

2016 Manhattan River Crossings



Bill de Blasio
Mayor



NEW YORK CITY
DOF
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Commissioner

A member of the New York Metropolitan Transportation Council

2016 Manhattan River Crossings

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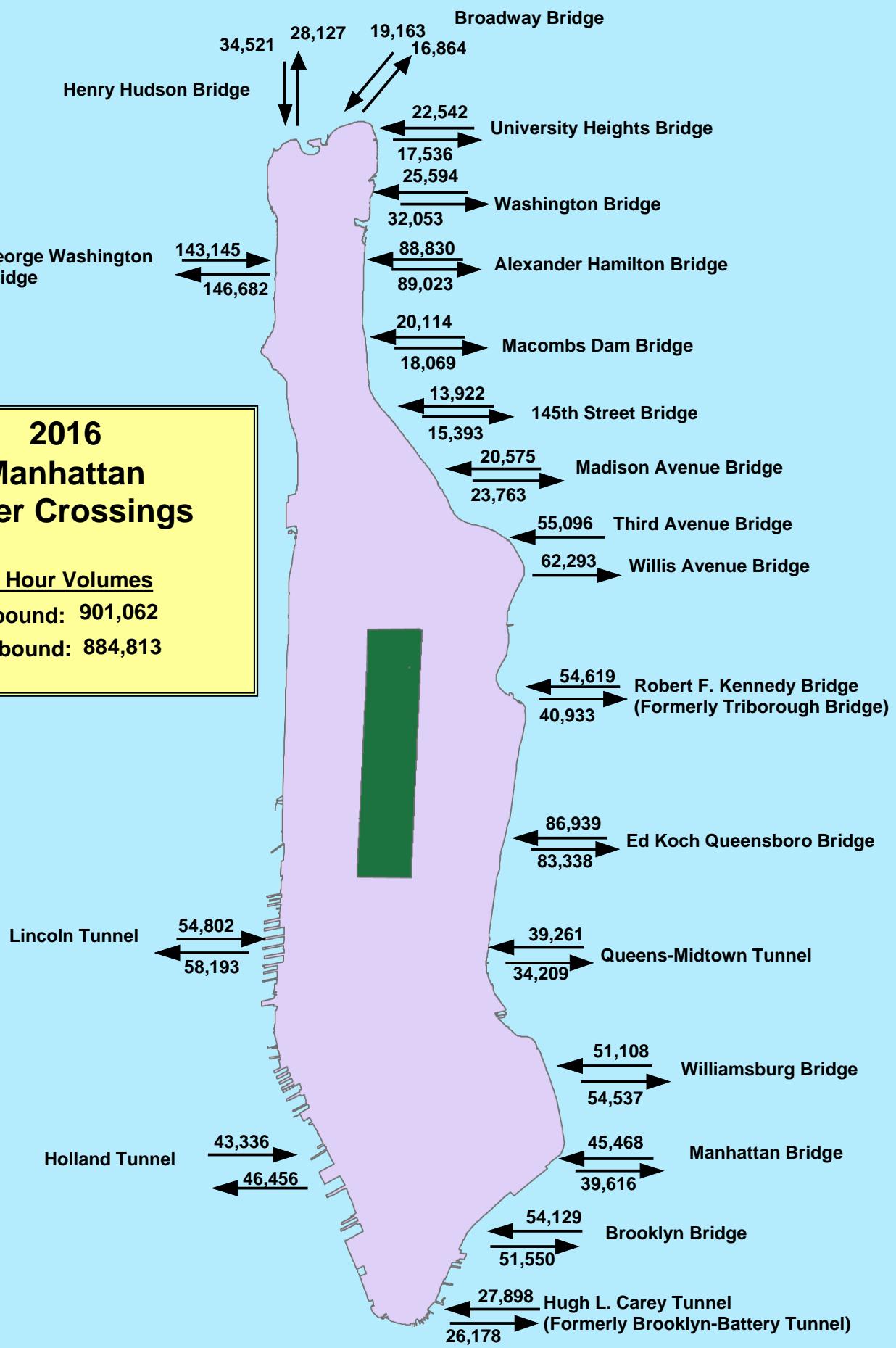
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2016 Manhattan River Crossings

24 Hour Volumes

Inbound: 901,062

Outbound: 884,813



1,785,875

daily vehicles used the 20 Manhattan River Crossings in 2016 (total of both directions).

decrease of 0.6%

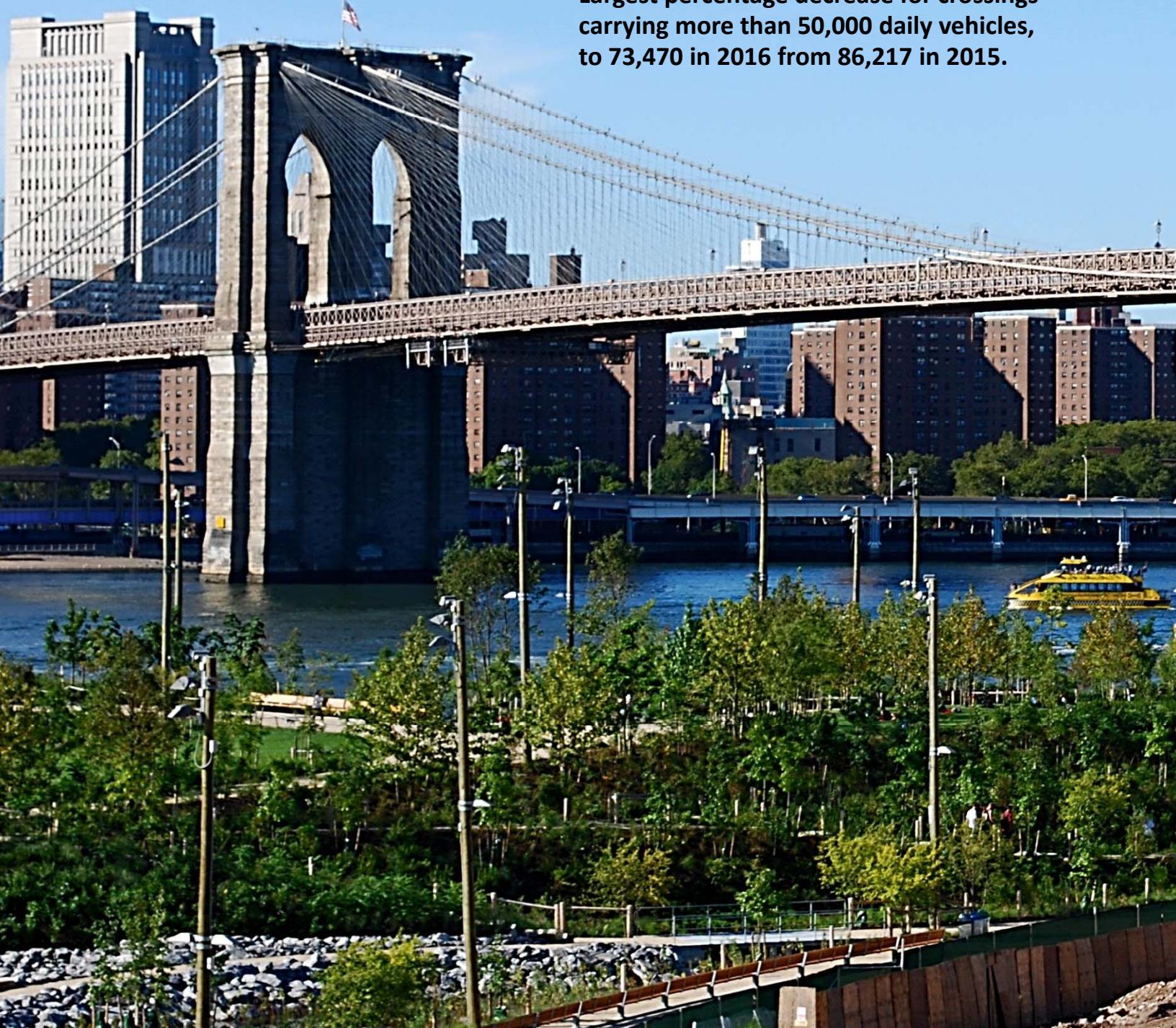
from the 1,795,790 daily vehicles recorded in 2015 (9,915 less daily vehicles).

**6.7% Increase
Washington Bridge
(Harlem River)**

Largest percentage increase for crossings carrying more than 50,000 daily vehicles, to 57,647 in 2016 from 54,006 in 2015.

**14.8% Decrease
Midtown Tunnel
(East River)**

Largest percentage decrease for crossings carrying more than 50,000 daily vehicles, to 73,470 in 2016 from 86,217 in 2015.



George Washington Bridge (Hudson River)

289,827 vehicles per day, the most heavily utilized Manhattan river crossing.

Ed Koch Queensboro Bridge (East River)

170,277 vehicles per day, the most heavily utilized East River crossing.

Alexander Hamilton Bridge (Harlem River)

177,853 vehicles per day, the most heavily utilized Harlem River crossing.

Annual Citywide Subway Ridership

0.33% decrease to 1,756,814,800 annual riders in 2016 from 1,762,565,419 in 2015.

During the past ten years, subway ridership increased 17.2% to 1,756,814,800 annual riders in 2016 from 1,498,600,000 in 2006. During the same period, Manhattan vehicular river crossings decreased 6.4% to 1,785,875 daily vehicles in 2016 from 1,907,118 in 2006.

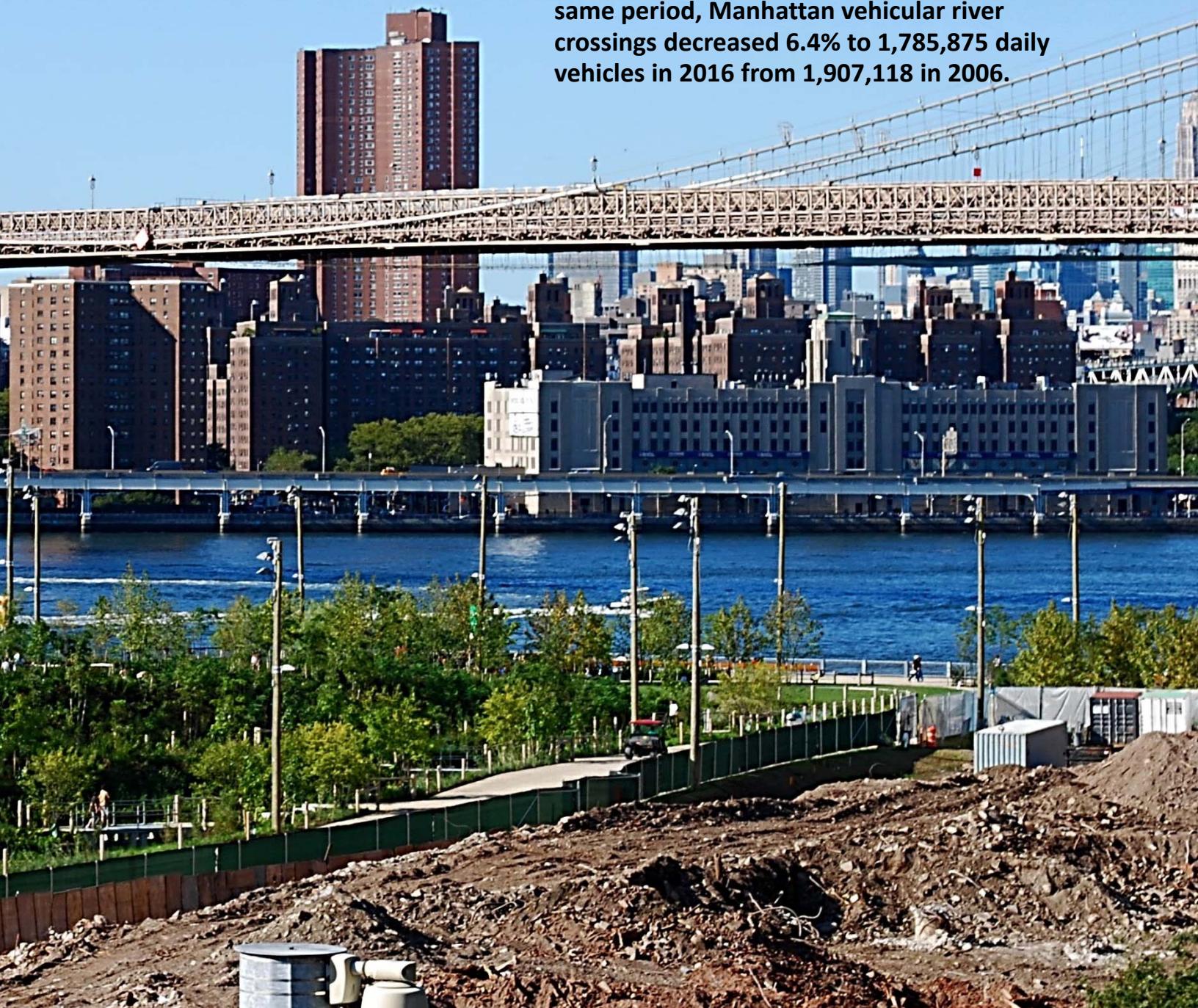


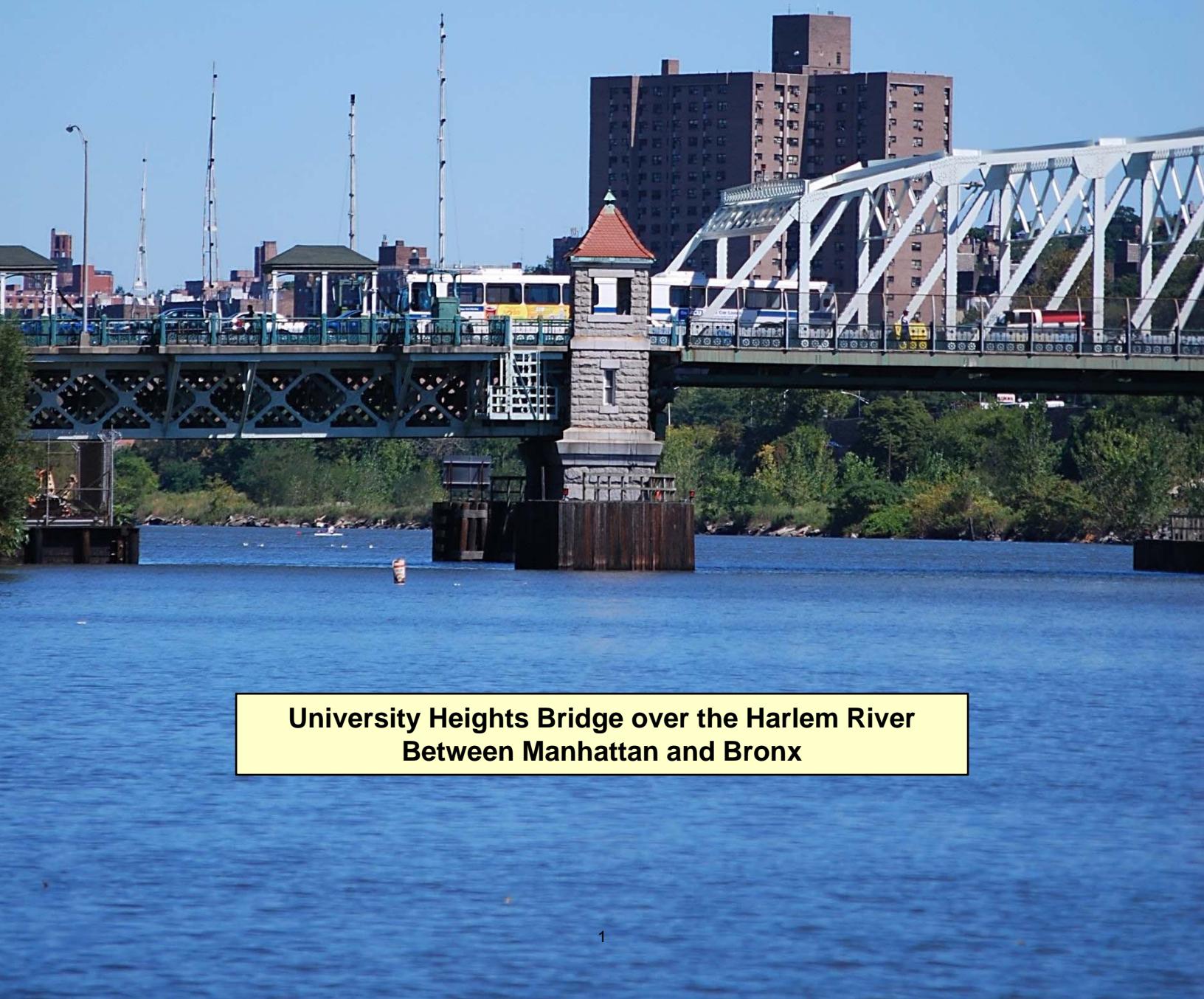
TABLE OF CONTENTS

	PAGE
INTRODUCTION	1
SUMMARY ~ 2016 Daily Traffic	5
Manhattan Cordon Flow Maps	9
Average Daily Traffic Volumes	12
Average Hourly Traffic Volumes	14
Manhattan Vehicular Accumulation	16
TRIP CHARACTERISTICS	17
Origins & Travel Modes of Manhattan Auto Commuters	18
Thru vs. Local Trips via Hudson River Crossings	19
Vehicle Occupancy	24
2015-2016 TRENDS	25
Hourly Vehicular Volumes 2016 vs. 2015	28
Manhattan Crossings Daily Traffic Volume Trends 2016 vs. 2015	30
Volume Comparisons 2016 vs. 2015	31
East River Bridges	32
Harlem River Bridges	33
MTABT Manhattan Crossings	34
PANYNJ Manhattan Crossings	35
TEN-YEAR TRENDS ~ 2006 - 2016	37
Manhattan Crossings Daily Traffic Volume Trends 2016 vs. 2006	41
Hourly Vehicular Volumes 2016 vs. 2006	43
Volume Comparisons 2016 vs. 2006	45
East River Bridges	46
Harlem River Bridges	47

	PAGE
MTABT Manhattan Crossings	48
PANYNJ Manhattan Crossings	49
Motor Vehicle Registrations 2006 - 2016	50
HISTORIC TRENDS	51
Manhattan Crossings Daily Volumes 1948 - 2016	52
East River Bridges	59
Harlem River Bridges	59
MTABT Manhattan Crossings	60
PANYNJ Manhattan Crossings	60
Manhattan River Crossings vs. Annual Subway Ridership 1948-2016	61
Motor Vehicle Registrations 1915 - 2016	63
Past and Present Passenger Car Toll Structures	64
River Crossings vs. Toll Rates	65
EAST RIVER BRIDGES	67
Brooklyn Bridge	70
Ed Koch Queensboro Bridge	72
Manhattan Bridge	74
Williamsburg Bridge	76
HARLEM RIVER BRIDGES	79
Alexander Hamilton Bridge	82
Broadway Bridge	84
Macombs Dam Bridge	86
Madison Avenue Bridge	88
Third Avenue Bridge	90

	PAGE
University Heights Bridge	92
Washington Bridge	94
Willis Avenue Bridge	96
145th Street Bridge	98
MTA BRIDGES AND TUNNELS FACILITIES	101
Hugh L. Carey Tunnel (formerly Brooklyn-Battery Tunnel)	104
Queens-Midtown Tunnel	106
R.F.K. Memorial Bridge Manhattan Plaza (formerly Triborough Bridge)	108
Henry Hudson Bridge	110
PORT AUTHORITY OF NEW YORK AND NEW JERSEY FACILITIES	111
George Washington Bridge	114
Holland Tunnel	116
Lincoln Tunnel	118

Introduction



**University Heights Bridge over the Harlem River
Between Manhattan and Bronx**

INTRODUCTION

The 2016 *Manhattan River Crossings* report is an annual publication prepared by the New York City Department of Transportation (NYCDOT), and funded by the Unified Planning Work Program (UPWP) under the Planning Program of the Moving Ahead for Progress (MAP-21) Act.

Since 1948, the City of New York has been monitoring traffic flow over the 20 bridges and tunnels serving Manhattan. The *Manhattan River Crossings* report, published annually by the New York City Department of Transportation (NYCDOT) since 1972, presents vehicular volumes, classification, and trends for all bridges and tunnels serving Manhattan. All toll-free bridges are monitored with automatic traffic recording (ATR) machines during the fall season.

The average hourly volumes by direction for 2016 are presented in histograms for each facility. The total vehicular flow to and from Manhattan has been summarized similarly with hourly histograms, and a graph of vehicle accumulation in Manhattan. The analysis presented in the report was performed by Subregional Transportation Planning Program staff of NYCDOT during the 2016-2017 and 2017-2018 program years.

NYCDOT extends its appreciation to the Port Authority of New York and New Jersey (PANYNJ), the Metropolitan Transportation Authority Bridges and Tunnels (MTABT), the New York City Department of City Planning (NYCDCP), and the New York Metropolitan Transportation Council (NYMTC) for their assistance in the data collection process.

Note: NYCDOT uses the averages of vehicular volumes from selected representative weekdays. Publications from other sources may be based on alternative computation methodologies for some facilities, most notably the tolled bridges and tunnels, possibly yielding different results for those facilities.

The Harlem River and East River Bridges, as well as the MTABT and PANYNJ facilities, have been classified under a highway functional classification system. Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the character of service each roadway provides.

The five functional classifications are defined as follows:

1. Interstate - connects population centers across state lines.
2. Principal Arterial - serves major centers of activity of an urban area and carries a high proportion of the total urban area travel on a minimum of mileage.
3. Minor Arterial - interconnects with and augments urban principal arterials; provides service for trips of moderate length at a somewhat lower level of travel mobility than principal arterials; distributes travel to geographic areas smaller than those identified with the higher system.
4. Collector Street - provides both land access service and traffic circulation within residential neighborhoods, and commercial and industrial areas. Differs from the arterial systems in that facilities on the collector system may penetrate residential neighborhoods, distributing trips from arterials to the ultimate destination.

Conversely, collector streets also collect traffic from local streets in residential neighborhoods and channel it into the arterial system.

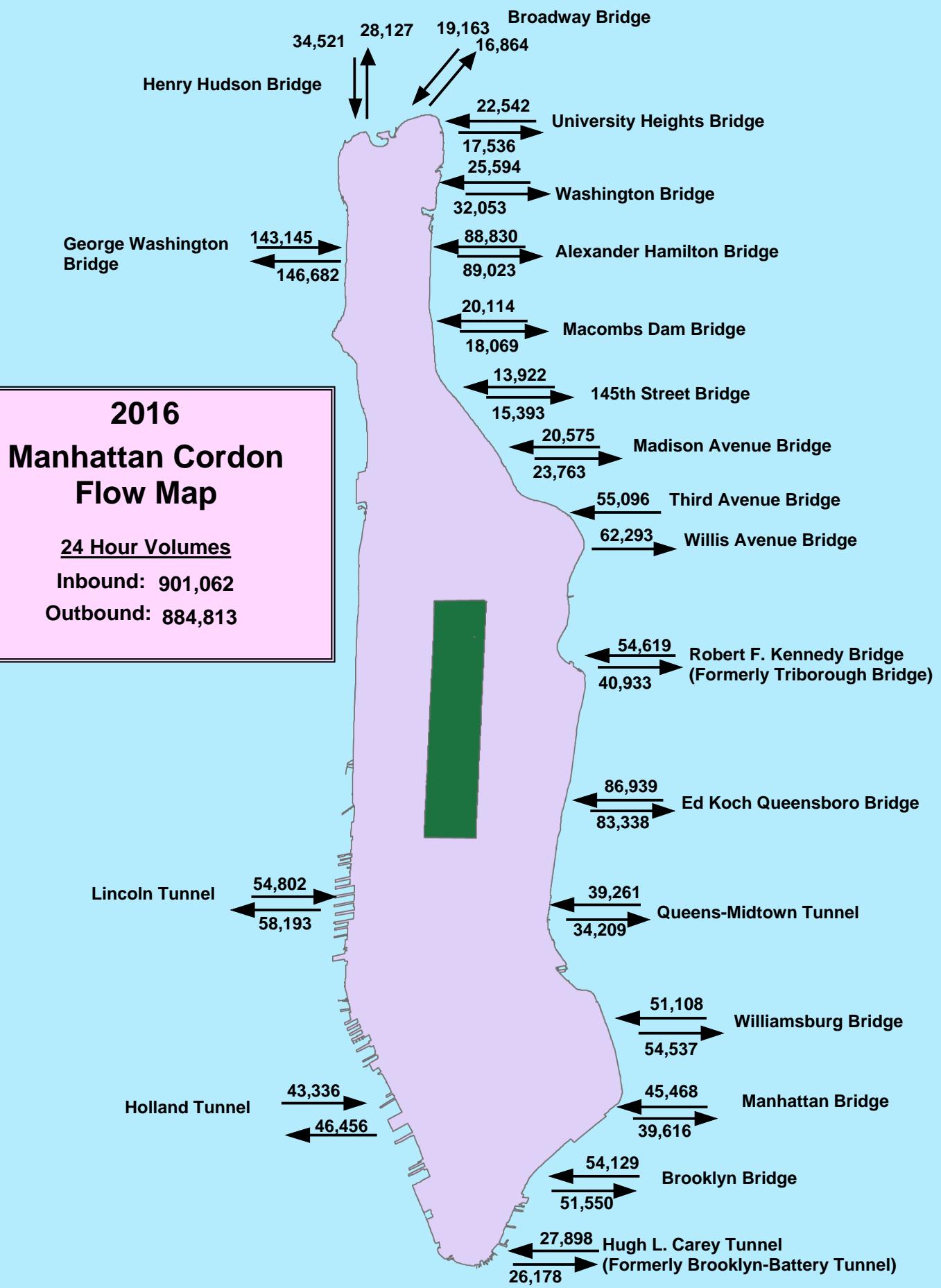
5. Local Street - comprises all facilities not on one of the higher systems. Serves primarily to provide direct access to abutting land and access to the higher order systems. Offers the lowest level of mobility and usually contains no bus or truck routes.

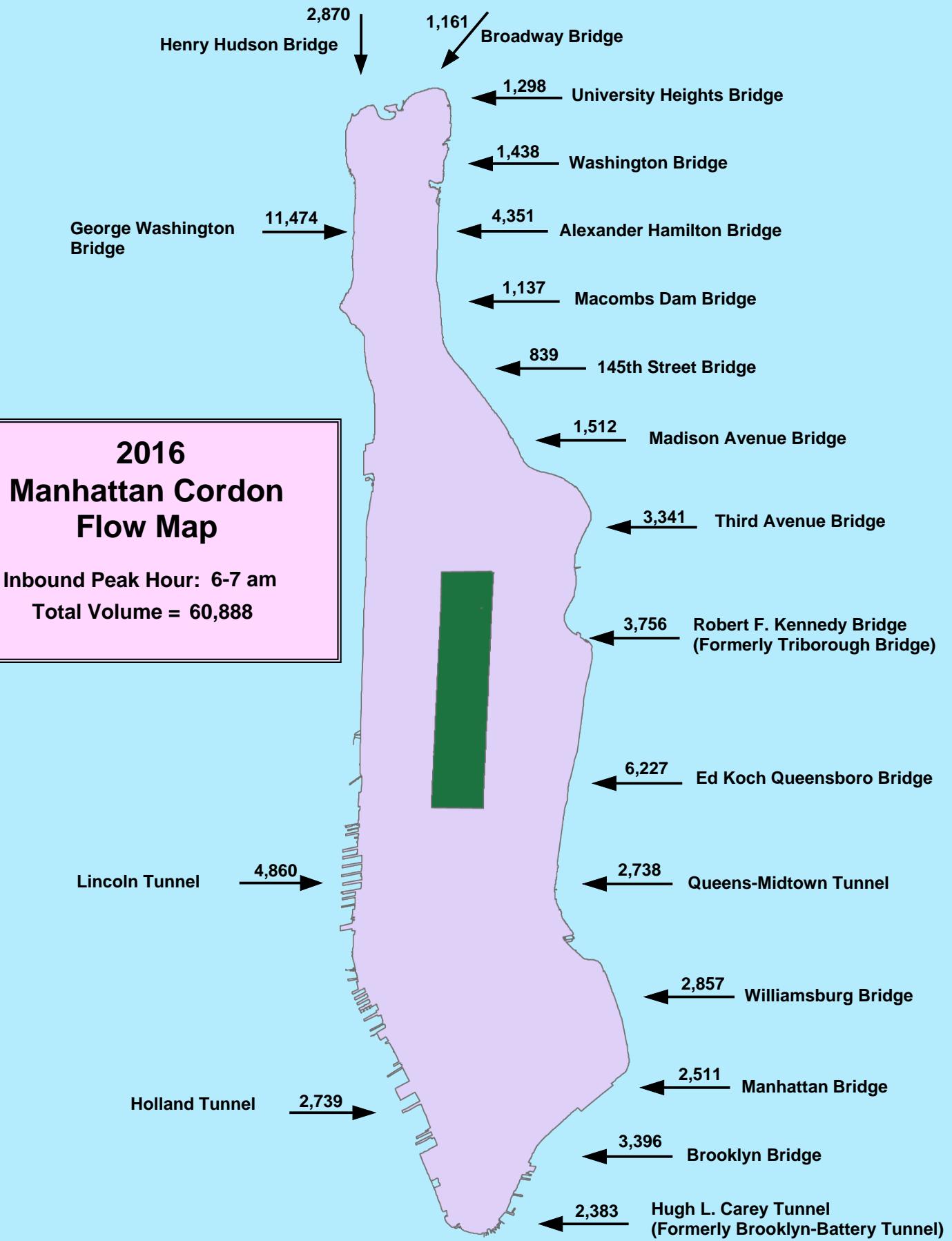
Summary ~ 2016 Daily Traffic

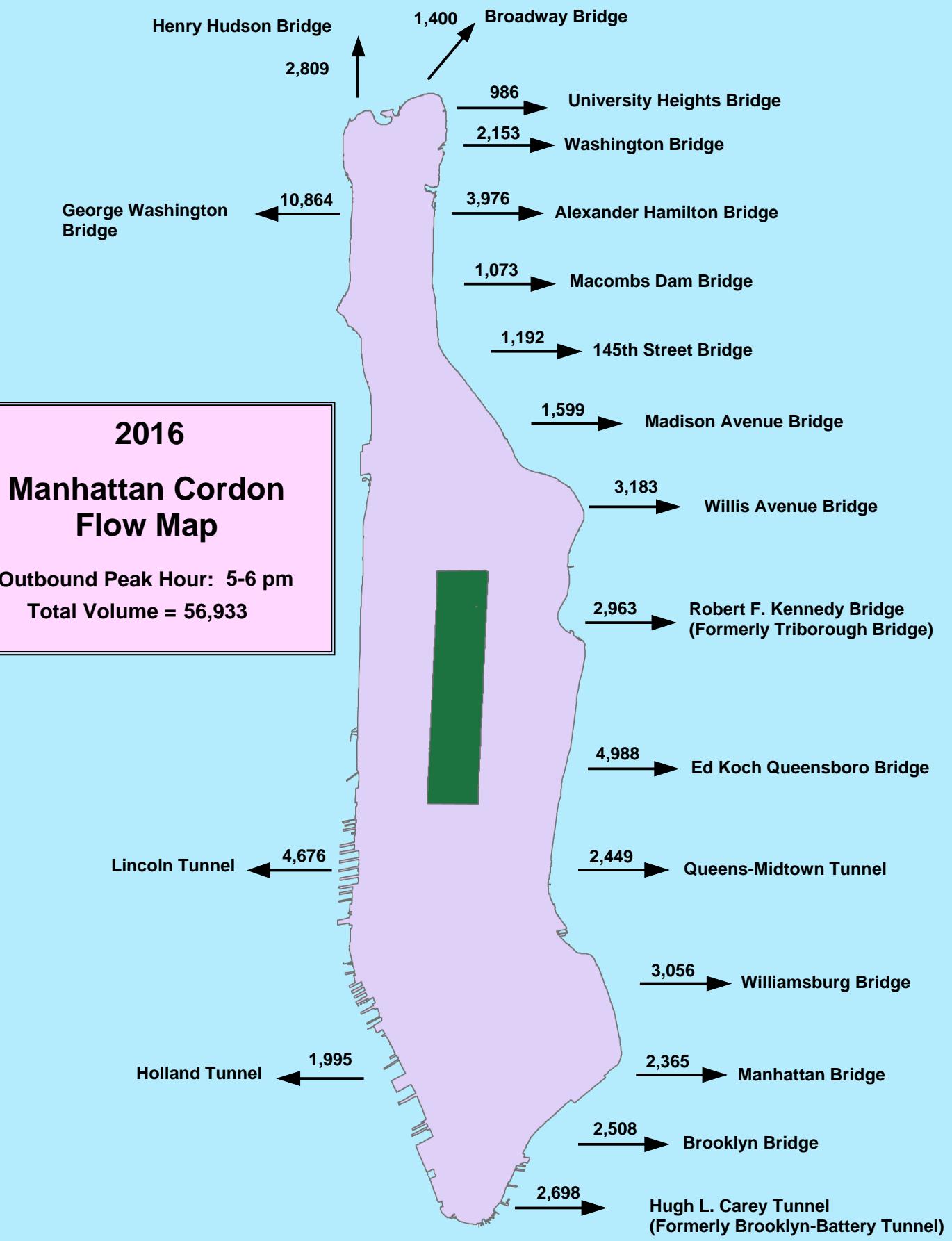


SUMMARY

- Daily Manhattan river crossings decreased 0.6%, to 1,785,875 daily vehicles in fall 2016 from 1,795,790 in fall 2015, a decrease of 9,915 daily vehicles.
- The busiest river crossings are the following.
 - For the 54th consecutive year, the George Washington Bridge carried more traffic than any other Manhattan river crossing. A two-way total of 289,827 daily vehicles used this bridge in fall 2016, which was 1.8% less than the average daily volume of 295,120 in fall 2015.
 - The Alexander Hamilton Bridge was second busiest, serving 177,853 daily vehicles in fall 2016, which was 0.3% less than its fall 2015 daily volume of 178,407 .
 - The Ed Koch Queensboro Bridge was third busiest with its fall 2016 daily volume of 170,277 daily vehicles, a decrease of 2.4% from the 174,447 recorded in fall 2015.
- The average automobile entering Manhattan during the morning peak period carried 1.34 persons including the driver. A total of 78.3% of peak period automobiles were occupied only by the driver. Note, this is based on PANYNJ 2013 and NYCDOT 2005 data.
- The peak accumulation of motor vehicles in Manhattan on an average weekday occurred at about 1 pm when an estimated 367,721 vehicles were either moving or parked on the island. This includes vehicles operating only within Manhattan as well as those entering via the river crossings.
- Annual subway ridership citywide decreased 0.33% to 1.757 billion in 2016 from 1.763 billion in 2015.
- According to census data (ACS 2012-2016 5 year estimate), 39% of automobile work trips (not including taxis) to Manhattan originated in the other four boroughs, 50% came from outside the city, and the remaining 9% originated within Manhattan.
- Origin and Destination (O & D) surveys conducted by PANYNJ in 2014 at its trans-Hudson crossings show that 43% of automobiles entering Manhattan from New Jersey each day have final destinations outside Manhattan. These figures indicate that approximately 100,000 autos entering Manhattan from New Jersey in 2016 each day were simply passing through.
- PANYNJ reports show that 60.5% of morning peak period (7-10 am) automobiles entering from New Jersey have final destinations in Manhattan.







Manhattan Crossings
2016 Average Daily Traffic Volumes
To and From Manhattan

EAST RIVER BRIDGES	To Manhattan	From Manhattan	2-way Total
Brooklyn Bridge	54,129	51,550	105,679
Ed Koch Queensboro Bridge *	86,939	83,338	170,277
Manhattan Bridge	45,468	39,616	85,084
Williamsburg Bridge	51,108	54,537	105,645
Total East River	237,644	229,041	466,685

HARLEM RIVER BRIDGES

Alexander Hamilton Bridge	88,830	89,023	177,853
Broadway Bridge	19,163	16,864	36,027
Macombs Dam Bridge	20,114	18,069	38,183
Madison Avenue Bridge	20,575	23,763	44,338
Third Avenue Bridge	55,096	-----	55,096
University Heights Bridge	22,542	17,536	40,078
Washington Bridge	25,594	32,053	57,647
Willis Avenue Bridge	-----	62,293	62,293
145th Street Bridge	13,922	15,393	29,315
Total Harlem River	265,836	274,994	540,830

MTABT FACILITIES

Henry Hudson Bridge	34,521	28,127	62,648
Hugh L. Carey Tunnel **	27,898	26,178	54,076
Queens-Midtown Tunnel	39,261	34,209	73,470
Robert F. Kennedy Bridge ***	54,619	40,933	95,552
Total MTABT	156,299	129,447	285,746

PANYNJ FACILITIES

George Washington Bridge	143,145	146,682	289,827
Holland Tunnel	43,336	46,456	89,792
Lincoln Tunnel	54,802	58,193	112,995
Total PANYNJ	241,283	251,331	492,614

GRAND TOTAL	901,062	884,813	1,785,875
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* Queensboro Bridge renamed April 11, 2011.

** Formerly Brooklyn-Battery Tunnel, renamed October 22, 2012.

*** Formerly Triborough Bridge, renamed November 19, 2008.

2016 Manhattan Crossings Vehicle Volumes

24-Hour Volumes – Both Directions



A.M. Peak Hour Volumes – Inbound 6-7 am



P.M. Peak Hour Volumes – Outbound 5-6 pm



Total Manhattan Crossings

2016 Average Hourly Traffic Volumes

To and From Manhattan

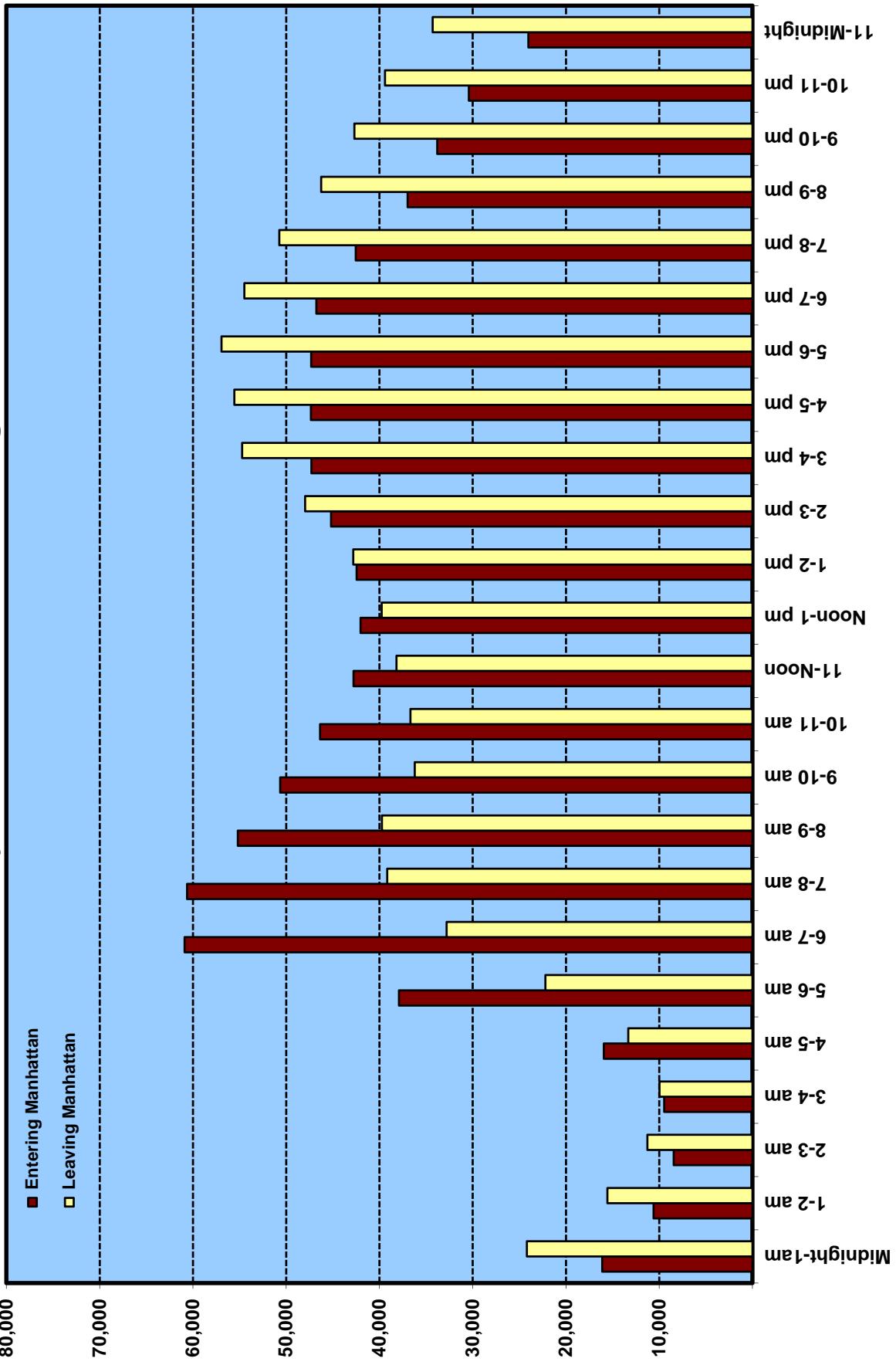
(All Facilities)

	Entering Manhattan	Leaving Manhattan	2-Way Total
12-1am	16,114	24,193	40,307
1-2am	10,605	15,554	26,159
2-3am	8,443	11,261	19,704
3-4am	9,457	9,966	19,423
4-5am	15,931	13,321	29,252
5-6am	37,907	22,205	60,112
6-7am	60,888 **	32,787	93,675
7-8am	60,622	39,161	99,783
8-9am	55,181	39,735	94,916
9-10am	50,642	36,215	86,857
10-11am	46,369	36,678	83,047
11-12am	42,776	38,163	80,939
12-1pm	42,020	39,757	81,777
1-2pm	42,445	42,806	85,251
2-3pm	45,185	47,969	93,154
3-4pm	47,289	54,720	102,009
4-5pm	47,341	55,553	102,894
5-6pm	47,318	56,933 **	104,251
6-7pm	46,766	54,487	101,253
7-8pm	42,545	50,729	93,274
8-9pm	36,975	46,240	83,215
9-10pm	33,798	42,679	76,477
10-11pm	30,414	39,407	69,821
11-12pm	24,031	34,294	58,325
24 hrs	901,062	884,813	1,785,875
7-10am	166,445	115,111	281,556
10am-1pm	131,165	114,598	245,763
1-4pm	134,919	145,495	280,414
4-7pm	141,425	166,973	308,398
7am-7pm	573,954	542,177	1,116,131

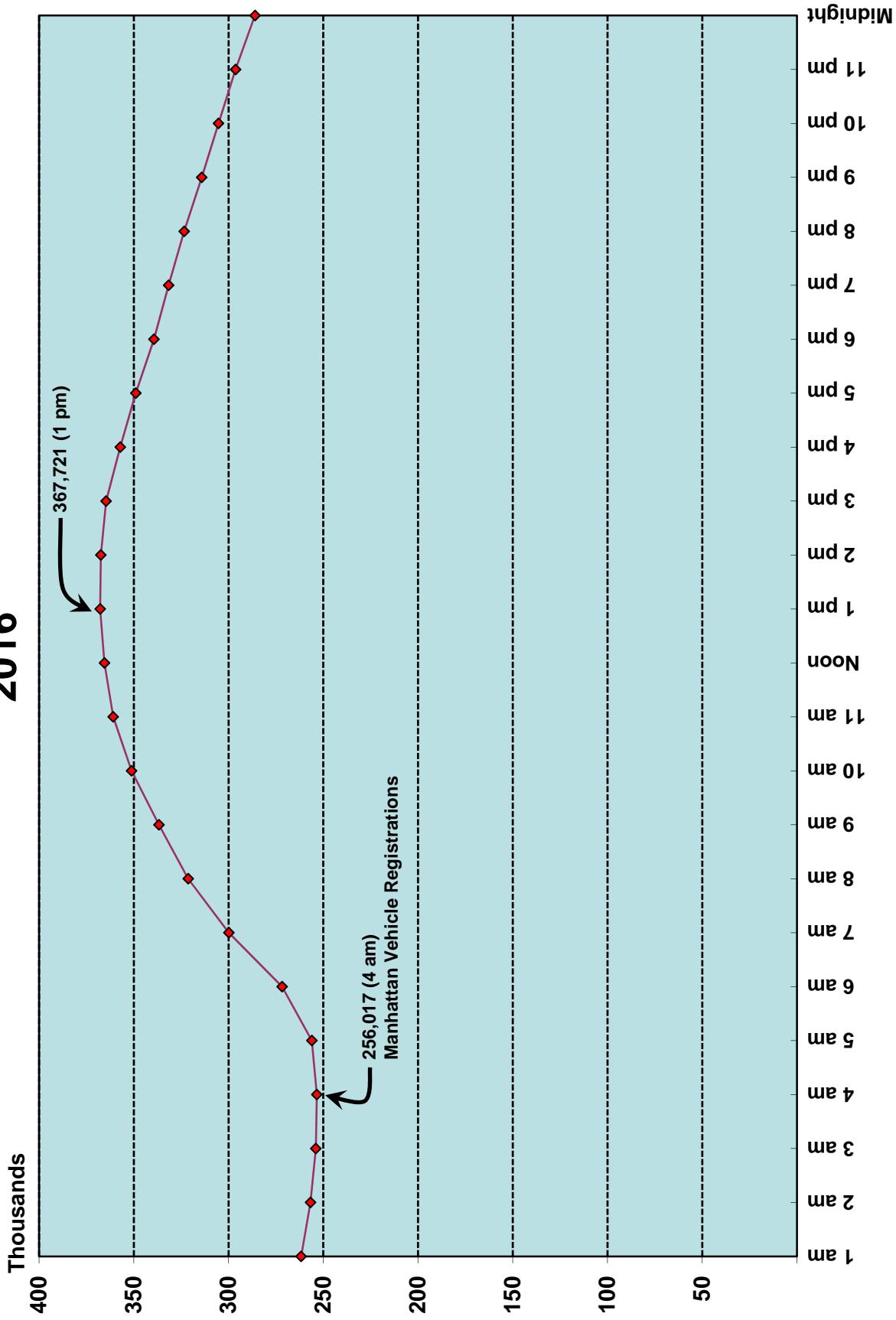
** Peak Volumes

Hourly Vehicle Volumes

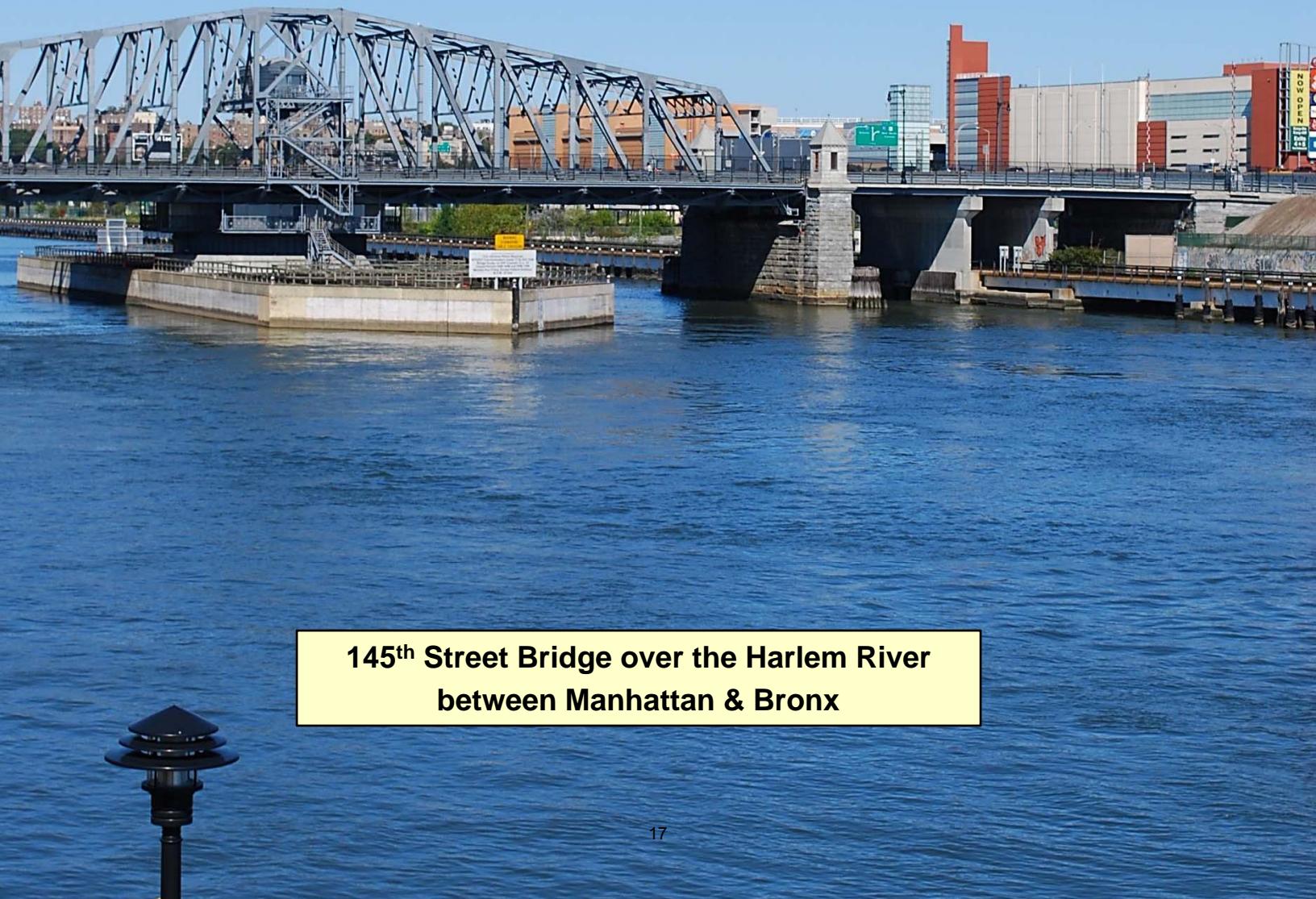
Total Hourly Manhattan River Crossings ~ 2016



Manhattan Vehicular Accumulation 2016



Trip Characteristics



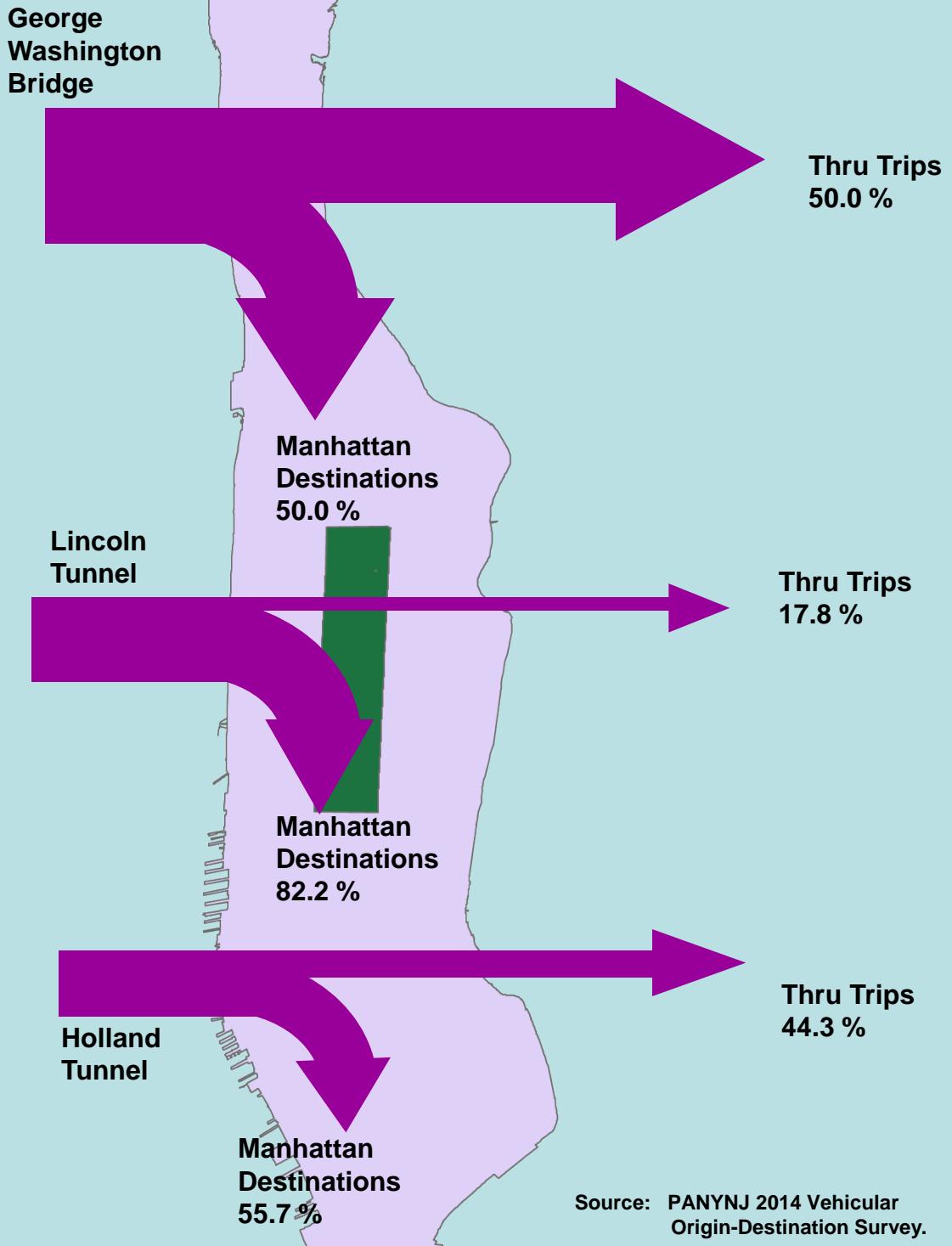
**145th Street Bridge over the Harlem River
between Manhattan & Bronx**

Origins and Travel Modes of Manhattan Commuters

State & County of Residence	Total		2 Person		3 Person		4 + Person		Bus or Streetcar		Subway or Elevated		Railroad		Ferry		Bicycle		Walk		Taxi		Other			
	Manhattan Workers	Drove Alone	Carpool	Carpool	Streetcar	Streetcar	Elevated	Elevated	Railroad	Railroad	Ferry	Ferry	Bicycle	Bicycle	Walk	Walk	Taxi	Taxi	Other	Other	Other	Other	Other	Other		
NY ~ Bronx	212,259	21,440	3,881	768	401	25,129	151,996	5,646	54	421	1,398	713	412													
NY ~ Kings	446,666	25,062	5,018	1,263	831	18,547	379,890	4,618	1,101	6,050	2,492	833	961													
NY ~ Manhattan	740,829	20,570	4,351	593	1,601	52,802	379,074	3,658	152	16,171	173,174	22,552	4,493													
NY ~ Queens	386,616	39,170	8,194	1,512	1,192	30,624	287,364	13,578	315	1,192	2,057	680	738													
NY ~ Richmond	47,870	9,455	1,018	443	118	25,781	3,537	783	6,190	55	370	49	71													
Subtotal NYC Origins	1,834,240	115,697	22,462	4,579	4,143	152,883	1,201,861	28,283	7,812	23,889	179,491	24,827	6,675													
NY ~ Nassau	100,898	20,848	2,165	467	612	2,863	8,123	64,859	0	11	437	186	327													
NY ~ Suffolk	40,830	9,667	1,300	324	100	1,328	2,419	24,613	43	109	462	179	286													
NY ~ Rockland	16,020	7,603	1,426	100	452	3,890	266	2,154	27	28	9	23	42													
NY ~ Orange	9,911	3,946	635	179	54	2,908	245	1,907	0	0	0	12	0	25												
NY ~ 53 Remaining Counties	107,970	22,934	3,907	490	411	4,424	10,056	63,944	39	87	935	196	547													
New York State Totals	2,109,869	180,695	31,895	6,139	5,772	168,296	1,222,970	185,760	7,921	24,124	181,346	25,411	7,902													
NJ ~ Hudson	90,350	5,216	1,570	335	251	29,512	44,090	4,098	4,435	181	305	88	269													
NJ ~ Bergen	68,402	18,215	3,701	1,495	330	31,437	2,220	8,915	1,580	131	188	0	190													
NJ ~ Essex	36,492	6,520	821	149	163	8,491	5,415	14,616	78	14	116	28	81													
NJ ~ Middlesex	28,426	4,218	457	50	80	8,945	1,125	13,188	83	29	35	0	216													
NJ ~ Monmouth	20,970	3,326	467	72	90	9,693	497	4,114	2,403	0	158	0	150													
NJ ~ Union	20,509	3,701	484	56	50	4,815	1,030	9,889	93	14	27	0	350													
NJ ~ Morris	13,780	3,142	337	120	0	3,311	498	6,120	101	0	16	11	124													
NJ ~ 14 Remaining Counties	35,284	7,941	934	99	48	13,066	1,254	11,431	104	11	249	56	91													
New Jersey Totals	314,213	52,279	8,771	2,376	1,012	109,270	56,129	72,371	8,877	380	1,094	183	1,471													
CT ~ 7 Remaining Counties	4,476	1,130	189	14	0	506	487	1,804	0	30	205	88	23													
CT ~ Fairfield	30,240	3,411	647	65	67	879	932	23,824	47	31	156	67	114													
Ct Totals	34,716	4,541	836	79	67	1,385	1,419	25,628	47	61	361	155	137													
Pennsylvania Totals	13,170	3,476	1,090	109	193	3,669	929	3,064	208	6	310	62	54													
Grand Totals	2,487,823	245,236	43,016	8,832	7,095	284,066	1,284,209	288,336	17,121	24,589	185,203	26,251	12,231													

Data Source: IPUMS-USA, University of Minnesota, www.ipums.org. American Community Survey 2012-2016 5-Year sample data, US Census Bureau.

