

Preserving Louisiana's Bridges

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



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 **TRIP**
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Executive Summary

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.

As vehicle travel increases, maintaining Louisiana's aging transportation network, including its bridges, will become more difficult. A significant number of Louisiana's bridges have surpassed or are approaching 50 years old, which is typically the intended design life for bridges of that age. The average age of all Louisiana's bridges is 38 years, while the average age of the state's more than 1,800 structurally deficient bridges is 50 years. The cost of repairing and preserving bridges increases as they age and as they reach the end of their intended design life.

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.

POPULATION AND VEHICLE TRAVEL GROWTH

Increased demands on Louisiana's major roads, highways and bridges, leads to additional wear and tear on its transportation system.

- Louisiana's population reached approximately 4.7 million residents in 2017, a five percent increase since 2000. Louisiana had 3.4 million licensed drivers in 2016.
- Vehicle miles traveled (VMT) in Louisiana increased 20 percent from 2000 to 2016, from 40.9 million VMT to 49.2 million VMT. In just the last three years, VMT has increased three percent. By 2030, vehicle travel in Louisiana is projected to increase by 20 percent.

- From 2000 to 2016, Louisiana’s gross domestic product (GDP), a measure of the state’s economic output, increased by 14 percent, when adjusted for inflation. U.S. GDP increased by 30 percent from 2000 to 2016, when adjusted for inflation.

LOUISIANA BRIDGE CONDITIONS

Fourteen percent of locally and state-maintained bridges in Louisiana are structurally deficient, meaning there is significant deterioration to the major components of the bridge. This is the seventh highest rate in the nation.

- There are a total of 12,910 bridges in Louisiana that are 20 feet or longer. These bridges are maintained by local and state agencies.
- Fourteen percent (1,821 bridges) of Louisiana’s state-and locally maintained bridges are structurally deficient, the seventh highest rate in the nation.
- 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.
- A significant number of Louisiana’s bridges have surpassed or are approaching 50 years old, which is typically the intended design life for bridges of that age. The average age of all Louisiana’s bridges is 38 years, while the average age of the state’s more than 1,800 structurally deficient bridges is 50 years. The cost of repairing and preserving bridges increases as they age and as they reach the end of their intended design life.
- The Federal Highway Administration estimates that it would cost \$1.9 billion to replace or rehabilitate all structurally deficient bridges in Louisiana.
- The chart below details the number and share of structurally deficient bridges statewide and in each parish.

Parish	SD Share	SD Total	Total Bridges	Parish	SD Share	SD Total	Total Bridges
ACADIA	11%	33	301	MADISON	12%	13	109
ALLEN	15%	27	184	MOREHOUSE	23%	34	146
ASCENSION	12%	26	212	NATCHITOCHE	18%	57	322
ASSUMPTION	7%	5	68	ORLEANS	10%	39	394
AVOUELLES	34%	54	159	OUACHITA	17%	57	344
BEAUREGARD	9%	21	226	PLAQUEMINES	11%	4	37
BIENVILLE	29%	54	189	POINTE COUPEE	27%	14	52
BOSSIER	25%	71	280	RAPIDES	10%	54	532
CADDO	9%	59	685	RED RIVER	38%	25	66
CALCASIEU	9%	39	455	RICHLAND	15%	32	214
CALDWELL	16%	22	141	SABINE	13%	27	202
CAMERON	17%	10	59	ST BERNARD	14%	4	29
CATAHOULA	10%	7	72	ST CHARLES	2%	2	83
CLAIBORNE	31%	49	158	ST HELENA	11%	16	140
CONCORDIA	12%	5	42	ST JAMES	4%	1	26
DE SOTO	12%	24	206	ST JOHN THE BAPTIST	0%	0	43
EAST BATON ROUGE	20%	111	545	ST LANDRY	11%	36	326
EAST CARROLL	27%	16	59	ST MARTIN	13%	16	119
EAST FELICIANA	22%	31	139	ST MARY	8%	10	123
EVANGELINE	7%	12	166	ST TAMMANY	8%	30	355
FRANKLIN	9%	13	142	TANGIPAHOA	13%	63	486
GRANT	19%	41	220	TENSAS	8%	4	53
IBERIA	11%	16	145	TERREBONNE	17%	36	214
IBERVILLE	14%	11	81	UNION	8%	10	122
JACKSON	9%	15	165	VERMILION	13%	33	264
JEFFERSON	14%	49	351	VERNON	11%	37	348
JEFFERSON DAVIS	19%	46	243	WASHINGTON	9%	27	290
LAFAYETTE	7%	22	316	WEBSTER	27%	53	195
LAFOURCHE	19%	25	132	WEST BATON ROUGE	16%	11	68
LA SALLE	9%	19	208	WEST CARROLL	13%	12	92
LINCOLN	19%	33	177	WEST FELICIANA	29%	33	112
LIVINGSTON	12%	31	255	WINN	15%	34	223
				STATEWIDE TOTAL	14%	1,821	12,910

- The chart below details the number and share of structurally deficient bridges and the daily number of vehicles traveling across structurally deficient bridges each of the following areas: the Alexandria area (which includes Rapides Parish), the Baton Rouge area (which includes East Baton Rouge and West Baton Rouge Parishes), the Lafayette area (which includes Lafayette and St. Martin Parishes), the Lake Charles area (which includes Calcasieu Parish), the Monroe area (which includes Ouachita Parish) the New Orleans area (which includes Jefferson and Orleans Parishes) and the Shreveport area (which includes Bossier and Caddo Parishes) areas.

Urban Area	SD Share	SD Total	Total Bridges	Vehicles Traveling Daily on SD Bridges
Alexandria	10%	54	532	49,000
Baton Rouge	20%	122	613	419,000
Lafayette	9%	38	435	183,000
Lake Charles	9%	39	455	352,000
Monroe	17%	57	344	97,000
New Orleans	12%	88	745	1,000,000
Shreveport	13%	130	965	628,000

- The list below details the 10 most heavily traveled structurally deficient bridges in the Alexandria, Baton Rouge, Lafayette, Lake Charles, Monroe, New Orleans and Shreveport areas. ADT is average daily traffic. A list of up to 25 most heavily traveled structurally bridges for each area is included in the body of the report.

Rank	Parish	Location	Facility Carried	Feature Intersected	Year Built	Average Daily Traffic	Open, Closed, Posted
Alexandria							
1	Rapides	Pineville	US0165B	KCS RAILROAD	1918	8400	Posted
2	Rapides		US0071	MP R/R @ TIOGA	1931	6600	Posted
3	Rapides	Alexandria	LA1208-1	HORSESHOE CANAL	1975	5200	Posted
4	Rapides	Ball	LA1204	FLAGON BAYOU	1973	2900	Posted
5	Rapides		LA0121	CALCASIEU RIVER	1973	2700	Posted
6	Rapides		LA0121	CALCASIEU RIVER TRIB	1973	2700	Posted
7	Rapides		LA0121	CREEK	1973	2700	Posted
8	Rapides	Alexandria	LA1243	FLAT BAYOU	1980	2700	Open
9	Rapides	Alexandria	Bryn Mawr St	HYNISON BAYOU	1951	2200	Posted
10	Rapides	Ball	LA0623	FLAGON BAYOU	1962	1730	Posted
Baton Rouge							
1	East Baton Rouge	Baton Rouge	US0061	LA 73 NORTH	1953	26500	Posted
2	East Baton Rouge	Baton Rouge	US0190	OLD MISS. RIVER BR	1939	20100	Open
3	West Baton Rouge	Baton Rouge	LA0001	PORT ALLEN CANAL	1960	19100	Posted
4	West Baton Rouge	Baton Rouge	LA0001	PORT ALLEN CANAL	1960	19100	Open
5	East Baton Rouge	Baton Rouge	BOB PETIT BLVD	BAYOU FOUNTAIN	1969	18462	Posted
6	East Baton Rouge		LA0427	BAYOU MANCHAC	1972	17100	Posted
7	East Baton Rouge	Baton Rouge	LA0067	MONTE SANO BAYOU	1956	16800	Open
8	East Baton Rouge	Baton Rouge	US0190	US 190 OVER US 61-SCENIC	1940	16350	Open
9	East Baton Rouge	Baton Rouge	US0190	US 190 OVER US 61-SCENIC	1940	16350	Open
10	East Baton Rouge	Baton Rouge	US0061	BAYOU MANCHAC	1953	16150	Open

