# Appendix A

	BRIDGE CAPITAL PROGRAM	
East River Bridge Rehabilitation Plans	A-1	
Bridges Under Construction	A-2	
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Bridges Under Design	A-4	

#### **MANHATTAN BRIDGE**

## REHABILITATION ITEMS

	TOTAL ESTIMATED COST	
•	Repair floor beams. (1982)	Est. Cost (\$ in millions) 0.70*
•	Replace inspection platforms, subway stringers on approach spans. (1985)	6.30*
•	Install truss supports on suspended spans. (1985)	0.50*
•	Partial rehabilitation of walkway. (1989)	3.00*
•	Rehabilitate truss hangers on east side of bridge. (1989)	0.70*
•	Install anti-torsional fix (side spans) and rehabilitate upper roadway decks or approach spans on east side; replace drainage system on approach spans install new lighting on entire upper roadways east side, including purchase of fabricated material for west side of bridge. (1989)	,
•	Eyebar rehabilitation - Manhattan anchorage Chamber "C." (1988)	12.20*
•	Replacement of maintenance platform in the suspended span. (1982)	4.27*
•	Reconstruct maintenance inspection platforms, including new rail and hanger systems and new electrical and mechanical systems; over 2,000 interim repairs to structural steel support system of lower roadway for future functioning of roadway as a detour during later construction contracts. (1992)	) )
•	Install anti-torsional fix on west side (main and side spans); west upper roadway decks, replace drainage systems on west suspended and approach spans; walkway rehabilitation (install fencing, new lighting on west upper roadways and walkways); rehabilitate cables in both Brooklyn and Manhattar anchorage chambers; dehumidify Brooklyn and Manhattan anchorages (1997)	n r N
•	Installation of test panels. (1982)	1.55****
•	Removal of existing suspender ropes and sockets in the suspended spans replacement with new suspender ropes and sockets in the suspended spans and re-tensioning of suspender ropes bearing plates; re-tensioning of cable band bolts; removal of existing main cable wrapping; cleaning of main cables application of new protective paste on main cables; replacement of new mair cable wrapping; reinforcement of truss verticals and gusset plates. Replacement of necklace lighting and multirotational bearings at truss "C" and "D," installation of access platforms at towers, rehabilitation of south upper Roadway Lighting. (2010)	5 ; n 159.12*
•	Interim Steel Rehabilitation and Painting - cable and saddle repairs lower roadway floorbeams @PP 37/38 on approaches and at anchorages; wes side truss rockers and grillages on approaches; cable and suspender repairs Removal of parking desk. Painting entire west side, all four cables. (2001)	t

#### MANHATTAN BRIDGE

#### REHABILITATION ITEMS TOTAL ESTIMATED COST

Est. Cost (\$ in millions)

143.80\*

147.50\*

- Stiffening of Main Span; Reconstruction of North Subway framing; reconstruction of North upper roadway deck at suspended spans; rehabilitation of north approach span trusses; replace overlay on north upper roadway approach spans; rehabilitation of north elevated structures and subway tunnels; removal of railing on truss "D" in the north spans; painting of north side of bridge; new inspection platforms and debris protection in approach spans; construction of new north bikeway, replacement of approach span bearings and grillages; installation of Intelligent Vehicle Highway System for North and South Upper Roadways as well as for Lower Roadway.
- Rehabilitation of Lower Roadway; rehabilitation of anchorage roofs under lower roadway; rehabilitation of substructures and retaining walls in Brooklyn and Manhattan approaches; installation of new signage on bridge and at plaza areas; installation of new lighting on lower roadway and plaza areas; clean and paint lower roadway; installation of grating platform under towers at lower roadway; canopy lighting at towers. (Present)
- Rewrapping of Cables and Replacement of Suspender; Installation of New Access Platforms to existing Tower Platforms, Replacement of Necklace Lighting, Messenger Cables and Cable Hand Ropes, Replacement of Multi Rotational Bearings and Reversal of Lower Roadway and Operation of HOV Lane.
- Structural and Component Rehabilitation (2018)
   Structural and Component Rehabilitation (2018)
   to
   110.00\*\*\*
  - TOTAL: \$ 1,078.02 to \$ 1,108.02

- \* Construction Complete
- \*\* In Construction
- \*\*\* In Design
- \*\*\*\* Research and Development (completed)

Revised 2018

#### ED KOCH QUEENSBORO BRIDGE

#### REHABILITATION ITEMS TOTAL ESTIMATED COST

TOTAL LOTIMATED COST	Est. Cost (\$ in millions)
<ul> <li>Repair lower outer roadways / reconstruct two ramps in lower Queens. (1984)</li> <li>Reconstruct south upper roadway, replace inspection platforms, lighting. (1986)</li> </ul>	18.80* 31.50*
<ul> <li>Interim rehabilitation, contracts A, B, &amp; C (repairs to lower deck and main bridge approaches). (1984)</li> </ul>	2.80*
<ul> <li>Interim rehabilitation, contract D (repairs to lower deck, main bridge, and new median barrier). (1985)</li> </ul>	3.00*
<ul> <li>Reconstruct north upper roadway and Queens approaches A &amp; B, rehabilitate bearings at Queens approach. (1989)</li> </ul>	50.00*
• Reconstruct ramps C & D (Queensboro only, not Thompson Avenue). (1988)	10.40*
• Rehabilitate bridge bearings, pier tops, and truss lower chords. (1989)	18.00*
• Rehabilitate Queens approach trusses, lower inner roadways on the main span and approaches. (1996)	172.00*
• Rehabilitate lower outer roadways main span and approaches, (bikeway) cleaning and painting. (2001)	227.05*
Cleaning and painting main bridge upper trusses. (2009)	168.24*
Miscellaneous Items – Component Rehabilitation.	43.88*
• Eye bar investigation. (2010)	0.62
<ul> <li>Installation of aviation lighting. (2010)</li> </ul>	1.76*
Replacement of Upper Roadways (2018)	300.00 to 350.00

TOTAL: \$1,048.05 to \$1,098.05

## \* Construction Complete

\*\* In Construction

\*\*\* In Design

\*\*\*\* Research and Development

Revised 2017

	WILLIAMSBURG BRIDGE REHABILITATION ITEMS TOTAL ESTIMATED COST	st. Cost
		\$ in millions)
•	Replace main span outer roadway. (1983)	11.20*
•	Replace one third of suspenders. (1984)	3.20*
•	Repair pier 20E foundation, and replace bulkhead. (1986)	2.30*
•	Paint side spans and towers. (1985)	1.10*
•	Paint main and approach spans. (1989)	4.24*
•	Emergency interim repairs. (1989)	10.00*
•	Install temporary hand-rope system on main cables. (1990)	0.63*
•	Main cable preservation (field test - oiling). (1991)	0.44*
•	Main cable strand splicing at Manhattan anchorage. (1991)	0.29*
•	Interim pedestrian walkway. (1994)	1.05*
•	Component repairs of flag conditions on the north outer roadway and north inner roadway. (1994)	1 4.12*
•	Rehabilitate main cables and new redundant suspender system. (1996)	88.30*
•	Demolish existing building under approaches. (1993)	1.50*
•	Testing Program for bored-in piles. (1993)	0.74*
•	Demolish DOS and DOH buildings, replace entire south outer roadway approach structures, rehabilitate south outer roadway deck and south inner roadway deck of the main bridge, and replace south inner roadway substructure of the approaches. (1998)	r

	WILLIAMSBURG BRIDGE	
	REHABILITATION ITEMS	
	TOTAL ESTIMATED COST	Est. Cost (\$ in millions)
•	Portion of Contract #6 BMT track structure work transferred to Contract #5 south approach roadway reconstruction work. (1998)	65.00*
•	Paint main and intermediate towers. (2001)	14.90 *(1)
•	Reconstruct BMT Subway structure; install new signals, tracks and communication system. (2000)	166.65*
•	Miscellaneous rehabilitation work: rehabilitation of towers, replace bearings, travelers, architectural work, painting of north and south trusses, suspender adjustment, tower jacking, construction of colonnades, purchase of barrier transfer machine BTM) and contra-flow barriers, lane control signal field system. Seismic retrofit – reinforce concrete with granite cladding, bearing replacement at PP10 & 15, rehabilitation of wind tongue casting assembly at main towers, contra-flow of south inner roadway – installation of contra-flow barriers, lightning protection grounding system. Kent Avenue Yard soil erosion and deck pins at PP29 E/W rehabilitation, modular joint repairs and structural flag repairs.	280.00*
•	Replace north approach structures (Manhattan / Brooklyn), and rehabilitate north half of bridge. (2002)	233.00*
	Miscellaneous repair and painting of the bridge. (2021)	200.00 to 300.00***
	TOTAL: \$1,2 \$1,3	286.66 to 386.66

Construction Complete
 In Construction
 In Design

(1) Painting suspended in 1996 pending publication of Environmental Impact Statement (EIS) in 1998. Painting resumed under a new schedule in 1999 and was completed in 2001.

Revised 2016

#### **BROOKLYN BRIDGE**

#### REHABILITATION ITEMS TOTAL ESTIMATED COST

		Est. Cost (\$ in millions)
•	Brooklyn Tower protection and new sign gantries. (1981)	2.72*
•	Rehabilitate promenade between towers. (1983)	0.94*
•	Rehabilitate cables in anchorage and replace short rod suspenders; rehabilitate balance of promenade and construct bikeway and new pedestrian ramp. (1988)	22.68*
•	Rehabilitate and paint York, Main, William and Prospect Street structures and main bridge roadway deck overlay. (1988)	6.21*
•	Replace suspenders, cable posts, stay cables, hand-rope necklace lights, main cable wrapping; paint suspended spans. (1991)	53.57*
•	Rehabilitate ramp E. concrete piers of ramp C and abutment at ramps C & I, and rehabilitate Sands and Washington Street structures in Brooklyn. (1991)	4.73*
•	Rehabilitate ramp D and H in Manhattan; permanent improvement of promenade at Manhattan approach. (1993)	17.92*
•	Rehabilitate floor systems, stiffening trusses, roadways of suspended spans and Franklin Square trusses. (1994)	66.30*
•	Rehabilitate Manhattan traveler (electrical work). (1997)	1.83*
•	Rehabilitate ramp D and widening along the FDR Drive. (1996)	11.50*
•	Arch supports for Franklin Square truss structure.	9.50*
•	Replacement of Suspended Span Deck. (2000)	36.2*
•	Resurfacing of the main spans. (1998)	6.67*

#### **BROOKLYN BRIDGE**

#### **REHABILITATION ITEMS** TOTAL ESTIMATED COST

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)*
***
)
)**
*
50 50

\* Construction Complete \*\* In Design \*\*\* In Construction

Revised 2018

#### BRIDGES UNDER CONSTRUCTION

CALENDAR YEAR 2017

	CALENDAR YEAR 2017
CONTRACT #	BRIDGE
HBX1086	Westchester Avenue over Hutchinson River Parkway
HBX1131	Bruckner Expressway NB & SB Service Road (Unionport Bridge) over
	Westchester Creek
HBX1131	Unionport Bridge Ramp A (NYSDOT)
HBX1131	Unionport Bridge Ramp B (NYSDOT)
HBX1164	City Island Road Bridge over Eastchester Bay
SANDHB001	Battery Place over FDR Drive (Emergency Contract)
SANDHB001	West Street over Rector Street (Emergency Contract)
SANDHB002	Macombs Dam Bridge over Harlem River (Emergency Contract)
SANDHB002	145 <sup>th</sup> Street Bridge over Harlem River (Emergency Contract)
SANDHB002	Third Avenue Bridge over Harlem River (Emergency Contract)
SANDHB002	Madison Avenue Bridge over Harlem River (Emergency Contract)
SANDHB002	Hunters Point Avenue Bridge over Dutch Kills (Emergency Contract)
SANDHB002	Carroll Street Bridge over Gowanus Canal (Emergency Contract)
SANDHB002	Ninth Street Bridge over Gowanus Canal (Emergency Contract)
SANDHB002	Third Street Bridge over Gowanus Canal (Emergency Contract)
SANDHB002 V	Nest 207 <sup>th</sup> Street/West Fordham Road Bridge over Harlem River (Emergency
	Contract)
SANDHB002	Borden Avenue Bridge over Dutch Kills (Emergency Contract)
SANDHB002	Union Street Bridge over Gowanus Canal (Emergency Contract)
SANDHB002	Grand Street Bridge over Newtown Creek (Emergency Contract)
HBM551	East 34th Street over Park Avenue Tunnel
HBM1027	Harlem River Drive Viaduct, 127 <sup>th</sup> Street (NB) Harlem River Drive Viaduct, 127 <sup>th</sup> Street (SB)
HBM1027	
BRX287S	Macombs Dam Bridge over Harlem River (Rehab of fender
	System & 155th St. Viaduct)
HBK643	Belt Parkway Bridge over Gerritsen Inlet Belt Parkway Bridge over Mill Basin
HBK1023 HBK1201	Atlantic Avenue over LIRR Atlantic Avenue
HBM1056	Houston Street over FDR Drive
HBM1056	FDR Drive NB Ramp to Houston Street over Relief
HBM1056	Houston Street Ramp to FDR Drive NB over Relief
HBM1172	Interim Repairs to HHP Viaduct over Amtrak (West 72nd Street to West 79th
TIDIVITI'Z	Street)
HBM1173	Interim Repairs to HHP Viaduct over Amtrak-West 96th Street (West 94th Street
	to West 98th Street)
HBK1072WM	Tidal Wetland Mitigation (4 Belt Parkway bridges)
HBM7240	Trans Manhattan Expressway Connection (HRD Ramp to GWB over HRD SB)
HBQ1203	Roosevelt Avenue over Van Wyck Expressway
HBQ1206	Highland Park Pedestrian Bridge over Pedestrian Path
HBQ1112	Metropolitan Avenue (Fresh Pond) over LIRR Montauk Division (Emergency
	Contract)
HBRC036A	Galloway Avenue over Marianne Street
HBRC037A	Forest Avenue over Crystal Avenue
HBRC039A	Midland Avenue over Hylan Boulevard
HBRC040A	Rockland Avenue over Brielle Avenue
HBRC041A	Forest Avenue over Randall Avenue
HBRC042A	Gregg Place over Randall Avenue
HBRC043A	Arthur Kill Road over Muldoon Avenue
HBRC045A	Arthur Kill Road over Ridgewood Avenue
BRC270C (#6)	Brooklyn Bridge (Ramps and painting)

BRC270FR (#6A) Brooklyn Bridge #6A (Rehabilitation of Stone Walls at Approach Spans and Ramps)

BRC270FR (#6A) Brooklyn Bridge Approach over Storage (Sands Street)

HBCBORERS-R (Marine Borers) FDR Drive relieving platforms-- downtown, FDR Drive relieving platform uptown + Carroll Street Bridge over Gowanus Canal + Ocean Avenue Pedestrian Bridge over

Sheepshead Bay

<sup>\*</sup> The contract was terminated for convenience by the City on March 21, 2017 with only 73% of the contract (by amount) completed.

#### **BRIDGE CONSTRUCTION**

PROJECTS COMPLETED IN CALENDAR YEAR 2017

CONTRACT #	BRIDGE
BRC270C (#6)	Brooklyn Bridge (Ramps and painting)
HBK1072WM	Tidal Wetland Mitigation (4 Belt Parkway bridges)
HBM1056	Houston Street over FDR Drive
HBM1056	FDR Drive NB Ramp to Houston Street over Relief
HBM1056	Houston Street Ramp to FDR Drive NB over Relief
HBM7240	Trans Manhattan Expressway Connection (HRD Ramp to GWB over HRD SB)
HBQ1206	Highland Park Pedestrian Bridge over Pedestrian Path
HBCBORERS	R (Marine Borers) FDR Drive relieving platforms downtown, FDR Drive
	relieving platforms midtown, FDR Drive relieving platform uptown + Carroll
	Street Bridge over Gowanus Canal + Ocean Avenue Pedestrian Bridge over
	Sheepshead Bay
	The contract was terminated for convenience by the City on March 21, 2017
	with only 73% of the contract (by amount) completed.

#### **Component Rehabilitation**

The following table illustrates the program's performance over the last eight years:

	FY 10	*FY 11	#FY 12	*FY 13	**FY 14	***FY 15	FY 16	#FY 17
Number of Bridges	13	0	10	0	11	10	6	8
Construction Cost	\$12.74	\$0	\$6.35	0	\$15.55	\$15.41	\$9.76	\$21.01

\* No contracts were bid during the 2011, and 2013 calendar years.

<sup>#</sup>One contract was bid during the 2012 calendar year and was registered in June 2012.

\*\* Two contracts were bid during the 2014 calendar year: one was registered in October 2014, and one in June 2015.

\*\*\*One contract was bid during the 2015 calendar year, and was registered in October 2015.

<sup>##</sup> One contract was bid during the 2016 calendar year and was registered in June 2017.

In 2017, work was completed at the following bridges, in the indicated boroughs, at the final cost shown, in millions:

McGuiness Boulevard/Newtown Creek (Pulaski Bridge Bike Path) (KQ)	\$4.72
East Fordham Road over Grand Concourse [B]	\$2.75
Douglaston Parkway NB over Cross Island Parkway (Q)	\$1.00
Douglaston Parkway SB over Cross Island Parkway (Q)	\$1.10
Southern Boulevard over East Fordham Road (B)	\$1.40
East 180 <sup>th</sup> Street over Bronx River (B)	\$0.26
East Drive over Bridle Path Near Zoo [K]	\$0.70
East 162 <sup>nd</sup> Street over Metro North RR HAR (B)	\$0.75
East 187 <sup>th</sup> Street over Metro North RR HAR (B)	\$0.87
Hannah Street over SIRT South Shore (R)	\$1.04
Ramp To Queensboro Bridge From East 58 <sup>th</sup> Street	
over East 59 <sup>th</sup> Street (M)	\$0.80
Ramp To 21 <sup>st</sup> Street From NY over 22 <sup>nd</sup> Street (Q)	\$2.15
Riverside Drive over West 138 <sup>th</sup> Street (M)	\$0.63
Matthewson Road over Mac Cracken Avenue (B)	\$3.00

#### TOTAL

<u>\$21.17M</u>

During calendar year 2017, work commenced at the following bridges:

Leggett Avenue over Amtrak (B)

Ramp To 21<sup>st</sup> Street From NY over 22<sup>nd</sup> Street (Q) 80<sup>th</sup> Road over LIRR Main Line (Q)

East 97<sup>th</sup> Street over Metro North Main Line (M) West 57<sup>th</sup> Street over Amtrak 30<sup>th</sup> Street Branch (M Matthewson Road over Mac Cracken Avenue (B)

49<sup>th</sup> Street over Grand Central Parkway (Q)

#### **Component Rehabilitation**

There is one project "still under construction" since the 2016 Annual Report was issued.

East 165<sup>th</sup> Street over Metro North RR HAR (B)

25 component rehabilitation projects are slated to continue, commence or be completed in the 2018 calendar year. They are:

Leggett Avenue over Amtrak (B) East 165<sup>th</sup> Street over Metro North RR HAR (B) Riverside Drive over West 145<sup>th</sup> Street (M)

80<sup>th</sup> Road over LIRR Main Line (Q) Forest Avenue over Clove Lakes Park Stream (R)

East 97<sup>th</sup> Street over Metro North Main Line (M) West 57<sup>th</sup> Street over Amtrak 30<sup>th</sup> Street Branch (M)

Southern Boulevard over CSX Trans-Pt. Morris (B) Sackett Street over Brooklyn-Queens Expressway (K) 49<sup>th</sup> Street over Grand Central Parkway (Q) East 149<sup>th</sup> Street over Amtrak-CSX (B) Unionport Road over Amtrak-CSX (B) Bronx Boulevard SB over Bronx River (B) Bronx Boulevard NB over Bronx River (B) Arthur Kill Road over SIRT South Shore (R)

Northern Boulevard WB over Flushing River (Q) Northern Boulevard EB over Flushing River (Q) 150<sup>th</sup> Street over Cross Island Parkway (Q) Knapp Street over Belt Parkway (K) Fremont Avenue Pedestrian over SIRT South Shore {R} Henry Hudson Parkway (SB) over Ramp to 96<sup>th</sup> Street (M) Henry Hudson Parkway (NB) over Ramp to 96<sup>th</sup> Street (M) 147<sup>th</sup> Street over Cross Island Parkway (Q) South of Tillary Street over Navy Street (K) Grand Concourse over East 174<sup>th</sup> Street (B) **BRIDGES UNDER DESIGN BY NEW YORK CITY** 

BIN NO.	CAPIS NO.	FEATURE CARRIED	FEATURE CROSSED	FY CNST	PHASE	BORO
2242319	HBCR03A	GRAND CONCOURSE	EAST 174 <sup>TH</sup> STREET	2018	FD	В
2242380	HBCR03B	GRAND CONCOURSE	EAST 204 <sup>TH</sup> STREET	2019	FD	В
2241790	HBX180	EAST 180 <sup>1H</sup> STREET	METRO NORTH RR	2020	PD	В
2075849	HBX1127	BRONX PELHAM PARKWAY	HUTCHINSON RIVER PARKWAY	2021	PD	В
2240200	HBX1148B	SHORE ROAD	HUTCHINSON RIVER	2021	PD	В
2241409	HBX1190	GRAND CONCOURSE	METRO NORTH RR HUD	2018	FD	В
2241740	HBX1215	EAST 175 <sup>™</sup> ST	METRO NORTH RR	2019	FD	В
2241460	HBX1460	WEST TREMONT AVENUE	METRO NORTH RR HUD	2020	PD	В
2241670	HBX1670	EAST 169 <sup>™</sup> STREET	METRO NORTH RR	2020	PD	В
2240027	BRC156F	MANHATTAN BRIDGE (LL)	EAST RIVER	2019	FD	KM
2240028	BRC156F	MANHATTAN BRIDGE (UL)	EAST RIVER	2019	FD	KM
2240019	BRC270D	BROOKLYN BRIDGE	2781 (B.Q.E.)	2019	FD	KM
2231449	HBCR03A	KNAPP STREET	BELT PARKWAY	2018	FD	K
2244440	HBCR03A	SOUTH OF TILLARY STREET	NAVY STREET	2018	FD	K
2231329	HBCR03B	BELT PARKWAY	26 <sup>TH</sup> AVENUE	2020	FD	К
2243140	HBCR16	NEWKIRK AVENUE	BMT SUBWAY (BRIGHTON)	2020	FD	К
2243370	HBCR16	17 <sup>™</sup> AVENUE	LIRR BAY RIDGE	2020	FD	К
2243380	HBCR16	18 <sup>™</sup> AVENUE	LIRR BAY RIDGE	2020	FD	К
2243400	HBCR16	50 <sup>™</sup> STREET	LIRR BAY RIDGE	2020	FD	K
2243450	HBCR16	EAST 14 <sup>™</sup> STREET	LIRR BAY RIDGE	2020	FD	K
2243500	HBCR16	NOSTRAND AVENUE	LIRR BAY RIDGE	2020	FD	K
2243600	HBCR16	7 <sup>™</sup> AVENUE	LIRR AND SEA BEACH	2020	FD	K
2243940	HBCR16	9 <sup>TH</sup> AVENUE	NYCTA IND SUBWAY	2020	FD	K
2243710	HBKC062	19TH AVE	BMT SEA BEACH	2023	FD	K
2243020	HBK530	PARKSIDE AVENUE – OCEAN AVENUE	BMT SUBWAY	2020	PD	К
2243820	HBK548	21 <sup>ST</sup> AVE	BMT SEA BEACH	2020	FD	K
2231439	HBK1090	BSHP	NOSTRAND AVE	2021	FD	K
2240270	HBK1213	UNION STREET BRIDGE	GOWANUS CANAL	2021	PD	K
2231319	HBK1202	BELT PARKWAY	BAY PARKWAY	2024	PD	K
2268350	HBKBQE	BROOKLYN PROMENADE	BQE EB (CANTILEVER)	2025	PD	K
2268497	HBKBQE	BQE WB	FURMAN STREET (CANTILEVER)	2025	PD	К
2268498	HBKBQE	BQE EB	BQE WB (CANTILEVER)	2025	PD	К
2268507	HBKBQE	BQE WB	YORK STREET (CANTILEVER)	2025	PD	К
2268508	HBKBQE	BQE EB	BQE WB (CANTILEVER)	2025	PD	K
2268517	HBKBQE	BQE WB	FURMAN STREET (CANTILEVER)	2025	PD	К
2268518	HBKBQE	BQE EB	BQE WB (CANTILEVER)	2025	PD	K
2230410	HBKBQE	BQE EB	WASHINGTON STREET	2025	PD	K
2230420	HBKBQE	BQE WB	WASHINGTON STREET	2025	PD	K
2230430	HBKBQE	BQE RAMP TO BROOKLYN BRIDGE	PROSPECT STREET	2025	PD	К
2230440	HBKBQE	BQE WB	ADAMS STREET	2025	PD	K
2230450	HBKBQE	BQE EB	ADAMS STREET	2025	PD	K
2230460	HBKBQE	BQE	PEARL STREET	2025	PD	K

PD=Preliminary Design; FD=Final Design; DB=Design Build

**BRIDGES UNDER DESIGN BY NEW YORK CITY** 

BIN NO.	CAPIS NO.	FEATURE CARRIED	FEATURE CROSSED	FY CNST	PHASE	BORO
2230470	HBKBQE	BQE	JAY STREET	2025	PD	К
2230480	HBKBQE	BQE	PROSPECT STREET	2025	PD	К
2230490	HBKBQE	BQE	SANDS STREET	2025	PD	К
2230857	HBKBQE	BQE WB	JORALEMON STREET	2025	PD	K
2230858	HBKBQE	BQE EB	JORALEMON STREET/BQE WB	2025	PD	К
2230870	HBKBQE	COLUMBIA HEIGHTS	BQE	2025	PD	K
2230887	HBKBQE	BQE WB	CADMAN PLAZA	2025	PD	K
2230888	HBKBQE	BQE EB	CADMAN PLAZA/BQE WB	2025	PD	K
2240048	BRC231F	ED KOCH QUEENSBORO BRIDGE (UL)	EAST RIVER	2018	PD	MQ
2229311	HBCR03A	HHP SB	RAMP TO 96 <sup>1H</sup> STREET	2018	FD	Μ
2229312	HBCR03A		RAMP TO 96 <sup>TH</sup> STREET	2018	FD	М
2245010	HBM1120	11 <sup>TH</sup> AVE VIADUCT [NORTH]	LIRR WEST SIDE YARD/AMTRAK	2020	FD	Μ
2246720	HBM1165	RIVERSIDE DRIVE	WEST 158 <sup>TH</sup> STREET/AMTRAK	2018	PD	Μ
2232070	HBM1221	E 25 <sup>TH</sup> STREET PEDESTRIAN BRIDGE	FDR DRIVE	2022	PD	Μ
2268650	HBM8650	FDR DRIVE NORTHBOUND EAST 42 <sup>ND</sup> TO EAST 49 <sup>TH</sup> STREET	EAST RIVER SHORELINE	2020	PD	Μ
2232167	HBMA23216	PROMENADE OVER FDR DRIVE	FDR DRIVE – EAST 81 <sup>ST</sup> TO EAST 90 <sup>TH</sup> STREET	2023	PD	Μ
2231950	HBCR03A	150 <sup>™</sup> STREET	CROSS ISLAND PARKWAY	2018	FD	Q
2231980	HBCR03A	147 <sup>™</sup> STREET	CROSS ISLAND PARKWAY	2018	FD	Q
2055801	HBCR03A	NORTHERN BOULEVARD WB	FLUSHING RIVER	2018	FD	Q
2055802	HBCR03A	NORTHERN BOULEVARD EB	FLUSHING RIVER	2018	FD	Q
2231630	HBCR03B	SPRINGFIELD BOULEVARD	BELT PARKWAY	2020	FD	Q
2231840	HBCR03B	HILLSIDE AVENUE FRANCIS LEWIS	CROSS ISLAND PARKWAY	2020	FD	Q
2231690	HBCR03B	BOULEVARD	BLP EASTBOUND	2020	FD	Q
2231700	HBCR03B	FRANCIS LEWIS BOULEVARD	BLP WESTBOUND	2020	FD	Q
2231730	HBCR03B	130 <sup>TH</sup> AVENUE	BLP NORTHBOUND	2020	FD	Q
2231740	HBCR03B	130 <sup>TH</sup> AVENUE	BLP SOUTHBOUND	2020	FD	Q
2247090	HBCR03B	149 <sup>™</sup> PLACE	LIRR PORT WASH BR	2020	FD	Q
2247290	HBQ49AV	49 <sup>™</sup> AVENUE	LIRR AMTRAK	2020	PD	Q
2231780	HBQ1114	HEMPSTEAD AVE	BCIP	2021	PD	Q
2266149	HBQ1114	HEMPSTEAD AVE	RAMP TO BCIP NB	2021	PD	Q
2231850	HBQ1115	UNION TPKE	BCIP	2021	PD	Q
2248160	HBQ1137	ELIOT AVE	QUEENS BLVD	2022	FD	Q
2266160	HBQC064	WHITESTONE EXPRY/VAN WYCK EXPRY SB TO BCIP EB	ACCESS ROAD FROM WHITESTONE EXPRY/VAN WYCK EXPRY	2019	FD	Q
2249450	HBCR03A	FREMONT AVENUE PEDESTRIAN	SIRT SOUTH SHORE	2018	FD	R
R00031	HBCR03B	TARLTON STREET	GREAT KILLS LANE	2020	FD	R

PD=Preliminary Design; FD=Final Design; DB=Design Build

#### **BRIDGES UNDER DESIGN BY NEW YORK CITY**

BIN NO.	CAPIS NO.	FEATURE CARRIED	FEATURE CROSSED	FY CNST	PHASE	BORO
2249390	HBRA24939	CEDARVIEW PEDESTRIAN	SIRT	2020	PD	R
2240039	BRC253D	WILLIAMSBURG BRIDGE	EAST RIVER	2022	PD	KM

Revised 12/20/17

PD=Preliminary Design; FD=Final Design; DB=Design Build

	FLAG CONDITIONS
Definitions and Procedures	B-1
2013 - 2017 Red, Yellow and Safety Flags	B-2
Flag Reporting and Tracking Process	В-3

#### FLAG DEFINITIONS AND PROCEDURES

(Source: NYSDOT Engineering Instruction 94-002)

New York State Department of Transportation (NYSDOT) bridge inspection procedures require that "**Flags**" be issued to report the existence of conditions that pose a clear and present danger, or conditions which, if left unattended for an extended period, would likely become a clear and present danger.

A "Flag" is classified as either a Red Flag, Yellow Flag or Safety Flag.

*Red Flag* is used to report the failure or potentially imminent failure of a critical primary structural component. Potentially imminent means that a failure is likely before the next scheduled inspection. The maximum time between bridge inspections is two years. Red Flags must be addressed within six weeks.



February 2011: Red Flag Stringer Repair at Riverside Drive Viaduct over West 158<sup>th</sup> Street. July 2015: Highway Transportation Specialist Andrew Hoang and Assistant Civil Engineer Medina Inspecting a Red Flag on the Manhattan Bridge From the Motorized Bridge Inspection Traveler Platform Beneath the Bridge. (Credit: Tiffany Wong)



August 2013 - Red Flags on the Ed Koch Queensboro Bridge. A truck caught fire on the bridge and damaged three stringers that support the eastbound upper roadway. Replacement of the two damaged stringers and the repair of a third were completed in October 2013. All work was performed by in-house forces. August 2013: Firefighters Examining the Damage. Repairing the Bridge Included Custom Designing the Steel Beams, as Well as Fabrication and Installation. Division Ironworkers Fabricated Two 26-Foot-Long, 1.5-Ton Beams in Their Brooklyn Shop.



August 2013 Red Flags on the Ed Koch Queensboro Bridge. October 2013: Removing the Warped Beams. The New Beams.



December 2016: Removing and Replacing a Severely Corroded Stringer Under Span 1 on the Grand Street Bridge over the Newtown Creek.

#### FLAG DEFINITIONS AND PROCEDURES

(Source: NYSDOT Engineering Instruction 94-002)

Yellow Flag is used to report a potentially hazardous condition which, if left unattended beyond the next scheduled inspection, would likely become a clear and present danger. A Yellow Flag is also used to report the actual or imminent failure of a non-critical primary structural component, where its failure may diminish the reserve capacity or redundancy of the bridge but would not result in structural collapse or a clear and present danger.



February 2008: Yellow Structural Flag Due to the Deteriorated Cap Beam. October 2008: Corrosion of Steel Secondary Member. November 2008: Crack in Steel Girder.

\*Safety Flag is used to report a condition that presents a clear and present vehicular or pedestrian traffic hazard, but there is no danger of structural failure or collapse.

\*A significant change in the inspection flagging procedure in early 2016 was the elimination of non-PIA Safety Flags. These were replaced with non-structural condition observations included in the inspection report. These may become a danger to vehicular or pedestrian traffic before the next anticipated inspection date, but pose no danger of structural failure or collapse, or require remediation to maintain bridge durability.



July 2013 Safety Flag: Ironworker and Mason Crews Repairing Missing Joint Seal Materials on the Brooklyn-Bound Williamsburg Bridge. The Joint Sealer Spaces Were Widened on Each Part of the Joint Utilizing the Shop-Made Jack Expansion Blocks, and Then Completely Cleaned With a Needle Gun to Prepare the Surface to be Rough Contacted With Epoxy Glue. After the Glue was Spread on the Sealer Space Surfaces, the Seal Strip was Installed and Tightened. (Credit: Hany Soliman) October 2017: Tripping Hazard on the Right Sidewalk of the Rockaway Boulevard Bridge over Hook Creek.



East 14<sup>th</sup> Street Bridge Over LIRR Bay Ridge –Ironworkers Fabricated and Installed the Bottom Cover of the Ventilation Post on the Right Sidewalk. June 2017 Safety Flag: Borden Avenue Bridge over Dutch Kills – Broken Wooden Planks of the Right Sidewalk at Span #1.

#### FLAG DEFINITIONS AND PROCEDURES

(Source: NYSDOT Engineering Instruction 94-002)

Certain Red or Safety Flags may be further classified as *Prompt Interim Action (PIA) flags*. PIA flags must be addressed within 24 hours of discovery, or as recommended by the issuing authority.



Example of PIA Safety Flag: Broken Grating. Associate Project Manager Thomas Whitehouse (White Hardhat) Ensuring the Proper Setup of Containment Procedures at the St. George Ferry Terminal Landing Slips Before the Masons Address A PIA Flag (Falling Concrete). Inspecting the Flagged Condition. November 2017 Chipping and Shielding at the Park Avenue Viaduct. Crew Removed Loose Concrete and Installed Expanded Sheet Metal Protective Shielding on the Underside of the Deck at Span #6.



July 2013 PIA Safety Flag on the old City Island Bridge. The repairs, conducted after a record-breaking heat wave, involved opening the joint plates and installing plug welds, which helped correct the plates' position and recreated the proper gap to allow the bridge to expand and contract safely. Finger Joint Before the Repair. Open Finger Joint. Division Crews Repairing the Joints. View Beneath the Finger Joint. The Joint Plates are Placed to Check for the Proper Gap. Leveling the Plate Before Welding. Close-Up of a Plug Weld. After 17 Plug Welds, the Finger Joints Sit Flush on the Roadway.



August 2014 PIA Safety Flag: Broken Joint Concrete Header And Steel Armor on the Long Island Expressway over Dutch Kills Creek. The Condition Was Made Safe By Installing Two Steel Plates. PIA Flag (Truck Wedged Under the FDR Drive at Span 41): Removing the Debris. (Credit: Victor Sandoval) PIA Flag Repair (Through Hole) on Harlem River Drive Ramp. (Credit: Bojidar Yanev)

#### **APPENDIX B-2** FLAG CONDITIONS BY CALENDAR YEAR 2013 2014 2015 2016 2017 % increase (2013 - 2017) Citywide FLAGS ROUTED 1,117 1,465 1,344 1,166 1,607 44% RED 62 128 60 68 54 -13% YELLOW 123 245 187 74 174 41% SAFETY<sup>!</sup> 932 1,092 1,097 1,024 48% 1,379 TOTAL FLAGS 1,176 1,167 1,410 979 1,362 16% ELIMINATED 94 RED 44 116 45 45% 64 YELLOW 212 173 322 139 212 0% SAFETY! 920 878 994 795 1,086 18% TOTAL FLAGS 3,953 4,251 4,184 4,370 4,617 17% OUTSTANDING 74 40 -15% RED 62 63 53 YELLOW 763 835 700 635 597 -22% SAFETY! 3,128 3,342 3,444 3,672 3,967 27% Division of Bridges Workload **FLAGS ROUTED\*** 938 1,200 1,220 1,017 1,398 49% 124 -16% RED 61 57 66 51 73 49% YELLOW 117 242 187 174 SAFETY' 760 834 976 878 1,173 54% FLAGS 1,091 1,081 1,315 858 1,276 17% **ELIMINATED\*\*** 90 43 111 44 58 35% RED YELLOW 208 171 322 138 211 1% SAFETY<sup>!</sup> 20% 840 799 903 676 1,007 FLAGS 2,166 2,300 2,220 2,418 12% 2,418 OUTSTANDING\*\*\* RED 40 3% 60 73 62 62 -17% 717 YELLOW 798 663 598 598 1,758 SAFETY' 1,389 1,429 1,517 1,758 27%

<sup>1</sup>The NYS DOT Bridge Inspection Manual- Appendix B was revised - as of January 2016, there were no longer any safety flags routed in. Only safety PIA flags are now reported.

\*Does not include re-routed flags. \*\*96.99% of 24-hour PIA flags were remediated within 24 hours in 2017. \*\*\*Includes re-routed flags.

Revised 2/8/18

#### FLAG REPORTING AND TRACKING PROCESS

There are four primary sources from which flags originate:

- NYSDOT inspectors
- NYCDOT inspectors
- NYCDOT Communications Center, 311, or other Public Channels
- NYCDOT Bridge Repair Section

#### State DOT Inspectors

- 1. State inspectors identify flag conditions.
- 2. Written notification of flag conditions are sent to the Bridge's Flags unit. (Immediate verbal notification is given for Red Flags and PIA flags.)
- 3. Flag condition reports are entered into the Division's "City Flag" and "State Flag" database.
- 4. Flag conditions are reviewed by City engineers who have four routing options:
  - assign flags to outside agencies for repair, or
    - have City inspectors monitor flags until further action is desired, or
    - assign flags to in-house or contractor forces for repair, or
  - assign flags to the Construction Section for Capital contractor repair.
- 5. Each flag condition is assigned a City Flag number, and routed to the appropriate group.
- 6. When flag conditions are eliminated, the respective databases are updated.

#### City DOT Division of Bridges Inspectors

- 1. City inspectors identify flag conditions and prepare a scope of work. (Immediate verbal notification is given for Red Flags and PIA flags.)
- 2. Flag condition reports are received and reviewed by the Flags unit.
- 3. Flag condition reports are entered into the "City Flag" database.
- 4. Flag conditions are reviewed by City engineers who have four routing options:
  - assign flags to outside agencies for repair, or
  - have City inspectors monitor flags until further action is desired, or
  - assign flags to in-house or contractor forces for repair, or
  - assign flags to the Construction Section for Capital contractor repair.
- 5. When flag conditions are eliminated, the database is updated.

#### City DOT Communications Center, 311, or other Public Channels

- 1. DOT is alerted to a possible flag condition.
- 2. City engineers visit the site to review the reported condition.
- 3. If the deficiency warrants, a verbal flag is communicated and a condition report is filed.
- 4. Flag condition reports are entered into the "City Flag" database.
- 5. Flag conditions are reviewed by City engineers who have four routing options:
  - assign flags to outside agencies for repair, or
  - have City inspectors monitor flags until further action is indicated, or
  - assign flags to in-house or contractor forces for repair, or
  - assign flags to the Construction Section for Capital contractor repair.
- 6. When flag conditions are eliminated, the database is updated.

#### City DOT Bridge Repair Section

- 1. Bridge Repair personnel complete a Post Flag Request Form for a condition which they have identified and already corrected.
- 2. Report is entered into the "City Flag" database as an eliminated flag.

Revised 12/1/14

## Appendix C

	2017 INVENTORY
Inventory Summary	C-1
Posted, Partially Closed & Closed Bridges	C-2
Bridge Identification Numbers	C-3
New York State Inspection System	C-4
Standard Abbreviations	C-5
Information on Inventory Lists	C-6
Adjustments to the Inventory	C-7
Listing of Bridge Inventory and Conditions	C-8

The bridge ratings reflected here are the traditional NYS bridge condition ratings from 2014 and 2015 with the exception of the bridges inspected by in-house NYCDOT forces (pedestrian bridges). The NYS bridge condition rating system is being converted to a federal system developed by AASHTO and there is no current acceptable formula to translate the results of inspections performed in 2016 and 2017 into the traditional NYS ratings. The AASHTO inspection method does not generate numerical overall bridge condition ratings. The condition ratings may be updated in the 2018 annual report.

#### **Inventory Summary**

In Calendar Year 2017, the total number of bridge and tunnel structures under the jurisdiction of the New York City Department of Transportation (NYCDOT) decreased to 793. In 2017, the four tunnels were assigned Tunnel Identification Numbers and removed from the inventory of bridges. NYCDOT owns, operates, and/or maintains 765 non-movable bridges, \*24 movable bridges, and four tunnels. In 1999, a Memorandum of Understanding between NYCDOT and the New York City Department of Environmental Protection (NYCDEP) added 67 culverts (since reduced to 53) in Staten Island to the Division's Inventory. While the Division is responsible for the capital rehabilitation of these structures, maintenance and inspection responsibilities remain with NYCDEP.

\*The Belt Parkway Bridge over Mil Basin was permanently taken out of service on December 8, 2017.

The condition of New York City's 789 elevated bridge structures, as measured by the City's general condition rating, are as follows: Two structures were rated *Poor*, 454 structures were rated *Fair*, 223 structures were rated *Good*, 106 structures were classified *Very Good*, and four two structures are not rated ( two of which are closed).

The Harlem River Drive Ramp to the George Washington Bridge over the Harlem River Drive Southbound (aka the Trans-Manhattan Connector Ramp) is not really poor, as we reached substantial completion of a reconstruction project on May 15, 2017. The 51<sup>st</sup> Avenue Pedestrian Bridge over LIRR Main Line is scheduled by DDC to start being replaced by a new bridge in Fiscal Year 2019.

The bridges in the Division's inventory connect a vast and diverse highway and street network throughout the City. The impressive East River crossings – the Brooklyn, Manhattan, Williamsburg, and Ed Koch Queensboro Bridges – are the most visible and famous structures, but are by no means representative of all the bridges in the City's inventory. Three hundred twenty-four (41.06%) of the Division's structures consist of one span (the portion of a bridge between two supports). One hundred five (13.31%) bridges carry only pedestrian traffic. Of the 789 structures in the City's inventory, 107 (13.56%) cross waterways; of these, 21 connect the boroughs of the Bronx, Brooklyn, Manhattan and Queens. Three hundred eighteen (40.30%) structures cross the City's labyrinthine system of railroad and subway tracks. Two hundred forty seven (31.31%) structures cross or connect arterial highways, such as the Henry Hudson Parkway, the Brooklyn-Queens Expressway, and the Belt Parkway, which facilitate traffic flow through and around the five boroughs of the City of New York.

#### **Rating System**

The Division of Bridges bases its general condition ratings directly on the numerical ratings assigned during bridge inspections. Federal law mandates that bridge structures be inspected at least once every two years. The New York State Department of Transportation hires engineering consultants to perform biennial inspections for all bridge structures except pedestrian bridge structures, and bridge structures less than 20 feet in length. Bridge structures not inspected by the State are inspected by the NYC Department of Transportation's Division of Bridges, with the exception of the East 63<sup>rd</sup> Street Pedestrian Bridge over the FDR Drive, which was inspected by Rockefeller University.

The State inspected 673 (85.30%) bridge structures. The balance of 115 (14.58%) were inspected by the City, with the exception of the High Bridge over the Harlem River, which was inspected in 2002 by the Department of Parks and Recreation. According to the NYSDOT Bridge Inspection protocol, during the federally mandated biennial inspections, bridge structures receive an overall numerical condition rating from 1 (structural failure) to 7 (new condition), reflecting a weighting of key features of the structure (see Appendix C-4). In certain cases, where a bridge structure is closed to traffic, only a city condition rating is given.

City condition ratings correspond to the following ranges of State ratings:

State Numerical Rating	<u>Ci</u>	ty Condition Rating
1.000 - 3.000	=	POOR
3.001 – 4.999	=	FAIR
5.000 - 6.000	=	GOOD
6.001 - 7.000	=	VERY GOOD

This method is used as a guide in assessing what operational action is needed. The overall bridge rating, in and of itself, is not always indicative of whether a bridge needs major rehabilitation. Further inspection and analysis must be done to determine specific rehabilitation or corrective repair needs.

Since 1972 NYSDOT has maintained a bridge condition rating database as described above. For the purposes of the National Bridge Inventory (NBI), the NYS bridge condition ratings were translated annually to a federal Sufficiency Rating, based on 100%, and federal condition ratings, on a 0 (failed) to 7 (new) scale. In 2015, the Federal Highway Administration converted to a new bridge inspection protocol developed by AASHTO. The purpose is to replace qualitative ratings with quantitative assessments. The new protocol assigns bridge elements to 4 condition states and assesses the quantities in each of them. There is no overall bridge condition rating. NYSDOT adopted the new federal/AASHTO protocol in March 2016. The biennial bridge inspections of that year and 2017 cannot be used to produce overall condition ratings. Attempts at consistent translations so far are inconclusive. NYCDOT will review the final decision with NYSDOT on this matter when it is produced, and take the appropriate action.

Rating	Number of	Percent	Number of	Percent	Deck Area	Percent
	Structures		Spans		Sq Ft	
Poor*	2	0.25%	60	1.39%	123,600	0.87%
Fair	454	57.83%	3,261	75.28%	10,227,582	71.65%
Good	223	28.41%	704	16.25%	2,510,396	17.59%
Very Good	106	13.50%	307	7.09%	1,412,017	9.89%
Closed	2					
Not Rated	2					
Total	789	100%	4,332	100%	14,273,595	100.00%

#### Summary of 2017 Bridge Structure Conditions

The Harlem River Drive Ramp to the George Washington Bridge over the Harlem River Drive Southbound (aka the Trans-Manhattan Connector Ramp) is not really poor, as we reached substantial completion of a reconstruction project on May 15, 2017. The 51<sup>st</sup> Avenue Pedestrian Bridge over LIRR Main Line is scheduled by DDC to start being replaced by a new bridge in Fiscal Year 2019.

As of December 31, 2017, the condition of the City's bridges indicated that 0.25% were rated as *Poor*, 57.83% were classified as *Fair*, 28.41% were awarded ratings of *Good*; and 13.50% as *Very Good*. Those structures given ratings of Fair encompassed 75.28% of bridge spans.

Rating	2014 2015 2016		2017					
Poor	0	0.00%	0	0.00%	0	0.00%	2	0.25%
Fair	456	57.87%	458	58.05%	461	58.21%	454	57.83%
Good	221	28.05%	228	28.90%	224	28.28%	223	28.41%
Very Good	111	14.09%	102	12.93%	107	13.51%	106	13.50%
Closed	1		1		2		2	
Not Rated							2	
Total	789	100	789	100	794	100	789	100

During 2017, Manhattan had the highest percentage of bridge structures rated *fair* – 74.85% - as well as the lowest percentage of bridge structures rated *good* – 20.47%. Staten Island had the highest percentage of bridge structures classified as *good* – 41.18%, and the second highest percentage of bridge structures rated *very good* – 19.12%, for a total of 60.3%. In 2017, Brooklyn had the highest percentage of bridge structures rated as *very good* – 22.29%. The Bronx had the second highest percentage of bridge structures classified as *fair* – 62.75%. Queens had the third highest percentage of bridge structures classified as *very good* – 14.72%, and the second highest percentage of bridge structures classified as *very good* – 14.72%, and the second highest percentage of bridge structures rated as *good* – 31.98%.

Borough*	Poor	% of Boro	Fair	% of Boro	Good	% of Boro	Very	% of Boro	Total
							Good		
Bronx	0	0.00%	96	62.75%	42	27.45%	15	9.80%	153
Brooklyn	0	0.00%	85	48.57%	51	29.14%	39	22.29%	175
Manhattan	1	0.58%	128	74.85%	35	20.47%	7	4.09%	171
Queens	1	0.51%	104	52.79%	63	31.98%	29	14.72%	197
Staten Island	0	0.00%	27	39.71%	28	41.18%	13	19.12%	68
Total	2	0.26%	440	57.59%	219	28.66%	103	13.48%	764

\* Does not include borough-crossing bridges (see next table).

Sixty-seven percent of the 21 borough-crossing bridge structures were rated in *fair* condition in 2017, and 33% were rated *good* or *very good*.

Boro- Crossing	Poor	% of Boro Crossing	Fair	% of Boro Crossing	Good	% of Boro Crossing	Very Good	% of Boro Crossing	Total
Bronx- Manhattan	0	0.00%	6	54.55%	2	18.18%	3	27.27%	11
Brooklyn- Manhattan	0	0.00%	4	100.00%	0	0.00%	0	0.00%	4
Queens- Manhattan	0	0.00%	2	66.67%	1	33.33%	0	0.00%	3
Brooklyn- Queens	0	0.00%	2	66.67%	1	33.33%	0	0.00%	3
Total	0	0.00%	14	66.67%	4	19.05%	3	14.29%	21

These figures evidence that the Division is continuing to make progress in improving the conditions of the City's bridges. The number of bridges rated *Fair* has decreased over the past few years while the number of bridges rated *Good* and *Very Good* has increased. However, it continues to remain essential that the overall bridge program include an expansion of the Preventive Maintenance and Corrective Repair programs which have traditionally slowed the deterioration of *good* and *very good* bridges.

During 2017 the total number of closed or partially closed bridge structures was five, with two closed and three partially-closed structures (see Appendix C-2).

Bridges with Posted Weight Restrictions NEW YORK CITY DEPARTMENT OF TRANSPORTATION									
BIN	BOROUGH	LOCATION FEATURE-1	LOCATION FEATURE-2	LOCATION FEATURE-3	FISCAL YEAR*	POSTED	REMARKS		
2231450	BROOKLYN	BELT SHORE PARKWAY	GERRITSEN INLET		2012	*5			
2231479	BROOKLYN	BELT SHORE PARKWAY	MILL BASIN CREEK		2016	•5	<sup>•</sup> This restriction will be lifte in spring 2018.		
2240019	BROOKLYN & MANHATTAN	BROOKLYN BRIDGE	EAST RIVER	INCLUDING RAMPS	2016	3	NO COMMERCIAL TRAFFIC NO TRUCKS, NO BUSSES; 11'0" CLEARANCE		
2240039	BROOKLYN & MANHATTAN	WILLIAMSBURG BRIDGE	EAST RIVER		2022		INNER ROADWAYS, <u>NO</u> <u>TRUCKS:</u> OUTER ROADWAY DESIGN FOR H520 [36 TONS AND TRUCKS ARE PERMITTED ON OUTER ROADWAY		
2240047	MANHATTAN & QUEENS	ED KOCH QUEENSBORO BRIDGE	EAST RIVER		2018	7.5	LOWER OUTER ROADWAYS POSTED AS H-75 [75 TONS] (PASSENGER CARS ONLY FOR SOUTHBOUND: PEDESTRIANS AND BICYCLES ONLY FOR NORTHBOUND): LOWER INNER ROADWAYS ARE DESIGNED FOR HS20 TRUCH LOAD [36 TONS]: UPPER ROADWAYS DESIGNED FOR H-15 [15 TONS], NO TRUCKS ONLY BUSES		
2240260	BROOKLYN	CARROLL STREET BRIDGE	GOWANUS CANAL	CARROLL STREET		10			
2240640	MANHATTAN & QUEENS	ROOSEVELT ISLAND	EAST CHANNEL OF THE EAST RIVER			36			
2240660	QUEENS	RIKERS ISLAND BRIDGE	RIKERS ISLAND CHANNEL			36			
2246550	MANHATTAN	PARK AVENUE VIADUCT	42 <sup>ND</sup> STREET			15	NO COMMERCIAL TRAFFIC		
2247590	QUEENS	FOREST PARK DRIVE	LIRR			8			
2247660	QUEENS	FOREST PARK DRIVE	ABANDONED LIRR			8			
2245460	MANHATTAN	PARK AVENUE SB	EAST 45 <sup>™</sup> STREET			15	NO COMMERCIAL TRAFFIC		
2245470	MANHATTAN	PARK AVENUE NB	EAST 45 <sup>™</sup> STREET			15	NO COMMERCIAL TRAFFIC		
2244120	BROOKLYN	HILL DRIVE	PROSPECT PARK LAKE				NO VEHICLES		
226771A**	MANHATTAN	79 <sup>Th</sup> STREET RAMP to HHP	79 <sup>™</sup> STREET BOAT BASIN GARAGE			15			
226771B**	MANHATTAN	79 <sup>TH</sup> STREET RAMP TO GARAGE	79 <sup>™</sup> STREET BOAT BASIN GARAGE			15			
226771C**	MANHATTAN	GARAGE RAMP TO 79 <sup>TH</sup> STREET	79 <sup>™</sup> STREET BOAT BASIN GARAGE			15			
226771D**	MANHATTAN	SB HHP RAMP TO 79 <sup>TH</sup> STREET	79 <sup>™</sup> STREET BOAT BASIN GARAGE			15			
2240507**	QUEENS	ROOSEVELT AVENUE BRIDGE	VAN WYCK EXPRESSWAY		2016	25			
2247120**	QUEENS	WOODSIDE AVENUE BRIDGE	LIRR MAIN LINE			8			

20 COUNT

\* - CONSTRUCTION CONTRACT LETTING



Truck on the Wrong Ed Koch-Queensboro Bridge Roadway.

12/1/15

# Partially Closed Bridges NEW YORK CITY DEPARTMENT OF TRANSPORTATION

BIN	BOROUGH	LOCATION FEATURE-1	LOCATION FEATURE-2	LOCATION FEATURE-3	FISCAL YEAR*	REMARKS
2076640	BRONX	DEPOT PLACE	CONRAIL HUDSON DIVISION			ONE LANE CLOSED TO TRAFFIC (BUT OPEN TO PEDESTRIANS AND BICYCLES), AND ONE LANE OPEN
2244120	BROOKLYN	HILL DRIVE (TERRACE BRIDGE)	PROSPECT PARK LAKE		CONSTR UCTION MOVED DUE TO LACK OF FUNDING	CLOSED TO VEHICULAR TRAFFIC, OPEN TO PEDESTRIAN TRAFFIC, ALONG THE CENTER OF THE ROADWAY.
2248379	QUEENS	BOATHOUSE BRIDGE	AQUACADE LAKE			LEFT SIDE CLOSED TO VEHICULAR TRAFFIC, AND OPEN TO PEDESTRIAN TRAFFIC.

3 COUNT

\* - CONSTRUCTION CONTRACT LETTING



Boathouse Bridge over Aquacade Lake in 2017. (Credit: NYSDOT) Madison Avenue Bridge Posted Weight Restriction in Effect in 1959. Eastchester Temporary Bridge - Posted Weight Restriction in 1920.



Carroll Street, Gerritsen Inlet, Mill Basin, Roosevelt Avenue, Roosevelt Island Bridge, 79<sup>th</sup> Street Ramp, and Brooklyn Bridge Posted Weight Restriction Signs. (Credit: NYSDOT)

3/21/18

# Closed Bridges NEW YORK CITY DEPARTMENT OF TRANSPORTATION

There are two closed bridges.

BIN	BOROUGH	LOCATION FEATURE-1	LOCATION FEATURE-2	LOCATION FEATURE-3	REMARKS
2248130	QUEENS	FLUSHING MEADOW PARK PEDESTRIAN	WILLOW LAKE	76 <sup>th</sup> ROAD	BRIDGE IS IN FLUSHING CORONA PARK, WHICH IS IN A REMOTE LOCATION AND WAS DAMAGED BY FIRE.
7703720	QUEENS	216 <sup>TH</sup> STREET PEDESTRIAN	LIRR PORT WASHINGTON		WILL BE DEMOLISHED BY DDC in 2018.



Flushing Meadow Park Pedestrian Bridge – (Date Unknown). 216<sup>th</sup> Street Pedestrian Bridge in April 2016: Delaminated Concrete and Detached Exposed Rebar at Span 4 – Deck Underside. June 2017 – Close-up of Span 4. Bridge Closed Sign.

#### **Bridge Identification Numbers**

In 1972, the State of New York developed a computerized system to store inventory and inspection data on bridges that are greater than 20 feet in length. In New York City, structures that are 20 feet in length or less, "mini-bridges," are tracked independently by the City. Each structure is distinguished by a separate Bridge Identification Number (B.I.N.).

A six-digit B.I.N. identifies a single structure or group of connected or associated structures, while the seven-digit B.I.N. identifies each of those connected or associated bridge structures individually. Each level of a bi-level bridge, each separate bridge structure in a parallel configuration, and each ramp attached to a main bridge is considered an individual structure and assigned its own unique B.I.N. For example, the Brooklyn Bridge has one six-digit B.I.N., 2-24001, which incorporates the entire bridge. All ramps and secondary structures, as well as the main structure, are identified by their own seven-digit numbers, such as 2-24001-A, 2-24001-B, etc.

#### If the prefix (first number) of the B.I.N. is:

1, the bridge is considered part of the **State** bridge system. This number might include City bridges if maintenance is shared between City and State.

**2**, the bridge is considered part of the **City** bridge system. This number might include State bridges if maintenance is shared between City and State.

**M**, **Q**, or **R**, the bridge is a "mini-bridge," and is considered part of the **City** bridge system. They are located in Manhattan, Queens, or Staten Island, respectively.

#### If the suffix (last character) of the B.I.N. is:

**1 through 6**, the bridge is in parallel configuration. The left-most bridge in the Direction of Orientation has a last character of 1. The next left-most bridge has a last character of 2, and so on.

**7 or 8**, the bridge is in a bi-level configuration. Seven indicates the lower level and eight indicates the upper level.

**0 or 9**, the bridge is not in parallel or bi-level configuration.

A letter of the alphabet, the structure is a ramp physically attached to the main bridge. If more than one ramp is attached to the same span of the main bridge, the characters are assigned alphabetically starting with the left-most ramp in the Direction of Orientation. Other ramps attached to the bridge are assigned alphabetical characters in a clockwise direction.

#### New York State Biennial Bridge Inspection and Condition Rating System

During the regularly scheduled State biennial bridge inspections, each bridge element is investigated and its structural condition is numerically rated according to the system indicated below:

Numerical Rating	Description
1	Potentially Hazardous
2	Used to shade between a rating of 1 and 3
3	Serious deterioration, or not functioning as originally designed
4	Used to shade between a rating of 3 and 5
5	Minor deterioration, and is functioning as originally designed
6	Used to shade between a rating of 5 and 7
7	New condition
8	Not Applicable
9	Unknown (due to inaccessibility, e.g. footings or piles)

Based on these individual ratings for each element, a weighted average rating is computed for the entire structure.

These ratings (both individual and weighted average) are recorded on New York State Department of Transportation Inspection report Forms. Together with photographs and explanatory descriptions, the ratings provide the Division with information on the existing condition of each bridge.

A description of the condition ratings 1 through 7, with programmed responses to certain critical ratings, demonstrates the importance of these inspections:

A rating of 1 describes an extremely serious condition which is deemed potentially hazardous. This rating, which is phoned in by the inspection leader, necessitates that the Division respond immediately by 1) closing the structure either completely or partially until emergency repairs are made, or 2) limiting the vehicle weight permitted on the structure and then performing repairs on a timely basis.

A rating of 3 describes a bridge element that is not functioning as designed. Although not considered hazardous, such members require extensive rehabilitation. A determination is then made to repair such rated members either by the Division's in-house repair personnel, the critical maintenance contractor (When and Where contracts), or a major capital contract. Until such repairs are made, this condition is periodically monitored.

A<u>rating of 5</u> indicates the member is functioning as designed but exhibits minor deterioration. These members are prioritized and scheduled for repair by the Bridge Maintenance, Inspection and Operations Bureau.

A rating of 7 indicates a new condition requiring no remediation.

The ratings of 2, 4, and 6 are utilized to shade between each of the above ratings.

The bridge ratings reflected here are the traditional NYS bridge condition ratings from 2014 and 2015 with the exception of the bridges inspected by in-house NYCDOT forces (pedestrian bridges). The NYS bridge condition rating system is being converted to a federal system developed by AASHTO and there is no current acceptable formula to translate the results of inspections performed in 2016 and 2017 into the traditional NYS ratings. The AASHTO inspection method does not generate numerical overall bridge condition ratings. The condition ratings may be updated in the 2018 annual report.

#### **Standard Abbreviations**

#### **General Abbreviations :**

APP:	Approach	NB:	Northbound
AVE:	Avenue	PED BR:	Pedestrian Bridge
BLVD:	Boulevard	PKWY:	Parkway
BR:	Bridge	PL:	Place
CPK:	Central Park	RD:	Road
DR:	Drive	SB:	Southbound
EB:	Eastbound	ST:	Street
EXPWY:	Expressway	TPKE:	Turnpike
l:	Interstate	WB:	Westbound
LN:	Lane		
X:	No State accepted mileage markers exist on this route		



Footbridge South of Forest Avenue over Stream in Park. Hylan Boulevard Bridge over Lemon Creek.

#### Routes :

No. 25 25A 27 1-87 1-95 1-278 1-278 1-278 1-295 1-295 1-295 1-295 1-440 1-478 1-495 1-678	Borough Queens Queens Brooklyn Manhattan, Bronx Manhattan, Bronx Brooklyn, Queens Bronx Staten Island Queens Bronx Staten Island Brooklyn Queens Queens	Name Union Turnpike Northern Boulevard Southern Parkway Major Deegan Expressway Cross Bronx Expressway Brooklyn-Queens Expressway Bruckner Expressway Staten Island Expressway Clearview Expressway Throgs Neck Expressway Richmond Parkway Brooklyn Battery Tunnel Long Island Expressway Whitestone Expressway, Van Wyck
	-	
	-	
l-878 l-895	Queens Bronx	Nassau Expressway Sheridan Expressway
1-090	DIVITA	onendari Expressway

### Standard Abbreviations

Highways : BCIP: BE: BLP: BPP: BQE: BRPC: BSHP: BSOP: CBE: FDRD: GCP: GW: HHP: HRD: HRPC: IP: LIE: MAP: MDE: MP: OCP: PR: RP: VWE:	Belt System - Cross Island Bruckner Expressway Belt System - Laurelton Parkway Bronx Pelham Parkway Bronx River Parkway (in NYC) Belt System - Shore Parkway Belt System - Southern Parkway Cross Bronx Expressway Franklin D. Roosevelt Drive (to East 127 <sup>th</sup> Street) Grand Central Parkway George Washington Bridge Henry Hudson Parkway Harlem River Drive (from East 127 <sup>th</sup> Street) Hutchinson River Parkway (in NYC) Jackie Robinson (Interborough) Parkway Long Island Expressway Marine Parkway Major Deegan Expressway Mosholu Parkway Prospect Expressway Richmond Parkway

R - Staten Island

#### Information Available On Division Of Bridges Inventory Of Bridge Structures

- **Bridge Identification Number (B.I.N.)**
- Borough :

B - The Bronx	Q - Queens
K - Brooklyn	M - Manhattan

- Feature Carried : Name of passageway carrying vehicle or pedestrian traffic. ٠
- Feature Crossed : Description of area crossed. •
  - Railroad Crossed (if applicable):
    - A Amtrak
- N New York & Atlantic O - B & O Railroad
- C Conrail
- C ConrailO B & O RailroadL Long Island RailroadS Staten Island RailwayM Metro-North (MTA)T NYC Transit Authority
- X CSX
- - Other Owner : ED Department of Education
    - Ferries (Department of Transportation) F
    - Р Department of Parks and Recreation
- Bridge Type :

•

А	Arterial	PED	Pedestrian
Е	East River	R	Ramp
Μ	Movable	Т	Tunnel
0	Off-System	W	Waterway

#### **Rating Source:**

(City)	City Inspection	(Parks) Parks Inspection	
(State)	State Inspection	(University)	Rockefeller University Inspection

Rating : Numerical and/or verbal rating •

1.000 - 3.000:	POOR	
3.001 - 4.999:	FAIR	
5.000 - 6.000:	GOOD	
6.001 - 7.000:	VGOOD	VERY GOOD

- Deck Area: Square feet •
- CD: •

**Community Board District** 

### 2016 Bridge Inventory Adjustments

There was 1 bridge deleted from City's inventory since the 2016 Annual Report was issued.

B.I.N.	BORO	FEATURE CARRIED	FEATURE CROSSED	EXPLANATION		
- Bridges d	- Bridges deleted from the City's Inventory:					
2268930	М	MORRIS STREET PEDESTRIAN BRIDGE	BROOKLYN-BATTERY TUNNEL PLAZA	TRANSFERRED TO AND DEMOLISHED BY TBTA		



Morris Street Pedestrian Bridge in February 2017: Span #1, Near Beginning Abutment – First Step Tread Plate Missing and Second Tread Plate Broken.

REV. DATE 3/2018

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHE R OWN ER	SPA NS	RATING SOURCE	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
1065210	a	WHITESTONE EXPRESSWAY NORTHBOUND	BELT SYSTEM - CROSS ISLAND		A		1	STATE	6/17/2014	4.656	FAIR	6/14/2016	2,500	\$11,250,000	407		
1066510	в	BRUCKNER EXPRESSWAY SERVICE ROAD	WESTCHESTER CREEK		WMA		17	STATE	9/18/2015	3.565	FAIR	10/23/2017	54,360	\$244,620,000	209		
1067150	в	NEREID AVENUE (EAST 240TH STREET)	BRONX RIVER PARKWAY	м	0		10	STATE	9/18/2015	4.500	FAIR	10/12/2017	57,750	\$259,875,000	212		
1240090	вм	MACOMBS DAM BRIDGE	HARLEM RIVER	м	wмо		52	STATE	12/18/2015	3.930	FAIR	12/11/2017	220,000	\$990,000,000	110	204	
1247010	a	91ST PLACE (2247010)	LIRR PORT WASHINGTON BRANCH	L	o		1	STATE	9/30/2015	6.500	VGOOD	10/12/2017	2,760	\$12,420,000	404		
1247200	a	67TH AVENUE PEDESTRIAN BRIDGE (2247200)	LIRR MAIN LINE	L	PED-O		3	СІТҮ	6/5/2017	4.219	FAIR	N/A	1,300	\$5,850,000	406		
1247280	a	51ST AVENUE PEDESTRIAN BRIDGE (2247280)	LIRR MAIN LINE	L	PED-O		5	СІТҮ	6/6/2017	2.927	POOR	N/A	700	\$3,150,000	402		
1247560	a	METROPOLITAN AVENUE	LIRR - NY&ATL	LN	0		2	STATE	10/9/2015	3.603	FAIR	11/15/2017	20,900	\$94,050,000	405		
2055801	đ	NORTHERN BOULEVARD WESTBOUND	FLUSHING RIVER		wo		40	STATE	10/28/2014	4.338	FAIR	9/29/2016	71,900	\$323,550,000	407		
2055802	a	NORTHERN BOULEVARD EASTBOUND	FLUSHING RIVER		wo		40	STATE	10/28/2014	4.268	FAIR	9/29/2016	78,894	\$355,023,000	407		
205580A	٩	NORTHERN BOULEVARD WESTBOUND TO 678I SOUTHBOUND	VACANT LAND		AR		16	STATE	6/5/2014	5.619	GOOD	5/26/2016	8,600	\$38,700,000	407		
2065629	в	BRONX RIVER PARKWAY	BOSTON ROAD - BRONX ZOO		А		1	STATE	8/12/2015	5.138	GOOD	8/10/2017	6,300	\$28,350,000	227		
2065930	a	HAMILTON PLACE	495I (LONG ISLAND EXPRESSWAY)		A		2	STATE	2/20/3014	5.528	GOOD	2/2/2016	11,111	\$49,999,500	405		
2065940	a	GRAND AVENUE	495I (LONG ISLAND EXPRESSWAY)		А		2	STATE	11/11/2014	4.861	FAIR	10/18/2016	12,850	\$57,825,000	405		
2065950	a	69TH STREET	495I (LONG ISLAND EXPRESSWAY)		А		2	STATE	6/24/2015	5.056	GOOD	6/23/2017	10,336	\$46,512,000	405		
2066002	a	4951 (2066000)	WOODHAVEN BOULEVARD		A		2	STATE	6/10/2015	5.479	GOOD	6/7/2017	25,200	\$113,400,000	406	404	
2066100	к	STH AVENUE	27 X PROSPECT EXPRESSWAY		A		1	STATE	4/22/2014	5.063	GOOD	5/12/2016	8,800	\$39,600,000	307		
2066671	в	BRUCKNER EXPRESSWAY SOUTHBOUND	BRONX RIVER		WA		3	STATE	10/7/2015	4.972	FAIR	10/6/2017	12,400	\$55,800,000	202	209	
2066672	в	BRUCKNER EXPRESSWAY NORTHBOUND	BRONX RIVER		WA		8	STATE	10/9/2015	4.418	FAIR	10/16/2017	22,300	\$100,350,000	202	209	
2066720	в	EAST 174TH STREET	SHERIDAN EXPRESSWAY/AMTRAK	A	A		13	STATE	7/29/2014	3.986	FAIR	8/11/2016	35,573	\$160,078,500	209	203	
206672A	в	174TH STREET-NORTH PEDESTRIAN BRIDGE	895I - SHERIDAN EXPRESSWAY		PED-A		4	СІТҮ	4/3/2017	4.833	FAIR	N/A	1,800	\$8,100,000	209		
206672B	в	174TH STREET-SOUTH PEDESTRIAN BRIDGE	895I - SHERIDAN EXPRESSWAY		PED-A		4	СІТҮ	4/3/2017	4.750	FAIR	N/A	1,900	\$8,550,000	209		
2066919	вм	WASHINGTON BRIDGE	HARLEM RIVER	м	wo		9	STATE	11/24/2014	4.493	FAIR	10/4/2017	128,339	\$577,525,500	112	205	i 204
2075351	в	BRUCKNER EXPRESSWAY SOUTHBOUND	AMTRAK - CSX	AX	A		1	STATE	10/29/2014	5.698	GOOD	10/27/2016	11,600	\$52,200,000	202		
2075352	в	BRUCKNER EXPRESSWAY NORTHBOUND	AMTRAK - CSX	АХ	А		1	STATE	10/30/2014	6.190	VGOOD	10/28/2016	10,900	\$49,050,000	202		
2075820	в	EAST TREMONT AVENUE	HUTCHINSON RIVER PARKWAY		A		2	STATE	10/20/2015	4.528	FAIR	10/3/2017	10,200	\$45,900,000	210		
2075837	в	WESTCHESTER AVENUE	HUTCHINSON RIVER PARKWAY		А		2	STATE	2/12/2016	3.958	FAIR	N/A	15,858	\$71,361,000	210	211	
2075849	в	BRONX PELHAM PARKWAY	HUTCHINSON RIVER PARKWAY		A		2	STATE	5/8/2014	3.974	FAIR	4/18/2016	17,600	\$79,200,000	210	211	
2075859	в	HUTCHINSON RIVER PARKWAY	HUTCHINSON RIVER		WMA		7	STATE	10/22/2015	4.578	FAIR	11/17/2017	60,500	\$272,250,000	210	228	
2076109	в	BRUCKNER EXPRESSWAY NORTHBOUND SERVICE ROAD	HUTCHINSON RIVER PARKWAY		A		2	STATE	8/13/2015	4.895	FAIR	8/9/2017	7,800	\$35,100,000	210		

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHE R OWN ER	SPA NS	RATING SOURCE	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2076129	в	BRUCKNER EXPRESSWAY SOUTHBBOUND SERVICE ROAD	HUTCHINSON RIVER PARKWAY		А		2	STATE	1/14/2016	5.105	GOOD	N/A	7,100	\$31,950,000	210		
2076640	в	DEPOT PLACE	METRO NORTH RR HUDSON	хм	o		11	STATE	5/12/2015	4.319	FAIR	4/21/2016	26,566	\$119,547,000	204		
2076929	в	BRUCKNER EXPRESSWAY	CSX - HUNTS POINT	x	А		1	STATE	8/24/2015	4.433	FAIR	8/21/2017	3,800	\$17,100,000	202		
2229289	м	HENRY HUDSON PARKWAY VIADUCT	AMTRAK - WEST 72ND STREET - WEST 79TH STREET	A	А		145	STATE	9/17/2014	3.597	FAIR	11/18/2016	213,173	\$959,278,500	107		
222928C	м	PEDESTRIAN BRIDGE AT WEST 73RD STREET	HENRY HUDSON PARKWAY - AMTRAK	A	PED-A	Р	5	СІТҮ	4/10/2016	3.781	FAIR	N/A	3,700	\$16,650,000	107		
222928D	м	WEST 72ND STREET RAMP TO HENRY HUDSON PARKWAY NORTHBOUND	RELIEF		AR		1	STATE	7/18/2014	6.648	VGOOD	7/18/2016	1,750	\$7,875,000	107		
2229290	м	WEST 79TH STREET	AMTRAK	А	А		1	STATE	6/11/2014	4.424	FAIR	6/13/2016	4,500	\$20,250,000	107		
2229309	м	HENRY HUDSON PARKWAY	RIVERSIDE PARK		А		1	STATE	1/11/2016	5.267	GOOD	N/A	2,172	\$9,774,000	107		
2229311	м	HENRY HUDSON PARKWAY SOUTHBOUND	RAMP TO WEST 96TH STREET		А		1	STATE	1/27/2016	4.273	FAIR	1/27/2016	2,000	\$9,000,000	107		
2229312	м	HENRY HUDSON PARKWAY NORTHBOUND	RAMP TO WEST 96TH STREET		А		1	STATE	1/27/2016	4.364	FAIR	N/A	2,000	\$9,000,000	107		
2229321	м	HENRY HUDSON PARKWAY SOUTHBOUND	RAMP FROM WEST 96TH STREET		А		1	STATE	1/29/2016	5.133	GOOD	N/A	2,000	\$9,000,000	107		
2229322	м	HENRY HUDSON PARKWAY NORTHBOUND	RAMP FROM WEST 96TH STREET		А		1	STATE	1/29/2016	5.300	GOOD	N/A	2,000	\$9,000,000	107		
2229349	м	HENRY HUDSON PARKWAY	WEST 158TH STREET	А	А		44	STATE	10/10/2014	4.155	FAIR	10/19/2016	140,000	\$630,000,000	109	112	
222934A	м	RAMP TO NORTHBOUND HENRY HUDSON PARKWAY	AMTRAK WEST SIDE	А	AR		26	STATE	10/14/2015	3.736	FAIR	12/20/2017	10,800	\$48,600,000	112		
2229400	м	WEST 181ST STREET PEDESTRIAN BRIDGE	HENRY HUDSON PARKWAY NORTHBOUND		PED-A	Р	7	СІТҮ	8/2/2017	3.877	FAIR	N/A	1,500	\$6,750,000	112		
2229440	в	HENRY HUDSON PARKWAY	KAPPOCK STREET		A		1	STATE	7/7/2015	5.069	GOOD	6/28/2017	3,900	\$17,550,000	208		
2229450	в	WEST 232ND STREET	HENRY HUDSON PARKWAY		А		2	STATE	7/8/2015	5.026	GOOD	6/27/2017	4,900	\$22,050,000	208		
2229460	в	WEST 236TH STREET PEDESTRIAN BRIDGE	HENRY HUDSON PARKWAY		PED-A		3	СІТҮ	7/12/2017	4.356	FAIR	N/A	2,500	\$11,250,000	208		
2229470	в	WEST 239TH STREET	HENRY HUDSON PARKWAY		А		2	STATE	6/3/2015	5.053	GOOD	6/2/2017	6,100	\$27,450,000	208		
2229480	в	MANHATTAN COLLEGE PARKWAY	HENRY HUDSON PARKWAY		А		3	STATE	6/3/2015	5.053	GOOD	6/2/2017	6,200	\$27,900,000	208		
2229490	в	WEST 246TH STREET	HENRY HUDSON PARKWAY		A		2	STATE	6/3/2015	4.868	FAIR	6/2/2017	5,600	\$25,200,000	208		
2229500	в	WEST 252ND STREET	HENRY HUDSON PARKWAY		A		2	STATE	1/19/2016	5.372	GOOD	N/A	4,500	\$20,250,000	208		
2229510	в	RIVERDALE AVENUE	HENRY HUDSON PARKWAY		A		2	STATE	7/9/2015	5.079	GOOD	6/27/2017	5,200	\$23,400,000	208		
2229520	в	FIELDSTON ROAD	HENRY HUDSON PARKWAY		А		1	STATE	7/10/2015	4.900	FAIR	6/26/2017	6,600	\$29,700,000	208		
2229530	в	HENRY HUDSON PARKWAY	BROADWAY		А		1	STATE	7/27/2015	4.830	FAIR	8/1/2017	7,500	\$33,750,000	208		
2229540	в	VAN CORTLANDT PARK	HENRY HUDSON PARKWAY		PED-A	Ρ	2	СІТҮ	8/3/2017	4.710	FAIR	N/A	3,900	\$17,550,000	226		
2229550	в	VAN CORTANLDT EQUESTRIAN	HENRY HUDSON PARKWAY		PED-A	Р	2	СІТҮ	8/8/2017	4.482	FAIR	N/A	2,100	\$9,450,000	226		
2229560	в	BRONX PELHAM PARKWAY	AMTRAK - CSX	АХ	А		3	STATE	11/12/2014	4.486	FAIR	11/28/2016	24,591	\$110,659,500	211		
2229579	в	BOSTON ROAD	HUTCHINSON RIVER		wo		14	STATE	5/26/2015	4.042	FAIR	6/30/2017	95,700	\$430,650,000	212		
2230000	к	HIGHLAND BOULEVARD EASTBOUND	JACKIE ROBINSON PARKWAY		Α		1	STATE	2/22/2016	4.724	FAIR	N/A	4,900	\$22,050,000	305		

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHE R OWN ER	SPA NS	RATING	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2230010	к	HIGHLAND BOULEVARD WESTBOUND	JACKIE ROBINSON PARKWAY		А		1	STATE	2/22/2016	4.700	FAIR	N/A	3,500	\$15,750,000	305		
2230020	к	HIGHLAND BOULEVARD WESTBOUND	JACKIE ROBINSON PARKWAY EASTBOUND ENTRANCE RAMP		А		2	STATE	3/11/2014	4.974	FAIR	3/11/2016	4,700	\$21,150,000	305		
2230040	٥	CYPRESS HILLS STREET	JACKIE ROBINSON PARKWAY		А		1	STATE	3/28/2014	4.722	FAIR	3/23/2016	5,000	\$22,500,000	405		
2230099	Q	JACKIE ROBINSON PARKWAY	CYPRESS HILLS CEMETRY		А		1	STATE	1/6/2016	5.593	GOOD	N/A	4,200	\$18,900,000	405		
2230120	٥	MYRTLE AVENUE	JACKIE ROBINSON PARKWAY		А		1	STATE	4/17/2014	5.250	GOOD	4/18/2016	6,400	\$28,800,000	405	482	
2230179	٥	JACKIE ROBINSON PARKWAY	METROPOLITAN AVENUE		А		2	STATE	4/22/2014	5.286	GOOD	4/14/2016	8,673	\$39,028,500	482		
2230180	Q	UNION TURPIKE	JACKIE ROBINSON PARKWAY		А		1	STATE	1/12/2016	5.672	GOOD	N/A	5,359	\$24,115,500	482		
2230190	٥	MARKWOOD ROAD	JACKIE ROBINSON PARKWAY		А		1	STATE	1/12/2016	5.167	GOOD	N/A	4,400	\$19,800,000	482	406	
2230209	Q	QUEENS BOULEVARD	JACKIE ROBINSON PARKWAY	т	А		5	STATE	6/9/2014	4.841	FAIR	6/3/2016	37,700	\$169,650,000	409		
2230220	к	HIGHLAND BOULEVARD NORTHBOUND	VERMONT STREET		А		1	STATE	5/29/2015	5.762	GOOD	5/15/2017	3,995	\$17,977,500	305		
2230250	в	MOSHOLU PARKWAY	BRONX RIVER		WA		5	STATE	1/7/2016	4.132	FAIR	N/A	16,300	\$73,350,000	227		
2230260	в	MOSHOLU PARKWAY	METRO NORTH	м	А		1	STATE	4/30/2014	5.391	GOOD	5/13/2016	8,880	\$39,960,000	227	207	
2230270	в	MOSHOLU PARKWAY	WEBSTER AVE		А		1	STATE	5/18/2015	5.203	GOOD	5/24/2017	8,480	\$38,160,000	207		
2230287	в	JEROME AVENUE	MOSHOLU PARKWAY	т	А		3	STATE	4/30/2015	4.711	FAIR	5/30/2017	11,800	\$53,100,000	207		
2230290	в	MOSHOLU PARKWAY	EQUESTRIAN PATH		А		1	STATE	1/11/2016	4.310	FAIR	N/A	4,300	\$19,350,000	226		
2230300	в	MOSHOLU PARKWAY	CONRAIL (ABANDONED)		А		1	STATE	7/31/2014	4.271	FAIR	7/20/2016	4,600	\$20,700,000	226		
2230310	в	MOSHOLU PARKWAY	SOUTHBOUND RAMP TO HENRY HUDSON PARKWAY		А		2	STATE	8/28/2015	4.919	FAIR	8/30/2017	7,400	\$33,300,000	226		
2230350	к	SUMMIT STREET PEDESTRIAN BRIDGE	278I (BROOKLYN QUEENS EXPRESSWAY)		PED-A		2	СІТҮ	4/15/2017	4.543	FAIR	N/A	1,400	\$6,300,000	306		
2230360	к	UNION STREET	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	3/19/2014	4.236	FAIR	4/13/2016	5,000	\$22,500,000	306		
2230370	к	SACKETT STREET	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	3/19/2014	4.500	FAIR	4/14/2016	5,000	\$22,500,000	306		
2230380	к	KANE STREET	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	3/27/2014	4.153	FAIR	5/24/2017	5,000	\$22,500,000	306		
2230390	к	CONGRESS STREET	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	3/27/2014	6.029	VGOOD	4/24/2016	5,000	\$22,500,000	306		
2230410	к	278I EASTBOUND (BROOKLYN QUEENS EXPRESSWAY)	WASHINGTON STREET		А		1	STATE	7/16/2014	4.500	FAIR	7/8/2016	2,500	\$11,250,000	302		
2230420	к	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY)	WASHINGTON STREET		А		1	STATE	7/16/2014	5.047	GOOD	7/8/2016	2,500	\$11,250,000	302		
2230430	к	278I (BROOKLYN QUEENS EXPRESSWAY) RAMP TO BROOKLYN BRIDGE	PROSPECT STREET		А		1	STATE	1/4/2016	5.000	GOOD	N/A	1,100	\$4,950,000	302		
2230440	к	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY)	ADAMS STREET		А		1	STATE	1/15/2016	5.200	GOOD	N/A	2,700	\$12,150,000	302		
2230450	к	278I EASTBOUND (BROOKLYN QUEENS EXPRESSWAY)	ADAMS STREET		А		1	STATE	1/15/2016	4.933	FAIR	N/A	2,500	\$11,250,000	302		
2230460	к	278I (BROOKLYN QUEENS EXPRESSWAY)	PEARL STREET		А		1	STATE	1/15/2016	5.467	GOOD	N/A	4,500	\$20,250,000	302		
2230470	к	278I (BROOKLYN QUEENS EXPRESSWAY)	JAY STREET		А		1	STATE	1/15/2016	4.833	FAIR	N/A	5,100	\$22,950,000	302		
2230480	к	278I (BROOKLYN QUEENS EXPRESSWAY)	PROSPECT STREET		А		1	STATE	1/27/2016	4.852	FAIR	N/A	8,400	\$37,800,000	302		

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHE R OWN ER	SPA NS	RATING SOURCE	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2230490	к	278I (BROOKLYN QUEENS EXPRESSWAY)	SANDS STREET		Α		1	STATE	2/27/2014	5.019	GOOD	3/16/2016	12,600	\$56,700,000	302		
2230500	к	278I (BROOKLYN QUEENS EXPRESSWAY)	RAMP TO BROOKLYN QUEENS EXPRESSWAY EASTBOUND		А		1	STATE	1/29/2016	4.567	FAIR	N/A	1,300	\$5,850,000	302		
2230510	к	278I (BROOKLYN QUEENS EXPRESSWAY)	NASSAU STREET		Α		6	STATE	7/3/2014	5.169	GOOD	7/15/2016	51,200	\$230,400,000	302		
2230520	Q	65TH PLACE	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	1/28/2016	5.889	GOOD	N/A	11,668	\$52,506,000	402		
2230530	٥	QUEENS BOULEVARD	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	10/22/2014	6.306	VGOOD	9/21/2016	25,543	\$114,943,500	402		
2230540	٥	WOODSIDE AVENUE	278I (BROOKLYN QUEENS EXPRESSWAY)		Α		1	STATE	1/29/2016	5.391	GOOD	N/A	7,529	\$33,880,500	402		
2230550	٥	69TH STREET	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	1/29/2016	5.263	GOOD	N/A	12,600	\$56,700,000	402		
2230560	٥	70TH STREET	278I (BROOKLYN QUEENS EXPRESSWAY)		Α		2	STATE	10/22/2014	6.556	VGOOD	9/21/2016	8,580	\$38,610,000	402		
2230570	٥	41ST AVENUE	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	10/22/2014	6.735	VGOOD	9/21/2016	8,580	\$38,610,000	402		
2230587	٥	ROOSEVELT AVENUE	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	9/1/2015	5.431	GOOD	9/22/2017	11,022	\$49,599,000	402		
2230590	٥	BROADWAY / 37TH AVENUE	278I (BROOKLYN QUEENS EXPRESSWAY)		Α		2	STATE	11/24/2014	5.579	GOOD	10/17/2016	16,000	\$72,000,000	402		
2230600	٥	STEINWAY STREET	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY)		А		1	STATE	8/7/2014	6.349	VGOOD	7/19/2016	5,229	\$23,530,500	401		
2230610	٥	STEINWAY STREET	278I EASTBOUND (BROOKLYN QUEENS EXPRESSWAY)		Α		1	STATE	8/8/2014	6.349	VGOOD	7/19/2016	5,146	\$23,157,000	401		
2230620	٥	37TH STREET	278I (BROOKLYN QUEENS EXPRESSWAY)		Α		2	STATE	3/12/2014	4.681	FAIR	3/11/2016	5,300	\$23,850,000	401		
2230630	٥	35TH STREET	278I (BROOKLYN QUEENS EXPRESSWAY)		Α		4	STATE	3/14/2014	4.667	FAIR	3/15/2016	9,000	\$40,500,000	401		
2230640	٥	32ND STREET	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	6/4/2015	4.875	FAIR	8/15/2017	8,100	\$36,450,000	401		
2230657	Q	31ST STREET	2781 (BROOKLYN QUEENS EXPRESSWAY) - NYCTA		А		2	STATE	11/19/2014	4.514	FAIR	10/13/2016	9,500	\$42,750,000	401		
2230669	Q	278I (BROOKLYN QUEENS EXPRESSWAY)	35TH AVENUE		А		1	STATE	7/29/2015	6.051	VGOOD	7/18/2017	13,135	\$59,107,500	402		
2230679	Q	278I (BROOKLYN QUEENS EXPRESSWAY)	34TH AVENUE		А		1	STATE	6/1/2015	5.983	GOOD	7/6/2017	7,793	\$35,068,500	402		
2230680	Q	278I (BROOKLYN QUEENS EXPRESSWAY)	NORTHERN BOULEVARD		А		1	STATE	11/5/2014	6.016	VGOOD	9/28/2016	27,011	\$121,549,500	402	401	
2230690	Q	278I NORTHBOUND (BROOKLYN QUEENS EXPRESSWAY WEST LEG)	32ND AVENUE		А		1	STATE	6/2/2014	6.407	VGOOD	5/26/2016	4,080	\$18,360,000	401		
2230700	۵	278I NORTHBOUND (BROOKLYN QUEENS EXPRESSWAY EAST LEG)	32ND AVENUE (TO BROOKLYN QUEENS EXPRESSWAY WEST LEG)		Α		8	STATE	11/5/2014	6.352	VGOOD	10/6/2016	31,600	\$142,200,000	401	403	
2230710	٥	278I SOUTHBOUND (BROOKLYN QUEENS EXPRESSWAY WEST LEG)	32ND AVENUE		А		1	STATE	6/23/2015	6.424	VGOOD	7/31/2017	5,240	\$23,580,000	401		
2230720	٥	278I SOUTHBOUND (BROOKLYN QUEENS EXPRESSWAY EAST LEG)	278I NORTHBOUND (BROOKLYN QUEENS EXPRESSWAY WEST LEG)		Α		3	STATE	6/17/2015	6.152	VGOOD	6/19/2017	20,896	\$94,032,000	401		
2230730	۵	31ST AVENUE	278I NORTHBOUND (BROOKLYN QUEENS EXPRESSWAY WEST LEG)		Α		1	STATE	6/17/2015	5.767	GOOD	6/16/2017	5,875	\$26,437,500	401		
2230740	۵	278I SOUTHBOUND (BROOKLYN QUEENS EXPRESSWAY WEST LEG)	31ST AVENUE		А		1	STATE	6/22/2015	5.978	GOOD	6/16/2017	5,246	\$23,607,000	401		
2230750	٥	278I SOUTHBOUND (BROOKLYN QUEENS EXPRESSWAY EAST LEG)	31ST AVENUE		Α		1	STATE	6/22/2015	6.424	VGOOD	6/19/2017	4,221	\$18,994,500	401	403	
2230760	۵	278I NORTHBOUND (BROOKLYN QUEENS EXPRESSWAY EAST LEG)	31ST AVENUE		А		1	STATE	7/23/2014	6.356	VGOOD	7/5/2016	4,161	\$18,724,500	401		
2230770	۵	278I (BROOKLYN QUEENS EXPRESSWAY WEST LEG)	30TH AVENUE		А		1	STATE	5/22/2015	6.102	VGOOD	5/25/2017	6,199	\$27,895,500	401		
2230780	۵	278I (BROOKLYN QUEENS EXPRESSWAY EAST LEG)	30TH AVENUE		А		1	STATE	5/22/2015	6.206	VGOOD	5/25/2017	7,071	\$31,819,500	403	401	

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2230790	٩	BULOVA AVENUE	278I (BROOKLYN QUEENS EXPRESSWAY WEST LEG)		А		2	STATE	4/4/2014	5.278	GOOD	3/24/2016	3,300	\$14,850,000	401		
2230800	a	49TH STREET	278I (BROOKLYN QUEENS EXPRESSWAY WEST LEG)		А		2	STATE	4/7/2014	5.278	GOOD	3/24/2016	4,900	\$22,050,000	401		
2230810	Q	ASTORIA BOULEVARD EASTBOUND	278I (BROOKLYN QUEENS EXPRESSWAY WEST LEG)		А		4	STATE	5/22/2015	4.279	FAIR	6/1/2017	8,200	\$36,900,000	401		
2230820	Q	47TH STREET	GRAND CENTRAL PARKWAY		А		2	STATE	4/28/2014	4.889	FAIR	4/19/2016	5,700	\$25,650,000	401		
2230830	Q	278I NORTHBOUND (BROOKLYN QUEENS EXPRESSWAY WEST LEG)	GRAND CENTRAL PARKWAY		А		2	STATE	4/28/2014	4.583	FAIR	4/19/2016	7,600	\$34,200,000	401		
2230840	Q	44TH STREET	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	5/13/2014	4.764	FAIR	5/4/2016	5,000	\$22,500,000	401		
2230857	к	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY)	JORALEMON STREET		А		1	STATE	3/11/2014	5.000	GOOD	3/29/2016	2,100	\$9,450,000	302		
2230858	к	278I EASTBOUND (BROOKLYN QUEENS EXPRESSWAY)	JORALEMON STREET / BROOKLYN QUEENS EXPRESSWAY WESTBOUND		А		1	STATE	10/20/2015	4.619	FAIR	11/2/2017	5,900	\$26,550,000	302		
2230869	٩	QUEENS BOULEVARD	ACCESS ROAD BROOKLYN QUEENS EXPRESSWAY SOUTHBOUND		Α		1	STATE	9/30/2014	5.659	GOOD	9/14/2016	7,900	\$35,550,000	402		
2230870	к	COLUMBIA HEIGHTS	278I (BROOKLYN QUEENS EXPRESSWAY)		А		1	STATE	8/7/2014	4.450	FAIR	8/21/2016	16,500	\$74,250,000	302		
2230887	к	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY)	CADMAN PLAZA		А		2	STATE	7/25/2014	4.403	FAIR	8/19/2016	4,500	\$20,250,000	302		
2230888	к	278I EASTBOUND (BROOKLYN QUEENS EXPRESSWAY)	CADMAN PLAZA / 278I WESTBOUND		А		2	STATE	7/28/2014	5.263	GOOD	8/19/2016	4,500	\$20,250,000	302		
2230890	Q	49TH STREET	GRAND CENTRAL PARKWAY		А		2	STATE	5/15/2014	4.444	FAIR	5/4/2016	6,350	\$28,575,000	401		
2231249	к	BELT SYSTEM - SHORE PARKWAY	BAY RIDGE AVENUE		Α		1	STATE	5/22/2015	6.905	VGOOD	5/7/2016	4,900	\$22,050,000	310		
2231250	к	81ST STREET PEDESTRIAN BRIDGE	BELT SYSTEM - SHORE PARKWAY		PED-A	Р	5	СІТҮ	2/14/2017	4.662	FAIR	N/A	3,100	\$13,950,000	310		
2231260	к	92ND STREET PEDESTRIAN BRIDGE	BELT SYSTEM - SHORE PARKWAY		PED-A	Р	6	СІТҮ	8/3/2016	3.770	FAIR	N/A	3,000	\$13,500,000	310		
2231270	к	4TH AVENUE	BELT SYSTEM - SHORE PARKWAY		Α		2	STATE	3/21/2014	4.763	FAIR	4/19/2016	6,100	\$27,450,000	310		
2231290	к	BAY 8TH STREET	BELT SYSTEM - SHORE PARKWAY		Α		1	STATE	6/4/2015	5.730	GOOD	5/24/2017	4,950	\$22,275,000	311		
2231300	к	17TH AVENUE PEDESTRIAN BRIDGE	BELT SYSTEM - SHORE PARKWAY		PED-A	Р	1	СІТҮ	9/14/2017	3.702	FAIR	N/A	2,100	\$9,450,000	311		
2231319	к	BELT SYSTEM - SHORE PARKWAY	BAY PARKWAY		Α		1	STATE	6/19/2015	4.533	FAIR	6/28/2017	7,200	\$32,400,000	311		
2231329	к	BELT SYSTEM - SHORE PARKWAY	26TH AVENUE		Α		1	STATE	4/1/2014	4.600	FAIR	4/22/2016	6,700	\$30,150,000	313		
2231330	к	27TH AVENUE PEDESTRIAN BRIDGE	BELT SYSTEM - SHORE PARKWAY		PED-A	Р	1	СІТҮ	2/21/2017	4.156	FAIR	N/A	2,100	\$9,450,000	313		
2231340	к	CROPSEY AVENUE	BELT SYSTEM - SHORE PARKWAY		Α		2	STATE	7/10/2014	4.639	FAIR	6/24/2016	13,100	\$58,950,000	313		
2231360	к	BELT SYSTEM - SHORE PARKWAY	OCEAN PARKWAY		A		3	STATE	7/16/2014	6.448	VGOOD	7/12/2016	29,637	\$133,366,500	313		
2231370	к	GUIDER AVENUE RAMP TO BELT SYSTEM - SHORE PARKWAY	BELT SYSTEM - SHORE PARKWAY		Α		4	STATE	9/23/2014	6.778	VGOOD	9/22/2016	10,818	\$48,681,000	313		
2231380	к	CONEY ISLAND AVENUE	BELT SYSTEM - SHORE PARKWAY		Α		4	STATE	10/9/2015	5.542	GOOD	10/27/2017	19,866	\$89,397,000	313		
2231390	к	EAST 12TH STREET	BELT SYSTEM - SHORE PARKWAY		А		4	STATE	7/7/2014	4.542	FAIR	6/22/2016	17,200	\$77,400,000	315		
2231409	к	BELT SYSTEM - SHORE PARKWAY	SHEEPSHEAD BAY ROAD		А		1	STATE	4/1/2014	4.738	FAIR	4/28/2016	6,500	\$29,250,000	315		
2231419	к	BELT SYSTEM - SHORE PARKWAY	OCEAN AVENUE		Α		3	STATE	3/25/2014	4.306	FAIR	4/18/2016	14,000	\$63,000,000	315		
2231429	к	BELT SYSTEM - SHORE PARKWAY	BEDFORD AVENUE		Α		3	STATE	4/23/2014	4.278	FAIR	5/10/2016	12,000	\$54,000,000	315		