Thru vs. Local E/B Auto Trips via Hudson River Crossings



DESTINATIONS OF HUDSON RIVER CROSSINGS EASTBOUND AUTO TRAFFIC

TOTAL OF HOLLAND TUNNEL, LINCOLN TUNNEL AND GEORGE WASHINGTON BRIDGE

Eastbound Auto Destinations	6-7 am	7-10 am	4-7 pm	5 am - 11 pm
Manhattan				
Manhattan CBD	33.5 %	34.6 %	26.4 %	32.1 %
Upper Manhattan	25.7 %	25.9 %	26.7 %	25.2 %
Manhattan Total	59.2 %	60.5 %	53.1 %	57.3 %
Bronx, NY	15.5 %	15.9 %	11.1 %	12.9 %
Brooklyn, NY	9.2 %	6.0 %	8.4 %	8.0 %
Connecticut	1.8 %	0.5 %	1.4 %	1.5 %
Long Island, NY	3.9 %	4.9 %	7.2 %	5.6 %
Other Destinations East of Hudson River	0.0 %	0.4 %	1.0 %	0.7 %
Other NY Destinations East of Hudson River	0.2 %	0.1 %	0.2 %	0.1 %
Other NY	0.0 %	0.0 %	0.0 %	0.1 %
Queens, NY	7.1 %	6.6 %	11.1 %	9.2 %
Staten Island, NY	0.0 %	0.0 %	0.2 %	0.1 %
Westchester, NY	3.1 %	5.2 %	6.3 %	4.6 %
Thru Trip Total	40.8 %	39.5 %	46.9 %	42.7 %
GRAND TOTAL	100.0 %	100.0 %	100.0 %	100.0 %

Source: Weekday data from the PANYNJ 2014 Vehicular Origin-Destination Survey.

DESTINATIONS OF GEORGE WASHINGTON BRIDGE EASTBOUND AUTO TRAFFIC

Eastbound Auto Destinations	6-7 am	7-10 am	4-7 pm	5 am - 11 pm
Manhattan				
Manhattan CBD	21.2 %	22.1 %	15.5 %	19.4 %
Upper Manhattan	29.9 %	30.8 %	33.3 %	30.6 %
Manhattan Total	51.1 %	53.0 %	48.8 %	50.0 %
Bronx, NY	23.2 %	22.5 %	15.7 %	19.2 %
Brooklyn, NY	6.4 %	3.0 %	4.0 %	4.4 %
Connecticut	2.3 %	0.8 %	1.9 %	2.1 %
Long Island, NY	5.1 %	5.7 %	8.6 %	7.0 %
Other Destinations East of Hudson River	0.0 %	0.6 %	1.4 %	1.1 %
Other NY Destinations East of Hudson River	0.3 %	0.1 %	0.2 %	0.2 %
Other NY	0.0 %	0.0 %	0.0 %	0.0 %
Queens, NY	7.7 %	7.5 %	10.7 %	9.6 %
Staten Island, NY	0.0 %	0.0 %	0.0 %	0.0 %
Westchester, NY	3.9 %	6.9 %	8.6 %	6.5 %
Thru Trip Total	48.9 %	47.0 %	51.2 %	50.0 %
GRAND TOTAL	100.0 %	100.0 %	100.0 %	100.0 %

Source: Weekday data from the PANYNJ 2014 Vehicular Origin-Destination Survey.

DESTINATIONS OF HOLLAND TUNNEL EASTBOUND AUTO TRAFFIC

Eastbound Auto Destinations	6-7 am	7-10 am	4-7 pm	5 am - 11 pm
Manhattan				
Manhattan CBD	52.9 %	56.7 %	46.8 %	48.5 %
Upper Manhattan	10.0 %	7.6 %	4.8 %	7.2 %
Manhattan Total	62.9 %	64.3 %	51.6 %	55.7 %
Bronx, NY	4.3 %	2.3 %	1.6 %	2.4 %
Brooklyn, NY	21.4 %	22.8 %	25.4 %	24.6 %
Connecticut	0.0 %	0.0 %	0.8 %	0.6 %
Long Island, NY	0.0 %	4.1 %	4.8 %	4.2 %
Other Destinations East of Hudson River	0.0 %	0.0 %	0.0 %	0.0 %
Other NY Destinations East of Hudson River	0.0 %	0.0 %	0.0 %	0.0 %
Other NY	0.0 %	0.0 %	0.0 %	0.0 %
Queens, NY	10.0 %	5.8 %	14.3 %	11.1 %
Staten Island, NY	0.0 %	0.0 %	0.0 %	0.0 %
Westchester, NY	1.4 %	0.6 %	1.6 %	1.4 %
Thru Trip Total	37.1 %	35.7 %	48.4 %	44.3 %
GRAND TOTAL	100.0 %	100.0 %	100.0 %	100.0 %

Source: Weekday data from the PANYNJ 2014 Vehicular Origin-Destination Survey.

DESTINATIONS OF LINCOLN TUNNEL EASTBOUND AUTO TRAFFIC

Eastbound Auto Destinations	6-7 am	7-10 am	4-7 pm	5 am - 11 pm
Manhattan				
Manhattan CBD	57.0 %	64.7 %	53.3 %	59.1 %
Upper Manhattan	24.3 %	20.9 %	26.7 %	23.1 %
Manhattan Total	81.3 %	85.5 %	80.0 %	82.2 %
Bronx, NY	0.9 %	1.3 %	1.3 %	1.5 %
Brooklyn, NY	9.3 %	5.1 %	4.0 %	5.3 %
Connecticut	0.0 %	0.0 %	0.0 %	0.1 %
Long Island, NY	2.8 %	2.1 %	4.0 %	2.3 %
Other Destinations East of Hudson River	0.0 %	0.0 %	0.0 %	0.1 %
Other NY Destinations East of Hudson River	0.0 %	0.0 %	0.0 %	0.0 %
Other NY	0.0 %	0.0 %	0.0 %	0.3 %
Queens, NY	3.7 %	3.8 %	8.0 %	6.4 %
Staten Island, NY	0.0 %	0.0 %	1.3 %	0.4 %
Westchester, NY	1.9 %	2.1 %	1.3 %	1.4 %
Thru Trip Total	18.7 %	14.5 %	20.0 %	17.8 %
GRAND TOTAL	100.0 %	100.0 %	100.0 %	100.0 %

Source: Weekday data from the PANYNJ 2014 Vehicular Origin-Destination Survey.

VEHICLE OCCUPANCY -- INBOUND TO MANHATTAN

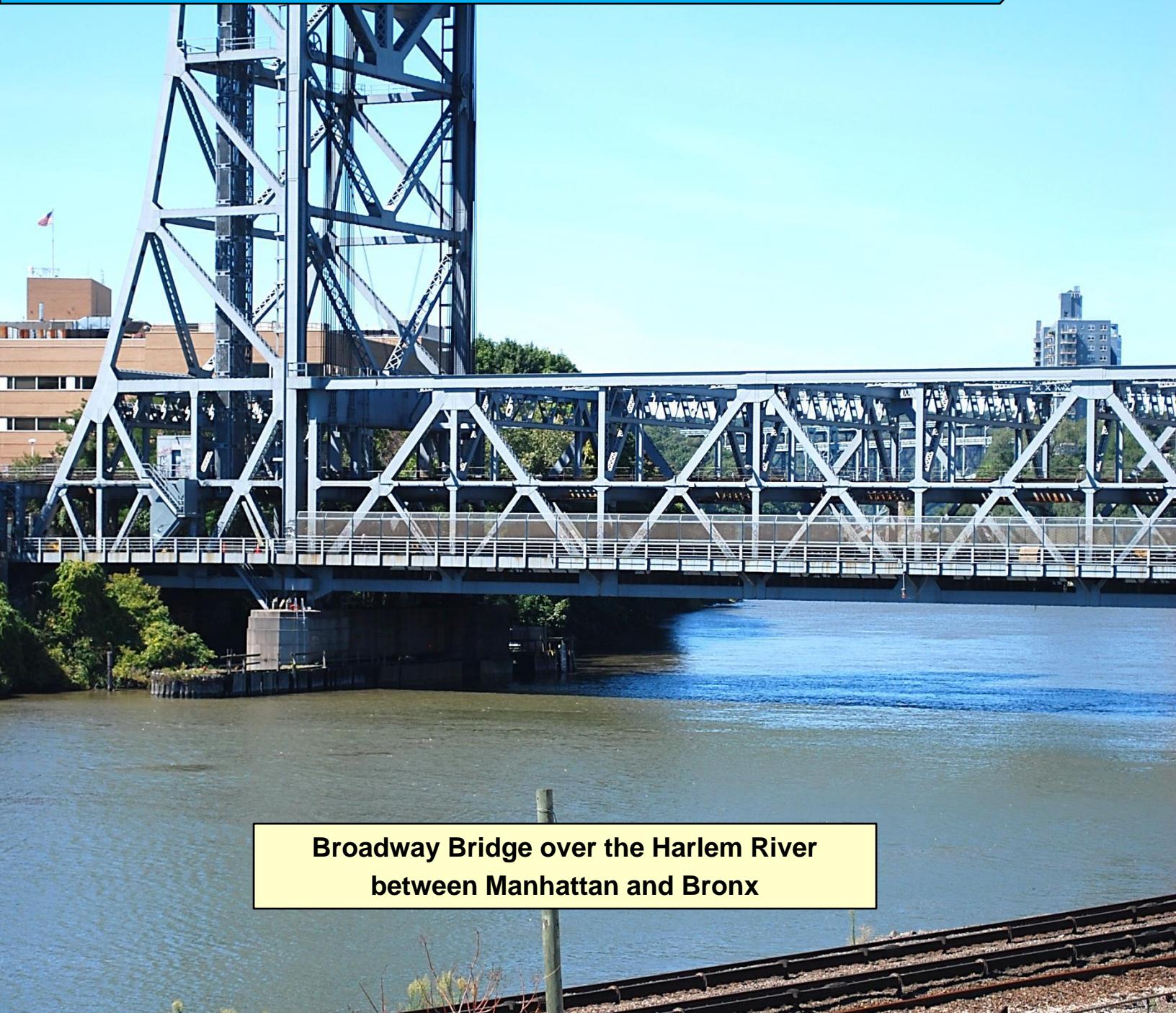
Average Number of Persons per Auto

	Peak Hour Persons Auto	7-10am Percent Autos with Driver Only
Brooklyn-Battery Tunnel	1.31	72.7 %
Brooklyn Bridge	1.22	80.5 %
Manhattan Bridge	1.25	80.1 %
Williamsburg Bridge	1.17	84.6 %
Holland Tunnel	1.22	65.7 %
5 Lower Manhattan Crossings	1.24	76.3 %
Queens-Midtown Tunnel	1.24	77.7 %
Ed Koch Queensboro Bridge	1.44	66.6 %
Lincoln Tunnel	1.41	73.1 %
3 Midtown Manhattan Crossings	1.37	72.7 %
Robert F. Kennedy Bridge	1.18	83.3 %
Alexander Hamilton Bridge	1.16	86.0 %
Broadway Bridge	1.19	84.7 %
Macombs Dam Bridge	1.32	72.4 %
Madison Avenue Bridge	1.28	77.1 %
Third Avenue Bridge	1.22	80.6 %
University Heights Bridge	1.23	82.9 %
Washington Bridge	1.38	73.0 %
145th Street Bridge	1.32	73.8 %
Henry Hudson Bridge	1.20	88.5 %
George Washington Bridge	1.74	79.6 %
11 Upper Manhattan Crossings	1.39	81.4 %
All 19 Inbound Manhattan Crossings	1.34	78.3 %

Sources:

1. Port Authority of New York & New Jersey: 2013 Passengers per Vehicle surveys at the George Washington Bridge, Holland Tunnel, and Lincoln Tunnel.
2. New York City Department of Transportation: Fall 2005 Vehicle Occupancy surveys at all other bridges and tunnels.

2015-2016 Trends



**Broadway Bridge over the Harlem River
between Manhattan and Bronx**

2015-2016 Trends

- Daily Manhattan river crossings decreased 0.6%, to 1,785,875 daily vehicles in fall 2016 from 1,795,790 in fall 2015, a decrease of 9,915 daily vehicles.
- The largest percentage/numerical decrease occurred on the Queens-Midtown Tunnel between Manhattan and Queens, where daily traffic decreased 14.8%, to 73,470 vehicles in fall 2016 from 86,217 in fall 2015 (12,747 fewer daily vehicles).
- The largest percentage/numerical increase occurred on the Madison Avenue Bridge over the Harlem River between Manhattan and The Bronx, where daily volume increased 9.7%, to 44,338 vehicles in fall 2016 from 40,432 in fall 2015 (3,906 additional daily vehicles).
- Total daily traffic on the four East River bridges combined remained relatively unchanged, decreasing 0.5%, to 466,685 in fall 2016 from 468,918 in fall 2015 (2,233 fewer daily vehicles).
- Daily volume using the nine Harlem River bridges increased 1.9%, to 540,830 in fall 2016 from 530,808 in fall 2015 (10,022 fewer daily vehicles).
- On the four MTABT Manhattan crossings, total daily traffic decreased 4.0% to 285,746 in fall 2016 from 297,794 in fall 2015 (12,048 fewer daily vehicles).
- Daily traffic using the three PANYNJ Manhattan crossings decreased 1.1% to 492,614 from 498,270 (5,656 fewer daily vehicles).
- Annual subway ridership citywide decreased 0.3% to 1,756,814,800 in 2016 from 1,762,565,419 in 2015.

Manhattan Crossings

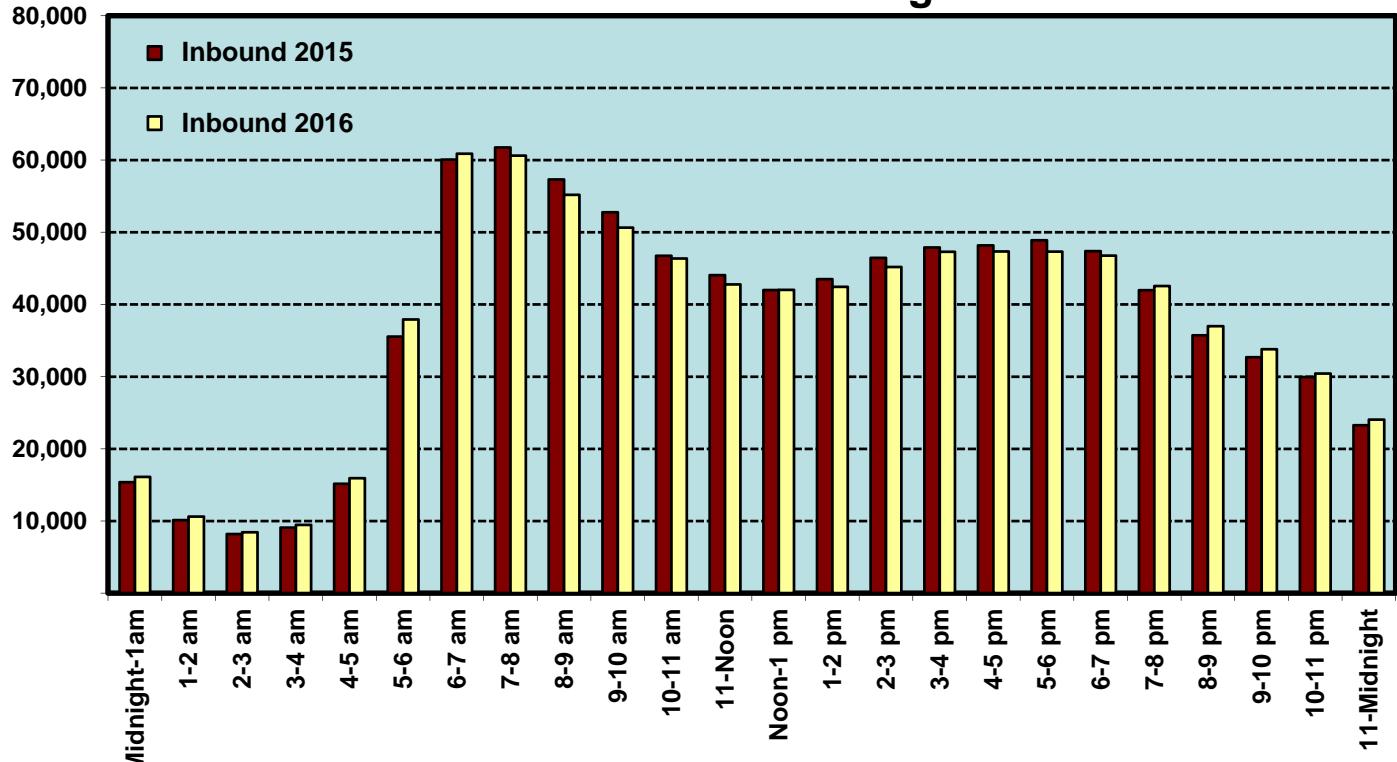
Hourly Vehicular Volumes

2016 vs 2015

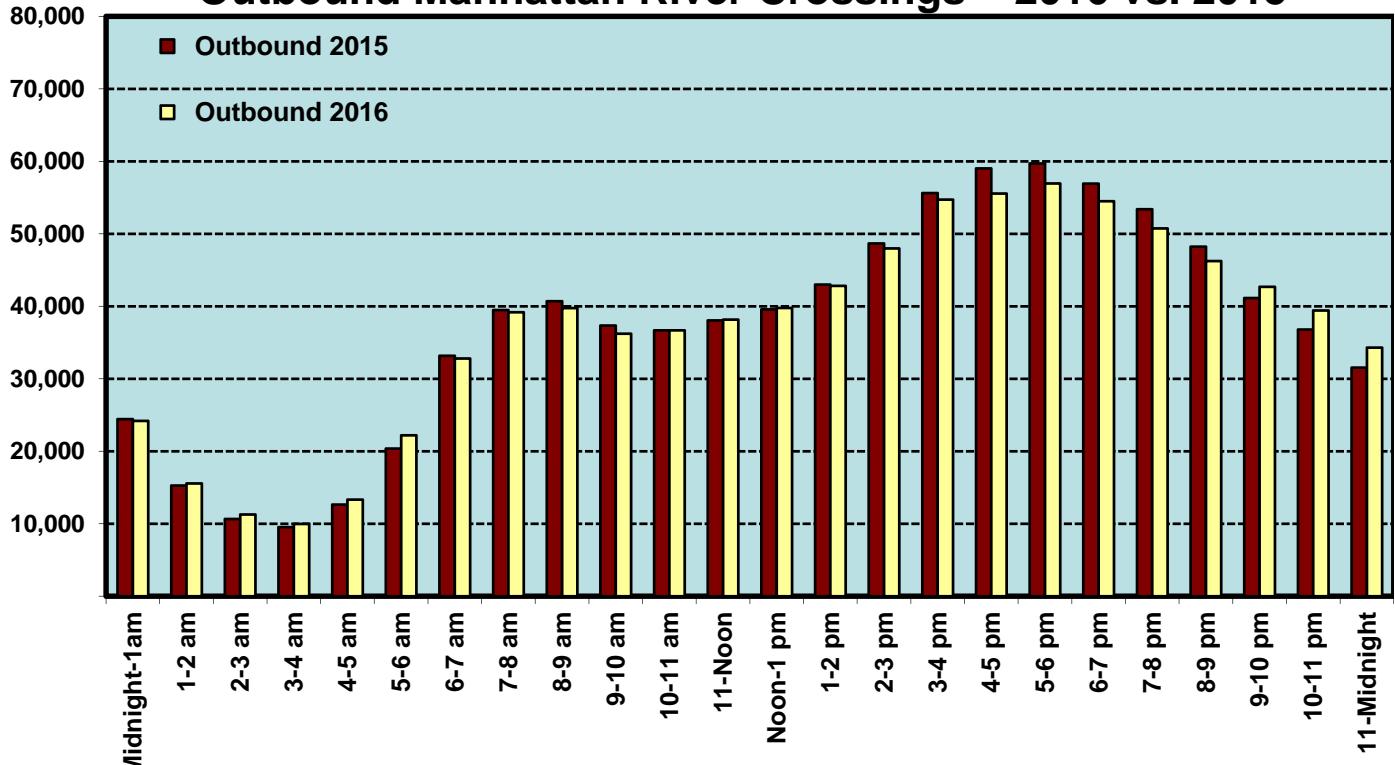
	Inbound			Outbound		
	2015	2016	Percent Change	2015	2016	Percent Change
Mid-1	15,370	16,114	4.8 %	24,432	24,193	- 1.0 %
1-2 am	10,127	10,605	4.7 %	15,268	15,554	1.9 %
2-3 am	8,200	8,443	3.0 %	10,642	11,261	5.8 %
3-4 am	9,081	9,457	4.1 %	9,522	9,966	4.7 %
4-5 am	15,142	15,931	5.2 %	12,644	13,321	5.4 %
5-6 am	35,552	37,907	6.6 %	20,356	22,205	9.1 %
6-7 am	60,062	60,888	1.4 %	33,168	32,787	- 1.1 %
7-8 am	61,748	60,622	- 1.8 %	39,483	39,161	- 0.8 %
8-9 am	57,317	55,181	- 3.7 %	40,696	39,735	- 2.4 %
9-10 am	52,768	50,642	- 4.0 %	37,339	36,215	- 3.0 %
10-11 a	46,728	46,369	- 0.8 %	36,666	36,678	0.0 %
11-Noon	44,061	42,776	- 2.9 %	38,043	38,163	0.3 %
Noon-1	41,990	42,020	0.1 %	39,571	39,757	0.5 %
1-2 pm	43,496	42,445	- 2.4 %	42,990	42,806	- 0.4 %
2-3 pm	46,453	45,185	- 2.7 %	48,670	47,969	- 1.4 %
3-4 pm	47,884	47,289	- 1.2 %	55,615	54,720	- 1.6 %
4-5 pm	48,189	47,341	- 1.8 %	59,014	55,553	- 5.9 %
5-6 pm	48,887	47,318	- 3.2 %	59,705	56,933	- 4.6 %
6-7 pm	47,374	46,766	- 1.3 %	56,919	54,487	- 4.3 %
7-8 pm	41,968	42,545	1.4 %	53,376	50,729	- 5.0 %
8-9 pm	35,711	36,975	3.5 %	48,219	46,240	- 4.1 %
9-10 pm	32,692	33,798	3.4 %	41,140	42,679	3.7 %
10-11 p	29,931	30,414	1.6 %	36,794	39,407	7.1 %
11-Mid	23,256	24,031	3.3 %	31,531	34,294	8.8 %
Totals	903,987	901,062	- 0.3 %	891,803	884,813	- 0.8 %
1-4am	27,408	28,505	4.0 %	35,432	36,781	3.8 %
4-7am	110,756	114,726	3.6 %	66,168	68,313	3.2 %
7-10am	171,833	166,445	- 3.1 %	117,518	115,111	- 2.0 %
10am-1pm	132,779	131,165	- 1.2 %	114,280	114,598	0.3 %
1-4pm	137,833	134,919	- 2.1 %	147,275	145,495	- 1.2 %
4-7pm	144,450	141,425	- 2.1 %	175,638	166,973	- 4.9 %
7-10pm	110,371	113,318	2.7 %	142,735	139,648	- 2.2 %
10pm-1am	68,557	70,559	2.9 %	92,757	97,894	5.5 %
7am-7pm	586,895	573,954	- 2.2 %	554,711	542,177	- 2.3 %
6-10am	231,895	227,333	- 2.0 %	150,686	147,898	- 1.9 %
3-7pm	192,334	188,714	- 1.9 %	231,253	221,693	- 4.1 %
6am-7pm	646,957	634,842	- 1.9 %	587,879	574,964	- 2.2 %

Hourly Vehicle Volumes

Inbound Manhattan River Crossings ~ 2016 vs. 2015



Outbound Manhattan River Crossings ~ 2016 vs. 2015



Weekday Manhattan Crossings 2015-2016 Traffic Volume Trends Both Directions

EAST RIVER BRIDGES	Highway Functional Classification	2015	2016	Percent Change
Brooklyn Bridge	Principal Arterial	102,219	105,679	3.4 %
Ed Koch Queensboro Bridge *	Principal Arterial	174,447	170,277	- 2.4 %
Manhattan Bridge	Principal Arterial	87,046	85,084	- 2.3 %
Williamsburg Bridge	Principal Arterial	105,206	105,645	0.4 %
Total, 4 East River Bridges		468,918	466,685	- 0.5 %

HARLEM RIVER BRIDGES

Alexander Hamilton Bridge	Interstate	178,407	177,853	- 0.3 %
Broadway Bridge	Principal Arterial	33,897	36,027	6.3 %
Macombs Dam Bridge	Principal Arterial	38,556	38,183	- 1.0 %
Madison Avenue Bridge	Principal Arterial	40,432	44,338	9.7 %
Third Avenue Bridge	Principal Arterial	55,988	55,096	- 1.6 %
University Heights Bridge	Principal Arterial	38,513	40,078	4.1 %
Washington Bridge	Minor Arterial	54,006	57,647	6.7 %
Willis Avenue Bridge	Principal Arterial	63,912	62,293	- 2.5 %
145th Street Bridge	Minor Arterial	27,097	29,315	8.2 %
Total, 9 Harlem River Bridges		530,808	540,830	1.9 %

MTABT Manhattan Facilities

Henry Hudson Bridge	Principal Arterial	62,554	62,648	0.2 %
Hugh L. Carey Tunnel **	Interstate	57,299	54,076	- 5.6 %
Queens-Midtown Tunnel	Interstate	86,217	73,470	- 14.8 %
R.F.K. Memorial Bridge Manhattan Plaza ***	Principal Arterial	91,724	95,552	4.2 %
Total, 4 MTABT Manhattan Crossings		297,794	285,746	- 4.0 %

PANYNJ Manhattan Facilities

George Washington Bridge	Interstate	295,120	289,827	- 1.8 %
Holland Tunnel	Interstate	89,367	89,792	0.5 %
Lincoln Tunnel	Principal Arterial	113,783	112,995	- 0.7 %
Total, 3 PANYNJ Manhattan - New Jersey Crossings		498,270	492,614	- 1.1 %

GRAND TOTALS	1,795,790	1,785,875	- 0.6 %
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* Queensboro Bridge renamed April 11, 2011.

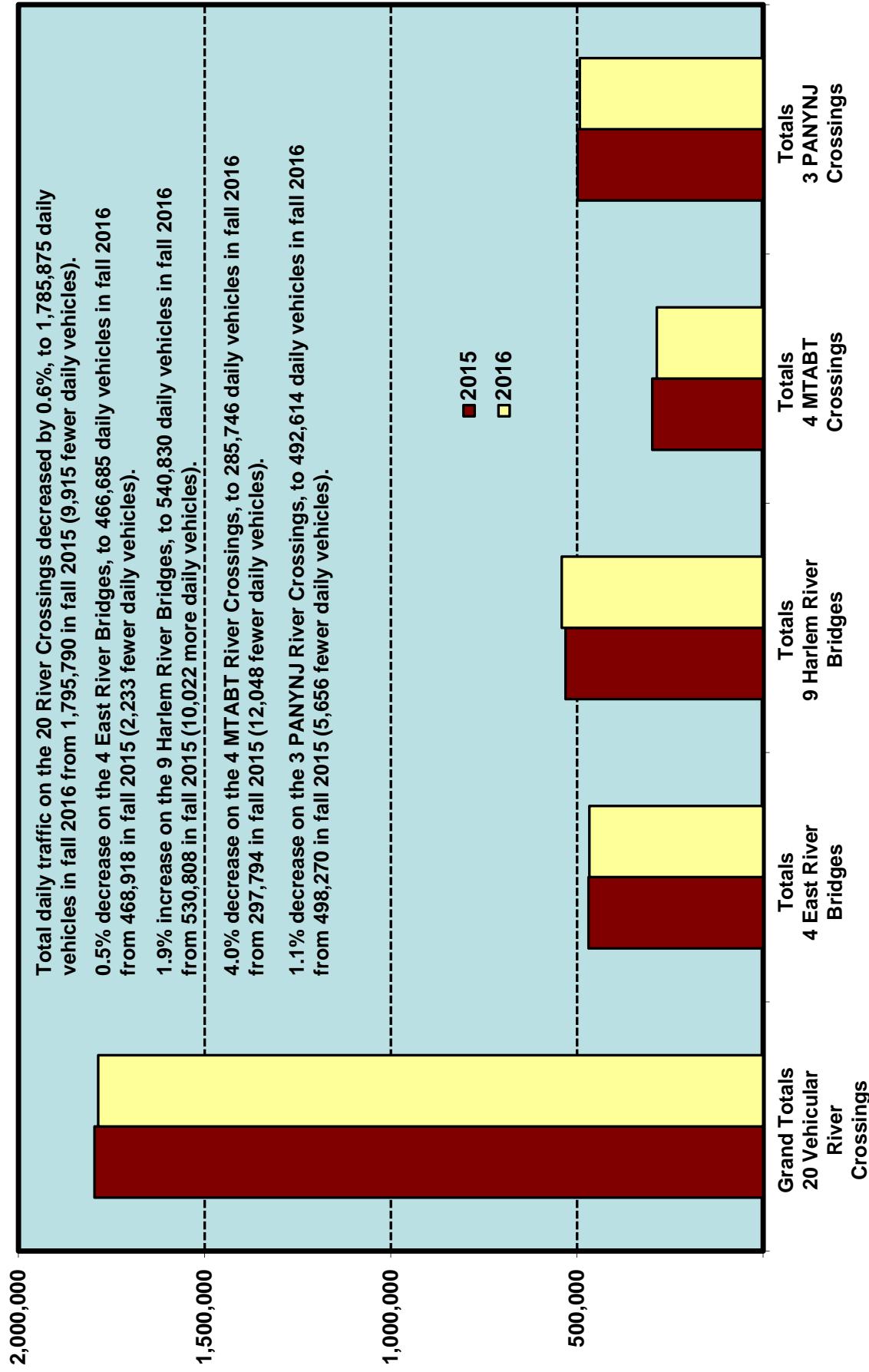
** Formerly Brooklyn-Battery Tunnel, renamed October 22, 2012.

*** Formerly Triborough Bridge, renamed November 19, 2008.

Manhattan River Crossings Daily Volumes

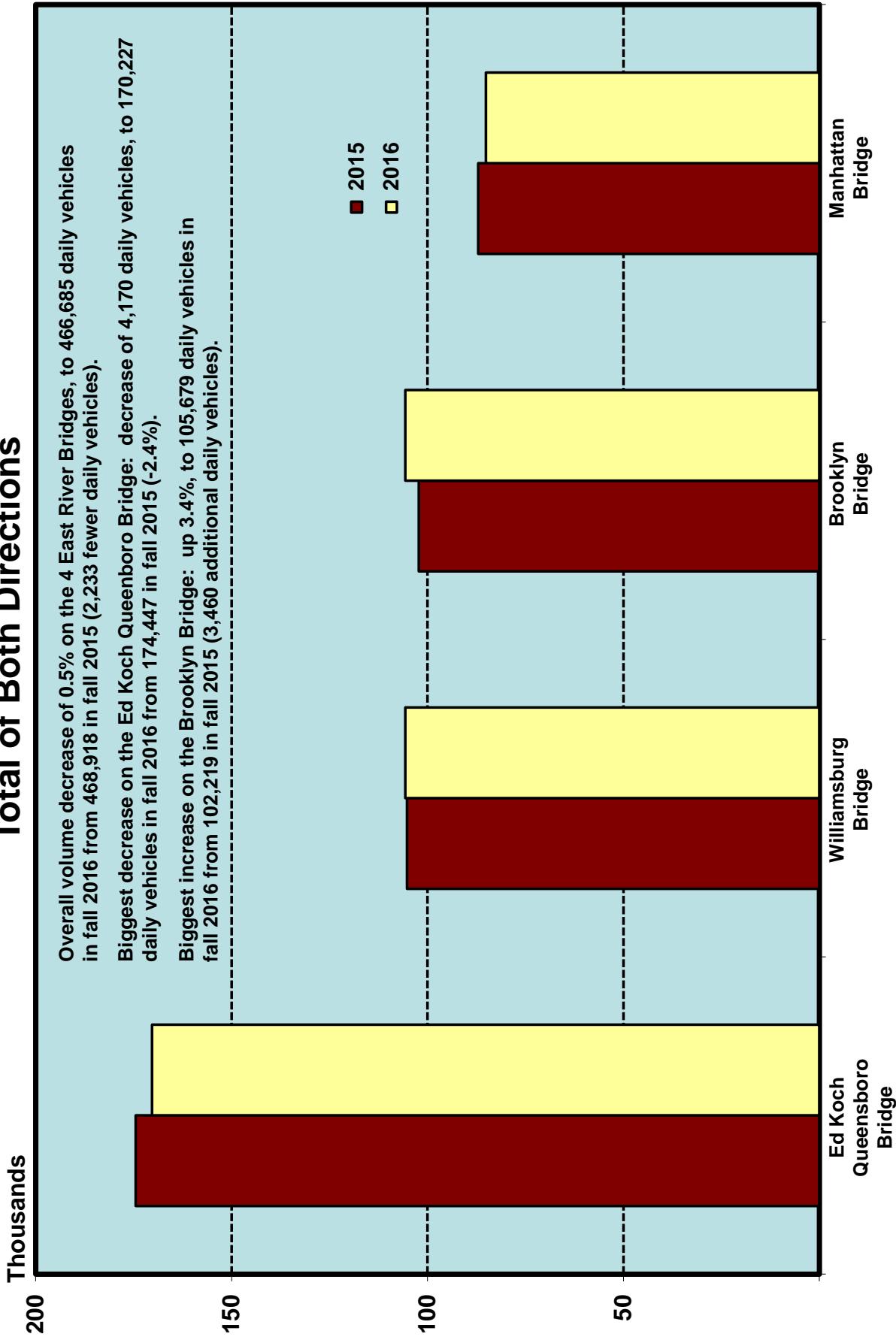
2016 vs. 2015

Total of Both Directions



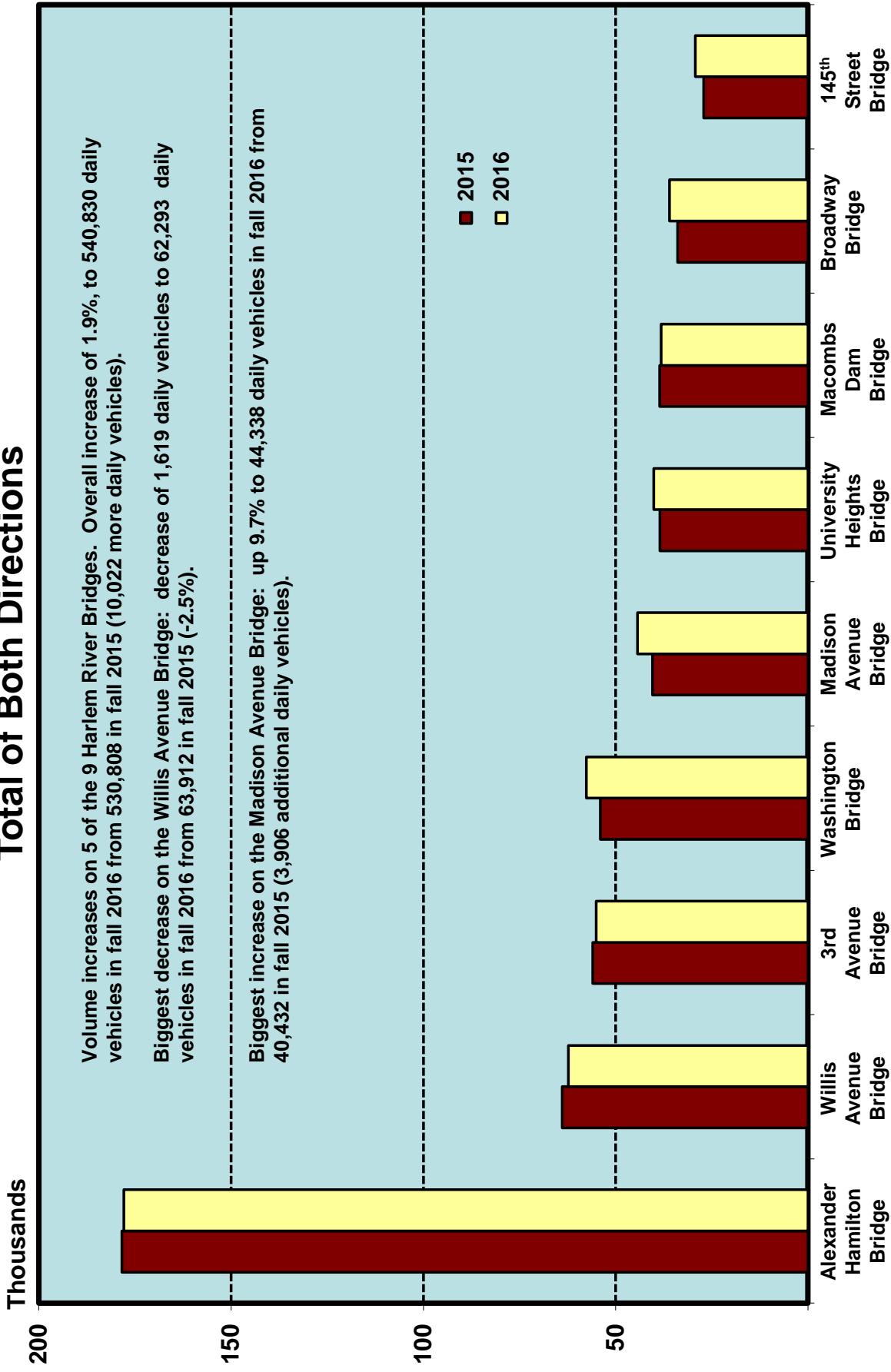
East River Bridges Daily Volumes 2016 vs. 2015

Total of Both Directions



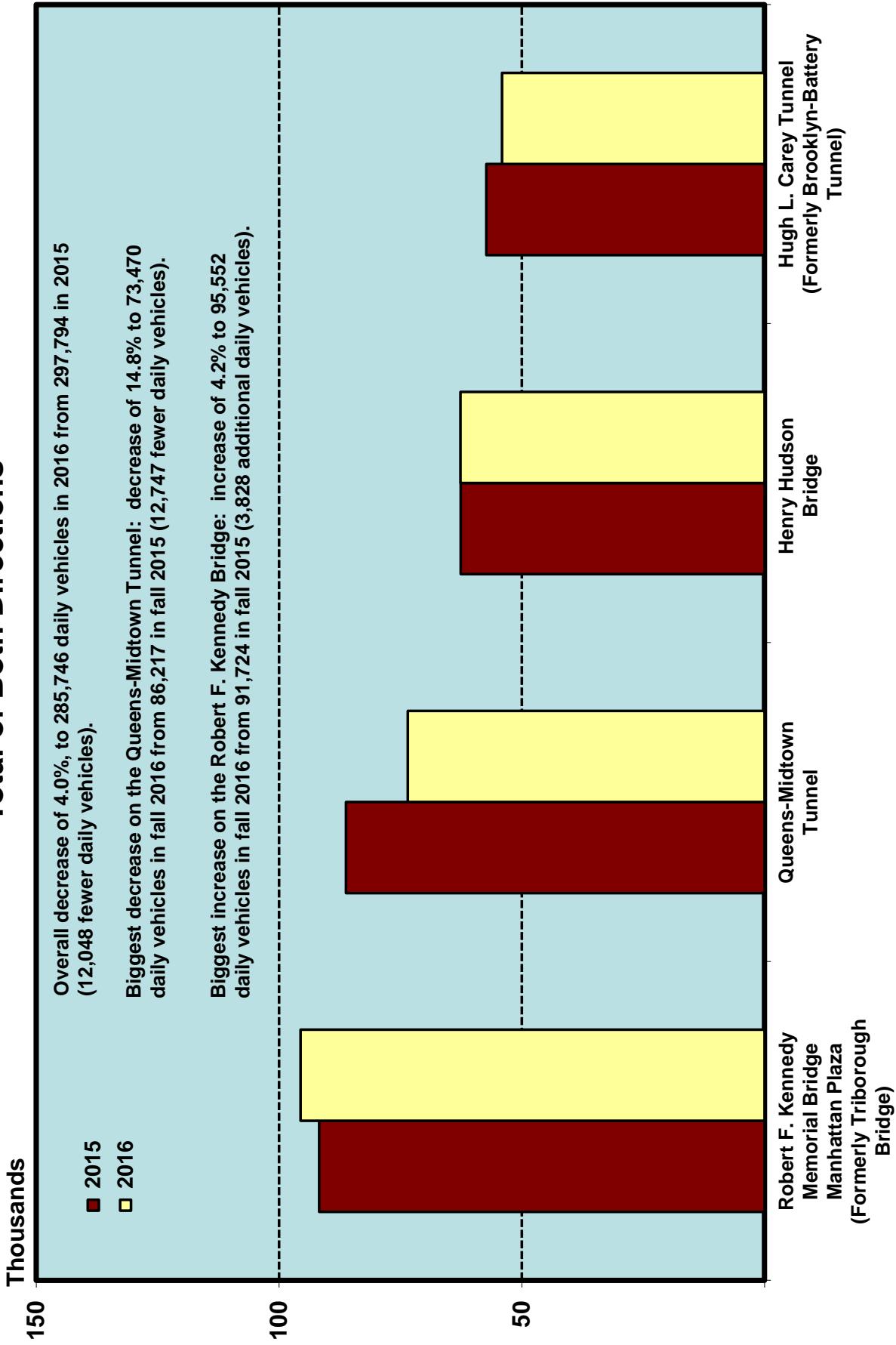
Harlem River Bridges Daily Volumes 2016 vs. 2015

Total of Both Directions



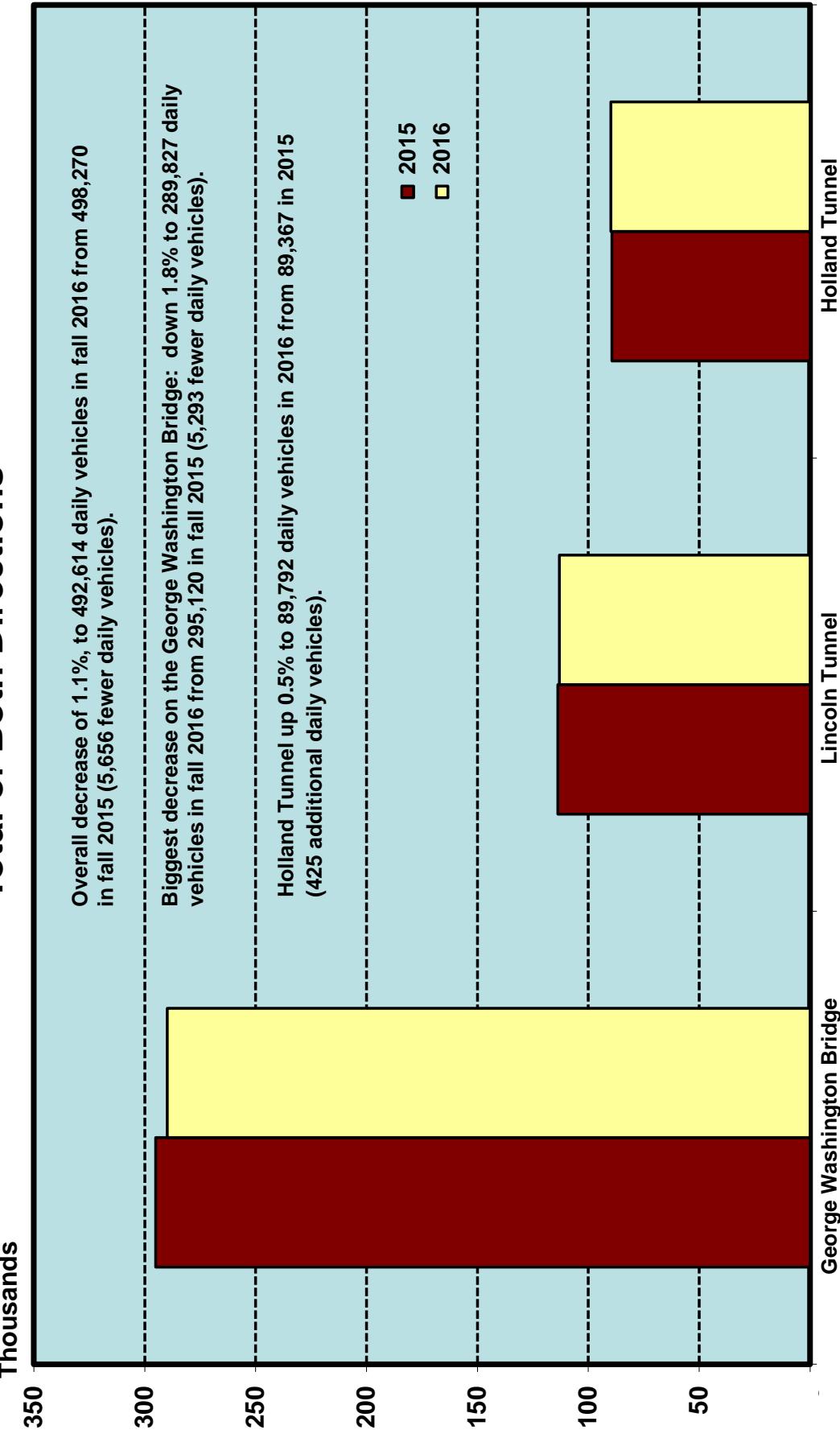
Metropolitan Transportation Authority Bridges & Tunnels (MTABT) Manhattan Facilities Daily Volumes 2016 vs. 2015

Total of Both Directions

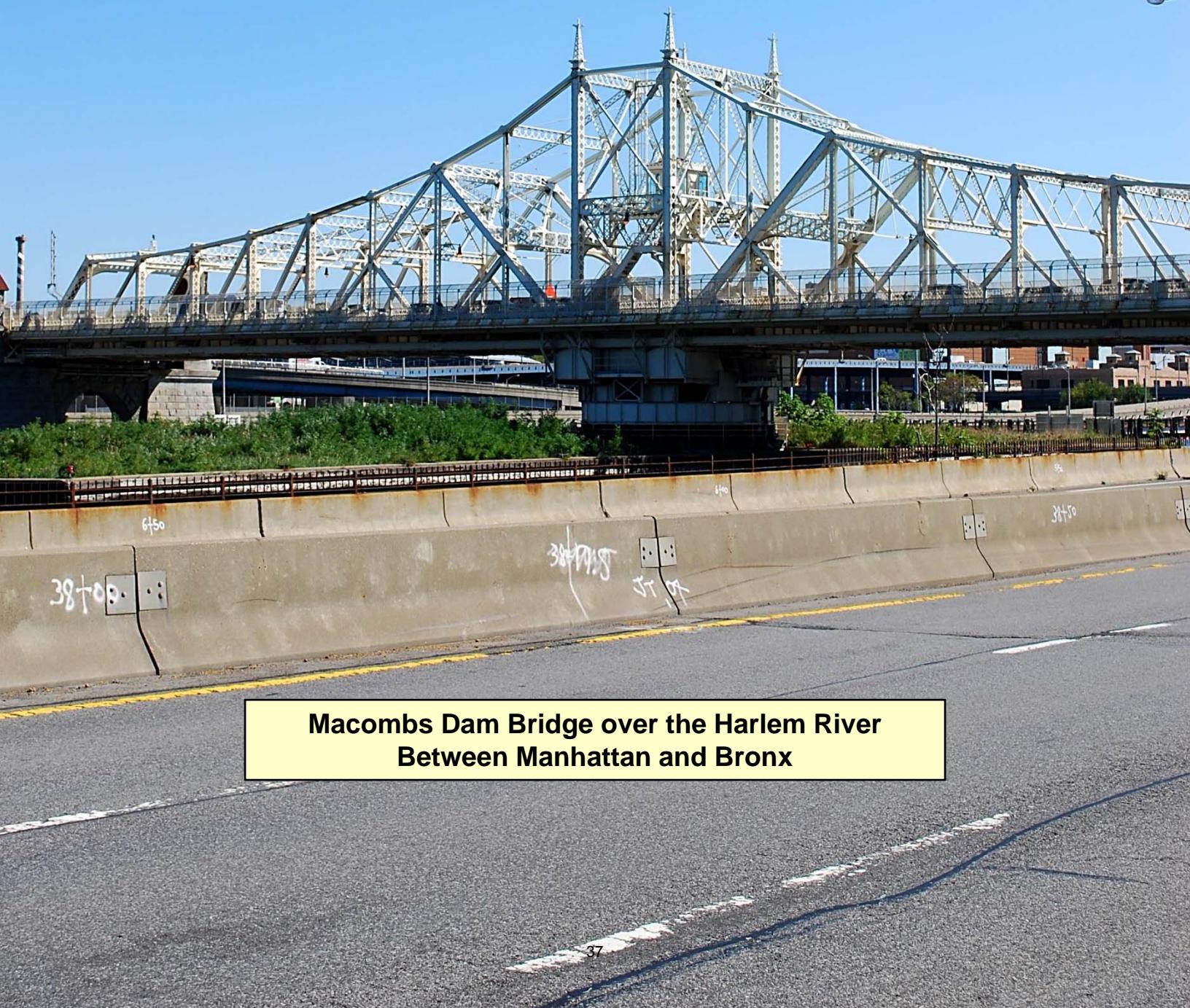


Port Authority of New York & New Jersey (PANYNJ)
Manhattan – N.J. Facilities Daily Volumes
2016 vs. 2015

Total of Both Directions



Ten-Year Trends 2006 – 2016



Ten-Year Trends: 2006 - 2016

- In the ten-year period from 2006 to 2016, Manhattan river crossings traffic volume decreased 6.4%, to 1,785,875 daily vehicles from 1,907,118, a decrease of 121,243 daily vehicles.
- Daily vehicle trips entering Manhattan decreased 5.7%, to 901,062 in 2016 from 955,662 in 2006 (54,600 fewer daily vehicles entering Manhattan).
 - Biggest percentage and numerical decrease in inbound trips during 7-10am: down 12.2% to 166,445 vehicles in 2016 from 189,617 in 2006 (23,172 fewer 7-10am entries).
 - Biggest percentage and numerical increase in inbound trips during 4-7am: increase of 5,641 vehicles, to 114,756 in 2016 from 109,085 in 2006 (+5.2%).
- Daily vehicle trips leaving Manhattan decreased 7.0%, to 884,813 in 2016 from 951,456 in 2006 (66,643 fewer daily vehicles leaving Manhattan).
 - Biggest percentage decrease in outbound trips during 1-4am: down 11.0% to 36,781 vehicles in 2016 from 41,304 in 2006 (4,523 fewer trips leaving Manhattan between 1-4am).
 - Biggest numerical decrease in outbound trips during 4pm-7pm: decrease of 18,689 vehicles to 166,973 in 2016 from 185,662 in 2006 (-10.1%).
- Vehicle trips on the 13 toll-free East and Harlem River bridges decreased 4.2%, to 1,007,515 daily vehicles in 2016 from 1,051,619 in 2006 (44,104 fewer daily vehicles).
 - Greatest numerical increase on the Manhattan Bridge: increase of 10,463 vehicles, to 85,084 in 2016 from 74,621 in 2006 (+14%).
 - Greatest percentage increase on the 145 Street Bridge: up 34.9% to 29,315 daily vehicles in 2016 from 21,733 in 2006 (7,582 additional daily vehicles).
 - Greatest percentage and numerical decrease on the Brooklyn Bridge over the East River: down 16.7%, to 105,679 daily vehicles in 2016 from 126,805 in 2006 (21,126 fewer daily vehicles).
- Traffic volumes on the four MTA Bridges and Tunnels (MTABT) river crossings serving Manhattan decreased 10.1%, to 285,746 daily vehicles in 2016 from 317,751 in 2006 (32,005 more daily vehicles).
 - Biggest volume and percentage decrease at the Queens-Midtown Tunnel: down 18.3% to 73,470 daily vehicles in 2016 from 89,972 in 2006 (16,502 fewer daily vehicles).
- Traffic volumes on the three trans-Hudson Port Authority of New York and New Jersey (PANYNJ) river crossings serving Manhattan decreased 8.4%, to 492,614 daily vehicles in 2016 from 537,748 in 2006 (45,134 fewer daily vehicles).
 - Decreases on all three PANYNJ trans-Hudson crossings.
 - Greatest numerical decrease on the George Washington Bridge: decrease of 22,251 daily vehicles, to 289,827 in 2016 from 312,078 in 2006.
 - Greatest percentage decrease on the Lincoln Tunnel: down 11.2% to 112,995 vehicles in 2016 from 127,245 vehicles in 2006.
- New York City motor vehicle registrations increased 17.9% to 2,162,349 in 2016 from 1,833,370 in 2006. Manhattan registrations increased 3.7% to 256,017 from 246,956.

