

2015 Manhattan River Crossings



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

2015 Manhattan River Crossings

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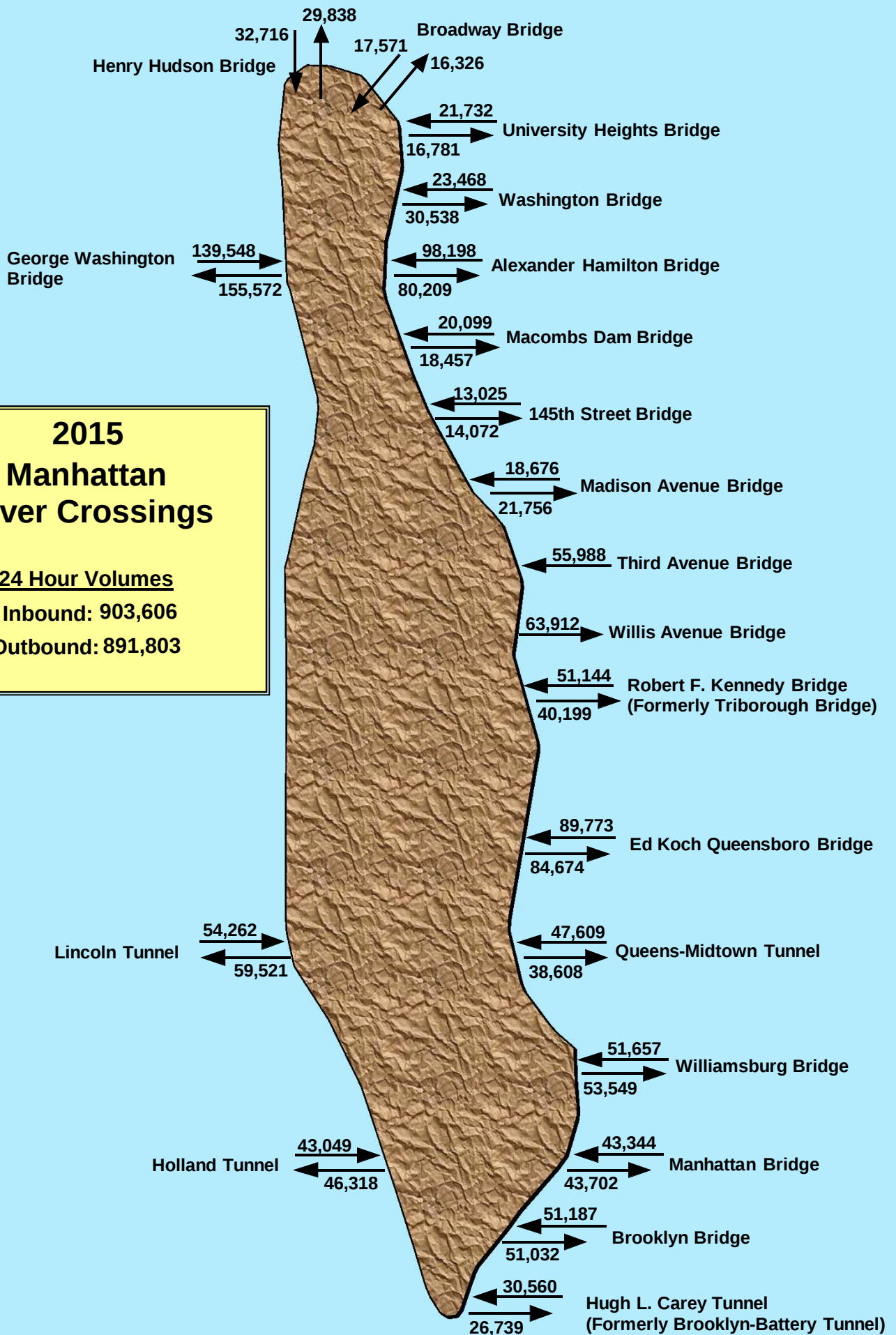
Published October 2016

2015 Manhattan River Crossings

24 Hour Volumes

Inbound: 903,606

Outbound: 891,803



1,795,790

daily vehicles used the 20
Manhattan River Crossings
in 2015 (total of both
directions).

Increase of 1.1%

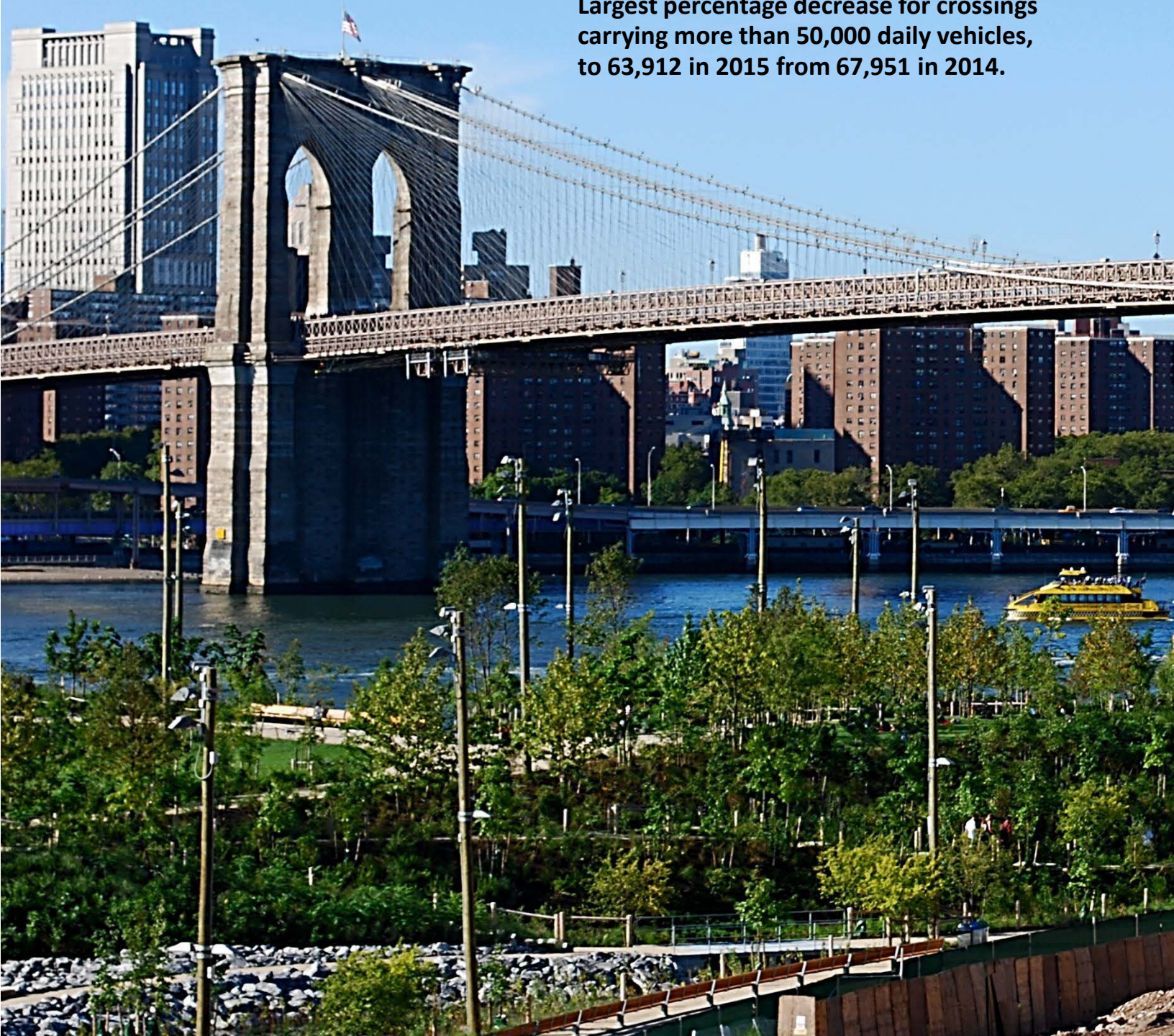
from the 1,776,013 daily
vehicles recorded in 2014
(19,777 more daily vehicles).

6.4% Increase
Henry Hudson Bridge
(Harlem River)

Largest percentage increase for crossings
carrying more than 50,000 daily vehicles,
to 62,554 in 2015 from 58,809 in 2014.

5.1% Decrease
Willis Avenue Bridge
(Harlem River)

Largest percentage decrease for crossings
carrying more than 50,000 daily vehicles,
to 63,912 in 2015 from 67,951 in 2014.



George Washington Bridge (Hudson River)

295,120 vehicles per day, the most heavily utilized Manhattan river crossing.

Alexander Hamilton Bridge (Harlem River)

178,407 vehicles per day, the most heavily utilized Harlem River crossing.

Ed Koch Queensboro Bridge (East River)

174,447 vehicles per day, the most heavily utilized East River crossing.

Annual Citywide Subway Ridership

0.6% increase to 1,762,565,419 annual riders in 2015 from 1,751,287,624 in 2014.

During the past ten years, subway ridership increased 21.6% to 1,762,565,419 annual riders in 2015 from 1,449,100,000 in 2005. During the same period, Manhattan vehicular river crossings decreased 6.9% to 1,795,790 daily vehicles in 2015 from 1,884,733 in 2005.

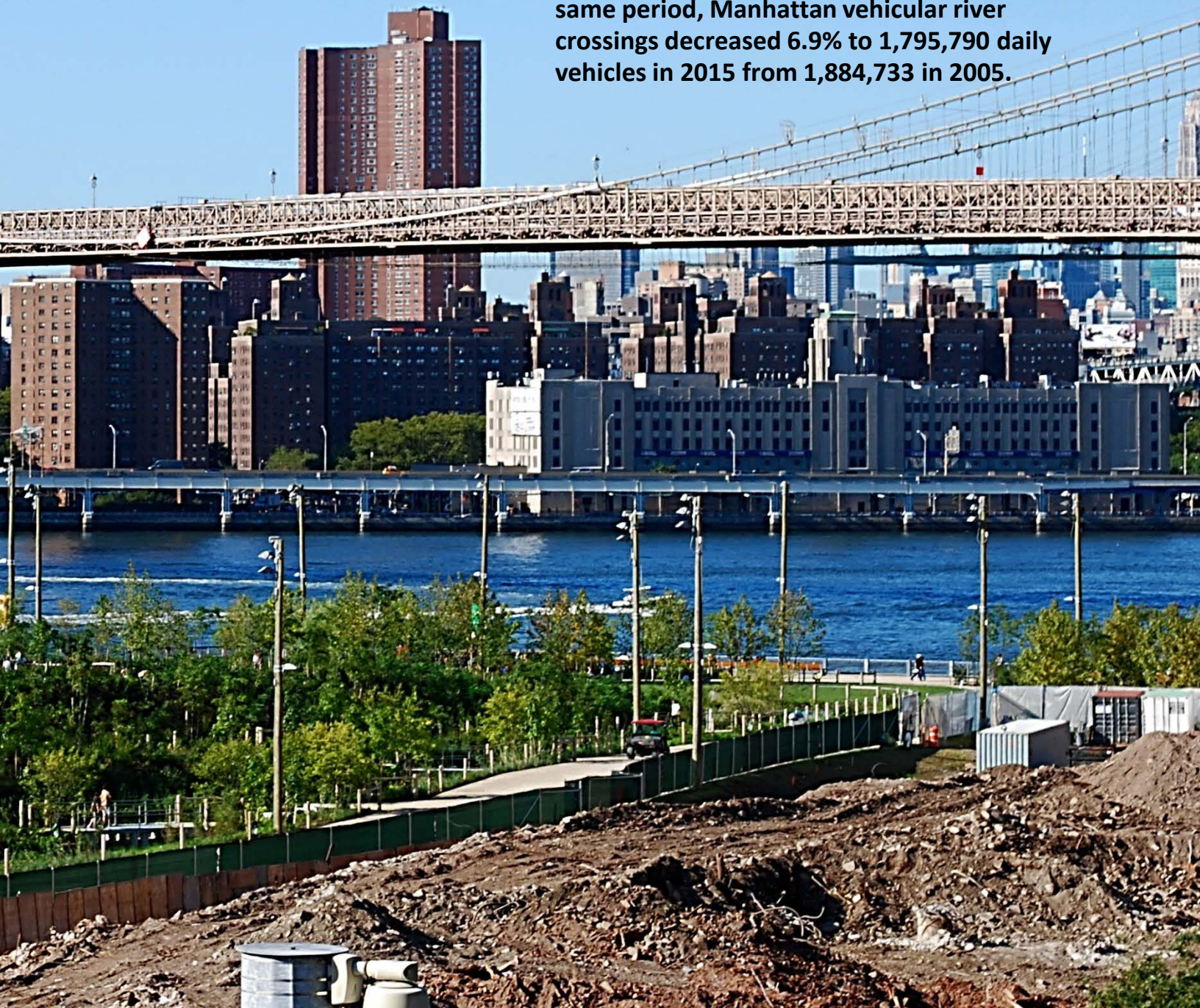


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Introduction



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

INTRODUCTION

The 2015 *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 2015 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 2015-2016 and 2016-2017 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 ~ 2015 Daily Traffic



**Brooklyn Bridge over the East River
between Manhattan and Brooklyn**

SUMMARY

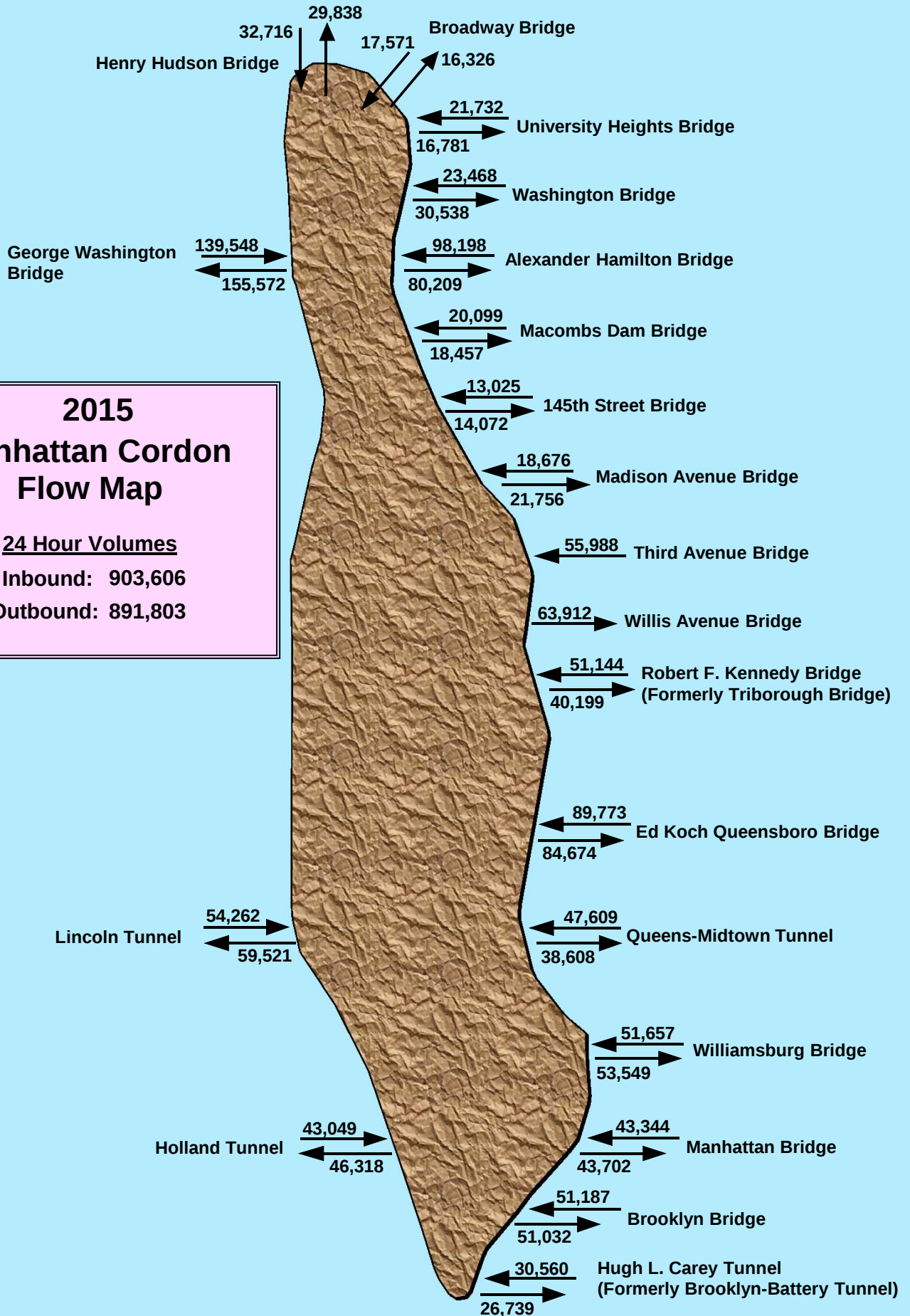
- Daily Manhattan river crossings increased 1.1%, to 1,795,790 daily vehicles in fall 2015 from 1,776,013 in fall 2014, an increase of 19,777 daily vehicles.
- The busiest river crossings are the following.
 - For the 53rd consecutive year, the George Washington Bridge carried more traffic than any other Manhattan river crossing. A two-way total of 295,120 daily vehicles used this bridge in fall 2015, which was 5.1% more than the average daily volume of 280,78 in fall 2014.
 - The Alexander Hamilton Bridge was second busiest, serving 178,407 daily vehicles in fall 2015, which was 0.2% less than its fall 2014 daily volume of 178,809.
 - The Ed Koch Queensboro Bridge was third busiest with its fall 2015 daily volume of 174,447 daily vehicles, a slight increase from the 174,809 recorded in fall 2014.
- The average automobile entering Manhattan during the morning peak period carried 1.34 persons including the driver. A total of 78.3% of peak period automobiles were occupied only by the driver.
- The peak accumulation of motor vehicles in Manhattan on an average weekday occurred at about 2 pm when an estimated 369,569 vehicles were either moving or parked on the island. This includes vehicles operating only within Manhattan as well as those entering via the river crossings.
- Annual subway ridership citywide increased 0.64% to 1.763 billion in 2015 from 1.751 billion in 2014. This was the highest level of subway ridership since 1949.
- According to census data, 38% of automobile work trips to Manhattan originated in the other four boroughs, 53% came from outside the city, and the remaining 9% 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 approximately 100,000 autos entering Manhattan from New Jersey in 2015 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.

2015 Manhattan Cordon Flow Map

24 Hour Volumes

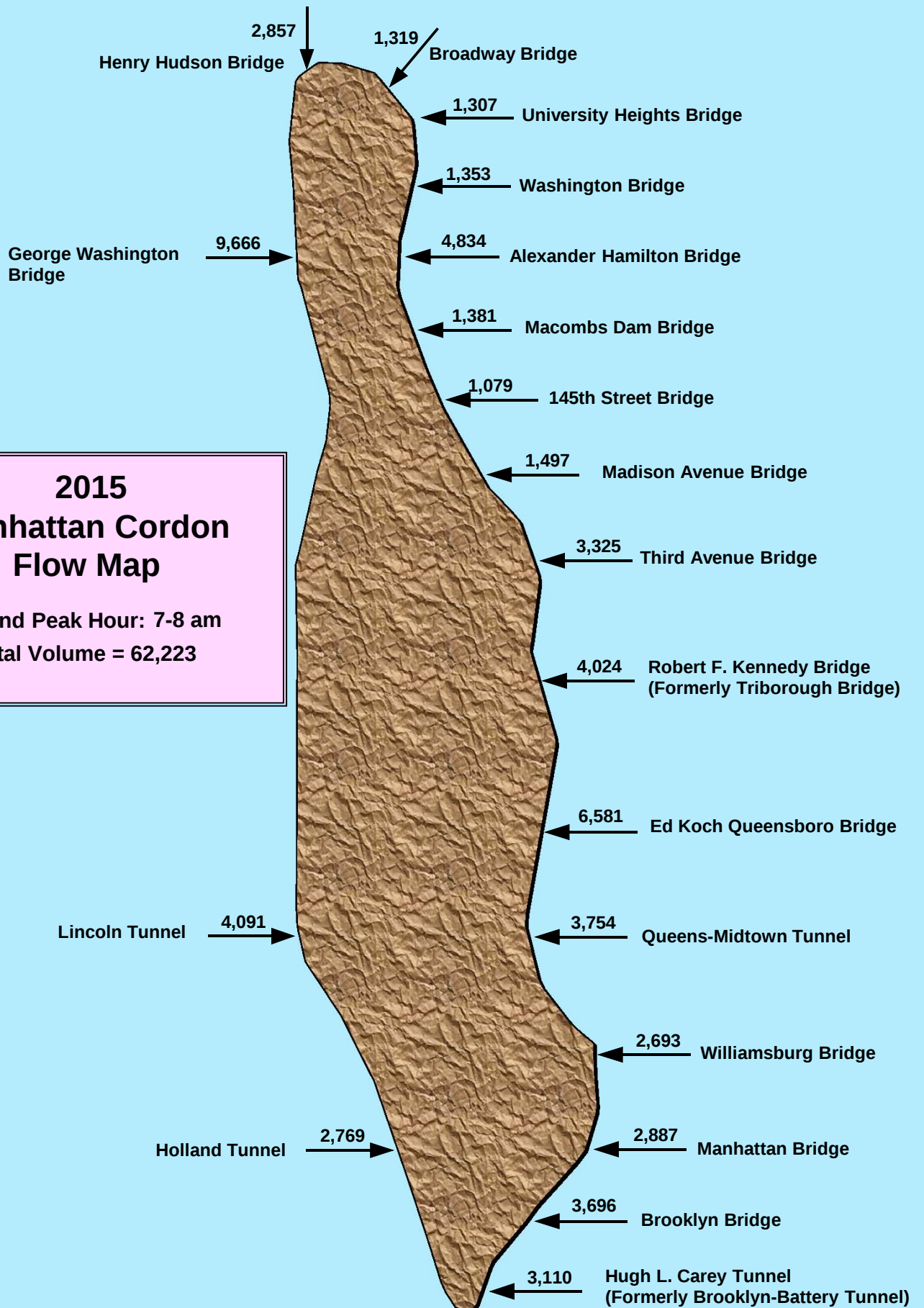
Inbound: 903,606

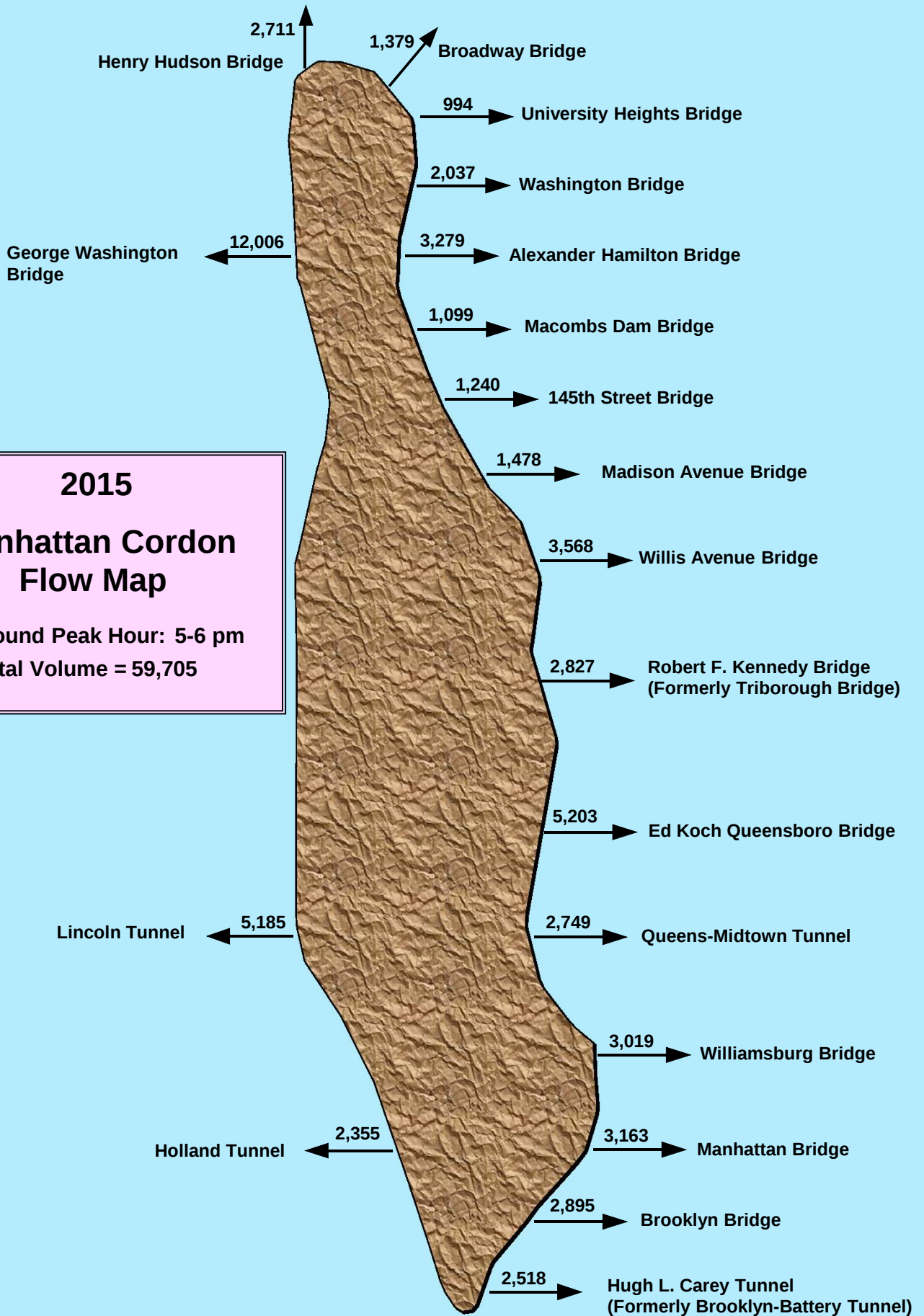
Outbound: 891,803



2015 Manhattan Cordon Flow Map

Inbound Peak Hour: 7-8 am
Total Volume = 62,223





**Manhattan Crossings
2015 Average Daily Traffic Volumes
To and From Manhattan**

<i>EAST RIVER BRIDGES</i>	To Manhattan	From Manhattan	2-way Total
Brooklyn Bridge	51,187	51,032	102,219
Ed Koch Queensboro Bridge *	89,773	84,674	174,447
Manhattan Bridge	43,344	43,702	87,046
Williamsburg Bridge	51,657	53,549	105,206
Total East River	235,961	232,957	468,918

HARLEM RIVER BRIDGES

Alexander Hamilton Bridge	98,198	80,209	178,407
Broadway Bridge	17,571	16,326	33,897
Macombs Dam Bridge	20,099	18,457	38,556
Madison Avenue Bridge	18,676	21,756	40,432
Third Avenue Bridge	55,988	-----	55,988
University Heights Bridge	21,732	16,781	38,513
Washington Bridge	23,468	30,538	54,006
Willis Avenue Bridge	-----	63,912	63,912
145th Street Bridge	13,025	14,072	27,097
Total Harlem River	268,757	262,051	530,808

MTABT FACILITIES

Henry Hudson Bridge	32,716	29,838	62,554
Hugh L. Carey Tunnel **	30,560	26,739	57,299
Queens-Midtown Tunnel	47,609	38,608	86,217
Robert F. Kennedy Bridge ***	51,525	40,199	91,724
Total MTABT	162,410	135,384	297,794

PANYNJ FACILITIES

George Washington Bridge	139,548	155,572	295,120
Holland Tunnel	43,049	46,318	89,367
Lincoln Tunnel	54,262	59,521	113,783
Total PANYNJ	236,859	261,411	498,270

GRAND TOTAL	903,987	891,803	1,795,790
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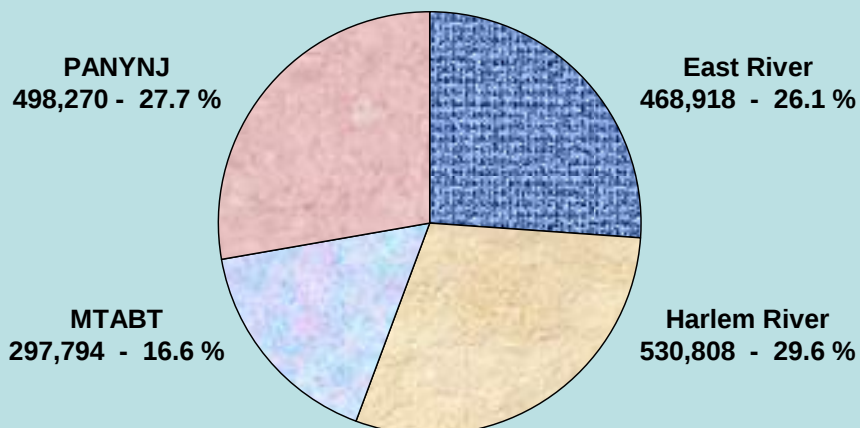
* Queensboro Bridge renamed April 11, 2011.

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

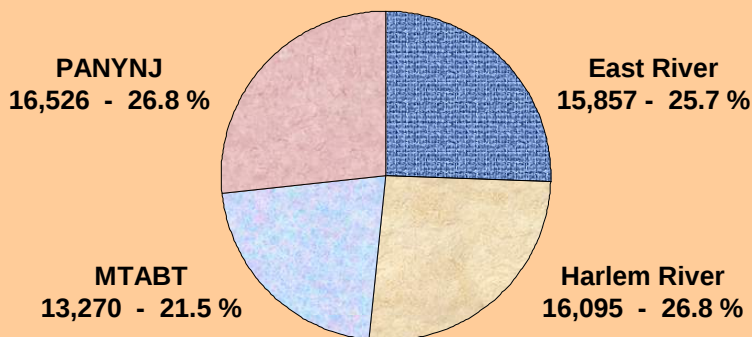
*** Formerly Triborough Bridge, renamed November 19, 2008.

2015 Manhattan Crossings Vehicle Volumes

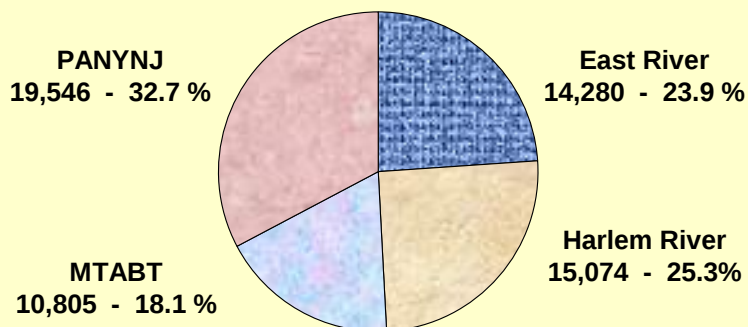
24-Hour Volumes – Both Directions



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



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



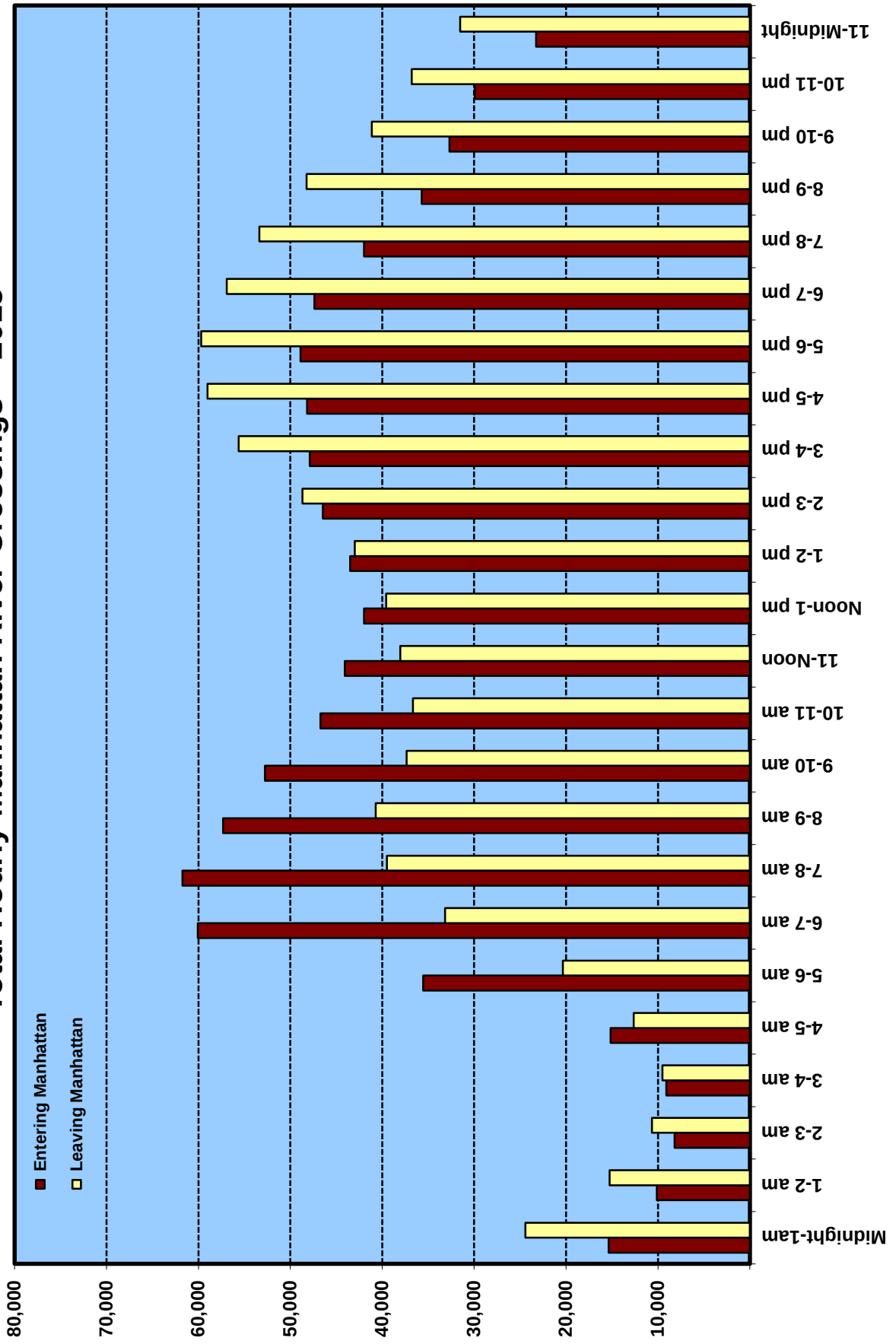
Total Manhattan Crossings 2015 Average Hourly Traffic Volumes To and From Manhattan (All Facilities)

	Entering Manhattan	Leaving Manhattan	2-Way Total
12-1am	15,370	24,432	39,802
1-2am	10,127	15,268	25,395
2-3am	8,200	10,642	18,842
3-4am	9,081	9,522	18,603
4-5am	15,142	12,644	27,786
5-6am	35,552	20,356	55,908
6-7am	60,062	33,168	93,230
7-8am	61,748 **	39,483	101,231
8-9am	57,317	40,696	98,013
9-10am	52,768	37,339	90,107
10-11am	46,728	36,666	83,394
11-12am	44,061	38,043	82,104
12-1pm	41,990	39,571	81,561
1-2pm	43,496	42,990	86,486
2-3pm	46,453	48,670	95,123
3-4pm	47,884	55,615	103,499
4-5pm	48,189	59,014	107,203
5-6pm	48,887	59,705 **	108,592
6-7pm	47,374	56,919	104,293
7-8pm	41,968	53,376	95,344
8-9pm	35,711	48,219	83,930
9-10pm	32,692	41,140	73,832
10-11pm	29,931	36,794	66,725
11-12pm	23,256	31,531	54,787
24 hrs	903,987	891,803	1,795,790
7-10am	171,833	117,518	289,351
10am-1pm	132,779	114,280	247,059
1-4pm	137,833	147,275	285,108
4-7pm	144,450	175,638	320,088
7am-7pm	586,895	554,711	1,141,606

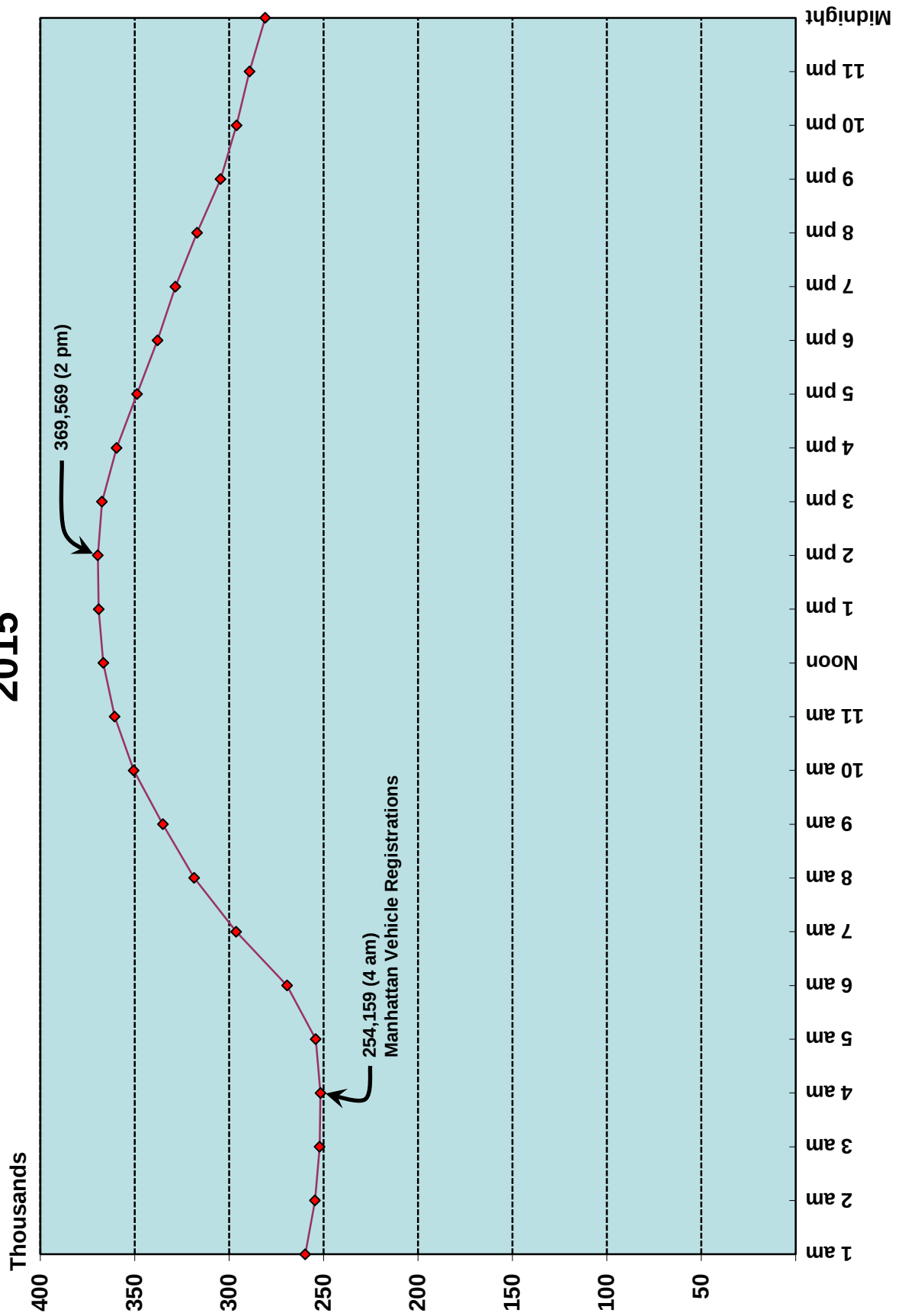
** Peak Volumes

Hourly Vehicle Volumes

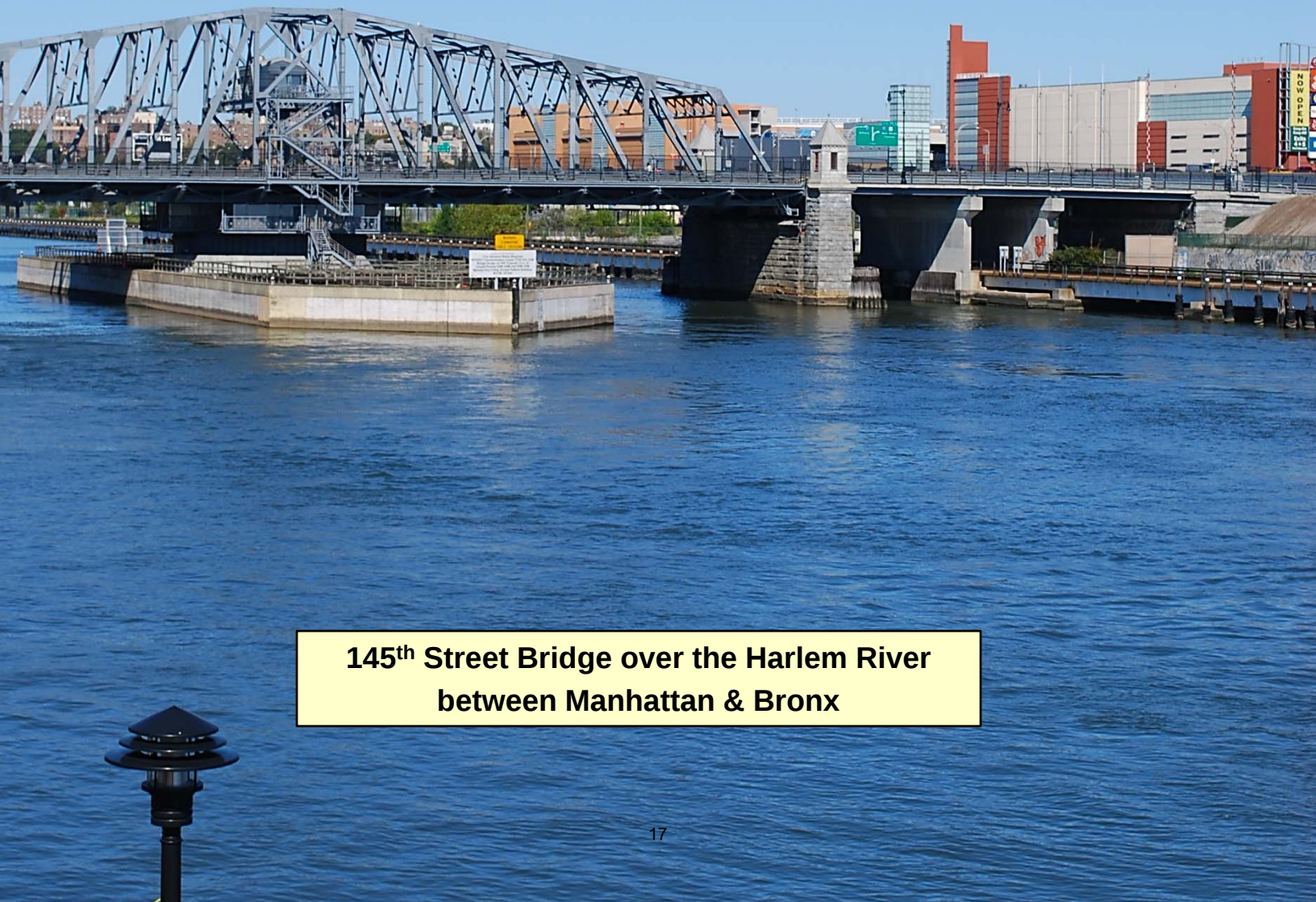
Total Hourly Manhattan River Crossings ~ 2015



Manhattan Vehicular Accumulation 2015



Trip Characteristics



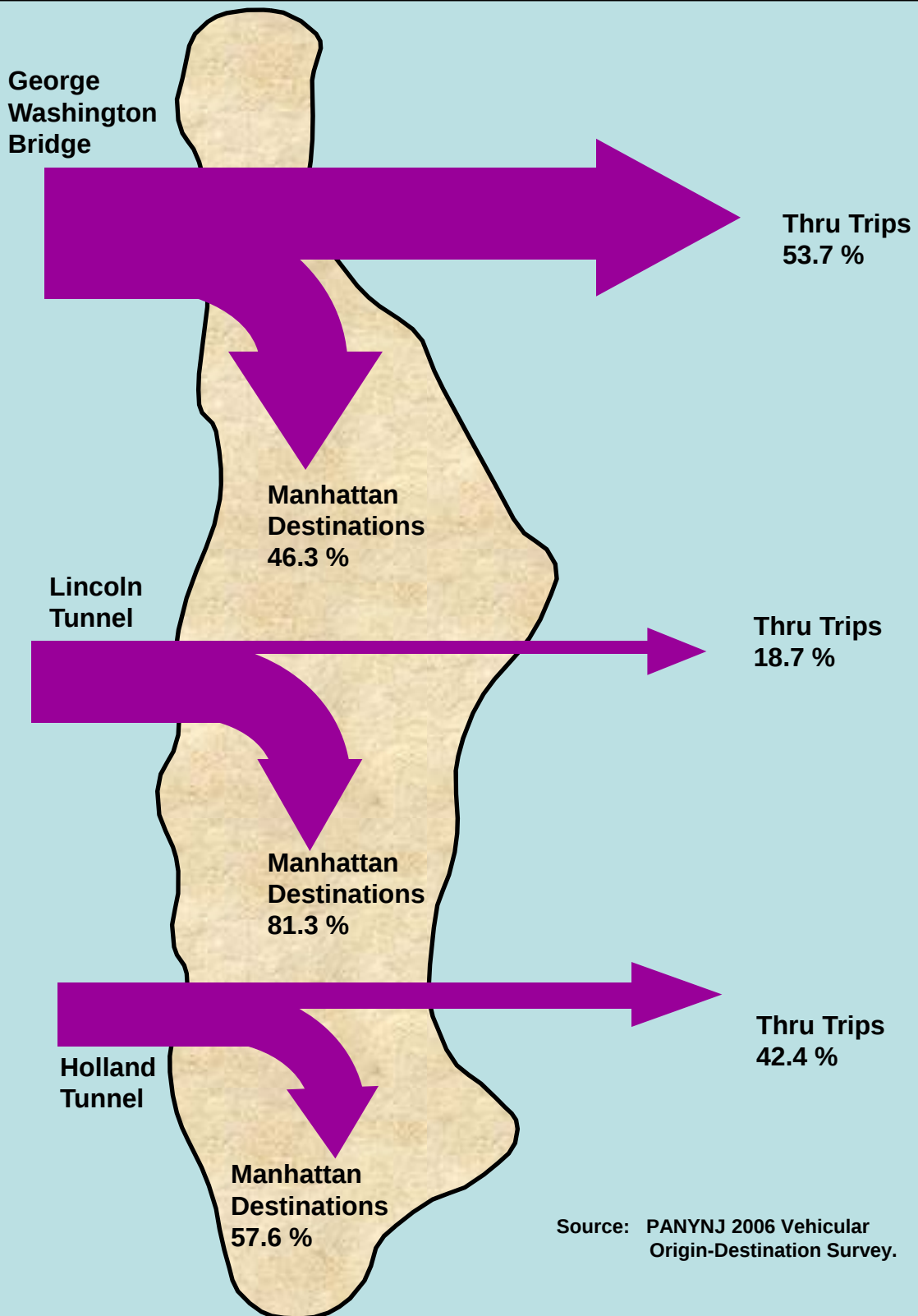
**145th Street Bridge over the Harlem River
between Manhattan & Bronx**

Origins and Travel Modes of Manhattan Commuters

State & County of Residence	Total Manhattan Workers	Drove Alone	2 Person Carpool	3 Person Carpool	4+ Person Carpool	Bus or Streetcar	Subway or elevated	Railroad	Ferry	Bicycle	Walk	Taxi	Other
NY ~ Bronx	197,533	20,494	4,373	700	527	24,543	138,078	5,452	26	379	1,536	859	566
NY ~ Brooklyn	413,912	22,064	4,837	1,198	1,095	19,110	350,394	5,728	701	4,876	2,519	542	848
NY ~ Manhattan	662,309	21,015	4,626	860	1,339	56,336	367,615	3,500	72	11,502	167,736	23,548	4,160
NY ~ Queens	372,779	37,945	7,976	1,506	1,036	29,643	276,164	13,495	219	1,138	1,693	906	1,058
NY ~ Staten Is.	46,824	9,153	1,269	541	165	25,076	3,364	693	5,851	47	428	55	182
Subtotal NYC Origins	1,693,357	110,671	23,081	4,805	4,162	154,708	1,135,615	28,868	6,869	17,942	173,912	25,910	6,814
NY ~ Nassau	95,911	22,185	2,442	446	565	2,783	7,422	59,140	105	11	327	159	326
NY ~ Westchester	87,058	18,876	3,214	387	274	3,351	7,380	52,514	0	0	323	164	575
NY ~ Suffolk	40,900	10,847	1,449	490	107	1,208	2,115	23,619	77	46	415	168	359
NY ~ Rockland	16,175	7,738	1,545	260	396	3,680	225	2,107	11	29	56	36	92
NY ~ Orange	9,991	3,842	703	94	72	2,836	389	1,962	0	0	35	0	58
NY ~ 52 Remaining Counties	16,072	4,999	458	59	83	672	1,923	6,810	52	73	602	94	247
New York State Totals	1,959,464	179,158	32,892	6,541	5,659	169,238	1,155,069	175,020	7,114	18,101	175,670	26,531	8,471
NJ ~ Hudson	84,064	5,664	1,513	340	356	26,070	41,755	4,019	3,566	114	255	75	337
NJ ~ Bergen	68,103	19,536	4,435	1,453	358	31,319	1,478	7,659	1,223	79	222	0	341
NJ ~ Essex	34,021	6,468	994	109	221	7,541	5,130	13,222	63	13	41	32	187
NJ ~ Middlesex	29,462	4,395	548	216	96	9,701	942	13,087	157	16	34	19	251
NJ ~ Monmouth	21,567	3,673	751	82	112	9,177	538	4,597	2,352	0	136	0	149
NJ ~ Union	19,144	4,180	508	175	30	4,565	889	8,216	50	0	112	0	419
NJ ~ Morris	12,523	3,416	387	176	0	2,850	467	5,098	80	0	0	0	49
NJ ~ 14 Remaining Counties	32,778	7,916	1,045	190	84	11,545	1,173	10,283	16	0	280	33	213
New Jersey Totals	301,662	55,248	10,181	2,741	1,257	102,768	52,372	66,181	7,507	222	1,080	159	1,946
CT ~ Fairfield	27,569	3,293	538	126	63	761	1,064	21,245	51	19	139	73	197
CT ~ 7 Remaining Counties	4,204	1,111	153	68	19	487	534	1,552	0	4	194	59	23
Connecticut Totals	31,773	4,404	691	194	82	1,248	1,598	22,797	51	23	333	132	220
Pennsylvania Totals	12,205	3,709	877	142	0	3,248	798	3,048	31	6	316	0	30
GRAND TOTALS	2,305,104	242,519	44,641	9,618	6,998	276,502	1,209,837	267,046	14,703	18,352	177,399	26,822	10,667

Data Source: IPUMS-USA, University of Minnesota, www.ipums.org. American Community Survey 2010-2014 5-Year sample data, US Census Bureau.

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



DESTINATIONS OF HUDSON RIVER CROSSINGS EASTBOUND AUTO TRAFFIC

TOTAL OF HOLLAND TUNNEL, LINCOLN TUNNEL AND GEORGE WASHINGTON BRIDGE

Eastbound Auto Destinations	6-7 am	7-10 am	4-7 pm	5 am - 11 pm
Manhattan				
Manhattan CBD	42.4 %	46.2 %	24.4 %	34.5 %
Upper Manhattan	23.8 %	20.1 %	21.3 %	21.7 %
Manhattan Total	66.2 %	66.3 %	45.7 %	56.2 %
Bronx	12.2 %	9.6 %	10.1 %	10.8 %
Brooklyn	7.8 %	7.1 %	10.6 %	9.0 %
Queens	4.6 %	7.3 %	17.3 %	10.9 %
Westchester	4.3 %	3.2 %	7.7 %	4.7 %
Long Island	3.5 %	3.7 %	7.4 %	5.5 %
Other	1.4 %	2.8 %	1.2 %	2.9 %
Thru Trip Total	33.8 %	33.7 %	54.3 %	43.8 %
GRAND TOTAL	100.0 %	100.0 %	100.0 %	100.0 %

Source: Weekday data from the PANYNJ 2006 Vehicular Origin-Destination Survey.