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2231439	к	BELT SYSTEM - SHORE PARKWAY	NOSTRAND AVENUE		A		3	STATE	3/25/2014	4.264	FAIR	4/19/2016	13,000	\$58,500,000	315		
2231449	к	KNAPP STREET	BELT SYSTEM - SHORE PARKWAY		A		1	STATE	4/9/2014	4.313	FAIR	5/4/2016	9,500	\$42,750,000	315		
2231450	к	BELT SYSTEM - SHORE PARKWAY	GERRITSEN INLET		WA		11	STATE	8/10/2015	3.239	FAIR	10/3/2017	52,000	\$234,000,000	356		
2231460	к	FLATBUSH AVENUE	BELT SYSTEM - SHORE PARKWAY		A		2	STATE	10/14/2015	6.088	VGOOD	10/30/2017	14,058	\$63,261,000	356		
2231479	к	BELT SYSTEM - SHORE PARKWAY	MILL BASIN		WMA		14	STATE	11/9/2015	3.209	FAIR	10/10/2017	73,500	\$330,750,000	318		
2231481	к	BELT SYSTEM - SHORE PARKWAY WESTBOUND	PAERDEGAT BASIN		WA		3	STATE	11/2/2015	6.758	VGOOD	10/19/2017	50,052	\$225,234,000	318		
2231482	к	BELT SYSTEM - SHORE PARKWAY EASTBOUND	PAERDEGAT BASIN		WA		5	STATE	11/4/2014	7.000	VGOOD	10/19/2016	82,074	\$369,333,000	318		
2231499	к	BELT SYSTEM - SHORE PARKWAY	ROCKAWAY PARKWAY		A		1	STATE	11/5/2014	7.000	VGOOD	10/27/2016	10,370	\$46,665,000	356		
2231509	к	BELT SYSTEM - SHORE PARKWAY	FRESH CREEK		WA		3	STATE	11/3/2015	6.577	VGOOD	11/2/2017	40,095	\$180,427,500	356		
2231519	к	PENNSYLVANIA AVENUE	BELT SYSTEM - SHORE PARKWAY		А		2	STATE	6/8/2015	5.583	GOOD	6/1/2017	6,640	\$29,880,000	356		
2231559	Q	CROSS BAY BOULEVARD	BELT SYSTEM - SHORE PARKWAY		А		4	STATE	5/30/2014	5.083	GOOD	5/19/2016	23,205	\$104,422,500	410		
2231560	Q	SOUTH CONDUIT BOULEVARD	BELT SYSTEM - SOUTHERN PARKWAY		А		2	STATE	6/16/2014	5.268	GOOD	6/8/2016	15,776	\$70,992,000	410		
2231570	Q	COHANCY STREET	BELT SYSTEM - SOUTHERN PARKWAY		А		2	STATE	4/17/2014	4.395	FAIR	4/11/2016	6,400	\$28,800,000	410		
2231590	Q	130TH STREET	BELT SYSTEM - SOUTHERN PARKWAY		А		2	STATE	1/14/2016	4.659	FAIR	N/A	6,800	\$30,600,000	410		
2231610	Q	GUY R. BREWER BOULEVARD	BELT SYSTEM - SOUTHERN PARKWAY		А		4	STATE	6/3/2015	6.028	VGOOD	8/2/2017	12,342	\$55,539,000	413		
2231620	a	FARMERS BOULEVARD	BELT SYSTEM - SOUTHERN PARKWAY		A		2	STATE	4/25/2014	4.477	FAIR	4/20/2016	6,400	\$28,800,000	413		
2231630	a	SPRINGFIELD BOULEVARD	BELT SYSTEM - SOUTHERN PARKWAY		A		2	STATE	4/25/2014	4.591	FAIR	4/20/2016	8,500	\$38,250,000	413		
2231640	٩	225TH STREET	BELT SYSTEM - SOUTHERN PARKWAY		A		2	STATE	5/15/2014	4.614	FAIR	5/5/2016	7,000	\$31,500,000	413		
2231650	a	SUNRISE HIGHWAY WESTBOUND	BELT SYSTEM - LAURELTON PARKWAY EASTBOUND		A		1	STATE	3/21/2014	4.262	FAIR	3/16/2016	4,100	\$18,450,000	413		
2231660	Q	SUNRISE HIGHWAY WESTBOUND	BELT SYSTEM - LAURELTON PARKWAY WESTBOUND		А		2	STATE	2/19/2016	4.565	FAIR	N/A	5,350	\$24,075,000	413		
2231670	Q	NORTH CONDUIT AVENUE WESTBOUND	BELT SYSTEM - LAURELTON PARKWAY EASTBOUND		А		1	STATE	1/11/2016	4.889	FAIR	N/A	4,000	\$18,000,000	413		
2231680	Q	NORTH CONDUIT AVENUE WESTBOUND	BELT SYSTEM - LAURELTON PARKWAY WESTBOUND		А		2	STATE	1/15/2016	4.932	FAIR	N/A	6,500	\$29,250,000	413		
2231690	a	FRANCIS LEWIS BOULEVARD	BELT SYSTEM - LAURELTON PARKWAY EASTBOUND		A		1	STATE	3/17/2014	5.033	GOOD	3/10/2016	6,000	\$27,000,000	413		
2231700	Q	FRANCIS LEWIS BOULEVARD	BELT SYSTEM - LAURELTON PARKWAY WESTBOUND		A		1	STATE	3/18/2014	4.700	FAIR	3/10/2016	6,000	\$27,000,000	413		
2231710	Q	MERRICK BOULEVARD	BELT SYSTEM - LAURELTON PARKWAY NORTHBOUND		А		1	STATE	1/21/2016	4.467	FAIR	N/A	6,000	\$27,000,000	413		
2231720	Q	MERRICK BOULEVARD	BELT SYSTEM - LAURELTON PARKWAY SOUTHBOUND		А		1	STATE	1/21/2016	4.200	FAIR	N/A	6,000	\$27,000,000	413		
2231730	Q	130TH AVENUE	BELT SYSTEM - LAURELTON PARKWAY NORTHBOUND		А		1	STATE	1/8/2016	5.133	GOOD	N/A	4,400	\$19,800,000	413		
2231740	Q	130TH AVENUE	BELT SYSTEM - LAURELTON PARKWAY SOUTHBOUND		А		1	STATE	1/8/2016	4.700	FAIR	N/A	4,400	\$19,800,000	413		
2231750	a	LINDEN BOULEVARD	BELT SYSTEM - CROSS ISLAND		A		2	STATE	2/18/2016	4.342	FAIR	N/A	6,700	\$30,150,000	413		
2231760	Q	BELT SYSTEM - CROSS ISLAND	DUTCH BROADWAY-115TH AVENUE		A		1	STATE	2/28/2014	4.233	FAIR	3/1/2016	7,300	\$32,850,000	413		

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2231770	۵	BELMONT PARK SOUTH RAMP	BELT SYSTEM - CROSS ISLAND		AR	Ρ	1	STATE	2/22/2016	4.781	FAIR	N/A	3,200	\$14,400,000	413		
2231780	۵	HEMPSTEAD AVENUE	BELT SYSTEM - CROSS ISLAND		А		2	STATE	1/20/2016	4.081	FAIR	N/A	14,200	\$63,900,000	413		
2231790	۵	BELMONT PARK NORTH RAMP	BELT SYSTEM - CROSS ISLAND		AR	Ρ	1	STATE	1/12/2016	4.656	FAIR	N/A	3,400	\$15,300,000	413		
2231800	۵	SUPERIOR ROAD	BELT SYSTEM - CROSS ISLAND		А		2	STATE	4/1/2014	4.682	FAIR	3/23/2016	7,000	\$31,500,000	413		
2231819	۵	JAMAICA AVENUE	BELT SYSTEM - CROSS ISLAND		А		2	STATE	3/19/2014	4.773	FAIR	3/18/2016	11,500	\$51,750,000	413		
2231829	۵	BRADDOCK AVENUE	BELT SYSTEM - CROSS ISLAND		А		2	STATE	5/22/2015	4.886	FAIR	8/22/2017	10,600	\$47,700,000	413		
2231840	۵	HILLSIDE AVENUE	BELT SYSTEM - CROSS ISLAND		А		2	STATE	3/18/2014	4.211	FAIR	3/15/2016	9,672	\$43,524,000	413		
2231850	۵	UNION TURNPIKE	BELT SYSTEM - CROSS ISLAND		А		2	STATE	3/19/2014	4.409	FAIR	3/18/2016	13,600	\$61,200,000	413		
2231860	۵	WEST ALLEY ROAD	BELT SYSTEM - CROSS ISLAND		А		2	STATE	7/8/2015	5.368	GOOD	8/21/2017	7,200	\$32,400,000	411		
2231870	۵	NORTHERN BOULEVARD	BELT SYSTEM - CROSS ISLAND		А		2	STATE	7/14/2014	5.764	GOOD	6/29/2016	9,400	\$42,300,000	411		
2231880	۵	CROCHERON PARK PEDESTRIAN	BELT SYSTEM - CROSS ISLAND		PED-A	Ρ	9	СІТҮ	6/7/2017	3.800	FAIR	N/A	2,300	\$10,350,000	411		
2231890	۵	28TH AVENUE PEDESTRIAN BRIDGE	BELT SYSTEM - CROSS ISLAND		PED-A	Р	24	СІТҮ	6/8/2017	4.554	FAIR	N/A	7,600	\$34,200,000	411		
2231900	۵	BELT SYSTEM - CROSS ISLAND	TOTTEN AVENUE		А		1	STATE	5/12/2014	4.609	FAIR	5/20/2016	4,900	\$22,050,000	407		
2231910	۵	UTOPIA PARKWAY	BELT SYSTEM - CROSS ISLAND		А		2	STATE	2/23/2016	5.023	GOOD	N/A	7,200	\$32,400,000	407		
2231920	۵	160TH STREET	BELT SYSTEM - CROSS ISLAND		А		2	STATE	6/10/2015	5.694	GOOD	8/10/2017	5,550	\$24,975,000	407		
2231930	a	FRANCIS LEWIS BOULEVARD	BELT SYSTEM - CROSS ISLAND		А		3	STATE	1/22/2016	5.182	GOOD	N/A	9,100	\$40,950,000	407		
2231940	Q	CLINTONVILLE STREET	BELT SYSTEM - CROSS ISLAND		А		2	STATE	2/1/2016	4.750	FAIR	N/A	7,400	\$33,300,000	407		
2231950	a	150TH STREET	BELT SYSTEM - CROSS ISLAND		А		2	STATE	2/1/2016	4.386	FAIR	N/A	5,900	\$26,550,000	407		
2231960	Q	149TH STREET	BELT SYSTEM - CROSS ISLAND		А		2	STATE	1/14/2016	4.795	FAIR	N/A	6,210	\$27,945,000	407		
2231970	۵	14TH AVENUE	BELT SYSTEM - CROSS ISLAND		А		2	STATE	1/14/2016	4.523	FAIR	N/A	8,100	\$36,450,000	407		
2231980	a	147TH STREET	BELT SYSTEM - CROSS ISLAND		А		2	STATE	1/13/2016	4.705	FAIR	N/A	6,300	\$28,350,000	407		
223201A	м	FDR DRIVE NORTHBOUND OFF RAMP	FDR DRIVE & SOUTH STREET		AR		17	STATE	7/23/2014	4.493	FAIR	7/22/2016	23,373	\$105,178,500	101		
223201B	м	SOUTH STREET RAMP TO FDR SOUTHBOUND	SOUTH STREET		AR		10	STATE	7/7/2015	3.881	FAIR	7/27/2016	13,388	\$60,246,000	101		
223201C	м	FDR DRIVE SOUTHBOUND OFF RAMP	SOUTH STREET		AR		8	STATE	3/3/2016	5.507	GOOD	N/A	36,700	\$165,150,000	103		
223201D	м	RAMP TO NORTHBOUND FDR DRIVE	FDR DRIVE & SOUTH STREET		AR		22	STATE	2/25/2014	4.967	FAIR	4/6/2016	15,825	\$71,212,500	101	103	
2232029	м	CORLEARS PARK ROAD	FDR DRIVE		А	Р	4	STATE	3/3/2016	4.000	FAIR	N/A	4,100	\$18,450,000	103		
2232030	м	DELANCEY STREET PEDESTRIAN BRIDGE	FDR DRIVE		PED-A	Р	12	СІТҮ	4/24/2017	4.271	FAIR	N/A	3,390	\$15,255,000	103		
2232040	м	HOUSTON STREET	FDR DRIVE		А		2	STATE	5/6/2014	3.750	FAIR	7/21/2017	11,010	\$49,545,000	103		
223204A	м	FDR DRIVE NORTHBOUND RAMP TO HOUSTON STREET	RELIEF		AR		4	STATE	1/19/2016	4.929	FAIR	N/A	6,150	\$27,675,000	103		
223204B	м	HOUSTON STREET RAMP TO FDR DRIVE NORTHBOUND	RELIEF		AR		4	STATE	1/19/2016	4.958	FAIR	N/A	7,125	\$32,062,500	103		

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE	OTHE R OWN ER	SPA NS	RATING SOURCE	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2232050	м	EAST 6TH SREETT PEDESTRIAN BRIDGE	FDR DRIVE		PED-A	Ρ	19	СІТҮ	7/12/2017	4.093	FAIR	N/A	2,200	\$9,900,000	103		
2232070	м	EAST 25TH STREET PEDESTRIAN BRIDGE	FDR DRIVE		PED-A		3	СІТҮ	4/24/2017	4.600	FAIR	N/A	1,700	\$7,650,000	106		
2232100	м	EAST 51ST STREET PEDESTRIAN BRIDGE	FDR DRIVE		PED-A	Ρ	6	СІТҮ	6/18/2017	4.067	FAIR	N/A	2,800	\$12,600,000	106		
2232110	м	EAST 63RD STREET PEDESTRIAN BRIDGE	FDR DRIVE		PED-A	Ρ	11	UNIVERSIT Y	11/29/2017	5.410	GOOD	N/A	2,100	\$9,450,000	108		
2232120	м	E AST 71ST STREET PEDESTRIAN BRIDGE	FDR DRIVE		PED-A	Ρ	19	СІТҮ	1/5/2017	4.761	FAIR	N/A	3,700	\$16,650,000	108		
2232140	м	EAST 78TH STREET PEDESTRIAN BRIDGE	FDR DRIVE		PED-A	Ρ	13	СІТҮ	6/18/2017	6.653	VGOOD	N/A	5,226	\$23,517,000	108		
2232167	м	PROMENADE OVER FDR DRIVE	FDR DRIVE- EAST 81ST STREET - EAST 90TH STREET		PED-A	Ρ	53	STATE	7/31/2015	3.143	FAIR	8/8/2017	93,000	\$418,500,000	108		
2232180	м	EAST 103RD STREET PEDESTRIAN BRIDGE	FDR DRIVE		PED-A		18	СІТҮ	12/21/2016	4.683	FAIR	N/A	6,807	\$30,631,500	111		
2232190	м	EAST 111TH STREET PEDESTRIAN BRIDGE	FDR DRIVE		PED-A	Ρ	9	СІТҮ	10/8/2016	4.319	FAIR	N/A	4,254	\$19,143,000	111		
2232200	м	EAST 120TH STREET PEDESTRIAN BRIDGE	FDR DRIVE		PED-A	Ρ	18	СІТҮ	11/19/2017	4.143	FAIR	N/A	3,978	\$17,901,000	111		
2233020	м	EAST 10TH STREET PEDESTRIAN BRIDGE	FDR DRIVE		PED-A	Ρ	21	СІТҮ	4/24/2017	4.596	FAIR	N/A	2,754	\$12,393,000	103		
2233038	м	FDR DRIVE SOUTHBOUND	FDR DRIVE NORTHBOUND / EAST 62ND STREET		А		34	STATE	11/25/2014	6.563	VGOOD	11/22/2016	58,700	\$264,150,000	106	108	
2233040	м	EAST 60TH STREET	FDR DRIVE		А	Ρ	17	STATE	7/22/2015	4.972	FAIR	8/4/2017	24,480	\$110,160,000	108		
2233059	м	HARLEM RIVER DRIVE	EAST 127TH STREET RAMP TO/FROM HARLEM RIVER DRIVE NORTHBOUND		А		11	STATE	6/30/2015	3.493	FAIR	6/27/2017	51,000	\$229,500,000	111		
2233080	к	EAST 14 STREET PEDESTRIAN BRIDGE	BELT SYSTEM - SHORE PARKWAY		PED-A		14	СІТҮ	8/2/2016	4.210	FAIR	N/A	4,700	\$21,150,000	315		
2240019	км	BROOKLYN BRIDGE	EAST RIVER		WEO		75	STATE	12/5/2014	3.139	FAIR	11/17/2016	503,788	\$2,267,046,000	103	302	101
224001A	м	PARK ROW TO BROOKLYN	WILLIAM STREET NORTHBOUND		OE		4	STATE	6/19/2015	5.086	GOOD	8/16/2017	10,167	\$45,751,500	101		
224001B	м	TO BROOKLYN FROM FDR DRIVE	FRANKFORT & PEARL STREETS		OE		31	STATE	8/1/2014	4.926	FAIR	10/4/2016	51,400	\$231,300,000	101	103	
224001C	м	PEARL STREET TO BROOKLYN	LAND ADJACENT TO BRIDGE		OE		9	STATE	7/1/2015	3.814	FAIR	8/18/2017	6,365	\$28,642,500	101		
224001D	м	TO FDR DRIVE NORTHBOUND	PEARL STREET		OE		30	STATE	6/11/2015	4.528	FAIR	7/15/2016	49,600	\$223,200,000	101	103	
224001E	м	TO PEARL STREET	LAND ADJACENT TO BRIDGE		OE		3	STATE	6/3/2015	4.944	FAIR	6/1/2016	5,300	\$23,850,000	101		
224001F	м	PEARL STREET TO FDR DRIVE	LAND ADJACENT TO BRIDGE		OE		3	STATE	6/4/2015	5.028	GOOD	6/15/2017	5,200	\$23,400,000	103		
224001G	м	TO PARK ROW	ROSE STREET		OE		11	STATE	7/30/2015	4.549	FAIR	9/28/2017	16,551	\$74,479,500	101		
2240027	км	MANHATTAN BRIDGE (LOWER LEVEL)	EAST RIVER	т	WEO		23	STATE	10/22/2014	4.375	FAIR	11/4/2016	616,390	\$2,773,755,000	103	302	
2240028	км	MANHATTAN BRIDGE (UPPER LEVEL)	NYCTA TRACKS-BMT	т	WEO		43	STATE	10/21/2014	3.757	FAIR	10/20/2016	587,424	\$2,643,408,000	103	302	
2240039	км	WILLIAMSBURG BRIDGE	EAST RIVER	т	WEO		53	STATE	10/20/2014	4.542	FAIR	10/20/2016	824,000	\$3,708,000,000	103	301	
2240047	MQ	QUEENSBORO (ED KOCH) BRIDGE (LOWER LEVEL)	EAST RIVER	AL	WEO		53	STATE	11/12/2014	4.167	FAIR	11/15/2016	626,900	\$2,821,050,000	108	402	401
2240048	MQ	QUEENSBORO (ED KOCH) BRIDGE (UPPER LEVEL)	EAST RIVER - LOWER LEVEL		WEO		37	STATE	10/13/2014	4.340	FAIR	11/10/2016	322,300	\$1,450,350,000	108	402	401
224004A	м	TO EAST 60TH STREET FROM QUEENS	FIRST AVENUE		OE		13	STATE	4/21/2014	5.338	GOOD	4/13/2016	14,800	\$66,600,000	108		
224004B	м	TO QUEENS FROM EAST 59TH STREET	FIRST AVENUE		OE		13	STATE	4/22/2014	5.542	GOOD	4/13/2016	14,800	\$66,600,000	108		

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224004C	м	TO EAST 62ND STREET FROM QUEENS	EAST 60TH - EAST 61ST STREET		OE		10	STATE	7/17/2014	4.985	FAIR	7/14/2016	16,720	\$75,240,000	108		
224004D	м	TO QUEENS FROM EAST 58TH STREET	EAST 59TH STREET		OE		12	STATE	6/13/2014	4.396	FAIR	6/10/2016	10,858	\$48,861,000	106	108	
224004E	۵	TO NEW YORK FROM THOMSON AVENUE	JACKSON AVENUE	L	OE		94	STATE	11/26/2014	4.679	FAIR	10/28/2016	104,600	\$470,700,000	402		
224004F	٥	TO NEW YORK FROM 21ST STREET	21ST STREET		OE		63	STATE	11/7/2014	4.712	FAIR	10/3/2016	63,310	\$284,895,000	402	401	
224004G	٥	TO NEW YORK FROM 11TH STREET	TERRAIN (CHAMBER)		OE		36	STATE	7/25/2014	5.268	GOOD	6/16/2016	8,360	\$37,620,000	401	402	$\square$
224004H	۵	TO 21ST STREET FROM NEW YORK	22ND STREET		OE		43	STATE	10/13/2014	4.366	FAIR	9/16/2016	48,100	\$216,450,000	402		
2240041	٥	TO THOMSON AVENUE FROM NEW YORK	JACKSON AVENUE	L	OE		39	STATE	11/21/2014	5.148	GOOD	11/13/2016	59,100	\$265,950,000	402		
224004J	м	25X TO/FROM 2ND AVENUE	NYC GARAGE		OE		14	STATE	4/21/2014	4.829	FAIR	4/20/2016	22,058	\$99,261,000	108		
2240059	вм	WILLIS AVENUE BRIDGE	HARLEM RIVER		wмо		15	STATE	11/12/2014	6.778	VGOOD	11/23/2016	171,105	\$769,972,500	111	201	
224005A	м	RAMP FROM FDR DRIVE	HARLEM RIVER DRIVE NORTHBOUND		OR		11	STATE	11/7/2014	6.887	VGOOD	10/25/2016	28,233	\$127,048,500	111		
224005B	в	TO BRUCKNER BOULEVARD	RELIEF		OR		4	STATE	9/16/2015	6.775	VGOOD	9/1/2017	19,990	\$89,955,000	201		
2240069	вм	THIRD AVENUE BRIDGE	HARLEM RIVER		wмо		14	STATE	9/4/2014	5.789	GOOD	8/26/2016	100,232	\$451,044,000	111	201	
224006A	в	FROM BRUCKNER BOULEVARD	PARKING AREA		OR		5	STATE	9/1/2015	6.310	VGOOD	9/1/2017	14,037	\$63,166,500	201		
2240079	вм	MADISON AVENUE BRIDGE	HARLEM RIVER		wмо		21	STATE	9/17/2014	4.861	FAIR	9/14/2016	80,000	\$360,000,000	111	201	
224007A	м	RAMP TO MADISON AVENUE	EAST 138TH STREET		OR		7	STATE	1/29/2016	4.972	FAIR	N/A	19,880	\$89,460,000	111		
2240089	вм	145TH STREET BRIDGE	HARLEM RIVER		wмо		8	STATE	8/21/2015	6.278	VGOOD	9/18/2017	56,700	\$255,150,000	110	204	201
2240120	BM	WEST 207TH STREET/WEST FORDHAM ROAD	HARLEM RIVER		WMO		5	STATE	7/31/2014	5.000	GOOD	7/29/2016	31,784	\$143,028,000	112	207	
2240137	вм	BROADWAY BRIDGE	HARLEM RIVER	тм	wмо		3	STATE	12/20/2015	3.806	FAIR	12/6/2016	46,848	\$210,816,000	112	207	208
2240138	вм	NYCTA IRT	HARLEM RVR/BROADWAY	тм	wмо		3	STATE	11/24/2015	4.720	FAIR	12/6/2017	19,520	\$87,840,000	112	207	208
2240180	в	WESTCHESTER AVE	BRONX RIVER		wo		1	STATE	8/19/2015	4.667	FAIR	8/22/2017	5,476	\$24,642,000	202	209	
2240200	в	SHORE ROAD	HUTCHINSON RIVER		wмо		7	STATE	6/10/2015	4.299	FAIR	7/13/2017	43,576	\$196,092,000	228		
2240210	в	CITY ISLAND ROAD	EASTCHESTER BAY		wo		7	STATE	12/11/2015	3.444	FAIR	11/28/2017	19,915	\$89,617,500	228		
2240231	к	HAMILTON AVE BRIDGE	GOWANUS CANAL		wмо		3	STATE	9/9/2014	5.472	GOOD	8/19/2016	7,300	\$32,850,000	307	306	
2240232	к	HAMILTON AVENUE BRIDGE	GOWANUS CANAL		wмо		3	STATE	8/7/2015	5.361	GOOD	8/25/2017	8,611	\$38,749,500	306		
2240240	к	NINTH STREET BRIDGE	GOWANUS CANAL		wмо		3	STATE	6/17/2015	6.161	VGOOD	6/7/2017	5,772	\$25,974,000	306		
2240250	к	THIRD STREET	GOWANUS CANAL		wмо		5	STATE	5/26/2015	4.722	FAIR	5/5/2017	4,900	\$22,050,000	306		
2240260	к	CARROLL STREET	GOWANUS CANAL		WMO		2	STATE	9/22/2015	4.931	FAIR	11/7/2017	3,000	\$13,500,000	306		
2240270	к	UNION STREET	GOWANUS CANAL		wмо		5	STATE	8/15/2014	4.111	FAIR	8/17/2016	4,900	\$22,050,000	306		
2240290	к	METROPOLITAN AVENUE	ENGLISH KILLS		wмо		5	STATE	7/13/2015	5.778	GOOD	7/26/2017	10,550	\$47,475,000	301		
2240301	к	CROPSEY AVENUE SOUTHBOUND	CONEY ISLAND CREEK		wo		3	STATE	6/26/2015	5.000	GOOD	7/26/2017	9,400	\$42,300,000	313		

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2240302	к	CROPSEY AVENUE NORTHBOUND	CONEY ISLAND CREEK		wo		3	STATE	6/26/2015	4.718	FAIR	7/26/2017	9,400	\$42,300,000	313		
2240310	к	THIRD AVENUE BRIDGE	GOWANUS CANAL		wo		1	STATE	5/27/2015	6.550	VGOOD	5/5/2017	3,412	\$15,354,000	306		
2240320	к	OCEAN AVENUE PEDESTRIAN BRIDGE	SHEEPSHEAD BAY		PED-WO		30	СІТҮ	6/22/2016	4.935	FAIR	N/A	4,450	\$20,025,000	315		
2240350	R	RICHMOND AVENUE	RICHMOND CREEK		wo		3	STATE	6/10/2015	5.194	GOOD	5/31/2017	32,589	\$146,650,500	502		
2240370	κο	GREENPOINT AVENUE BRIDGE	NEWTOWN CREEK	L	wмо		12	STATE	7/31/2015	5.083	GOOD	8/8/2017	76,106	\$342,477,000	301	402	
2240390	κo	GRAND STREET BRIDGE	NEWTOWN CREEK		WMO		2	STATE	10/7/2015	4.014	FAIR	11/1/2017	5,100	\$22,950,000	301	405	
2240410	۵	BORDEN AVENUE	DUTCH KILLS		wмо		2	STATE	6/26/2015	4.806	FAIR	7/14/2017	8,400	\$37,800,000	402		
2240440	۵	NORTHERN BOULEVARD	ALLEY CREEK		wo		2	STATE	6/17/2014	4.681	FAIR	6/20/2016	8,300	\$37,350,000	411		
2240450	۵	HUNTERS POINT AVENUE	DUTCH KILLS		wмо		4	STATE	5/30/2014	5.056	GOOD	5/25/2016	12,168	\$54,756,000	402		
2240507	۵	ROOSEVELT AVENUE	WHITESTONE EXPRESSWAY - VAN WYCK - FLUSHING RIVER		WA		27	STATE	11/5/2015	3.521	FAIR	10/7/2017	84,424	\$379,908,000	407	481	
2240540	к	STILLWELL AVENUE	CONEY ISLAND CREEK		wo		2	STATE	5/28/2015	6.125	VGOOD	5/15/2017	17,000	\$76,500,000	313		
2240620	м	WARDS ISLAND PEDESTRIAN BRIDGE	HARLEM RIVER		PED-WMO		10	СІТҮ	6/13/2016	4.933	FAIR	N/A	19,500	\$87,750,000	111		
2240639	ĸq	PULASKI BRIDGE	NEWTOWN CREEK		wмо		44	STATE	6/5/2014	4.437	FAIR	6/23/2016	205,770	\$925,965,000	301	402	
2240640	MQ	ROOSEVELT ISLAND BRIDGE	EAST RIVER EAST CHANNEL		₩МО		8	STATE	10/29/2014	5.569	GOOD	9/27/2017	36,500	\$164,250,000	108	401	
2240650	Q	163RD AVENUE PEDESTRIAN BRIDGE	HAWTREE BASIN		PED-WO		13	СІТҮ	7/18/2016	4.037	FAIR	N/A	5,000	\$22,500,000	410		
2240660	٩	RIKERS ISLAND BRIDGE	RIKERS ISLAND CHANNEL		wo		56	STATE	9/4/2015	4.324	FAIR	10/3/2017	183,100	\$823,950,000	401	480	
2241000	в	WESTCHESTER AVENUE	CSX PORT MORRIS - (ABANDONED)		o		1	STATE	8/29/2014	4.660	FAIR	8/23/2016	1,740	\$7,830,000	201		
2241010	в	EAST 156TH STREET	CSX PORT MORRIS - (ABANDONED)		o		1	STATE	5/9/2014	4.612	FAIR	4/19/2016	2,400	\$10,800,000	201		
2241020	в	EAST 161ST STREET	CSX PORT MORRIS - (ABANDONED)		o		1	STATE	3/3/2016	5.900	GOOD	N/A	12,800	\$57,600,000	203		
2241030	в	EAST 163RD STREET	CSX PORT MORRIS - (ABANDONED)		o		1	STATE	2/9/2016	4.815	FAIR	N/A	3,200	\$14,400,000	203		
2241040	в	THIRD AVENUE BRIDGE	CSX PORT MORRIS - (ABANDONED)		o		1	STATE	7/3/2014	4.563	FAIR	6/30/2016	2,700	\$12,150,000	201	203	
2241050	в	EAST 149TH STREET/JACKSON AVENUE	CSX PORT MORRIS - (ABANDONED)		o		1	STATE	5/12/2014	4.817	FAIR	4/29/2016	65,000	\$292,500,000	201		
2241060	в	ST. MARYS & CONCORD	CSX PORT MORRIS - (ABANDONED)		ο		1	STATE	7/2/3014	5.370	GOOD	6/28/2016	4,500	\$20,250,000	201		
2241070	в	WALES AVENUE	CSX PORT MORRIS - (ABANDONED)		o		1	STATE	7/2/2014	6.467	VGOOD	6/29/2016	2,535	\$11,407,500	201		
2241080	в	SOUTHERN BOULEVARD	CSX PORT MORRIS - (ABANDONED)		o		1	STATE	7/1/2014	4.093	FAIR	6/27/2016	3,900	\$17,550,000	201		
2241099	в	BRUCKNER BOULEVARD	CSX TRANS - PORT MORRIS	x	o		1	STATE	7/16/2014	6.067	VGOOD	7/7/2016	6,700	\$30,150,000	201		
2241110	в	MELROSE AVENUE	CSX PORT MORRIS - (ABANDONED)		o		8	STATE	8/18/2015	5.500	GOOD	8/22/2017	37,854	\$170,343,000	203		
2241129	в	EAST 149TH STREET	AMTRAK - CSX	АХ	o		2	STATE	11/17/2014	4.592	FAIR	11/2/2016	18,258	\$82,161,000	201	202	
2241139	в	LEGGETT AVENUE	AMTRAK - CSX	АХ	0		3	STATE	11/17/2014	4.620	FAIR	11/3/2016	41,551	\$186,979,500	202		
2241159	в	LONGWOOD AVENUE	AMTRAK - CSX	АХ	o		2	STATE	11/18/2014	5.236	GOOD	11/4/2016	10,625	\$47,812,500	202		

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2241169	в	LAFAYETTE AVENUE	AMTRAK - CSX	АХ	o		1	STATE	11/18/2014	5.365	GOOD	11/5/2016	12,000	\$54,000,000	202		$\square$
2241170	в	TIFFANY STREET	AMTRAK - CSX	AX	0		1	STATE	11/13/2015	5.078	GOOD	12/12/2017	7,267	\$32,701,500	202		$\square$
2241180	в	BARRETTO STREET	AMTRAK - CSX	АХ	o		1	STATE	11/18/2014	5.813	GOOD	11/10/2016	5,313	\$23,908,500	202		
2241190	в	HUNTS POINT AVENUE	AMTRAK - CSX	АХ	o		1	STATE	11/20/2014	4.813	FAIR	12/24/2016	10,049	\$45,220,500	202		
2241200	в	FAILE STREET	AMTRAK - CSX	АХ	o		1	STATE	11/19/2014	5.578	GOOD	11/11/2016	6,208	\$27,936,000	202		
2241210	в	BRYANT AVENUE	AMTRAK - CSX	АХ	o		1	STATE	3/2/2016	6.559	VGOOD	N/A	5,300	\$23,850,000	202		$\square$
2241230	в	WESTCHESTER AVENUE	AMTRAK - CSX	AX	0		3	STATE	11/1/2014	5.778	GOOD	11/9/2016	15,600	\$70,200,000	202	209	
2241259	в	204TH STREET PEDESTRIAN BRIDGE	METRO NORTH RR HAR	м	PED-O	Р	1	СІТҮ	3/3/2017	3.845	FAIR	N/A	4,700	\$21,150,000	227	207	
2241269	в	EAST 177TH STREET	AMTRAK - CSX	AX	0		3	STATE	7/29/2014	5.278	GOOD	8/4/2016	16,606	\$74,727,000	206		
2241270	в	EAST TREMONT AVENUE	AMTRAK - CSX	АХ	o		2	STATE	10/31/2014	5.153	GOOD	11/8/2016	22,300	\$100,350,000	209	211	
2241329	в	WHITE PLAINS ROAD	AMTRAK - CSX	АХ	o		1	STATE	10/28/2014	4.781	FAIR	10/3/2016	6,900	\$31,050,000	211		
2241330	в	UNIONPORT ROAD	AMTRAK - CSX	АХ	o		1	STATE	10/28/2014	4.688	FAIR	10/4/2016	7,631	\$34,339,500	211		
2241369	в	WILLIAMSBRIDGE ROAD	AMTRAK - CSX	АХ	o		2	STATE	10/29/2014	4.985	FAIR	10/29/2016	6,510	\$29,295,000	211		
2241380	в	PELHAM BAY PARK EQUESTRIAN	AMTRAK - CSX	AX	PED-O	Р	1	СІТҮ	7/24/2013	3.339	FAIR	N/A	7,300	\$32,850,000	228		
2241390	в	SHORE ROAD CIRCLE	AMTRAK - CSX	АХ	0		1	STATE	7/21/2014	7.000	VGOOD	8/3/2016	8,067	\$36,301,500	228		
2241409	в	GRAND CONCOURSE	METRO NORTH RR HUD	МТ	ο		1	STATE	6/23/2015	3.688	FAIR	11/27/2017	14,300	\$64,350,000	204		
2241410	в	WALTON AVENUE	METRO NORTH RR HUD	м	0		1	STATE	5/5/2014	4.406	FAIR	5/7/2016	3,600	\$16,200,000	204		
2241420	в	GERARD AVENUE	METRO NORTH RR HUD	м	ο		1	STATE	5/5/2014	5.422	GOOD	4/23/2016	5,063	\$22,783,500	204		
2241430	в	RIVER AVENUE	METRO NORTH RR HUD	м	ο		1	STATE	8/26/2015	6.156	VGOOD	9/11/2017	5,040	\$22,680,000	204		
2241460	в	WEST TREMONT AVENUE	METRO NORTH RR HUD	м	0		8	STATE	6/12/2014	3.776	FAIR	6/8/2016	12,900	\$58,050,000	205		
2241470	в	WEST FORDHAM ROAD	METRO NORTH RR HUD	м	0		4	STATE	9/1/2015	5.694	GOOD	9/25/2017	16,052	\$72,234,000	207		
2241489	в	WEST 225TH STREET	CSX TRANS - PUTNAM	x	0		2	STATE	8/28/2014	5.269	GOOD	8/26/2016	10,900	\$49,050,000	207	208	
2241490	в	WEST 230TH STREET	CSX PUTNAM (ABANDONED)		ο		1	STATE	4/27/2015	5.125	GOOD	5/19/2017	5,600	\$25,200,000	208		
2241509	в	WEST 231ST STREET	CSX PUTNAM (ABANDONED)		o		1	STATE	7/3/2014	4.745	FAIR	6/30/2016	4,723	\$21,253,500	208		
2241510	в	WEST 233RD STREET	CSX PUTNAM (ABANDONED)		o		1	STATE	4/27/2015	5.275	GOOD	5/15/2017	3,760	\$16,920,000	208		
2241520	в	WEST 234TH STREET	CSX PUTNAM (ABANDONED)		0		1	STATE	4/27/2015	5.176	GOOD	5/15/2017	3,770	\$16,965,000	208		
2241550	в	EAST 144TH STREET	METRO NORTH RR HAR	м	o		2	STATE	8/28/2015	5.847	GOOD	9/25/2017	8,290	\$37,305,000	201		
2241560	в	EAST 149TH STREET	METRO NORTH RR HAR	м	o		8	STATE	5/5/2014	4.625	FAIR	5/3/2016	27,900	\$125,550,000	201	204	
2241590	в	CONCOURSE VILLAGE AVENUE	METRO NORTH RR HAR	м	0		1	STATE	4/19/2014	3.969	FAIR	4/20/2016	12,077	\$54,346,500	204		
2241600	в	EAST 158TH STREET	METRO NORTH RR HAR	м	o		1	STATE	8/25/2015	5.200	GOOD	9/26/2017	3,400	\$15,300,000	204		

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHE R OWN ER	SPA NS	RATING	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2241610	в	EAST 161ST STREET	METRO NORTH RR HAR	м	o		1	STATE	9/2/2015	5.050	GOOD	9/25/2017	6,600	\$29,700,000	204	203	
2241620	в	EAST 162ND STREET	METRO NORTH RR HAR	м	ο		1	STATE	4/26/2014	4.781	FAIR	5/4/2016	4,700	\$21,150,000	203		
2241630	в	EAST 165TH STREET	METRO NORTH RR HAR	м	o		1	STATE	4/26/2014	4.300	FAIR	5/17/2016	16,400	\$73,800,000	203		
2241650	в	EAST 167TH STREET	METRO NORTH RR HAR	м	ο		1	STATE	4/21/2014	5.510	GOOD	4/21/2016	3,363	\$15,133,500	203		
2241660	в	EAST 168TH STREET	METRO NORTH RR HAR	м	ο		1	STATE	4/22/2014	4.641	FAIR	4/22/2016	4,800	\$21,600,000	203		
2241670	в	EAST 169TH STREET	METRO NORTH RR HAR	м	o		1	STATE	4/22/2014	4.188	FAIR	4/29/2016	3,300	\$14,850,000	203		
2241680	в	EAST 170TH STREET	METRO NORTH RR HAR	м	0		1	STATE	4/22/2014	6.333	VGOOD	4/26/2016	3,150	\$14,175,000	203		
2241700	в	ST PAULS PLACE PEDESTRIAN BRIDGE	METRO NORTH RR HAR	м	PED-O		2	СІТҮ	2/26/2017	4.746	FAIR	N/A	888	\$3,996,000	203		
2241710	в	CLAREMONT PARKWAY	METRO NORTH RR HAR	м	o		1	STATE	4/17/2014	6.458	VGOOD	4/14/2016	5,950	\$26,775,000	203		
2241720	в	EAST 173RD STREET	METRO NORTH RR HAR	м	0		1	STATE	4/17/2014	4.875	FAIR	4/15/2016	3,000	\$13,500,000	203		
2241740	в	EAST 175TH STREET	METRO NORTH RR HAR	м	ο		1	STATE	4/14/2014	3.875	FAIR	4/12/2016	3,600	\$16,200,000	206		
2241760	в	EAST TREMONT AVENUE	METRO NORTH RR HAR	м	o		1	STATE	8/29/2015	6.350	VGOOD	9/25/2017	8,424	\$37,908,000	206		
2241770	в	EAST 178TH STREET PEDESTRIAN BRIDGE	METRO NORTH RR HAR	м	PED-O		1	СІТҮ	2/13/2017	4.921	FAIR	N/A	731	\$3,289,500	206		
2241780	в	EAST 179TH STREET PEDESTRIAN BRIDGE	METRO NORTH RR HAR	м	PED-O		6	СІТҮ	2/13/2017	5.311	GOOD	N/A	1,011	\$4,549,500	206		
2241790	в	EAST 180TH STREET	METRO NORTH RR HAR	м	0		1	STATE	4/24/2104	3.844	FAIR	5/13/2016	5,000	\$22,500,000	206		
2241800	в	EAST 183RD STREET	METRO NORTH RR HAR	м	ο		1	STATE	4/24/2104	3.953	FAIR	5/14/2016	4,080	\$18,360,000	206		
2241810	в	EAST 188TH STREET	METRO NORTH RR HAR	м	ο		1	STATE	4/16/2014	4.094	FAIR	4/13/2016	5,300	\$23,850,000	206		
2241820	в	EAST 187TH STREET	METRO NORTH RR HAR	м	ο		1	STATE	4/23/2014	4.344	FAIR	4/27/2016	3,800	\$17,100,000	206		
2241839	в	FORDHAM ROAD - EAST 189TH STREET	METRO NORTH RR HAR	м	ο		1	STATE	8/27/2015	6.300	VGOOD	9/25/2017	43,157	\$194,206,500	206	207	
2241840	в	BEDFORD PARK BOULEVARD	METRO NORTH RR HAR	м	o		1	STATE	4/28/2014	4.656	FAIR	5/6/2016	6,400	\$28,800,000	227	207	
2241860	в	GUN HILL ROAD	METRO NORTH RR HAR	м	ο		1	STATE	4/29/2014	6.531	VGOOD	5/11/2016	9,128	\$41,076,000	212		
2241870	в	EAST 233RD STREET	METRO NORTH RR HAR	м	ο		1	STATE	4/28/2014	4.902	FAIR	5/10/2016	7,664	\$34,488,000	212	207	
2241890	в	EAST 241ST STREET	BRP, METRO NORTH HAR	м	wo		28	STATE	10/23/2015	4.639	FAIR	11/9/2017	49,500	\$222,750,000	212		
2241900	в	EASTCHESTER ROAD	NYCTA-DYRE AVE LINE	т	0		3	STATE	10/28/2014	4.472	FAIR	10/19/2016	13,500	\$60,750,000	212		
2241910	в	GUN HILL ROAD	NYCTA-DYRE AVE LINE	т	0		1	STATE	10/28/2014	5.516	GOOD	10/19/2016	7,500	\$33,750,000	211	212	
2241930	в	BEDFORD PARK BOULEVARD	NYCTA IND YARDS	т	0		4	STATE	10/31/2014	5.347	GOOD	10/21/2016	46,300	\$208,350,000	207		
2241940	в	WEST 205TH STREET	NYCTA IND YARDS	т	ο		4	STATE	10/31/2014	5.514	GOOD	10/20/2016	32,508	\$146,286,000	207		
2241959	в	HUTCHINSON RIVER PARKWAY	AMTRAK - CSX	АХ	ο		1	STATE	10/9/2014	5.542	GOOD	9/28/2016	15,444	\$69,498,000	210	211	
2242010	в	EAST FORDHAM ROAD	BRONX RIVER		wo		1	STATE	3/5/2016	5.267	GOOD	N/A	9,360	\$42,120,000	227		
2242029	в	SOUTHERN BOULEVARD	EAST FORDHAM ROAD		0		2	STATE	1/20/2016	4.605	FAIR	N/A	12,900	\$58,050,000	227		

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2242030	в	CROTONA AVENUE	BRONX PELHAM PARKWAY		o		2	STATE	1/20/2016	5.447	GOOD	N/A	7,600	\$34,200,000	206		
2242071	в	BRONX BOULEVARD SOUTHBOUND	BRONX RIVER (NORTH)		wo		1	STATE	3/27/2014	4.367	FAIR	3/12/2016	1,800	\$8,100,000	212		
2242072	в	BRONX BOULEVARD NORTHBOUND	BRONX RIVER (NORTH)		wo		1	STATE	3/27/2014	4.867	FAIR	3/12/2016	1,800	\$8,100,000	212		
2242081	в	BRONX BOULEVARD SOUTHBOUND	BRONX RIVER (SOUTH)		wo		1	STATE	3/4/2016	4.300	FAIR	N/A	2,800	\$12,600,000	212		i
2242082	в	BRONX BOULEVARD NORTHBOUND	BRONX RIVER (SOUTH)		wo		1	STATE	3/4/2016	4.467	FAIR	N/A	2,800	\$12,600,000	212		
2242099	в	PARK ROAD (204TH STREET)	BRONX RIVER		wo		1	STATE	5/6/2014	4.655	FAIR	4/20/2016	4,700	\$21,150,000	212		
2242100	в	BOTANICAL GARDEN ROAD	TWIN LAKES		wo	Ρ	1	STATE	2/10/2016	4.833	FAIR	N/A	2,200	\$9,900,000	227		
2242110	в	BOSTON ROAD	BRONX RIVER		wo		1	STATE	2/10/2016	4.227	FAIR	N/A	6,200	\$27,900,000	227		
2242120	в	FOOTBRIDGE NORTH OF ROUTE 1 (HESTER BRIDGE)	BRONX RIVER		PED-WO	Ρ	1	СІТҮ	12/18/2017	3.630	FAIR	N/A	1,900	\$8,550,000	227		
2242149	в	EAST TREMONT AVENUE	BRONX RIVER		wo		2	STATE	5/6/2015	4.361	FAIR	5/30/2017	12,900	\$58,050,000	206		
2242210	в	MAGNOLIA WAY	BRONX RIVER		wo	Ρ	3	STATE	5/6/2014	4.763	FAIR	4/25/2016	6,200	\$27,900,000	227		Í
2242220	в	SNUFF MILL ROAD	BRONX RIVER		wo	Ρ	2	STATE	1/8/2016	4.158	FAIR	N/A	4,800	\$21,600,000	227		
2242259	в	GRAND CONCOURSE	EAST 161ST STREET		o		1	STATE	6/30/2014	6.333	VGOOD	6/28/2016	27,017	\$121,576,500	204		
2242260	в	EAGLE AVENUE	EAST 161ST STREET		o		1	STATE	1/28/2016	5.117	GOOD	N/A	2,800	\$12,600,000	201	203	
2242280	в	GRAND CONCOURSE	EAST 167TH STREET		o		2	STATE	7/2/2014	4.754	FAIR	6/24/2016	42,900	\$193,050,000	204		
2242299	в	GRAND CONCOURSE	EAST 138TH STREET		0		1	STATE	6/12/2015	4.733	FAIR	6/8/2017	9,500	\$42,750,000	201		
2242300	в	GRAND CONCOURSE	EAST 170TH STREET		o		2	STATE	3/2/2016	4.754	FAIR	N/A	39,300	\$176,850,000	204		
2242319	в	GRAND CONCOURSE	EAST 174TH STREET	т	o		1	STATE	2/29/2016	3.933	FAIR	N/A	14,900	\$67,050,000	204		
2242329	в	GRAND CONCOURSE	EAST 175TH STREET	т	0		1	STATE	6/11/2014	4.833	FAIR	6/10/2016	11,900	\$53,550,000	205		
2242330	в	GRAND CONCOURSE	EAST TREMONT AVENUE		o		1	STATE	9/3/2015	5.583	GOOD	8/30/2017	11,700	\$52,650,000	205		
2242340	в	GRAND CONCOURSE	EAST KINGSBRIDGE ROAD		o		2	STATE	6/12/2014	4.714	FAIR	6/10/2016	18,285	\$82,282,500	207		
2242350	в	EAST FORDHAM RD	GRAND CONCOURSE		o		1	STATE	2/10/2016	4.700	FAIR	N/A	10,300	\$46,350,000	205	207	
2242360	в	GRAND CONCOURSE	EAST BURNSIDE AVENUE		o		2	STATE	6/30/2014	4.265	FAIR	7/1/2016	8,400	\$37,800,000	205		
2242370	в	GRAND CONCOURSE	BEDFORD PARK BOULEVARD		o		1	STATE	2/8/2016	4.608	FAIR	N/A	8,418	\$37,881,000	207		Í
2242380	в	GRAND CONCOURSE	EAST 204TH STREET		o		1	STATE	9/2/2015	5.406	GOOD	8/29/2017	9,272	\$41,724,000	207		
2242400	в	EAST 180TH STREET	BRONX RIVER		wo		1	STATE	9/26/2014	4.810	FAIR	9/6/2016	4,500	\$20,250,000	206	227	
2242430	в	GUN HILL ROAD	BRONX BOULEVARD		o		4	STATE	2/2/2016	4.947	FAIR	N/A	9,400	\$42,300,000	212		
2242440	в	GUN HILL ROAD	BRONX RIVER		wo		1	STATE	1/12/2016	4.867	FAIR	N/A	8,700	\$39,150,000	212		
2242459	в	EAST 233RD STREET	BRONX RIVER		wo		1	STATE	2/9/2016	4.233	FAIR	N/A	7,000	\$31,500,000	212		
2242460	в	EAST 233RD STREET	ENTRANCE ROAD BRONX RIVER PARKWAY		o		1	STATE	1/7/2016	4.900	FAIR	N/A	5,300	\$23,850,000	212		

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2243010	к	LINCOLN ROAD	BMT SUBWAY, BRIGHTON	т	o		1	STATE	5/19/2014	6.685	VGOOD	5/27/2016	6,243	\$28,093,500	355		
2243020	к	PARKSIDE AVENUE - OCEAN AVENUE	BMT SUBWAY, BRIGHTON	т	ο		6	STATE	6/18/2014	4.043	FAIR	7/27/2017	48,700	\$219,150,000	314		
2243040	к	CROOKE AVENUE	BMT SUBWAY, BRIGHTON	т	0		4	STATE	6/2/2015	4.316	FAIR	7/28/2017	6,000	\$27,000,000	314		
2243050	к	CATON AVENUE	BMT SUBWAY, BRIGHTON	т	o		4	STATE	8/19/2015	4.842	FAIR	7/24/2017	20,800	\$93,600,000	314		
2243080	к	EAST 18TH STREET - CHURCH AVENUE	BMT SUBWAY, BRIGHTON	т	ο		4	STATE	8/19/2015	4.545	FAIR	7/24/2017	18,200	\$81,900,000	314		
2243100	к	BEVERLY ROAD	BMT SUBWAY, BRIGHTON	т	0		3	STATE	6/11/2015	4.088	FAIR	7/27/2017	4,200	\$18,900,000	314		
2243110	к	CORTELYOU ROAD	BMT SUBWAY, BRIGHTON	т	o		3	STATE	8/17/2015	6.083	VGOOD	7/25/2017	4,810	\$21,645,000	314		
2243120	к	DORCHESTER ROAD	BMT SUBWAY, BRIGHTON	т	ο		1	STATE	6/16/2014	5.863	GOOD	6/17/2016	4,825	\$21,712,500	314		
2243130	к	DITMAS AVENUE	BMT SUBWAY, BRIGHTON	т	o		1	STATE	8/17/2015	5.723	GOOD	7/25/2017	5,150	\$23,175,000	314		
2243140	к	NEWKIRK AVENUE	BMT SUBWAY, BRIGHTON	т	o		3	STATE	6/17/2014	4.574	FAIR	6/22/2016	4,100	\$18,450,000	314		
2243150	к	FOSTER AVENUE	BMT SUBWAY, BRIGHTON	т	ο		1	STATE	6/2/2015	4.283	FAIR	8/4/2017	3,000	\$13,500,000	314		
2243170	к	STERLING PLACE	FRANKLIN SHUTTLE	т	ο		1	STATE	7/24/2015	6.375	VGOOD	6/28/2017	2,300	\$10,350,000	308		
2243180	к	ST JOHNS PLACE	FRANKLIN SHUTTLE	т	o		1	STATE	7/24/2015	6.656	VGOOD	6/29/2017	2,300	\$10,350,000	308		
2243190	к	LINCOLN PLACE	FRANKLIN SHUTTLE	т	ο		1	STATE	6/26/2014	6.672	VGOOD	7/11/2016	2,460	\$11,070,000	308		
2243200	к	UNION STREET	FRANKLIN SHUTTLE	т	0		2	STATE	6/25/2014	4.913	FAIR	7/12/2016	4,100	\$18,450,000	309		
2243210	к	PRESIDENT STREET	FRANKLIN SHUTTLE	т	o		2	STATE	6/25/2014	5.078	GOOD	7/13/2016	2,500	\$11,250,000	309		
2243220	к	CARROLL STREET PEDESTRIAN BRIDGE	FRANKLIN SHUTTLE	т	PED-O		3	СІТҮ	7/29/2016	5.127	GOOD	N/A	600	\$2,700,000	309		
2243230	к	CROWN STREET	FRANKLIN SHUTTLE	т	0		3	STATE	7/29/2015	5.069	GOOD	7/20/2017	4,060	\$18,270,000	309		
2243240	к	MONTGOMERY STREET	FRANKLIN SHUTTLE	т	o		1	STATE	7/29/2015	5.843	GOOD	6/26/2017	2,240	\$10,080,000	309		
2243250	к	WASHINGTON AVENUE	FRANKLIN SHUTTLE	т	0		1	STATE	6/24/2014	6.000	GOOD	7/8/2016	3,657	\$16,456,500	309	355	
2243260	к	FLATBUSH AVENUE	FRANKLIN SHUTTLE	т	0		2	STATE	6/23/2014	4.961	FAIR	7/1/2016	11,300	\$50,850,000	309		
2243279	к	EASTERN PARKWAY	FRANKLIN SHUTTLE	т	ο		1	STATE	6/27/2014	4.833	FAIR	7/22/2016	7,700	\$34,650,000	309	308	
2243280	к	6TH AVENUE	LIRR ATLANTIC AVENUE	L	0		9	STATE	9/5/2014	5.431	GOOD	9/2/2016	12,276	\$55,242,000	302		
2243290	к	CARLTON AVENUE	LIRR ATLANTIC AVENUE	L	0		4	STATE	7/24/2015	6.694	VGOOD	8/21/2017	15,400	\$69,300,000	302		
2243310	к	2ND AVENUE	LIRR BAY RIDGE	N	0		2	STATE	10/7/2014	6.208	VGOOD	9/27/2016	17,751	\$79,879,500	310		
2243320	к	3RD AVENUE	LIRR BAY RIDGE	N	0		4	STATE	9/1/2015	4.972	FAIR	8/23/2017	17,230	\$77,535,000	310		
2243330	к	4TH AVENUE	LIRR BAY RIDGE	NT	0		4	STATE	8/7/2015	5.486	GOOD	7/27/2017	13,668	\$61,506,000	310		
2243340	к	15TH AVENUE	LIRR BAY RIDGE	N	0		1	STATE	10/3/2014	4.872	FAIR	9/26/2016	3,614	\$16,263,000	311		
2243350	к	60TH STREET	LIRR BAY RIDGE	N	0		1	STATE	9/1/2015	6.000	GOOD	8/15/2017	3,900	\$17,550,000	311		
2243360	к	16TH AVENUE	LIRR BAY RIDGE	N	0		1	STATE	10/3/2014	5.350	GOOD	9/23/2016	4,345	\$19,552,500	311		

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHE R OWN ER	SPA NS	RATING	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2243370	к	17TH AVENUE	LIRR BAY RIDGE	N	o		1	STATE	10/2/2014	4.745	FAIR	9/23/2016	3,406	\$15,327,000	312		
2243380	к	18TH AVENUE	LIRR BAY RIDGE	N	0		1	STATE	10/2/2014	4.625	FAIR	9/22/2016	6,006	\$27,027,000	312		
2243390	к	52ND STREET	LIRR BAY RIDGE	N	o		1	STATE	10/1/2014	6.017	VGOOD	9/23/2016	3,293	\$14,818,500	312		
2243400	к	50TH STREET	LIRR BAY RIDGE	N	o		2	STATE	8/5/2015	4.731	FAIR	8/8/2017	7,100	\$31,950,000	312		
2243410	к	MCDONALD AVENUE	LIRR BAY RIDGE	N	o		1	STATE	10/1/2014	5.141	GOOD	9/22/2016	2,760	\$12,420,000	312		
2243420	к	EAST 3RD STREET	LIRR BAY RIDGE	N	o		1	STATE	8/5/2015	6.517	VGOOD	8/8/2017	1,840	\$8,280,000	312		
2243439	к	OCEAN PARKWAY	LIRR BAY RIDGE	N	o		1	STATE	9/19/2014	4.927	FAIR	9/22/2016	7,000	\$31,500,000	312		
2243440	к	CONEY ISLAND AVENUE	LIRR BAY RIDGE	N	o		1	STATE	9/18/2014	5.043	GOOD	9/15/2016	3,231	\$14,539,500	312		
2243450	к	EAST 14TH STREET	LIRR BAY RIDGE	N	0		1	STATE	9/17/2014	4.809	FAIR	9/15/2016	1,775	\$7,987,500	314		
2243460	к	EAST 15TH STREET PEDESTRIAN BRIDGE	LIRR BAY RIDGE	N	PED-0		3	СІТҮ	8/15/2017	5.479	GOOD	N/A	900	\$4,050,000	314		
2243480	к	OCEAN AVENUE	LIRR BAY RIDGE	N	o		2	STATE	9/16/2014	4.965	FAIR	9/14/2016	5,000	\$22,500,000	314		
2243490	к	BEDFORD AVENUE	LIRR BAY RIDGE	N	o		6	STATE	9/15/2014	5.097	GOOD	9/14/2016	12,000	\$54,000,000	314		
2243500	к	NOSTRAND AVENUE	LIRR BAY RIDGE	N	o		2	STATE	9/29/2014	4.898	FAIR	9/19/2016	4,320	\$19,440,000	314		
2243510	к	FLATBUSH AVENUE	LIRR BAY RIDGE	N	0		2	STATE	8/4/2015	4.651	FAIR	8/7/2017	5,900	\$26,550,000	318		
2243520	к	BROOKLYN AVENUE	LIRR BAY RIDGE	N	0		3	STATE	8/4/2015	5.727	GOOD	8/7/2017	4,500	\$20,250,000	318		
2243530	к	ALBANY AVENUE - AVENUE H	LIRR BAY RIDGE	N	o		2	STATE	8/31/2015	5.956	GOOD	8/15/2017	35,100	\$157,950,000	318		
2243569	к	ATLANTIC AVENUE	LIRR ATLANTIC AVENUE	L	ο		75	STATE	6/8/2014	3.620	FAIR	9/19/2017	135,100	\$607,950,000	316	305	
2243570	к	86TH STREET	BMT SEA BEACH	т	o		1	STATE	6/4/2014	5.797	GOOD	6/10/2016	12,167	\$54,751,500	313		
2243580	к	STH AVENUE	LIRR & SEA BEACH	NT	ο		4	STATE	10/27/2014	3.882	FAIR	9/13/2016	12,395	\$55,777,500	310		
2243590	к	6TH AVENUE	LIRR & SEA BEACH	NT	0		2	STATE	7/9/2015	6.056	VGOOD	7/10/2017	14,382	\$64,719,000	310		
2243600	к	7TH AVENUE	LIRR & SEA BEACH	NT	o		7	STATE	10/22/2014	4.806	FAIR	9/13/2016	18,628	\$83,826,000	310		
2243610	к	STH AVENUE	LIRR & SEA BEACH	NT	ο		2	STATE	7/9/2015	6.097	VGOOD	7/10/2017	10,834	\$48,753,000	310		
2243620	к	FORT HAMILTON PARKWAY	LIRR & SEA BEACH	NT	o		3	STATE	6/19/2014	4.729	FAIR	7/11/2016	14,800	\$66,600,000	310		
2243630	к	11TH AVENUE	LIRR & SEA BEACH	NT	0		5	STATE	7/1/2014	5.985	GOOD	7/11/2016	9,700	\$43,650,000	310		
2243640	к	13TH AVENUE	LIRR & SEA BEACH	NT	0		5	STATE	7/10/2015	4.972	FAIR	7/24/2017	16,000	\$72,000,000	310		
2243650	к	14TH AVENUE	LIRR BAY RIDGE	N	0		1	STATE	10/3/2014	6.167	VGOOD	9/26/2016	4,720	\$21,240,000	311		
2243660	к	NEW UTRECHT AVENUE	LIRR BAY RIDGE	N	0		1	STATE	10/3/2014	5.883	GOOD	9/26/2016	2,350	\$10,575,000	311		
2243670	к	15TH AVENUE	BMT SEA BEACH	т	0		4	STATE	6/22/2015	6.114	VGOOD	6/20/2017	9,800	\$44,100,000	311		
2243680	к	16TH AVENUE	BMT SEA BEACH	т	0		3	STATE	6/6/2014	5.481	GOOD	5/31/2016	6,816	\$30,672,000	311		
2243690	к	17TH AVENUE	BMT SEA BEACH	т	0		4	STATE	5/30/2014	6.173	VGOOD	6/1/2016	8,946	\$40,257,000	311		

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2243700	к	18TH AVENUE	BMT SEA BEACH	т	o		1	STATE	7/1/2015	6.421	VGOOD	6/19/2017	5,200	\$23,400,000	311		
2243710	к	19TH AVENUE	BMT SEA BEACH	т	ο		4	STATE	5/29/2014	4.237	FAIR	6/2/2016	4,800	\$21,600,000	311		
2243720	к	20TH AVENUE	BMT SEA BEACH	т	o		1	STATE	6/2/2014	6.421	VGOOD	6/3/2016	7,000	\$31,500,000	311		
2243730	к	65TH STREET	BMT SEA BEACH	т	o		4	STATE	5/23/2014	5.132	GOOD	5/26/2016	12,000	\$54,000,000	311		i
2243740	к	BAY PARKWAY	BMT SEA BEACH	т	ο		4	STATE	5/22/2014	4.658	FAIR	5/26/2016	16,800	\$75,600,000	311		
2243750	к	AVENUE O	BMT SEA BEACH	т	o		1	STATE	8/10/2015	5.706	GOOD	6/21/2017	4,658	\$20,961,000	311		i
2243760	к	AVENUE P	BMT SEA BEACH	т	o		1	STATE	8/10/2015	6.140	VGOOD	6/13/2017	5,544	\$24,948,000	311		i
2243770	к	KINGS HIGHWAY	BMT SEA BEACH	т	o		1	STATE	6/22/2015	6.628	VGOOD	6/20/2017	5,032	\$22,644,000	311		
2243780	к	HIGHLAWN AVENUE	BMT SEA BEACH	т	o		1	STATE	7/27/2015	6.280	VGOOD	6/16/2017	6,960	\$31,320,000	311		i
2243790	к	AVENUE S	BMT SEA BEACH	т	o		1	STATE	6/26/2015	5.967	GOOD	6/22/2017	5,360	\$24,120,000	315		
2243800	к	AVENUE T	BMT SEA BEACH	т	o		1	STATE	6/26/2015	6.000	GOOD	6/23/2017	5,360	\$24,120,000	311		
2243810	к	AVENUE U	BMT SEA BEACH	т	o		1	STATE	6/20/2014	5.294	GOOD	6/9/2016	5,880	\$26,460,000	315		i
2243820	к	21ST AVENUE	BMT SEA BEACH	т	o		4	STATE	7/22/2015	4.026	FAIR	6/20/2017	21,400	\$96,300,000	311		ł
2243839	к	4TH AVENUE	NYCTA BMT TRACKS	т	o		1	STATE	7/27/2015	6.250	VGOOD	7/10/2017	4,440	\$19,980,000	307		
2243840	к	9TH AVENUE	NYCTA BMT YARD	т	o		5	STATE	7/30/2015	5.736	GOOD	7/3/2017	12,440	\$55,980,000	312		
2243850	к	LIBERTY AVENUE	LIRR BAY RIDGE	N	0		3	STATE	9/23/2014	6.103	VGOOD	9/29/2016	6,659	\$29,965,500	316		i
2243860	к	GLENMORE AVENUE	LIRR BAY RIDGE	N	0		2	STATE	9/22/2014	6.456	VGOOD	9/29/2016	5,616	\$25,272,000	316		
2243870	к	PITKIN AVENUE	LIRR BAY RIDGE	N	o		2	STATE	9/24/2014	6.279	VGOOD	9/29/2016	5,328	\$23,976,000	316		i
2243890	к	SUTTER AVENUE	LIRR BAY RIDGE	N	0		3	STATE	9/26/2014	6.292	VGOOD	9/30/2016	5,497	\$24,736,500	316		i
2243900	к	BLAKE AVENUE	LIRR BAY RIDGE	N	o		3	STATE	9/26/2014	4.927	FAIR	9/30/2016	4,912	\$22,104,000	316		ł
2243910	к	LIVONIA AVENUE PEDESTRIAN BRIDGE	LIRR BAY RIDGE	N	PED-O		6	СІТҮ	10/3/2017	4.833	FAIR	N/A	2,500	\$11,250,000	316		
2243920	к	7TH AVENUE	NYCTA BMT YARD	т	0		2	STATE	6/30/2014	6.042	VGOOD	7/15/2016	4,700	\$21,150,000	307		
2243940	к	9TH AVENUE	NYCTA IND SBWY	т	o		5	STATE	7/29/2015	4.667	FAIR	8/3/2017	6,300	\$28,350,000	312		
2244010	к	EAST DRIVE (ENDALE ARCH)	PEDESTRIAN PATH NEAR GRAND ARMY PLAZA		0	Ρ	1	СІТҮ	5/23/2016	4.400	FAIR	N/A	1,533	\$6,898,500	355		i
2244020	к	WEST DRIVE (MEADOWPORT ARCH)	PEDESTRIAN PATH NEAR GRAND ARMY PLAZA		o	Р	1	STATE	4/27/2015	5.321	GOOD	4/19/2017	2,500	\$11,250,000	355		
2244030	к	EAST DRIVE	BRIDLE PATH NEAR ZOO		o	Р	1	STATE	4/28/2015	4.878	FAIR	4/20/2017	2,000	\$9,000,000	355		
2244040	к	EAST DRIVE (EAST WOOD ARCH)	PEDESTRIAN PATH NEAR CENTER DRIVE		o	Р	1	СІТҮ	7/19/2017	3.933	FAIR	N/A	1,066	\$4,797,000	355		
2244050	к	CENTER DRIVE (NETHERMEAD ARCHES)	PEDESTRIAN PATH & STREAM		wo	Р	3	STATE	4/30/2015	5.000	GOOD	4/24/2017	7,020	\$31,590,000	355		
2244060	к	HILL DRIVE (CLEFT RIDGE SPAN)	PEDESTRIAN PATH SOUTH OF BOATHOUSE		o	Р	1	СІТҮ	5/8/2017	4.433	FAIR	N/A	750	\$3,375,000	355		
2244100	к	WEST FOOTBRIDGE (MUSIC GROVE BRIDGE)	PROSPCT PARK STREAM		PED-WO	Р	1	СІТҮ	4/28/2017	5.000	GOOD	N/A	308	\$1,386,000	355		

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2244120	к	HILL DRIVE (TERRACE BRIDGE)	PROSPECT PARK LAKE		wo	Ρ	3	STATE	9/15/2015	3.291	FAIR	10/10/2017	7,800	\$35,100,000	355		
2244130	к	PEDESTRIAN BRIDGE NEAR BOATHOUSE (LULLWATER BRIDGE)	PROSPECT PARK LAKE		PED-WO	Ρ	1	СІТҮ	8/24/2016	4.885	FAIR	N/A	1,000	\$4,500,000	355		
2244150	к	RIDGE BOULEVARD	SHORE ROAD DRIVE		o		1	STATE	5/29/2015	6.333	VGOOD	5/16/2017	4,350	\$19,575,000	310		
2244160	к	3RD AVENUE	SHORE ROAD DRIVE		o		1	STATE	6/1/2015	6.273	VGOOD	5/17/2017	4,360	\$19,620,000	310		
2244170	к	ATALNTIC AVENUE SERVICE ROAD EASTBOUND	EAST NEW YORK AVENUE		o		2	STATE	7/28/2015	5.474	GOOD	7/19/2017	3,192	\$14,364,000	305		
2244180	к	ATALNTIC AVENUE SERVICE ROAD WESTBOUND	EAST NEW YORK AVENUE		o		2	STATE	7/28/2015	5.105	GOOD	7/19/2017	5,600	\$25,200,000	305		
2244440	к	FLEET WALK PEDESTRIAN BRIDGE	NAVY STREET		PED-O		1	СІТҮ	8/16/2017	3.919	FAIR	N/A	620	\$2,790,000	302		
2244460	к	CONDUIT BOULEVARD NORTHBOUND	ATLANTIC AVENUE EASTBOUND		o		1	STATE	10/10/2014	4.833	FAIR	10/20/2016	3,800	\$17,100,000	305		
2244470	к	SEELEY STREET	PROSPECT AVENUE		o		1	STATE	6/1/2015	4.033	FAIR	7/7/2017	8,496	\$38,232,000	307		
2244480	к	5TH AVENUE	GREENWOOD CEMETERY ROAD		o		1	STATE	9/10/2015	5.333	GOOD	9/18/2017	3,600	\$16,200,000	307		
2245010	м	11TH AVENUE VIADUCT	LIRR WEST SIDE YARD	AL	o		39	STATE	12/12/2014	4.056	FAIR	11/23/2016	149,100	\$670,950,000	104		
224501B	м	WEST 33RD STREET	AMTRAK 30 STREET BRANCH	А	OR		8	STATE	2/11/2016	4.500	FAIR	N/A	16,500	\$74,250,000	104		
224501C	м	WEST 33RD STREET	LAND ADJACENT TO AMTRAK	А	OR		2	STATE	4/28/2015	4.500	FAIR	5/3/2017	2,360	\$10,620,000	104		
224501D	м	WEST 34TH STREET	AMTRAK 30 STREET BRANCH	А	OR		4	STATE	5/11/2015	4.375	FAIR	5/9/2017	11,800	\$53,100,000	104		
224501E	м	WEST 35TH STREET	AMTRAK 30 STREET BRANCH	А	OR		3	STATE	7/29/2014	4.181	FAIR	11/3/2016	6,500	\$29,250,000	104		
224501F	м	WEST 36TH STREET	AMTRAK 30 STREET BRANCH	А	OR		3	STATE	12/4/2015	4.433	FAIR	12/21/2017	5,520	\$24,840,000	104		
2245040	м	MARGARET CORBIN DRIVE	PEDESTRIAN PATH NEAR CAFÉ		o	Ρ	1	СІТҮ	5/12/2017	5.000	GOOD	N/A	598	\$2,691,000	112		
2245050	м	MARGARET CORBIN DRIVE	PEDESTRIAN PATH NEAR NORTH ENTRANCE		o	Ρ	1	СІТҮ	5/17/2017	4.667	FAIR	N/A	889	\$4,000,500	112		
2245060	м	WEST 37TH STREET	AMTRAK 30 STREET BRANCH	А	o		3	STATE	12/4/2015	6.079	VGOOD	12/21/2017	7,505	\$33,772,500	104		
2245070	м	WEST 38TH STREET	AMTRAK 30 STREET BRANCH	А	o		2	STATE	7/8/2014	4.135	FAIR	7/18/2016	6,200	\$27,900,000	104		
2245080	м	WEST 39TH STREET	AMTRAK 30 STREET BRANCH	А	o		3	STATE	7/8/2014	4.173	FAIR	7/18/2016	6,300	\$28,350,000	104		
2245090	м	WEST 43RD STREET	AMTRAK 30 STREET BRANCH	А	o		2	STATE	4/18/2014	4.662	FAIR	6/9/2016	4,140	\$18,630,000	104		
2245100	м	WEST 44TH STREET	AMTRAK 30 STREET BRANCH	А	o		2	STATE	4/18/2014	4.559	FAIR	6/9/2016	4,300	\$19,350,000	104		
2245110	м	WEST 45TH STREET	AMTRAK 30 STREET BRANCH	А	o		2	STATE	4/29/2014	5.338	GOOD	6/16/2016	4,100	\$18,450,000	104		
2245120	м	WEST 46TH STREET	AMTRAK 30 STREET BRANCH	А	o		2	STATE	4/29/2014	4.500	FAIR	6/16/2016	4,100	\$18,450,000	104		
2245130	м	WEST 47TH STREET	AMTRAK 30 STREET BRANCH	А	ο		2	STATE	5/6/2014	4.721	FAIR	6/18/2016	4,100	\$18,450,000	104		
2245140	м	WEST 48TH STREET	AMTRAK 30 STREET BRANCH	А	o		2	STATE	5/6/2014	4.618	FAIR	6/18/2016	4,100	\$18,450,000	104		
2245150	м	WEST 49TH STREET	AMTRAK 30 STREET BRANCH	А	o		3	STATE	5/6/2014	4.426	FAIR	6/24/2016	4,100	\$18,450,000	104		
2245160	м	WEST 51ST STREET	AMTRAK 30 STREET BRANCH	А	ο		2	STATE	5/13/2014	4.853	FAIR	6/22/2016	4,300	\$19,350,000	104		
2245170	м	WEST 52ND STREET	AMTRAK 30 STREET BRANCH	А	o		2	STATE	5/13/2014	5.191	GOOD	6/24/2016	4,300	\$19,350,000	104		

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2245180	м	WEST 53RD STREET	AMTRAK 30 STREET BRANCH	А	o		2	STATE	5/20/2014	5.221	GOOD	6/30/2016	5,100	\$22,950,000	104		
2245190	м	WEST 58TH STREET	AMTRAK 30 STREET BRANCH	А	o		2	STATE	5/20/2014	4.706	FAIR	7/7/2016	4,100	\$18,450,000	104		
2245209	м	11TH AVENUE	AMTRAK 30 STREET BRANCH	А	o		2	STATE	6/4/2014	4.426	FAIR	7/11/2016	15,400	\$69,300,000	104		
2245210	м	WEST 42ND STREET	AMTRAK 30 STREET BRANCH	А	o		4	STATE	11/5/2014	4.587	FAIR	11/18/2016	10,300	\$46,350,000	104		
2245220	м	WEST 57TH STREET	AMTRAK 30 STREET BRANCH	А	o		3	STATE	5/20/2014	4.853	FAIR	7/7/2016	9,100	\$40,950,000	104		
2245230	м	WEST 148TH STREET PEDESTRIAN BRIDGE	AMTRAK 30 STREET BRANCH	А	PED-O	Ρ	5	СІТҮ	3/18/2016	4.617	FAIR	N/A	1,100	\$4,950,000	109		
2245250	м	WEST 158TH STREET	AMTRAK 30 STREET BRANCH	А	0		7	STATE	10/22/2015	5.917	GOOD	12/17/2017	20,219	\$90,985,500	112		
2245260	м	WEST 173RD STREET PEDESTRIAN BRIDGE	AMTRAK 30 STREET BRANCH	А	PED-O	Р	2	СІТҮ	3/10/2016	4.600	FAIR	N/A	1,500	\$6,750,000	112		
2245290	м	WEST 155TH STREET PEDESTRIAN BRIDGE	AMTRAK 30 STREET BRANCH	A	PED-O		3	СІТҮ	3/24/2016	4.092	FAIR	N/A	800	\$3,600,000	109	112	
2245300	м	INWOOD HILL PARK FOOTBRIDGE	AMTRAK 30 STREET BRANCH	А	PED-O	Р	6	СІТҮ	3/19/2016	4.171	FAIR	N/A	700	\$3,150,000	112		
2245319	м	EAST 97TH STREET	AMTRAK 30 STREET BRANCH	м	o		1	STATE	12/17/2014	4.647	FAIR	11/29/2016	3,200	\$14,400,000	111		
2245330	м	WEST 41ST STREET	AMTRAK 30 STREET BRANCH	А	0		3	STATE	7/24/2014	4.444	FAIR	7/26/2016	6,200	\$27,900,000	104		
2245340	z	WEST 50TH STREET	AMTRAK 30 STREET BRANCH	A	ο		2	STATE	5/13/2014	4.500	FAIR	6/22/2016	4,100	\$18,450,000	104		
2245350	м	WEST 54TH STREET	AMTRAK 30 STREET BRANCH	Α	ο		2	STATE	5/20/2014	5.492	GOOD	6/30/2016	4,700	\$21,150,000	104		
2245360	×	WEST 55TH STREET	AMTRAK 30 STREET BRANCH	Α	ο		2	STATE	5/20/2014	5.529	GOOD	7/2/2016	4,300	\$19,350,000	104		
2245370	м	WEST 56TH STREET	AMTRAK 30 STREET BRANCH	Α	ο		2	STATE	5/20/2014	5.397	GOOD	7/2/2016	4,400	\$19,800,000	104		
2245380	м	TRANSVERSE ROAD #1 WESTBOUND	PEDESTRIAN PATH OPPOSITE EAST 66TH STREET		0	Р	1	STATE	1/12/2016	5.000	GOOD	N/A	1,500	\$6,750,000	164		
2245420	м	WEST 65TH STREET ENTRANCE EASTBOUND	BRIDLE PATH WEST END		ο	Ρ	1	STATE	1/12/2016	5.100	GOOD	N/A	1,300	\$5,850,000	164		
2245440	м	WEST 40TH STREET	AMTRAK 30 STREET BRANCH	Α	ο		4	STATE	7/23/2014	4.103	FAIR	7/26/2016	9,400	\$42,300,000	104		
2245460	м	PARK AVENUE SOUTHBOUND	EAST 45TH STREET		0		1	STATE	6/9/2015	4.514	FAIR	6/1/2017	2,400	\$10,800,000	105		
2245470	м	PARK AVENUE NORTHBOUND	EAST 45TH STREET		ο		1	STATE	6/9/2015	4.757	FAIR	6/1/2017	2,400	\$10,800,000	105		
2245480	м	TO GEORGE WASHINGTON BRIDGE OPPOSITE WEST 171ST STREET	RIVERSIDE DRIVE		0		1	STATE	2/9/2016	4.500	FAIR	2/9/2016	10,773	\$48,478,500	112		
2246000	м	WEST DRIVE (GREYSHOT ARCH)	PEDESTRIAN PATH BETWEEN 61ST & 62ND STREETS		0	Р	1	STATE	1/21/2016	5.400	GOOD	N/A	2,500	\$11,250,000	164		
2246010	м	WEST 62ND STREET PEDESTRIAN BRIDGE (PINEBANK ARCH)	BRIDLE PATH		PED-O	Р	1	СІТҮ	7/25/2017	4.654	FAIR	N/A	1,000	\$4,500,000	164		
2246030	×	EAST 62ND STREET PEDESTRIAN BRIDGE (GAPSTOW BRIDGE)	THE POND		PED-O	Р	1	СІТҮ	6/6/2016	4.241	FAIR	N/A	1,400	\$6,300,000	164		
2246040	м	EAST DRIVE (INSCOPE ARCH)	PEDESTRIAN PATH OPPOSITE EAST 62ND STREET		ο	Р	1	СІТҮ	4/21/2017	4.400	FAIR	N/A	1,515	\$6,817,500	164		
2246050	м	CENTER DRIVE (DRIPROCK ARCH)	PEDESTRIAN OPPOSITE 63RD STREET		o	Р	1	STATE	1/13/2016	4.867	FAIR	N/A	1,725	\$7,762,500	164		
2246069	м	EAST DRIVE (GREEN GAP ARCH)	PEDESTRIAN PATH BETWEEN 63RD & 64TH STREETS		ο	Р	1	STATE	1/15/2016	4.433	FAIR	N/A	2,075	\$9,337,500	164		
2246070	м	CENTER DRIVE (PLAYMATES ARCH)	PEDESTRIAN PATH OPPOSITE 65TH STREET		0	Ρ	1	СІТҮ	6/6/2017	4.333	FAIR	N/A	1,129	\$5,080,500	164		
2246080	м	WEST DRIVE (DALEHEAD ARCH)	BRIDLE OPPOSITE WEST 64TH STREET		ο	Ρ	1	STATE	1/14/2016	4.667	FAIR	N/A	2,000	\$9,000,000	164		

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE	OTHE R OWN ER	SPA NS	RATING	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2246090	м	PEDESTRIAN BRIDGE OPPOSITE 65TH STREET	TRANSVERSE ROAD #1		PED-O	Ρ	1	СІТҮ	10/15/2016	4.583	FAIR	N/A	2,300	\$10,350,000	164		
2246100	м	CENTER DRIVE	TRANSVERSE ROAD #1		o	P.	1	STATE	1/29/2016	4.333	FAIR	N/A	6,000	\$27,000,000	164		
2246110	м	EAST DRIVE	TRANSVERSE ROAD #1		o	Ρ	1	STATE	3/19/2014	4.667	FAIR	4/11/2016	6,000	\$27,000,000	164		
2246120	₽	WEST DRIVE	TRANSVERSE ROAD #1		0	Ρ	1	STATE	3/25/2014	4.700	FAIR	4/18/2016	7,900	\$35,550,000	164		
2246130	м	EAST DRIVE (WILLOWDELL ARCH)	PEDESTRIAN PATH OPPOSITE EAST 67TH STREET		o	Ρ	1	СІТҮ	4/14/2017	3.500	FAIR	N/A	666	\$2,997,000	164		
2246140	м	WEST 72ND STREET ENTRANCE (RIFTSTONE ARCH)	BRIDLE PATH		o	Ρ	1	STATE	1/19/2016	4.467	FAIR	N/A	3,600	\$16,200,000	164		
2246150	м	72ND STREET CROSS DRIVE (TERRACE BRIDGE)	PEDESTRIAN PATH TO FOUNTAIN		o	Ρ	3	STATE	2/4/2016	5.500	GOOD	N/A	7,300	\$32,850,000	164		
2246160	м	73RD STREET PEDESTRIAN BRIDGE (BOW BRIDGE)	THE LAKE		PED-WO	Ρ	1	СІТҮ	6/20/2016	4.629	FAIR	N/A	1,700	\$7,650,000	164		
2246170	₽	EAST DRIVE (TREFOIL ARCH)	PEDESTRIAN PATH OPPOSITE EAST 73RD STREET		0	Ρ	1	STATE	1/19/2016	5.056	GOOD	N/A	1,900	\$8,550,000	164		
2246230	м	EAST DRIVE	TRANSVERSE ROAD #2		o	Ρ	1	STATE	3/11/2014	4.600	FAIR	3/31/2016	5,080	\$22,860,000	164		
2246240	м	WEST DRIVE	TRANSVERSE ROAD #2		o	Ρ	1	STATE	3/12/2014	4.167	FAIR	4/5/2016	7,200	\$32,400,000	164		
2246250	м	EAST DRIVE	TRANSVERSE ROAD #3		o	Ρ	1	STATE	1/20/2016	4.433	FAIR	N/A	4,500	\$20,250,000	164		
2246260	м	WEST DRIVE	TRANSVERSE ROAD #3		o	Ρ	1	STATE	3/18/2014	4.800	FAIR	4/6/2016	5,100	\$22,950,000	164		
2246270	м	EAST DRIVE	TRANSVERSE ROAD #4		o	Ρ	1	STATE	3/20/2014	4.100	FAIR	4/13/2016	7,000	\$31,500,000	164		
2246280	м	WEST DRIVE	TRANSVERSE ROAD #4		o	Ρ	1	STATE	3/21/2014	4.167	FAIR	4/6/2016	4,700	\$21,150,000	164		
2246320	₽	WEST 77TH STREET PEDESTRIAN BRIDGE (OAK BRIDGE)	THE LAKE		PED-WO	Ρ	3	СІТҮ	6/9/2016	5.474	GOOD	N/A	1,100	\$4,950,000	164		
2246330	м	WEST DRIVE (BALCONY BRIDGE)	STREAM TO THE LAKE		wo	P.	1	STATE	1/14/2016	5.000	GOOD	N/A	1,817	\$8,176,500	164		
2246340	м	WEST 77TH STREET PEDESTRIAN BRIDGE (LADIES POND BRIDGE)	STREAM TO THE LAKE		PED-WO	Ρ	3	СІТҮ	11/28/2016	4.355	FAIR	N/A	500	\$2,250,000	164		
2246350	м	EAST DRIVE (GREYWACKE ARCH)	PEDESTRIAN PATH OPPOSITE EAST 80TH STREET		o	Ρ	1	СІТҮ	5/4/2017	3.733	FAIR	N/A	1,266	\$5,697,000	164		
2246360	м	WEST DRIVE (WINTERDALE ARCH)	PEDESTRIAN PATH OPPOSITE WEST 82ND STREET		o	P.	1	STATE	1/15/2016	5.182	GOOD	N/A	2,502	\$11,259,000	164		
2246380	×	EAST 86TH STREET PEDESTRIAN BRIDGE (SOUTHEAST RESERVOIR BRIDGE)	BRIDLE PATH		PED-O	Ρ	1	СІТҮ	11/2/2017	4.852	FAIR	N/A	700	\$3,150,000	164		
2246390	м	WEST 86TH STREET PEDESTRIAN BRIDGE (SOUTHWEST RESERVOIR BRIDGE)	BRIDLE PATH		PED-O	P.	3	СІТҮ	11/21/2016	4.509	FAIR	N/A	1,100	\$4,950,000	164		
2246400	м	PEDESTRIAN PATH OPPOSITE EAST 79TH STREET	TRANSVERSE ROAD #2		PED-O	Ρ	1	СІТҮ	7/20/2017	4.233	FAIR	N/A	3,700	\$16,650,000	164		
2246410	м	TRANSVERSE ROAD 1 EASTBOUND (DENESMOUTH ARCH)	PEDESTRIAN PATH OPPOSITE EAST 65TH STREET		o	Ρ	1	STATE	2/4/2016	4.636	FAIR	N/A	1,739	\$7,825,500	164		
2246430	м	WEST 110TH STREET ENTRANCE (MOUNTCLIFF ARCH)	PEDESTRIAN PATH OPPOSITE WEST 109TH STREET		o	P.	1	STATE	2/8/2016	4.250	FAIR	N/A	1,200	\$5,400,000	164		
2246440	м	79TH STREET PEDESTRIAN BRIDGE	TRANSVERSE ROAD #2		PED-O	Ρ	1	CITY	7/20/2017	3.909	FAIR	N/A	5,900	\$26,550,000	164		
2246450	м	EAST 77TH STREET PEDESTRIAN BRIDGE (GLADE ARCH)	PEDESTRIAN PATH OPPOSITE EAST 77TH STREET		PED-O	Ρ	1	СІТҮ	4/7/2017	4.138	FAIR	N/A	5,000	\$22,500,000	164		
2246460	м	WEST 77TH STREET ENTRANCE (EAGLEVALE ARCH)	PEDESTRIAN PATH OPPOSITE WEST 77TH STREET		o	Ρ	2	STATE	1/21/2016	4.132	FAIR	N/A	3,066	\$13,797,000	164		
2246470	м	EAST DRIVE (HUDDLESTONE ARCH)	THE LOCH		wo	Ρ	1	STATE	1/22/2016	4.500	FAIR	N/A	1,100	\$4,950,000	164		
2246489	м	WEST 181ST STREET	RAMP TO WASHINGTON BRIDGE		0		1	STATE	1/27/2016	5.033	GOOD	N/A	8,200	\$36,900,000	112		

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2246490	м	A.C. POWELL BOULEVARD NORTHBOUND	A.C. POWELL BOULEVARD		o		1	STATE	1/28/2016	4.347	FAIR	N/A	3,000	\$13,500,000	110		
2246500	м	FORT TRYON PLACE	ENTRANCE FROM RIVERSIDE DRIVE		o	Ρ	1	STATE	3/25/2014	4.200	FAIR	3/29/2016	3,280	\$14,760,000	112		
2246510	м	CORBIN PLACE OVERPASS	CORBIN PLACE		o	Ρ	1	STATE	1/20/2016	5.133	GOOD	N/A	2,223	\$10,003,500	112		
2246550	м	PARK AVENUE VIADUCT	EAST 42ND STREET		o		10	STATE	12/7/2015	4.537	FAIR	12/13/2017	22,150	\$99,675,000	105		
2246560	м	TUDOR CITY PLACE	EAST 42ND STREET		o		1	STATE	1/22/2016	4.867	FAIR	N/A	6,600	\$29,700,000	106		
2246580	вм	HIGH BRIDGE PEDESTRIAN OVERPASS	MAJOR DEEGAN EXPRESSWAY - HARLEM RIVER	м	PED-WA	Ρ	11	PARKS	8/12/2002	3.759	FAIR	N/A	34,100	\$153,450,000	112	204	
2246600	м	WEST 176TH STREET PEDESTRIAN BRIDGE	APPROACH TO GEORGE WASHINGTON BRIDGE		PED-O	Ρ	1	СІТҮ	2/6/2017	4.400	FAIR	N/A	1,200	\$5,400,000	112		
2246620	м	EAST 128TH STREET PEDESTRIAN BRIDGE	3RD AVENUE BRIDGE APPROACH		PED-O		18	СІТҮ	8/10/2017	3.816	FAIR	N/A	2,300	\$10,350,000	111		
2246660	м	RIVERSIDE DRIVE	WEST 125TH STREET - WEST 134TH STREET		o		27	STATE	7/13/2015	4.444	FAIR	10/6/2017	148,300	\$667,350,000	109		
2246670	м	WEST 134TH STREET	TERRAIN		o		4	STATE	6/8/2015	4.778	FAIR	5/31/2017	7,500	\$33,750,000	109		
2246690	м	ISHAM PARK VEHICULR	HARLEM RIVER INLET		wo	Ρ	1	STATE	4/28/2014	6.065	VGOOD	4/22/2016	911	\$4,099,500	112		
2246700	м	ISHAM PARK PEDESTRIAN BRIDGE	HARLEM RIVER INLET		PED-WO	Ρ	1	СІТҮ	3/8/2017	4.138	FAIR	N/A	300	\$1,350,000	112		
2246710	м	WEST 153RD STREET	A.C. POWELL BOULEVARD		o		1	STATE	1/28/2016	4.611	FAIR	N/A	3,082	\$13,869,000	110		
2246720	м	RIVERSIDE DRIVE	WEST 158TH STREET - AMTRAK	A	ο		77	STATE	10/24/2014	3.528	FAIR	11/22/2016	185,658	\$835,461,000	109	112	
2246970	м	RIVERSIDE DRIVE	WEST 96TH STREET		o		3	STATE	4/27/2015	5.471	GOOD	5/3/2017	10,600	\$47,700,000	107		
2246980	м	RIVERSIDE DRIVE	WEST 138TH STREET		o		1	STATE	1/14/2016	4.767	FAIR	N/A	6,700	\$30,150,000	109		
2246990	м	EAST 129TH STREET PEDESTRIAN BRIDGE	3RD AVENUE BRIDGE RAMP		PED-O	Ρ	5	СІТҮ	10/6/2016	4.524	FAIR	N/A	1,046	\$4,707,000	111		
2247020	۵	94TH STREET PEDESTRIAN BRIDGE	LIRR PORT WASHINGTON BRANCH	L	PED-O		5	СІТҮ	6/15/2017	4.231	FAIR	N/A	905	\$4,072,500	404		
2247040	۵	UNION STREET	LIRR PORT WASHINGTON BRANCH	L	o		1	STATE	9/22/2015	6.172	VGOOD	10/16/2017	3,313	\$14,908,500	407		
2247050	۵	BOWNE STREET	LIRR PORT WASHINGTON BRANCH	L	o		1	STATE	9/24/2014	5.451	GOOD	8/8/2016	4,974	\$22,383,000	407		
2247060	٩	PARSONS BOULEVARD	LIRR PORT WASHINGTON BRANCH	L	o		1	STATE	9/24/2014	4.824	FAIR	8/8/2016	4,200	\$18,900,000	407		
2247070	۵	147TH STREET	LIRR PORT WASHINGTON BRANCH	L	o		1	STATE	9/23/2015	5.392	GOOD	10/17/2017	2,800	\$12,600,000	407		
2247080	۵	149TH STREET	LIRR PORT WASHINGTON BRANCH	L	o		1	STATE	9/8/2009	4.776	FAIR	10/27/2016	4,100	\$18,450,000	407		
2247090	۵	149TH PLACE	LIRR PORT WASHINGTON BRANCH	L	o		2	STATE	1/21/2015	5.000	GOOD	10/18/2017	4,300	\$19,350,000	407		
2247100	۵	150TH STREET	LIRR PORT WASHINGTON BRANCH	L	o		2	STATE	9/21/2015	6.088	VGOOD	10/19/2017	5,508	\$24,786,000	407		
2247110	۵	MURRAY STREET	LIRR PORT WASHINGTON BRANCH	L	o		1	STATE	9/22/2015	5.185	GOOD	10/20/2017	4,000	\$18,000,000	407		
2247120	a	WOODSIDE AVENUE	LIRR MAIN LINE	L	o		3	STATE	10/7/2015	4.413	FAIR	11/4/2017	14,900	\$67,050,000	402		
2247130	٩	CORPORAL KENNEDY STREET	LIRR PORT WASHINGTON BRANCH	L	o		1	STATE	10/9/2015	6.157	VGOOD	11/6/2017	3,379	\$15,205,500	411		
2247140	٩	BELL BOULEVARD	LIRR PORT WASHINGTON BRANCH	L	o		1	STATE	10/1/2015	5.610	GOOD	11/7/2017	4,320	\$19,440,000	411		
2247150	۵	65TH STREET	LIRR MAIN LINE	L	o		3	STATE	10/12/2015	6.375	VGOOD	11/5/2017	6,344	\$28,548,000	402		

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2247160	٥	65TH PLACE	LIRR MAIN LINE	L	o		3	STATE	10/12/2015	6.324	VGOOD	11/5/2017	8,381	\$37,714,500	402		
2247170	Q	DOUGLASTON PARKWAY	LIRR PORT WASHINGTON BRANCH	L	o		3	STATE	10/1/2014	4.542	FAIR	8/10/2016	6,300	\$28,350,000	411		
2247180	٥	GRAND AVENUE	LIRR MAIN LINE	L	o		3	STATE	10/1/2014	4.396	FAIR	8/12/2016	7,415	\$33,367,500	404		
2247190	٥	55TH AVENUE PEDESTRIAN BRIDGE	LIRR MAIN LINE	L	PED-O		3	СІТҮ	6/7/2017	4.120	FAIR	N/A	1,296	\$5,832,000	404		
2247220	٥	80TH ROAD	LIRR MAIN LINE	L	o		3	STATE	9/28/2015	4.698	FAIR	11/14/2017	4,100	\$18,450,000	409		
2247230	٥	82ND AVENUE	LIRR MAIN LINE	L	o		3	STATE	9/25/2015	5.246	GOOD	11/13/2017	4,100	\$18,450,000	409		
2247240	Q	LEFFERTS BOULEVARD	LIRR MAIN LINE	L	o		3	STATE	9/25/2015	5.736	GOOD	11/10/2017	5,460	\$24,570,000	409		
2247260	Q	JACKSON AVENUE	LIRR MONTAUK DIVISION	L	o		1	STATE	10/8/2014	5.550	GOOD	9/26/2016	4,517	\$20,326,500	402		
2247270	Q	21ST STREET	LIRR NORTH SHORE YARD	L	o		6	STATE	10/6/2015	5.153	GOOD	10/12/2017	17,590	\$79,155,000	402		
2247290	٥	49TH AVENUE	LIRR - AMTRAK	AL	o		5	STATE	10/29/2015	3.819	FAIR	10/18/2016	20,400	\$91,800,000	402		
2247300	٥	THOMPSON AVENUE	AMTRAK & LIRR YARD	AL	o		14	STATE	11/8/2014	5.125	GOOD	11/4/2016	61,280	\$275,760,000	402		
2247310	٥	QUEENS BOULEVARD	AMTRAK & LIRR YARD	AL	o		19	STATE	11/8/2014	6.268	VGOOD	11/4/2016	92,400	\$415,800,000	402	401	
2247320	Q	HONEYWELL STREET	SUNNYSIDE YARD	AL	o		22	STATE	12/16/2015	5.792	GOOD	12/20/2017	99,036	\$445,662,000	402	401	
2247330	Q	39TH STREET (NORTH)	SUNNYSIDE YARD	А	o		14	STATE	12/22/2015	6.208	VGOOD	12/19/2017	48,200	\$216,900,000	402	401	
2247370	Q	37TH AVENUE	CSX - HELLGATE	x	o		1	STATE	9/15/2015	5.894	GOOD	10/2/2017	6,868	\$30,906,000	402		
2247380	Q	ROOSEVELT AVENUE	CSX - HELLGATE - NYCTA	x	o		2	STATE	9/15/2015	6.208	VGOOD	10/2/2017	7,380	\$33,210,000	402	403	404
2247390	Q	41ST AVENUE	CSX - HELLGATE	x	o		2	STATE	9/15/2015	4.788	FAIR	10/2/2017	4,400	\$19,800,000	402	404	
2247400	Q	WOODSIDE AVENUE	CSX TRANSPORT	x	o		1	STATE	9/15/2015	5.033	GOOD	10/3/2017	4,970	\$22,365,000	402	404	
2247410	Q	43RD AVENUE	CSX TRANSPORT	x	o		1	STATE	9/15/2015	5.000	GOOD	10/3/2017	3,905	\$17,572,500	402	404	
2247420	Q	44TH AVENUE	CSX TRANSPORT	x	o		1	STATE	9/15/2015	5.267	GOOD	10/4/2017	3,888	\$17,496,000	402	404	
2247430	Q	45TH AVENUE	CSX TRANSPORT	x	o		1	STATE	9/15/2015	5.224	GOOD	10/4/2017	2,400	\$10,800,000	402	404	
2247440	Q	GRAND AVENUE	CSX TRANSPORT	x	o		1	STATE	9/21/2015	6.183	VGOOD	10/5/2017	3,280	\$14,760,000	405		
2247450	Q	57TH AVENUE	CSX TRANSPORT	x	o		1	STATE	9/21/2015	5.976	GOOD	10/5/2017	2,248	\$10,116,000	405		
2247460	Q	CALDWELL AVENUE	CSX TRANSPORT	x	o		1	STATE	11/10/2014	5.889	GOOD	11/30/2016	2,243	\$10,093,500	405		
2247470	Q	ELIOT AVENUE	CSX TRANSPORT	x	o		1	STATE	9/21/2015	4.972	FAIR	10/6/2017	2,960	\$13,320,000	405		
2247480	٥	JUNIPER BOULEVARD SOUTH	CSX TRANSPORT	x	o		1	STATE	9/22/2015	4.833	FAIR	10/6/2017	9,000	\$40,500,000	405		
2247490	٥	69TH STREET	CSX TRANSPORT	x	o		1	STATE	11/10/2014	4.979	FAIR	11/30/2016	6,175	\$27,787,500	405		
2247500	٥	METROPOLITAN AVENUE	CSX TRANSPORT	x	o		1	STATE	9/22/2015	4.233	FAIR	10/10/2017	18,650	\$83,925,000	405		
2247530	٥	ANDREWS AVENUE	LIRR MONTAUK DIVISION	L	o		1	STATE	9/29/2015	6.688	VGOOD	11/3/2017	1,783	\$8,023,500	405		
2247540	٥	60TH STREET	LIRR MONTAUK DIVISION	L	o		2	STATE	9/29/2015	5.208	GOOD	11/2/2017	5,340	\$24,030,000	405	1	