- Annual citywide subway ridership increased 17.2% to 1,756,814,800 passengers in 2016 from 1,498,600,000 in 2006.

Weekday Manhattan Crossings
10-Year Traffic Volume Trends ~ 2006-2016
Both Directions

EAST RIVER BRIDGES	Highway Functional Classification	2006	2016	Percent Change
Brooklyn Bridge	Principal Arterial	126,805	105,679	- 16.7 %
Ed Koch Queensboro Bridge *	Principal Arterial	186,110	170,277	- 8.5 %
Manhattan Bridge	Principal Arterial	74,621	85,084	14.0 %
Williamsburg Bridge	Principal Arterial	107,040	105,645	- 1.3 %
Total, 4 East River Bridges		494,576	466,685	- 5.6 %

HARLEM RIVER BRIDGES

Alexander Hamilton Bridge	Interstate	190,183	177,853	- 6.5 %
Broadway Bridge	Principal Arterial	33,551	36,027	7.4 %
Macombs Dam Bridge	Principal Arterial	39,878	38,183	- 4.3 %
Madison Avenue Bridge	Principal Arterial	43,805	44,338	1.2 %
Third Avenue Bridge	Principal Arterial	61,874	55,096	- 11.0 %
University Heights Bridge	Principal Arterial	42,118	40,078	- 4.8 %
Washington Bridge	Minor Arterial	57,689	57,647	- 0.1 %
Willis Avenue Bridge	Principal Arterial	66,212	62,293	- 5.9 %
145th Street Bridge	Minor Arterial	21,733	29,315	34.9 %
Total, 9 Harlem River Bridges		557,043	540,830	- 2.9 %

MTABT Manhattan Facilities

Henry Hudson Bridge	Principal Arterial	71,761	62,648	- 12.7 %
Hugh L. Carey Tunnel **	Interstate	57,436	54,076	- 5.8 %
Queens-Midtown Tunnel	Interstate	89,972	73,470	- 18.3 %
R.F.K. Memorial Bridge Manhattan Plaza ***	Principal Arterial	98,582	95,552	- 3.1 %
Total, 4 MTABT Manhattan Crossings		317,751	285,746	- 10.1 %

PANYNJ Manhattan Facilities

George Washington Bridge	Interstate	312,078	289,827	- 7.1 %
Holland Tunnel	Interstate	98,425	89,792	- 8.8 %
Lincoln Tunnel	Principal Arterial	127,245	112,995	- 11.2 %
Total, 3 PANYNJ Manhattan - New Jersey Crossings		537,748	492,614	- 8.4 %

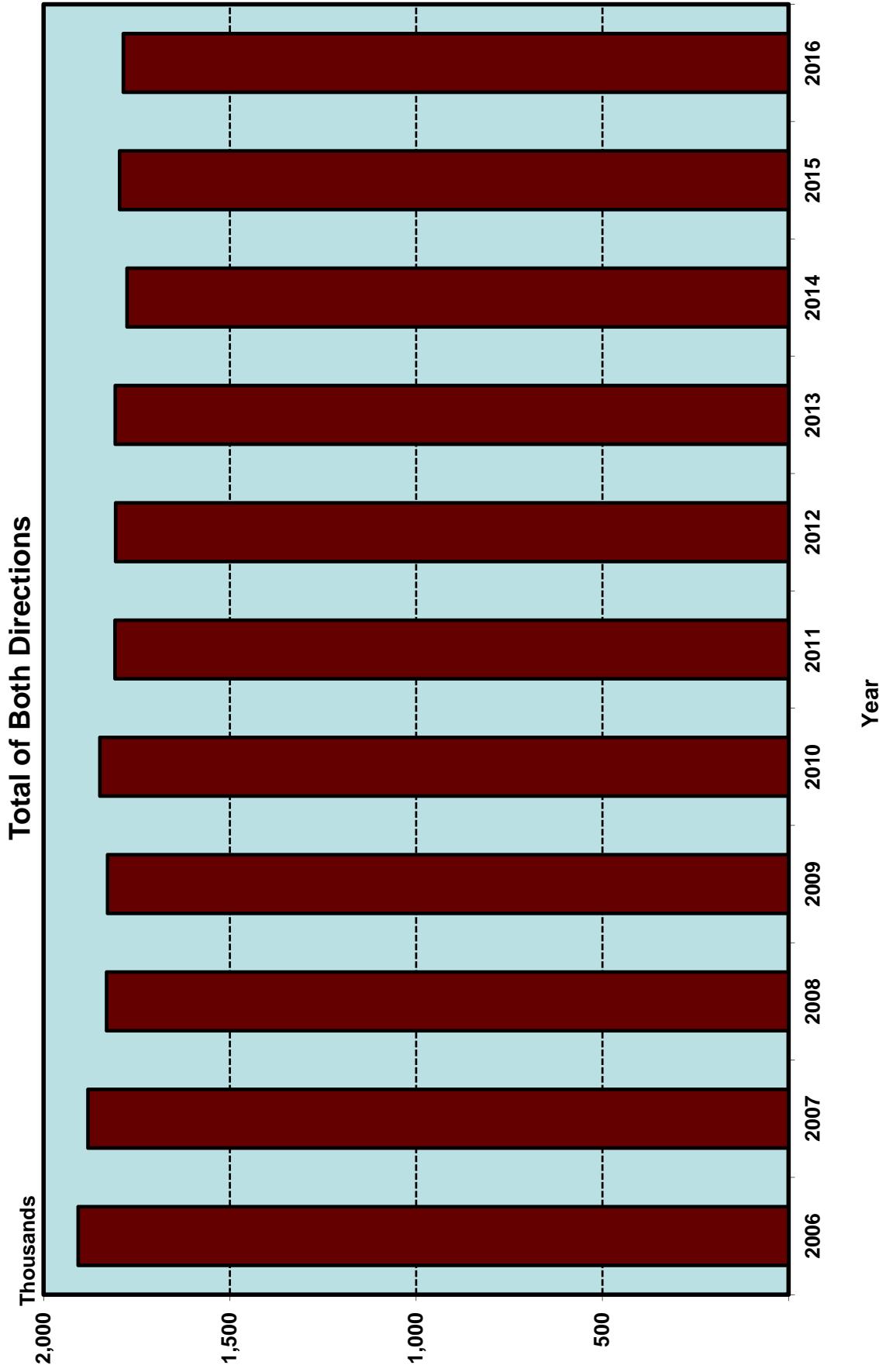
GRAND TOTALS	1,907,118	1,785,875	- 6.4 %
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* Queensboro Bridge renamed April 11, 2011.

** Formerly Brooklyn-Battery Tunnel, renamed October 22, 2012.

*** Formerly Triborough Bridge, renamed November 19, 2008.

Daily Manhattan River Crossings 2006 - 2016



Manhattan River Crossings

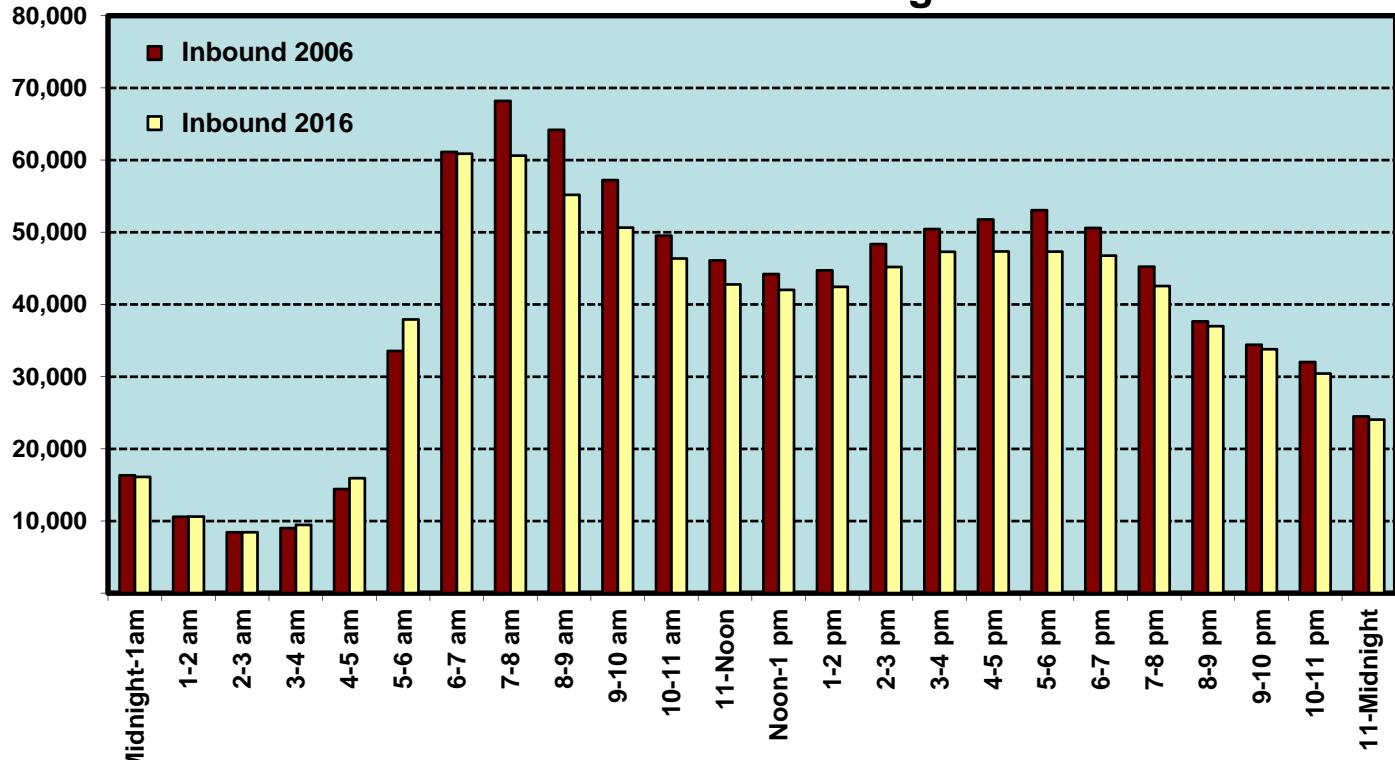
Hourly Vehicular Volumes

2006 vs 2016

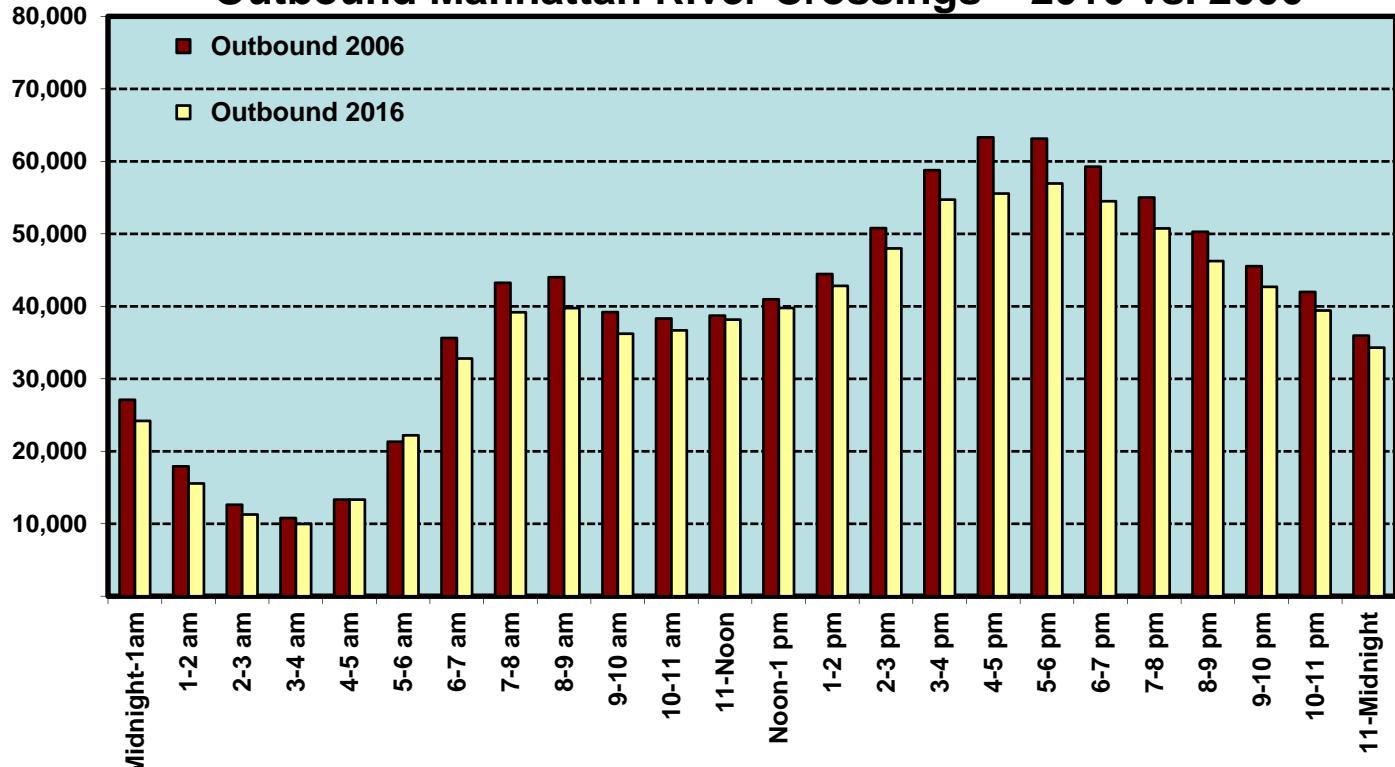
	Inbound			Outbound		
	2006	2016	Percent Change	2006	2016	Percent Change
Mid-1	16,324	16,114	- 1.3 %	27,096	24,193	-10.7 %
1-2 am	10,588	10,605	0.2 %	17,911	15,554	-13.2 %
2-3 am	8,443	8,443	0.0 %	12,609	11,261	-10.7 %
3-4 am	9,014	9,457	4.9 %	10,784	9,966	- 7.6 %
4-5 am	14,408	15,931	10.6 %	13,328	13,321	- 0.1 %
5-6 am	33,547	37,907	13.0 %	21,317	22,205	4.2 %
6-7 am	61,130	60,888	- 0.4 %	35,615	32,787	- 7.9 %
7-8 am	68,198	60,622	-11.1 %	43,227	39,161	- 9.4 %
8-9 am	64,188	55,181	-14.0 %	44,008	39,735	- 9.7 %
9-10 am	57,231	50,642	-11.5 %	39,189	36,215	- 7.6 %
10-11 a	49,527	46,369	- 6.4 %	38,318	36,678	- 4.3 %
11-Noon	46,099	42,776	- 7.2 %	38,714	38,163	- 1.4 %
Noon-1	44,220	42,020	- 5.0 %	40,968	39,757	- 3.0 %
1-2 pm	44,721	42,445	- 5.1 %	44,445	42,806	- 3.7 %
2-3 pm	48,353	45,185	- 6.6 %	50,787	47,969	- 5.5 %
3-4 pm	50,444	47,289	- 6.3 %	58,761	54,720	- 6.9 %
4-5 pm	51,772	47,341	- 8.6 %	63,294	55,553	-12.2 %
5-6 pm	53,050	47,318	-10.8 %	63,113	56,933	- 9.8 %
6-7 pm	50,597	46,766	- 7.6 %	59,255	54,487	- 8.0 %
7-8 pm	45,237	42,545	- 6.0 %	54,997	50,729	- 7.8 %
8-9 pm	37,660	36,975	- 1.8 %	50,276	46,240	- 8.0 %
9-10 pm	34,404	33,798	- 1.8 %	45,518	42,679	- 6.2 %
10-11 p	32,024	30,414	- 5.0 %	41,978	39,407	- 6.1 %
11-Mid	24,483	24,031	- 1.8 %	35,948	34,294	- 4.6 %
Totals	955,662	901,062	- 5.7 %	951,456	884,813	- 7.0 %
1-4am	28,045	28,505	1.6 %	41,304	36,781	-11.0 %
4-7am	109,085	114,726	5.2 %	70,260	68,313	- 2.8 %
7-10am	189,617	166,445	-12.2 %	126,424	115,111	- 8.9 %
10am-1pm	139,846	131,165	- 6.2 %	118,000	114,598	- 2.9 %
1-4pm	143,518	134,919	- 6.0 %	153,993	145,495	- 5.5 %
4-7pm	155,419	141,425	- 9.0 %	185,662	166,973	-10.1 %
7-10pm	117,301	113,318	- 3.4 %	150,791	139,648	- 7.4 %
10pm-1am	72,831	70,559	- 3.1 %	105,022	97,894	- 6.8 %
7am-7pm	628,400	573,954	- 8.7 %	584,079	542,177	- 7.2 %
6-10am	250,747	227,333	- 9.3 %	162,039	147,898	- 8.7 %
3-7pm	205,863	188,714	- 8.3 %	244,423	221,693	- 9.3 %
6am-7pm	689,530	634,842	- 7.9 %	619,694	574,964	- 7.2 %

Hourly Vehicle Volumes

Inbound Manhattan River Crossings ~ 2016 vs. 2006

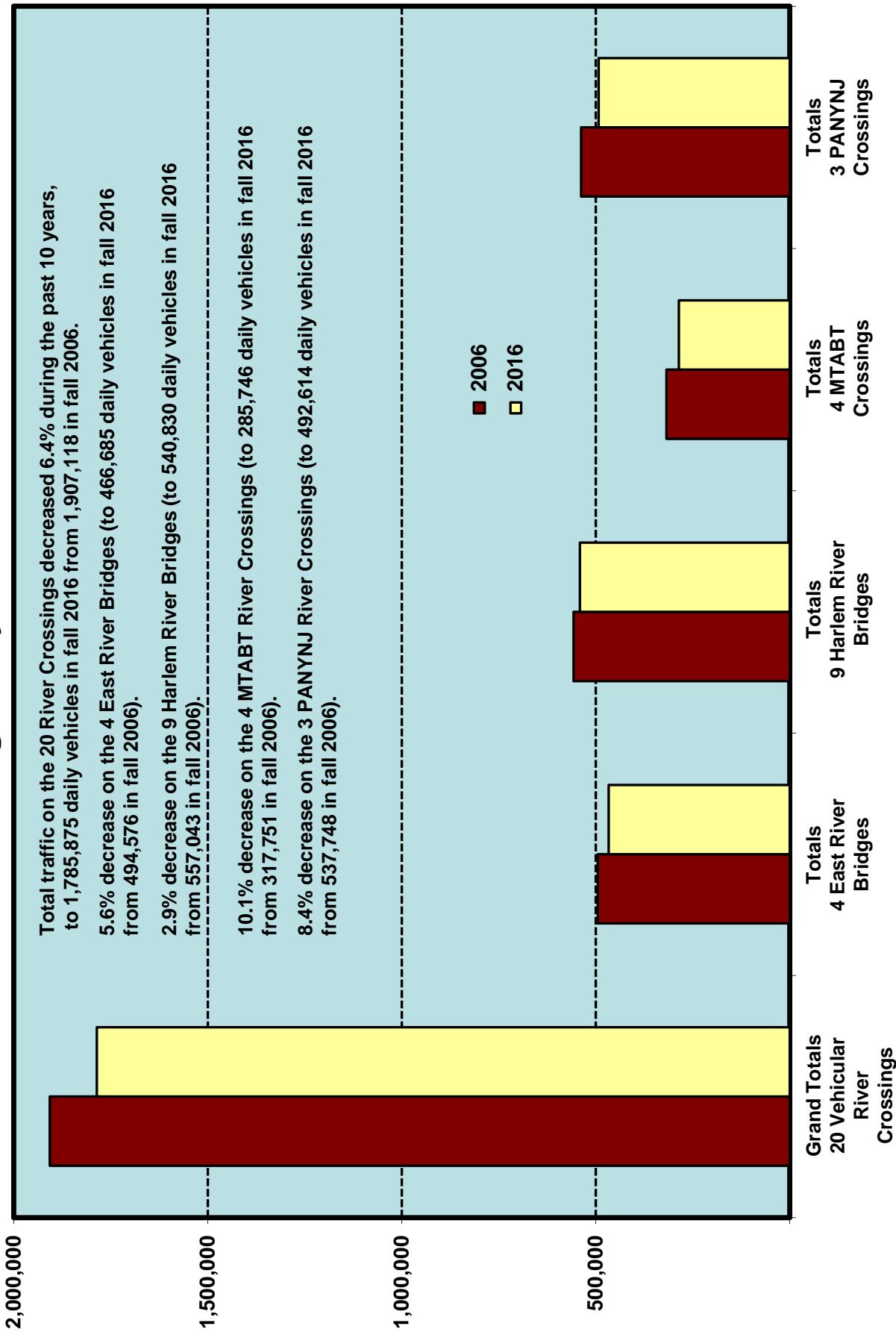


Outbound Manhattan River Crossings ~ 2016 vs. 2006



10-Year Volume Changes ~ 2006 vs. 2016

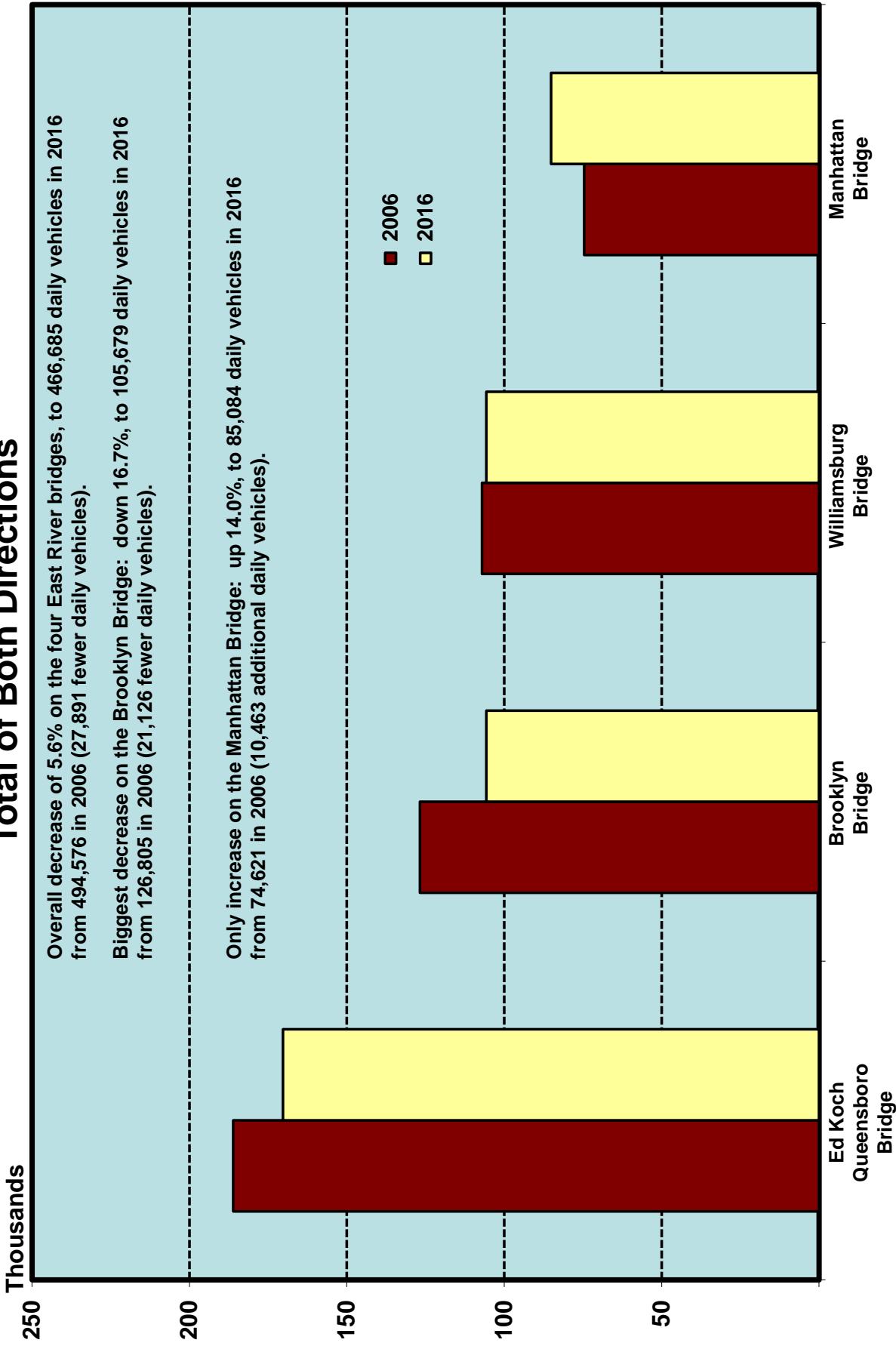
Manhattan River Crossings Daily Volumes ~ Total of Both Directions



10-Year Volume Changes ~ 2006 – 2016

East River Bridges Daily Volumes

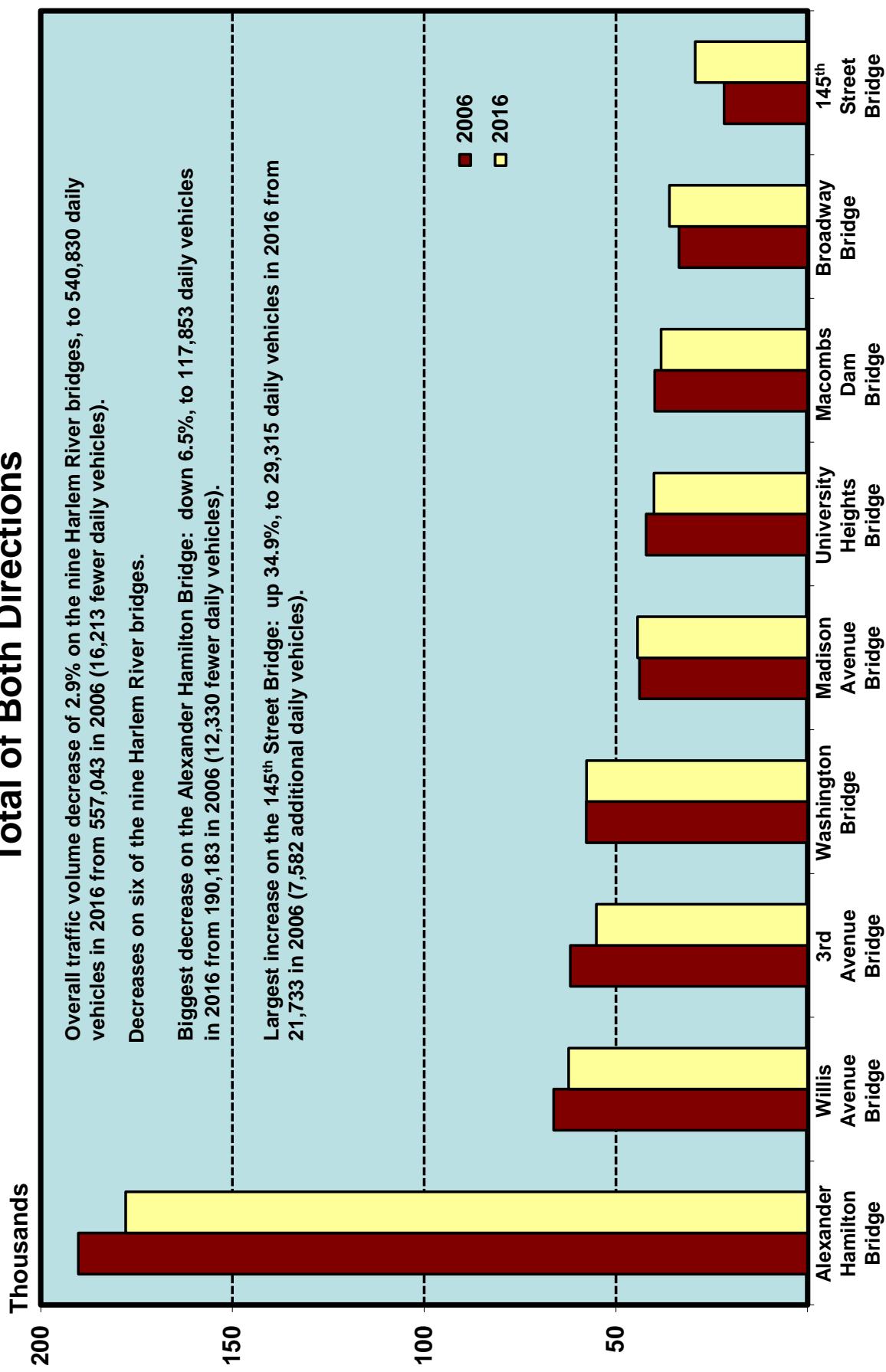
Total of Both Directions



10-Year Volume Changes ~ 2006 – 2016

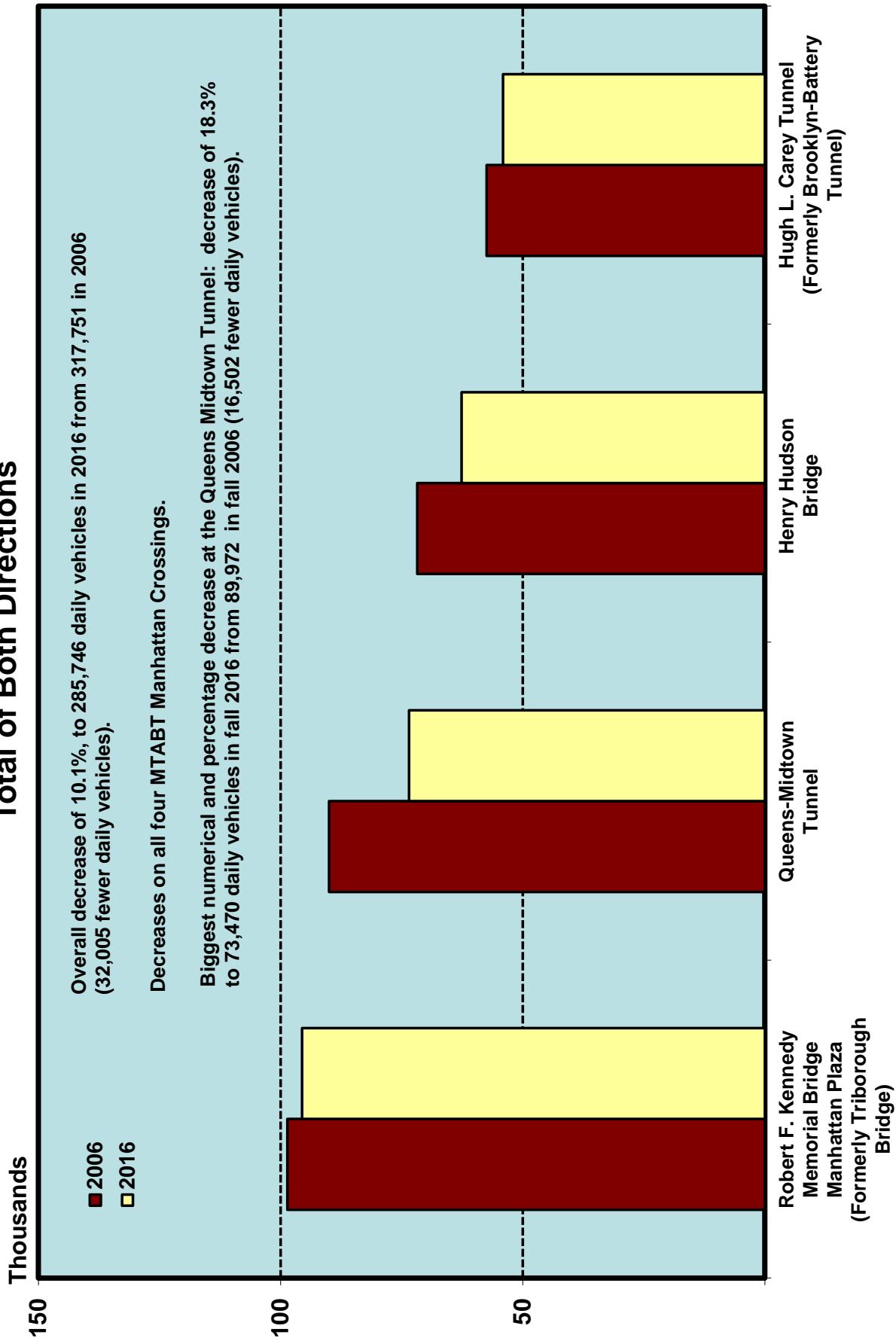
Harlem River Bridges Daily Volumes

Total of Both Directions



10-Year Volume Changes ~ 2006 – 2016

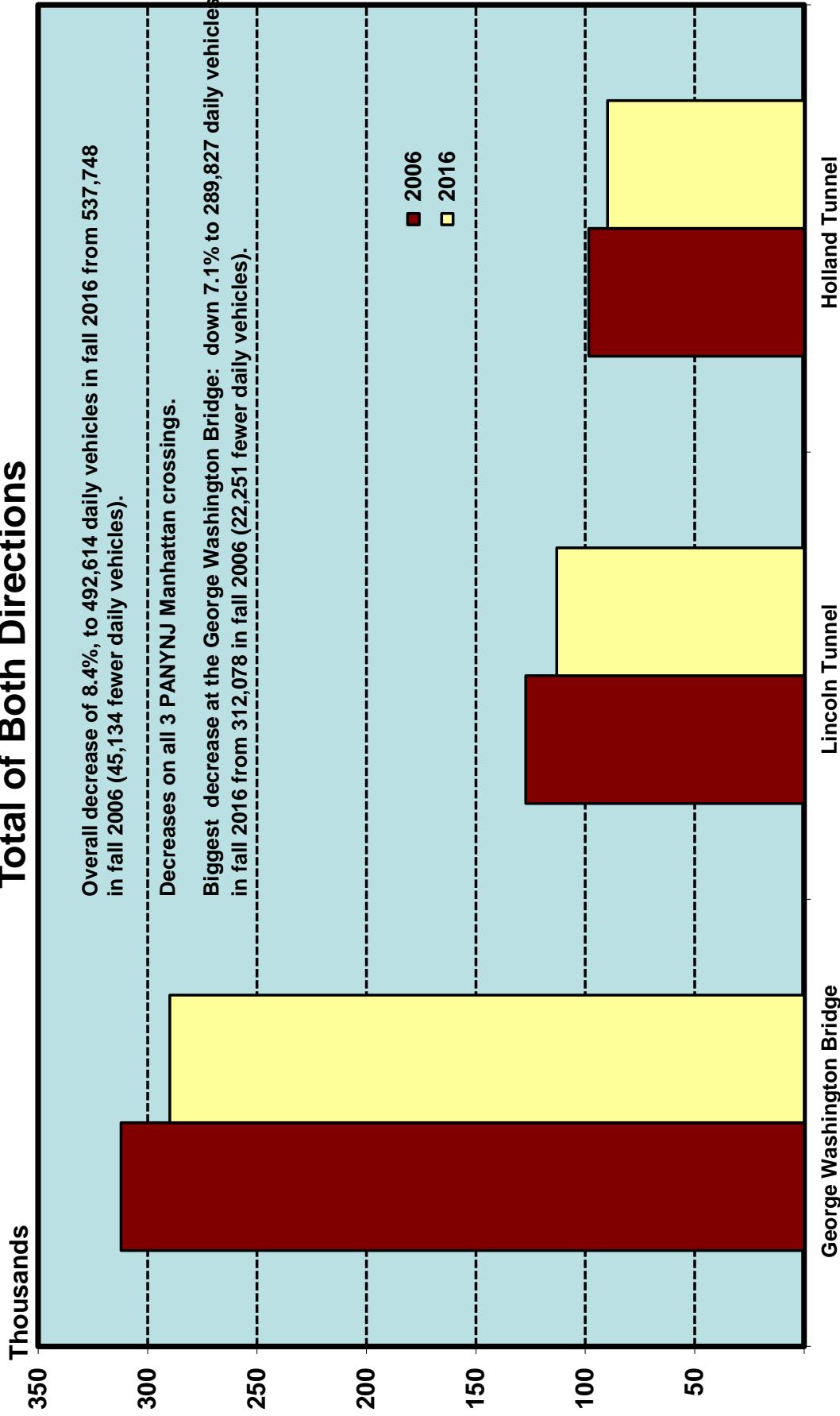
Metropolitan Transportation Authority Bridges & Tunnels (MTABT) Manhattan Facilities Daily Volumes Total of Both Directions



10-Year Volume Changes ~ 2006 – 2016

Port Authority of New York & New Jersey (PANYNJ) Manhattan – N.J. Facilities Daily Volumes

Total of Both Directions



New York City Motor Vehicle Registrations

2006-2016



Historic Trends



**Madison Avenue Bridge over the Harlem River
between Manhattan and Bronx**

Total Manhattan Crossings
Average Daily Traffic Volumes
1948 - 2016

Year	East River Bridges	Harlem River Bridges	M.T.A.B.T. Facilities	P.A.N.Y.N.J. Facilities	Totals
1948	254,068	207,177	92,977	115,785	670,007
1949	260,933	193,510	110,071	129,943	694,457
1950	240,227	222,671	161,856	146,653	771,407
1951	269,352	249,199	180,272	166,150	864,973
1952	261,704	222,196	194,327	181,253	859,480
1953	292,726	248,629	200,535	194,577	936,467
1954	297,903	236,056	204,616	202,394	940,969
1955	293,633	250,239	216,835	211,926	972,633
1956	297,866	266,781	231,535	213,088	1,009,270
1957	297,028	316,530	236,343	218,623	1,068,524
1958	304,470	329,747	232,413	221,494	1,088,124
1959	312,431	342,349	231,501	237,021	1,123,302
1960	322,660	345,199	230,768	239,620	1,138,247
1961	316,813	333,463	227,241	236,833	1,114,350
1962	318,170	313,230	233,010	250,646	1,115,056
1963	333,880	309,090	225,100	265,603	1,133,673
1964	341,030	407,680	236,513	285,824	1,271,047
1965	353,518	401,259	240,949	293,339	1,289,065
1966	355,745	402,487	243,107	303,981	1,305,320
1967	352,936	427,744	244,038	308,153	1,332,871
1968	357,232	362,095	247,924	320,292	1,287,543
1969	379,416	412,992	254,863	329,123	1,376,394
1970	371,743	429,690	271,063	347,838	1,420,334
1971	364,070	432,195	286,692	362,063	1,445,020
1972	390,292	422,364	252,871	378,620	1,444,147
1973	394,290	449,670	251,593	397,203	1,492,756
1974	394,631	439,112	242,846	376,547	1,453,136
1975	404,379	440,354	214,120	374,707	1,433,560
1976	398,248	429,629	217,207	381,250	1,426,334
1977	398,140	442,200	229,766	385,013	1,455,119
1978	400,146	450,758	241,125	399,512	1,491,541
1979	382,028	427,816	251,544	393,724	1,455,112
1980	392,460	446,292	255,858	404,734	1,499,344
1981	395,125	448,323	269,854	427,381	1,540,683
1982	414,984	470,785	253,499	433,744	1,573,012
1983	413,152	491,153	263,510	441,164	1,608,979
1984	428,541	496,949	262,985	453,775	1,642,250
1985	476,032	538,263	275,858	468,452	1,758,605
1986	469,711	546,896	274,693	485,751	1,777,051
1987	460,092	530,228	289,642	486,639	1,766,601
1988	460,858	520,282	293,550	490,179	1,764,869
1989	461,102	539,381	275,358	487,693	1,763,534
1990	448,713	539,563	289,066	482,243	1,759,585
1991	447,969	533,368	295,265	467,501	1,744,103
1992	443,145	537,353	300,203	476,872	1,757,573
1993	431,874	542,306	282,159	473,069	1,729,408
1994	448,263	526,044	263,351	473,799	1,711,457
1995	464,903	521,882	293,574	482,098	1,762,457
1996	463,482	530,950	281,116	493,194	1,768,742
1997	511,410	546,750	283,686	504,788	1,846,634
1998	523,690	560,062	293,990	522,512	1,900,254
1999	516,507	563,182	303,966	549,352	1,933,007
2000	514,767	578,770	313,504	548,465	1,955,506
2001	427,321	568,759	257,937	458,944	1,712,961
2002	467,080	551,831	305,300	532,839	1,857,050
2003	493,418	549,510	307,034	547,449	1,897,411
2004	507,589	552,421	312,159	536,396	1,908,565
2005	498,213	561,392	297,411	527,717	1,884,733
2006	494,576	557,043	317,751	537,748	1,907,118
2007	496,666	557,925	312,253	513,974	1,880,818
2008	477,211	539,434	305,993	508,269	1,830,907
2009	485,313	543,736	294,156	504,860	1,828,065
2010	487,301	549,574	305,297	506,546	1,848,718
2011	478,203	544,642	294,293	491,109	1,808,247
2012	480,259	547,207	296,626	482,557	1,806,649
2013	477,147	558,163	292,355	479,819	1,807,484
2014	469,907	537,888	290,406	477,812	1,776,013
2015	468,918	530,808	297,794	498,270	1,795,790
2016	466,685	540,830	285,746	492,614	1,785,875

HISTORIC TRENDS

In 1948, average daily traffic to and from Manhattan was 670,007 trips per day. By 1969 that figure had more than doubled, to 1,376,394 daily trips. In 2016, it stood at 1,785,875 daily trips, up 167% over the 1948 volume.

1948 – 1966

- Between 1948 and 1966, daily traffic to and from Manhattan increased 94.8%, to 1,305,320 daily river crossings in 1966 from 670,007 in 1948, an increase of 635,313 daily vehicles.
- Large increases in daily traffic occurred at the following facilities.
 - George Washington Bridge (Hudson River between Manhattan and New Jersey): up 295.5% to 167,304 daily vehicles in 1966 from 42,306 in 1948 (124,998 additional daily vehicles). The lower level was opened in 1962.
 - Lincoln Tunnel between Manhattan and New Jersey: up 162.9% to 81,118 daily vehicles in 1966 from 30,856 in 1948 (50,262 additional daily vehicles).
 - Queens-Midtown Tunnel (East River between Manhattan and Queens): up 164% to 69,850 daily vehicles from 26,462 (43,388 additional daily vehicles).
 - Robert F. Kennedy Memorial Bridge Manhattan Plaza (Harlem River between Manhattan and Bronx/Queens): up 170.3% to 71,540 daily vehicles from 26,465 (45,075 additional daily vehicles).
 - Brooklyn Bridge (East River between Manhattan and Brooklyn): up 140.8% to 89,124 daily vehicles from 37,011 (52,113 additional daily vehicles).
 - Ed Koch Queensboro Bridge between Manhattan and Queens: up 47.7% to 122,896 daily vehicles from 83,201 (39,695 additional daily vehicles).
 - Third Avenue Bridge (Harlem River between Manhattan and Bronx): up 125.9% to 70,938 daily vehicles from 31,403 (39,535 additional daily vehicles).
 - Williamsburg Bridge (East River between Manhattan and Brooklyn): up 69.8% to 80,032 daily vehicles from 47,139 (32,893 additional daily vehicles).
- The only significant decrease from 1948 to 1966 occurred on the Manhattan Bridge (East River between Manhattan and Brooklyn): down 27% to 63,693 daily vehicles in 1966 from 86,717 in 1948 (23,024 fewer daily vehicles).

1966 – 1976

- From 1966 to 1976, daily river crossings to and from Manhattan increased 9.3%, to 1,426,334 daily vehicles in 1976 from 1,305,320 in 1966, an increase of 121,014 daily vehicles.
- Major increases in daily traffic occurred at the following facilities.
 - Alexander Hamilton Bridge (Harlem River): up 31.2% to 137,141 daily vehicles in 1976 from 104,559 in 1966 (32,582 additional daily vehicles).
 - George Washington Bridge between Manhattan and New Jersey: up 28.6% to 215,136 daily vehicles in 1976 from 167,304 in 1966 (47,832 additional daily vehicles).
 - Brooklyn Bridge between Manhattan and Brooklyn: up 15.1% to 102,590 daily vehicles from 89,124 (13,466 additional daily vehicles).

- Ed Koch Queensboro Bridge between Manhattan and Queens: up 18.1% to 145,130 daily vehicles from 122,896 (22,234 additional daily vehicles).
- Lincoln Tunnel between Manhattan and New Jersey: up 25.1% to 101,451 daily vehicles from 81,118 (20,333 additional daily vehicles).
- Major decreases occurred at the following facilities.
 - Henry Hudson Bridge between Manhattan and Bronx: down 30.6% to 13,486 daily vehicles from 44,043 (13,486 fewer daily vehicles).
 - 3rd Avenue Bridge between Manhattan and Bronx: down 22.5% to 54,987 daily vehicles from 70,938 (15,981 fewer daily vehicles).

1976 – 1986

- From 1976 to 1986, daily river crossings to and from Manhattan increased 24.6%, to 1,777,051 daily vehicles in 1986 from 1,426,334 in 1976, an increase of 350,717 daily vehicles.
- The largest increases in daily traffic occurred at the following facilities.
 - George Washington Bridge between Manhattan and New Jersey: up 33.1% to 286,398 daily vehicles in 1986 from 215,136 in 1976 (71,262 additional daily vehicles).
 - Lincoln Tunnel between Manhattan and New Jersey: up 20.3% to 122,053 daily vehicles from 101,451 (20,602 additional daily vehicles).
 - Alexander Hamilton Bridge (Harlem River between Manhattan and Bronx): up 28.1% to 175,635 daily vehicles from 137,141 (38,494 additional daily vehicles).
 - Williamsburg Bridge between Manhattan and Brooklyn: up 30% to 107,181 daily vehicles from 82,471 (24,710 additional daily vehicles).
 - Robert F. Kennedy Memorial Bridge Manhattan Plaza between Manhattan and Bronx/Queens: up 36.7% to 93,432 daily vehicles from 68,325 (25,107 additional daily vehicles).
 - Brooklyn Bridge between Manhattan and Brooklyn: up 23.4% to 126,555 daily vehicles from 102,590 (23,965 additional daily vehicles).

1986 – 1996

- From 1986 to 1996, daily river crossings to and from Manhattan increased 0.5%, to 1,768,742 daily vehicles in 1996 from 1,777,051 in 1986, an increase of 8,309 daily vehicles.
- Large increases in daily traffic occurred at the following facilities.
 - Holland Tunnel between Manhattan and New Jersey: up 25.2% to 96,798 daily vehicles in 1996 from 77,300 in 1986 (19,498 additional daily vehicles).
 - Henry Hudson Bridge between Manhattan and Bronx: up 19.9% to 58,759 daily vehicles from 49,005 (9,754 additional daily vehicles).
 - Brooklyn Bridge between Manhattan and Brooklyn: up 4.2% to 131,872 daily vehicles from 126,555 (5,317 additional daily vehicles).
 - Broadway Bridge between Manhattan and the Bronx: up 23.9% to 40,040 daily vehicles from 32,314 (7,726 additional daily vehicles).

- The most significant decreases occurred at the following facilities.
 - Williamsburg Bridge between Manhattan and Brooklyn: down 17.4% to 88,570 daily vehicles in 1996 from 107,181 in 1986 (18,611 fewer daily vehicles).
 - Madison Avenue Bridge between Manhattan and Bronx: down 54.9% to 17,948 daily vehicles from 39,809 (21,861 fewer daily vehicles).
 - Macombs Dam Bridge between Manhattan and the Bronx: down 20.9% to 40,031 daily vehicles from 50,602 (10,571 fewer daily vehicles).
 - George Washington Bridge between Manhattan and New Jersey: down 3.8% to 275,469 daily vehicles from 286,398 (10,929 fewer daily vehicles).

1996 – 2006

- From 1996 to 2006, daily river crossings to and from Manhattan increased 7.7%, to 1,905,118 daily vehicles in 2006 from 1,768,742 in 1996, an increase of 136,376 daily vehicles.
- Large increases in daily traffic occurred at the following facilities.
 - George Washington Bridge between Manhattan and New Jersey: up 13.3% to 312,078 daily vehicles in 2006 from 275,469 in 1996 (36,609 additional daily vehicles).
 - Ed Koch Queensboro Bridge between Manhattan and Queens: up 14.9% to 186,110 daily vehicles from 161,965 (24,145 additional daily vehicles).
 - Madison Avenue Bridge between Manhattan and Bronx: up 144.1% to 43,805 daily vehicles from 17,948 (25,857 additional daily vehicles).
 - Queens-Midtown Tunnel between Manhattan and Queens: up 21.7% to 87,972 daily vehicles from 72,285 (15,687 additional daily vehicles).
 - Williamsburg Bridge between Manhattan and Queens: up 20.9% to 107,040 daily vehicles from 88,570 (18,470 additional daily vehicles).
- The most significant decreases occurred at the following facilities.
 - Manhattan Bridge between Manhattan and Brooklyn: down 8% to 74,621 daily vehicles from 81,075 (6,454 fewer daily vehicles).
 - Broadway Bridge between Manhattan and Bronx: down 16.2% to 33,551 daily vehicles from 40,040 (6,489 fewer daily vehicles).
 - 145th Street Bridge between Manhattan and Bronx: down 20% to 21,733 daily vehicles in 2006 from 27,156 in 1996 (5,423 fewer daily vehicles).

