

2011 Manhattan River Crossings



Michael R. Bloomberg
Mayor



Janette Sadik-Khan
Commissioner

A member of the New York Metropolitan Transportation Council

2011 Manhattan River Crossings

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Prepared by:
New York City Department of Transportation

Janette Sadik-Khan
Commissioner

Lori A. Ardito
First Deputy Commissioner

Bruce Schaller
Deputy Commissioner

Ryan Russo
Assistant Commissioner

Naim Rasheed
Director, Traffic Planning

Ann Marie Doherty
Chief, Research, Implementation, & Safety

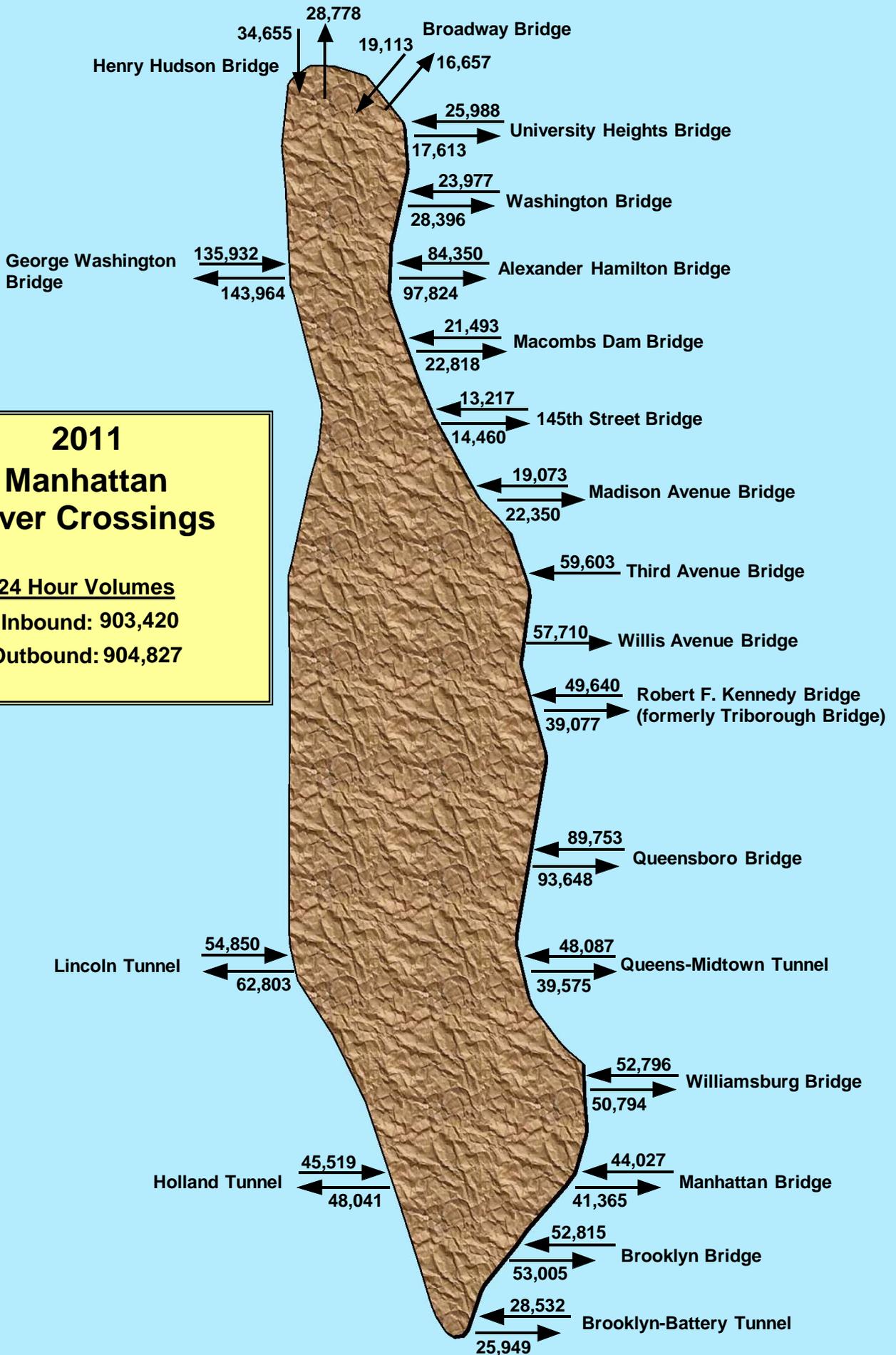
Richard P. Roan
Research, Implementation, & Safety

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2011 Manhattan River Crossings

24 Hour Volumes

Inbound: 903,420
Outbound: 904,827



1,808,000

daily vehicles used the 20
Manhattan River Crossings
in 2011 (total of both
directions).

2.2% Decrease

from the 1,849,000 daily
vehicles recorded in 2010.

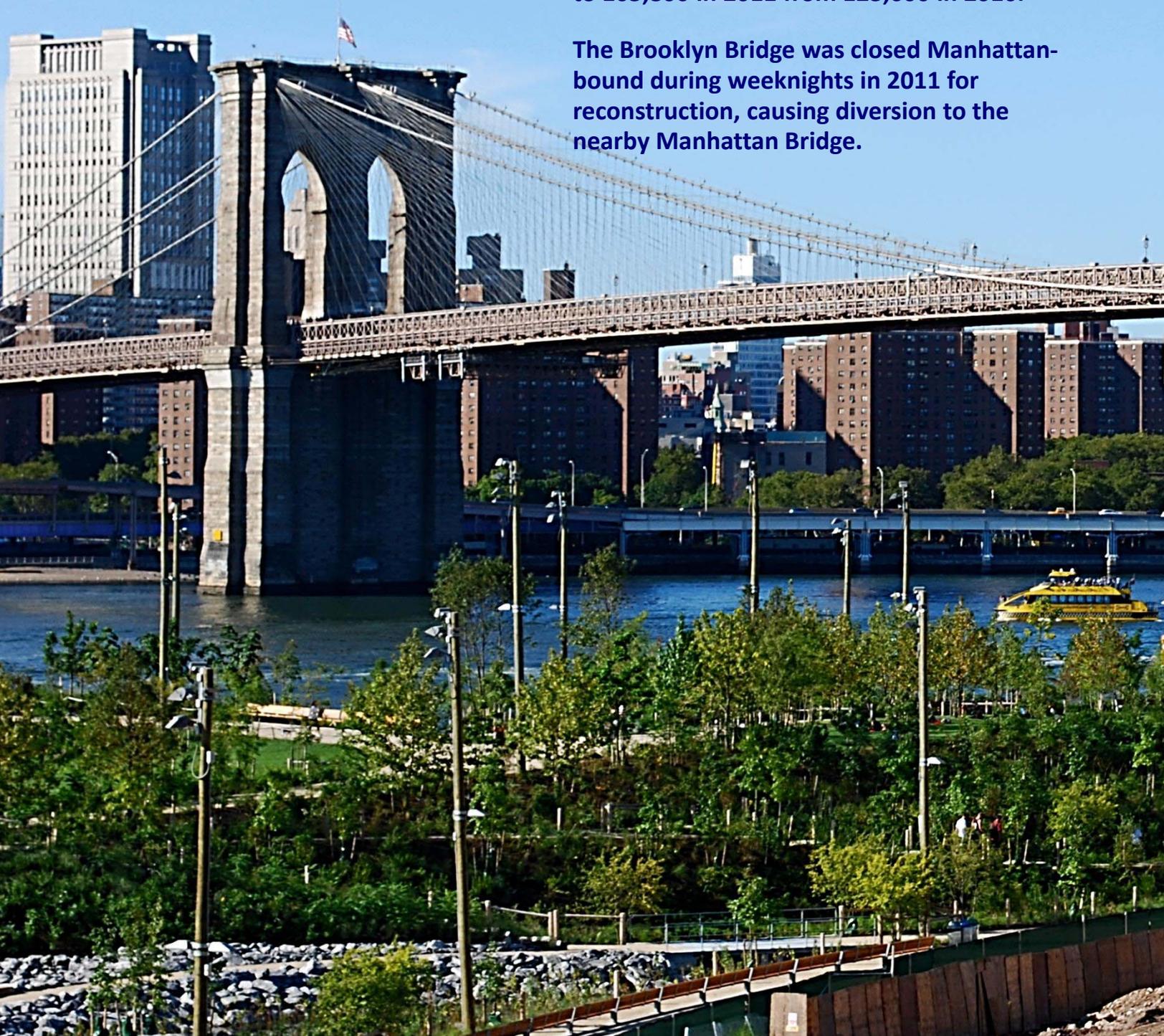
14.2% Increase
Manhattan Bridge (East River)

Largest percentage increase for crossings
carrying more than 50,000 daily vehicles,
to 85,400 in 2011 from 74,800 in 2010.

14.4% Decrease
Brooklyn Bridge (East River)

Largest percentage decrease for crossings
carrying more than 50,000 daily vehicles,
to 105,800 in 2011 from 123,600 in 2010.

The Brooklyn Bridge was closed Manhattan-
bound during weeknights in 2011 for
reconstruction, causing diversion to the
nearby Manhattan Bridge.



George Washington Bridge (Hudson River)

279,900 vehicles per day, the most heavily utilized Manhattan river crossing.

Alexander Hamilton Bridge (Harlem River)

182,200 vehicles per day, the most heavily utilized Harlem River crossing.

Ed Koch Queensboro Bridge (East River)

183,400 vehicles per day, the most heavily utilized East River crossing.

Annual Citywide Subway Ridership

2.2% increase to 1.640 billion in 2011 from 1.604 billion in 2010.

During the past ten years, subway ridership increased 16.7% to 1.640 billion in 2011 from 1.405 billion in 2001. During the same period, Manhattan vehicular river crossings increased 5.6% to 1,808,200 daily vehicles in 2011 from 1,713,000 in 2001.



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Introduction



Broadway Bridge

INTRODUCTION

The 2011 *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), and the Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy For Users (SAFETEA - LU).

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 2011 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 2011-2012 and 2012-2013 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 ~ 2011 Daily Traffic



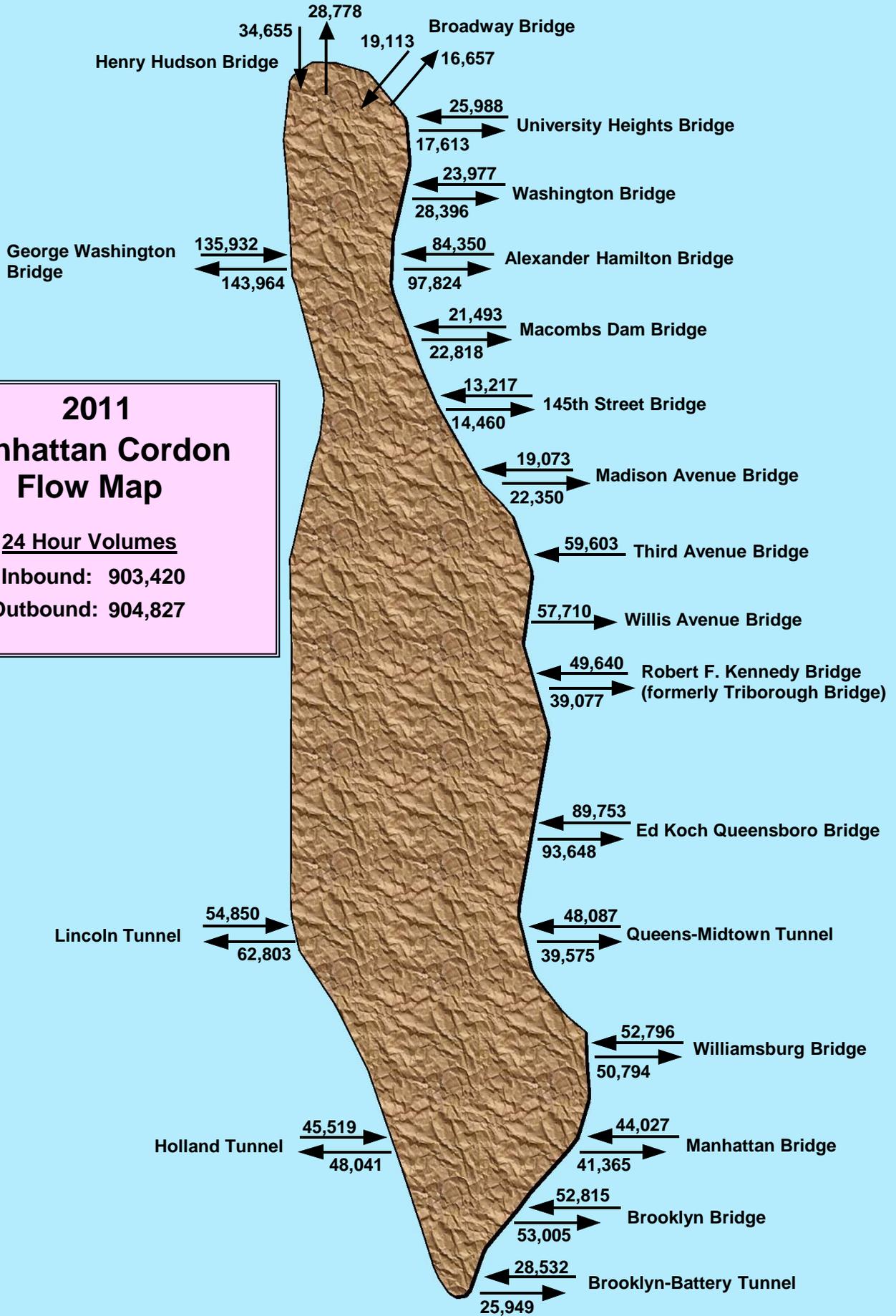
University Heights Bridge

SUMMARY

- Daily Manhattan river crossings decreased 2.2%, to 1,808,200 in fall 2011 from 1,848,700 in fall 2010, a decrease of 40,500 daily vehicles.
- The busiest river crossings are the following.
 - For the 49th consecutive year, the George Washington Bridge carried more traffic than any other Manhattan river crossing. Some 279,900 daily vehicles used this bridge in fall 2011, which was 4.2% fewer than the average daily volume of 292,000 in fall 2010.
 - The Ed Koch Queensboro Bridge was second busiest, serving 183,400 daily vehicles in fall 2011, which was 3.2% more than its fall 2010 daily volume of 177,700.
 - The Alexander Hamilton Bridge was third busiest with its fall 2011 daily volume of 182,200, a decrease of 5.2% from the 192,200 recorded in fall 2010.
- The average automobile entering Manhattan during the morning peak period carried 1.38 persons including the driver. A total of 78% 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 1 pm when an estimated 363,600 vehicles were either moving or parked on the island. This includes vehicles operating only within Manhattan as well as those entering via the river crossings.
- Annual subway ridership citywide increased 2.2% to 1.640 billion in 2011 from 1.504 billion in 2010. This was the highest level of subway ridership since 1950.
- 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 2011 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.

**2011
Manhattan Cordon
Flow Map**

24 Hour Volumes
Inbound: 903,420
Outbound: 904,827

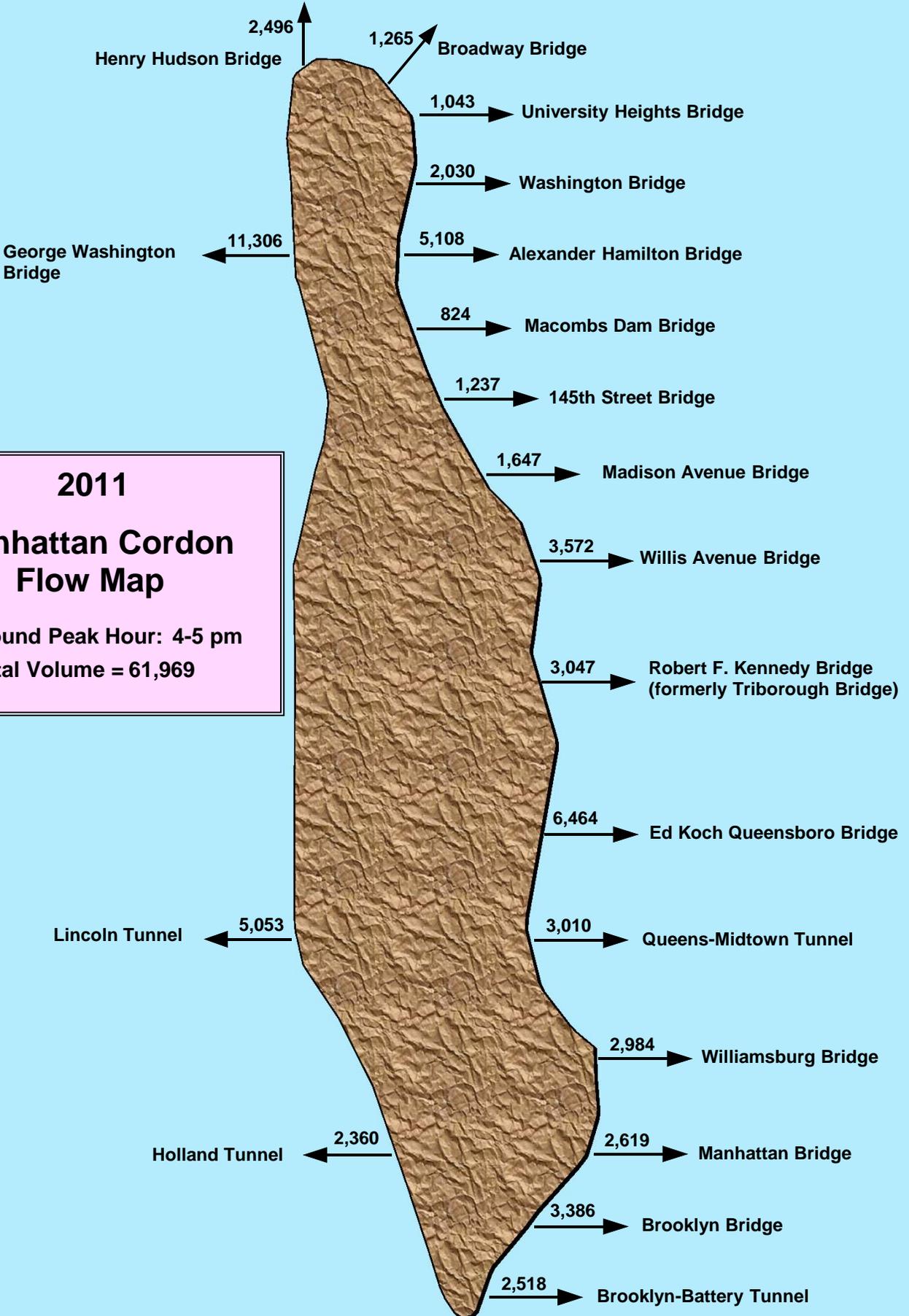


**2011
Manhattan Cordon
Flow Map**

Inbound Peak Hour: 7-8 am
Total Volume = 64,613



2011
Manhattan Cordon
Flow Map
 Outbound Peak Hour: 4-5 pm
 Total Volume = 61,969



**Manhattan Crossings
2011 Average Daily Traffic Volumes
To and From Manhattan**

<i>EAST RIVER BRIDGES</i>	To Manhattan	From Manhattan	2-way Total
Brooklyn Bridge	52,815	53,005	105,820
Ed Koch Queensboro Bridge	89,753	93,648	183,401
Manhattan Bridge	44,027	41,365	85,392
Williamsburg Bridge	52,796	50,794	103,590
Total East River	239,391	238,812	478,203

HARLEM RIVER BRIDGES

Alexander Hamilton Bridge	84,350	97,824	182,174
Broadway Bridge	19,113	16,657	35,770
Macombs Dam Bridge	21,493	22,818	44,311
Madison Avenue Bridge	19,073	22,350	41,423
Third Avenue Bridge	59,603	-----	59,603
University Heights Bridge	25,988	17,613	43,601
Washington Bridge	23,977	28,396	52,373
Willis Avenue Bridge	-----	57,710	57,710
145th Street Bridge	13,217	14,460	27,677
Total Harlem River	266,814	277,828	544,642

MTABT FACILITIES

Brooklyn-Battery Tunnel	28,532	25,949	54,481
Henry Hudson Bridge	34,655	28,778	63,433
Queens-Midtown Tunnel	48,087	39,575	87,662
Robert F. Kennedy Bridge	49,640	39,077	88,717
Total MTABT	160,914	133,379	294,293

PANYNJ FACILITIES

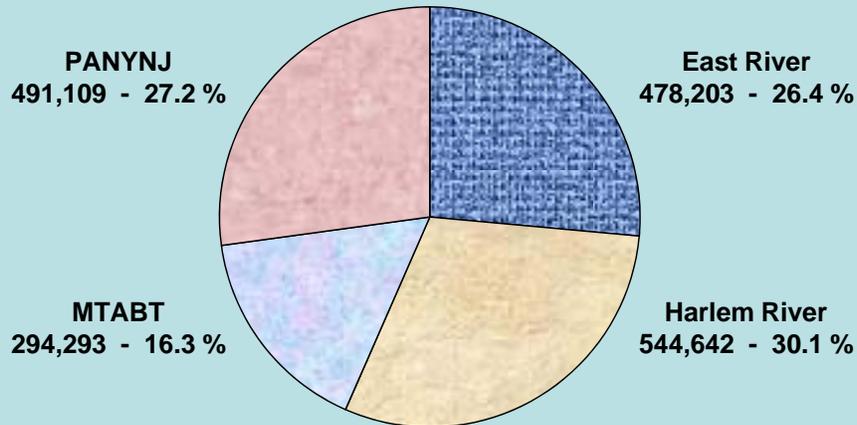
George Washington Bridge	135,932	143,964	279,896
Holland Tunnel	45,519	48,041	93,560
Lincoln Tunnel	54,850	62,803	117,653
Total PANYNJ	236,301	254,808	491,109

GRAND TOTAL	903,420	904,827	1,808,247
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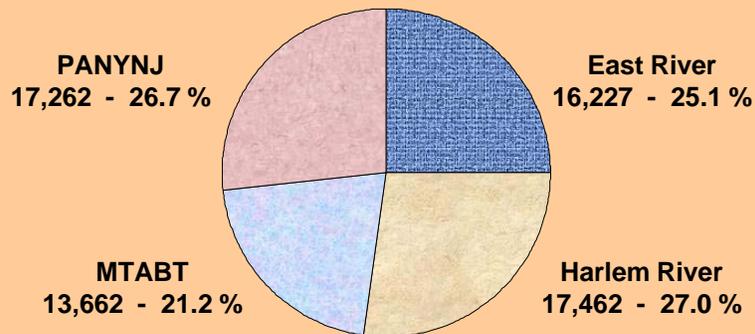
Note: Robert F. Kennedy Bridge, formerly Triborough Bridge, was renamed Nov. 19, 2008.

2011 Manhattan Crossings Vehicle Volumes

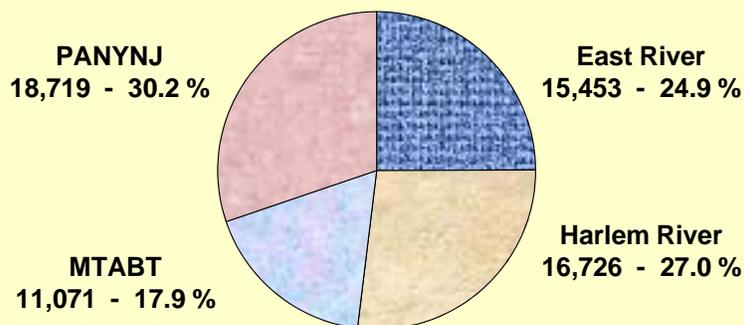
24-Hour Volumes – Both Directions



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



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



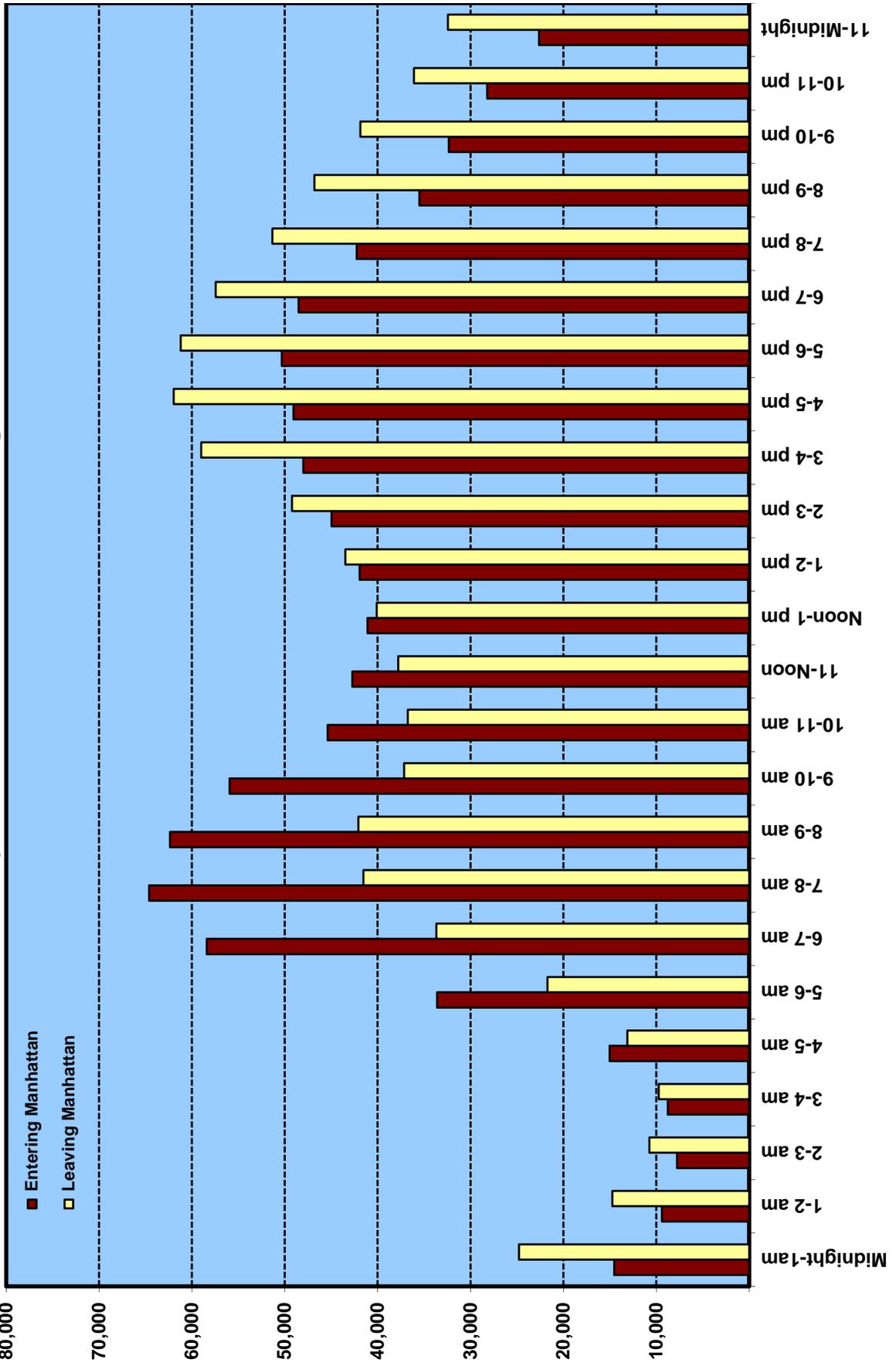
Total Manhattan Crossings 2011 Average Hourly Traffic Volumes To and From Manhattan (All Facilities)

	Entering Manhattan	Leaving Manhattan	2-Way Total
12-1am	14,532	24,790	39,322
1-2am	9,401	14,731	24,132
2-3am	7,770	10,749	18,519
3-4am	8,758	9,740	18,498
4-5am	15,022	13,126	28,148
5-6am	33,604	21,716	55,320
6-7am	58,402	33,682	92,084
7-8am	64,613 **	41,541	106,154
8-9am	62,361	42,074	104,435
9-10am	55,937	37,149	93,086
10-11am	45,384	36,755	82,139
11-12am	42,730	37,787	80,517
12-1pm	41,100	40,103	81,203
1-2pm	41,950	43,485	85,435
2-3pm	44,968	49,230	94,198
3-4pm	48,006	59,003	107,009
4-5pm	49,071	61,969 **	111,040
5-6pm	50,328	61,206	111,534
6-7pm	48,517	57,434	105,951
7-8pm	42,269	51,333	93,602
8-9pm	35,506	46,824	82,330
9-10pm	32,353	41,871	74,224
10-11pm	28,215	36,093	64,308
11-12pm	22,623	32,436	55,059
24 hrs	903,420	904,827	1,808,247
7-10am	182,911	120,764	303,675
10am-1pm	129,214	114,645	243,859
1-4pm	134,924	151,718	286,642
4-7pm	147,916	180,609	328,525
7am-7pm	594,965	567,736	1,162,701

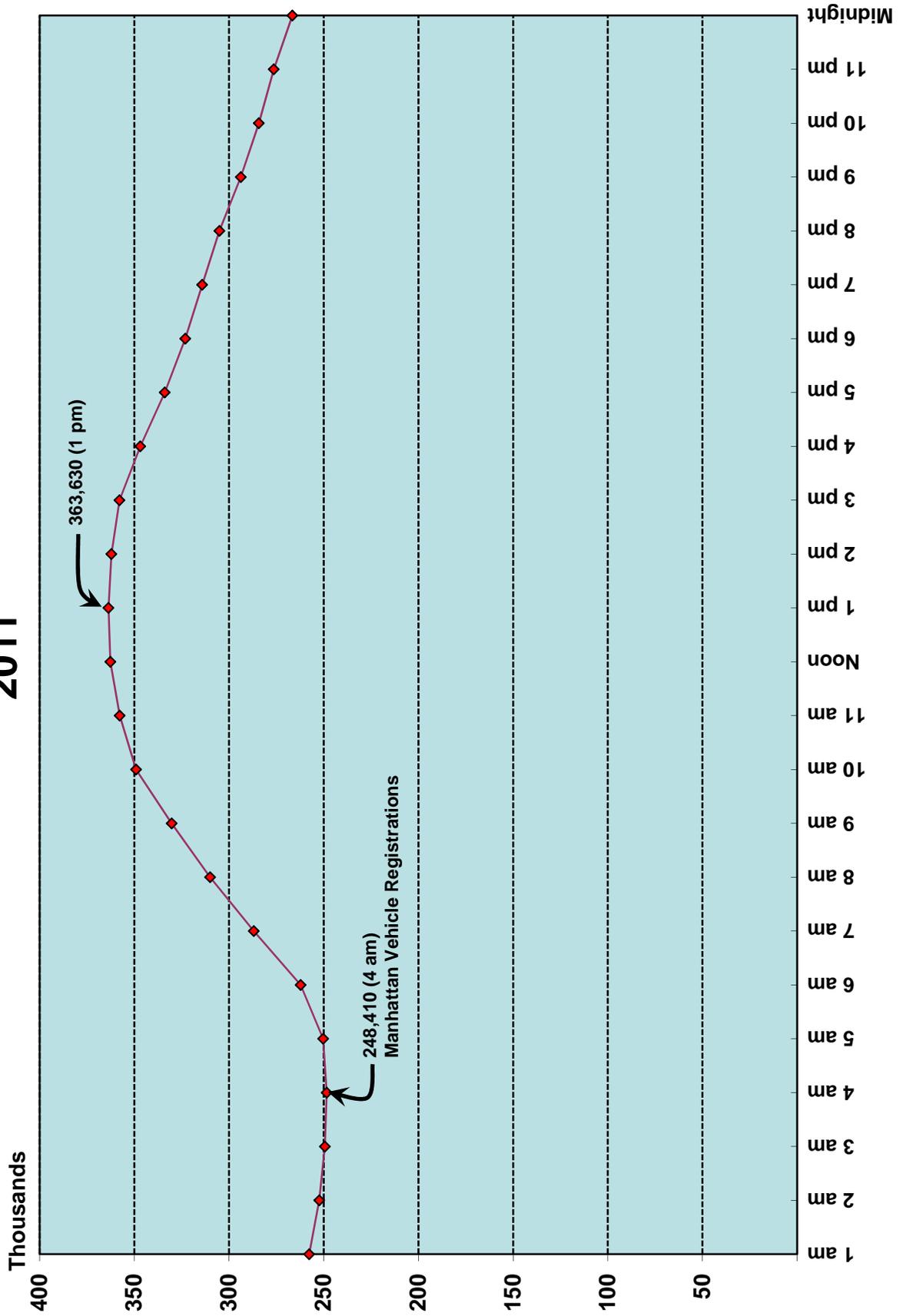
** Peak Volumes

Hourly Vehicle Volumes

Total Hourly Manhattan River Crossings ~ 2011



Manhattan Vehicular Accumulation 2011



Trip Characteristics



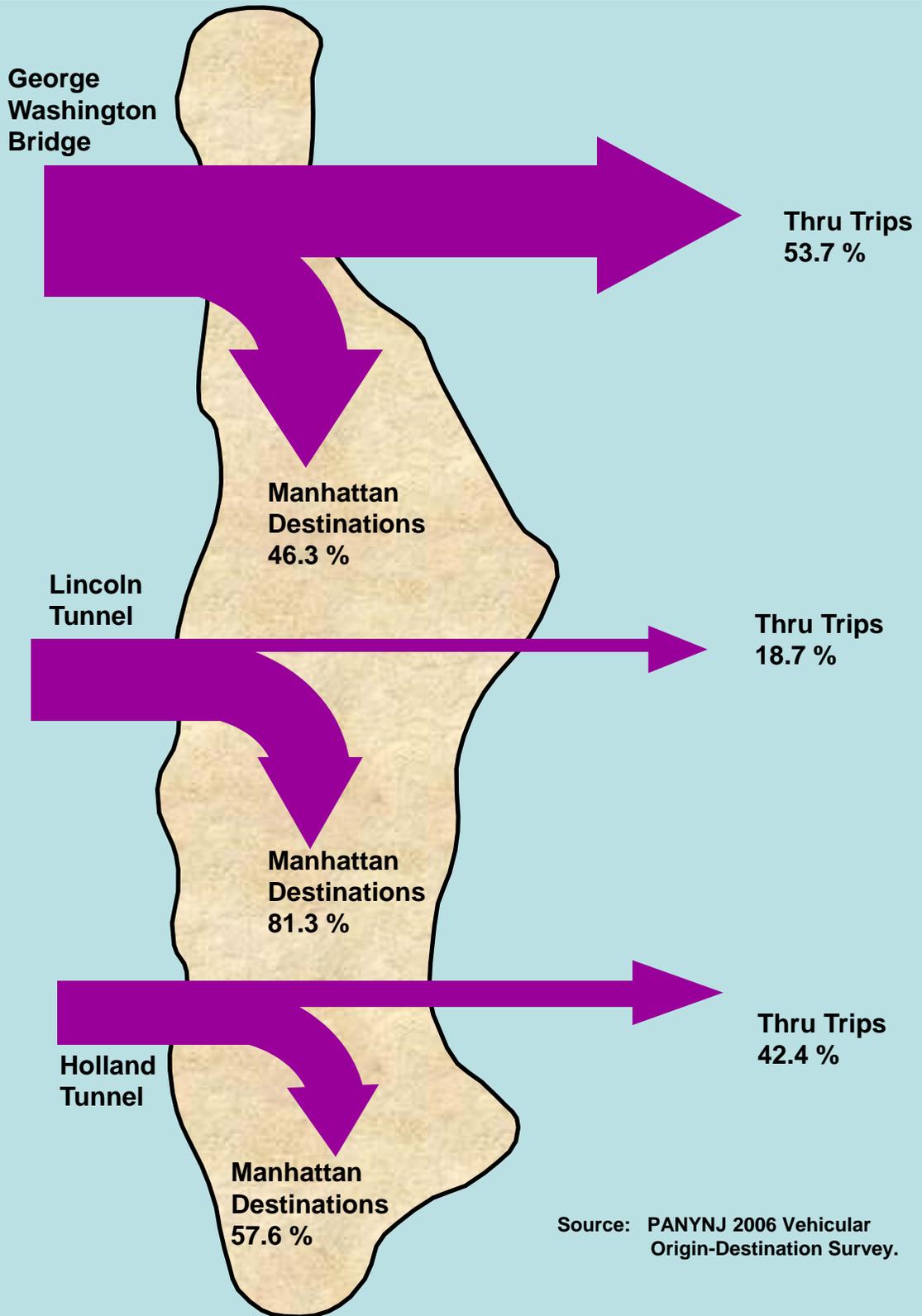
Vehicles Exiting the Brooklyn-Battery Tunnel in Manhattan

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	72.7 %
Brooklyn Bridge	1.22	80.5 %
Manhattan Bridge	1.25	79.9 %
Williamsburg Bridge	1.17	84.6 %
Holland Tunnel	1.32	65.7 %
5 Lower Manhattan Crossings	1.25	76.8 %
Queens-Midtown Tunnel	1.24	77.6 %
Ed Koch Queensboro Bridge	1.44	66.5 %
Lincoln Tunnel	1.97	73.1 %
3 Midtown Manhattan Crossings	1.54	71.5 %
Robert F. Kennedy Bridge	1.18	83.2 %
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	77.0 %
Third Avenue Bridge	1.22	80.6 %
University Heights Bridge	1.23	82.9 %
Washington Bridge	1.38	72.9 %
145th Street Bridge	1.32	73.7 %
Henry Hudson Bridge	1.20	89.0 %
George Washington Bridge	1.74	79.6 %
11 Upper Manhattan Crossings	1.37	81.6 %
All 19 Inbound Manhattan Crossings	1.38	78.0 %

Sources:

1. Port Authority of New York & New Jersey: 2008 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.

2010-2011 Trends



Willis Avenue Bridge

2010-2011 Trends

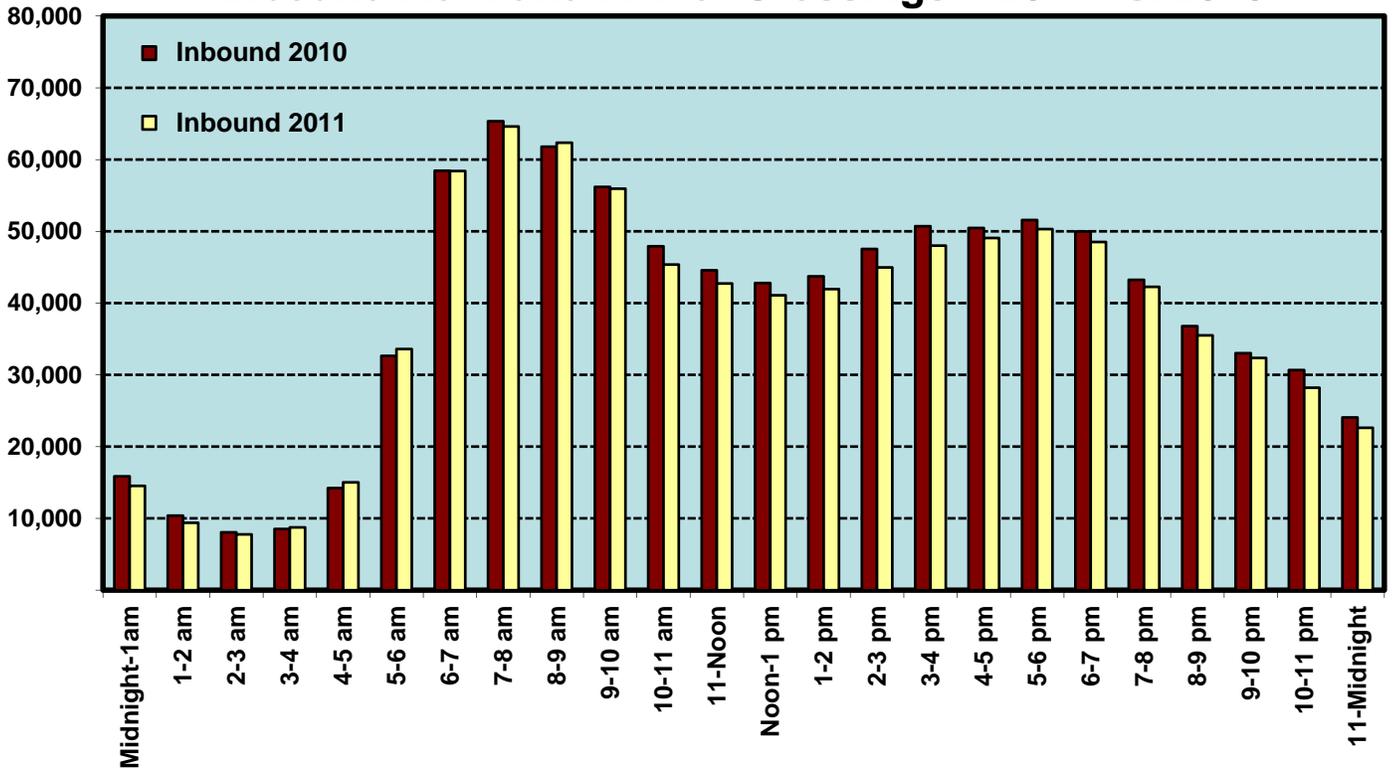
- Daily Manhattan river crossings decreased 2.2%, to 1,808,200 in fall 2011 from 1,848,700 in fall 2010 (40,500 fewer daily vehicles).
- The largest percentage and numerical decrease occurred on the Brooklyn Bridge over the East River between Manhattan and Brooklyn, where daily traffic decreased 14.4%, to 105,800 vehicles in 2011 from 123,600 in 2010 (17,800 fewer daily vehicles). Due to major reconstruction work, the Brooklyn Bridge was closed to Manhattan-bound traffic during 11pm-6am weeknights in 2011.
- The largest percentage and numerical increase occurred on the Manhattan Bridge over the East River between Manhattan and Brooklyn, where daily volume increased 14.2%, to 85,400 vehicles in fall 2011 from 74,800 in fall 2010 (10,600 additional daily vehicles). The Manhattan Bridge is the closest alternative to the Brooklyn Bridge which was closed Manhattan-bound during 11pm-6am weeknights in 2011.
- Total daily traffic on the four East River bridges combined decreased 1.9%, to 478,200 in fall 2011 from 487,300 in fall 2010 (9,100 fewer daily vehicles).
- Daily volume using the nine Harlem River bridges decreased 0.9%, to 544,600 in fall 2011 from 549,600 in fall 2010 (5,000 fewer daily vehicles).
- On the four MTABT Manhattan crossings, total daily traffic decreased 3.6% to 294,300 in fall 2011 from 305,300 in fall 2010 (11,000 fewer daily vehicles).
- Daily traffic using the three PANYNJ Manhattan crossings decreased 3.0% to 491,100 from 506,500. (15,400 fewer daily vehicles)
- Annual subway ridership citywide increased 2.2% to 1.640 billion in 2011 from 1.604 billion in 2010. This was the highest level of subway ridership since 1950.