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2247550	Q	ELIOT AVENUE	LIRR MONTAUK DIVISION	L	o		2	STATE	9/24/2015	5.627	GOOD	11/1/2017	9,550	\$42,975,000	405		
2247570	Q	BOTH STREET	77TH AVE - LIRR MT	L	o		5	STATE	10/21/2014	4.932	FAIR	9/21/2016	11,725	\$52,762,500	405		
2247590	Q	FOREST PARK DRIVE	LIRR MONTAUK DIV	L	o	Р	5	STATE	10/8/2015	5.158	GOOD	10/31/2017	6,000	\$27,000,000	409		
2247600	Q	PARK LANE SOUTH	LIRR MONTAUK DIV	L	ο		1	STATE	9/22/2014	6.983	VGOOD	8/9/2016	3,024	\$13,608,000	409	482	
2247620	Q	MYRTLE AVENUE	ABANDONED LIRR		o		3	STATE	1/5/2016	5.028	GOOD	N/A	6,725	\$30,262,500	482	406	
2247630	Q	PEDESTRIAN BRIDGE NEAR UNION TURNPIKE	ABANDONED LIRR		PED-0		8	СІТҮ	6/14/2017	4.522	FAIR	N/A	1,500	\$6,750,000	406		
2247640	Q	39TH STREET (SOUTH)	AMTRAK & LIRR YARD	AL	ο		9	STATE	12/16/2015	5.667	GOOD	12/19/2017	34,100	\$153,450,000	402		
2247650	Q	60TH ROAD PEDESTRIAN BRIDGE	LIRR MAIN LINE	L	PED-0		3	СІТҮ	6/8/2017	4.893	FAIR	N/A	1,200	\$5,400,000	405	406	
2247660	Q	FOREST PARK DRIVE	ABANDONED LIRR		o	Р	6	STATE	4/28/2015	4.302	FAIR	7/11/2017	10,011	\$45,049,500	409		
2247680	Q	221ST STREET	LIRR PORT WASHINGTON BRANCH	L	ο		3	STATE	9/23/2015	5.926	GOOD	11/8/2017	6,050	\$27,225,000	411		
2248019	Q	WOODHAVEN BOULEVARD	ATLANTIC AVENUE		o		3	STATE	3/26/2014	4.208	FAIR	4/1/2016	19,400	\$87,300,000	409		
2248020	Q	WHITELAW PEDESTRIAN BRIDGE	NORTH & SOUTH CONDUIT AVENUE		PED-0		7	СІТҮ	10/10/2017	4.507	FAIR	N/A	5,500	\$24,750,000	410		
2248039	a	CROSS BAY BOULEVARD	NASSAU EXPESSWAY - ROUTE 27		0		2	STATE	5/26/2015	5.958	GOOD	7/31/2017	16,544	\$74,448,000	410		
2248040	a	RAMP TO LINDEN BOULEVARD	SOUTH CONDUIT AVENUE		0		1	STATE	5/15/2014	5.200	GOOD	5/5/2016	3,352	\$15,084,000	410		
2248059	Q	MOTOR PARKWAY (PEDESTRIAN)	FRANCIS LEWIS BOULEVARD		PED-O	Р	2	СІТҮ	6/9/2017	4.528	FAIR	N/A	2,800	\$12,600,000	408		
2248060	٩	MOTOR PARKWAY (PEDESTRIAN)	BELL BOULEVARD		PED-O	Р	2	СІТҮ	5/8/2017	4.403	FAIR	N/A	2,650	\$11,925,000	411		
2248070	Q	MOTOR PARKWAY (PEDESTRIAN)	SPRINGFIELD BOULEVARD		PED-O	Р	3	СІТҮ	6/2/2017	3.836	FAIR	N/A	2,900	\$13,050,000	411		
2248080	Q	MOTOR PARKWAY (PEDESTRIAN)	HOLLIS COURT BOULEVARD		PED-O	Р	3	СІТҮ	11/30/2017	4.323	FAIR	N/A	2,700	\$12,150,000	408		
2248090	٩	FLUSHING MEADOW PARK PEDESTRIAN	COLLEGE POINT BOULEVARD		PED-O	Р	3	СІТҮ	1/4/2017	4.694	FAIR	N/A	8,400	\$37,800,000	407		
2248100	q	MOTOR PARKWAY (PEDESTRIAN)	73RD AVENUE		PED-O	Р	3	СІТҮ	12/1/2017	4.672	FAIR	N/A	2,600	\$11,700,000	408		
2248110	٩	MOTOR PARKWAY (PEDESTRIAN)	ALLEY PARK PEDESTRIAN WALK		PED-O	Р	1	СІТҮ	6/7/2017	3.833	FAIR	N/A	1,000	\$4,500,000	413		
2248129	۵	UNION TURNPIKE	CREEDMOORE HOSPITAL ROAD		o		1	STATE	6/1/2015	4.733	FAIR	7/7/2017	3,500	\$15,750,000	413		
2248130	Q	FLUSHING MEADOW PARK PEDESTRIAN	WILLOW LAKE & 76TH ROAD		PED-WO	Р	4	СІТҮ	4/20/2002	1.000	CLOSED	N/A	1,891	\$8,509,500	481		
2248140	Q	FLUSHING MEADOW PARK ROAD	STREAM NORTH OF LONG ISLAND EXPRESSWAY		wo	Р	5	STATE	7/22/2015	4.333	FAIR	7/20/2017	4,100	\$18,450,000	481		
2248159	Q	WOODHAVEN BOULEVARD	QUEENS BOULEVARD		0		2	STATE	7/17/2014	4.078	FAIR	7/12/2016	11,500	\$51,750,000	404		
2248160	Q	ELIOT AVENUE	QUEENS BOULEVARD		ο		2	STATE	7/17/2014	4.804	FAIR	7/12/2016	13,785	\$62,032,500	406		
2248200	Q	RUST STREET	FLUSHING AVENUE		0		1	STATE	7/2/2015	4.672	FAIR	7/7/2017	2,940	\$13,230,000	405		
2248220	۵	SERVICE ROAD TURNAROUND	FLUSHING AVENUE		ο		1	STATE	7/2/2015	5.078	GOOD	7/7/2017	2,940	\$13,230,000	405		
2248230	Q	BEACH CHANNEL DRIVE WESTBOUND	BEACH CHANNEL DRIVE EASTBOUND		0		1	STATE	6/15/2015	4.400	FAIR	6/12/2017	3,600	\$16,200,000	484		
2248240	۵	FLUSHING AVENUE SERVICE ROAD	FLUSHING AVENUE		0		1	STATE	7/2/2015	5.250	GOOD	7/7/2017	2,940	\$13,230,000	405		

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2248250	Q	102ND STREET	HAWTREE BASIN		wo		3	STATE	7/23/2015	6.015	VGOOD	7/21/2017	4,900	\$22,050,000	410		
2248260	Q	MEADOW LAKE BRIDGE	MEADOW LAKE		wo	Р	5	STATE	5/26/2015	4.458	FAIR	7/19/2017	4,200	\$18,900,000	481		
2248280	Q	HIGHLAND PARK PEDESTRIAN	PEDESTRIAN PATH		PED-O	Р	1	СІТҮ	12/16/2015	3.667	FAIR	N/A	1,900	\$8,550,000	405		
2248299	٥	JACKIE ROBINSON PARKWAY-UNION TURNPIKE	AUSTIN STREET		ο		1	STATE	5/23/2014	4.806	FAIR	5/16/2016	5,900	\$26,550,000	409	406	
2248300	٥	71ST AVENUE	COOPER AVENUE		0		1	STATE	6/24/2015	4.373	FAIR	7/26/2017	2,800	\$12,600,000	405		
2248340	Q	FOREST PARK DRIVE	MYRTLE AVENUE		o	Р	3	STATE	6/1/2015	4.984	FAIR	7/26/2017	5,100	\$22,950,000	409		
2248369	Q	ROCKAWAY BOULEVARD	THURSTON BASIN		wo		2	STATE	7/15/2015	5.474	GOOD	7/13/2017	6,000	\$27,000,000	483	413	
2248379	Q	BOATHOUSE BRIDGE	AQUACADE LAKE		wo	Р	5	STATE	7/21/2015	4.296	FAIR	7/18/2017	6,300	\$28,350,000	481		
2249040	R	TOMPKINS AVENUE	B&O RR (ABANDONED)		o		1	STATE	4/4/2014	5.953	GOOD	4/19/2016	5,096	\$22,932,000	501		
2249070	R	JOHN STREET PEDESTRIAN BRIDGE	B&O RR (ABANDONED)	o	PED-O		2	СІТҮ	9/20/2016	5.423	GOOD	N/A	1,050	\$4,725,000	501		
2249090	R	MORNINGSTAR ROAD	B&O RR (ABANDONED)	o	o		4	STATE	7/8/2015	4.627	FAIR	6/16/2016	7,900	\$35,550,000	501		
2249100	R	GRANITE AVENUE	B&O RR (ABANDONED)	o	ο		4	STATE	2/3/2016	5.966	GOOD	N/A	7,300	\$32,850,000	501		
2249110	R	LAKE AVENUE	B&O RR (ABANDONED)	o	o		3	STATE	5/1/2015	4.556	FAIR	4/21/2017	5,900	\$26,550,000	501		
2249120	R	SIMONSON AVENUE	B&O RR (ABANDONED)	o	o		3	STATE	5/1/2015	5.852	GOOD	4/21/2017	5,819	\$26,185,500	501		
2249130	R	VAN NAME AVENUE	B&O RR (ABANDONED)	o	ο		3	STATE	5/1/2015	5.186	GOOD	4/21/2017	5,474	\$24,633,000	501		
2249140	R	VAN PELT AVENUE	B&O RR (ABANDONED)	o	0		3	STATE	4/29/2015	5.576	GOOD	4/21/2017	5,000	\$22,500,000	501		
2249160	R	DE HART AVENUE	B&O RR (ABANDONED)	o	0		4	STATE	4/29/2015	6.389	VGOOD	4/21/2017	6,700	\$30,150,000	501		
2249170	R	UNION AVENUE	B&O RR (ABANDONED)	o	0		4	STATE	4/29/2015	5.130	GOOD	4/21/2017	6,630	\$29,835,000	501		
2249180	R	HARBOR ROAD	CONRAIL - EX B&O RR	с	0		4	STATE	9/12/2015	6.000	GOOD	10/7/2017	5,778	\$26,001,000	501		
2249200	R	SOUTH AVENUE	ARLINGTON YARD	с	o		3	STATE	9/12/2015	6.527	VGOOD	10/7/2017	8,500	\$38,250,000	501		
2249210	R	MAIN STREET PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	PED-O		9	CITY	7/17/2017	4.600	FAIR	N/A	400	\$1,800,000	503		
2249230	R	TRACY AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	PED-O		9	СІТҮ	7/18/2017	3.451	FAIR	N/A	635	\$2,857,500	503		
2249240	R	ARTHUR KILL ROAD	SIRT SOUTH SHORE	s	o		1	STATE	10/14/2014	4.796	FAIR	10/3/2016	3,650	\$16,425,000	503		
2249250	R	BETHEL AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	PED-0		12	СІТҮ	7/20/2017	3.526	FAIR	N/A	1,165	\$5,242,500	503		
2249269	R	PAGE AVENUE	SIRT - TIDAL STREAM	s	wo		4	STATE	9/23/2015	5.806	GOOD	9/11/2017	30,710	\$138,195,000	503		
2249270	R	RICHMOND VALLEY ROAD	SIRT SOUTH SHORE	s	0		4	STATE	8/26/2015	5.164	GOOD	8/29/2017	9,440	\$42,480,000	503		
2249280	R	RICHMOND VALLEY STATION PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	PED-O		7	СІТҮ	7/21/2017	4.464	FAIR	N/A	595	\$2,677,500	503		
2249290	R	SEGUINE AVENUE	SIRT SOUTH SHORE	s	o		1	STATE	8/24/2015	6.016	VGOOD	8/22/2017	3,250	\$14,625,000	503		
2249300	R	HUGUENOT AVENUE	SIRT SOUTH SHORE	s	o		2	STATE	9/23/2015	4.788	FAIR	9/13/2017	6,514	\$29,313,000	503		
2249320	R	ALBEE AVENUE	SIRT SOUTH SHORE	s	o		3	STATE	9/16/2015	4.689	FAIR	9/14/2017	6,500	\$29,250,000	503		

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2249330	R	ANNADALE ROAD	SIRT SOUTH SHORE	s	o		1	STATE	8/20/2015	6.233	VGOOD	8/25/2017	3,540	\$15,930,000	503		
2249350	R	NELSON AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	PED-O		3	СІТҮ	7/24/2017	4.143	FAIR	N/A	300	\$1,350,000	503		
2249360	R	GIFFORDS LANE	SIRT SOUTH SHORE	s	o		1	STATE	10/15/2014	5.625	GOOD	10/4/2016	3,042	\$13,689,000	503		
2249370	R	GREAVES AVENUE	SIRT SOUTH SHORE	s	o		1	STATE	8/19/2015	6.533	VGOOD	8/24/2017	2,650	\$11,925,000	503		
2249380	R	GUYON AVENUE	SIRT SOUTH SHORE	s	ο		3	STATE	9/23/2015	4.672	FAIR	9/12/2017	6,900	\$31,050,000	503		
2249390	R	CEDARVIEW AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	PED-O		5	СІТҮ	7/25/2017	3.912	FAIR	N/A	625	\$2,812,500	503		1
2249400	R	BEACH AVENUE	SIRT SOUTH SHORE	s	ο		2	STATE	8/11/2015	5.364	GOOD	8/15/2017	3,700	\$16,650,000	502		
2249410	R	ROSS AVENUE	SIRT SOUTH SHORE	s	o		2	STATE	8/12/2015	5.182	GOOD	8/16/2017	3,800	\$17,100,000	502		
2249420	R	ROSE AVENUE	SIRT SOUTH SHORE	s	o		2	STATE	8/13/2015	5.258	GOOD	8/17/2017	3,800	\$17,100,000	502		1
2249430	R	NEW DORP LANE	SIRT SOUTH SHORE	s	ο		2	STATE	8/14/2015	4.955	FAIR	9/1/2017	7,600	\$34,200,000	502		
2249440	R	BANCROFT AVENUE	SIRT SOUTH SHORE	s	o		3	STATE	9/17/2015	5.393	GOOD	9/5/2017	5,900	\$26,550,000	502		
2249450	R	FREMONT AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	PED-0		3	СІТҮ	7/26/2017	4.164	FAIR	N/A	800	\$3,600,000	502		
2249460	R	LINCOLN AVENUE	SIRT SOUTH SHORE	s	o		1	STATE	9/1/2015	5.172	GOOD	9/6/2017	4,500	\$20,250,000	502		
2249470	R	MIDLAND AVENUE	SIRT SOUTH SHORE	s	o		1	STATE	9/18/2015	5.466	GOOD	9/7/2017	3,000	\$13,500,000	502		
2249480	R	WEST FINGERBOARD ROAD	SIRT SOUTH SHORE	s	o		2	STATE	9/16/2015	6.403	VGOOD	9/8/2017	5,100	\$22,950,000	502		
2249490	R	CLOVE ROAD	SIRT SOUTH SHORE	s	0		3	STATE	10/16/2014	5.778	GOOD	10/5/2016	5,104	\$22,968,000	502		
2249510	R	TOMPKINS AVENUE	WILLOW AVENUE, SIRT	s	0		2	STATE	10/17/2014	5.269	GOOD	10/6/2016	5,378	\$24,201,000	501		
2249520	R	HANNAH STREET	SIRT SOUTH SHORE	s	0		10	STATE	10/16/2015	4.627	FAIR	10/10/2016	13,360	\$60,120,000	501		
2249530	R	MINTHORNE STREET PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	PED-O		26	CITY	7/27/2017	4.358	FAIR	N/A	6,000	\$27,000,000	501		
2249580	R	BELFIELD AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	PED-O		5	СІТҮ	7/28/2017	3.980	FAIR	N/A	400	\$1,800,000	503		
2249710	R	WEST FOOTBRIDGE	CLOVE LAKE		PED-WO	Р	2	СІТҮ	6/7/2016	3.857	FAIR	N/A	900	\$4,050,000	501		
2249720	R	EAST FOOTBRIDGE	CLOVE LAKE		PED-WO	Р	2	СІТҮ	6/8/2016	4.143	FAIR	N/A	900	\$4,050,000	501		
2249730	R	BRIDGE OVER DAM	NORTH END CLOVE LAKE		PED-WO	Р	1	СІТҮ	6/8/2016	3.405	FAIR	N/A	1,000	\$4,500,000	501		
2249760	R	MARTLINGS AVENUE	RICHMOND LAKE DAM		wo		2	STATE	6/12/2015	4.467	FAIR	6/5/2017	7,000	\$31,500,000	501		
2249770	R	SOUTH OF BROOKS LAKE	STREAM IN PARK		PED-WO	Р	3	СІТҮ	11/8/2017	4.767	FAIR	N/A	700	\$3,150,000	501		
2249780	R	FOOTBRIDGE	BROOKS LAKE DAM		PED-WO	Р	1	СІТҮ	6/1/2017	4.033	FAIR	N/A	800	\$3,600,000	501		
2249790	R	FOOTBRIDGE SOUTH OF FOREST AVENUE	STREAM IN PARK		PED-WO	Р	3	СІТҮ	11/8/2017	4.953	FAIR	N/A	700	\$3,150,000	501		
2249800	R	FOREST AVENUE	CLOVE LAKES PARK STREAM		wo	Р	1	STATE	10/29/2015	4.300	FAIR	11/6/2017	1,600	\$7,200,000	501		
2249810	R	HYLAN BOULEVARD	LEMON CREEK		wo		1	STATE	3/10/2014	6.172	VGOOD	3/15/2016	11,400	\$51,300,000	503		
2249820	R	ARTHUR KILL ROAD	ARTHUR KILL STREAM		wo		1	STATE	5/5/2015	4.102	FAIR	4/27/2017	1,500	\$6,750,000	503		

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2249840	R	TOMPKINS AVENUE	GREENFIELD AVENUE		ο		1	STATE	3/10/2014	4.638	FAIR	3/21/2016	2,690	\$12,105,000	501		l
2249860	R	SLATER BOULEVARD	NEW CREEK		wo		1	STATE	5/4/2015	5.510	GOOD	4/28/2017	2,037	\$9,166,500	502		l
2249870	R	TRAVIS AVENUE	MAIN CREEK		wo		1	STATE	10/15/2015	5.483	GOOD	10/30/2017	1,700	\$7,650,000	502		i
2249880	R	CHELSEA ROAD	SAWMILL CREEK		wo		1	STATE	5/21/2015	6.633	VGOOD	4/26/2017	2,205	\$9,922,500	502		ĺ
2257569	м	MILLER HIGHWAY - ROUTE 9A	RIVERSIDE PARK SOUTH		А		64	STATE	8/25/2015	4.296	FAIR	10/13/2017	272,475	\$1,226,137,500	104	107	ĺ
2266129	۵	DOUGLASTON PARKWAY	BELT SYSTEM - CROSS ISLAND SOUTHBOUND		А		1	STATE	3/10/2014	4.592	FAIR	3/3/2016	4,400	\$19,800,000	411		i
2266139	Q	DOUGLASTON PARKWAY	BELT SYSTEM - CROSS ISLAND NORTHBOUND		А		1	STATE	3/12/2014	4.653	FAIR	3/3/2016	6,400	\$28,800,000	411		ĺ
2266149	۵	HEMPSTEAD AVENUE	BELT SYSTEM - CROSS ISLAND RAMP NORTHBOUND		А		2	STATE	3/12/2014	4.190	FAIR	3/4/2016	9,500	\$42,750,000	413		Í
2266160	۵	WHITESTONE EXPRESSWAY - VAN WYCK SOUTHBOUND TO BELT SYSTEM - CROSS ISLAND EASTBOUND	WHITESTONE EXPRESSWAY - VAN WYCK - BELT SYSTEM - CROSS ISLAND JUNCTION		Α		1	STATE	6/12/2015	4.156	FAIR	8/11/2017	2,300	\$10,350,000	407		Í
2266229	м	HENRY HUDSON PARKWAY	PEDESTRIAN PATH AT WEST 148TH STREET		А		1	STATE	1/28/2016	5.000	GOOD	N/A	1,840	\$8,280,000	109		ĺ
2266230	м	HENRY HUDSON PARKWAY NORTHBOUND	PEDESTRIAN PATH INWOOD PARK		А		1	STATE	1/19/2016	5.000	GOOD	N/A	800	\$3,600,000	112		i
2266240	м	HENRY HUDSON PARKWAY SOUTHBOUND	PEDESTRIAN PATH INWOOD PARK		А		1	STATE	1/19/2016	5.526	GOOD	N/A	1,100	\$4,950,000	112		
2266540	в	BRUCKNER EXPRESSWAY	BRUCKNER BOULEVARD		А		2	STATE	7/1/2015	4.435	FAIR	6/27/2017	32,900	\$148,050,000	201		i
226672A	м	WEST 31ST STREET	AMTRAK LAYUP TRACKS	A	0		9	STATE	11/15/2014	3.619	FAIR	10/24/2016	8,800	\$39,600,000	104		i
2266770	٥	BELT SYSTEM - CROSS ISLAND	LAURELTON PARKWAY		A		1	STATE	3/7/2014	4.972	FAIR	3/2/2016	9,508	\$42,786,000	413		
2267130	м	RIVERSIDE DRIVE	WEST 145TH STREET		ο		1	STATE	4/27/2015	5.000	GOOD	5/8/2017	5,800	\$26,100,000	109		
2267160	q	ROOSEVELT AVENUE	SHEA ROAD		ο		4	STATE	7/29/2015	4.651	FAIR	7/21/2017	7,280	\$32,760,000	408		
2267199	Q	FRANCIS LEWIS BOULEVARD	CUNNINGHAM PARK ROAD		ο		1	STATE	5/14/2015	5.300	GOOD	5/17/2017	7,085	\$31,882,500	408		
2267240	м	HARLEM RIVER DRIVE RAMP TO GEORGE WASHINGTON BRIDGE	HARLEM RIVER DRIVE SOUTHBOUND		Α		55	STATE	10/6/2015	2.986	POOR	11/17/2016	122,900	\$553,050,000	112		
2267250	м	HENRY HUDSON PARKWAY	AMTRAK - W96TH ST	A	A		55	STATE	11/1/2014	3.548	FAIR	11/16/2016	40,000	\$180,000,000	107		
2267717	м	79TH STREET PEDESTRIAN PLAZA	79TH STREET BOAT BASIN GARAGE		Α	Ρ	10	STATE	5/5/2015	4.444	FAIR	7/5/2017	27,400	\$123,300,000	107		
2267718	м	79TH STREET TRAFFIC CIRCLE	79TH STREET PEDESTRIAN PLAZA		A	Р	34	STATE	6/3/2015	3.754	FAIR	6/14/2017	24,130	\$108,585,000	107		
226771A	м	79TH STREET RAMP TO HENRY HUDSON PARKWAY	79TH STREET BOAT BASIN GARAGE		AR	Р	4	STATE	5/5/2015	4.221	FAIR	5/8/2017	3,131	\$14,089,500	107		
226771B	м	79TH STREET RAMP TO GARAGE	79TH STREET BOAT BASIN GARAGE		AR	Ρ	21	STATE	5/12/2015	4.452	FAIR	5/16/2017	8,989	\$40,450,500	107		ĺ
226771C	м	GARAGE RAMP TO 79TH STREET	79TH STREET BOAT BASIN GARAGE		AR	Ρ	21	STATE	5/12/2015	4.435	FAIR	5/17/2017	9,095	\$40,927,500	107		Í
226771D	м	SOUTHBOUND HENRY HUDSON PARKWAY RAMP TO 79 STREET	79TH STREET BOAT BASIN GARAGE		AR	Р	4	STATE	5/7/2015	4.403	FAIR	5/11/2017	2,601	\$11,704,500	107		
2267860	к	BROOKLYN BRIDGE APPROACH	STORAGE (SANDS STREET)		0		1	STATE	5/23/2014	4.344	FAIR	6/10/2016	6,490	\$29,205,000	302		
2268350	к	BROOKLYN PROMENADE	278I BROOKLYN QUEENS EXPRESSWAY EASTBOUND		PED-A	Ρ	35	СІТҮ	10/6/2017	3.828	FAIR	N/A	46,184	\$207,828,000	302		
2268480	м	CHAMBERS STREET PEDESTRIAN BRIDGE	ROUTE 9A - WEST STREET		PED-O		10	СІТҮ	6/5/2017	5.391	GOOD	N/A	7,481	\$33,664,500	101		
2268497	к	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY)	FURMAN STREET - BROOKLYN QUEENS EXPRESSWAY EASTBOUND		A		45	STATE	9/16/2015	4.357	FAIR	9/28/2017	86,406	\$388,827,000	302		

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHE R OWN ER	SPA NS	RATING SOURCE	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2268498	к	278I EASTBOUND (BROOKLYN QUEENS EXPRESSWAY)	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY) - PROMENADE		A		69	STATE	11/26/2014	3.754	FAIR	11/1/2017	133,708	\$601,686,000	302		
2268507	к	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY)	YORK STREET		А		6	STATE	6/29/2015	4.071	FAIR	7/12/2017	10,388	\$46,746,000	302		
2268508	к	278I EASTBOUND (BROOKLYN QUEENS EXPRESSWAY)	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY) - BROOKLYN BRIDGE		А		11	STATE	6/29/2015	4.297	FAIR	7/12/2017	20,529	\$92,380,500	302		
2268517	к	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY)	FURMAN STREET		А		7	STATE	6/30/2015	4.104	FAIR	7/14/2017	10,988	\$49,446,000	302		
2268518	к	278I EASTBOUND (BROOKLYN QUEENS EXPRESSWAY)	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY)		А		5	STATE	7/1/2015	4.119	FAIR	7/14/2017	9,275	\$41,737,500	302		
2268650	м	FDR DRIVE NORTHBOUND EAST 42ND TO EAST 49TH STRET	EAST RIVER SHORELINE		А		119	STATE	10/9/2015	3.836	FAIR	10/31/2017	30,767	\$138,451,500	106		
2268760	м	PS-5 PEDESTRIAN BRIDGE	TENTH AVENUE		PED-O		5	СІТҮ	12/1/2017	4.767	FAIR	N/A	1,285	\$5,782,500	112		
2268770	٥	SPRINGFIELD BOULEVARD	EQUESTRIAN PATH (ABANDONED)		o		1	STATE	4/29/2015	4.889	FAIR	5/9/2017	1,470	\$6,615,000	413		
2268920	R	AMBOY ROAD	LEMON CREEK		wo		1	STATE	3/10/2014	6.333	VGOOD	3/28/2016	1,310	\$5,895,000	503		
2269030	в	MATTHEWSON ROAD	MACCRACKEN AVENUE		o		15	STATE	10/8/2014	4.175	FAIR	9/21/2016	14,880	\$66,960,000	205		
2269190	м	WEST 70TH STREET	AMTRAK	A	o		3	STATE	11/7/2015	5.542	GOOD	12/16/2017	17,258	\$77,661,000	107		
2269200	м	RIVERSIDE DRIVE SOUTH	AMTRAK	A	o		11	STATE	11/6/2015	5.792	GOOD	12/16/2017	69,040	\$310,680,000	107		
2269210	м	WEST 68TH STREET	AMTRAK	А	ο		3	STATE	11/19/2015	6.542	VGOOD	12/19/2017	5,382	\$24,219,000	107		
2269240	м	RIVERSIDE DRIVE	WEST 155TH STREET		o		1	STATE	5/7/2015	4.640	FAIR	5/8/2017	2,780	\$12,510,000	109	112	
2269390	м	WEST 66TH STREET	AMTRAK	A	ο		2	STATE	N/A	N/A	UNRATED	12/12/2016	4,480	\$20,160,000	107		
2269480	в	STARLIGHT PARK PEDESTRIAN BRIDGE	BRONX RIVER		PED-WO	Ρ	1	СІТҮ	10/18/2016	6.844	VGOOD	N/A	1,906	\$8,577,000	209		
2269600	к	ERSKINE STREET	BELT SYSTEM - SHORE PARKWAY		А		1	STATE	8/20/2014	5.938	GOOD	8/12/2016	8,258	\$37,161,000	305		
2269730	R	PARKING EXIT RAMP	SIRT	s	o	F	10	STATE	11/7/2014	6.097	VGOOD	10/21/2016	20,727	\$93,271,500	501		
2269740	R	BUS STATION NORTH	SIRT - FERRY TERMINAL	s	o	F	12	STATE	11/2/2014	5.600	GOOD	10/21/2016	64,605	\$290,722,500	501		
2269750	R	BUS STATION SOUTH	SIRT - PARKING LOT	s	ο	F	12	STATE	11/2/2014	5.280	GOOD	10/21/2016	154,688	\$696,096,000	501		
2269760	R	NORTH RAMP	SIRT	s	o	F	2	STATE	10/22/2014	6.431	VGOOD	9/29/2016	6,000	\$27,000,000	501		
2269770	R	BUS STATION ENTRANCE RAMP	SIRT	s	o	F	19	STATE	10/9/2015	5.431	GOOD	11/3/2017	39,333	\$176,998,500	501		
2269780	R	PARKING ENTRANCE RAMP	SIRT	s	o	F	3	STATE	11/7/2014	5.889	GOOD	10/20/2016	8,589	\$38,650,500	501		
2269790	R	BUS STATION EXIT RAMP	SIRT	s	o	F	7	STATE	11/4/2014	5.167	GOOD	10/20/2016	28,721	\$129,244,500	501		
2269820	м	EAST 81ST STREET PEDESTRIAN BRIDGE	FDR DRIVE NORTHBOUND		PED-A	Ρ	3	СІТҮ	6/8/2014	3.439	FAIR	N/A	600	\$2,700,000	108		
2269980	м	WEST 64TH STREET	AMTRAK	А	o		2	STATE	N/A	N/A	UNRATED	12/12/2016	5,220	\$23,490,000	107		
2270030	в	EAST 156TH STREET	ACCESS TO HOUSING		o	ED	16	STATE	11/13/2014	3.493	FAIR	11/11/2016	50,830	\$228,735,000	204		
2270170	R	SI FERRY PEDESTRIAN BRIDGE	PARKING LOT EXIT ROADWAY		PED-O	F	5	СІТҮ	6/9/2017	5.600	GOOD	N/A	2,917	\$13,126,500	501		
2270180	R	BOROUGH PLACE - RAMP A	STATEN ISLAND RAILWAY	s	o	F	1	STATE	5/9/2014	6.594	VGOOD	5/31/2016	1,870	\$8,415,000	501		
2270250	в	BROOKE AVENUE	CSX TRANS - PORT MORRIS (ABANDONED)		0		1	STATE	7/17/2015	3.873	FAIR	6/29/2017	21,035	\$94,657,500	201		

BIN	BOR	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHE R OWN	SPA NS	RATING SOURCE	BRIDGE CONDITION INSPECTION	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2270890	R	SPRINGVILLE GREENWAY PEDESTRIAN	FRESHWATER WETLANDS		PED-0	ER P	1	СІТҮ	DATE 10/25/2016	6.849	RATING	N/A	273	\$1,228,500	502		
2270970	вм	RANDALL'S ISLAND CONNECTOR PEDESTRIAN	BRONX KILL		PED-WO	Ρ	6	СІТҮ	10/20/2016	6.662	VGOOD	N/A	3,040	\$13,680,000	111	201	
2300130	۵	ROCKAWAY BOULEVARD	HOOK CREEK		wo		3	STATE	7/2/2015	5.763	GOOD	7/12/2017	18,302	\$82,359,000	413		
7703720	۵	216TH STREET PEDESTRIAN BRIDGE	LIRR PORT WASHINGTON BRIDGE	L	PED-O		6	СІТҮ	6/12/2017	1.000	CLOSED	N/A	960	\$4,320,000	411		
7705510	۵	167TH STREET PEDESTRIAN BRIDGE	LIRR PORT WASHINGTON BRIDGE	L	PED-O		3	СІТҮ	6/14/2017	4.000	FAIR	N/A	840	\$3,780,000	407		
M00001	м	WEST 191ST STREET PEDESTRIAN TUNNEL	BROADWAY - IRT #1 SUBWAY		PED-O	D-0 3 CITY 6/14/2017 4.000 F						N/A	2,000	\$9,000,000	112		
M00003	м	HENRY HUDSON PARKWAY ON/OFF RAMP-79TH STREET SOUTH SIDE	PEDESTRIAN PATH SOUTH OF 79TH STREET		А		1	СІТҮ	5/2/2017	4.500	FAIR	N/A	846	\$3,807,000	107		
M00004	м	HENRY HUDSON PARKWAY ON/OFF RAMP-79TH STREET NORTH SIDE	PEDESTRIAN PATH NORTH OF 79TH STREET		А		1	СІТҮ	6/6/2017	4.533	FAIR	N/A	846	\$3,807,000	107		
Q00002	٩	BELT SYSTEM - CROSS ISLAND	PATH OPPOSITE 88TH ROAD		A		1	СІТҮ	5/12/2017	4.267	FAIR	N/A	1,272	\$5,724,000	413		
787 OPEN BRIDGES												OPEN SF	14,283,295	\$64,287,657,000	ALL		

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE	OTHE R OWN ER	SPA NS	RATING	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2241129	в	EAST 149TH STREET	AMTRAK - CSX	АХ	o		2	STATE	11/17/2014	4.592	FAIR	11/2/2016	18,258	\$82,161,000	201	202	
2241040	в	THIRD AVENUE BRIDGE	CSX PORT MORRIS - (ABANDONED)		o		1	STATE	7/3/2014	4.563	FAIR	6/30/2016	2,700	\$12,150,000	201	203	
2242260	в	EAGLE AVENUE	EAST 161ST STREET		0		1	STATE	1/28/2016	5.117	GOOD	N/A	2,800	\$12,600,000	201	203	
2241560	в	EAST 149TH STREET	METRO NORTH RR HAR	м	o		8	STATE	5/5/2014	4.625	FAIR	5/3/2016	27,900	\$125,550,000	201	204	
224005B	в	TO BRUCKNER BOULEVARD	RELIEF		OR		4	STATE	9/16/2015	6.775	VGOOD	9/1/2017	19,990	\$89,955,000	201		
224006A	в	FROM BRUCKNER BOULEVARD	PARKING AREA		OR		5	STATE	9/1/2015	6.310	VGOOD	9/1/2017	14,037	\$63,166,500	201		
2241000	в	WESTCHESTER AVENUE	CSX PORT MORRIS - (ABANDONED)		o		1	STATE	8/29/2014	4.660	FAIR	8/23/2016	1,740	\$7,830,000	201		
2241010	в	EAST 156TH STREET	CSX PORT MORRIS - (ABANDONED)		o		1	STATE	5/9/2014	4.612	FAIR	4/19/2016	2,400	\$10,800,000	201		
2241050	в	EAST 149TH STREET/JACKSON AVENUE	CSX PORT MORRIS - (ABANDONED)		o		1	STATE	5/12/2014	4.817	FAIR	4/29/2016	65,000	\$292,500,000	201		
2241060	в	ST. MARYS & CONCORD	CSX PORT MORRIS - (ABANDONED)		ο		1	STATE	7/2/3014	5.370	GOOD	6/28/2016	4,500	\$20,250,000	201		
2241070	в	WALES AVENUE	CSX PORT MORRIS - (ABANDONED)		o		1	STATE	7/2/2014	6.467	VGOOD	6/29/2016	2,535	\$11,407,500	201		
2241080	в	SOUTHERN BOULEVARD	CSX PORT MORRIS - (ABANDONED)		ο		1	STATE	7/1/2014	4.093	FAIR	6/27/2016	3,900	\$17,550,000	201		
2241099	в	BRUCKNER BOULEVARD	CSX TRANS - PORT MORRIS	x	o		1	STATE	7/16/2014	6.067	VGOOD	7/7/2016	6,700	\$30,150,000	201		
2241550	в	EAST 144TH STREET	METRO NORTH RR HAR	м	0		2	STATE	8/28/2015	5.847	GOOD	9/25/2017	8,290	\$37,305,000	201		
2242299	в	GRAND CONCOURSE	EAST 138TH STREET		0		1	STATE	6/12/2015	4.733	FAIR	6/8/2017	9,500	\$42,750,000	201		
2266540	в	BRUCKNER EXPRESSWAY	BRUCKNER BOULEVARD		A		2	STATE	7/1/2015	4.435	FAIR	6/27/2017	32,900	\$148,050,000	201		
2270250	в	BROOKE AVENUE	CSX TRANS - PORT MORRIS (ABANDONED)		0		1	STATE	7/17/2015	3.873	FAIR	6/29/2017	21,035	\$94,657,500	201		
2066671	в	BRUCKNER EXPRESSWAY SOUTHBOUND	BRONX RIVER		WA		3	STATE	10/7/2015	4.972	FAIR	10/6/2017	12,400	\$55,800,000	202	209	
2066672	в	BRUCKNER EXPRESSWAY NORTHBOUND	BRONX RIVER		WA		8	STATE	10/9/2015	4.418	FAIR	10/16/2017	22,300	\$100,350,000	202	209	
2240180	в	WESTCHESTER AVE	BRONX RIVER		wo		1	STATE	8/19/2015	4.667	FAIR	8/22/2017	5,476	\$24,642,000	202	209	
2241230	в	WESTCHESTER AVENUE	AMTRAK - CSX	АХ	0		3	STATE	11/1/2014	5.778	GOOD	11/9/2016	15,600	\$70,200,000	202	209	
2075351	в	BRUCKNER EXPRESSWAY SOUTHBOUND	AMTRAK - CSX	АХ	Α		1	STATE	10/29/2014	5.698	GOOD	10/27/2016	11,600	\$52,200,000	202		
2075352	в	BRUCKNER EXPRESSWAY NORTHBOUND	AMTRAK - CSX	АХ	A		1	STATE	10/30/2014	6.190	VGOOD	10/28/2016	10,900	\$49,050,000	202		
2076929	в	BRUCKNER EXPRESSWAY	CSX - HUNTS POINT	x	А		1	STATE	8/24/2015	4.433	FAIR	8/21/2017	3,800	\$17,100,000	202		
2241139	в	LEGGETT AVENUE	AMTRAK - CSX	АХ	0		3	STATE	11/17/2014	4.620	FAIR	11/3/2016	41,551	\$186,979,500	202		
2241159	в	LONGWOOD AVENUE	AMTRAK - CSX	АХ	0		2	STATE	11/18/2014	5.236	GOOD	11/4/2016	10,625	\$47,812,500	202		
2241169	в	LAFAYETTE AVENUE	AMTRAK - CSX	АХ	0		1	STATE	11/18/2014	5.365	GOOD	11/5/2016	12,000	\$54,000,000	202		
2241170	в	TIFFANY STREET	AMTRAK - CSX	АХ	ο		1	STATE	11/13/2015	5.078	GOOD	12/12/2017	7,267	\$32,701,500	202		
2241180	в	BARRETTO STREET	AMTRAK - CSX	АХ	0		1	STATE	11/18/2014	5.813	GOOD	11/10/2016	5,313	\$23,908,500	202		
2241190	в	HUNTS POINT AVENUE	AMTRAK - CSX	АХ	o		1	STATE	11/20/2014	4.813	FAIR	12/24/2016	10,049	\$45,220,500	202		

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2241200	в	FAILE STREET	AMTRAK - CSX	АХ	o		1	STATE	11/19/2014	5.578	GOOD	11/11/2016	6,208	\$27,936,000	202		
2241210	в	BRYANT AVENUE	AMTRAK - CSX	АХ	o		1	STATE	3/2/2016	6.559	VGOOD	N/A	5,300	\$23,850,000	202		
2241020	в	EAST 161ST STREET	CSX PORT MORRIS - (ABANDONED)		o		1	STATE	3/3/2016	5.900	GOOD	N/A	12,800	\$57,600,000	203		
2241030	в	EAST 163RD STREET	CSX PORT MORRIS - (ABANDONED)		o		1	STATE	2/9/2016	4.815	FAIR	N/A	3,200	\$14,400,000	203		
2241110	в	MELROSE AVENUE	CSX PORT MORRIS - (ABANDONED)		o		8	STATE	8/18/2015	5.500	GOOD	8/22/2017	37,854	\$170,343,000	203		
2241620	в	EAST 162ND STREET	METRO NORTH RR HAR	м	o		1	STATE	4/26/2014	4.781	FAIR	5/4/2016	4,700	\$21,150,000	203		
2241630	в	EAST 165TH STREET	METRO NORTH RR HAR	м	o		1	STATE	4/26/2014	4.300	FAIR	5/17/2016	16,400	\$73,800,000	203		
2241650	в	EAST 167TH STREET	METRO NORTH RR HAR	м	o		1	STATE	4/21/2014	5.510	GOOD	4/21/2016	3,363	\$15,133,500	203		
2241660	в	EAST 168TH STREET	METRO NORTH RR HAR	м	0		1	STATE	4/22/2014	4.641	FAIR	4/22/2016	4,800	\$21,600,000	203		
2241670	в	EAST 169TH STREET	METRO NORTH RR HAR	м	o		1	STATE	4/22/2014	4.188	FAIR	4/29/2016	3,300	\$14,850,000	203		
2241680	в	EAST 170TH STREET	METRO NORTH RR HAR	м	o		1	STATE	4/22/2014	6.333	VGOOD	4/26/2016	3,150	\$14,175,000	203		
2241700	в	ST PAULS PLACE PEDESTRIAN BRIDGE	METRO NORTH RR HAR	м	PED-0		2	СІТҮ	2/26/2017	4.746	FAIR	N/A	888	\$3,996,000	203		
2241710	в	CLAREMONT PARKWAY	METRO NORTH RR HAR	м	o		1	STATE	4/17/2014	6.458	VGOOD	4/14/2016	5,950	\$26,775,000	203		
2241720	в	EAST 173RD STREET	METRO NORTH RR HAR	м	o		1	STATE	4/17/2014	4.875	FAIR	4/15/2016	3,000	\$13,500,000	203		
2241610	в	EAST 161ST STREET	METRO NORTH RR HAR	м	0		1	STATE	9/2/2015	5.050	GOOD	9/25/2017	6,600	\$29,700,000	204	203	
2076640	в	DEPOT PLACE	METRO NORTH RR HUDSON	хм	o		11	STATE	5/12/2015	4.319	FAIR	4/21/2016	26,566	\$119,547,000	204		
2241409	в	GRAND CONCOURSE	METRO NORTH RR HUD	МТ	ο		1	STATE	6/23/2015	3.688	FAIR	11/27/2017	14,300	\$64,350,000	204		
2241410	в	WALTON AVENUE	METRO NORTH RR HUD	м	o		1	STATE	5/5/2014	4.406	FAIR	5/7/2016	3,600	\$16,200,000	204		
2241420	в	GERARD AVENUE	METRO NORTH RR HUD	м	ο		1	STATE	5/5/2014	5.422	GOOD	4/23/2016	5,063	\$22,783,500	204		
2241430	в	RIVER AVENUE	METRO NORTH RR HUD	м	0		1	STATE	8/26/2015	6.156	VGOOD	9/11/2017	5,040	\$22,680,000	204		
2241590	в	CONCOURSE VILLAGE AVENUE	METRO NORTH RR HAR	м	o		1	STATE	4/19/2014	3.969	FAIR	4/20/2016	12,077	\$54,346,500	204		
2241600	в	EAST 158TH STREET	METRO NORTH RR HAR	м	ο		1	STATE	8/25/2015	5.200	GOOD	9/26/2017	3,400	\$15,300,000	204		
2242259	в	GRAND CONCOURSE	EAST 161ST STREET		o		1	STATE	6/30/2014	6.333	VGOOD	6/28/2016	27,017	\$121,576,500	204		
2242280	в	GRAND CONCOURSE	EAST 167TH STREET		0		2	STATE	7/2/2014	4.754	FAIR	6/24/2016	42,900	\$193,050,000	204		
2242300	в	GRAND CONCOURSE	EAST 170TH STREET		0		2	STATE	3/2/2016	4.754	FAIR	N/A	39,300	\$176,850,000	204		
2242319	в	GRAND CONCOURSE	EAST 174TH STREET	т	ο		1	STATE	2/29/2016	3.933	FAIR	N/A	14,900	\$67,050,000	204		
2270030	в	EAST 156TH STREET	ACCESS TO HOUSING		0	ED	16	STATE	11/13/2014	3.493	FAIR	11/11/2016	50,830	\$228,735,000	204		
2242350	в	EAST FORDHAM RD	GRAND CONCOURSE		ο		1	STATE	2/10/2016	4.700	FAIR	N/A	10,300	\$46,350,000	205	207	
2241460	в	WEST TREMONT AVENUE	METRO NORTH RR HUD	м	0		8	STATE	6/12/2014	3.776	FAIR	6/8/2016	12,900	\$58,050,000	205		
2242329	в	GRAND CONCOURSE	EAST 175TH STREET	т	0		1	STATE	6/11/2014	4.833	FAIR	6/10/2016	11,900	\$53,550,000	205		

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2242330	в	GRAND CONCOURSE	EAST TREMONT AVENUE		o		1	STATE	9/3/2015	5.583	GOOD	8/30/2017	11,700	\$52,650,000	205		
2242360	в	GRAND CONCOURSE	EAST BURNSIDE AVENUE		ο		2	STATE	6/30/2014	4.265	FAIR	7/1/2016	8,400	\$37,800,000	205		
2269030	в	MATTHEWSON ROAD	MACCRACKEN AVENUE		o		15	STATE	10/8/2014	4.175	FAIR	9/21/2016	14,880	\$66,960,000	205		
2241839	в	FORDHAM ROAD - EAST 189TH STREET	METRO NORTH RR HAR	м	o		1	STATE	8/27/2015	6.300	VGOOD	9/25/2017	43,157	\$194,206,500	206	207	
2242400	в	EAST 180TH STREET	BRONX RIVER		wo		1	STATE	9/26/2014	4.810	FAIR	9/6/2016	4,500	\$20,250,000	206	227	
2241269	в	EAST 177TH STREET	AMTRAK - CSX	AX	0		3	STATE	7/29/2014	5.278	GOOD	8/4/2016	16,606	\$74,727,000	206		
2241740	в	EAST 175TH STREET	METRO NORTH RR HAR	м	0		1	STATE	4/14/2014	3.875	FAIR	4/12/2016	3,600	\$16,200,000	206		
2241760	в	EAST TREMONT AVENUE	METRO NORTH RR HAR	м	o		1	STATE	8/29/2015	6.350	VGOOD	9/25/2017	8,424	\$37,908,000	206		
2241770	в	EAST 178TH STREET PEDESTRIAN BRIDGE	METRO NORTH RR HAR	м	PED-O		1	СІТҮ	2/13/2017	4.921	FAIR	N/A	731	\$3,289,500	206		
2241780	в	EAST 179TH STREET PEDESTRIAN BRIDGE	METRO NORTH RR HAR	м	PED-O		6	СІТҮ	2/13/2017	5.311	GOOD	N/A	1,011	\$4,549,500	206		
2241790	в	EAST 180TH STREET	METRO NORTH RR HAR	м	0		1	STATE	4/24/2104	3.844	FAIR	5/13/2016	5,000	\$22,500,000	206		
2241800	в	EAST 183RD STREET	METRO NORTH RR HAR	м	0		1	STATE	4/24/2104	3.953	FAIR	5/14/2016	4,080	\$18,360,000	206		
2241810	в	EAST 188TH STREET	METRO NORTH RR HAR	м	0		1	STATE	4/16/2014	4.094	FAIR	4/13/2016	5,300	\$23,850,000	206		
2241820	в	EAST 187TH STREET	METRO NORTH RR HAR	м	0		1	STATE	4/23/2014	4.344	FAIR	4/27/2016	3,800	\$17,100,000	206		
2242030	в	CROTONA AVENUE	BRONX PELHAM PARKWAY		0		2	STATE	1/20/2016	5.447	GOOD	N/A	7,600	\$34,200,000	206		
2242149	в	EAST TREMONT AVENUE	BRONX RIVER		wo		2	STATE	5/6/2015	4.361	FAIR	5/30/2017	12,900	\$58,050,000	206		
2241489	в	WEST 225TH STREET	CSX TRANS - PUTNAM	x	0		2	STATE	8/28/2014	5.269	GOOD	8/26/2016	10,900	\$49,050,000	207	208	
2230270	в	MOSHOLU PARKWAY	WEBSTER AVE		А		1	STATE	5/18/2015	5.203	GOOD	5/24/2017	8,480	\$38,160,000	207		
2230287	в	JEROME AVENUE	MOSHOLU PARKWAY	т	А		3	STATE	4/30/2015	4.711	FAIR	5/30/2017	11,800	\$53,100,000	207		
2241470	в	WEST FORDHAM ROAD	METRO NORTH RR HUD	м	0		4	STATE	9/1/2015	5.694	GOOD	9/25/2017	16,052	\$72,234,000	207		
2241930	в	BEDFORD PARK BOULEVARD	NYCTA IND YARDS	т	0		4	STATE	10/31/2014	5.347	GOOD	10/21/2016	46,300	\$208,350,000	207		
2241940	в	WEST 205TH STREET	NYCTA IND YARDS	т	0		4	STATE	10/31/2014	5.514	GOOD	10/20/2016	32,508	\$146,286,000	207		
2242340	в	GRAND CONCOURSE	EAST KINGSBRIDGE ROAD		0		2	STATE	6/12/2014	4.714	FAIR	6/10/2016	18,285	\$82,282,500	207		
2242370	в	GRAND CONCOURSE	BEDFORD PARK BOULEVARD		0		1	STATE	2/8/2016	4.608	FAIR	N/A	8,418	\$37,881,000	207		
2242380	в	GRAND CONCOURSE	EAST 204TH STREET		0		1	STATE	9/2/2015	5.406	GOOD	8/29/2017	9,272	\$41,724,000	207		
2229440	в	HENRY HUDSON PARKWAY	KAPPOCK STREET		Α		1	STATE	7/7/2015	5.069	GOOD	6/28/2017	3,900	\$17,550,000	208		
2229450	в	WEST 232ND STREET	HENRY HUDSON PARKWAY		Α		2	STATE	7/8/2015	5.026	GOOD	6/27/2017	4,900	\$22,050,000	208		
2229460	в	WEST 236TH STREET PEDESTRIAN BRIDGE	HENRY HUDSON PARKWAY		PED-A		3	СІТҮ	7/12/2017	4.356	FAIR	N/A	2,500	\$11,250,000	208		
2229470	в	WEST 239TH STREET	HENRY HUDSON PARKWAY		Α		2	STATE	6/3/2015	5.053	GOOD	6/2/2017	6,100	\$27,450,000	208		
2229480	в	MANHATTAN COLLEGE PARKWAY	HENRY HUDSON PARKWAY		А		3	STATE	6/3/2015	5.053	GOOD	6/2/2017	6,200	\$27,900,000	208		

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHE R OWN ER	SPA NS	RATING	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2229490	в	WEST 246TH STREET	HENRY HUDSON PARKWAY		A		2	STATE	6/3/2015	4.868	FAIR	6/2/2017	5,600	\$25,200,000	208		
2229500	в	WEST 252ND STREET	HENRY HUDSON PARKWAY		А		2	STATE	1/19/2016	5.372	GOOD	N/A	4,500	\$20,250,000	208		
2229510	в	RIVERDALE AVENUE	HENRY HUDSON PARKWAY		А		2	STATE	7/9/2015	5.079	GOOD	6/27/2017	5,200	\$23,400,000	208		
2229520	в	FIELDSTON ROAD	HENRY HUDSON PARKWAY		А		1	STATE	7/10/2015	4.900	FAIR	6/26/2017	6,600	\$29,700,000	208		
2229530	в	HENRY HUDSON PARKWAY	BROADWAY		А		1	STATE	7/27/2015	4.830	FAIR	8/1/2017	7,500	\$33,750,000	208		
2241490	в	WEST 230TH STREET	CSX PUTNAM (ABANDONED)		o		1	STATE	4/27/2015	5.125	GOOD	5/19/2017	5,600	\$25,200,000	208		
2241509	в	WEST 231ST STREET	CSX PUTNAM (ABANDONED)		ο		1	STATE	7/3/2014	4.745	FAIR	6/30/2016	4,723	\$21,253,500	208		
2241510	в	WEST 233RD STREET	CSX PUTNAM (ABANDONED)		ο		1	STATE	4/27/2015	5.275	GOOD	5/15/2017	3,760	\$16,920,000	208		
2241520	в	WEST 234TH STREET	CSX PUTNAM (ABANDONED)		o		1	STATE	4/27/2015	5.176	GOOD	5/15/2017	3,770	\$16,965,000	208		
2066720	в	EAST 174TH STREET	SHERIDAN EXPRESSWAY/AMTRAK	А	А		13	STATE	7/29/2014	3.986	FAIR	8/11/2016	35,573	\$160,078,500	209	203	
2241270	в	EAST TREMONT AVENUE	AMTRAK - CSX	АХ	ο		2	STATE	10/31/2014	5.153	GOOD	11/8/2016	22,300	\$100,350,000	209	211	
1066510	в	BRUCKNER EXPRESSWAY SERVICE ROAD	WESTCHESTER CREEK		WMA		17	STATE	9/18/2015	3.565	FAIR	10/23/2017	54,360	\$244,620,000	209		
206672A	в	174TH STREET-NORTH PEDESTRIAN BRIDGE	8951 - SHERIDAN EXPRESSWAY		PED-A		4	СІТҮ	4/3/2017	4.833	FAIR	N/A	1,800	\$8,100,000	209		
206672B	в	174TH STREET-SOUTH PEDESTRIAN BRIDGE	895I - SHERIDAN EXPRESSWAY		PED-A		4	СІТҮ	4/3/2017	4.750	FAIR	N/A	1,900	\$8,550,000	209		
2269480	в	STARLIGHT PARK PEDESTRIAN BRIDGE	BRONX RIVER		PED-WO	Ρ	1	СІТҮ	10/18/2016	6.844	VGOOD	N/A	1,906	\$8,577,000	209		
2075837	в	WESTCHESTER AVENUE	HUTCHINSON RIVER PARKWAY		A		2	STATE	2/12/2016	3.958	FAIR	N/A	15,858	\$71,361,000	210	211	
2075849	в	BRONX PELHAM PARKWAY	HUTCHINSON RIVER PARKWAY		A		2	STATE	5/8/2014	3.974	FAIR	4/18/2016	17,600	\$79,200,000	210	211	
2241959	в	HUTCHINSON RIVER PARKWAY	AMTRAK - CSX	АХ	ο		1	STATE	10/9/2014	5.542	GOOD	9/28/2016	15,444	\$69,498,000	210	211	
2075859	в	HUTCHINSON RIVER PARKWAY	HUTCHINSON RIVER		WMA		7	STATE	10/22/2015	4.578	FAIR	11/17/2017	60,500	\$272,250,000	210	228	
2075820	в	EAST TREMONT AVENUE	HUTCHINSON RIVER PARKWAY		A		2	STATE	10/20/2015	4.528	FAIR	10/3/2017	10,200	\$45,900,000	210		
2076109	в	BRUCKNER EXPRESSWAY NORTHBOUND SERVICE ROAD	HUTCHINSON RIVER PARKWAY		Α		2	STATE	8/13/2015	4.895	FAIR	8/9/2017	7,800	\$35,100,000	210		
2076129	в	BRUCKNER EXPRESSWAY SOUTHBBOUND SERVICE ROAD	HUTCHINSON RIVER PARKWAY		A		2	STATE	1/14/2016	5.105	GOOD	N/A	7,100	\$31,950,000	210		
2241910	в	GUN HILL ROAD	NYCTA-DYRE AVE LINE	т	ο		1	STATE	10/28/2014	5.516	GOOD	10/19/2016	7,500	\$33,750,000	211	212	
2229560	в	BRONX PELHAM PARKWAY	AMTRAK - CSX	АХ	Α		3	STATE	11/12/2014	4.486	FAIR	11/28/2016	24,591	\$110,659,500	211		
2241329	в	WHITE PLAINS ROAD	AMTRAK - CSX	АХ	ο		1	STATE	10/28/2014	4.781	FAIR	10/3/2016	6,900	\$31,050,000	211		
2241330	в	UNIONPORT ROAD	AMTRAK - CSX	АХ	0		1	STATE	10/28/2014	4.688	FAIR	10/4/2016	7,631	\$34,339,500	211		
2241369	в	WILLIAMSBRIDGE ROAD	AMTRAK - CSX	АХ	0		2	STATE	10/29/2014	4.985	FAIR	10/29/2016	6,510	\$29,295,000	211		
2241870	в	EAST 233RD STREET	METRO NORTH RR HAR	м	o		1	STATE	4/28/2014	4.902	FAIR	5/10/2016	7,664	\$34,488,000	212	207	
1067150	в	NEREID AVENUE (EAST 240TH STREET)	BRONX RIVER PARKWAY	м	0		10	STATE	9/18/2015	4.500	FAIR	10/12/2017	57,750	\$259,875,000	212		
2229579	в	BOSTON ROAD	HUTCHINSON RIVER		wo		14	STATE	5/26/2015	4.042	FAIR	6/30/2017	95,700	\$430,650,000	212		

number num	BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHE R OWN ER	SPA NS	RATING SOURCE	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
vi       vi <td< td=""><td>2241860</td><td>в</td><td>GUN HILL ROAD</td><td>METRO NORTH RR HAR</td><td>м</td><td>o</td><td></td><td>1</td><td>STATE</td><td>4/29/2014</td><td>6.531</td><td>VGOOD</td><td>5/11/2016</td><td>9,128</td><td>\$41,076,000</td><td>212</td><td></td><td></td></td<>	2241860	в	GUN HILL ROAD	METRO NORTH RR HAR	м	o		1	STATE	4/29/2014	6.531	VGOOD	5/11/2016	9,128	\$41,076,000	212		
Name	2241890	в	EAST 241ST STREET	BRP, METRO NORTH HAR	м	wo		28	STATE	10/23/2015	4.639	FAIR	11/9/2017	49,500	\$222,750,000	212	$\square$	
No     <	2241900	в	EASTCHESTER ROAD	NYCTA-DYRE AVE LINE	т	o		3	STATE	10/28/2014	4.472	FAIR	10/19/2016	13,500	\$60,750,000	212	$\square$	
strain         strain<	2242071	в	BRONX BOULEVARD SOUTHBOUND	BRONX RIVER (NORTH)		wo		1	STATE	3/27/2014	4.367	FAIR	3/12/2016	1,800	\$8,100,000	212	$\square$	
state         state <th< td=""><td>2242072</td><td>в</td><td>BRONX BOULEVARD NORTHBOUND</td><td>BRONX RIVER (NORTH)</td><td></td><td>wo</td><td></td><td>1</td><td>STATE</td><td>3/27/2014</td><td>4.867</td><td>FAIR</td><td>3/12/2016</td><td>1,800</td><td>\$8,100,000</td><td>212</td><td><math>\square</math></td><td></td></th<>	2242072	в	BRONX BOULEVARD NORTHBOUND	BRONX RIVER (NORTH)		wo		1	STATE	3/27/2014	4.867	FAIR	3/12/2016	1,800	\$8,100,000	212	$\square$	
n       n	2242081	в	BRONX BOULEVARD SOUTHBOUND	BRONX RIVER (SOUTH)		wo		1	STATE	3/4/2016	4.300	FAIR	N/A	2,800	\$12,600,000	212	$\square$	
sind       windende       win	2242082	в	BRONX BOULEVARD NORTHBOUND	BRONX RIVER (SOUTH)		wo		1	STATE	3/4/2016	4.467	FAIR	N/A	2,800	\$12,600,000	212	$\square$	
var         var <td>2242099</td> <td>в</td> <td>PARK ROAD (204TH STREET)</td> <td>BRONX RIVER</td> <td></td> <td>wo</td> <td></td> <td>1</td> <td>STATE</td> <td>5/6/2014</td> <td>4.655</td> <td>FAIR</td> <td>4/20/2016</td> <td>4,700</td> <td>\$21,150,000</td> <td>212</td> <td><math>\square</math></td> <td></td>	2242099	в	PARK ROAD (204TH STREET)	BRONX RIVER		wo		1	STATE	5/6/2014	4.655	FAIR	4/20/2016	4,700	\$21,150,000	212	$\square$	
1     A <td>2242430</td> <td>в</td> <td>GUN HILL ROAD</td> <td>BRONX BOULEVARD</td> <td></td> <td>o</td> <td></td> <td>4</td> <td>STATE</td> <td>2/2/2016</td> <td>4.947</td> <td>FAIR</td> <td>N/A</td> <td>9,400</td> <td>\$42,300,000</td> <td>212</td> <td><math>\square</math></td> <td></td>	2242430	в	GUN HILL ROAD	BRONX BOULEVARD		o		4	STATE	2/2/2016	4.947	FAIR	N/A	9,400	\$42,300,000	212	$\square$	
space         space <th< td=""><td>2242440</td><td>в</td><td>GUN HILL ROAD</td><td>BRONX RIVER</td><td></td><td>wo</td><td></td><td>1</td><td>STATE</td><td>1/12/2016</td><td>4.867</td><td>FAIR</td><td>N/A</td><td>8,700</td><td>\$39,150,000</td><td>212</td><td><math>\square</math></td><td></td></th<>	2242440	в	GUN HILL ROAD	BRONX RIVER		wo		1	STATE	1/12/2016	4.867	FAIR	N/A	8,700	\$39,150,000	212	$\square$	
No     <	2242459	в	EAST 233RD STREET	BRONX RIVER		wo		1	STATE	2/9/2016	4.233	FAIR	N/A	7,000	\$31,500,000	212	$\square$	
n       n	2242460	в	EAST 233RD STREET	ENTRANCE ROAD BRONX RIVER PARKWAY		o		1	STATE	1/7/2016	4.900	FAIR	N/A	5,300	\$23,850,000	212	$\square$	
i       i	2229540	в	VAN CORTLANDT PARK	HENRY HUDSON PARKWAY		PED-A	Ρ	2	СІТҮ	8/3/2017	4.710	FAIR	N/A	3,900	\$17,550,000	226		
No     <	2229550	в	VAN CORTANLDT EQUESTRIAN	HENRY HUDSON PARKWAY		PED-A	Ρ	2	СІТҮ	8/8/2017	4.482	FAIR	N/A	2,100	\$9,450,000	226		
A       A	2230290	в	MOSHOLU PARKWAY	EQUESTRIAN PATH		А		1	STATE	1/11/2016	4.310	FAIR	N/A	4,300	\$19,350,000	226		
1 $1$	2230300	в	MOSHOLU PARKWAY	CONRAIL (ABANDONED)		A		1	STATE	7/31/2014	4.271	FAIR	7/20/2016	4,600	\$20,700,000	226		
1 $1$	2230310	в	MOSHOLU PARKWAY	SOUTHBOUND RAMP TO HENRY HUDSON PARKWAY		А		2	STATE	8/28/2015	4.919	FAIR	8/30/2017	7,400	\$33,300,000	226		
1 $1$	2230260	в	MOSHOLU PARKWAY	METRO NORTH	м	А		1	STATE	4/30/2014	5.391	GOOD	5/13/2016	8,880	\$39,960,000	227	207	
1 $1$	2241259	в	204TH STREET PEDESTRIAN BRIDGE	METRO NORTH RR HAR	м	PED-O	Ρ	1	CITY	3/3/2017	3.845	FAIR	N/A	4,700	\$21,150,000	227	207	
1 $1$	2241840	в	BEDFORD PARK BOULEVARD	METRO NORTH RR HAR	м	0		1	STATE	4/28/2014	4.656	FAIR	5/6/2016	6,400	\$28,800,000	227	207	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	2065629	в	BRONX RIVER PARKWAY	BOSTON ROAD - BRONX ZOO		A		1	STATE	8/12/2015	5.138	GOOD	8/10/2017	6,300	\$28,350,000	227		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	2230250	в	MOSHOLU PARKWAY	BRONX RIVER		WA		5	STATE	1/7/2016	4.132	FAIR	N/A	16,300	\$73,350,000	227		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	2242010	в	EAST FORDHAM ROAD	BRONX RIVER		wo		1	STATE	3/5/2016	5.267	GOOD	N/A	9,360	\$42,120,000	227		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	2242029	в	SOUTHERN BOULEVARD	EAST FORDHAM ROAD		0		2	STATE	1/20/2016	4.605	FAIR	N/A	12,900	\$58,050,000	227		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	2242100	в	BOTANICAL GARDEN ROAD	TWIN LAKES		wo	Ρ	1	STATE	2/10/2016	4.833	FAIR	N/A	2,200	\$9,900,000	227		
224220       A       NAGNOLIA WAY       BRONX RIVER       MA       V <td< td=""><td>2242110</td><td>в</td><td>BOSTON ROAD</td><td>BRONX RIVER</td><td></td><td>wo</td><td></td><td>1</td><td>STATE</td><td>2/10/2016</td><td>4.227</td><td>FAIR</td><td>N/A</td><td>6,200</td><td>\$27,900,000</td><td>227</td><td></td><td></td></td<>	2242110	в	BOSTON ROAD	BRONX RIVER		wo		1	STATE	2/10/2016	4.227	FAIR	N/A	6,200	\$27,900,000	227		
224220       A	2242120	в	FOOTBRIDGE NORTH OF ROUTE 1 (HESTER BRIDGE)	BRONX RIVER		PED-WO	Ρ	1	СІТҮ	12/18/2017	3.630	FAIR	N/A	1,900	\$8,550,000	227		
	2242210	в	MAGNOLIA WAY	BRONX RIVER		wo	Ρ	3	STATE	5/6/2014	4.763	FAIR	4/25/2016	6,200	\$27,900,000	227		
2240200 B SHORE ROAD HUTCHINSON RIVER WMO 7 STATE 6/10/2015 4.299 FAIR 7/13/2017 43,576 \$196,092,000 228	2242220	в	SNUFF MILL ROAD	BRONX RIVER		wo	Ρ	2	STATE	1/8/2016	4.158	FAIR	N/A	4,800	\$21,600,000	227		
	2240200	в	SHORE ROAD	HUTCHINSON RIVER		wмо		7	STATE	6/10/2015	4.299	FAIR	7/13/2017	43,576	\$196,092,000	228		

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE	OTHE R OWN ER	SPA NS	RATING	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2240210	в	CITY ISLAND ROAD	EASTCHESTER BAY		wo		7	STATE	12/11/2015	3.444	FAIR	11/28/2017	19,915	\$89,617,500	228		
2241380	в	PELHAM BAY PARK EQUESTRIAN	AMTRAK - CSX	АХ	PED-O	Ρ	1	СІТҮ	7/24/2013	3.339	FAIR	N/A	7,300	\$32,850,000	228		
2241390	в	SHORE ROAD CIRCLE	AMTRAK - CSX	АХ	o		1	STATE	7/21/2014	7.000	VGOOD	8/3/2016	8,067	\$36,301,500	228		
2240089	вм	145TH STREET BRIDGE	HARLEM RIVER		wмо		8	STATE	8/21/2015	6.278	VGOOD	9/18/2017	56,700	\$255,150,000	110	204	201
1240090	вм	MACOMBS DAM BRIDGE	HARLEM RIVER	м	wмо		52	STATE	12/18/2015	3.930	FAIR	12/11/2017	220,000	\$990,000,000	110	204	
2240059	вм	WILLIS AVENUE BRIDGE	HARLEM RIVER		wмо		15	STATE	11/12/2014	6.778	VGOOD	11/23/2016	171,105	\$769,972,500	111	201	
2240069	вм	THIRD AVENUE BRIDGE	HARLEM RIVER		wмо		14	STATE	9/4/2014	5.789	GOOD	8/26/2016	100,232	\$451,044,000	111	201	
2240079	вм	MADISON AVENUE BRIDGE	HARLEM RIVER		wмо		21	STATE	9/17/2014	4.861	FAIR	9/14/2016	80,000	\$360,000,000	111	201	
2270970	вм	RANDALL'S ISLAND CONNECTOR PEDESTRIAN	BRONX KILL		PED-WO	Ρ	6	СІТҮ	10/20/2016	6.662	VGOOD	N/A	3,040	\$13,680,000	111	201	
2246580	вм	HIGH BRIDGE PEDESTRIAN OVERPASS	MAJOR DEEGAN EXPRESSWAY - HARLEM RIVER	м	PED-WA	Ρ	11	PARKS	8/12/2002	3.759	FAIR	N/A	34,100	\$153,450,000	112	204	
2066919	вм	WASHINGTON BRIDGE	HARLEM RIVER	м	wo		9	STATE	11/24/2014	4.493	FAIR	10/4/2017	128,339	\$577,525,500	112	205	204
2240137	вм	BROADWAY BRIDGE	HARLEM RIVER	тм	wмо		3	STATE	12/20/2015	3.806	FAIR	12/6/2016	46,848	\$210,816,000	112	207	208
2240138	вм	NYCTA IRT	HARLEM RVR/BROADWAY	тм	wмо		3	STATE	11/24/2015	4.720	FAIR	12/6/2017	19,520	\$87,840,000	112	207	208
2240120	вм	WEST 207TH STREET/WEST FORDHAM ROAD	HARLEM RIVER		WMO		5	STATE	7/31/2014	5.000	GOOD	7/29/2016	31,784	\$143,028,000	112	207	
2240290	к	METROPOLITAN AVENUE	ENGLISH KILLS		wмо		5	STATE	7/13/2015	5.778	GOOD	7/26/2017	10,550	\$47,475,000	301		
2230410	к	278I EASTBOUND (BROOKLYN QUEENS EXPRESSWAY)	WASHINGTON STREET		А		1	STATE	7/16/2014	4.500	FAIR	7/8/2016	2,500	\$11,250,000	302		
2230420	к	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY)	WASHINGTON STREET		А		1	STATE	7/16/2014	5.047	GOOD	7/8/2016	2,500	\$11,250,000	302		
2230430	к	278I (BROOKLYN QUEENS EXPRESSWAY) RAMP TO BROOKLYN BRIDGE	PROSPECT STREET		А		1	STATE	1/4/2016	5.000	GOOD	N/A	1,100	\$4,950,000	302		
2230440	к	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY)	ADAMS STREET		А		1	STATE	1/15/2016	5.200	GOOD	N/A	2,700	\$12,150,000	302		
2230450	к	278I EASTBOUND (BROOKLYN QUEENS EXPRESSWAY)	ADAMS STREET		А		1	STATE	1/15/2016	4.933	FAIR	N/A	2,500	\$11,250,000	302		
2230460	к	278I (BROOKLYN QUEENS EXPRESSWAY)	PEARL STREET		А		1	STATE	1/15/2016	5.467	GOOD	N/A	4,500	\$20,250,000	302		
2230470	к	278I (BROOKLYN QUEENS EXPRESSWAY)	JAY STREET		А		1	STATE	1/15/2016	4.833	FAIR	N/A	5,100	\$22,950,000	302		
2230480	к	278I (BROOKLYN QUEENS EXPRESSWAY)	PROSPECT STREET		A		1	STATE	1/27/2016	4.852	FAIR	N/A	8,400	\$37,800,000	302		
2230490	к	278I (BROOKLYN QUEENS EXPRESSWAY)	SANDS STREET		A		1	STATE	2/27/2014	5.019	GOOD	3/16/2016	12,600	\$56,700,000	302		
2230500	к	278I (BROOKLYN QUEENS EXPRESSWAY)	RAMP TO BROOKLYN QUEENS EXPRESSWAY EASTBOUND		А		1	STATE	1/29/2016	4.567	FAIR	N/A	1,300	\$5,850,000	302		
2230510	к	278I (BROOKLYN QUEENS EXPRESSWAY)	NASSAU STREET		A		6	STATE	7/3/2014	5.169	GOOD	7/15/2016	51,200	\$230,400,000	302		
2230857	к	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY)	JORALEMON STREET		А		1	STATE	3/11/2014	5.000	GOOD	3/29/2016	2,100	\$9,450,000	302		
2230858	к	278I EASTBOUND (BROOKLYN QUEENS EXPRESSWAY)	JORALEMON STREET / BROOKLYN QUEENS EXPRESSWAY WESTBOUND		А		1	STATE	10/20/2015	4.619	FAIR	11/2/2017	5,900	\$26,550,000	302		
2230870	к	COLUMBIA HEIGHTS	278I (BROOKLYN QUEENS EXPRESSWAY)		А		1	STATE	8/7/2014	4.450	FAIR	8/21/2016	16,500	\$74,250,000	302		
2230887	к	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY)	CADMAN PLAZA		А		2	STATE	7/25/2014	4.403	FAIR	8/19/2016	4,500	\$20,250,000	302		

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE	OTHE R OWN ER	SPA NS	RATING	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2230888	к	278I EASTBOUND (BROOKLYN QUEENS EXPRESSWAY)	CADMAN PLAZA / 278I WESTBOUND		А		2	STATE	7/28/2014	5.263	GOOD	8/19/2016	4,500	\$20,250,000	302		
2243280	к	6TH AVENUE	LIRR ATLANTIC AVENUE	L	0		9	STATE	9/5/2014	5.431	GOOD	9/2/2016	12,276	\$55,242,000	302		
2243290	к	CARLTON AVENUE	LIRR ATLANTIC AVENUE	L	o		4	STATE	7/24/2015	6.694	VGOOD	8/21/2017	15,400	\$69,300,000	302		
2244440	к	FLEET WALK PEDESTRIAN BRIDGE	NAVY STREET		PED-O		1	СІТҮ	8/16/2017	3.919	FAIR	N/A	620	\$2,790,000	302		
2267860	к	BROOKLYN BRIDGE APPROACH	STORAGE (SANDS STREET)		0		1	STATE	5/23/2014	4.344	FAIR	6/10/2016	6,490	\$29,205,000	302		
2268350	к	BROOKLYN PROMENADE	278I BROOKLYN QUEENS EXPRESSWAY EASTBOUND		PED-A	Ρ	35	СІТҮ	10/6/2017	3.828	FAIR	N/A	46,184	\$207,828,000	302		
2268497	к	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY)	FURMAN STREET - BROOKLYN QUEENS EXPRESSWAY EASTBOUND		А		45	STATE	9/16/2015	4.357	FAIR	9/28/2017	86,406	\$388,827,000	302		
2268498	к	278I EASTBOUND (BROOKLYN QUEENS EXPRESSWAY)	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY) - PROMENADE		А		69	STATE	11/26/2014	3.754	FAIR	11/1/2017	133,708	\$601,686,000	302		
2268507	к	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY)	YORK STREET		А		6	STATE	6/29/2015	4.071	FAIR	7/12/2017	10,388	\$46,746,000	302		
2268508	к	278I EASTBOUND (BROOKLYN QUEENS EXPRESSWAY)	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY) - BROOKLYN BRIDGE		А		11	STATE	6/29/2015	4.297	FAIR	7/12/2017	20,529	\$92,380,500	302		
2268517	к	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY)	FURMAN STREET		А		7	STATE	6/30/2015	4.104	FAIR	7/14/2017	10,988	\$49,446,000	302		
2268518	к	278I EASTBOUND (BROOKLYN QUEENS EXPRESSWAY)	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY)		А		5	STATE	7/1/2015	4.119	FAIR	7/14/2017	9,275	\$41,737,500	302		
2230000	к	HIGHLAND BOULEVARD EASTBOUND	JACKIE ROBINSON PARKWAY		А		1	STATE	2/22/2016	4.724	FAIR	N/A	4,900	\$22,050,000	305		
2230010	к	HIGHLAND BOULEVARD WESTBOUND	JACKIE ROBINSON PARKWAY		А		1	STATE	2/22/2016	4.700	FAIR	N/A	3,500	\$15,750,000	305		
2230020	к	HIGHLAND BOULEVARD WESTBOUND	JACKIE ROBINSON PARKWAY EASTBOUND ENTRANCE RAMP		А		2	STATE	3/11/2014	4.974	FAIR	3/11/2016	4,700	\$21,150,000	305		
2230220	к	HIGHLAND BOULEVARD NORTHBOUND	VERMONT STREET		А		1	STATE	5/29/2015	5.762	GOOD	5/15/2017	3,995	\$17,977,500	305		
2244170	к	ATALNTIC AVENUE SERVICE ROAD EASTBOUND	EAST NEW YORK AVENUE		0		2	STATE	7/28/2015	5.474	GOOD	7/19/2017	3,192	\$14,364,000	305		
2244180	к	ATALNTIC AVENUE SERVICE ROAD WESTBOUND	EAST NEW YORK AVENUE		o		2	STATE	7/28/2015	5.105	GOOD	7/19/2017	5,600	\$25,200,000	305		
2244460	к	CONDUIT BOULEVARD NORTHBOUND	ATLANTIC AVENUE EASTBOUND		o		1	STATE	10/10/2014	4.833	FAIR	10/20/2016	3,800	\$17,100,000	305		
2269600	к	ERSKINE STREET	BELT SYSTEM - SHORE PARKWAY		А		1	STATE	8/20/2014	5.938	GOOD	8/12/2016	8,258	\$37,161,000	305		
2230350	к	SUMMIT STREET PEDESTRIAN BRIDGE	278I (BROOKLYN QUEENS EXPRESSWAY)		PED-A		2	СІТҮ	4/15/2017	4.543	FAIR	N/A	1,400	\$6,300,000	306		
2230360	к	UNION STREET	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	3/19/2014	4.236	FAIR	4/13/2016	5,000	\$22,500,000	306		
2230370	к	SACKETT STREET	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	3/19/2014	4.500	FAIR	4/14/2016	5,000	\$22,500,000	306		
2230380	к	KANE STREET	278I (BROOKLYN QUEENS EXPRESSWAY)		Α		2	STATE	3/27/2014	4.153	FAIR	5/24/2017	5,000	\$22,500,000	306		
2230390	к	CONGRESS STREET	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	3/27/2014	6.029	VGOOD	4/24/2016	5,000	\$22,500,000	306		
2240232	к	HAMILTON AVENUE BRIDGE	GOWANUS CANAL		wмо		3	STATE	8/7/2015	5.361	GOOD	8/25/2017	8,611	\$38,749,500	306		
2240240	к	NINTH STREET BRIDGE	GOWANUS CANAL		WMO		3	STATE	6/17/2015	6.161	VGOOD	6/7/2017	5,772	\$25,974,000	306		
2240250	к	THIRD STREET	GOWANUS CANAL		wмо		5	STATE	5/26/2015	4.722	FAIR	5/5/2017	4,900	\$22,050,000	306		
2240260	к	CARROLL STREET	GOWANUS CANAL		wмо		2	STATE	9/22/2015	4.931	FAIR	11/7/2017	3,000	\$13,500,000	306		
2240270	к	UNION STREET	GOWANUS CANAL		WMO		5	STATE	8/15/2014	4.111	FAIR	8/17/2016	4,900	\$22,050,000	306		

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2240310	к	THIRD AVENUE BRIDGE	GOWANUS CANAL		wo		1	STATE	5/27/2015	6.550	VGOOD	5/5/2017	3,412	\$15,354,000	306		
2240231	к	HAMILTON AVE BRIDGE	GOWANUS CANAL		WMO		3	STATE	9/9/2014	5.472	GOOD	8/19/2016	7,300	\$32,850,000	307	306	
2066100	к	STH AVENUE	27 X PROSPECT EXPRESSWAY		Α		1	STATE	4/22/2014	5.063	GOOD	5/12/2016	8,800	\$39,600,000	307		
2243839	к	4TH AVENUE	NYCTA BMT TRACKS	т	o		1	STATE	7/27/2015	6.250	VGOOD	7/10/2017	4,440	\$19,980,000	307		
2243920	к	7TH AVENUE	NYCTA BMT YARD	т	0		2	STATE	6/30/2014	6.042	VGOOD	7/15/2016	4,700	\$21,150,000	307		
2244470	к	SEELEY STREET	PROSPECT AVENUE		o		1	STATE	6/1/2015	4.033	FAIR	7/7/2017	8,496	\$38,232,000	307		
2244480	к	STH AVENUE	GREENWOOD CEMETERY ROAD		o		1	STATE	9/10/2015	5.333	GOOD	9/18/2017	3,600	\$16,200,000	307		
2243170	к	STERLING PLACE	FRANKLIN SHUTTLE	т	o		1	STATE	7/24/2015	6.375	VGOOD	6/28/2017	2,300	\$10,350,000	308		
2243180	к	ST JOHNS PLACE	FRANKLIN SHUTTLE	т	o		1	STATE	7/24/2015	6.656	VGOOD	6/29/2017	2,300	\$10,350,000	308		
2243190	к	LINCOLN PLACE	FRANKLIN SHUTTLE	т	o		1	STATE	6/26/2014	6.672	VGOOD	7/11/2016	2,460	\$11,070,000	308		
2243279	к	EASTERN PARKWAY	FRANKLIN SHUTTLE	т	o		1	STATE	6/27/2014	4.833	FAIR	7/22/2016	7,700	\$34,650,000	309	308	
2243250	к	WASHINGTON AVENUE	FRANKLIN SHUTTLE	т	o		1	STATE	6/24/2014	6.000	GOOD	7/8/2016	3,657	\$16,456,500	309	355	
2243200	к	UNION STREET	FRANKLIN SHUTTLE	т	o		2	STATE	6/25/2014	4.913	FAIR	7/12/2016	4,100	\$18,450,000	309		
2243210	к	PRESIDENT STREET	FRANKLIN SHUTTLE	т	o		2	STATE	6/25/2014	5.078	GOOD	7/13/2016	2,500	\$11,250,000	309		
2243220	к	CARROLL STREET PEDESTRIAN BRIDGE	FRANKLIN SHUTTLE	т	PED-O		3	СІТҮ	7/29/2016	5.127	GOOD	N/A	600	\$2,700,000	309		
2243230	к	CROWN STREET	FRANKLIN SHUTTLE	т	0		3	STATE	7/29/2015	5.069	GOOD	7/20/2017	4,060	\$18,270,000	309		
2243240	к	MONTGOMERY STREET	FRANKLIN SHUTTLE	т	0		1	STATE	7/29/2015	5.843	GOOD	6/26/2017	2,240	\$10,080,000	309		
2243260	к	FLATBUSH AVENUE	FRANKLIN SHUTTLE	т	0		2	STATE	6/23/2014	4.961	FAIR	7/1/2016	11,300	\$50,850,000	309		
2231249	к	BELT SYSTEM - SHORE PARKWAY	BAY RIDGE AVENUE		А		1	STATE	5/22/2015	6.905	VGOOD	5/7/2016	4,900	\$22,050,000	310		
2231250	к	81ST STREET PEDESTRIAN BRIDGE	BELT SYSTEM - SHORE PARKWAY		PED-A	Ρ	5	СІТҮ	2/14/2017	4.662	FAIR	N/A	3,100	\$13,950,000	310		
2231260	к	92ND STREET PEDESTRIAN BRIDGE	BELT SYSTEM - SHORE PARKWAY		PED-A	Ρ	6	СІТҮ	8/3/2016	3.770	FAIR	N/A	3,000	\$13,500,000	310		
2231270	к	4TH AVENUE	BELT SYSTEM - SHORE PARKWAY		А		2	STATE	3/21/2014	4.763	FAIR	4/19/2016	6,100	\$27,450,000	310		
2243310	к	2ND AVENUE	LIRR BAY RIDGE	N	0		2	STATE	10/7/2014	6.208	VGOOD	9/27/2016	17,751	\$79,879,500	310		
2243320	к	3RD AVENUE	LIRR BAY RIDGE	N	0		4	STATE	9/1/2015	4.972	FAIR	8/23/2017	17,230	\$77,535,000	310		
2243330	к	4TH AVENUE	LIRR BAY RIDGE	NT	0		4	STATE	8/7/2015	5.486	GOOD	7/27/2017	13,668	\$61,506,000	310		
2243580	к	5TH AVENUE	LIRR & SEA BEACH	NT	0		4	STATE	10/27/2014	3.882	FAIR	9/13/2016	12,395	\$55,777,500	310		
2243590	к	6TH AVENUE	LIRR & SEA BEACH	NT	o		2	STATE	7/9/2015	6.056	VGOOD	7/10/2017	14,382	\$64,719,000	310		
2243600	к	7TH AVENUE	LIRR & SEA BEACH	NT	0		7	STATE	10/22/2014	4.806	FAIR	9/13/2016	18,628	\$83,826,000	310		
2243610	к	8TH AVENUE	LIRR & SEA BEACH	NT	0		2	STATE	7/9/2015	6.097	VGOOD	7/10/2017	10,834	\$48,753,000	310		
2243620	к	FORT HAMILTON PARKWAY	LIRR & SEA BEACH	NT	o		3	STATE	6/19/2014	4.729	FAIR	7/11/2016	14,800	\$66,600,000	310		

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2243630	к	11TH AVENUE	LIRR & SEA BEACH	NT	o		5	STATE	7/1/2014	5.985	GOOD	7/11/2016	9,700	\$43,650,000	310		
2243640	к	13TH AVENUE	LIRR & SEA BEACH	NT	o		5	STATE	7/10/2015	4.972	FAIR	7/24/2017	16,000	\$72,000,000	310		
2244150	к	RIDGE BOULEVARD	SHORE ROAD DRIVE		o		1	STATE	5/29/2015	6.333	VGOOD	5/16/2017	4,350	\$19,575,000	310		
2244160	к	3RD AVENUE	SHORE ROAD DRIVE		o		1	STATE	6/1/2015	6.273	VGOOD	5/17/2017	4,360	\$19,620,000	310		
2231290	к	BAY 8TH STREET	BELT SYSTEM - SHORE PARKWAY		А		1	STATE	6/4/2015	5.730	GOOD	5/24/2017	4,950	\$22,275,000	311		
2231300	к	17TH AVENUE PEDESTRIAN BRIDGE	BELT SYSTEM - SHORE PARKWAY		PED-A	Ρ	1	СІТҮ	9/14/2017	3.702	FAIR	N/A	2,100	\$9,450,000	311		
2231319	к	BELT SYSTEM - SHORE PARKWAY	BAY PARKWAY		А		1	STATE	6/19/2015	4.533	FAIR	6/28/2017	7,200	\$32,400,000	311		
2243340	к	15TH AVENUE	LIRR BAY RIDGE	N	o		1	STATE	10/3/2014	4.872	FAIR	9/26/2016	3,614	\$16,263,000	311		
2243350	к	60TH STREET	LIRR BAY RIDGE	N	0		1	STATE	9/1/2015	6.000	GOOD	8/15/2017	3,900	\$17,550,000	311		
2243360	к	16TH AVENUE	LIRR BAY RIDGE	N	o		1	STATE	10/3/2014	5.350	GOOD	9/23/2016	4,345	\$19,552,500	311		
2243650	к	14TH AVENUE	LIRR BAY RIDGE	N	o		1	STATE	10/3/2014	6.167	VGOOD	9/26/2016	4,720	\$21,240,000	311		
2243660	к	NEW UTRECHT AVENUE	LIRR BAY RIDGE	N	o		1	STATE	10/3/2014	5.883	GOOD	9/26/2016	2,350	\$10,575,000	311		
2243670	к	15TH AVENUE	BMT SEA BEACH	т	o		4	STATE	6/22/2015	6.114	VGOOD	6/20/2017	9,800	\$44,100,000	311		
2243680	к	16TH AVENUE	BMT SEA BEACH	т	o		3	STATE	6/6/2014	5.481	GOOD	5/31/2016	6,816	\$30,672,000	311		
2243690	к	17TH AVENUE	BMT SEA BEACH	т	o		4	STATE	5/30/2014	6.173	VGOOD	6/1/2016	8,946	\$40,257,000	311		
2243700	к	18TH AVENUE	BMT SEA BEACH	т	0		1	STATE	7/1/2015	6.421	VGOOD	6/19/2017	5,200	\$23,400,000	311		
2243710	к	19TH AVENUE	BMT SEA BEACH	т	o		4	STATE	5/29/2014	4.237	FAIR	6/2/2016	4,800	\$21,600,000	311		
2243720	к	20TH AVENUE	BMT SEA BEACH	т	o		1	STATE	6/2/2014	6.421	VGOOD	6/3/2016	7,000	\$31,500,000	311		
2243730	к	65TH STREET	BMT SEA BEACH	т	0		4	STATE	5/23/2014	5.132	GOOD	5/26/2016	12,000	\$54,000,000	311		
2243740	к	BAY PARKWAY	BMT SEA BEACH	т	o		4	STATE	5/22/2014	4.658	FAIR	5/26/2016	16,800	\$75,600,000	311		
2243750	к	AVENUE O	BMT SEA BEACH	т	o		1	STATE	8/10/2015	5.706	GOOD	6/21/2017	4,658	\$20,961,000	311		
2243760	к	AVENUE P	BMT SEA BEACH	т	o		1	STATE	8/10/2015	6.140	VGOOD	6/13/2017	5,544	\$24,948,000	311		
2243770	к	KINGS HIGHWAY	BMT SEA BEACH	т	o		1	STATE	6/22/2015	6.628	VGOOD	6/20/2017	5,032	\$22,644,000	311		
2243780	к	HIGHLAWN AVENUE	BMT SEA BEACH	т	o		1	STATE	7/27/2015	6.280	VGOOD	6/16/2017	6,960	\$31,320,000	311		
2243800	к	AVENUE T	BMT SEA BEACH	т	o		1	STATE	6/26/2015	6.000	GOOD	6/23/2017	5,360	\$24,120,000	311		
2243820	к	21ST AVENUE	BMT SEA BEACH	т	0		4	STATE	7/22/2015	4.026	FAIR	6/20/2017	21,400	\$96,300,000	311		
2243370	к	17TH AVENUE	LIRR BAY RIDGE	N	0		1	STATE	10/2/2014	4.745	FAIR	9/23/2016	3,406	\$15,327,000	312		
2243380	к	18TH AVENUE	LIRR BAY RIDGE	N	o		1	STATE	10/2/2014	4.625	FAIR	9/22/2016	6,006	\$27,027,000	312		
2243390	к	52ND STREET	LIRR BAY RIDGE	N	0		1	STATE	10/1/2014	6.017	VGOOD	9/23/2016	3,293	\$14,818,500	312		
2243400	к	50TH STREET	LIRR BAY RIDGE	N	o		2	STATE	8/5/2015	4.731	FAIR	8/8/2017	7,100	\$31,950,000	312		

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2243410	к	MCDONALD AVENUE	LIRR BAY RIDGE	N	o		1	STATE	10/1/2014	5.141	GOOD	9/22/2016	2,760	\$12,420,000	312		
2243420	к	EAST 3RD STREET	LIRR BAY RIDGE	N	o		1	STATE	8/5/2015	6.517	VGOOD	8/8/2017	1,840	\$8,280,000	312		
2243439	к	OCEAN PARKWAY	LIRR BAY RIDGE	N	o		1	STATE	9/19/2014	4.927	FAIR	9/22/2016	7,000	\$31,500,000	312		
2243440	к	CONEY ISLAND AVENUE	LIRR BAY RIDGE	N	o		1	STATE	9/18/2014	5.043	GOOD	9/15/2016	3,231	\$14,539,500	312		
2243840	к	9TH AVENUE	NYCTA BMT YARD	т	o		5	STATE	7/30/2015	5.736	GOOD	7/3/2017	12,440	\$55,980,000	312		
2243940	к	9TH AVENUE	NYCTA IND SBWY	т	o		5	STATE	7/29/2015	4.667	FAIR	8/3/2017	6,300	\$28,350,000	312		
2231329	к	BELT SYSTEM - SHORE PARKWAY	26TH AVENUE		А		1	STATE	4/1/2014	4.600	FAIR	4/22/2016	6,700	\$30,150,000	313		
2231330	к	27TH AVENUE PEDESTRIAN BRIDGE	BELT SYSTEM - SHORE PARKWAY		PED-A	Р	1	СІТҮ	2/21/2017	4.156	FAIR	N/A	2,100	\$9,450,000	313		
2231340	к	CROPSEY AVENUE	BELT SYSTEM - SHORE PARKWAY		А		2	STATE	7/10/2014	4.639	FAIR	6/24/2016	13,100	\$58,950,000	313		
2231360	к	BELT SYSTEM - SHORE PARKWAY	OCEAN PARKWAY		А		3	STATE	7/16/2014	6.448	VGOOD	7/12/2016	29,637	\$133,366,500	313		
2231370	к	GUIDER AVENUE RAMP TO BELT SYSTEM - SHORE PARKWAY	BELT SYSTEM - SHORE PARKWAY		А		4	STATE	9/23/2014	6.778	VGOOD	9/22/2016	10,818	\$48,681,000	313		
2231380	к	CONEY ISLAND AVENUE	BELT SYSTEM - SHORE PARKWAY		А		4	STATE	10/9/2015	5.542	GOOD	10/27/2017	19,866	\$89,397,000	313		
2240301	к	CROPSEY AVENUE SOUTHBOUND	CONEY ISLAND CREEK		wo		3	STATE	6/26/2015	5.000	GOOD	7/26/2017	9,400	\$42,300,000	313		ГП
2240302	к	CROPSEY AVENUE NORTHBOUND	CONEY ISLAND CREEK		wo		3	STATE	6/26/2015	4.718	FAIR	7/26/2017	9,400	\$42,300,000	313		
2240540	к	STILLWELL AVENUE	CONEY ISLAND CREEK		wo		2	STATE	5/28/2015	6.125	VGOOD	5/15/2017	17,000	\$76,500,000	313		
2243570	к	86TH STREET	BMT SEA BEACH	т	o		1	STATE	6/4/2014	5.797	GOOD	6/10/2016	12,167	\$54,751,500	313		
2243020	к	PARKSIDE AVENUE - OCEAN AVENUE	BMT SUBWAY, BRIGHTON	т	o		6	STATE	6/18/2014	4.043	FAIR	7/27/2017	48,700	\$219,150,000	314		ГП
2243040	к	CROOKE AVENUE	BMT SUBWAY, BRIGHTON	т	o		4	STATE	6/2/2015	4.316	FAIR	7/28/2017	6,000	\$27,000,000	314		
2243050	к	CATON AVENUE	BMT SUBWAY, BRIGHTON	т	o		4	STATE	8/19/2015	4.842	FAIR	7/24/2017	20,800	\$93,600,000	314		ГП
2243080	к	EAST 18TH STREET - CHURCH AVENUE	BMT SUBWAY, BRIGHTON	т	o		4	STATE	8/19/2015	4.545	FAIR	7/24/2017	18,200	\$81,900,000	314		
2243100	к	BEVERLY ROAD	BMT SUBWAY, BRIGHTON	т	o		3	STATE	6/11/2015	4.088	FAIR	7/27/2017	4,200	\$18,900,000	314		
2243110	к	CORTELYOU ROAD	BMT SUBWAY, BRIGHTON	т	o		3	STATE	8/17/2015	6.083	VGOOD	7/25/2017	4,810	\$21,645,000	314		ГП
2243120	к	DORCHESTER ROAD	BMT SUBWAY, BRIGHTON	т	o		1	STATE	6/16/2014	5.863	GOOD	6/17/2016	4,825	\$21,712,500	314		
2243130	к	DITMAS AVENUE	BMT SUBWAY, BRIGHTON	т	o		1	STATE	8/17/2015	5.723	GOOD	7/25/2017	5,150	\$23,175,000	314		ГП
2243140	к	NEWKIRK AVENUE	BMT SUBWAY, BRIGHTON	т	o		3	STATE	6/17/2014	4.574	FAIR	6/22/2016	4,100	\$18,450,000	314		
2243150	к	FOSTER AVENUE	BMT SUBWAY, BRIGHTON	т	o		1	STATE	6/2/2015	4.283	FAIR	8/4/2017	3,000	\$13,500,000	314		
2243450	к	EAST 14TH STREET	LIRR BAY RIDGE	N	0		1	STATE	9/17/2014	4.809	FAIR	9/15/2016	1,775	\$7,987,500	314		
2243460	к	EAST 15TH STREET PEDESTRIAN BRIDGE	LIRR BAY RIDGE	N	PED-0		3	СІТҮ	8/15/2017	5.479	GOOD	N/A	900	\$4,050,000	314		
2243480	к	OCEAN AVENUE	LIRR BAY RIDGE	N	0		2	STATE	9/16/2014	4.965	FAIR	9/14/2016	5,000	\$22,500,000	314		
2243490	к	BEDFORD AVENUE	LIRR BAY RIDGE	N	o		6	STATE	9/15/2014	5.097	GOOD	9/14/2016	12,000	\$54,000,000	314		