DESTINATIONS OF GEORGE WASHINGTON BRIDGE EASTBOUND AUTO TRAFFIC

Eastbound Auto Destinations	6-7 am	7-10 am	4-7 pm	5 am - 11 pm
Manhattan				
Manhattan CBD	25.5 %	26.8 %	12.3 %	18.4 %
Upper Manhattan	31.5 %	28.9 %	26.1 %	27.9 %
Manhattan Total	57.0 %	55.7 %	38.4 %	46.3 %
Bronx	19.5 %	16.6 %	14.5 %	17.3 %
Brooklyn	4.3 %	3.9 %	6.6 %	5.4 %
Queens	5.3 %	9.3 %	15.6 %	11.3 %
Westchester	6.9 %	4.5 %	12.3 %	7.3 %
Long Island	5.3 %	5.5 %	11.0 %	7.8 %
Other	1.7 %	4.5 %	1.6 %	4.6 %
Thru Trip Total	43.0 %	44.3 %	61.6 %	53.7 %
GRAND TOTAL	100.0 %	100.0 %	100.0 %	100.0 %

Source: Weekday data from the PANYNJ 2006 Vehicular Origin-Destination Survey.

DESTINATIONS OF HOLLAND TUNNEL EASTBOUND AUTO TRAFFIC

Eastbound Auto Destinations	6-7 am	7-10 am	4-7 pm	5 am - 11 pm
Manhattan				
Manhattan CBD	60.6 %	62.7 %	40.3 %	49.0 %
Upper Manhattan	11.4 %	5.8 %	12.2 %	8.6 %
Manhattan Total	72.0 %	68.5 %	52.5 %	57.6 %
Bronx	2.1 %	0.6 %	3.2 %	2.2 %
Brooklyn	19.3 %	20.4 %	24.9 %	23.0 %
Queens	3.9 %	4.9 %	16.9 %	12.4 %
Westchester	0.6 %	3.3 %	0.0 %	2.0 %
Long Island	0.5 %	2.3 %	1.8 %	2.4 %
Other	1.6 %	0.0 %	0.7 %	0.4 %
Thru Trip Total	28.0 %	31.5 %	47.5 %	42.4 %
GRAND TOTAL	100.0 %	100.0 %	100.0 %	100.0 %

Source: Weekday data from the PANYNJ 2006 Vehicular Origin-Destination Survey.

DESTINATIONS OF LINCOLN TUNNEL EASTBOUND AUTO TRAFFIC

Eastbound Auto Destinations	6-7 am	7-10 am	4-7 pm	5 am - 11 pm
Manhattan				
Manhattan CBD	76.7 %	78.6 %	51.6 %	64.0 %
Upper Manhattan	12.1 %	10.3 %	15.0 %	17.3 %
Manhattan Total	88.8 %	88.9 %	66.6 %	81.3 %
Bronx	0.0 %	0.2 %	2.7 %	1.2 %
Brooklyn	7.8 %	5.1 %	3.9 %	6.0 %
Queens	2.9 %	4.5 %	25.8 %	8.6 %
Westchester	0.0 %	0.1 %	0.0 %	0.3 %
Long Island	0.5 %	0.5 %	1.0 %	2.0 %
Other	0.0 %	0.7 %	0.0 %	0.6 %
Thru Trip Total	11.2 %	11.1 %	33.4 %	18.7 %
GRAND TOTAL	100.0 %	100.0 %	100.0 %	100.0 %

Source: Weekday data from the PANYNJ 2006 Vehicular Origin-Destination Survey.

VEHICLE OCCUPANCY -- INBOUND TO MANHATTAN

Average Number of Persons per Auto

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

Sources:

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

2014-2015 Trends



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

2014-2015 Trends

- Daily Manhattan river crossings increased 1.1%, to 1,795,790 in fall 2015 from 1,776,013 in fall 2014 (19,777 more daily vehicles).
- The largest percentage decrease occurred on the Madison Avenue Bridge over the Harlem River between Manhattan and The Bronx, where daily traffic decreased 12.1%, to 41,340 vehicles in fall 2014 from 47,046 in fall 2013 (5,706 fewer daily vehicles).
- The largest numerical decrease occurred on the Williamsburg Bridge over the East River between Manhattan and Brooklyn, where traffic decreased by 6,428 daily vehicles, to 105,206 in fall 2015 from 111,634 in fall 2014 (-5.8%).
- The largest percentage increase occurred on the Henry Hudson Bridge over the Harlem River between Manhattan and The Bronx, where daily volume increased 6.4%, to 62,554 vehicles in fall 2015 from 58,809 in fall 2013 (3,745 additional daily vehicles).
- The largest numerical increase occurred on the George Washington Bridge over the Hudson River between Manhattan and New Jersey, where daily volume increased by 14,336 daily vehicles to 295,120 in fall 2015 from 280,784 in fall 2014 (+5.1%).
- Total daily traffic on the four East River bridges combined remained relatively unchanged, decreasing 0.2%, to 468,918 in fall 2015 from 469,907 in fall 2014 (989 fewer daily vehicles).
- Daily volume using the nine Harlem River bridges decreased 1.3%, to 530,808 in fall 2015 from 537,888 in fall 2014 (7,080 fewer daily vehicles).
- On the four MTABT Manhattan crossings, total daily traffic increased 2.5% to 297,794 in fall 2015 from 290,406 in fall 2014 (7,388 more daily vehicles).
- Daily traffic using the three PANYNJ Manhattan crossings increased 4.3% to 498,270 from 477,812 (20,458 more daily vehicles).
- Annual subway ridership citywide increased 0.6% to 1,762,565,419 in 2015 from 1,751,287,621 in 2014. This was the highest level of subway ridership since 1949.

Manhattan Crossings

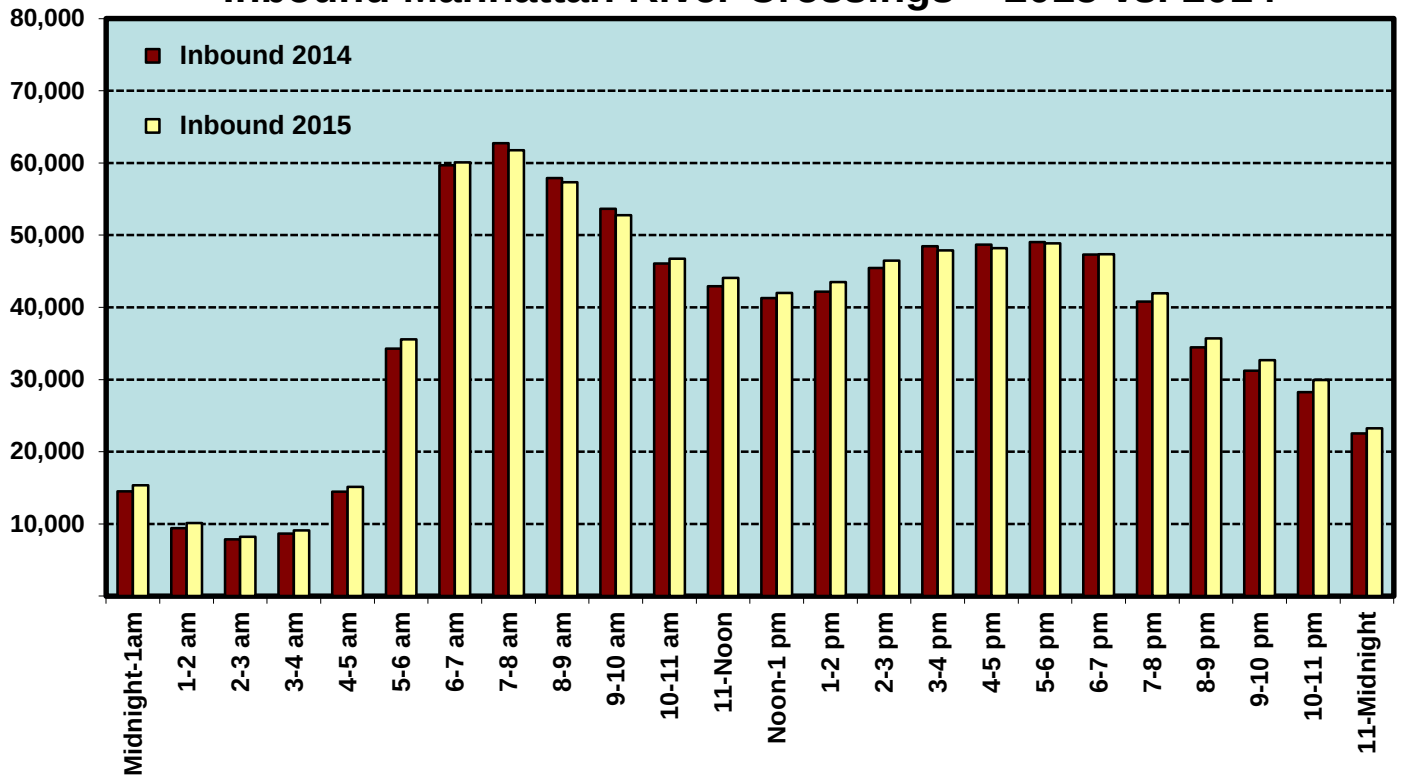
Hourly Vehicular Volumes

2015 vs 2014

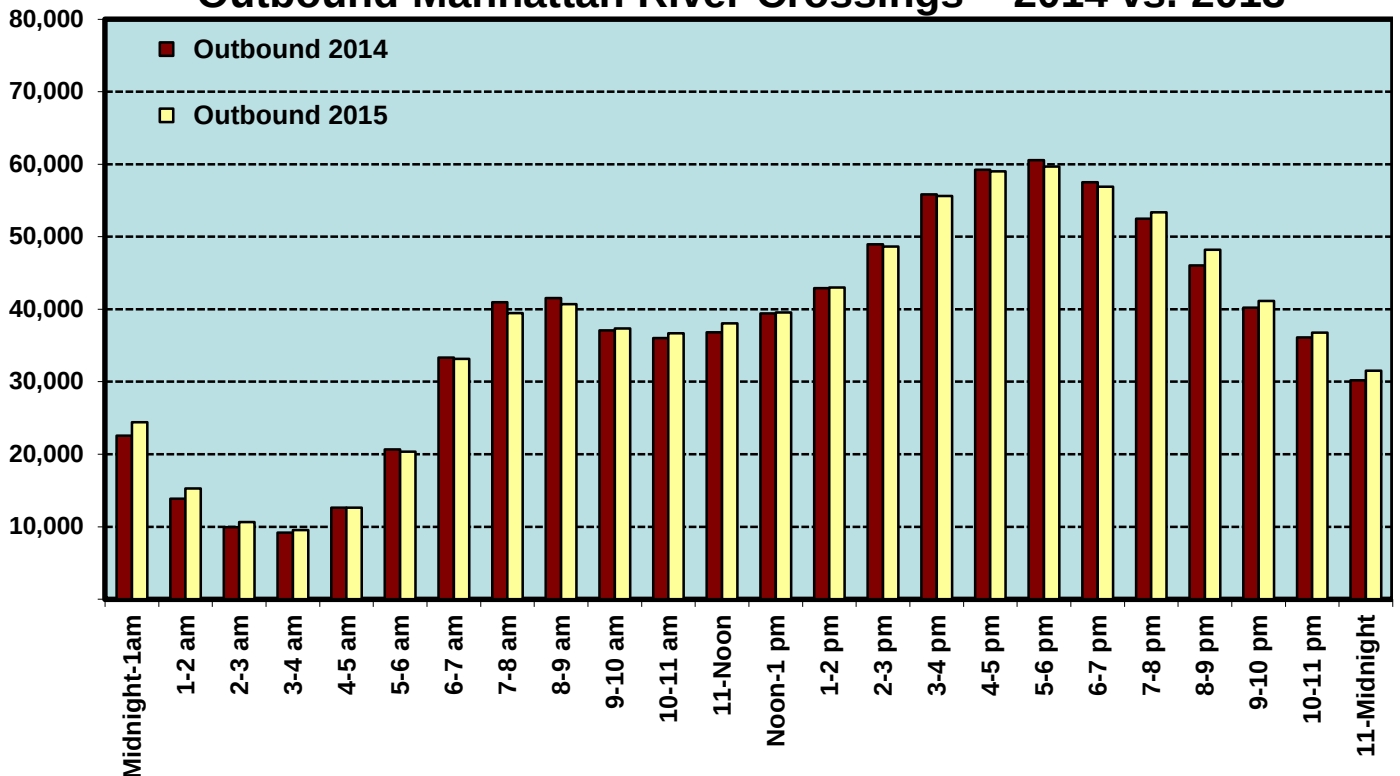
	Inbound			Outbound		
	2014	2015	Percent Change	2014	2015	Percent Change
Mid-1	14,486	15,370	6.1 %	22,556	24,432	8.3 %
1-2 am	9,427	10,127	7.4 %	13,873	15,268	10.1 %
2-3 am	7,848	8,200	4.5 %	9,921	10,642	7.3 %
3-4 am	8,636	9,081	5.2 %	9,171	9,522	3.8 %
4-5 am	14,446	15,142	4.8 %	12,618	12,644	0.2 %
5-6 am	34,296	35,552	3.7 %	20,663	20,356	- 1.5 %
6-7 am	59,675	60,062	0.6 %	33,343	33,168	- 0.5 %
7-8 am	62,723	61,748	- 1.6 %	40,976	39,483	- 3.6 %
8-9 am	57,903	57,317	- 1.0 %	41,551	40,696	- 2.1 %
9-10 am	53,643	52,768	- 1.6 %	37,105	37,339	0.6 %
10-11 a	46,056	46,728	1.5 %	36,015	36,666	1.8 %
11-Noon	42,920	44,061	2.7 %	36,841	38,043	3.3 %
Noon-1	41,277	41,990	1.7 %	39,424	39,571	0.4 %
1-2 pm	42,155	43,496	3.2 %	42,914	42,990	0.2 %
2-3 pm	45,437	46,453	2.2 %	48,951	48,670	- 0.6 %
3-4 pm	48,465	47,884	- 1.2 %	55,854	55,615	- 0.4 %
4-5 pm	48,677	48,189	- 1.0 %	59,260	59,014	- 0.4 %
5-6 pm	49,064	48,887	- 0.4 %	60,591	59,705	- 1.5 %
6-7 pm	47,331	47,374	0.1 %	57,522	56,919	- 1.0 %
7-8 pm	40,800	41,968	2.9 %	52,491	53,376	1.7 %
8-9 pm	34,471	35,711	3.6 %	46,041	48,219	4.7 %
9-10 pm	31,242	32,692	4.6 %	40,222	41,140	2.3 %
10-11 p	28,245	29,931	6.0 %	36,130	36,794	1.8 %
11-Mid	22,546	23,256	3.1 %	30,211	31,531	4.4 %
Totals	891,769	903,987	1.4 %	884,244	891,803	0.9 %
1-4am	25,911	27,408	5.8 %	32,965	35,432	7.5 %
4-7am	108,417	110,756	2.2 %	66,624	66,168	- 0.7 %
7-10am	174,269	171,833	- 1.4 %	119,632	117,518	- 1.8 %
10am-1pm	130,253	132,779	1.9 %	112,280	114,280	1.8 %
1-4pm	136,057	137,833	1.3 %	147,719	147,275	- 0.3 %
4-7pm	145,072	144,450	- 0.4 %	177,373	175,638	- 1.0 %
7-10pm	106,513	110,371	3.6 %	138,754	142,735	2.9 %
10pm-1am	65,277	68,557	5.0 %	88,897	92,757	4.3 %
7am-7pm	585,651	586,895	0.2 %	557,004	554,711	- 0.4 %
6-10am	233,944	231,895	- 0.9 %	152,975	150,686	- 1.5 %
3-7pm	193,537	192,334	- 0.6 %	233,227	231,253	- 0.8 %
6am-7pm	645,326	646,957	0.3 %	590,347	587,879	- 0.4 %

Hourly Vehicle Volumes

Inbound Manhattan River Crossings ~ 2015 vs. 2014



Outbound Manhattan River Crossings ~ 2014 vs. 2013



Weekday Manhattan Crossings **2014-2015 Traffic Volume Trends** **Both Directions**

EAST RIVER BRIDGES	Highway Functional Classification	2014	2015	Percent Change
Brooklyn Bridge	Principal Arterial	99,986	102,219	2.2 %
Ed Koch Queensboro Bridge *	Principal Arterial	174,239	174,447	0.1 %
Manhattan Bridge	Principal Arterial	84,048	87,046	3.6 %
Williamsburg Bridge	Principal Arterial	111,634	105,206	- 5.8 %
Total, 4 East River Bridges		469,907	468,918	- 0.2 %

HARLEM RIVER BRIDGES				
Alexander Hamilton Bridge	Interstate	178,809	178,407	- 0.2 %
Broadway Bridge	Principal Arterial	34,239	33,897	- 1.0 %
Macombs Dam Bridge	Principal Arterial	38,417	38,556	0.4 %
Madison Avenue Bridge	Principal Arterial	41,340	40,432	- 2.2 %
Third Avenue Bridge	Principal Arterial	58,447	55,988	- 4.2 %
University Heights Bridge	Principal Arterial	37,791	38,513	1.9 %
Washington Bridge	Minor Arterial	52,537	54,006	2.8 %
Willis Avenue Bridge	Principal Arterial	67,951	63,912	- 5.9 %
145th Street Bridge	Minor Arterial	28,357	27,097	- 4.4 %
Total, 9 Harlem River Bridges		537,888	530,808	- 1.3 %

MTABT Manhattan Facilities

Henry Hudson Bridge	Principal Arterial	58,809	62,554	6.4 %
Hugh L. Carey Tunnel **	Interstate	54,007	57,299	6.1 %
Queens-Midtown Tunnel	Interstate	86,081	86,217	0.2 %
R.F.K. Memorial Bridge Manhattan Plaza ***	Principal Arterial	91,509	91,724	0.2 %
Total, 4 MTABT Manhattan Crossings		290,406	297,794	2.5 %

PANYNJ Manhattan Facilities

George Washington Bridge	Interstate	280,784	295,120	5.1 %
Holland Tunnel	Interstate	87,232	89,367	2.4 %
Lincoln Tunnel	Principal Arterial	109,796	113,783	3.6 %
Total, 3 PANYNJ Manhattan - New Jersey Crossings		477,812	498,270	4.3 %

GRAND TOTALS		1,776,013	1,795,790	1.1 %
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* Queensboro Bridge renamed April 11, 2011.

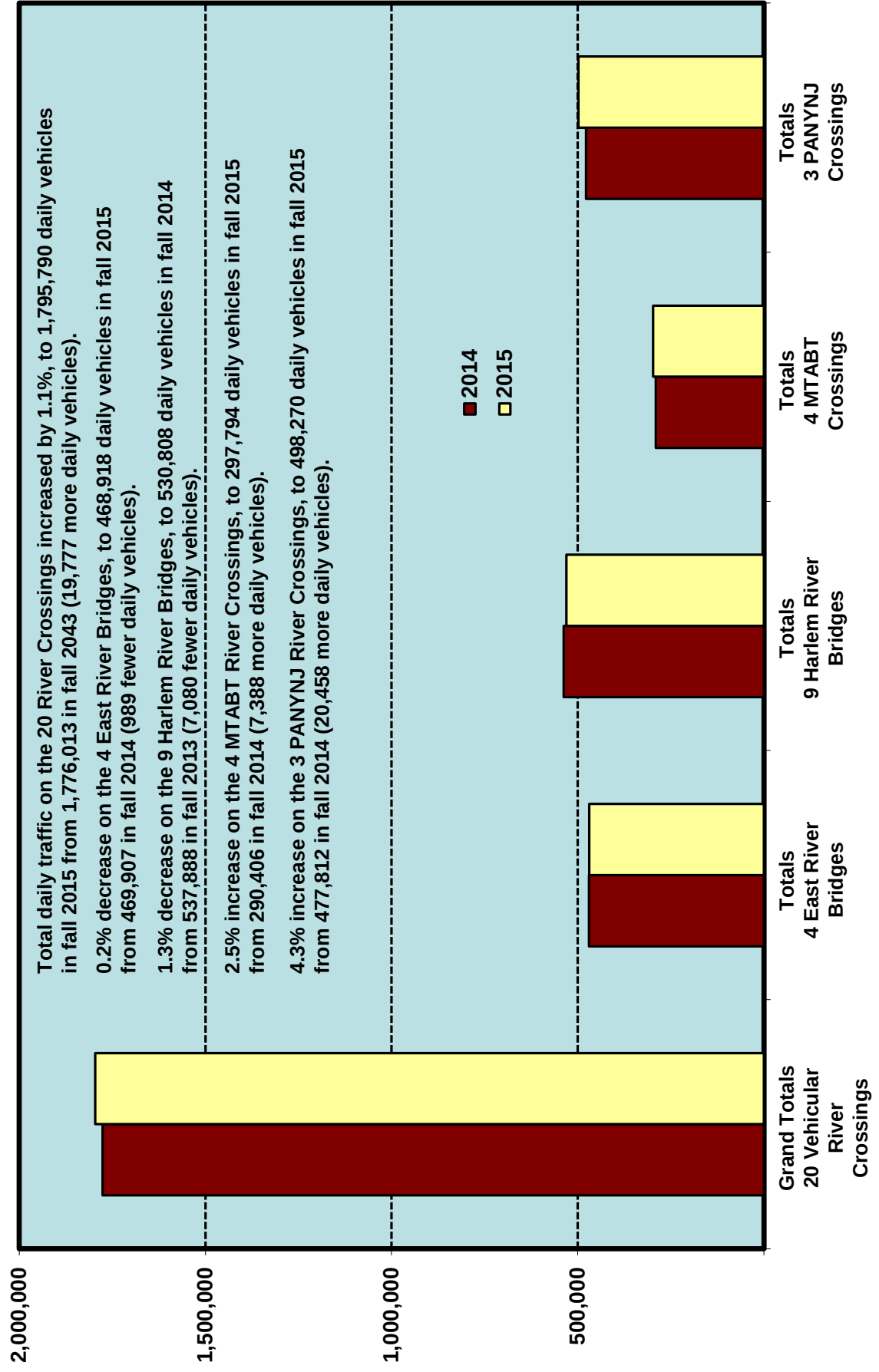
** Formerly Brooklyn-Battery Tunnel, renamed October 22, 2012.

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

Manhattan River Crossings Daily Volumes

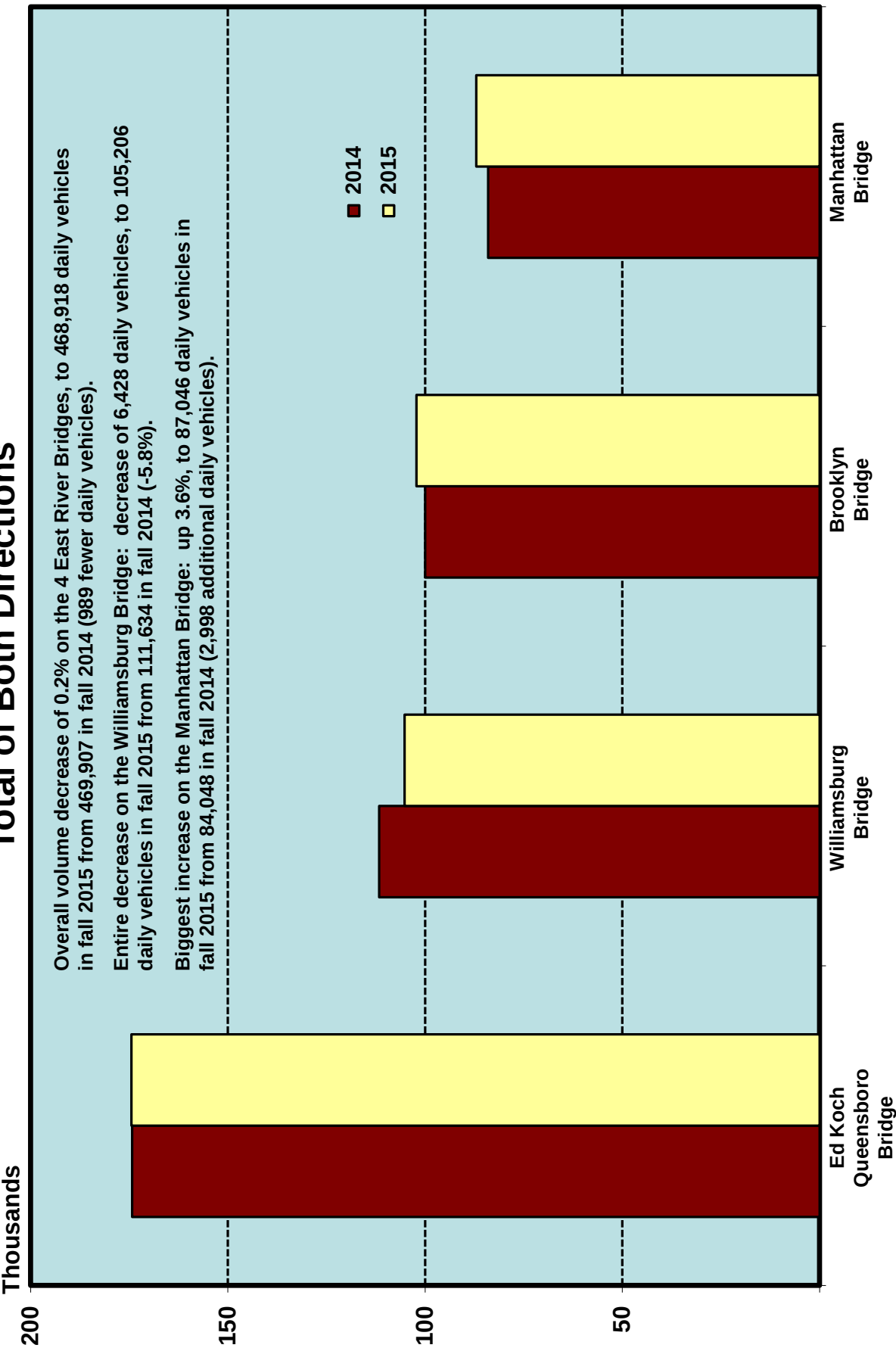
2015 vs. 2014

Total of Both Directions



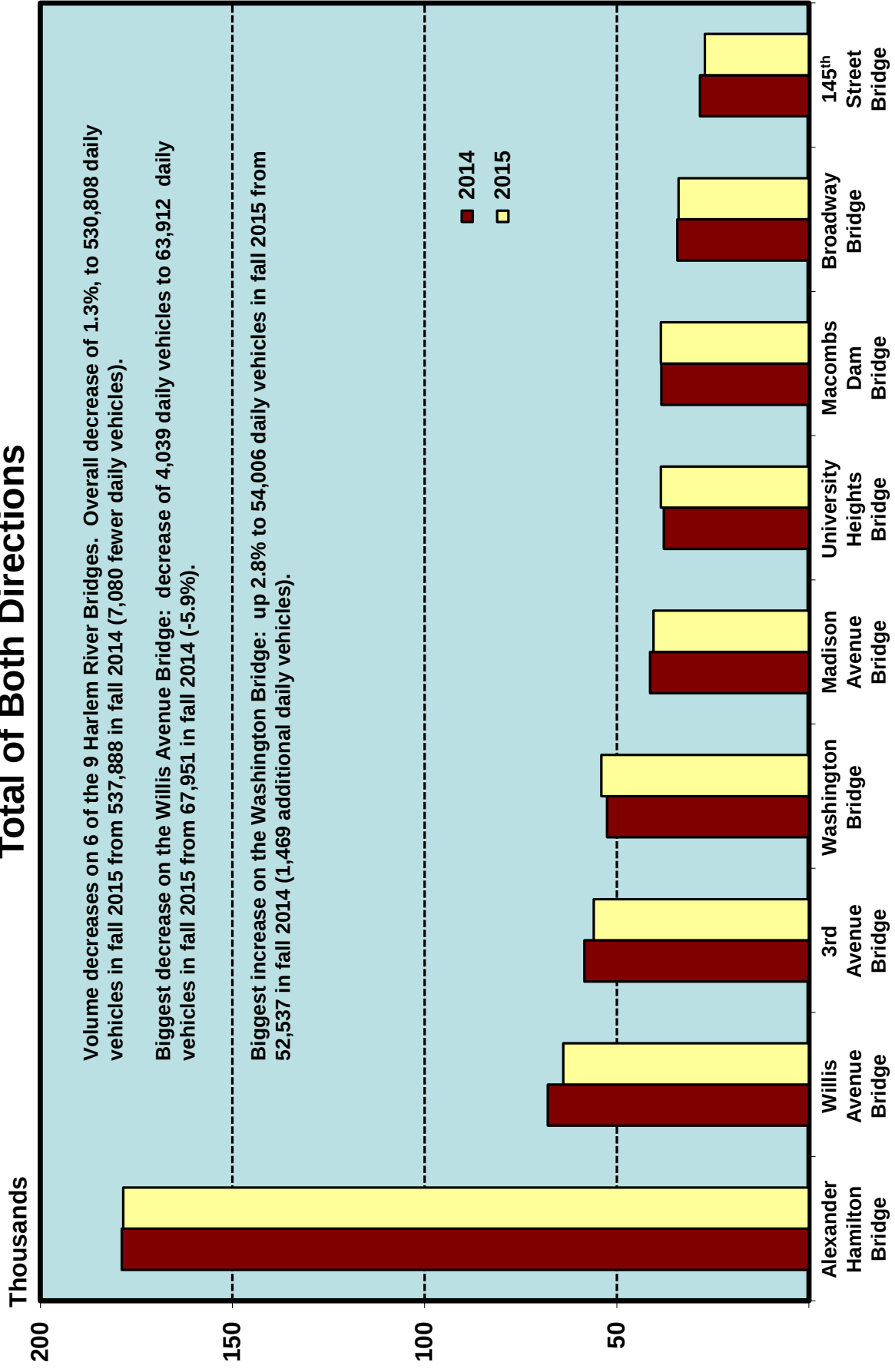
East River Bridges Daily Volumes 2015 vs. 2014

Total of Both Directions



Harlem River Bridges Daily Volumes 2015 vs. 2014

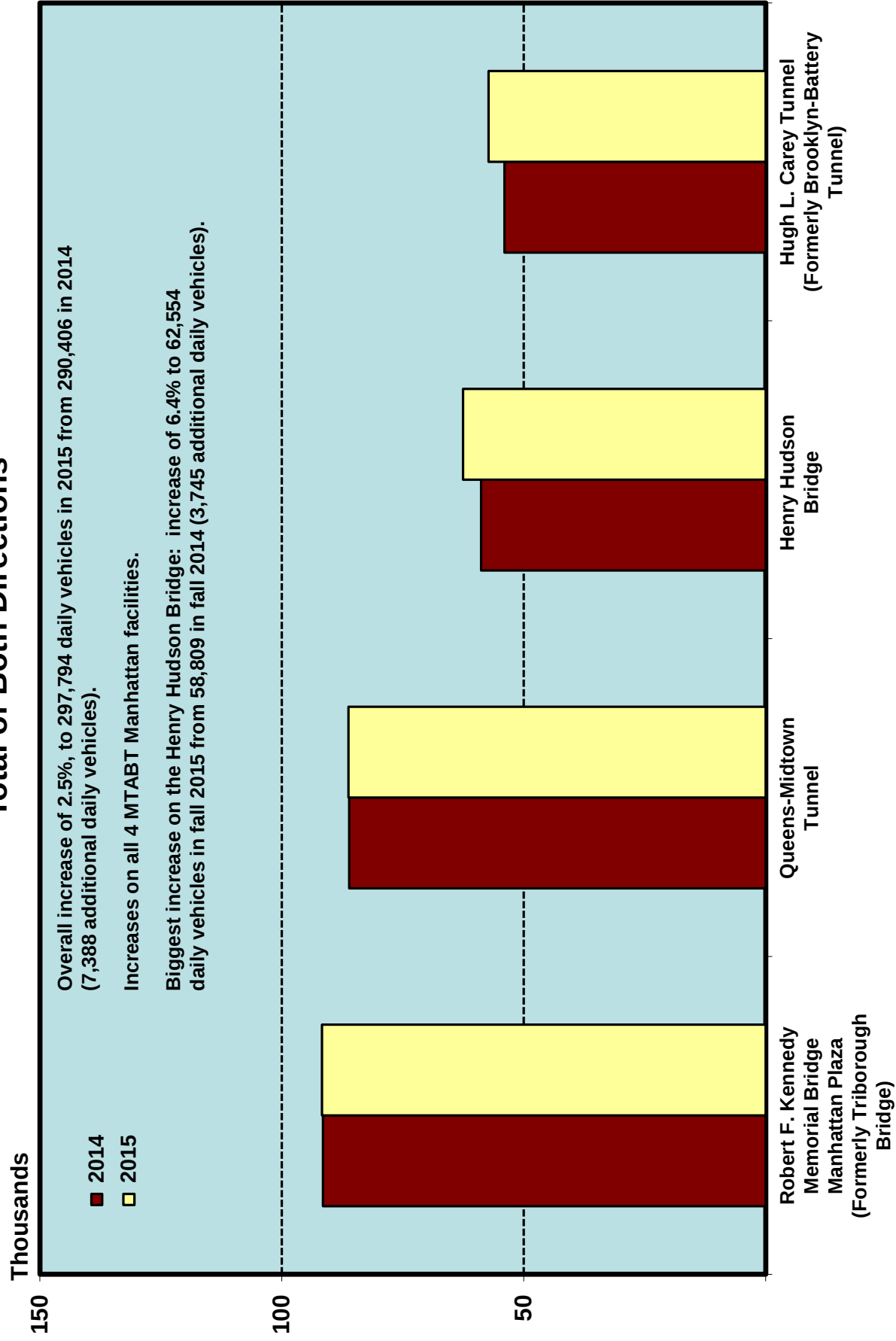
Total of Both Directions



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

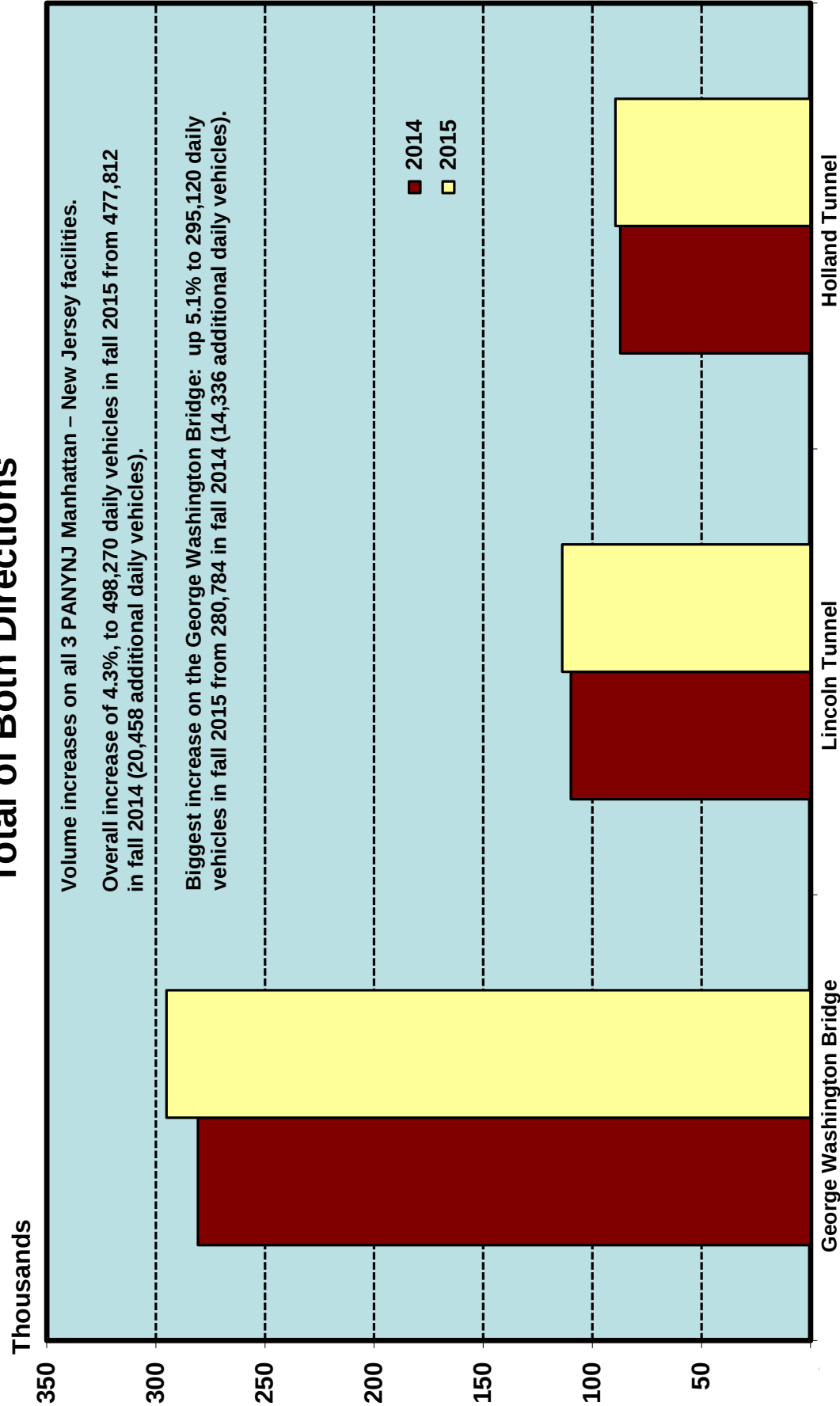
2015 vs. 2014

Total of Both Directions

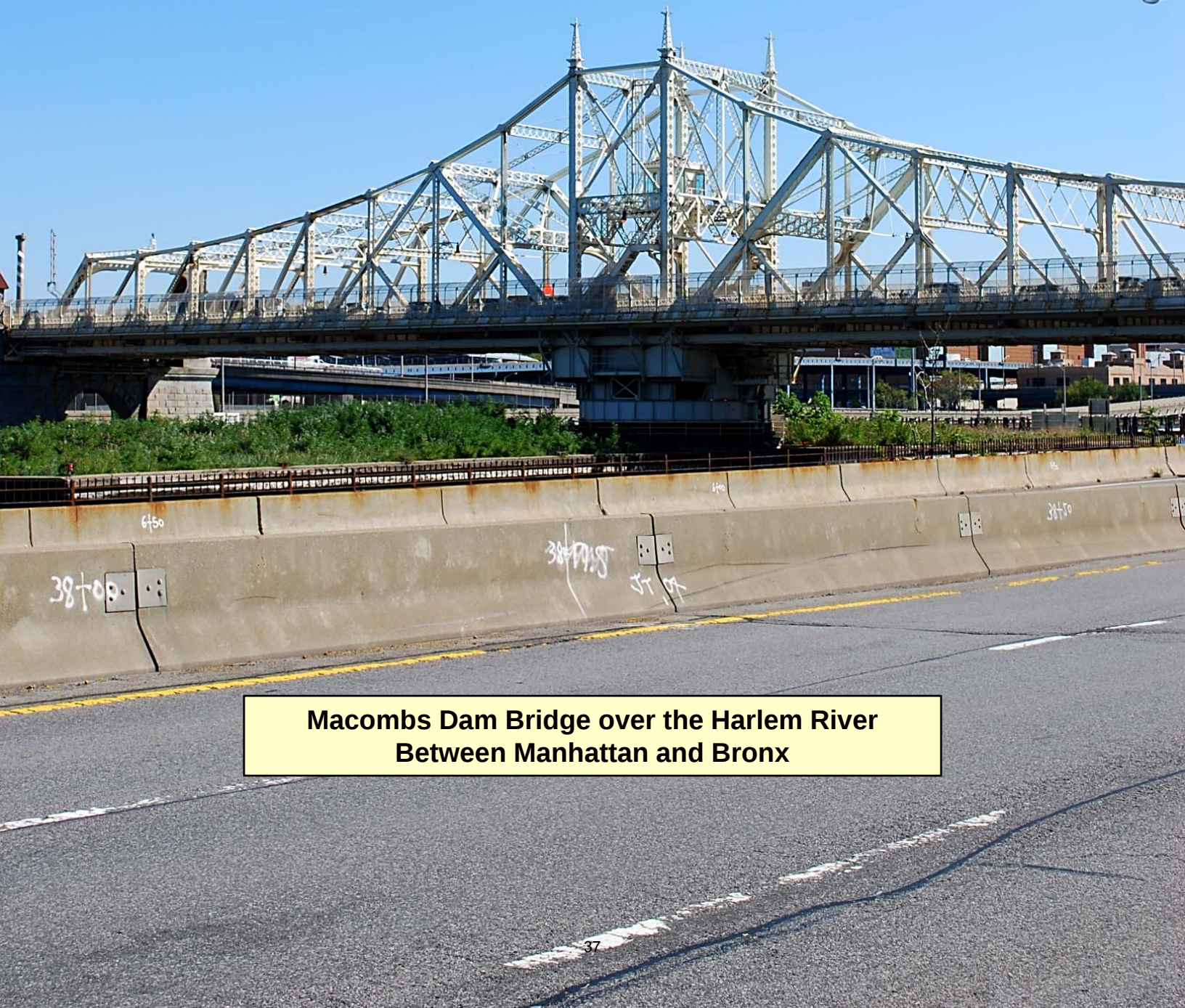


Port Authority of New York & New Jersey (PANYNJ)
Manhattan – N.J. Facilities Daily Volumes
2015 vs. 2014

Total of Both Directions



Ten-Year Trends 2005 - 2015



**Macombs Dam Bridge over the Harlem River
Between Manhattan and Bronx**

Ten-Year Trends: 2005 - 2015

- In the ten-year period from 2005 to 2015, Manhattan river crossings traffic volume decreased 6.9%, to 1,795,790 daily vehicles from 1,884,733, a decrease of 88,943 daily vehicles.
- Daily vehicle trips entering Manhattan decreased 4.2%, to 903,987 in 2015 from 943,381 in 2005 (39,394 fewer daily vehicles entering Manhattan).
 - Biggest percentage and numerical decrease in inbound trips during 7-10am: down 8.6% to 171,833 vehicles in 2015 from 187,955 in 2005 (16,122 fewer 7-10am entries).
 - Biggest percentage and numerical increase in inbound trips during 4-7am: increase of 5,881 vehicles, to 110,756 in 2015 from 104,875 in 2005 (+5.6%).
- Daily vehicle trips leaving Manhattan decreased 5.3%, to 891,803 in 2015 from 941,352 in 2005 (49,549 fewer daily vehicles leaving Manhattan).
 - Biggest percentage decrease in outbound trips during 1-4am: down 11.8% to 35,432 vehicles in 2015 from 40,188 in 2005 (4,756 fewer trips leaving Manhattan between 1-4am).
 - Biggest numerical decrease in outbound trips during 10pm-1am: decrease of 10,424 vehicles to 92,757 in 2015 from 103,181 in 2005 (-10.1%).
- Vehicle trips on the 13 toll-free East and Harlem River bridges decreased 5.7%, to 999,726 daily vehicles in 2015 from 1,059,605 in 2005 (59,879 fewer daily vehicles).
 - Greatest percentage and numerical increase on the Manhattan: up 8.3% to 87,046 daily vehicles in 2015 from 80,363 in 2005 (6,683 additional daily vehicles).
 - Greatest percentage and numerical decrease on the Brooklyn Bridge over the East River: down 22.7%, to 102,219 daily vehicles in 2015 from 132,210 in 2005 (29,991 fewer daily vehicles). Throughout 2014 and 2015, the Brooklyn Bridge was closed to Manhattan-bound traffic between 11:00pm and 6:00am weeknights for reconstruction.
- Traffic volumes on the four MTA Bridges and Tunnels (MTABT) river crossings serving Manhattan decreased 0.1%, to 297,794 daily vehicles in 2015 from 297,411 in 2005 (383 more daily vehicles).
 - Increase in daily vehicle trips in the Hugh L. Carey Tunnel: up 16.8% to 57,299 daily vehicles in 2015 from 49,043 in 2005 (8,256 more daily vehicles).
 - Biggest volume and percentage decrease at the Henry Hudson Bridge: down 11.2% to 62,554 daily vehicles in 2015 from 70,407 in 2005 (7,853 fewer daily vehicles).
- Traffic volumes on the three trans-Hudson Port Authority of New York and New Jersey (PANYNJ) river crossings serving Manhattan decreased 12.4%, to 498,270 daily vehicles in 2015 from 527,717 in 2005 (29,447 fewer daily vehicles).
 - Decreases on all three PANYNJ trans-Hudson crossings.
 - Greatest decrease on the Lincoln Tunnel: decrease of 12,672 daily vehicles, to 113,783 in 2014 from 126,455 in 2005.
- New York City motor vehicle registrations increased 13.5% to 2,107,321 in 2015 from 1,856,524 in 2005. Manhattan registrations increased 4.9% to 254,159 from 242,200.

- Annual citywide subway ridership increased 21.6% to 1,762,565,419 passengers in 2015 from 1,449,100,000 in 2005, and is now at its highest level since 1949.

Weekday Manhattan Crossings

10-Year Traffic Volume Trends ~ 2005-2015

Both Directions

EAST RIVER BRIDGES	Highway Functional Classification	2005	2015	Percent Change
Brooklyn Bridge	Principal Arterial	132,210	102,219	- 22.7 %
Ed Koch Queensboro Bridge *	Principal Arterial	178,610	174,447	- 2.3 %
Manhattan Bridge	Principal Arterial	80,363	87,046	8.3 %
Williamsburg Bridge	Principal Arterial	107,030	105,206	- 1.7 %
Total, 4 East River Bridges		498,213	468,918	- 5.9 %

HARLEM RIVER BRIDGES				
Alexander Hamilton Bridge	Interstate	181,566	178,407	- 1.7 %
Broadway Bridge	Principal Arterial	35,698	33,897	- 5.0 %
Macombs Dam Bridge	Principal Arterial	40,112	38,556	- 3.9 %
Madison Avenue Bridge	Principal Arterial	48,397	40,432	- 16.5 %
Third Avenue Bridge	Principal Arterial	60,152	55,988	- 6.9 %
University Heights Bridge	Principal Arterial	44,938	38,513	- 14.3 %
Washington Bridge	Minor Arterial	58,019	54,006	- 6.9 %
Willis Avenue Bridge	Principal Arterial	66,708	63,912	- 4.2 %
145th Street Bridge	Minor Arterial	25,802	27,097	5.0 %
Total, 9 Harlem River Bridges		561,392	530,808	- 5.4 %

MTABT Manhattan Facilities				
Henry Hudson Bridge	Principal Arterial	70,407	62,554	- 11.2 %
Hugh L. Carey Tunnel **	Interstate	49,043	57,299	16.8 %
Queens-Midtown Tunnel	Interstate	86,063	86,217	0.2 %
R.F.K. Memorial Bridge Manhattan Plaza ***	Principal Arterial	91,898	91,724	- 0.2 %
Total, 4 MTABT Manhattan Crossings		297,411	297,794	0.1 %

PANYNJ Manhattan Facilities				
George Washington Bridge	Interstate	304,302	295,120	- 3.0 %
Holland Tunnel	Interstate	96,960	89,367	- 7.8 %
Lincoln Tunnel	Principal Arterial	126,455	113,783	- 10.0 %
Total, 3 PANYNJ Manhattan - New Jersey Crossings		527,717	498,270	- 5.6 %

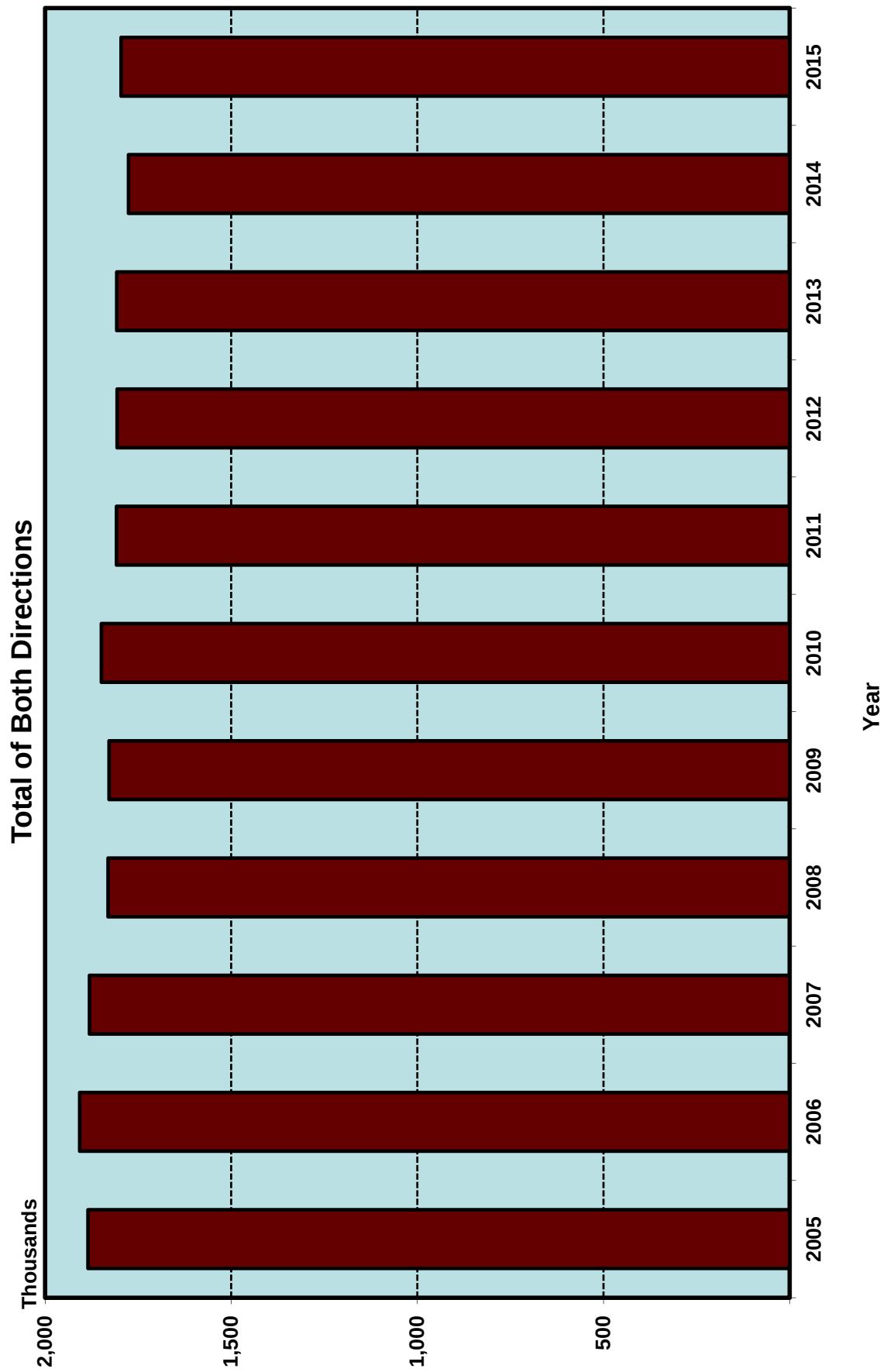
GRAND TOTALS		1,884,733	1,795,790	- 4.7 %
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* Queensboro Bridge renamed April 11, 2011.

