Preserving Monroe Bridges

THE CONDITION AND FUNDING NEEDS OF MONROE'S AGING BRIDGE SYSTEM



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Founded in 1971, TRIP * of Washington, DC, is a nonprofit organization that researches, evaluates and distributes economic and technical data on surface transportation issues. TRIP is sponsored by insurance companies, equipment manufacturers, distributors and suppliers; businesses involved in highway and transit engineering and construction; labor unions; and organizations concerned with efficient and safe surface transportation.

Louisiana's bridges are a critical element of the state's transportation system, which supports commerce, economic vitality and personal mobility. The state's transportation system is literally the backbone of Louisiana's economy. Louisiana's transportation system enables the state's residents and visitors to travel to work and school, visit family and friends, and frequent tourist and recreation attractions, while providing its businesses with reliable access to customers, materials, suppliers and employees.

To retain businesses, accommodate population and economic growth, maintain economic competitiveness, and achieve further economic growth, Louisiana will need to maintain and modernize its bridges by repairing or replacing deficient bridges and providing needed maintenance on other bridges to ensure that they remain in good condition as long as possible. Making needed improvements to Louisiana's bridges will require increased and reliable funding from local, state and federal governments, which will also provide a significant boost to the state's economy by creating jobs in the short term and stimulating long term economic growth as a result of preserved and enhanced mobility and access.

MONROE BRIDGE CONDITIONS

Seventeen percent of locally and state-maintained bridges in the Monroe area (which includes Ouachita Parish) are structurally deficient, meaning there is significant deterioration to the major components of the bridge.

- There are a total of 344 bridges in the Monroe area that are 20 feet or longer. These bridges are maintained by local and state agencies.
- Seventeen percent (57 bridges) of state-and locally maintained bridges in the Monroe area are structurally deficient.
- Bridges in the Monroe area that are structurally deficient carry approximately 97,000 vehicles each day.
- Bridges that are structurally deficient may be posted for lower weight limits or closed if their condition
 warrants such action. Deteriorated bridges can have a significant impact on daily life. Restrictions on
 vehicle weight may cause many vehicles especially emergency vehicles, commercial trucks, school
 buses and farm equipment to use alternate routes to avoid weight-restricted bridges. Redirected
 trips also lengthen travel time, waste fuel and reduce the efficiency of the local economy.
- The list below details the 20 most heavily traveled structurally deficient bridges in the Monroe area. ADT is average daily traffic.

Rank	Parish	Location	Facility Carried	Feature Intersected	Year Built	Average Daily Traffic	Open, Closed, Posted
1	Ouachita		LA0034	CHENIERE CREEK	1970	11,500	Open
2	Ouachita	Monroe	LA0594	LA 594 OVER I-20	1965	10,500	Open
3	Ouachita	Monroe	LA0616	CREEK	1910	9,700	Posted
4	Ouachita	Monroe	LOC RD	LOCAL ROAD OVER I-20	1963	6,220	Posted
5	Ouachita	Monroe	LOC RD	I-20	1963	5,890	Posted
6	Ouachita	Monroe	US0080	MO PAC RR SICARD	1936	5,700	Posted
7	Ouachita	Monroe	LA0139	CREEK	1937	5,000	Open
8	Ouachita		LA0143	D'ARBONNE BAYOU	1962	4,400	Open
9	Ouachita		LA3033	CHENIERE SPILLWAY	1947	4,300	Posted
10	Ouachita	Monroe	LOC RD	I-20	1968	3,950	Open
11	Ouachita		LOC RD	I-20	1964	3,770	Posted
12	Ouachita		LA0151	LA 151 OVER I-20	1960	3,400	Open
13	Ouachita		LA0151	CURRYS CREEK	1950	3,400	Open
14	Ouachita		LA0151	COCKEREL CREEK	1967	3,400	Posted
15	Ouachita		LA0841	HALFWAY BAYOU	1975	2,900	Open
16	Ouachita		LA0015	BAYOU LAFOUCHE	1953	2,700	Open
17	Ouachita		LA0594	CANEY CREEK	1954	2,500	Posted
18	Ouachita		LA0134	MILL BAYOU	1957	1,540	Posted
19	Ouachita		SWARTZ SCHOOL RD	CONEY CREEK	1979	1,330	Posted
20	Ouachita	Monroe	BAYOU OAKS DR	PATRICKS CANAL	1981	1,200	Open

 The following 20 structurally deficient bridges in the Monroe area have the lowest average rating for deck, substructure and superstructure (carrying a minimum of 250 vehicles per day). Each major component of a bridge is rated on a scale of zero to nine, with a score of four or below indicating poor condition. If a bridge receives a rating of four or below for its deck, substructure or superstructure, it is rated as structurally deficient.