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHE R OWN ER	SPA NS	RATING	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2243500	к	NOSTRAND AVENUE	LIRR BAY RIDGE	N	o		2	STATE	9/29/2014	4.898	FAIR	9/19/2016	4,320	\$19,440,000	314		
2231390	к	EAST 12TH STREET	BELT SYSTEM - SHORE PARKWAY		А		4	STATE	7/7/2014	4.542	FAIR	6/22/2016	17,200	\$77,400,000	315		
2231409	к	BELT SYSTEM - SHORE PARKWAY	SHEEPSHEAD BAY ROAD		А		1	STATE	4/1/2014	4.738	FAIR	4/28/2016	6,500	\$29,250,000	315		
2231419	к	BELT SYSTEM - SHORE PARKWAY	OCEAN AVENUE		А		3	STATE	3/25/2014	4.306	FAIR	4/18/2016	14,000	\$63,000,000	315		
2231429	к	BELT SYSTEM - SHORE PARKWAY	BEDFORD AVENUE		А		3	STATE	4/23/2014	4.278	FAIR	5/10/2016	12,000	\$54,000,000	315		
2231439	к	BELT SYSTEM - SHORE PARKWAY	NOSTRAND AVENUE		А		3	STATE	3/25/2014	4.264	FAIR	4/19/2016	13,000	\$58,500,000	315		
2231449	к	KNAPP STREET	BELT SYSTEM - SHORE PARKWAY		А		1	STATE	4/9/2014	4.313	FAIR	5/4/2016	9,500	\$42,750,000	315		
2233080	к	EAST 14 STREET PEDESTRIAN BRIDGE	BELT SYSTEM - SHORE PARKWAY		PED-A		14	СІТҮ	8/2/2016	4.210	FAIR	N/A	4,700	\$21,150,000	315		
2240320	к	OCEAN AVENUE PEDESTRIAN BRIDGE	SHEEPSHEAD BAY		PED-WO		30	СІТҮ	6/22/2016	4.935	FAIR	N/A	4,450	\$20,025,000	315		
2243790	к	AVENUE S	BMT SEA BEACH	т	o		1	STATE	6/26/2015	5.967	GOOD	6/22/2017	5,360	\$24,120,000	315		
2243810	к	AVENUE U	BMT SEA BEACH	т	o		1	STATE	6/20/2014	5.294	GOOD	6/9/2016	5,880	\$26,460,000	315		
2243569	к	ATLANTIC AVENUE	LIRR ATLANTIC AVENUE	L	o		75	STATE	6/8/2014	3.620	FAIR	9/19/2017	135,100	\$607,950,000	316	305	
2243850	к	LIBERTY AVENUE	LIRR BAY RIDGE	N	o		3	STATE	9/23/2014	6.103	VGOOD	9/29/2016	6,659	\$29,965,500	316		
2243860	к	GLENMORE AVENUE	LIRR BAY RIDGE	N	o		2	STATE	9/22/2014	6.456	VGOOD	9/29/2016	5,616	\$25,272,000	316		
2243870	к	PITKIN AVENUE	LIRR BAY RIDGE	N	o		2	STATE	9/24/2014	6.279	VGOOD	9/29/2016	5,328	\$23,976,000	316		
2243890	к	SUTTER AVENUE	LIRR BAY RIDGE	N	0		3	STATE	9/26/2014	6.292	VGOOD	9/30/2016	5,497	\$24,736,500	316		
2243900	к	BLAKE AVENUE	LIRR BAY RIDGE	N	0		3	STATE	9/26/2014	4.927	FAIR	9/30/2016	4,912	\$22,104,000	316		
2243910	к	LIVONIA AVENUE PEDESTRIAN BRIDGE	LIRR BAY RIDGE	N	PED-O		6	СІТҮ	10/3/2017	4.833	FAIR	N/A	2,500	\$11,250,000	316		
2231479	к	BELT SYSTEM - SHORE PARKWAY	MILL BASIN		WMA		14	STATE	11/9/2015	3.209	FAIR	10/10/2017	73,500	\$330,750,000	318		
2231481	к	BELT SYSTEM - SHORE PARKWAY WESTBOUND	PAERDEGAT BASIN		WA		3	STATE	11/2/2015	6.758	VGOOD	10/19/2017	50,052	\$225,234,000	318		
2231482	к	BELT SYSTEM - SHORE PARKWAY EASTBOUND	PAERDEGAT BASIN		WA		5	STATE	11/4/2014	7.000	VGOOD	10/19/2016	82,074	\$369,333,000	318		
2243510	к	FLATBUSH AVENUE	LIRR BAY RIDGE	N	0		2	STATE	8/4/2015	4.651	FAIR	8/7/2017	5,900	\$26,550,000	318		
2243520	к	BROOKLYN AVENUE	LIRR BAY RIDGE	N	0		3	STATE	8/4/2015	5.727	GOOD	8/7/2017	4,500	\$20,250,000	318		
2243530	к	ALBANY AVENUE - AVENUE H	LIRR BAY RIDGE	N	o		2	STATE	8/31/2015	5.956	GOOD	8/15/2017	35,100	\$157,950,000	318		
2243010	к	LINCOLN ROAD	BMT SUBWAY, BRIGHTON	т	o		1	STATE	5/19/2014	6.685	VGOOD	5/27/2016	6,243	\$28,093,500	355		
2244010	к	EAST DRIVE (ENDALE ARCH)	PEDESTRIAN PATH NEAR GRAND ARMY PLAZA		0	Ρ	1	СІТҮ	5/23/2016	4.400	FAIR	N/A	1,533	\$6,898,500	355		
2244020	к	WEST DRIVE (MEADOWPORT ARCH)	PEDESTRIAN PATH NEAR GRAND ARMY PLAZA		0	Ρ	1	STATE	4/27/2015	5.321	GOOD	4/19/2017	2,500	\$11,250,000	355		
2244030	к	EAST DRIVE	BRIDLE PATH NEAR ZOO		o	Ρ	1	STATE	4/28/2015	4.878	FAIR	4/20/2017	2,000	\$9,000,000	355		
2244040	к	EAST DRIVE (EAST WOOD ARCH)	PEDESTRIAN PATH NEAR CENTER DRIVE		0	Ρ	1	СІТҮ	7/19/2017	3.933	FAIR	N/A	1,066	\$4,797,000	355		
2244050	к	CENTER DRIVE (NETHERMEAD ARCHES)	PEDESTRIAN PATH & STREAM		wo	Ρ	3	STATE	4/30/2015	5.000	GOOD	4/24/2017	7,020	\$31,590,000	355		

Image: Marcine Control BRIDGE         PRODUCT PARK STREAM         Image: Control BRIDGE         PRODUCT PARK STREAM         PRODUCT PARK STREAM         PRODUCT PARK LAKE         PRODUC	PA RATING BRIDGE IS SOURCE CONDITION C INSPECTION DATE	BRIDGE VERBAL CONDITION BRIDGE RATING CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
244130       K       HILLDRIVE (TERBACE BRIDGE)       PROSPECT PARK LAKE       NO       P       3       51         244130       K       PEDESTRIAN BRIDGE NAR BOATHOUSE (LULIWATER BRIDGE)       PROSPECT PARK LAKE       I.       PEDSWO       P       1       0       0       1       0       10       0       11       51         221160       K       RELT SYSTEM-SHORE PARKWAY       GEBRITSEN INLET       I.       MA       0       1       1       51         221161       K       RELT SYSTEM-SHORE PARKWAY       GEBRITSEN INLET       I.       MA       0       1       1       51         221161       K       RELT SYSTEM-SHORE PARKWAY       GEBRITSEN INLET       I.       MA       0       1       1       51         221161       K       RELT SYSTEM-SHORE PARKWAY       RELT SYSTEM-SHORE PARKWAY       I.       MA       1       1       51         221010       K       RELT SYSTEM-SHORE PARKWAY       RELT SYSTEM-SHORE PARKWAY       I.       MA       1	1 CITY 5/8/2017	4.433 FAIR	N/A	750	\$3,375,000	355	$\square$	
244130       K       PEDESTRIAN BRIDGE NEAR BOATHOUSE (LULUWATER BRIDGE)       PROSPECT PARK LAKE       II       PED.W0       P       1       0         2214400       K       BLT SYSTEM - SHORE PARKWAY       GERRTSEN INLET       II       NA       0       1       1       0       1       1<	1 CITY 4/28/2017	5.000 GOOD	N/A	308	\$1,386,000	355	$\square$	
Image: Constraint of the constraint	3 STATE 9/15/2015	3.291 FAIR	10/10/2017	7,800	\$35,100,000	355		
2231400     K     FATBUSH AVENUE     BELT SYSTEM - SHORE PARKWAY     I     A     I     2     51       2231400     K     BELT SYSTEM - SHORE PARKWAY     ROCKAWAY PARKWAY     I     A     I     5       2231507     K     BELT SYSTEM - SHORE PARKWAY     RESH CREEK     I     VA     I     2     51       2231507     K     BELT SYSTEM - SHORE PARKWAY     RESH CREEK     I     VA     I     2     51       2231507     K     BELT SYSTEM - SHORE PARKWAY     RESH CREEK     I     VA     I     2     51       224007     K     WILLIAMSBUG BRIOGE     CAST RIVER     C     VE     I     53     51       224007     K     MILLAMSBUG BRIOGE     CAST RIVER     C     VE     I     43     51       224007     K     MARMATAN BRIDGE (LOVER LEVEL)     RACKSBMT     T     WEO     I     2     51       224007     KO     GERENPOINT AVENUE BRIDGE     NEVTOWN CREEK     L     WMO     I     4     51       224037     KO     GERENPOINT AVENUE BRIDGE     NEVTOWN CREEK     L     WMO     I     4     51       224037     KO     GERENPOINT AVENUE BRIDGE     NEVTOWN CREEK     L     WMO	1 CITY 8/24/2016	4.885 FAIR	N/A	1,000	\$4,500,000	355	$\square$	
23149       K       BELT SYSTEM - SHORE PARKWAY       ROCKAWAY PARKWAY       I       J       J         223169       K       BELT SYSTEM - SHORE PARKWAY       RESH CREEK       I       WA       I       J         223169       K       BELT SYSTEM - SHORE PARKWAY       RESH CREEK       I       WA       I       J       J         223169       K       BELT SYSTEM - SHORE PARKWAY       RESH CREEK       I       WA       I       J       J         223169       K       BELT SYSTEM - SHORE PARKWAY       RESH CREEK       I       WA       I       J       J         2240017       K       BELT SYSTEM - SHORE PARKWAY       REST RIVER       T       WEO       I       J       J         2240027       KM       MAMHATAN BRIDGE (LOWER LEVEL)       EAST RIVER       T       WEO       I       J <td>11 STATE 8/10/2015</td> <td>3.239 FAIR</td> <td>10/3/2017</td> <td>52,000</td> <td>\$234,000,000</td> <td>356</td> <td><math>\square</math></td> <td></td>	11 STATE 8/10/2015	3.239 FAIR	10/3/2017	52,000	\$234,000,000	356	$\square$	
L       L <thl< th=""> <thl< th=""> <thl< th=""></thl<></thl<></thl<>	2 STATE 10/14/2015	6.088 VGOOD	10/30/2017	14,058	\$63,261,000	356	$\square$	
LLL <thl< td=""><td>1 STATE 11/5/2014</td><td>7.000 VGOOD</td><td>10/27/2016</td><td>10,370</td><td>\$46,665,000</td><td>356</td><td><math>\square</math></td><td></td></thl<>	1 STATE 11/5/2014	7.000 VGOOD	10/27/2016	10,370	\$46,665,000	356	$\square$	
24.003KMKILLIAMSBURO BRIGGEEAST RIVERTWEOAAA224001KMBROOKLYN BRIGGEEAST RIVERCWEOA3512240027KMMANHATTAN BRIGGE (LOWER LEVEL)EAST RIVERTWEOA3512240028KMMANHATTAN BRIGGE (LOWER LEVEL)EAST RIVERTWEOA43512240028KMMANHATTAN BRIGGE (LOPPER LEVEL)NYCTA TRACKS-BMTTWEOA43512240370KOGREENPOINT AVENUE BRIGGENEWTOWN CREEKLWMOA44512240370KOQULASKI BRIGGENEWTOWN CREEKLWMOA22512240370KOGRAND STREET BRIGGENEWTOWN CREEKJWMOA22512240370KOGRAND STREET BRIGGENEWTOWN CREEKJAR22512240370KOGRAND STREET BRIGGENEWTOWN CREEKJAR22512240370KOGRAND STREET BRIGGENEWTOWN CREEKJAR22512240370MTO BROOKLYN FOM FDR DRIVEFRANKFORT & PEARL STREETJAR3512240370MTO BROOKLYN FOM FDR DRIVEFRANKFORT & PEARL STREETJAR3512240370MTO FDR DRIVE NORTHBOUND OF RAMPFDR DRIVE & SOUTH STREETJAR451224010MFOR DRIVE NORTHBOUND OF RAMPFDR DRIV	3 STATE 11/3/2015	6.577 VGOOD	11/2/2017	40,095	\$180,427,500	356	$\square$	
Z240019KMBROOKLYN BRIDGEEAST RIVERImage: Comparison of the compariso	2 STATE 6/8/2015	5.583 GOOD	6/1/2017	6,640	\$29,880,000	356	$\square$	
2240027KMMANHATTAN BRIDGE (LOWER LEVEL)EAST RIVERTWED23512240028KMMANHATTAN BRIDGE (LOWER LEVEL)NYCTA TRACKS-BMTTWEO43512240370KQGREENPOINT AVENUE BRIDGENEWTOWN CREEKLWMO44512240390KQPULASKI BRIDGENEWTOWN CREEKJWMO44512240390KQGRAND STREET BRIDGENEWTOWN CREEKJWMO42512240390KQGRAND STREET BRIDGENEWTOWN CREEKJWMO42512240390KQGRAND STREET BRIDGENEWTOWN CREEKJMMO42512240390KQGRAND STREET BRIDGENEWTOWN CREEKJAR22512240310MTO BROOKLYN FROM FDR DRIVEFDR DRIVE & SOUTH STREETJAR22512240310MTO BROOKLYN FROM FDR DRIVEFRANKFORT & PEARL STREETJAR10512240310MTO FDR DRIVE NORTHBOUND OF FAMPFDR DRIVE & SOUTH STREETJAR10512240310MFOR DRIVE NORTHBOUND OF FAMPFDR DRIVE & SOUTH STREETJAR10512240310MFOR DRIVE NORTHBOUND OF FAMPFDR DRIVE & SOUTH STREETJAR10512240311MFOR DRIVE NORTHBOUND OF FAMPSOUTH STREET NORTHBOUNDJOEJ4512240311MFOR DRIVE NORTHBOUND OF RAMPLAND ADJACE	53 STATE 10/20/2014	4.542 FAIR	10/20/2016	824,000	\$3,708,000,000	0 103	301	
LII	75 STATE 12/5/2014	3.139 FAIR	11/17/2016	503,788	\$2,267,046,000	0 103	302	101
2240370KQGREENPOINT AVENUE BRIDGENEWTOWN CREEKLWMO12ST2240370KQGREENPOINT AVENUE BRIDGENEWTOWN CREEKJWMO44ST2240390KQGRAND STREET BRIDGENEWTOWN CREEKJWMO2ST2240390KQGRAND STREET BRIDGENEWTOWN CREEKJAR22ST2240390KQGRAND STREET BRIDGEFDR DRIVEFDR DRIVE & SOUTH STREETJAR22ST224001BMTO BROOKLYN FROM FDR DRIVEFRANKFORT & PEARL STREETSJOEJ31ST224001DMTO FDR DRIVE NORTHBOUND OFF RAMPFDR DRIVE & SOUTH STREETJARJ10ST223201AMFOR DRIVE NORTHBOUND OFF RAMPFDR DRIVE & SOUTH STREETJARJ10ST224001AMPARK ROW TO BROOKLYNWILLIAM STREET NORTHBOUNDOEJ4ST224001AMPARK ROW TO BROOKLYNLAND ADJACENT TO BRIDGEOEJ3ST224001CMPEARL STREET TO BROOKLYNLAND ADJACENT TO BRIDGEOEJ3ST224001EMTO PEARL STREETLAND ADJACENT TO BRIDGEOEJ3ST224001CMPEARL STREETOEOEJ3ST224001CMPEARL STREET TO BROOKLYNLAND ADJACENT TO BRIDGEOEJ3ST224001CMPEARL STREETOEOE </td <td>23 STATE 10/22/2014</td> <td>4.375 FAIR</td> <td>11/4/2016</td> <td>616,390</td> <td>\$2,773,755,000</td> <td>103</td> <td>302</td> <td></td>	23 STATE 10/22/2014	4.375 FAIR	11/4/2016	616,390	\$2,773,755,000	103	302	
2240639       K0       PULASKI BRIDGE       NEWTOWN CREEK       WMO       1       4       57         2240390       K0       GRAND STREET BRIDGE       NEWTOWN CREEK       WMO       1       2       57         2232010       M       RAMP TO NORTHBOUND FDR DRIVE       FDR DRIVE & SOUTH STREET       AR       1       22       57         2240018       M       TO BROOKLYN FROM FDR DRIVE       FRANKFORT & PEARL STREETS       OE       31       37         2240019       M       TO FOR DRIVE NORTHBOUND OFF RAMP       PEARL STREET       OE       30       57         2240010       M       TO FOR DRIVE NORTHBOUND OFF RAMP       FOR DRIVE & SOUTH STREET       AR       10       57         223011       M       FOR DRIVE NORTHBOUND OFF RAMP       FOR DRIVE & SOUTH STREET       AR       11       57         2240010       M       FOR DRIVE NORTHBOUND OFF RAMP       FOR DRIVE & SOUTH STREET       AR       11       57         223013       M       SOUTH STREET RAMP TO FOR SOUTHBOUND       SOUTH STREET       AR       11       57         2240014       M       PARK ROW TO BROOKLYN       MULLIAM STREET NORTHBOUND       OE       4       57         2240015       M       PARL STREET TO	13 STATE 10/21/2014	3.757 FAIR	10/20/2016	587,424	\$2,643,408,000	0 103	302	
2240390       KQ       GRAND STREET BRIDGE       NEWTOWN CREEK       WMO       1       2       ST         22301D       M       RAMP TO NORTHBOUND FDR DRIVE       FDR DRIVE & SOUTH STREET       AR       1       22       ST         22401B       M       TO BROOKLYN FROM FDR DRIVE       FRANKFORT & PEARL STREETS       OE       31       ST         224001D       M       TO BROOKLYN FROM FDR DRIVE       FRANKFORT & PEARL STREETS       OE       30       ST         224001D       M       TO FDR DRIVE NORTHBOUND OFF RAMP       FDR DRIVE & SOUTH STREET       OE       AR       17       ST         223201A       M       FDR DRIVE NORTHBOUND OFF RAMP       FDR DRIVE & SOUTH STREET       AR       10       ST         223201A       M       FDR DRIVE NORTHBOUND OFF RAMP       FDR DRIVE & SOUTH STREET       AR       10       ST         224001A       M       FOR DRIVE NORTHBOUND       SOUTH STREET       AR       10       ST         224001C       M       PARK ROW TO BROOKLYN       WILLIAM STREET NORTHBOUND       OE       9       57         224001C       M       PARL STREET TO BROOKLYN       LAND ADJACENT TO BRIDGE       OE       9       57         224001C       M       TO PA	12 STATE 7/31/2015	5.083 GOOD	8/8/2017	76,106	\$342,477,000	301	402	
223201D       M       RAMP TO NORTHBOUND FOR DRIVE       FOR DRIVE & SOUTH STREET       AR       22       ST         224001B       M       TO BROOKLYN FROM FOR DRIVE       FRANKFORT & PEARL STREETS       OE       31       ST         224001D       M       TO BROOKLYN FROM FOR DRIVE       FRANKFORT & PEARL STREETS       OE       30       ST         224001D       M       TO FOR DRIVE NORTHBOUND       PEARL STREET       OE       AR       17       ST         223201A       M       FOR DRIVE NORTHBOUND OFF RAMP       FDR DRIVE & SOUTH STREET       AR       10       ST         223201B       M       SOUTH STREET RAMP TO FDR SOUTHBOUND       SOUTH STREET       AR       10       ST         224001C       M       PARK ROW TO BROOKLYN       WILLIAM STREET NORTHBOUND       OE       4       ST         224001C       M       PEARL STREET       D ROULD       AND ADJACENT TO BRIDGE       OE       3       ST         2240016       M       TO PEARL STREET       D ROULD       ROSE STREET       OE       11       ST         2240016       M       TO PEARL STREET PEDESTRIAN BRIDGE       ROUTE 9A - WEST STREET       OE       11       ST         2240016       M       CHAMBERS STREE	44 STATE 6/5/2014	4.437 FAIR	6/23/2016	205,770	\$925,965,000	301	402	
224001B       M       TO BROOKLYN FROM FDR DRIVE       FRANKFORT & PEARL STREETS       OE       31       ST         224001D       M       TO FDR DRIVE NORTHBOUND       PEARL STREET       OE       30       ST         22301A       M       FDR DRIVE NORTHBOUND OFF RAMP       FDR DRIVE & SOUTH STREET       AR       10       ST         223201B       M       SOUTH STREET RAMP TO FDR SOUTHBOUND       SOUTH STREET       AR       10       ST         224001C       M       PARL STREET TO BROOKLYN       WILLIAM STREET NORTHBOUND       OE       4       ST         224001C       M       PEARL STREET TO BROOKLYN       LAND ADJACENT TO BRIDGE       OE       9       ST         224001C       M       PEARL STREET TO BROOKLYN       LAND ADJACENT TO BRIDGE       OE       4       51         224001C       M       PEARL STREET TO BROOKLYN       LAND ADJACENT TO BRIDGE       OE       4       51         224001C       M       PEARL STREET TO BROOKLYN       LAND ADJACENT TO BRIDGE       OE       4       51         224001C       M       PEARL STREET TO BROOKLYN       LAND ADJACENT TO BRIDGE       OE       3       51         224001C       M       TO PEARL STREET       DROKLYN       OE	2 STATE 10/7/2015	4.014 FAIR	11/1/2017	5,100	\$22,950,000	301	405	
224001D       M       TO FDR DRIVE NORTHBOUND       PEARL STREET       OE       30       ST         223201A       M       FDR DRIVE NORTHBOUND OFF RAMP       FDR DRIVE & SOUTH STREET       AR       17       ST         223201A       M       FDR DRIVE NORTHBOUND OFF RAMP       FDR DRIVE & SOUTH STREET       AR       10       ST         223201A       M       SOUTH STREET RAMP TO FDR SOUTHBOUND       SOUTH STREET       AR       10       ST         224001A       M       PARK ROW TO BROOKLYN       WILLIAM STREET NORTHBOUND       OE       4       ST         224001C       M       PEARL STREET       DROUKLYN       LAND ADJACENT TO BRIDGE       OE       9       ST         224001C       M       TO PEARL STREET       LAND ADJACENT TO BRIDGE       OE       3       ST         2240016       M       TO PEARL STREET       LAND ADJACENT TO BRIDGE       OE       11       ST         2240016       M       TO PEARL STREET PEDESTRIAN BRIDGE       ROSE STREET       OE       11       ST         2260480       M       CHAMBERS STREET PEDESTRIAN BRIDGE       ROUTE 9A - WEST STREET       PED-0       10       C         223201C       M       FDR DRIVE SOUTHBOUND OFF RAMP       SOUTH STREET </td <td>22 STATE 2/25/2014</td> <td>4.967 FAIR</td> <td>4/6/2016</td> <td>15,825</td> <td>\$71,212,500</td> <td>0 101</td> <td>103</td> <td></td>	22 STATE 2/25/2014	4.967 FAIR	4/6/2016	15,825	\$71,212,500	0 101	103	
223201A       M       FDR DRIVE NORTHBOUND OFF RAMP       FDR DRIVE & SOUTH STREET       AR       10       ST         223201B       M       SOUTH STREET RAMP TO FDR SOUTHBOUND       SOUTH STREET       AR       10       ST         223201A       M       SOUTH STREET RAMP TO FDR SOUTHBOUND       SOUTH STREET       AR       10       ST         223201A       M       SOUTH STREET RAMP TO FDR SOUTHBOUND       SOUTH STREET       AR       10       ST         224001A       M       PARK ROW TO BROOKLYN       WILLIAM STREET NORTHBOUND       OE       4       ST         224001C       M       PEARL STREET TO BROOKLYN       LAND ADJACENT TO BRIDGE       OE       0E       9       ST         224001C       M       PEARL STREET       BROOKLYN       LAND ADJACENT TO BRIDGE       OE       0E       9       ST         224001C       M       TO PEARL STREET       AR       OE       1       ST         224001C       M       TO PEARL STREET       BROOKLYN       LAND ADJACENT TO BRIDGE       OE       3       ST         224001C       M       TO PARK ROW       ROSE STREET       OE       0E       1       ST         224001C       M       TO PARK ROW       COL<	31 STATE 8/1/2014	4.926 FAIR	10/4/2016	51,400	\$231,300,000	0 101	103	
223201B       M       SOUTH STREET RAMP TO FDR SOUTHBOUND       SOUTH STREET       AR       10       ST         224001A       M       PARK ROW TO BROOKLYN       WILLIAM STREET NORTHBOUND       OE       4       ST         224001C       M       PEARL STREET TO BROOKLYN       LAND ADJACENT TO BRIDGE       OE       9       ST         224001E       M       TO PEARL STREET       DROOKLYN       LAND ADJACENT TO BRIDGE       OE       9       ST         224001E       M       TO PEARL STREET       DROOKLYN       LAND ADJACENT TO BRIDGE       OE       1       9       ST         224001E       M       TO PEARL STREET       OE       0E       11       ST         224001E       M       TO PEARL STREET       OE       11       ST         224001E       M       TO PEARL STREET       OE       11       ST         224001E       M       TO PARK ROW       ROSE STREET       OE       11       ST         2260480       M       CHAMBERS STREET PEDESTRIAN BRIDGE       ROUTE 9A - WEST STREET       PED-0       10       C         223201C       M       FDR DRIVE SOUTHBOUND OFF RAMP       SOUTH STREET       AR       8       ST	30 STATE 6/11/2015	4.528 FAIR	7/15/2016	49,600	\$223,200,000	0 101	103	
224001A       M       PARK ROW TO BROOKLYN       WILLIAM STREET NORTHBOUND       OE       0.       4       5T         224001C       M       PARK STREET TO BROOKLYN       LAND ADJACENT TO BRIDGE       OE       0.       9       5T         224001C       M       PEARL STREET TO BROOKLYN       LAND ADJACENT TO BRIDGE       OE       0.       9       5T         224001C       M       TO PEARL STREET       LAND ADJACENT TO BRIDGE       OE       0.       9       5T         224001C       M       TO PEARL STREET       LAND ADJACENT TO BRIDGE       OE       0.       9       5T         224001C       M       TO PEARL STREET       LAND ADJACENT TO BRIDGE       OE       0.       1       5T         224001C       M       TO PARK ROW       ROSE STREET       OE       0.       11       5T         224001C       M       TO PARK ROW       CHAMBERS STREET PEDESTRIAN BRIDGE       ROUTE 9A - WEST STREET       DED-0       10       0.         226016       M       FDR DRIVE SOUTHBOUND OFF RAMP       SOUTH STREET       AR       8       5T	17 STATE 7/23/2014	4.493 FAIR	7/22/2016	23,373	\$105,178,500	0 101	$\square$	
224001C       M       PEARL STREET TO BROOKLYN       LAND ADJACENT TO BRIDGE       OE       0       9       ST         224001C       M       TO PEARL STREET TO BROOKLYN       LAND ADJACENT TO BRIDGE       OE       0       3       ST         224001E       M       TO PEARL STREET       Comparison       OE       0       1       ST         224001E       M       TO PEARL STREET       Comparison       OE       0       1       ST         224001E       M       TO PARK ROW       ROSE STREET       OE       0       1       ST         2260480       M       CHAMBERS STREET PEDESTRIAN BRIDGE       ROUTE 9A - WEST STREET       PED-0       10       C         223201C       M       FDR DRIVE SOUTHBOUND OFF RAMP       SOUTH STREET       AR       8       ST	10 STATE 7/7/2015	3.881 FAIR	7/27/2016	13,388	\$60,246,000	0 101		
2240016       M       TO PARK ROW       ROSE STREET       OE       OE       0       11       ST         2240016       M       TO PARK ROW       ROSE STREET       OE       0       11       ST         226016       M       TO PARK ROW       ROSE STREET       OE       0       11       ST         226016       M       CHAMBERS STREET PEDESTRIAN BRIDGE       ROUTE 9A - WEST STREET       OE       0       10       C         226016       M       FDR DRIVE SOUTHBOUND OFF RAMP       SOUTH STREET       AR       8       8       ST	4 STATE 6/19/2015	5.086 GOOD	8/16/2017	10,167	\$45,751,500	0 101		
224001G       M       TO PARK ROW       ROSE STREET       OE       0       11       ST         2268480       M       CHAMBERS STREET PEDESTRIAN BRIDGE       ROUTE 9A - WEST STREET       PED-0       10       C         223201C       M       FDR DRIVE SOUTHBOUND OFF RAMP       SOUTH STREET       AR       8       ST	9 STATE 7/1/2015	3.814 FAIR	8/18/2017	6,365	\$28,642,500	0 101		
Image: Constraint of the second sec	3 STATE 6/3/2015	4.944 FAIR	6/1/2016	5,300	\$23,850,000	0 101		
223201C         M         FDR DRIVE SOUTHBOUND OFF RAMP         SOUTH STREET         AR         8         ST	11 STATE 7/30/2015	4.549 FAIR	9/28/2017	16,551	\$74,479,500	0 101	$\square$	
	10 CITY 6/5/2017	5.391 GOOD	N/A	7,481	\$33,664,500	0 101		
2232029 M CORLEARS PARK ROAD FDR DRIVE A P 4 ST	8 STATE 3/3/2016	5.507 GOOD	N/A	36,700	\$165,150,000	0 103		
	4 STATE 3/3/2016	4.000 FAIR	N/A	4,100	\$18,450,000	0 103		
2232030 M DELANCEY STREET PEDESTRIAN BRIDGE FOR DRIVE PED-A P 12 C	12 CITY 4/24/2017	4.271 FAIR	N/A	3,390	\$15,255,000	0 103		
2232040 M HOUSTON STREET FDR DRIVE A 2 ST	2 STATE 5/6/2014	3.750 FAIR	7/21/2017	11,010	\$49,545,000	0 103		

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHE R OWN ER	SPA NS	RATING SOURCE	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
223204A	м	FDR DRIVE NORTHBOUND RAMP TO HOUSTON STREET	RELIEF		AR		4	STATE	1/19/2016	4.929	FAIR	N/A	6,150	\$27,675,000	103		
223204B	м	HOUSTON STREET RAMP TO FDR DRIVE NORTHBOUND	RELIEF		AR		4	STATE	1/19/2016	4.958	FAIR	N/A	7,125	\$32,062,500	103		
2232050	м	EAST 6TH SREETT PEDESTRIAN BRIDGE	FDR DRIVE		PED-A	Ρ	19	СІТҮ	7/12/2017	4.093	FAIR	N/A	2,200	\$9,900,000	103		
2233020	м	EAST 10TH STREET PEDESTRIAN BRIDGE	FDR DRIVE		PED-A	Ρ	21	СІТҮ	4/24/2017	4.596	FAIR	N/A	2,754	\$12,393,000	103		
224001F	м	PEARL STREET TO FDR DRIVE	LAND ADJACENT TO BRIDGE		OE		3	STATE	6/4/2015	5.028	GOOD	6/15/2017	5,200	\$23,400,000	103		
2257569	м	MILLER HIGHWAY - ROUTE 9A	RIVERSIDE PARK SOUTH		А		64	STATE	8/25/2015	4.296	FAIR	10/13/2017	272,475	\$1,226,137,500	104	107	
2245010	м	11TH AVENUE VIADUCT	LIRR WEST SIDE YARD	AL	o		39	STATE	12/12/2014	4.056	FAIR	11/23/2016	149,100	\$670,950,000	104		
224501B	м	WEST 33RD STREET	AMTRAK 30 STREET BRANCH	А	OR		8	STATE	2/11/2016	4.500	FAIR	N/A	16,500	\$74,250,000	104		
224501C	м	WEST 33RD STREET	LAND ADJACENT TO AMTRAK	А	OR		2	STATE	4/28/2015	4.500	FAIR	5/3/2017	2,360	\$10,620,000	104		
224501D	м	WEST 34TH STREET	AMTRAK 30 STREET BRANCH	А	OR		4	STATE	5/11/2015	4.375	FAIR	5/9/2017	11,800	\$53,100,000	104		
224501E	м	WEST 35TH STREET	AMTRAK 30 STREET BRANCH	А	OR		3	STATE	7/29/2014	4.181	FAIR	11/3/2016	6,500	\$29,250,000	104		
224501F	м	WEST 36TH STREET	AMTRAK 30 STREET BRANCH	А	OR		3	STATE	12/4/2015	4.433	FAIR	12/21/2017	5,520	\$24,840,000	104		
2245060	м	WEST 37TH STREET	AMTRAK 30 STREET BRANCH	А	ο		3	STATE	12/4/2015	6.079	VGOOD	12/21/2017	7,505	\$33,772,500	104		
2245070	м	WEST 38TH STREET	AMTRAK 30 STREET BRANCH	A	o		2	STATE	7/8/2014	4.135	FAIR	7/18/2016	6,200	\$27,900,000	104		
2245080	м	WEST 39TH STREET	AMTRAK 30 STREET BRANCH	A	o		3	STATE	7/8/2014	4.173	FAIR	7/18/2016	6,300	\$28,350,000	104		
2245090	м	WEST 43RD STREET	AMTRAK 30 STREET BRANCH	A	o		2	STATE	4/18/2014	4.662	FAIR	6/9/2016	4,140	\$18,630,000	104		
2245100	м	WEST 44TH STREET	AMTRAK 30 STREET BRANCH	A	ο		2	STATE	4/18/2014	4.559	FAIR	6/9/2016	4,300	\$19,350,000	104		
2245110	м	WEST 45TH STREET	AMTRAK 30 STREET BRANCH	А	o		2	STATE	4/29/2014	5.338	GOOD	6/16/2016	4,100	\$18,450,000	104		
2245120	м	WEST 46TH STREET	AMTRAK 30 STREET BRANCH	A	o		2	STATE	4/29/2014	4.500	FAIR	6/16/2016	4,100	\$18,450,000	104		
2245130	м	WEST 47TH STREET	AMTRAK 30 STREET BRANCH	A	o		2	STATE	5/6/2014	4.721	FAIR	6/18/2016	4,100	\$18,450,000	104		
2245140	м	WEST 48TH STREET	AMTRAK 30 STREET BRANCH	A	o		2	STATE	5/6/2014	4.618	FAIR	6/18/2016	4,100	\$18,450,000	104		
2245150	м	WEST 49TH STREET	AMTRAK 30 STREET BRANCH	A	ο		3	STATE	5/6/2014	4.426	FAIR	6/24/2016	4,100	\$18,450,000	104		
2245160	м	WEST 51ST STREET	AMTRAK 30 STREET BRANCH	А	o		2	STATE	5/13/2014	4.853	FAIR	6/22/2016	4,300	\$19,350,000	104		
2245170	м	WEST 52ND STREET	AMTRAK 30 STREET BRANCH	A	o		2	STATE	5/13/2014	5.191	GOOD	6/24/2016	4,300	\$19,350,000	104		
2245180	м	WEST 53RD STREET	AMTRAK 30 STREET BRANCH	A	o		2	STATE	5/20/2014	5.221	GOOD	6/30/2016	5,100	\$22,950,000	104		
2245190	м	WEST 58TH STREET	AMTRAK 30 STREET BRANCH	А	0		2	STATE	5/20/2014	4.706	FAIR	7/7/2016	4,100	\$18,450,000	104		
2245209	м	11TH AVENUE	AMTRAK 30 STREET BRANCH	А	о		2	STATE	6/4/2014	4.426	FAIR	7/11/2016	15,400	\$69,300,000	104		
2245210	м	WEST 42ND STREET	AMTRAK 30 STREET BRANCH	А	ο		4	STATE	11/5/2014	4.587	FAIR	11/18/2016	10,300	\$46,350,000	104		
2245220	м	WEST 57TH STREET	AMTRAK 30 STREET BRANCH	А	ο		3	STATE	5/20/2014	4.853	FAIR	7/7/2016	9,100	\$40,950,000	104		
2245330	м	WEST 41ST STREET	AMTRAK 30 STREET BRANCH	А	о		3	STATE	7/24/2014	4.444	FAIR	7/26/2016	6,200	\$27,900,000	104		

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHE R OWN ER	SPA NS	RATING SOURCE	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2245340	м	WEST 50TH STREET	AMTRAK 30 STREET BRANCH	А	o		2	STATE	5/13/2014	4.500	FAIR	6/22/2016	4,100	\$18,450,000	104		
2245350	м	WEST 54TH STREET	AMTRAK 30 STREET BRANCH	А	o		2	STATE	5/20/2014	5.492	GOOD	6/30/2016	4,700	\$21,150,000	104		
2245360	м	WEST 55TH STREET	AMTRAK 30 STREET BRANCH	А	o		2	STATE	5/20/2014	5.529	GOOD	7/2/2016	4,300	\$19,350,000	104		
2245370	м	WEST 56TH STREET	AMTRAK 30 STREET BRANCH	А	o		2	STATE	5/20/2014	5.397	GOOD	7/2/2016	4,400	\$19,800,000	104		
2245440	м	WEST 40TH STREET	AMTRAK 30 STREET BRANCH	А	o		4	STATE	7/23/2014	4.103	FAIR	7/26/2016	9,400	\$42,300,000	104		
226672A	м	WEST 31ST STREET	AMTRAK LAYUP TRACKS	A	o		9	STATE	11/15/2014	3.619	FAIR	10/24/2016	8,800	\$39,600,000	104		
2245460	м	PARK AVENUE SOUTHBOUND	EAST 45TH STREET		o		1	STATE	6/9/2015	4.514	FAIR	6/1/2017	2,400	\$10,800,000	105		
2245470	м	PARK AVENUE NORTHBOUND	EAST 45TH STREET		o		1	STATE	6/9/2015	4.757	FAIR	6/1/2017	2,400	\$10,800,000	105		
2246550	м	PARK AVENUE VIADUCT	EAST 42ND STREET		o		10	STATE	12/7/2015	4.537	FAIR	12/13/2017	22,150	\$99,675,000	105		
2233038	м	FDR DRIVE SOUTHBOUND	FDR DRIVE NORTHBOUND / EAST 62ND STREET		А		34	STATE	11/25/2014	6.563	VGOOD	11/22/2016	58,700	\$264,150,000	106	108	
224004D	м	TO QUEENS FROM EAST 58TH STREET	EAST 59TH STREET		OE		12	STATE	6/13/2014	4.396	FAIR	6/10/2016	10,858	\$48,861,000	106	108	
2232070	м	EAST 25TH STREET PEDESTRIAN BRIDGE	FDR DRIVE		PED-A		3	СІТҮ	4/24/2017	4.600	FAIR	N/A	1,700	\$7,650,000	106		
2232100	м	EAST 51ST STREET PEDESTRIAN BRIDGE	FDR DRIVE		PED-A	Ρ	6	СІТҮ	6/18/2017	4.067	FAIR	N/A	2,800	\$12,600,000	106		
2246560	м	TUDOR CITY PLACE	EAST 42ND STREET		o		1	STATE	1/22/2016	4.867	FAIR	N/A	6,600	\$29,700,000	106		
2268650	м	FDR DRIVE NORTHBOUND EAST 42ND TO EAST 49TH STRET	EAST RIVER SHORELINE		А		119	STATE	10/9/2015	3.836	FAIR	10/31/2017	30,767	\$138,451,500	106		
2229289	м	HENRY HUDSON PARKWAY VIADUCT	AMTRAK - WEST 72ND STREET - WEST 79TH STREET	А	А		145	STATE	9/17/2014	3.597	FAIR	11/18/2016	213,173	\$959,278,500	107		
222928C	м	PEDESTRIAN BRIDGE AT WEST 73RD STREET	HENRY HUDSON PARKWAY - AMTRAK	А	PED-A	Ρ	5	СІТҮ	4/10/2016	3.781	FAIR	N/A	3,700	\$16,650,000	107		
222928D	м	WEST 72ND STREET RAMP TO HENRY HUDSON PARKWAY NORTHBOUND	RELIEF		AR		1	STATE	7/18/2014	6.648	VGOOD	7/18/2016	1,750	\$7,875,000	107		
2229290	м	WEST 79TH STREET	AMTRAK	A	A		1	STATE	6/11/2014	4.424	FAIR	6/13/2016	4,500	\$20,250,000	107		
2229309	м	HENRY HUDSON PARKWAY	RIVERSIDE PARK		А		1	STATE	1/11/2016	5.267	GOOD	N/A	2,172	\$9,774,000	107		
2229311	м	HENRY HUDSON PARKWAY SOUTHBOUND	RAMP TO WEST 96TH STREET		А		1	STATE	1/27/2016	4.273	FAIR	1/27/2016	2,000	\$9,000,000	107		
2229312	м	HENRY HUDSON PARKWAY NORTHBOUND	RAMP TO WEST 96TH STREET		А		1	STATE	1/27/2016	4.364	FAIR	N/A	2,000	\$9,000,000	107		
2229321	м	HENRY HUDSON PARKWAY SOUTHBOUND	RAMP FROM WEST 96TH STREET		A		1	STATE	1/29/2016	5.133	GOOD	N/A	2,000	\$9,000,000	107		
2229322	≥	HENRY HUDSON PARKWAY NORTHBOUND	RAMP FROM WEST 96TH STREET		A		1	STATE	1/29/2016	5.300	GOOD	N/A	2,000	\$9,000,000	107		
2246970	×	RIVERSIDE DRIVE	WEST 96TH STREET		0		3	STATE	4/27/2015	5.471	GOOD	5/3/2017	10,600	\$47,700,000	107		
2267250	м	HENRY HUDSON PARKWAY	AMTRAK - W96TH ST	A	A		55	STATE	11/1/2014	3.548	FAIR	11/16/2016	40,000	\$180,000,000	107		
2267717	м	79TH STREET PEDESTRIAN PLAZA	79TH STREET BOAT BASIN GARAGE		А	Ρ	10	STATE	5/5/2015	4.444	FAIR	7/5/2017	27,400	\$123,300,000	107		
2267718	м	79TH STREET TRAFFIC CIRCLE	79TH STREET PEDESTRIAN PLAZA		A	Ρ	34	STATE	6/3/2015	3.754	FAIR	6/14/2017	24,130	\$108,585,000	107		
226771A	м	79TH STREET RAMP TO HENRY HUDSON PARKWAY	79TH STREET BOAT BASIN GARAGE		AR	Ρ	4	STATE	5/5/2015	4.221	FAIR	5/8/2017	3,131	\$14,089,500	107		
226771B	м	79TH STREET RAMP TO GARAGE	79TH STREET BOAT BASIN GARAGE		AR	Ρ	21	STATE	5/12/2015	4.452	FAIR	5/16/2017	8,989	\$40,450,500	107		1

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE	OTHE R OWN ER	SPA NS	RATING	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
226771C	м	GARAGE RAMP TO 79TH STREET	79TH STREET BOAT BASIN GARAGE		AR	Ρ	21	STATE	5/12/2015	4.435	FAIR	5/17/2017	9,095	\$40,927,500	107		
226771D	м	SOUTHBOUND HENRY HUDSON PARKWAY RAMP TO 79 STREET	79TH STREET BOAT BASIN GARAGE		AR	Ρ	4	STATE	5/7/2015	4.403	FAIR	5/11/2017	2,601	\$11,704,500	107		ГП
2269190	м	WEST 70TH STREET	AMTRAK	А	o		3	STATE	11/7/2015	5.542	GOOD	12/16/2017	17,258	\$77,661,000	107		
2269200	м	RIVERSIDE DRIVE SOUTH	амтрак	A	o		11	STATE	11/6/2015	5.792	GOOD	12/16/2017	69,040	\$310,680,000	107		ГП
2269210	м	WEST 68TH STREET	AMTRAK	А	o		3	STATE	11/19/2015	6.542	VGOOD	12/19/2017	5,382	\$24,219,000	107		
2269390	м	WEST 66TH STREET	AMTRAK	А	o		2	STATE	N/A	N/A	UNRATED	12/12/2016	4,480	\$20,160,000	107		ГП
2269980	м	WEST 64TH STREET	AMTRAK	А	o		2	STATE	N/A	N/A	UNRATED	12/12/2016	5,220	\$23,490,000	107		
M00003	м	HENRY HUDSON PARKWAY ON/OFF RAMP-79TH STREET SOUTH SIDE	PEDESTRIAN PATH SOUTH OF 79TH STREET		А		1	СІТҮ	5/2/2017	4.500	FAIR	N/A	846	\$3,807,000	107		
M00004	м	HENRY HUDSON PARKWAY ON/OFF RAMP-79TH STREET NORTH SIDE	PEDESTRIAN PATH NORTH OF 79TH STREET		А		1	СІТҮ	6/6/2017	4.533	FAIR	N/A	846	\$3,807,000	107		ГП
2232110	м	EAST 63RD STREET PEDESTRIAN BRIDGE	FDR DRIVE		PED-A	Ρ	11	UNIVERSIT Y	11/29/2017	5.410	GOOD	N/A	2,100	\$9,450,000	108		
2232120	м	E AST 71ST STREET PEDESTRIAN BRIDGE	FDR DRIVE		PED-A	Ρ	19	СІТҮ	1/5/2017	4.761	FAIR	N/A	3,700	\$16,650,000	108		
2232140	м	EAST 78TH STREET PEDESTRIAN BRIDGE	FDR DRIVE		PED-A	Ρ	13	СІТҮ	6/18/2017	6.653	VGOOD	N/A	5,226	\$23,517,000	108		
2232167	м	PROMENADE OVER FDR DRIVE	FDR DRIVE- EAST 81ST STREET - EAST 90TH STREET		PED-A	Ρ	53	STATE	7/31/2015	3.143	FAIR	8/8/2017	93,000	\$418,500,000	108		
2233040	м	EAST 60TH STREET	FDR DRIVE		А	Ρ	17	STATE	7/22/2015	4.972	FAIR	8/4/2017	24,480	\$110,160,000	108		
224004A	м	TO EAST 60TH STREET FROM QUEENS	FIRST AVENUE		OE		13	STATE	4/21/2014	5.338	GOOD	4/13/2016	14,800	\$66,600,000	108		
224004B	₽	TO QUEENS FROM EAST 59TH STREET	FIRST AVENUE		OE		13	STATE	4/22/2014	5.542	GOOD	4/13/2016	14,800	\$66,600,000	108		
224004C	м	TO EAST 62ND STREET FROM QUEENS	EAST 60TH - EAST 61ST STREET		OE		10	STATE	7/17/2014	4.985	FAIR	7/14/2016	16,720	\$75,240,000	108		
224004J	м	25X TO/FROM 2ND AVENUE	NYC GARAGE		OE		14	STATE	4/21/2014	4.829	FAIR	4/20/2016	22,058	\$99,261,000	108		
2269820	м	EAST 81ST STREET PEDESTRIAN BRIDGE	FDR DRIVE NORTHBOUND		PED-A	Ρ	3	СІТҮ	6/8/2014	3.439	FAIR	N/A	600	\$2,700,000	108		i
2229349	м	HENRY HUDSON PARKWAY	WEST 158TH STREET	A	А		44	STATE	10/10/2014	4.155	FAIR	10/19/2016	140,000	\$630,000,000	109	112	
2245290	₽	WEST 155TH STREET PEDESTRIAN BRIDGE	AMTRAK 30 STREET BRANCH	A	PED-O		3	СІТҮ	3/24/2016	4.092	FAIR	N/A	800	\$3,600,000	109	112	
2246720	м	RIVERSIDE DRIVE	WEST 158TH STREET - AMTRAK	A	o		77	STATE	10/24/2014	3.528	FAIR	11/22/2016	185,658	\$835,461,000	109	112	
2269240	м	RIVERSIDE DRIVE	WEST 155TH STREET		0		1	STATE	5/7/2015	4.640	FAIR	5/8/2017	2,780	\$12,510,000	109	112	
2245230	м	WEST 148TH STREET PEDESTRIAN BRIDGE	AMTRAK 30 STREET BRANCH	A	PED-O	Ρ	5	СІТҮ	3/18/2016	4.617	FAIR	N/A	1,100	\$4,950,000	109		
2246660	м	RIVERSIDE DRIVE	WEST 125TH STREET - WEST 134TH STREET		o		27	STATE	7/13/2015	4.444	FAIR	10/6/2017	148,300	\$667,350,000	109		ГП
2246670	м	WEST 134TH STREET	TERRAIN		o		4	STATE	6/8/2015	4.778	FAIR	5/31/2017	7,500	\$33,750,000	109		i T
2246980	м	RIVERSIDE DRIVE	WEST 138TH STREET		0		1	STATE	1/14/2016	4.767	FAIR	N/A	6,700	\$30,150,000	109		
2266229	м	HENRY HUDSON PARKWAY	PEDESTRIAN PATH AT WEST 148TH STREET		А		1	STATE	1/28/2016	5.000	GOOD	N/A	1,840	\$8,280,000	109		
2267130	м	RIVERSIDE DRIVE	WEST 145TH STREET		0		1	STATE	4/27/2015	5.000	GOOD	5/8/2017	5,800	\$26,100,000	109		
2246490	м	A.C. POWELL BOULEVARD NORTHBOUND	A.C. POWELL BOULEVARD		o		1	STATE	1/28/2016	4.347	FAIR	N/A	3,000	\$13,500,000	110		

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHE R OWN ER	SPA NS	RATING SOURCE	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2246710	м	WEST 153RD STREET	A.C. POWELL BOULEVARD		o		1	STATE	1/28/2016	4.611	FAIR	N/A	3,082	\$13,869,000	110		
2232180	м	EAST 103RD STREET PEDESTRIAN BRIDGE	FDR DRIVE		PED-A		18	СІТҮ	12/21/2016	4.683	FAIR	N/A	6,807	\$30,631,500	111		
2232190	м	EAST 111TH STREET PEDESTRIAN BRIDGE	FDR DRIVE		PED-A	Ρ	9	СІТҮ	10/8/2016	4.319	FAIR	N/A	4,254	\$19,143,000	111		
2232200	м	EAST 120TH STREET PEDESTRIAN BRIDGE	FDR DRIVE		PED-A	Р	18	СІТҮ	11/19/2017	4.143	FAIR	N/A	3,978	\$17,901,000	111		
2233059	м	HARLEM RIVER DRIVE	EAST 127TH STREET RAMP TO/FROM HARLEM RIVER DRIVE NORTHBOUND		А		11	STATE	6/30/2015	3.493	FAIR	6/27/2017	51,000	\$229,500,000	111		
224005A	м	RAMP FROM FDR DRIVE	HARLEM RIVER DRIVE NORTHBOUND		OR		11	STATE	11/7/2014	6.887	VGOOD	10/25/2016	28,233	\$127,048,500	111		
224007A	м	RAMP TO MADISON AVENUE	EAST 138TH STREET		OR		7	STATE	1/29/2016	4.972	FAIR	N/A	19,880	\$89,460,000	111		
2240620	м	WARDS ISLAND PEDESTRIAN BRIDGE	HARLEM RIVER		PED-WMO		10	СІТҮ	6/13/2016	4.933	FAIR	N/A	19,500	\$87,750,000	111		
2245319	м	EAST 97TH STREET	AMTRAK 30 STREET BRANCH	м	o		1	STATE	12/17/2014	4.647	FAIR	11/29/2016	3,200	\$14,400,000	111		
2246620	м	EAST 128TH STREET PEDESTRIAN BRIDGE	3RD AVENUE BRIDGE APPROACH		PED-O		18	СІТҮ	8/10/2017	3.816	FAIR	N/A	2,300	\$10,350,000	111		
2246990	м	EAST 129TH STREET PEDESTRIAN BRIDGE	3RD AVENUE BRIDGE RAMP		PED-O	Ρ	5	СІТҮ	10/6/2016	4.524	FAIR	N/A	1,046	\$4,707,000	111		
222934A	м	RAMP TO NORTHBOUND HENRY HUDSON PARKWAY	AMTRAK WEST SIDE	A	AR		26	STATE	10/14/2015	3.736	FAIR	12/20/2017	10,800	\$48,600,000	112		
2229400	м	WEST 181ST STREET PEDESTRIAN BRIDGE	HENRY HUDSON PARKWAY NORTHBOUND		PED-A	Ρ	7	СІТҮ	8/2/2017	3.877	FAIR	N/A	1,500	\$6,750,000	112		
2245040	м	MARGARET CORBIN DRIVE	PEDESTRIAN PATH NEAR CAFÉ		0	Ρ	1	СІТҮ	5/12/2017	5.000	GOOD	N/A	598	\$2,691,000	112		
2245050	м	MARGARET CORBIN DRIVE	PEDESTRIAN PATH NEAR NORTH ENTRANCE		o	Ρ	1	СІТҮ	5/17/2017	4.667	FAIR	N/A	889	\$4,000,500	112		
2245250	м	WEST 158TH STREET	AMTRAK 30 STREET BRANCH	A	ο		7	STATE	10/22/2015	5.917	GOOD	12/17/2017	20,219	\$90,985,500	112		
2245260	м	WEST 173RD STREET PEDESTRIAN BRIDGE	AMTRAK 30 STREET BRANCH	A	PED-O	Ρ	2	СІТҮ	3/10/2016	4.600	FAIR	N/A	1,500	\$6,750,000	112		
2245300	м	INWOOD HILL PARK FOOTBRIDGE	AMTRAK 30 STREET BRANCH	A	PED-O	Ρ	6	СІТҮ	3/19/2016	4.171	FAIR	N/A	700	\$3,150,000	112		
2245480	м	TO GEORGE WASHINGTON BRIDGE OPPOSITE WEST 171ST STREET	RIVERSIDE DRIVE		0		1	STATE	2/9/2016	4.500	FAIR	2/9/2016	10,773	\$48,478,500	112		
2246489	м	WEST 181ST STREET	RAMP TO WASHINGTON BRIDGE		o		1	STATE	1/27/2016	5.033	GOOD	N/A	8,200	\$36,900,000	112		
2246500	м	FORT TRYON PLACE	ENTRANCE FROM RIVERSIDE DRIVE		ο	Ρ	1	STATE	3/25/2014	4.200	FAIR	3/29/2016	3,280	\$14,760,000	112		
2246510	м	CORBIN PLACE OVERPASS	CORBIN PLACE		o	Ρ	1	STATE	1/20/2016	5.133	GOOD	N/A	2,223	\$10,003,500	112		
2246600	м	WEST 176TH STREET PEDESTRIAN BRIDGE	APPROACH TO GEORGE WASHINGTON BRIDGE		PED-O	Ρ	1	СІТҮ	2/6/2017	4.400	FAIR	N/A	1,200	\$5,400,000	112		
2246690	м	ISHAM PARK VEHICULR	HARLEM RIVER INLET		wo	Ρ	1	STATE	4/28/2014	6.065	VGOOD	4/22/2016	911	\$4,099,500	112		
2246700	м	ISHAM PARK PEDESTRIAN BRIDGE	HARLEM RIVER INLET		PED-WO	Р	1	СІТҮ	3/8/2017	4.138	FAIR	N/A	300	\$1,350,000	112		
2266230	м	HENRY HUDSON PARKWAY NORTHBOUND	PEDESTRIAN PATH INWOOD PARK		A		1	STATE	1/19/2016	5.000	GOOD	N/A	800	\$3,600,000	112		
2266240	м	HENRY HUDSON PARKWAY SOUTHBOUND	PEDESTRIAN PATH INWOOD PARK		A		1	STATE	1/19/2016	5.526	GOOD	N/A	1,100	\$4,950,000	112		
2267240	м	HARLEM RIVER DRIVE RAMP TO GEORGE WASHINGTON BRIDGE	HARLEM RIVER DRIVE SOUTHBOUND		А		55	STATE	10/6/2015	2.986	POOR	11/17/2016	122,900	\$553,050,000	112		
2268760	м	PS-5 PEDESTRIAN BRIDGE	TENTH AVENUE		PED-O		5	СІТҮ	12/1/2017	4.767	FAIR	N/A	1,285	\$5,782,500	112		
M00001	м	WEST 191ST STREET PEDESTRIAN TUNNEL	BROADWAY - IRT #1 SUBWAY		PED-O		1	СІТҮ	1/3/2017	4.000	FAIR	N/A	2,000	\$9,000,000	112		

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2245380	м	TRANSVERSE ROAD #1 WESTBOUND	PEDESTRIAN PATH OPPOSITE EAST 66TH STREET		o	Р	1	STATE	1/12/2016	5.000	GOOD	N/A	1,500	\$6,750,000	164		
2245420	м	WEST 65TH STREET ENTRANCE EASTBOUND	BRIDLE PATH WEST END		o	Р	1	STATE	1/12/2016	5.100	GOOD	N/A	1,300	\$5,850,000	164		
2246000	м	WEST DRIVE (GREYSHOT ARCH)	PEDESTRIAN PATH BETWEEN 61ST & 62ND STREETS		o	Р	1	STATE	1/21/2016	5.400	GOOD	N/A	2,500	\$11,250,000	164		
2246010	м	WEST 62ND STREET PEDESTRIAN BRIDGE (PINEBANK ARCH)	BRIDLE PATH		PED-O	Ρ	1	СІТҮ	7/25/2017	4.654	FAIR	N/A	1,000	\$4,500,000	164		
2246030	м	EAST 62ND STREET PEDESTRIAN BRIDGE (GAPSTOW BRIDGE)	THE POND		PED-O	Ρ	1	СІТҮ	6/6/2016	4.241	FAIR	N/A	1,400	\$6,300,000	164		
2246040	м	EAST DRIVE (INSCOPE ARCH)	PEDESTRIAN PATH OPPOSITE EAST 62ND STREET		o	Ρ	1	СІТҮ	4/21/2017	4.400	FAIR	N/A	1,515	\$6,817,500	164		
2246050	м	CENTER DRIVE (DRIPROCK ARCH)	PEDESTRIAN OPPOSITE 63RD STREET		o	Р	1	STATE	1/13/2016	4.867	FAIR	N/A	1,725	\$7,762,500	164		
2246069	м	EAST DRIVE (GREEN GAP ARCH)	PEDESTRIAN PATH BETWEEN 63RD & 64TH STREETS		o	Р	1	STATE	1/15/2016	4.433	FAIR	N/A	2,075	\$9,337,500	164		
2246070	м	CENTER DRIVE (PLAYMATES ARCH)	PEDESTRIAN PATH OPPOSITE 65TH STREET		o	Р	1	СІТҮ	6/6/2017	4.333	FAIR	N/A	1,129	\$5,080,500	164		
2246080	м	WEST DRIVE (DALEHEAD ARCH)	BRIDLE OPPOSITE WEST 64TH STREET		o	Р	1	STATE	1/14/2016	4.667	FAIR	N/A	2,000	\$9,000,000	164		
2246090	м	PEDESTRIAN BRIDGE OPPOSITE 65TH STREET	TRANSVERSE ROAD #1		PED-O	Ρ	1	СІТҮ	10/15/2016	4.583	FAIR	N/A	2,300	\$10,350,000	164		
2246100	м	CENTER DRIVE	TRANSVERSE ROAD #1		o	Р	1	STATE	1/29/2016	4.333	FAIR	N/A	6,000	\$27,000,000	164		
2246110	м	EAST DRIVE	TRANSVERSE ROAD #1		o	Р	1	STATE	3/19/2014	4.667	FAIR	4/11/2016	6,000	\$27,000,000	164		
2246120	м	WEST DRIVE	TRANSVERSE ROAD #1		o	Ρ	1	STATE	3/25/2014	4.700	FAIR	4/18/2016	7,900	\$35,550,000	164		
2246130	м	EAST DRIVE (WILLOWDELL ARCH)	PEDESTRIAN PATH OPPOSITE EAST 67TH STREET		o	Р	1	СІТҮ	4/14/2017	3.500	FAIR	N/A	666	\$2,997,000	164		
2246140	м	WEST 72ND STREET ENTRANCE (RIFTSTONE ARCH)	BRIDLE PATH		o	Ρ	1	STATE	1/19/2016	4.467	FAIR	N/A	3,600	\$16,200,000	164		
2246150	м	72ND STREET CROSS DRIVE (TERRACE BRIDGE)	PEDESTRIAN PATH TO FOUNTAIN		o	Р	3	STATE	2/4/2016	5.500	GOOD	N/A	7,300	\$32,850,000	164		
2246160	м	73RD STREET PEDESTRIAN BRIDGE (BOW BRIDGE)	THE LAKE		PED-WO	Р	1	СІТҮ	6/20/2016	4.629	FAIR	N/A	1,700	\$7,650,000	164		
2246170	м	EAST DRIVE (TREFOIL ARCH)	PEDESTRIAN PATH OPPOSITE EAST 73RD STREET		o	Р	1	STATE	1/19/2016	5.056	GOOD	N/A	1,900	\$8,550,000	164		
2246230	м	EAST DRIVE	TRANSVERSE ROAD #2		o	Р	1	STATE	3/11/2014	4.600	FAIR	3/31/2016	5,080	\$22,860,000	164		
2246240	м	WEST DRIVE	TRANSVERSE ROAD #2		o	Ρ	1	STATE	3/12/2014	4.167	FAIR	4/5/2016	7,200	\$32,400,000	164		
2246250	м	EAST DRIVE	TRANSVERSE ROAD #3		o	Ρ	1	STATE	1/20/2016	4.433	FAIR	N/A	4,500	\$20,250,000	164		
2246260	м	WEST DRIVE	TRANSVERSE ROAD #3		o	Р	1	STATE	3/18/2014	4.800	FAIR	4/6/2016	5,100	\$22,950,000	164		
2246270	м	EAST DRIVE	TRANSVERSE ROAD #4		o	Р	1	STATE	3/20/2014	4.100	FAIR	4/13/2016	7,000	\$31,500,000	164		
2246280	м	WEST DRIVE	TRANSVERSE ROAD #4		o	Р	1	STATE	3/21/2014	4.167	FAIR	4/6/2016	4,700	\$21,150,000	164		
2246320	м	WEST 77TH STREET PEDESTRIAN BRIDGE (OAK BRIDGE)	THE LAKE		PED-WO	Р	3	СІТҮ	6/9/2016	5.474	GOOD	N/A	1,100	\$4,950,000	164		
2246330	м	WEST DRIVE (BALCONY BRIDGE)	STREAM TO THE LAKE		wo	Р	1	STATE	1/14/2016	5.000	GOOD	N/A	1,817	\$8,176,500	164		
2246340	м	WEST 77TH STREET PEDESTRIAN BRIDGE (LADIES POND BRIDGE)	STREAM TO THE LAKE		PED-WO	Ρ	3	СІТҮ	11/28/2016	4.355	FAIR	N/A	500	\$2,250,000	164		
2246350	м	EAST DRIVE (GREYWACKE ARCH)	PEDESTRIAN PATH OPPOSITE EAST 80TH STREET		o	Р	1	СІТҮ	5/4/2017	3.733	FAIR	N/A	1,266	\$5,697,000	164		
2246360	м	WEST DRIVE (WINTERDALE ARCH)	PEDESTRIAN PATH OPPOSITE WEST 82ND STREET		o	Р	1	STATE	1/15/2016	5.182	GOOD	N/A	2,502	\$11,259,000	164		

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHE R OWN ER	SPA NS	RATING SOURCE	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2246380	м	EAST 86TH STREET PEDESTRIAN BRIDGE (SOUTHEAST RESERVOIR BRIDGE)	BRIDLE PATH		PED-O	Ρ	1	СІТҮ	11/2/2017	4.852	FAIR	N/A	700	\$3,150,000	164		
2246390	м	WEST 86TH STREET PEDESTRIAN BRIDGE (SOUTHWEST RESERVOIR BRIDGE)	BRIDLE PATH		PED-O	Ρ	3	СІТҮ	11/21/2016	4.509	FAIR	N/A	1,100	\$4,950,000	164		
2246400	м	PEDESTRIAN PATH OPPOSITE EAST 79TH STREET	TRANSVERSE ROAD #2		PED-O	Ρ	1	СІТҮ	7/20/2017	4.233	FAIR	N/A	3,700	\$16,650,000	164		
2246410	м	TRANSVERSE ROAD 1 EASTBOUND (DENESMOUTH ARCH)	PEDESTRIAN PATH OPPOSITE EAST 65TH STREET		o	Ρ	1	STATE	2/4/2016	4.636	FAIR	N/A	1,739	\$7,825,500	164		
2246430	м	WEST 110TH STREET ENTRANCE (MOUNTCLIFF ARCH)	PEDESTRIAN PATH OPPOSITE WEST 109TH STREET		o	Ρ	1	STATE	2/8/2016	4.250	FAIR	N/A	1,200	\$5,400,000	164		
2246440	м	79TH STREET PEDESTRIAN BRIDGE	TRANSVERSE ROAD #2		PED-O	Ρ	1	СІТҮ	7/20/2017	3.909	FAIR	N/A	5,900	\$26,550,000	164		
2246450	м	EAST 77TH STREET PEDESTRIAN BRIDGE (GLADE ARCH)	PEDESTRIAN PATH OPPOSITE EAST 77TH STREET		PED-O	Ρ	1	СІТҮ	4/7/2017	4.138	FAIR	N/A	5,000	\$22,500,000	164		
2246460	м	WEST 77TH STREET ENTRANCE (EAGLEVALE ARCH)	PEDESTRIAN PATH OPPOSITE WEST 77TH STREET		o	Ρ	2	STATE	1/21/2016	4.132	FAIR	N/A	3,066	\$13,797,000	164		
2246470	м	EAST DRIVE (HUDDLESTONE ARCH)	THE LOCH		wo	Ρ	1	STATE	1/22/2016	4.500	FAIR	N/A	1,100	\$4,950,000	164		
2240640	MQ	ROOSEVELT ISLAND BRIDGE	EAST RIVER EAST CHANNEL		WMO		8	STATE	10/29/2014	5.569	GOOD	9/27/2017	36,500	\$164,250,000	108	401	
2240047	MQ	QUEENSBORO (ED KOCH) BRIDGE (LOWER LEVEL)	EAST RIVER	AL	WEO		53	STATE	11/12/2014	4.167	FAIR	11/15/2016	626,900	\$2,821,050,000	108	402	401
2240048	MQ	QUEENSBORO (ED KOCH) BRIDGE (UPPER LEVEL)	EAST RIVER - LOWER LEVEL		WEO		37	STATE	10/13/2014	4.340	FAIR	11/10/2016	322,300	\$1,450,350,000	108	402	401
224004G	D	TO NEW YORK FROM 11TH STREET	TERRAIN (CHAMBER)		OE		36	STATE	7/25/2014	5.268	GOOD	6/16/2016	8,360	\$37,620,000	401	402	
2230700	D	278I NORTHBOUND (BROOKLYN QUEENS EXPRESSWAY EAST LEG)	32ND AVENUE (TO BROOKLYN QUEENS EXPRESSWAY WEST LEG)		А		8	STATE	11/5/2014	6.352	VGOOD	10/6/2016	31,600	\$142,200,000	401	403	
2230750	Q	278I SOUTHBOUND (BROOKLYN QUEENS EXPRESSWAY EAST LEG)	31ST AVENUE		А		1	STATE	6/22/2015	6.424	VGOOD	6/19/2017	4,221	\$18,994,500	401	403	
2240660	D	RIKERS ISLAND BRIDGE	RIKERS ISLAND CHANNEL		wo		56	STATE	9/4/2015	4.324	FAIR	10/3/2017	183,100	\$823,950,000	401	480	
2230600	Q	STEINWAY STREET	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY)		А		1	STATE	8/7/2014	6.349	VGOOD	7/19/2016	5,229	\$23,530,500	401		
2230610	٩	STEINWAY STREET	278I EASTBOUND (BROOKLYN QUEENS EXPRESSWAY)		A		1	STATE	8/8/2014	6.349	VGOOD	7/19/2016	5,146	\$23,157,000	401		
2230620	٩	37TH STREET	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	3/12/2014	4.681	FAIR	3/11/2016	5,300	\$23,850,000	401		
2230630	Q	35TH STREET	278I (BROOKLYN QUEENS EXPRESSWAY)		А		4	STATE	3/14/2014	4.667	FAIR	3/15/2016	9,000	\$40,500,000	401		
2230640	D	32ND STREET	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	6/4/2015	4.875	FAIR	8/15/2017	8,100	\$36,450,000	401		
2230657	Q	31ST STREET	278I (BROOKLYN QUEENS EXPRESSWAY) - NYCTA		A		2	STATE	11/19/2014	4.514	FAIR	10/13/2016	9,500	\$42,750,000	401		
2230690	٩	278I NORTHBOUND (BROOKLYN QUEENS EXPRESSWAY WEST LEG)	32ND AVENUE		А		1	STATE	6/2/2014	6.407	VGOOD	5/26/2016	4,080	\$18,360,000	401		
2230710	D	278I SOUTHBOUND (BROOKLYN QUEENS EXPRESSWAY WEST LEG)	32ND AVENUE		А		1	STATE	6/23/2015	6.424	VGOOD	7/31/2017	5,240	\$23,580,000	401		
2230720	Q	278I SOUTHBOUND (BROOKLYN QUEENS EXPRESSWAY EAST LEG)	278I NORTHBOUND (BROOKLYN QUEENS EXPRESSWAY WEST LEG)		А		3	STATE	6/17/2015	6.152	VGOOD	6/19/2017	20,896	\$94,032,000	401		
2230730	٩	31ST AVENUE	278I NORTHBOUND (BROOKLYN QUEENS EXPRESSWAY WEST LEG)		A		1	STATE	6/17/2015	5.767	GOOD	6/16/2017	5,875	\$26,437,500	401		
2230740	٥	278I SOUTHBOUND (BROOKLYN QUEENS EXPRESSWAY WEST LEG)	31ST AVENUE		A		1	STATE	6/22/2015	5.978	GOOD	6/16/2017	5,246	\$23,607,000	401		
2230760	۵	278I NORTHBOUND (BROOKLYN QUEENS EXPRESSWAY EAST LEG)	31ST AVENUE		A		1	STATE	7/23/2014	6.356	VGOOD	7/5/2016	4,161	\$18,724,500	401		
2230770	۵	278I (BROOKLYN QUEENS EXPRESSWAY WEST LEG)	30TH AVENUE		А		1	STATE	5/22/2015	6.102	VGOOD	5/25/2017	6,199	\$27,895,500	401		
2230790	٩	BULOVA AVENUE	278I (BROOKLYN QUEENS EXPRESSWAY WEST LEG)		А		2	STATE	4/4/2014	5.278	GOOD	3/24/2016	3,300	\$14,850,000	401		

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE	OTHE R OWN ER	SPA NS	RATING	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2230800	α	49TH STREET	278I (BROOKLYN QUEENS EXPRESSWAY WEST LEG)		А		2	STATE	4/7/2014	5.278	GOOD	3/24/2016	4,900	\$22,050,000	401		
2230810	α	ASTORIA BOULEVARD EASTBOUND	278I (BROOKLYN QUEENS EXPRESSWAY WEST LEG)		А		4	STATE	5/22/2015	4.279	FAIR	6/1/2017	8,200	\$36,900,000	401		
2230820	٥	47TH STREET	GRAND CENTRAL PARKWAY		А		2	STATE	4/28/2014	4.889	FAIR	4/19/2016	5,700	\$25,650,000	401		
2230830	٥	278I NORTHBOUND (BROOKLYN QUEENS EXPRESSWAY WEST LEG)	GRAND CENTRAL PARKWAY		А		2	STATE	4/28/2014	4.583	FAIR	4/19/2016	7,600	\$34,200,000	401		
2230840	٥	44TH STREET	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	5/13/2014	4.764	FAIR	5/4/2016	5,000	\$22,500,000	401		
2230890	٥	49TH STREET	GRAND CENTRAL PARKWAY		А		2	STATE	5/15/2014	4.444	FAIR	5/4/2016	6,350	\$28,575,000	401		
2230680	٥	278I (BROOKLYN QUEENS EXPRESSWAY)	NORTHERN BOULEVARD		А		1	STATE	11/5/2014	6.016	VGOOD	9/28/2016	27,011	\$121,549,500	402	401	
224004F	٥	TO NEW YORK FROM 21ST STREET	21ST STREET		OE		63	STATE	11/7/2014	4.712	FAIR	10/3/2016	63,310	\$284,895,000	402	401	
2247310	۵	QUEENS BOULEVARD	AMTRAK & LIRR YARD	AL	o		19	STATE	11/8/2014	6.268	VGOOD	11/4/2016	92,400	\$415,800,000	402	401	
2247320	Q	HONEYWELL STREET	SUNNYSIDE YARD	AL	o		22	STATE	12/16/2015	5.792	GOOD	12/20/2017	99,036	\$445,662,000	402	401	$\square$
2247330	٥	39TH STREET (NORTH)	SUNNYSIDE YARD	А	o		14	STATE	12/22/2015	6.208	VGOOD	12/19/2017	48,200	\$216,900,000	402	401	
2247380	Q	ROOSEVELT AVENUE	CSX - HELLGATE - NYCTA	x	o		2	STATE	9/15/2015	6.208	VGOOD	10/2/2017	7,380	\$33,210,000	402	403	404
2247390	σ	41ST AVENUE	CSX - HELLGATE	x	o		2	STATE	9/15/2015	4.788	FAIR	10/2/2017	4,400	\$19,800,000	402	404	
2247400	۵	WOODSIDE AVENUE	CSX TRANSPORT	x	o		1	STATE	9/15/2015	5.033	GOOD	10/3/2017	4,970	\$22,365,000	402	404	
2247410	۵	43RD AVENUE	CSX TRANSPORT	x	o		1	STATE	9/15/2015	5.000	GOOD	10/3/2017	3,905	\$17,572,500	402	404	
2247420	σ	44TH AVENUE	CSX TRANSPORT	x	o		1	STATE	9/15/2015	5.267	GOOD	10/4/2017	3,888	\$17,496,000	402	404	
2247430	α	45TH AVENUE	CSX TRANSPORT	x	o		1	STATE	9/15/2015	5.224	GOOD	10/4/2017	2,400	\$10,800,000	402	404	
1247280	α	51ST AVENUE PEDESTRIAN BRIDGE (2247280)	LIRR MAIN LINE	L	PED-O		5	СІТҮ	6/6/2017	2.927	POOR	N/A	700	\$3,150,000	402		
2230520	α	65TH PLACE	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	1/28/2016	5.889	GOOD	N/A	11,668	\$52,506,000	402		
2230530	۵	QUEENS BOULEVARD	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	10/22/2014	6.306	VGOOD	9/21/2016	25,543	\$114,943,500	402		
2230540	σ	WOODSIDE AVENUE	278I (BROOKLYN QUEENS EXPRESSWAY)		А		1	STATE	1/29/2016	5.391	GOOD	N/A	7,529	\$33,880,500	402		
2230550	α	69TH STREET	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	1/29/2016	5.263	GOOD	N/A	12,600	\$56,700,000	402		
2230560	α	70TH STREET	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	10/22/2014	6.556	VGOOD	9/21/2016	8,580	\$38,610,000	402		
2230570	۵	41ST AVENUE	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	10/22/2014	6.735	VGOOD	9/21/2016	8,580	\$38,610,000	402		
2230587	٥	ROOSEVELT AVENUE	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	9/1/2015	5.431	GOOD	9/22/2017	11,022	\$49,599,000	402		
2230590	٥	BROADWAY / 37TH AVENUE	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	11/24/2014	5.579	GOOD	10/17/2016	16,000	\$72,000,000	402		
2230669	٥	278I (BROOKLYN QUEENS EXPRESSWAY)	35TH AVENUE		А		1	STATE	7/29/2015	6.051	VGOOD	7/18/2017	13,135	\$59,107,500	402		
2230679	Q	278I (BROOKLYN QUEENS EXPRESSWAY)	34TH AVENUE		А		1	STATE	6/1/2015	5.983	GOOD	7/6/2017	7,793	\$35,068,500	402		
2230869	۵	QUEENS BOULEVARD	ACCESS ROAD BROOKLYN QUEENS EXPRESSWAY SOUTHBOUND		А		1	STATE	9/30/2014	5.659	GOOD	9/14/2016	7,900	\$35,550,000	402		
224004E	Q	TO NEW YORK FROM THOMSON AVENUE	JACKSON AVENUE	L	OE		94	STATE	11/26/2014	4.679	FAIR	10/28/2016	104,600	\$470,700,000	402		$\square$

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224004H	۵	TO 21ST STREET FROM NEW YORK	22ND STREET		OE		43	STATE	10/13/2014	4.366	FAIR	9/16/2016	48,100	\$216,450,000	402	$\square$	
2240041	۵	TO THOMSON AVENUE FROM NEW YORK	JACKSON AVENUE	L	OE		39	STATE	11/21/2014	5.148	GOOD	11/13/2016	59,100	\$265,950,000	402	$\square$	
2240410	a	BORDEN AVENUE	DUTCH KILLS		WMO		2	STATE	6/26/2015	4.806	FAIR	7/14/2017	8,400	\$37,800,000	402		
2240450	٥	HUNTERS POINT AVENUE	DUTCH KILLS		WMO		4	STATE	5/30/2014	5.056	GOOD	5/25/2016	12,168	\$54,756,000	402		
2247120	٥	WOODSIDE AVENUE	LIRR MAIN LINE	L	o		3	STATE	10/7/2015	4.413	FAIR	11/4/2017	14,900	\$67,050,000	402		
2247150	a	65TH STREET	LIRR MAIN LINE	L	ο		3	STATE	10/12/2015	6.375	VGOOD	11/5/2017	6,344	\$28,548,000	402		
2247160	۵	65TH PLACE	LIRR MAIN LINE	L	ο		3	STATE	10/12/2015	6.324	VGOOD	11/5/2017	8,381	\$37,714,500	402	$\square$	
2247260	σ	JACKSON AVENUE	LIRR MONTAUK DIVISION	L	o		1	STATE	10/8/2014	5.550	GOOD	9/26/2016	4,517	\$20,326,500	402		
2247270	٥	21ST STREET	LIRR NORTH SHORE YARD	L	o		6	STATE	10/6/2015	5.153	GOOD	10/12/2017	17,590	\$79,155,000	402		
2247290	۵	49TH AVENUE	LIRR - AMTRAK	AL	ο		5	STATE	10/29/2015	3.819	FAIR	10/18/2016	20,400	\$91,800,000	402	$\square$	
2247300	a	THOMPSON AVENUE	AMTRAK & LIRR YARD	AL	ο		14	STATE	11/8/2014	5.125	GOOD	11/4/2016	61,280	\$275,760,000	402		
2247370	۵	37TH AVENUE	CSX - HELLGATE	x	ο		1	STATE	9/15/2015	5.894	GOOD	10/2/2017	6,868	\$30,906,000	402	$\square$	
2247640	a	39TH STREET (SOUTH)	AMTRAK & LIRR YARD	AL	ο		9	STATE	12/16/2015	5.667	GOOD	12/19/2017	34,100	\$153,450,000	402		
2230780	٥	278I (BROOKLYN QUEENS EXPRESSWAY EAST LEG)	30TH AVENUE		А		1	STATE	5/22/2015	6.206	VGOOD	5/25/2017	7,071	\$31,819,500	403	401	
1247010	٥	91ST PLACE (2247010)	LIRR PORT WASHINGTON BRANCH	L	o		1	STATE	9/30/2015	6.500	VGOOD	10/12/2017	2,760	\$12,420,000	404		
2247020	D	94TH STREET PEDESTRIAN BRIDGE	LIRR PORT WASHINGTON BRANCH	L	PED-O		5	СІТҮ	6/15/2017	4.231	FAIR	N/A	905	\$4,072,500	404		
2247180	D	GRAND AVENUE	LIRR MAIN LINE	L	ο		3	STATE	10/1/2014	4.396	FAIR	8/12/2016	7,415	\$33,367,500	404		
2247190	٩	55TH AVENUE PEDESTRIAN BRIDGE	LIRR MAIN LINE	L	PED-O		3	СІТҮ	6/7/2017	4.120	FAIR	N/A	1,296	\$5,832,000	404		
2248159	D	WOODHAVEN BOULEVARD	QUEENS BOULEVARD		ο		2	STATE	7/17/2014	4.078	FAIR	7/12/2016	11,500	\$51,750,000	404		
2247650	D	60TH ROAD PEDESTRIAN BRIDGE	LIRR MAIN LINE	L	PED-O		3	СІТҮ	6/8/2017	4.893	FAIR	N/A	1,200	\$5,400,000	405	406	
2230120	D	MYRTLE AVENUE	JACKIE ROBINSON PARKWAY		А		1	STATE	4/17/2014	5.250	GOOD	4/18/2016	6,400	\$28,800,000	405	482	
1247560	Q	METROPOLITAN AVENUE	LIRR - NY&ATL	LN	ο		2	STATE	10/9/2015	3.603	FAIR	11/15/2017	20,900	\$94,050,000	405		
2065930	٩	HAMILTON PLACE	495I (LONG ISLAND EXPRESSWAY)		А		2	STATE	2/20/3014	5.528	GOOD	2/2/2016	11,111	\$49,999,500	405		
2065940	۵	GRAND AVENUE	495I (LONG ISLAND EXPRESSWAY)		А		2	STATE	11/11/2014	4.861	FAIR	10/18/2016	12,850	\$57,825,000	405		
2065950	٩	69TH STREET	495I (LONG ISLAND EXPRESSWAY)		А		2	STATE	6/24/2015	5.056	GOOD	6/23/2017	10,336	\$46,512,000	405		
2230040	۵	CYPRESS HILLS STREET	JACKIE ROBINSON PARKWAY		А		1	STATE	3/28/2014	4.722	FAIR	3/23/2016	5,000	\$22,500,000	405		
2230099	٥	JACKIE ROBINSON PARKWAY	CYPRESS HILLS CEMETRY		A		1	STATE	1/6/2016	5.593	GOOD	N/A	4,200	\$18,900,000	405		
2247440	٩	GRAND AVENUE	CSX TRANSPORT	x	ο		1	STATE	9/21/2015	6.183	VGOOD	10/5/2017	3,280	\$14,760,000	405		
2247450	a	57TH AVENUE	CSX TRANSPORT	x	0		1	STATE	9/21/2015	5.976	GOOD	10/5/2017	2,248	\$10,116,000	405		
2247460	a	CALDWELL AVENUE	CSX TRANSPORT	x	o		1	STATE	11/10/2014	5.889	GOOD	11/30/2016	2,243	\$10,093,500	405		

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2247470	٥	ELIOT AVENUE	CSX TRANSPORT	x	o		1	STATE	9/21/2015	4.972	FAIR	10/6/2017	2,960	\$13,320,000	405		
2247480	Q	JUNIPER BOULEVARD SOUTH	CSX TRANSPORT	x	ο		1	STATE	9/22/2015	4.833	FAIR	10/6/2017	9,000	\$40,500,000	405		
2247490	٥	69TH STREET	CSX TRANSPORT	x	o		1	STATE	11/10/2014	4.979	FAIR	11/30/2016	6,175	\$27,787,500	405		
2247500	٥	METROPOLITAN AVENUE	CSX TRANSPORT	x	0		1	STATE	9/22/2015	4.233	FAIR	10/10/2017	18,650	\$83,925,000	405		
2247530	٥	ANDREWS AVENUE	LIRR MONTAUK DIVISION	L	0		1	STATE	9/29/2015	6.688	VGOOD	11/3/2017	1,783	\$8,023,500	405		
2247540	۵	60TH STREET	LIRR MONTAUK DIVISION	L	o		2	STATE	9/29/2015	5.208	GOOD	11/2/2017	5,340	\$24,030,000	405		
2247550	٥	ELIOT AVENUE	LIRR MONTAUK DIVISION	L	0		2	STATE	9/24/2015	5.627	GOOD	11/1/2017	9,550	\$42,975,000	405		
2247570	۵	80TH STREET	77TH AVE - LIRR MT	L	o		5	STATE	10/21/2014	4.932	FAIR	9/21/2016	11,725	\$52,762,500	405		
2248200	٥	RUST STREET	FLUSHING AVENUE		0		1	STATE	7/2/2015	4.672	FAIR	7/7/2017	2,940	\$13,230,000	405		
2248220	٥	SERVICE ROAD TURNAROUND	FLUSHING AVENUE		o		1	STATE	7/2/2015	5.078	GOOD	7/7/2017	2,940	\$13,230,000	405		
2248240	۵	FLUSHING AVENUE SERVICE ROAD	FLUSHING AVENUE		o		1	STATE	7/2/2015	5.250	GOOD	7/7/2017	2,940	\$13,230,000	405		
2248280	٥	HIGHLAND PARK PEDESTRIAN	PEDESTRIAN PATH		PED-O	Р	1	СІТҮ	12/16/2015	3.667	FAIR	N/A	1,900	\$8,550,000	405		
2248300	٥	71ST AVENUE	COOPER AVENUE		o		1	STATE	6/24/2015	4.373	FAIR	7/26/2017	2,800	\$12,600,000	405		
2066002	۵	4951 (2066000)	WOODHAVEN BOULEVARD		Α		2	STATE	6/10/2015	5.479	GOOD	6/7/2017	25,200	\$113,400,000	406	404	
1247200	٥	67TH AVENUE PEDESTRIAN BRIDGE (2247200)	LIRR MAIN LINE	L	PED-O		3	СІТҮ	6/5/2017	4.219	FAIR	N/A	1,300	\$5,850,000	406		
2247630	۵	PEDESTRIAN BRIDGE NEAR UNION TURNPIKE	ABANDONED LIRR		PED-O		8	СІТҮ	6/14/2017	4.522	FAIR	N/A	1,500	\$6,750,000	406		
2248160	Q	ELIOT AVENUE	QUEENS BOULEVARD		ο		2	STATE	7/17/2014	4.804	FAIR	7/12/2016	13,785	\$62,032,500	406		
2240507	٥	ROOSEVELT AVENUE	WHITESTONE EXPRESSWAY · VAN WYCK · FLUSHING RIVER		WA		27	STATE	11/5/2015	3.521	FAIR	10/7/2017	84,424	\$379,908,000	407	481	
1065210	۵	WHITESTONE EXPRESSWAY NORTHBOUND	BELT SYSTEM - CROSS ISLAND		Α		1	STATE	6/17/2014	4.656	FAIR	6/14/2016	2,500	\$11,250,000	407		
2055801	Q	NORTHERN BOULEVARD WESTBOUND	FLUSHING RIVER		wo		40	STATE	10/28/2014	4.338	FAIR	9/29/2016	71,900	\$323,550,000	407		
2055802	۵	NORTHERN BOULEVARD EASTBOUND	FLUSHING RIVER		wo		40	STATE	10/28/2014	4.268	FAIR	9/29/2016	78,894	\$355,023,000	407		
205580A	٥	NORTHERN BOULEVARD WESTBOUND TO 678I SOUTHBOUND	VACANT LAND		AR		16	STATE	6/5/2014	5.619	GOOD	5/26/2016	8,600	\$38,700,000	407		
2231900	٥	BELT SYSTEM - CROSS ISLAND	TOTTEN AVENUE		Α		1	STATE	5/12/2014	4.609	FAIR	5/20/2016	4,900	\$22,050,000	407		
2231910	Q	UTOPIA PARKWAY	BELT SYSTEM - CROSS ISLAND		Α		2	STATE	2/23/2016	5.023	GOOD	N/A	7,200	\$32,400,000	407		
2231920	٥	160TH STREET	BELT SYSTEM - CROSS ISLAND		А		2	STATE	6/10/2015	5.694	GOOD	8/10/2017	5,550	\$24,975,000	407		
2231930	٥	FRANCIS LEWIS BOULEVARD	BELT SYSTEM - CROSS ISLAND		Α		3	STATE	1/22/2016	5.182	GOOD	N/A	9,100	\$40,950,000	407		
2231940	٥	CLINTONVILLE STREET	BELT SYSTEM - CROSS ISLAND		Α		2	STATE	2/1/2016	4.750	FAIR	N/A	7,400	\$33,300,000	407		
2231950	٥	150TH STREET	BELT SYSTEM - CROSS ISLAND		A		2	STATE	2/1/2016	4.386	FAIR	N/A	5,900	\$26,550,000	407		
2231960	٥	149TH STREET	BELT SYSTEM - CROSS ISLAND		A		2	STATE	1/14/2016	4.795	FAIR	N/A	6,210	\$27,945,000	407		
2231970	٥	14TH AVENUE	BELT SYSTEM - CROSS ISLAND		Α		2	STATE	1/14/2016	4.523	FAIR	N/A	8,100	\$36,450,000	407		

BIN I	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHE R OWN ER	SPA NS	RATING SOURCE	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2231980	۵	147TH STREET	BELT SYSTEM - CROSS ISLAND		А		2	STATE	1/13/2016	4.705	FAIR	N/A	6,300	\$28,350,000	407		
2247040	٥	UNION STREET	LIRR PORT WASHINGTON BRANCH	L	0		1	STATE	9/22/2015	6.172	VGOOD	10/16/2017	3,313	\$14,908,500	407		
2247050	٥	BOWNE STREET	LIRR PORT WASHINGTON BRANCH	L	o		1	STATE	9/24/2014	5.451	GOOD	8/8/2016	4,974	\$22,383,000	407		
2247060	۵	PARSONS BOULEVARD	LIRR PORT WASHINGTON BRANCH	L	ο		1	STATE	9/24/2014	4.824	FAIR	8/8/2016	4,200	\$18,900,000	407		
2247070	٥	147TH STREET	LIRR PORT WASHINGTON BRANCH	L	o		1	STATE	9/23/2015	5.392	GOOD	10/17/2017	2,800	\$12,600,000	407		
2247080	٥	149TH STREET	LIRR PORT WASHINGTON BRANCH	L	o		1	STATE	9/8/2009	4.776	FAIR	10/27/2016	4,100	\$18,450,000	407		
2247090	۵	149TH PLACE	LIRR PORT WASHINGTON BRANCH	L	ο		2	STATE	1/21/2015	5.000	GOOD	10/18/2017	4,300	\$19,350,000	407		
2247100	٥	150TH STREET	LIRR PORT WASHINGTON BRANCH	L	o		2	STATE	9/21/2015	6.088	VGOOD	10/19/2017	5,508	\$24,786,000	407		
2247110	۵	MURRAY STREET	LIRR PORT WASHINGTON BRANCH	L	ο		1	STATE	9/22/2015	5.185	GOOD	10/20/2017	4,000	\$18,000,000	407		
2248090	Q	FLUSHING MEADOW PARK PEDESTRIAN	COLLEGE POINT BOULEVARD		PED-O	Р	3	СІТҮ	1/4/2017	4.694	FAIR	N/A	8,400	\$37,800,000	407		
2266160		WHITESTONE EXPRESSWAY - VAN WYCK SOUTHBOUND TO BELT SYSTEM - CROSS ISLAND EASTBOUND	WHITESTONE EXPRESSWAY - VAN WYCK - BELT SYSTEM - CROSS ISLAND JUNCTION		А		1	STATE	6/12/2015	4.156	FAIR	8/11/2017	2,300	\$10,350,000	407		
705510	Q	167TH STREET PEDESTRIAN BRIDGE	LIRR PORT WASHINGTON BRIDGE	L	PED-0		3	СІТҮ	6/14/2017	4.000	FAIR	N/A	840	\$3,780,000	407		
2248059	٥	MOTOR PARKWAY (PEDESTRIAN)	FRANCIS LEWIS BOULEVARD		PED-O	Р	2	СІТҮ	6/9/2017	4.528	FAIR	N/A	2,800	\$12,600,000	408		
2248080	٥	MOTOR PARKWAY (PEDESTRIAN)	HOLLIS COURT BOULEVARD		PED-O	Р	3	СІТҮ	11/30/2017	4.323	FAIR	N/A	2,700	\$12,150,000	408		
2248100	Q	MOTOR PARKWAY (PEDESTRIAN)	73RD AVENUE		PED-O	Р	3	СІТҮ	12/1/2017	4.672	FAIR	N/A	2,600	\$11,700,000	408		
2267160	۵	ROOSEVELT AVENUE	SHEA ROAD		ο		4	STATE	7/29/2015	4.651	FAIR	7/21/2017	7,280	\$32,760,000	408		
2267199	۵	FRANCIS LEWIS BOULEVARD	CUNNINGHAM PARK ROAD		ο		1	STATE	5/14/2015	5.300	GOOD	5/17/2017	7,085	\$31,882,500	408		
2248299	٥	JACKIE ROBINSON PARKWAY-UNION TURNPIKE	AUSTIN STREET		o		1	STATE	5/23/2014	4.806	FAIR	5/16/2016	5,900	\$26,550,000	409	406	
2247600	٥	PARK LANE SOUTH	LIRR MONTAUK DIV	L	0		1	STATE	9/22/2014	6.983	VGOOD	8/9/2016	3,024	\$13,608,000	409	482	
2230209	٥	QUEENS BOULEVARD	JACKIE ROBINSON PARKWAY	т	А		5	STATE	6/9/2014	4.841	FAIR	6/3/2016	37,700	\$169,650,000	409		
2247220	٥	80TH ROAD	LIRR MAIN LINE	L	0		3	STATE	9/28/2015	4.698	FAIR	11/14/2017	4,100	\$18,450,000	409		
2247230	٥	82ND AVENUE	LIRR MAIN LINE	L	0		3	STATE	9/25/2015	5.246	GOOD	11/13/2017	4,100	\$18,450,000	409		
2247240	σ	LEFFERTS BOULEVARD	LIRR MAIN LINE	L	o		3	STATE	9/25/2015	5.736	GOOD	11/10/2017	5,460	\$24,570,000	409		
2247590	٥	FOREST PARK DRIVE	LIRR MONTAUK DIV	L	o	Р	5	STATE	10/8/2015	5.158	GOOD	10/31/2017	6,000	\$27,000,000	409		
2247660	٥	FOREST PARK DRIVE	ABANDONED LIRR		o	Р	6	STATE	4/28/2015	4.302	FAIR	7/11/2017	10,011	\$45,049,500	409		
2248019	٥	WOODHAVEN BOULEVARD	ATLANTIC AVENUE		0		3	STATE	3/26/2014	4.208	FAIR	4/1/2016	19,400	\$87,300,000	409		
2248340	۵	FOREST PARK DRIVE	MYRTLE AVENUE		0	Р	3	STATE	6/1/2015	4.984	FAIR	7/26/2017	5,100	\$22,950,000	409		
2231559	۵	CROSS BAY BOULEVARD	BELT SYSTEM - SHORE PARKWAY		А		4	STATE	5/30/2014	5.083	GOOD	5/19/2016	23,205	\$104,422,500	410		
2231560	٥	SOUTH CONDUIT BOULEVARD	BELT SYSTEM - SOUTHERN PARKWAY		А		2	STATE	6/16/2014	5.268	GOOD	6/8/2016	15,776	\$70,992,000	410		
2231570	٥	COHANCY STREET	BELT SYSTEM - SOUTHERN PARKWAY		А		2	STATE	4/17/2014	4.395	FAIR	4/11/2016	6,400	\$28,800,000	410		

