Preserving New York's Bridges

THE CONDITION AND FUNDING NEEDS OF NEW YORK'S AGING BRIDGE SYSTEM

SEPTEMBER 2019

TRIP | A National Transportation Research Nonprofit

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Executive Summary

New York's bridges are a critical element of the state's transportation system, supporting commerce, economic vitality and personal mobility. To retain businesses, accommodate population and economic growth, and preserve economic competitiveness, New York will need to maintain and modernize its bridges by repairing or replacing deficient bridges and providing needed maintenance on other bridges. Making needed improvements to New York'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 YORK BRIDGES ARE INCREASINGLY DETERIORATED

Ten percent (1,757 of 17,521) of New York's locally and state-maintained bridges are rated as poor/structurally deficient, the 12th highest rate in the nation. A bridge is rated in poor/structurally deficient condition if there is significant deterioration of the bridge deck, supports or other major components. Bridges that are poor/structurally deficient may be posted for lower weight limits or closed if their condition warrants such action. Fifty-three percent of New York's locally and state-maintained bridges have been rated in fair condition. A fair rating indicates that a bridge's structural elements are sound but minor deterioration has occurred to the bridge's deck, substructure or superstructure. The remaining 37 percent of the state's bridges are rated in good condition.

The chart below details the number and share of poor/structurally deficient, fair and good bridges statewide and in New York's largest urban areas.

	Poor/Struturally Deficient		Fair		Good		All Bridges
Albany-Schenectady-Troy	68	8%	477	57%	294	35%	839
Binghamton	45	7%	370	55%	261	39%	676
Buffalo	91	8%	525	45%	548	47%	1,164
Hudson Valley	329	13%	1634	64%	588	23%	2,551
Long Island	6	1%	388	56%	295	43%	689
New York	113	8%	930	64%	409	28%	1,452
Rochester	122	10%	613	50%	503	41%	1,238
Syracuse	101	12%	528	60%	246	28%	875
Utica	54	11%	241	49%	192	39%	487
NY STATEWIDE	**1,757**	**10%**	**9,364**	**53%**	**6,400**	**37%**	**17,521**

Every day, approximately 11.6 million vehicles cross poor/structurally deficient New York bridges. The chart below details the number of vehicles in each urban area and statewide that cross a poor/structurally deficient bridge each day.

Urban Area	Vehicles Traveling Over Poor/ Structurally Deficient Bridges Daily
Albany-Schenectady-Troy	350,373
Binghamton	140,464
Buffalo	501,684
Hudson Valley	2,552,156
Long Island	77,668
New York	4,382,332
Rochester	1,140,742
Syracuse	911,382
Utica	222,731
NY STATEWIDE	11,590,945

NEW YORK'S MOST DEFICIENT BRIDGES

The list below details the five most heavily traveled poor/structurally deficient bridges in the Albany-Schenectady-Troy, Binghamton, Buffalo, Hudson Valley, Long Island, New York City, Rochester, Syracuse and Utica areas. ADT is average daily traffic. A list of the 25 most heavily traveled poor/structurally deficient bridges in each area can be found in the body of the report.

Rank	County	City	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
ALBANY-SCHENECTADY-TROY									
1	Albany	Albany	RTE I90	BROADWAY	0.5 MI NW JCT I90 & I787	1967	4	54,421	Open
2	Albany	Green Island	RTE I787	HUDSON AVENUE	RTE.787I AND HUDSON RIVER	1981	8	50,508	Open
3	Albany	Coeymans	RTE I87	CSX RR/CAN PAC RR	2.5 MILES NORTH OF RAVENA	1954	4	49,476	Open
4	Rensselaer	East Greenbush	RTE 4	RTE I90	JCT OF RTS I90 & 4	1968	4	23,817	Open
5	Saratoga	Ballston	RTE 67	RR BRIDGE 7029170, MOURN	0.9 MI SE JCT RTS 50 & 67	1993	2	16,187	Open
BIMGHAMTON									
1	Broome	Dickinson	RTE 11	RTE 81	.6 MI N INT5 I-81 ON RT11	1966	3	17,136	Open
2	Broome	Barker	RTE I81	PEASE HILL ROAD	1.0MI S JCT RTS I-81 + 26	1969	2	12,523	Open
3	Broome	Vestal	RTE 434	CHOCONUT CREEK	1.2MI W JCT RTS 434 & 26	1946	4	12,216	Open
4	Broome	Chenango	RTE 12	GILBERT CREEK	2 MI NE JCT SH 12 & SH 12	1928	2	10,790	Open
5	Tioga	Owego	RTE 960J	RTE 17	OWEGO INTERCHANGE RTE 17	1968	3	10,579	Open
BUFFALO									
1	Erie	Amherst	RTE I290	RTE 952T	1.7 MI NW INT RTS263+I290	1982	5	51,953	Open
2	Erie	Buffalo	RTE 33	W L GAITER AVENUE	3.5 MI NE JCT RTS 33 & 5	1967	4	47,202	Open
3	Erie	Cheektowaga	RTE 952Q	RTE I90	1.2 MI N JCT I90 & SH 130	1950	6	38,021	Open
4	Erie	Lancaster	RTE I90	CSX RR (ABAND)	2.0 MI W JCT I90 < RTE 78	1953	4	34,461	Open
5	Erie	Hamburg	RTE 75	RTE I90	JCT RT 75 + I-90	1957	5	27,772	Open
HUDSON VALLEY									
1	Rockland	Clarkstown	PASCACK ROAD	RTE I87	0.9 MI E JCT RTS I87<45	1954	7	133,202	Open
2	Rockland	Nyack	RTE 59	RTE I87	0.2 MI S JCT RTS I87 & 9W	1953	9	131,991	Open
3	Rockland	Clarkstown	RTE 303	RTE I87	2.2 MI E INT I87 & PIP	1953	8	131,991	Open
4	Rockland	Chestnut Ridge	RTE 45	RTE I87	JCT OF RTS I87 & 45	1953	6	112,158	Open
5	Rockland	Ramapo	SPOOK ROCK RD	RTE I87	2.6 MI E JCT RTS I-87&202	1953	6	112,158	Open
LONG ISLAND									
1	Suffolk	Brookhaven	FLOYD PKWY EX	NARROW BAY	SW OF MASTIC BEACH	1959	2	26,762	Posted
2	Suffolk	Brookhaven	HORSE BLOCK R	LONG ISLAND AVE, LIRR MA	1.5 MI EAST OF MEDFORD	1940	2	21,097	Posted
3	Nassau	Great Neck Plaza	BAYVIEW AVEN	LIRR PT WASH BR	2.2 MI SW OF MANHASSET	1955	4	12,151	Open
4	Nassau	Hempstead	PEARL STREET	MILL RIVER	1.0 MI NE EAST ROCKAWAY	1932	2	10,980	Open
5	Nassau	Great Neck Plaza	BARSTOW RD	LIRR PT WASH BR	1.4 MI SW OF MANHASSET	1935	2	6,678	Open
NEW YORK CITY									
1	Kings	New York City	RTE I278	6TH AVENUE	JCT PROSPECT EXPY & I278	1962	6	189,441	Open
2	Kings	New York City	RTE 907C	MILL BASIN	7.7 MI SW I678+BELT PKWY	1941	6	167,236	Open
3	Kings	New York City	RTE 907C	SHEEPSHEAD BAY RD	.8MI E BELT PKY+OCEAN PKY	1942	6	160,861	Open
4	Kings	New York City	RTE 907C	OCEAN AVENUE	.9 MI E BELT PKY &OCN PKY	1942	6	160,861	Open
5	Kings	New York City	RTE I278	FLUSHING AVENUE	3.3 MI SW JCT I278 + I495	1954	6	145,240	Open
ROCHESTER									
1	Monroe	Brighton	RTE I590	SOUTH CLINTON AVENUE	1 MI E JCT I-390 & 15A	1981	2	80,929	Open
2	Monroe	Perinton	RTE I490	ERIE CANAL	JCT C+I490 PERINTON	1955	4	63,334	Open
3	Monroe	Gates	RTE 390	TROLLEY BLVD, ABAND	2.5MI S JCT ROL SB + 104	1971	3	51,741	Open
4	Monroe	Gates	RTE 390	TROLLEY BLVD, ABAND	2.5MI S JCT ROL NB + 104	1971	3	51,741	Open
5	Monroe	Gates	RTE 390	ERIE CANAL	JCT ST BARGE C + RTE 47SB	1971	4	51,741	Open
SYRACUSE									
1	Onondaga	Syracuse	RTE I690	N TOWNSEND STREET	0.3MI E JCT 690I WB+ I-81	1968	3	68,620	Open
2	Onondaga	Syracuse	RTE I690	N CLINTON STREET	.8 MI E JCT I-690 + 298	1968	3	68,620	Open
3	Onondaga	Syracuse	RTE I690	RTE I81	JCT OF RTS I-690 WB +I-81	1968	2	68,620	Open
4	Onondaga	Geddes	RTE I690	RTE I90	JCT I90 & I690	1954	6	55,150	Open
5	Onondaga	Salina	RTE I81	RTE 11, S BAY RD - CR 20	JCT US 11 & I81	1989	3	51,033	Open
UTICA									
1	Oneida	Westmoreland	RTE I90	NYO&W RR (ABAND)	1.65 MI W INT 32 ON I-90	1954	4	28,725	Open
2	Oneida	New Hartford	RTE 8	RTE 921E	05MI S JCT RTS 8+12	1967	4	28,519	Open
3	Oneida	Whitesboro	RTE I90	RTE 69	3.0MI W INT 31 UTICA NY	1954	4	23,699	Open
4	Oneida	Utica	RTE 8	RTE 5	JCT 5+8 NEW HARTFORD	1960	6	22,020	Open
5	Oneida	Verona	RTE 365	RTE I90	.3 MI S JCT SH234 & SH365	1954	5	19,283	Open

The list below details the five poor/structurally deficient bridges in the state's largest urban areas (carrying a minimum of 500 vehicles per day) with the lowest average rating for the condition of the 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. A bridge receiving a rating of four or below for its deck, substructure or superstructure is rated as poor/structurally deficient. A list of the 25 bridges in each area with the lowest average rating for the major components of the bridge can be found in the body of the report. The report's Appendix also includes the individual ratings for the superstructure, substructure and deck of each bridge.