Manhattan Crossings Hourly Vehicular Volumes 2011 vs 2010

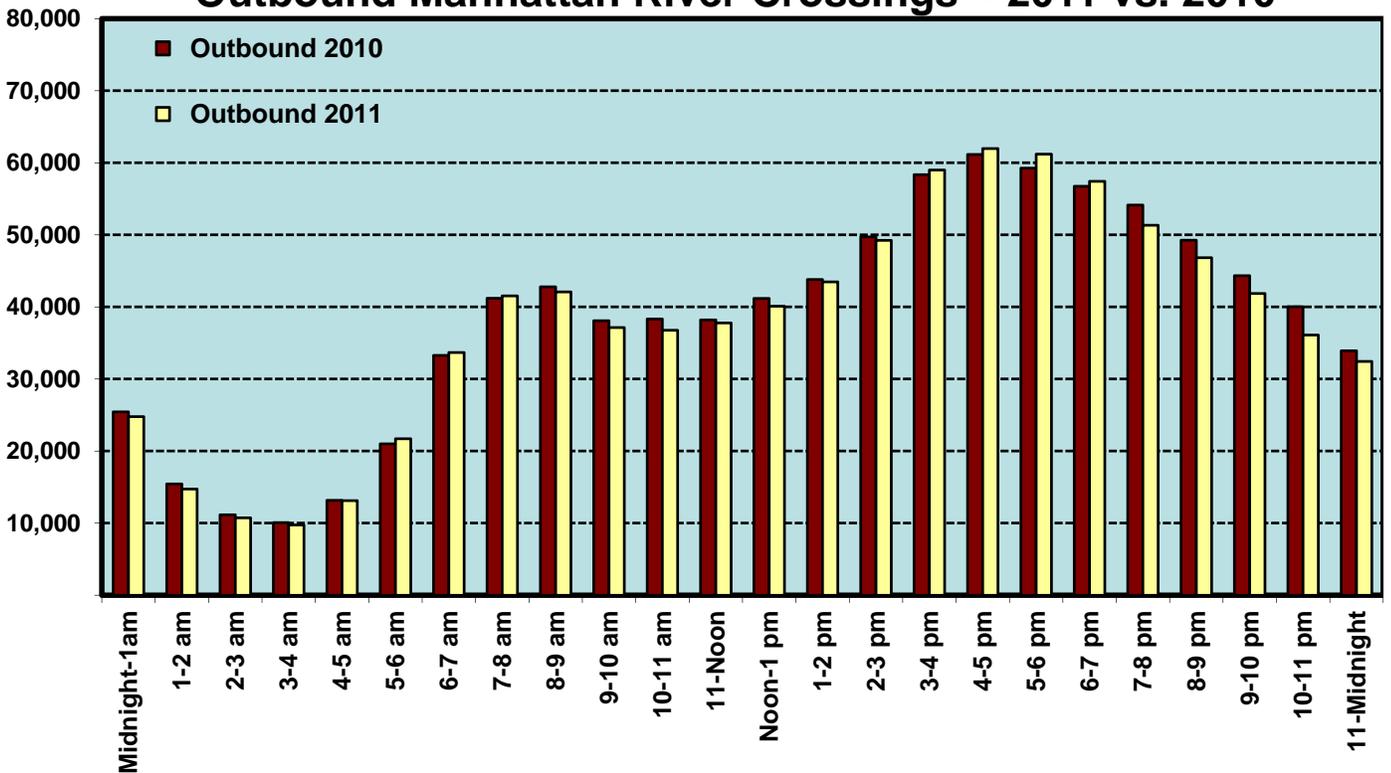
	Inbound			Outbound		
	2010	2011	Percent Change	2010	2011	Percent Change
Mid-1	15,873	14,532	- 8.4 %	25,448	24,790	- 2.6 %
1-2 am	10,391	9,401	- 9.5 %	15,443	14,731	- 4.6 %
2-3 am	8,058	7,770	- 3.6 %	11,159	10,749	- 3.7 %
3-4 am	8,523	8,758	2.8 %	10,079	9,740	- 3.4 %
4-5 am	14,237	15,022	5.5 %	13,159	13,126	- 0.3 %
5-6 am	32,644	33,604	2.9 %	21,001	21,716	3.4 %
6-7 am	58,456	58,402	- 0.1 %	33,287	33,682	1.2 %
7-8 am	65,356	64,613	- 1.1 %	41,198	41,541	0.8 %
8-9 am	61,794	62,361	0.9 %	42,782	42,074	- 1.7 %
9-10 am	56,197	55,937	- 0.5 %	38,100	37,149	- 2.5 %
10-11 a	47,913	45,384	- 5.3 %	38,341	36,755	- 4.1 %
11-Noon	44,570	42,730	- 4.1 %	38,191	37,787	- 1.1 %
Noon-1	42,795	41,100	- 4.0 %	41,175	40,103	- 2.6 %
1-2 pm	43,726	41,950	- 4.1 %	43,797	43,485	- 0.7 %
2-3 pm	47,536	44,968	- 5.4 %	49,728	49,230	- 1.0 %
3-4 pm	50,715	48,006	- 5.3 %	58,346	59,003	1.1 %
4-5 pm	50,464	49,071	- 2.8 %	61,164	61,969	1.3 %
5-6 pm	51,587	50,328	- 2.4 %	59,252	61,206	3.3 %
6-7 pm	49,995	48,517	- 3.0 %	56,747	57,434	1.2 %
7-8 pm	43,255	42,269	- 2.3 %	54,127	51,333	- 5.2 %
8-9 pm	36,788	35,506	- 3.5 %	49,254	46,824	- 4.9 %
9-10 pm	33,017	32,353	- 2.0 %	44,330	41,871	- 5.5 %
10-11 p	30,674	28,215	- 8.0 %	40,042	36,093	- 9.9 %
11-Mid	24,078	22,623	- 6.0 %	33,926	32,436	- 4.4 %
Totals	928,642	903,420	- 2.7 %	920,076	904,827	- 1.7 %
1-4am	26,972	25,929	- 3.9 %	36,681	35,220	- 4.0 %
4-7am	105,337	107,028	1.6 %	67,447	68,524	1.6 %
7-10am	183,347	182,911	- 0.2 %	122,080	120,764	- 1.1 %
10am-1pm	135,278	129,214	- 4.5 %	117,707	114,645	- 2.6 %
1-4pm	141,977	134,924	- 5.0 %	151,871	151,718	- 0.1 %
4-7pm	152,046	147,916	- 2.7 %	177,163	180,609	1.9 %
7-10pm	113,060	110,128	- 2.6 %	147,711	140,028	- 5.2 %
10pm-1am	70,625	65,370	- 7.4 %	99,416	93,319	- 6.1 %
7am-7pm	612,648	594,965	- 2.9 %	568,821	567,736	- 0.2 %
6-10am	241,803	241,313	- 0.2 %	155,367	154,446	- 0.6 %
3-7pm	202,761	195,922	- 3.4 %	235,509	239,612	1.7 %
6am-7pm	671,104	653,367	- 2.6 %	602,108	601,418	- 0.1 %

Hourly Vehicle Volumes

Inbound Manhattan River Crossings ~ 2011 vs. 2010



Outbound Manhattan River Crossings ~ 2011 vs. 2010



Weekday Manhattan Crossings 2010-2011 Traffic Volume Trends Both Directions

EAST RIVER BRIDGES	Highway Functional Classification	2010	2011	Percent Change
Brooklyn Bridge	Principal Arterial	123,640	105,820	- 14.4 %
Ed Koch Queensboro Bridge *	Principal Arterial	177,695	183,401	3.2 %
Manhattan Bridge	Principal Arterial	74,777	85,392	14.2 %
Williamsburg Bridge	Principal Arterial	111,189	103,590	- 6.8 %
Total, 4 East River Bridges		487,301	478,203	- 1.9 %
HARLEM RIVER BRIDGES				
Alexander Hamilton Bridge	Interstate	192,213	182,174	- 5.2 %
Broadway Bridge	Principal Arterial	37,292	35,770	- 4.1 %
Macombs Dam Bridge	Principal Arterial	39,627	44,311	11.8 %
Madison Avenue Bridge	Principal Arterial	42,966	41,423	- 3.6 %
Third Avenue Bridge	Principal Arterial	60,549	59,603	- 1.6 %
University Heights Bridge	Principal Arterial	39,230	43,601	11.1 %
Washington Bridge	Minor Arterial	52,014	52,373	0.7 %
Willis Avenue Bridge	Principal Arterial	56,934	57,710	1.4 %
145th Street Bridge	Minor Arterial	28,749	27,677	- 3.7 %
Total, 9 Harlem River Bridges		549,574	544,642	- 0.9 %
MTABT Manhattan Facilities				
Brooklyn-Battery Tunnel	Interstate	54,187	54,481	0.5 %
Henry Hudson Bridge	Principal Arterial	69,641	63,433	- 8.9 %
Queens-Midtown Tunnel	Interstate	88,014	87,662	- 0.4 %
R.F.K. Memorial Bridge Manhattan Plaza **	Principal Arterial	93,455	88,717	- 5.1 %
Total, 4 MTABT Manhattan Crossings		305,297	294,293	- 3.6 %
PANYNJ Manhattan Facilities				
George Washington Bridge	Interstate	292,047	279,896	- 4.2 %
Holland Tunnel	Interstate	94,667	93,560	- 1.2 %
Lincoln Tunnel	Principal Arterial	119,832	117,653	- 1.8 %
Total, 3 PANYNJ Manhattan - New Jersey Crossings		506,546	491,109	- 3.0 %
GRAND TOTALS		1,848,718	1,808,247	- 2.2 %

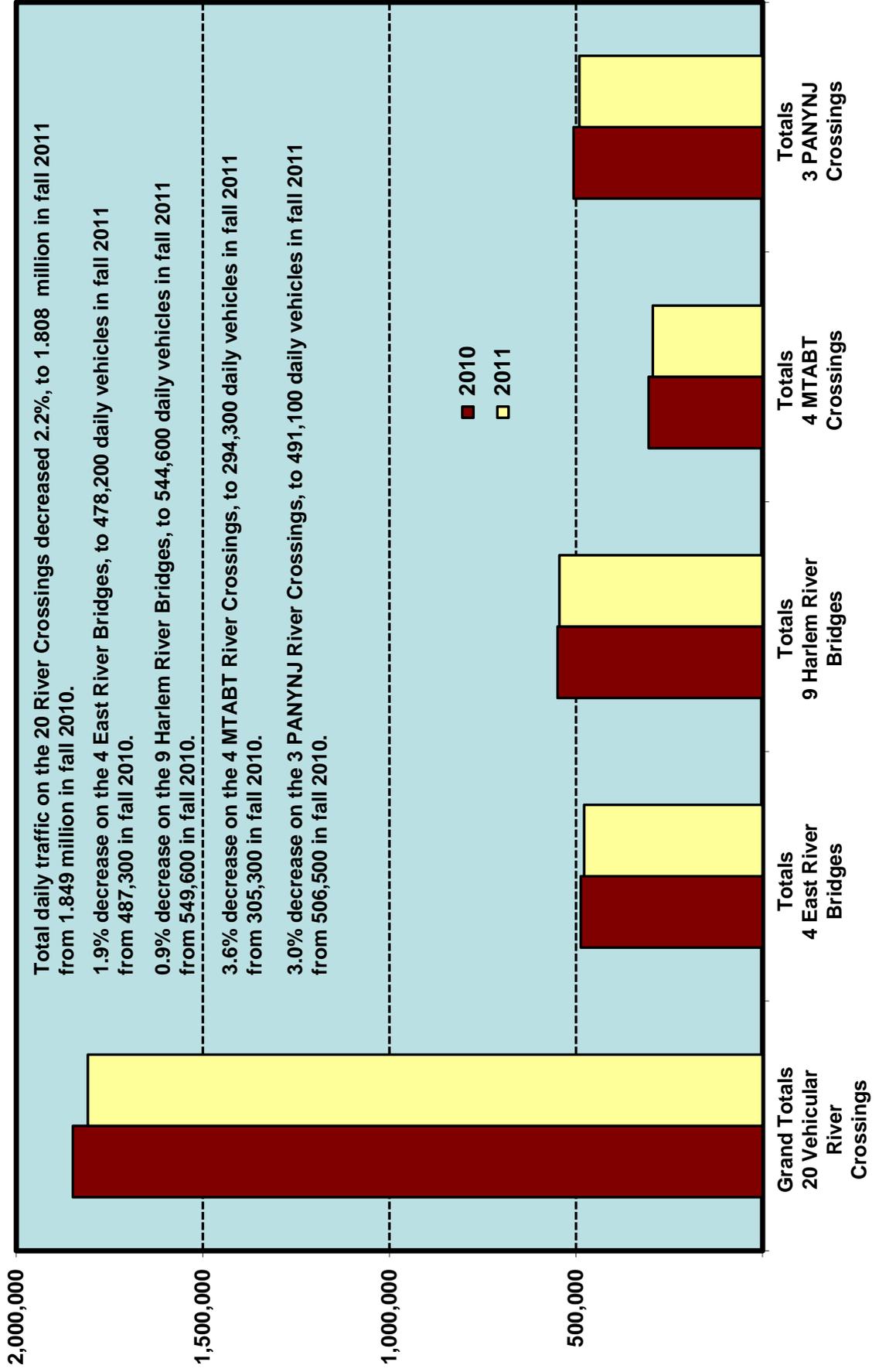
* Queensboro Bridge renamed April 11, 2011.

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

Manhattan River Crossings Daily Volumes

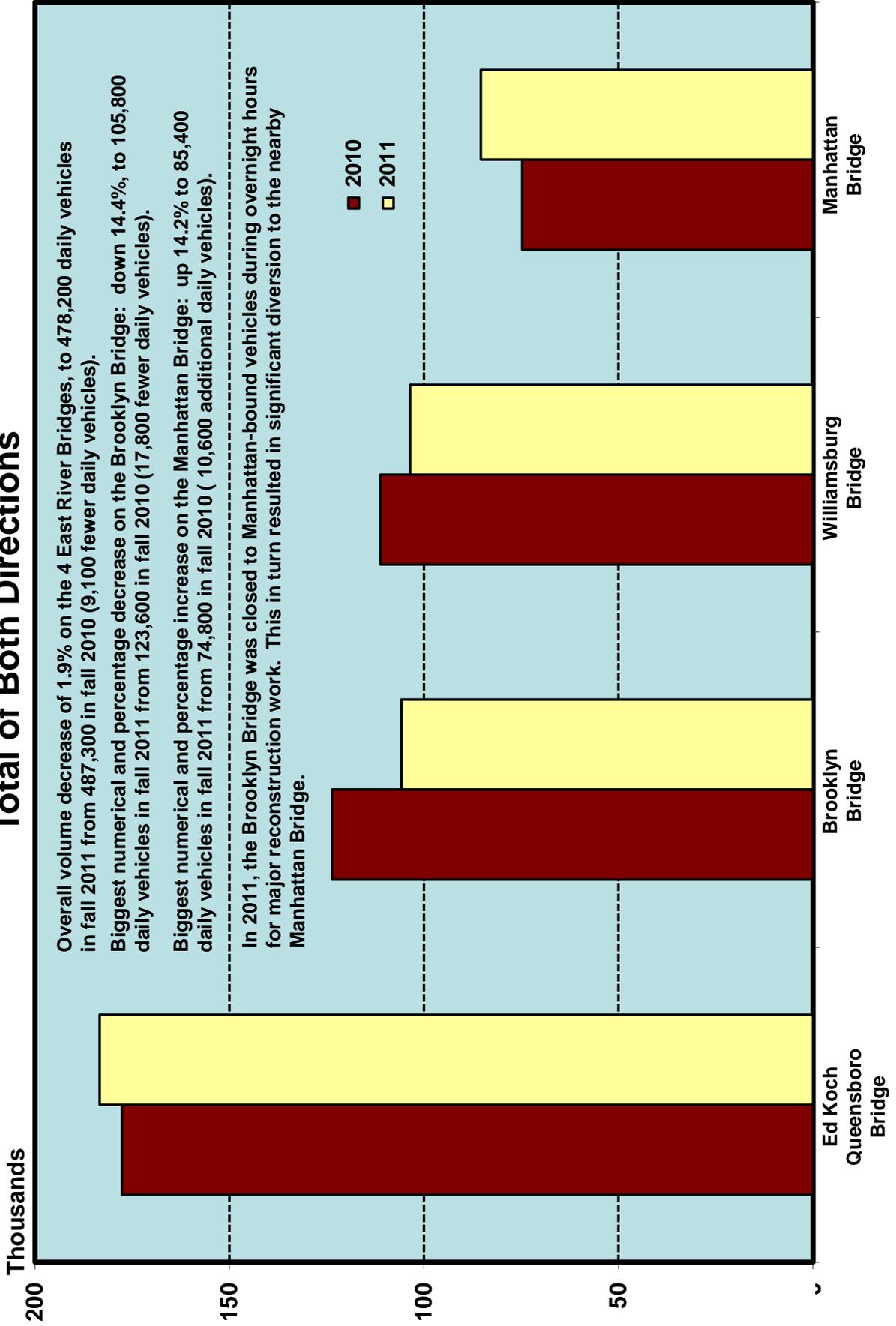
2011 vs. 2010

Total of Both Directions



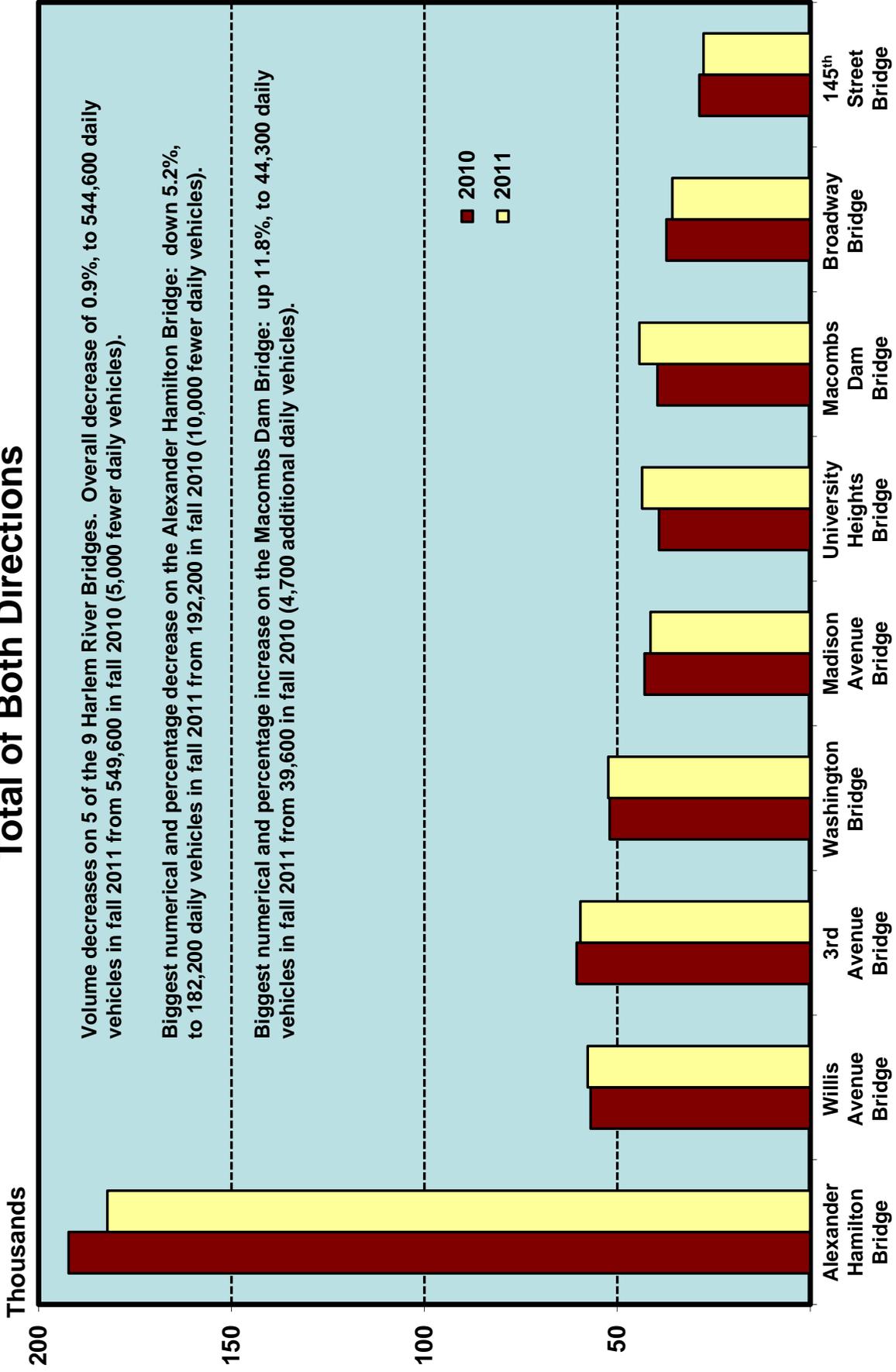
East River Bridges Daily Volumes 2011 vs. 2010

Total of Both Directions



Harlem River Bridges Daily Volumes 2011 vs. 2010

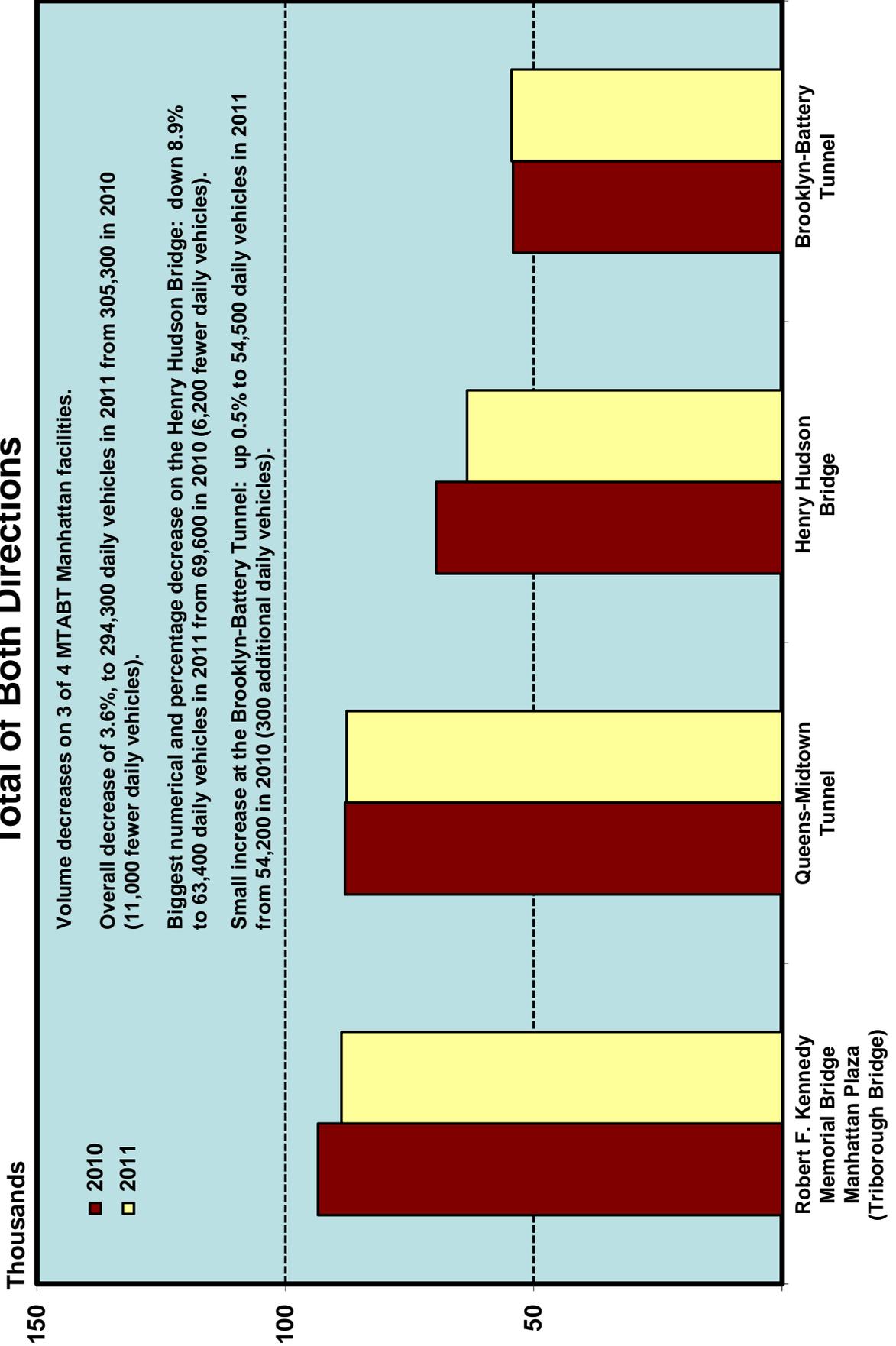
Total of Both Directions



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

2011 vs. 2010

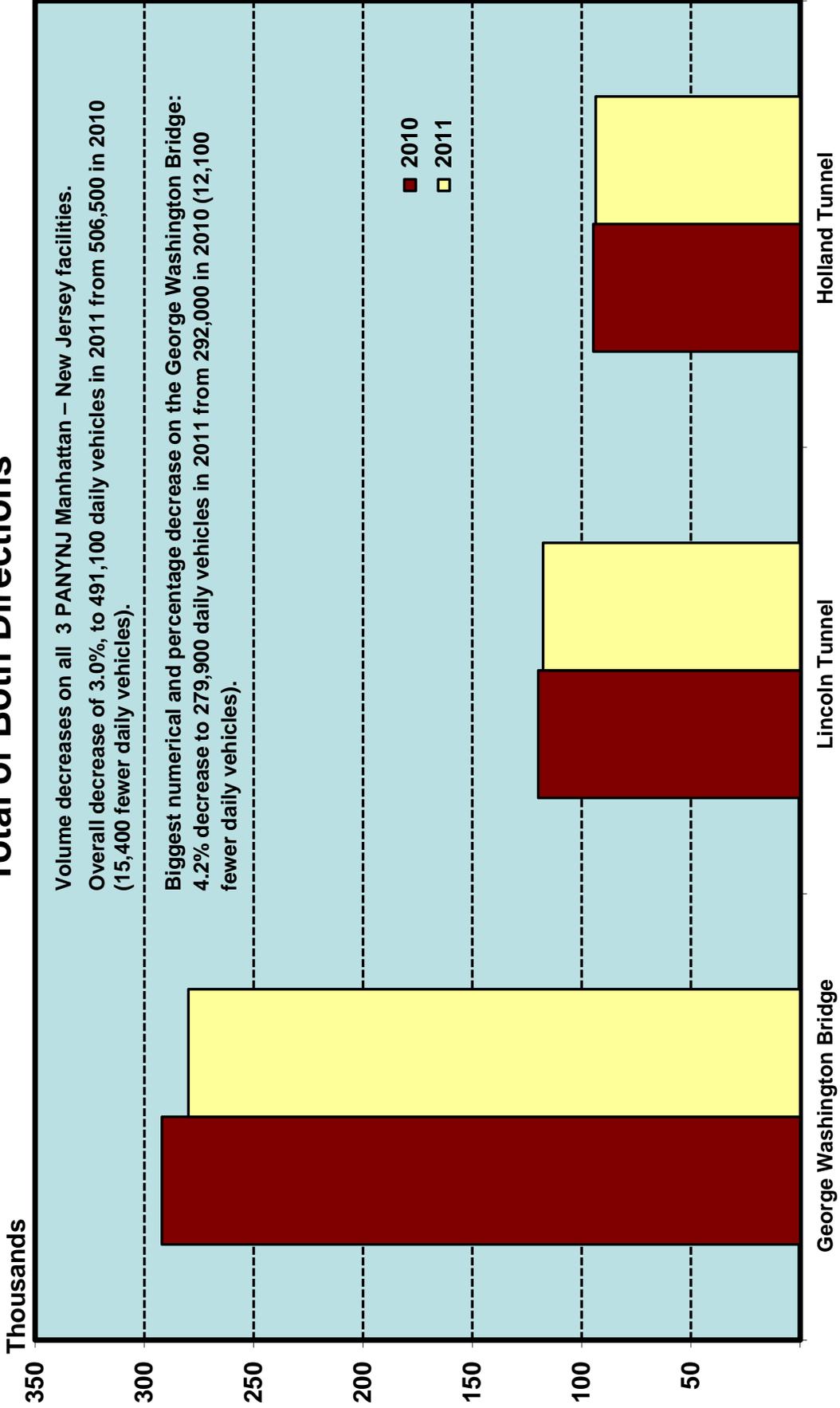
Total of Both Directions



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

2011 vs. 2010

Total of Both Directions



Ten-Year Trends 2001 - 2011



3rd Avenue Bridge

Ten-Year Trends: 2001 - 2011

- In the ten-year period from 2001 to 2011, Manhattan river crossings traffic volume increased 5.6%, to 1,808,200 daily vehicles from 1,713,000, an increase of 95,200 daily vehicles.
- Daily vehicle trips entering Manhattan increased 5.1%, to 903,400 in 2011 from 859,700 in 2001 (43,700 additional daily vehicles entering Manhattan).
 - Biggest percentage increase in inbound trips during 4-7am: up 21.4% to 107,000 vehicles in 2011 from 88,200 in 2001 (18,800 additional 4-7 am entries).
 - Biggest numerical increase in inbound trips during 7-10am: increase of 25,600 vehicles, to 182,900 in 2011 from 157,300 in 2001 (+16.2%).
- Daily vehicle trips leaving Manhattan increased 6.0%, to 904,800 in 2011 from 853,300 in 2001 (51,500 additional daily vehicles leaving Manhattan).
 - Biggest percentage increase in outbound trips during 4-7am: up 26.1% to 68,500 vehicles in 2011 from 54,300 in 2001 (14,200 additional trips leaving Manhattan between 4-7am).
 - Biggest numerical increase in outbound trips during 1-4pm: increase of 16,300 vehicles, to 151,700 in 2011 from 135,400 in 2001 (+12.0%).
- Vehicle trips on the 13 toll-free East and Harlem River bridges increased 2.7%, to 1,022,800 daily vehicles in 2011 from 996,100 in 2001.
 - Greatest volume and percentage increase on the Williamsburg Bridge over the East River: up 26.0%, to 103,600 daily vehicles in 2011 from 82,200 in 2001 (21,400 additional daily vehicles).
 - Greatest volume and percentage decrease on the Willis Avenue Bridge over the Harlem River: down 20.8%, to 57,700 daily vehicles in 2011 from 72,900 in 2001 (15,200 fewer daily vehicles).
- Traffic volumes on the four MTA Bridges and Tunnels (MTABT) river crossings serving Manhattan increased 14.1%, to 294,300 daily vehicles in 2011 from 257,900 in 2001 (36,400 additional daily vehicles).
 - Greatest volume and percentage increase at the Brooklyn-Battery Tunnel: up 296% to 54,500 daily vehicles in fall 2011 from 13,800 in fall 2001 (40,700 additional daily vehicles). Following the events of September 11, 2001, severe restrictions had been imposed on vehicle entries into Lower Manhattan.
 - Biggest volume and percentage decrease at the Manhattan Plaza of Robert F. Kennedy Memorial Bridge: down 13.2% to 88,700 daily vehicles in 2011 from 102,200 in 2001 (13,500 fewer daily vehicles).
- Traffic volumes on the three trans-Hudson Port Authority of New York and New Jersey (PANYNJ) river crossings serving Manhattan in 7.0%, to 491,100 daily vehicles in 2011 from 458,900 in 2001 (32,200 additional daily vehicles).
 - Greatest volume and percentage increase at the Holland Tunnel: up 116% to 93,600 daily vehicles in fall 2011 from 43,400 in fall 2001 (50,200 additional vehicles per day). Following the events of September 11, 2001, severe restrictions had been imposed on vehicle entries into Lower Manhattan.

- Greatest volume and percentage decrease on the George Washington Bridge: down 9.5% to 279,900 daily vehicles in fall 2011 from 309,300 in fall 2001 (29,400 fewer daily vehicles).
- New York City motor vehicle registrations decreased 3.1% to 1,961,300 in 2011 from 2,024,900 in 2001. Manhattan registrations decreased 3.5% to 248,400 from 257,500.
- Annual citywide subway ridership increased 16.7% to 1,640,000,000 in 2011 from 1,405,000,000 in 2001, and is now at its highest level since 1950.

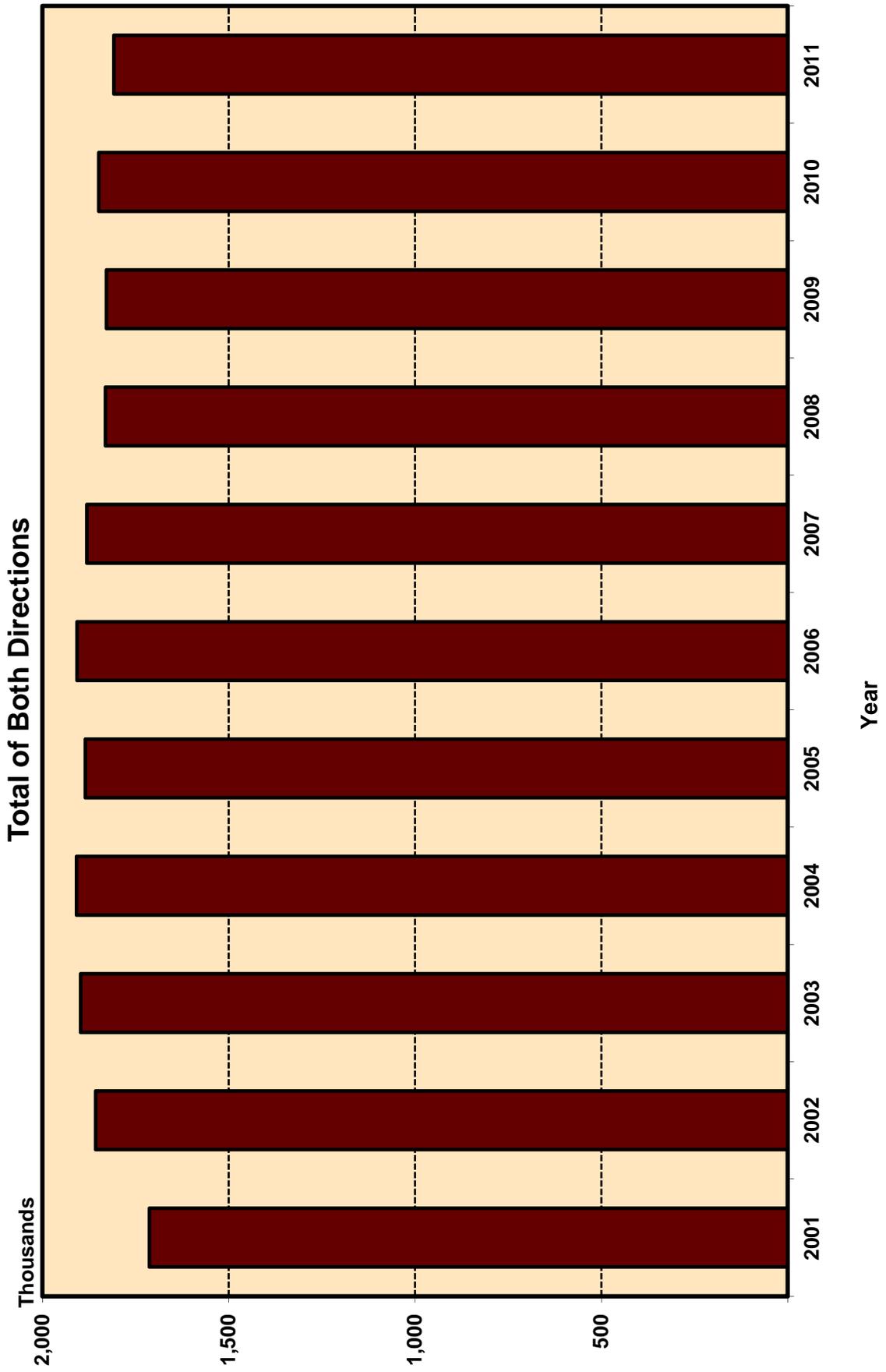
Weekday Manhattan Crossings 10-Year Traffic Volume Trends ~ 2001-2011 Both Directions

EAST RIVER BRIDGES	Highway Functional Classification	2001	2011	Percent Change
Brooklyn Bridge	Principal Arterial	95,586	105,820	10.7 %
Ed Koch Queensboro Bridge *	Principal Arterial	176,469	183,401	3.9 %
Manhattan Bridge	Principal Arterial	73,064	85,392	16.9 %
Williamsburg Bridge	Principal Arterial	82,202	103,590	26.0 %
Total, 4 East River Bridges		427,321	478,203	11.9 %
HARLEM RIVER BRIDGES				
Alexander Hamilton Bridge	Interstate	168,605	182,174	8.0 %
Broadway Bridge	Principal Arterial	41,175	35,770	- 13.1 %
Macombs Dam Bridge	Principal Arterial	39,615	44,311	11.9 %
Madison Avenue Bridge	Principal Arterial	43,331	41,423	- 4.4 %
Third Avenue Bridge	Principal Arterial	72,756	59,603	- 18.1 %
University Heights Bridge	Principal Arterial	46,381	43,601	- 6.0 %
Washington Bridge	Minor Arterial	57,443	52,373	- 8.8 %
Willis Avenue Bridge	Principal Arterial	72,901	57,710	- 20.8 %
145th Street Bridge	Minor Arterial	26,552	27,677	4.2 %
Total, 9 Harlem River Bridges		568,759	544,642	- 4.2 %
MTABT Manhattan Facilities				
Brooklyn-Battery Tunnel	Interstate	13,762	54,481	295.9 %
Henry Hudson Bridge	Principal Arterial	69,087	63,433	- 8.2 %
Queens-Midtown Tunnel	Interstate	72,864	87,662	20.3 %
R.F.K. Memorial Bridge Manhattan Plaza **	Principal Arterial	102,224	88,717	- 13.2 %
Total, 4 MTABT Manhattan Crossings		257,937	294,293	14.1 %
PANYNJ Manhattan Facilities				
George Washington Bridge	Interstate	309,310	279,896	- 9.5 %
Holland Tunnel	Interstate	43,377	93,560	115.7 %
Lincoln Tunnel	Principal Arterial	106,257	117,653	10.7 %
Total, 3 PANYNJ Manhattan - New Jersey Crossings		458,944	491,109	7.0 %
GRAND TOTALS		1,712,961	1,808,247	5.6 %

* Queensboro Bridge renamed April 11, 2011.

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

Daily Manhattan River Crossings 2001 - 2011

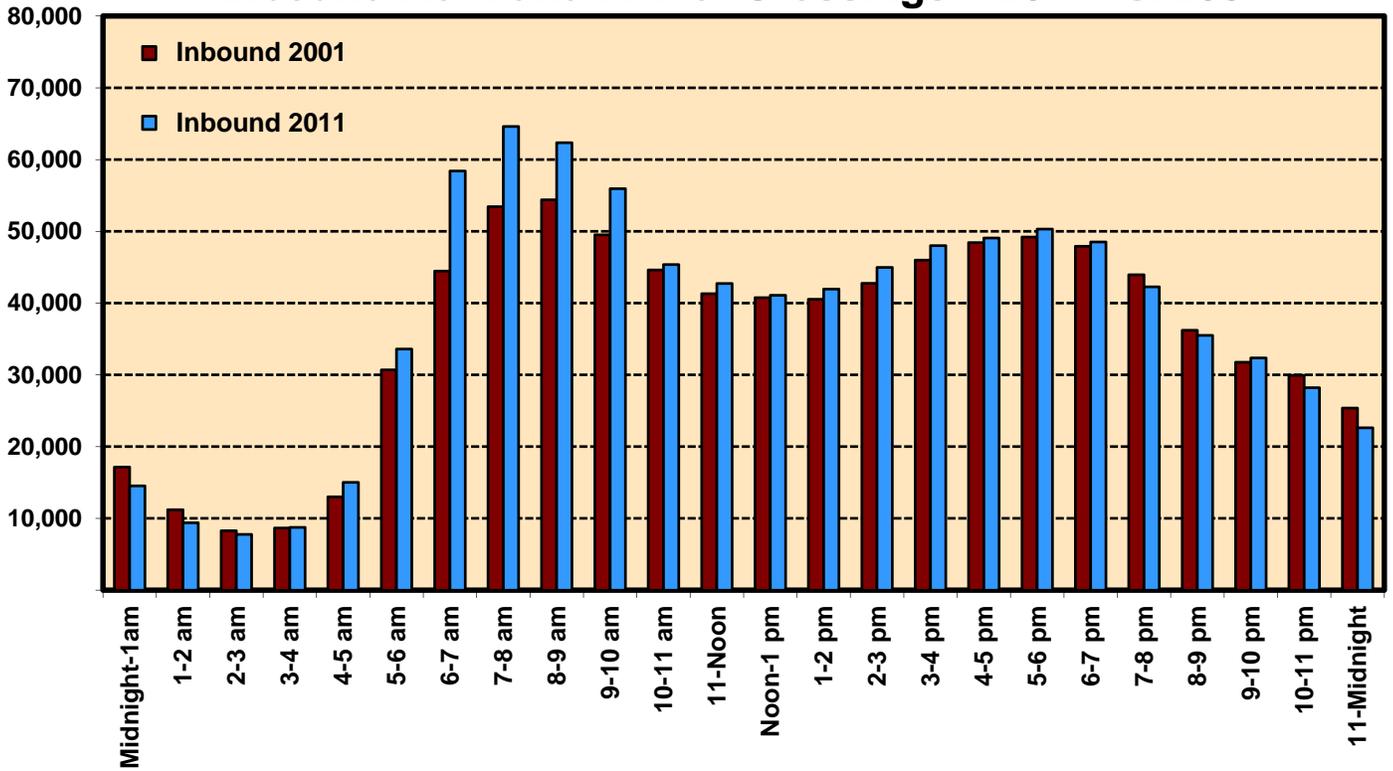


Manhattan River Crossings Hourly Vehicular Volumes 2001 vs 2011

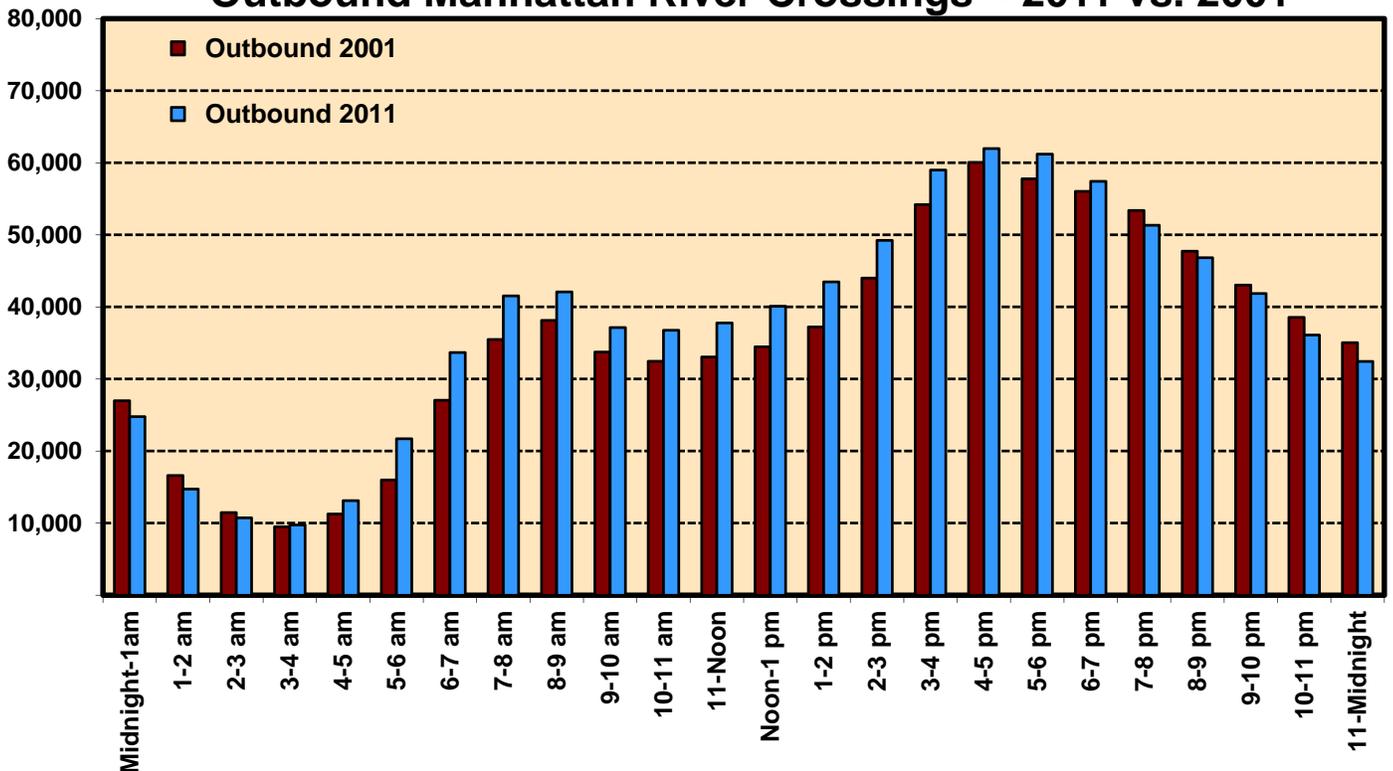
	Inbound			Outbound		
	2001	2011	Percent Change	2001	2011	Percent Change
Mid-1	17,160	14,532	-15.3 %	26,978	24,790	- 8.1 %
1-2 am	11,210	9,401	-16.1 %	16,623	14,731	-11.4 %
2-3 am	8,286	7,770	- 6.2 %	11,463	10,749	- 6.2 %
3-4 am	8,665	8,758	1.1 %	9,504	9,740	2.5 %
4-5 am	13,010	15,022	15.5 %	11,273	13,126	16.4 %
5-6 am	30,698	33,604	9.5 %	16,002	21,716	35.7 %
6-7 am	44,459	58,402	31.4 %	27,062	33,682	24.5 %
7-8 am	53,439	64,613	20.9 %	35,481	41,541	17.1 %
8-9 am	54,396	62,361	14.6 %	38,134	42,074	10.3 %
9-10 am	49,514	55,937	13.0 %	33,747	37,149	10.1 %
10-11 a	44,630	45,384	1.7 %	32,463	36,755	13.2 %
11-Noon	41,320	42,730	3.4 %	33,062	37,787	14.3 %
Noon-1	40,760	41,100	0.8 %	34,462	40,103	16.4 %
1-2 pm	40,552	41,950	3.4 %	37,218	43,485	16.8 %
2-3 pm	42,749	44,968	5.2 %	44,001	49,230	11.9 %
3-4 pm	45,991	48,006	4.4 %	54,210	59,003	8.8 %
4-5 pm	48,444	49,071	1.3 %	60,053	61,969	3.2 %
5-6 pm	49,207	50,328	2.3 %	57,777	61,206	5.9 %
6-7 pm	47,934	48,517	1.2 %	56,033	57,434	2.5 %
7-8 pm	43,965	42,269	- 3.9 %	53,377	51,333	- 3.8 %
8-9 pm	36,210	35,506	- 1.9 %	47,734	46,824	- 1.9 %
9-10 pm	31,770	32,353	1.8 %	43,031	41,871	- 2.7 %
10-11 p	29,955	28,215	- 5.8 %	38,546	36,093	- 6.4 %
11-Mid	25,370	22,623	-10.8 %	35,033	32,436	- 7.4 %
Totals	859,694	903,420	5.1 %	853,267	904,827	6.0 %
1-4am	28,161	25,929	- 7.9 %	37,590	35,220	- 6.3 %
4-7am	88,167	107,028	21.4 %	54,337	68,524	26.1 %
7-10am	157,349	182,911	16.2 %	107,362	120,764	12.5 %
10am-1pm	126,710	129,214	2.0 %	99,987	114,645	14.7 %
1-4pm	129,292	134,924	4.4 %	135,429	151,718	12.0 %
4-7pm	145,585	147,916	1.6 %	173,863	180,609	3.9 %
7-10pm	111,945	110,128	- 1.6 %	144,142	140,028	- 2.9 %
10pm-1am	72,485	65,370	- 9.8 %	100,557	93,319	- 7.2 %
7am-7pm	558,936	594,965	6.4 %	516,641	567,736	9.9 %
6-10am	201,808	241,313	19.6 %	134,424	154,446	14.9 %
3-7pm	191,576	195,922	2.3 %	228,073	239,612	5.1 %
6am-7pm	603,395	653,367	8.3 %	543,703	601,418	10.6 %

Hourly Vehicle Volumes

Inbound Manhattan River Crossings ~ 2011 vs. 2001

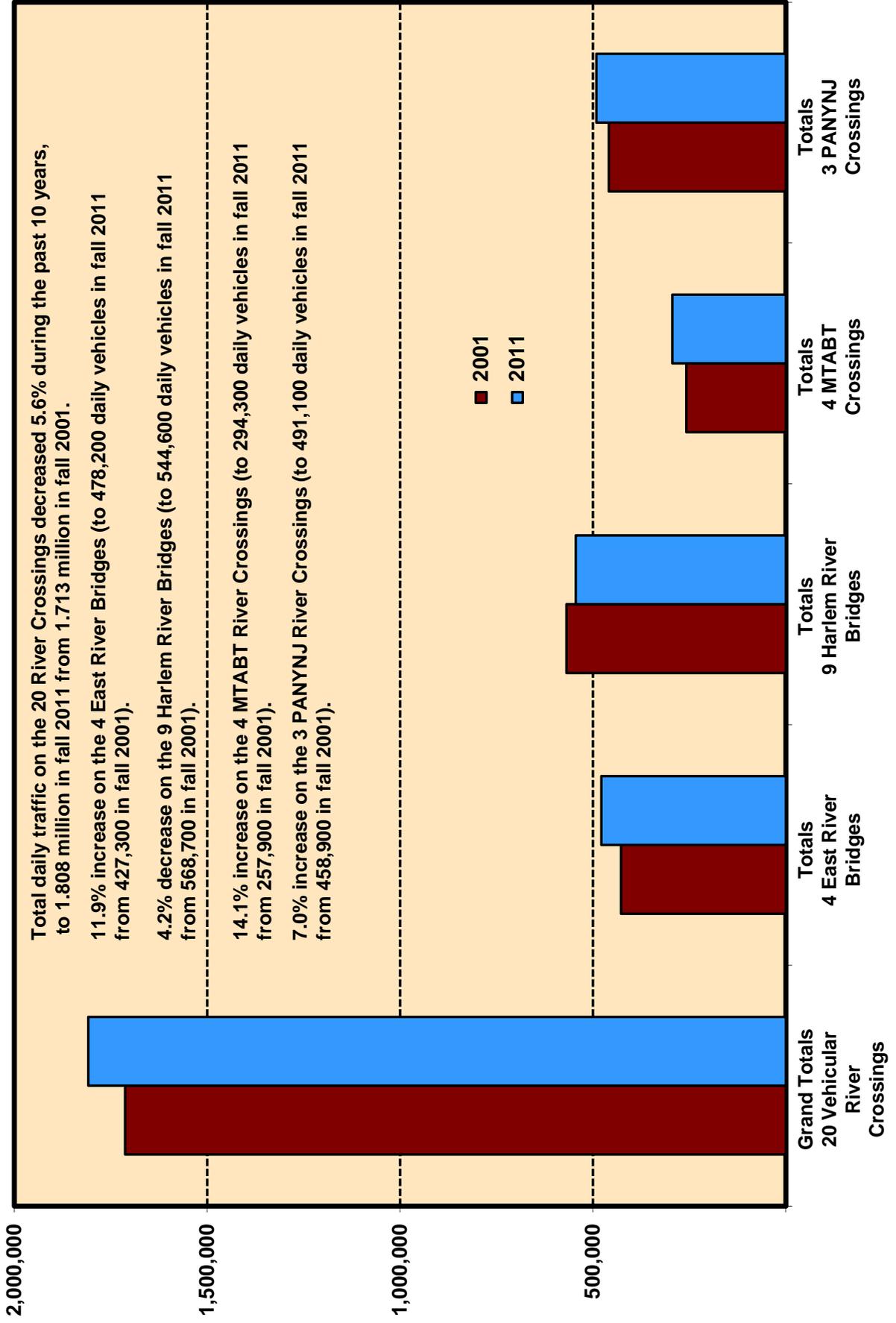


Outbound Manhattan River Crossings ~ 2011 vs. 2001



10-Year Volume Changes ~ 2001 vs. 2011

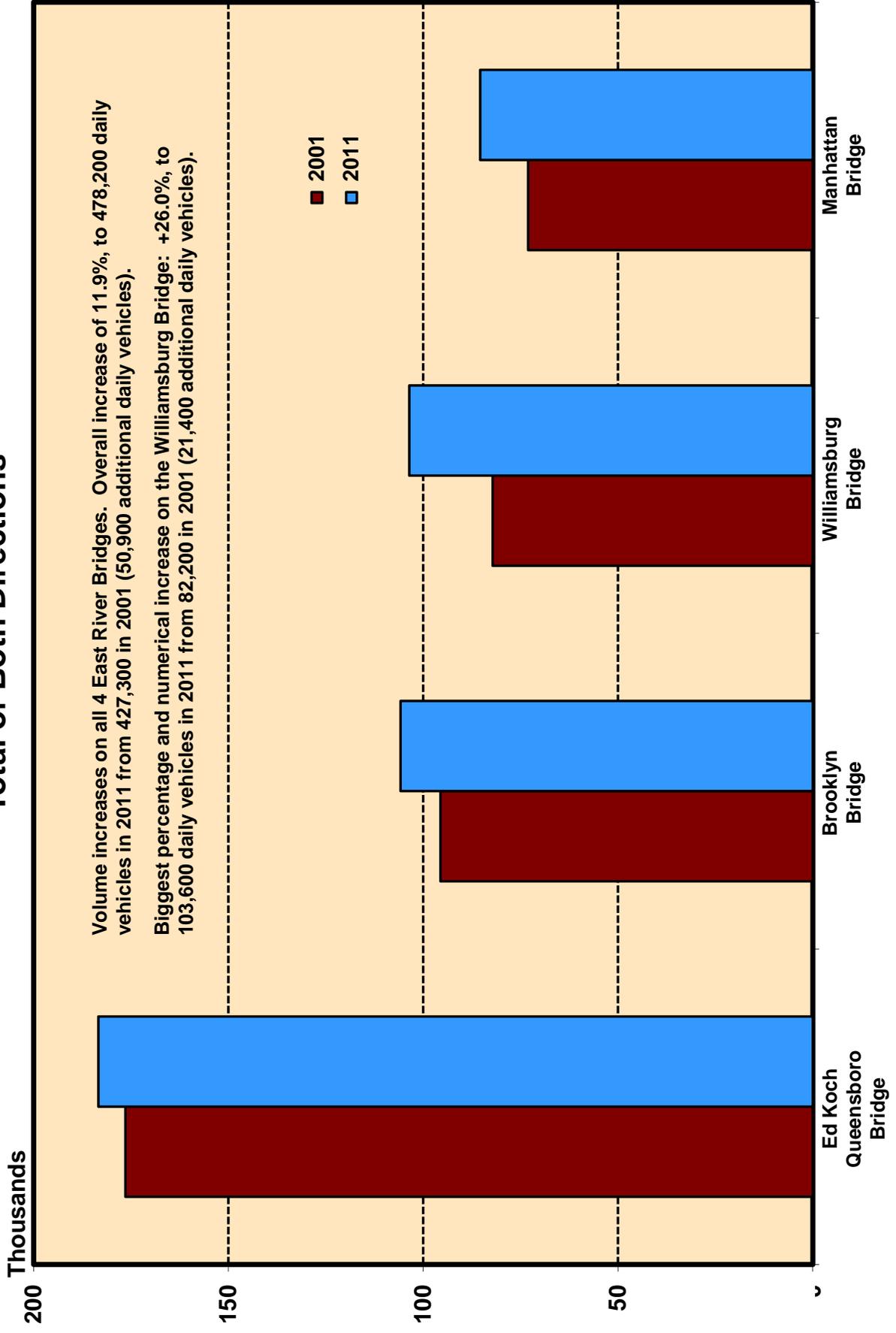
Manhattan River Crossings Daily Volumes ~ Total of Both Directions