Lafayette							
1	Lafayette	Lafayette	LA3073	VERMILION RIVER	1986	50300	Open
2	Lafayette	Lafayette	US0167	COULEE MINE	1958	32900	Open
3	Lafayette	Lafayette	Surry St.	VERMILION R @ SURREY ST	1948	16800	Closed
4	Lafayette	Lafayette	LA0098	COULEE	1983	12200	Open
5	Lafayette	Youngsville	E. Milton Ave.	ANSEIM COULEE	1973	8700	Open
6	Lafayette	Youngsville	E. Milton Ave.	CREEK	1973	8700	Open
7	Lafayette	Youngsville	Iberia St	BAYOU PATE PERDU	1973	8700	Open
8	Lafayette	Lafayette	LA0093	DITCH	1956	7700	Open
9	St. Martin		I0010	RAMP B. OFF RAMP	1971	5660	Open
10	Lafayette		LA0343	INDIAN BAYOU	1957	4800	Posted
Lake Charles							
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
Monroe							
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
New Orleans							
1	Orleans	New Orleans	I0010	INNER HARBOR /CITY STS	1966	116500	Open
2	Jefferson	New Orleans	I0010	VET MEM HWY	1967	84720	Open
3	Jefferson	New Orleans	I0010	VET MEM HWY	1967	84720	Open
4	Jefferson	Kenner	I0010	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	I0010	DRAIN CANAL	1967	34260	Open
8	Orleans	New Orleans	I0010	DRAIN CANAL	1967	33050	Open
9	Orleans	New Orleans	I0010	DRAIN CANAL	1967	33050	Open
10	Jefferson	New Orleans	US0090B	HARVEY CANAL/STS/RR	1987	33000	Open
Shreveport							
1	Caddo	Shreveport	I0020	ST. LOUIS & SW RR	1965	86800	Posted
2	Bossier	Bossier City	I0020	STL&SW-KCS RR/WESTERFIEL	1966	43950	Open
3	Bossier	Bossier City	I0020	STL&SW-KCS RR/WESTERFIEL	1966	43950	Open
4	Caddo	Shreveport	I0020	LK SHORE DR&KESRR	1965	31800	Open
5	Caddo	Shreveport	I0020	M.P. RR	1965	27400	Open
6	Caddo	Shreveport	I0020	M.P. RR	1965	27400	Open
7	Bossier	Shreveport	LA0511	RED R.,C.FANT PKWY,AR TE	1968	24400	Open
8	Caddo	Shreveport	US0071	ICG RR	1937	22400	Posted
9	Caddo	Shreveport	US0071	ICG RR	1940	22400	Posted
10	Caddo	Shreveport	LINWOOD AVE	KCS,MOPAC & PAC RRS	1950	22308	Posted

- The list below details the 10 structurally deficient bridges in the Alexandria, Baton Rouge, Lafayette, Lake Charles, Monroe, New Orleans and Shreveport areas that have the lowest average rating for deck, substructure and superstructure. 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. A list of up to 25 bridges in each area with the lowest average rating for deck, superstructure and substructure is included in the body of the report.

Rank	Parish	Location	Facility Carried	Feature Intersected	Year Built	Average Daily Traffic	Open, Closed, Posted
Alexandria							
1	Rapides		Palmer Chapel Rd	WIGGINS BAYOU	1970	330	Open
2	Rapides		LA0121	CREEK	1973	2700	Posted
3	Rapides	Alexandria	North 16th St	BAYOU RAPIDES	1978	500	Closed
4	Rapides	Pineville	US0165B	KCS RAILROAD	1918	8400	Posted
5	Rapides		US0071	MP R/R @ TIOGA	1931	6600	Posted
6	Rapides		LA1199	CREEK	1965	590	Posted
7	Rapides	Ball	LA0623	FLAGON BAYOU	1962	1730	Posted
8	Rapides		LA0121	CALCASIEU RIVER TRIB	1973	2700	Posted
9	Rapides		LA1200	CREEK	1960	1340	Open
10	Rapides		LA1200	BAYOU COCODRIE	1960	1340	Open
Baton Rouge							
1	East Baton Rouge	Baton Rouge	SILVERLEAF AVE.	ROBERTS CANAL	1956	8137	Closed
2	West Baton Rouge	Baton Rouge	LA0001	PORT ALLEN CANAL	1960	19100	Posted
3	West Baton Rouge	Baton Rouge	LA0001	PORT ALLEN CANAL	1960	19100	Open
4	East Baton Rouge	Baton Rouge	US0061	LA 73 NORTH	1953	26500	Posted
5	East Baton Rouge	Baton Rouge	US0061	BAYOU MANCHAC	1953	16150	Open
6	West Baton Rouge		US0190	LA 415/M P RR @ LOBDELL	1940	14100	Open
7	West Baton Rouge	Baton Rouge	LA0001	MO PACIFIC RR	1952	8700	Open
8	East Baton Rouge		LOCAL ROAD	DRAINAGE CANAL	1968	610	Posted
9	East Baton Rouge	Baton Rouge	BOB PETIT BLVD	BAYOU FOUNTAIN	1969	18462	Posted
10	East Baton Rouge	Baton Rouge	US0190	US 190 OVER US 61-SCENIC	1940	16350	Open
Lafayette							
1	Lafayette	Broussard	Garber Rd.	COULEE	1977	320	Posted
2	Lafayette	Lafayette	Surry St.	VERMILION R @ SURREY ST	1948	16800	Closed
3	St. Martin		I0010	RAMP B. OFF RAMP	1971	5660	Open
4	Lafayette		LA1252	BAYOU POINT BRULE	1975	3900	Posted
5	Lafayette	Lafayette	US0167	COULEE MINE	1958	32900	Open
6	Lafayette		LA0734	CREEK	1940	3400	Open
7	St. Martin		LA0352	BAYOU AMY	1968	2600	Posted
8	St. Martin		LA3083	BAYOU ALEXANDRE	1965	1510	Open
9	Lafayette	Lafayette	LA0098	COULEE	1983	12200	Open
10	St. Martin		LA0341	COULEE DATIDER	1964	2400	Open

