

2013 Manhattan River Crossings



Bill de Blasio
Mayor



Polly Trottenberg
Commissioner

A member of the New York Metropolitan Transportation Council

2013 Manhattan River Crossings

Contract D000642

2013-2014: PTDT13D00.E01

2014-2015: PTDT14D00.E01

The preparation of this report was financed in part with funds from the U.S. Department of Transportation, Federal Highway Administration, under the Federal Highway Act of 1956, as amended, and the Urban Mass Transportation Act of 1964, as amended. This document is disseminated by the New York City Department of Transportation in the interest of information exchange. It reflects the views of the New York City Department of Transportation (NYCDOT), which is responsible for the facts and the accuracy of the data presented herein. The report does not necessarily reflect any official views or policies of the Federal Transit Administration, the Federal Highway Administration, or the State of New York. The report does not constitute a standard, specification, or regulation. NYCDOT is grateful 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 (NYC DCP), and the New York Metropolitan Transportation Council (NYMTC) for providing data used to develop this report.

Prepared by:
New York City Department of Transportation

Polly Trottenberg
Commissioner

Lori A. Ardito
First Deputy Commissioner

Ryan Russo
Deputy Commissioner

Naim Rasheed
Director, Traffic Planning

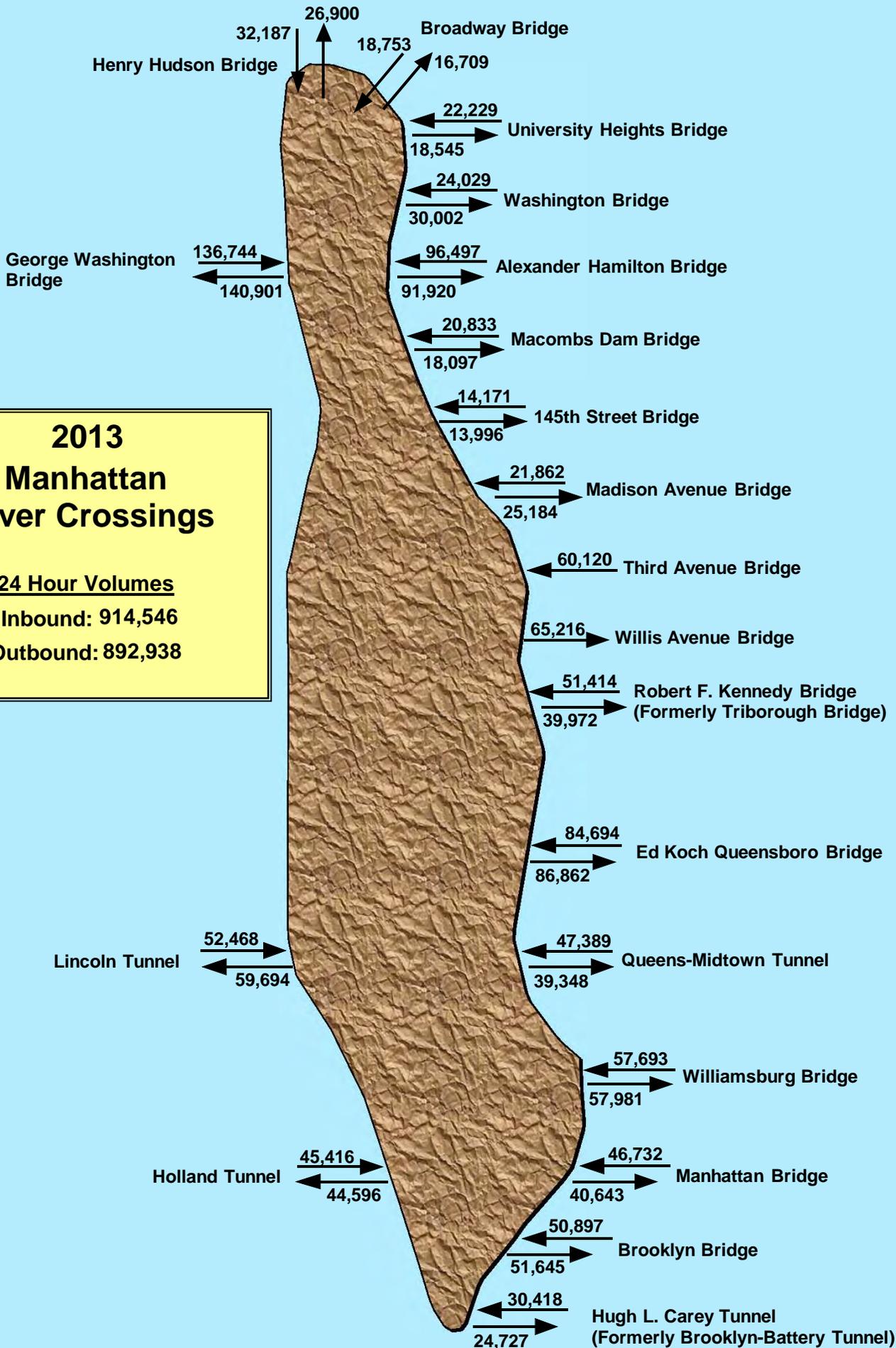
Ann Marie Doherty
Chief, Research, Implementation, & Safety

Richard P. Roan
Research, Implementation, & Safety

Published December 2014

2013 Manhattan River Crossings

24 Hour Volumes
Inbound: 914,546
Outbound: 892,938



1,807,484

daily vehicles used the 20
Manhattan River Crossings
in 2013 (total of both
directions).

Increase of Less Than 1%

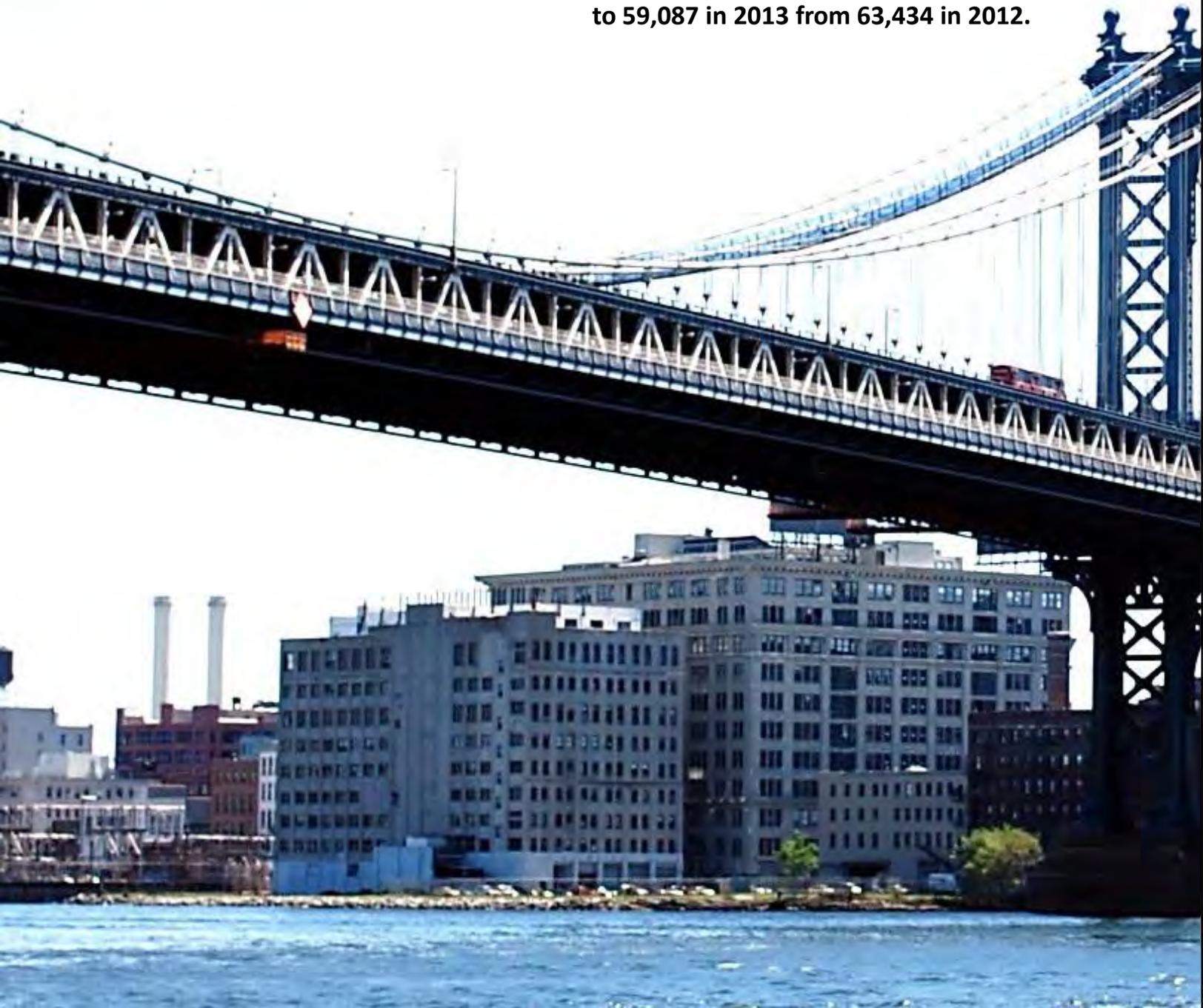
from the 1,806,649 daily
vehicles recorded in 2012 (835
additional daily vehicles).

5.1% Increase Willis Avenue Bridge (Harlem River)

Largest percentage increase for crossings
carrying more than 50,000 daily vehicles,
to 65,216 in 2013 from 62,062 in 2012.

6.9% Decrease Henry Hudson Bridge (Harlem River)

Largest percentage decrease for crossings
carrying more than 50,000 daily vehicles,
to 59,087 in 2013 from 63,434 in 2012.



George Washington Bridge (Hudson River)

277,645 vehicles per day, the most heavily utilized Manhattan river crossing.

Alexander Hamilton Bridge (Harlem River)

188,417 vehicles per day, the most heavily utilized Harlem River crossing.

Ed Koch Queensboro Bridge (East River)

171,556 vehicles per day, the most heavily utilized East River crossing.

Annual Citywide Subway Ridership

3.2% increase to 1,707,555,714 annual riders in 2013 from 1,654,582,265 in 2012.

During the past ten years, subway ridership increased 23.3% to 1.708 billion annual riders in 2013 from 1.384 billion in 2003. During the same period, Manhattan vehicular river crossings decreased 4.7% to 1,807,484 daily vehicles in 2013 from 1,897,411 in 2003.



TABLE OF CONTENTS

	PAGE
INTRODUCTION	1
SUMMARY ~ 2013 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
2012-2013 TRENDS	25
Hourly Vehicular Volumes 2013 vs. 2012	28
Manhattan Crossings Daily Traffic Volume Trends 2013 vs. 2012	30
Volume Comparisons 2013 vs. 2012	31
East River Bridges	32
Harlem River Bridges	33
MTABT Manhattan Crossings	34
PANYNJ Manhattan Crossings	35
TEN-YEAR TRENDS ~ 2003 - 2013	37
Manhattan Crossings Daily Traffic Volume Trends 2013 vs. 2003	41
Hourly Vehicular Volumes 2013 vs. 2003	43
Volume Comparisons 2013 vs. 2003	45
East River Bridges	46
Harlem River Bridges	47

	PAGE
MTABT Manhattan Crossings	48
PANYNJ Manhattan Crossings	49
Motor Vehicle Registrations 2003 - 2013	50
HISTORIC TRENDS	51
Manhattan Crossings Daily Volumes 1948 - 2013	57
Historical Comparisons 1948 - 2013	58
East River Bridges	59
Harlem River Bridges	59
MTABT Manhattan Crossings	60
PANYNJ Manhattan Crossings	60
Manhattan River Crossings vs. Annual Subway Ridership 1948-2013	61
Motor Vehicle Registrations 1915 - 2013	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)	109
Henry Hudson Bridge	110
PORT AUTHORITY OF NEW YORK AND NEW JERSEY FACILITIES	111
George Washington Bridge	114
Holland Tunnel	116
Lincoln Tunnel	118
APPENDIX -- 2013 Bridge and Tunnel Reconstruction	
Brooklyn Bridge	A - 1
Ed Koch Queensboro Bridge	A - 2
Manhattan Bridge	A - 3
Williamsburg Bridge	A - 4
Alexander Hamilton Bridge	A - 4
Broadway Bridge	A - 5
Washington Bridge	A - 5
Willis Avenue Bridge	A - 5
Henry Hudson Bridge	A - 6
Hugh L. Carey Tunnel (Formerly Brooklyn-Battery Tunnel)	A - 6

	PAGE
Queens-Midtown Tunnel	A - 7
R.F.K. Memorial Bridge	A - 7
George Washington Bridge	A - 8
Holland Tunnel	A - 8
Lincoln Tunnel	A - 8

Introduction



Broadway Bridge

INTRODUCTION

The 2013 *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 2013 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 2013-2014 and 2014-2015 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 ~ 2013 Daily Traffic



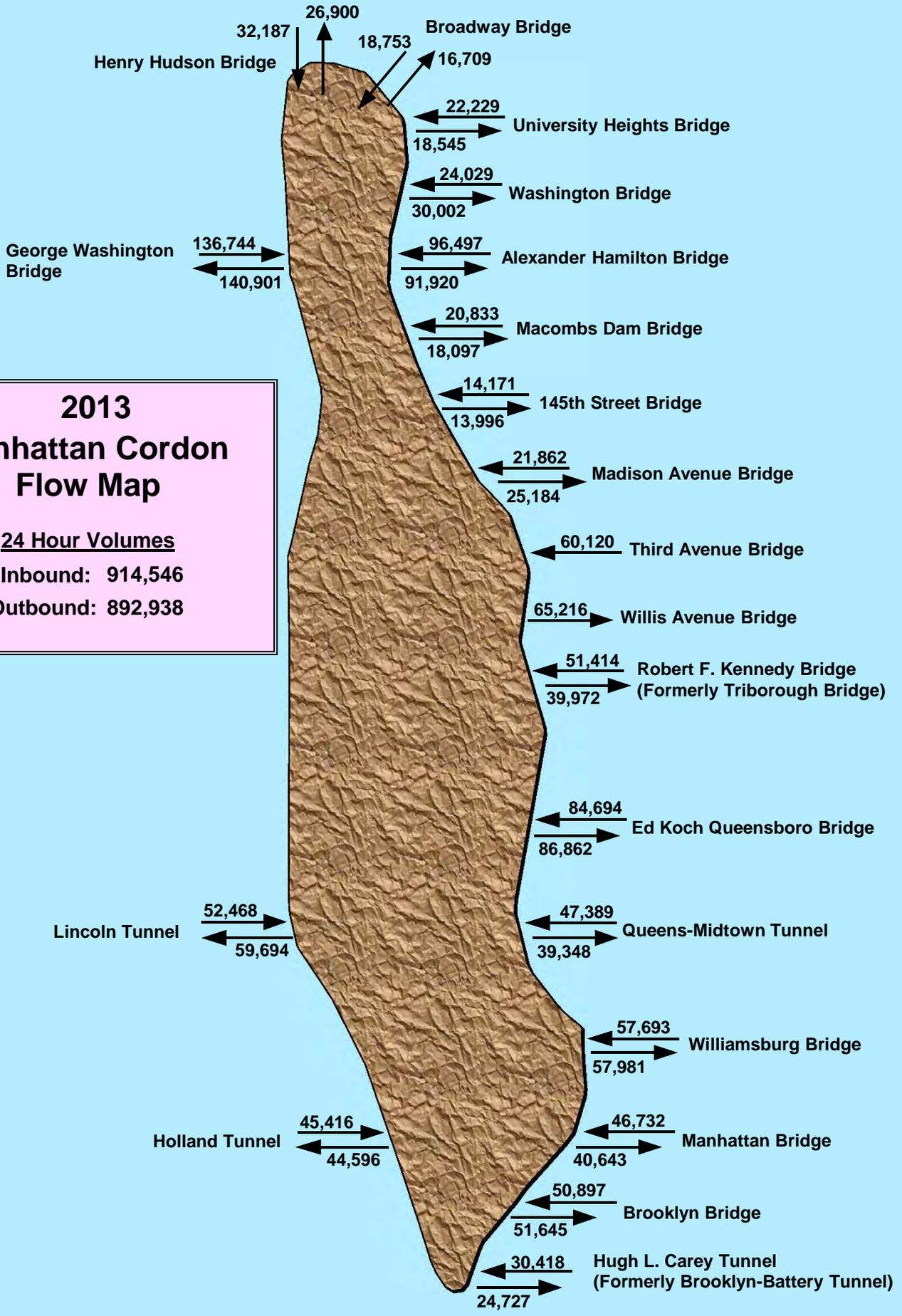
Holland Tunnel Entrance at Varick-Broome Streets

SUMMARY

- Daily Manhattan river crossings increased less than 0.1%, to 1,807,484 daily vehicles in fall 2013 from 1,806,649 in fall 2012, an increase of 835 daily vehicles.
- The busiest river crossings are the following.
 - For the 52nd consecutive year, the George Washington Bridge carried more traffic than any other Manhattan river crossing. A two-way total of 277,645 daily vehicles used this bridge in fall 2013, which was 0.4% more than the average daily volume of 276,648 in fall 2012.
 - The Alexander Hamilton Bridge was second busiest, serving 188,417 daily vehicles in fall 2013, which was 1.7% more than its fall 2012 daily volume of 185,309.
 - The Ed Koch Queensboro Bridge was third busiest with its fall 2013 daily volume of 171,556 daily vehicles, a decrease of 3.7% from the 178,188 recorded in fall 2012.
- The average automobile entering Manhattan during the morning peak period carried 1.34 persons including the driver. A total of 78.4% of peak period automobiles were occupied only by the driver.
- The peak accumulation of motor vehicles in Manhattan on an average weekday occurred at about 2 pm when an estimated 370,000 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 (page 16).
- Annual subway ridership citywide increased 3.2% to 1.708 billion in 2013 from 1.655 billion in 2012. This was the highest level of subway ridership since 1949 (page 61).
- According to census data, 39% of automobile work trips to Manhattan originated in the other four boroughs, 51% came from outside the city, and the remaining 10% originated within Manhattan.
- Origin and Destination (O & D) surveys conducted by PANYNJ in 2006 at its trans-Hudson crossings show that 44% of automobiles entering Manhattan from New Jersey each day have final destinations outside Manhattan. These figures indicate that nearly 100,000 autos entering Manhattan from New Jersey in 2013 each day were simply passing through.
- Similar surveys conducted in 2009 showed that some 70% of trucks entering from New Jersey had final destinations outside Manhattan at that time. However, the Holland Tunnel was closed to all Manhattan-bound trucks during that time. It was reopened to Manhattan-bound 2-axle and 3-axle single unit trucks as of January 3, 2010. Therefore the applicability of the 2009 surveys is uncertain under the present operating conditions since diversion would have been occurring during those 2009 surveys.
- PANYNJ reports show that 66% of morning peak period (7-10 am) automobiles entering from New Jersey have final destinations in Manhattan.

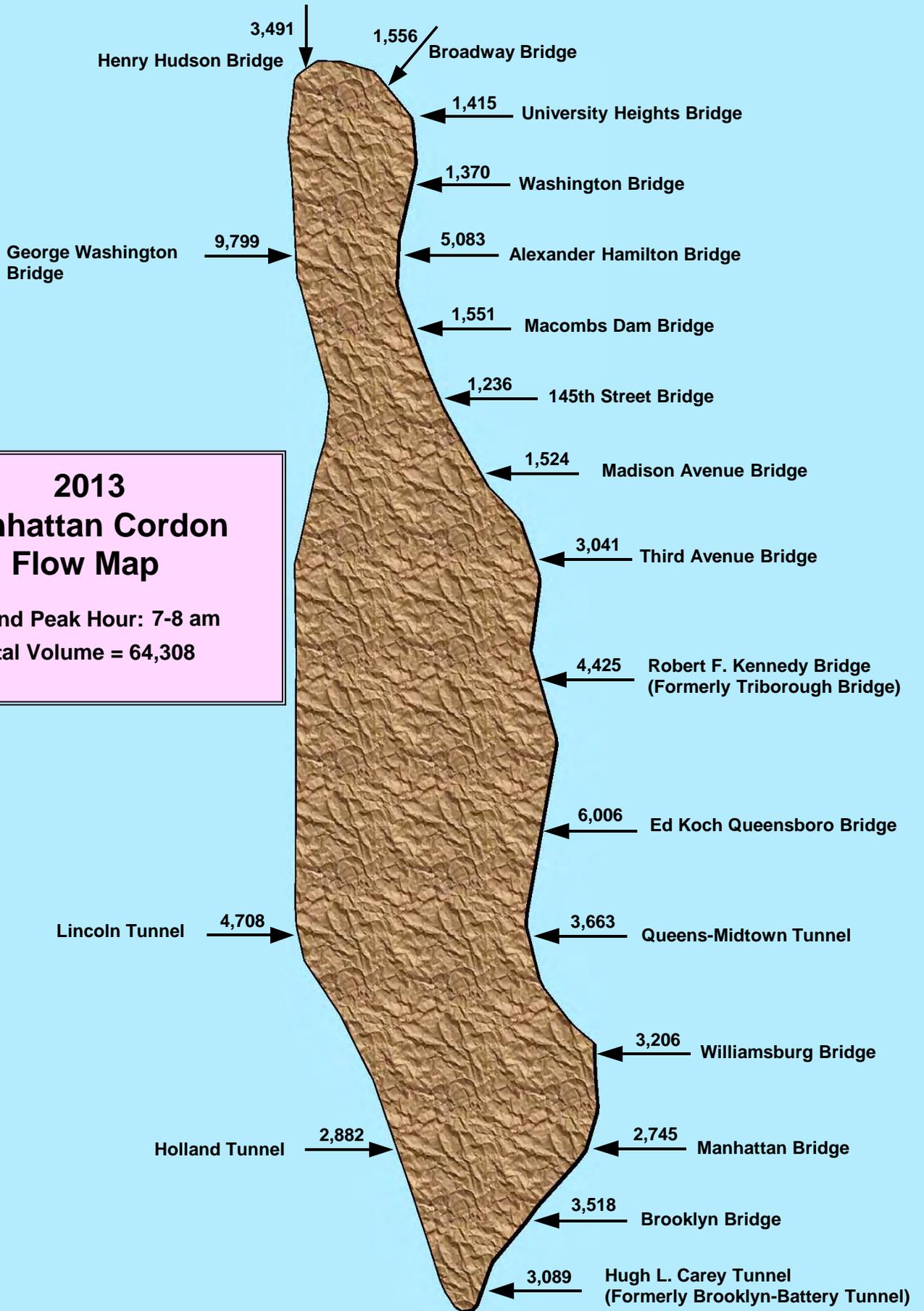
**2013
Manhattan Cordon
Flow Map**

24 Hour Volumes
Inbound: 914,546
Outbound: 892,938

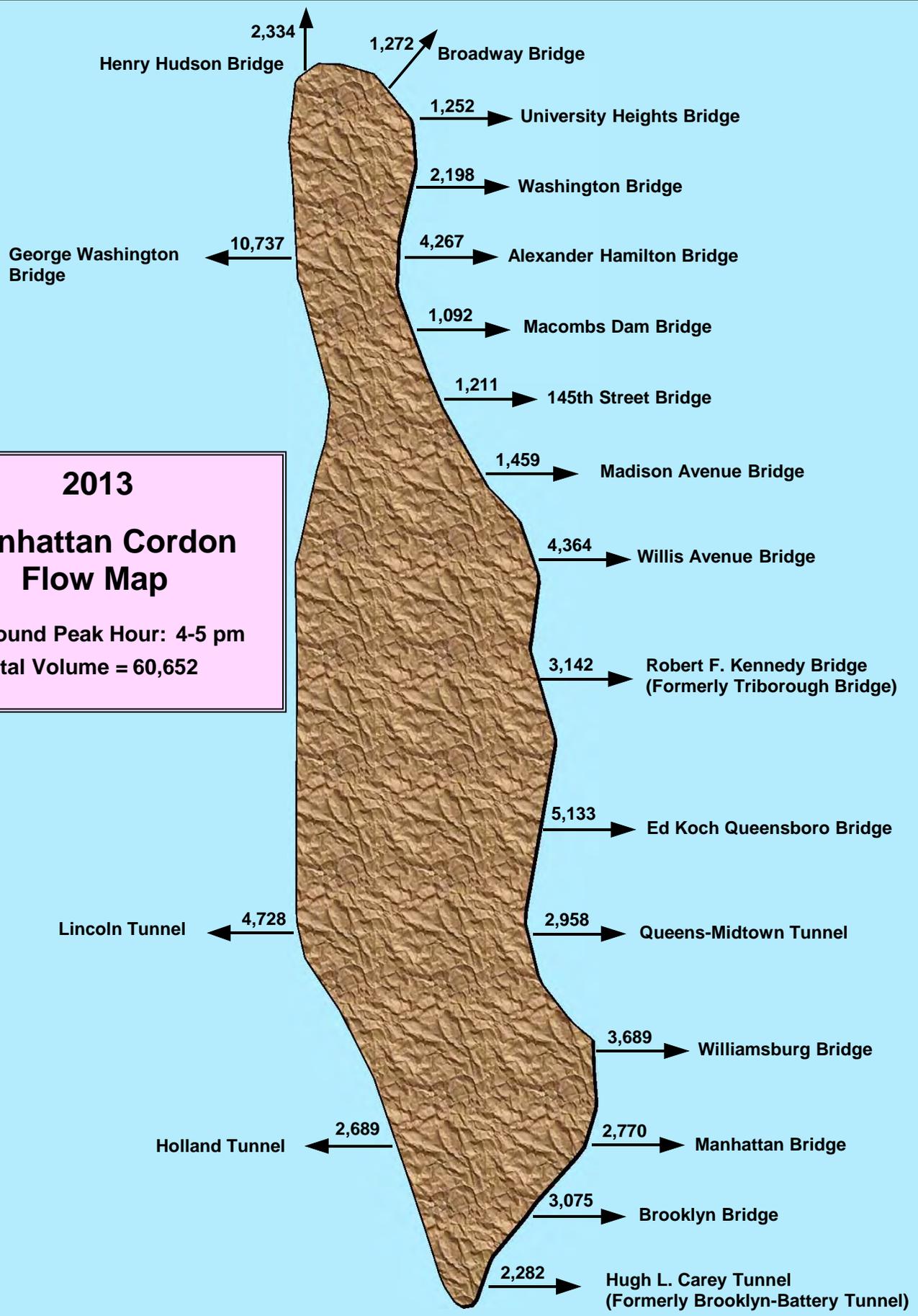


2013 Manhattan Cordon Flow Map

Inbound Peak Hour: 7-8 am
Total Volume = 64,308



2013
Manhattan Cordon
Flow Map
 Outbound Peak Hour: 4-5 pm
 Total Volume = 60,652



**Manhattan Crossings
2013 Average Daily Traffic Volumes
To and From Manhattan**

<i>EAST RIVER BRIDGES</i>	To Manhattan	From Manhattan	2-way Total
Brooklyn Bridge	50,897	51,645	102,542
Ed Koch Queensboro Bridge *	84,694	86,862	171,556
Manhattan Bridge	46,732	40,643	87,375
Williamsburg Bridge	57,693	57,981	115,674
Total East River	240,016	237,131	477,147

<i>HARLEM RIVER BRIDGES</i>			
Alexander Hamilton Bridge	96,497	91,920	188,417
Broadway Bridge	18,753	16,709	35,462
Macombs Dam Bridge	20,833	18,097	38,930
Madison Avenue Bridge	21,862	25,184	47,046
Third Avenue Bridge	60,120	-----	60,120
University Heights Bridge	22,229	18,545	40,774
Washington Bridge	24,029	30,002	54,031
Willis Avenue Bridge	-----	65,216	65,216
145th Street Bridge	14,171	13,996	28,167
Total Harlem River	278,494	279,669	558,163

<i>MTABT FACILITIES</i>			
Henry Hudson Bridge	32,187	26,900	59,087
Hugh L. Carey Tunnel **	30,418	24,727	55,145
Queens-Midtown Tunnel	47,389	39,348	86,737
Robert F. Kennedy Bridge ***	51,414	39,972	91,386
Total MTABT	161,408	130,947	292,355

<i>PANYNJ FACILITIES</i>			
George Washington Bridge	136,744	140,901	277,645
Holland Tunnel	45,416	44,596	90,012
Lincoln Tunnel	52,468	59,694	112,162
Total PANYNJ	234,628	245,191	479,819

GRAND TOTAL	914,546	892,938	1,807,484
--------------------	----------------	----------------	------------------

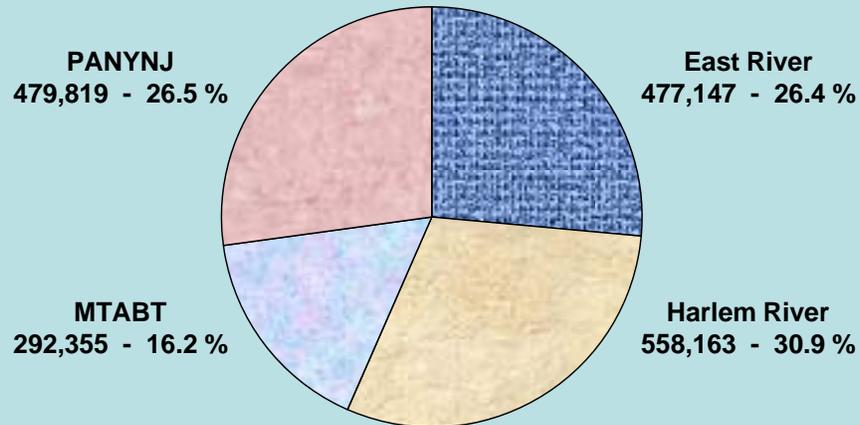
* Queensboro Bridge renamed April 11, 2011.

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

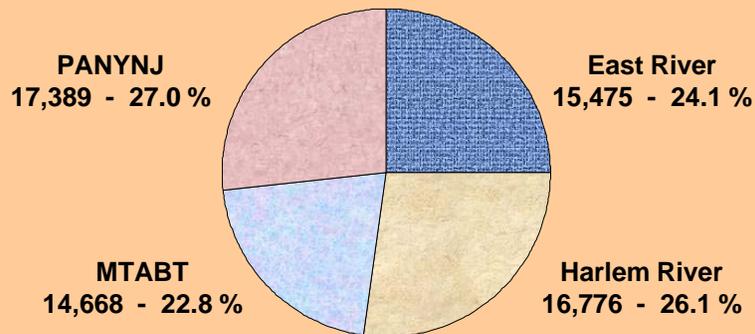
*** Formerly Triborough Bridge, renamed November 19, 2008.

2013 Manhattan Crossings Vehicle Volumes

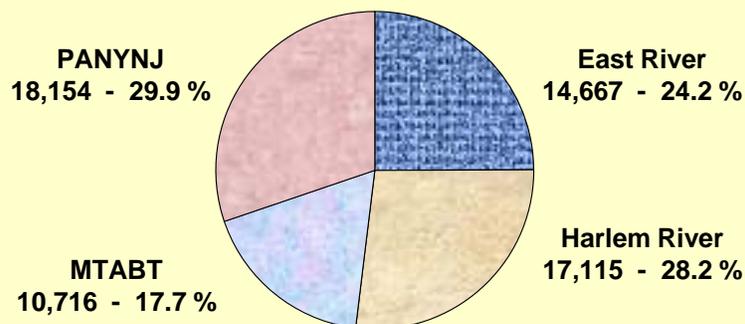
24-Hour Volumes – Both Directions



A.M. Peak Hour Volumes – Inbound 7-8 am



P.M. Peak Hour Volumes – Outbound 4-5 pm



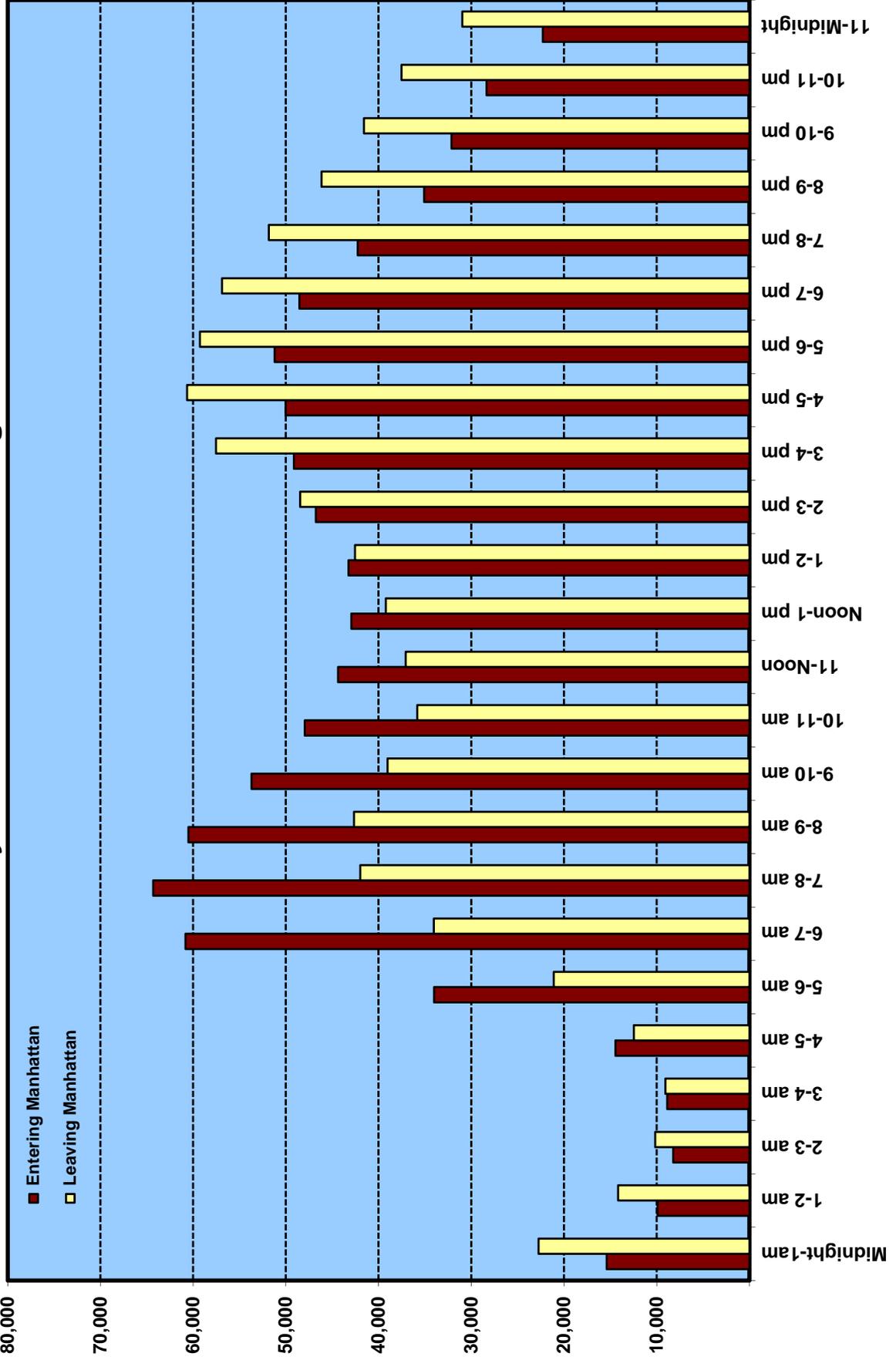
Total Manhattan Crossings 2013 Average Hourly Traffic Volumes To and From Manhattan (All Facilities)

	Entering Manhattan	Leaving Manhattan	2-Way Total
12-1am	15,402	22,750	38,152
1-2am	9,920	14,168	24,088
2-3am	8,226	10,174	18,400
3-4am	8,876	9,075	17,951
4-5am	14,461	12,467	26,928
5-6am	34,011	21,106	55,117
6-7am	60,834	34,048	94,882
7-8am	64,308 **	41,979	106,287
8-9am	60,511	42,650	103,161
9-10am	53,699	39,027	92,726
10-11am	47,953	35,825	83,778
11-12am	44,374	37,071	81,445
12-1pm	42,933	39,213	82,146
1-2pm	43,242	42,541	85,783
2-3pm	46,762	48,457	95,219
3-4pm	49,131	57,534	106,665
4-5pm	50,029	60,652 **	110,681
5-6pm	51,209	59,261	110,470
6-7pm	48,546	56,880	105,426
7-8pm	42,257	51,836	94,093
8-9pm	35,086	46,158	81,244
9-10pm	32,133	41,575	73,708
10-11pm	28,356	37,524	65,880
11-12pm	22,287	30,967	53,254
24 hrs	914,546	892,938	1,807,484
7-10am	178,518	123,656	302,174
10am-1pm	135,260	112,109	247,369
1-4pm	139,135	148,532	287,667
4-7pm	149,784	176,793	326,577
7am-7pm	602,697	561,090	1,163,787

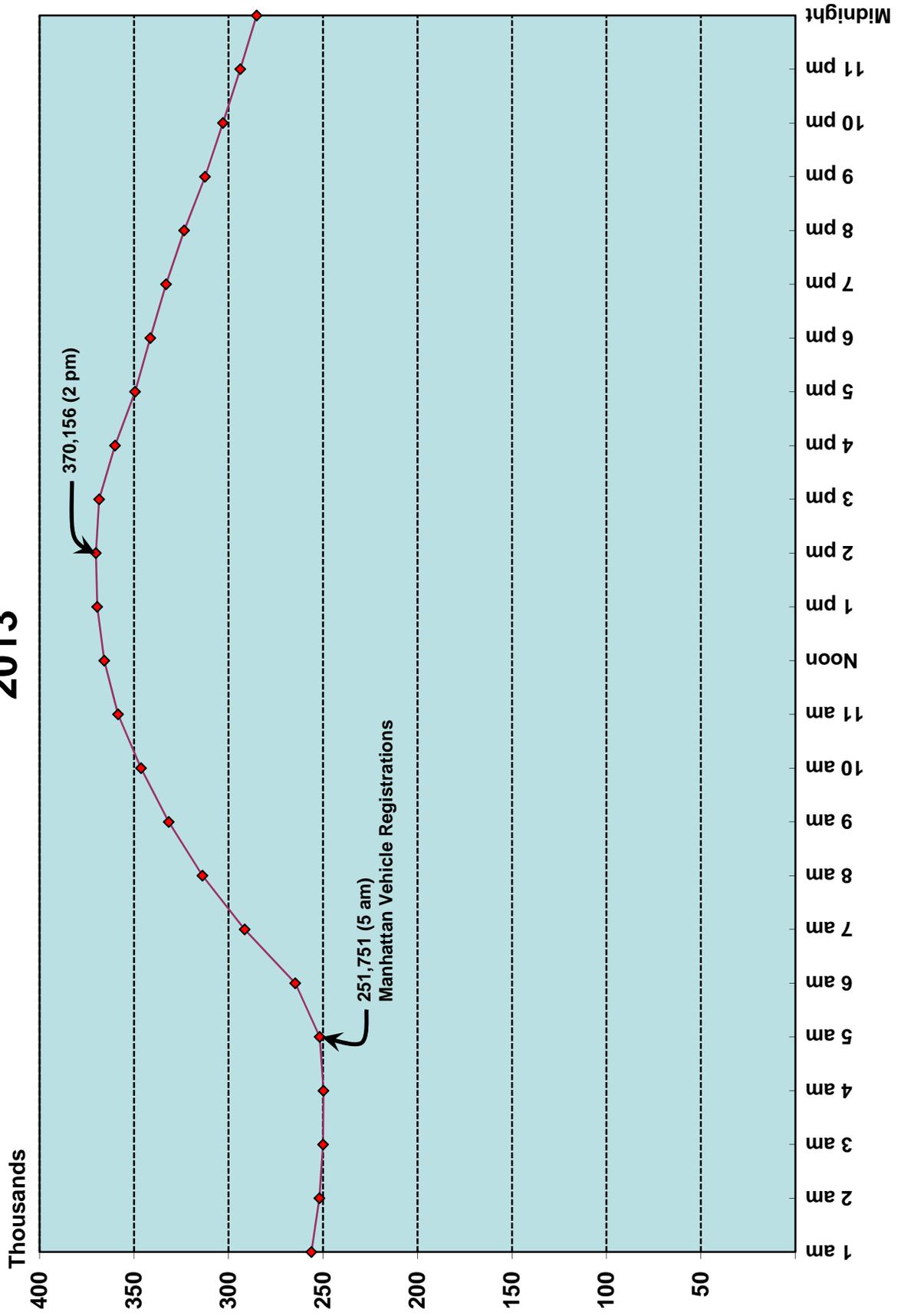
** Peak Volumes

Hourly Vehicle Volumes

Total Hourly Manhattan River Crossings ~ 2013



Manhattan Vehicular Accumulation 2013



Trip Characteristics



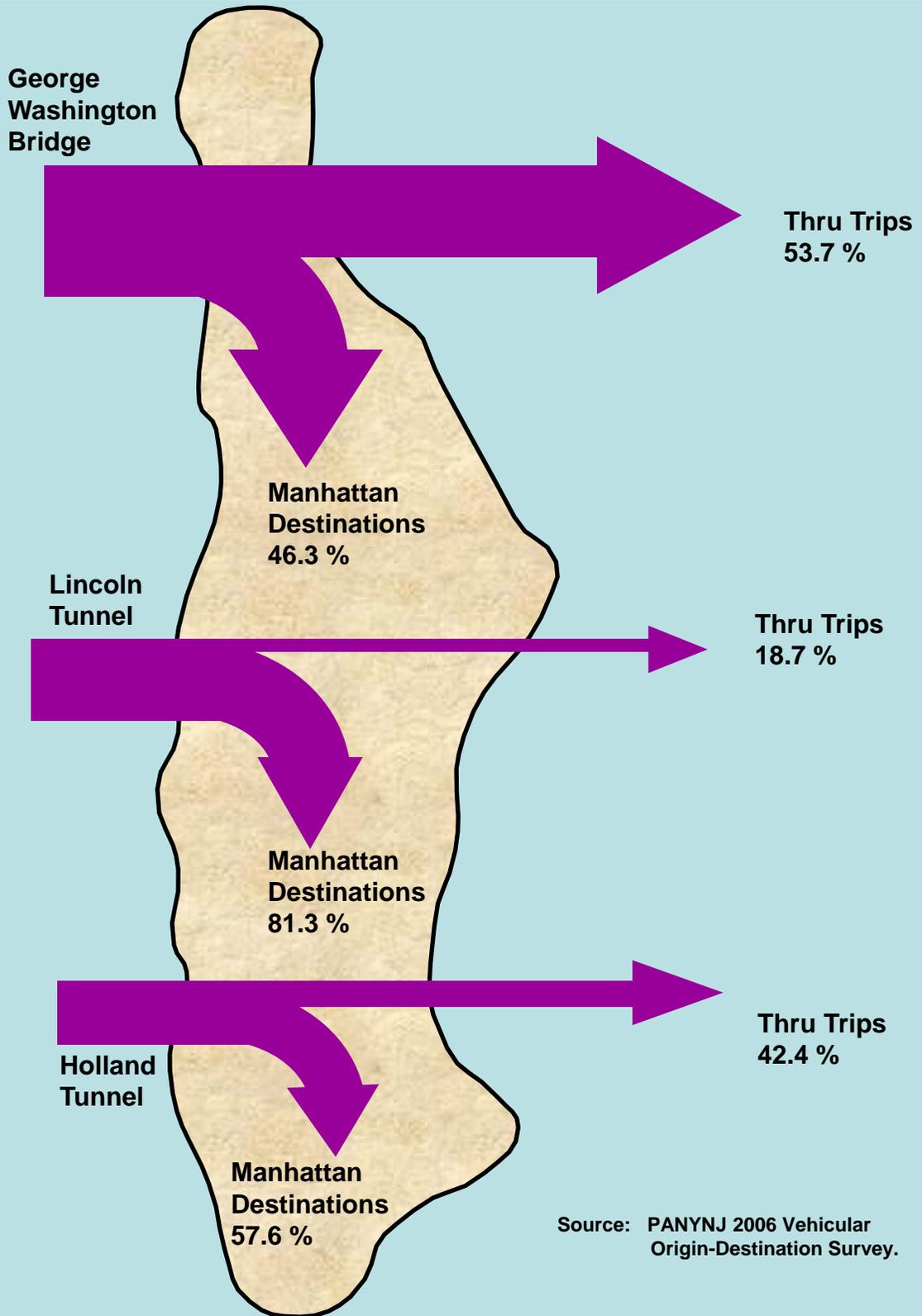
**University Heights Bridge over the Harlem River
between Manhattan & Bronx**

Origins and Travel Modes of Manhattan Commuters

State & County of Residence	Total Manhattan Workers	2		3		4+		Rail				Taxi	Other
		Drove Alone	Person Carpool	Person Carpool	Person Carpool	Bus	Rapid Transit	Railroad	Ferry	Bicycle	Walk		
NY ~ Bronx	191,715	22,815	4,245	970	530	21,335	133,375	5,425	65	270	1,375	1,080	230
NY ~ Brooklyn	387,960	25,155	5,295	1,835	930	19,635	322,275	6,500	155	2,405	2,045	800	930
NY ~ Manhattan	656,595	23,435	5,365	1,155	1,255	67,875	333,275	7,990	30	8,070	173,830	31,035	3,280
NY ~ Queens	378,360	39,800	8,980	1,735	1,285	29,305	274,565	18,710	105	360	1,385	965	1,165
NY ~ Staten Is.	56,695	10,280	1,550	425	395	31,580	4,845	830	6,360	105	185	20	120
Subtotal NYC Origins	1,671,325	121,485	25,435	6,120	4,395	169,730	1,068,335	39,455	6,715	11,210	178,820	33,900	5,725
NY ~ Nassau	95,554	18,550	3,635	550	255	2,755	9,860	59,205	60	4	305	120	255
NY ~ Westchester	83,745	17,620	3,510	515	200	3,325	7,810	49,645	140	0	300	285	395
NY ~ Suffolk	41,135	9,990	1,975	525	60	1,070	2,420	24,100	115	35	365	310	170
NY ~ Rockland	15,815	7,430	1,455	225	115	4,365	260	1,790	100	45	0	0	30
NY ~ Orange	11,595	4,955	800	190	180	2,180	445	2,780	0	0	40	25	0
NY ~ 52 Remaining Counties	16,298	5,022	1,183	89	49	753	1,801	6,367	15	98	678	60	183
New York State Totals	1,935,467	185,052	37,993	8,214	5,254	184,178	1,090,931	183,342	7,145	11,392	180,508	34,700	6,758
NJ ~ Hudson	70,020	5,930	1,295	390	235	22,155	32,840	2,540	4,000	70	310	45	210
NJ ~ Bergen	65,495	18,855	5,055	1,075	600	30,310	1,980	6,445	880	0	130	25	140
NJ ~ Essex	33,030	5,165	1,015	380	155	8,435	3,270	14,090	50	0	85	20	365
NJ ~ Middlesex	28,130	3,800	655	80	50	9,295	1,075	12,990	50	0	50	15	70
NJ ~ Monmouth	24,809	4,080	1,245	305	360	9,070	940	6,305	2,280	35	130	4	55
NJ ~ Union	17,380	3,650	715	170	160	3,295	1,730	6,840	15	0	60	0	745
NJ ~ Morris	13,064	4,200	330	95	29	2,930	525	4,760	30	0	30	0	135
NJ ~ 14 Remaining Counties	36,397	8,734	1,930	165	270	11,550	1,469	11,470	135	40	275	79	280
New Jersey Totals	288,325	54,414	12,240	2,660	1,859	97,040	43,829	65,440	7,440	145	1,070	188	2,000
CT ~ Fairfield	27,965	4,095	725	15	20	740	1,725	20,365	0	0	80	20	180
CT ~ 7 Remaining Counties	5,813	1,955	314	80	30	320	585	2,240	20	0	124	75	70
Connecticut Totals	33,778	6,050	1,039	95	50	1,060	2,310	22,605	20	0	204	95	250
Pennsylvania Totals	14,886	3,739	744	240	395	4,993	1,333	2,965	0	0	269	0	208
GRAND TOTALS	2,272,456	249,255	52,016	11,209	7,558	287,271	1,138,403	274,352	14,605	11,537	182,051	34,983	9,216

Data Source: American Association of State Highway and Transportation Officials (AASHTO) Census Transportation Planning Products (CTTP).
AASHTO county to county flow tables based on 2006-2008 American Community Survey (ACS) data collected by the U.S. Census Bureau.

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



Source: PANYNJ 2006 Vehicular Origin-Destination Survey.