10-Year Volume Changes ~ 2001 – 2011

East River Bridges Daily Volumes

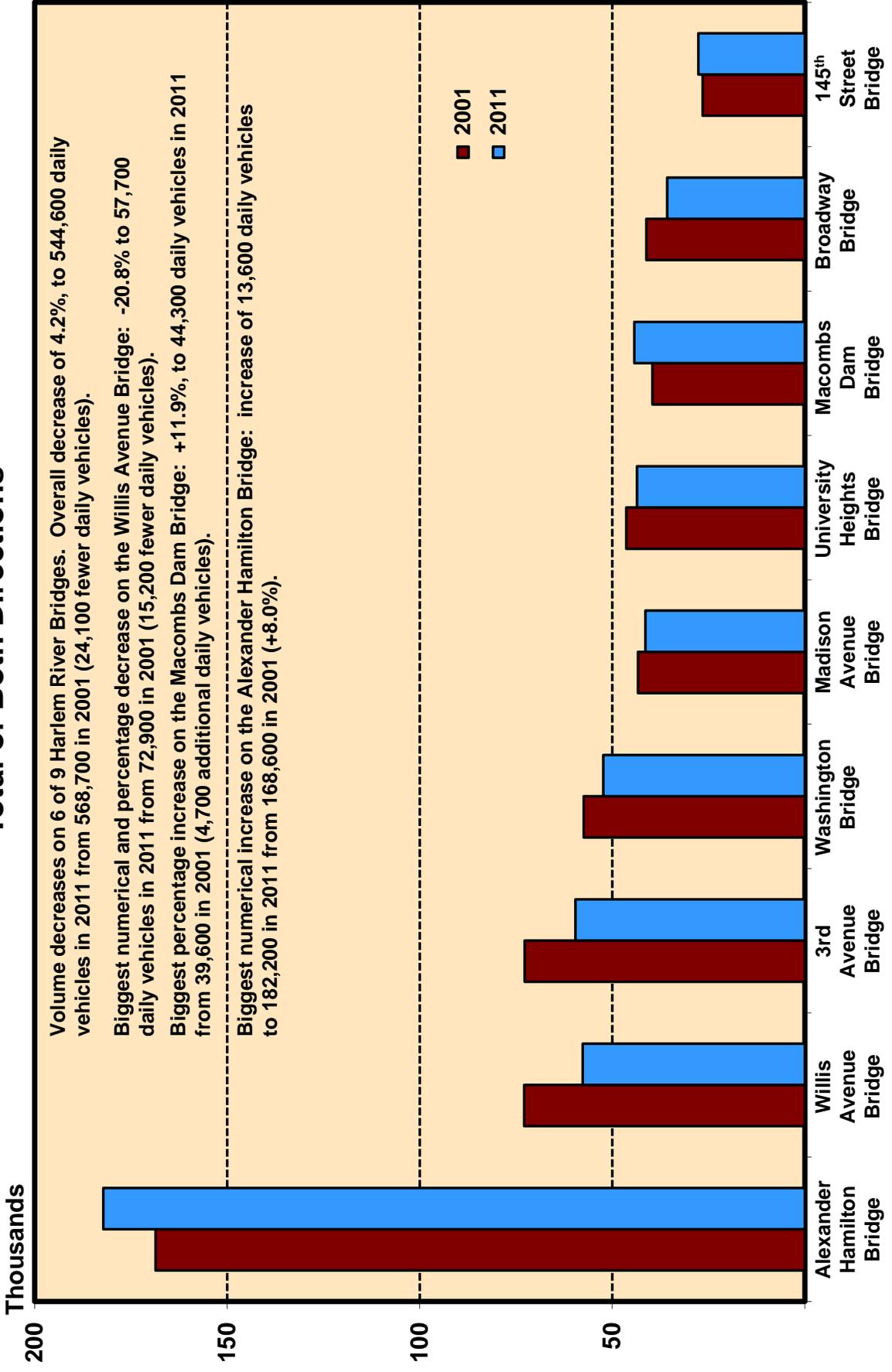
Total of Both Directions



10-Year Volume Changes ~ 2001 – 2011

Harlem River Bridges Daily Volumes

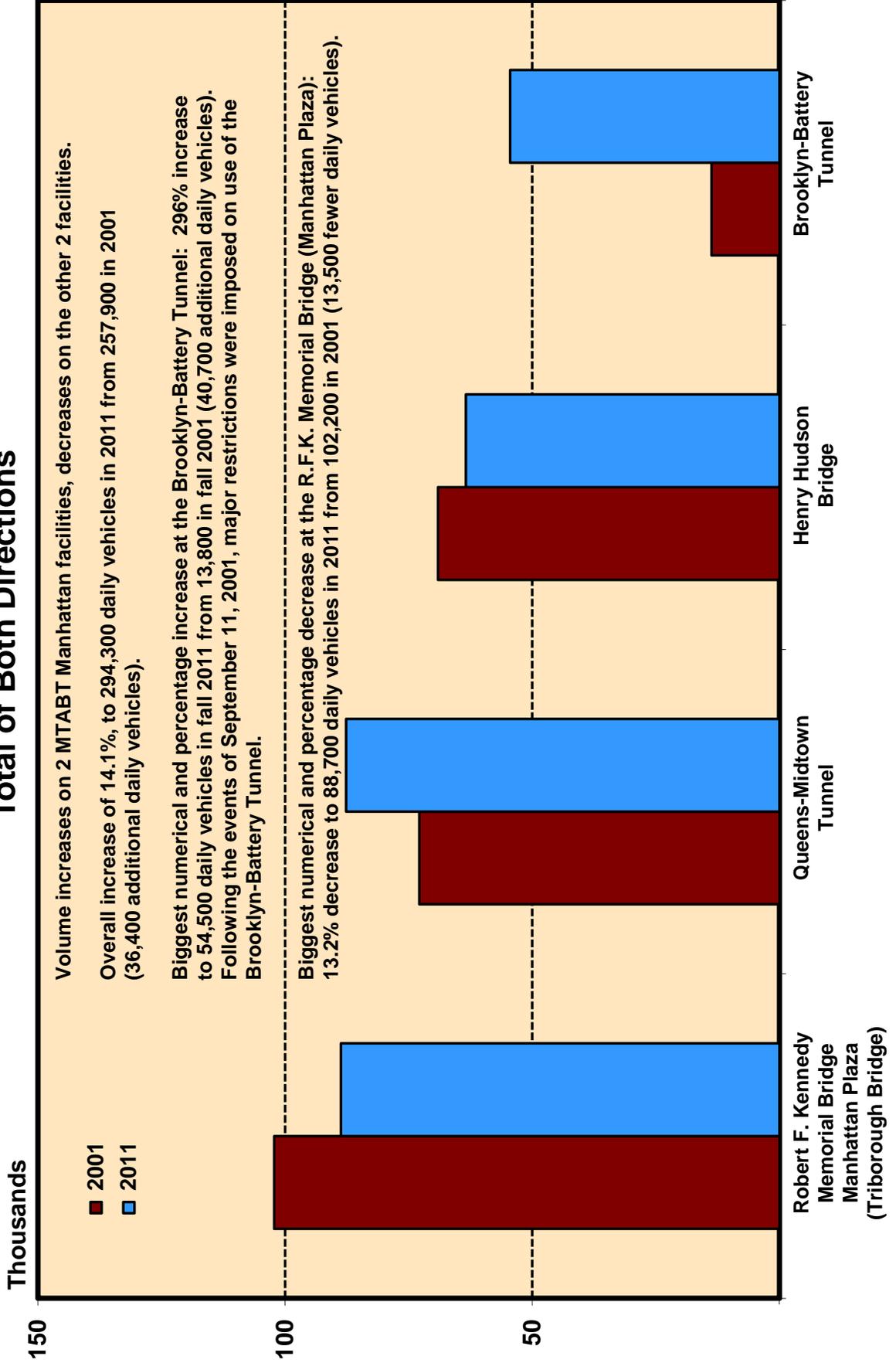
Total of Both Directions



10-Year Volume Changes ~ 2001 – 2011

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

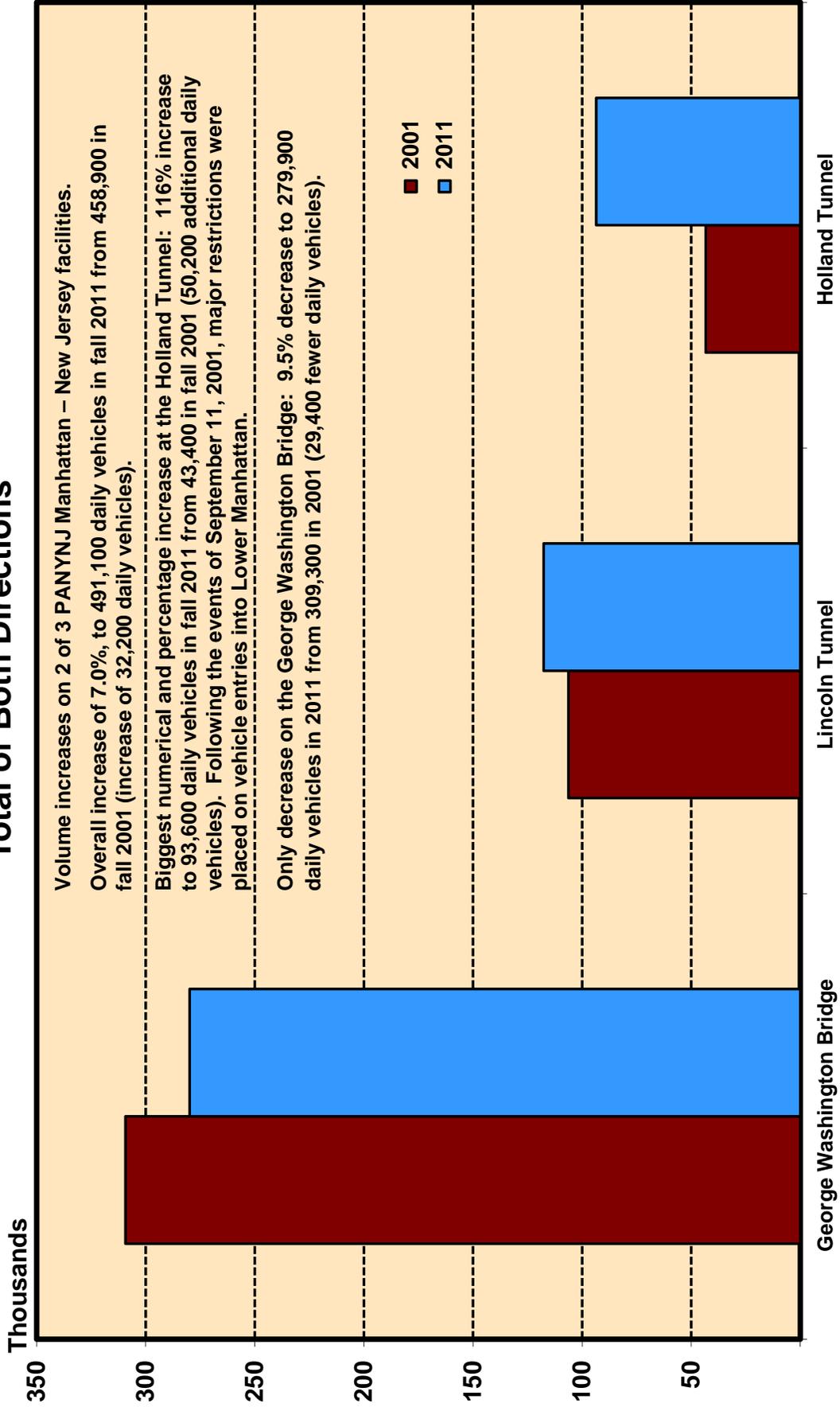
Total of Both Directions



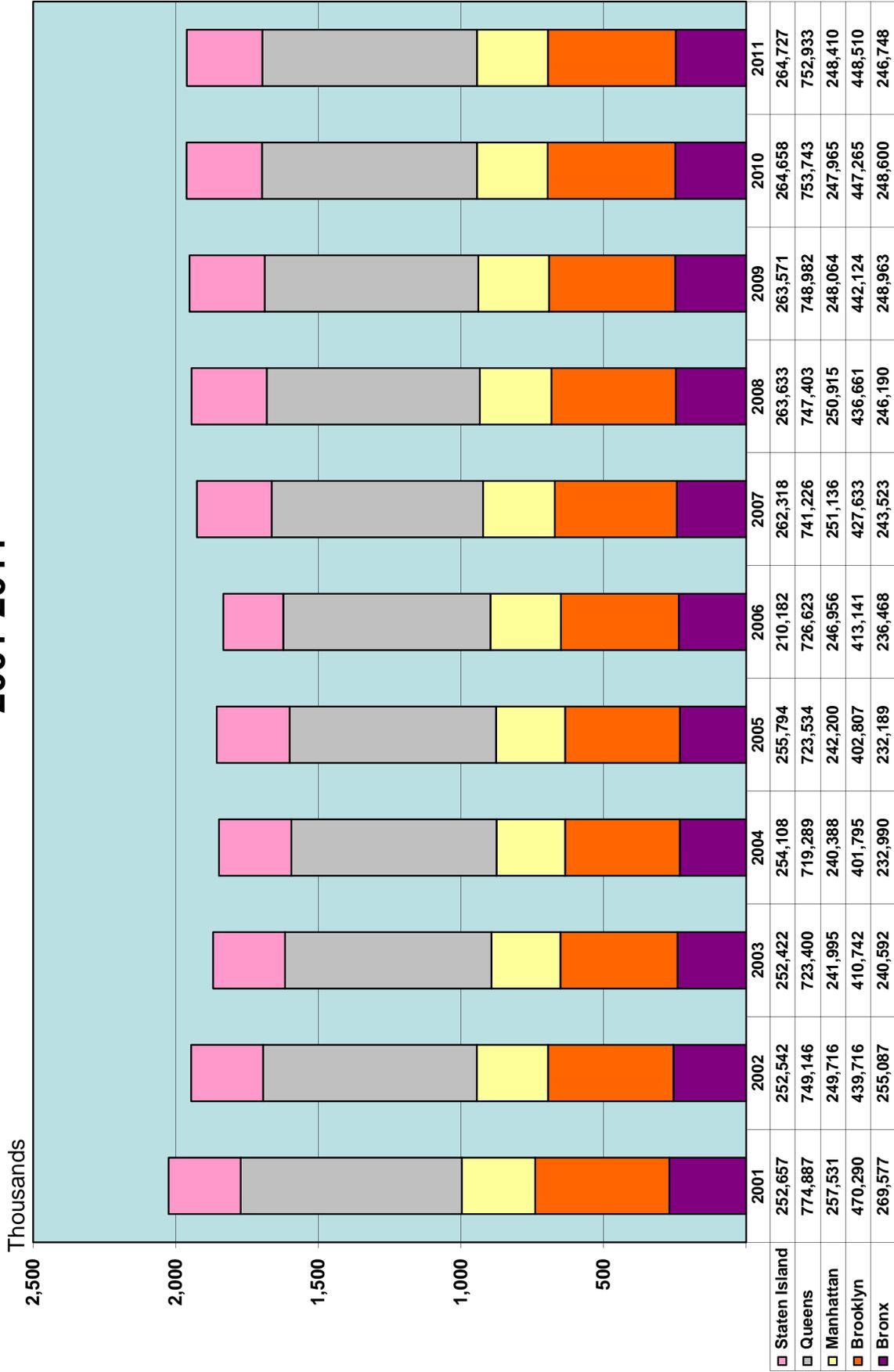
10-Year Volume Changes ~ 2001 – 2011

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

Total of Both Directions



New York City Motor Vehicle Registrations 2001-2011



Historic Trends



University Heights Bridge
(Harlem River)

HISTORIC TRENDS

In 1948, average daily traffic to and from Manhattan was 670,000 trips per day. By 1969 that figure had more than doubled, to 1,376,400 daily trips. In 2011, it stood at 1,808,200 daily trips, nearly three times the 1948 volume.

1948 – 1961

- Between 1948 and 1961, daily traffic to and from Manhattan increased 66.3%, to 1,114,400 daily river crossings in 1961 from 670,000 in 1948, an increase of 444,400 daily vehicles.
- Large increases in daily traffic occurred at the following facilities.
 - George Washington Bridge (Hudson River between Manhattan and New Jersey): up 146% to 104,100 daily vehicles in 1961 from 42,300 in 1948 (61,800 additional daily vehicles).
 - Lincoln Tunnel between Manhattan and New Jersey: up 148% to 76,500 daily vehicles in 1961 from 30,900 in 1948 (45,600 additional daily vehicles).
 - Robert F. Kennedy Memorial Bridge Manhattan Plaza (Harlem River between Manhattan and Bronx/Queens): up 125% to 59,600 daily vehicles from 26,500 (33,100 additional daily vehicles).
 - Queens-Midtown Tunnel (East River between Manhattan and Queens): up 135% to 62,300 daily vehicles from 26,500 (35,800 additional daily vehicles).
 - Washington Bridge (Harlem River between Manhattan and Bronx): up 110% to 61,500 daily vehicles from 29,400 (32,100 additional daily vehicles).
 - Brooklyn Bridge (East River between Manhattan and Brooklyn): up 86% to 69,000 daily vehicles from 37,000 (32,000 additional daily vehicles).
 - University Heights Bridge (Harlem River between Manhattan and Bronx): up 102% to 43,700 daily vehicles from 21,700 (22,000 additional daily vehicles).
 - Third Avenue Bridge (Harlem River between Manhattan and Bronx): up 96% to 61,600 daily vehicles from 31,400 (30,200 additional daily vehicles).
- The only decreases from 1948 to 1961 occurred at the following two facilities.
 - Manhattan Bridge (East River between Manhattan and Brooklyn): down 27.6% to 62,800 daily vehicles in 1961 from 86,700 in 1948 (23,900 fewer daily vehicles).
 - Macombs Dam Bridge (Harlem River between Manhattan and Bronx): down 3.5% to 32,400 daily vehicles in 1961 from 33,600 in 1948 (1,200 fewer daily vehicles).

1961 – 1971

- From 1961 to 1971, daily river crossings to and from Manhattan increased 29.7%, to 1,445,000 daily vehicles in 1971 from 1,114,400 in 1961, an increase of 330,600 daily vehicles.
- Large increases in daily traffic occurred at the following facilities.
 - George Washington Bridge: up 102% to 210,700 daily vehicles in 1971 from 104,100 in 1961 (106,600 additional daily vehicles). The lower level was opened in 1962.
 - Robert F. Kennedy Memorial Bridge Manhattan Plaza: up 51.6% to 90,400 daily vehicles from 59,600 (30,800 additional daily vehicles).

- Brooklyn Bridge: up 48.6% to 102,500 daily vehicles from 69,000 (33,500 additional daily vehicles).
- Large decreases in daily traffic occurred at the following facilities.
 - Washington Bridge: down 37.4% to 38,500 daily vehicles in 1971 from 61,500 in 1961 (23,000 fewer daily vehicles).
 - University Heights Bridge: down 32.3% to 29,600 daily vehicles from 43,700 (14,100 fewer daily vehicles).

1971 – 1981

- From 1971 to 1981, daily river crossings to and from Manhattan increased just 6.6%, to 1,540,700 daily vehicles in 1981 from 1,445,000 in 1971, an increase of 95,700 daily vehicles.
- The largest increases in daily traffic occurred at the following facilities.
 - George Washington Bridge: up 19.0% to 250,800 daily vehicles in 1981 from 210,700 in 1971 (40,100 additional daily vehicles).
 - Lincoln Tunnel: up 15.5% to 107,800 daily vehicles from 93,300 (14,500 additional daily vehicles).
 - Williamsburg Bridge (East River between Manhattan and Brooklyn): up 17.7% to 85,100 daily vehicles from 72,300 (12,800 additional daily vehicles).
 - Manhattan Bridge: up 15.9% to 79,600 daily vehicles from 68,700 (10,900 additional daily vehicles).
- The most significant decrease occurred at the Henry Hudson Bridge (Harlem River between Manhattan and Bronx): down 27.5% to 36,600 daily vehicles in 1981 from 50,500 in 1971 (13,900 fewer daily vehicles).

1981 – 1991

- From 1981 to 1991, daily river crossings to and from Manhattan increased 13.2%, to 1,744,100 daily vehicles in 1991 from 1,540,700 in 1981, an increase of 203,400 daily vehicles.
- Large increases in daily traffic occurred at the following facilities.
 - Holland Tunnel between Manhattan and New Jersey: up 27.3% to 87,500 daily vehicles from 68,700 (18,800 additional daily vehicles).
 - Henry Hudson Bridge: up 53.7% to 56,300 daily vehicles from 36,600 (19,700 additional daily vehicles).
 - Alexander Hamilton Bridge (Harlem River between Manhattan and Bronx): up 26.0% to 187,300 daily vehicles from 148,600 (38,700 additional daily vehicles).
 - Williamsburg Bridge: up 35.5% to 115,300 daily vehicles from 85,100 (30,200 additional daily vehicles).
 - Brooklyn Bridge: up 25.3% to 128,500 daily vehicles from 102,600 (25,900 additional daily vehicles).
 - Washington Bridge: up 51.1% to 57,500 daily vehicles from 38,100 (19,400 additional daily vehicles). In 1991, the nearby University Heights Bridge was closed in the Bronx-bound direction.

- Large decreases in daily traffic occurred at the following facilities.
 - University Heights Bridge: down 47.1% to 18,200 daily vehicles in 1991 from 34,400 in 1981 (16,200 fewer daily vehicles). This bridge was closed in the Bronx-bound direction during 1991.
 - Manhattan Bridge: down 8.7% to 72,700 daily vehicles from 79,600 (6,900 fewer daily vehicles).

1991 – 2001

- From 1991 to 2001, daily river crossings to and from Manhattan decreased 1.8%, to 1,713,000 daily vehicles in fall 2001 from 1,744,100 in fall 1991. Vehicle entries into lower Manhattan were severely restricted following the events of September 11, 2001.
- Large decreases in daily traffic occurred at the following facilities.
 - Holland Tunnel: down 50.4% to 43,400 daily vehicles in fall 2001 from 87,500 in fall 1991 (44,100 fewer daily vehicles).
 - Brooklyn-Battery Tunnel (East River between Manhattan and Brooklyn): down 78.5% to 13,800 daily vehicles in fall 2001 from 63,900 in fall 1991 (50,100 fewer daily vehicles).
 - Brooklyn Bridge: down 25.6% to 95,600 daily vehicles in fall 2001 from 128,500 in fall 1991 (32,900 fewer daily vehicles).
 - Williamsburg Bridge: down 28.7% to 82,200 daily vehicles in fall 2001 from 115,300 in fall 1991 (33,100 fewer daily vehicles).
- Large increases in daily traffic occurred at the following facilities.
 - George Washington Bridge: up 17.8% to 309,300 daily vehicles in 2001 from 262,500 in 1991 (46,800 additional daily vehicles).
 - Ed Koch Queensboro Bridge (East River between Manhattan and Queens): up 34.3% to 176,400 daily vehicles from 131,400 (45,000 additional daily vehicles).
 - University Heights Bridge: up 155% to 46,400 daily vehicles from 18,200 (28,200 additional daily vehicles). This bridge had a reduced capacity during 1991 as it was undergoing reconstruction.
 - Henry Hudson Bridge: up 22.8% to 69,100 daily vehicles from 56,300 (12,800 additional daily vehicles).

1948 – 2011

- From 1948 to 2001, Manhattan vehicular river crossings increased 170%, to 1,808,200 vehicles per day in 2011 from 670,000 in 1948 (1,138,200 additional daily motor vehicle trips).
 - 324% increase on PANYNJ's three trans-Hudson facilities (to 491,100 daily vehicles in 2011 from 115,800 in 1948).
 - 88% increase on the four toll-free East River bridges (to 478,200 daily vehicles from 254,100).
 - 163% on the nine toll-free Harlem River bridges (to 544,600 daily vehicles from 207,200).
 - 217% on MTABT's four tolled crossings (to 294,300 daily vehicles from 93,000).

- Large increases in daily traffic occurred at the following individual facilities.
 - George Washington Bridge: up six fold to 279,900 daily vehicles in 2011 from 42,300 in 1948.
 - Brooklyn Bridge: up 186% to 105,800 daily vehicles from 37,000.
 - Lincoln Tunnel: up 281% to 117,700 daily vehicles from 30,900.
 - Queens-Midtown Tunnel: up 231% to 87,700 daily vehicles from 26,500.
 - Robert F. Kennedy Memorial Bridge Manhattan Plaza: up 235% to 88,700 daily vehicles from 26,500.
 - Williamsburg Bridge: up 120% to 103,600 daily vehicles from 47,100.
- The only decrease was on the Manhattan Bridge over the East River, where traffic decreased 2%, to 85,400 vehicles per day in 2011 from 86,700 in 1948.
- During the same 63-year period, annual citywide subway ridership declined by 19%, to 1,640,000,000 in 2011 from 2,031,000,000 in 1948.

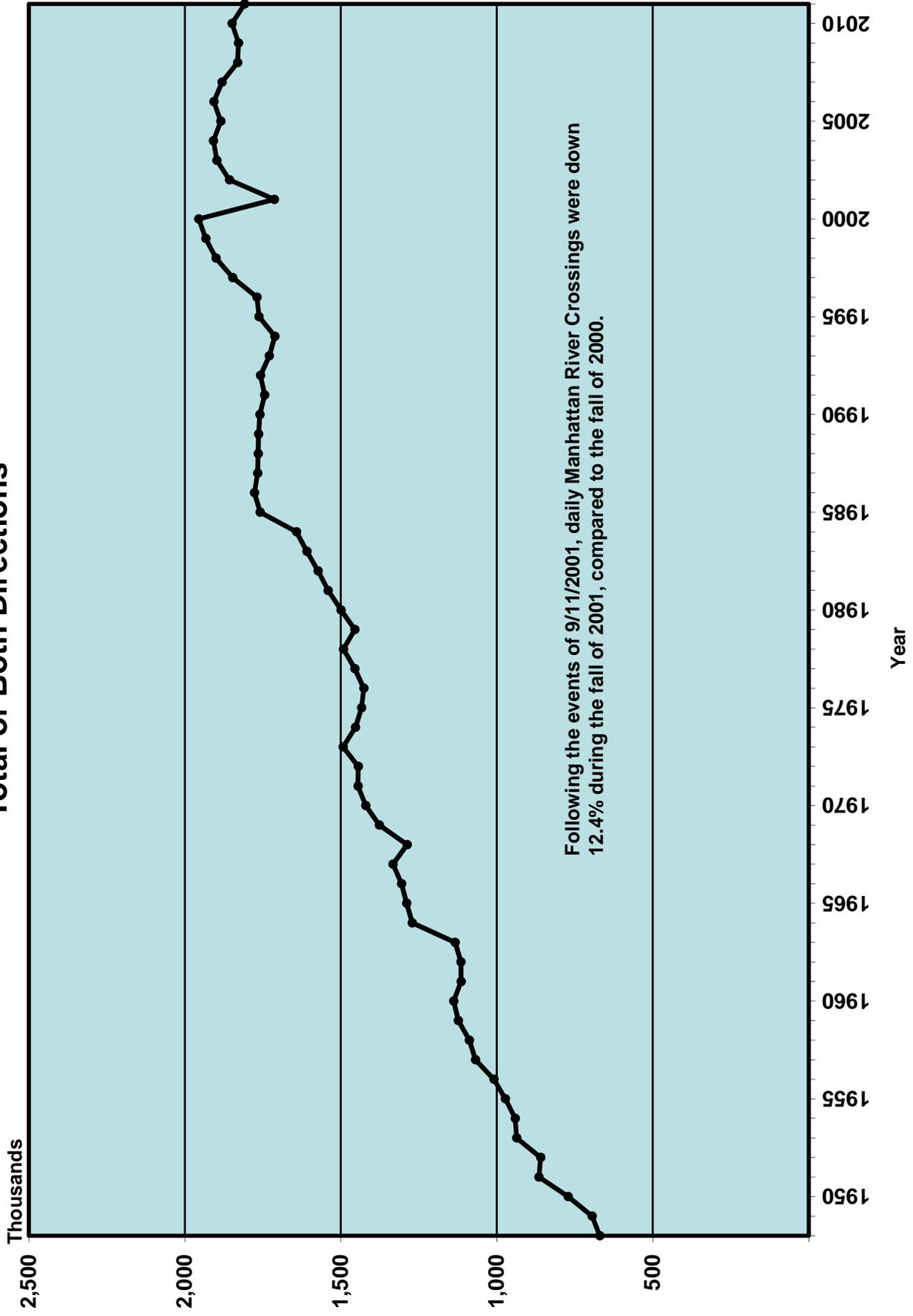
1991 – 2011

- 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.
 - Manhattan river crossings have increased just 3.7%, to 1.808 million in 2011 from 1.744 million in 1991.
 - Citywide subway ridership has increased by 64.8%, to 1,640 million daily riders in 2011 from 995 million in 1991.
 - Subway ridership in 2011 was the highest since 1950.

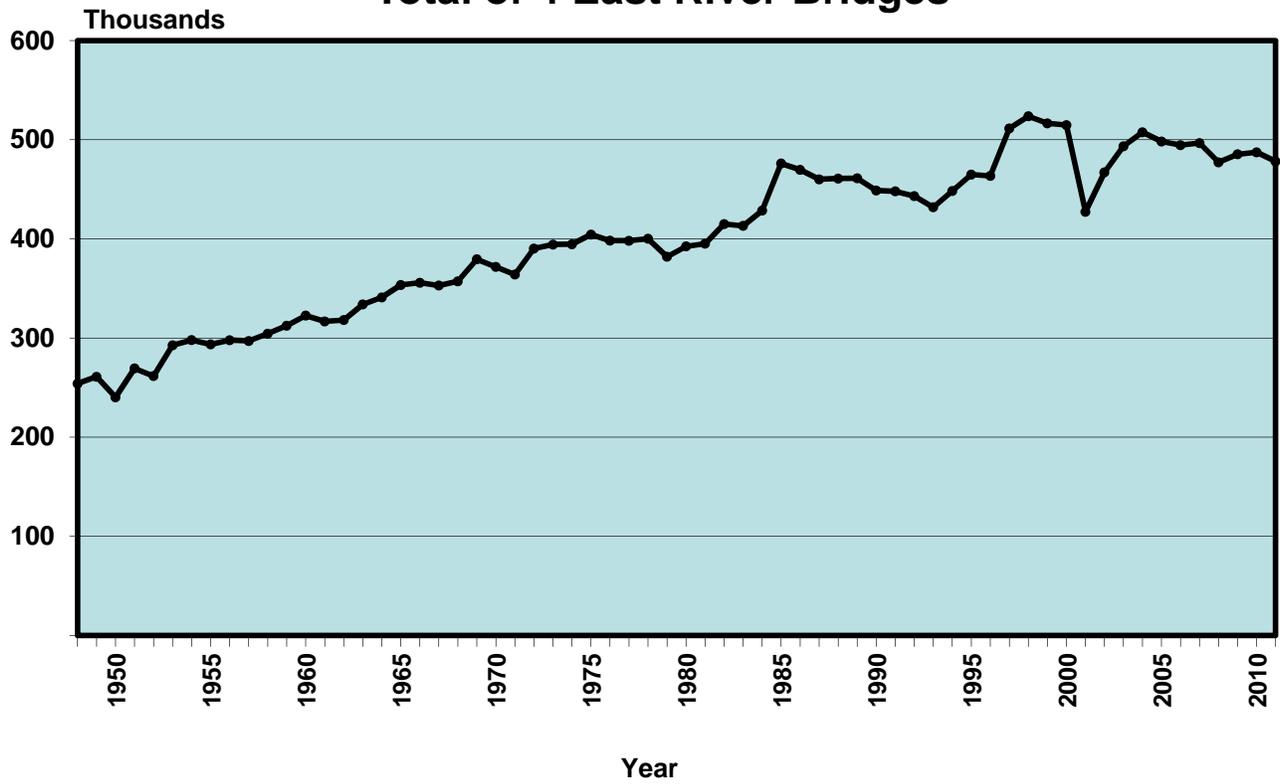
Total Manhattan Crossings
Average Daily Traffic Volumes
1948 - 2011

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

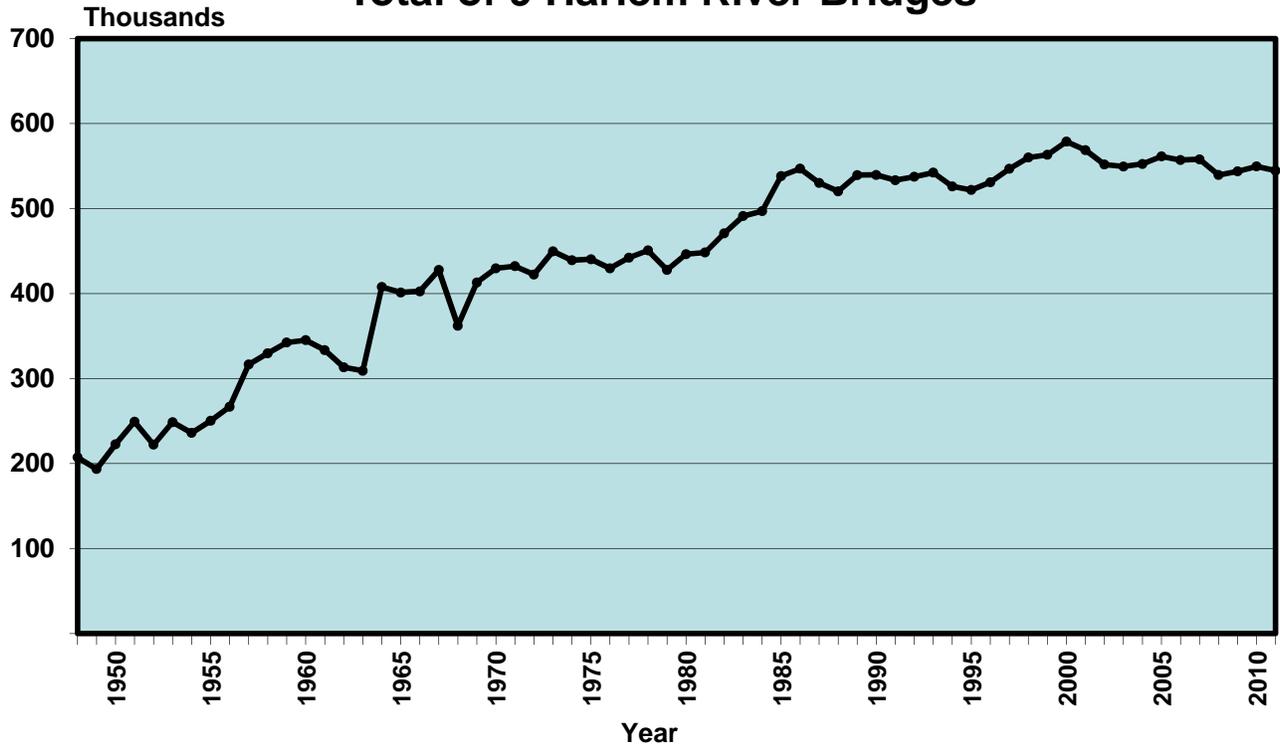
Average Daily Manhattan River Crossings Total of Both Directions



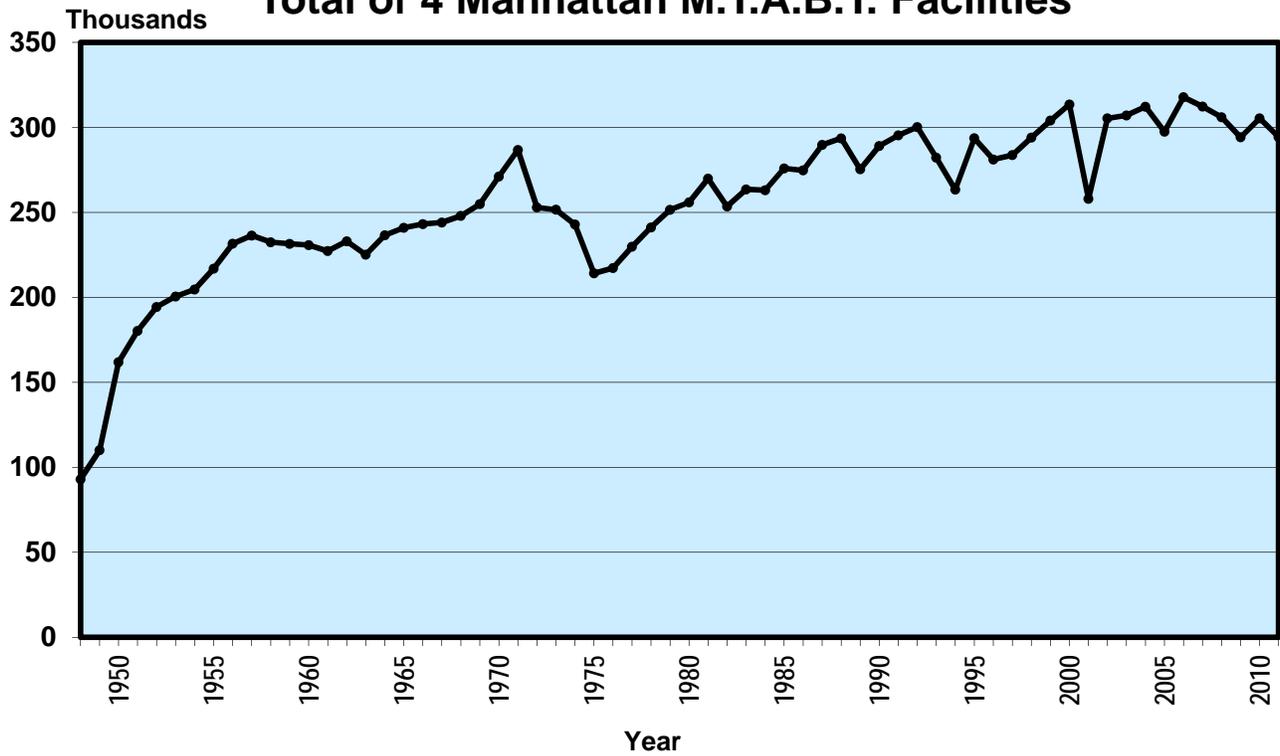
Average Daily Traffic Volumes ~ Total of Both Directions Total of 4 East River Bridges



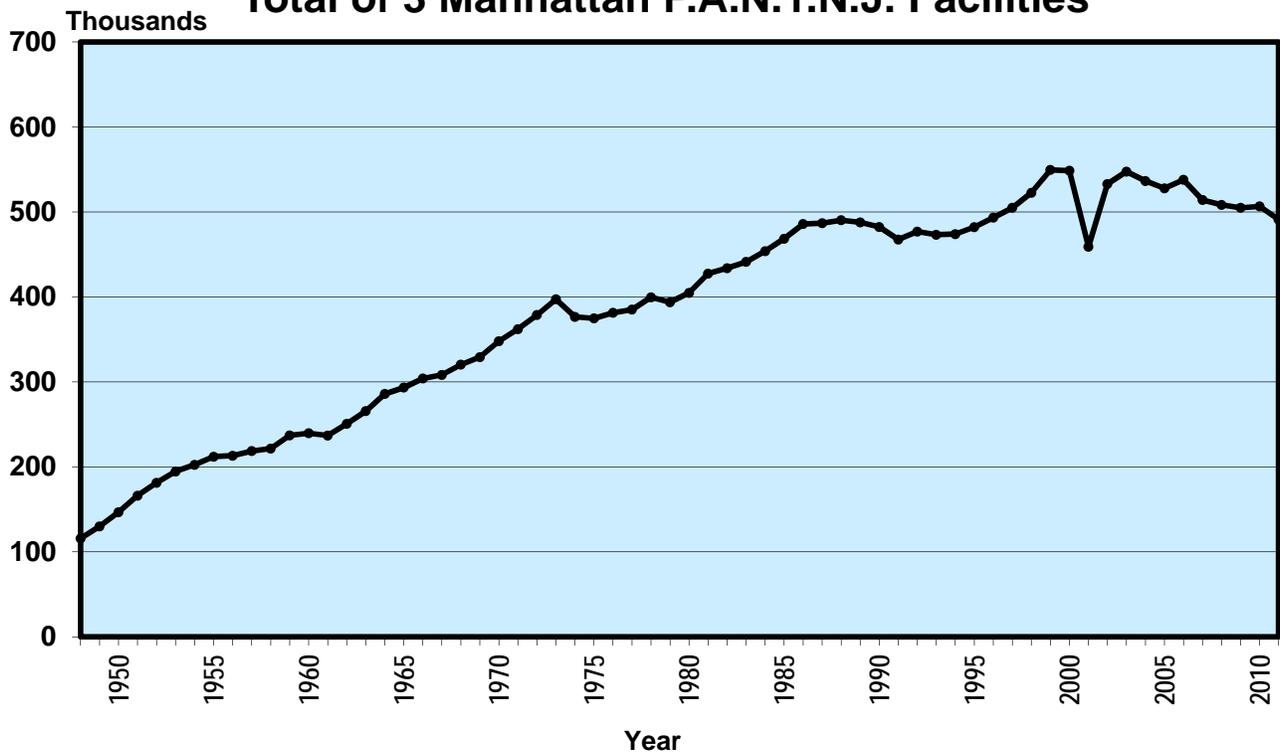
Average Daily Traffic Volumes ~ Total of Both Directions Total of 9 Harlem River Bridges



**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**



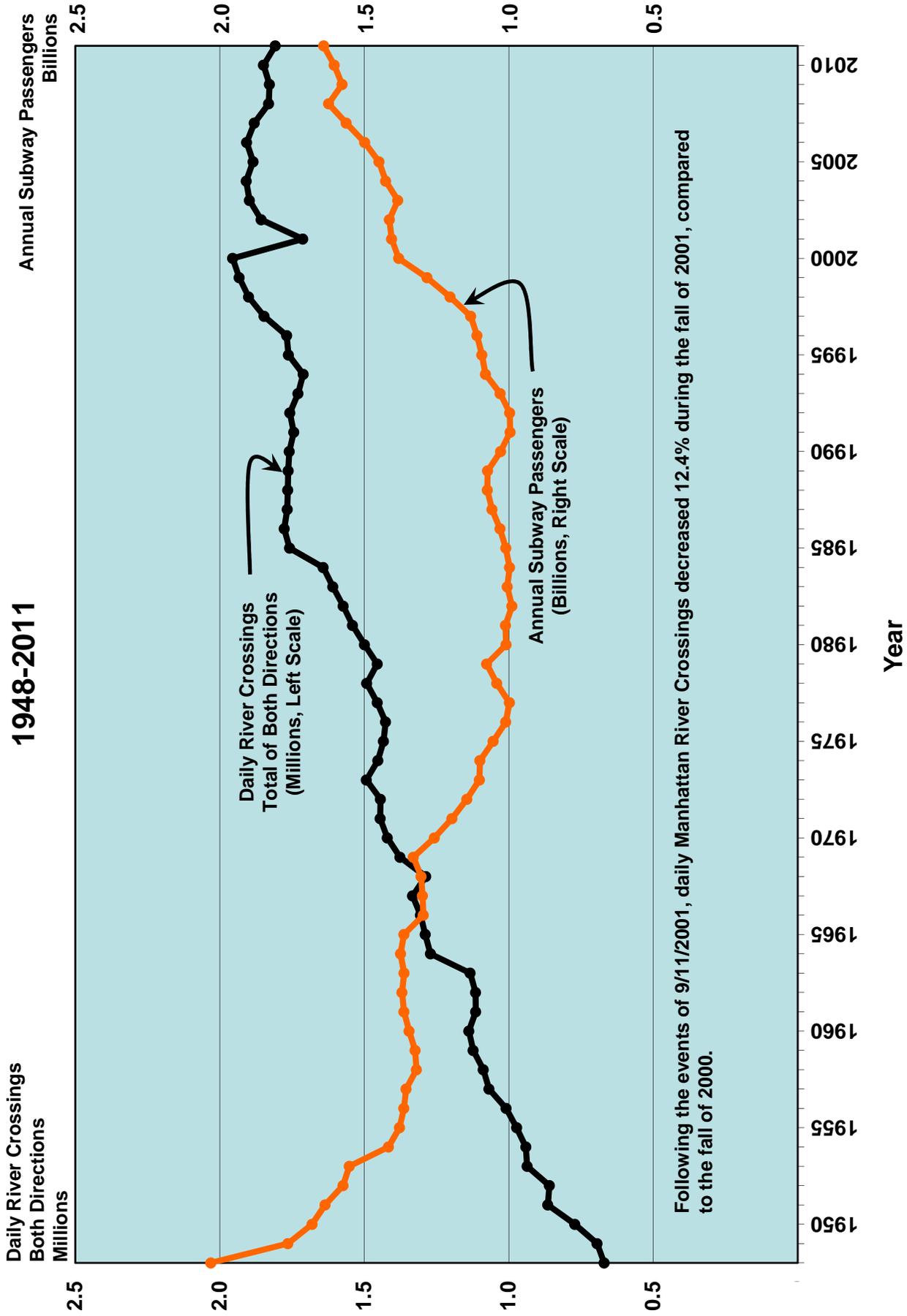
**Average Daily Manhattan River Motor Vehicle Crossings
(Total of Both Directions)
vs.
Annual Subway Ridership**

Year	Daily Manhattan River Crossings	Annual Subway Ridership (millions)	Year	Daily Manhattan River Crossings	Annual Subway Ridership (millions)
1948	670,007	2,031	1988	1,764,869	1,074
1949	694,457	1,764	1989	1,763,534	1,073
1950	771,407	1,681	1990	1,759,585	1,028
1951	864,973	1,636	1991	1,744,103	995
1952	859,480	1,574	1992	1,757,573	997
1953	936,467	1,552	1993	1,729,408	1,030
1954	940,969	1,416	1994	1,711,457	1,081
1955	972,633	1,378	1995	1,762,457	1,093
1956	1,009,270	1,363	1996	1,768,742	1,110
1957	1,068,524	1,355	1997	1,846,634	1,130
1958	1,088,124	1,319	1998	1,900,254	1,199
1959	1,123,302	1,324	1999	1,933,007	1,283
1960	1,138,247	1,345	2000	1,955,506	1,381
1961	1,114,350	1,363	2001	1,712,961	1,405
1962	1,115,056	1,370	2002	1,857,050	1,413
1963	1,133,673	1,362	2003	1,897,411	1,384
1964	1,271,047	1,375	2004	1,908,565	1,426
1965	1,289,065	1,363	2005	1,884,733	1,449
1966	1,305,320	1,296	2006	1,907,118	1,499
1967	1,332,871	1,298	2007	1,880,818	1,563
1968	1,287,543	1,303	2008	1,830,907	1,624
1969	1,376,394	1,330	2009	1,828,065	1,580
1970	1,420,334	1,258	2010	1,848,718	1,604
1971	1,445,020	1,197	2011	1,808,247	1,640
1972	1,444,147	1,145			
1973	1,492,756	1,102			
1974	1,453,136	1,100			
1975	1,433,560	1,054			
1976	1,426,334	1,010			
1977	1,455,119	998			
1978	1,491,541	1,042			
1979	1,455,112	1,077			
1980	1,499,344	1,009			
1981	1,540,683	1,011			
1982	1,573,012	989			
1983	1,608,979	1,005			
1984	1,642,250	997			
1985	1,758,605	1,010			
1986	1,777,051	1,030			
1987	1,766,601	1,058			
Percent Changes	Average Daily Crossings	Annual Subway Ridership	Period	Average Daily Crossings	Annual Subway Ridership
1950-1960	+ 47.6 %	- 20.0 %	1990-2000	+ 11.1 %	+ 34.3 %
1960-1970	+ 24.8 %	- 6.5 %	2000-2011	- 7.5 %	+ 18.8 %
1970-1980	+ 5.6 %	- 19.8 %	1948-2011	+169.9 %	- 19.3 %
1980-1990	+ 17.4 %	+ 1.9 %			

Source for Annual Subway Ridership: MTA

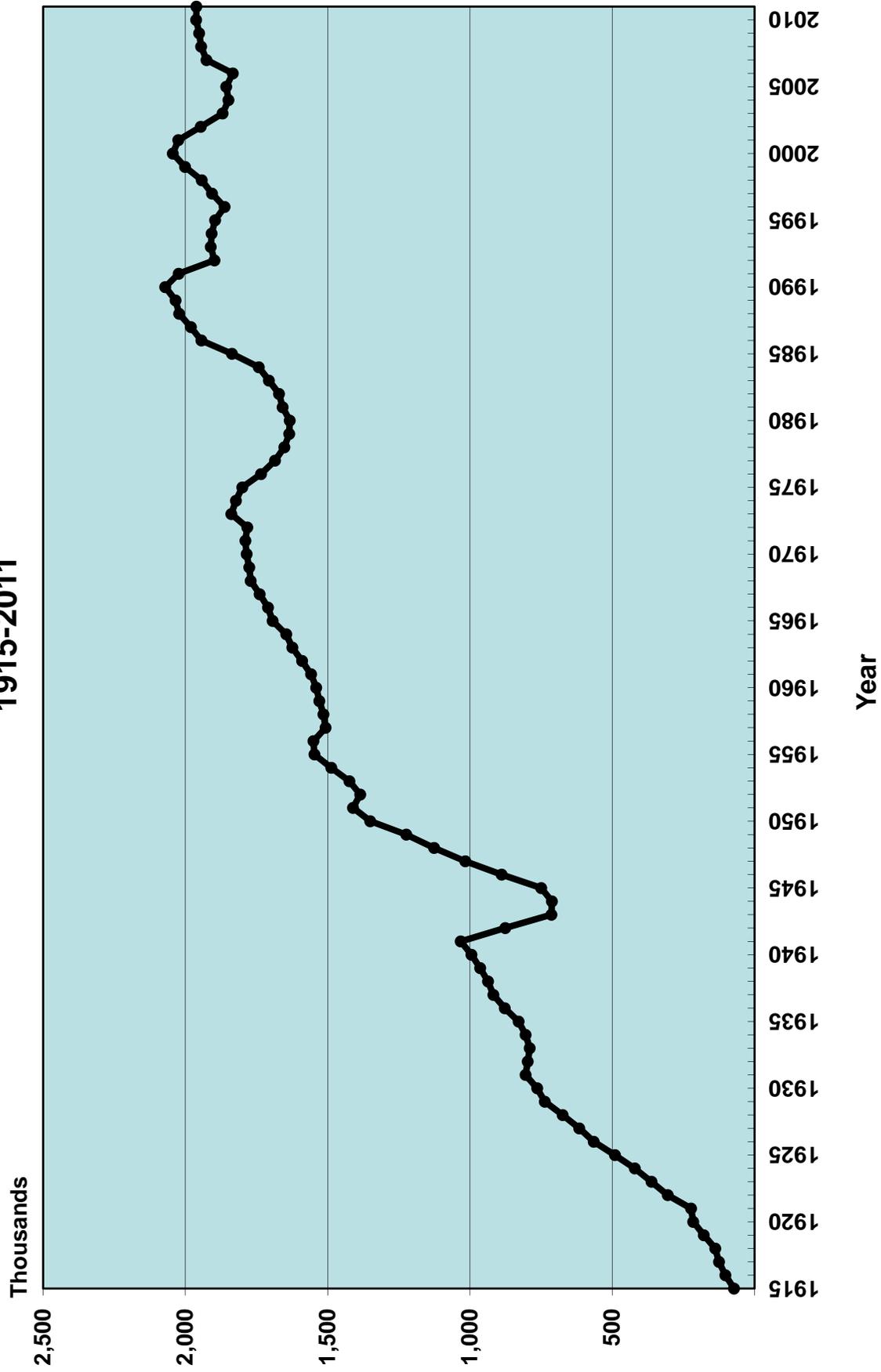
Vehicular River Crossings vs. Subway Ridership

1948-2011



New York City Motor Vehicle Registrations

1915-2011



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

	Brooklyn Battery 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

\$ 1.70 discount EZ Pass (\$ 1.80 on Henry Hudson Bridge).

