

2012 Manhattan River Crossings



Bill de Blasio
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A member of the New York Metropolitan Transportation Council

2012 Manhattan River Crossings

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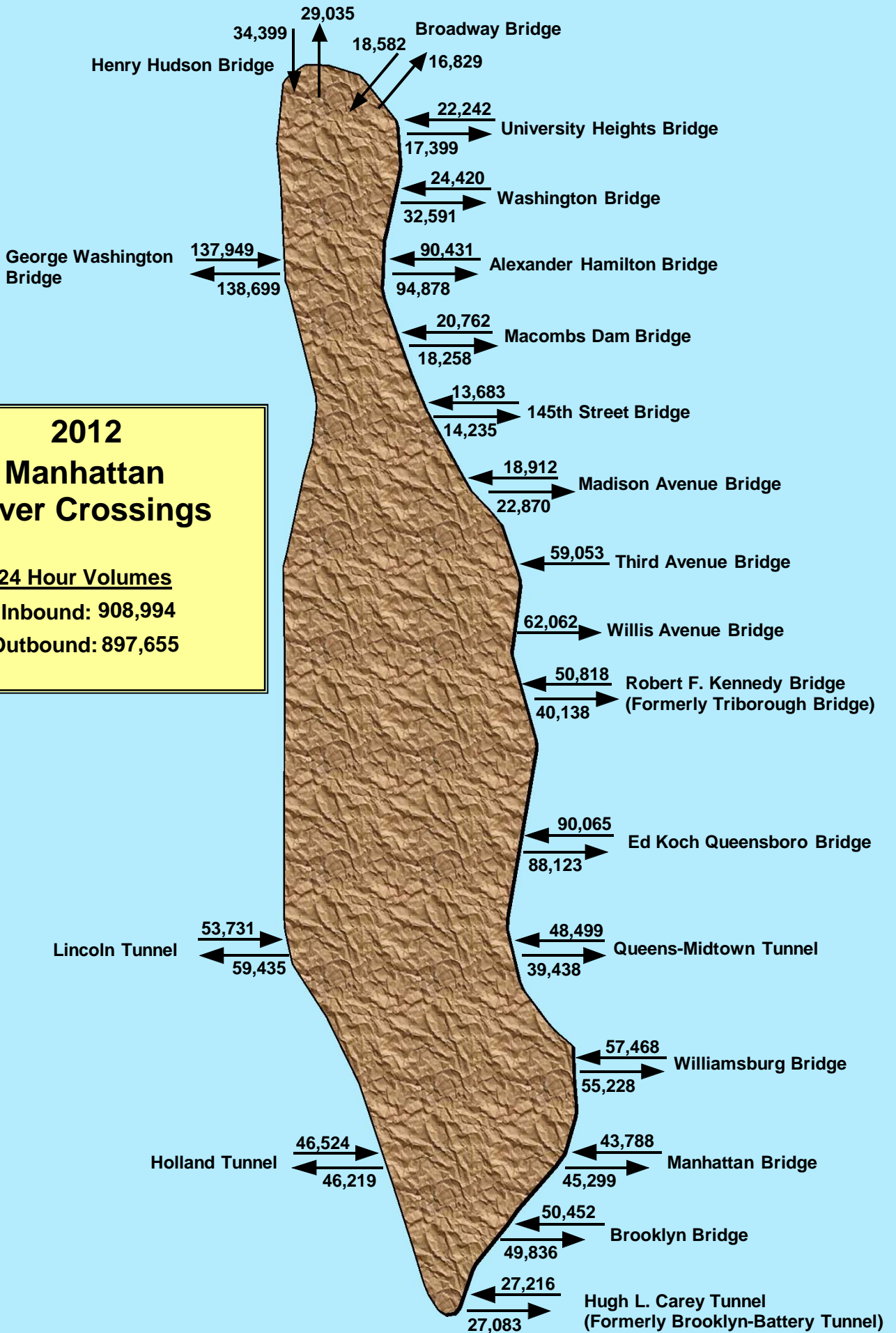
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2012 Manhattan River Crossings

24 Hour Volumes
 Inbound: 908,994
 Outbound: 897,655



1,806,600

daily vehicles used the 20
Manhattan River Crossings
in 2012 (total of both
directions).

0.1% Decrease

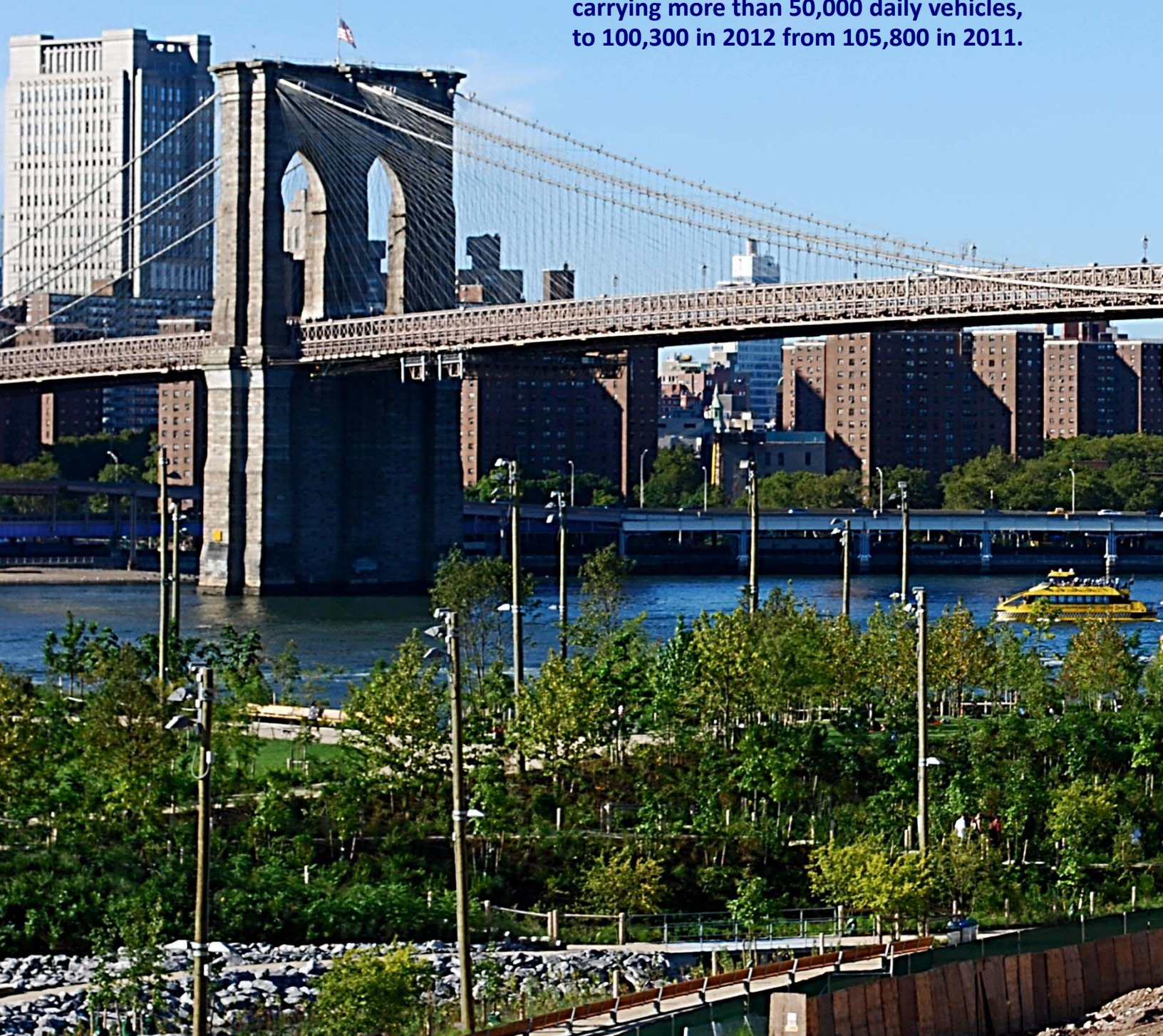
from the 1,808,200 daily
vehicles recorded in 2011.

8.9% Increase
**Washington Bridge (Harlem
River)**

Largest percentage increase for crossings
carrying more than 50,000 daily vehicles,
to 57,000 in 2012 from 52,400 in 2011.

5.2% Decrease
Brooklyn Bridge (East River)

Largest percentage decrease for crossings
carrying more than 50,000 daily vehicles,
to 100,300 in 2012 from 105,800 in 2011.



George Washington Bridge (Hudson River)

276,600 vehicles per day, the most heavily utilized Manhattan river crossing.

Alexander Hamilton Bridge (Harlem River)

185,300 vehicles per day, the most heavily utilized Harlem River crossing.

Ed Koch Queensboro Bridge (East River)

178,200 vehicles per day, the most heavily utilized East River crossing.

Annual Citywide Subway Ridership

0.8% increase to 1.655 billion in 2012 from 1.640 billion in 2011.

During the past ten years, subway ridership increased 17.1% to 1.655 billion in 2012 from 1.413 billion in 2002. During the same period, Manhattan vehicular river crossings decreased 2.7% to 1,806,600 daily vehicles in 2012 from 1,857,100 in 2002.



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Introduction



Madison Avenue Bridge

INTRODUCTION

The 2012 *Manhattan River Crossings* report is an annual publication prepared by the New York City Department of Transportation (NYCDOT), and funded by the Unified Planning Work Program (UPWP) under the Planning Program of the Moving Ahead for Progress (MAP-21) Act.

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

The average hourly volumes by direction for 2012 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 2012-2013 and 2013-2014 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 ~ 2012 Daily Traffic



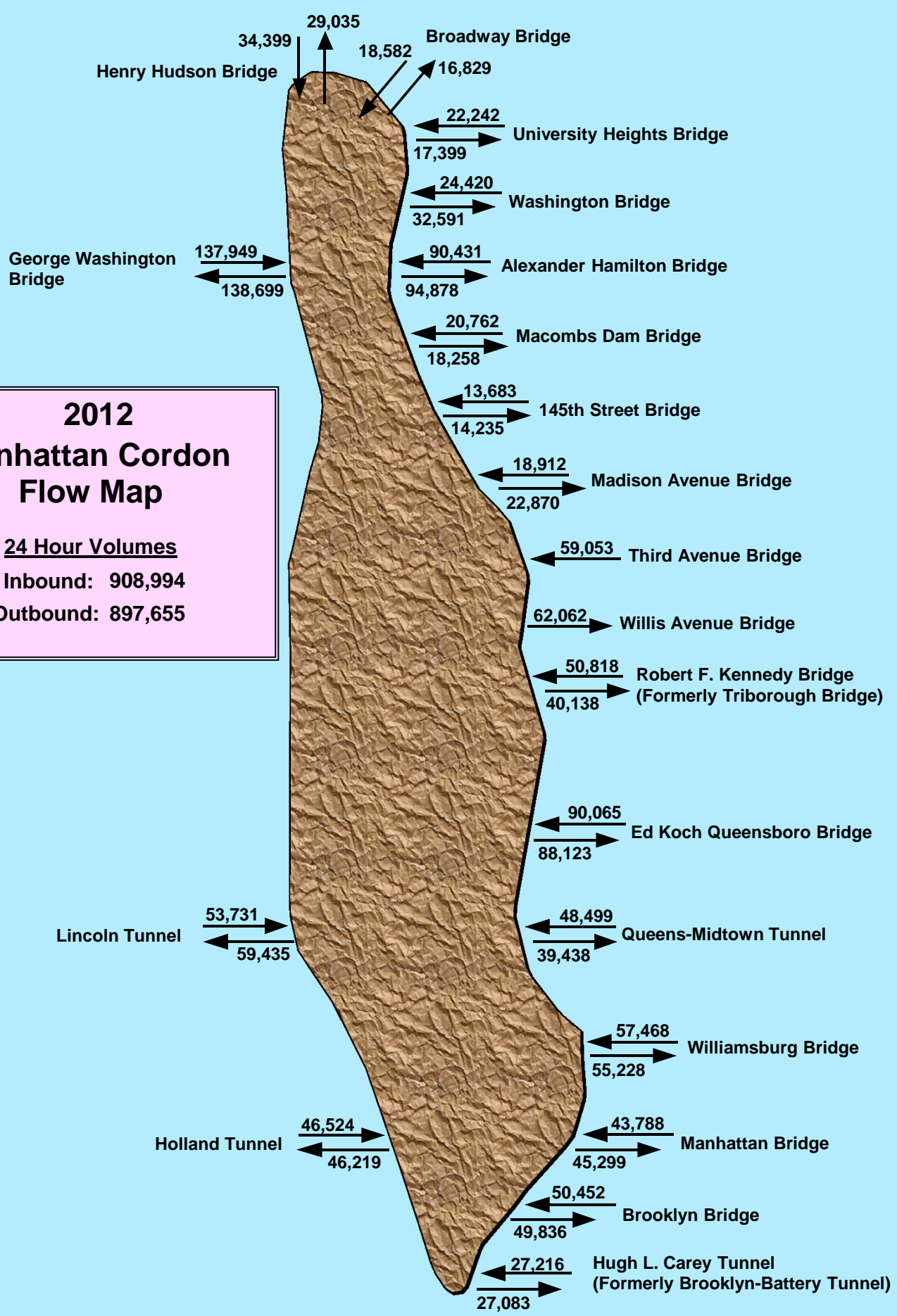
Brooklyn Bridge

SUMMARY

- Daily Manhattan river crossings decreased 0.1%, to 1,806,600 in fall 2012 from 1,808,200 in fall 2011, a decrease of just 1,600 daily vehicles.
- The busiest river crossings are the following.
 - For the 50th consecutive year, the George Washington Bridge carried more traffic than any other Manhattan river crossing. Some 276,600 daily vehicles used this bridge in fall 2012, which was 1.2% fewer than the average daily volume of 279,900 in fall 2011.
 - The Alexander Hamilton Bridge was second busiest, serving 185,300 daily vehicles in fall 2012, which was 1.7% more than its fall 2011 daily volume of 182,200.
 - The Ed Koch Queensboro Bridge was third busiest with its fall 2012 daily volume of 178,200, a decrease of 2.8% from the 183,400 recorded in fall 2011.
- 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 365,000 vehicles were either moving or parked on the island. This includes vehicles operating only within Manhattan as well as those entering via the river crossings (page 16).
- Annual subway ridership citywide increased 0.8% to 1.655 billion in 2012 from 1.640 billion in 2011. This was the highest level of subway ridership since 1950 (page 61).
- According to census data, 39% of automobile work trips to Manhattan originated in the other four boroughs, 51% came from outside the city, and the remaining 10% originated within Manhattan.
- Origin and Destination (O & D) surveys conducted by PANYNJ in 2006 at its trans-Hudson crossings show that 44% of automobiles entering Manhattan from New Jersey each day have final destinations outside Manhattan. These figures indicate that nearly 100,000 autos entering Manhattan from New Jersey in 2012 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.

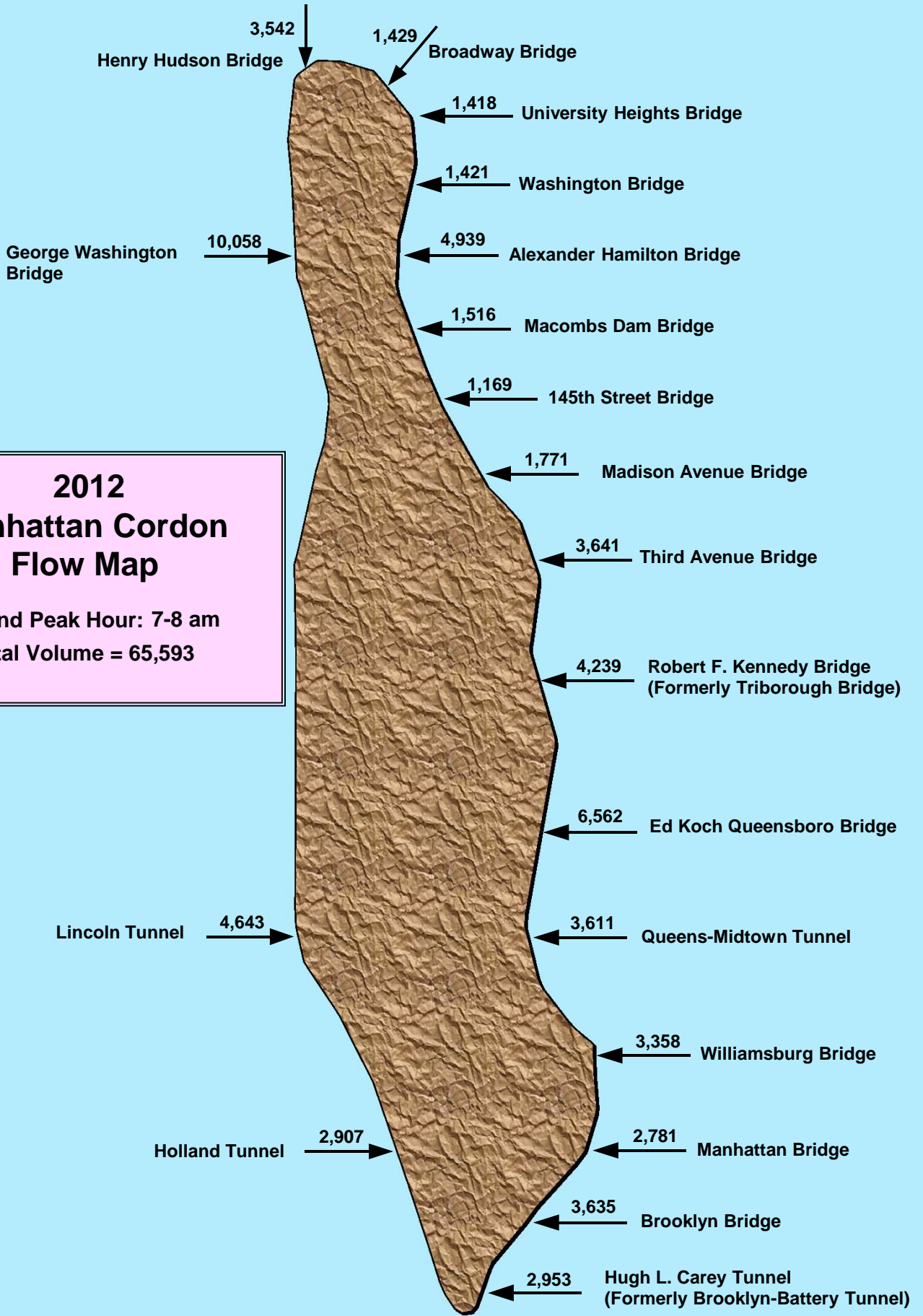
**2012
Manhattan Cordon
Flow Map**

24 Hour Volumes
Inbound: 908,994
Outbound: 897,655

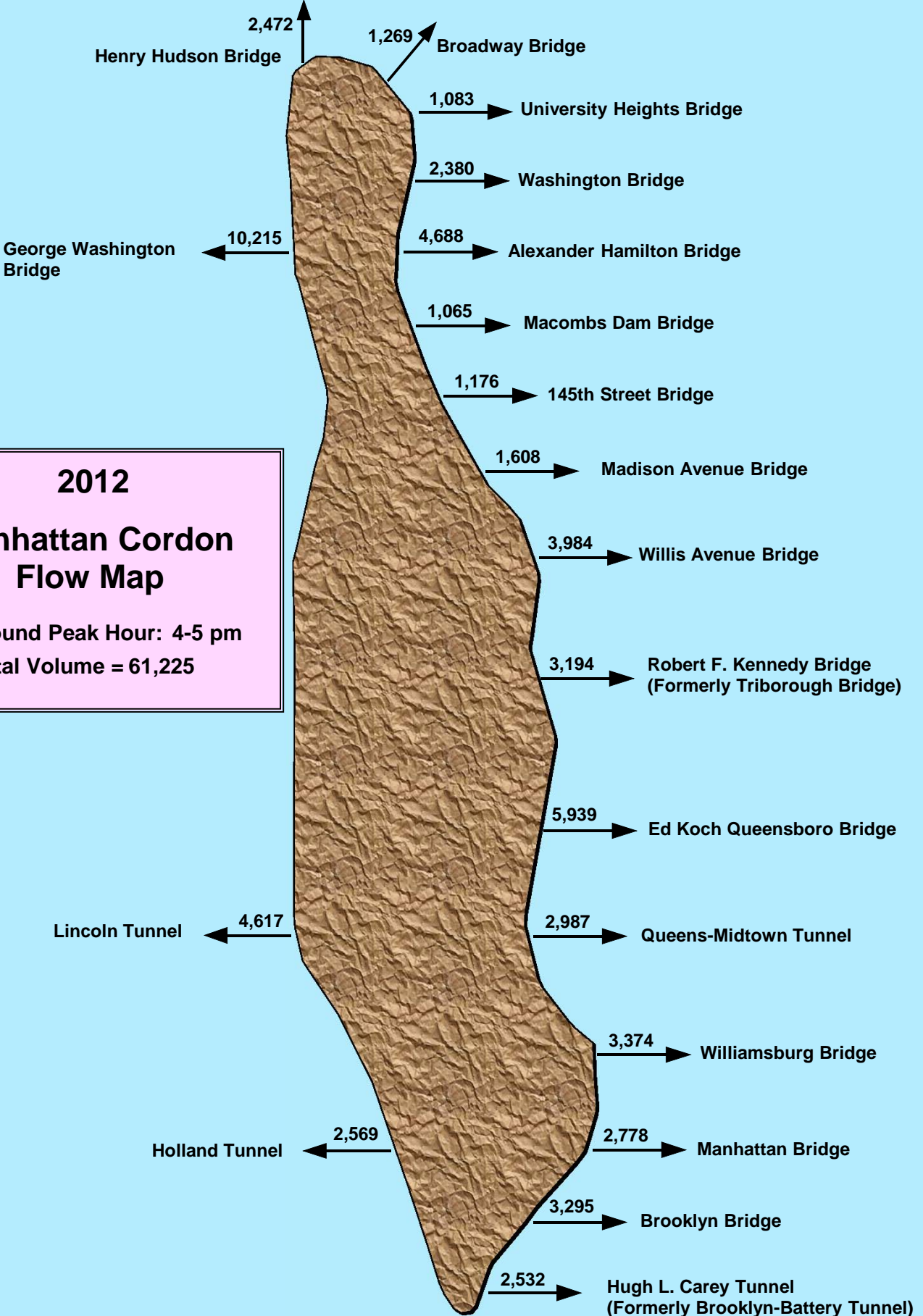


**2012
Manhattan Cordon
Flow Map**

Inbound Peak Hour: 7-8 am
Total Volume = 65,593



2012
Manhattan Cordon
Flow Map
 Outbound Peak Hour: 4-5 pm
 Total Volume = 61,225



**Manhattan Crossings
2012 Average Daily Traffic Volumes
To and From Manhattan**

<i>EAST RIVER BRIDGES</i>	To Manhattan	From Manhattan	2-way Total
Brooklyn Bridge	50,452	49,836	100,288
Ed Koch Queensboro Bridge *	90,065	88,123	178,188
Manhattan Bridge	43,788	45,299	89,087
Williamsburg Bridge	57,468	55,228	112,696
Total East River	241,773	238,486	480,259

<i>HARLEM RIVER BRIDGES</i>			
Alexander Hamilton Bridge	90,431	94,878	185,309
Broadway Bridge	18,582	16,829	35,411
Macombs Dam Bridge	20,762	18,258	39,020
Madison Avenue Bridge	18,912	22,870	41,782
Third Avenue Bridge	59,053	-----	59,053
University Heights Bridge	22,242	17,399	39,641
Washington Bridge	24,420	32,591	57,011
Willis Avenue Bridge	-----	62,062	62,062
145th Street Bridge	13,683	14,235	27,918
Total Harlem River	268,085	279,122	547,207

<i>MTABT FACILITIES</i>			
Henry Hudson Bridge	34,399	29,035	63,434
Hugh L. Carey Tunnel **	27,216	27,083	54,299
Queens-Midtown Tunnel	48,499	39,438	87,937
Robert F. Kennedy Bridge ***	50,818	40,138	90,956
Total MTABT	160,932	135,694	296,626

<i>PANYNJ FACILITIES</i>			
George Washington Bridge	137,949	138,699	276,648
Holland Tunnel	46,524	46,219	92,743
Lincoln Tunnel	53,731	59,435	113,166
Total PANYNJ	238,204	244,353	482,557

GRAND TOTAL	908,994	897,655	1,806,649
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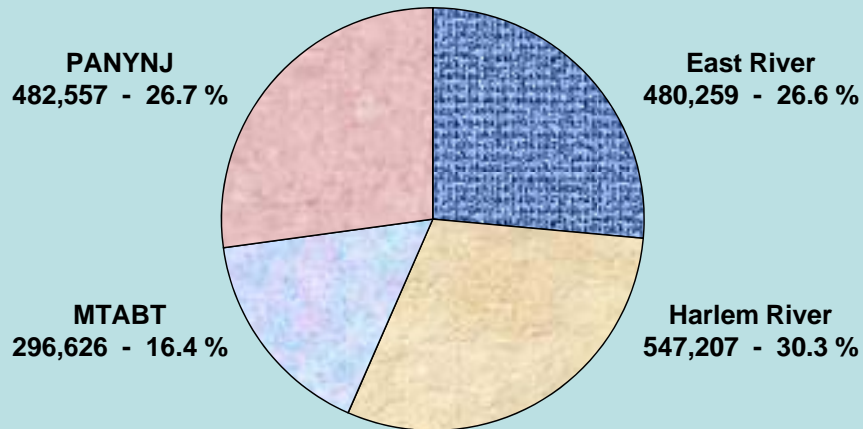
* Queensboro Bridge renamed April 11, 2011.

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

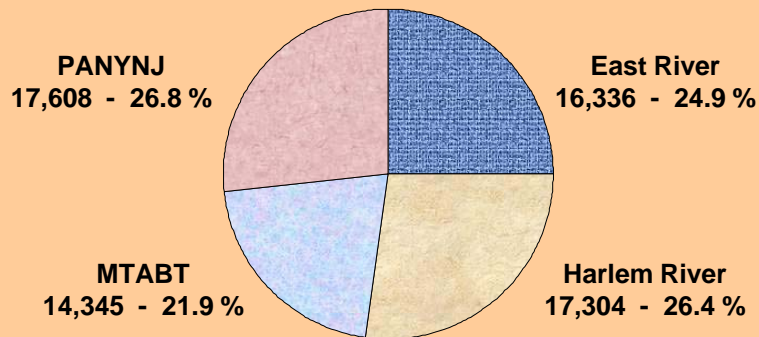
*** Formerly Triborough Bridge, renamed November 19, 2008.

2012 Manhattan Crossings Vehicle Volumes

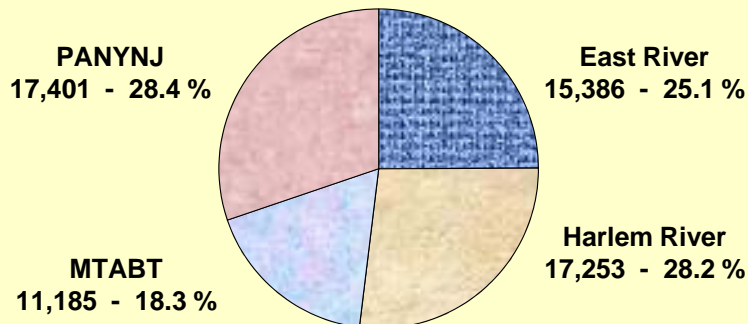
24-Hour Volumes – Both Directions



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



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



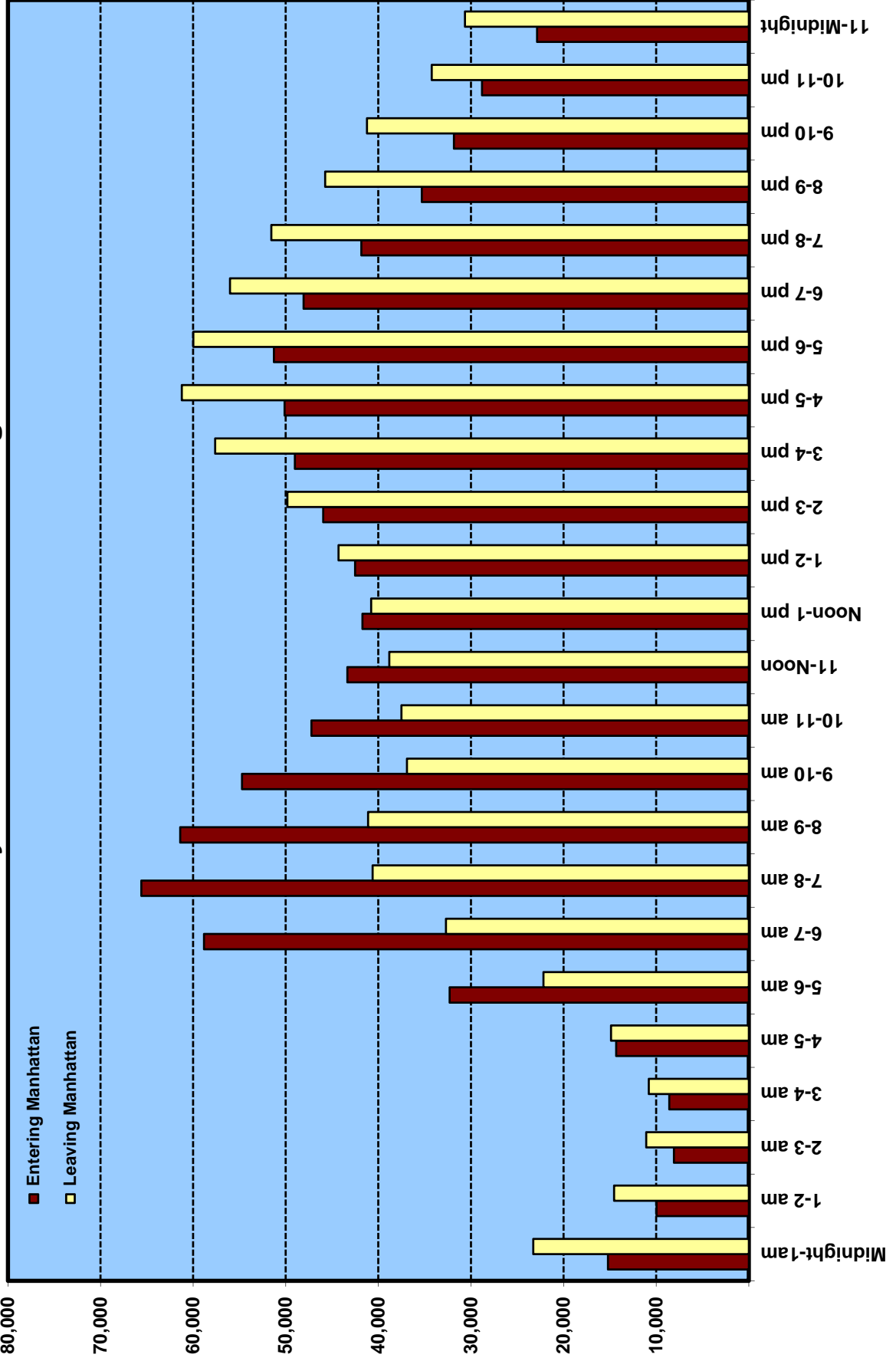
Total Manhattan Crossings 2012 Average Hourly Traffic Volumes To and From Manhattan (All Facilities)

	Entering Manhattan	Leaving Manhattan	2-Way Total
12-1am	15,214	23,271	38,485
1-2am	9,965	14,547	24,512
2-3am	8,091	11,083	19,174
3-4am	8,591	10,803	19,394
4-5am	14,323	14,879	29,202
5-6am	32,308	22,179	54,487
6-7am	58,832	32,708	91,540
7-8am	65,593 **	40,628	106,221
8-9am	61,391	41,106	102,497
9-10am	54,727	36,921	91,648
10-11am	47,235	37,504	84,739
11-12am	43,350	38,827	82,177
12-1pm	41,717	40,779	82,496
1-2pm	42,518	44,309	86,827
2-3pm	45,952	49,825	95,777
3-4pm	49,018	57,619	106,637
4-5pm	50,133	61,225 **	111,358
5-6pm	51,283	59,977	111,260
6-7pm	48,074	56,021	104,095
7-8pm	41,840	51,564	93,404
8-9pm	35,318	45,750	81,068
9-10pm	31,848	41,234	73,082
10-11pm	28,805	34,241	63,046
11-12pm	22,868	30,655	53,523
24 hrs	908,994	897,655	1,806,649
7-10am	181,711	118,655	300,366
10am-1pm	132,302	117,110	249,412
1-4pm	137,488	151,753	289,241
4-7pm	149,490	177,223	326,713
7am-7pm	600,991	564,741	1,165,732

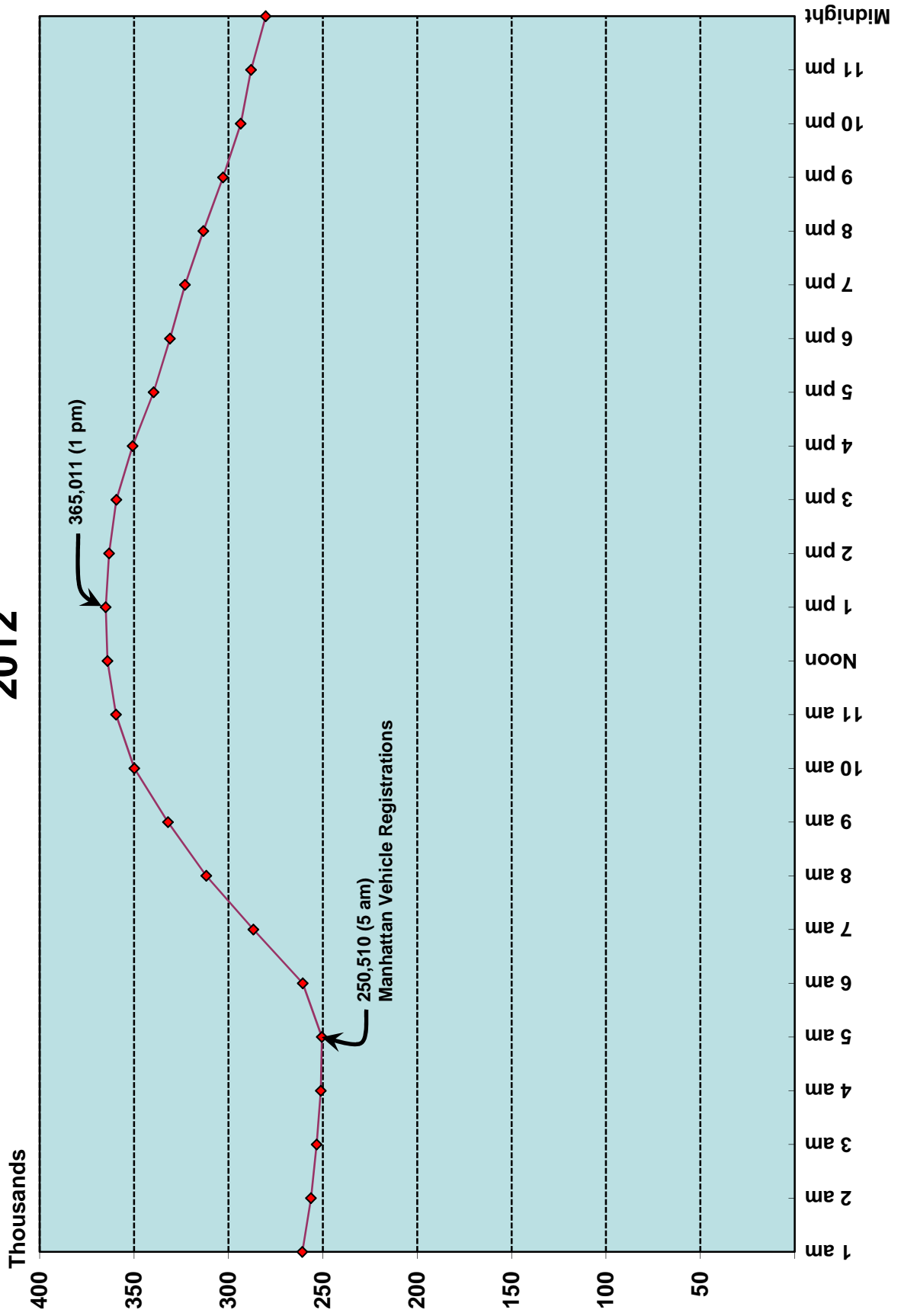
** Peak Volumes

Hourly Vehicle Volumes

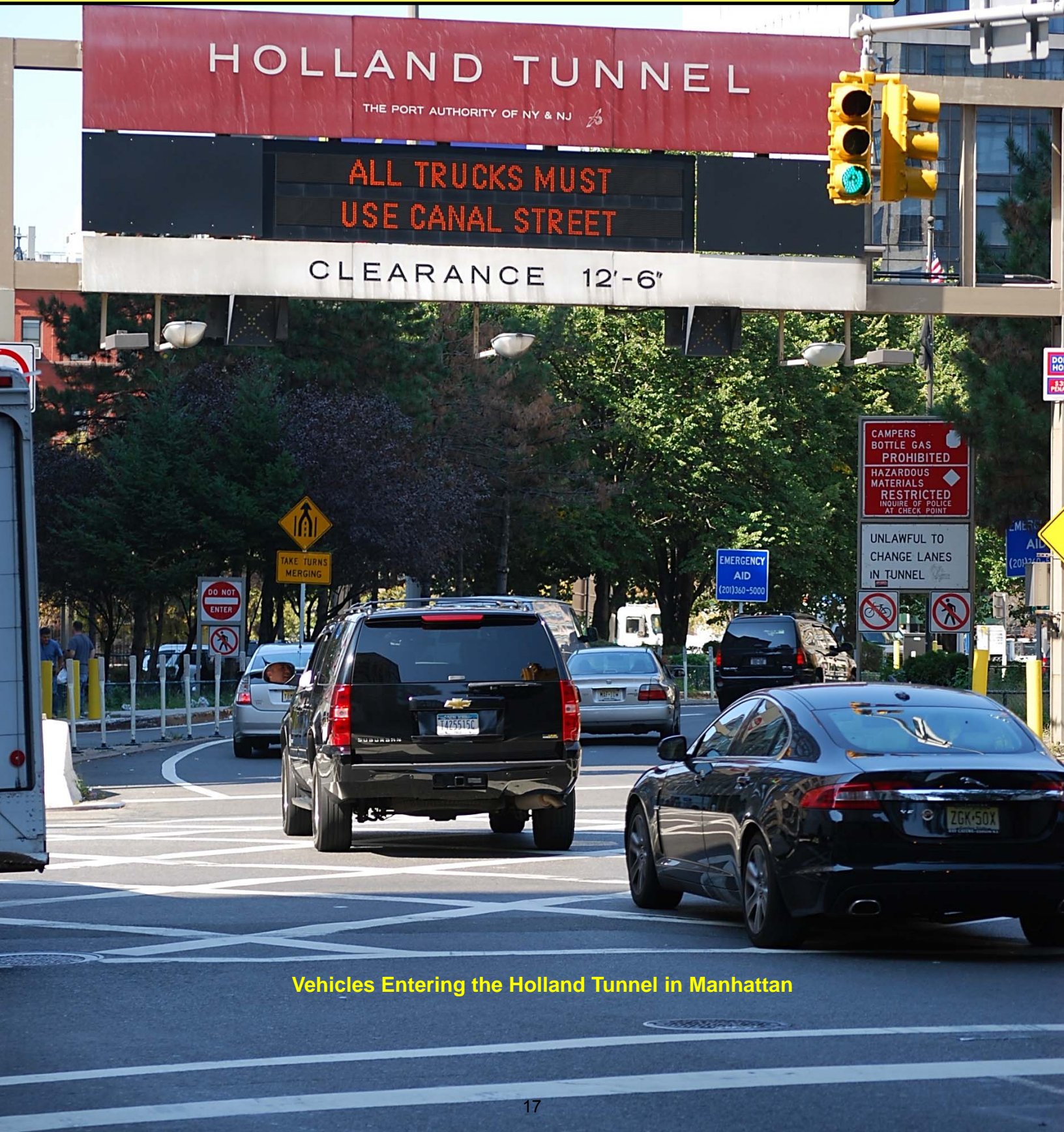
Total Hourly Manhattan River Crossings ~ 2012



Manhattan Vehicular Accumulation 2012



Trip Characteristics



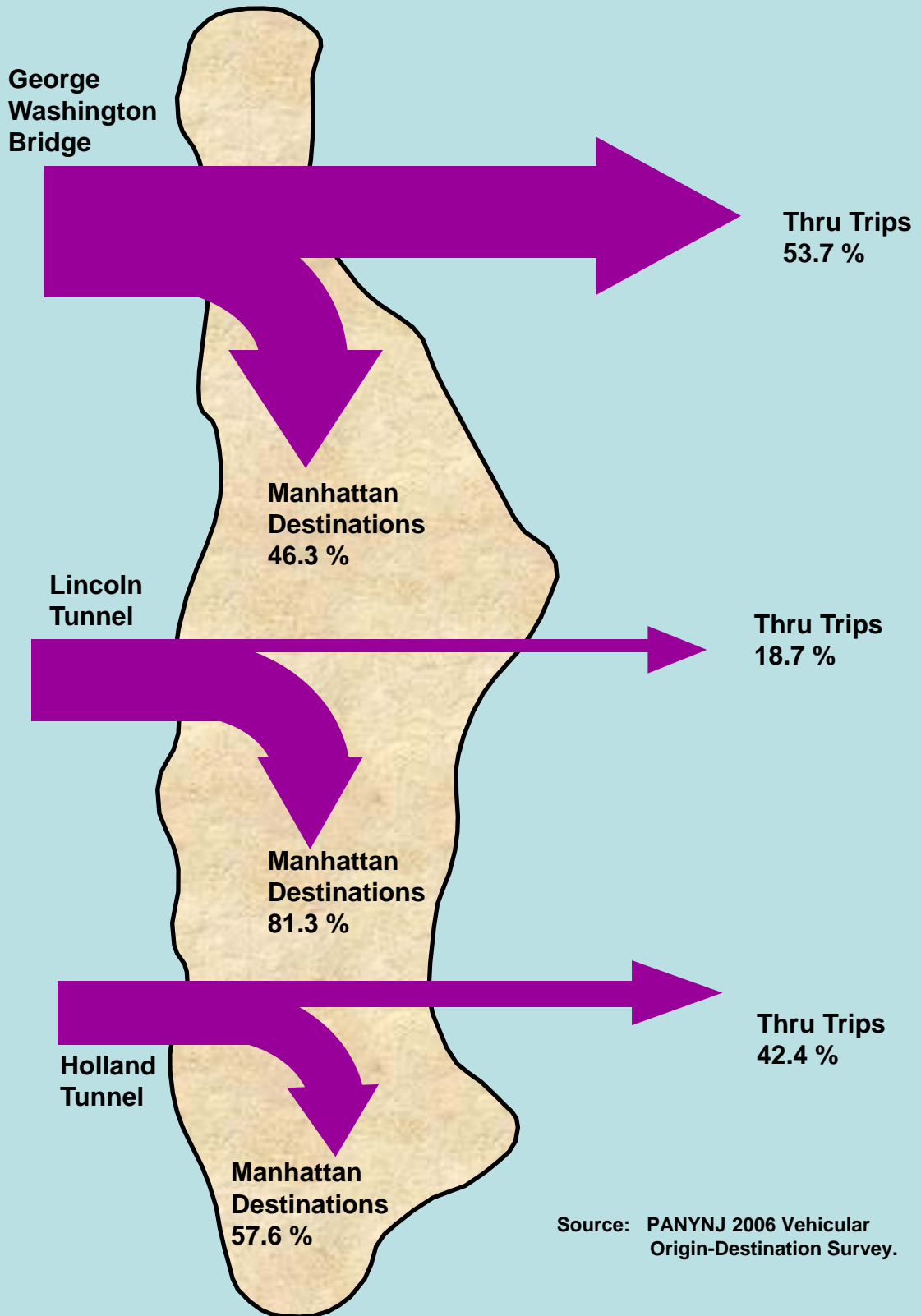
Vehicles Entering the Holland Tunnel in Manhattan

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	72.8 %
Brooklyn Bridge	1.22	80.6 %
Manhattan Bridge	1.25	80.0 %
Williamsburg Bridge	1.17	84.6 %
Holland Tunnel	1.32	65.7 %
5 Lower Manhattan Crossings	1.25	77.1 %
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	72.3 %
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	73.0 %
145th Street Bridge	1.32	73.7 %
Henry Hudson Bridge	1.20	88.5 %
George Washington Bridge	1.74	79.6 %
11 Upper Manhattan Crossings	1.38	81.5 %
All 19 Inbound Manhattan Crossings	1.38	78.1 %

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.