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	42.4 %	46.2 %	24.4 %	34.5 %
Upper Manhattan	23.8 %	20.1 %	21.3 %	21.7 %
Manhattan Total	66.2 %	66.3 %	45.7 %	56.2 %
Bronx	12.2 %	9.6 %	10.1 %	10.8 %
Brooklyn	7.8 %	7.1 %	10.6 %	9.0 %
Queens	4.6 %	7.3 %	17.3 %	10.9 %
Westchester	4.3 %	3.2 %	7.7 %	4.7 %
Long Island	3.5 %	3.7 %	7.4 %	5.5 %
Other	1.4 %	2.8 %	1.2 %	2.9 %
Thru Trip Total	33.8 %	33.7 %	54.3 %	43.8 %
GRAND TOTAL	100.0 %	100.0 %	100.0 %	100.0 %

Source: Weekday data from the PANYNJ 2006 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	25.5 %	26.8 %	12.3 %	18.4 %
Upper Manhattan	31.5 %	28.9 %	26.1 %	27.9 %
Manhattan Total	57.0 %	55.7 %	38.4 %	46.3 %
Bronx	19.5 %	16.6 %	14.5 %	17.3 %
Brooklyn	4.3 %	3.9 %	6.6 %	5.4 %
Queens	5.3 %	9.3 %	15.6 %	11.3 %
Westchester	6.9 %	4.5 %	12.3 %	7.3 %
Long Island	5.3 %	5.5 %	11.0 %	7.8 %
Other	1.7 %	4.5 %	1.6 %	4.6 %
Thru Trip Total	43.0 %	44.3 %	61.6 %	53.7 %
GRAND TOTAL	100.0 %	100.0 %	100.0 %	100.0 %

Source: Weekday data from the PANYNJ 2006 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	60.6 %	62.7 %	40.3 %	49.0 %
Upper Manhattan	11.4 %	5.8 %	12.2 %	8.6 %
Manhattan Total	72.0 %	68.5 %	52.5 %	57.6 %
Bronx	2.1 %	0.6 %	3.2 %	2.2 %
Brooklyn	19.3 %	20.4 %	24.9 %	23.0 %
Queens	3.9 %	4.9 %	16.9 %	12.4 %
Westchester	0.6 %	3.3 %	0.0 %	2.0 %
Long Island	0.5 %	2.3 %	1.8 %	2.4 %
Other	1.6 %	0.0 %	0.7 %	0.4 %
Thru Trip Total	28.0 %	31.5 %	47.5 %	42.4 %
GRAND TOTAL	100.0 %	100.0 %	100.0 %	100.0 %

Source: Weekday data from the PANYNJ 2006 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	76.7 %	78.6 %	51.6 %	64.0 %
Upper Manhattan	12.1 %	10.3 %	15.0 %	17.3 %
Manhattan Total	88.8 %	88.9 %	66.6 %	81.3 %
Bronx	0.0 %	0.2 %	2.7 %	1.2 %
Brooklyn	7.8 %	5.1 %	3.9 %	6.0 %
Queens	2.9 %	4.5 %	25.8 %	8.6 %
Westchester	0.0 %	0.1 %	0.0 %	0.3 %
Long Island	0.5 %	0.5 %	1.0 %	2.0 %
Other	0.0 %	0.7 %	0.0 %	0.6 %
Thru Trip Total	11.2 %	11.1 %	33.4 %	18.7 %
GRAND TOTAL	100.0 %	100.0 %	100.0 %	100.0 %

Source: Weekday data from the PANYNJ 2006 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	72.8 %
Brooklyn Bridge	1.22	80.6 %
Manhattan Bridge	1.25	79.9 %
Williamsburg Bridge	1.17	84.7 %
Holland Tunnel	1.22	65.7 %
5 Lower Manhattan Crossings	1.24	76.1 %
Queens-Midtown Tunnel	1.24	77.7 %
Ed Koch Queensboro Bridge	1.44	66.5 %
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	88.4 %
George Washington Bridge	1.74	79.6 %
11 Upper Manhattan Crossings	1.38	81.5 %
All 19 Inbound Manhattan Crossings	1.34	78.4 %

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.

2012-2013 Trends



Brooklyn Bridge

2012-2013 Trends

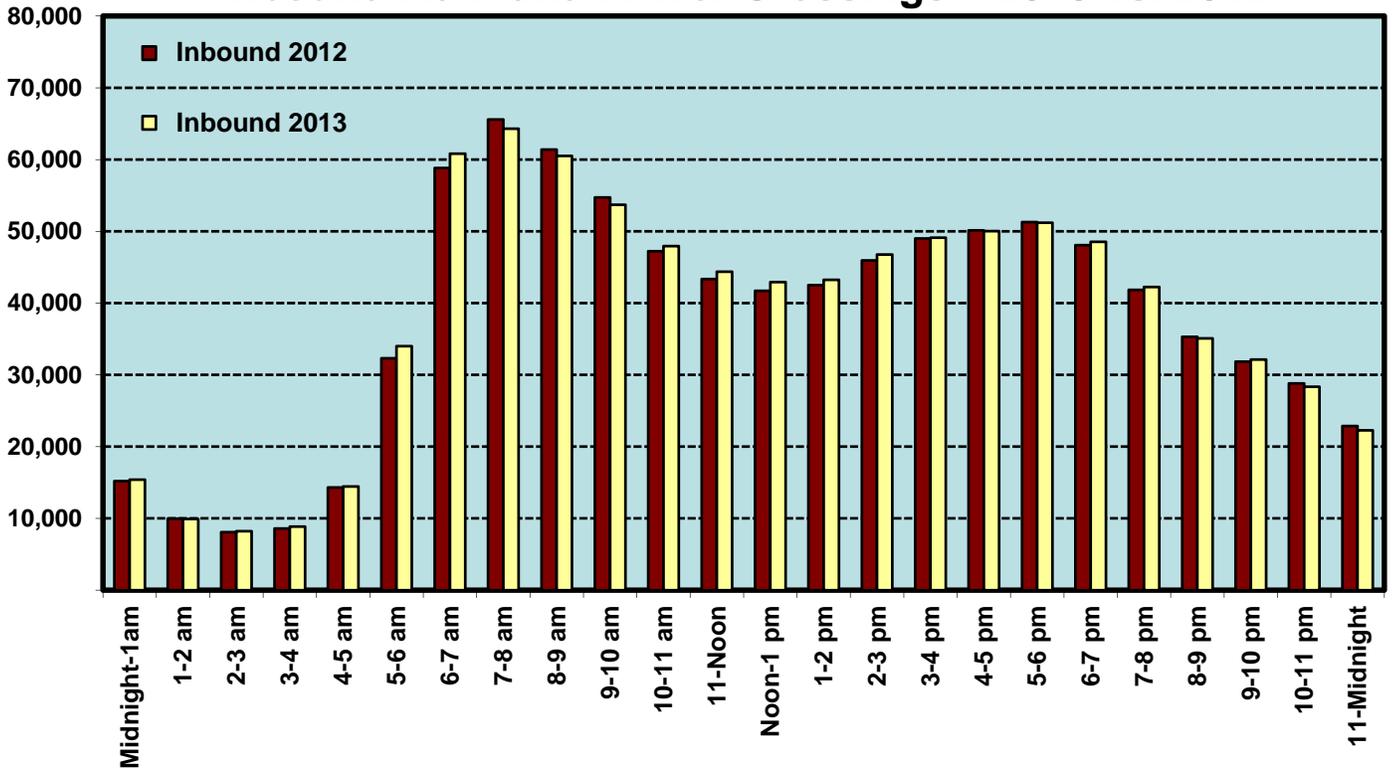
- Daily Manhattan river crossings increased less than 0.1%, to 1,807,484 in fall 2013 from 1,806,649 in fall 2012 (835 Additional daily vehicles).
- The largest percentage and numerical increase occurred on the Madison Avenue Bridge over the Harlem River between Manhattan and The Bronx, where daily volume increased 12.6%, to 47,046 vehicles in fall 2013 from 41,782 in fall 2012 (5,264 additional daily vehicles).
- The largest percentage decrease occurred on the Henry Hudson Bridge over the Harlem River between Manhattan and The Bronx, where daily traffic decreased 6.9%, to 59,087 vehicles in fall 2013 from 63,434 in fall 2012 (4,347 fewer daily vehicles).
- The largest numerical decrease occurred on the Ed Koch Queensboro Bridge over the East River between Manhattan and Brooklyn, where traffic decreased by 6,632 daily vehicles, to 171,556 in fall 2013 from 178,188 in fall 2012 (-3.7%).
- Total daily traffic on the four East River bridges combined decreased 0.6%, to 477,147 in fall 2013 from 480,259 in fall 2012 (3,112 fewer daily vehicles).
- Daily volume using the nine Harlem River bridges increased 2.0%, to 558,163 in fall 2013 from 547,207 in fall 2012 (10,956 additional daily vehicles).
- On the four MTABT Manhattan crossings, total daily traffic decreased 1.4% to 292,355 in fall 2013 from 296,626 in fall 2012 (4,271 fewer daily vehicles).
- Daily traffic using the three PANYNJ Manhattan crossings decreased 0.6% to 479,819 from 482,557 (2,738 fewer daily vehicles)
- Annual subway ridership citywide increased 3.2% to 1,707,555,714 in 2013 from 1,654,582,265 in 2012. This was the highest level of subway ridership since 1949.

Manhattan Crossings Hourly Vehicular Volumes 2013 vs 2012

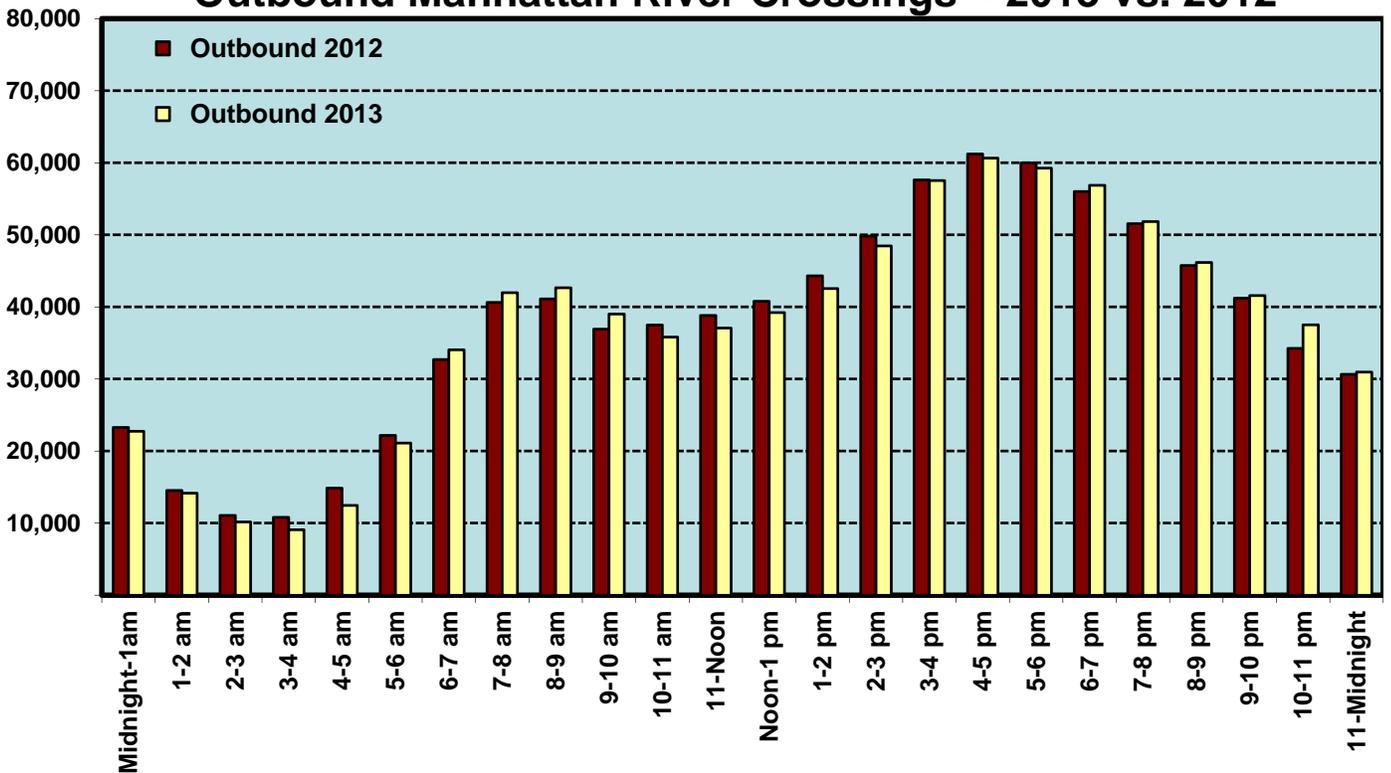
	Inbound			Outbound		
	2012	2013	Percent Change	2012	2013	Percent Change
Mid-1	15,214	15,402	1.2 %	23,271	22,750	- 2.2 %
1-2 am	9,965	9,920	- 0.5 %	14,547	14,168	- 2.6 %
2-3 am	8,091	8,226	1.7 %	11,083	10,174	- 8.2 %
3-4 am	8,591	8,876	3.3 %	10,803	9,075	-16.0 %
4-5 am	14,323	14,461	1.0 %	14,879	12,467	-16.2 %
5-6 am	32,308	34,011	5.3 %	22,179	21,106	- 4.8 %
6-7 am	58,832	60,834	3.4 %	32,708	34,048	4.1 %
7-8 am	65,593	64,308	- 2.0 %	40,628	41,979	3.3 %
8-9 am	61,391	60,511	- 1.4 %	41,106	42,650	3.8 %
9-10 am	54,727	53,699	- 1.9 %	36,921	39,027	5.7 %
10-11 a	47,235	47,953	1.5 %	37,504	35,825	- 4.5 %
11-Noon	43,350	44,374	2.4 %	38,827	37,071	- 4.5 %
Noon-1	41,717	42,933	2.9 %	40,779	39,213	- 3.8 %
1-2 pm	42,518	43,242	1.7 %	44,309	42,541	- 4.0 %
2-3 pm	45,952	46,762	1.8 %	49,825	48,457	- 2.7 %
3-4 pm	49,018	49,131	0.2 %	57,619	57,534	- 0.1 %
4-5 pm	50,133	50,029	- 0.2 %	61,225	60,652	- 0.9 %
5-6 pm	51,283	51,209	- 0.1 %	59,977	59,261	- 1.2 %
6-7 pm	48,074	48,546	1.0 %	56,021	56,880	1.5 %
7-8 pm	41,840	42,257	1.0 %	51,564	51,836	0.5 %
8-9 pm	35,318	35,086	- 0.7 %	45,750	46,158	0.9 %
9-10 pm	31,848	32,133	0.9 %	41,234	41,575	0.8 %
10-11 p	28,805	28,356	- 1.6 %	34,241	37,524	9.6 %
11-Mid	22,868	22,287	- 2.5 %	30,655	30,967	1.0 %
Totals	908,994	914,546	0.6 %	897,655	892,938	- 0.5 %
1-4am	26,647	27,022	1.4 %	36,433	33,417	- 8.3 %
4-7am	105,463	109,306	3.6 %	69,766	67,621	- 3.1 %
7-10am	181,711	178,518	- 1.8 %	118,655	123,656	4.2 %
10am-1pm	132,302	135,260	2.2 %	117,110	112,109	- 4.3 %
1-4pm	137,488	139,135	1.2 %	151,753	148,532	- 2.1 %
4-7pm	149,490	149,784	0.2 %	177,223	176,793	- 0.2 %
7-10pm	109,006	109,476	0.4 %	138,548	139,569	0.7 %
10pm-1am	66,887	66,045	- 1.3 %	88,167	91,241	3.5 %
7am-7pm	600,991	602,697	0.3 %	564,741	561,090	- 0.6 %
6-10am	240,543	239,352	- 0.5 %	151,363	157,704	4.2 %
3-7pm	198,508	198,915	0.2 %	234,842	234,327	- 0.2 %
6am-7pm	659,823	663,531	0.6 %	597,449	595,138	- 0.4 %

Hourly Vehicle Volumes

Inbound Manhattan River Crossings ~ 2013 vs. 2012



Outbound Manhattan River Crossings ~ 2013 vs. 2012



Weekday Manhattan Crossings 2012-2013 Traffic Volume Trends Both Directions

EAST RIVER BRIDGES	Highway Functional Classification	2012	2013	Percent Change
Brooklyn Bridge	Principal Arterial	100,288	102,542	2.2 %
Ed Koch Queensboro Bridge *	Principal Arterial	178,188	171,556	- 3.7 %
Manhattan Bridge	Principal Arterial	89,087	87,375	- 1.9 %
Williamsburg Bridge	Principal Arterial	112,696	115,674	2.6 %
Total, 4 East River Bridges		480,259	477,147	- 0.6 %
HARLEM RIVER BRIDGES				
Alexander Hamilton Bridge	Interstate	185,309	188,417	1.7 %
Broadway Bridge	Principal Arterial	35,411	35,462	0.1 %
Macombs Dam Bridge	Principal Arterial	39,020	38,930	- 0.2 %
Madison Avenue Bridge	Principal Arterial	41,782	47,046	12.6 %
Third Avenue Bridge	Principal Arterial	59,053	60,120	1.8 %
University Heights Bridge	Principal Arterial	39,641	40,774	2.9 %
Washington Bridge	Minor Arterial	57,011	54,031	- 5.2 %
Willis Avenue Bridge	Principal Arterial	62,062	65,216	5.1 %
145th Street Bridge	Minor Arterial	27,918	28,167	0.9 %
Total, 9 Harlem River Bridges		547,207	558,163	2.0 %
MTABT Manhattan Facilities				
Henry Hudson Bridge	Principal Arterial	63,434	59,087	- 6.9 %
Hugh L. Carey Tunnel **	Interstate	54,299	55,145	1.6 %
Queens-Midtown Tunnel	Interstate	87,937	86,737	- 1.4 %
R.F.K. Memorial Bridge Manhattan Plaza ***	Principal Arterial	90,956	91,386	0.5 %
Total, 4 MTABT Manhattan Crossings		296,626	292,355	- 1.4 %
PANYNJ Manhattan Facilities				
George Washington Bridge	Interstate	276,648	277,645	0.4 %
Holland Tunnel	Interstate	92,743	90,012	- 2.9 %
Lincoln Tunnel	Principal Arterial	113,166	112,162	- 0.9 %
Total, 3 PANYNJ Manhattan - New Jersey Crossings		482,557	479,819	- 0.6 %
GRAND TOTALS		1,806,649	1,807,484	0.0 %

* Queensboro Bridge renamed April 11, 2011.

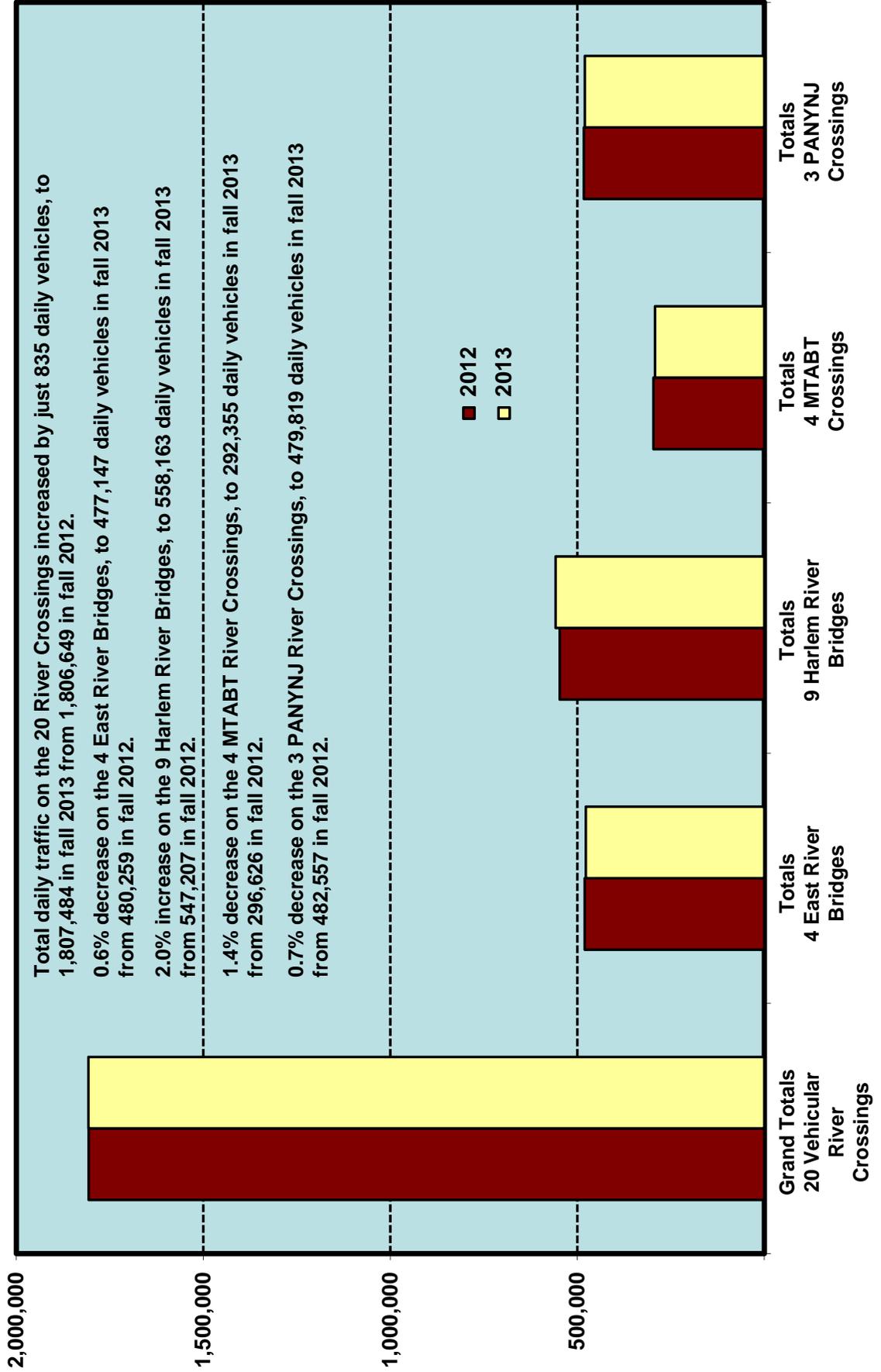
** Formerly Brooklyn-Battery Tunnel, renamed October 22, 2012.

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

Manhattan River Crossings Daily Volumes

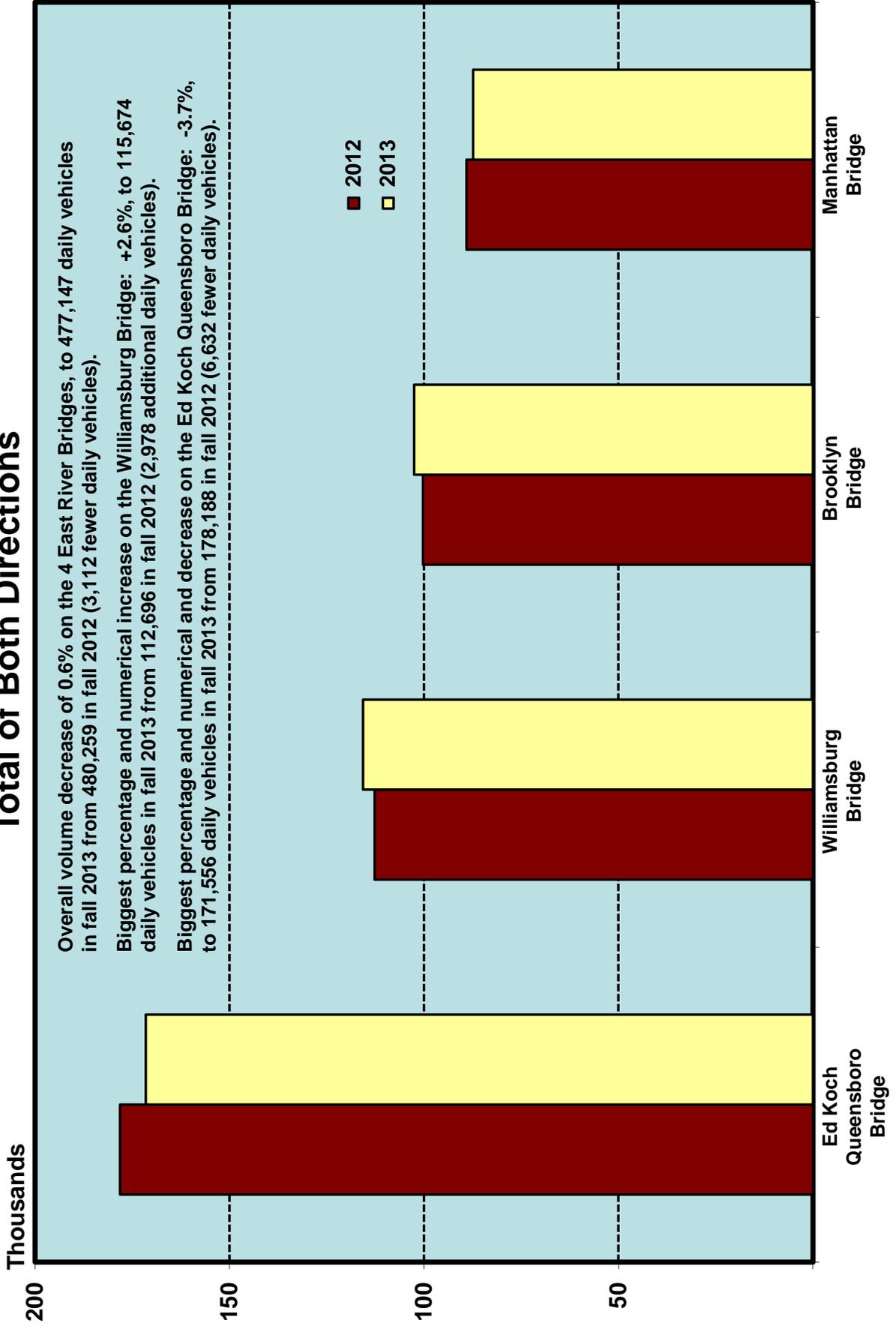
2013 vs. 2012

Total of Both Directions



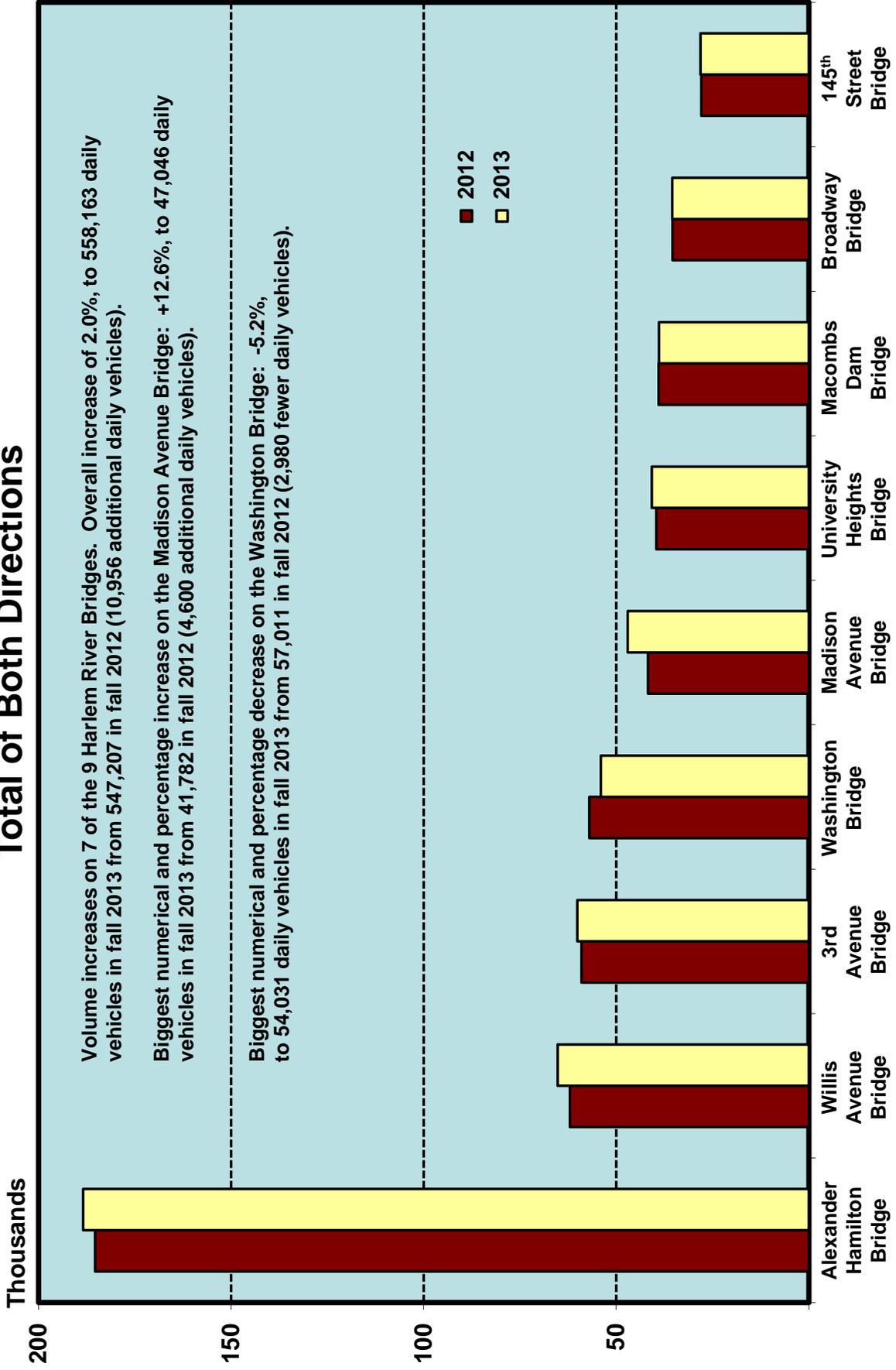
East River Bridges Daily Volumes 2013 vs. 2012

Total of Both Directions



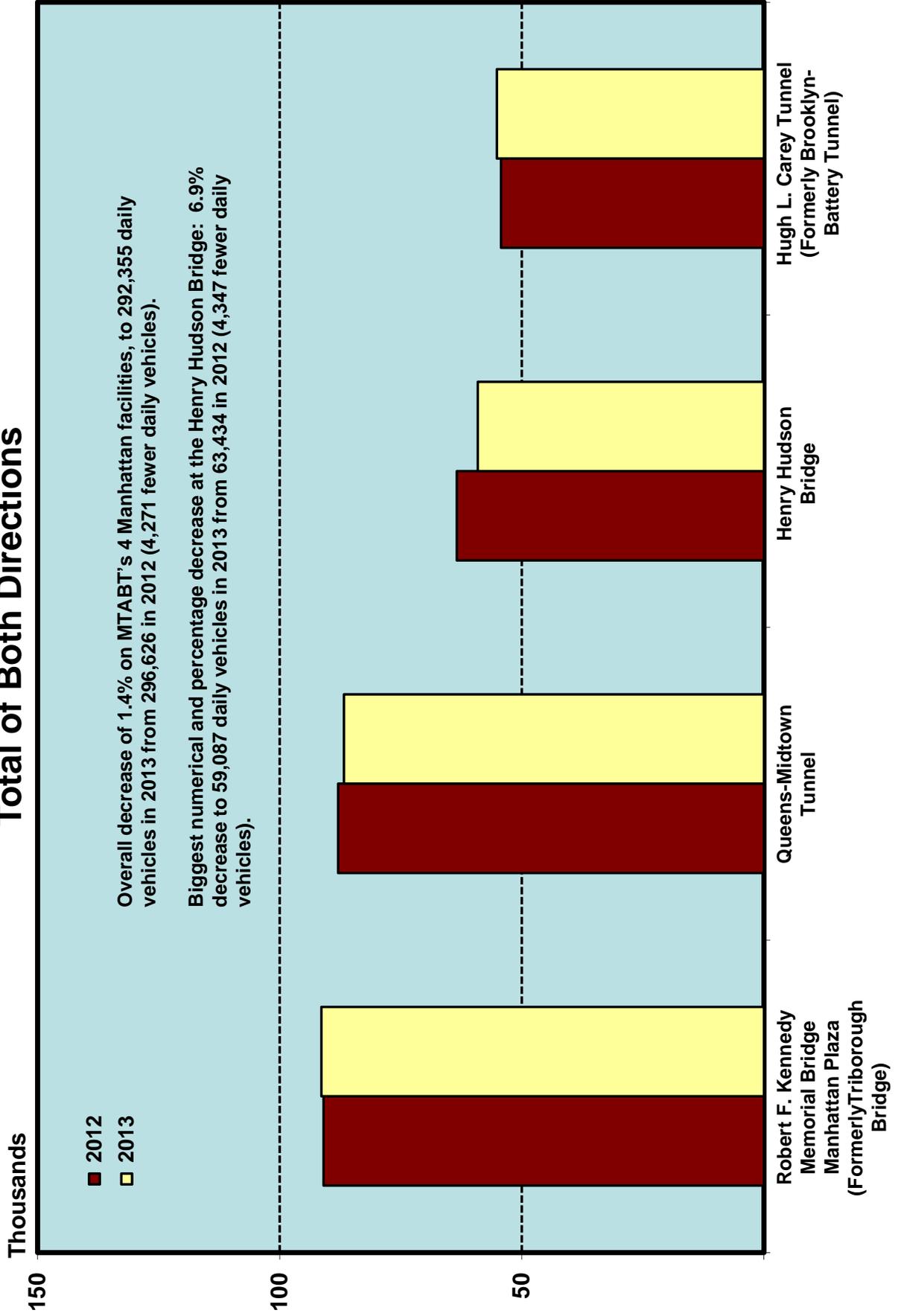
Harlem River Bridges Daily Volumes 2013 vs. 2012

Total of Both Directions



Metropolitan Transportation Authority Bridges & Tunnels (MTABT) Manhattan Facilities Daily Volumes 2013 vs. 2012

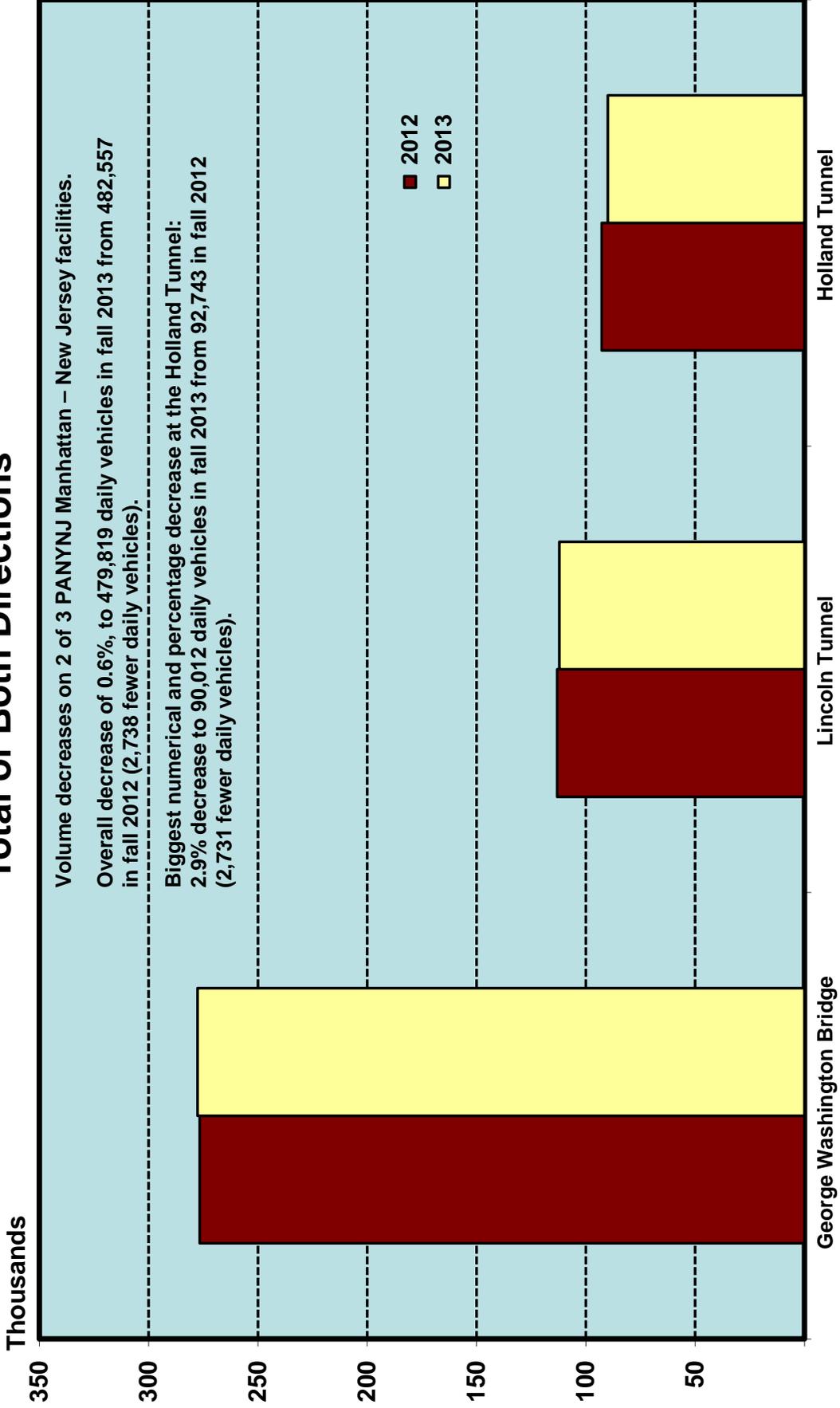
Total of Both Directions



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

2013 vs. 2012

Total of Both Directions



Ten-Year Trends 2003 - 2013



Williamsburg Bridge

Ten-Year Trends: 2003 - 2013

- In the ten-year period from 2003 to 2013, Manhattan river crossings traffic volume decreased 4.7%, to 1,807,484 daily vehicles from 1,897,411, a decrease of 89,927 daily vehicles.
- Daily vehicle trips entering Manhattan decreased 3.6%, to 914,546 in 2013 from 948,213 in 2003 (33,667 fewer daily vehicles entering Manhattan).
 - Biggest percentage decrease in inbound trips during 10pm-1am: down 7.5% to 66,045 vehicles in 2013 from 71,394 in 2003 (5,349 fewer 10pm-1am entries).
 - Biggest numerical decrease in inbound trips during 7-10am: decrease of 10,791 vehicles, to 178,518 in 2013 from 189,309 in 2003 (-5.7%).
 - Biggest percentage and numerical increase in inbound trips during 4-7am: increase of 5,097 vehicles, to 109,306 in 2013 from 104,209 in 2003 (+4.9%).
- Daily vehicle trips leaving Manhattan decreased 5.9%, to 892,938 in 2013 from 949,198 in 2003 (56,260 fewer daily vehicles leaving Manhattan).
 - Biggest percentage decrease in outbound trips during 1-4am: down 11.9% to 33,417 vehicles in 2013 from 37,914 in 2003 (4,497 fewer trips leaving Manhattan between 1-4am).
 - Biggest numerical decrease in outbound trips during 10pm-1am: decrease of 11,674 vehicles to 91,241 in 2013 from 102,915 in 2003 (-11.3%).
 - Biggest percentage and numerical increase in outbound trips during 4-7am: increase of 1,166 vehicles, to 67,621 in 2013 from 66,455 in 2003 (+1.8%).
- Vehicle trips on the 13 toll-free East and Harlem River bridges decreased 0.7%, to 1,035,310 daily vehicles in 2013 from 1,042,928 in 2003.
 - Greatest percentage and numerical increase on the Third Avenue Bridge over the Harlem River: up 39.6% to 60,120 daily vehicles in 2013 from 43,065 in 2003 (17,055 additional daily vehicles). During 2003, two of the four lanes on this bridge were closed round-the-clock for reconstruction.
 - Greatest percentage and numerical decrease on the Brooklyn Bridge over the East River: down 23.7%, to 102,542 daily vehicles in 2013 from 134,444 in 2003 (31,902 fewer daily vehicles). Throughout 2003, the Brooklyn Bridge was closed to Manhattan-bound traffic between 11:00pm and 6:00am weeknights for reconstruction.
- Traffic volumes on the four MTA Bridges and Tunnels (MTABT) river crossings serving Manhattan decreased 4.8%, to 292,355 daily vehicles in 2013 from 307,034 in 2003 (14,679 fewer daily vehicles).
 - Biggest volume and percentage decrease at the Henry Hudson Bridge: down 18.2% to 59,087 daily vehicles in 2013 from 72,209 in 2003 (13,122 fewer daily vehicles).
 - Greatest volume and percentage increase at the Queens-Midtown Tunnel: up 1.6% to 86,737 daily vehicles in 2013 from 85,377 in 2003 (1,360 additional daily vehicles).
- Traffic volumes on the three trans-Hudson Port Authority of New York and New Jersey (PANYNJ) river crossings serving Manhattan decreased 12.4%, to 479,819 daily vehicles in 2013 from 547,449 in 2003.
 - Decreases on all three PANYNJ trans-Hudson crossings.

- Greatest volume and percentage decrease on the George Washington Bridge: down 13.0% to 277,645 daily vehicles in 2013 from 319,029 in 2003 (41,384 fewer daily vehicles).
- New York City motor vehicle registrations increased 7.9% to 2,016,158 in 2013 from 1,869,151 in 2003. Manhattan registrations increased 4.0% to 251,751 from 241,995.
- Annual citywide subway ridership increased 23.4% to 1,707,555,714 in 2013 from 1,384,100,000 in 2003, and is now at its highest level since 1949.

Weekday Manhattan Crossings 10-Year Traffic Volume Trends ~ 2003-2013 Both Directions

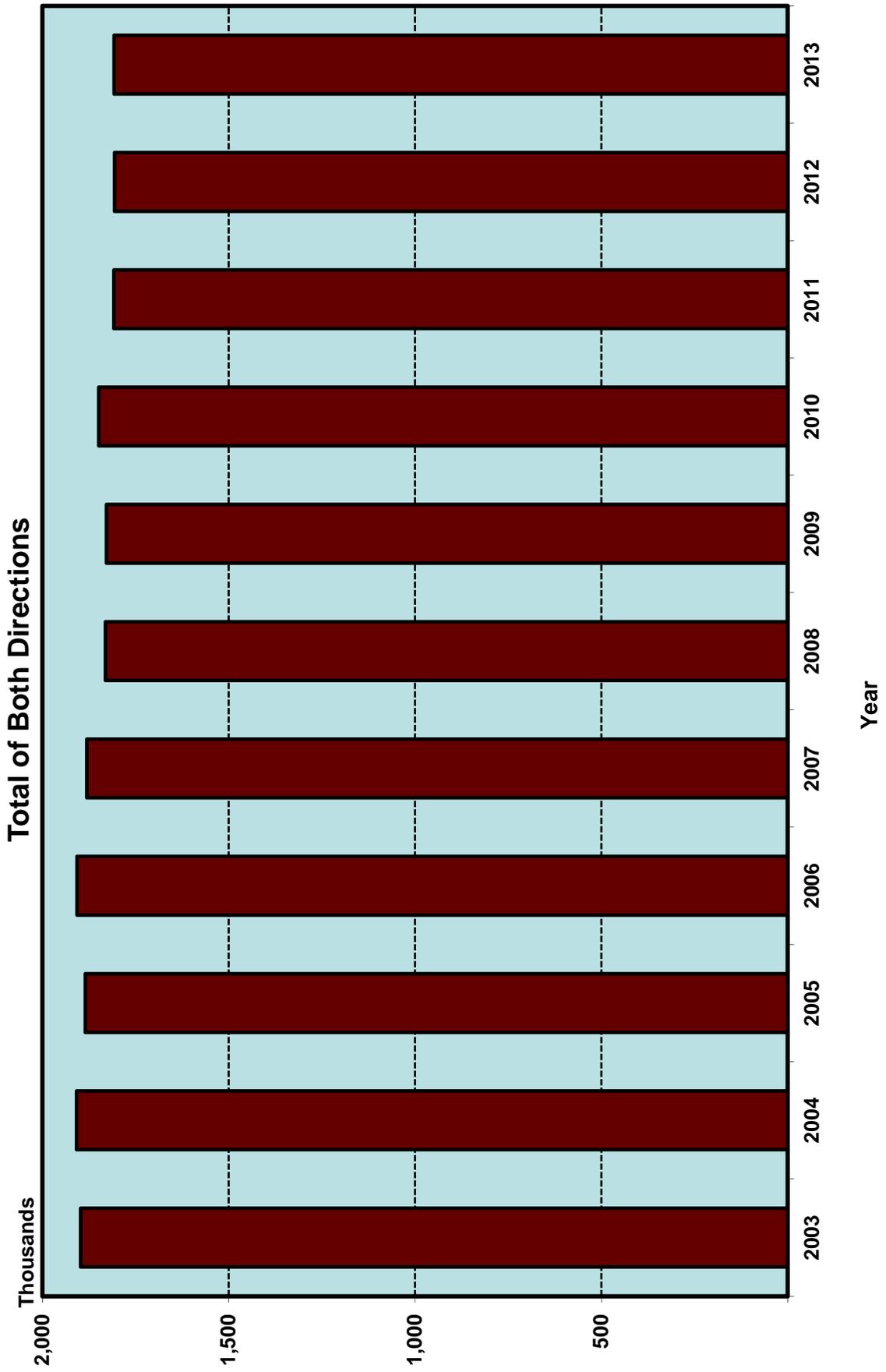
EAST RIVER BRIDGES	Highway Functional Classification	2003	2013	Percent Change
Brooklyn Bridge	Principal Arterial	134,444	102,542	- 23.7 %
Ed Koch Queensboro Bridge *	Principal Arterial	184,964	171,556	- 7.2 %
Manhattan Bridge	Principal Arterial	73,767	87,375	18.4 %
Williamsburg Bridge	Principal Arterial	100,243	115,674	15.4 %
Total, 4 East River Bridges		493,418	477,147	- 3.3 %
 HARLEM RIVER BRIDGES				
Alexander Hamilton Bridge	Interstate	182,704	188,417	3.1 %
Broadway Bridge	Principal Arterial	36,888	35,462	- 3.9 %
Macombs Dam Bridge	Principal Arterial	42,254	38,930	- 7.9 %
Madison Avenue Bridge	Principal Arterial	41,575	47,046	13.2 %
Third Avenue Bridge	Principal Arterial	43,065	60,120	39.6 %
University Heights Bridge	Principal Arterial	50,126	40,774	- 18.7 %
Washington Bridge	Minor Arterial	63,154	54,031	- 14.4 %
Willis Avenue Bridge	Principal Arterial	66,710	65,216	- 2.2 %
145th Street Bridge	Minor Arterial	23,034	28,167	22.3 %
Total, 9 Harlem River Bridges		549,510	558,163	1.6 %
 MTABT Manhattan Facilities				
Henry Hudson Bridge	Principal Arterial	72,209	59,087	- 18.2 %
Hugh L. Carey Tunnel **	Interstate	56,271	55,145	- 2.0 %
Queens-Midtown Tunnel	Interstate	85,377	86,737	1.6 %
R.F.K. Memorial Bridge Manhattan Plaza ***	Principal Arterial	93,177	91,386	- 1.9 %
Total, 4 MTABT Manhattan Crossings		307,034	292,355	- 4.8 %
 PANYNJ Manhattan Facilities				
George Washington Bridge	Interstate	319,029	277,645	- 13.0 %
Holland Tunnel	Interstate	101,097	90,012	- 11.0 %
Lincoln Tunnel	Principal Arterial	127,323	112,162	- 11.9 %
Total, 3 PANYNJ Manhattan - New Jersey Crossings		547,449	479,819	- 12.4 %
GRAND TOTALS		1,897,411	1,807,484	- 4.7 %