*Formerly Triborough Bridge.

PORT AUTHORITY OF NEW YORK & NEW JERSEY

Tolls collected eastbound only

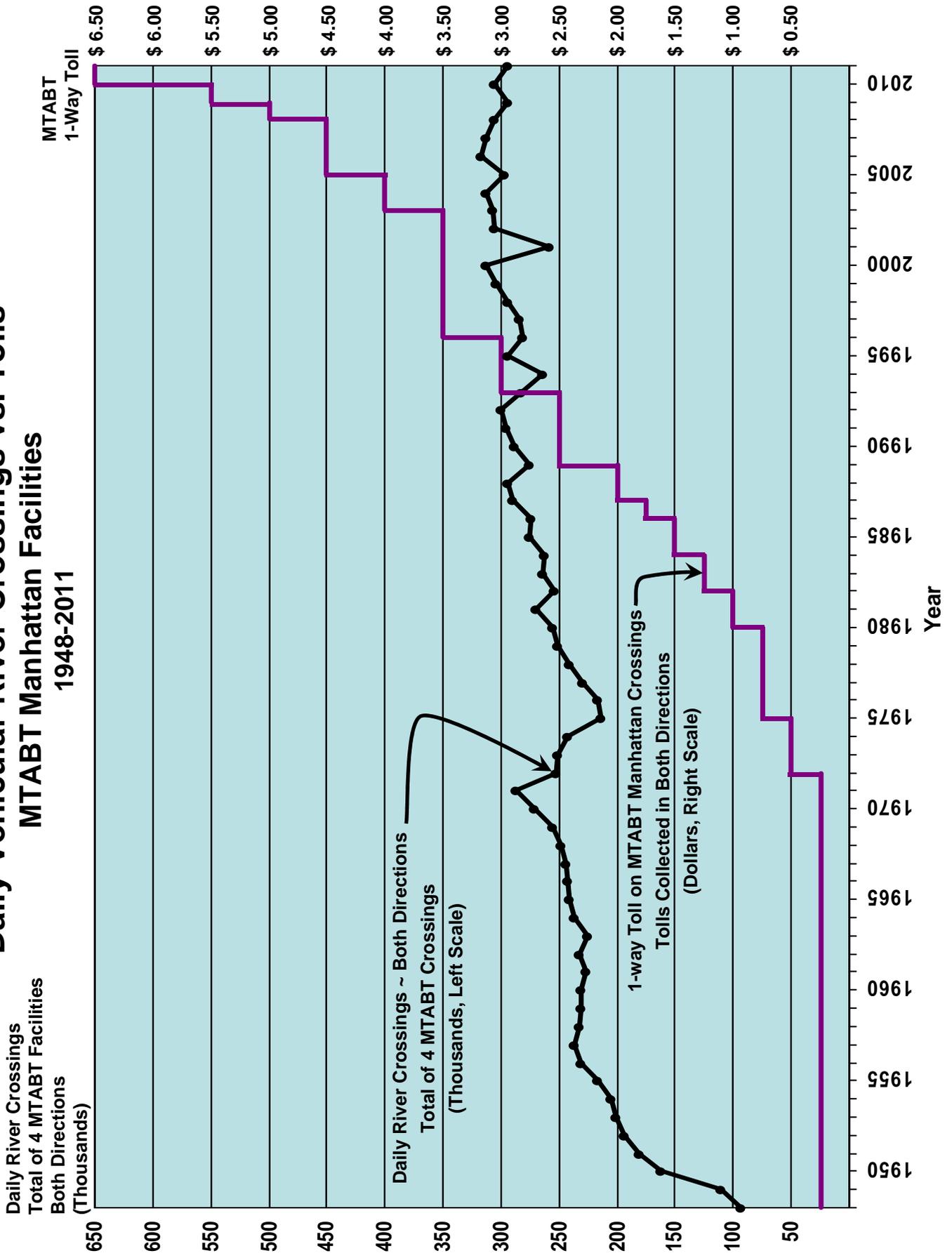
	George Washington Bridge	Holland Tunnel	Lincoln Tunnel
Effective 08/12/1970	\$ 1.00	\$ 1.00	\$ 1.00
Effective 05/05/1975	1.50	1.50	1.50
Effective 01/01/1984	2.00	2.00	2.00
Effective 04/12/1987	3.00	3.00	3.00
Effective 04/07/1991	4.00	4.00	4.00
Effective 03/25/2001	6.00	6.00	6.00
Effective 03/02/2008	8.00	8.00	8.00
Effective 09/18/2011	12.00	12.00	12.00
EZ-Pass Off Peak	7.50	7.50	7.50
EZ-Pass Peak	9.50	9.50	9.50

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

Daily Vehicular River Crossings vs. Tolls

MTABT Manhattan Facilities

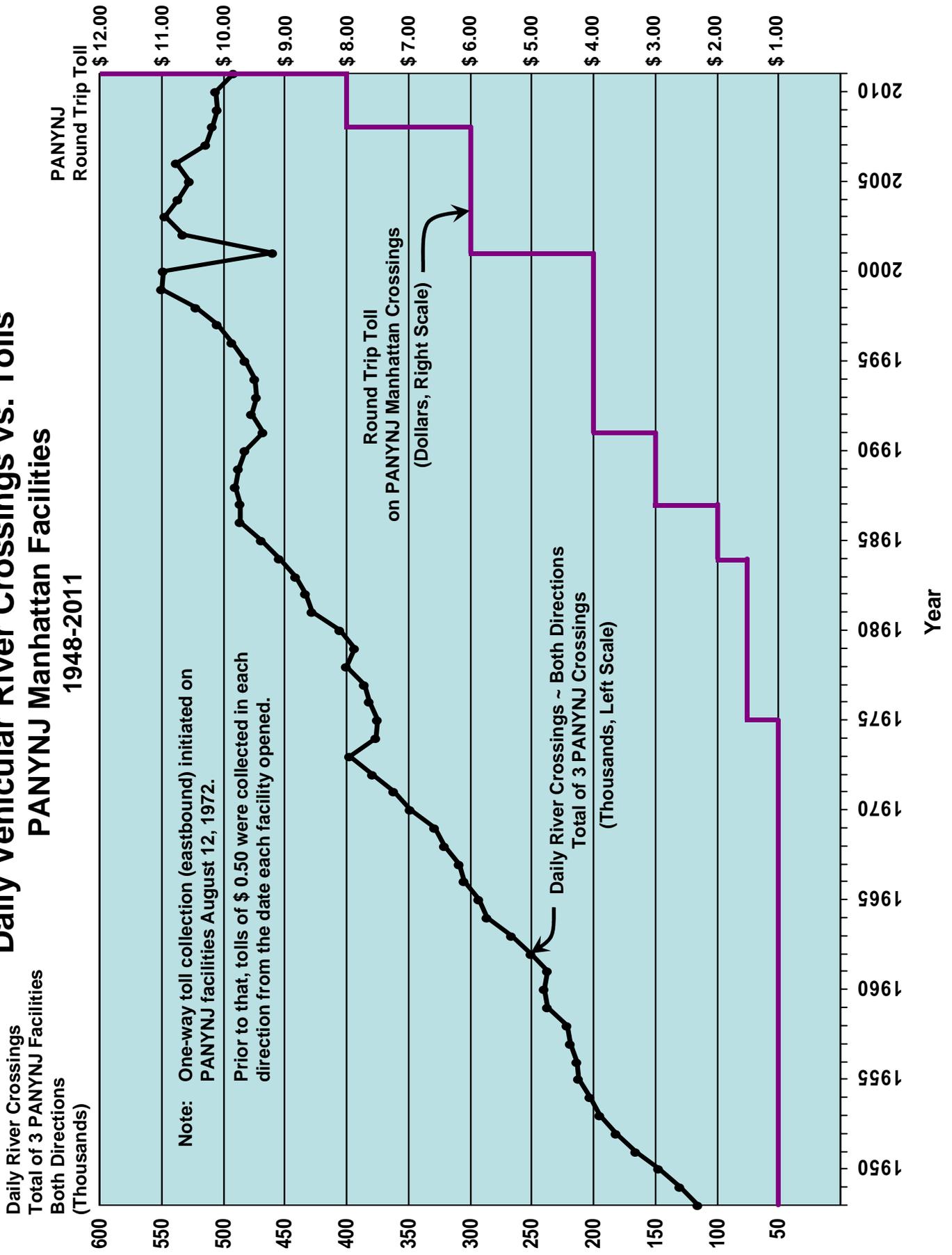
1948-2011



Daily Vehicular River Crossings vs. Tolls

PANYNJ Manhattan Facilities

1948-2011



East River Bridges



Williamsburg Bridge

East River Bridges
Average Daily Traffic Volumes
1948 - 2011

<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

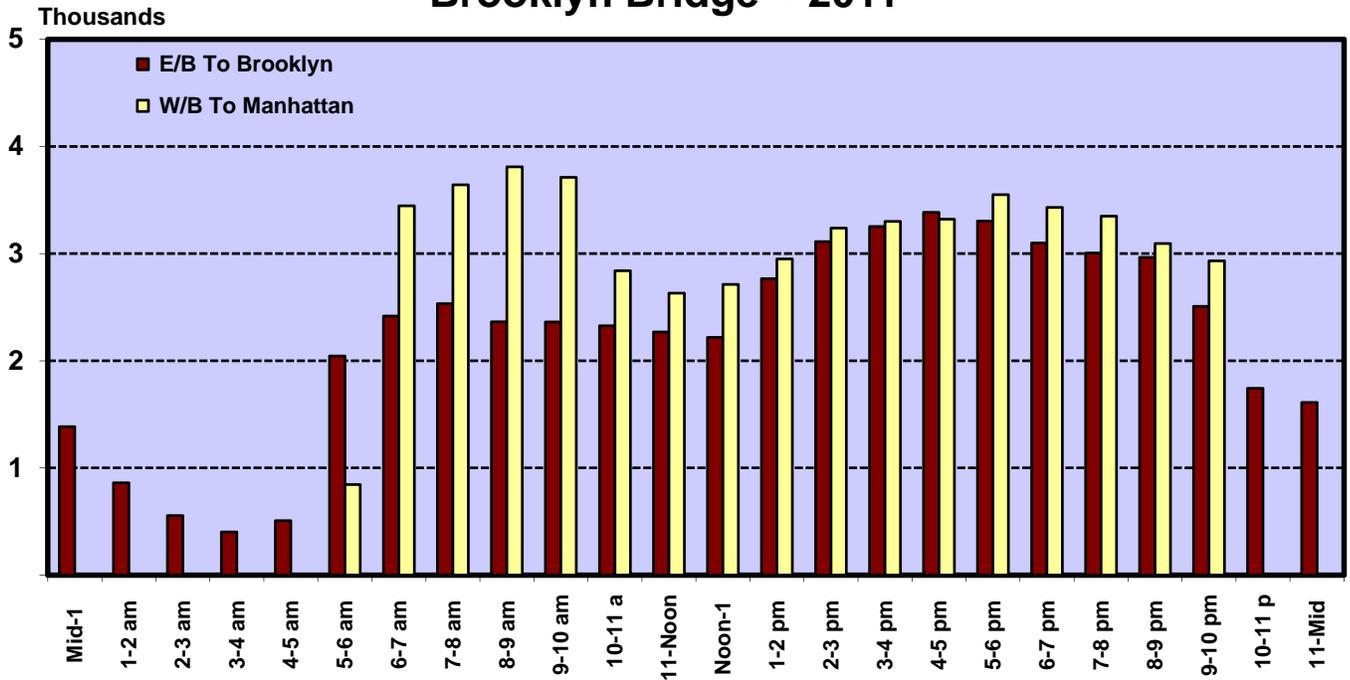
Hourly Vehicular Volumes Brooklyn Bridge - 2011

FHWA Classes ▲	Eastbound to Brooklyn										Westbound to Manhattan								2-Way Grand Totals		
	Commuter Vans					Single Unit Trucks	Tractor Trailers	Total Vehicles	Commuter Vans					Single Unit Trucks	Tractor Trailers	Total Vehicles					
	Autos & Motorcycles	Large SUVs	Pickups	Buses	4				5-7	8-13	Autos & Motorcycles	Large SUVs	Pickups				Buses	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	1,385	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,386	
1-2am	858	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	862	
2-3am	554	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	556	
3-4am	400	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	403	
4-5am	501	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	508	
5-6am	2,018	25	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,890	
6-7am	2,372	35	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,865	
7-8am	2,481	32	19	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,176	
8-9am	2,307	37	19	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,174	
9-10am	2,293	42	26	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,074	
10-11am	2,282	28	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,168	
11-12am	2,205	42	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,901	
12-1pm	2,158	39	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,931	
1-2pm	2,695	40	30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,717	
2-3pm	3,024	41	45	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,351	
3-4pm	3,182	34	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,554	
4-5pm	3,327	35	23	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,708	
5-6pm	3,249	36	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,855	
6-7pm	3,037	47	14	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,531	
7-8pm	2,969	32	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,356	
8-9pm	2,949	14	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,059	
9-10pm	2,497	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,440	
10-11pm	1,741	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,744	
11-12pm	1,607	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,611	
Totals	52,091	590	315	9	0	0	0	53,005	0	0	0	0	52,815	0	0	0	0	0	0	105,820	
7-10am	7,081	111	64	3	0	0	0	7,259	0	0	0	0	11,165	0	0	0	0	0	0	0	18,424
10am-1pm	6,645	109	60	0	0	0	0	6,814	0	0	0	0	8,186	0	0	0	0	0	0	0	15,000
1-4pm	8,901	115	112	3	0	0	0	9,131	0	0	0	0	9,491	0	0	0	0	0	0	0	18,622
4-7pm	9,613	118	56	2	0	0	0	9,789	0	0	0	0	10,305	0	0	0	0	0	0	0	20,094
7am-7pm	32,240	453	292	8	0	0	0	32,993	0	0	0	0	39,147	0	0	0	0	0	0	0	72,140
6-10am	9,453	146	74	4	0	0	0	9,677	0	0	0	0	14,612	0	0	0	0	0	0	0	24,289
3-7pm	12,795	152	93	2	0	0	0	13,042	0	0	0	0	13,606	0	0	0	0	0	0	0	26,648
6am-7pm	34,612	488	302	9	0	0	0	35,411	0	0	0	0	42,594	0	0	0	0	0	0	0	78,005

Based on March 2006 Classification Survey Data

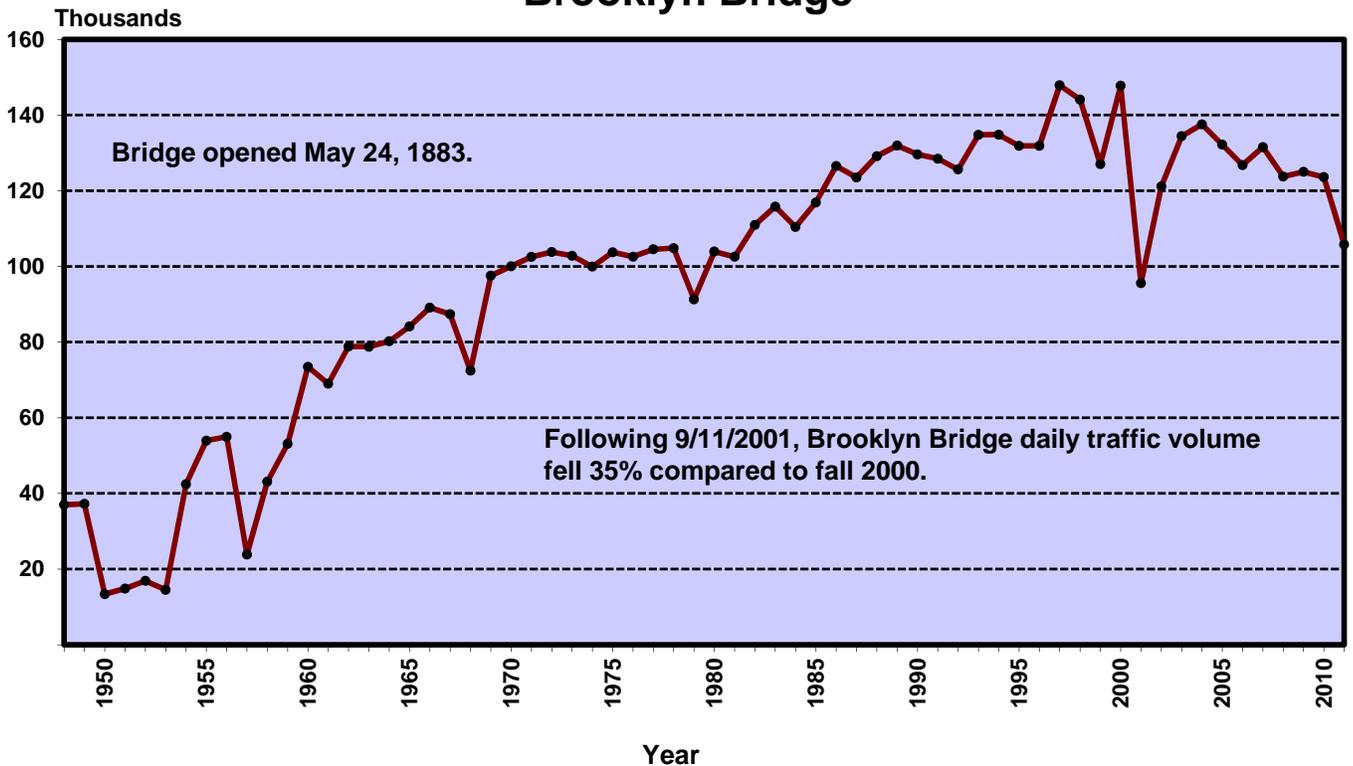
** Peak Volumes

Hourly Vehicular Volumes Brooklyn Bridge ~ 2011



Note: Bridge closed overnight Manhattan-bound during 2011.

Average Daily Traffic Volumes ~ Total of Both Directions Brooklyn Bridge



Hourly Vehicular Volumes Ed Koch Queensboro Bridge - 2011

Eastbound to Queens

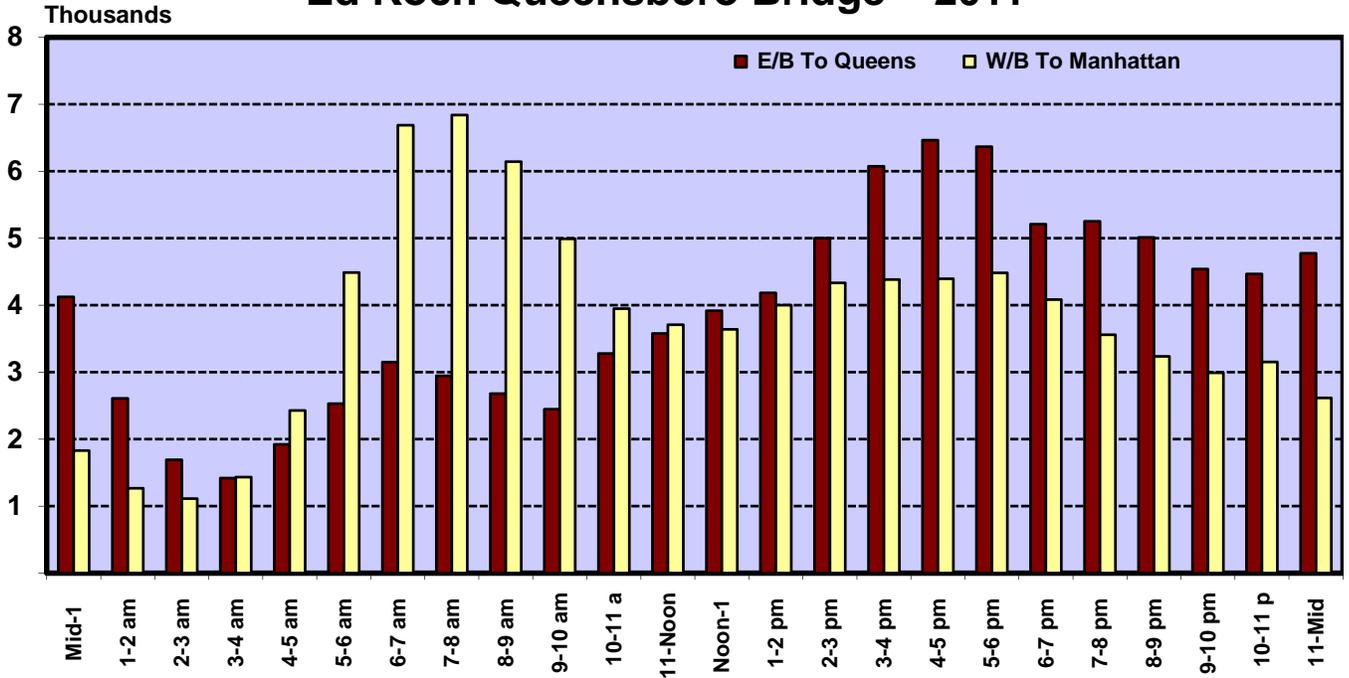
Westbound to Manhattan

FHWA Classes ▲	Commuter Vans							Total Vehicles	Commuter Vans							Total Vehicles									
	Autos & Motorcycles			Commercial Vans			Single Unit Trucks		Autos & Motorcycles			Commercial Vans			Single Unit Trucks										
	1 & 2	3	4	5	6	7			8	9	10	11	12	13											
12-1am	4,022	50	15	38	0	0	4,125	1,790	17	12	10	1	1,830												
1-2am	2,560	20	9	19	1	1	2,609	1,231	15	6	13	1	1,266												
2-3am	1,652	10	4	25	1	1	1,692	1,059	11	5	37	0	1,112												
3-4am	1,370	8	3	37	0	0	1,418	1,347	8	12	65	1	1,433												
4-5am	1,837	17	12	56	0	0	1,922	2,248	28	19	134	0	2,429												
5-6am	2,383	38	16	92	1	1	2,530	4,170	54	27	214	23	4,488												
6-7am	2,920	32	24	174	1	1	3,151	6,317	83	40	232	15	6,687												
7-8am	2,666	49	27	201	4	4	2,947	6,413	73	53	270	30	6,839												
8-9am	2,389	48	36	201	6	6	2,680	5,727	77	67	250	24	6,145												
9-10am	2,170	38	34	201	5	5	2,448	4,622	76	53	207	33	4,991												
10-11am	2,889	60	56	264	10	10	3,279	3,609	66	33	210	31	3,949												
11-12am	3,233	53	43	246	4	4	3,579	3,407	56	26	185	36	3,710												
12-1pm	3,523	70	44	275	6	6	3,918	3,348	38	37	182	34	3,639												
1-2pm	3,759	85	48	288	5	5	4,185	3,738	52	36	137	39	4,002												
2-3pm	4,575	91	58	269	7	7	5,000	4,055	69	42	132	35	4,333												
3-4pm	5,630	92	63	284	7	7	6,076	4,131	51	41	139	21	4,383												
4-5pm	6,054	95	47	261	7	7	6,464	4,191	50	32	109	13	4,395												
5-6pm	5,980	81	50	246	10	10	6,367	4,324	37	33	69	21	4,484												
6-7pm	4,914	64	50	177	6	6	5,211	3,974	31	24	43	13	4,085												
7-8pm	4,942	81	62	158	9	9	5,252	3,465	24	26	33	11	3,559												
8-9pm	4,720	85	70	134	4	4	5,013	3,148	29	20	30	8	3,235												
9-10pm	4,311	64	51	111	3	3	4,540	2,916	25	14	32	4	2,991												
10-11pm	4,257	56	47	107	0	0	4,467	3,084	23	19	27	0	3,153												
11-12pm	4,635	57	30	52	1	1	4,775	2,562	15	15	22	1	2,615												
Totals	87,391	1,344	899	3,916	98	98	93,648	84,876	1,008	692	2,782	395	89,753												
7-10am	7,225	135	97	603	15	15	8,075	16,762	226	173	727	87	17,975												
10am-1pm	9,645	183	143	785	20	20	10,776	10,364	160	96	577	101	11,298												
1-4pm	13,964	268	169	841	19	19	15,261	11,924	172	119	408	95	12,718												
4-7pm	16,948	240	147	684	23	23	18,042	12,489	118	89	221	47	12,964												
7am-7pm	47,782	826	556	2,913	77	77	52,154	51,539	676	477	1,933	330	54,955												
6-10am	10,145	167	121	777	16	16	11,226	23,079	309	213	959	102	24,662												
3-7pm	22,578	332	210	968	30	30	24,118	16,620	169	130	360	68	17,347												
6am-7pm	50,702	858	580	3,087	78	78	55,305	57,856	759	517	2,165	345	61,642												
2-Way Grand Totals	5,955	3,875	2,804	2,851	4,351	7,018	9,838	9,786	8,825	7,439	7,228	7,289	7,557	8,187	9,333	10,459	10,859	10,851	9,296	8,811	8,248	7,531	7,620	7,390	183,401

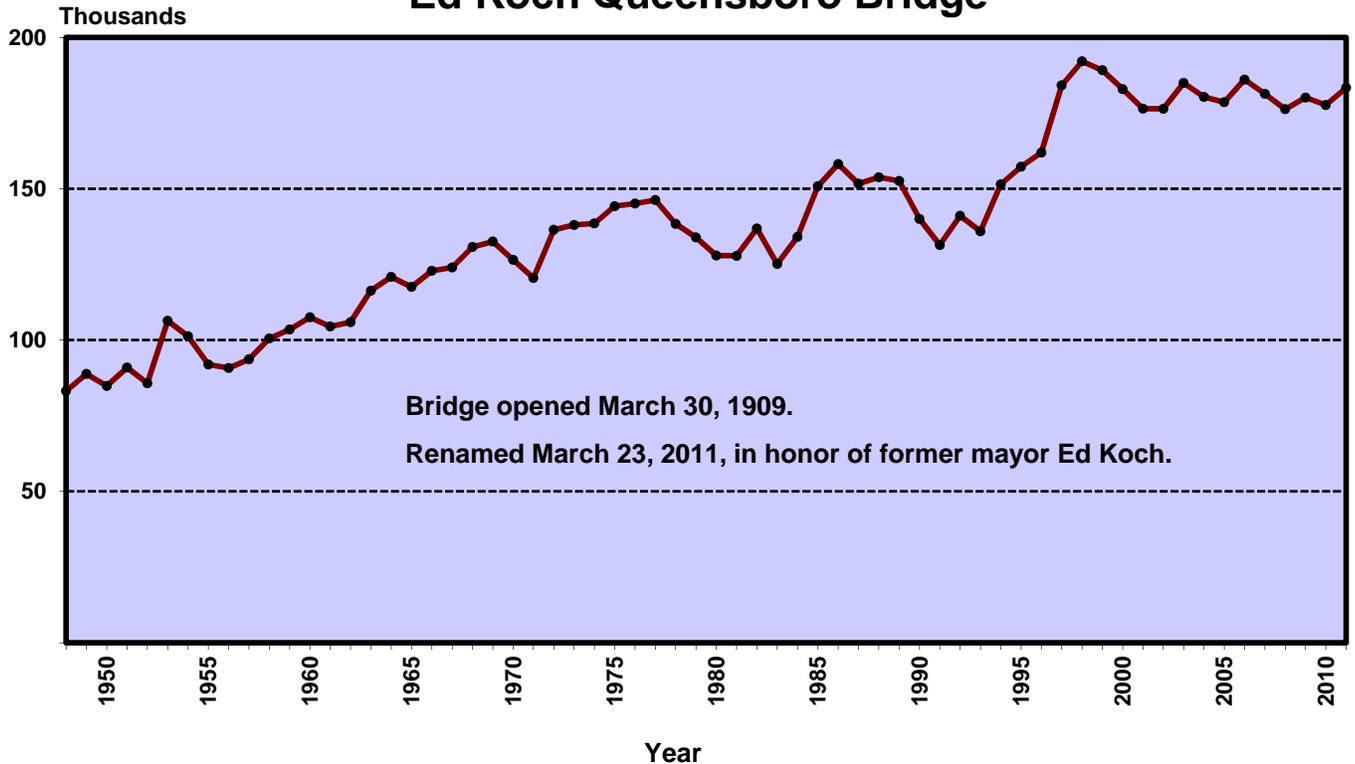
** Peak Volumes

Based on April 2006 Classification Survey Data.

Hourly Vehicular Volumes Ed Koch Queensboro Bridge ~ 2011



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



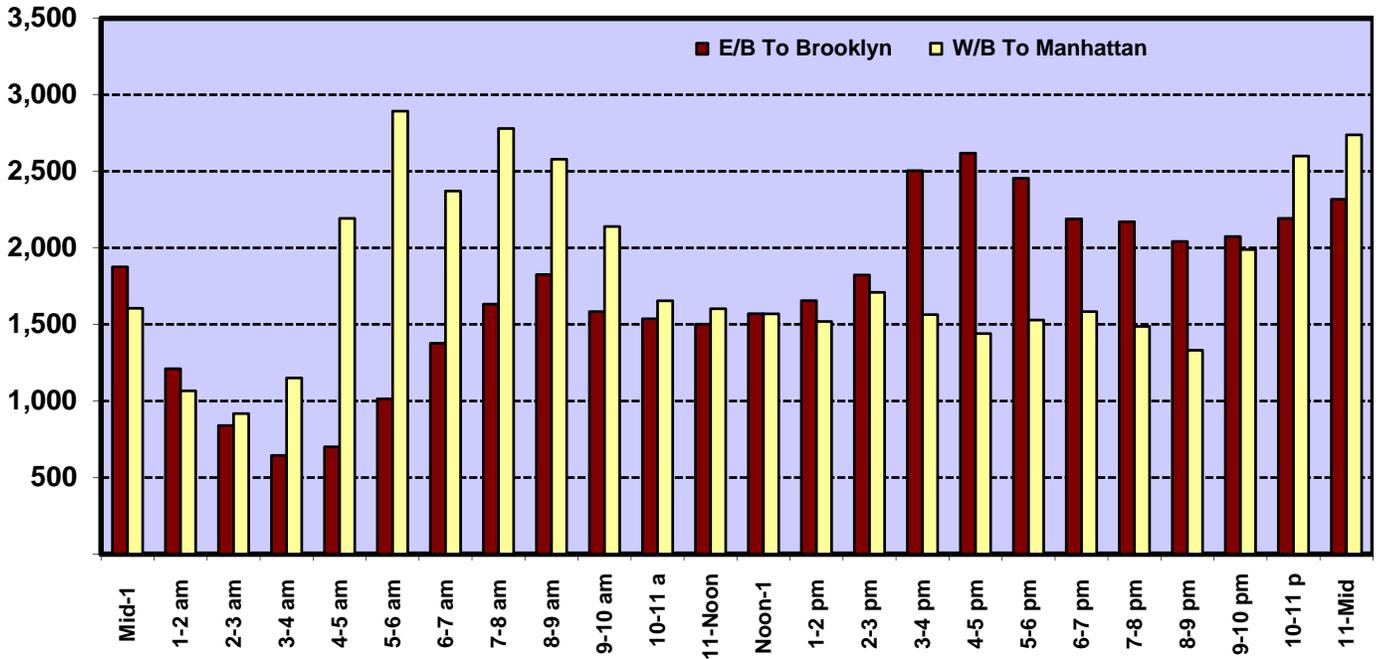
Hourly Vehicular Volumes Manhattan Bridge - 2011

FHWA Classes ▲	Eastbound to Brooklyn										Westbound to Manhattan								2-Way Grand Totals
	Commuter Vans					Total Vehicles	Commuter Vans					Total Vehicles							
	Autos & Motorcycles	Large SUVs	Buses	Single Unit Trucks	Tractor Trailers		Autos & Motorcycles	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	1,807	35	12	19	3	1,876	1,590	11	1	4	0	1,606						3,482	
1-2am	1,176	23	4	7	1	1,211	1,054	10	1	2	0	1,067						2,278	
2-3am	809	19	4	6	2	840	907	5	1	5	0	918						1,758	
3-4am	614	17	4	6	4	645	1,134	8	3	5	1	1,151						1,796	
4-5am	681	9	3	7	1	701	1,948	41	6	190	8	2,193						2,894	
5-6am	977	8	9	20	1	1,015	2,438	46	55	302	53	2,894						3,909	
6-7am	1,225	31	35	77	9	1,377	1,871	59	70	326	46	2,372						3,749	
7-8am	1,378	47	54	145	9	1,633	2,225	58	70	408	19	2,780						4,413	
8-9am	1,540	35	60	177	14	1,826	2,131	44	50	337	18	2,580						4,406	
9-10am	1,280	35	62	195	12	1,584	1,694	42	40	342	22	2,140						3,724	
10-11am	1,258	23	53	190	13	1,537	1,261	34	35	300	25	1,655						3,192	
11-12am	1,218	33	51	187	13	1,502	1,222	40	29	297	15	1,603						3,105	
12-1pm	1,224	41	53	240	13	1,571	1,150	42	36	327	15	1,570						3,141	
1-2pm	1,298	45	57	245	11	1,656	1,085	38	44	339	14	1,520						3,176	
2-3pm	1,508	34	54	212	15	1,823	1,465	25	33	180	7	1,710						3,533	
3-4pm	2,132	54	105	207	7	2,505	1,357	28	32	136	11	1,564						4,069	
4-5pm	2,370	57	69	115	8	2,619	1,231	27	32	144	7	1,441						4,060	
5-6pm	2,261	44	62	79	9	2,455	1,335	26	42	123	3	1,529						3,984	
6-7pm	2,044	30	54	57	5	2,190	1,406	13	58	104	3	1,584						3,774	
7-8pm	2,029	27	59	49	7	2,171	1,346	20	42	80	0	1,488						3,659	
8-9pm	1,938	22	39	40	3	2,042	1,228	13	21	68	2	1,332						3,374	
9-10pm	1,967	33	35	35	5	2,075	1,945	7	10	28	0	1,990						4,065	
10-11pm	2,108	28	26	28	3	2,193	2,561	9	6	25	0	2,601						4,794	
11-12pm	2,250	22	19	24	3	2,318	2,711	5	4	18	1	2,739						5,057	
Totals	37,092	752	983	2,367	171	41,365	38,295	651	721	4,090	270	44,027						85,392	
7-10am	4,198	117	176	517	35	5,043	6,050	144	160	1,087	59	7,500						12,543	
10am-1pm	3,700	97	157	617	39	4,610	3,633	116	100	924	55	4,828						9,438	
1-4pm	4,938	133	216	664	33	5,984	3,907	91	109	655	32	4,794						10,778	
4-7pm	6,675	131	185	251	22	7,264	3,972	66	132	371	13	4,554						11,818	
7am-7pm	19,511	478	734	2,049	129	22,901	17,562	417	501	3,037	159	21,676						44,577	
6-10am	5,423	148	211	594	44	6,420	7,921	203	230	1,413	105	9,872						16,292	
3-7pm	8,807	185	290	458	29	9,769	5,329	94	164	507	24	6,118						15,887	
6am-7pm	20,736	509	769	2,126	138	24,278	19,433	476	571	3,363	205	24,048						48,326	

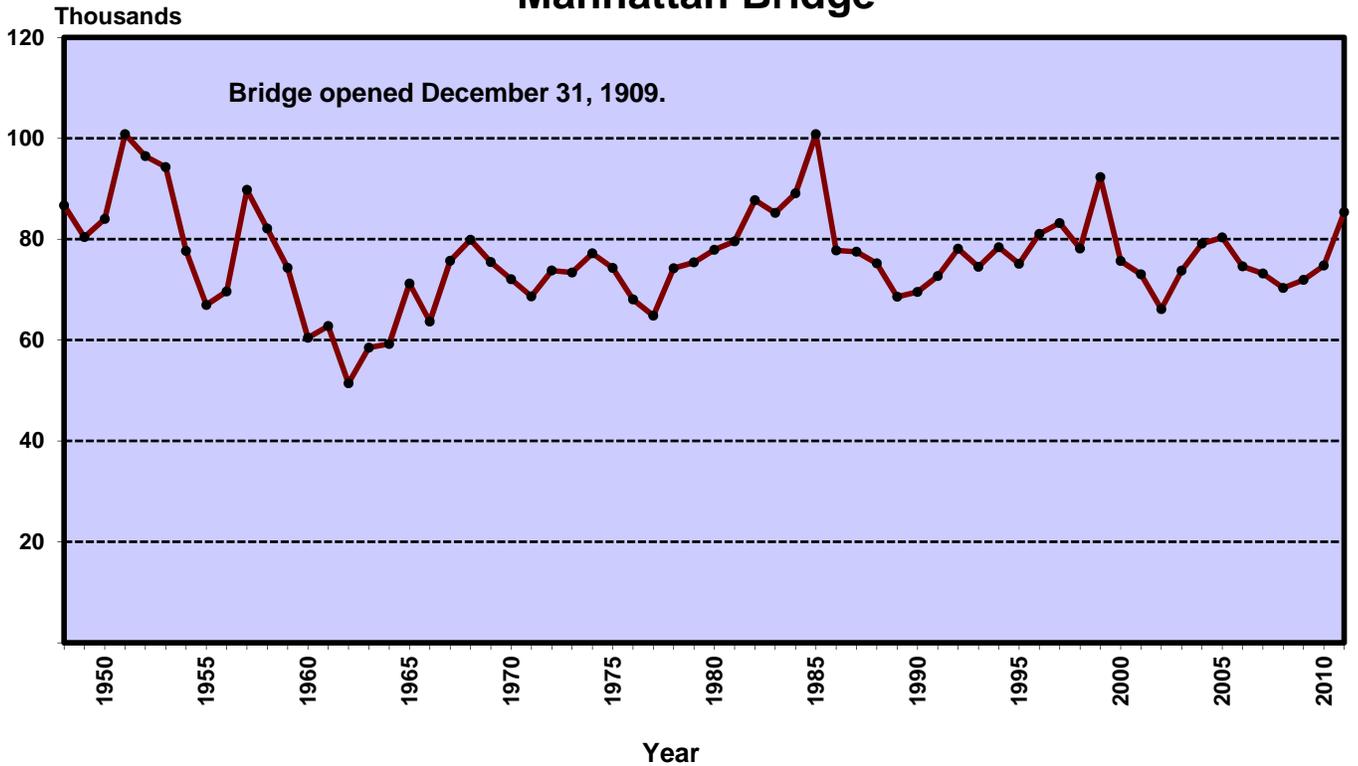
Based on April 2006 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Manhattan Bridge ~ 2011



Average Daily Traffic Volumes ~ Total of Both Directions Manhattan Bridge



Hourly Vehicular Volumes Williamsburg Bridge - 2011

Eastbound to Brooklyn

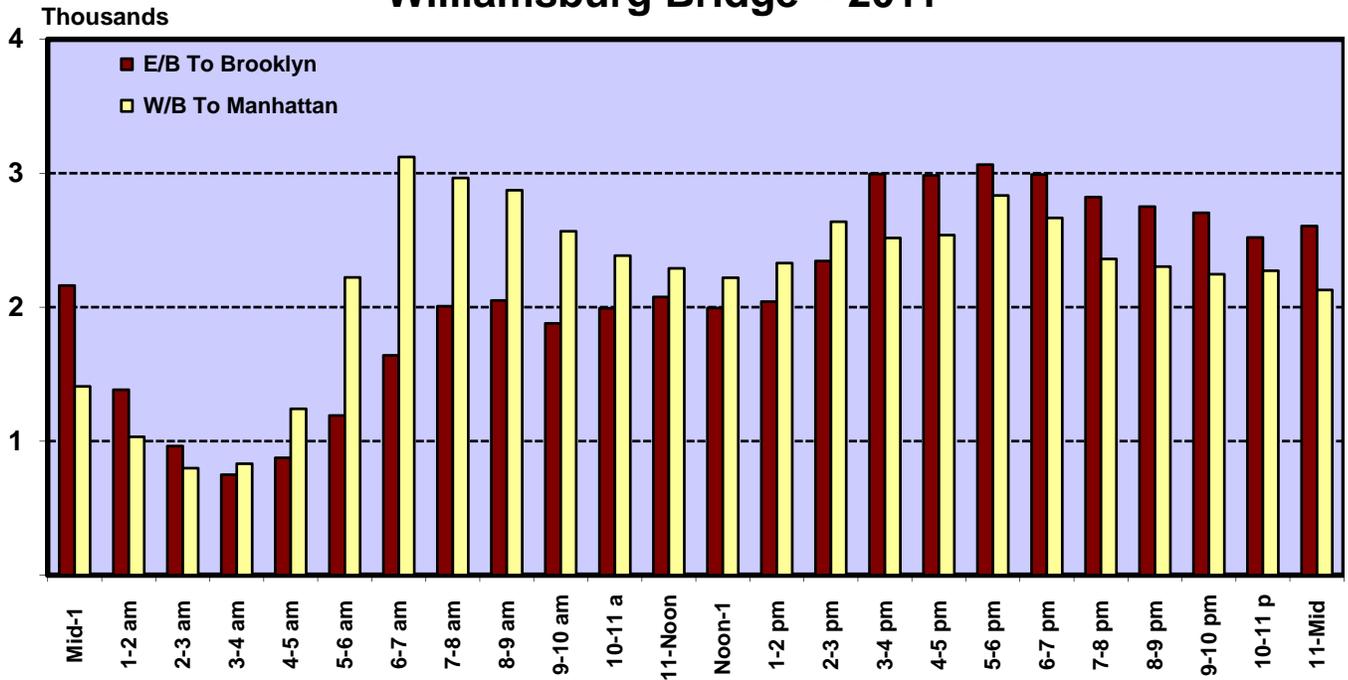
Westbound to Manhattan

FHWA Classes ▲	Commuter Vans							Commuter Vans							2-Way Grand Totals			
	Commercial Vans			Single Unit Trucks				Commercial Vans			Single Unit Trucks							
	Autos & Motorcycles	Pickups Large SUVs	Buses	1 & 2	3	4	5 - 7	8 - 13	Total Vehicles	Autos & Motorcycles	Pickups Large SUVs	Buses	1 & 2	3		4	5 - 7	8 - 13
12-1am	2,152	7	1	2	2	0	0	2,162	1,404	4	1	1	0	0	0	0	0	1,409
1-2am	1,379	3	1	0	0	1	1	1,384	1,028	3	1	1	1	1	0	0	0	1,033
2-3am	952	5	3	2	2	1	1	963	790	6	1	2	2	0	0	0	0	799
3-4am	735	7	3	3	3	2	2	750	826	4	0	1	1	1	1	1	1	832
4-5am	863	7	3	3	3	0	0	876	1,232	6	1	1	1	1	2	2	2	1,241
5-6am	1,171	6	9	6	6	0	0	1,192	2,207	6	7	1	1	2	2	2	2	2,223
6-7am	1,578	12	27	22	22	2	2	1,641	3,086	14	15	7	7	0	0	0	0	3,122
7-8am	1,901	22	48	36	36	1	1	2,008	2,915	24	15	11	11	0	0	0	0	2,965
8-9am	1,950	22	44	31	31	3	3	2,050	2,815	28	17	13	13	1	1	1	1	2,874
9-10am	1,775	27	44	31	31	2	2	1,879	2,519	21	15	10	10	2	2	2	2	2,567
10-11am	1,848	38	64	41	41	1	1	1,992	2,335	26	14	7	7	3	3	3	3	2,385
11-12am	1,939	33	58	44	44	2	2	2,076	2,245	23	14	7	7	1	1	1	1	2,290
12-1pm	1,867	51	23	51	51	2	2	1,994	2,163	28	14	14	14	1	1	1	1	2,220
1-2pm	1,910	58	26	45	45	3	3	2,042	2,270	28	17	14	14	1	1	1	1	2,330
2-3pm	2,216	51	34	41	41	3	3	2,345	2,578	29	14	15	15	2	2	2	2	2,638
3-4pm	2,839	64	37	52	52	3	3	2,995	2,450	26	19	20	20	2	2	2	2	2,517
4-5pm	2,845	56	34	44	44	5	5	2,984	2,467	35	18	18	18	1	1	1	1	2,539
5-6pm	2,944	56	33	31	31	1	1	3,065	2,751	40	24	18	18	1	1	1	1	2,834
6-7pm	2,904	38	24	23	23	2	2	2,991	2,601	32	16	16	16	2	2	2	2	2,667
7-8pm	2,749	29	24	19	19	1	1	2,822	2,311	24	14	11	11	0	0	0	0	2,360
8-9pm	2,693	24	19	13	13	2	2	2,751	2,282	13	5	4	4	0	0	0	0	2,304
9-10pm	2,672	14	12	5	5	2	2	2,705	2,225	13	4	3	3	1	1	1	1	2,246
10-11pm	2,500	11	4	4	4	2	2	2,521	2,253	13	2	3	3	1	1	1	1	2,272
11-12pm	2,594	7	2	3	3	0	0	2,606	2,117	8	2	2	2	0	0	0	0	2,129
Totals	48,976	648	577	552	552	41	41	50,794	51,870	454	250	199	199	23	23	23	23	52,796
7-10am	5,626	71	136	98	98	6	6	5,937	8,249	73	47	34	34	3	3	3	3	8,406
10am-1pm	5,654	122	145	136	136	5	5	6,062	6,743	77	42	28	28	5	5	5	5	6,895
1-4pm	6,965	173	97	138	138	9	9	7,382	7,298	83	50	49	49	5	5	5	5	7,485
4-7pm	8,693	150	91	98	98	8	8	9,040	7,819	107	58	52	52	4	4	4	4	8,040
7am-7pm	26,938	516	469	470	470	28	28	28,421	30,109	340	197	163	163	17	17	17	17	30,826
6-10am	7,204	83	163	120	120	8	8	7,578	11,335	87	62	41	41	3	3	3	3	11,528
3-7pm	11,532	214	128	150	150	11	11	12,035	10,269	133	77	72	72	6	6	6	6	10,557
6am-7pm	28,516	528	496	492	492	30	30	30,062	33,195	354	212	170	170	17	17	17	17	33,948

