

2009 Manhattan River Crossings



Michael R. Bloomberg
Mayor



Janette Sadik-Khan
Commissioner
A member of the New York Metropolitan Transportation Council

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Manhattan River Crossings 2009

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2009 Manhattan River Crossings

24 Hour Volumes
Inbound: 923,683
Outbound: 904,382

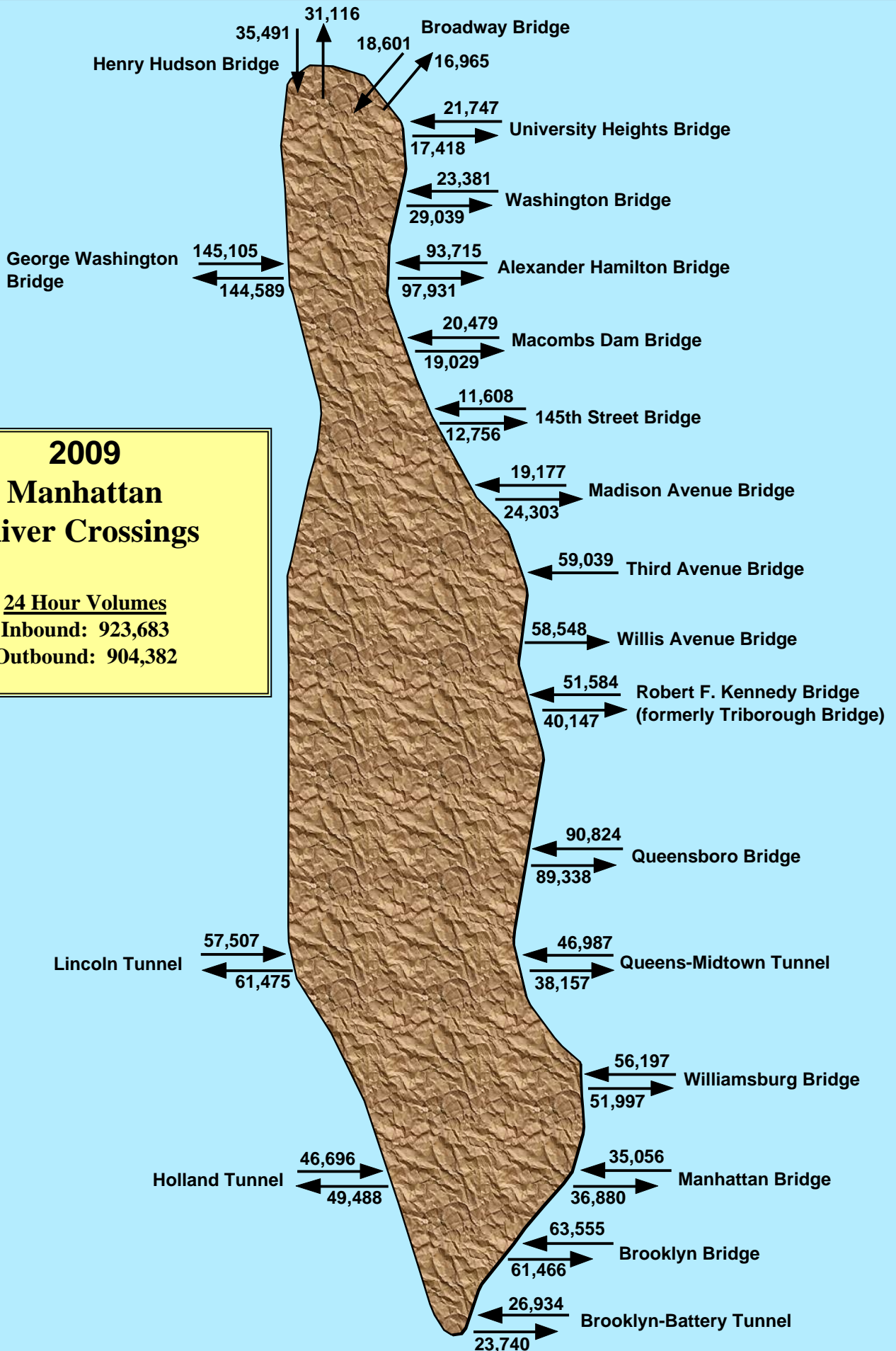


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Introduction



Madison Avenue Bridge

INTRODUCTION

The 2009 *Manhattan River Crossings* report is an annual publication prepared by the New York City Department of Transportation (NYCDOT), and funded by the Unified Planning Work Program (UPWP), and the Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy For Users (SAFETEA - LU).