* 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 2003 - 2013

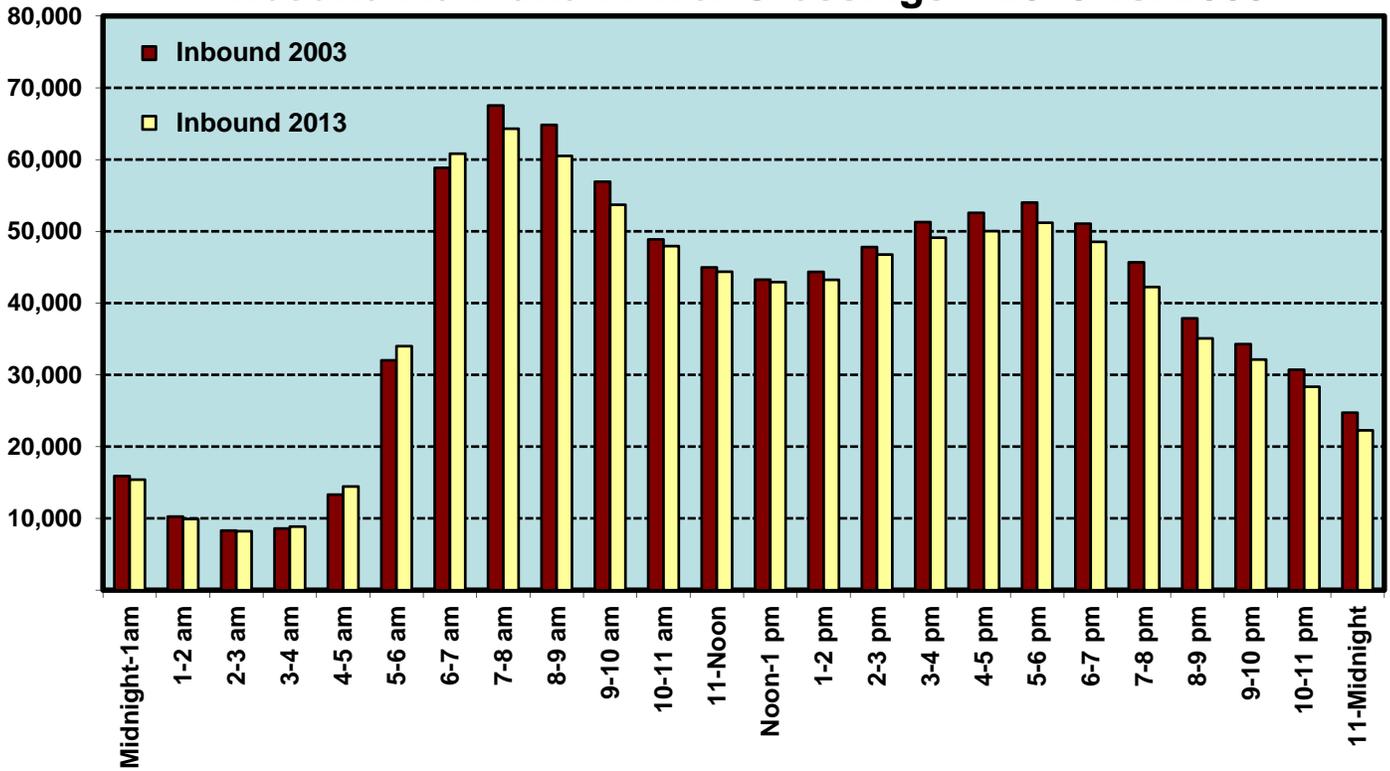


Manhattan River Crossings Hourly Vehicular Volumes 2003 vs 2013

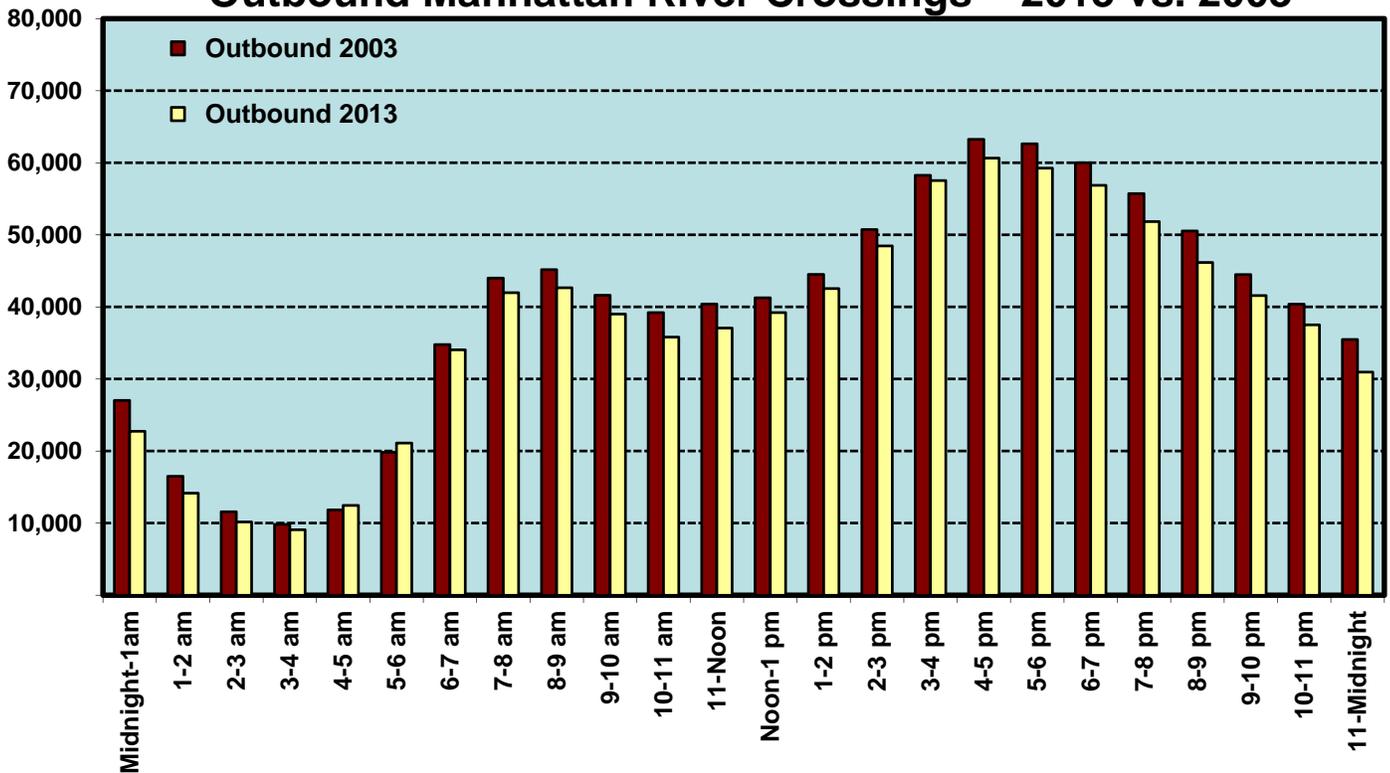
	Inbound			Outbound		
	2003	2013	Percent Change	2003	2013	Percent Change
Mid-1	15,924	15,402	- 3.3 %	27,039	22,750	-15.9 %
1-2 am	10,271	9,920	- 3.4 %	16,510	14,168	-14.2 %
2-3 am	8,308	8,226	- 1.0 %	11,576	10,174	-12.1 %
3-4 am	8,591	8,876	3.3 %	9,828	9,075	- 7.7 %
4-5 am	13,327	14,461	8.5 %	11,845	12,467	5.3 %
5-6 am	32,024	34,011	6.2 %	19,834	21,106	6.4 %
6-7 am	58,858	60,834	3.4 %	34,776	34,048	- 2.1 %
7-8 am	67,533	64,308	- 4.8 %	44,001	41,979	- 4.6 %
8-9 am	64,848	60,511	- 6.7 %	45,176	42,650	- 5.6 %
9-10 am	56,928	53,699	- 5.7 %	41,623	39,027	- 6.2 %
10-11 a	48,866	47,953	- 1.9 %	39,219	35,825	- 8.7 %
11-Noon	44,977	44,374	- 1.3 %	40,414	37,071	- 8.3 %
Noon-1	43,270	42,933	- 0.8 %	41,273	39,213	- 5.0 %
1-2 pm	44,354	43,242	- 2.5 %	44,523	42,541	- 4.5 %
2-3 pm	47,821	46,762	- 2.2 %	50,748	48,457	- 4.5 %
3-4 pm	51,301	49,131	- 4.2 %	58,268	57,534	- 1.3 %
4-5 pm	52,579	50,029	- 4.8 %	63,259	60,652	- 4.1 %
5-6 pm	54,021	51,209	- 5.2 %	62,643	59,261	- 5.4 %
6-7 pm	51,073	48,546	- 4.9 %	60,018	56,880	- 5.2 %
7-8 pm	45,692	42,257	- 7.5 %	55,726	51,836	- 7.0 %
8-9 pm	37,879	35,086	- 7.4 %	50,541	46,158	- 8.7 %
9-10 pm	34,298	32,133	- 6.3 %	44,482	41,575	- 6.5 %
10-11 p	30,733	28,356	- 7.7 %	40,391	37,524	- 7.1 %
11-Mid	24,737	22,287	- 9.9 %	35,485	30,967	-12.7 %
Totals	948,213	914,546	- 3.6 %	949,198	892,938	- 5.9 %
1-4am	27,170	27,022	- 0.5 %	37,914	33,417	-11.9 %
4-7am	104,209	109,306	4.9 %	66,455	67,621	1.8 %
7-10am	189,309	178,518	- 5.7 %	130,800	123,656	- 5.5 %
10am-1pm	137,113	135,260	- 1.4 %	120,906	112,109	- 7.3 %
1-4pm	143,476	139,135	- 3.0 %	153,539	148,532	- 3.3 %
4-7pm	157,673	149,784	- 5.0 %	185,920	176,793	- 4.9 %
7-10pm	117,869	109,476	- 7.1 %	150,749	139,569	- 7.4 %
10pm-1am	71,394	66,045	- 7.5 %	102,915	91,241	-11.3 %
7am-7pm	627,571	602,697	- 4.0 %	591,165	561,090	- 5.1 %
6-10am	248,167	239,352	- 3.6 %	165,576	157,704	- 4.8 %
3-7pm	208,974	198,915	- 4.8 %	244,188	234,327	- 4.0 %
6am-7pm	686,429	663,531	- 3.3 %	625,941	595,138	- 4.9 %

Hourly Vehicle Volumes

Inbound Manhattan River Crossings ~ 2013 vs. 2003

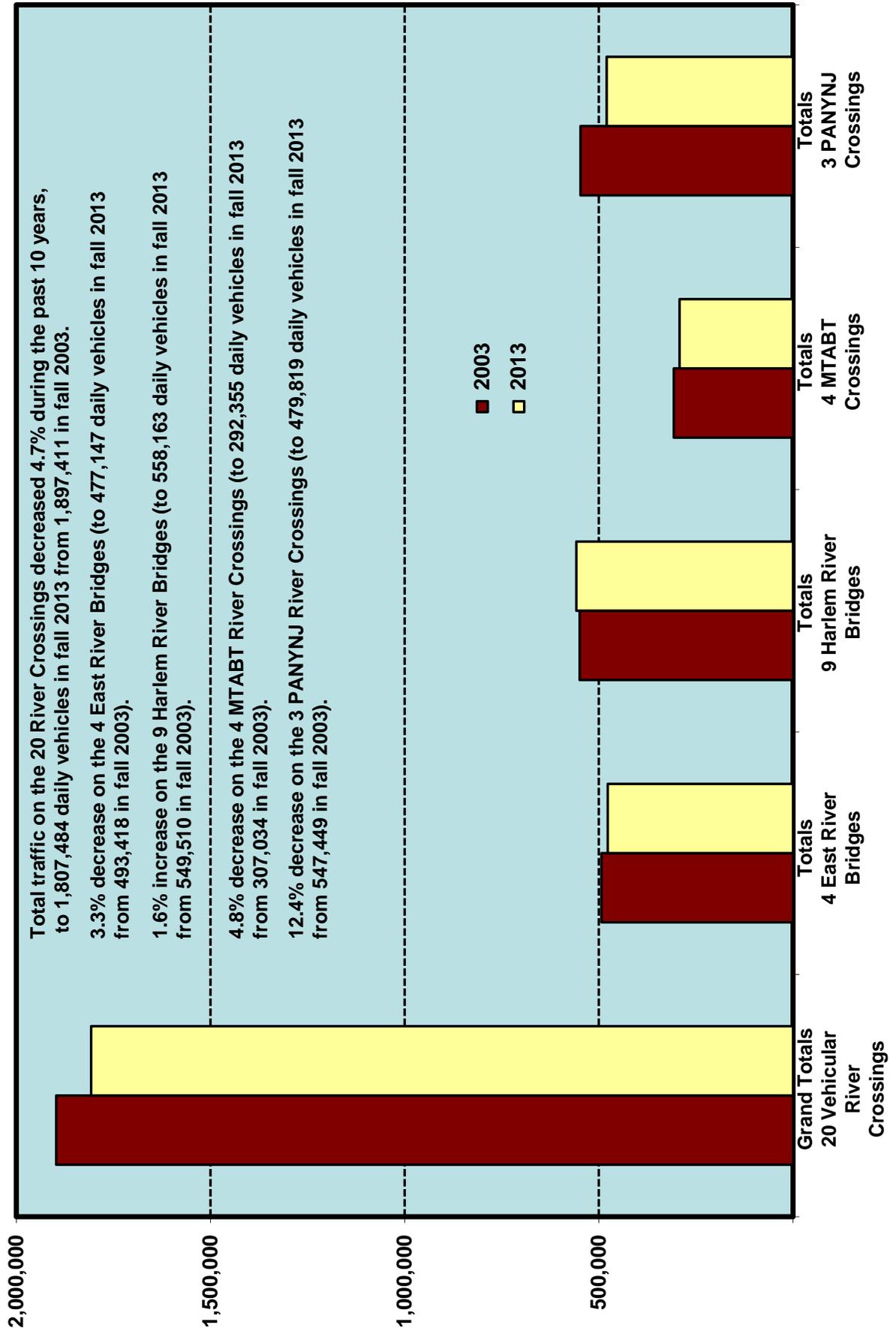


Outbound Manhattan River Crossings ~ 2013 vs. 2003



10-Year Volume Changes ~ 2003 vs. 2013

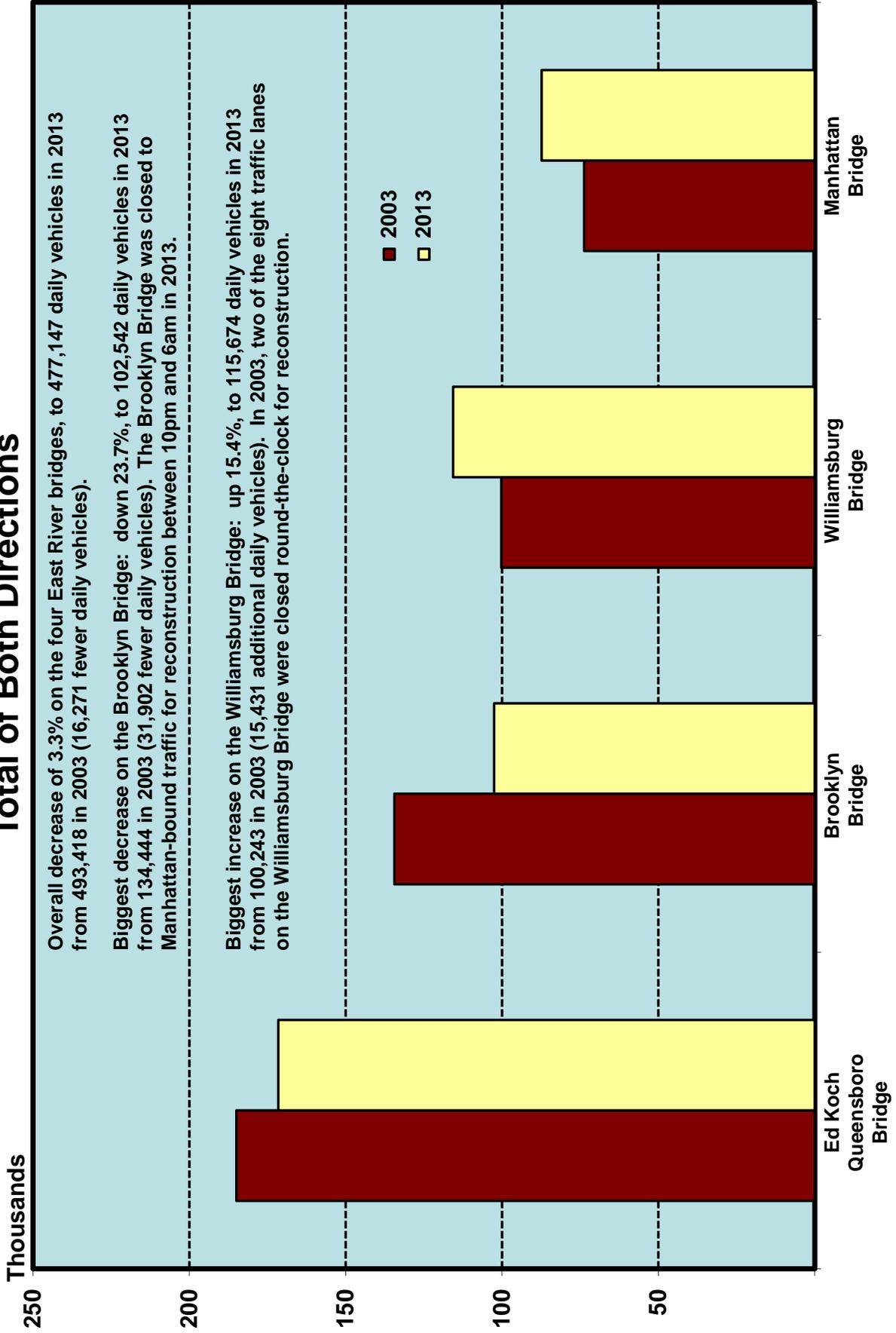
Manhattan River Crossings Daily Volumes ~ Total of Both Directions



10-Year Volume Changes ~ 2003 – 2013

East River Bridges Daily Volumes

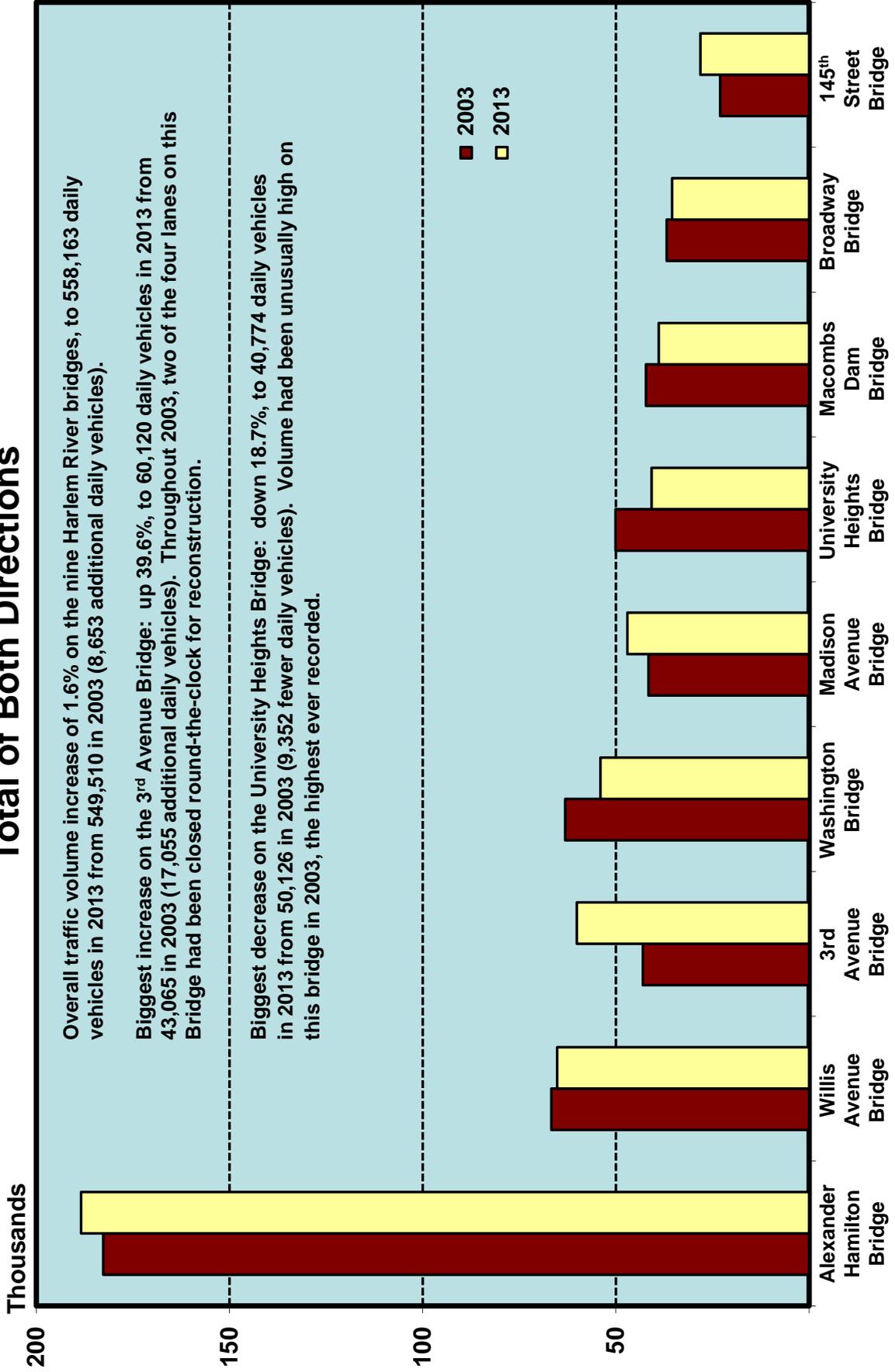
Total of Both Directions



10-Year Volume Changes ~ 2003 – 2013

Harlem River Bridges Daily Volumes

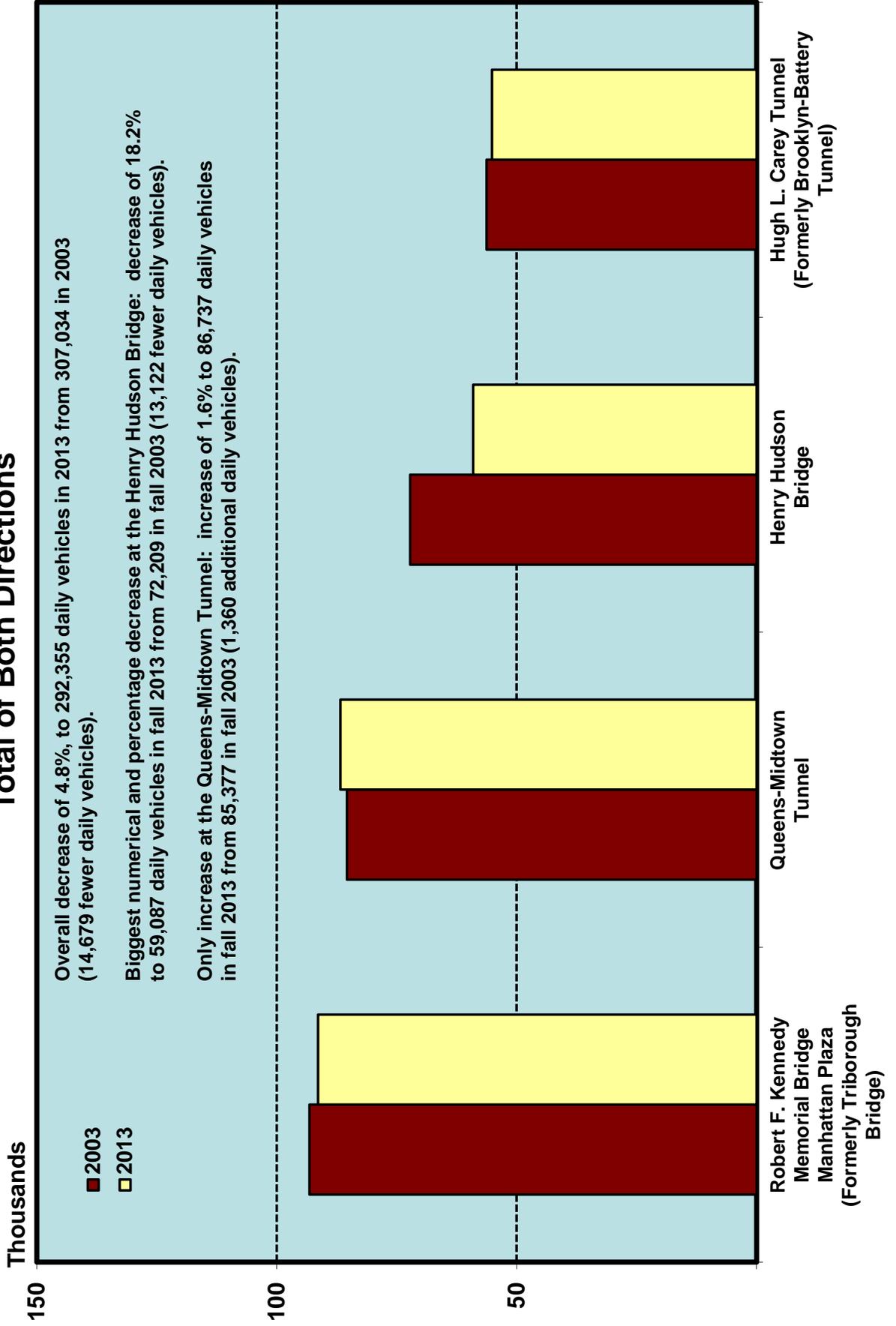
Total of Both Directions



10-Year Volume Changes ~ 2003 – 2013

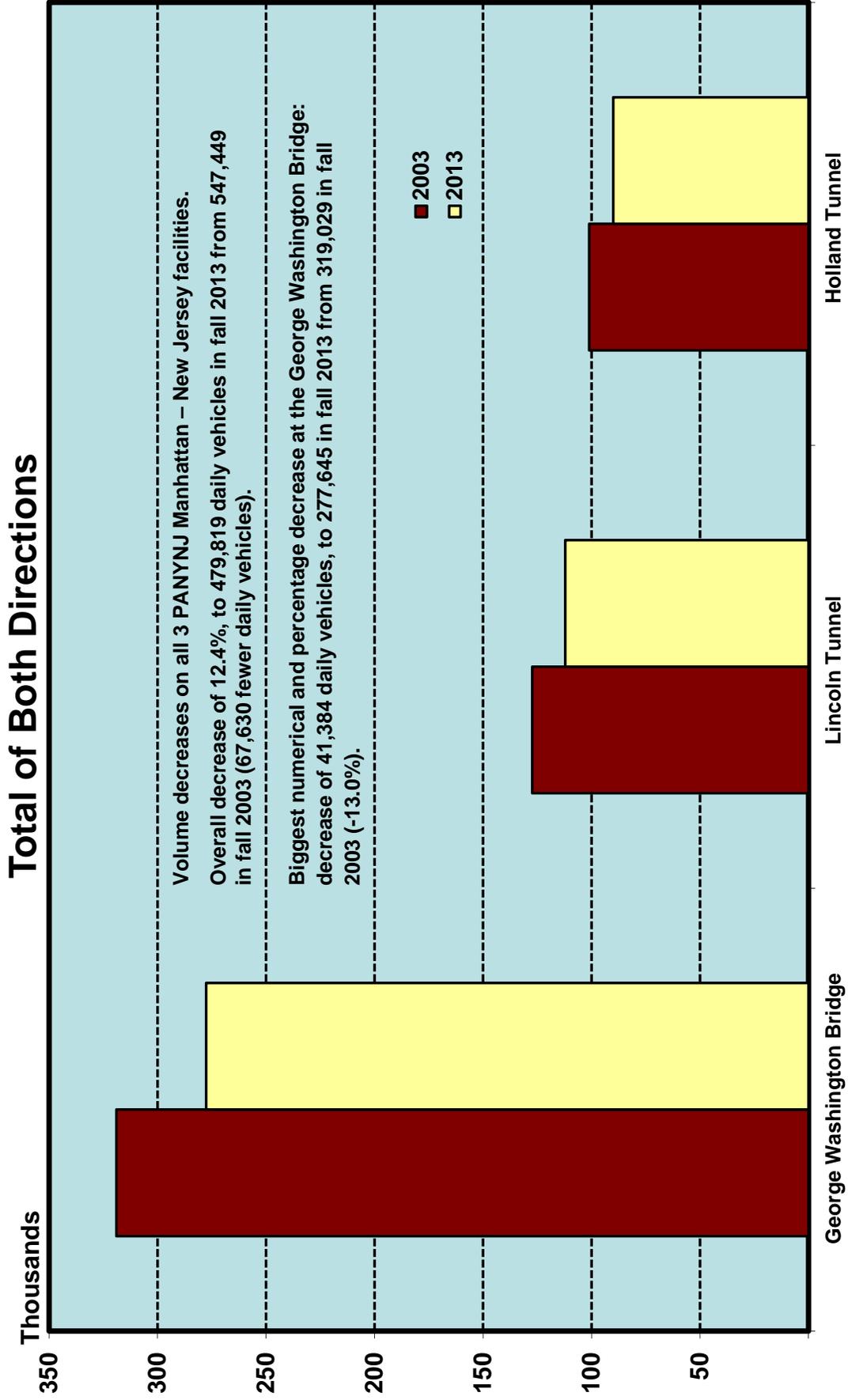
Metropolitan Transportation Authority Bridges & Tunnels (MTABT) Manhattan Facilities Daily Volumes

Total of Both Directions



10-Year Volume Changes ~ 2003 – 2013

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



New York City Motor Vehicle Registrations 2003-2013



Historic Trends



**145th Street Bridge
(Harlem River)**

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 2013, it stood at 1,807,484 daily trips, nearly three times the 1948 volume.

1948 – 1963

- Between 1948 and 1963, daily traffic to and from Manhattan increased 69.2%, to 1,133,673 daily river crossings in 1963 from 670,007 in 1948, an increase of 463,666 daily vehicles.
- Large increases in daily traffic occurred at the following facilities.
 - George Washington Bridge (Hudson River between Manhattan and New Jersey): up 201% to 127,452 daily vehicles in 1963 from 42,306 in 1948 (85,146 additional daily vehicles). The lower level was opened in 1962.
 - Lincoln Tunnel between Manhattan and New Jersey: up 157% to 79,337 daily vehicles in 1963 from 30,856 in 1948 (48,481 additional daily vehicles).
 - Queens-Midtown Tunnel (East River between Manhattan and Queens): up 138% to 63,038 daily vehicles from 26,462 (36,576 additional daily vehicles).
 - Robert F. Kennedy Memorial Bridge Manhattan Plaza (Harlem River between Manhattan and Bronx/Queens): up 130% to 60,988 daily vehicles from 26,465 (34,523 additional daily vehicles).
 - Brooklyn Bridge (East River between Manhattan and Brooklyn): up 113% to 78,770 daily vehicles from 37,011 (41,759 additional daily vehicles).
 - Willis Avenue Bridge (Harlem River between Manhattan and Bronx): up 120% to 65,290 daily vehicles from 29,648 (35,642 additional daily vehicles).
 - Third Avenue Bridge (Harlem River between Manhattan and Bronx): up 103% to 63,840 daily vehicles from 31,403 (32,437 additional daily vehicles).
 - Williamsburg Bridge (East River between Manhattan and Brooklyn): up 70.2% to 80,250 daily vehicles from 47,139 (33,111 additional daily vehicles).
- The only significant decrease from 1948 to 1963 occurred on the Manhattan Bridge (East River between Manhattan and Brooklyn): down 32.5% to 58,510 daily vehicles in 1963 from 86,717 in 1948 (28,207 fewer daily vehicles).

1963 – 1973

- From 1963 to 1973, daily river crossings to and from Manhattan increased 31.7%, to 1,492,756 daily vehicles in 1973 from 1,133,673 in 1963, an increase of 359,083 daily vehicles.
- Large increases in daily traffic occurred at the following facilities.
 - George Washington Bridge between Manhattan and New Jersey: up 82.6% to 232,686 daily vehicles in 1973 from 127,452 in 1963 (105,234 additional daily vehicles).
 - Robert F. Kennedy Memorial Bridge Manhattan Plaza between Manhattan and Bronx/Queens: up 40.3% to 85,592 daily vehicles from 60,988 (24,604 additional daily vehicles).

- Brooklyn Bridge between Manhattan and Brooklyn: up 30.5% to 102,834 daily vehicles from 78,770 (24,064 additional daily vehicles).
- Ed Koch Queensboro Bridge between Manhattan and Queens: up 18.7% to 138,066 daily vehicles from 116,350 (21,716 additional daily vehicles).
- Lincoln Tunnel between Manhattan and New Jersey: up 25.8% to 99,786 daily vehicles from 79,337 (20,449 additional daily vehicles).
- Large decreases in daily traffic occurred at the following facilities.
 - Willis Avenue Bridge between Manhattan and Bronx: down 21.1% to 51,537 daily vehicles in 1973 from 65,290 in 1963 (13,753 fewer daily vehicles).
 - Henry Hudson Bridge between Manhattan and Bronx: down 20.7% to 41,871 daily vehicles from 52,803 (10,932 fewer daily vehicles).

1973 – 1983

- From 1973 to 1983, daily river crossings to and from Manhattan increased 7.8%, to 1,608,979 daily vehicles in 1983 from 1,492,756 in 1973, an increase of 116,223 daily vehicles.
- The largest increases in daily traffic occurred at the following facilities.
 - Alexander Hamilton Bridge (Harlem River between Manhattan and Bronx): up 18.0% to 161,772 daily vehicles from 137,133 (24,639 additional daily vehicles).
 - George Washington Bridge between Manhattan and New Jersey: up 9.5% to 254,728 daily vehicles in 1983 from 232,686 in 1973 (22,042 additional daily vehicles).
 - Lincoln Tunnel between Manhattan and New Jersey: up 10.4% to 110,210 daily vehicles from 99,786 (10,424 additional daily vehicles).
 - Holland Tunnel between Manhattan and New Jersey: up 17.8% to 76,226 daily vehicles from 64,731 (11,495 additional daily vehicles).
 - Brooklyn-Battery Tunnel (Hugh L. Carey Tunnel) between Manhattan and Brooklyn: up 22.5% to 61,130 daily vehicles from 49,916 (11,214 additional daily vehicles).
 - Manhattan Bridge between Manhattan and Brooklyn: up 16.1% to 85,222 daily vehicles from 73,401 (11,821 additional daily vehicles).
 - Brooklyn Bridge between Manhattan and Brooklyn: up 12.6% to 115,825 daily vehicles from 102,834 (12,991 additional daily vehicles).
- The most significant decreases occurred at the following facilities.
 - Henry Hudson Bridge (Harlem River between Manhattan and Bronx): down 25.3% to 31,279 daily vehicles in 1983 from 41,871 in 1973 (10,592 fewer daily vehicles).
 - Ed Koch Queensboro Bridge between Manhattan and Queens: down 9.3% to 125,158 daily vehicles from 138,066 (12,908 fewer daily vehicles).

1983 – 1993

- From 1983 to 1993, daily river crossings to and from Manhattan increased 7.5%, to 1,729,408 daily vehicles in 1993 from 1,608,979 in 1983, an increase of 120,429 daily vehicles.

- Large increases in daily traffic occurred at the following facilities.
 - Holland Tunnel between Manhattan and New Jersey: up 21.6% to 92,685 daily vehicles from 76,266 (16,459 additional daily vehicles).
 - Henry Hudson Bridge between Manhattan and Bronx: up 74.7% to 54,650 daily vehicles from 31,279 (23,371 additional daily vehicles).
 - Alexander Hamilton Bridge between Manhattan and Bronx: up 11.6% to 180,507 daily vehicles from 161,772 (18,735 additional daily vehicles).
 - Brooklyn Bridge between Manhattan and Brooklyn: up 16.4% to 134,793 daily vehicles from 115,825 (18,968 additional daily vehicles).
- The most significant decrease occurred at the Manhattan Bridge between Manhattan and Brooklyn: down 12.6% to 74,526 daily vehicles in 1993 from 85,222 in 1983 (10,696 fewer daily vehicles).

1993 – 2003

- From 1993 to 2003, daily river crossings to and from Manhattan increased 9.7%, to 1,897,411 daily vehicles in 2003 from 1,729,408 in 1993, an increase of 168,003 daily vehicles.
- Large increases in daily traffic occurred at the following facilities.
 - George Washington Bridge between Manhattan and New Jersey: up 22.4% to 319,029 daily vehicles in 2003 from 260,732 in 1993 (58,297 additional daily vehicles).
 - Ed Koch Queensboro Bridge between Manhattan and Queens: up 36.0% to 184,964 daily vehicles from 135,964 (49,000 additional daily vehicles). Throughout 1993, two lower inner roadway lanes were closed round-the-clock for reconstruction.
 - Henry Hudson Bridge between Manhattan and Bronx: up 32.1% to 72,209 daily vehicles from 54,650 (17,559 additional daily vehicles).
 - Williamsburg Bridge between Manhattan and Brooklyn: up 15.8% to 100,243 daily vehicles from 86,591 (13,652 additional daily vehicles).
 - University Heights Bridge between Manhattan and Bronx: up 28.9% to 50,126 daily vehicles from 38,895 (11,231 additional daily vehicles).
 - Washington Bridge between Manhattan and Bronx: up 19.6% to 63,154 daily vehicles from 52,795 (10,359 additional daily vehicles).
- The only major decrease in daily traffic occurred at the Third Avenue Bridge between Manhattan and Bronx: down 37.4% to 43,065 daily vehicles in 2003 from 68,812 in 1993 (25,747 fewer daily vehicles). Throughout 2003, two of four lanes were closed round-the-clock for reconstruction.

1948 – 2013

- From 1948 to 2013, Manhattan vehicular river crossings increased 170%, to 1,807,484 vehicles per day in 2013 from 670,007 in 1948 (1,137,477 additional daily motor vehicle trips).
 - Increases occurred on all twenty Manhattan river crossings.
 - 88% increase on the four toll-free East River bridges (to 477,147 daily vehicles in 2013 from 254,068 in 1948).

- 169% increase on the nine toll-free Harlem River bridges (to 558,163 daily vehicles from 207,177).
 - 214% increase on MTABT's four tolled crossings (to 292,355 daily vehicles from 92,977).
 - 314% increase on PANYNJ's three trans-Hudson facilities (to 479,819 daily vehicles in 2013 from 115,785 in 1948).
- Large increases in daily traffic occurred at the following individual facilities.
 - George Washington Bridge: up nearly six fold to 277,645 daily vehicles in 2013 from 42,306 in 1948.
 - Brooklyn Bridge: up 177% to 102,542 daily vehicles from 37,011.
 - Lincoln Tunnel: up 264% to 112,162 daily vehicles from 30,856.
 - Queens-Midtown Tunnel: up 228% to 86,737 daily vehicles from 26,462.
 - Robert F. Kennedy Memorial Bridge Manhattan Plaza: up 245% to 91,386 daily vehicles from 26,465.
 - Williamsburg Bridge: up 145% to 115,674 daily vehicles from 47,139.
 - During the same 65-year period, annual citywide subway ridership declined by 15.9%, to 1,708 million in 2013 from 2,031 million in 1948.

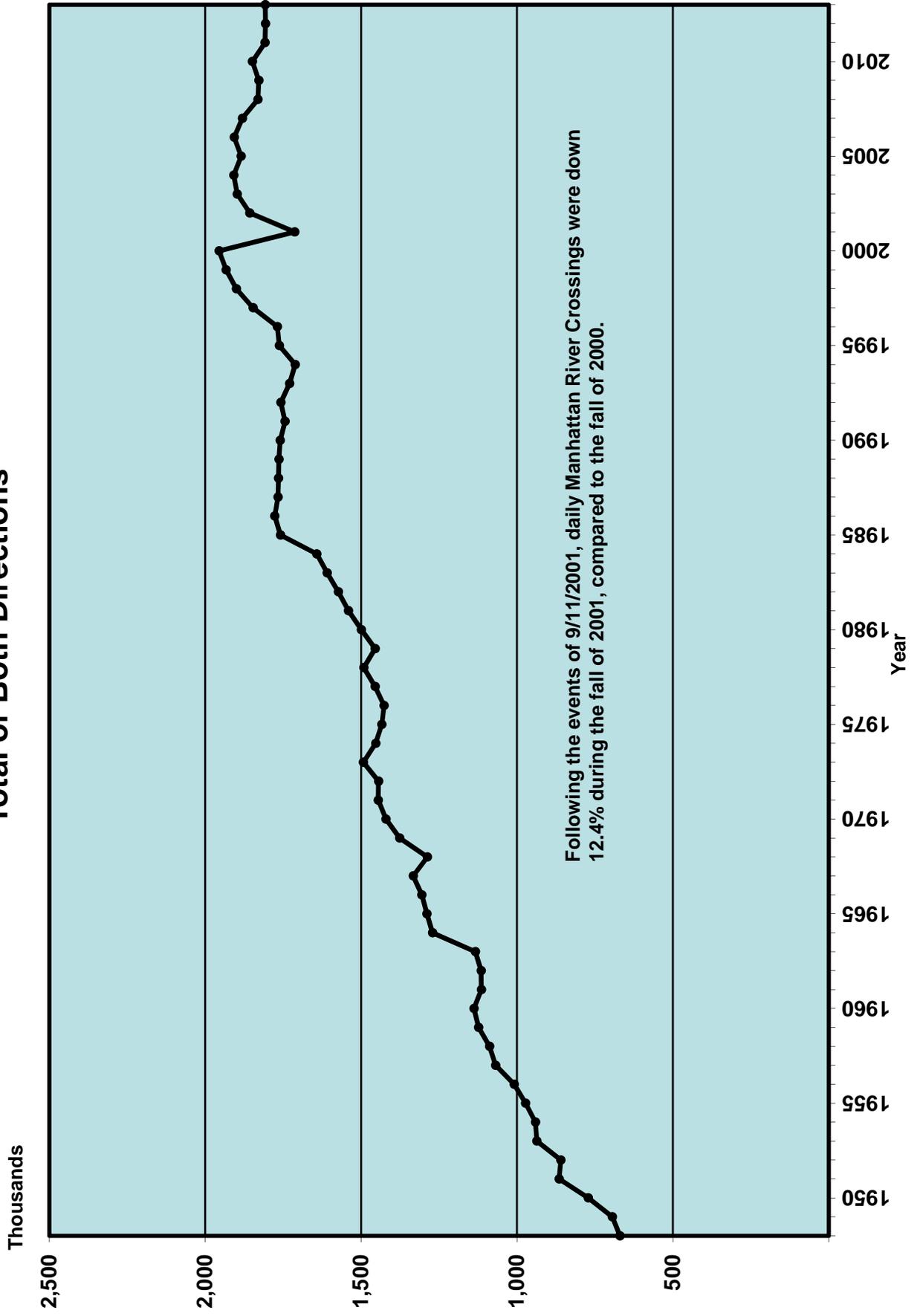
1993 – 2013

- 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 1993, Manhattan River Crossings increased 158%, to 1,729,408 daily vehicles in 1993 from 670,007 in 1948. During the same period, annual subway ridership decreased 49.3%, to 1,030 million annual riders from 2,031 million.
 - From 1993 to 2013, Manhattan River Crossings increased just 4.5%, to 1,807,484 daily vehicles in 2013 from 1,729,408 in 1993. Concurrently, annual subway ridership increased at the much faster rate of 65.8%, to 1,708 million annual riders in 2013 from 1,030 million in 1993.
 - Subway ridership in 2013 was the highest since 1949.

