

MAP 21

PERFORMANCE MEASURES



Infrastructure Condition in Central Arkansas: Bridges

In CARTS there are 1,272 bridges from the National Bridge Inventory (NBI) from 2017. Bridges are important links in our transportation system. Bridges connect the transportation network over features that would otherwise be obstacles to movement. Maintaining safe bridges is one of the goals of the MAP-21 performance measures.

What is a Bridge? A structure including supports erected over a depression or an obstruction, such as water, highway, or railway, and having a track or passageway for carrying traffic or other moving loads, and having an opening measured along the center of the roadway of more than 20 feet.

National Bridge Inventory (NBI). The aggregation of structure inventory and appraisal data collected to fulfill the requirements of the National Bridge Inspection Standards. Each State shall prepare and maintain an inventory of all bridges subject to the NBIS.¹

MAP 21

Moving Ahead for Progress in the 21st Century

Map-21 is the current funding and authorization bill that governs United States federal surface transportation policy and spending. It was passed by Congress on June 29, 2012, and President Barack Obama signed it into law on July 6, 2012.

Performance Management

A key and new feature of Map-21 is the establishment of a performance and outcome-based program. The states are required to invest resources toward the achievement of national goals for (1) Safety, (2) Infrastructure Condition, (3) Congestion Reduction, (4) System Reliability, (5) Freight Movement and Economic Vitality, (6) Environmental Sustainability, and (7) Reduced Project Delivery Delays.

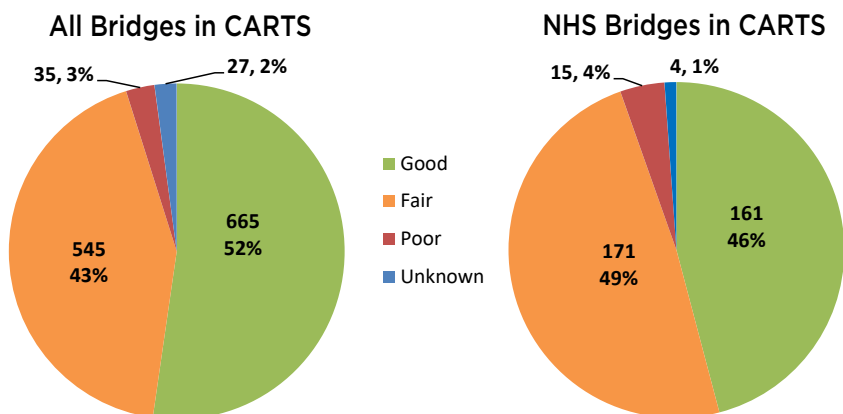
Regional Performance Measures

Metroplan is responsible for tracking the first five performance measures for central Arkansas, and for assisting the state with reaching statewide targets. Metroplan has released a series of fact sheets on each performance measure. Metroplan is working with the Arkansas Department of Transportation (ArDOT) to identify policies and projects that can help reach targets.

Categories within the National Bridge Inventory:

The classification for bridges is determined from the lowest ranking from the deck, superstructure, substructure, or culvert from the National Bridge Inventory (NBI).

Ratings greater than or equal to 7 are considered in good condition while ratings of 4 or less are considered poor.²



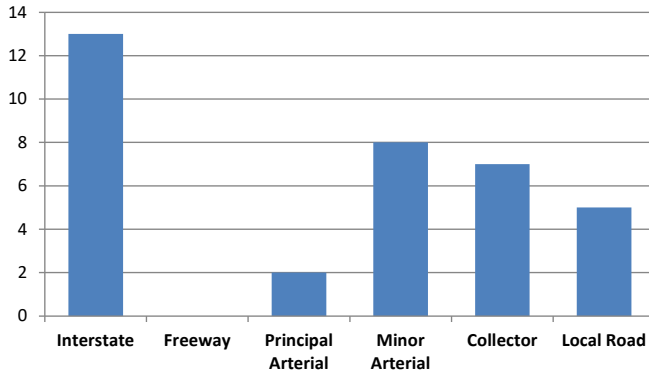
Bridges on the National Highway System (NHS) are similar in condition to the entire bridge inventory. The NHS has 28 percent of the bridges within central Arkansas.

