Preserving New Orleans Bridges

THE CONDITION AND FUNDING NEEDS OF NEW ORLEANS' 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.

NEW ORLEANS BRIDGE CONDITIONS

Twelve percent of locally and state-maintained bridges in the New Orleans area, which includes Jefferson and Orleans Parishes, are structurally deficient, meaning there is significant deterioration to the major components of the bridge.

- There are a total of 745 bridges in the New Orleans area that are 20 feet or longer. These bridges are maintained by local and state agencies.
- Twelve percent (88 bridges) of state-and locally maintained bridges in the New Orleans area are structurally deficient.
- Bridges in the New Orleans area that are structurally deficient carry approximately 1 million 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 New Orleans area.

Rank	Parish	Location	Facility Carried	Feature Intersected	Year Built	Average Daily Traffic	Open, Closed, Posted
1	Orleans	New Orleans	10010	INNER HARBOR /CITY STS	1966	116500	Open
2	Jefferson	New Orleans	10010	VET MEM HWY	1967	84720	Open
3	Jefferson	New Orleans	10010	VET MEM HWY	1967	84720	Open
4	Jefferson	Kenner	10010	LOYOLA AVE.	1971	61800	Open
5	Jefferson	New Orleans	LA3046	R/R,CITY STS,LA 611	1957	52500	Open
6	Orleans	New Orleans	WISNER BLVD	I-610 & SOUTHERN RR.	1973	37553	Closed
7	Orleans	New Orleans	10010	DRAIN CANAL	1967	34260	Open
8	Orleans	New Orleans	10010	DRAIN CANAL	1967	33050	Open
9	Orleans	New Orleans	10010	DRAIN CANAL	1967	33050	Open
10	Jefferson	New Orleans	US0090B	HARVEY CANAL/STS/RR	1987	33000	Open
11	Jefferson	New Orleans	US0090B	HARVEY CANAL/STS/RR	1987	33000	Open
12	Orleans	New Orleans	LA0047	BAYOU BIENVENUE	1973	28100	Open
13	Jefferson	Metairie	W. METAIRIE AVE	SUBURBAN CANAL	1968	24900	Open
14	Jefferson	Metairie	W. METAIRIE AVE	SONIAT CANAL	1960	23200	Closed
15	Orleans	New Orleans	ALMONASTER AVE	CITY STREET/RAILROAD	1991	22680	Open
16	Orleans	New Orleans	US0061	I-10	1940	21500	Posted
17	Orleans	New Orleans	LA0046	NO PUBLIC BELT R/R	1960	21400	Open
18	Orleans	New Orleans	LA0046	SISTER STREET	1960	21400	Open
19	Orleans	New Orleans	LA0039	N O P B RR(CLAIBORNE AVE	1949	20700	Open
20	Orleans	New Orleans	US0090	DRAIN CANAL	1937	18200	Closed
21	Orleans	New Orleans	PONTCHATRAIN EXPWY	PONT.EXPWY OVER I-610&I1	1963	15410	Open
22	Jefferson	Gretna	US0090B	ON RAMP FM STUMPF BLVD.	1987	8940	Open
23	Jefferson	Gretna	US0090B	OFF RAMP OVER WHITNEY AV	1987	8940	Open
24	Jefferson	Gretna	US0090B	ON RAMP FM SERVICE ROAD	1987	8940	Open
25	Jefferson	Gretna	US0090B	ON RAMP ST-4	1985	8940	Open

The following 25 structurally deficient bridges in the New Orleans area have the lowest average rating
for deck, substructure and superstructure (carrying a minimum of 500 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	Orleans	New Orleans	WISNER BLVD	I-610 & SOUTHERN RR.	1973	37553	Closed
2	Jefferson	Grand Isle	LA0001	BAYOU THUNDER OVERFLOW	1977	4800	Posted
3	Jefferson		LA0045	DRAIN CANAL	1959	2000	Open
4	Orleans	New Orleans	10010	INNER HARBOR /CITY STS	1966	116500	Open
5	Orleans	New Orleans	LA0047	BAYOU BIENVENUE	1973	28100	Open
6	Jefferson	Metairie	W. METAIRIE AVE	SUBURBAN CANAL	1968	24900	Open
7	Orleans		US0011	LAKE PONTCHARTRAIN	1938	6800	Posted
8	Orleans	New Orleans	US0090	CHEF MENTEUR PASS	1930	1410	Posted
9	Jefferson	New Orleans	US0090B	HARVEY CANAL/STS/RR	1987	33000	Open
10	Orleans	New Orleans	US0061	I-10	1940	21500	Posted
11	Jefferson		LA0045	GOOSE BAYOU	1968	2000	Posted
12	Jefferson		LA0302	BAYOU BARATARIA	1948	870	Posted
13	Orleans	New Orleans	10010	DRAIN CANAL	1967	34260	Open
14	Orleans	New Orleans	LA0046	NO PUBLIC BELT R/R	1960	21400	Open
15	Orleans	New Orleans	LA0046	SISTER STREET	1960	21400	Open
16	Jefferson	Gretna	US0090B	ON RAMP FM STUMPF BLVD.	1987	8940	Open
17	Jefferson	Gretna	US0090B	OFF RAMP TO STUMPF BLVD.	1987	6600	Open
18	Jefferson	Gretna	US0090B	RAMP LA-4	1985	6600	Open
19	Jefferson	New Orleans	US0090B	RAMP BA-1	1984	6600	Open
20	Jefferson	New Orleans	US0090B	U-TURN LANES	1992	5410	Open
21	Jefferson	New Orleans	US0090B	GROUND	1992	5410	Open
22	Orleans	New Orleans	US0011	IRISH BAYOU	1978	3300	Open
23	Jefferson	Harahan	LOCAL ROAD	SONIAT CANAL	1960	1000	Open
24	Jefferson	New Orleans	10010	VET MEM HWY	1967	84720	Open
25	Jefferson	New Orleans	LA3046	R/R,CITY STS,LA 611	1957	52500	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 <u>Area Development Magazine</u>. 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.