Lake Charles							
1	Calcasieu	Lake Charles	FIFTH AVE	FIFTH AVENUE DRAIN	1975	7200	Closed
2	Calcasieu	Sulphur	PEARL ST	CREEK	1975	250	Closed
3	Calcasieu	Lake Charles	US0090	US 90 OVER I-10/RAMPS	1960	5200	Open
4	Calcasieu	Lake Charles	I0010	CALCASIEU RIVER, RR, STS	1952	81100	Open
5	Calcasieu		LA3256	ENGLISH BAYOU	1969	2500	Open
6	Calcasieu	Lake Charles	LOUISIANA AVE	CONTRABAND BAYOU	1957	6400	Open
7	Calcasieu		LA1133	BAYOU	1963	4500	Open
8	Calcasieu		LA0012	SABINE RIVER	1938	3200	Open
9	Calcasieu		LA0109	GULLY	1957	2100	Posted
10	Calcasieu	Sulphur	LA0027	LA 27 OVER I-10	1962	11050	Posted
Monroe							
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
New Orleans							
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	I0010	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
Shreveport							
1	Bossier		LA0157	FLAT RIVER	1964	3500	Closed
2	Bossier	Haughton	Sligo Rd	FOXSKIN BAYOU	1987	900	Open
3	Bossier		Fairview Pt-Koran	SPRING BRANCH	1980	570	Open
4	Caddo	Shreveport	US0071	ICG RR	1940	22400	Posted
5	Caddo	Shreveport	US0080	KCS RR	1927	8800	Posted
6	Bossier	Bossier City	LA07822	MACKS BAYOU	1970	6300	Open
7	Caddo		LA0001	CADDO LAKE	1940	5400	Posted
8	Caddo	Shreveport	US0071	ICG RR	1940	4480	Posted
9	Caddo		LA0002	JEEMS BAYOU	1973	1890	Open
10	Caddo	Shreveport	LINWOOD AVE	KCS,MOPAC & PAC RRS	1950	22308	Posted

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.

INTRODUCTION

Louisiana's transportation system provides links for the state's residents, visitors and businesses, providing daily access to homes, jobs, shopping, natural resources and recreation. Modernizing Louisiana's transportation system, including its bridges, is critical to fostering quality of life and economic competitiveness in the Bayou State.

Maintaining Louisiana's aging network of bridges is becoming more challenging as the bridges age. A significant number of Louisiana's bridges have surpassed or are approaching 50 years old, which is typically the intended design life for bridges of that age. The average age of all Louisiana bridges is 38 years, while the average age of the state's more than 1,800 structurally deficient bridges is 50 years. The cost of repairing and preserving bridges increases as they age and as they reach the end of their intended design life.

The preservation and modernization of Louisiana's transportation system plays an important role in retaining Louisiana's economic competitiveness and improving its economic well-being by providing critically needed jobs in the short term and by improving the productivity and competitiveness of the state's businesses in the long term.

As Louisiana faces the challenge of preserving and modernizing its bridges, the future level of federal, state and local transportation funding will be a critical factor in whether the state's residents and visitors continue to enjoy access to a safe and efficient transportation network.

This report examines the condition and use of Louisiana's bridges. Sources of information for this study include the Federal Highway Administration (FHWA), the National Bridge Inventory (NBI), the U.S. Census Bureau, and the Bureau of Transportation Statistics (BTS).

POPULATION, TRAVEL AND ECONOMIC TRENDS IN LOUISIANA

Louisiana residents and businesses require a high level of personal and commercial mobility. Population increases and an increase in vehicle miles of travel (VMT) have resulted in an increase in the demand for mobility. To foster quality of life and spur economic growth in Louisiana, it will be critical that the state provide a safe and modern transportation system that can accommodate future growth in population, tourism, recreation and vehicle travel.

Louisiana's population grew to approximately 4.7 million residents in 2017, a five percent increase since 2000.¹ Louisiana had approximately 3.4 million licensed drivers in 2016.²

Vehicle miles traveled (VMT) in Louisiana increased 20 percent from 2000 to 2016, from 40.9 billion VMT to 49.2 billion VMT in 2016.³ In just the last three years, VMT in Louisiana has increased three percent.⁴ Based on population and other lifestyle trends, TRIP estimates that travel on Louisiana's roads and highways will increase by 20 percent by 2030.⁵

From 2000 to 2016, Louisiana's gross domestic product (GDP), a measure of the state's economic output, increased by 14 percent, when adjusted for inflation.⁶ U.S. GDP increased by 30 percent from 2000 to 2016, when adjusted for inflation.⁷

BRIDGE CONDITIONS IN LOUISIANA

Louisiana's bridges form key links in the state's highway system, providing communities and individuals access to employment, schools, shopping and medical facilities, and facilitating commerce and access for emergency vehicles.

Fourteen percent of Louisiana's locally and state maintained bridges are rated as structurally deficient, the seventh highest rate in the nation.⁸ A bridge is structurally deficient if there is significant deterioration of the bridge deck, supports or other major components. 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.

A significant number of Louisiana's bridges have surpassed or are approaching 50 years old, which is typically the intended design life for bridges of that age. The average age of all Louisiana's bridges is 38 years, while the average age of the state's more than 1,800 structurally deficient bridges is 50 years.⁹ The cost of repairing and preserving bridges increases as they age and as they reach the end of their intended design life.

The chart below details the number and share of structurally deficient bridges in each Louisiana Parish and statewide.

Chart 1. Louisiana bridge conditions.

Parish	SD Share	SD Total	Total Bridges	Parish	SD Share	SD Total	Total Bridges
ACADIA	11%	33	301	MADISON	12%	13	109
ALLEN	15%	27	184	MOREHOUSE	23%	34	146
ASCENSION	12%	26	212	NATCHITOCHE	18%	57	322
ASSUMPTION	7%	5	68	ORLEANS	10%	39	394
AVOUELLES	34%	54	159	OUACHITA	17%	57	344
BEAUREGARD	9%	21	226	PLAQUEMINES	11%	4	37
BIENVILLE	29%	54	189	POINTE COUPEE	27%	14	52
BOSSIER	25%	71	280	RAPIDES	10%	54	532
CADDO	9%	59	685	RED RIVER	38%	25	66
CALCASIEU	9%	39	455	RICHLAND	15%	32	214
CALDWELL	16%	22	141	SABINE	13%	27	202
CAMERON	17%	10	59	ST BERNARD	14%	4	29
CATAHOULA	10%	7	72	ST CHARLES	2%	2	83
CLAIBORNE	31%	49	158	ST HELENA	11%	16	140
CONCORDIA	12%	5	42	ST JAMES	4%	1	26
DE SOTO	12%	24	206	ST JOHN THE BAPTIST	0%	0	43
EAST BATON ROUGE	20%	111	545	ST LANDRY	11%	36	326
EAST CARROLL	27%	16	59	ST MARTIN	13%	16	119
EAST FELICIANA	22%	31	139	ST MARY	8%	10	123
EVANGELINE	7%	12	166	ST TAMMANY	8%	30	355
FRANKLIN	9%	13	142	TANGIPAHOA	13%	63	486
GRANT	19%	41	220	TENSAS	8%	4	53
IBERIA	11%	16	145	TERREBONNE	17%	36	214
IBERVILLE	14%	11	81	UNION	8%	10	122
JACKSON	9%	15	165	VERMILION	13%	33	264
JEFFERSON	14%	49	351	VERNON	11%	37	348
JEFFERSON DAVIS	19%	46	243	WASHINGTON	9%	27	290
LAFAYETTE	7%	22	316	WEBSTER	27%	53	195
LAFOURCHE	19%	25	132	WEST BATON ROUGE	16%	11	68
LA SALLE	9%	19	208	WEST CARROLL	13%	12	92
LINCOLN	19%	33	177	WEST FELICIANA	29%	33	112
LIVINGSTON	12%	31	255	WINN	15%	34	223
				STATEWIDE TOTAL	14%	1,821	12,910

Source: Federal Highway Administration National Bridge Inventory, 2017.

The chart below details the number and share of structurally deficient bridges and the daily number of vehicles traveling across structurally deficient bridges each of the following areas: the Alexandria area (which includes Rapides Parish), the Baton Rouge area (which includes East Baton Rouge and West Baton Rouge Parishes), the Lafayette area (which includes Lafayette and St. Martin Parishes), the Lake Charles area (which includes Calcasieu Parish), the Monroe area (which includes Ouachita Parish) the New Orleans area (which includes Jefferson and Orleans Parishes) and the Shreveport area (which includes Bossier and Caddo Parishes) areas.