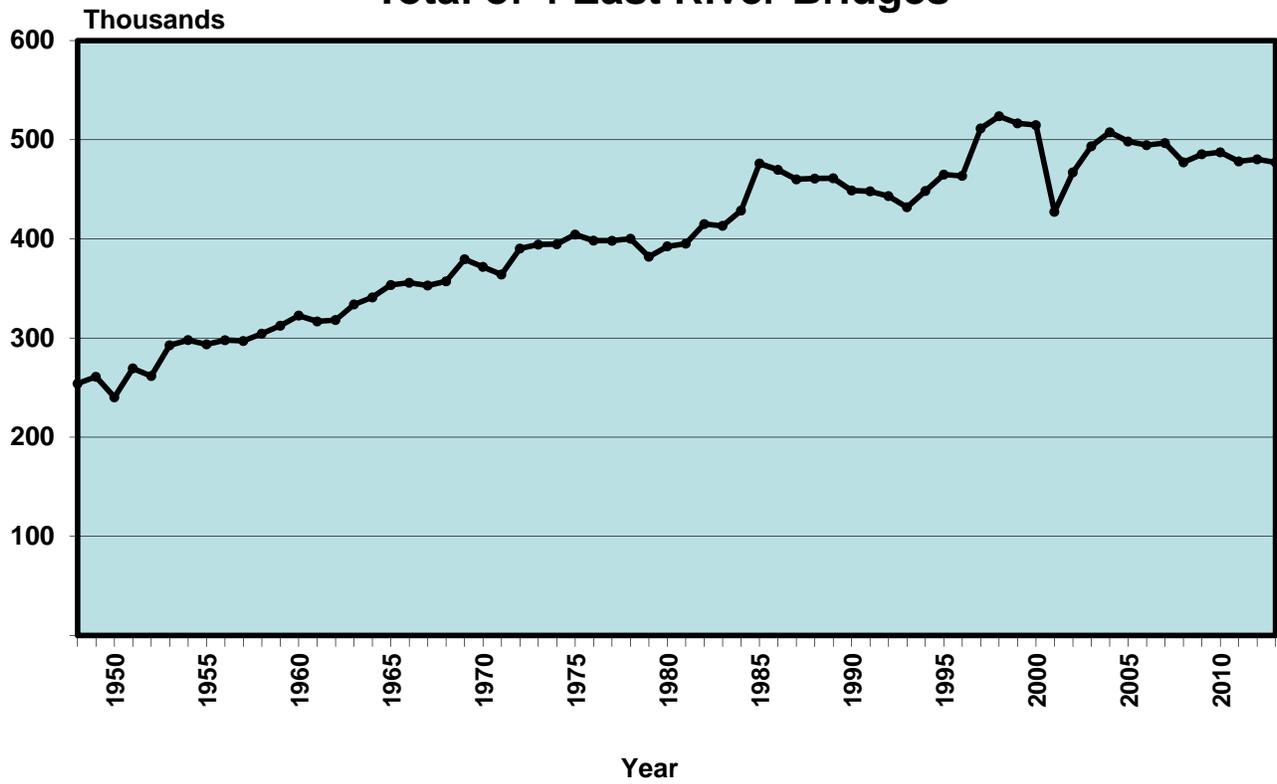
**Total Manhattan Crossings
Average Daily Traffic Volumes
1948 - 2013**

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

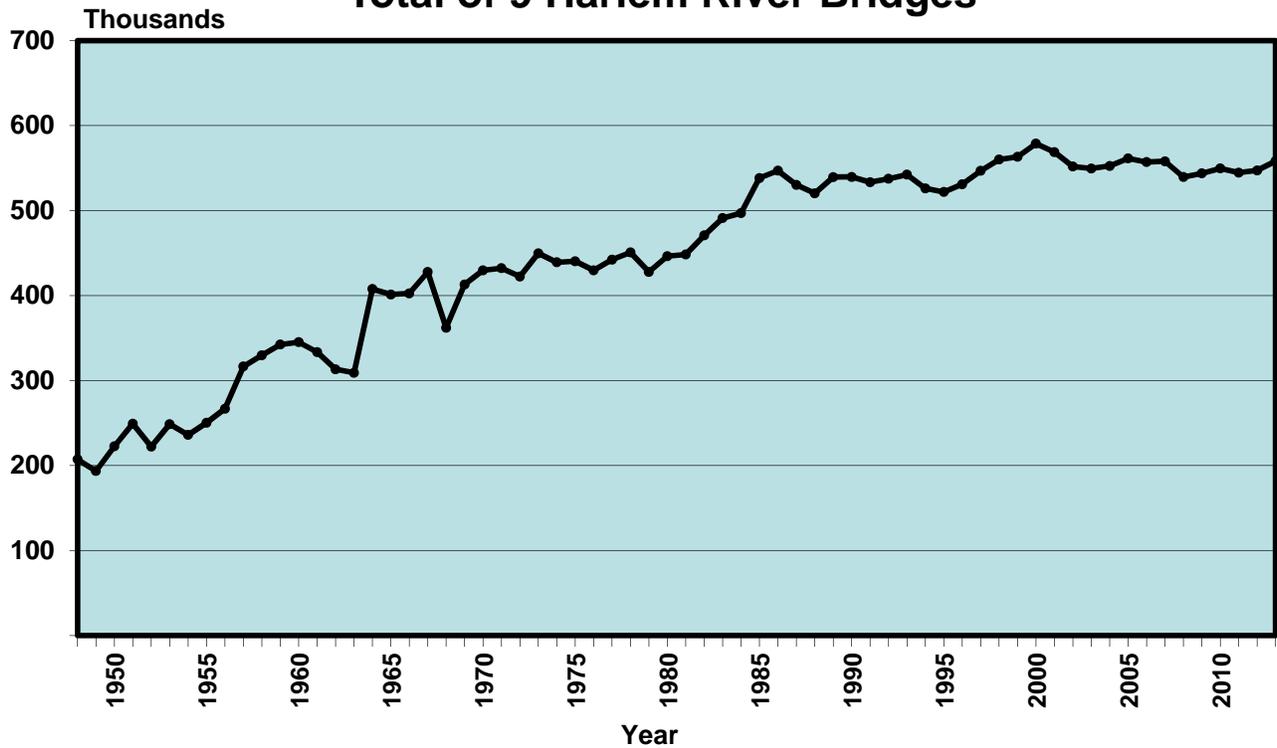
Average Daily Manhattan River Crossings Total of Both Directions



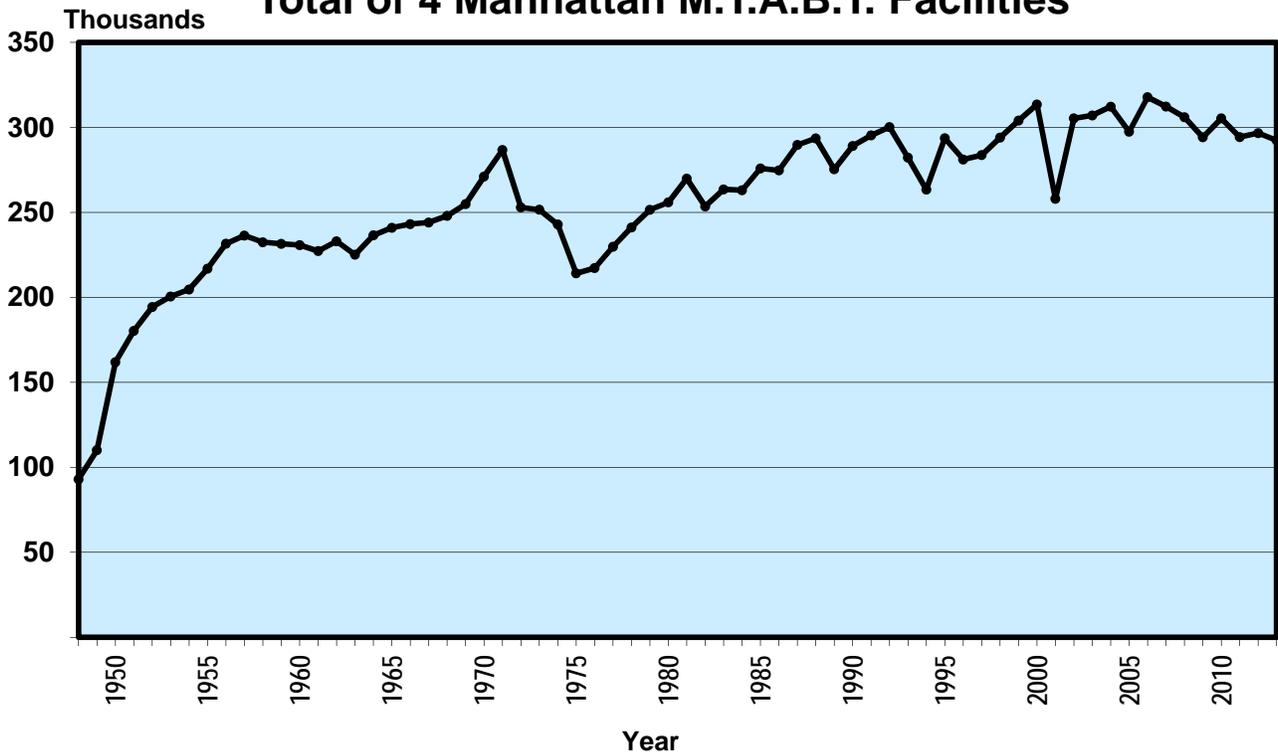
Average Daily Traffic Volumes ~ Total of Both Directions Total of 4 East River Bridges



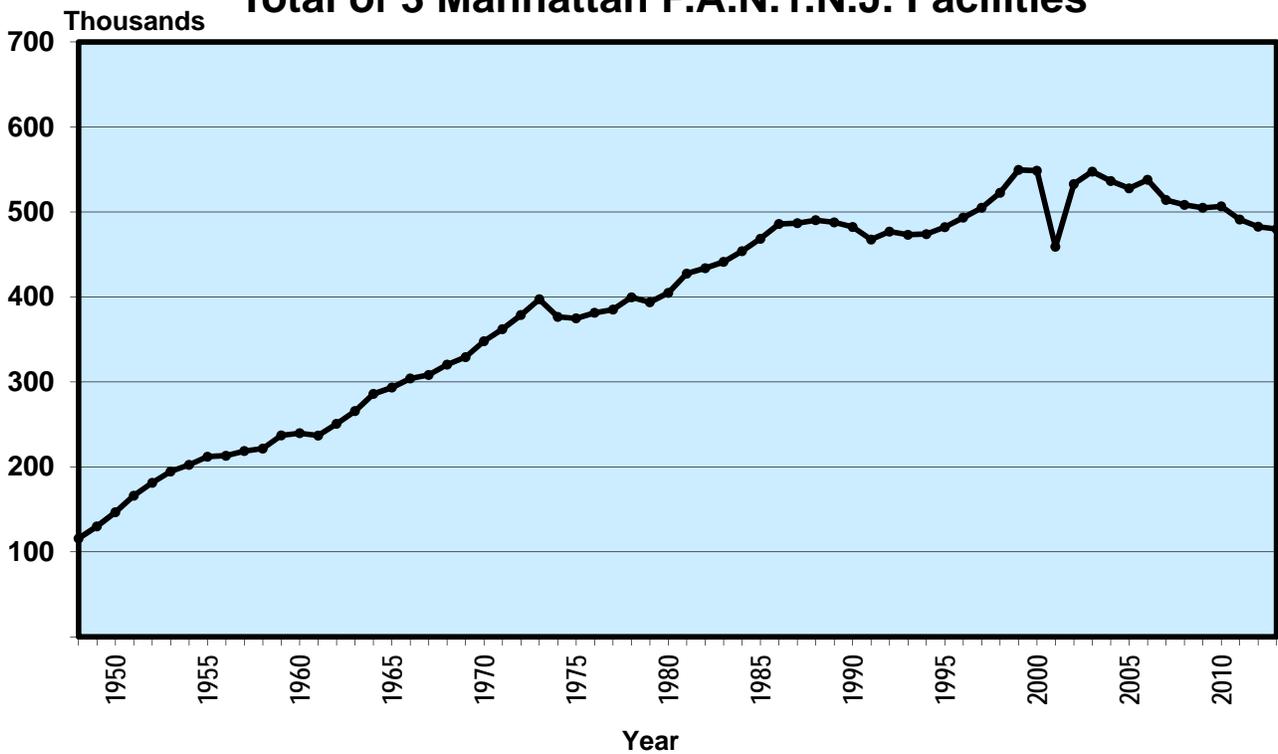
Average Daily Traffic Volumes ~ Total of Both Directions Total of 9 Harlem River Bridges



**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**

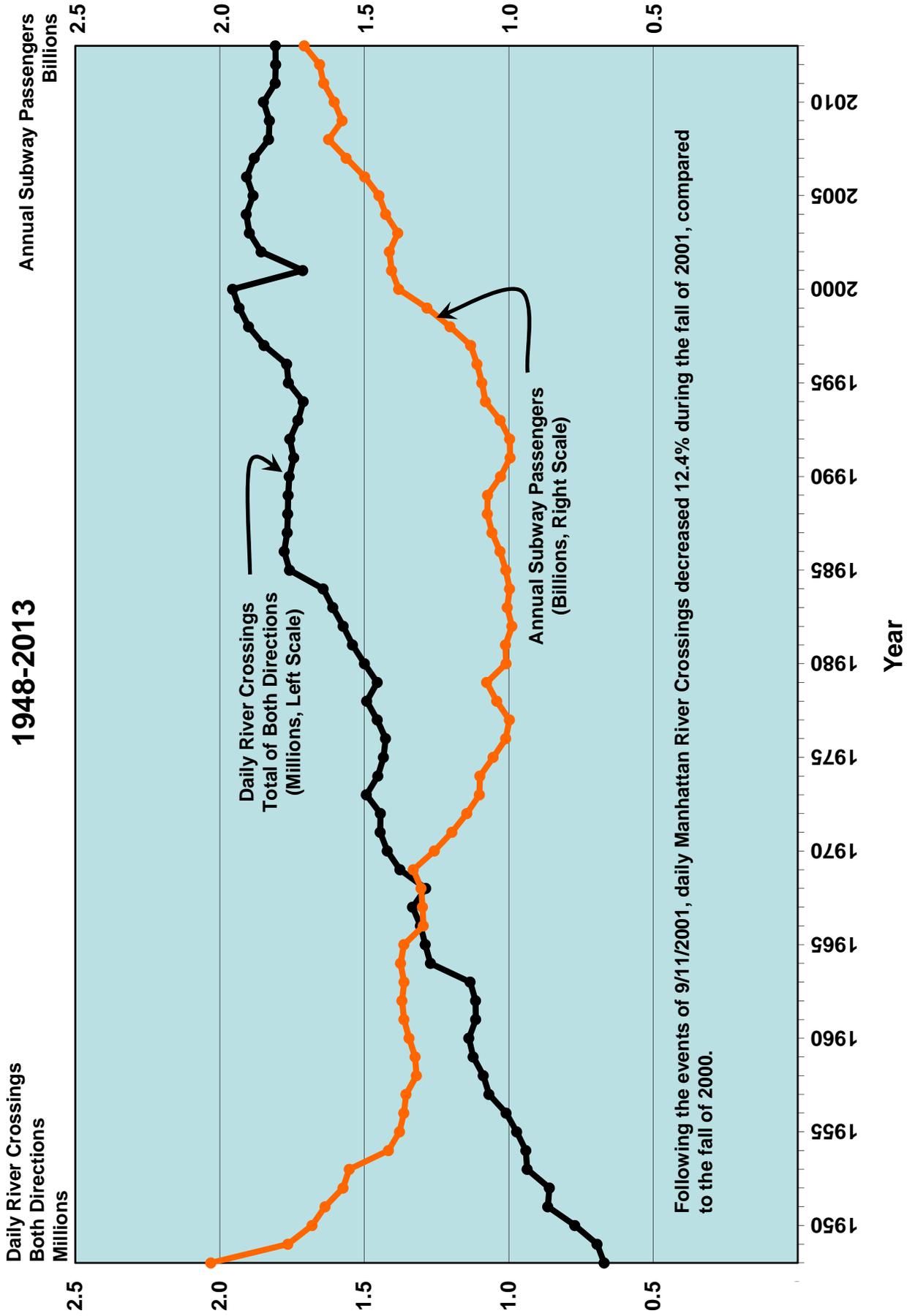
Year	Daily Manhattan River Crossings	Annual Subway Ridership	Year	Daily Manhattan River Crossings	Annual Subway Ridership
1948	670,007	2,031,142,410	1988	1,764,869	1,074,200,253
1949	694,457	1,764,469,530	1989	1,763,534	1,073,179,880
1950	771,407	1,680,843,742	1990	1,759,585	1,028,305,701
1951	864,973	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			
1975	1,433,560	1,053,932,743			
1976	1,426,334	1,010,496,909			
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	Average Daily Crossings	Annual Subway Ridership	Period	Average Daily Crossings	Annual Subway Ridership
	+ 47.6 %	- 20.0 %	1950-1960	+ 11.1 %	+ 34.3 %
	+ 24.8 %	- 6.5 %	1960-1970	- 7.6 %	+ 23.6 %
	+ 5.6 %	- 19.7 %	1970-1980	+169.8 %	- 15.9 %
	+ 17.4 %	+ 1.9 %	1980-1990		

Source for Annual Subway Ridership: MTA

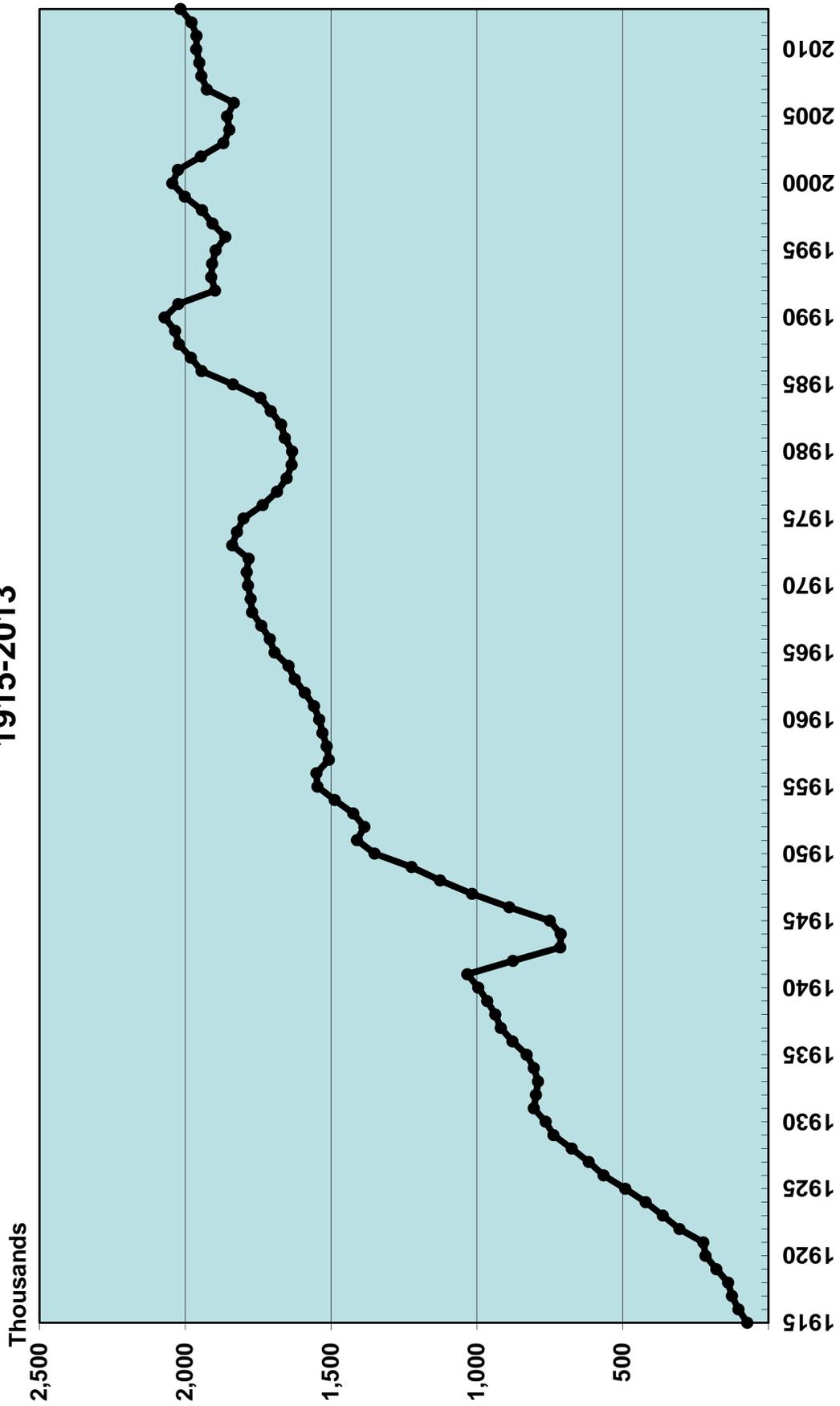
Vehicular River Crossings vs. Subway Ridership

1948-2013



New York City Motor Vehicle Registrations

1915-2013



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

\$ 2.17 discount with EZ Pass (\$ 2.56 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

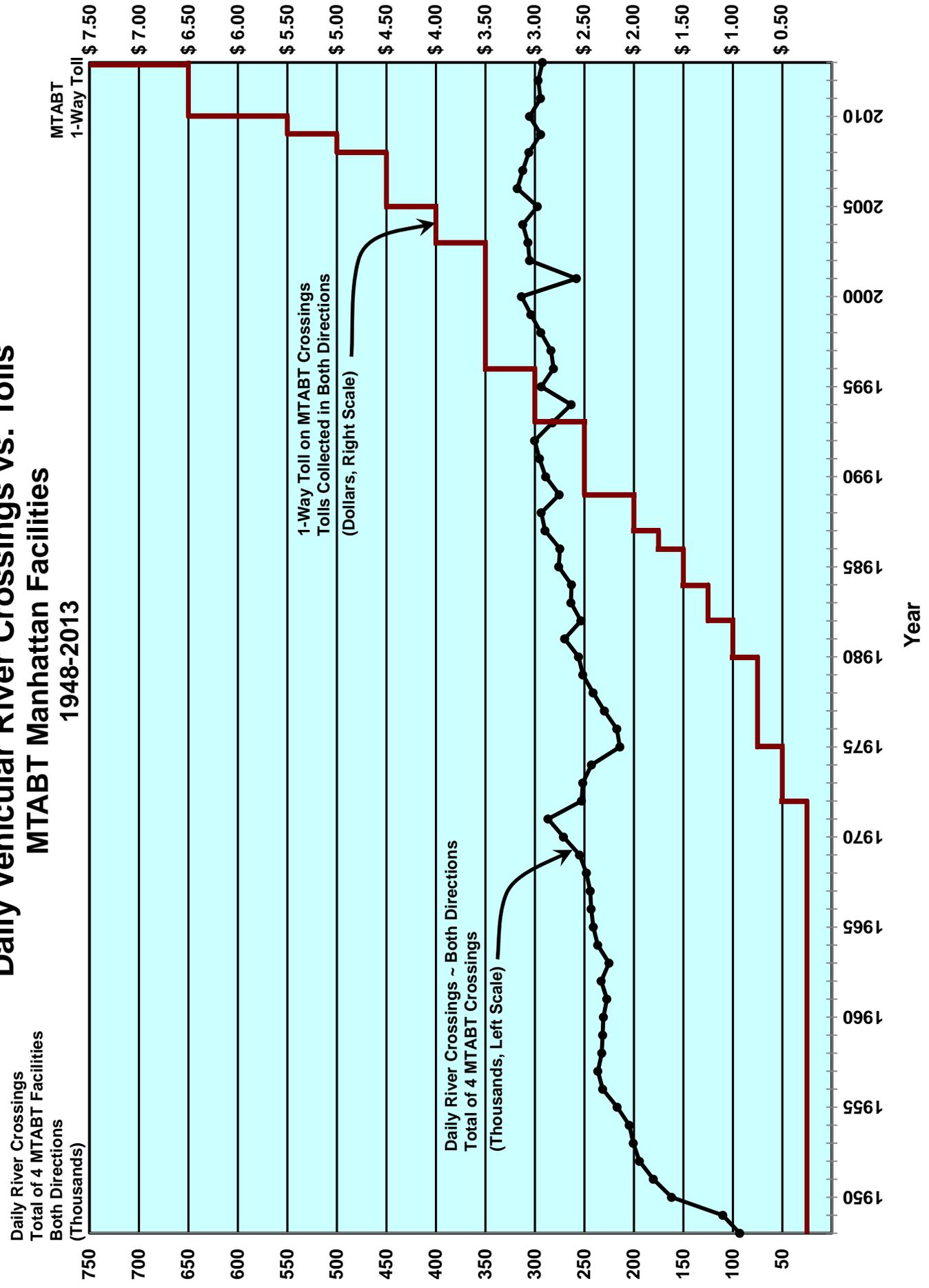
	Cash Toll	EZ-Pass Peak Hours	EZ-Pass Off-Peak Hours
Effective 08/12/1970	\$ 1.00		
Effective 05/05/1975	1.50		
Effective 01/01/1984	2.00		
Effective 04/12/1987	3.00		
Effective 04/07/1991	4.00		
Effective 03/25/2001	6.00	\$ 5.40	\$ 5.40
Effective 03/02/2008	8.00	8.00	6.00
Effective 09/18/2011	12.00	9.50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

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

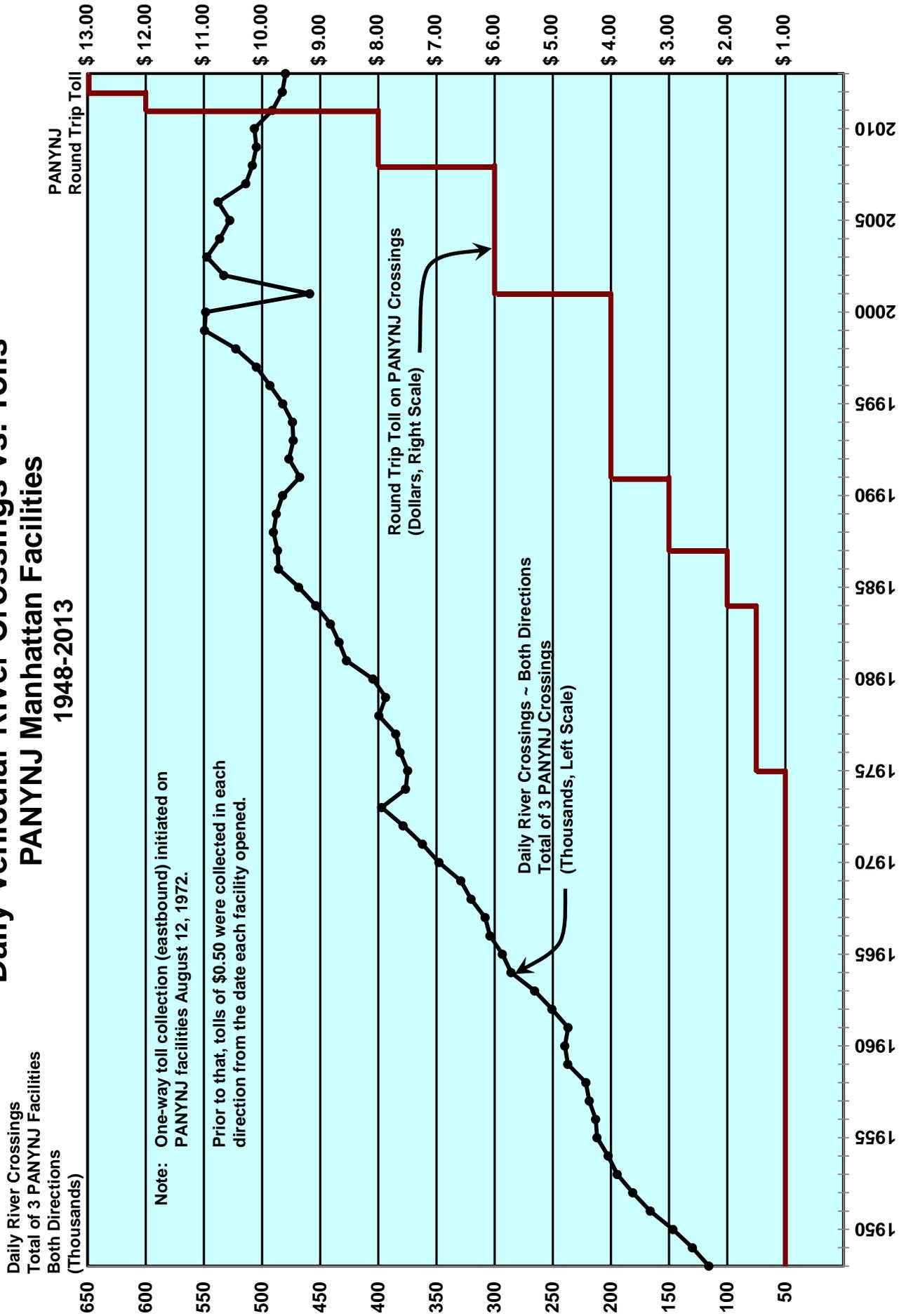
MTABT Manhattan Facilities

1948-2013



Daily Vehicular River Crossings vs. Tolls

PANYNJ Manhattan Facilities 1948-2013



East River Bridges



Brooklyn Bridge

East River Bridges
Average Daily Traffic Volumes
1948 - 2013

<i>Year</i>	<i>Brooklyn Bridge</i>	<i>Ed Koch Queensboro Bridge</i>	<i>Manhattan Bridge</i>	<i>Williamsburg Bridge</i>	<i>Totals</i>
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

Hourly Vehicular Volumes Brooklyn Bridge - 2013

Eastbound to Brooklyn

Westbound to Manhattan

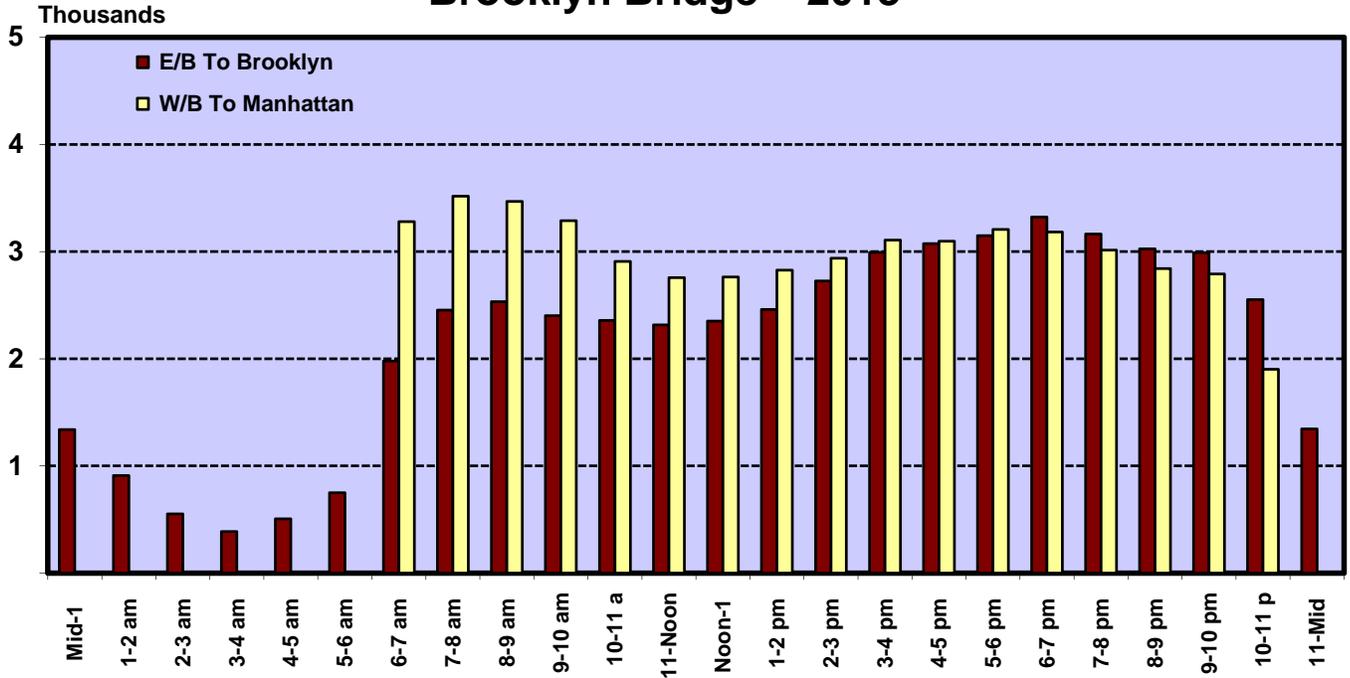
FHWA Classes	Commuter Vans				Commercial Vans				Autos & Motorcycles				Single Unit Trucks				Tractor Trailers	Total Vehicles	2-Way Grand Totals
	1 & 2	3	4	5-7	8-13	1 & 2	3	4	5-7	8-13	1 & 2	3	4	5-7	8-13				
12-1am	1,338	1	0	0	0	1,339												1,339	
1-2am	906	3	1	0	0	910												910	
2-3am	551	2	0	0	0	553												553	
3-4am	385	3	0	0	0	388												388	
4-5am	499	6	1	0	0	506												506	
5-6am	740	9	1	0	0	750												750	
6-7am	1,941	29	9	1	0	1,980												1,980	
7-8am	2,404	31	18	1	0	2,454												2,454	
8-9am	2,471	40	21	1	0	2,533												2,533	
9-10am	2,332	43	26	1	0	2,402												2,402	
10-11am	2,313	28	17	0	0	2,358												2,358	
11-12am	2,252	43	22	0	0	2,317												2,317	
12-1pm	2,289	41	22	0	0	2,352												2,352	
1-2pm	2,396	36	27	1	0	2,460												2,460	
2-3pm	2,650	36	39	1	0	2,726												2,726	
3-4pm	2,928	31	34	0	0	2,993												2,993	
4-5pm	3,021	32	21	1	0	3,075												3,075	
5-6pm	3,097	34	18	0	0	3,149												3,149	
6-7pm	3,257	50	15	1	0	3,323												3,323	
7-8pm	3,125	34	5	0	0	3,164												3,164	
8-9pm	3,010	14	2	0	0	3,026												3,026	
9-10pm	2,976	13	1	0	0	2,990												2,990	
10-11pm	2,547	5	0	0	0	2,552												2,552	
11-12pm	1,342	2	1	0	0	1,345												1,345	
Totals	50,770	566	301	8	0	51,645												51,645	
7-10am	7,207	114	65	3	0	7,389												7,389	
10am-1pm	6,854	112	61	0	0	7,027												7,027	
1-4pm	7,974	103	100	2	0	8,179												8,179	
4-7pm	9,375	116	54	2	0	9,547												9,547	
7am-7pm	31,410	445	280	7	0	32,142												32,142	
6-10am	9,148	143	74	4	0	9,369												9,369	
3-7pm	12,303	147	88	2	0	12,540												12,540	
6am-7pm	33,351	474	289	8	0	34,122												34,122	

Bridge closed westbound for reconstruction weeknights from 11 pm to 6 am.

Based on March 2006 Classification Survey Data from New York Metropolitan Transportation Council.

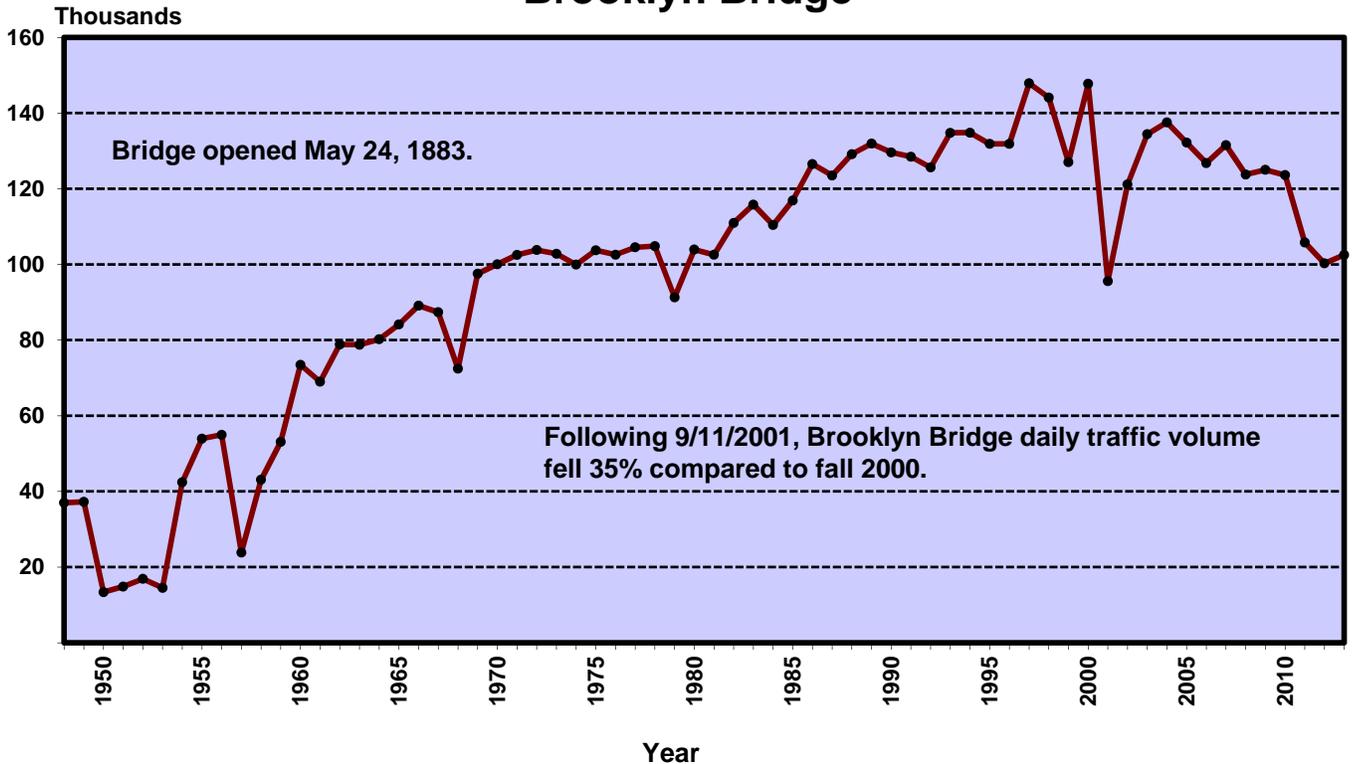
** Peak Volumes

Hourly Vehicular Volumes Brooklyn Bridge ~ 2013



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

Average Daily Traffic Volumes ~ Total of Both Directions Brooklyn Bridge



Hourly Vehicular Volumes Ed Koch Queensboro Bridge - 2013

Eastbound to Queens

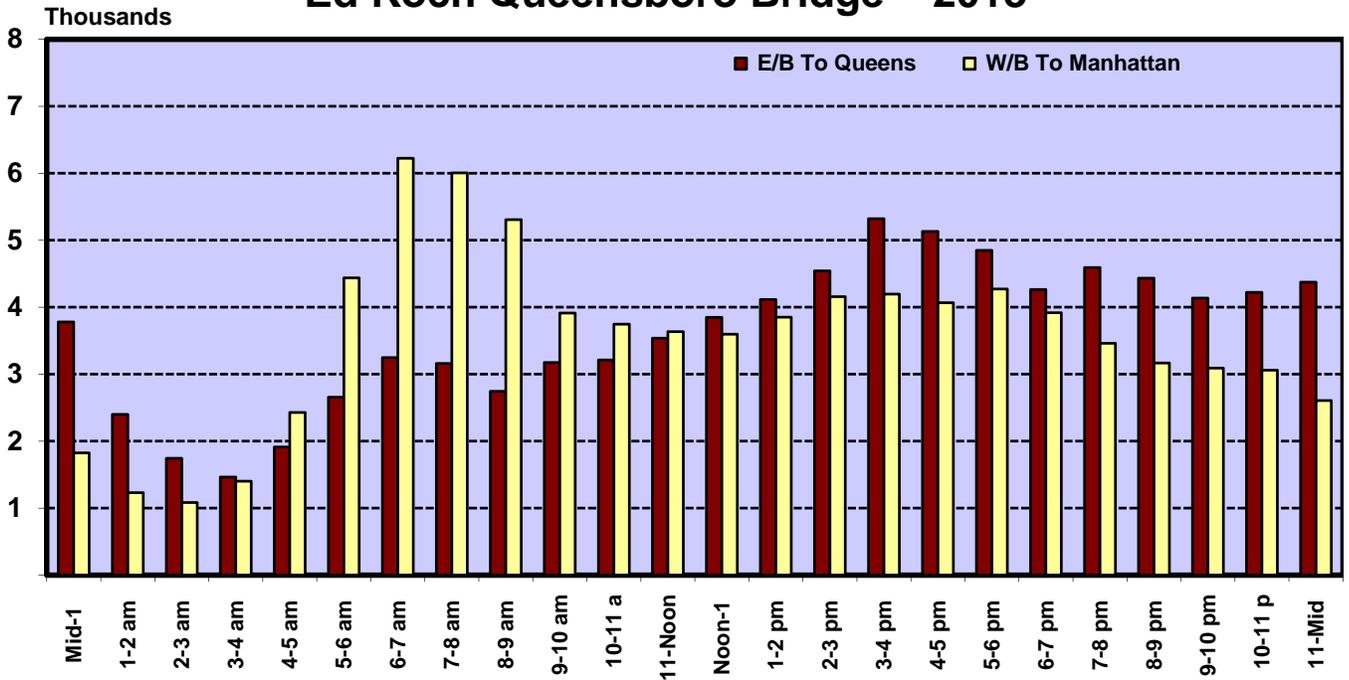
Westbound to Manhattan

FHWA Classes	Commercial Vans,							Commercial Vans,							2-Way Grand Totals		
	Autos, SUVs, Family Vans			Taxis, Liveries, Limos			Panel Trucks, Pickups, Police, Fleet Vehicles			Autos, Motorcycles SUVs, Family Vans			Taxis, Liveries, Limos			Panel Trucks, Pickups, Police, Fleet Vehicles	
	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles			
12-1am	2,193	1,458	61	13	46	8	3,779	987	743	26	8	41	21	1,826			
1-2am	881	1,422	44	6	36	11	2,400	609	508	50	6	14	43	3,630			
2-3am	707	926	45	6	39	21	1,744	503	432	79	3	23	45	2,829			
3-4am	616	727	60	2	44	15	1,464	701	442	139	4	67	49	2,866			
4-5am	854	901	59	3	78	17	1,912	1,347	708	212	2	93	67	4,341			
5-6am	1,858	539	132	3	84	41	2,657	2,590	1,325	283	12	126	103	7,096			
6-7am	2,666	264	138	21	117	41	3,247	3,686	1,812	465	23	158	81	9,472			
7-8am	2,373	372	175	49	170	20	3,159	3,458	1,531	540	51	344	82	9,165			
8-9am	1,998	368	143	103	122	10	2,744	3,050	875	978	41	328	36	8,052			
9-10am	2,365	236	230	120	183	40	3,174	2,352	553	698	47	155	107	7,086			
10-11am	1,765	853	293	77	207	18	3,213	2,611	377	465	71	128	95	6,960			
11-12am	1,908	886	471	37	223	12	3,537	2,501	393	425	37	222	58	7,173			
12-1pm	2,245	809	501	53	225	16	3,849	2,384	583	382	37	172	39	7,446			
1-2pm	2,251	926	563	72	279	24	4,115	2,872	415	317	55	126	67	7,967			
2-3pm	2,418	1,243	513	42	307	19	4,542	3,121	543	298	62	92	42	8,700			
3-4pm	3,020	1,254	714	57	268	10	5,323	3,380	413	217	30	132	25	9,520			
4-5pm	2,616	1,625	623	64	199	6	5,133	3,207	590	153	38	67	13	9,201			
5-6pm	2,751	1,210	575	116	191	6	4,849	2,921	1,087	154	30	52	28	9,121			
6-7pm	2,836	845	295	130	146	12	4,264	3,233	467	141	20	35	22	8,182			
7-8pm	3,173	1,049	194	74	92	10	4,592	2,991	285	98	21	52	14	8,053			
8-9pm	3,260	905	145	45	73	5	4,433	2,769	262	55	19	45	18	7,601			
9-10pm	2,796	1,064	145	39	74	19	4,137	2,551	351	72	12	50	56	7,229			
10-11pm	2,568	1,468	84	18	71	12	4,221	2,495	434	64	10	29	28	7,281			
11-12pm	2,979	1,216	68	27	65	19	4,374	1,891	600	44	15	37	19	6,980			
Totals	53,097	22,566	6,271	1,177	3,339	412	86,862	58,210	15,729	6,355	654	2,588	1,158	171,556			
7-10am	6,736	976	548	272	475	70	9,077	8,860	2,959	2,216	139	827	225	24,303			
10am-1pm	5,918	2,548	1,265	167	655	46	10,599	7,496	1,353	1,272	145	522	192	21,579			
1-4pm	7,689	3,423	1,790	171	854	53	13,980	9,373	1,371	832	147	350	134	26,187			
4-7pm	8,203	3,680	1,493	310	536	24	14,246	9,361	2,144	448	88	154	63	26,504			
7am-7pm	28,546	10,627	5,096	920	2,520	193	47,902	35,090	7,827	4,768	519	1,853	614	98,573			
6-10am	9,402	1,240	686	293	592	111	12,324	12,546	4,771	2,681	162	985	306	33,775			
3-7pm	11,223	4,934	2,207	367	804	34	19,569	12,741	2,557	665	118	286	88	36,024			
6am-7pm	31,212	10,891	5,234	941	2,637	234	51,149	38,776	9,639	5,233	542	2,011	695	108,045			

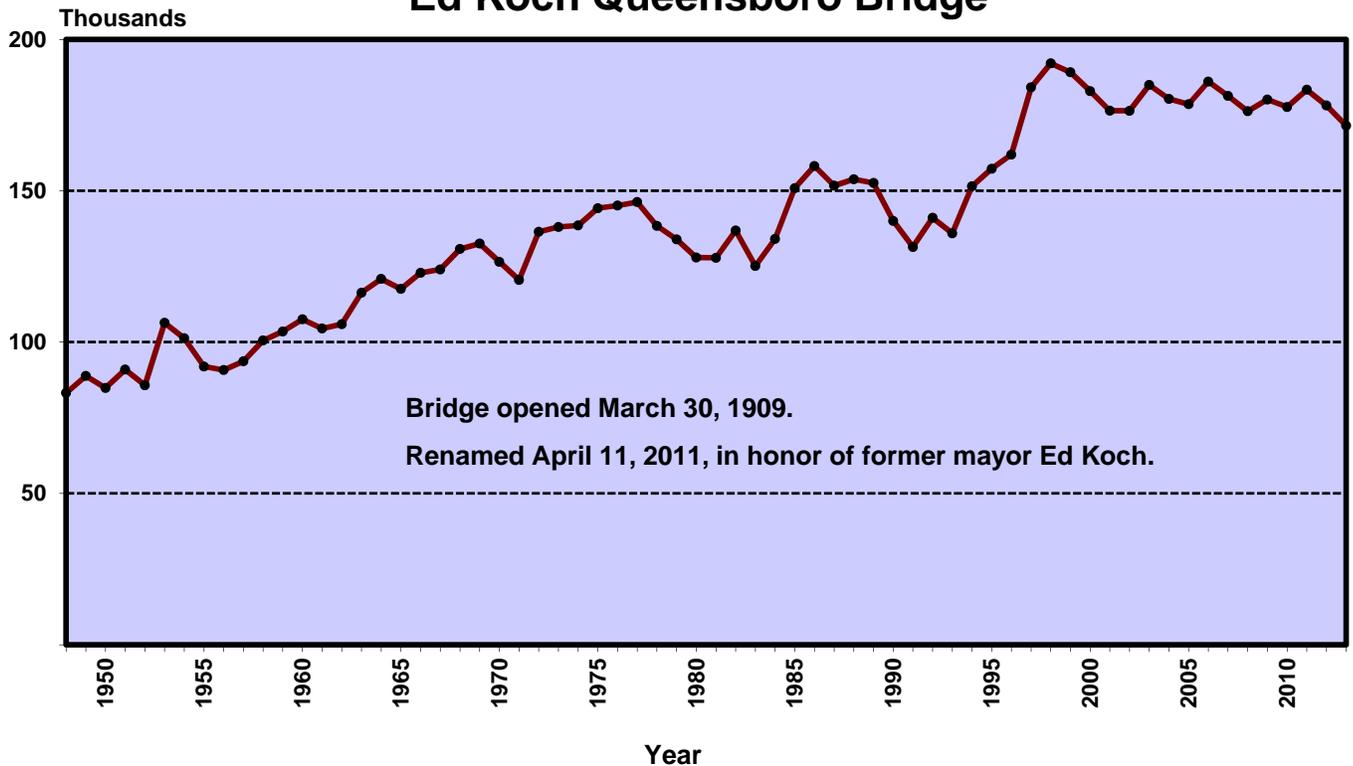
Based on October 2013 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Ed Koch Queensboro Bridge ~ 2013



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



Hourly Vehicular Volumes Manhattan Bridge - 2013

Eastbound to Brooklyn

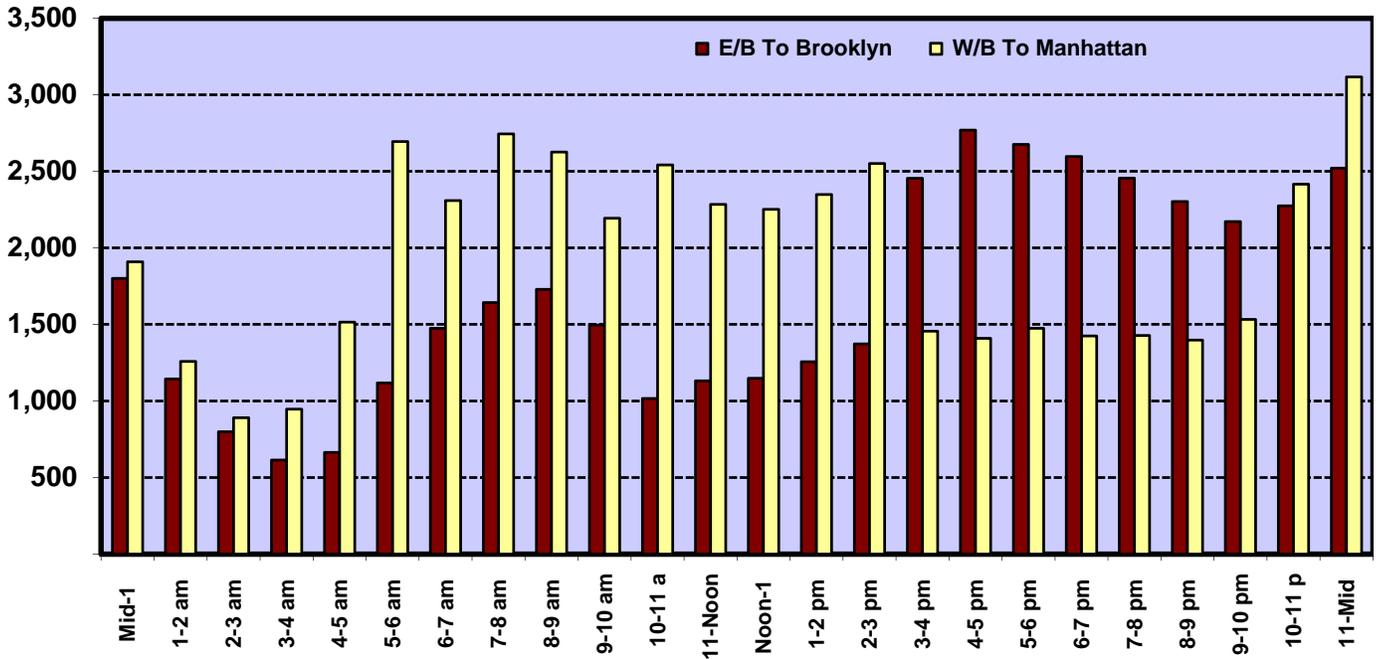
Westbound to Manhattan

FHWA Classes	Commuter Vans					Total Vehicles	Commuter Vans					Total Vehicles
	Autos & Motorcycles		Commercial Vans Pickups		Single Trucks		Autos & Motorcycles		Commercial Vans Pickups		Single Trucks	
	1 & 2	3	4	5 - 7			8 - 13	1 & 2	3	4		
12-1am	1,735	34	11	18	3	1,801	1,894	10	1	4	1,909	
1-2am	1,112	22	3	7	1	1,145	1,247	9	1	2	1,259	
2-3am	770	18	4	6	2	800	880	5	1	5	891	
3-4am	586	16	4	6	3	615	930	8	3	5	947	
4-5am	646	8	3	6	1	664	1,382	24	6	100	1,516	
5-6am	1,077	9	10	22	1	1,119	2,271	44	52	279	2,695	
6-7am	1,313	33	37	82	10	1,475	1,842	56	70	301	2,310	
7-8am	1,387	47	54	146	9	1,643	2,195	57	69	405	2,745	
8-9am	1,460	33	56	168	13	1,730	2,158	46	49	355	2,627	
9-10am	1,210	33	59	184	11	1,497	1,748	42	42	340	2,194	
10-11am	832	15	35	126	9	1,017	1,963	53	57	438	2,542	
11-12am	918	25	39	141	9	1,132	1,750	52	47	417	2,285	
12-1pm	895	30	39	175	10	1,149	1,649	60	63	460	2,252	
1-2pm	986	34	43	186	8	1,257	1,699	56	71	503	2,349	
2-3pm	1,136	26	41	159	11	1,373	2,182	39	50	271	2,552	
3-4pm	2,092	53	102	202	6	2,455	1,263	26	30	127	1,456	
4-5pm	2,509	61	70	122	8	2,770	1,205	26	31	141	1,410	
5-6pm	2,469	47	64	87	9	2,676	1,288	25	41	118	1,475	
6-7pm	2,428	34	60	68	7	2,597	1,266	11	52	94	1,425	
7-8pm	2,297	32	63	57	7	2,456	1,291	19	41	77	1,428	
8-9pm	2,189	24	41	44	5	2,303	1,289	14	22	71	1,398	
9-10pm	2,059	34	37	37	5	2,172	1,486	8	10	29	1,533	
10-11pm	2,186	29	27	29	4	2,275	2,378	9	6	24	2,417	
11-12pm	2,450	23	20	26	3	2,522	3,089	5	4	18	3,117	
Totals	36,742	720	922	2,104	155	40,643	40,345	704	819	4,584	46,732	
7-10am	4,057	113	169	498	33	4,870	6,101	145	160	1,100	7,566	
10am-1pm	2,645	70	113	442	28	3,298	5,362	165	167	1,315	7,079	
1-4pm	4,214	113	186	547	25	5,085	5,144	121	151	901	6,357	
4-7pm	7,406	142	194	277	24	8,043	3,759	62	124	353	4,310	
7am-7pm	18,322	438	662	1,764	110	21,296	20,366	493	602	3,669	25,312	
6-10am	5,370	146	206	580	43	6,345	7,943	201	230	1,401	9,876	
3-7pm	9,498	195	296	479	30	10,498	5,022	88	154	480	5,766	
6am-7pm	19,635	471	699	1,846	120	22,771	22,208	549	672	3,970	27,622	
Totals	87,375	1,922	2,744	7,922	505	99,568	99,568	1,922	2,744	7,922	113,962	

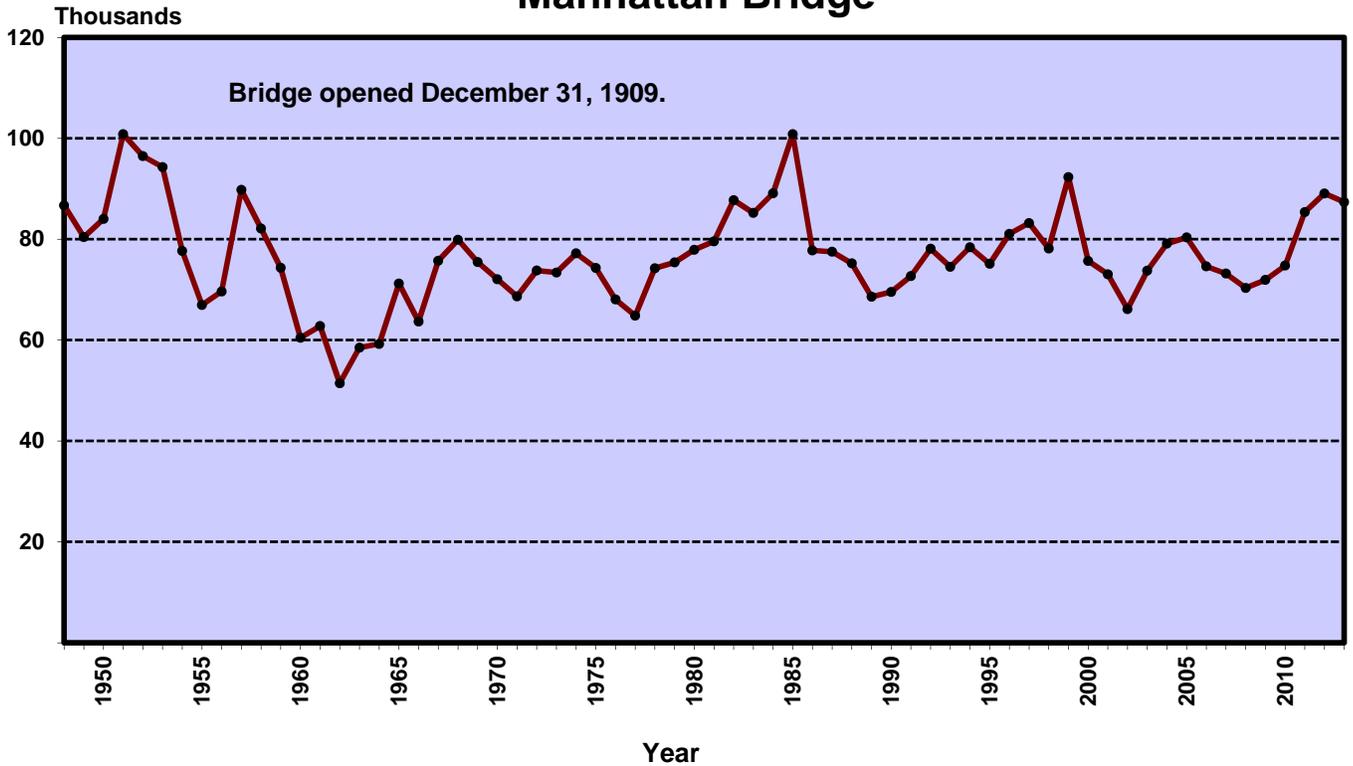
Based on April 2006 Classification Survey Data from New York Metropolitan Transportation Council.