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2231590	٥	130TH STREET	BELT SYSTEM - SOUTHERN PARKWAY		А		2	STATE	1/14/2016	4.659	FAIR	N/A	6,800	\$30,600,000	410		
2240650	Q	163RD AVENUE PEDESTRIAN BRIDGE	HAWTREE BASIN		PED-WO		13	СІТҮ	7/18/2016	4.037	FAIR	N/A	5,000	\$22,500,000	410		
2248020	۵	WHITELAW PEDESTRIAN BRIDGE	NORTH & SOUTH CONDUIT AVENUE		PED-O		7	СІТҮ	10/10/2017	4.507	FAIR	N/A	5,500	\$24,750,000	410		
2248039	Q	CROSS BAY BOULEVARD	NASSAU EXPESSWAY - ROUTE 27		o		2	STATE	5/26/2015	5.958	GOOD	7/31/2017	16,544	\$74,448,000	410		
2248040	۵	RAMP TO LINDEN BOULEVARD	SOUTH CONDUIT AVENUE		o		1	STATE	5/15/2014	5.200	GOOD	5/5/2016	3,352	\$15,084,000	410		
2248250	۵	102ND STREET	HAWTREE BASIN		wo		3	STATE	7/23/2015	6.015	VGOOD	7/21/2017	4,900	\$22,050,000	410		
2231860	٩	WEST ALLEY ROAD	BELT SYSTEM - CROSS ISLAND		А		2	STATE	7/8/2015	5.368	GOOD	8/21/2017	7,200	\$32,400,000	411		
2231870	Q	NORTHERN BOULEVARD	BELT SYSTEM - CROSS ISLAND		А		2	STATE	7/14/2014	5.764	GOOD	6/29/2016	9,400	\$42,300,000	411		Í
2231880	Q	CROCHERON PARK PEDESTRIAN	BELT SYSTEM - CROSS ISLAND		PED-A	Ρ	9	СІТҮ	6/7/2017	3.800	FAIR	N/A	2,300	\$10,350,000	411		Í
2231890	٩	28TH AVENUE PEDESTRIAN BRIDGE	BELT SYSTEM - CROSS ISLAND		PED-A	Ρ	24	СІТҮ	6/8/2017	4.554	FAIR	N/A	7,600	\$34,200,000	411		
2240440	۵	NORTHERN BOULEVARD	ALLEY CREEK		wo		2	STATE	6/17/2014	4.681	FAIR	6/20/2016	8,300	\$37,350,000	411		
2247130	٩	CORPORAL KENNEDY STREET	LIRR PORT WASHINGTON BRANCH	L	o		1	STATE	10/9/2015	6.157	VGOOD	11/6/2017	3,379	\$15,205,500	411		
2247140	Q	BELL BOULEVARD	LIRR PORT WASHINGTON BRANCH	L	o		1	STATE	10/1/2015	5.610	GOOD	11/7/2017	4,320	\$19,440,000	411		
2247170	q	DOUGLASTON PARKWAY	LIRR PORT WASHINGTON BRANCH	L	ο		3	STATE	10/1/2014	4.542	FAIR	8/10/2016	6,300	\$28,350,000	411		
2247680	q	221ST STREET	LIRR PORT WASHINGTON BRANCH	L	o		3	STATE	9/23/2015	5.926	GOOD	11/8/2017	6,050	\$27,225,000	411		
2248060	Q	MOTOR PARKWAY (PEDESTRIAN)	BELL BOULEVARD		PED-O	Ρ	2	СІТҮ	5/8/2017	4.403	FAIR	N/A	2,650	\$11,925,000	411		
2248070	Q	MOTOR PARKWAY (PEDESTRIAN)	SPRINGFIELD BOULEVARD		PED-O	Ρ	3	СІТҮ	6/2/2017	3.836	FAIR	N/A	2,900	\$13,050,000	411		
2266129	Q	DOUGLASTON PARKWAY	BELT SYSTEM - CROSS ISLAND SOUTHBOUND		A		1	STATE	3/10/2014	4.592	FAIR	3/3/2016	4,400	\$19,800,000	411		
2266139	Q	DOUGLASTON PARKWAY	BELT SYSTEM - CROSS ISLAND NORTHBOUND		А		1	STATE	3/12/2014	4.653	FAIR	3/3/2016	6,400	\$28,800,000	411		
7703720	Q	216TH STREET PEDESTRIAN BRIDGE	LIRR PORT WASHINGTON BRIDGE	L	PED-O		6	СІТҮ	6/12/2017	1.000	CLOSED	N/A	960	\$4,320,000	411		
2231610	a	GUY R. BREWER BOULEVARD	BELT SYSTEM - SOUTHERN PARKWAY		А		4	STATE	6/3/2015	6.028	VGOOD	8/2/2017	12,342	\$55,539,000	413		
2231620	۵	FARMERS BOULEVARD	BELT SYSTEM - SOUTHERN PARKWAY		A		2	STATE	4/25/2014	4.477	FAIR	4/20/2016	6,400	\$28,800,000	413		
2231630	۵	SPRINGFIELD BOULEVARD	BELT SYSTEM - SOUTHERN PARKWAY		A		2	STATE	4/25/2014	4.591	FAIR	4/20/2016	8,500	\$38,250,000	413		
2231640	Q	225TH STREET	BELT SYSTEM - SOUTHERN PARKWAY		А		2	STATE	5/15/2014	4.614	FAIR	5/5/2016	7,000	\$31,500,000	413		
2231650	٥	SUNRISE HIGHWAY WESTBOUND	BELT SYSTEM - LAURELTON PARKWAY EASTBOUND		А		1	STATE	3/21/2014	4.262	FAIR	3/16/2016	4,100	\$18,450,000	413		
2231660	٥	SUNRISE HIGHWAY WESTBOUND	BELT SYSTEM - LAURELTON PARKWAY WESTBOUND		А		2	STATE	2/19/2016	4.565	FAIR	N/A	5,350	\$24,075,000	413		
2231670	٥	NORTH CONDUIT AVENUE WESTBOUND	BELT SYSTEM - LAURELTON PARKWAY EASTBOUND		А		1	STATE	1/11/2016	4.889	FAIR	N/A	4,000	\$18,000,000	413		
2231680	٥	NORTH CONDUIT AVENUE WESTBOUND	BELT SYSTEM - LAURELTON PARKWAY WESTBOUND		А		2	STATE	1/15/2016	4.932	FAIR	N/A	6,500	\$29,250,000	413		
2231690	۵	FRANCIS LEWIS BOULEVARD	BELT SYSTEM - LAURELTON PARKWAY EASTBOUND		А		1	STATE	3/17/2014	5.033	GOOD	3/10/2016	6,000	\$27,000,000	413		
2231700	۵	FRANCIS LEWIS BOULEVARD	BELT SYSTEM - LAURELTON PARKWAY WESTBOUND		А		1	STATE	3/18/2014	4.700	FAIR	3/10/2016	6,000	\$27,000,000	413		1 ]

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2231710	٩	MERRICK BOULEVARD	BELT SYSTEM - LAURELTON PARKWAY NORTHBOUND		Α		1	STATE	1/21/2016	4.467	FAIR	N/A	6,000	\$27,000,000	413		
2231720	Q	MERRICK BOULEVARD	BELT SYSTEM - LAURELTON PARKWAY SOUTHBOUND		А		1	STATE	1/21/2016	4.200	FAIR	N/A	6,000	\$27,000,000	413		
2231730	Q	130TH AVENUE	BELT SYSTEM - LAURELTON PARKWAY NORTHBOUND		А		1	STATE	1/8/2016	5.133	GOOD	N/A	4,400	\$19,800,000	413		
2231740	٥	130TH AVENUE	BELT SYSTEM - LAURELTON PARKWAY SOUTHBOUND		А		1	STATE	1/8/2016	4.700	FAIR	N/A	4,400	\$19,800,000	413		
2231750	٩	LINDEN BOULEVARD	BELT SYSTEM - CROSS ISLAND		Α		2	STATE	2/18/2016	4.342	FAIR	N/A	6,700	\$30,150,000	413		
2231760	٥	BELT SYSTEM - CROSS ISLAND	DUTCH BROADWAY-115TH AVENUE		Α		1	STATE	2/28/2014	4.233	FAIR	3/1/2016	7,300	\$32,850,000	413		
2231770	٥	BELMONT PARK SOUTH RAMP	BELT SYSTEM - CROSS ISLAND		AR	Р	1	STATE	2/22/2016	4.781	FAIR	N/A	3,200	\$14,400,000	413		
2231780	٥	HEMPSTEAD AVENUE	BELT SYSTEM - CROSS ISLAND		Α		2	STATE	1/20/2016	4.081	FAIR	N/A	14,200	\$63,900,000	413		
2231790	Q	BELMONT PARK NORTH RAMP	BELT SYSTEM - CROSS ISLAND		AR	Р	1	STATE	1/12/2016	4.656	FAIR	N/A	3,400	\$15,300,000	413		
2231800	٥	SUPERIOR ROAD	BELT SYSTEM - CROSS ISLAND		А		2	STATE	4/1/2014	4.682	FAIR	3/23/2016	7,000	\$31,500,000	413		
2231819	٥	JAMAICA AVENUE	BELT SYSTEM - CROSS ISLAND		Α		2	STATE	3/19/2014	4.773	FAIR	3/18/2016	11,500	\$51,750,000	413		
2231829	٥	BRADDOCK AVENUE	BELT SYSTEM - CROSS ISLAND		А		2	STATE	5/22/2015	4.886	FAIR	8/22/2017	10,600	\$47,700,000	413		
2231840	٥	HILLSIDE AVENUE	BELT SYSTEM - CROSS ISLAND		Α		2	STATE	3/18/2014	4.211	FAIR	3/15/2016	9,672	\$43,524,000	413		
2231850	Q	UNION TURNPIKE	BELT SYSTEM - CROSS ISLAND		А		2	STATE	3/19/2014	4.409	FAIR	3/18/2016	13,600	\$61,200,000	413		
2248110	٥	MOTOR PARKWAY (PEDESTRIAN)	ALLEY PARK PEDESTRIAN WALK		PED-O	Р	1	СІТҮ	6/7/2017	3.833	FAIR	N/A	1,000	\$4,500,000	413		
2248129	Q	UNION TURNPIKE	CREEDMOORE HOSPITAL ROAD		o		1	STATE	6/1/2015	4.733	FAIR	7/7/2017	3,500	\$15,750,000	413		
2266149	Q	HEMPSTEAD AVENUE	BELT SYSTEM - CROSS ISLAND RAMP NORTHBOUND		А		2	STATE	3/12/2014	4.190	FAIR	3/4/2016	9,500	\$42,750,000	413		
2266770	Q	BELT SYSTEM - CROSS ISLAND	LAURELTON PARKWAY		А		1	STATE	3/7/2014	4.972	FAIR	3/2/2016	9,508	\$42,786,000	413		
2268770	Q	SPRINGFIELD BOULEVARD	EQUESTRIAN PATH (ABANDONED)		ο		1	STATE	4/29/2015	4.889	FAIR	5/9/2017	1,470	\$6,615,000	413		
2300130	Q	ROCKAWAY BOULEVARD	HOOK CREEK		wo		3	STATE	7/2/2015	5.763	GOOD	7/12/2017	18,302	\$82,359,000	413		
Q00002	Q	BELT SYSTEM - CROSS ISLAND	PATH OPPOSITE 88TH ROAD		А		1	СІТҮ	5/12/2017	4.267	FAIR	N/A	1,272	\$5,724,000	413		
2248130	Q	FLUSHING MEADOW PARK PEDESTRIAN	WILLOW LAKE & 76TH ROAD		PED-WO	Р	4	СІТҮ	4/20/2002	1.000	CLOSED	N/A	1,891	\$8,509,500	481		
2248140	۵	FLUSHING MEADOW PARK ROAD	STREAM NORTH OF LONG ISLAND EXPRESSWAY		wo	Р	5	STATE	7/22/2015	4.333	FAIR	7/20/2017	4,100	\$18,450,000	481		
2248260	Q	MEADOW LAKE BRIDGE	MEADOW LAKE		wo	Р	5	STATE	5/26/2015	4.458	FAIR	7/19/2017	4,200	\$18,900,000	481		
2248379	Q	BOATHOUSE BRIDGE	AQUACADE LAKE		wo	Р	5	STATE	7/21/2015	4.296	FAIR	7/18/2017	6,300	\$28,350,000	481		
2230190	٩	MARKWOOD ROAD	JACKIE ROBINSON PARKWAY		А		1	STATE	1/12/2016	5.167	GOOD	N/A	4,400	\$19,800,000	482	406	
2247620	٩	MYRTLE AVENUE	ABANDONED LIRR		0		3	STATE	1/5/2016	5.028	GOOD	N/A	6,725	\$30,262,500	482	406	
2230179	٩	JACKIE ROBINSON PARKWAY	METROPOLITAN AVENUE		А		2	STATE	4/22/2014	5.286	GOOD	4/14/2016	8,673	\$39,028,500	482		
2230180	٩	UNION TURPIKE	JACKIE ROBINSON PARKWAY		А		1	STATE	1/12/2016	5.672	GOOD	N/A	5,359	\$24,115,500	482		
2248369	٩	ROCKAWAY BOULEVARD	THURSTON BASIN		wo		2	STATE	7/15/2015	5.474	GOOD	7/13/2017	6,000	\$27,000,000	483	413	

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2248230	۵	BEACH CHANNEL DRIVE WESTBOUND	BEACH CHANNEL DRIVE EASTBOUND		о		1	STATE	6/15/2015	4.400	FAIR	6/12/2017	3,600	\$16,200,000	484		
2249040	R	TOMPKINS AVENUE	B&O RR (ABANDONED)		o		1	STATE	4/4/2014	5.953	GOOD	4/19/2016	5,096	\$22,932,000	501		
2249070	R	JOHN STREET PEDESTRIAN BRIDGE	B&O RR (ABANDONED)	o	PED-O		2	СІТҮ	9/20/2016	5.423	GOOD	N/A	1,050	\$4,725,000	501		
2249090	R	MORNINGSTAR ROAD	B&O RR (ABANDONED)	o	o		4	STATE	7/8/2015	4.627	FAIR	6/16/2016	7,900	\$35,550,000	501		
2249100	R	GRANITE AVENUE	B&O RR (ABANDONED)	o	o		4	STATE	2/3/2016	5.966	GOOD	N/A	7,300	\$32,850,000	501		
2249110	R	LAKE AVENUE	B&O RR (ABANDONED)	o	о		3	STATE	5/1/2015	4.556	FAIR	4/21/2017	5,900	\$26,550,000	501		
2249120	R	SIMONSON AVENUE	B&O RR (ABANDONED)	o	o		3	STATE	5/1/2015	5.852	GOOD	4/21/2017	5,819	\$26,185,500	501		
2249130	R	VAN NAME AVENUE	B&O RR (ABANDONED)	o	o		3	STATE	5/1/2015	5.186	GOOD	4/21/2017	5,474	\$24,633,000	501		
2249140	R	VAN PELT AVENUE	B&O RR (ABANDONED)	o	o		3	STATE	4/29/2015	5.576	GOOD	4/21/2017	5,000	\$22,500,000	501		
2249160	R	DE HART AVENUE	B&O RR (ABANDONED)	o	o		4	STATE	4/29/2015	6.389	VGOOD	4/21/2017	6,700	\$30,150,000	501		
2249170	R	UNION AVENUE	B&O RR (ABANDONED)	o	о		4	STATE	4/29/2015	5.130	GOOD	4/21/2017	6,630	\$29,835,000	501		
2249180	R	HARBOR ROAD	CONRAIL - EX B&O RR	с	o		4	STATE	9/12/2015	6.000	GOOD	10/7/2017	5,778	\$26,001,000	501		
2249200	R	SOUTH AVENUE	ARLINGTON YARD	с	o		3	STATE	9/12/2015	6.527	VGOOD	10/7/2017	8,500	\$38,250,000	501		
2249510	R	TOMPKINS AVENUE	WILLOW AVENUE, SIRT	s	o		2	STATE	10/17/2014	5.269	GOOD	10/6/2016	5,378	\$24,201,000	501		
2249520	R	HANNAH STREET	SIRT SOUTH SHORE	s	o		10	STATE	10/16/2015	4.627	FAIR	10/10/2016	13,360	\$60,120,000	501		
2249530	R	MINTHORNE STREET PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	PED-O		26	СІТҮ	7/27/2017	4.358	FAIR	N/A	6,000	\$27,000,000	501		
2249710	R	WEST FOOTBRIDGE	CLOVE LAKE		PED-WO	Ρ	2	СІТҮ	6/7/2016	3.857	FAIR	N/A	900	\$4,050,000	501		
2249720	R	EAST FOOTBRIDGE	CLOVE LAKE		PED-WO	Ρ	2	СІТҮ	6/8/2016	4.143	FAIR	N/A	900	\$4,050,000	501		
2249730	R	BRIDGE OVER DAM	NORTH END CLOVE LAKE		PED-WO	Ρ	1	СІТҮ	6/8/2016	3.405	FAIR	N/A	1,000	\$4,500,000	501		
2249760	R	MARTLINGS AVENUE	RICHMOND LAKE DAM		wo		2	STATE	6/12/2015	4.467	FAIR	6/5/2017	7,000	\$31,500,000	501		
2249770	R	SOUTH OF BROOKS LAKE	STREAM IN PARK		PED-WO	Ρ	3	СІТҮ	11/8/2017	4.767	FAIR	N/A	700	\$3,150,000	501		
2249780	R	FOOTBRIDGE	BROOKS LAKE DAM		PED-WO	Ρ	1	СІТҮ	6/1/2017	4.033	FAIR	N/A	800	\$3,600,000	501		
2249790	R	FOOTBRIDGE SOUTH OF FOREST AVENUE	STREAM IN PARK		PED-WO	Ρ	3	СІТҮ	11/8/2017	4.953	FAIR	N/A	700	\$3,150,000	501		
2249800	R	FOREST AVENUE	CLOVE LAKES PARK STREAM		wo	Ρ	1	STATE	10/29/2015	4.300	FAIR	11/6/2017	1,600	\$7,200,000	501		
2249840	R	TOMPKINS AVENUE	GREENFIELD AVENUE		ο		1	STATE	3/10/2014	4.638	FAIR	3/21/2016	2,690	\$12,105,000	501		
2269730	R	PARKING EXIT RAMP	SIRT	s	0	F	10	STATE	11/7/2014	6.097	VGOOD	10/21/2016	20,727	\$93,271,500	501		
2269740	R	BUS STATION NORTH	SIRT - FERRY TERMINAL	s	o	F	12	STATE	11/2/2014	5.600	GOOD	10/21/2016	64,605	\$290,722,500	501		
2269750	R	BUS STATION SOUTH	SIRT - PARKING LOT	s	о	F	12	STATE	11/2/2014	5.280	GOOD	10/21/2016	154,688	\$696,096,000	501		
2269760	R	NORTH RAMP	SIRT	s	0	F	2	STATE	10/22/2014	6.431	VGOOD	9/29/2016	6,000	\$27,000,000	501		
2269770	R	BUS STATION ENTRANCE RAMP	SIRT	s	o	F	19	STATE	10/9/2015	5.431	GOOD	11/3/2017	39,333	\$176,998,500	501		ιT

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHE R OWN ER	SPA NS	RATING	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2269780	R	PARKING ENTRANCE RAMP	SIRT	s	o	F	3	STATE	11/7/2014	5.889	GOOD	10/20/2016	8,589	\$38,650,500	501		
2269790	R	BUS STATION EXIT RAMP	SIRT	s	o	F	7	STATE	11/4/2014	5.167	GOOD	10/20/2016	28,721	\$129,244,500	501		
2270170	R	SI FERRY PEDESTRIAN BRIDGE	PARKING LOT EXIT ROADWAY		PED-O	F	5	СІТҮ	6/9/2017	5.600	GOOD	N/A	2,917	\$13,126,500	501		
2270180	R	BOROUGH PLACE - RAMP A	STATEN ISLAND RAILWAY	s	o	F	1	STATE	5/9/2014	6.594	VGOOD	5/31/2016	1,870	\$8,415,000	501		
2240350	R	RICHMOND AVENUE	RICHMOND CREEK		wo		3	STATE	6/10/2015	5.194	GOOD	5/31/2017	32,589	\$146,650,500	502		
2249400	R	BEACH AVENUE	SIRT SOUTH SHORE	s	о		2	STATE	8/11/2015	5.364	GOOD	8/15/2017	3,700	\$16,650,000	502		
2249410	R	ROSS AVENUE	SIRT SOUTH SHORE	s	o		2	STATE	8/12/2015	5.182	GOOD	8/16/2017	3,800	\$17,100,000	502		
2249420	R	ROSE AVENUE	SIRT SOUTH SHORE	s	o		2	STATE	8/13/2015	5.258	GOOD	8/17/2017	3,800	\$17,100,000	502		
2249430	R	NEW DORP LANE	SIRT SOUTH SHORE	s	o		2	STATE	8/14/2015	4.955	FAIR	9/1/2017	7,600	\$34,200,000	502		
2249440	R	BANCROFT AVENUE	SIRT SOUTH SHORE	s	o		3	STATE	9/17/2015	5.393	GOOD	9/5/2017	5,900	\$26,550,000	502		
2249450	R	FREMONT AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	PED-O		3	СІТҮ	7/26/2017	4.164	FAIR	N/A	800	\$3,600,000	502		
2249460	R	LINCOLN AVENUE	SIRT SOUTH SHORE	s	o		1	STATE	9/1/2015	5.172	GOOD	9/6/2017	4,500	\$20,250,000	502		
2249470	R	MIDLAND AVENUE	SIRT SOUTH SHORE	s	o		1	STATE	9/18/2015	5.466	GOOD	9/7/2017	3,000	\$13,500,000	502		
2249480	R	WEST FINGERBOARD ROAD	SIRT SOUTH SHORE	s	ο		2	STATE	9/16/2015	6.403	VGOOD	9/8/2017	5,100	\$22,950,000	502		
2249490	R	CLOVE ROAD	SIRT SOUTH SHORE	s	ο		3	STATE	10/16/2014	5.778	GOOD	10/5/2016	5,104	\$22,968,000	502		
2249860	R	SLATER BOULEVARD	NEW CREEK		wo		1	STATE	5/4/2015	5.510	GOOD	4/28/2017	2,037	\$9,166,500	502		
2249870	R	TRAVIS AVENUE	MAIN CREEK		wo		1	STATE	10/15/2015	5.483	GOOD	10/30/2017	1,700	\$7,650,000	502		
2249880	R	CHELSEA ROAD	SAWMILL CREEK		wo		1	STATE	5/21/2015	6.633	VGOOD	4/26/2017	2,205	\$9,922,500	502		
2270890	R	SPRINGVILLE GREENWAY PEDESTRIAN	FRESHWATER WETLANDS		PED-O	Ρ	1	СІТҮ	10/25/2016	6.849	VGOOD	N/A	273	\$1,228,500	502		
2249210	R	MAIN STREET PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	PED-O		9	СІТҮ	7/17/2017	4.600	FAIR	N/A	400	\$1,800,000	503		
2249230	R	TRACY AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	PED-O		9	СІТҮ	7/18/2017	3.451	FAIR	N/A	635	\$2,857,500	503		
2249240	R	ARTHUR KILL ROAD	SIRT SOUTH SHORE	s	o		1	STATE	10/14/2014	4.796	FAIR	10/3/2016	3,650	\$16,425,000	503		
2249250	R	BETHEL AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	PED-O		12	СІТҮ	7/20/2017	3.526	FAIR	N/A	1,165	\$5,242,500	503		
2249269	R	PAGE AVENUE	SIRT - TIDAL STREAM	s	wo		4	STATE	9/23/2015	5.806	GOOD	9/11/2017	30,710	\$138,195,000	503		
2249270	R	RICHMOND VALLEY ROAD	SIRT SOUTH SHORE	s	o		4	STATE	8/26/2015	5.164	GOOD	8/29/2017	9,440	\$42,480,000	503		
2249280	R	RICHMOND VALLEY STATION PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	PED-O		7	СІТҮ	7/21/2017	4.464	FAIR	N/A	595	\$2,677,500	503		
2249290	R	SEGUINE AVENUE	SIRT SOUTH SHORE	s	0		1	STATE	8/24/2015	6.016	VGOOD	8/22/2017	3,250	\$14,625,000	503		
2249300	R	HUGUENOT AVENUE	SIRT SOUTH SHORE	s	о		2	STATE	9/23/2015	4.788	FAIR	9/13/2017	6,514	\$29,313,000	503		
2249320	R	ALBEE AVENUE	SIRT SOUTH SHORE	s	0		3	STATE	9/16/2015	4.689	FAIR	9/14/2017	6,500	\$29,250,000	503		
2249330	R	ANNADALE ROAD	SIRT SOUTH SHORE	s	0		1	STATE	8/20/2015	6.233	VGOOD	8/25/2017	3,540	\$15,930,000	503		

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2249350	R	NELSON AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	PED-0		3	СІТУ	7/24/2017	4.143	FAIR	N/A	300	\$1,350,000	503		
2249360	R	GIFFORDS LANE	SIRT SOUTH SHORE	s	0		1	STATE	10/15/2014	5.625	GOOD	10/4/2016	3,042	\$13,689,000	503		
2249370	R	GREAVES AVENUE	SIRT SOUTH SHORE	s	o		1	STATE	8/19/2015	6.533	VGOOD	8/24/2017	2,650	\$11,925,000	503		
2249380	R	GUYON AVENUE	SIRT SOUTH SHORE	s	0		3	STATE	9/23/2015	4.672	FAIR	9/12/2017	6,900	\$31,050,000	503		
2249390	R	CEDARVIEW AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	PED-O		5	СІТҮ	7/25/2017	3.912	FAIR	N/A	625	\$2,812,500	503		
2249580	R	BELFIELD AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	PED-O		5	СІТҮ	7/28/2017	3.980	FAIR	N/A	400	\$1,800,000	503		
2249810	R	HYLAN BOULEVARD	LEMON CREEK		wo		1	STATE	3/10/2014	6.172	VGOOD	3/15/2016	11,400	\$51,300,000	503		
2249820	R	ARTHUR KILL ROAD	ARTHUR KILL STREAM		wo		1	STATE	5/5/2015	4.102	FAIR	4/27/2017	1,500	\$6,750,000	503		
2268920	R	AMBOY ROAD	LEMON CREEK		wo		1	STATE	3/10/2014	6.333	VGOOD	3/28/2016	1,310	\$5,895,000	503		
787 OPEN BRIDGES			OPEN SPANS 4,336									OPEN SF	14,283,295	\$64,287,657,000	ALL		

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2248250	٩	102ND STREET	HAWTREE BASIN		wo		3	STATE	7/23/2015	6.015	VGOOD	7/21/2017	4,900	\$22,050,000	410		
2245209	м	11TH AVENUE	AMTRAK 30 STREET BRANCH	А	0		2	STATE	6/4/2014	4.426	FAIR	7/11/2016	15,400	\$69,300,000	104		
2243630	к	11TH AVENUE	LIRR & SEA BEACH	NT	o		5	STATE	7/1/2014	5.985	GOOD	7/11/2016	9,700	\$43,650,000	310		
2245010	м	11TH AVENUE VIADUCT	LIRR WEST SIDE YARD	AL	o		39	STATE	12/12/2014	4.056	FAIR	11/23/2016	149,100	\$670,950,000	104		
2231730	٩	130TH AVENUE	BELT SYSTEM - LAURELTON PARKWAY NORTHBOUND		Α		1	STATE	1/8/2016	5.133	GOOD	N/A	4,400	\$19,800,000	413		
2231740	٩	130TH AVENUE	BELT SYSTEM - LAURELTON PARKWAY SOUTHBOUND		Α		1	STATE	1/8/2016	4.700	FAIR	N/A	4,400	\$19,800,000	413		
2231590	٩	130TH STREET	BELT SYSTEM - SOUTHERN PARKWAY		А		2	STATE	1/14/2016	4.659	FAIR	N/A	6,800	\$30,600,000	410		
2243640	к	13TH AVENUE	LIRR & SEA BEACH	NT	o		5	STATE	7/10/2015	4.972	FAIR	7/24/2017	16,000	\$72,000,000	310		
2240089	вм	145TH STREET BRIDGE	HARLEM RIVER		wмо		8	STATE	8/21/2015	6.278	VGOOD	9/18/2017	56,700	\$255,150,000	110	204	201
2231980	٩	147TH STREET	BELT SYSTEM - CROSS ISLAND		А		2	STATE	1/13/2016	4.705	FAIR	N/A	6,300	\$28,350,000	407		
2247070	٩	147TH STREET	LIRR PORT WASHINGTON BRANCH	L	o		1	STATE	9/23/2015	5.392	GOOD	10/17/2017	2,800	\$12,600,000	407		
2247090	٩	149TH PLACE	LIRR PORT WASHINGTON BRANCH	L	ο		2	STATE	1/21/2015	5.000	GOOD	10/18/2017	4,300	\$19,350,000	407		
2231960	٩	149TH STREET	BELT SYSTEM - CROSS ISLAND		А		2	STATE	1/14/2016	4.795	FAIR	N/A	6,210	\$27,945,000	407		
2247080	a	149TH STREET	LIRR PORT WASHINGTON BRANCH	L	0		1	STATE	9/8/2009	4.776	FAIR	10/27/2016	4,100	\$18,450,000	407		
2231970	٩	14TH AVENUE	BELT SYSTEM - CROSS ISLAND		А		2	STATE	1/14/2016	4.523	FAIR	N/A	8,100	\$36,450,000	407		
2243650	к	14TH AVENUE	LIRR BAY RIDGE	N	0		1	STATE	10/3/2014	6.167	VGOOD	9/26/2016	4,720	\$21,240,000	311		
2231950	٩	150TH STREET	BELT SYSTEM - CROSS ISLAND		A		2	STATE	2/1/2016	4.386	FAIR	N/A	5,900	\$26,550,000	407		
2247100	٩	150TH STREET	LIRR PORT WASHINGTON BRANCH	L	0		2	STATE	9/21/2015	6.088	VGOOD	10/19/2017	5,508	\$24,786,000	407		
2243670	к	15TH AVENUE	BMT SEA BEACH	т	0		4	STATE	6/22/2015	6.114	VGOOD	6/20/2017	9,800	\$44,100,000	311		
2243340	к	15TH AVENUE	LIRR BAY RIDGE	N	0		1	STATE	10/3/2014	4.872	FAIR	9/26/2016	3,614	\$16,263,000	311		
2231920	٩	160TH STREET	BELT SYSTEM - CROSS ISLAND		A		2	STATE	6/10/2015	5.694	GOOD	8/10/2017	5,550	\$24,975,000	407		
2240650	٩	163RD AVENUE PEDESTRIAN BRIDGE	HAWTREE BASIN		PED-WO		13	СІТҮ	7/18/2016	4.037	FAIR	N/A	5,000	\$22,500,000	410		
7705510	٩	167TH STREET PEDESTRIAN BRIDGE	LIRR PORT WASHINGTON BRIDGE	L	PED-O		3	СІТҮ	6/14/2017	4.000	FAIR	N/A	840	\$3,780,000	407		
2243680	к	16TH AVENUE	BMT SEA BEACH	т	ο		3	STATE	6/6/2014	5.481	GOOD	5/31/2016	6,816	\$30,672,000	311		
2243360	к	16TH AVENUE	LIRR BAY RIDGE	N	ο		1	STATE	10/3/2014	5.350	GOOD	9/23/2016	4,345	\$19,552,500	311		
206672A	в	174TH STREET-NORTH PEDESTRIAN BRIDGE	8951 - SHERIDAN EXPRESSWAY		PED-A		4	СІТҮ	4/3/2017	4.833	FAIR	N/A	1,800	\$8,100,000	209		
206672B	в	174TH STREET-SOUTH PEDESTRIAN BRIDGE	895I - SHERIDAN EXPRESSWAY		PED-A		4	СІТҮ	4/3/2017	4.750	FAIR	N/A	1,900	\$8,550,000	209		
2243690	к	17TH AVENUE	BMT SEA BEACH	т	0		4	STATE	5/30/2014	6.173	VGOOD	6/1/2016	8,946	\$40,257,000	311		
2243370	к	17TH AVENUE	LIRR BAY RIDGE	N	o		1	STATE	10/2/2014	4.745	FAIR	9/23/2016	3,406	\$15,327,000	312		
2231300	к	17TH AVENUE PEDESTRIAN BRIDGE	BELT SYSTEM - SHORE PARKWAY		PED-A	Ρ	1	СІТҮ	9/14/2017	3.702	FAIR	N/A	2,100	\$9,450,000	311		

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2243700	к	18TH AVENUE	BMT SEA BEACH	т	o		1	STATE	7/1/2015	6.421	VGOOD	6/19/2017	5,200	\$23,400,000	311		
2243380	к	18TH AVENUE	LIRR BAY RIDGE	N	o		1	STATE	10/2/2014	4.625	FAIR	9/22/2016	6,006	\$27,027,000	312		
2243710	к	19TH AVENUE	BMT SEA BEACH	т	o		4	STATE	5/29/2014	4.237	FAIR	6/2/2016	4,800	\$21,600,000	311		
2241259	в	204TH STREET PEDESTRIAN BRIDGE	METRO NORTH RR HAR	м	PED-O	Р	1	СІТҮ	3/3/2017	3.845	FAIR	N/A	4,700	\$21,150,000	227	207	
2243720	к	20TH AVENUE	BMT SEA BEACH	т	o		1	STATE	6/2/2014	6.421	VGOOD	6/3/2016	7,000	\$31,500,000	311		
7703720	a	216TH STREET PEDESTRIAN BRIDGE	LIRR PORT WASHINGTON BRIDGE	L	PED-O		6	СІТҮ	6/12/2017	1.000	CLOSED	N/A	960	\$4,320,000	411		
2243820	к	21ST AVENUE	BMT SEA BEACH	т	o		4	STATE	7/22/2015	4.026	FAIR	6/20/2017	21,400	\$96,300,000	311		
2247270	a	21ST STREET	LIRR NORTH SHORE YARD	L	o		6	STATE	10/6/2015	5.153	GOOD	10/12/2017	17,590	\$79,155,000	402		
2247680	a	221ST STREET	LIRR PORT WASHINGTON BRANCH	L	o		3	STATE	9/23/2015	5.926	GOOD	11/8/2017	6,050	\$27,225,000	411		
2231640	٩	225TH STREET	BELT SYSTEM - SOUTHERN PARKWAY		А		2	STATE	5/15/2014	4.614	FAIR	5/5/2016	7,000	\$31,500,000	413		
224004J	м	25X TO/FROM 2ND AVENUE	NYC GARAGE		OE		14	STATE	4/21/2014	4.829	FAIR	4/20/2016	22,058	\$99,261,000	108		
2230679	a	278I (BROOKLYN QUEENS EXPRESSWAY)	34TH AVENUE		А		1	STATE	6/1/2015	5.983	GOOD	7/6/2017	7,793	\$35,068,500	402		
2230669	٩	278I (BROOKLYN QUEENS EXPRESSWAY)	35TH AVENUE		А		1	STATE	7/29/2015	6.051	VGOOD	7/18/2017	13,135	\$59,107,500	402		
2230470	к	278I (BROOKLYN QUEENS EXPRESSWAY)	JAY STREET		А		1	STATE	1/15/2016	4.833	FAIR	N/A	5,100	\$22,950,000	302		
2230510	к	278I (BROOKLYN QUEENS EXPRESSWAY)	NASSAU STREET		А		6	STATE	7/3/2014	5.169	GOOD	7/15/2016	51,200	\$230,400,000	302		
2230680	٩	278I (BROOKLYN QUEENS EXPRESSWAY)	NORTHERN BOULEVARD		A		1	STATE	11/5/2014	6.016	VGOOD	9/28/2016	27,011	\$121,549,500	402	401	
2230460	к	278I (BROOKLYN QUEENS EXPRESSWAY)	PEARL STREET		A		1	STATE	1/15/2016	5.467	GOOD	N/A	4,500	\$20,250,000	302		
2230480	к	278I (BROOKLYN QUEENS EXPRESSWAY)	PROSPECT STREET		A		1	STATE	1/27/2016	4.852	FAIR	N/A	8,400	\$37,800,000	302		
2230500	к	278I (BROOKLYN QUEENS EXPRESSWAY)	RAMP TO BROOKLYN QUEENS EXPRESSWAY EASTBOUND		А		1	STATE	1/29/2016	4.567	FAIR	N/A	1,300	\$5,850,000	302		
2230490	к	278I (BROOKLYN QUEENS EXPRESSWAY)	SANDS STREET		А		1	STATE	2/27/2014	5.019	GOOD	3/16/2016	12,600	\$56,700,000	302		
2230430	к	278I (BROOKLYN QUEENS EXPRESSWAY) RAMP TO BROOKLYN BRIDGE	PROSPECT STREET		A		1	STATE	1/4/2016	5.000	GOOD	N/A	1,100	\$4,950,000	302		
2230780	٩	278I (BROOKLYN QUEENS EXPRESSWAY EAST LEG)	30TH AVENUE		A		1	STATE	5/22/2015	6.206	VGOOD	5/25/2017	7,071	\$31,819,500	403	401	
2230770	٩	278I (BROOKLYN QUEENS EXPRESSWAY WEST LEG)	30TH AVENUE		A		1	STATE	5/22/2015	6.102	VGOOD	5/25/2017	6,199	\$27,895,500	401		
2268518	к	278I EASTBOUND (BROOKLYN QUEENS EXPRESSWAY)	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY)		А		5	STATE	7/1/2015	4.119	FAIR	7/14/2017	9,275	\$41,737,500	302		
2268508	к	278I EASTBOUND (BROOKLYN QUEENS EXPRESSWAY)	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY) - BROOKLYN BRIDGE		А		11	STATE	6/29/2015	4.297	FAIR	7/12/2017	20,529	\$92,380,500	302		
2268498	к	278I EASTBOUND (BROOKLYN QUEENS EXPRESSWAY)	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY) - PROMENADE		А		69	STATE	11/26/2014	3.754	FAIR	11/1/2017	133,708	\$601,686,000	302		
2230450	к	278I EASTBOUND (BROOKLYN QUEENS EXPRESSWAY)	ADAMS STREET		А		1	STATE	1/15/2016	4.933	FAIR	N/A	2,500	\$11,250,000	302		
2230888	к	278I EASTBOUND (BROOKLYN QUEENS EXPRESSWAY)	CADMAN PLAZA / 278I WESTBOUND		А		2	STATE	7/28/2014	5.263	GOOD	8/19/2016	4,500	\$20,250,000	302		
2230858	к	278I EASTBOUND (BROOKLYN QUEENS EXPRESSWAY)	JORALEMON STREET / BROOKLYN QUEENS EXPRESSWAY WESTBOUND		А		1	STATE	10/20/2015	4.619	FAIR	11/2/2017	5,900	\$26,550,000	302		
2230410	к	278I EASTBOUND (BROOKLYN QUEENS EXPRESSWAY)	WASHINGTON STREET		A		1	STATE	7/16/2014	4.500	FAIR	7/8/2016	2,500	\$11,250,000	302		

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE	OTHE R OWN ER	SPA NS	RATING	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2230760	٥	278I NORTHBOUND (BROOKLYN QUEENS EXPRESSWAY EAST LEG)	31ST AVENUE		А		1	STATE	7/23/2014	6.356	VGOOD	7/5/2016	4,161	\$18,724,500	401		
2230700	٥	278I NORTHBOUND (BROOKLYN QUEENS EXPRESSWAY EAST LEG)	32ND AVENUE (TO BROOKLYN QUEENS EXPRESSWAY WEST LEG)		А		8	STATE	11/5/2014	6.352	VGOOD	10/6/2016	31,600	\$142,200,000	401	403	
2230690	۵	278I NORTHBOUND (BROOKLYN QUEENS EXPRESSWAY WEST LEG)	32ND AVENUE		А		1	STATE	6/2/2014	6.407	VGOOD	5/26/2016	4,080	\$18,360,000	401		
2230830	٥	278I NORTHBOUND (BROOKLYN QUEENS EXPRESSWAY WEST LEG)	GRAND CENTRAL PARKWAY		А		2	STATE	4/28/2014	4.583	FAIR	4/19/2016	7,600	\$34,200,000	401		
2230720	٥	278I SOUTHBOUND (BROOKLYN QUEENS EXPRESSWAY EAST LEG)	278I NORTHBOUND (BROOKLYN QUEENS EXPRESSWAY WEST LEG)		А		3	STATE	6/17/2015	6.152	VGOOD	6/19/2017	20,896	\$94,032,000	401		
2230750	۵	278I SOUTHBOUND (BROOKLYN QUEENS EXPRESSWAY EAST LEG)	31ST AVENUE		А		1	STATE	6/22/2015	6.424	VGOOD	6/19/2017	4,221	\$18,994,500	401	403	
2230740	٥	278I SOUTHBOUND (BROOKLYN QUEENS EXPRESSWAY WEST LEG)	31ST AVENUE		А		1	STATE	6/22/2015	5.978	GOOD	6/16/2017	5,246	\$23,607,000	401		
2230710	٥	278I SOUTHBOUND (BROOKLYN QUEENS EXPRESSWAY WEST LEG)	32ND AVENUE		A		1	STATE	6/23/2015	6.424	VGOOD	7/31/2017	5,240	\$23,580,000	401		
2230440	к	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY)	ADAMS STREET		A		1	STATE	1/15/2016	5.200	GOOD	N/A	2,700	\$12,150,000	302		
2230887	к	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY)	CADMAN PLAZA		A		2	STATE	7/25/2014	4.403	FAIR	8/19/2016	4,500	\$20,250,000	302		
2268517	к	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY)	FURMAN STREET		A		7	STATE	6/30/2015	4.104	FAIR	7/14/2017	10,988	\$49,446,000	302		
2268497	к	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY)	FURMAN STREET - BROOKLYN QUEENS EXPRESSWAY EASTBOUND		A		45	STATE	9/16/2015	4.357	FAIR	9/28/2017	86,406	\$388,827,000	302		
2230857	к	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY)	JORALEMON STREET		A		1	STATE	3/11/2014	5.000	GOOD	3/29/2016	2,100	\$9,450,000	302		
2230420	к	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY)	WASHINGTON STREET		A		1	STATE	7/16/2014	5.047	GOOD	7/8/2016	2,500	\$11,250,000	302		
2268507	к	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY)	YORK STREET		A		6	STATE	6/29/2015	4.071	FAIR	7/12/2017	10,388	\$46,746,000	302		
2231330	к	27TH AVENUE PEDESTRIAN BRIDGE	BELT SYSTEM - SHORE PARKWAY		PED-A	Ρ	1	СІТҮ	2/21/2017	4.156	FAIR	N/A	2,100	\$9,450,000	313		
2231890	٥	28TH AVENUE PEDESTRIAN BRIDGE	BELT SYSTEM - CROSS ISLAND		PED-A	Ρ	24	СІТҮ	6/8/2017	4.554	FAIR	N/A	7,600	\$34,200,000	411		
2243310	к	2ND AVENUE	LIRR BAY RIDGE	N	ο		2	STATE	10/7/2014	6.208	VGOOD	9/27/2016	17,751	\$79,879,500	310		
2230730	٥	31ST AVENUE	278I NORTHBOUND (BROOKLYN QUEENS EXPRESSWAY WEST LEG)		A		1	STATE	6/17/2015	5.767	GOOD	6/16/2017	5,875	\$26,437,500	401		
2230657	٥	31ST STREET	278I (BROOKLYN QUEENS EXPRESSWAY) - NYCTA		A		2	STATE	11/19/2014	4.514	FAIR	10/13/2016	9,500	\$42,750,000	401		
2230640	٥	32ND STREET	278I (BROOKLYN QUEENS EXPRESSWAY)		A		2	STATE	6/4/2015	4.875	FAIR	8/15/2017	8,100	\$36,450,000	401		
2230630	٥	35TH STREET	278I (BROOKLYN QUEENS EXPRESSWAY)		A		4	STATE	3/14/2014	4.667	FAIR	3/15/2016	9,000	\$40,500,000	401		
2247370	٥	37TH AVENUE	CSX - HELLGATE	x	o		1	STATE	9/15/2015	5.894	GOOD	10/2/2017	6,868	\$30,906,000	402		
2230620	Q	37TH STREET	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	3/12/2014	4.681	FAIR	3/11/2016	5,300	\$23,850,000	401		
2247330	٥	39TH STREET (NORTH)	SUNNYSIDE YARD	А	o		14	STATE	12/22/2015	6.208	VGOOD	12/19/2017	48,200	\$216,900,000	402	401	
2247640	٥	39TH STREET (SOUTH)	AMTRAK & LIRR YARD	AL	o		9	STATE	12/16/2015	5.667	GOOD	12/19/2017	34,100	\$153,450,000	402		
2243320	к	3RD AVENUE	LIRR BAY RIDGE	N	0		4	STATE	9/1/2015	4.972	FAIR	8/23/2017	17,230	\$77,535,000	310		
2244160	к	3RD AVENUE	SHORE ROAD DRIVE		0		1	STATE	6/1/2015	6.273	VGOOD	5/17/2017	4,360	\$19,620,000	310		
2230570	٥	41ST AVENUE	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	10/22/2014	6.735	VGOOD	9/21/2016	8,580	\$38,610,000	402		
2247390	٥	41ST AVENUE	CSX - HELLGATE	x	0		2	STATE	9/15/2015	4.788	FAIR	10/2/2017	4,400	\$19,800,000	402	404	

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE	OTHE R OWN ER	SPA NS	RATING SOURCE	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2247410	٥	43RD AVENUE	CSX TRANSPORT	x	o		1	STATE	9/15/2015	5.000	GOOD	10/3/2017	3,905	\$17,572,500	402	404	
2247420	۵	44TH AVENUE	CSX TRANSPORT	x	o		1	STATE	9/15/2015	5.267	GOOD	10/4/2017	3,888	\$17,496,000	402	404	
2230840	α	44TH STREET	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	5/13/2014	4.764	FAIR	5/4/2016	5,000	\$22,500,000	401		i
2247430	D	45TH AVENUE	CSX TRANSPORT	x	o		1	STATE	9/15/2015	5.224	GOOD	10/4/2017	2,400	\$10,800,000	402	404	i
2230820	۵	47TH STREET	GRAND CENTRAL PARKWAY		А		2	STATE	4/28/2014	4.889	FAIR	4/19/2016	5,700	\$25,650,000	401		l
2066002	α	4951 (2066000)	WOODHAVEN BOULEVARD		А		2	STATE	6/10/2015	5.479	GOOD	6/7/2017	25,200	\$113,400,000	406	404	i
2247290	α	49TH AVENUE	LIRR - AMTRAK	AL	o		5	STATE	10/29/2015	3.819	FAIR	10/18/2016	20,400	\$91,800,000	402		Í
2230800	α	49TH STREET	278I (BROOKLYN QUEENS EXPRESSWAY WEST LEG)		А		2	STATE	4/7/2014	5.278	GOOD	3/24/2016	4,900	\$22,050,000	401		i
2230890	α	49TH STREET	GRAND CENTRAL PARKWAY		А		2	STATE	5/15/2014	4.444	FAIR	5/4/2016	6,350	\$28,575,000	401		Í
2231270	к	4TH AVENUE	BELT SYSTEM - SHORE PARKWAY		А		2	STATE	3/21/2014	4.763	FAIR	4/19/2016	6,100	\$27,450,000	310		i
2243330	к	4TH AVENUE	LIRR BAY RIDGE	NT	o		4	STATE	8/7/2015	5.486	GOOD	7/27/2017	13,668	\$61,506,000	310		l
2243839	к	4TH AVENUE	NYCTA BMT TRACKS	т	o		1	STATE	7/27/2015	6.250	VGOOD	7/10/2017	4,440	\$19,980,000	307		
2243400	к	50TH STREET	LIRR BAY RIDGE	N	o		2	STATE	8/5/2015	4.731	FAIR	8/8/2017	7,100	\$31,950,000	312		Í
1247280	α	51ST AVENUE PEDESTRIAN BRIDGE (2247280)	LIRR MAIN LINE	L	PED-O		5	СІТҮ	6/6/2017	2.927	POOR	N/A	700	\$3,150,000	402		Í
2243390	к	52ND STREET	LIRR BAY RIDGE	N	o		1	STATE	10/1/2014	6.017	VGOOD	9/23/2016	3,293	\$14,818,500	312		i
2247190	D	55TH AVENUE PEDESTRIAN BRIDGE	LIRR MAIN LINE	L	PED-O		3	СІТҮ	6/7/2017	4.120	FAIR	N/A	1,296	\$5,832,000	404		i
2247450	۵	57TH AVENUE	CSX TRANSPORT	x	o		1	STATE	9/21/2015	5.976	GOOD	10/5/2017	2,248	\$10,116,000	405		
2066100	к	STH AVENUE	27 X PROSPECT EXPRESSWAY		А		1	STATE	4/22/2014	5.063	GOOD	5/12/2016	8,800	\$39,600,000	307		ĺ
2244480	к	5TH AVENUE	GREENWOOD CEMETERY ROAD		o		1	STATE	9/10/2015	5.333	GOOD	9/18/2017	3,600	\$16,200,000	307		ĺ
2243580	к	5TH AVENUE	LIRR & SEA BEACH	NT	o		4	STATE	10/27/2014	3.882	FAIR	9/13/2016	12,395	\$55,777,500	310		Í
2247650	D	60TH ROAD PEDESTRIAN BRIDGE	LIRR MAIN LINE	L	PED-O		3	СІТҮ	6/8/2017	4.893	FAIR	N/A	1,200	\$5,400,000	405	406	ĺ
2243350	к	60TH STREET	LIRR BAY RIDGE	N	o		1	STATE	9/1/2015	6.000	GOOD	8/15/2017	3,900	\$17,550,000	311		
2247540	ρ	60TH STREET	LIRR MONTAUK DIVISION	L	0		2	STATE	9/29/2015	5.208	GOOD	11/2/2017	5,340	\$24,030,000	405		
2230520	ρ	65TH PLACE	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	1/28/2016	5.889	GOOD	N/A	11,668	\$52,506,000	402		
2247160	۵	65TH PLACE	LIRR MAIN LINE	L	0		3	STATE	10/12/2015	6.324	VGOOD	11/5/2017	8,381	\$37,714,500	402		
2243730	к	65TH STREET	BMT SEA BEACH	т	0		4	STATE	5/23/2014	5.132	GOOD	5/26/2016	12,000	\$54,000,000	311		
2247150	۵	65TH STREET	LIRR MAIN LINE	L	0		3	STATE	10/12/2015	6.375	VGOOD	11/5/2017	6,344	\$28,548,000	402		
1247200	۵	67TH AVENUE PEDESTRIAN BRIDGE (2247200)	LIRR MAIN LINE	L	PED-O		3	СІТҮ	6/5/2017	4.219	FAIR	N/A	1,300	\$5,850,000	406		
2230550	a	69TH STREET	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	1/29/2016	5.263	GOOD	N/A	12,600	\$56,700,000	402		
2065950	a	69TH STREET	495I (LONG ISLAND EXPRESSWAY)		А		2	STATE	6/24/2015	5.056	GOOD	6/23/2017	10,336	\$46,512,000	405		

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2247490	٥	69TH STREET	CSX TRANSPORT	x	o		1	STATE	11/10/2014	4.979	FAIR	11/30/2016	6,175	\$27,787,500	405		
2243590	к	6TH AVENUE	LIRR & SEA BEACH	NT	o		2	STATE	7/9/2015	6.056	VGOOD	7/10/2017	14,382	\$64,719,000	310		
2243280	к	6TH AVENUE	LIRR ATLANTIC AVENUE	L	o		9	STATE	9/5/2014	5.431	GOOD	9/2/2016	12,276	\$55,242,000	302		
2230560	٥	70TH STREET	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	10/22/2014	6.556	VGOOD	9/21/2016	8,580	\$38,610,000	402		
2248300	٥	71ST AVENUE	COOPER AVENUE		o		1	STATE	6/24/2015	4.373	FAIR	7/26/2017	2,800	\$12,600,000	405		
2246150	м	72ND STREET CROSS DRIVE (TERRACE BRIDGE)	PEDESTRIAN PATH TO FOUNTAIN		o	Ρ	3	STATE	2/4/2016	5.500	GOOD	N/A	7,300	\$32,850,000	164		
2246160	м	73RD STREET PEDESTRIAN BRIDGE (BOW BRIDGE)	THE LAKE		PED-WO	Ρ	1	СІТҮ	6/20/2016	4.629	FAIR	N/A	1,700	\$7,650,000	164		
2246440	м	79TH STREET PEDESTRIAN BRIDGE	TRANSVERSE ROAD #2		PED-O	Ρ	1	СІТҮ	7/20/2017	3.909	FAIR	N/A	5,900	\$26,550,000	164		
2267717	м	79TH STREET PEDESTRIAN PLAZA	79TH STREET BOAT BASIN GARAGE		A	Ρ	10	STATE	5/5/2015	4.444	FAIR	7/5/2017	27,400	\$123,300,000	107		
226771B	м	79TH STREET RAMP TO GARAGE	79TH STREET BOAT BASIN GARAGE		AR	Ρ	21	STATE	5/12/2015	4.452	FAIR	5/16/2017	8,989	\$40,450,500	107		
226771A	м	79TH STREET RAMP TO HENRY HUDSON PARKWAY	79TH STREET BOAT BASIN GARAGE		AR	Ρ	4	STATE	5/5/2015	4.221	FAIR	5/8/2017	3,131	\$14,089,500	107		
2267718	м	79TH STREET TRAFFIC CIRCLE	79TH STREET PEDESTRIAN PLAZA		А	Ρ	34	STATE	6/3/2015	3.754	FAIR	6/14/2017	24,130	\$108,585,000	107		
2243600	к	7TH AVENUE	LIRR & SEA BEACH	NT	0		7	STATE	10/22/2014	4.806	FAIR	9/13/2016	18,628	\$83,826,000	310		
2243920	к	7TH AVENUE	NYCTA BMT YARD	т	o		2	STATE	6/30/2014	6.042	VGOOD	7/15/2016	4,700	\$21,150,000	307		
2247220	۵	80TH ROAD	LIRR MAIN LINE	L	o		3	STATE	9/28/2015	4.698	FAIR	11/14/2017	4,100	\$18,450,000	409		
2247570	Q	80TH STREET	77TH AVE - LIRR MT	L	0		5	STATE	10/21/2014	4.932	FAIR	9/21/2016	11,725	\$52,762,500	405		
2231250	к	81ST STREET PEDESTRIAN BRIDGE	BELT SYSTEM - SHORE PARKWAY		PED-A	Ρ	5	СІТҮ	2/14/2017	4.662	FAIR	N/A	3,100	\$13,950,000	310		
2247230	٩	82ND AVENUE	LIRR MAIN LINE	L	0		3	STATE	9/25/2015	5.246	GOOD	11/13/2017	4,100	\$18,450,000	409		
2243570	к	86TH STREET	BMT SEA BEACH	т	o		1	STATE	6/4/2014	5.797	GOOD	6/10/2016	12,167	\$54,751,500	313		
2243610	к	8TH AVENUE	LIRR & SEA BEACH	NT	0		2	STATE	7/9/2015	6.097	VGOOD	7/10/2017	10,834	\$48,753,000	310		
1247010	٩	91ST PLACE (2247010)	LIRR PORT WASHINGTON BRANCH	L	0		1	STATE	9/30/2015	6.500	VGOOD	10/12/2017	2,760	\$12,420,000	404		
2231260	к	92ND STREET PEDESTRIAN BRIDGE	BELT SYSTEM - SHORE PARKWAY		PED-A	Ρ	6	СІТҮ	8/3/2016	3.770	FAIR	N/A	3,000	\$13,500,000	310		
2247020	٥	94TH STREET PEDESTRIAN BRIDGE	LIRR PORT WASHINGTON BRANCH	L	PED-O		5	СІТҮ	6/15/2017	4.231	FAIR	N/A	905	\$4,072,500	404		
2243840	к	9TH AVENUE	NYCTA BMT YARD	т	ο		5	STATE	7/30/2015	5.736	GOOD	7/3/2017	12,440	\$55,980,000	312		
2243940	к	9TH AVENUE	NYCTA IND SBWY	т	o		5	STATE	7/29/2015	4.667	FAIR	8/3/2017	6,300	\$28,350,000	312		
2246490	м	A.C. POWELL BOULEVARD NORTHBOUND	A.C. POWELL BOULEVARD		o		1	STATE	1/28/2016	4.347	FAIR	N/A	3,000	\$13,500,000	110		
2243530	к	ALBANY AVENUE - AVENUE H	LIRR BAY RIDGE	N	0		2	STATE	8/31/2015	5.956	GOOD	8/15/2017	35,100	\$157,950,000	318		
2249320	R	ALBEE AVENUE	SIRT SOUTH SHORE	s	0		3	STATE	9/16/2015	4.689	FAIR	9/14/2017	6,500	\$29,250,000	503		
2268920	R	AMBOY ROAD	LEMON CREEK		wo		1	STATE	3/10/2014	6.333	VGOOD	3/28/2016	1,310	\$5,895,000	503		
2247530	۵	ANDREWS AVENUE	LIRR MONTAUK DIVISION	L	o		1	STATE	9/29/2015	6.688	VGOOD	11/3/2017	1,783	\$8,023,500	405		

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2249330	R	ANNADALE ROAD	SIRT SOUTH SHORE	s	o		1	STATE	8/20/2015	6.233	VGOOD	8/25/2017	3,540	\$15,930,000	503		
2249820	R	ARTHUR KILL ROAD	ARTHUR KILL STREAM		wo		1	STATE	5/5/2015	4.102	FAIR	4/27/2017	1,500	\$6,750,000	503		
2249240	R	ARTHUR KILL ROAD	SIRT SOUTH SHORE	s	o		1	STATE	10/14/2014	4.796	FAIR	10/3/2016	3,650	\$16,425,000	503		
2230810	α	ASTORIA BOULEVARD EASTBOUND	278I (BROOKLYN QUEENS EXPRESSWAY WEST LEG)		А		4	STATE	5/22/2015	4.279	FAIR	6/1/2017	8,200	\$36,900,000	401		
2244170	к	ATALNTIC AVENUE SERVICE ROAD EASTBOUND	EAST NEW YORK AVENUE		o		2	STATE	7/28/2015	5.474	GOOD	7/19/2017	3,192	\$14,364,000	305		
2244180	к	ATALNTIC AVENUE SERVICE ROAD WESTBOUND	EAST NEW YORK AVENUE		o		2	STATE	7/28/2015	5.105	GOOD	7/19/2017	5,600	\$25,200,000	305		
2243569	к	ATLANTIC AVENUE	LIRR ATLANTIC AVENUE	L	o		75	STATE	6/8/2014	3.620	FAIR	9/19/2017	135,100	\$607,950,000	316	305	
2243750	к	AVENUE O	BMT SEA BEACH	т	o		1	STATE	8/10/2015	5.706	GOOD	6/21/2017	4,658	\$20,961,000	311		
2243760	к	AVENUE P	BMT SEA BEACH	т	o		1	STATE	8/10/2015	6.140	VGOOD	6/13/2017	5,544	\$24,948,000	311		
2243790	к	AVENUE S	BMT SEA BEACH	т	o		1	STATE	6/26/2015	5.967	GOOD	6/22/2017	5,360	\$24,120,000	315		
2243800	к	AVENUE T	BMT SEA BEACH	т	o		1	STATE	6/26/2015	6.000	GOOD	6/23/2017	5,360	\$24,120,000	311		
2243810	к	AVENUE U	BMT SEA BEACH	т	o		1	STATE	6/20/2014	5.294	GOOD	6/9/2016	5,880	\$26,460,000	315		
2249440	R	BANCROFT AVENUE	SIRT SOUTH SHORE	s	o		3	STATE	9/17/2015	5.393	GOOD	9/5/2017	5,900	\$26,550,000	502		
2241180	в	BARRETTO STREET	AMTRAK - CSX	АХ	o		1	STATE	11/18/2014	5.813	GOOD	11/10/2016	5,313	\$23,908,500	202		
2231290	к	BAY 8TH STREET	BELT SYSTEM - SHORE PARKWAY		А		1	STATE	6/4/2015	5.730	GOOD	5/24/2017	4,950	\$22,275,000	311		
2243740	к	BAY PARKWAY	BMT SEA BEACH	т	0		4	STATE	5/22/2014	4.658	FAIR	5/26/2016	16,800	\$75,600,000	311		
2249400	R	BEACH AVENUE	SIRT SOUTH SHORE	s	o		2	STATE	8/11/2015	5.364	GOOD	8/15/2017	3,700	\$16,650,000	502		
2248230	a	BEACH CHANNEL DRIVE WESTBOUND	BEACH CHANNEL DRIVE EASTBOUND		0		1	STATE	6/15/2015	4.400	FAIR	6/12/2017	3,600	\$16,200,000	484		
2243490	к	BEDFORD AVENUE	LIRR BAY RIDGE	N	o		6	STATE	9/15/2014	5.097	GOOD	9/14/2016	12,000	\$54,000,000	314		
2241840	в	BEDFORD PARK BOULEVARD	METRO NORTH RR HAR	м	o		1	STATE	4/28/2014	4.656	FAIR	5/6/2016	6,400	\$28,800,000	227	207	
2241930	в	BEDFORD PARK BOULEVARD	NYCTA IND YARDS	т	o		4	STATE	10/31/2014	5.347	GOOD	10/21/2016	46,300	\$208,350,000	207		
2249580	R	BELFIELD AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	PED-O		5	СІТҮ	7/28/2017	3.980	FAIR	N/A	400	\$1,800,000	503		
2247140	a	BELL BOULEVARD	LIRR PORT WASHINGTON BRANCH	L	0		1	STATE	10/1/2015	5.610	GOOD	11/7/2017	4,320	\$19,440,000	411		
2231790	ρ	BELMONT PARK NORTH RAMP	BELT SYSTEM - CROSS ISLAND		AR	Р	1	STATE	1/12/2016	4.656	FAIR	N/A	3,400	\$15,300,000	413		
2231770	٥	BELMONT PARK SOUTH RAMP	BELT SYSTEM - CROSS ISLAND		AR	Р	1	STATE	2/22/2016	4.781	FAIR	N/A	3,200	\$14,400,000	413		
2231760	۵	BELT SYSTEM - CROSS ISLAND	DUTCH BROADWAY-115TH AVENUE		А		1	STATE	2/28/2014	4.233	FAIR	3/1/2016	7,300	\$32,850,000	413		
2266770	۵	BELT SYSTEM - CROSS ISLAND	LAURELTON PARKWAY		А		1	STATE	3/7/2014	4.972	FAIR	3/2/2016	9,508	\$42,786,000	413		
Q00002	۵	BELT SYSTEM - CROSS ISLAND	PATH OPPOSITE 88TH ROAD		А		1	СІТҮ	5/12/2017	4.267	FAIR	N/A	1,272	\$5,724,000	413		
2231900	α	BELT SYSTEM - CROSS ISLAND	TOTTEN AVENUE		А		1	STATE	5/12/2014	4.609	FAIR	5/20/2016	4,900	\$22,050,000	407		
2231329	к	BELT SYSTEM - SHORE PARKWAY	26TH AVENUE		А		1	STATE	4/1/2014	4.600	FAIR	4/22/2016	6,700	\$30,150,000	313		

BIN I	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHE R OWN ER	SPA NS	RATING SOURCE	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2231319	к	BELT SYSTEM - SHORE PARKWAY	BAY PARKWAY		А		1	STATE	6/19/2015	4.533	FAIR	6/28/2017	7,200	\$32,400,000	311		
2231249	к	BELT SYSTEM - SHORE PARKWAY	BAY RIDGE AVENUE		А		1	STATE	5/22/2015	6.905	VGOOD	5/7/2016	4,900	\$22,050,000	310		
2231429	к	BELT SYSTEM - SHORE PARKWAY	BEDFORD AVENUE		А		3	STATE	4/23/2014	4.278	FAIR	5/10/2016	12,000	\$54,000,000	315		
2231509	к	BELT SYSTEM - SHORE PARKWAY	FRESH CREEK		WA		3	STATE	11/3/2015	6.577	VGOOD	11/2/2017	40,095	\$180,427,500	356		
2231450	к	BELT SYSTEM - SHORE PARKWAY	GERRITSEN INLET		WA		11	STATE	8/10/2015	3.239	FAIR	10/3/2017	52,000	\$234,000,000	356		
2231479	к	BELT SYSTEM - SHORE PARKWAY	MILL BASIN		WMA		14	STATE	11/9/2015	3.209	FAIR	10/10/2017	73,500	\$330,750,000	318		
2231439	к	BELT SYSTEM - SHORE PARKWAY	NOSTRAND AVENUE		А		3	STATE	3/25/2014	4.264	FAIR	4/19/2016	13,000	\$58,500,000	315		
2231419	к	BELT SYSTEM - SHORE PARKWAY	OCEAN AVENUE		A		3	STATE	3/25/2014	4.306	FAIR	4/18/2016	14,000	\$63,000,000	315		
2231360	к	BELT SYSTEM - SHORE PARKWAY	OCEAN PARKWAY		A		3	STATE	7/16/2014	6.448	VGOOD	7/12/2016	29,637	\$133,366,500	313		
2231499	к	BELT SYSTEM - SHORE PARKWAY	ROCKAWAY PARKWAY		А		1	STATE	11/5/2014	7.000	VGOOD	10/27/2016	10,370	\$46,665,000	356		
2231409	к	BELT SYSTEM - SHORE PARKWAY	SHEEPSHEAD BAY ROAD		A		1	STATE	4/1/2014	4.738	FAIR	4/28/2016	6,500	\$29,250,000	315		
2231482	к	BELT SYSTEM - SHORE PARKWAY EASTBOUND	PAERDEGAT BASIN		WA		5	STATE	11/4/2014	7.000	VGOOD	10/19/2016	82,074	\$369,333,000	318		
2231481	к	BELT SYSTEM - SHORE PARKWAY WESTBOUND	PAERDEGAT BASIN		WA		3	STATE	11/2/2015	6.758	VGOOD	10/19/2017	50,052	\$225,234,000	318		
2249250	R	BETHEL AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	PED-O		12	СІТҮ	7/20/2017	3.526	FAIR	N/A	1,165	\$5,242,500	503		
2243100	к	BEVERLY ROAD	BMT SUBWAY, BRIGHTON	т	o		3	STATE	6/11/2015	4.088	FAIR	7/27/2017	4,200	\$18,900,000	314		
2243900	к	BLAKE AVENUE	LIRR BAY RIDGE	N	ο		3	STATE	9/26/2014	4.927	FAIR	9/30/2016	4,912	\$22,104,000	316		
2248379	Q	BOATHOUSE BRIDGE	AQUACADE LAKE		wo	Ρ	5	STATE	7/21/2015	4.296	FAIR	7/18/2017	6,300	\$28,350,000	481		
2240410	٥	BORDEN AVENUE	DUTCH KILLS		wмо		2	STATE	6/26/2015	4.806	FAIR	7/14/2017	8,400	\$37,800,000	402		
2270180	R	BOROUGH PLACE - RAMP A	STATEN ISLAND RAILWAY	s	o	F	1	STATE	5/9/2014	6.594	VGOOD	5/31/2016	1,870	\$8,415,000	501		
2242110	в	BOSTON ROAD	BRONX RIVER		wo		1	STATE	2/10/2016	4.227	FAIR	N/A	6,200	\$27,900,000	227		
2229579	в	BOSTON ROAD	HUTCHINSON RIVER		wo		14	STATE	5/26/2015	4.042	FAIR	6/30/2017	95,700	\$430,650,000	212		
2242100	в	BOTANICAL GARDEN ROAD	TWIN LAKES		wo	Ρ	1	STATE	2/10/2016	4.833	FAIR	N/A	2,200	\$9,900,000	227		
2247050	٥	BOWNE STREET	LIRR PORT WASHINGTON BRANCH	L	o		1	STATE	9/24/2014	5.451	GOOD	8/8/2016	4,974	\$22,383,000	407		
2231829	Q	BRADDOCK AVENUE	BELT SYSTEM - CROSS ISLAND		А		2	STATE	5/22/2015	4.886	FAIR	8/22/2017	10,600	\$47,700,000	413		
2249730	R	BRIDGE OVER DAM	NORTH END CLOVE LAKE		PED-WO	Ρ	1	СІТҮ	6/8/2016	3.405	FAIR	N/A	1,000	\$4,500,000	501		
2230590	٥	BROADWAY / 37TH AVENUE	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	11/24/2014	5.579	GOOD	10/17/2016	16,000	\$72,000,000	402		
2240137	вм	BROADWAY BRIDGE	HARLEM RIVER	тм	ωмо		3	STATE	12/20/2015	3.806	FAIR	12/6/2016	46,848	\$210,816,000	112	207	208
2242072	в	BRONX BOULEVARD NORTHBOUND	BRONX RIVER (NORTH)		wo		1	STATE	3/27/2014	4.867	FAIR	3/12/2016	1,800	\$8,100,000	212		
2242082	в	BRONX BOULEVARD NORTHBOUND	BRONX RIVER (SOUTH)		wo		1	STATE	3/4/2016	4.467	FAIR	N/A	2,800	\$12,600,000	212		
2242071	в	BRONX BOULEVARD SOUTHBOUND	BRONX RIVER (NORTH)		wo		1	STATE	3/27/2014	4.367	FAIR	3/12/2016	1,800	\$8,100,000	212		

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHE R OWN ER	SPA NS	RATING	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2242081	в	BRONX BOULEVARD SOUTHBOUND	BRONX RIVER (SOUTH)		wo		1	STATE	3/4/2016	4.300	FAIR	N/A	2,800	\$12,600,000	212		
2229560	в	BRONX PELHAM PARKWAY	AMTRAK - CSX	АХ	А		3	STATE	11/12/2014	4.486	FAIR	11/28/2016	24,591	\$110,659,500	211		
2075849	в	BRONX PELHAM PARKWAY	HUTCHINSON RIVER PARKWAY		А		2	STATE	5/8/2014	3.974	FAIR	4/18/2016	17,600	\$79,200,000	210	211	
2065629	в	BRONX RIVER PARKWAY	BOSTON ROAD - BRONX ZOO		А		1	STATE	8/12/2015	5.138	GOOD	8/10/2017	6,300	\$28,350,000	227		
2270250	в	BROOKE AVENUE	CSX TRANS - PORT MORRIS (ABANDONED)		ο		1	STATE	7/17/2015	3.873	FAIR	6/29/2017	21,035	\$94,657,500	201		
2243520	к	BROOKLYN AVENUE	LIRR BAY RIDGE	N	ο		3	STATE	8/4/2015	5.727	GOOD	8/7/2017	4,500	\$20,250,000	318		
2240019	км	BROOKLYN BRIDGE	EAST RIVER		WEO		75	STATE	12/5/2014	3.139	FAIR	11/17/2016	503,788	\$2,267,046,000	103	302	101
2267860	к	BROOKLYN BRIDGE APPROACH	STORAGE (SANDS STREET)		ο		1	STATE	5/23/2014	4.344	FAIR	6/10/2016	6,490	\$29,205,000	302		
2268350	к	BROOKLYN PROMENADE	278I BROOKLYN QUEENS EXPRESSWAY EASTBOUND		PED-A	Ρ	35	СІТҮ	10/6/2017	3.828	FAIR	N/A	46,184	\$207,828,000	302		
2241099	в	BRUCKNER BOULEVARD	CSX TRANS - PORT MORRIS	x	ο		1	STATE	7/16/2014	6.067	VGOOD	7/7/2016	6,700	\$30,150,000	201		
2266540	в	BRUCKNER EXPRESSWAY	BRUCKNER BOULEVARD		А		2	STATE	7/1/2015	4.435	FAIR	6/27/2017	32,900	\$148,050,000	201		
2076929	в	BRUCKNER EXPRESSWAY	CSX - HUNTS POINT	x	А		1	STATE	8/24/2015	4.433	FAIR	8/21/2017	3,800	\$17,100,000	202		
2075352	в	BRUCKNER EXPRESSWAY NORTHBOUND	AMTRAK - CSX	АХ	А		1	STATE	10/30/2014	6.190	VGOOD	10/28/2016	10,900	\$49,050,000	202		
2066672	в	BRUCKNER EXPRESSWAY NORTHBOUND	BRONX RIVER		WA		8	STATE	10/9/2015	4.418	FAIR	10/16/2017	22,300	\$100,350,000	202	209	
2076109	в	BRUCKNER EXPRESSWAY NORTHBOUND SERVICE ROAD	HUTCHINSON RIVER PARKWAY		А		2	STATE	8/13/2015	4.895	FAIR	8/9/2017	7,800	\$35,100,000	210		
1066510	в	BRUCKNER EXPRESSWAY SERVICE ROAD	WESTCHESTER CREEK		WMA		17	STATE	9/18/2015	3.565	FAIR	10/23/2017	54,360	\$244,620,000	209		
2076129	в	BRUCKNER EXPRESSWAY SOUTHBBOUND SERVICE ROAD	HUTCHINSON RIVER PARKWAY		А		2	STATE	1/14/2016	5.105	GOOD	N/A	7,100	\$31,950,000	210		
2075351	в	BRUCKNER EXPRESSWAY SOUTHBOUND	AMTRAK - CSX	АХ	А		1	STATE	10/29/2014	5.698	GOOD	10/27/2016	11,600	\$52,200,000	202		
2066671	в	BRUCKNER EXPRESSWAY SOUTHBOUND	BRONX RIVER		WA		3	STATE	10/7/2015	4.972	FAIR	10/6/2017	12,400	\$55,800,000	202	209	
2241210	в	BRYANT AVENUE	AMTRAK - CSX	АХ	o		1	STATE	3/2/2016	6.559	VGOOD	N/A	5,300	\$23,850,000	202		
2230790	Q	BULOVA AVENUE	278I (BROOKLYN QUEENS EXPRESSWAY WEST LEG)		А		2	STATE	4/4/2014	5.278	GOOD	3/24/2016	3,300	\$14,850,000	401		
2269770	R	BUS STATION ENTRANCE RAMP	SIRT	s	ο	F	19	STATE	10/9/2015	5.431	GOOD	11/3/2017	39,333	\$176,998,500	501		
2269790	R	BUS STATION EXIT RAMP	SIRT	s	o	F	7	STATE	11/4/2014	5.167	GOOD	10/20/2016	28,721	\$129,244,500	501		
2269740	R	BUS STATION NORTH	SIRT - FERRY TERMINAL	s	o	F	12	STATE	11/2/2014	5.600	GOOD	10/21/2016	64,605	\$290,722,500	501		
2269750	R	BUS STATION SOUTH	SIRT - PARKING LOT	s	o	F	12	STATE	11/2/2014	5.280	GOOD	10/21/2016	154,688	\$696,096,000	501		
2247460	Q	CALDWELL AVENUE	CSX TRANSPORT	x	ο		1	STATE	11/10/2014	5.889	GOOD	11/30/2016	2,243	\$10,093,500	405		
2243290	к	CARLTON AVENUE	LIRR ATLANTIC AVENUE	L	ο		4	STATE	7/24/2015	6.694	VGOOD	8/21/2017	15,400	\$69,300,000	302		
2240260	к	CARROLL STREET	GOWANUS CANAL		WMO		2	STATE	9/22/2015	4.931	FAIR	11/7/2017	3,000	\$13,500,000	306		
2243220	к	CARROLL STREET PEDESTRIAN BRIDGE	FRANKLIN SHUTTLE	т	PED-O		3	СІТҮ	7/29/2016	5.127	GOOD	N/A	600	\$2,700,000	309		
2243050	к	CATON AVENUE	BMT SUBWAY, BRIGHTON	т	ο		4	STATE	8/19/2015	4.842	FAIR	7/24/2017	20,800	\$93,600,000	314		

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE	OTHE R OWN ER	SPA NS	RATING	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2249390	R	CEDARVIEW AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	PED-O		5	СІТҮ	7/25/2017	3.912	FAIR	N/A	625	\$2,812,500	503		
2246100	м	CENTER DRIVE	TRANSVERSE ROAD #1		o	Ρ	1	STATE	1/29/2016	4.333	FAIR	N/A	6,000	\$27,000,000	164		
2246050	м	CENTER DRIVE (DRIPROCK ARCH)	PEDESTRIAN OPPOSITE 63RD STREET		o	Ρ	1	STATE	1/13/2016	4.867	FAIR	N/A	1,725	\$7,762,500	164		
2244050	к	CENTER DRIVE (NETHERMEAD ARCHES)	PEDESTRIAN PATH & STREAM		wo	Ρ	3	STATE	4/30/2015	5.000	GOOD	4/24/2017	7,020	\$31,590,000	355		
2246070	м	CENTER DRIVE (PLAYMATES ARCH)	PEDESTRIAN PATH OPPOSITE 65TH STREET		o	Ρ	1	СІТҮ	6/6/2017	4.333	FAIR	N/A	1,129	\$5,080,500	164		
2268480	м	CHAMBERS STREET PEDESTRIAN BRIDGE	ROUTE 9A - WEST STREET		PED-O		10	СІТҮ	6/5/2017	5.391	GOOD	N/A	7,481	\$33,664,500	101		
2249880	R	CHELSEA ROAD	SAWMILL CREEK		wo		1	STATE	5/21/2015	6.633	VGOOD	4/26/2017	2,205	\$9,922,500	502		
2240210	в	CITY ISLAND ROAD	EASTCHESTER BAY		wo		7	STATE	12/11/2015	3.444	FAIR	11/28/2017	19,915	\$89,617,500	228		
2241710	в	CLAREMONT PARKWAY	METRO NORTH RR HAR	м	o		1	STATE	4/17/2014	6.458	VGOOD	4/14/2016	5,950	\$26,775,000	203		
2231940	۵	CLINTONVILLE STREET	BELT SYSTEM - CROSS ISLAND		А		2	STATE	2/1/2016	4.750	FAIR	N/A	7,400	\$33,300,000	407		
2249490	R	CLOVE ROAD	SIRT SOUTH SHORE	s	o		3	STATE	10/16/2014	5.778	GOOD	10/5/2016	5,104	\$22,968,000	502		
2231570	۵	COHANCY STREET	BELT SYSTEM - SOUTHERN PARKWAY		А		2	STATE	4/17/2014	4.395	FAIR	4/11/2016	6,400	\$28,800,000	410		
2230870	к	COLUMBIA HEIGHTS	278I (BROOKLYN QUEENS EXPRESSWAY)		А		1	STATE	8/7/2014	4.450	FAIR	8/21/2016	16,500	\$74,250,000	302		
2241590	в	CONCOURSE VILLAGE AVENUE	METRO NORTH RR HAR	м	o		1	STATE	4/19/2014	3.969	FAIR	4/20/2016	12,077	\$54,346,500	204		
2244460	к	CONDUIT BOULEVARD NORTHBOUND	ATLANTIC AVENUE EASTBOUND		o		1	STATE	10/10/2014	4.833	FAIR	10/20/2016	3,800	\$17,100,000	305		
2231380	к	CONEY ISLAND AVENUE	BELT SYSTEM - SHORE PARKWAY		A		4	STATE	10/9/2015	5.542	GOOD	10/27/2017	19,866	\$89,397,000	313		
2243440	к	CONEY ISLAND AVENUE	LIRR BAY RIDGE	N	0		1	STATE	9/18/2014	5.043	GOOD	9/15/2016	3,231	\$14,539,500	312		
2230390	к	CONGRESS STREET	278I (BROOKLYN QUEENS EXPRESSWAY)		A		2	STATE	3/27/2014	6.029	VGOOD	4/24/2016	5,000	\$22,500,000	306		
2246510	м	CORBIN PLACE OVERPASS	CORBIN PLACE		o	Ρ	1	STATE	1/20/2016	5.133	GOOD	N/A	2,223	\$10,003,500	112		
2232029	м	CORLEARS PARK ROAD	FDR DRIVE		А	Ρ	4	STATE	3/3/2016	4.000	FAIR	N/A	4,100	\$18,450,000	103		
2247130	٥	CORPORAL KENNEDY STREET	LIRR PORT WASHINGTON BRANCH	L	o		1	STATE	10/9/2015	6.157	VGOOD	11/6/2017	3,379	\$15,205,500	411		
2243110	к	CORTELYOU ROAD	BMT SUBWAY, BRIGHTON	т	o		3	STATE	8/17/2015	6.083	VGOOD	7/25/2017	4,810	\$21,645,000	314		
2231880	٥	CROCHERON PARK PEDESTRIAN	BELT SYSTEM - CROSS ISLAND		PED-A	Ρ	9	СІТҮ	6/7/2017	3.800	FAIR	N/A	2,300	\$10,350,000	411		
2243040	к	CROOKE AVENUE	BMT SUBWAY, BRIGHTON	т	o		4	STATE	6/2/2015	4.316	FAIR	7/28/2017	6,000	\$27,000,000	314		
2231340	к	CROPSEY AVENUE	BELT SYSTEM - SHORE PARKWAY		А		2	STATE	7/10/2014	4.639	FAIR	6/24/2016	13,100	\$58,950,000	313		
2240302	к	CROPSEY AVENUE NORTHBOUND	CONEY ISLAND CREEK		wo		3	STATE	6/26/2015	4.718	FAIR	7/26/2017	9,400	\$42,300,000	313		
2240301	к	CROPSEY AVENUE SOUTHBOUND	CONEY ISLAND CREEK		wo		3	STATE	6/26/2015	5.000	GOOD	7/26/2017	9,400	\$42,300,000	313		
2231559	٩	CROSS BAY BOULEVARD	BELT SYSTEM - SHORE PARKWAY		А		4	STATE	5/30/2014	5.083	GOOD	5/19/2016	23,205	\$104,422,500	410		
2248039	٩	CROSS BAY BOULEVARD	NASSAU EXPESSWAY - ROUTE 27		0		2	STATE	5/26/2015	5.958	GOOD	7/31/2017	16,544	\$74,448,000	410		
2242030	в	CROTONA AVENUE	BRONX PELHAM PARKWAY		o		2	STATE	1/20/2016	5.447	GOOD	N/A	7,600	\$34,200,000	206		

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE	OTHE R OWN ER	SPA NS	RATING	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2243230	к	CROWN STREET	FRANKLIN SHUTTLE	т	o		3	STATE	7/29/2015	5.069	GOOD	7/20/2017	4,060	\$18,270,000	309		
2230040	۵	CYPRESS HILLS STREET	JACKIE ROBINSON PARKWAY		А		1	STATE	3/28/2014	4.722	FAIR	3/23/2016	5,000	\$22,500,000	405		
2249160	R	DE HART AVENUE	B&O RR (ABANDONED)	ο	o		4	STATE	4/29/2015	6.389	VGOOD	4/21/2017	6,700	\$30,150,000	501		
2232030	м	DELANCEY STREET PEDESTRIAN BRIDGE	FDR DRIVE		PED-A	Ρ	12	СІТҮ	4/24/2017	4.271	FAIR	N/A	3,390	\$15,255,000	103		
2076640	в	DEPOT PLACE	METRO NORTH RR HUDSON	хм	o		11	STATE	5/12/2015	4.319	FAIR	4/21/2016	26,566	\$119,547,000	204		
2243130	к	DITMAS AVENUE	BMT SUBWAY, BRIGHTON	т	o		1	STATE	8/17/2015	5.723	GOOD	7/25/2017	5,150	\$23,175,000	314		
2243120	к	DORCHESTER ROAD	BMT SUBWAY, BRIGHTON	т	o		1	STATE	6/16/2014	5.863	GOOD	6/17/2016	4,825	\$21,712,500	314		
2266139	۵	DOUGLASTON PARKWAY	BELT SYSTEM - CROSS ISLAND NORTHBOUND		А		1	STATE	3/12/2014	4.653	FAIR	3/3/2016	6,400	\$28,800,000	411		
2266129	۵	DOUGLASTON PARKWAY	BELT SYSTEM - CROSS ISLAND SOUTHBOUND		А		1	STATE	3/10/2014	4.592	FAIR	3/3/2016	4,400	\$19,800,000	411		
2247170	Q	DOUGLASTON PARKWAY	LIRR PORT WASHINGTON BRANCH	L	o		3	STATE	10/1/2014	4.542	FAIR	8/10/2016	6,300	\$28,350,000	411		
2232120	м	E AST 71ST STREET PEDESTRIAN BRIDGE	FDR DRIVE		PED-A	Ρ	19	СІТҮ	1/5/2017	4.761	FAIR	N/A	3,700	\$16,650,000	108		
2242260	в	EAGLE AVENUE	EAST 161ST STREET		o		1	STATE	1/28/2016	5.117	GOOD	N/A	2,800	\$12,600,000	201	203	
2232110	м	EAST 63RD STREET PEDESTRIAN BRIDGE	FDR DRIVE		PED-A	Ρ	11	UNIVERSIT Y	11/29/2017	5.410	GOOD	N/A	2,100	\$9,450,000	108		
2232180	м	EAST 103RD STREET PEDESTRIAN BRIDGE	FDR DRIVE		PED-A		18	СІТҮ	12/21/2016	4.683	FAIR	N/A	6,807	\$30,631,500	111		
2233020	м	EAST 10TH STREET PEDESTRIAN BRIDGE	FDR DRIVE		PED-A	Ρ	21	СІТҮ	4/24/2017	4.596	FAIR	N/A	2,754	\$12,393,000	103		
2232190	м	EAST 111TH STREET PEDESTRIAN BRIDGE	FDR DRIVE		PED-A	Ρ	9	СІТҮ	10/8/2016	4.319	FAIR	N/A	4,254	\$19,143,000	111		
2232200	м	EAST 120TH STREET PEDESTRIAN BRIDGE	FDR DRIVE		PED-A	Ρ	18	СІТҮ	11/19/2017	4.143	FAIR	N/A	3,978	\$17,901,000	111		
2246620	м	EAST 128TH STREET PEDESTRIAN BRIDGE	3RD AVENUE BRIDGE APPROACH		PED-O		18	СІТҮ	8/10/2017	3.816	FAIR	N/A	2,300	\$10,350,000	111		
2246990	м	EAST 129TH STREET PEDESTRIAN BRIDGE	3RD AVENUE BRIDGE RAMP		PED-O	Ρ	5	СІТҮ	10/6/2016	4.524	FAIR	N/A	1,046	\$4,707,000	111		
2231390	к	EAST 12TH STREET	BELT SYSTEM - SHORE PARKWAY		А		4	STATE	7/7/2014	4.542	FAIR	6/22/2016	17,200	\$77,400,000	315		
2233080	к	EAST 14 STREET PEDESTRIAN BRIDGE	BELT SYSTEM - SHORE PARKWAY		PED-A		14	СІТҮ	8/2/2016	4.210	FAIR	N/A	4,700	\$21,150,000	315		
2241550	в	EAST 144TH STREET	METRO NORTH RR HAR	м	0		2	STATE	8/28/2015	5.847	GOOD	9/25/2017	8,290	\$37,305,000	201		
2241129	в	EAST 149TH STREET	AMTRAK - CSX	АХ	o		2	STATE	11/17/2014	4.592	FAIR	11/2/2016	18,258	\$82,161,000	201	202	
2241560	в	EAST 149TH STREET	METRO NORTH RR HAR	м	o		8	STATE	5/5/2014	4.625	FAIR	5/3/2016	27,900	\$125,550,000	201	204	
2241050	в	EAST 149TH STREET/JACKSON AVENUE	CSX PORT MORRIS - (ABANDONED)		0		1	STATE	5/12/2014	4.817	FAIR	4/29/2016	65,000	\$292,500,000	201		
2243450	к	EAST 14TH STREET	LIRR BAY RIDGE	N	0		1	STATE	9/17/2014	4.809	FAIR	9/15/2016	1,775	\$7,987,500	314		
2270030	в	EAST 156TH STREET	ACCESS TO HOUSING		o	ED	16	STATE	11/13/2014	3.493	FAIR	11/11/2016	50,830	\$228,735,000	204		
2241010	в	EAST 156TH STREET	CSX PORT MORRIS - (ABANDONED)		o		1	STATE	5/9/2014	4.612	FAIR	4/19/2016	2,400	\$10,800,000	201		
2241600	в	EAST 158TH STREET	METRO NORTH RR HAR	м	0		1	STATE	8/25/2015	5.200	GOOD	9/26/2017	3,400	\$15,300,000	204		
2243460	к	EAST 15TH STREET PEDESTRIAN BRIDGE	LIRR BAY RIDGE	N	PED-O		3	СІТҮ	8/15/2017	5.479	GOOD	N/A	900	\$4,050,000	314		

	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHE R OWN ER	SPA NS	RATING SOURCE	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2241020	в	EAST 161ST STREET	CSX PORT MORRIS - (ABANDONED)		ο		1	STATE	3/3/2016	5.900	GOOD	N/A	12,800	\$57,600,000	203		
2241610	в	EAST 161ST STREET	METRO NORTH RR HAR	м	o		1	STATE	9/2/2015	5.050	GOOD	9/25/2017	6,600	\$29,700,000	204	203	
2241620	в	EAST 162ND STREET	METRO NORTH RR HAR	м	o		1	STATE	4/26/2014	4.781	FAIR	5/4/2016	4,700	\$21,150,000	203		
2241030	в	EAST 163RD STREET	CSX PORT MORRIS - (ABANDONED)		o		1	STATE	2/9/2016	4.815	FAIR	N/A	3,200	\$14,400,000	203		
2241630	в	EAST 165TH STREET	METRO NORTH RR HAR	м	ο		1	STATE	4/26/2014	4.300	FAIR	5/17/2016	16,400	\$73,800,000	203		
2241650	в	EAST 167TH STREET	METRO NORTH RR HAR	м	o		1	STATE	4/21/2014	5.510	GOOD	4/21/2016	3,363	\$15,133,500	203		
2241660	в	EAST 168TH STREET	METRO NORTH RR HAR	м	ο		1	STATE	4/22/2014	4.641	FAIR	4/22/2016	4,800	\$21,600,000	203		
2241670	в	EAST 169TH STREET	METRO NORTH RR HAR	м	ο		1	STATE	4/22/2014	4.188	FAIR	4/29/2016	3,300	\$14,850,000	203		
2241680	в	EAST 170TH STREET	METRO NORTH RR HAR	м	o		1	STATE	4/22/2014	6.333	VGOOD	4/26/2016	3,150	\$14,175,000	203		
2241720	в	EAST 173RD STREET	METRO NORTH RR HAR	м	ο		1	STATE	4/17/2014	4.875	FAIR	4/15/2016	3,000	\$13,500,000	203		
2066720	в	EAST 174TH STREET	SHERIDAN EXPRESSWAY/AMTRAK	А	А		13	STATE	7/29/2014	3.986	FAIR	8/11/2016	35,573	\$160,078,500	209	203	
2241740	в	EAST 175TH STREET	METRO NORTH RR HAR	м	o		1	STATE	4/14/2014	3.875	FAIR	4/12/2016	3,600	\$16,200,000	206		
2241269	в	EAST 177TH STREET	AMTRAK - CSX	АХ	ο		3	STATE	7/29/2014	5.278	GOOD	8/4/2016	16,606	\$74,727,000	206		
2241770	в	EAST 178TH STREET PEDESTRIAN BRIDGE	METRO NORTH RR HAR	м	PED-0		1	СІТҮ	2/13/2017	4.921	FAIR	N/A	731	\$3,289,500	206		
2241780	в	EAST 179TH STREET PEDESTRIAN BRIDGE	METRO NORTH RR HAR	м	PED-0		6	СІТҮ	2/13/2017	5.311	GOOD	N/A	1,011	\$4,549,500	206		
2242400	в	EAST 180TH STREET	BRONX RIVER		wo		1	STATE	9/26/2014	4.810	FAIR	9/6/2016	4,500	\$20,250,000	206	227	
2241790	в	EAST 180TH STREET	METRO NORTH RR HAR	м	ο		1	STATE	4/24/2104	3.844	FAIR	5/13/2016	5,000	\$22,500,000	206		
2241800	в	EAST 183RD STREET	METRO NORTH RR HAR	м	ο		1	STATE	4/24/2104	3.953	FAIR	5/14/2016	4,080	\$18,360,000	206		
2241820	в	EAST 187TH STREET	METRO NORTH RR HAR	м	o		1	STATE	4/23/2014	4.344	FAIR	4/27/2016	3,800	\$17,100,000	206		
2241810	в	EAST 188TH STREET	METRO NORTH RR HAR	м	ο		1	STATE	4/16/2014	4.094	FAIR	4/13/2016	5,300	\$23,850,000	206		
2243080	к	EAST 18TH STREET - CHURCH AVENUE	BMT SUBWAY, BRIGHTON	т	o		4	STATE	8/19/2015	4.545	FAIR	7/24/2017	18,200	\$81,900,000	314		
2242459	в	EAST 233RD STREET	BRONX RIVER		wo		1	STATE	2/9/2016	4.233	FAIR	N/A	7,000	\$31,500,000	212		
2242460	в	EAST 233RD STREET	ENTRANCE ROAD BRONX RIVER PARKWAY		o		1	STATE	1/7/2016	4.900	FAIR	N/A	5,300	\$23,850,000	212		
2241870	в	EAST 233RD STREET	METRO NORTH RR HAR	м	o		1	STATE	4/28/2014	4.902	FAIR	5/10/2016	7,664	\$34,488,000	212	207	
2241890	в	EAST 241ST STREET	BRP, METRO NORTH HAR	м	wo		28	STATE	10/23/2015	4.639	FAIR	11/9/2017	49,500	\$222,750,000	212		
2232070	м	EAST 25TH STREET PEDESTRIAN BRIDGE	FDR DRIVE		PED-A		3	СІТҮ	4/24/2017	4.600	FAIR	N/A	1,700	\$7,650,000	106		
2243420	к	EAST 3RD STREET	LIRR BAY RIDGE	N	o		1	STATE	8/5/2015	6.517	VGOOD	8/8/2017	1,840	\$8,280,000	312		
2232100	м	EAST 51ST STREET PEDESTRIAN BRIDGE	FDR DRIVE		PED-A	Ρ	6	СІТҮ	6/18/2017	4.067	FAIR	N/A	2,800	\$12,600,000	106		
2233040	м	EAST 60TH STREET	FDR DRIVE		A	Ρ	17	STATE	7/22/2015	4.972	FAIR	8/4/2017	24,480	\$110,160,000	108		
2246030	м	EAST 62ND STREET PEDESTRIAN BRIDGE (GAPSTOW BRIDGE)	THE POND		PED-O	Ρ	1	СІТҮ	6/6/2016	4.241	FAIR	N/A	1,400	\$6,300,000	164		