2011-2012 Trends



Willis Avenue Bridge

2011-2012 Trends

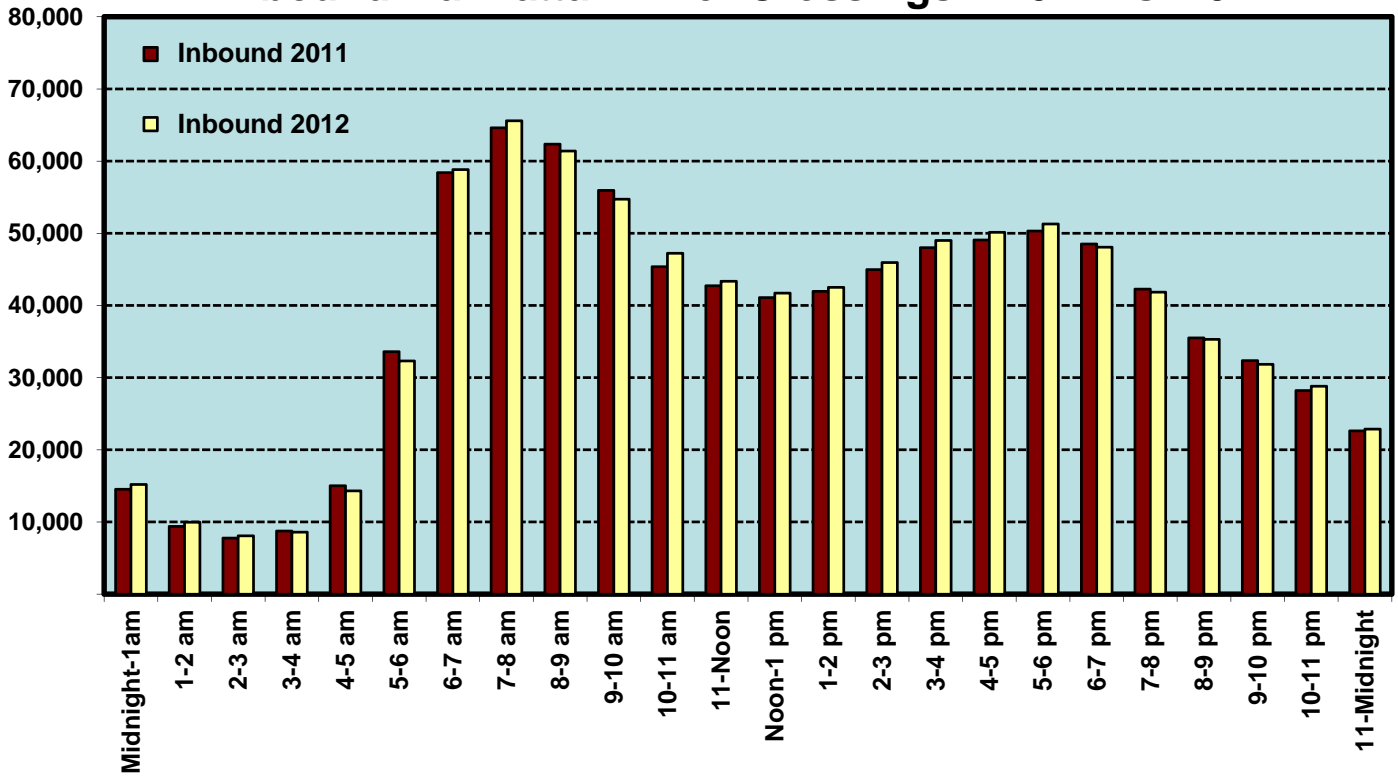
- Daily Manhattan river crossings decreased 0.1%, to 1,806,600 in fall 2012 from 1,808,200 in fall 2011 (1,600 fewer daily vehicles).
- The largest percentage decrease occurred on the Macombs Dam Bridge over the Harlem River between Manhattan and The Bronx, where daily traffic decreased 11.9%, to 39,000 vehicles in fall 2012 from 44,300 in fall 2011 (5,300 fewer daily vehicles).
- The largest numerical decrease occurred on the Brooklyn Bridge over the East River between Manhattan and Brooklyn, where traffic decreased by 5,500 daily vehicles, to 100,300 in fall 2012 from 105,800 in fall 2011 (-5.2%). Due to major reconstruction work, the Brooklyn Bridge was closed to Manhattan-bound traffic in 2011 and 2012.
- The largest percentage increase occurred on the Washington Bridge over the Harlem River between Manhattan and The Bronx, where daily volume increased 8.9%, to 57,000 vehicles in fall 2012 from 52,400 in fall 2011 (4,600 additional daily vehicles). There had been significant lane closures on the Washington Bridge during 2011.
- The largest numerical increase occurred on the Williamsburg Bridge over the East River between Manhattan and Brooklyn, where daily volume increased by 9,100 daily vehicles, to 112,700 vehicles in fall 2012 from 103,600 in fall 2011 (+8.8%).
- Total daily traffic on the four East River bridges combined increased 0.4%, to 480,300 in fall 2012 from 478,200 in fall 2011 (2,100 additional daily vehicles).
- Daily volume using the nine Harlem River bridges increased 0.5%, to 547,200 in fall 2012 from 544,600 in fall 2011 (2,600 additional daily vehicles).
- On the four MTABT Manhattan crossings, total daily traffic increased 0.8% to 296,600 in fall 2012 from 294,300 in fall 2011 (2,300 additional daily vehicles).
- Daily traffic using the three PANYNJ Manhattan crossings decreased 1.7% to 482,600 from 491,100. (8,500 fewer daily vehicles)
- Annual subway ridership citywide increased 0.8% to 1.655 billion in 2012 from 1.640 billion in 2011. This was the highest level of subway ridership since 1950.

Manhattan Crossings Hourly Vehicular Volumes 2012 vs 2011

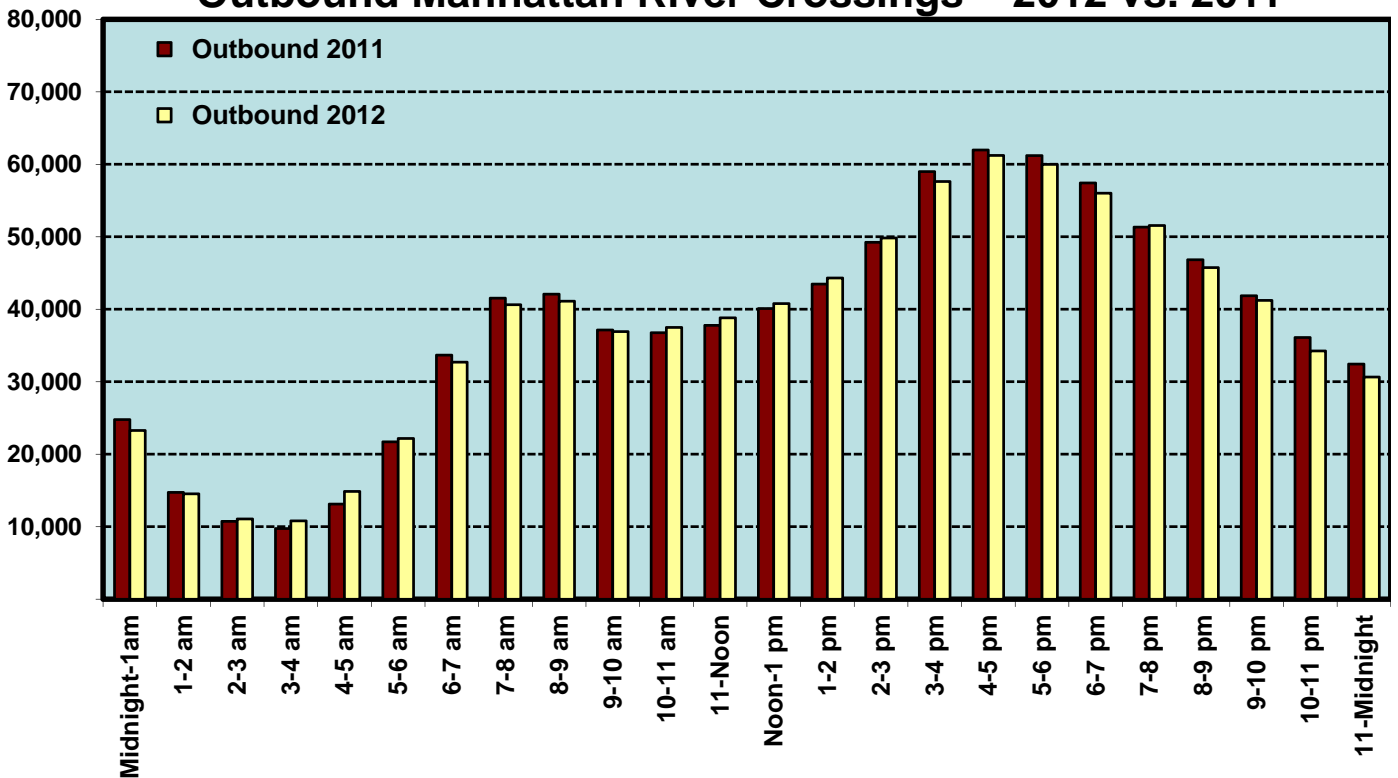
	Inbound			Outbound		
	2011	2012	Percent Change	2011	2012	Percent Change
Mid-1	14,532	15,214	4.7 %	24,790	23,271	- 6.1 %
1-2 am	9,401	9,965	6.0 %	14,731	14,547	- 1.2 %
2-3 am	7,770	8,091	4.1 %	10,749	11,083	3.1 %
3-4 am	8,758	8,591	- 1.9 %	9,740	10,803	10.9 %
4-5 am	15,022	14,323	- 4.7 %	13,126	14,879	13.4 %
5-6 am	33,604	32,308	- 3.9 %	21,716	22,179	2.1 %
6-7 am	58,402	58,832	0.7 %	33,682	32,708	- 2.9 %
7-8 am	64,613	65,593	1.5 %	41,541	40,628	- 2.2 %
8-9 am	62,361	61,391	- 1.6 %	42,074	41,106	- 2.3 %
9-10 am	55,937	54,727	- 2.2 %	37,149	36,921	- 0.6 %
10-11 a	45,384	47,235	4.1 %	36,755	37,504	2.0 %
11-Noon	42,730	43,350	1.5 %	37,787	38,827	2.8 %
Noon-1	41,100	41,717	1.5 %	40,103	40,779	1.7 %
1-2 pm	41,950	42,518	1.4 %	43,485	44,309	1.9 %
2-3 pm	44,968	45,952	2.2 %	49,230	49,825	1.2 %
3-4 pm	48,006	49,018	2.1 %	59,003	57,619	- 2.3 %
4-5 pm	49,071	50,133	2.2 %	61,969	61,225	- 1.2 %
5-6 pm	50,328	51,283	1.9 %	61,206	59,977	- 2.0 %
6-7 pm	48,517	48,074	- 0.9 %	57,434	56,021	- 2.5 %
7-8 pm	42,269	41,840	- 1.0 %	51,333	51,564	0.5 %
8-9 pm	35,506	35,318	- 0.5 %	46,824	45,750	- 2.3 %
9-10 pm	32,353	31,848	- 1.6 %	41,871	41,234	- 1.5 %
10-11 p	28,215	28,805	2.1 %	36,093	34,241	- 5.1 %
11-Mid	22,623	22,868	1.1 %	32,436	30,655	- 5.5 %
Totals	903,420	908,994	0.6 %	904,827	897,655	- 0.8 %
1-4am	25,929	26,647	2.8 %	35,220	36,433	3.4 %
4-7am	107,028	105,463	- 1.5 %	68,524	69,766	1.8 %
7-10am	182,911	181,711	- 0.7 %	120,764	118,655	- 1.7 %
10am-1pm	129,214	132,302	2.4 %	114,645	117,110	2.2 %
1-4pm	134,924	137,488	1.9 %	151,718	151,753	0.0 %
4-7pm	147,916	149,490	1.1 %	180,609	177,223	- 1.9 %
7-10pm	110,128	109,006	- 1.0 %	140,028	138,548	- 1.1 %
10pm-1am	65,370	66,887	2.3 %	93,319	88,167	- 5.5 %
7am-7pm	594,965	600,991	1.0 %	567,736	564,741	- 0.5 %
6-10am	241,313	240,543	- 0.3 %	154,446	151,363	- 2.0 %
3-7pm	195,922	198,508	1.3 %	239,612	234,842	- 2.0 %
6am-7pm	653,367	659,823	1.0 %	601,418	597,449	- 0.7 %

Hourly Vehicle Volumes

Inbound Manhattan River Crossings ~ 2012 vs. 2011



Outbound Manhattan River Crossings ~ 2012 vs. 2011



Weekday Manhattan Crossings 2011-2012 Traffic Volume Trends Both Directions

EAST RIVER BRIDGES	Highway Functional Classification	2011	2012	Percent Change
Brooklyn Bridge	Principal Arterial	105,820	100,288	- 5.2 %
Ed Koch Queensboro Bridge *	Principal Arterial	183,401	178,188	- 2.8 %
Manhattan Bridge	Principal Arterial	85,392	89,087	4.3 %
Williamsburg Bridge	Principal Arterial	103,590	112,696	8.8 %
Total, 4 East River Bridges		478,203	480,259	0.4 %
HARLEM RIVER BRIDGES				
Alexander Hamilton Bridge	Interstate	182,174	185,309	1.7 %
Broadway Bridge	Principal Arterial	35,770	35,411	- 1.0 %
Macombs Dam Bridge	Principal Arterial	44,311	39,020	- 11.9 %
Madison Avenue Bridge	Principal Arterial	41,423	41,782	0.9 %
Third Avenue Bridge	Principal Arterial	59,603	59,053	- 0.9 %
University Heights Bridge	Principal Arterial	43,601	39,641	- 9.1 %
Washington Bridge	Minor Arterial	52,373	57,011	8.9 %
Willis Avenue Bridge	Principal Arterial	57,710	62,062	7.5 %
145th Street Bridge	Minor Arterial	27,677	27,918	0.9 %
Total, 9 Harlem River Bridges		544,642	547,207	0.5 %
MTABT Manhattan Facilities				
Henry Hudson Bridge	Principal Arterial	63,433	63,434	0.0 %
Hugh L. Carey Tunnel **	Interstate	54,481	54,299	- 0.3 %
Queens-Midtown Tunnel	Interstate	87,662	87,937	0.3 %
R.F.K. Memorial Bridge Manhattan Plaza ***	Principal Arterial	88,717	90,956	2.5 %
Total, 4 MTABT Manhattan Crossings		294,293	296,626	0.8 %
PANYNJ Manhattan Facilities				
George Washington Bridge	Interstate	279,896	276,648	- 1.2 %
Holland Tunnel	Interstate	93,560	92,743	- 0.9 %
Lincoln Tunnel	Principal Arterial	117,653	113,166	- 3.8 %
Total, 3 PANYNJ Manhattan - New Jersey Crossings		491,109	482,557	- 1.7 %
GRAND TOTALS		1,808,247	1,806,649	- 0.1 %

* Queensboro Bridge renamed April 11, 2011.

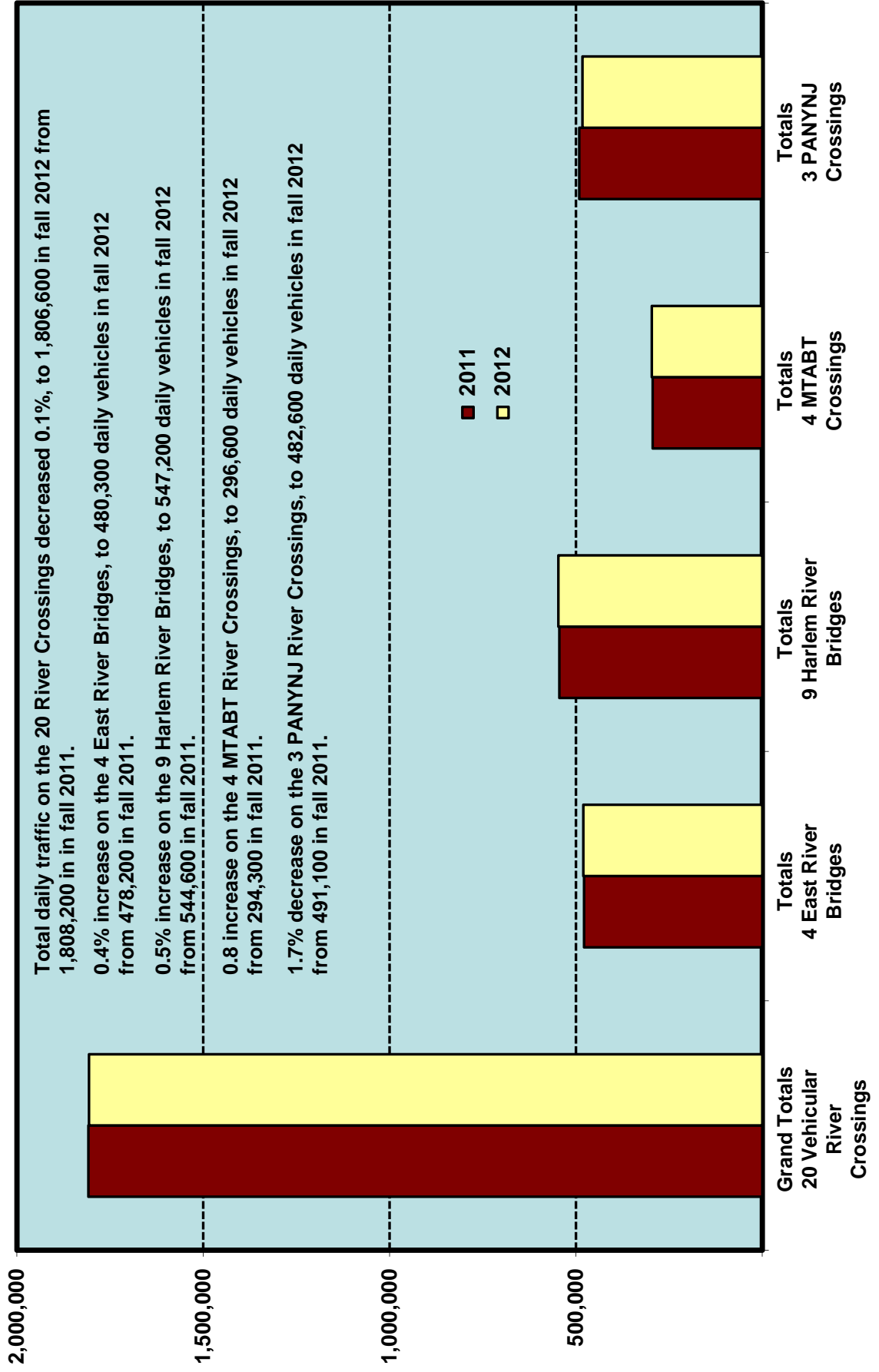
** Formerly Brooklyn-Battery Tunnel, renamed October 22, 2012.

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

Manhattan River Crossings Daily Volumes

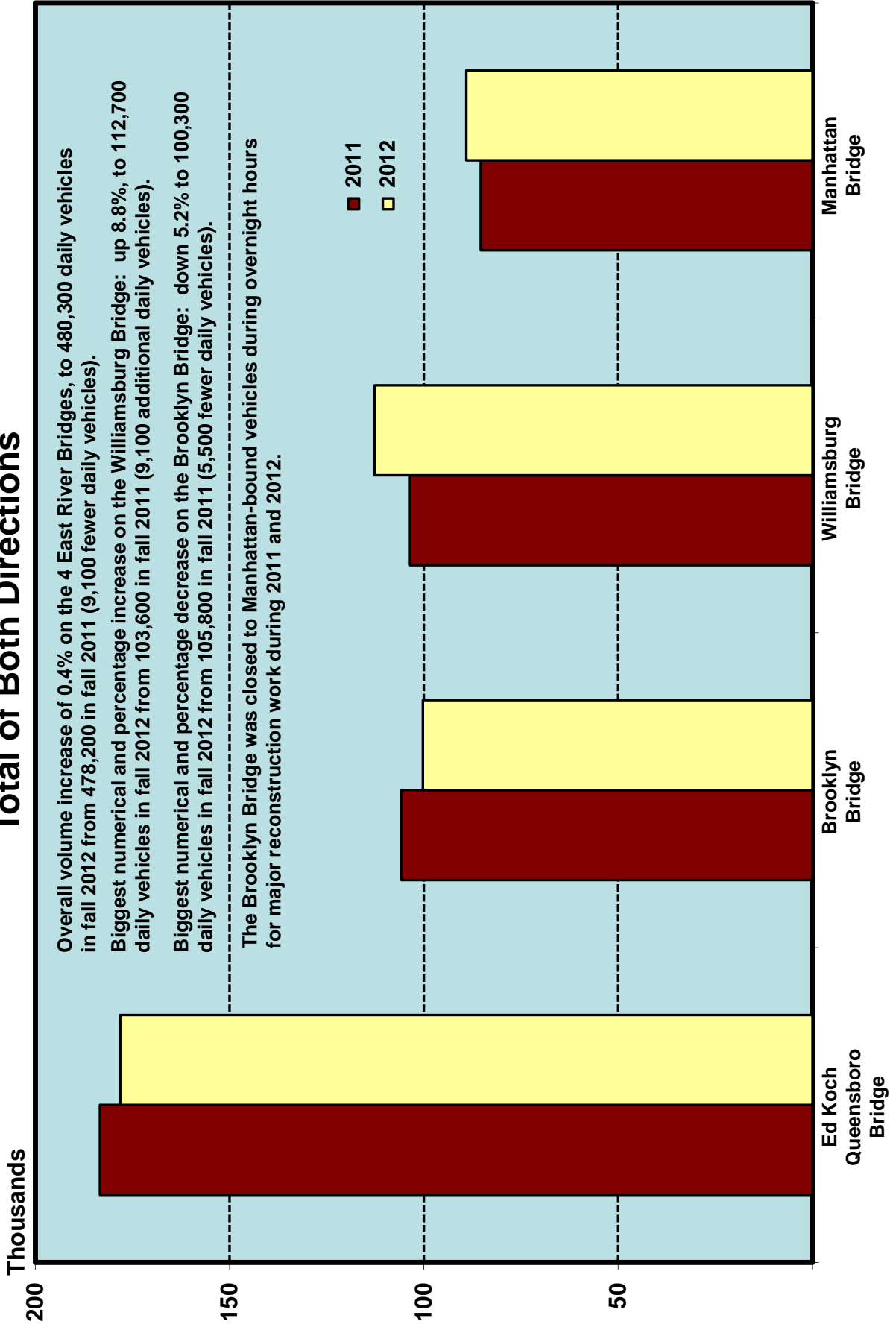
2012 vs. 2011

Total of Both Directions



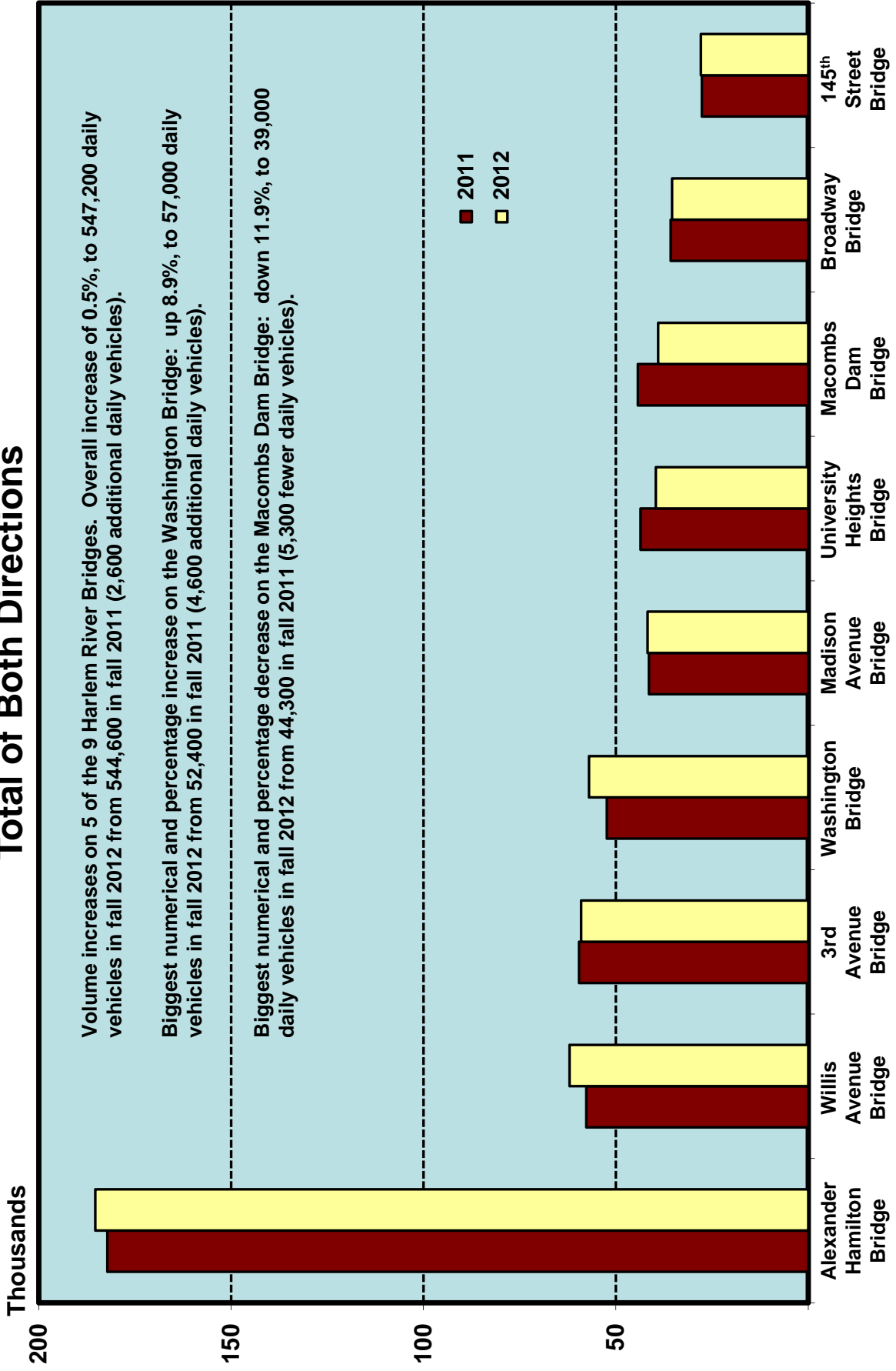
East River Bridges Daily Volumes 2012 vs. 2011

Total of Both Directions



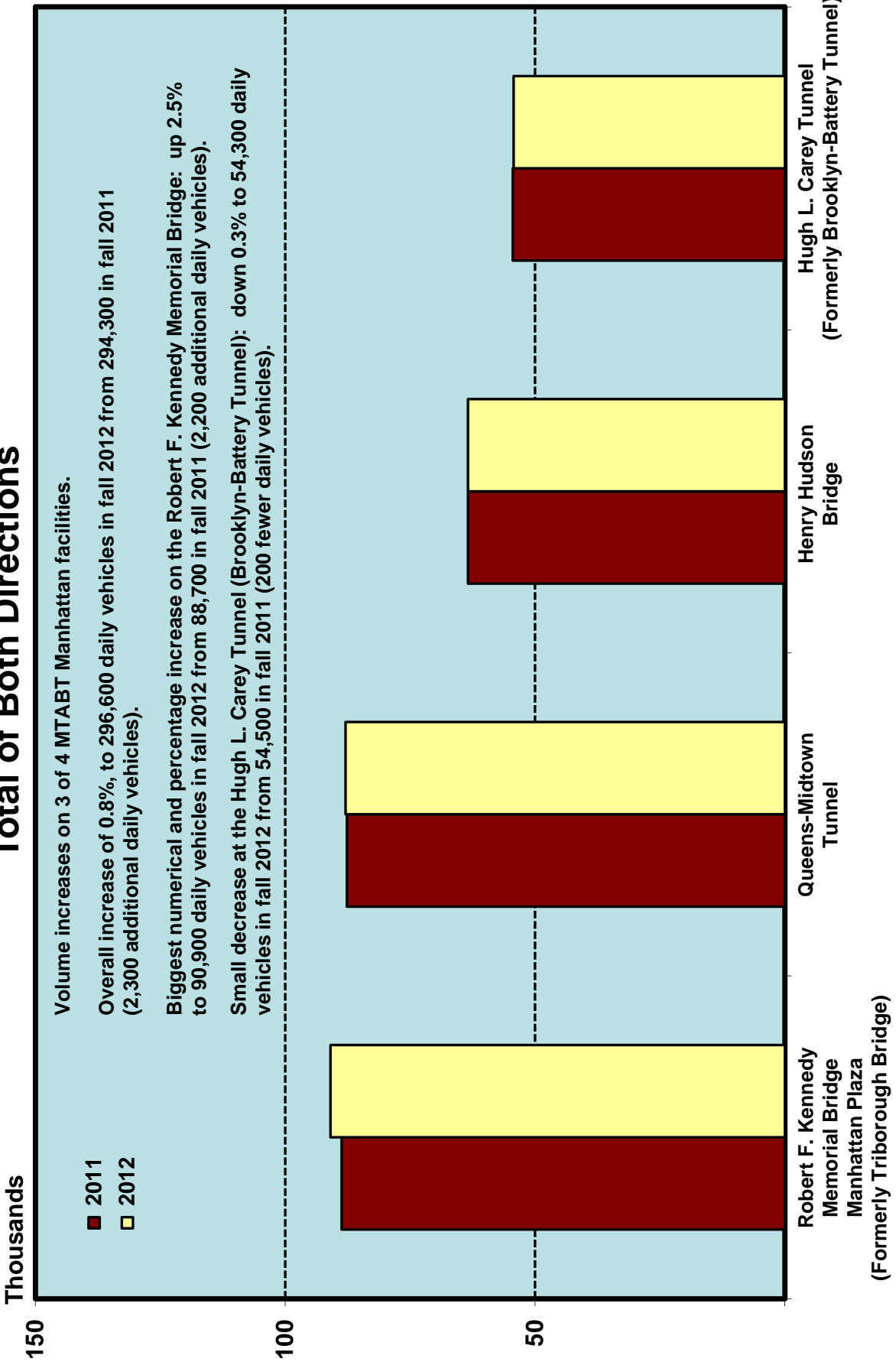
Harlem River Bridges Daily Volumes 2012 vs. 2011

Total of Both Directions



Metropolitan Transportation Authority Bridges & Tunnels (MTABT) Manhattan Facilities Daily Volumes 2012 vs. 2011

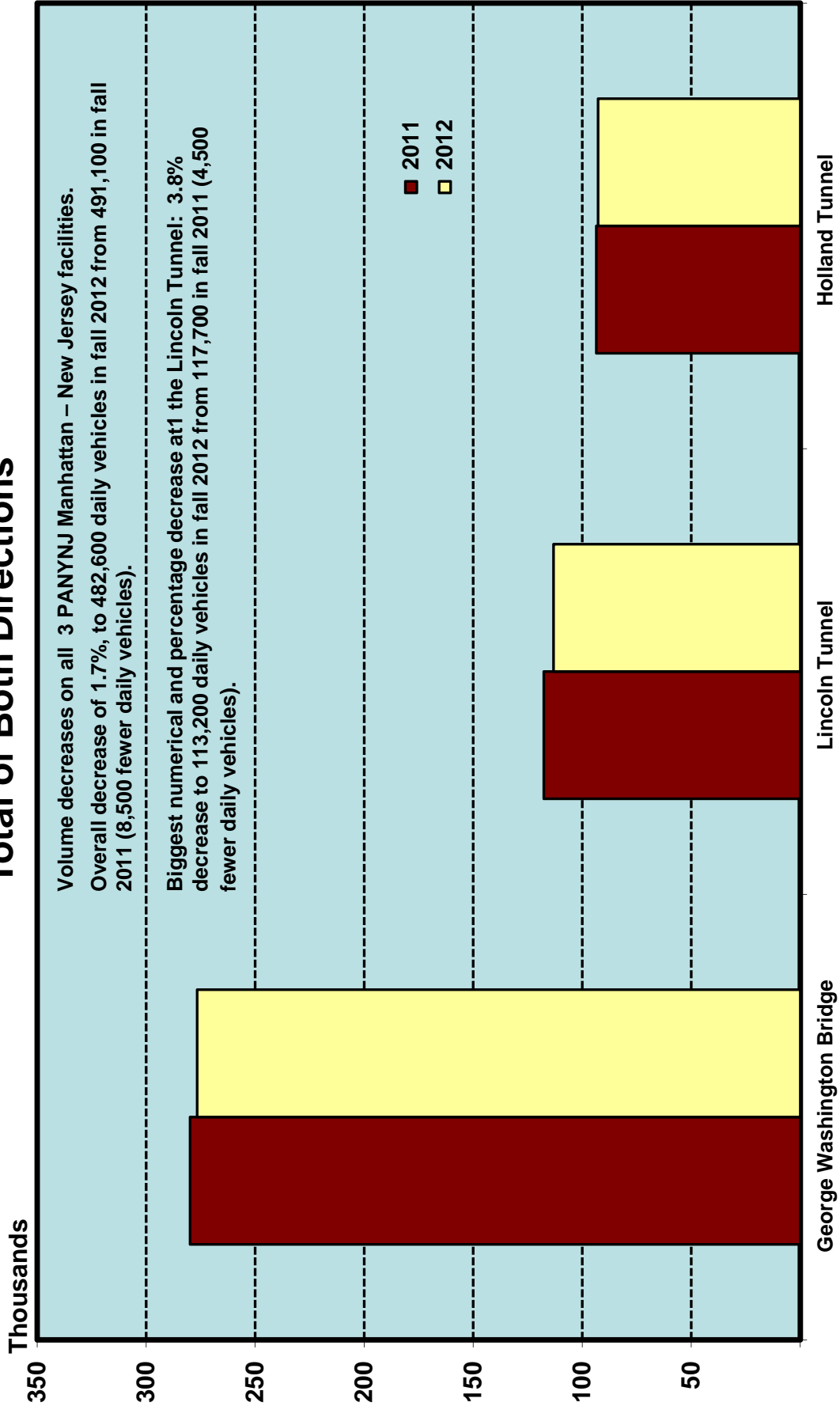
Total of Both Directions



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

2012 vs. 2011

Total of Both Directions



Ten-Year Trends 2002 - 2012



145th Street Bridge

Ten-Year Trends: 2002 - 2012

- In the ten-year period from 2002 to 2012, Manhattan river crossings traffic volume decreased 2.7%, to 1,806,600 daily vehicles from 1,857,000, a decrease of 50,400 daily vehicles.
- Daily vehicle trips entering Manhattan decreased 2.4%, to 909,000 in 2012 from 931,200 in 2002 (22,200 fewer daily vehicles entering Manhattan).
 - Biggest percentage decrease in inbound trips during 10pm-1am: down 5.7% to 66,900 vehicles in 2012 from 70,900 in 2002 (4,000 fewer 10pm-1am entries).
 - Biggest numerical decrease in inbound trips during 7-10am: decrease of 6,000 vehicles, to 181,700 in 2012 from 187,700 in 2002 (-3.2%).
 - Biggest percentage and numerical increase in inbound trips during 4-7am: increase of 2,700 vehicles, to 105,500 in 2012 from 102,800 in 2002 (+2.6%).
- Daily vehicle trips leaving Manhattan decreased 3.0%, to 897,600 in 2012 from 925,800 in 2002 (28,200 fewer daily vehicles leaving Manhattan).
 - Biggest percentage and numerical decrease in outbound trips during 10pm-1am: down 11.8% to 88,200 vehicles in 2012 from 99,900 in 2002 (11,700 fewer trips leaving Manhattan between 10pm-1am).
 - Biggest percentage and numerical increase in outbound trips during 4-7am: increase of 5,000 vehicles, to 69,800 in 2012 from 64,800 in 2002 (+7.7%).
- Vehicle trips on the 13 toll-free East and Harlem River bridges increased 0.8%, to 1,027,500 daily vehicles in 2012 from 1,018,900 in 2002.
 - Greatest volume increase on the Manhattan Bridge over the East River: increase of 22,900 daily vehicles to 89,100 in 2012 from 66,200 in 2002 (+34.7%). During the fall 2002 count, the North Upper Roadway had been closed round-the-clock for reconstruction. In addition, non-essential single-occupant vehicles had been banned from entering Manhattan via the Manhattan Bridge on weekdays between 6-10am; this restriction had been put in place following the events of 9/11/2001.
 - Greatest percentage increase on the Macombs Dam Bridge over the Harlem River: up 106.7% to 39,000 daily vehicles in 2012 from 18,900 in 2002 (20,100 additional daily vehicles). During the fall 2002 count, one lane in each direction on the Macombs Dam Bridge and on the 155th Street viaduct was closed round-the-clock for reconstruction. In addition, the ramp from southbound Major Deegan Expressway to the bridge (Exit 5), and the ramp from the bridge to southbound Major Deegan Expressway, were also closed. Access to and from the bridge via Adam Clayton Powell, Jr. Boulevard and Macombs Place was also closed.
 - Greatest percentage decrease on the 145th Street Bridge over the Harlem River: down 22.0%, to 27,900 daily vehicles in 2012 from 35,800 in 2002 (7,900 fewer daily vehicles). During the fall 2002 count, this 145th Street Bridge was accommodating some of the traffic diverted from the nearby Macombs Dam Bridge where capacity had been reduced due to reconstruction activities during 2002.
 - Greatest numerical decrease on the Willis Avenue Bridge over the Harlem River: decrease of 11,400 daily vehicles to 62,000 in 2012 from 73,400 in 2002 (-15.5%). During the fall 2012 count, this Willis Avenue Bridge was closed between 1:00am and 5:30am Tuesdays through Fridays.

- Traffic volumes on the four MTA Bridges and Tunnels (MTABT) river crossings serving Manhattan decreased 2.8%, to 296,600 daily vehicles in 2012 from 305,300 in 2002 (8,700 fewer daily vehicles).
 - Biggest volume and percentage decrease at the Henry Hudson Bridge: down 10.3% to 63,400 daily vehicles in 2012 from 70,700 in 2002 (7,300 fewer daily vehicles).
 - Greatest volume and percentage increase at the Queens-Midtown Tunnel: up 6.2% to 87,900 daily vehicles in fall 2012 from 82,800 in fall 2002 (5,100 additional daily vehicles).
- Traffic volumes on the three trans-Hudson Port Authority of New York and New Jersey (PANYNJ) river crossings serving Manhattan decreased 9.4%, to 482,500 daily vehicles in 2012 from 532,800 in 2002 (50,300 fewer daily vehicles).
 - Greatest volume decrease on the George Washington Bridge: decrease of 34,100 daily vehicles to 276,600 in fall 2012 from 310,700 in fall 2002 (-11.0%)
 - Greatest percentage decrease at the Lincoln Tunnel: down 12.6% to 113,200 daily vehicles in fall 2012 from 129,500 in fall 2002 (16,300 fewer daily vehicles).
- New York City motor vehicle registrations increased 1.7% to 1,978,400 in 2012 from 1,946,200 in 2002. Manhattan registrations increased 0.3% to 250,500 from 249,700.
- Annual citywide subway ridership increased 17.1% to 1,655,000,000 in 2012 from 1,413,000,000 in 2002, and is now at its highest level since 1950.

Weekday Manhattan Crossings 10-Year Traffic Volume Trends ~ 2002-2012 Both Directions

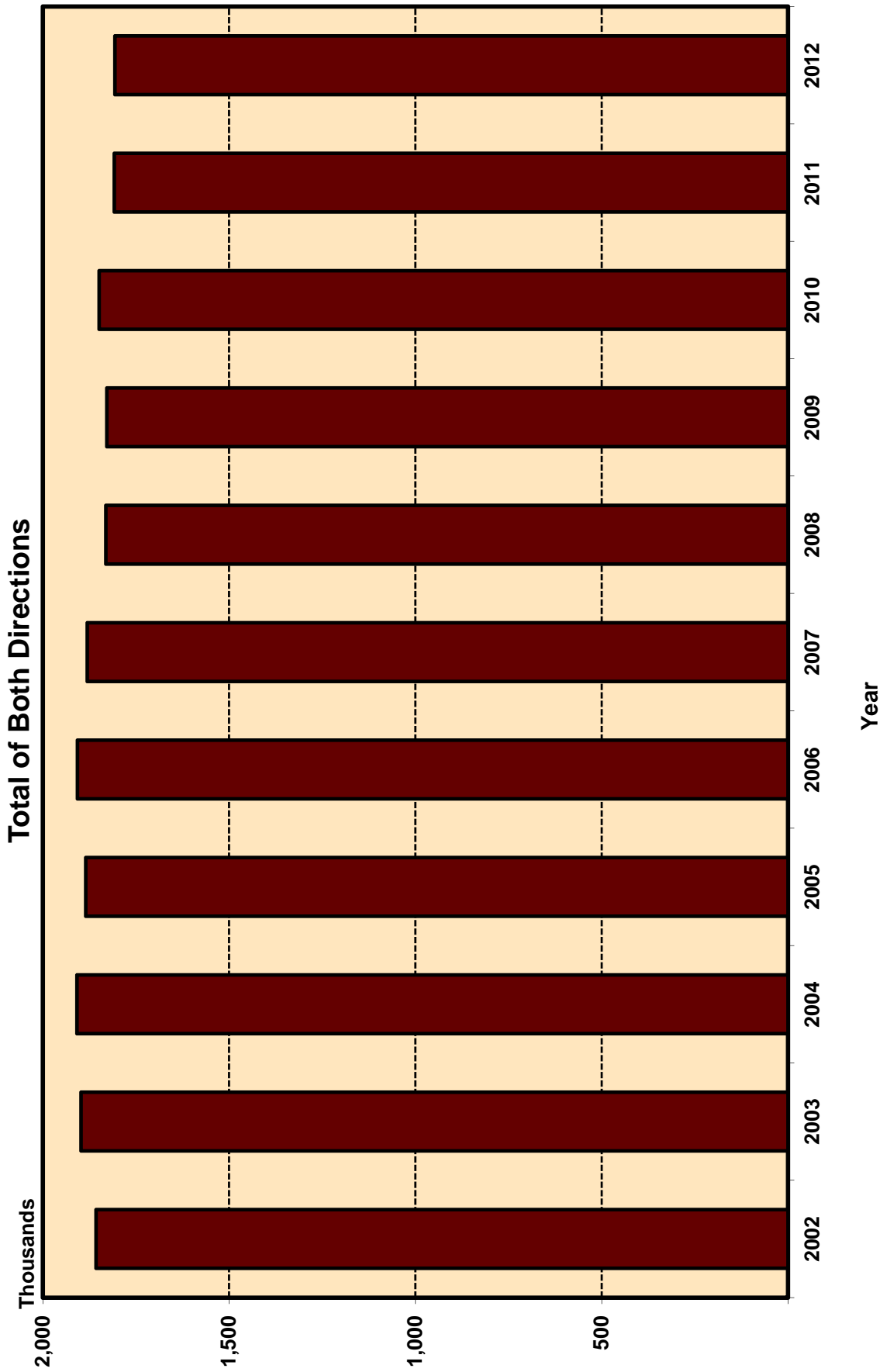
EAST RIVER BRIDGES	Highway Functional Classification	2002	2012	Percent Change
Brooklyn Bridge	Principal Arterial	121,145	100,288	- 17.2 %
Ed Koch Queensboro Bridge *	Principal Arterial	176,419	178,188	1.0 %
Manhattan Bridge	Principal Arterial	66,152	89,087	34.7 %
Williamsburg Bridge	Principal Arterial	103,364	112,696	9.0 %
Total, 4 East River Bridges		467,080	480,259	2.8 %
HARLEM RIVER BRIDGES				
Alexander Hamilton Bridge	Interstate	168,079	185,309	10.3 %
Broadway Bridge	Principal Arterial	38,287	35,411	- 7.5 %
Macombs Dam Bridge	Principal Arterial	18,878	39,020	106.7 %
Madison Avenue Bridge	Principal Arterial	49,487	41,782	- 15.6 %
Third Avenue Bridge	Principal Arterial	58,949	59,053	0.2 %
University Heights Bridge	Principal Arterial	45,311	39,641	- 12.5 %
Washington Bridge	Minor Arterial	63,609	57,011	- 10.4 %
Willis Avenue Bridge	Principal Arterial	73,435	62,062	- 15.5 %
145th Street Bridge	Minor Arterial	35,796	27,918	- 22.0 %
Total, 9 Harlem River Bridges		551,831	547,207	- 0.8 %
MTABT Manhattan Facilities				
Henry Hudson Bridge	Principal Arterial	70,731	63,434	- 10.3 %
Hugh L. Carey Tunnel **	Interstate	56,976	54,299	- 4.7 %
Queens-Midtown Tunnel	Interstate	82,834	87,937	6.2 %
R.F.K. Memorial Bridge Manhattan Plaza ***	Principal Arterial	94,759	90,956	- 4.0 %
Total, 4 MTABT Manhattan Crossings		305,300	296,626	- 2.8 %
PANYNJ Manhattan Facilities				
George Washington Bridge	Interstate	310,771	276,648	- 11.0 %
Holland Tunnel	Interstate	92,557	92,743	0.2 %
Lincoln Tunnel	Principal Arterial	129,511	113,166	- 12.6 %
Total, 3 PANYNJ Manhattan - New Jersey Crossings		532,839	482,557	- 9.4 %
GRAND TOTALS		1,857,050	1,806,649	- 2.7 %

* Queensboro Bridge renamed April 11, 2011.

