County Structurally Deficient Bridges Summary Report - Fiscal Year 2016

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 (origin of deficient bridges)			Progress Made: Bridges removed from structurally deficient status (restored to full legal load capacity)				Ending Status					
								Still in Service (Open)			Closed		
	Carry over from previous FY	Became deficient during FY15	**Total at Start of FY16**	Replaced	Major Rehabilitation	Light Rehabilitation	**Total Fixed**	Partial Rehabilitation	Programmed	Not yet Programmed	Not yet Programmed	Permanently Closed	**Total Remaining**
Adair	74		**74**	13			**13**		4	51		6	**61**
Adams	62	4	**66**	5	1		**6**		3	57			**60**
Allamakee	20		**20**	1			**1**		6	13			**19**
Appanoose	46	7	**53**				**0**		6	47			**53**
Audubon	50	3	**53**	7	4		**11**	1	6	29	1	5	**42**
Benton	56	1	**57**	7			**7**		33	17			**50**
Black Hawk	16	6	**22**	2			**2**		10	10			**20**
Boone	40	7	**47**	3			**3**		7	35		2	**44**
Bremer	42	5	**47**	4			**4**		10	31	2		**43**
Buchanan	41	1	**42**	6			**6**	2	14	18	2		**36**
Buena Vista	23	2	**25**	1			**1**		8	16			**24**
Butler	49	1	**50**	6	1		**7**		17	24	1	1	**43**
Calhoun	19		**19**	1			**1**		5	12		1	**18**
Carroll	19		**19**	3			**3**	1	8	6	1		**16**
Cass	59	10	**69**	7		4	**11**	6	7	44		1	**58**
Cedar	66	6	**72**	1			**1**	1	17	50	1	2	**71**
Cerro Gordo	28	2	**30**				**0**	1	7	21	1		**30**
Cherokee	74		**74**	3			**3**		3	60	7	1	**71**
Chickasaw	23	9	**32**	1			**1**		5	25		1	**31**
Clarke	47	4	**51**	2	2	8	**12**		14	25			**39**
Clay	22	1	**23**	3			**3**		9	11			**20**
Clayton	43	3	**46**	6			**6**		10	30			**40**
Clinton	10	2	**12**	2			**2**		3	6		1	**10**
Crawford	70	1	**71**	6			**6**		24	41			**65**
Dallas	21	2	**23**	2			**2**		3	16		2	**21**
Davis	78	5	**83**	2			**2**		5	69	7		**81**
Decatur	55	2	**57**	1			**1**	2	12	41	1		**56**
Delaware	15	1	**16**	1	1		**2**	1	3	10			**14**
Des Moines	21	10	**31**	2	4		**6**	1	9	12	3		**25**
Dickinson	6	1	**7**				**0**		3	4			**7**
Dubuque	48	1	**49**				**0**		6	41		2	**49**
Emmet	12	7	**19**				**0**		1	16		2	**19**
Fayette	37	4	**41**	2			**2**	7	3	28	1		**39**
Floyd	23	2	**25**	2			**2**		4	16	1	2	**23**
Franklin	37	6	**43**	4			**4**		8	28		3	**39**
Fremont	38		**38**	1	4		**5**		3	30			**33**
Greene	15	1	**16**				**0**	2	3	9	2		**16**
Grundy	45	5	**50**	1	1		**2**		15	33			**48**
Guthrie	72	11	**83**	3	3		**6**		9	68			**77**
Hamilton	27	4	**31**	6	2		**8**		5	17		1	**23**
Hancock	38		**38**				**0**		5	33			**38**
Hardin	33	4	**37**				**0**		12	20	5		**37**
Harrison	44	8	**52**				**0**		6	46			**52**
Henry	24	3	**27**	4			**4**	3	2	15		3	**23**
Howard	44	7	**51**	5			**5**		16	29		1	**46**
Humboldt	16	1	**17**	2			**2**		6	9			**15**
Ida	21		**21**	1			**1**		6	13	1		**20**
Iowa	36	1	**37**	7			**7**		7	19	2	2	**30**
Jackson	25	3	**28**				**0**		5	22		1	**28**
Jasper	109	13	**122**	3			**3**		27	91	1		**119**
Jefferson	50		**50**	4	1		**5**		10	34	1		**45**
Johnson	35	1	**36**	2			**2**	29				5	**34**
Jones	18		**18**	4	1		**5**		3	10			**13**
Keokuk	46	6	**52**	3			**3**	13	9	22		5	**49**
Kossuth	26		**26**	2			**2**		12	10		2	**24**
Lee	23	1	**24**	2			**2**		5	17			**22**
Linn	17	4	**21**	5			**5**	3	4	9			**16**
Louisa	10	2	**12**		2		**2**		2	7		1	**10**
Lucas	74		**74**	1			**1**		6	67			**73**
Lyon	73	5	**78**	14			**14**	15	9	36	4		**64**
Madison	72		**72**	4	5		**9**		5	52	3	3	**63**
Mahaska	41	1	**42**	1	1		**2**	1	4	34	1		**40**
Marion	54	1	**55**	6	2		**8**		10	37			**47**
Marshall	85	18	**103**	3			**3**		16	83		1	**100**
Mills	42		**42**				**0**		6	36			**42**
Mitchell	32	2	**34**	1	2		**3**		2	24	5		**31**
Monona	39	8	**47**				**0**		15	23	8	1	**47**
Monroe	49	2	**51**	2			**2**		5	42		2	**49**
Montgomery	56	3	**59**	3	5		**8**	5	8	34	3	1	**51**
Muscatine	24		**24**	2	1		**3**		6	13		2	**21**
O'Brien	26	1	**27**	5	2		**7**		4	16			**20**
Osceola	2		**2**				**0**			2			**2**
Page	53	3	**56**	1	1		**2**		6	47	1		**54**