Chart 2. Number and share of structurally deficient bridges and average number of vehicles traveling daily over structurally deficient bridges in the Alexandria, Baton Rouge, Lafayette, Lake Charles, Monroe, New Orleans and Shreveport areas.

Urban Area	SD Share	SD Total	Total Bridges	Vehicles Traveling Daily on SD Bridges
Alexandria	10%	54	532	49,000
Baton Rouge	20%	122	613	419,000
Lafayette	9%	38	435	183,000
Lake Charles	9%	39	455	352,000
Monroe	17%	57	344	97,000
New Orleans	12%	88	745	1,000,000
Shreveport	13%	130	965	628,000

Source: Federal Highway Administration National Bridge Inventory, 2017.

The list below details the 20 most heavily traveled structurally deficient bridges in the Alexandria area. ADT is average daily traffic.

Chart 3. Alexandria area structurally deficient bridges with highest average daily traffic.

Rank	Parish	Location	Facility Carried	Feature Intersected	Year Built	Average Daily Traffic	Open, Closed, Posted
1	Rapides	Pineville	US0165B	KCS RAILROAD	1918	8400	Posted
2	Rapides		US0071	MP R/R @ TIOGA	1931	6600	Posted
3	Rapides	Alexandria	LA1208-1	HORSESHOE CANAL	1975	5200	Posted
4	Rapides	Ball	LA1204	FLAGON BAYOU	1973	2900	Posted
5	Rapides		LA0121	CALCASIEU RIVER	1973	2700	Posted
6	Rapides		LA0121	CALCASIEU RIVER TRIB	1973	2700	Posted
7	Rapides		LA0121	CREEK	1973	2700	Posted
8	Rapides	Alexandria	LA1243	FLAT BAYOU	1980	2700	Open
9	Rapides	Alexandria	Bryn Mawr St	HYNSON BAYOU	1951	2200	Posted
10	Rapides	Ball	LA0623	FLAGON BAYOU	1962	1730	Posted
11	Rapides		LA1200	CREEK	1960	1340	Open
12	Rapides		LA1200	BAYOU COCODRIE	1960	1340	Open
13	Rapides		LA1200	BAYOU BERTRAND	1960	1340	Posted
14	Rapides		US0167	BAYOU BOEUF	1985	1030	Open
15	Rapides		LA1206	CREEK	1939	920	Open
16	Rapides		LA1206	CREEK	1975	920	Posted
17	Rapides		LA1199	CREEK	1965	590	Posted
18	Rapides		LA0456	BAYOU LAMOURIE	1950	560	Posted
19	Rapides	Alexandria	North 16th St	BAYOU RAPIDES	1978	500	Closed
20	Rapides	Alexandria	Applewhite St	CHATLINE LAKE CANAL	1983	400	Open

Source: LADOTD response to TRIP survey, 2018.

The following 20 structurally deficient bridges in the Alexandria 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.

Chart 4. Alexandria area bridges with lowest average rating for deck, substructure and superstructure.

Rank	Parish	Location	Facility Carried	Feature Intersected	Year Built	Average Daily Traffic	Open, Closed, Posted
1	Rapides		Palmer Chapel Rd	WIGGINS BAYOU	1970	330	Open
2	Rapides		LA0121	CREEK	1973	2700	Posted
3	Rapides	Alexandria	North 16th St	BAYOU RAPIDES	1978	500	Closed
4	Rapides	Pineville	US0165B	KCS RAILROAD	1918	8400	Posted
5	Rapides		US0071	MP R/R @ TIOGA	1931	6600	Posted
6	Rapides		LA1199	CREEK	1965	590	Posted
7	Rapides	Ball	LA0623	FLAGON BAYOU	1962	1730	Posted
8	Rapides		LA0121	CALCASIEU RIVER TRIB	1973	2700	Posted
9	Rapides		LA1200	CREEK	1960	1340	Open
10	Rapides		LA1200	BAYOU COCODRIE	1960	1340	Open
11	Rapides		LA1200	BAYOU BERTRAND	1960	1340	Posted
12	Rapides	Woodworth	Caster Plunge Rd	LITTLE BAYOU CLEAR	1970	300	Posted
13	Rapides	Ball	LA1204	FLAGON BAYOU	1973	2900	Posted
14	Rapides		LA0121	CALCASIEU RIVER	1973	2700	Posted
15	Rapides	Alexandria	LA1243	FLAT BAYOU	1980	2700	Open
16	Rapides		LA0456	BAYOU LAMOURIE	1950	560	Posted
17	Rapides	Alexandria	Bryn Mawr St	HYNSON BAYOU	1951	2200	Posted
18	Rapides		LA1206	CREEK	1939	920	Open
19	Rapides		LA1206	CREEK	1975	920	Posted
20	Rapides	Alexandria	LA1208-1	HORSESHOE CANAL	1975	5200	Posted

Source: LADOTD response to TRIP survey, 2018.

The list below details the 25 most heavily traveled structurally deficient bridges in the Baton Rouge area. ADT is average daily traffic.

Chart 5. Baton Rouge area structurally deficient bridges with highest average daily traffic.

Rank	Parish	Location	Facility Carried	Feature Intersected	Year Built	Average Daily Traffic	Open, Closed, Posted
1	East Baton Rouge	Baton Rouge	US0061	LA 73 NORTH	1953	26500	Posted
2	East Baton Rouge	Baton Rouge	US0190	OLD MISS.RIVER BR	1939	20100	Open
3	West Baton Rouge	Baton Rouge	LA0001	PORT ALLEN CANAL	1960	19100	Posted
4	West Baton Rouge	Baton Rouge	LA0001	PORT ALLEN CANAL	1960	19100	Open
5	East Baton Rouge	Baton Rouge	BOB PETIT BLVD	BAYOU FOUNTAIN	1969	18462	Posted
6	East Baton Rouge		LA0427	BAYOU MANCHAC	1972	17100	Posted
7	East Baton Rouge	Baton Rouge	LA0067	MONTE SANO BAYOU	1956	16800	Open
8	East Baton Rouge	Baton Rouge	US0190	US 190 OVER US 61-SCENIC	1940	16350	Open
9	East Baton Rouge	Baton Rouge	US0190	US 190 OVER US 61-SCENIC	1940	16350	Open
10	East Baton Rouge	Baton Rouge	US0061	BAYOU MANCHAC	1953	16150	Open
11	East Baton Rouge	Baton Rouge	US0061	BAYOU MANCHAC	1953	16150	Open
12	East Baton Rouge	Zachary	LA0019	WHITE BAYOU	1951	15400	Open
13	East Baton Rouge	Baton Rouge	LA0030	STREAM NO NAME	1961	14200	Posted
14	West Baton Rouge		US0190	LA 415/M P RR @ LOBDELL	1940	14100	Open
15	East Baton Rouge	Baton Rouge	LA0073	BAYOU MANCHAC	1931	12900	Posted
16	East Baton Rouge	Baton Rouge	LA0327	BAYOU FOUNTIAN	1968	12500	Posted
17	East Baton Rouge	Baton Rouge	N. FLANNERY RD	LIVELY BAYOU	1965	10200	Posted
18	East Baton Rouge		US0061	BATON ROUGE BAYOU	1961	8800	Open
19	West Baton Rouge	Baton Rouge	LA0001	MO PACIFIC RR	1952	8700	Open
20	East Baton Rouge		LA0037	HUBS BAYOU	1972	8600	Posted
21	East Baton Rouge	Baton Rouge	S.FLANNERY RD.	LIVELY BAYOU	1965	8270	Posted
22	East Baton Rouge	Baton Rouge	SILVERLEAF AVE.	ROBERTS CANAL	1956	8137	Closed
23	East Baton Rouge	Baton Rouge	GOODWOOD BLVD.	JONES CREEK	1960	7300	Posted
24	West Baton Rouge		LA0076	STREAM NO NAME	1930	6500	Posted
25	East Baton Rouge	Baton Rouge	CONNELLS VILLAGE L	N. BRANCH WARDS CREEK	1988	6180	Posted

Source: LADOTD response to TRIP survey, 2018.