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

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

Daily Manhattan River Crossings 2002 - 2012

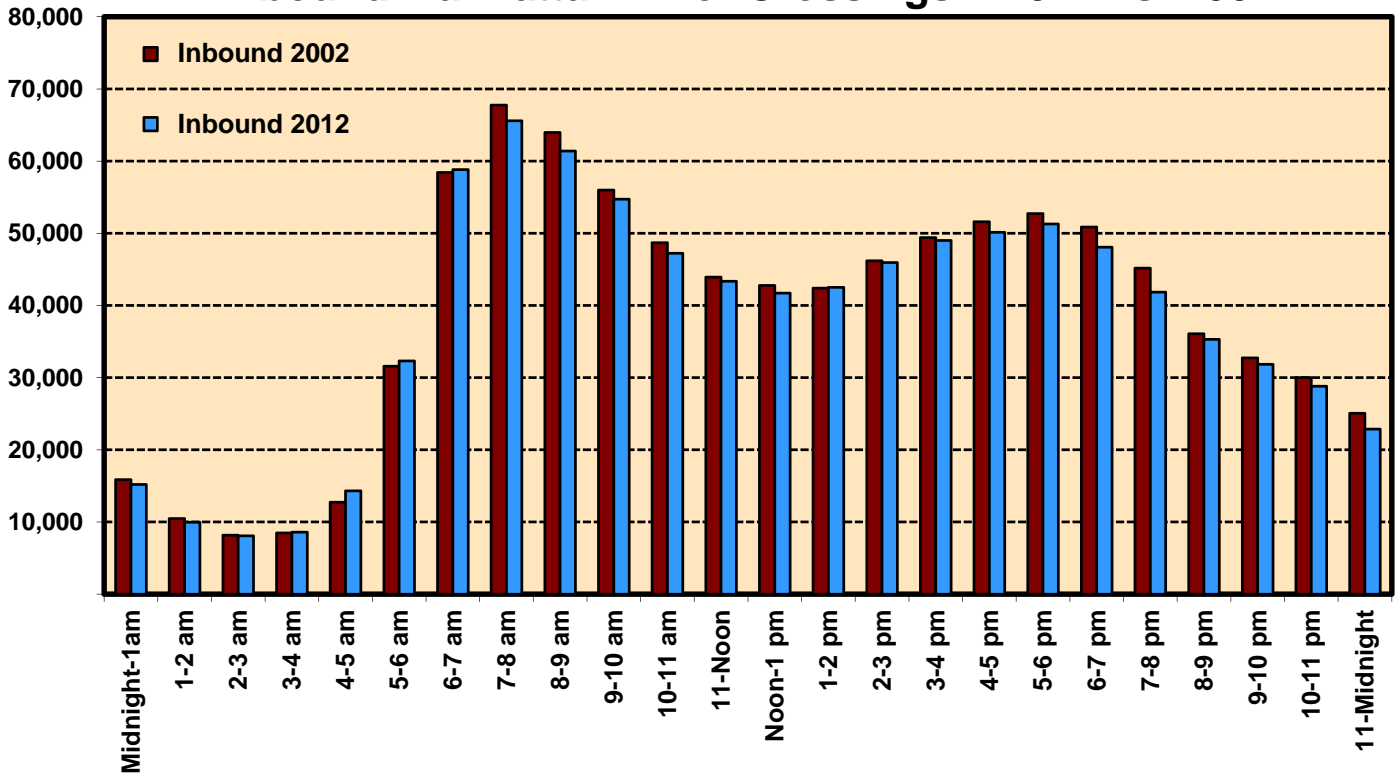


Manhattan River Crossings Hourly Vehicular Volumes 2002 vs 2012

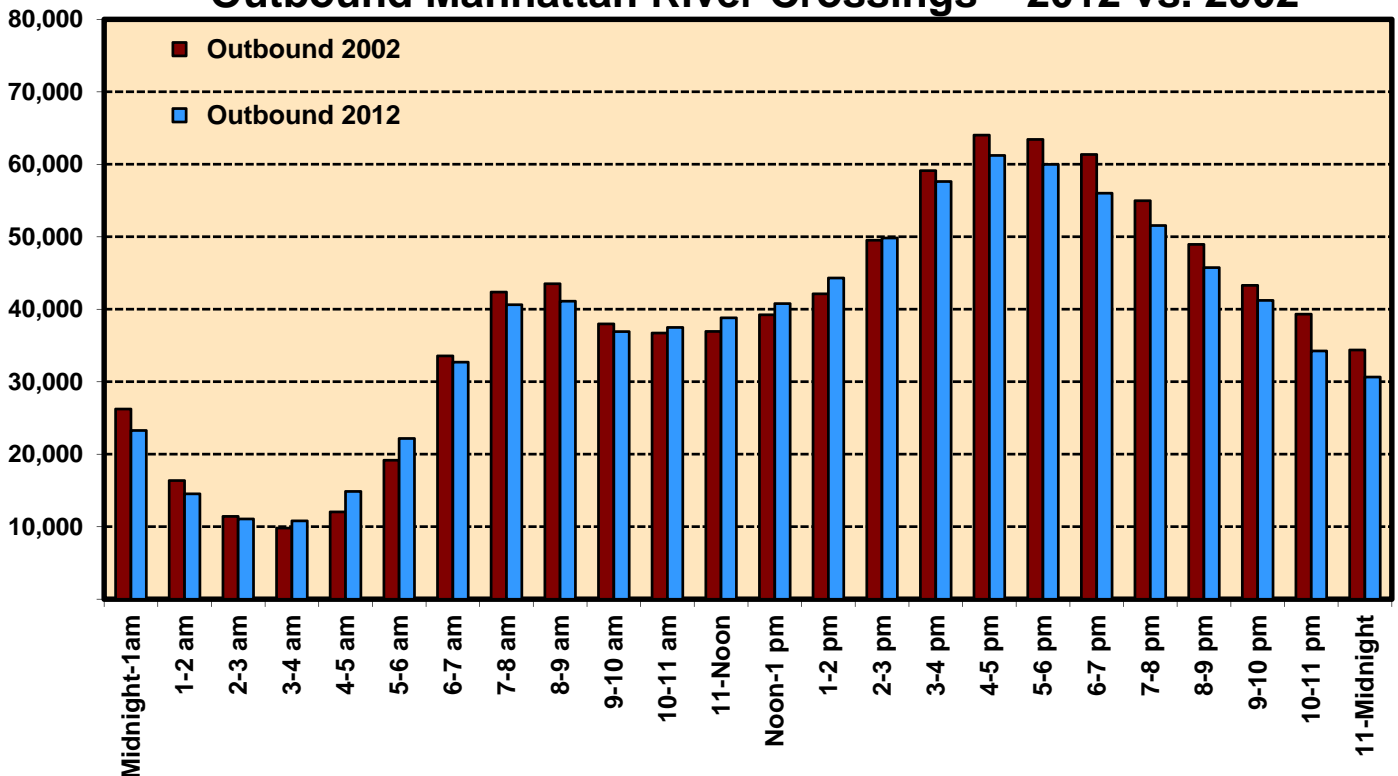
	Inbound			Outbound		
	2002	2012	Percent Change	2002	2012	Percent Change
Mid-1	15,881	15,214	- 4.2 %	26,244	23,271	-11.3 %
1-2 am	10,473	9,965	- 4.9 %	16,361	14,547	-11.1 %
2-3 am	8,177	8,091	- 1.1 %	11,424	11,083	- 3.0 %
3-4 am	8,484	8,591	1.3 %	9,810	10,803	10.1 %
4-5 am	12,744	14,323	12.4 %	12,041	14,879	23.6 %
5-6 am	31,580	32,308	2.3 %	19,168	22,179	15.7 %
6-7 am	58,440	58,832	0.7 %	33,557	32,708	- 2.5 %
7-8 am	67,769	65,593	- 3.2 %	42,361	40,628	- 4.1 %
8-9 am	63,970	61,391	- 4.0 %	43,521	41,106	- 5.5 %
9-10 am	55,982	54,727	- 2.2 %	37,983	36,921	- 2.8 %
10-11 a	48,702	47,235	- 3.0 %	36,716	37,504	2.1 %
11-Noon	43,936	43,350	- 1.3 %	36,934	38,827	5.1 %
Noon-1	42,780	41,717	- 2.5 %	39,232	40,779	3.9 %
1-2 pm	42,397	42,518	0.3 %	42,132	44,309	5.2 %
2-3 pm	46,195	45,952	- 0.5 %	49,521	49,825	0.6 %
3-4 pm	49,414	49,018	- 0.8 %	59,119	57,619	- 2.5 %
4-5 pm	51,603	50,133	- 2.8 %	64,019	61,225	- 4.4 %
5-6 pm	52,739	51,283	- 2.8 %	63,440	59,977	- 5.5 %
6-7 pm	50,862	48,074	- 5.5 %	61,359	56,021	- 8.7 %
7-8 pm	45,166	41,840	- 7.4 %	54,972	51,564	- 6.2 %
8-9 pm	36,097	35,318	- 2.2 %	48,939	45,750	- 6.5 %
9-10 pm	32,749	31,848	- 2.8 %	43,292	41,234	- 4.8 %
10-11 p	30,004	28,805	- 4.0 %	39,322	34,241	-12.9 %
11-Mid	25,061	22,868	- 8.8 %	34,378	30,655	-10.8 %
Totals	931,205	908,994	- 2.4 %	925,845	897,655	- 3.0 %
1-4am	27,134	26,647	- 1.8 %	37,595	36,433	- 3.1 %
4-7am	102,764	105,463	2.6 %	64,766	69,766	7.7 %
7-10am	187,721	181,711	- 3.2 %	123,865	118,655	- 4.2 %
10am-1pm	135,418	132,302	- 2.3 %	112,882	117,110	3.7 %
1-4pm	138,006	137,488	- 0.4 %	150,772	151,753	0.7 %
4-7pm	155,204	149,490	- 3.7 %	188,818	177,223	- 6.1 %
7-10pm	114,012	109,006	- 4.4 %	147,203	138,548	- 5.9 %
10pm-1am	70,946	66,887	- 5.7 %	99,944	88,167	-11.8 %
7am-7pm	616,349	600,991	- 2.5 %	576,337	564,741	- 2.0 %
6-10am	246,161	240,543	- 2.3 %	157,422	151,363	- 3.8 %
3-7pm	204,618	198,508	- 3.0 %	247,937	234,842	- 5.3 %
6am-7pm	674,789	659,823	- 2.2 %	609,894	597,449	- 2.0 %

Hourly Vehicle Volumes

Inbound Manhattan River Crossings ~ 2012 vs. 2002

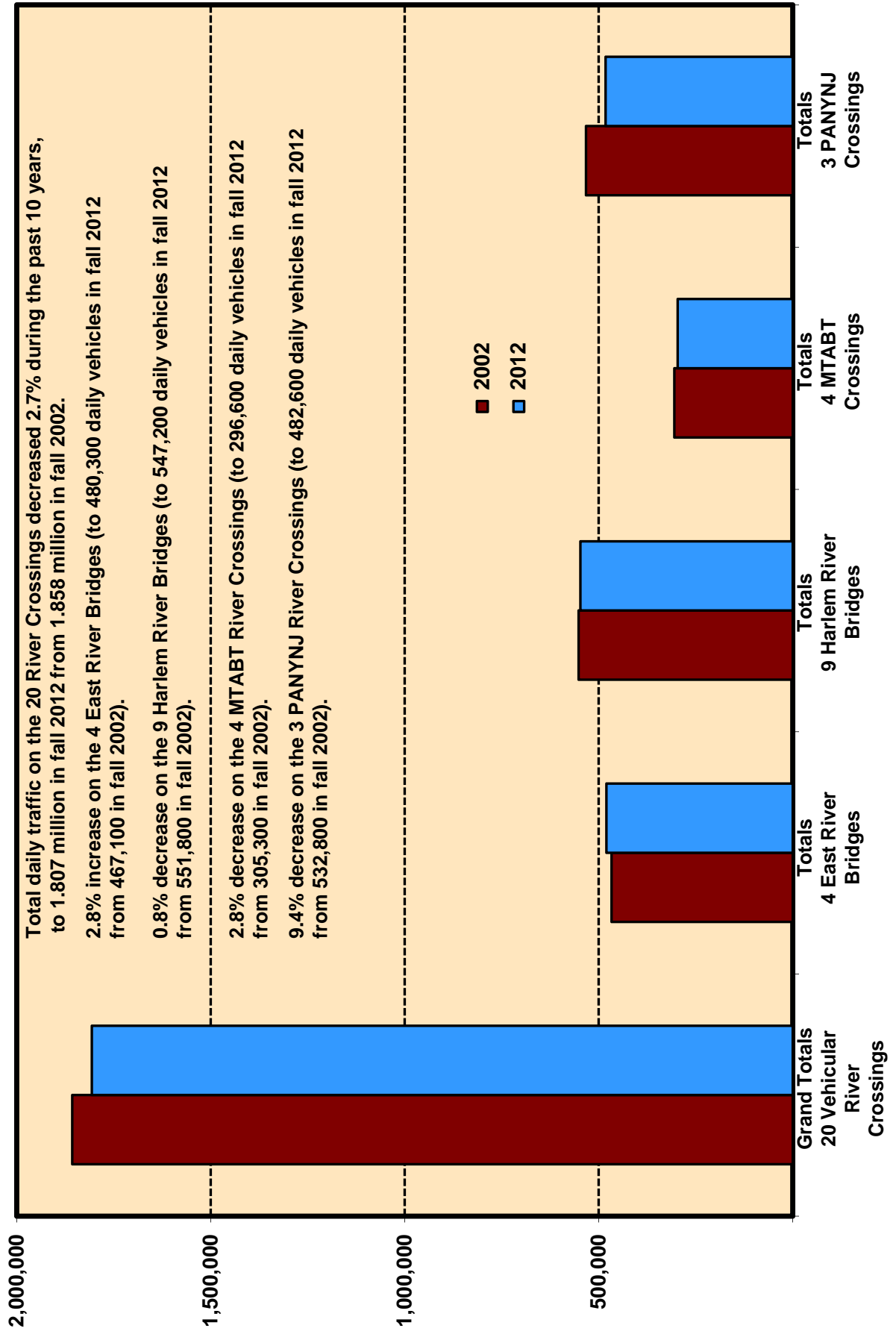


Outbound Manhattan River Crossings ~ 2012 vs. 2002



10-Year Volume Changes ~ 2002 vs. 2012

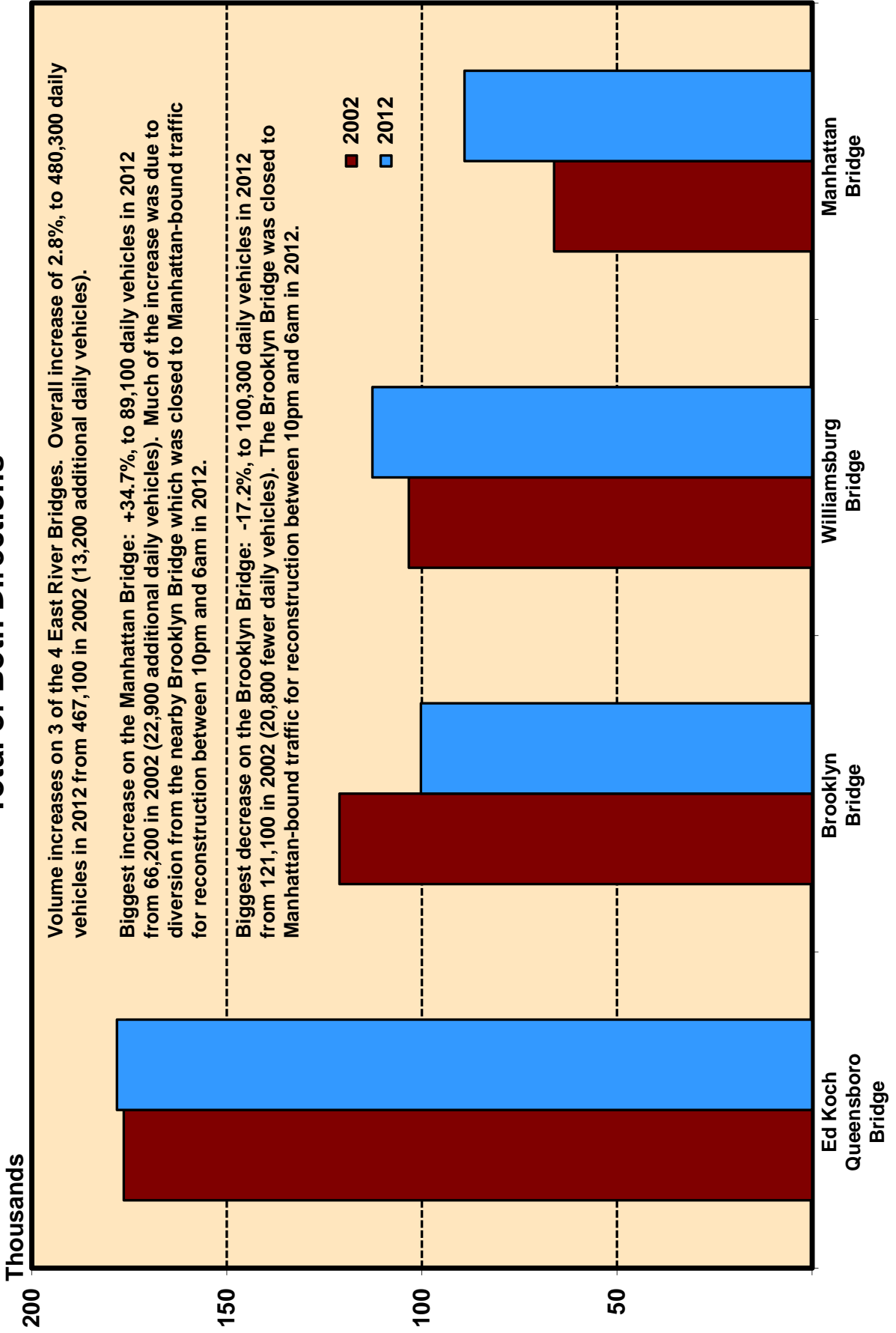
Manhattan River Crossings Daily Volumes ~ Total of Both Directions



10-Year Volume Changes ~ 2002 – 2012

East River Bridges Daily Volumes

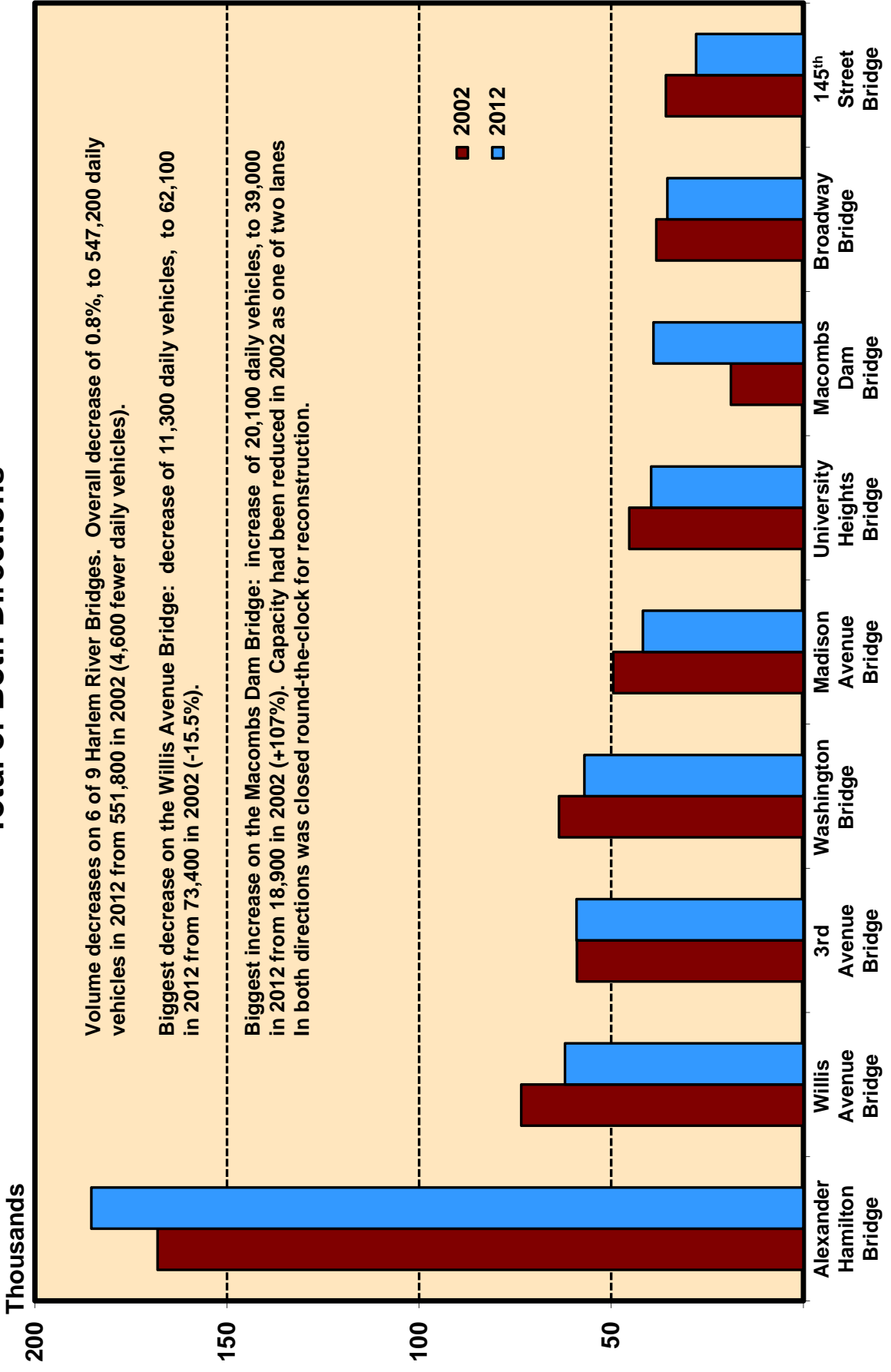
Total of Both Directions



10-Year Volume Changes ~ 2002 – 2012

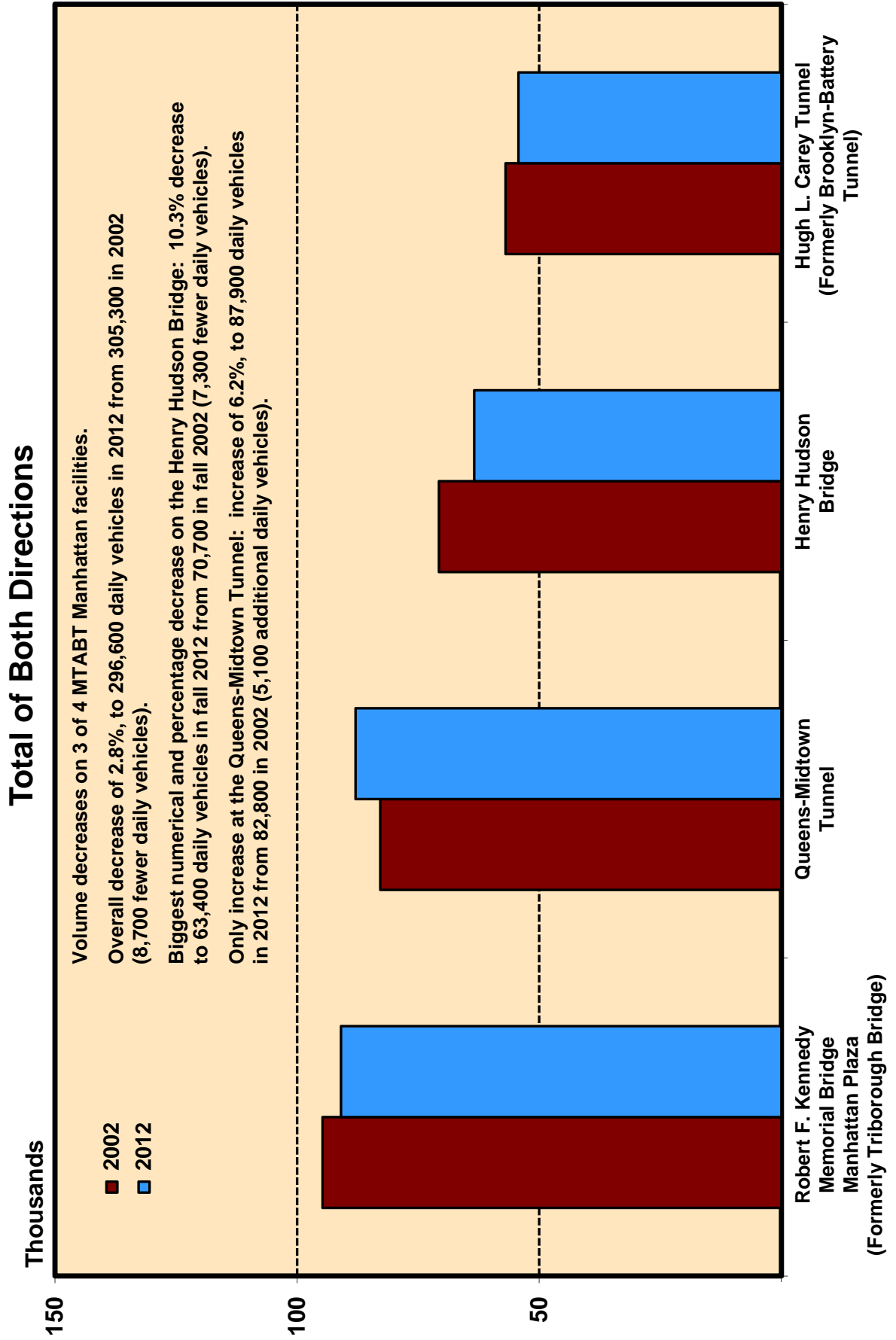
Harlem River Bridges Daily Volumes

Total of Both Directions



10-Year Volume Changes ~ 2002 – 2012

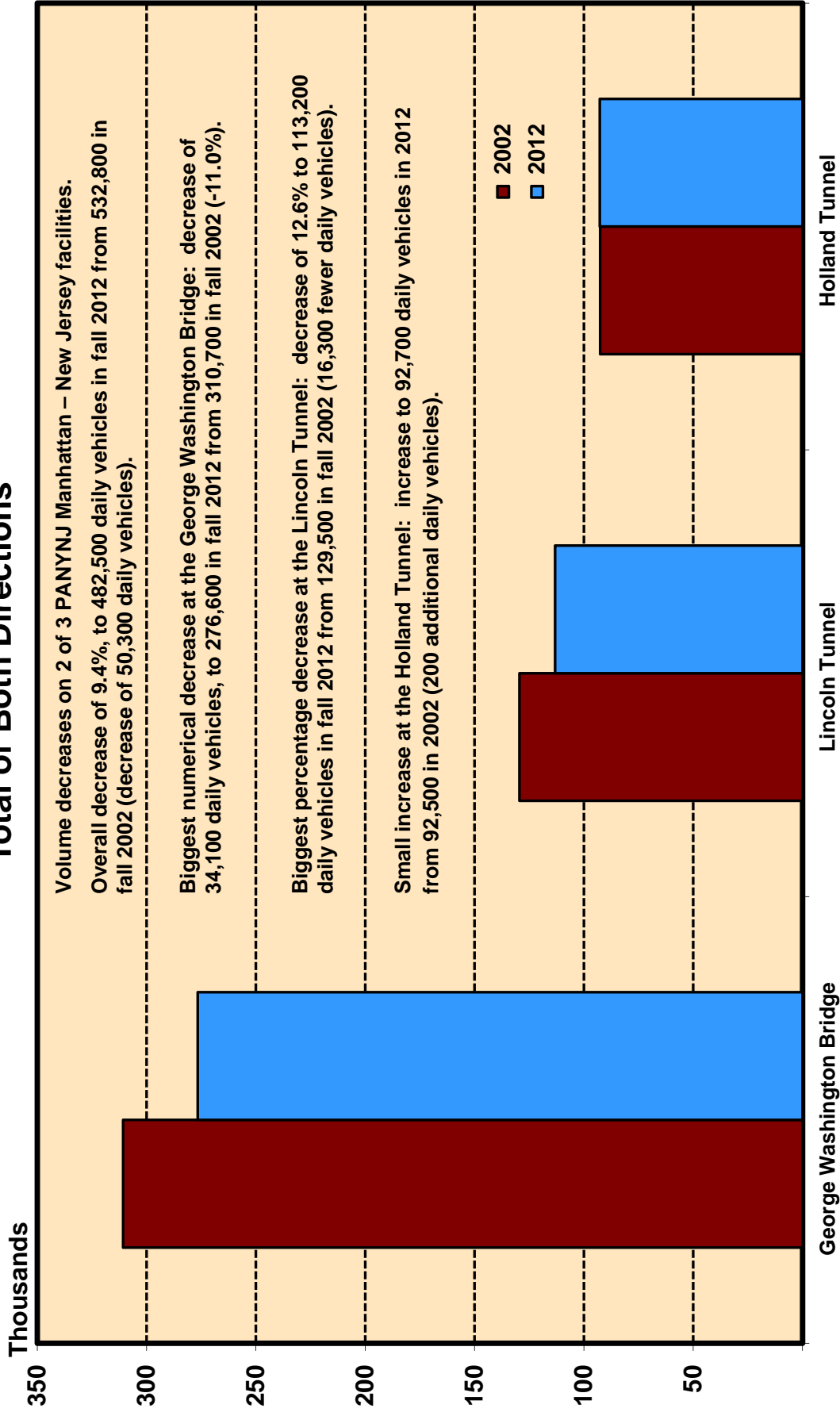
Metropolitan Transportation Authority Bridges & Tunnels (MTABT) Manhattan Facilities Daily Volumes



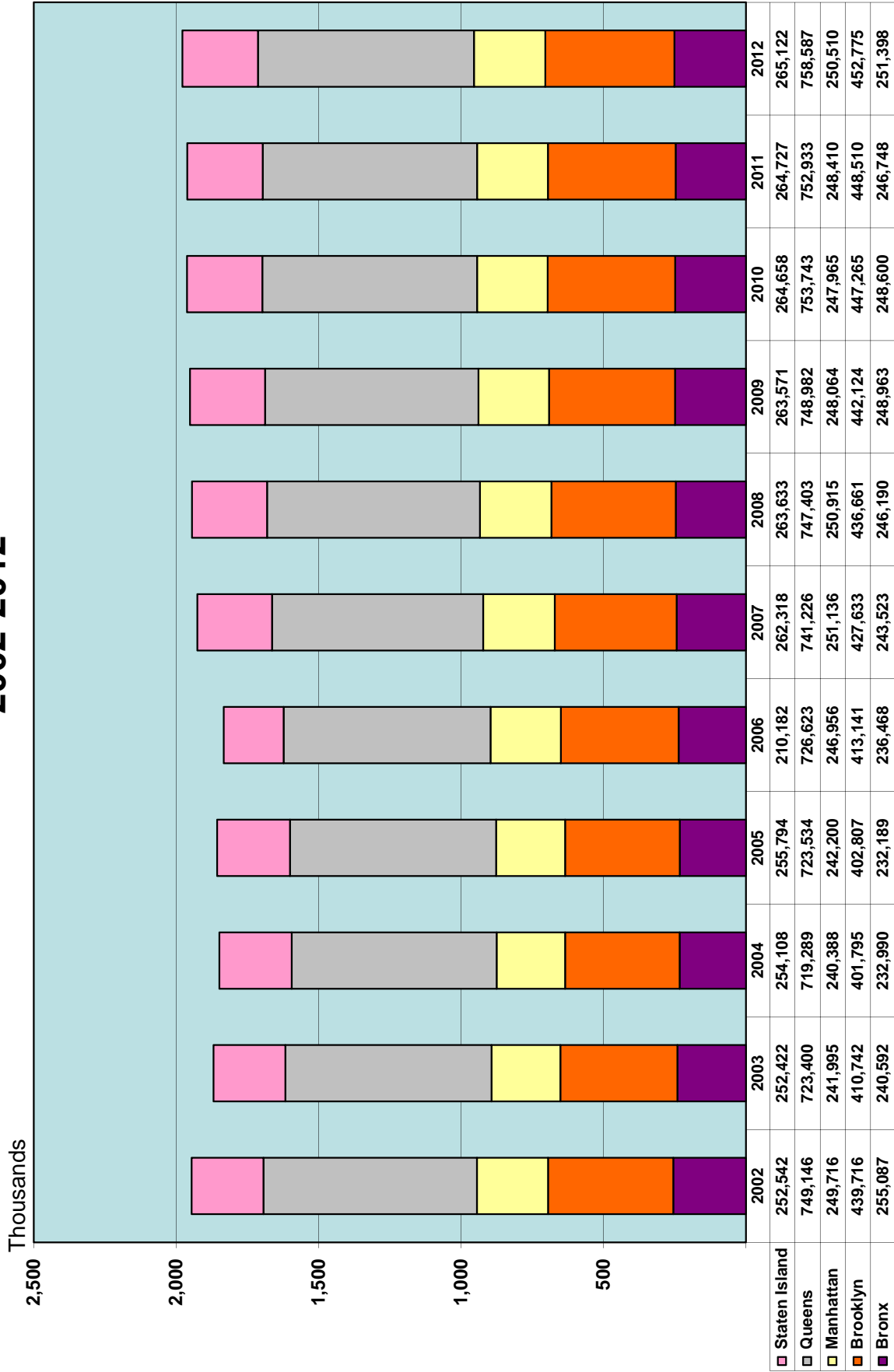
10-Year Volume Changes ~ 2002 – 2012

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

Total of Both Directions



New York City Motor Vehicle Registrations 2002-2012



Historic Trends



**145th Street 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 2012, it stood at 1,806,600 daily trips, nearly three times the 1948 volume.

1948 – 1962

- Between 1948 and 1962, daily traffic to and from Manhattan increased 66.4%, to 1,115,100 daily river crossings in 1962 from 670,000 in 1948, an increase of 445,100 daily vehicles.
- Large increases in daily traffic occurred at the following facilities.
 - George Washington Bridge (Hudson River between Manhattan and New Jersey): up 163% to 111,100 daily vehicles in 1962 from 42,300 in 1948 (68,800 additional daily vehicles).
 - Lincoln Tunnel between Manhattan and New Jersey: up 163% to 81,000 daily vehicles in 1962 from 30,800 in 1948 (50,200 additional daily vehicles).
 - Queens-Midtown Tunnel (East River between Manhattan and Queens): up 146% to 65,000 daily vehicles from 26,400 (38,600 additional daily vehicles).
 - Robert F. Kennedy Memorial Bridge Manhattan Plaza (Harlem River between Manhattan and Bronx/Queens): up 128% to 60,300 daily vehicles from 26,500 (33,800 additional daily vehicles).
 - Brooklyn Bridge (East River between Manhattan and Brooklyn): up 113% to 78,800 daily vehicles from 37,000 (41,800 additional daily vehicles).
 - Washington Bridge (Harlem River between Manhattan and Bronx): up 91% to 56,100 daily vehicles from 29,400 (26,700 additional daily vehicles).
 - Williamsburg Bridge (East River between Manhattan and Brooklyn): up 74% to 81,900 daily vehicles from 47,100 (34,800 additional daily vehicles).
 - Willis Avenue Bridge (Harlem River between Manhattan and Bronx): up 89% to 55,900 daily vehicles from 29,600 (26,300 additional daily vehicles).
 - Third Avenue Bridge (Harlem River between Manhattan and Bronx): up 71% to 53,600 daily vehicles from 31,400 (22,200 additional daily vehicles).
- The only decreases from 1948 to 1962 occurred at the following two facilities.
 - Manhattan Bridge (East River between Manhattan and Brooklyn): down 40.7% to 51,400 daily vehicles in 1962 from 86,700 in 1948 (35,300 fewer daily vehicles).
 - Madison Avenue Bridge (Harlem River between Manhattan and Bronx): down 6.7% to 25,400 daily vehicles in 1962 from 27,200 in 1948 (1,800 fewer daily vehicles).

1962 – 1972

- From 1962 to 1972, daily river crossings to and from Manhattan increased 29.5%, to 1,444,100 daily vehicles in 1972 from 1,115,100 in 1962, an increase of 329,000 daily vehicles.

- Large increases in daily traffic occurred at the following facilities.
 - George Washington Bridge between Manhattan and New Jersey: up 99% to 221,200 daily vehicles in 1972 from 111,100 in 1962 (110,100 additional daily vehicles). The lower level was opened in 1962.
 - Robert F. Kennedy Memorial Bridge Manhattan Plaza between Manhattan and Bronx/Queens: up 32.9% to 80,100 daily vehicles from 60,300 (19,800 additional daily vehicles).
 - Brooklyn Bridge between Manhattan and Brooklyn: up 31.7% to 103,800 daily vehicles from 78,800 (25,000 additional daily vehicles).
 - Ed Koch Queensboro Bridge between Manhattan and Queens: up 28.8% to 136,400 daily vehicles from 105,900 (30,500 additional daily vehicles).
 - Manhattan Bridge between Manhattan and Brooklyn: up 43.4% to 73,800 daily vehicles from 51,400 (22,400 additional daily vehicles).
- Large decreases in daily traffic occurred at the following facilities.
 - Washington Bridge between Manhattan and Bronx: down 34.4% to 36,800 daily vehicles in 1972 from 56,100 in 1962 (19,300 fewer daily vehicles).
 - Henry Hudson Bridge between Manhattan and Bronx: down 23.1% to 45,800 daily vehicles from 59,500 (13,700 fewer daily vehicles).

1972 – 1982

- From 1972 to 1982, daily river crossings to and from Manhattan increased 8.9%, to 1,573,000 daily vehicles in 1982 from 1,444,100 in 1972, an increase of 128,900 daily vehicles.
- The largest increases in daily traffic occurred at the following facilities.
 - George Washington Bridge between Manhattan and New Jersey: up 12.7% to 249,300 daily vehicles in 1982 from 221,200 in 1972 (28,100 additional daily vehicles).
 - Lincoln Tunnel between Manhattan and New Jersey: up 15.1% to 110,500 daily vehicles from 96,000 (14,500 additional daily vehicles).
 - Alexander Hamilton Bridge (Harlem River between Manhattan and Bronx): up 9.8% to 156,000 daily vehicles from 142,100 (13,900 additional daily vehicles).
 - Manhattan Bridge between Manhattan and Brooklyn: up 18.9% to 87,800 daily vehicles from 73,800 (14,000 additional daily vehicles).
- The most significant decrease occurred at the Henry Hudson Bridge (Harlem River between Manhattan and Bronx): down 32.5% to 30,900 daily vehicles in 1982 from 45,800 in 1972 (14,900 fewer daily vehicles).

1982 – 1992

- From 1982 to 1992, daily river crossings to and from Manhattan increased 11.7%, to 1,757,600 daily vehicles in 1992 from 1,573,000 in 1982, an increase of 184,600 daily vehicles.
- Large increases in daily traffic occurred at the following facilities.
 - Holland Tunnel between Manhattan and New Jersey: up 21.9% to 90,200 daily vehicles from 74,000 (16,200 additional daily vehicles).

- Henry Hudson Bridge between Manhattan and Bronx: up 90% to 58,700 daily vehicles from 30,900 (27,800 additional daily vehicles).
 - Alexander Hamilton Bridge between Manhattan and Bronx: up 13.0% to 176,300 daily vehicles from 156,000 (20,300 additional daily vehicles).
 - Williamsburg Bridge between Manhattan and Brooklyn: up 23.9% to 98,300 daily vehicles from 79,400 (18,900 additional daily vehicles).
 - Brooklyn Bridge between Manhattan and Brooklyn: up 13.2% to 125,600 daily vehicles from 111,000 (14,600 additional daily vehicles).
 - University Heights Bridge between Manhattan and Bronx: up 54.4% to 39,200 daily vehicles from 25,400 (13,800 additional daily vehicles).
- The most significant decrease occurred at the Manhattan Bridge between Manhattan and Brooklyn: down 11.0% to 78,100 daily vehicles in 1992 from 87,800 in 1982 (9,700 fewer daily vehicles).

1992 – 2002

- From 1992 to 2002, daily river crossings to and from Manhattan increased 5.7%, to 1,857,100 daily vehicles in fall 2002 from 1,757,600 in fall 1992, an increase of 99,500 daily vehicles.
- Large increases in daily traffic occurred at the following facilities.
 - George Washington Bridge between Manhattan and New Jersey: up 16.0% to 310,800 daily vehicles in 2002 from 268,000 in 1992 (42,800 additional daily vehicles).
 - Ed Koch Queensboro Bridge between Manhattan and Queens: up 25.1% to 176,400 daily vehicles from 141,100 (35,300 additional daily vehicles). Throughout 1992, two lower inner roadway lanes were closed round-the-clock.
 - Madison Avenue Bridge between Manhattan and Bronx: up 50.4% to 49,500 daily vehicles in 2002 from 32,900 in 1992 (16,600 additional daily vehicles). In 2002, this bridge was accommodating traffic diverted from the nearby Macombs Dam Bridge which was subject to ongoing lane closures due to major reconstruction.
 - Washington Bridge between Manhattan and Bronx: up 22.5% to 63,600 daily vehicles from 51,900 (11,700 additional daily vehicles).
 - Henry Hudson Bridge between Manhattan and Bronx: up 20.6% to 70,700 daily vehicles from 58,700 (12,000 additional daily vehicles).
- Large decreases in daily traffic occurred at the following facilities.
 - Macombs Dam Bridge between Manhattan and Bronx: down 55.1% to 18,900 daily vehicles in 2002 from 42,000 in 1992 (23,100 fewer daily vehicles). This bridge had a reduced capacity during 2002 as it was undergoing reconstruction.
 - Manhattan Bridge between Manhattan and Brooklyn: down 15.3% to 66,100 daily vehicles from 78,100 (12,000 fewer daily vehicles).

1948 – 2012

- From 1948 to 2012, Manhattan vehicular river crossings increased 170%, to 1,806,600 vehicles per day in 2012 from 670,000 in 1948 (1,136,600 additional daily motor vehicle trips).
 - Increases occurred on all twenty Manhattan river crossings.

- 89% increase on the four toll-free East River bridges (to 480,300 daily vehicles in 2012 from 254,100 in 1948).
 - 164% on the nine toll-free Harlem River bridges (to 547,200 daily vehicles from 207,200).
 - 219% on MTABT's four tolled crossings (to 296,600 daily vehicles from 93,000).
 - 317% increase on PANYNJ's three trans-Hudson facilities (to 482,600 daily vehicles in 2012 from 115,800 in 1948).
- Large increases in daily traffic occurred at the following individual facilities.
 - George Washington Bridge: up six fold to 276,600 daily vehicles in 2012 from 42,300 in 1948.
 - Brooklyn Bridge: up 171% to 100,300 daily vehicles from 37,000.
 - Lincoln Tunnel: up 267% to 113,200 daily vehicles from 30,900.
 - Queens-Midtown Tunnel: up 232% to 87,900 daily vehicles from 26,500.
 - Robert F. Kennedy Memorial Bridge Manhattan Plaza: up 244% to 91,000 daily vehicles from 26,500.
 - Williamsburg Bridge: up 139% to 112,700 daily vehicles from 47,100.
 - During the same 64-year period, annual citywide subway ridership declined by 18.5%, to 1,655 million in 2012 from 2,031 million in 1948.

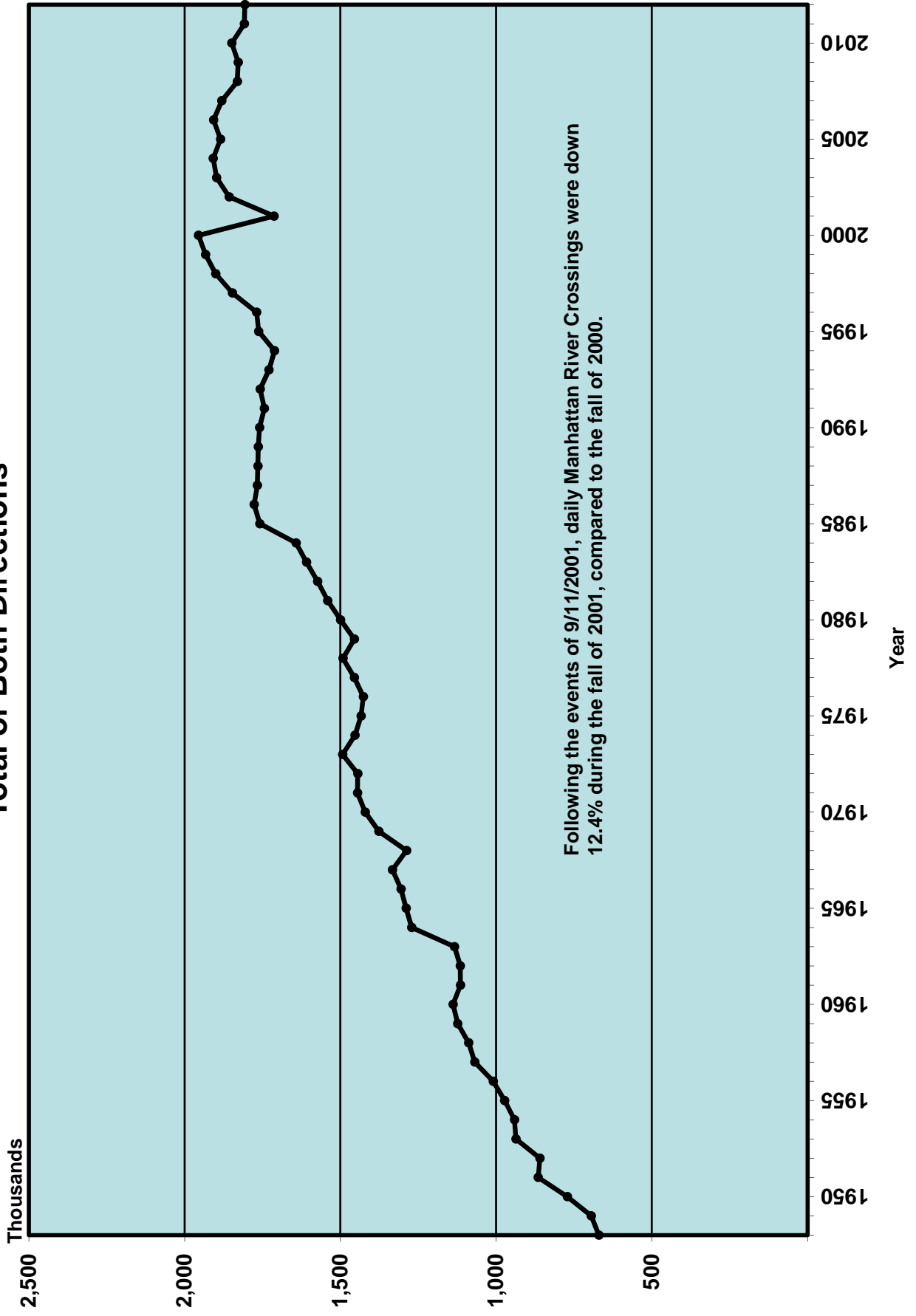
1992 – 2012

- Over the past two decades, the long term trends of rapidly increasing Manhattan vehicular river crossings and declining subway ridership, which began after the end of World War II, have changed markedly.
 - From 1948 to 1992, Manhattan River Crossings increased 162.3%, to 1,758 million daily vehicles in 1992 from 670 thousand in 1948. During the same period, annual subway ridership decreased 50.9%, to 997 million annual riders from 2,031 million.
 - From 1992 to 2012, Manhattan River Crossings increased just 2.8%, to 1.807 million daily vehicles in 2012 from 1.758 million in 1992. Concurrently, annual subway ridership increased at the much faster rate of 66.0%, to 1,655 million annual riders in 2012 from 997 in 1992.
 - Subway ridership in 2012 was the highest since 1950.