Based on March 2006 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Williamsburg Bridge ~ 2011



Average Daily Traffic Volumes ~ Total of Both Directions Williamsburg Bridge



Harlem River Bridges



145th Street Bridge

Harlem River Bridges
Average Daily Traffic Volumes
1948 - 2011

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

Harlem River Bridges (cont'd)
Average Daily Traffic Volumes
1948 - 2011

<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

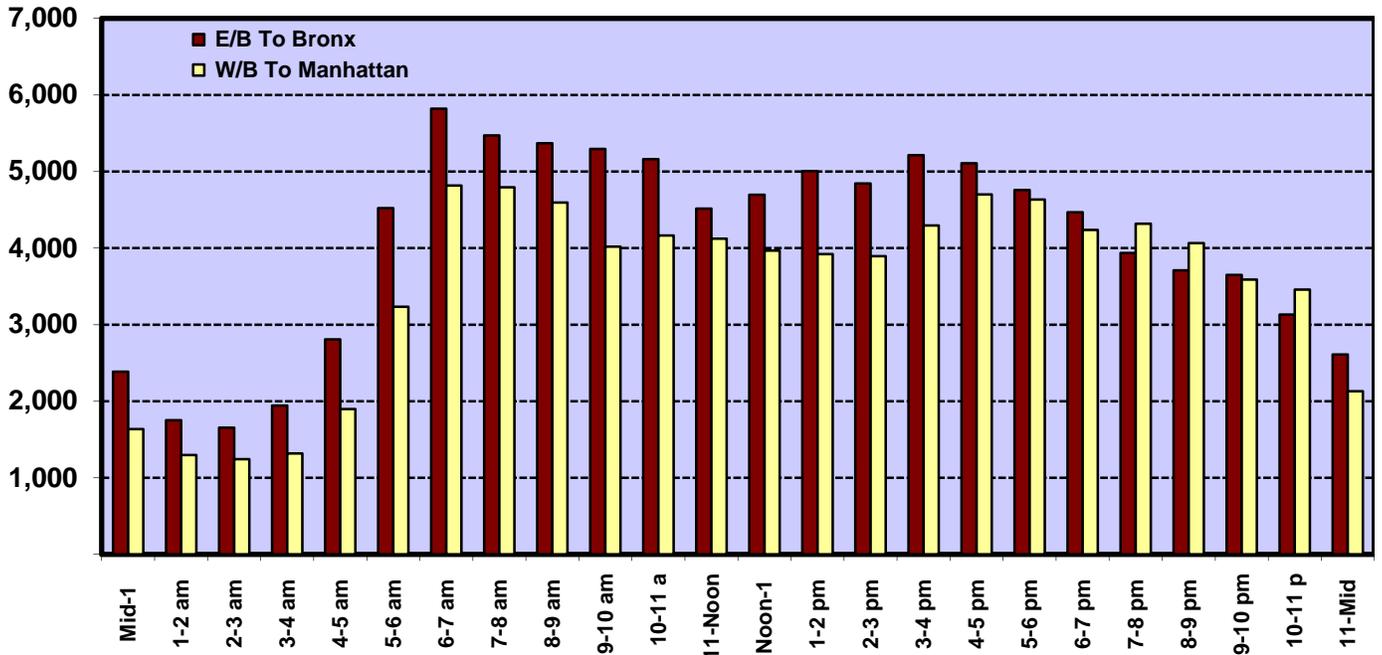
**Hourly Vehicular Volumes
Alexander Hamilton Bridge - 2011**

	Eastbound to Bronx					Westbound to Manhattan					2-Way Totals	
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks		Commercial Vans
12-1am	---	---	---	---	---	2,386	---	---	---	---	---	1,637
1-2am	---	---	---	---	---	1,752	---	---	---	---	---	1,297
2-3am	---	---	---	---	---	1,655	---	---	---	---	---	2,898
3-4am	---	---	---	---	---	1,943	---	---	---	---	---	1,319
4-5am	---	---	---	---	---	2,807	---	---	---	---	---	1,898
5-6am	---	---	---	---	---	4,521	---	---	---	---	---	3,233
6-7am	---	---	---	---	---	5,820 **	---	---	---	---	---	4,816 **
7-8am	4,270	14	247	816	124	5,471	4,056	9	86	431	213	4,795
8-9am	3,902	5	255	980	228	5,370	3,929	32	32	456	145	4,594
9-10am	3,706	5	237	1,214	133	5,295	3,091	44	26	678	180	4,019
10-11am	4,635	3	110	362	52	5,162	3,603	25	16	389	131	4,164
11-12am	3,384	10	243	753	125	4,515	2,921	13	19	911	259	4,123
12-1pm	4,072	0	115	459	50	4,696	3,362	9	8	469	119	3,967
1-2pm	3,816	8	182	910	91	5,007	2,930	10	21	762	199	3,922
2-3pm	3,749	6	200	778	110	4,843	2,908	16	36	779	156	3,895
3-4pm	4,646	8	94	363	102	5,213	3,741	20	15	440	80	4,296
4-5pm	4,283	6	161	535	123	5,108	3,545	4	41	894	216	4,700
5-6pm	4,149	5	117	390	97	4,758	3,633	2	30	810	159	4,634
6-7pm	3,755	9	197	430	76	4,467	3,645	2	21	442	127	4,237
7-8pm	---	---	---	---	---	3,935	---	---	---	---	---	4,318
8-9pm	---	---	---	---	---	3,709	---	---	---	---	---	4,065
9-10pm	---	---	---	---	---	3,649	---	---	---	---	---	3,589
10-11pm	---	---	---	---	---	3,132	---	---	---	---	---	3,458
11-12pm	---	---	---	---	---	2,610	---	---	---	---	---	2,131
Totals	---	---	---	---	---	97,824	---	---	---	---	---	84,350
7-10am	11,878	24	739	3,010	485	16,136	11,076	85	144	1,565	538	13,408
10am-1pm	12,091	13	468	1,574	227	14,373	9,886	47	43	1,769	509	12,254
1-4pm	12,211	22	476	2,051	303	15,063	9,579	46	72	1,981	435	12,113
4-7pm	12,187	20	475	1,355	296	14,333	10,823	8	92	2,146	502	13,571
7am-7pm	48,367	79	2,158	7,990	1,311	59,905	41,364	186	351	7,461	1,984	51,346
6-10am	---	---	---	---	---	21,956	---	---	---	---	---	18,224
3-7pm	16,833	28	569	1,718	398	19,546	14,564	28	107	2,586	582	17,867
6am-7pm	---	---	---	---	---	65,725	---	---	---	---	---	56,162

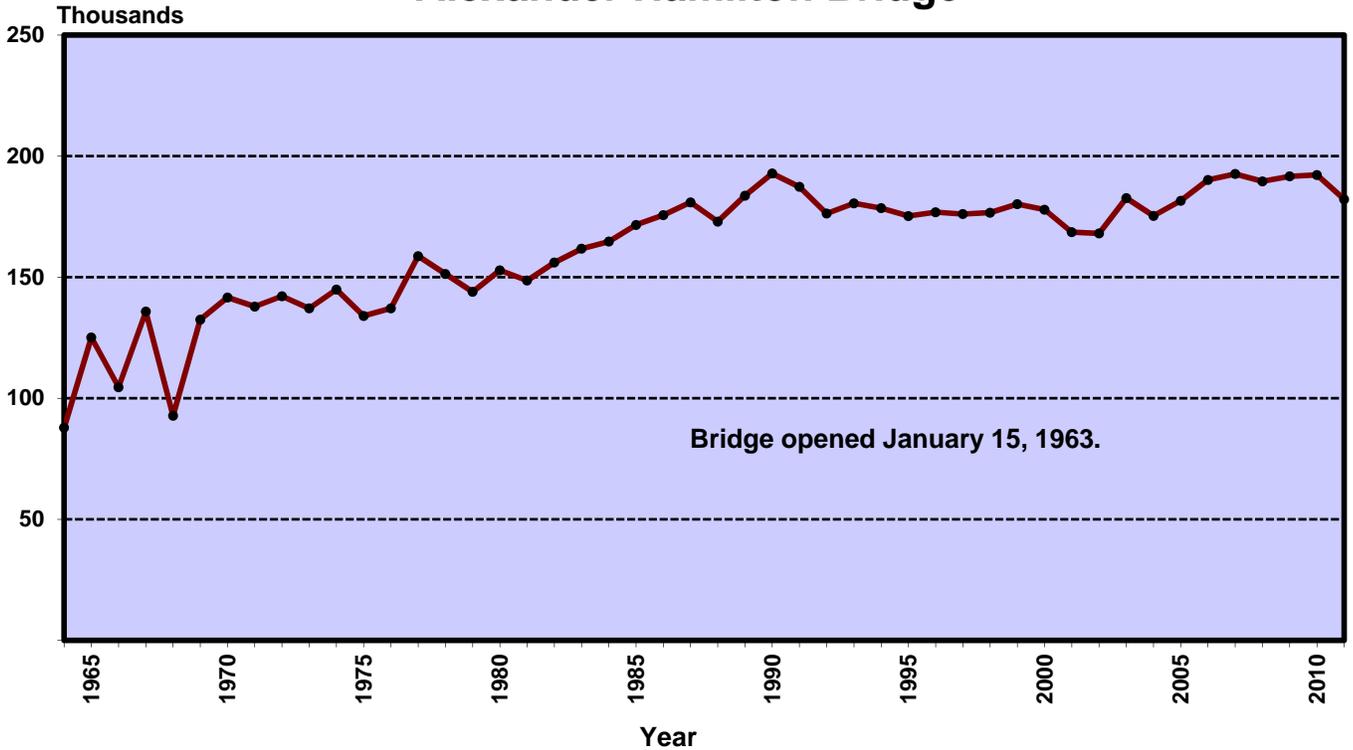
** Peak Volumes

Based on 1989 Classification Survey Data

Hourly Vehicular Volumes Alexander Hamilton Bridge ~ 2011



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



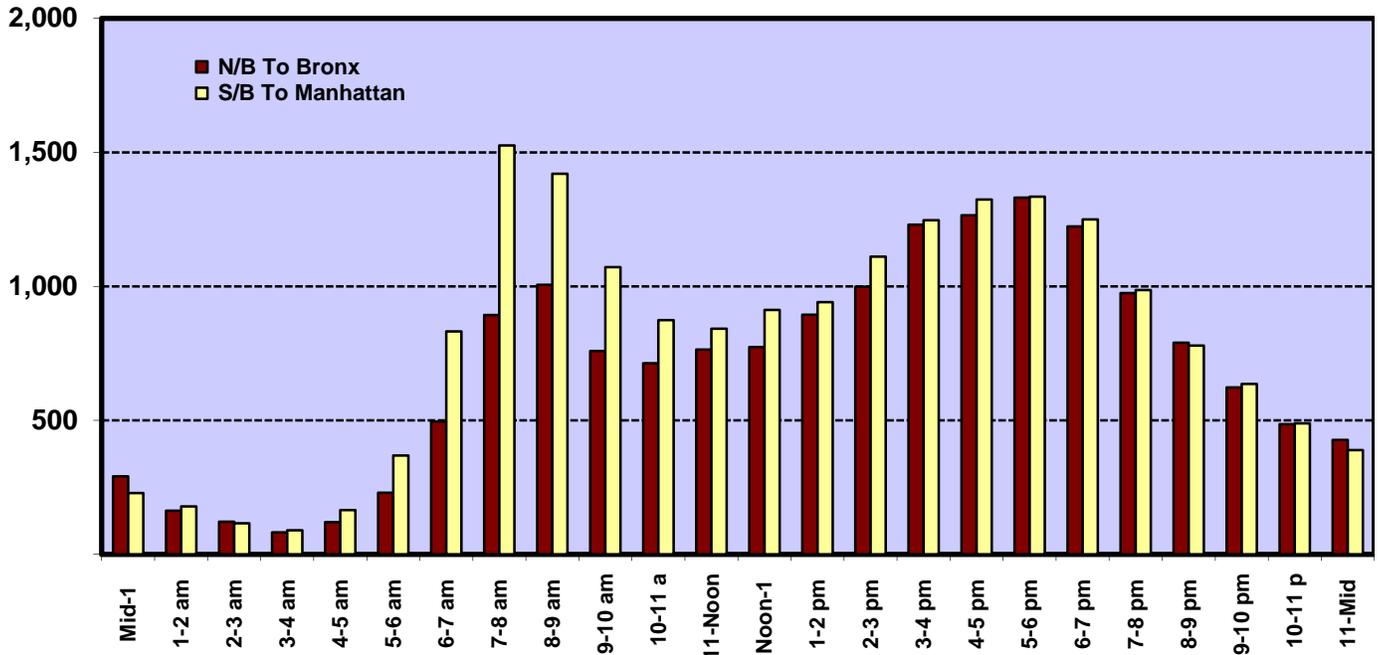
Hourly Vehicular Volumes Broadway Bridge - 2011

	Northbound to Bronx					Southbound to Manhattan					2-Way Totals	
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks		Commercial Vans
12-1am	---	---	---	---	---	291	---	---	---	---	---	229
1-2am	---	---	---	---	---	163	---	---	---	---	---	179
2-3am	---	---	---	---	---	122	---	---	---	---	---	116
3-4am	---	---	---	---	---	82	---	---	---	---	---	90
4-5am	---	---	---	---	---	120	---	---	---	---	---	165
5-6am	---	---	---	---	---	230	---	---	---	---	---	369
6-7am	---	---	---	---	---	496	---	---	---	---	---	832
7-8am	728	40	22	73	30	893	1,346	62	42	31	45	1,526 **
8-9am	856	62	22	37	29	1,006	1,261	43	29	44	43	1,420
9-10am	650	22	3	26	58	759	916	35	26	54	41	1,072
10-11am	640	16	2	33	22	713	795	21	12	37	9	874
11-12am	668	20	8	27	41	764	697	23	23	49	50	842
12-1pm	707	20	5	20	22	774	857	22	4	18	11	912
1-2pm	809	25	3	28	29	894	872	24	9	20	16	941
2-3pm	863	25	1	36	74	999	1,003	31	24	35	18	1,111
3-4pm	1,139	28	10	15	38	1,230	1,170	33	14	19	11	1,247
4-5pm	1,120	39	27	24	55	1,265	1,197	32	22	37	36	1,324
5-6pm	1,219	28	8	12	64	1,331 **	1,228	31	32	19	25	1,335
6-7pm	1,085	21	0	12	106	1,224	1,162	31	28	20	9	1,250
7-8pm	---	---	---	---	---	975	---	---	---	---	---	986
8-9pm	---	---	---	---	---	790	---	---	---	---	---	779
9-10pm	---	---	---	---	---	623	---	---	---	---	---	636
10-11pm	---	---	---	---	---	486	---	---	---	---	---	489
11-12pm	---	---	---	---	---	427	---	---	---	---	---	389
Totals	---	---	---	---	---	16,657	---	---	---	---	---	19,113
7-10am	2,234	124	47	136	117	2,658	3,523	140	97	129	129	4,018
10am-1pm	2,015	56	15	80	85	2,251	2,349	66	39	104	70	2,628
1-4pm	2,811	78	14	79	141	3,123	3,045	88	47	74	45	3,299
4-7pm	3,424	88	35	48	225	3,820	3,587	94	82	76	70	3,909
7am-7pm	10,484	346	111	343	568	11,852	12,504	388	265	383	314	13,854
6-10am	---	---	---	---	---	3,154	---	---	---	---	---	4,850
3-7pm	4,563	116	45	63	263	5,050	4,757	127	96	95	81	5,156
6am-7pm	---	---	---	---	---	12,348	---	---	---	---	---	14,686

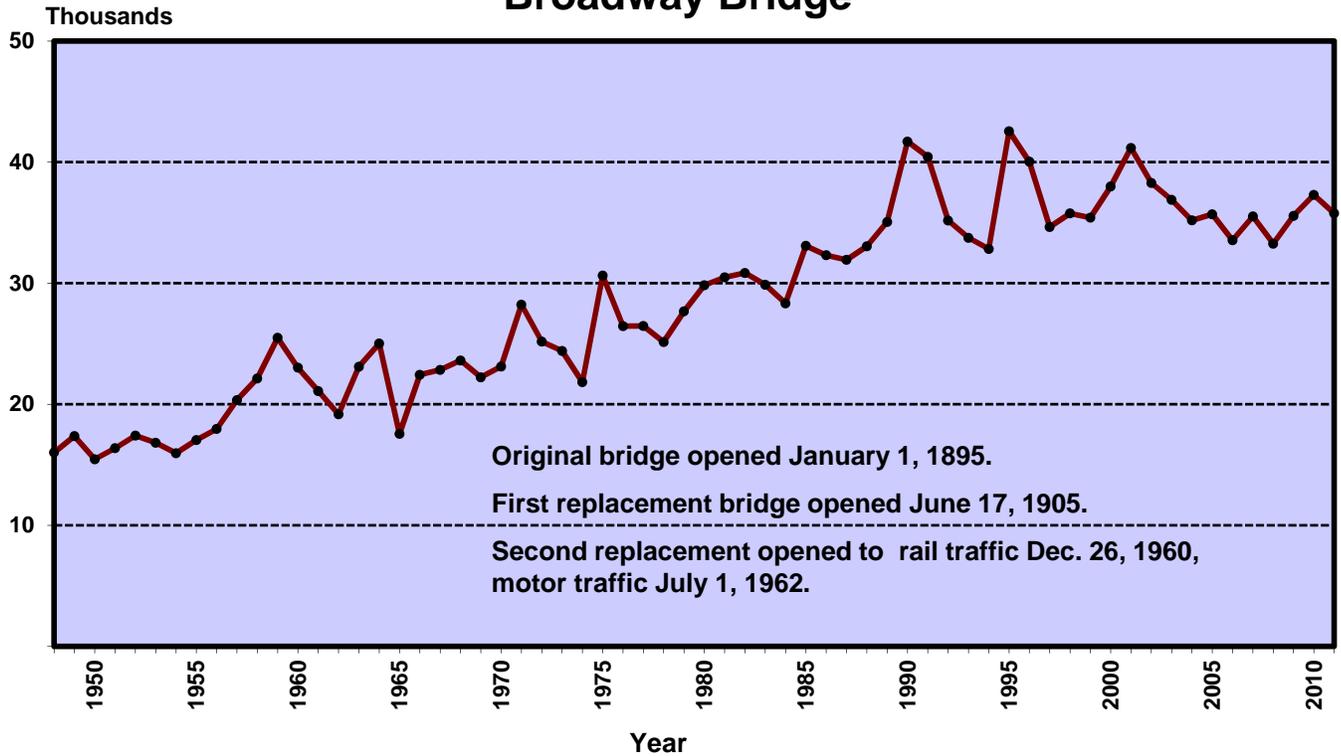
Based on 1989 Classification Survey Data

** Peak Volumes

Hourly Vehicular Volumes Broadway Bridge ~ 2011



Average Daily Traffic Volumes ~ Total of Both Directions Broadway Bridge



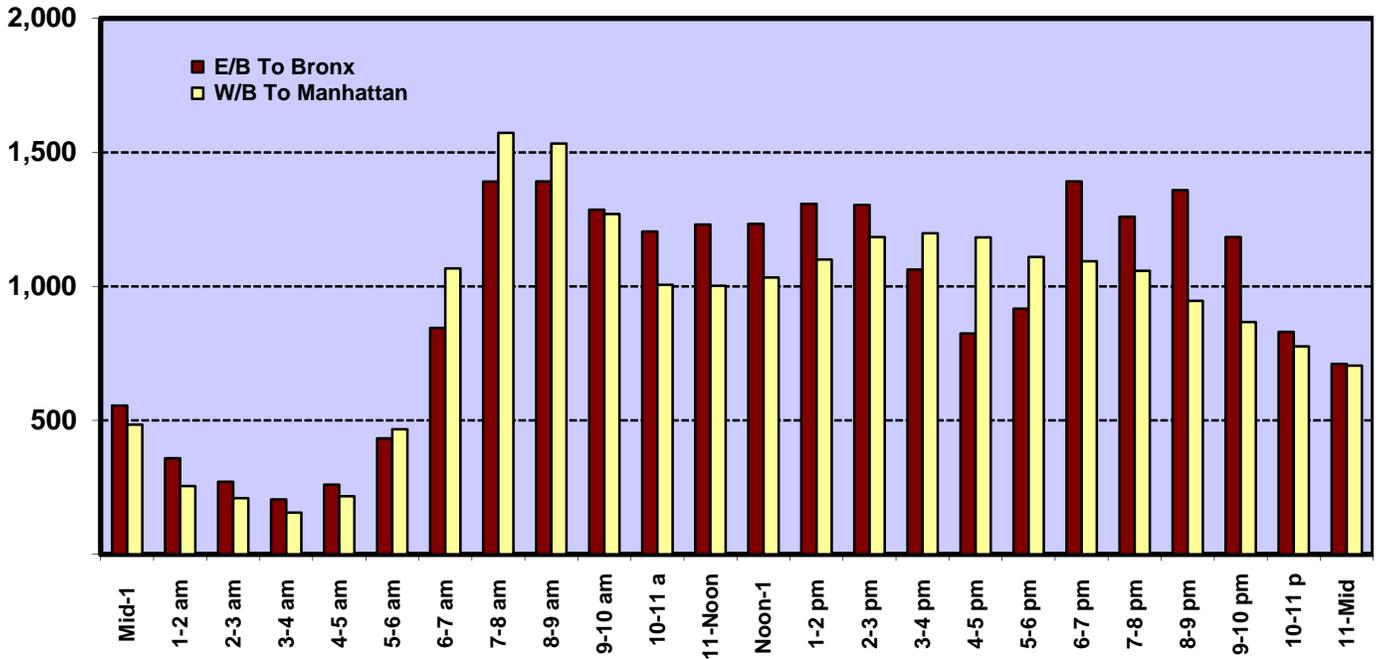
Hourly Vehicular Volumes Macombs Dam Bridge - 2011

	Eastbound to Bronx					Westbound to Manhattan					2-Way Totals	
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks		Commercial Vans
12-1am	---	---	---	---	---	555	---	---	---	---	---	484
1-2am	---	---	---	---	---	359	---	---	---	---	---	255
2-3am	---	---	---	---	---	271	---	---	---	---	---	210
3-4am	---	---	---	---	---	205	---	---	---	---	---	156
4-5am	---	---	---	---	---	260	---	---	---	---	---	217
5-6am	---	---	---	---	---	433	---	---	---	---	---	467
6-7am	---	---	---	---	---	845	---	---	---	---	---	1,067 **
7-8am	1,141	46	30	70	104	1,391 **	1,212	39	6	86	230	1,573 **
8-9am	1,164	16	21	71	120	1,392 **	1,246	11	2	98	176	1,533
9-10am	1,101	24	18	69	74	1,286	949	19	13	110	179	1,270
10-11am	1,088	10	4	46	57	1,205	898	8	7	39	54	1,006
11-12am	1,019	13	16	84	99	1,231	827	7	13	73	82	1,002
12-1pm	1,125	13	8	37	50	1,233	953	17	3	19	41	1,033
1-2pm	1,225	3	8	38	34	1,308	975	19	7	21	78	1,100
2-3pm	1,082	17	27	85	93	1,304	1,010	22	15	50	87	1,184
3-4pm	927	19	8	50	59	1,063	1,094	34	9	20	41	1,198
4-5pm	638	6	21	55	104	824	1,038	9	28	38	70	1,183
5-6pm	770	7	11	27	102	917	1,017	11	9	17	56	1,110
6-7pm	1,297	4	8	31	52	1,392 **	980	6	11	22	75	1,094
7-8pm	---	---	---	---	---	1,260	---	---	---	---	---	1,058
8-9pm	---	---	---	---	---	1,359	---	---	---	---	---	946
9-10pm	---	---	---	---	---	1,184	---	---	---	---	---	867
10-11pm	---	---	---	---	---	830	---	---	---	---	---	776
11-12pm	---	---	---	---	---	711	---	---	---	---	---	704
Totals	---	---	---	---	---	22,818	---	---	---	---	---	21,493
7-10am	3,406	86	69	210	298	4,069	3,407	69	21	294	585	4,376
10am-1pm	3,232	36	28	167	206	3,669	2,678	32	23	131	177	3,041
1-4pm	3,234	39	43	173	186	3,675	3,079	75	31	91	206	3,482
4-7pm	2,705	17	40	113	258	3,133	3,035	26	48	77	201	3,387
7am-7pm	12,577	178	180	663	948	14,546	12,199	202	123	593	1,169	14,286
6-10am	---	---	---	---	---	4,914	---	---	---	---	---	5,443
3-7pm	3,632	36	48	163	317	4,196	4,129	60	57	97	242	4,585
6am-7pm	---	---	---	---	---	15,391	---	---	---	---	---	15,353

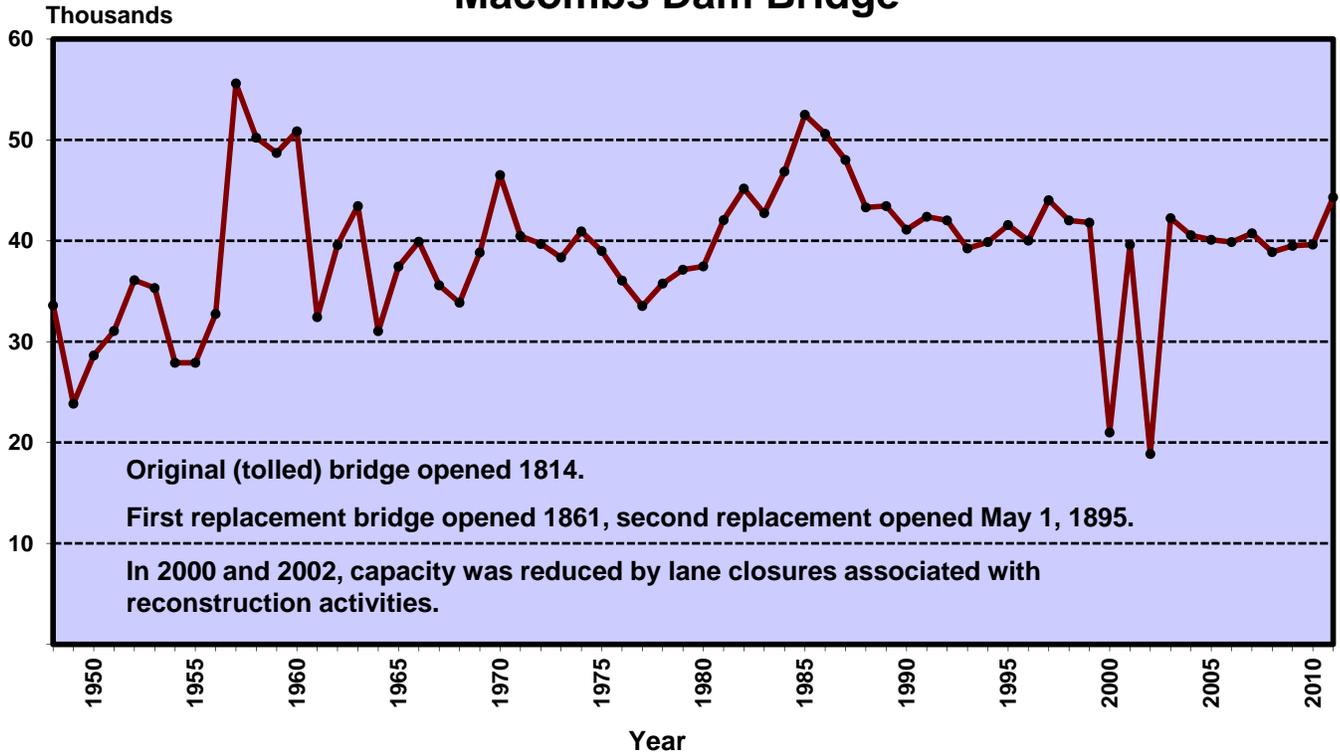
Based on 1989 Classification Survey Data

** Peak Volumes

Hourly Vehicular Volumes Macombs Dam Bridge ~ 2011



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



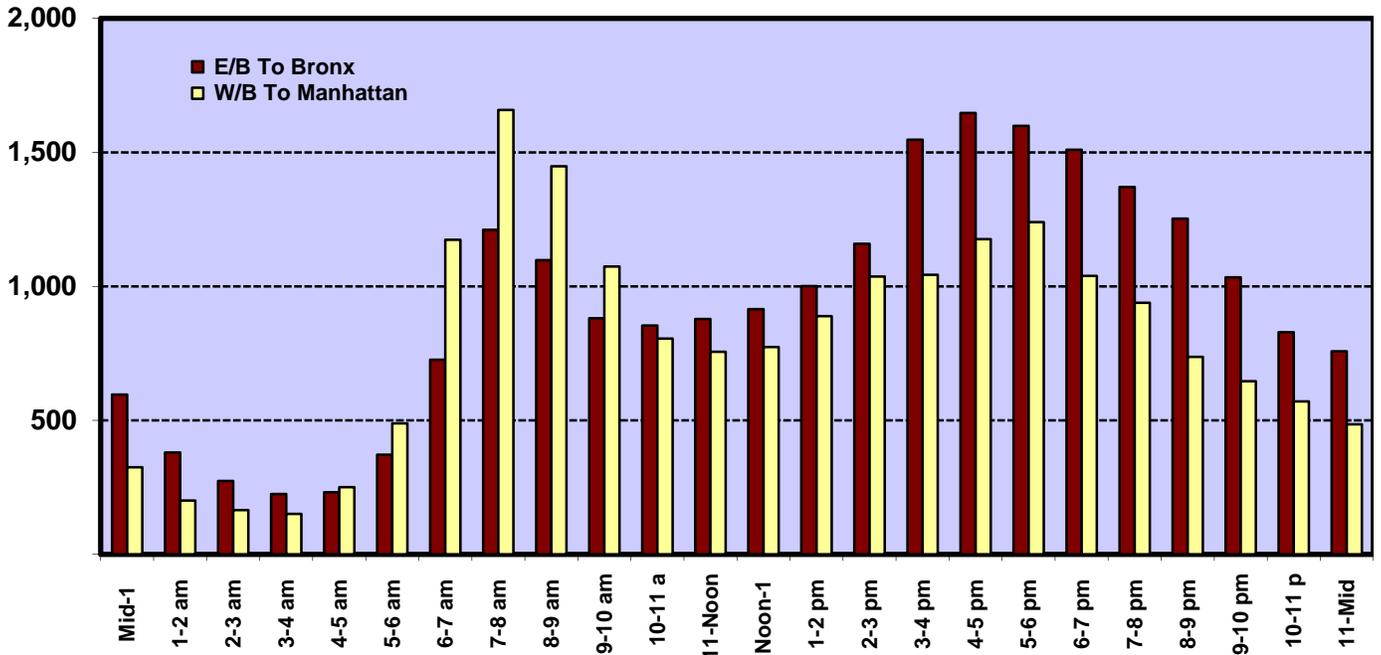
Hourly Vehicular Volumes Madison Avenue Bridge - 2011

	Eastbound to Bronx					Westbound to Manhattan					2-Way Totals	
	Autos	Buses	Commuter		Commercial Vans	Autos	Buses	Commuter		Commercial Vans		
			Vans	Trucks				Vans	Trucks			
12-1am	---	---	---	---	---	---	---	---	---	---	---	921
1-2am	---	---	---	---	---	---	---	---	---	---	---	581
2-3am	---	---	---	---	---	---	---	---	---	---	---	439
3-4am	---	---	---	---	---	---	---	---	---	---	---	376
4-5am	---	---	---	---	---	---	---	---	---	---	---	483
5-6am	---	---	---	---	---	---	---	---	---	---	---	861
6-7am	---	---	---	---	---	---	---	---	---	---	---	1,900
7-8am	944	47	104	61	55	1,358	108	15	55	122	1,658	**
8-9am	860	59	77	45	57	1,147	95	27	61	118	1,448	
9-10am	633	56	82	68	42	759	54	30	131	100	1,074	
10-11am	709	32	43	31	39	655	55	18	18	59	805	
11-12am	593	24	77	96	88	576	22	29	57	72	756	
12-1pm	780	26	31	38	40	650	29	22	26	47	774	
1-2pm	850	29	32	43	47	757	51	26	14	41	889	
2-3pm	846	32	74	103	104	827	70	29	31	80	1,037	
3-4pm	1,334	27	42	75	69	898	62	18	24	41	1,043	
4-5pm	1,227	31	138	114	137	1,017	63	27	24	45	1,176	
5-6pm	1,279	35	110	90	85	1,089	49	34	27	41	1,240	
6-7pm	1,243	72	49	63	83	942	37	21	19	20	1,039	
7-8pm	---	---	---	---	---	---	---	---	---	---	---	939
8-9pm	---	---	---	---	---	---	---	---	---	---	---	737
9-10pm	---	---	---	---	---	---	---	---	---	---	---	1,990
10-11pm	---	---	---	---	---	---	---	---	---	---	---	1,680
11-12pm	---	---	---	---	---	---	---	---	---	---	---	1,400
11-12pm	---	---	---	---	---	---	---	---	---	---	---	1,243
Totals	---	---	---	---	---	---	---	---	---	---	---	41,423
7-10am	2,437	162	263	174	154	3,264	257	72	247	340	4,180	
10am-1pm	2,082	82	151	165	167	1,881	106	69	101	178	2,335	
1-4pm	3,030	88	148	221	220	2,482	183	73	69	162	2,969	
4-7pm	3,749	138	297	267	305	3,048	149	82	70	106	3,455	
7am-7pm	11,298	470	859	827	846	10,675	695	296	487	786	12,939	
6-10am	---	---	---	---	---	---	---	---	---	---	---	5,354
3-7pm	5,083	165	339	342	374	3,946	211	100	94	147	4,498	
6am-7pm	---	---	---	---	---	---	---	---	---	---	---	14,113

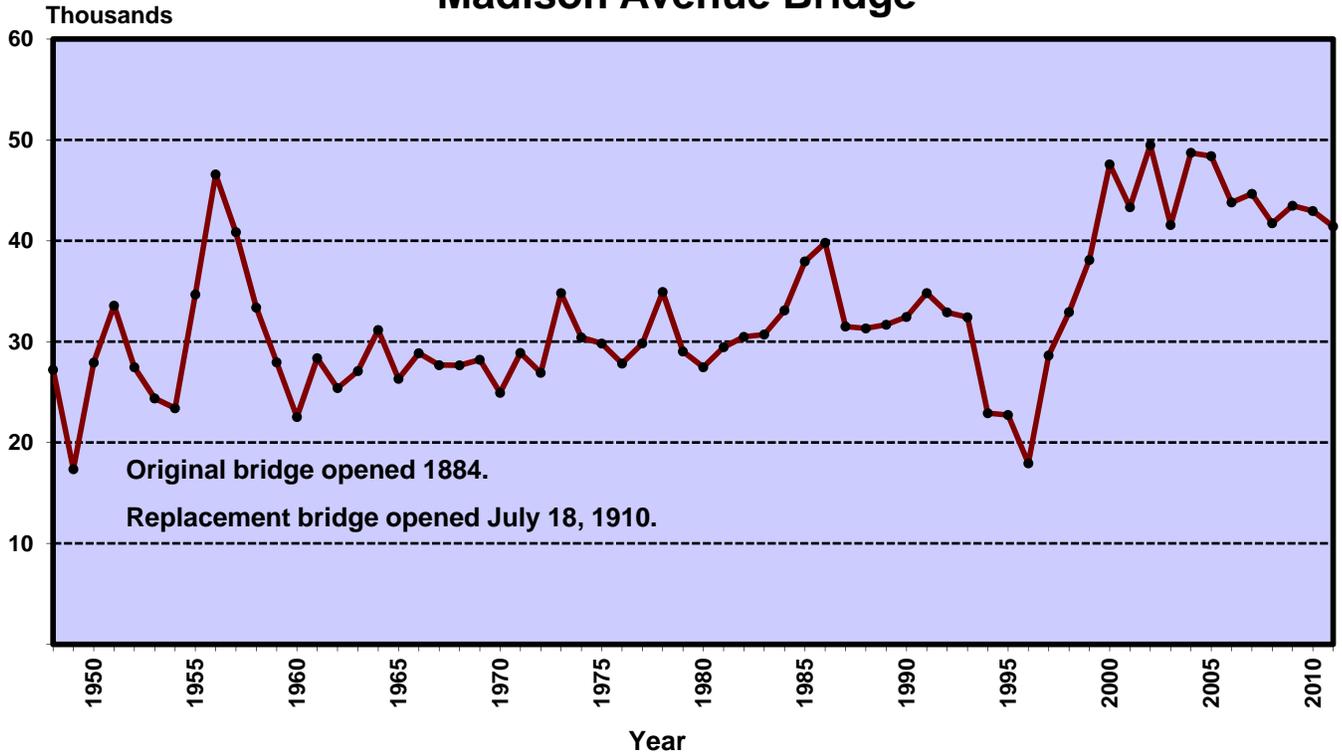
Based on 1989 Classification Survey Data

** Peak Volumes

Hourly Vehicular Volumes Madison Avenue Bridge ~ 2011



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



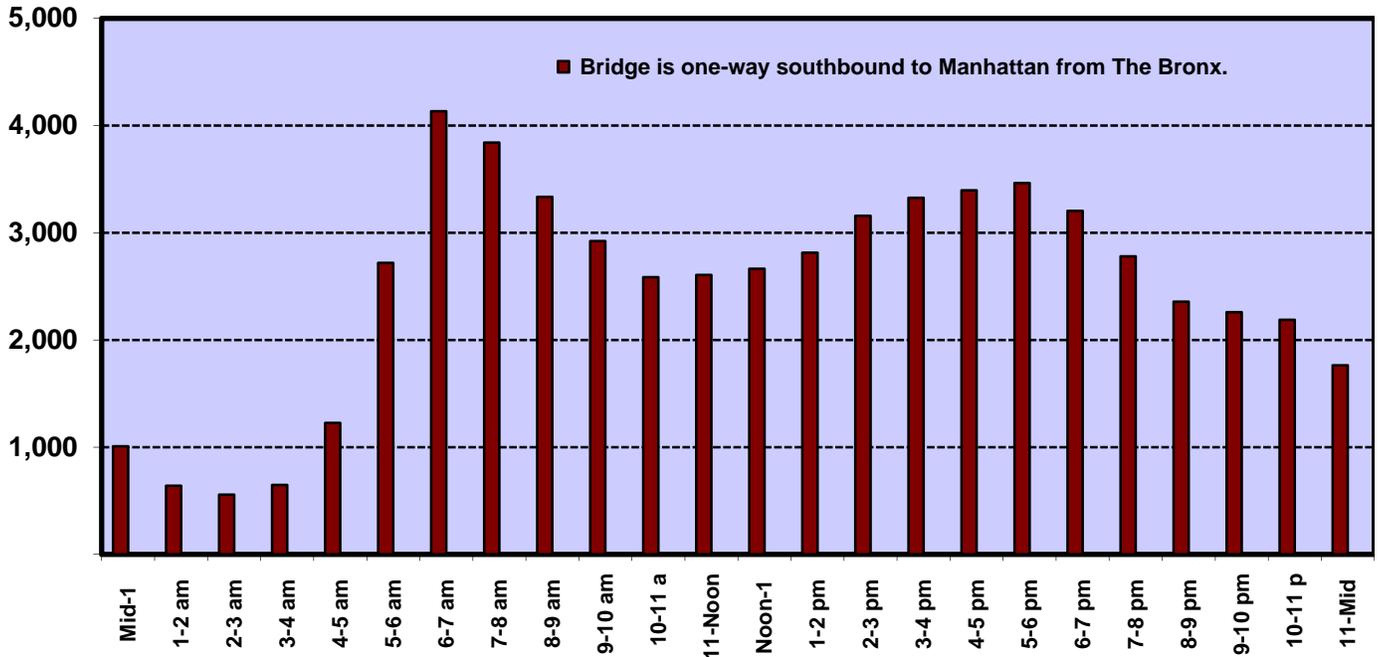
**Hourly Vehicular Volumes
Third Avenue Bridge - 2011**

	Northbound to Bronx					Southbound to Manhattan					2-Way Totals	
	Autos	Buses	Commuter		Commercial Vans	Autos	Buses	Commuter		Commercial Vans		Totals
			Vans	Trucks				Vans	Trucks			
12-1am	---	---	---	---	---	---	---	---	---	---	---	1,009
1-2am	---	---	---	---	---	---	---	---	---	---	---	640
2-3am	---	---	---	---	---	---	---	---	---	---	---	557
3-4am	---	---	---	---	---	---	---	---	---	---	---	648
4-5am	---	---	---	---	---	---	---	---	---	---	---	1,226
5-6am	---	---	---	---	---	---	---	---	---	---	---	2,720
6-7am	---	---	---	---	---	---	---	---	---	---	---	4,134 **
7-8am	2,468	51	382	515	425	425	515	425	425	425	3,841	3,841
8-9am	2,187	31	216	442	460	460	442	460	460	460	3,336	3,336
9-10am	1,951	32	258	381	301	301	381	301	301	301	2,923	2,923
10-11am	2,163	26	143	139	115	115	139	115	115	115	2,586	2,586
11-12am	1,738	48	282	333	206	206	333	206	206	206	2,607	2,607
12-1pm	2,251	67	116	130	100	100	130	100	100	100	2,664	2,664
1-2pm	2,101	96	183	160	274	274	160	274	274	274	2,814	2,814
2-3pm	2,191	109	274	269	316	316	269	316	316	316	3,159	3,159
3-4pm	2,978	88	103	83	74	74	83	74	74	74	3,326	3,326
4-5pm	2,859	65	154	148	170	170	148	170	170	170	3,396	3,396
5-6pm	3,079	60	127	108	91	91	108	91	91	91	3,465	3,465
6-7pm	2,867	58	116	78	85	85	78	85	85	85	3,204	3,204
7-8pm	---	---	---	---	---	---	---	---	---	---	---	2,780
8-9pm	---	---	---	---	---	---	---	---	---	---	---	2,357
9-10pm	---	---	---	---	---	---	---	---	---	---	---	2,259
10-11pm	---	---	---	---	---	---	---	---	---	---	---	2,188
11-12pm	---	---	---	---	---	---	---	---	---	---	---	1,764
Totals	---	---	---	---	---	---	---	---	---	---	---	59,603
7-10am	6,606	114	856	1,338	1,186	1,186	1,338	1,186	1,186	1,186	10,100	10,100
10am-1pm	6,152	141	541	602	421	421	602	421	421	421	7,857	7,857
1-4pm	7,270	293	560	512	664	664	512	664	664	664	9,299	9,299
4-7pm	8,805	183	397	334	346	346	334	346	346	346	10,065	10,065
7am-7pm	28,833	731	2,354	2,786	2,617	2,617	2,786	2,617	2,617	2,617	37,321	37,321
6-10am	---	---	---	---	---	---	---	---	---	---	---	14,234
3-7pm	11,783	271	500	417	420	420	417	420	420	420	13,391	13,391
6am-7pm	---	---	---	---	---	---	---	---	---	---	---	41,455

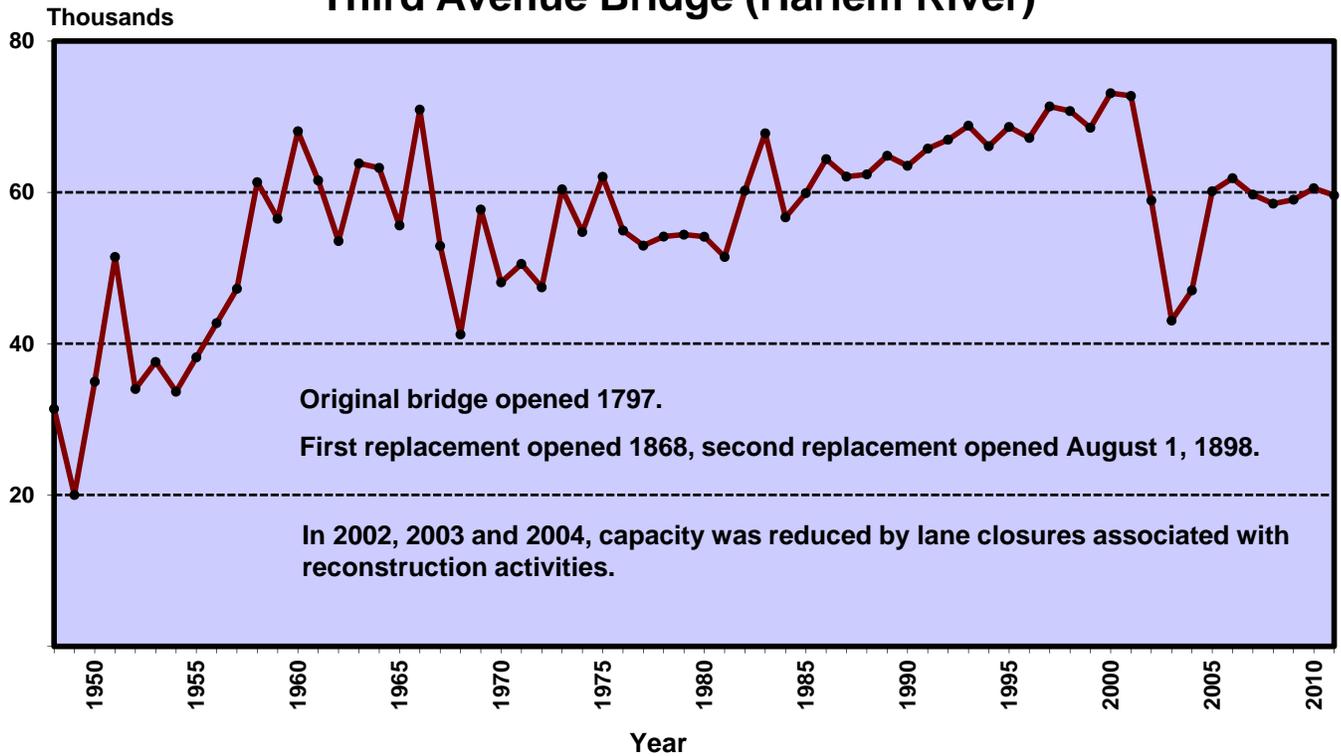
** Peak Volumes

Based on 1989 Classification Survey Data

Hourly Vehicular Volumes Third Avenue Bridge (Harlem River) ~ 2011



Average Daily Traffic Volumes Third Avenue Bridge (Harlem River)