1948 – 2016

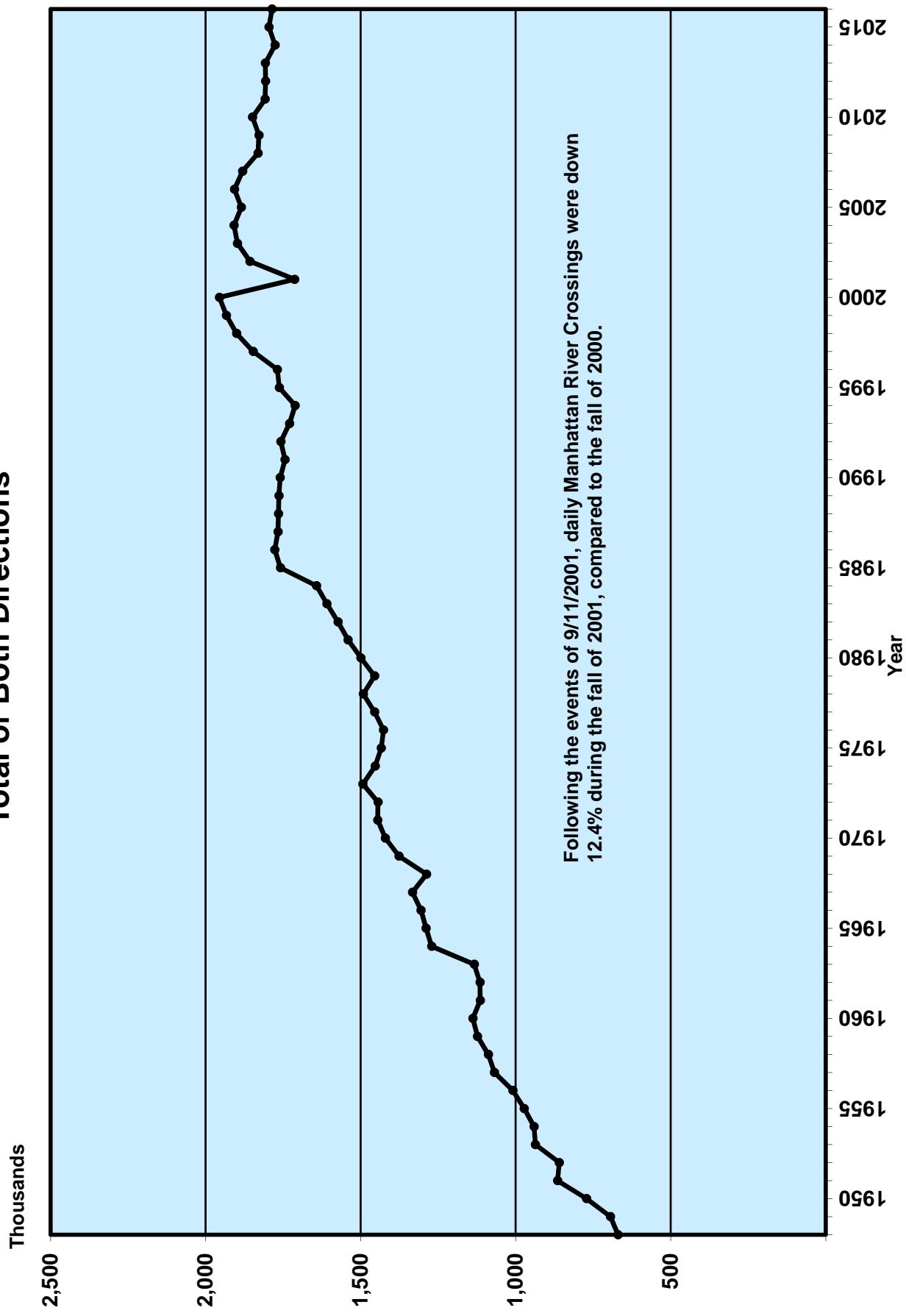
- From 1948 to 2016, Manhattan vehicular river crossings increased 167%, to 1,785,875 vehicles per day in 2016 from 670,007 in 1948 (1,115,868 additional daily motor vehicle trips).
 - Increases occurred on all of the twenty Manhattan river crossings.
 - 84% increase on the four toll-free East River bridges (to 466,685 daily vehicles in 2016 from 254,068 in 1948).
 - 161% increase on the nine toll-free Harlem River bridges (to 540,830 daily vehicles from 207,177).
 - 207% increase on MTABT's four tolled crossings (to 285,746 daily vehicles in 2016 from 92,977 in 1948).

- 326% increase on PANYNJ's three trans-Hudson facilities (to 492,614 daily vehicles in 2016 from 115,785 in 1948).
- Large increases in daily traffic occurred at the following individual facilities.
 - George Washington Bridge: up nearly 585% to 289,827 daily vehicles in 2016 from 42,306 in 1948.
 - Brooklyn Bridge: up 186% to 105,679 daily vehicles from 37,011.
 - Lincoln Tunnel: up 266% to 112,995 daily vehicles from 30,856.
 - Queens-Midtown Tunnel: up 178% to 73,470 daily vehicles from 26,462.
 - Robert F. Kennedy Memorial Bridge Manhattan Plaza: up 261% to 95,552 daily vehicles from 26,465.
 - Williamsburg Bridge: up 124% to 105,645 daily vehicles from 47,139.
 - Broadway Bridge: up 125% to 36,027 daily vehicles from 16,020.
- During the same 68-year period, annual citywide subway ridership declined by 13.5%, to 1,757 million in 2016 from 2,031 million in 1948.

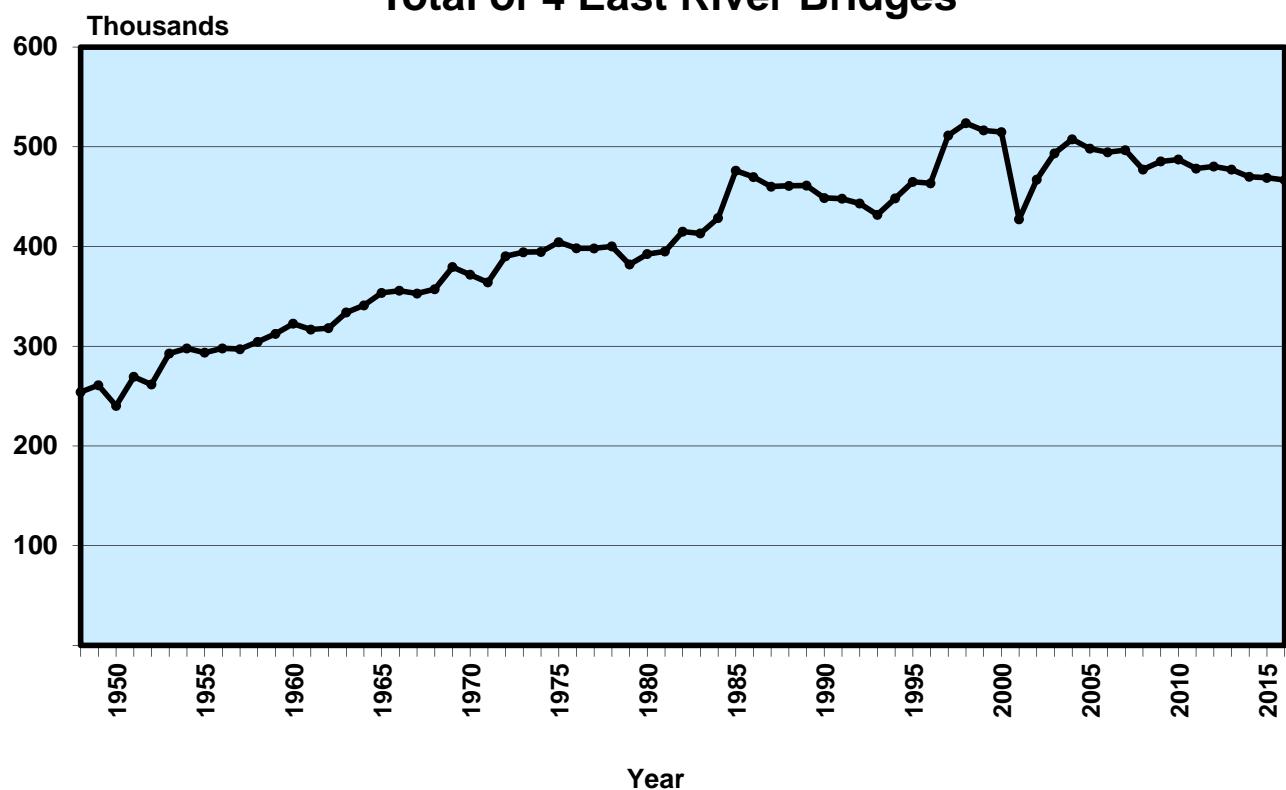
1996 – 2016

- Over the past two decades, the long term trends of rapidly increasing Manhattan vehicular river crossings and declining subway ridership, which began after the end of World War II, have changed markedly.
 - From 1948 to 1996, Manhattan River Crossings increased 164%, to 1,768,742 daily vehicles in 1996 from 670,007 in 1948. During the same period, annual subway ridership decreased 45.4%, to 1,110 million annual riders from 2,031 million.
 - From 1996 to 2016, Manhattan River Crossings increased just 1%, to 1,785,875 daily vehicles in 2016 from 1,768,742 in 1996. Concurrently, annual subway ridership increased at the much faster rate of 58.3%, to 1,757 million annual riders in 2016 from 1,110 million in 1996.

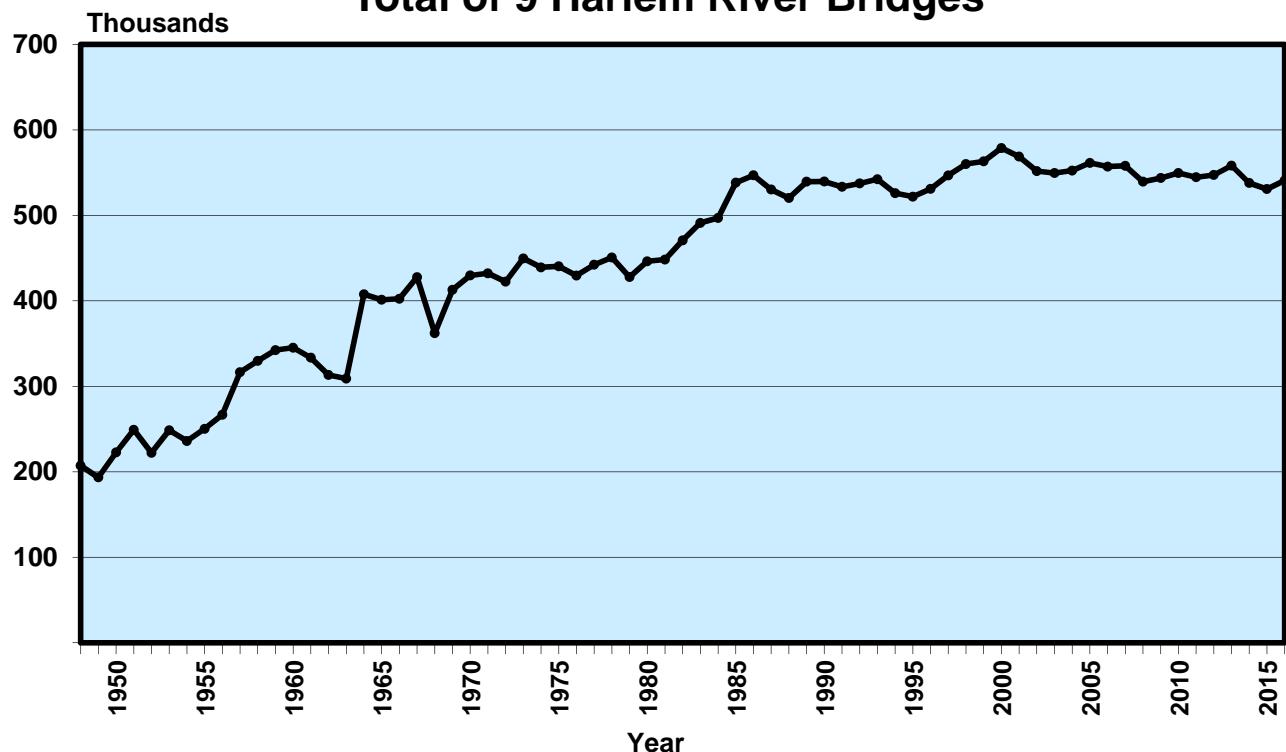
Average Daily Manhattan River Crossings Total of Both Directions



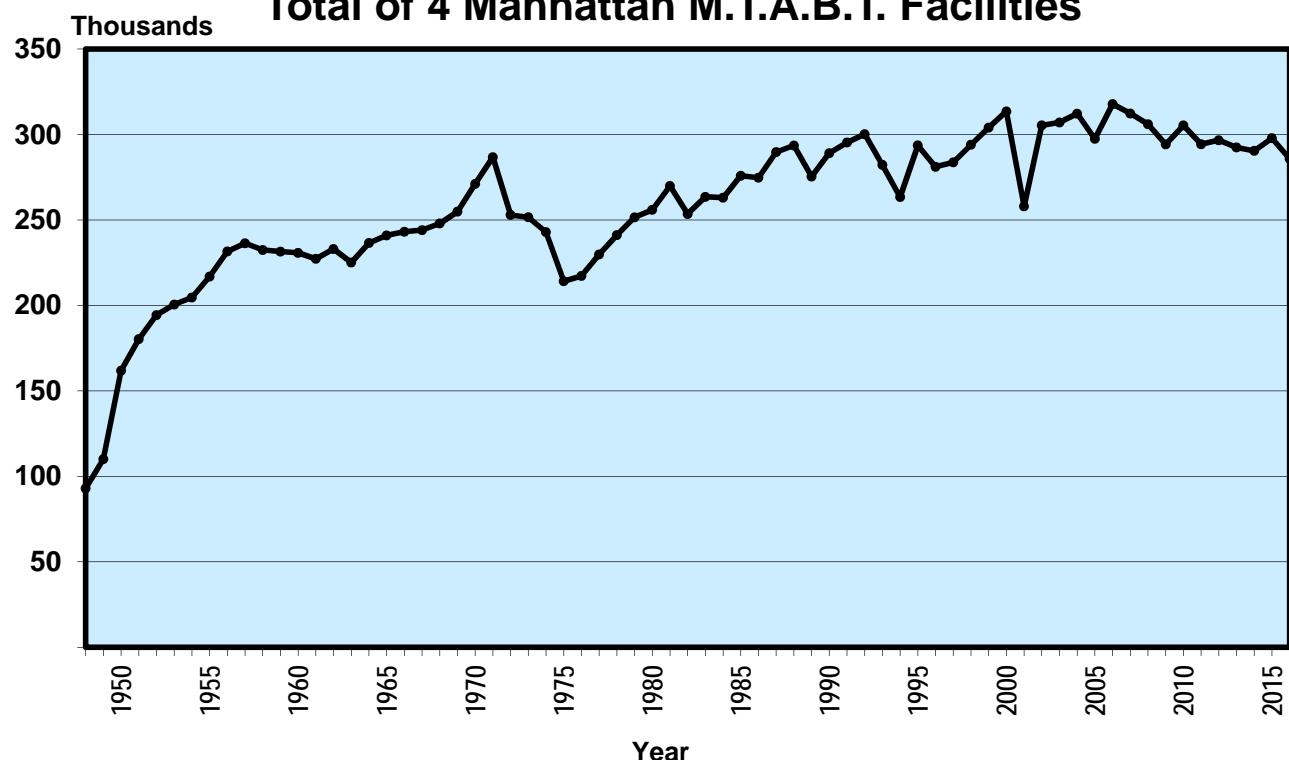
Average Daily Traffic Volumes ~ Total of Both Directions Total of 4 East River Bridges



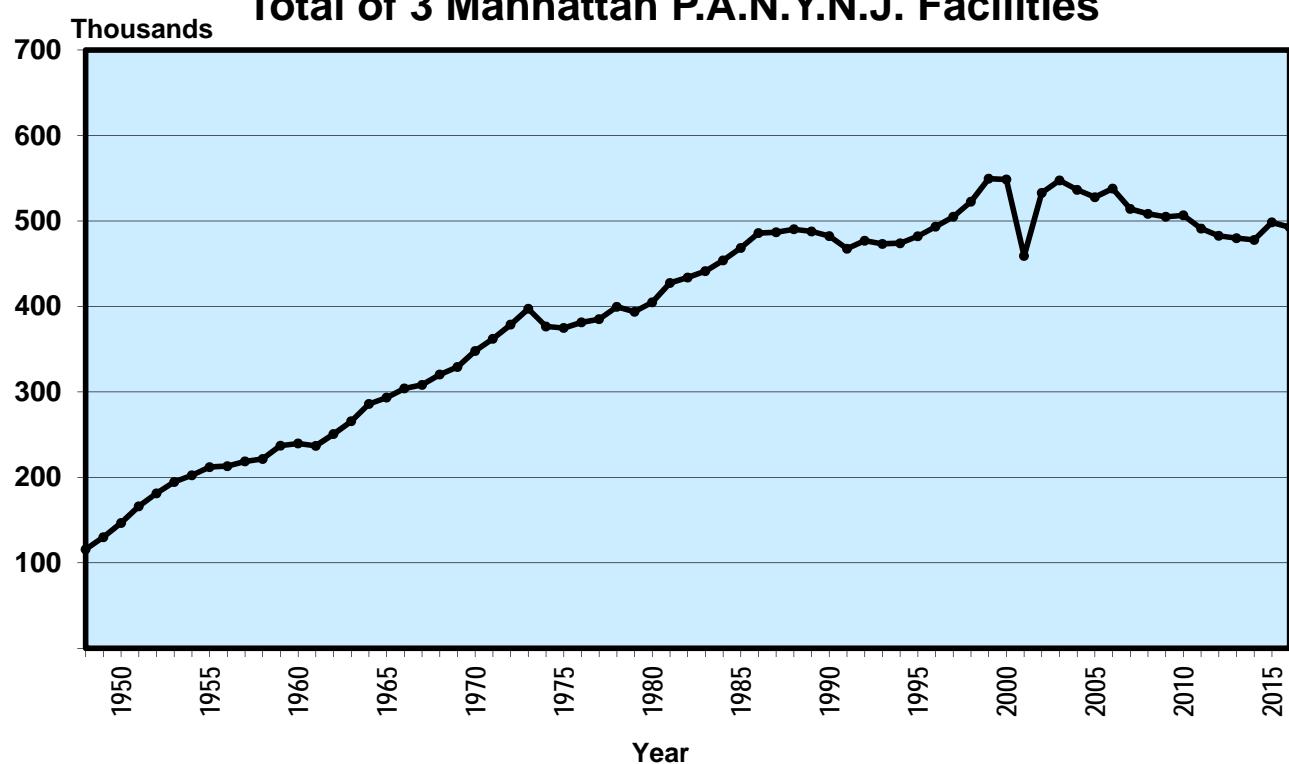
Average Daily Traffic Volumes ~ Total of Both Directions Total of 9 Harlem River Bridges



**Average Daily Traffic Volumes ~ Total of Both Directions
Total of 4 Manhattan M.T.A.B.T. Facilities**



**Average Daily Traffic Volumes ~ Total of Both Directions
Total of 3 Manhattan P.A.N.Y.N.J. Facilities**



**Average Daily Manhattan River Motor Vehicle Crossings
(Total of Both Directions)**
vs.
Annual Subway Ridership

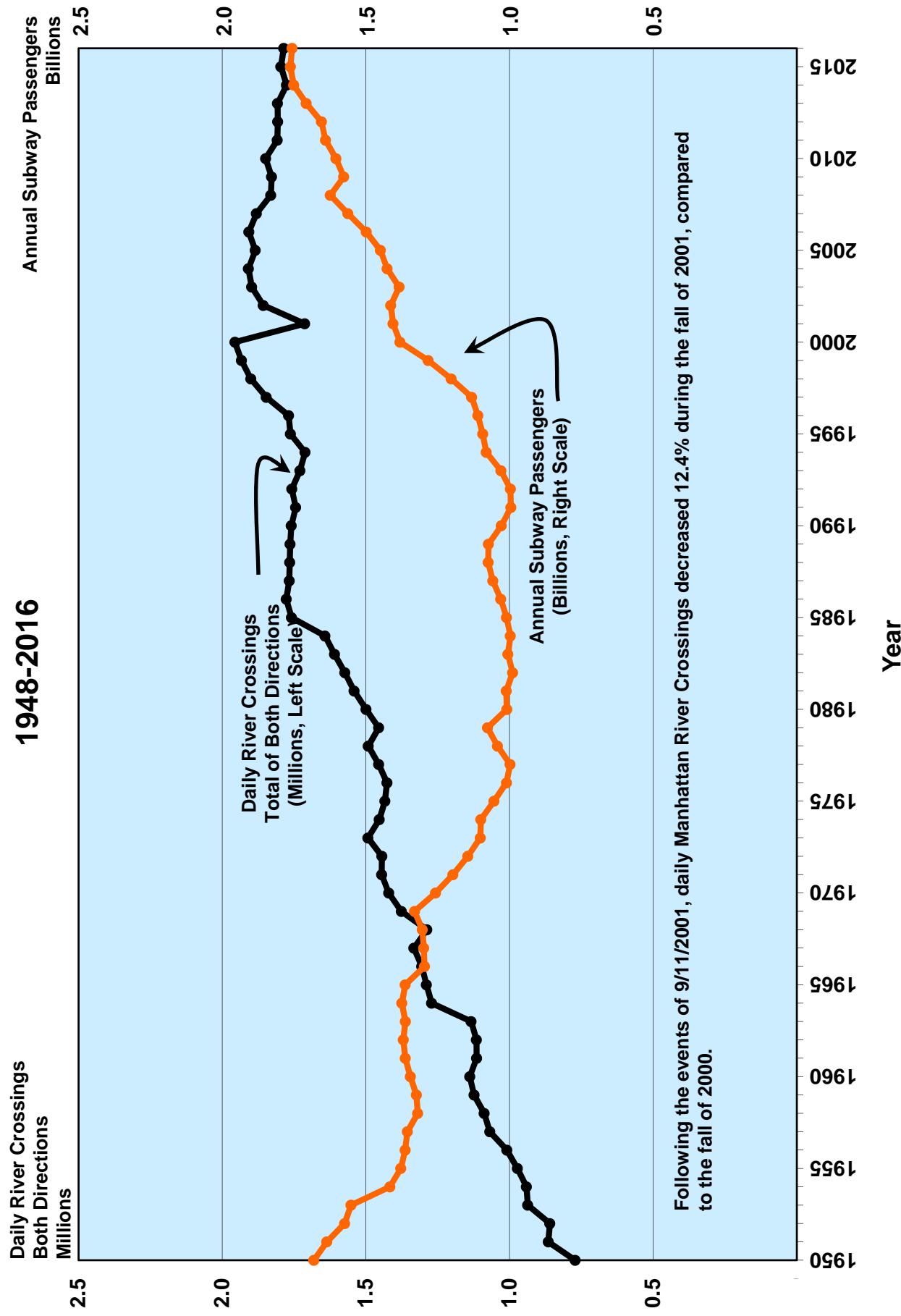
Year	Daily Manhattan River Crossings	Annual Subway Ridership	Year	Daily Manhattan River Crossings	Annual Subway Ridership
1948	670,007	2,031,142,410	1988	1,764,869	1,074,200,253
1949	694,457	1,764,469,530	1989	1,763,534	1,073,179,880
1950	771,407	1,680,843,742	1990	1,759,585	1,028,305,701
1951	864,973	1,635,728,973	1991	1,744,103	995,227,534
1952	859,480	1,573,642,697	1992	1,757,573	996,701,756
1953	936,467	1,551,796,171	1993	1,729,408	1,029,765,350
1954	940,969	1,416,371,403	1994	1,711,457	1,080,757,098
1955	972,633	1,378,149,559	1995	1,762,457	1,093,029,231
1956	1,009,270	1,363,134,171	1996	1,768,742	1,110,025,587
1957	1,068,524	1,355,383,900	1997	1,846,634	1,131,675,966
1958	1,088,124	1,319,457,461	1998	1,900,254	1,203,023,499
1959	1,123,302	1,324,054,282	1999	1,933,007	1,283,081,633
1960	1,138,247	1,344,952,725	2000	1,955,506	1,381,078,913
1961	1,114,350	1,362,736,027	2001	1,712,961	1,405,304,701
1962	1,115,056	1,369,507,594	2002	1,857,050	1,413,200,000
1963	1,133,673	1,362,251,702	2003	1,897,411	1,384,100,000
1964	1,271,047	1,374,506,950	2004	1,908,565	1,426,000,000
1965	1,289,065	1,362,884,851	2005	1,884,733	1,449,100,000
1966	1,305,320	1,295,839,328	2006	1,907,118	1,498,600,000
1967	1,332,871	1,298,484,890	2007	1,880,818	1,562,515,065
1968	1,287,543	1,303,465,841	2008	1,830,907	1,623,881,369
1969	1,376,394	1,330,383,466	2009	1,828,065	1,579,866,600
1970	1,420,334	1,257,569,124	2010	1,848,718	1,604,198,017
1971	1,445,020	1,196,875,980	2011	1,808,247	1,640,434,672
1972	1,444,147	1,145,128,739	2012	1,806,649	1,654,582,265
1973	1,492,756	1,101,597,734	2013	1,807,484	1,707,555,714
1974	1,453,136	1,099,786,500	2014	1,776,013	1,751,287,621
1975	1,433,560	1,053,932,743	2015	1,795,790	1,762,565,419
1976	1,426,334	1,010,496,909	2016	1,785,875	1,756,814,800
1977	1,455,119	997,773,441			
1978	1,491,541	1,041,628,298			
1979	1,455,112	1,076,540,944			
1980	1,499,344	1,009,332,713			
1981	1,540,683	1,011,345,460			
1982	1,573,012	989,091,943			
1983	1,608,979	1,005,343,639			
1984	1,642,250	997,025,422			
1985	1,758,605	1,010,210,607			
1986	1,777,051	1,030,385,208			
1987	1,766,601	1,058,005,483			

Percent Changes Period	Average Daily Crossings	Annual Subway Ridership	Period	Average Daily Crossings	Annual Subway Ridership
1950-1960	+ 47.6 %	- 20.0 %	1990-2000	+ 11.1 %	+ 34.3 %
1960-1970	+ 24.8 %	- 6.5 %	2000-2015	- 8.2 %	+ 27.6 %
1970-1980	+ 5.6 %	- 19.7 %	1948-2015	+168.0 %	- 13.2 %
1980-1990	+ 17.4 %	+ 1.9 %	1948-2016	+166.5 %	- 13.5 %

Source for Annual Subway Ridership: MTA

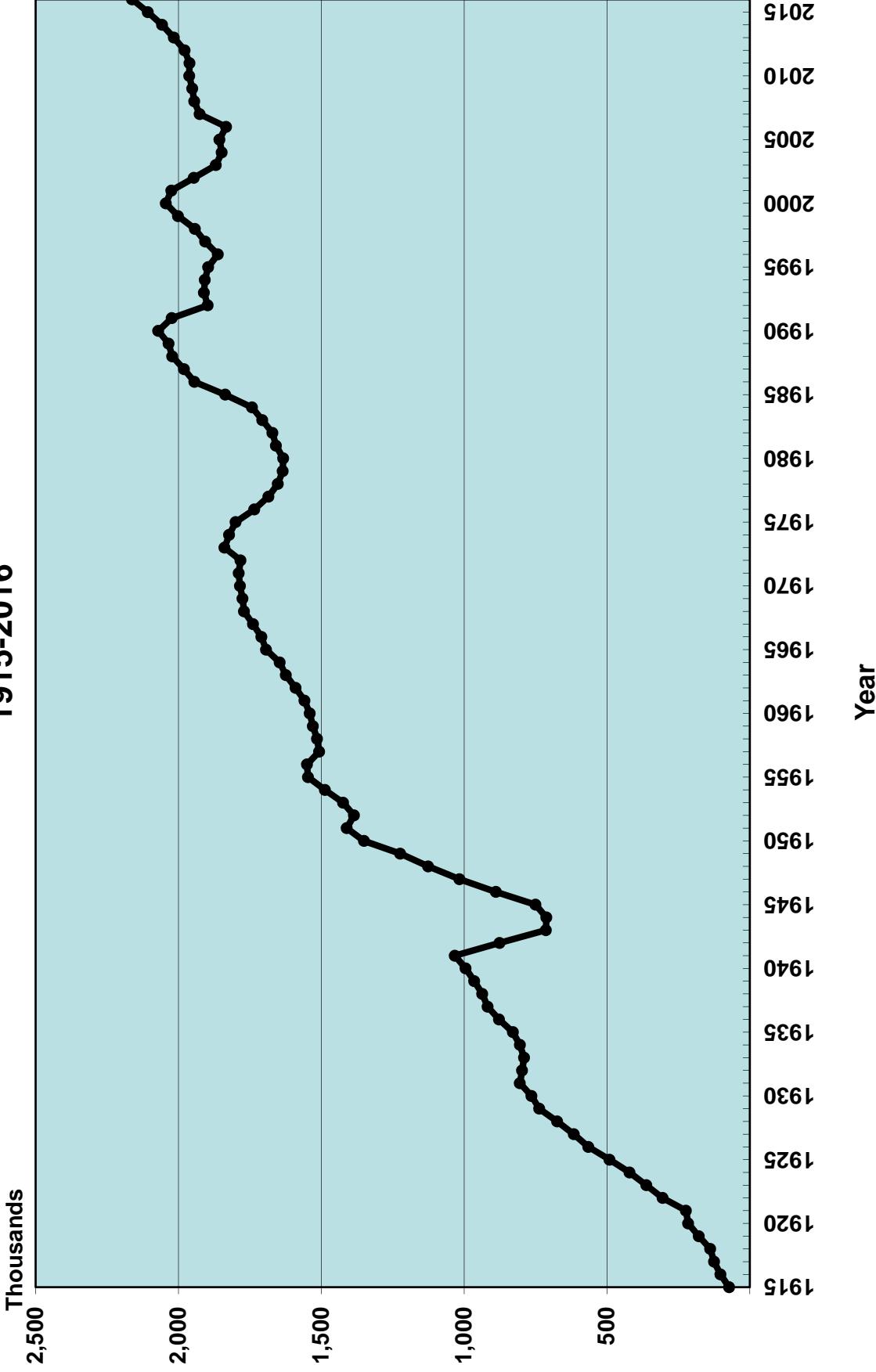
Vehicular River Crossings vs. Subway Ridership

1948-2016



New York City Motor Vehicle Registrations

1915-2016



Note: As of 1992, registration data are not strictly comparable to earlier data because of a revised method adopted by NY State Department of Motor Vehicles.

PAST & PRESENT PASSENGER CAR TOLL STRUCTURES

MTA BRIDGES & TUNNELS FACILITIES *Tolls collected both directions*

	Hugh L. Carey Tunnel*	Queens Midtown Tunnel	Robert F. Kennedy Memorial Bridge**	Henry Hudson Bridge
Prior to 01/06/1972	\$ 0.35	\$ 0.25	\$ 0.25	\$ 0.10
Effective 01/06/1972	0.70	0.50	0.50	0.25
Effective 09/01/1975	0.75	0.75	0.75	0.50
Effective 05/19/1980	1.00	1.00	1.00	0.60
Effective 04/19/1982	1.25	1.25	1.25	0.90
Effective 01/03/1984	1.50	1.50	1.50	0.90
Effective 01/02/1986	1.75	1.75	1.75	1.00
Effective 02/07/1987	2.00	2.00	2.00	1.00
Effective 07/16/1989	2.50	2.50	2.50	1.25
Effective 01/31/1993	3.00	3.00	3.00	1.50
Effective 03/24/1996	3.50	3.50	3.50	1.75
Effective 05/18/2003	4.00	4.00	4.00	2.00
Effective 03/18/2005	4.50	4.50	4.50	2.25
Effective 03/16/2008	5.00	5.00	5.00	2.75
Effective 07/12/2009	5.50	5.50	5.50	3.00
Effective 12/30/2010	6.50	6.50	6.50	4.00
Effective 03/03/2013	7.50	7.50	7.50	5.00
Effective 03/22/2015	8.00	8.00	8.00	5.50

\$ 2.46 discount with EZ Pass (\$ 2.96 on Henry Hudson Bridge).

*Formerly Brooklyn-Battery Tunnel.

**Formerly Triborough Bridge.

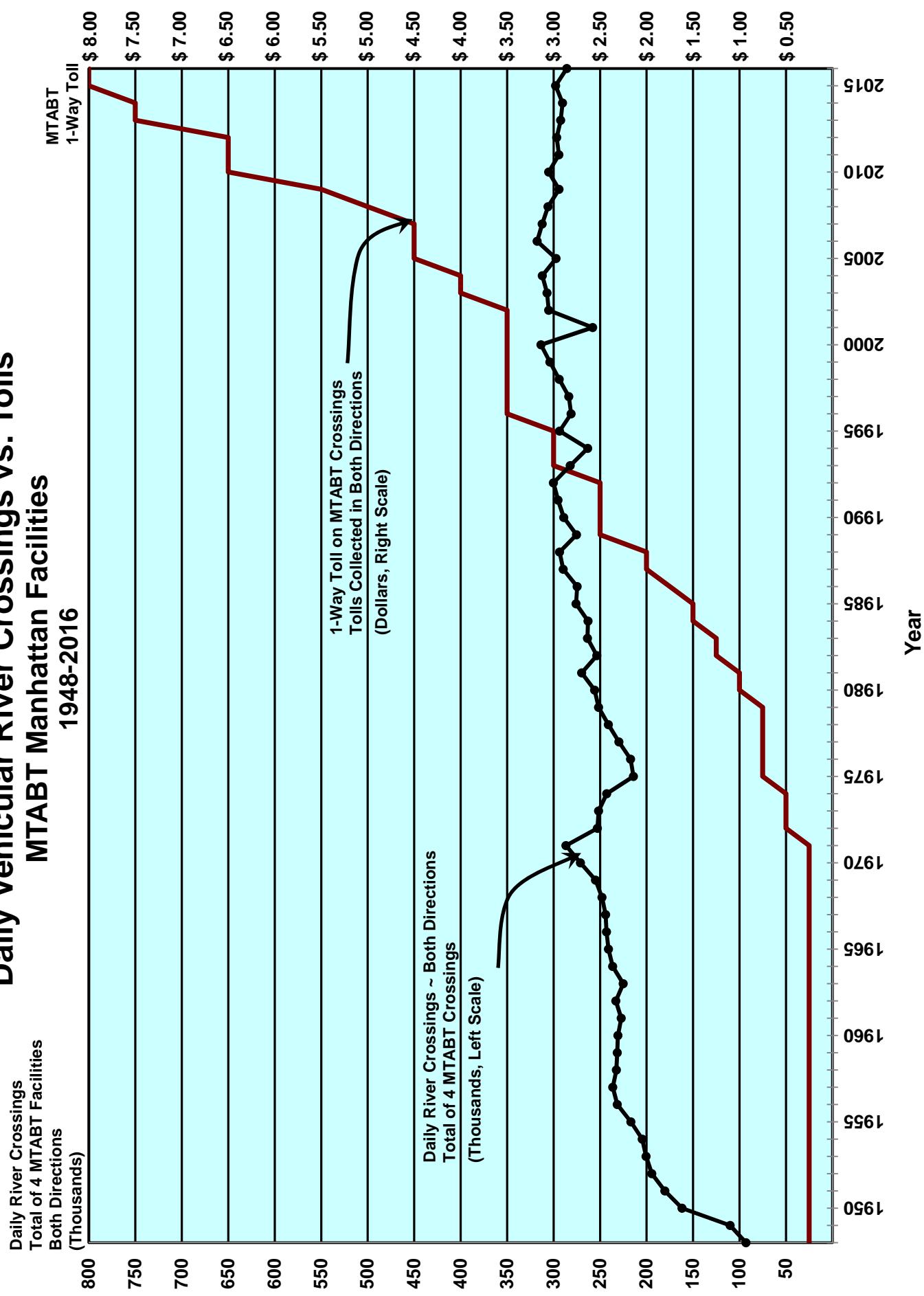
PORT AUTHORITY OF NEW YORK & NEW JERSEY *Tolls collected eastbound only*

George Washington Bridge, Holland Tunnel, and Lincoln Tunnel

	Cash Toll	EZ-Pass Peak Hours	EZ-Pass Off-Peak Hours
Effective 08/12/1970	\$ 1.00		
Effective 05/05/1975	1.50		
Effective 01/01/1984	2.00		
Effective 04/12/1987	3.00		
Effective 04/07/1991	4.00		
Effective 03/25/2001	6.00	\$ 5.40	\$ 5.40
Effective 03/02/2008	8.00	8.00	6.00
Effective 09/18/2011	12.00	9.50	7.50
Effective 12/02/2012	13.00	10.25	8.25
Effective 12/01/2013	13.00	11.00	9.00
Effective 12/07/2014	14.00	11.75	9.75
Effective 12/06/2015	15.00	12.50	10.50

One way toll collection system initiated on PANYNJ facilities August 12, 1970. Prior to that, tolls of \$ 0.50 were collected each way from the date each facility opened.

Daily Vehicular River Crossings vs. Tolls MTABT Manhattan Facilities 1948-2016

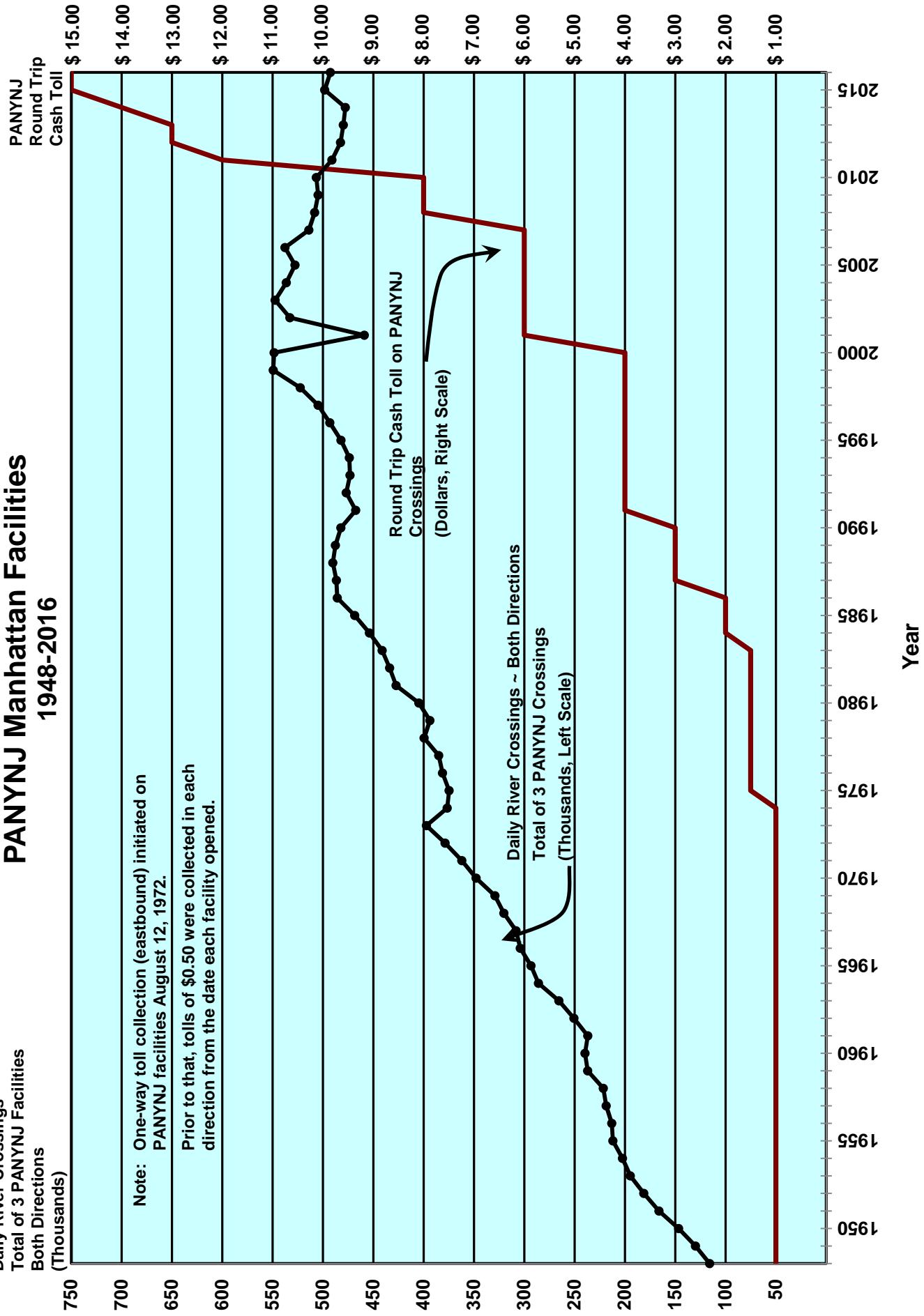


Daily Vehicular River Crossings vs. Tolls

PANYNJ Manhattan Facilities 1948-2016

Daily River Crossings
Total of 3 PANYNJ Facilities
Both Directions
(Thousands)

Note: One-way toll collection (eastbound) initiated on
PANYNJ facilities August 12, 1972.
Prior to that, tolls of \$0.50 were collected in each
direction from the date each facility opened.



East River Bridges



**Ed Koch Queensboro Bridge over the East River
between Manhattan and Queens**

East River Bridges
Average Daily Traffic Volumes
1948 - 2016

Year	Brooklyn Bridge	Ed Koch Queensboro Bridge	Manhattan Bridge	Williamsburg Bridge	Totals
1948	37,011	83,201	86,717	47,139	254,068
1949	37,244	88,821	80,420	54,448	260,933
1950	13,397	84,863	84,027	57,940	240,227
1951	14,865	90,922	100,826	62,739	269,352
1952	16,907	85,748	96,476	62,573	261,704
1953	14,513	106,391	94,320	77,502	292,726
1954	42,455	101,285	77,698	76,465	297,903
1955	53,964	91,958	66,968	80,743	293,633
1956	54,981	90,786	69,656	82,443	297,866
1957	23,852	93,676	89,793	89,707	297,028
1958	43,089	100,555	82,128	78,698	304,470
1959	53,115	103,522	74,329	81,465	312,431
1960	73,486	107,536	60,481	81,157	322,660
1961	68,997	104,505	62,797	80,514	316,813
1962	78,850	105,930	51,450	81,940	318,170
1963	78,770	116,350	58,510	80,250	333,880
1964	80,230	120,900	59,250	80,650	341,030
1965	84,141	117,588	71,222	80,567	353,518
1966	89,124	122,896	63,693	80,032	355,745
1967	87,387	124,033	75,741	65,775	352,936
1968	72,475	130,777	79,906	74,074	357,232
1969	97,565	132,553	75,473	73,825	379,416
1970	100,050	126,554	72,077	73,062	371,743
1971	102,535	120,555	68,681	72,299	364,070
1972	103,815	136,455	73,803	76,219	390,292
1973	102,834	138,066	73,401	79,989	394,290
1974	99,959	138,560	77,198	78,914	394,631
1975	103,750	144,252	74,320	82,057	404,379
1976	102,590	145,130	68,057	82,471	398,248
1977	104,532	146,283	64,835	82,490	398,140
1978	104,848	138,415	74,257	82,626	400,146
1979	91,319	133,966	75,403	81,340	382,028
1980	103,954	127,929	77,914	82,663	392,460
1981	102,572	127,864	79,589	85,100	395,125
1982	110,991	136,864	87,760	79,369	414,984
1983	115,825	125,158	85,222	86,947	413,152
1984	110,432	134,107	89,104	94,898	428,541
1985	116,929	150,892	100,825	107,386	476,032
1986	126,555	158,191	77,784	107,181	469,711
1987	123,523	151,688	77,519	107,362	460,092
1988	129,153	153,841	75,221	102,643	460,858
1989	131,951	152,591	68,593	107,967	461,102
1990	129,626	140,063	69,550	109,474	448,713
1991	128,491	131,438	72,695	115,345	447,969
1992	125,643	141,078	78,117	98,307	443,145
1993	134,793	135,964	74,526	86,591	431,874
1994	134,837	151,483	78,418	83,525	448,263
1995	131,883	157,306	75,126	100,588	464,903
1996	131,872	161,965	81,075	88,570	463,482
1997	147,898	184,179	83,209	96,124	511,410
1998	144,131	192,119	78,172	109,268	523,690
1999	127,065	189,190	92,311	107,941	516,507
2000	147,767	182,940	75,684	108,376	514,767
2001	95,586	176,469	73,064	82,202	427,321
2002	121,145	176,419	66,152	103,364	467,080
2003	134,444	184,964	73,767	100,243	493,418
2004	137,563	180,369	79,129	110,528	507,589
2005	132,210	178,610	80,363	107,030	498,213
2006	126,805	186,110	74,621	107,040	494,576
2007	131,551	181,365	73,205	110,545	496,666
2008	123,781	176,306	70,341	106,783	477,211
2009	125,021	180,162	71,936	108,194	485,313
2010	123,640	177,695	74,777	111,189	487,301
2011	105,820	183,401	85,392	103,590	478,203
2012	100,288	178,188	89,087	112,696	480,259
2013	102,542	171,556	87,375	115,674	477,147
2014	99,986	174,239	84,048	111,634	469,907
2015	102,219	174,447	87,046	105,206	468,918
2016	105,679	170,277	85,084	105,645	466,685

Hourly Vehicular Volumes Brooklyn Bridge - 2016

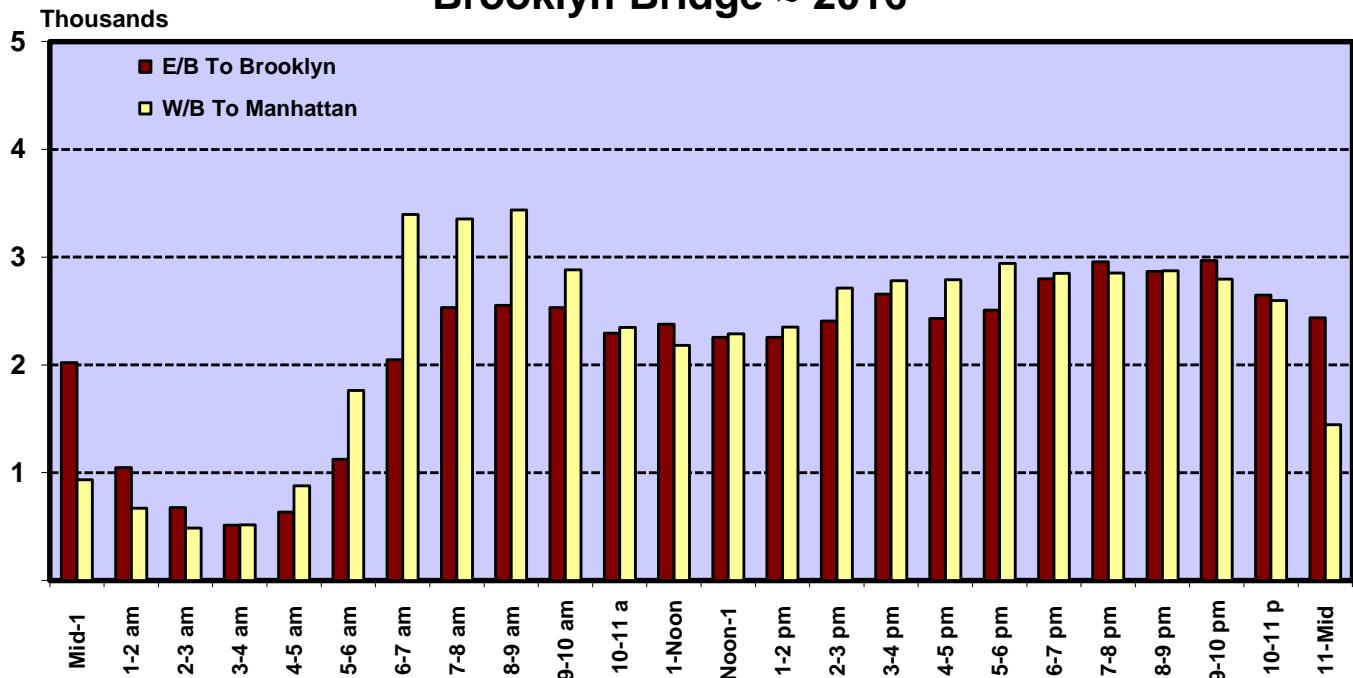
Eastbound to Brooklyn

FHWA Classes	Autos & Motorcycles	<i>Eastbound to Brooklyn</i>						<i>Westbound to Manhattan</i>						2-Way Grand Totals
		Taxi	Commercial Vans Pickups Large SUVs	Buses	Single Unit Trucks	Tractor Trailers	Total Vehicles	Autos & Motorcycles	Taxi	Commercial Vans Pickups Large SUVs	Buses	Single Unit Trucks	Tractor Trailers	
1 & 2	2	3	4	5-7	8-13		1 & 2	2	3	4	5-7	8-13		
12-1am	1,611	385	22	0	4	0	2,022	676	233	22	0	3	0	934
1-2am	770	262	14	0	0	0	1,046	648	132	19	0	2	0	669
2-3am	506	160	11	0	0	0	677	470	86	15	0	2	0	487
3-4am	405	100	9	0	0	0	514	483	71	33	0	0	0	516
4-5am	528	96	11	0	1	0	636	852	84	22	1	4	0	879
5-6am	1,064	44	14	0	3	0	1,125	1,719	145	32	9	4	0	1,515
6-7am	1,954	72	18	3	0	0	2,047	3,308	284	56	30	2	0	3,396
7-8am	2,345	125	35	27	1	0	2,633	3,235	382	90	26	3	0	3,354
8-9am	2,256	195	54	48	0	0	2,553	3,293	330	133	10	3	0	5,992
9-10am	2,196	269	38	26	3	0	2,532	2,738	271	139	3	3	0	5,415
10-11am	2,005	253	32	4	0	0	2,294	2,236	177	104	6	3	0	2,349
11-12am	2,112	210	55	2	0	0	2,379	2,065	192	114	2	0	0	2,181
12-1pm	1,983	220	45	7	0	0	2,255	2,167	187	113	8	0	0	2,288
1-2pm	1,979	223	48	2	3	0	2,255	2,244	177	87	16	4	0	2,351
2-3pm	2,112	254	36	6	0	0	2,408	2,601	206	84	27	1	0	2,713
3-4pm	2,295	305	29	0	0	0	2,658	2,697	223	68	14	3	0	2,782
4-5pm	2,146	241	27	18	0	0	2,432	2,712	208	69	7	1	0	2,789
5-6pm	2,330	149	26	3	0	0	2,508	2,877	299	62	2	1	0	5,453
6-7pm	2,564	208	23	3	0	0	2,798	2,805	312	44	1	0	0	4,606
7-8pm	2,649	293	14	1	0	0	2,957	2,804	294	47	1	0	0	5,121
8-9pm	2,474	376	17	1	0	0	2,868	2,851	368	22	0	0	0	5,440
9-10pm	2,378	563	27	0	0	0	2,968	2,751	443	42	0	3	0	5,221
10-11pm	2,065	566	16	1	0	1	2,649	2,572	478	22	0	2	0	5,450
11-12pm	1,941	485	10	0	0	0	2,436	1,428	335	15	0	3	0	5,648
Totals	44,668	631	181	15	1	51,550	52,232	5,917	1,454	163	47	0	54,129	105,679
7-10am	6,797	127	101	4	0	7,618	9,266	362	39	9	0	0	9,676	17,294
10am-1pm	6,100	132	13	0	0	6,928	6,468	331	16	3	0	0	6,818	13,746
1-4pm	6,386	113	37	3	0	7,321	7,542	239	57	8	0	0	7,846	15,167
4-7pm	7,040	76	24	0	0	7,738	8,394	175	10	2	0	0	8,581	16,319
7am-7pm	26,323	448	175	7	0	29,605	31,670	1,107	122	22	0	0	32,921	62,526
6-10am	8,751	145	104	4	0	9,665	12,574	418	69	11	0	0	13,072	22,737
3-7pm	9,335	105	53	0	0	10,396	11,091	243	24	5	0	0	11,363	21,759
6am-7pm	28,277	466	178	7	0	31,652	34,978	1,163	152	24	0	0	36,317	67,969

Based on March 2006 Classification Survey Data.

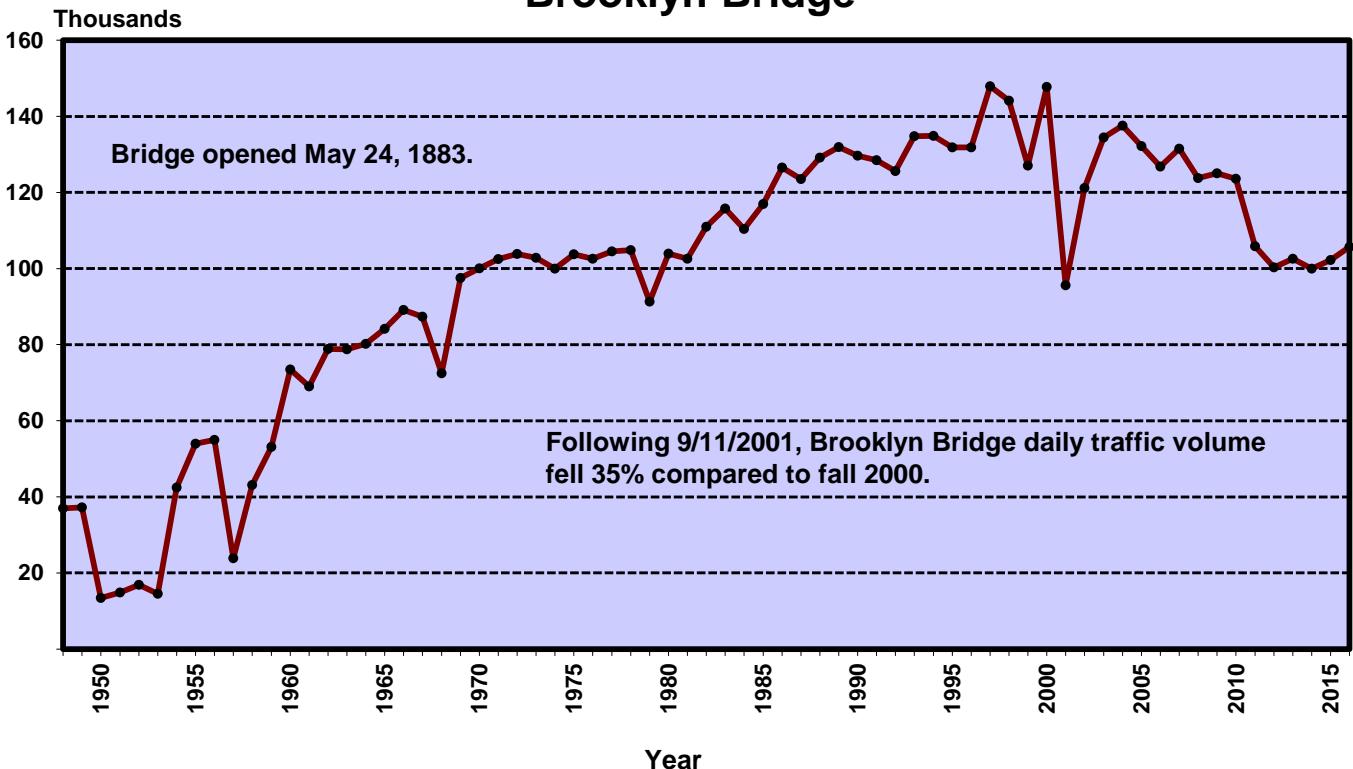
** Peak Volumes

Hourly Vehicular Volumes Brooklyn Bridge ~ 2016



Note: Bridge closed overnight Manhattan-bound for reconstruction during 2011, 2012, 2013, 2014, and 2015.