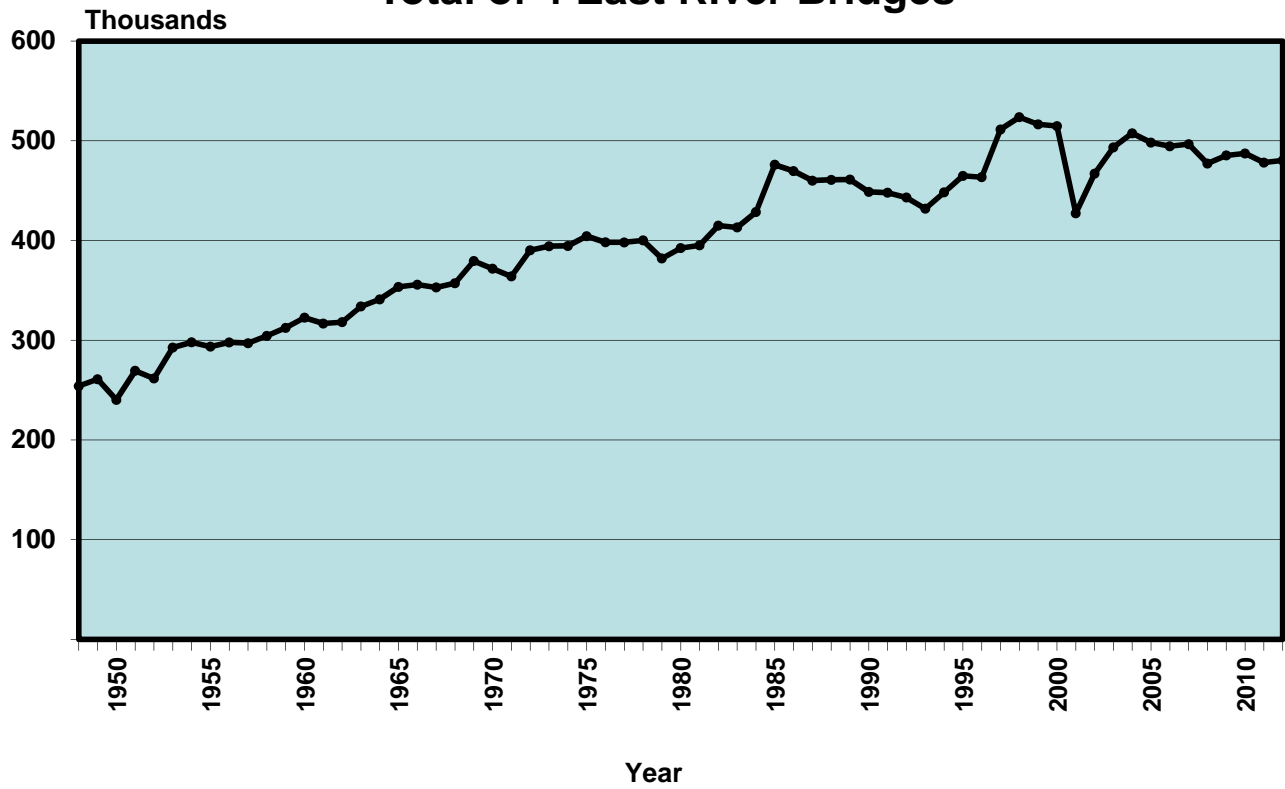
**Total Manhattan Crossings
Average Daily Traffic Volumes
1948 - 2012**

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

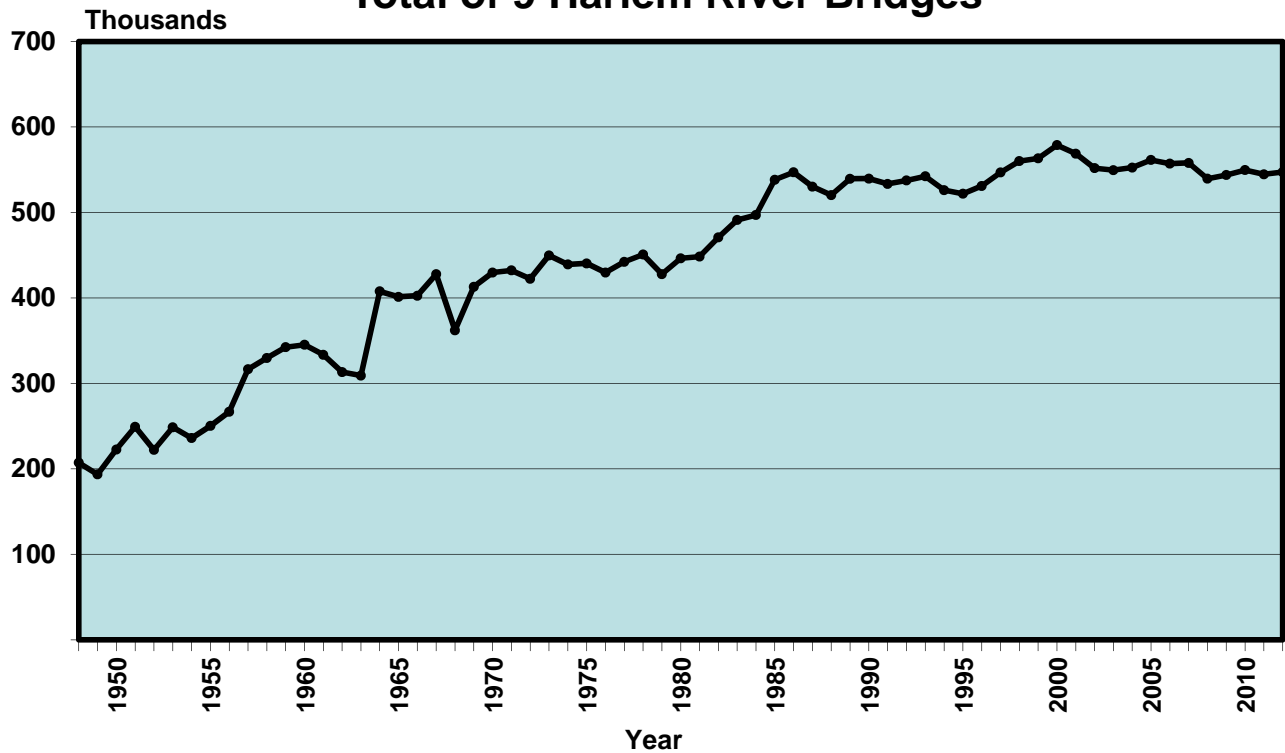
Average Daily Manhattan River Crossings Total of Both Directions



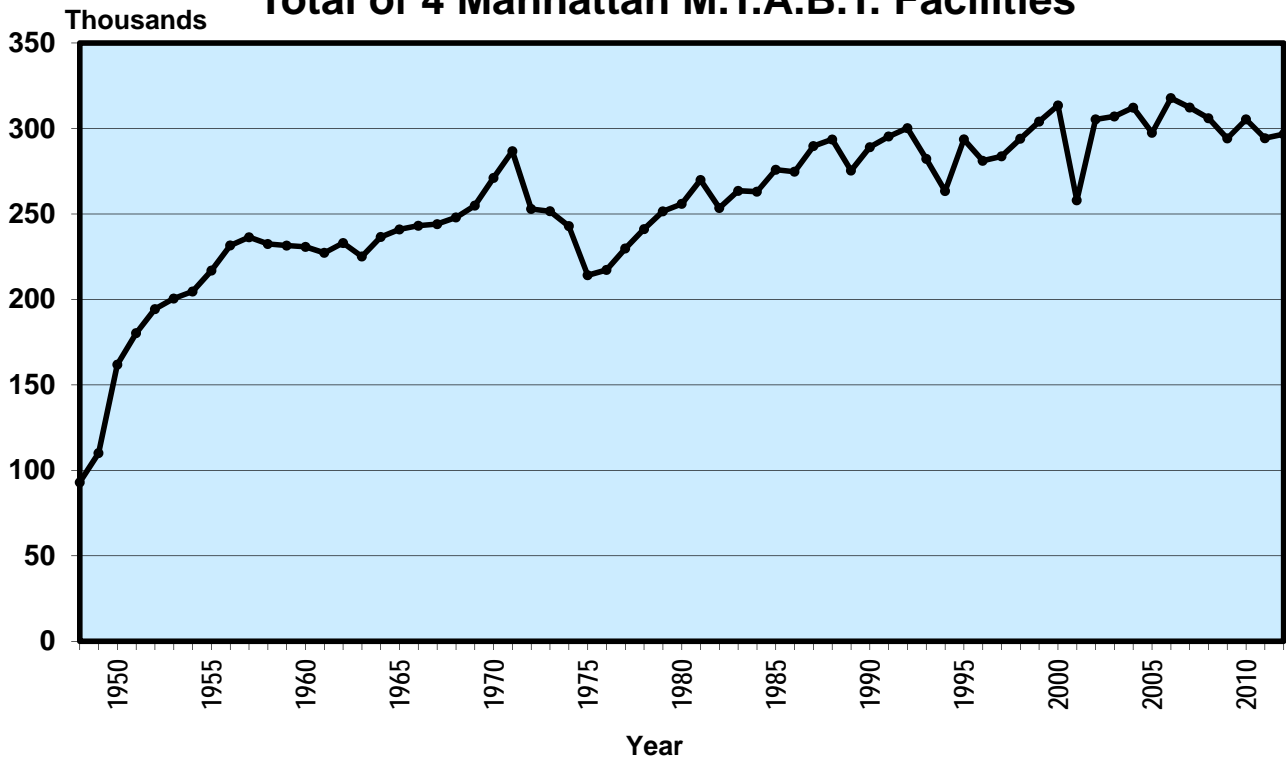
Average Daily Traffic Volumes ~ Total of Both Directions Total of 4 East River Bridges



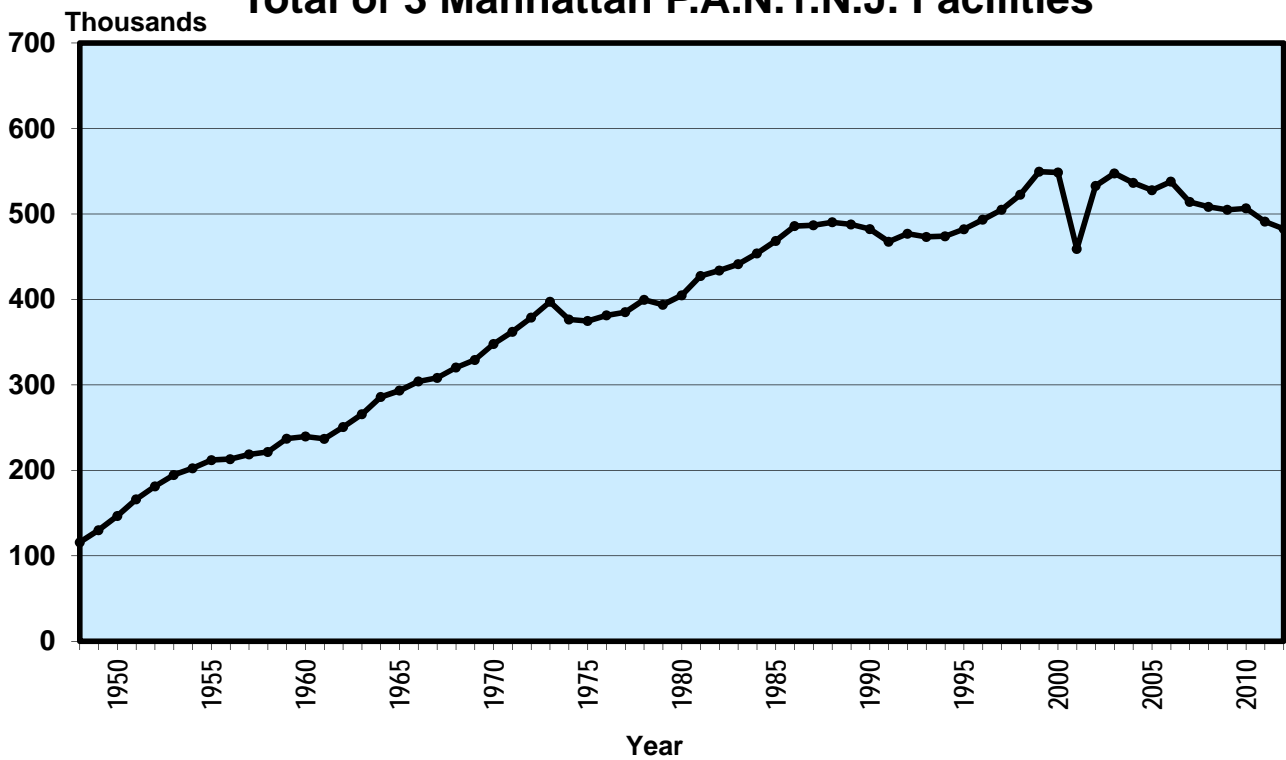
Average Daily Traffic Volumes ~ Total of Both Directions Total of 9 Harlem River Bridges



**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**



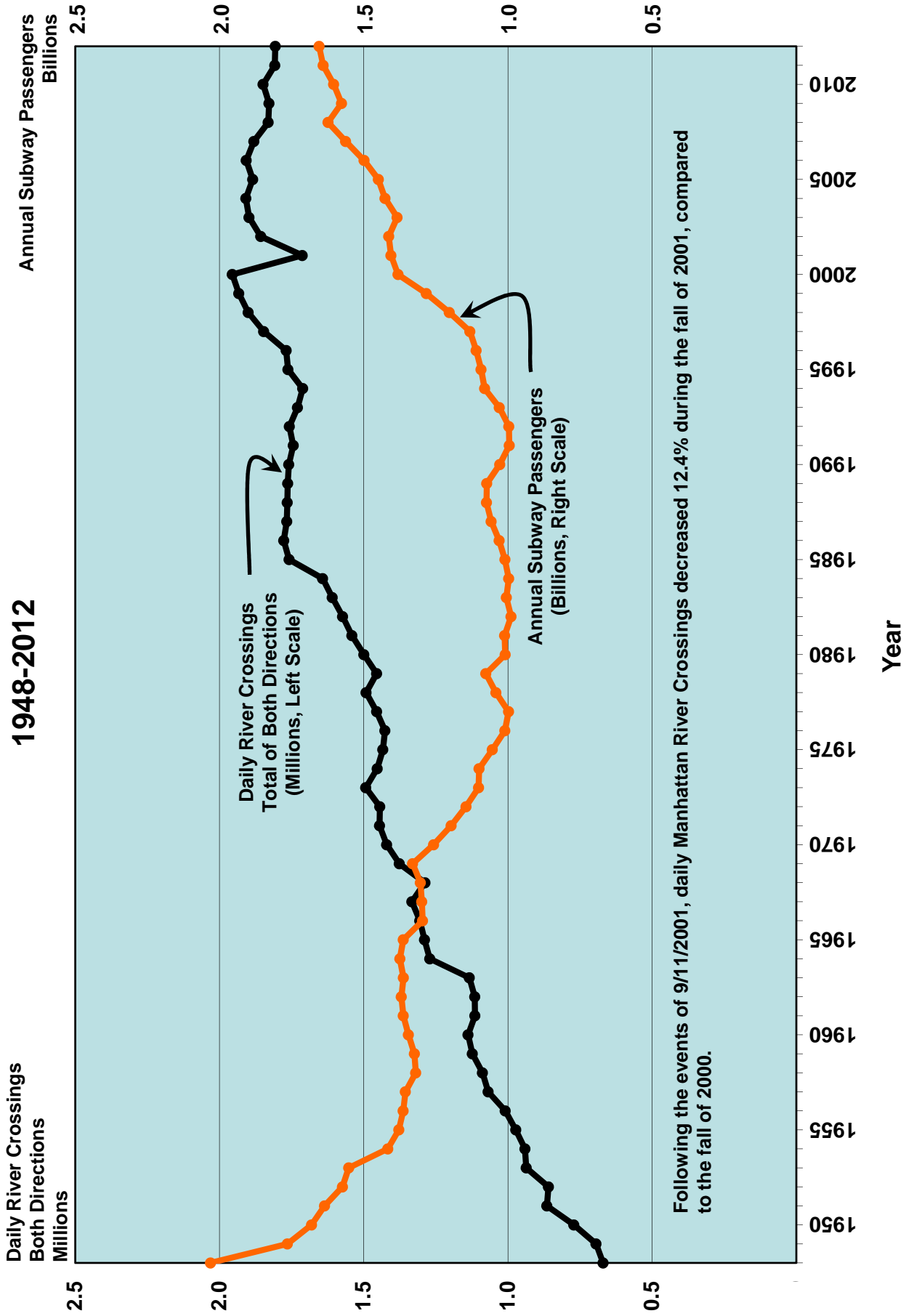
**Average Daily Manhattan River Motor Vehicle Crossings
(Total of Both Directions)
vs.
Annual Subway Ridership**

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	2012	1,806,649	1,655
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 %	2000-2012	- 7.6 %	+ 19.8 %
1970-1980	+ 5.6 %	- 19.8 %	1948-2012	+169.6 %	- 18.5 %
1980-1990	+ 17.4 %	+ 1.9 %			

Source for Annual Subway Ridership: MTA

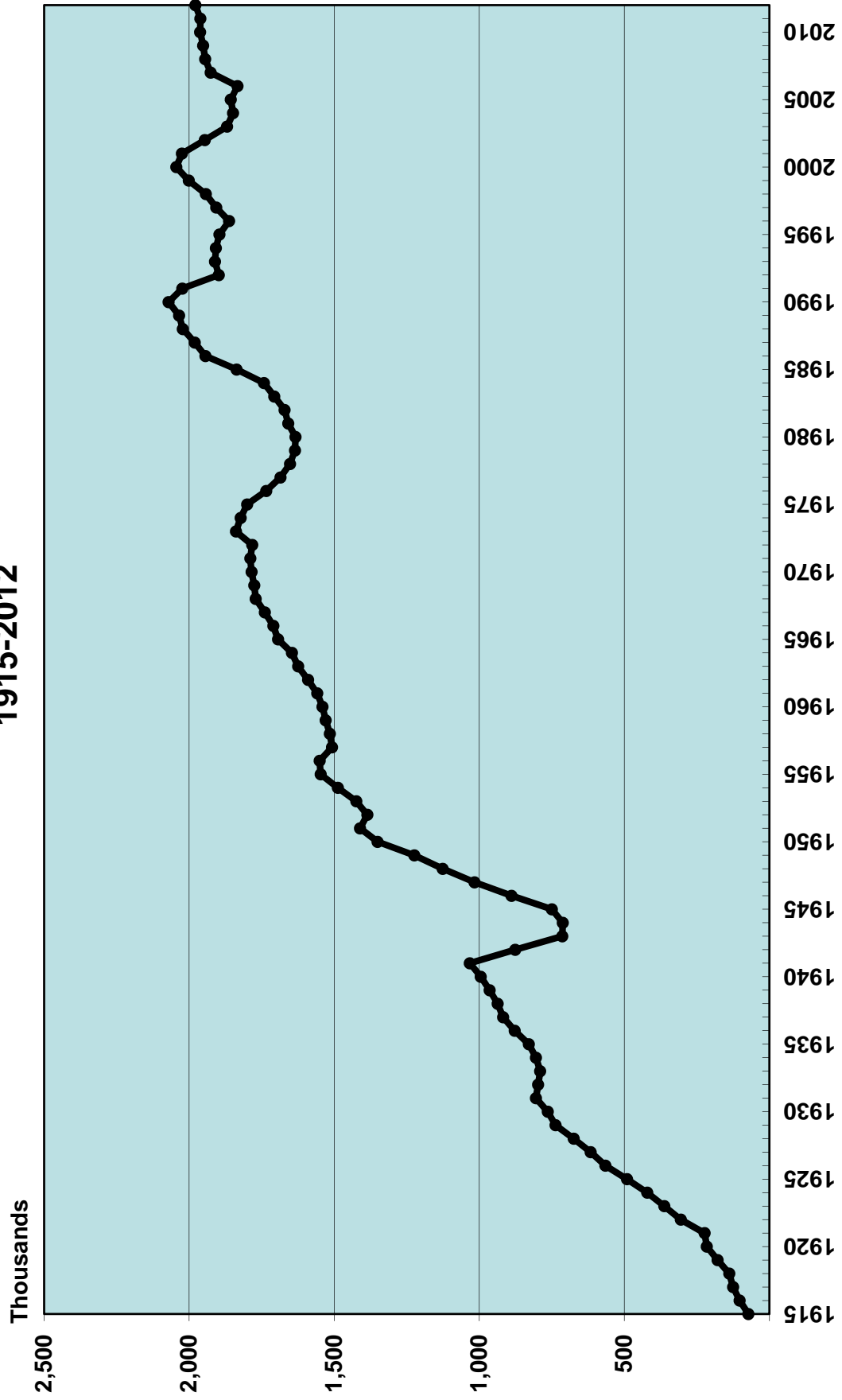
Vehicular River Crossings vs. Subway Ridership

1948-2012



New York City Motor Vehicle Registrations

1915-2012



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

PAST & PRESENT PASSENGER CAR TOLL STRUCTURES

MTA BRIDGES & TUNNELS FACILITIES

Tolls collected both directions

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

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

*Formerly Brooklyn-Battery Tunnel.

**Formerly Triborough Bridge.

PORT AUTHORITY OF NEW YORK & NEW JERSEY

Tolls collected eastbound only

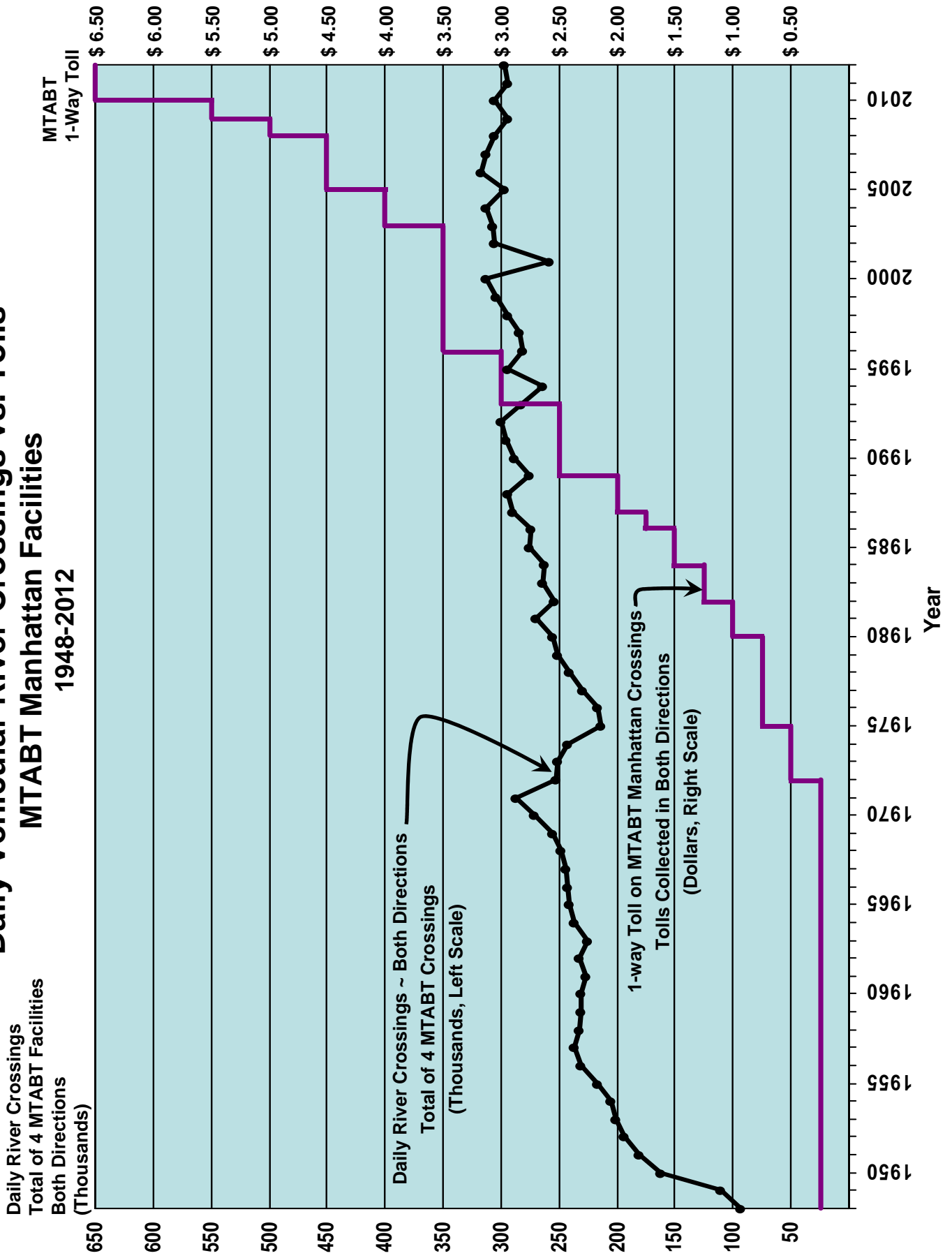
	George Washington Bridge	Holland Tunnel	Lincoln Tunnel
Effective 08/12/1970	\$ 1.00	\$ 1.00	\$ 1.00
Effective 05/05/1975	1.50	1.50	1.50
Effective 01/01/1984	2.00	2.00	2.00
Effective 04/12/1987	3.00	3.00	3.00
Effective 04/07/1991	4.00	4.00	4.00
Effective 03/25/2001	6.00	6.00	6.00
Effective 03/02/2008	8.00	8.00	8.00
Effective 09/18/2011	12.00	12.00	12.00
Effective 12/02/2012	13.00	13.00	13.00
EZ-Pass Off Peak	8.25	8.25	8.25
EZ-Pass Peak	10.25	10.25	10.25

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

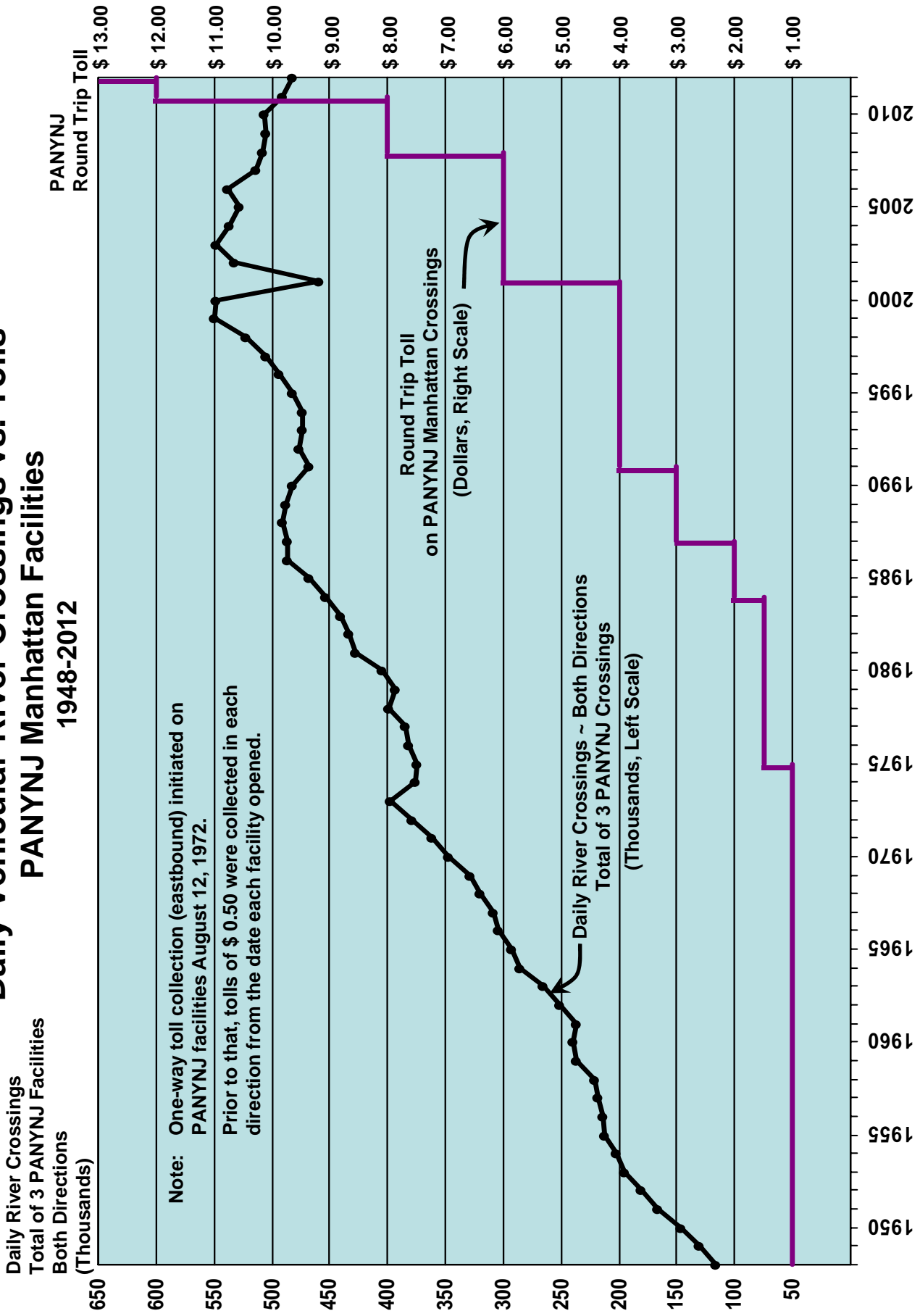
1948-2012



Daily Vehicular River Crossings vs. Tolls

PANYNJ Manhattan Facilities

1948-2012



East River Bridges



Manhattan Bridge

East River Bridges
Average Daily Traffic Volumes
1948 - 2012

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

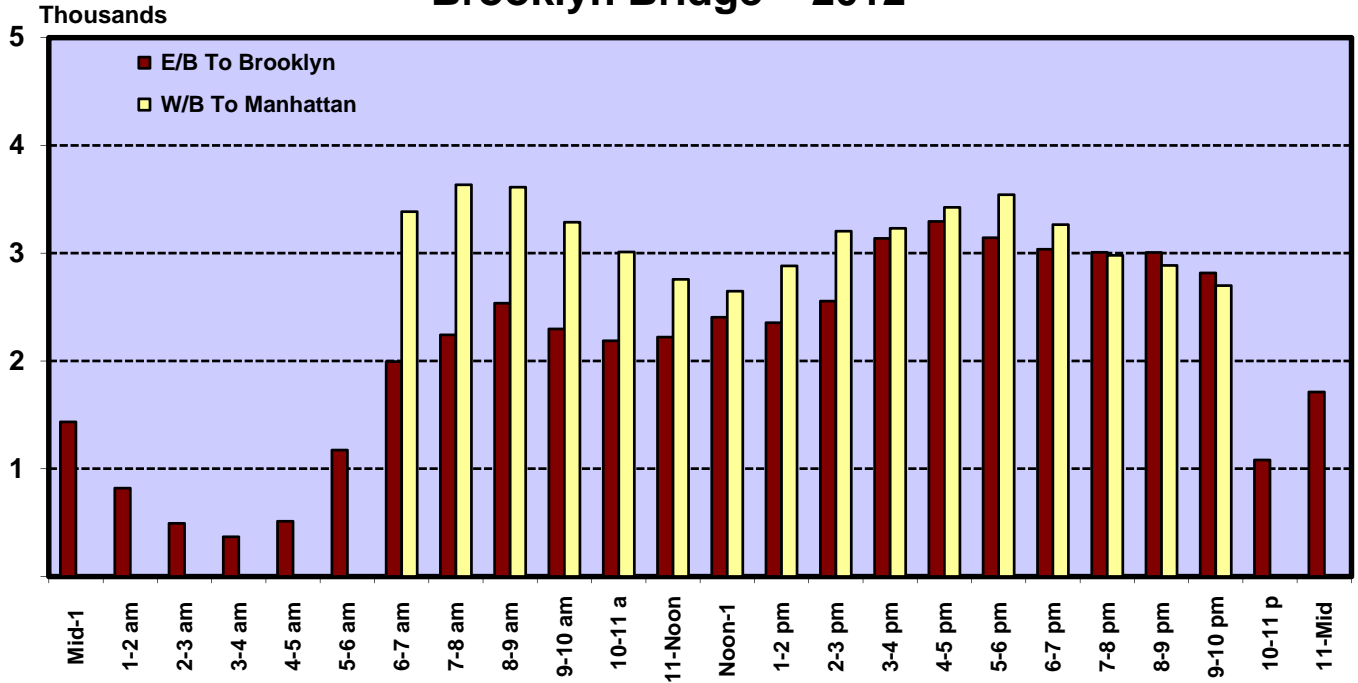
Hourly Vehicular Volumes Brooklyn Bridge - 2012

FHWA Classes ▲	Eastbound to Brooklyn										Westbound to Manhattan								2-Way Grand Totals		
	Commuter Vans					Total Vehicles	Commuter Vans					Total Vehicles									
	Autos & Motorcycles	Pickups Large SUVs	Buses	4	5 - 7		8 - 13	Autos & Motorcycles	Pickups Large SUVs	Buses	4		5 - 7	8 - 13							
12-1am	1,433	1	0	0	0	1,434	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,434
1-2am	816	3	1	0	0	820	0	0	0	0	0	0	0	0	0	0	0	0	0	0	820
2-3am	491	2	0	0	0	493	0	0	0	0	0	0	0	0	0	0	0	0	0	0	493
3-4am	365	3	0	0	0	368	0	0	0	0	0	0	0	0	0	0	0	0	0	0	368
4-5am	506	6	1	0	0	513	0	0	0	0	0	0	0	0	0	0	0	0	0	0	513
5-6am	1,158	14	1	0	0	1,173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,173
6-7am	1,956	29	9	1	0	1,995	3,267	40	77	2	0	0	0	0	0	0	0	0	0	0	3,386
7-8am	2,196	29	17	1	0	2,243	3,571	24	38	2	0	0	0	0	0	0	0	0	0	0	3,635
8-9am	2,475	40	21	1	0	2,537	3,571	29	10	3	0	0	0	0	0	0	0	0	0	0	3,613
9-10am	2,230	41	25	1	0	2,297	3,242	27	11	7	0	0	0	0	0	0	0	0	0	0	3,287
10-11am	2,145	26	16	0	0	2,187	2,968	24	12	7	0	0	0	0	0	0	0	0	0	0	3,011
11-12am	2,159	41	22	0	0	2,222	2,701	35	14	7	0	0	0	0	0	0	0	0	0	0	2,757
12-1pm	2,342	42	22	0	0	2,406	2,600	22	23	2	0	0	0	0	0	0	0	0	0	0	2,647
1-2pm	2,294	34	26	1	0	2,355	2,784	37	51	10	0	0	0	0	0	0	0	0	0	0	2,882
2-3pm	2,483	34	37	1	0	2,555	3,139	32	31	3	0	0	0	0	0	0	0	0	0	0	3,205
3-4pm	3,069	33	35	0	0	3,137	3,157	36	37	1	0	0	0	0	0	0	0	0	0	0	3,231
4-5pm	3,237	34	23	1	0	3,295	3,369	36	18	2	0	0	0	0	0	0	0	0	0	0	3,425
5-6pm	3,092	34	18	0	0	3,144	3,501	24	16	2	0	0	0	0	0	0	0	0	0	0	3,543
6-7pm	2,976	46	14	1	0	3,037	3,225	25	13	2	0	0	0	0	0	0	0	0	0	0	3,265
7-8pm	2,971	32	5	0	0	3,008	2,961	14	5	0	0	0	0	0	0	0	0	0	0	0	2,980
8-9pm	2,991	14	2	0	0	3,007	2,865	19	1	1	0	0	0	0	0	0	0	0	0	0	2,886
9-10pm	2,804	12	1	0	0	2,817	2,673	22	3	1	0	0	0	0	0	0	0	0	0	0	2,699
10-11pm	1,079	2	0	0	0	1,081	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,081
11-12pm	1,708	3	1	0	0	1,712	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,712
Totals	48,976	555	297	8	0	49,836	49,594	446	360	52	0	0	0	0	0	0	0	0	0	0	100,288
7-10am	6,901	110	63	3	0	7,077	10,384	80	59	12	0	0	0	0	0	0	0	0	0	0	17,612
10am-1pm	6,646	109	60	0	0	6,815	8,269	81	49	16	0	0	0	0	0	0	0	0	0	0	15,230
1-4pm	7,846	101	98	2	0	8,047	9,080	105	119	14	0	0	0	0	0	0	0	0	0	0	17,365
4-7pm	9,305	114	55	2	0	9,476	10,095	85	47	6	0	0	0	0	0	0	0	0	0	0	19,709
7am-7pm	30,698	434	276	7	0	31,415	37,828	351	274	48	0	0	0	0	0	0	0	0	0	0	69,916
6-10am	8,857	139	72	4	0	9,072	13,651	120	136	14	0	0	0	0	0	0	0	0	0	0	22,993
3-7pm	12,374	147	90	2	0	12,613	13,252	121	84	7	0	0	0	0	0	0	0	0	0	0	26,077
6am-7pm	32,654	463	285	8	0	33,410	41,095	391	351	50	0	0	0	0	0	0	0	0	0	0	75,297

Based on March 2006 Classification Survey Data

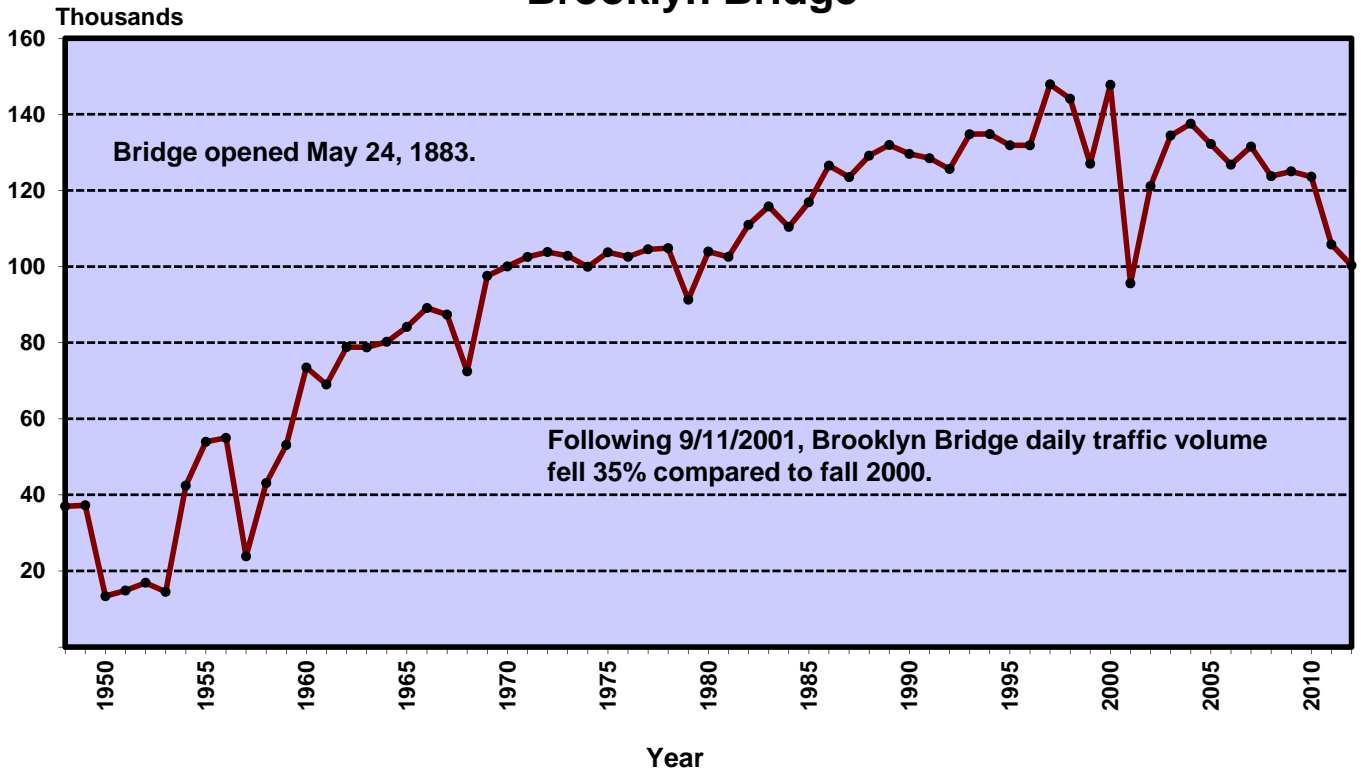
** Peak Volumes

Hourly Vehicular Volumes Brooklyn Bridge ~ 2012



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

Average Daily Traffic Volumes ~ Total of Both Directions Brooklyn Bridge



Hourly Vehicular Volumes Ed Koch Queensboro Bridge - 2012

Eastbound to Queens

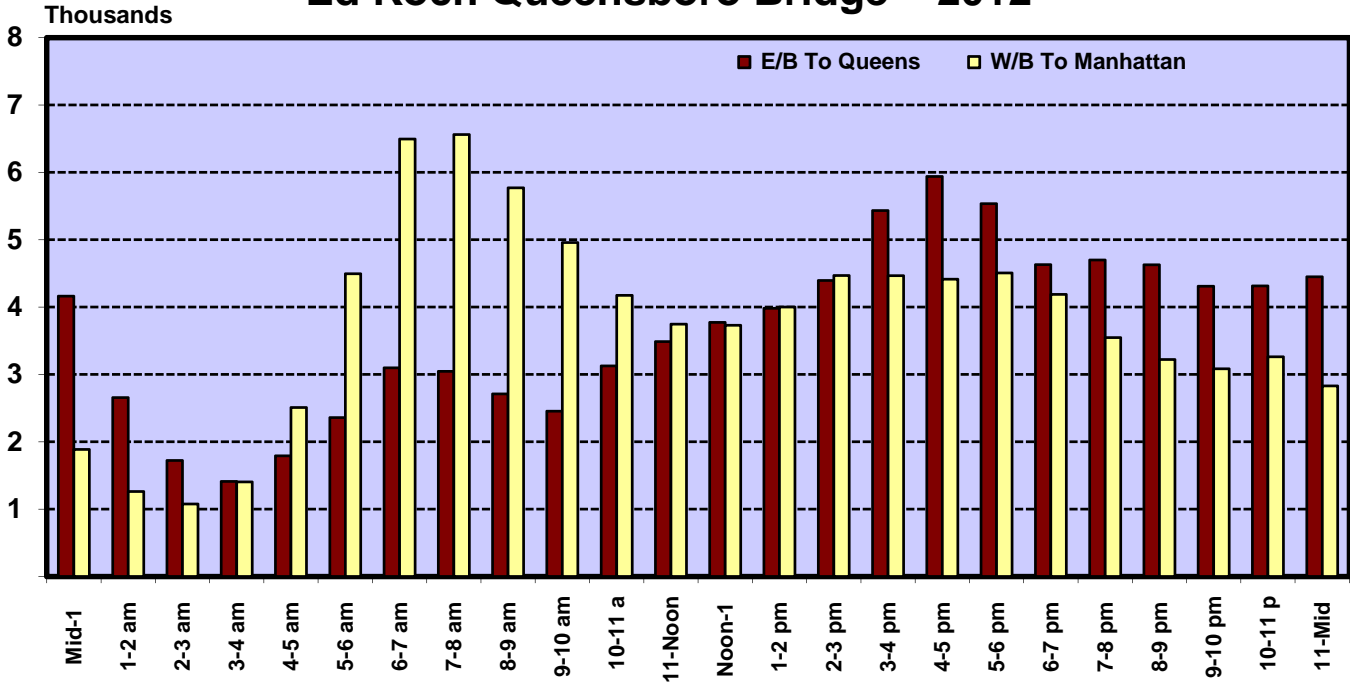
Westbound to Manhattan

FHWA Classes ▲	Commuter Vans						Total Vehicles	Commuter Vans						Total Vehicles
	Commercial Vans			Single Unit Trucks				Commercial Vans			Single Unit Trucks			
	Autos & Motorcycles	Pickups Large SUVs	Buses	4	5 - 7	8 - 13		Autos & Motorcycles	Pickups Large SUVs	Buses	4	5 - 7	8 - 13	
12-1am	4,051	50	16	45	0	4,162	1,845	17	13	11	1	1,887		
1-2am	2,600	21	10	24	1	2,656	1,226	14	6	14	2	1,262		
2-3am	1,681	9	4	27	1	1,722	1,023	11	5	37	0	1,076		
3-4am	1,360	7	2	42	0	1,411	1,312	8	13	70	1	1,404		
4-5am	1,709	15	12	55	0	1,791	2,306	30	22	151	1	2,510		
5-6am	2,229	35	14	80	1	2,359	4,169	54	28	222	23	4,496		
6-7am	2,877	31	23	168	0	3,099	6,091	84	41	263	17	6,496		
7-8am	2,760	50	27	206	4	3,047	6,119	71	52	287	33	6,562		
8-9am	2,417	48	37	204	6	2,712	5,342	74	58	269	27	5,770		
9-10am	2,176	38	34	201	5	2,454	4,585	75	46	215	35	4,958		
10-11am	2,755	58	52	252	10	3,127	3,802	70	36	231	35	4,174		
11-12am	3,151	51	41	242	4	3,489	3,429	58	27	194	38	3,746		
12-1pm	3,395	67	41	265	6	3,774	3,421	40	39	194	37	3,731		
1-2pm	3,571	80	45	280	5	3,981	3,732	53	35	141	40	4,001		
2-3pm	4,006	79	52	252	7	4,396	4,175	71	44	141	38	4,469		
3-4pm	5,018	82	56	271	7	5,434	4,199	52	43	150	23	4,467		
4-5pm	5,543	89	43	257	7	5,939	4,197	51	34	117	15	4,414		
5-6pm	5,178	73	44	231	10	5,536	4,336	39	36	74	23	4,508		
6-7pm	4,355	57	45	167	6	4,630	4,069	32	25	48	14	4,188		
7-8pm	4,410	74	55	151	9	4,699	3,450	25	27	34	11	3,547		
8-9pm	4,345	82	65	133	4	4,629	3,133	29	21	30	8	3,221		
9-10pm	4,078	64	49	116	3	4,310	3,005	26	16	34	4	3,085		
10-11pm	4,087	59	47	121	1	4,315	3,186	24	21	30	1	3,262		
11-12pm	4,309	53	27	60	2	4,451	2,773	15	18	24	1	2,831		
Totals	82,061	1,272	841	3,850	99	88,123	84,925	1,023	708	2,981	428	90,065		
7-10am	7,353	136	98	611	15	8,213	16,046	220	158	771	95	17,290		
10am-1pm	9,301	176	134	759	20	10,390	10,652	168	102	619	110	11,651		
1-4pm	12,595	241	153	803	19	13,811	12,106	176	122	432	101	12,937		
4-7pm	15,076	219	132	655	23	16,105	12,602	122	95	239	52	13,110		
7am-7pm	44,325	772	517	2,828	77	48,519	51,406	686	477	2,061	358	54,988		
6-10am	10,230	167	121	779	15	11,312	22,137	304	199	1,034	112	23,786		
3-7pm	20,094	301	188	926	30	21,539	16,801	174	138	389	75	17,577		
6am-7pm	47,202	803	540	2,996	77	51,618	57,497	770	518	2,324	375	61,484		
2-Way Grand Totals	6,049	3,918	2,798	2,815	4,301	6,855	9,595	9,609	8,482	7,412	7,301	7,235		
	7,505	7,982	8,865	9,901	10,353	10,044	8,818	8,246	7,850	7,395	7,577	7,282		
	178,188	25,503	22,041	26,748	29,215	103,507	35,098	39,116	113,102					

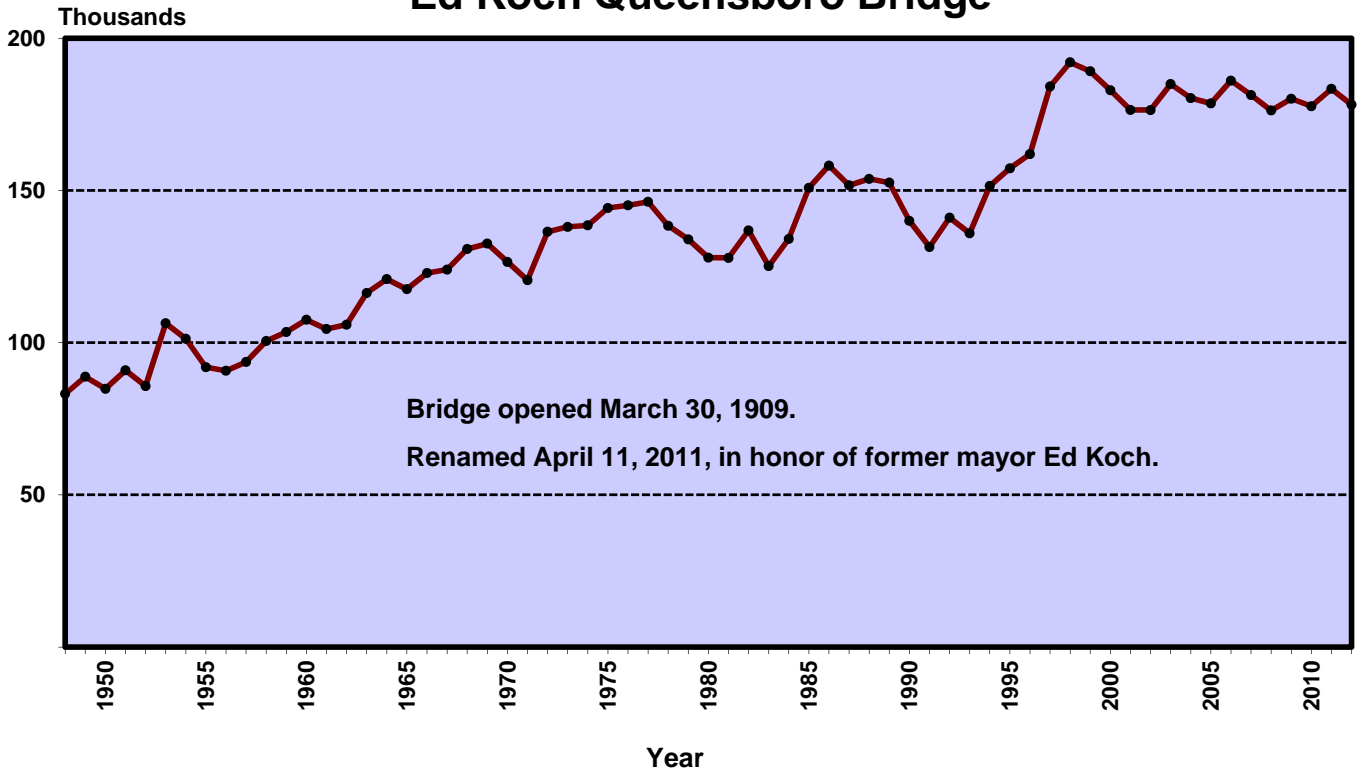
** Peak Volumes

Based on April 2006 Classification Survey Data.