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

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

Daily Manhattan River Crossings 2005 - 2015



Manhattan River Crossings

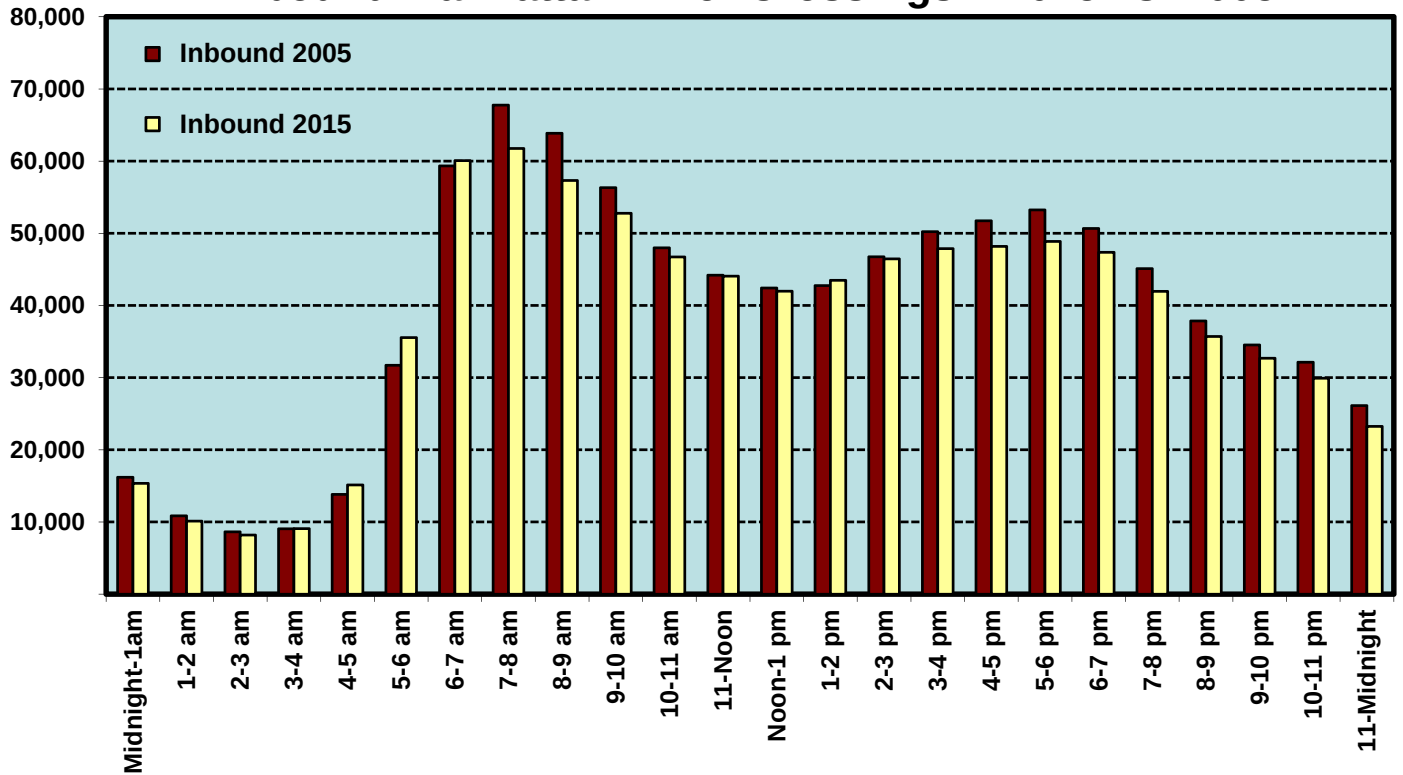
Hourly Vehicular Volumes

2005 vs 2015

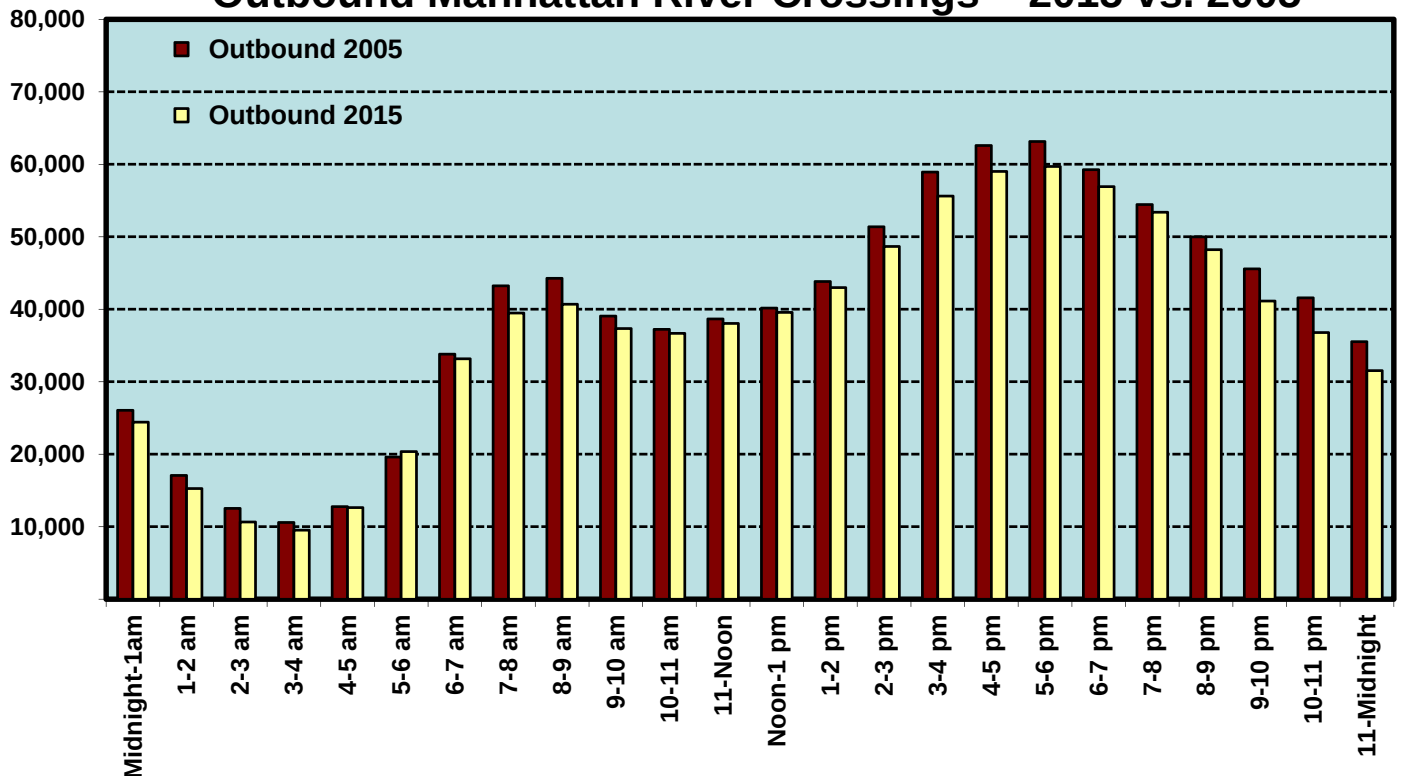
	Inbound			Outbound		
	2005	2015	Percent Change	2005	2015	Percent Change
Mid-1	16,211	15,370	- 5.2 %	26,064	24,432	- 6.3 %
1-2 am	10,867	10,127	- 6.8 %	17,074	15,268	-10.6 %
2-3 am	8,643	8,200	- 5.1 %	12,526	10,642	-15.0 %
3-4 am	9,059	9,081	0.2 %	10,588	9,522	-10.1 %
4-5 am	13,821	15,142	9.6 %	12,777	12,644	- 1.0 %
5-6 am	31,718	35,552	12.1 %	19,621	20,356	3.7 %
6-7 am	59,336	60,062	1.2 %	33,810	33,168	- 1.9 %
7-8 am	67,767	61,748	- 8.9 %	43,231	39,483	- 8.7 %
8-9 am	63,871	57,317	-10.3 %	44,280	40,696	- 8.1 %
9-10 am	56,317	52,768	- 6.3 %	39,067	37,339	- 4.4 %
10-11 a	47,982	46,728	- 2.6 %	37,234	36,666	- 1.5 %
11-Noon	44,207	44,061	- 0.3 %	38,667	38,043	- 1.6 %
Noon-1	42,435	41,990	- 1.0 %	40,164	39,571	- 1.5 %
1-2 pm	42,749	43,496	1.7 %	43,831	42,990	- 1.9 %
2-3 pm	46,756	46,453	- 0.6 %	51,370	48,670	- 5.3 %
3-4 pm	50,218	47,884	- 4.6 %	58,923	55,615	- 5.6 %
4-5 pm	51,743	48,189	- 6.9 %	62,593	59,014	- 5.7 %
5-6 pm	53,237	48,887	- 8.2 %	63,144	59,705	- 5.4 %
6-7 pm	50,665	47,374	- 6.5 %	59,265	56,919	- 4.0 %
7-8 pm	45,111	41,968	- 7.0 %	54,451	53,376	- 2.0 %
8-9 pm	37,854	35,711	- 5.7 %	49,985	48,219	- 3.5 %
9-10 pm	34,538	32,692	- 5.3 %	45,570	41,140	- 9.7 %
10-11 p	32,134	29,931	- 6.9 %	41,584	36,794	-11.5 %
11-Mid	26,142	23,256	-11.0 %	35,533	31,531	-11.3 %
Totals	943,381	903,987	- 4.2 %	941,352	891,803	- 5.3 %
1-4am	28,569	27,408	- 4.1 %	40,188	35,432	-11.8 %
4-7am	104,875	110,756	5.6 %	66,208	66,168	- 0.1 %
7-10am	187,955	171,833	- 8.6 %	126,578	117,518	- 7.2 %
10am-1pm	134,624	132,779	- 1.4 %	116,065	114,280	- 1.5 %
1-4pm	139,723	137,833	- 1.4 %	154,124	147,275	- 4.4 %
4-7pm	155,645	144,450	- 7.2 %	185,002	175,638	- 5.1 %
7-10pm	117,503	110,371	- 6.1 %	150,006	142,735	- 4.8 %
10pm-1am	74,487	68,557	- 8.0 %	103,181	92,757	-10.1 %
7am-7pm	617,947	586,895	- 5.0 %	581,769	554,711	- 4.7 %
6-10am	247,291	231,895	- 6.2 %	160,388	150,686	- 6.0 %
3-7pm	205,863	192,334	- 6.6 %	243,925	231,253	- 5.2 %
6am-7pm	677,283	646,957	- 4.5 %	615,579	587,879	- 4.5 %

Hourly Vehicle Volumes

Inbound Manhattan River Crossings ~ 2015 vs. 2005

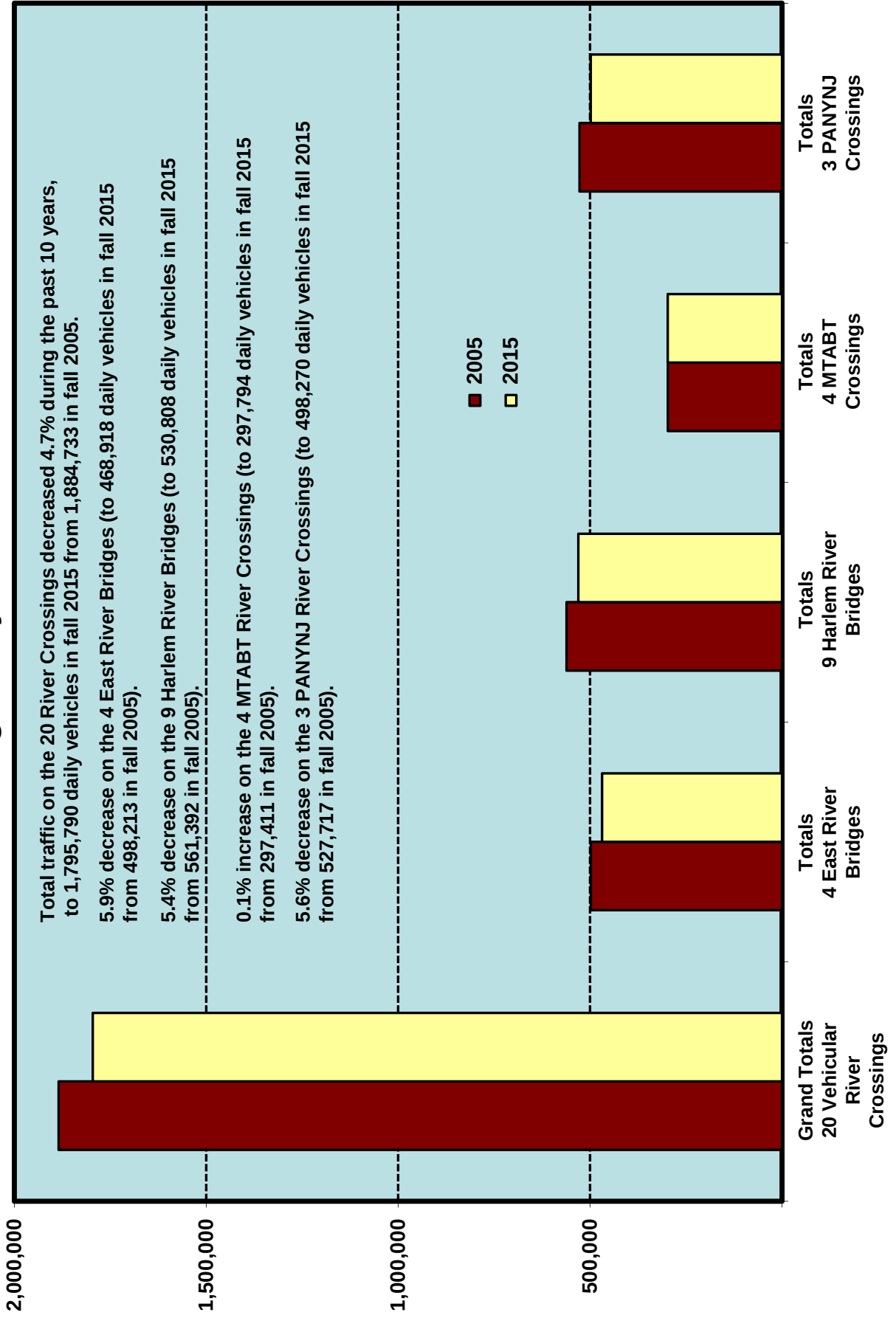


Outbound Manhattan River Crossings ~ 2015 vs. 2005



10-Year Volume Changes ~ 2005 vs. 2015

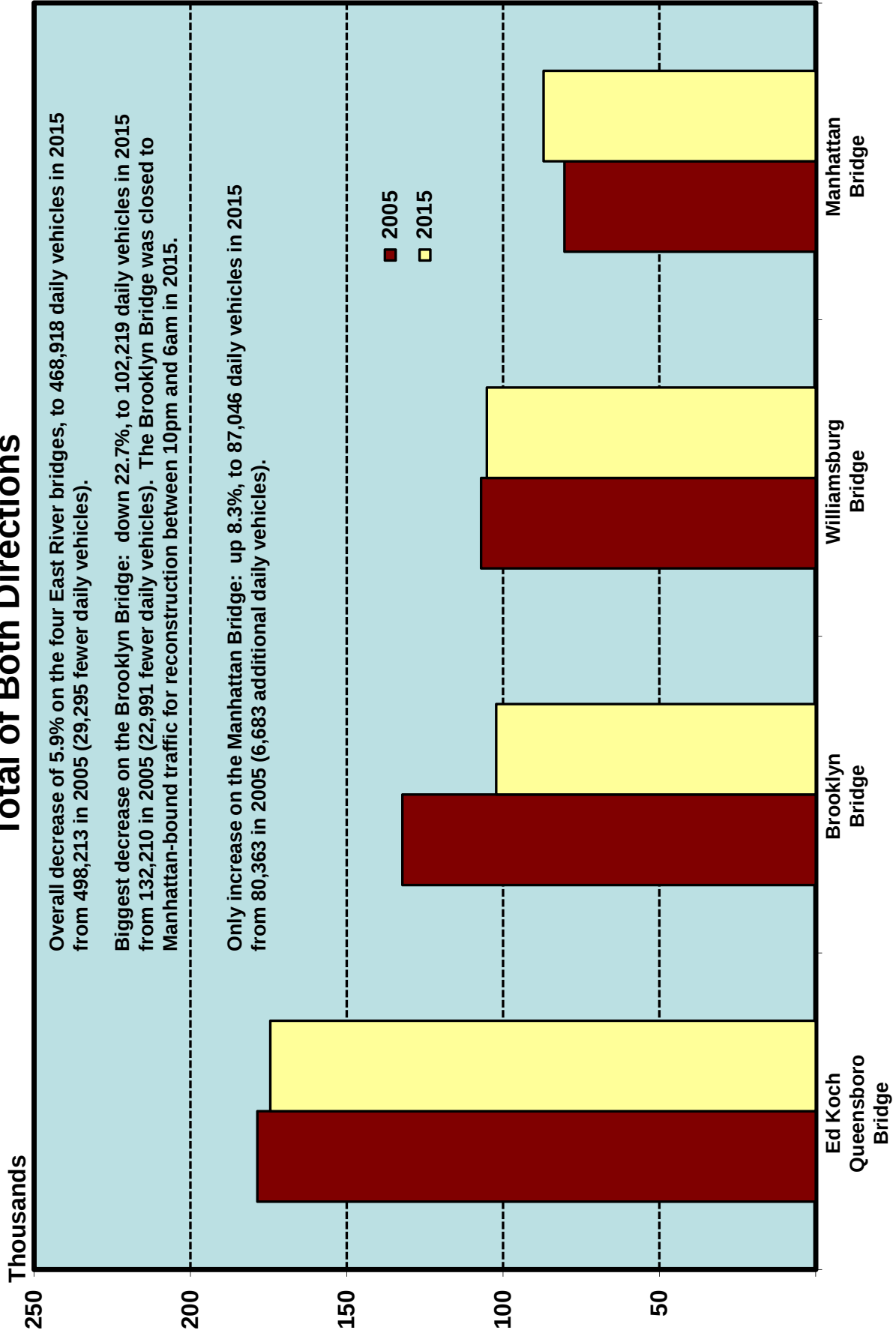
Manhattan River Crossings Daily Volumes ~ Total of Both Directions



10-Year Volume Changes ~ 2005 – 2015

East River Bridges Daily Volumes

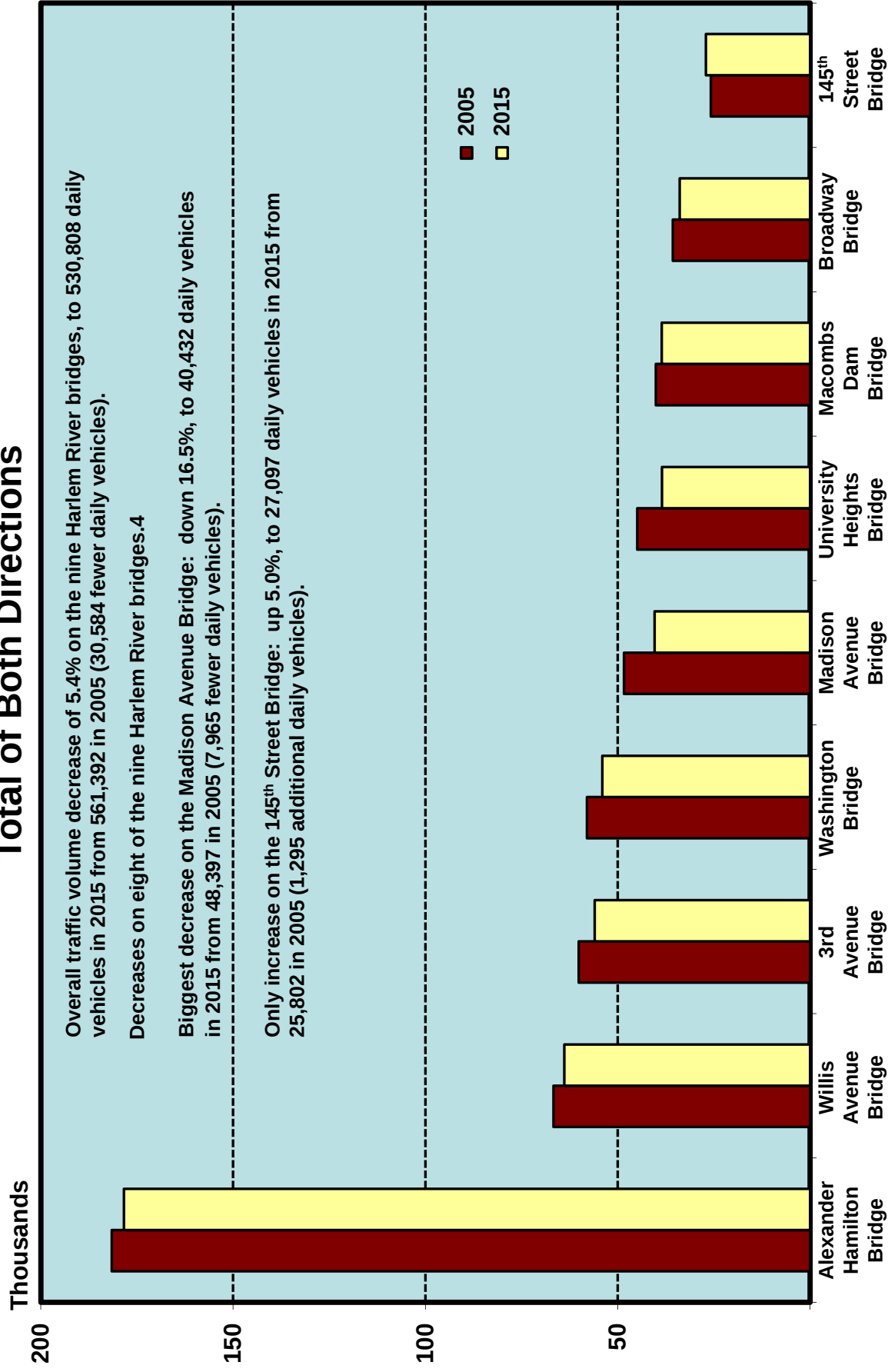
Total of Both Directions



10-Year Volume Changes ~ 2005 – 2015

Harlem River Bridges Daily Volumes

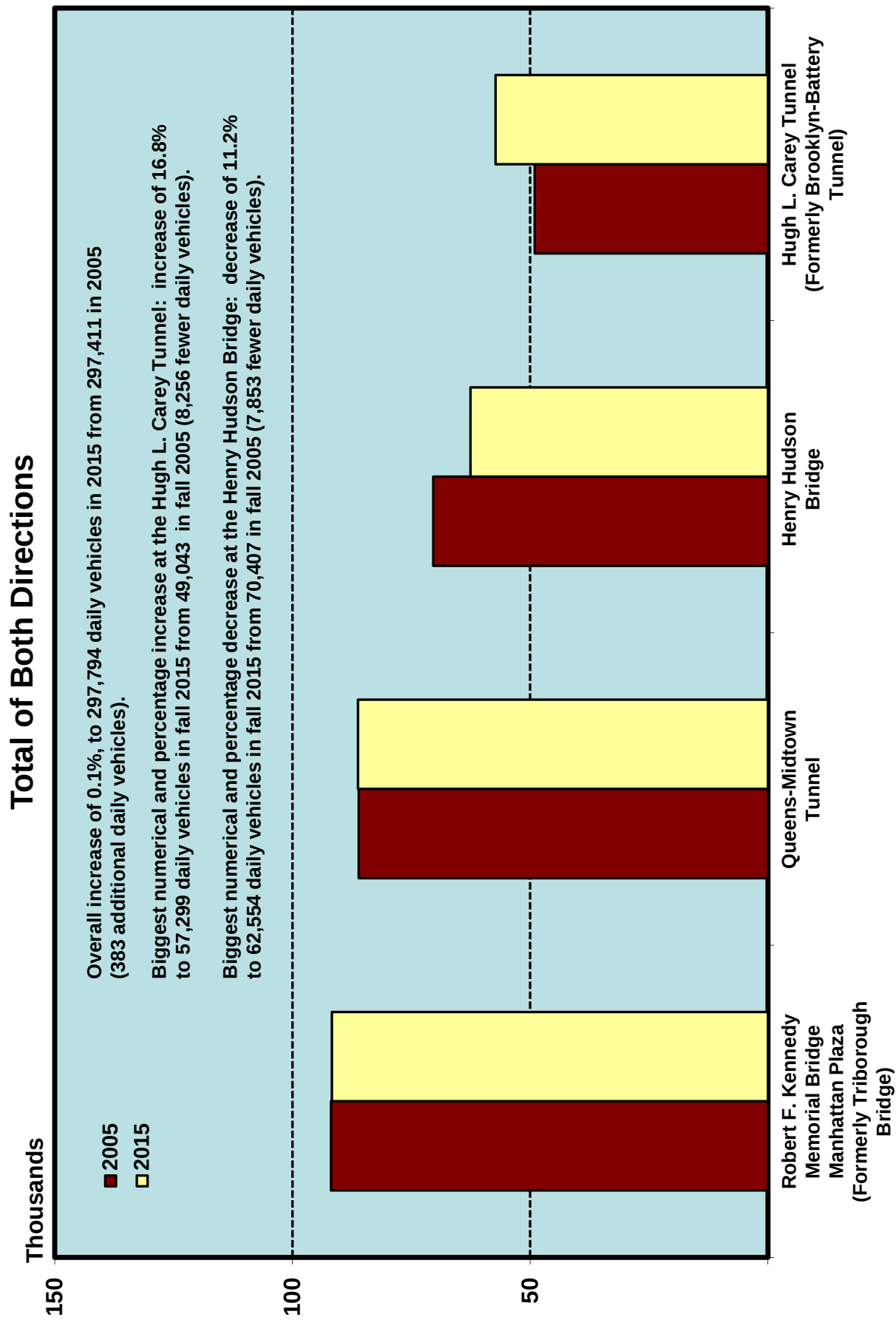
Total of Both Directions



10-Year Volume Changes ~ 2005 – 2015

Metropolitan Transportation Authority Bridges & Tunnels (MTABT)

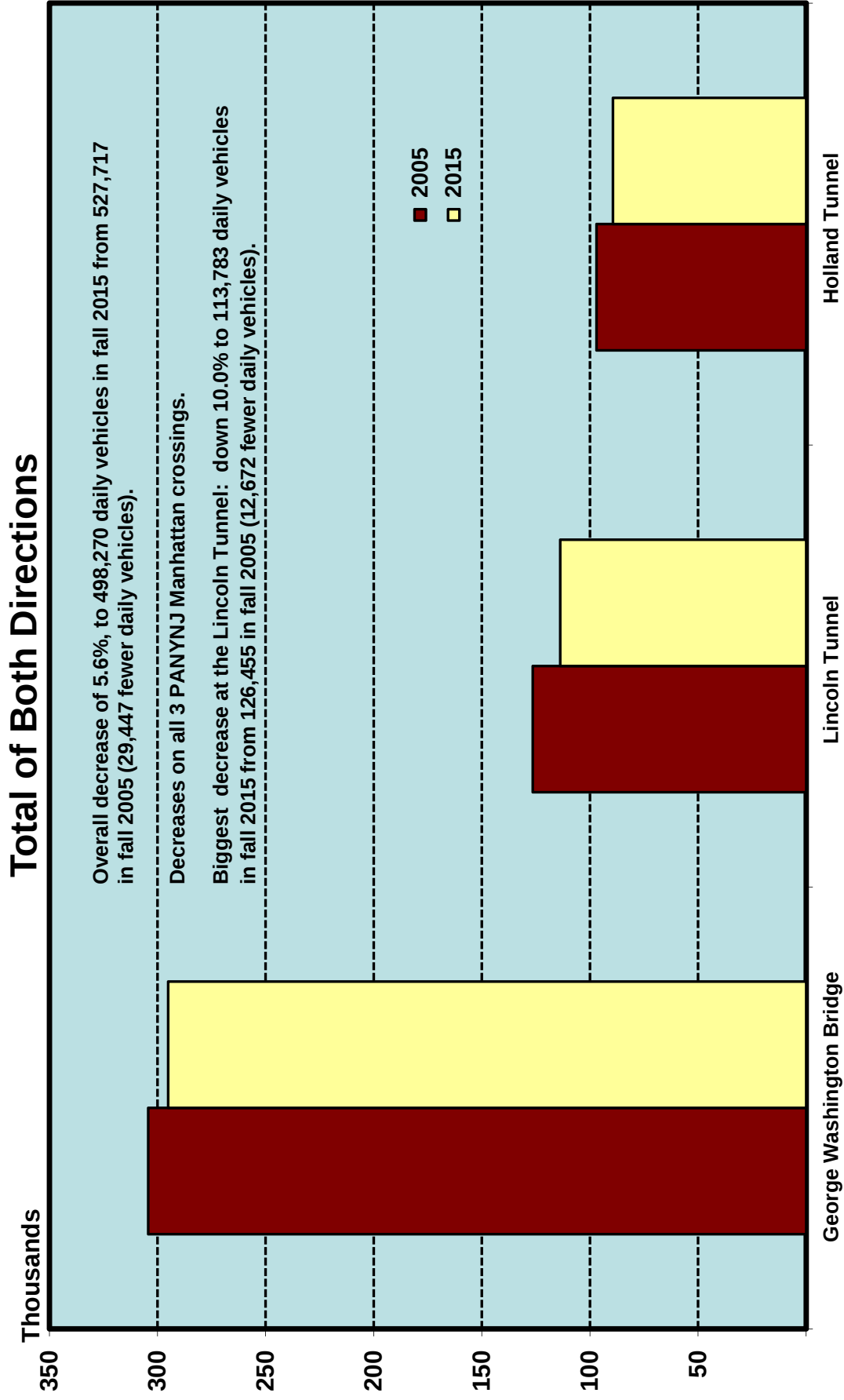
Manhattan Facilities Daily Volumes



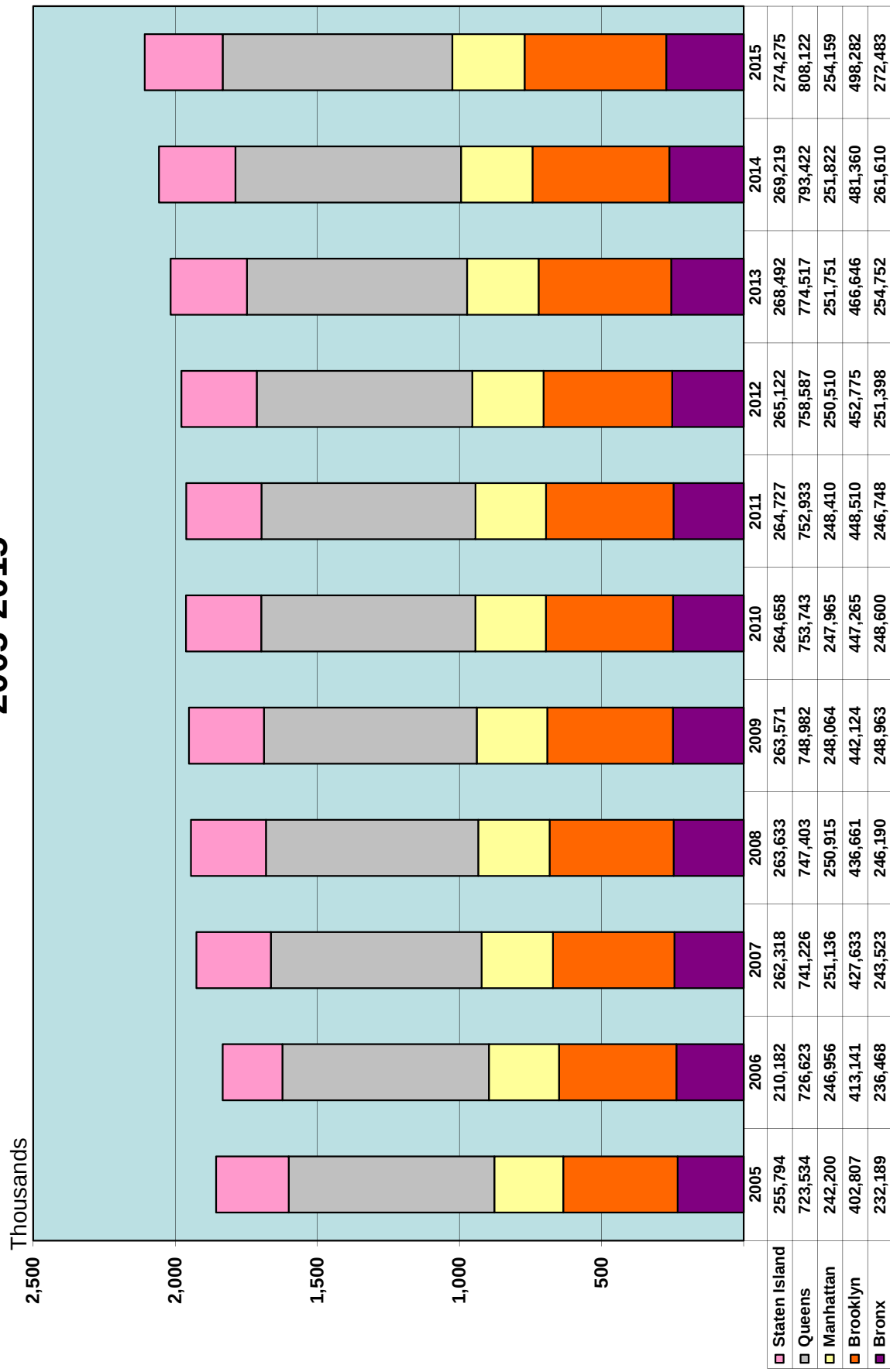
10-Year Volume Changes ~ 2005 – 2015

Port Authority of New York & New Jersey (PANYNJ)

Manhattan – N.J. Facilities Daily Volumes



New York City Motor Vehicle Registrations 2005-2015



Historic Trends

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

**Total Manhattan Crossings
Average Daily Traffic Volumes
1948 - 2015**

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

HISTORIC TRENDS

In 1948, average daily traffic to and from Manhattan was 670,007 trips per day. By 1969 that figure had more than doubled, to 1,376,394 daily trips. In 2015, it stood at 1,795,790 daily trips, up 168% over the 1948 volume.

1948 – 1965

- Between 1948 and 1965, daily traffic to and from Manhattan increased 92.4%, to 1,289,065 daily river crossings in 1965 from 670,007 in 1948, an increase of 619,058 daily vehicles.
- Large increases in daily traffic occurred at the following facilities.
 - George Washington Bridge (Hudson River between Manhattan and New Jersey): up 269% to 155,967 daily vehicles in 1965 from 42,306 in 1948 (113,661 additional daily vehicles). The lower level was opened in 1962.
 - Lincoln Tunnel between Manhattan and New Jersey: up 167% to 82,312 daily vehicles in 1965 from 30,856 in 1948 (51,456 additional daily vehicles).
 - Queens-Midtown Tunnel (East River between Manhattan and Queens): up 162% to 69,386 daily vehicles from 26,462 (42,924 additional daily vehicles).
 - Robert F. Kennedy Memorial Bridge Manhattan Plaza (Harlem River between Manhattan and Bronx/Queens): up 164% to 69,755 daily vehicles from 26,465 (43,290 additional daily vehicles).
 - Brooklyn Bridge (East River between Manhattan and Brooklyn): up 127% to 84,141 daily vehicles from 37,011 (47,130 additional daily vehicles).
 - Willis Avenue Bridge (Harlem River between Manhattan and Bronx): up 80% to 53,219 daily vehicles from 29,648 (8,728 additional daily vehicles).
 - Third Avenue Bridge (Harlem River between Manhattan and Bronx): up 77% to 55,644 daily vehicles from 31,403 (33,428 additional daily vehicles).
 - Williamsburg Bridge (East River between Manhattan and Brooklyn): up 71% to 80,567 daily vehicles from 47,139 (24,241 additional daily vehicles).
- The only significant decrease from 1948 to 1965 occurred on the Manhattan Bridge (East River between Manhattan and Brooklyn): down 18% to 71,222 daily vehicles in 1965 from 86,717 in 1948 (15,495 fewer daily vehicles).

1965 – 1975

- From 1965 to 1975, daily river crossings to and from Manhattan increased 11.2%, to 1,433,560 daily vehicles in 1975 from 1,289,065 in 1965, an increase of 144,495 daily vehicles.
- Major increases in daily traffic occurred at the following facilities.
 - Broadway Bridge (Harlem River): up 74.5% to 30,638 daily vehicles in 1975 from 17,555 in 1965 (13,083 additional daily vehicles).
 - George Washington Bridge between Manhattan and New Jersey: up 38.4% to 215,927 daily vehicles in 1975 from 155,967 in 1965 (59,960 additional daily vehicles).
 - Brooklyn Bridge between Manhattan and Brooklyn: up 23.3% to 103,750 daily vehicles from 84,141 (19,609 additional daily vehicles).

- Ed Koch Queensboro Bridge between Manhattan and Queens: up 22.7% to 144,252 daily vehicles from 117,588 (26,664 additional daily vehicles).
- Lincoln Tunnel between Manhattan and New Jersey: up 17.1% to 96,399 daily vehicles from 82,312 (12,042 additional daily vehicles).
- Major decreases occurred at the following facilities.
 - Hugh L. Carey Tunnel (formerly Brooklyn-Battery Tunnel) between Manhattan and Brooklyn: down 19.2% to 45,636 daily vehicles in 1975 from 56,455 in 1965 (10,819 fewer daily vehicles).
 - Henry Hudson Bridge between Manhattan and Bronx: down 32.5% to 30,603 daily vehicles from 45,353 (14,750 fewer daily vehicles).
 - 145th Street Bridge between Manhattan and Bronx: down 21.3% to 21,189 daily vehicles from 26,924 (5,735 fewer daily vehicles).

1975 – 1985

- From 1975 to 1985, daily river crossings to and from Manhattan increased 22.7%, to 1,758,605 daily vehicles in 1985 from 1,433,560 in 1975, an increase of 325,045 daily vehicles.
- The largest increases in daily traffic occurred at the following facilities.
 - George Washington Bridge between Manhattan and New Jersey: up 27.8% to 275,934 daily vehicles in 1985 from 215,927 in 1975 (60,007 additional daily vehicles).
 - Lincoln Tunnel between Manhattan and New Jersey: up 20.7% to 116,397 daily vehicles from 96,339 (19,998 additional daily vehicles).
 - Holland Tunnel between Manhattan and New Jersey: up 22% to 76,121 daily vehicles from 62,381 (13,740 additional daily vehicles).
 - Alexander Hamilton Bridge (Harlem River between Manhattan and Bronx): up 28% to 171,602 daily vehicles from 125,133 (37,589 additional daily vehicles).
 - Williamsburg Bridge between Manhattan and Brooklyn: up 30.9% to 107,386 daily vehicles from 82,057 (25,329 additional daily vehicles).
 - Willis Avenue Bridge between Manhattan and Bronx: up 23.9% to 65,638 daily vehicles from 52,984 (12,654 additional daily vehicles).
 - Hugh L. Carey Tunnel (formerly Brooklyn-Battery Tunnel) between Manhattan and Brooklyn: up 39.1% to 63,469 daily vehicles from 45,636 (17,833 additional daily vehicles).
 - Manhattan Bridge between Manhattan and Brooklyn: up 35.7% to 100,825 daily vehicles from 74,320 (26,505 additional daily vehicles).
 - Robert F. Kennedy Memorial Bridge Manhattan Plaza between Manhattan and Bronx/Queens: up 30.7% to 94,644 daily vehicles from 72,566 (22,078 additional daily vehicles).
 - Henry Hudson Bridge (Harlem River between Manhattan and Bronx): up 36.2% to 41,680 daily vehicles in 1985 from 30,603 in 1975 (11,077 additional daily vehicles).
 - Macombs Dam Bridge (Harlem River between Manhattan and Bronx): up 34.6% to 52,497 daily vehicles from 38,995 (13,502 additional daily vehicles).
 - Madison Avenue Bridge between Manhattan and Bronx: up 27.3% to 37,956 daily vehicles from 29,823 (8,133 additional daily vehicles).

- University Heights Bridge between Manhattan and the Bronx: up 29% to 37,553 daily vehicles from 29,111 (8,442 additional daily vehicles).
- Washington Bridge between Manhattan and the Bronx: up 23.6% to 51,302 daily vehicles from 41,522 (9,780 additional daily vehicles).
- 145th Street Bridge between Manhattan and the Bronx: up 35.6% to 28,722 daily vehicles from 21,189 (7,533 additional daily vehicles).

1985 – 1995

- From 1985 to 1995, daily river crossings to and from Manhattan increased 0.2%, to 1,762,457 daily vehicles in 1995 from 1,758,605 in 1985, an increase of 3,852 daily vehicles.
- Large increases in daily traffic occurred at the following facilities.
 - Holland Tunnel between Manhattan and New Jersey: up 26.5% to 96,310 daily vehicles in 1995 from 76,121 in 1985 (20,189 additional daily vehicles).
 - Henry Hudson Bridge between Manhattan and Bronx: up 50.9% to 62,899 daily vehicles from 41,680 (21,219 additional daily vehicles).
 - Brooklyn Bridge between Manhattan and Brooklyn: up 12.8% to 131,883 daily vehicles from 116,929 (14,954 additional daily vehicles).
 - Broadway Bridge between Manhattan and the Bronx: up 28.6% to 42,555 daily vehicles from 33,086 (9,469 additional daily vehicles).
 - Third Avenue Bridge between Manhattan and the Bronx: up 14.6% to 68,663 daily vehicles from 59,907 (8,756 additional daily vehicles).
- The most significant decreases occurred at the following facilities.
 - Manhattan Bridge between Manhattan and Brooklyn: down 25.5% to 75,126 daily vehicles in 1995 from 100,825 in 1985 (25,699 fewer daily vehicles).
 - Madison Avenue Bridge between Manhattan and Bronx: down 40.1% to 22,739 daily vehicles from 37,956 (15,217 fewer daily vehicles).
 - University Heights Bridge between Manhattan and the Bronx: down 43.4% to 21,238 daily vehicles from 37,553 (16,315 fewer daily vehicles).
 - 145th Street Bridge between Manhattan and the Bronx: down 10.4% to 25,749 daily vehicles from 28,722 (2,973 fewer daily vehicles).

1995 – 2005

- From 1995 to 2005, daily river crossings to and from Manhattan increased 6.9%, to 1,884,733 daily vehicles in 2005 from 1,762,457 in 1995, an increase of 122,276 daily vehicles.
- Large increases in daily traffic occurred at the following facilities.
 - George Washington Bridge between Manhattan and New Jersey: up 14.4% to 304,302 daily vehicles in 2005 from 266,029 in 1995 (38,273 additional daily vehicles).
 - Ed Koch Queensboro Bridge between Manhattan and Queens: up 13.5% to 178,610 daily vehicles from 157,306 (21,304 additional daily vehicles).
 - Madison Avenue Bridge between Manhattan and Bronx: up 112.8% to 48,397 daily vehicles from 22,739 (25,658 additional daily vehicles). Major reconstruction had caused significant capacity reductions in both directions during 1995.

- Queens-Midtown Tunnel between Manhattan and Queens: up 16.5% to 86,063 daily vehicles from 73,882 (12,181 additional daily vehicles).
- Henry Hudson Bridge between Manhattan and Bronx: up 11.9% to 70,407 daily vehicles from 62,899 (7,508 additional daily vehicles).
- University Heights Bridge between Manhattan and Bronx: up 111.6% to 44,938 daily vehicles from 21,238 (23,700 additional daily vehicles).
- The most significant decreases occurred at the following facilities.
 - Hugh L. Carey Tunnel (formerly Brooklyn-Battery Tunnel) between Manhattan and Brooklyn: down 19.7% to 49,043 daily vehicles from 61,097 (12,054 fewer daily vehicles).
 - Broadway Bridge between Manhattan and Bronx: down 16.1% to 35,698 daily vehicles from 42,555 (6,857 fewer daily vehicles).
 - Third Avenue Bridge between Manhattan and Bronx: down 12.4% to 60,152 daily vehicles in 2005 from 68,663 in 1995 (8,511 fewer daily vehicles).

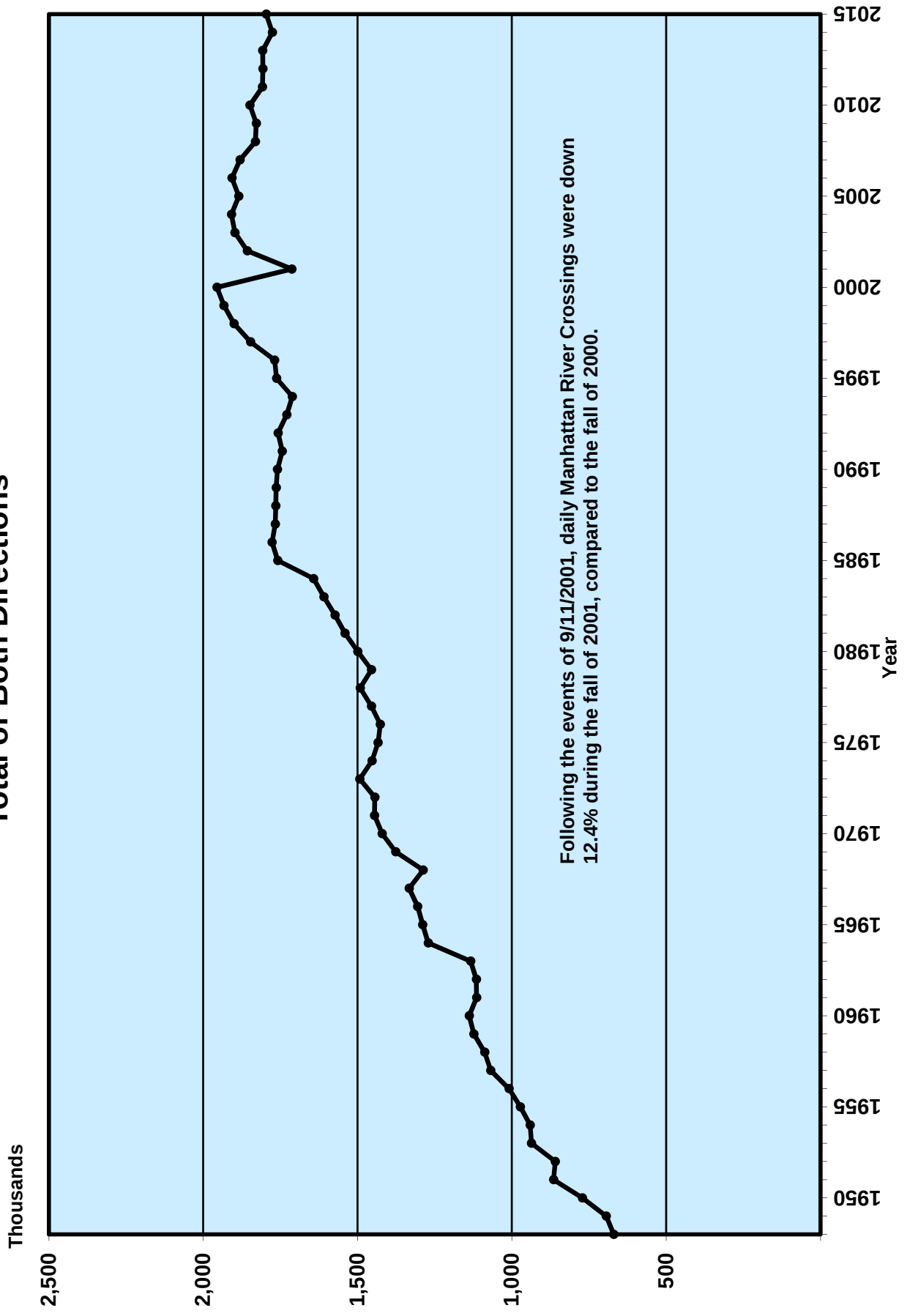
1948 – 2015

- From 1948 to 2015, Manhattan vehicular river crossings increased 168%, to 1,795,790 vehicles per day in 2015 from 670,007 in 1948 (1,125,783 additional daily motor vehicle trips).
 - Increases occurred on all of the twenty Manhattan river crossings.
 - 85% increase on the four toll-free East River bridges (to 468,918 daily vehicles in 2015 from 254,068 in 1948).
 - 156% increase on the nine toll-free Harlem River bridges (to 530,808 daily vehicles from 207,177).
 - 220% increase on MTABT's four tolled crossings (to 297,794 daily vehicles from 92,977).
 - 330% increase on PANYNJ's three trans-Hudson facilities (to 498,270 daily vehicles in 2015 from 115,785 in 1948).
- Large increases in daily traffic occurred at the following individual facilities.
 - George Washington Bridge: up nearly 598% to 295,120 daily vehicles in 2015 from 42,306 in 1948.
 - Brooklyn Bridge: up 176% to 102,2019 daily vehicles from 37,011.
 - Lincoln Tunnel: up 269% to 113,783 daily vehicles from 30,856.
 - Queens-Midtown Tunnel: up 226% to 86,217 daily vehicles from 26,462.
 - Robert F. Kennedy Memorial Bridge Manhattan Plaza: up 247% to 91,724 daily vehicles from 26,465.
 - Williamsburg Bridge: up 123% to 105,206 daily vehicles from 47,139.
- During the same 66-year period, annual citywide subway ridership declined by 13.2%, to 1,763 million in 2015 from 2,031 million in 1948.

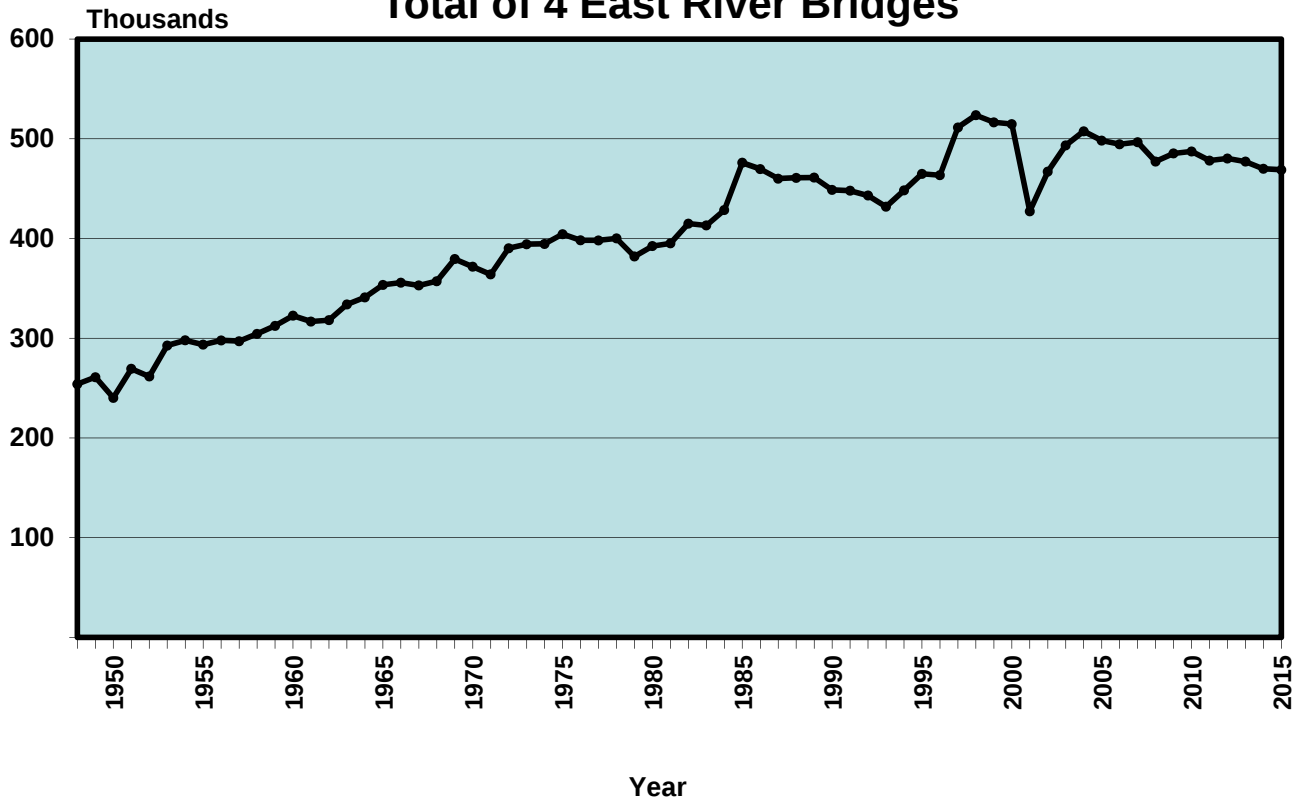
1995 – 2015

- 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 1995, Manhattan River Crossings increased 163%, to 1,762,457 daily vehicles in 1995 from 670,007 in 1948. During the same period, annual subway ridership decreased 46.2%, to 1,093 million annual riders from 2,031 million.
 - From 1995 to 2015, Manhattan River Crossings increased just 1.9%, to 1,795,790 daily vehicles in 2015 from 1,762,457 in 1995. Concurrently, annual subway ridership increased at the much faster rate of 61.3%, to 1,763 million annual riders in 2014 from 1,093 million in 1995.
 - Subway ridership in 2015 was the highest since 1949.

