	In accord	lance with I				eficient Br ne manner in w						urally deficient	t bridges.			
		ginning Sta				en off SD statu		use their road use tax funds to replace or repair structurally deficient bridges. Structures that remained in SD status at end of year								Structure
	Carry over and newly designated SD				Bridges removed from structurally deficient status: restored to full legal load capacity				In Service (Open) - Still SD			Out of Service (Closed)				Removed
County	SD at beginning of reporting period	Became SD during FY 2018	Total SD during this FY	via Replacement	via Major Rehabilitation	via Light Rehabilitation	Total Restored	Partially Rehabed	Programmed for Replace or Rehab	Not yet Programmed	Closed: plan to replace	Closed: programmed to replace	Closed: Not likely to reopen	Total SD Remaining		Sold Demolished Abandoned No longer NBIS
Adair Adams	62 56	3	65 58	2			2	0	4 2	51 54	1		7	63 57		i
Allamakee	25		25	2			2	0	7	15			1	23		1
Appanoose	57	2	59	4			4	0	21	31	1		2	55		
Audubon	35	1	36	4			4	1	5	19	2		6	32		l
Benton Black Hawk	54 24	16 1	70 25	1	1	1 2	2 4	0	34 10	29 10	2	1	2	68 21		l
Boone	45	1	46	2		2	2	0	5	37			2	44		
Bremer	43		43	3			3	0	9	27	1	2	1	40		1
Buchanan	34		34	5	1		6	0	12	13	1	2		28		
Buena Vista	37		37	1			1	0	5	24			7	36		l
Butler Calhoun	54 25	3	57 34	4			4	1	27	23 18		1	2	53 33		i
Carroll	14	2	16	1		1	2	0	6	8			1	14		1
Cass	75	1	76	4		1	5	0	17	51	1	1	1	71		
Cedar	81	1	82	4			4	9	12	64			2	78		1
Cerro Gordo	26		26			4	0	0	8	18			7	26		
Cherokee Chickasaw	68 48	2 12	70 60	5	1	4	4 6	2	2 9	57 42	1		7	66 54		
Clarke	52	3	55	3	· ·		3	0	10	33	2		7	52		
Clay	23		23	3			3	0	5	13				18		
Clayton	41	1	42	4	1		5	0	9	27		1		37		
Clinton	8	2	10	1	1		1	0	2	5	1		2	9		
Crawford Dallas	47 19		47	5	1		2 6	2	19 4	24	1		2	45 13		
Davis	74	3	77	6	3	1	10	0	13	44	1	2	7	67		
Decatur	76	7	83	7			7	0	10	58	2	2	4	76		
Delaware	20	2	22	1			1	0	1	19			1	21		l
Des Moines	31	3	34	3	1		4	0	6	19			5	30		l
Dickinson Dubuque	9 60	2	11 65	17			0 17	0	5	8 41			5	13 48		i
Emmet	21		21				0	0	0	19			2	21		
Fayette	52	10	62	1			1	2	8	51	1	1		61		
Floyd	26	3	29	3			3	0	5	18		1	2	26		l
Franklin	41 36	1 5	42	10			10 4	0	11 5	19 31	1		1	32 37		l
Fremont Greene	19	5	19	4			4	0	1	16	2		1	19		
Grundy	63		63		1		1	0	25	32		2	3	62		
Guthrie	75	1	76	5			5	0	5	64			2	71		[
Hamilton	31	1	32	2			2	0	8	22				30		i
Hancock Hardin	37 39	1 8	38 47	7 2		1	7 3	0	10 20	21 19		1	4	31 44		i
Harrison	51	2	53	2		1	2	0	13	37		-	1	51		i
Henry	28	7	35	4			4	0	7	21			3	31		
Howard	53	2	55	1			1	0	8	37		4	5	54		1
Humboldt	17		17	2			2	0	5	10				15		í
lda Iowa	24 35	1	25 36	5			0	0	3	21 20	1 2	3	1	25 31		l
Jackson	46	11	57	6			6	0	8	40	1	5	2	51		1
Jasper	130	11	141	7			7	0	23	98	1	2	10	134		
Jefferson	52	4	56	9			9	0	30	15			2	47		
Johnson	27	4	31 17	2			2	0	10	19			4	29		
Jones Keokuk	16 40	<u> </u>	17 40	3	4		3	0	4	6 18	2	2	4	14 34		
Kossuth	39	4	40	8			8	0	12	16	2	2	2	34		0
Lee	20		20				0	0	7	13				20		
Linn	17	_	17	1			1	0	5	10			1	16		
Louisa Lucas	14 72	2	16 73	7			0 7	0	5	10 53			1 5	16 66		
Lucas Lyon	64	3	67	10			10	0	14	30			13	57		
Madison	81	12	93	2	2		4	8	26	57	1	1	4	89		
Mahaska	70	15	85	10			10	0	5	64			6	75		
Marion	58	4	62	2	5	2	9	1	16	35			2	53		
Marshall Mills	95 39	10 1	105 40	4 3			4 3	0	20	78 32			3	101 37		
Mitchell	27	1	28	2	1		3	0	4 5	16	2		2	25		
Monona	48	2	50		2		2	0	12	27	5	4		48		
Monroe	49		49	7			7	0	4	36			2	42		
Montgomery	59	2	61		2	1	3	1	9	42		1	6	58		
Muscatine O'Brien	28 15	4	32 15	2 4			2 4	0	8	20 4			2	30 11		
Osceola	15		15	-			0	0	4	10			2	16		
Page	57	1	58	1	1	<u> </u>	2	0	5	48			3	56		
Palo Alto	25		25				0	0	1	24				25		
Plymouth	124	1	125	13			13	0	32	80				112		
Pocahontas Polk	53 25	1 3	54 28	4 5			4 5	0	4 9	36 13	2	2	6	50 23		
Potkawattamie	69	2	71	12			5 12	0	22	35			2	59		
Poweshiek	91		91	4	1		5	2	9	72			5	86		
Ringgold	118	2	120	12			12	0	7	83	1	2	15	108		
Sac	68	40	68	1			1	0	26	34	1	1	5	67		
Scott Shelby	11 34	13 2	24 36	6			0	0	13 9	10 20	1		1	24 30		
Sileiby	34		30	0		I	0		1 9	20				30		