Average Daily Traffic Volumes ~ Total of Both Directions Brooklyn Bridge



Hourly Vehicular Volumes

Ed Koch Queensboro Bridge - 2016

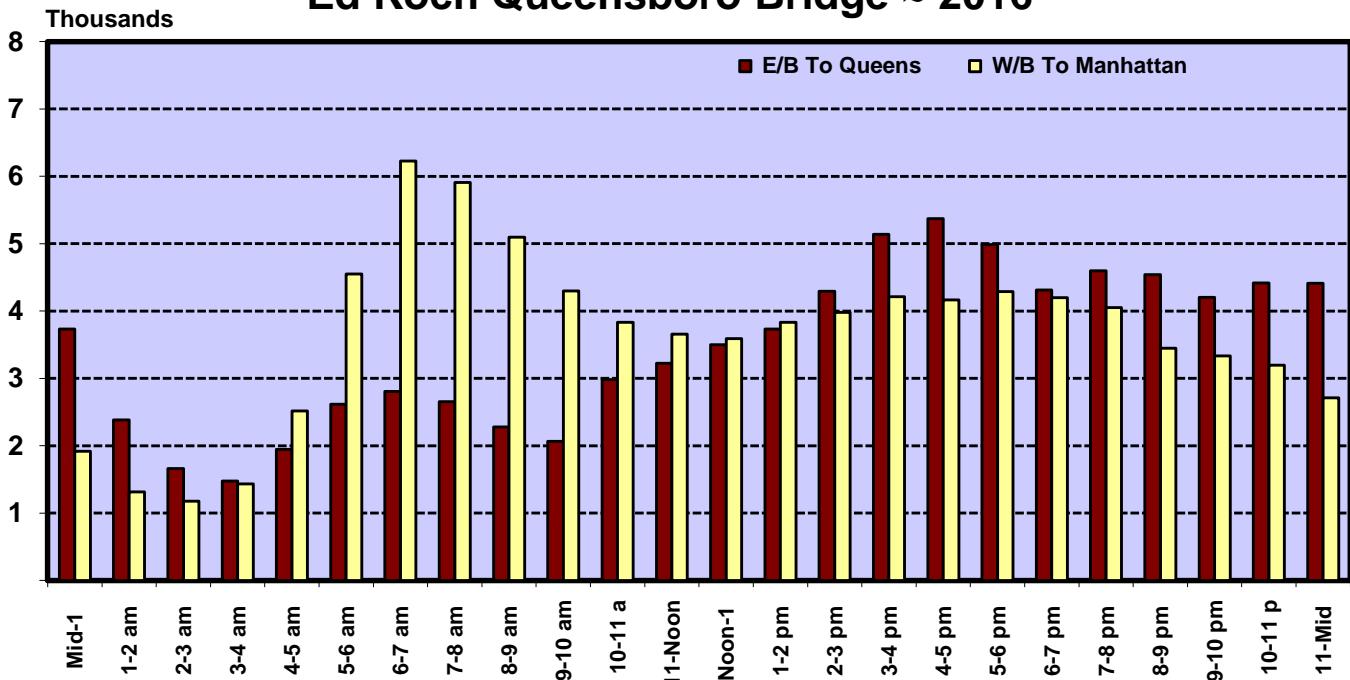
Eastbound to Queens

FHWA Classes ▶	Commercial Vans, Panel Trucks,				Commercial Vans, Panel Trucks,				Commercial Vans, Panel Trucks,				Commercial Vans, Panel Trucks,			
	Autos, Motorcycles	SUVs, Family Vans	Taxis, Liveries, Limos	Police, Fleet Vehicles	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	Autos, Motorcycles	SUVs, Family Vans	Taxis, Liveries, Limos	Police, Fleet Vehicles	Busses	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	
1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	1, 2, 3	1, 2, 3	972	812	56	9	36	31	1,916	5,647	
4-7am	1,736	1,793	113	13	54	22	3,731	537	624	69	6	37	40	1,313	3,698	
7-8am	845	1,367	76	13	43	41	2,385	477	491	127	4	38	41	1,178	2,839	
8-9am	665	830	78	6	34	48	1,661	1,474	603	495	224	4	60	48	1,434	2,908
9-10am	646	628	105	3	31	61	1,947	1,199	896	237	7	87	89	2,515	4,462	
10-11am	897	755	132	5	40	118	2,616	2,463	1,549	276	11	181	70	4,550	7,166	
11-12pm	1,757	572	151	4	53	79	2,808	3,760	1,826	333	44	203	61	6,227	**	
12-1pm	2,349	203	118	11	77	50	2,654	2,967	1,854	767	55	237	31	5,911	9,035	
1-2pm	2,227	169	114	45	89	10	2,278	2,662	1,084	981	70	282	19	5,098	8,565	
2-3pm	1,768	248	108	60	82	12	2,064	2,301	731	950	26	263	27	7,376	6,362	
3-4pm	1,464	302	128	56	103	11	1,744	272	47	144	15	2,056	778	53	261	
4-5pm	1,868	809	348	34	144	22	3,225	1,960	892	557	21	188	41	3,659	6,884	
5-6pm	2,191	681	416	34	162	17	3,501	1,878	982	499	29	157	44	3,589	7,090	
6-7pm	2,373	728	390	41	187	16	3,735	2,146	1,013	436	40	165	31	3,831	7,566	
7-8pm	2,463	1,030	551	40	193	15	4,292	2,351	1,047	378	42	128	35	3,981	8,273	
8-9pm	2,993	1,147	721	54	211	15	5,141	2,607	1,115	351	20	98	21	4,212	9,353	
9-10pm	3,069	1,409	676	61	152	5	5,372	2,476	1,330	258	24	60	17	4,165	9,537	
10-11pm	3,554	755	475	90	109	5	4,988	2,489	1,516	191	22	64	8	4,290	9,278	
11-12pm	2,661	1,558	100	23	41	28	4,417	2,711	1,196	190	30	54	16	4,197	8,509	
Totals	52,424	21,047	6,082	888	2,219	678	83,338	50,273	24,245	8,119	618	2,866	818	86,939	170,277	
7-10am	5,459	719	350	161	274	33	6,996	7,930	3,669	151	782	77	15,307	22,303		
10am-1pm	5,803	2,248	1,036	115	450	54	9,706	5,894	2,652	1,712	103	606	115	11,082	20,788	
1-4pm	7,829	2,905	1,662	135	591	46	13,168	7,104	3,175	1,165	102	391	87	12,024	25,192	
4-7pm	9,861	2,794	1,438	232	333	14	14,672	7,676	4,042	639	76	178	41	12,652	27,324	
7am-7pm	28,952	8,666	4,486	643	1,648	147	44,542	28,604	13,538	6,214	432	1,957	320	51,065	95,607	
6-10am	7,808	922	468	172	351	83	9,804	11,690	5,495	3,031	195	985	138	21,534	31,338	
3-7pm	12,854	3,941	2,159	286	544	29	19,813	10,283	5,157	990	96	276	62	16,864	36,677	
6am-7pm	31,301	8,869	4,604	654	1,725	197	47,350	32,364	15,364	6,547	476	2,160	381	57,292	104,642	

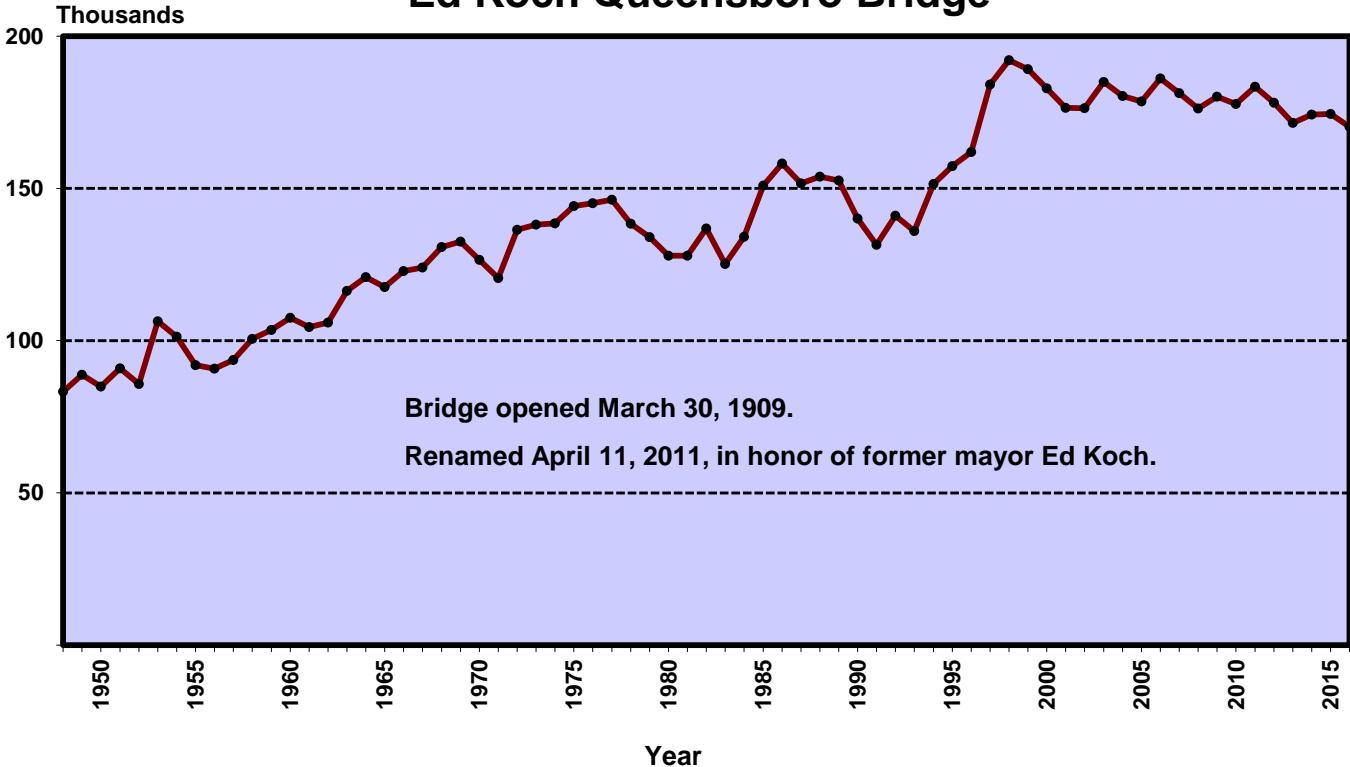
Based on October 2014 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Ed Koch Queensboro Bridge ~ 2016



Average Daily Traffic Volumes ~ Total of Both Directions Ed Koch Queensboro Bridge



Hourly Vehicular Volumes

Manhattan Bridge - 2016

Eastbound to Brooklyn

FHWA Classes ▶	Commercial Vans, Panel Trucks,				Commercial Vans, Panel Trucks,				Commercial Vans, Panel Trucks,				Commercial Vans, Panel Trucks,			
	Autos, Motorcycles	SUVs, Family Vans	Taxis, Liveries, Limos	Police, Fleet Vehicles	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	Autos, Motorcycles	SUVs, Family Vans	Taxis, Liveries, Limos	Police, Fleet Vehicles	Busses	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	
1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	1,2, 3	1,2, 3	1,492	769	476	30	2	2 & 3	4	5 - 7	8 - 13
12-1am	910	478	53	9	25	17	1,492	1,055	402	290	40	1	32	13	1,322	2,814
1-2am	581	377	55	13	14	15	1,055		326	188	24	3	25	8	763	1,818
2-3am	403	226	44	6	31	18	728		312	139	43	2	39	20	582	1,310
3-4am	308	191	53	5	29	21	607		536	142	49	2	29	27	555	1,162
4-5am	360	128	60	2	50	25	625		1,262	190	112	18	67	38	785	1,410
5-6am	639	85	67	15	110	24	940		1,531	230	368	127	170	85	1,687	2,627
6-7am	997	71	165	27	101	55	1,416		1,808	244	581	102	199	77	3,011 **	3,927
7-8am	1,020	61	206	18	107	64	1,476		1,604	155	607	51	261	103	2,781	4,487
8-9am	1,080	94	240	63	138	58	1,673		1,647	191	631	51	296	61	2,877	4,454
9-10am	821	120	228	34	121	45	1,369		1,493	152	549	31	297	100	2,511	4,246
10-11am	830	102	243	21	105	39	1,340		1,339	124	429	39	244	87	2,622	3,962
11-12am	940	84	138	51	75	21	1,309		1,202	112	400	51	215	59	2,262	3,571
12-1pm	1,017	87	169	32	97	15	1,417		1,198	103	375	98	188	68	2,039	3,456
1-2pm	917	88	320	23	129	22	1,499		1,262	111	342	51	171	51	2,030	3,529
2-3pm	1,188	120	320	20	133	34	1,815		1,255	106	302	23	119	32	1,837	3,803
3-4pm	1,454	167	421	74	131	30	2,277		1,336	108	221	25	120	15	1,825	4,114
4-5pm	1,580	200	498	60	94	19	2,451 **		1,387	168	251	20	74	18	1,918	4,276
5-6pm	1,734	133	355	27	103	13	2,365		1,484	279	152	17	63	12	2,007	4,283
6-7pm	1,774	201	272	56	66	21	2,390		1,452	285	145	32	62	18	1,994	4,397
7-8pm	1,627	245	174	77	51	4	2,178		1,267	319	102	36	49	13	1,786	4,172
8-9pm	1,688	373	127	82	39	24	2,333		1,265	411	85	34	36	39	1,870	4,119
9-10pm	1,570	499	96	53	33	25	2,276		1,289	568	57	12	32	15	1,973	4,146
10-11pm	1,484	618	106	59	21	5	2,293		1,508	853	53	3	17	9	2,443	4,266
11-12pm	1,496	652	85	19	28	12	2,292		1,853	4,840	559	2,247	683	27,197	4,735 **	48,578
Totals	26,418	5,400	4,495	846	1,831	626	39,616	28,934	5,944	5,948	831	2,827	984	45,468	85,084	

74

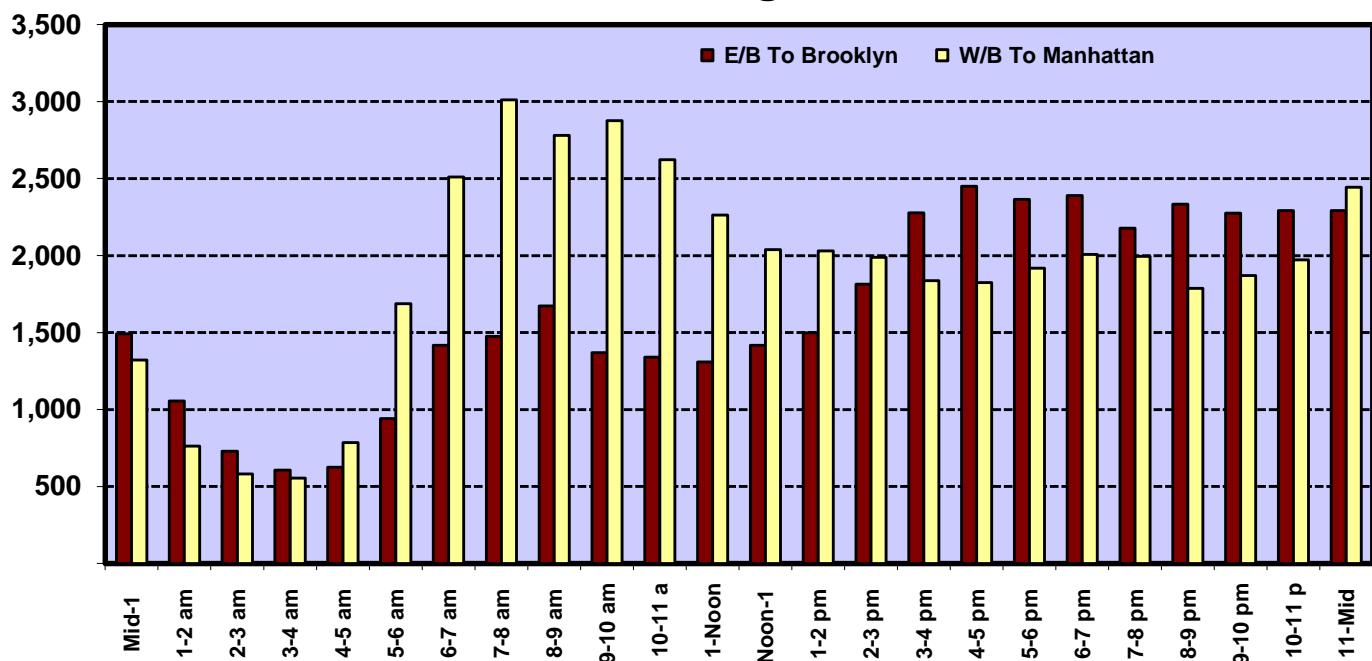
Westbound to Manhattan

FHWA Classes ▶	Commercial Vans, Panel Trucks,				Commercial Vans, Panel Trucks,				Commercial Vans, Panel Trucks,				Commercial Vans, Panel Trucks,			
	Autos, Motorcycles	SUVs, Family Vans	Taxis, Liveries, Limos	Police, Fleet Vehicles	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	Autos, Motorcycles	SUVs, Family Vans	Taxis, Liveries, Limos	Police, Fleet Vehicles	Busses	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	
1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	1,2, 3	1,2, 3	1,492	769	476	30	2	2 & 3	4	5 - 7	8 - 13
7-10am	2,921	275	674	115	366	167	4,518	5,059	590	1,819	204	756	241	8,669	13,187	
10am-1pm	2,787	273	550	104	277	75	4,066	4,034	388	1,378	121	756	246	6,923	10,989	
1-4pm	3,559	375	1,061	117	393	86	5,591	3,715	320	1,019	172	478	151	5,855	11,446	
4-7pm	5,088	534	1,125	143	263	53	7,206	4,207	555	624	62	257	45	5,750	12,956	
7am-7pm	14,355	1,457	3,410	479	1,299	381	21,381	17,015	1,853	4,840	559	2,247	683	27,197	48,578	
6-10am	3,918	346	839	142	467	222	5,934	6,590	820	2,187	331	926	326	11,180	17,114	
3-7pm	6,542	701	1,546	217	394	83	9,483	5,462	661	926	85	376	77	7,587	17,070	
6am-7pm	15,352	1,528	3,575	506	1,400	436	22,797	18,546	2,083	5,208	686	2,417	768	29,708	52,505	

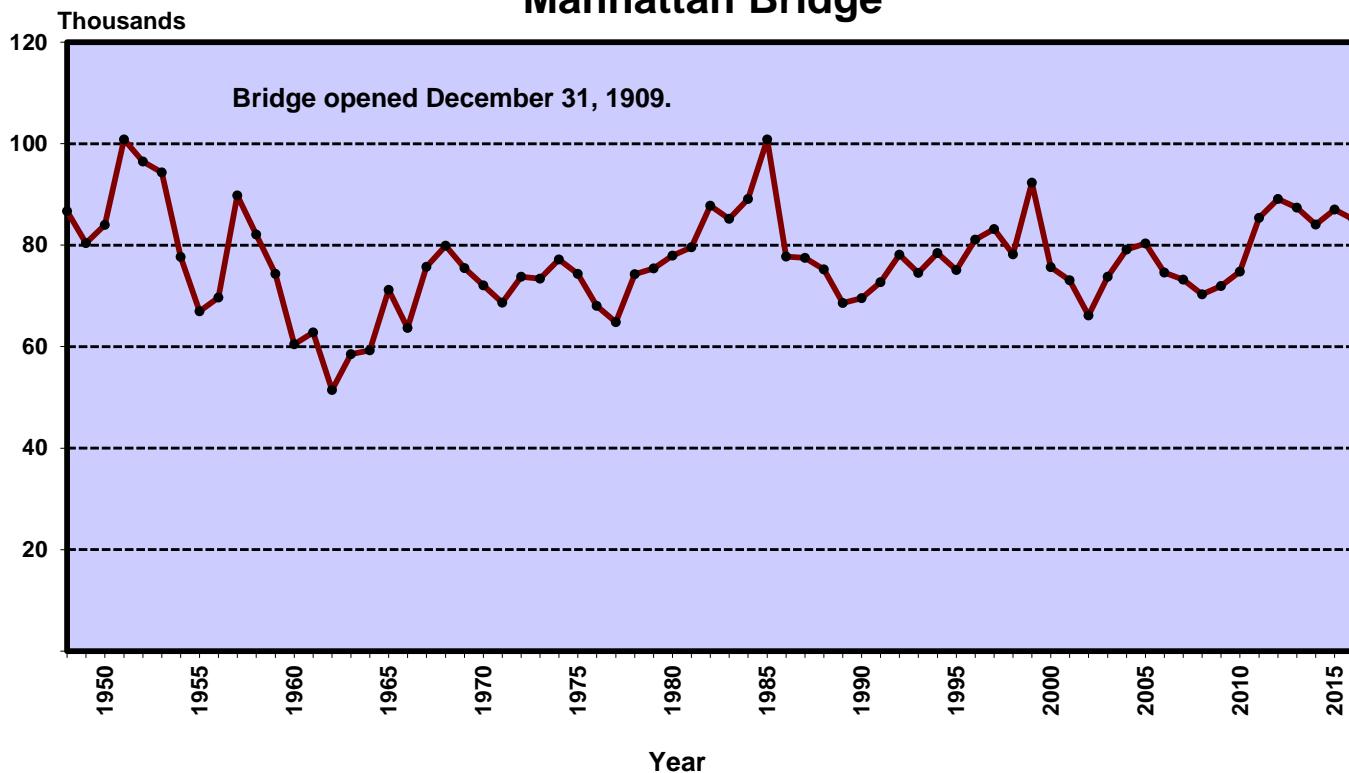
Based on October 2015 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Manhattan Bridge ~ 2016



Average Daily Traffic Volumes ~ Total of Both Directions Manhattan Bridge



Hourly Vehicular Volumes

Williamsburg Bridge - 2016

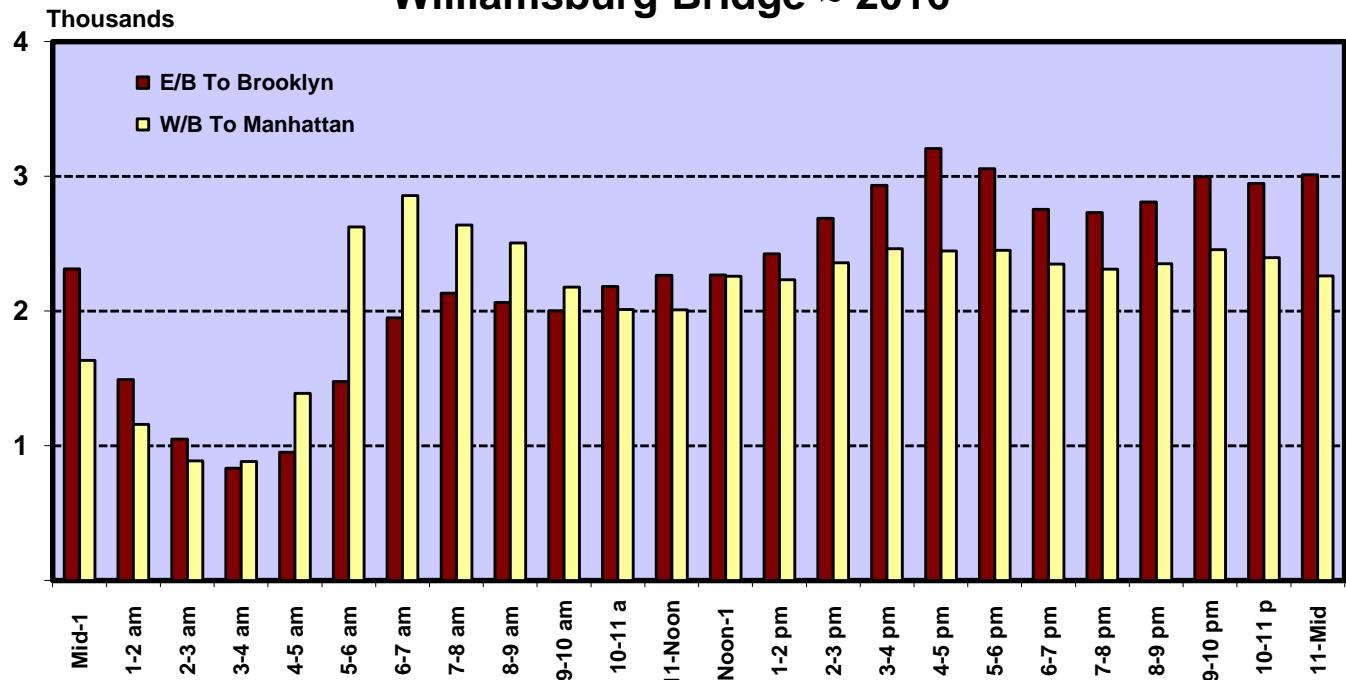
Eastbound to Brooklyn

		Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles										Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles																		
		Total Vehicles					Multiple Unit Trucks					Single Unit Trucks					Multiple Unit Trucks					Single Unit Trucks					Grand Totals			
		Autos, Motorcycles		SUVs, Family Vans		Taxis, Liveries, Limos		Buses		Single Unit Trucks		Multiple Unit Trucks		Autos, Motorcycles		SUVs, Family Vans		Taxis, Liveries, Limos		Buses		Single Unit Trucks		Multiple Unit Trucks		Total Vehicles	Grand Totals			
FHWA Classes	►	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13			1, 2, 3	2	2 & 3	4	5 - 7	8 - 13			1, 2, 3	2	2 & 3	4	5 - 7	8 - 13							
12-1am		1,406	793	83	2	28	2	2,314	683	886	39	1	23	2	1,634	3,948	1,491	343	752	32	1	28	3	1,159	2,650					
1-2am		854	544	62	3	23	5	1,491	343	752	32	1	28	3	1,634	3,948	51	257	565	32	1	28	5	888	1,937					
2-3am		575	396	51	7	19	1	1,049	501	308	37	0	32	5	888	1,937	951	634	1,22	4	97	15	1,715	2,339						
3-4am		404	359	38	8	22	1	832	516	1,608	228	24	220	22	2,625	4,102	1,477	1,798	405	65	251	40	2,857	4,806						
4-5am		481	371	52	6	40	1	951	634	1,608	228	24	220	22	2,625	4,102	1,477	1,798	405	65	251	40	2,857	4,806						
5-6am		857	405	124	4	83	4	1,477	523	298	65	251	40	22	2,625	4,102	1,949	1,798	405	65	251	40	2,857	4,806						
6-7am		1,279	372	213	7	71	7	1,949	1,798	405	298	65	251	40	2,625	4,102	1,798	1,798	405	65	251	40	2,857	4,806						
7-8am		1,369	419	225	21	94	5	2,133	1,703	275	365	38	237	21	2,639	4,772	1,703	275	365	38	237	21	2,639	4,772						
8-9am		1,302	322	247	49	134	10	2,064	1,388	249	543	23	290	13	2,596	4,570	1,388	249	543	23	290	13	2,596	4,570						
9-10am		1,213	317	276	43	140	13	2,002	1,166	263	464	13	254	17	2,177	4,179	1,166	263	464	13	254	17	2,177	4,179						
10-11am		1,286	340	341	26	178	12	2,183	1,267	279	285	11	164	6	2,012	4,195	1,267	279	285	11	164	6	2,012	4,195						
11-12am		1,457	291	314	15	182	6	2,265	1,382	274	231	11	111	0	2,009	4,274	1,382	274	231	11	111	0	2,009	4,274						
12-1pm		1,482	337	257	13	172	6	2,267	1,430	424	241	19	128	17	2,259	4,526	1,430	424	241	19	128	17	2,259	4,526						
1-2pm		1,677	316	252	9	164	6	2,424	1,489	318	235	33	142	16	2,233	4,657	1,489	318	235	33	142	16	2,233	4,657						
2-3pm		1,814	440	237	9	186	2	2,688	1,717	296	200	15	119	11	2,388	5,046	1,717	296	200	15	119	11	2,388	5,046						
3-4pm		1,886	543	273	36	188	6	2,932	1,877	317	163	16	86	4	2,463	5,395	1,877	317	163	16	86	4	2,463	5,395						
4-5pm		2,188	489	307	35	185	2	3,206	1,812	422	131	14	63	3	2,445	5,651	1,812	422	131	14	63	3	2,445	5,651						
5-6pm		2,152	577	193	12	119	3	3,056	1,690	589	110	15	44	3	2,451	5,507	1,690	589	110	15	44	3	2,451	5,507						
6-7pm		1,737	818	102	12	86	1	2,756	1,583	604	109	3	47	2	2,348	5,104	1,583	604	109	3	47	2	2,348	5,104						
7-8pm		1,488	1,073	92	11	66	2	2,732	1,572	608	95	10	26	0	2,311	5,043	1,572	608	95	10	26	0	2,311	5,043						
8-9pm		1,529	1,155	83	7	34	2	2,810	1,447	774	83	4	39	3	2,350	5,160	1,447	774	83	4	39	3	2,350	5,160						
9-10pm		1,664	1,230	50	13	39	1	2,997	1,517	819	73	3	44	0	2,456	5,453	1,517	819	73	3	44	0	2,456	5,453						
10-11pm		1,617	1,207	82	2	35	4	2,947	1,341	955	59	7	34	1	2,397	5,344	1,341	955	59	7	34	1	2,397	5,344						
11-12pm		1,233	45	4	38	2	3,012	1,134	1,032	47	2	43	2	2,260	5,272	1,134	1,032	47	2	43	2	2,260	5,272							
Totals		33,407	14,347	3,999	354	2,326	104	54,537	31,146	12,646	4,222	333	2,550	211	51,108	105,645														
7-10am		3,884	1,058	748	113	368	28	6,199	4,257	787	1,372	74	781	51	7,322	13,521	1,058	748	1,372	74	781	51	7,322	13,521						
10am-1pm		4,225	968	912	54	532	24	6,715	4,079	977	757	41	403	23	6,280	12,995	532	968	912	54	532	24	6,280	12,995						
1-4pm		5,377	1,299	762	54	538	14	8,044	5,083	931	598	64	347	31	7,054	15,098	8,044	538	931	598	64	347	31	7,054	15,098					
4-7pm		6,077	1,884	602	59	390	6	9,018	5,085	1,615	350	32	154	8	7,244	16,262	9,018	5,085	1,615	350	32	154	8	7,244	16,262					
7am-7pm		19,563	5,209	3,024	280	1,828	72	29,976	18,504	4,310	3,077	211	1,685	113	27,900	57,876	5,209	3,024	280	1,828	72	29,976	18,504	4,310	3,077	211	1,685	113	27,900	57,876

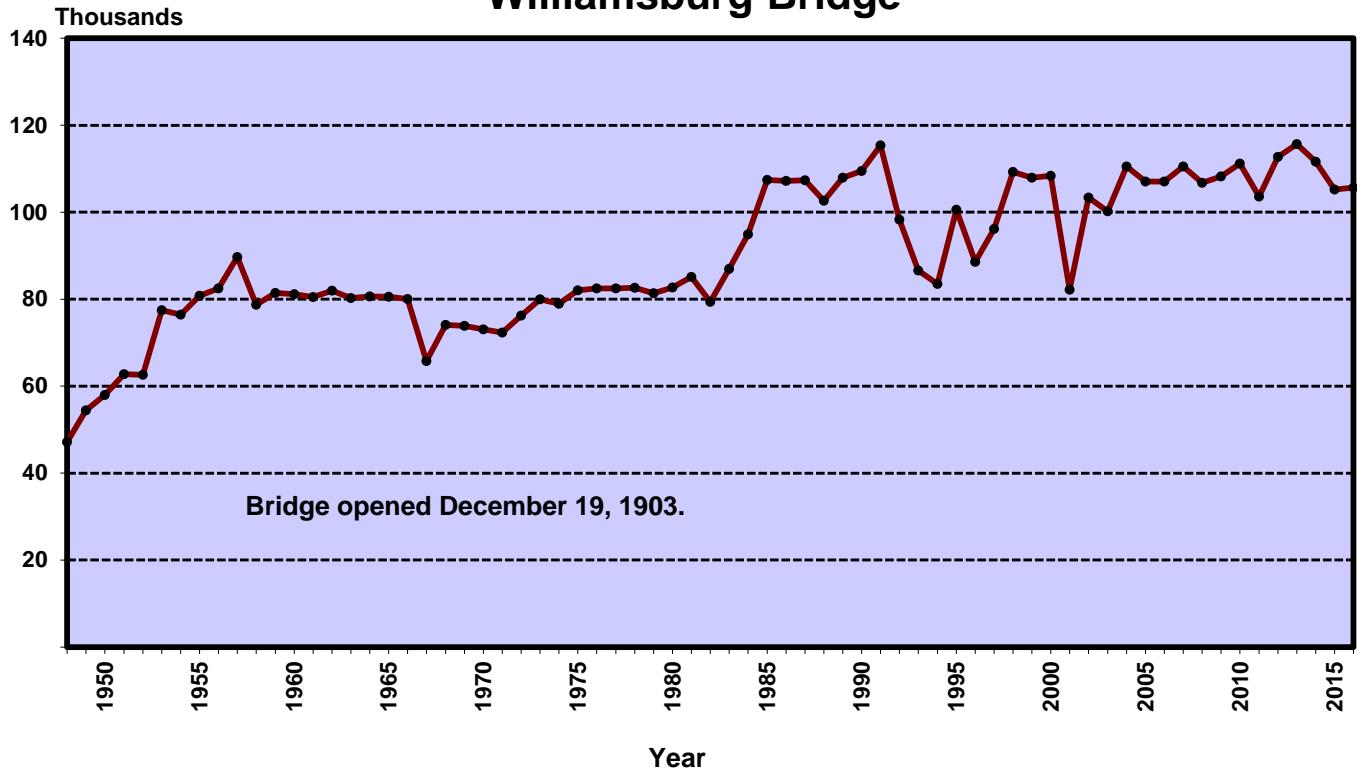
Based on October 2015 Classification Survey Data

** Peak Volumes

Hourly Vehicular Volumes Williamsburg Bridge ~ 2016



Average Daily Traffic Volumes ~ Total of Both Directions Williamsburg Bridge



Harlem River Bridges



**3rd Avenue Bridge
Over the Harlem River
Between Manhattan and Bronx**

Harlem River Bridges
Average Daily Traffic Volumes
1948 - 2016

Year	Alexander Hamilton	Broadway	Macombs Dam	Madison Avenue	Third Avenue
1948		16,020	33,608	27,222	31,403
1949		17,369	23,854	17,363	20,024
1950		15,462	28,641	27,933	34,984
1951	<i>Bridge Opened</i>	16,374	31,072	33,576	51,478
1952		17,412	36,100	27,468	34,023
1953	<i>Jan. 1963</i>	16,821	35,331	24,382	37,593
1954		15,958	27,911	23,408	33,667
1955		17,046	27,914	34,681	38,201
1956		17,960	32,761	46,591	42,735
1957		20,345	55,609	40,860	47,269
1958		22,132	50,227	33,393	61,367
1959		25,491	48,720	27,967	56,525
1960		23,025	50,865	22,541	68,079
1961		21,097	32,447	28,375	61,584
1962		19,170	39,580	25,400	53,580
1963		23,110	43,450	27,090	63,840
1964	87,840	25,020	31,050	31,170	63,250
1965	125,133	17,555	37,451	26,315	55,644
1966	104,559	22,438	39,922	28,865	70,938
1967	135,803	22,844	35,595	27,683	52,931
1968	92,771	23,621	33,875	27,658	41,243
1969	132,487	22,224	38,845	28,219	57,748
1970	141,609	23,115	46,523	24,941	48,110
1971	137,881	28,232	40,489	28,891	50,548
1972	142,139	25,178	39,702	26,923	47,454
1973	137,133	24,408	38,349	34,815	60,415
1974	144,909	21,825	40,934	30,425	54,770
1975	134,013	30,638	38,995	29,823	62,079
1976	137,141	26,453	36,065	27,838	54,957
1977	158,710	26,465	33,539	29,832	52,969
1978	151,342	25,145	35,764	34,938	54,177
1979	143,973	27,673	37,145	29,036	54,428
1980	152,852	29,838	37,464	27,476	54,152
1981	148,609	30,485	42,064	29,456	51,483
1982	156,038	30,846	45,178	30,485	60,236
1983	161,772	29,875	42,747	30,715	67,813
1984	164,734	28,338	46,870	33,101	56,706
1985	171,602	33,086	52,497	37,956	59,907
1986	175,635	32,314	50,602	39,809	64,404
1987	180,908	31,934	48,021	31,506	62,089
1988	172,970	33,047	43,318	31,321	62,379
1989	183,661	35,066	43,450	31,688	64,849
1990	192,848	41,705	41,113	32,458	63,516
1991	187,309	40,444	42,393	34,826	65,787
1992	176,279	35,184	42,022	32,907	66,967
1993	180,507	33,752	39,251	32,432	68,812
1994	178,522	32,833	39,876	22,923	66,104
1995	175,279	42,555	41,571	22,739	68,663
1996	176,856	40,040	40,031	17,948	67,206
1997	176,102	34,645	44,033	28,646	71,365
1998	176,632	35,770	42,027	32,922	70,757
1999	180,201	35,412	41,813	38,102	68,544
2000	177,899	37,990	21,008	47,583	73,121
2001	168,605	41,175	39,615	43,331	72,756
2002	168,079	38,287	18,878	49,487	58,949
2003	182,704	36,888	42,254	41,575	43,065
2004	175,323	35,190	40,558	48,723	47,053
2005	181,566	35,698	40,112	48,397	60,152
2006	190,183	33,551	39,878	43,805	61,874
2007	192,651	35,523	40,749	44,663	59,712
2008	189,598	33,266	38,897	41,740	58,510
2009	191,646	35,566	39,508	43,480	59,039
2010	192,213	37,292	39,627	42,966	60,549
2011	182,174	35,770	44,311	41,423	59,603
2012	185,309	35,411	39,020	41,782	59,053
2013	188,417	35,462	38,930	47,046	60,120
2014	178,809	34,239	38,417	41,340	58,447
2015	178,407	33,897	38,556	40,432	55,988
2016	177,853	36,027	38,183	44,338	55,096

Harlem River Bridges (cont'd)

Average Daily Traffic Volumes

1948 - 2016

Year	University Heights	Washington	Willis Avenue	145th Street	Totals	Year
1948	21,706	29,374	29,648	18,196	207,177	1948
1949	14,098	32,122	42,772	25,908	193,510	1949
1950	24,986	29,541	38,708	22,416	222,671	1950
1951	25,270	28,599	35,958	26,872	249,199	1951
1952	21,527	28,270	33,207	24,189	222,196	1952
1953	29,240	37,298	38,579	29,385	248,629	1953
1954	22,979	39,339	46,675	26,119	236,056	1954
1955	18,151	33,988	44,809	35,449	250,239	1955
1956	21,834	30,598	43,752	30,550	266,781	1956
1957	34,077	38,861	51,395	28,114	316,530	1957
1958	37,078	50,100	49,773	25,677	329,747	1958
1959	33,580	51,652	58,705	39,709	342,349	1959
1960	36,763	54,008	59,050	30,868	345,199	1960
1961	43,749	61,542	50,902	33,767	333,463	1961
1962	35,940	56,110	55,910	27,540	313,230	1962
1963	26,030	32,760	65,290	27,520	309,090	1963
1964	31,490	41,410	65,190	31,260	407,680	1964
1965	23,458	35,560	53,219	26,924	401,259	1965
1966	25,700	31,104	53,677	25,284	402,487	1966
1967	26,990	33,921	69,609	22,368	427,744	1967
1968	26,126	35,218	58,730	22,853	362,095	1968
1969	29,941	19,136	60,192	24,200	412,992	1969
1970	26,718	33,661	61,433	23,580	429,690	1970
1971	29,622	38,522	53,609	24,401	432,195	1971
1972	31,620	36,812	49,431	23,105	422,364	1972
1973	33,503	46,079	51,537	23,431	449,670	1973
1974	29,297	42,014	53,322	21,616	439,112	1974
1975	29,111	41,522	52,984	21,189	440,354	1975
1976	34,494	39,058	53,873	19,750	429,629	1976
1977	29,128	38,185	52,484	20,888	442,200	1977
1978	35,883	37,690	54,335	21,484	450,758	1978
1979	31,796	37,348	44,851	21,566	427,816	1979
1980	32,562	38,061	52,061	21,826	446,292	1980
1981	34,454	38,061	52,561	21,150	448,323	1981
1982	25,416	44,168	55,762	22,656	470,785	1982
1983	32,233	42,186	60,296	23,516	491,153	1983
1984	30,485	46,896	66,017	23,802	496,949	1984
1985	37,553	51,302	65,638	28,722	538,263	1985
1986	36,192	54,935	66,824	26,181	546,896	1986
1987	37,223	46,094	67,558	24,895	530,228	1987
1988	38,542	48,025	64,862	25,818	520,282	1988
1989	42,246	49,092	66,012	23,317	539,381	1989
1990	19,768	61,668	62,315	24,172	539,563	1990
1991	18,220	57,526	60,415	26,448	533,368	1991
1992	39,232	51,925	66,522	26,315	537,353	1992
1993	38,895	52,795	70,472	25,390	542,306	1993
1994	38,134	57,009	67,344	23,299	526,044	1994
1995	21,238	56,372	67,716	25,749	521,882	1995
1996	35,280	56,204	70,229	27,156	530,950	1996
1997	39,639	54,708	73,461	24,151	546,750	1997
1998	41,640	57,307	78,145	24,862	560,062	1998
1999	42,287	58,907	71,555	26,361	563,182	1999
2000	45,557	68,075	73,175	34,362	578,770	2000
2001	46,381	57,443	72,901	26,552	568,759	2001
2002	45,311	63,609	73,435	35,796	551,831	2002
2003	50,126	63,154	66,710	23,034	549,510	2003
2004	47,350	57,530	74,700	25,994	552,421	2004
2005	44,938	58,019	66,708	25,802	561,392	2005
2006	42,118	57,689	66,212	21,733	557,043	2006
2007	41,422	56,945	65,113	21,147	557,925	2007
2008	39,340	52,768	62,167	23,148	539,434	2008
2009	39,165	52,420	58,548	24,364	543,736	2009
2010	39,230	52,014	56,934	28,749	549,574	2010
2011	43,601	52,373	57,710	27,677	544,642	2011
2012	39,641	57,011	62,062	27,918	547,207	2012
2013	40,774	54,031	65,216	28,167	558,163	2013
2014	37,791	52,537	67,951	28,357	537,888	2014
2015	38,513	54,006	63,912	27,097	530,808	2015
2016	40,078	57,647	62,293	29,315	540,830	2016

Hourly Vehicular Volumes

Alexander Hamilton Bridge - 2016

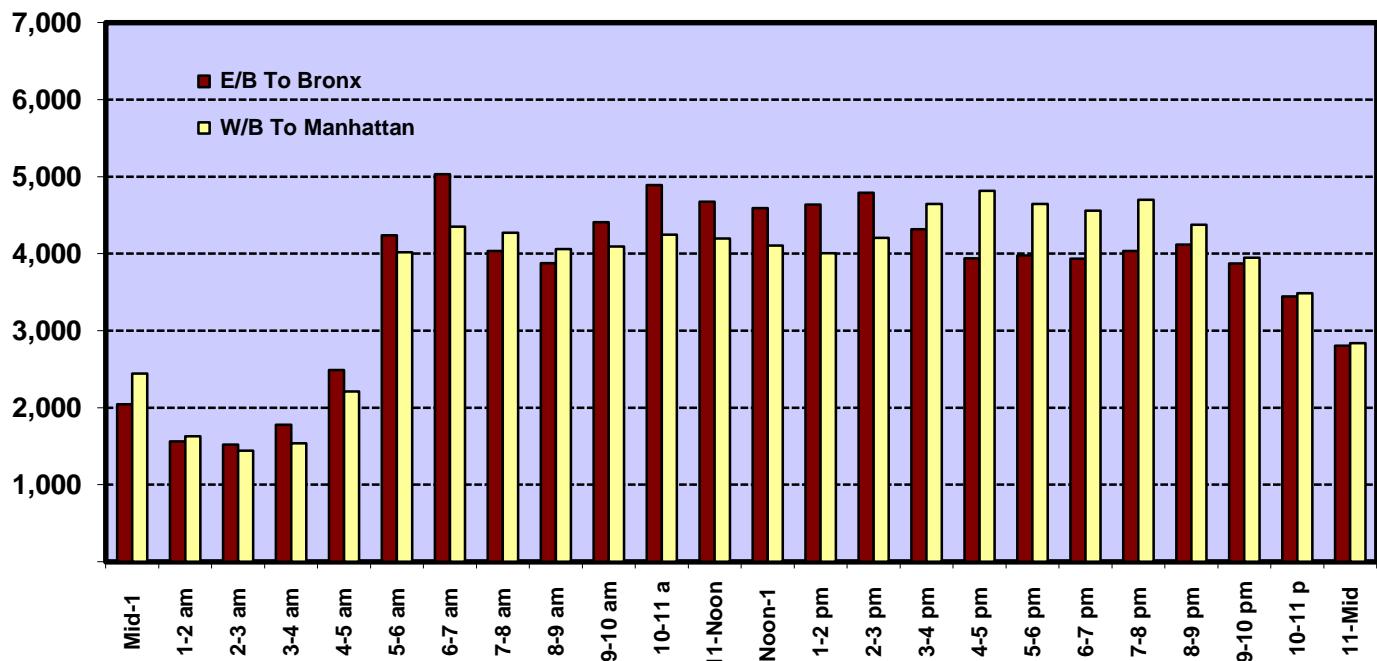
Eastbound to Bronx

FHWA Classes ▶	Westbound to Manhattan										Eastbound to Bronx																	
	Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles					Single Unit Trucks					Multiple Unit Trucks					Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles					Single Unit Trucks							
	Autos, Motorcycles	SUVs, Family Vans	Taxis, Liveries, Limous	Buses	Total Vehicles	Autos, Motorcycles	SUVs, Family Vans	Taxis, Liveries, Limous	Buses	Total Vehicles	Autos, Motorcycles	SUVs, Family Vans	Taxis, Liveries, Limous	Buses	Total Vehicles	Autos, Motorcycles	SUVs, Family Vans	Taxis, Liveries, Limous	Buses	Total Vehicles	Autos, Motorcycles	SUVs, Family Vans	Taxis, Liveries, Limous	Buses	Total Vehicles			
12-1am	1,466	77	40	4	75	382	2,044	1,790	17	67	64	488	2,443	4,487	4,487	4,487	4,487	4,487	4,487	4,487	4,487	4,487	4,487	4,487	4,487	4,487		
1-2am	924	65	24	3	69	477	1,562	999	25	65	7	70	462	1,628	3,190	3,190	3,190	3,190	3,190	3,190	3,190	3,190	3,190	3,190	3,190	3,190	3,190	
2-3am	723	42	27	0	120	607	1,519	705	13	43	3	48	629	1,441	2,960	2,960	2,960	2,960	2,960	2,960	2,960	2,960	2,960	2,960	2,960	2,960	2,960	
3-4am	684	54	40	2	230	768	1,778	588	0	46	3	93	809	1,539	3,317	3,317	3,317	3,317	3,317	3,317	3,317	3,317	3,317	3,317	3,317	3,317	3,317	
4-5am	1,231	71	98	0	253	838	2,491	1,122	21	98	0	186	785	2,212	4,703	4,703	4,703	4,703	4,703	4,703	4,703	4,703	4,703	4,703	4,703	4,703	4,703	
5-6am	2,503	24	115	3	187	1,406	4,238	2,426	51	144	0	381	1,016	4,018	8,256	8,256	8,256	8,256	8,256	8,256	8,256	8,256	8,256	8,256	8,256	8,256	8,256	
6-7am	3,518	9	300	1	85	1,121	5,034	**	3,210	34	229	46	159	673	9,385	9,385	9,385	9,385	9,385	9,385	9,385	9,385	9,385	9,385	9,385	9,385	9,385	
7-8am	3,113	17	235	16	277	375	4,033	3,281	55	282	36	236	381	4,271	8,304	8,304	8,304	8,304	8,304	8,304	8,304	8,304	8,304	8,304	8,304	8,304	8,304	
8-9am	2,838	40	256	29	349	365	3,877	3,123	34	184	22	266	429	4,058	7,935	7,935	7,935	7,935	7,935	7,935	7,935	7,935	7,935	7,935	7,935	7,935	7,935	
9-10am	3,158	26	347	40	379	461	4,411	2,924	34	152	18	374	592	4,094	8,505	8,505	8,505	8,505	8,505	8,505	8,505	8,505	8,505	8,505	8,505	8,505	8,505	
10-11am	3,544	15	316	16	500	502	4,893	2,717	29	291	21	444	745	4,247	9,140	9,140	9,140	9,140	9,140	9,140	9,140	9,140	9,140	9,140	9,140	9,140	9,140	
11-12am	3,326	87	300	8	464	491	4,676	2,656	26	223	23	348	921	4,197	8,873	8,873	8,873	8,873	8,873	8,873	8,873	8,873	8,873	8,873	8,873	8,873	8,873	
12-1pm	3,312	80	281	24	412	484	4,593	2,579	38	221	26	384	856	4,104	8,697	8,697	8,697	8,697	8,697	8,697	8,697	8,697	8,697	8,697	8,697	8,697	8,697	
1-2pm	3,571	44	280	28	327	387	4,637	2,629	29	239	39	295	775	4,006	8,643	8,643	8,643	8,643	8,643	8,643	8,643	8,643	8,643	8,643	8,643	8,643	8,643	
2-3pm	3,866	42	233	23	326	302	4,792	2,919	57	221	27	280	702	4,206	8,998	8,998	8,998	8,998	8,998	8,998	8,998	8,998	8,998	8,998	8,998	8,998	8,998	
3-4pm	3,404	63	213	33	291	315	4,319	3,441	43	303	14	239	605	4,645	8,964	8,964	8,964	8,964	8,964	8,964	8,964	8,964	8,964	8,964	8,964	8,964	8,964	
4-5pm	3,183	42	202	52	232	227	3,938	3,740	32	275	13	224	533	4,817	**	**	**	**	**	**	**	**	**	**	**	**		
5-6pm	3,211	35	296	20	172	242	3,976	3,877	37	163	3	167	399	4,646	8,622	8,622	8,622	8,622	8,622	8,622	8,622	8,622	8,622	8,622	8,622	8,622	8,622	
6-7pm	3,343	7	140	7	147	293	3,937	3,959	16	123	2	111	347	4,558	8,495	8,495	8,495	8,495	8,495	8,495	8,495	8,495	8,495	8,495	8,495	8,495	8,495	
7-8pm	3,369	36	121	29	154	324	4,033	3,985	21	132	7	118	436	4,699	8,732	8,732	8,732	8,732	8,732	8,732	8,732	8,732	8,732	8,732	8,732	8,732	8,732	
8-9pm	3,454	58	96	10	172	327	4,117	3,667	27	136	5	103	439	4,377	8,494	8,494	8,494	8,494	8,494	8,494	8,494	8,494	8,494	8,494	8,494	8,494	8,494	
9-10pm	3,122	84	108	4	102	454	3,874	3,281	29	99	0	86	451	3,946	7,820	7,820	7,820	7,820	7,820	7,820	7,820	7,820	7,820	7,820	7,820	7,820	7,820	
10-11pm	2,876	49	71	0	56	394	3,446	2,952	38	107	8	79	303	3,487	6,933	6,933	6,933	6,933	6,933	6,933	6,933	6,933	6,933	6,933	6,933	6,933	6,933	
11-12pm	2,391	75	38	0	50	251	2,805	2,056	27	90	11	86	570	2,840	5,645	5,645	5,645	5,645	5,645	5,645	5,645	5,645	5,645	5,645	5,645	5,645	5,645	
Totals	66,130	1,142	4,177	352	5,429	11,793	89,023	64,626	733	3,933	351	4,841	14,346	88,830	177,853													
7-10am	9,109	83	838	85	1,005	1,201	12,321	9,328	123	618	76	876	1,402	12,423	24,744	24,744	24,744	24,744	24,744	24,744	24,744	24,744	24,744	24,744	24,744	24,744	24,744	
10am-1pm	10,182	182	897	48	1,376	1,477	14,162	7,952	93	735	70	1,176	2,522	12,548	26,710	26,710	26,710	26,710	26,710	26,710	26,710	26,710	26,710	26,710	26,710	26,710	26,710	
1-4pm	10,841	149	726	84	944	1,004	13,748	8,989	129	763	80	814	2,082	12,857	26,605	26,605	26,605	26,605	26,605	26,605	26,605	26,605	26,605	26,605	26,605	26,605	26,605	
4-7pm	9,737	84	638	79	551	762	11,851	11,576	85	561	18	502	1,279	14,021	25,872	25,872	25,872	25,872	25,872	25,872	25,872	25,872	25,872	25,872	25,872	25,872	25,872	
7am-7pm	39,869	498	3,099	296	3,876	4,444	52,082	37,845	430	2,677	244	3,368	7,285	51,849	103,931	103,931	103,931	103,931	103,931	103,931	103,931	103,931	103,931	103,931	103,931	103,931	103,931	
6-10am	12,627	92	1,138	86	1,090	2,322	17,355	12,538	157	847	122	1,035	2,075	16,774	34,129	34,129	34,129	34,129	34,129	34,129	34,129	34,129	34,129	34,129	34,129	34,129	34,129	
3-7pm	13,141	147	851	112	842	1,077	16,170	15,017	128	864	32	741	1,884	18,666	34,836	34,836	34,836	34,836	34,836	34,836	34,836	34,836	34,836	34,836	34,836	34,836	34,836	
6am-7pm	43,387	507	3,399	297	3,961	5,565	57,116	41,055	464	2,906	290	3,527	7,958	56,200														