Rank	County	City	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
ALBANY-SCHENECTADY-TROY									
1	Rensselaer	Rensselaer	SECOND AVENUE	MILL CREEK	CITY OF RENSSELAER	1935	2	805	Closed
2	Albany	Guilderland	OLD STATE ROAD	RTE I90	2.94 MI NW INT24 ON I90	1955	2	5,205	Open
3	Saratoga	Stillwater	RTE 4	SCHUYLER CREEK	.4MI.S.JCT RTE 4<67	1885	2	9,144	Open
4	Saratoga	Malta	EAST HIGH STREET	RTE I87	1.7 MI N JCT I87 & SH 67	1962	2	4,136	Open
5	Saratoga	Northumberland	RTE 4	HUDSON RIVER&CANL	0.2 MI N JCT RTES 4 & 32	1917	2	3,760	Posted
BIMGHAMTON									
1	Broome	Fenton	RTE 79	CHENANGO RIVER	JCT SH 79 & CHENANGO RIVE	1936	2	1,116	Open
2	Tioga	Berkshire	RTE 38	TRIB E BR OWEGOCK	0.4 MI S OF BERSHIRE	1959	2	4,131	Open
3	Tioga	Richford	RTE 38	BARDEN CREEK	SOUTH END OF RICHFORD	1936	2	3,439	Open
4	Broome	Vestal	WASHINGTON DR	FULLER HOLLOW CR.	1.0 MI S OF JOHNSON CITY	1961	2	1,158	Posted
5	Broome	Sanford	RTE 41	FLY CREEK	0.1 MI S JCT RTS 41 + 17	1927	2	707	Open
BUFFALO									
1	Erie	Akron	STATE STREET	MURDER CREEK	1.5 MI NE JCT 935 '	1938	2	732	Closed
2	Niagara	Lockport	NORTH ADAM ST	ERIE CANAL	AT LOCKPORT ON CANAL	1918	2	558	Closed
3	Erie	Buffalo	LOUISIANA STREET	RTE I190, CSX TRANS/AMTR	0.8 MI E JCT RTS I190 < 5	1960	4	3,892	Open
4	Erie	Lancaster	STONY ROAD	ELLICOTT CREEK	1.5 MI E JCT SH78 & SH33	1956	2	2,705	Open
5	Erie	Lancaster	MAIN STREET	ELLICOTT CREEK	0.75 MI SE JCT I-90RT 78'	1922	2	557	Open
HUDSON VALLEY									
1	Columbia	Hudson	CSX, LEASED AMTRA	FERRY STREET	IN HUDSON	1905	2	640	Closed
2	Orange	New Windsor	MILL STREET	QUASSAICK CREEK	IN NEWBURGH	1883	2	4,529	Closed
3	Westchester	Mount Vernon	UNIVERSAL MTL BLG	EAST 3RD STREET	1.3 MI NW OF PELHAM MANOR	1912	4	7,658	Open
4	Ulster	Kingston	DOCK ST, RONDOUT CK	RTE 984	12.5MI N JCT RTS 9W+299	1921	2	4,868	Posted
5	Westchester	Mamaroneck	MAMARONECK RVR	TOMPKINS AVE	AT MAMARONECK	1900	2	3,286	Posted
LONG ISLAND									
1	Nassau	Great Neck Plaza	BARSTOW RD	LIRR PT WASH BR	1.4 MI SW OF MANHASSET	1935	2	6,678	Open
2	Suffolk	Brookhaven	FLOYD PKWY EXT	NARROW BAY	SW OF MASTIC BEACH	1959	2	26,762	Posted
3	Suffolk	Brookhaven	HORSE BLOCK RD	LONG ISLAND AVE, LIRR MA	1.5 MI EAST OF MEDFORD	1940	2	21,097	Posted
4	Nassau	Great Neck Plaza	BAYVIEW AVENUE	LIRR PT WASH BR	2.2 MI SW OF MANHASSET	1955	4	12,151	Open
5	Nassau	Hempstead	PEARL STREET	MILL RIVER	1.0 MI NE EAST ROCKAWAY	1932	2	10,980	Open
NEW YORK CITY									
1	Bronx	New York City	RTE I95	RTE 907F	1.4 MI NW I295 + I95	1958	8	134,784	Open
2	Bronx	New York City	RTE 907H	MORRIS PARK AVE, NYC RAP	.4 MI N I95+BX RIVER PKWY	1951	6	110,518	Open
3	Bronx	New York City	RTE 907H	AMTRAK/CSXT/P&W	.1 MILE N JCT I95 & BRP	1951	6	110,518	Open
4	Bronx	New York City	RTE 908F	BRONX RIVER	JCT MOSHOLU PKY+BRONX RIV	1905	4	30,667	Open
5	Kings	New York City	RTE 907C	MILL BASIN	7.7 MI SW I678+BELT PKWY	1941	6	167,236	Open
ROCHESTER									
1	Monroe	Gates	RTE 390	TROLLEY BOULEVARD, ABAND	2.5MI S JCT ROL NB + 104	1971	3	51,741	Open
2	Monroe	Gates	RTE 390	TROLLEY BOULEVARD, ABAND	2.5MI S JCT ROL SB + 104	1971	3	51,741	Open
3	Monroe	Chili	RTE 386	BLACK CREEK	JCT RTE 251+BLACK CREEK	1931	2	2,374	Posted
4	Orleans	Albion	BROWN STREET	Erie Canal Heritage Trail	0.8MI E JCT BARGE C+RTE98	1912	1	1,219	Posted
5	Ontario	Phelps	RTE I90	CANANDAIGUA OUTLE	0.4 MI W OF EXIT 42 90I	1953	4	40,586	Open
SYRACUSE									
1	Onondaga	Salina	RTE I90	CSX RR	1MI NW THRUWAY EXIT 35	1951	4	37,980	Open
2	Onondaga	Geddes	RTE I90	CSX TRANSPORTATIO	.5 MI E EXIT 39 ON I90	1954	4	34,483	Open
3	Onondaga	Onondaga	Rockwell Road	RTE I81	2.0 MI S JCT RTS I-81+173	1963	2	893	Open
4	Madison	Oneida	CR 13	OLD ERIE CANAL	AT CITY OF ONEIDA	1925	2	714	Posted
5	Madison	Sullivan	CANASERAGA ROAD	OLD ERIE CANAL	W CANASTOTA E CHITTENANGO	1927	2	515	Posted
UTICA									
1	Oneida	Verona	HIGGINSVILLE ROAD	Mud road or clearing use	3.3 MI.E.SH 13 & CANAL	1908	1	1,193	Closed
2	Oneida	Whitesboro	RTE I90	RTE 69	3.0MI W INT 31 UTICA NY	1954	4	23,699	Open
3	Oneida	Whitestown	JUDD ROAD	RTE I90	7.63 MI W INT 31 ON I-90	1952	2	8,492	Open
4	Oneida	Verona	CENTER STREET	OLD ERIE CANAL	AT DURHAMVILLE	1927	2	1,327	Posted
5	Oneida	Camden	BREWER ROAD	W BR FISH CREEK	1 MI SE OF CAMDEN	1963	2	812	Posted

NEW YORK'S BRIDGES ARE AGING

A significant number of New York's bridges have surpassed or are approaching 50 years old, which is typically the intended design life for bridges built during this era. The average age of all New York's bridges is 50 years, while the average age of the state's bridges that are rated in poor/structurally deficient condition is 70 years.

TRANSPORTATION FUNDING AND PRESERVING NEW YORK'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.

The Federal Highway Administration estimates that it would cost $3.6 billion to replace or rehabilitate all poor/structurally deficient bridges in New York.

TRANSPORTATION AND ECONOMIC DEVELOPMENT

The health and future growth of New York's economy is riding on its transportation system. Each year, $1.3 trillion in goods are shipped to and from sites in New York, mostly by truck. Increases in passenger and freight movement will place further burdens on the state's already deteriorated and congested network of roads and bridges. The value of freight shipped from and to sites in New York, when adjusted for inflation, is expected to increase by 154 percent from 2016 to 2045, and by 108 percent for goods shipped by trucks.

A report by the American Road & Transportation Builders Association found that the design, construction and maintenance of transportation infrastructure in New York supports approximately 319,000 full-time jobs across all sectors of the state economy. These workers earn $9.8 billion annually. Approximately 3.5 million full-time jobs in New York in key industries like tourism, manufacturing, retail sales, agriculture are completely dependent on the state's transportation infrastructure network.

Sources of information for this report include the Federal Highway Administration (FHWA), the National Bridge Inventory (NBI), the Bureau of Transportation Statistics (BTS), the American Road and Transportation Builders Association (ARTBA) and the U.S. Census Bureau.

INTRODUCTION

New York'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 New York's transportation system, including its bridges, is critical to fostering quality of life improvements and economic competitiveness in the Empire State.

Maintaining New York's aging network of bridges is becoming more challenging as the bridges age. A significant number of New York's bridges have surpassed or are approaching 50 years old, which is typically the intended design life for bridges built during this era. The average age of all of New York's bridges is 50 years old, while the average age of the state's bridges that are rated in poor/structurally deficient condition is 70 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 New York's transportation system plays an important role in retaining New York's economic competitiveness and improving its economic well-being by providing jobs in the short term and by improving the productivity and competitiveness of the state's businesses in the long term. As New York faces the challenge of preserving and modernizing its bridges, the 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.

TRIP has prepared a statewide report on bridge conditions throughout New York as well as regional reports for the Albany-Schenectady-Troy, Binghamton, Buffalo, Hudson Valley, Long Island, New York City, Rochester, Syracuse and Utica areas. The reports include a list of bridges in each area with the lowest average rating for the condition of the deck, superstructure and substructure, and a list of each area's most heavily traveled poor/structurally deficient bridges.

Bridge condition data in this report is from the Federal Highway Administration's (FHWA) National Bridge Inventory (NBI), which was released on December 31, 2018. Specific conditions of bridges may have changed as a result of recent work.

This report examines the condition and use of New York's bridges, funding needs, and the future mobility needs of the state. Sources of information for this study include the Federal Highway Administration (FHWA), the National Bridge Inventory (NBI), the U.S. Census Bureau, the Bureau of Transportation Statistics (BTS), and the American Road and Transportation Builders Association (ARTBA).

POPULATION, TRAVEL AND ECONOMIC TRENDS IN NEW YORK

New York residents and businesses require a high level of personal and commercial mobility. To foster quality of life and spur economic growth in New York, 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.

New York's population grew to approximately 19.5 million residents in 2018, a three percent increase since 2000.[1] New York had approximately 12.2 million licensed drivers in 2017.[2] Vehicle miles traveled (VMT) in New York reached 123.7 billion in 2017.[3]

From 2000 to 2017, New York's gross domestic product (GDP), a measure of the state's economic output, increased by 30 percent, when adjusted for inflation.[4] U.S. GDP increased by 37 percent during that time, when adjusted for inflation.[5]

BRIDGE CONDITIONS IN NEW YORK

New York'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.

Bridges are inspected on a regular basis by the organization responsible for their upkeep and maintenance. The components of the bridge are evaluated and given a score between zero and nine based on their condition. The overall condition of the bridge is determined by the lowest rating for the deck, superstructure, substructure or culvert. If the lowest rating for any of these components is less than or equal to four, the bridge is rated poor/structurally deficient; if it is five or six, the bridge is rated fair; and if it is greater than or equal to seven, the bridge is rated good.

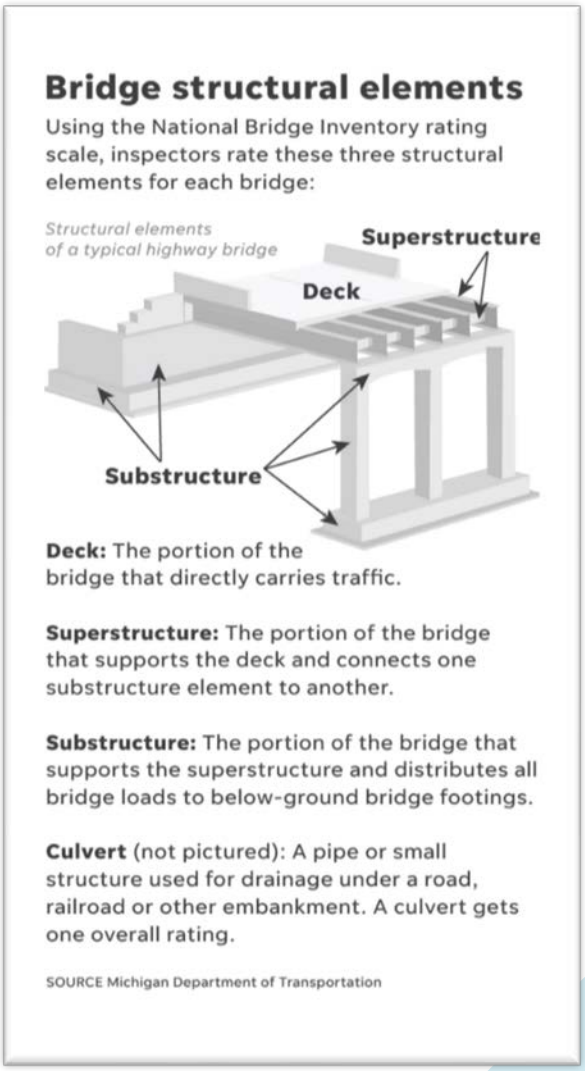


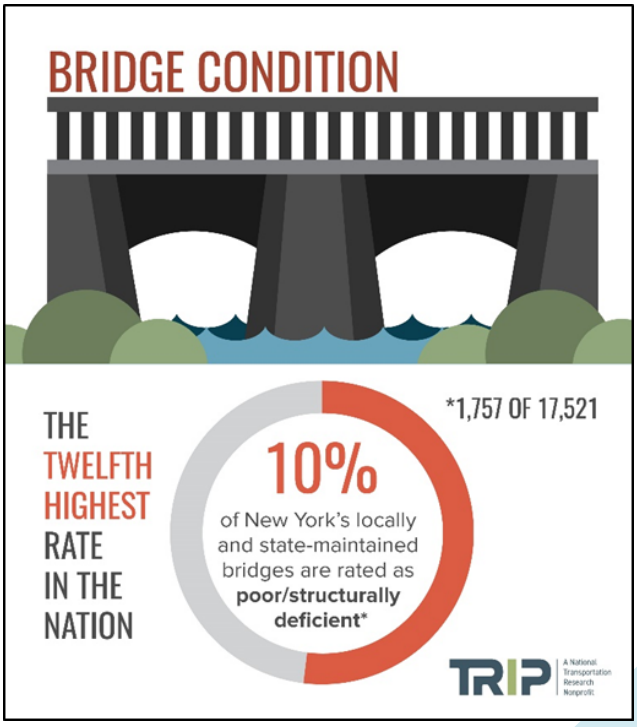
Chart 1. Bridge ratings and definitions.

SCORE	CONDITION	DEFINITION
9	Excellent	No problems noted.
8	Very Good	No problems noted.
7	Good	Some minor problems.
6	Satisfactory	Minor deterioration to structural elements.
5	Fair	Primary structural elements are sound, but may have minor section loss, ceracking, spalling or scour.
4	Poor	Advance section loss, deterioration, spalling or scour.
3	Serious	Loss of section, deterioration, spalling or scour have seriously affected primary components. Local failures possible, fatigue cracks in steel or concrete may be present.
2	Critical	Advanced deterioration of primary elements, cracks in steel or concrete. Requires close monitoring or closure until corrective action.
1	Imminent Failure	Major deterioration or section loss, obvious vertical or horizontal movement affecting structure stability. Closed to traffic but corrective action may put back in light service.
0	Failed	Out of service, beyond corrective action.

Source. Federal Highway Administration National Bridge Inventory.

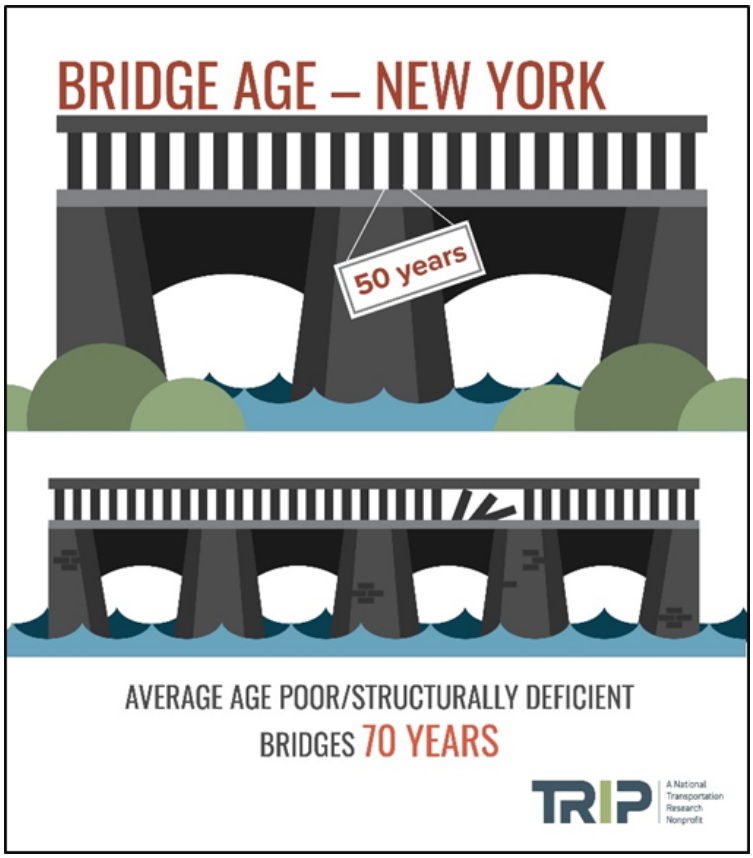
Ten percent (1,757 of 17,521) of New York's locally and state-maintained bridges are rated as poor/structurally deficient, the 12th highest rate in the nation.