** Peak Volumes

Hourly Vehicular Volumes Manhattan Bridge ~ 2013



Average Daily Traffic Volumes ~ Total of Both Directions Manhattan Bridge



Hourly Vehicular Volumes Williamsburg Bridge - 2013

Eastbound to Brooklyn

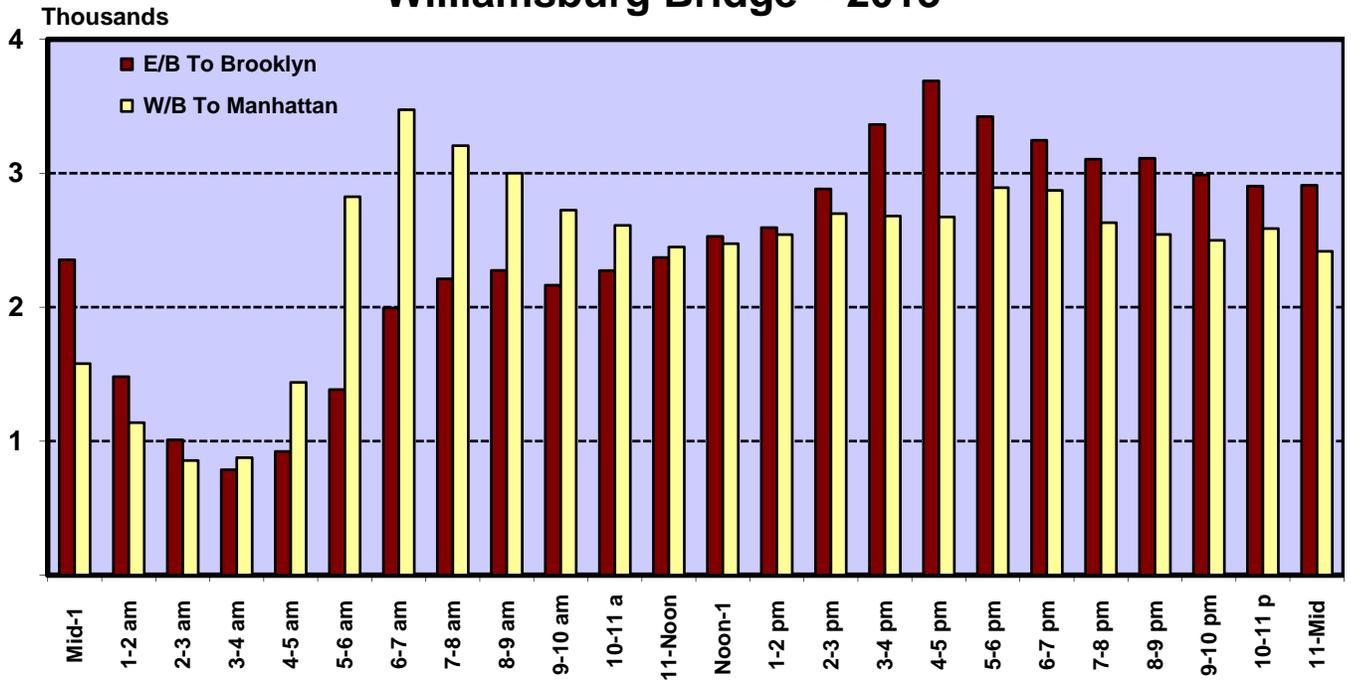
Westbound to Manhattan

FHWA Classes	Autos, Motorcycles SUVs, Family Vans					Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles					Autos, Motorcycles SUVs, Family Vans					Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles					2-Way Grand Totals
	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	
12-1am	1,353	928	48	0	23	2	2,354	658	855	38	0	19	9	1,579	658	855	38	0	19	9	1,579
1-2am	643	780	38	1	17	3	1,482	411	670	27	0	26	4	1,138	411	670	27	0	26	4	1,138
2-3am	416	520	45	0	22	7	1,010	287	477	50	1	38	3	856	287	477	50	1	38	3	856
3-4am	337	339	39	3	63	6	787	406	337	76	0	48	10	877	406	337	76	0	48	10	877
4-5am	459	387	35	2	28	12	923	763	400	166	0	95	15	1,439	763	400	166	0	95	15	1,439
5-6am	829	407	60	7	58	24	1,385	1,680	585	312	11	211	26	2,825	1,680	585	312	11	211	26	2,825
6-7am	1,516	246	140	8	78	6	1,994	2,354	386	330	106	219	80	3,475	2,354	386	330	106	219	80	3,475
7-8am	1,696	243	140	26	96	11	2,212	2,206	214	451	59	244	32	3,206	2,206	214	451	59	244	32	3,206
8-9am	1,766	189	183	34	96	7	2,275	1,977	163	569	17	261	14	3,001	1,977	163	569	17	261	14	3,001
9-10am	1,505	298	186	41	124	11	2,165	1,691	178	544	5	285	22	2,725	1,691	178	544	5	285	22	2,725
10-11am	1,450	381	251	30	155	7	2,274	1,716	172	445	14	251	13	2,611	1,716	172	445	14	251	13	2,611
11-12am	1,488	330	317	15	214	7	2,371	1,613	203	386	10	223	14	2,449	1,613	203	386	10	223	14	2,449
12-1pm	1,581	339	347	21	235	6	2,529	1,611	237	406	14	186	20	2,474	1,611	237	406	14	186	20	2,474
1-2pm	1,644	376	317	9	241	8	2,595	1,742	201	345	34	192	28	2,542	1,742	201	345	34	192	28	2,542
2-3pm	1,847	484	301	17	216	18	2,883	1,861	251	363	45	162	17	2,699	1,861	251	363	45	162	17	2,699
3-4pm	2,245	317	516	38	220	28	3,364	1,890	268	363	18	131	11	2,681	1,890	268	363	18	131	11	2,681
4-5pm	2,525	353	528	89	187	7	3,689	1,892	314	328	9	122	9	2,674	1,892	314	328	9	122	9	2,674
5-6pm	2,580	287	368	30	148	11	3,424	2,079	410	308	2	81	12	2,892	2,079	410	308	2	81	12	2,892
6-7pm	2,574	315	260	15	74	9	3,247	2,031	518	260	1	55	7	2,872	2,031	518	260	1	55	7	2,872
7-8pm	2,306	529	169	13	79	9	3,105	1,820	591	167	3	45	5	2,631	1,820	591	167	3	45	5	2,631
8-9pm	2,132	773	139	6	56	6	3,112	1,668	679	137	3	51	5	2,543	1,668	679	137	3	51	5	2,543
9-10pm	2,091	744	109	11	26	6	2,987	1,487	866	106	1	35	4	2,499	1,487	866	106	1	35	4	2,499
10-11pm	1,876	894	98	6	23	7	2,904	1,411	1,010	123	0	39	4	2,587	1,411	1,010	123	0	39	4	2,587
11-12pm	1,694	1,110	69	5	31	1	2,910	1,273	1,059	54	0	25	7	2,418	1,273	1,059	54	0	25	7	2,418
Totals	38,553	11,569	4,703	427	2,510	219	57,981	36,527	11,044	6,354	353	3,044	371	57,693	36,527	11,044	6,354	353	3,044	371	57,693
7-10am	4,967	730	509	101	316	29	6,652	5,874	555	1,564	81	790	68	8,932	5,874	555	1,564	81	790	68	8,932
10am-1pm	4,519	1,050	915	66	604	20	7,174	4,940	612	1,237	38	660	47	7,534	4,940	612	1,237	38	660	47	7,534
1-4pm	5,736	1,177	1,134	64	677	54	8,842	5,493	720	1,071	97	485	56	7,922	5,493	720	1,071	97	485	56	7,922
4-7pm	7,679	955	1,156	134	409	27	10,360	6,002	1,242	896	12	258	28	8,438	6,002	1,242	896	12	258	28	8,438
7am-7pm	22,901	3,912	3,714	365	2,006	130	33,028	22,309	3,129	4,768	228	2,193	199	32,826	22,309	3,129	4,768	228	2,193	199	32,826
6-10am	6,483	976	649	109	394	35	8,646	8,228	941	1,894	187	1,009	148	12,407	8,228	941	1,894	187	1,009	148	12,407
3-7pm	9,924	1,272	1,672	172	629	55	13,724	7,892	1,510	1,259	30	389	39	11,119	7,892	1,510	1,259	30	389	39	11,119
6am-7pm	24,417	4,158	3,854	373	2,084	136	35,022	24,663	3,515	5,098	334	2,412	279	36,301	24,663	3,515	5,098	334	2,412	279	36,301

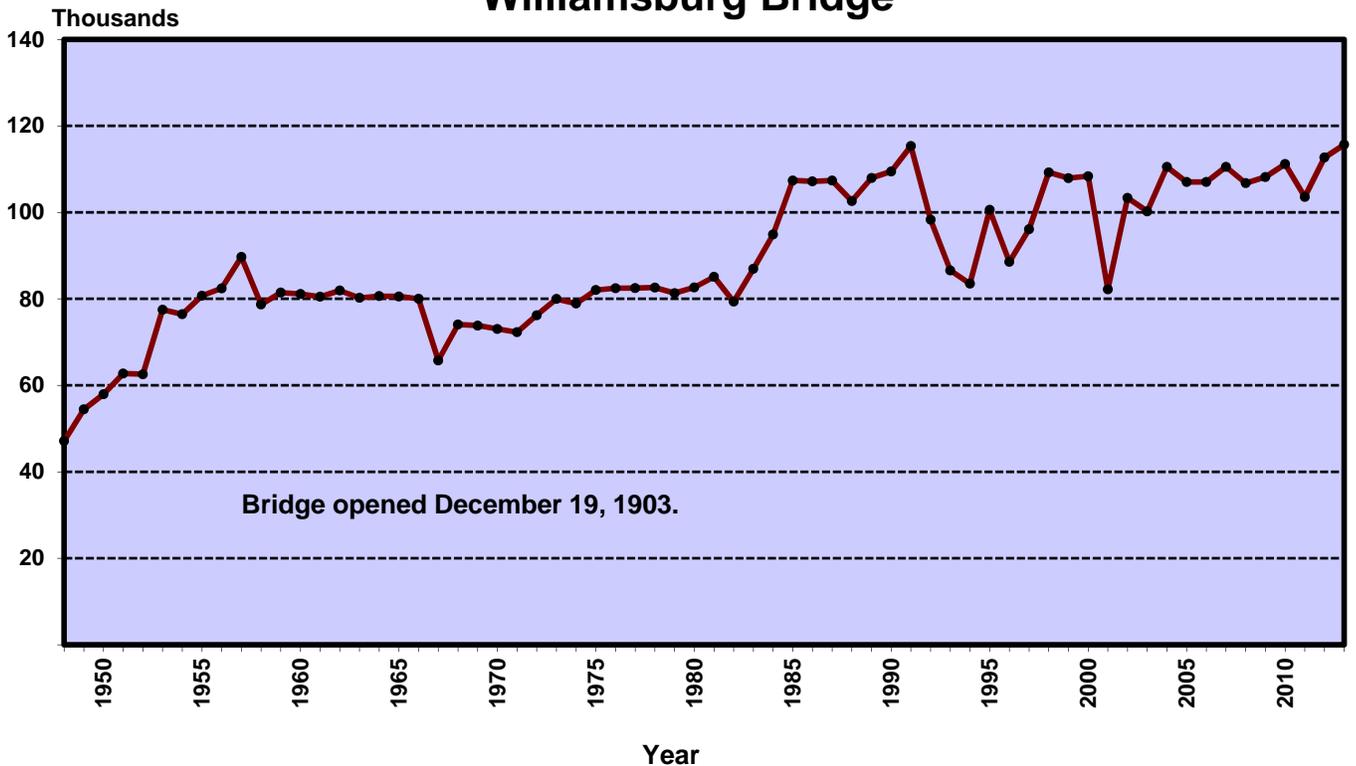
Based on November 2013 Classification Survey Data.

** Peak Volumes

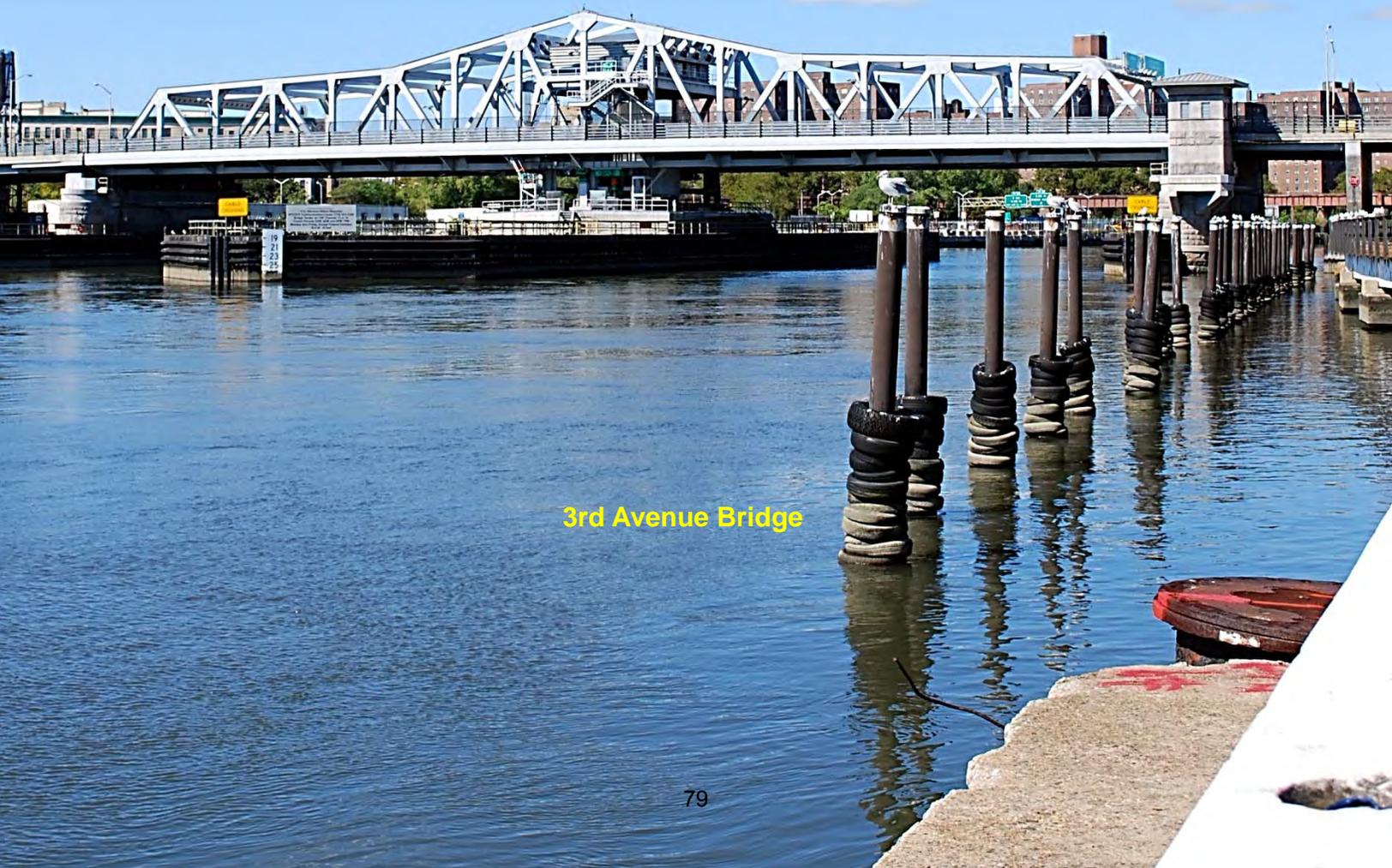
Hourly Vehicular Volumes Williamsburg Bridge ~ 2013



Average Daily Traffic Volumes ~ Total of Both Directions Williamsburg Bridge



Harlem River Bridges



3rd Avenue Bridge

Harlem River Bridges
Average Daily Traffic Volumes
1948 - 2013

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</i>	16,374	31,072	33,576	51,478
1952	<i>Opened</i>	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

Harlem River Bridges (cont'd)
Average Daily Traffic Volumes
1948 - 2013

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

Hourly Vehicular Volumes Alexander Hamilton Bridge - 2013

Eastbound to Bronx

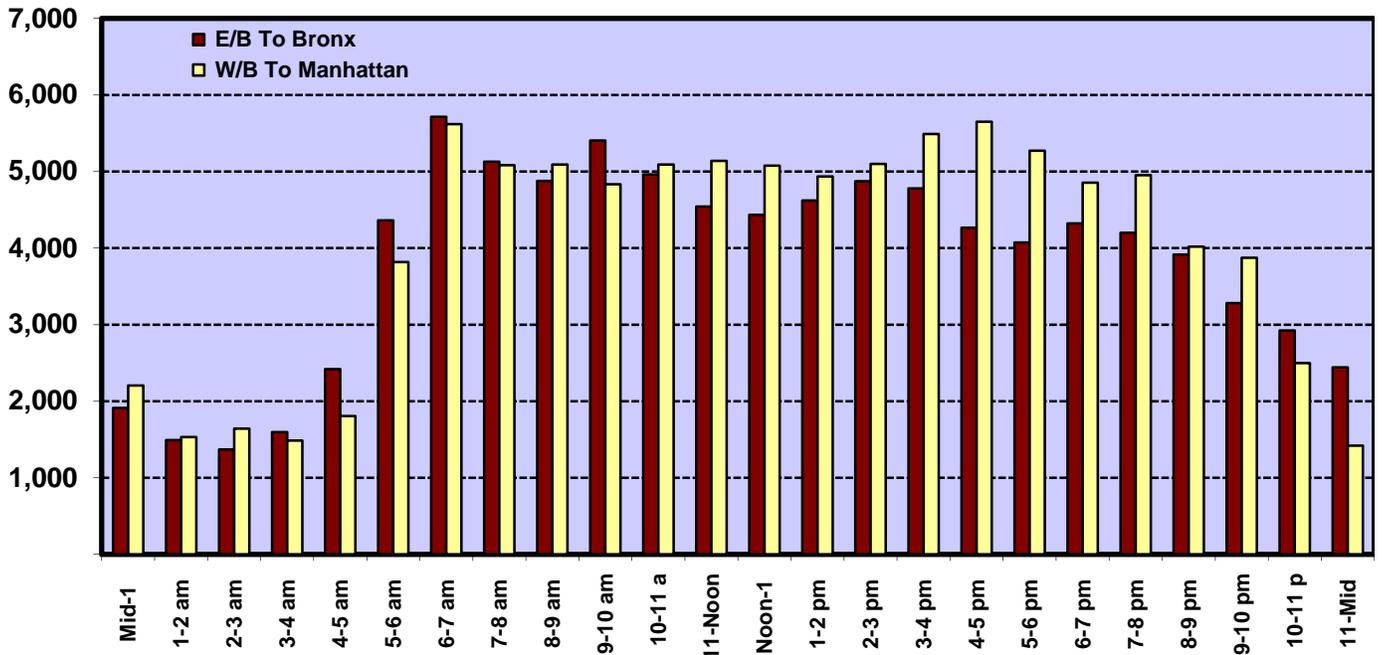
Westbound to Manhattan

FHWA Classes	Commercial Vans,							Commercial Vans,							2-way Grand Totals
	Autos, Motorcycles SUVs, Family Vans			Taxis, Liveries, Limos		Panel Trucks, Pickups, Police, Fleet Vehicles		Autos, Motorcycles SUVs, Family Vans			Taxis, Liveries, Limos		Panel Trucks, Pickups, Police, Fleet Vehicles		
	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles	
12-1am	1,373	72	37	4	70	357	1,913	1,615	16	60	16	58	441	2,206	
1-2am	884	62	23	3	65	455	1,492	940	23	62	6	66	435	1,532	
2-3am	653	38	24	0	108	548	1,371	806	14	49	3	54	717	1,643	
3-4am	613	49	36	2	207	690	1,597	567	0	45	3	90	782	1,487	
4-5am	1,196	69	95	0	246	814	2,420	917	17	80	0	152	641	1,807	
5-6am	2,577	25	118	3	192	1,447	4,362	2,305	48	137	0	362	966	3,818	
6-7am	3,994	10	340	1	97	1,272	5,714	4,146	44	295	59	206	869	5,619	
7-8am	3,958	22	299	21	352	477	5,129	3,905	65	335	43	281	454	5,083	
8-9am	3,570	50	322	37	439	459	4,877	3,917	43	231	28	334	539	5,092	
9-10am	3,870	32	425	48	464	565	5,404	3,453	40	179	21	442	699	4,834	
10-11am	3,596	15	320	16	507	509	4,963	3,257	34	349	25	533	894	5,092	
11-12am	3,231	84	291	8	451	477	4,542	3,254	31	273	28	426	1,128	5,140	
12-1pm	3,199	77	271	23	398	467	4,435	3,191	47	273	32	475	1,059	5,077	
1-2pm	3,558	44	279	28	326	386	4,621	3,238	36	295	48	364	955	5,557	
2-3pm	3,932	43	237	23	331	307	4,873	3,540	69	267	32	340	851	5,099	
3-4pm	3,767	70	236	36	322	349	4,780	4,068	51	358	16	282	715	5,490	
4-5pm	3,448	45	219	57	252	246	4,267	4,388	37	322	15	263	626	5,651	
5-6pm	3,291	35	304	20	176	248	4,074	4,397	42	185	4	190	453	5,271	
6-7pm	3,669	38	154	8	162	322	4,323	4,216	17	131	2	118	370	4,854	
7-8pm	3,508	38	126	30	160	337	4,199	4,201	22	139	7	125	459	4,953	
8-9pm	3,285	55	91	9	164	311	3,915	3,367	25	125	5	95	403	4,020	
9-10pm	2,644	71	91	4	86	385	3,281	3,220	29	98	0	84	443	3,874	
10-11pm	2,442	42	60	0	47	334	2,925	2,116	27	76	6	57	217	2,499	
11-12pm	2,083	65	33	0	43	219	2,443	1,027	14	45	6	43	285	1,420	
Totals	68,341	1,121	4,431	381	5,665	11,981	91,920	70,051	791	4,409	405	5,440	15,401	96,497	
7-10am	11,398	104	1,046	106	1,255	1,501	15,410	11,275	148	745	92	1,057	1,692	15,009	
10am-1pm	10,026	176	882	47	1,356	1,453	13,940	9,702	112	895	85	1,434	3,081	15,309	
1-4pm	11,257	157	752	87	979	1,042	14,274	10,846	156	920	96	986	2,521	15,525	
4-7pm	10,408	88	677	85	590	816	12,664	13,001	96	638	21	571	1,449	15,776	
7am-7pm	43,089	525	3,357	325	4,180	4,812	56,288	44,824	512	3,198	294	4,048	8,743	61,619	
6-10am	15,392	114	1,386	107	1,352	2,773	21,124	15,421	192	1,040	151	1,263	2,561	20,628	
3-7pm	14,175	158	913	121	912	1,165	17,444	17,069	147	996	37	853	2,164	21,266	
6am-7pm	47,083	535	3,697	326	4,277	6,084	62,002	48,970	556	3,493	353	4,254	9,612	67,238	

Based on October 2013 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Alexander Hamilton Bridge ~ 2013



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



Hourly Vehicular Volumes Broadway Bridge - 2013

Northbound to Bronx

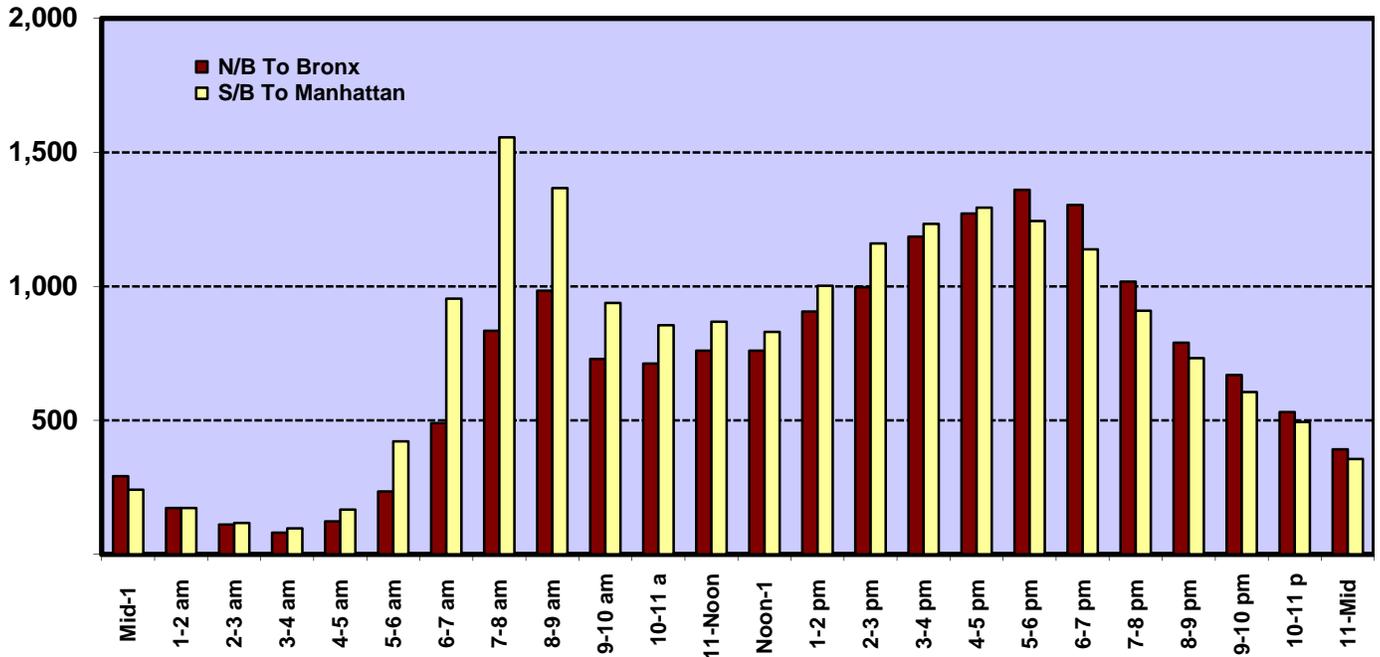
Southbound to Manhattan

FHWA Classes	Northbound to Bronx							Southbound to Manhattan							2-way Grand Totals
	Autos, SUVs, Family Vans			Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles			Total Vehicles	Autos, Motorcycles SUVs, Family Vans			Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles			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	251	17	8	12	2	2	292	145	73	4	17	2	0	241	
1-2am	138	17	0	12	5	1	173	97	50	1	22	0	3	173	
2-3am	96	6	5	1	2	1	111	62	44	4	4	1	2	117	
3-4am	63	14	3	0	0	1	81	63	23	3	2	4	2	97	
4-5am	89	11	1	14	4	4	123	116	31	12	1	1	6	167	
5-6am	136	9	3	54	32	1	235	328	59	20	8	5	2	422	
6-7am	359	14	13	70	3	31	490	760	87	29	68	9	1	954	
7-8am	695	27	22	61	17	12	834	1,257	178	52	50	14	5	1,556	
8-9am	832	75	22	35	10	10	984	1,059	174	58	47	20	9	1,367	
9-10am	571	57	46	33	18	4	729	679	132	50	39	21	17	938	
10-11am	556	59	45	16	26	10	712	570	170	40	25	22	28	855	
11-12am	608	76	26	19	24	7	760	583	176	66	11	22	10	868	
12-1pm	604	66	35	20	27	8	760	618	123	44	17	20	8	830	
1-2pm	720	56	49	46	34	1	906	698	198	51	24	21	10	1,002	
2-3pm	822	76	30	37	22	10	997	862	162	55	44	30	7	1,160	
3-4pm	1,013	86	28	41	16	2	1,186	923	182	57	51	18	2	1,233	
4-5pm	1,068	119	26	48	10	1	1,272	1,023	167	53	32	19	0	1,294	
5-6pm	1,157	125	39	35	3	1	1,360	1,024	141	41	30	7	1	1,244	
6-7pm	1,204	46	23	29	1	1	1,304	915	153	16	44	8	2	1,138	
7-8pm	932	44	15	15	9	3	1,018	735	107	17	42	7	1	909	
8-9pm	711	42	11	16	9	1	790	519	148	22	34	4	5	732	
9-10pm	603	43	16	3	1	3	669	435	113	11	45	1	1	606	
10-11pm	464	46	12	7	0	2	531	334	115	6	33	3	3	494	
11-12pm	338	32	9	7	5	1	392	235	94	14	11	0	2	356	
Totals	14,030	1,163	487	631	280	118	16,709	14,040	2,900	726	701	259	127	18,753	
7-10am	2,098	159	90	129	45	26	2,547	2,995	484	160	136	55	31	3,861	
10am-1pm	1,768	201	106	55	77	25	2,232	1,771	469	150	53	64	46	2,553	
1-4pm	2,555	218	107	124	72	13	3,089	2,483	542	163	119	69	19	3,395	
4-7pm	3,429	290	88	112	14	3	3,936	2,962	461	110	106	34	3	3,676	
7am-7pm	9,850	868	391	420	208	67	11,804	10,211	1,956	583	414	222	99	13,485	
6-10am	2,457	173	103	199	48	57	3,037	3,755	571	189	204	64	32	4,815	
3-7pm	4,442	376	116	153	30	5	5,122	3,885	643	167	157	52	5	4,909	
6am-7pm	10,209	882	404	490	211	98	12,294	10,971	2,043	612	482	231	100	14,439	

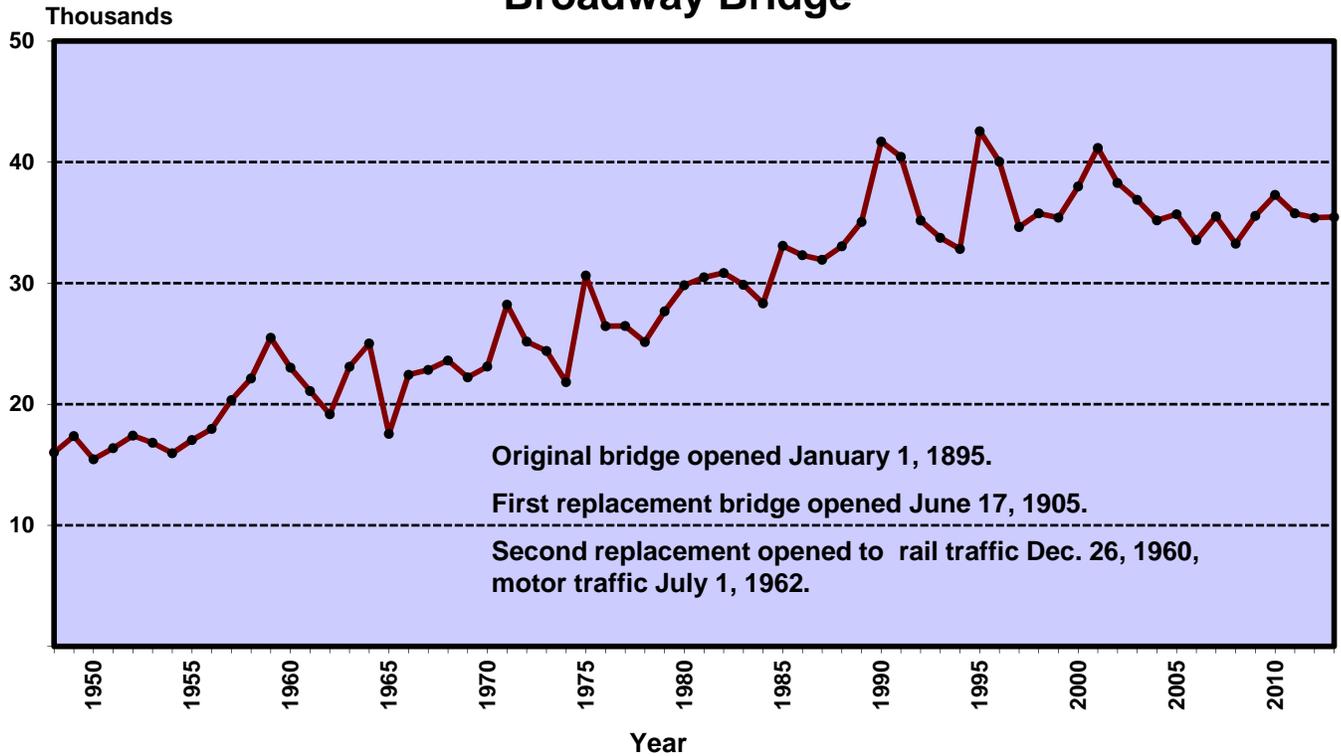
Based on October 2013 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Broadway Bridge ~ 2013



Average Daily Traffic Volumes ~ Total of Both Directions Broadway Bridge



Hourly Vehicular Volumes

Macombs Dam Bridge - 2013

Eastbound to Bronx

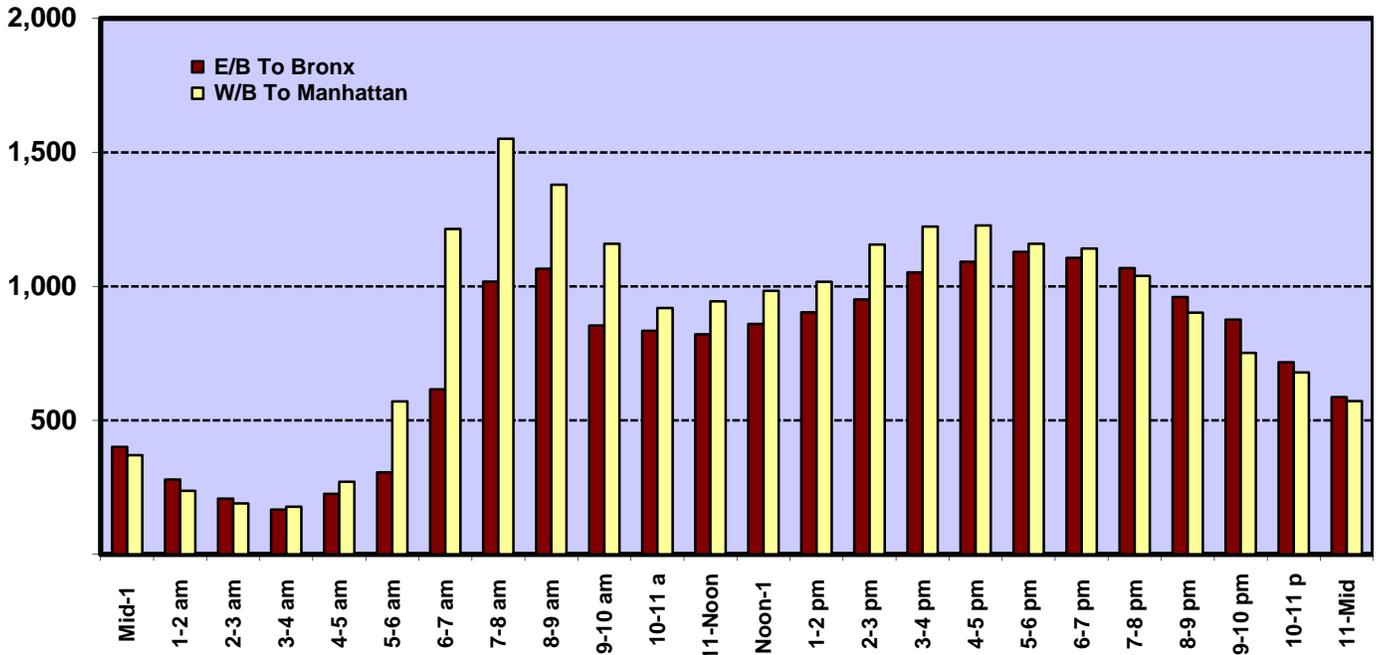
Westbound to Manhattan

FHWA Classes	Commercial Vans,										Total Vehicles	Commercial Vans,										Total Vehicles									
	Autos, Motorcycles SUVs, Family Vans					Taxis, Liveryes, Limos						Panel Trucks, Pickups, Police, Fleet Vehicles					Autos, Motorcycles SUVs, Family Vans						Taxis, Liveryes, Limos					Panel Trucks, Pickups, Police, Fleet Vehicles			
	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	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	2-way Grand Totals
12-1am	325	38	24	4	8	2	320	30	14	4	1	370	320	30	14	4	1	1	320	30	14	4	1	370	320	30	14	4	1	771	
1-2am	227	24	17	4	5	2	206	18	11	1	0	237	206	18	11	1	0	1	206	18	11	1	0	237	206	18	11	1	0	516	
2-3am	159	29	10	1	8	1	155	24	7	2	2	190	155	24	7	2	2	0	155	24	7	2	2	190	155	24	7	2	0	398	
3-4am	126	25	11	1	1	3	152	20	3	2	1	178	152	20	3	2	1	0	152	20	3	2	1	178	152	20	3	2	0	345	
4-5am	168	42	7	1	7	1	211	23	19	14	3	271	211	23	19	14	3	1	211	23	19	14	3	271	211	23	19	14	1	497	
5-6am	243	45	9	3	1	5	419	89	34	18	8	571	419	89	34	18	8	3	419	89	34	18	8	571	419	89	34	18	3	877	
6-7am	483	84	23	7	19	0	771	196	120	67	47	1,214	771	196	120	67	47	13	771	196	120	67	47	1,214	771	196	120	67	13	1,830	
7-8am	832	122	25	20	16	3	1,090	198	121	89	32	1,551	1,090	198	121	89	32	21	1,090	198	121	89	32	1,551	1,090	198	121	89	21	2,569	
8-9am	876	88	23	58	16	5	1,100	112	92	25	43	1,379	1,100	112	92	25	43	7	1,100	112	92	25	43	1,379	1,100	112	92	25	7	2,445	
9-10am	683	81	42	25	21	2	915	96	66	12	63	1,159	915	96	66	12	63	7	915	96	66	12	63	1,159	915	96	66	12	7	2,013	
10-11am	648	88	49	13	33	3	734	66	53	21	39	919	734	66	53	21	39	6	734	66	53	21	39	919	734	66	53	21	6	1,753	
11-12am	616	98	66	8	27	6	722	85	81	18	31	944	722	85	81	18	31	7	722	85	81	18	31	944	722	85	81	18	7	1,765	
12-1pm	653	99	70	8	25	5	775	90	73	13	21	983	775	90	73	13	21	11	775	90	73	13	21	983	775	90	73	13	11	1,843	
1-2pm	686	108	68	10	28	3	767	126	72	21	23	1,017	767	126	72	21	23	8	767	126	72	21	23	1,017	767	126	72	21	8	1,920	
2-3pm	757	105	54	10	24	1	883	139	83	28	20	1,156	883	139	83	28	20	3	883	139	83	28	20	1,156	883	139	83	28	3	2,107	
3-4pm	870	83	50	17	26	6	941	127	82	35	34	1,223	941	127	82	35	34	4	941	127	82	35	34	1,223	941	127	82	35	4	2,275	
4-5pm	922	73	46	25	23	3	987	96	92	36	15	1,227	987	96	92	36	15	1	987	96	92	36	15	1,227	987	96	92	36	1	2,319	
5-6pm	904	109	41	33	34	8	983	87	62	21	6	1,159	983	87	62	21	6	0	983	87	62	21	6	1,159	983	87	62	21	0	2,288	
6-7pm	904	102	58	12	25	5	985	79	54	17	6	1,141	985	79	54	17	6	0	985	79	54	17	6	1,141	985	79	54	17	0	2,247	
7-8pm	874	96	68	9	17	4	899	74	46	17	2	1,039	899	74	46	17	2	1	899	74	46	17	2	1,039	899	74	46	17	1	2,107	
8-9pm	800	92	51	5	8	4	786	63	41	9	3	902	786	63	41	9	3	0	786	63	41	9	3	902	786	63	41	9	0	1,862	
9-10pm	736	80	47	6	6	1	651	63	25	10	3	752	651	63	25	10	3	0	651	63	25	10	3	752	651	63	25	10	0	1,628	
10-11pm	596	65	40	5	6	5	582	44	39	9	5	679	582	44	39	9	5	0	582	44	39	9	5	679	582	44	39	9	0	1,396	
11-12pm	489	49	34	3	8	4	495	39	24	11	3	572	495	39	24	11	3	0	495	39	24	11	3	572	495	39	24	11	0	1,159	
Totals	14,577	1,825	933	288	392	82	16,529	1,984	1,314	500	411	20,833	16,529	1,984	1,314	500	411	95	16,529	1,984	1,314	500	411	20,833	16,529	1,984	1,314	500	95	38,930	
7-10am	2,391	291	90	103	53	10	3,105	406	279	126	138	4,089	3,105	406	279	126	138	35	3,105	406	279	126	138	4,089	3,105	406	279	126	35	7,027	
10am-1pm	1,917	285	185	29	85	14	2,231	241	207	52	91	2,846	2,231	241	207	52	91	24	2,231	241	207	52	91	2,846	2,231	241	207	52	24	5,361	
1-4pm	2,313	296	172	37	78	10	2,906	392	237	84	77	3,396	2,906	392	237	84	77	15	2,906	392	237	84	77	3,396	2,906	392	237	84	15	6,302	
4-7pm	2,730	284	145	70	82	16	3,327	262	208	74	27	3,527	3,327	262	208	74	27	1	3,327	262	208	74	27	3,527	3,327	262	208	74	1	6,854	
7am-7pm	9,351	1,156	592	239	298	50	10,882	1,301	931	336	333	13,858	10,882	1,301	931	336	333	75	10,882	1,301	931	336	333	13,858	10,882	1,301	931	336	75	25,544	
6-10am	2,874	375	113	110	72	10	3,876	602	399	193	185	5,303	3,876	602	399	193	185	48	3,876	602	399	193	185	5,303	3,876	602	399	193	48	8,857	
3-7pm	3,600	367	195	87	108	22	4,379	389	290	109	61	5,303	4,379	389	290	109	61	5	4,379	389	290	109	61	5,303	4,379	389	290	109	5	9,129	
6am-7pm	9,834	1,240	615	246	317	50	11,653	1,497	1,051	403	380	15,072	11,653	1,497	1,051	403	380	88	11,653	1,497	1,051	403	380	15,072	11,653	1,497	1,051	403	88	27,374	

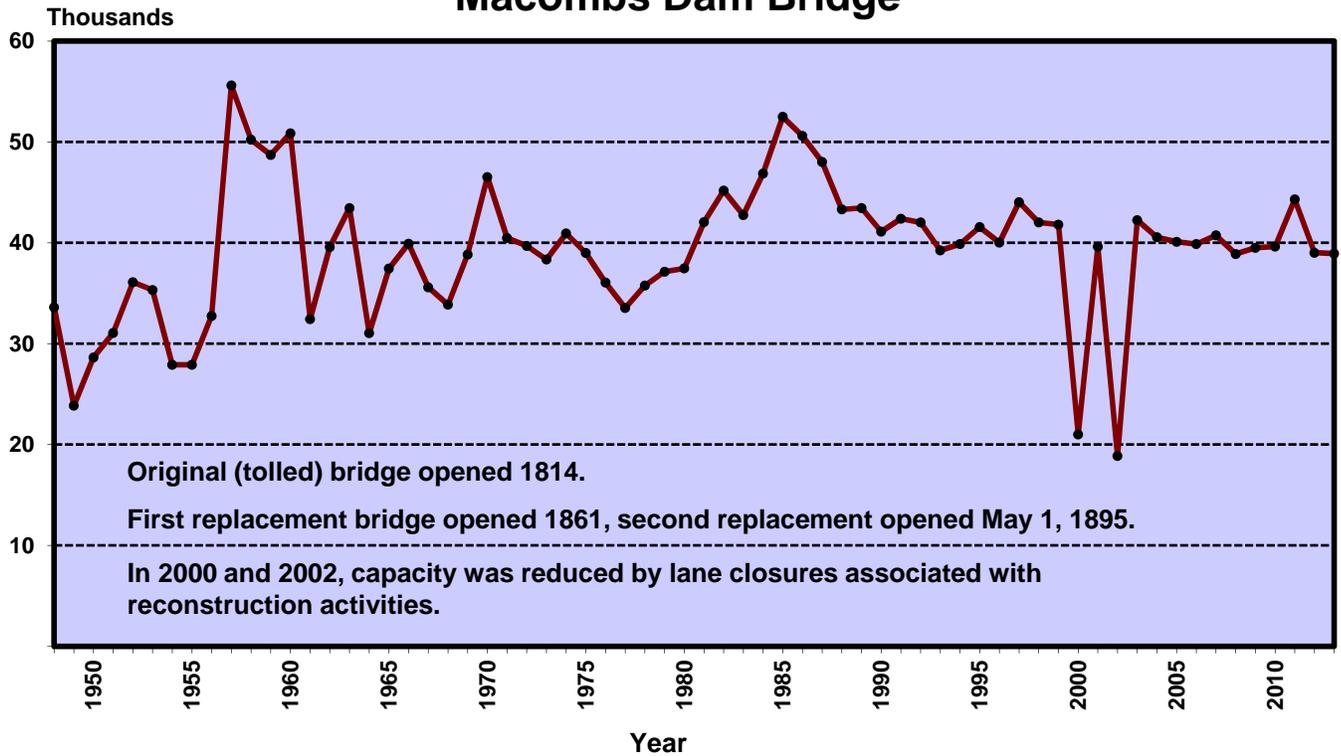
Based on October 2013 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Macombs Dam Bridge ~ 2013