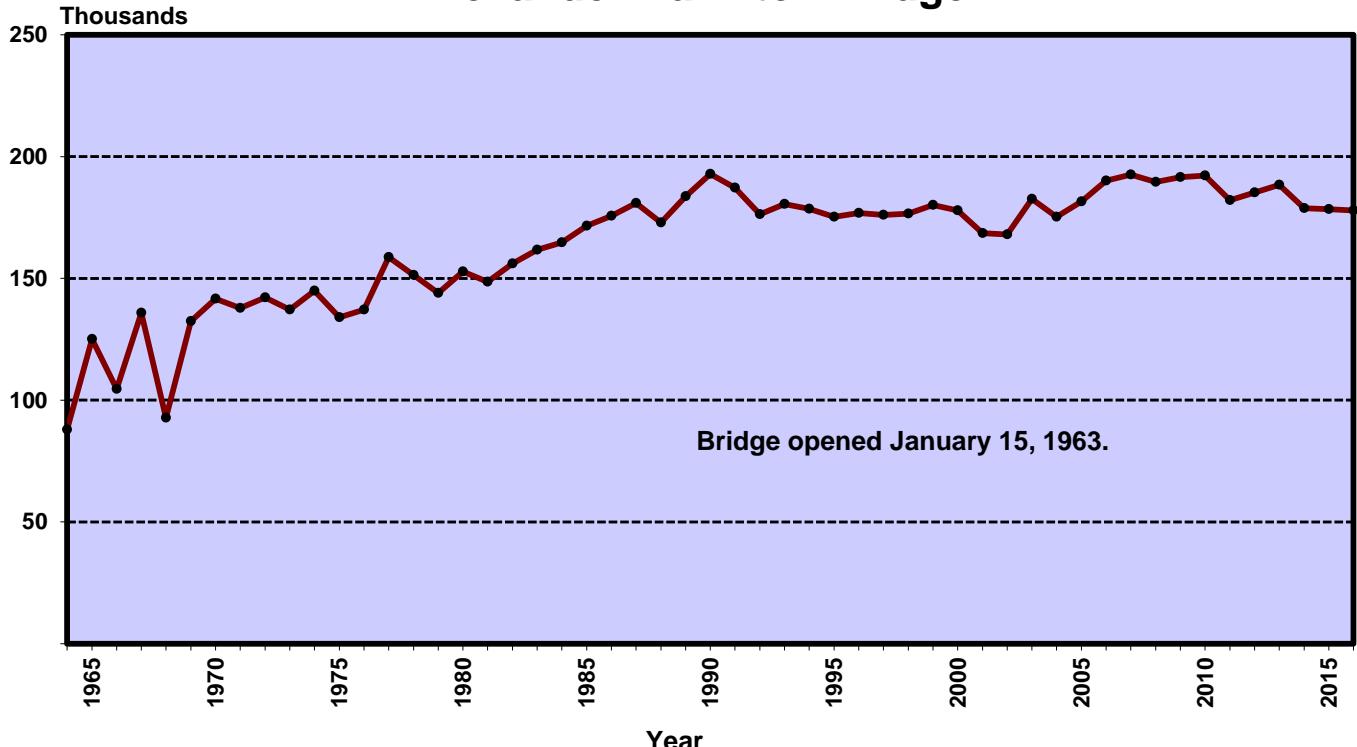
Based on October 2013 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Alexander Hamilton Bridge ~ 2016



Average Daily Traffic Volumes ~ Total of Both Directions Alexander Hamilton Bridge



Hourly Vehicular Volumes

Broadway Bridge - 2016

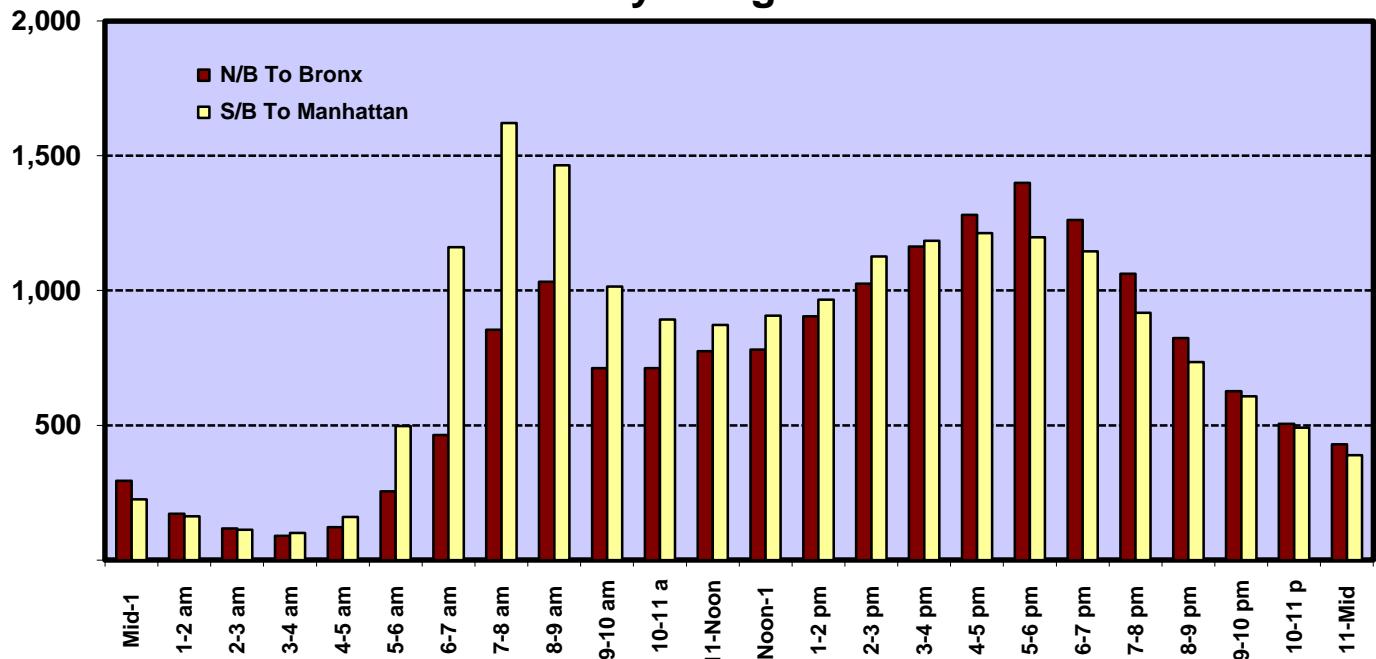
Northbound to Bronx

FHWA Classes ►	Southbound to Manhattan						Northbound to Bronx					
	Autos, Motorcycles SUVs, Family Vans	Taxis, Liveries, Limous	Panel Trucks, Pickups, Police, Fleet Vehicles	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	Autos, Motorcycles SUVs, Family Vans	Panel Trucks, Pickups, Police, Fleet Vehicles	Taxis, Liveries, Limous	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles
12-1am	252	18	8	12	2	294	136	68	3	16	2	0
1-2am	137	17	0	12	5	172	91	47	1	20	0	3
2-3am	100	7	6	1	2	117	59	43	4	4	1	2
3-4am	69	16	3	0	0	90	65	24	3	2	4	2
4-5am	88	11	1	14	4	122	111	30	11	1	1	6
5-6am	149	10	3	58	34	1	255	387	70	23	9	6
6-7am	339	14	12	67	2	30	464	924	106	36	83	11
7-8am	712	27	23	63	17	13	855	1,311	186	54	52	14
8-9am	875	79	23	36	10	10	1,033	1,135	187	62	50	21
9-10am	588	56	45	32	17	4	712	734	142	54	43	23
10-11am	556	59	45	16	26	10	712	595	177	42	26	23
11-12am	620	77	26	20	24	8	775	587	176	66	11	22
12-1pm	620	68	36	21	28	8	781	675	135	48	19	22
1-2pm	719	55	49	46	34	1	904	673	191	49	23	20
2-3pm	847	78	30	38	22	11	1,026	836	158	53	43	29
3-4pm	993	84	27	41	16	2	1,163	886	175	55	49	18
4-5pm	1,075	120	27	48	10	1	1,281	958	157	50	30	18
5-6pm	1,191	129	40	36	3	1	1,400	986	136	39	29	7
6-7pm	1,165	45	22	28	1	1	1,262	920	154	16	45	8
7-8pm	973	45	16	16	9	3	1,062	741	108	17	42	8
8-9pm	740	44	12	17	10	1	824	520	149	22	34	4
9-10pm	566	40	15	2	1	2	626	436	113	11	45	1
10-11pm	441	44	11	7	0	2	505	334	115	6	32	2
11-12pm	369	35	10	8	6	1	429	256	103	16	12	0
Totals	14,154	1,178	490	639	283	120	16,864	14,356	2,950	741	720	265
7-10am	2,145	162	91	131	44	27	2,600	3,180	515	170	145	58
10am-1pm	1,796	204	107	57	78	26	2,268	1,857	488	156	67	48
1-4pm	2,559	217	106	125	72	14	3,093	2,395	524	157	115	67
4-7pm	3,431	294	89	112	14	3	3,943	2,864	447	105	104	33
7am-7pm	9,931	877	393	425	208	70	11,904	10,296	1,974	588	420	225
6-10am	2,484	176	103	198	46	57	3,064	4,104	621	206	228	69
3-7pm	4,424	378	116	153	30	5	5,106	3,750	622	160	153	51
6am-7pm	10,270	891	405	492	210	100	12,368	11,220	2,080	624	503	236

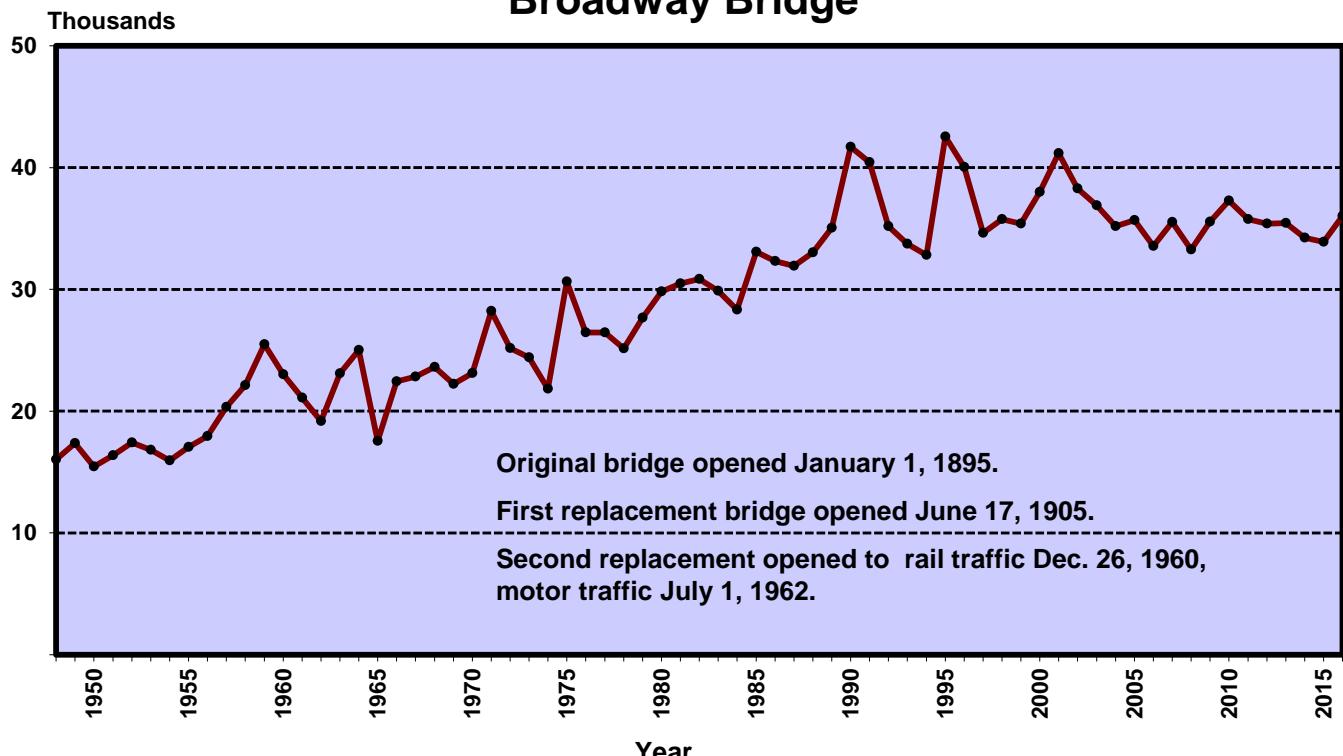
Based on October 2013 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Broadway Bridge ~ 2016



Average Daily Traffic Volumes ~ Total of Both Directions Broadway Bridge



Hourly Vehicular Volumes

Macombs Dam Bridge - 2016

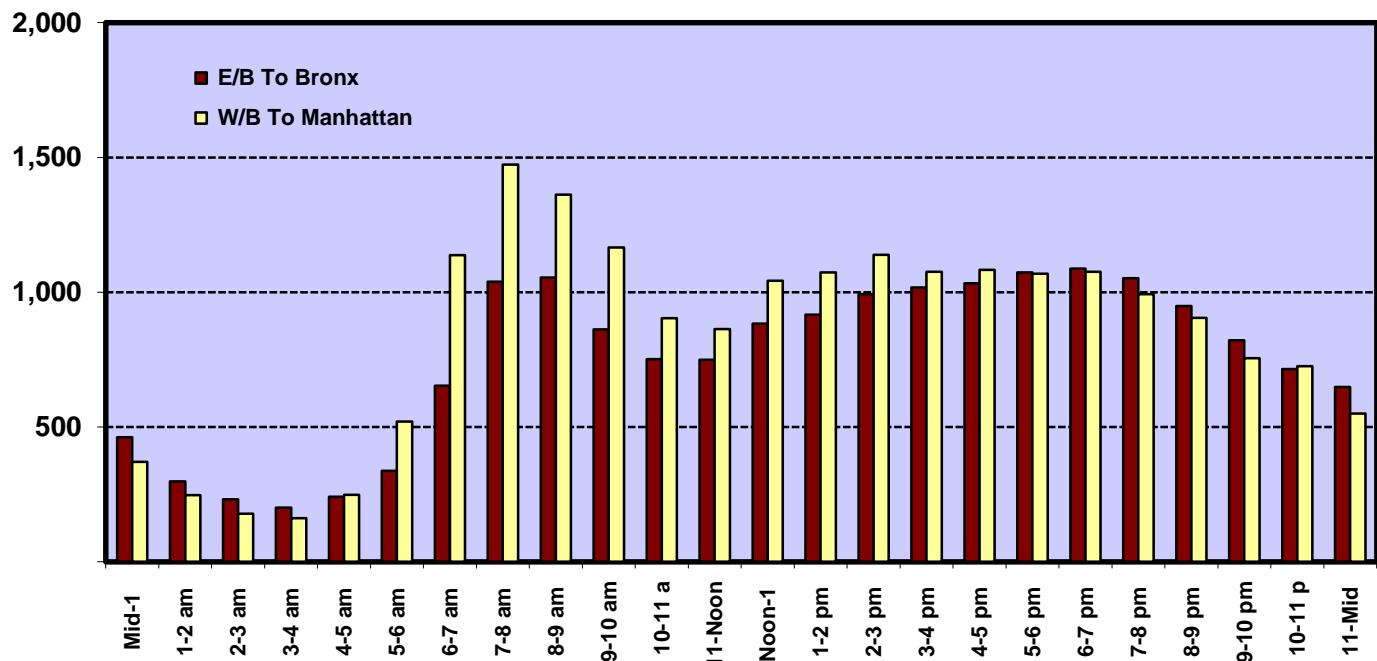
Eastbound to Bronx

FHWA Classes ►	<i>Westbound to Manhattan</i>						<i>Eastbound to Bronx</i>						
	Autos, Motorcycles	SUVs, Family Vans	Taxis, Liveries, Limous	Panel Trucks, Pickups, Police, Fleet Vehicles	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	Autos, Motorcycles	SUVs, Family Vans	Taxis, Liveries, Limous	Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles	Single Unit Trucks	Multiple Unit Trucks
12-1am	373	44	28	5	9	3	462	320	30	14	1	1	370
1-2am	242	26	18	5	5	2	298	215	18	11	2	0	247
2-3am	176	32	11	2	9	2	232	146	22	6	2	2	178
3-4am	152	31	13	1	1	3	201	137	18	3	2	1	161
4-5am	180	45	7	1	7	1	241	194	21	17	13	2	248
5-6am	268	50	10	3	1	5	337	382	81	31	16	7	520
6-7am	511	89	25	8	20	0	653	723	183	113	62	44	1,137
7-8am	850	124	25	21	16	3	1,039	1,036	188	115	85	30	20
8-9am	866	87	23	57	16	5	1,054	1,086	110	91	25	43	7
9-10am	691	81	42	25	21	2	862	920	97	67	12	63	7
10-11am	585	79	44	11	30	3	752	721	65	52	20	39	6
11-12am	560	90	61	7	25	6	749	660	78	74	16	29	6
12-1pm	670	102	72	8	26	5	883	823	95	77	14	22	12
1-2pm	698	109	69	10	28	3	917	811	133	75	22	24	8
2-3pm	790	110	56	10	25	1	992	871	136	82	27	20	3
3-4pm	840	80	49	17	25	6	1,017	827	112	72	31	30	4
4-5pm	872	69	43	24	22	3	1,033	871	85	81	32	13	1
5-6pm	858	104	39	32	33	7	1,073	905	80	57	20	6	0
6-7pm	889	101	57	12	24	5	1,088	930	74	51	16	5	0
7-8pm	860	95	67	9	17	4	1,052	858	71	44	16	2	1
8-9pm	790	91	51	5	8	4	949	788	63	41	10	3	0
9-10pm	690	75	44	6	6	1	822	654	63	25	10	3	0
10-11pm	595	64	40	5	6	5	715	623	47	41	9	5	0
11-12pm	540	54	38	3	9	4	648	475	38	23	11	3	0
Totals	14,546	1,832	932	287	389	83	18,069	15,976	1,908	1,263	477	397	93
7-10am	2,407	292	90	103	53	10	2,955	3,042	395	273	122	136	34
10am-1pm	1,815	271	177	26	81	14	2,384	2,204	238	203	50	90	24
1-4pm	2,328	299	174	37	78	10	2,926	2,509	381	229	80	74	15
4-7pm	2,619	274	139	68	79	15	3,194	2,706	239	189	68	24	1
7am-7pm	9,169	1,136	580	234	291	49	11,459	10,461	1,253	894	320	324	74
6-10am	2,918	381	115	111	73	10	3,608	3,765	578	386	184	180	46
3-7pm	3,459	354	188	85	104	21	4,211	3,533	351	261	99	54	5
6am-7pm	9,680	1,225	605	242	311	49	12,112	11,184	1,436	1,007	382	368	86

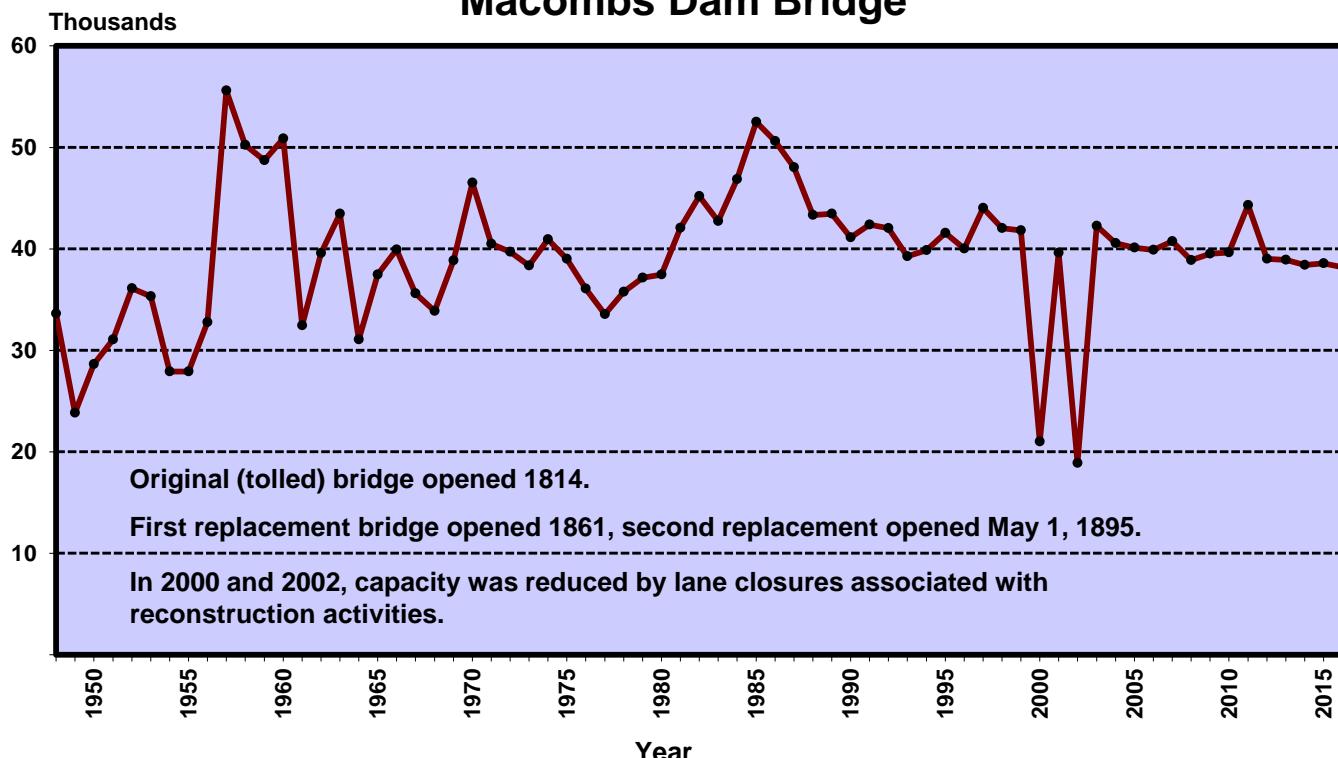
Based on October 2013 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Macombs Dam Bridge ~ 2016



Average Daily Traffic Volumes ~ Total of Both Directions Macombs Dam Bridge



Hourly Vehicular Volumes

Madison Avenue Bridge - 2016

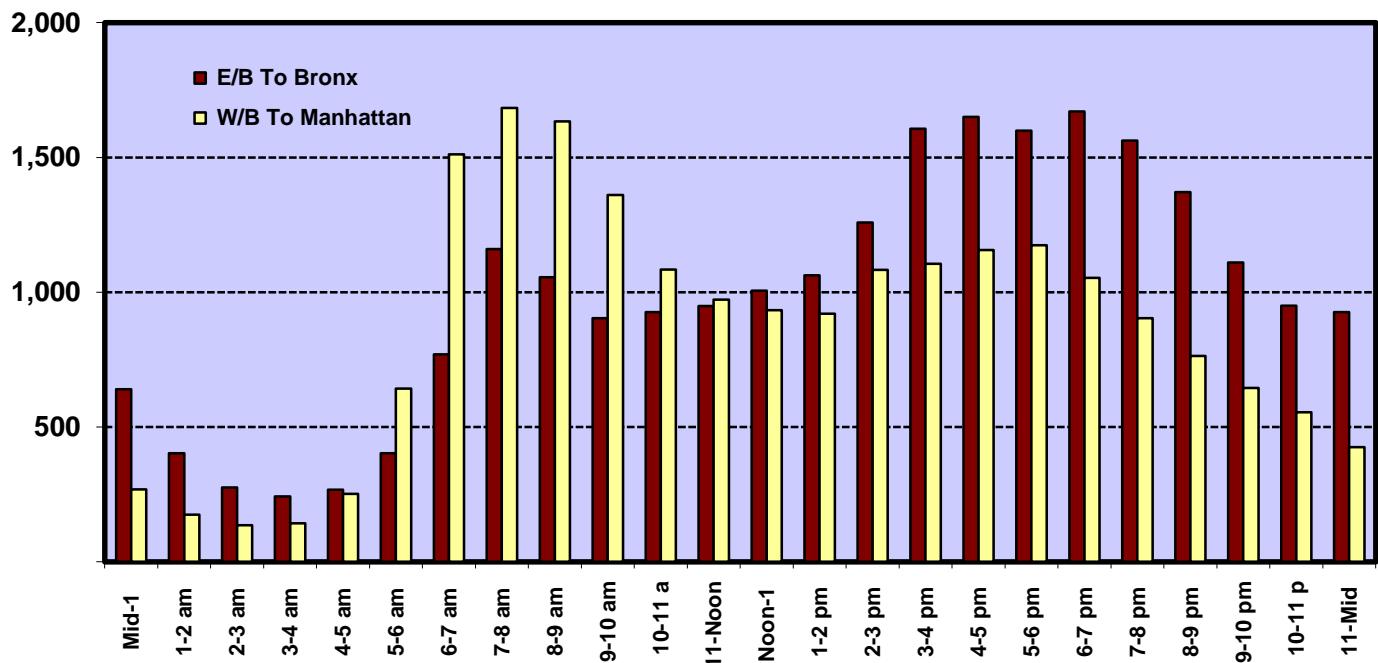
Eastbound to Bronx

FHWA Classes ►	Autos, Motorcycles SUVs, Family Vans	Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles				Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles				Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	2-way Grand Totals	
		Taxis, Liveries, Limos	Buses	1,2,3	2 & 3				1,2,3	2	2 & 3	4	5 - 7	8 - 13			
12-1am	513	86	18	11	8	4	640	244	11	6	3	4	0	268	908		
1-2am	279	90	12	4	17	0	402	152	15	1	1	4	1	174	576		
2-3am	188	66	6	1	15	0	276	119	10	1	0	3	2	135	411		
3-4am	158	55	14	1	9	5	242	97	28	11	0	5	2	143	385		
4-5am	174	54	15	1	16	7	267	168	44	20	2	16	2	252	519		
5-6am	314	41	15	2	30	0	402	457	81	19	23	58	4	642	1,044		
6-7am	644	51	28	9	37	0	769	969	146	67	197	121	12	1,572	2,281		
7-8am	1,003	37	26	39	52	3	1,160	1,314	108	105	80	70	6	1,683	2,843	**	**
8-9am	816	68	39	94	36	2	1,055	1,275	49	167	26	113	4	1,634	2,689		
9-10am	562	177	76	43	36	9	903	1,006	43	146	43	119	4	1,361	2,264		
10-11am	604	141	86	28	66	1	926	818	39	112	49	64	2	1,084	2,010		
11-12am	692	91	92	20	51	3	949	748	28	120	22	53	1	972	1,921		
12-1pm	671	121	114	31	67	2	1,006	752	16	64	40	58	3	933	1,939		
1-2pm	797	73	92	24	77	0	1,063	747	19	45	51	57	1	920	1,983		
2-3pm	972	61	121	22	82	0	1,258	856	25	84	80	36	3	1,083	2,341		
3-4pm	1,159	129	171	74	70	3	1,606	960	21	69	35	20	0	1,105	2,711		
4-5pm	1,177	204	163	60	43	3	1,650	1,051	48	14	32	11	0	1,156	2,806		
5-6pm	1,352	62	119	38	28	0	1,599	1,046	93	5	22	8	0	1,174	2,773		
6-7pm	1,483	41	75	34	38	0	1,671	* 950	47	23	21	10	2	1,053	2,724		
7-8pm	1,377	72	67	23	22	1	1,562	829	27	19	25	2	1	903	2,465		
8-9pm	1,216	88	39	16	11	1	1,371	724	18	9	5	6	1	763	2,134		
9-10pm	978	82	31	9	10	0	1,110	599	8	21	10	6	1	645	1,755		
10-11pm	809	100	23	8	9	1	950	498	23	19	9	5	1	555	1,505		
11-12pm	797	75	25	12	16	1	926	396	13	5	8	3	0	425	1,351		
Totals	18,735	2,065	1,467	604	846	46	23,763	16,775	960	1,152	784	851	53	20,575	44,338		
7-10am	2,381	282	141	176	124	14	3,118	3,595	200	418	149	302	14	4,678	7,796		
10am-1pm	1,967	353	292	79	184	6	2,881	2,318	83	296	111	175	6	2,989	5,870		
1-4pm	2,928	263	384	120	229	3	3,927	2,563	65	198	166	112	4	3,108	7,035		
4-7pm	4,012	307	357	132	109	3	4,920	3,047	188	42	75	29	2	3,383	8,303		
7am-7pm	11,288	1,205	1,174	507	646	26	14,846	11,523	536	954	501	618	26	14,158	29,004		
6-10am	3,025	333	169	185	161	14	3,887	4,564	346	485	346	423	26	6,190	10,077		
3-7pm	5,171	436	528	206	179	6	6,526	4,007	209	111	49	2	4,488	11,014			
6am-7pm	11,932	1,256	1,202	516	683	26	15,615	12,492	682	1,021	698	739	38	15,670	31,285		

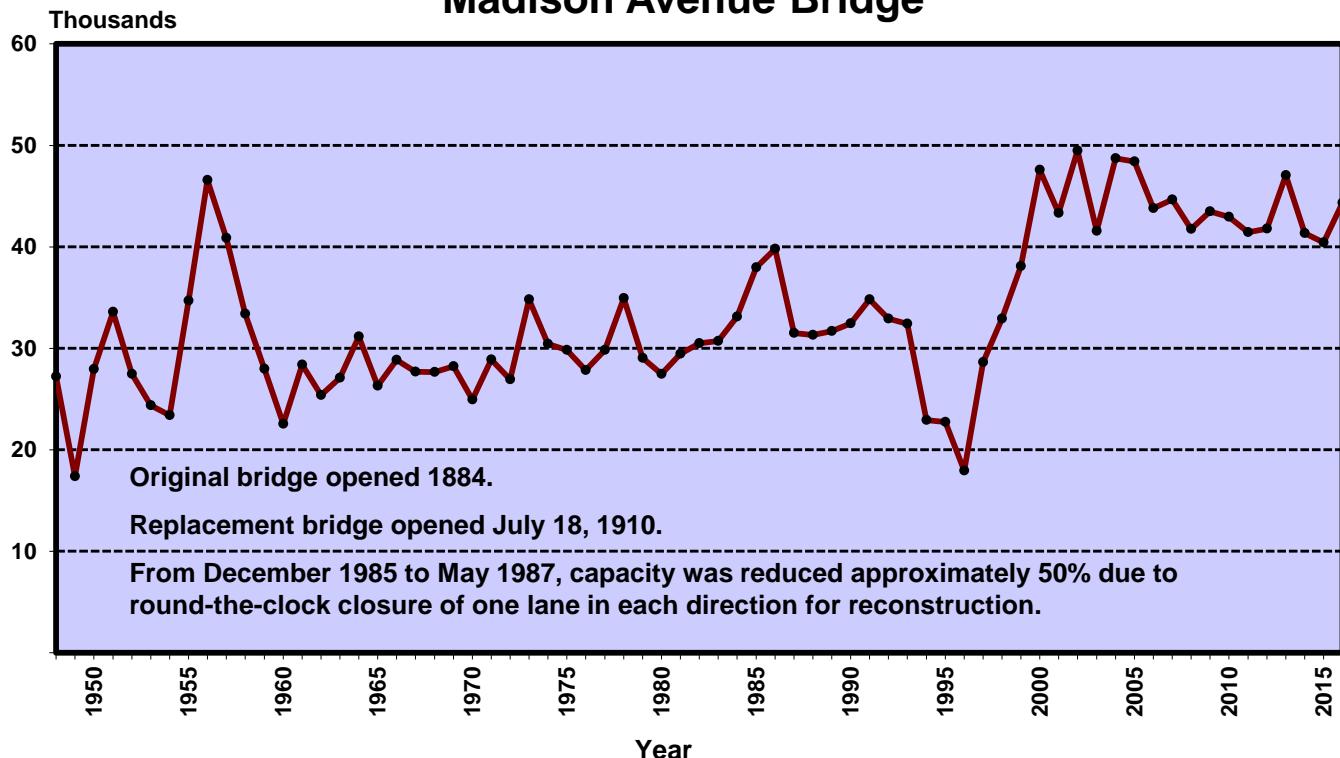
Based on October 2013 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Madison Avenue Bridge ~ 2016



Average Daily Traffic Volumes ~ Total of Both Directions Madison Avenue Bridge



Hourly Vehicular Volumes

Third Avenue Bridge - 2016

Northbound to Bronx

FHWA Classes ▶	Autos, Motorcycles SUVs, Family Vans	Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles			Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles			Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	2-way Grand Totals
		Taxis, Liveries, Limos	Buses	1,2,3				1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	
12-1am														
1-2am														
2-3am														
3-4am														
4-5am														
5-6am														
6-7am														
7-8am														
8-9am														
9-10am														
10-11am														
11-12am														
12-1pm														
1-2pm														
2-3pm														
3-4pm														
4-5pm														
5-6pm														
6-7pm														
7-8pm														
8-9pm														
9-10pm														
10-11pm														
11-12pm														
Totals														
43,389	5,002	3,375	757	2,352	221	55,096								
7-10am														
10am-1pm	5,703	431	910	119	457	25	7,645							
1-4pm	5,474	697	772	106	343	33	7,425							
4-7pm	6,861	636	454	276	241	12	8,480							
7am-7pm	7,736	782	321	67	109	19	9,034							
25,774	2,546	2,457	568	1,150	89	32,584								
6-10am	8,201	597	1,145	257	736	50	10,986							
10-243	10,243	993	417	116	152	22	11,943							
28,272	2,712	2,692	706	1,429	114	35,925								

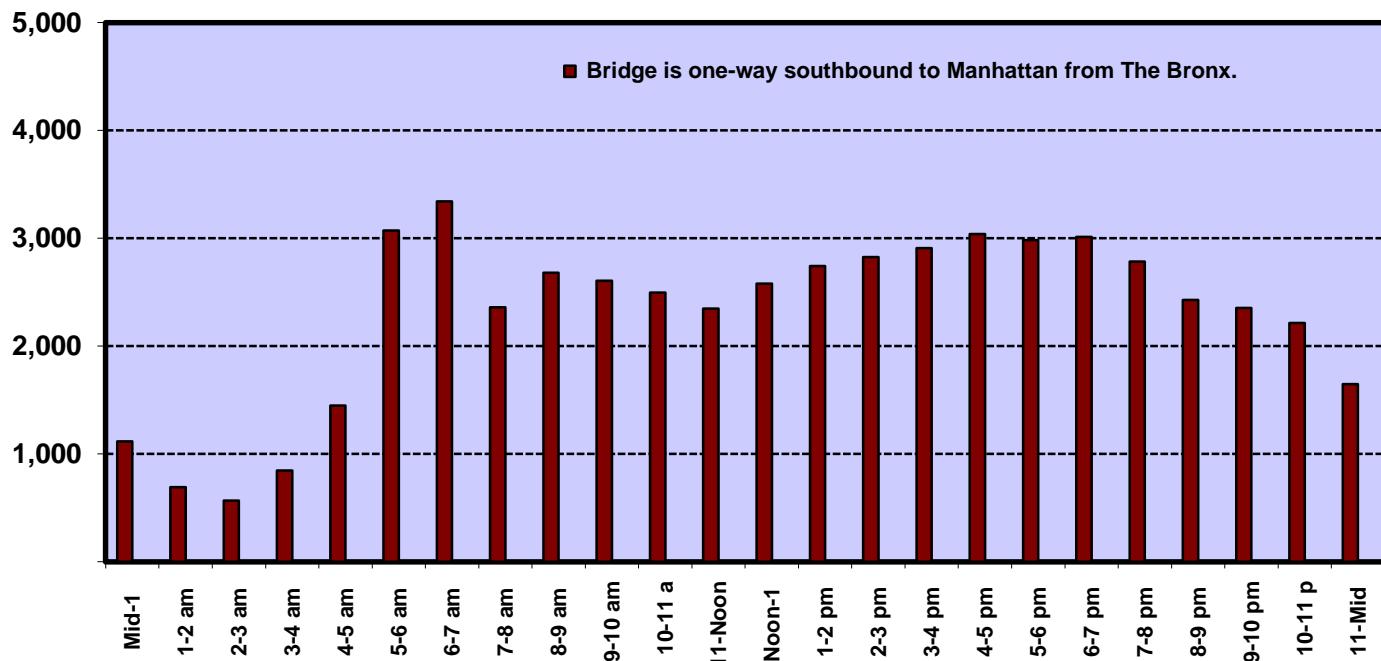
Southbound to Manhattan

FHWA Classes ▶	Autos, Motorcycles SUVs, Family Vans	Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles			Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles			Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	2-way Grand Totals
		Taxis, Liveries, Limos	Buses	1,2,3				1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	
12-1am														
1-2am														
2-3am														
3-4am														
4-5am														
5-6am														
6-7am														
7-8am														
8-9am														
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3-4pm														
4-5pm														
5-6pm														
6-7pm														
7-8pm														
8-9pm														
9-10pm														
10-11pm														
11-12pm														
Totals														
43,389	5,002	3,375	757	2,352	221	55,096								
7-10am	5,703	431	910	119	457	25	7,645							
10am-1pm	5,474	697	772	106	343	33	7,425							
1-4pm	6,861	636	454	276	241	12	8,480							
4-7pm	7,736	782	321	67	109	19	9,034							
7am-7pm	25,774	2,546	2,457	568	1,150	89	32,584							
6-10am	8,201	597	1,145	257	736	50	10,986							
10-243	10,243	993	417	116	152	22	11,943							
28,272	2,712	2,692	706	1,429	114	35,925								

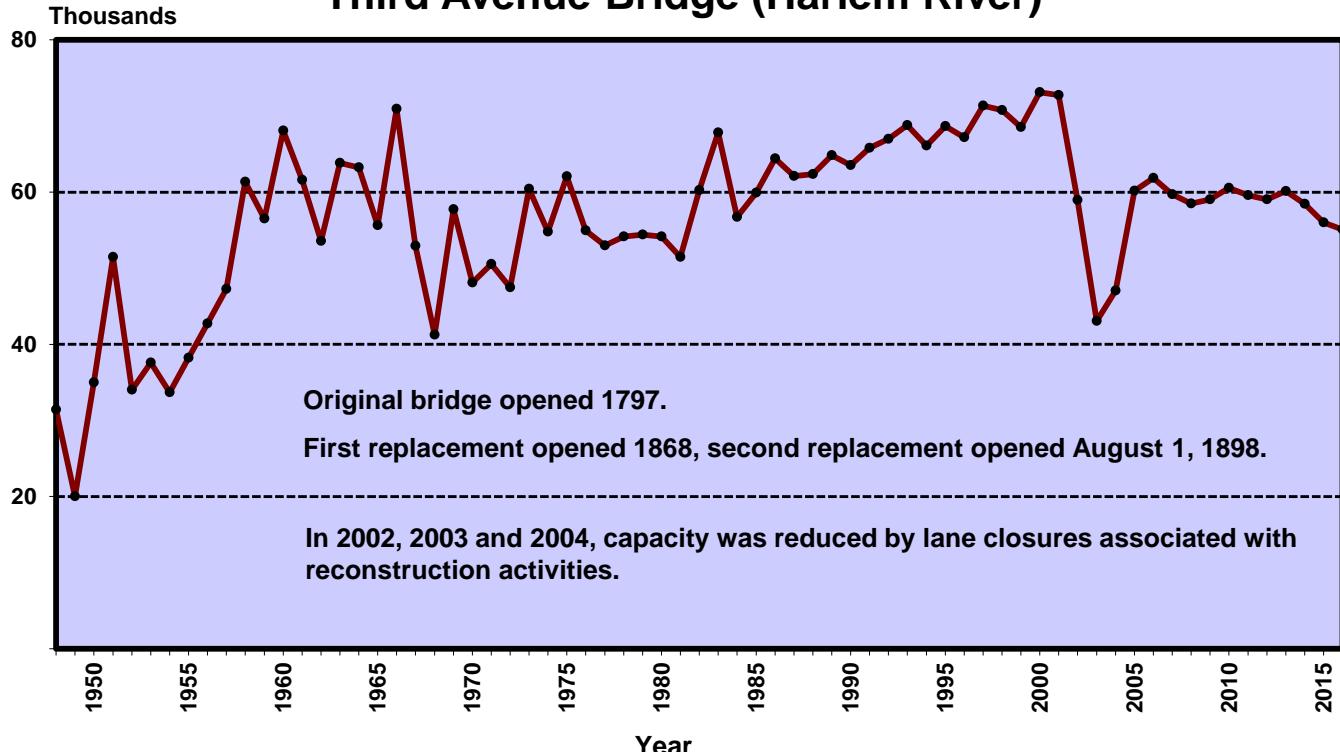
Based on October 2013 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Third Avenue Bridge (Harlem River) ~ 2016



Average Daily Traffic Volumes Third Avenue Bridge (Harlem River)



Hourly Vehicular Volumes

University Heights Bridge - 2016

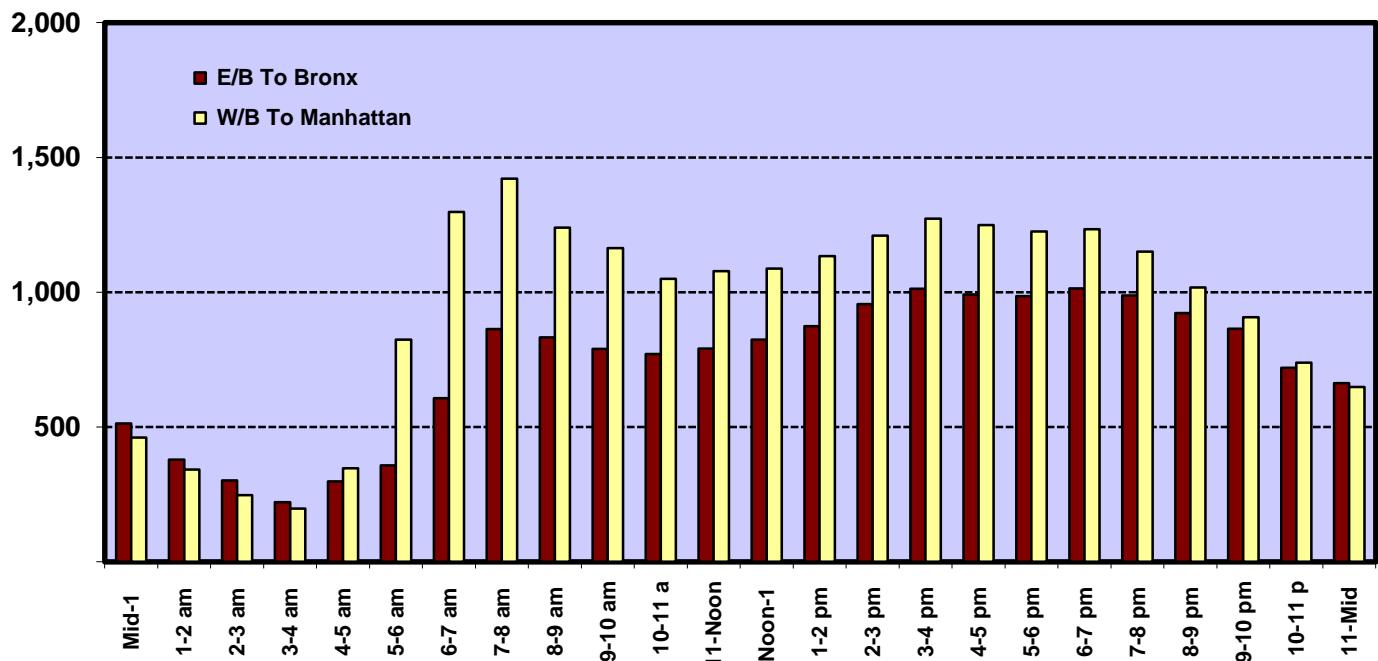
Eastbound to Bronx

FHWA Classes ►	Autos, Motorcycles SUVs, Family Vans	Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles				Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles				Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	2-way Grand Totals	
		2 & 3	4	5 - 7	8 - 13				1,2, 3	2	2 & 3	4	5 - 7	8 - 13	461	974	
12-1am	435	57	5	10	1	513	397	41	7	7	9	0	461	342	721		
1-2am	339	24	10	3	0	379	265	56	11	1	9	0	342	247	549		
2-3am	269	21	3	3	6	0	302	179	38	10	2	18	0	0	197	418	
3-4am	178	20	7	2	13	1	221	182	4	3	4	4	0	0	347	645	
4-5am	245	13	23	4	6	7	298	300	22	10	1	14	0	0	347	1,181	
5-6am	304	21	16	4	9	3	357	695	55	43	10	19	2	2	824	1,298	
6-7am	463	49	18	19	57	1	607	1,040	78	83	69	26	2	2	1,421	1,905	**
7-8am	698	54	39	30	38	4	863	1,194	61	59	54	51	2	2	2,284	2,284	
8-9am	646	70	57	32	23	4	832	1,019	78	74	20	45	3	3	1,239	2,071	
9-10am	542	103	63	21	59	2	790	854	112	100	27	61	10	10	1,164	1,954	
10-11am	561	79	88	17	22	3	770	791	108	73	13	63	2	2	1,050	1,820	
11-12am	607	64	50	14	48	8	791	878	53	63	20	57	7	7	1,073	1,869	
12-1pm	618	76	57	16	53	4	824	879	64	58	26	57	4	4	1,088	1,912	
1-2pm	692	58	72	18	25	9	874	879	102	72	35	45	1	1	1,134	2,008	
2-3pm	748	91	54	21	31	11	956	957	121	63	25	43	1	1	1,216	2,166	
3-4pm	795	81	77	32	27	1	1,013	1,077	66	52	36	40	2	2	1,273	2,286	**
4-5pm	797	68	62	42	21	1	991	1,030	91	60	25	42	1	1	1,249	2,240	
5-6pm	795	102	51	20	14	4	986	1,009	110	69	18	19	0	0	1,225	2,211	
6-7pm	871	84	32	7	18	2	1,014	1,045	114	37	16	22	0	0	1,234	2,248	
7-8pm	764	141	51	19	11	2	988	940	138	39	16	17	0	0	1,150	2,138	
8-9pm	753	117	28	12	11	1	922	846	110	35	12	13	1	1	1,017	1,939	
9-10pm	775	53	22	10	4	0	864	776	93	21	11	6	0	0	907	1,771	
10-11pm	616	71	19	7	6	0	719	616	94	12	9	7	1	1	739	1,458	
11-12pm	576	65	10	6	4	1	662	539	74	17	4	13	1	1	648	1,310	
Totals	14,087	1,582	914	364	519	70	17,536	18,387	1,883	1,071	461	700	40	40	22,542	40,078	
7-10am	1,886	227	159	83	120	10	2,485	3,067	251	233	101	157	15	15	3,824	6,309	
10am-1pm	1,786	219	195	47	123	15	2,385	2,548	225	194	59	177	13	13	3,216	5,601	
1-4pm	2,235	230	71	83	21	21	2,843	2,913	289	187	96	128	4	4	3,617	6,460	
4-7pm	2,463	254	145	69	53	7	2,991	3,084	315	166	59	83	1	1	3,708	6,699	
7am-7pm	8,370	930	702	270	379	53	10,704	11,612	1,080	780	315	545	33	33	14,365	25,069	
6-10am	2,349	276	177	102	177	11	3,092	4,107	329	316	170	183	17	17	5,122	8,214	
3-7pm	3,258	335	222	101	80	8	4,004	4,161	381	218	95	123	3	3	4,981	8,985	
6am-7pm	8,833	979	720	289	436	54	11,311	12,652	1,158	863	384	571	35	35	15,663	26,974	

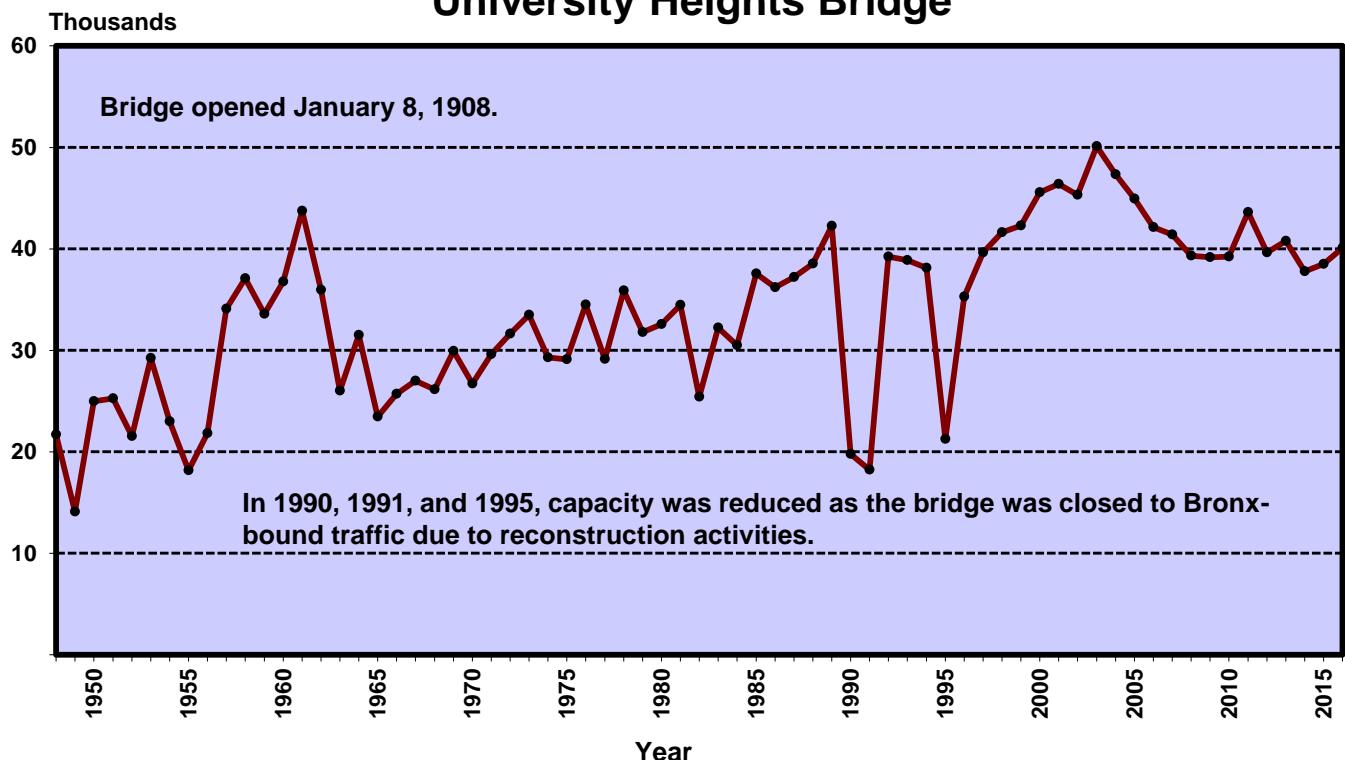
Based on October 2013 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes University Heights Bridge ~ 2016



Average Daily Traffic Volumes ~ Total of Both Directions University Heights Bridge