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2232050	м	EAST 6TH SREETT PEDESTRIAN BRIDGE	FDR DRIVE		PED-A	Ρ	19	СІТҮ	7/12/2017	4.093	FAIR	N/A	2,200	\$9,900,000	103		
2246450	м	EAST 77TH STREET PEDESTRIAN BRIDGE (GLADE ARCH)	PEDESTRIAN PATH OPPOSITE EAST 77TH STREET		PED-O	Ρ	1	СІТҮ	4/7/2017	4.138	FAIR	N/A	5,000	\$22,500,000	164		
2232140	м	EAST 78TH STREET PEDESTRIAN BRIDGE	FDR DRIVE		PED-A	Ρ	13	СІТҮ	6/18/2017	6.653	VGOOD	N/A	5,226	\$23,517,000	108		
2269820	м	EAST 81ST STREET PEDESTRIAN BRIDGE	FDR DRIVE NORTHBOUND		PED-A	Ρ	3	СІТҮ	6/8/2014	3.439	FAIR	N/A	600	\$2,700,000	108		
2246380		EAST 86TH STREET PEDESTRIAN BRIDGE (SOUTHEAST RESERVOIR BRIDGE)	BRIDLE PATH		PED-O	Ρ	1	СІТҮ	11/2/2017	4.852	FAIR	N/A	700	\$3,150,000	164		
2245319	м	EAST 97TH STREET	AMTRAK 30 STREET BRANCH	м	о		1	STATE	12/17/2014	4.647	FAIR	11/29/2016	3,200	\$14,400,000	111		
2244030	к	EAST DRIVE	BRIDLE PATH NEAR ZOO		o	Ρ	1	STATE	4/28/2015	4.878	FAIR	4/20/2017	2,000	\$9,000,000	355		
2246110	м	EAST DRIVE	TRANSVERSE ROAD #1		o	Ρ	1	STATE	3/19/2014	4.667	FAIR	4/11/2016	6,000	\$27,000,000	164		
2246230	м	EAST DRIVE	TRANSVERSE ROAD #2		o	Ρ	1	STATE	3/11/2014	4.600	FAIR	3/31/2016	5,080	\$22,860,000	164		
2246250	м	EAST DRIVE	TRANSVERSE ROAD #3		o	Ρ	1	STATE	1/20/2016	4.433	FAIR	N/A	4,500	\$20,250,000	164		
2246270	м	EAST DRIVE	TRANSVERSE ROAD #4		o	Ρ	1	STATE	3/20/2014	4.100	FAIR	4/13/2016	7,000	\$31,500,000	164		
2244040	к	EAST DRIVE (EAST WOOD ARCH)	PEDESTRIAN PATH NEAR CENTER DRIVE		o	Ρ	1	СІТҮ	7/19/2017	3.933	FAIR	N/A	1,066	\$4,797,000	355		
2244010	к	EAST DRIVE (ENDALE ARCH)	PEDESTRIAN PATH NEAR GRAND ARMY PLAZA		o	Ρ	1	СІТҮ	5/23/2016	4.400	FAIR	N/A	1,533	\$6,898,500	355		
2246069	м	EAST DRIVE (GREEN GAP ARCH)	PEDESTRIAN PATH BETWEEN 63RD & 64TH STREETS		o	Ρ	1	STATE	1/15/2016	4.433	FAIR	N/A	2,075	\$9,337,500	164		
2246350	м	EAST DRIVE (GREYWACKE ARCH)	PEDESTRIAN PATH OPPOSITE EAST 80TH STREET		o	Ρ	1	СІТҮ	5/4/2017	3.733	FAIR	N/A	1,266	\$5,697,000	164		
2246470	м	EAST DRIVE (HUDDLESTONE ARCH)	THE LOCH		wo	Ρ	1	STATE	1/22/2016	4.500	FAIR	N/A	1,100	\$4,950,000	164		
2246040	м	EAST DRIVE (INSCOPE ARCH)	PEDESTRIAN PATH OPPOSITE EAST 62ND STREET		ο	Ρ	1	СІТҮ	4/21/2017	4.400	FAIR	N/A	1,515	\$6,817,500	164		
2246170	м	EAST DRIVE (TREFOIL ARCH)	PEDESTRIAN PATH OPPOSITE EAST 73RD STREET		о	Ρ	1	STATE	1/19/2016	5.056	GOOD	N/A	1,900	\$8,550,000	164		
2246130	м	EAST DRIVE (WILLOWDELL ARCH)	PEDESTRIAN PATH OPPOSITE EAST 67TH STREET		ο	Ρ	1	СІТҮ	4/14/2017	3.500	FAIR	N/A	666	\$2,997,000	164		
2249720	R	EAST FOOTBRIDGE	CLOVE LAKE		PED-WO	Ρ	2	СІТҮ	6/8/2016	4.143	FAIR	N/A	900	\$4,050,000	501		
2242350	в	EAST FORDHAM RD	GRAND CONCOURSE		ο		1	STATE	2/10/2016	4.700	FAIR	N/A	10,300	\$46,350,000	205	207	
2242010	в	EAST FORDHAM ROAD	BRONX RIVER		wo		1	STATE	3/5/2016	5.267	GOOD	N/A	9,360	\$42,120,000	227		
2241270	в	EAST TREMONT AVENUE	AMTRAK - CSX	АХ	о		2	STATE	10/31/2014	5.153	GOOD	11/8/2016	22,300	\$100,350,000	209	211	
2242149	в	EAST TREMONT AVENUE	BRONX RIVER		wo		2	STATE	5/6/2015	4.361	FAIR	5/30/2017	12,900	\$58,050,000	206		
2075820	в	EAST TREMONT AVENUE	HUTCHINSON RIVER PARKWAY		А		2	STATE	10/20/2015	4.528	FAIR	10/3/2017	10,200	\$45,900,000	210		
2241760	в	EAST TREMONT AVENUE	METRO NORTH RR HAR	м	ο		1	STATE	8/29/2015	6.350	VGOOD	9/25/2017	8,424	\$37,908,000	206		
2241900	в	EASTCHESTER ROAD	NYCTA-DYRE AVE LINE	т	о		3	STATE	10/28/2014	4.472	FAIR	10/19/2016	13,500	\$60,750,000	212		
2243279	к	EASTERN PARKWAY	FRANKLIN SHUTTLE	т	о		1	STATE	6/27/2014	4.833	FAIR	7/22/2016	7,700	\$34,650,000	309	308	
2247470	٩	ELIOT AVENUE	CSX TRANSPORT	x	ο		1	STATE	9/21/2015	4.972	FAIR	10/6/2017	2,960	\$13,320,000	405		
2247550	۵	ELIOT AVENUE	LIRR MONTAUK DIVISION	L	o		2	STATE	9/24/2015	5.627	GOOD	11/1/2017	9,550	\$42,975,000	405		

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2248160	a	ELIOT AVENUE	QUEENS BOULEVARD		o		2	STATE	7/17/2014	4.804	FAIR	7/12/2016	13,785	\$62,032,500	406		
2269600	к	ERSKINE STREET	BELT SYSTEM - SHORE PARKWAY		А		1	STATE	8/20/2014	5.938	GOOD	8/12/2016	8,258	\$37,161,000	305		
2241200	в	FAILE STREET	AMTRAK - CSX	АХ	o		1	STATE	11/19/2014	5.578	GOOD	11/11/2016	6,208	\$27,936,000	202		
2231620	۵	FARMERS BOULEVARD	BELT SYSTEM - SOUTHERN PARKWAY		А		2	STATE	4/25/2014	4.477	FAIR	4/20/2016	6,400	\$28,800,000	413		
2268650	м	FDR DRIVE NORTHBOUND EAST 42ND TO EAST 49TH STRET	EAST RIVER SHORELINE		А		119	STATE	10/9/2015	3.836	FAIR	10/31/2017	30,767	\$138,451,500	106		
223201A	м	FDR DRIVE NORTHBOUND OFF RAMP	FDR DRIVE & SOUTH STREET		AR		17	STATE	7/23/2014	4.493	FAIR	7/22/2016	23,373	\$105,178,500	101		
223204A	м	FDR DRIVE NORTHBOUND RAMP TO HOUSTON STREET	RELIEF		AR		4	STATE	1/19/2016	4.929	FAIR	N/A	6,150	\$27,675,000	103		
2233038	м	FDR DRIVE SOUTHBOUND	FDR DRIVE NORTHBOUND / EAST 62ND STREET		А		34	STATE	11/25/2014	6.563	VGOOD	11/22/2016	58,700	\$264,150,000	106	108	
223201C	м	FDR DRIVE SOUTHBOUND OFF RAMP	SOUTH STREET		AR		8	STATE	3/3/2016	5.507	GOOD	N/A	36,700	\$165,150,000	103		
2229520	в	FIELDSTON ROAD	HENRY HUDSON PARKWAY		А		1	STATE	7/10/2015	4.900	FAIR	6/26/2017	6,600	\$29,700,000	208		
2231460	к	FLATBUSH AVENUE	BELT SYSTEM - SHORE PARKWAY		А		2	STATE	10/14/2015	6.088	VGOOD	10/30/2017	14,058	\$63,261,000	356		
2243260	к	FLATBUSH AVENUE	FRANKLIN SHUTTLE	т	o		2	STATE	6/23/2014	4.961	FAIR	7/1/2016	11,300	\$50,850,000	309		
2243510	к	FLATBUSH AVENUE	LIRR BAY RIDGE	N	o		2	STATE	8/4/2015	4.651	FAIR	8/7/2017	5,900	\$26,550,000	318		
2244440	к	FLEET WALK PEDESTRIAN BRIDGE	NAVY STREET		PED-O		1	СІТҮ	8/16/2017	3.919	FAIR	N/A	620	\$2,790,000	302		
2248240	٥	FLUSHING AVENUE SERVICE ROAD	FLUSHING AVENUE		o		1	STATE	7/2/2015	5.250	GOOD	7/7/2017	2,940	\$13,230,000	405		
2248090	D	FLUSHING MEADOW PARK PEDESTRIAN	COLLEGE POINT BOULEVARD		PED-O	P	3	СІТҮ	1/4/2017	4.694	FAIR	N/A	8,400	\$37,800,000	407		
2248130	D	FLUSHING MEADOW PARK PEDESTRIAN	WILLOW LAKE & 76TH ROAD		PED-WO	Ρ	4	СІТҮ	4/20/2002	1.000	CLOSED	N/A	1,891	\$8,509,500	481		
2248140	ρ	FLUSHING MEADOW PARK ROAD	STREAM NORTH OF LONG ISLAND EXPRESSWAY		wo	Ρ	5	STATE	7/22/2015	4.333	FAIR	7/20/2017	4,100	\$18,450,000	481		
2249780	R	FOOTBRIDGE	BROOKS LAKE DAM		PED-WO	Ρ	1	СІТҮ	6/1/2017	4.033	FAIR	N/A	800	\$3,600,000	501		
2242120	в	FOOTBRIDGE NORTH OF ROUTE 1 (HESTER BRIDGE)	BRONX RIVER		PED-WO	Ρ	1	СІТҮ	12/18/2017	3.630	FAIR	N/A	1,900	\$8,550,000	227		
2249790	R	FOOTBRIDGE SOUTH OF FOREST AVENUE	STREAM IN PARK		PED-WO	P	3	СІТҮ	11/8/2017	4.953	FAIR	N/A	700	\$3,150,000	501		
2241839	в	FORDHAM ROAD - EAST 189TH STREET	METRO NORTH RR HAR	м	0		1	STATE	8/27/2015	6.300	VGOOD	9/25/2017	43,157	\$194,206,500	206	207	
2249800	R	FOREST AVENUE	CLOVE LAKES PARK STREAM		wo	Ρ	1	STATE	10/29/2015	4.300	FAIR	11/6/2017	1,600	\$7,200,000	501		
2247660	٥	FOREST PARK DRIVE	ABANDONED LIRR		o	Ρ	6	STATE	4/28/2015	4.302	FAIR	7/11/2017	10,011	\$45,049,500	409		
2247590	٥	FOREST PARK DRIVE	LIRR MONTAUK DIV	L	o	Ρ	5	STATE	10/8/2015	5.158	GOOD	10/31/2017	6,000	\$27,000,000	409		
2248340	D	FOREST PARK DRIVE	MYRTLE AVENUE		o	Ρ	3	STATE	6/1/2015	4.984	FAIR	7/26/2017	5,100	\$22,950,000	409		
2243620	к	FORT HAMILTON PARKWAY	LIRR & SEA BEACH	NT	o		3	STATE	6/19/2014	4.729	FAIR	7/11/2016	14,800	\$66,600,000	310		
2246500	м	FORT TRYON PLACE	ENTRANCE FROM RIVERSIDE DRIVE		o	Ρ	1	STATE	3/25/2014	4.200	FAIR	3/29/2016	3,280	\$14,760,000	112		
2243150	к	FOSTER AVENUE	BMT SUBWAY, BRIGHTON	т	0		1	STATE	6/2/2015	4.283	FAIR	8/4/2017	3,000	\$13,500,000	314		
2231930	۵	FRANCIS LEWIS BOULEVARD	BELT SYSTEM - CROSS ISLAND		А		3	STATE	1/22/2016	5.182	GOOD	N/A	9,100	\$40,950,000	407		

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHE R OWN ER	SPA NS	RATING SOURCE	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2231690	۵	FRANCIS LEWIS BOULEVARD	BELT SYSTEM - LAURELTON PARKWAY EASTBOUND		А		1	STATE	3/17/2014	5.033	GOOD	3/10/2016	6,000	\$27,000,000	413		
2231700	۵	FRANCIS LEWIS BOULEVARD	BELT SYSTEM - LAURELTON PARKWAY WESTBOUND		А		1	STATE	3/18/2014	4.700	FAIR	3/10/2016	6,000	\$27,000,000	413		
2267199	۵	FRANCIS LEWIS BOULEVARD	CUNNINGHAM PARK ROAD		o		1	STATE	5/14/2015	5.300	GOOD	5/17/2017	7,085	\$31,882,500	408		
2249450	R	FREMONT AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	PED-O		3	СІТҮ	7/26/2017	4.164	FAIR	N/A	800	\$3,600,000	502		
224006A	в	FROM BRUCKNER BOULEVARD	PARKING AREA		OR		5	STATE	9/1/2015	6.310	VGOOD	9/1/2017	14,037	\$63,166,500	201		
226771C	м	GARAGE RAMP TO 79TH STREET	79TH STREET BOAT BASIN GARAGE		AR	Ρ	21	STATE	5/12/2015	4.435	FAIR	5/17/2017	9,095	\$40,927,500	107		
2241420	в	GERARD AVENUE	METRO NORTH RR HUD	м	o		1	STATE	5/5/2014	5.422	GOOD	4/23/2016	5,063	\$22,783,500	204		
2249360	R	GIFFORDS LANE	SIRT SOUTH SHORE	s	o		1	STATE	10/15/2014	5.625	GOOD	10/4/2016	3,042	\$13,689,000	503		
2243860	к	GLENMORE AVENUE	LIRR BAY RIDGE	N	o		2	STATE	9/22/2014	6.456	VGOOD	9/29/2016	5,616	\$25,272,000	316		
2065940	۵	GRAND AVENUE	495i (LONG ISLAND EXPRESSWAY)		А		2	STATE	11/11/2014	4.861	FAIR	10/18/2016	12,850	\$57,825,000	405		
2247440	۵	GRAND AVENUE	CSX TRANSPORT	x	o		1	STATE	9/21/2015	6.183	VGOOD	10/5/2017	3,280	\$14,760,000	405		
2247180	۵	GRAND AVENUE	LIRR MAIN LINE	L	o		3	STATE	10/1/2014	4.396	FAIR	8/12/2016	7,415	\$33,367,500	404		
2242370	в	GRAND CONCOURSE	BEDFORD PARK BOULEVARD		o		1	STATE	2/8/2016	4.608	FAIR	N/A	8,418	\$37,881,000	207		
2242299	в	GRAND CONCOURSE	EAST 138TH STREET		o		1	STATE	6/12/2015	4.733	FAIR	6/8/2017	9,500	\$42,750,000	201		
2242259	в	GRAND CONCOURSE	EAST 161ST STREET		o		1	STATE	6/30/2014	6.333	VGOOD	6/28/2016	27,017	\$121,576,500	204		
2242280	в	GRAND CONCOURSE	EAST 167TH STREET		o		2	STATE	7/2/2014	4.754	FAIR	6/24/2016	42,900	\$193,050,000	204		
2242300	в	GRAND CONCOURSE	EAST 170TH STREET		o		2	STATE	3/2/2016	4.754	FAIR	N/A	39,300	\$176,850,000	204		
2242319	в	GRAND CONCOURSE	EAST 174TH STREET	т	o		1	STATE	2/29/2016	3.933	FAIR	N/A	14,900	\$67,050,000	204		
2242329	в	GRAND CONCOURSE	EAST 175TH STREET	т	o		1	STATE	6/11/2014	4.833	FAIR	6/10/2016	11,900	\$53,550,000	205		
2242380	в	GRAND CONCOURSE	EAST 204TH STREET		o		1	STATE	9/2/2015	5.406	GOOD	8/29/2017	9,272	\$41,724,000	207		
2242360	в	GRAND CONCOURSE	EAST BURNSIDE AVENUE		o		2	STATE	6/30/2014	4.265	FAIR	7/1/2016	8,400	\$37,800,000	205		
2242340	в	GRAND CONCOURSE	EAST KINGSBRIDGE ROAD		o		2	STATE	6/12/2014	4.714	FAIR	6/10/2016	18,285	\$82,282,500	207		
2242330	в	GRAND CONCOURSE	EAST TREMONT AVENUE		o		1	STATE	9/3/2015	5.583	GOOD	8/30/2017	11,700	\$52,650,000	205		
2241409	в	GRAND CONCOURSE	METRO NORTH RR HUD	МТ	o		1	STATE	6/23/2015	3.688	FAIR	11/27/2017	14,300	\$64,350,000	204		
2240390	κο	GRAND STREET BRIDGE	NEWTOWN CREEK		WMO		2	STATE	10/7/2015	4.014	FAIR	11/1/2017	5,100	\$22,950,000	301	405	
2249100	R	GRANITE AVENUE	B&O RR (ABANDONED)	o	o		4	STATE	2/3/2016	5.966	GOOD	N/A	7,300	\$32,850,000	501		
2249370	R	GREAVES AVENUE	SIRT SOUTH SHORE	s	0		1	STATE	8/19/2015	6.533	VGOOD	8/24/2017	2,650	\$11,925,000	503		
2240370	κo	GREENPOINT AVENUE BRIDGE	NEWTOWN CREEK	L	ωмо		12	STATE	7/31/2015	5.083	GOOD	8/8/2017	76,106	\$342,477,000	301	402	
2231370	к	GUIDER AVENUE RAMP TO BELT SYSTEM - SHORE PARKWAY	BELT SYSTEM - SHORE PARKWAY		А		4	STATE	9/23/2014	6.778	VGOOD	9/22/2016	10,818	\$48,681,000	313		
2242430	в	GUN HILL ROAD	BRONX BOULEVARD		o		4	STATE	2/2/2016	4.947	FAIR	N/A	9,400	\$42,300,000	212		

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2242440	в	GUN HILL ROAD	BRONX RIVER		wo		1	STATE	1/12/2016	4.867	FAIR	N/A	8,700	\$39,150,000	212		
2241860	в	GUN HILL ROAD	METRO NORTH RR HAR	м	o		1	STATE	4/29/2014	6.531	VGOOD	5/11/2016	9,128	\$41,076,000	212		
2241910	в	GUN HILL ROAD	NYCTA-DYRE AVE LINE	т	o		1	STATE	10/28/2014	5.516	GOOD	10/19/2016	7,500	\$33,750,000	211	212	
2231610	Q	GUY R. BREWER BOULEVARD	BELT SYSTEM - SOUTHERN PARKWAY		А		4	STATE	6/3/2015	6.028	VGOOD	8/2/2017	12,342	\$55,539,000	413		
2249380	R	GUYON AVENUE	SIRT SOUTH SHORE	s	o		3	STATE	9/23/2015	4.672	FAIR	9/12/2017	6,900	\$31,050,000	503		
2240231	к	HAMILTON AVE BRIDGE	GOWANUS CANAL		₩МО		3	STATE	9/9/2014	5.472	GOOD	8/19/2016	7,300	\$32,850,000	307	306	
2240232	к	HAMILTON AVENUE BRIDGE	GOWANUS CANAL		wмо		3	STATE	8/7/2015	5.361	GOOD	8/25/2017	8,611	\$38,749,500	306		
2065930	۵	HAMILTON PLACE	495I (LONG ISLAND EXPRESSWAY)		А		2	STATE	2/20/3014	5.528	GOOD	2/2/2016	11,111	\$49,999,500	405		
2249520	R	HANNAH STREET	SIRT SOUTH SHORE	s	o		10	STATE	10/16/2015	4.627	FAIR	10/10/2016	13,360	\$60,120,000	501		
2249180	R	HARBOR ROAD	CONRAIL - EX B&O RR	с	o		4	STATE	9/12/2015	6.000	GOOD	10/7/2017	5,778	\$26,001,000	501		
2233059	м	HARLEM RIVER DRIVE	EAST 127TH STREET RAMP TO/FROM HARLEM RIVER DRIVE NORTHBOUND		А		11	STATE	6/30/2015	3.493	FAIR	6/27/2017	51,000	\$229,500,000	111		
2267240	м	HARLEM RIVER DRIVE RAMP TO GEORGE WASHINGTON BRIDGE	HARLEM RIVER DRIVE SOUTHBOUND		А		55	STATE	10/6/2015	2.986	POOR	11/17/2016	122,900	\$553,050,000	112		
2231780	Q	HEMPSTEAD AVENUE	BELT SYSTEM - CROSS ISLAND		A		2	STATE	1/20/2016	4.081	FAIR	N/A	14,200	\$63,900,000	413		
2266149	Q	HEMPSTEAD AVENUE	BELT SYSTEM - CROSS ISLAND RAMP NORTHBOUND		А		2	STATE	3/12/2014	4.190	FAIR	3/4/2016	9,500	\$42,750,000	413		
2267250	м	HENRY HUDSON PARKWAY	AMTRAK - W96TH ST	А	А		55	STATE	11/1/2014	3.548	FAIR	11/16/2016	40,000	\$180,000,000	107		
2229530	в	HENRY HUDSON PARKWAY	BROADWAY		A		1	STATE	7/27/2015	4.830	FAIR	8/1/2017	7,500	\$33,750,000	208		
2229440	в	HENRY HUDSON PARKWAY	KAPPOCK STREET		A		1	STATE	7/7/2015	5.069	GOOD	6/28/2017	3,900	\$17,550,000	208		
2266229	м	HENRY HUDSON PARKWAY	PEDESTRIAN PATH AT WEST 148TH STREET		A		1	STATE	1/28/2016	5.000	GOOD	N/A	1,840	\$8,280,000	109		
2229309	м	HENRY HUDSON PARKWAY	RIVERSIDE PARK		А		1	STATE	1/11/2016	5.267	GOOD	N/A	2,172	\$9,774,000	107		
2229349	м	HENRY HUDSON PARKWAY	WEST 158TH STREET	A	А		44	STATE	10/10/2014	4.155	FAIR	10/19/2016	140,000	\$630,000,000	109	112	
2266230	м	HENRY HUDSON PARKWAY NORTHBOUND	PEDESTRIAN PATH INWOOD PARK		A		1	STATE	1/19/2016	5.000	GOOD	N/A	800	\$3,600,000	112		
2229322	м	HENRY HUDSON PARKWAY NORTHBOUND	RAMP FROM WEST 96TH STREET		A		1	STATE	1/29/2016	5.300	GOOD	N/A	2,000	\$9,000,000	107		
2229312	м	HENRY HUDSON PARKWAY NORTHBOUND	RAMP TO WEST 96TH STREET		A		1	STATE	1/27/2016	4.364	FAIR	N/A	2,000	\$9,000,000	107		
M00004	м	HENRY HUDSON PARKWAY ON/OFF RAMP-79TH STREET NORTH SIDE	PEDESTRIAN PATH NORTH OF 79TH STREET		A		1	СІТҮ	6/6/2017	4.533	FAIR	N/A	846	\$3,807,000	107		
M00003	м	HENRY HUDSON PARKWAY ON/OFF RAMP-79TH STREET SOUTH SIDE	PEDESTRIAN PATH SOUTH OF 79TH STREET		A		1	CITY	5/2/2017	4.500	FAIR	N/A	846	\$3,807,000	107		
2266240	м	HENRY HUDSON PARKWAY SOUTHBOUND	PEDESTRIAN PATH INWOOD PARK		A		1	STATE	1/19/2016	5.526	GOOD	N/A	1,100	\$4,950,000	112		
2229321	м	HENRY HUDSON PARKWAY SOUTHBOUND	RAMP FROM WEST 96TH STREET		A		1	STATE	1/29/2016	5.133	GOOD	N/A	2,000	\$9,000,000	107		
2229311	м	HENRY HUDSON PARKWAY SOUTHBOUND	RAMP TO WEST 96TH STREET		A		1	STATE	1/27/2016	4.273	FAIR	1/27/2016	2,000	\$9,000,000	107		
2229289	м	HENRY HUDSON PARKWAY VIADUCT	AMTRAK - WEST 72ND STREET - WEST 79TH STREET	A	A		145	STATE	9/17/2014	3.597	FAIR	11/18/2016	213,173	\$959,278,500	107		
2246580	вм	HIGH BRIDGE PEDESTRIAN OVERPASS	MAJOR DEEGAN EXPRESSWAY - HARLEM RIVER	м	PED-WA	Ρ	11	PARKS	8/12/2002	3.759	FAIR	N/A	34,100	\$153,450,000	112	204	

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2230000	к	HIGHLAND BOULEVARD EASTBOUND	JACKIE ROBINSON PARKWAY		А		1	STATE	2/22/2016	4.724	FAIR	N/A	4,900	\$22,050,000	305		
2230220	к	HIGHLAND BOULEVARD NORTHBOUND	VERMONT STREET		А		1	STATE	5/29/2015	5.762	GOOD	5/15/2017	3,995	\$17,977,500	305		
2230010	к	HIGHLAND BOULEVARD WESTBOUND	JACKIE ROBINSON PARKWAY		А		1	STATE	2/22/2016	4.700	FAIR	N/A	3,500	\$15,750,000	305		
2230020	к	HIGHLAND BOULEVARD WESTBOUND	JACKIE ROBINSON PARKWAY EASTBOUND ENTRANCE RAMP		А		2	STATE	3/11/2014	4.974	FAIR	3/11/2016	4,700	\$21,150,000	305		
2248280	۵	HIGHLAND PARK PEDESTRIAN	PEDESTRIAN PATH		PED-O	Р	1	СІТҮ	12/16/2015	3.667	FAIR	N/A	1,900	\$8,550,000	405		
2243780	к	HIGHLAWN AVENUE	BMT SEA BEACH	т	o		1	STATE	7/27/2015	6.280	VGOOD	6/16/2017	6,960	\$31,320,000	311		
2244060	к	HILL DRIVE (CLEFT RIDGE SPAN)	PEDESTRIAN PATH SOUTH OF BOATHOUSE		o	Ρ	1	СІТҮ	5/8/2017	4.433	FAIR	N/A	750	\$3,375,000	355		
2244120	к	HILL DRIVE (TERRACE BRIDGE)	PROSPECT PARK LAKE		wo	Ρ	3	STATE	9/15/2015	3.291	FAIR	10/10/2017	7,800	\$35,100,000	355		
2231840	۵	HILLSIDE AVENUE	BELT SYSTEM - CROSS ISLAND		А		2	STATE	3/18/2014	4.211	FAIR	3/15/2016	9,672	\$43,524,000	413		
2247320	٥	HONEYWELL STREET	SUNNYSIDE YARD	AL	o		22	STATE	12/16/2015	5.792	GOOD	12/20/2017	99,036	\$445,662,000	402	401	
2232040	м	HOUSTON STREET	FDR DRIVE		А		2	STATE	5/6/2014	3.750	FAIR	7/21/2017	11,010	\$49,545,000	103		
223204B	м	HOUSTON STREET RAMP TO FDR DRIVE NORTHBOUND	RELIEF		AR		4	STATE	1/19/2016	4.958	FAIR	N/A	7,125	\$32,062,500	103		
2249300	R	HUGUENOT AVENUE	SIRT SOUTH SHORE	s	o		2	STATE	9/23/2015	4.788	FAIR	9/13/2017	6,514	\$29,313,000	503		
2240450	۵	HUNTERS POINT AVENUE	DUTCH KILLS		wмо		4	STATE	5/30/2014	5.056	GOOD	5/25/2016	12,168	\$54,756,000	402		
2241190	в	HUNTS POINT AVENUE	AMTRAK - CSX	АХ	o		1	STATE	11/20/2014	4.813	FAIR	12/24/2016	10,049	\$45,220,500	202		
2241959	в	HUTCHINSON RIVER PARKWAY	AMTRAK - CSX	АХ	o		1	STATE	10/9/2014	5.542	GOOD	9/28/2016	15,444	\$69,498,000	210	211	
2075859	в	HUTCHINSON RIVER PARKWAY	HUTCHINSON RIVER		WMA		7	STATE	10/22/2015	4.578	FAIR	11/17/2017	60,500	\$272,250,000	210	228	
2249810	R	HYLAN BOULEVARD	LEMON CREEK		wo		1	STATE	3/10/2014	6.172	VGOOD	3/15/2016	11,400	\$51,300,000	503		
2245300	м	INWOOD HILL PARK FOOTBRIDGE	AMTRAK 30 STREET BRANCH	A	PED-O	Ρ	6	СІТҮ	3/19/2016	4.171	FAIR	N/A	700	\$3,150,000	112		
2246700	м	ISHAM PARK PEDESTRIAN BRIDGE	HARLEM RIVER INLET		PED-WO	Ρ	1	СІТҮ	3/8/2017	4.138	FAIR	N/A	300	\$1,350,000	112		
2246690	м	ISHAM PARK VEHICULR	HARLEM RIVER INLET		wo	Ρ	1	STATE	4/28/2014	6.065	VGOOD	4/22/2016	911	\$4,099,500	112		
2230099	٥	JACKIE ROBINSON PARKWAY	CYPRESS HILLS CEMETRY		А		1	STATE	1/6/2016	5.593	GOOD	N/A	4,200	\$18,900,000	405		
2230179	٥	JACKIE ROBINSON PARKWAY	METROPOLITAN AVENUE		A		2	STATE	4/22/2014	5.286	GOOD	4/14/2016	8,673	\$39,028,500	482		
2248299	۵	JACKIE ROBINSON PARKWAY-UNION TURNPIKE	AUSTIN STREET		o		1	STATE	5/23/2014	4.806	FAIR	5/16/2016	5,900	\$26,550,000	409	406	
2247260	۵	JACKSON AVENUE	LIRR MONTAUK DIVISION	L	o		1	STATE	10/8/2014	5.550	GOOD	9/26/2016	4,517	\$20,326,500	402		
2231819	٥	JAMAICA AVENUE	BELT SYSTEM - CROSS ISLAND		A		2	STATE	3/19/2014	4.773	FAIR	3/18/2016	11,500	\$51,750,000	413		
2230287	в	JEROME AVENUE	MOSHOLU PARKWAY	т	А		3	STATE	4/30/2015	4.711	FAIR	5/30/2017	11,800	\$53,100,000	207		
2249070	R	JOHN STREET PEDESTRIAN BRIDGE	B&O RR (ABANDONED)	ο	PED-O		2	СІТҮ	9/20/2016	5.423	GOOD	N/A	1,050	\$4,725,000	501		
2247480	٥	JUNIPER BOULEVARD SOUTH	CSX TRANSPORT	x	o		1	STATE	9/22/2015	4.833	FAIR	10/6/2017	9,000	\$40,500,000	405		
2230380	к	KANE STREET	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	3/27/2014	4.153	FAIR	5/24/2017	5,000	\$22,500,000	306		

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2243770	к	KINGS HIGHWAY	BMT SEA BEACH	т	o		1	STATE	6/22/2015	6.628	VGOOD	6/20/2017	5,032	\$22,644,000	311		
2231449	к	KNAPP STREET	BELT SYSTEM - SHORE PARKWAY		А		1	STATE	4/9/2014	4.313	FAIR	5/4/2016	9,500	\$42,750,000	315		
2241169	в	LAFAYETTE AVENUE	AMTRAK - CSX	АХ	o		1	STATE	11/18/2014	5.365	GOOD	11/5/2016	12,000	\$54,000,000	202		
2249110	R	LAKE AVENUE	B&O RR (ABANDONED)	o	o		3	STATE	5/1/2015	4.556	FAIR	4/21/2017	5,900	\$26,550,000	501		
2247240	Q	LEFFERTS BOULEVARD	LIRR MAIN LINE	L	o		3	STATE	9/25/2015	5.736	GOOD	11/10/2017	5,460	\$24,570,000	409		
2241139	в	LEGGETT AVENUE	AMTRAK - CSX	АХ	o		3	STATE	11/17/2014	4.620	FAIR	11/3/2016	41,551	\$186,979,500	202		
2243850	к	LIBERTY AVENUE	LIRR BAY RIDGE	N	o		3	STATE	9/23/2014	6.103	VGOOD	9/29/2016	6,659	\$29,965,500	316		
2249460	R	LINCOLN AVENUE	SIRT SOUTH SHORE	s	o		1	STATE	9/1/2015	5.172	GOOD	9/6/2017	4,500	\$20,250,000	502		
2243190	к	LINCOLN PLACE	FRANKLIN SHUTTLE	т	o		1	STATE	6/26/2014	6.672	VGOOD	7/11/2016	2,460	\$11,070,000	308		
2243010	к	LINCOLN ROAD	BMT SUBWAY, BRIGHTON	т	o		1	STATE	5/19/2014	6.685	VGOOD	5/27/2016	6,243	\$28,093,500	355		
2231750	۵	LINDEN BOULEVARD	BELT SYSTEM - CROSS ISLAND		А		2	STATE	2/18/2016	4.342	FAIR	N/A	6,700	\$30,150,000	413		
2243910	к	LIVONIA AVENUE PEDESTRIAN BRIDGE	LIRR BAY RIDGE	N	PED-O		6	СІТҮ	10/3/2017	4.833	FAIR	N/A	2,500	\$11,250,000	316		
2241159	в	LONGWOOD AVENUE	AMTRAK - CSX	АХ	o		2	STATE	11/18/2014	5.236	GOOD	11/4/2016	10,625	\$47,812,500	202		
1240090	вм	MACOMBS DAM BRIDGE	HARLEM RIVER	м	wмо		52	STATE	12/18/2015	3.930	FAIR	12/11/2017	220,000	\$990,000,000	110	204	
2240079	вм	MADISON AVENUE BRIDGE	HARLEM RIVER		wмо		21	STATE	9/17/2014	4.861	FAIR	9/14/2016	80,000	\$360,000,000	111	201	
2242210	в	MAGNOLIA WAY	BRONX RIVER		wo	Р	3	STATE	5/6/2014	4.763	FAIR	4/25/2016	6,200	\$27,900,000	227		
2249210	R	MAIN STREET PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	PED-O		9	СІТҮ	7/17/2017	4.600	FAIR	N/A	400	\$1,800,000	503		
2240027	км	MANHATTAN BRIDGE (LOWER LEVEL)	EAST RIVER	т	WEO		23	STATE	10/22/2014	4.375	FAIR	11/4/2016	616,390	\$2,773,755,000	103	302	
2240028	км	MANHATTAN BRIDGE (UPPER LEVEL)	NYCTA TRACKS-BMT	т	WEO		43	STATE	10/21/2014	3.757	FAIR	10/20/2016	587,424	\$2,643,408,000	103	302	
2229480	в	MANHATTAN COLLEGE PARKWAY	HENRY HUDSON PARKWAY		А		3	STATE	6/3/2015	5.053	GOOD	6/2/2017	6,200	\$27,900,000	208		
2245040	м	MARGARET CORBIN DRIVE	PEDESTRIAN PATH NEAR CAFÉ		0	Р	1	СІТҮ	5/12/2017	5.000	GOOD	N/A	598	\$2,691,000	112		
2245050	м	MARGARET CORBIN DRIVE	PEDESTRIAN PATH NEAR NORTH ENTRANCE		0	Р	1	СІТҮ	5/17/2017	4.667	FAIR	N/A	889	\$4,000,500	112		
2230190	Q	MARKWOOD ROAD	JACKIE ROBINSON PARKWAY		A		1	STATE	1/12/2016	5.167	GOOD	N/A	4,400	\$19,800,000	482	406	
2249760	R	MARTLINGS AVENUE	RICHMOND LAKE DAM		wo		2	STATE	6/12/2015	4.467	FAIR	6/5/2017	7,000	\$31,500,000	501		
2269030	в	MATTHEWSON ROAD	MACCRACKEN AVENUE		o		15	STATE	10/8/2014	4.175	FAIR	9/21/2016	14,880	\$66,960,000	205		
2243410	к	MCDONALD AVENUE	LIRR BAY RIDGE	N	0		1	STATE	10/1/2014	5.141	GOOD	9/22/2016	2,760	\$12,420,000	312		
2248260	a	MEADOW LAKE BRIDGE	MEADOW LAKE		wo	Р	5	STATE	5/26/2015	4.458	FAIR	7/19/2017	4,200	\$18,900,000	481		
2241110	в	MELROSE AVENUE	CSX PORT MORRIS - (ABANDONED)		o		8	STATE	8/18/2015	5.500	GOOD	8/22/2017	37,854	\$170,343,000	203		
2231710	٩	MERRICK BOULEVARD	BELT SYSTEM - LAURELTON PARKWAY NORTHBOUND		А		1	STATE	1/21/2016	4.467	FAIR	N/A	6,000	\$27,000,000	413		
2231720	۵	MERRICK BOULEVARD	BELT SYSTEM - LAURELTON PARKWAY SOUTHBOUND		А		1	STATE	1/21/2016	4.200	FAIR	N/A	6,000	\$27,000,000	413		

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHE R OWN ER	SPA NS	RATING SOURCE	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2247500	۵	METROPOLITAN AVENUE	CSX TRANSPORT	x	o		1	STATE	9/22/2015	4.233	FAIR	10/10/2017	18,650	\$83,925,000	405		$\square$
2240290	к	METROPOLITAN AVENUE	ENGLISH KILLS		₩МО		5	STATE	7/13/2015	5.778	GOOD	7/26/2017	10,550	\$47,475,000	301		$\square$
1247560	۵	METROPOLITAN AVENUE	LIRR - NY&ATL	LN	o		2	STATE	10/9/2015	3.603	FAIR	11/15/2017	20,900	\$94,050,000	405		$\square$
2249470	R	MIDLAND AVENUE	SIRT SOUTH SHORE	s	o		1	STATE	9/18/2015	5.466	GOOD	9/7/2017	3,000	\$13,500,000	502		$\square$
2257569	м	MILLER HIGHWAY - ROUTE 9A	RIVERSIDE PARK SOUTH		А		64	STATE	8/25/2015	4.296	FAIR	10/13/2017	272,475	\$1,226,137,500	104	107	$\square$
2249530	R	MINTHORNE STREET PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	PED-O		26	СІТҮ	7/27/2017	4.358	FAIR	N/A	6,000	\$27,000,000	501		$\square$
2243240	к	MONTGOMERY STREET	FRANKLIN SHUTTLE	т	o		1	STATE	7/29/2015	5.843	GOOD	6/26/2017	2,240	\$10,080,000	309		
2249090	R	MORNINGSTAR ROAD	B&O RR (ABANDONED)	o	o		4	STATE	7/8/2015	4.627	FAIR	6/16/2016	7,900	\$35,550,000	501		
2230250	в	MOSHOLU PARKWAY	BRONX RIVER		WA		5	STATE	1/7/2016	4.132	FAIR	N/A	16,300	\$73,350,000	227		
2230300	в	MOSHOLU PARKWAY	CONRAIL (ABANDONED)		А		1	STATE	7/31/2014	4.271	FAIR	7/20/2016	4,600	\$20,700,000	226		
2230290	в	MOSHOLU PARKWAY	EQUESTRIAN PATH		А		1	STATE	1/11/2016	4.310	FAIR	N/A	4,300	\$19,350,000	226		
2230260	в	MOSHOLU PARKWAY	METRO NORTH	м	А		1	STATE	4/30/2014	5.391	GOOD	5/13/2016	8,880	\$39,960,000	227	207	
2230310	в	MOSHOLU PARKWAY	SOUTHBOUND RAMP TO HENRY HUDSON PARKWAY		А		2	STATE	8/28/2015	4.919	FAIR	8/30/2017	7,400	\$33,300,000	226		
2230270	в	MOSHOLU PARKWAY	WEBSTER AVE		А		1	STATE	5/18/2015	5.203	GOOD	5/24/2017	8,480	\$38,160,000	207		
2248100	۵	MOTOR PARKWAY (PEDESTRIAN)	73RD AVENUE		PED-O	Ρ	3	СІТҮ	12/1/2017	4.672	FAIR	N/A	2,600	\$11,700,000	408		
2248110	Q	MOTOR PARKWAY (PEDESTRIAN)	ALLEY PARK PEDESTRIAN WALK		PED-O	P	1	СІТҮ	6/7/2017	3.833	FAIR	N/A	1,000	\$4,500,000	413		
2248060	Q	MOTOR PARKWAY (PEDESTRIAN)	BELL BOULEVARD		PED-O	Ρ	2	СІТҮ	5/8/2017	4.403	FAIR	N/A	2,650	\$11,925,000	411		
2248059	٩	MOTOR PARKWAY (PEDESTRIAN)	FRANCIS LEWIS BOULEVARD		PED-O	Ρ	2	СІТҮ	6/9/2017	4.528	FAIR	N/A	2,800	\$12,600,000	408		
2248080	Q	MOTOR PARKWAY (PEDESTRIAN)	HOLLIS COURT BOULEVARD		PED-O	P	3	СІТҮ	11/30/2017	4.323	FAIR	N/A	2,700	\$12,150,000	408		
2248070	Q	MOTOR PARKWAY (PEDESTRIAN)	SPRINGFIELD BOULEVARD		PED-O	Ρ	3	СІТҮ	6/2/2017	3.836	FAIR	N/A	2,900	\$13,050,000	411		
2247110	Q	MURRAY STREET	LIRR PORT WASHINGTON BRANCH	L	0		1	STATE	9/22/2015	5.185	GOOD	10/20/2017	4,000	\$18,000,000	407		
2247620	۵	MYRTLE AVENUE	ABANDONED LIRR		ο		3	STATE	1/5/2016	5.028	GOOD	N/A	6,725	\$30,262,500	482	406	
2230120	٩	MYRTLE AVENUE	JACKIE ROBINSON PARKWAY		A		1	STATE	4/17/2014	5.250	GOOD	4/18/2016	6,400	\$28,800,000	405	482	
2249350	R	NELSON AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	PED-O		3	СІТҮ	7/24/2017	4.143	FAIR	N/A	300	\$1,350,000	503		
1067150	в	NEREID AVENUE (EAST 240TH STREET)	BRONX RIVER PARKWAY	м	0		10	STATE	9/18/2015	4.500	FAIR	10/12/2017	57,750	\$259,875,000	212		
2249430	R	NEW DORP LANE	SIRT SOUTH SHORE	s	0		2	STATE	8/14/2015	4.955	FAIR	9/1/2017	7,600	\$34,200,000	502		
2243660	к	NEW UTRECHT AVENUE	LIRR BAY RIDGE	N	0		1	STATE	10/3/2014	5.883	GOOD	9/26/2016	2,350	\$10,575,000	311		
2243140	к	NEWKIRK AVENUE	BMT SUBWAY, BRIGHTON	т	o		3	STATE	6/17/2014	4.574	FAIR	6/22/2016	4,100	\$18,450,000	314		
2240240	к	NINTH STREET BRIDGE	GOWANUS CANAL		WMO		3	STATE	6/17/2015	6.161	VGOOD	6/7/2017	5,772	\$25,974,000	306		
2231670	۵	NORTH CONDUIT AVENUE WESTBOUND	BELT SYSTEM - LAURELTON PARKWAY EASTBOUND		А		1	STATE	1/11/2016	4.889	FAIR	N/A	4,000	\$18,000,000	413		

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2231680	a	NORTH CONDUIT AVENUE WESTBOUND	BELT SYSTEM - LAURELTON PARKWAY WESTBOUND		A		2	STATE	1/15/2016	4.932	FAIR	N/A	6,500	\$29,250,000	413		
2269760	R	NORTH RAMP	SIRT	s	0	F	2	STATE	10/22/2014	6.431	VGOOD	9/29/2016	6,000	\$27,000,000	501		
2240440	Q	NORTHERN BOULEVARD	ALLEY CREEK		wo		2	STATE	6/17/2014	4.681	FAIR	6/20/2016	8,300	\$37,350,000	411		
2231870	Q	NORTHERN BOULEVARD	BELT SYSTEM - CROSS ISLAND		А		2	STATE	7/14/2014	5.764	GOOD	6/29/2016	9,400	\$42,300,000	411		
2055802	Q	NORTHERN BOULEVARD EASTBOUND	FLUSHING RIVER		wo		40	STATE	10/28/2014	4.268	FAIR	9/29/2016	78,894	\$355,023,000	407		
2055801	Q	NORTHERN BOULEVARD WESTBOUND	FLUSHING RIVER		wo		40	STATE	10/28/2014	4.338	FAIR	9/29/2016	71,900	\$323,550,000	407		
205580A	Q	NORTHERN BOULEVARD WESTBOUND TO 678I SOUTHBOUND	VACANT LAND		AR		16	STATE	6/5/2014	5.619	GOOD	5/26/2016	8,600	\$38,700,000	407		
2243500	к	NOSTRAND AVENUE	LIRR BAY RIDGE	N	0		2	STATE	9/29/2014	4.898	FAIR	9/19/2016	4,320	\$19,440,000	314		
2240138	вм	NYCTA IRT	HARLEM RVR/BROADWAY	тм	WMO		3	STATE	11/24/2015	4.720	FAIR	12/6/2017	19,520	\$87,840,000	112	207	208
2243480	к	OCEAN AVENUE	LIRR BAY RIDGE	N	o		2	STATE	9/16/2014	4.965	FAIR	9/14/2016	5,000	\$22,500,000	314		
2240320	к	OCEAN AVENUE PEDESTRIAN BRIDGE	SHEEPSHEAD BAY		PED-WO		30	СІТҮ	6/22/2016	4.935	FAIR	N/A	4,450	\$20,025,000	315		
2243439	к	OCEAN PARKWAY	LIRR BAY RIDGE	N	o		1	STATE	9/19/2014	4.927	FAIR	9/22/2016	7,000	\$31,500,000	312		
2249269	R	PAGE AVENUE	SIRT - TIDAL STREAM	s	wo		4	STATE	9/23/2015	5.806	GOOD	9/11/2017	30,710	\$138,195,000	503		
2245470	₽	PARK AVENUE NORTHBOUND	EAST 45TH STREET		0		1	STATE	6/9/2015	4.757	FAIR	6/1/2017	2,400	\$10,800,000	105		
2245460	м	PARK AVENUE SOUTHBOUND	EAST 45TH STREET		0		1	STATE	6/9/2015	4.514	FAIR	6/1/2017	2,400	\$10,800,000	105		
2246550	₽	PARK AVENUE VIADUCT	EAST 42ND STREET		0		10	STATE	12/7/2015	4.537	FAIR	12/13/2017	22,150	\$99,675,000	105		
2247600	a	PARK LANE SOUTH	LIRR MONTAUK DIV	L	0		1	STATE	9/22/2014	6.983	VGOOD	8/9/2016	3,024	\$13,608,000	409	482	
2242099	в	PARK ROAD (204TH STREET)	BRONX RIVER		wo		1	STATE	5/6/2014	4.655	FAIR	4/20/2016	4,700	\$21,150,000	212		
224001A	₽	PARK ROW TO BROOKLYN	WILLIAM STREET NORTHBOUND		OE		4	STATE	6/19/2015	5.086	GOOD	8/16/2017	10,167	\$45,751,500	101		
2269780	R	PARKING ENTRANCE RAMP	SIRT	s	0	F	3	STATE	11/7/2014	5.889	GOOD	10/20/2016	8,589	\$38,650,500	501		
2269730	R	PARKING EXIT RAMP	SIRT	s	0	F	10	STATE	11/7/2014	6.097	VGOOD	10/21/2016	20,727	\$93,271,500	501		
2243020	к	PARKSIDE AVENUE - OCEAN AVENUE	BMT SUBWAY, BRIGHTON	т	0		6	STATE	6/18/2014	4.043	FAIR	7/27/2017	48,700	\$219,150,000	314		
2247060	٩	PARSONS BOULEVARD	LIRR PORT WASHINGTON BRANCH	L	o		1	STATE	9/24/2014	4.824	FAIR	8/8/2016	4,200	\$18,900,000	407		
224001C	м	PEARL STREET TO BROOKLYN	LAND ADJACENT TO BRIDGE		OE		9	STATE	7/1/2015	3.814	FAIR	8/18/2017	6,365	\$28,642,500	101		
224001F	м	PEARL STREET TO FDR DRIVE	LAND ADJACENT TO BRIDGE		OE		3	STATE	6/4/2015	5.028	GOOD	6/15/2017	5,200	\$23,400,000	103		
222928C	м	PEDESTRIAN BRIDGE AT WEST 73RD STREET	HENRY HUDSON PARKWAY - AMTRAK	A	PED-A	Ρ	5	СІТҮ	4/10/2016	3.781	FAIR	N/A	3,700	\$16,650,000	107		
2244130	к	PEDESTRIAN BRIDGE NEAR BOATHOUSE (LULLWATER BRIDGE)	PROSPECT PARK LAKE		PED-WO	Ρ	1	СІТҮ	8/24/2016	4.885	FAIR	N/A	1,000	\$4,500,000	355		
2247630	Q	PEDESTRIAN BRIDGE NEAR UNION TURNPIKE	ABANDONED LIRR		PED-O		8	СІТҮ	6/14/2017	4.522	FAIR	N/A	1,500	\$6,750,000	406		
2246090	м	PEDESTRIAN BRIDGE OPPOSITE 65TH STREET	TRANSVERSE ROAD #1		PED-O	Ρ	1	СІТҮ	10/15/2016	4.583	FAIR	N/A	2,300	\$10,350,000	164		
2246400	м	PEDESTRIAN PATH OPPOSITE EAST 79TH STREET	TRANSVERSE ROAD #2		PED-O	Ρ	1	СІТҮ	7/20/2017	4.233	FAIR	N/A	3,700	\$16,650,000	164		

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2241380	в	PELHAM BAY PARK EQUESTRIAN	AMTRAK - CSX	АХ	PED-O	Ρ	1	СІТҮ	7/24/2013	3.339	FAIR	N/A	7,300	\$32,850,000	228		
2231519	к	PENNSYLVANIA AVENUE	BELT SYSTEM - SHORE PARKWAY		А		2	STATE	6/8/2015	5.583	GOOD	6/1/2017	6,640	\$29,880,000	356		
2243870	к	PITKIN AVENUE	LIRR BAY RIDGE	N	o		2	STATE	9/24/2014	6.279	VGOOD	9/29/2016	5,328	\$23,976,000	316		
2243210	к	PRESIDENT STREET	FRANKLIN SHUTTLE	т	o		2	STATE	6/25/2014	5.078	GOOD	7/13/2016	2,500	\$11,250,000	309		
2232167	м	PROMENADE OVER FDR DRIVE	FDR DRIVE- EAST 81ST STREET - EAST 90TH STREET		PED-A	Ρ	53	STATE	7/31/2015	3.143	FAIR	8/8/2017	93,000	\$418,500,000	108		
2268760	м	PS-5 PEDESTRIAN BRIDGE	TENTH AVENUE		PED-O		5	СІТҮ	12/1/2017	4.767	FAIR	N/A	1,285	\$5,782,500	112		
2240639	κο	PULASKI BRIDGE	NEWTOWN CREEK		wмо		44	STATE	6/5/2014	4.437	FAIR	6/23/2016	205,770	\$925,965,000	301	402	
2230530	٥	QUEENS BOULEVARD	278I (BROOKLYN QUEENS EXPRESSWAY)		А		2	STATE	10/22/2014	6.306	VGOOD	9/21/2016	25,543	\$114,943,500	402		
2230869	٥	QUEENS BOULEVARD	ACCESS ROAD BROOKLYN QUEENS EXPRESSWAY SOUTHBOUND		А		1	STATE	9/30/2014	5.659	GOOD	9/14/2016	7,900	\$35,550,000	402		
2247310	۵	QUEENS BOULEVARD	AMTRAK & LIRR YARD	AL	o		19	STATE	11/8/2014	6.268	VGOOD	11/4/2016	92,400	\$415,800,000	402	401	
2230209	٥	QUEENS BOULEVARD	JACKIE ROBINSON PARKWAY	т	А		5	STATE	6/9/2014	4.841	FAIR	6/3/2016	37,700	\$169,650,000	409		
2240048	MQ	QUEENSBORO (ED KOCH) BRIDGE (UPPER LEVEL)	EAST RIVER - LOWER LEVEL		WEO		37	STATE	10/13/2014	4.340	FAIR	11/10/2016	322,300	\$1,450,350,000	0 108	402	401
2240047	MQ	QUEENSBORO (ED KOCH) BRIDGE (LOWER LEVEL)	EAST RIVER	AL	WEO		53	STATE	11/12/2014	4.167	FAIR	11/15/2016	626,900	\$2,821,050,000	108	402	401
224005A	м	RAMP FROM FDR DRIVE	HARLEM RIVER DRIVE NORTHBOUND		OR		11	STATE	11/7/2014	6.887	VGOOD	10/25/2016	28,233	\$127,048,500	111		
2248040	٥	RAMP TO LINDEN BOULEVARD	SOUTH CONDUIT AVENUE		o		1	STATE	5/15/2014	5.200	GOOD	5/5/2016	3,352	\$15,084,000	410		
224007A	м	RAMP TO MADISON AVENUE	EAST 138TH STREET		OR		7	STATE	1/29/2016	4.972	FAIR	N/A	19,880	\$89,460,000	0 111		
223201D	м	RAMP TO NORTHBOUND FDR DRIVE	FDR DRIVE & SOUTH STREET		AR		22	STATE	2/25/2014	4.967	FAIR	4/6/2016	15,825	\$71,212,500	101	103	
222934A	м	RAMP TO NORTHBOUND HENRY HUDSON PARKWAY	AMTRAK WEST SIDE	A	AR		26	STATE	10/14/2015	3.736	FAIR	12/20/2017	10,800	\$48,600,000	112		
2270970	вм	RANDALL'S ISLAND CONNECTOR PEDESTRIAN	BRONX KILL		PED-WO	Ρ	6	СІТҮ	10/20/2016	6.662	VGOOD	N/A	3,040	\$13,680,000	111	201	
2240350	R	RICHMOND AVENUE	RICHMOND CREEK		wo		3	STATE	6/10/2015	5.194	GOOD	5/31/2017	32,589	\$146,650,500	502		
2249270	R	RICHMOND VALLEY ROAD	SIRT SOUTH SHORE	s	o		4	STATE	8/26/2015	5.164	GOOD	8/29/2017	9,440	\$42,480,000	503		
2249280	R	RICHMOND VALLEY STATION PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	PED-O		7	СІТҮ	7/21/2017	4.464	FAIR	N/A	595	\$2,677,500	503		
2244150	к	RIDGE BOULEVARD	SHORE ROAD DRIVE		o		1	STATE	5/29/2015	6.333	VGOOD	5/16/2017	4,350	\$19,575,000	310		
2240660	٥	RIKERS ISLAND BRIDGE	RIKERS ISLAND CHANNEL		wo		56	STATE	9/4/2015	4.324	FAIR	10/3/2017	183,100	\$823,950,000	401	480	
2241430	в	RIVER AVENUE	METRO NORTH RR HUD	м	o		1	STATE	8/26/2015	6.156	VGOOD	9/11/2017	5,040	\$22,680,000	204		
2229510	в	RIVERDALE AVENUE	HENRY HUDSON PARKWAY		А		2	STATE	7/9/2015	5.079	GOOD	6/27/2017	5,200	\$23,400,000	208		
2246660	м	RIVERSIDE DRIVE	WEST 125TH STREET - WEST 134TH STREET		o		27	STATE	7/13/2015	4.444	FAIR	10/6/2017	148,300	\$667,350,000	0 109		
2246980	м	RIVERSIDE DRIVE	WEST 138TH STREET		o		1	STATE	1/14/2016	4.767	FAIR	N/A	6,700	\$30,150,000	0 109		
2267130	м	RIVERSIDE DRIVE	WEST 145TH STREET		o		1	STATE	4/27/2015	5.000	GOOD	5/8/2017	5,800	\$26,100,000	0 109		
2269240	м	RIVERSIDE DRIVE	WEST 155TH STREET		ο		1	STATE	5/7/2015	4.640	FAIR	5/8/2017	2,780	\$12,510,000	0 109	112	

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2246720	м	RIVERSIDE DRIVE	WEST 158TH STREET - AMTRAK	А	o		77	STATE	10/24/2014	3.528	FAIR	11/22/2016	185,658	\$835,461,000	109	112	
2246970	м	RIVERSIDE DRIVE	WEST 96TH STREET		o		3	STATE	4/27/2015	5.471	GOOD	5/3/2017	10,600	\$47,700,000	107		
2269200	м	RIVERSIDE DRIVE SOUTH	AMTRAK	A	0		11	STATE	11/6/2015	5.792	GOOD	12/16/2017	69,040	\$310,680,000	107		
2300130	۵	ROCKAWAY BOULEVARD	HOOK CREEK		wo		3	STATE	7/2/2015	5.763	GOOD	7/12/2017	18,302	\$82,359,000	413		
2248369	٥	ROCKAWAY BOULEVARD	THURSTON BASIN		wo		2	STATE	7/15/2015	5.474	GOOD	7/13/2017	6,000	\$27,000,000	483	413	
2230587	Q	ROOSEVELT AVENUE	278I (BROOKLYN QUEENS EXPRESSWAY)		A		2	STATE	9/1/2015	5.431	GOOD	9/22/2017	11,022	\$49,599,000	402		
2247380	Q	ROOSEVELT AVENUE	CSX - HELLGATE - NYCTA	x	0		2	STATE	9/15/2015	6.208	VGOOD	10/2/2017	7,380	\$33,210,000	402	403	404
2267160	Q	ROOSEVELT AVENUE	SHEA ROAD		0		4	STATE	7/29/2015	4.651	FAIR	7/21/2017	7,280	\$32,760,000	408		
2240507	q	ROOSEVELT AVENUE	WHITESTONE EXPRESSWAY - VAN WYCK - FLUSHING RIVER		WA		27	STATE	11/5/2015	3.521	FAIR	10/7/2017	84,424	\$379,908,000	407	481	
2240640	MQ	ROOSEVELT ISLAND BRIDGE	EAST RIVER EAST CHANNEL		wмо		8	STATE	10/29/2014	5.569	GOOD	9/27/2017	36,500	\$164,250,000	108	401	
2249420	R	ROSE AVENUE	SIRT SOUTH SHORE	s	0		2	STATE	8/13/2015	5.258	GOOD	8/17/2017	3,800	\$17,100,000	502		
2249410	R	ROSS AVENUE	SIRT SOUTH SHORE	s	o		2	STATE	8/12/2015	5.182	GOOD	8/16/2017	3,800	\$17,100,000	502		
2248200	Q	RUST STREET	FLUSHING AVENUE		0		1	STATE	7/2/2015	4.672	FAIR	7/7/2017	2,940	\$13,230,000	405		
2230370	к	SACKETT STREET	278I (BROOKLYN QUEENS EXPRESSWAY)		A		2	STATE	3/19/2014	4.500	FAIR	4/14/2016	5,000	\$22,500,000	306		
2244470	к	SEELEY STREET	PROSPECT AVENUE		0		1	STATE	6/1/2015	4.033	FAIR	7/7/2017	8,496	\$38,232,000	307		
2249290	R	SEGUINE AVENUE	SIRT SOUTH SHORE	s	ο		1	STATE	8/24/2015	6.016	VGOOD	8/22/2017	3,250	\$14,625,000	503		
2248220	٥	SERVICE ROAD TURNAROUND	FLUSHING AVENUE		o		1	STATE	7/2/2015	5.078	GOOD	7/7/2017	2,940	\$13,230,000	405		
2240200	в	SHORE ROAD	HUTCHINSON RIVER		wмо		7	STATE	6/10/2015	4.299	FAIR	7/13/2017	43,576	\$196,092,000	228		
2241390	в	SHORE ROAD CIRCLE	AMTRAK - CSX	АХ	ο		1	STATE	7/21/2014	7.000	VGOOD	8/3/2016	8,067	\$36,301,500	228		
2270170	R	SI FERRY PEDESTRIAN BRIDGE	PARKING LOT EXIT ROADWAY		PED-O	F	5	СІТҮ	6/9/2017	5.600	GOOD	N/A	2,917	\$13,126,500	501		
2249120	R	SIMONSON AVENUE	B&O RR (ABANDONED)	ο	ο		3	STATE	5/1/2015	5.852	GOOD	4/21/2017	5,819	\$26,185,500	501		
2249860	R	SLATER BOULEVARD	NEW CREEK		wo		1	STATE	5/4/2015	5.510	GOOD	4/28/2017	2,037	\$9,166,500	502		
2242220	в	SNUFF MILL ROAD	BRONX RIVER		wo	Р	2	STATE	1/8/2016	4.158	FAIR	N/A	4,800	\$21,600,000	227		
2249200	R	SOUTH AVENUE	ARLINGTON YARD	с	ο		3	STATE	9/12/2015	6.527	VGOOD	10/7/2017	8,500	\$38,250,000	501		
2231560	Q	SOUTH CONDUIT BOULEVARD	BELT SYSTEM - SOUTHERN PARKWAY		A		2	STATE	6/16/2014	5.268	GOOD	6/8/2016	15,776	\$70,992,000	410		
2249770	R	SOUTH OF BROOKS LAKE	STREAM IN PARK		PED-WO	Ρ	3	СІТҮ	11/8/2017	4.767	FAIR	N/A	700	\$3,150,000	501		
223201B	м	SOUTH STREET RAMP TO FDR SOUTHBOUND	SOUTH STREET		AR		10	STATE	7/7/2015	3.881	FAIR	7/27/2016	13,388	\$60,246,000	101		
226771D	м	SOUTHBOUND HENRY HUDSON PARKWAY RAMP TO 79 STREET	79TH STREET BOAT BASIN GARAGE		AR	Р	4	STATE	5/7/2015	4.403	FAIR	5/11/2017	2,601	\$11,704,500	107		
2241080	в	SOUTHERN BOULEVARD	CSX PORT MORRIS - (ABANDONED)		ο		1	STATE	7/1/2014	4.093	FAIR	6/27/2016	3,900	\$17,550,000	201		
2242029	в	SOUTHERN BOULEVARD	EAST FORDHAM ROAD		0		2	STATE	1/20/2016	4.605	FAIR	N/A	12,900	\$58,050,000	227		

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHE R OWN ER	SPA NS	RATING SOURCE	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2231630	Q	SPRINGFIELD BOULEVARD	BELT SYSTEM - SOUTHERN PARKWAY		А		2	STATE	4/25/2014	4.591	FAIR	4/20/2016	8,500	\$38,250,000	413		
2268770	۵	SPRINGFIELD BOULEVARD	EQUESTRIAN PATH (ABANDONED)		o		1	STATE	4/29/2015	4.889	FAIR	5/9/2017	1,470	\$6,615,000	413		
2270890	R	SPRINGVILLE GREENWAY PEDESTRIAN	FRESHWATER WETLANDS		PED-O	Ρ	1	СІТҮ	10/25/2016	6.849	VGOOD	N/A	273	\$1,228,500	502		
2243180	к	ST JOHNS PLACE	FRANKLIN SHUTTLE	т	o		1	STATE	7/24/2015	6.656	VGOOD	6/29/2017	2,300	\$10,350,000	308		
2241700	в	ST PAULS PLACE PEDESTRIAN BRIDGE	METRO NORTH RR HAR	м	PED-O		2	СІТҮ	2/26/2017	4.746	FAIR	N/A	888	\$3,996,000	203		
2241060	в	ST. MARYS & CONCORD	CSX PORT MORRIS - (ABANDONED)		o		1	STATE	7/2/3014	5.370	GOOD	6/28/2016	4,500	\$20,250,000	201		
2269480	в	STARLIGHT PARK PEDESTRIAN BRIDGE	BRONX RIVER		PED-WO	Ρ	1	СІТҮ	10/18/2016	6.844	VGOOD	N/A	1,906	\$8,577,000	209		
2230610	٥	STEINWAY STREET	278I EASTBOUND (BROOKLYN QUEENS EXPRESSWAY)		А		1	STATE	8/8/2014	6.349	VGOOD	7/19/2016	5,146	\$23,157,000	401		
2230600	٥	STEINWAY STREET	278I WESTBOUND (BROOKLYN QUEENS EXPRESSWAY)		А		1	STATE	8/7/2014	6.349	VGOOD	7/19/2016	5,229	\$23,530,500	401		
2243170	к	STERLING PLACE	FRANKLIN SHUTTLE	т	o		1	STATE	7/24/2015	6.375	VGOOD	6/28/2017	2,300	\$10,350,000	308		
2240540	к	STILLWELL AVENUE	CONEY ISLAND CREEK		wo		2	STATE	5/28/2015	6.125	VGOOD	5/15/2017	17,000	\$76,500,000	313		
2230350	к	SUMMIT STREET PEDESTRIAN BRIDGE	278I (BROOKLYN QUEENS EXPRESSWAY)		PED-A		2	СІТҮ	4/15/2017	4.543	FAIR	N/A	1,400	\$6,300,000	306		
2231650	٥	SUNRISE HIGHWAY WESTBOUND	BELT SYSTEM - LAURELTON PARKWAY EASTBOUND		А		1	STATE	3/21/2014	4.262	FAIR	3/16/2016	4,100	\$18,450,000	413		
2231660	۵	SUNRISE HIGHWAY WESTBOUND	BELT SYSTEM - LAURELTON PARKWAY WESTBOUND		А		2	STATE	2/19/2016	4.565	FAIR	N/A	5,350	\$24,075,000	413		
2231800	۵	SUPERIOR ROAD	BELT SYSTEM - CROSS ISLAND		А		2	STATE	4/1/2014	4.682	FAIR	3/23/2016	7,000	\$31,500,000	413		
2243890	к	SUTTER AVENUE	LIRR BAY RIDGE	N	0		3	STATE	9/26/2014	6.292	VGOOD	9/30/2016	5,497	\$24,736,500	316		
2241040	в	THIRD AVENUE BRIDGE	CSX PORT MORRIS - (ABANDONED)		o		1	STATE	7/3/2014	4.563	FAIR	6/30/2016	2,700	\$12,150,000	201	203	
2240310	к	THIRD AVENUE BRIDGE	GOWANUS CANAL		wo		1	STATE	5/27/2015	6.550	VGOOD	5/5/2017	3,412	\$15,354,000	306		
2240069	вм	THIRD AVENUE BRIDGE	HARLEM RIVER		wмо		14	STATE	9/4/2014	5.789	GOOD	8/26/2016	100,232	\$451,044,000	111	201	
2240250	к	THIRD STREET	GOWANUS CANAL		wмо		5	STATE	5/26/2015	4.722	FAIR	5/5/2017	4,900	\$22,050,000	306		
2247300	Q	THOMPSON AVENUE	AMTRAK & LIRR YARD	AL	0		14	STATE	11/8/2014	5.125	GOOD	11/4/2016	61,280	\$275,760,000	402		
2241170	в	TIFFANY STREET	AMTRAK - CSX	АХ	0		1	STATE	11/13/2015	5.078	GOOD	12/12/2017	7,267	\$32,701,500	202		
224004H	۵	TO 21ST STREET FROM NEW YORK	22ND STREET		OE		43	STATE	10/13/2014	4.366	FAIR	9/16/2016	48,100	\$216,450,000	402		
224001B	м	TO BROOKLYN FROM FDR DRIVE	FRANKFORT & PEARL STREETS		OE		31	STATE	8/1/2014	4.926	FAIR	10/4/2016	51,400	\$231,300,000	101	103	
224005B	в	TO BRUCKNER BOULEVARD	RELIEF		OR		4	STATE	9/16/2015	6.775	VGOOD	9/1/2017	19,990	\$89,955,000	201		
224004A	м	TO EAST 60TH STREET FROM QUEENS	FIRST AVENUE		OE		13	STATE	4/21/2014	5.338	GOOD	4/13/2016	14,800	\$66,600,000	108		
224004C	м	TO EAST 62ND STREET FROM QUEENS	EAST 60TH - EAST 61ST STREET		OE		10	STATE	7/17/2014	4.985	FAIR	7/14/2016	16,720	\$75,240,000	108		
224001D	м	TO FDR DRIVE NORTHBOUND	PEARL STREET		OE		30	STATE	6/11/2015	4.528	FAIR	7/15/2016	49,600	\$223,200,000	101	103	
2245480	м	TO GEORGE WASHINGTON BRIDGE OPPOSITE WEST 171ST STREET	RIVERSIDE DRIVE		0		1	STATE	2/9/2016	4.500	FAIR	2/9/2016	10,773	\$48,478,500	112		
224004G	Q	TO NEW YORK FROM 11TH STREET	TERRAIN (CHAMBER)		OE		36	STATE	7/25/2014	5.268	GOOD	6/16/2016	8,360	\$37,620,000	401	402	

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE	OTHE R OWN ER	SPA NS	RATING	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
224004F	٩	TO NEW YORK FROM 21ST STREET	21ST STREET		OE		63	STATE	11/7/2014	4.712	FAIR	10/3/2016	63,310	\$284,895,000	402	401	
224004E	Q	TO NEW YORK FROM THOMSON AVENUE	JACKSON AVENUE	L	OE		94	STATE	11/26/2014	4.679	FAIR	10/28/2016	104,600	\$470,700,000	402		
224001G	м	TO PARK ROW	ROSE STREET		OE		11	STATE	7/30/2015	4.549	FAIR	9/28/2017	16,551	\$74,479,500	101		
224001E	м	TO PEARL STREET	LAND ADJACENT TO BRIDGE		OE		3	STATE	6/3/2015	4.944	FAIR	6/1/2016	5,300	\$23,850,000	101		1
224004D	м	TO QUEENS FROM EAST 58TH STREET	EAST 59TH STREET		OE		12	STATE	6/13/2014	4.396	FAIR	6/10/2016	10,858	\$48,861,000	106	108	
224004B	м	TO QUEENS FROM EAST 59TH STREET	FIRST AVENUE		OE		13	STATE	4/22/2014	5.542	GOOD	4/13/2016	14,800	\$66,600,000	108		
2240041	Q	TO THOMSON AVENUE FROM NEW YORK	JACKSON AVENUE	L	OE		39	STATE	11/21/2014	5.148	GOOD	11/13/2016	59,100	\$265,950,000	402		
2249040	R	TOMPKINS AVENUE	B&O RR (ABANDONED)		o		1	STATE	4/4/2014	5.953	GOOD	4/19/2016	5,096	\$22,932,000	501		1
2249840	R	TOMPKINS AVENUE	GREENFIELD AVENUE		o		1	STATE	3/10/2014	4.638	FAIR	3/21/2016	2,690	\$12,105,000	501		
2249510	R	TOMPKINS AVENUE	WILLOW AVENUE, SIRT	s	o		2	STATE	10/17/2014	5.269	GOOD	10/6/2016	5,378	\$24,201,000	501		
2249230	R	TRACY AVENUE PEDESTRIAN BRIDGE	SIRT SOUTH SHORE	s	PED-O		9	СІТҮ	7/18/2017	3.451	FAIR	N/A	635	\$2,857,500	503		
2245380	м	TRANSVERSE ROAD #1 WESTBOUND	PEDESTRIAN PATH OPPOSITE EAST 66TH STREET		o	Ρ	1	STATE	1/12/2016	5.000	GOOD	N/A	1,500	\$6,750,000	164		
2246410	м	TRANSVERSE ROAD 1 EASTBOUND (DENESMOUTH ARCH)	PEDESTRIAN PATH OPPOSITE EAST 65TH STREET		o	Ρ	1	STATE	2/4/2016	4.636	FAIR	N/A	1,739	\$7,825,500	164		
2249870	R	TRAVIS AVENUE	MAIN CREEK		wo		1	STATE	10/15/2015	5.483	GOOD	10/30/2017	1,700	\$7,650,000	502		
2246560	м	TUDOR CITY PLACE	EAST 42ND STREET		o		1	STATE	1/22/2016	4.867	FAIR	N/A	6,600	\$29,700,000	106		
2249170	R	UNION AVENUE	B&O RR (ABANDONED)	0	0		4	STATE	4/29/2015	5.130	GOOD	4/21/2017	6,630	\$29,835,000	501		
2230360	к	UNION STREET	278I (BROOKLYN QUEENS EXPRESSWAY)		A		2	STATE	3/19/2014	4.236	FAIR	4/13/2016	5,000	\$22,500,000	306		
2243200	к	UNION STREET	FRANKLIN SHUTTLE	т	0		2	STATE	6/25/2014	4.913	FAIR	7/12/2016	4,100	\$18,450,000	309		
2240270	к	UNION STREET	GOWANUS CANAL		wмо		5	STATE	8/15/2014	4.111	FAIR	8/17/2016	4,900	\$22,050,000	306		
2247040	Q	UNION STREET	LIRR PORT WASHINGTON BRANCH	L	o		1	STATE	9/22/2015	6.172	VGOOD	10/16/2017	3,313	\$14,908,500	407		
2231850	Q	UNION TURNPIKE	BELT SYSTEM - CROSS ISLAND		А		2	STATE	3/19/2014	4.409	FAIR	3/18/2016	13,600	\$61,200,000	413		
2248129	Q	UNION TURNPIKE	CREEDMOORE HOSPITAL ROAD		0		1	STATE	6/1/2015	4.733	FAIR	7/7/2017	3,500	\$15,750,000	413		
2230180	٩	UNION TURPIKE	JACKIE ROBINSON PARKWAY		A		1	STATE	1/12/2016	5.672	GOOD	N/A	5,359	\$24,115,500	482		
2241330	в	UNIONPORT ROAD	AMTRAK - CSX	АХ	o		1	STATE	10/28/2014	4.688	FAIR	10/4/2016	7,631	\$34,339,500	211		
2231910	Q	UTOPIA PARKWAY	BELT SYSTEM - CROSS ISLAND		А		2	STATE	2/23/2016	5.023	GOOD	N/A	7,200	\$32,400,000	407		
2229550	в	VAN CORTANLDT EQUESTRIAN	HENRY HUDSON PARKWAY		PED-A	Ρ	2	СІТҮ	8/8/2017	4.482	FAIR	N/A	2,100	\$9,450,000	226		
2229540	в	VAN CORTLANDT PARK	HENRY HUDSON PARKWAY		PED-A	Ρ	2	СІТҮ	8/3/2017	4.710	FAIR	N/A	3,900	\$17,550,000	226		
2249130	R	VAN NAME AVENUE	B&O RR (ABANDONED)	o	o		3	STATE	5/1/2015	5.186	GOOD	4/21/2017	5,474	\$24,633,000	501		
2249140	R	VAN PELT AVENUE	B&O RR (ABANDONED)	o	o		3	STATE	4/29/2015	5.576	GOOD	4/21/2017	5,000	\$22,500,000	501		
2241070	в	WALES AVENUE	CSX PORT MORRIS - (ABANDONED)		o		1	STATE	7/2/2014	6.467	VGOOD	6/29/2016	2,535	\$11,407,500	201		

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE	OTHE R OWN ER	SPA NS	RATING	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2241410	в	WALTON AVENUE	METRO NORTH RR HUD	м	o		1	STATE	5/5/2014	4.406	FAIR	5/7/2016	3,600	\$16,200,000	204		
2240620	м	WARDS ISLAND PEDESTRIAN BRIDGE	HARLEM RIVER		PED-WMO		10	СІТҮ	6/13/2016	4.933	FAIR	N/A	19,500	\$87,750,000	111		
2243250	к	WASHINGTON AVENUE	FRANKLIN SHUTTLE	т	o		1	STATE	6/24/2014	6.000	GOOD	7/8/2016	3,657	\$16,456,500	309	355	
2066919	вм	WASHINGTON BRIDGE	HARLEM RIVER	м	wo		9	STATE	11/24/2014	4.493	FAIR	10/4/2017	128,339	\$577,525,500	112	205	204
2246430	м	WEST 110TH STREET ENTRANCE (MOUNTCLIFF ARCH)	PEDESTRIAN PATH OPPOSITE WEST 109TH STREET		o	Ρ	1	STATE	2/8/2016	4.250	FAIR	N/A	1,200	\$5,400,000	164		
2246670	м	WEST 134TH STREET	TERRAIN		o		4	STATE	6/8/2015	4.778	FAIR	5/31/2017	7,500	\$33,750,000	109		
2245230	м	WEST 148TH STREET PEDESTRIAN BRIDGE	AMTRAK 30 STREET BRANCH	А	PED-O	Ρ	5	СІТҮ	3/18/2016	4.617	FAIR	N/A	1,100	\$4,950,000	109		
2246710	м	WEST 153RD STREET	A.C. POWELL BOULEVARD		o		1	STATE	1/28/2016	4.611	FAIR	N/A	3,082	\$13,869,000	110		
2245290	м	WEST 155TH STREET PEDESTRIAN BRIDGE	AMTRAK 30 STREET BRANCH	А	PED-O		3	СІТҮ	3/24/2016	4.092	FAIR	N/A	800	\$3,600,000	109	112	
2245250	м	WEST 158TH STREET	AMTRAK 30 STREET BRANCH	А	o		7	STATE	10/22/2015	5.917	GOOD	12/17/2017	20,219	\$90,985,500	112		
2245260	м	WEST 173RD STREET PEDESTRIAN BRIDGE	AMTRAK 30 STREET BRANCH	А	PED-O	Ρ	2	СІТҮ	3/10/2016	4.600	FAIR	N/A	1,500	\$6,750,000	112		
2246600	м	WEST 176TH STREET PEDESTRIAN BRIDGE	APPROACH TO GEORGE WASHINGTON BRIDGE		PED-O	Ρ	1	СІТҮ	2/6/2017	4.400	FAIR	N/A	1,200	\$5,400,000	112		
2246489	м	WEST 181ST STREET	RAMP TO WASHINGTON BRIDGE		o		1	STATE	1/27/2016	5.033	GOOD	N/A	8,200	\$36,900,000	112		
2229400	м	WEST 181ST STREET PEDESTRIAN BRIDGE	HENRY HUDSON PARKWAY NORTHBOUND		PED-A	Ρ	7	СІТҮ	8/2/2017	3.877	FAIR	N/A	1,500	\$6,750,000	112		
M00001	м	WEST 191ST STREET PEDESTRIAN TUNNEL	BROADWAY - IRT #1 SUBWAY		PED-O		1	СІТҮ	1/3/2017	4.000	FAIR	N/A	2,000	\$9,000,000	112		
2241940	в	WEST 205TH STREET	NYCTA IND YARDS	т	o		4	STATE	10/31/2014	5.514	GOOD	10/20/2016	32,508	\$146,286,000	207		
2240120	вм	WEST 207TH STREET/WEST FORDHAM ROAD	HARLEM RIVER		WMO		5	STATE	7/31/2014	5.000	GOOD	7/29/2016	31,784	\$143,028,000	112	207	
2241489	в	WEST 225TH STREET	CSX TRANS - PUTNAM	x	0		2	STATE	8/28/2014	5.269	GOOD	8/26/2016	10,900	\$49,050,000	207	208	
2241490	в	WEST 230TH STREET	CSX PUTNAM (ABANDONED)		o		1	STATE	4/27/2015	5.125	GOOD	5/19/2017	5,600	\$25,200,000	208		
2241509	в	WEST 231ST STREET	CSX PUTNAM (ABANDONED)		o		1	STATE	7/3/2014	4.745	FAIR	6/30/2016	4,723	\$21,253,500	208		
2229450	в	WEST 232ND STREET	HENRY HUDSON PARKWAY		A		2	STATE	7/8/2015	5.026	GOOD	6/27/2017	4,900	\$22,050,000	208		
2241510	в	WEST 233RD STREET	CSX PUTNAM (ABANDONED)		o		1	STATE	4/27/2015	5.275	GOOD	5/15/2017	3,760	\$16,920,000	208		
2241520	в	WEST 234TH STREET	CSX PUTNAM (ABANDONED)		o		1	STATE	4/27/2015	5.176	GOOD	5/15/2017	3,770	\$16,965,000	208		
2229460	в	WEST 236TH STREET PEDESTRIAN BRIDGE	HENRY HUDSON PARKWAY		PED-A		3	СІТҮ	7/12/2017	4.356	FAIR	N/A	2,500	\$11,250,000	208		
2229470	в	WEST 239TH STREET	HENRY HUDSON PARKWAY		А		2	STATE	6/3/2015	5.053	GOOD	6/2/2017	6,100	\$27,450,000	208		
2229490	в	WEST 246TH STREET	HENRY HUDSON PARKWAY		А		2	STATE	6/3/2015	4.868	FAIR	6/2/2017	5,600	\$25,200,000	208		
2229500	в	WEST 252ND STREET	HENRY HUDSON PARKWAY		А		2	STATE	1/19/2016	5.372	GOOD	N/A	4,500	\$20,250,000	208		
226672A	м	WEST 31ST STREET	AMTRAK LAYUP TRACKS	А	o		9	STATE	11/15/2014	3.619	FAIR	10/24/2016	8,800	\$39,600,000	104		
224501B	м	WEST 33RD STREET	AMTRAK 30 STREET BRANCH	А	OR		8	STATE	2/11/2016	4.500	FAIR	N/A	16,500	\$74,250,000	104		
224501C	м	WEST 33RD STREET	LAND ADJACENT TO AMTRAK	А	OR		2	STATE	4/28/2015	4.500	FAIR	5/3/2017	2,360	\$10,620,000	104		

a       b       a       b	BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHE R OWN	SPA NS	RATING SOURCE	BRIDGE CONDITION INSPECTION	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
subs	224501D	м	WEST 34TH STREET	AMTRAK 30 STREET BRANCH	А	OR	ER	4	STATE	DATE 5/11/2015	4.375	FAIR	5/9/2017	11,800	\$53,100,000	104		
vis       v	224501E	м	WEST 35TH STREET	AMTRAK 30 STREET BRANCH	A	OR		3	STATE	7/29/2014	4.181	FAIR	11/3/2016	6,500	\$29,250,000	104		
no       no <td< td=""><td>224501F</td><td>м</td><td>WEST 36TH STREET</td><td>AMTRAK 30 STREET BRANCH</td><td>A</td><td>OR</td><td></td><td>3</td><td>STATE</td><td>12/4/2015</td><td>4.433</td><td>FAIR</td><td>12/21/2017</td><td>5,520</td><td>\$24,840,000</td><td>104</td><td>1</td><td></td></td<>	224501F	м	WEST 36TH STREET	AMTRAK 30 STREET BRANCH	A	OR		3	STATE	12/4/2015	4.433	FAIR	12/21/2017	5,520	\$24,840,000	104	1	
var       var<	2245060	м	WEST 37TH STREET	AMTRAK 30 STREET BRANCH	А	o		3	STATE	12/4/2015	6.079	VGOOD	12/21/2017	7,505	\$33,772,500	104		
value         value <th< td=""><td>2245070</td><td>м</td><td>WEST 38TH STREET</td><td>AMTRAK 30 STREET BRANCH</td><td>A</td><td>0</td><td></td><td>2</td><td>STATE</td><td>7/8/2014</td><td>4.135</td><td>FAIR</td><td>7/18/2016</td><td>6,200</td><td>\$27,900,000</td><td>104</td><td>1</td><td></td></th<>	2245070	м	WEST 38TH STREET	AMTRAK 30 STREET BRANCH	A	0		2	STATE	7/8/2014	4.135	FAIR	7/18/2016	6,200	\$27,900,000	104	1	
value       value       Match Strett Banch       value       value </td <td>2245080</td> <td>м</td> <td>WEST 39TH STREET</td> <td>AMTRAK 30 STREET BRANCH</td> <td>А</td> <td>0</td> <td></td> <td>3</td> <td>STATE</td> <td>7/8/2014</td> <td>4.173</td> <td>FAIR</td> <td>7/18/2016</td> <td>6,300</td> <td>\$28,350,000</td> <td>104</td> <td>1</td> <td></td>	2245080	м	WEST 39TH STREET	AMTRAK 30 STREET BRANCH	А	0		3	STATE	7/8/2014	4.173	FAIR	7/18/2016	6,300	\$28,350,000	104	1	
Normal	2245440	м	WEST 40TH STREET	AMTRAK 30 STREET BRANCH	A	o		4	STATE	7/23/2014	4.103	FAIR	7/26/2016	9,400	\$42,300,000	104	1	
var       v	2245330	м	WEST 41ST STREET	AMTRAK 30 STREET BRANCH	A	o		3	STATE	7/24/2014	4.444	FAIR	7/26/2016	6,200	\$27,900,000	104		
10       VI AND	2245210	м	WEST 42ND STREET	AMTRAK 30 STREET BRANCH	A	0		4	STATE	11/5/2014	4.587	FAIR	11/18/2016	10,300	\$46,350,000	104		
vacuum	2245090	м	WEST 43RD STREET	AMTRAK 30 STREET BRANCH	A	0		2	STATE	4/18/2014	4.662	FAIR	6/9/2016	4,140	\$18,630,000	104		
A       STATUTE       MEAD	2245100	м	WEST 44TH STREET	AMTRAK 30 STREET BRANCH	A	о		2	STATE	4/18/2014	4.559	FAIR	6/9/2016	4,300	\$19,350,000	104		
rank	2245110	м	WEST 45TH STREET	AMTRAK 30 STREET BRANCH	A	ο		2	STATE	4/29/2014	5.338	GOOD	6/16/2016	4,100	\$18,450,000	104		
A     A <td>2245120</td> <td>м</td> <td>WEST 46TH STREET</td> <td>AMTRAK 30 STREET BRANCH</td> <td>A</td> <td>о</td> <td></td> <td>2</td> <td>STATE</td> <td>4/29/2014</td> <td>4.500</td> <td>FAIR</td> <td>6/16/2016</td> <td>4,100</td> <td>\$18,450,000</td> <td>104</td> <td></td> <td></td>	2245120	м	WEST 46TH STREET	AMTRAK 30 STREET BRANCH	A	о		2	STATE	4/29/2014	4.500	FAIR	6/16/2016	4,100	\$18,450,000	104		
A       A       A       A       A       A       A       A       A       A       A       A       B       A       B	2245130	м	WEST 47TH STREET	AMTRAK 30 STREET BRANCH	A	0		2	STATE	5/6/2014	4.721	FAIR	6/18/2016	4,100	\$18,450,000	104		
A       M	2245140	м	WEST 48TH STREET	AMTRAK 30 STREET BRANCH	A	ο		2	STATE	5/6/2014	4.618	FAIR	6/18/2016	4,100	\$18,450,000	104		
A       A	2245150	м	WEST 49TH STREET	AMTRAK 30 STREET BRANCH	А	o		3	STATE	5/6/2014	4.426	FAIR	6/24/2016	4,100	\$18,450,000	104		
1 $1$ <td>2245340</td> <td>м</td> <td>WEST 50TH STREET</td> <td>AMTRAK 30 STREET BRANCH</td> <td>A</td> <td>0</td> <td></td> <td>2</td> <td>STATE</td> <td>5/13/2014</td> <td>4.500</td> <td>FAIR</td> <td>6/22/2016</td> <td>4,100</td> <td>\$18,450,000</td> <td>104</td> <td></td> <td></td>	2245340	м	WEST 50TH STREET	AMTRAK 30 STREET BRANCH	A	0		2	STATE	5/13/2014	4.500	FAIR	6/22/2016	4,100	\$18,450,000	104		
1 $1$	2245160	м	WEST 51ST STREET	AMTRAK 30 STREET BRANCH	A	0		2	STATE	5/13/2014	4.853	FAIR	6/22/2016	4,300	\$19,350,000	104		
1 $1$	2245170	м	WEST 52ND STREET	AMTRAK 30 STREET BRANCH	А	o		2	STATE	5/13/2014	5.191	GOOD	6/24/2016	4,300	\$19,350,000	104		
1 $1$	2245180	м	WEST 53RD STREET	AMTRAK 30 STREET BRANCH	А	o		2	STATE	5/20/2014	5.221	GOOD	6/30/2016	5,100	\$22,950,000	104		
x $x$	2245350	м	WEST 54TH STREET	AMTRAK 30 STREET BRANCH	A	0		2	STATE	5/20/2014	5.492	GOOD	6/30/2016	4,700	\$21,150,000	104		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	2245360	м	WEST 55TH STREET	AMTRAK 30 STREET BRANCH	A	0		2	STATE	5/20/2014	5.529	GOOD	7/2/2016	4,300	\$19,350,000	104		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	2245370	м	WEST 56TH STREET	AMTRAK 30 STREET BRANCH	A	ο		2	STATE	5/20/2014	5.397	GOOD	7/2/2016	4,400	\$19,800,000	104		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	2245220	м	WEST 57TH STREET	AMTRAK 30 STREET BRANCH	A	ο		3	STATE	5/20/2014	4.853	FAIR	7/7/2016	9,100	\$40,950,000	104		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	2245190	м	WEST 58TH STREET	AMTRAK 30 STREET BRANCH	A	ο		2	STATE	5/20/2014	4.706	FAIR	7/7/2016	4,100	\$18,450,000	104		
224500       M       Sector Street entrance eastbound       Amprox Amp	2246010	м	WEST 62ND STREET PEDESTRIAN BRIDGE (PINEBANK ARCH)	BRIDLE PATH		PED-O	Р	1	СІТҮ	7/25/2017	4.654	FAIR	N/A	1,000	\$4,500,000	164		
226930       M       WEST 66TH STREET       AMTRAK       A       O       C       V       NA       NA       UNRATED       12/12/2016       4,480       \$20,160,000       107	2269980	м	WEST 64TH STREET	AMTRAK	A	0		2	STATE	N/A	N/A	UNRATED	12/12/2016	5,220	\$23,490,000	107		
	2245420	м	WEST 65TH STREET ENTRANCE EASTBOUND	BRIDLE PATH WEST END		0	Р	1	STATE	1/12/2016	5.100	GOOD	N/A	1,300	\$5,850,000	164		
2269210 M WEST 68TH STREET AMTRAK A O 3 STATE 11/19/2015 6.542 VGOOD 12/19/2017 5,382 \$24,219,000 107	2269390	м	WEST 66TH STREET	AMTRAK	A	0		2	STATE	N/A	N/A	UNRATED	12/12/2016	4,480	\$20,160,000	107		
	2269210	м	WEST 68TH STREET	AMTRAK	A	0		3	STATE	11/19/2015	6.542	VGOOD	12/19/2017	5,382	\$24,219,000	107		

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE	OTHE R OWN ER	SPA NS	RATING	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2269190	м	WEST 70TH STREET	AMTRAK	А	o		3	STATE	11/7/2015	5.542	GOOD	12/16/2017	17,258	\$77,661,000	107		
2246140	м	WEST 72ND STREET ENTRANCE (RIFTSTONE ARCH)	BRIDLE PATH		o	Ρ	1	STATE	1/19/2016	4.467	FAIR	N/A	3,600	\$16,200,000	164		
222928D	м	WEST 72ND STREET RAMP TO HENRY HUDSON PARKWAY NORTHBOUND	RELIEF		AR		1	STATE	7/18/2014	6.648	VGOOD	7/18/2016	1,750	\$7,875,000	107		
2246340	м	WEST 77TH STREET PEDESTRIAN BRIDGE (LADIES POND BRIDGE)	STREAM TO THE LAKE		PED-WO	Ρ	3	СІТҮ	11/28/2016	4.355	FAIR	N/A	500	\$2,250,000	164		
2246460	м	WEST 77TH STREET ENTRANCE (EAGLEVALE ARCH)	PEDESTRIAN PATH OPPOSITE WEST 77TH STREET		o	Ρ	2	STATE	1/21/2016	4.132	FAIR	N/A	3,066	\$13,797,000	164		
2246320	м	WEST 77TH STREET PEDESTRIAN BRIDGE (OAK BRIDGE)	THE LAKE		PED-WO	Ρ	3	СІТҮ	6/9/2016	5.474	GOOD	N/A	1,100	\$4,950,000	164		
2229290	м	WEST 79TH STREET	AMTRAK	А	А		1	STATE	6/11/2014	4.424	FAIR	6/13/2016	4,500	\$20,250,000	107		
2246390	м	WEST 86TH STREET PEDESTRIAN BRIDGE (SOUTHWEST RESERVOIR BRIDGE)	BRIDLE PATH		PED-O	Ρ	3	СІТҮ	11/21/2016	4.509	FAIR	N/A	1,100	\$4,950,000	164		
2231860	Q	WEST ALLEY ROAD	BELT SYSTEM - CROSS ISLAND		А		2	STATE	7/8/2015	5.368	GOOD	8/21/2017	7,200	\$32,400,000	411		
2246120	м	WEST DRIVE	TRANSVERSE ROAD #1		o	Ρ	1	STATE	3/25/2014	4.700	FAIR	4/18/2016	7,900	\$35,550,000	164		
2246240	м	WEST DRIVE	TRANSVERSE ROAD #2		o	Ρ	1	STATE	3/12/2014	4.167	FAIR	4/5/2016	7,200	\$32,400,000	164		
2246260	м	WEST DRIVE	TRANSVERSE ROAD #3		o	Ρ	1	STATE	3/18/2014	4.800	FAIR	4/6/2016	5,100	\$22,950,000	164		
2246280	м	WEST DRIVE	TRANSVERSE ROAD #4		o	Ρ	1	STATE	3/21/2014	4.167	FAIR	4/6/2016	4,700	\$21,150,000	164		
2246330	м	WEST DRIVE (BALCONY BRIDGE)	STREAM TO THE LAKE		wo	Ρ	1	STATE	1/14/2016	5.000	GOOD	N/A	1,817	\$8,176,500	164		
2246080	м	WEST DRIVE (DALEHEAD ARCH)	BRIDLE OPPOSITE WEST 64TH STREET		o	Ρ	1	STATE	1/14/2016	4.667	FAIR	N/A	2,000	\$9,000,000	164		
2246000	м	WEST DRIVE (GREYSHOT ARCH)	PEDESTRIAN PATH BETWEEN 61ST & 62ND STREETS		o	Ρ	1	STATE	1/21/2016	5.400	GOOD	N/A	2,500	\$11,250,000	164		
2244020	к	WEST DRIVE (MEADOWPORT ARCH)	PEDESTRIAN PATH NEAR GRAND ARMY PLAZA		o	Ρ	1	STATE	4/27/2015	5.321	GOOD	4/19/2017	2,500	\$11,250,000	355		
2246360	м	WEST DRIVE (WINTERDALE ARCH)	PEDESTRIAN PATH OPPOSITE WEST 82ND STREET		o	Ρ	1	STATE	1/15/2016	5.182	GOOD	N/A	2,502	\$11,259,000	164		
2249480	R	WEST FINGERBOARD ROAD	SIRT SOUTH SHORE	s	o		2	STATE	9/16/2015	6.403	VGOOD	9/8/2017	5,100	\$22,950,000	502		
2249710	R	WEST FOOTBRIDGE	CLOVE LAKE		PED-WO	Ρ	2	СІТҮ	6/7/2016	3.857	FAIR	N/A	900	\$4,050,000	501		
2244100	к	WEST FOOTBRIDGE (MUSIC GROVE BRIDGE)	PROSPCT PARK STREAM		PED-WO	Ρ	1	СІТҮ	4/28/2017	5.000	GOOD	N/A	308	\$1,386,000	355		
2241470	в	WEST FORDHAM ROAD	METRO NORTH RR HUD	м	0		4	STATE	9/1/2015	5.694	GOOD	9/25/2017	16,052	\$72,234,000	207		
2241460	в	WEST TREMONT AVENUE	METRO NORTH RR HUD	м	0		8	STATE	6/12/2014	3.776	FAIR	6/8/2016	12,900	\$58,050,000	205		
2240180	в	WESTCHESTER AVE	BRONX RIVER		wo		1	STATE	8/19/2015	4.667	FAIR	8/22/2017	5,476	\$24,642,000	202	209	
2241230	в	WESTCHESTER AVENUE	AMTRAK - CSX	АХ	o		3	STATE	11/1/2014	5.778	GOOD	11/9/2016	15,600	\$70,200,000	202	209	
2241000	в	WESTCHESTER AVENUE	CSX PORT MORRIS - (ABANDONED)		0		1	STATE	8/29/2014	4.660	FAIR	8/23/2016	1,740	\$7,830,000	201		
2075837	в	WESTCHESTER AVENUE	HUTCHINSON RIVER PARKWAY		А		2	STATE	2/12/2016	3.958	FAIR	N/A	15,858	\$71,361,000	210	211	
2241329	в	WHITE PLAINS ROAD	AMTRAK - CSX	АХ	o		1	STATE	10/28/2014	4.781	FAIR	10/3/2016	6,900	\$31,050,000	211		
2248020	۵	WHITELAW PEDESTRIAN BRIDGE	NORTH & SOUTH CONDUIT AVENUE		PED-O		7	СІТҮ	10/10/2017	4.507	FAIR	N/A	5,500	\$24,750,000	410		
2266160	Q	WHITESTONE EXPRESSWAY - VAN WYCK SOUTHBOUND TO BELT SYSTEM - CROSS ISLAND EASTBOUND	WHITESTONE EXPRESSWAY - VAN WYCK - BELT SYSTEM - CROSS ISLAND JUNCTION		А		1	STATE	6/12/2015	4.156	FAIR	8/11/2017	2,300	\$10,350,000	407		

BIN	BOR O	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE		SPA NS	RATING SOURCE	BRIDGE CONDITION INSPECTION DATE	BRIDGE CONDITION RATING	VERBAL BRIDGE CONDITION RATING	AASHTO Inspection Method Date	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
1065210	٩	WHITESTONE EXPRESSWAY NORTHBOUND	BELT SYSTEM - CROSS ISLAND		А		1	STATE	6/17/2014	4.656	FAIR	6/14/2016	2,500	\$11,250,000	407		$\square$
2241369	в	WILLIAMSBRIDGE ROAD	AMTRAK - CSX	АХ	o		2	STATE	10/29/2014	4.985	FAIR	10/29/2016	6,510	\$29,295,000	211		
2240039	км	WILLIAMSBURG BRIDGE	EAST RIVER	т	WEO		53	STATE	10/20/2014	4.542	FAIR	10/20/2016	824,000	\$3,708,000,000	103	301	
2240059	вм	WILLIS AVENUE BRIDGE	HARLEM RIVER		wмо		15	STATE	11/12/2014	6.778	VGOOD	11/23/2016	171,105	\$769,972,500	111	201	
2248019	٩	WOODHAVEN BOULEVARD	ATLANTIC AVENUE		0		3	STATE	3/26/2014	4.208	FAIR	4/1/2016	19,400	\$87,300,000	409		
2248159	a	WOODHAVEN BOULEVARD	QUEENS BOULEVARD		o		2	STATE	7/17/2014	4.078	FAIR	7/12/2016	11,500	\$51,750,000	404		
2230540	٩	WOODSIDE AVENUE	278I (BROOKLYN QUEENS EXPRESSWAY)		А		1	STATE	1/29/2016	5.391	GOOD	N/A	7,529	\$33,880,500	402		
2247400	٩	WOODSIDE AVENUE	CSX TRANSPORT	x	o		1	STATE	9/15/2015	5.033	GOOD	10/3/2017	4,970	\$22,365,000	402	404	
2247120	٩	WOODSIDE AVENUE	LIRR MAIN LINE	L	o		3	STATE	10/7/2015	4.413	FAIR	11/4/2017	14,900	\$67,050,000	402		
787 OPEN BRIDGES			OPEN SPANS 4,336	NS 4,336							OPEN SF	14,283,295	\$64,287,657,000	ALL			

#### TUNNEL INVENTORY

TUNNEL	BORO	FEATURE CARRIED	FEATURE CROSSED	BRIDGE	SPANS	RATING	INSPECTION	TUNNEL	VERBAL	AASHTO	DECK	REPLACEMENT	CD	CD2
IDENTIFICATION				TYPE		SOURCE	DATE	CONDITION	TUNNEL	Inspection	AREA	соят		
NUMBER								RATING	CONDITION	Method Date				
									RATING					
NYCDOTN3101	м	EAST 34TH STREET (2246540)	PARK AVENUE TUNNEL	от	1	CITY	08/20/14	4.117	FAIR	07/21/17	36,200	\$162,900,000	105	106
NYCDOTN3102	м	EAST 42ND STREET - EAST 47TH	FIRST AVENUE TUNNEL	от	2	СІТҮ	05/20/14	4.922	FAIR	07/18/17	95,000	\$427,500,000	106	
		STREET (2246570)											1	
NYCDOTN3103	м	BATTERY PLACE (2232000)	FDR DRIVE	AT	2	СІТҮ	10/16/15	5.182	GOOD	08/08/17	142,000	\$639,000,000	101	1
NYCDOTN3104	м	WEST STREET (2267380)	RECTOR STREET - BROOKLYN	AT	1	СІТҮ	11/20/15	5.033	GOOD	08/08/17	25,760	\$115,920,000	101	1
			BATTERY TUNNEL MANHATTAN										1	
			PLAZA										1	
														-
In 2017, the fou	ır tunne	els were assigned Tunnel Identificati	on Numbers and removed from	the inven	tory of I	oridges. 1	The tunnel ra	atings reflec	cted here ar	e the traditio	nal NYS b	ridge condition ra	atings	5
from 2014 and	2015.	The NYS condition rating system is	being converted to a federal sy	stem dev	eloped	by AASHT	O and there	is no currer	nt acceptab	le formula to	translate	the results of the	e tunr	nel
inspections per	formed	I in 2017 into the traditional NYS rati	ngs. The AASHTO inspection n	nethod do	es not a	- ienerate r	numerical ov	verall condit	ion ratings.	The conditio	on ratings	may be updated	in the	¢.
					55 .iot ş	,		S. L. Sonan		Sonance				
2018 annual re	JUIT.													