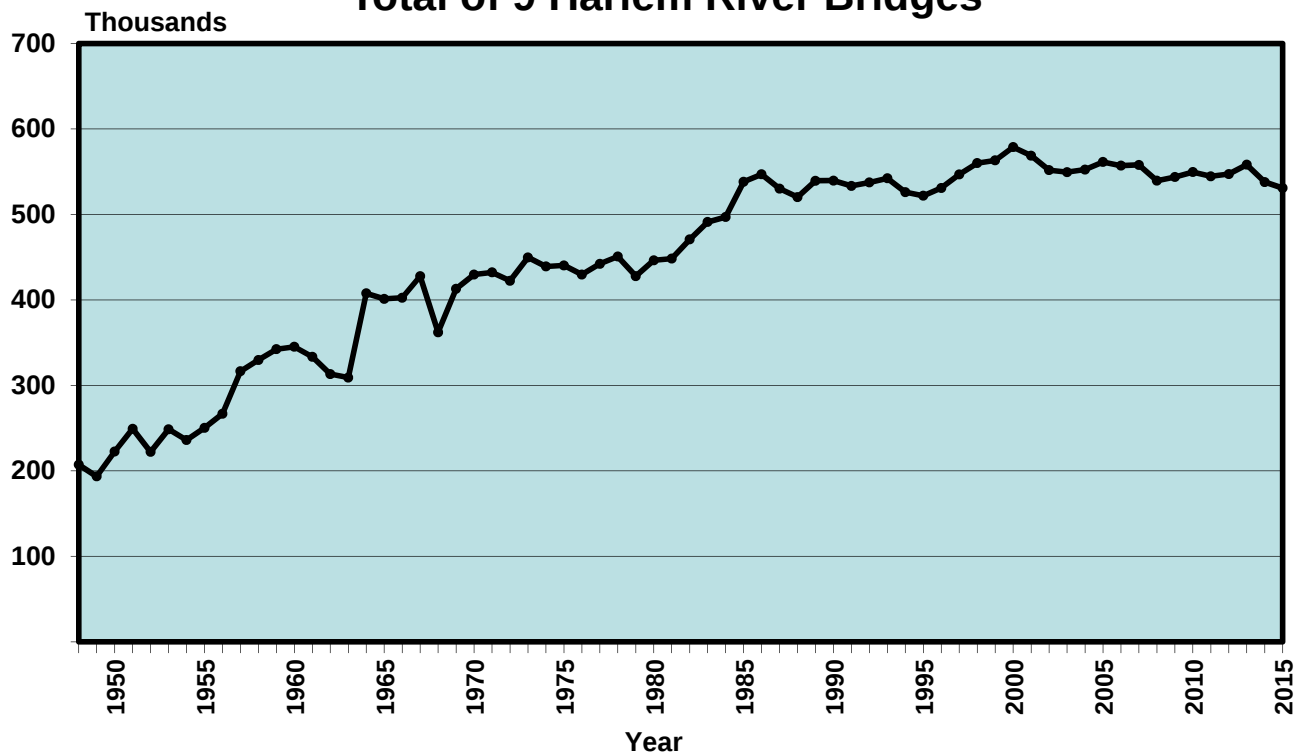
Average Daily Manhattan River Crossings Total of Both Directions



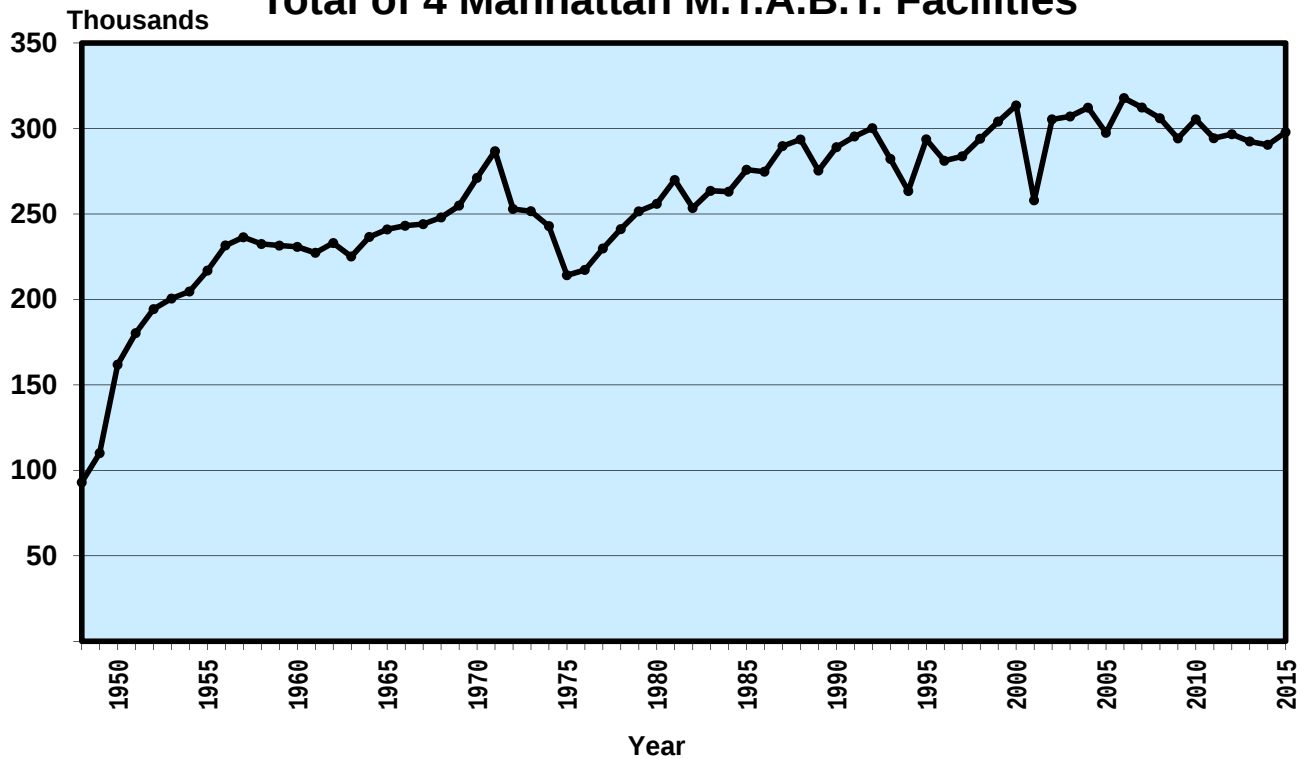
Average Daily Traffic Volumes ~ Total of Both Directions Total of 4 East River Bridges



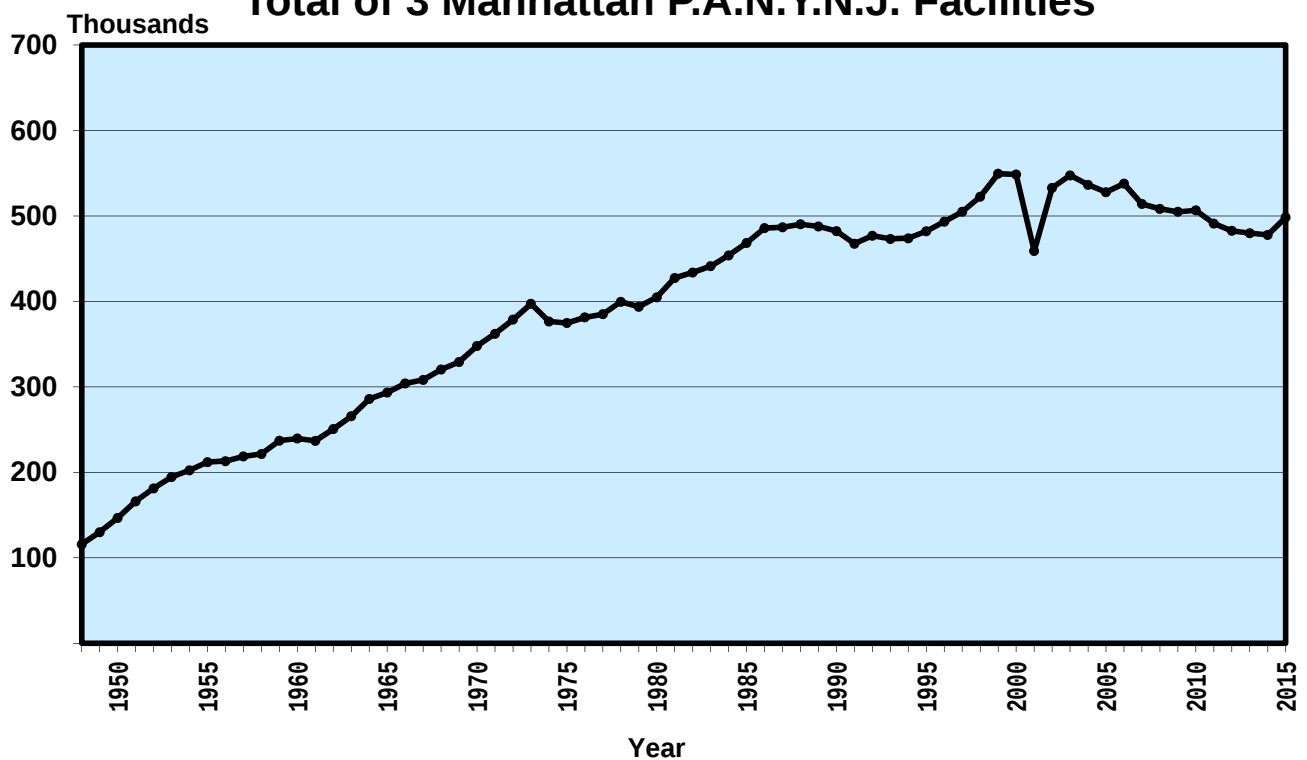
Average Daily Traffic Volumes ~ Total of Both Directions Total of 9 Harlem River Bridges



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



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



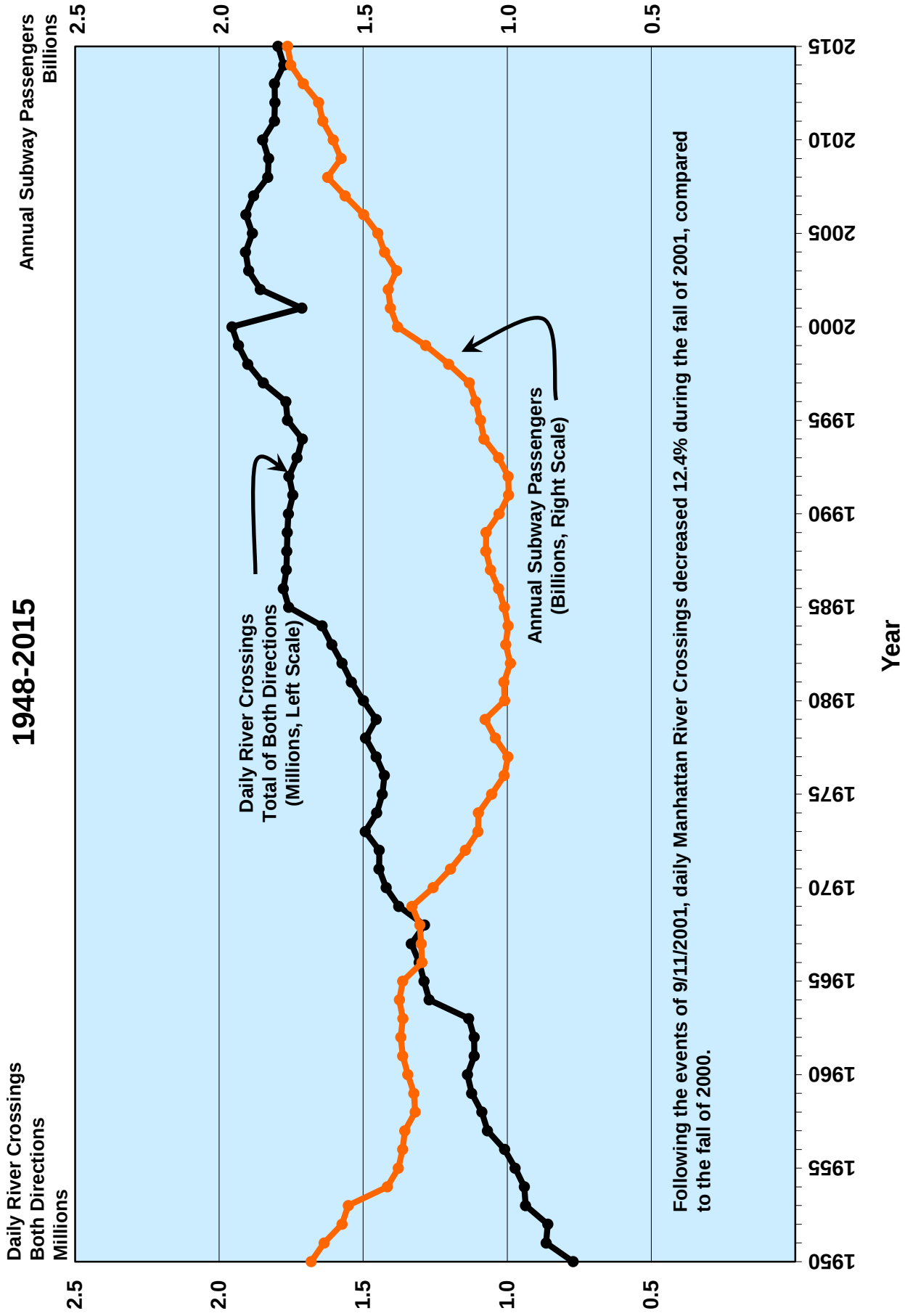
**Average Daily Manhattan River Motor Vehicle Crossings
(Total of Both Directions)
vs.
Annual Subway Ridership**

Year	Daily Manhattan River Crossings	Annual Subway Ridership	Year	Daily Manhattan River Crossings	Annual Subway Ridership
1948	670,007	2,031,142,410	1988	1,764,869	1,074,200,253
1949	694,457	1,764,469,530	1989	1,763,534	1,073,179,880
1950	771,407	1,680,843,742	1990	1,759,585	1,028,305,701
1951	864,973	1,635,728,973	1991	1,744,103	995,227,534
1952	859,480	1,573,642,697	1992	1,757,573	996,701,756
1953	936,467	1,551,796,171	1993	1,729,408	1,029,765,350
1954	940,969	1,416,371,403	1994	1,711,457	1,080,757,098
1955	972,633	1,378,149,559	1995	1,762,457	1,093,029,231
1956	1,009,270	1,363,134,171	1996	1,768,742	1,110,025,587
1957	1,068,524	1,355,383,900	1997	1,846,634	1,131,675,966
1958	1,088,124	1,319,457,461	1998	1,900,254	1,203,023,499
1959	1,123,302	1,324,054,282	1999	1,933,007	1,283,081,633
1960	1,138,247	1,344,952,725	2000	1,955,506	1,381,078,913
1961	1,114,350	1,362,736,027	2001	1,712,961	1,405,304,701
1962	1,115,056	1,369,507,594	2002	1,857,050	1,413,200,000
1963	1,133,673	1,362,251,702	2003	1,897,411	1,384,100,000
1964	1,271,047	1,374,506,950	2004	1,908,565	1,426,000,000
1965	1,289,065	1,362,884,851	2005	1,884,733	1,449,100,000
1966	1,305,320	1,295,839,328	2006	1,907,118	1,498,600,000
1967	1,332,871	1,298,484,890	2007	1,880,818	1,562,515,065
1968	1,287,543	1,303,465,841	2008	1,830,907	1,623,881,369
1969	1,376,394	1,330,383,466	2009	1,828,065	1,579,866,600
1970	1,420,334	1,257,569,124	2010	1,848,718	1,604,198,017
1971	1,445,020	1,196,875,980	2011	1,808,247	1,640,434,672
1972	1,444,147	1,145,128,739	2012	1,806,649	1,654,582,265
1973	1,492,756	1,101,597,734	2013	1,807,484	1,707,555,714
1974	1,453,136	1,099,786,500	2014	1,776,013	1,751,287,621
1975	1,433,560	1,053,932,743	2015	1,795,790	1,762,565,419
1976	1,426,334	1,010,496,909			
1977	1,455,119	997,773,441			
1978	1,491,541	1,041,628,298			
1979	1,455,112	1,076,540,944			
1980	1,499,344	1,009,332,713			
1981	1,540,683	1,011,345,460			
1982	1,573,012	989,091,943			
1983	1,608,979	1,005,343,639			
1984	1,642,250	997,025,422			
1985	1,758,605	1,010,210,607			
1986	1,777,051	1,030,385,208			
1987	1,766,601	1,058,005,483			
Percent Changes	Average Daily Crossings	Annual Subway Ridership	Period	Average Daily Crossings	Annual Subway Ridership
1950-1960	+ 47.6 %	- 20.0 %	1990-2000	+ 11.1 %	+ 34.3 %
1960-1970	+ 24.8 %	- 6.5 %	2000-2015	- 8.2 %	+ 27.6 %
1970-1980	+ 5.6 %	- 19.7 %	1948-2015	+168.0 %	- 13.2 %
1980-1990	+ 17.4 %	+ 1.9 %			

Source for Annual Subway Ridership: MTA

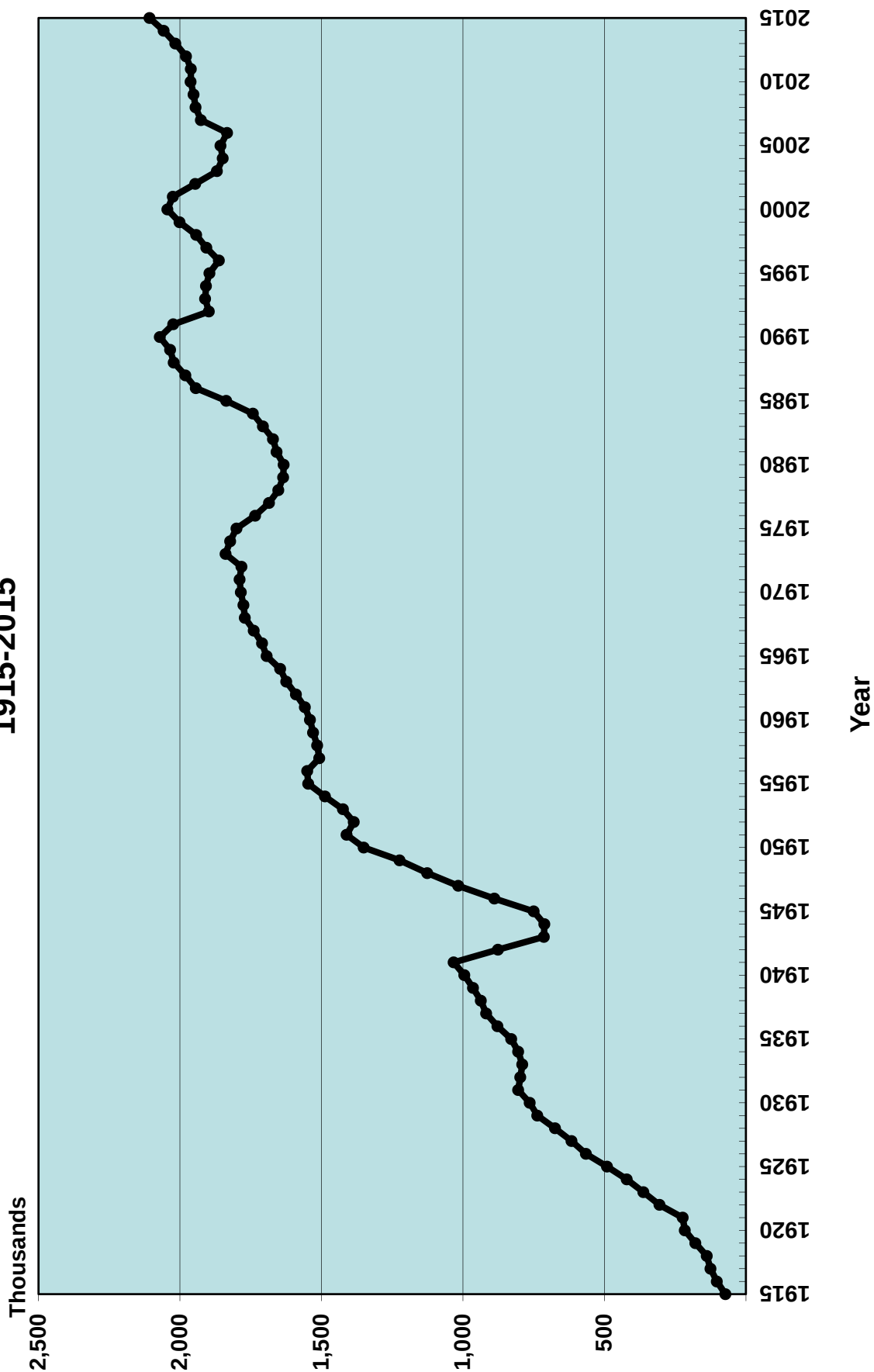
Vehicular River Crossings vs. Subway Ridership

1948-2015



New York City Motor Vehicle Registrations

1915-2015



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

PAST & PRESENT PASSENGER CAR TOLL STRUCTURES

MTA BRIDGES & TUNNELS FACILITIES *Tolls collected both directions*

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

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

*Formerly Brooklyn-Battery Tunnel.

**Formerly Triborough Bridge.

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

George Washington Bridge, Holland Tunnel, and Lincoln Tunnel

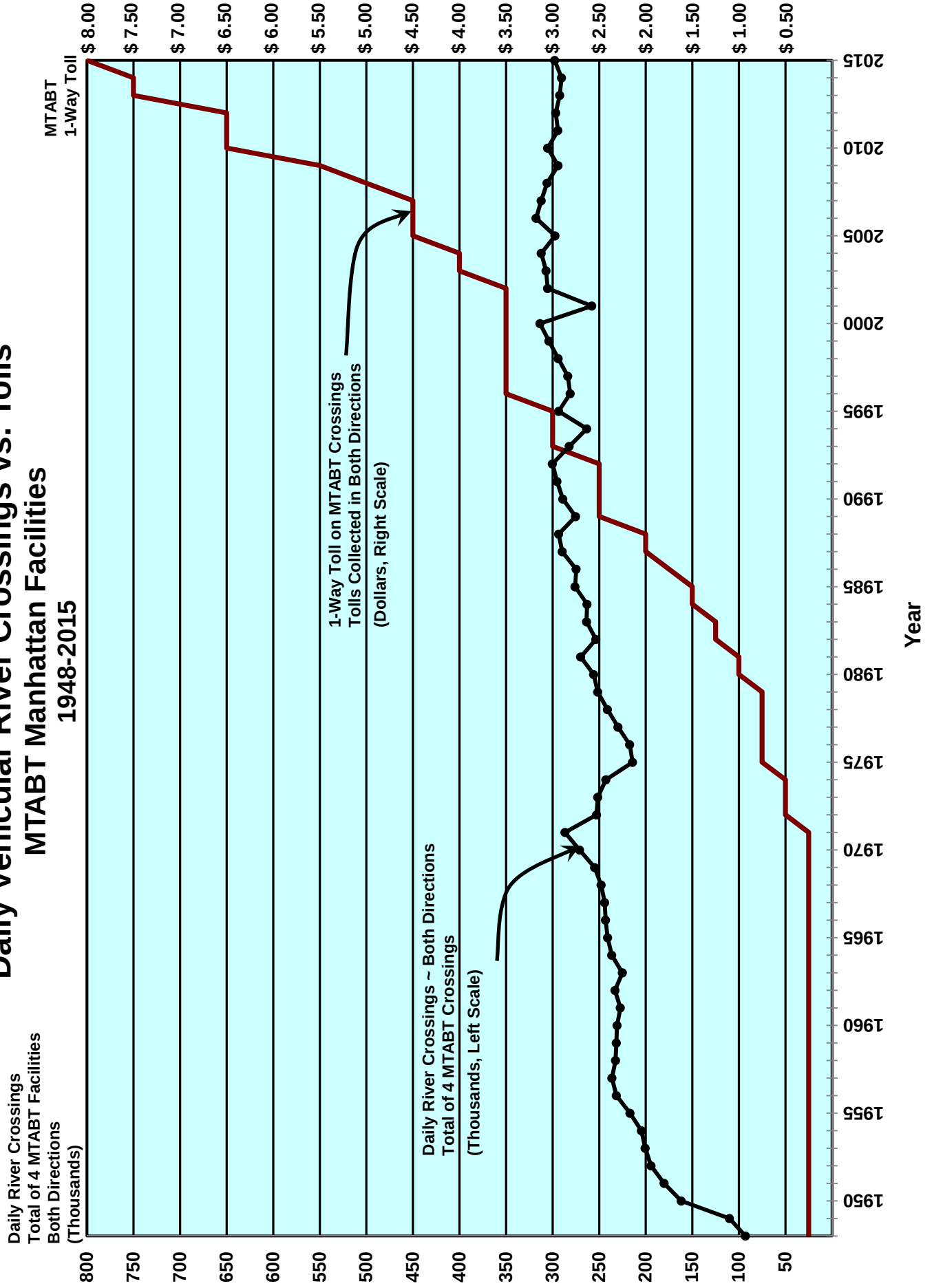
	Cash Toll	EZ-Pass Peak Hours	EZ-Pass Off-Peak Hours
Effective 08/12/1970	\$ 1.00		
Effective 05/05/1975	1.50		
Effective 01/01/1984	2.00		
Effective 04/12/1987	3.00		
Effective 04/07/1991	4.00		
Effective 03/25/2001	6.00	\$ 5.40	\$ 5.40
Effective 03/02/2008	8.00	8.00	6.00
Effective 09/18/2011	12.00	9.50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

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

Daily Vehicular River Crossings vs. Tolls

MTABT Manhattan Facilities

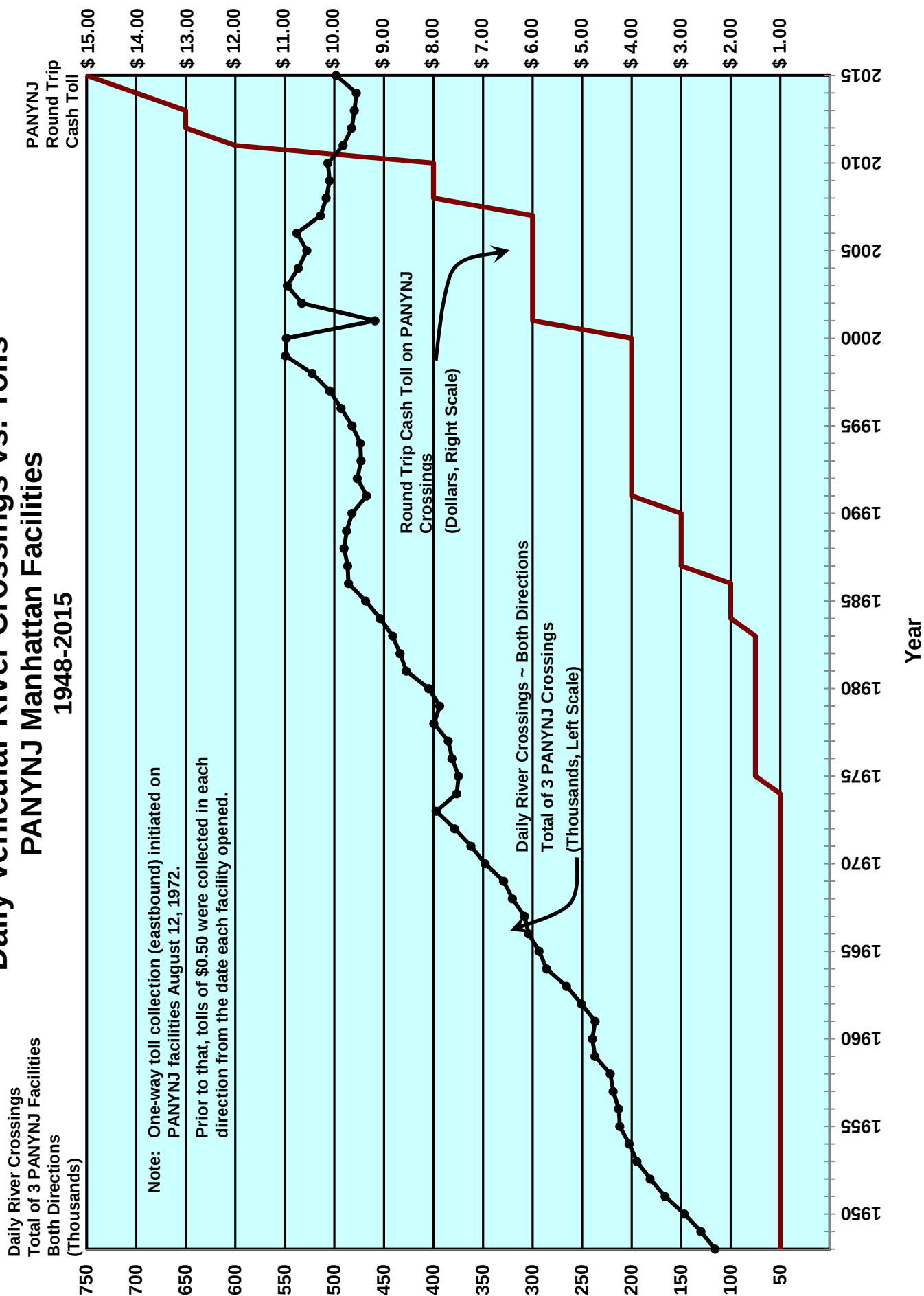
1948-2015



Daily Vehicular River Crossings vs. Tolls

PANYNJ Manhattan Facilities

1948-2015



East River Bridges



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

East River Bridges
Average Daily Traffic Volumes
1948 - 2015

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

Hourly Vehicular Volumes Brooklyn Bridge - 2015

Eastbound to Brooklyn

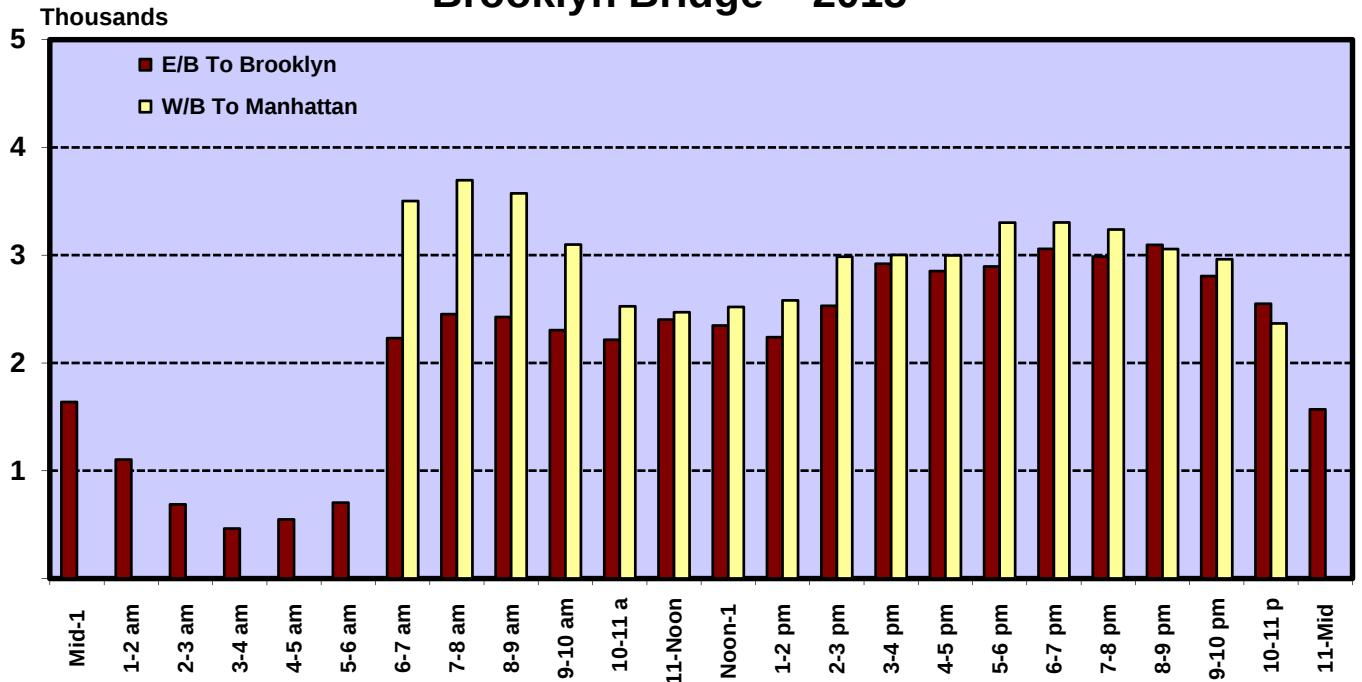
Westbound to Manhattan

FHWA Classes ▲	Commuter Vans							Commuter Vans							2-Way Grand Totals		
	Autos & Motorcycles			Commercial Vans		Single Unit Trucks	Tractor Trailers	Total Vehicles	Autos & Motorcycles			Commercial Vans		Single Unit Trucks		Tractor Trailers	Total Vehicles
	1 & 2	3	4	Buses	1 & 2				3	4	Buses	1 & 2	3				
12-1am	1,636	1	1	1	0	0	1,638	0	0	0	0	0	0	0	0	1,638	
1-2am	1,099	4	1	1	0	0	1,104	0	0	0	0	0	0	0	0	1,104	
2-3am	685	3	0	0	0	0	688	0	0	0	0	0	0	0	0	688	
3-4am	459	4	0	0	0	0	463	0	0	0	0	0	0	0	0	463	
4-5am	540	6	2	0	0	0	548	0	0	0	0	0	0	0	0	548	
5-6am	694	9	1	0	0	0	704	0	0	0	0	0	0	0	0	704	
6-7am	2,186	33	10	1	0	0	2,230	3,380	41	80	2	2	0	3,503	5,733		
7-8am	2,403	31	18	1	0	0	2,453	3,631	24	39	2	2	0	3,696	6,149		
8-9am	2,367	38	20	1	0	0	2,426	3,534	28	9	3	3	0	3,574	6,000		
9-10am	2,238	41	25	1	0	0	2,305	3,058	25	10	6	6	0	3,099	5,404		
10-11am	2,174	26	16	0	0	0	2,216	2,490	20	10	6	6	0	2,526	4,742		
11-12am	2,334	45	23	0	0	0	2,402	2,421	31	12	7	7	0	2,471	4,873		
12-1pm	2,284	41	22	0	0	0	2,347	2,475	21	22	2	2	0	2,520	4,867		
1-2pm	2,180	33	25	1	0	0	2,239	2,493	33	46	9	9	0	2,581	4,820		
2-3pm	2,460	34	36	1	0	0	2,531	2,925	30	29	2	2	0	2,986	5,517		
3-4pm	2,858	30	33	0	0	0	2,921	2,934	34	34	1	1	0	3,003	5,924		
4-5pm	2,803	29	20	1	0	0	2,853	2,949	31	16	2	2	0	2,998	5,851		
5-6pm	2,847	31	17	0	0	0	2,895	3,263	22	15	2	2	0	3,302	6,197		
6-7pm	2,998	46	14	1	0	0	3,059	3,264	25	13	2	2	0	3,304	6,363		
7-8pm	2,951	32	5	0	0	0	2,988	3,216	16	6	0	0	0	3,238	6,226		
8-9pm	3,080	14	2	0	0	0	3,096	3,032	21	2	2	2	0	3,057	6,153		
9-10pm	2,794	12	1	0	0	0	2,807	2,934	24	3	1	1	0	2,962	5,769		
10-11pm	2,545	5	0	0	0	0	2,550	2,347	17	0	3	3	0	2,367	4,917		
11-12pm	1,565	3	1	0	0	0	1,569	0	0	0	0	0	0	0	1,569		
Totals	50,180	551	293	8	0	0	51,032	50,346	443	346	52	52	0	51,187	102,219		
7-10am	7,008	110	63	3	0	0	7,184	10,223	77	58	11	11	0	10,369	17,553		
10am-1pm	6,792	112	61	0	0	0	6,965	7,386	72	44	15	15	0	7,517	14,482		
1-4pm	7,498	97	94	2	0	0	7,691	8,352	97	109	12	12	0	8,570	16,261		
4-7pm	8,648	106	51	2	0	0	8,807	9,476	78	44	6	6	0	9,604	18,411		
7am-7pm	29,946	425	269	7	0	0	30,647	35,437	324	255	44	44	0	36,060	66,707		
6-10am	9,194	143	73	4	0	0	9,414	13,603	118	138	13	13	0	13,872	23,286		
3-7pm	11,506	136	84	2	0	0	11,728	12,410	112	78	7	7	0	12,607	24,335		
6am-7pm	32,132	458	279	8	0	0	32,877	38,817	365	335	46	46	0	39,563	72,440		

Based on March 2006 Classification Survey Data.

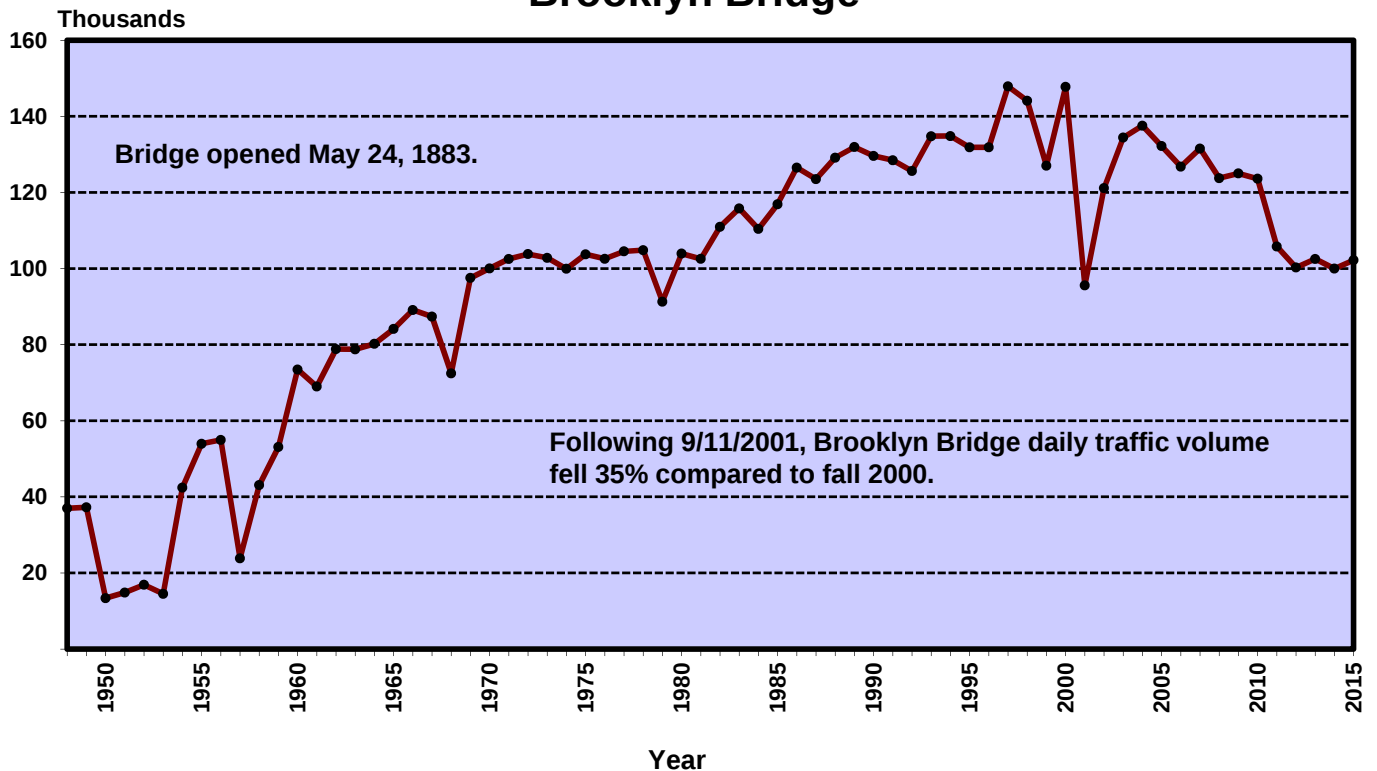
** Peak Volumes

Hourly Vehicular Volumes Brooklyn Bridge ~ 2015



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

Average Daily Traffic Volumes ~ Total of Both Directions Brooklyn Bridge



Hourly Vehicular Volumes

Ed Koch Queensboro Bridge - 2015

Eastbound to Queens

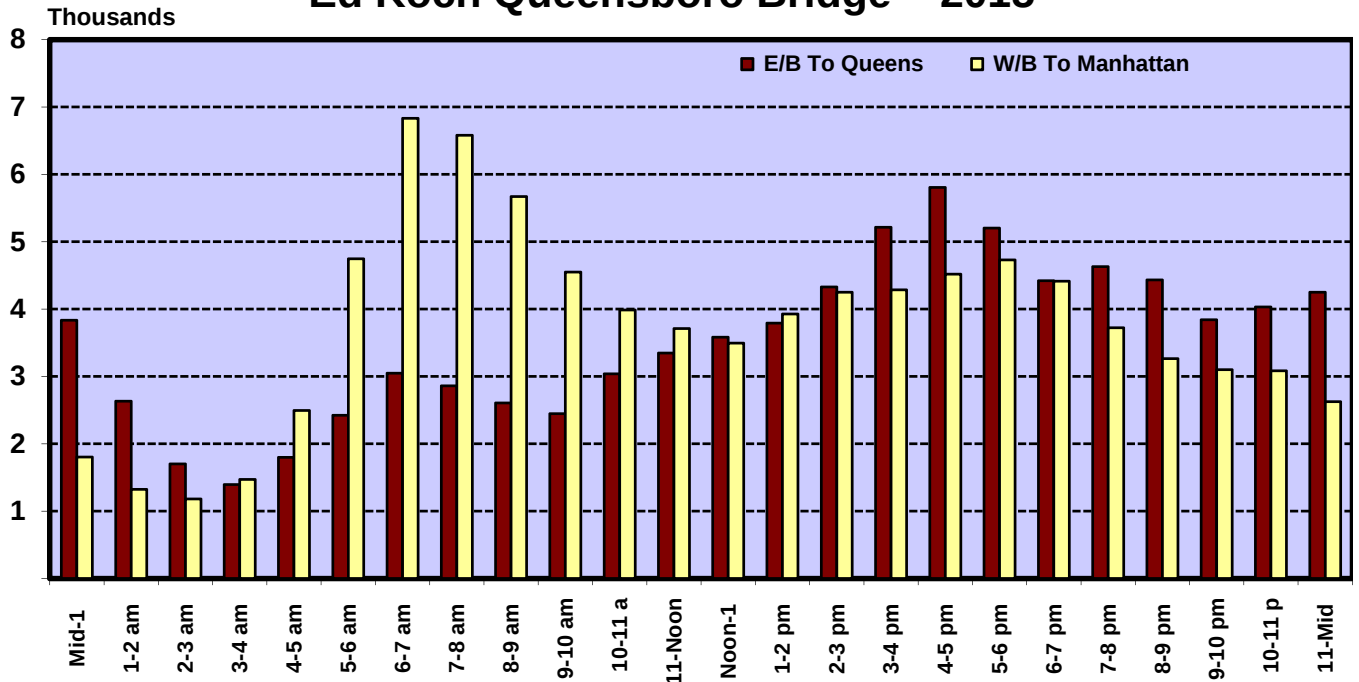
Westbound to Manhattan

FHWA Classes ▶	Commercial Vans, Panel Trucks, Pickups,						Commercial Vans, Panel Trucks, Pickups,						Total Vehicles	Multiple Unit Trucks	Single Unit Trucks	Buses	5 - 7	8 - 13	2-Way Grand Totals
	Autos, Motorcycles	Taxis, Liveries, Limos	Police, Fleet Vehicles	Police, Fleet Vehicles	Police, Fleet Vehicles	Police, Fleet Vehicles	Autos, Motorcycles	Taxis, Liveries, Limos	Police, Fleet Vehicles	Police, Fleet Vehicles	Police, Fleet Vehicles	Police, Fleet Vehicles							
	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13							
Totals	53,957	20,710	6,134	894	2,303	676	50,961	25,347	8,674	667	3,233	891	89,773						174,447
7-10am	6,273	769	373	171	292	36	8,559	4,039	3,006	169	939	92	16,804						24,718
10am-1pm	6,072	2,203	1,049	118	469	56	5,851	2,685	1,764	110	659	123	11,192						21,159
1-4pm	8,036	2,847	1,656	135	612	49	7,279	3,319	1,226	109	434	96	12,463						25,798
4-7pm	10,432	2,894	1,500	236	354	15	8,157	4,459	707	85	208	48	13,664						29,095
7am-7pm	30,813	8,713	4,578	660	1,727	156	29,846	14,502	6,703	473	2,240	359	54,123						100,770
6-10am	8,844	980	496	182	372	88	12,572	6,084	3,396	221	1,194	169	23,636						34,598
3-7pm	13,512	4,020	2,219	290	573	31	10,794	5,599	1,068	106	312	70	17,949						38,594
6am-7pm	33,384	8,924	4,701	671	1,807	208	33,859	16,547	7,093	525	2,495	436	60,955						110,650

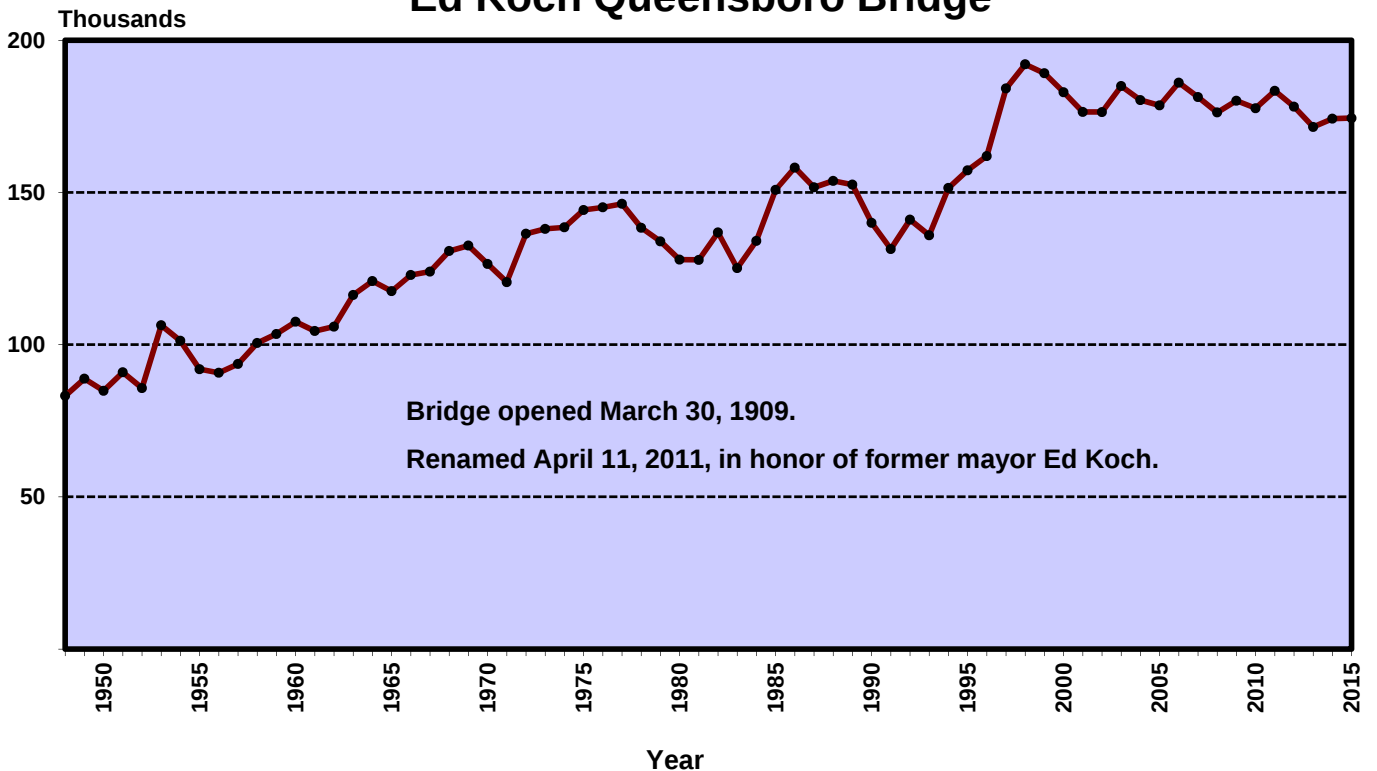
Based on October 2014 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Ed Koch Queensboro Bridge ~ 2015