Since 1948, the City of New York has been monitoring traffic flow over the 20 bridges and tunnels serving Manhattan. The *Manhattan River Crossings* report, published annually by the New York City Department of Transportation (NYCDOT) since 1972, presents vehicular volumes, classification, and trends for all bridge and tunnel facilities 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 2009 are presented in histograms for each facility. Trends were developed from a regression analysis of volumes from 1948 to 2009. The annual growth rate was derived from the linear regression equation that reflects the best fitting straight line. The total vehicular flow to and from Manhattan has been summarized similarly with growth curves, hourly histograms, and a graph of vehicle accumulation in Manhattan. The statistical analysis presented in the report was performed by Subregional Transportation Planning Program staff of NYCDOT during the 2009-2010 and 2010-2011 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 report presents annual growth rates for each bridge. These growth rates are derived from the linear regression equation, which reflects the best fitting straight line for the data plotted.

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 ~ 2009 Daily Traffic



Robert F. Kennedy Memorial Bridge (formerly Triborough Bridge)

SUMMARY

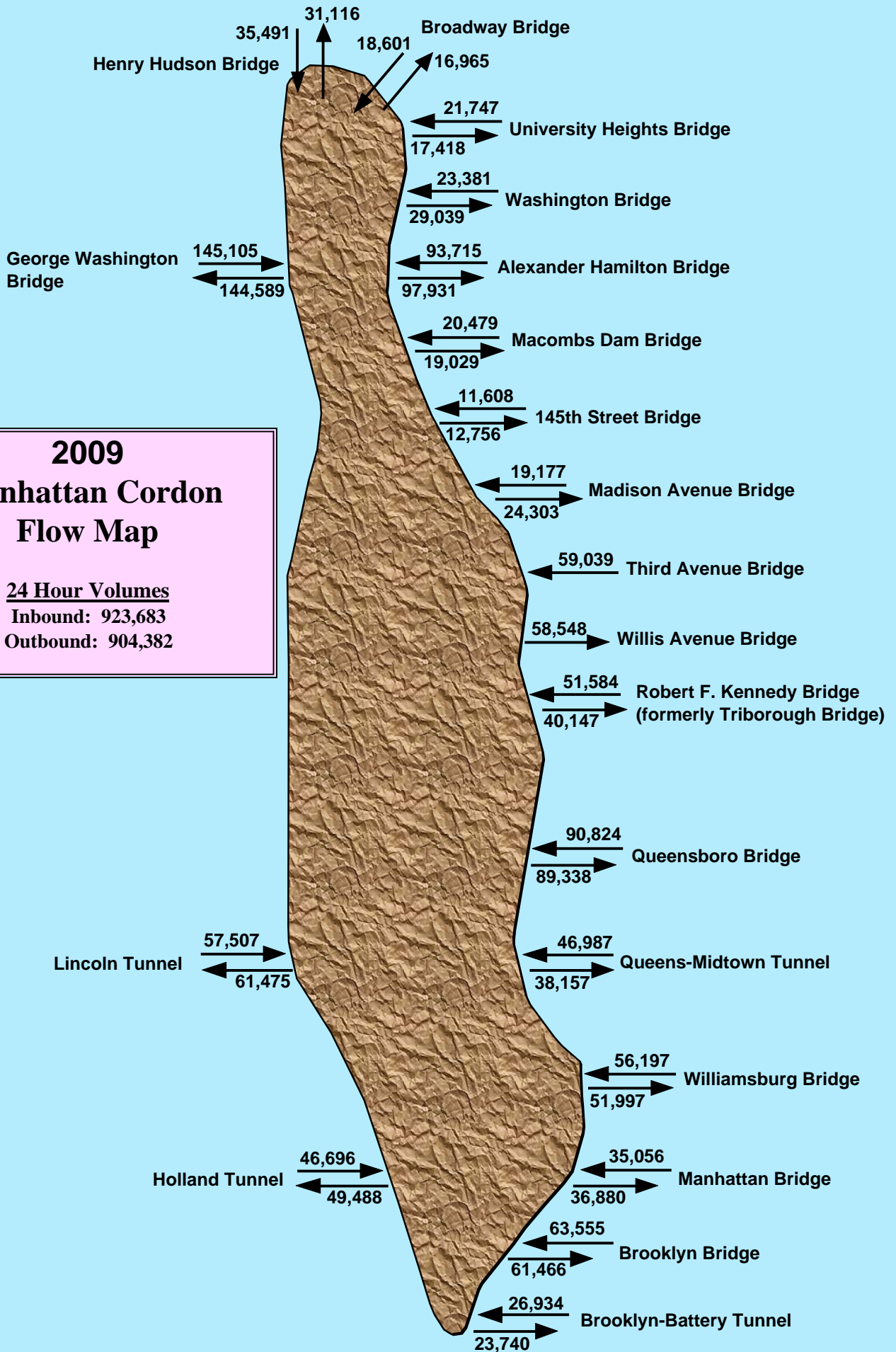
- Daily Manhattan river crossings decreased 0.2%, to 1,828,100 in fall 2009 from 1,830,900 in fall 2008, a decrease of 2,800 daily vehicles.
- During the 7-8 am morning peak hour, 64,900 vehicles entered Manhattan. During the 4-5pm evening peak hour, 59,200 vehicles exited.
- For the 48th consecutive year, the George Washington Bridge carried more traffic than any other river crossing serving Manhattan. Some 289,700 daily vehicles used this bridge in fall 2008, which was 1.1% fewer than the average daily volume of 293,100 in fall 2008.