The following 25 structurally deficient bridges in the Baton Rouge 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.

Chart 6. Baton Rouge area bridges with lowest average rating for deck, substructure and superstructure.

Rank	Parish	Location	Facility Carried	Feature Intersected	Year Built	Average Daily Traffic	Open, Closed, Posted
1	East Baton Rouge	Baton Rouge	SILVERLEAF AVE.	ROBERTS CANAL	1956	8137	Closed
2	West Baton Rouge	Baton Rouge	LA0001	PORT ALLEN CANAL	1960	19100	Posted
3	West Baton Rouge	Baton Rouge	LA0001	PORT ALLEN CANAL	1960	19100	Open
4	East Baton Rouge	Baton Rouge	US0061	LA 73 NORTH	1953	26500	Posted
5	East Baton Rouge	Baton Rouge	US0061	BAYOU MANCHAC	1953	16150	Open
6	West Baton Rouge		US0190	LA 415/M P RR @ LOBDELL	1940	14100	Open
7	West Baton Rouge	Baton Rouge	LA0001	MO PACIFIC RR	1952	8700	Open
8	East Baton Rouge		LOCAL ROAD	DRAINAGE CANAL	1968	610	Posted
9	East Baton Rouge	Baton Rouge	BOB PETIT BLVD	BAYOU FOUNTAIN	1969	18462	Posted
10	East Baton Rouge	Baton Rouge	US0190	US 190 OVER US 61-SCENIC	1940	16350	Open
11	East Baton Rouge	Baton Rouge	US0190	US 190 OVER US 61-SCENIC	1940	16350	Open
12	East Baton Rouge	Baton Rouge	US0061	BAYOU MANCHAC	1953	16150	Open
13	East Baton Rouge	Baton Rouge	N. FLANNERY RD	LIVELY BAYOU	1965	10200	Posted
14	East Baton Rouge	Central	LOCAL ROAD	DRAINAGE BAYOU	1966	1480	Open
15	East Baton Rouge		LOCAL ROAD	WHITE BAYOU	1965	1120	Open
16	East Baton Rouge	Baton Rouge	CONGRESS BLVD	DAWSON CREEK	1970	500	Open
17	East Baton Rouge	Baton Rouge	US0190	OLD MISS.RIVER BR	1939	20100	Open
18	East Baton Rouge	Baton Rouge	S.FLANNERY RD.	LIVELY BAYOU	1965	8270	Posted
19	West Baton Rouge		LA0076	STREAM NO NAME	1930	6500	Posted
20	East Baton Rouge	Baton Rouge	CLAYCUT ROAD	DAWSON CREEK	1964	5323	Posted
21	West Baton Rouge		LA0076	CHALPIN BAYOU	1980	1720	Open
22	East Baton Rouge		LOCAL ROAD	DRAINAGE BAYOU	1968	610	Posted
23	East Baton Rouge	Baton Rouge	LA0030	STREAM NO NAME	1961	14200	Posted
24	East Baton Rouge	Baton Rouge	LA0073	BAYOU MANCHAC	1931	12900	Posted
25	East Baton Rouge		US0061	BATON ROUGE BAYOU	1961	8800	Open

Source: LADOTD response to TRIP survey, 2018.

The list below details the 25 most heavily traveled structurally deficient bridges in the Lafayette area.

Chart 7. Lafayette area structurally deficient bridges with highest average daily traffic.

Rank	Parish	Location	Facility Carried	Feature Intersected	Year Built	Average Daily Traffic	Open, Closed, Posted
1	Lafayette	Lafayette	LA3073	VERMILION RIVER	1986	50300	Open
2	Lafayette	Lafayette	US0167	COULEE MINE	1958	32900	Open
3	Lafayette	Lafayette	Surry St.	VERMILION R @ SURREY ST	1948	16800	Closed
4	Lafayette	Lafayette	LA0098	COULEE	1983	12200	Open
5	Lafayette	Youngsville	E. Milton Ave.	ANSEIM COULEE	1973	8700	Open
6	Lafayette	Youngsville	E. Milton Ave.	CREEK	1973	8700	Open
7	Lafayette	Youngsville	Iberia St	BAYOU PATE PERDU	1973	8700	Open
8	Lafayette	Lafayette	LA0093	DITCH	1956	7700	Open
9	St. Martin		I0010	RAMP B. OFF RAMP	1971	5660	Open
10	Lafayette		LA0343	INDIAN BAYOU	1957	4800	Posted
11	Lafayette		LA1252	BAYOU POINT BRULE	1975	3900	Posted
12	Lafayette		LA0734	CREEK	1940	3400	Open
13	St. Martin		LA0321	CREEK	1966	3100	Posted
14	St. Martin		LA0352	BAYOU AMY	1968	2600	Posted
15	St. Martin		LA0341	COULEE DATIDER	1964	2400	Open
16	St. Martin		LA3083	BAYOU ALEXANDRE	1965	1510	Open
17	Lafayette	Lafayette	High Meadow Blvd	COULEE	1974	1100	Open
18	St. Martin		LA0737	GRAND CANAL 02	1973	970	Open
19	St. Martin		Poche Bridge Rd	TECHE BAYOU	1974	710	Open
20	Lafayette	Lafayette	Galbert Rd.	COULEE	1977	620	Open
21	Lafayette	Lafayette	Failla Rd	COULEE	1978	600	Posted
22	Lafayette	Scott	W. Congress Rd.	ILE DES CANNES COULEE	1973	580	Posted
23	Lafayette		W. Congress St	INDIAN BAYOU (SPOIL BANK)	1974	390	Open
24	Lafayette	Lafayette	La Neuville Rd.	COULEE	1976	330	Open
25	Lafayette	Broussard	Garber Rd.	COULEE	1977	320	Posted

Source: LADOTD response to TRIP survey, 2018.

The following 25 structurally deficient bridges in the Lafayette area have the lowest average rating for deck, substructure and superstructure (carrying a minimum of 300 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.

Chart 8. Lafayette area bridges with lowest average rating for deck, substructure and superstructure.