Hourly Vehicular Volumes Ed Koch Queensboro Bridge ~ 2012



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



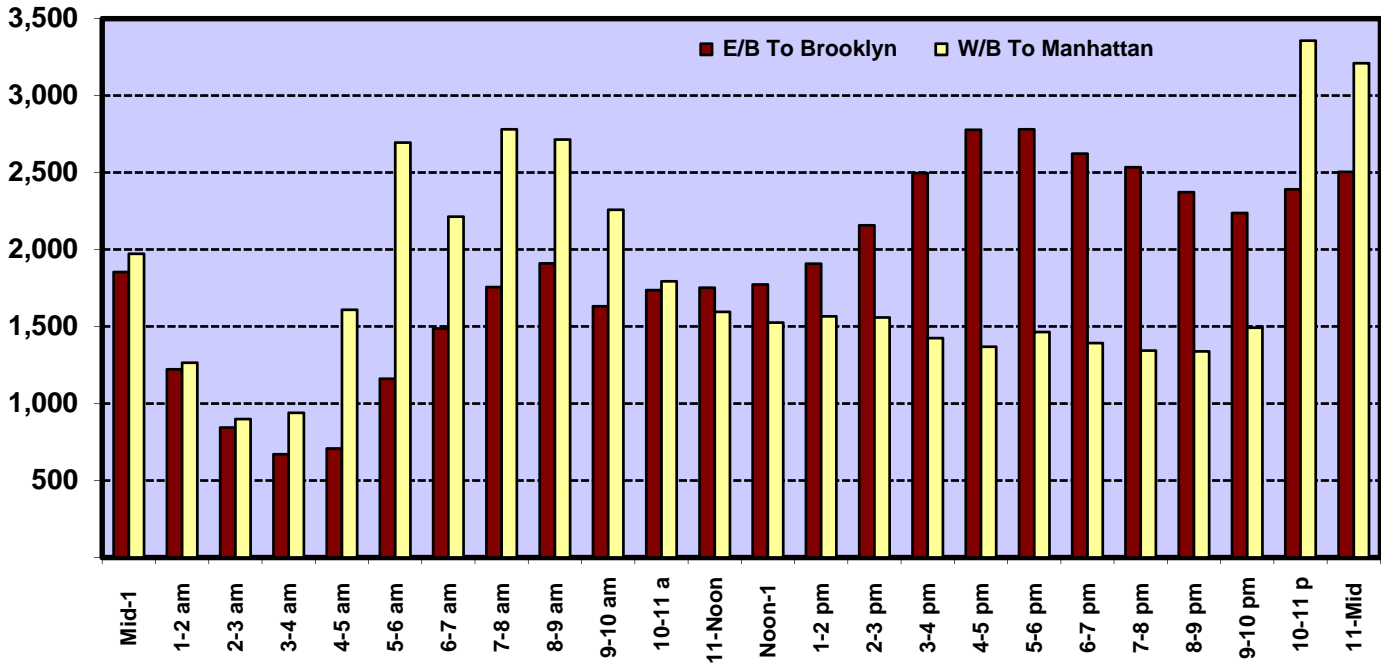
Hourly Vehicular Volumes Manhattan Bridge - 2012

FHWA Classes ▲	Eastbound to Brooklyn										Westbound to Manhattan								2-Way Grand Totals
	Commuter Vans					Total Vehicles	Commuter Vans					Tractor Trailers	Total Vehicles						
	Autos & Motorcycles	Large SUVs	Pickups	Buses	Single Unit Trucks		Autos & Motorcycles	Large SUVs	Pickups	Buses	Single Unit Trucks								
1 & 2	3	4	5-7	8-13	1 & 2	3	4	5-7	8-13										
12-1am	1,785	35	12	19	3	1,854	1,957	11	1	4	1,973	0	1,973						
1-2am	1,186	24	4	7	1	1,222	1,252	10	1	2	1,265	0	1,265						
2-3am	813	19	4	6	2	844	888	5	1	5	899	0	899						
3-4am	638	18	4	7	4	671	923	8	3	5	940	1	940						
4-5am	688	9	3	7	1	708	1,475	24	7	99	1,609	4	1,609						
5-6am	1,117	9	11	23	1	1,161	2,276	43	52	276	2,695	48	2,695						
6-7am	1,325	33	37	83	10	1,488	1,763	54	67	290	2,214	40	2,214						
7-8am	1,482	51	58	156	10	1,757	2,221	58	70	412	2,781	20	2,781						
8-9am	1,611	37	62	185	15	1,910	2,233	47	51	364	2,715	20	2,715						
9-10am	1,319	36	64	201	12	1,632	1,802	44	43	347	2,259	23	2,259						
10-11am	1,574	14	31	111	7	1,737	1,423	37	45	279	1,794	10	1,794						
11-12am	1,571	21	33	120	8	1,753	1,235	31	39	282	1,596	9	1,596						
12-1pm	1,536	28	36	164	9	1,773	1,122	39	52	302	1,526	11	1,526						
1-2pm	1,683	28	36	154	7	1,908	1,168	33	53	303	1,567	10	1,567						
2-3pm	1,953	22	35	138	10	2,158	1,252	39	42	216	1,559	10	1,559						
3-4pm	2,126	54	105	206	6	2,497	1,236	26	29	124	1,425	10	1,425						
4-5pm	2,517	60	71	122	8	2,778	1,168	26	31	137	1,369	7	1,369						
5-6pm	2,565	49	67	90	10	2,781	1,279	25	40	118	1,465	3	1,465						
6-7pm	2,453	35	61	68	7	2,624	1,238	11	51	91	1,393	2	1,393						
7-8pm	2,372	32	66	58	7	2,535	1,216	18	38	72	1,344	0	1,344						
8-9pm	2,256	25	42	45	5	2,373	1,235	13	21	68	1,339	2	1,339						
9-10pm	2,122	35	38	38	5	2,238	1,448	7	10	28	1,493	0	1,493						
10-11pm	2,299	30	28	31	4	2,392	3,289	15	11	41	3,357	1	3,357						
11-12pm	2,433	23	20	26	3	2,505	3,183	5	4	18	3,211	1	3,211						
Totals	41,424	727	928	2,065	155	45,299	38,282	629	762	3,883	43,788	232	43,788						
7-10am	4,412	124	184	542	37	5,299	6,256	149	164	1,123	7,755	63	7,755						
10am-1pm	4,681	63	100	395	24	5,263	3,780	107	136	863	4,916	30	4,916						
1-4pm	5,762	104	176	498	23	6,563	3,656	98	124	643	4,551	30	4,551						
4-7pm	7,535	144	199	280	25	8,183	3,685	62	122	346	4,227	12	4,227						
7am-7pm	22,390	435	659	1,715	109	25,308	17,377	416	546	2,975	21,449	135	21,449						
6-10am	5,737	157	221	625	47	6,787	8,019	203	231	1,413	9,969	103	9,969						
3-7pm	9,661	198	304	486	31	10,680	4,921	88	151	470	5,652	22	5,652						
6am-7pm	23,715	468	696	1,798	119	26,796	19,140	470	613	3,265	23,663	175	23,663						

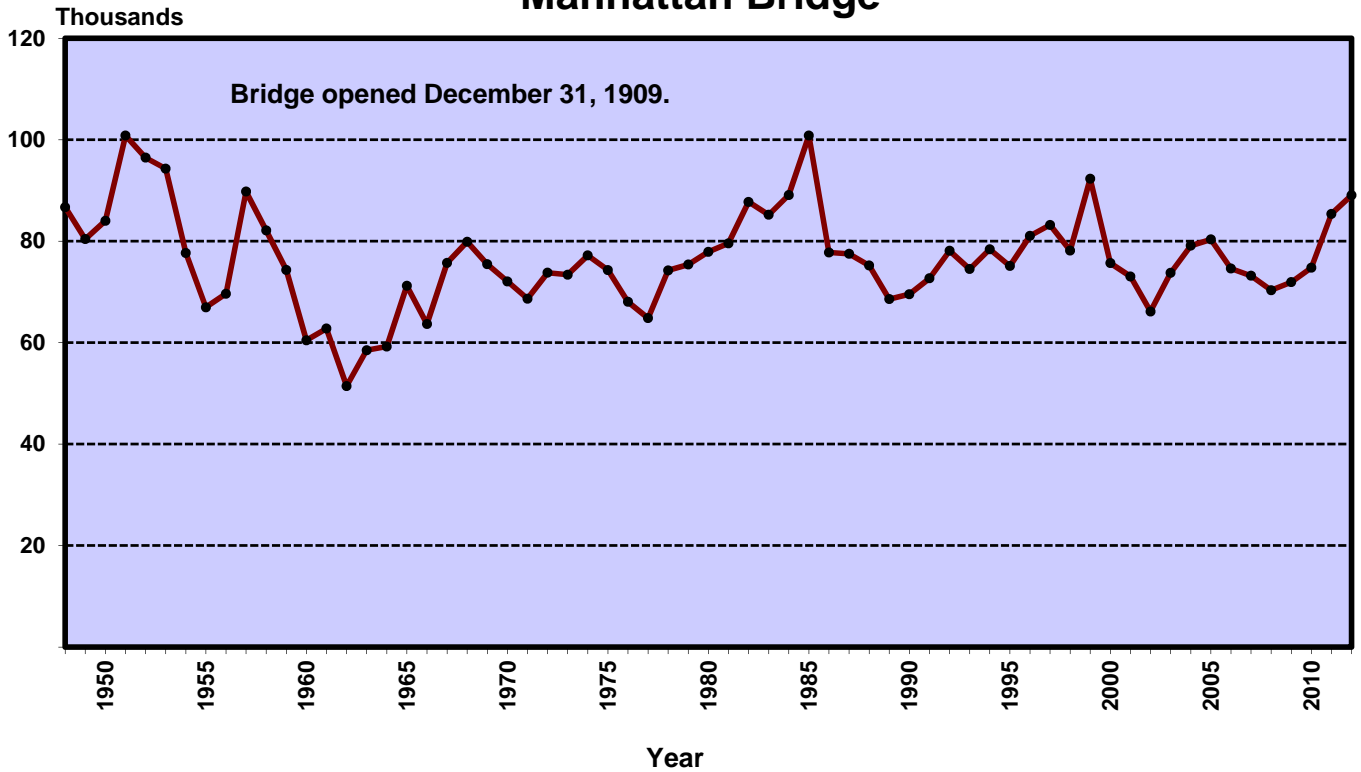
Based on April 2006 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Manhattan Bridge ~ 2012



Average Daily Traffic Volumes ~ Total of Both Directions Manhattan Bridge



Hourly Vehicular Volumes Williamsburg Bridge - 2012

Eastbound to Brooklyn

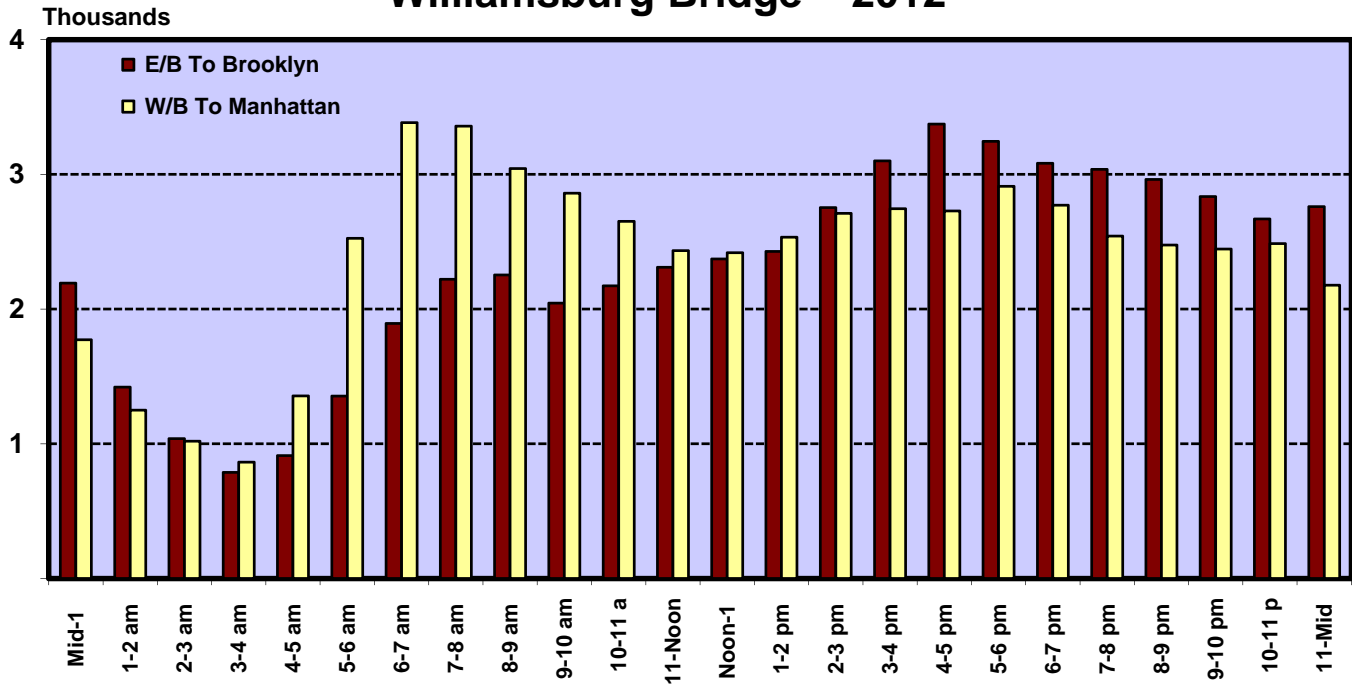
Westbound to Manhattan

FHWA Classes ▲	Commuter Vans					Commuter Vans					Total Vehicles	Commuter Vans					Total Vehicles				
	Autos & Motorcycles		Pickups Large SUVs		Buses	Single Trucks		Tractor Trailers		8 - 13		Autos & Motorcycles		Pickups Large SUVs		Buses		Single 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	1 & 2	3	4
12-1am	2,183	7	1	2	0	2,193	7	1	2	0	2,193	5	1	0	0	1,772	5	1	0	0	1,772
1-2am	1,416	3	1	0	1	1,421	3	1	0	1	1,421	4	2	0	0	1,250	4	2	0	0	1,250
2-3am	1,028	5	3	2	1	1,039	5	3	2	1	1,039	7	1	0	1	1,020	7	1	0	1	1,020
3-4am	773	7	3	3	2	788	7	3	3	2	788	4	1	1	1	864	4	1	1	1	864
4-5am	899	7	3	3	0	912	7	3	3	0	912	6	1	1	1	1,355	6	1	1	1	1,355
5-6am	1,330	7	10	7	0	1,354	7	10	7	0	1,354	7	7	1	2	2,526	7	7	1	2	2,526
6-7am	1,820	14	32	25	3	1,894	14	32	25	3	1,894	17	17	0	0	3,384	17	17	0	0	3,384
7-8am	2,102	25	53	40	1	2,221	25	53	40	1	2,221	31	20	0	0	3,358	31	20	0	0	3,358
8-9am	2,145	24	48	34	3	2,254	24	48	34	3	2,254	34	21	1	1	3,044	34	21	1	1	3,044
9-10am	1,931	30	48	34	2	2,045	30	48	34	2	2,045	28	19	3	3	2,860	28	19	3	3	2,860
10-11am	2,017	41	69	45	1	2,173	41	69	45	1	2,173	33	18	3	3	2,652	33	18	3	3	2,652
11-12am	2,159	37	64	48	2	2,310	37	64	48	2	2,310	27	16	8	1	2,434	27	16	8	1	2,434
12-1pm	2,219	61	28	61	3	2,372	61	28	61	3	2,372	34	17	17	1	2,419	34	17	17	1	2,419
1-2pm	2,271	69	31	53	4	2,428	69	31	53	4	2,428	33	20	16	1	2,534	33	20	16	1	2,534
2-3pm	2,604	59	40	48	3	2,754	59	40	48	3	2,754	32	16	17	2	2,711	32	16	17	2	2,711
3-4pm	2,940	66	38	54	3	3,101	66	38	54	3	3,101	29	21	22	2	2,745	29	21	22	2	2,745
4-5pm	3,216	64	39	49	6	3,374	64	39	49	6	3,374	38	20	19	1	2,729	38	20	19	1	2,729
5-6pm	3,117	59	35	33	1	3,245	59	35	33	1	3,245	41	25	18	2	2,912	41	25	18	2	2,912
6-7pm	2,993	39	25	24	2	3,083	39	25	24	2	3,083	33	16	16	2	2,771	33	16	16	2	2,771
7-8pm	2,960	31	25	21	1	3,038	31	25	21	1	3,038	25	15	12	0	2,542	25	15	12	0	2,542
8-9pm	2,901	26	20	14	2	2,963	26	20	14	2	2,963	14	5	4	1	2,476	14	5	4	1	2,476
9-10pm	2,802	14	13	5	2	2,836	14	13	5	2	2,836	14	4	3	1	2,446	14	4	3	1	2,446
10-11pm	2,648	11	4	4	2	2,669	11	4	4	2	2,669	15	2	3	1	2,486	15	2	3	1	2,486
11-12pm	2,749	7	2	3	0	2,761	7	2	3	0	2,761	8	2	2	0	2,178	8	2	2	0	2,178
Totals	53,223	713	635	612	45	55,228	713	635	612	45	55,228	519	287	226	27	57,468	519	287	226	27	57,468
7-10am	6,178	79	149	108	6	6,520	79	149	108	6	6,520	93	60	43	4	9,262	93	60	43	4	9,262
10am-1pm	6,395	139	161	154	6	6,855	139	161	154	6	6,855	94	51	33	5	7,505	94	51	33	5	7,505
1-4pm	7,815	194	109	155	10	8,283	194	109	155	10	8,283	94	57	55	5	7,990	94	57	55	5	7,990
4-7pm	9,326	162	99	106	9	9,702	162	99	106	9	9,702	112	61	53	5	8,412	112	61	53	5	8,412
7am-7pm	29,714	574	518	523	31	31,360	574	518	523	31	31,360	393	229	184	19	33,169	393	229	184	19	33,169
6-10am	7,998	93	181	133	9	8,414	93	181	133	9	8,414	110	77	52	4	12,646	110	77	52	4	12,646
3-7pm	12,266	228	137	160	12	12,803	228	137	160	12	12,803	141	82	75	7	11,157	141	82	75	7	11,157
6am-7pm	31,534	588	550	548	34	33,254	588	550	548	34	33,254	410	246	193	19	36,553	410	246	193	19	36,553

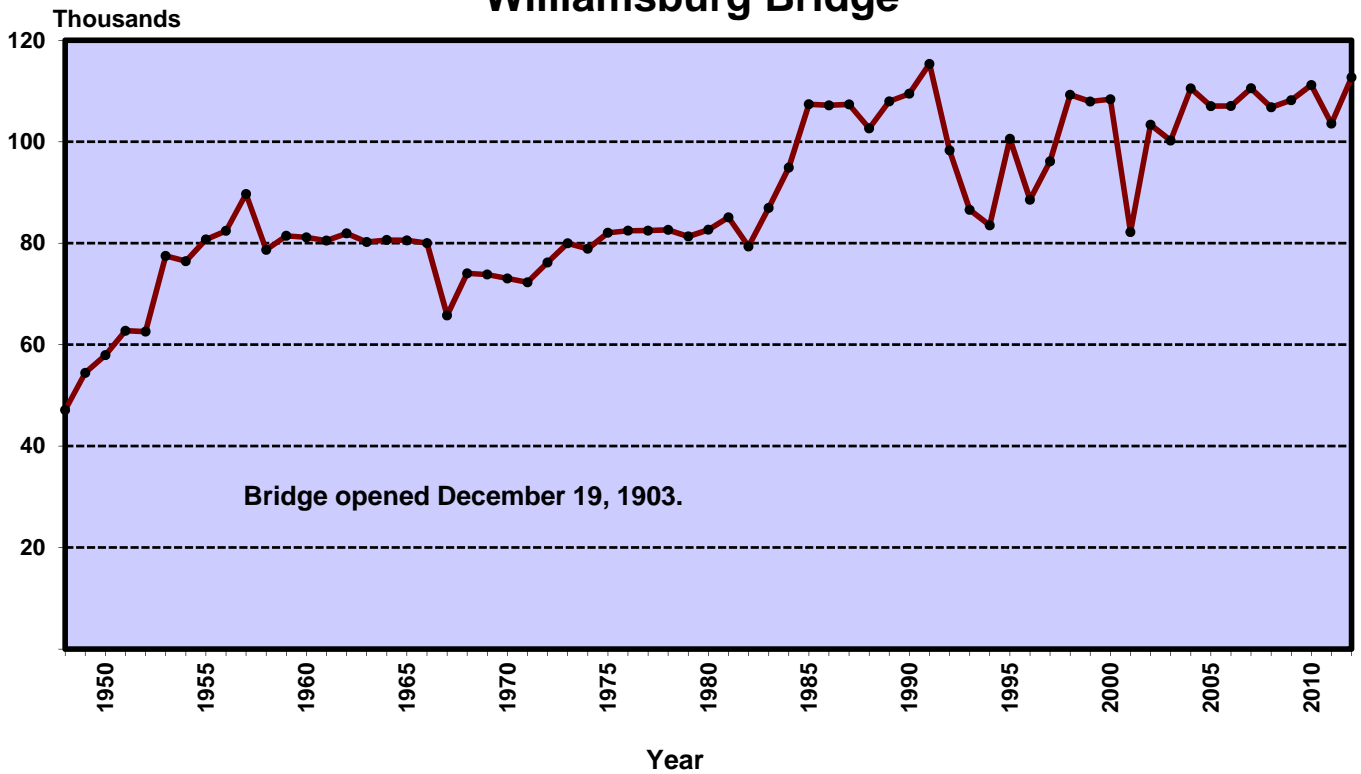
Based on March 2006 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Williamsburg Bridge ~ 2012



Average Daily Traffic Volumes ~ Total of Both Directions Williamsburg Bridge



Harlem River Bridges



Broadway Bridge

Harlem River Bridges
Average Daily Traffic Volumes
1948 - 2012

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

Harlem River Bridges (cont'd)
Average Daily Traffic Volumes
1948 - 2012

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

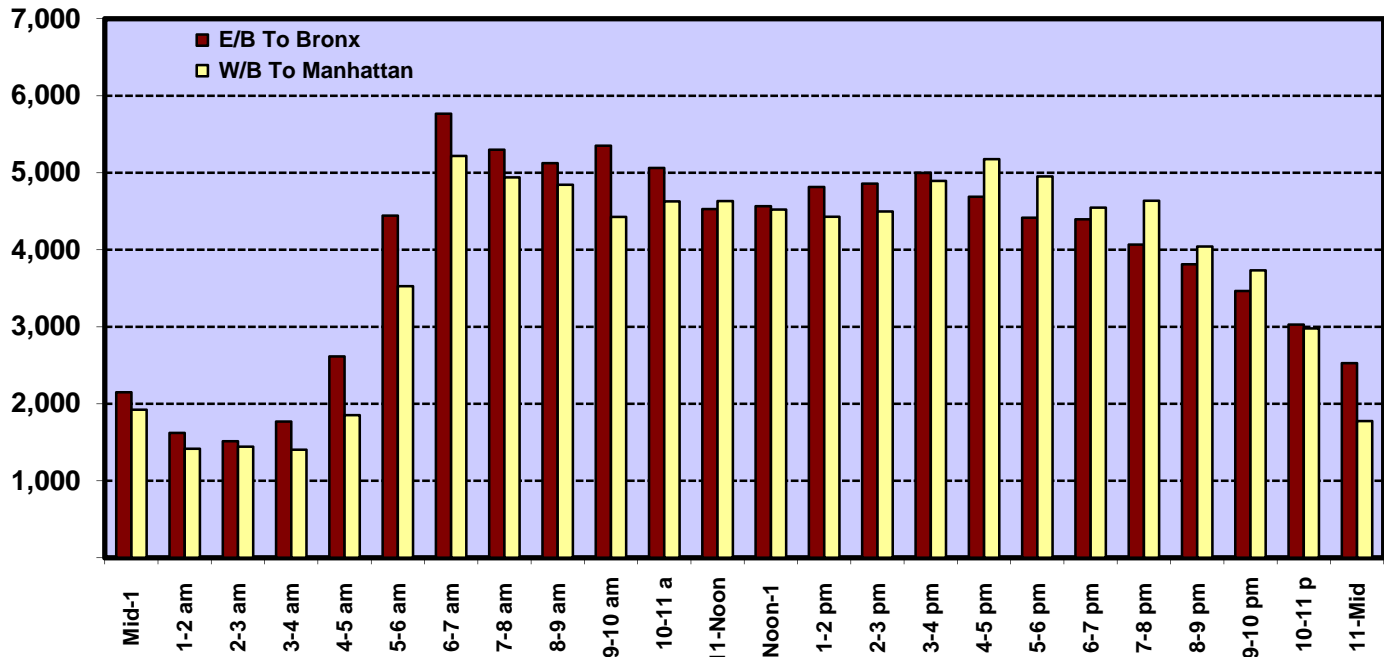
Hourly Vehicular Volumes Alexander Hamilton Bridge - 2012

	Eastbound to Bronx						Westbound to Manhattan						2-Way Totals
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	
12-1am	---	---	---	---	---	2,150	---	---	---	---	---	1,922	4,072
1-2am	---	---	---	---	---	1,622	---	---	---	---	---	1,415	3,037
2-3am	---	---	---	---	---	1,513	---	---	---	---	---	1,443	2,956
3-4am	---	---	---	---	---	1,770	---	---	---	---	---	1,403	3,173
4-5am	---	---	---	---	---	2,614	---	---	---	---	---	1,853	4,467
5-6am	---	---	---	---	---	4,442	---	---	---	---	---	3,526	7,968
6-7am	---	---	---	---	---	5,767	---	---	---	---	---	5,218	10,985
7-8am	4,137	14	239	790	120	5,300	4,177	9	89	444	220	4,939	10,239
8-9am	3,723	5	243	936	217	5,124	4,141	34	34	481	153	4,843	9,967
9-10am	3,744	5	240	1,226	135	5,350	3,404	49	28	747	199	4,427	9,777
10-11am	4,546	3	108	355	51	5,063	4,005	28	18	432	145	4,628	9,691
11-12am	3,395	10	244	755	125	4,529	3,282	14	21	1,024	291	4,632	9,161
12-1pm	3,959	0	112	446	49	4,566	3,830	11	10	535	136	4,522	9,088
1-2pm	3,669	8	175	875	87	4,814	3,308	12	24	860	225	4,429	9,243
2-3pm	3,762	6	200	780	110	4,858	3,357	19	41	900	180	4,497	9,355
3-4pm	4,453	8	90	348	98	4,997	4,261	23	17	501	91	4,893	9,890
4-5pm	3,931	6	148	491	112	4,688	3,904	4	45	985	238	5,176	9,864
5-6pm	3,851	5	108	362	90	4,416	3,883	2	32	866	170	4,953	9,369
6-7pm	3,694	8	194	424	75	4,395	3,910	3	23	474	136	4,546	8,941
7-8pm	---	---	---	---	---	4,067	---	---	---	---	---	4,636	8,703
8-9pm	---	---	---	---	---	3,812	---	---	---	---	---	4,043	7,855
9-10pm	---	---	---	---	---	3,465	---	---	---	---	---	3,732	7,197
10-11pm	---	---	---	---	---	3,029	---	---	---	---	---	2,979	6,008
11-12pm	---	---	---	---	---	2,527	---	---	---	---	---	1,776	4,303
Totals	---	---	---	---	---	94,878	---	---	---	---	---	90,431	185,309
7-10am	11,604	24	722	2,952	472	15,774	11,722	92	151	1,672	572	14,209	29,983
10am-1pm	11,900	13	464	1,556	225	14,158	11,117	53	49	1,991	572	13,782	27,940
1-4pm	11,884	22	465	2,003	295	14,669	10,926	54	82	2,261	496	13,819	28,488
4-7pm	11,476	19	450	1,277	277	13,499	11,697	9	100	2,325	544	14,675	28,174
7am-7pm	46,864	78	2,101	7,788	1,269	58,100	45,462	208	382	8,249	2,184	56,485	114,585
6-10am	---	---	---	---	---	21,541	---	---	---	---	---	19,427	40,968
3-7pm	15,929	27	540	1,625	375	18,496	15,958	32	117	2,826	635	19,568	38,064
6am-7pm	---	---	---	---	---	63,867	---	---	---	---	---	61,703	125,570

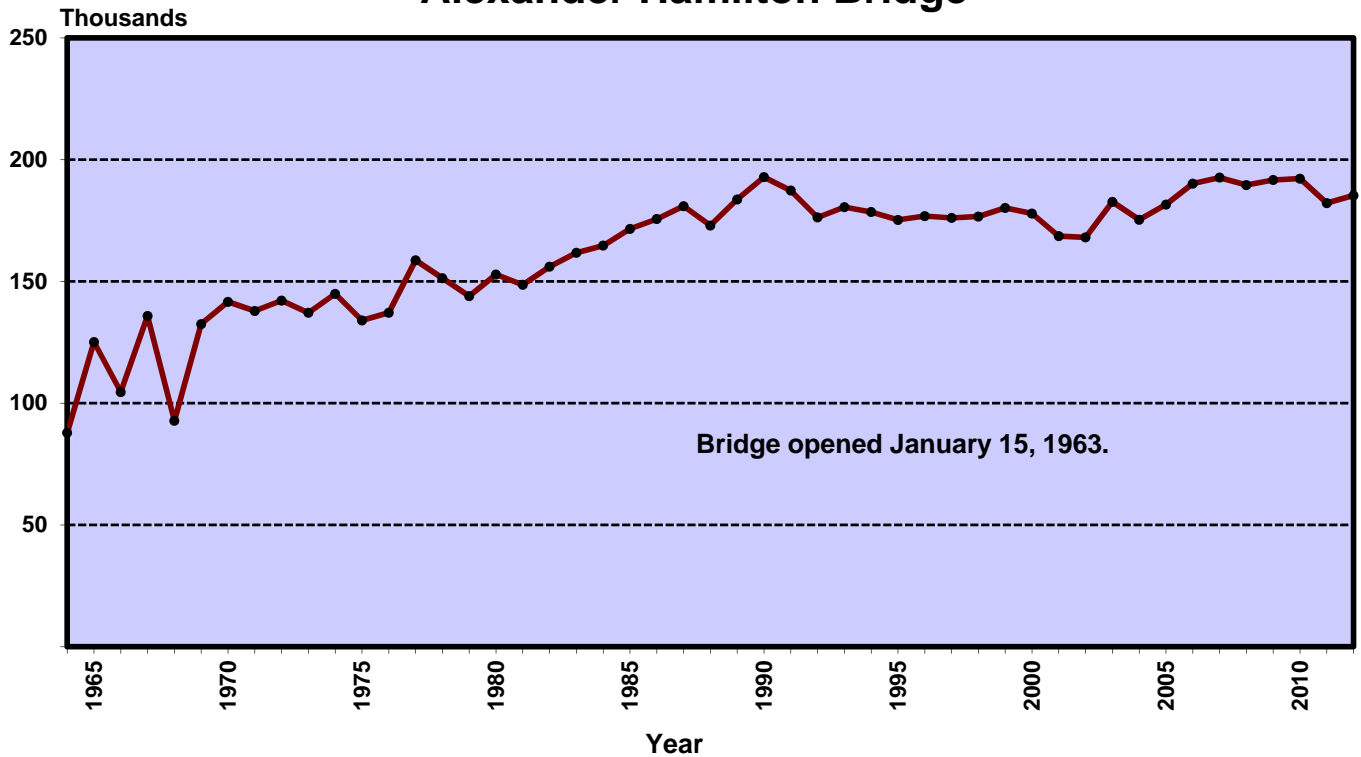
Based on 1989 Classification Survey Data

** Peak Volumes

Hourly Vehicular Volumes Alexander Hamilton Bridge ~ 2012



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



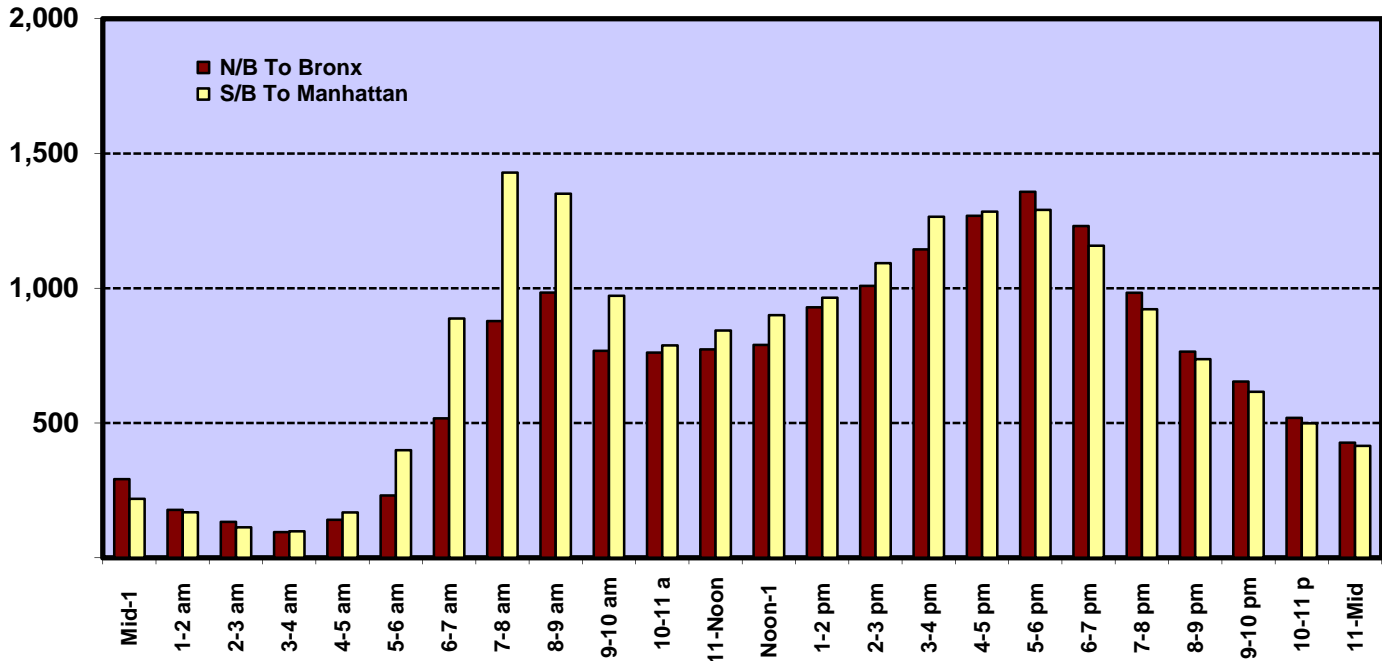
Hourly Vehicular Volumes Broadway Bridge - 2012

	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	---	---	---	---	---	292	---	---	---	---	---	219
1-2am	---	---	---	---	---	178	---	---	---	---	---	169
2-3am	---	---	---	---	---	133	---	---	---	---	---	113
3-4am	---	---	---	---	---	95	---	---	---	---	---	98
4-5am	---	---	---	---	---	141	---	---	---	---	---	168
5-6am	---	---	---	---	---	231	---	---	---	---	---	399
6-7am	---	---	---	---	---	517	---	---	---	---	---	888
7-8am	715	40	21	72	30	878	1,260	58	40	29	42	1,429 **
8-9am	838	61	21	36	28	984	1,199	41	28	42	41	1,351
9-10am	656	23	3	27	59	768	830	32	24	49	37	972
10-11am	683	17	2	35	24	761	717	19	10	33	9	788
11-12am	676	21	8	27	41	773	698	23	23	49	50	843
12-1pm	721	21	5	21	22	790	847	21	4	17	11	900
1-2pm	841	26	3	29	30	929	893	25	9	21	17	965
2-3pm	872	25	1	37	74	1,009	986	31	23	35	18	1,093
3-4pm	1,059	26	9	14	36	1,144	1,188	33	14	19	11	1,265
4-5pm	1,124	39	27	24	55	1,269	1,161	31	21	36	35	1,284
5-6pm	1,244	29	8	12	65	1,358 **	1,187	30	31	19	24	1,291
6-7pm	1,091	21	0	12	107	1,231	1,077	29	26	18	8	1,158
7-8pm	---	---	---	---	---	983	---	---	---	---	---	922
8-9pm	---	---	---	---	---	765	---	---	---	---	---	737
9-10pm	---	---	---	---	---	654	---	---	---	---	---	616
10-11pm	---	---	---	---	---	519	---	---	---	---	---	499
11-12pm	---	---	---	---	---	427	---	---	---	---	---	415
Totals	---	---	---	---	---	16,829	---	---	---	---	---	18,582
7-10am	2,209	124	45	135	117	2,630	3,289	131	92	120	120	3,752
10am-1pm	2,080	59	15	83	87	2,324	2,262	63	37	99	70	2,531
1-4pm	2,772	77	13	80	140	3,082	3,067	89	46	75	46	3,323
4-7pm	3,459	89	35	48	227	3,858	3,425	90	78	73	67	3,733
7am-7pm	10,520	349	108	346	571	11,894	12,043	373	253	367	303	13,339
6-10am	---	---	---	---	---	3,147	---	---	---	---	---	4,640
3-7pm	4,518	115	44	62	263	5,002	4,613	123	92	92	78	4,998
6am-7pm	---	---	---	---	---	12,411	---	---	---	---	---	14,227

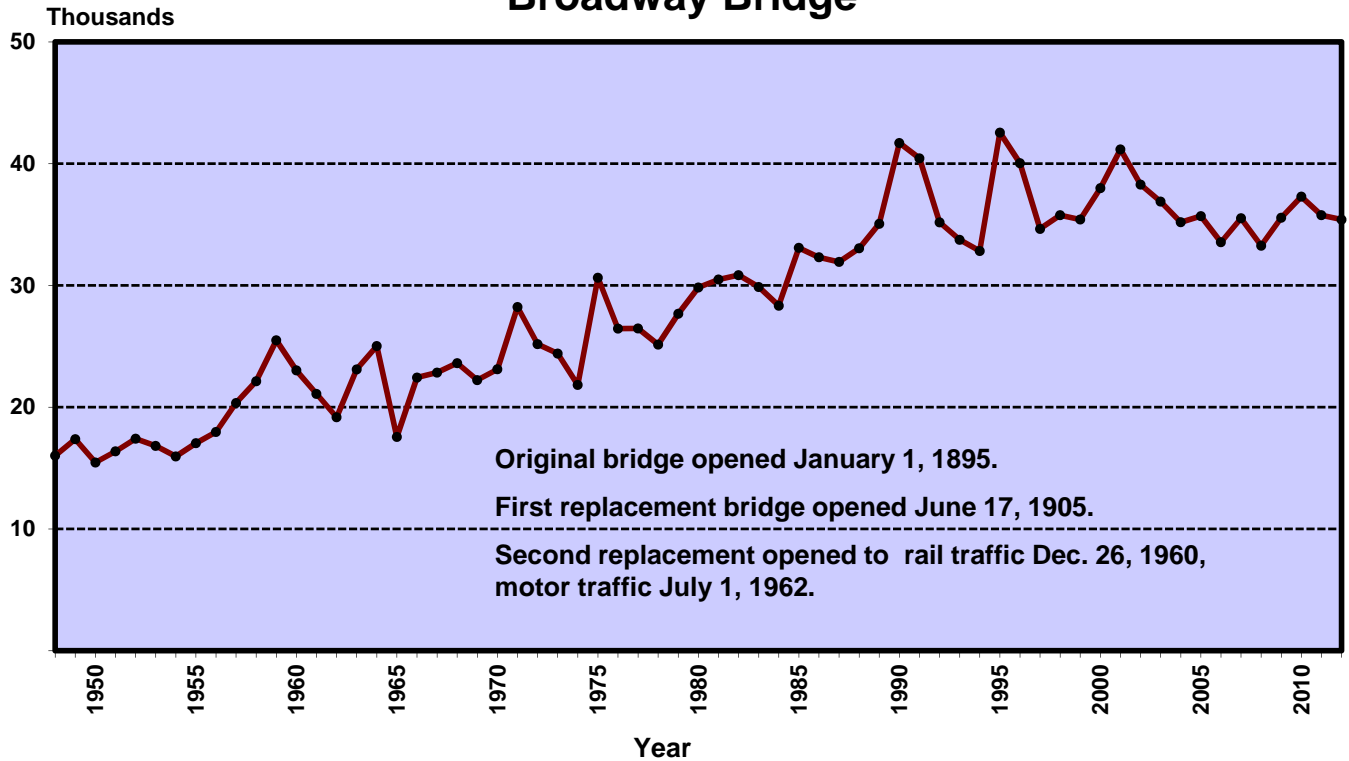
Based on 1989 Classification Survey Data

** Peak Volumes

Hourly Vehicular Volumes Broadway Bridge ~ 2012



Average Daily Traffic Volumes ~ Total of Both Directions Broadway Bridge



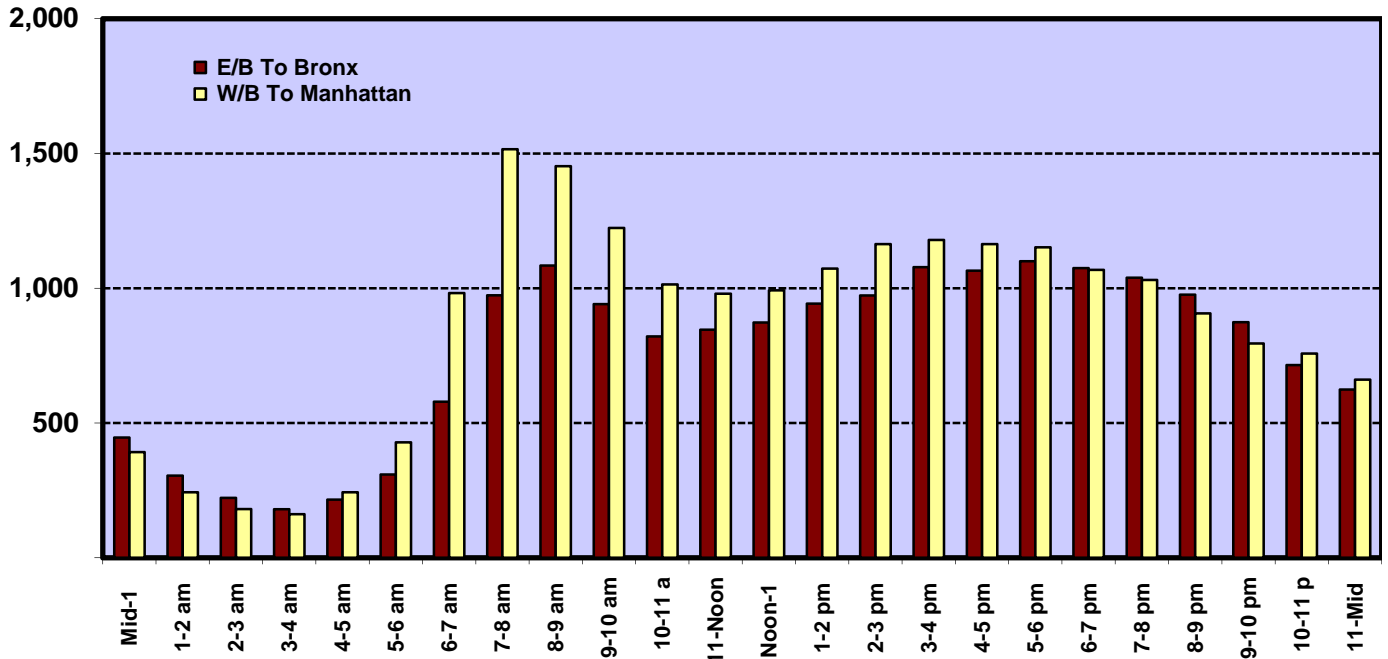
Hourly Vehicular Volumes Macombs Dam Bridge - 2012

	<i>Eastbound to Bronx</i>					<i>Westbound to Manhattan</i>					2-Way Totals	
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks		Commercial Vans
12-1am	---	---	---	---	---	446	---	---	---	---	---	392
1-2am	---	---	---	---	---	305	---	---	---	---	---	243
2-3am	---	---	---	---	---	222	---	---	---	---	---	181
3-4am	---	---	---	---	---	180	---	---	---	---	---	162
4-5am	---	---	---	---	---	216	---	---	---	---	---	243
5-6am	---	---	---	---	---	309	---	---	---	---	---	428
6-7am	---	---	---	---	---	579	---	---	---	---	---	982
7-8am	799	32	21	49	73	974	1,168	37	6	83	222	1,516 **
8-9am	907	13	16	55	93	1,084	1,181	10	2	93	167	1,453
9-10am	805	18	13	51	54	941	913	19	13	106	173	1,224
10-11am	741	7	3	31	39	821	905	8	7	39	55	1,014
11-12am	700	9	11	58	68	846	810	6	13	71	80	980
12-1pm	796	9	6	26	36	873	914	17	3	18	40	992
1-2pm	883	2	6	27	25	943	950	19	7	21	76	1,073
2-3pm	808	12	20	64	69	973	993	22	15	49	85	1,164
3-4pm	939	20	8	51	60	1,078	1,077	33	9	20	40	1,179
4-5pm	826	7	27	71	134	1,065	1,021	9	28	37	69	1,164
5-6pm	924	8	13	33	122	1,100 **	1,056	12	9	17	58	1,152
6-7pm	1,002	3	6	24	40	1,075	957	6	11	21	73	1,068
7-8pm	---	---	---	---	---	1,039	---	---	---	---	---	1,031
8-9pm	---	---	---	---	---	976	---	---	---	---	---	907
9-10pm	---	---	---	---	---	874	---	---	---	---	---	795
10-11pm	---	---	---	---	---	715	---	---	---	---	---	758
11-12pm	---	---	---	---	---	624	---	---	---	---	---	661
Totals	---	---	---	---	---	18,258	---	---	---	---	---	20,762
7-10am	2,511	63	50	155	220	2,999	3,262	66	21	282	562	4,193
10am-1pm	2,237	25	20	115	143	2,540	2,629	31	23	128	175	2,986
1-4pm	2,630	34	34	142	154	2,994	3,020	74	31	90	201	3,416
4-7pm	2,752	18	46	128	296	3,240	3,034	27	48	75	200	3,384
7am-7pm	10,130	140	150	540	813	11,773	11,945	198	123	575	1,138	13,979
6-10am	---	---	---	---	---	3,578	---	---	---	---	---	5,175
3-7pm	3,691	38	54	179	356	4,318	4,111	60	57	95	240	4,563
6am-7pm	---	---	---	---	---	12,352	---	---	---	---	---	14,961