- The Alexander Hamilton Bridge was the second busiest river crossing, serving 191,600 daily vehicles in fall 2009, which was 1.1% more than its fall 2008 daily volume of 189,600. The Queensboro Bridge was third busiest with its fall 2009 daily volume of 180,200, an increase of 2.2% from the 176,300 recorded in fall 2008.
- The average automobile entering Manhattan during the morning peak period carried 1.38 persons including the driver. A total of 78% of peak period automobiles were occupied only by the driver.
- The peak accumulation of motor vehicles in Manhattan on an average weekday occurred at about 2 pm when an estimated 369,100 vehicles were either moving or parked on the island. This includes vehicles operating only within Manhattan as well as those entering via the river crossings.
- Annual subway ridership citywide decreased 2.9% to 1.577 billion in 2009 from 1.624 billion in 2008. Nevertheless, this was still the second highest level of subway ridership since 1951.
- According to the 2000 census data, 45% of all automobile work trips ending in Manhattan originated in the other four boroughs, 44% came from outside the city, and the remaining 11% originated within Manhattan.
- Origin and Destination (O & D) surveys conducted by PANYNJ in 2006 at its trans-Hudson crossings show that 44% of all automobiles entering Manhattan from New Jersey each day have final destinations outside Manhattan. Similar surveys conducted in 2009 show that some 70% of the trucks entering from New Jersey have final destinations outside Manhattan. These figures indicate that over 100,000 autos and trucks entering Manhattan from New Jersey in 2009 each day were simply passing through.
- PANYNJ reports show that 66% of morning peak period (7-10 am) automobiles entering from New Jersey have final destinations in Manhattan.