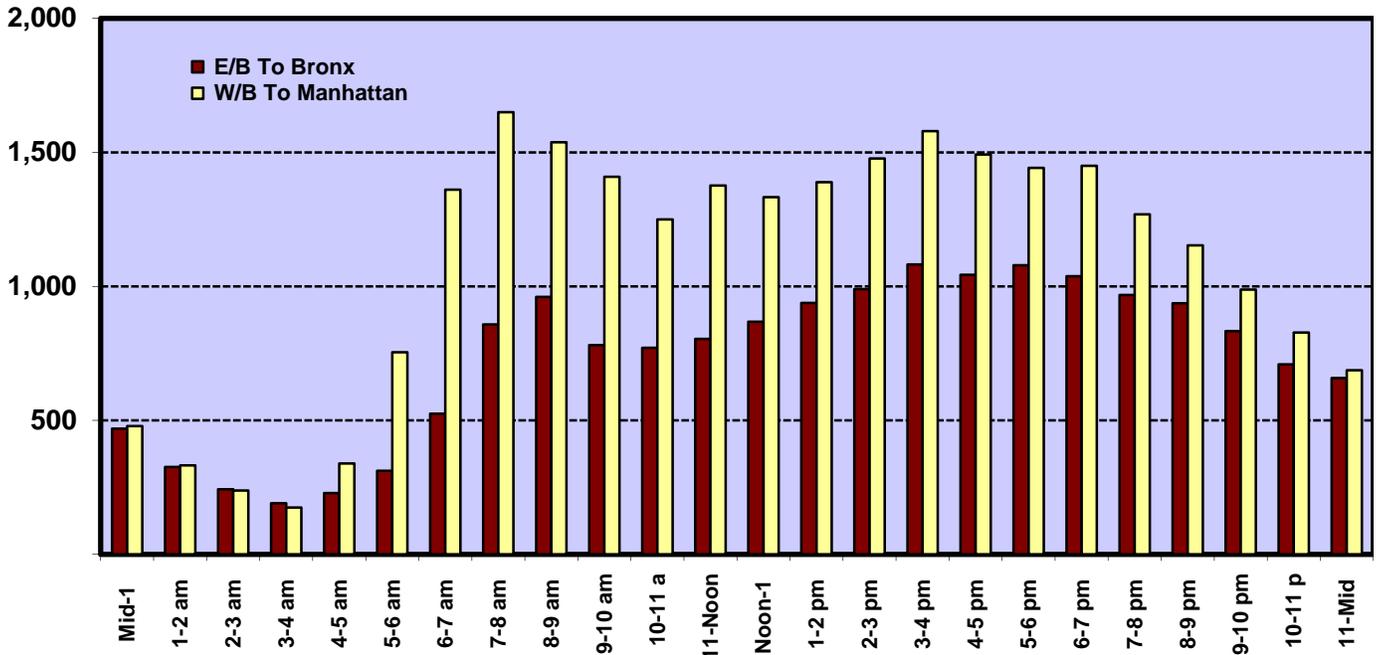
**Hourly Vehicular Volumes
University Heights Bridge - 2011**

	Eastbound to Bronx					Westbound to Manhattan					2-Way Totals	
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks		Commercial Vans
12-1am	---	---	---	---	---	469	---	---	---	---	---	479
1-2am	---	---	---	---	---	326	---	---	---	---	---	332
2-3am	---	---	---	---	---	243	---	---	---	---	---	238
3-4am	---	---	---	---	---	191	---	---	---	---	---	175
4-5am	---	---	---	---	---	229	---	---	---	---	---	339
5-6am	---	---	---	---	---	312	---	---	---	---	---	754
6-7am	---	---	---	---	---	525	---	---	---	---	---	1,361
7-8am	648	45	83	40	42	858	1,431	23	37	41	118	1,650 **
8-9am	746	8	79	56	72	961	1,334	13	28	54	109	1,538
9-10am	582	8	58	66	67	781	1,192	16	19	61	121	1,409
10-11am	672	4	35	33	27	771	1,143	4	4	31	68	1,250
11-12am	620	7	64	75	38	804	1,172	9	16	74	105	1,376
12-1pm	782	13	24	27	22	868	1,232	2	6	34	59	1,333
1-2pm	804	40	39	31	24	938	1,312	4	5	24	44	1,389
2-3pm	810	13	69	50	48	990	1,265	12	24	56	120	1,477
3-4pm	986	17	22	29	28	1,082 **	1,428	50	7	31	63	1,579
4-5pm	909	4	56	42	32	1,043	1,328	20	18	28	98	1,492
5-6pm	946	0	60	29	44	1,079	1,351	1	16	14	60	1,442
6-7pm	906	0	56	19	57	1,038	1,355	8	12	11	64	1,450
7-8pm	---	---	---	---	---	968	---	---	---	---	---	1,269
8-9pm	---	---	---	---	---	937	---	---	---	---	---	1,153
9-10pm	---	---	---	---	---	833	---	---	---	---	---	988
10-11pm	---	---	---	---	---	709	---	---	---	---	---	828
11-12pm	---	---	---	---	---	658	---	---	---	---	---	687
Totals	---	---	---	---	---	17,613	---	---	---	---	---	25,988
7-10am	1,976	61	220	162	181	2,600	3,957	52	84	156	348	4,597
10am-1pm	2,074	24	123	135	87	2,443	3,547	15	26	139	232	3,959
1-4pm	2,600	70	130	110	100	3,010	4,005	66	36	111	227	4,445
4-7pm	2,761	4	172	90	133	3,160	4,034	29	46	53	222	4,384
7am-7pm	9,411	159	645	497	501	11,213	15,543	162	192	459	1,029	17,385
6-10am	---	---	---	---	---	3,125	---	---	---	---	---	5,958
3-7pm	3,747	21	194	119	161	4,242	5,462	79	53	84	285	5,963
6am-7pm	---	---	---	---	---	11,738	---	---	---	---	---	18,746

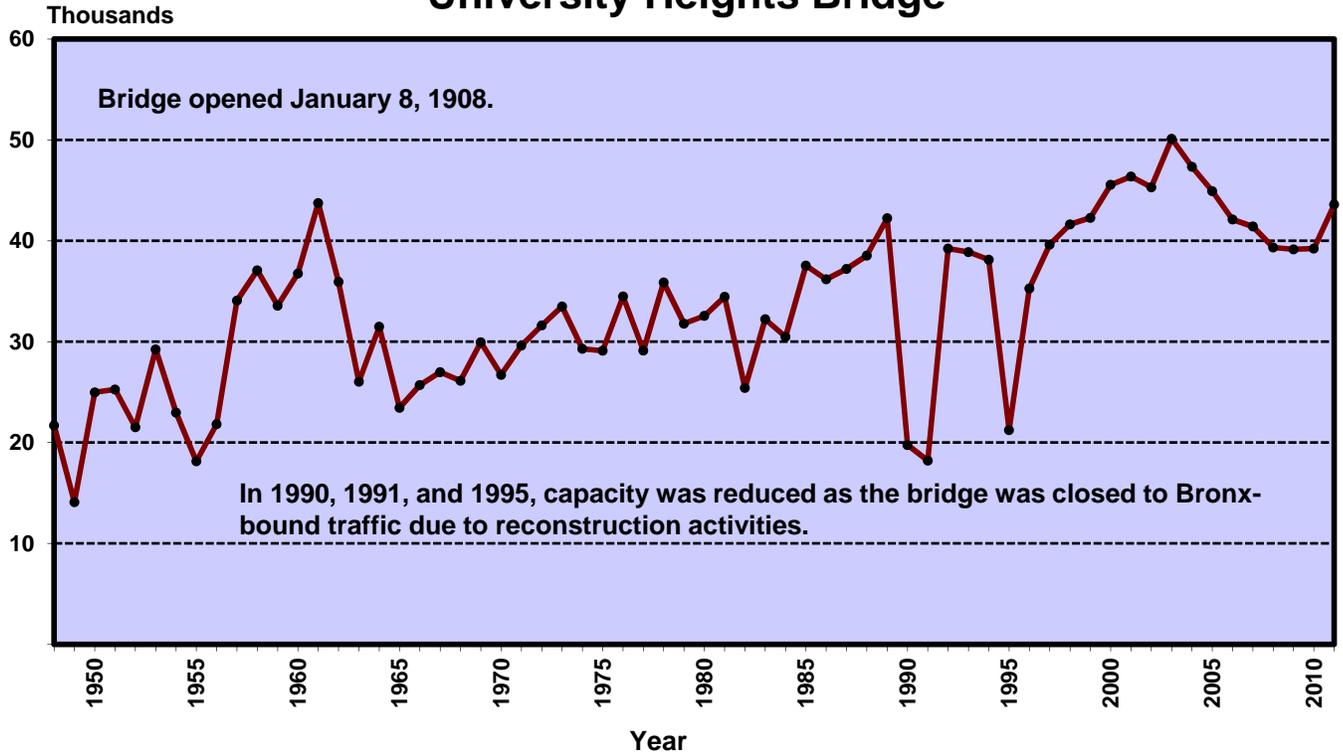
Based on 1989 Classification Survey Data

** Peak Volumes

Hourly Vehicular Volumes University Heights Bridge ~ 2011



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



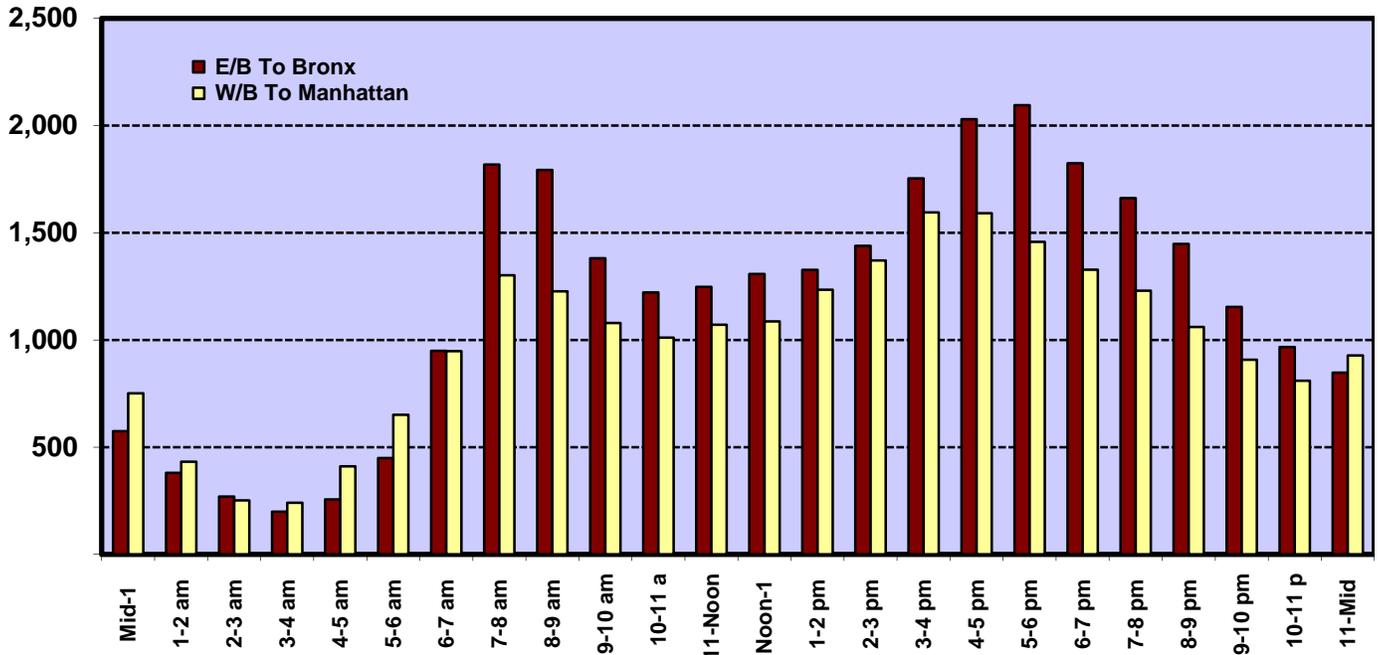
**Hourly Vehicular Volumes
Washington Bridge - 2011**

	Eastbound to Bronx					Westbound to Manhattan					2-Way Totals	
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks		Commercial Vans
12-1am	---	---	---	---	---	575	---	---	---	---	---	751
1-2am	---	---	---	---	---	380	---	---	---	---	---	432
2-3am	---	---	---	---	---	270	---	---	---	---	---	252
3-4am	---	---	---	---	---	199	---	---	---	---	---	241
4-5am	---	---	---	---	---	256	---	---	---	---	---	411
5-6am	---	---	---	---	---	449	---	---	---	---	---	651
6-7am	---	---	---	---	---	949	---	---	---	---	---	948
7-8am	1,558	59	33	54	114	1,818	1,099	51	98	32	22	1,302
8-9am	1,501	46	27	81	138	1,793	1,035	57	63	47	25	1,227
9-10am	1,144	37	24	90	86	1,381	939	32	47	36	25	1,079
10-11am	1,110	33	7	31	41	1,222	922	33	10	25	21	1,011
11-12am	1,079	26	15	60	68	1,248	934	44	28	30	35	1,071
12-1pm	1,171	39	18	23	57	1,308	1,018	26	9	19	15	1,087
1-2pm	1,214	30	5	31	47	1,327	1,155	29	17	19	14	1,234
2-3pm	1,252	31	23	61	72	1,439	1,183	56	42	50	40	1,371
3-4pm	1,595	37	11	31	80	1,754	1,438	45	45	45	22	1,595 **
4-5pm	1,689	40	51	62	188	2,030	1,353	39	69	84	46	1,591
5-6pm	1,872	35	52	37	99	2,095 **	1,324	26	40	30	38	1,458
6-7pm	1,675	22	30	23	74	1,824	1,204	33	48	16	27	1,328
7-8pm	---	---	---	---	---	1,662	---	---	---	---	---	1,230
8-9pm	---	---	---	---	---	1,448	---	---	---	---	---	1,061
9-10pm	---	---	---	---	---	1,154	---	---	---	---	---	908
10-11pm	---	---	---	---	---	967	---	---	---	---	---	810
11-12pm	---	---	---	---	---	848	---	---	---	---	---	928
Totals	---	---	---	---	---	28,396	---	---	---	---	---	23,977
7-10am	4,203	142	84	225	338	4,992	3,073	140	208	115	72	3,608
10am-1pm	3,360	98	40	114	166	3,778	2,874	103	47	74	71	3,169
1-4pm	4,061	98	39	123	199	4,520	3,776	130	104	114	76	4,200
4-7pm	5,236	97	133	122	361	5,949	3,881	98	157	130	111	4,377
7am-7pm	16,860	435	296	584	1,064	19,239	13,604	471	516	433	330	15,354
6-10am	---	---	---	---	---	5,941	---	---	---	---	---	4,556
3-7pm	6,831	134	144	153	441	7,703	5,319	143	202	175	133	5,972
6am-7pm	---	---	---	---	---	20,188	---	---	---	---	---	16,302

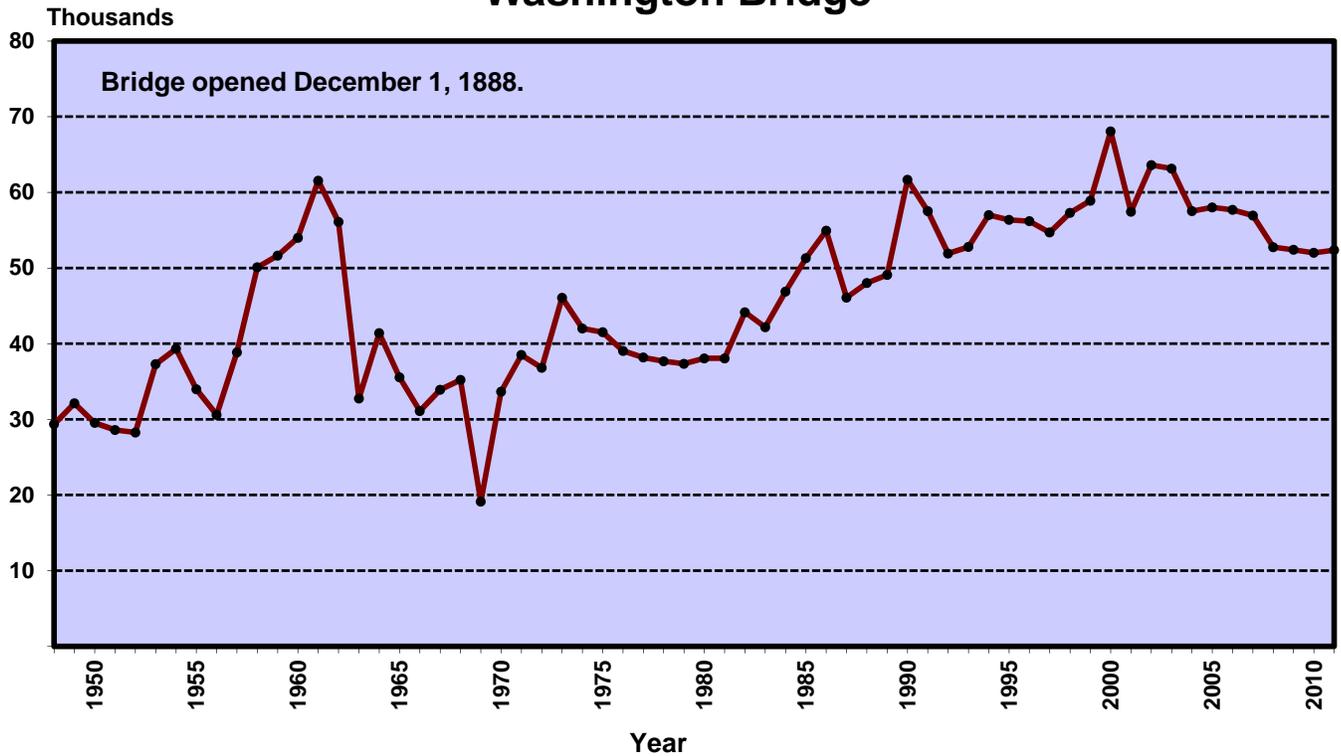
Based on 1989 Classification Survey Data

** Peak Volumes

Hourly Vehicular Volumes Washington Bridge ~ 2011



Average Daily Traffic Volumes ~ Total of Both Directions Washington Bridge



**Hourly Vehicular Volumes
Willis Avenue Bridge - 2011**

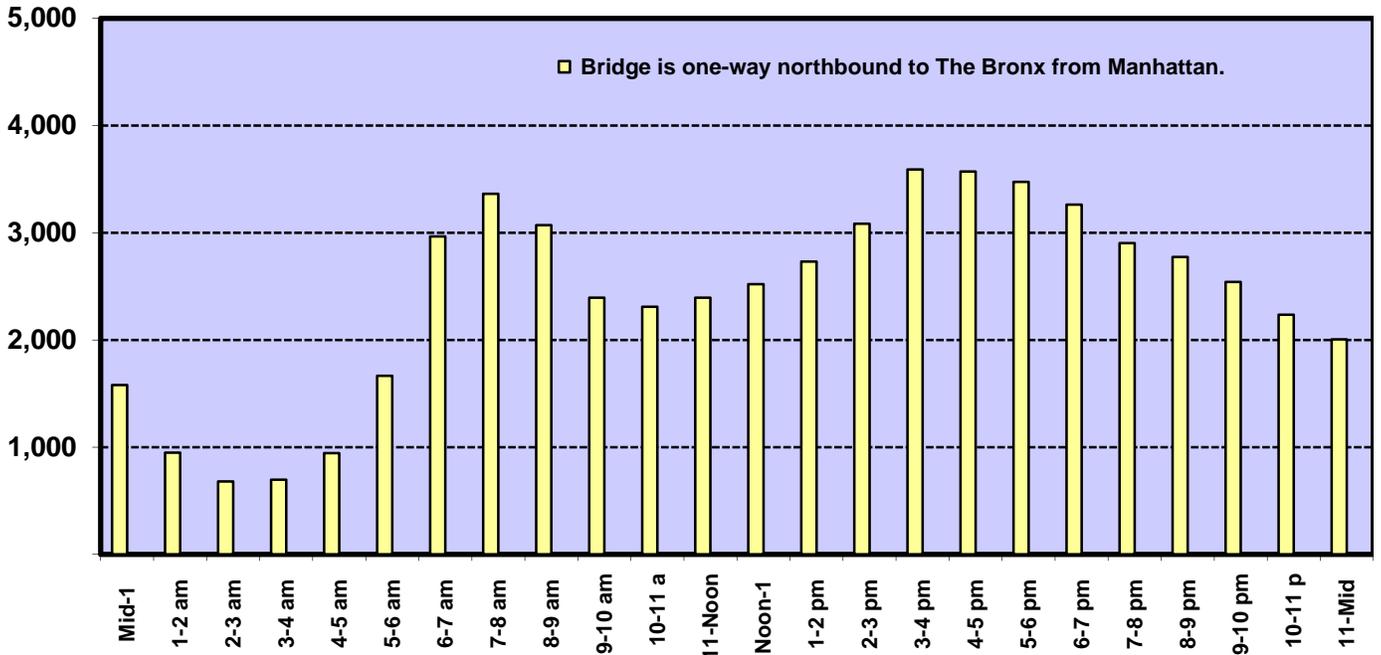
	Northbound to Bronx					Southbound to Manhattan					2-Way Totals	
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks		Commercial Vans
12-1am	---	---	---	---	---	1,580	---	---	---	---	---	1,580
1-2am	---	---	---	---	---	949	---	---	---	---	---	949
2-3am	---	---	---	---	---	680	---	---	---	---	---	680
3-4am	---	---	---	---	---	697	---	---	---	---	---	697
4-5am	---	---	---	---	---	945	---	---	---	---	---	945
5-6am	---	---	---	---	---	1,665	---	---	---	---	---	1,665
6-7am	---	---	---	---	---	2,966	---	---	---	---	---	2,966
7-8am	2,865	85	133	166	115	3,364	---	---	---	---	---	3,364
8-9am	2,477	105	92	179	218	3,071	---	---	---	---	---	3,071
9-10am	1,789	105	88	214	198	2,394	---	---	---	---	---	2,394
10-11am	1,923	45	62	144	136	2,310	---	---	---	---	---	2,310
11-12am	1,770	31	104	254	235	2,394	---	---	---	---	---	2,394
12-1pm	2,206	38	47	136	93	2,520	---	---	---	---	---	2,520
1-2pm	2,440	22	37	103	129	2,731	---	---	---	---	---	2,731
2-3pm	2,284	28	112	329	332	3,085	---	---	---	---	---	3,085
3-4pm	3,177	58	54	153	148	3,590 **	---	---	---	---	---	3,590 **
4-5pm	2,812	33	108	241	378	3,572	---	---	---	---	---	3,572
5-6pm	2,827	50	94	157	347	3,475	---	---	---	---	---	3,475
6-7pm	2,855	27	87	100	193	3,262	---	---	---	---	---	3,262
7-8pm	---	---	---	---	---	2,903	---	---	---	---	---	2,903
8-9pm	---	---	---	---	---	2,774	---	---	---	---	---	2,774
9-10pm	---	---	---	---	---	2,541	---	---	---	---	---	2,541
10-11pm	---	---	---	---	---	2,236	---	---	---	---	---	2,236
11-12pm	---	---	---	---	---	2,006	---	---	---	---	---	2,006
Totals	---	---	---	---	---	57,710	---	---	---	---	---	57,710
7-10am	7,131	295	313	559	531	8,829	---	---	---	---	---	8,829
10am-1pm	5,899	114	213	534	464	7,224	---	---	---	---	---	7,224
1-4pm	7,901	108	203	585	609	9,406	---	---	---	---	---	9,406
4-7pm	8,494	110	289	498	918	10,309	---	---	---	---	---	10,309
7am-7pm	29,425	627	1,018	2,176	2,522	35,768	---	---	---	---	---	35,768
6-10am	---	---	---	---	---	11,795	---	---	---	---	---	11,795
3-7pm	11,671	168	343	651	1,066	13,899	---	---	---	---	---	13,899
6am-7pm	---	---	---	---	---	38,734	---	---	---	---	---	38,734

Bridge is 1-way northbound to The Bronx

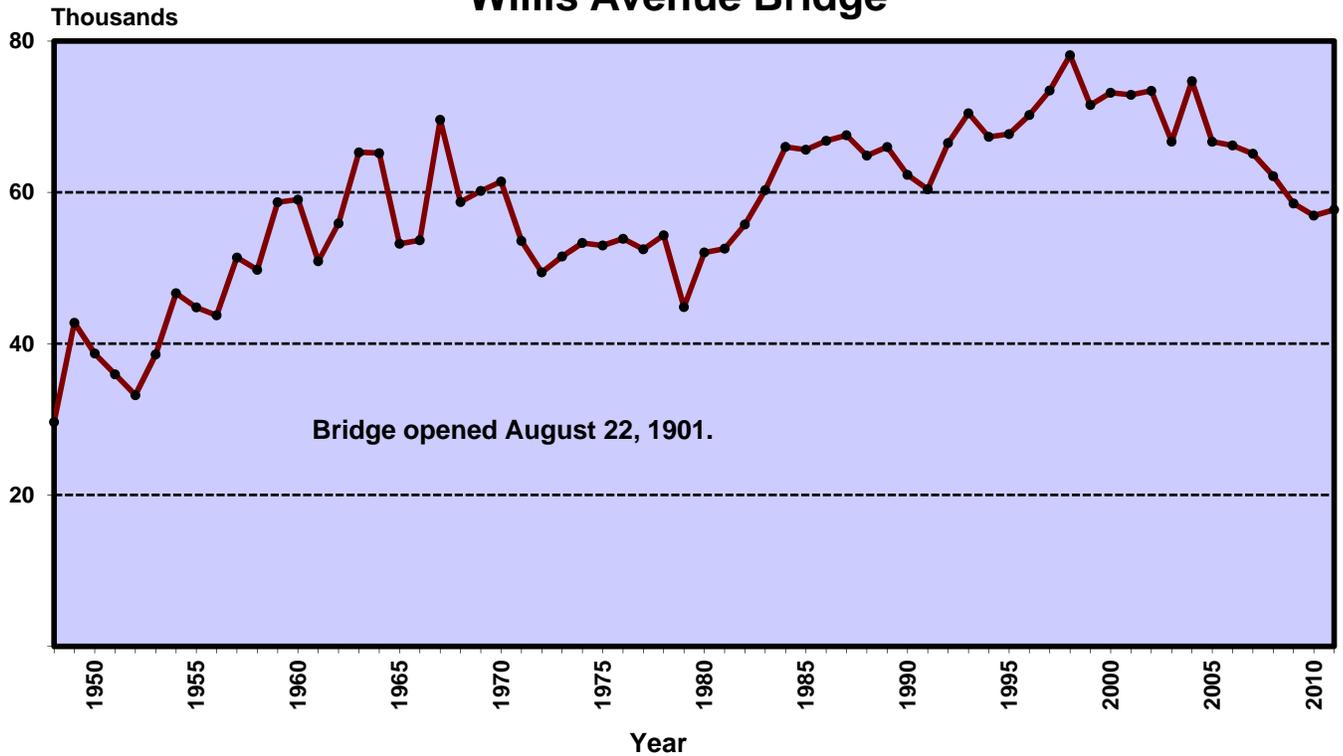
Based on 1989 Classification Survey Data

** Peak Volumes

Hourly Vehicular Volumes Willis Avenue Bridge ~ 2011



Average Daily Traffic Volumes Willis Avenue Bridge



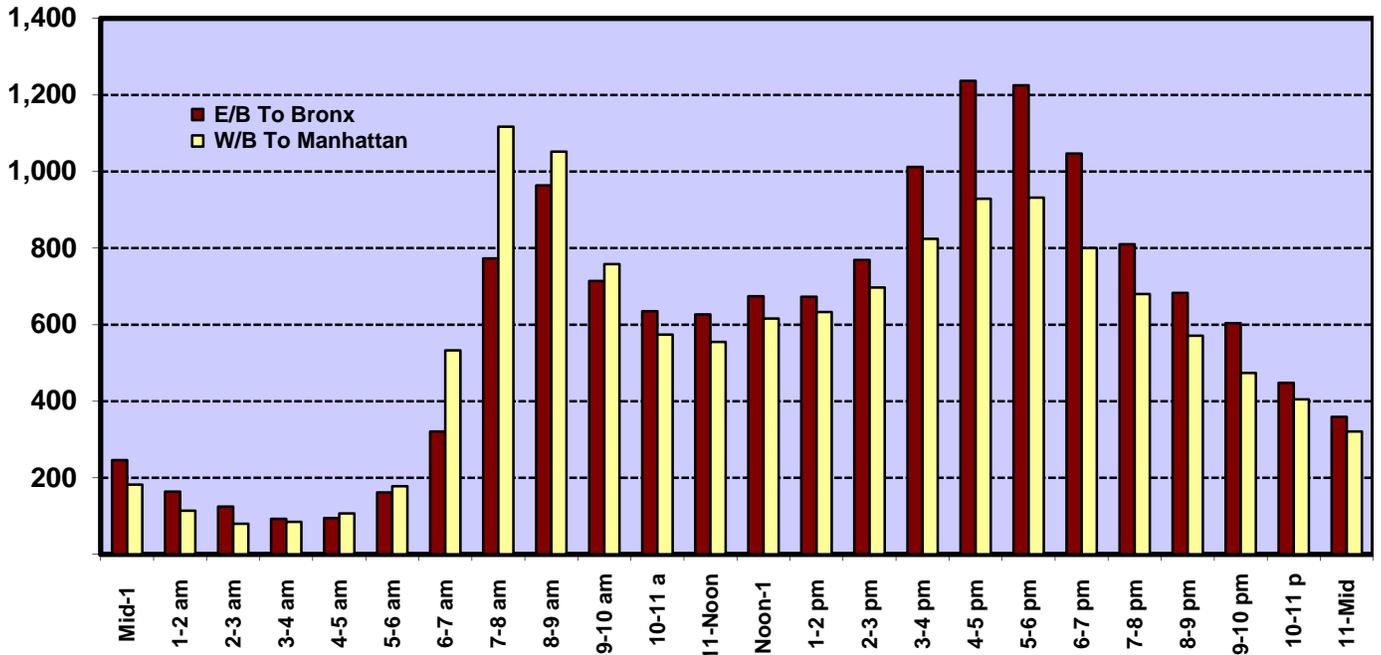
**Hourly Vehicular Volumes
145th Street Bridge - 2011**

	Eastbound to Bronx					Westbound to Manhattan					2-Way Totals	
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks		Commercial Vans
12-1am	---	---	---	---	---	246	---	---	---	---	---	182
1-2am	---	---	---	---	---	164	---	---	---	---	---	114
2-3am	---	---	---	---	---	125	---	---	---	---	---	80
3-4am	---	---	---	---	---	93	---	---	---	---	---	85
4-5am	---	---	---	---	---	95	---	---	---	---	---	107
5-6am	---	---	---	---	---	162	---	---	---	---	---	178
6-7am	---	---	---	---	---	321	---	---	---	---	---	533
7-8am	648	31	42	42	10	773	972	45	20	42	38	1,117 **
8-9am	804	29	49	52	30	964	901	31	35	30	55	1,052
9-10am	576	13	39	61	25	714	609	20	36	28	65	758
10-11am	558	9	15	26	27	635	458	16	31	23	46	574
11-12am	478	15	28	65	41	627	411	10	41	43	50	555
12-1pm	585	13	17	42	17	674	571	11	11	9	14	616
1-2pm	581	12	33	30	17	673	572	28	11	14	8	633
2-3pm	579	17	32	99	42	769	584	22	27	26	38	697
3-4pm	891	23	24	43	31	1,012	767	30	9	7	11	824
4-5pm	986	16	64	110	61	1,237 **	861	19	16	9	24	929
5-6pm	999	11	57	83	75	1,225	874	19	15	10	14	932
6-7pm	910	29	32	25	51	1,047	755	24	6	4	11	800
7-8pm	---	---	---	---	---	810	---	---	---	---	---	680
8-9pm	---	---	---	---	---	683	---	---	---	---	---	571
9-10pm	---	---	---	---	---	604	---	---	---	---	---	474
10-11pm	---	---	---	---	---	448	---	---	---	---	---	405
11-12pm	---	---	---	---	---	359	---	---	---	---	---	321
Totals	---	---	---	---	---	14,460	---	---	---	---	---	13,217
7-10am	2,028	73	130	155	65	2,451	2,482	96	91	100	158	2,927
10am-1pm	1,621	37	60	133	85	1,936	1,440	37	83	75	110	1,745
1-4pm	2,051	52	89	172	90	2,454	1,923	80	47	47	57	2,154
4-7pm	2,895	56	153	218	187	3,509	2,490	62	37	23	49	2,661
7am-7pm	8,595	218	432	678	427	10,350	8,335	275	258	245	374	9,487
6-10am	---	---	---	---	---	2,772	---	---	---	---	---	3,460
3-7pm	3,786	79	177	261	218	4,521	3,257	92	46	30	60	3,485
6am-7pm	---	---	---	---	---	10,671	---	---	---	---	---	10,020

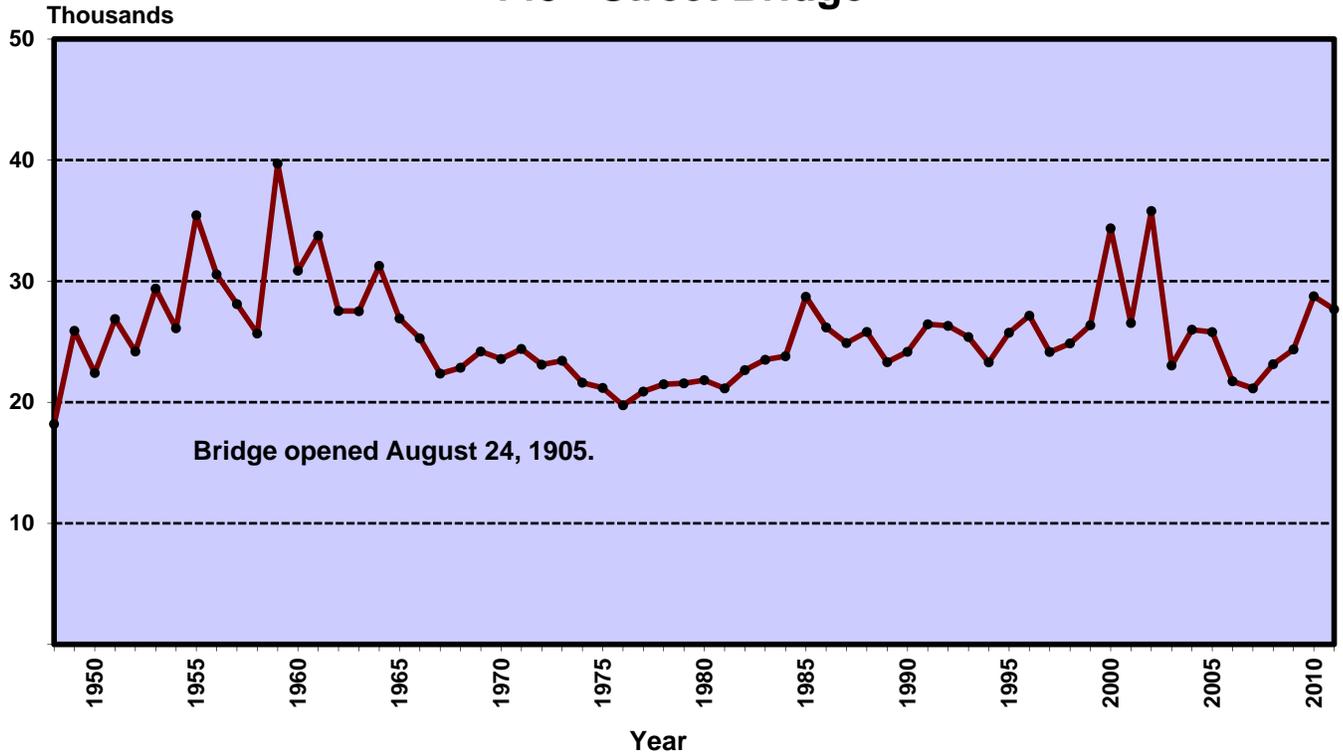
Based on 1989 Classification Survey Data

** Peak Volumes

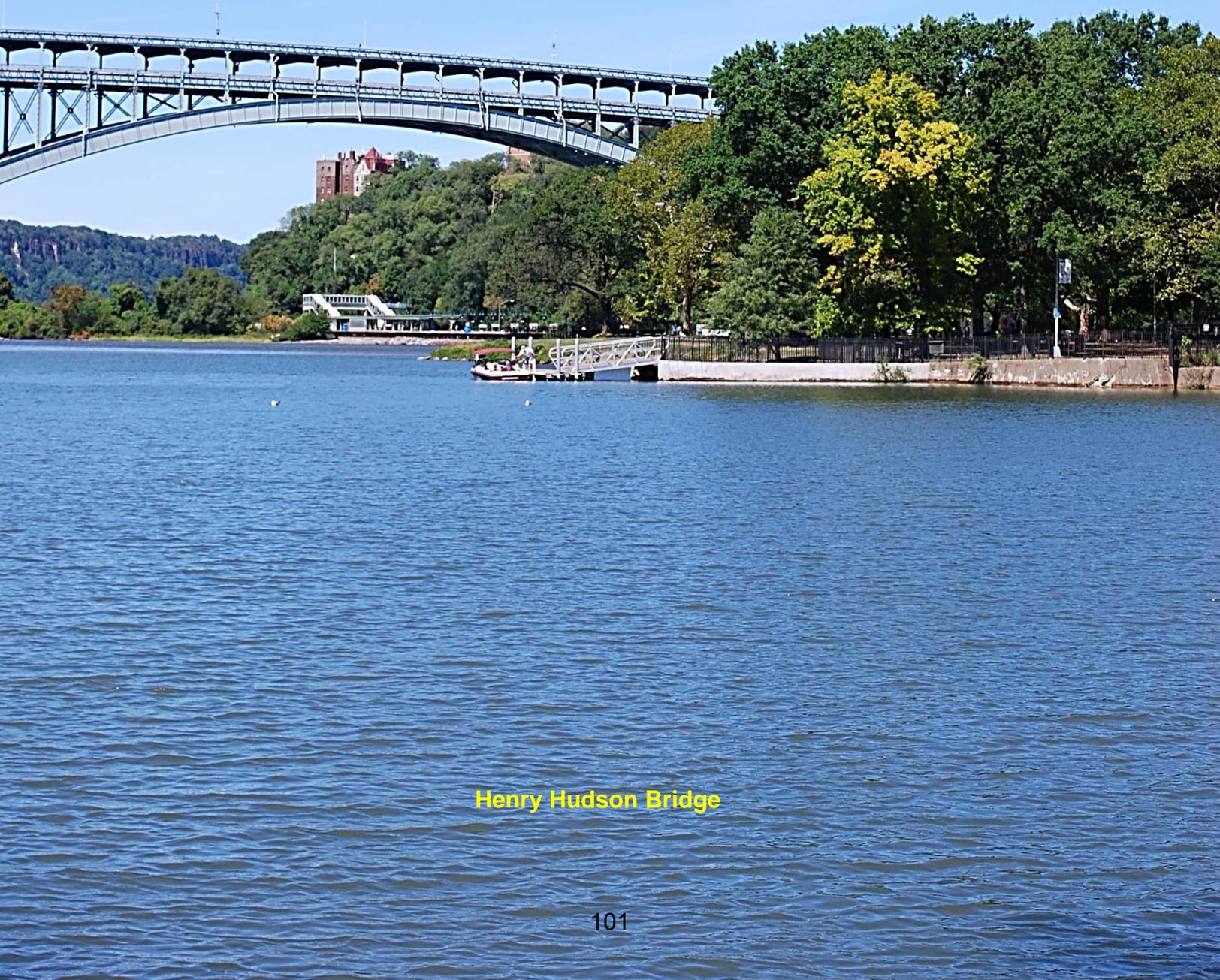
Hourly Vehicular Volumes 145th Street Bridge ~ 2011



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



MTABT Facilities



Henry Hudson Bridge

**MTABT Manhattan Facilities ~ Average Daily Traffic Volumes
1948 - 2011**

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

MTABT Toll Increases: 1/72, 9/75, 5/80, 4/82, 1/84, 1/86, 2/87, 7/89, 1/93, 3/96, 5/03, 3/05, 3/08, 7/09, & 12/10.

Hourly Vehicular Volumes

Metropolitan Transportation Authority Bridges & Tunnels 2011

	Brooklyn-Battery Tunnel		Henry Hudson Bridge		Queens-Midtown Tunnel		Robert F. Kennedy Memorial Bridge (Triborough Bridge)		Totals	
	N/B	S/B	S/B	N/B	W/B	E/B	W/B	E/B	Entering Manhattan	Leaving Manhattan
12-1am	179	504	170	341	488	826	434	418	1,271	2,089
1-2am	94	227	89	161	210	425	181	244	574	1,057
2-3am	59	128	49	88	108	263	106	153	322	632
3-4am	76	86	42	54	147	179	115	175	380	494
4-5am	166	89	102	68	304	391	270	439	842	987
5-6am	730	152	418	124	1,046	780	922	917	3,116	1,973
6-7am	2,087	459	1,641	553	2,560	1,334	2,946	1,544	9,234	3,890
7-8am	2,981	673	3,017	1,326	3,512	1,362	4,152 **	2,024	13,662	5,385
8-9am	3,243 **	742	3,305 **	1,724	4,335 **	1,335	4,037	2,145	14,920 **	5,946
9-10am	3,016	783	2,902	1,078	4,159	1,351	3,443	1,952	13,520	5,164
10-11am	1,781	815	2,131	902	2,612	1,563	3,023	1,693	9,547	4,973
11-12am	1,538	992	1,674	962	2,856	1,689	2,676	1,801	8,744	5,444
12-1pm	1,342	1,121	1,626	1,071	2,586	2,035	2,372	1,983	7,926	6,210
1-2pm	1,278	1,293	1,607	1,232	2,336	2,411	2,475	2,239	7,696	7,175
2-3pm	1,331	1,525	1,588	1,579	2,601	2,733	2,647	2,608	8,167	8,445
3-4pm	1,386	1,930	2,077	2,103	2,716	2,935	3,059	3,010	9,238	9,978
4-5pm	1,328	2,518	2,281	2,496	2,781	3,010 **	2,937	3,047 **	9,327	11,071
5-6pm	1,287	2,587 **	2,546	2,911 **	2,979	2,984	3,173	2,776	9,985	11,258 **
6-7pm	1,492	2,261	2,623	2,614	2,660	2,555	3,040	2,509	9,815	9,939
7-8pm	1,199	1,937	1,872	2,106	1,939	2,209	2,292	2,084	7,302	8,336
8-9pm	612	1,741	1,151	1,514	1,680	2,081	1,717	1,678	5,160	7,014
9-10pm	492	1,353	832	1,463	1,471	2,055	1,477	1,543	4,272	6,414
10-11pm	471	1,132	564	1,351	1,192	1,801	1,308	1,317	3,535	5,601
11-12pm	364	901	348	957	809	1,268	838	778	2,359	3,904
Totals	28,532	25,949	34,655	28,778	48,087	39,575	49,640	39,077	160,914	133,379
7-10am	9,240	2,198	9,224	4,128	12,006	4,048	11,632	6,121	42,102	16,495
10am-1pm	4,661	2,928	5,431	2,935	8,054	5,287	8,071	5,477	26,217	16,627
1-4pm	3,995	4,748	5,272	4,914	7,653	8,079	8,181	7,857	25,101	25,598
4-7pm	4,107	7,366	7,450	8,021	8,420	8,549	9,150	8,332	29,127	32,268
7am-7pm	22,003	17,240	27,377	19,998	36,133	25,963	37,034	27,787	122,547	90,988
6-10am	11,327	2,657	10,865	4,681	14,566	5,382	14,578	7,665	51,336	20,385
3-7pm	5,493	9,296	9,527	10,124	11,136	11,484	12,209	11,342	38,365	42,246
6am-7pm	24,090	17,699	29,018	20,551	38,693	27,297	39,980	29,331	131,781	94,878

** Peak Volumes

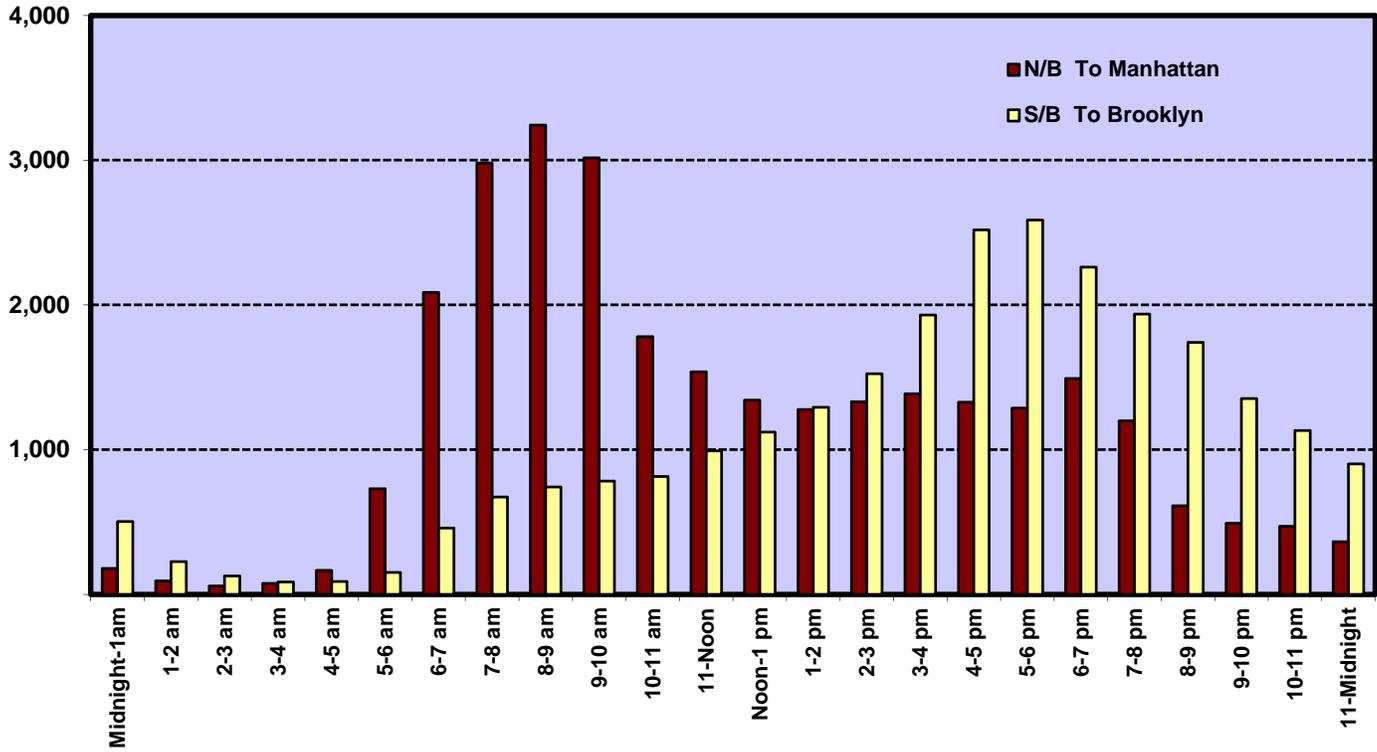
**Hourly Vehicular Volumes
Brooklyn-Battery Tunnel - 2011**

FHWA Classes ▶	Northbound to Manhattan										Southbound to Brooklyn										2-Way Grand Totals
	Commuter Vans					Total Vehicles	Commuter Vans					Tractor Trailers	Commuter Vans					Tractor Trailers	Total Vehicles		
	Autos & Motorcycles	Large SUVs	Buses	Single Trucks	5-7		8-13	Autos & Motorcycles	Large SUVs	Buses	Single Trucks		5-7	8-13	Autos & Motorcycles	Large SUVs	Buses			Single Trucks	
1-2am	153	6	10	10	10	179	459	10	30	5	0	504	459	10	30	5	0	504			
1-2am	82	4	7	1	1	94	216	0	10	1	0	227	216	0	10	1	0	227			
2-3am	53	0	3	3	3	59	121	2	3	2	0	128	121	2	3	2	0	128			
3-4am	65	1	7	3	3	76	84	0	0	2	0	86	84	0	0	2	0	86			
4-5am	107	6	41	12	12	166	82	0	5	2	0	89	82	0	5	2	0	89			
5-6am	658	7	58	7	7	730	134	2	11	5	0	152	134	2	11	5	0	152			
6-7am	1,863	13	187	24	24	2,087	342	7	96	14	0	459	342	7	96	14	0	459			
7-8am	2,616	16	309	40	40	2,981	485	8	162	18	0	673	485	8	162	18	0	673			
8-9am	2,835	16	353	39	39	3,243	542	6	176	18	0	742	542	6	176	18	0	742			
9-10am	2,753	22	196	45	45	3,016	600	8	153	22	0	783	600	8	153	22	0	783			
10-11am	1,620	22	90	48	48	1,781	713	9	76	17	0	815	713	9	76	17	0	815			
11-12am	1,426	13	63	35	35	1,538	896	9	67	20	0	992	896	9	67	20	0	992			
12-1pm	1,235	14	65	28	28	1,342	1,033	12	56	20	0	1,121	1,033	12	56	20	0	1,121			
1-2pm	1,156	11	78	33	33	1,278	1,167	13	84	29	0	1,293	1,167	13	84	29	0	1,293			
2-3pm	1,196	10	101	24	24	1,331	1,396	15	87	27	0	1,525	1,396	15	87	27	0	1,525			
3-4pm	1,238	5	131	12	12	1,386	1,759	13	134	24	0	1,930	1,759	13	134	24	0	1,930			
4-5pm	1,158	4	156	9	9	1,328	2,284	7	206	21	0	2,518	2,284	7	206	21	0	2,518			
5-6pm	1,146	3	129	6	6	1,287	2,301	7	264	14	1	2,587	2,301	7	264	14	1	2,587			
6-7pm	1,386	4	93	8	8	1,492	2,076	6	168	10	1	2,261	2,076	6	168	10	1	2,261			
7-8pm	1,139	1	55	4	4	1,199	1,825	5	99	8	0	1,937	1,825	5	99	8	0	1,937			
8-9pm	582	3	23	4	4	612	1,626	8	97	10	0	1,741	1,626	8	97	10	0	1,741			
9-10pm	467	1	22	2	2	492	1,279	4	56	14	0	1,353	1,279	4	56	14	0	1,353			
10-11pm	446	1	21	3	3	471	1,087	5	31	9	0	1,132	1,087	5	31	9	0	1,132			
11-12pm	323	0	30	11	11	364	850	7	35	9	0	901	850	7	35	9	0	901			
Totals	25,703	183	2,228	411	411	28,532	23,357	163	2,106	321	2	25,949	23,357	163	2,106	321	2	25,949			
7-10am	8,204	54	858	124	124	9,240	1,627	22	491	58	0	2,198	1,627	22	491	58	0	2,198			
10am-1pm	4,281	49	218	111	111	4,661	2,642	30	199	57	0	2,928	2,642	30	199	57	0	2,928			
1-4pm	3,590	26	310	69	69	3,995	4,322	41	305	80	0	4,748	4,322	41	305	80	0	4,748			
4-7pm	3,690	11	378	23	23	4,107	6,661	20	638	45	2	7,366	6,661	20	638	45	2	7,366			
7am-7pm	19,765	140	1,764	327	327	22,003	15,252	113	1,633	240	2	17,240	15,252	113	1,633	240	2	17,240			
6-10am	10,067	67	1,045	148	148	11,327	1,969	29	587	72	0	2,657	1,969	29	587	72	0	2,657			
3-7pm	4,928	16	509	35	35	5,493	8,420	33	772	69	2	9,296	8,420	33	772	69	2	9,296			
7am-7pm	21,628	153	1,951	351	351	24,090	15,594	120	1,729	254	2	17,699	15,594	120	1,729	254	2	17,699			

** Peak Volumes

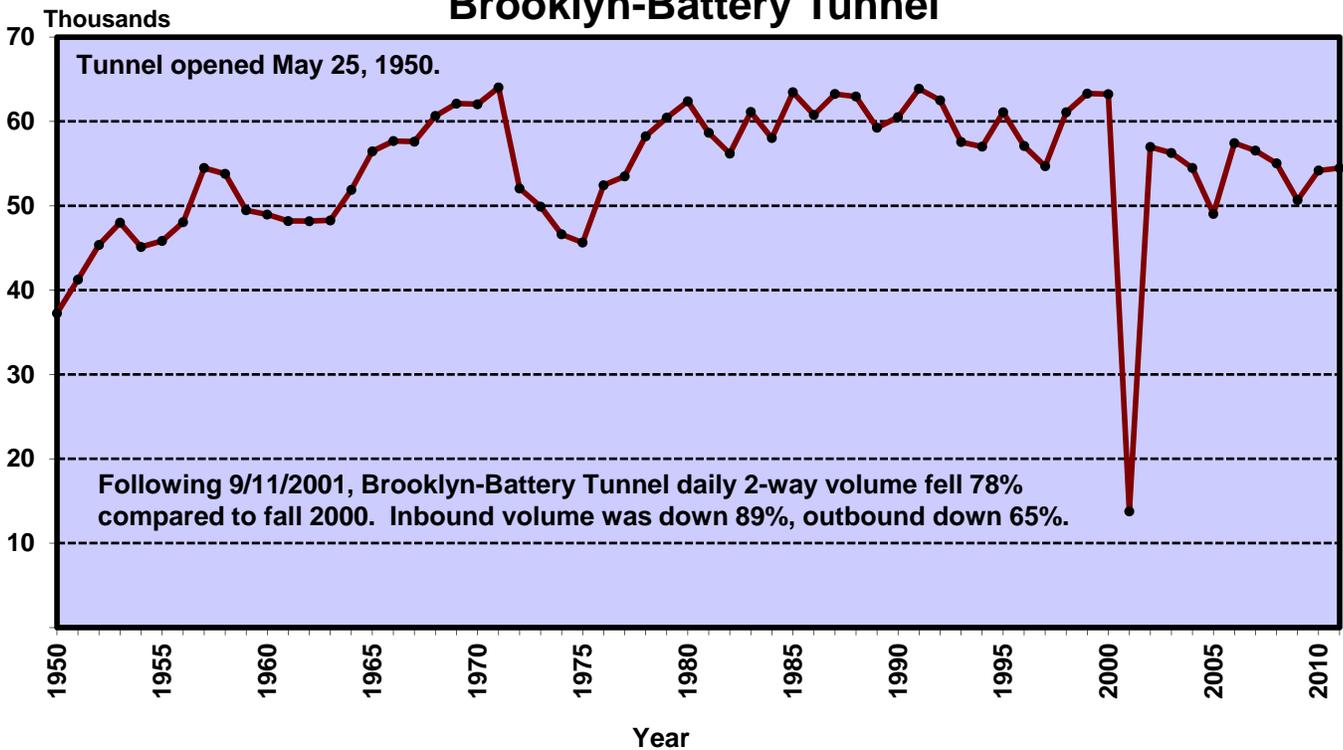
Based on May 2006 Classification Survey Data.