Rank	Parish	Location	Facility Carried	Feature Intersected	Year Built	Average Daily Traffic	Open, Closed, Posted
1	Ouachita		PINE BLUFF RD	DRAIN TO CYPRESS CREEK	1978	360	Posted
2	Ouachita	Monroe	US0080	MO PAC RR SICARD	1936	5,700	Posted
3	Ouachita		LA0034	CHENIERE CREEK	1970	11,500	Open
4	Ouachita	Monroe	LA0616	CREEK	1910	9,700	Posted
5	Ouachita		LA3033	CHENIERE SPILLWAY	1947	4,300	Posted
6	Ouachita		LA0151	COCKEREL CREEK	1967	3,400	Posted
7	Ouachita		LA0015	BAYOU LAFOUCHE	1953	2,700	Open
8	Ouachita		LA0134	MILL BAYOU	1957	1,540	Posted
9	Ouachita	Monroe	BAYOU OAKS DR	PATRICKS CANAL	1981	1,200	Open
10	Ouachita	Monroe	LOC RD	I-20	1968	3,950	Open
11	Ouachita		LA0151	LA 151 OVER I-20	1960	3,400	Open
12	Ouachita		LA0151	CURRYS CREEK	1950	3,400	Open
13	Ouachita		LA0594	CANEY CREEK	1954	2,500	Posted
14	Ouachita	Monroe	HADLEY ST	YOUNGS BAYOU CANAL	1965	400	Posted
15	Ouachita		LA0838	CREEK	1955	270	Posted
16	Ouachita	Monroe	LA0838	STEEP BAYOU	1955	270	Open
17	Ouachita		LA0143	D'ARBONNE BAYOU	1962	4,400	Open
18	Ouachita	Monroe	LA0594	LA 594 OVER I-20	1965	10,500	Open
19	Ouachita	Monroe	LOC RD	LOCAL ROAD OVER I-20	1963	6,220	Posted
20	Ouachita		LA0841	HALFWAY BAYOU	1975	2,900	Open

TRANSPORTATION FUNDING AND PRESERVING LOUISIANA'S AGING BRIDGES

Maintaining aging bridges becomes more costly as they reach the limits of their design life, challenging state and local transportation agencies to take an asset management approach to bridge preservation that emphasizes enhanced maintenance techniques that keep infrastructure in good condition as long as possible, delaying the need for costly reconstruction or replacement.

- Repairing and replacing bridges in poor condition and preserving bridges in fair and good condition will
 require increased and reliable funding from local, state and federal governments.
- A recent <u>survey of states by the U.S. General Accountability Office</u> (GAO) found that more than half of states surveyed (14 out of 24) reported that inadequate funding was a challenge to their ability to maintain bridges in a state of good repair.
- Under pressure from fiscal constraints, aging bridges, and increased wear due to growing travel
 volume, particularly by large trucks, transportation agencies are adopting cost-effective strategies
 focused on keeping bridges in good condition as long as possible. While this strategy requires
 increased initial investment, it saves money over the long run by extending the lifespan of bridges.

- The GAO Report found that the increase in the number and size of bridges that are approaching the limits of their design life will likely place a greater demand on bridge owners in the near future, making it more difficult to mitigate issues in a cost-effective manner.
- A survey included in the GAO report found that more than half of states surveyed (13 out of 24)
 indicated that the advanced age of many bridges posed a challenge to their ability to maintain their
 bridges in a state of good repair.
- Bridge preservation may include washing, sealing deck joints, facilitating drainage, sealing concrete, painting steel, removing channel debris, and protecting against stream erosion.
- Rehabilitation involves major work required to restore the structural integrity of a bridge as well as work necessary to correct major safety defects.
- Replacement projects include total replacements, superstructure replacements, and bridge widening.
- The need to repair or replace high priority bridges may create a funding cycle that makes it difficult to keep pace with the needed preservation activities.

TRANSPORTATION AND ECONOMIC GROWTH IN LOUISIANA

The efficiency of Louisiana's transportation system, particularly its roads, highways and bridges, is critical to the health of the state's economy. Businesses rely on an efficient and dependable transportation system to move products and services. A key component in business efficiency and success is the level and ease of access to customers, markets, materials and workers.

- Annually, \$734 billion in goods are shipped to and from sites in Louisiana.
- Businesses have responded to improved communications and greater competition by moving from a
 push-style distribution system, which relies on low-cost movement of bulk commodities and largescale warehousing, to a pull-style distribution system, which relies on smaller, more strategic and timesensitive movement of goods.
- Increasingly, companies are looking at the quality of a region's transportation system when deciding
 where to re-locate or expand. Regions with congested or poorly maintained roads may see businesses
 relocate to areas with a smoother, more efficient and more modern transportation system.
- Increasingly, companies are looking at the quality of a region's transportation system when deciding where to re-locate or expand. Regions with congested or poorly maintained roads may see businesses relocate to areas with a smoother, more efficient and more modern transportation system. Highway accessibility was ranked the number one site selection factor in a 2017 survey of corporate executives by Area Development Magazine. Labor costs and the availability of skilled labor, which are both impacted by a site's level of accessibility, were rated second and third, respectively.

• The <u>Federal Highway Administration</u> estimates that each dollar spent on road, highway and bridge improvements results in an average benefit of \$5.20 in the form of reduced vehicle maintenance costs, reduced delays, reduced fuel consumption, improved safety, reduced road and bridge maintenance costs and reduced emissions as a result of improved traffic flow.

Sources of information for this report include the Louisiana Department of Transportation and Development (LADOTD), the Federal Highway Administration (FHWA), the National Bridge Inventory (NBI), the Bureau of Transportation Statistics (BTS), and the U.S. Census Bureau.