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



Hourly Vehicular Volumes Madison Avenue Bridge - 2013

Eastbound to Bronx

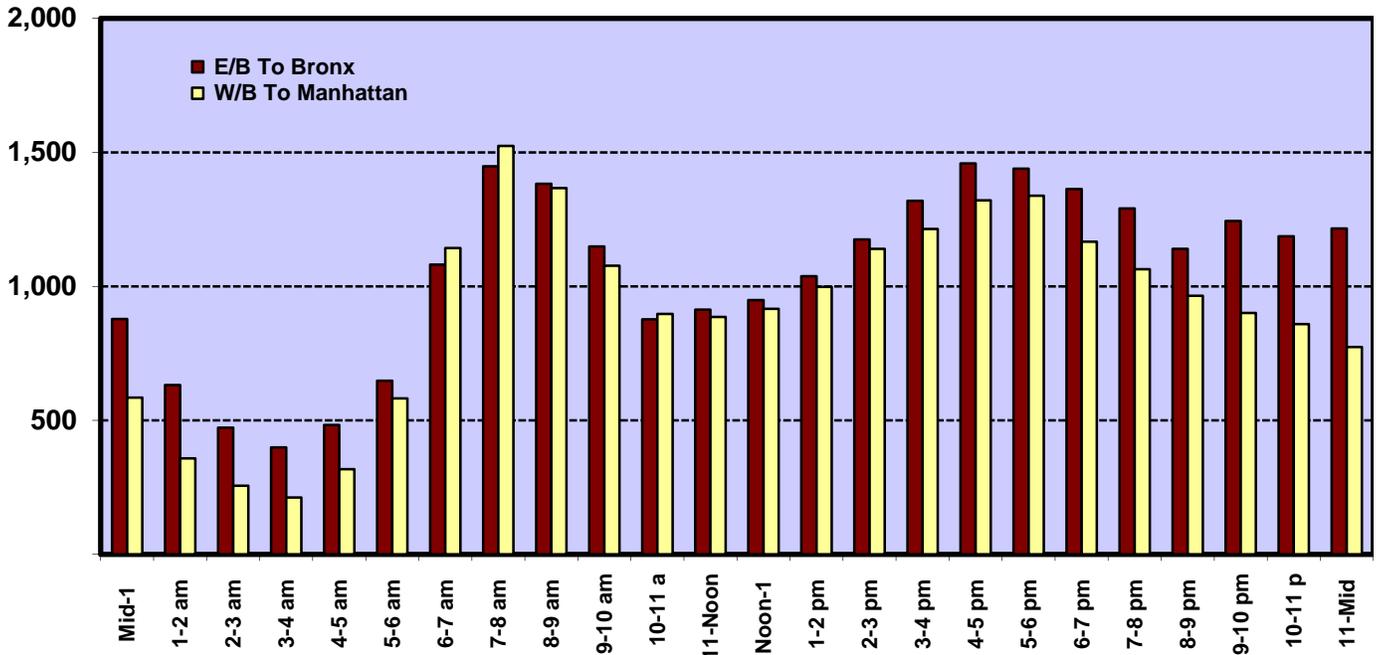
Westbound to Manhattan

FHWA Classes	Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles							Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles							2-way Grand Totals				
	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							
12-1am	705	119	24	14	11	878	1, 2, 3	2	2 & 3	4	5-7	8-13	533	24	13	6	9	0	585
1-2am	439	142	18	6	27	632							312	32	2	2	8	2	358
2-3am	322	113	11	1	26	473							226	18	2	0	6	4	256
3-4am	260	91	23	1	16	399							144	41	16	0	7	4	212
4-5am	317	98	26	1	28	483							212	55	25	3	20	3	318
5-6am	505	67	25	3	48	648							414	17	21	21	52	4	582
6-7am	904	72	40	13	52	1,081							733	110	51	149	91	9	1,143
7-8am	1,252	46	33	49	64	1,448							1,190	98	95	72	64	5	1,524 **
8-9am	1,069	89	52	123	47	1,383							1,066	41	140	22	95	3	1,367
9-10am	715	225	97	54	46	1,449							797	34	115	34	94	3	1,077
10-11am	573	133	82	26	62	877							677	33	93	40	53	1	897
11-12am	667	87	88	19	49	913							682	25	110	20	48	1	886
12-1pm	634	114	107	29	63	949							738	16	63	40	57	2	916
1-2pm	779	71	90	23	75	1,038							811	20	49	55	62	1	998
2-3pm	907	57	113	21	77	1,175							902	26	88	84	37	3	1,140
3-4pm	952	106	140	60	58	1,319							1,054	23	76	39	22	0	1,214
4-5pm	1,040	181	144	53	38	1,459 **							1,203	54	16	36	12	0	1,321
5-6pm	1,210	56	107	34	25	1,439							1,192	106	6	25	9	0	1,338
6-7pm	1,210	33	61	28	31	1,363							1,053	52	26	23	11	2	1,167
7-8pm	1,138	60	55	19	18	1,291							976	32	23	29	3	1	1,064
8-9pm	1,012	73	32	13	9	1,140							917	22	12	6	7	1	965
9-10pm	1,096	92	35	10	11	1,244							837	11	29	14	9	1	901
10-11pm	1,011	124	29	10	12	1,187							771	35	30	13	8	2	859
11-12pm	1,049	98	32	15	21	1,216							720	24	9	15	6	0	774
Totals	19,773	2,347	1,464	625	914	25,184	18,160	1,006	1,106	748	790	52	18,160	1,006	1,106	748	790	52	21,862
7-10am	3,036	360	182	226	157	3,980	3,053	173	350	128	253	11	3,053	173	350	128	253	11	3,968
10am-1pm	1,874	334	277	74	174	2,739	2,097	74	266	100	158	4	2,097	74	266	100	158	4	2,699
1-4pm	2,638	234	343	104	210	3,532	2,767	69	213	178	121	4	2,767	69	213	178	121	4	3,352
4-7pm	3,467	270	312	115	94	4,261	3,448	212	48	84	32	2	3,448	212	48	84	32	2	3,826
7am-7pm	11,015	1,198	1,114	519	635	14,512	11,365	528	877	490	564	21	11,365	528	877	490	564	21	13,845
6-10am	3,940	432	222	239	209	5,061	3,786	283	401	277	344	20	3,786	283	401	277	344	20	5,111
3-7pm	4,419	376	452	175	152	5,580	4,502	235	124	123	54	2	4,502	235	124	123	54	2	5,040
6am-7pm	11,919	1,270	1,154	532	687	15,593	12,098	638	928	639	655	30	12,098	638	928	639	655	30	14,988

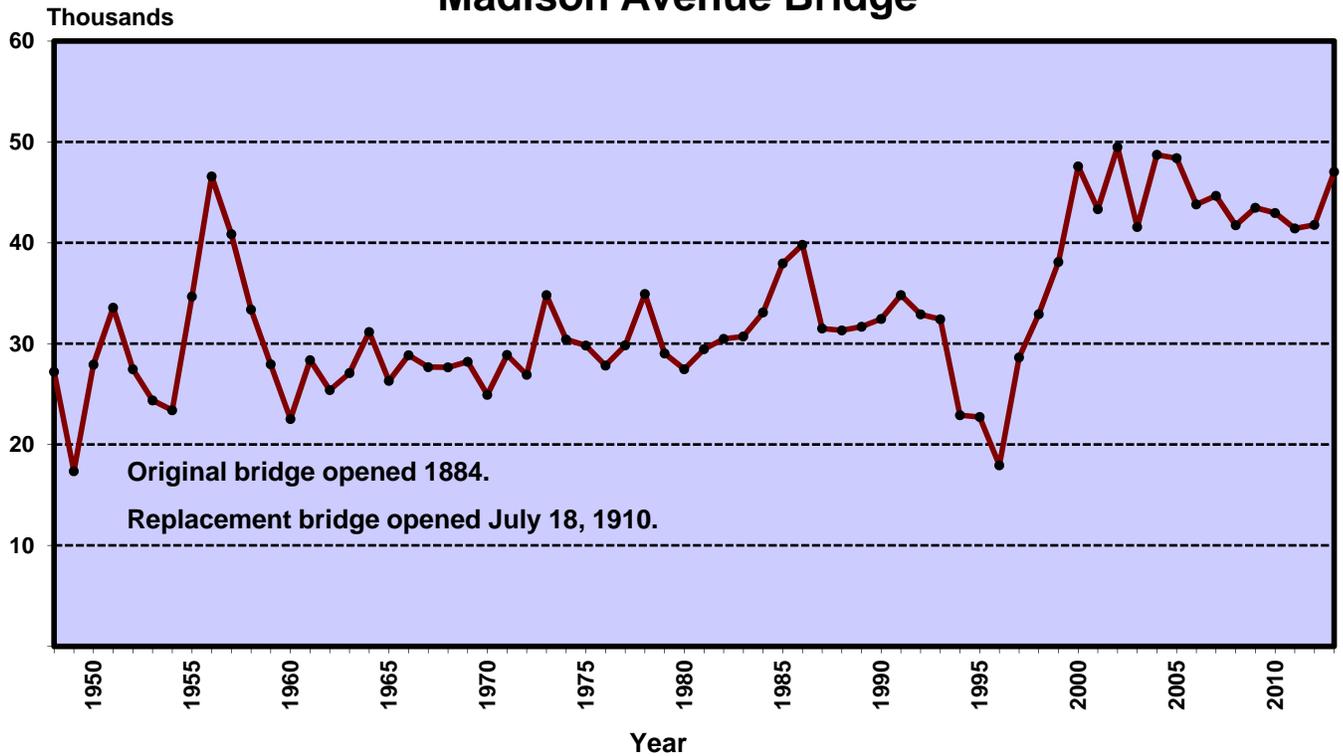
Based on October 2013 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Madison Avenue Bridge ~ 2013



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



Hourly Vehicular Volumes

Third Avenue Bridge - 2013

Northbound to Bronx

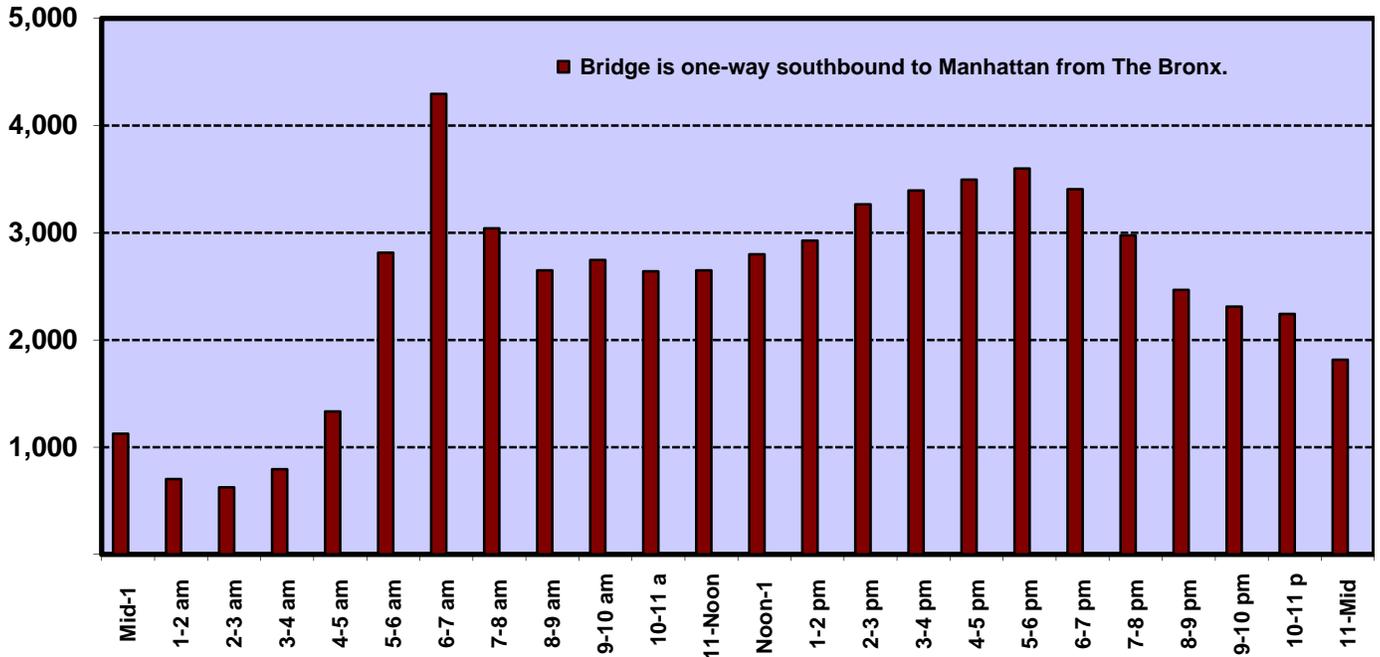
Southbound to Manhattan

FHWA Classes	Northbound to Bronx					Southbound to Manhattan					Grand Totals			
	Autos, Motorcycles SUVs, Family Vans	Taxis, Liveries, Limos	Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles	Buses	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	Autos, Motorcycles SUVs, Family Vans	Taxis, Liveries, Limos	Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles		Buses	Single Unit Trucks	Multiple Unit Trucks
	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13		1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	
12-1am	890	172	22	3	35	4		890	172	22	3	35	4	1,126
1-2am	494	134	20	2	47	6		494	134	20	2	47	6	703
2-3am	374	176	37	1	33	4		374	176	37	1	33	4	625
3-4am	425	222	43	0	97	7		425	222	43	0	97	7	794
4-5am	817	209	79	4	205	20		817	209	79	4	205	20	1,334
5-6am	2,031	288	171	17	268	39		2,031	288	171	17	268	39	2,814
6-7am	3,213	213	302	177	358	33		3,213	213	302	177	358	33	4,296
7-8am	2,273	187	290	95	182	14		2,273	187	290	95	182	14	3,041
8-9am	2,023	89	360	20	152	6		2,023	89	360	20	152	6	2,650
9-10am	1,997	206	338	25	171	9		1,997	206	338	25	171	9	2,746
10-11am	1,904	282	297	26	122	10		1,904	282	297	26	122	10	2,641
11-12am	1,954	261	259	28	131	17		1,954	261	259	28	131	17	2,650
12-1pm	2,110	215	283	63	120	8		2,110	215	283	63	120	8	2,799
1-2pm	2,268	188	215	136	114	6		2,268	188	215	136	114	6	2,927
2-3pm	2,572	288	180	116	105	4		2,572	288	180	116	105	4	3,265
3-4pm	2,925	246	112	57	50	4		2,925	246	112	57	50	4	3,394
4-5pm	3,007	313	94	30	46	6		3,007	313	94	30	46	6	3,496
5-6pm	3,012	330	176	28	43	10		3,012	330	176	28	43	10	3,599
6-7pm	2,968	268	106	21	38	6		2,968	268	106	21	38	6	3,407
7-8pm	2,587	259	80	11	32	7		2,587	259	80	11	32	7	2,976
8-9pm	2,166	205	59	6	28	3		2,166	205	59	6	28	3	2,467
9-10pm	2,017	174	62	2	55	1		2,017	174	62	2	55	1	2,311
10-11pm	1,919	217	58	1	44	4		1,919	217	58	1	44	4	2,243
11-12pm	1,492	234	36	5	40	9		1,492	234	36	5	40	9	1,816
Totals	47,438	5,376	3,679	874	2,516	237		47,438	5,376	3,679	874	2,516	237	60,120
7-10am	6,293	482	988	140	505	29		6,293	482	988	140	505	29	8,437
10am-1pm	5,968	758	839	117	373	35		5,968	758	839	117	373	35	8,090
1-4pm	7,765	722	507	309	269	14		7,765	722	507	309	269	14	9,586
4-7pm	8,987	911	376	79	127	22		8,987	911	376	79	127	22	10,502
7am-7pm	29,013	2,873	2,710	645	1,274	100		29,013	2,873	2,710	645	1,274	100	36,615
6-10am	9,506	695	1,290	317	863	62		9,506	695	1,290	317	863	62	12,733
3-7pm	11,912	1,157	488	136	177	26		11,912	1,157	488	136	177	26	13,896
6am-7pm	32,226	3,086	3,012	822	1,632	133		32,226	3,086	3,012	822	1,632	133	40,911

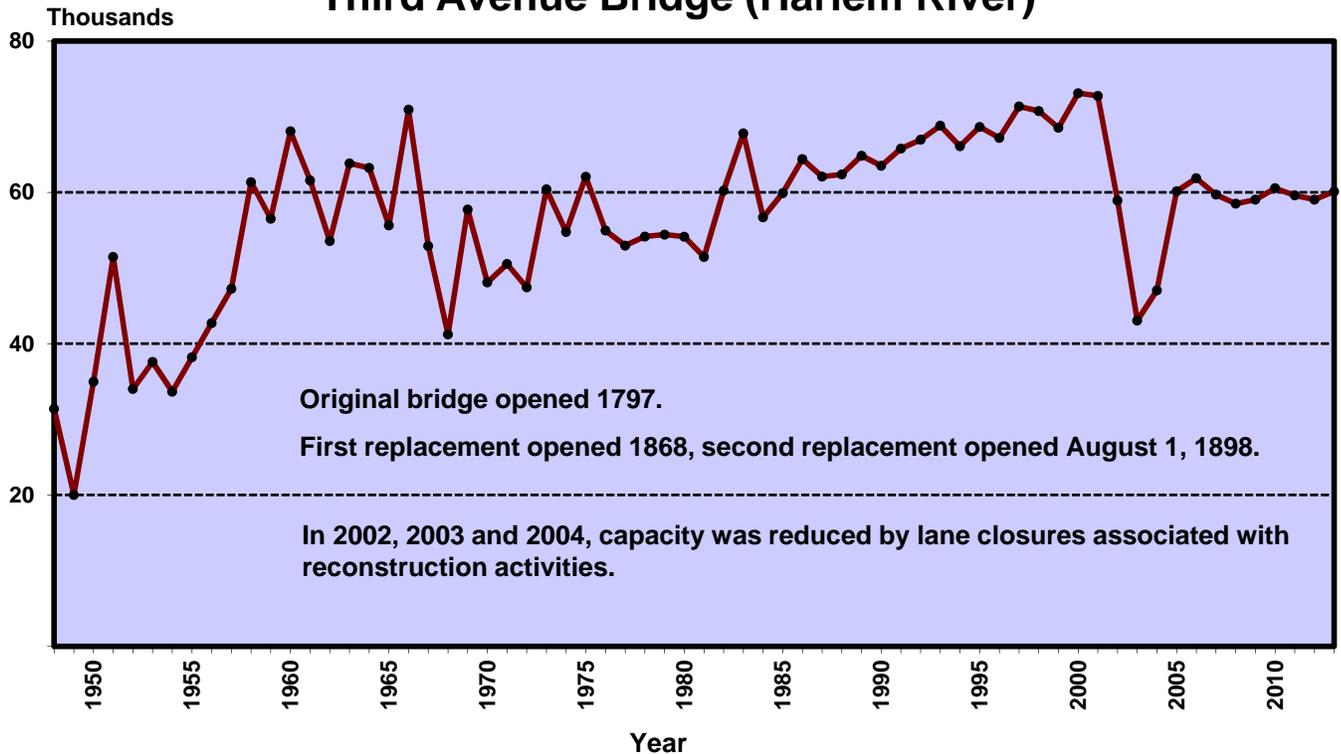
Based on October 2013 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Third Avenue Bridge (Harlem River) ~ 2013



Average Daily Traffic Volumes Third Avenue Bridge (Harlem River)



Hourly Vehicular Volumes

University Heights Bridge - 2013

Eastbound to Bronx

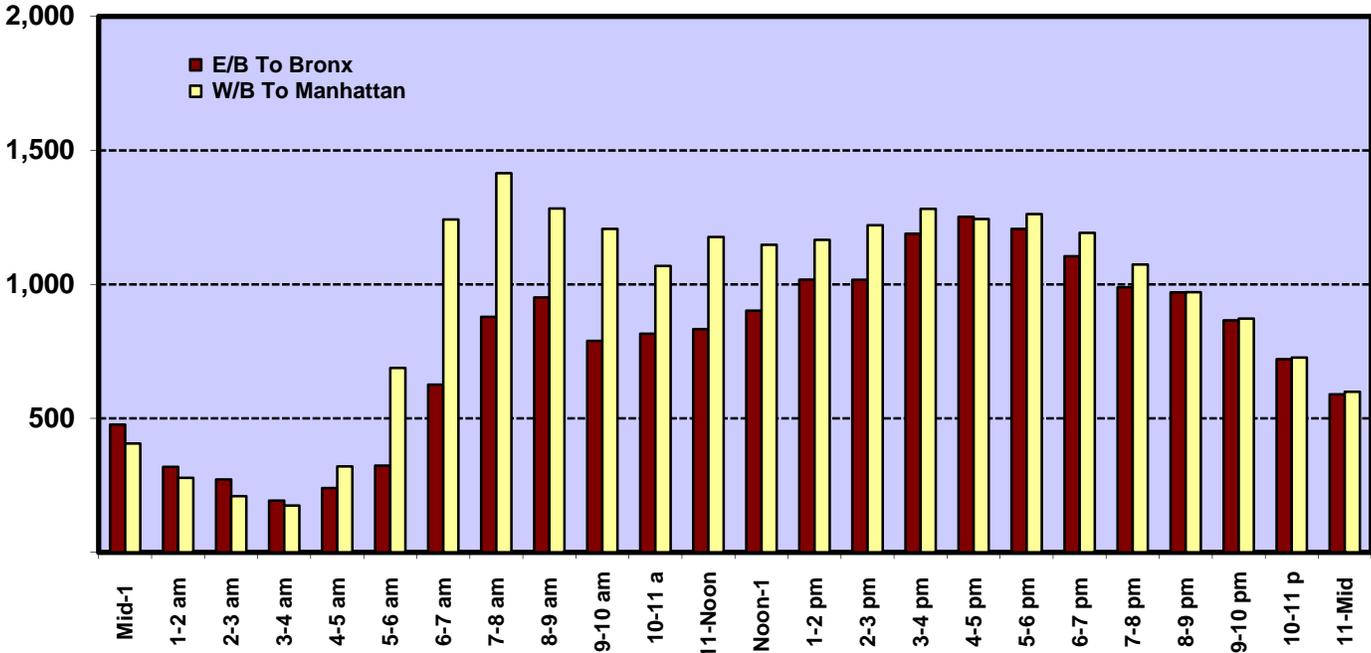
Westbound to Manhattan

FHWA Classes	Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles							Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles							2-way Grand Totals
	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			
12-1am	1, 2, 3	2	2 & 3	4	5-7	8-13	1, 2, 3	2	2 & 3	4	5-7	8-13	883		
1-2am	404	53	5	5	9	1	350	36	6	6	8	0	406		
2-3am	286	21	8	2	2	0	214	46	9	1	8	0	278		
3-4am	242	19	3	3	5	0	151	32	9	2	16	0	210		
4-5am	155	17	7	2	11	1	161	4	2	4	4	0	175		
5-6am	198	10	18	3	5	6	277	21	9	1	13	0	321		
6-7am	277	19	14	4	8	2	580	46	36	8	16	2	688		
7-8am	478	51	18	19	59	1	996	74	80	66	24	2	1,242		
8-9am	710	55	40	31	38	5	1,190	60	58	54	51	2	1,415		
9-10am	738	80	65	36	27	5	1,054	81	77	21	47	3	1,283		
10-11am	541	103	63	21	59	2	883	117	104	28	64	11	1,996		
11-12am	592	84	94	18	24	4	804	110	75	14	64	2	1,069		
12-1pm	639	67	53	15	50	9	958	58	69	22	62	8	1,177		
1-2pm	675	84	63	17	58	5	927	68	61	27	60	5	1,148		
2-3pm	806	67	84	21	29	11	904	105	74	36	46	1	1,166		
3-4pm	796	97	57	22	33	12	964	122	64	26	44	1	1,221		
4-5pm	933	96	90	37	32	1	1,084	66	53	36	41	2	1,282		
5-6pm	1,007	86	78	53	27	1	1,027	90	60	25	41	1	1,244		
6-7pm	974	125	63	24	17	4	1,038	110	71	19	20	0	1,262		
7-8pm	949	91	35	8	20	2	1,009	114	36	16	21	0	1,192		
8-9pm	765	141	51	19	11	2	878	129	37	14	16	0	1,074		
9-10pm	791	123	30	13	12	1	806	105	34	12	13	1	971		
10-11pm	777	53	22	10	4	0	745	90	20	11	6	0	872		
11-12pm	617	72	19	7	6	0	606	93	12	8	7	1	1,448		
Totals	14,863	1,672	989	396	549	76	18,104	1,845	1,072	461	704	43	22,229		
7-10am	1,989	238	168	88	124	12	3,127	258	239	103	162	16	6,524		
10am-1pm	1,906	235	210	50	132	18	2,689	236	205	63	186	15	5,945		
1-4pm	2,535	260	231	80	94	24	2,952	293	191	98	131	4	6,893		
4-7pm	2,930	302	176	85	64	7	3,074	314	167	60	82	1	7,262		
7am-7pm	9,360	1,035	785	303	414	61	11,842	1,101	802	324	561	36	26,624		
6-10am	2,467	289	186	107	183	13	4,123	332	319	169	186	18	8,392		
3-7pm	3,863	398	266	122	96	8	4,158	380	220	96	123	3	9,733		
6am-7pm	9,838	1,086	803	322	473	62	12,838	1,175	882	390	585	38	15,908		

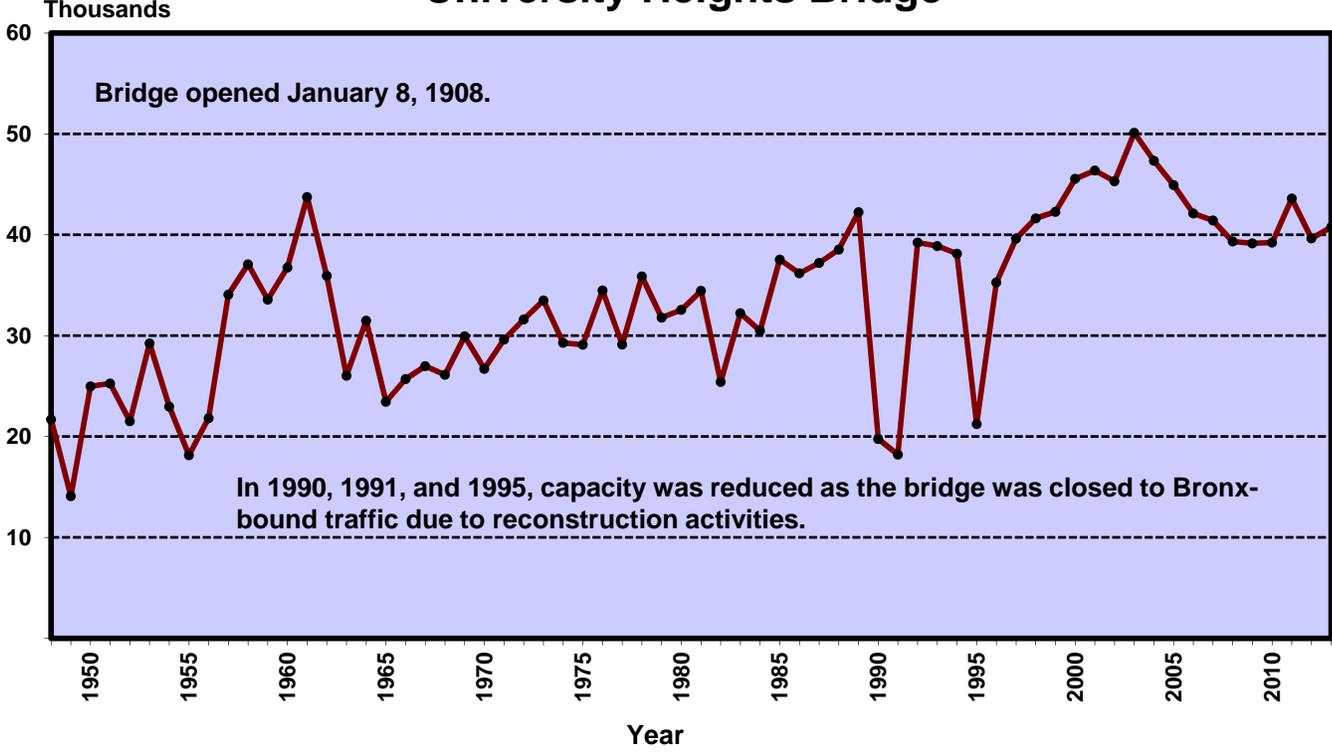
Based on October 2013 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes University Heights Bridge ~ 2013



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



Hourly Vehicular Volumes

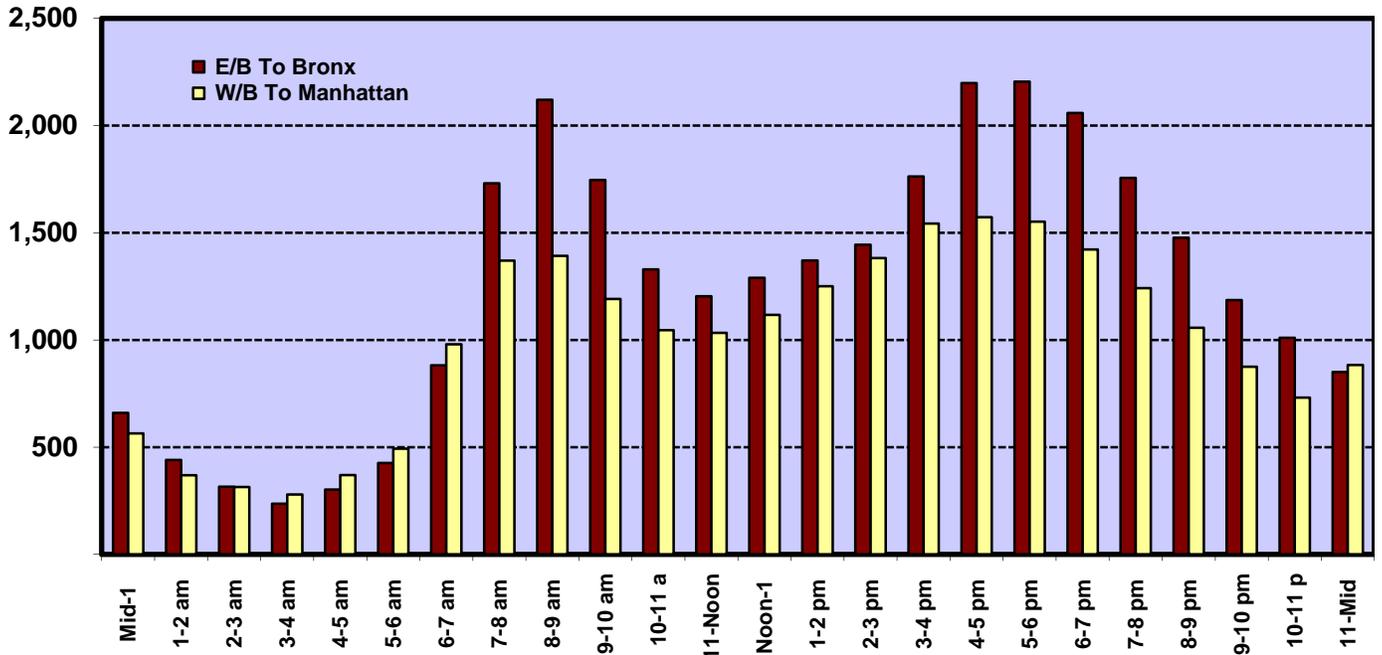
Washington Bridge - 2013

	Eastbound to Bronx						Westbound to Manhattan						2-Way Totals
	Commuter			Commercial			Commuter			Commercial			
	Autos	Buses	Vans	Trucks	Vans	Totals	Autos	Buses	Vans	Trucks	Vans	Totals	
12-1am	---	---	---	---	---	660	---	---	---	---	---	564	1,224
1-2am	---	---	---	---	---	440	---	---	---	---	---	369	809
2-3am	---	---	---	---	---	316	---	---	---	---	---	314	630
3-4am	---	---	---	---	---	236	---	---	---	---	---	279	515
4-5am	---	---	---	---	---	302	---	---	---	---	---	370	672
5-6am	---	---	---	---	---	426	---	---	---	---	---	493	919
6-7am	---	---	---	---	---	882	---	---	---	---	---	980	1,862
7-8am	1,482	57	32	51	109	1,731	1,157	54	103	33	23	1,370	3,101
8-9am	1,776	54	32	95	163	2,120	1,173	64	72	54	29	1,392	3,512
9-10am	1,445	47	31	114	109	1,746	1,035	36	52	40	28	1,191	2,937
10-11am	1,207	36	8	33	45	1,329	954	34	10	26	22	1,046	2,375
11-12am	1,041	25	15	57	66	1,204	901	43	27	28	34	1,033	2,237
12-1pm	1,155	39	17	23	56	1,290	1,046	27	9	20	15	1,117	2,407
1-2pm	1,255	31	5	32	48	1,371	1,171	30	17	19	14	1,251	2,622
2-3pm	1,257	31	23	61	72	1,444	1,193	56	42	51	40	1,382	2,826
3-4pm	1,602	38	11	31	81	1,763	1,393	43	43	43	21	1,543	3,306
4-5pm	1,829	44	55	67	203	2,198	1,338	38	68	83	46	1,573	3,771 **
5-6pm	1,970	37	55	39	104	2,205 **	1,409	28	43	32	40	1,552	3,757
6-7pm	1,891	24	34	26	84	2,059	1,288	35	52	18	29	1,422	3,481
7-8pm	---	---	---	---	---	1,756	---	---	---	---	---	1,242	2,998
8-9pm	---	---	---	---	---	1,477	---	---	---	---	---	1,057	2,534
9-10pm	---	---	---	---	---	1,186	---	---	---	---	---	875	2,061
10-11pm	---	---	---	---	---	1,010	---	---	---	---	---	731	1,741
11-12pm	---	---	---	---	---	851	---	---	---	---	---	883	1,734
Totals	---	---	---	---	---	30,002	---	---	---	---	---	24,029	54,031
7-10am	4,703	158	95	260	381	5,597	3,365	154	227	127	80	3,953	9,550
10am-1pm	3,403	100	40	113	167	3,823	2,901	104	46	74	71	3,196	7,019
1-4pm	4,114	100	39	124	201	4,578	3,757	129	102	113	75	4,176	8,754
4-7pm	5,690	105	144	132	391	6,462	4,035	101	163	133	115	4,547	11,009
7am-7pm	17,910	463	318	629	1,140	20,460	14,058	488	538	447	341	15,872	36,332
6-10am	---	---	---	---	---	6,479	---	---	---	---	---	4,933	11,412
3-7pm	7,292	143	155	163	472	8,225	5,428	144	206	176	136	6,090	14,315
6am-7pm	---	---	---	---	---	21,342	---	---	---	---	---	16,852	38,194

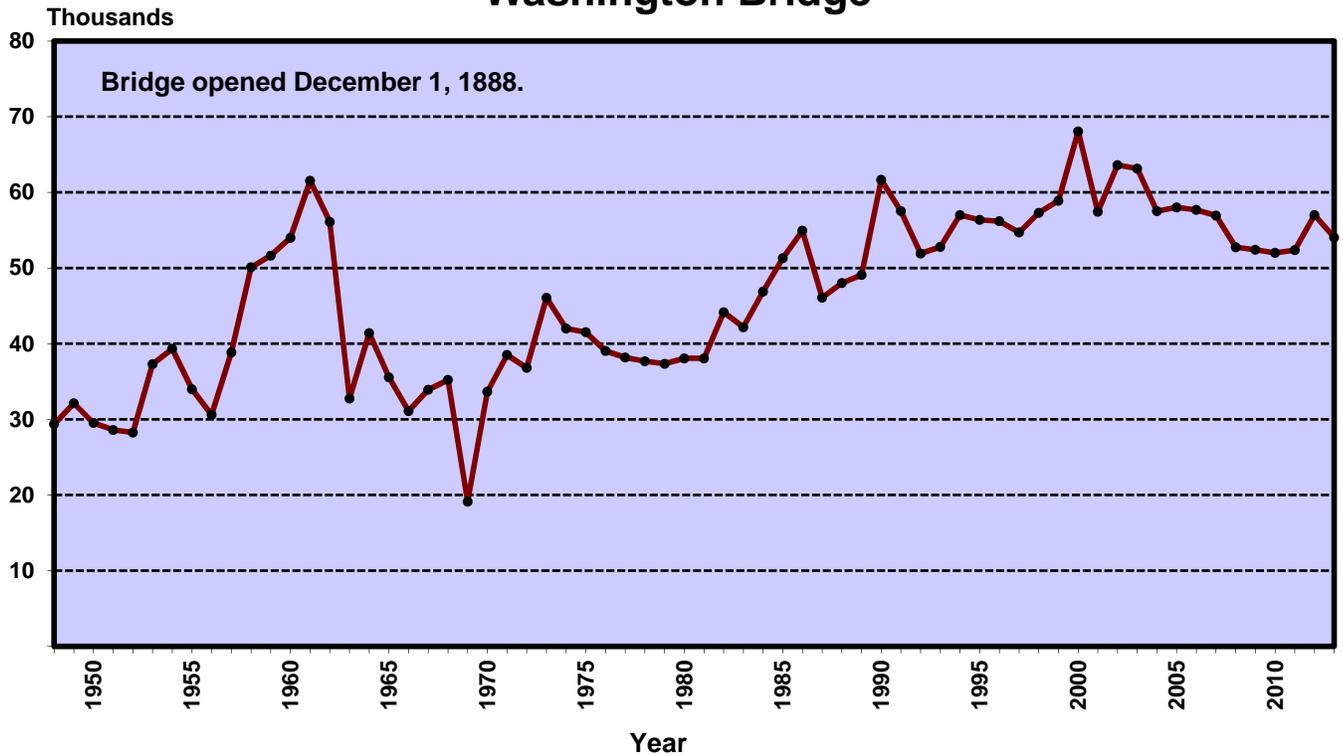
** Peak Volumes

Based on September 1989 Classification Survey Data.

Hourly Vehicular Volumes Washington Bridge ~ 2013



Average Daily Traffic Volumes ~ Total of Both Directions Washington Bridge



Hourly Vehicular Volumes

Willis Avenue Bridge - 2013

Northbound to Bronx

Southbound to Manhattan

FHWA Classes	Northbound to Bronx					Southbound to Manhattan					Grand Totals			
	Autos, SUVs, Family Vans	Taxis, Liveries, Limos	Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles	Buses	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	Autos, Motorcycles SUVs, Family Vans	Taxis, Liveries, Limos	Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles		Buses	Single Unit Trucks	Multiple Unit Trucks
12-1am	1,576	102	63	2	29	9	1,781	1,2,3	2	2 & 3	4	5 - 7	8 - 13	1,781
1-2am							1,062							1,062
2-3am							730							730
3-4am							685							685
4-5am							952							952
5-6am	1,309	94	67	9	52	51	1,582							1,582
6-7am	2,657	84	112	30	94	57	3,034							3,034
7-8am	3,395	96	136	61	102	25	3,815							3,815
8-9am	2,921	113	174	208	121	33	3,570							3,570
9-10am	2,148	99	216	83	157	26	2,729							2,729
10-11am	1,891	104	268	41	185	29	2,518							2,518
11-12am	1,960	86	301	19	204	29	2,599							2,599
12-1pm	2,068	111	282	34	258	37	2,790							2,790
1-2pm	2,255	96	320	39	251	32	2,983							2,983
2-3pm	2,537	65	351	39	233	26	3,251							3,251
3-4pm	3,174	112	366	113	194	27	3,986							3,986
4-5pm	3,396	173	451	159	171	14	4,364							4,364
5-6pm	3,544	105	329	64	121	12	4,175							4,175
6-7pm	3,587	62	228	30	79	9	3,995							3,995
7-8pm	3,240	91	157	17	72	8	3,585							3,585
8-9pm	2,929	86	112	9	49	13	3,198							3,198
9-10pm	2,615	99	79	7	63	15	2,878							2,878
10-11pm	2,455	119	96	6	35	9	2,720							2,720
11-12pm	1,971	120	98	6	35	4	2,234							2,234
Totals	51,628	2,017	4,206	966	2,505	465	65,216							65,216
7-10am	8,464	308	526	352	380	84	10,114							10,114
10am-1pm	5,919	301	851	94	647	95	7,907							7,907
1-4pm	7,966	273	1,037	181	678	85	10,220							10,220
4-7pm	10,527	340	1,008	253	371	35	12,534							12,534
7am-7pm	32,876	1,222	3,422	880	2,076	299	40,775							40,775
6-10am	11,121	392	638	382	474	141	13,148							13,148
3-7pm	13,701	452	1,374	366	565	62	16,520							16,520
6am-7pm	35,533	1,306	3,534	910	2,170	356	43,809							43,809

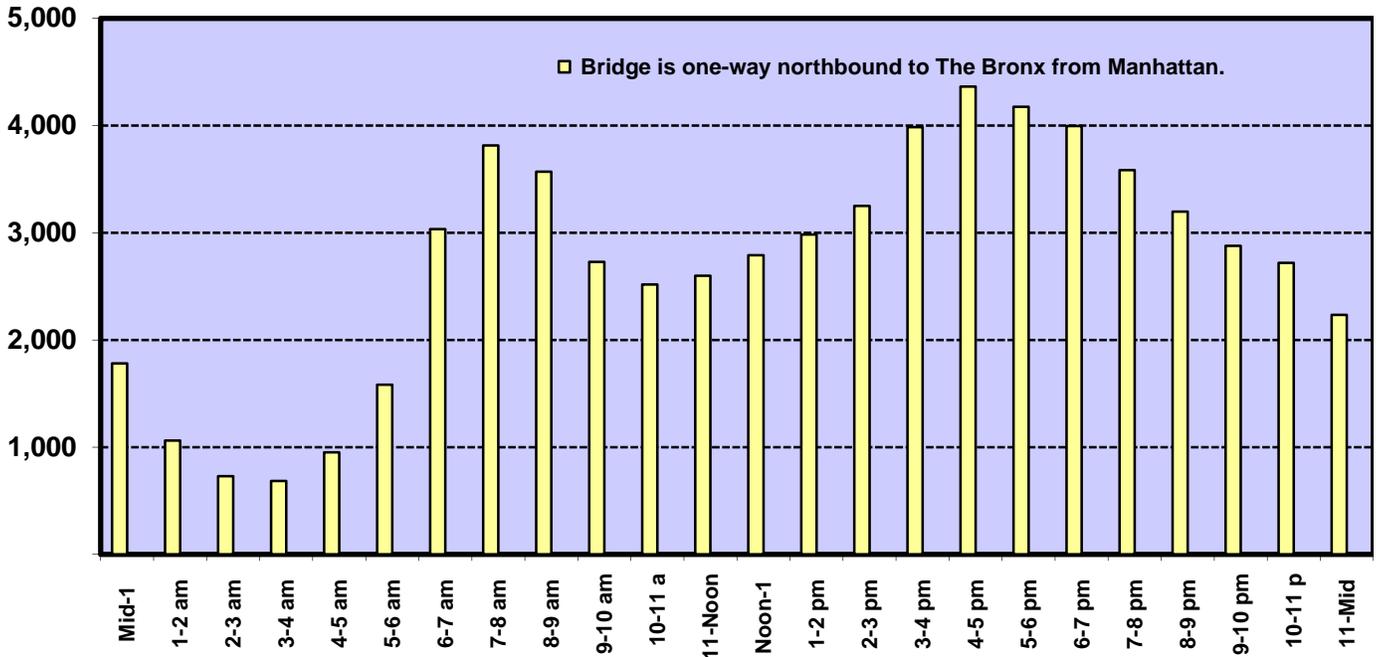
Bridge is 1-way northbound from Manhattan to Bronx.

Bridge Closed for Reconstruction from 1:00 am to 5:00 am

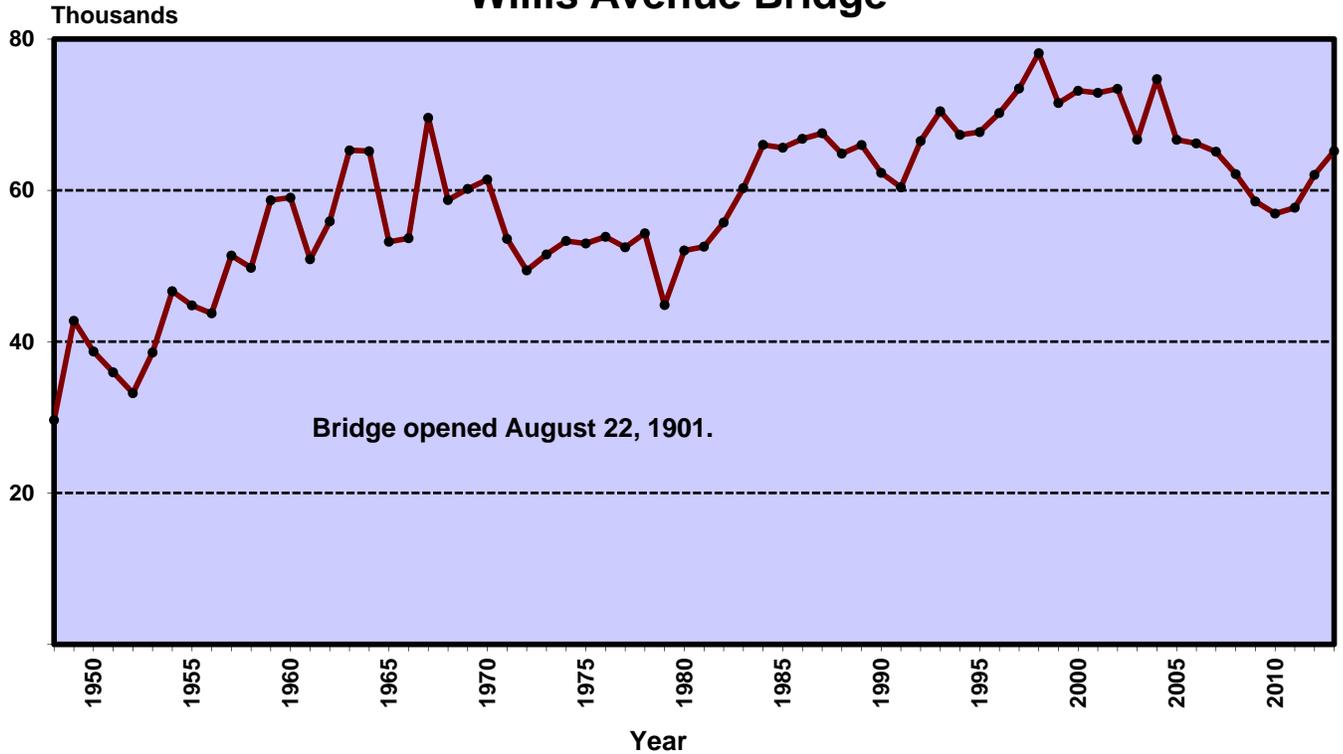
Based on October 2013 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Willis Avenue Bridge ~ 2013



Average Daily Traffic Volumes Willis Avenue Bridge



Hourly Vehicular Volumes 145th Street Bridge - 2013

Eastbound to Bronx

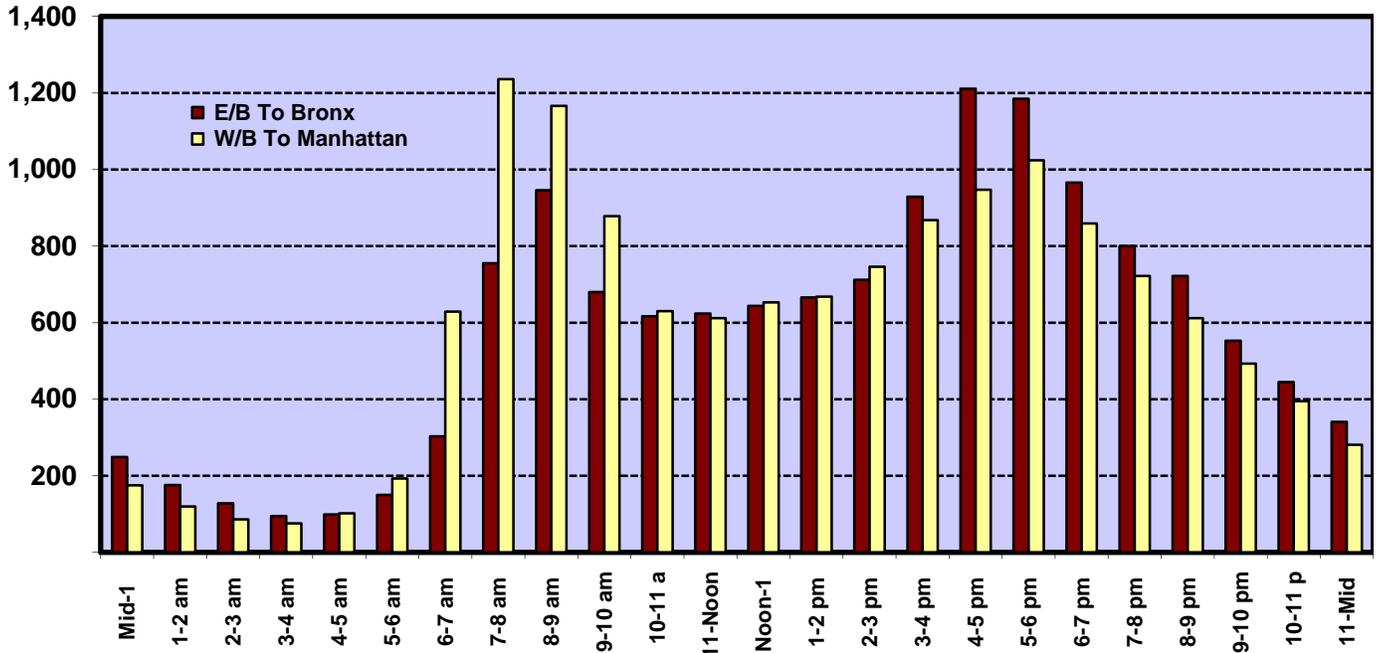
Westbound to Manhattan

FHWA Classes	Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles							Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles							2-way Grand Totals
	Autos, SUVs, Family Vans	Taxis, Liveries, Limos	Buses	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles		Autos, SUVs, Family Vans	Taxis, Liveries, Limos	Buses	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles		
12-1am	169	67	5	0	1	249		113	51	4	2	0	175		
1-2am	75	87	8	1	1	176		62	55	1	1	0	120		
2-3am	52	69	0	4	0	128		32	51	1	2	0	86		
3-4am	41	45	1	4	3	95		33	34	4	1	1	76		
4-5am	42	40	11	2	2	99		46	34	12	5	2	102		
5-6am	92	43	5	7	0	150		128	39	7	10	2	193		
6-7am	211	58	11	17	1	303		319	109	34	64	8	629		
7-8am	541	156	26	21	1	755		760	253	90	46	22	1,236		
8-9am	639	165	50	68	3	946		692	237	153	45	21	1,166		
9-10am	388	207	34	19	4	680		537	180	85	53	6	878		
10-11am	342	180	48	12	2	617		378	135	64	31	4	630		
11-12am	365	150	61	12	6	624		367	147	57	23	7	612		
12-1pm	352	150	77	12	7	644		424	116	78	14	7	653		
1-2pm	402	129	66	15	2	666		415	127	59	41	5	668		
2-3pm	425	161	61	13	3	712		521	112	43	25	4	746		
3-4pm	586	184	67	58	1	929		674	106	44	36	2	868		
4-5pm	728	198	121	122	5	1,211	**	799	89	28	5	2	947		
5-6pm	824	233	65	31	1	1,185		801	166	27	13	1	1,024		
6-7pm	812	72	44	11	3	966		652	167	17	9	1	859		
7-8pm	661	81	37	11	1	800		599	89	19	5	2	722		
8-9pm	627	40	30	12	0	722		498	88	12	5	3	612		
9-10pm	357	173	15	6	0	553		370	94	14	6	1	493		
10-11pm	287	134	12	7	0	445		292	82	9	5	1	395		
11-12pm	227	91	11	6	0	341		220	49	6	1	3	281		
Totals	9,245	2,913	866	473	47	13,996		9,732	2,610	868	425	105	14,171		
7-10am	1,568	528	110	108	8	2,381		1,989	670	328	144	49	3,280		
10am-1pm	1,059	480	186	36	15	1,885		1,169	398	199	68	18	1,895		
1-4pm	1,413	474	194	86	6	2,307		1,610	345	146	72	11	2,282		
4-7pm	2,364	503	230	164	9	3,362		2,252	422	72	34	4	2,830		
7am-7pm	6,404	1,985	720	394	38	9,935		7,020	1,835	745	318	82	10,287		
6-10am	1,779	586	121	125	9	2,684		2,308	779	362	208	57	3,909		
3-7pm	2,950	687	297	222	10	4,291		2,926	528	116	40	6	3,698		
6am-7pm	6,615	2,043	731	411	39	10,238		7,339	1,944	779	382	90	10,916		

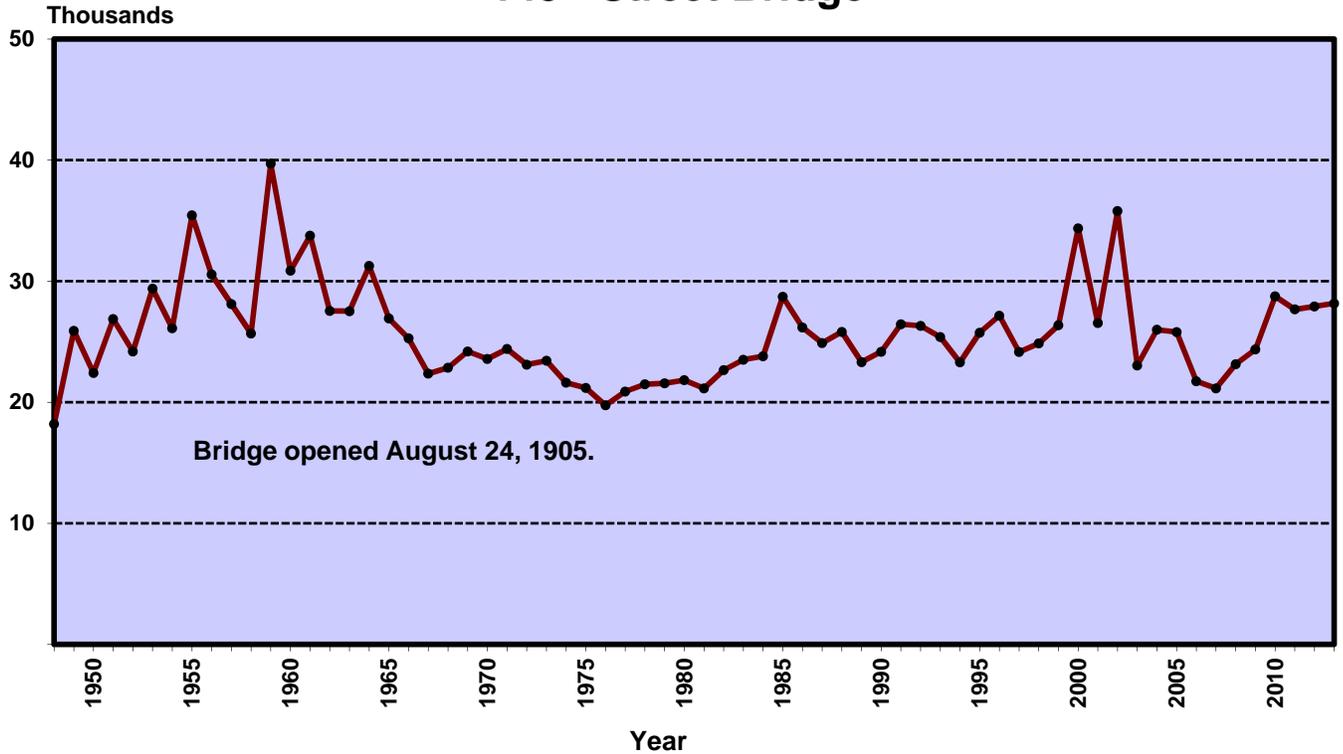
Based on October 2013 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes 145th Street Bridge ~ 2013



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



MTABT Facilities



Robert F. Kennedy Memorial Bridge

**MTABT Manhattan Facilities ~ Average Daily Traffic Volumes
1948 - 2013**

Year	Hugh L. Carey Tunnel (Brooklyn- Battery Tunnel)		Robert F. Kennedy Memorial Bridge Manh. Plz. (Triborough Bridge)		Manhattan Totals
	Henry Hudson Bridge	Queens- Midtown Tunnel	Queens- Midtown 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

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.