Did you know? Only 3% of all bridges in the CARTS are classified in poor condition.

¹ <http://www.fhwa.dot.gov/bridge/mtguide.pdf>

² <http://nationalbridges.com/guide-to-ratings>

Poor Distribution by Functional Class



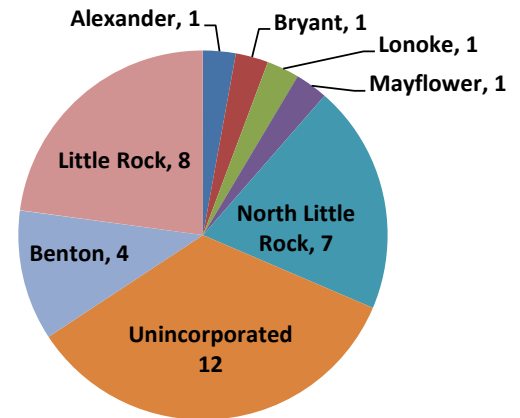
The poor bridges on functionally classed roads show that Interstate bridges are the class that has the most representation.

Bridges Classified as Poor

State Owned Bridge	Feature Over	NHS
Kerr Rd (Lonoke Co.)	I-40	No
Highway 31 (Lonoke)	I-40	No
Fairplay Rd (Saline Co.)	I-30	No
Highway 167 (Saline Co.)	I-530	Yes
*Highway 89 (Mayflower)	I-40	No
*I-30 EB (Benton)	Saline River Relief	Yes
*I-30 EB (Benton)	Saline River	Yes
*I-30 WB (Benton)	Highway 229	Yes
*I-30 WB (Benton)	Saline River Relief	Yes
*Highway 5 (Bryant)	Unnamed Creek	No
Highway 381 (Lonoke Co.)	Oak Branch	No
*Highway 365 (Pulaski/Faulkner Co.)	Palarm Creek	No
*Locust St (NLR)	UPRR	No
*I-30 (LR)	2nd St	Yes
Military (NLR)	I-40	No
Pratt Rd (Pulaski Co.)	I-530	No
I-440 Ramp (NLR)	I-40	Yes
*Highway 10 (LR)	Gill St, LRWRR, Rose Cr	Yes
*I-30 WB (LR)	UPRR	Yes
*I-630 WB (LR)	Rodney Paraham	Yes
I-440 EB (LR)	Lindsay Rd	Yes
*I-30 EB (LR)	UPRR	Yes
*I-630 EB (LR)	Rodney Paraham	Yes
I-440 WB (LR)	Lindsay Rd	Yes
*I-30 (NLR)	UPRR	Yes
*Highway 176 (NLR)	Shilcutt Bayou	No
County Bridge	Feature Over	
Mt Ida Rd (Saline)	Little Alum Fork	
Unity Rd (Saline)	Lees Creek	
Round Mt Road (Faulkner)	Gold Creek Fork	
Bob Long Lane (Lonoke)	White Oak Branch	
Fairview (Lonoke)	Wattensaw Bayou	
Oneida Dr (Pulaski)	Kellogg Creek	
City Bridge	Feature Over	
Main St (NLR)	UPRR	
W 14th St (NLR)	UPRR	
Cornerstone Rd (Alexander)	Branch Crooked Cr	

*scheduled for replacement

Poor Distribution by Entity



In the distribution of structurally deficient bridges, the unincorporated areas have the most with 12, but in terms of cities, both North Little Rock and Little Rock are close with 7 and 8 respectively.

CARTS Baseline Performance Measures

	2017
Percent of NHS bridges by deck area classified in "Good" condition	33.5%
Percent of NHS bridges by deck area classified in "Poor" condition	7.5%

Adopted Targets by ArDOT

	2-Year	4-Year
Percent of NHS bridges by deck area classified in "Good" condition	50%	50%
Percent of NHS bridges by deck area classified in "Poor" condition	4%	6%

Metroplan has adopted state targets for bridges.

Did you know? Of the 35 bridges classified as poor on the NHS in CARTS, 16 are to be replaced in upcoming projects.