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



Hourly Vehicular Volumes

Manhattan Bridge - 2015

Eastbound to Brooklyn

Westbound to Manhattan

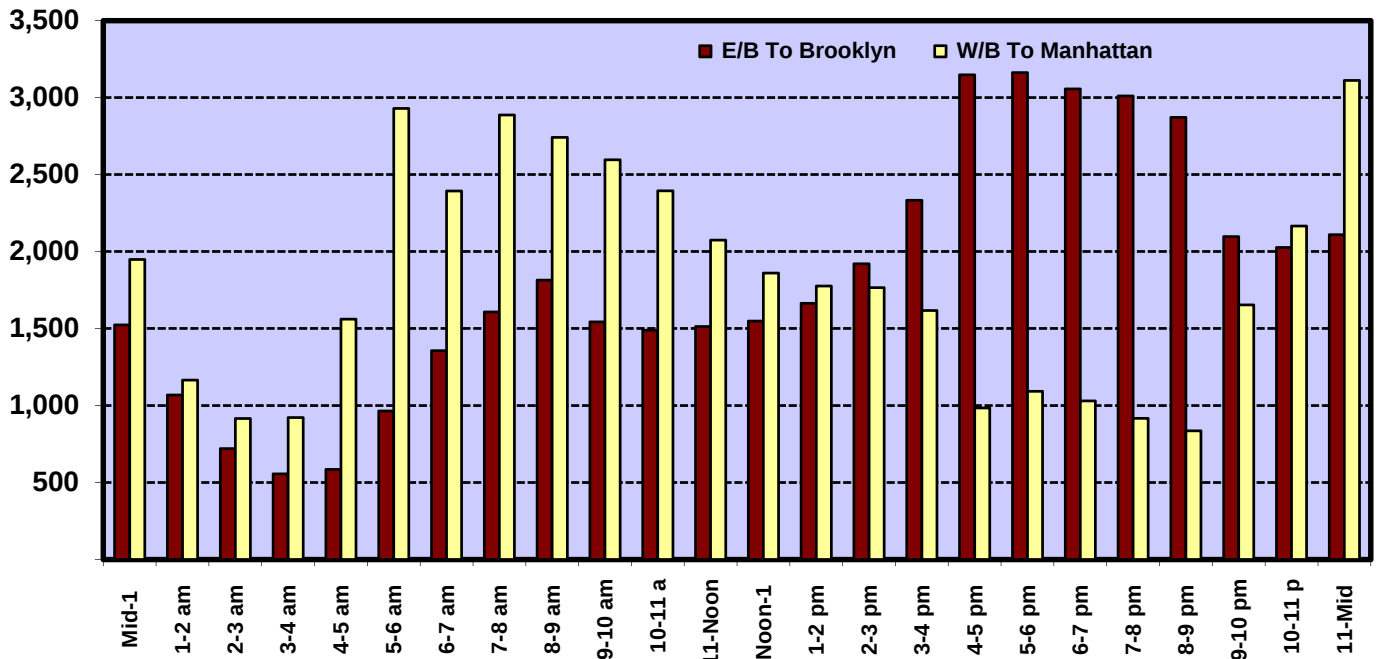
FHWA Classes ►	Commercial Vans, Panel Trucks, Pickups,							Commercial Vans, Panel Trucks, Pickups,							2-Way Grand Totals
	Autos, Motorcycles	Taxis, Liveries, Limos	Police, Fleet Vehicles	Buses	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	Autos, Motorcycles	Taxis, Liveries, Limos	Police, Fleet Vehicles	Buses	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	
	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13		1, 2, 3	2	2 & 3	4	5 - 7	8 - 13		
12-1am	929	489	54	9	25	18	1,524	1,125	708	44	4	48	20	1,949	3,473
1-2am	588	382	56	13	14	16	1,069	600	459	57	1	34	14	1,165	2,234
2-3am	398	224	44	6	31	18	721	497	312	37	6	38	26	916	1,637
3-4am	282	175	49	5	26	19	556	490	240	70	3	77	42	922	1,678
4-5am	337	120	56	2	47	23	585	996	308	102	5	73	77	1,561	2,146
5-6am	658	87	68	15	113	24	965	2,078	366	207	25	161	93	2,930	3,895
6-7am	955	68	158	26	97	53	1,357	1,446	219	349	117	175	88	2,394	3,751
7-8am	1,112	66	224	20	117	69	1,608	1,733	234	557	99	190	74	2,887	4,495
8-9am	1,171	102	261	68	150	63	1,815	1,584	153	603	50	253	99	2,742	4,557
9-10am	925	135	258	38	137	51	1,544	1,492	172	572	45	262	53	2,596	4,140
10-11am	923	113	271	23	116	44	1,490	1,377	138	503	28	262	87	2,395	3,885
11-12am	1,088	97	159	59	87	24	1,514	1,235	113	394	37	219	77	2,075	3,589
12-1pm	1,112	95	185	35	106	16	1,549	1,100	101	366	48	193	53	1,861	3,410
1-2pm	1,018	97	355	26	143	25	1,664	1,055	89	331	87	158	56	1,776	3,440
2-3pm	1,258	127	339	21	140	36	1,921	1,120	99	304	46	151	46	1,766	3,687
3-4pm	1,491	172	431	76	134	30	2,334	1,107	93	265	21	104	27	1,617	3,951
4-5pm	2,075	243	606	75	127	22	3,148	724	60	107	9	74	10	984	4,132
5-6pm	2,341	173	456	39	135	19	3,163	760	120	151	9	43	10	1,093	4,256
6-7pm	2,303	244	333	65	85	27	3,057	729	186	71	6	33	5	1,030	4,087
7-8pm	2,235	332	257	103	76	8	3,011	670	156	47	6	28	10	917	3,928
8-9pm	2,087	420	167	106	62	30	2,872	572	202	40	1	18	3	836	3,708
9-10pm	1,447	460	89	49	30	23	2,098	1,115	367	76	30	32	34	1,654	3,752
10-11pm	1,313	546	94	52	18	4	2,027	1,405	638	59	13	35	16	2,166	4,193
11-12pm	1,377	600	79	17	26	11	2,110	1,897	1,111	67	3	22	12	3,112	5,222
Totals	29,423	5,567	5,049	948	2,042	673	43,702	26,907	6,644	5,379	699	2,683	1,032	43,344	87,046

7-10am	3,208	303	743	126	404	183	4,967	4,809	559	1,732	194	705	226	8,225	13,192
10am-1pm	3,123	305	615	117	309	84	4,553	3,712	352	1,263	113	674	217	6,331	10,884
1-4pm	3,767	396	1,125	123	417	91	5,919	3,282	281	900	154	413	129	5,159	11,078
4-7pm	6,719	660	1,395	179	347	68	9,368	2,213	366	329	24	150	25	3,107	12,475
7am-7pm	16,817	1,664	3,878	545	1,477	426	24,807	14,016	1,558	4,224	485	1,942	597	22,822	47,629
6-10am	4,163	371	901	152	501	236	6,324	6,255	778	2,081	311	880	314	10,619	16,943
3-7pm	8,210	832	1,826	255	481	98	11,702	3,320	459	594	45	254	52	4,724	16,426
6am-7pm	17,772	1,732	4,036	571	1,574	479	26,164	15,462	1,777	4,573	602	2,117	685	25,216	51,380

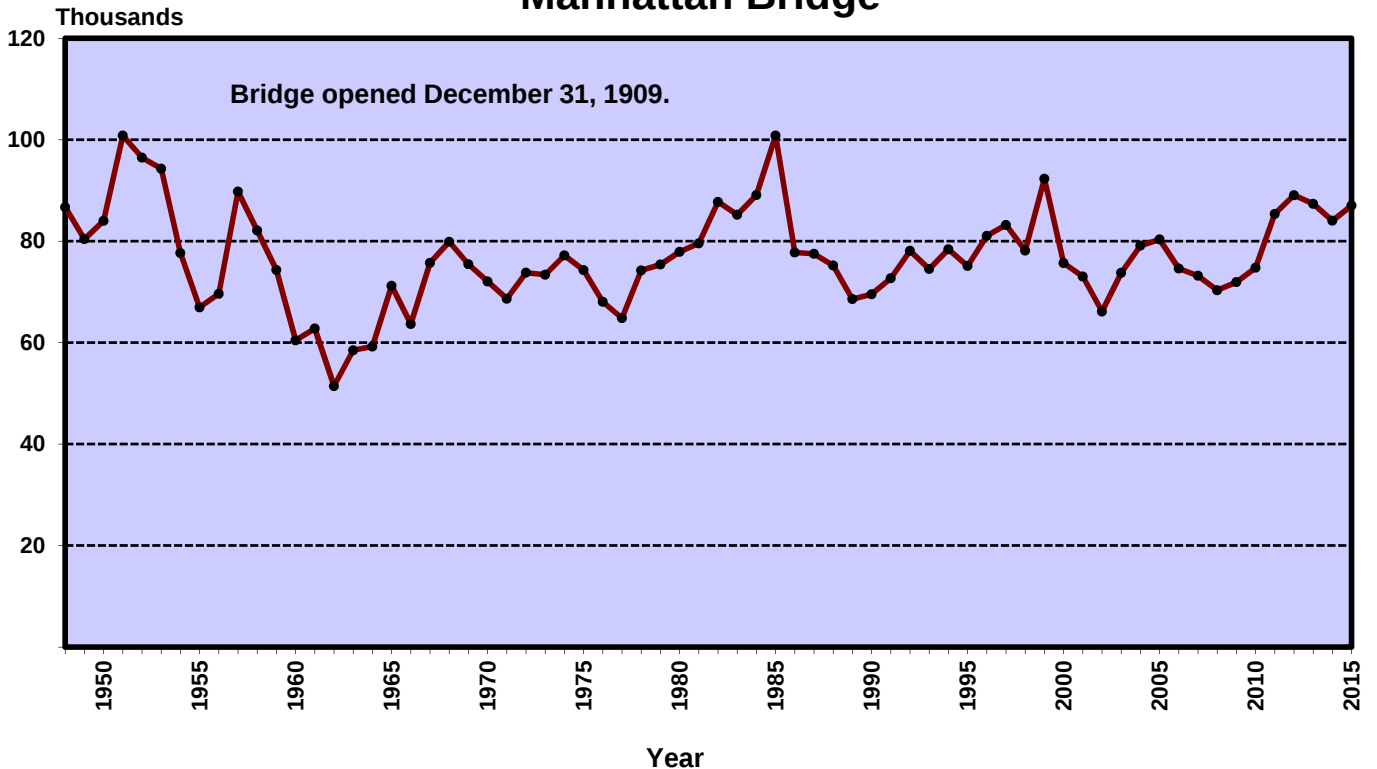
Based on October 2015 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Manhattan Bridge ~ 2015



Average Daily Traffic Volumes ~ Total of Both Directions Manhattan Bridge



Hourly Vehicular Volumes

Williamsburg Bridge - 2015

Eastbound to Brooklyn

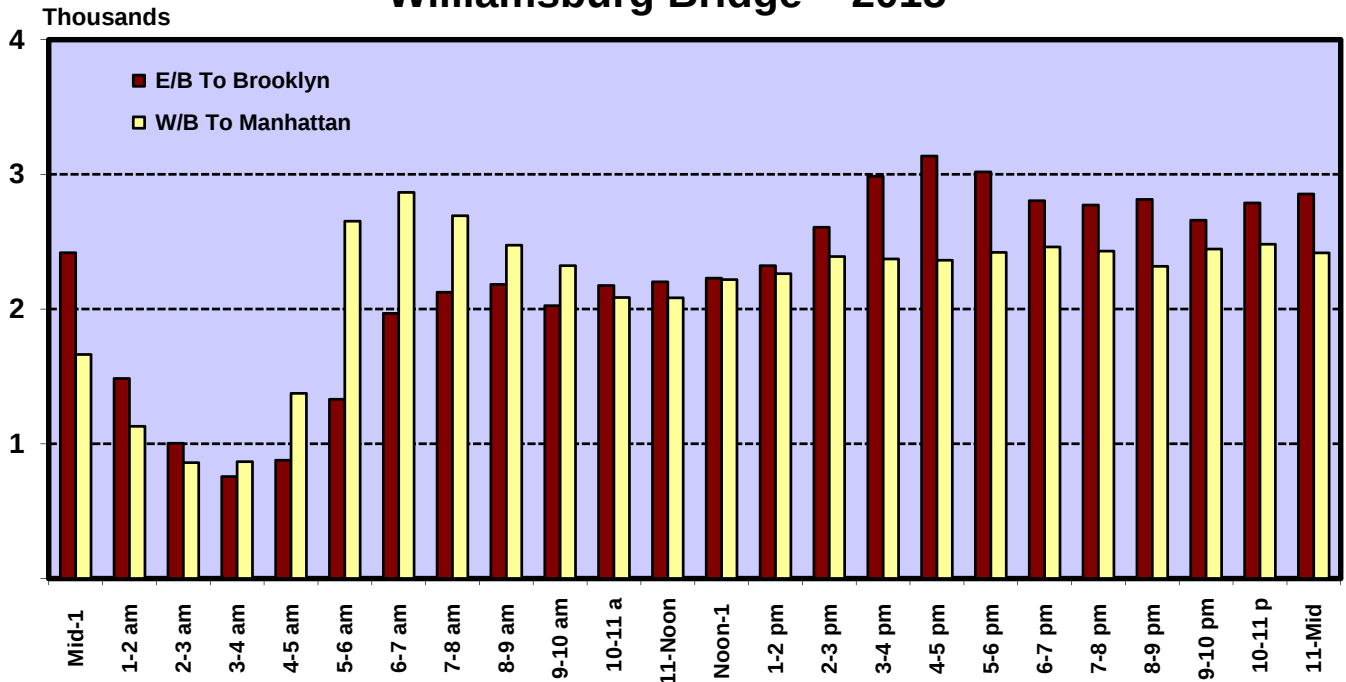
Westbound to Manhattan

FHWA Classes ▶	Commercial Vans, Panel Trucks, Pickups,							Commercial Vans, Panel Trucks, Pickups,							2-Way Grand Totals
	Autos, Motorcycles			Taxis, Liveries, Limos		Police, Fleet Vehicles		Autos, Motorcycles			Taxis, Liveries, Limos		Police, Fleet Vehicles		
	Family SUVs, Vans	1, 2, 3	2	Buses	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	Family SUVs, Vans	1, 2, 3	2	Buses	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	
12-1am	1,484	815	88	2	28	2	2,419	694	902	40	1	24	2	1,663	4,082
1-2am	851	542	61	3	23	5	1,485	334	734	31	1	27	3	1,130	2,615
2-3am	544	386	48	6	19	1	1,004	249	548	31	1	27	4	860	1,864
3-4am	363	333	33	6	21	1	757	303	492	36	0	31	5	867	1,624
4-5am	438	349	44	6	40	1	878	627	510	121	4	97	15	1,374	2,252
5-6am	763	372	105	4	83	4	1,331	1,627	527	230	25	222	22	2,653	3,984
6-7am	1,295	372	213	7	74	7	1,968	1,797	407	300	66	256	41	2,867	4,835
7-8am	1,362	415	224	22	97	5	2,125	1,740	282	373	39	238	21	2,693	4,818
8-9am	1,376	337	260	53	147	11	2,184	1,367	247	536	23	289	13	2,475	4,659
9-10am	1,212	319	276	46	158	15	2,026	1,251	282	496	13	263	18	2,323	4,349
10-11am	1,254	347	340	26	195	13	2,175	1,313	289	296	11	171	6	2,086	4,261
11-12am	1,396	289	307	15	189	6	2,202	1,435	284	239	12	114	0	2,084	4,286
12-1pm	1,437	334	260	14	179	6	2,230	1,405	416	237	19	125	17	2,219	4,449
1-2pm	1,598	301	246	9	163	6	2,323	1,509	322	239	33	144	16	2,263	4,586
2-3pm	1,747	424	238	9	188	2	2,608	1,742	300	202	15	120	11	2,390	4,998
3-4pm	1,907	549	288	37	199	6	2,986	1,810	306	157	15	80	4	2,372	5,358
4-5pm	2,144	480	298	33	179	2	3,136	1,751	409	126	14	60	3	2,363	5,499
5-6pm	2,115	550	209	13	129	3	3,019	1,669	582	108	15	44	3	2,421	5,440
6-7pm	1,767	813	114	13	97	1	2,805	1,660	633	114	3	49	2	2,461	5,266
7-8pm	1,511	1,088	93	11	67	2	2,772	1,653	641	100	10	26	0	2,430	5,202
8-9pm	1,532	1,156	83	7	34	2	2,814	1,428	764	81	4	38	3	2,318	5,132
9-10pm	1,479	1,091	44	11	34	1	2,660	1,513	815	72	2	44	0	2,446	5,106
10-11pm	1,531	1,141	78	2	33	3	2,788	1,387	988	61	8	36	1	2,481	5,269
11-12pm	1,613	1,158	43	3	35	2	2,854	1,213	1,105	50	2	46	2	2,418	5,272
Totals	32,719	13,961	3,993	358	2,411	107	53,549	31,477	12,785	4,276	336	2,571	212	51,657	105,206
7-10am	3,950	1,071	760	121	402	31	6,335	4,358	811	1,405	75	790	52	7,491	13,826
10am-1pm	4,087	970	907	55	563	25	6,607	4,153	989	772	42	410	23	6,389	12,996
1-4pm	5,252	1,274	772	55	550	14	7,917	5,061	928	598	63	344	31	7,025	14,942
4-7pm	6,026	1,843	621	59	405	6	8,960	5,080	1,624	348	32	153	8	7,245	16,205
7am-7pm	19,315	5,158	3,060	290	1,920	76	29,819	18,652	4,352	3,123	212	1,697	114	28,150	57,969
6-10am	5,245	1,443	973	128	476	38	8,303	6,155	1,218	1,705	141	1,046	93	10,358	18,661
3-7pm	7,933	2,392	909	96	604	12	11,946	6,890	1,930	505	47	233	12	9,617	21,563
6am-7pm	20,610	5,530	3,273	297	1,994	83	31,787	20,449	4,759	3,423	278	1,953	155	31,017	62,804

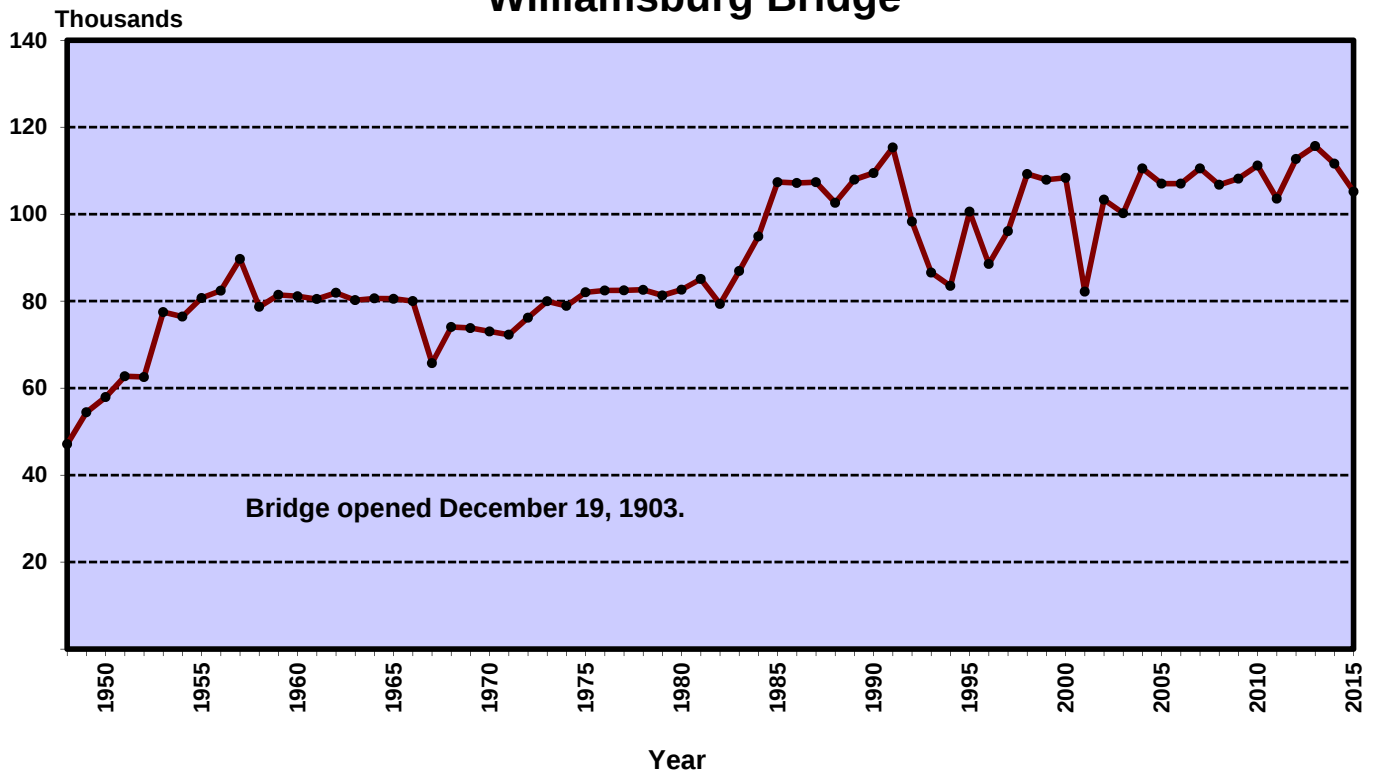
Based on October 2015 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Williamsburg Bridge ~ 2015



Average Daily Traffic Volumes ~ Total of Both Directions Williamsburg Bridge



Harlem River Bridges



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

Harlem River Bridges
Average Daily Traffic Volumes
1948 - 2015

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
2013	188,417	35,462	38,930	47,046	60,120
2014	178,809	34,239	38,417	41,340	58,447
2015	178,407	33,897	38,556	40,432	55,988

Harlem River Bridges (cont'd)
Average Daily Traffic Volumes
1948 - 2015

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

Hourly Vehicular Volumes

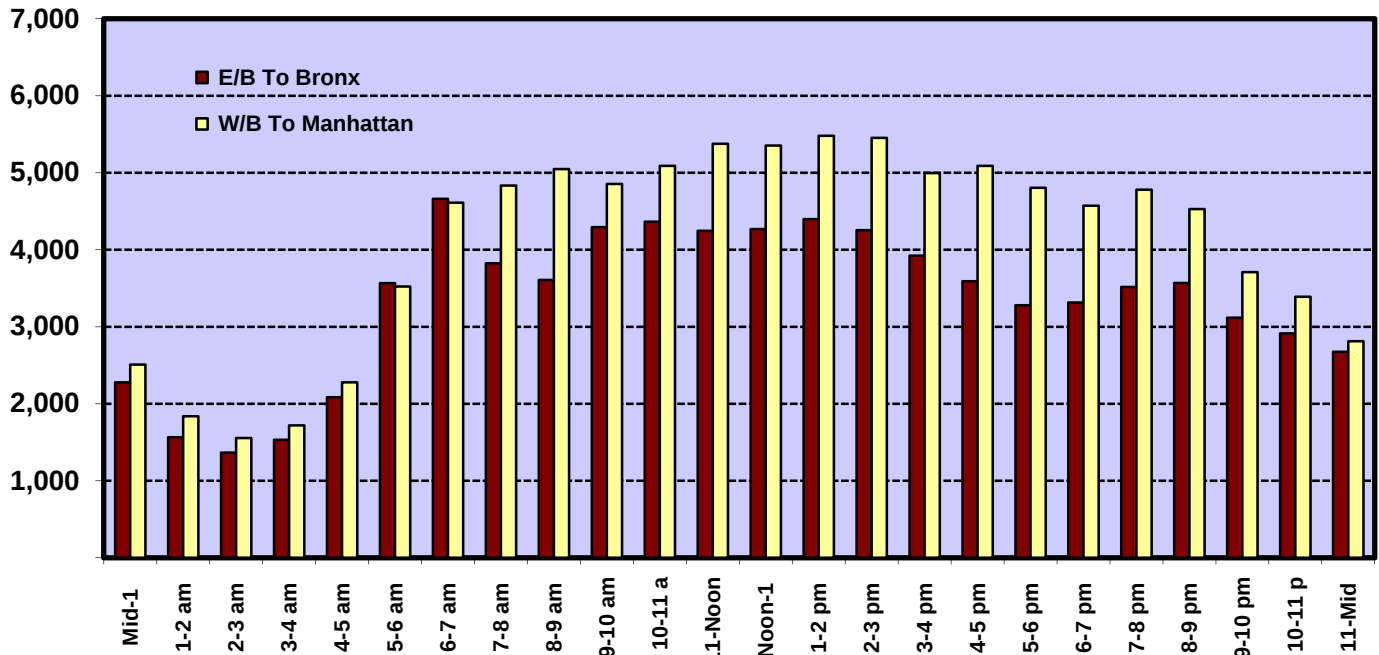
Alexander Hamilton Bridge - 2015

Westbound to Manhattan														
FHWA Classes ▶	Commercial Vans,													
	Autos, Motorcycles							Panel Trucks, Pickups,						
	SUVs, Family Vans	Taxis, Liveries, Limos	Police, Fleet Vehicles	Buses	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	SUVs, Family Vans	Taxis, Liveries, Limos	Police, Fleet Vehicles	Buses	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles
1, 2, 3	2	2 & 3	4	5 - 7	8 - 13		1, 2, 3	2	2 & 3	4	5 - 7	8 - 13		
12-1am	1,634	86	45	4	83	426	2,278	1,836	18	69	18	66	501	2,508
1-2am	926	65	25	3	69	478	1,566	1,126	28	74	8	79	522	1,837
2-3am	650	38	24	0	108	546	1,366	762	14	46	3	51	678	1,554
3-4am	588	47	35	2	198	662	1,532	657	0	52	3	104	904	1,720
4-5am	1,030	60	82	0	212	701	2,085	1,155	22	101	0	191	808	2,277
5-6am	2,107	21	97	2	157	1,183	3,567	2,126	45	126	0	334	891	3,522
6-7am	3,257	8	278	1	79	1,038	4,661	3,403	36	242	48	169	713	4,611
7-8am	2,951	16	223	16	262	356	3,824	3,713	62	319	40	268	432	4,834
8-9am	2,642	37	238	27	325	339	3,608	3,884	43	229	27	331	534	5,048
9-10am	3,075	26	337	38	368	449	4,293	3,466	41	180	22	444	702	4,855
10-11am	3,160	13	282	14	446	448	4,363	3,257	34	349	25	532	893	5,090
11-12am	3,020	79	272	7	422	446	4,246	3,402	33	286	30	445	1,179	5,375
12-1pm	3,079	74	261	22	383	449	4,268	3,367	49	288	34	500	1,116	5,354
1-2pm	3,387	41	265	27	310	367	4,397	3,594	40	327	54	404	1,061	5,480
2-3pm	3,433	37	207	20	289	268	4,254	3,785	73	286	35	363	910	5,452
3-4pm	3,093	57	194	30	264	286	3,924	3,701	46	326	15	257	651	4,996
4-5pm	2,902	38	185	48	212	207	3,592	3,953	33	290	13	237	563	5,089
5-6pm	2,648	29	244	16	142	200	3,279	4,008	38	169	3	173	413	4,804
6-7pm	2,814	6	118	6	124	247	3,315	3,972	16	123	2	111	348	4,572
7-8pm	2,939	32	105	25	134	282	3,517	4,053	22	135	7	120	443	4,780
8-9pm	2,994	50	83	8	149	284	3,568	3,794	28	141	5	107	454	4,529
9-10pm	2,513	67	87	3	82	365	3,117	3,084	27	93	0	81	424	3,709
10-11pm	2,433	41	60	0	47	333	2,914	2,868	37	104	8	77	295	3,389
11-12pm	2,281	72	36	0	47	239	2,675	2,037	27	89	11	85	564	2,813
Totals	59,556	1,040	3,783	319	4,912	10,599	80,209	71,003	812	4,444	411	5,529	15,999	98,198
7-10am	8,668	79	798	81	955	1,144	11,725	11,063	146	728	89	1,043	1,668	14,737
10am-1pm	9,259	166	815	43	1,251	1,343	12,877	10,026	116	923	89	1,477	3,188	15,819
1-4pm	9,913	135	666	77	863	921	12,575	11,080	159	939	104	1,024	2,622	15,928
4-7pm	8,364	73	547	70	478	654	10,186	11,933	87	582	18	521	1,324	14,465
7am-7pm	36,204	453	2,826	271	3,547	4,062	47,363	44,102	508	3,172	300	4,065	8,802	60,949
6-10am	11,925	87	1,076	82	1,034	2,182	16,386	14,466	182	970	137	1,212	2,381	19,348
3-7pm	11,457	130	741	100	742	940	14,110	15,634	133	908	33	778	1,975	19,461
6am-7pm	39,461	461	3,104	272	3,626	5,100	52,024	47,505	544	3,414	348	4,234	9,515	65,560

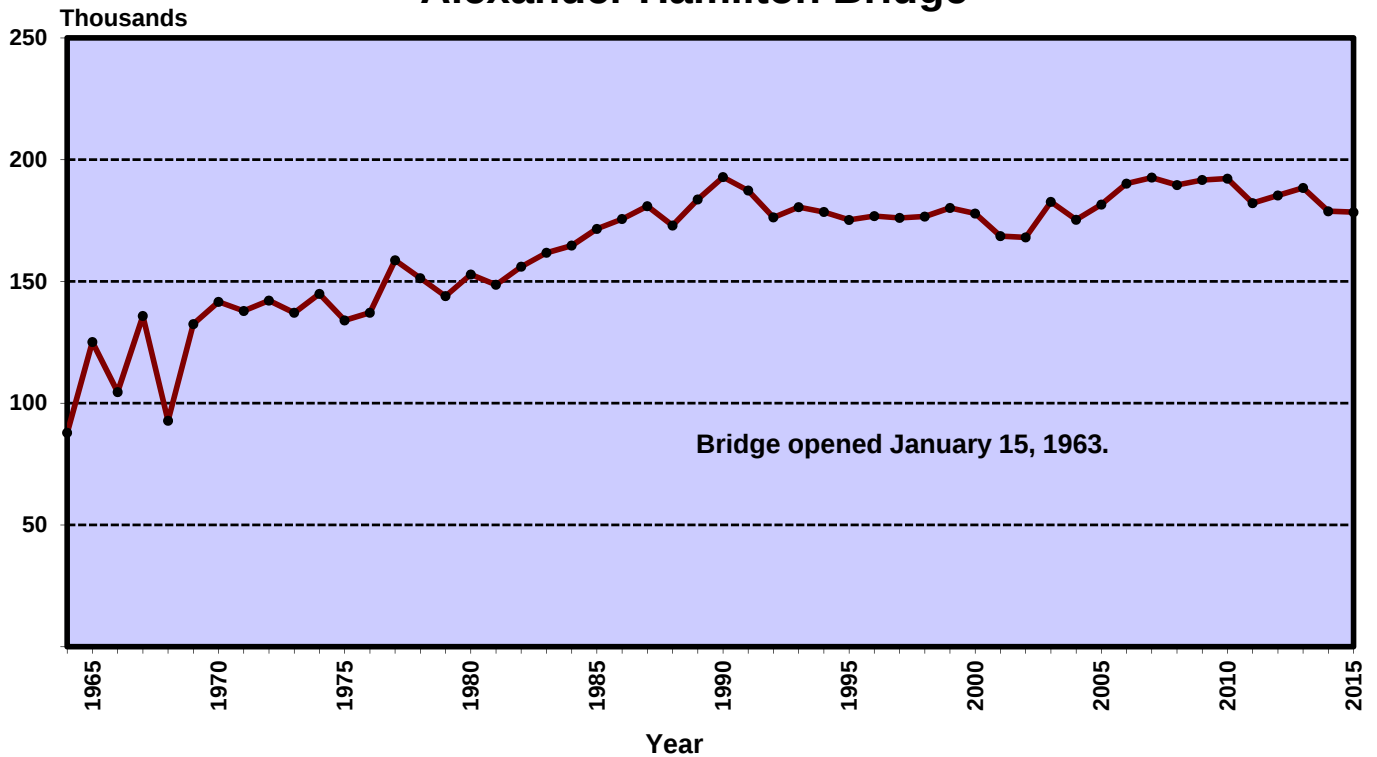
Based on October 2013 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Alexander Hamilton Bridge ~ 2015



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



Hourly Vehicular Volumes

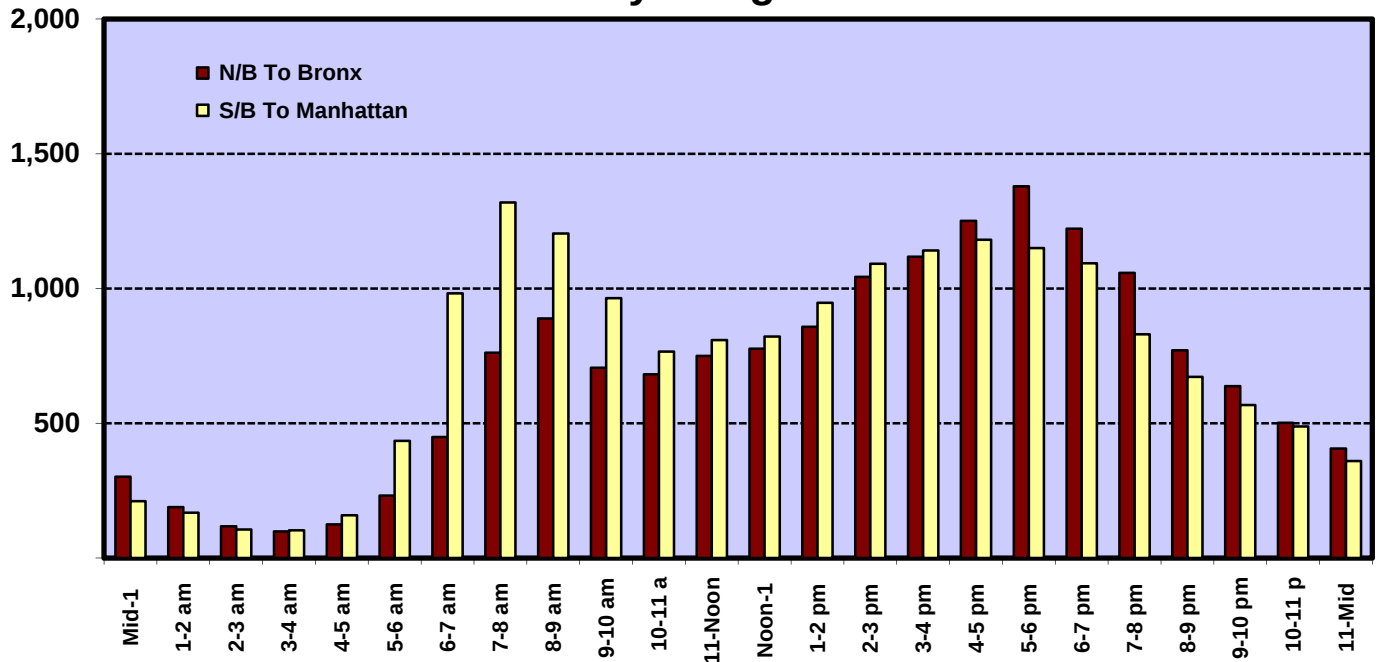
Broadway Bridge - 2015

Northbound to Bronx															Southbound to Manhattan																												
FHWA Classes ▶	Commercial Vans,							Autos, Motorcycles							Commercial Vans,							Autos, Motorcycles							2-way Grand Totals														
	Panel Trucks, Pickups, Police, Fleet Vehicles							Taxis, Liveries, Limos							Panel Trucks, Pickups, Police, Fleet Vehicles							Taxis, Liveries, Limos								Panel Trucks, Pickups, Police, Fleet Vehicles							Taxis, Liveries, Limos						
	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles															
12-1am	260	18	8	12	2	2	302	127	64	3	15	2	0	211	513																												
1-2am	150	19	0	14	5	1	189	94	49	1	21	0	3	168	357																												
2-3am	101	7	6	1	2	1	118	55	40	4	4	1	2	106	224																												
3-4am	77	17	3	0	0	2	99	67	24	3	2	5	2	103	202																												
4-5am	90	12	1	14	4	4	125	111	29	11	1	1	6	159	284																												
5-6am	135	9	3	53	31	1	232	339	61	20	8	5	2	435	667																												
6-7am	329	13	12	64	2	29	449	782	90	30	70	9	1	982	1,431																												
7-8am	636	24	20	56	15	11	762	1,066	151	44	42	12	4	1,319	2,081																												
8-9am	752	68	20	31	9	9	889	934	153	51	41	17	8	1,204	2,093																												
9-10am	554	55	44	32	17	4	706	698	135	51	40	22	18	964	1,670																												
10-11am	532	57	43	15	25	10	682	509	152	36	23	20	26	766	1,448																												
11-12am	601	75	25	19	23	7	750	544	164	61	11	20	9	809	1,559																												
12-1pm	619	67	35	21	27	8	777	612	122	43	17	20	8	822	1,599																												
1-2pm	682	53	46	44	32	1	858	660	187	48	23	20	9	947	1,805																												
2-3pm	860	79	31	39	23	11	1,043	812	153	51	42	28	6	1,092	2,135																												
3-4pm	955	81	26	39	15	2	1,118	854	168	53	47	17	2	1,141	2,259																												
4-5pm	1,051	117	26	47	9	1	1,251	933	153	48	29	18	0	1,181	2,432																												
5-6pm	1,172	127	40	36	3	1	1,379	945	131	38	28	7	1	1,150	2,529	**																											
6-7pm	1,128	43	22	27	1	1	1,222	878	148	16	43	7	2	1,094	2,316																												
7-8pm	969	45	16	16	9	3	1,058	670	98	16	38	7	1	830	1,888																												
8-9pm	693	41	11	16	9	1	771	476	136	20	31	4	5	672	1,443																												
9-10pm	576	41	16	2	1	2	638	407	106	11	42	1	1	568	1,206																												
10-11pm	439	43	11	7	0	2	502	332	114	6	32	2	2	488	990																												
11-12pm	350	33	10	7	5	1	406	238	95	14	11	0	2	360	766																												
Totals	13,711	1,144	475	612	269	115	16,326	13,143	2,723	679	661	245	120	17,571	33,897																												
7-10am	1,942	147	84	119	41	24	2,357	2,698	439	146	123	51	30	3,487	5,844																												
10am-1pm	1,752	199	103	55	75	25	2,209	1,665	438	140	51	60	43	2,397	4,606																												
1-4pm	2,497	213	103	122	70	14	3,019	2,326	508	152	112	65	17	3,180	6,199																												
4-7pm	3,351	287	88	110	13	3	3,852	2,756	432	102	100	32	3	3,425	7,277																												
7am-7pm	9,542	846	378	406	199	66	11,437	9,445	1,817	540	386	208	93	12,489	23,926																												
6-10am	2,271	160	96	183	43	53	2,806	3,480	529	176	193	60	31	4,469	7,275																												
3-7pm	4,306	368	114	149	28	5	4,970	3,610	600	155	147	49	5	4,566	9,536																												
6am-7pm	9,871	859	390	470	201	95	11,886	10,227	1,907	570	456	217	94	13,471	25,357																												

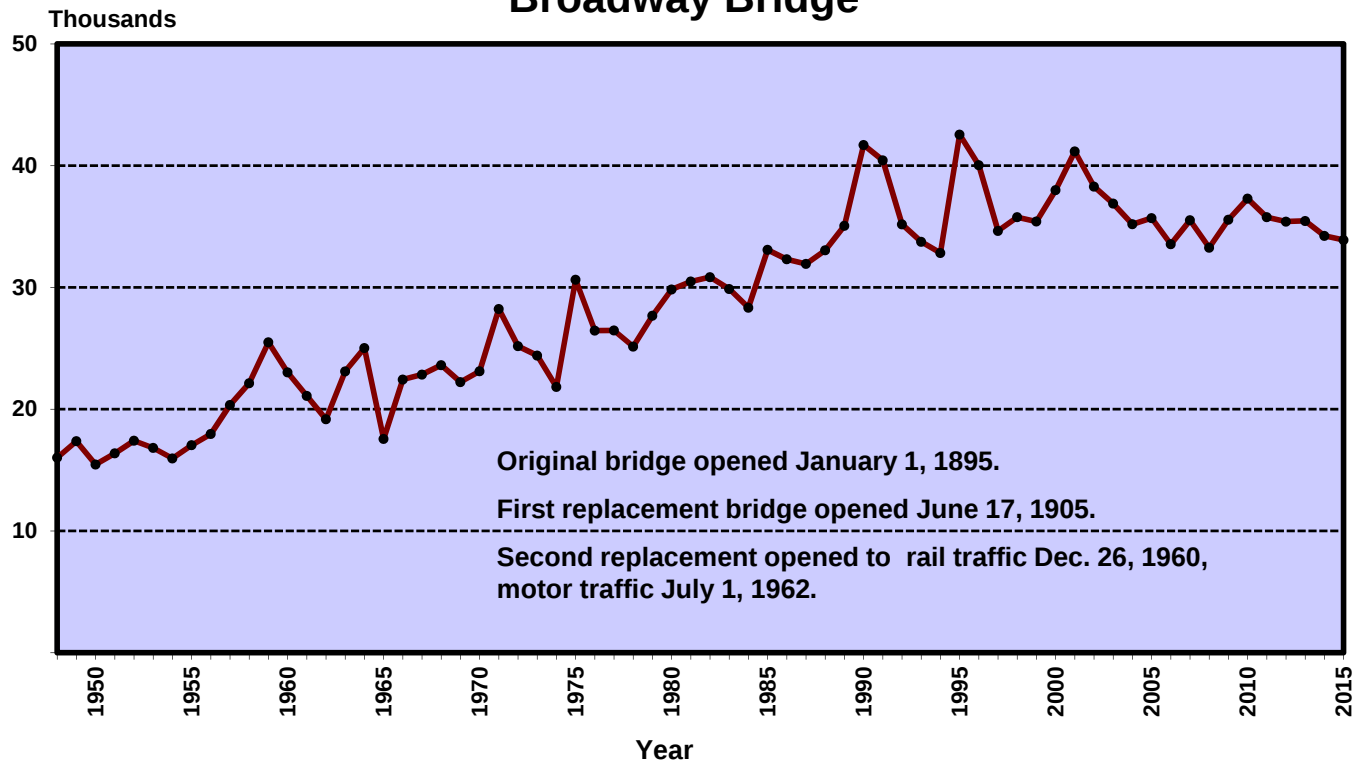
Based on October 2013 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Broadway Bridge ~ 2015



Average Daily Traffic Volumes ~ Total of Both Directions Broadway Bridge



Hourly Vehicular Volumes

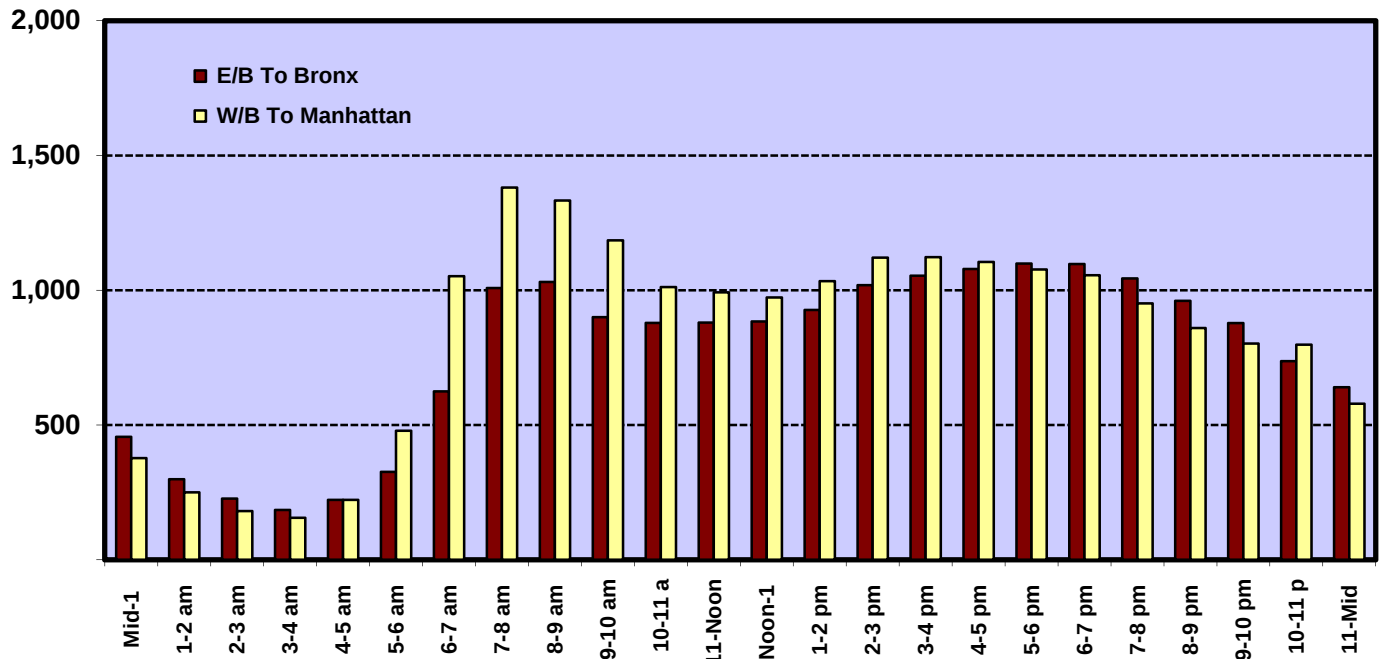
Macombs Dam Bridge - 2015

Eastbound to Bronx															Westbound to Manhattan															2-way Grand Totals
FHWA Classes ▶	Commercial Vans,							Commercial Vans,							Commercial Vans,															
	Autos, Motorcycles			Panel Trucks, Pickups,				Autos, Motorcycles			Panel Trucks, Pickups,				Autos, Motorcycles			Panel Trucks, Pickups,												
	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles	Taxis, Liveries, Limos	Police, Fleet Vehicles	Buses	Single Unit Trucks	Multiple Unit Trucks	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles									
12-1am	369	43	27	5	9	3	456	325	31	15	4	1	1	377	833															
1-2am	243	26	18	5	5	2	299	217	18	12	2	0	1	250	549															
2-3am	172	32	11	2	8	2	227	148	23	6	2	2	0	181	408															
3-4am	140	28	12	1	1	3	185	132	18	3	2	1	0	156	341															
4-5am	165	41	7	1	7	1	222	173	19	16	11	2	1	222	444															
5-6am	260	48	9	3	1	5	326	350	75	29	15	7	3	479	805															
6-7am	491	85	23	7	19	0	625	669	169	104	58	41	11	1,052	1,677															
7-8am	825	120	25	20	15	3	1,008	970	176	108	79	29	19	1,381	2,389															
8-9am	847	85	22	56	16	5	1,031	1,063	108	89	24	42	7	1,333	2,364															
9-10am	720	85	44	27	22	2	900	936	98	68	12	64	7	1,185	2,085															
10-11am	684	92	52	13	35	3	879	810	72	58	23	43	6	1,012	1,891															
11-12am	659	105	71	9	29	7	880	759	89	85	19	33	7	992	1,872															
12-1pm	671	102	72	8	26	5	884	767	89	72	13	21	11	973	1,857															
1-2pm	705	110	70	11	28	3	927	781	128	73	21	23	8	1,034	1,961															
2-3pm	811	113	58	10	26	1	1,019	856	134	81	27	20	3	1,121	2,140															
3-4pm	872	83	50	17	26	6	1,054	865	116	75	32	31	4	1,123	2,177															
4-5pm	911	72	45	25	23	3	1,079	888	87	83	32	14	1	1,105	2,184															
5-6pm	878	106	40	33	34	8	1,099	913	81	57	20	6	0	1,077	2,176															
6-7pm	897	101	57	12	25	5	1,097	912	73	50	16	5	0	1,056	2,153															
7-8pm	854	94	66	9	17	4	1,044	822	68	42	16	2	1	951	1,995															
8-9pm	800	92	52	5	8	4	961	749	60	39	9	3	0	860	1,821															
9-10pm	738	80	47	6	6	1	878	695	67	27	10	3	0	802	1,680															
10-11pm	614	66	41	5	6	5	737	684	52	46	10	6	0	798	1,535															
11-12pm	533	53	38	3	9	4	640	501	40	24	11	3	0	579	1,219															
Totals	14,859	1,862	957	293	401	85	18,457	15,985	1,891	1,262	468	402	91	20,099	38,556															
7-10am	2,392	290	91	103	53	10	2,939	2,969	382	265	115	135	33	3,899	6,838															
10am-1pm	2,014	299	195	30	90	15	2,643	2,336	250	215	55	97	24	2,977	5,620															
1-4pm	2,388	306	178	38	80	10	3,000	2,502	378	229	80	74	15	3,278	6,278															
4-7pm	2,686	279	142	70	82	16	3,275	2,713	241	190	68	25	1	3,238	6,513															
7am-7pm	9,480	1,174	606	241	305	51	11,857	10,520	1,251	899	318	331	73	13,392	25,249															
6-10am	2,883	375	114	110	72	10	3,564	3,638	551	369	173	176	44	4,951	8,515															
3-7pm	3,558	362	192	87	108	22	4,329	3,578	357	265	100	56	5	4,361	8,690															
6am-7pm	9,971	1,259	629	248	324	51	12,482	11,189	1,420	1,003	376	372	84	14,444	26,926															

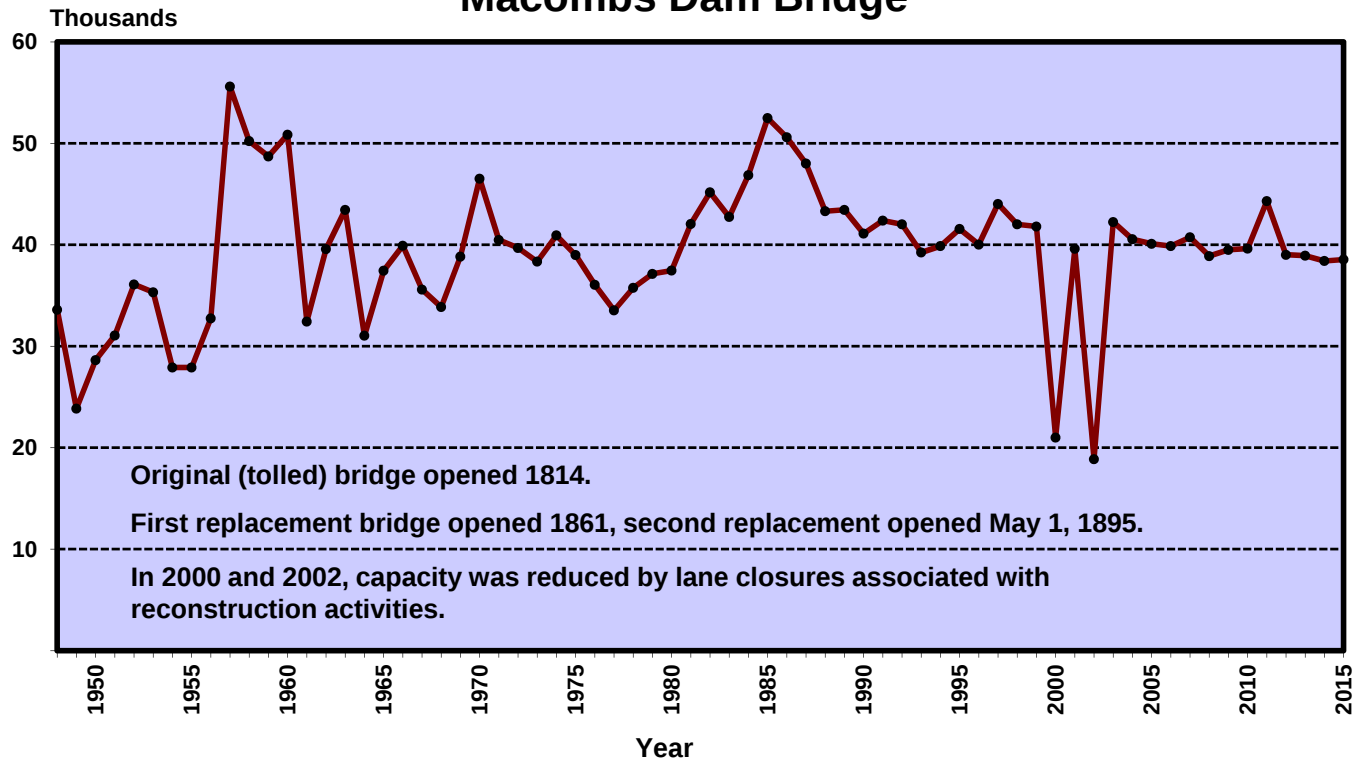
Based on October 2013 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Macombs Dam Bridge ~ 2015