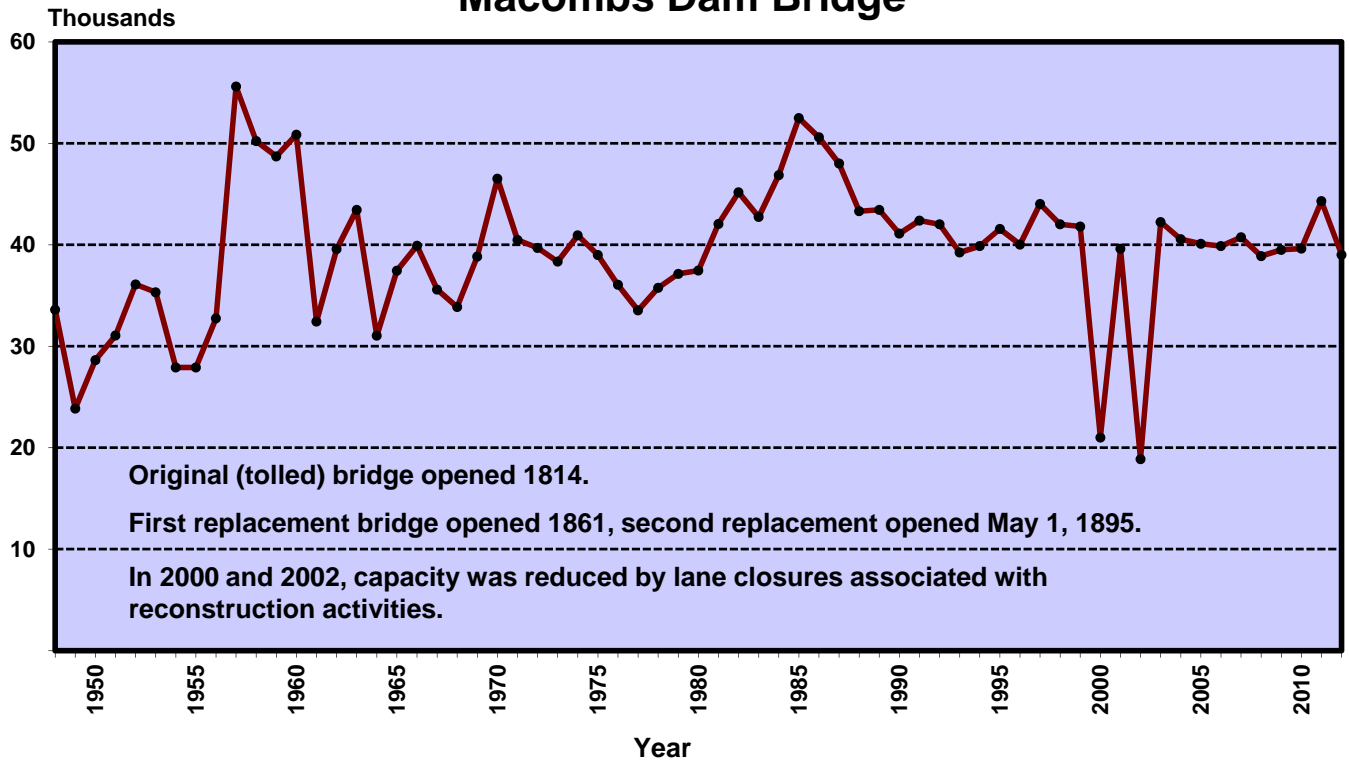
Based on 1989 Classification Survey Data

** Peak Volumes

Hourly Vehicular Volumes Macombs Dam Bridge ~ 2012



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



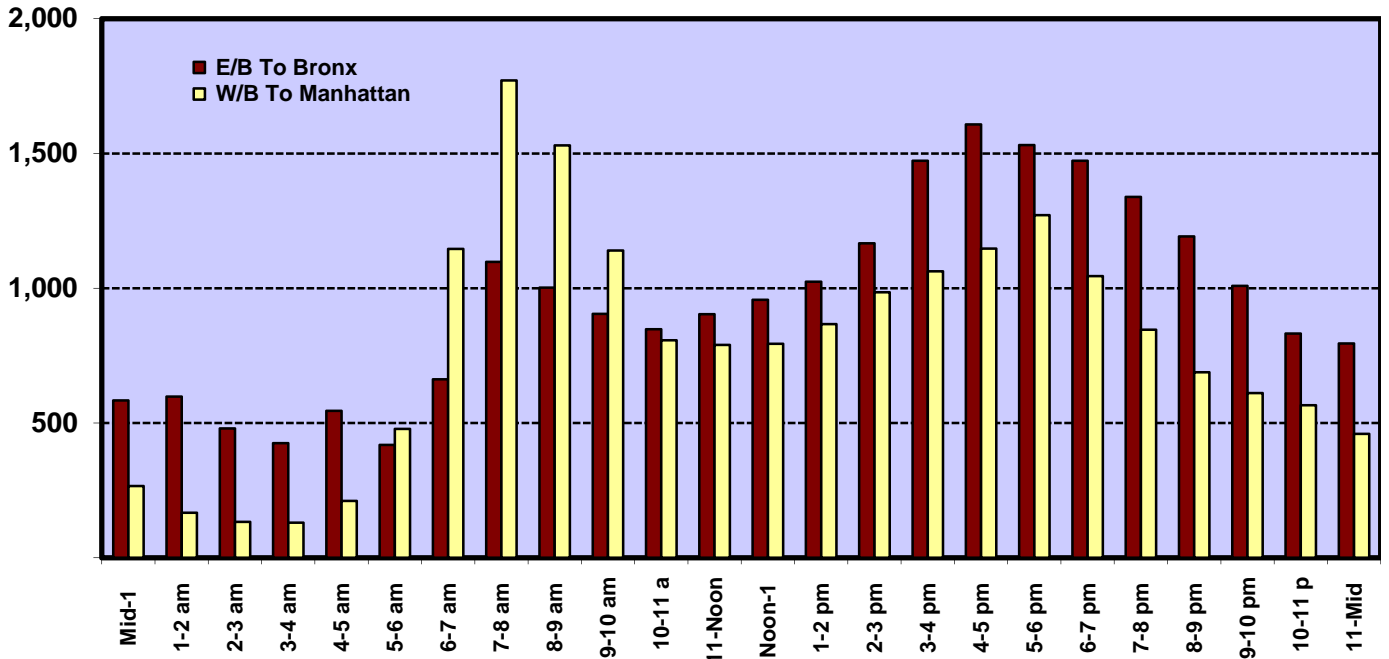
**Hourly Vehicular Volumes
Madison Avenue Bridge - 2012**

	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	---	---	---	---	---	584	---	---	---	---	---	266
1-2am	---	---	---	---	---	598	---	---	---	---	---	167
2-3am	---	---	---	---	---	480	---	---	---	---	---	133
3-4am	---	---	---	---	---	425	---	---	---	---	---	130
4-5am	---	---	---	---	---	545	---	---	---	---	---	211
5-6am	---	---	---	---	---	419	---	---	---	---	---	478
6-7am	---	---	---	---	---	662	---	---	---	---	---	1,146
7-8am	856	43	94	55	50	1,098	1,450	116	16	59	130	1,771 **
8-9am	785	54	70	41	52	1,002	1,211	101	29	64	125	1,530
9-10am	649	58	84	70	44	905	805	58	32	139	106	1,140
10-11am	704	32	42	31	39	848	657	55	18	18	59	807
11-12am	611	24	80	99	90	904	601	23	31	59	76	790
12-1pm	818	27	32	39	41	957	668	29	22	27	48	794
1-2pm	870	30	32	44	48	1,024	737	50	26	14	40	867
2-3pm	851	32	75	104	105	1,167	786	66	27	30	76	985
3-4pm	1,269	26	40	72	66	1,473	916	63	18	24	42	1,063
4-5pm	1,199	30	135	111	133	1,608 **	992	61	26	24	44	1,147
5-6pm	1,224	33	106	86	82	1,531	1,116	50	35	28	42	1,271
6-7pm	1,213	70	48	61	81	1,473	947	38	21	19	20	1,045
7-8pm	---	---	---	---	---	1,339	---	---	---	---	---	846
8-9pm	---	---	---	---	---	1,192	---	---	---	---	---	688
9-10pm	---	---	---	---	---	1,009	---	---	---	---	---	611
10-11pm	---	---	---	---	---	832	---	---	---	---	---	566
11-12pm	---	---	---	---	---	795	---	---	---	---	---	460
Totals	---	---	---	---	---	22,870	---	---	---	---	---	18,912
7-10am	2,290	155	248	166	146	3,005	3,466	275	77	262	361	4,441
10am-1pm	2,133	83	154	169	170	2,709	1,926	107	71	104	183	2,391
1-4pm	2,990	88	147	220	219	3,664	2,439	179	71	68	158	2,915
4-7pm	3,636	133	289	258	296	4,612	3,055	149	82	71	106	3,463
7am-7pm	11,049	459	838	813	831	13,990	10,886	710	301	505	808	13,210
6-10am	---	---	---	---	---	3,667	---	---	---	---	---	5,587
3-7pm	4,905	159	329	330	362	6,085	3,971	212	100	95	148	4,526
6am-7pm	---	---	---	---	---	14,652	---	---	---	---	---	14,356

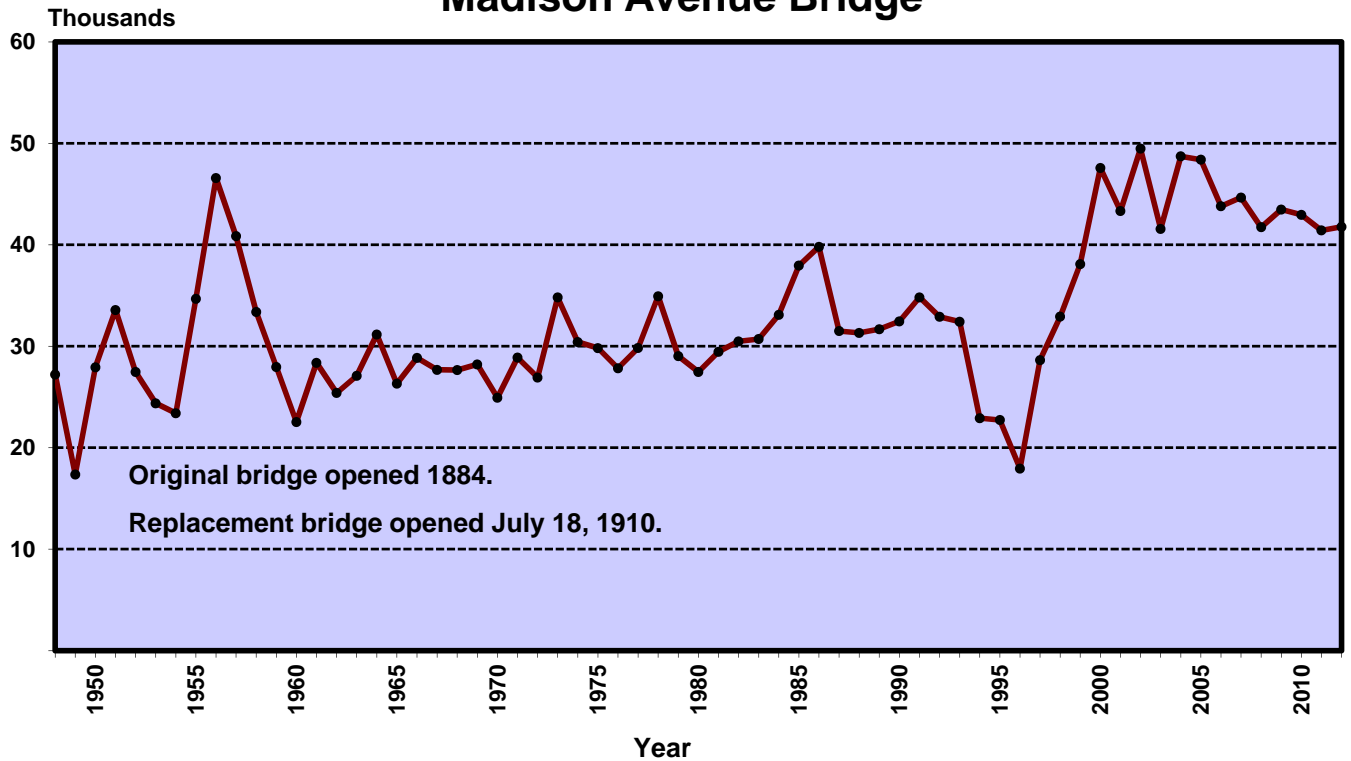
Based on 1989 Classification Survey Data

** Peak Volumes

Hourly Vehicular Volumes Madison Avenue Bridge ~ 2012



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



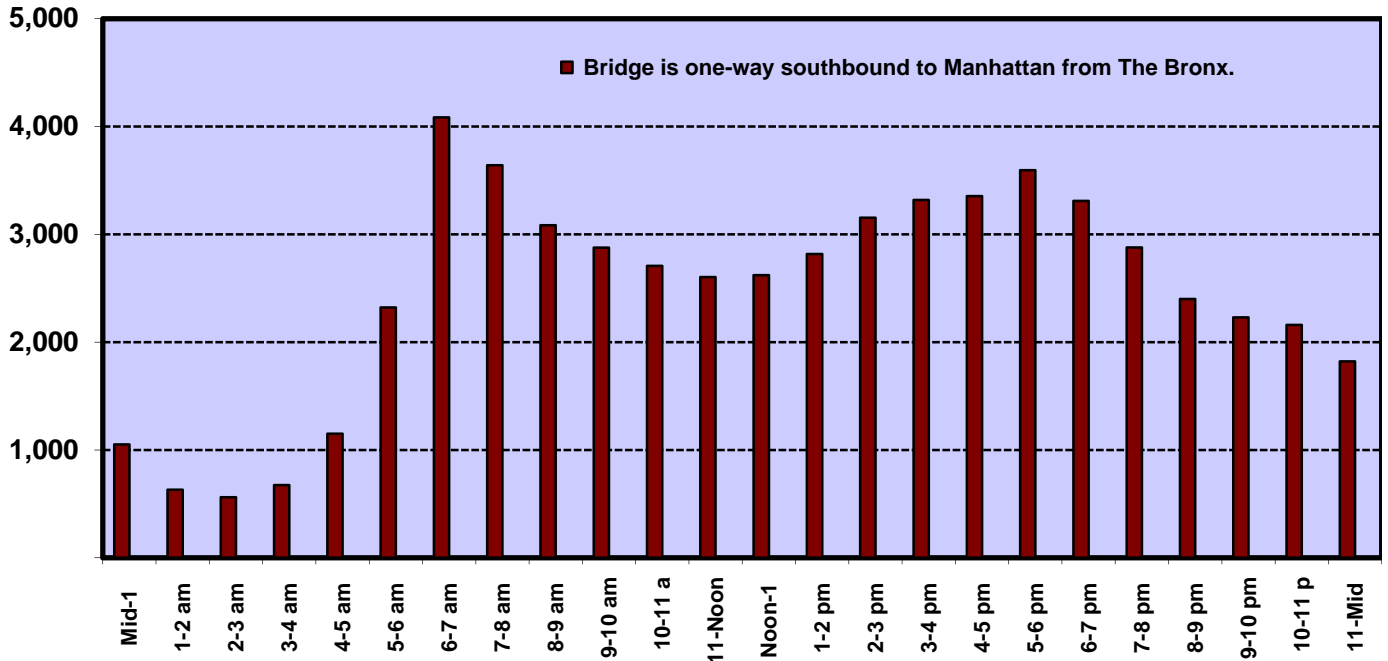
**Hourly Vehicular Volumes
Third Avenue Bridge - 2012**

	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	---	---	---	---	---	---	---	---	---	---	---	1,052
1-2am	---	---	---	---	---	---	---	---	---	---	---	632
2-3am	---	---	---	---	---	---	---	---	---	---	---	562
3-4am	---	---	---	---	---	---	---	---	---	---	---	675
4-5am	---	---	---	---	---	---	---	---	---	---	---	1,151
5-6am	---	---	---	---	---	---	---	---	---	---	---	2,322
6-7am	---	---	---	---	---	---	---	---	---	---	---	4,085 **
7-8am	2,340	48	362	488	403	3,641	403	488	403	426	3,085	3,641
8-9am	2,021	29	200	409	426	3,085	426	409	426	296	2,877	3,085
9-10am	1,922	31	253	375	296	2,877	296	375	296	120	2,708	2,877
10-11am	2,265	28	150	145	206	2,603	206	145	128	98	2,622	2,603
11-12am	1,735	48	281	333	206	2,603	206	333	160	274	2,818	2,603
12-1pm	2,216	66	114	128	98	2,622	98	128	160	274	2,818	2,622
1-2pm	2,105	96	183	160	274	2,818	274	160	269	315	3,154	2,818
2-3pm	2,188	109	273	269	315	3,154	315	269	83	74	3,319	3,154
3-4pm	2,972	88	102	83	74	3,319	74	102	146	168	3,354	3,319
4-5pm	2,824	64	152	146	168	3,354	168	152	112	94	3,595	3,354
5-6pm	3,194	63	132	112	94	3,595	94	132	80	88	3,310	3,595
6-7pm	2,962	60	120	80	88	3,310	88	120	---	---	2,878	3,310
7-8pm	---	---	---	---	---	---	---	---	---	---	2,400	2,878
8-9pm	---	---	---	---	---	---	---	---	---	---	2,229	2,400
9-10pm	---	---	---	---	---	---	---	---	---	---	2,160	2,229
10-11pm	---	---	---	---	---	---	---	---	---	---	1,821	2,160
11-12pm	---	---	---	---	---	---	---	---	---	---	1,821	1,821
Totals	---	---	---	---	---	59,053	---	---	---	---	---	59,053
7-10am	6,283	108	815	1,272	1,125	9,603	1,125	1,272	606	424	7,933	9,603
10am-1pm	6,216	142	545	606	424	7,933	424	606	512	663	9,291	7,933
1-4pm	7,265	293	558	512	663	9,291	663	558	338	350	10,259	9,291
4-7pm	8,980	187	404	338	350	10,259	350	404	2,728	2,562	37,086	10,259
7am-7pm	28,744	730	2,322	2,728	2,562	37,086	2,562	2,728	---	---	13,688	37,086
6-10am	---	---	---	---	---	---	---	---	---	---	13,688	13,688
3-7pm	11,952	275	506	421	424	13,578	424	506	---	---	13,578	13,578
6am-7pm	---	---	---	---	---	---	---	---	---	---	41,171	41,171

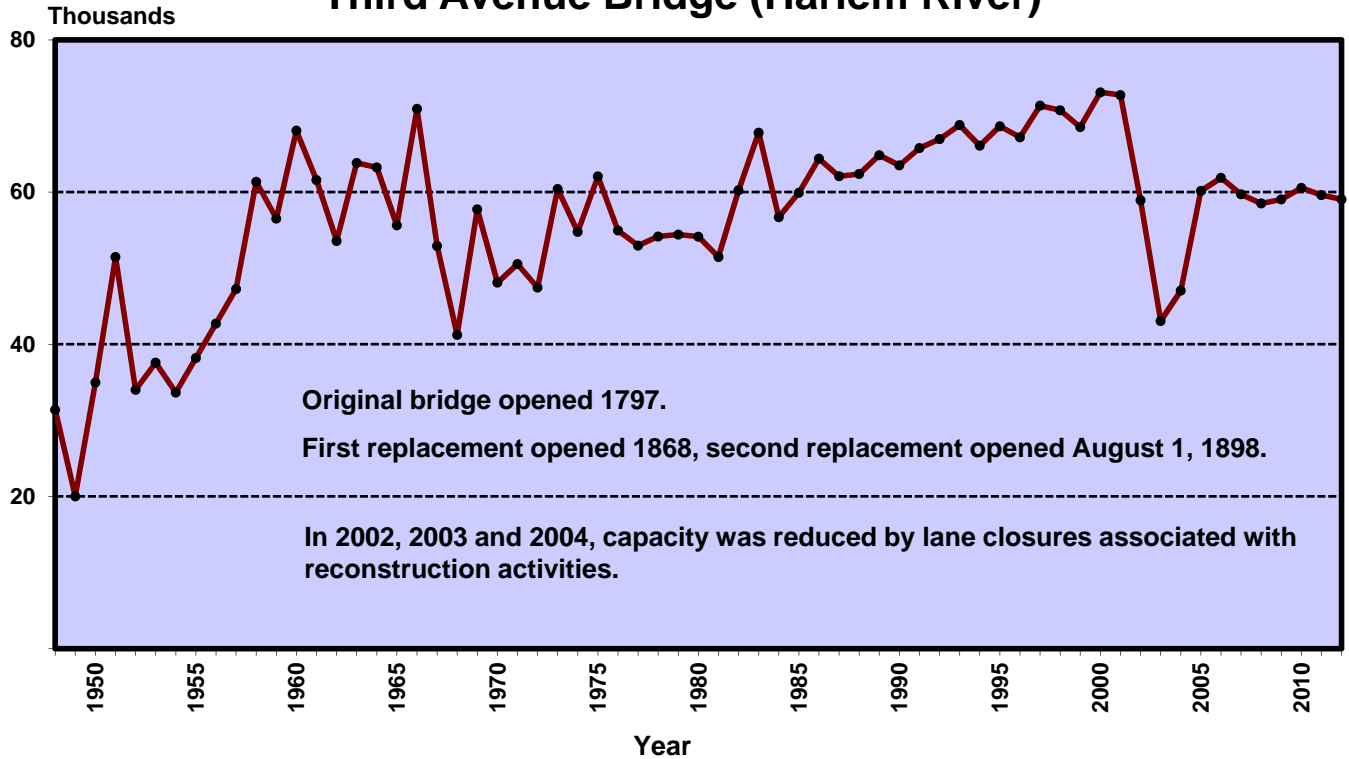
** Peak Volumes

Based on 1989 Classification Survey Data

Hourly Vehicular Volumes Third Avenue Bridge (Harlem River) ~ 2012



Average Daily Traffic Volumes Third Avenue Bridge (Harlem River)



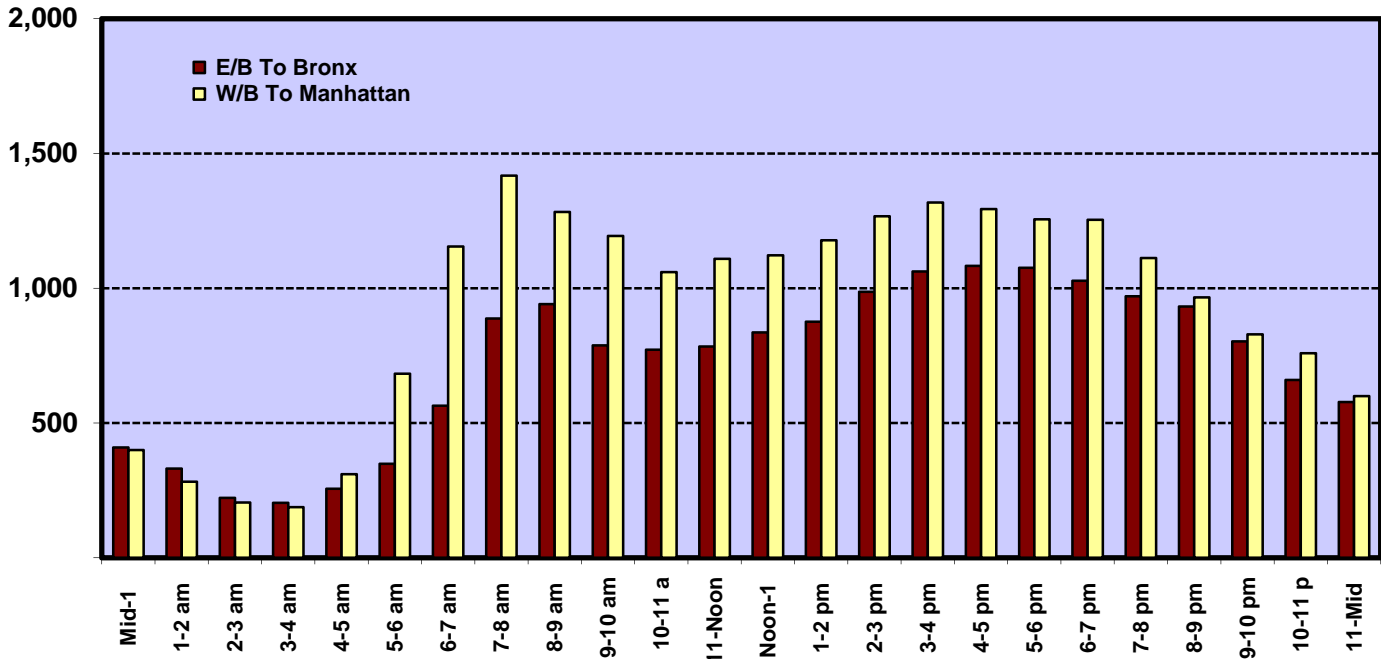
**Hourly Vehicular Volumes
University Heights Bridge - 2012**

	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	---	---	---	---	---	409	---	---	---	---	---	400
1-2am	---	---	---	---	---	331	---	---	---	---	---	282
2-3am	---	---	---	---	---	222	---	---	---	---	---	205
3-4am	---	---	---	---	---	204	---	---	---	---	---	188
4-5am	---	---	---	---	---	256	---	---	---	---	---	310
5-6am	---	---	---	---	---	349	---	---	---	---	---	683
6-7am	---	---	---	---	---	564	---	---	---	---	---	1,155
7-8am	671	47	86	41	43	888	1,230	20	32	35	101	1,418 **
8-9am	730	8	77	55	71	941	1,112	11	24	45	91	1,283
9-10am	587	8	58	67	68	788	1,011	13	16	52	102	1,194
10-11am	673	4	35	33	27	772	967	4	4	27	58	1,060
11-12am	604	7	63	73	37	784	944	7	13	60	85	1,109
12-1pm	754	12	23	26	21	836	1,037	2	5	28	50	1,122
1-2pm	750	38	37	29	22	876	1,112	4	5	20	37	1,178
2-3pm	807	13	69	50	48	987	1,085	10	21	48	103	1,267
3-4pm	967	17	22	28	28	1,062	1,191	42	6	26	53	1,318
4-5pm	943	5	58	44	33	1,083 **	1,151	18	16	24	85	1,294
5-6pm	944	0	59	29	44	1,076	1,176	1	14	13	52	1,256
6-7pm	898	0	55	19	56	1,028	1,173	7	10	9	55	1,254
7-8pm	---	---	---	---	---	970	---	---	---	---	---	1,112
8-9pm	---	---	---	---	---	932	---	---	---	---	---	966
9-10pm	---	---	---	---	---	803	---	---	---	---	---	829
10-11pm	---	---	---	---	---	660	---	---	---	---	---	759
11-12pm	---	---	---	---	---	578	---	---	---	---	---	600
Totals	---	---	---	---	---	17,399	---	---	---	---	---	22,242
7-10am	1,988	63	221	163	182	2,617	3,353	44	72	132	294	3,895
10am-1pm	2,031	23	121	132	85	2,392	2,948	13	22	115	193	3,291
1-4pm	2,524	68	128	107	98	2,925	3,388	56	32	94	193	3,763
4-7pm	2,785	5	172	92	133	3,187	3,500	26	40	46	192	3,804
7am-7pm	9,328	159	642	494	498	11,121	13,189	139	166	387	872	14,753
6-10am	---	---	---	---	---	3,181	---	---	---	---	---	5,050
3-7pm	3,752	22	194	120	161	4,249	4,691	68	46	72	245	5,122
6am-7pm	---	---	---	---	---	11,685	---	---	---	---	---	15,908

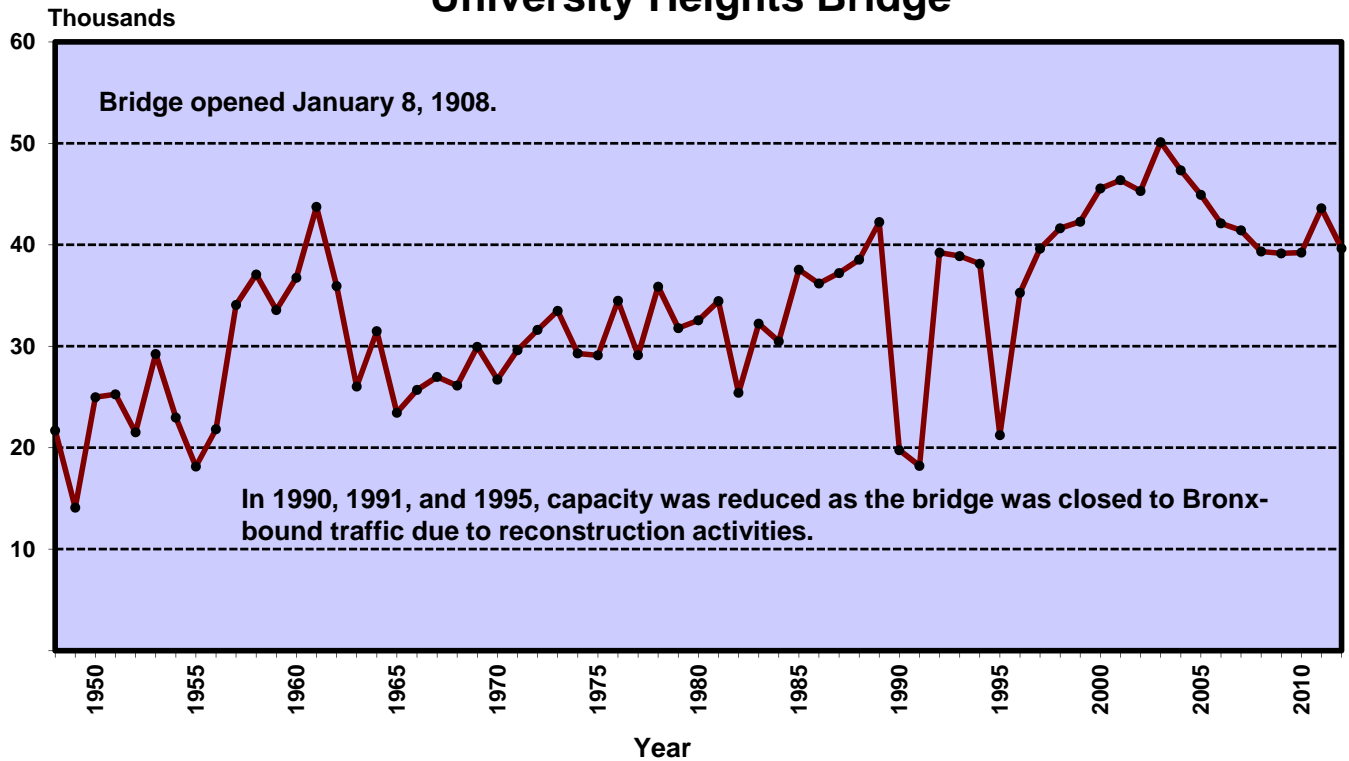
Based on 1989 Classification Survey Data

** Peak Volumes

Hourly Vehicular Volumes University Heights Bridge ~ 2012



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



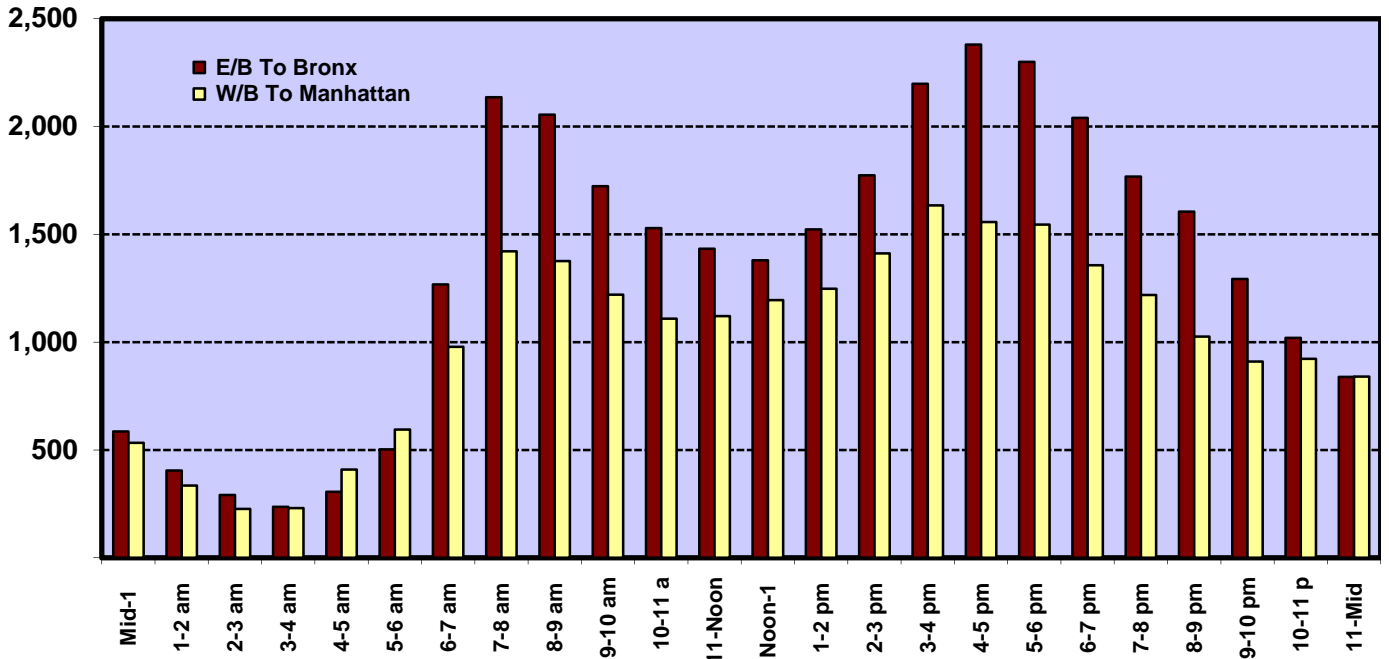
**Hourly Vehicular Volumes
Washington Bridge - 2012**

	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	---	---	---	---	---	586	---	---	---	---	---	533
1-2am	---	---	---	---	---	405	---	---	---	---	---	335
2-3am	---	---	---	---	---	291	---	---	---	---	---	227
3-4am	---	---	---	---	---	236	---	---	---	---	---	230
4-5am	---	---	---	---	---	306	---	---	---	---	---	409
5-6am	---	---	---	---	---	503	---	---	---	---	---	595
6-7am	---	---	---	---	---	1,268	---	---	---	---	---	978
7-8am	1,830	70	39	63	134	2,136	1,199	56	107	35	24	1,421
8-9am	1,721	53	31	92	158	2,055	1,160	64	71	53	28	1,376
9-10am	1,426	47	30	113	107	1,723	1,062	36	53	41	28	1,220
10-11am	1,390	41	9	38	51	1,529	1,012	36	11	27	23	1,109
11-12am	1,239	30	18	68	78	1,433	978	46	29	31	37	1,121
12-1pm	1,235	41	19	25	60	1,380	1,119	29	10	21	16	1,195
1-2pm	1,395	34	6	35	53	1,523	1,168	30	17	19	14	1,248
2-3pm	1,544	38	28	75	89	1,774	1,219	57	43	52	41	1,412
3-4pm	1,999	47	13	39	100	2,198	1,474	46	46	46	22	1,634
4-5pm	1,980	47	60	73	220	2,380	1,325	38	67	82	45	1,557
5-6pm	2,057	38	57	40	108	2,300	1,402	28	43	32	40	1,545
6-7pm	1,875	24	33	25	83	2,040	1,230	34	49	17	27	1,357
7-8pm	---	---	---	---	---	1,768	---	---	---	---	---	1,219
8-9pm	---	---	---	---	---	1,605	---	---	---	---	---	1,026
9-10pm	---	---	---	---	---	1,293	---	---	---	---	---	910
10-11pm	---	---	---	---	---	1,020	---	---	---	---	---	923
11-12pm	---	---	---	---	---	839	---	---	---	---	---	840
Totals	---	---	---	---	---	32,591	---	---	---	---	---	24,420
7-10am	4,977	170	100	268	399	5,914	3,421	156	231	129	80	4,017
10am-1pm	3,864	112	46	131	189	4,342	3,109	111	50	79	76	3,425
1-4pm	4,938	119	47	149	242	5,495	3,861	133	106	117	77	4,294
4-7pm	5,912	109	150	138	411	6,720	3,957	100	159	131	112	4,459
7am-7pm	19,691	510	343	686	1,241	22,471	14,348	500	546	456	345	16,195
6-10am	---	---	---	---	---	7,182	---	---	---	---	---	4,995
3-7pm	7,911	156	163	177	511	8,918	5,431	146	205	177	134	6,093
6am-7pm	---	---	---	---	---	23,739	---	---	---	---	---	17,173

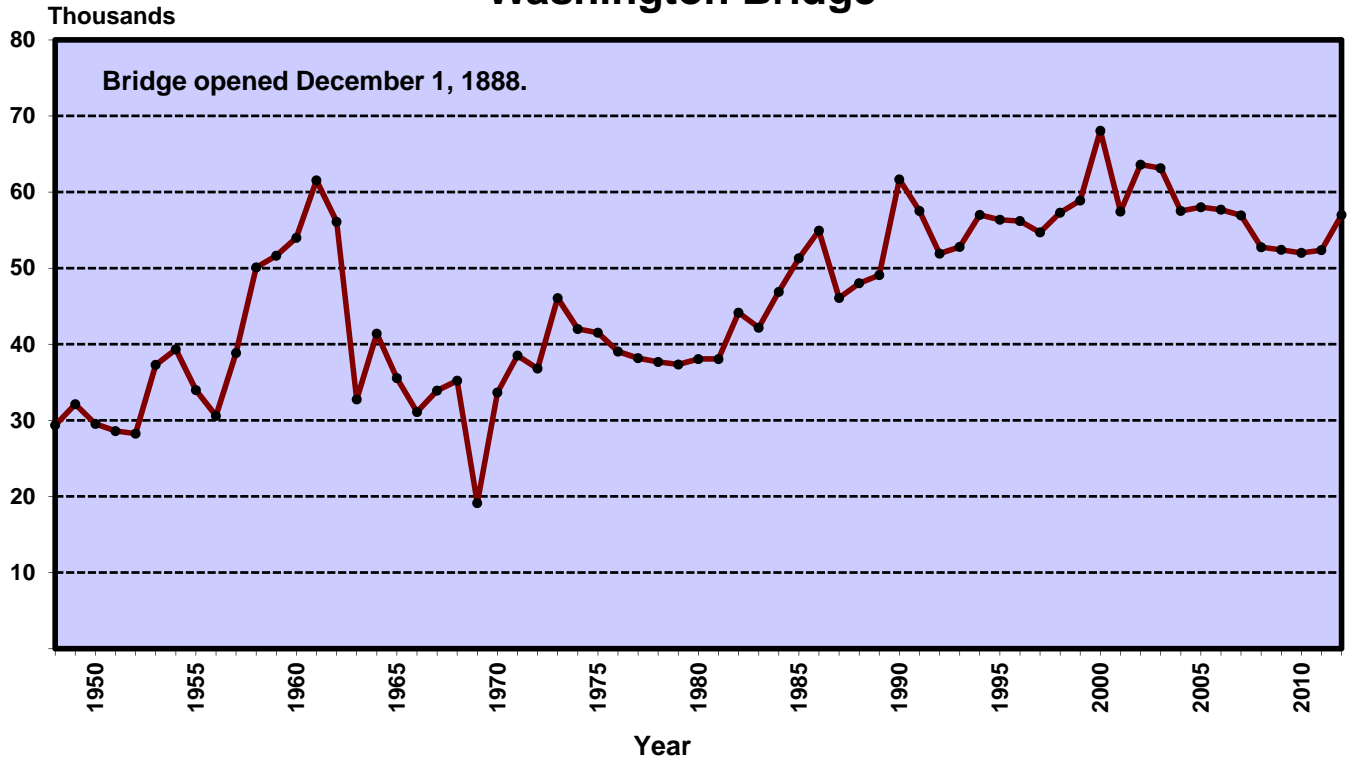
Based on 1989 Classification Survey Data

** Peak Volumes

Hourly Vehicular Volumes Washington Bridge ~ 2012



Average Daily Traffic Volumes ~ Total of Both Directions Washington Bridge



**Hourly Vehicular Volumes
Willis Avenue Bridge - 2012**

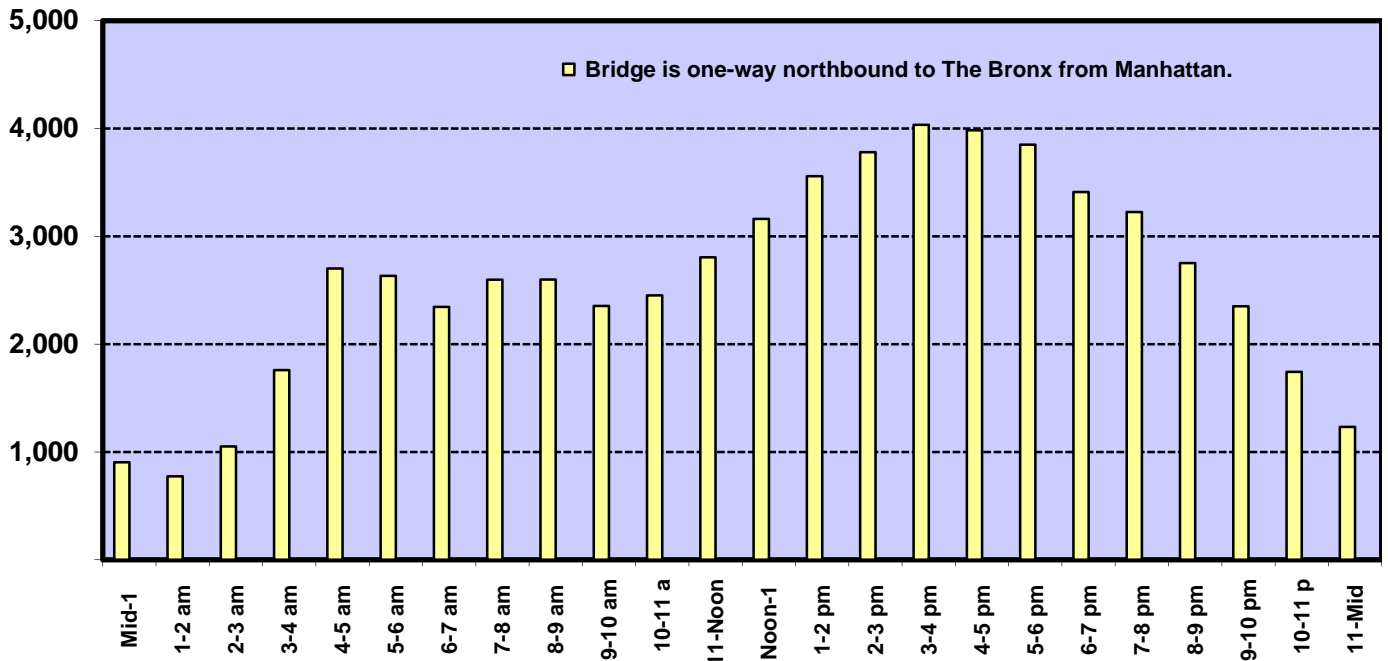
	Northbound to Bronx					Southbound to Manhattan					2-Way Totals	
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks		Commercial Vans
12-1am	---	---	---	---	---	904	---	---	---	---	---	904
1-2am	---	---	---	---	---	774	---	---	---	---	---	774
2-3am	---	---	---	---	---	1,052	---	---	---	---	---	1,052
3-4am	---	---	---	---	---	1,759	---	---	---	---	---	1,759
4-5am	---	---	---	---	---	2,701	---	---	---	---	---	2,701
5-6am	---	---	---	---	---	2,633	---	---	---	---	---	2,633
6-7am	---	---	---	---	---	2,345	---	---	---	---	---	2,345
7-8am	2,211	66	103	128	89	2,597	---	---	---	---	---	2,597
8-9am	2,097	89	78	151	184	2,599	---	---	---	---	---	2,599
9-10am	1,760	103	86	211	195	2,355	---	---	---	---	---	2,355
10-11am	2,044	47	65	153	144	2,453	---	---	---	---	---	2,453
11-12am	2,074	36	122	298	275	2,805	---	---	---	---	---	2,805
12-1pm	2,770	47	59	170	116	3,162	---	---	---	---	---	3,162
1-2pm	3,179	29	48	134	168	3,558	---	---	---	---	---	3,558
2-3pm	2,799	34	137	403	407	3,780	---	---	---	---	---	3,780
3-4pm	3,570	65	61	171	167	4,034	---	---	---	---	---	4,034
4-5pm	3,137	36	121	268	422	3,984	---	---	---	---	---	3,984
5-6pm	3,132	56	104	174	385	3,851	---	---	---	---	---	3,851
6-7pm	2,984	29	91	105	202	3,411	---	---	---	---	---	3,411
7-8pm	---	---	---	---	---	3,226	---	---	---	---	---	3,226
8-9pm	---	---	---	---	---	2,752	---	---	---	---	---	2,752
9-10pm	---	---	---	---	---	2,351	---	---	---	---	---	2,351
10-11pm	---	---	---	---	---	1,743	---	---	---	---	---	1,743
11-12pm	---	---	---	---	---	1,233	---	---	---	---	---	1,233
Totals	---	---	---	---	---	62,062	---	---	---	---	---	62,062
7-10am	6,068	258	267	490	468	7,551	---	---	---	---	---	7,551
10am-1pm	6,888	130	246	621	535	8,420	---	---	---	---	---	8,420
1-4pm	9,548	128	246	708	742	11,372	---	---	---	---	---	11,372
4-7pm	9,253	121	316	547	1,009	11,246	---	---	---	---	---	11,246
7am-7pm	31,757	637	1,075	2,366	2,754	38,589	---	---	---	---	---	38,589
6-10am	---	---	---	---	---	9,896	---	---	---	---	---	9,896
3-7pm	12,823	186	377	718	1,176	15,280	---	---	---	---	---	15,280
6am-7pm	---	---	---	---	---	40,934	---	---	---	---	---	40,934