Rank	Parish	Location	Facility Carried	Feature Intersected	Year Built	Average Daily Traffic	Open, Closed, Posted
1	Lafayette	Broussard	Garber Rd.	COULEE	1977	320	Posted
2	Lafayette	Lafayette	Surry St.	VERMILION R @ SURREY ST	1948	16800	Closed
3	St. Martin		I0010	RAMP B. OFF RAMP	1971	5660	Open
4	Lafayette		LA1252	BAYOU POINT BRULE	1975	3900	Posted
5	Lafayette	Lafayette	US0167	COULEE MINE	1958	32900	Open
6	Lafayette		LA0734	CREEK	1940	3400	Open
7	St. Martin		LA0352	BAYOU AMY	1968	2600	Posted
8	St. Martin		LA3083	BAYOU ALEXANDRE	1965	1510	Open
9	Lafayette	Lafayette	LA0098	COULEE	1983	12200	Open
10	St. Martin		LA0341	COULEE DATIDER	1964	2400	Open
11	St. Martin		Johnson Rd	DUMOLIN CANAL	1970	310	Posted
12	Lafayette	Lafayette	LA3073	VERMILION RIVER	1986	50300	Open
13	Lafayette	Youngsville	E. Milton Ave.	ANSEIM COULEE	1973	8700	Open
14	Lafayette	Youngsville	E. Milton Ave.	CREEK	1973	8700	Open
15	Lafayette	Youngsville	Iberia St	BAYOU PATE PERDU	1973	8700	Open
16	Lafayette		LA0343	INDIAN BAYOU	1957	4800	Posted
17	Lafayette	Lafayette	High Meadow Blvd	COULEE	1974	1100	Open
18	St. Martin		LA0737	GRAND CANAL 02	1973	970	Open
19	St. Martin		Poche Bridge Rd	TECHE BAYOU	1974	710	Open
20	Lafayette	Lafayette	Failla Rd	COULEE	1978	600	Posted
21	Lafayette	Scott	W. Congress Rd.	ILE DES CANNES COULEE	1973	580	Posted
22	Lafayette		W. Congress St	INDIAN BAYOU (SPOIL BANK)	1974	390	Open
23	St. Martin		E Stephenville Rd	COULEE	1970	310	Posted
24	Lafayette	Scott	W. Willow St.	COULEE	1975	300	Posted
25	St. Martin		LA0321	CREEK	1966	3100	Posted

Source: LADOTD response to TRIP survey, 2018.

The list below details the 25 most heavily traveled structurally deficient bridges in the Lake Charles area.

Chart 9. Lake Charles area structurally deficient bridges with highest average daily traffic.

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

Source: LADOTD response to TRIP survey, 2018.

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 200 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.

Chart 10. Lake Charles area bridges with lowest average rating for deck, substructure and superstructure.

Rank	Parish	Location	Facility Carried	Feature Intersected	Year Built	Average Daily Traffic	Open, Closed, Posted
1	Calcasieu	Lake Charles	FIFTH AVE	FIFTH AVENUE DRAIN	1975	7200	Closed
2	Calcasieu	Sulphur	PEARL ST	CREEK	1975	250	Closed
3	Calcasieu	Lake Charles	US0090	US 90 OVER I-10/RAMPS	1960	5200	Open
4	Calcasieu	Lake Charles	I0010	CALCASIEU RIVER, RR, STS	1952	81100	Open
5	Calcasieu		LA3256	ENGLISH BAYOU	1969	2500	Open
6	Calcasieu	Lake Charles	LOUISIANA AVE	CONTRABAND BAYOU	1957	6400	Open
7	Calcasieu		LA1133	BAYOU	1963	4500	Open
8	Calcasieu		LA0012	SABINE RIVER	1938	3200	Open
9	Calcasieu		LA0109	GULLY	1957	2100	Posted
10	Calcasieu	Sulphur	LA0027	LA 27 OVER I-10	1962	11050	Posted
11	Calcasieu	Lake Charles	KIRKMAN ST	CONTRABAND BAYOU	1964	9320	Open
12	Calcasieu		LA0378	W FORK CALCASIEU RIVER	1968	15300	Posted
13	Calcasieu	Sulphur	PICARD RD	GUM SLOUGH	1968	1400	Open
14	Calcasieu	Lake Charles	HENDERSON BAYOU RD	HENDERSON BAYOU	1960	250	Open
15	Calcasieu	Iowa	LA3258	BAYOU	1969	2500	Open
16	Calcasieu		I0010	SABINE RELIEF	1954	54500	Open
17	Calcasieu		LA0108	BAYOU D'INDE	1945	7700	Open
18	Calcasieu	Sulphur	BRYAN ST	GUM SLOUGH	1974	250	Posted
19	Calcasieu		LA0012	WASHOUT SLOUGH	1952	3700	Open
20	Calcasieu		LA0012	MUD LAKE	1952	3700	Open
21	Calcasieu		LA0012	HURSEY SLOUGH	1952	3700	Open
22	Calcasieu	Lake Charles	RUSSELL ST	FARMERS L & C CO. CANAL	1970	350	Open
23	Calcasieu		PARISH BARN RD	GULLY	1992	300	Posted
24	Calcasieu	Sulphur	LA0027	LA 27 OVER I-10	1988	11050	Posted
25	Calcasieu		LA0012	OLD RIVER SLOUGH	1952	3700	Open

Source: LADOTD response to TRIP survey, 2018.

The list below details the 20 most heavily traveled structurally deficient bridges in the Monroe area.

Chart 11. Monroe area structurally deficient bridges with highest 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

Source: LADOTD response to TRIP survey, 2018.

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.

Chart 12. Monroe area bridges with lowest average rating for deck, substructure and superstructure.

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

Source: LADOTD response to TRIP survey, 2018.

The list below details the 25 most heavily traveled structurally deficient bridges in the New Orleans area.

Chart 13. New Orleans area structurally deficient bridges with highest average daily traffic.

Rank	Parish	Location	Facility Carried	Feature Intersected	Year Built	Average Daily Traffic	Open, Closed, Posted
1	Orleans	New Orleans	I0010	INNER HARBOR /CITY STS	1966	116500	Open
2	Jefferson	New Orleans	I0010	VET MEM HWY	1967	84720	Open
3	Jefferson	New Orleans	I0010	VET MEM HWY	1967	84720	Open
4	Jefferson	Kenner	I0010	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	I0010	DRAIN CANAL	1967	34260	Open
8	Orleans	New Orleans	I0010	DRAIN CANAL	1967	33050	Open
9	Orleans	New Orleans	I0010	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

Source: LADOTD response to TRIP survey, 2018.

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.

Chart 14. New Orleans area bridges with lowest average rating for deck, substructure and superstructure.

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	I0010	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	I0010	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	I0010	VET MEM HWY	1967	84720	Open
25	Jefferson	New Orleans	LA3046	R/R,CITY STS,LA 611	1957	52500	Open

Source: LADOTD response to TRIP survey, 2018.

The list below details the 25 most heavily traveled structurally deficient bridges in the Shreveport area.

Chart 15. Shreveport area structurally deficient bridges with highest average daily traffic.

Rank	Parish	Location	Facility Carried	Feature Intersected	Year Built	Average Daily Traffic	Open, Closed, Posted
1	Caddo	Shreveport	I0020	ST. LOUIS & SW RR	1965	86800	Posted
2	Bossier	Bossier City	I0020	STL&SW-KCS RR/WESTERFIEL	1966	43950	Open
3	Bossier	Bossier City	I0020	STL&SW-KCS RR/WESTERFIEL	1966	43950	Open
4	Caddo	Shreveport	I0020	LK SHORE DR&KESRR	1965	31800	Open
5	Caddo	Shreveport	I0020	M.P. RR	1965	27400	Open
6	Caddo	Shreveport	I0020	M.P. RR	1965	27400	Open
7	Bossier	Shreveport	LA0511	RED R.,C.FANT PKWY,AR TE	1968	24400	Open
8	Caddo	Shreveport	US0071	ICG RR	1937	22400	Posted
9	Caddo	Shreveport	US0071	ICG RR	1940	22400	Posted
10	Caddo	Shreveport	LINWOOD AVE	KCS,MOPAC & PAC RRS	1950	22308	Posted
11	Caddo	Shreveport	LA0001	KCS RR/JONES ST	1954	12850	Posted
12	Bossier	Bossier City	US0080	RED RIVER @ TEXAS ST.	1934	12400	Posted
13	Caddo	Shreveport	LA3094	KANSAS CITY SOUTHERN RR	1977	11000	Posted
14	Caddo	Shreveport	LA3094	TWELVE MILE BAYOU	1968	11000	Open
15	Caddo	Shreveport	LA0525	BOGGY BAYOU	1969	10700	Posted
16	Caddo	Shreveport	LA0525	BOGGY BAYOU	1969	10700	Posted
17	Bossier	Bossier City	US0080	ALLIGATOR BAYOU	1955	9750	Posted
18	Bossier	Bossier City	US0080	ALLIGATOR BAYOU	1936	9750	Open
19	Caddo	Shreveport	I0020	I-20 RAMP W-N I-20 MKT S	1985	9690	Open
20	Caddo	Shreveport	US0080	KCS RR	1927	8800	Posted
21	Bossier	Bossier City	I0020	US71&KCSRR	1966	8790	Open
22	Caddo	Shreveport	LAKESHORE DRIVE	TRIB TO CROSS LAKE	1960	7168	Open
23	Bossier		US0080	BAYOU FIFI	1934	7050	Posted
24	Bossier		US0080	BAYOU FIFI	1955	7050	Posted
25	Bossier		LA0612	CREEK	1965	7000	Open