		STATEN ISLAND	CULVERTS			
BIN	FEATURE CARRIED	FEATURE CROSSED	BRIDGE TYPE	SPANS	SOURCE	
R00141	ALTER AVE	STORM&GRND FED STRE	EAM	0	1	CITY
R00036	AMBOY ROAD	ARBUTUS AVE		0	1	CITY
R00133	ARDEN AVE	HALPIN AVE		0	1	CITY
R00105	ARTHUR KILL ROAD	CLARKE AVENUE		0	1	CITY
R00086	ARTHUR KILL ROAD	ENGLEWOOD ST		0	1	CITY
R00084	ARTHUR KILL ROAD	MULDOON AVE		0	1	CITY
R00085	ARTHUR KILL ROAD	150' N.W. ELLIS ROAD		0	1	CITY
R00106	ARTHUR KILL ROAD	RICHMONDTOWN ROAD		0	1	CITY
R00122	ARTHUR KILL ROAD	RIDGEWOOD AVE		0	1	CITY
R00103		ST GEORGE ROAD		0	2	CITY
R00005 R00035	BIDWELL AVE BRADLEY AVE	COLUMBUS PLACE WILLOWBROOK ROAD		0	1	CITY CITY
R00035 R00077	BUCHANAN AVE	HAROLD ST		0	1	CITY
R00077 R00139	DE PEW PL	MAGUIRE AVE		0	1	CITY
R00139 R00004	DICKIE AVE	NEAR COLUMBUS PLACE		0	1	CITY
R00004 R00027	ELEANOR ST	ROCKLAND AVE	•	0	1	CITY
R00027 R00011	FOREST AVE	CRYSTAL AVE		0	1	CITY
R00011 R00068	FORESTAVE	RANDALL AVE		0	1	CITY
R00068	93 FOSTER ROAD	AMBOY ROAD		0	1	CITY
R00041	GALLOWAY AVE	MARIANNE ST		0	1	CITY
R00016	GRAHAM BLVD	JAY ST		0	2	CITY
R00025	GREELEY AVE	SANILAC ST		0	1	CITY
R00069	GREGG PLACE	RANDALL AVE		0	1	CITY
R00051	HARBOR ROAD			0	1	CITY
R00065	HENDERSON AVE	WESTBURY AVE		0	1	CITY
R00138	HOLLAND AVE	BENJAMIN PLACE		0	1	CITY
R00021	HUNTER AVE	IDLEASE PLACE		0	1	CITY
R00135	HYLAN BLVD	CORNELIA AVE		0	1	CITY
R00022	IDLEASE PLACE	HUNTER AVE		0	1	CITY
R00062	KISSEL AVE	SNUG HARBOR ROAD		0	1	CITY
R00042	LEDYARD PLACE	LACONIA AVE		0	1	CITY
R00024	LINCOLN AVE	SANILAC ST		0	1	CITY
R00038	MAGUIRE AVE	DEPEW PLACE		0	1	CITY
R00040	113 MAGUIRE AVE	DEPEW PLACE		0	1	CITY
R00095	MEISNER AVE	ROCKLAND AVE		0	1	CITY
R00023	MIDLAND AVE	HYLAN BLVD		0	1	CITY
R00013	NAUGHTON AVE	PATTERSON AVE		0	3	CITY
R00015	OLYMPIA BLVD	SLATER AVE		0	1	CITY
R00097	RICHMOND HILL ROAD	RICHMOND ROAD		0	1	CITY
R00046	RICHMOND TERRACE	SNUG HARBOUR		0	2	CITY
R00137	RICHMOND TERRACE	WESTERN AVE		0	2	CITY
R00034	ROCKLAND AVE	BRIELLE AVE		0	1	CITY
R00096	ROCKLAND AVE	MANOR ROAD		0	1	CITY
R00076	ROOSEVELT AVE	HAROLD ST		0	1	CITY
R00101	ST ANDREWS ROAD	LIGHTHOUSE AVE		0	1	CITY
R00032	SEGUINE AVE	PURDY PLACE		0	1	CITY
R00060	SIGNS ROAD	VICTORY BLVD		0	1	CITY
R00136	SNUG HARBOR ROAD	KISSEL AVE		0	1	CITY
R00114	SWEET BROOK ROAD	RIDGEWOOD ROAD		0	1	CITY
R00031	TARLTON ST	GREAT KILLS LANE		0	1	CITY
R00055	TRAVIS AVE	VICTORY BLVD		0	1	CITY
R00115	VICTORY BLVD	CLOVES LAKE PARK		0	3	CITY
R00059	WESTERN AVE	RR BRIDGE		WO	1	CITY



R00032 Seguine Avenue over Purdy Place. R00115 Victory Boulevard over Cloves Lake Park. R00114 Sweet Brook Road over Ridgewood Road. R00103 Aultman Avenue over St. George Road. R00139 De Pew Place over Maguire Avenue. R00105 Arthur Kill Road over Clarke Avenue. R00101 St. Andrews Road over Lighthouse Avenue. R00040 113 Maguire Avenue over Depew Place. R00059 Western Avenue over RR Bridge. R00005 Bidwell Avenue over Columbus Place. R00060 Signs Road over Victory Boulevard. R00062 Kissel Avenue over Snug Harbor Road.

Revised 2/26/13

### Bridge Protection through Dirt and Water Control

**Cleaning of Abutment and Pier Tops** Removal of debris, dirt and vegetation from abutment and pier tops; cleaning and lubrication of bridge bearings.

**Pier Top Cleaning of Bridges Over Water (including Pigeon Waste Removal)** This work consists of removing all debris, including pigeon waste, from bridge abutments and pier tops. Workers pull the material from the edges into the center of the pier with a broom or shovel while supervisors monitor the work to ensure that, to the maximum extent practicable, material is not pushed from the pier during the cleaning process. Using hand tools, debris is collected and removed for disposal. When removing pigeon waste, a 3.5 gallon manual spray canister is used to apply a bleach/water solution to the waste and to the area to be cleaned. The solution is sprayed at a low height to limit aeration and prevent material from falling into the waterway. Once the waste has been sufficiently treated, it is removed for proper disposal.

<u>Cleaning and Lubrication of Bearings of Bridges Over Water</u> This work consists of cleaning bearings, as well as removing old and applying new lubricant where required. For bearings on flat, solid surfaces, located 12 inches or more from the edge of the structure, no containment/bulkhead will be used. A containment/bulkhead will be used when cleaning or lubrication bearings located less than 12 inches from the edge of the structure. Dirt and old lubricant are collected and disposed of properly.

**Debris Removal** Removal of spilled trash; removal of rocks, wood, plastic or metal objects, tires, mufflers, wheel covers, and other traffic droppings; removal of paper products, bottles, cans, accumulated dirt and other trash. Debris removal is also required for walkways and plazas. For movable bridges and bridges over water, the protective fender systems need to be cleared of debris. The removal of debris from bridges is an important and critical component of maintenance. Debris can cause safety and hazard conditions. In addition, debris traps moisture and salts on the structure and prevents proper drainage.



Assistant City Highway Repairer Lashawn Elam and Highway Repairer Anita Ramos Removing Vegetation and Other Debris. Assistant City Highway Repairer E'boni Brown Removing Debris under the Henry Hudson Parkway at 58<sup>th</sup> Street. (HHP Credit: Edward Pedersen)

**Cleaning of Drainage System** Removal of debris, dirt and vegetation from drainage systems, including gutter gratings, gutters and leaders, scuppers, down spouts, clean-outs, and scupper piping systems. The cleaning of surface gratings and gutters requires hand tools, brooms and brushes. In some cases, a vacuum truck is used to clear the drain lines. Cleaning the scuppers and scupper piping systems requires specialized equipment.



Drain Truck on Brooklyn Bridge Ramp. (Credit: Peter Basich) Drain Cleaning on the Williamsburg Bridge in September 2011. (Credit: Shaikh Islam) Cleaning Catch Basins on the Manhattan Bridge.



Preventive Maintenance Contractors on Traveler #3 South on the Ed Koch – Queensboro Bridge Conducting Drainage Cleaning. Drain Crew: Highway Repairer Anthony Irizarry, Supervisor Highway Repairer Michael Parise, and Assistant City Highway Repairer Giavonni Caballero. (Crew Credit: James Campbell)

**Cleaning of Expansion Joints** Removal of debris and dirt from the troughs using compressed air or water; and cleaning and resealing of the joints. Performed on all bridges. Expansion joints are located at the surface level where they are subjected to impact and vibration and are exposed not only to the elements such as water, dust, grit, ultra-violet rays and ozone, but also to the effect of chemicals such as salt solutions, cement alkalis and petroleum derivatives. In addition to regular lubrication of moving parts, penetration of water, silt and grit must be effectively prevented or provision made for their removal.



Manhattan Bridge Expansion Joint Cleaning in 2008: Supervisor Highway Repairer Thomas Cruz, Assistant City Highway Repairer Antonio Asaro, Highway Repairer Louie Dumeng, and Oiler Stanley Karolewicz. Assistant City Highway Repairers Jonathan Adorno and Antonio Asaro, Oilers Stanley Karolewicz and Ronald Grady. (Credit: Thomas Whitehouse)



Expansion Joint Cleaning on the Williamsburg and Ed Koch - Queensboro Bridges in September 2011. (Credit: Shaikh Islam)

**Cleaning of Open Grating Decks** Removal of debris and dirt from open-grating decks and washing with high-pressure water jets.

**Sweeping** Sweeping each bridge with a mechanical sweeper along each curb. Bulk debris is removed by hand in advance of the mechanical sweeper, which then removes smaller debris such as litter, rocks, and sand to prevent clogging of drainage systems and trapping of moisture against the curbs.



Mechanical Sweeper – Side and Rear Views. (Credit: Peter Basich)

Washing of Decks and Salt Splash Zones Washing of decks, under-decks, substructures, and salt splash zones to remove remnants of de-icing salts; use of water jets to clean tight corners.



Washing the Williamsburg Bridge in July 2011 and May 2015.



Washing the Ed Koch Queensboro Bridge in August 2011.

### Roadway Surface Maintenance

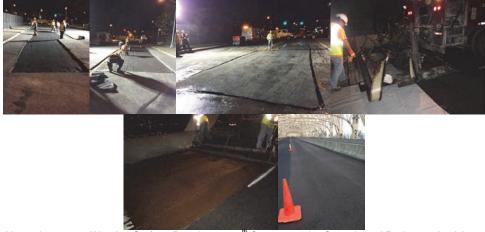
**Crack Sealing in Pavement and Curbline Sealing** Cleaning of cracks and filling them with sealant; sealing with mastic material along the curb line to prevent water leakage onto bridge components. This maintenance function is sensitive to weather conditions.

**Repair of Sidewalks and Curbs** Sidewalk repair to restore sidewalk to original condition. Curb repair to be undertaken along with this task.

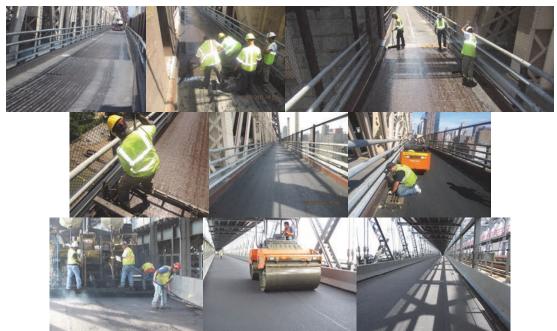


Sidewalk Repairs in August 2010 at Houston Street Bridge over the FDR Drive: Tractor Operator Robert Noordzy (in Tractor), Bricklayer Vincent Sciulla, Cement Masons Frank Finizio and Victor Porowski, and Bricklayer Luigi Cuffari. Bridge Repairer and Riveter Brook Budd and Bricklayer Luigi Cuffari. Tractor Operator Noordzy (in Tractor), Cement Masons Frank Finizio (Foreground) and Victor Porowski (Background), and Bricklayer Vincent Sciulla. Bricklayer Vincent Sciulla, Bridge Repairer and Riveters James Philip and Brook Budd, Bricklayer Luigi Cuffari, Tractor Operator Robert Noordzy, Supervisor Bricklayer Edward Alfano, and Cement Masons Frank Finizio and Victor Porowski. (Credit: Russell Holcomb)

**Replacement of Wearing Surfaces** Removal of old wearing surface; preparation of exposed concrete slab or steel plate; installation of new wearing surface. The wearing surface is a minimum two-inch course of bituminous concrete. Also includes minor deck repair, cleaning and waterproofing of deck.



November 2014: Wearing Surface Repairs at 149<sup>th</sup> Street over the Cross Island Parkway. Applying the Waterproofing Membrane. The Finished Patch. (Credit: Steve Mezzacappa) Resurfacing the Deck of the Queens-Bound Upper Roadway of the Ed Koch - Queensboro Bridge in June 2014. (Credit: Sunil Desai)



Repairing the Concrete Overlay on the South Upper Roadway of the Ed Koch – Queensboro Bridge in June 2013. (Credit: Sunil Desai) Repaying the Williamsburg Bridge in 2011.

# Electrical and Mechanical Component Maintenance of the 4 East River Bridges and 24 Movable Bridges

**Maintenance of Electrical Devices** Checking and servicing electrical systems such as travelers, relays, auxiliary contacts, meters, overload relays, time delay relays, span and tail locks, brake systems, transmitters, transformers, fuses, wiring, resistors, etc. Also includes checking interior anchorage lighting, caution lighting, navigation lighting, and necklace lighting. During inspection, the travelers of the East River Bridges are operated to ensure proper calibration of electric motors. If motors are not calibrated properly, the travelers may rotate and jam along their guides. Many of the movable bridges are very old and replacement parts are difficult to find or may not be available any longer. When necessary, Division personnel fabricate machine parts such as shafts, and brake and warning gate components. In addition to inspection of systems, the electrical technicians replace poor condition components with electric systems before corrective maintenance is required. This preventive maintenance strategy avoids disruption of bridge service to motorists. This is important, because once corrective maintenance is necessary, it may require the bridge to be out of service for lengthy periods.



Construction Project Manager Gholamali Mozaffari, and Electricians Nelson Crooks and Gary Emmanuel Fixing Machinery in the Ninth Street Bridge Operator House in April 2008. (Credit: Vera Ovetskaya) Repairing the Navigation Lighting on the Hunterspoint Bridge. On the Bridge: Oilers Carl Wharton, Richard Morreale, and Paul Califano, Mozaffari Ali, Electrician Naum Golburt, and Highway Repairers Manny Nardiello and Kevin Donahue. In the Snooper Bucket: Harry Parmaman and Supervisor Electrician Jose Done. (Credit: Samuel Teaw)

**Maintenance of Mechanical Components** Cleaning and lubrication of all movable parts for the four East River Bridges and the twenty-four movable bridges. In addition, specialized maintenance is performed on the bridge cables and eye-bars inside the anchorages, and on the solid rods on the suspended spans of the East River bridges, cleaning and lubrication of the travelers' mechanical components; cleaning of truss, sliding-surface, stringer, and roller bearings; cleaning and lubricating air and fire line valves. Cleaning and lubrication is required to keep components from corroding and becoming immobile. Allowing components to seize could cause operating failure and introduce unsafe structural stresses.



Cleaning and Lubricating the Solid Rods' Suspender Bearings on the Brooklyn Bridge. Oiler Rene Francis on the Madison Avenue Bridge During a Manual Opening of the End Lift Machinery. (Credit: Vera Ovetskaya)



Repairing the Brooklyn Bridge Standpipe System, 130 Feet Below the Roadway. Maintenance Crew Conducting the Annual Cleaning and Lubrication of the Solid Rod Suspenders and Spherical Bearings on the Brooklyn Bridge. 2<sup>nd</sup> Photo - Oilers Steven Marxhausen, Rene Francis, Richard Morreale, Thomas McAuliffe, and Andrew Sorrentino. (Credit: Anatoly Orlov) Oiler T. McAuliffe at the 9<sup>th</sup> Street Bridge. Oiler Thomas McCarthy on the Macomb's Dam Bridge. Credit: Vera Ovetskaya)



Assistant Mechanical Engineer Vera Ovetskaya Climbing to the Brooklyn Bridge Tower in 2008. (Credit: Gennadiy Kaplun) Oiler Tom Strommen Maintaining the Hydraulic Power Unit at the Hamilton Avenue Bridge in February 2010. (Credit: Vera Ovetskaya) Cleaning and Lubricating the Broadway Bridge. (Credit: Reza Taheri) Associate Project Manager Thomas Whitehouse (Wearing Yellow Jacket) Inspecting the Broadway Bridge Machinery Room and Instructing the Contractor. (Credit: Albert Hong)

### Steel Protection – Painting\*\*

**Total Paint Removal and Repainting** This work consists of constructing a negative pressure containment (Class 1A); washing and surface blasting the structure to commercial-blast or near-white metal condition (Society for Protective Coating SP-6 or SP-10); constructing a Class 3P containment; power tool cleaning the structure to bare metal condition (Society for Protective Coating SP-11 or SP-15); lead monitoring and disposal; and applying lead-free paint; primer, intermediate coat and top coat to the structure. Surface preparation is accomplished by abrasive blasting. The containment materials include tarps, plywood, scaffolding, and cables.

Equipment includes blasting machines, needle guns, spray pumps, compressors, dust collectors, filters, and ductwork.



Brooklyn Bridge Contract #6 in 2014 - Painting Main Cables and Suspension Ropes. Painting at Main Bridge – Safety Barrier and Touchup. Containment at Ramp A, Span 4.



Brooklyn Bridge Contract #6 in 2014 - Main Bridge Touch-Up Painting, and Painting Manhattan Main Span Promenade Railing. Blasting and Painting – Brooklyn Approach Structures. Class 1A Containment at the Woodhaven Boulevard Bridge over Atlantic Avenue. (Credit: Sergey Parayev)



Movable Bridge Preventive Maintenance Contractor Removing Paint and Repainting on the Borden Avenue Bridge.

For over 100 years, lead was used in industrial paints applied to steel structures. Lead paints were chosen because they were the best anti-corrosion agents available to preserve steel structures. The application of lead-based paints to steel structures and facilities continued through the 1970's until health hazards associated with lead became known, and less toxic

coatings were developed. Presently, the lead paint coatings (and the steel surface beneath) on many steel bridges in NYC are weathered and corroded and no longer provide adequate protection from the elements. The lead paint and underlying rust must now be removed and non-lead paint applied.

NYCDOT takes into consideration several factors before deciding the method of paint removal for a particular bridge. The primary factors are the type of bridge structure, its paint coating conditions and its surrounding environment. Based on these and other factors, NYCDOT will select a method that is most appropriate for the recoating needs, yet will be least intrusive on the surrounding community and protective of workers, motorists and the public.

The available methods range from abrasive blasting, and water blasting, to power tool cleaning and chemical stripping. Generally, faster methods such as abrasive blasting mean less disruption on the community, but they also have a greater potential for lead paint dust emission. The slower methods have a lower potential for dust emission but can be more disruptive to the public as they require a longer work period. While removal operations are taking place, appropriate containment procedures must be implemented to protect health and safety.

The Division treats all lead paint waste as hazardous waste, and stores and then disposes of it according to the Resource Conservation and Recovery Act (RCRA). Waste is stored in approved leak-proof drums and containers which are, in turn stored temporarily in a fenced, secured area on-site until they are transferred to a disposal/recycling facility.

**Full-Steel (Overcoating)** Overcoating of the entire bridge. Solvent cleaning and cleaning of steel surfaces in areas with deteriorated paint is conducted using approved environmentally safe paint removal techniques, and either power tools, hand tools or combination hand/power tools. Power tool cleaning is performed in a Class 3P containment, and hand tool cleaning in a Class 4 containment. Combination hand/power tool cleaning is performed in a Class 3P containment. A localized primer coat and a single finish coat are then applied by brush, roller, or spray over the entire bridge.

**Salt Splash/Spot Painting** This is a new process that combines salt splash with spot painting. It involves preparation of the area to be painted by power wash, using clean water or steam. Solvent cleaning is done in locations where oil and grease need to be removed from the steel surface. Areas to be power washed and painted are: the superstructure (up to six feet upwards from the deck), the underdeck steel (up to three feet from each side of the center line of the expansion joints), and the outside of the bridge's steel faces. In addition to these painted areas, we now perform localized surface preparation and painting of any deteriorated locations as mentioned in our spot painting definition above. After power washing, hand and power tools are used in areas that have started to show deterioration from accumulated de-icing agents. Power tool cleaning is performed in a Class 3P containment, and hand tool cleaning in a Class 4 containment. Combination hand/power tool cleaning is performed in a Class 3P containment. A spot primer coat and finish coat are then applied by brush or roller. Occasionally, when there is no danger of overspray, spray painting may be performed.



Williamsburg Bridge in June 2010: Application of Finish Coat at North Truss Diagonal. Salt Splash Painting on the Williamsburg Bridge. (Salt Splash Credit: Fouad Althaibani). Inspection of Blasting Surfaces Inside the Franklin Square Arch Containment in September 2010. Brooklyn Bridge Main Span Painting in December 2010.

TASK	IMPACT*
Debris Removal	6.1%
Sweeping	5.3%
Clean Abutments & Piers	8.1%
Clean Open Grating	7.0%
Clean Expansion Joints	9.1%
Wash Deck & Splash Zones	5.1%
Paint	4.2%

TASK	IMPACT*
Spot Paint	3.7%
Drain Cleaning	10.6%
Sidewalk & Curb Repair	2.5%
Pavement & Crack Sealing	12.2%
Wash Underside	15.9%
Mechanical Device Maintenance	6.7%
Replace Wearing Surface	3.5%

### \*IMPACT ON BRIDGE RATING



Cleaning the Brooklyn Bridge Brooklyn Anchorage in July 2007. (Credit: Serag Saad) Bridge Repairer and Riveter James Philip Using a Track-Mounted Torch to Bevel the Edge of a Steel Plate in September 2012. (Credit: Thomas Whitehouse) Checking the Navigation Lights at Pier #5 of the Third Avenue Bridge.

\*Consortium of Civil Engineering Departments of New York City Colleges and Universities. Preventive Maintenance Management System For New York City Bridges: Update 1998. Technical Report No. 98-1. 1999. \*\*Descriptions modified in November 2003.

# MAINTENANCE PERSONNEL RESOURCES IN 2017

Preventive maintenance, corrective repair, flag repair, and painting work on the bridges and other structures within the City is performed by mechanics and supervisors in a variety of trades. The bridge operators provide safe and expedient passage to all marine and vehicular traffic under and on movable bridges. A breakdown of this work force by trade is:

	SUPERVISORS	MECHANICS
BRICKLAYERS	2	4
BRIDGE OPERATORS	20	84
BRIDGE PAINTERS	8	34
BRIDGE REPAIRERS/RIVETERS	4	40
CARPENTERS	2	14
CEMENT MASONS	-	7
CITY LABORER	-	1
ELECTRICIANS (INCLUDES HELPERS)	4	21
HIGHWAY REPAIRERS (INCLUDES ASSISTANTS & SEASONAL WORKERS)	25	81
MACHINISTS	-	2
MOTOR GRADER OPERATORS	-	1
OILERS	2	15
TRACTOR OPERATORS	-	1
TOTALS	67 SUPERVISORS	305 MECHANICS



Bridge Repairer Riveter Damian Venezia Squeezing Between the Girders to Access a Floor Beam That Needed to be Reinforced on the Ed Koch Queensboro Bridge – August 2010. (Credit: Hany Soliman) Carpenters John Horgan and Ruben Urena, and Assistant Civil Engineer Fouad Althaibani Repairing the PS-5 Bridge in November 2011. (Credit: Thomas Whitehouse) Cement Mason Victor Porowski Spreading Sodium Acetate on the Walkway of the Brooklyn Bridge in 2013. (Credit: Paul Schwartz). Supervisor Bridge Painter Cesar Pazmino Demonstrating Flag Change Preparations. (Credit: Bonny Tsang)



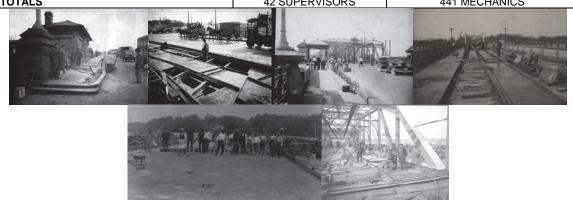
Bridge Operator Delonda Bates-Pinkney at the Controls of the 9th Street Bridge. She has worked for the Department since 1989. (Credit: Keith Burrowes) BO Bates-Pinkney Preparing to Check the Bridge's Mechanisms. (Credit: Vera Ovetskaya) Deputy Director of In-House Painting Earlene Powell on the Brooklyn Bridge. Bridge Repairer and Riveter Kevin Clarkson Installing Anemometers on the Ed Koch-Queensboro Bridge in July 2013. (Credit: Paul Schwartz). Administrative Superintendent of Bridge Operations George Kern inspecting the Battery Park Underpass after Hurricane Sandy. (Credit: Alexander Engel) Bridge Operators Nestor Ortiz and Brian Brown Assisting the Engineers on the Roosevelt Island Bridge in July 2015. (Credit: Vera Ovetskaya)

Revised 11/30/17

# MAINTENANCE PERSONNEL RESOURCES IN 1900

	SUPERVISORS	MECHANICS
AXEMAN		8
BLACKSMITH	1	2
BOILERMAKER		
BRICK MASON	1	4
BRIDGE TENDER	15	137
CARPENTER	1	23
DOCKBUILDER		1
DRIVER		11
FIREMAN		18
FITTER		3
GATEMAN		7
INSPECTOR (INCLUDING STEEL)		10
LABORER (INCLUDES HELPERS)	7	111
LEVELER		4
LINEMAN		3
MACHINIST (INCLUDING HELPERS)		13
MASONRY INSPECTOR		7
MECHANIC	1	2
PAINTER	1	16
RIGGER		11
RIVETER	1	6
RODMAN		4
SHIP CARPENTER		4
SOUNDER		4
STABLEHAND		3
STEAM ENGINEER (INCLUDES DYNAMO)		15
STONE CUTTER/STONE MASON	1	2
SUPERINTENDENT ELECTRIC LIGHT	1	
SUPERVISOR (INCLUDES ASSTS)	12	
TOOLMAN		2
TRANSITMAN		7
TRIMMER		2
TOTALS	42 SUPERVISORS	441 MECHANICS

A breakdown of the Department of Bridges work force by trade in 1900:



Willis Avenue Bridge Curbing and Road Repair in the Early 1920's. Madison Avenue Bridge - Constructing New Guardrail in September 1934. Concreting on City Island Bridge in 1912 and Shore Road in 1908. University Heights Bridge Roadway Repair in 1923.

# BRIDGE INSPECTION EQUIPMENT LIST

Inspector Equipment	Regular Inspection Team Equipment	Inspection Van Equipment
Boots-Knee High	5 Boro Map	Tool Chest
Dust Masks (Disposable)	Binoculars, Broom	Clip Boards
Safety Goggles	Digital Camera, Camera Card Reader	Flashlight (3 "D" Cell)
Hard Hat With Liner	Hand Compass	Fire Extinguisher & First Aid Kit
Rain Hat & Jacket	Screwdriver Set (Regular & Phillips)	3 Safety Flags
Work Gloves Long Cuff	Dye Penetrant Kit	Step Ladder 6' or 8'
Work Gloves Unlined & Unlined	Rotational Distance Meter	Traffic Regulation Barrels
Spring/Winter Jackets	Lantern D-Meter With Test block	10 Traffic Cones
Work Boots & Overalls	Marking Paint Spray	Special Equipment for Inspection of Bridges Over Railroads
Chipping Hammer	Retract Survey Rod 25	Third Rail Insulating Mat
Clip Boards	Portable Laser Distance Meter, Handheld Computer	Put In Trucks By Highway Repairers When Needed
Deceleration Lanyards	Thermometer, Spray Penetrating Oil	Generator
Flashlight (2 "D" Cell) Safety Vest	Cell Phone/Radio, Vernier Calipers Wrenches 12", Tool Pouch	Oil For Generator Extension Ladder 32'
Level 9" (Magnetic)	Lumber Crayons, Spray Paint	Extension Ladder 32
Tool Bags (24")	Awl, Calipers, Hacksaw	Extension Ladder 16'
Class III Body Harness	Hacksaw Blades (Extra), Paint Scraper	Shovel
Lanyards	Inspection Mirror, Level 24"	Push Broom
Bridge Inspection Manual (New York State)	Pliers 8", Vinyl Coated	Dust Pan & Sweep Broom
Technical Advisories For Inspection Manual	Plumb Bob, Pocket Knife	Bottled Water
Emergency Procedure Instructions	Ruler 25' or 30' (Metal)	Bolt Cutter
OSHA Approved Respirator & Filters	Digital Ultrasonic Thickness Gage, Scraper Blades (Extra)	Flood Lights
Belt With Two Drop Forged D-Rings	Wire Brush, Folding Ruler 8'	Approved Safety Gasoline Can
Hard Hat Flashlight	Rope 5/8" With 100' Coil	Sledge Hammer (8 lbs.)
	Digital Angle Gauge	Extension Cord Winder
	In-Depth Inspection Team Equipment	
	High-Definition LIDAR 3-D Camera and Software	
	Fiber-Optic Borescope	
	Ultrasonic Thickness Meters	
Administrative Engineer Gennadiy Kaplun Measuring a Flagged Condition at Cross Island Parkway Bridge over Totten Avenue in November 2017. (Credit: Sergey Parayev)	Using Hand Mirror to Inspect Brooklyn Bridge Cables in October 2014 and Manhattan Bridge Cables in October 2016. D-Meter Used to Verify a Deteriorated Web Plate on the Ed Koch-Queensboro Bridge in June 2016. (Credit: NYSDOT)	
Utilizing an 8' A-Frame Ladder to Inspect the Ceiling of the West 191s' Street Pedestrian Tunnel.	Using Extension Ladder to Inspect John Street Pedestrian Bridge in October 2017.	Inspecting Bridge Over Dam at Clove Lake in May 2014 Using Small Boats and Scaffolding.

\*New York City Department of Transportation, Division of Bridges. *Inspections and Bridge Management Section Equipment Checklist.* 2006, Revised 11/15/10, 12/31/13, 11/17/15, and 2/6/18.

### **Personnel Recognition and Service Awards**

### Labor-Management Employee Recognition Award Ceremony

Division personnel were honored in a Labor-Management employee recognition ceremony on April 28, 2017 for their years of service to the City.

#### 35 Years of Service

Bridge Operator Brian Corry, Oiler Rene Francis, and Administrative Manager Marija Raborg.

### 30 Years of Service

Area Supervisor Highway Maintenance James Campbell, Administrative Staff Analyst Michael Depompo, Highway Repairer Kevin Donahue, Bridge Operator Arturo Fisher, Civil Engineer Lev Gold, Supervisor Electrician Raymond Hanley, Administrative Staff Analyst Paul Kahn, Bridge Operator George Kutty, Cement Mason Luigi Mula, Associate Staff Analyst Laurie Oberson, Electrician Richard Parisi, Carpenter William Sic, and Assistant Civil Engineer Reza Taheri.

### 25 Years of Service

Bridge Repairer and Riveter Shawn Ahearn, Supervisor Highway Repairer Victor Andrade, Administrative Manager Monique Bryson-Sambula, Bridge Operator Michael Elliston, Bridge Operator David Emrich, Bridge Operator Anthony Hunter, Highway Repairer Dowen Marshall, Supervisor Bridge Repairer and Riveter Gean Pilipiak, Administrative Manager Cherlyn Thorpe, and Highway Repairer Paul Voluz.



Chief Operations Officer Margaret Forgione, Bridge Operator Brian Corry, Commissioner Polly Trottenberg, and Executive Deputy Commissioner for Strategic and Agency Services Joseph Jarrin. Civil Engineer Lev Gold and Commissioner Polly Trottenberg.

### Department Recognition (Above and Beyond) Ceremony

Division personnel were honored on September 14, 2017 for their outstanding work on various projects. The awards were presented by Commissioner Polly Trottenberg, Executive Deputy Commissioner for Strategic and Agency Services Joseph Jarrin, and Chief Operations Officer Margaret Forgione.



Commissioner Polly Trottenberg, Executive Deputy Commissioner for Strategic and Agency Services Joseph Jarrin, Chief Operations Officer Margaret Forgione, and Chief Bridge Officer Robert Collyer at the Ceremony. (Credit: Jaclyn Whitney)

### Emergency Repair of the East 16<sup>th</sup> Street Retaining Wall

Supervisor Bricklayer Edward Alfano, Assistant City Highway Repairer Edward Alfano Jr., Assistant City Highway Repairer Anthony Angioletti Jr., Cement Mason Mike Biancaniello, Highway Repairer Giavonni Caballero, Assistant City Highway Repairer Anthony Connelly, Assistant City Highway Repairer Devon Cromarty, Assistant City Highway Repairer James Cummings, Highway Repairer Peter Dalton, Bricklayer Stephen Daniel III, Assistant City Highway Repairer Marlon Doyle, Carpenter Brian Dunn, Cement Mason Frank Finizio, Area Supervisor Highway Maintenance Salvatore Gioia, Cement Mason Lawrence Marks, Tractor Operator Andrew Mondi, Carpenter Joseph Moschella, Carpenter Michael Nallen, Highway Repairer James Olsen Sr., Assistant City Highway Repairer Luz Orlando, Cement Mason Victor Porowski, Supervisor Highway Repairer Anita Ramos-Colon, Carpenter William Sic, Supervisor Highway Repairer Robert Tuite, and Supervisor Carpenter Joseph Vaccaro.

A complaint regarding a retaining wall with significant cracks and deterioration at East 16<sup>th</sup> Street and Gravesend Neck Road in Brooklyn was referred to the Division in 2015. The wall was inspected and found to be structurally sound, although large cracks and concrete delamination were evident. Staff began to regularly monitor the wall. Later that year, a large pine tree that was growing off the roof of the structure was removed by Bridges Maintenance staff. They determined that the cracked wall could pose a danger to the public and therefore closed the sidewalk area around the structure. The Department of Buildings issued an Emergency Declaration permitting DOT to proceed with repairs and/or demolition of the wall for the purpose of making the condition safe.

In April 2017, Division staff began the needed repairs. Although the wall was originally built to support three sets of tracks as they spanned along East 16<sup>th</sup> Street over Gravesend Neck Road, crews were now faced with an L-shaped abutment and wing wall at the corner covered in stucco that was cracked and shored-up via timber that supported an encroaching patio area for the adjacent house. This area had to be removed with all of its material, before any repair could commence.

From the start, the lack of as-built drawings, or any substantial drawings, required research into other similar structures in the area to find clues relating to how the subjected wall was originally built. After determining the original wall was a concrete gravity-retaining wall, a work plan was executed in a methodical and deliberate fashion to ensure structural integrity. The damaged section of the wall was removed by hand, revealing a shear failure between the original concrete

wall and the masonry block addition, caused by a large amount of fill and plant growth placed on top of the original wall. The addition as well as the section of the original wall that had deteriorated was removed, as well as the fill behind it. An unstable brick veneer wall was removed, and a new section of concrete wall and cap was built, tying into the existing structure by grouting epoxy coated #5 reinforcing bar. Existing cracks were patched with epoxy and a stucco finish was reapplied. All of this work was completed without damaging the existing patio on private property. Fences were erected for public safety and the sidewalk was returned to service. The repair work began on April 24, and was completed by May 12, 2017.



East 16th Street Retaining Wall – Before and After Repairs.



Assistant Chief Engineer Flags and Operations Paul Schwartz, Tractor Operator Andrew Mondi, Assistant City Highway Repairers Edward Alfano Jr. and Marlon Doyle, Commissioner Polly Trottenberg, Area Supervisor Highway Maintenance Salvatore Gioia, Supervisor Highway Repairer Anita Ramos-Colon, and Assistant City Highway Repairers Anthony Angioletti Jr. and Anthony Connelly. Cement Masons Victor Porowski and Frank Finizio, Highway Repairer Giavonni Caballero, Carpenter Brian Dunn, Commissioner Polly Trottenberg, Carpenters Joseph Moschella (Behind the Commissioner) and William Sic, Supervisor Bricklayer Edward Alfano, Cement Mason Mike Biancaniello, Bricklayer Stephen Daniel III, and Cement Mason Lawrence Marks. (Credit: Jaclyn Whitney)

# Final Design for the Replacement of the Bruckner Boulevard over Westchester Creek Bridge (Unionport Bridge)

Civil Engineer Simona Finkelstein.

Trans-Manhattan Expressway Ramp

Civil Engineer Kamil Halal.



Civil Engineer Kamil Halal and Commissioner Polly Trottenberg. (Credit: Jaclyn Whitney)

<u>Contract Payment Training and New Payment Tracking</u> Deputy Chief Engineer, Bridge Capital Design and Construction David Dunn.

<u>Kiosks</u>

Administrative Engineer Mohsin Rizvi.

### Brooklyn Bridge Security Cameras/Kosciuskzo Bridge Fiber Relocation

Civil Engineer Sudhakar Pallaki and Administrative Superintendent of Highway Operations Paul Schwartz.



Civil Engineer Sudhakar Pallaki. (Credit: Jaclyn Whitney)

A glossary of the terms most commonly used in bridge design, construction and maintenance is presented below. Crossreferences are indicated through the use of BLOCK LETTERING.

AASHTO (AMERICAN ASSOCIATION OF STATE HIGHWAY TRANSPORTATION OFFICIALS) - A nonprofit, nonpartisan association representing highway and transportation departments in the fifty states, the District of Columbia, and Puerto Rico, representing all five transportation modes air — highways, public transportation, rail, and water.

ABUTMENT - Walls of reinforced concrete or masonry. Abutments support a bridge's SUPERSTRUCTURE and APPROACHES, as well as retain the embankments that are positioned at the extreme ends of a multi-span bridge.



Riverside Drive Viaduct Abutment End. Battery Place Underpass Abutments. City Island Bridge Beginning and Ending Abutment. 79th Street Traffic Circle Abutment End. (Credit: NYSDOT) Constructing the Abutment of the Eastchester Bridge in 1921.

ADA (AMERICANS WITH DISABILITIES ACT) - The Americans with Disabilities Act gives civil rights protections to individuals with disabilities, similar to those rights provided to individuals on the basis of race, color, sex, national origin, age, and religion. It guarantees equal opportunity for individuals with disabilities in public accommodations, employment, transportation, state and local government services, and telecommunications.

ADMIXTURE - Material, other than water, AGGREGATE, and hydraulic cement, used as an ingredient of concrete, mortar, grout, or plaster and added to the batch immediately before or during mixing.

AERIAL LIFT - Any vehicle-mounted device used to elevate personnel, including: extendable boom platforms, aerial ladders, articulating (jointed) boom platforms, vertical towers, or any combination of these. Aerial lifts have replaced ladders and scaffolding on many job sites due to their mobility and flexibility. They may be made of metal, fiberglass-reinforced plastic, or other materials. They may be powered or manually operated, and are considered to be aerial lifts whether or not they can rotate around a primarily vertical axis.



Inspecting the Belt Parkway Bridge over 26<sup>th</sup> Avenue in December 2012. (Credit: Artemio Angeles) Nereid Avenue Bridge over Bronx River Parkway in June 2012 - Using a 60 Foot Boom With Outriggers. (Credit: Bojidar Yanev) Brooklyn-Queens Expressway (Eastbound) over Cadman Plaza/Brooklyn-Queens Expressway (Westbound). Pulaski Bridge in July 2017. (Credit: Mitul Patel)

AGGREGATE - Inert material such as sand or stone that is mixed with cement, lime and water to produce grout or mortar.

ALIGNMENT - The relative horizontal and vertical positioning between the bridge and APPROACHES.

ALLISION - The violent impact of a movable object (vessel) striking a stationary object (bridge or/and bridge protective system).

ANCHORAGE - A solid mass, usually comprised of concrete, that encases a grillage of heavy steel bars into which the ends of a SUSPENSION BRIDGE'S main CABLES are anchored. Anchorages are designed to resist the pull of the cables.



Inspecting the Exterior of the Manhattan Bridge Anchorage. Manhattan Bridge Brooklyn and Manhattan Anchorages. Ed Koch - Queensboro Bridge Queens Anchorage (Credit: NYSDOT)

ANTICIPATED SERVICE LIFE (ASL) - An estimate of the remaining life of a bridge based on current age, structural condition, specification used for design, and capacity to handle current and future traffic. The ASL may be taken as the expected life of a new bridge (75 years, AASHTO 1998) less the age of the bridge under consideration.

APPROACH - Roadway at each end of a bridge, beyond the ABUTMENT, providing access to the bridge.



End Approach to Bridge Over Dam at Clove Lake. Metropolitan Avenue Bridge Approach. (Metropolitan Credit: NYSDOT) Belt Parkway Bridge over 26<sup>th</sup> Avenue Approach. (Credit: Artemio Angeles) Begin Approach to Delancey Street Pedestrian Bridge Over FDR Drive. Ed Koch - Queensboro Bridge Approach. End Approach to East 120<sup>th</sup> Pedestrian Bridge Over FDR Drive. (QBB and East 120<sup>th</sup> Street Credit: NYSDOT)

ARTERIAL BRIDGE - Any bridge upon which an arterial highway runs as it crosses streets, water, railroads, etc.

ASBESTOS - A generic name given to a fibrous variety of six naturally occurring minerals. The term "asbestos" is not a mineralogical definition but a commercial name given to a group of minerals that possess high tensile strength, flexibility, resistance to chemical and thermal degradation, and electrical resistance.

AS-BUILT DRAWINGS - Drawings that are prepared from measurements taken on-site to accurately depict the actual sizes and location of elements of the construction project. The as-built drawings indicate variations from the construction documents that occurred during construction.

ASPHALT - Black bituminous surface material made from AGGREGATE and processed petroleum.



Hamilton Avenue Asphalt Plant Silo. (Credit: Sheena Diaz)

BACKFILL - Material used to refill an excavated area.

BASCULE BRIDGES - Bascule bridges are movable bridges, typically referred to as "draw bridges" which rotate the superstructure vertically. The movable leaf of the structure - known as a *bascule* - is counterbalanced by weights of such size that minimal power is required for operation - just enough to overcome inertia, frictional resistance, wind and snow loads. Such bridges are relatively speedy to operate and provide unlimited vertical clearance. Examples of bascule bridges currently under the jurisdiction of the New York City Department of Transportation include the Unionport, Shore Road (Pelham), Hamilton Avenue, Third Street, Union Street, Metropolitan Avenue, Hunters Point Avenue, and Greenpoint Avenue Bridges.



Unionport and Hamilton Avenue Bridge. (Open Credits: NYSDOT) Union Street Bridge. Greenpoint Avenue Bridge. (Greenpoint Credit: Michele N. Vulcan)



Shore Road Bridge in July 2011. (Credit: Sergey Parayev) Metropolitan and Hunters Point Avenue Bridges.

BASE COURSE - The layer of compacted ASPHALT directly under the WEARING SURFACE.

BEAM - A linear structural member designed to span from one support to another.

**BEARINGS** - Designed to transmit the load from the SUPERSTRUCTURE to the SUBSTRUCTURE. Divided into two types, expansion and fixed, bearings are needed to ensure that certain elements are not forced to take more load than that for which they were designed and that the bridge can move slightly under load and temperature changes as needed. Bearings that do not allow for horizontal movement of the superstructure are referred to as fixed bearings. Bearings that allow for horizontal movement of the superstructure are known as expansion bearings. Both fixed and expansion bearings permit rotation.



Truss Bearing on Manhattan Bridge. (Credit: NYSDOT)

BICYCLE LANE - A portion of the roadway that has been designated by striping, signing, and pavement markings for the preferential or exclusive use of bicycles. (New York State Vehicle and Traffic Law, Title 1, Article 1, §102-a)

BICYCLE PATH - A path physically separated from motorized vehicle traffic by an open space or barrier and either within the highway right-of-way or within an independent right-of-way and which is intended for the use of bicycles. (New York State Vehicle and Traffic Law, Title 1, Article 1, § 102-b)



Brooklyn Bridge Bicycle/Pedestrian Path in 2010. Manhattan Bridge Bicycle Path in 2013. Ed Koch - Queensboro Bicycle/Pedestrian Path in 2016. Entrance to Williamsburg Bridge Bicycle/Pedestrian Path in2017.

BID - A contractor's formal proposal, including prices, to perform the work set out in the project SPECIFICATIONS.

BMP (BEST MANAGEMENT PRACTICES) - Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage, or leaks, sludge or waste disposal, or drainage from raw material storage.

BOAT BASIN - A naturally or artificially enclosed or nearly enclosed harbor area for small craft..

BORING - A soil exploration technique of drilling into the ground at various locations in an attempt to construct an accurate subsurface profile.



Conducting Soil Borings in 2008 as Part of the Seismic Retrofit Design of the Manhattan Bridge. Drilling to a Depth of Approximately 210 Feet to Obtain an 8-foot Long Hard Rock Sample. A 2 1/2 – Foot Long Hard Rock Sample Taken From a Depth of Between 202 and 204 ½ Feet.



BOX BEAM - A hollow structural beam with a square, rectangular, or trapezoidal cross-section.

BRIDGE - A structure connecting two points, greater than 20 feet in distance, which carries vehicular and/or pedestrian traffic over water, a descending slope, or another road.

BRIDGE STRIKE - An incident in which a vehicle, its load or equipment collides with a bridge. A majority of these strikes occur on low-vertical clearance bridges over parkways or other local roadways prohibited to truck traffic.



Douglaston Parkway Bridge Strike in 2015: Police Observing the Truck Damage. Underside of Bridge Concrete Beams Only Exhibited Scratches. (Credit: Artemio Angeles) 17<sup>th</sup> Avenue Pedestrian Bridge Strike in 2015.

BULKHEAD - A RETAINING WALL-like structure commonly composed of driven piles supporting a wall or a barrier of wooden timbers or reinforced concrete members.

CABLE - A steel rope, composed of parallel or twisted wires, used to support the road deck of SUSPENSION BRIDGES or CABLE STAYED BRIDGES.



Inspector on Manhattan Bridge Cable. Cable B. (Credit: NYSDOT)

CABLE STAYED BRIDGES - Bridges in which the superstructure is directly supported by cables, or stays, passing over or attached to towers located at the main piers.



East 64th Street Pedestrian Bridge over FDR Drive.

CAISSON - A rectangular or cylindrical chamber for keeping water or soft ground from flowing into an excavation.

CAMELBACK TRUSS - A TRUSS having a curved top chord and straight bottom chord meeting at each end. There is a camelback truss on the Macombs Dam Bridge.



Macombs Dam Camelback Truss.

*CANTILEVER BRIDGES* - A cantilever is a BEAM that is supported only on one end. In a cantilever bridge, the tree branch-like beams project toward each other, forming a span of the bridge when connected in the center. Bridges of this type are economical to build because they require less material in construction and less condemnation of property is necessary for the narrow piers which are sufficient for support. Typically, no FALSEWORK is required during construction and the bridge does not exceed 1,800 feet in length. NYCDOT's *Ed Koch Queensboro Bridge* is a notable example of this type of structure.



Ed Koch Queensboro Bridge. (Credit: Russell Holcomb)

CAST-IN-PLACE - Concrete that is poured and cured in its final position at the project site.

CATCH BASIN - A receptacle, commonly box shaped and fitted with a grilled inlet and a pipe outlet drain, designed to collect the rain water and floating debris from the roadway surface and retain the solid material so that it may be periodically removed.

CATWALK - A narrow walkway for access to some part of a structure, typically running parallel to the girders under the superstructure.



Ed Koch Queensboro Bridge Lower Level Flooring System Catwalk under Span 37. Manhattan Bridge Brooklyn Tower Catwalk. (Credit: NYSDOT) Fresh Creek Catwalk Under Deck. Brooklyn Bridge Manhattan Side Catwalk. (Brooklyn Credit: NYSDOT)

CHANGE ORDER - An approved modification of the SPECIFICATIONS or the costs in a construction contract.

CHIPPING HAMMER - A welder's compressed-air tool for cleaning steel after welding. It is also used by bridge inspectors.

*CITY ENVIRONMENTAL QUALITY REVIEW (CEOR)* - Provides a means for City agencies and decision-makers to: systematically consider environmental effects along with other aspects of project planning and design; evaluate reasonable alternatives; identify the process by which agencies review proposed discretionary actions to identify and disclose the potential adverse effects those actions may have on the environment; and develop mitigation measures for those impacts, where appropriate and practicable. These procedures take into account the special circumstances of the City's urban environment. The CEOR process requires City agencies to assess, disclose, and mitigate to the greatest extent practicable, the environmental consequences of their decisions to fund, directly undertake, or approve a project in the City of New York.

CLADDING - Non-load-bearing stone or brick veneer used as the facing material in exterior bridge wall construction.



Hutchinson River Parkway Bridge. Brooklyn-Queens Expressway Over Ramp to Brooklyn-Queens Expressway (Eastbound). Right Side Fascia on the Bronx Pelham Parkway Bridge. Inspecting the Cladding Stones of the Fascia of Span 1 on West 252<sup>nd</sup> Street Bridge Over Henry Hudson Parkway. Eliot Avenue Bridge Over Queens Boulevard.

CLEARANCE - The unobstructed vertical and horizontal space provided between two objects



United Nations – 1<sup>st</sup> Avenue Tunnel, Grand Street, Roosevelt Island, and Macombs Dam Bridge Vertical Clearance Posting. (Credit: NYSDOT)



Retro-reflective Material Improves Visibility of These Low Vertical Clearance Bridges: East 60<sup>th</sup> Street Bridge Over FDR Drive and Westchester Avenue Bridge over Hutchinson River Parkway. Vertical Clearance Beam at Span 53,Southbound Roadway of the Promenade over the FDR Drive. (FDR Credit: NYSDOT)

COFFERDAM - A temporary dam-like structure constructed around an excavation to exclude water.



April 2010: Cofferdam With Filter Fabric and Gravel Placed Prior to Pile Driving During the Emergency Repair Project on the Borden Avenue Bridge over Dutch Kills. February 2011: Fresh Creek Bridge Cofferdam Pad. May 2016: View Inside the Gerritsen Inlet Pier 2 Cofferdam. Building the Cofferdam for the Eastchester Bridge in 1920.

COLLATERAL SEISMIC HAZARD - A seismic hazard other than direct ground shaking e.g. ground failure (slumping, settlement), liquefaction, fault rupture, landslide and the like.

COLONNADE - A series of regularly spaced columns.



Manhattan Colonnade Begin and End Face in 2016. (Credit: NYSDOT)

COMPRESSION - The stress resulting from a pushing force on a structure.

CONDITION RATING - A judgment of a structure's condition in comparison to its original as-built condition.

CONSTRUCTION ZONE - The area from the first traffic control sign announcing that roadwork is being performed ahead to the last sign announcing the end of the roadwork.

CONTRACT LIMITS - The limits shown in the contract documents, in which all work occurs, including advanced signing and detours covered under an individual contract. The Contractor shall be responsible for the highway within the contract limits. For contracts with multiple sites, this may be defined as a single larger limit if the sites are in close proximity, or as multiple sets of contract limits if the sites are widely separated. On-site contract work cannot be conducted outside the contract limits. If the contract limits are not specified in the contact documents, the contract limits shall be the limits within which all work is performed, including advanced signing and detours included in the contract documents.

COPING - The material forming the top layer of a masonry unit which protects the MASONRY below from penetrating water.

CORE - A cylindrical sample of concrete removed from a bridge component for the purpose of destructive testing.



Removing a Core From 252<sup>nd</sup> Street Bridge over Henry Hudson Parkway in January 2009. (Credit: Masroor Mahmood) Core Sampling on the Bay Ridge Avenue Bridge in 2014. Utilizing a Coring Machine to Obtain a Concrete Core for Testing in June 2016 from the Westbound BQE over Adams Street.

CORROSION - The general disintegration of surface metal through oxidation.

COUPON - A sample of steel taken from an element in order to test material properties.

COUNTERWEIGHT - A weight which is used to balance the weight of a movable member; in bridge applications counterweights are used to balance a movable span so that it rotates or lifts with minimum resistance.

CRITICAL PATH - The set of activities that must be completed on time for the contract completion date to be met. Activities on the critical path have no slack time.

*CULVERT* - Any structure under the roadway with a clear opening of twenty feet or less, measured along the center of the roadway. A culvert is primarily a hydraulic structure, and its main purpose is to allow free flow of water under roadways.



Sweet Brook Road Culvert. Richmond Terrace over Snug Harbor Culvert. Victory Boulevard Culvert. Arthur Kill Road Over Clarke Avenue Culvert.

CURING - Process of maintaining freshly placed concrete mortar, grout, or plaster moist and at a favorable temperature for a suitable period of time during its early stages so that the desired properties of the material can develop. Curing assures satisfactory hydration and hardening of the cementitious materials.

DAMAGE INSPECTION - An unscheduled inspection to assess structural damage resulting from environmental factors or human actions.

DEAD LOAD - The weight of the bridge itself without any traffic or external loads.

DECK - The supporting slab and wearing surface of a bridge. Since the deck is directly affected by traffic loads, it's most susceptible to traffic-related problems such as: traffic abrasion, corrosion effects of deicing chemicals, live load deflections and cracking, and impact loads that materially increase as the deck surface deteriorates.



Hamilton Avenue Bridge, East 81<sup>st</sup> to East 90<sup>th</sup> Street Promenade over FDR Drive, Chambers Street Pedestrian, and Roosevelt Island Bridge Decks. (Hamilton and FDR Drive Credit: NYSDOT)

DELAMINATION - The subsurface separation of concrete or steel into layers. Delaminated areas give off a hollow "clacking" sound when tapped with a hammer or chain drag. Hammer-sounding of large areas generally proves to be extremely time consuming. More productive sounding methods are available when working with horizontal flat surfaces. Chain dragging accomplishes the same result as hammer-sounding. As the chain is dragged across a concrete surface, a distinctly different sound is heard when it crosses over a delaminated area. When a delaminated area completely separates from the member, the resulting depression is called a SPALL.



Hollow Sounding And Delaminated Concrete Areas With Exposed Rebars on the Sunrise Highway Bridge Westbound over Laurelton Parkway in 2014. Brooklyn Bridge Tower Stone Delamination in 2016.

DESIGN DRAWINGS - The graphic and pictorial portions of the contract documents showing the design, location and dimensions of the work. These documents generally include plans, elevations, sections, details, schedules, diagrams and notes.

DESIGN-BUILD CONTRACTS - A delivery procedure where one company is retained to perform both design and construction, thus expediting the capital bridge rehabilitation program.

**DIAPHRAGMS** - Structural members used to tie adjoining girders together to improve the lateral stability of the girder and to distribute forces among adjacent longitudinal elements.

DOLPHIN - A group of PILES driven close together and placed to protect portions of a bridge or other structure exposed to possible damage by collision with marine traffic.



2014: Union Street Bridge Dolphins. Greenpoint Avenue Bridge Dolphin & Fender System. (Greenpoint Credit: Peter Basich) Hunters Point Avenue Bridge Dolphins. (Credit: Michele N. Vulcan) 145<sup>th</sup> Street Bridge Dolphin. (Credit: NYSDOT)

DRAINAGE SYSTEM - A collection of surface and/or subsurface drains and pumps that are used to remove surface or ground water.

DRILLED SHAFT - A cylindrical structural column transmitting loads to soil and/or rock. The drilled shaft is constructed in a hole with a circular cross section. The hole is filled with concrete and may be reinforced with a steel REBAR CAGE.

EFFLORESCENCE - White salts that water movement brings to the surface of porous construction materials. Efflorescence may also occur because of contaminates in the ground water or de-icing salts.



Heavy Efflorescence on End Abutment Stem Wall of Bridge Over Dam at Clove Lake in 2014. Efflorescent Stains on the Shielding of Span #1of the East Drive Bridge over Transverse Road #3 in 2015. Efflorescence, Stalactite Formations, and Scattered Areas of Dampness and Active Water Leakage on the Underside of the Span 3 Arch of the Mosholu Parkway Bridge over the Bronx River in 2016. (Mosholu Credit: NYSDOT) Heavy Efflorescence on Cladding Stones of Crotona Avenue Bridge over Bronx Pelham Parkway in 2016. Efflorescence and Discoloration on the Right Side Fascia of the Meadowport Arch in 2017.

ELECTRICAL MAINTENANCE - Preventive maintenance to electrical systems on the East River bridges (e.g., travelers, lighting systems) and the movable bridges (e.g., contacts, relays, switches, controls, limit switches, and lighting systems).

ELEVATION VIEW - A photograph or drawing of the side view of a structure.



Elevation View of Roosevelt Island Bridge. (Credit: NYSDOT) Right Elevation of Span 3 of the Randall's Island Connector Bridge over the Bronx Kill.

(EIS) ENVIRONMENTAL IMPACT STATEMENT - A comprehensive study of potential social, economic and environmental impacts related to a federally-assisted project. Projects for which an EIS is required are defined in the National Environmental Policy Act of 1969, as amended.

EXPANSION JOINTS - Located between bridge spans, expansion joints are located in the deck, directly above the BEARINGS. Expansion joints allow parts of the structure to expand independently and therefore relieve stresses that may otherwise cause damage.



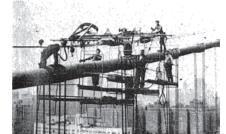
Constructing an Expansion Joint on the Riverside Drive Viaduct in 1918. Joint for Span 7 on the Chambers Street Pedestrian Bridge in 2017.

EXTREME EVENT - Large intensity events with a lower probability of occurrence that could push a structure beyond the expected response for which it was designed. These may be of geological origin (e.g., earthquakes and tsunamis), of hydro meteorological origin (e.g., hurricanes and floods), or man-made hazards with intentional sources (e.g., terrorist attacks) or accidental sources (e.g., vehicle and vessel collisions).

*EYEBARS* - Steel bars with each end shaped like the eyes of giant needles. They provide total anchorage of the cable and are buried deep within the ANCHORAGE structure. They also are configured with an eye on each end and are tension structural members connected by pins on truss structures.

FACE - The outer, exposed surface of a MASONRY unit.

FALSEWORK - Any temporary structure that facilitates the construction, modification, or removal of a bridge. Types of falsework include: work platforms, temporary bents, erection towers, and COFFERDAMS.



Platform for Aerial Work on the Manhattan Bridge Cables in 1957.

FATIGUE - Cause of structural deficiencies (such as metal fracture) due to repetitive (or cyclic) loading over time.

FENDER - A structure that acts as a buffer to protect the portions of a bridge exposed to floating debris and water-borne traffic from collision damage.



Metropolitan Avenue Bridge Fender. Installing the Fresh Creek Bridge Fender System in 2013. Inspecting a Damaged 145<sup>th</sup> Street Bridge Fender in 1917. North Fender Pier of 145<sup>th</sup> Street Bridge in 2015. (Credit: Litcy Barreto) Unionport Pier 8 Fender.

FINGER DAM - EXPANSION JOINT in which the opening is spanned by meshing steel fingers or teeth. Finger plate joints are made up of two loosely interlocking pieces of steel plates that cantilever out into the deck joint opening. The cantilevered portion of each plate is made up of rows of finger shaped protrusions that fit into the row of grooves in the opposing plate. The finger plates are anchored into the deck slab or directly attached to the underlying superstructure steel. Whenever the bridge spans undergo a movement, the finger plates move back and forth into the opposing grooves and accommodate this movement.



Manhattan Bridge Finger Dam. (Credit: Jagtar Khinda) Unionport Bridge Finger Dam at Span 9 in 2016. Riker's Island Finger Dam.

FIRE HAZARD - Accumulation of debris, where the debris is of sufficient quantity, in a location where, if it caught fire, it would compromise the structural integrity of the bridge.

FIXED PRICE CONTRACT - A contract with an overall predetermined price for the project work.

FLAG CONDITIONS - A "Flag" is a hazardous or potentially hazardous condition on a bridge. A "Flag" is classified as either Red, Yellow, or Safety. A "Red Flag" requires prompt evaluation and, possibly, corrective action. A "Yellow Flag" is used to report a potentially hazardous structural condition, which if left unresolved will most likely become a danger to the soundness of the bridge and a hazard to the public. In the case of a "Safety Flag," there is no danger of partial or complete structural failure of the bridge; however, if left unattended, those conditions can present a vehicular or pedestrian hazard.

FLAGPERSON - Controls movement of pedestrian and/or vehicular traffic through construction projects using sign, hand, and flag signals.



Flagperson at the Rockland Avenue at Manor Road Culvert, Hannah Street Over SIRT, and at the Queensboro Bridge Ramp to East 62<sup>nd</sup> Street From Queens.

FLOORBEAMS - Horizontal members placed crosswise to the bridge's major BEAMS, girders, or TRUSSES to support the deck.



South Transit Floorbeams, Stringers, and Bracing Members on the Manhattan Bridge. Ed Koch Queensboro Bridge North Outer Roadway Floorbeam. (Credit: NYSDOT) Eastchester Bridge Floorbeams in 1914.

FOOTINGS - Part of the substructure known as the bridge foundation, they are masses of reinforced concrete which can be found beneath the ABUTMENTS and PIER and which spread the load to allow the soil to support the structure above.

FORMS - The temporary molds that hold concrete in place while it is hardening; also known as form work.



West 252<sup>nd</sup> Street Bridge Formwork at the Pier and West Abutment in 2007. Formwork for the Westbound Roadway of the Rockaway Parkway Bridge in 2010. (Rockaway Bridge Credit: Eric Callender) Gerittsen Inlet Bridge in March 2014: Putting up Insulated Forms in Preparation for the Placement of Concrete at the West Abutment Wingwall. The Insulation Helps Protect the Concrete From the Elements and Fluctuating Temperatures During the Curing Period.

FREEZE-THAW - Freezing of water within the capillaries and pores of cement paste and aggregate resulting in internal overstressing of the concrete, which leads to deterioration including cracking, scaling, and crumbling.

*FULL STEEL PAINTING* - A bridge painting technique that involves cleaning of steel surfaces using approved environmentally safe paint removal techniques (blasting, power tools, or hand tools). A full primer, intermediate and finish coat are applied using combinations of brush, roller, or (if necessary) spray painting.

FUNCTIONALLY OBSOLETE - A status used to describe a bridge that, because of its geometry, is no longer functionally adequate for its task. Reasons for this status include that the bridge doesn't have enough lanes to accommodate the traffic flow, it may be a drawbridge on a congested highway, or it may not have space for emergency shoulders. "Functionally Obsolete" does not communicate anything of a structural nature. A functionally obsolete bridge may be perfectly safe and structurally sound, but may be the source of traffic jams or may not have a high enough CLEARANCE to allow an oversized vehicle.

GENERAL CONTRACTOR - has overall responsibility for a construction project. The general contractor may break down the project into smaller pieces to be handled by subcontractors.

GEOMETRIC IMPROVEMENT - Roadway improvements other than a surface treatment, such as shoulder and lane widening, curb and gutter, or roadway alignment.

GIRDER SPAN BRIDGES - are primarily employed in bridging short distances, and may be classified as either simple or continuous. The steel girders carry the roadway and roadway load to end supports. The Midtown Highway, *Hook Creek*, Little Neck and *Brooklyn Third Avenue Bridges* are of this type.



Hook Creek Bridge and Brooklyn's Third Avenue Bridge. (Credit: NYSDOT)

GRADE - The degree of inclination of the ground surface.

GRID FLOORING - A steel floor system comprising a lattice pattern which may or may not be filled with concrete.



Installation of Full Width Grid Deck Panels on the Manhattan Bridge Lower Roadway in 2006. Pouring the Concrete. Grand Street Deck. (Grand Street Credit: NYSDOT)

GRIZZLY - A coarse screen used to remove oversize pieces from ASPHALT or earth.



New Grizzly Under Fabrication for the Agency Hamilton Asphalt Plant. (Credit: Russell Holcomb)

GUSSET PLATE - A metal plate connecting truss members.



Grand Street Bridge Span 1 Truss Diagonal Member Gusset Plate.

GUTTER - A paved drain commonly constructed in conjunction with the curbs of the roadway.

HISTORIC PROPERTIES - Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria.

(I/D) INCENTIVE/DISINCENTIVE - Predetermined adjustment to the total contract amount for each day or portion thereof that the work is completed ahead of or behind a specific milestone, phase or contract completion date.

*IMPACT ATTENUATOR*s also known as crash cushions, crash attenuators, or cowboy cushions are systems that mitigate the effects of errant vehicles that strike hazards, either by smoothly decelerating the vehicle to a stop when hit head-on, or by redirecting the errant vehicle. Periodic inspection of these devices is necessary to assure that attenuators function as intended throughout their useful life or that they undergo prompt repair/replacement if hit or damaged.



Williamsburg Bridge Impact Attenuators in 2014 and 2018.

INLET - A short, narrow waterway connecting a bay, lagoon, or similar body of water with a large parent body of water.

JACKING - The mechanical lifting or sliding of an element.



Ed Koch Queensboro Bridge Bent Column Ready for Jacking in 2005.

JERSEY BARRIER - A low, gradually narrowing, reinforced concrete wall used as a highway divider and as a means of preventing a vehicle from crossing a median or leaving the roadway. These barriers were first used on the New Jersey Turnpike.

LEAF - The movable portion of a BASCULE bridge that forms the SPAN of the structure.



Leaves of the Hamilton Avenue Bridge. Cropsey Avenue Bridge Leaf Under Construction in 1932.

LIVE LOAD - The weight of the traffic crossing a bridge and of other external loads applied to the structure (excluding the weight of the bridge itself.)

LOAD RATING - A value that indicates the LIVE LOAD capacity of a bridge. This is determined by analytic and experimental procedures specified by ASSHTO, using design documents and information gathered from field inspection and testing.

LUBRICATION MAINTENANCE - Lubrication of mechanical parts of the East River bridges (e.g., travelers, cables, solid rod SUSPENDERS, and EYEBARS), and the movable bridges (e.g., bearings, brakes, limit switches, and gates).

MAINTENANCE AND PROTECTION OF TRAFFIC - The control plan for traffic around and through a construction site.

MANUAL FOR UNIFORM RECORD KEEPING ON CONSTRUCTION CONTRACTS (MURK - Manual(s) containing uniform contract record keeping forms and procedures to be followed by the engineer, current on the date of contract award. MURK Part 1A is the Contract Administration Manual (CAM), Part 1B is the Construction Inspection Manual (CIM), Part 1C is the Safety and Health Program Manual, and Part 2A is the Materials Inspection Manual (MIM). The MURK manuals are guidance documents, and are not a part of the contract documents.

MAP CRACKING (CRAZE CRACKING) - Large pattern cracking can be caused by alkali-silica reaction within the concrete. Environmental conditions such as low humidity, high outside temperatures, direct sunlight, and wind can create high rates of evaporation from the surface layer of concrete. Resistance to shrinkage from the underlying concrete causes stress that is relieved by map cracking.



Union Street Bridge over Brooklyn-Queens Expressway in 2012 – Extensive Map Cracking With Efflorescence on the Underside of the Deck. (Credit: NYSDOT) Tompkins Avenue Bridge over B&O Railroad (Abandoned) in 2016 - Map Cracks With Efflorescence Near the End of the Wing Wall.

MARINE BORERS - Mollusks and crustaceans which live in water and destroy wood by digesting it.



During the Demolition of the North End of the Existing University Heights Bridge Fender, Marine Borers were Discovered in the Southern Yellow Pine Piles. The End of a Pile Segment Removed From the Fender - Based on the Size of the Holes, *Teredo Navalis* is the Likely Species.

MARINE NAVIGATIONAL LIGHTING - The lights maintained on a bridge for the protection of marine navigation.

# GLOSSARY



Northern Boulevard Bridge - Bridge and Pier Marine Navigational Lighting. Grand Street Bridge- Left Side Channel Light. Pulaski Bridge - Center Lights at Span #26. Third Street Bridge - Span #3. Ninth Street Span 2 Right Fascia and End Left Channel Embankment. (Credit Grand, Third, and Ninth Street: NYSDOT)

MASONRY - Construction materials made of concrete, brick, tile, or stone.



Brooklyn Bridge Cliff Street Arch Masonry. Cleaning the Masonry of the North Face of the Manhattan Bridge's Brooklyn Anchorage and of the North and East Faces of the Roosevelt Island Pier of the Ed Koch Queensboro Bridge. Masonry of the East Drive Bridge Over Eastwood Arch.

MITIGATION WETLAND - A WETLAND constructed to replace the functions lost by human development, usually in the same or adjacent watershed.

MORTAR - Mixture of cementitious materials, fine AGGREGATE, and water, which may contain ADMIXTURES, and is usually used to bond MASONRY units.

MOVABLE BRIDGE - A type of bridge which carries vehicular or pedestrian traffic over a navigable waterway, and which opens to permit the passage of a ship, barge or boat. The 24 movable bridges currently under the jurisdiction of the New York City Department of Transportation include the Harlem River group (Broadway, West 207<sup>th</sup>/West Fordham Road, Macombs Dam, 145<sup>th</sup> Street, Madison Avenue, Third Avenue, *Willis Avenue*, and *Wards Island*); the Bronx group (Hutchinson River Parkway, *Shore Road*, and Bruckner Expressway/Westchester Creek); the Queens group (Borden Avenue, Grand Street, Greenpoint Avenue, Hunterspoint Avenue, *Pulaski Avenue*, and *Roosevelt Island*); and the Brooklyn group (Hamilton Avenue, Ninth Street, *Third Street, Carroll Street*, Union Street, Metropolitan Avenue, and Mill Basin.)



Roosevelt Island Bridge in 2013. (Credit: Stephen Mallon). Shore Road Bridge in 2009. (Credit: George Kern) Wards Island Pedestrian Bridge in 2009. (Credit: Duane Bailey-Castro) Carroll Street Bridge in 2012 and Third Street Bridge in 2015. (Credit: NYSDOT) Pulaski Bridge.

MOVING LOAD - A LIVE LOAD that is moving, for example, vehicular traffic.

NECKLACE LIGHTS - The necklace lights are those lights on the main cables of bridges which, when illuminated at night, resemble a necklace.



Repairing a Manhattan Bridge Necklace Light. Bridge Repairer and Riveter Neil Dalton Installing a New Light on the Williamsburg Bridge in 2012. (Credit: Hany Soliman) Manhattan Bridge Side Necklace Light. (Credit: NYSDOT)

NONDESTRUCTIVE TESTING - A method of checking the structural quality of materials that does not damage them.

NOTICE TO PROCEED - The formal document authorizing the contractor to commence work under its contract.

**OPERATOR'S HOUSE** - The building containing the power plant and operating machinery and devices required for the operator's (bridge tender's) work in executing the complete cycle of opening and closing a MOVABLE BRIDGE span.



Ninth Street Bridge over Gowanus Canal, Metropolitan Avenue Bridge over English Kills and Grand Street Bridge Operator Houses. (Metropolitan Avenue Credit: Sunil Desai)

ORTHOTROPIC DECK - A lightweight decking system that uses closely spaced open or closed steel ribs and a horizontal steel deck plate.

PANEL POINT - The point at which two members of a TRUSS cross.

PARAPET - A low wall along the outmost edge of the roadway of a bridge to protect vehicles and pedestrians.



East 81<sup>st</sup> to East 90<sup>th</sup> Street Promenade over FDR Drive – Right Parapet at Span 45. West 65<sup>th</sup> Street Entrance Eastbound over Bridle Path West End – View From End of Left Side Parapet. Belt Parkway Bridge over Rockaway Parkway – Right Side Parapet. Congress Street Bridge over Brooklyn-Queens Expressway - Span 1 & 2 Parapet Right side, Looking Northwest. Woodside Avenue Bridge over Brooklyn-Queens Expressway – Left Parapet Above Beginning Abutment. (Promenade and Rockaway Parkway Credit: NYSDOT)

PEDESTRIAN BRIDGES - Bridges designed and constructed to provide means of crossing for pedestrian traffic only.



West 181st Street, PS-5, and Carroll Street over Franklin Shuttle Pedestrian Bridges.



Staten Island Ferry (Over Parking Lot Exit Roadway), East 78<sup>th</sup> Street over FDR Drive, Bridge Opposite 65<sup>th</sup> Street over Transverse Road #1, and Springville Greenway over Freshwater Wetlands Pedestrian Bridges.

PIER - Part of a bridge's substructure, piers are the intermediate supports or columns which support a multi-span bridge. Piers may be composed of steel or reinforced concrete, and can appear as columns or solid walls.



Madison Avenue Bridge Center Pier Under Construction in September 1909, Pier 2 of Broadway Bridge Piers 12, 33, 37, and 42 of Macombs Dam Bridge. (Credit: NYSDOT) Pier 1 (Looking East) of Hutchinson River Parkway Bridge over Hutchinson River. Pier 6 of Manhattan Bridge. Pier 39 of Brooklyn Bridge. (Manhattan and Brooklyn Bridge Credit: NYSDOT)

*PILES* - A concrete, steel or timber column located beneath the FOOTINGS of a bridge and embedded in the soil. Piles are employed in bridges only if the soil directly below the footing is not firm enough to support the bridge loads. Piles are also used to found a structure below the depth of potential scour, and for fender systems.

*PLAZA* - An area designated for use by pedestrians, which may vary in size and shape; which may abut a sidewalk and is located fully within the bed of a roadway; may be at the same level as the roadway or raised above the level of the roadway; may be physically separated from the roadway by curbing, bollards, or other separators; may be treated with special markings and materials; and may contain benches, tables, or other facilities for pedestrian use.



Manhattan Bridge Brooklyn Plaza. Evening View of the Plaza Looking Southeast With Benches, Lights, and Granite Pavers in Foreground. Aerial View of the Plaza. Looking South From the Pedestrian Entrance. Delancey Street Plaza Near the Williamsburg Bridge.

PLUMB BOB - A weight hanging on a string (plumb line), used by bridge inspectors to show the direction of the vertical distance.



Plumb Bob in Use at Eliot Avenue Bridge over Queens Boulevard in 2016, and the Lower Level of the Ed Koch – Queensboro Bridge in 2018.

**POINTING** - The compacting of the mortar in the outermost portion of a joint and the troweling of its exposed surface to secure water tightness or desired architectural effect.



Pointing Joints on the East Face of the Brooklyn Anchorage of the Manhattan Bridge. Pointing the Masonry on the East Drive Bridge (East Wood Arch).

**PORTLAND CEMENT CONCRETE** - The most common concrete used in construction. It was patented in England in 1820, and is so named because when hard, it resembles Portland stones from Dorset. Portland cement is made with the following raw materials: limestone - provides lime, quartz or cement rock - provides silica, claystone - provides aluminum oxide, and iron ore - provides iron oxide.

**POSTED** - An announcement or sign limiting dimension, speed, or loading, indicating that larger dimensions and higher speeds and loads cannot be safely taken by the bridge.



Roosevelt Island Bridge Vertical Clearance Restriction and Posted Weight Signs. Ed Koch - Queensboro Vertical Clearance Signs. (Credit: NYSDOT)

POTHOLE - A hole in a roadway or pavement, usually caused by heavy vehicular traffic or weathering



Repairing Potholes on the Roosevelt Avenue Bridge Deck Between Janet Place and 126th Street in January 2016. Each Perimeter is Sawcut. Filling in the Pothole With Asphalt. Paver Rolls Over the Pothole to Compact the Fill Material and Level the Surface. Finished Repair.

PRECAST CONCRETE - Concrete members that are cast and cured before being placed into their final positions on the construction site.

**PRESTRESSED** CONCRETE ELEMENTS - Concrete elements that are pre-compressed with high-strength steel tendons under tension. The tendons can be pre - or post - tensioned, relative to the setting of the concrete.

**PREVENTIVE MAINTENANCE** - Preventive maintenance involves cleaning, protecting, and performing minor repairs of bridge components to prevent deterioration from becoming so extensive that major REHABILITATION or RECONSTRUCTION is needed. Specified interval maintenance, such as cleaning DRAINAGE SYSTEMS and lubrication, are done on a scheduled basis. Other maintenance is carried out when inspectors point out the need for it, such as resealing an EXPANSION JOINT or replacing the wearing surface. Preventive maintenance tasks on the bridges include: the cleaning of drainage systems, gratings, and expansion joints; the washing of the deck area and salt splash zones; full-steel, salt splash, and spot painting; the patching of sidewalks; the maintenance of electrical devices; and the oiling of mechanical components.



Power Washing the Corrosive Deicing Solvents Within the Range of the Roadway Splash Zone on The Manhattan Bridge in October 2007. Particular Attention is Directed to Cleaning the Gusset Plate. (Credit: Albert Hong) Performing Wear and Tear Resurfacing Work on the Roosevelt Avenue Bridges in April 2010: Assistant City Highway Repairer Victor Magagna, Supervisor Highway Repairer Joseph Palemine, Assistant City Highway Repairer Jonathan Adorno (Obscured), Assistant City Highway Repairer Anthony Montalbano, and Area Supervisor Highway Maintenance Edward Pedersen. Assistant City Highway Repairers Jonathan Adorno and Victor Magagna. (Credit: Joseph Flood)

PRIMER - The first layer of paint used to cover the unsealed surface. This is followed by at least one more coat of paint.

**PROTECTION SYSTEM** - Methods used to prevent CABLE corrosion, including wire coating, impregnation with oil, wire wrapping, painting, neoprene or plastic sheathing, and injection of dried air.

PUNCH LIST - A catalogue of minor items still outstanding at the end of a construction project.

QUALITY ASSURANCE - An independent evaluation of a service (i.e., an inspection) to establish that a pre-described level of quality has been met.

RAILING - A fence-like construction built at the outermost edge of the roadway or the sidewalk portion of a bridge to protect pedestrians and vehicles.



University Heights Bridge Railing. (Credit: NYSDOT) Manhattan Bridge Railing. (Credit: Russell Holcomb) Greywacke Arch Guide Railing in 2017. Northern Boulevard over Cross Island Parkway - Left Sidewalk Railing in 2016. Staten Island Pedestrian Bridge over Parking Lot Exit Roadway - Right Side Railing of Span #2. 14th Avenue Bridge over Cross Island Parkway -End Approach Guide Railing in 2017. New Belt Parkway Bridge over Mill Basin Guide Railing.

RAILROAD FORCE ACCOUNTS - Railroad force accounts are contracts between the Agency and railroads by which the railroads supply flag personnel so the Division can perform repair work on bridges that cross over railroad tracks.

**REBAR CAGES** - Rebar cages are placed in large cast-in-place concrete columns (DRILLED SHAFTS), and are fabricated from steel reinforcing bars. The reinforcement will typically include concentric hoops (or spirals) along the length of the cage, which are tied to longitudinal bars perpendicular to the hoops.



City Island, Gerittsen Inlet, and Bay Ridge Avenue Bridge Rebar Cages. 2016: Rebar Cage Assembly for the City Island Bridge. May 2016: Each Drilled Shaft Requires a Custom-Built Rebar Cage. These Steel Structures Strengthen the Concrete That is Placed Within Each Shaft Casing. Steel Bars are Laid Out on a Template to Form the Shape of the Cage, and are Then Tied Together. Once completed, the cage is Lifted by Crane and Placed Within a Corresponding Drilled Shaft.

**REHABILITATION** - Extending the useful life of a bridge by painting, repairing or replacing the DECK or selected elements of the SUBSTRUCTURE or SUPERSTRUCTURE. This type of work is performed primarily on those structures not classified as deficient, but which contain specific components that have low condition ratings.

RELIEVING PLATFORM - A platform supported on piles or fill, adjacent to and capable to carry live loads diverted from a roadway.

**REPLACEMENT** - That type of work where an existing bridge is removed and is fully replaced at the same site, or at an adjacent location, by a substitute bridge, as part of the same project.

RETAINING WALL - A structure designed to restrain and hold back a mass of earth.



Inspecting a Bulge in a Retaining Wall Along Douglas Road in Staten Island in 2014. Brooklyn-Queens Expressway (BQE) Retaining Wall Between Washington and Adams Streets - Looking Northeast and Southwest. BQE Retaining Wall Between Adams and Pearl Streets - Looking Northeast and Southwest.

RETARDING AGENT - A chemical added to mortar to slow down the set.

RETRACTILE BRIDGES - Retractile bridges are movable bridges that are mounted on tracks that are positioned to one side of a navigational channel. To open, the bridge is withdrawn or "retracted" to shore. Although fascinating to observe and efficient to operate, retractile bridges are considered obsolete because of the expansive land areas that must be condemned in order to accommodate their tracks. The New York City Department of Transportation currently possesses two retractile bridges - the Borden Avenue and Carroll Street bridges, rare examples of the bridge builders' art.



Borden Avenue Bridge. (1st and 2nd Credit: Peter Basich, 3rd: Vadim Sokolovsky Carroll Street Bridge. (1st Credit: NYSDOT, 2nd: Russell Holcomb)

**RETROFIT** - Upgrading parts of an existing structure to meet current standards.

(RFI) REQUEST FOR INFORMATION - A written inquiry for information or clarification generated during the construction phase of the project.

RIGHT-OF-WAY - A general term denoting land, property, or interest therein, usually in a strip, acquired for or devoted to transportation purposes.

RIPRAP - Irregularly broken, random-sized pieces of rock used for a foundation or to prevent soil erosion.



Riprap Installed in 2013 on South Side of Belt Parkway Bridge over Fresh Creek, Facing East. Riprap at the Southwest Side of the South Approach of the Shore Road Bridge over Hutchinson River in 1908. Barge-Mounted Crane Placing Riprap Stones on the South Slope of Gerritsen Inlet at the West Abutment in 2017.

ROADWAY - The portion of the road intended for the use of vehicular traffic.



University Heights Roadway and Sidewalk in 1922.

ROCKER BEARING - A bridge support that accommodates expansion and contraction of the superstructure through a rocking action.

**ROUTINE INSPECTION** - Regularly scheduled inspection or condition assessment that consists of observations and/or measurements needed to determine the physical and functional condition of the bridge, to identify any changes from initial or previously recorded conditions, and to ensure that the structure continues to satisfy present service requirements.

SADDLE - A special curved casting atop a SUSPENSION BRIDGE tower into which the cables are placed to avoid sharp bends in directional changes of the cable.



Manhattan Bridge Saddle. (Credit: Jagtar Khinda)

SAFETY HARNESS - Harness with shoulder, leg, and waist straps of approved OSHA design used as personal fall protection in conjunction with appropriate lanyards and tie off devices.

*SALT SPLASH ZONE PAINTING* - A bridge painting process that involves preparation of the area to be painted by power wash, using clean water or steam. After power washing, hand and power tools are used in areas which have started to show deterioration from accumulated de-icing agents. Solvent cleaning is done in locations where oil and grease need to be removed from the steel surface. A spot PRIMER coat and finish coat are then applied by brush or roller. Occasionally, when there is no danger of overspray, spray painting may be performed.

SCAFFOLD - Any temporary elevated platform (supported or suspended) and its supporting structure (including points of anchorage), used for supporting employees or materials or both.



Mill Basin Bridge Scaffold Used During Pier Cap and Pier Column Repairs.

SCALING - Also known as surface breakdown, scaling is the gradual and continuing loss of concrete's surface mortar and aggregate over an area due to the chemical breakdown of the cement bond. Scaling is accelerated when the member is exposed to a harsh environment.



Brooklyn Bridge Tower Stone Scaling in 2016.

SCOUR - The washing away of stream bed material around or underneath the bridge abutments or piers that is caused by water channel flow.



Scour on Pier 2 End Face of Mosholu Parkway Bridge Over Bronx River in 2008. (Credit: NYSDOT)

SCREED - A long section of metal or wood which is dragged across freshly placed concrete to both smooth the surface and consolidate the concrete.



Screed at East 8th Street Ramp in 2011, and at West Approach of Gerritsen Inlet Bridge in 2014.

SCUPPER - An opening in the deck portion of a bridge to provide means for rain or other water accumulated upon the roadway surface to drain through it into the space beneath the structure.



Scuppers on the Pulaski, Madison Avenue, and Brooklyn Bridges. (Credit: NYSDOT) Delancey Street Pedestrian Bridge - Span 8.

SERVICE LIFE - The expected duration of satisfactory operation of a structure, component, or system under routine operating and maintenance conditions.

SET - When the consistency of mortar changes from plastic to hard.

SHOP DRAWINGS - detailed drawings developed from the more general design drawings used in the manufacture or fabrication of bridge components.

SHORING - Temporary bracing to support a structure.



2014: Timber Shoring at Spans 7 and 8 of the Harlem River Drive over Ramp to and From Northbound Harlem River Drive. Steel Shoring of the Damaged Column at Pier 4 of the Crocheron Park Pedestrian Bridge. Timber Shoring at Piers 5 and 6. 2016: Steel Shoring at Span 5 of the East 174<sup>th</sup> Street Bridge over the Sheridan Expressway. Eastbound Brooklyn-Queens Expressway over Washington Street - Shoring on the Right Side of the End Abutment.

SHOTCRETE - MORTAR or small-AGGREGATE concrete that is conveyed by compressed air through a hose and applied at high velocity to a surface. Also known as gunite and sprayed concrete.

*(SHPO) State Historic Preservation* Office A subdivision of the NYS Office of Parks, Recreation, and Historic Preservation (OPRHP). Coordination with SHPO is required on projects involving historic properties.

SOFFIT - The underside of a structural component, such as a beam or arch.

SOUNDING - A method of checking for voids or DELAMINATIONS in concrete by striking a hammer against the structure and listening for a hollow sound.

SPALLING - The flaking or breaking out of concrete parallel to the main surface, caused by a blow, or by the action of weather or pressure.



Spalled Section of Curb on the East 8<sup>th</sup> Street Bridge in 2006. (Credit: NYSDOT) Spalling With Exposed Rebar on the Beginning Abutment Joint Header of the Westchester Avenue Bridge over the Bronx River in 2011. Underdeck Spalling With Exposed Rebar on the Concourse Village Avenue Bridge over Metro North in 2012.

SPAN - Portions of the bridge SUPERSTRUCTURE between consecutive supports or joints.

(SPDES) State Pollution Discharge Elimination System A State program, approved by the United States Environmental Protection Agency (USEPA), for the control of wastewater and stormwater discharges in accordance with the Clean Water Act. SPDES is broader in scope than what is required by the Clean Water Act in that it controls point source discharges to groundwater, as well as to surface waters. SPDES operates through the USEPA's National Pollutant Discharge Elimination System (NPDES) program. Permits are issued in accordance with the requirements of the New York State Environmental Conservation Law ("ECL"). Discharges of pollutants to all "Waters of New York State," including groundwater, are unlawful unless they are authorized by a SPDES permit.

SPECIFICATIONS OR SPECS - A detailed listing of required construction materials and methods to be used in the project. This information is a supplement to the blue prints and working drawings.

*SPLAY CASTING* - A steel or cast-iron collar fitted around a bridge suspension CABLE at the location where it spreads out (splays) into separate bundles of wires which are then attached to the ANCHORAGE EYEBARS. It is used to control the degree and location of the splay. These castings are usually located at the entry point of the cable into the anchorage chamber.

SPOT PAINTING - When the surface to be painted is contaminated with de-icing salts, sea salt, bird excrement, or other corrosive agents, the area is prepared by power washing, using clean water or steam. When grease or oil is present, it is removed by solvents. Mechanical cleaning with hand and/or power tools is performed in the areas containing deteriorated paint. A spot PRIMER coat and a single finish coat are applied by brush or roller. Occasionally, when there is no danger of overspray, spray painting may be performed.

STAGED CONSTRUCTION - Construction done so that traffic may be maintained on a portion of an existing bridge structure while a longitudinal section of a new structure is constructed. Traffic is then shifted over to that portion of the new structure while the existing structure is removed and the new structure is completed.

STAINING - a discoloration of the concrete surface caused by the passing of dissolved materials through cracks and the redepositing of the materials on the surface as water emerges and then evaporates. Although staining can be of any color, brown staining usually signifies that corrosion is occurring in the underlying steel reinforcing.

STEEL ARCH BRIDGES - Steel arch bridges consist of either a single arch or a series of arches fashioned from steel or concrete. Aesthetically one of the more attractive bridge types. Arch structures can prove economical to construct if the bridge spans between high ABUTMENTS. At present, there is only one bridge of this kind in steel under the guardianship of the NYCDOT; the twin-arched *Washington Bridge*, positioned over the Harlem River at 181<sup>st</sup> Street. This bridge opened to traffic in December 1888 and, with its approaches, is 2,375 feet long.



Washington Bridge. (Credit: NYSDOT) Washington Bridge in 2008. (Credit: Duane Bailey-Castro) 2010.

STEEL ERECTION - the process of lifting, placing, and connecting structural steel elements in their intended final position in a bridge.

STEM - The vertical part of a retaining wall, usually made of concrete or masonry.

### GLOSSARY



East Face of Brooklyn Bridge North Stem Wall. (Credit: NYSDOT) West 176<sup>th</sup> Street Pedestrian Bridge Beginning Abutment Stem Wall.

STOPPING SIGHT DISTANCE - The distance required for a vehicle to stop before hitting a stationary object in its path. It is equal to the distance required for the driver to react and apply the brakes plus the distance required for the vehicle to stop once the brakes are applied.

STORM SURGE - The water, combined with normal tides, that is pushed toward the shore by strong winds during a storm. This rise in water level can cause severe flooding in coastal areas, particularly when the storm coincides with the normal high tides. The height of the storm surge is affected by many variables, including storm intensity, storm track and speed, the presence of waves, offshore depths, and shoreline configuration.

STRAIN GAUGE TESTING - Small strips of material (imagine a small band-aid) are glued onto part of a structure to measure the stress in the material under load. Inside the small "band-aid" are tiny electrical wires. When a structure is under load it stretches (tension) or contracts (compression). When this happens, the resistance in the tiny wires in the strain gauge changes, resulting in a change in the wire's current. What is actually being measured are changes in the electrical current in the tiny wires. Knowing the physical properties of the structural member that the gauge is attached to, (such as steel), a calculation is can then be made to convert these changes in current to changes in stress. The readings are taken with special instruments that record the information over the desired period of time or loading sequences.



June 2012 - Metropolitan Avenue Bridge. Summer College Intern Nikita Gupta Unsealing the Wire for Strain Gauge Testing. July 2012 - Unionport Bridge. Summer College Intern Kevin Hillery Setting up Inclinometer Calibration. August 2012 -Hunters Point Avenue Bridge. Kevin Hillery Checking Strain Gauge Connections With a Millimeter. (Credit: Vera Ovetskaya) August 2015: Assistant Mechanical Engineer Vera Ovetskaya Reviewing the Roosevelt Island Test Results.

STRAND - Comprised of hundreds of thin wires laid parallel to form a bundle, strands comprise the base element in the CABLES, or main cables, on a SUSPENSION BRIDGE or cable stayed bridge.

STRINGER - A part of a bridge's SUPERSTRUCTURE, a stringer is essentially a BEAM parallel to the span used to support the road DECK.



Stringers on the Manhattan Bridge. (Credit: NYSDOT) Bridge Repairer and Riveter Joseph Antony Repairing a Red-Flagged Stringer on the Bridge. (Credit: Hany Soliman)

STRUCTURAL DEFICIENCY - An engineering term-of-art used by the Federal government to indicate that there are elements of the bridge that need to be monitored and/or repaired. It covers a wide range of conditions and does not reflect the fundamental integrity of a structure. Any city bridge deemed unsafe would be shut to the public.

STRUCTURAL HEALTH MONITORING - The continuous or regular monitoring of the condition of a structure or system using built-in or autonomous sensory systems, and any resultant intervention to preserve structural integrity.

Borescope Investigations: The borescope is a high-tech device combining fiber-optic technology with digitized computer memory. It allows scanning and photographing of otherwise inaccessible locations.

Corrosion Sensors: Corrosion sensors were developed for the first time under a FHWA contract specifically for New York City's suspension bridges.

Fiber Optic Sensors: Fiber optic sensors can measure very small displacements as well as strain gauges, but are more resilient and insensitive to temperature changes. The information is readily transmitted online and lends itself to real-time monitoring.

Ground Penetrating Radar. Ground penetrating radar uses the propagation and retraction of high frequency waves through materials such as concrete to detect the presence of voids. This nondestructive method uses electromagnetic radiation in the microwave band (UHF/VHF frequencies) of the radio spectrum and detects the reflected signals from subsurface structures.



Director of Bridge Management Kevin McAnulty Inspecting the Bridge Carrying the Belt Parkway over Ocean Parkway, Utilizing the Unit's Borescope. June 2015: Inspecting the Brooklyn-Queens Expressway Between Cadman Plaza and Atlantic Avenue.



Experimental Corrosion Sensors Installed for a Test on Cable D of the Manhattan Bridge in 2011 (Left Corner). A Fiber Optic Sensor Monitoring a Crack in the Masonry of the Brooklyn Bridge's Manhattan Approach. A Ground Penetrating Radar Inspection of the Belt Parkway Bridge over Ocean Parkway. (Credit: Bojidar Yanev) 2016: Ground Penetrating Radar Utilized to Locate Rebars in the Brooklyn Heights Promenade Pavement. 2017: Ground Penetrating Radar Utilized to Detect Possible Subsurface Voids and Areas of Disturbed Soils That Could Cause Settlement in a Fenced, Paved Maintenance Storage Yard Located Under an Elevated Section of the FDR Drive Near its Intersection With the Avenue C Loop.

SUBSTRUCTURE - The name given to those elements below a bridge's road deck system, namely the ABUTMENTS, ANCHORAGES, BEARINGS, and PIERS.

SUICIDE BARRIER - A barrier on a bridge, observation deck or other structure designed to prevent people from attempting suicide by deliberately jumping.