Bridges rated poor/structurally deficient may be posted for lower weight limits or closed if their condition warrants such action. Fifty-three percent of New York's locally and state-maintained bridges have been rated in fair condition.[6] A fair rating indicates that a bridge's structural elements are sound but minor deterioration has occurred to the bridge's deck, substructure or superstructure.



The remaining 37 percent of the state's bridges are rated in good condition.

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 New York's bridges have surpassed or are approaching 50 years old, which is typically the intended design life for bridges built during this era. The average age of all New York's bridges is 50 years, while the average age of bridges that are rated in poor/structurally deficient condition is 70 years.[7] 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 poor/structurally deficient, fair and good bridges in each New York County and statewide.

Chart 2. New York bridge conditions by county.

	Poor/Struturally Deficient		Fair		Good		All Bridges
ALBANY	20	6%	204	59%	121	35%	345
ALLEGANY	35	9%	204	51%	162	40%	401
BRONX	40	13%	213	67%	63	20%	316
BROOME	21	5%	250	54%	188	41%	459
CATTARAUGUS	26	5%	157	33%	297	62%	480
CAYUGA	31	21%	70	48%	44	30%	145
CHAUTAUQUA	42	8%	254	46%	262	47%	558
CHEMUNG	29	11%	133	52%	93	36%	255
CHENANGO	20	8%	128	50%	108	42%	256
CLINTON	20	10%	87	44%	93	47%	200
COLUMBIA	46	19%	146	60%	51	21%	243
CORTLAND	26	14%	104	54%	62	32%	192
DELAWARE	40	9%	229	51%	181	40%	450
DUTCHESS	39	12%	217	65%	80	24%	336
ERIE	69	8%	406	45%	421	47%	896
ESSEX	23	9%	106	42%	121	48%	250
FRANKLIN	29	15%	78	41%	81	43%	188
FULTON	12	13%	59	61%	25	26%	96
GENESEE	29	17%	94	57%	43	26%	166
GREENE	19	8%	107	47%	101	44%	227
HAMILTON	16	18%	41	47%	30	34%	87
HERKIMER	25	10%	115	48%	100	42%	240
JEFFERSON	49	15%	144	45%	127	40%	320
KINGS	23	10%	127	53%	91	38%	241
LEWIS	36	21%	82	49%	50	30%	168
LIVINGSTON	9	6%	91	56%	62	38%	162
MADISON	24	14%	98	57%	51	29%	173
MONROE	60	10%	305	50%	245	40%	610
MONTGOMERY	16	8%	118	58%	69	34%	203
NASSAU	4	1%	182	56%	137	42%	323
NEW YORK	19	8%	198	80%	30	12%	247
NIAGARA	22	8%	119	44%	127	47%	268
ONEIDA	54	11%	241	49%	192	39%	487
ONONDAGA	49	10%	292	62%	131	28%	472
ONTARIO	15	8%	90	50%	74	41%	179
ORANGE	66	14%	296	62%	112	24%	474
ORLEANS	19	14%	69	51%	48	35%	136
OSWEGO	28	12%	138	60%	64	28%	230
OTSEGO	34	13%	143	53%	95	35%	272
PUTNAM	11	11%	69	68%	22	22%	102
QUEENS	28	6%	308	63%	154	31%	490
RENSSELAER	31	12%	166	62%	70	26%	267
RICHMOND	3	2%	84	53%	71	45%	158
ROCKLAND	22	9%	162	66%	60	25%	244
ST LAWRENCE	40	13%	130	41%	145	46%	315
SARATOGA	17	7%	107	47%	103	45%	227
SCHENECTADY	10	9%	64	56%	41	36%	115
SCHOHARIE	15	9%	97	57%	59	35%	171
SCHUYLER	10	10%	56	57%	33	33%	99
SENECA	14	24%	22	37%	23	39%	59
STEUBEN	55	9%	331	53%	243	39%	629
SUFFOLK	2	1%	206	56%	158	43%	366
SULLIVAN	45	13%	183	51%	130	36%	358
TIOGA	24	11%	120	55%	73	34%	217
TOMPKINS	30	15%	91	46%	75	38%	196
ULSTER	90	23%	224	58%	71	18%	385
WARREN	18	13%	70	51%	49	36%	137
WASHINGTON	22	12%	96	52%	65	36%	183
WAYNE	16	17%	35	36%	45	47%	96
WESTCHESTER	55	7%	520	68%	192	25%	767
WYOMING	12	9%	65	49%	57	43%	134
YATES	3	5%	23	42%	29	53%	55
TOTALS	**1,757**	**10%**	**9,364**	**53%**	**6,400**	**37%**	**17,521**

Source: Federal Highway Administration National Bridge Inventory, 2018.

The chart below details the number and share of poor/structurally deficient bridges statewide and in the Albany-Schenectady-Troy area (Albany, Rensselaer and Saratoga Counties), Binghamton area (Broome and Tioga Counties), Buffalo area (Erie and Niagara Counties), Hudson Valley area (Columbia, Dutchess, Orange, Putnam, Rockland, Ulster and Westchester Counties), Long Island (Nassau and Suffolk Counties), New York City area (Bronx, Kings, New York, Richmond and Queens Counties), Rochester area (Livingston, Monroe, Ontario, Orleans, Wayne and Yates Counties), Syracuse area (Madison, Onondaga and Oswego Counties) and Utica area (Oneida County).

Chart 3: Number and share of poor/structurally deficient, fair and good bridges in New York's largest urban areas and statewide.

	Poor/Struturally Deficient		Fair		Good		All Bridges
Albany-Schenectady-Troy	68	8%	477	57%	294	35%	839
Binghamton	45	7%	370	55%	261	39%	676
Buffalo	91	8%	525	45%	548	47%	1,164
Hudson Valley	329	13%	1634	64%	588	23%	2,551
Long Island	6	1%	388	56%	295	43%	689
New York	113	8%	930	64%	409	28%	1,452
Rochester	122	10%	613	50%	503	41%	1,238
Syracuse	101	12%	528	60%	246	28%	875
Utica	54	11%	241	49%	192	39%	487
NY STATEWIDE	**1,757**	**10%**	**9,364**	**53%**	**6,400**	**37%**	**17,521**

Source: Federal Highway Administration National Bridge Inventory, 2018.

Every day, approximately 11.6 million vehicles cross poor/structurally deficient New York bridges. The chart below details the number of vehicles in New York's largest urban areas and statewide that cross a poor/structurally deficient bridge each day.

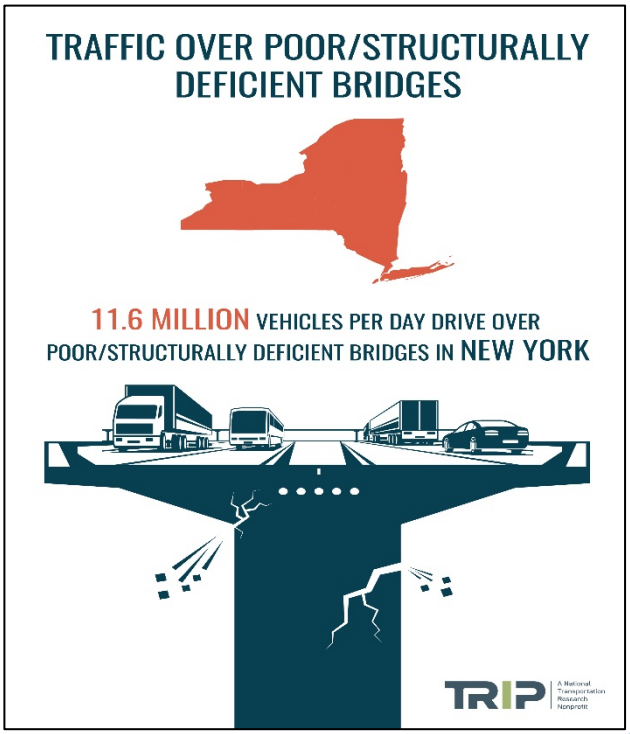


Chart 4. Number of vehicles crossing poor/structurally deficient bridges daily.

Urban Area	Vehicles Traveling Over Poor/ Structurally Deficient Bridges Daily
Albany-Schenectady-Troy	350,373
Binghamton	140,464
Buffalo	501,684
Hudson Valley	2,552,156
Long Island	77,668
New York	4,382,332
Rochester	1,140,742
Syracuse	911,382
Utica	222,731
NY STATEWIDE	11,590,945

Source: Federal Highway Administration National Bridge Inventory, 2018.

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 poor/structurally deficient.

Bridge condition data in this report is from the Federal Highway Administration's (FHWA) National Bridge Inventory (NBI), which was released on December 31, 2018. Specific conditions of bridges may have changed as a result of recent work.

The list below details the 25 most heavily traveled poor/structurally deficient bridges in the Albany-Schenectady-Troy area. ADT is average daily traffic.

Chart 5. Albany-Schenectady-Troy area poor/structurally deficient bridges with highest average daily traffic.

Rank	County	City	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
1	Albany	Albany	RTE I90	BROADWAY	0.5 MI NW JCT I90 & I787	1967	4	54,421	Open
2	Albany	Green Island	RTE I787	HUDSON AVENUE	RTE.787I AND HUDSON RIVER	1981	8	50,508	Open
3	Albany	Coeymans	RTE I87	CSX RR/CAN PAC RR	2.5 MILES NORTH OF RAVENA	1954	4	49,476	Open
4	Rensselaer	East Greenbush	RTE 4	RTE I90	JCT OF RTS I90 & 4	1968	4	23,817	Open
5	Saratoga	Ballston	RTE 67	RR BRIDGE 7029170	0.9 MI SE JCT RTS 50 & 67	1993	2	16,187	Open
6	Albany	Colonie	RTE 7	RTE I87	INTER RTES 87I & 7 E.B.	1986	2	15,510	Open
7	Saratoga	Clifton Park	SITTERLY ROAD	RTE I87, 87I NORTHBOUND	0.7 MI S JCT I87 & RT 146	1958	2	15,272	Open
8	Albany	Albany	HENRY JOHNSON BVD	SHERMAN STREET, ELK ST	NORTHERN BLVD CITY ALBANY	1980	2	15,138	Open
9	Rensselaer	Nassau	RTE I90	RTE 203	JCT RTS 203 & 90	1957	2	13,274	Open
10	Rensselaer	Nassau	RTE I90	RTE 203	JCT RTS 203 & 90	1957	2	12,236	Open
11	Rensselaer	Troy	CAMPBELL AVENUE	WYNANTS KILL	JCT CAMPBEL AV&WYNANTSKIL	1980	2	11,405	Open
12	Saratoga	Stillwater	RTE 4	SCHUYLER CREEK	.4MI.S.JCT RTE 4<67	1885	2	9,144	Open
13	Albany	Bethlehem	RTE 9W	CSX TRANS/C P RWY	1 MI S.JCT 9W < 396	1976	4	8,327	Open
14	Albany	Guilderland	OLD STATE ROAD	RTE I90	2.94 MI NW INT24 ON I90	1955	2	5,205	Open
15	Albany	Guilderland	SCHOOL ROAD	BLACK CREEK	IN GUILDERLAND CENTER	1987	2	4,650	Open
16	Saratoga	Malta	EAST HIGH STREET	RTE I87	1.7 MI N JCT I87 & SH 67	1962	2	4,136	Open
17	Saratoga	Northumberland	RTE 4	HUDSON RIVER&CANL	0.2 MI N JCT RTES 4 & 32	1917	2	3,760	Posted
18	Rensselaer	Brunswick	RTE 2	POESTEN KILL	2.5 MI E JCT RTS 66 & 2	1931	2	3,228	Open
19	Saratoga	Milton	CR 49	KAYADEROSSERAS CK	ROCK CITY FALLS	1952	2	3,056	Open
20	Rensselaer	Schaghticoke	RTE 67	BOSTON & MAINE	1.OMI.SW.OF SCHAGHTICOKE	1970	2	2,998	Open
21	Saratoga	Saratoga Springs	CRESCENT AVENUE	RTE I87	2.75 MI N JCT US 9 & I87	1962	2	2,788	Posted
22	Albany	Bethlehem	RTE 396	COEYMANS CREEK	1.4 MI SW JCT 9W < 396	1977	2	2,542	Open
23	Albany	Westerlo	COUNTY ROAD 405	BASIC CREEK	HMLT OF S WESTERLO	1933	2	2,266	Open
24	Rensselaer	Petersburgh	RTE 2	RTE 22	JCT OF RTS 2 & 22	1931	2	2,174	Open
25	Rensselaer	Schaghticoke	COUNTY ROAD 114	POWAMPPOKONK CRK	.7 MI NW OF JOHNSONVILLE	1950	2	1,411	Posted

Source: Federal Highway Administration National Bridge Inventory, 2018.

The following 25 poor/structurally deficient bridges in the Albany-Schenectady-Troy area (carrying a minimum of 500 vehicles per day) 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 poor/structurally deficient. The Appendix includes the individual ratings for the deck, substructure and superstructure of each bridge listed below.