Hourly Vehicular Volumes Brooklyn-Battery Tunnel ~ 2011



Originally Brooklyn-Battery Tunnel; renamed Hugh L. Carey Tunnel December 2010.

Average Daily Traffic Volumes ~ Total of Both Directions Brooklyn-Battery Tunnel



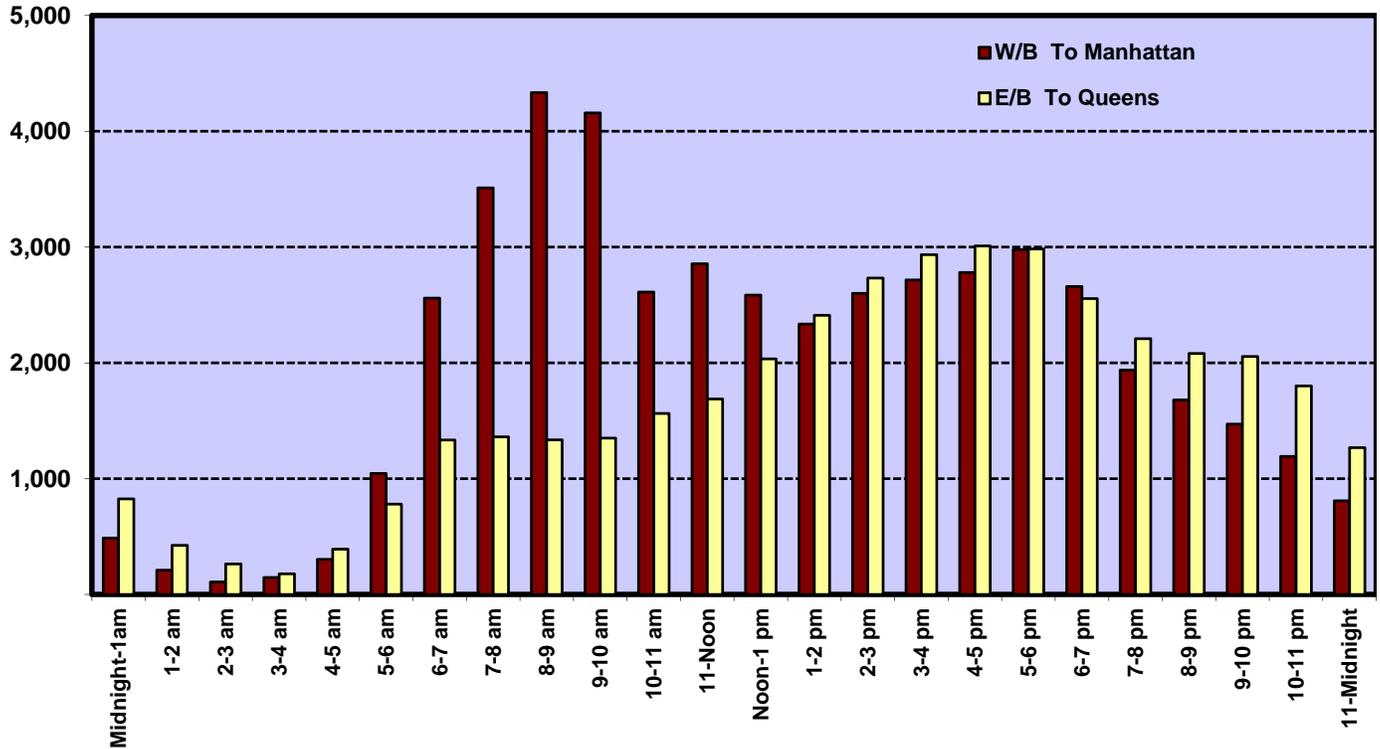
**Hourly Vehicular Volumes
Queens-Midtown Tunnel - 2011**

FHWA Classes ▶	Westbound to Manhattan							Eastbound to Queens							2-Way Grand Totals
	Commuter Vans			Single Unit Trucks	Tractor Trailers	Total Vehicles	Commuter Vans			Single Unit Trucks	Tractor Trailers	Total Vehicles			
	Autos & Motorcycles	Pickups Large SUVs	Buses				Autos & Motorcycles	Pickups Large SUVs	Buses						
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	472	2	3	11	0	488	797	8	1	20	0	826			
1-2am	200	2	1	7	0	210	405	4	0	16	0	425			
2-3am	100	1	1	6	0	108	247	5	0	11	0	263			
3-4am	133	1	3	10	0	147	160	8	0	11	0	179			
4-5am	244	6	17	37	0	304	322	27	3	38	1	391			
5-6am	912	10	52	72	0	1,046	695	20	12	53	0	780			
6-7am	2,188	90	161	121	0	2,560	1,209	36	52	37	0	1,334			
7-8am	3,027	124	222	138	1	3,512	1,211	52	65	34	0	1,362			
8-9am	3,898	122	153	162	0	4,335	1,166	43	80	46	0	1,335			
9-10am	3,750	105	187	113	4	4,159	1,185	51	69	46	0	1,351			
10-11am	2,371	73	88	78	2	2,612	1,356	63	75	69	0	1,563			
11-12am	2,648	71	67	70	0	2,856	1,500	57	73	59	0	1,689			
12-1pm	2,398	40	59	89	0	2,586	1,823	65	56	91	0	2,035			
1-2pm	2,131	67	69	69	0	2,336	2,141	110	61	99	0	2,411			
2-3pm	2,361	63	119	58	0	2,601	2,534	78	47	74	0	2,733			
3-4pm	2,415	56	176	69	0	2,716	2,713	66	68	88	0	2,935			
4-5pm	2,541	34	170	36	0	2,781	2,777	82	70	81	0	3,010			
5-6pm	2,798	19	137	25	0	2,979	2,816	47	76	45	0	2,984			
6-7pm	2,543	18	74	25	0	2,660	2,428	31	58	38	0	2,555			
7-8pm	1,869	12	44	14	0	1,939	2,107	22	59	21	0	2,209			
8-9pm	1,598	21	30	31	0	1,680	1,977	24	39	41	0	2,081			
9-10pm	1,414	14	17	26	0	1,471	1,971	21	21	41	1	2,055			
10-11pm	1,142	8	12	30	0	1,192	1,736	19	10	36	0	1,801			
11-12pm	785	7	3	14	0	809	1,234	4	4	26	0	1,268			
Totals	43,938	966	1,865	1,311	7	48,087	36,510	943	999	1,121	2	39,575			
7-10am	10,675	351	562	413	5	12,006	3,562	146	214	126	0	4,048			
10am-1pm	7,417	184	214	237	2	8,054	4,679	185	204	219	0	5,287			
1-4pm	6,907	186	364	196	0	7,653	7,388	254	176	261	0	8,079			
4-7pm	7,882	71	381	86	0	8,420	8,021	160	204	164	0	8,549			
7am-7pm	32,881	792	1,521	932	7	36,133	23,650	745	798	770	0	25,963			
6-10am	12,863	441	723	534	5	14,566	4,771	182	266	163	0	5,382			
3-7pm	10,297	127	557	155	0	11,136	10,734	226	272	252	0	11,484			
7am-7pm	35,069	882	1,682	1,053	7	38,693	24,859	781	850	807	0	27,297			

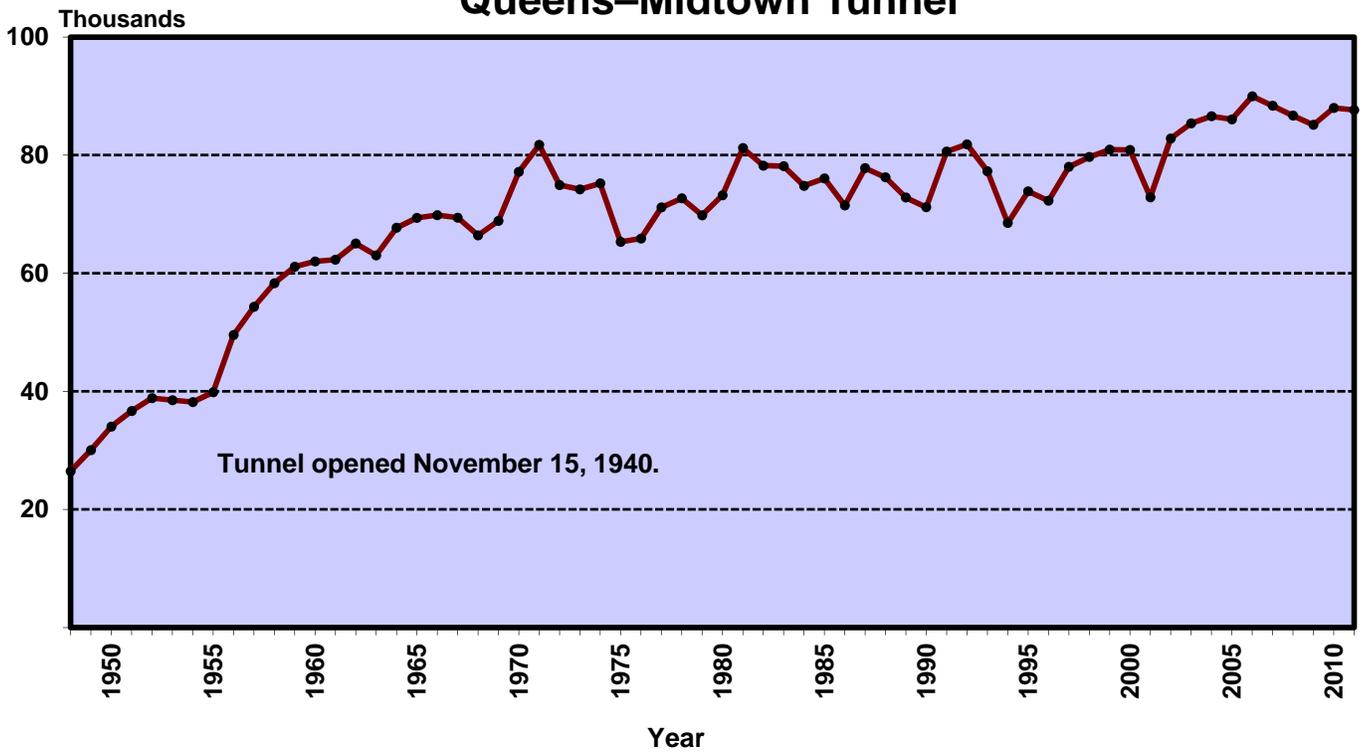
** Peak Volumes

Based on May 2006 Classification Survey Data.

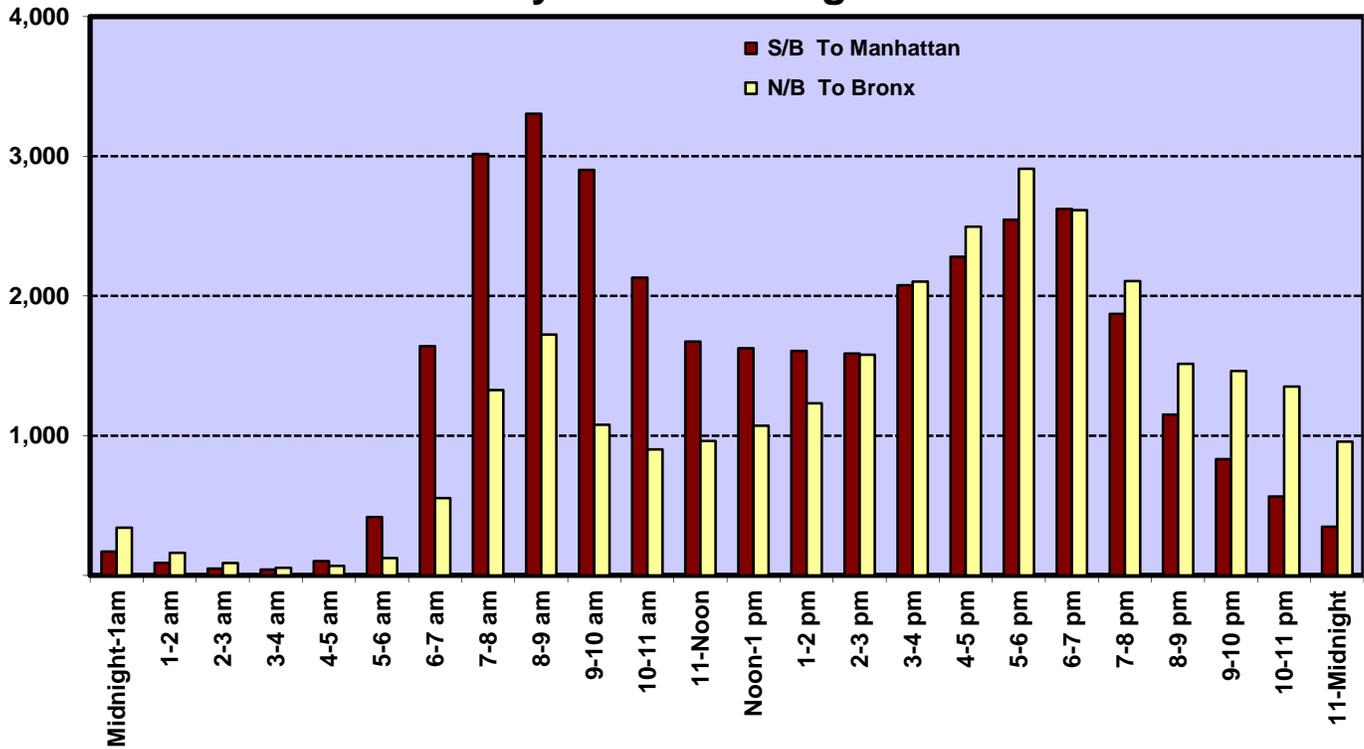
Hourly Vehicular Volumes Queens-Midtown Tunnel ~ 2011



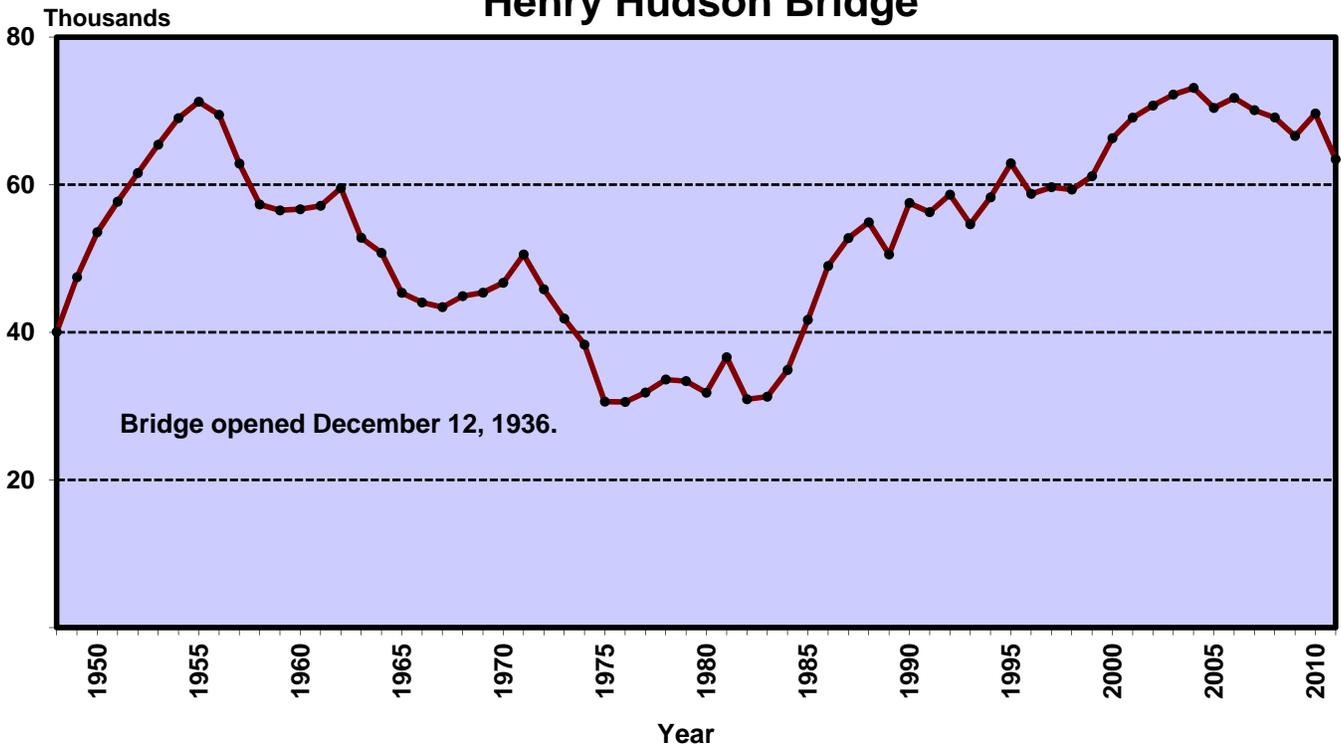
Average Daily Traffic Volumes ~ Total of Both Directions Queens-Midtown Tunnel



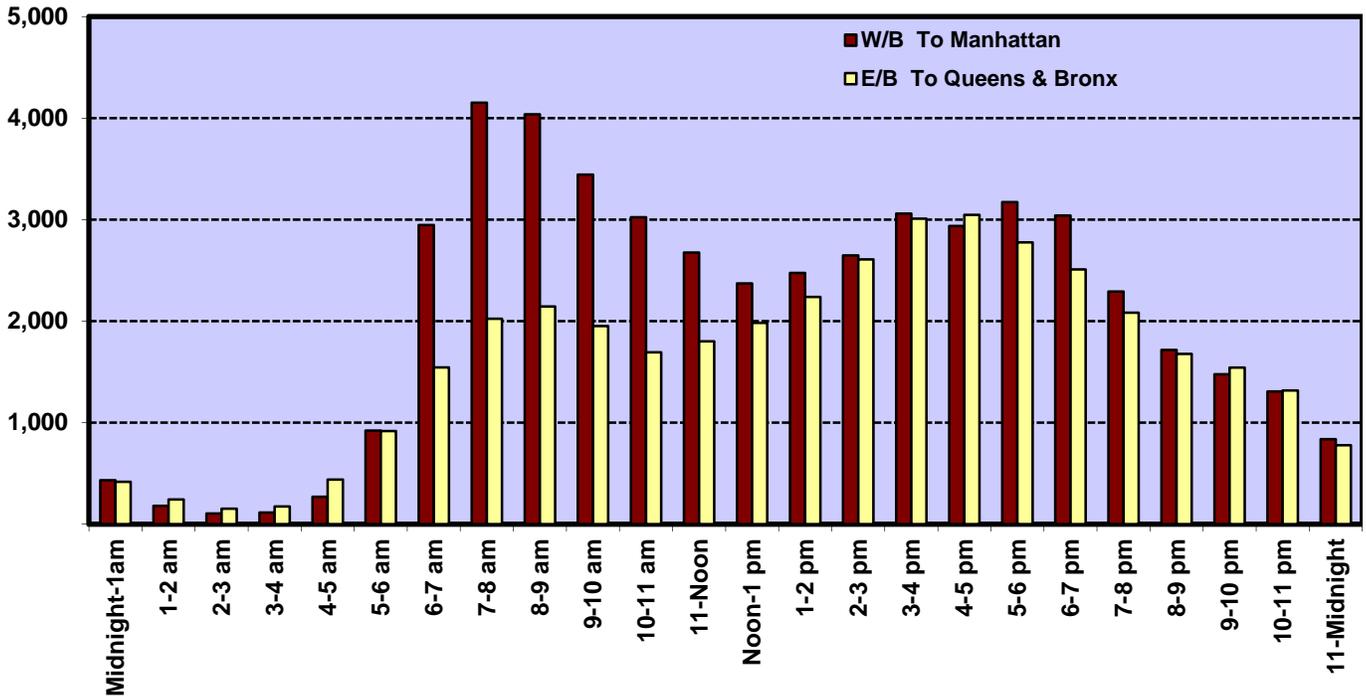
Hourly Vehicular Volumes Henry Hudson Bridge ~ 2011



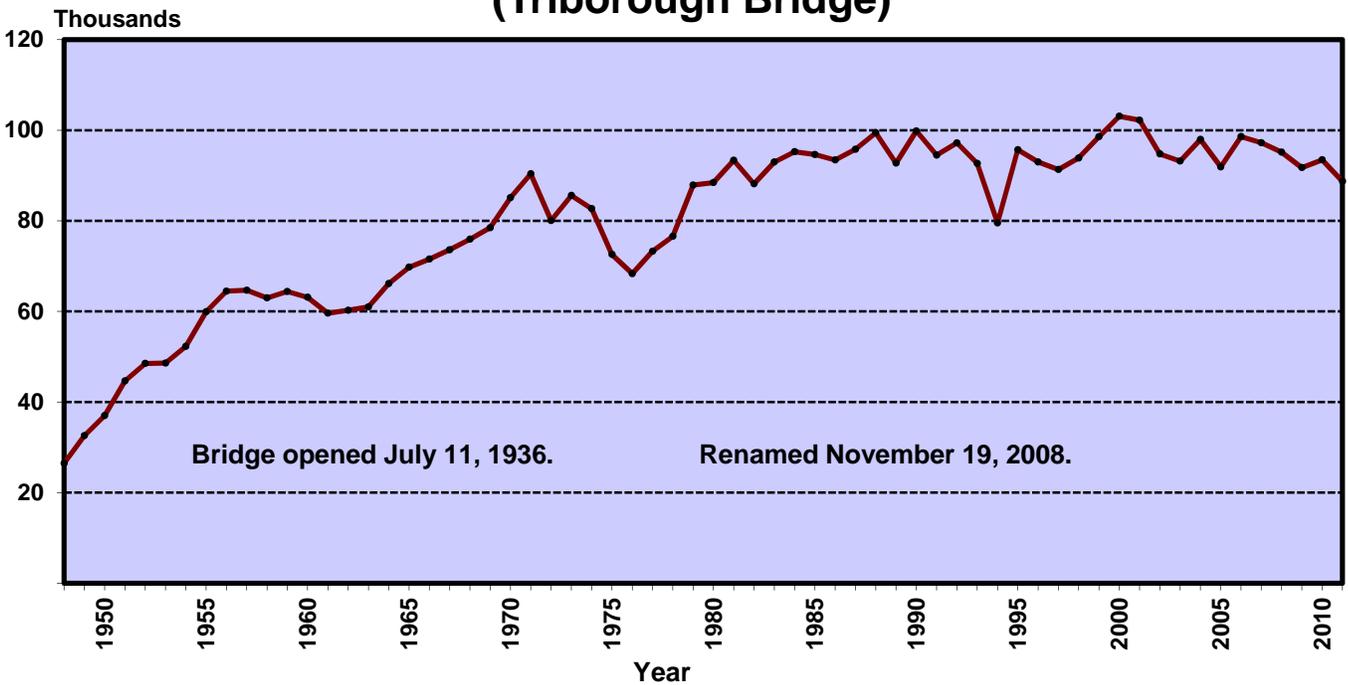
Average Daily Traffic Volumes ~ Total of Both Directions Henry Hudson Bridge



Hourly Vehicular Volumes Robert F. Kennedy Memorial Bridge, Manhattan Plaza ~ 2011 (Triborough Bridge)



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



PANYNJ Facilities



George Washington Bridge

PANYNJ Manhattan - New Jersey Facilities
Average Daily Traffic Volumes
1948 - 2011

<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

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.

Hourly Vehicular Volumes

Port Authority of New York & New Jersey 2011

	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	1,801	3,593	677	1,371	842	1,490	3,320	6,454
1-2am	1,142	1,447	418	756	451	932	2,011	3,135
2-3am	1,042	1,182	330	657	386	587	1,758	2,426
3-4am	1,278	1,126	392	766	427	503	2,097	2,395
4-5am	2,178	1,538	641	1,080	884	570	3,703	3,188
5-6am	6,149	2,598	2,180	1,377	2,848	842	11,177	4,817
6-7am	10,609 **	4,941	2,996 **	2,187	5,070 **	1,429	18,675 **	8,557
7-8am	9,665	6,697	2,976	2,495	4,621	2,064	17,262	11,256
8-9am	8,638	7,036	2,892	2,605	4,354	1,912	15,884	11,553
9-10am	8,539	6,095	2,733	2,157	4,131	1,969	15,403	10,221
10-11am	7,277	5,340	2,378	2,107	3,082	2,328	12,737	9,775
11-12am	6,492	5,937	2,118	2,045	2,809	2,474	11,419	10,456
12-1pm	6,151	6,275	1,948	2,164	2,547	2,765	10,646	11,204
1-2pm	6,096	6,151	1,945	2,433	2,488	3,198	10,529	11,782
2-3pm	6,297	7,432	2,061	2,743	2,592	3,742	10,950	13,917
3-4pm	6,907	10,534	2,374	2,753 **	2,614	4,418	11,895	17,705 **
4-5pm	7,582	11,306 **	2,615	2,360	2,059	5,053 **	12,256	18,719 **
5-6pm	7,982	11,221	2,803	2,005	1,544	5,052	12,329	18,278
6-7pm	7,949	10,902	2,638	2,422	1,945	4,916	12,532	18,240
7-8pm	6,480	9,420	2,271	2,525	2,199	3,917	10,950	15,862
8-9pm	5,012	7,803	1,784	2,550	1,916	3,733	8,712	14,086
9-10pm	4,113	6,429	1,589	2,447	1,853	3,131	7,555	12,007
10-11pm	3,787	4,748	1,585	2,175	1,757	3,007	7,129	9,930
11-12pm	2,766	4,213	1,175	1,861	1,431	2,771	5,372	8,845
Totals	135,932	143,964	45,519	48,041	54,850	62,803	236,301	254,808
7-10am	26,842	19,828	8,601	7,257	13,106	5,945	48,549	33,030
10am-1pm	19,920	17,552	6,444	6,316	8,438	7,567	34,802	31,435
1-4pm	19,300	24,117	6,380	7,929	7,694	11,358	33,374	43,404
4-7pm	23,513	33,429	8,056	6,787	5,548	15,021	37,117	55,237
7am-7pm	89,575	94,926	29,481	28,289	34,786	39,891	153,842	163,106
6-10am	37,451	24,769	11,597	9,444	18,176	7,374	67,224	41,587
3-7pm	30,420	43,963	10,430	9,540	8,162	19,439	49,012	72,942
6am-7pm	100,184	99,867	32,477	30,476	39,856	41,320	172,517	171,663

** 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.

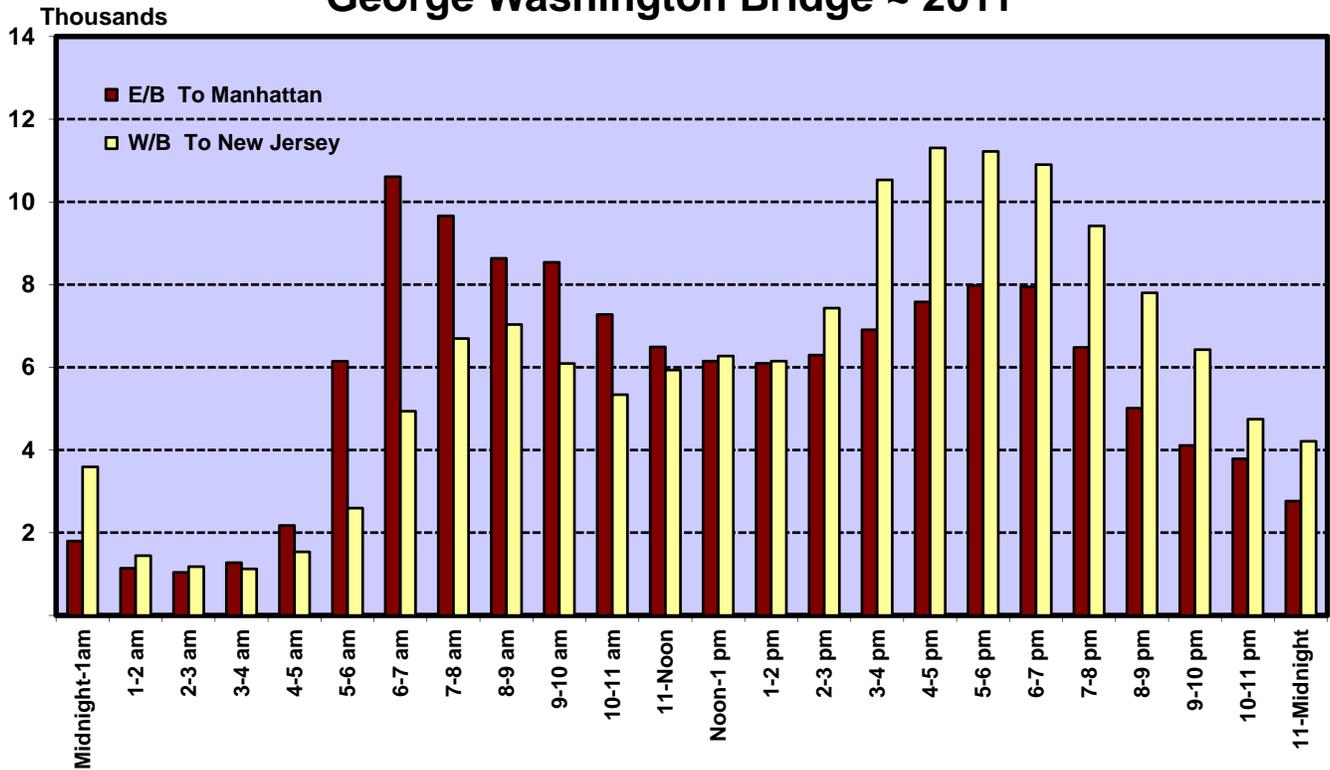
**Hourly Vehicular Volumes
George Washington Bridge - 2011**

	Eastbound to Manhattan					Westbound to New Jersey					2-Way Grand Totals
	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles	
12-1am	1,475	15	42	269	1,801	3,210	14	64	305	3,593	5,394
1-2am	760	4	56	322	1,142					1,447	2,589
2-3am	579	7	75	381	1,042					1,182	2,224
3-4am	682	5	105	486	1,278					1,126	2,404
4-5am	1,388	11	150	629	2,178					1,538	3,716
5-6am	5,144	32	280	693	6,149					2,598	8,747
6-7am	9,556	69	419	565	10,609	**				4,941	15,550
7-8am	8,882	91	327	365	9,665	5,856	80	331	430	6,697	16,362
8-9am	7,873	76	332	357	8,638	6,326	65	274	371	7,036	15,674
9-10am	7,670	79	345	445	8,539	5,274	79	302	440	6,095	14,634
10-11am	6,486	56	313	422	7,277	4,434	53	300	553	5,340	12,617
11-12am	5,791	51	272	378	6,492	4,814	37	377	709	5,937	12,429
12-1pm	5,475	59	260	357	6,151	5,123	41	356	755	6,275	12,426
1-2pm	5,458	54	259	325	6,096	5,113	38	384	616	6,151	12,247
2-3pm	5,687	71	261	278	6,297	6,533	49	363	487	7,432	13,729
3-4pm	6,317	95	235	260	6,907	9,589	58	378	509	10,534	17,441
4-5pm	7,049	94	196	243	7,582	10,479	75	330	422	11,306	18,888
5-6pm	7,519	100	150	213	7,982	10,521	58	259	383	11,221	19,203
6-7pm	7,533	72	117	227	7,949	10,274	83	210	335	10,902	18,851
7-8pm	6,077	66	90	247	6,480	8,905	50	148	317	9,420	15,900
8-9pm	4,625	51	75	261	5,012	7,327	44	116	316	7,803	12,815
9-10pm	3,769	40	74	230	4,113	5,999	36	77	317	6,429	10,542
10-11pm	3,437	29	55	266	3,787	4,423	19	46	260	4,748	8,535
11-12pm	2,442	21	48	255	2,766	3,907	21	53	232	4,213	6,979
Totals	121,674	1,248	4,536	8,474	135,932					143,964	279,896
7-10am	24,425	246	1,004	1,167	26,842	17,456	224	907	1,241	19,828	46,670
10am-1pm	17,752	166	845	1,157	19,920	14,371	131	1,033	2,017	17,552	37,472
1-4pm	17,462	220	755	863	19,300	21,235	145	1,125	1,612	24,117	43,417
4-7pm	22,101	266	463	683	23,513	31,274	216	799	1,140	33,429	56,942
7am-7pm	81,740	898	3,067	3,870	89,575	84,336	716	3,864	6,010	94,926	184,501
6-10am	33,981	315	1,423	1,732	37,451	21,534	266	1,158	1,811	24,769	62,220
3-7pm	28,418	361	698	943	30,420	40,863	274	1,177	1,649	43,963	74,383
6am-7pm	91,296	967	3,486	4,435	100,184	88,414	758	4,115	6,580	99,867	200,051

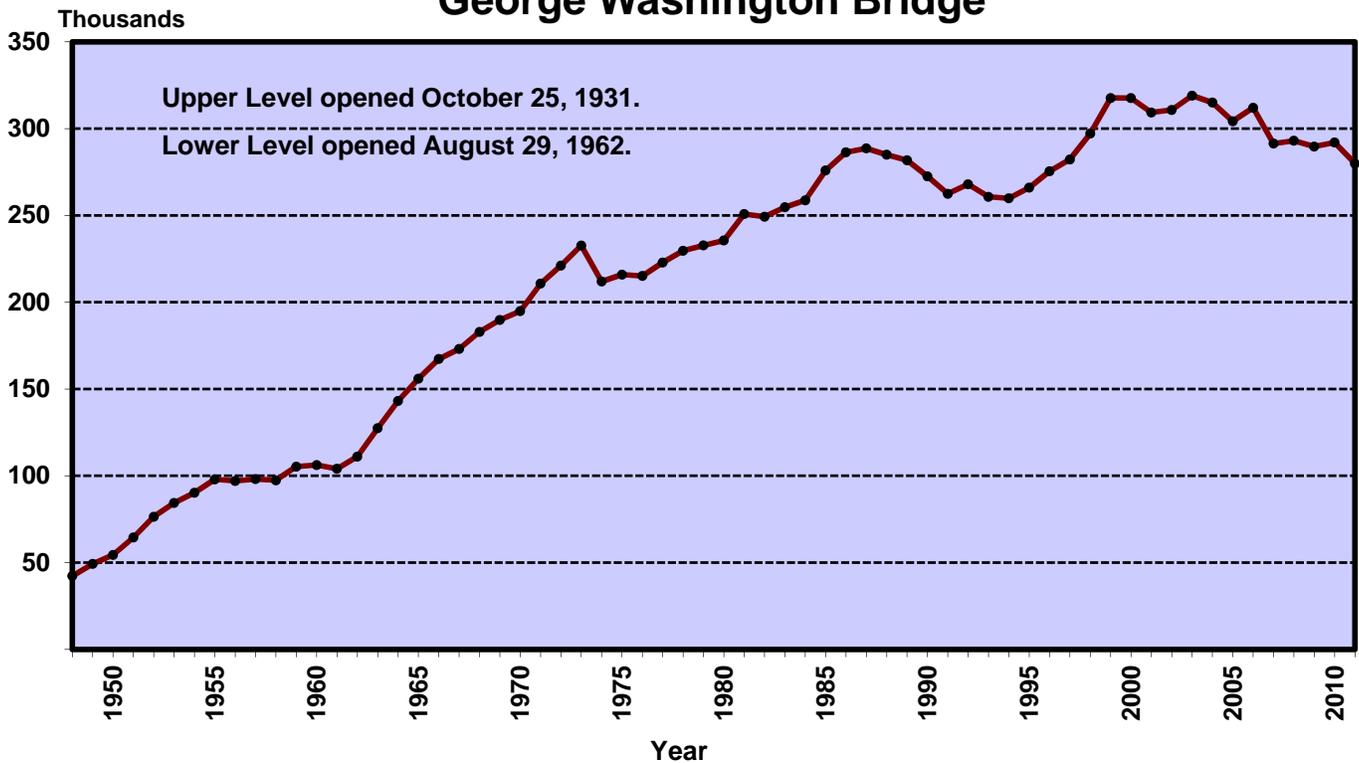
Classification based on October 2011 Data.

** Peak Volumes

Hourly Vehicular Volumes George Washington Bridge ~ 2011



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



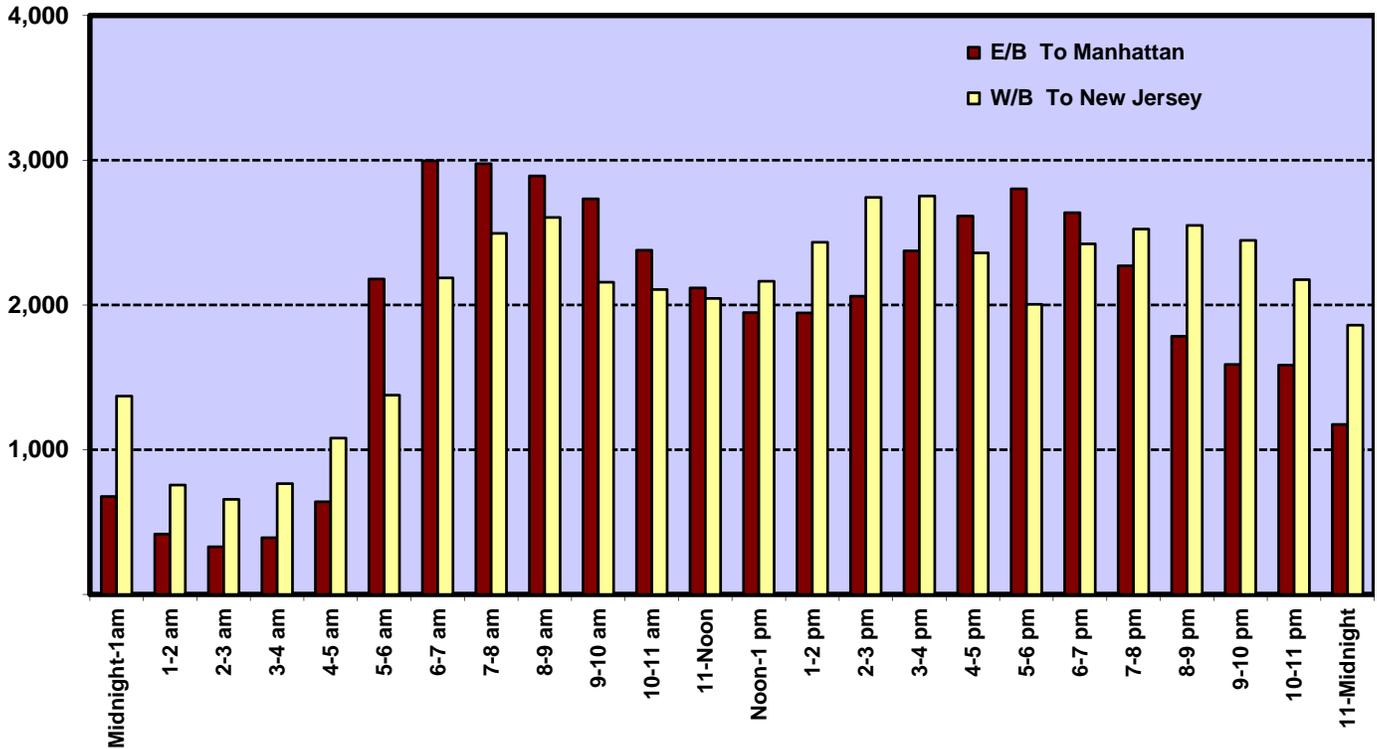
**Hourly Vehicular Volumes
Holland Tunnel - 2011**

	Eastbound to Manhattan					Westbound to New Jersey					2-Way Grand Totals
	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles	
12-1am	646	12	19	0	677	1,317	13	41	0	1,371	2,048
1-2am	380	9	29	0	418					756	1,174
2-3am	287	6	37	0	330					657	987
3-4am	317	4	70	1	392					766	1,158
4-5am	574	9	57	1	641					1,080	1,721
5-6am	2,068	22	89	1	2,180	1,294	4	78	1	1,377	3,557
6-7am	2,842	56	96	2	2,996	2,038	26	122	1	2,187	5,183
7-8am	2,822	61	92	1	2,976	2,345	43	106	1	2,495	5,471
8-9am	2,730	53	107	2	2,892	2,412	65	127	1	2,605	5,497 **
9-10am	2,595	49	88	1	2,733	1,930	57	169	1	2,157	4,890
10-11am	2,266	28	83	1	2,378	1,879	26	201	1	2,107	4,485
11-12am	2,024	22	71	1	2,118	1,853	11	181	0	2,045	4,163
12-1pm	1,864	24	59	1	1,948	1,984	12	167	1	2,164	4,112
1-2pm	1,865	25	55	0	1,945	2,240	14	171	8	2,433	4,378
2-3pm	1,974	29	57	1	2,061	2,573	16	152	2	2,743	4,804
3-4pm	2,262	58	53	1	2,374	2,577	30	146	0	2,753 **	5,127
4-5pm	2,465	106	43	1	2,615	2,197	43	120	0	2,360	4,975
5-6pm	2,690	83	29	1	2,803	1,884	49	72	0	2,005	4,808
6-7pm	2,551	62	25	0	2,638	2,303	45	74	0	2,422	5,060
7-8pm	2,217	31	23	0	2,271	2,434	22	68	1	2,525	4,796
8-9pm	1,740	18	25	1	1,784	2,450	38	62	0	2,550	4,334
9-10pm	1,544	15	30	0	1,589	2,365	26	56	0	2,447	4,036
10-11pm	1,540	21	23	1	1,585	2,104	25	46	0	2,175	3,760
11-12pm	1,142	15	18	0	1,175	1,792	21	48	0	1,861	3,036
Totals	43,405	818	1,278	18	45,519					48,041	93,560
7-10am	8,147	163	287	4	8,601	6,687	165	402	3	7,257	15,858
10am-1pm	6,154	74	213	3	6,444	5,716	49	549	2	6,316	12,760
1-4pm	6,101	112	165	2	6,380	7,390	60	469	10	7,929	14,309
4-7pm	7,706	251	97	2	8,056	6,384	137	266	0	6,787	14,843
7am-7pm	28,108	600	762	11	29,481	26,177	411	1,686	15	28,289	57,770
6-10am	10,989	219	383	6	11,597	8,725	191	524	4	9,444	21,041
3-7pm	9,968	309	150	3	10,430	8,961	167	412	0	9,540	19,970
6am-7pm	30,950	656	858	13	32,477	28,215	437	1,808	16	30,476	62,953

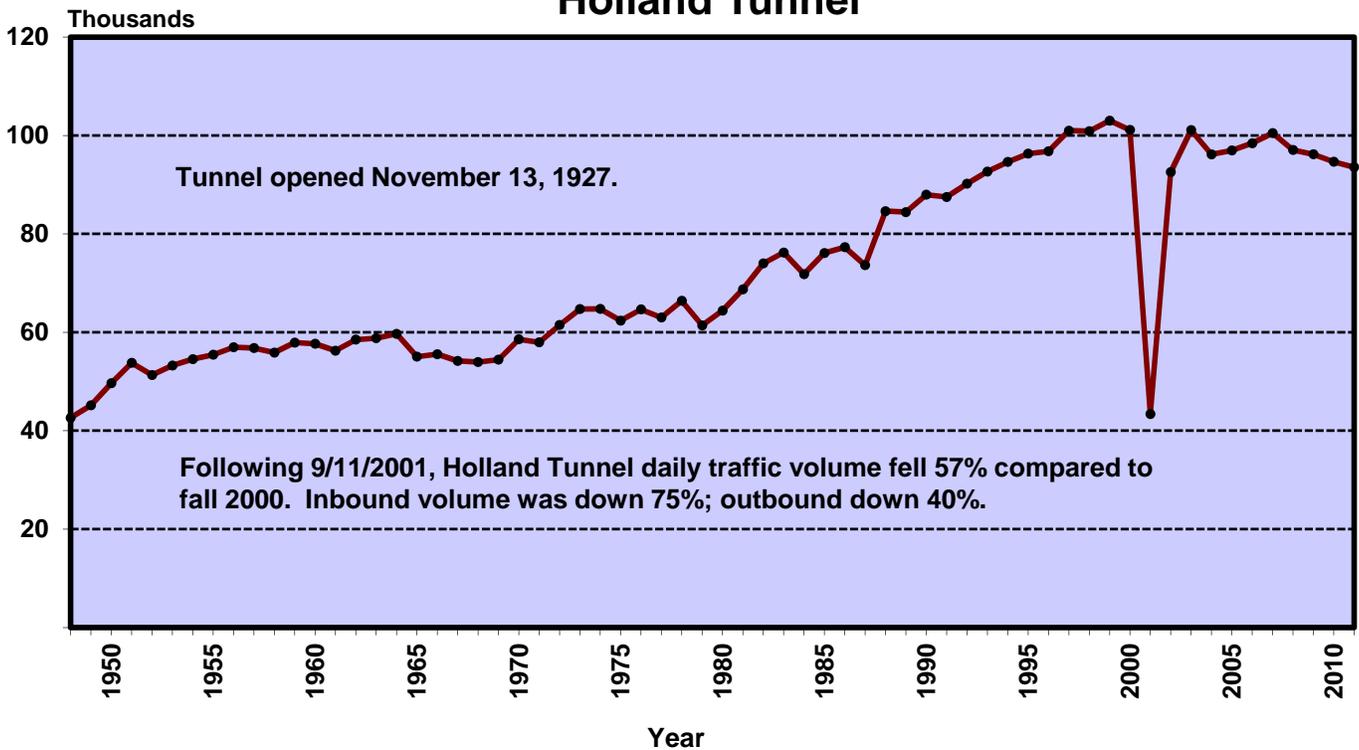
Classification based on October 2011 Data.