County Structurally Deficient Bridges Summary Report - Fiscal Year 2016

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 (origin of deficient bridges)			Progress Made: Bridges removed from structurally deficient status (restored to full legal load capacity)				Ending Status					
								Still in Service (Open)			Closed		
	Carry over from previous FY	Became deficient during FY15	**Total at Start of FY16**	Replaced	Major Rehabilitation	Light Rehabilitation	**Total Fixed**	Partial Rehabilitation	Programmed	Not yet Programmed	Not yet Programmed	Permanently Closed	**Total Remaining**
Palo Alto	29	1	**30**	5			**5**		1	24			**25**
Plymouth	132		**132**	6			**6**		41	85			**126**
Pocahontas	47	5	**52**	5	3		**8**	1	5	38			**44**
Polk	24		**24**	1			**1**		7	16			**23**
Pottawattamie	70	7	**77**	6			**6**		18	50	3		**71**
Poweshiek	77	1	**78**	11	1		**12**		8	52	1	5	**66**
Ringgold	97	13	**110**	6	1		**7**		5	83	6	9	**103**
Sac	39	15	**54**				**0**		7	43	2	2	**54**
Scott	12		**12**	4			**4**		8				**8**
Shelby	43	2	**45**	4	4		**8**		13	23	1		**37**
Sioux	15	1	**16**	3			**3**	2	8	2		1	**13**
Story	49	9	**58**				**0**		8	50			**58**
Tama	108	19	**127**	10	9		**19**		4	92	4	8	**108**
Taylor	85	6	**91**	3	2		**5**		4	66	3	13	**86**
Union	51	5	**56**	2			**2**	1	11	39	1	2	**54**
Van Buren	59	3	**62**	3			**3**		12	47			**59**
Wapello	47	4	**51**	2			**2**	1	16	26		6	**49**
Warren	75	3	**78**	7	3		**10**		20	48			**68**
Washington	41		**41**	4			**4**		14	20	3		**37**
Wayne	53	3	**56**	6	2		**8**		17	31			**48**
Webster	49	4	**53**	3			**3**		36	13	1		**50**
Winnebago	27		**27**	2			**2**	1	18	6			**25**
Winneshiek	81		**81**	10			**10**	2	7	53		9	**71**
Woodbury	85	2	**87**	10			**10**	1	26	47	2	1	**77**
Worth	24		**24**	2			**2**		3	18	1		**22**
Wright	36	3	**39**	2			**2**	1	8	24		4	**37**
Totals	4341	341	**4682**	**321**	**71**	**12**	**404**	**104**	**892**	**3065**	**94**	**123**	**4278**

Total still in service	**4061**	**Total closed**	**217**

A Guide to the County Structurally Deficient Bridges Summary Report

Prepared by the Iowa Department of Transportation
February 10, 2017

Background

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 15 – the number of bridge that moved into SD status during the previous year.

Total at Start of FY 16 – the sum of the previous two columns, which provides the total of SD bridges at the start of the reporting period.

Progress Made – 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.

Replaced – the number of SD bridges that were completed reconstructed.

Major Rehabilitation – the number of 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 (supporting columns).

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

Total Fixed – 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.

Ending Status – This section describes the status of bridges that remained in SD status at the end of the reporting period. These bridges are grouped into two main categories and several subcategories, as shown below:

Still in Service – These bridges are still open to traffic will remaining in SD condition. This group of bridges are broken down into 3 subcategories:

Partial Rehabilitation – the number of bridges that are open to traffic and were partially repaired, but not enough to remove the SD condition. Examples might include limited deck patching, bridge approach pavement repairs, bridge railing repairs, or minor joint replacements.

Programmed – the number of SD bridges that are open to traffic and included in the county's five year program. These bridges are scheduled for repairs or replacement.

Not yet programmed – the number of SD bridges that still open to traffic but are not yet included in the county's five year program.