Chart 6. Albany-Schenectady-Troy area bridges with lowest average rating for deck, substructure and superstructure.

Rank	County	City	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
1	Rensselaer	Rensselaer	SECOND AVENUE	MILL CREEK	CITY OF RENSSELAER	1935	2	805	Closed
2	Albany	Guilderland	OLD STATE ROAD	RTE I90	2.94 MI NW INT24 ON I90	1955	2	5,205	Open
3	Saratoga	Stillwater	RTE 4	SCHUYLER CREEK	.4MI.S.JCT RTE 4<67	1885	2	9,144	Open
4	Saratoga	Malta	EAST HIGH STREET	RTE I87	1.7 MI N JCT I87 & SH 67	1962	2	4,136	Open
5	Saratoga	Northumberland	RTE 4	HUDSON RIVER	0.2 MI N JCT RTES 4 & 32	1917	2	3,760	Posted
6	Saratoga	Saratoga Springs	CRESCENT AVENUE	RTE I87	2.75 MI N JCT US 9 & I87	1962	2	2,788	Posted
7	Albany	Coeymans	RTE 144	HANNACROIS CREEK	0.7 MI S JCT RT 143 & 144	1931	2	1,382	Open
8	Saratoga	Saratoga Springs	NELSON AVE EXT	RTE I87	2.0 MI N JCT RT 9 & I87RT	1962	2	694	Open
9	Saratoga	Saratoga Springs	NELSON AVE EXT	RTE I87	2.0 MI N RT 9 & I87 LT	1962	2	694	Open
10	Albany	Coeymans	RTE I87	CSX RR/CAN PAC RR	2.5 MILES NORTH OF RAVENA	1954	4	49,476	Open
11	Rensselaer	Nassau	RTE I90	RTE 203	JCT RTS 203 & 90	1957	2	13,274	Open
12	Rensselaer	Troy	CAMPBELL AVENUE	WYNANTS KILL	JCT CAMPBEL AV&WYNANTSKIL	1980	2	11,405	Open
13	Rensselaer	Schaghticoke	RTE 67	BOSTON & MAINE	1.OMI.SW.OF SCHAGHTICOKE	1970	2	2,998	Open
14	Albany	Berne	BRADT HOLLOW ROAD	FOX CREEK	HAMLET OF WEST BERNE	1939	2	577	Posted
15	Albany	Albany	RTE I90	BROADWAY	0.5 MI NW JCT I90 & I787	1967	4	54,421	Open
16	Albany	Green Island	RTE I787	HUDSON AVENUE	RTE.787I AND HUDSON RIVER	1981	8	50,508	Open
17	Rensselaer	East Greenbush	RTE 4	RTE I90	JCT OF RTS I90 & 4	1968	4	23,817	Open
18	Rensselaer	Nassau	RTE I90	RTE 203	JCT RTS 203 & 90	1957	2	12,236	Open
19	Rensselaer	Petersburgh	RTE 2	RTE 22	JCT OF RTS 2 & 22	1931	2	2,174	Open
20	Rensselaer	Sand Lake	FIRST DYKE ROAD	BURDEN LAKE	2.2 MILES SW OF SAND LAKE	1950	2	1,291	Posted
21	Rensselaer	Schodack	VAN HOUSEN ROAD	AMTRAK	3 MI SE OF CASTLETON	1908	2	988	Posted
22	Rensselaer	Poestenkill	CR40 PLANK ROAD	POESTENKILL	5.5 MI E OF POESTENKILL	1988	2	954	Posted
23	Saratoga	Saratoga	RTE 32	FISH CREEK	1.7 MI SW JT RTS 4 & 32	1993	2	817	Open
24	Saratoga	Herrings	RTE 67	RR BRIDGE 7029170, M(	0.9 MI SE JCT RTS 50 & 67	1993	2	16,187	Open
25	Saratoga	Clifton Park	SITTERLY ROAD	RTE I87, 87I NORTHBOU	0.7 MI S JCT I87 & RT 146	1958	2	15,272	Open

Source: Federal Highway Administration National Bridge Inventory, 2018.

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

Chart 7. Binghamton area poor/structurally deficient bridges with highest average daily traffic.

Rank	County	City	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
1	Broome	Dickinson	RTE 11	RTE 81	.6 MI N INT5 I-81 ON RT11	1966	3	17,136	Open
2	Broome	Barker	RTE I81	PEASE HILL ROAD	1.0MI S JCT RTS I-81 + 26	1969	2	12,523	Open
3	Broome	Vestal	RTE 434	CHOCONUT CREEK	1.2MI W JCT RTS 434 & 26	1946	4	12,216	Open
4	Broome	Chenango	RTE 12	GILBERT CREEK	2 MI NE JCT SH 12 & SH 12	1928	2	10,790	Open
5	Tioga	Owego	RTE 960J	RTE 17	OWEGO INTERCHANGE RTE 17	1968	3	10,579	Open
6	Tioga	Owego	RTE 960J	SUSQUEHANNA RIVER, PARK	0.1 MI N OWEGOINTERCHANGE	1968	2	10,579	Open
7	Broome	Union	COUNTRY CLUB RD	PATTERSON CREEK	HAMLET OF ENDWELL	1949	2	8,934	Open
8	Tioga	Barton	RTE 34	CAYUTA CREEK	1.2 MI N OF WAVERLY	1939	2	5,530	Open
9	Tioga	Barton	RTE 34	MP 274.41 NOR SOU	1.3 MI.N.OF WAVERLY	1938	2	5,530	Open
10	Tioga	Owego	RTE 38	MCLEAN CREEK	3.1 MI N OF OWEGO	1940	2	5,373	Open
11	Tioga	Newark Valley	RTE 38	WADE HOLLOW CREEK	6.9 MI N OF OWEGO	1940	2	4,283	Open
12	Tioga	Berkshire	RTE 38	TRIB E BR OWEGOCK	0.4 MI S OF BERSHIRE	1959	2	4,131	Open
13	Broome	Lisle	RTE 79	UNKNOWN CREEK	4.9MI W JCT RTS 79 + I-81	1940	2	3,525	Open
14	Tioga	Richford	RTE 38	E BR OWEGO CREEK	0.8 MI SE OF RICHFORD	2017	2	3,439	Open
15	Tioga	Richford	RTE 38	BIGGIES CREEK	.5 MILE SW OF RICHFORD	1936	2	3,439	Open
16	Tioga	Richford	RTE 38	BARDEN CREEK	SOUTH END OF RICHFORD	1936	2	3,439	Open
17	Broome	Maine	RTE 26	TRB E B NAN CREEK	6.8 MI N JCT SH26 & SH38B	1938	2	2,931	Open
18	Broome	Kirkwood	COUNTY ROAD 52	DUELL CREEK	2 MI NE OF FIVE MILE PNT	1974	2	2,514	Open
19	Broome	Fenton	RTE 79	PAGE BROOK	.9 MI E JCT SH 79 & SH 36	1992	2	1,621	Open
20	Broome	Vestal	OWEGO ROAD	TRACY CREEK	3.0 MI SW OF VESTAL	1935	2	1,579	Open
21	Broome	Vestal	WASHINGTON DR	FULLER HOLLOW CR.	1.0 MI S OF JOHNSON CITY	1961	2	1,158	Posted
22	Broome	Fenton	RTE 79	CHENANGO RIVER	JCT SH 79 & CHENANGO RIVE	1936	2	1,116	Open
23	Tioga	Nichols	WEST RIVER DRIVE	PARKS CREEK	3 MILES SW OF BARTON	1971	2	1,021	Open
24	Tioga	Spencer	SABIN ROAD	DEAN CREEK	0.6 MI S OF SPENCER	2012	2	913	Open
25	Broome	Sanford	RTE 41	MARSH CREEK	0.5 MI N JCT RTS 41 + 17	1927	2	707	Open

Source: Federal Highway Administration National Bridge Inventory, 2018.

The following 25 poor/structurally deficient bridges in the Binghamton area (carrying a minimum of 500 vehicles per day) have the lowest average rating for deck, substructure and superstructure. The Appendix includes the individual ratings for the deck, substructure and superstructure of each bridge listed below.

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

Rank	County	City	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
1	Broome	Fenton	RTE 79	CHENANGO RIVER	JCT SH 79 & CHENANGO RVR	1936	2	1,116	Open
2	Tioga	Berkshire	RTE 38	TRIB E BR OWEGOCK	0.4 MI S OF BERSHIRE	1959	2	4,131	Open
3	Tioga	Richford	RTE 38	BARDEN CREEK	SOUTH END OF RICHFORD	1936	2	3,439	Open
4	Broome	Vestal	WASHINGTON DR	FULLER HOLLOW CR.	1.0 MI S OF JOHNSON CITY	1961	2	1,158	Posted
5	Broome	Sanford	RTE 41	FLY CREEK	0.1 MI S JCT RTS 41 + 17	1927	2	707	Open
6	Broome	Vestal	OWEGO ROAD	TRACY CREEK	3.0 MI SW OF VESTAL	1935	2	1,579	Open
7	Broome	Chenango	RTE 12	GILBERT CREEK	2 MI NE JCT SH 12 & SH 12	1928	2	10,790	Open
8	Tioga	Barton	RTE 34	CAYUTA CREEK	1.2 MI N OF WAVERLY	1939	2	5,530	Open
9	Tioga	Barton	RTE 34	MP 274.41 NOR SOU	1.3 MI.N.OF WAVERLY	1938	2	5,530	Open
10	Tioga	Owego	RTE 38	MCLEAN CREEK	3.1 MI N OF OWEGO	1940	2	5,373	Open
11	Tioga	Newark Valley	RTE 38	WADE HOLLOW CRK	6.9 MI N OF OWEGO	1940	2	4,283	Open
12	Tioga	Richford	RTE 38	E BR OWEGO CREEK	0.8 MI SE OF RICHFORD	2017	2	3,439	Open
13	Broome	Maine	RTE 26	TRB E B NAN CREEK	6.8 MI N JCT SH26 & SH38B	1938	2	2,931	Open
14	Broome	Sanford	RTE 41	MARSH CREEK	0.5 MI N JCT RTS 41 + 17	1927	2	707	Open
15	Broome	Barker	RTE I81	PEASE HILL ROAD	1.0MI S JCT RTS I-81 + 26	1969	2	12,523	Open
16	Broome	Vestal	RTE 434	CHOCONUT CREEK	1.2MI W JCT RTS 434 & 26	1946	4	12,216	Open
17	Tioga	Owego	RTE 960J	RTE 17	OWEGO INTCH RTE 17	1968	3	10,579	Open
18	Tioga	Owego	RTE 960J	SUSQUEHANNA RVR	0.1 MI N OWEGO INTCH	1968	2	10,579	Open
19	Tioga	Richford	RTE 38	BIGGIES CREEK	.5 MILE SW OF RICHFORD	1936	2	3,439	Open
20	Broome	Colesville	CR221 TUNNEL RD	OSBORNE CREEK	3 MI S OF N COLESVILLE	1942	2	623	Open
21	Broome	Dickinson	RTE 11	RTE 81	.6 MI N INT5 I-81 ON RT11	1966	3	17,136	Open
22	Broome	Union	COUNTRY CLUB RD	PATTERSON CREEK	HAMLET OF ENDWELL	1949	2	8,934	Open
23	Tioga	Nichols	WEST RIVER DRIVE	PARKS CREEK	3 MILES SW OF BARTON	1971	2	1,021	Open
24	Broome	Vestal	GLENWOOD ROAD	BIG CHOCONUT CR	1.5 MI SE VESTAL CENTER	1935	2	506	Open
25	Broome	Fenton	RTE 79	PAGE BROOK	.9 MI E JCT SH 79 & SH 36	1992	2	1,621	Open

Source: Federal Highway Administration National Bridge Inventory, 2018.

The list below details the 25 most heavily traveled poor/structurally deficient bridges in the Buffalo-Niagara Falls area. ADT is average daily traffic.

Chart 9. Buffalo-Niagara Falls area poor/structurally deficient bridges with highest average daily traffic.