** Peak Volumes

Hourly Vehicular Volumes Holland Tunnel ~ 2011



Average Daily Traffic Volumes ~ Total of Both Directions Holland Tunnel



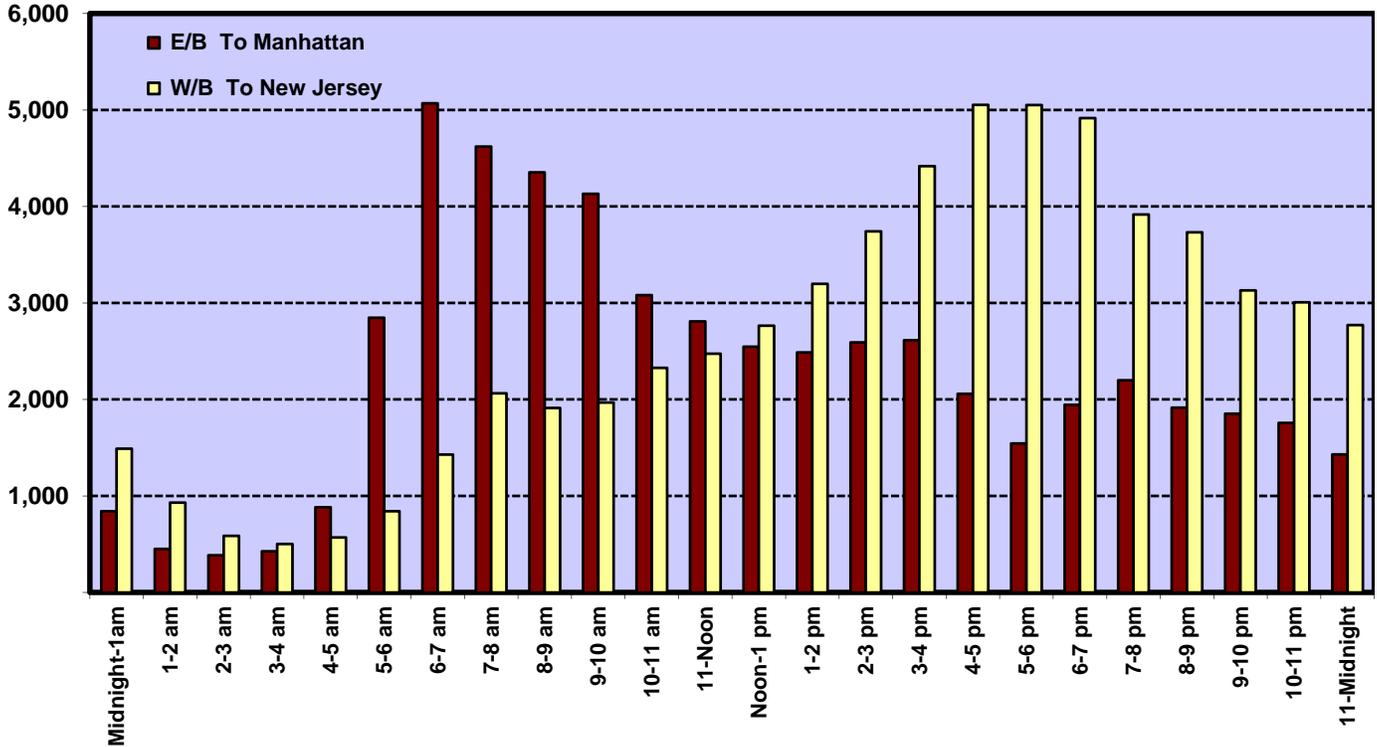
**Hourly Vehicular Volumes
Lincoln Tunnel - 2011**

	Eastbound to Manhattan					Westbound to New Jersey					2-Way Grand Totals
	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles	
12-1am	721	60	40	21	842	1,342	83	43	22	1,490	2,332
1-2am	368	29	37	17	451					932	1,383
2-3am	302	11	49	24	386					587	973
3-4am	313	13	70	31	427					503	930
4-5am	639	25	149	71	884					570	1,454
5-6am	2,277	162	320	89	2,848	617	25	113	87	842	3,690
6-7am	4,127	485	404	54	5,070	981	254	118	76	1,429	6,499
7-8am	3,464	818	307	32	4,621	1,342	516	137	69	2,064	6,685
8-9am	3,096	938	301	19	4,354	1,069	659	144	40	1,912	6,266
9-10am	3,289	555	269	18	4,131	1,091	668	160	50	1,969	6,100
10-11am	2,630	247	189	16	3,082	1,690	359	207	72	2,328	5,410
11-12am	2,428	209	159	13	2,809	1,926	206	266	76	2,474	5,283
12-1pm	2,190	195	150	12	2,547	2,228	205	274	58	2,765	5,312
1-2pm	2,135	219	123	11	2,488	2,668	182	293	55	3,198	5,686
2-3pm	2,175	293	115	9	2,614	3,198	216	281	47	3,742	3,742
3-4pm	2,118	392	97	7	2,614	3,794	289	289	46	4,418	7,032
4-5pm	1,456	532	67	4	2,059	4,366	390	262	35	5,053	7,112
5-6pm	1,129	374	38	3	1,544	4,153	654	221	24	5,052	6,596
6-7pm	1,484	408	46	7	1,945	4,036	701	162	17	4,916	6,861
7-8pm	1,802	326	59	12	2,199	3,282	498	121	16	3,917	6,116
8-9pm	1,613	220	64	19	1,916	3,270	364	86	13	3,733	5,649
9-10pm	1,576	176	76	25	1,853	2,787	244	72	28	3,131	4,984
10-11pm	1,512	145	73	27	1,757	2,687	204	85	31	3,007	4,764
11-12pm	1,240	108	64	19	1,431	2,487	160	74	50	2,771	4,202
Totals	44,084	6,940	3,266	560	52,258	2,487	160	74	50	2,771	115,061
7-10am	9,849	2,311	877	69	13,106	3,502	1,843	441	159	5,945	19,051
10am-1pm	7,248	651	498	41	8,438	5,844	770	747	206	7,567	16,005
1-4pm	6,428	904	335	27	5,102	9,660	687	863	148	11,358	16,460
4-7pm	4,069	1,314	151	14	5,548	12,555	1,745	645	76	15,021	20,569
7am-7pm	27,594	5,180	1,861	151	32,194	31,561	5,045	2,696	589	39,891	72,085
6-10am	13,976	2,796	1,281	123	18,176	4,483	2,097	559	235	7,374	25,550
3-7pm	6,187	1,706	248	21	8,162	16,349	2,034	934	122	19,439	27,601
6am-7pm	31,721	5,665	2,265	205	37,264	32,542	5,299	2,814	665	41,320	78,584

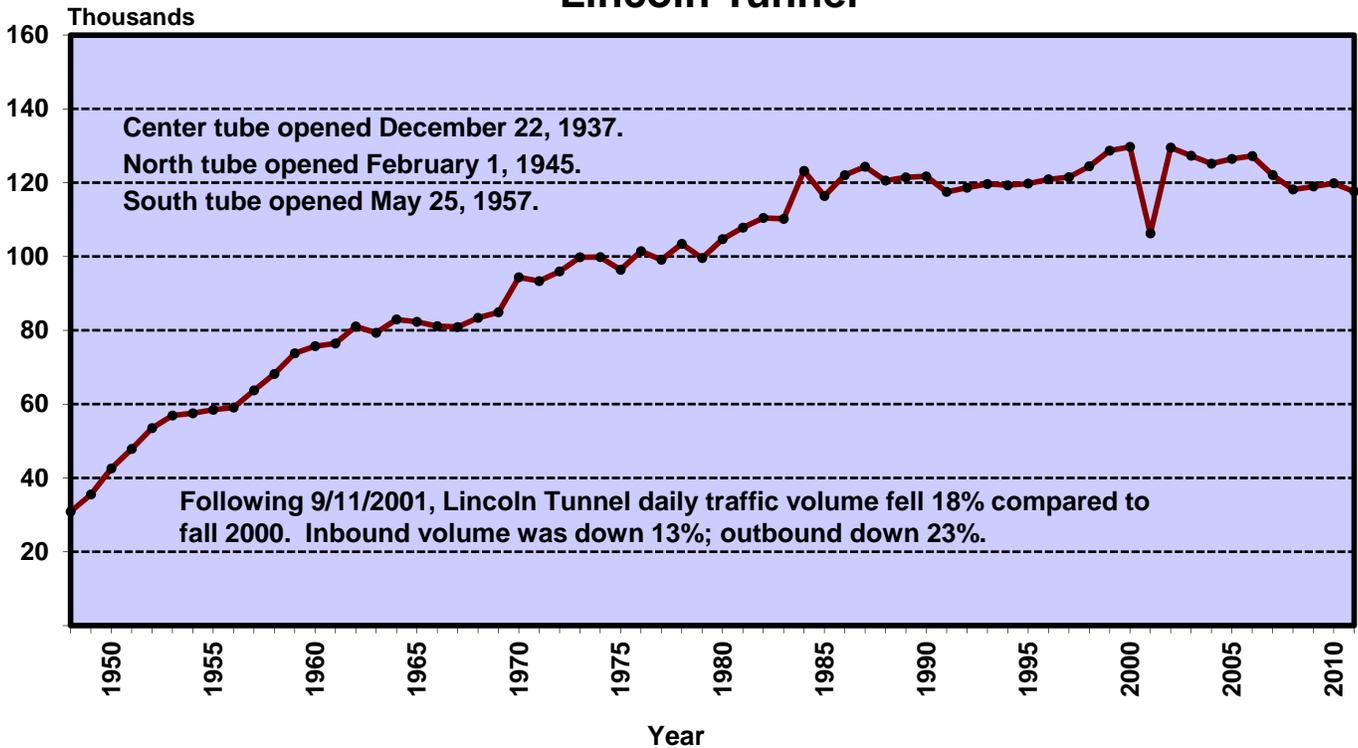
Classification based on October 2011 Data.

** Peak Volumes

Hourly Vehicular Volumes Lincoln Tunnel ~ 2011



Average Daily Traffic Volumes ~ Total of Both Directions Lincoln Tunnel



APPENDIX

2011 Bridge and Tunnel Reconstruction

APPENDIX

Major Bridge Reconstruction In 2011

Brooklyn Bridge (East River between Brooklyn & Manhattan)

As of Monday night, April 4, 2011, the Brooklyn Bridge was closed to Manhattan-bound traffic during the following times.

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

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 bridge was closed during these times.

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

There were no closures the weekend of July 4.

There were no closures the weekend of October 28-31.

There were no closures the weekend of November 11-14.

There were no closures November 23-28.

There were no closures December 23, 2011 to January 2, 2012.

The northbound FDR Drive Ramp C to the Brooklyn Bridge eastbound and Civic Center was closed as follows:

07/22 – 08/22: 11:00pm Friday – 6:00am Monday.
09/23 – 09/26: 11:00pm Friday – 6:00am Monday.
09/30– 10/09: 11:00pm Friday – 6:00am Sunday.
10/14 – 10/17: 11:00pm Friday – 6:00am Monday.
10/21– 10/23: 11:00pm Friday – 6:00am Sunday.
11/04 – 11/07: 11:00pm Friday – 6:00am Monday.
11/18 – 12/19: 11:00pm Friday – 6:00am Monday.

The southbound FDR Drive Exit Ramp A to the Brooklyn Bridge westbound Pearl Street exit were closed as follows:

10/28 – 10/31: 11:00pm Friday – 6:00am Monday.
11/11 – 11/14: 11:00pm Friday – 6:00am Monday.

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 2011, trucks were permitted only on the two Lower Inner Roadways.

Throughout 2011, 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 10:00am on weekdays to accommodate Manhattan-bound HOVs (no trucks) carrying two or more occupants.

Throughout 2011, the North Outer Roadway was reserved for bicyclists and pedestrians.

Ed Koch Queensboro Bridge Operation: All 2011 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 6:00–10:00am weekdays, Closed for reversal 10:00–11:00am 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 closed as follows in 2011.

04/30 – 05/05:	12:30am – 7:30am	Sat.
	12:30am – 5:30am	Mon-Thu.
06/08:	1:00am – 5:30am	Wed.
06/11 – 06/16:	1:00am – 8:00am	Sat.
	12:30am – 5:30am	Mon-Thu.
06/22:	1:00am – 5:30am	Wed.

South Outer Roadway closed intermittently as follows in 2011.

01/05 – 01/19:	1:00am – 5:30am	Wed.	Roadway closed as needed.
05/16 – 06/06:	1:00am – 5:30am		One weeknight per week, closed as needed.
05/18 – 05/25:	1:00am – 5:30am	Wed.	Roadway closed as needed.
09/10 – 10/28:	12:30am – 5:30am	Weekdays.	Roadway closed as needed.
	1:00am – 8:00am	Sat-Sun.	Roadway closed as needed.

Entrance ramp from 21st Street at Queens Plaza North closed as follows in 2011.

11:00pm Monday, Dec. 12 – 5:00am Tuesday, Dec. 13.

Throughout 2011, 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 2011. From January 1 to July 17, the north path was for cyclists and the south path was for pedestrians. As of July 18, pedestrians and bicyclists traded paths so that the north path was for pedestrians and the south path was for cyclists.

Manhattan Bridge Operation: January 1 - April 3, 2011

- **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+), plus 2 lanes on the Lower Roadway for all vehicle types.
- Brooklyn-bound: 2 lanes on the South Upper Roadway.

- **10:00am – 2:00pm weekdays.**

Two of three lanes closed on the Lower Roadway.

- Manhattan-bound: 3 lanes. 2 lanes on the North Upper Roadway (no trucks), plus 1 lane on the Lower Roadway for all vehicle types.
- Brooklyn-bound: 2 lanes on the South Upper Roadway.

- **2:00pm – 3:00pm weekdays.**

Lower Roadway closed for reversal.

- Manhattan-bound: Two lanes on the North Upper Roadway.
- Brooklyn-bound: Two lanes on the South Upper Roadway.

- **3:00pm – 5:00am weekdays.**

One of three lanes closed on the Lower Roadway.

- Manhattan-bound: Two lanes on the North Upper Roadway.
- Brooklyn-bound: Four lanes. Two lanes on the South Upper Roadway, and two lanes on the Lower Roadway.

- **5:00am – 6:00am weekdays.**

Lower Roadway closed for reversal.

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

- **9:00pm Friday – 10:00am Monday.**

One of three lanes closed on the Lower Roadway.

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

- **North Upper Roadway closed as follows.**

01/08-01/15: 12:01am – 6:00am Saturdays.

Manhattan Bridge Operation: April 4 - December 31, 2011

Note: *During these dates, 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+), plus 2 lanes on the Lower Roadway for all vehicle types.
- Brooklyn-bound: 2 lanes on the South Upper Roadway.

- **10:00am – 2:00pm weekdays.**

Two of three lanes closed on the Lower Roadway.

- Manhattan-bound: 3 lanes. 2 lanes on the North Upper Roadway (no trucks), plus 1 lane on the Lower Roadway for all vehicle types.
- Brooklyn-bound: 2 lanes on the South Upper Roadway.

- **2:00pm – 3:00pm weekdays.**

Lower Roadway closed for reversal.

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

- **3:00pm – 9:00pm 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, and 2 lanes on the Lower Roadway.

- **9:00pm – 9:30pm weekdays.**

Lower Roadway closed for reversal.

- Manhattan-bound: Two lanes on the North Upper Roadway.
- Brooklyn-bound: Two lanes on the South Upper Roadway.

- **9:30pm – 6:00am weekdays.**

One of three lanes closed on the Lower Roadway.

- Manhattan-bound: Four lanes. Two lanes on the North Upper Roadway, and two lanes on the Lower Roadway.
- Brooklyn-bound: Two lanes on the South Upper Roadway.

- **9:30pm Friday – 10:00am Monday.**

One of three lanes closed on the Lower Roadway.

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

- **North Upper Roadway closed as follows.**

07/24-07/25: 11:00pm Sunday – 5:00am Monday.

Manhattan Bridge Lower Roadway

- Available to all vehicle types at all times.
- Manhattan-bound trucks required to use the Lower Roadway weekdays 6:00am – 2:00pm.
- Access to westbound Canal Street in Manhattan.
- Off-peak lane closures as needed on the Lower Roadway.

Manhattan Bridge North Upper Roadway

- Manhattan-bound all hours.
- No trucks weekdays 6:00am – 2:00pm.
- Left lane reserved for buses and HOVs weekdays 6:00am – 10:00am. Access to the HOV lane from Brooklyn–Queens Expressway eastbound exit 29A, from Nassau Street, and from Flatbush Avenue–Tillary Street.
- Single-occupant cars permitted only in the right lane weekdays 6:00am – 10:00am, with access from Brooklyn–Queens Expressway eastbound exit 29A and from Nassau Street. Single-occupant cars are not permitted to access the North Upper Roadway from Flatbush Avenue–Tillary Street during these hours.
- When the Lower Roadway is Manhattan-bound, access in Manhattan from the North Upper Roadway is to northbound Chrystie Street and eastbound Canal Street only, with no access to westbound Canal Street from the North Upper Roadway during these hours. Drivers seeking access to westbound Canal Street during these hours must use the Lower Roadway.
- The North Upper Roadway was closed as follows during 2011.
 - 01/08-01/15: 12:01am – 6:00am Saturdays.
 - 07/24-07/25: 11:00pm Sunday – 5:00am Monday.
- Off-peak lane closures as needed on the Manhattan-bound North Upper Roadway.

Manhattan Bridge South Upper Roadway

- Brooklyn-bound all hours for all vehicle types.
- Off-peak lane closures as needed on the Brooklyn-bound South Upper Roadway.

Williamsburg Bridge (East River between Brooklyn & Manhattan)

Throughout 2011 trucks were permitted only on the outer roadways.

Pedestrian and bicycle access was maintained on the bridge at all times throughout 2011.

As of May 13, the bicycle-pedestrian path at Delancey Street and Clinton Street was narrowed. Bicyclists and pedestrians shared the area during sidewalk work by NYCDOT Bridges.

From June 13 to July 31: Brooklyn south path access at Bedford Avenue near South 6th Street. Construction work required complete closure of the south path access from June 13 to July 31, 2011. During this period, the bike path at South 5th Place near South 5th Street was used as a shared bike and pedestrian path, and access was maintained at all times. To access this entrance, it was recommended to proceed north on Bedford Avenue to South 5th

Street, turn right on South 5th Street and proceed two blocks to path entrance at South 5th Place and South 5th Street.

As of July 14, construction work required partial closure of the north path access. The path was never fully closed during this phase of the project.

Williamsburg Bridge Operation: All 2011, Except as noted below.

• **6:00am – 10:00am weekdays.**

Two lanes closed in the off-peak direction.

- Manhattan-bound: 4 lanes.
- Brooklyn-bound: 2 lanes.

• **10:00am – 3:00pm weekdays.**

Three lanes closed.

- Manhattan-bound: 3 lanes.
- Brooklyn-bound: 2 lanes.

• **All other times.**

- Manhattan-bound: 4 lanes.
- Brooklyn-bound: 4 lanes.

The North Outer Roadway was closed as follows.

03/26-04/10: 5:00am – 6:00pm Sat. (Rain date Sun.)

South Inner Roadway reversed to Manhattan-bound.

Manhattan-bound trucks banned from the bridge.

Manhattan-bound: 4 lanes (No Trucks).

Brooklyn-bound: 2 lanes.

08/06-08/13: 12:01am – 2:00pm Sat. (Rain date Sun.),
10:00am – 5:00am Weeknights ~ Closed as necessary

South Inner Roadway reversed to Manhattan-bound 5:00am – 2:00pm Sat.

Manhattan-bound trucks banned from the bridge.

Manhattan-bound: 4 lanes (No Trucks).

Brooklyn-bound: 2 lanes.

The North Inner Roadway was closed as follows.

07/09-07/24: 10:00pm – 5:00am Weeknights,
12:01am – 2:00pm Sat-Sun.

*South Inner Roadway reversed to Manhattan-bound Sat. & Sun.
5:00am - 2:00pm.*

Manhattan-bound: 4 lanes.

Brooklyn-bound: 2 lanes.

07/30: 12:01am – 2:00pm Sat.
*South Inner Roadway reversed to Manhattan-bound Sat
5:00am - 2:00pm.*
Manhattan-bound: 4 lanes.
Brooklyn-bound: 2 lanes.

The South Outer Roadway was closed as follows.

04/16-04/17: 5:00am – 6:00pm Sat. (Rain date Sun.)
Brooklyn-bound trucks banned from the bridge.
Manhattan-bound: 4 lanes.
Brooklyn-bound: 2 lanes (No Trucks).

04/30-05/01: 5:00am – 6:00pm Sat. (Rain date Sun.)
Brooklyn-bound trucks banned from the bridge.
Manhattan-bound: 4 lanes.
Brooklyn-bound: 2 lanes (No Trucks).

05/14-05/15: 5:00am – 6:00pm Sat. (Rain date Sun.)
Brooklyn-bound trucks banned from the bridge.
Manhattan-bound: 4 lanes.
Brooklyn-bound: 2 lanes (No Trucks).

Two of four Brooklyn-bound lanes were closed as follows.

10/08-12/09: 4:00am – Noon Sat-Sun.

Third Avenue Bridge (Harlem River from Bronx to Manhattan)

The ramp from the bridge to the southbound FDR Drive was closed as follows.

04/09-04/13: 12:30am - 5:00am Sat., Tue., Wed.
04/19-04/20: 12:01am - 5:00am Tue-Wed.

Motorists were advised to use the Lexington Avenue exit southbound to 125th Street and turn left proceeding eastbound to enter the Drive under the R.F.K. Bridge during these closures.

The entire bridge was closed as follows.

05/17-05/19: 12:01am - 5:00am Tue-Thu. Closed one night only.

Motorists were advised to use the Macombs Dam Bridge, the 145th Street Bridge, or the Madison Avenue Bridge during these hours.

The Major Deegan Expressway northbound Exit 2 to the Third Avenue Bridge was closed as follows.

11/08–11/12: 12:01am – 5:00am Thu.-Sat.

The Major Deegan Expressway southbound Exit 2 to the Third Avenue Bridge was closed as follows.

11/07–11/28: Round-the-clock All Days.

Washington Bridge (Harlem River between Bronx & Manhattan)

The ramp from the eastbound Trans-Manhattan Expressway (I-95) to the Washington Bridge was closed as follows.

01/01-11/25: Round-the-clock All days Ramp closed since Aug. 19, 2009.

The ramp from the westbound Washington Bridge onto the George Washington Bridge was closed as follows.

06/04-10/28: 12:01am – 6:00am Weeknights.

Eastbound Lane closures were in effect as follows.

01/01-10/28: 12:01am - 6:00am Weeknights 1 of 3 E/B lanes closed.
No closures until 2 hours after Yankee Home games.

Westbound Lane closures were in effect as follows.

01/01-06/17: 12:01am - 6:00am Weeknights 1 of 3 W/B lanes closed.
No closures until 2 hours after Yankee Home games.

06/18-07/01: 12:01am - 6:00am Weeknights 1 of 3 W/B lanes closed.
9:00am – 3:00pm Weekdays 1 of 3 W/B lanes closed as needed.
10:00pm – 5:00am nightly 2 of 3 W/B lanes closed as needed.
No closures until 2 hours after Yankee Home games.

07/02-10/28 : 12:01am - 6:00am Weeknights 1 of 3 W/B lanes closed.
9:00am – 3:00pm Weekdays 1 of 3 W/B lanes closed as needed.
9:30am – 2:00pm Weekdays 2 of 3 W/B lanes closed as needed.
10:00pm – 5:00am nightly 2 of 3 W/B lanes closed as needed.
No closures until 2 hours after Yankee Home games.

Willis Avenue Bridge (Harlem River from Manhattan to Bronx)

Throughout 2011, the pedestrian access at First Avenue and East 125th Street was closed, and a temporary access stairway was available at First Avenue and East 127th Street. The temporary staircase was not accessible to disabled persons unable to climb or descend stairs; they were encouraged to use the Third Avenue Bridge as an alternate. This closure was in effect since December 11, 2008.

The entire bridge was closed as needed for testing operations as follows:

01/18:	1:00am - 5:30am	Tuesday.
02/08:	1:00am - 5:30am	Tuesday.
02/12:	2:00am - 6:00am	Saturday.
03/26-04/23:	1:00am - 5:30am	Tue-Fri.
	2:00am - 6:00am	Saturday.
05/03-05/05:	1:00am - 5:30am	Tue-Thu.
05/24-05/27:	1:00am - 5:30am	Tue-Fri.

06/07-06/11:	1:00am - 5:30am 2:00am - 6:00am	Tue-Fri. Saturday.
10/04-10/15:	1:00am - 5:30am 2:00am - 6:00am	Tue-Fri. Saturday.
11/01-11/04:	1:00am - 5:30am 2:00am - 6:00am	Tue-Fri. Saturday.
11/15-11/19:	1:00am - 5:30am 2:00am - 6:00am	Tue-Fri. Saturday.
12/13-12/23:	1:00am - 5:30am 2:00am - 6:00am	Tue-Fri. Saturday.

Motorists were advised to use the Madison Avenue Bridge during these closures. Pedestrians and bicyclists advised to use the Third Avenue Bridge during these closures.

No closures when the 145th Street Bridge was closed.

No closures until 2 hours after Yankee Home games.

No closures April 19-22 during Harlem River Drive resurfacing.

Throughout 2011, there were additional lane closures on the Willis Avenue Bridge as needed during off-peak hours.

145th Street Bridge (Harlem River between Bronx & Manhattan)

The entire bridge was fully closed as needed in 2011 according to the following schedule for testing operations to complete the NYC DOT bridge reconstruction project:

02/21–02/26:	10:00pm – 6:00am	Mon-Sat.
02/28–03/12:	10:00pm – 6:00am 12:01am – 7:00am	Weeknights; Sat.
03/14–04/16:	10:00pm – 6:00am 12:01am – 7:00am	Weeknights; Sat.
04/30:	12:01am – 7:00am	Sat.
06/28–06/29:	12:01am – 6:00am	Tue-Wed.
07/05–07/15:	12:01am – 6:00am	Tue-Sat.
07/22–07/23:	12:01am – 6:00am	Fri-Sat.
08/08–08/13:	10:00pm – 6:00am 12:01am – 7:00am	Weeknights; Sat.
11/05–11/28:	10:00pm – 6:00am 12:01am – 7:00am	Weeknights; Sat.
12/20–12/23:	10:00pm – 6:00am	Fri-Sat.

No closures on this bridge during closures on the Macombs Dam Bridge, or within 2 hours of Yankee home games.

Motorists advised to use the Macombs Dam Bridge or the Madison Avenue Bridge during these closures.

Throughout 2011, there were additional closures of single lanes in each direction on the 145th Street Bridge and its approach ramps as needed during off-peak hours.

Brooklyn-Battery Tunnel

Throughout 2011, the inbound exit to Trinity Place was closed weekdays between 6:00-10:00am, and between 3:00–7:00pm.

Throughout 2011, between 6:00am and 10:00am on weekdays, there were three lanes inbound and one lane outbound.

Throughout 2011, on weekdays between 4:00pm and 7:00pm, there were two lanes outbound to Brooklyn in the south tube, plus one outbound contra-flow lane in the north tube.

Throughout 2011, one tube was closed intermittently as needed during the following hours:

01/01-05/13:	10:00pm - 5:30am 10:00am – 2:00pm	Sun-Thu. Mon-Fri.
05/14-05/20:	10:00pm - 5:30am 9:00pm – 5:30am 10:00am – 2:00pm	Mon-Thu. Sun. Mon-Fri .
05/21-06/17:	10:00pm - 5:30am 10:00am – 2:00pm	Sun-Thu. Mon-Fri .
06/18-07/22:	9:00pm - 5:30am 10:00am – 2:00pm	Sun-Thu. Mon-Fri .
07/23-09/02:	10:00pm - 5:30am 10:00am – 2:00pm	Sun-Thu. Mon-Fri .
09/03-09/09:	10:00pm - 5:30am 10:00am – 2:00pm	Tue-Thu. Tue-Fri.
09/10-09/16:	10:00pm - 5:30am 10:00am – 2:00pm	Sun-Thu. Mon-Fri .
09/17-10/07:	10:00pm - 5:30am 10:00am – 2:00pm 11:00pm Sat (09/24) – 8:00am Sun (09/25).	Sun-Thu. Mon-Fri .
10/08-10/14:	10:00pm - 5:30am	Mon-Thu.
10/15-11/04:	10:00pm - 5:30am	Sun-Thu.
11/05-11/20:	10:00pm - 5:30am	Sun, Tue, Wed.

In addition, due to a major electrical equipment project, there were a series of 21 weekend tube closures. One tube (2 lanes) was closed from 10:00pm on Fridays through 5:00am on Mondays. The closures, which began Friday, November 11 through Monday, November 14, were not consecutive, but occurred in a series of phases through the end of 2012. Signs were posted in advance of these closures as well as on the MTA website.

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

On Sunday, September 25, from 8:00am to 3:00pm, the entire tunnel was closed in both directions to accommodate the annual Tunnel-to-Towers charity run.

Throughout 2011, there were additional intermittent closures of single lanes in both directions during off-peak hours.

Throughout 2011, the inbound exit to Trinity Place was closed weekdays between 6:00-10:00am, and between 3:00–7:00pm.

Throughout 2011, between 6:00am and 10:00am on weekdays, there were three lanes inbound and one lane outbound.

Throughout 2011, on weekdays between 4:00pm and 7:00pm, there were two lanes outbound to Brooklyn in the south tube, plus one outbound contra-flow lane in the north tube.

Throughout 2011, one tube was closed intermittently as needed during the following hours:

01/01-05/13:	10:00pm - 5:30am 10:00am – 2:00pm	Sun-Thu. Mon-Fri.
05/14-05/20:	10:00pm - 5:30am 9:00pm – 5:30am 10:00am – 2:00pm	Mon-Thu. Sun. Mon-Fri .
05/21-06/17:	10:00pm - 5:30am 10:00am – 2:00pm	Sun-Thu. Mon-Fri .
06/18-07/22:	9:00pm - 5:30am 10:00am – 2:00pm	Sun-Thu. Mon-Fri .
07/23-09/02:	10:00pm - 5:30am 10:00am – 2:00pm	Sun-Thu. Mon-Fri .
09/03-09/09:	10:00pm - 5:30am 10:00am – 2:00pm	Tue-Thu. Tue-Fri.
09/10-09/16:	10:00pm - 5:30am 10:00am – 2:00pm	Sun-Thu. Mon-Fri .
09/17-10/07:	10:00pm - 5:30am 10:00am – 2:00pm 11:00pm Sat (09/24) – 8:00am Sun (09/25).	Sun-Thu. Mon-Fri .
10/08-10/14:	10:00pm - 5:30am	Mon-Thu.
10/15-11/04:	10:00pm - 5:30am	Sun-Thu.
11/05-11/20:	10:00pm - 5:30am	Sun, Tue, Wed.

In addition, due to a major electrical equipment project, there were a series of 21 weekend tube closures. One tube (2 lanes) was closed from 10:00pm on Fridays through 5:00am on Mondays. The closures, which began Friday, November 11 through Monday, November 14, were not consecutive, but occurred in a series of phases through the end of 2012. Signs were posted in advance of these closures as well as on the MTA website.

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

On Sunday, September 25, from 8:00am to 3:00pm, the entire tunnel was closed in both directions to accommodate the annual Tunnel-to-Towers charity run.

Throughout 2011, there were additional intermittent closures of single lanes in both directions during off-peak hours.

Henry Hudson Bridge

Southbound (Manhattan-bound) lane closures were in effect as follows.

01/01-04/15:	10:00am – 3:00pm	Mon-Fri.	1 of 4 Manhattan-bound lanes closed as needed.
04/16-04/29:	10:00am – 2:00pm	Mon.	1 of 4 Manhattan-bound lanes closed as needed.
	10:00am – 3:00pm	Tue-Fri.	1 of 4 Manhattan-bound lanes closed as needed.
04/30-05/06:	10:00am – 3:00pm	Mon-Fri.	1 of 4 Manhattan-bound lanes closed as needed.
05/07-05/13:	10:00am – 2:00pm	Mon-Fri.	1 of 4 Manhattan-bound lanes closed as needed.
	10:00pm – 1:00am	Tue.	1 of 4 Manhattan-bound lanes closed as needed.
05/14-07/22:	10:00am – 3:00pm	Mon-Fri.	1 of 4 Manhattan-bound lanes closed as needed.
07/23-08/12:	10:00am – 2:00pm	Mon-Fri.	1 of 4 Manhattan-bound lanes closed as needed.
	7:00pm – 5:00am	Sun-Thu.	2 of 4 Manhattan-bound lanes closed as needed.
08/13-08/19:	10:00am – 2:00pm	Mon-Fri.	1 of 4 Manhattan-bound lanes closed as needed.
	9:00pm – 5:00am	Sun-Mon.	2 of 4 Manhattan-bound lanes closed as needed.
	7:00pm – 5:00am	Mon-Thu.	2 of 4 Manhattan-bound lanes closed as needed.
08/20-09/02:	10:00am – 2:00pm	Mon-Fri.	1 of 4 Manhattan-bound lanes closed as needed.
	9:00pm – 5:00am	Sun-Mon.	2 of 4 Manhattan-bound lanes closed as needed.
	7:00pm – 5:00am	Mon-Fri.	2 of 4 Manhattan-bound lanes closed as needed.
09/03-09/09:	10:00am – 3:00pm	Tue-Fri.	2 of 4 Manhattan-bound lanes closed as needed.
09/10-09/16:	10:00am – 2:00pm	Mon-Fri.	1 of 4 Manhattan-bound lanes closed as needed.
	10:00pm – 5:00am	Wed.	1 of 4 Manhattan-bound lanes closed as needed.
09/17-10/07:	10:00am – 3:00pm	Mon-Fri.	1 of 4 Manhattan-bound lanes closed as needed.
10/08-10/14:	10:00am – 2:00pm	Tue.	2 of 4 Manhattan-bound lanes closed as needed.
	10:00am – 3:00pm	Mon.	1 of 4 Manhattan-bound lanes closed as needed.
	10:00am – 3:00pm	Wed-Fri.	1 of 4 Manhattan-bound lanes closed as needed.

10/15-10/28:	10:00am – 2:00pm	Mon-Fri.	2 of 4 Manhattan-bound lanes closed as needed.
10/29-11/20:	10:00am – 3:00pm	Mon-Fri.	1 of 4 Manhattan-bound lanes closed as needed.

Northbound (Bronx-bound) lane closures were in effect as follows.

01/01-05/06:	7:00am – 2:00pm	Mon-Fri.	1 of 3 Bronx-bound lanes closed as needed.
05/07-05/13:	10:00am – 2:00pm	Mon-Tue.	1 of 3 Bronx-bound lanes closed as needed.
	7:30pm – 5:00am	Tue-Thu.	2 of 3 Bronx-bound lanes closed as needed.
	Round-the -clock	Wed-Sun.	1 of 3 Bronx-bound lanes closed.
05/14-08/12:	9:30am – 11:30am	Mon-Fri.	2 of 3 Bronx-bound lanes closed as needed.
	Round-the -clock	All Days.	1 of 3 Bronx-bound lanes closed.
08/13-08/19:	9:30am – 11:30am	Mon-Fri.	2 of 3 Bronx-bound lanes closed as needed.
	Midnight – 5:00am	Fri.	All Bronx-bound lanes closed as needed for 15 minute periods.
	Round-the -clock	All Days.	1 of 3 Bronx-bound lanes closed.
08/20-09/02:	9:30am – 11:30am	Mon-Fri.	2 of 3 Bronx-bound lanes closed as needed.
	6:00am – 2:00pm	Mon.	2 of 3 Bronx-bound lanes closed as needed.
	Round-the -clock	All Days.	1 of 3 Bronx-bound lanes closed.
09/03-09/09:	9:30am – 11:30am	Tue-Fri.	2 of 3 Bronx-bound lanes closed as needed.
	Round-the -clock	All Days.	1 of 3 Bronx-bound lanes closed.
09/10-09/16:	9:30am – 11:30am	Mon-Fri.	2 of 3 Bronx-bound lanes closed as needed.
	10:00pm – 5:00am	Wed.	2 of 3 Bronx-bound lanes closed as needed.
	Round-the -clock	All Days.	1 of 3 Bronx-bound lanes closed.
09/17-09/23:	9:30am – 11:30am	Mon-Fri.	2 of 3 Bronx-bound lanes closed as needed.
	Round-the -clock	All Days.	1 of 3 Bronx-bound lanes closed.
09/24-10/07:	9:30am – 11:30am	Mon-Fri.	2 of 3 Bronx-bound lanes closed as needed.
	10:00pm – 5:00am	Mon-Tue.	2 of 3 Bronx-bound lanes closed as needed.
	Round-the -clock	All Days.	1 of 3 Bronx-bound lanes closed.
10/08-11/04:	9:30am – 11:30am	Mon-Fri.	2 of 3 Bronx-bound lanes closed as needed.
	Round-the -clock	All Days.	1 of 3 Bronx-bound lanes closed.

11/05-11/11:	9:30am – 11:30am	Mon.	2 of 3 Bronx-bound lanes closed as needed.
	9:30am – 11:30am	Wed-Thu.	2 of 3 Bronx-bound lanes closed as needed.
	Round-the -clock	All Days.	1 of 3 Bronx-bound lanes closed.
11/12-11/20:	9:30am – 11:30am	Mon-Fri.	2 of 3 Bronx-bound lanes closed as needed.
	Round-the -clock	All Days.	1 of 3 Bronx-bound lanes closed.

Throughout 2011, there were additional intermittent lane closures in both directions during off-peak hours.

Queens-Midtown Tunnel

One tube was closed as follows.

07/08-07/11:	9:00pm Friday – 2:00am Monday.		<i>2-way traffic maintained in the open tube.</i>
07/30-08/01:	1:00am Saturday – 3:00am Monday.		<i>2-way traffic maintained in the open tube, no trucks allowed.</i>

Throughout 2011, there were also intermittent closures of single lanes in both directions during off-peak hours.

Robert F. Kennedy Bridge (formerly Triborough Bridge)

At the **Harlem River Lift Span**, the following closures were in effect as needed.

01/01–04/15:	10:00am – 2:30pm	Mon-Fri.	<ul style="list-style-type: none"> • 1 of 3 lanes closed to Manhattan and to Queens/Bronx.
04/16–06/17:	10:00am – 2:30pm	Mon-Fri.	<ul style="list-style-type: none"> • 1 of 3 lanes closed to Manhattan and to Queens/Bronx.
	Midnight – 5:00am	Mon-Fri.	<ul style="list-style-type: none"> • 1 of 3 lanes closed to Manhattan and to Queens/Bronx.
06/18–09/02:	10:00am – 2:30pm	Mon-Fri.	<ul style="list-style-type: none"> • 1 of 3 lanes closed to Manhattan and to Queens/Bronx.
	9:00pm – 5:00am	Mon-Thu.	<ul style="list-style-type: none"> • 2 of 3 lanes closed to Manhattan and to Queens/Bronx.
	10:00pm – 10:00am	Fri-Sat.	<ul style="list-style-type: none"> • 2 of 3 lanes closed to Manhattan and to Queens/Bronx.
09/03–09/23:	10:00am – 2:30pm	Mon-Fri.	<ul style="list-style-type: none"> • 1 of 3 lanes closed Manhattan and to Queens/Bronx.
	9:00pm – 5:00am	Mon-Thu.	<ul style="list-style-type: none"> • 2 of 3 lanes closed to Queens/Bronx.

- 10:00pm – 10:00am Fri-Sat.
 - 2 of 3 lanes closed to Queens/Bronx.
- 09/24–10/28: 10:00am – 2:30pm Mon-Fri.
 - 1 of 3 lanes closed to Manhattan.
- 9:00pm – 5:00am Mon-Thu.
 - 2 of 3 lanes closed to Queens/Bronx.
- 10:00pm – 10:00am Fri-Sat.
 - 2 of 3 lanes closed to Queens/Bronx.
- 10/29–11/04: 10:00am – 2:30pm Mon-Fri.
 - 1 of 3 lanes closed to Manhattan.
- 11/05–11/11: 10:00am – 2:30pm Mon-Fri.
 - 1 of 3 lanes closed to Manhattan.
- 9:00pm – 9:00am Fri-Sat.
 - 2 of 3 lanes closed to Manhattan and to Queens/Bronx.
- 11/12–11/20: 10:00am – 2:30pm Mon-Fri.
 - 1 of 3 lanes closed to Manhattan.
- 10:00pm – 9:00am Mon-Fri.
 - 2 of 3 lanes closed to Queens/Bronx.

At the **Queens Suspended Span/Viaduct**, the following closures were in effect as needed.

- 01/01–03/11: 10:00am – 3:00pm Mon-Fri.
 - 1 of 4 lanes closed to Bronx/Manhattan.
- 6:00am – 3:00pm Mon-Fri.
 - 1 of 4 lanes closed to Queens.
- 9:00pm – 5:00am Mon-Fri.
 - 2 of 4 lanes closed to Bronx/Manhattan.
 - 2 of 4 lanes closed to Queens.
- 03/12–04/08: 10:00am – 3:00pm Mon-Fri.
 - 1 of 4 lanes closed to Bronx/Manhattan.
- Midnight – 5:00am Sat-Sun.
 - 3 of 4 lanes closed to Bronx/Manhattan.
- 9:00pm – 5:00am Mon-Fri.
 - 2 of 4 lanes closed to Bronx/Manhattan.
 - 2 of 4 lanes closed to Queens.
- 04/09–04/15: 10:00am – 3:00pm Mon-Fri.
 - 1 of 4 lanes closed to Bronx/Manhattan.

- Midnight – 5:00am Sat-Sun.
 - 3 of 4 lanes closed to Bronx/Manhattan.
- 9:00pm – 5:00am Mon-Fri.
 - 2 of 4 lanes closed to Bronx/Manhattan.
 - 2 of 4 lanes closed to Queens.
- 6:00am – 3:00pm Mon-Fri.
 - 1 of 4 lanes closed to Queens.
- 04/16–04/29: 10:00am – 3:00pm Mon-Fri.
 - 1 of 4 lanes closed to Bronx/Manhattan.
- 10:00am – 2:00pm Mon.
 - 1 of 4 lanes closed to Queens.
- 6:00am – 3:00pm Tue-Fri.
 - 1 of 4 lanes closed to Queens.
- 04/30–05/20: 10:00am – 3:00pm Mon-Fri.
 - 1 of 4 lanes closed to Bronx/Manhattan.
- 6:00am – 3:00pm Mon-Fri.
 - 1 of 4 lanes closed to Queens.
- 9:00pm – 5:00am Mon-Thu.
 - 2 of 4 lanes closed to Queens.
- 10:00pm – 10:00am Fri-Sat.
 - 2 of 4 lanes closed to Queens.
- 05/21–06/03: 10:00am – 3:00pm Mon-Fri.
 - 1 of 4 lanes closed to Bronx/Manhattan.
- 5:00am – 3:00pm Mon-Fri.
 - 1 of 4 lanes closed to Queens.
- 9:00pm – 5:00am Mon-Thu.
 - 2 of 4 lanes closed to Queens.
- 10:00pm – 10:00am Fri-Sat.
 - 2 of 4 lanes closed to Queens.
- 06/04–06/17: 10:00am – 3:00pm Mon-Fri.
 - 1 of 4 lanes closed to Bronx/Manhattan.
- 5:00am – 3:00pm Mon-Fri.
 - 1 of 4 lanes closed to Queens.
- 9:00pm – 5:00am Mon-Thu.
 - 2 of 4 lanes closed to Queens.
- Midnight – 5:00am Mon-Thu.
 - 3 of 4 lanes closed to Queens.

- 10:00pm – 10:00am Fri-Sat.
 - 2 of 4 lanes closed to Queens.
- Midnight – 5:00am Fri-Sat.
 - 3 of 4 lanes closed to Queens.
- 06/18–07/14: 10:00am – 3:00pm Mon-Fri.
 - 1 of 4 lanes closed to Bronx/Manhattan.
- 5:00am – 3:00pm Mon-Fri.
 - 1 of 4 lanes closed to Queens.
- 9:00pm – 5:00am Mon-Thu.
 - 2 of 4 lanes closed to Queens.
- 10:00pm – 10:00am Fri-Sat.
 - 2 of 4 lanes closed to Queens.
- 07/15–10/14: 10:00am – 3:00pm Mon-Fri.
 - 1 of 4 lanes closed to Bronx/Manhattan.
- 9:00pm – 5:00am Mon-Thu.
 - 2 of 4 lanes closed to Bronx/Manhattan.
- 10:00pm – 10:00am Fri-Sat.
 - 2 of 4 lanes closed to Bronx/Manhattan.
 - 3 of 4 lanes closed 12:01am to 5:00am.
- Round-the-clock Sat-Sun.
 - 1 of 3 lanes closed on Queens to Manhattan ramp.
- 5:00am – 3:00pm Mon-Fri.
 - 1 of 4 lanes closed to Queens.
- 9:00pm – 5:00am Mon-Thu.
 - 2 of 4 lanes closed to Queens.
 - 3 of 4 lanes closed 12:01 am to 5:00am.
- 10:00pm – 10:00am Fri-Sat.
 - 2 of 4 lanes closed to Queens.
 - 3 of 4 lanes closed 12:01ma to 5:00am.
- 7:00am – 4:00pm Mon-Fri.
 - 1 of 2 lanes closed on Randall’s Island ramp.
- 10/14–12/31: 10:00am – 3:00pm Mon-Fri.
 - 1 of 4 lanes closed to Bronx/Manhattan.
- 5:00am – 3:00pm Mon-Fri.
 - 1 of 4 lanes closed to Queens.
- 7:00am – 4:00pm Mon-Fri.
 - 1 of 2 lanes closed on Randall’s Island ramp.

At the **Bronx Span**, the following closures were in effect as needed.

01/01–12/31: 10:00am – 3:00pm Mon-Fri.

- 1 lane closed as needed to Bronx.
- 1 lane closed as needed to Manhattan/Queens.

10:00pm – 5:00am Mon-Fri.

- 2 lanes closed as needed to Manhattan/Queens.
- 2 lanes closed as needed to Bronx.

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

Throughout 2011, there were intermittent closures of single lanes during off-peak hours to facilitate PANYNJ maintenance work.

Holland Tunnel (Hudson River between Manhattan & New Jersey)

As of January 3, 2010, the restriction that prohibited 2-axle and 3-axle single unit trucks from using the eastbound tunnel to New York was lifted. All 4-axle, 5-axle, and 6-axle trucks, as well as 3-axle dual unit trucks, trailers, and towed vehicles remained restricted from using the tunnel in both directions.

Westbound (to New Jersey) lane closures were in effect in the Holland Tunnel as follows.

All 2011:	11:30pm – 5:30am	Mon–Fri.	1 w/b lane closed.
	12:01am – 8:00am	Sat.	1 w/b lane closed.

Lincoln Tunnel (Hudson River between Manhattan & New Jersey)

One of the three tubes of the Lincoln Tunnel was closed as follows.

All 2011	11:00pm – 5:00am	Mon–Fri.	<i>Two tubes open, providing two traffic lanes in each direction.</i>
	1:00am – 9:00am	Sat.	
	1:00am – 10:00am	Sun.	