of SD bridges for the reporting period are calculated.

Carry over from previous FY – the number of bridges that were classified at the beginning of the previous year.

Became deficient during FY 16 – the number of bridge that moved into SD status during the previous year.

Total at Start of FY 17 – the sum of the previous two columns, which provides the total of SD bridges at the start of the reporting period.

Structures Taken Off SD Status – This section shows the number of bridges that were restored to full legal load capacity, thereby removing the SD classification. This section also provides a breakdown of how these bridges were fixed.

Replacement – the number of SD bridges that were replaced by a new bridge or culvert.

Major Rehabilitation – SD bridges that were not completely reconstructed, but substantial repairs were made to remove the SD condition. Examples might include complete deck replacements, beam replacements, or major repairs to the bridge piers or abutments (supporting columns).

Light Rehabilitation – SD bridges for which only minor repairs were needed to remove the SD condition. Examples might include deck patching, beam strengthening, or less substantial repairs to the bridge piers (supporting columns).

Total Restored – the sum of the previous three columns, representing the total number of SD bridges that were replaced or repaired during the reporting period so that they are no longer in SD condition.

Structures that Remained in SD Status at the End of the Year – This section describes the status of bridges that did not have their SD status removed through the work accomplished during the year. These bridges are grouped into two main categories and several subcategories, as shown below:

Still in Service – These bridges are still open to traffic while remaining in SD condition.

Partial Rehabilitation – SD bridges that received minor repair, but not enough to remove the SD condition. Examples might include limited deck patching, bridge approach pavement repairs, bridge railing repairs, or joint replacements.

Programmed for Rehab or Replace – SD bridges that are included in the county’s five-year program. and are scheduled for repairs or replacement.

Not yet programmed – SD bridges not yet included in the county’s five-year program for repair or replacement.

Out of Service (Closed) – These bridges are closed to vehicular traffic and remain in SD condition.

Closed: Plan to Replace – SD bridges that had an inspection that revealed issues were serious enough that the structure had to be closed.

Closed: Programmed to Replace – SD bridges that are closed to traffic and will be replaced with an upcoming project that may or may not be in the county’s five-year plan.

Closed: Not Likely to Reopen – SD bridges that are closed to traffic and the county has no current plans to repair or replace the bridge.

Total SD Remaining – This is the total number of bridges that remain in SD status at the close of the reporting period.

Structure Removed – Reflects structures that are no longer a public structure due to the being demolished, abandoned in place, de-listed by Federal Highway Administration, vacated or sold.