Rank	County	City	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
1	Erie	Amherst	RTE I290	RTE 952T	1.7 MI NW INT RTS263+I290	1982	5	51,953	Open
2	Erie	Buffalo	RTE 33	W L GAITER AVENUE	3.5 MI NE JCT RTS 33 & 5	1967	4	47,202	Open
3	Erie	Cheektowaga	RTE 952Q	RTE I90	1.2 MI N JCT I90 & SH 130	1950	6	38,021	Open
4	Erie	Lancaster	RTE I90	CSX RR (ABAND)	2.0 MI W JCT I90 < RTE 78	1953	4	34,461	Open
5	Erie	Hamburg	RTE 75	RTE I90	JCT RT 75 + I-90	1957	5	27,772	Open
6	Erie	Hamburg	RTE 179	RTE I90	MILE STRIP ROAD, RT. 179	1956	4	26,968	Open
7	Erie	Tonawanda	RTE 265	ERIE CANAL	JCT RTE 265 + CANAL	1956	4	17,111	Open
8	Erie	Buffalo	RTE 62	CSX TRANS/AMTRAK	0.2 MI S JCT RTS 62 + 130	1979	4	15,469	Open
9	Erie	Cheektowaga	RTE 33B	RTE I90, SCAJAQUADA CK B	JCT GENESEE ST + I-90	1951	4	14,582	Open
10	Erie	Hamburg	RTE 62	RTE I90	JCT RT 62 + I-90	1956	4	13,002	Open
11	Erie	Amherst	YOUNGS ROAD	BR ELLICOTT CREEK	.6 MI NE OF BUF INT AIRPT	1946	2	12,424	Open
12	Erie	Elma	RTE 400	BOWEN RD CR 361	0.5 MI SE JCT RT 400 +422	1968	2	11,906	Open
13	Erie	Elma	RTE 400	MAPLE ST CR 241	1.2 MI E JCT SH400 &SH242	1968	2	11,906	Open
14	Erie	Grand Island	RTE 324	RTE I190	INT N18 ON I-90	1954	2	9,871	Open
15	Erie	Buffalo	ERIE ST & PERRY	CSX TRANS/AMTRAK	0.7 MI NW RTE 5BUFFALO R'	1945	4	8,799	Open
16	Erie	Buffalo	CAZENOVIA STREET	CAZENOVIA CREEK	NW QUAD OF CAZENOVIA PARK	1953	2	8,575	Open
17	Niagara	Lockport	ROBINSON ROAD	ERIE CANAL	2.7 MI SW JCT SH78 & CANL	1965	2	7,824	Open
18	Erie	Buffalo	SOUTH OGDEN ST	BUFFALO RIVER	0.7 MI SW RTE 354 I-90 '	1974	2	7,455	Open
19	Erie	Akron	RTE 93	MURDER CREEK	0.2 MI S JCT RTS 93 + 267	1960	2	7,403	Open
20	Erie	Hamburg	Sowles Road - Coun	RTE I90	0.6 MI NE OF INT 57	1955	2	6,985	Open
21	Erie	Buffalo	SOUTH PARK AVE	CSX TRANSPRTATION	1.4 MI SE JCT I190 & SH 5	1981	4	6,764	Open
22	Niagara	Pendleton	BEAR RIDGE ROAD	TRB TONAWANDA CRK	2.6 MI SW PENDLETON CTR.	1982	2	5,826	Open
23	Erie	Collins	IRR RTE 438	CLEAR CREEK	4.5 MI E JCT RT 438 + I90	1935	2	4,948	Open
24	Erie	Hamburg	LAKEVIEW RD. CR65	RTE I90	4.1 MI.NE OF I-90 INT 57A	1956	2	4,818	Open
25	Erie	Hamburg	LAKEVIEW RD. CR65	RTE I90	4.1 MI.NE OF I-90 INT 57A	1956	2	4,818	Open

Source: Federal Highway Administration National Bridge Inventory, 2018.

The following 25 poor/structurally deficient bridges in the Buffalo-Niagara Falls area (carrying a minimum of 500 vehicles per day) have the lowest average rating for deck, substructure and superstructure. The Appendix includes the individual ratings for the deck, substructure and superstructure of each bridge listed below.

Chart 10. Buffalo-Niagara Falls area bridges with lowest average rating for deck, substructure and superstructure.

Rank	County	City	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
1	Erie	Akron	STATE STREET	MURDER CREEK	1.5 MI NE JCT 935 '	1938	2	732	Closed
2	Niagara	Lockport	NORTH ADAM ST	ERIE CANAL	AT LOCKPORT ON CANAL	1918	2	558	Closed
3	Erie	Buffalo	LOUISIANA STREET	RTE I190, CSX TRANS	0.8 MI E JCT RTS I190 < 5	1960	4	3,892	Open
4	Erie	Lancaster	STONY ROAD	ELLICOTT CREEK	1.5 MI E JCT SH78 & SH33	1956	2	2,705	Open
5	Erie	Lancaster	MAIN STREET	ELLICOTT CREEK	0.75 MI SE JCT I-90RT 78'	1922	2	557	Open
6	Erie	Hamburg	RTE 75	RTE I90	JCT RT 75 + I-90	1957	5	27,772	Open
7	Erie	North Collins	RTE 62	BR BIG SISTER CRK	.2 MI S JCT US 62 & SH249	1931	2	3,897	Open
8	Erie	West Seneca	MILL ROAD	CAZENOVIA CREEK	2.5 MI W JCT SH78 & US20	1930	2	3,093	Open
9	Erie	West Seneca	LEYDECKER ROAD	CAZENOVIA CREEK	1 MI W JCT SH400 & SH78	1934	2	1,673	Posted
10	Erie	Boston	TREVETT ROAD	EIGHTEEN MILE CRK	.8 MILE SE OF BOSTON	1930	2	1,038	Posted
11	Erie	Concord	SHARP STREET	SPRING BROOK	.8 MILE N OF SPRINGVILLE	1929	2	885	Posted
12	Erie	Buffalo	DEWEY AVENUE	CSXT	.5 MI N JCT SH 198 & SH33	1909	2	1,345	Open
13	Erie	North Collins	GENESEE ROAD	N BR CLEAR CREEK	2.5 MILES S OF LANGFORD	1935	2	558	Posted
14	Erie	Grand Island	RTE 324	RTE I190	INT N18 ON I-90	1954	2	9,871	Open
15	Erie	Buffalo	ERIE ST & PERRY	CSX TRANS/AMTRAK	0.7 MI NW RTE 5BUFFALO	1945	4	8,799	Open
16	Erie	Hamburg	LAKEVIEW RD.	RTE I90	4.1 MI.NE OF I-90 INT 57A	1956	2	4,818	Open
17	Erie	Hamburg	LAKEVIEW RD.	RTE I90	4.1 MI.NE OF I-90 INT 57A	1956	2	4,818	Open
18	Niagara	Wheatfield	NIAGARA ROAD	BERGHOLTZ CREEK	1.2 MI N OF ST JOHNSBURG	1929	2	4,083	Posted
19	Erie	Orchard Park	WARD DRIVE	BIG GULF CREEK	CHESTNUT RIDGE PARK	1933	2	3,931	Posted
20	Niagara	Wilson	RTE 425	E B TWELVEMILE CR	1.6 MI N JCT SH425 &SH104	1930	2	3,159	Open
21	Erie	Clarence	HEISE ROAD	RANSOM CREEK	1 MILE NW OF CLARENCE CTR	1931	2	2,514	Posted
22	Niagara	Newfane	WILSON-BURT RD	HOPKINS CREEK	2.2 MILES SW OF OLCOTT	1961	2	1,374	Open
23	Niagara	Royalton	SLAYTON SETTMT RD	ERIE CANAL	4 MI W JCT SH271 & CANAL	1911	1	1,046	Posted
24	Niagara	Royalton	GRISWOLD STREET	TRIB MUD CREEK	1.4 MI E OF WALCOTTSVILLE	1963	2	968	Posted
25	Erie	Aurora	BLAKELEY CORNERS RD	RTE 400	2.5 MI S JCT SH400 &US20A	1971	2	954	Open

Source: Federal Highway Administration National Bridge Inventory, 2018.

The list below details the 25 most heavily traveled poor/structurally deficient bridges in the Hudson Valley area. ADT is average daily traffic.

Chart 11. Hudson Valley area poor/structurally deficient bridges with highest average daily traffic.

Rank	County	City	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
1	Rockland	Clarkstown	PASCACK ROAD, PASCACK BR	RTE I87	0.9 MI E JCT RTS I87<45	1954	7	133,202	Open
2	Rockland	Nyack	RTE 59	RTE I87	0.2 MI S JCT RTS I87 & 9W	1953	9	131,991	Open
3	Rockland	Clarkstown	RTE 303	RTE I87	2.2 MI E INT I87 & PIP	1953	8	131,991	Open
4	Rockland	Chestnut Ridge	RTE 45	RTE I87	JCT OF RTS I87 & 45	1953	6	112,158	Open
5	Rockland	Ramapo	SPOOK ROCK RD	RTE I87	2.6 MI E JCT RTS I-87&202	1953	6	112,158	Open
6	Westchester	Mount Vernon	RTE 907G, BRONX RVR	RTE 907K	0.8 MI E INT & NYSTWAY87I	1983	2	77,826	Open
7	Westchester	Yonkers	RTE 907K	RTE 987D	JCT OF RTS SMRP + CCP	1940	6	75,986	Posted
8	Westchester	Dobbs Ferry	SAW MILL RIVER	RTE 987D	2.8 MI S JCT RTS SMRP<I87	1927	4	58,280	Open
9	Westchester	Yonkers	RTE I87, RTE 100	RTE 907K	JCT OF I87 & CCP	1954	6	55,259	Open
10	Orange	New Windsor	RTE I87	RTE 207	JCT OF I87 & S H 207	1953	4	51,718	Open
11	Rockland	Suffern	RTE 59, NJ TRANSIT RR	RTE I87	ORANGE AVE. RT.59 & NJ TR	1954	3	47,215	Open
12	Westchester	Mount Pleasant	RTE 987G	RTE 987F	0.2 MI S JCT RTS BRP+TSP	1972	3	44,475	Open
13	Ulster	Espous	RTE 213, WALLKILL RIVER	RTE I87	1.2 MI S OF TILLSON	1955	4	44,125	Open
14	Ulster	Rosendale	COUNTY ROAD 25	RTE I87	0.4 N JCT I-87< RONDOUT R	1955	4	44,125	Open
15	Ulster	Kingston	HURLEY AVE	RTE I87	0.4 MI SW JCT I-87 < 22	1953	4	44,125	Open
16	Westchester	Elmsford	RTE 119	RTE 987D	1.2 MI N JCT RTS SMRP&I87	1934	4	43,955	Open
17	Dutchess	Poughkeepsie	RTE 9	RAILROAD PLAZA	0.3 MI N JCT RTS 9+44+55	1966	4	35,377	Open
18	Westchester	Yonkers	SAW MILL RIVER, EX-NYCRR	RTE 987D	1.9 MI N JCT SMRP & CCP	1957	2	32,448	Open
19	Orange	Montgomery	RTE I84	NORFOLK SOUTHERN	1.1 MI E JCT I84 & SH 208	1968	2	26,859	Open
20	Dutchess	East Fishkill	RTE I84	HOSNER MOUNTAIN ROAD	.9 MI E JCT I84 & TSP	1968	2	26,344	Open
21	Orange	Wallkill	RTE I84	MNRR PJ LINE	3.4 MI E JCT SH 17 & I84	1969	2	23,963	Open
22	Orange	Montgomery	RTE I84	NORFOLK SOUTHERN RR	1.8 MI W JCT I84 & SH 208	1969	2	23,963	Open
23	Orange	Cornwall	RTE 9W	CR 107-QUAKER AVE	7 MI N JCT US 9W & SH 293	1941	4	23,898	Open
24	Orange	New Windsor	RTE 9W	MOODNA CREEK	2.1 MI S JCT RTS 9W+94	1932	3	23,898	Open
25	Westchester	Bedford	RTE I684	RTE 35	JCT RTS I684+35	1966	6	23,670	Open

Source: Federal Highway Administration National Bridge Inventory, 2018.

The following 25 poor/structurally deficient bridges in the Hudson Valley area (carrying a minimum of 500 vehicles per day) have the lowest average rating for deck, substructure and superstructure. The Appendix includes the individual ratings for the deck, substructure and superstructure of each bridge listed below.

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

Rank	County	City	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
1	Columbia	Hudson	CSX, LEASED AMTRA	FERRY STREET	IN HUDSON	1905	2	640	Closed
2	Orange	New Windsor	MILL STREET	QUASSAICK CREEK	IN NEWBURGH	1883	2	4,529	Closed
3	Westchester	Mount Vernon	UNIVERSAL MTL BLG	EAST 3RD STREET	1.3 MI NW OF PELHAM MANOI	1912	4	7,658	Open
4	Ulster	Kingston	DOCK STREET, RONDOU	RTE 984	12.5MI N JCT RTS 9W+299	1921	2	4,868	Posted
5	Westchester	Mamaroneck	MAMARONECK RIVER	TOMPKINS AVE	AT MAMARONECK	1900	2	3,286	Posted
6	Orange	Woodbury	PINE HILL ROAD	RTE I87	0.6 MI SE OF HIGHL. MILLS	1953	2	1,159	Open
7	Westchester	Greenburgh	RTE 9A	RTE 100C	JCT RTS 9A+100C	1936	3	12,610	Open
8	Rockland	Ramapo	RTE I87	COLLEGE ROAD CR81	3.1 MI E JCT RTS I87<202	1956	2	11,294	Open
9	Westchester	Mamaroneck	SHELDRAKE RIVER	WAVERLY AVENUE	AT MAMARONECK	1931	2	10,385	Posted
10	Westchester	Mount Vernon	BUILDING	SOUTH FULTON AVE	1.2 MI NW OF PELHAM MANOI	1912	4	8,933	Open
11	Columbia	Claverack	RTE 987G	RTE 23	JCT RT 23+TSP	1956	2	4,491	Posted
12	Orange	Warwick	SOUTH STREET	WAWAYANDA CREEK	IN THE VILLAGE OF WARWICK	1930	2	3,709	Posted
13	Ulster	Woodstock	SAW KILL	COUNTY ROAD 30	1.5 MI E OF WOODSTOCK	1931	2	2,280	Open
14	Dutchess	Pleasant Valley	RTE 115	LITTLE WAPPINGER CREEK	IN SALT POINT	1915	2	2,249	Posted
15	Putnam	Philipstown	CANOPUS CREEK	SPROUT BROOK ROAD	3.7 MI NE OF PEEKSKILL	1935	2	1,967	Posted
16	Westchester	Cortlandt	MNRR HU LINE	MONTROSE STA ROAD	IN MONTROSE	1937	2	1,894	Posted
17	Westchester	Mamaroneck	MAMARONECK RIVER	HILLSIDE AVENUE	AT MAMARONECK	1936	2	1,849	Posted
18	Westchester	Yonkers	RTE 907K	RTE 987D	JCT OF RTS SMRP + CCP	1940	6	75,986	Posted
19	Orange	New Windsor	RTE I87	RTE 207	JCT OF I87 & S H 207	1953	4	51,718	Open
20	Ulster	Ulster	ESOPUS CREEK	RTE 209	1.6 MI S JCT RTS 209+28	1962	2	12,896	Open
21	Rockland	Orangetown	CSX Transportation	ORANGEBURG ROAD	1.5 MI NW OF SPARKILL	2016	2	12,562	Open
22	Putnam	Brewster	MNRR HA LINE	RTE 6	0.9 MI W JCT RTS 6+22+202	1937	2	9,812	Open
23	Putnam	Putnam Valley	PEEKSKLL HOLLW CK	OSCAWANNA LAKE RD	2.9 MI W OF SHRUB OAK	1964	2	9,588	Open
24	Orange	Walden	RTE 52	TIN BROOK	0.4 MI E JCT RTS 52+208	1931	2	7,924	Open
25	Westchester	Cortlandt	CANOPUS(SPRT)BRK.	COUNTY ROAD 306	.2 MI E US209/ANNSVILLE	1929	2	7,882	Open

Source: Federal Highway Administration National Bridge Inventory, 2018.