County Structurally Deficient Bridges Summary Report - Fiscal Year 2018 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 structu

r						ne manner in w		use their road					U		_	
County	Beginning Status Carry over and newly designated SD			5	Structures take	en off SD statu	IS	Structures that remained in SD status at end of year								Structure
						ructurally deficie		In Service (Open) - Still SD			Out of Service (Closed)					Removed
	SD at beginning of reporting period	Became SD during FY 2018	Total SD during this FY	via Replacement	via Major Rehabilitation	via Light Rehabilitation	Total Restored	Partially Rehabed	Programmed for Replace or Rehab	Not yet Programmed	Closed: plan to replace	Closed: programmed to replace	Closed: Not likely to reopen	Total SD Remaining		Sold Demolished Abandoned No longer NBIS
Sioux	14	3	17	4			4	0	9	3			1	13		
Story	54		54	5			5	0	9	38			2	49		
Tama	116	7	123	7	3	4	14	1	8	87			14	109		
Taylor	103	7	110	1	2		3	0	10	76	2	1	18	107		
Union	60	3	63	3			3	0	6	44	1		9	60		
Van Buren	59		59	1			1	0	7	46			5	58		
Wapello	51	2	53	3	1		4	0	13	31	1		4	49		
Warren	71	6	77	4		1	5	0	13	51		2	6	72		
Washington	40	6	46	1		2	3	0	7	35			1	43		
Wayne	50	2	52	11			11	0	17	21			3	41		
Webster	53	7	60	11			11	0	34	14			1	49		
Winnebago	26	6	32	7			7	0	21	4				25		
Winneshiek	78	2	80	5			5	0	14	54	1	2	4	75		
Woodbury	89	5	94	7			7	0	23	55	5	4		87		
Worth	22	1	23	5			5	1	7	10			1	18		
Wright	45	4	49				0	0	10	34	1		4	49		
Totals	4699	305	5004	368	35	21	424	32	1042	3154	53	48	283	4580		0
s	SD Structures to account for: 5004 Restored: 424 Still SD: 4580								Still open: 4196 Closed: 384 Net Improvement: 119							0

County Structurally Deficient Bridges Summary Report - Fiscal Year 2018

A Guide to the County Structurally Deficient Bridges Summary Report

Prepared by the Iowa Department of Transportation November 16, 2018

Background

Counties are required to inspect all bridges biannually for structurally 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?

<u>Beginning Status</u> – 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.

<u>Structures Taken Off SD Status</u> – 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.

<u>Structures that Remained in SD Status at the End of the Year</u> – 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.

<u>Structure Removed</u> – 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.