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



Hourly Vehicular Volumes

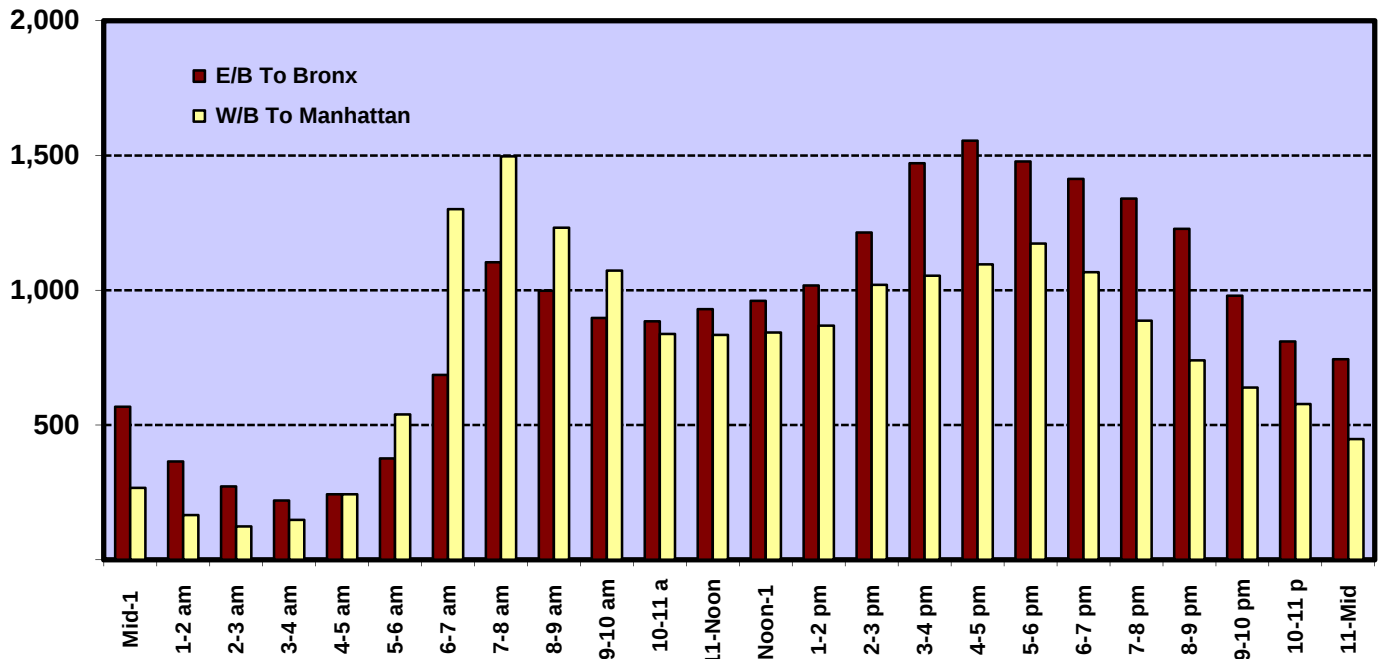
Madison Avenue Bridge - 2015

Eastbound to Bronx														Westbound to Manhattan														2-way Grand Totals						
Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles														Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles																				
Autos, Motorcycles SUVs, Family Vans				Taxis, Liveries, Limos		Buses		Single Unit Trucks		Multiple Unit Trucks		Total Vehicles				Autos, Motorcycles SUVs, Family Vans				Taxis, Liveries, Limos		Buses		Single Unit Trucks		Multiple Unit Trucks			Total Vehicles					
FHWA Classes	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13							1, 2, 3	2	2 & 3	4	5 - 7	8 - 13						1, 2, 3	2	2 & 3	4	5 - 7	8 - 13					
12-1am	456	77	16	9	7	3	568						243	11	6	3	4	0						243	11	6	3	4	0					835
1-2am	254	82	11	3	15	0	365						144	15	1	1	4	1						144	15	1	1	4	1					531
2-3am	185	65	6	1	15	0	272						109	9	1	0	3	2						109	9	1	0	3	2					396
3-4am	142	50	13	1	9	5	220						101	29	11	0	5	2						101	29	11	0	5	2					368
4-5am	160	49	13	1	14	6	243						162	42	19	2	16	2						162	42	19	2	16	2					486
5-6am	293	39	14	2	28	0	376						384	68	16	20	48	3						384	68	16	20	48	3					915
6-7am	574	46	25	8	33	0	686						833	126	58	170	104	10						833	126	58	170	104	10					1,987
7-8am	955	35	25	37	49	3	1,104						1,169	96	94	71	62	5						1,169	96	94	71	62	5					2,601
8-9am	772	64	37	89	34	2	998						961	37	126	20	85	3						961	37	126	20	85	3					2,230
9-10am	558	176	76	42	36	9	897						793	34	115	34	94	3						793	34	115	34	94	3					1,970
10-11am	579	134	82	26	63	1	885						632	31	87	38	49	1						632	31	87	38	49	1					1,723
11-12am	679	89	90	19	50	3	930						641	24	103	19	46	1						641	24	103	19	46	1					1,764
12-1pm	641	116	109	29	64	2	961						679	15	58	37	52	2						679	15	58	37	52	2					1,804
1-2pm	763	70	88	23	74	0	1,018						705	18	43	48	54	1						705	18	43	48	54	1					1,887
2-3pm	938	59	116	22	79	0	1,214						808	23	79	75	33	2						808	23	79	75	33	2					2,234
3-4pm	1,063	118	156	67	64	3	1,471						915	20	66	34	19	0						915	20	66	34	19	0					2,525
4-5pm	1,107	193	154	57	41	3	1,555						998	45	13	30	10	0						998	45	13	30	10	0					2,651
5-6pm	1,250	57	110	35	26	0	1,478						1,045	93	5	22	8	0						1,045	93	5	22	8	0					2,651
6-7pm	1,255	34	63	29	32	0	1,413						963	48	23	21	10	2						963	48	23	21	10	2					2,480
7-8pm	1,181	62	57	20	19	1	1,340						814	27	19	24	2	1						814	27	19	24	2	1					2,227
8-9pm	1,090	79	35	14	9	1	1,228						702	17	9	5	6	1						702	17	9	5	6	1					1,968
9-10pm	863	72	28	8	9	0	980						594	8	20	10	6	1						594	8	20	10	6	1					1,619
10-11pm	689	85	20	7	8	1	810						519	23	20	9	6	1						519	23	20	9	6	1					1,388
11-12pm	641	60	20	9	13	1	744						417	14	5	9	3	0						417	14	5	9	3	0					1,192
Totals	17,088	1,911	1,364	558	791	44	21,756						15,331	873	997	702	729	44						15,331	873	997	702	729	44					40,432
7-10am	2,285	275	138	168	119	14	2,999						2,923	167	335	125	241	11						2,923	167	335	125	241	11					6,801
10am-1pm	1,899	339	281	74	177	6	2,776						1,952	70	248	94	147	4						1,952	70	248	94	147	4					5,291
1-4pm	2,764	247	360	112	217	3	3,703						2,428	61	188	157	106	3						2,428	61	188	157	106	3					6,646
4-7pm	3,612	284	327	121	99	3	4,446						3,006	186	41	73	28	2						3,006	186	41	73	28	2					7,782
7am-7pm	10,560	1,145	1,106	475	612	26	13,924						10,309	484	812	449	522	20						10,309	484	812	449	522	20					26,520
6-10am	2,859	321	163	176	152	14	3,685						3,756	293	393	295	345	21						3,756	293	393	295	345	21					8,788
3-7pm	4,675	402	483	188	163	6	5,917						3,921	206	107	107	47	2						3,921	206	107	107	47	2					10,307
6am-7pm	11,134	1,191	1,131	483	645	26	14,610						11,142	610	870	619	626	30						11,142	610	870	619	626	30					28,507

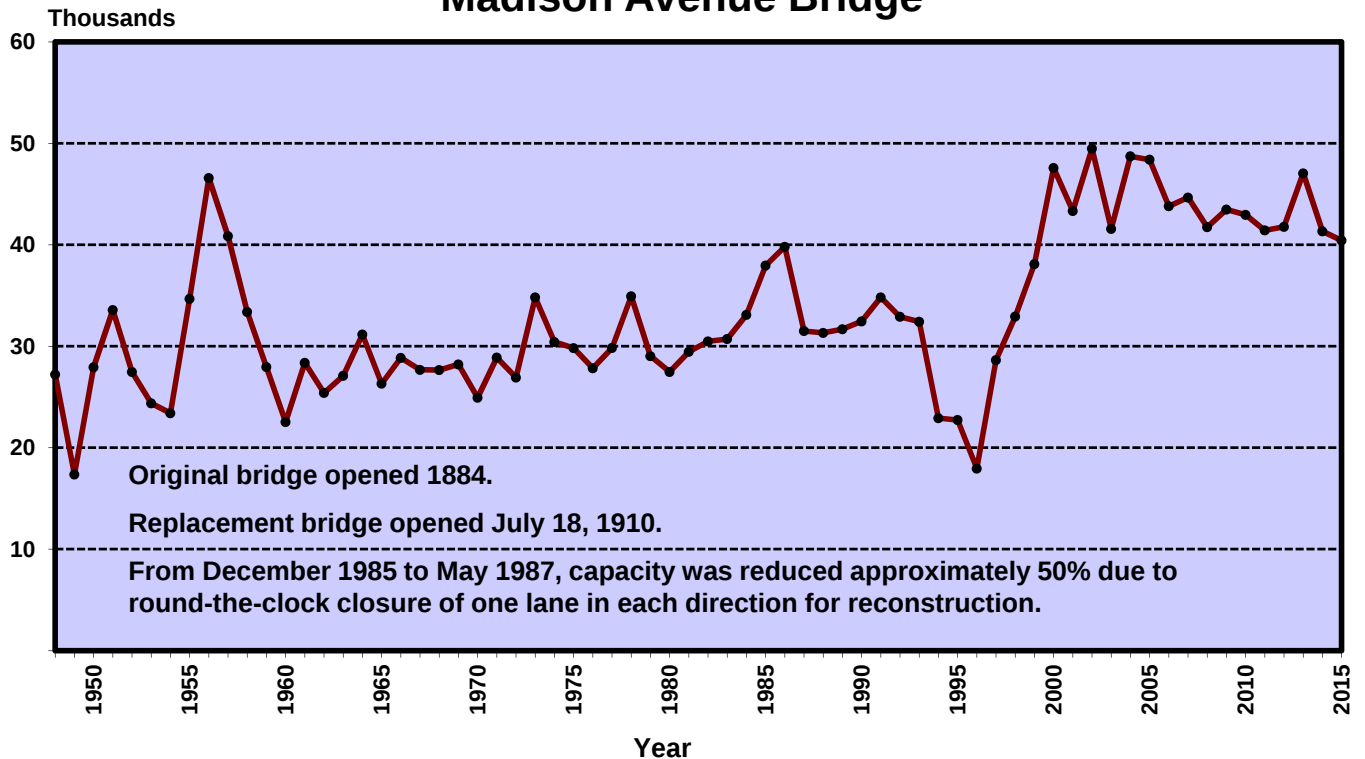
Based on October 2013 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Madison Avenue Bridge ~ 2015



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



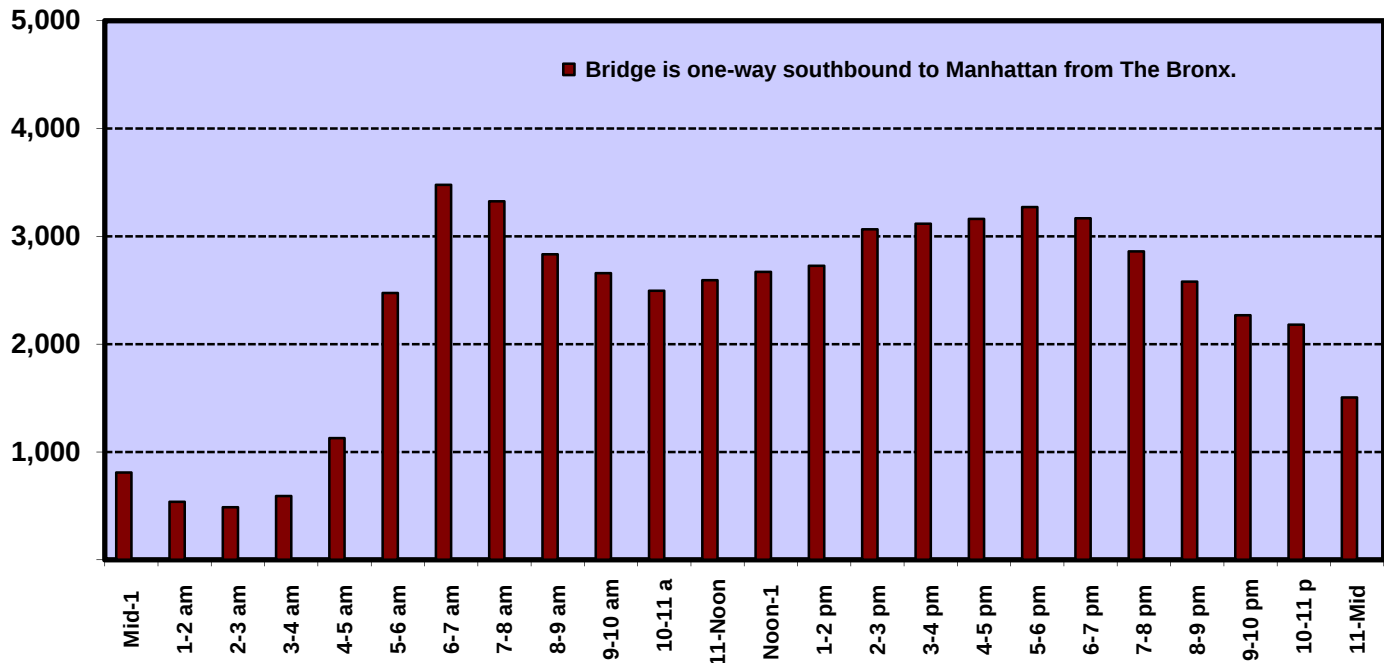
Hourly Vehicular Volumes

Northbound to Bronx															Southbound to Manhattan															
FHWA Classes ▶	Commercial Vans,					Autos, Motorcycles					Commercial Vans,					Autos, Motorcycles					Commercial Vans,									
	Panel Trucks, Pickups,					Taxis, Liveries, Limos					Panel Trucks, Pickups, Police, Fleet Vehicles					Buses					Single Unit Trucks					Multiple Unit Trucks				
	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles		
Bridge is 1-way southbound from Bronx to Manhattan.																														
12-1am	640	124	16	2	25	3	810	1,785	253	151	15	236	34	2,474	**	3,478	2,600	173	245	143	290	27	3,325	2,485	204	318	104	199	15	3,325
1-2am	378	103	15	1	36	5	538	2,162	95	385	22	163	6	2,833		2,833	2,719	200	327	24	165	8	2,658	2,739	300	160	25	39	9	3,272
2-3am	291	138	29	1	26	3	488	1,934	200	327	24	115	10	2,495		2,495	2,414	270	169	109	99	4	3,065	2,685	226	103	53	46	4	3,117
3-4am	316	166	32	0	73	5	592	1,799	267	280	24	115	10	2,495		2,495	2,719	283	85	27	42	6	3,162	2,739	300	160	25	39	9	3,272
4-5am	691	177	67	3	173	17	1,128	1,913	256	254	27	128	16	2,594		2,594	2,739	249	99	19	35	6	3,167	2,739	249	99	19	35	6	3,167
5-6am	1,785	253	151	15	236	34	2,474	2,013	205	270	60	114	8	2,670		2,670	2,739	249	99	19	35	6	3,167	2,739	249	99	19	35	6	3,167
6-7am	2,600	173	245	143	290	27	3,478	2,113	175	200	127	106	6	2,727		2,727	2,414	270	169	109	99	4	3,065	2,414	270	169	109	99	4	3,065
7-8am	2,485	204	318	104	199	15	3,325	2,414	270	169	109	99	4	3,065		3,065	2,685	226	103	53	46	4	3,117	2,685	226	103	53	46	4	3,117
8-9am	2,162	95	385	22	163	6	2,833	2,719	283	85	27	42	6	3,162		3,162	2,719	283	85	27	42	6	3,162	2,719	283	85	27	42	6	3,162
9-10am	1,934	200	327	24	165	8	2,658	2,739	300	160	25	39	9	3,272		3,272	2,739	300	160	25	39	9	3,272	2,739	300	160	25	39	9	3,272
10-11am	1,799	267	280	24	115	10	2,495	2,013	205	270	60	114	8	2,670		2,670	2,414	270	169	109	99	4	3,065	2,414	270	169	109	99	4	3,065
11-12am	1,913	256	254	27	128	16	2,594	2,113	175	200	127	106	6	2,727		2,727	2,414	270	169	109	99	4	3,065	2,414	270	169	109	99	4	3,065
12-1pm	2,013	205	270	60	114	8	2,670	2,113	175	200	127	106	6	2,727		2,727	2,414	270	169	109	99	4	3,065	2,414	270	169	109	99	4	3,065
1-2pm	2,113	175	200	127	106	6	2,727	2,414	270	169	109	99	4	3,065		3,065	2,685	226	103	53	46	4	3,117	2,685	226	103	53	46	4	3,117
2-3pm	2,414	270	169	109	99	4	3,065	2,685	226	103	53	46	4	3,117		3,117	2,719	283	85	27	42	6	3,162	2,719	283	85	27	42	6	3,162
3-4pm	2,685	226	103	53	46	4	3,117	2,719	283	85	27	42	6	3,162		3,162	2,739	300	160	25	39	9	3,272	2,739	300	160	25	39	9	3,272
4-5pm	2,719	283	85	27	42	6	3,162	2,739	300	160	25	39	9	3,272		3,272	2,739	300	160	25	39	9	3,272	2,739	300	160	25	39	9	3,272
5-6pm	2,739	300	160	25	39	9	3,272	2,739	300	160	25	39	9	3,272		3,272	2,739	300	160	25	39	9	3,272	2,739	300	160	25	39	9	3,272
6-7pm	2,759	249	99	19	35	6	3,167	2,759	249	99	19	35	6	3,167		3,167	2,759	249	99	19	35	6	3,167	2,759	249	99	19	35	6	3,167
7-8pm	2,486	249	77	11	31	7	2,861	2,486	249	77	11	31	7	2,861		2,861	2,486	249	77	11	31	7	2,861	2,486	249	77	11	31	7	2,861
8-9pm	2,265	215	62	6	29	3	2,580	2,265	215	62	6	29	3	2,580		2,580	2,265	215	62	6	29	3	2,580	2,265	215	62	6	29	3	2,580
9-10pm	1,981	170	61	2	54	1	2,269	1,981	170	61	2	54	1	2,269		2,269	1,981	170	61	2	54	1	2,269	1,981	170	61	2	54	1	2,269
10-11pm	1,865	211	57	1	42	4	2,180	1,865	211	57	1	42	4	2,180		2,180	1,865	211	57	1	42	4	2,180	1,865	211	57	1	42	4	2,180
11-12pm	1,236	194	30	4	33	8	1,505	1,236	194	30	4	33	8	1,505		1,505	1,236	194	30	4	33	8	1,505	1,236	194	30	4	33	8	1,505
Totals	44,269	4,903	3,492	810	2,299	215	55,988	44,269	4,903	3,492	810	2,299	215	55,988		55,988	44,269	4,903	3,492	810	2,299	215	55,988	44,269	4,903	3,492	810	2,299	215	55,988
7-10am	6,581	499	1,030	150	527	29	8,816	6,581	499	1,030	150	527	29	8,816		8,816	6,581	499	1,030	150	527	29	8,816	6,581	499	1,030	150	527	29	8,816
10am-1pm	5,725	728	804	111	357	34	7,759	5,725	728	804	111	357	34	7,759		7,759	5,725	728	804	111	357	34	7,759	5,725	728	804	111	357	34	7,759
1-4pm	7,212	671	472	289	251	14	8,909	7,212	671	472	289	251	14	8,909		8,909	7,212	671	472	289	251	14	8,909	7,212	671	472	289	251	14	8,909
4-7pm	8,217	832	344	71	116	21	9,601	8,217	832	344	71	116	21	9,601		9,601	8,217	832	344	71	116	21	9,601	8,217	832	344	71	116	21	9,601
7am-7pm	27,735	2,730	2,650	621	1,251	98	35,085	27,735	2,730	2,650	621	1,251	98	35,085		35,085	27,735	2,730	2,650	621	1,251	98	35,085	27,735	2,730	2,650	621	1,251	98	35,085
6-10am	9,181	672	1,275	293	817	56	12,294	9,181	672	1,275	293	817	56	12,294		12,294	9,181	672	1,275	293	817	56	12,294	9,181	672	1,275	293	817	56	12,294
3-7pm	10,902	1,058	447	124	162	25	12,718	10,902	1,058	447	124	162	25	12,718		12,718	10,902	1,058	447	124	162	25	12,718	10,902	1,058	447	124	162	25	12,718
8am-7pm	30,335	2,903	2,895	764	1,541	125	38,563	30,335	2,903	2,895	764	1,541	125	38,563		38,563	30,335	2,903	2,895	764	1,541	125	38,563	30,335	2,903	2,895	764	1,541	125	38,563

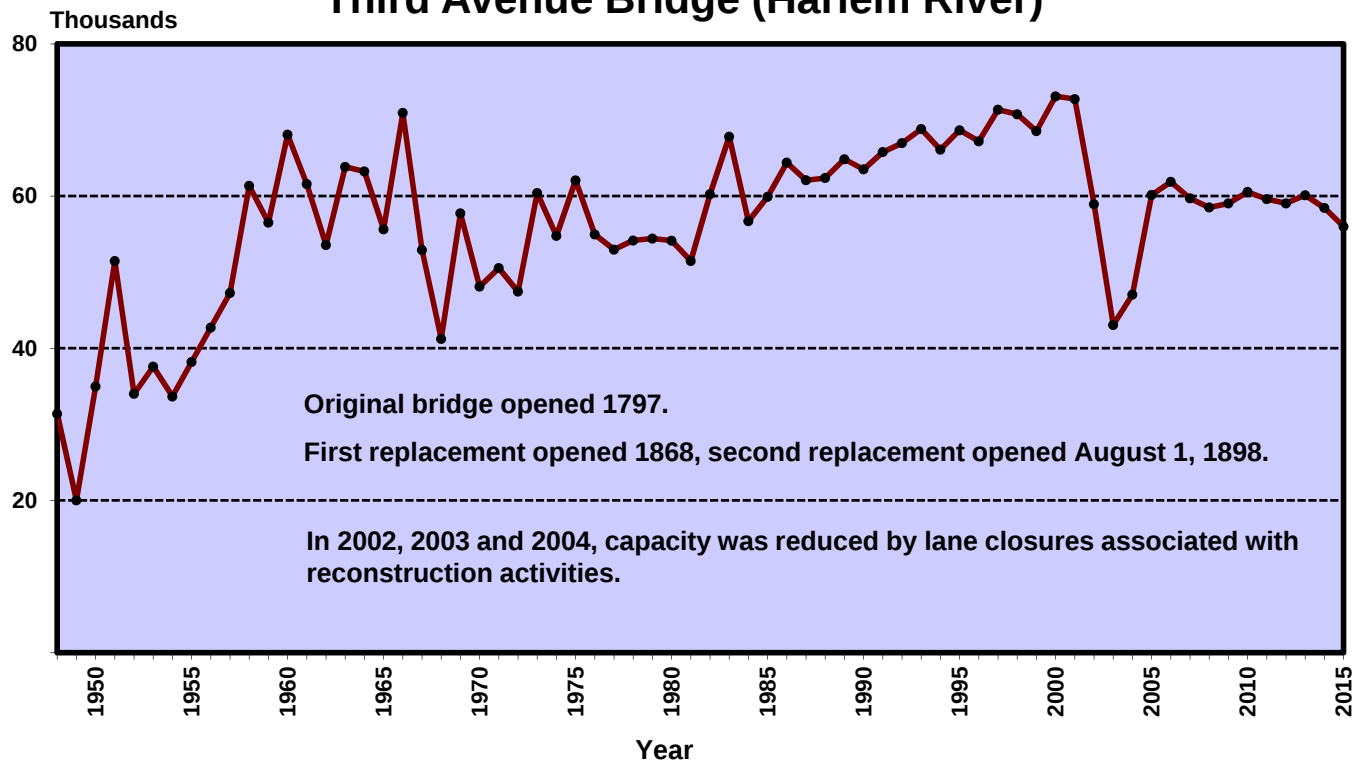
Based on October 2013 Classification Survey Data.

**** Peak Volumes**

Hourly Vehicular Volumes Third Avenue Bridge (Harlem River) ~ 2015



Average Daily Traffic Volumes Third Avenue Bridge (Harlem River)



Hourly Vehicular Volumes

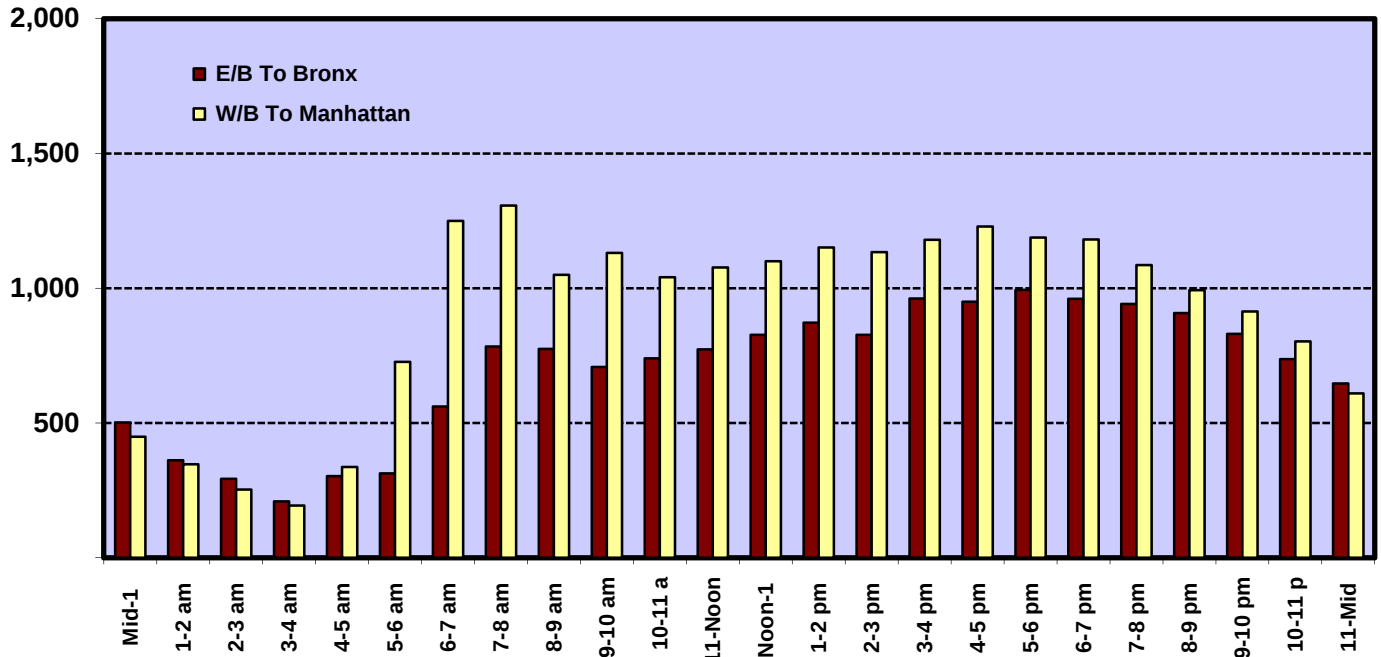
University Heights Bridge - 2015

Westbound to Manhattan														
FHWA Classes ▶	Commercial Vans,													
	Autos, Motorcycles				Panel Trucks, Pickups,				Taxis, Liveries, Limos					
	SUVs, Family Vans	1, 2, 3	2	2 & 3	Buses	Single Unit Trucks	Multiple Unit Trucks	Police, Fleet Vehicles	8 - 13	5 - 7	8 - 13	Multiple Unit Trucks	Total Vehicles	
12-1am	426	388	40	6	6	9	0	449	951					
1-2am	323	268	57	11	1	10	0	347	709					
2-3am	261	182	39	11	2	19	0	253	546					
3-4am	168	179	4	3	4	4	0	194	403					
4-5am	250	291	22	10	1	13	0	337	640					
5-6am	268	613	49	38	8	17	2	727	1,040					
6-7am	428	1,002	75	80	66	25	2	1,250	1,811					
7-8am	635	1,099	56	54	49	47	2	1,307	2,091	**				
8-9am	601	862	66	63	17	39	3	1,050	1,825					
9-10am	487	829	109	97	26	60	10	1,131	1,839					
10-11am	538	784	107	73	13	62	2	1,041	1,781					
11-12am	593	877	53	63	20	57	7	1,077	1,850					
12-1pm	619	890	65	58	26	57	4	1,100	1,927					
1-2pm	691	891	104	73	36	46	1	1,151	2,023					
2-3pm	647	896	113	59	24	41	1	1,134	1,961					
3-4pm	755	997	61	49	33	38	2	1,180	2,142					
4-5pm	765	1,013	89	60	25	41	1	1,229	2,179					
5-6pm	801	977	107	67	18	19	0	1,188	2,182	**				
6-7pm	826	1,000	109	35	16	21	0	1,181	2,142					
7-8pm	729	887	131	37	15	16	0	1,086	2,028					
8-9pm	741	826	107	34	12	13	1	993	1,901					
9-10pm	746	782	94	21	11	6	0	914	1,745					
10-11pm	631	670	102	13	9	8	1	803	1,540					
11-12pm	563	508	69	16	4	12	1	610	1,257					
Totals	13,492	17,711	1,828	1,031	442	680	40	21,732	38,513					
7-10am	1,723	2,790	231	214	92	146	15	3,488	5,755					
10am-1pm	1,750	2,551	225	194	59	176	13	3,218	5,558					
1-4pm	2,093	2,784	278	181	93	125	4	3,465	6,126					
4-7pm	2,392	2,990	305	162	59	81	1	3,598	6,503					
7am-7pm	7,958	11,115	1,039	751	303	528	33	13,769	23,942					
6-10am	2,151	3,792	306	294	158	171	17	4,738	7,566					
3-7pm	3,147	3,987	366	211	92	119	3	4,778	8,645					
6am-7pm	8,386	12,117	1,114	831	369	553	35	15,019	25,753					

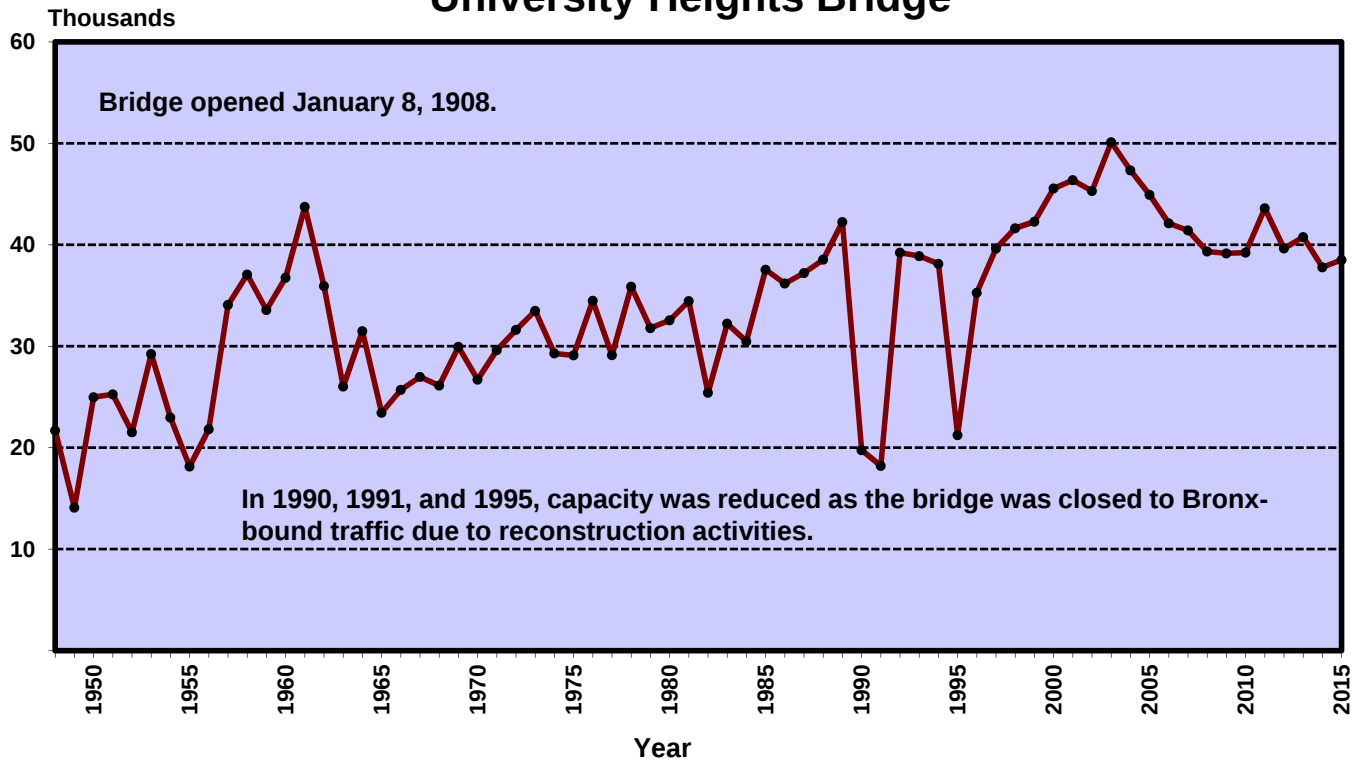
Based on October 2013 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes University Heights Bridge ~ 2015



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



Hourly Vehicular Volumes

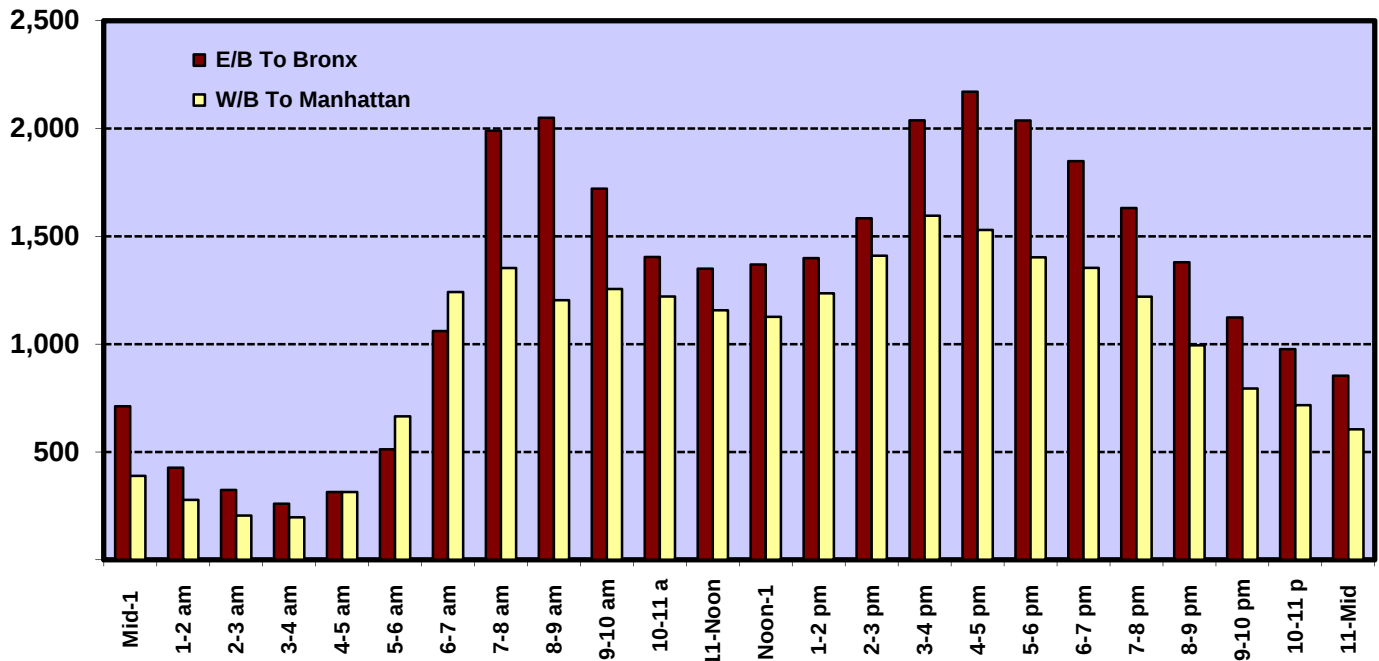
Washington Bridge - 2015

Eastbound to Bronx										Westbound to Manhattan											
FHWA Classes ▶	Commercial Vans, Panel Trucks, Pickups,					Autos, Motorcycles					Commercial Vans, Panel Trucks, Pickups,					Autos, Motorcycles					2-way Grand Totals
	Taxis, Liveries, Limos	Police, Fleet Vehicles	Buses	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	Taxis, Liveries, Limos	Police, Fleet Vehicles	Buses	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	Taxis, Liveries, Limos	Police, Fleet Vehicles	Buses	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles			
12-1am	649	18	14	1	0	712	30	27	9	18	2	1	332	27	9	18	2	1	389	1,101	
1-2am	383	6	10	2	0	427	26	25	6	7	0	0	240	25	6	7	0	0	278	705	
2-3am	287	8	3	7	0	324	19	14	6	3	0	2	180	14	6	3	0	2	205	529	
3-4am	218	11	3	13	4	260	218	13	7	4	1	1	171	13	7	4	1	1	197	457	
4-5am	280	15	2	3	0	314	280	17	16	5	8	12	256	17	16	5	8	12	314	628	
5-6am	448	22	18	16	0	512	448	18	22	24	15	23	563	18	22	24	15	23	665	1,177	
6-7am	931	47	37	19	5	1,061	931	43	58	134	12	7	988	43	58	134	12	7	1,242	2,303	
7-8am	1,820	57	71	10	0	1,990	1,820	59	67	70	16	5	1,136	59	67	70	16	5	1,353	3,343	
8-9am	1,787	78	120	24	5	2,050	1,787	57	83	61	24	5	974	57	83	61	24	5	1,204	3,254	
9-10am	1,485	97	60	40	5	1,721	1,485	36	116	62	20	7	1,015	36	116	62	20	7	1,256	2,977	
10-11am	1,200	96	39	37	4	1,404	1,200	33	110	42	31	6	999	33	110	42	31	6	1,221	2,625	
11-12am	1,130	94	31	43	9	1,350	1,130	33	66	37	29	15	977	33	66	37	29	15	1,157	2,507	
12-1pm	1,149	98	39	39	4	1,369	1,149	40	71	46	27	13	930	40	71	46	27	13	1,127	2,496	
1-2pm	1,181	91	57	33	1	1,399	1,181	29	99	68	34	11	995	29	99	68	34	11	1,236	2,635	
2-3pm	1,360	80	53	44	4	1,584	1,360	44	78	56	24	5	1,203	44	78	56	24	5	1,410	2,994	
3-4pm	1,728	138	84	45	1	2,038	1,728	47	72	57	19	9	1,392	47	72	57	19	9	1,596	3,634	
4-5pm	1,840	161	105	21	2	2,171	1,840	44	89	49	25	4	1,319	44	89	49	25	4	1,530	3,701	
5-6pm	1,774	132	65	27	2	2,037	1,774	36	76	48	10	1	1,232	36	76	48	10	1	1,403	3,440	
6-7pm	1,650	95	49	17	2	1,849	1,650	24	54	37	8	0	1,231	24	54	37	8	0	1,354	3,203	
7-8pm	1,485	65	33	19	2	1,631	1,485	24	26	33	1	3	1,133	24	26	33	1	3	1,220	2,851	
8-9pm	1,225	50	40	12	1	1,380	1,225	15	17	41	1	2	919	15	17	41	1	2	995	2,375	
9-10pm	969	39	29	4	1	1,124	969	24	3	29	1	0	737	24	3	29	1	0	794	1,918	
10-11pm	874	41	29	5	1	977	874	15	7	20	3	11	661	15	7	20	3	11	717	1,694	
11-12pm	712	20	19	1	1	854	712	19	6	19	0	1	560	19	6	19	0	1	605	1,459	
Totals	26,565	882	1,547	1,008	482	30,538	26,565	736	1,164	970	311	144	20,143	736	1,164	970	311	144	23,468	54,006	
7-10am	5,092	102	232	251	74	5,761	5,092	152	266	193	60	17	3,125	152	266	193	60	17	3,813	9,574	
10am-1pm	3,479	111	288	109	119	4,123	3,479	106	247	125	87	34	2,906	106	247	125	87	34	3,505	7,628	
1-4pm	4,269	121	309	194	122	5,021	4,269	120	249	181	77	25	3,590	120	249	181	77	25	4,242	9,263	
4-7pm	5,264	115	388	219	65	6,057	5,264	104	219	134	43	5	3,782	104	219	134	43	5	4,287	10,344	
7am-7pm	18,104	449	1,217	773	380	20,962	18,104	482	981	633	267	81	13,403	482	981	633	267	81	15,847	36,809	
6-10am	6,023	124	279	288	93	6,822	6,023	195	324	327	72	24	4,113	195	324	327	72	24	5,055	11,877	
3-7pm	6,992	157	526	303	110	8,095	6,992	151	291	191	62	14	5,174	151	291	191	62	14	5,883	13,978	
6am-7pm	19,035	471	1,264	810	399	22,023	19,035	525	1,039	767	279	88	14,391	525	1,039	767	279	88	17,089	39,112	

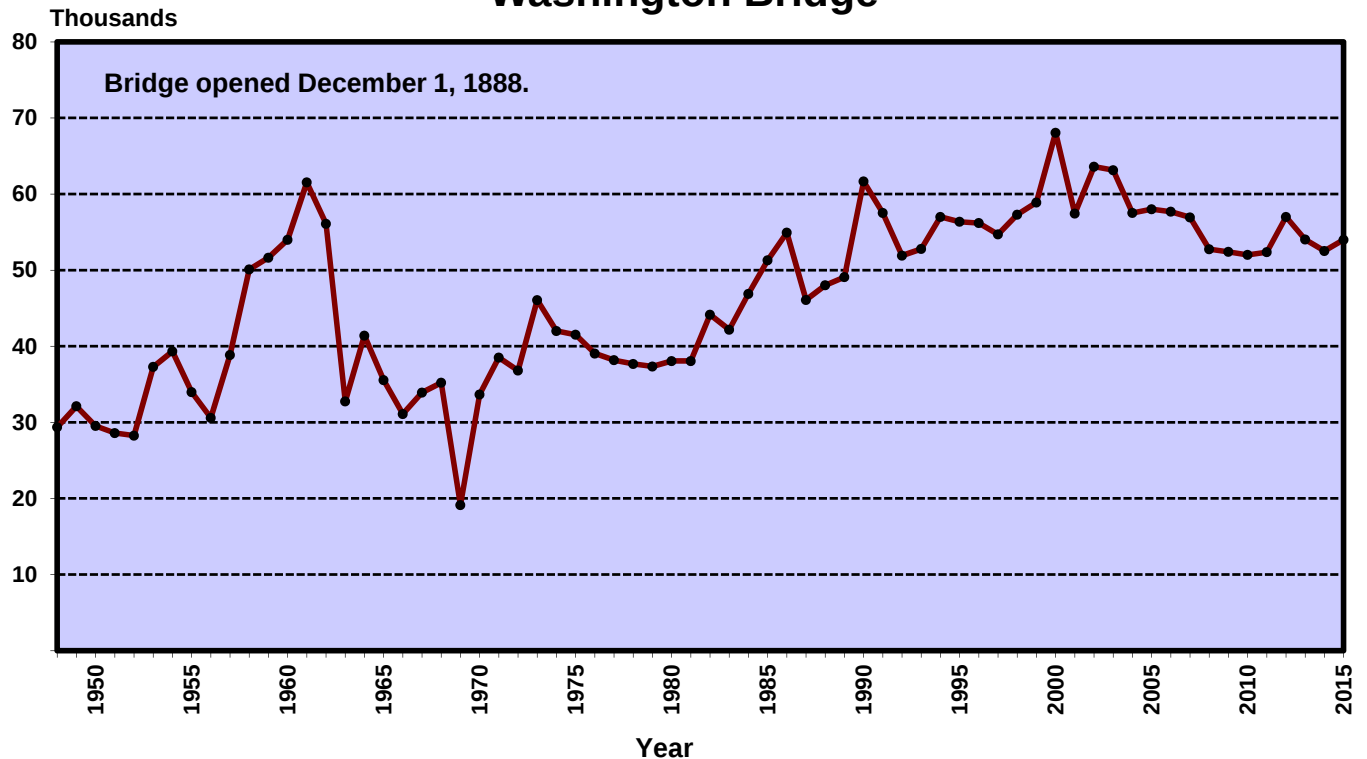
Based on October 2015 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Washington Bridge ~ 2015



Average Daily Traffic Volumes ~ Total of Both Directions Washington Bridge



Hourly Vehicular Volumes

Willis Avenue Bridge - 2015

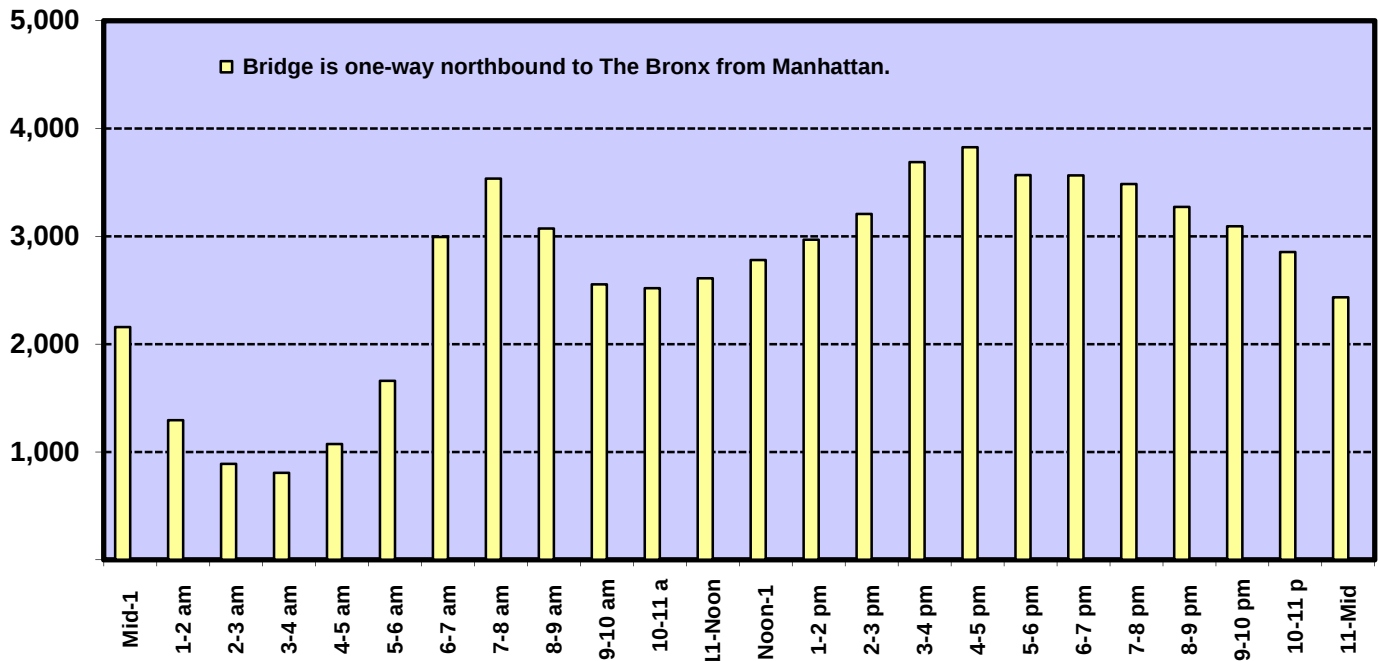
Northbound to Bronx

Southbound to Manhattan

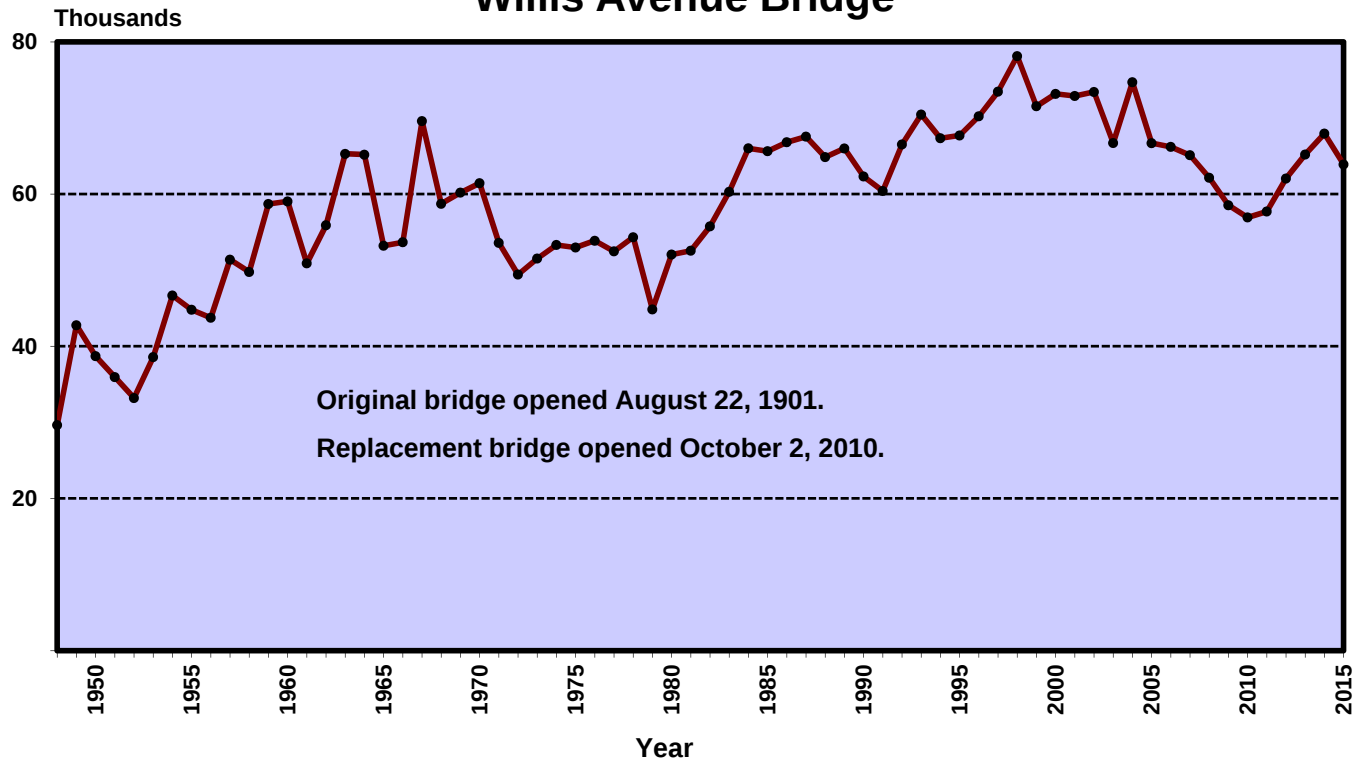
Based on October 2013 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Willis Avenue Bridge ~ 2015



