American Road & Transportation Builders Association

Illinois

Highlights from FHWA's 2016 National Bridge Inventory Data

- Of the 26,704 bridges in Illinois, 2,243, or 8%, are classified as structurally deficient. This means one or more of the key bridge elements, such as the deck, superstructure or substructure, is considered to be in "poor" or worse condition.[1]
- 1,932 bridges, or 7%, are classified as functionally obsolete. This means the bridge does not meet design standards in line with current practice.
- 874 bridges are posted for load, which may restrict the size and weight of vehicles crossing the structure.
- Federal investment in Illinois has supported $4.7 billion for capital improvements on 3,384 bridges between 2005 and 2014.[2]
- Over the last 10 years, 2,420 new bridges have been constructed in the state; 528 have undergone major reconstruction.
- The state has identified needed repairs on 2,716 bridges, which the state estimates will cost $10 billion.[3]

Bridge Inventory

Type of Bridge[4]	All Bridges			Structurally Deficient Bridges		
	Total Number	Area (sq. meters)	Daily Crossings	Total Number	Area (sq. meters)	Daily Crossings
Rural Bridges						
Interstate	873	748,481	9,112,450	61	89,905	533,025
Other principal arterial	827	500,510	3,904,350	43	29,020	223,700
Minor arterial	1,498	701,615	3,922,975	121	94,811	316,625
Major collector	3,599	1,117,998	3,561,110	235	107,123	231,650
Minor collector	953	220,976	381,560	78	15,970	31,725
Local	12,184	1,992,609	1,447,286	1,065	120,010	105,534
Urban Bridges						
Interstate	1,410	2,874,389	58,330,850	92	259,700	2,493,025
Freeway/expressway	190	250,663	5,833,600	11	16,014	551,500
Other principal arterial	1,420	2,086,139	28,566,175	141	325,458	2,772,075
Minor arterial	1,323	1,247,313	12,538,430	111	114,278	1,105,885
Collector	1,080	766,157	4,871,470	116	129,825	619,860
Local	1,347	497,566	1,239,470	169	52,689	140,480
Total	26,704	13,004,417	133,709,736	2,243	1,354,803	9,125,084

Proposed Bridge Work

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	1,749	$8,644.9	11,686,254	1,375,326
Widening & rehabilitation	303	$363.4	4,044,965	359,156
Rehabilitation	447	$481.2	5,282,132	486,884
Deck rehabilitation/replacement	66	$138.3	3,896,425	156,417
Other work	151	$180.9	2,000,690	244,271

Top Most Traveled Structurally Deficient Bridges in Illinois

County	Year Built	Daily Crossings	Type of Bridge	Location
DuPage	1960	148,000	Urban Interstate	I- 55 over Lemont Rd
Cook	1963	147,600	Urban freeway/expressway	IL 53 SB over Kirchoff Rd
Cook	1963	147,600	Urban freeway/expressway	IL 53 NB over Kirchoff Rd
DuPage	1970	136,000	Urban Interstate	I-290 over Salt Creek
Cook	1937	124,500	Urban other principal arterial	Lake Shore Drive over Main Br Chicago Riv
Cook	1962	111,750	Urban Interstate	I- 90 94 NB Elv Lo over Wells to 29th Pl
Will	1955	105,700	Urban Interstate	I- 55 over Joliet Rd
Cook	1933	102,500	Urban other principal arterial	Lake Shore Drive over Wilson Avenue
Cook	1933	98,700	Urban other principal arterial	Lake Shore Drive over Lawrence Ave
St. Clair	1963	82,900	Urban Interstate	Poplar Street Bridge

Sources: Bridge data is from the 2016 National Bridge Inventory ASCII files, released by the Federal Highway Administration in January 2017. Note that specific conditions on bridges may have changed as a result of recent work.

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[1] According to the Federal Highway Administration (FHWA), a bridge is classified as structurally deficient if the condition rating for the deck, superstructure, substructure or culvert and retaining walls is rated 4 or below or if the bridge receives an appraisal rating of 2 or less for structural condition or waterway adequacy. During inspection, the conditions of a variety of bridge elements are rated on a scale of 0 (failed condition) to 9 (excellent condition). A rating of 4 is considered "poor" condition and the individual element displays signs of advanced section loss, deterioration, spalling or scour. ARTBA follows the methodology of the FHWA and evaluates bridge status without applying the 10-year rule.

[2] ARTBA analysis of FHWA data, includes all bridge construction-related spending on projects approved by FHWA between 2005 and 2014.

[3] States report the cost of proposed bridge work for each bridge to the Federal Highway Administration as part of the bridge inventory data each year. Each highway agency is encouraged to use its best available information and established procedures to determine bridge improvement costs.

[4] Bridges are classified by FHWA into types based on the functional classification of the roadway on the bridge. Interstates comprise routes officially designated by the Secretary of Transportation, and the Dwight D. Eisenhower National System of Interstate and Defense Highways. Other principal arterials serve major centers of urban areas or provide mobility through rural areas. Freeways and expressways are similar to interstates, with directional lanes generally separated by a physical barrier, and access/egress points generally limited to on- and off-ramps. Minor arterials are used for trips of moderate length, serve smaller geographic areas and connect to the higher arterial system. Collectors funnel traffic from local roads to the arterial network; major collectors have higher speed limits and traffic volumes, and are longer in length and spaced at greater intervals, while minor collectors are shorter and provide service to smaller communities. Local roads do not carry through traffic, and are intended for short distance travel.