Washington Bridge - 2016

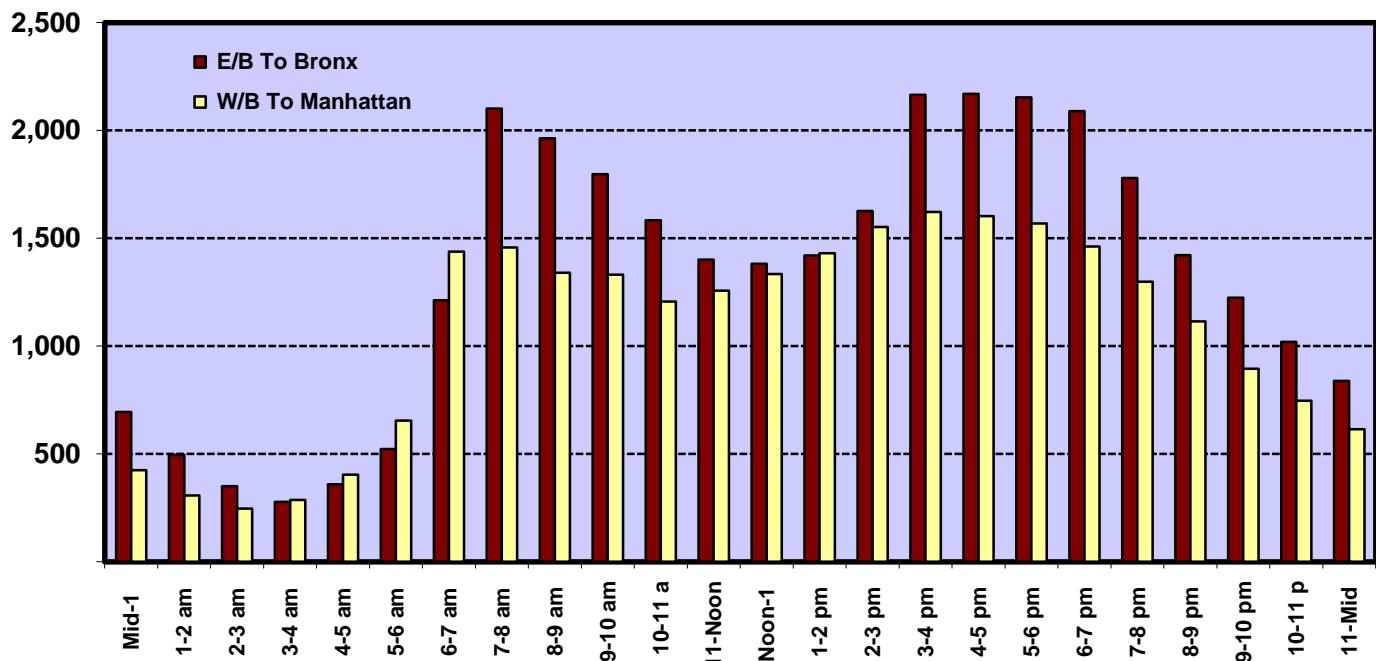
Eastbound to Bronx

FHWA Classes ►	Westbound to Manhattan				Eastbound to Bronx									
	Autos, Motorcycles	SUVs, Family Vans	Taxis, Liveries, Limos	Buses	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	Autos, Motorcycles	SUVs, Family Vans	Taxis, Liveries, Limos	Buses	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles
1,2,3	2	2 & 3	4	5 - 7	8 - 13	1,2, 3	2	2 & 3	4	5 - 7	8 - 13			
12-1am	634	29	18	13	1	0	695	361	30	10	19	3	1	424
1-2am	443	30	8	11	3	0	495	265	28	7	8	0	0	308
2-3am	312	20	8	4	7	0	351	215	17	7	4	0	3	246
3-4am	233	12	12	3	14	4	278	249	19	10	6	1	1	286
4-5am	321	16	17	2	3	0	359	329	22	21	6	11	15	404
5-6am	459	8	22	18	16	0	523	555	17	21	24	14	23	654
6-7am	1,063	25	54	43	21	6	1,212	1,143	50	67	156	14	8	1,433
7-8am	1,922	34	61	75	10	0	2,102	1,224	63	73	75	17	6	1,458
8-9am	1,711	35	75	115	23	4	1,963	1,085	64	92	68	26	5	1,340
9-10am	1,552	35	102	63	41	5	1,798	1,075	39	123	65	21	8	1,331
10-11am	1,353	32	109	44	42	4	1,584	987	33	109	41	31	6	1,207
11-12am	1,175	44	97	32	44	9	1,401	1,061	36	72	40	32	16	1,257
12-1pm	1,159	41	99	39	40	4	1,382	1,100	48	84	54	33	15	1,334
1-2pm	1,198	37	92	58	34	1	1,420	1,151	34	114	79	39	13	1,430
2-3pm	1,398	44	82	54	45	4	1,627	1,322	49	86	62	27	6	1,552
3-4pm	1,835	45	147	90	48	1	2,166	1,415	48	73	58	19	9	1,622
4-5pm	1,839	42	161	105	21	2	2,170	1,382	46	93	52	26	4	1,603
5-6pm	1,875	39	139	69	29	2	2,153	1,378	41	84	54	11	1	1,569
6-7pm	1,866	40	107	55	19	2	2,089	1,330	26	58	40	8	0	1,462
7-8pm	1,619	29	71	36	21	3	1,779	1,206	25	28	35	1	4	1,299
8-9pm	1,262	54	52	41	12	1	1,422	1,029	17	19	46	1	2	1,114
9-10pm	1,057	89	43	31	4	1	1,225	832	27	3	32	1	0	895
10-11pm	912	43	30	29	5	1	1,020	690	15	7	20	3	11	746
11-12pm	698	100	20	19	1	1	839	570	19	6	19	0	1	615
Totals	27,896	923	1,626	1,049	504	55	32,053	21,954	813	1,267	1,063	339	158	25,594
7-10am	5,185	104	238	253	74	9	5,863	3,384	166	288	208	64	19	4,129
10am-1pm	3,687	117	305	115	126	17	4,367	3,148	117	265	135	96	37	3,798
1-4pm	4,431	126	321	202	127	6	5,213	3,888	131	273	199	85	28	4,604
4-7pm	5,580	121	407	229	69	6	6,412	4,090	113	235	146	45	5	4,634
7am-7pm	18,883	468	1,271	799	396	38	21,855	14,510	527	1,061	688	290	89	17,165
6-10am	6,248	129	292	296	95	15	7,075	4,527	216	355	364	78	27	5,567
7-7pm	7,415	166	554	319	117	7	8,578	5,505	161	308	204	64	14	6,256
6am-7pm	19,946	493	1,325	842	417	44	23,067	15,653	577	1,128	844	304	97	18,603

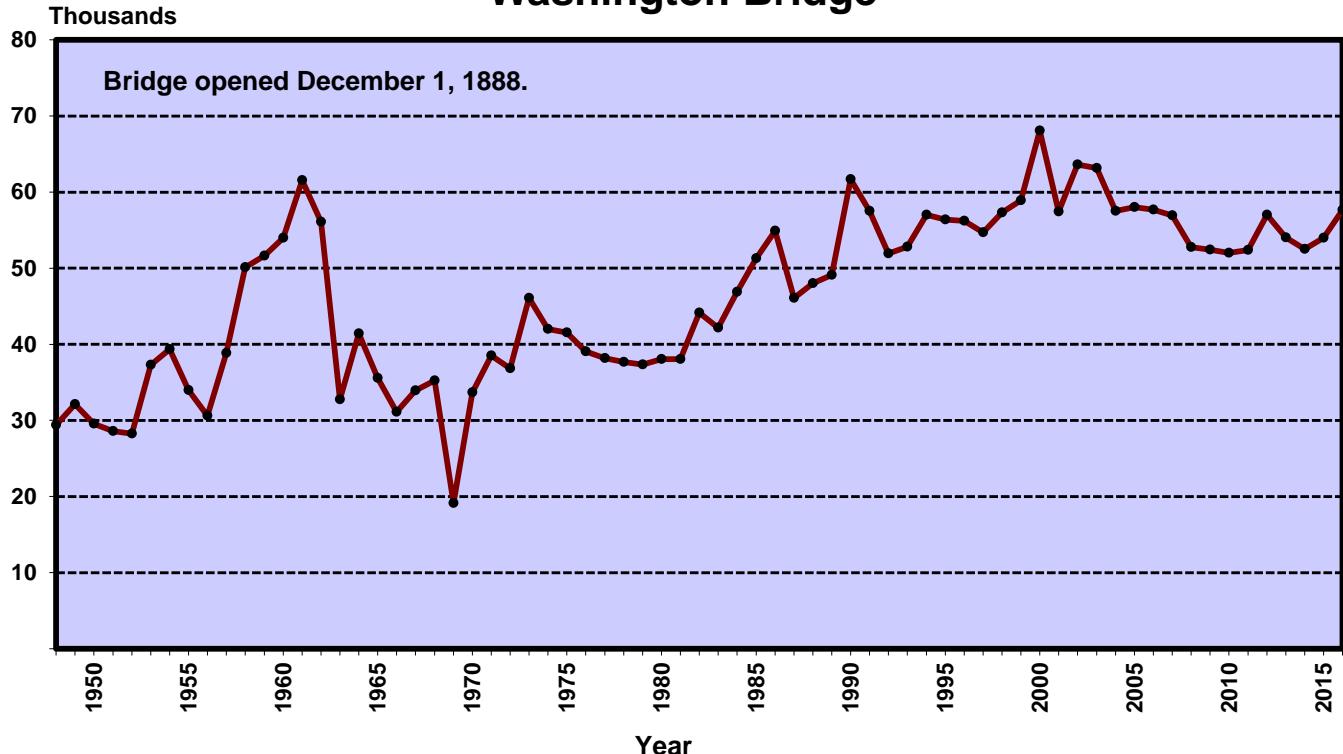
Based on October 2015 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Washington Bridge ~ 2016



Average Daily Traffic Volumes ~ Total of Both Directions Washington Bridge



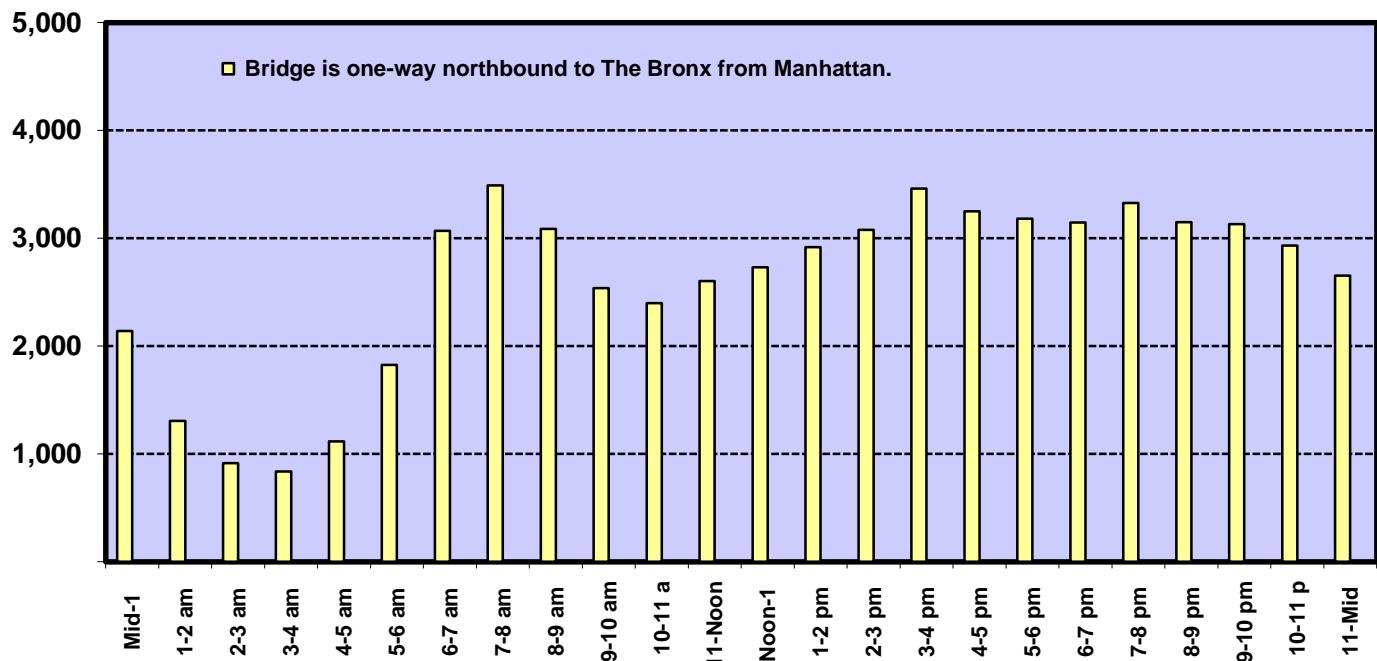
Hourly Vehicular Volumes

Willis Avenue Bridge - 2016

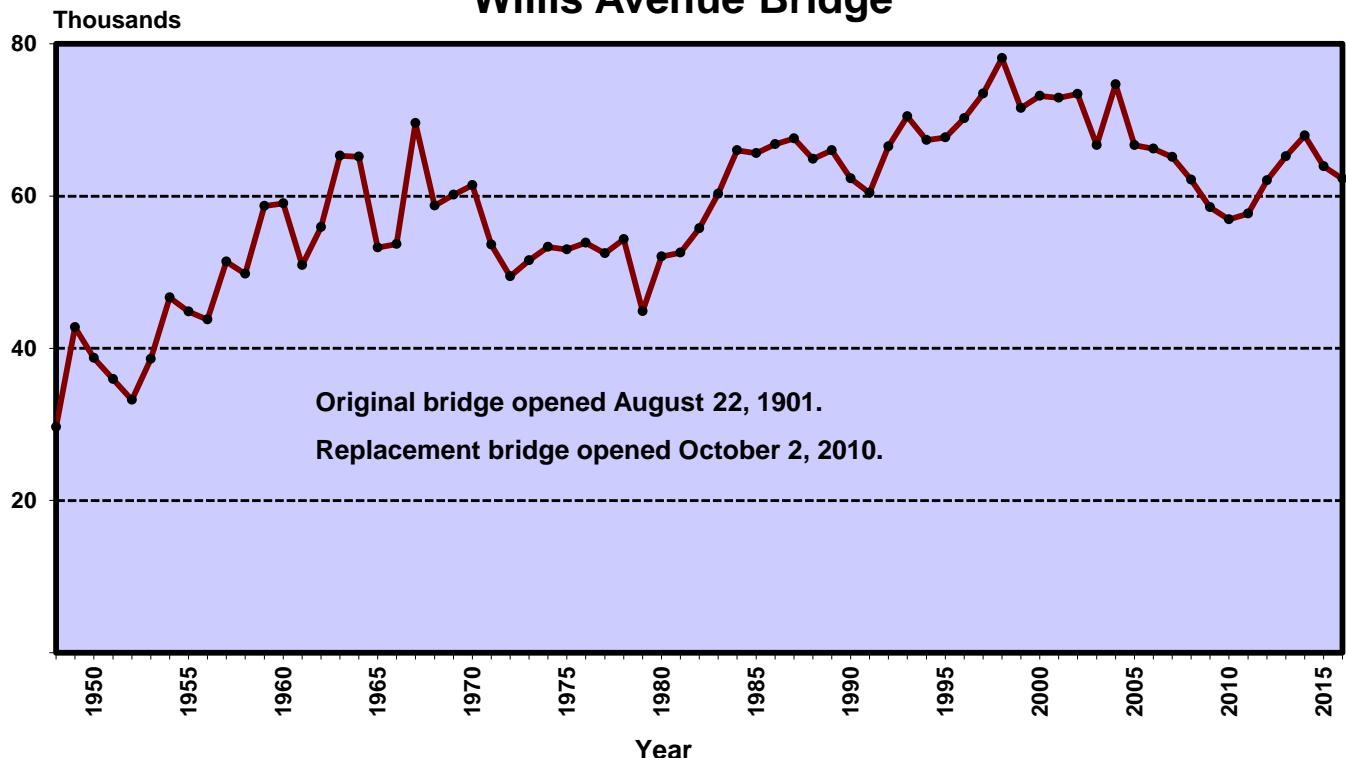
Northbound to Bronx

FHWA Classes ►	Southbound to Manhattan				Northbound to Bronx				Southbound to Manhattan				Southbound to Manhattan			
	Autos, Motorcycles	Taxis, Liveries, Limous	Panel Trucks, Pickups, Police, Fleet Vehicles	Buses	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	Autos, Motorcycles	SUVs, Family Vans	Taxis, Liveries, Limous	Buses	Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	
12-1am	1,897	122	75	3	34	10	2,141	1,123	76	50	4	31	23	1,307	2,141	
1-2am																
2-3am	786	53	35	3	22	16	915								915	
3-4am	719	49	32	3	20	15	838								838	
4-5am	959	65	43	4	26	19	1,116								1,116	
5-6am	1,511	108	77	10	60	59	1,825								1,825	
6-7am	2,688	85	113	30	95	57	3,068								3,068	
7-8am	3,107	88	125	56	93	23	3,492								3,492	
8-9am	2,526	98	150	180	104	29	3,087								3,087	
9-10am	1,997	92	201	78	146	24	2,538								2,538	
10-11am	1,802	99	255	39	177	27	2,399								2,399	
11-12am	1,965	86	301	19	204	29	2,604								2,604	
12-1pm	2,024	108	276	34	252	36	2,730								2,730	
1-2pm	2,208	94	313	28	245	31	2,919								2,919	
2-3pm	2,403	62	333	37	220	24	3,079								3,079	
3-4pm	2,755	98	318	98	169	24	3,462								3,462	
4-5pm	2,529	129	336	118	128	11	3,251								3,251	
5-6pm	2,702	80	251	49	92	9	3,183								3,183	
6-7pm	2,826	49	179	23	62	7	3,146								3,146	
7-8pm	3,005	84	146	16	67	8	3,326								3,326	
8-9pm	2,884	85	110	9	49	13	3,150								3,150	
9-10pm	2,848	107	86	7	68	16	3,132								3,132	
10-11pm	2,646	128	103	7	38	10	2,932								2,932	
11-12pm	2,339	143	117	7	42	5	2,653								2,653	
Totals	52,249	2,188	4,025	862	2,444	525	62,293								62,293	
7-10am	7,630	278	476	314	343	76	9,117								9,117	
10am-1pm	5,791	293	832	92	633	92	7,733								7,733	
1-4pm	7,366	254	964	163	634	79	9,460								9,460	
4-7pm	8,057	258	766	190	282	27	9,580								9,580	
7am-7pm	28,844	1,083	3,038	759	1,892	274	35,890								35,890	
6-10am	10,318	363	589	344	438	133	12,185								12,185	
3-7pm	10,812	356	1,084	288	451	51	13,042								13,042	
6am-7pm	31,532	1,168	3,151	789	1,987	331	38,958								38,958	

Hourly Vehicular Volumes Willis Avenue Bridge ~ 2016



Average Daily Traffic Volumes Willis Avenue Bridge



Hourly Vehicular Volumes

145th Street Bridge - 2016

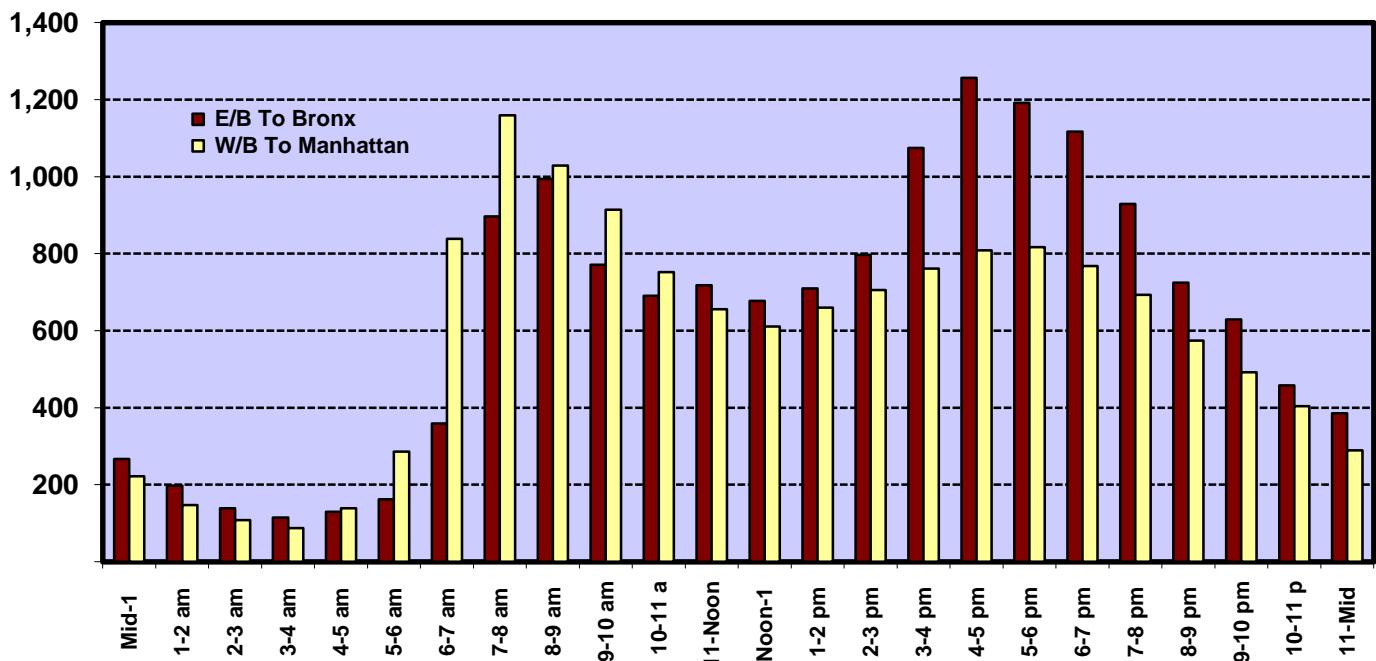
Eastbound to Bronx

FHWA Classes ►	Autos, Motorcycles SUVs, Family Vans	Taxis, Liveries, Limous	Panel Trucks, Pickups, Police, Fleet Vehicles	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	Commercial Vans,			Commercial Vans,			Total Vehicles	2-way Grand Totals
							Panel Trucks, Pickups, Police, Fleet Vehicles	Autos, Motorcycles SUVs, Family Vans	Taxis, Liveries, Limous	Buses	Single Unit Trucks	Multiple Unit Trucks	Buses	Single Unit Trucks
12-1am	182	72	5	7	0	1	267	143	65	5	6	3	0	222
1-2am	82	98	9	5	2	2	198	77	67	1	1	0	0	147
2-3am	57	75	0	3	4	0	139	40	65	1	0	2	0	108
3-4am	49	54	2	2	5	3	115	37	39	5	4	1	1	87
4-5am	58	52	14	2	2	2	130	63	46	16	4	7	3	139
5-6am	98	47	6	4	7	0	162	188	58	11	11	15	3	286
6-7am	250	69	13	20	6	1	359	427	145	46	126	85	10	839
7-8am	643	185	31	25	12	1	897	712	238	84	61	43	21	1,159 **
8-9am	670	174	53	72	22	3	994	611	209	135	16	40	18	1,029
9-10am	441	235	38	21	32	4	771	559	187	88	18	55	7	914
10-11am	385	201	54	13	36	2	691	451	161	76	21	38	5	752
11-12am	421	172	70	14	34	7	718	392	158	62	12	24	8	656
12-1pm	371	157	81	12	49	7	677	395	108	73	14	14	7	611
1-2pm	428	138	71	16	55	2	710	411	126	58	21	40	4	660
2-3pm	475	180	69	14	55	4	797	494	106	40	39	23	4	706
3-4pm	678	212	77	68	39	1	1,075	590	93	39	31	6	2	761
4-5pm	754	206	126	127	39	5	1,257 **	683	76	24	20	4	2	809
5-6pm	830	234	65	31	31	1	1,192	639	132	22	10	13	1	817
6-7pm	939	83	51	13	28	3	1,117	584	149	15	8	11	1	768
7-8pm	768	94	43	12	11	1	929	575	86	18	8	4	2	693
8-9pm	630	40	30	12	13	0	725	468	82	11	6	5	2	574
9-10pm	405	197	17	7	3	0	629	370	93	14	8	6	1	492
10-11pm	294	138	13	8	5	0	458	299	84	9	6	5	1	404
11-12pm	259	103	12	6	6	0	386	226	51	6	2	1	3	289
Totals	10,167	3,216	950	514	496	50	15,393	9,434	2,624	859	453	446	106	13,922
7-10am	1,754	594	122	118	66	8	2,662	1,882	634	307	95	138	46	3,102
10am-1pm	1,177	530	205	39	119	16	2,086	1,238	427	211	47	76	20	2,019
1-4pm	1,581	530	217	98	149	7	2,582	1,495	325	137	91	69	10	2,127
4-7pm	2,523	523	242	171	98	9	3,566	1,906	357	61	38	28	4	4,709
7am-7pm	7,035	2,177	786	426	432	40	10,896	6,521	1,743	716	271	311	80	9,642
6-10am	2,004	663	135	138	72	9	3,021	2,309	779	353	221	223	56	3,941
3-7pm	3,201	735	319	239	137	10	4,641	2,496	450	100	69	34	6	3,155
6am-7pm	7,285	2,246	799	446	438	41	11,255	6,948	1,888	762	397	396	90	10,481

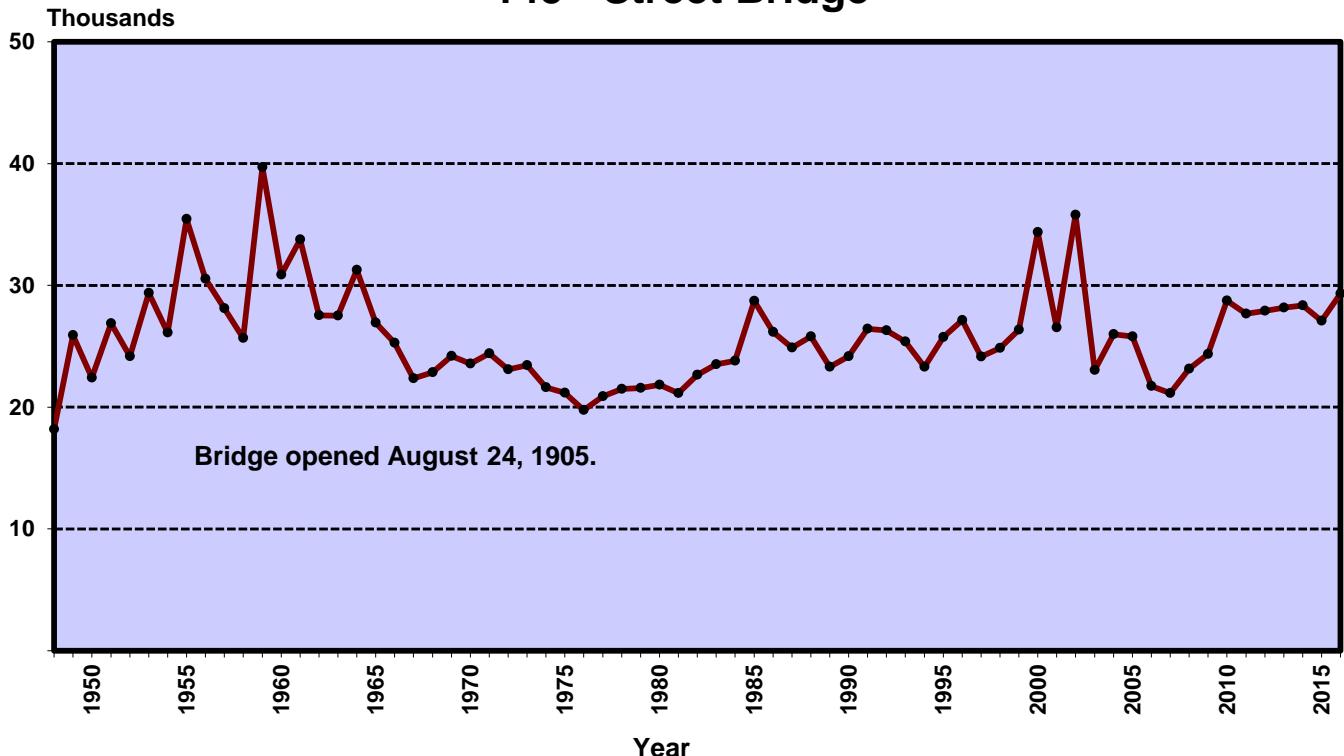
Based on October 2013 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes 145th Street Bridge ~ 2016



Average Daily Traffic Volumes ~ Total of Both Directions 145th Street Bridge



MTABT Facilities



**Robert F. Kennedy Memorial Bridge
between Manhattan and Queens/Bronx**

**MTABT Manhattan Facilities ~ Average Daily Traffic Volumes
1948 - 2016**

Year	Henry Hudson Bridge	Hugh L. Carey Tunnel (Brooklyn-Battery Tunnel)	Queens-Midtown Tunnel	Robert F. Kennedy Memorial Bridge	Manhattan Totals
		(Brooklyn-Battery Tunnel)		Manh. Plz. (Triborough Bridge)	
1948	40,050	Opened	26,462	26,465	92,977
1949	47,472	05/25/1950	30,045	32,554	110,071
1950	53,559	37,258	34,044	36,995	161,856
1951	57,700	41,253	36,680	44,639	180,272
1952	61,592	45,366	38,866	48,503	194,327
1953	65,432	47,999	38,509	48,595	200,535
1954	69,025	45,120	38,185	52,286	204,616
1955	71,240	45,843	39,839	59,913	216,835
1956	69,477	48,054	49,544	64,460	231,535
1957	62,865	54,490	54,311	64,677	236,343
1958	57,321	53,789	58,321	62,982	232,413
1959	56,529	49,468	61,115	64,389	231,501
1960	56,675	48,970	62,008	63,115	230,768
1961	57,140	48,197	62,301	59,603	227,241
1962	59,548	48,173	65,038	60,251	233,010
1963	52,803	48,271	63,038	60,988	225,100
1964	50,768	51,893	67,713	66,139	236,513
1965	45,353	56,455	69,386	69,755	240,949
1966	44,043	57,674	69,850	71,540	243,107
1967	43,409	57,611	69,416	73,602	244,038
1968	44,908	60,652	66,432	75,932	247,924
1969	45,382	62,116	68,884	78,481	254,863
1970	46,720	62,042	77,180	85,121	271,063
1971	50,541	64,032	81,747	90,372	286,692
1972	45,818	52,065	74,936	80,052	252,871
1973	41,871	49,916	74,214	85,592	251,593
1974	38,331	46,620	75,219	82,676	242,846
1975	30,603	45,636	65,315	72,566	214,120
1976	30,557	52,444	65,881	68,325	217,207
1977	31,840	53,500	71,150	73,276	229,766
1978	33,605	58,252	72,696	76,572	241,125
1979	33,387	60,445	69,827	87,885	251,544
1980	31,817	62,386	73,216	88,439	255,858
1981	36,625	58,657	81,211	93,361	269,854
1982	30,923	56,189	78,229	88,158	253,499
1983	31,279	61,130	78,134	92,967	263,510
1984	34,898	58,032	74,808	95,247	262,985
1985	41,680	63,469	76,065	94,644	275,858
1986	49,005	60,778	71,478	93,432	274,693
1987	52,778	63,256	77,813	95,795	289,642
1988	54,910	62,959	76,243	99,438	293,550
1989	50,556	59,254	72,828	92,720	275,358
1990	57,528	60,512	71,186	99,840	289,066
1991	56,279	63,883	80,616	94,487	295,265
1992	58,660	62,510	81,835	97,198	300,203
1993	54,650	57,561	77,288	92,660	282,159
1994	58,291	57,013	68,511	79,536	263,351
1995	62,899	61,097	73,882	95,696	293,574
1996	58,759	57,091	72,285	92,981	281,116
1997	59,660	54,690	78,023	91,313	283,686
1998	59,339	61,091	79,697	93,863	293,990
1999	61,165	63,307	80,941	98,553	303,966
2000	66,304	63,242	80,879	103,079	313,504
2001	69,087	13,762	72,864	102,224	257,937
2002	70,731	56,976	82,834	94,759	305,300
2003	72,209	56,271	85,377	93,177	307,034
2004	73,114	54,488	86,599	97,958	312,159
2005	70,407	49,043	86,063	91,898	297,411
2006	71,761	57,436	89,972	98,582	317,751
2007	70,094	56,539	88,379	97,241	312,253
2008	69,101	55,037	86,709	95,146	305,993
2009	66,607	50,674	85,144	91,731	294,156
2010	69,641	54,187	88,014	93,455	305,297
2011	63,433	54,481	87,662	88,717	294,293
2012	63,434	54,299	87,937	90,956	296,626
2013	59,087	55,145	86,737	91,386	292,355
2014	58,809	54,007	86,081	91,509	290,406
2015	62,554	57,299	86,217	91,724	297,794
2016	62,648	54,076	73,470	95,552	285,746

MTABT Toll Increases January 1972, September 1975, May 1980, April 1982, January 1984, January 1986, February 1987, July 1989, January 1993, March 1996, May 2003, March 2005, March 2008, July 2009, December 2010, March 2013, & March 2015.

Hourly Vehicular Volumes

Metropolitan Transportation Authority Bridges & Tunnels

2016

**Robert F. Kennedy
Memorial Bridge
(Triborough Bridge)**

Henry Hudson Bridge	S/B	N/B	Hugh L. Carey Tunnel (Brooklyn-Battery Tunnel) S/B			Queens-Midtown Tunnel			Manhattan Plaza W/B			Entering Manhattan			Leaving Manhattan			Totals
			W	B	E/B	Tunnel	E/B	W/B	E/B	Manhattan	W/B	E/B	Manhattan	W/B	E/B	Manhattan		
12-1am	112	329	221	607	454	713	483	519	1,270	2,168								
1-2am	57	147	85	288	197	364	213	277	552	1,076								
2-3am	33	64	51	181	111	231	110	182	305	658								
3-4am	63	46	78	135	139	194	146	194	426	569								
4-5am	133	52	249	159	315	429	337	513	1,034	1,153								
5-6am	744	125	832	185	1,174	800	1,450	1,075	4,200	2,185								
6-7am	2,870	434	2,383	388	2,738	1,173	3,756	1,484	11,747	3,479								
7-8am	3,030	**	1,196	2,972	633	3,479	**	4,095	1,894	13,576	**	4,941						
8-9am	2,644		1,629	2,711	800	3,120	1,109	3,283	2,202	11,758		5,740						
9-10am	2,148		1,130	2,226	821	2,835	1,107	2,959	2,022	10,168		5,080						
10-11am	1,955		995	1,808	884	2,389	1,229	2,957	1,860	9,109		4,968						
11-12am	1,761	1,017	1,675	972	1,952	1,684	2,770	1,947	8,158		5,620							
12-1pm	1,723	1,080	1,547	1,094	1,814	1,949	2,826	2,058	7,910		6,181							
1-2pm	1,695	1,257	1,480	1,206	1,802	2,174	2,925	2,341	7,902		6,978							
2-3pm	1,998	1,643	1,394	1,401	1,969	2,394	3,311	2,591	8,672		8,029							
3-4pm	2,424	2,235	1,417	1,974	2,055	2,487	3,528	2,709	9,424		9,405							
4-5pm	2,448	2,618	1,311	2,275	2,010	2,401	3,334	2,888	9,103		10,182							
5-6pm	2,428	2,809	**	1,193	2,698	**	2,070	2,449	3,266	2,963	**	8,957	10,919	*				
6-7pm	2,264	2,558	1,102	2,535	2,174	2,240	3,166	2,459	8,706		9,792							
7-8pm	1,537	1,976	957	2,056	1,926	2,111	2,755	2,243	7,775		8,386							
8-9pm	1,001	1,513	690	1,438	1,780	2,157	2,271	2,076	5,742		7,184							
9-10pm	761	1,381	603	1,364	1,194	1,301	1,982	1,840	4,540		5,886							
10-11pm	462	1,068	473	1,129	870	1,238	1,740	1,635	3,545		5,070							
11-12pm	230	825	440	955	694	1,057	956	961	2,320		3,798							
Totals	34,521	28,127		27,898	26,178	39,261	34,209	54,619	40,933	156,299	129,447							
7-10am	7,822	3,955	7,909	2,254	9,434	3,434	10,337	6,118	35,502		15,761							
10am-1pm	5,439	3,092	5,030	2,950	6,155	4,862	8,553	5,865	25,177		16,769							
1-4pm	6,117	5,135	4,291	4,581	5,826	7,055	9,764	7,641	25,998		24,412							
4-7pm	7,140	7,985	3,606	7,508	6,254	7,090	9,766	8,310	26,766		30,893							
7am-7pm	26,518	20,167	20,836	17,293	27,669	22,441	38,420	27,934	113,443		87,835							
6-10am	10,692	4,389	10,292	2,642	12,172	4,607	14,093	7,602	47,249		19,240							
3-7pm	9,564	10,220	5,023	9,482	8,309	9,577	13,294	11,019	36,190		40,298							
6am-7pm	29,388	20,601	23,219	17,681	30,407	23,614	42,176	42,176	125,190		91,314							

** Peak Volumes

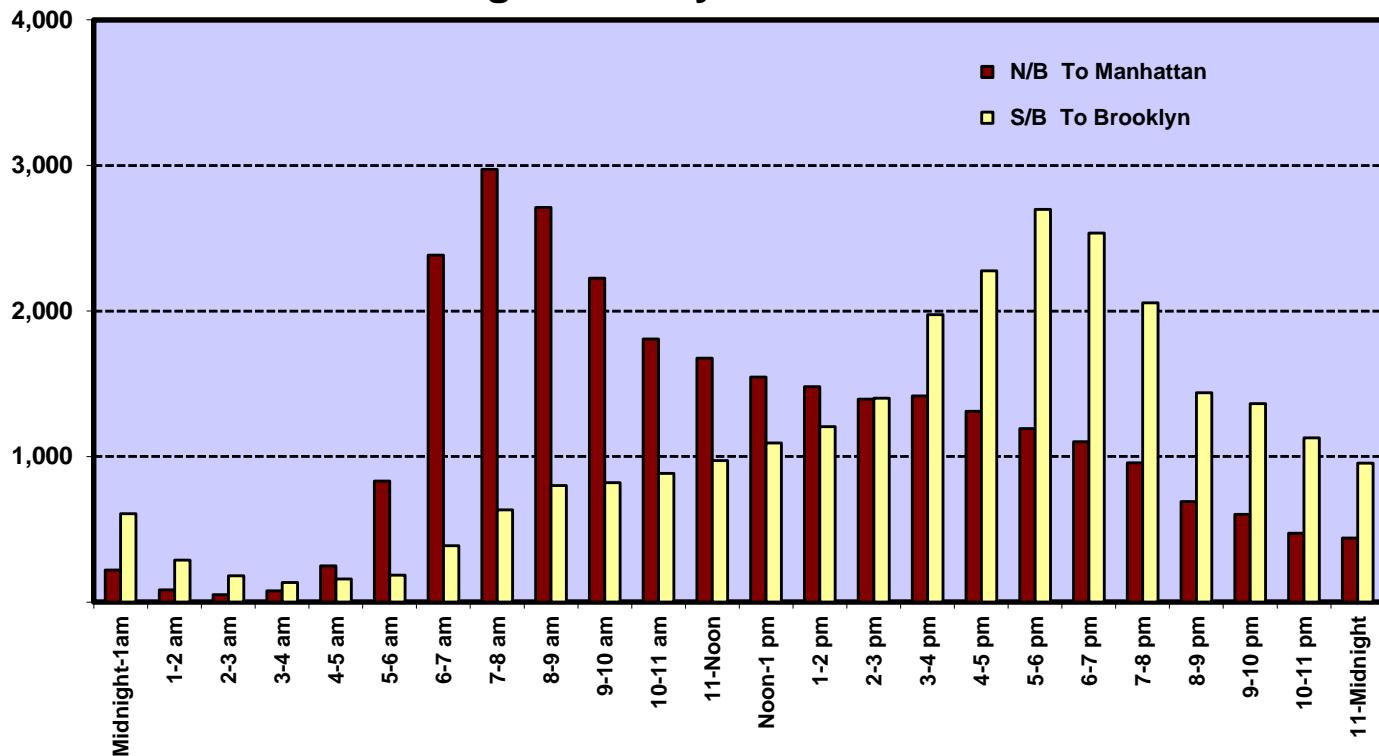
Hugh L. Carey Tunnel - 2016

Northbound to Manhattan										Southbound to Brooklyn										
FHWA Classes	Commuter Vans				Commercial Vans				Autos & Motorcycles				Commercial Vans				Single Unit Trucks			
	1 & 2	3	4	5 - 7	8 - 13	Total Vehicles	Tractor Trailers	Single Unit Trucks	Busses	1 & 2	3	4	5 - 7	8 - 13	Total Vehicles	Tractor Trailers	Single Unit Trucks	Busses	Total Vehicles	
12-1am	190	7	12	12	0	221	553	12	36	6	1	0	607	828	828	0	2,254	10,163		
1-2am	74	4	6	1	0	85	275	0	12	1	0	0	288	373	373	0	2,950	7,980		
2-3am	46	0	3	2	0	51	173	2	4	2	0	0	181	232	232	0	4,581	8,872		
3-4am	66	1	8	3	0	78	132	0	0	3	0	0	135	213	213	0	2,708	11,114		
4-5am	161	9	61	18	0	249	147	0	9	3	0	0	159	408	408	0	1,017	12,934		
5-6am	749	8	67	8	0	832	164	2	13	6	0	0	185	2,771	2,771	0	3,605	14,505		
6-7am	2,127	15	214	27	0	2,383	289	6	81	12	0	0	388	3,605	3,605	0	3,511	40,900		
7-8am	2,608	16	308	40	0	2,972	456	7	153	17	0	0	633	3,511	3,511	0	3,047	12,934		
8-9am	2,370	14	295	32	0	2,711	585	6	190	19	0	0	800	2,641	2,641	0	2,686	12,934		
9-10am	2,032	16	145	33	0	2,226	629	8	161	23	0	0	821	2,692	2,692	0	2,647	12,934		
10-11am	1,645	22	92	48	1	1,808	772	10	83	18	1	0	884	2,647	2,647	0	2,275	12,934		
11-12am	1,552	15	69	38	1	1,675	877	9	66	20	0	0	972	2,641	2,641	0	2,275	12,934		
12-1pm	1,422	16	75	33	1	1,547	1,007	12	55	20	0	0	1,094	2,686	2,686	0	2,686	12,934		
1-2pm	1,338	13	91	38	0	1,480	1,088	13	78	27	0	0	821	3,891	3,891	0	3,891	12,934		
2-3pm	1,253	10	106	25	0	1,394	1,282	14	80	25	0	0	1,401	2,795	2,795	0	2,795	12,934		
3-4pm	1,266	5	134	12	0	1,417	1,800	13	137	24	0	0	1,974	3,391	3,391	0	3,391	12,934		
4-5pm	1,143	4	154	9	1	1,311	2,063	7	186	19	0	0	972	3,586	3,586	0	3,586	12,934		
5-6pm	1,063	2	120	6	2	1,193	2,399	7	276	15	1	0	2,698	3,891	3,891	0	3,891	12,934		
6-7pm	1,023	3	69	6	1	1,102	2,329	6	188	11	1	1	2,535	3,637	3,637	0	3,637	12,934		
7-8pm	909	1	44	3	0	957	1,938	5	105	8	0	0	2,056	3,013	3,013	0	3,013	12,934		
8-9pm	655	4	26	5	0	690	1,343	7	80	8	0	0	1,438	2,128	2,128	0	2,128	12,934		
9-10pm	573	1	27	2	0	603	1,289	4	57	14	0	0	1,364	1,967	1,967	0	1,967	12,934		
10-11pm	448	1	21	3	0	473	1,084	5	31	9	0	0	1,129	1,602	1,602	0	1,602	12,934		
11-12pm	389	0	37	14	0	440	902	7	37	9	0	0	955	1,395	1,395	0	1,395	12,934		
Totals	25,102	187	2,184	418	7	27,898	23,576	162	2,118	319	3	3	26,178	54,076	54,076	0	54,076	12,934		

Based on May 2006 Classification Survey Data.

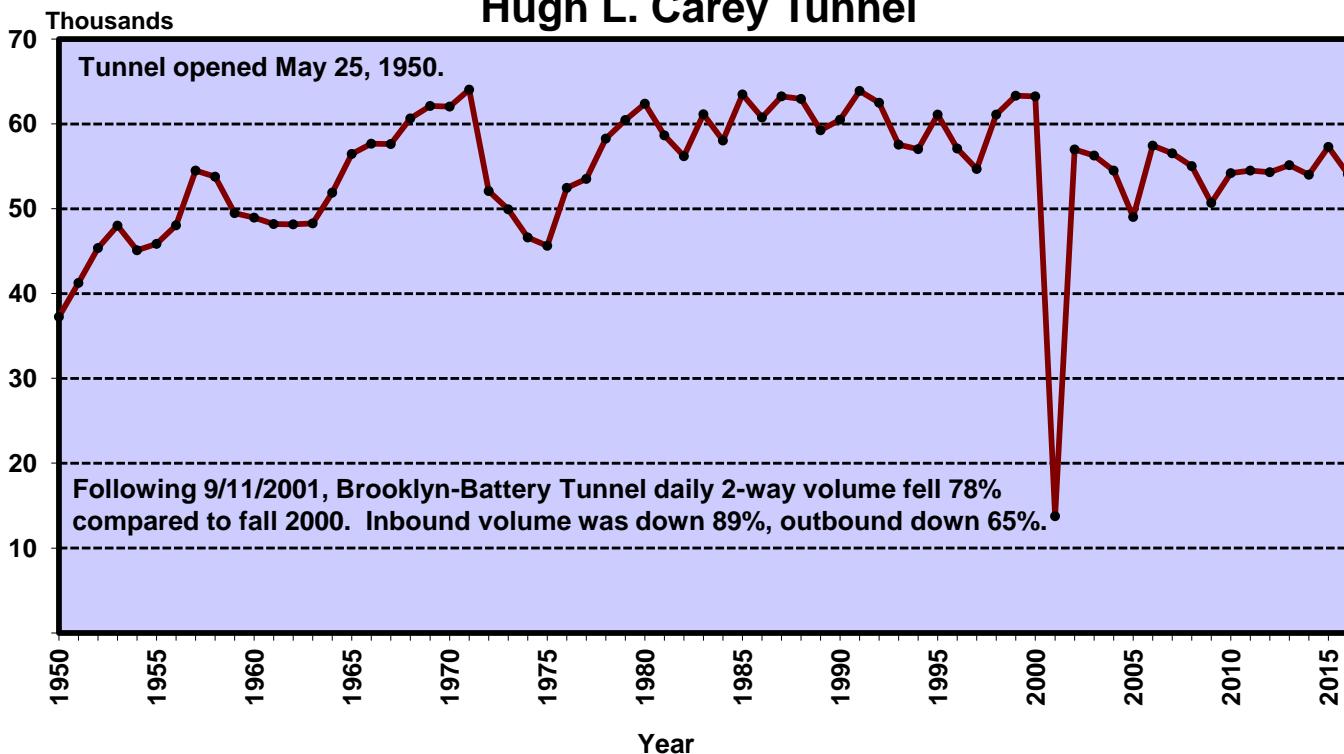
** Peak Volumes

Hourly Vehicular Volumes Hugh L. Carey Tunnel ~ 2016



Formerly Brooklyn-Battery Tunnel; officially renamed Hugh L. Carey Tunnel October 22, 2012.