Bridge is 1-way northbound to The Bronx

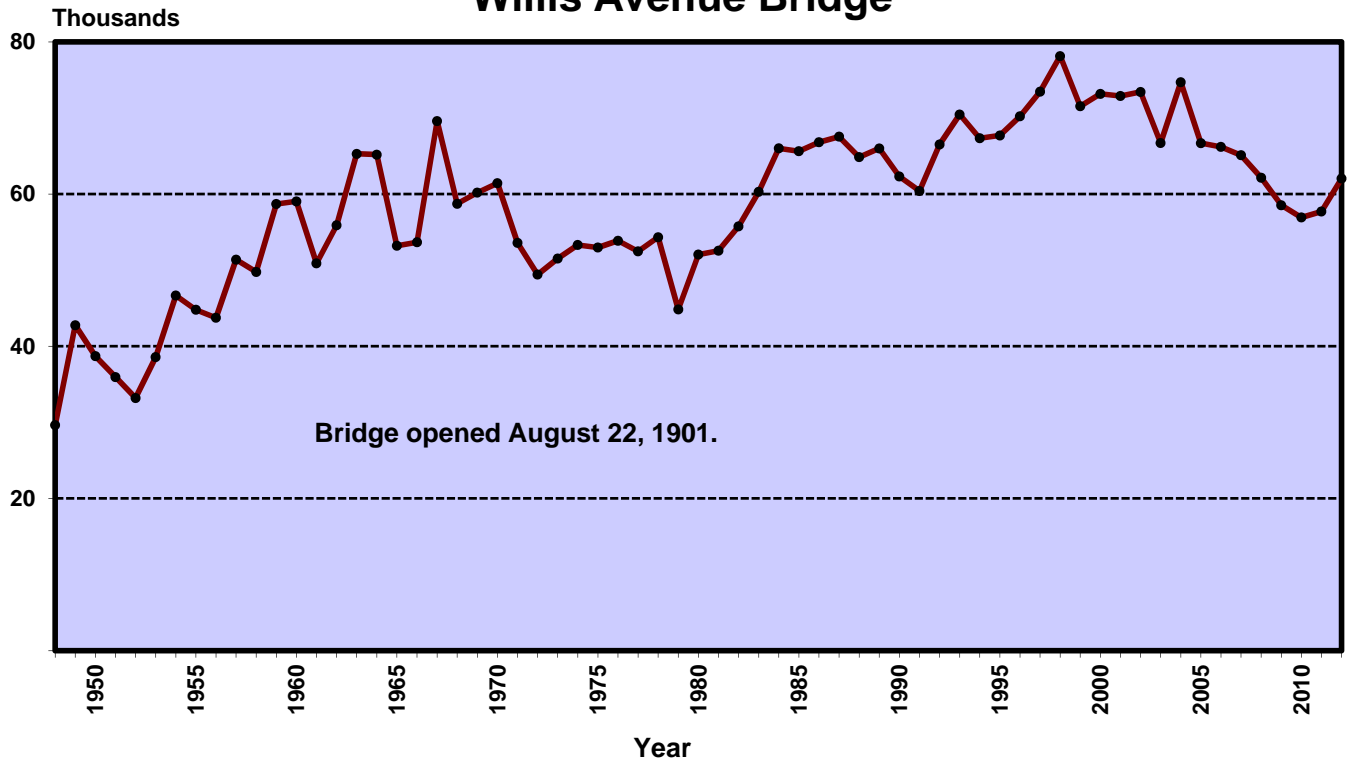
Based on 1989 Classification Survey Data

** Peak Volumes

Hourly Vehicular Volumes Willis Avenue Bridge ~ 2012



Average Daily Traffic Volumes Willis Avenue Bridge



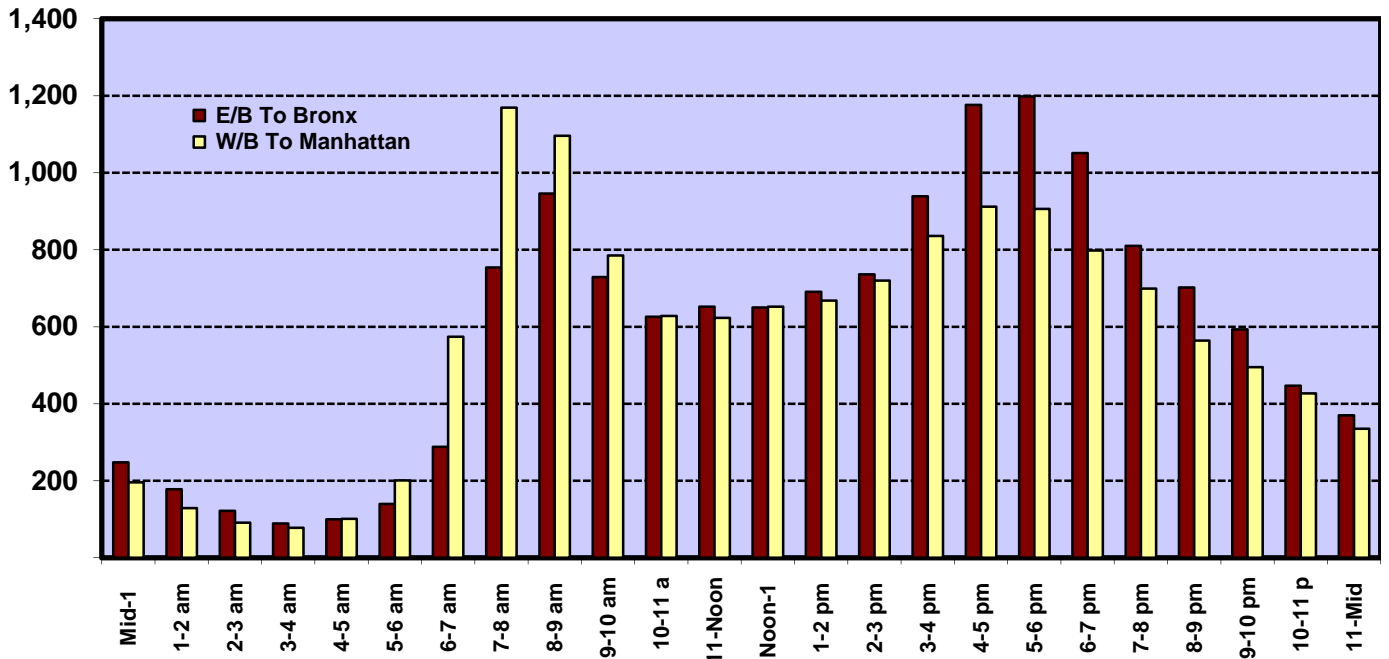
**Hourly Vehicular Volumes
145th Street Bridge - 2012**

	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	---	---	---	---	---	248	---	---	---	---	---	196
1-2am	---	---	---	---	---	178	---	---	---	---	---	129
2-3am	---	---	---	---	---	122	---	---	---	---	---	91
3-4am	---	---	---	---	---	89	---	---	---	---	---	78
4-5am	---	---	---	---	---	100	---	---	---	---	---	101
5-6am	---	---	---	---	---	140	---	---	---	---	---	201
6-7am	---	---	---	---	---	288	---	---	---	---	---	574
7-8am	632	30	41	41	10	754	1,017	47	21	44	40	1,169 **
8-9am	789	28	48	51	30	946	939	32	37	31	57	1,096
9-10am	588	13	40	63	25	729	630	21	38	29	67	785
10-11am	550	9	15	25	27	626	501	17	34	26	50	628
11-12am	496	16	29	68	43	652	460	12	47	48	56	623
12-1pm	564	12	17	40	17	650	606	11	11	9	15	652
1-2pm	596	12	34	31	18	691	603	30	11	15	9	668
2-3pm	555	16	30	95	40	736	602	23	28	27	40	720
3-4pm	828	21	22	40	28	939	779	30	9	7	11	836
4-5pm	937	15	61	105	58	1,176	846	18	16	9	23	912
5-6pm	977	11	56	81	73	1,198 **	849	18	15	10	14	906
6-7pm	914	29	32	25	51	1,051	753	24	6	4	11	798
7-8pm	---	---	---	---	---	810	---	---	---	---	---	699
8-9pm	---	---	---	---	---	702	---	---	---	---	---	564
9-10pm	---	---	---	---	---	593	---	---	---	---	---	495
10-11pm	---	---	---	---	---	447	---	---	---	---	---	427
11-12pm	---	---	---	---	---	370	---	---	---	---	---	335
Totals	---	---	---	---	---	14,235	---	---	---	---	---	13,683
7-10am	2,009	71	129	155	65	2,429	2,586	100	96	104	164	3,050
10am-1pm	1,610	37	61	133	87	1,928	1,567	40	92	83	121	1,903
1-4pm	1,979	49	86	166	86	2,366	1,984	83	48	49	60	2,224
4-7pm	2,828	55	149	211	182	3,425	2,448	60	37	23	48	2,616
7am-7pm	8,426	212	425	665	420	10,148	8,585	283	273	259	393	9,793
6-10am	---	---	---	---	---	2,717	---	---	---	---	---	3,624
3-7pm	3,656	76	171	251	210	4,364	3,227	90	46	30	59	3,452
6am-7pm	---	---	---	---	---	10,436	---	---	---	---	---	10,367

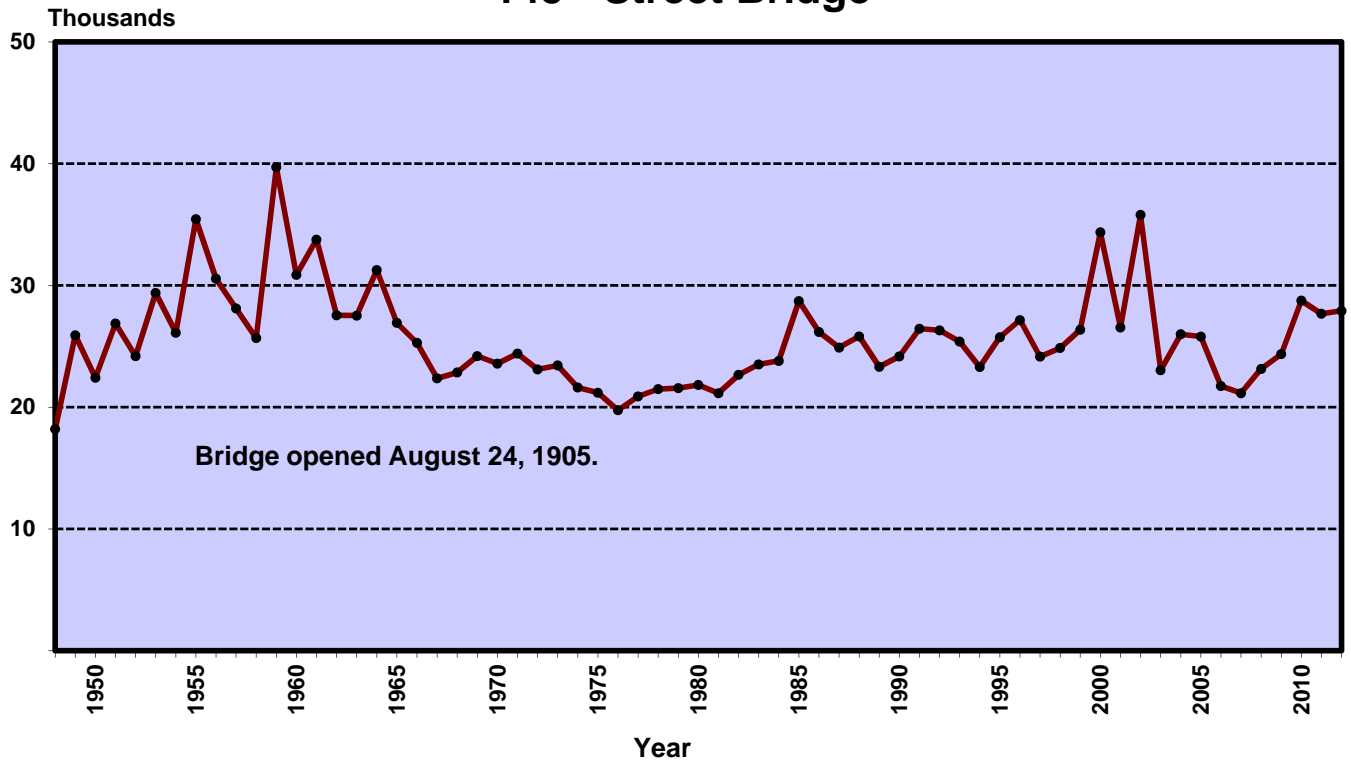
Based on 1989 Classification Survey Data

** Peak Volumes

Hourly Vehicular Volumes 145th Street Bridge ~ 2012



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



MTABT Facilities



Robert F. Kennedy Memorial Bridge

**MTABT Manhattan Facilities ~ Average Daily Traffic Volumes
1948 - 2012**

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

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 2012

	Henry Hudson Bridge		Hugh L. Carey Tunnel (Brooklyn-Battery Tunnel)		Queens-Midtown Tunnel		Robert F. Kennedy Memorial Bridge (Triborough Bridge)		Totals	
	S/B	N/B	N/B	S/B	W/B	E/B	W/B	E/B	Entering Manhattan	Leaving Manhattan
12-1am	113	364	179	578	573	743	576	454	1,441	2,139
1-2am	57	160	112	245	274	378	245	251	688	1,034
2-3am	42	92	66	115	126	230	123	187	357	624
3-4am	46	58	53	76	139	171	106	205	344	510
4-5am	112	59	168	70	284	391	239	495	803	1,015
5-6am	508	123	741	162	1,029	765	896	958	3,174	2,008
6-7am	2,144	539	2,081	381	2,413	1,333	2,836	1,556	9,474	3,809
7-8am	3,542 **	1,331	2,953	696	3,611	1,383	4,239 **	1,996	14,345	5,406
8-9am	3,156	1,762	3,234 **	840	4,285 **	1,311	4,096	2,167	14,771 **	6,080
9-10am	2,435	1,072	2,476	845	3,997	1,275	3,648	1,965	12,556	5,157
10-11am	1,965	967	1,645	708	2,970	1,590	3,252	1,797	9,832	5,062
11-12am	1,823	997	1,307	881	2,804	1,817	2,784	1,990	8,718	5,685
12-1pm	1,561	1,088	1,339	1,045	2,452	2,090	2,448	2,094	7,800	6,317
1-2pm	1,458	1,265	1,287	1,319	2,379	2,407	2,473	2,264	7,597	7,255
2-3pm	1,689	1,610	1,376	1,458	2,451	2,766	2,761	2,532	8,277	8,366
3-4pm	2,256	2,133	1,477	2,057	2,661	2,956	3,085	3,020	9,479	10,166
4-5pm	2,449	2,472	1,342	2,894	2,894	2,987 **	2,977	3,194 **	9,662	11,185
5-6pm	2,734	2,832 **	1,297	2,830 **	3,042	2,881	3,201	2,906	10,274	11,449 **
6-7pm	2,432	2,744	1,192	2,488	2,663	2,605	3,073	2,476	9,360	10,313
7-8pm	1,458	2,163	857	2,390	2,191	2,243	2,300	2,226	6,806	9,022
8-9pm	967	1,595	659	1,782	1,678	2,067	1,777	1,763	5,081	7,207
9-10pm	710	1,526	441	1,744	1,432	2,104	1,479	1,553	4,062	6,927
10-11pm	484	1,310	583	1,025	1,242	1,788	1,312	1,260	3,621	5,383
11-12pm	258	773	351	816	909	1,157	892	829	2,410	3,575
Totals	34,399	29,035	27,216	27,083	48,499	39,438	50,818	40,138	160,932	135,694
7-10am	9,133	4,165	8,663	2,381	11,893	3,969	11,983	6,128	41,672	16,643
10am-1pm	5,349	3,052	4,291	2,634	8,226	5,497	8,484	5,881	26,350	17,064
1-4pm	5,403	5,008	4,140	4,834	7,491	8,129	8,319	7,816	25,353	25,787
4-7pm	7,615	8,048	3,831	7,850	8,599	8,473	9,251	8,576	29,296	32,947
7am-7pm	27,500	20,273	20,925	17,699	36,209	26,068	38,037	28,401	122,671	92,441
6-10am	11,277	4,704	10,744	2,762	14,306	5,302	14,819	7,684	51,146	20,452
3-7pm	9,871	10,181	5,308	9,907	11,260	11,429	12,336	11,596	38,775	43,113
6am-7pm	29,644	20,812	23,006	18,080	38,622	27,401	40,873	29,957	132,145	96,250

** Peak Volumes

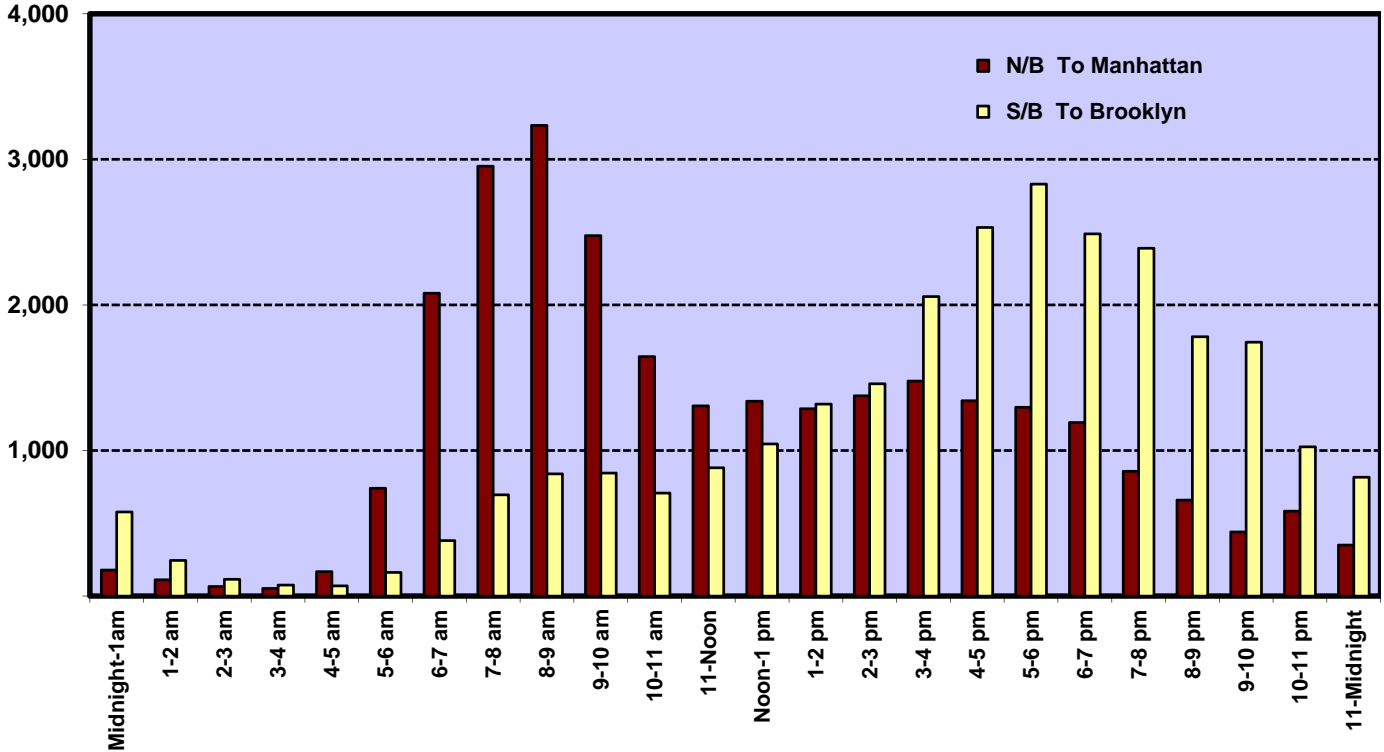
**Hourly Vehicular Volumes
Hugh L. Carey Tunnel (Brooklyn-Battery Tunnel) - 2012**

FHWA Classes ▶	Northbound to Manhattan										Southbound to Brooklyn										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	1 & 2				Autos & Motorcycles	Pickups	Large SUVs	Buses	3				4	5-7	8-13		
12-1am	153	6	10	10	179	0	0	179	525	12	35	6	0	578							
1-2am	97	5	8	2	112	0	0	112	234	0	10	1	0	245							
2-3am	59	0	4	3	66	0	0	66	110	1	3	1	0	115							
3-4am	45	1	5	2	53	0	0	53	74	0	0	2	0	76							
4-5am	109	6	41	12	168	0	0	168	65	0	4	1	0	173							
5-6am	668	7	59	7	741	0	0	741	144	2	11	5	0	802							
6-7am	1,857	13	187	24	2,081	0	0	2,081	283	6	80	12	0	381							
7-8am	2,592	16	306	39	2,953	0	0	2,953	502	8	168	18	0	696							
8-9am	2,827	16	352	39	3,234	0	0	3,234	613	7	200	20	0	840							
9-10am	2,260	18	161	37	2,476	0	0	2,476	649	8	165	23	0	845							
10-11am	1,497	20	83	44	1,645	1	1	1,646	619	8	66	15	0	708							
11-12am	1,211	11	54	30	1,307	1	1	1,308	795	8	60	18	0	881							
12-1pm	1,232	14	65	28	1,339	0	0	1,339	961	12	53	19	0	1,045							
1-2pm	1,164	11	79	33	1,287	0	0	1,287	1,190	14	85	30	0	1,319							
2-3pm	1,237	10	104	25	1,376	0	0	1,376	1,334	15	83	26	0	1,458							
3-4pm	1,319	6	140	12	1,477	0	0	1,477	1,875	14	143	25	0	2,057							
4-5pm	1,170	4	158	9	1,342	1	1	1,343	2,296	7	207	22	0	2,532							
5-6pm	1,155	3	130	6	1,297	3	3	1,299	2,517	7	289	16	1	2,830							
6-7pm	1,107	3	74	7	1,192	1	1	1,193	2,285	6	185	11	1	2,488							
7-8pm	814	1	39	3	857	0	0	857	2,253	6	122	9	0	2,390							
8-9pm	625	4	25	5	659	0	0	659	1,664	8	100	10	0	1,782							
9-10pm	419	1	19	2	441	0	0	441	1,648	5	73	18	0	1,744							
10-11pm	553	1	26	3	583	0	0	583	984	5	28	8	0	1,025							
11-12pm	311	0	29	11	351	0	0	351	770	6	32	8	0	816							
Totals	24,481	177	2,158	393	27,216	7	7	27,216	24,390	165	2,202	324	2	27,083							
7-10am	7,679	50	819	115	8,663	0	0	8,663	1,764	23	533	61	0	2,381							
10am-1pm	3,940	45	202	102	4,291	2	2	4,293	2,375	28	179	52	0	2,634							
1-4pm	3,720	27	323	70	4,140	0	0	4,140	4,399	43	311	81	0	4,834							
4-7pm	3,432	10	362	22	3,831	5	5	3,836	7,098	20	681	49	2	7,850							
7am-7pm	18,771	132	1,706	309	20,925	7	7	20,932	15,636	114	1,704	243	2	17,699							
6-10am	9,536	63	1,006	139	10,744	0	0	10,744	2,047	29	613	73	0	2,762							
3-7pm	4,751	16	502	34	5,308	5	5	5,313	8,973	34	824	74	2	9,907							
7am-7pm	20,628	145	1,893	333	23,006	7	7	23,013	15,919	120	1,784	255	2	18,080							

** Peak Volumes

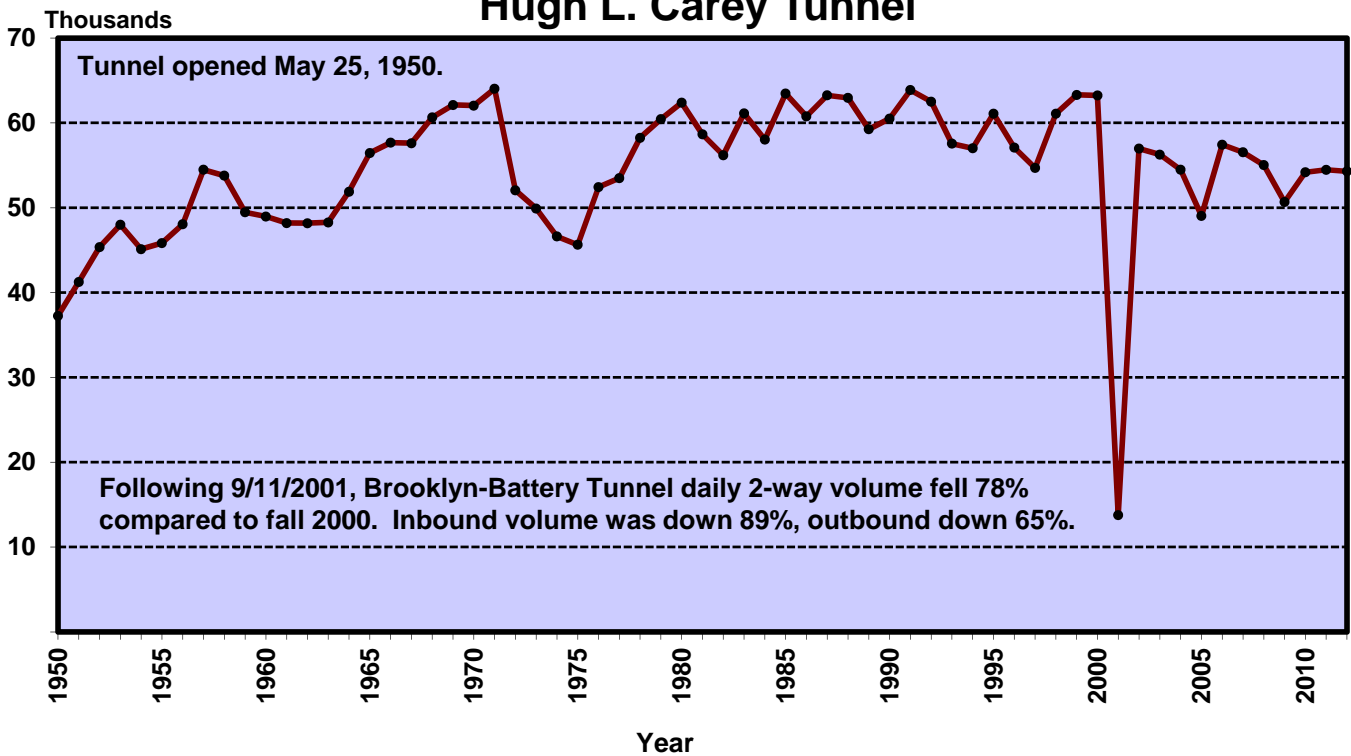
Based on May 2006 Classification Survey Data.

Hourly Vehicular Volumes Hugh L. Carey Tunnel ~ 2012



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

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



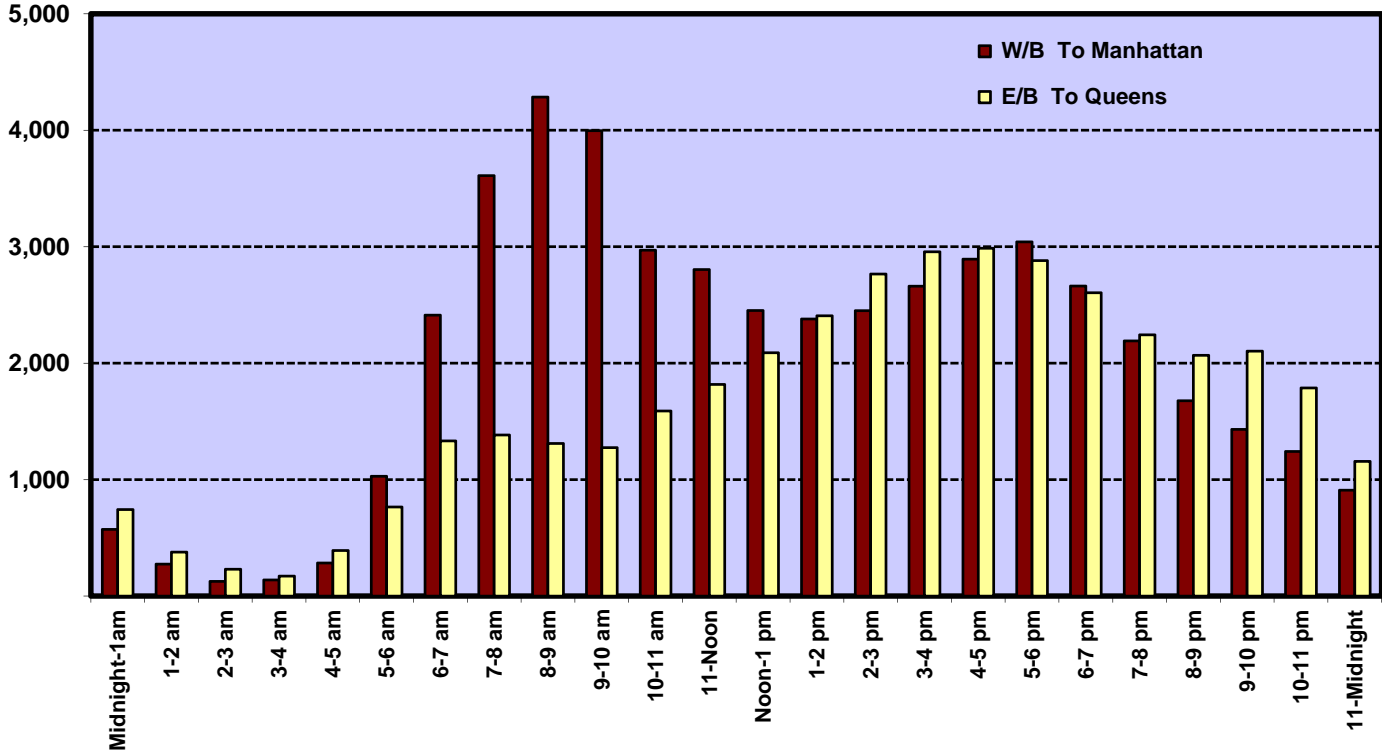
**Hourly Vehicular Volumes
Queens-Midtown Tunnel - 2012**

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	Large SUVs	Buses	Pickups	Commercial Vans				Autos & Motorcycles	Large SUVs	Buses	Pickups	Commercial Vans								
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	554	2	4	13	0	717	1	18	0	743	7	1	18	0	743						
1-2am	261	2	1	10	0	360	4	14	0	378	4	0	14	0	378						
2-3am	117	1	1	7	0	215	5	10	0	230	5	0	10	0	230						
3-4am	125	1	3	10	0	139	8	10	0	171	8	0	10	0	171						
4-5am	229	5	15	35	0	284	27	38	1	391	27	3	38	1	391						
5-6am	897	10	51	71	0	1,029	20	52	0	765	20	12	52	0	765						
6-7am	2,062	85	152	114	0	2,413	36	37	0	1,333	36	52	37	0	1,333						
7-8am	3,112	128	228	142	1	3,611	53	35	0	1,383	53	66	35	0	1,383						
8-9am	3,853	121	151	160	0	4,285	42	45	0	1,311	42	79	45	0	1,311						
9-10am	3,603	101	180	109	4	3,997	48	44	0	1,275	48	65	44	0	1,275						
10-11am	2,696	83	100	89	2	2,970	64	77	0	1,590	64	77	70	0	1,590						
11-12am	2,600	70	66	68	0	2,804	61	78	0	1,817	61	78	64	0	1,817						
12-1pm	2,275	37	56	84	0	2,452	67	58	0	2,090	67	58	94	0	2,090						
1-2pm	2,169	68	71	71	0	2,379	109	61	0	2,407	109	61	99	0	2,407						
2-3pm	2,225	59	112	55	0	2,451	79	47	0	2,766	79	47	75	0	2,766						
3-4pm	2,366	55	173	67	0	2,661	66	68	0	2,956	66	68	88	0	2,956						
4-5pm	2,645	36	176	37	0	2,894	82	70	0	2,987	82	70	81	0	2,987						
5-6pm	2,857	20	140	25	0	3,042	46	44	0	2,881	46	74	44	0	2,881						
6-7pm	2,545	18	75	25	0	2,663	31	59	0	2,605	31	59	39	0	2,605						
7-8pm	2,111	14	50	16	0	2,191	22	60	0	2,243	22	60	21	0	2,243						
8-9pm	1,596	21	30	31	0	1,678	24	39	0	2,067	24	39	40	0	2,067						
9-10pm	1,377	13	17	25	0	1,432	21	22	1	2,104	21	22	42	1	2,104						
10-11pm	1,190	8	13	31	0	1,242	18	10	0	1,788	18	10	36	0	1,788						
11-12pm	881	8	4	16	0	909	3	3	0	1,157	3	3	24	0	1,157						
Totals	44,346	966	1,869	1,311	7	48,499	943	1,004	2	39,438	943	1,004	1,120	2	87,937						
7-10am	10,568	350	559	411	5	11,893	143	210	0	3,969	143	210	124	0	3,969						
10am-1pm	7,571	190	222	241	2	8,226	192	213	0	5,497	192	213	228	0	5,497						
1-4pm	6,760	182	356	193	0	7,491	254	176	0	8,129	254	176	262	0	8,129						
4-7pm	8,047	74	391	87	0	8,599	159	203	0	8,473	159	203	164	0	8,473						
7am-7pm	32,946	796	1,528	932	7	36,209	748	802	0	26,068	748	802	778	0	26,068						
6-10am	12,630	435	711	525	5	14,306	179	262	0	5,302	179	262	161	0	5,302						
3-7pm	10,413	129	564	154	0	11,260	225	271	0	11,429	225	271	252	0	11,429						
7am-7pm	35,008	881	1,680	1,046	7	38,622	784	854	0	27,401	784	854	815	0	27,401						

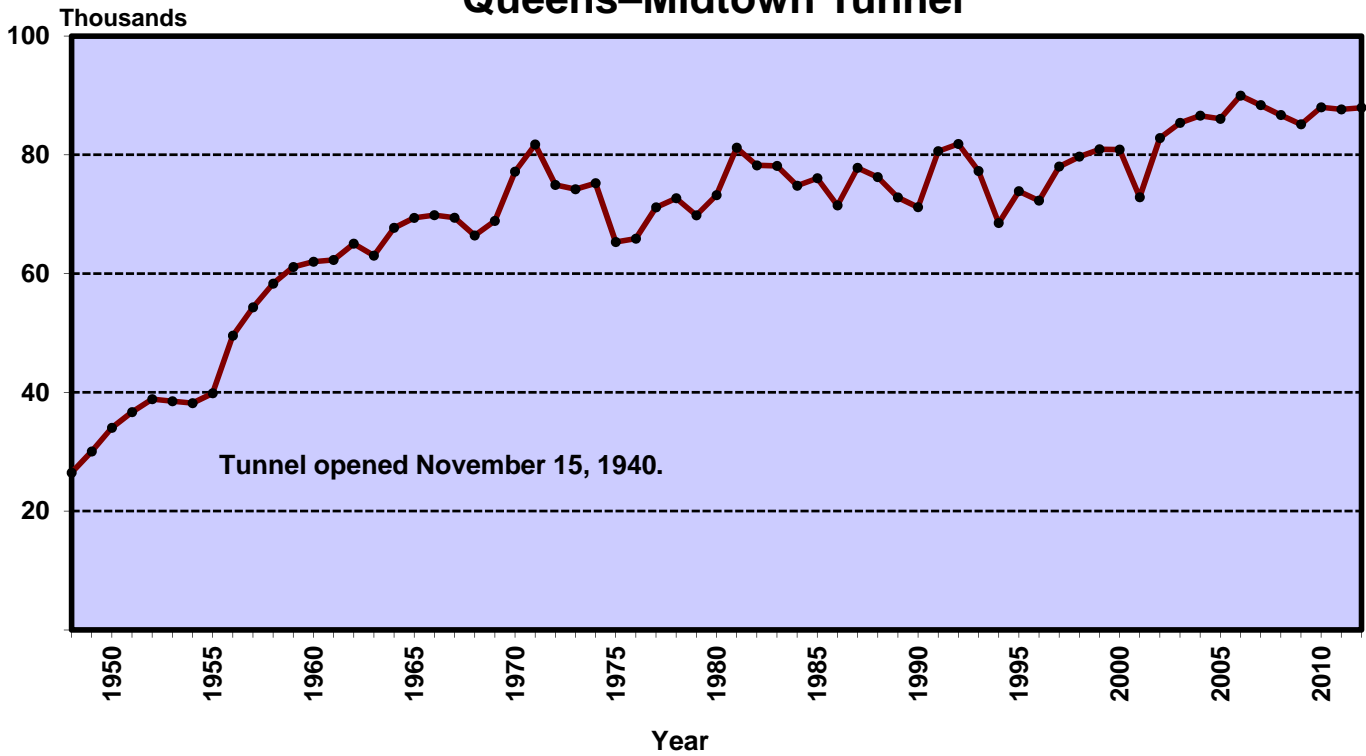
Based on May 2006 Classification Survey Data.

** Peak Volumes

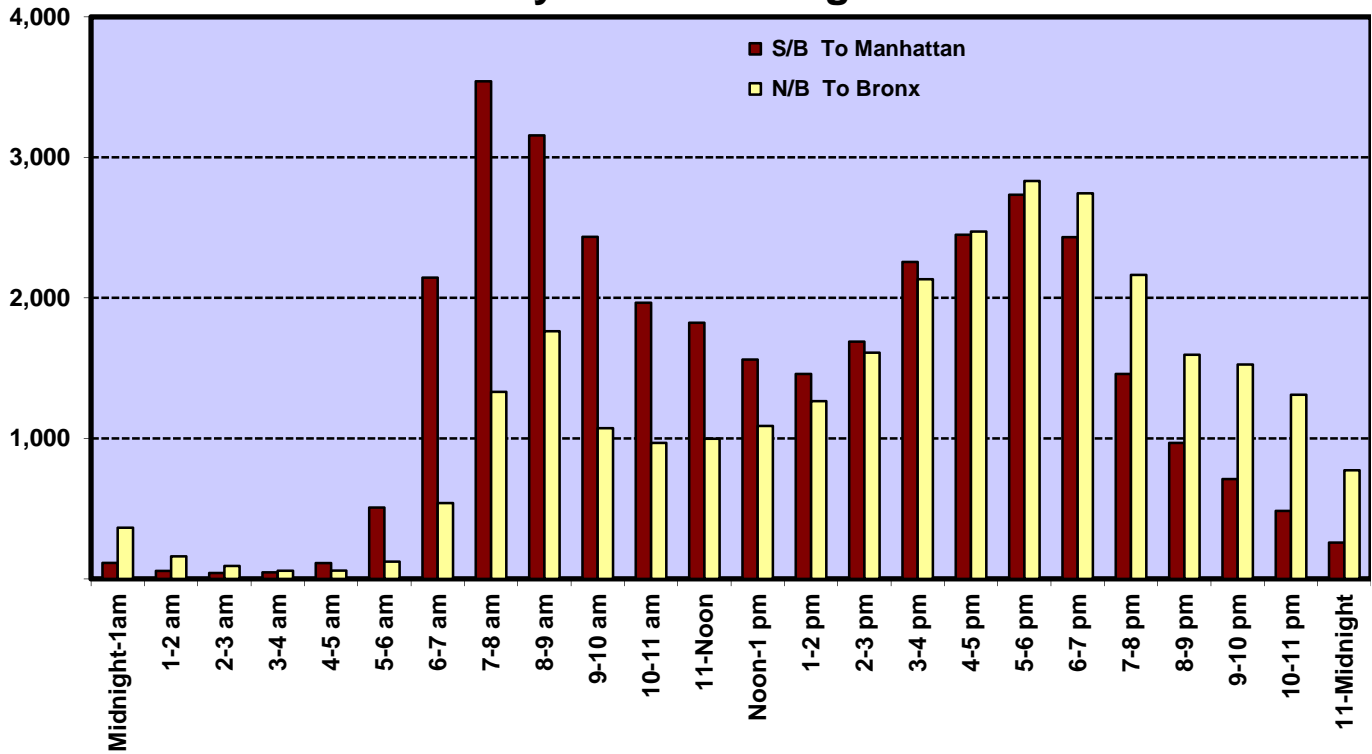
Hourly Vehicular Volumes Queens-Midtown Tunnel ~ 2012



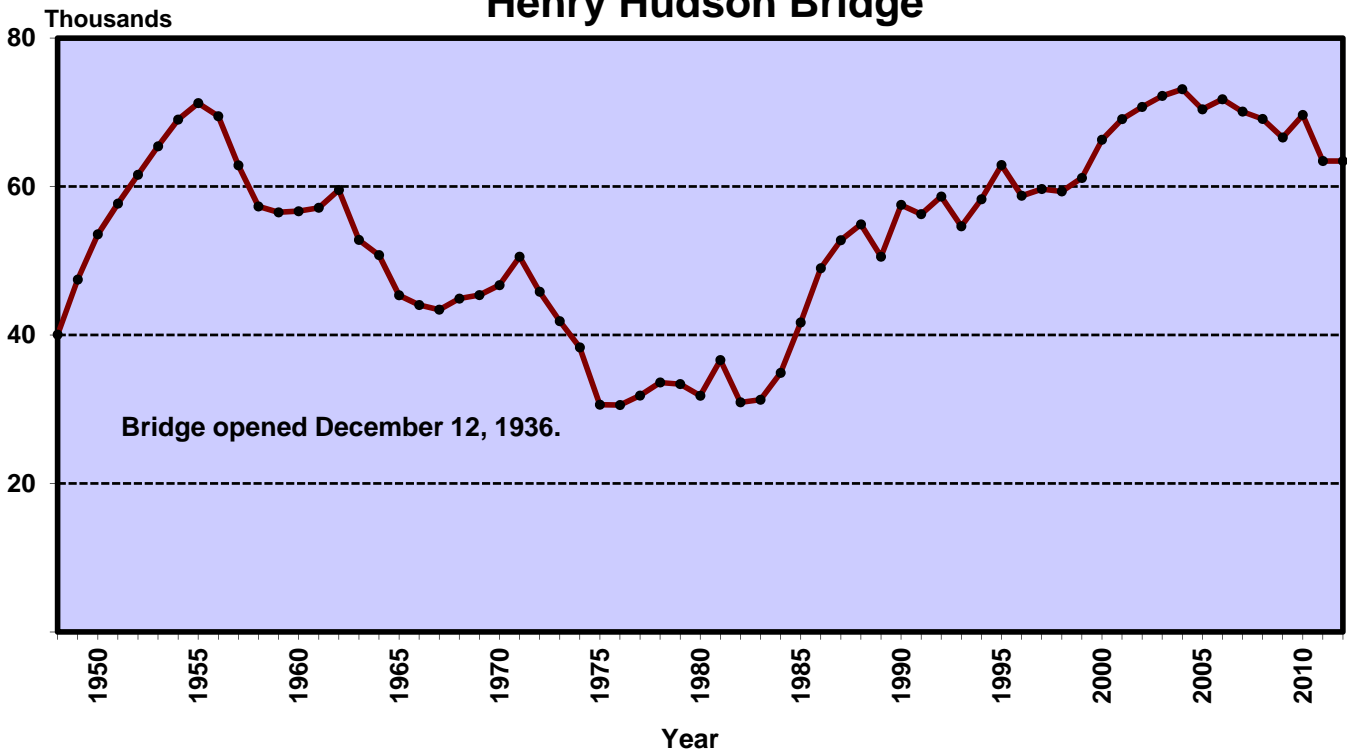
Average Daily Traffic Volumes ~ Total of Both Directions Queens-Midtown Tunnel



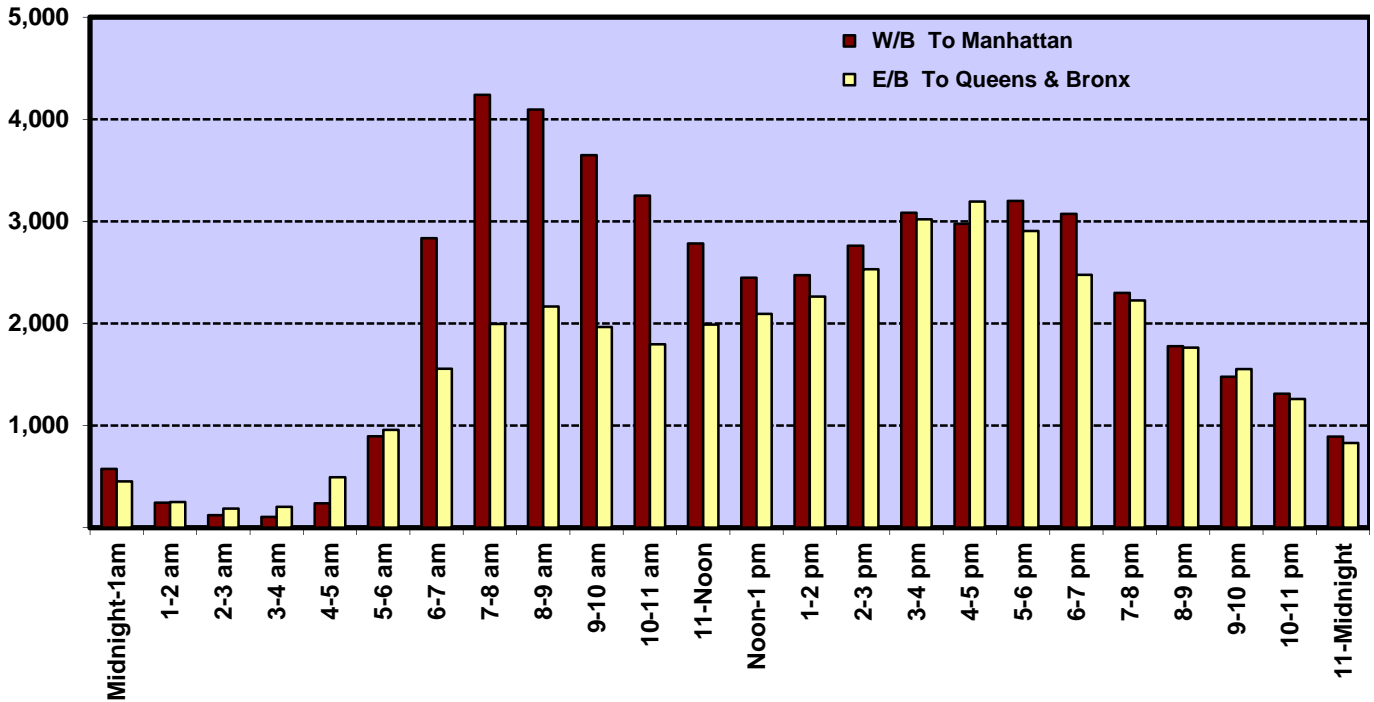
Hourly Vehicular Volumes Henry Hudson Bridge ~ 2012