Hourly Vehicular Volumes

Metropolitan Transportation Authority Bridges & Tunnels 2013

	Henry Hudson Bridge		Hugh L. Carey Tunnel (Brooklyn-Battery Tunnel)		Queens-Midtown Tunnel		Robert F. Kennedy Memorial Bridge (Triborough Bridge)		Totals	
	S/B	N/B	N/B	S/B	W/B	E/B	W/B	E/B	Entering Manhattan	Leaving Manhattan
12-1am	102	292	179	556	424	684	452	421	1,157	1,953
1-2am	50	113	90	233	176	376	194	229	510	951
2-3am	41	71	53	109	106	223	111	150	311	553
3-4am	41	44	72	70	126	173	126	154	365	441
4-5am	114	46	194	70	281	380	254	403	843	899
5-6am	504	106	851	133	1,101	764	998	978	3,454	1,981
6-7am	2,324	479	2,170	390	2,536	1,262	3,208	1,574	10,238	3,705
7-8am	3,491**	1,215	3,089	641	3,663	1,351	4,425**	1,960	14,668**	5,167
8-9am	3,056	1,606	3,226**	738	4,172**	1,222	4,094	2,028	14,548	5,594
9-10am	2,163	1,011	2,888	754	3,969	1,218	3,621	1,923	12,641	4,906
10-11am	1,824	890	2,055	797	2,841	1,508	3,050	1,902	9,770	5,097
11-12am	1,604	944	1,619	865	2,590	1,725	2,709	1,962	8,522	5,496
12-1pm	1,454	994	1,427	1,051	2,285	2,084	2,437	2,102	7,603	6,231
1-2pm	1,339	1,162	1,313	1,225	2,242	2,411	2,287	2,264	7,181	7,062
2-3pm	1,539	1,474	1,420	1,572	2,515	2,768	2,583	2,591	8,057	8,405
3-4pm	2,021	1,973	1,516	1,974	2,710	2,799	3,148	3,021	9,395	9,767
4-5pm	2,245	2,334	1,598	2,282	2,871	2,958	3,083	3,142**	9,797	10,716
5-6pm	2,535	2,587**	1,608	2,326	2,983	2,967**	3,323	3,036	10,449	10,916**
6-7pm	2,309	2,569	1,627	2,394**	2,630	2,765	3,180	2,493	9,746	10,221
7-8pm	1,267	2,038	1,196	1,908	2,105	2,257	2,453	2,134	7,021	8,337
8-9pm	838	1,486	744	1,523	1,625	2,120	1,791	1,828	4,998	6,957
9-10pm	654	1,412	545	1,165	1,461	2,182	1,600	1,595	4,260	6,354
10-11pm	430	1,350	524	1,058	1,142	1,925	1,315	1,326	3,411	5,659
11-12pm	242	704	414	893	835	1,226	972	756	2,463	3,579
Totals	32,187	26,900	30,418	24,727	47,389	39,348	51,414	39,972	161,408	130,947
7-10am	8,710	3,832	9,203	2,133	11,804	3,791	12,140	5,911	41,857	15,667
10am-1pm	4,882	2,828	5,101	2,713	7,716	5,317	8,196	5,966	25,895	16,824
1-4pm	4,899	4,609	4,249	4,771	7,467	7,978	8,018	7,876	24,633	25,234
4-7pm	7,089	7,490	4,833	7,002	8,484	8,690	9,586	8,671	29,992	31,853
7am-7pm	25,580	18,759	23,386	16,619	35,471	25,776	37,940	28,424	122,377	89,578
6-10am	11,034	4,311	11,373	2,523	14,340	5,053	15,348	7,485	52,095	19,372
3-7pm	9,110	9,463	6,349	8,976	11,194	11,489	12,734	11,692	39,387	41,620
6am-7pm	27,904	19,238	25,556	17,009	38,007	27,038	41,148	29,998	132,615	93,283

** Peak Volumes

Hourly Vehicular Volumes

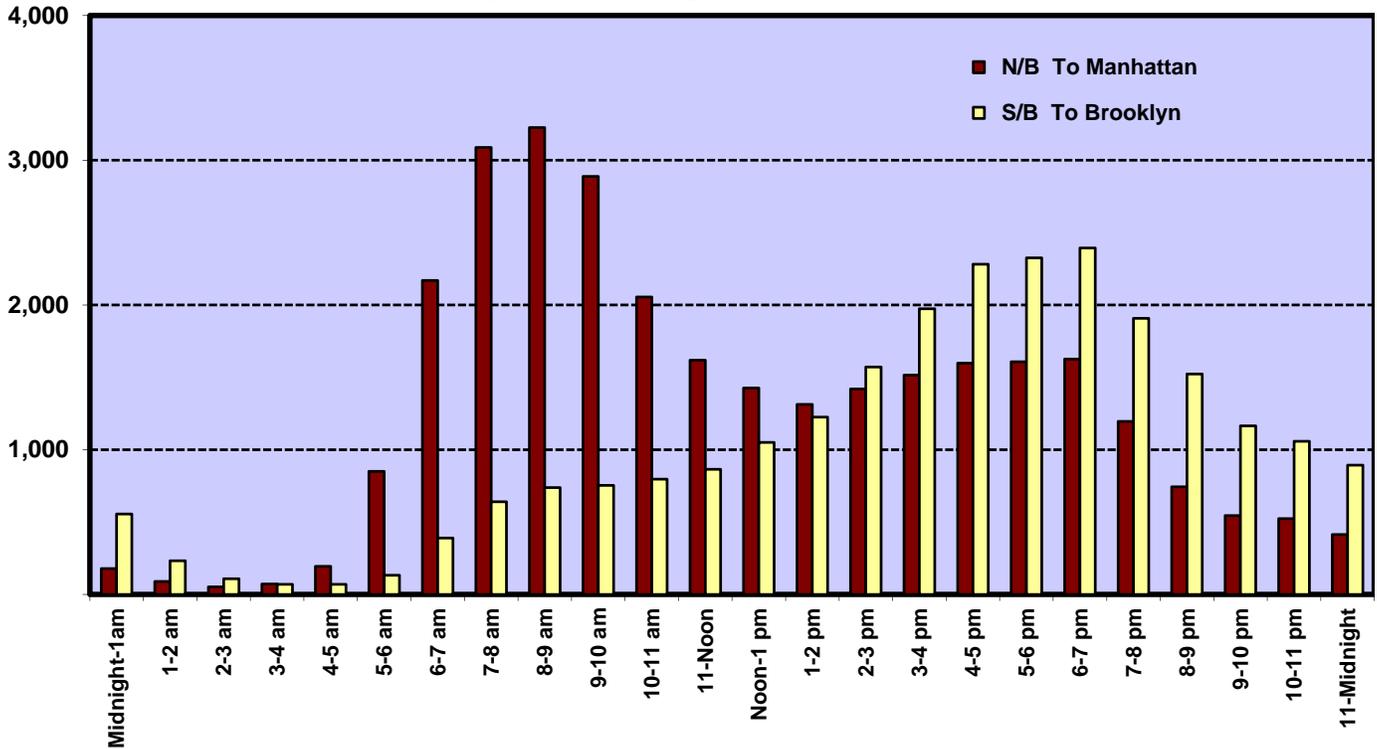
Hugh L. Carey Tunnel - 2013 (Formerly Brooklyn-Battery Tunnel)

FHWA Classes	Northbound to Manhattan										Southbound to Brooklyn										2-Way Grand Totals			
	Commuter Vans					Commuter Vans					Commuter Vans					Commuter Vans								
	Autos & Motorcycles		Pickups Large SUVs		Buses	Single Unit Trucks	Tractor Trailers	Total Vehicles	Autos & Motorcycles		Pickups Large SUVs		Buses	Single Unit Trucks	Tractor Trailers	Total Vehicles	Autos & Motorcycles		Pickups Large SUVs			Buses	Single Unit Trucks	Tractor Trailers
	1 & 2	3	4	5-7	8-13				1 & 2	3	4	5-7	8-13				1 & 2	3	4	5-7	8-13			
12-1am	153	6	10	10	0	179			506	11	33	6	0	556			506	11	33	6	0	556		
1-2am	79	4	6	1	0	90			222	0	10	1	0	233			222	0	10	1	0	233		
2-3am	48	0	3	2	0	53			104	1	3	1	0	109			104	1	3	1	0	109		
3-4am	61	1	7	3	0	72			68	0	0	2	0	70			68	0	0	2	0	70		
4-5am	125	7	48	14	0	194			65	0	4	1	0	70			65	0	4	1	0	70		
5-6am	765	9	68	9	0	851			119	1	9	4	0	133			119	1	9	4	0	133		
6-7am	1,937	13	195	25	0	2,170			290	6	82	12	0	390			290	6	82	12	0	390		
7-8am	2,712	16	320	41	0	3,089			462	7	155	17	0	641			462	7	155	17	0	641		
8-9am	2,820	16	351	39	0	3,226	**		539	6	175	18	0	738			539	6	175	18	0	738		
9-10am	2,636	21	188	43	0	2,888			578	7	148	21	0	754			578	7	148	21	0	754		
10-11am	1,870	25	104	55	1	2,055			696	9	75	17	0	797			696	9	75	17	0	797		
11-12am	1,500	14	67	37	1	1,619			781	8	59	17	0	865			781	8	59	17	0	865		
12-1pm	1,312	15	69	30	1	1,427			967	12	53	19	0	1,051			967	12	53	19	0	1,051		
1-2pm	1,186	12	81	34	0	1,313			1,105	13	79	28	0	1,225			1,105	13	79	28	0	1,225		
2-3pm	1,276	11	108	25	0	1,420			1,438	16	90	28	0	1,572			1,438	16	90	28	0	1,572		
3-4pm	1,354	6	143	13	0	1,516			1,800	13	137	24	0	1,974			1,800	13	137	24	0	1,974		
4-5pm	1,393	5	188	11	1	1,598			2,069	7	187	19	0	2,282			2,069	7	187	19	0	2,282		
5-6pm	1,434	3	161	7	3	1,608			2,068	6	238	13	1	2,326	**		2,068	6	238	13	1	2,326	**	
6-7pm	1,510	5	102	9	1	1,627			2,198	6	178	11	1	2,394	**		2,198	6	178	11	1	2,394	**	
7-8pm	1,136	1	55	4	0	1,196			1,798	5	97	8	0	1,908			1,798	5	97	8	0	1,908		
8-9pm	707	4	28	5	0	744			1,423	7	85	8	0	1,523			1,423	7	85	8	0	1,523		
9-10pm	518	1	24	2	0	545			1,100	4	49	12	0	1,165			1,100	4	49	12	0	1,165		
10-11pm	496	1	24	3	0	524			1,016	5	29	8	0	1,058			1,016	5	29	8	0	1,058		
11-12pm	366	0	35	13	0	414			842	7	35	9	0	893			842	7	35	9	0	893		
Totals	27,394	196	2,385	435	8	30,418			22,254	157	2,010	304	2	24,727			22,254	157	2,010	304	2	24,727		
7-10am	8,168	53	859	123	0	9,203			1,579	20	478	56	0	2,133			1,579	20	478	56	0	2,133		
10am-1pm	4,682	54	240	122	3	5,101			2,444	29	187	53	0	2,713			2,444	29	187	53	0	2,713		
1-4pm	3,816	29	332	72	0	4,249			4,343	42	306	80	0	4,771			4,343	42	306	80	0	4,771		
4-7pm	4,337	13	451	27	5	4,833			6,335	19	603	43	2	7,002			6,335	19	603	43	2	7,002		
7am-7pm	21,003	149	1,882	344	8	23,386			14,701	110	1,574	232	2	16,619			14,701	110	1,574	232	2	16,619		
6-10am	10,105	66	1,054	148	0	11,373			1,869	26	560	68	0	2,523			1,869	26	560	68	0	2,523		
3-7pm	5,691	19	594	40	5	6,349			8,135	32	740	67	2	8,976			8,135	32	740	67	2	8,976		
7am-7pm	22,940	162	2,077	369	8	25,556			14,991	116	1,656	244	2	17,009			14,991	116	1,656	244	2	17,009		

Based on May 2006 Classification Survey Data.

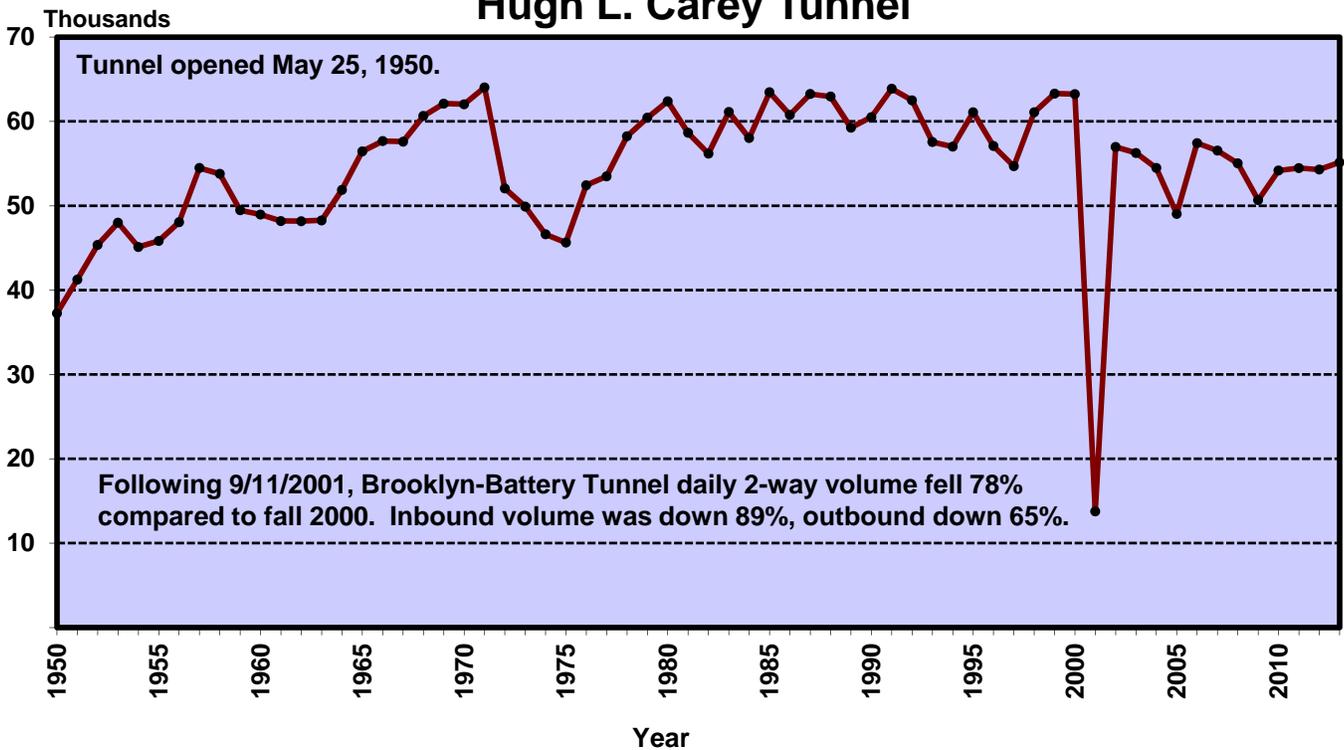
** Peak Volumes

Hourly Vehicular Volumes Hugh L. Carey Tunnel ~ 2013



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

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



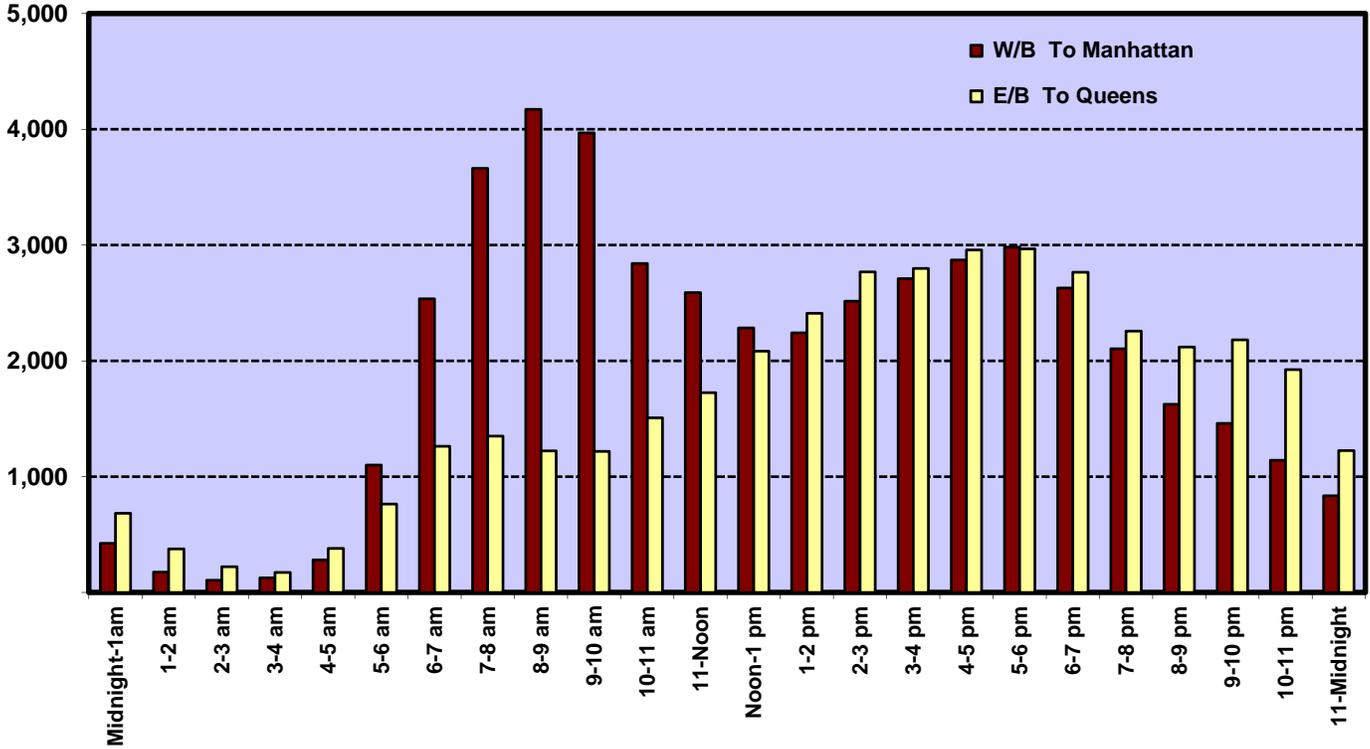
Hourly Vehicular Volumes Queens-Midtown Tunnel - 2013

FHWA Classes ▲	Westbound to Manhattan										Eastbound to Queens										2-Way Grand Totals																					
	Commuter Vans					Commuter Vans					Commuter Vans					Commuter Vans																										
	Autos & Motorcycles		Large SUVs		Buses	Single Unit Trucks		Tractor Trailers			Total Vehicles	Autos & Motorcycles		Large SUVs		Buses	Single Unit Trucks		Tractor Trailers			Total Vehicles																				
	1 & 2	3	4	5-7	8-13	1 & 2	3	4	5-7	8-13	1 & 2	3	4	5-7	8-13	1 & 2	3	4	5-7	8-13	1 & 2	3	4	5-7	8-13	1 & 2	3	4	5-7	8-13	1 & 2	3	4	5-7	8-13							
12-1am	410	2	3	9	0	660	6	1	17	0	660	6	1	17	0	660	6	1	17	0	684																					
1-2am	169	1	0	6	0	358	4	0	14	0	358	4	0	14	0	358	4	0	14	0	376																					
2-3am	98	1	1	6	0	208	5	0	10	0	208	5	0	10	0	208	5	0	10	0	223																					
3-4am	113	1	3	9	0	154	8	0	11	0	154	8	0	11	0	154	8	0	11	0	173																					
4-5am	226	5	15	35	0	281	26	3	36	1	314	26	3	36	1	314	26	3	36	1	380																					
5-6am	960	11	54	76	0	1,101	20	12	52	0	680	20	12	52	0	680	20	12	52	0	764																					
6-7am	2,167	89	160	120	0	2,536	34	49	35	0	1,144	34	49	35	0	1,144	34	49	35	0	1,262																					
7-8am	3,157	130	231	144	1	3,663	51	64	34	0	1,202	51	64	34	0	1,202	51	64	34	0	1,351																					
8-9am	3,751	118	147	156	0	4,172	39	74	42	0	1,067	39	74	42	0	1,067	39	74	42	0	1,222																					
9-10am	3,577	101	179	108	4	3,969	46	62	42	0	1,068	46	62	42	0	1,068	46	62	42	0	1,218																					
10-11am	2,580	79	95	85	2	2,841	61	73	67	0	1,307	61	73	67	0	1,307	61	73	67	0	1,508																					
11-12am	2,402	64	61	63	0	2,590	58	74	61	0	1,532	58	74	61	0	1,532	58	74	61	0	1,725																					
12-1pm	2,120	35	52	78	0	2,285	67	58	94	0	1,865	67	58	94	0	1,865	67	58	94	0	2,084																					
1-2pm	2,044	64	67	67	0	2,242	110	61	99	0	2,141	110	61	99	0	2,141	110	61	99	0	2,411																					
2-3pm	2,283	61	115	56	0	2,515	79	47	75	0	2,567	79	47	75	0	2,567	79	47	75	0	2,768																					
3-4pm	2,409	56	176	69	0	2,710	83	64	84	0	2,588	83	64	84	0	2,588	83	64	84	0	2,799																					
4-5pm	2,624	35	175	37	0	2,871	35	175	37	0	2,728	35	175	37	0	2,728	35	175	37	0	2,958																					
5-6pm	2,802	19	137	25	0	2,983	19	137	25	0	2,799	19	137	25	0	2,799	19	137	25	0	2,967																					
6-7pm	2,513	18	74	25	0	2,630	18	74	25	0	2,628	18	74	25	0	2,628	18	74	25	0	2,765																					
7-8pm	2,029	13	48	15	0	2,105	22	61	21	0	2,153	22	61	21	0	2,153	22	61	21	0	2,257																					
8-9pm	1,545	21	29	30	0	1,625	21	29	30	0	2,014	21	29	30	0	2,014	21	29	30	0	2,120																					
9-10pm	1,404	14	17	26	0	1,461	8	12	29	0	2,093	8	12	29	0	2,093	8	12	29	0	2,182																					
10-11pm	1,093	8	12	29	0	1,142	7	12	29	0	1,856	7	12	29	0	1,856	7	12	29	0	1,925																					
11-12pm	811	7	3	14	0	835	7	3	14	0	1,193	7	3	14	0	1,193	7	3	14	0	1,226																					
Totals	43,287	953	1,854	1,288	7	47,389	931	989	1,107	2	36,319	931	989	1,107	2	36,319	931	989	1,107	2	39,348																					
7-10am	10,485	349	557	408	5	11,804	337	200	118	0	3,337	337	200	118	0	3,337	337	200	118	0	3,791																					
10am-1pm	7,102	178	208	226	2	7,716	4704	205	222	0	4,704	186	205	222	0	4,704	186	205	222	0	5,317																					
1-4pm	6,736	181	358	192	0	7,467	296	172	258	0	7,296	252	172	258	0	7,296	252	172	258	0	7,978																					
4-7pm	7,939	72	386	87	0	8,484	155	208	166	0	8,155	161	208	166	0	8,155	161	208	166	0	8,690																					
7am-7pm	32,262	780	1,509	913	7	35,471	23,492	785	764	0	23,492	735	785	764	0	23,492	735	785	764	0	25,776																					
6-10am	12,652	438	717	528	5	14,340	4,481	249	153	0	4,481	170	249	153	0	4,481	170	249	153	0	5,053																					
3-7pm	10,348	128	562	156	0	11,194	10,743	272	250	0	10,743	224	272	250	0	10,743	224	272	250	0	11,489																					
7am-7pm	34,429	869	1,669	1,033	7	38,007	24,636	834	799	0	24,636	769	834	799	0	24,636	769	834	799	0	27,038																					

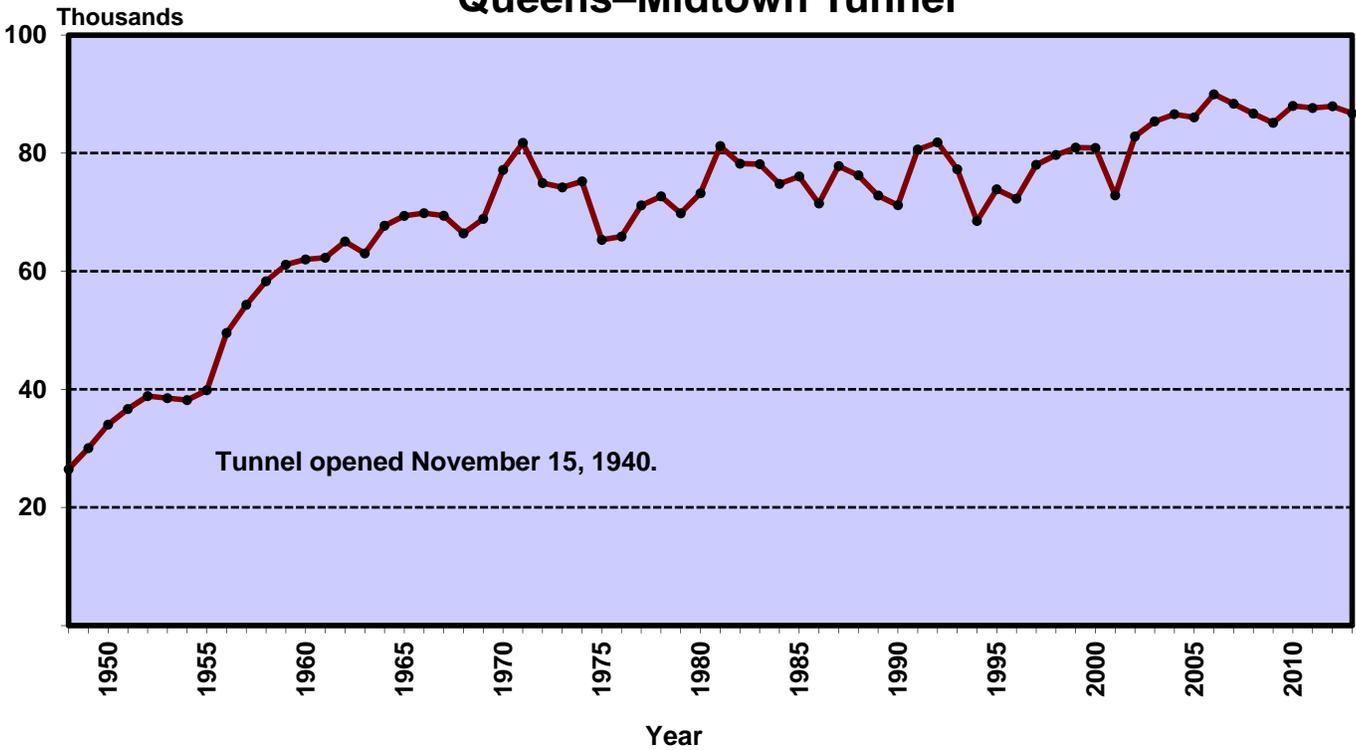
Based on May 2006 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Queens-Midtown Tunnel ~ 2013



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



Hourly Vehicular Volumes

Robert F. Kennedy Memorial Bridge Manhattan Plaza - 2013

Eastbound to Queens & Bronx

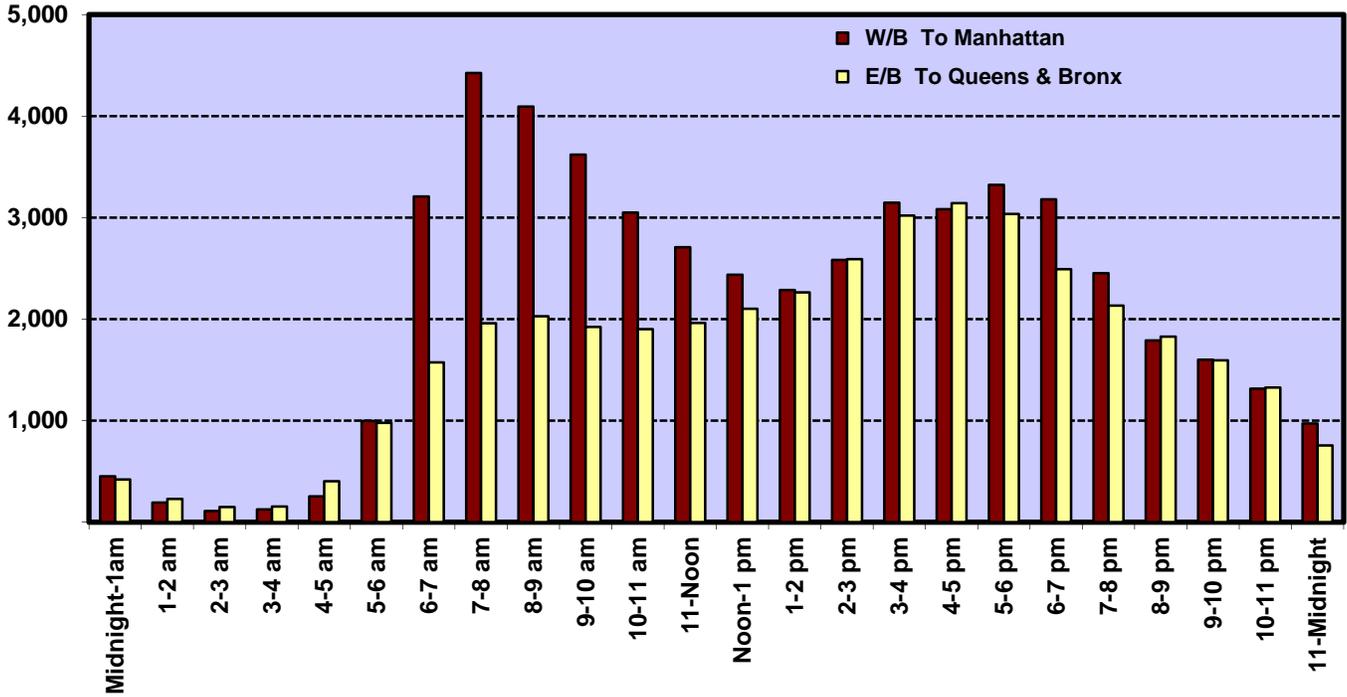
Westbound to Manhattan

FHWA Classes	Eastbound to Queens & Bronx							Westbound to Manhattan							2-way Grand Totals
	Autos, Motorcycles			Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles			Total Vehicles	Autos, Motorcycles			Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles			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	358	16	9	4	26	8	299	120	9	4	14	6	452		
1-2am	164	11	5	2	41	6	140	34	3	2	9	6	194		
2-3am	110	8	3	1	20	8	76	9	8	1	10	7	111		
3-4am	110	8	9	1	18	8	92	7	6	0	11	10	126		
4-5am	285	62	7	3	31	15	196	20	9	2	13	14	254		
5-6am	701	111	29	8	76	53	800	65	34	9	57	33	998		
6-7am	1,101	185	51	28	159	50	2,567	183	168	56	140	94	3,208		
7-8am	1,397	188	122	45	151	57	3,376	334	295	108	195	117	4,425		
8-9am	1,530	171	137	32	135	23	2,959	352	325	74	257	127	4,094		
9-10am	1,440	158	124	18	136	47	2,541	436	256	47	212	129	3,621		
10-11am	1,355	160	125	22	186	54	1,991	520	198	39	177	125	3,050		
11-12am	1,335	209	140	12	205	61	1,844	451	139	32	136	107	2,709		
12-1pm	1,491	225	140	14	191	41	1,619	384	130	37	160	107	2,437		
1-2pm	1,562	274	158	17	208	45	1,550	296	169	34	141	97	2,287		
2-3pm	1,826	323	161	33	210	38	1,815	399	143	39	113	74	2,583		
3-4pm	2,177	326	223	45	223	27	2,279	492	159	47	108	63	3,148		
4-5pm	2,322	307	240	57	193	23	2,238	461	186	49	103	46	3,083		
5-6pm	2,490	215	166	21	124	20	2,519	501	133	44	86	40	3,323		
6-7pm	2,056	171	123	24	97	22	2,536	460	82	25	54	23	3,180		
7-8pm	1,790	106	107	30	75	26	1,949	377	40	29	35	23	2,453		
8-9pm	1,542	112	70	23	37	44	1,449	250	35	15	26	16	1,791		
9-10pm	1,360	120	45	18	33	19	1,257	283	16	17	15	12	1,600		
10-11pm	1,134	92	25	9	55	11	912	350	14	9	15	15	1,315		
11-12pm	652	40	23	6	26	9	598	321	14	8	15	16	972		
Totals	30,288	3,598	2,242	473	2,656	715	37,602	7,105	2,571	727	2,102	1,307	51,414		
7-10am	4,367	517	383	95	422	127	8,876	1,122	876	229	664	373	12,140		
10am-1pm	4,181	594	405	48	582	156	5,454	1,355	467	108	473	339	8,196		
1-4pm	5,565	923	542	95	641	110	5,644	1,187	471	120	362	234	8,018		
4-7pm	6,868	693	529	102	414	65	7,293	1,422	401	118	243	109	9,586		
7am-7pm	20,981	2,727	1,859	340	2,059	458	27,267	5,086	2,215	575	1,742	1,055	37,940		
6-10am	5,468	702	434	123	581	177	11,443	1,305	1,044	285	804	467	15,348		
3-7pm	9,045	1,019	752	147	637	92	9,572	1,914	560	165	351	172	12,734		
6am-7pm	22,082	2,912	1,910	368	2,218	508	29,834	5,269	2,383	631	1,882	1,149	41,148		

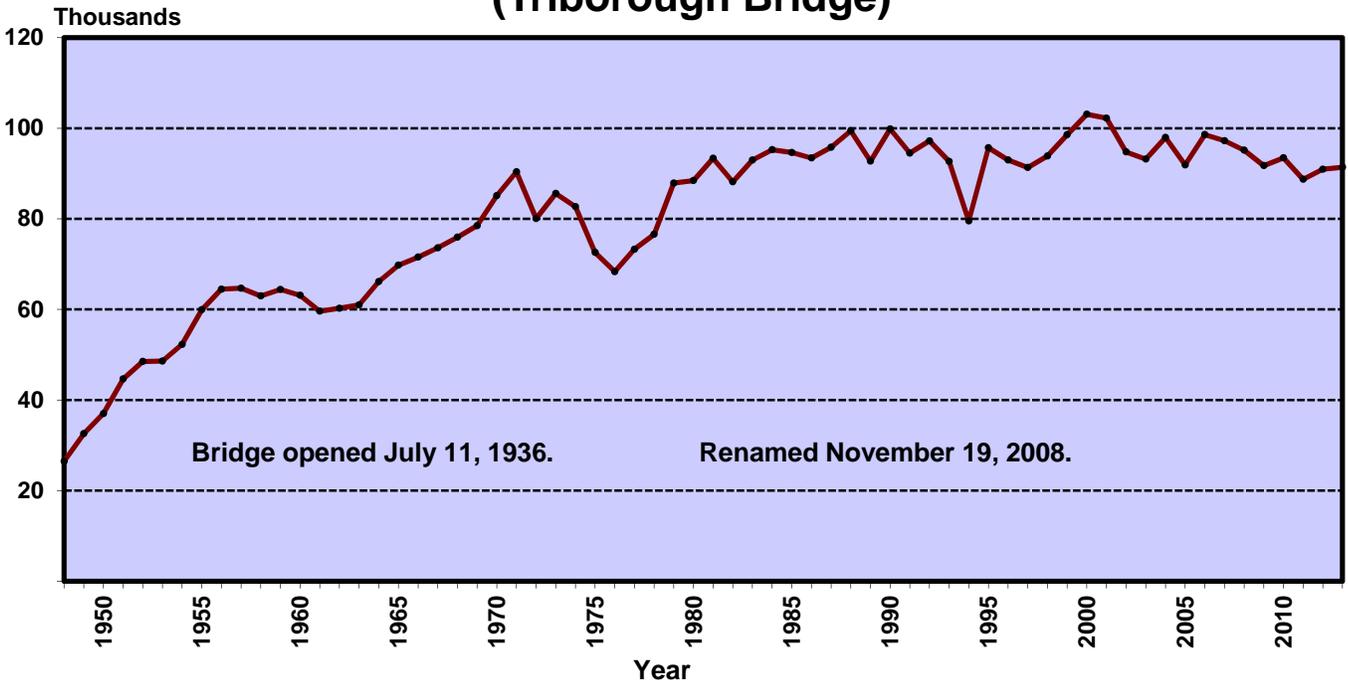
Based on October 2013 Classification Survey Data.

** Peak Volumes

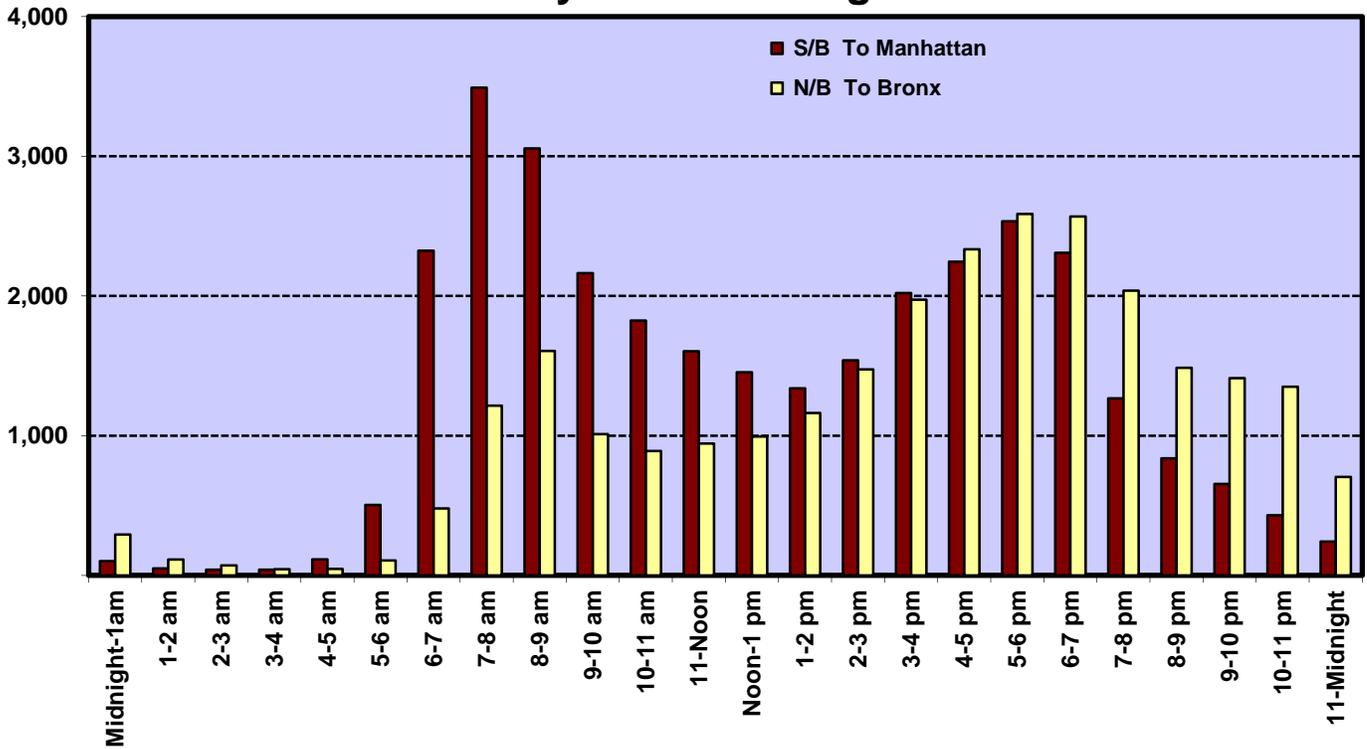
Hourly Vehicular Volumes Robert F. Kennedy Memorial Bridge, Manhattan Plaza ~ 2013 (Triborough Bridge)



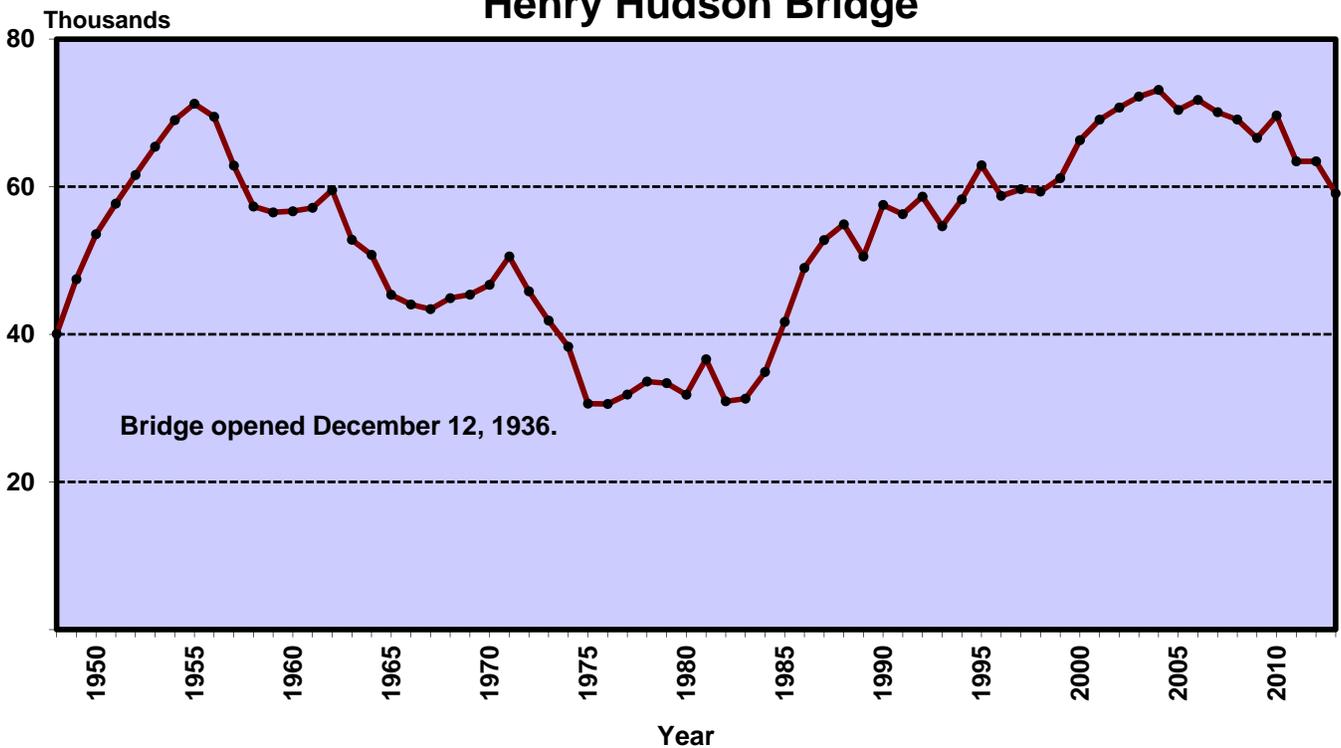
Average Daily Traffic Volumes ~ Total of Both Directions Robert F. Kennedy Memorial Bridge, Manhattan Plaza (Triborough Bridge)



Hourly Vehicular Volumes Henry Hudson Bridge ~ 2013



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



PANYNJ Facilities



George Washington Bridge

PANYNJ Manhattan - New Jersey Facilities
Average Daily Traffic Volumes
1948 - 2013

<i>Year</i>	<i>George Washington Bridge</i>	<i>Holland Tunnel</i>	<i>Lincoln Tunnel</i>	<i>Totals</i>
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

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.