Average Daily Traffic Volumes ~ Total of Both Directions Hugh L. Carey Tunnel



Hourly Vehicular Volumes

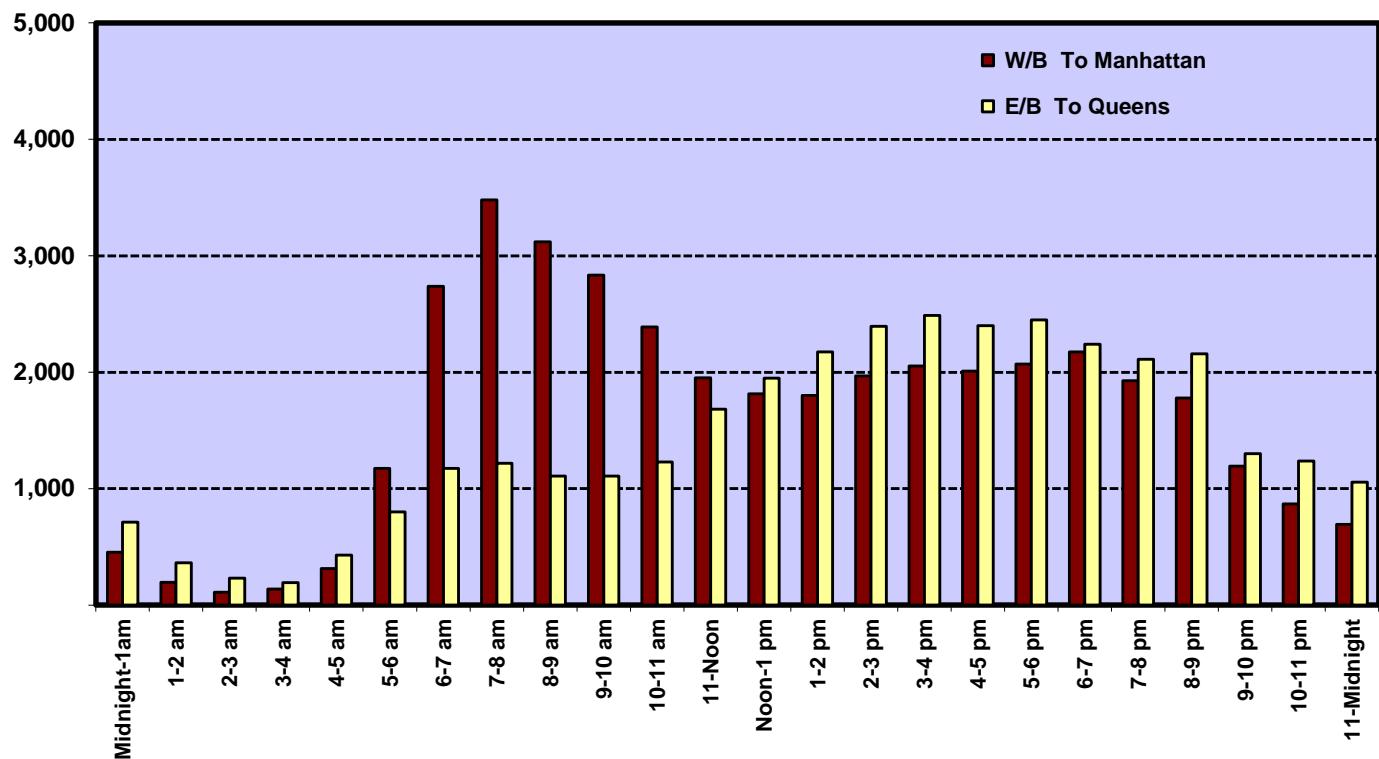
Queens-Midtown Tunnel - 2016

FHWA Classes ▶	Westbound to Manhattan						Eastbound to Queens						2-Way Grand Totals	
	Commuter Vans			Single Unit Trucks			Autos & Motorcycles			Single Unit Trucks				
	Commercial Vans	Pickups	Large SUVs	Buses	Trucks	Trailers	Total Vehicles	Autos & Motorcycles	Commercial Vans	Pickups	Large SUVs	Buses		
1 & 2	3	4	5 - 7	8 - 13			1 & 2	3	4	5 - 7	8 - 13			
12-1am	439	2	3	10	0	454	687	7	1	18	0	713	1,167	
1-2am	188	2	0	7	0	197	346	4	0	14	0	364	561	
2-3am	103	1	1	6	0	111	216	5	0	10	0	231	342	
3-4am	125	1	3	10	0	139	173	9	0	12	0	194	333	
4-5am	253	6	17	39	0	315	352	30	4	41	2	429	744	
5-6am	1,023	12	58	81	0	1,174	714	20	12	54	0	800	1,974	
6-7am	2,339	96	173	130	0	2,738	1,062	32	46	33	0	1,173	3,911	
7-8am	2,999	123	220	136	1	3,479	1,083	46	58	31	0	1,218	4,697 **	
8-9am	2,805	88	110	117	0	3,120	968	36	67	38	0	1,109	4,229	
9-10am	2,555	72	128	77	3	2,835	971	42	56	38	0	1,107	3,942	
10-11am	2,169	66	80	72	2	2,389	1,066	50	59	54	0	1,229	3,618	
11-12am	1,810	48	46	48	0	1,952	1,496	57	72	59	0	1,684	3,636	
12-1pm	1,683	28	41	62	0	1,814	1,746	62	54	87	0	1,949	3,763	
1-2pm	1,643	51	54	54	0	1,802	1,931	99	55	89	0	2,174	3,976	
2-3pm	1,788	47	90	44	0	1,969	2,220	68	41	65	0	2,394	4,363	
3-4pm	1,827	42	134	52	0	2,055	2,300	56	57	74	0	2,487 **	4,542	
4-5pm	1,836	25	123	26	0	2,010	2,214	66	56	65	0	2,401	4,411	
5-6pm	1,945	13	95	17	0	2,070	2,310	39	63	37	0	2,449	4,519	
6-7pm	2,078	15	61	20	0	2,174	2,129	27	51	33	0	2,240	4,414	
7-8pm	1,856	12	44	14	0	1,926	2,013	21	57	20	0	2,111	4,037	
8-9pm	1,692	23	32	33	0	1,780	2,050	25	40	42	0	2,157	3,937	
9-10pm	1,148	11	14	21	0	1,194	1,248	13	14	26	0	1,301	2,495	
10-11pm	833	6	9	22	0	870	1,193	13	7	25	0	1,238	2,108	
11-12pm	673	6	3	12	0	694	1,029	3	3	22	0	1,057	1,751	
Totals	35,810	796	1,539	1,110	6	39,261	31,517	830	873	987	2	34,209	73,470	

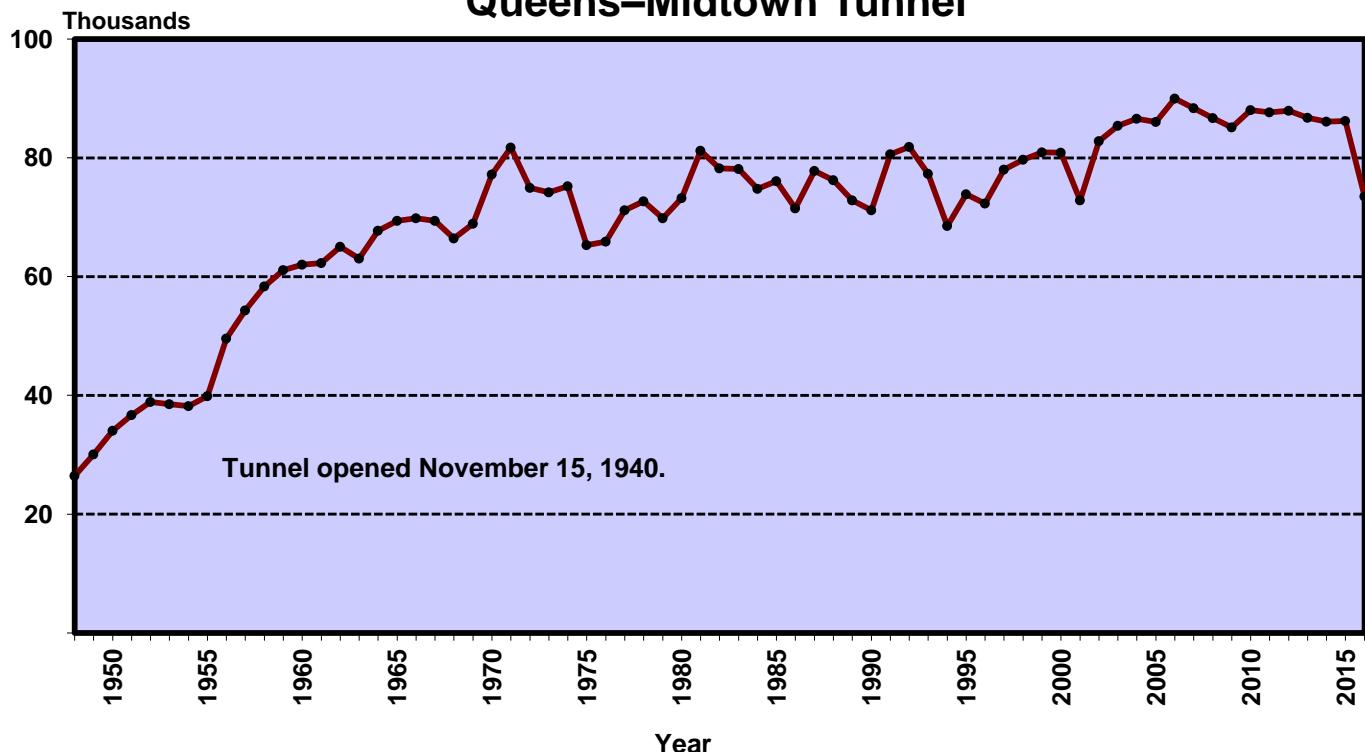
Based on May 2006 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Queens-Midtown Tunnel ~ 2016



Average Daily Traffic Volumes ~ Total of Both Directions Queens–Midtown Tunnel



Hourly Vehicular Volumes

Robert F. Kennedy Memorial Bridge Manhattan Plaza - 2016

Eastbound to Queens & Bronx

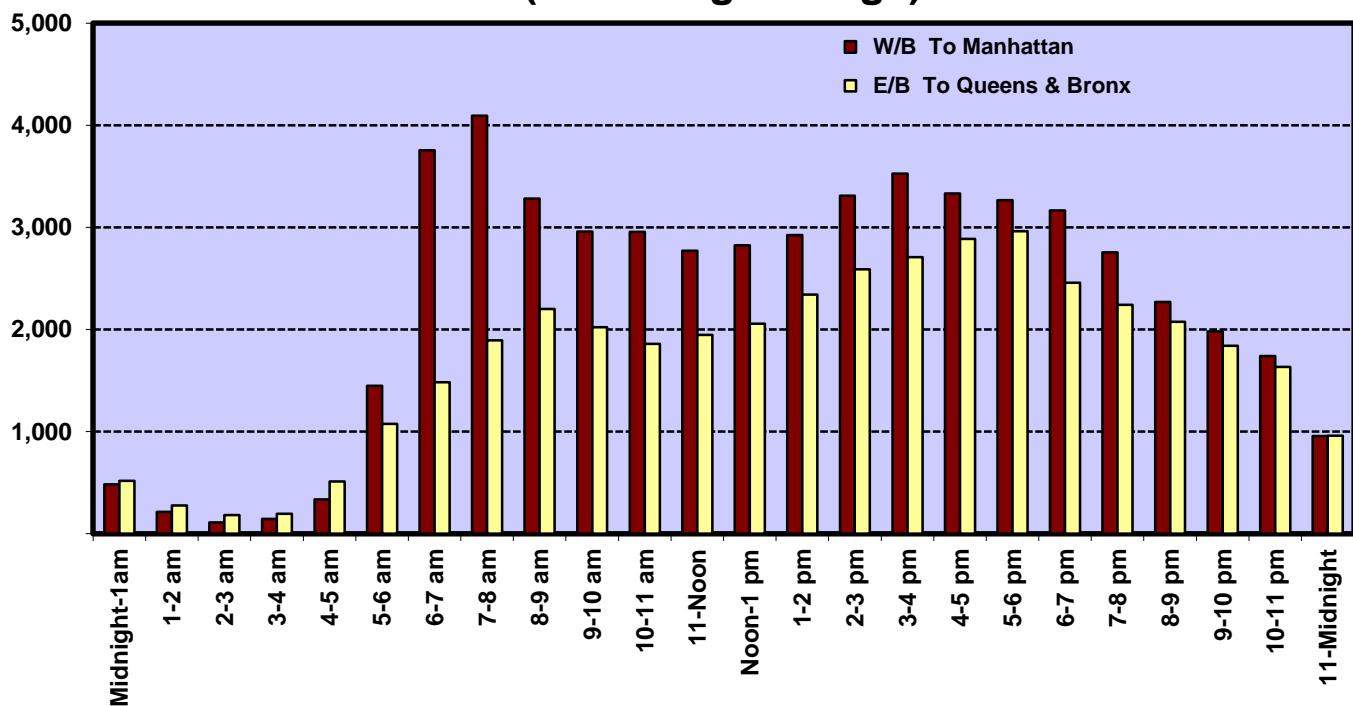
FHWA Classes ►	Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles						Multiple Unit Trucks	Single Unit Trucks	Westbound to Manhattan			Total Vehicles
	Autos, Motorcycles	SUVs, Family Vans	Taxis, Liveries, Limos	Buses	Total Vehicles	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	
12-1am	443	19	12	4	32	9	519	320	128	9	4	15
1-2am	199	14	6	2	49	7	277	153	38	3	2	10
2-3am	134	10	4	1	24	9	182	75	9	8	1	10
3-4am	138	10	11	1	23	11	194	106	8	7	0	13
4-5am	362	79	9	4	40	19	513	261	26	12	3	17
5-6am	770	122	32	9	84	58	1,075	1,162	94	49	13	84
6-7am	1,039	174	48	26	150	47	1,484	3,005	214	197	66	163
7-8am	1,350	182	118	43	146	55	1,894	3,124	309	273	100	181
8-9am	1,662	186	149	34	146	25	2,202	2,372	283	260	60	206
9-10am	1,514	166	131	19	143	49	2,022	2,078	356	209	38	173
10-11am	1,323	157	123	22	182	53	1,860	1,931	504	192	38	171
11-12am	1,325	207	139	12	203	61	1,947	1,886	461	142	33	139
12-1pm	1,461	220	137	13	187	40	2,058	1,877	446	151	43	185
1-2pm	1,615	284	163	18	215	46	2,341	1,982	379	216	43	181
2-3pm	1,826	323	161	33	210	38	2,591	2,327	511	184	50	144
3-4pm	1,952	293	200	40	200	24	2,709	2,553	552	178	53	122
4-5pm	2,135	283	220	52	177	21	2,888	2,421	499	201	53	111
5-6pm	2,430	210	162	21	121	19	2,963	* 2,476	492	131	43	85
6-7pm	2,027	168	122	24	96	22	2,459	2,527	458	82	24	53
7-8pm	1,881	111	113	32	79	27	2,243	2,189	424	45	32	39
8-9pm	1,749	128	80	27	42	50	2,076	1,837	317	45	19	33
9-10pm	1,567	139	52	21	39	22	1,840	1,557	351	19	21	15
10-11pm	1,399	113	31	12	67	13	1,635	1,206	464	18	12	20
11-12pm	829	51	29	8	33	11	961	588	315	14	8	15
Totals	31,130	3,649	2,252	478	2,688	736	40,933	40,013	7,638	2,645	759	2,189
7-10am	4,526	534	398	96	435	129	6,118	7,574	948	742	198	560
10am-1pm	4,109	584	399	47	572	154	5,865	5,694	1,411	485	114	495
1-4pm	5,393	900	524	91	625	108	7,641	6,862	1,442	578	146	447
4-7pm	6,592	661	504	97	394	62	8,310	7,424	1,449	414	120	249
7am-7pm	20,620	2,679	1,825	331	2,026	453	27,934	27,554	5,250	2,219	578	1,751
6-10am	5,565	708	446	122	585	176	7,602	10,579	1,162	939	264	723
3-7pm	8,544	954	704	137	594	86	11,019	9,977	2,001	592	173	371
6am-7pm	21,659	2,853	1,873	357	2,176	500	29,418	30,559	5,464	2,416	644	1,914
												95,552

Based on October 2013 Classification Survey Data.

** Peak Volumes

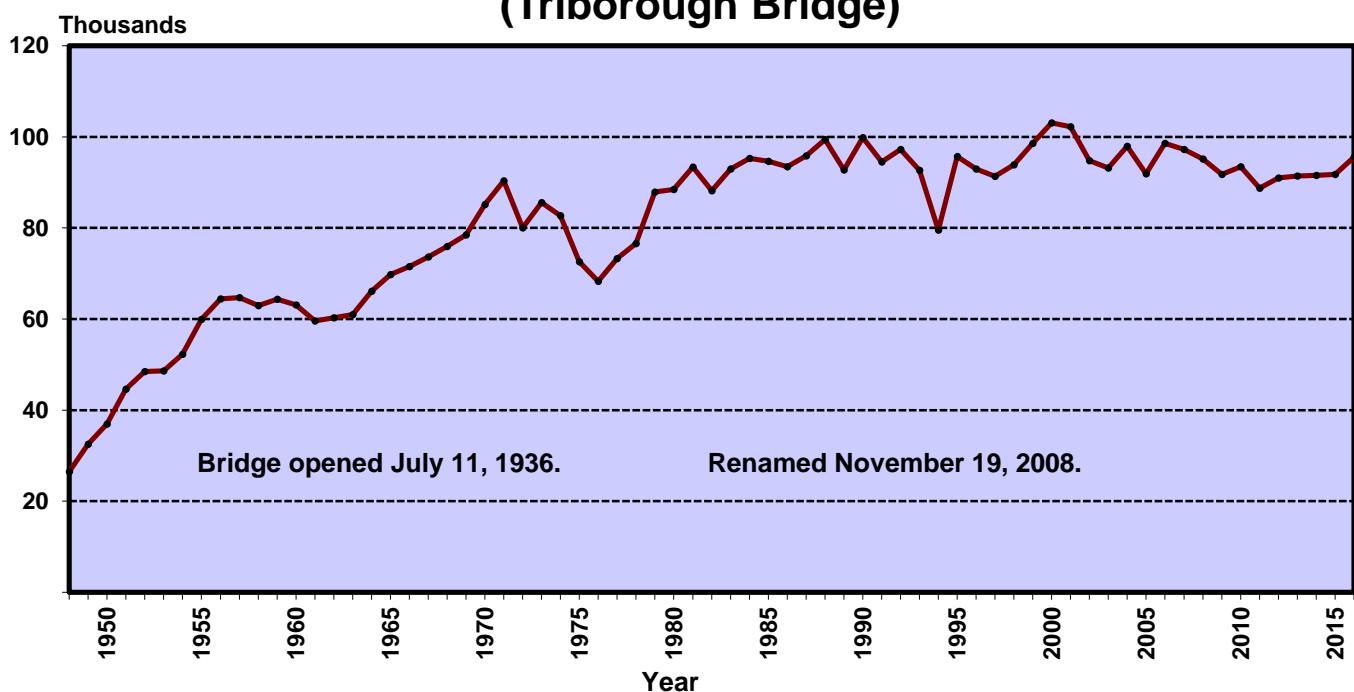
Hourly Vehicular Volumes

Robert F. Kennedy Memorial Bridge, Manhattan Plaza ~ 2016 (Triborough Bridge)

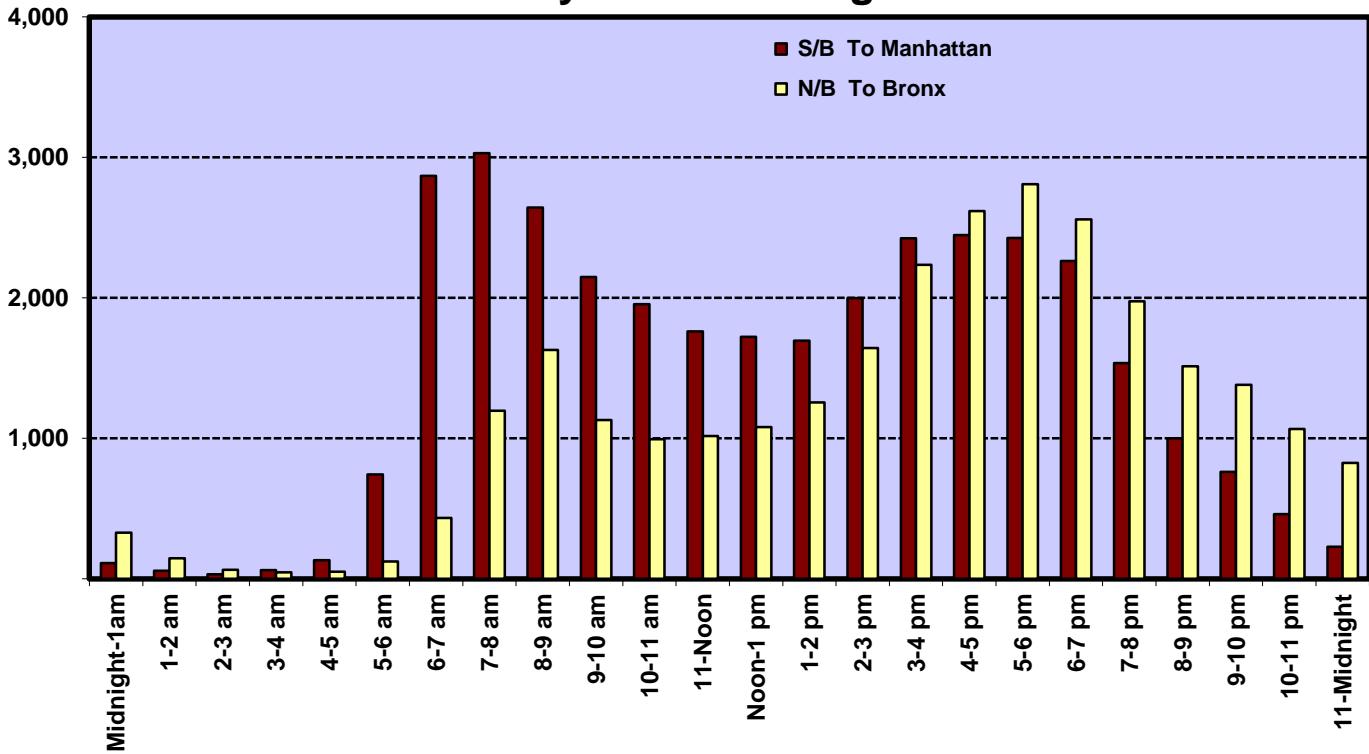


Average Daily Traffic Volumes ~ Total of Both Directions

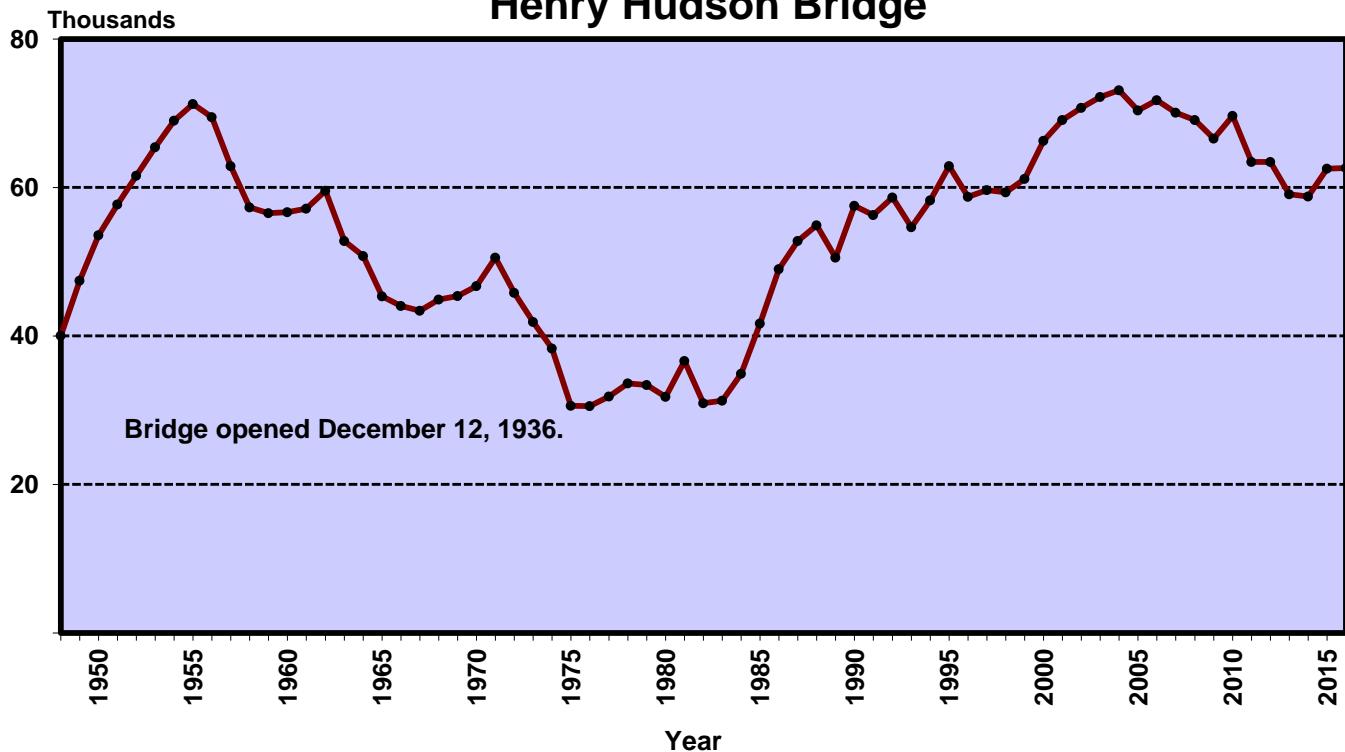
Robert F. Kennedy Memorial Bridge, Manhattan Plaza (Triborough Bridge)



Hourly Vehicular Volumes Henry Hudson Bridge ~ 2016



Average Daily Traffic Volumes ~ Total of Both Directions Henry Hudson Bridge



PANYNJ Facilities



**George Washington Bridge over the Hudson River
between Manhattan and New Jersey**

PANYNJ Manhattan - New Jersey Facilities

Average Daily Traffic Volumes

1948 - 2016

Year	George Washington Bridge	Holland Tunnel	Lincoln Tunnel	Totals
1948	42,306	42,623	30,856	115,785
1949	49,261	45,167	35,515	129,943
1950	54,437	49,660	42,556	146,653
1951	64,516	53,792	47,842	166,150
1952	76,446	51,317	53,490	181,253
1953	84,398	53,270	56,909	194,577
1954	90,306	54,560	57,528	202,394
1955	98,013	55,445	58,468	211,926
1956	97,059	56,961	59,068	213,088
1957	98,110	56,801	63,712	218,623
1958	97,435	55,881	68,178	221,494
1959	105,334	57,926	73,761	237,021
1960	106,245	57,678	75,697	239,620
1961	104,107	56,277	76,449	236,833
1962	111,090	58,518	81,038	250,646
1963	127,452	58,814	79,337	265,603
1964	143,193	59,702	82,929	285,824
1965	155,967	55,060	82,312	293,339
1966	167,304	55,559	81,118	303,981
1967	173,093	54,181	80,879	308,153
1968	182,934	53,962	83,396	320,292
1969	189,817	54,438	84,868	329,123
1970	194,910	58,574	94,354	347,838
1971	210,749	57,968	93,346	362,063
1972	221,172	61,485	95,963	378,620
1973	232,686	64,731	99,786	397,203
1974	211,955	64,765	99,827	376,547
1975	215,927	62,381	96,399	374,707
1976	215,136	64,663	101,451	381,250
1977	222,897	63,015	99,101	385,013
1978	229,666	66,405	103,441	399,512
1979	232,739	61,403	99,582	393,724
1980	235,615	64,417	104,702	404,734
1981	250,804	68,750	107,827	427,381
1982	249,294	73,997	110,453	433,744
1983	254,728	76,226	110,210	441,164
1984	258,723	71,819	123,233	453,775
1985	275,934	76,121	116,397	468,452
1986	286,398	77,300	122,053	485,751
1987	288,642	73,655	124,342	486,639
1988	284,984	84,626	120,569	490,179
1989	281,812	84,429	121,452	487,693
1990	272,556	87,976	121,711	482,243
1991	262,491	87,502	117,508	467,501
1992	268,007	90,206	118,659	476,872
1993	260,732	92,685	119,652	473,069
1994	259,863	94,637	119,299	473,799
1995	266,029	96,310	119,759	482,098
1996	275,469	96,798	120,927	493,194
1997	282,293	100,986	121,509	504,788
1998	297,188	100,872	124,452	522,512
1999	317,640	103,020	128,692	549,352
2000	317,618	101,137	129,710	548,465
2001	309,310	43,377	106,257	458,944
2002	310,771	92,557	129,511	532,839
2003	319,029	101,097	127,323	547,449
2004	315,066	96,171	125,159	536,396
2005	304,302	96,960	126,455	527,717
2006	312,078	98,425	127,245	537,748
2007	291,391	100,491	122,092	513,974
2008	293,059	97,057	118,153	508,269
2009	289,694	96,184	118,982	504,860
2010	292,047	94,667	119,832	506,546
2011	279,896	93,560	117,653	491,109
2012	276,648	92,743	113,166	482,557
2013	277,645	90,012	112,162	479,819
2014	280,784	87,232	109,796	477,812
2015	295,120	89,367	113,783	498,270
2016	289,827	89,792	112,995	492,614

PANYNJ one-way tolls initiated 8/12/1970.

PANYNJ toll increases May 1975, January 1984, April 1987, April 1991, March 2001, March 2008, September 2011, December 2012, December 2013, December 2014, & December 2015.

Hourly Vehicular Volumes

Port Authority of New York & New Jersey

2016

	George Washington Bridge		Holland Tunnel		Lincoln Tunnel		Totals	
	E/B	W/B	E/B	W/B	E/B	W/B	Entering Manhattan	Leaving Manhattan
12-1am	1,926	2,840	682	876	900	1,694	3,508	5,410
1-2am	1,359	1,792	483	925	608	971	2,450	3,688
2-3am	1,144	1,293	347	732	477	612	1,968	2,637
3-4am	1,358	1,236	394	573	533	398	2,285	2,207
4-5am	2,386	1,622	750	811	982	552	4,118	2,985
5-6am	6,988	3,377	2,308	1,578	3,272	808	12,568	5,763
6-7am	11,474 **	5,382	2,739 **	2,113	4,860 **	1,427	19,073 **	8,922
7-8am	9,833	6,578	2,706	2,477	4,145	1,928	16,684	10,983
8-9am	8,156	7,287	2,641	2,369	3,994	1,876	14,791	11,532
9-10am	8,242	6,523	2,569	2,063	3,778	1,797	14,589	10,383
10-11am	8,055	6,177	2,386	2,154	3,369	1,855	13,810	10,186
11-12am	7,294	6,330	2,072	2,131	2,897	2,241	12,263	10,702
12-1pm	6,888	6,803	1,908	2,057	2,540	2,400	11,336	11,260
1-2pm	6,867	7,197	1,853	2,397	2,445	2,877	11,165	12,471
2-3pm	7,103	8,387	1,962	2,475	2,559	3,348	11,624	14,210
3-4pm	7,509	10,266	2,122	2,297	2,364	3,923	11,995	16,486
4-5pm	7,522	9,247	2,465	2,297	2,058	4,795 **	12,045	16,339 **
5-6pm	7,756	10,864 **	2,587	1,995	1,738	4,676	12,081	17,535 **
6-7pm	7,773	10,224	2,536	2,171	2,040	4,720	12,349	17,115
7-8pm	6,523	8,553	2,091	2,351	2,108	4,243	10,722	15,147
8-9pm	5,308	7,341	1,658	2,521 **	1,898	3,160	8,864	13,022
9-10pm	4,680	6,630	1,556	2,510	1,964	2,925	8,200	12,065
10-11pm	4,041	6,075	1,453	2,398	1,853	2,813	7,347	11,286
11-12pm	2,960	4,658	1,068	2,185	1,420	2,154	5,448	8,997
Totals	143,145	146,682	43,336	46,456	54,802	58,193	241,283	251,331
7-10am	26,231	20,388	7,916	6,909	11,917	5,601	46,064	32,898
10am-1pm	22,237	19,310	6,366	6,342	8,806	6,496	37,409	32,148
1-4pm	21,479	25,850	5,937	7,169	7,368	10,148	34,784	43,167
4-7pm	23,051	30,335	7,588	6,463	5,836	14,191	36,475	50,989
7am-7pm	92,998	95,883	27,807	26,883	33,927	36,436	154,732	159,202
6-10am	37,705	25,770	10,655	9,022	16,777	7,028	65,137	41,820
3-7pm	30,560	40,601	9,710	8,760	8,200	18,114	48,470	67,475
6am-7pm	104,472	101,265	30,546	28,996	38,787	37,863	173,805	168,124

** Peak Volumes

Note: NYC DOT uses the averages of vehicular volumes from selected representative fall weekdays. Publications from other sources may be based on alternative computation methodologies, yielding different results for some facilities, notably the tolled bridges and tunnels.

Hourly Vehicular Volumes
George Washington Bridge - 2016

Eastbound to Manhattan

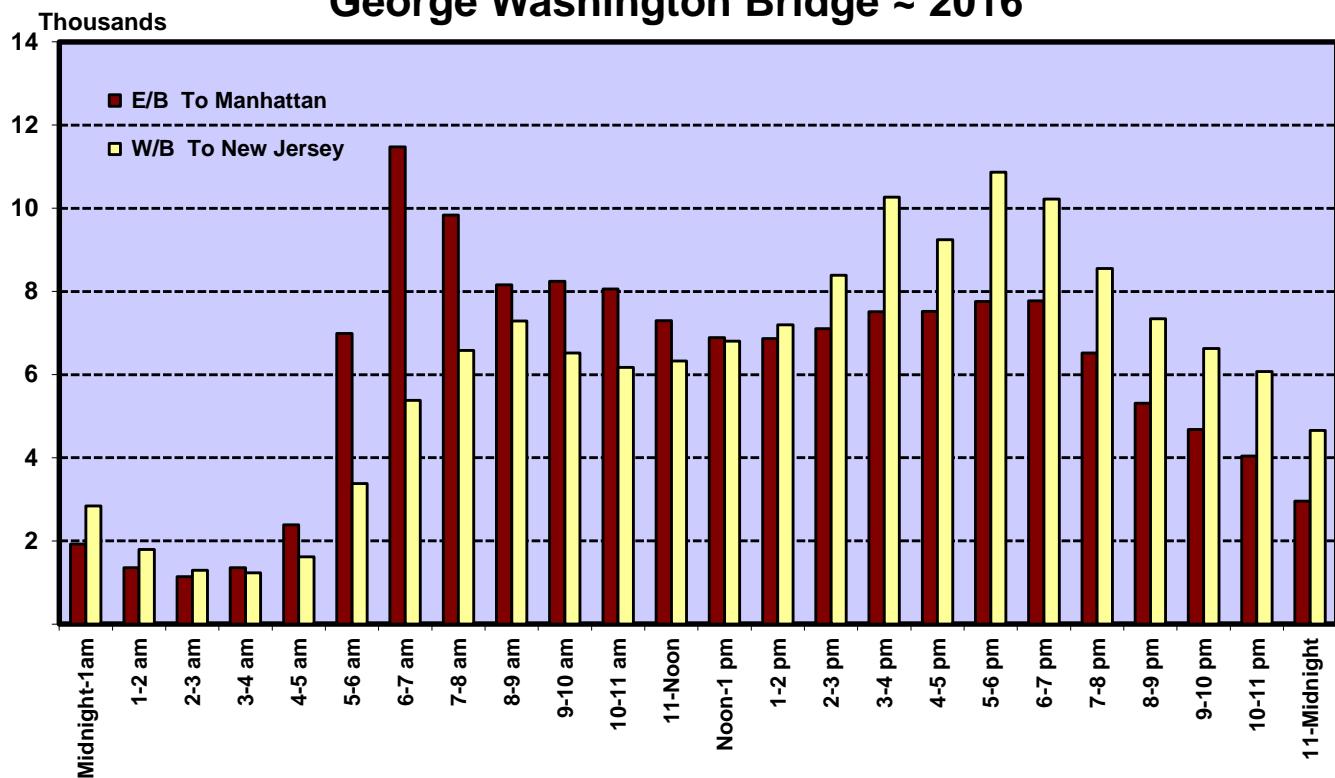
Autos	Buses	Small Trucks		Large Trucks		Total Vehicles	<i>Westbound to New Jersey</i>			2-Way Grand Totals
		Autos	Buses	Autos	Buses		Small Trucks	Large Trucks	Total Vehicles	
12-1am	1,580	8	64	274	1,926	2,377	12	77	374	2,840
1-2am	990	5	69	295	1,359	1,352	4	89	347	1,792
2-3am	720	5	72	347	1,144	920	1	78	294	1,293
3-4am	793	4	120	441	1,358	742	3	95	396	1,236
4-5am	1,586	12	187	601	2,386	1,025	5	136	456	1,622
5-6am	5,746	35	437	770	6,988	2,490	17	252	618	3,377
6-7am	10,377	88	509	500	11,474	**	4,578	44	347	413
7-8am	9,071	92	343	327	9,833	5,786	87	324	381	5,382
8-9am	7,397	87	347	325	8,156	6,437	115	378	357	6,578
9-10am	7,388	92	368	394	8,242	5,545	89	378	511	6,523
10-11am	7,221	65	356	413	8,055	5,068	61	384	664	6,177
11-12am	6,522	60	312	400	7,294	5,128	50	394	758	6,330
12-1pm	6,201	58	288	341	6,888	5,338	61	455	949	6,803
1-2pm	6,216	72	273	306	6,867	6,015	53	500	629	7,197
2-3pm	6,520	77	248	258	7,103	7,203	71	492	621	8,387
3-4pm	6,952	107	225	225	7,509	9,229	55	450	532	10,266
4-5pm	7,072	91	179	180	7,522	8,574	63	280	330	9,247
5-6pm	7,355	101	141	159	7,756	10,079	86	335	364	10,864
6-7pm	7,370	88	127	188	7,773	9,558	66	294	306	10,224
7-8pm	6,109	73	108	233	6,523	8,002	60	199	292	8,553
8-9pm	4,951	52	78	227	5,308	6,851	48	114	328	7,341
9-10pm	4,338	42	70	230	4,680	6,242	31	84	273	6,630
10-11pm	3,681	27	56	277	4,041	5,682	36	69	288	6,075
11-12pm	2,607	18	56	279	2,960	4,154	20	72	412	4,658
Totals	128,763	1,359	5,033	7,990	143,145	128,375	1,138	6,276	10,893	146,682
7-10am	23,856	271	1,058	1,046	26,231	17,768	291	1,080	1,249	20,388
10am-1pm	19,944	183	956	1,154	22,237	15,534	172	1,233	2,371	19,310
1-4pm	19,688	256	746	789	21,479	22,447	179	1,442	1,782	25,850
4-7pm	21,797	280	447	527	23,051	28,211	215	909	1,000	30,335
7am-7pm	85,285	990	3,207	3,516	92,998	83,960	857	4,664	6,402	95,883
6-10am	34,233	359	1,567	1,546	37,705	22,346	335	1,427	1,662	25,770
3-7pm	28,749	387	672	752	30,560	37,440	270	1,359	1,532	40,601
6am-7pm	95,662	1,078	3,716	4,016	104,472	88,538	901	5,011	6,815	101,265

Classification based on 2016 classification data.

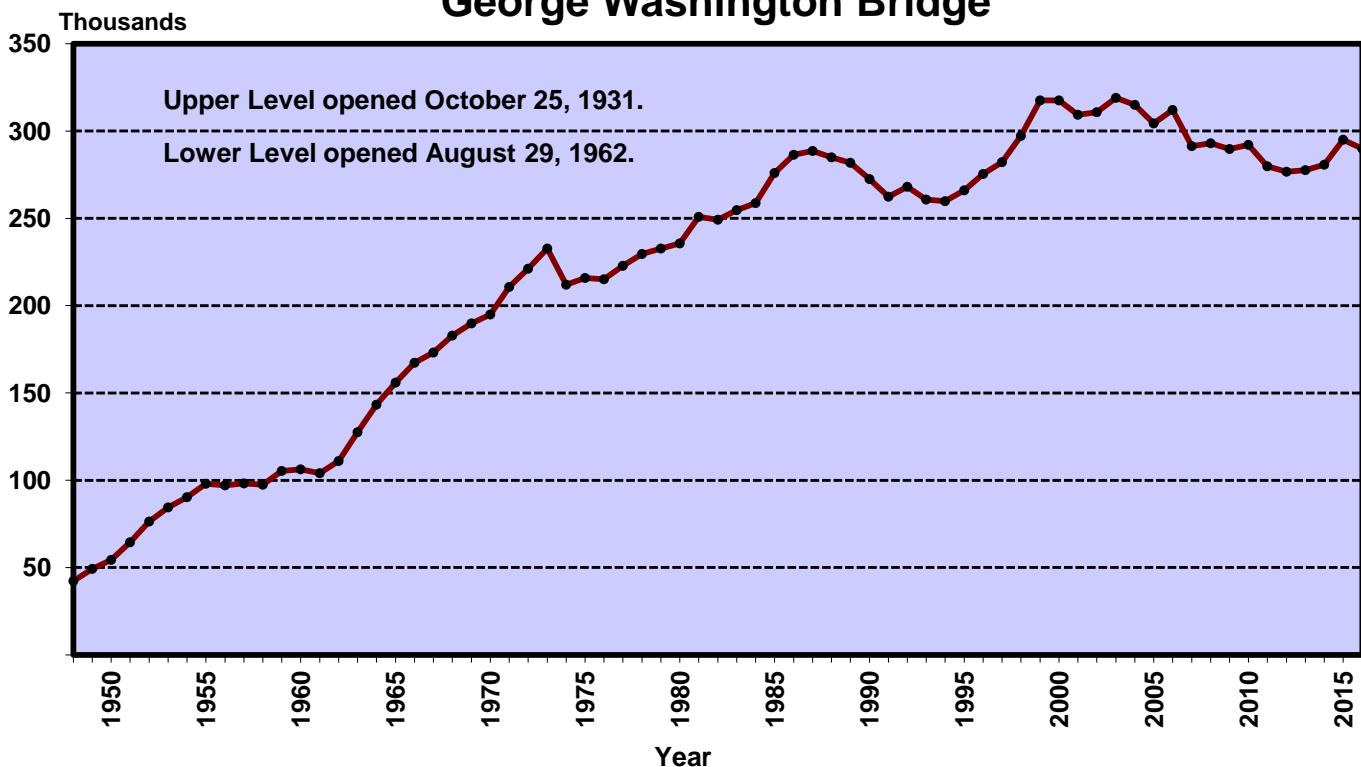
2-Way Grand Totals									
4,766	3,151	2,437	2,594	4,008	10,365	16,856	16,411	15,443	14,765

** Peak Volumes

Hourly Vehicular Volumes George Washington Bridge ~ 2016



Average Daily Traffic Volumes ~ Total of Both Directions George Washington Bridge



Hourly Vehicular Volumes Holland Tunnel - 2016

Eastbound to Manhattan

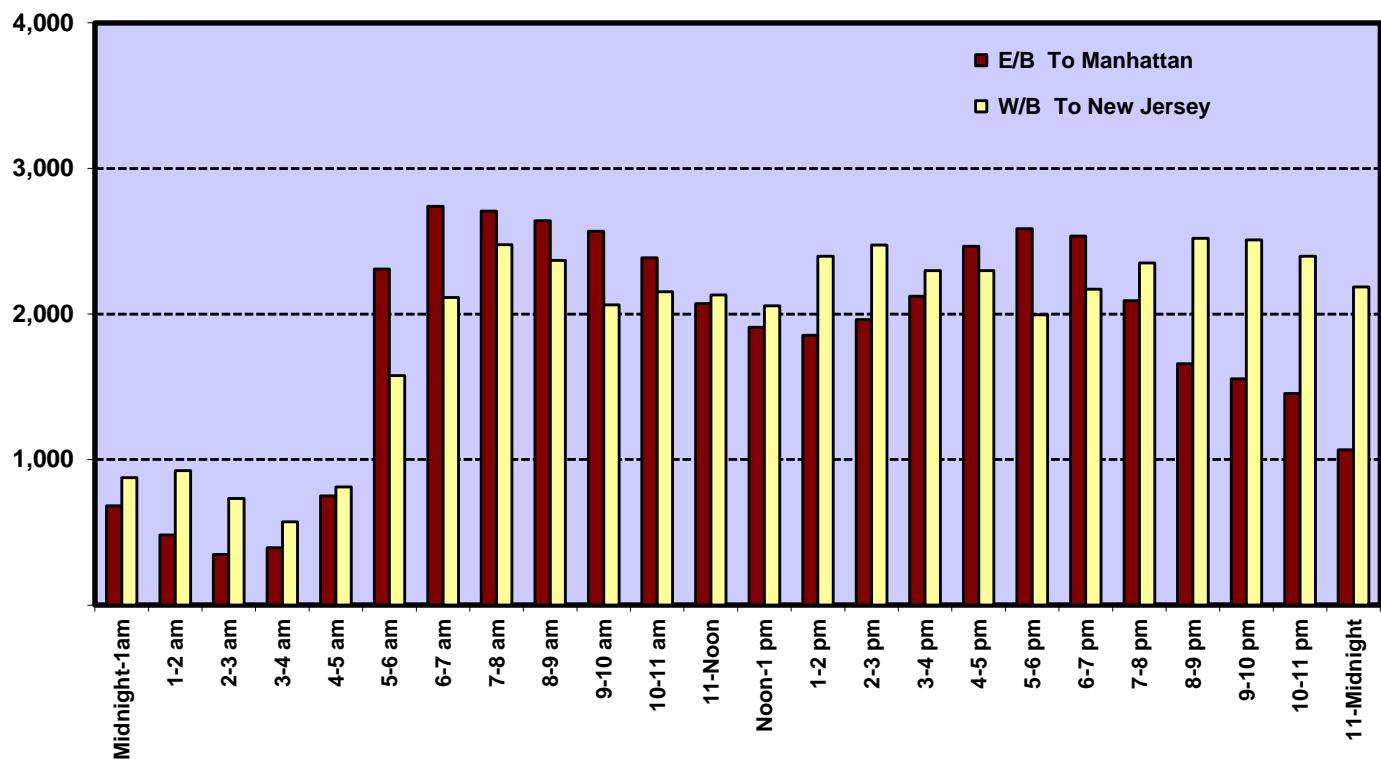
Westbound to New Jersey

	<i>Eastbound to Manhattan</i>						<i>Westbound to New Jersey</i>						2-Way Grand Totals
	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles			
12-1am	660	4	18	0	682	865	2	9	0	876	1,558	1,408	
1-2am	456	3	24	0	483	908	3	14	0	925	1,079	1,079	
2-3am	314	3	30	0	347	707	0	25	0	732	967	967	
3-4am	347	5	42	0	394	524	0	49	0	573	1,561	1,561	
4-5am	668	8	73	1	750	739	1	71	0	811	3,886	3,886	
5-6am	2,130	22	154	2	2,308	1,478	10	90	0	1,578	4,852	4,852	
6-7am	2,561	47	129	2	2,739	1,990	24	99	0	2,113	5,183	5,183	**
7-8am	2,505	55	145	1	2,706	2,356	32	89	0	2,477	5,010	5,010	
8-9am	2,413	66	159	3	2,641	2,170	71	127	1	2,369	4,632	4,632	
9-10am	2,396	62	109	2	2,569	1,864	65	134	0	2,063	4,540	4,540	
10-11am	2,239	29	117	1	2,386	1,948	30	176	0	2,154	4,203	4,203	
11-12am	1,977	18	76	1	2,072	1,957	9	165	0	2,131	3,965	3,965	
12-1pm	1,831	14	62	1	1,908	1,877	15	165	0	2,057	4,250	4,250	
1-2pm	1,769	19	64	1	1,853	2,191	18	188	0	2,397	4,437	4,437	
2-3pm	1,873	22	66	1	1,962	2,309	16	150	0	2,475	4,419	4,419	
3-4pm	2,018	45	58	1	2,122	2,123	26	148	0	2,297	4,762	4,762	
4-5pm	2,353	66	46	0	2,465	2,159	32	106	0	2,297	4,582	4,582	
5-6pm	2,500	55	32	0	2,587	1,869	54	72	0	1,995	4,707	4,707	
6-7pm	2,474	37	25	0	2,536	2,037	54	79	1	2,171	4,442	4,442	
7-8pm	2,042	25	24	0	2,091	2,255	30	66	0	2,351	4,179	4,179	
8-9pm	1,623	14	21	0	1,658	2,454	31	36	0	2,521	4,066	4,066	
9-10pm	1,523	10	22	1	1,556	2,462	18	30	0	2,510	3,851	3,851	
10-11pm	1,424	10	18	1	1,453	2,357	15	26	0	2,398	3,253	3,253	
11-12pm	1,042	5	21	0	1,068	2,144	16	25	0	2,185			
Totals	41,138	644	1,535	19	43,336	43,743	572	2,139	2	46,456	89,792		
7-10am	7,314	183	413	6	7,916	6,390	168	350	1	6,909	14,825		
10am-1pm	6,047	61	255	3	6,366	5,782	54	506	0	6,342	12,708		
1-4pm	5,660	86	188	3	5,937	6,623	60	486	0	7,169	13,106		
4-7pm	7,327	158	103	0	7,588	6,065	140	257	1	6,463	14,051		
7am-7pm	26,348	488	959	12	27,807	24,860	422	1,599	2	26,883	54,690		
6-10am	9,875	230	542	8	10,655	8,380	192	449	1	9,022	19,677		
3-7pm	9,345	203	161	1	9,710	8,188	166	405	1	8,760	18,470		
6am-7pm	28,909	535	1,088	14	30,546	26,850	446	1,698	2	28,996	59,542		

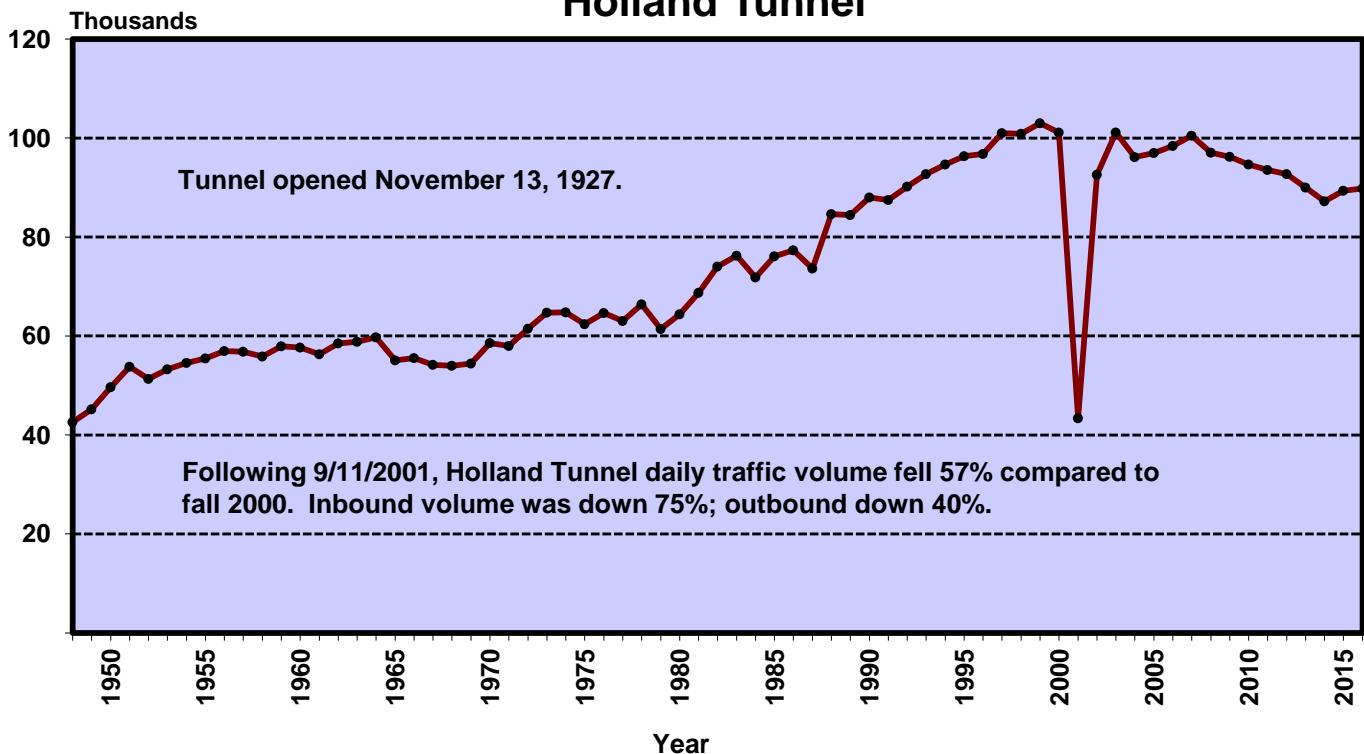
Classification based on 2016 classification data.

** Peak Volumes

Hourly Vehicular Volumes Holland Tunnel ~ 2016



Average Daily Traffic Volumes ~ Total of Both Directions Holland Tunnel



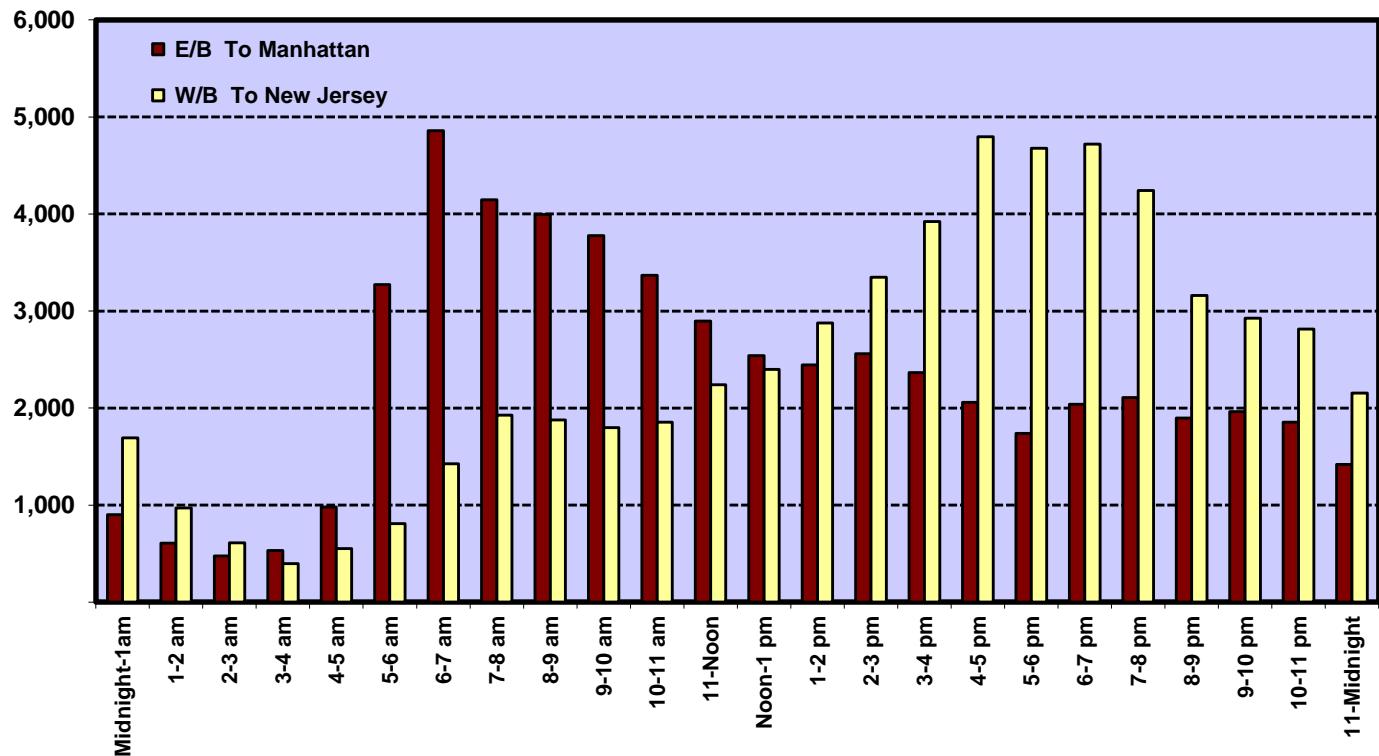
Hourly Vehicular Volumes
Lincoln Tunnel - 2016

	Eastbound to Manhattan						Westbound to New Jersey					
	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles	2-Way Grand Totals	
12-1am	790	51	40	19	900	1,496	93	67	38	1,664	2,594	
1-2am	510	27	43	28	608	836	39	60	36	971	1,579	
2-3am	383	9	55	30	477	505	19	55	33	612	1,089	
3-4am	364	13	101	55	533	274	12	60	52	398	931	
4-5am	690	25	175	92	982	406	18	66	62	552	1,534	
5-6am	2,594	189	372	117	3,272	571	74	95	68	808	4,080	
6-7am	3,878	519	408	55	4,860	982	304	97	44	1,427	6,287	
7-8am	3,011	821	282	31	4,145	1,152	573	155	48	1,928	6,073	
8-9am	2,775	935	266	18	3,994	903	707	218	48	1,876	5,870	
9-10am	2,859	655	247	17	3,778	933	649	176	39	1,797	5,575	
10-11am	2,860	288	203	18	3,369	1,269	328	213	45	1,855	5,224	
11-12am	2,517	216	149	15	2,897	1,713	219	258	51	2,241	5,138	
12-1pm	2,218	185	123	14	2,540	1,897	171	278	54	2,400	4,940	
1-2pm	2,118	213	100	14	2,445	2,316	206	313	42	2,877	5,322	
2-3pm	2,191	272	89	7	2,559	2,817	195	297	39	3,348	5,907	
3-4pm	1,950	337	72	5	2,364	3,318	276	294	35	3,923	6,287	
4-5pm	1,490	504	61	3	2,058	4,021	461	292	21	4,795	6,853	
5-6pm	1,223	476	35	4	1,738	3,755	679	223	19	4,676	6,414	
6-7pm	1,552	442	38	8	2,040	3,773	763	172	12	4,720	6,760	
7-8pm	1,720	318	52	18	2,108	3,624	470	138	11	4,243	6,351	
8-9pm	1,588	226	60	24	1,898	2,740	321	78	21	3,160	5,058	
9-10pm	1,697	176	62	29	1,964	2,602	236	63	24	2,925	4,889	
10-11pm	1,615	149	62	27	1,853	2,493	218	66	36	2,813	4,666	
11-12pm	1,243	105	47	25	1,420	1,919	139	62	34	2,154	3,574	
Totals	43,836	7,151	3,142	673	54,802	46,315	7,170	3,796	912	58,193	112,995	
7-10am	8,645	2,411	795	66	11,917	2,988	1,929	549	135	5,601	17,518	
10am-1pm	7,595	689	475	47	8,806	4,879	718	749	150	6,496	15,302	
1-2pm	6,259	822	261	26	7,368	8,451	677	904	116	10,148	17,516	
4-7pm	4,265	1,422	134	15	5,836	11,549	1,903	687	52	14,191	20,027	
7am-7pm	26,764	5,344	1,665	154	33,927	27,867	5,227	2,889	453	36,436	70,363	
6-10am	12,523	2,930	1,203	121	16,777	3,970	2,233	646	179	7,028	23,805	
3-7pm	6,215	1,759	206	20	8,200	14,867	2,179	981	87	18,114	26,314	
6am-7pm	30,642	5,863	2,073	209	38,787	28,849	5,531	2,986	497	37,863	76,650	

Classification based on 2016 classification data.

** Peak Volumes

Hourly Vehicular Volumes Lincoln Tunnel ~ 2016



Average Daily Traffic Volumes ~ Total of Both Directions Lincoln Tunnel