Average Daily Traffic Volumes Willis Avenue Bridge



Hourly Vehicular Volumes

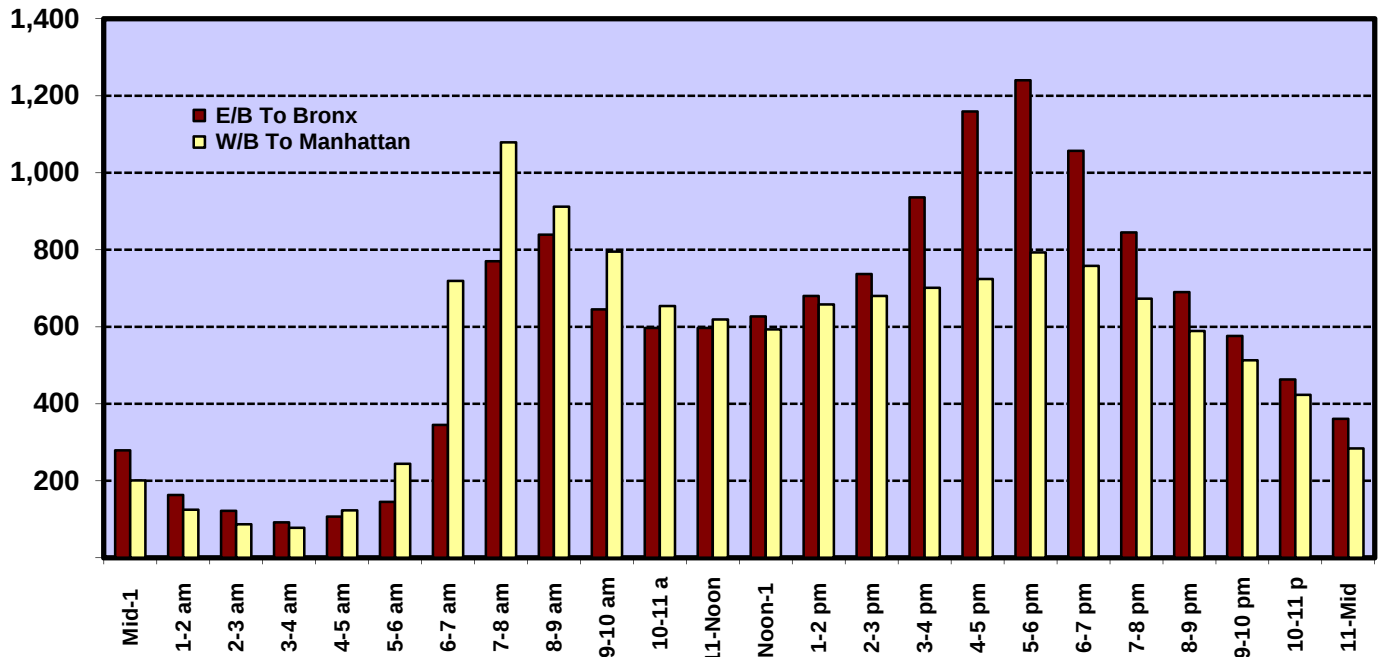
145th Street Bridge - 2015

Eastbound to Bronx											Westbound to Manhattan										
FHWA Classes ▶	Commercial Vans,						Total Vehicles	Commercial Vans,						Total Vehicles							
	Autos, Motorcycles SUVs, Family Vans	Taxis, Liveries, Limos	Panel Trucks, Pickups, Police, Fleet Vehicles	Buses	Single Unit Trucks	Multiple Unit Trucks		Autos, Motorcycles SUVs, Family Vans	Taxis, Liveries, Limos	Panel Trucks, Pickups, Police, Fleet Vehicles	Buses	Single Unit Trucks	Multiple Unit Trucks								
	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13		1, 2, 3	2	2 & 3	4	5 - 7	8 - 13								
12-1am	189	76	5	8	0	1	279	130	58	5	6	2	0	201							
1-2am	69	81	7	4	1	1	163	65	57	1	1	1	0	125							
2-3am	50	66	0	2	4	0	122	32	52	1	0	2	0	87							
3-4am	40	43	1	1	4	3	92	34	35	4	3	1	1	170							
4-5am	46	43	12	2	2	2	107	53	41	15	4	7	3	230							
5-6am	89	42	5	3	6	0	145	162	49	9	9	13	2	244							
6-7am	239	66	13	20	6	1	345	366	124	39	108	73	9	719							
7-8am	551	159	27	22	10	1	770	664	221	78	57	40	19	1,079							
8-9am	567	146	44	60	19	3	839	542	185	120	14	35	16	912							
9-10am	367	197	32	18	27	4	645	485	163	77	16	48	6	795							
10-11am	331	174	47	11	32	2	597	393	140	66	18	33	4	654							
11-12am	351	143	58	12	28	5	597	371	149	58	11	23	7	619							
12-1pm	342	146	75	12	45	7	627	385	105	70	13	13	7	593							
1-2pm	410	132	68	15	53	2	680	410	125	58	21	40	4	658							
2-3pm	440	167	64	13	50	3	737	475	102	39	38	22	4	680							
3-4pm	590	185	67	59	34	1	936	543	86	36	29	5	2	701							
4-5pm	695	190	116	117	36	5	1,159	611	68	21	18	4	2	724							
5-6pm	863	244	68	32	32	1	1,240	621	128	21	10	12	1	793							
6-7pm	889	79	48	12	26	3	1,057	576	147	15	8	11	1	758							
7-8pm	699	85	39	11	10	1	845	559	83	17	8	4	2	673							
8-9pm	601	38	28	11	12	0	690	481	84	11	6	5	2	589							
9-10pm	372	180	16	6	2	0	576	387	97	14	8	6	1	513							
10-11pm	298	139	13	8	5	0	463	313	88	9	7	5	1	423							
11-12pm	240	97	12	6	6	0	361	222	50	6	2	1	3	284							
Totals	9,328	2,918	865	465	450	46	14,072	8,880	2,437	790	415	406	97	13,025							
7-10am	1,485	502	103	100	56	8	2,254	1,691	569	275	87	123	41	2,786							
10am-1pm	1,024	463	180	35	105	14	1,821	1,149	394	194	42	69	18	1,866							
1-4pm	1,440	484	199	87	137	6	2,353	1,428	313	133	88	67	10	2,039							
4-7pm	2,447	513	232	161	94	9	3,456	1,808	343	57	36	27	4	2,275							
7am-7pm	6,396	1,962	714	383	392	37	9,884	6,076	1,619	659	253	286	73	8,966							
6-10am	1,724	568	116	120	62	9	2,599	2,057	693	314	195	196	50	3,505							
3-7pm	3,037	698	299	220	128	10	4,392	2,351	429	93	65	32	6	2,976							
6am-7pm	6,635	2,028	727	403	398	38	10,229	6,442	1,743	698	361	359	82	9,685							
			</																		

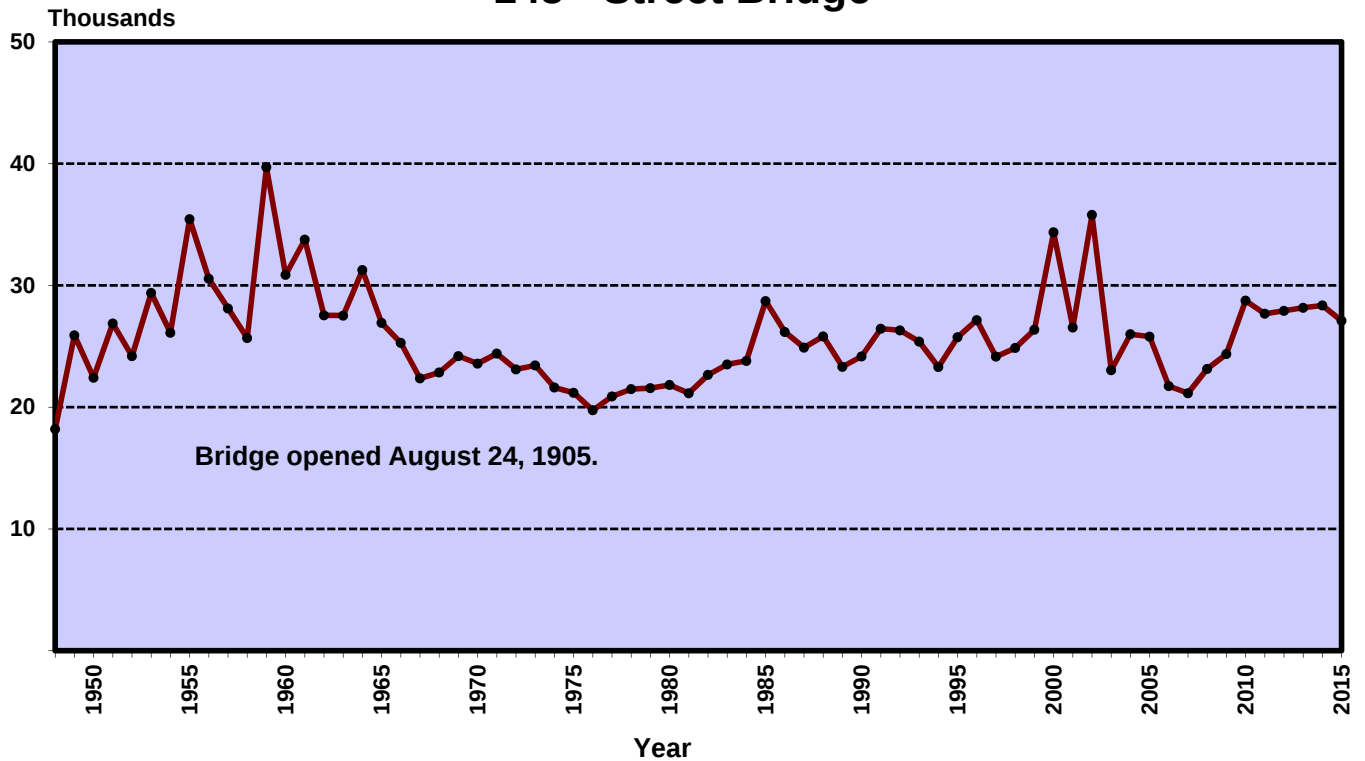
Based on October 2013 Classification Survey Data.

** Peak Volumes

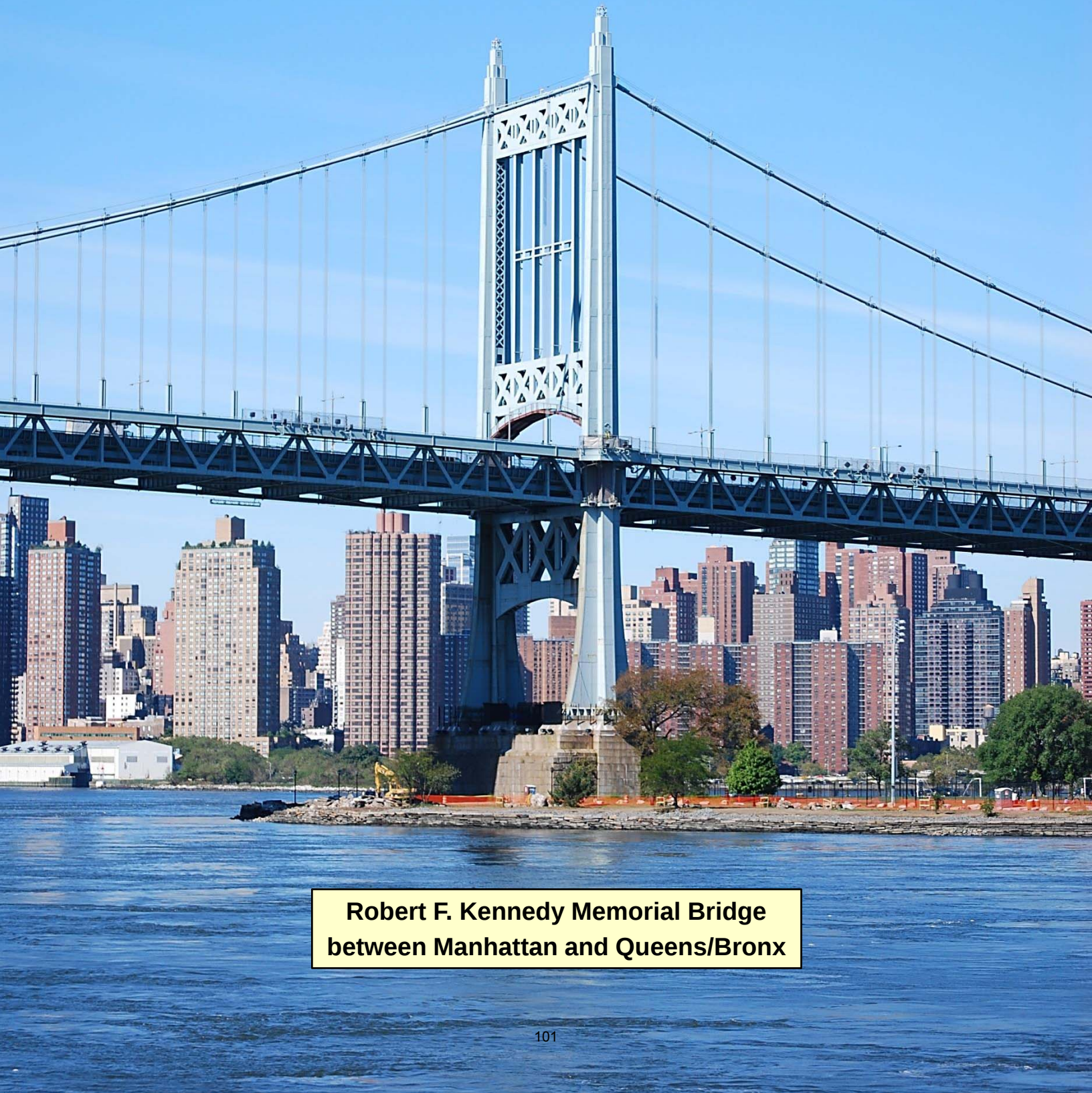
Hourly Vehicular Volumes 145th Street Bridge ~ 2015



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



MTABT Facilities



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

**MTABT Manhattan Facilities ~ Average Daily Traffic Volumes
1948 - 2015**

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

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

Hourly Vehicular Volumes

Metropolitan Transportation Authority Bridges & Tunnels

2015

	Henry Hudson Bridge		Hugh L. Carey Tunnel (Brooklyn-BatteryTunnel)		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	119	430	200	703	480	871	684	523	1,483	2,527
1-2am	58	167	101	319	201	440	229	250	589	1,176
2-3am	35	86	68	157	107	263	129	185	339	691
3-4am	46	45	71	101	139	220	133	192	389	558
4-5am	109	56	223	104	315	455	285	460	932	1,075
5-6am	705	118	912	175	1,249	934	1,276	1,001	4,142	2,228
6-7am	2,630	516	2,501	425	2,832	1,267	3,163	1,476	11,126	3,684
7-8am	2,857 **	1,371	3,110 **	744	3,754	1,231	3,549	1,868	13,270 **	5,214
8-9am	2,753	1,992	3,025	855	4,082 **	1,283	3,048	2,060	12,908	6,190
9-10am	2,224	1,307	2,739	841	3,567	1,271	3,065	1,993	11,595	5,412
10-11am	1,858	1,088	1,932	802	2,862	1,330	2,579	1,799	9,231	5,019
11-12am	1,760	1,134	1,610	883	2,603	1,931	2,490	1,841	8,463	5,789
12-1pm	1,577	1,211	1,335	1,082	2,353	2,150	2,324	1,960	7,589	6,403
1-2pm	1,490	1,395	1,428	1,202	2,307	2,498	2,864	2,433	8,089	7,528
2-3pm	1,685	1,709	1,542	1,541	2,402	2,543	3,167	2,664	8,796	8,457
3-4pm	2,241	2,082	1,524	2,090	2,621	2,695	3,443	2,898	9,829	9,765
4-5pm	2,390	2,551	1,543	2,370	2,681	2,621	3,399	3,024 **	10,013	10,566
5-6pm	2,408	2,711 **	1,599	2,518 **	2,749	2,749 **	3,558 **	2,827	10,314	10,805 **
6-7pm	2,211	2,654	1,475	2,495	2,606	2,411	3,388	2,537	9,680	10,097
7-8pm	1,312	2,129	1,278	2,304	2,364	2,294	2,643	2,217	7,597	8,944
8-9pm	863	1,585	820	1,769	1,823	2,323	1,921	2,067	5,427	7,744
9-10pm	678	1,429	577	1,418	1,516	2,303	1,604	1,643	4,375	6,793
10-11pm	475	1,207	516	1,033	1,137	1,264	1,343	1,438	3,471	4,942
11-12pm	232	865	431	808	859	1,261	1,241	843	2,763	3,777
Totals	32,716	29,838	30,560	26,739	47,609	38,608	51,525	40,199	162,410	135,384
7-10am	7,834	4,670	8,874	2,440	11,403	3,785	9,662	5,921	37,773	16,816
10am-1pm	5,195	3,433	4,877	2,767	7,818	5,411	7,393	5,600	25,283	17,211
1-4pm	5,416	5,186	4,494	4,833	7,330	7,736	9,474	7,995	26,714	25,750
4-7pm	7,009	7,916	4,617	7,383	8,036	7,781	10,345	8,388	30,007	31,468
7am-7pm	25,454	21,205	22,862	17,423	34,587	24,713	36,874	27,904	119,777	91,245
6-10am	10,464	5,186	11,375	2,865	14,235	5,052	12,825	7,397	48,899	20,500
3-7pm	9,250	9,998	6,141	9,473	10,657	10,476	13,788	11,286	39,836	41,233
6am-7pm	28,084	21,721	25,363	17,848	37,419	25,980	40,037	29,380	130,903	94,929

** Peak Volumes

Hourly Vehicular Volumes

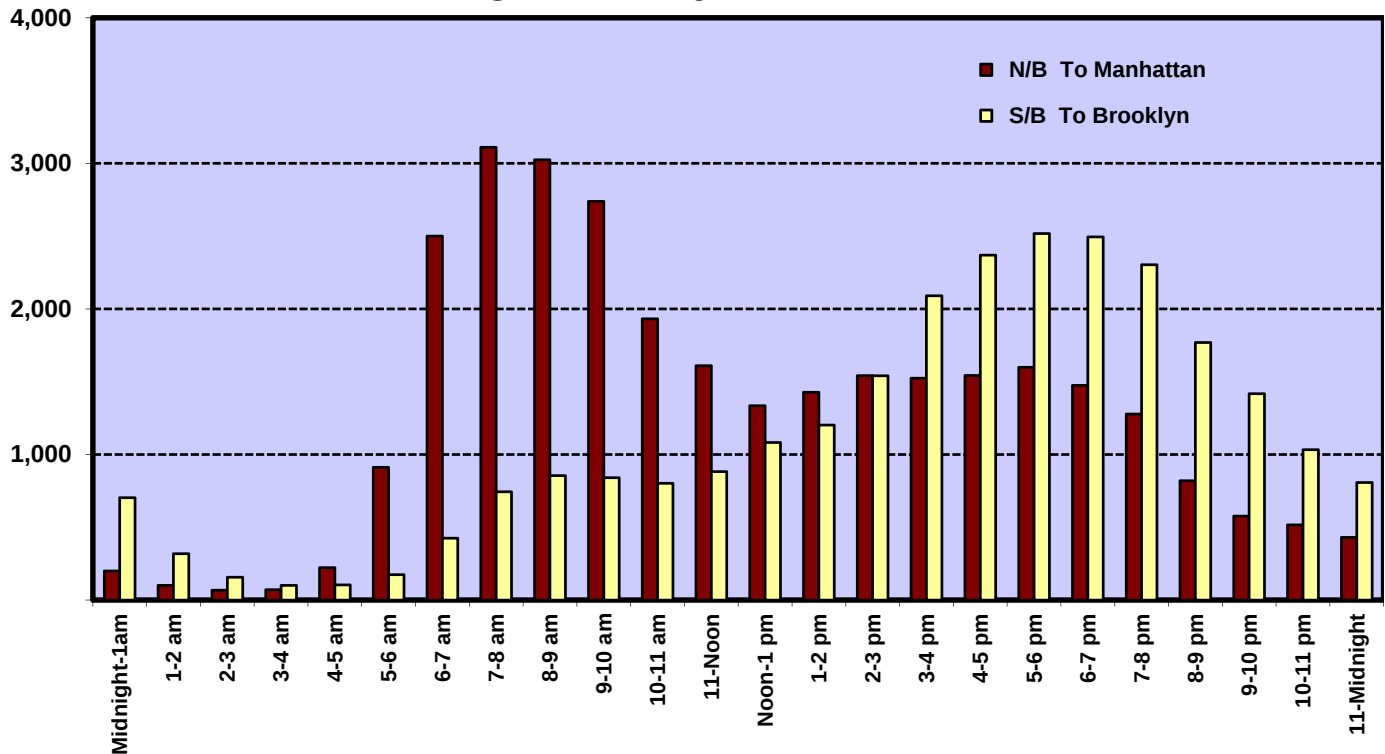
Hugh L. Carey Tunnel - 2015

Southbound to Brooklyn												
FHWA Classes ▲	Commuter Vans					Commercial Vans					2-Way Grand Totals	
	Autos & Motorcycles		Commercial Vans		Single Unit Trucks	Tractor Trailers	Total Vehicles					
	1 & 2	3	4	5 - 7				8 - 13				
12-1am	172	6	11	11	0	200	14	42	7	0	703	903
1-2am	89	4	7	1	0	101	0	13	1	0	319	420
2-3am	61	0	4	3	0	68	2	4	2	0	157	225
3-4am	60	1	7	3	0	71	0	0	2	0	101	172
4-5am	143	8	55	17	0	223	0	6	2	0	104	327
5-6am	821	9	73	9	0	912	2	12	5	0	175	1,087
6-7am	2,234	15	224	28	0	2,501	7	89	13	0	425	2,926
7-8am	2,730	17	322	41	0	3,110	8	180	20	0	744	3,854
8-9am	2,645	15	329	36	0	3,025	7	203	21	0	855	3,880
9-10am	2,500	20	178	41	0	2,739	8	165	23	0	841	3,580
10-11am	1,758	23	98	52	1	1,932	9	75	17	0	802	2,734
11-12am	1,492	14	66	37	1	1,610	8	60	18	0	883	2,493
12-1pm	1,229	14	64	28	0	1,335	12	55	19	0	1,082	2,417
1-2pm	1,290	13	88	37	0	1,428	13	78	27	0	1,202	2,630
2-3pm	1,385	11	117	28	1	1,542	15	88	27	0	1,541	3,083
3-4pm	1,361	6	144	13	0	1,524	14	145	26	0	2,090	3,614
4-5pm	1,344	5	182	11	1	1,543	7	194	20	0	2,370	3,913
5-6pm	1,425	3	161	7	3	1,599	6	257	14	1	2,518	4,117
6-7pm	1,370	4	92	8	1	1,475	6	185	11	1	2,495	3,970
7-8pm	1,214	1	59	4	0	1,278	6	117	9	0	2,304	3,582
8-9pm	778	5	31	6	0	820	8	99	10	0	1,769	2,589
9-10pm	549	1	25	2	0	577	4	59	14	0	1,418	1,995
10-11pm	489	1	23	3	0	516	5	29	8	0	1,033	1,549
11-12pm	382	0	36	13	0	431	6	32	8	0	808	1,239
Totals	27,521	196	2,396	439	8	30,560	167	2,187	324	2	26,739	57,299
7-10am	7,875	52	829	118	0	8,874	23	548	64	0	2,440	11,314
10am-1pm	4,479	51	228	117	2	4,877	29	190	54	0	2,767	7,644
1-4pm	4,036	30	349	78	1	4,494	42	311	80	0	4,833	9,327
4-7pm	4,139	12	435	26	5	4,617	19	636	45	2	7,383	12,000
7am-7pm	20,529	145	1,841	339	8	22,862	113	1,685	243	2	17,423	40,285
6-10am	10,109	67	1,053	146	0	11,375	30	637	77	0	2,865	14,240
3-7pm	5,500	18	579	39	5	6,141	33	781	71	2	9,473	15,614
7am-7pm	22,763	160	2,065	367	8	25,363	120	1,774	256	2	17,848	43,211

Based on May 2006 Classification Survey Data.

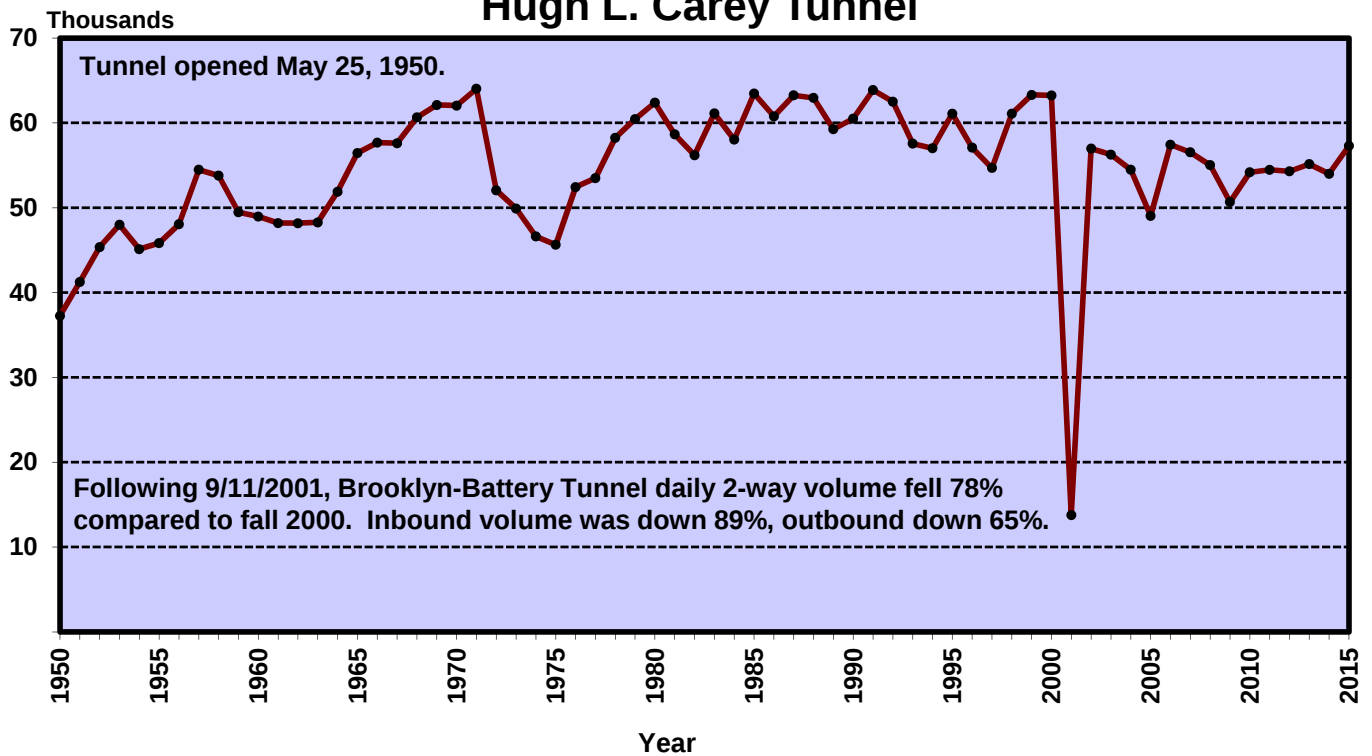
** Peak Volumes

Hourly Vehicular Volumes Hugh L. Carey Tunnel ~ 2015



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

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



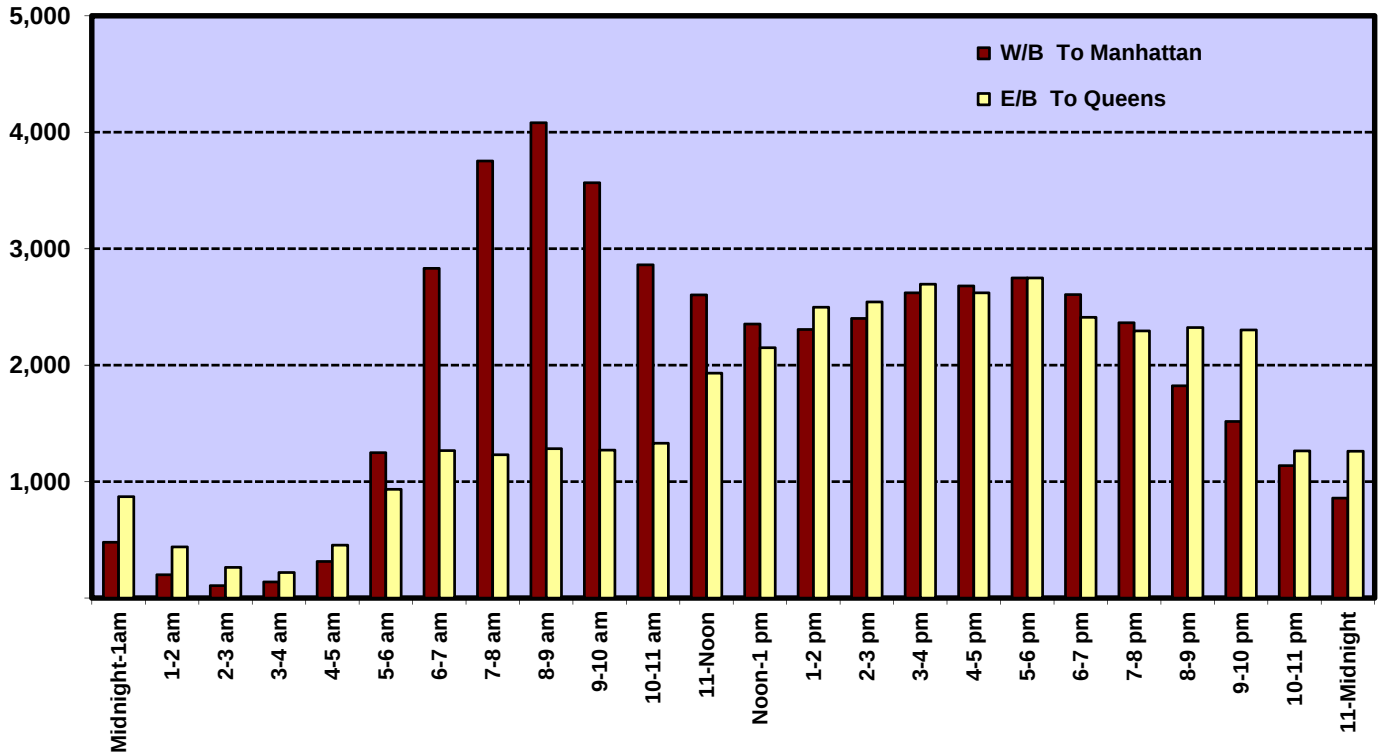
Hourly Vehicular Volumes Queens-Midtown Tunnel - 2015

Westbound to Manhattan													Eastbound to Queens													2-Way Grand Totals
FHWA Classes ▲	Commuter Vans					Single Unit Trucks	Tractor Trailers	Total Vehicles	Commuter Vans					Single Unit Trucks	Tractor Trailers	Total Vehicles										
	Autos & Motorcycles	Pickups	Large SUVs	Buses					Autos & Motorcycles	Pickups	Large SUVs	Buses														
	1 & 2	3	4	5 - 7	8 - 13						1 & 2	3	4	5 - 7	8 - 13											
12-1am	464	2	3	11	0	480					840	8	1	22	0	871		1,351								
1-2am	192	2	0	7	0	201					419	4	0	17	0	440		641								
2-3am	99	1	1	6	0	107					247	5	0	11	0	263		370								
3-4am	125	1	3	10	0	139					197	10	0	13	0	220		359								
4-5am	253	6	17	39	0	315					373	32	4	44	2	455		770								
5-6am	1,088	13	62	86	0	1,249					832	24	14	64	0	934		2,183								
6-7am	2,420	99	179	134	0	2,832					1,148	35	49	35	0	1,267		4,099								
7-8am	3,236	133	237	147	1	3,754					1,095	47	58	31	0	1,231		4,985								
8-9am	3,670	115	144	153	0	4,082	**				1,121	41	77	44	0	1,283		5,365								
9-10am	3,216	90	161	97	3	3,567					1,115	48	65	43	0	1,271		4,838								
10-11am	2,598	80	96	86	2	2,862					1,153	54	64	59	0	1,330		4,192								
11-12am	2,413	65	61	64	0	2,603					1,715	65	83	68	0	1,931		4,534								
12-1pm	2,182	36	54	81	0	2,353					1,925	69	59	97	0	2,150		4,503								
1-2pm	2,103	66	69	69	0	2,307					2,219	113	63	103	0	2,498		4,805								
2-3pm	2,180	58	110	54	0	2,402					2,357	73	44	69	0	2,543		4,945								
3-4pm	2,331	54	170	66	0	2,621					2,492	60	62	81	0	2,695		5,316								
4-5pm	2,451	33	163	34	0	2,681					2,417	72	61	71	0	2,621	**	5,302								
5-6pm	2,582	18	126	23	0	2,749					2,593	44	70	42	0	2,749	**	5,498								
6-7pm	2,490	18	73	25	0	2,606					2,291	29	55	36	0	2,411		5,017								
7-8pm	2,278	15	54	17	0	2,364					2,189	22	62	21	0	2,294		4,658								
8-9pm	1,734	23	32	34	0	1,823					2,208	27	43	45	0	2,323		4,146								
9-10pm	1,457	14	18	27	0	1,516					2,210	23	24	45	1	2,303		3,819								
10-11pm	1,088	8	12	29	0	1,137					1,219	13	7	25	0	1,264		2,401								
11-12pm	833	7	4	15	0	859					1,227	4	4	26	0	1,261		2,120								
Totals	43,483	957	1,849	1,314	6	47,609					35,602	922	969	1,112	3	38,608		86,217								
7-10am	10,122	338	542	397	4	11,403					3,331	136	200	118	0	3,785		15,188								
10am-1pm	7,193	181	211	231	2	7,818					4,793	188	206	224	0	5,411		13,229								
1-4pm	6,614	178	349	189	0	7,330					7,068	246	169	253	0	7,736		15,066								
4-7pm	7,523	69	362	82	0	8,036					7,301	145	186	149	0	7,781		15,817								
7am-7pm	31,452	766	1,464	899	6	34,587					22,493	715	761	744	0	24,713		59,300								
6-10am	12,542	437	721	531	4	14,235					4,479	171	249	153	0	5,052		19,287								
3-7pm	9,854	123	532	148	0	10,657					9,793	205	248	230	0	10,476		21,133								
7am-7pm	33,872	865	1,643	1,033	6	37,419					23,641	750	810	779	0	25,980		63,399								

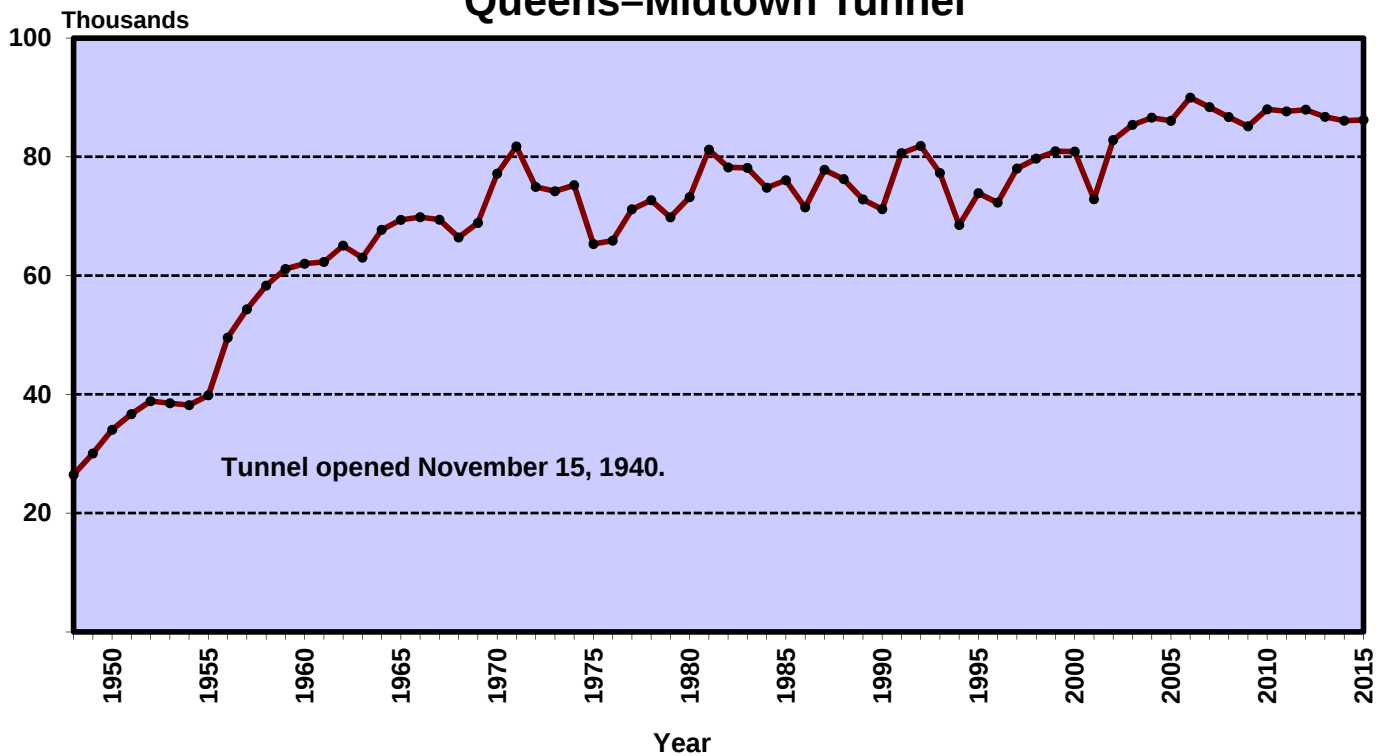
Based on May 2006 Classification Survey Data.

** Peak Volumes

Hourly Vehicular Volumes Queens-Midtown Tunnel ~ 2015



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



Hourly Vehicular Volumes

Robert F. Kennedy Memorial Bridge Manhattan Plaza - 2015

Eastbound to Queens & Bronx

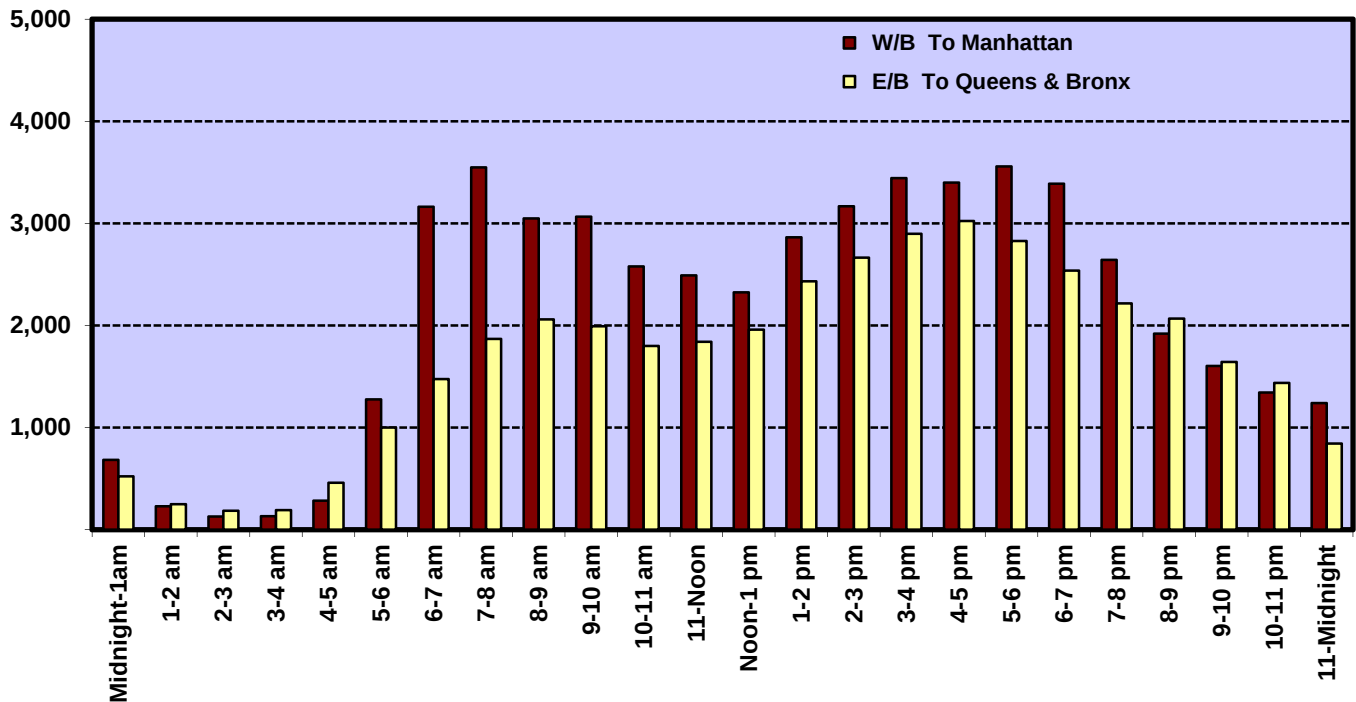
Westbound to Manhattan

FHWA Classes ▲	Autos, Motorcycles							Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles							Total Vehicles		
	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles	Autos, Motorcycles	Taxis, Liveries, Limos	Police, Fleet Vehicles	Buses	Single Unit Trucks	Multiple Unit Trucks	Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles	Buses	Single Unit Trucks	Multiple Unit Trucks
12-1am	445	20	12	4	33	9	523	453	182	13	6	21	9	13	6	21	9
1-2am	180	13	5	2	44	6	250	165	40	3	2	11	8	3	2	11	8
2-3am	136	10	4	1	25	9	185	89	10	9	1	11	9	9	1	11	9
3-4am	137	10	11	1	23	10	192	96	7	7	0	12	11	7	0	12	11
4-5am	325	71	8	3	36	17	460	221	22	10	3	14	15	22	3	14	15
5-6am	717	114	30	8	78	54	1,001	1,022	83	43	12	74	42	83	12	74	42
6-7am	1,033	173	48	26	149	47	1,476	2,531	180	165	56	138	93	165	56	138	93
7-8am	1,331	180	116	43	144	54	1,868	2,708	268	236	86	157	94	236	86	157	94
8-9am	1,555	174	139	32	137	23	2,060	2,202	262	242	55	192	95	242	55	192	95
9-10am	1,491	164	129	19	141	49	1,993	2,152	369	216	40	179	109	216	40	179	109
10-11am	1,280	152	119	21	176	51	1,799	1,683	440	168	33	149	106	168	33	149	106
11-12am	1,251	196	132	12	192	58	1,841	1,694	415	128	30	125	98	128	30	125	98
12-1pm	1,390	210	131	13	178	38	1,960	1,543	367	124	36	152	102	124	36	152	102
1-2pm	1,679	295	170	18	223	48	2,433	1,941	371	212	42	177	121	212	42	177	121
2-3pm	1,877	332	166	34	216	39	2,664	2,225	489	176	48	138	91	176	48	138	91
3-4pm	2,088	313	214	43	214	26	2,898	2,491	539	174	52	119	68	174	52	119	68
4-5pm	2,235	296	231	55	185	22	3,024	2,467	509	205	54	114	50	205	54	114	50
5-6pm	2,317	201	155	20	116	18	2,827	2,697	536	143	47	93	42	143	47	93	42
6-7pm	2,091	174	126	24	99	23	2,537	2,703	490	88	26	57	24	88	26	57	24
7-8pm	1,859	110	111	32	78	27	2,217	2,101	406	43	31	38	24	43	31	38	24
8-9pm	1,742	127	80	27	42	49	2,067	1,554	268	38	16	28	17	38	16	28	17
9-10pm	1,400	124	46	19	34	20	1,643	1,259	284	16	17	15	13	16	17	15	13
10-11pm	1,230	99	28	10	59	12	1,438	930	358	14	9	16	16	14	9	16	16
11-12pm	726	45	26	7	29	10	843	764	409	18	10	19	21	18	10	19	21
Totals	30,515	3,603	2,237	474	2,651	719	40,199	37,691	7,304	2,491	712	2,049	1,278	2,491	712	2,049	1,278
7-10am	4,377	518	384	94	422	126	5,921	7,082	899	694	181	528	298	694	181	528	298
10am-1pm	3,921	558	382	46	546	147	5,600	4,920	1,222	420	99	426	306	420	99	426	306
1-4pm	5,644	940	550	95	653	113	7,995	6,657	1,399	562	142	434	280	562	142	434	280
4-7pm	6,643	671	512	99	400	63	8,388	7,867	1,535	436	127	264	116	436	127	264	116
7am-7pm	20,585	2,687	1,828	334	2,021	449	27,904	26,506	5,055	2,112	549	1,652	1,000	2,112	549	1,652	1,000
6-10am	5,410	691	432	120	571	173	7,397	9,593	1,079	859	237	666	391	859	237	666	391
3-7pm	8,731	984	726	142	614	89	11,286	10,358	2,074	610	179	383	184	610	179	383	184
6am-7pm	21,618	2,860	1,876	360	2,170	496	29,380	29,037	5,235	2,277	605	1,790	1,093	2,277	605	1,790	1,093
Totals	69,417	8,417	5,235	1,093	13,788	4,037	89,417	84,417	17,304	5,235	1,652	4,037	2,049	5,235	1,652	4,037	2,049

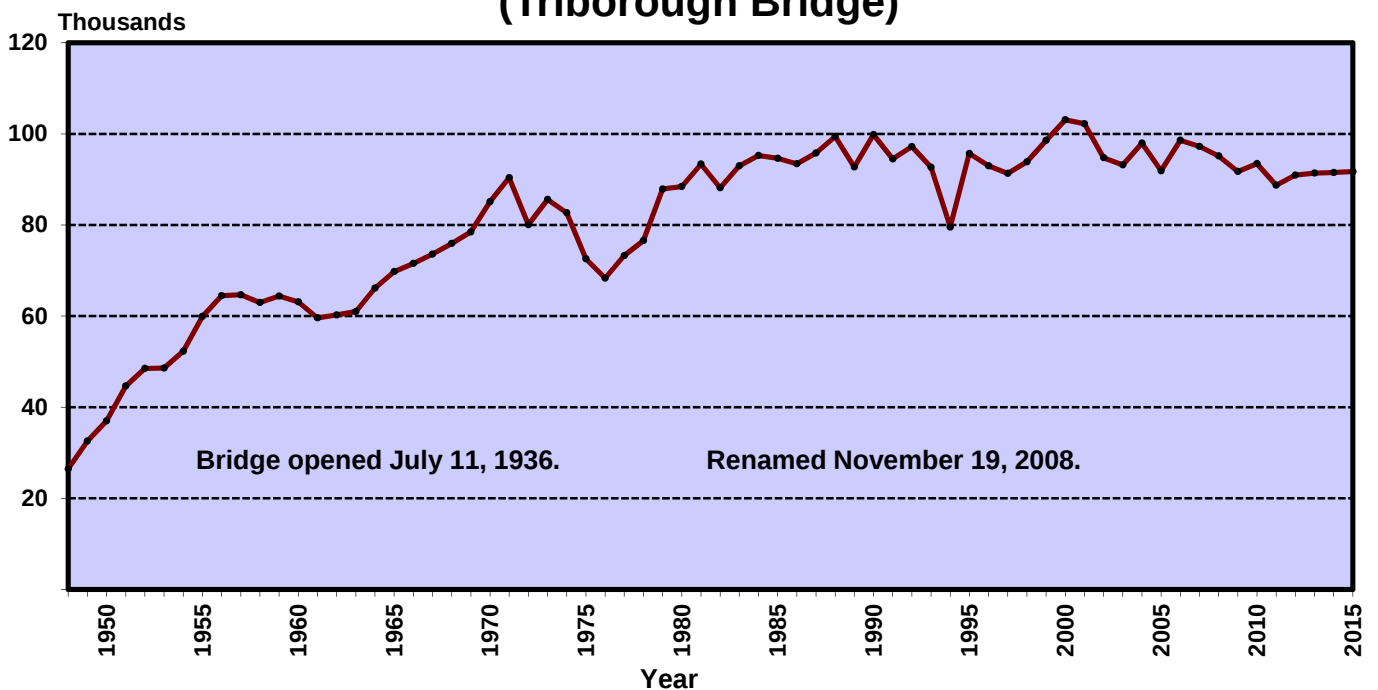
Based on October 2013 Classification Survey Data.