Hourly Vehicular Volumes

Port Authority of New York & New Jersey 2013

	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	1,803	2,474	693	996	762	1,403	3,258	4,873
1-2am	1,106	1,304	447	619	460	784	2,013	2,707
2-3am	955	995	314	441	373	469	1,642	1,905
3-4am	1,175	1,062	375	486	437	379	1,987	1,927
4-5am	2,075	1,444	681	760	788	514	3,544	2,718
5-6am	6,086	2,976	2,207	1,381	2,724	824	11,017	5,181
6-7am	11,120 **	5,031	3,040 **	2,142	5,069 **	1,728	19,229 **	8,901
7-8am	9,799	6,516	2,882	2,579	4,708	2,640	17,389	11,735
8-9am	8,826	7,076	2,752	2,367	4,285	2,434	15,863	11,877
9-10am	8,359	6,425	2,661	2,016	3,888	2,362	14,908	10,803
10-11am	7,461	5,541	2,510	1,836	3,254	1,823	13,225	9,200
11-12am	6,615	5,805	2,068	1,943	2,732	2,174	11,415	9,922
12-1pm	6,293	6,087	1,943	1,998	2,485	2,388	10,721	10,473
1-2pm	6,209	6,377	1,962	2,264	2,354	2,905	10,525	11,546
2-3pm	6,595	8,072	2,134	2,618	2,460	3,418	11,189	14,108
3-4pm	7,216	10,148	2,374	2,646	2,457	4,634	12,047	17,428
4-5pm	7,857	10,737 **	2,617	2,689 **	1,755	4,728 **	12,229	18,154 **
5-6pm	8,290	10,718	2,757	2,171	1,418	4,584	12,465	17,473
6-7pm	7,861	10,104	2,655	2,237	1,706	4,666	12,222	17,007
7-8pm	6,328	9,634	2,269	2,272	2,126	3,570	10,723	15,476
8-9pm	4,846	7,746	1,745	2,212	1,820	3,197	8,411	13,155
9-10pm	4,014	5,897	1,570	2,282	1,689	3,203	7,273	11,382
10-11pm	3,298	4,588	1,578	2,013	1,475	3,056	6,351	9,657
11-12pm	2,557	4,144	1,182	1,628	1,243	1,811	4,982	7,583
Totals	136,744	140,901	45,416	44,596	52,468	59,694	234,628	245,191
7-10am	26,984	20,017	8,295	6,962	12,881	7,436	48,160	34,415
10am-1pm	20,369	17,433	6,521	5,777	8,471	6,385	35,361	29,595
1-4pm	20,020	24,597	6,470	7,528	7,271	10,957	33,761	43,082
4-7pm	24,008	31,559	8,029	7,097	4,879	13,978	36,916	52,634
7am-7pm	91,381	93,606	29,315	27,364	33,502	38,756	154,198	159,726
6-10am	38,104	25,048	11,335	9,104	17,950	9,164	67,389	43,316
3-7pm	31,224	41,707	10,403	9,743	7,336	18,612	48,963	70,062
6am-7pm	102,501	98,637	32,355	29,506	38,571	40,484	173,427	168,627

** 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.

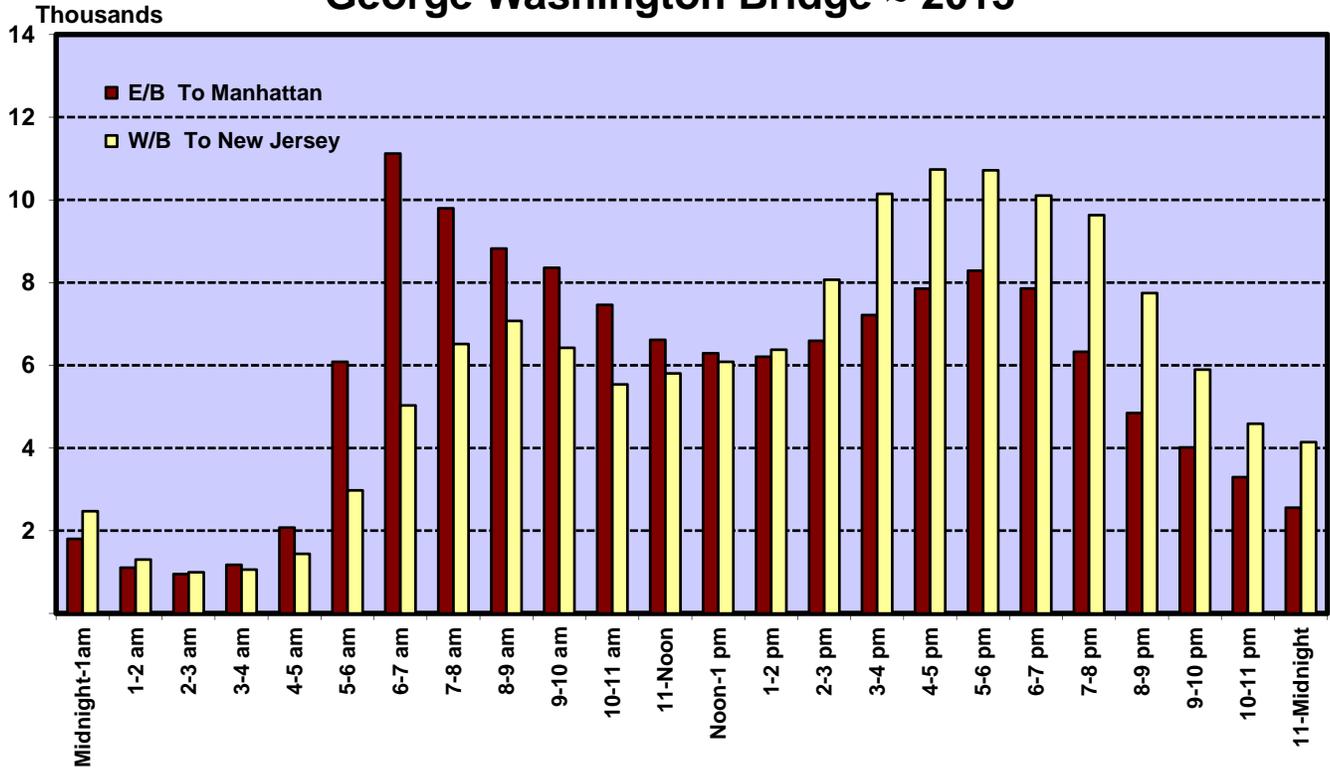
Hourly Vehicular Volumes George Washington Bridge - 2013

	<i>Eastbound to Manhattan</i>					<i>Westbound to New Jersey</i>					2-Way Totals
	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles	
12-1am	1,512	14	51	226	1,803	2,135	11	38	290	2,474	4,277
1-2am	788	4	60	254	1,106	1,065	8	44	187	1,304	2,410
2-3am	591	4	66	294	955	704	2	38	251	995	1,950
3-4am	685	4	101	385	1,175	714	0	81	267	1,062	2,237
4-5am	1,349	11	171	544	2,075	965	1	119	359	1,444	3,519
5-6am	5,056	28	310	692	6,086	2,109	22	259	586	2,976	9,062
6-7am	9,988	74	470	588	11,120**	4,206	76	262	487	5,031	16,151
7-8am	9,021	101	329	348	9,799	5,726	90	286	414	6,516	16,315
8-9am	8,022	84	358	362	8,826	6,256	104	326	390	7,076	15,902
9-10am	7,510	78	348	423	8,359	5,380	85	371	589	6,425	14,784
10-11am	6,648	62	316	435	7,461	4,499	46	330	666	5,541	13,002
11-12am	5,897	56	280	382	6,615	4,687	48	335	735	5,805	12,420
12-1pm	5,607	58	276	352	6,293	4,819	63	397	808	6,087	12,380
1-2pm	5,561	64	265	319	6,209	5,288	64	368	657	6,377	12,586
2-3pm	5,956	90	261	288	6,595	7,110	71	348	543	8,072	14,667
3-4pm	6,637	105	219	255	7,216	9,266	63	355	464	10,148	17,364
4-5pm	7,321	104	207	225	7,857	9,928	77	306	426	10,737**	18,594
5-6pm	7,832	100	153	205	8,290	10,122	77	237	282	10,718	19,008**
6-7pm	7,455	84	115	207	7,861	9,528	76	182	318	10,104	17,965
7-8pm	5,927	73	95	233	6,328	9,007	61	180	386	9,634	15,962
8-9pm	4,475	55	80	236	4,846	7,279	45	98	324	7,746	12,592
9-10pm	3,701	38	64	211	4,014	5,506	28	61	302	5,897	9,911
10-11pm	3,043	21	42	192	3,298	4,392	27	34	135	4,588	7,886
11-12pm	2,304	20	36	197	2,557	3,925	20	42	157	4,144	6,701
Totals	122,886	1,332	4,673	7,853	136,744	124,616	1,165	5,097	10,023	140,901	277,645
7-10am	24,553	263	1,035	1,133	26,984	17,362	279	983	1,393	20,017	47,001
10am-1pm	18,152	176	872	1,169	20,369	14,005	157	1,062	2,209	17,433	37,802
1-4pm	18,154	259	745	862	20,020	21,664	198	1,071	1,664	24,597	44,617
4-7pm	22,608	288	475	637	24,008	29,578	230	725	1,026	31,559	55,567
7am-7pm	83,467	986	3,127	3,801	91,381	82,609	864	3,841	6,292	93,606	184,987
6-10am	34,541	337	1,505	1,721	38,104	21,568	355	1,245	1,880	25,048	63,152
3-7pm	29,245	393	694	892	31,224	38,844	293	1,080	1,490	41,707	72,931
6am-7pm	93,455	1,060	3,597	4,389	102,501	86,815	940	4,103	6,779	98,637	201,138

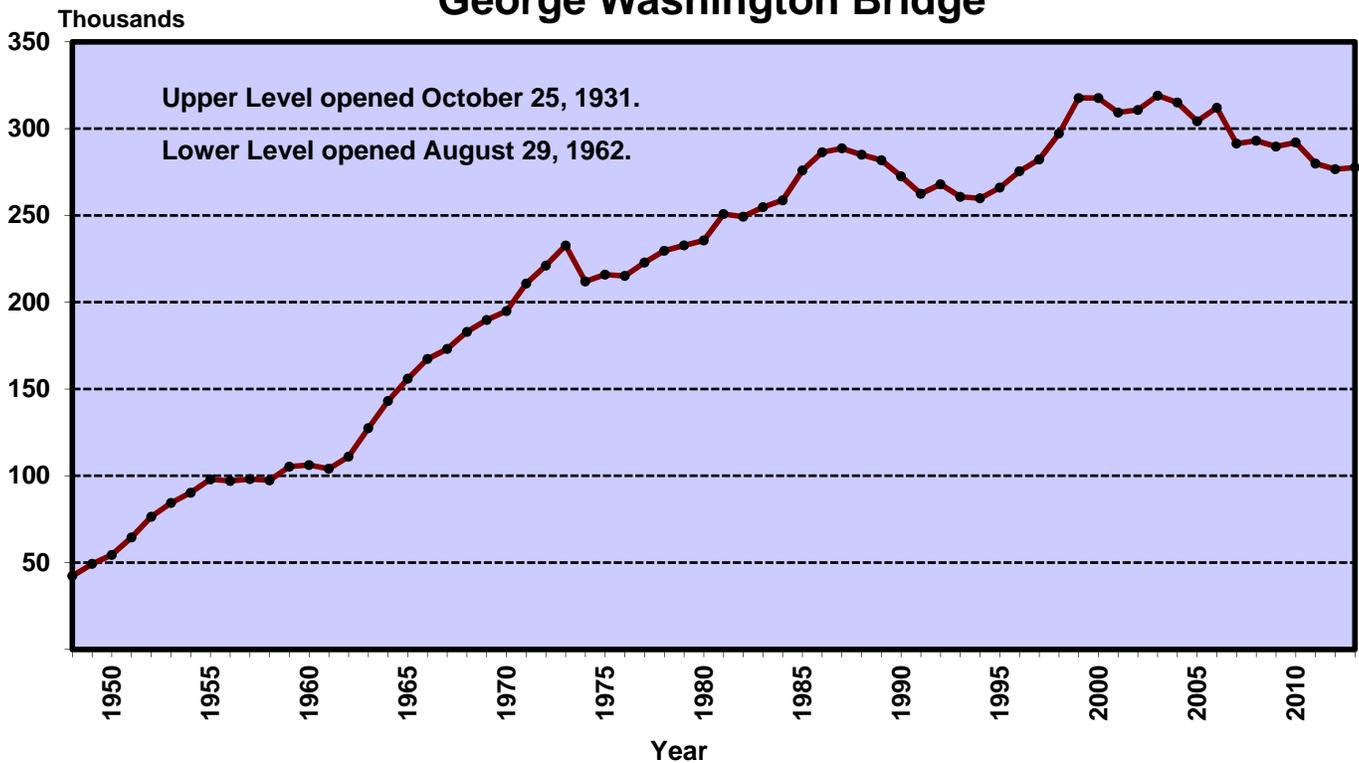
Classification based on October 2013 Data.

** Peak Volumes

Hourly Vehicular Volumes George Washington Bridge ~ 2013



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



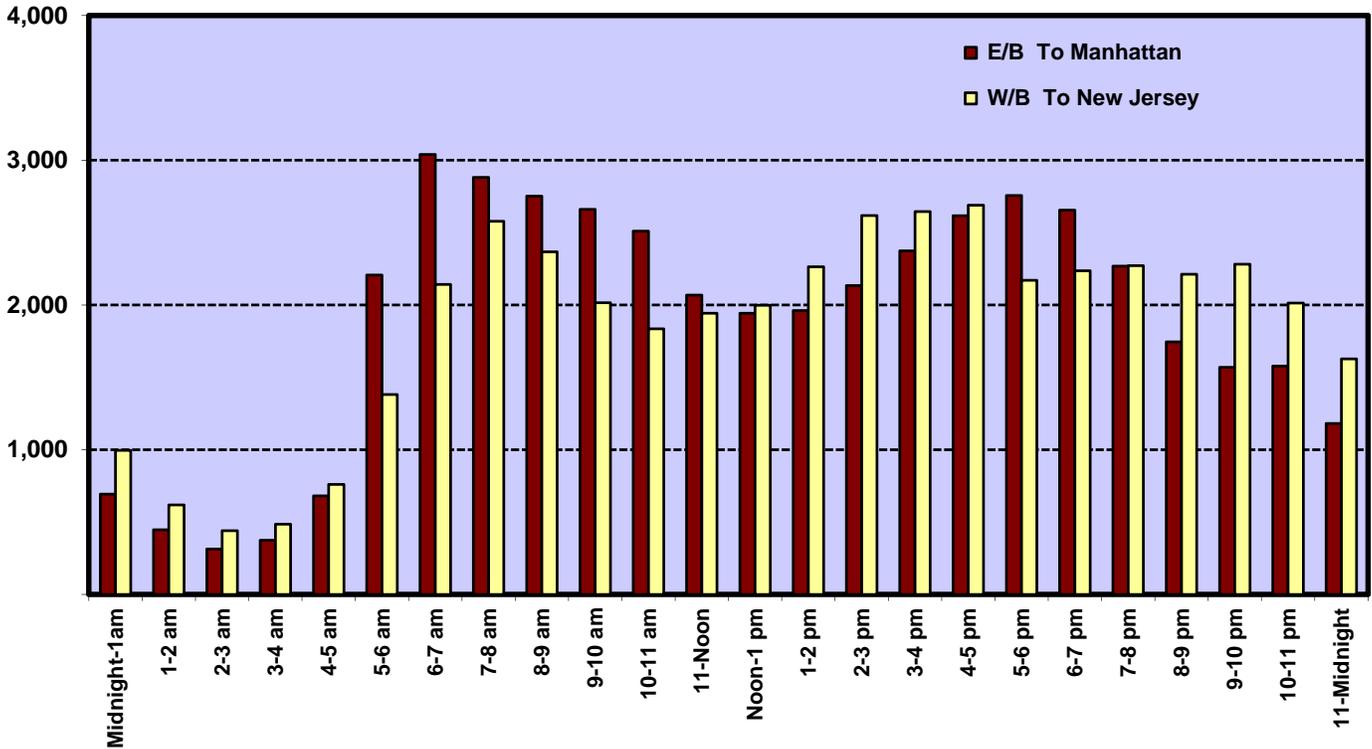
Hourly Vehicular Volumes Holland Tunnel - 2013

	Eastbound to Manhattan				Westbound to New Jersey				2-Way Totals	
	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles	Autos	Buses	Small Trucks		Large Trucks
12-1am	649	6	38	0	693	963	3	29	1	996
1-2am	416	5	26	0	447	596	2	20	1	619
2-3am	275	5	33	1	314	415	0	26	0	441
3-4am	301	5	68	1	375	444	1	40	1	486
4-5am	612	6	61	2	681	693	1	66	0	760
5-6am	2,063	21	120	3	2,207	1,308	6	67	0	1,381
6-7am	2,863	51	125	1	3,040 **	2,024	27	91	0	2,142
7-8am	2,695	57	128	2	2,882	2,458	19	101	1	2,579
8-9am	2,565	58	127	2	2,752	2,202	52	113	0	2,367
9-10am	2,497	48	115	1	2,661	1,822	46	148	0	2,016
10-11am	2,383	28	98	1	2,510	1,657	18	160	1	1,836
11-12am	1,972	17	78	1	2,068	1,725	14	204	0	1,943
12-1pm	1,856	17	69	1	1,943	1,814	10	174	0	1,998
1-2pm	1,877	20	64	1	1,962	2,100	18	146	0	2,264
2-3pm	2,047	24	62	1	2,134	2,455	12	151	0	2,618
3-4pm	2,257	54	62	1	2,374	2,480	25	141	0	2,646
4-5pm	2,472	95	49	1	2,617	2,516	39	134	0	2,689 **
5-6pm	2,648	72	37	0	2,757	2,022	63	86	0	2,171
6-7pm	2,573	52	29	1	2,655	2,145	39	53	0	2,237
7-8pm	2,217	27	24	1	2,269	2,184	18	70	0	2,272
8-9pm	1,691	12	41	1	1,745	2,169	19	24	0	2,212
9-10pm	1,527	12	31	0	1,570	2,236	18	28	0	2,282
10-11pm	1,541	11	26	0	1,578	1,975	15	23	0	2,013
11-12pm	1,154	6	21	1	1,182	1,568	8	52	0	1,628
Totals	43,151	709	1,532	24	45,416	41,971	473	2,147	5	44,596
7-10am	7,757	163	370	5	8,295	6,482	117	362	1	6,962
10am-1pm	6,211	62	245	3	6,521	5,196	42	538	1	5,777
1-4pm	6,181	98	188	3	6,470	7,035	55	438	0	7,528
4-7pm	7,693	219	115	2	8,029	6,683	141	273	0	7,097
7am-7pm	27,842	542	918	13	29,315	25,396	355	1,611	2	27,364
6-10am	10,620	214	495	6	11,335	8,506	144	453	1	9,104
3-7pm	9,950	273	177	3	10,403	9,163	166	414	0	9,743
6am-7pm	30,705	593	1,043	14	32,355	27,420	382	1,702	2	29,506

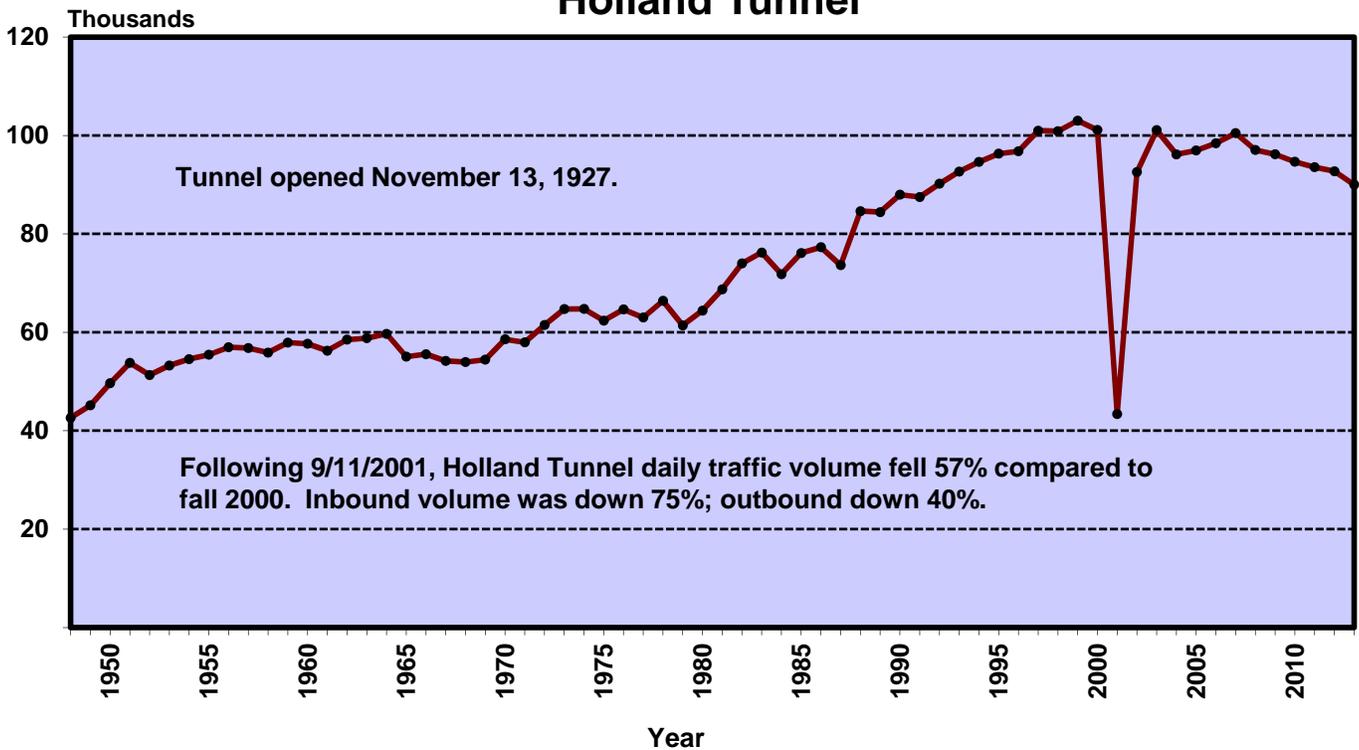
Classification based on October 2013 Data.

** Peak Volumes

Hourly Vehicular Volumes Holland Tunnel ~ 2013



Average Daily Traffic Volumes ~ Total of Both Directions Holland Tunnel



Hourly Vehicular Volumes

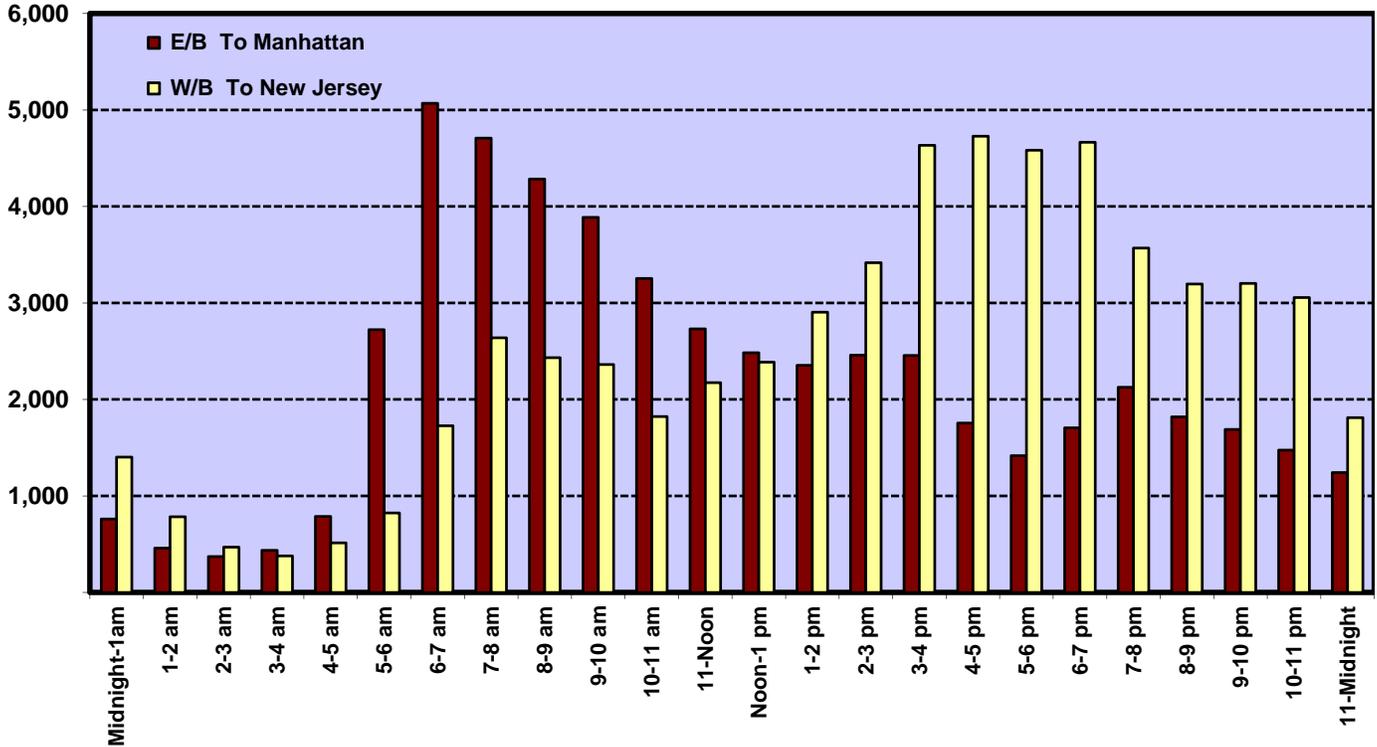
Lincoln Tunnel - 2013

	Eastbound to Manhattan					Westbound to New Jersey					2-Way Totals
	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles	
12-1am	640	63	39	20	762	1,180	119	57	47	1,403	2,165
1-2am	365	30	43	22	460	629	57	55	43	784	1,244
2-3am	280	11	49	33	373	362	18	53	36	469	842
3-4am	305	13	82	37	437	266	9	53	51	379	816
4-5am	549	26	136	77	788	383	8	52	71	514	1,302
5-6am	2,150	167	310	97	2,724	577	68	99	80	824	3,548
6-7am	4,086	500	419	64	5,069**	1,027	531	105	65	1,728	6,797
7-8am	3,532	823	315	38	4,708	1,232	1,196	135	77	2,640	7,348**
8-9am	3,023	959	285	18	4,285	1,074	1,172	144	44	2,434	6,719
9-10am	2,997	621	251	19	3,888	1,060	1,101	157	44	2,362	6,250
10-11am	2,753	269	213	19	3,254	1,265	320	176	62	1,823	5,077
11-12am	2,369	202	144	17	2,732	1,627	204	278	65	2,174	4,906
12-1pm	2,157	186	129	13	2,485	1,877	182	271	58	2,388	4,873
1-2pm	2,008	224	112	10	2,354	2,391	180	273	61	2,905	5,259
2-3pm	2,060	289	103	8	2,460	2,858	214	286	60	3,418	5,878
3-4pm	1,941	424	84	8	2,457	4,011	260	320	43	4,634	7,091
4-5pm	1,236	455	59	5	1,755	4,012	428	267	21	4,728**	6,483
5-6pm	1,044	328	41	5	1,418	3,721	643	205	15	4,584	6,002
6-7pm	1,311	347	36	12	1,706	3,852	666	141	7	4,666	6,372
7-8pm	1,716	330	62	18	2,126	2,948	495	114	13	3,570	5,696
8-9pm	1,509	224	66	21	1,820	2,805	295	72	25	3,197	5,017
9-10pm	1,419	171	71	28	1,689	2,869	223	77	34	3,203	4,892
10-11pm	1,255	136	58	26	1,475	2,776	170	70	40	3,056	4,531
11-12pm	1,057	103	52	31	1,243	1,574	130	76	31	1,811	3,054
Totals	41,762	6,901	3,159	646	52,468	46,376	8,689	3,536	1,093	59,694	112,162
7-10am	9,552	2,403	851	75	12,881	3,366	3,469	436	165	7,436	20,317
10am-1pm	7,279	657	486	49	8,471	4,769	706	725	185	6,385	14,856
1-4pm	6,009	937	299	26	7,271	9,260	654	879	164	10,957	18,228
4-7pm	3,591	1,130	136	22	4,879	11,585	1,737	613	43	13,978	18,857
7am-7pm	26,431	5,127	1,772	172	33,502	28,980	6,566	2,653	557	38,756	72,258
6-10am	13,638	2,903	1,270	139	17,950	4,393	4,000	541	230	9,164	27,114
3-7pm	5,532	1,554	220	30	7,336	15,596	1,997	933	86	18,612	25,948
6am-7pm	30,517	5,627	2,191	236	38,571	30,007	7,097	2,758	622	40,484	79,055

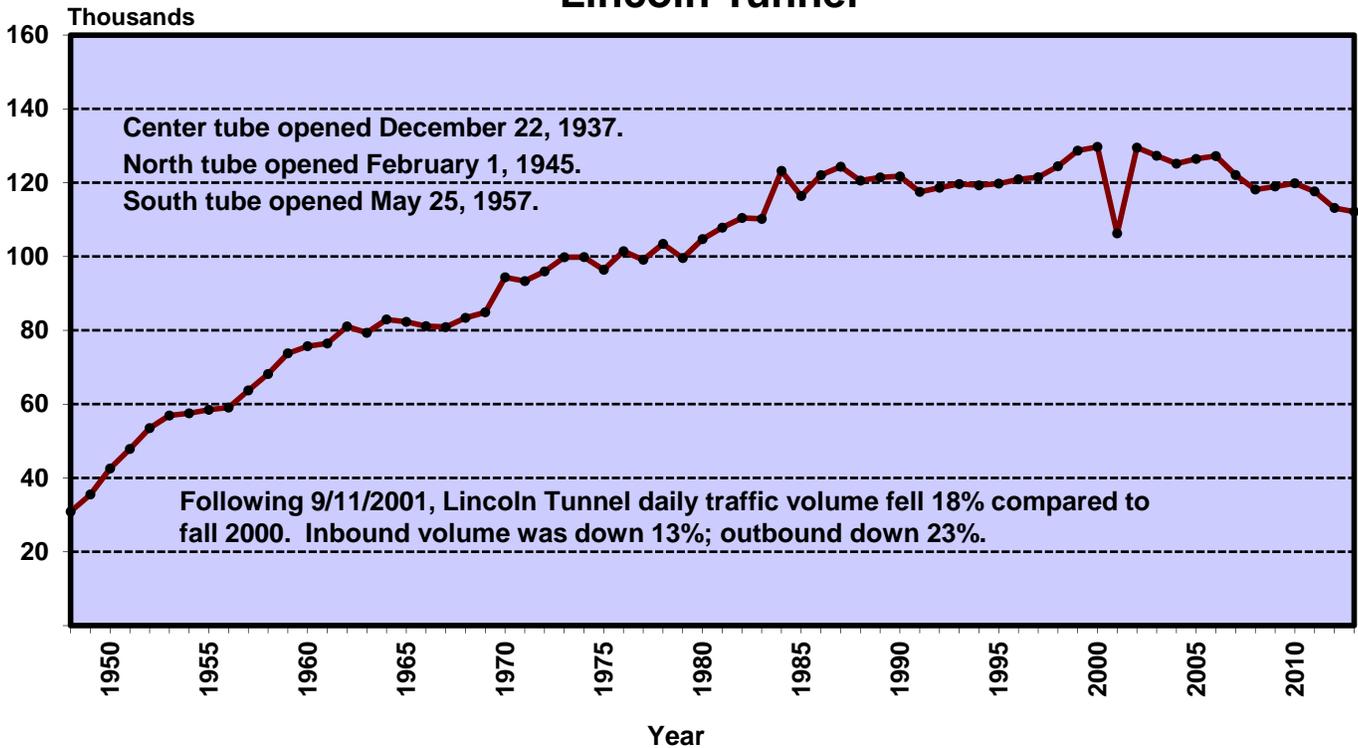
Classification based on October 2013 Data.

** Peak Volumes

Hourly Vehicular Volumes Lincoln Tunnel ~ 2013



Average Daily Traffic Volumes ~ Total of Both Directions Lincoln Tunnel



APPENDIX

2013 Bridge and Tunnel Reconstruction

APPENDIX

Major Bridge Reconstruction In 2013

Brooklyn Bridge (East River between Brooklyn & Manhattan)

As of Monday night, April 4, 2011, the Brooklyn Bridge was closed to Manhattan-bound traffic during overnight hours for reconstruction.

The closure times in 2013 were as follows.

01/02 – 01/12: 11:00pm–6:00am Sun–Fri,
12:01am–7:00am Sat,
12:01am–9:00am Sun.

01/12 – 01/14: 12:01am Sat. - 6:00am Mon.

01/14 – 02/15: 11:00pm–6:00am Sun–Fri,
12:01am–7:00am Sat,
12:01am–9:00am Sun.

02/16 – 04/26: 11:00pm–6:00am Mon–Fri,
12:01am–7:00am Sat.

04/27 – 04/29: 12:01am Sat. - 6:00am Mon.

04/30 – 05/17: 11:00pm–6:00am Mon–Fri,
12:01am–7:00am Sat.

05/18 – 07/19: 11:00pm–6:00am Mon–Fri,
12:01am–7:00am Sat,
12:01am–9:00am Sun.

07/20 – 07/22: 11:00pm–6:00am Mon–Fri,
12:01am Sat – 6:00am Mon.

07/23 – 08/04: 11:00pm–6:00am Mon–Fri,
12:01am–7:00am Sat,
12:01am–9:00am Sun.

08/04 –09/09: 11:00pm–6:00am Mon–Fri,
12:01am Sat – 6:00am Mon.

09/10 – 09/27: 11:00pm–6:00am Mon–Fri,
12:01am–6:00am Sat,
12:01am–9:00am Sun.

09/28 – 12/31: 11:00pm–6:00am Mon–Fri,
12:01am Sat – 6:00am Mon as needed.

Bicycle and pedestrian access was maintained during these times.

The northbound FDR Drive exit to the bridge was closed during these times.

The Brooklyn – Queens Expressway eastbound exit to the Manhattan-bound bridge was closed during these times.

The Manhattan Bridge Lower Roadway was operated Manhattan-bound weekdays from 9:30pm to 3:00pm.

There were no closures Memorial Day weekend or Labor Day weekend.

There were no closures July 3-5, 2013.

Throughout 2013, there were additional closures of single lanes in each direction on the Brooklyn Bridge during off-peak hours.

Ed Koch Queensboro Bridge (East River between Queens & Manhattan)

This bridge was officially renamed on April 11, 2011, when Mayor Michael R. Bloomberg signed the legislation which had been passed by the City Council on March 23, 2011.

Throughout 2013, a High Occupancy Vehicle (HOV) facility was in effect on the Ed Koch Queensboro Bridge. The normally Queens-bound South Upper Roadway was reversed between 6:00am and 9:30am on weekdays to accommodate Manhattan-bound HOVs (no trucks) carrying two or more occupants.

Throughout 2013, the North Outer Roadway was reserved for bicyclists and pedestrians.

Ed Koch Queensboro Bridge Operation: All 2013 except as noted.

North Inner Roadway: W/B all times; W/B trucks required to use this roadway.

South Inner Roadway: E/B all times; E/B trucks required to use this roadway.

North Upper Roadway: W/B all times.

South Upper Roadway: Closed for reversal 5:30–6:00am weekdays,
W/B HOVs 6:00–9:30am weekdays,
Closed for reversal 9:30–10:00am weekdays,
E/B all other times.

North Outer Roadway: Bicyclists and pedestrians all times.

South Outer Roadway: E/B all times (passenger cars only).

South Outer Roadway was closed as follows in 2013.

01/29 – 02/01: 1:00am – 5:00pm. Tue – Fri.

02/02 – 02/10: 2:00am – 2:00pm. Sat – Sun.

02/21 – 02/22: 12:01am – 5:00am. Thu – Fri.

02/28 – 03/01: 2:00am – 2:00pm. Thu – Fri.

03/02 – 03/03: 2:00am – 2:00pm. Sat – Sun.

03/20 – 03/22: 12:01am – 5:00am. Wed – Fri.

03/23 – 03/24: 2:00am – 2:00pm. Sat – Sun.

04/06 – 04/07: 2:00am – 2:00pm. Sat – Sun.

One of two lanes on the South Upper Roadway was closed as follows in 2013.

08/24 – 10/14: Round-the-Clock1 All Days.

Throughout 2013, there were additional intermittent closings of single lanes on individual roadways of the Ed Koch Queensboro Bridge during off-peak hours.

Manhattan Bridge (East River between Brooklyn & Manhattan)

The Manhattan Bridge was open to pedestrians and bicyclists during all hours throughout 2013. As of July 18, 2011, pedestrians and bicyclists had traded paths so that the north path was used by pedestrians and the south path was used by cyclists. This reversal of pedestrian and bicycle paths was necessary during reconstruction along the north side. The reversal of paths remained in effect until March 5, 2012, at which time cyclists returned to the north path and pedestrians returned to the south path.

Manhattan Bridge Operation: All 2013

Note: *During 2013, the nearby Brooklyn Bridge was closed to Manhattan-bound traffic during overnight hours.*

- **6:00am – 10:00am weekdays.**

One of three lanes closed on the Lower Roadway.

- Manhattan-bound: 4 lanes.
 - 2 lanes on the North Upper Roadway (no trucks, left lane reserved for buses and HOV 2+).
 - 2 lanes on the Lower Roadway.
- Brooklyn-bound: 2 lanes on the South Upper Roadway.

- **10:00am – 3:00pm weekdays.**

Two of three lanes closed on the Lower Roadway.

- Manhattan-bound: 3 lanes.
 - 2 lanes on the North Upper Roadway.
 - 1 lane on the Lower Roadway.
- Brooklyn-bound: 2 lanes on the South Upper Roadway.

- **3:00pm – 9:30pm weekdays.**

One of three lanes closed on the Lower Roadway.

- Manhattan-bound: 2 lanes on the North Upper Roadway.
- Brooklyn-bound: 4 lanes.
 - 2 lanes on the South Upper Roadway.
 - 2 lanes on the Lower Roadway.

- **9:30pm – 6:00am weekdays.**

One of three lanes closed on the Lower Roadway.

- Manhattan-bound: 4 lanes.
 - 2 lanes on the North Upper Roadway.
 - 2 lanes on the Lower Roadway.
- Brooklyn-bound: 2 lanes on the South Upper Roadway.

- **9:00pm Friday – 6:00am Monday.**

One of three lanes closed on the Lower Roadway.

- Manhattan-bound: 4 lanes.
 - 2 lanes on the North Upper Roadway.
 - 2 lanes on the Lower Roadway.
- Brooklyn-bound: 2 lanes on the South Upper Roadway.

Williamsburg Bridge (East River between Brooklyn & Manhattan)

Throughout 2013 trucks were permitted only on the outer roadways.

Pedestrian and bicycle access was maintained on the bridge at all times throughout 2013.

Williamsburg Bridge Operation: January 1 – March 22, 2013.

- 2 westbound lanes closed weeknights 11pm – 5am as needed, 1 night per week.
- 2 eastbound lanes closed as needed weekdays 6am – 2pm.
- All other times: 4 lanes in each direction with intermittent closures of single lanes in each direction during off-peak hours.

Williamsburg Bridge Operation: March 23 – April 12, 2013.

- 2 westbound lanes closed weeknights 11pm – 5am as needed, 1 night per week.
- 2 eastbound lanes closed as needed weekdays 12:01am – 5pm.
- All other times: 4 lanes in each direction with intermittent closures of single lanes in each direction during off-peak hours.

Williamsburg Bridge Operation: April 13 – December 31, 2013.

- 2 eastbound lanes closed as needed weekdays 12:01am – 5pm.
- All other times: 4 lanes in each direction with intermittent closures of single lanes in each direction during off-peak hours.

Throughout 2013, there were additional closures of single lanes in each direction on the Williamsburg Bridge during off-peak hours.

Alexander Hamilton Bridge (Harlem River between Bronx & Manhattan)

Eastbound lane closures were in effect as follows:

06/08-12/31:	11:00pm - 5:30am	Weeknights.	1 E/B lane closed as needed.
	12:01am-5:30am	Sat.	1 or 2 E/B lanes closed as needed.
	12:01am-6:00am	Sun.	1 or 2 E/B lanes closed as needed.

Westbound lane closures were in effect as follows:

06/08-12/31:	11:00pm - 5:30am	Weeknights.	1 W/B lane closed as needed.
	12:01am-5:30am	Sat.	1 W/B lanes closed as needed.
	1:00am-5:30am	Sat.	1 or 2 W/B lanes closed as needed.
	2:00am-5:30am	Sun.	1 or 2 W/B lanes closed as needed.

Broadway Bridge (Harlem River between Bronx & Manhattan)

2 of 3 lanes were closed in both directions as follows:

05/14-05/16: 11:00pm - 5:00am Tue-Thu.

Throughout 2013, there were additional closures of single lanes in each direction on the Broadway Bridge during off-peak hours.

Washington Bridge (Harlem River between Bronx & Manhattan)

Two of three lanes, one direction at a time, were closed as needed weeknights from 11 pm to 5 am to facilitate NYCDOT bridge repairs as follows:

01/22-02/06: 11:00pm - 5:00am Weeknights.

Throughout 2013, there were additional closures of single lanes in each direction on the Washington Bridge during off-peak hours.

Willis Avenue Bridge (Harlem River from Manhattan to Bronx)

The entire bridge was closed as follows:

02/05-02/16:	1:00am - 5:30am	Tue-Fri,
	2:00am - 6:00am	Sat.
03/07-03/08:	1:00am - 5:30am	Thu-Fri.
03/26-03/29:	1:00am - 5:30am	Tue-Fri.
04/09-04/27:	1:00am - 5:30am	Tue-Fri,
	2:00am - 6:00am	Sat.
06/04-06/15:	1:00am - 5:30am	Tue-Fri,
	2:00am - 6:00am	Sat.
06/25-06/29:	1:00am - 5:30am	Tue-Fri,
	2:00am - 6:00am	Sat.
07/16-08/03:	1:00am - 5:30am	Tue-Fri,
	2:00am - 6:00am	Sat.
12/03-12/07:	1:00am - 5:30am	Tue-Fri,
	2:00am - 6:00am	Sat.

Throughout 2013, there were additional lane closures on the Willis Avenue Bridge as needed during off-peak hours.

Henry Hudson Bridge

Throughout 2013, lane closures were in effect as needed in both directions due to a major project to rehabilitate the original 1930s-era upper level support structures. This included round-the-clock closure of the center lane on the northbound upper level from June 26, 2013, to July 31, 2013.

On Sunday, July 14, from 4:00 am to noon, the entire upper level was closed for the Aquaphor New York City Triathlon.

From August 19 to August 21, The Kappock Street exit from the northbound upper level was closed between 7:00 am and 3:00 pm for paving work.

On August 28 and August 29, one Manhattan-bound lane from the Kappock Street entrance to the bridge was closed for reconstruction between 10:00 am and 3:00 pm.

Also on August 28 and August 29, the bridge was fully closed intermittently (for approximately 15-minute intervals) Bronx-bound between 12:01 am and 5:00 am.

On Sunday, October 6, the bridge was fully closed from 7:00 am to noon for the Bike MS event.

In addition, throughout 2013, there were additional intermittent lane closures in both directions on the Henry Hudson Bridge during off-peak hours.

Hugh L. Carey Tunnel (formerly Brooklyn-Battery Tunnel)

Throughout 2013, the inbound exit to Trinity Place was closed weekdays between 6:00-10:00am, and between 3:00–7:00pm.

Throughout 2013, between 6:00am and 10:00am on weekdays, there were three lanes inbound and one lane outbound.

Due to a major electrical equipment modernization project, there were a series of overnight and weekend tube closures as follows.

04/19-04/22: 10:00pm Friday - 5:00am Monday One tube closed.

05/06-05/24: 9:00pm - 5:00am Mon-Fri One tube closed.

09/20-09/23: 9:00pm Friday - 5:00am Monday One tube closed.

10/04-10/07: 9:00pm Friday - 5:00am Monday One tube closed.

10/18-10/21: 9:00pm Friday - 5:00am Monday One tube closed.

11/15-11/25: 9:00pm Friday - 5:00am Monday One tube closed.

2-way traffic was maintained in the open tube during all of the above-described tube closures.

The following closures were in effect for the Annual Stephen Siller Tunnels to Towers Run.

09/28-09/29: 10:00pm Saturday - 8:00am Sunday One tube closed.

2-way traffic was maintained in the open tube during this time.

09/29: 8:00pm – 3:00pm Sunday Both tubes closed.

Throughout 2013, there were additional intermittent closures of single lanes in the Hugh L. Carey Tunnel during off-peak hours.

Queens-Midtown Tunnel

One tube was closed as follows.

01/26-01/28: 2:00am Saturday – 5:00am Monday.

02/23-02/25: 2:00am Saturday – 5:00am Monday.

04/13-04/22: 2:00am Saturday – 5:00am Monday.

07/27-07/29: 2:00am Saturday – 5:00am Monday.

10/26-10/28: 1:00am Saturday – 5:00am Monday.

2-way traffic was maintained in the open tube for cars & NYCT buses only during all of the above-described tube closures.

Throughout 2013, there were also intermittent closures of single lanes in both directions of the Queens-Midtown Tunnel during off-peak hours.

Robert F. Kennedy Bridge (formerly Triborough Bridge)

At the Harlem River Lift Span, closures were in effect as follows.

02/01: 1:00am – 5:00am Fri.

All lanes closed in both directions for up to 15 minutes at a time.

03/05: Approximately 10:15am Tue.

All lanes closed in both directions for about 15-20 minutes for marine traffic as required by federal law.

04/03: Approximately 3:30am Wed.

All lanes closed in both directions for about 15-20 minutes for marine traffic as required by federal law.

05/17: 1:00am – 5:00am Fri.

All lanes closed in both directions for up to 15 minutes at a time.

06/21: 12:01am – 5:00am Fri.

All lanes closed in both directions for 15-20 minutes at a time.

07/19: 12:01am – 5:00am Fri.

All lanes closed in both directions for 15-20 minutes at a time.

08/09: 12:01am – 5:00am Fri.

All lanes closed in both directions for the full 5 hours.

09/20: 12:01am – 5:00am Fri.

All lanes closed in both directions for up to 20 minutes at a time.

11/15: 12:01am – 5:00am Fri.

All lanes closed in both directions for up to 20 minutes at a time.

The center lane approaching the Bronx toll plaza heading to Queens was closed round-the-clock for several weeks beginning April 5, 2013.

Throughout 2013, there were also intermittent closures of single lanes on the Robert F. Kennedy Bridge during off-peak hours.

George Washington Bridge (Hudson River between Manhattan & New Jersey)

Beginning August 12, 2013, 3 of 4 eastbound upper level lanes were closed Monday to Thursday from 11:00 pm to 5:00 am, and from midnight to 8:00 am Friday into Saturday.

On November 18, 2013, 2 of 4 upper level eastbound lanes were closed for emergency repairs until the following morning.

On December 11, 2013, 2 of 4 upper level westbound lanes were closed for emergency repairs until the following morning.

On the morning of December 16, 2013, 2 of 4 upper level westbound lanes were closed for emergency repairs until approximately 2:00pm.

From 9:00pm Friday, December 20, to 5:00am Saturday, December 21, 3 of 4 Upper Level eastbound lanes were closed to replace critical steel deck panels.

From 10:00pm Saturday, December 21, to 10:00am Sunday, December 22, 3 of 4 Upper Level lanes in both directions closed.

From 9:00pm Sunday, December 22, to 5:00am Monday, December 23, 3 of 4 Upper Level westbound lanes were closed.

Throughout 2013, there were additional intermittent closures of single lanes during off-peak hours to facilitate PANYNJ maintenance work.

Holland Tunnel (Hudson River between Manhattan & New Jersey)

On Sunday, November 17, 2013, from Midnight to 6:00am, the tunnel was closed eastbound for an emergency response drill.

Throughout 2013, there were additional intermittent closures of single lanes during off-peak hours to facilitate PANYNJ maintenance work.

Lincoln Tunnel (Hudson River between Manhattan & New Jersey)

Throughout 2013, there were intermittent lane closures during off-peak hours to facilitate PANYNJ maintenance work.