Source: LADOTD response to TRIP survey, 2018.

The following 25 structurally deficient bridges in the Shreveport 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.

Chart 16. Shreveport area bridges with lowest average rating for deck, substructure and superstructure.

Rank	Parish	Location	Facility Carried	Feature Intersected	Year Built	Average Daily Traffic	Open, Closed, Posted
1	Bossier		LA0157	FLAT RIVER	1964	3500	Closed
2	Bossier	Haughton	Sligo Rd	FOXSKIN BAYOU	1987	900	Open
3	Bossier		Fairview Pt-Koran	SPRING BRANCH	1980	570	Open
4	Caddo	Shreveport	US0071	ICG RR	1940	22400	Posted
5	Caddo	Shreveport	US0080	KCS RR	1927	8800	Posted
6	Bossier	Bossier City	LA07822	MACKS BAYOU	1970	6300	Open
7	Caddo		LA0001	CADDO LAKE	1940	5400	Posted
8	Caddo	Shreveport	US0071	ICG RR	1940	4480	Posted
9	Caddo		LA0002	JEEMS BAYOU	1973	1890	Open
10	Caddo	Shreveport	LINWOOD AVE	KCS,MOPAC & PAC RRS	1950	22308	Posted
11	Bossier	Bossier City	US0080	RED RIVER @ TEXAS ST.	1934	12400	Posted
12	Caddo	Shreveport	LA0525	BOGGY BAYOU	1969	10700	Posted
13	Caddo	Shreveport	LA0525	BOGGY BAYOU	1969	10700	Posted
14	Bossier	Bossier City	US0080	ALLIGATOR BAYOU	1936	9750	Open
15	Caddo	Shreveport	US0071	CROSS BAYOU	1940	6950	Open
16	Bossier		LA0527	FLAT RIVER	1981	2600	Open
17	Caddo	Greenwood	LA0169	S FORK CROSS B	1965	2200	Posted
18	Caddo		LA0789	FOSTER CREEK	1971	1370	Open
19	Caddo		LA0789	SPRING BRANCH	1971	1370	Posted
20	Caddo		LA0789	CYPRESS BAYOU	1975	1370	Open
21	Bossier	Benton	LA0162	BLACK BAYOU	1967	1240	Posted
22	Caddo		LA0530	BLACK BAYOU	1928	990	Posted
23	Caddo		LA0173	MAHLIN BAYOU	1965	870	Posted
24	Bossier	Shreveport	LA0511	RED R.,C.FANT PKWY,AR TE	1968	24400	Open
25	Caddo	Shreveport	US0071	ICG RR	1937	22400	Posted

Source: LADOTD response to TRIP survey, 2018.

The list below details the 25 most heavily traveled structurally deficient bridges outside the state's largest urban areas.

Chart 17. Structurally deficient bridges outside Louisiana’s largest urban areas with highest average daily traffic.

Rank	Parish	Location	Facility Carried	Feature Intersected	Year Built	Average Daily Traffic	Open, Closed, Posted
1	Lincoln	Ruston	I0020	CREEK	1963	38200	Open
2	St. Bernard		LA0039	LA 39 OVER RR CANAL	1991	26200	Open
3	Madison	Delta	I0020	MISSISSIPPI RIVER	1973	25400	Open
4	Jefferson Davis		I0010	I-10 OVER US 165 & MP RR	1964	25400	Open
5	Jefferson Davis		I0010	I-10 OVER US 165 & MP RR	1964	25400	Open
6	St. Mary		US0090	BAYOU RAMOS/LOC RD	1994	24800	Posted
7	Vermillion	Abbeville	LA0014	VERMILION R/ABBEVILLE	1964	22200	Open
8	Tangipahoa	Hammond	US0051	YELLOW WATER RIVER	1953	17300	Posted
9	Lafourche		LA0020	DRAINAGE CANAL	1968	14900	Posted
10	Natchitoches		I0049	BAYOU DERBONNE	1986	14900	Open
11	St. Tammany	Slidell	US0011	NO&NE RAILROAD	1937	14400	Posted
12	Iberville	Plaquemine	LA0001	PLAQUEMINE BRIDGE	1950	13500	Open
13	St. Mary		US0090	BAYOU RAMOS	1994	12400	Posted
14	Livingston	Port Vincent	LA0016	SLOUGH	1974	12300	Open
15	Livingston	Port Vincent	LA0016	WILLIS BAYOU	1982	12300	Open
16	Ascension		LA0431	VILLAR CANAL	1971	12200	Posted
17	Lafourche		LA0308	DRAINAGE CANAL	1957	11900	Open
18	Lafourche		LA0308	VALENTINE CANAL	1964	11900	Posted
19	Livingston		LA0016	CANAL	1955	11600	Posted
20	Lafourche		LA0001	CO CANAL LOCKPORT	1959	11400	Open
21	Natchitoches	Natchitoches	LA0001-X	CANE RIVER	1936	11300	Posted
22	Webster		LA0531	BRUSHY CREEK	1966	11000	Posted
23	Webster		LA0531	LA 531 OVER I-20	1960	11000	Posted
24	Ascension		LA0044	BLACK BAYOU	1969	11000	Closed
25	Terrebonne	Houma	LA0660	BAYOU TERREBONNE	1961	10500	Posted

Source: LADOTD response to TRIP survey, 2018.

The following 25 structurally deficient bridges outside the state’s largest urban areas 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.

Chart 18. Structurally deficient bridges outside the state’s largest urban areas with lowest average rating for deck, substructure and superstructure.