Closed – These bridges are closed to vehicular traffic and remain in SD condition. This group of bridges are broken down into 2 subcategories:

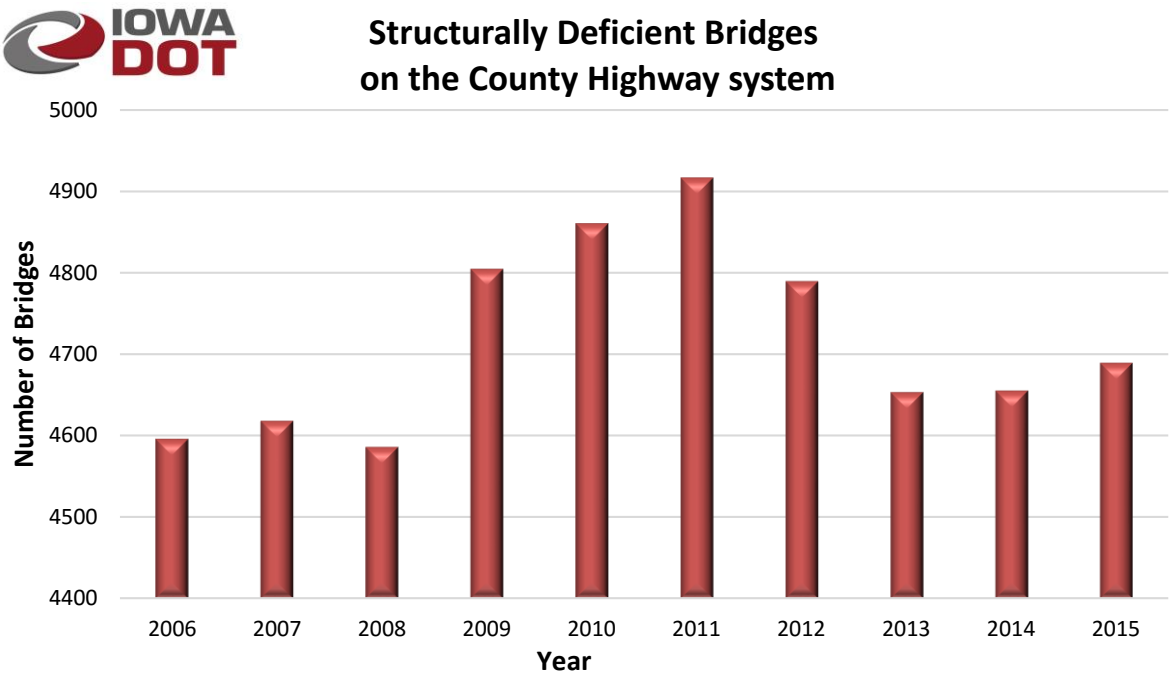
Not yet programmed – the number of SD bridges that are closed to traffic and not yet included in the county's five year program.

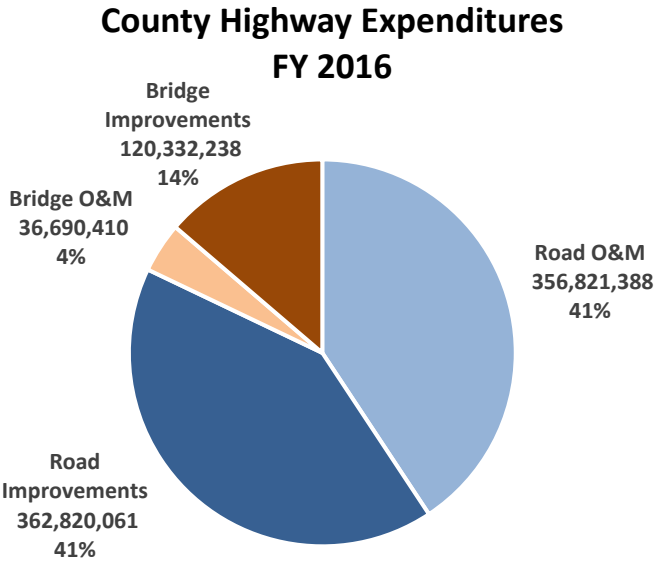
Permanently Closed – the number of SD bridges that are closed to traffic and the county has no current plans to repair or replace the bridge.

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

County Bridge Trends and Expenditures

Prepared by the Iowa Department of Transportation
February 14, 2017





FY 2016 total county highway expenditures = $876,664,097

Definitions

- Operations and Maintenance (O&M) – These costs include what it takes to operate and maintain the facility as it is. Road examples include plowing snow, applying traffic paint / markings, filling potholes, sealing cracks, and cleaning ditches. Bridge examples include bridge inspection and monitoring, bridge painting, and joint repairs.
- Improvements – These costs include activities that either partially or fully restore the facility to new or almost new condition. Road examples include resurfacing, rehabilitation, and reconstruction. Bridge examples include deck replacements, major and minor rehabilitation, and complete replacement.