** Peak Volumes

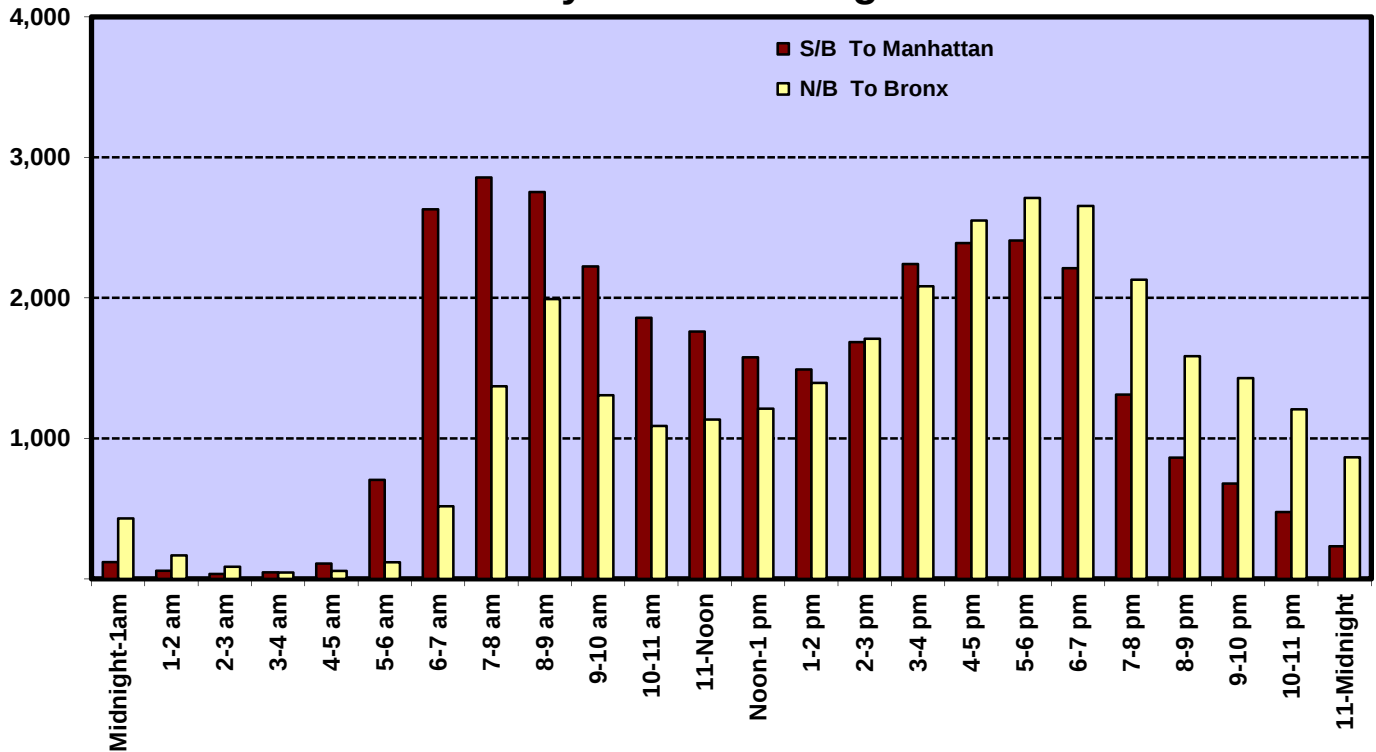
Hourly Vehicular Volumes Robert F. Kennedy Memorial Bridge, Manhattan Plaza ~ 2015 (Triborough Bridge)



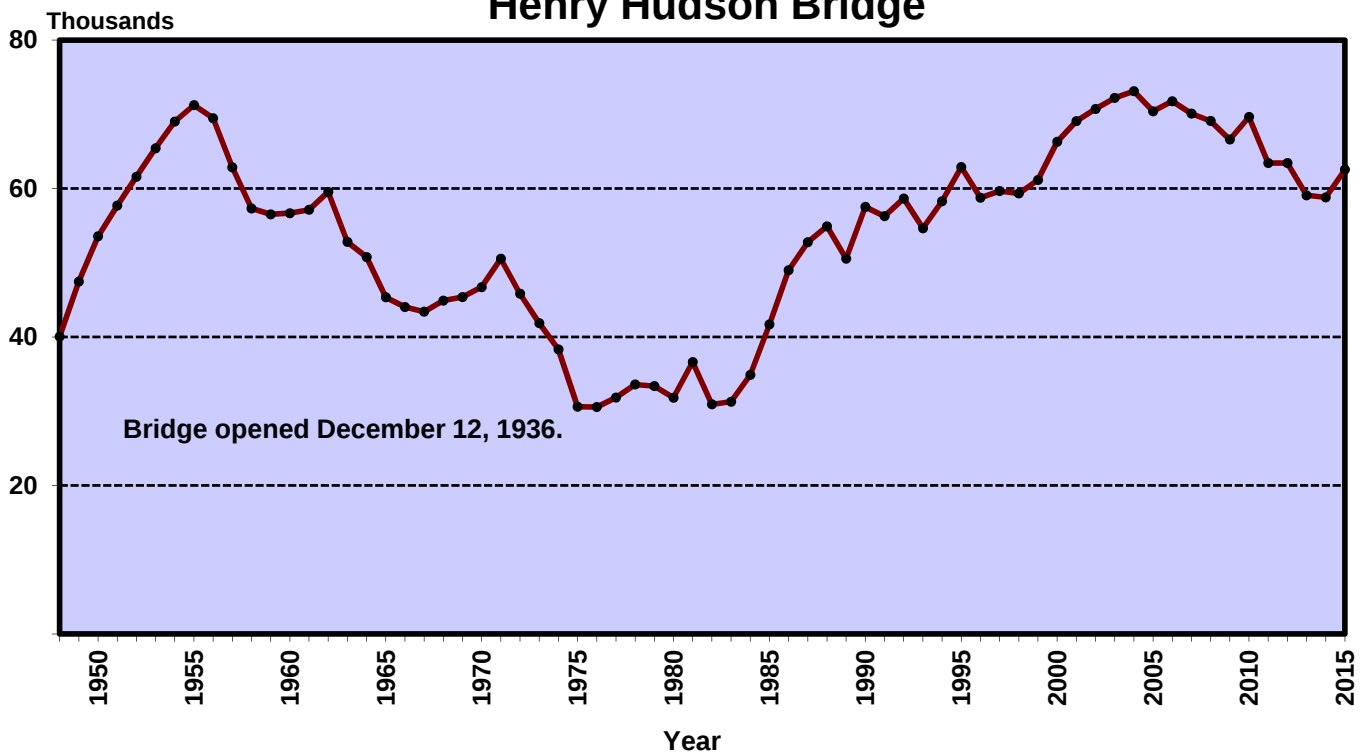
Average Daily Traffic Volumes ~ Total of Both Directions Robert F. Kennedy Memorial Bridge, Manhattan Plaza (Triborough Bridge)



Hourly Vehicular Volumes Henry Hudson Bridge ~ 2015



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



PANYNJ Facilities



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

PANYNJ Manhattan - New Jersey Facilities
Average Daily Traffic Volumes
1948 - 2015

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

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

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

Hourly Vehicular Volumes

Port Authority of New York & New Jersey

2015

	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	1,732	2,841	678	1,255	850	1,138	3,260	5,234
1-2am	1,196	1,718	438	814	577	604	2,211	3,136
2-3am	1,095	1,283	338	549	472	394	1,905	2,226
3-4am	1,333	1,416	389	551	522	422	2,244	2,389
4-5am	2,326	1,920	695	767	957	599	3,978	3,286
5-6am	6,724	3,306	2,155	1,388	3,117	879	11,996	5,573
6-7am	11,059	5,735	2,834	2,199	4,812	1,565	18,705	9,499
7-8am	9,666	6,953	2,769	2,430	4,091	2,062	16,526	11,445
8-9am	8,375	7,784	2,664	2,371	4,091	2,057	15,130	12,212
9-10am	8,404	7,123	2,529	1,948	3,754	2,109	14,687	11,180
10-11am	7,601	6,661	2,397	1,949	3,388	2,049	13,386	10,659
11-12am	6,841	6,553	2,021	1,894	2,938	2,205	11,800	10,652
12-1pm	6,419	6,399	1,854	2,098	2,552	2,470	10,825	10,967
1-2pm	6,455	7,040	1,829	2,387	2,473	2,897	10,757	12,324
2-3pm	6,790	9,017	1,965	2,494	2,536	3,428	11,291	14,939
3-4pm	7,309	10,713	2,118	2,229	2,443	4,262	11,870	17,204
4-5pm	7,769	10,676	2,385	2,373	2,043	4,872	12,197	17,921
5-6pm	8,009	12,006	2,561	2,355	1,596	5,185	12,166	19,546
6-7pm	7,859	11,573	2,479	2,299	1,897	5,128	12,235	19,000
7-8pm	6,528	10,427	2,130	2,435	2,117	4,306	10,775	17,168
8-9pm	5,199	8,470	1,680	2,460	1,971	3,550	8,850	14,480
9-10pm	4,462	6,249	1,541	2,407	1,943	3,046	7,946	11,702
10-11pm	3,747	5,139	1,484	2,412	1,755	2,909	6,986	10,460
11-12pm	2,650	4,570	1,116	2,254	1,367	1,385	5,133	8,209
Totals	139,548	155,572	43,049	46,318	54,262	59,521	236,859	261,411
7-10am	26,445	21,860	7,962	6,749	11,936	6,228	46,343	34,837
10am-1pm	20,861	19,613	6,272	5,941	8,878	6,724	36,011	32,278
1-4pm	20,554	26,770	5,912	7,110	7,452	10,587	33,918	44,467
4-7pm	23,637	34,255	7,425	7,027	5,536	15,185	36,598	56,467
7am-7pm	91,497	102,498	27,571	26,827	33,802	38,724	152,870	168,049
6-10am	37,504	27,595	10,796	8,948	16,748	7,793	65,048	44,336
3-7pm	30,946	44,968	9,543	9,256	7,979	19,447	48,468	73,671
6am-7pm	102,556	108,233	30,405	29,026	38,614	40,289	171,575	177,548

** 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

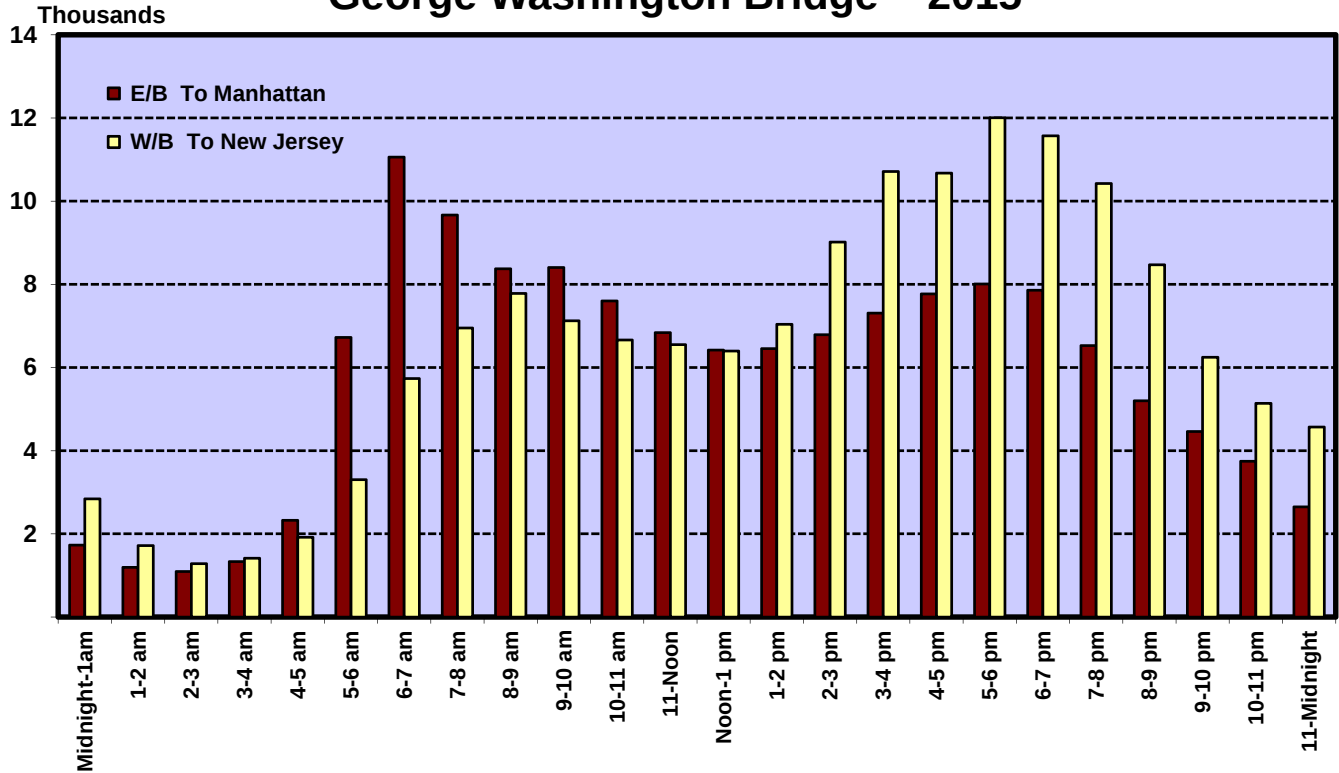
George Washington Bridge - 2015

	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	1,375	10	65	282	1,732	2,345	12	68	416	2,841	4,573
1-2am	817	4	72	303	1,196	1,300	5	66	347	1,718	2,914
2-3am	646	6	79	364	1,095	829	1	62	391	1,283	2,378
3-4am	745	4	127	457	1,333	859	3	104	450	1,416	2,749
4-5am	1,516	10	205	595	2,326	1,217	6	139	558	1,920	4,246
5-6am	5,512	35	398	779	6,724	2,452	13	231	610	3,306	10,030
6-7am	9,955	82	502	520	11,059	4,631	61	389	654	5,735	16,794
7-8am	8,917	88	339	322	9,666	6,122	77	333	421	6,953	16,619
8-9am	7,594	88	355	338	8,375	6,785	88	411	500	7,784	16,159
9-10am	7,520	83	395	406	8,404	5,959	79	434	651	7,123	15,527
10-11am	6,737	60	381	423	7,601	5,367	67	436	791	6,661	14,262
11-12am	6,093	57	300	391	6,841	5,211	44	446	852	6,553	13,394
12-1pm	5,726	58	289	346	6,419	5,369	46	361	623	6,399	12,818
1-2pm	5,800	64	278	313	6,455	6,000	45	408	587	7,040	13,495
2-3pm	6,175	86	258	271	6,790	7,884	61	486	586	9,017	15,807
3-4pm	6,744	102	234	229	7,309	9,600	65	507	541	10,713	18,022
4-5pm	7,296	94	187	192	7,769	9,833	72	361	410	10,676	18,445
5-6pm	7,595	94	145	175	8,009	11,038	78	355	535	12,006	20,015
6-7pm	7,455	81	133	190	7,859	10,794	86	271	422	11,573	19,432
7-8pm	6,127	69	101	231	6,528	9,738	67	163	459	10,427	16,955
8-9pm	4,827	54	80	238	5,199	7,933	50	118	369	8,470	13,669
9-10pm	4,104	42	68	248	4,462	5,785	26	97	341	6,249	10,711
10-11pm	3,412	29	52	254	3,747	4,753	22	55	309	5,139	8,886
11-12pm	2,347	20	50	233	2,650	4,041	18	74	437	4,570	7,220
Totals	125,035	1,320	5,093	8,100	139,548	135,845	1,092	6,375	12,260	155,572	295,120
7-10am	24,031	259	1,089	1,066	26,445	18,866	244	1,178	1,572	21,860	48,305
10am-1pm	18,556	175	970	1,160	20,861	15,947	157	1,243	2,266	19,613	40,474
1-4pm	18,719	252	770	813	20,554	23,484	171	1,401	1,714	26,770	47,324
4-7pm	22,346	269	465	557	23,637	31,665	236	987	1,367	34,255	57,892
7am-7pm	83,652	955	3,294	3,596	91,497	89,962	808	4,809	6,919	102,498	193,995
6-10am	33,986	341	1,591	1,586	37,504	23,497	305	1,567	2,226	27,595	65,099
3-7pm	29,090	371	699	786	30,946	41,265	301	1,494	1,908	44,968	75,914
6am-7pm	93,607	1,037	3,796	4,116	102,556	94,593	869	5,198	7,573	108,233	210,789

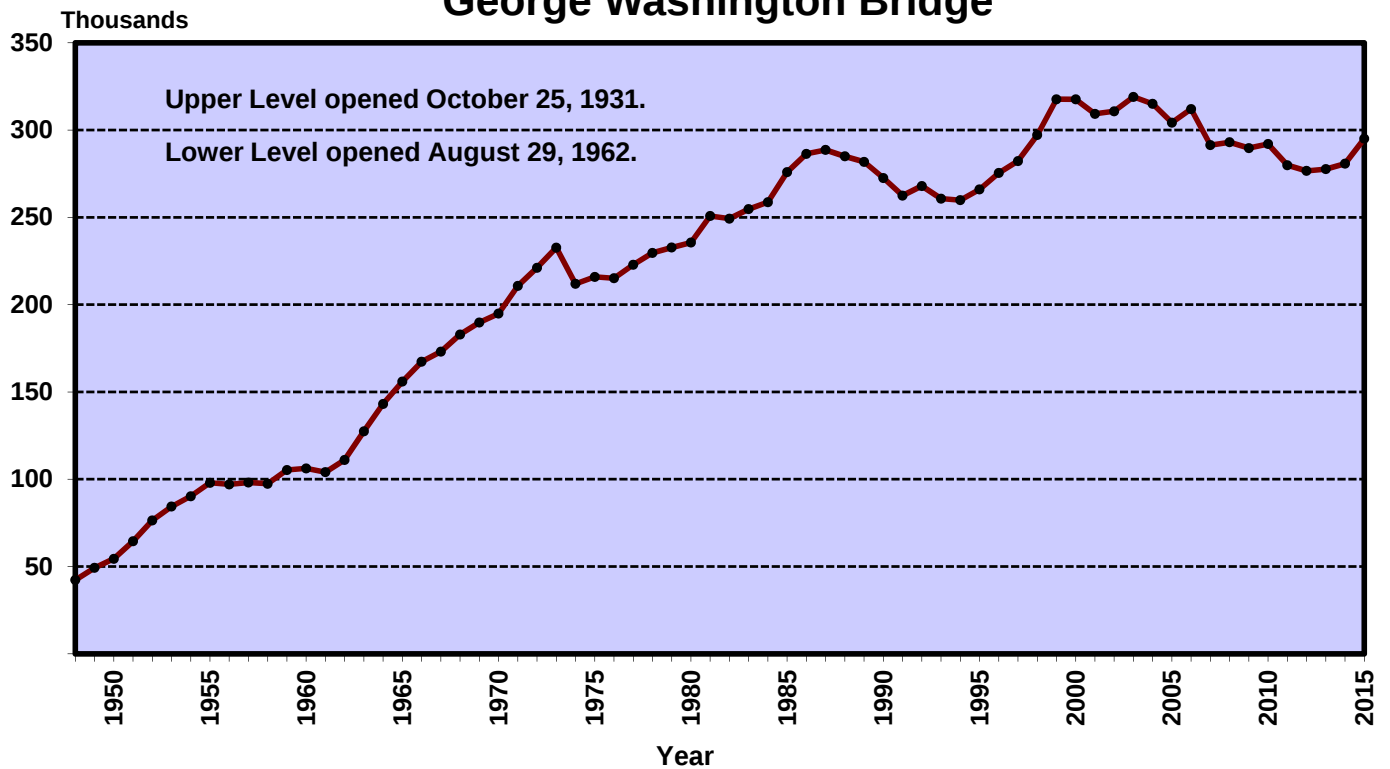
Classification based on 2015 classification data.

** Peak Volumes

Hourly Vehicular Volumes George Washington Bridge ~ 2015



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



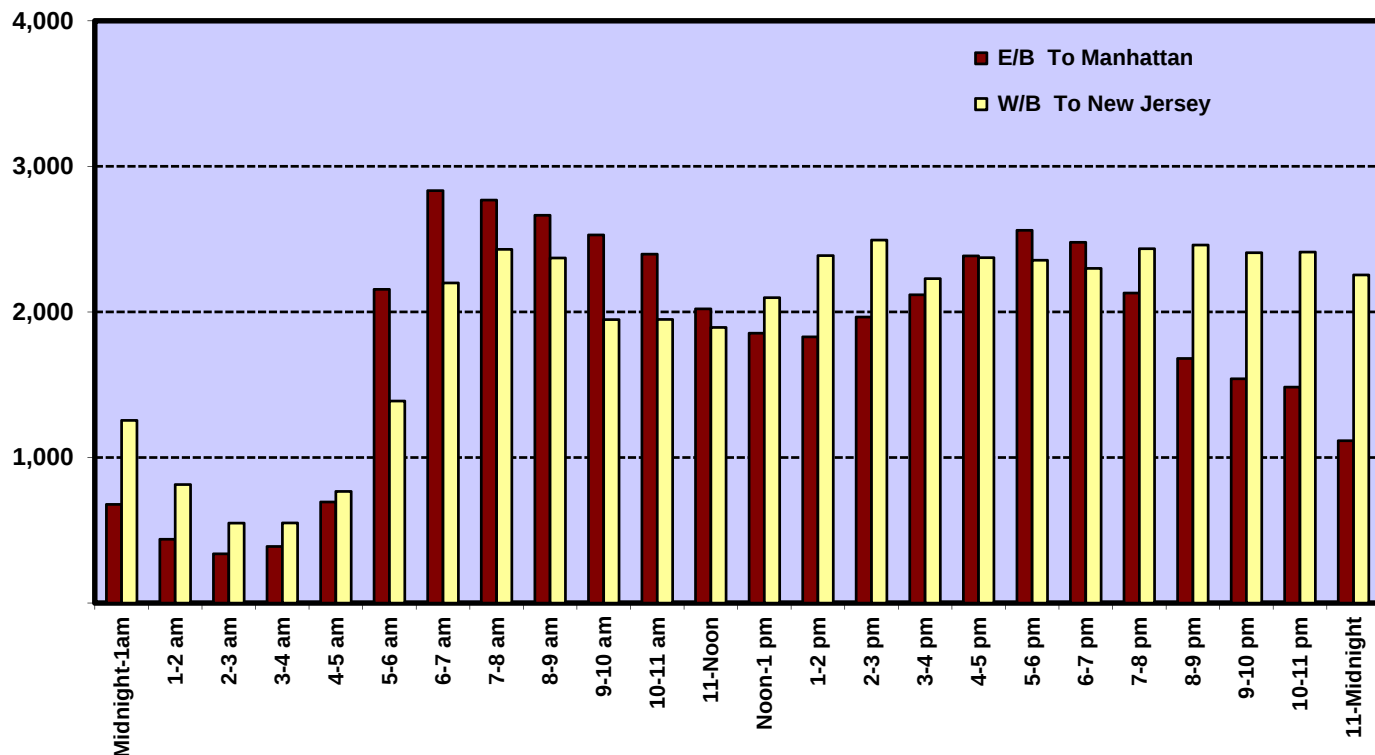
Hourly Vehicular Volumes Holland Tunnel - 2015

	<i>Eastbound to Manhattan</i>					<i>Westbound to New Jersey</i>					2-Way Grand Totals
	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles	
12-1am	646	4	28	0	678	1,215	0	40	0	1,255	1,933
1-2am	406	2	29	1	438	796	2	16	0	814	1,252
2-3am	302	3	32	1	338	524	0	25	0	549	887
3-4am	338	3	47	1	389	502	0	49	0	551	940
4-5am	608	8	77	2	695	704	1	61	1	767	1,462
5-6am	1,983	21	149	2	2,155	1,299	5	79	5	1,388	3,543
6-7am	2,651	47	134	2	2,834	2,073	22	104	0	2,199	5,033
7-8am	2,552	60	155	2	2,769	2,301	36	93	0	2,430	5,199
8-9am	2,444	66	152	2	2,664	2,201	60	110	0	2,371	5,035
9-10am	2,357	55	116	1	2,529	1,772	45	131	0	1,948	4,477
10-11am	2,260	27	109	1	2,397	1,771	23	154	1	1,949	4,346
11-12am	1,923	17	80	1	2,021	1,696	7	187	4	1,894	3,915
12-1pm	1,778	14	61	1	1,854	1,886	12	197	3	2,098	3,952
1-2pm	1,743	18	67	1	1,829	2,187	15	185	0	2,387	4,216
2-3pm	1,876	25	63	1	1,965	2,308	15	171	0	2,494	4,459
3-4pm	2,006	45	66	1	2,118	2,064	24	141	0	2,229	4,347
4-5pm	2,261	70	54	0	2,385	2,195	41	137	0	2,373	4,758
5-6pm	2,465	58	37	1	2,561	2,147	66	142	0	2,355	4,916
6-7pm	2,407	39	33	0	2,479	2,206	38	55	0	2,299	4,778
7-8pm	2,078	22	29	1	2,130	2,342	35	58	0	2,435	4,565
8-9pm	1,636	15	28	1	1,680	2,389	32	38	1	2,460	4,140
9-10pm	1,508	11	22	0	1,541	2,361	14	32	0	2,407	3,948
10-11pm	1,457	9	18	0	1,484	2,362	20	30	0	2,412	3,896
11-12pm	1,088	6	21	1	1,116	2,201	10	42	1	2,254	3,370
Totals	40,773	645	1,607	24	43,049	43,502	523	2,277	16	46,318	89,367
7-10am	7,353	181	423	5	7,962	6,274	141	334	0	6,749	14,711
10am-1pm	5,961	58	250	3	6,272	5,353	42	538	8	5,941	12,213
1-4pm	5,625	88	196	3	5,912	6,559	54	497	0	7,110	13,022
4-7pm	7,133	167	124	1	7,425	6,548	145	334	0	7,027	14,452
7am-7pm	26,072	494	993	12	27,571	24,734	382	1,703	8	26,827	54,398
6-10am	10,004	228	557	7	10,796	8,347	163	438	0	8,948	19,744
3-7pm	9,139	212	190	2	9,543	8,612	169	475	0	9,256	18,799
6am-7pm	28,723	541	1,127	14	30,405	26,807	404	1,807	8	29,026	59,431

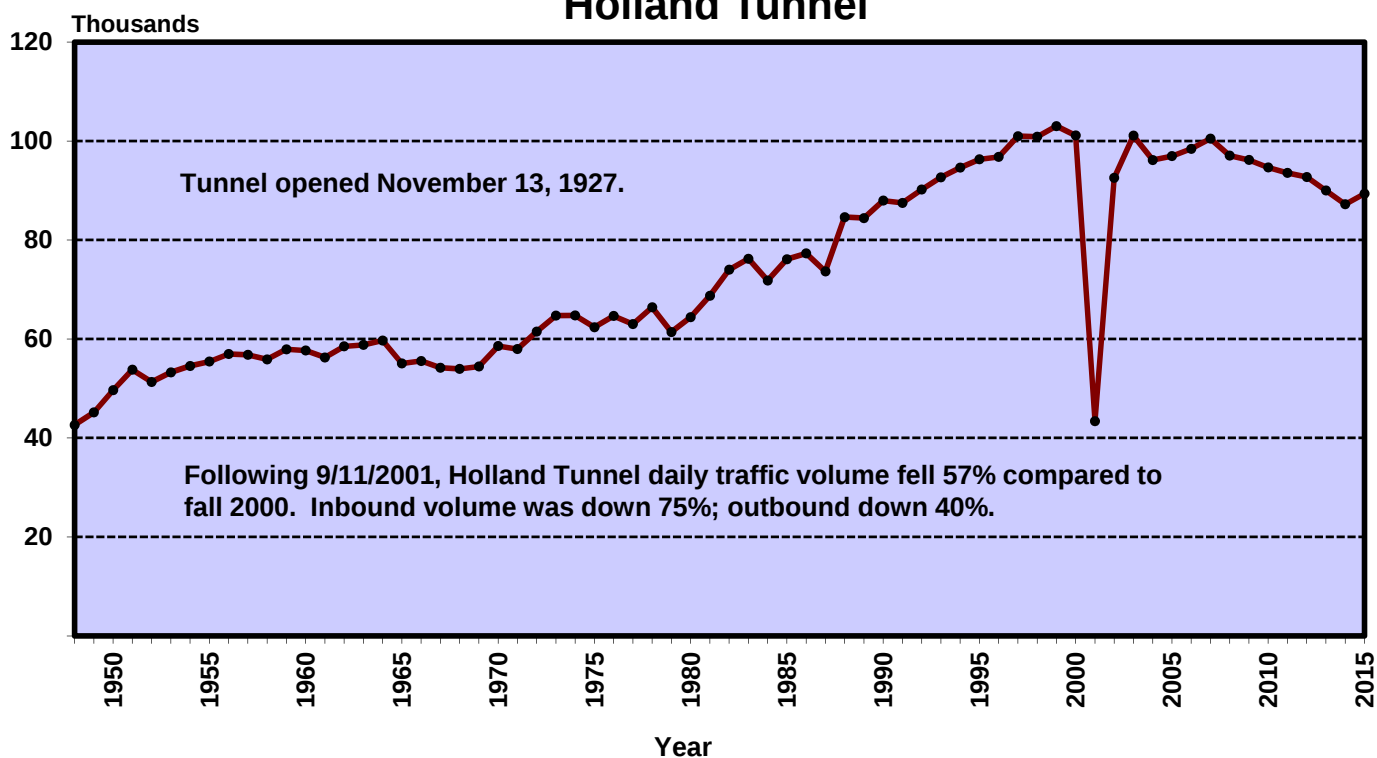
Classification based on 2015 classification data.

** Peak Volumes

Hourly Vehicular Volumes Holland Tunnel ~ 2015



Average Daily Traffic Volumes ~ Total of Both Directions Holland Tunnel



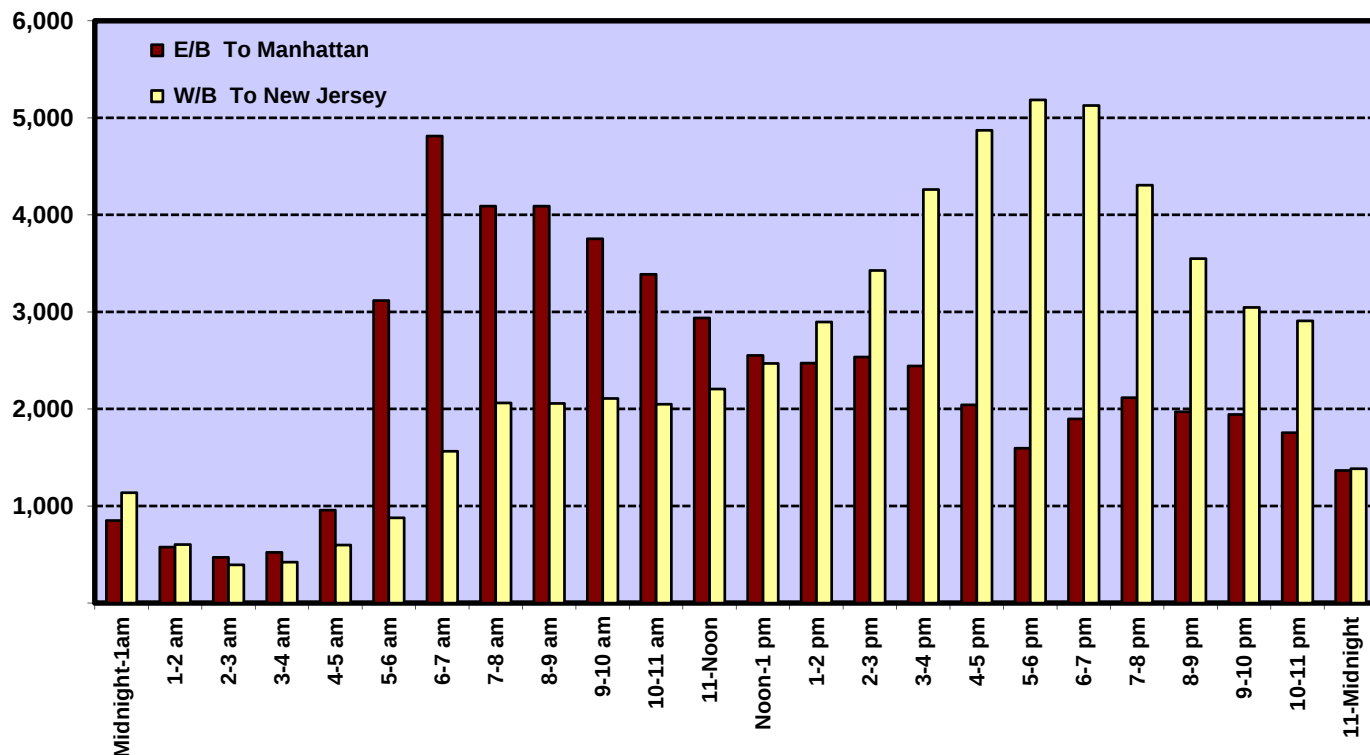
Hourly Vehicular Volumes Lincoln Tunnel - 2015

<i>Eastbound to Manhattan</i>						<i>Westbound to New Jersey</i>					
	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles		Autos	Buses	Small Trucks	Large Trucks	Total Vehicles
12-1am	734	51	43	22	850		989	70	51	28	1,138
1-2am	465	31	50	31	577		496	39	40	29	604
2-3am	370	11	58	33	472		306	13	46	29	394
3-4am	357	13	95	57	522		315	13	53	41	422
4-5am	665	28	169	95	957		444	12	88	55	599
5-6am	2,470	184	350	113	3,117		681	76	72	50	879
6-7am	3,830	509	413	60	4,812	**	1,109	320	60	76	1,565
7-8am	2,959	810	288	34	4,091		1,311	596	86	69	2,062
8-9am	2,859	939	274	19	4,091		1,144	743	107	63	2,057
9-10am	2,856	634	250	14	3,754		1,193	757	102	57	2,109
10-11am	2,880	266	221	21	3,388		1,538	333	129	49	2,049
11-12am	2,554	216	152	16	2,938		1,804	207	130	64	2,205
12-1pm	2,229	186	122	15	2,552		2,093	154	156	67	2,470
1-2pm	2,141	216	106	10	2,473		2,485	161	184	67	2,897
2-3pm	2,158	277	93	8	2,536		3,021	183	168	56	3,428
3-4pm	2,009	352	77	5	2,443		3,802	250	149	61	4,262
4-5pm	1,437	534	68	4	2,043		4,279	435	140	18	4,872
5-6pm	1,109	431	48	8	1,596		4,323	746	106	10	5,185
6-7pm	1,431	411	46	9	1,897		4,121	918	81	8	5,128
7-8pm	1,713	329	57	18	2,117		3,665	554	75	12	4,306
8-9pm	1,644	238	64	25	1,971		3,123	343	67	17	3,550
9-10pm	1,672	177	61	33	1,943		2,760	226	41	19	3,046
10-11pm	1,510	154	63	28	1,755		2,652	198	41	18	2,909
11-12pm	1,193	103	44	27	1,367		1,222	112	25	26	1,385
Totals	43,245	7,100	3,212	705	54,262		48,876	7,459	2,197	989	59,521
7-10am	8,674	2,383	812	67	11,936		3,648	2,096	295	189	6,228
10am-1pm	7,663	668	495	52	8,878		5,435	694	415	180	6,724
1-4pm	6,308	845	276	23	7,452		9,308	594	501	184	10,587
4-7pm	3,977	1,376	162	21	5,536		12,723	2,099	327	36	15,185
7am-7pm	26,622	5,272	1,745	163	33,802		31,114	5,483	1,538	589	38,724
6-10am	12,504	2,892	1,225	127	16,748		4,757	2,416	355	265	7,793
3-7pm	5,986	1,728	239	26	7,979		16,525	2,349	476	97	19,447
6am-7pm	30,452	5,781	2,158	223	38,614		32,223	5,803	1,598	665	40,289
2-Way Grand Totals	1,988										
	1,181										
	866										
	944										
	1,556										
	3,996										
	6,377										
	6,153										
	6,148										
	5,863										
	5,437										
	5,143										
	5,022										
	5,370										
	5,964										
	6,705										
	6,915										
	6,781										
	7,025										
	6,423										
	5,521										
	4,989										
	4,664										
	2,752										
	113,783										

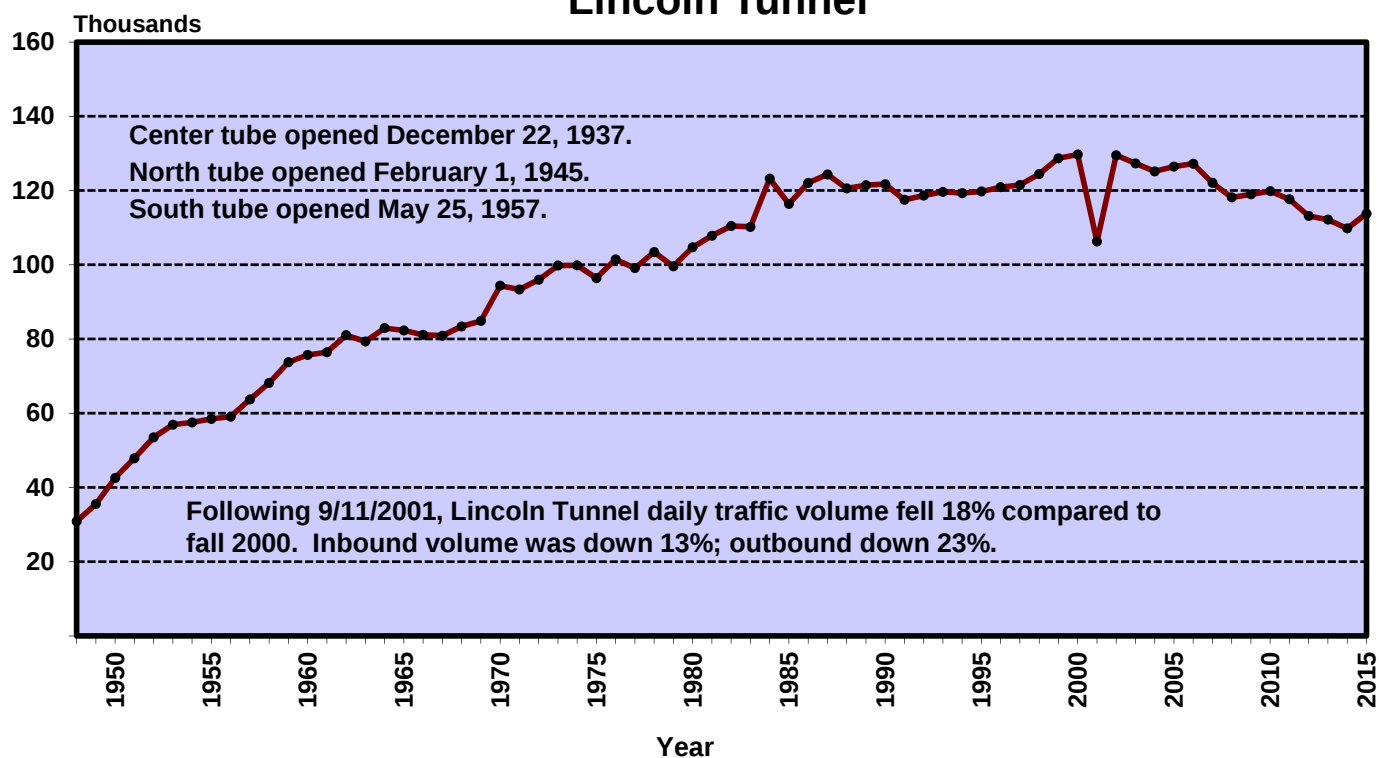
** Peak Volumes

Classification based on 2015 classification data.

Hourly Vehicular Volumes Lincoln Tunnel ~ 2015



Average Daily Traffic Volumes ~ Total of Both Directions Lincoln Tunnel



APPENDIX

2015 Bridge and Tunnel Reconstruction

APPENDIX

Major Bridge and Tunnel Reconstruction In 2015

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 long-term reconstruction.

The closure times in 2015 were as follows.

01/03 – 01/09:	Mon – Thu nights Saturday Sunday	11:00pm – 6:00am. 12:01am – 7:00am, 12:01am – 9:00am,
01/10 – 01/30:	Fri night/Sat morning Sat night/Sun morning Mon – Thu nights	Midnight - 7:00am, Midnight - 9:00am. 11:00pm – 6:00am.
01/31 – 02/06:	Fri night/Sat morning Mon – Thu nights	Midnight - 7:00am, 11:00pm – 6:00am.
02/07 – 02/13:	Mon – Thu nights	11:00pm – 6:00am.
02/14 – 03/06:	Fri night/Sat morning Mon – Thu nights	Midnight - 7:00am, 11:00pm – 6:00am.
03/07 – 03/20:	Fri night/Sat morning Sat night/Sun morning Mon – Thu nights	Midnight - 7:00am, Midnight - 9:00am. 11:00pm – 6:00am.
03/21 – 06/12:	Fri night/Sat morning Mon – Thu nights	Midnight - 7:00am, 11:00pm – 6:00am.
05/16 – 05/17:	12:01am Sat – 9:00 am Sun.	
06/06 – 06/07:	12:01am Sat – 9:00 am Sun.	
06/13 – 07/10:	Fri night/Sat morning Sat night/Sun morning Mon – Thu nights	Midnight - 7:00am, Midnight - 9:00am. 11:00pm – 6:00am.
07/11 – 07/17:	12:01am Sat – 5:00 am Mon, Mon – Thu nights	11:00pm – 6:00am.
07/18 – 08/07:	Fri night/Sat morning Sat night/Sun morning Mon – Thu nights	Midnight - 7:00am, Midnight - 9:00am. 11:00pm – 6:00am.
08/08 – 08/14:	Fri night/Sat morning Mon – Thu nights	Midnight - 7:00am, 11:00pm – 6:00am.

08/15 – 08/21:	Fri night/Sat morning Sat night/Sun morning Mon – Thu nights	Midnight - 7:00am, Midnight - 7:00am. 11:00pm – 6:00am.
08/22 – 08/28:	Fri night/Sat morning Mon – Thu nights	Midnight - 7:00am, 11:00pm – 6:00am.
08/29 – 10/09:	Fri night/Sat morning Sat night/Sun morning Mon – Thu nights	Midnight - 7:00am, Midnight - 9:00am. 11:00pm – 6:00am.
10/10 – 10/16:	Mon – Thu nights 12:01am Saturday – 5:00am Monday.	11:00pm – 6:00am,
10/17 – 11/06:	Fri night/Sat morning Mon – Thu nights	Midnight - 7:00am, 11:00pm – 6:00am.
11/07 – 11/24:	Fri night/Sat morning Sat night/Sun morning Mon – Thu nights	Midnight - 7:00am, Midnight - 9:00am. 11:00pm – 6:00am.
11/25 – 11/29:	No Closures.	
11/30 – 12/11:	Fri night/Sat morning Mon – Thu nights	Midnight - 7:00am, 11:00pm – 6:00am.
12/12 – 12/18:	Intermittent overnight closures.	

Bicycle and pedestrian access was maintained during all times. From March 26, 2015, through December 2015, the promenade for pedestrians and bicyclists was reduced in width at various locations. Pedestrians and bicyclists were directed to cautiously share the narrowed pathway.

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

The Brooklyn–Queens Expressway eastbound exit onto the bridge was closed 30 minutes earlier during these times, the northbound FDR Drive exits were closed up to an hour earlier, and other Brooklyn ramps onto the bridge were closed 5-15 minutes earlier.

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

Throughout 2015, 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 the mayor signed the legislation which had been passed by the City Council on March 23, 2011.

Throughout 2015, a High Occupancy Vehicle (HOV) facility was in effect on the Ed Koch Queensboro Bridge. The normally Queens–bound South Upper Roadway was reversed between 6:00am and 9:30am on weekdays to accommodate Manhattan–bound HOVs (no trucks) carrying two or more occupants.

Ed Koch Queensboro Bridge Operation (All 2015):

- North Inner Roadway: W/B all times; W/B trucks required to use this roadway.
- South Inner Roadway: E/B all times; E/B trucks required to use this roadway.
- North Upper Roadway: W/B all times.
- South Upper Roadway: Closed for reversal 5:30–6:00am weekdays,
W/B HOVs 6:00–9:30am weekdays,
Closed for reversal 9:30–10:00am weekdays,
E/B all other times.
- North Outer Roadway: Reserved for bicyclists and pedestrians at all times.
- South Outer Roadway: E/B for passenger cars only.
Closed nightly from 9:00pm to 6:00am.

Throughout 2015, there were 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)

Note: *During 2015, the nearby Brooklyn Bridge was closed to Manhattan-bound traffic during overnight hours.*

Manhattan Bridge Operation: January 1, 2015 To March 27, 2015

- **6:00am – 3:30pm weekdays.**
 - Manhattan-bound: 5 lanes.
 - 2 lanes on the North Upper Roadway
No trucks 5–10 am
Left lane reserved for buses and HOV 2+.
 - 3 lanes on the Lower Roadway.
 - Brooklyn-bound: 2 lanes on the South Upper Roadway.
- **4:00pm – 9:30pm weekdays.**
 - Manhattan-bound: 2 lanes on the North Upper Roadway.
 - Brooklyn-bound: 5 lanes.
 - 2 lanes on the South Upper Roadway.
 - 3 lanes on the Lower Roadway.
- **9:30pm – 2:00pm weekdays.**
 - Manhattan-bound: 5 lanes.
 - 2 lanes on the North Upper Roadway.
 - 3 lanes on the Lower Roadway.
 - Brooklyn-bound: 2 lanes on the South Upper Roadway.
- **9:00pm Friday To 3:30pm Monday.**
 - Manhattan-bound: 5 lanes.
 - 2 lanes on the North Upper Roadway.
 - 3 lanes on the Lower Roadway.
 - Brooklyn-bound: 2 lanes on the South Upper Roadway.

Manhattan Bridge Operation: March 28, 2015 To April 3, 2015

Eastbound upper level fully closed and one lane eastbound on the lower level closed from 12:01am to 8:00am Sunday, and from 9:00pm Sunday to 5:00am Monday. Two lanes maintained eastbound on the lower level during this time.

- **6:00am – 3:30pm weekdays.**
 - Manhattan-bound: 5 lanes.
 - 2 lanes on the North Upper Roadway
No trucks 5–10 am
Left lane reserved for buses and HOV 2+.
 - 3 lanes on the Lower Roadway.
 - Brooklyn-bound: 2 lanes on the South Upper Roadway.
- **3:30pm – 9:00pm weekdays.**
 - Manhattan-bound: 2 lanes on the North Upper Roadway.
 - Brooklyn-bound: 5 lanes.
 - 2 lanes on the South Upper Roadway.
 - 3 lanes on the Lower Roadway.
- **9:30pm – 3:30pm weekdays.**
 - Manhattan-bound: 5 lanes.
 - 2 lanes on the North Upper Roadway.
 - 3 lanes on the Lower Roadway.
 - Brooklyn-bound: 2 lanes on the South Upper Roadway.
- **7:00am Saturday To 5:00am Monday.**
 - Manhattan-bound: 2 lanes on the North Upper Roadway.
 - Brooklyn-bound: 5 lanes.
 - 2 lanes on the South Upper Roadway.
 - 3 lanes on the Lower Roadway.

Manhattan Bridge Operation: April 4, 2015 To November 20, 2015

- **6:00am – 2:30pm weekdays.**
 - Manhattan-bound: 5 lanes.
 - 2 lanes on the North Upper Roadway (no trucks 5–10 am, left lane reserved for buses and HOV 2+).
 - 3 lanes on the Lower Roadway.
 - Brooklyn-bound: 2 lanes on the South Upper Roadway.
- **3:00pm – 9:30pm weekdays.**
 - Manhattan-bound: 2 lanes on the North Upper Roadway.
 - Brooklyn-bound: 5 lanes.
 - 2 lanes on the South Upper Roadway.
 - 3 lanes on the Lower Roadway.

- **9:30pm – 3:30pm weekdays.**
 - Manhattan-bound: 5 lanes.
 - 2 lanes on the North Upper Roadway.
 - 3 lanes on the Lower Roadway.
 - Brooklyn-bound: 2 lanes on the South Upper Roadway.
- **7:00am Saturday To 5:00am Monday.**
 - Manhattan-bound: 2 lanes on the North Upper Roadway.
 - Brooklyn-bound: 5 lanes.
 - 2 lanes on the South Upper Roadway.
 - 3 lanes on the Lower Roadway.

Manhattan Bridge Operation: November 21, 2015 To December 31, 2015

Same as April 4 to November 20, plus:

1 of 3 lanes on the Lower Roadway and 1 of 2 lanes on the North Upper Roadway was closed westbound from 12:01am to 5:00am on weekdays to facilitate NYCDOT bridge repairs.

Throughout 2015, 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 2015 trucks were permitted only on the outer roadways.

Pedestrian and bicycle access was maintained on the bridge at all times throughout 2015.

Throughout 2015, there were closures of single lanes in each direction on the Williamsburg Bridge during off-peak hours.

Alexander Hamilton Bridge (Harlem River between Bronx & Manhattan)

Eastbound lane closures were in effect as follows:

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

Westbound lane closures were in effect as follows:

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

3rd Avenue Bridge (Harlem River between Manhattan and Bronx)

The 3rd Avenue Bridge was fully closed Tuesday, May 12, from 1:00am to 4:00am for testing operations.

Washington Bridge (Harlem River between Manhattan and Bronx)

From January 31 to September 30, two lanes (either eastbound or westbound) were closed twice a week from 12:01am to 5:00am to facilitate NYCDOT bridge repair work.

From November 7 to December 31, two westbound lanes were closed twice a week from 12:01am to 5:00am weeknights to facilitate NYCDOT bridge repair work.

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

The 145th Street Bridge was fully closed Friday, May 15, from 12:01am to 4:00am for testing operations.

Henry Hudson Bridge

Throughout 2015, there were intermittent lane closures in both directions on the Henry Hudson Bridge during off-peak hours.

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

From March 7 to December 31, one tube was closed nightly from 9:30pm to 5:30am, and from 9:30pm Friday to 5:30am Monday. During these times there was one lane in each direction in the remaining tube.

Robert F. Kennedy Bridge (formerly Triborough Bridge)

From March 16 to April 13, one of two lanes on the ramp to the Bruckner Expressway was closed round-the-clock.

Throughout 2015, there were also intermittent closures of single lanes on the Robert F. Kennedy Bridge during off-peak hours.

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

Eastbound closures were in effect on the George Washington Bridge as follows:

02/17 – 05/11:	11:00pm – 5:00am Weekdays, 11:59pm Fri – 8:00am Sat.	2 E/B lanes closed.
05/12 – 07/11:	11:00pm – 5:00am Weekdays, 11:59pm Fri – 8:00am Sat.	2 or 3 E/B lanes closed.
08/29 – 09/20:	11:00pm – 5:00am Weekdays, Midnight Fri – 8:00am Sat. Midnight Sat – 8:00am Sun.	2 E/B lanes closed.
Mon, 09/21, 9:00pm – Tue, 09/22, 5:00am:		E/B Lower Level closed.
Fri, 09/25, 11:00pm – Sat, 09/26, 8:00am:		E/B Lower Level closed.
Sat, 09/26, 11:59pm – Sun, 09/27, 8:00am:		2 E/B Upper Level lanes closed.

09/28 – 10/02: 9:00pm – 5:00am Mon-Thu E/B Lower Level closed.
11:00pm – 8:00am Fri.

Fri, 10/02, 1100pm – Sat, 10/03, 8:00am: E/B Lower Level closed.
Mon, 10/05, 11:00pm – Tue, 10/06, 5:00am: 2 E/B Upper Level lanes closed.
Tue, 10/06, 10:00pm – Wed, 10/07, 5:00am: 2 E/B Upper Level lanes closed.
Wed, 10/07, 11:00pm – Thu, 10/08, 5:00am: E/B Lower Level closed.
Thu, 10/08, 11:00pm – Fri, 10/09, 8:00am: E/B Lower Level closed.
Wed, 10/14, 11:00pm – Thu, 10/15, 5:00am: 2 E/B Upper Level lanes closed.
Thu, 10/15, 11:00pm – Fri, 10/16, 8:00am: 2 E/B Upper Level lanes closed.
Fri, 10/16, 1100pm – Sat, 10/17, 8:00am: E/B Lower Level closed.
Mon, 10/19, 11:00pm – Tue, 10/20, 5:00am: E/B Lower Level closed.
Tue, 10/20, 10:00pm – Wed, 10/21, 5:00am: E/B Lower Level closed.
Fri, 10/23, 1100pm – Sat, 10/24, 8:00am: E/B Lower Level closed.
Mon, 10/26, 9:00pm – Tue, 10/27, 5:00am: E/B Lower Level closed.
Tue, 10/27, 9:00pm – Wed, 10/07, 5:00am: E/B Lower Level closed.
Fri, 10/30, 1100pm – Sat, 10/31, 8:00am: E/B Lower Level closed.
Thu, 12/17, 11:00pm – Fri, 12/18, 5:00am: E/B Lower Level closed.

Westbound closures were in effect on the George Washington Bridge as follows:

02/26 – 07/11: 11:00pm – 5:00am Weekdays, 2 W/B lanes closed.
11:59pm Fri – 8:00am Sat.
08/29 – 09/23: 9:00pm – 5:00am Weekdays, 2 W/B lanes closed.
11:59pm Fri – 8:00am Sat.
11:59pm Sat – 8:00am Sun.
Thu, 09/24, 9:00pm – Fri, 09/25, 5:00am: W/B Lower Level closed.
Fri, 09/25, 11:59pm – Sat, 09/26, 8:00am: 2 W/B Upper Level lanes closed.
Sat, 09/26, 11:59pm – Sun, 09/27, 8:00am: 2 W/B Upper Level lanes closed.
Fri, 10/02, 11:59pm – Sat, 10/03, 8:00am: 2 W/B Upper Level lanes closed.
Sat, 10/03, 11:59pm – Sun, 10/04, 8:00am: 2 W/B Upper Level lanes closed.
Mon, 10/05, 9:00pm – Tue, 10/06, 5:00am: W/B Lower Level closed.
Tue, 10/06, 9:00pm – Wed, 10/07, 5:00am: W/B Lower Level closed.
Wed, 10/07, 9:00pm – Thu, 10/08, 5:00am: W/B Lower Level closed.
Thu, 10/08, 9:00pm – Fri, 10/09, 8:00am: 2 W/B Lower Level lanes closed.
Tue, 10/13, 9:00pm – Wed, 10/14, 5:00am: W/B Lower Level closed.
Wed, 10/14, 9:00pm – Thu, 10/15, 5:00am: W/B Lower Level closed.
Thu, 10/08, 9:00pm – Fri, 10/16, 5:00am: W/B Lower Level closed.
Fri, 10/16, 11:59pm – Sat, 10/17, 8:00am: 2 W/B Upper Level lanes closed.

Sat, 10/17, 11:59pm – Sun, 10/18, 8:00am:	2 W/B Upper Level lanes closed.
Wed, 10/21, 9:00pm – Thu, 10/22, 5:00am:	W/B Lower Level closed.
Thu, 10/22, 9:00pm – Fri, 10/23, 5:00am:	W/B Lower Level closed.
Sat, 10/24, 11:59pm – Sun, 10/25, 8:00am:	2 W/B Upper Level lanes closed.
Tue, 10/27, 9:00pm – Wed, 10/28, 5:00am:	2-3 W/B Lower Level lanes closed.
Wed, 10/28, 9:00pm – Thu, 10/29, 5:00am:	2-3 W/B Lower Level lanes closed.
Thu, 10/29, 9:00pm – Fri, 10/30, 5:00am:	2-3 W/B Lower Level lanes closed.
Mon, 11/02, 10:00pm – Tue, 11/03, 5:00am:	W/B Lower Level closed.

Throughout 2015, there were additional closures of single or multiple lanes, as well as individual roadways, during off-peak hours, to facilitate PANYNJ maintenance work.

Holland Tunnel (Hudson River between Manhattan & New Jersey)

Throughout 2015, only two and three-axle single unit trucks were allowed in both directions.

From 11:59pm Saturday, March 28, to 8:00am Sunday, March 29, the Holland Tunnel was closed eastbound for an emergency response drill.⁸

Throughout 2015, there were intermittent closures of single lanes in both directions during off-peak hours to facilitate PANYNJ maintenance work.

Lincoln Tunnel (Hudson River between Manhattan & New Jersey)

From February 16 to December 31, there were off-peak closures of one of the three tubes for routine maintenance.

From March 9 to December 31, there were intermittent full-time partial closures of the helix in both directions, with full closures in one direction during the off-peak overnight hours.

Throughout 2015, there were additional intermittent lane closures during off-peak hours to facilitate PANYNJ maintenance work.