The list below details the most heavily traveled poor/structurally deficient bridges in the Long Island area. ADT is average daily traffic.

Chart 13. Long Island area poor/structurally deficient bridges with highest average daily traffic.

Rank	County	City	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
1	Suffolk	Brookhaven	FLOYD PKWY EXT	NARROW BAY	SW OF MASTIC BEACH	1959	2	26,762	Posted
2	Suffolk	Brookhaven	HORSE BLOCK RD	LONG ISLAND AVE, LIRR MA	1.5 MI EAST OF MEDFORD	1940	2	21,097	Posted
3	Nassau	Great Neck Plaza	BAYVIEW AVENUE	LIRR PT WASH BR	2.2 MI SW OF MANHASSET	1955	4	12,151	Open
4	Nassau	Hempstead	PEARL STREET	MILL RIVER	1.0 MI NE EAST ROCKAWAY	1932	2	10,980	Open
5	Nassau	Great Neck Plaza	BARSTOW RD	LIRR PT WASH BR	1.4 MI SW OF MANHASSET	1935	2	6,678	Open

Source: Federal Highway Administration National Bridge Inventory, 2018.

The following poor/structurally deficient bridges in the Long Island area (carrying a minimum of 500 vehicles per day) have the lowest average rating for deck, substructure and superstructure. The Appendix includes the individual ratings for the deck, substructure and superstructure of each bridge listed below.

Chart 14. Long Island area bridges with lowest average rating for deck, substructure and superstructure.

Rank	County	City	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
1	Nassau	Great Neck Plaza	BARSTOW RD	LIRR PT WASH BR	1.4 MI SW OF MANHASSET	1935	2	6,678	Open
2	Suffolk	Brookhaven	FLOYD PKWY EXT	NARROW BAY	SW OF MASTIC BEACH	1959	2	26,762	Posted
3	Suffolk	Brookhaven	HORSE BLOCK RD	LONG ISLAND AVE, LIRR MA	1.5 MI EAST OF MEDFORD	1940	2	21,097	Posted
4	Nassau	Great Neck Plaza	BAYVIEW AVENUE	LIRR PT WASH BR	2.2 MI SW OF MANHASSET	1955	4	12,151	Open
5	Nassau	Hempstead	PEARL STREET	MILL RIVER	1.0 MI NE EAST ROCKAWAY	1932	2	10,980	Open

Source: Federal Highway Administration National Bridge Inventory, 2018.

The list below details the 25 most heavily traveled poor/structurally deficient bridges in the New York City area. ADT is average daily traffic.

Chart 15. New York City area poor/structurally deficient bridges with highest average daily traffic.

Rank	County	City	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
1	Kings	New York City	RTE I278	6TH AVENUE	JCT PROSPECT EXPY & I278	1962	6	189,441	Open
2	Kings	New York City	RTE 907C	MILL BASIN	7.7 MI SW I678+BELT PKWY	1941	6	167,236	Open
3	Kings	New York City	RTE 907C	SHEEPSHEAD BAY RD	.8MI E BELT PKY+OCEAN PKY	1942	6	160,861	Open
4	Kings	New York City	RTE 907C	OCEAN AVENUE	.9 MI E BELT PKY &OCN PKY	1942	6	160,861	Open
5	Kings	New York City	RTE I278	FLUSHING AVENUE	3.3 MI SW JCT I278 + I495	1954	6	145,240	Open
6	New York	New York City	RTE 907	EAST RIVER SHORE	EAST RIVER SHORE	1985	1	142,461	Open
7	New York	New York City	RTE 907V	AMTRAK-W SIDE CON	4 MI NE ROUTE 9A+79 ST	1939	1	141,734	Open
8	Bronx	New York City	RTE I278	BRUCKNER BLVD, 138TH STR	1 MI NE I278+I87	1960	4	138,029	Open
9	New York	New York City	BROOKLYN BRIDGE	I278 BKN-QNS EXP, EAST R	BROOKLYN BR OVER EAST RVR	1883	6	136,657	Posted
10	Queens	New York City	RTE I678	FLUSHING CREEK, MEADOW L	JCT I495+RTE 678	1963	6	135,408	Open
11	Kings	New York City	RTE I278	RTE I278, CADMAN PLAZA E	0.1 MI E JCT I278 & BK BR	1948	2	134,789	Open
12	Bronx	New York City	RTE I95	RTE 907F	1.4 MI NW I295 + I95	1958	8	134,784	Open
13	Bronx	New York City	RTE I95	RTE I895, RELOC BRONX RI	JCT I95+I278	1951	6	132,543	Open
14	Queens	New York City	RTE I678	NORTH CONDUIT AV	JCT RTE 678+RTE 27	1948	8	130,266	Open
15	Queens	New York City	RTE 907A	TOTTEN AVE	.4 MI E JCT I295 & C I PK	1941	6	126,744	Open
16	Kings	New York City	RTE I278	RTE I278, BROOKLYN BRIDG	ADJACENT TO YORK STREET	1944	3	119,669	Open
17	Bronx	New York City	RTE I87	METRO NO COMMUTER	1.5 MI S JCT I87 & I95	1954	3	118,682	Open
18	Queens	New York City	RTE I295	END APPR RAMP B, EAST RI	295I OVER EAST RIVER	1961	6	115,453	Open
19	Bronx	New York City	RTE I87	ALEXANDER AVENUE	2.7 MILES S JCT I87 & I95	1960	6	110,648	Open
20	Bronx	New York City	RTE 907H	MORRIS PARK AVE, NYC RAP	.4 MI N I95+BX RIVER PKWY	1951	6	110,518	Open
21	Bronx	New York City	RTE 907H	E TREMONT AVENUE	.2 MILE N JCT I95 & BRP	1951	6	110,518	Open
22	Bronx	New York City	RTE 907H	AMTRAK/CSXT/P&W	.1 MILE N JCT I95 & BRP	1951	6	110,518	Open
23	Kings	New York City	RTE I278	RTE I278, YORK STREET	ADJACENT TO YORK STREET	1944	3	106,102	Open
24	New York	New York City	RTE 907P	RAMP TO N.B HRD	3.6 MI NE JCT FDR & SH 25	1958	3	97,039	Open
25	Bronx	New York City	RTE 907H	METRO NO COMMUTER	4.4 MI N JCT I95 & BR PKY	1952	6	94,386	Open

Source: Federal Highway Administration National Bridge Inventory, 2018.

The following 25 poor/structurally deficient bridges in the New York City area (carrying a minimum of 500 vehicles per day) have the lowest average rating for deck, substructure and superstructure. The Appendix includes the individual ratings for the deck, substructure and superstructure of each bridge listed below.

Chart 16. New York City area bridges with lowest average rating for deck, substructure and superstructure.

Rank	County	City	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
1	Bronx	New York City	RTE I95	RTE 907F	1.4 MI NW I295 + I95	1958	8	134,784	Open
2	Bronx	New York City	RTE 907H	MORRIS PARK AVE, NYC RAP	.4 MI N I95+BX RIVER PKWY	1951	6	110,518	Open
3	Bronx	New York City	RTE 907H	AMTRAK/CSXT/P&W	.1 MILE N JCT I95 & BRP	1951	6	110,518	Open
4	Bronx	New York City	RTE 908F	BRONX RIVER	JCT MOSHOLU PKY+BRONX RIV	1905	4	30,667	Open
5	Kings	New York City	RTE 907C	MILL BASIN	7.7 MI SW I678+BELT PKWY	1941	6	167,236	Open
6	Queens	New York City	RTE I678	FLUSHING CREEK, MEADOW L	JCT I495+RTE 678	1963	6	135,408	Open
7	Queens	New York City	RTE I678	NORTH CONDUIT AV	JCT RTE 678+RTE 27	1948	8	130,266	Open
8	Bronx	New York City	RTE 907H	E TREMONT AVENUE	.2 MILE N JCT I95 & BRP	1951	6	110,518	Open
9	Bronx	New York City	RTE 907H	METRO NO COMMUTER	4.4 MI N JCT I95 & BR PKY	1952	6	94,386	Open
10	New York	New York City	RTE 900	FROM HARLEM RV DR, QNS T	ON RANDALLS ISLAND	1936	6	85,985	Open
11	Queens	New York City	ASTORIA BOULEVARD	RTE I278	JCT OF GCP & BQE EAST LEG	1942	3	36,255	Open
12	New York	New York City	RTE 9	METRO NO COMMUTER	JCT US 9 & HARLEM RIVER	1961	6	30,161	Open
13	Bronx	New York City	BE SERVICE ROAD	WESTCHESTER CREEK	JCT.I95-I678-I295 & I278	1971	4	16,913	Open
14	Bronx	New York City	BE SERVICE RD NB	RELIEF	JCT I95/I678/I295 & I278	1971	1	16,913	Open
15	Queens	New York City	FARMERS BOULEVARD	RTE 907D, RTE 907D	1.8 MI E JCT I678 & BL PK	1940	4	12,620	Open
16	New York	New York City	PEARL ST TO BKLYN	TO PARK DEPT YARD	AT BROOKLYN BR.OVER E.RVR	1964	1	6,611	Posted
17	Bronx	New York City	RTE 907F	RTE 908A, RTE 908A	.4 MI SW I95+HTCHSN R PKY	1942	6	46,856	Open
18	Kings	New York City	OCEAN AVENUE	NYCTA BRIGHTON LN	AT KENSINGTON	1916	2	14,721	Open
19	Kings	New York City	CROOKE AVENUE	NYCTA BMT LINE	IN KENSINGTON	1935	1	1,899	Posted
20	Kings	New York City	RTE I278	FLUSHING AVENUE	3.3 MI SW JCT I278 + I495	1954	6	145,240	Open
21	New York	New York City	RTE 907	EAST RIVER SHORE	EAST RIVER SHORE	1985	1	142,461	Open
22	Bronx	New York City	RTE I278	BRUCKNER BLVD, 138TH STR	1 MI NE I278+I87	1960	4	138,029	Open
23	Bronx	New York City	RTE I87	METRO NO COMMUTER	1.5 MI S JCT I87 & I95	1954	3	118,682	Open
24	Kings	New York City	RTE I278	RTE I278, YORK STREET	ADJACENT TO YORK STREET	1944	3	106,102	Open
25	Queens	New York City	RTE 24	RTE 907A, RTE 907A	2.4 MI S JCT GCP & CI PKY	1939	6	43,692	Open

Source: Federal Highway Administration National Bridge Inventory, 2018.

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

Chart 17. Rochester area poor/structurally deficient bridges with highest average daily traffic.

Rank	County	City	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
1	Monroe	Brighton	RTE I590	SOUTH CLINTON AVENUE	1 MI E JCT I-390 & 15A	1981	2	80,929	Open
2	Monroe	Perinton	RTE I490	ERIE CANAL	JCT C+I490 PERINTON	1955	4	63,334	Open
3	Monroe	Gates	RTE 390	TROLLEY BOULEVARD, ABAND	2.5MI S JCT ROL SB + 104	1971	3	51,741	Open
4	Monroe	Gates	RTE 390	TROLLEY BOULEVARD, ABAND	2.5MI S JCT ROL NB + 104	1971	3	51,741	Open
5	Monroe	Gates	RTE 390	ERIE CANAL	JCT ST BARGE C + RTE 47SB	1971	4	51,741	Open
6	Monroe	Greece	RTE 390	LATONA RD	0.6MI S JCT ROL SB+104	1971	3	42,276	Open
7	Monroe	Greece	RTE 390	LATONA RD	0.6MI S JCT ROL NB+104	1971	3	42,276	Open
8	Monroe	Greece	RTE 390	WEILAND ROAD	0.8MI S JCT ROL NB+104	1971	3	42,276	Open
9	Ontario	Phelps	RTE I90	CANANDAIGUA OUTLE	0.4 MI W OF EXIT 42 90I	1953	4	40,586	Open
10	Ontario	Phelps	RTE I90	NORFOLK SOUTHERN	0.4 MI E OF EXIT 42 90I	1953	4	36,791	Open
11	Monroe	Penfield	RTE 441	IRONDEQUOIT CREEK	0.8MI W JCT RTS441+253	1971	5	34,099	Open
12	Monroe	Henrietta	RTE I390	RTE 253	JCT OF RTS 390I & 253	1980	4	31,059	Open
13	Monroe	Chili	RTE I90	RTE 383	JCT SH 383 & NYS THRUWAY	1954	4	29,702	Open
14	Monroe	Perinton	RTE 31	RTE I490	2.9MI NW JCT RTS I490+96	1954	4	28,039	Open
15	Monroe	Webster	RTE 104	HARD ROAD	1.6MI W RTES 250 & 104 WB	1986	2	25,303	Open
16	Monroe	Webster	RTE 104	HARD ROAD	1.6MI W RTES 250 & 104 EB	1986	2	25,303	Open
17	Monroe	Greece	RTE 390	MAIDEN LANE	1.2 MI N JCT SH390 &SH104	1983	3	24,121	Open
18	Monroe	Rochester	E MAIN ST	RTE 940T	JCT E MAIN ST & I.L.	1965	6	20,846	Open
19	Ontario	Manchest	RTE I90	FALL BROOK	3.9 MI E OF EXIT 43 90I	1953	2	20,293	Open
20	Monroe	Irondequo	PORTLAND AVE	RTE 104	1.8MI E JCT104+GENESEE R	1969	4	19,035	Open
21	Ontario	Manchest	RTE I90	FALL BROOK	3.9 MI E OF EXIT 43 90I	1953	2	18,825	Open
22	Monroe	Rochester	CULVER ROAD	RTE I490	2.2MI W JCT I490EAST+441	1959	3	18,721	Open
23	Monroe	Gates	RTE 31	ERIE CANAL	JCT BARGEC+31 W SIDE ROCH	1937	2	15,323	Open
24	Monroe	Rochester	NORTH STREET	RTE 940T	JCT OF NORTH ST&I.L.	1962	4	15,046	Open
25	Ontario	Victor	RTE 96	MUD CREEK	1.4MI W JCT RTS 96 + 332	1928	2	14,791	Open

Source: Federal Highway Administration National Bridge Inventory, 2018.