Suicide Gates on the Cables of the Manhattan (Credit: NYSDOT) and Brooklyn Bridges.

SUPERSTRUCTURE - The superstructure is all that part of a structure above the bearings of simple and continuous spans, skewbacks of arches and top of footings of rigid frames; excluding backwalls, WINGWALLS and wing protection railings.

SUSPENDER - A wire rope or a short vertical rod that transmits forces from the roadway of a SUSPENSION BRIDGE to the supporting CABLES. The suspenders assist in supporting the bridge floor system and its superimposed loads by transferring loads to the main suspension members of the structure. They support other members against sagging, twisting, or other deformation due to its own weight.



Manhattan Bridge Suspenders. (Credit: NYSDOT and Jagtar Khinda)

SUSPENSION BRIDGES - Suspension bridges are high level bridges with spans that usually exceed 1,500 feet in length. Supported by large wire CABLES that are anchored to masses of concrete and which pass over the tops of towers, the road DECK is suspended at regular intervals by smaller cables called suspenders. While the main cables carry the entire live and dead load, stiffening TRUSSES are required to distribute the LIVE LOAD and prevent excessive deflection at any point. The Brooklyn, *Manhattan* and *Williamsburg* Bridges are noted New York City examples of this type.



Manhattan Bridge. (Credit: Bernard Ente) Williamsburg Bridge. (Credit: Peter Basich)

*SWING BRIDGES* - Swing bridges are movable bridges that are supported on a center PIER in the center of a waterway, and are opened by rotating the SUPERSTRUCTURE horizontally on wheels riding on a circular track. Two channels are provided on either side of the bridge for navigational ease when the bridge is in the open position. Because swing bridges are slow to operate and restrict channel width, they are rarely constructed today. Examples of swing bridges in New York City include the *Third Avenue, Madison Avenue, 145<sup>th</sup> Street, University Heights, Grand Street* and *Macombs Dam* Bridges.



Third Avenue and University Heights Bridges. (Credit: Michele N. Vulcan) Grand Street and 145th Street Bridges. (Credit: NYSDOT) Macombs Dam Bridge.

TEMPORARY BRIDGE - A pedestrian and/or vehicular bridge built to carry traffic around an active construction site in lieu of STAGE CONSTRUCTION. The structure is removed after the new bridge is open to traffic.



1911 Boston Road Bridge over Hutchinson River Temporary Bridge. 2011: Fresh Creek Temporary Bridge. 2004: Almost Completed New Third Avenue Span and Temporary Bridge. (Credit: Daniel Hom)



2005: Pontoon Bridge Used During the Emergency Reconstruction of the Ocean Avenue Pedestrian Bridge over Sheepshead Bay. (Credit: Russell Holcomb) 2015: City Island Temporary Bridge.

THERMAL EXPANSION - Temperature-induced changes in the lengths of steel and other materials used to construct bridges. Thermal expansion governs the design of joints and can, in extreme cases, impact the operation of movable bridges.

TORSION - Twisting force usually caused by unbalanced or asymmetrical loading.

TOWER - Often the most majestic element in a SUSPENSION or cable stayed bridge, the tower serves as a support for the structure's main CABLES.



Inspectors on Manhattan Bridge Tower. (Inspector Credit: NYSDOT) Manhattan Bridge Tower. (Credit: Michele N. Vulcan) Manhattan Bridge Tower Detail. (Credit: Russell Holcomb) Williamsburg Tower Detail. (Credit: Bojidar Yanev) Brooklyn Bridge Tower. (Credit: Earlene Powell) Ed Koch - Queensboro Bridge Tower Top. Broadway Bridge Begin and End South Tower Face. (Credit: NYSDOT)

TRAVELER MAINTENANCE - The maintenance of a traveler (movable underdeck platform) that runs under the East River Bridges so maintenance, inspections and repairs can be performed to the underside of the bridge. A traveler platform is typically perpendicular to the girders and the platform runs on a rail system between substructure elements.



Manhattan Bridge and Ed Koch - Queensboro Bridge Travelers. (Credit: NYSDOT) Williamsburg Bridge in 1942: First Traveler in Place at the Brooklyn Tower. Second Traveler Shown on Scow Prior to Lifting.

TREMIE SEAL - concrete placed under water through the use of a tremie placement tube. As the concrete is placed, water is displaced and the tube is gradually raised keeping the outlet below the level of the placed concrete. Tremie seals are usually used where piers need to be constructed in fairly deep water and it is difficult to dewater the excavation.

TRENCH DRAIN - These drainage structures consist of a slotted opening with bars perpendicular to the opening. Trench drains (also known as slotted drains) function as weirs with flow entering from the side. They can be used to intercept sheet flow, collect gutter flow with or without curbs, modify existing systems to accommodate roadway widening or increased runoff, and reduce ponding depth and spread at grate inlets. The two types of trench drains in general use are the vertical riser type and the vane type.



Manhattan Bridge Trench Drain.

TRUSS - A rigid framework built of interconnecting steel beams, creating a large "girder" to support the floor system and transfer loads to the substructure over a longer span.



Brooklyn Bridge Franklin Square Truss. General view of Manhattan Bridge Trusses B and C From the Lower Roadway on the Main Span. (Credit: NYSDOT) Chambers Street Pedestrian Bridge Truss. Madison Avenue Bridge Truss Swinging. (Credit: NYSDOT)

TRUSS BRIDGES - Truss bridges possess road decks that are supported by Steel TRUSSES that rest on PIERS and ABUTMENTS, and which span short distances. The 174th Street Bridge in the Bronx is an example of a truss bridge.



East 174<sup>th</sup> Street Truss Bridge over Sheridan Expressway and 204<sup>th</sup> Street Pedestrian Bridge over Metro North in 2017.

TUNNEL - An enclosed roadway for motor vehicle traffic with vehicle access limited to portals, regardless of type of structure or method of construction, that requires, based on the owner's determination, special design considerations to include lighting, ventilation, fire protection systems, and emergency egress capacity.



First Avenue Tunnel.

TURBIDITY CURTAIN - A flexible, impermeable barrier used to trap sediment in water bodies. This curtain is generally weighted at the bottom to ensure that sediment does not travel under the curtain, which is supported at the top through a flotation system. Turbidity curtains prevent the migration of sediment from a work site in a water environment into the larger body of water. Also known as a turbidity barrier or silt curtain.



Installation of a Turbidity Curtain to Protect the Shore During Construction of the Temporary City Island Bridge in 2014.

VERTICAL LIFT BRIDGES - Vertical lift bridges are movable bridges which have road DECKS that operate in much the same fashion as an elevator. Comprised of supporting end CABLES that are attached at one end to the road DECK and at the other to rotating drums, these bridges are raised and lowered to allow for the safe passage of marine traffic. The *Roosevelt Island Bridge*, 103rd Street - Wards Island Pedestrian Bridge, Ninth Street Bridge, and Broadway Bridge are examples of this type of bridge.



Lifted Roosevelt Island Bridge. (Credit: NYSDOT). Wards Island Pedestrian Bridge. Ninth Street Bridge. (9th Street Credits: Bojidar Yanev and Roly Parroco) Broadway Bridge.

VIADUCT BRIDGES - Viaduct bridges are multi-span bridges containing two end spans and any number of intermediate SPANS. The end spans are supported by an ABUTMENT on one end and a PIER on the other. The intermediate spans held aloft by piers.



Park Avenue Viaduct Bridge. The Viaduct During Summer Streets 2012. Newly Installed Color-Changing LED Lighting in 2016. (LED Credit: MTA) Riverside Drive Viaduct.

VOIDS - An empty or unfilled space in concrete.

WARNING GATE - Warning gates are installed at movable bridges to decrease the likelihood of vehicles and pedestrians passing the stop line and entering an area where potential hazards exist because of bridge operations. The gates are striped with 16-inch alternate vertical, fully reflectorized red and white stripes. Flashing red lights are included on the gate arm and they are only operated if the gate is closed or in the process of being opened or closed.



Metropolitan Avenue Bridge over English Kills Warning Gates. (Credit: NYSDOT) West 207<sup>th</sup> Street//West Fordham Road Bridge Warning Gate. Greenpoint Avenue Bridge over Newtown Creek Southwest Warning Gate.

WATERPROOFING MEMBRANE - A protective sheet placed between a WEARING SURFACE and concrete DECK to shield the concrete deck from water and corrosive chemicals which could cause DELAMINATION and SPALLING.

WEARING SURFACE - The topmost layer of material applied on the DECK or roadway that receives the traffic loads; also known as wearing course. Wearing surfaces perform two functions in protecting the deck: they provide a seal and prevent water and deicing chemicals from penetrating into the deck slab, and they provide a smooth, skid-resistant surface for vehicular traffic, minimizing impact forces to the structure.



Brooklyn Bridge Wearing Surface. Manhattan Bridge Wearing Surface and Safety-Shaped Barriers. Williamsburg Bridge South Inner Roadway Wearing Surface. (Credit: NYSDOT) West 86<sup>th</sup> Street Pedestrian Bridge (Southwest Reservoir Bridge) Wooden Wearing Surface. Ocean Avenue Pedestrian Bridge over Sheepshead Bay. 60<sup>th</sup> Road Pedestrian Bridge over LIRR. Promenade over FDR Drive Span 43. (FDR Credit: NYSDOT)

WELD - To fasten together metals by bonding with molten metal.



Welding Steel Packs for the Southbound Bruckner Expressway Bridge.

WETLAND - Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.



Springville Greenway Pedestrian Bridge over Freshwater Wetlands.

WICK DRAINS - A mechanism used to accelerate the process in which water travels through the layers of soft soil, therefore allowing the soil to reach its full level of compaction (settling). Once full soil compaction is reached, the roadway surface can be built on top with a reduced risk for pavement damage due to additional settling in the future.



Northwest Quadrant Wick Drains for the New Mill Basin Bridge. Drains Backfilled.

WINGWALL - Walls of reinforced concrete or stone that prevent the soil behind the ABUTMENT from eroding away and leaving a void beneath the APPROACHES of the bridge. Wingwalls may extend over longer distances into retaining walls. Wingwalls are extensions of ABUTMENT STEMS, not supporting direct loads from the SUPERSTRUCTURE.



Belt Parkway over Rockaway Parkway, Grand Street, 145<sup>th</sup> Street, and Center Drive (Playmates Arch) Wingwalls. (First Four Credit: NYSDOT) Belt Parkway Over Bay Ridge Avenue Bridge Northwest and Southeast Wingwalls in 2015. Brooklyn Bridge North Wingwall in 2016. (Brooklyn Bridge Credit: NYSDOT)

WINTER INSPECTION - Inspection of a site known to have a greater hazard potential during winter. This may be due to low ambient temperatures, accidental or deliberately set fires.



Timber Shoring Supporting a Failing Steel Beam - a Potential Winter Hazard. (Credit: Bojidar Yanev)

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Åkesson, Björn. Fatigue Life of Riveted Steel Bridges. CRC Press, 2010.

Åkesson, Björn (editor). Plate Buckling in Bridges and Other Structures. Taylor & Francis, 2007.

Åkesson, Björn (editor). Understanding Bridge Collapses: From the Horizon of the Structural Engineer. Taylor & Francis, 2008.

Alampalli, Sreenivas. and Moreau, William. J., (editors). Inspection, Evaluation and Maintenance of Suspension Bridges. CRC Press, 2016.

Alampalli, Sreenivas. and Moreau, William. J., (editors). Inspection, Evaluation and Maintenance of Suspension Bridges: Case Studies. CRC Press, 2016.

Anitori, Giorgio, Casas, Joan R., and Ghosn, Michel. *Methodology for Development of Live Load Models for Refined Analysis of Short and Medium-Span Highway Bridges*. Structure and Infrastructure Engineering, Volume 14, Issue 4, 2018.

Ansari, Farhad (editor). Sensing Issues in Civil Structural Health Monitoring. Springer, 2010.

Azizinamini, Atorod, Yakel, Aaron, Abdelrahman, Magdy, (editors), and United Engineering Foundation. *High Performance Materials in Bridges: Proceedings of the International Conference.* American Society of Civil Engineers, August 2003.

Barker, Richard M., and Puckett, Jay A. Design of Highway Bridges: An LRFD Approach. John Wiley & Sons, 3rd edition, 2013.

Beard, Jeffrey L., Wundram, Edward C., and Loulakis, Michael C. *Design-Build: Planning Through Development*. McGraw-Hill Professional, 2001.

Benaim, Robert. The Design of Concrete Bridges. Taylor & Francis, 2007.

Biondini, Fabio, and Frangopol, Dan M. (editors). Bridge Maintenance, Safety, Management, Resilience and Sustainability: Proceedings of the Sixth International IABMAS Conference, Stresa, Lake Maggiore, Italy. CRC Press, 2012.

Birnstiel, Charles, Foerster, George, and Bowden, William. Movable Bridge Design. ICE Publishing, 2015.

Bittencourt, Tulio Nogueira, Frangopol, Dan M., and Beck, Andre (editors). *Maintenance, Monitoring, Safety, Risk and Resilience of Bridges and Bridge Networks – IABMAS 2016- Proceedings of the Eighth International Conference on Bridge Maintenance, Safety and Management*, Foz do Iguaçu, Paraná, Brazil, 26-30 June, 2016. CRC Press, 2016.

Blakstad, Lucy (editor). Bridge: The Architecture of Connection. Birkhauser Verlag, 2002.

Blockley, David. Bridges: The Science and Art of the World's Most Inspiring Structures. Oxford University Press, USA, 2010.

Branco, Fernando, A., and de Brito, Jorge. Handbook of Concrete Bridge Management. American Society of Civil Engineers, 2003.

Brown, David J. Bridges: Three Thousand Years of Defying Nature. Motorbooks International, October 2001.

Burke Jr., Martin P. Integral and Semi-Integral Bridges. Wiley-Blackwell, 2009.

Chatterjee, Suhken. Design of Modern Steel Bridges. Blackwell Science Inc., 2<sup>nd</sup> edition, 2003.

Chen, Airong, Frangopol, Dan M., and Ruan, Xin (editors). Bridge Design, Assessment and Monitoring. Routledge, 2018. (Originally published as a special issue in *Structure and Infrastructure Engineering*.)

Chen, Airong, Frangopol, Dan M., and Ruan, Xin (editors). Bridge Maintenance, Safety, Management and Life Extension - IABMAS'14: Proceedings of the Seventh International Conference on Bridge Maintenance, Safety and Management, Shanghai, China, 7-11, 2014. CRC Press, 2014.

Chen , Hua-Peng. Structural Health Monitoring of Large Civil Engineering Structures. Wiley-Blackwell, 2018.

Chen, Wai-Fah, and Duan, Lian (editors). Bridge Engineering Handbook, Five Volume Set: Fundamentals, Superstructure Design, Substructure Design, Seismic Design, and Construction and Maintenance. CRC Press, 2<sup>nd</sup> edition, 2014.

Cho, Yoon-Ho, Tayabi, Shiraz D., Won, Moon C., and Yuan, Jianbo (editors). *New Technologies in Construction and Rehabilitation of Portland Cement Concrete Pavement and Bridge Deck Pavement (GSP 196*). (Proceedings of the GeoHunan International Conference: Challenges and Recent Advances in Pavement Technologies and Transportation Geotechnics). American Society of Civil Engineers, 2009.

Chotickai, Piya. Fatigue Life of Steel Bridges: Structural Evaluation and Reliability-Based Analysis Method. VDM Verlag, 2009.

Collings, David. Steel Concrete Composite Bridges. Thomas Telford Ltd., 2005.

Construction Institute Committee on Specification. *Preparing Requests for Proposals and Specifications for Design-Build Projects*. American Society of Civil Engineers, 2008.

Cossons, Neil, and Trinder, Barrie. Iron Bridge: Symbol of the Industrial Revolution. Phillimore & Company, Limited, 2002.

Cruz, Paulo J. S., Frangopol, Da M., and Neves, Luis C. (editors). Advances in Bridge Maintenance, Safety Management and Lifecycle Performance. Taylor & Francis, 2006. (With CD-ROM).

Cunha, Alvaro (editor). Topics in Dynamics of Bridges, Volume 3: Proceedings of the 31<sup>st</sup> IMAC, A Conference on Structural Dynamics, 2013 (Conference Proceedings of the Society for Experimental Mechanics Series). Springer, 2013.

Datta, T. K. Seismic Analysis of Structures. Wiley, 2010.

Dawe, Peter. Traffic Loading on Highway Bridges. American Society of Civil Engineers (Thomas Telford, Ltd.), 2004.

Day, Robert W. Geotechnical Earthquake Engineering Handbook. McGraw-Hill, 2001.

Deng, Linzhong. Artificial Intelligence Techniques for Bridge Reliability Assessment. VDM Verlag, 2009.

Denison, Edward, and Stewart, Ian. How to Read Bridges: A Crash Course In Engineering and Architecture. Rizzoli, 2012.

Denny, Mark. Super Structures: The Science of Bridges, Buildings, Dams, and Other Feats of Engineering. The Johns Hopkins University Press, 2010.

Eggert, Helmut, and Kauschke, Wolfgang. Structural Bearings. John Wiley & Sons, 2003.

Erdem, Arda. Seismic Design of Bridges. LAP Lambert Academic Publishing, 2010.

Ettouney, Mohammed, and Alampalli, Sreenivas. Infrastructure Health in Civil Engineering (Two-Volume Set): Theory and Components, & Applications and Management. CRC Press, 2011.

Federal Highway Administration. Accelerated Bridge Construction: Experience in Design, Fabrication and Erection of Prefabricated Bridge Elements and Systems. U.S. Department of Transportation Federal Highway Administration. FHWA Publication No.: FHWA-HF-12\_013, November 2011, Final version, 2015.

Fiorillo, Graziano, and Ghosn, Michel. *Fragility Analysis of Bridges Due to Overweight Traffic Load.* Structure and Infrastructure Engineering, Volume 14, Issue 5, 2018.

Frangopol, Dan M., Sause, Richard, and Kusko, Chad (editors). Bridge Maintenance, Safety and Management - IABMAS'10: Proceedings of the Fifth International IABMAS Conference, Philadelphia, USA, 11-15 July 2010. CRC Press, 2010.

Fu, Chung C., and Wang, Shuqing. Computational Analysis and Design of Bridge Structures. CRC Press, 2014.

Gao, Lubin. Load Rating Highway Bridges: In Accordance with Load and Resistance Factor Rating Method. Outskirts Press, 2013. Ger, Jeffrey, and Cheng, Franklin Y. Seismic Design Aids for Nonlinear Pushover Analysis of Reinforced Concrete and Steel Bridges. CRC Press, 2011.

Gere, James M. Mechanics of Materials. Brooks/Cole Publishing, 5th edition, 2000.

Ghali, A., Favre, R., and Elbadry, M. Concrete Structures: Stresses and Deformations: Analysis and Design for Sustainability. Spon, 4<sup>th</sup> edition, 2011.

Ghosh, Uptal K. (editor). Design and Construction of Steel Bridges. Taylor & Francis, 2007.

Ghosh, Uptal K. Repair & Rehabilitation of Steel Bridges. Balkema Publishers, 2000.

Ghosn, Michel, Fiorillo, Graziano, Gayovyy, Volodymyr, Getso, Tenzin, Ahmed, Sallem, and Parker, Neville. *Effects of Overweight Vehicles on New York State DOT Infrastructure - Final Report (2009 – 2015)*. Department of Civil Engineering - The City College of New York, 2015.

Gimsing, Niels J., and Georgakis, Christos T. Cable Supported Bridges: Concept and Design. Wiley, 3rd edition, 2012.

Gohler, Bernhard, and Pearson, Brian. Incrementally Launched Bridges: Design and Construction. John Wiley & Sons, 2000.

Gonzalez, Arturo. Development of a Bridge Weigh-In-Motion System: A technology to convert the bridge response to the passage of traffic into data on vehicle configurations, speeds, times of travel and weights. LAP Lambert Academic Publishing, 2010.

Gottemoeller, Frederick. Bridgescape: The Art of Designing Bridges. John Wiley & Sons, 2nd edition, 2004.

Gransberg, Douglas D., Koch, James E., and Molennar, Keith R. Preparing for Design-Build Projects: A Primer for Owners, Engineers, and Contractors. American Society of Civil Engineers, 2006.

Grigg, Neil S., Criswell, Marvin E, Fontane, Darrell G., and Siller, Thom. *Civil Engineering Practice in the Twenty-First Century: Knowledge and Skills for Design and Management.* American Society of Civil Engineers, 2001.

Hewson, Nigel R. Prestressed Concrete Bridges. ICE Publishing, 2<sup>nd</sup> edition, 2011.

Holcomb, Russell. *Maintaining Anchorage Enhancements*. Chapter 9 in Alampalli, Sreenivas. and Moreau, William. J., (editors). *Inspection, Evaluation and Maintenance of Suspension Bridges*. CRC Press, 2016.

Hurt, Mark A., and Schrock, Steven D. Highway Bridge Maintenance Planning and Scheduling. Butterworth-Heinemann, 2016.

Idelberger, Klaus, and Wilharm, Linda (Translator). The World of Footbridges: From the Utilitarian to the Spectacular. Wiley-VCH, 2011.

Imhof, Daniel. *Risk Assessment of Existing Bridge Structures: Evaluation of the Risk of Structural Collapse.* VDM Verlag, 2008. Jaffe, Rochelle C. *Masonry Instant Answers (Instant Answer Series).* McGraw-Hill Professional, 2003.

Jurado, J. A., Hernandez, S., Nieto, F, and Mosquera, A. Bridge Aeroelasticity: Sensitivity Analysis and Optimum Design (High Performance Structures and Materials). WIT Press / Computational Mechanics, 2011.

Kappos, Andreas J. (editor). Dynamic Loading and Design of Structures. E & F N Spon, 2001.

Kappos, Andreas J., Saiidi, M. Saiid, Aydinoglu, M. Nuray, and Isakovic, Tatjana. (editors). Seismic Design and Assessment of Bridges: Inelastic Methods of Analysis and Case Studies (Geotechnical, Geological and Earthquake Engineering). Springer; 2012.

Kardon, Joshua A. (editor). *Guidelines for Forensic Engineering Practice*. American Society of Civil Engineers, 2<sup>nd</sup> edition, 2012. Kawada, Tadaki, Ohashi, Harukazu (Translator), Scott, Richard (Editor). *History of the Modern Suspension Bridge: Solving the Dilemma between Economy and Stiffness*. American Society of Civil Engineers, 2010.

Kennedy-Reid, Ian L. Concrete Bridge Strengthening and Repair. Thomas Telford Ltd., 2009.

Khan, Mohiuddin A. Bridge and Highway Structure Rehabilitation and Repair. McGraw-Hill Professional, 2010.

Khan, Mohiuddin A. Accelerated Bridge Construction: Best Practices and Techniques. Butterworth-Heinemann, 2014.

Khan, Mohiuddin A. Flood Scour for Bridges and Highways: Prevention and Control of Soil Erosion. McGraw-Hill Professional, 2014.

Kim, Jai B., Kim, Robert H., Eberle, Jonathan, with Mante, Dave M., and Weaver, Eric J. *Simplified LRFD Bridge Design*. CRC Press, 2013.

Kim, Yail Jimmy (editor). Advanced Composites in Bridge Construction and Repair (Woodhead Publishing Series in Civil and Structural Engineering). Woodhead Publishing, 2014.

Koglin, Terry. Movable Bridge Engineering. John Wiley & Sons, 2004.

Koh, Hyun-Moo, and Frangpol, Dan M. (editors). Bridge Maintenance, Safety, Management, Health Monitoring and Informatics: Proceedings of the Fourth International Conference, Seoul, Korea, 13-17 July 2008. Taylor & Francis, 2008.

Kratkey, Richard J. (Editor). Assessment of Performance of Vital Long-Span Bridges in the United States. American Society of Civil Engineers, 2003.

Lagasse, P.F., Clopper, P. E., Pagán-Ortiz, J. E., Zevenbergen, L. W., Arneson, L. A., Schall, J. D., and Girard, L. G. *Bridge Scour and Stream Instability Countermeasures: Experience, Selection and Design Guidance - Third Edition: Volume 1.* U.S. Department of Transportation Federal Highway Administration. FHWA Publication No.: FHWA-NHI-09-111, September 2009

Lagasse, P.F., Clopper, P. E., Pagán-Ortiz, J. E., Zevenbergen, L. W., Arneson, L. A., Schall, J. D., and Girard, L. G. *Bridge Scour and Stream Instability Countermeasures: Experience, Selection and Design Guidance - Third Edition: Volume 2.* U.S. Department of Transportation Federal Highway Administration. FHWA Publication No.: FHWA-NHI-09-112, September 2009.

Lee, George C., Sternberg, Ernest, and Pierro, David C. (illustrator). Bridges: Their Engineering and Planning. SUNY Press, 2015.

Leitch, Kenneth. Close-Range Photogrammetric Measurement of Bridge Deformations: A Non-Contact Analysis Method. LAP Lambert Academic Publishing, 2010.

LePatner, Barry B. Too Big to Fall: America's Failing Infrastructure and the Way Forward. Foster Publishing, 2010.

Lou, Peng, Nassif, Hani, Su, Dan, and Truban, Paul. *Impact of Overweight Trucks on the Service Life of Bridge Girders*. Transportation Research Record: Journal of the Transportation Research Board, No. 2642, 2017.

Mahmoud, Khaled M. (editor). Innovations in Bridge Engineering Technology: Selected Papers, 3<sup>rd</sup> NYC Bridge Conference, 27-28 August 2007. CRC, 2007.

Mahmoud, Khaled M. (editor). Safety and Reliability of Bridge Structures: Selected Papers, 5<sup>th</sup> New York City Bridge Conference. CRC, 2009.

Mahmoud, Khaled M. (editor). Modern Techniques in Bridge Engineering: Proceedings of 6th New York City Bridge Conference, 25-26 July 2011. CRC, 2011.

Malhotra, V. M., and Carino, N. J. (editors). Handbook on Nondestructive Testing of Concrete. Auerbach Publishing, 2<sup>nd</sup> edition, 2004.

McCurley, Loui. *Professional Rope Access: A Guide to Working Safely at Height*. Wiley, 2016.

Measures, Raymond M. Structural Monitoring With Fiber Optic Technology. Academic Press, 2001.

Mort, Michael. A Bridge Worth Saving: A Community Guide to Historic Bridge Preservation. Michigan State University Press, 2008. Moutassem, Fayez. High Strength Concrete Prestressed Bridge Girders: Evaluation and Modification of the Allowable Stresses. VDM Verlag, 2010.

Nguyen, Bella, and Brilakis, Ioannis. Understanding the Problem of Bridge and Tunnel Strikes Caused by Over-height Vehicles. Transportation Research Procedia, Volume 14, 2016.

Obrien, Eugene, Keogh, Damien, and O'Connor, Alan. Bridge Deck Analysis. CRC Press, 2<sup>nd</sup> edition, 2014.

O'Connor, Colin O., and Shaw, Peter A. Bridge Loads. Routledge, 2000.

Outerbridge, Graeme (photographer), and Outerbridge, David. Bridges. Harry N Abrams, 1989.

Paipetis, Alkiviadis S., Matikas, Theodore E., Aggelis, Dimitrios G., and Van Hemelrijck, Danny (editors), *Emerging Technologies in Non-Destructive Testing V: Fifth Conference on Emerging Technologies in Non-Destructive Testing (Ioannina, Greece, 19-21 September 2011).* CRC Press, 2012.

Parke, G. A. R., and Disney, P. (editors) Bridge Management 5: Fifth International Conference on Bridge Management, 2005. Thomas Telford, Ltd., 2005.

Parmley, Robert O. Civil Engineer's Illustrated Sourcebook. McGraw-Hill Professional, 2003.

Pearce, Martin, and Jobson, R. Bridge Builders. John Wiley & Sons, 2002.

Petroski, Henry. Pushing the Limits: New Adventures in Engineering. Vintage, 2005.

Petroski, Henry. The Road Taken: The History and Future of America's Infrastructure. Bloomsbury USA, 2016.

Pipinato, Alessio. (editor). Innovative Bridge Design Handbook: Construction, Rehabilitation and Maintenance. Butterworth-Heinemann, 2015.

Proske, Dirk, and van Gelder, Pieter. Safety of Historical Stone Arch Bridges. boyer, 2009.

Proulx, Tom (editor). Dynamics of Bridges, Volume 5: Proceedings of the 28th IMAC, A Conference on Structural Dynamics, 2010 (Conference Proceedings of the Society for Experimental Mechanics Series). Springer, 2011.

Raina, V. K. Raina's Concrete Bridge Practice Construction, Maintenance and Rehabilitation. Shroff Publishers and Distributors Pvt. Ltd., 2nd Edition, 2010.

Rasenberger, Jim. High Steel: The Daring Men Who Built The World's Greatest Skyline, 1881 to The Present. HarperCollinsUS, 2010.

Ratay, Robert T. (editor). Forensic Structural Engineering Handbook. McGraw-Hill Professional, 2000.

Ratay, Robert T. Structural Condition Assessment. John Wiley & Sons, 2005.

Reece, Martin B. Strengthening Historic Covered Bridges to Carry Modern Traffic. Nova Science Publishers, 2009.

Richardson, Mark. Fundamentals of Durable Reinforced Concrete. E & F N Spon, 2002.

Rosignoli, Marco. Bridge Construction Equipment. ICE Publishing, 2013.

Rosignoli, Marco. Bridge Launching. ICE Publishing, 2<sup>nd</sup> edition, 2014.

Ruddock, Ted (editor). Masonry Bridges, Viaducts and Aquaducts. Ashgate Publishing Company, 2000.

Russell, Jeffrey S. (editor). Perspectives in Civil Engineering: Commemorating the 150th Anniversary of the American Society of Civil Engineers. American Society of Civil Engineers, 2003.

Ryall, Michael J. Bridge Management. Butterworth-Heinemann, 2<sup>nd</sup> edition, 2009.

Ryall, Michael J., Parke, G. A. R., and Harding, J. E. *Manual of Bridge Engineering*. American Society of Civil Engineers (Thomas Telford, Ltd.), 2000.

Ryall, M. J., Parke, G. A. R., and Harding, J. E. (editors). *Bridge Management Four: Inspection, Maintenance, Assessment, and Repair. (Proceedings of the Fourth International Conference on Bridge Management).* American Society of Civil Engineers (Thomas Telford, Ltd.), 2000.

Scheer, Joachim, Wilharm, Linda (translator), and Menn, Christian (forward). Failed Bridges: Case Studies, Causes and Consequences. Wiley-VCH, 2010.

Shu, Zhan, Axe, Lisa, Jahan, Kauser, Ramanujachary, Kandalam V., and Kochersberger, Carl. *Metal Concentrations and Distribution in Paint Waste Generated During Bridge Rehabilitation in New York State.* Science of the Total Environment, Volume 526, September 2015.

Simiu, Emil, and Miyata, Toshio. Design of Buildings and Bridges for Wind: A Practical Guide for ASCE-7 Standard Users and Designers of Special Structures. John Wiley & Sons, 2006.

Strasky, Jiri. Stress Ribbon and Cable-supported Pedestrian Bridges. ICE Publishing, 2<sup>nd</sup> edition, 2011.

Strømmen, Einar. Theory of Bridge Aerodynamics. Springer, 2<sup>nd</sup> edition, 2010.

Sussman, Joseph M. Perspectives on Intelligent Transportation Systems (ITS). Plenum US, 2005.

Taly, Narendra. Highway Bridge Superstructure Engineering: LRFD Approaches to Design and Analysis. CRC Press, 2014.

Tilly, Graham, Gifford, and Partners. Bridge Conservation: A Guide to Good Practice. Taylor & Francis, 2002.

Transport Association of Canada. *Guide to Bridge Hydraulics*. American Society of Civil Engineers (Thomas Telford Ltd), 2<sup>nd</sup> edition, 2004.

Troyano, Leonardo Fernýýndez. Bridge Engineering: A Global Perspective. American Society of Civil Engineers (Thomas Telford, Ltd.), 2004.

Unsworth, John F. Design of Modern Steel Railway Bridges. CRC Press, 2010.

Wenzel, Helmut. Health Monitoring of Bridges. Wiley, 2009.

Whitney, Charles S. Bridges of the World: Their Design and Construction. Dover Publications, 2003.

Williams, Alan. Civil & Structural Engineering: Seismic Design of Buildings & Bridges. Kaplan, 5th edition, 2005.

Xu, You-Lin. Wind Effects on Cable-Supported Bridges. Wiley, 2013.

Xu, You Lin, and Xia, Yong. Structural Health Monitoring of Long Span Suspension Bridges. CRC Press, 2012.

Yanev, Bojidar. Bridge Management. Wiley, 2007. (Also available in Chinese and Japanese editions.)

Yanev, Bojidar. Comparing Bridge Condition Evaluations with Life-Cycle Expenditures. Chapter 22 in Frangopol, Dan M., and Tsompanakis, Yiannis (editors). Maintenance and Safety of Aging Infrastructure: Structures And Infrastructures Book Series, Volume 10. CRC Press, 2014.

Yanev, Bojidar. Suspension Bridges: An Overview. Chapter 1 in Alampalli, Sreenivas. and Moreau, William. J., (editors). Inspection, Evaluation and Maintenance of Suspension Bridges. CRC Press, 2016.

Yeomans, David. How Structures Work: Design and Behaviour from Bridges to Buildings. Wiley Blackwell, 2nd edition, 2016.

Zhao, Jim J., and Tonias, Demetrios E. Bridge Engineering: Design, Rehabilitation, and Maintenance of Modern Highway Bridges. McGraw-Hill Professional, 4<sup>th</sup> edition, 2017.

New York City Bridge Conference: A Special Issue of the Journal of Bridge Engineering: Proceedings of the 1st New York City Bridge Conference. American Society of Civil Engineers, 2001.

### History and Images

Adeli, Hojjat. Historic Bridges: Evaluation, Preservation, and Management. CRC Press, 2012.

Agrawal, Roma. Built: The Hidden Stories Behind our Structures. Bloomsbury USA, 2018.

Baus, Ursula, Schlaich, Mike, Dechau, Wilfried (photographer), Rieser, C. (translator), and Toovey, Richard (translator). Footbridges. Birkhäuser Basel, 2007.

Beck, Haig, and Cooper, Jackie. Kurilpa Bridge: Brisbane's New Bridge. The Images Publishing Group, 2012.

Boyer, Margorie Nice. Medieval French Bridges: A History. Medieval Academy of America, 1976.

Cleary, Richard L. *Bridges.* (Norton/Library of Congress Visual Sourcebooks in Architecture, Design & Engineering.) W. W. Norton, 2007.

Cooper, Alan. Bridges, Law and Power in Medieval England, 700-1400. Boydell Press, 2006.

Cortright, Robert S. (photographer), and Cortright Neff, Jeane (editor). Bridging the World. Bridge Ink, 2003.

Cruickshank, Dan. Dan Cruickshank's Bridges: Heroic Designs That Changed the World. Collins, 2010.

DeYoung, Bill. Skyway: The True Story of Tampa Bay's Signature Bridge and the Man Who Brought It Down. University Press of Florida; 2016.

Dyble, Louise N. Paying the Toll: Local Power, Regional Politics, and the Golden Gate Bridge (American Business, Politics, and Society). University of Pennsylvania Press, 2009.

Frampton, Kenneth, Tischhauser, Anthony, and Webster, Anthony C. (editors). *Calatrava Bridges*. Birkhauser (Architectural), 3<sup>rd</sup> edition, 2004.

Frick, Karen Trapenberg. Remaking the San Francisco-Oakland Bay Bridge: A Case of Shadowboxing with Nature (Planning, History and Environment Series). Routledge, 2015.

Fujino, Yozo, Kimura, Kichiro, and Tanaka, Hiroshi. Wind Resistant Design of Bridges in Japan: Developments and Practices. Springer, 2012.

Fuller, Robert G., Lang, Charles R., and Lang, Roberta H., (editors). *Twin Views of the Tacoma Narrows Bridge Collapse*. American Association of Physics Teachers, 2000.

Graf, Bernhard. Bridges That Changed the World. Prestel USA, 2002.

Guth, David W. Bridging the Chesapeake: A 'Fool Idea' That Unified Maryland. Old Line Publishing LLC, 2013.

Hadlow, Robert W. Elegant Arches, Soaring Spans: C. B. McCullough, Oregon's Master Bridge Builder. Oregon State University Press, 2001.

Harrison, David. The Bridges of Medieval England: Transport and Society 400-1800. (Oxford Historical Monographs). Oxford University Press, 2007.

Jamieson, Eric. Tragedy at Second Narrows: The Story of the Ironworkers Memorial Bridge. Harbour Publishing Company, 2008.

Kemp, Emory L. (editor). American Bridge Patents: The First Century, 1790-1890. West Virginia University Press, 2005.

Knapp, Ronald G., and Ong, A. Chester (photographer). Chinese Bridges: Living Architecture From China's Past. Tuttle Publishing, 2008.

MacDonald, Donald, and Nadel, Ira. Bay Bridge: History and Design of a New Icon. Chronicle Books, 2013.

Mackay, Sheila. The Forth Bridge: A Picture History. Birlinn Ltd., 2011.

Menn, Christian, and Schärer, Caspar (editor). Christian Menn - Bridges. Scheidegger and Spiess (bilingual edition), 2016.

Mikesell, Stephen. A Tale of Two Bridges: The San Francisco-Oakland Bay Bridges of 1936 and 2013. University of Nevada Press, 2017.

Miller, Terry E., Knapp, Ronald G., and Chester Ong, A. (photographer). *America's Covered Bridges: Practical Crossings - Nostalgic Icons.* Tuttle Publishing, 2014.

Nielsen, Stuart S., and Olson, Kimball. The New Keosauqua Bridge - Construction of the New Bridge in Keosauqua, Van Buren County, Iowa. NieKo, 1<sup>st</sup> edition, 2013.

Pascoe, Michael. 150 Years of Clifton Suspension Bridge: A Photographic History. The History Press, 2014.

Robinson, John V. Building the Benicia-Martinez Bridge. Carquinez Press; 2007.

Ruddock, Ted. Arch Bridges and their Builders 1735-1835. Cambridge University Press, 2008.

Salamak, Marek, and Foss, Klaudiusz. *Bridges in Urban Planning and Architectural Culture*. World Multidisciplinary Civil Engineering-Architecture-Urban Planning Symposium 2016, WMCAUS 2016. Procedia Engineering, Volume 161, 2016.

Scheer, Joachim, and Wilharm, Linda (translator). Failed Bridges: Case Studies, Causes and Consequences. Wiley, John & Sons, Incorporated, 2010.

Schwartz, Harvey. Building the Golden Gate Bridge: A Workers' Oral History. University of Washington Press, 2015.

Scott, R. In the Wake of Tacoma : Suspension Bridges and the Quest for Aerodynamic Stability. American Society of Civil Engineers, 2001.

Solomon, Brian. North American Railroad Bridges. Voyageur Press, 1st edition, 2008.

Sweetman, John. The Artist and the Bridge: 1700-1920. Ashgate Publishing, Limited, 2000.

Thienel, Phillip M. *Mr. Lincoln's Bridge Builders: The Right Hand of American Genius*. White Mane Publishing Company, Incorporated, 2000.

Van den Berg, Christa, and Nijenhuis, Gerhard. Bridging the Dutch Landscape: Design Guide for Bridges. Bis Publishers, 2009.

Van Uffelen, Chris. Link Itl: Masterpieces of Bridge Design. Braun Publishing, 2014.

Watson, Wilbur J. Great Bridges: From Ancient Times to the Twentieth Century. Dover Publications, 2006.

Wells, Matthew, and Pearman, Hugh (introduction). 30 Bridges. Watson-Guptill Publications, 2002.

Wisely, William H., Fairweather, Virginia, and Caballeros, Harold A. The American Civil Engineer 1852-2002: The History,

Traditions, and Development of the American Society of Civil Engineers. American Society of Civil Engineers, 2002.

#### New York City Bridges

Abrahams, Michael J. Seismic Retrofit of Two New York City Bridges. Proceedings of Structures Congress 2001. American Society of Civil Engineers.

Agrawal, A. K., Yi, Z., Alampalli, S., Ettouney, M., King, L., Hui, K., and Patel, M. *Remote Corrosion Monitoring Systems for Highway Bridges*. Practice Periodical on Structural Design and Construction, Volume 14, Issue 4, November 2009.

Albhaisi, S., Ho, J. and Bashir, T. The Rehabilitation of the Alexander Hamilton Bridge. Proceedings of the 31st Annual International Bridge Conference, 2015.

Arzoumanidis, Serafim G, Savage, Itunumi, and Zhang, Jun. In-Depth Seismic Investigation of the Williamsburg Bridge: A Major East-Coast Suspension Bridge. Proceedings of Structures Congress 2000. American Society of Civil Engineers.

Ashraf, Syed, Jayakumaran S., and Chen, Lihui. *Case History: Pile Driving and Vibration Monitoring for Avenue P Bridge in Brooklyn, New York.* Proceedings of the International Deep Foundations Congress 2002.

Barbas, Jamey A. Saving the Williamsburg Bridge. Civil Engineering, Volume 70, Issue 10, 2000.

Barbas, Jamey A., and Matusewitch, Peter. *Reconstruction of the Williamsburg Bridge: Transition to a Modern Structure.* Proceedings of the Third National Congress on Civil Engineering History and Heritage. American Society of Civil Engineers, 2007.

Barelli, Michael, White, Joshua, and Billington, and David P. *History and Aesthetics of the Bronx-Whitestone Bridge*. Journal of Bridge Engineering, Volume 11, Issue 2, March 2006.

Bashir, Tariq M., McCotter, Michael, Haight, Roger Q., and Dinmore, Gary M. *Alexander Hamilton Bridge – Construction Challenges and Solutions*. Transportation Research Board Annual Meeting, 2014.

Begonja, K. The Belt Parkway Bridge Replacement. Concrete Engineering International, Volume 8, Number 4, 2004.

Betti, Raimondo, Khazem, Dyab, Carlos, Mark, Gostautas, Richard, and Virman, Y. Paul. *Corrosion Monitoring Research for City of New York Bridges*. U.S. Department of Transportation Federal Highway Administration. FHWA Publication No.: FHWA-HRT-14-023, May 2014.

Brown, Jeff L. The Bridges of Central Park. Civil Engineering, Volume 83, Issue 2, 2013.



73rd Street Pedestrian Bridge (Bow Bridge). East 77th Street Pedestrian Bridge (Glade Arch).

Buyson, Marco, and Shams, Mohammad. A Yankee Clip: Bronx Bridge Project Packs Plenty of Speed, Precision. Roads & Bridges, Volume 48, Number 11, November 2010.

Coates, Andrew, Yegian, Mishac, Kishore, Kamal, Jin, Sajjan Jain, Patel, Jay, Pizzi, John, Connolly, Paul, and Yin, Beile. *Foundation Retrofit of the Third Avenue Bridge in New York*. Proceedings of GeoTrans 2004. American Society of Civil Engineers.

Coates, Andrew C., Bluni, Sean A., Connolly, Paul J., Patel, Jay A., and Chandiramani, Balram. Swinging into Action: The Recently Completed Replacement of New York City's 108-Year-Old Third Avenue Bridge Required Complex Staged Construction and the Use of a Temporary Structure to Limit Disruptions to Bridge and Marine Traffic. Civil Engineering, Volume 75, Issue 12, 2005.

Coates, Andrew C., Bluni, Sean A., and Connolly, Paul J. *Replacement of the Third Avenue Bridge over the Harlem River.* Proceedings of the 2005 Structures Congress and the 2005 Forensic Engineering Symposium, American Society of Civil Engineers. Csogi, Ralph D., *Reconstructing the Manhattan Bridge*. Civil Engineering, Volume 85, Issue 1, 2015.

De Vries, Susan. Bridging Nature With New Technology: The Cleft Ridge Span of Prospect Park. https://www.brownstoner.com/history/prospect-park-brooklyn-cleft-ridge-span-bridge-olmsted-vaux/ (accessed January 2, 2018). Dubin, Earl E., and Yanev, Bojidar S. Managing the East River Bridges in New York City. Federal Highway Administration, 2012. Fanjiang, G. N., Gajer, R. B., and Ye, Q. Seismic Evaluation and Retrofit of the Manhattan Bridge. Proceedings of Structures Congress 2001. American Society of Civil Engineers.

Fisher, John W., and Barsom, John M. Evaluation of Cracking in the Rib-to-Deck Welds of the Bronx-Whitestone Bridge. Journal of Bridge Engineering, Volume 21, Issue 3, 2016.

Gong, Xu, and Agrawal, Anil K. Numerical Simulation of Fire Damage to a Long-Span Truss Bridge. Journal of Bridge Engineering, Volume 20, Issue 10, 2015.

Greater Astoria Historical Society, and Roosevelt Island Historical Society. *Images of America: The Queensboro Bridge*. Arcadia Publishing, 2008.



Ed Koch - Queensboro Bridge in the 1950's. Brooklyn Bridge in 2015. (Brooklyn Credit: Bojidar Yanev) Gateman on Shore Road Bridge Over Hutchinson River in 1911.

Griggs, Jr., Francis. E. Bridge Across the Hudson. Journal of Bridge Engineering, Volume 14, Issue 5, September 2009.

Griggs, Jr., Francis. E. John A. Roebling and His East River Bridge Proposals 1847 – 1869. John A. Roebling: A Bicentennial Celebration of His Birth 1806-2006: Proceedings of the Conference. American Society of Civil Engineers, 2007.

Griggs, Jr., Francis. E. The Manhattan Bridge: A Clash of Titans. Journal of Professional Issues in Engineering Education and Practice, Volume 134, Issue 3, 2008.

Haight, Roger, Chang, Sherry, and Kushmock, Robert . Orthotropic Deck Rehabilitation at the Throgs Neck Bridge. Proceedings of the 2005 Structures Congress and the 2005 Forensic Engineering Symposium.

Haw, Richard. The Brooklyn Bridge: A Cultural History. Rutgers University Press, 2005.

Haw, Richard. Art of the Brooklyn Bridge: A Visual History. Routledge, 2008.

Hay, Thomas R. Bridge Cable Inspection with Long Range Ultrasound. NCHRP-IDEA Program Project Final Report, 2012.

Hecox, Doug, Guterman, Josh. Working Work of Art: At 130, The Brooklyn Bridge Still Does the Job it Was Built For. Better Roads, Volume 83, Issue 5, May 2013.

Hill, David. Suspension System of New York's Manhattan Bridge Gets Long-Awaited Update. Civil Engineering, Volume 83, Issue 11, 2013.

Holman, Terence P., Tuozzolo, Thomas J., Davis, Kyle, and Pastore, Joseph A. *Micropile Construction for the Willis Avenue Bridge Replacement – Geologic Challenges Meet Urban Construction Logistics*. Proceedings of the 28<sup>th</sup> Annual International Bridge Conference, 2011.

Jayakumaran, S., Bergmann, Michael, Ashraf, Syed, and Norrish, Charles. *Case Study: A Jointless Structure to Replace the Belt Parkway Bridge Over Ocean Parkway.* Proceedings of Integral Abutment and Jointless Bridges (IAJB 2005), 2005.

Jones, Jenny. NYC Pedestrian Bridge Blends Rustic Simplicity With Urban Modernism. Civil Engineering, Volume 81, Issue 7, 2011.

Khinda, Jagtar S. *The New Performance Based Seismic Design Criteria for New York City.* Proceedings of Structures Congress 2013: Bridging Your Passion with Your Profession. American Society of Civil Engineers.

Krstic, Vedrana, Mankbadi, Raymond, and Ramakrishna, Aravinda. *Willis Avenue Swing Bridge: Design and Construction of Drilled Shaft Foundations*. Selected Papers of the 2009 International Foundation Congress and Equipment Expo, American Society of Civil Engineers, 2009.

Lai, Chee K., and Hubbard, Stephen. Prestressed Concrete Box Beams with Curved Soffits. Proceedings of Structures Congress 2000.

Levy, Matthys. Unusual Arrangement: A New Form of Cable-Stayed Bridge Has Been Developed to Join Two Parts of the Campus of New York City's Rockefeller University. Civil Engineering, Volume 75, Issue 11, 2005

Levy, Matthys. *Rockefeller University Bridge and Plaza*. Metropolis & Beyond: Proceedings of the 2005 Structures Congress and the 2005 Forensic Engineering Symposium. American Society of Civil Engineers, 2005.

Mahmoud, Khaled. Accessible and Cost-Effective Approach for Seismic Retrofit of Highway Bridges. Proceedings of Structures Congress 2001. American Society of Civil Engineers.

Mallick, A. A., and Valenti, J. A Walk Above the Harlem River: The Revitalization of New York City's High Bridge. Proceedings of the 8<sup>th</sup> New York City Bridge Conference, 2015.

Manbeck, John. Historic Photos of the Brooklyn Bridge. Turner Publishing Company, 2009.

Masio, Antonio (painter), and Dim, Joan Marans (essays). New York's Golden Age of Bridges. Empire State Editions, 2011.

Mayer, Lorenzo, Yanev, Bojidar S., Olson, Larry D., and Smyth, Andrew W. *Monitoring of Manhattan Bridge for Vertical and Torsional Performance with GPS and Interferometric Radar Systems.* . Transportation Research Board 89<sup>th</sup> Annual Meeting Compendium of Papers DVD, 2010.

Metals in Construction, Fall 2004, Pages 48 – 51. Steel Hits Home Run in Macombs Dam Bridge Rehabilitation. The Steel Institute of New York and The Ornamental Metal Institute of New York.

Metals in Construction, Fall 2005, Pages 26 – 29. Third Avenue Bridge: Steel Bridge Barges in to Replace Its Predecessor. The Steel Institute of New York and The Ornamental Metal Institute of New York.

Metals in Construction, Spring 2007, Pages 36 - 41. Williamsburg Bridge Rehabilitation Contract 8: 100-Year-Old Steel Bridge Ready For 100 Years More. The Steel Institute of New York and The Ornamental Metal Institute of New York.

Metals in Construction, Spring 2008, Pages 38 - 43. *Manhattan Bridge Rehabilitation: Steel is the East River Workhorse.* The Steel Institute of New York and The Ornamental Metal Institute of New York.

Metals in Construction, Spring 2012, Pages 36 - 41. *Paerdegat Basin Bridge*. The Steel Institute of New York and The Ornamental Metal Institute of New York.

Miksanek, C. (editor), and Roebling, W. (contributor). The Brooklyn Bridge: Its Earliest Years. Bamber Books, 2015.

Mumford, Jason L. *Planning the Brooklyn Bridge: John A. Roebling and 19th Century Project Development.* John A. Roebling: A Bicentennial Celebration of His Birth 1806-2006: Proceedings of the Conference. American Society of Civil Engineers, 2007.

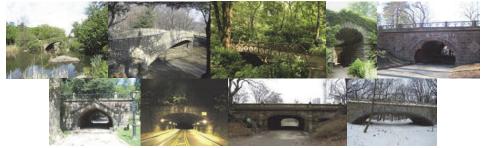
Nikolaou, Sissy, Mylonakis, George, and Edinger, Peter. *Evaluation of Site Factors for Seismic Bridge Design in New York City Area.* Journal of Bridge Engineering, Volume 6, Issue 6, November/December 2001.

Pantoli, E., Vincenzi, L., Savoia, M., and Testa, R. *The Effect of Local Vibrations on Fatigue in Old Steel Riveted Bridges: A Case Study, the Manhattan Bridge.* Proceedings of the 8<sup>th</sup> International Conference on Structural Dynamics, EURODYN 2011.

Puri, Satinder P. S. Aesthetics of Central Park's Cast Iron Bridges. Proceedings of the 2006 Structures Congress.

Rastorfer, Darl. Six Bridges: The Legacy of Othmar H. Ammann. Yale University Press, 2000.

Reid, Robert L. Security-Related Traffic Changes on George Washington Bridge Accelerated Structural Cracking. Civil Engineering, Volume 81, Issue 12, 2011.



East 62<sup>nd</sup> Street Pedestrian Bridge (Gapstow Bridge) over the Pond. West 62<sup>nd</sup> Pedestrian Bridge (Pinebank Arch). West 77<sup>th</sup> Street Pedestrian Bridge (Ladies Pond Bridge) in 2016. Central Park West Drive over the Loch Stream From the Pool (Glen Span Arch) in 2017. (Ladies Pond and Glen Span Credit: Eugene Parker) East Drive (Trefoil Arch) in 2017. (Credit: Michele N. Vulcan) Greywacke Arch (East Drive Bridge Opposite East 80<sup>th</sup> Street) in 2011. East Drive Bridge over Transverse Road #3 in 2015. West Drive (Dalehead Arch) in 2016. Highland Park Pedestrian Bridge.

Reier, Sharon. The Bridges of New York. Dover Publications, Incorporated, 2000.

Rockland, Michael A. The George Washington Bridge: Poetry in Steel. Rutgers University Press, 2008.

Rosenthal, Andrea, and Scozzari, Samuel. *Modern Delivery of Construction Management Services with Emphasis on Environmental Risk Management for Projects in Marine and Tidal Areas.* Proceedings of the Eleventh Triennial International Conference. American Society of Civil Engineers, 2007.

Sayenga, Donald (editor). Washington Roebling's Father: A Memoir of John A. Roebling. American Society of Civil Engineers, 2008. Schmidt, J. C. The 2006 Rope Access Inspection of the Brooklyn Bridge Towers: A New View of an Old Bridge. (Proceedings of the 4<sup>th</sup> New York City Bridge Conference). Taylor & Francis/Balkema, 2007.

Schultz, Allison R., and Billington, David P. *History and Aesthetics of the East River Bridges*. John A. Roebling: A Bicentennial Celebration of His Birth 1806-2006: Proceedings of the Conference. American Society of Civil Engineers, 2007.

Sharif, Mo. Protecting New York City's Bridge Assets. Public Roads, Volume: 68, Issue 6, 2005.

Shi, Yuwei, Deodatis, George, and Betti, Raimondo. *Random Field-Based Approach for Strength Evaluation of Suspension Bridge Cables.* Journal of Structural Engineering, Volume 133, Issue 12, 2007.

Shields, Gerarda M. *Resiliency Planning: Prioritizing the Vulnerability of Coastal Bridges to Flooding and Scour.* International Conference on Sustainable Design, Engineering and Construction. Procedia Engineering 145, 2016.

Spiegler, Jennifer C., and Gaykowski, Paul M. The Bridges of Central Park. Arcadia Publishing, 2006.

Stamm, Rolan, Marcic, David M., and Drugge, H. Everett. Seismic Evaluation and Retrofit Design of the Harlem River Lift Bridge. Proceedings of Structures Congress 2001.

Sutherland, Cara. Bridges of New York City (Portraits of America). Friedman/Fairfax Publishing, 2002.



Southern Boulevard, Madison Avenue, and Mosholu Parkway Bridges. (Credit: Russell Holcomb) 17th Avenue Pedestrian Bridge. (Credit: Peter Basich)



West 86th Street Pedestrian Bridge (Southeast Reservoir Bridge) in 2017. Wards Island Pedestrian Bridge in October 2011. (Credit: Rafael Lopez) University Heights Bridge in July 2011. (Credit: Russell Holcomb) Starlight Park Pedestrian Bridge over Bronx River in 2016. Music Grove Bridge in Prospect Park in 2017.

Talebinejad, Iman, Fischer, Chad, and Ansari, Farhad. A Hybrid Approach for Safety Assessment of the Double Span Masonry Vaults of the Brooklyn Bridge. Journal of Civil Structural Health Monitoring, June 2011.

Talebinejad, Iman, Fischer, Chad, Ansari, Farhad, and Yanev, Bojidar S. Structural Health Monitoring of the Masonry Arch Approach Spans in Brooklyn Bridge. Transportation Research Board 89th Annual Meeting Compendium of Papers DVD, 2010.

Talese, Gay, Davidson, Bruce (photographer), and Rethi, Lili (illustrator). The Bridge: The Building of the Verrazano-Narrows Bridge. Walker & Company, 2002. (Also available in a Spanish edition.)

Tsakopoulos, Paul A., and Fisher, John W. Full-Scale Fatigue Tests of Steel Orthotropic Decks for the Williamsburg Bridge. Journal of Bridge Engineering, Volume 8, Issue 5, September/October 2003.

Wagner, Erica. Chief Engineer: The Man Who Built the Brooklyn Bridge. Bloomsbury Publishing, 2017.

Winpenny, Thomas R. Manhattan Bridge: The Troubled Story of a New York Monument, Moore, Hugh Historical Park & Museums, Incorporated, 2003.



Ed Koch Queensboro Bridge in 2009. (Credit: Bernard Ente) The Manhattan Bridge Brooklyn Plaza in 1916: The Statues Represent Manhattan and Brooklyn, Manhattan Bridge in 2009. (Credit: Bernard Ente) Moon Over the Manhattan Bridge in 2015. Bridge Repairer and Riveter John Mcallister, Assistant Civil Engineer Clara Medina, and Bridge Repairer and Riveter Daniel Wynne Atop a Manhattan Bridge Tower in 2016. (Credit: Salvatore Dimuro)

Yanev, Bojidar S. Bridge Maintenance Life Cycle Cost Assessment. Proceedings of First US-Japan Workshop on Life-Cycle Cost Analysis and Design of Civil Infrastructure Systems. American Society of Civil Engineers, 2000.

Yaney, Bojidar S. Deck Joints: the Weak Link in Bridge Structures and Life-Cycles. Transportation Research Board Annual Meeting, 2014.

Yanev, Bojidar S. Joints: the Weak Link in Bridge Structures and Lifecycles. Smart Structures and Systems, Volume 15, No. 3, 2015.

Yanev, Bojidar S. Williamsburg Bridge-12 Years After. Proceedings of Structures Congress 2001. American Society of Civil Engineers.

Yanev, Bojidar, and Gill, Brian. Manhattan Bridge. Chapter 1 in Alampalli, Sreenivas. and Moreau, William. J., (editors). Inspection, Evaluation and Maintenance of Suspension Bridges: Case Studies. CRC Press, 2016.

Yanev, Bojidar S., and Richards, George. Bridge Maintenance in New York City: Network- and Project-Level Interaction. Transportation Research Record: Journal of the Transportation Research Board, No. 2220, 2011.

Yanev, Bojidar S, and Richards, George A.C. Designing Bridge Maintenance on the Network and Project Levels. Structure and Infrastructure Engineering, Volume 9, Issue 4, 2013.

Yegian, M. K., Arzoumanidis, S., Kishore, K., Patel J., Jain, S. K., Strohman, B. P., and Edwards, N. Seismic Soil-Foundation Investigation of the Brooklyn Bridge. Proceedings of the Geotechnical Earthquake Engineering and Soil Dynamics IV Congress, American Society of Civil Engineers, 2008.

Yegian, Mishac. K., Arzoumanidis, Serafim, Strohman, Bryan P., Kishore, Kamal, and Patel, Jay. Appraising the Brooklyn Bridge. Civil Engineering, Volume 79, Issue 2, 2009.

Shields, Gerarda M. Resiliency Planning: Prioritizing the Vulnerability of Coastal Bridges to Flooding and Scour. International Conference on Sustainable Design, Engineering and Construction. Procedia Engineering 145, 2016.

Zhou, K. and Wu, Z. Y. Strain Gauge Placement Optimization for Structural Performance Assessment. Engineering Structures, Volume 141, 2017.

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### For Children

Aaseng, Nathan. Construction: Building the Impossible. Oliver Press, Incorporated, 2000.

Adkins, Jan (illustrator). Bridges: From My Side to Yours. Roaring Brook, 2002.

Aloian, Sam. Como Se Construye Un Puente (How a Bridge Is Built) (Mundo y la Ingenieria - (Engineering Our World) (Spanish and English Editions), Gareth Stevens Publishing, 2016.

Baxter, Nicola. Bridges. Scholastic Library Publishing, 2000.

Bernhardt, Carolyn. Engineer It! Bridge Projects (Super Simple Engineering Projects). Super Sandcastle, 2017.

Burns, Kylie. A Bridge Goes Over (Be An Engineer! Designing to Solve Problems). Crabtree Publishing Company, 2017.

Cornille, Didier, and Stern Broad, Yolanda (translator). Who Built That? Bridges: An Introduction to Ten Great Bridges and Their Designers. Princeton Architectural Press, 2016.

Enz, Tammy. Building Bridges (Young Engineers). Heinemann, 2017.



Working Models of Rolling Lift Bascule, Retractile, Swing, and Vertical Lift Bridges created by Machinist Mark Blokh in 2016. (Credit: Vera Ovetskaya)

Eggers, Dave, and Nichols, Tucker (illustrator). This Bridge Will Not Be Gray. McSweeney's, 2015.

Harris, David W. Truss Fun. BaHa Enterprises, 2<sup>nd</sup> edition, 2004.

Johmann, Carol A., Rieth, Elizabeth, and Kline, Michael P. (illustrator). Bridges: Amazing Structures to Design, Build & Test (Kaleidoscope Kids Series), Williamson Publishing, 1999.

Keely, Cheryl, and Krampien, Celia (illustrator). A Book of Bridges: Here To There and Me To You. Sleeping Bear Press, 2017. Landau, Elaine. Bridges. (True Books: Buildings and Structures). Children's Press, 2000.

Latham, Donna, and Vaughn, Jen (illustrator). Bridges and Tunnels: Investigate Feats of Engineering with 25 Projects (Build It Yourself series). Nomad Press, 2012. (Recommended by the National Science Teachers Association.)

Levy, Matthys, and Panchyk, Richard. Engineering the City: How Infrastructure Works - Projects and Principles for Beginners. Chicago Review Press, 2000.

Macaulay, David. Building Big. Houghton Mifflin Company, 2000.

Manzano, Sonia, and Gibbons, Noelle S. (illustrator). The Lowdown on the High Bridge: The Story of How New York City Got its Water. Bronx Children's Museum, 2015.

Maxwell, Yolonda. *Famous Bridges of The World: Measuring Length, Weight, And Volume*. PowerKids Press, revised edition, 2005. Nardo, Don. *Roman Roads and Aqueducts*. Gale Group, 2000.

Nelson, Robin. From Cement to Bridge (Start to Finish). Lerner Publications, 2004. (Also available in a Spanish edition.)

NJIT Civil Engineering Mentors. Roxy the Fox and the Tree Truss Bridge. XLIBRIS, 2017.

Parker, Janice. Science of Structures. Weigl Publishers, Incorporated, 2001.

Richards, Julie. Bridges. Smart Apple Media, 2003.

Simon, Seymour. *Bridges (Seemore Readers).* Chronicle Books, 2005. (Winner of the Oppenheim Toy Portfolio Best Book Award Gold Seal.)

Simon, Seymour, Fauteux, Nicole, and Cushman, Doug (illustrator). Let's Try It Out with Towers and Bridges: Hands-On Early-Learning Activities. Atheneum, 2003.

Squire, Ann O. Extreme Bridges (True Books). Children's Press, 2014.

Stone, Lynn M. Bridges. Rourke Publishing, 2002.

Vanderwarker, Peter, and Keller, John (editor). Big Dig: Reshaping an American City. Little, Brown Children's Books, 2001.

Weitzman, David. Skywalkers: Mohawk Ironworkers Build the City. Flash Point, 2010.

Willard, Keith, and Richardson, Adele. Bridges. The Creative Company, 2000.

Wolny, Philip. *High Risk Construction Work: Life Building Skyscrapers, Bridges, and Tunnels.* (Extreme Career Series). The Rosen Publishing Group, 2008.

Zaunders, Bo, and Munro, Roxie (illustrator). The Great Bridge-Building Contest. Harry N. Abrams, 2004.

### Teaching Children About Bridges- Internet

ABCD's Bridge Design Tips for Kids. http://www.abcdpittsburgh.org/kids/kids.htm (accessed August 18, 2009). American Institute of Steel Construction. *Student Steel Bridge Competition*. http://www.aisc.org/content.aspx?id=780 (College level) (accessed August 18, 2009).

ASCE. Welcome to ASCEville. http://content.asce.org/asceville/index.html (accessed November 30, 2009).

Brenner, Brian, Gravel, Brian, and Carroll, Julia. *Buildable Bridge Models*. {The models are available for use for engineering outreach for grades K-12} Proceedings of the ASEE New England Section 2006 Annual Conference. <u>http://www.wpi.edu/News/Conf/ASEE/PDFs/1-e-brenner.pdf</u> (accessed August 22, 2014).

Carroll, Douglas R. Bridge Engineering for the Elementary Grades. Department of Basic Engineering, University of Missouri-Rolla. http://web.umr.edu/~dougc/bridge/Web\_Instructions.htm (accessed November 19, 2007).

The Children's Museum of Memphis. Build-A-Bridge Classroom Activities. http://www.cmom.com/wpcontent/uploads/2013/10/Build-A-Bridge-Curriculum-Guide.pdf (accessed August 22, 2014).

Christenson, Lea Ann, and James, Jenny. Building Bridges to Understanding in a Preschool Classroom: A Morning in the Block Center. National Association for the Education of Young Children.

http://www.naeyc.org/yc/files/yc/file/201503/YC0315\_Buliding\_Bridges\_to\_Understanding\_Christenson.pdf (Preschool) (accessed December 1, 2015).

Cooper, James D., and Munley, Eric. *Bridge Research: Leading The Way to The Future*. United States Department of Transportation - Federal Highway Administration - Turner Fairbanks Highway Research Center. <u>http://www.tfhrc.gov/pubrds/summer95/p95su23.htm</u> (accessed November 19, 2007).

Council for the Curriculum Examinations and Assessment. 2010. Bridges: Key Stage 2 Thematic Unit.

http://ccea.org.uk/sites/default/files/docs/curriculum/connected\_learning/thematic\_units/stem/tu\_bridges.pdf (accessed December 29, 2016).

Cridlebaugh, Bruce S. Bridge Basics - A Spotter's Guide to Bridge Design. <u>http://pghbridges.com/basics.htm</u> (accessed November 19, 2008).

DeMember, Don. Discovery School.com. 2007. Bridges: Technology Lesson Plan (Grades 6 - 8).

http://school.discoveryeducation.com/lessonplans/programs/bridges/index.html (accessed November 19, 2007).

East Prairie School Bridge Building Unit. <u>http://www.eps.n-cook.k12.il.us/teched/bridge/bridge.htm</u> (accessed November 19, 2007).

*Engineering a Bridge Lesson (Grade: 4-6).* http://www.scholastic.com/browse/lessonplan.jsp?id=1509 (accessed August 22, 2014). Engineer Your Life Coalition. *Engineer Your Life.* http://www.engineeryourlife.org/ (accessed November 30, 2009).

Erickson, Lars. *The Toothpick Bridge*. <u>http://www.pisymphony.com/toothpick/toothpick1.htm</u> (accessed August 22, 2014) Expedition Engineering (In association with the Institution of Structural Engineers Educational Trust). *Bridge Builders' Teacher Pack*. <u>http://expeditionworkshed.org/assets/Bridge\_builders\_teacher\_pack.pdf</u> (accessed August 22, 2014).

Expedition Engineering (In association with the Institution of Structural Engineers Educational Trust). Bridge Building Competition: A Group Design, Build and Test Competition. <u>http://expeditionworkshed.org/assets/Bridge\_building\_competition.pdf</u> (accessed August 22, 2014).

Expedition Engineering (In association with the Institution of Structural Engineers Educational Trust). *Materials Interactive Fact File*. <u>http://expeditionworkshed.org/assets/Materials\_fact\_file.pdf</u> (accessed August 22, 2014).

González, Luis Alberto Segovia, Morsch, Inácio Benvegnu, and Masuero, João Ricardo. *Didactic Games in Engineering Teaching – Case: Spaghetti Bridges Design and Building Contest.* (Proceedings of the 18<sup>th</sup> International Congress of Mechanical Engineering, 2005.) <u>http://www.ppgec.ufrgs.br/segovia/espaguete/arquivos/COBEM2005-1756.pdf</u> (for college teachers). (accessed August 18, 2009)

Harris Middle School. Building Bridges: An Internet WebQuest on The Study of Bridges.

http://volweb.utk.edu/Schools/bedford/harrisms/bridge.htm (accessed August 18, 2009).

History of Wire Rope in Suspension Bridges - The Roebling Story.

http://www.inventionfactory.com/history/RHAgen/rstory/rsfound.html (accessed November 19, 2007).

Hughes, Melissa. Bridges: An Integrated STEM Teaching Guide (Grades 4 - 8).

http://www.attheworks.org/files/documents/Elmers%20Bridges%20Teaching%20Guide.pdf (accessed December 29, 2016).

Integrated Teaching and Learning Program, College of Engineering, University of Colorado, Boulder. Curricular Unit: Bridges. Lesson 1: Bridging the Gaps. (Grade 8).

http://www.teachengineering.org/view\_lesson.php?url=collection/cub\_/lessons/cub\_brid/cub\_brid\_lesson01.xml (accessed August 22, 2014).

Integrated Teaching and Learning Program, College of Engineering, University of Colorado, Boulder. Hands-on Activity: Bridge Types: Tensile and Compressive Forces. (Grade 8).

http://www.teachengineering.org/view\_activity.php?url=http://www.teachengineering.org/collection/cub\_/activities/cub\_brid/cub\_bri

Integrated Teaching and Learning Program, College of Engineering, University of Colorado, Boulder. Hands-on Activity: Straw Bridges. (Grade 8).

http://www.teachengineering.org/view\_activity.php?url=collection/cub\_/activities/cub\_brid/cub\_brid\_lesson01\_activity2.xml (accessed August 22, 2014).

Integrated Teaching and Learning Program, College of Engineering, University of Colorado, Boulder. *Curricular Unit: Bridges. Lesson 2: Designing Bridges. (Grade 8).* 

http://www.teachengineering.org/view\_lesson.php?url=collection/cub\_/lessons/cub\_brid/cub\_brid\_lesson02.xml (accessed August 22, 2014).

Integrated Teaching and Learning Program, College of Engineering, University of Colorado, Boulder. Hands-on Activity: Load It Up! (Grade 8).

http://www.teachengineering.org/view\_activity.php?url=collection/cub\_/activities/cub\_brid/cub\_brid\_lesson02\_activity1.xml (accessed August 22, 2014).

Integrated Teaching and Learning Program, College of Engineering, University of Colorado, Boulder. Curricular Unit: Bridges. Lesson 3: A Good Foundation.

http://www.teachengineering.org/view\_lesson.php?url=collection/cub\_/lessons/cub\_brid/cub\_brid\_lesson03.xml (accessed August 22, 2014).

Integrated Teaching and Learning Program, College of Engineering, University of Colorado, Boulder. Hands-on Activity: Shallow and Deep Foundations. (Grade 8).

http://www.teachengineering.org/view\_activity.php?url=collection/cub\_/activities/cub\_brid/cub\_brid\_lesson03\_activity1.xml (accessed August 22, 2014).

Integrated Teaching and Learning Program, College of Engineering, University of Colorado, Boulder. Curricular Unit: Bridges. Lesson 4: Strength of Materials. (Grade 8).

http://www.teachengineering.org/view\_lesson.php?url=collection/cub\_/lessons/cub\_brid/cub\_brid\_lesson04.xml (accessed August 22, 2014).



Inspector Utilizing a Motorized Platform Boat With Scaffolding to Access Most of the Underside of the Grand Street Bridge over Newtown Creek in November 2017. (Credit: NYSDOT)

Integrated Teaching and Learning Program, College of Engineering, University of Colorado, Boulder. Hands-on Activity: Breaking the Mold. (Grade 8).

http://www.teachengineering.org/view\_activity.php?url=collection/cub\_/activities/cub\_brid/cub\_brid\_lesson04\_activity1.xml (accessed August 22, 2014).

Integrated Teaching and Learning Program, College of Engineering, University of Colorado, Boulder. *Curricular Unit: Bridges.* Lesson 5: Show Me the Money. (Grade 8).

http://www.teachengineering.org/view\_lesson.php?url=collection/cub\_/lessons/cub\_brid/cub\_brid\_lesson05.xml (accessed August 22, 2014).

Integrated Teaching and Learning Program, College of Engineering, University of Colorado, Boulder. Hands-on Activity: Cost Comparisons. (Grade 8).

http://www.teachengineering.org/view\_activity.php?url=collection/cub\_/activities/cub\_brid/cub\_brid\_lesson05\_activity1.xml (accessed August 22, 2014)

Johns Hopkins Virtual Laboratory: Bridge Designer. <u>http://www.jhu.edu/virtlab/bridge/truss.htm</u> (accessed August 18, 2009). Junior Engineering Technical Society. <u>http://www.jets.org/students/index.cfm</u> (accessed November 30, 2009).

Lalupu, Heather, and Burgoyne, Chris (In association with the Institution of Structural Engineers Educational Trust). *Teaching Material for Use in Schools - Bridge Design*. <u>http://www-civ.eng.cam.ac.uk/cjb/schools/bridges1/index.html</u> (accessed August 22, 2014).

National Academy of Engineering. *Engineer Girl.* The EngineerGirl website is part of an NAE project to bring national attention to the opportunity that engineering represents to all people at any age, but particularly to women and girls. <u>http://www.engineergirl.org/</u> (accessed August 11, 2011).

National Building Museum. Bridge Basics: Educator's Resource Packet (Grades 4 - 8). <u>http://www.nbm.org/assets/pdfs/youth-education/bridges\_erpacket.pdf</u> (accessed August 22, 2014)

The National Partnerships for Afterschool Science - A Project of the Education Development Center. Design It! Engineering in After School Programs: Paper Bridges. <u>http://npass2.edc.org/sites/npass2.edc.org/files/Paper%20Bridges%20Sample.pdf</u> (accessed August 22, 2014)

Pasternack, Alex. The Strangest, Most Spectacular Bridge Collapse (And How We Got It Wrong).

http://motherboard.vice.com/read/the-myth-of-galloping-gertie (accessed December 14, 2015).

PBS Bridge Basics. 2000 - 2001. *Building Big: Bridges*. <u>http://www.pbs.org/wgbh/buildingbig/bridge/index.html</u> (accessed November 19, 2007).

Pelland, Beth C., and Fischer, Gideon. *The Golden Gate Bridge: From U.S. History to Physics. (Part of the Wright Center for Science Education Innovative Curriculum Series.)* <u>http://goldengatebridge75.org/assets/ggb75-pdfs-docs/wright-ggb.pdf</u> (accessed August 22, 2014).

Popsicle Bridge. http://www.tryengineering.org/lesson\_detail.php?lesson=56 (accessed December 30, 2010).

Ranson, Anna. Designing and Building Bridges Activity. <u>http://theimaginationtree.com/2013/04/designing-and-building-bridges-activity.html</u> (accessed August 22, 2014).

Reitherman, Robert, Anagnos, Thalia, and Meluch, Wendy. *Building Bridges Between Civil Engineers and Science Museums*. Consortium of Universities for Research in Earthquake Engineering, 2008. <u>http://www.curee.org/projects/ce-museums/docs/cem\_monograph.pdf</u> (accessed August 22, 2014).

Rochester Bridge Trust. Learning About Bridges. Lesson 1: An Introduction to Bridges. (Ages 8 to 11). http://www.rochesterbridgetrust.org.uk/wp-content/uploads/2014/07/RBTEducationKit-Session1.pdf (accessed April 11, 2018).

Rochester Bridge Trust. Learning About Bridges, Lesson 2: Beam Bridges, Simple but Strong. (Ages 8 to 11).

http://www.rochesterbridgetrust.org.uk/wp-content/uploads/2014/07/RBTEducationKit-Session2.pdf (accessed April 11, 2018). Rochester Bridge Trust. Learning About Bridges. Lesson 3: Loads and Forces. (Ages 8 to 11).

http://www.rochesterbridgetrust.org.uk/wp-content/uploads/2014/07/RBTEducationKit-Session3.pdf (accessed April 11, 2018). Rochester Bridge Trust. Learning About Bridges. Lesson 4: Beam Bridges Challenge. (Ages 8 to 11).

http://www.rochesterbridgetrust.org.uk/wp-content/uploads/2014/07/RBTEducationKit-Session4.pdf (accessed April 11, 2018). Rochester Bridge Trust. *Learning About Bridges. Lesson 5: Truss Bridges (Part 1). (Ages 8 to 11).* 

http://www.rochesterbridgetrust.org.uk/wp-content/uploads/2014/07/RBTEducationKit-Session5.pdf (accessed April 11, 2018). Rochester Bridge Trust. Learning About Bridges. Lesson 6: Truss Bridges (Part 2). (Ages 8 to 11).

http://www.rochesterbridgetrust.org.uk/wp-content/uploads/2014/07/RBTEducationKit-Session6.pdf (accessed April 11, 2018). Rochester Bridge Trust. Learning About Bridges. Lesson 7: Arch Bridges (Part 1). (Ages 8 to 11).

http://www.rochesterbridgetrust.org.uk/wp-content/uploads/2014/07/RBTEducationKit-Session7.pdf (accessed April 11, 2018). Rochester Bridge Trust. Learning About Bridges. Lesson 8: Arch Bridges (Part 2). (Ages 8 to 11).

http://www.rochesterbridgetrust.org.uk/wp-content/uploads/2014/07/RBTEducationKit-Session8.pdf (accessed April 11, 2018).

Rochester Bridge Trust. Learning About Bridges. Lesson 9: Materials. (Ages 8 to 11). <u>http://www.rochesterbridgetrust.org.uk/wp-content/uploads/2014/07/RBTEducationKit-Session9.pdf</u> (accessed April 11, 2018).

Rochester Bridge Trust. Learning About Bridges. Lesson 10: Suspension Bridges. (Ages 8 to 11).

http://www.rochesterbridgetrust.org.uk/wp-content/uploads/2014/07/RBTEducationKit-Session10.pdf (accessed April 11, 2018). Rochester Bridge Trust. *Learning About Bridges. Lesson 11: Building Underwater. (Ages 8 to 11).* 

http://www.rochesterbridgetrust.org.uk/wp-content/uploads/2014/07/RBTEducationKit-Session11.pdf (accessed April 11, 2018). Rochester Bridge Trust. *Learning About Bridges. Lesson 12: Cable-Stayed Bridges. (Ages 8 to 11).* 

http://www.rochesterbridgetrust.org.uk/wp-content/uploads/2014/07/RBTEducationKit-Session12.pdf (accessed April 11, 2018). Ryan. V. Structures (44 lessons). http://www.technologystudent.com/struct1/struindex.htm (accessed December 29, 2016).

Saliklis, E. P. 2008. Arch Building for Kids. What did they learn? What did we learn? (Grades 5 - 6)

http://digitalcommons.calpoly.edu/cgi/viewcontent.cgi?article=1024&context=aen\_fac (accessed December 29, 2016) Schunn, Christian D. *How Kids Learn Engineering: The Cognitive Science Perspective.* The Bridge on K-12 Engineering Education, Volume 39, Number 3, Fall 2009. <u>https://www.nae.edu/Publications/Bridge/16145/16214.aspx</u> (accessed August 22, 2014).

Science Buddies Staff. The Effect of Bridge Design on Weight Bearing Capacity. <u>http://www.sciencebuddies.org/science-fair-projects/project\_ideas/CE\_p011.shtml#summary</u> (accessed August 22, 2014).

Society of Women Engineers. *SWE Scholarships*. The SWE Scholarship Program provides financial assistance to women admitted to accredited baccalaureate or graduate programs, in preparation for careers in engineering, engineering technology and computer science. <u>http://societyofwomenengineers.swe.org/index.php?option=com\_content&task=view&id=222&Itemid=229</u> (accessed August 11, 2011).

Turner, Corey. *Teaching Students To Use Their Noodles*. nprED. <u>http://www.npr.org/sections/ed/2015/07/29/425058097/teaching-students-to-use-their-noodles</u> (High School). (accessed December 1, 2015).

Unicycle NYC Bridge Tour. Unicycle enthusiasts Keith Nelson and Rob Hickman are on a mission to cross every bridge in New York City -- all 2,078 of them -- on one wheel. <u>http://unicyclenycbridgetour.blogspot.com</u> (accessed November 12, 2010)

U.S. Department of Transportation. DOT Women and Girls Initiative - Pilot Entrepreneurial Training and Technical Assistance - Spelman College. <u>http://www.dot.gov/wg/spelman.html</u> (accessed September 25, 2009).

U. S. Military Academy at West Point. West Point Bridge Design Contest. <u>http://bridgecontest.usma.edu/</u> (accessed November 19, 2007).

Washington State Department of Transportation. Tacoma Narrows Bridge Lesson Plan. (Grades 1 - 4).

http://www.wsdot.wa.gov/tnbhistory/Lessons/BridgeCrossing.htm (accessed August 22, 2014).

WGBH. 1997. Nova Online - Super Bridge. http://www.pbs.org/wgbh/nova/bridge/ (accessed November 19, 2007).

Yale-New Haven Teachers Institute. 2001, Volume V. Bridges: Human links and innovations.

http://www.yale.edu/ynhti/curriculum/units/2001/5/ (accessed November 19, 2007).

### For Children And Young Adults- Careers

Baine, Celeste. Is There A Civil Engineer Inside You? A Student's Guide to Exploring Careers in Civil Engineering and Civil Engineering Technology. Bonamy Publishing; 2<sup>nd</sup> edition, Kindle edition, 2012.

Bix, Amy. Girls Coming to Tech!: A History of American Engineering Education for Women (Engineering Studies). The MIT Press, 2014.

Bulleit, William M. What Makes an Engineering Education an Engineering Education? Proceedings of the Structures Congress 2012.

Canel, Annie, Oldenziel, Ruth, and Zachman, Karin, (editors). Crossing Boundaries, Building Bridges : Comparing the History of Women Engineers, 1870s-1990s. Gordon & Breach Publishing Group, 2000.

Galloway, Patricia D. The 21st-Century Engineer: A Proposal for Engineering Education Reform. American Society of Civil Engineers, 2007.

Hatch, Sybil E., and Vanoni, Vito A. (Editor). Changing Our World: True Stories of Women Engineers (ASCE Manuals and Reports on Engineering Practice, No. 109.) American Society of Civil Engineers, 2006.

Hayes, Amy. Building Bridges and Roads: Civil Engineers (Engineers Rule!). PowerKids Press, 2016.



Assistant Mechanical Engineer Vera Ovetskaya on Union Street Bridge During a Strain Gauge Test. On the Bridge to her Right is an Electronic Inclinometer That Records the Angle of the Bridge Opening. Brooklyn Bridge Engineer-in-Charge Ohene Duodu. Engineering Technician Christopher Brathwaite Assisting in Strain Gauge Balance Testing on Unionport Bridge in October 2010.



Associate Project Manager Jessica Wang Atop the Brooklyn Bridge Tower. Summer College Intern Litcy Barreto on the Third Street Bridge During Strain Gauge Installation in June 2015. (Credit: Vera Ovetskaya) Construction Project Manager Beatriz Duran and Administrative Engineer Bhaskar Gusani in the Battery Park Underpass. (Credit: Tamara Berlyavsky). Assistant Civil Engineer Clara Medina on the Brooklyn Bridge.

"Most engineers won't go to the top of the bridges. They prefer to do their work from the ground, but I'm not like most. I love going up. It's hard work getting there, too. You have to clip into your safety gear and walk up the cables step-bycareful-step. You get out of breath. If it's windy, your hands can blow off the lines. If it's rainy, your feet can slip. But when I make it to the top, I feel so free! As a civil engineer, I've been supervising crews on all of New York City's bridges for 16 years now. Just yesterday, I went up with a new guy, who just graduated from school. When we got to the top, he told me he'd never go up again. I said, "Well if this is once-in-a-lifetime for you, we should take a picture." He said, "Clara, my hands are shaking too much! I can't even grab my camera!" So, I took a picture for him. Of course, you feel fear, especially when you try something new, but you can never let that stop you. You have to use it to make you stronger. That's what I do."

-Assistant Civil Engineer Clara Medina, as told to the Kazoo Magazine for girls, ages 5 to 10, in the architecture issue, published in Winter 2016/2017.



Associate Project Manager Jessica Wang at the Mill Basin Bridge Site. Assistant Civil Engineer Clara Medina on the Queensboro Bridge. (Credit: Samuel Teaw). Highway Transportation Specialist Andrew Hoang on Manhattan Bridge. (Credit: Peter Basich) Construction Apprentice Utilizing a Hydraulic Tension Calibrator to Test the High-Strength Bolts for the Belt Parkway Over Mill Basin Bridge. (Credit: Jessica Wang). Associate Project Manager Richard Solomon. Component Rehabilitation Engineer Malgorzata Banka. Civil Engineer Tiffany Wong on the Brooklyn Bridge Traveler. (Credit: Andrew Hoang)

Layne, Margaret Edith (editor). *Women in Engineering: Pioneers and Trailblazers*. American Society of Civil Engineers, 2009. Layne, Margaret Edith (editor). *Women in Engineering: Professional Life*. American Society of Civil Engineers, 2009. Lewis, Anna M. *Women of Steel and Stone: 22 Inspirational Architects, Engineers, and Landscape Designe*rs (Women of Action). Chicago Review Press, 2017.

Macdonald, Averil. People Like Me - A Resource Pack for Schools: Careers in Construction. WISE Campaign for Gender Balance in Science, Technology & Engineering (UK). <u>https://www.wisecampaign.org.uk/uploads/wise/files/plm-construction-pack\_(1)1.pdf</u> (accessed April 11, 2018).

Pasternak, Ceel, and Thornburg, Linda. Cool Careers for Girls in Construction. Impact Publications, 2000.



Bridge Painters Elisangela Oliveira and Joice White. (Credit: Jaclyn Jablkowski and Earlene Powell) Director of Personnel and Payroll Helene Holloway. Executive Director of Management and Support Services Dorothy Roses.



Civil Engineers Maria Mikolajczyk, Aldona Ulanecka, and Simona Finkelstein, Staff Analyst Keisha Atkins, Civil Engineer Malgorzata Banka. (Credit: Jagtar Khinda) Civil Engineer Ajda Ozyurt. Associate Staff Analyst Vera Ribakove and Community Assistant Shahnaz Begum. Administrative Managers Leslie Pipes, Lourdes Acevedo, and Kathy Barker, and Community Assistant Joyce McClain. Civil Engineer Tiffany Wong. Chief Staff Manager/Executive Director of Community Affairs Joannene Kidder. Secretary Patricia Foster.

""No matter how tough, no matter how high it is, this woman can do anything." — Bridge Painter Elisangela Oliveira, as told to NY1's Jose Martinez on International Women's Day, March 8, 2017.



Associate Staff Analyst Susan Garcia. (Credit: Vera Ovetskaya. Project Manager Tamara Berlyavsky. (Credit: Kamran Sikandar). Computer Associate (Software) Laurie Oberson. (Credit: Michele N. Vulcan) Associate Staff Analyst Barbara Pedersen. Assistant Civil Engineers Evgenia Campbell and Elena Maressova. (Credit: Paul Schwartz) Assistant Mechanical Engineer Nancy Guernsey, City Research Scientist Dr. Tehrani Ghodsieh, and Administrative Manager Milagros Jorge. (Credit: Samuel Teaw) Construction Project Manager Beatriz Duran at the Houston Street Bridge Project Site. Deputy Director of In-House Painting Earlene Powell and Commissioner Polly Trottenberg. Administrative Procurement Analyst Darlene Lucchese. Highway Repairer Michelle Hemmings-Harrin. Administrative Engineer Hui Yang. Society of Women Engineers Corporate Partnership Council. Be That Engineer: Inspiration and Insight from Accomplished Women Engineers: Submissions from Members of the Society of Women Engineers' Corporate Partnership Council (CPC). Society of Women Engineers, 2014.

Tietjen, Jill S. Engineering Women: Re-visioning Women's Scientific Achievements and Impacts (Women in Engineering and Science). Springer, 2017.

Walesh, Stuart G. Engineering Your Future: The Professional Practice of Engineering. Wiley, 2012.

Weingardt, Richard G. Engineering Legends: Great American Civil Engineers (32 Profiles of Inspiration and Achievement). American Society of Civil Engineers, 2005.

Williams, F. Mary, and Emerson, Carolyn J. *Becoming Leaders: A Practical Handbook for Women in Engineering, Science, and Technology.* American Society of Civil Engineers, ASME Press, and Society of Women Engineers, 2008.

#### For Children – Brooklyn Bridge

Bildner, Phil, and Pham, LeUyen (illustrator). Twenty-One Elephants. Simon & Schuster Children's Publishing, 2005.

Curlee, Lynn. Brooklyn Bridge. Simon & Schuster Trade, 2001.

Cobblestone Magazine: Discover American History. The Great Bridge (Special Issue Focus on the Brooklyn Bridge). March 2010, Volume 31, Number 3.

Mann, Elizabeth, and Witschonke, Alan (illustrator). The Brooklyn Bridge: The Story of the World's Most Famous Bridge and the Remarkable Family That Built It. Mikaya Press, 2006.

Muaddi Darraj, Susan. Brooklyn Bridge. (Building America: Now and Then Series.) Chelsea House Publishers, 2009.

Prentzas, G. S. The Brooklyn Bridge (Building America: Then and Now). Chelsea House Publications, 2009.

Prince, April Jones, and Roca, Francois (illustrator). Twenty-One Elephants and Still Standing. Houghton Mifflin, 2005. (Also available in a Spanish edition.)

Ratliff, Tom, and Bergin, Mark. You Wouldn't Want to Work on the Brooklyn Bridge!: An Enormous Project That Seemed Impossible. (You Wouldn't Want to...Series) Scholastic Library Publishing, 2009.

Tieck, Sarah. Brooklyn Bridge. ABDO Publishing Company, 2008.

Tomasi, Peter J., and DuVall, Sara (illustrator). The Bridge: How the Roeblings Connected Brooklyn to New York. Abrams ComicArts, 2018.

Stine, Megan, and Hinderliter, John and Groff, David (illustrators). *Where Is the Brooklyn Bridge*? Grosset & Dunlap, 2016. Weiner, Vicki. *The Brooklyn Bridge: New York City's Graceful Connection*. Children's Press, 2004.



Brooklyn Bridge: 2009 Tower Closeup, 2010 View, 2010 Biennial Inspection. (2009 Credit: Emily Goodman, 2010 Credit: Jagtar Khinda, Inspection Credit: NYSDOT)

### Shorts, Video, Videodisc, and DVD

Across Brooklyn Bridge. American Mutoscope & Biograph, silent black and white, 1899.

Bitzer, G.W. "Billy". *The Opening of the Williamsburg Bridge*. American Mutoscope & Biograph, silent black and white,1904. Library of Congress - The Life of A City: Early Films of New York, 1898 to 1906. <u>http://lccn.loc.gov/00694395</u> (accessed May 29, 2014).

Bonine, Robert K. *Parade of Horses on Speedway.* American Mutoscope and Biograph Company, 1903. (High Bridge and Washington Bridge.) Library of Congress - The Life of A City: Early Films of New York, 1898 to 1906. <u>http://lccn.loc.gov/00694402</u> (accessed May 29, 2014).



Traffic on the 145<sup>th</sup> Street Bridge in 1921, and Roadway Repair in 1922.

Burns, Ken. Ken Burns' America: Brooklyn Bridge. PBS Home Video, DVD-2003, Video - 1982. Fuller, Robert G., Zollman, Dean A., and Campbell, Thomas C. *The Puzzle of the Tacoma Narrows Bridge Collapse*. John Wiley & Sons, Videodisc - 1982.

Klein, Larry. *Building Big with David Macaulay: Bridges*. WGBH Records, 2000, WGBH Boston, DVD, 2004. *Bob the Builder: On Site - Roads and Bridge*. Lyons/Hit Entertainment, DVD, 2008. (For Children.) Classic Famous Bridge Films DVD: 1930 - 1950s Golden Gate Suspension Bridge, Bridge Collapse Disaster, & Bridge Construction, Design And Engineering History Pictures Films. Quality Information Publishers Inc., DVD, 2007.

Design For Safety & Quality: The Inspection and Auditing Process of Bridges, and Some Important Lessons Learned. Cimwareukandusa.com, DVD, 2006.

De Vries, Susan. A Moment of Calm: The Rotating Sculptures of the Manhattan Bridge. <u>https://www.brownstoner.com/brooklyn-life/manhattan-bridge-rotating-sculptures-miss-brooklyn-brian-tolle/</u> (accessed January 4, 2018).

Eckerson Jr., C. *Streetfilms: Counting Bicyclists on NYC's Manhattan Bridge!* <u>http://www.streetfilms.org/counting-bicyclists-on-nycs-manhattan-bridge/</u> (accessed December 31, 2014).

Eckerson Jr., C. Streetfilms: East River Bridges: 100 Years of Free Rides Take Their "Toll." http://www.streetfilms.org/east-riverbridges-100-free-years-take-a-toll/ (accessed October 6, 2011).

Eckerson Jr., C. Streetfilms: Gawk at the Great New Bike Access to the Williamsburg Bridge From Brooklyn.

http://www.streetfilms.org/the-williamsburg-bridge-now-has-world-class-bike-access-from-brooklyn/ (accessed November 22, 2017). Eckerson Jr., C. Streetfilms: Pulaski Bridge: Six Lanes for Cars; One Cramped Path for Bikes and Peds.

http://vimeo.com/76018201/ (accessed November 14, 2013).

Eckerson Jr., C. *Streetfilms: The Pulaski Bridge Protected Bike Path Is (Finally) Open!* <u>http://www.streetfilms.org/the-pulaski-bridge-protected-bike-path-is-finally-open/</u> (accessed December 29, 2016).

Eckerson Jr., C. Streetfilms: Randall's Island Connector: The Bronx's New Car-Free Link to Manhattan.

http://www.streetfilms.org/randalls-island-connector-the-bronxs-new-car-free-link-to-manhattan/ (accessed February 17, 2016).

Eckerson Jr., C. *Streetfilms: The Queensboro Bridge Turns 100*. <u>http://www.streetsblog.org/2009/06/01/streetfilms-the-queensboro-bridge-turns-100/</u> (accessed December 1, 2009).

Eckerson Jr., C. Streetfilms: The Sands Street Bike Path, a New Kind of Bridge Approach.

http://www.streetsblog.org/2009/09/25/streetfilms-the-sands-street-bike-path-a-new-kind-of-bridge-approach/ (accessed December 1, 2009).

Eckerson Jr., C. *Streetfilms: Turning NYC's Oldest Bridge Into Its Newest Bike-Ped Amenity.* [High Bridge] http://www.streetsblog.org/2009/11/30/streetfilms-turning-nycs-oldest-bridge-into-its-newest-bike-ped-amenity/ (accessed December 1, 2009).

Farrell, Stephen. An Umbrella's View of Snowy New York. <u>http://www.nytimes.com/2015/03/06/nyregion/video-an-umbrellas-view-of-snowy-new-york.html</u> (accessed March 6, 2015.)

Maillart's Bridges a.k.a. Maillarts Brücken. 451, DVD, 2008.

Mega Movers - Massive Bridges. A&E Home Video, DVD, 2007.

Modern Marvels: Brooklyn Bridge. A&E Home Video, DVD, 2005.

Modern Marvels: George Washington Bridge. A&E Home Video, DVD, 2006.

Modern Marvels: New York Bridges. A&E Home Video, DVD, 2006.

New Brooklyn to New York via Brooklyn Bridge, No. 1and No. 2. Edison Manufacturing Company, silent black and white, 1899.

Panorama of Brooklyn Bridge, River Front, and Tall Buildings from the East River. Edison Manufacturing Company, silent black and white, 1901.

Passengers Descending from the Brooklyn Bridge. Lumière, silent black and white, 1896.

Porter, Edwin S. *Panorama of Blackwell's Island, N.Y.* (Shows the piers for the Queensborough or 59<sup>th</sup> Street Bridge beginning at Frame 2388.) Thomas A. Edison, Inc., 1903. Library of Congress - The Life of A City: Early Films of New York, 1898 to 1906. http://lccn.loc.gov/00694366 (accessed May 29, 2014).

Porter, Edwin S. *Panorama Water Front and Brooklyn Bridge From East River.* (Shows the Brooklyn Bridge beginning at Frame 4202.) Thomas A. Edison, Inc., 1903. Library of Congress - The Life of A City: Early Films of New York, 1898 to 1906. http://lccn.loc.gov/00694364 (accessed May 29, 2014).

A Remarkable Fire (Brooklyn Bridge). American Mutoscope & Biograph, silent black and white, 1902.

Ross, Daniel, and Rezvani, Bijan. The City Concealed: High Bridge. <u>http://www.thirteen.org/thecityconcealed/2011/01/11/high-bridge/</u> (accessed June 9, 2015)

Smith, James Blair. *Opening of New East River Bridge, New York.* (Opening of Williamsburg Bridge.) Thomas A. Edison, Inc., 1903. Library of Congress - The Life of A City: Early Films of New York, 1898 to 1906. <u>http://lccn.loc.gov/00694396</u> (accessed May 29, 2014).

View of Brooklyn Bridge from a Ferryboat. American Mutoscope & Biograph, silent black and white, 1899.



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Manhattan Bridge Plaque Detail. (Credit: Peter Basich)