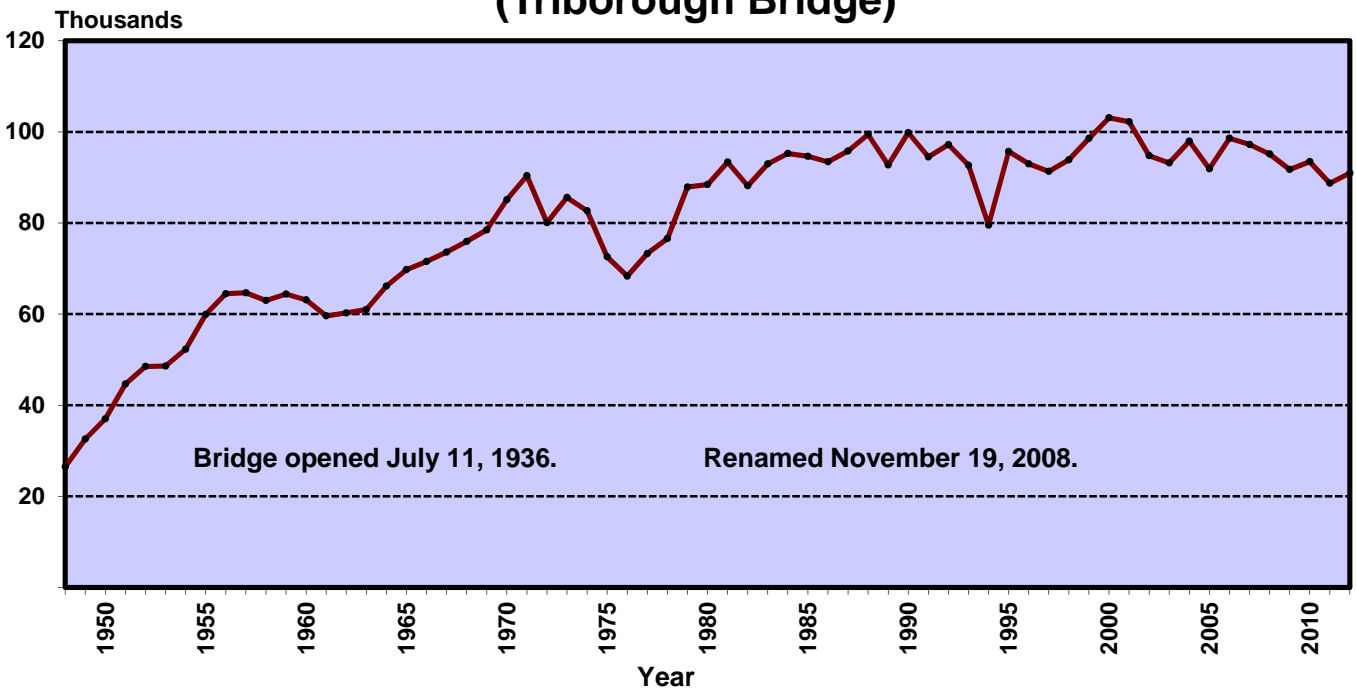
Average Daily Traffic Volumes ~ Total of Both Directions Henry Hudson Bridge



Hourly Vehicular Volumes Robert F. Kennedy Memorial Bridge, Manhattan Plaza ~ 2012 (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 - 2012**

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

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

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

Hourly Vehicular Volumes

Port Authority of New York & New Jersey 2012

	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	1,657	3,127	723	1,133	781	1,610	3,161	5,870
1-2am	1,196	1,394	443	727	489	882	2,128	3,003
2-3am	1,049	1,139	341	632	394	555	1,784	2,326
3-4am	1,273	1,084	378	737	424	476	2,075	2,297
4-5am	2,157	1,482	658	1,039	785	540	3,600	3,061
5-6am	6,075	2,882	2,065	1,383	2,645	833	10,785	5,098
6-7am	10,749 **	4,715	3,047 **	2,253	5,056 **	1,465	18,852 **	8,433
7-8am	10,058	6,483	2,907	2,719	4,643	2,127	17,608	11,329
8-9am	8,404	6,467	2,771	2,492	4,286	1,919	15,461	10,878
9-10am	8,270	6,102	2,715	2,029	3,983	1,646	14,968	9,777
10-11am	7,236	6,190	2,518	2,015	3,276	2,140	13,030	10,345
11-12am	6,413	6,318	2,154	2,013	2,831	2,311	11,398	10,642
12-1pm	6,263	6,351	1,990	2,004	2,542	2,568	10,795	10,923
1-2pm	6,187	6,885	2,032	2,265 **	2,472	2,874	10,691	12,024
2-3pm	6,704	7,892	2,174	2,753 **	2,561	3,667	11,439	14,312
3-4pm	7,277	9,241	2,492	2,753 **	2,395	4,365	12,164	16,359
4-5pm	8,074	10,215 **	2,697	2,569	1,875	4,617	12,646	17,401 **
5-6pm	8,314	10,413 **	2,741	1,917	1,557	4,662	12,612	16,992
6-7pm	8,098	9,557	2,667	2,273	1,796	4,800 **	12,561	16,630
7-8pm	6,488	8,604	2,504	2,588	2,286	3,868	11,278	15,060
8-9pm	5,092	7,090	1,946	2,268	1,946	3,477	8,984	12,835
9-10pm	4,380	5,750	1,677	2,180	1,789	3,134	7,846	11,064
10-11pm	3,795	4,987	1,622	1,882	1,591	2,567	7,008	9,436
11-12pm	2,740	4,331	1,262	1,595	1,328	2,332	5,330	8,258
Totals	137,949	138,699	46,524	46,219	53,731	59,435	238,204	244,353
7-10am	26,732	19,052	8,393	7,240	12,912	5,692	48,037	31,984
10am-1pm	19,912	18,859	6,662	6,032	8,649	7,019	35,223	31,910
1-4pm	20,168	24,018	6,698	7,771	7,428	10,906	34,294	42,695
4-7pm	24,486	30,185	8,105	6,759	5,228	14,079	37,819	51,023
7am-7pm	91,298	92,114	29,858	27,802	34,217	37,696	155,373	157,612
6-10am	37,481	23,767	11,440	9,493	17,968	7,157	66,889	40,417
3-7pm	31,763	39,426	10,597	9,512	7,623	18,444	49,983	67,382
6am-7pm	102,047	96,829	32,905	30,055	39,273	39,161	174,225	166,045

** 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.

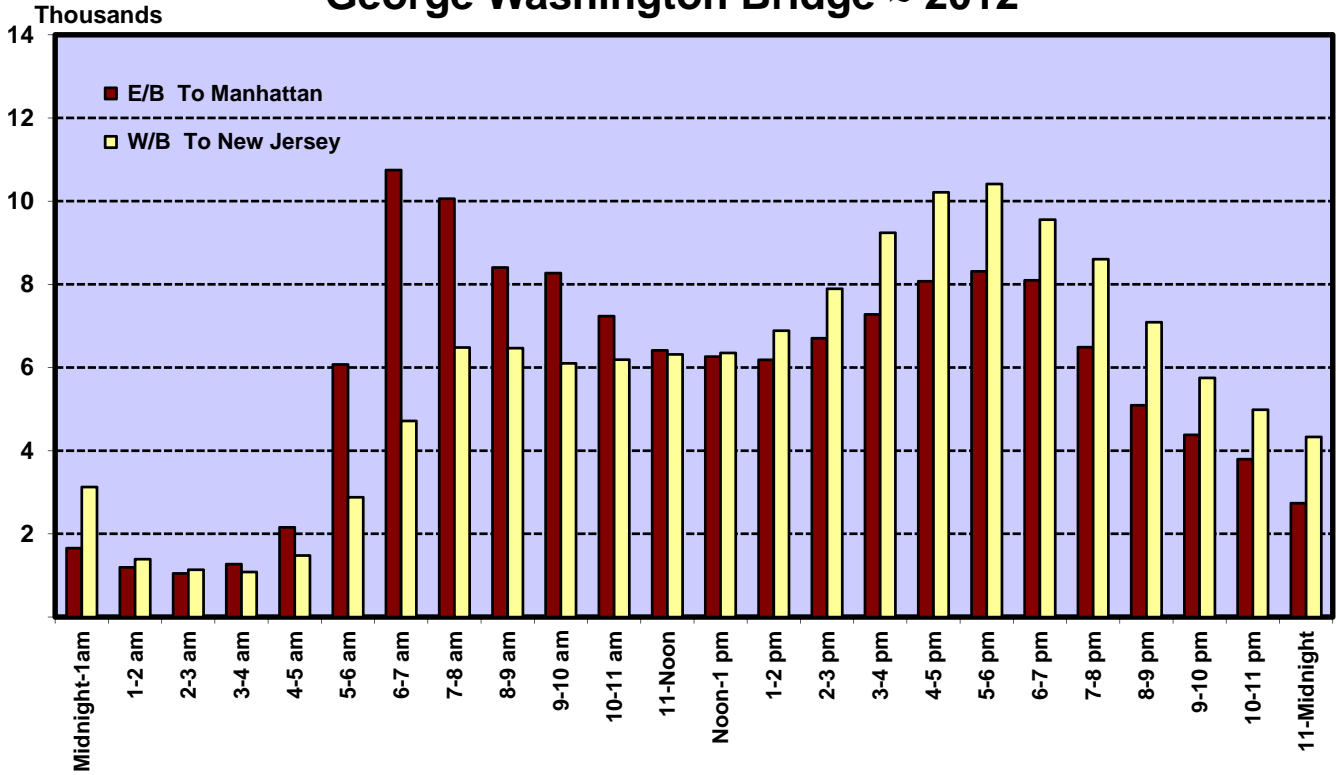
Hourly Vehicular Volumes George Washington Bridge - 2012

	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	1,318	10	45	284	1,657	2,756	17	58	296	3,127	4,784
1-2am	811	5	66	314	1,196					1,394	2,590
2-3am	612	4	74	359	1,049					1,139	2,188
3-4am	696	4	103	470	1,273					1,084	2,357
4-5am	1,371	12	154	620	2,157					1,482	3,639
5-6am	4,958	37	344	736	6,075	2,068	17	230	567	2,882	8,957
6-7am	9,638	73	451	587	10,749	3,808	58	299	550	4,715	15,464
7-8am	9,208	100	359	391	10,058	5,609	85	346	443	6,483	16,541
8-9am	7,612	82	362	348	8,404	5,685	79	304	399	6,467	14,871
9-10am	7,408	81	370	411	8,270	5,152	80	354	516	6,102	14,372
10-11am	6,449	56	321	410	7,236	5,020	68	373	729	6,190	13,426
11-12am	5,699	57	278	379	6,413	5,030	53	423	812	6,318	12,731
12-1pm	5,566	67	278	352	6,263	5,134	63	439	715	6,351	12,614
1-2pm	5,561	64	257	305	6,187	5,784	50	457	594	6,885	13,072
2-3pm	6,067	85	259	293	6,704	6,891	62	419	520	7,892	14,596
3-4pm	6,708	97	227	245	7,277	8,201	68	420	552	9,241	16,518
4-5pm	7,554	102	200	218	8,074	9,328	82	343	462	10,215	18,289
5-6pm	7,864	102	150	198	8,314	9,601	79	310	423	10,413	18,727
6-7pm	7,694	79	120	205	8,098	8,935	82	207	333	9,557	17,655
7-8pm	6,120	67	88	213	6,488	8,046	67	147	344	8,604	15,092
8-9pm	4,737	50	73	232	5,092	6,584	49	117	340	7,090	12,182
9-10pm	4,042	39	64	438	4,380	5,261	37	95	357	5,750	10,130
10-11pm	3,469	23	50	253	3,795	4,573	41	58	315	4,987	8,782
11-12pm	2,434	19	37	250	2,740	3,951	32	59	289	4,331	7,071
Totals	123,596	1,315	4,730	8,308	137,949					138,699	276,648
7-10am	24,228	263	1,091	1,150	26,732	16,446	244	1,004	1,358	19,052	45,784
10am-1pm	17,714	180	877	1,141	19,912	15,184	184	1,235	2,256	18,859	38,771
1-4pm	18,336	246	743	843	20,168	20,876	180	1,296	1,666	24,018	44,186
4-7pm	23,112	283	470	621	24,486	27,864	243	860	1,218	30,185	54,671
7am-7pm	83,390	972	3,181	3,755	91,298	80,370	851	4,395	6,498	92,114	183,412
6-10am	33,866	336	1,542	1,737	37,481	20,254	302	1,303	1,908	23,767	61,248
3-7pm	29,820	380	697	866	31,763	36,065	311	1,280	1,770	39,426	71,189
6am-7pm	93,028	1,045	3,632	4,342	102,047	84,178	909	4,694	7,048	96,829	198,876

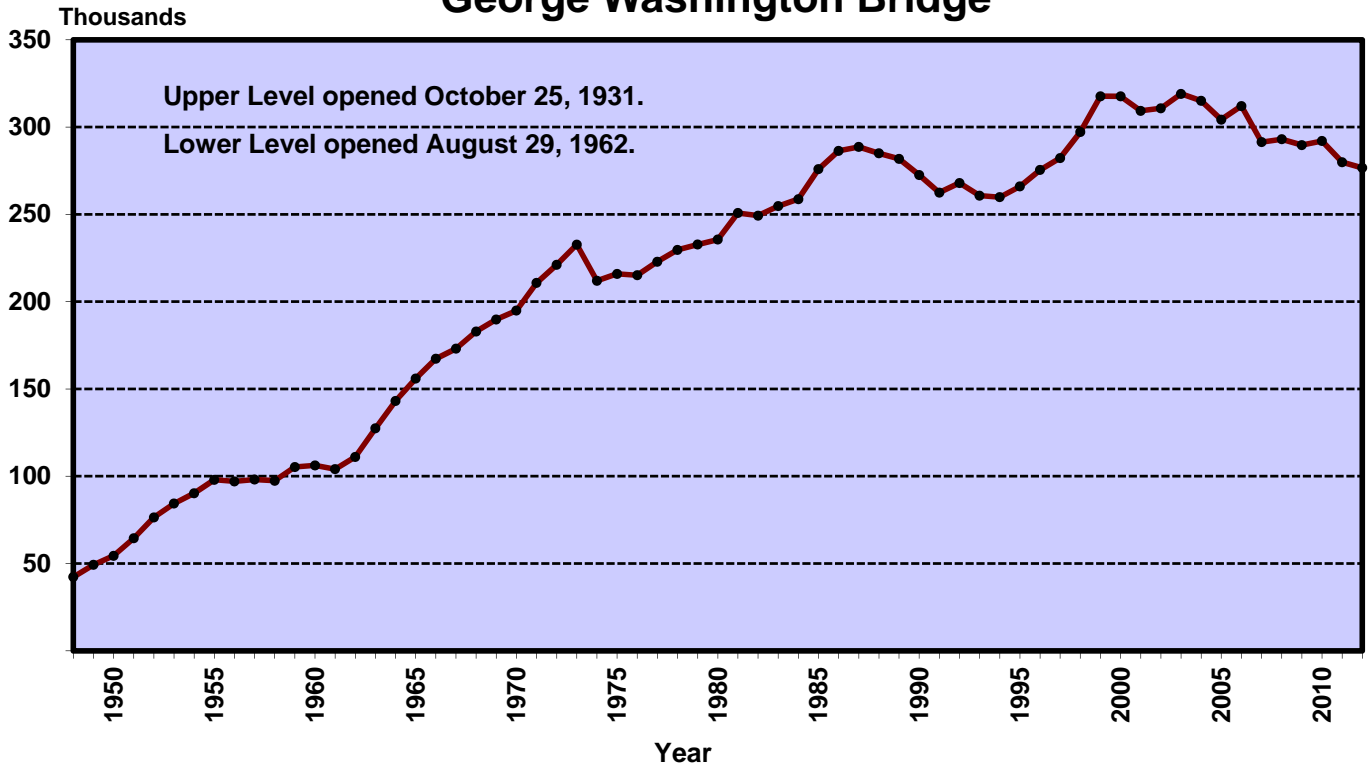
Classification based on October 2012 Data.

** Peak Volumes

Hourly Vehicular Volumes George Washington Bridge ~ 2012



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



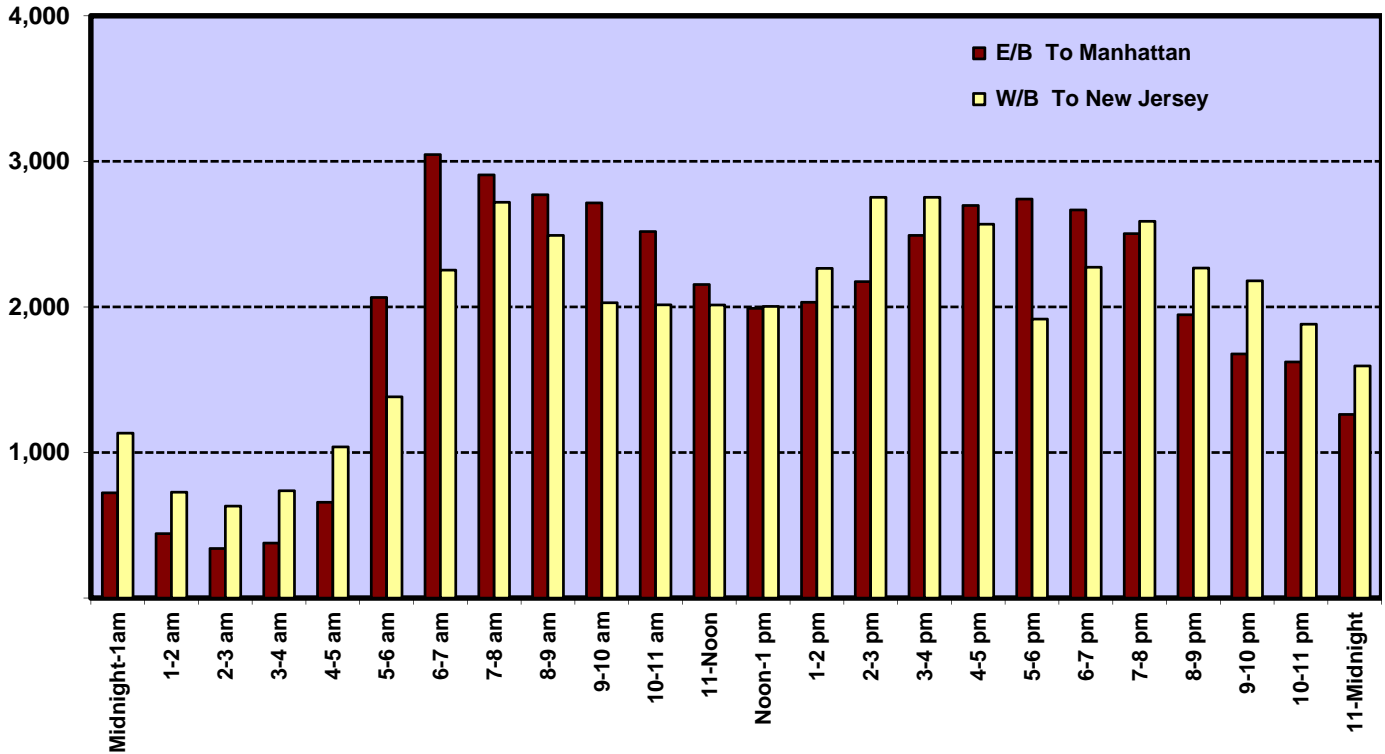
**Hourly Vehicular Volumes
Holland Tunnel - 2012**

	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	667	9	47	0	723	1,096	2	35	0	1,133	1,856
1-2am	411	4	28	0	443					727	1,170
2-3am	301	6	34	0	341					632	973
3-4am	315	2	61	0	378					737	1,115
4-5am	574	8	74	2	658					1,039	1,697
5-6am	1,926	21	115	3	2,065	1,300	7	76	0	1,383	3,448
6-7am	2,868	64	113	2	3,047	2,126	23	104	0	2,253	5,300
7-8am	2,721	68	116	2	2,907	2,574	32	113	0	2,719	5,626 **
8-9am	2,587	56	126	2	2,771	2,339	47	104	2	2,492	5,263
9-10am	2,550	55	108	2	2,715	1,829	48	152	0	2,029	4,744
10-11am	2,390	28	99	1	2,518	1,821	26	167	1	2,015	4,533
11-12am	2,060	19	75	0	2,154	1,800	13	199	1	2,013	4,167
12-1pm	1,906	19	64	1	1,990	1,805	6	191	2	2,004	3,994
1-2pm	1,948	20	63	1	2,032	2,094	9	161	1	2,265	4,297
2-3pm	2,089	28	57	0	2,174	2,567	13	172	1	2,753 **	4,927
3-4pm	2,378	57	56	1	2,492	2,597	22	134	0	2,753 **	5,245
4-5pm	2,538	105	53	1	2,697	2,400	49	120	0	2,569	5,266
5-6pm	2,639	71	31	0	2,741	1,773	53	91	0	1,917	4,658
6-7pm	2,580	58	28	1	2,667	2,185	44	44	0	2,273	4,940
7-8pm	2,445	32	27	0	2,504	2,503	19	65	1	2,588	5,092
8-9pm	1,884	15	46	1	1,946	2,191	27	49	1	2,268	4,214
9-10pm	1,629	12	36	0	1,677	2,136	17	27	0	2,180	3,857
10-11pm	1,588	12	22	0	1,622	1,844	16	21	1	1,882	3,504
11-12pm	1,236	8	17	1	1,262	1,533	6	56	0	1,595	2,857
Totals	44,230	777	1,496	21	46,524					46,219	92,743
7-10am	7,858	179	350	6	8,393	6,742	127	369	2	7,240	15,633
10am-1pm	6,356	66	238	2	6,662	5,426	45	557	4	6,032	12,694
1-4pm	6,415	105	176	2	6,698	7,258	44	467	2	7,771	14,469
4-7pm	7,757	234	112	2	8,105	6,358	146	255	0	6,759	14,864
7am-7pm	28,386	584	876	12	29,858	25,784	362	1,648	8	27,802	57,660
6-10am	10,726	243	463	8	11,440	8,868	150	473	2	9,493	20,933
3-7pm	10,135	291	168	3	10,597	8,955	168	389	0	9,512	20,109
6am-7pm	31,254	648	989	14	32,905	27,910	385	1,752	8	30,055	62,960

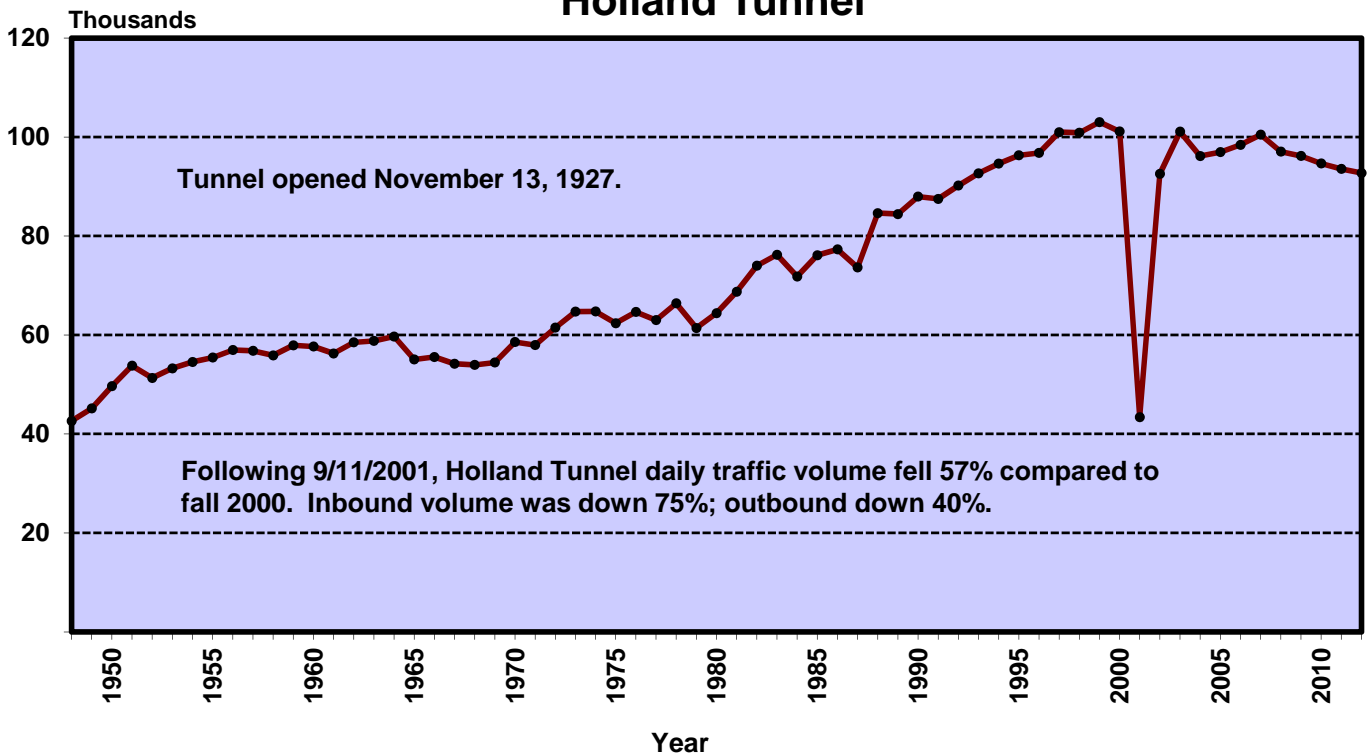
Classification based on October 2012 Data.

** Peak Volumes

Hourly Vehicular Volumes Holland Tunnel ~ 2012



Average Daily Traffic Volumes ~ Total of Both Directions Holland Tunnel



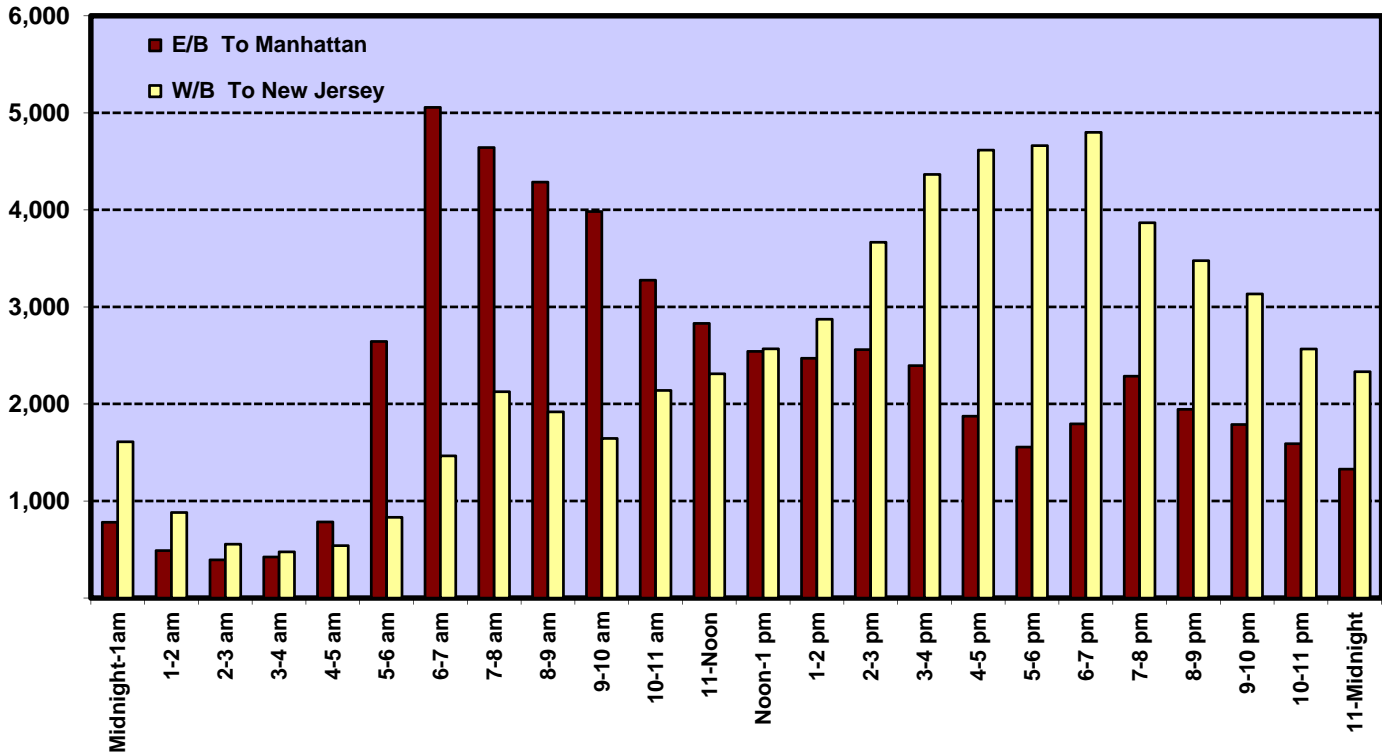
Hourly Vehicular Volumes Lincoln Tunnel - 2012

	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	661	61	39	20	781	1,445	94	59	12	1,610	2,391
1-2am	391	26	43	29	489					882	1,371
2-3am	318	10	44	22	394					555	949
3-4am	310	11	71	32	424					476	900
4-5am	562	23	133	67	785					540	1,325
5-6am	2,077	169	316	83	2,645	594	63	99	77	833	3,478
6-7am	4,090	497	399	70	5,056	1,006	281	104	74	1,465	6,521
7-8am	3,503	791	314	35	4,643	1,377	560	139	51	2,127	6,770
8-9am	3,036	938	294	18	4,286	1,054	673	148	44	1,919	6,205
9-10am	3,089	630	245	19	3,983	817	659	137	33	1,646	5,629
10-11am	2,780	271	208	17	3,276	1,480	352	246	62	2,140	5,416
11-12am	2,453	215	150	13	2,831	1,748	236	262	65	2,311	5,142
12-1pm	2,201	189	140	12	2,542	2,030	157	299	82	2,568	5,110
1-2pm	2,114	226	122	10	2,472	2,346	169	299	60	2,874	5,346
2-3pm	2,150	291	113	7	2,561	3,098	209	309	51	3,667	6,228
3-4pm	1,911	394	84	6	2,395	3,752	270	299	44	4,365	6,760
4-5pm	1,342	474	54	5	1,875	3,910	396	285	26	4,617	6,492
5-6pm	1,172	345	37	3	1,557	3,829	625	197	11	4,662	6,219
6-7pm	1,391	356	41	8	1,796	3,932	722	135	11	4,800	6,596
7-8pm	1,882	325	64	15	2,286	3,307	449	102	10	3,868	6,154
8-9pm	1,649	222	58	17	1,946	3,085	294	79	19	3,477	5,423
9-10pm	1,529	176	61	23	1,789	2,807	228	71	28	3,134	4,923
10-11pm	1,361	143	60	27	1,591	2,289	184	63	31	2,567	4,158
11-12pm	1,139	108	58	23	1,328	2,102	128	52	50	2,332	3,660
Totals	43,111	6,891	3,148	581	53,731	3,248	1,892	424	128	5,692	113,166
7-10am	9,628	2,359	853	72	12,912	3,248	1,892	424	128	5,692	18,604
10am-1pm	7,434	675	498	42	8,649	5,258	745	807	209	7,019	15,668
1-4pm	6,175	911	319	23	7,428	9,196	648	907	155	10,906	18,334
4-7pm	3,905	1,175	132	16	5,228	11,671	1,743	617	48	14,079	19,307
7am-7pm	27,142	5,120	1,802	153	34,217	29,373	5,028	2,755	540	37,696	71,913
6-10am	13,718	2,856	1,252	142	17,968	4,254	2,173	528	202	7,157	25,125
3-7pm	5,816	1,569	216	22	7,623	15,423	2,013	916	92	18,444	26,067
6am-7pm	31,232	5,617	2,201	223	39,273	30,379	5,309	2,859	614	39,161	78,434

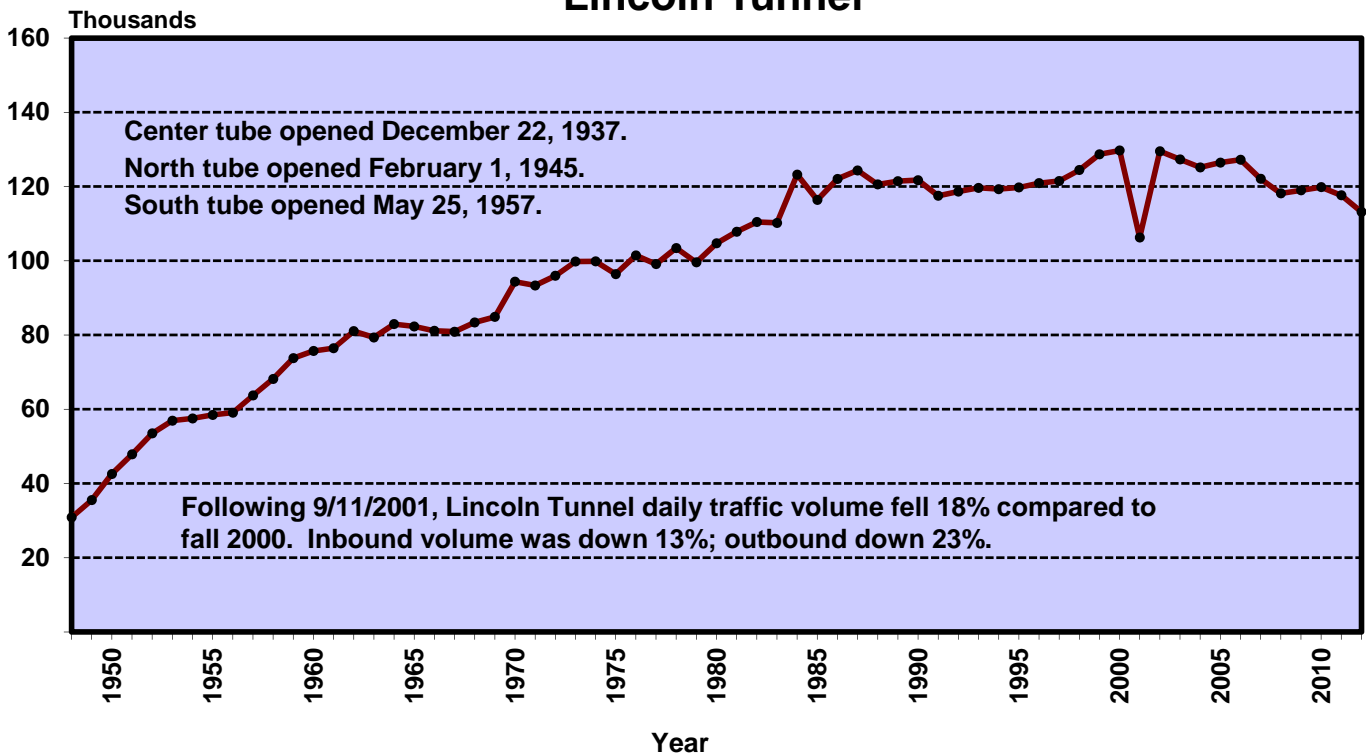
Classification based on October 2012 Data.

** Peak Volumes

Hourly Vehicular Volumes Lincoln Tunnel ~ 2012



Average Daily Traffic Volumes ~ Total of Both Directions Lincoln Tunnel



APPENDIX

2012 Bridge and Tunnel Reconstruction

APPENDIX

Major Bridge Reconstruction In 2012

Brooklyn Bridge (East River between Brooklyn & Manhattan)

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

The closure times in 2012 were as follows.

01/01 – 06/30:	11:00pm–6:00am	Sun–Fri,
	12:01am–7:00am	Sat,
	12:01am–9:00am	Sun.
07/01 – 07/13:	11:00pm–6:00am	Sun–Fri,
	12:01am–7:00am	Sat.
07/14 – 08/17:	10:30pm–6:00am	Sun–Fri,
	12:01am–7:00am	Sat,
	12:01am–9:00am	Sun.
08/18 – 10/05:	10:30pm–6:00am	Sun–Fri,
	12:01am–7:00am	Sat.
10/06 – 10/19:	10:30pm–6:00am	Sun–Fri,
	12:01am Sat. – 6:00am Mon.	
10/20 – 11/02:	10:30pm–6:00am	Sun–Fri,
	12:01am–7:00am	Sat,
	12:01am–9:00am	Sun.
12/10 –12/21:	10:30pm–6:00am	Sun–Fri,
	12:01am–7:00am	Sat,
	12:01am–9:00am	Sun.

On Gridlock Alert Days, closures did not begin until midnight.

Bicycle and pedestrian access was maintained during these times.

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

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

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

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

There were no closures from December 22, 2012 to January 2, 2013.

Throughout 2012, there were additional closures of single lanes in each direction on the Brooklyn Bridge during off-peak hours.

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

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

Throughout 2012, trucks were permitted only on the two Lower Inner Roadways.

Throughout 2012, 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 2012, the North Outer Roadway was reserved for bicyclists and pedestrians.

Ed Koch Queensboro Bridge Operation: All 2012 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 was closed as follows in 2012.

- | | | | |
|----------------|-----------------|--------------|-----------------------------|
| 02/18 – 02/26: | 2:00am – 2:00pm | Sat-Sun-Mon. | Roadway closed. |
| 03/02 – 03/17: | 2:00am – 2:00pm | Sat-Sun. | Roadway closed. |
| 10/27 – 11/16: | 1:00am – 5:30am | Mon-Fri. | Rdwy closed intermittently. |
| | 2:00am – 7:00am | Sat. | Rdwy closed intermittently. |
| | 2:00am – 8:00am | Sun. | Rdwy closed intermittently. |

One of two lanes on the South Upper Roadway was closed as follows in 2012.

- | | | |
|----------------|------------------|----------|
| 06/16 - 06/17: | 10:00am – 2:00pm | Mon-Fri, |
| | 6:00am – 1:00pm | Sat-Sun. |
| 06/23 - 12/31: | 10:00am – 2:00pm | Mon-Fri. |

North Upper Roadway lane closures were in effect as follows in 2012.

- | | | | |
|----------------|-------------------|----------|----------------------|
| 08/18 – 08/31: | 10:00pm – 11:00pm | Fri-Sat. | 1 of 2 lanes closed. |
| | 6:00am – 2:00pm | Sat-Sun. | 1 of 2 lanes closed. |
| | 11:00pm – 6:00am | Fri-Sat. | Both lanes closed. |

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

Manhattan Bridge Operation: All 2012

Note: *During 2012, the nearby Brooklyn Bridge was closed to Manhattan-bound traffic during overnight hours.*

- **6:00am – 10:00am weekdays.**

One of three lanes closed on the Lower Roadway.

- Manhattan-bound: 4 lanes.
 - 2 lanes on the North Upper Roadway (no trucks, left lane reserved for buses and HOV 2+).
 - 2 lanes on the Lower Roadway 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 January 1 to March 16).
Truck ban during these hours discontinued as of March 17, 2012.
 - 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.
 - 2 lanes on the Lower Roadway.

- **9:00pm – 9:30pm weekdays.**

Lower Roadway closed for reversal.

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

- **9:30pm – 6:00am weekdays.**

One of three lanes closed on the Lower Roadway.

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

- **9:00pm Friday – 10:00am Monday.**

One of three lanes closed on the Lower Roadway.

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

Manhattan Bridge Lower Roadway

- Available to all vehicle types at all times.
- Manhattan-bound trucks required to use the Lower Roadway during the following times.
 - Weekdays 6:00am – 2:00pm from Jan. 1 to March 16, 2012.
 - Weekdays 6:00am – 10:00am as of March 17, 2012.
- 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 during the following times.
 - Weekdays 6:00am – 2:00pm from Jan. 1 to March 16, 2012.
 - Weekdays 6:00am – 10:00am as of March 17, 2012.
- 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.
- 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.

Throughout 2012, there were additional closures of single lanes in each direction on the Manhattan Bridge during off-peak hours.

Williamsburg Bridge (East River between Brooklyn & Manhattan)

Throughout 2012 trucks were permitted only on the outer roadways.

Pedestrian and bicycle access was maintained on the bridge at all times throughout 2012.

Williamsburg Bridge Operation: January 1 – March 18, 2012, 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.

Williamsburg Bridge Operation: March 19 – April 2, 2012, 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.

- **10:00pm – 5:00am Mon-Thu.**

Three lanes closed.

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

- **All other times.**

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

Williamsburg Bridge Operation: April 3 – June 29, 2012, Except as noted below.

Same as January 1– March 18 Above.

Williamsburg Bridge Operation: June 30 – August 3, 2012, Except as noted below.

- 2 eastbound lanes closed as needed weekdays 6am – 2pm.
- All other times.
 - Manhattan-bound: 4 lanes.
 - Brooklyn-bound: 4 lanes.

Williamsburg Bridge Operation: August 4 – December 31, 2012, Except as noted below.

- 2 westbound lanes closed 11pm – 5am, 1 night per week.
- 2 eastbound lanes closed as needed weekdays 6am – 2pm.
- All other times.
 - Manhattan-bound: 4 lanes.
 - Brooklyn-bound: 4 lanes.

The North Outer Roadway was closed as follows.

08/18-08/25: 12:01am – 7:00am Sat.
Manhattan-bound trucks banned from the bridge.

The South Inner Roadway was closed as follows.

02/25-03/04: 5:00am – Noon Sat-Sun.
03/10-04/08: 5:00am – Noon Sat.

Throughout 2012, there were additional closures of single lanes in each direction on the Williamsburg Bridge during off-peak hours.

Alexander Hamilton Bridge (Harlem River Between Bronx & Manhattan)

Starting July 14, 2012 and continuing through December 7, 2012, 4 lanes of traffic were maintained on the eastbound Alexander Hamilton Bridge (Cross Bronx Expressway). However, west of this area from the lower level of the George Washington Bridge, 2 lanes were reduced to 1 lane to accommodate a slip ramp for the upper level truck traffic to gain access to the Major Deegan Expressway. The 2 lanes of traffic from the upper level of the George Washington Bridge were maintained at all times. This traffic pattern was necessary to facilitate NYSDOT roadway rehabilitation.

Throughout 2012, there were additional closures of single lanes in each direction on the Alexander Hamilton Bridge during off-peak hours.

Broadway Bridge (Harlem River between Bronx & Manhattan)

2 of 3 northbound (Bronx-bound) lanes were closed as follows.

03/26-03/29: 11:00pm - 5:00am Mon-Thu.

2 of 3 southbound (Manhattan-bound) lanes were closed as follows.

04/09-08/03: 11:00pm - 5:00am Mon-Fri, 2 S/B lanes closed as needed.
11:00pm Fri – 9:00am Sat. 2 S/B lanes closed as needed.

Throughout 2012, there were additional closures of single lanes in each direction on the Broadway Bridge during off-peak hours.

Willis Avenue Bridge (Harlem River from Manhattan to Bronx)

The entire bridge was closed for testing operations as follows:

01/10-01/14:	1:00am - 5:30am	Tue-Fri,
	2:00am - 6:00am	Sat.
03/06-03/10:	1:00am - 5:30am	Tue-Fri.
	2:00am - 6:00am	Sat.
04/17-05/05:	1:00am - 5:30am	Tue-Fri.
	2:00am - 6:00am	Sat.
07/17:	1:00am - 5:30am	Tue.
07/21:	2:00am - 6:00am	Sat.
08/14-08/18:	1:00am - 5:30am	Tue-Fri,
	2:00am - 6:00am	Sat.
08/31:	1:00am - 5:30am	Fri. <i>Bridge closed as needed.</i>
09/05:	1:00am - 5:30am	Wed. <i>Bridge closed as needed.</i>
09/18-09/22:	1:00am - 5:30am	Tue-Fri,
	2:00am - 6:00am	Sat.
10/02-11/03:	1:00am - 5:30am	Tue-Fri,
	2:00am - 6:00am	Sat.
12/04-12/15:	1:00am - 5:30am	Tue-Fri,
	2:00am - 6:00am	Sat.

Throughout 2012, 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 2012 according to the following schedule for testing operations.

03/26–03/31: 10:00pm – 6:00am Weeknights, *Bridge closed as needed*
12:01am – 7:00am Sat. *for testing operations.*

Throughout 2012, 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.

Henry Hudson Bridge

Throughout 2012, lane closures were in effect as needed in both directions due to a major project to rehabilitate the original 1930s-era upper level support structures.

The Kappock Street exit from the Bronx-bound upper level was closed as follows.

03/12-03/23: Round-the-clock All days.

08/13-08/29: Round-the-clock All days.

Throughout 2012, there were additional intermittent lane closures in both directions on the Henry Hudson Bridge during off-peak hours.

Hugh L. Carey Tunnel (Brooklyn-Battery Tunnel)

Throughout 2012, the inbound exit to Trinity Place was closed weekdays between 6:00-10:00am, and between 3:00-7:00pm.

Throughout 2012, between 6:00am and 10:00am on weekdays, there were three lanes inbound and one lane outbound.

Due to a major electrical equipment modernization project, there were a series of weekend tube closures. One tube (2 lanes) was closed from 10:00pm Friday through 5:00am Monday as follows.

01/13-02/20: 10:00pm Friday - 5:00am Monday One tube closed.

04/13-04/30: 10:00pm Friday - 5:00am Monday One tube closed.

06/22-06/25: 10:00pm Friday - 5:00am Monday One tube closed.

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

One tube was also closed during the following additional times:

10/22: 10:00am - 2:00pm Mon. *One tube closed.*

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

12/08-12/16: 3:00am - 1:00pm Sat-Sun.

One tube closed for post-Sandy repair work.

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

Throughout 2012, there were additional intermittent closures of single lanes in the Hugh L. Carey Tunnel during off-peak hours.

Queens-Midtown Tunnel

One tube was closed as follows.

10/19-10/29: 11:00pm Friday – 2:00am Monday.

2-way traffic maintained in the open tube for cars & NYCT buses only.

Throughout 2012, there were also intermittent closures of single lanes in both directions of the Queens-Midtown Tunnel during off-peak hours.

Robert F. Kennedy Bridge (formerly Triborough Bridge)

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

01/30:	1:00am – 3:00am	Mon.	All lanes closed both directions.
04/13:	1:00am – 3:00am	Fri.	All lanes closed both directions.
05/15:	12:01am – 5:00am	Tue.	<i>Intermittent 15 minute closures of all lanes in both directions.</i>
07/17:	3:00pm (Approximate)	Tue.	<i>20 minute closure of all lanes in both directions.</i>
10/26:	12:01am – 5:00am	Fri.	<i>Intermittent 15 minute closures of all lanes in both directions.</i>
12/28:	1:00am – 5:00am	Fri.	<i>Intermittent 15 minute closures of all lanes in both directions.</i>

On the Queens to Manhattan ramp, lane closures were in effect as follows.

02/27-03/12	Round-the-clock.	All days.	Center lane closed.
04/05-04/06	10:00am Thu – 5:00am Fri.		2 of 3 lanes closed.

On the Manhattan to Queens ramp, lane closures were in effect as follows.

03/02-03/12	9:00pm Fri. to 5:00am Mon.		2 of 3 lanes closed.
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The Randall's Island ramp was closed to traffic entering Randall's Island as follows.

03/12-04/06	Round-the-clock.	All days.	
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George Washington Bridge (Hudson River between Manhattan & New Jersey)

Throughout 2012, 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.

01/01-11/02:	11:30pm – 5:30am	Mon–Fri.	1 W/B lane closed.
	12:01am – 8:00am	Sat.	1 W/B lane closed.
04/21-04/22:	1:00am – 8:00am	Sat–Sun.	<i>Tunnel completely closed W/B to New Jersey.</i>

Lincoln Tunnel (Hudson River between Manhattan & New Jersey)

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

01/01-11/02	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.	