Preserving Lake Charles Bridges

THE CONDITION AND FUNDING NEEDS OF LAKE CHARLES' AGING BRIDGE SYSTEM

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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.

LAKE CHARLES BRIDGE CONDITIONS

Nine percent of locally and state-maintained bridges in the Lake Charles area, which includes Calcasieu Parish, are structurally deficient, meaning there is significant deterioration to the major components of the bridge.

- There are a total of 455 bridges in the Lake Charles area that are 20 feet or longer. These bridges are maintained by local and state agencies.
- Nine percent (39 bridges) of state-and locally maintained bridges in the Lake Charles area are structurally deficient.
- Bridges in the Lake Charles area that are structurally deficient carry approximately 352,000 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 25 most heavily traveled structurally deficient bridges in the Lake Charles area.

Rank	Parish	Location	Facility Carried	Feature Intersected	Year Built	Average Daily Traffic	Open, Closed, Posted
1	Calcasieu	Lake Charles	I0010	CALCASIEU RIVER, RR, STS	1952	81100	Open
2	Calcasieu		I0010	SABINE RELIEF	1954	54500	Open
3	Calcasieu		LA0378	W FORK CALCASIEU RIVER	1968	15300	Posted
4	Calcasieu	Sulphur	LA0027	LA 27 OVER I-10	1962	11050	Posted
5	Calcasieu	Sulphur	LA0027	LA 27 OVER I-10	1988	11050	Posted
6	Calcasieu	Lake Charles	KIRKMAN ST	CONTRABAND BAYOU	1964	9320	Open
7	Calcasieu		LA0108	BAYOU D'INDE	1945	7700	Open
8	Calcasieu	Lake Charles	FIFTH AVE	FIFTH AVENUE DRAIN	1975	7200	Closed
9	Calcasieu	Lake Charles	LOUISIANA AVE	CONTRABAND BAYOU	1957	6400	Open
10	Calcasieu	Lake Charles	US0090	US 90 OVER I-10/RAMPS	1960	5200	Open
11	Calcasieu		LA1133	BAYOU	1963	4500	Open
12	Calcasieu		LA0012	OLD RIVER SLOUGH	1952	3700	Open
13	Calcasieu		LA0012	CURRENT SLOUGH	1952	3700	Open
14	Calcasieu		LA0012	WASHOUT SLOUGH	1952	3700	Open
15	Calcasieu		LA0012	MUD LAKE	1952	3700	Open
16	Calcasieu		LA0012	HURSEY SLOUGH	1952	3700	Open
17	Calcasieu		LA0012	ASHWORTH SLOUGH	1952	3700	Open
18	Calcasieu		LA0012	SABINE RIVER	1938	3200	Open
19	Calcasieu	Vinton	LA3063	DRAINAGE DITCH	1968	2600	Posted
20	Calcasieu		LA3256	ENGLISH BAYOU	1969	2500	Open
21	Calcasieu	Iowa	LA3258	BAYOU	1969	2500	Open
22	Calcasieu		LA0109	GULLY	1957	2100	Posted
23	Calcasieu	Sulphur	PICARD RD	GUM SLOUGH	1968	1400	Open
24	Calcasieu	Lake Charles	RUSSELL ST	FARMERS L & C CO. CANAL	1970	350	Open
25	Calcasieu		PARISH BARN RD	GULLY	1992	300	Posted

- The following 25 structurally deficient bridges in the Lake Charles 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	Calcasieu	Lake Charles	KIRKMAN ST	CONTRABAND BAYOU	1964	9320	Open
2	Calcasieu	Lake Charles	LOUISIANA AVE	CONTRABAND BAYOU	1957	6400	Open
3	Calcasieu	Vinton	VINCENT ST	CANAL	1968	100	Posted
4	Calcasieu	Lake Charles	FIFTH AVE	FIFTH AVENUE DRAIN	1975	7200	Closed
5	Calcasieu		CURRIE DR	DRAIN	1969	100	Posted
6	Calcasieu	Lake Charles	RUSSELL ST	FARMERS L & C CO. CANAL	1970	350	Open
7	Calcasieu		PARISH BARN RD	GULLY	1992	300	Posted
8	Calcasieu		JIM KENT RD	LITTLE RIVER	1961	50	Posted
9	Calcasieu		GREEN ISLAND RD	GREEN ISLAND MARSH CREE	1996	0	Open
10	Calcasieu		BIG WOODS RD	BIRD ISLAND BAY	1968	200	Open
11	Calcasieu		WEBB GULLY RD	WEBB GULLY	1989	200	Closed
12	Calcasieu	DeQuincy	N GRAND AVE	BUXTON CREEK	1997	0	Open
13	Calcasieu		NURSERY RD	BUXTON CREEK	1958	100	Posted
14	Calcasieu	Sulphur	W ELIZABETH ST	GUM SLOUGH	1968	200	Closed
15	Calcasieu	Sulphur	PEARL ST	CREEK	1975	250	Closed
16	Calcasieu	Sulphur	BRYAN ST	GUM SLOUGH	1974	250	Posted
17	Calcasieu	Sulphur	PICARD RD	GUM SLOUGH	1968	1400	Open
18	Calcasieu	Sulphur	W CROCKER ST	FARMERS L & C CO. CANAL	1970	150	Closed
19	Calcasieu	Lake Charles	HENDERSON BAYOU RD	HENDERSON BAYOU	1960	250	Open
20	Calcasieu	Lake Charles	US0090	US 90 OVER I-10/RAMPS	1960	5200	Open
21	Calcasieu		LA0012	SABINE RIVER	1938	3200	Open
22	Calcasieu		LA0012	OLD RIVER SLOUGH	1952	3700	Open
23	Calcasieu		LA0012	CURRENT SLOUGH	1952	3700	Open
24	Calcasieu		LA0012	WASHOUT SLOUGH	1952	3700	Open
25	Calcasieu		LA0012	MUD LAKE	1952	3700	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 survey of states by the U.S. General Accountability Office (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 large-scale warehousing, to a pull-style distribution system, which relies on smaller, more strategic and time-sensitive 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 Federal Highway Administration 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.