Rank	Parish	Location	Facility Carried	Feature Intersected	Year Built	Average Daily Traffic	Open, Closed, Posted
1	Lafourche		LA0308	DRAINAGE CANAL	1957	11900	Open
2	Ascension		LA0044	BLACK BAYOU	1969	11000	Closed
3	Lafourche	Raceland	LA0308	DRAINAGE CANAL	1958	4700	Posted
4	De Soto		LA0175	KCS RAILWAY	1957	4200	Open
5	Jefferson Davis		US0090	BAYOU	1971	4100	Open
6	St. Landry	Eucine	LA0091	DRAINAGE CANAL	1954	2400	Closed
7	Tangipahoa		LA1054	BIG CREEK	1951	1540	Closed
8	Terrebonne		LOCAL ROAD	DONNER CANAL	1962	1500	Closed
9	East Feliciana	Wilson	LOCAL ROAD	REDWOOD CREEK	1999	1100	Closed
10	Terrebonne	Houma	LA3197	HOUMA CANAL	1938	850	Closed
11	Tangipahoa		LOCAL ROAD	ASHLEYS BR.	1975	700	Closed
12	Terrebonne		LOCAL ROAD	BLACK BAYOU	1945	660	Closed
13	Natchitoches		LA0117	RELIEF SLOUGH	1955	1000	Closed
14	Allen		N CARPENTERS BR RD	FLAT CREEK	1960	1707	Closed
15	Natchitoches	Natchitoches	LA0001-X	CANE RIVER	1936	11300	Posted
16	St. Tammany	Pearl River	LOCAL ROAD	GUM CREEK	1957	4000	Closed
17	Sabine		LA0120	BAYOU SCIE	1960	740	Posted
18	Webster		LA0531	LA 531 OVER I-20	1960	11000	Posted
19	Lincoln		US0080	ICG RAILROAD	1949	2800	Posted
20	Red River		LA0507	CREEK	1968	1430	Posted
21	Bienville		US0080	CROWS CREEK	1954	1320	Posted
22	Webster		LA0002A	INDIAN CREEK	1968	1100	Open
23	Claiborne	Athens	LA0154	DRAIN	1931	1090	Posted
24	Claiborne	Homer	LA0540	DRAIN	1958	1070	Open
25	Lafourche		LA0653	BAYOU DUMAR	1960	820	Posted

Source: LADOTD response to TRIP survey, 2018.

TRANSPORTATION FUNDING AND PRESERVING LOUISIANA’S BRIDGES

Investment in Louisiana’s roads, highways and bridges is funded by local, state and federal governments. A lack of sufficient funding at all levels will make it difficult to adequately maintain and improve the state’s bridges.

The Federal Highway Administration estimates that it would cost \$1.9 billion to replace or rehabilitate all structurally deficient bridges in Louisiana.¹⁰

A recent survey conducted for a [report by the US. General Accountability Office](#) (GAO) found that more than half of states surveyed (14 out of 24) indicated that inadequate funding was a challenge to their ability to maintain their bridges in a state of good repair.

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.¹¹

The design life of most bridges is 50 years, though bridges have life spans that are dependent on factors such as materials, environment, level of use, and level of maintenance. The average age of all Louisiana bridges is 38 years, while the state's more than 1,800 structurally deficient bridges have an average age of 50 years. Current design guidelines and construction materials may raise the expected service life of new bridges to 75 years or longer.¹² The GAO report found that more than half of states surveyed (13 out of 24) indicated that aging bridges were a challenge to their ability to maintain their bridges in a state of good repair.¹³

State and local transportation agencies are increasingly taking an asset management approach to bridge preservation that emphasizes enhanced maintenance techniques, delaying the need for costly reconstruction or replacement.¹⁴

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.¹⁵ While this strategy requires increased initial investment, it saves money over the long run by extending the lifespan of bridges.

With limited funding available to address bridge deficiencies, transportation agencies need to extend the life of a bridge to defer higher replacement costs as long as possible. Bridge preservation is essentially any work that preserves or extends the useful life of a bridge and is part of achieving the 75-year design life target. Preservation may include washing, sealing deck joints, facilitating drainage, sealing concrete, painting steel, removing channel debris, and protecting against stream erosion. This work keeps a bridge from prematurely deteriorating and extends the years before a bridge needs to be replaced.

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. When a bridge deteriorates to the

point that it is rated poor or structurally deficient, the cost to restore the bridge to good condition increases significantly. The need to repair or replace high priority bridges tends to create a funding cycle that makes it difficult to keep pace with the needed preservation activities.

IMPORTANCE OF TRANSPORTATION TO ECONOMIC GROWTH

Today's culture of business demands that an area have well-maintained and efficient roads, highways and bridges if it is to remain economically competitive. Global communications and the impact of free trade in North America and elsewhere have resulted in a significant increase in freight movement, making the quality of a region's transportation system a key component in a business' ability to compete locally, nationally and internationally.

Businesses have responded to improved communications and the need to cut costs with a variety of innovations including just-in-time delivery, increased small package delivery, demand-side inventory management and e-commerce. The result of these changes has been a significant improvement in logistics efficiency as firms move from a push-style distribution system, which relies on large-scale warehousing of materials, to a pull-style distribution system, which relies on smaller, more strategic movement of goods. These improvements have made mobile inventories the norm, resulting in the nation's trucks literally becoming rolling warehouses.

Bridges are vitally important to continued economic development in Louisiana, particularly to the state's agricultural, forestry, fishing and tourism industries. As the economy expands, creating more jobs and increasing consumer confidence, the demand for consumer and business products grows. In turn, manufacturers ship greater quantities of goods to meet this demand, a process that adds to truck traffic on the state's highways, bridges and major arterial roads. Annually, \$734 billion in goods are shipped to and from sites in Louisiana.¹⁶

The cost of road and bridge improvements are more than offset by the reduction of user costs associated with driving on rough roads, the improvement in business productivity, the reduction in delays and the improvement in traffic safety. 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.¹⁷

Local, regional and state economic performance is improved when a region's surface transportation system is expanded or repaired. This improvement comes as a result of the initial job creation and increased employment created over the long-term because of improved access, reduced transport costs and improved safety.

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.¹⁸

CONCLUSION

As Louisiana works to build and enhance a thriving, growing and dynamic state, it will be critical that it is able to provide a 21st century network of roads, highways and bridges that can accommodate the mobility demands of a modern society.

The state will need to modernize its transportation system by improving the physical condition of its bridges, which will enhance the system's ability to provide efficient and reliable mobility for motorists and businesses. Making needed improvements to Louisiana's bridges could 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 enhanced mobility and access.

Without a substantial boost in federal, state and local funding, numerous projects to improve and preserve Louisiana's bridges will not be able to proceed, hampering the state's ability to improve the condition of its transportation system and to support economic development opportunities in the state.

###

ENDNOTES

¹ U.S. Census Bureau (2017).

² Highway Statistics (2016). Federal Highway Administration. DL-1C

³ U.S. Department of Transportation and Development - Federal Highway Administration: Highway Statistics 2000 and 2016.

⁴ Ibid.

⁵ TRIP calculation based on U.S. Census and Federal Highway Administration data.

⁶ TRIP analysis of Bureau of Economic Analysis data.

⁷ Ibid.

⁸ Federal Highway Administration National Bridge Inventory, 2017.

⁹ Ibid.

¹⁰ Federal Highway Administration (2017). Bridge Replacement Unit Costs 2016. <https://www.fhwa.dot.gov/bridge/nbi/sd2017.cfm> TRIP estimate is based on $\frac{3}{4}$ of structurally deficient bridges being rehabilitated and $\frac{1}{4}$ being replaced.

¹¹ United States Government Accountability Office (2016). Highway Bridges: Linking Funding to Conditions May Help Demonstrate Impact of Federal Investment. P. 29.

¹² Ibid. P. 13.

¹³ Ibid.

¹⁴ Federal Highway Administration (2011). National Bridge Management, Inspection and Preservation Conference Proceedings: Beyond the Short Term. P. 3.

¹⁵ Ibid.

¹⁶ TRIP analysis of Bureau of Transportation Statistics data, 2012.

¹⁷ FHWA estimate based on its analysis of 2006 data. For more information on FHWA's cost-benefit analysis of highway investment, see the 2008 Status of the Nation's Highways, Bridges, and Transit: Conditions and Performance.

¹⁸ Area Development Magazine (2018). 32nd Annual Survey of Corporate Executives: Availability of Skilled Labor New Top Priority. <http://www.areadevelopment.com/Corporate-Consultants-Survey-Results/Q1-2018/32nd-annual-corporate-survey-14th-annual-consultants-survey.shtml>