The following 25 poor/structurally deficient bridges in the Rochester area (carrying a minimum of 500 vehicles per day) have the lowest average rating for deck, substructure and superstructure. The Appendix includes the individual ratings for the deck, substructure and superstructure of each bridge listed below.

Chart 18. Rochester area bridges with lowest average rating for deck, substructure and superstructure.

Rank	County	City	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
1	Monroe	Gates	RTE 390	TROLLEY BOULEVARD, ABAND	2.5MI S JCT ROL NB + 104	1971	3	51,741	Open
2	Monroe	Gates	RTE 390	TROLLEY BOULEVARD, ABAND	2.5MI S JCT ROL SB + 104	1971	3	51,741	Open
3	Monroe	Chili	RTE 386	BLACK CREEK	JCT RTE 251+BLACK CREEK	1931	2	2,374	Posted
4	Orleans	Albion	BROWN STREET	Erie Canal Heritage Trail	0.8MI E JCT BARGE C+RTE98	1912	1	1,219	Posted
5	Ontario	Phelps	RTE I90	CANANDAIGUA OUTLE	0.4 MI W OF EXIT 42 90I	1953	4	40,586	Open
6	Ontario	Victor	RTE 96	MUD CREEK	1.4MI W JCT RTS 96 + 332	1928	2	14,791	Open
7	Monroe	Chili	RTE I490	CSX TRANS/W SHORE	0.6MI E JCT RTSI490WB+259	1963	2	13,715	Open
8	Monroe	Perinton	MARSH ROAD	Canal Trailway, ERIE CAN	0.3MI W JCT BARGE C+I490	1912	1	3,459	Posted
9	Wayne	Palmyra	DIVISION STREET	ERIE CANAL	0.4 MI W JCT RTE 21 + C	1913	2	2,468	Closed
10	Ontario	Naples	RTE 245	NAPLES CRK OVFLOW	.1 MI E JCT SH 245 & SH21	1929	2	2,141	Open
11	Orleans	Ridgeway	KNOWLESVILLE RD	ERIE CANAL	4.3 MI E JCT BG CNL &SH63	1910	2	1,059	Closed
12	Monroe	Gates	RTE 31	ERIE CANAL	JCT BARGEC+31 W SIDE ROCH	1937	2	15,323	Open
13	Monroe	Greece	RTE 18	SMITH CREEK	1.6MI E JCT RTS 18&261	1931	2	8,923	Posted
14	Wayne	Clyde	RTE 414	CSX TRANS/AMTRAK, ERIE C	JCT OF SH 414 & BARGE CNL	1970	2	2,665	Posted
15	Monroe	Rochester	AVERILL AVENUE	RTE I490	JCT I490 EAST + AVERILL	1959	2	2,401	Open
16	Monroe	Spencerpor	MARTHA STREET	Canal Trailway, ERIE CAN	0.2MI W JCT BARGE C + 259	1908	1	993	Posted
17	Wayne	Arcadia	COUNTY HOUSE RD	ERIE CANAL	2.8 MI NE JCT RTE 88 + C	1914	1	993	Posted
18	Wayne	Arcadia	ARCAD-ZURIC ROAD	GANARGUA CREEK	4.4 MILES NE OF NEWARK	1964	2	852	Open
19	Orleans	Murray	MON-ORL CO LNE RD	E BR SANDY CREEK	2.9 MILES NW OF ALABAMA	1928	2	806	Open
20	Orleans	Murray	BENNETTS CORS RD	Erie Canal Tow Path Trai	1.1MI E JCT BARGE C+237	1911	1	647	Posted
21	Monroe	Chili	RTE I90	RTE 383	JCT SH 383 & NYS THRUWAY	1954	4	29,702	Open
22	Ontario	Mancheste	RTE I90	FALL BROOK	3.9 MI E OF EXIT 43 90I	1953	2	20,293	Open
23	Monroe	Rochester	CULVER ROAD	RTE I490	2.2MI W JCT I490EAST+441	1959	3	18,721	Open
24	Ontario	Mancheste	RTE 21	RTE I90	JCT RTS 21 + NYS THRUWAY	1953	2	13,383	Open
25	Monroe	Rochester	ST PAUL STREET	RTE 940T	JCT OF ST PAUL ST&I.L.	1962	6	13,157	Open

Source: Federal Highway Administration National Bridge Inventory, 2018.

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

Chart 19. Syracuse area poor/structurally deficient bridges with highest average daily traffic.

Rank	County	City	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
1	Onondaga	Syracuse	RTE I690	N TOWNSEND STREET	0.3MI E JCT 690I WB+ I-81	1968	3	68,620	Open
2	Onondaga	Syracuse	RTE I690	N CLINTON STREET	.8 MI E JCT I-690 + 298	1968	3	68,620	Open
3	Onondaga	Syracuse	RTE I690	RTE I81	JCT OF RTS I-690 WB +I-81	1968	2	68,620	Open
4	Onondaga	Geddes	RTE I690	RTE I90	JCT I90 & I690	1954	6	55,150	Open
5	Onondaga	Salina	RTE I81	RTE 11, S BAY RD - CR 20	JCT US 11 & I81	1989	3	51,033	Open
6	Madison	Canastota	RTE I90	CANASTOTA CREEK	0.7 MI W JCT I90<INT 34	1953	4	40,119	Open
7	Onondaga	Salina	RTE I90	CSX RR	1MI NW THRUWAY EXIT 35	1951	4	37,980	Open
8	Onondaga	Salina	RTE I90	VINE ST CR 51	2.1 MI NW JCT I90 & I81	1949	4	37,980	Open
9	Madison	Oneida	RTE I90	N LAKE ST	4 MI W EXIT 33 OF I90	1953	4	36,256	Open
10	Onondaga	Salina	RTE I90	ONONDAGA PARK RD	.6 MI W JCT370<90I ON 90I	1954	4	34,483	Open
11	Onondaga	Geddes	RTE I90	CSX TRANSPORTATIO	.5 MI E EXIT 39 ON I90	1954	4	34,483	Open
12	Onondaga	Syracuse	RTE I690	N.FRANKLIN STREET	.9 MI E JCT RTS 690I +298	1968	3	34,310	Open
13	Onondaga	Salina	RTE I90	BEAR TRAP CREEK	.1 MI E JCT I81 & I90	1946	5	32,326	Open
14	Onondaga	Clay	RTE 481	MUD CREEK	2.3 MI SE JCT RTS 481$ 31	1993	4	29,472	Open
15	Onondaga	De Witt	RTE I481	KIRKVILLE RD-CR53	.5 MI N JCT I481 SB & SH2	1972	3	22,378	Open
16	Onondaga	Manlius	RTE I90	CHITTENANGO CREEK	INT I90 < CHITTENANGO CRK	1953	2	20,263	Open
17	Onondaga	Manlius	RTE I90	LIMESTONE CREEK	2 MI E INTERCHANGE 34A	1950	2	20,263	Open
18	Madison	Lenox	RTE I90	COWASELON CREEK	.5 MI E JCT I90<INT 34	1953	2	18,128	Open
19	Onondaga	De Witt	RTE 290	BUTTERNUT CREEK	.1 MI E JCT SH 290 & I481	1984	2	17,544	Open
20	Onondaga	Cicero	TAFT ROAD	RTE I81	1.6 MI NE JCT RTS I-81+11	1959	4	16,071	Open
21	Onondaga	De Witt	RTE 298	RTE I90	JCT OF SH 298 & I90	1953	2	15,114	Open
22	Madison	Canastota	RTE 13	RTE I90	NORTH PETERBORO ST RT 13	1954	2	11,836	Open
23	Onondaga	Syracuse	E BRIGHTON AVE	NY S & W/ONTRACK	JUST N.OF I481 - EXIT 1	1985	4	11,242	Open
24	Oswego	West Monr	RTE 49	BIG BAY CREEK	1.8 MI E JCT SH 49 & I81	1941	2	10,667	Posted
25	Onondaga	Cicero	LAKESHORE ROAD	MAPLE CREEK	1.7 MI E OF CICERO CENTER	1965	2	8,803	Open

Source: Federal Highway Administration National Bridge Inventory, 2018.

The following 25 poor/structurally deficient bridges in the Syracuse area (carrying a minimum of 500 vehicles per day) have the lowest average rating for deck, substructure and superstructure. The Appendix includes the individual ratings for the deck, substructure and superstructure of each bridge listed below.

Chart 20. Syracuse area bridges with lowest average rating for deck, substructure and superstructure.

Rank	County	City	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
1	Onondaga	Salina	RTE I90	CSX RR	1MI NW THRUWAY EXIT 35	1951	4	37,980	Open
2	Onondaga	Geddes	RTE I90	CSX TRANSPORTATIO	.5 MI E EXIT 39 ON I90	1954	4	34,483	Open
3	Onondaga	Onondaga	Rockwell Road	RTE I81	2.0 MI S JCT RTS I-81+173	1963	2	893	Open
4	Madison	Oneida	CR 13	OLD ERIE CANAL	AT CITY OF ONEIDA	1925	2	714	Posted
5	Madison	Sullivan	CANASERAGA RD	OLD ERIE CANAL	W CANASTOTA E CHITTENANGO	1927	2	515	Posted
6	Onondaga	Salina	RTE I90	VINE ST CR 51	2.1 MI NW JCT I90 & I81	1949	4	37,980	Open
7	Madison	Canastota	RTE 13	RTE I90	NORTH PETERBORO ST RT 13	1954	2	11,836	Open
8	Madison	Oneida	RTE 46	ONEIDA CREEK	0.1 MI N JCT RTS 46 & 316	1957	2	2,786	Open
9	Onondaga	Van Buren	CANTON STREET	RTE I90	3.5MI W INT 39 ON I90	1954	2	2,503	Open
10	Onondaga	Pompey	RTE 20	LIMESTONE CREEK	6.4 MI NE JCT RTS 20 + 91	1931	2	1,958	Open
11	Onondaga	Skaneateles	Kelley Street	Skaneateles Creek	N OF US20 IN SKANEATELES	1920	2	1,576	Posted
12	Madison	Cazenovia	CR65 MILL STREET	E BR LIMESTONE CREEK	AT EARLVILLE	1930	2	878	Open
13	Oswego	Sandy Creek	MILLER ROAD	RTE I81	RTE I-81 3. MI S JEFF. CL	1961	2	502	Open
14	Oswego	Granby	RTE 48	TANNERY CREEK	2.3 MI N JCT SH 48 & SH 3	1932	2	4,125	Open
15	Oswego	Mexico	RTE 69	LITT SALMON RIVER	.3 MI W JCT SH 69 & US 11	1934	2	2,705	Open
16	Onondaga	Syracuse	RTE I690	RTE I81	JCT OF RTS I-690 WB +I-81	1968	2	68,620	Open
17	Madison	Oneida	RTE I90	N LAKE ST	4 MI W EXIT 33 OF I90	1953	4	36,256	Open
18	Onondaga	Manlius	RTE I90	CHITTENANGO CREEK	INT I90 < CHITTENANGO CRK	1953	2	20,263	Open
19	Onondaga	Manlius	RTE I90	LIMESTONE CREEK	2 MI E INTERCHANGE 34A	1950	2	20,263	Open
20	Madison	Lenox	RTE I90	COWASELON CREEK	.5 MI E JCT I90<INT 34	1953	2	18,128	Open
21	Onondaga	Cicero	TAFT ROAD	RTE I81	1.6 MI NE JCT RTS I-81+11	1959	4	16,071	Open
22	Onondaga	De Witt	RTE 298	RTE I90	JCT OF SH 298 & I90	1953	2	15,114	Open
23	Oswego	West Monroe	RTE 49	BIG BAY CREEK	1.8 MI E JCT SH 49 & I81	1941	2	10,667	Posted
24	Madison	Oneida	RTE 46	RTE I90	0.3 MI S JCT RTS 316 + 46	1954	2	7,529	Open
25	Onondaga	Cicero	RTE 11	ONEIDA RIVER	JCT RTE 11 + ONEIDA LAKE	1932	2	6,884	Open

Source: Federal Highway Administration National Bridge Inventory, 2018.

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

Chart 21. Utica area poor/structurally deficient bridges with highest average daily traffic.

Rank	County	City	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
1	Oneida	Westmoreland	RTE I90	NYO&W RR (ABAND)	1.65 MI W INT 32 ON I-90	1954	4	28,725	Open
2	Oneida	New Hartford	RTE 8	RTE 921E	05MI S JCT RTS 8+12	1967	4	28,519	Open
3	Oneida	Whitesboro	RTE I90	RTE 69	3.0MI W INT 31 UTICA NY	1954	4	23,699	Open
4	Oneida	Utica	RTE 8	RTE 5	JCT 5+8 NEW HARTFORD	1960	6	22,020	Open
5	Oneida	Verona	RTE 365	RTE I90	.3 MI S JCT SH234 & SH365	1954	5	19,283	Open
6	Oneida	Utica	RTE 5	SAUQUOIT CREEK	02MI N JCT RTS 5+8	1960	3	12,742	Open
7	Oneida	Rome	DOMINICK STREET	MOHAWK RIVER	IN ROME	1929	4	12,333	Open
8	Oneida	New Hartford	RTE 8	KELLOGG ROAD-CR26	1.9 MI S JCT SH 8 & SH 12	1969	2	11,713	Open
9	Oneida	New Hartford	RTE 8	KELLOGG ROAD-CR26	1.9 MI S JCT SH 8 & SH 12	1969	2	11,713	Open
10	Oneida	Whitestown	JUDD ROAD	RTE I90	7.63 MI W INT 31 ON I-90	1952	2	8,492	Open
11	Oneida	Westmoreland	RTE 233	DEANS CREEK	3 MI S OF EXIT 32 OF I90	1927	2	7,687	Open
12	Oneida	Floyd	RTE 365	DRY CREEK	21MI SW JCT RTS 365+291	1975	2	5,946	Open
13	Oneida	Utica	TRENTON AVENUE	REALL CREEK	IN UTICA	1933	2	5,462	Open
14	Oneida	Utica	LELAND AVENUE	MOHAWK RIVER	CITY OF UTICA	1980	2	4,465	Open
15	Oneida	Verona	RTE 46	OLD ERIE CANAL	HAMLET OF DURHAMVILLE	1955	2	2,786	Open
16	Oneida	Trenton	RTE 28	CINCINNATI CREEK	.5 MI E JCT RTS 12 & 28	1937	2	2,051	Open
17	Oneida	Western	RTE 46	STRINGER BROOK	1.7 MI N JCT RTS 46 & 274	1931	2	1,810	Open
18	Oneida	Verona	CENTER STREET	OLD ERIE CANAL	AT DURHAMVILLE	1927	2	1,327	Posted
19	Oneida	Verona	CR50 MAIN STREET	OLD ERIE CANAL	IN NEW LONDON	1925	2	1,324	Posted
20	Oneida	Verona	HIGGINSVILLE ROAD	Mud road or clearing use	3.3 MI.E.SH 13 & CANAL	1908	1	1,193	Closed
21	Oneida	Boonville	MOOSE RIVER ROAD	FRSTPT CNL FEEDER	NE OF BOONVILLE	1929	2	1,053	Open
22	Oneida	Camden	BREWER ROAD	W BR FISH CREEK	1 MI SE OF CAMDEN	1963	2	812	Posted
23	Oneida	Verona	GERMANY ROAD	OLD ERIE CANAL	4.3 MI.S.W.OF NEW LONDON	1927	2	717	Posted
24	Oneida	Rome	RAILROAD STREET	MOHAWK RIVER	IN ROME	1900	2	681	Open
25	Oneida	Verona	RANDEL RD	RTE I90	3.7 MI W EXIT 33 OF I90	1953	2	666	Open

Source: Federal Highway Administration National Bridge Inventory, 2018.

The following 25 poor/structurally deficient bridges in the Utica area (carrying a minimum of 500 vehicles per day) have the lowest average rating for deck, substructure and superstructure. The Appendix includes the individual ratings for the deck, substructure and superstructure of each bridge listed below.

Chart 22. Utica area bridges with lowest average rating for deck, substructure and superstructure.

Rank	County	City	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
1	Oneida	Verona	HIGGINSVILLE ROAD	Mud road or clearing use	3.3 MI.E.SH 13 & CANAL	1908	1	1,193	Closed
2	Oneida	Whitesboro	RTE I90	RTE 69	3.0MI W INT 31 UTICA NY	1954	4	23,699	Open
3	Oneida	Whitestown	JUDD ROAD	RTE I90	7.63 MI W INT 31 ON I-90	1952	2	8,492	Open
4	Oneida	Verona	CENTER STREET	OLD ERIE CANAL	AT DURHAMVILLE	1927	2	1,327	Posted
5	Oneida	Camden	BREWER ROAD	W BR FISH CREEK	1 MI SE OF CAMDEN	1963	2	812	Posted
6	Oneida	Verona	GERMANY ROAD	OLD ERIE CANAL	4.3 MI.S.W.OF NEW LONDON	1927	2	717	Posted
7	Oneida	Rome	RAILROAD STREET	MOHAWK RIVER	IN ROME	1900	2	681	Open
8	Oneida	Rome	DOMINICK STREET	MOHAWK RIVER	IN ROME	1929	4	12,333	Open
9	Oneida	Westmoreland	RTE I90	NYO&W RR (ABAND)	1.65 MI W INT 32 ON I-90	1954	4	28,725	Open
10	Oneida	New Hartford	RTE 8	RTE 921E	05MI S JCT RTS 8+12	1967	4	28,519	Open
11	Oneida	Utica	RTE 8	RTE 5	JCT 5+8 NEW HARTFORD	1960	6	22,020	Open
12	Oneida	Utica	TRENTON AVENUE	REALL CREEK	IN UTICA	1933	2	5,462	Open
13	Oneida	Trenton	RTE 28	CINCINNATI CREEK	.5 MI E JCT RTS 12 & 28	1937	2	2,051	Open
14	Oneida	Verona	CR50 MAIN STREET	OLD ERIE CANAL	IN NEW LONDON	1925	2	1,324	Posted
15	Oneida	Trenton	CR56 OLD POLAND RD	CINCINNATI CREEK	.2 MI W SH12 AT BARNEVELD	1930	2	531	Posted
16	Oneida	Verona	RTE 365	RTE I90	.3 MI S JCT SH234 & SH365	1954	5	19,283	Open
17	Oneida	Utica	RTE 5	SAUQUOIT CREEK	02MI N JCT RTS 5+8	1960	3	12,742	Open
18	Oneida	Westmoreland	RTE 233	DEANS CREEK	3 MI S OF EXIT 32 OF I90	1927	2	7,687	Open
19	Oneida	Boonville	MOOSE RIVER ROAD	FRSTPT CNL FEEDER	NE OF BOONVILLE	1929	2	1,053	Open
20	Oneida	Vernon	SIMMONS ROAD	SCONONDOA CREEK	3.6 MI SE OF VERNON	1939	2	605	Open
21	Oneida	Western	RTE 46	STRINGER BROOK	1.7 MI N JCT RTS 46 & 274	1931	2	1,810	Open
22	Oneida	Verona	RANDEL RD	RTE I90	3.7 MI W EXIT 33 OF I90	1953	2	666	Open
23	Oneida	Westmoreland	BARTLETT RD CR 42	RTE I90	2.05 MI W INT 32 ON I-90	1954	2	626	Open
24	Oneida	New Hartford	RTE 8	KELLOGG ROAD-CR26	1.9 MI S JCT SH 8 & SH 12	1969	2	11,713	Open
25	Oneida	New Hartford	RTE 8	KELLOGG ROAD-CR26	1.9 MI S JCT SH 8 & SH 12	1969	2	11,713	Open

Source: Federal Highway Administration National Bridge Inventory, 2018.

TRANSPORTATION FUNDING AND PRESERVING NEW YORK'S BRIDGES

Investment in New York'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.

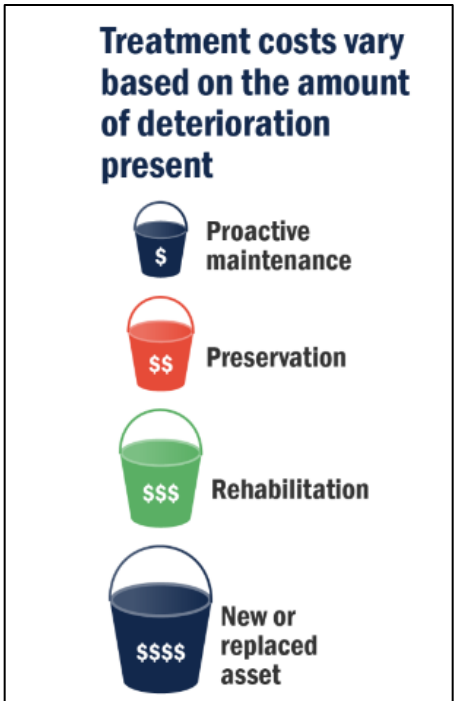
The Federal Highway Administration estimates that it would cost $3.6 billion to replace or rehabilitate all poor/structurally deficient bridges in New York.[8]

Depending on the type of bridge, the condition and type of deterioration of the bridge, and typical traffic levels, one of the following types of improvements may be necessary. The cost of bridge improvements required increases based on the amount of deterioration present. The Illinois Department of Transportation has estimated the following statewide average costs for each type of improvement, including both preconstruction and construction items.[9]

Construction/Reconstruction: Complete replacement of the bridge, typically ranges in price from $300 to $375 per square foot of deck area.

Rehabilitation: This includes rehabilitation to, or replacement of, one or more of the major bridge elements, such as deck replacement, superstructure replacement, or substructure rehabilitation, ranging in price from $185 to $233 per square foot of deck area.

Preservation: This includes low-cost treatments applied to bridges in relatively good condition to slow their rate of deterioration, including washing, deck sealing, concrete substructure sealing, and painting, ranging in price from $5 to $50 per square foot of deck area.



Illinois DOT Transportation Asset Management Plan, 2018.

Maintenance: This include planned activities to a specific bridge component, such as expansion joint replacement, bearing replacement, steel repair, concrete repair, deck patching, and overlays. The average cost of these maintenance treatments is $30 per square foot of deck area.

A 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.[10]

Current design guidelines and construction materials may raise the expected service life of new bridges to 75 years or longer.[11] 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.[12]

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. [13]

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.[14] 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 and 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/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.

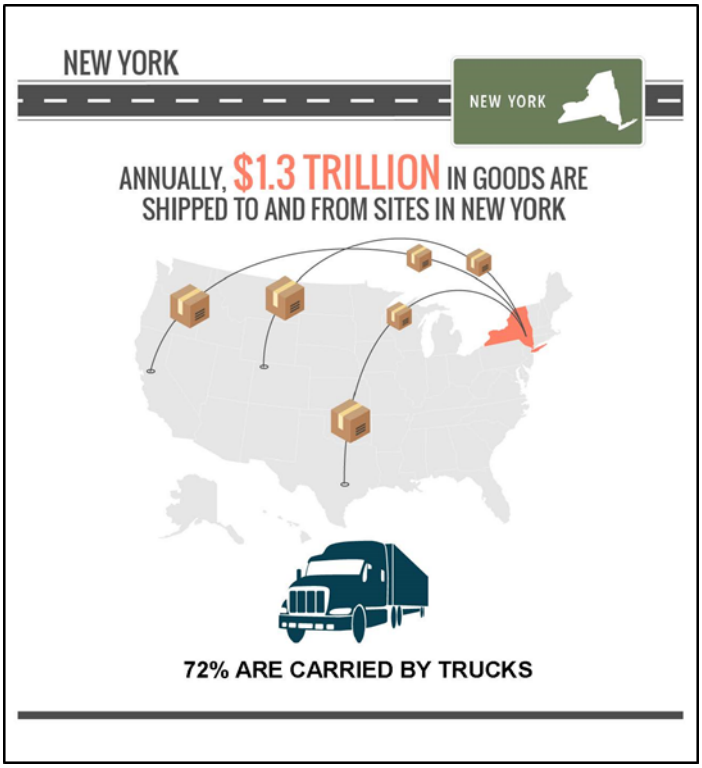
IMPORTANCE OF TRANSPORTATION TO ECONOMIC GROWTH

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 New York, particularly to the state's agriculture, industrial manufacturing 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 market to meet this demand, a process that adds to truck traffic on the state's highways, bridges and major arterial roads.



Every year, $1.3 trillion in goods are shipped to and from sites in New York, mostly by truck.[15] Seventy-two percent of the goods shipped annually to and from sites in New York are carried by truck and another 17 percent are carried by courier services or multiple-mode deliveries, which include trucking.[16] From 2016 to 2045 the value of freight shipped to and from sites in New York, in inflation-adjusted dollars, is expected to increase 154 percent and by 108 percent for goods shipped by trucks.[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.

A report by the American Road & Transportation Builders Association found that the design, construction and maintenance of transportation infrastructure in New York play a critical role in the state's economy, supporting the equivalent of approximately 319,000 full-time jobs across all sectors of the state economy, earning these workers approximately $9.8 billion annually.[18] These jobs include 159,000 full-time jobs directly involved in transportation infrastructure construction and related activities as well as 160,000 full-time jobs as a result of spending by employees and companies in the transportation design and construction industry.[19] Transportation construction in New York annually contributes an estimated $1.8 billion in state and local income, corporate and unemployment insurance taxes and the federal payroll tax.

Approximately 3.5 million full-time jobs in New York in key industries like tourism, retail sales, agriculture and manufacturing are dependent on the quality, safety and reliability of the state's transportation infrastructure network. These workers earn $145 billion in wages and contribute an estimated $26.4 billion in state and local income, corporate and unemployment insurance taxes and the federal payroll tax.[20]

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 and bridges may see businesses relocate to areas with a smoother, more efficient and more modern transportation system. In a 2018 survey of corporate executives by Area Development Magazine highway accessibility was ranked the third highest site selection factor behind the availability of skilled labor and labor costs.[21]

CONCLUSION

It is critical New York provides 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 New York'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 New York'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 (2018).
[2] Highway Statistics (2017). Federal Highway Administration. DL-1C
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