2009 Manhattan Cordon Flow Map

24 Hour Volumes

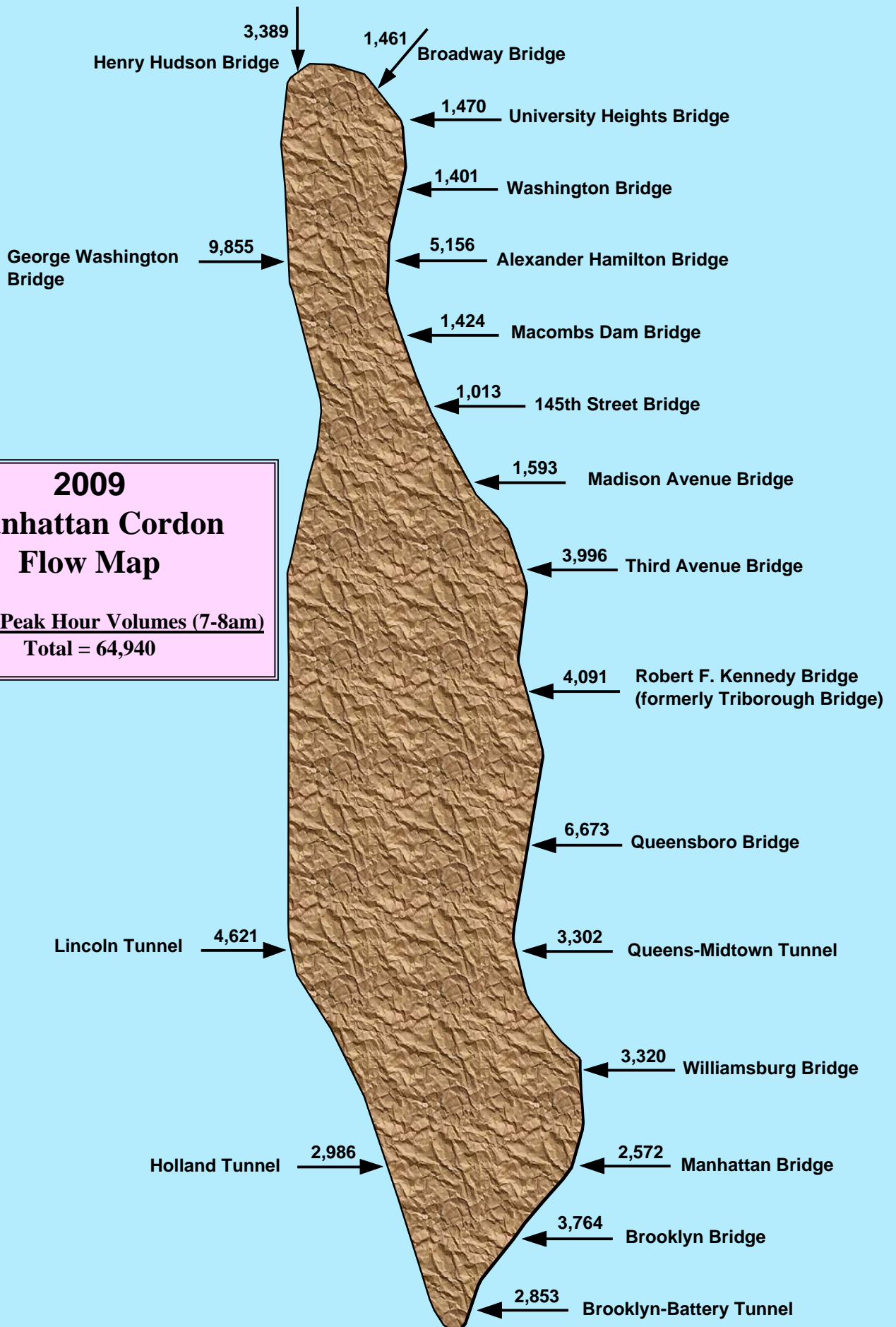
Inbound: 923,683

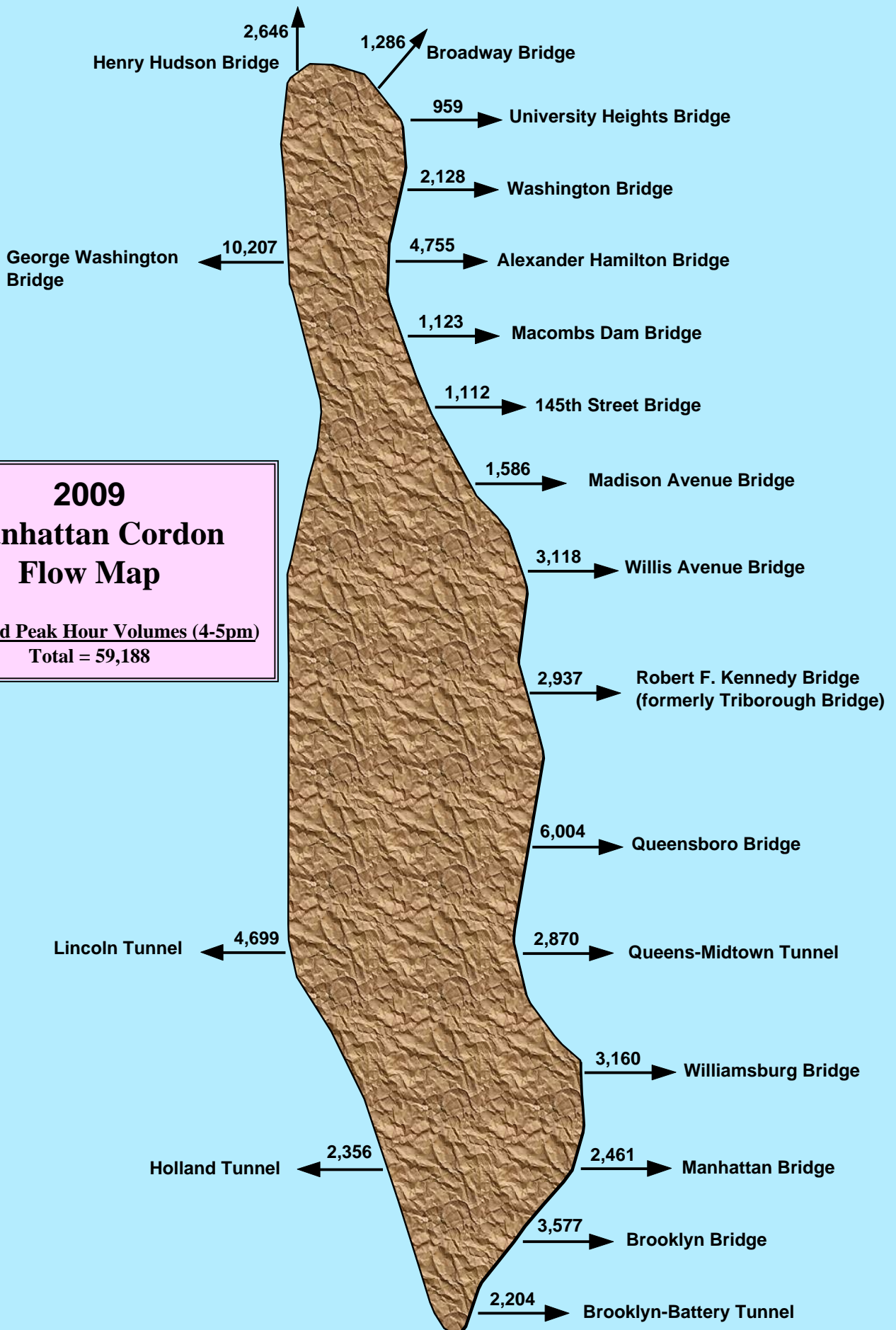
Outbound: 904,382



**2009
Manhattan Cordon
Flow Map**

Inbound Peak Hour Volumes (7-8am)
Total = 64,940





Manhattan Crossings **2009 Average Daily Traffic Volumes** **To and From Manhattan**

<i>EAST RIVER BRIDGES</i>	To Manhattan	From Manhattan	2-way Total
Brooklyn Bridge	63,555	61,466	125,021
Manhattan Bridge	35,056	36,880	71,936
Queensboro Bridge	90,824	89,338	180,162
Williamsburg Bridge	56,197	51,997	108,194
Total East River	245,632	239,681	485,313

<i>HARLEM RIVER BRIDGES</i>			
Alexander Hamilton Bridge	93,715	97,931	191,646
Broadway Bridge	18,601	16,965	35,566
Macombs Dam Bridge	20,479	19,029	39,508
Madison Avenue Bridge	19,177	24,303	43,480
Third Avenue Bridge	59,039	-----	59,039
University Heights Bridge	21,747	17,418	39,165
Washington Bridge	23,381	29,039	52,420
Willis Avenue Bridge	-----	58,548	58,548
145th Street Bridge	11,608	12,756	24,364
Total Harlem River	267,747	275,989	543,736

<i>MTABT FACILITIES</i>			
Brooklyn-Battery Tunnel	26,934	23,740	50,674
Henry Hudson Bridge	35,491	31,116	66,607
Queens-Midtown Tunnel	46,987	38,157	85,144
Robert F. Kennedy Bridge	51,584	40,147	91,731
Total MTABT	160,996	133,160	294,156

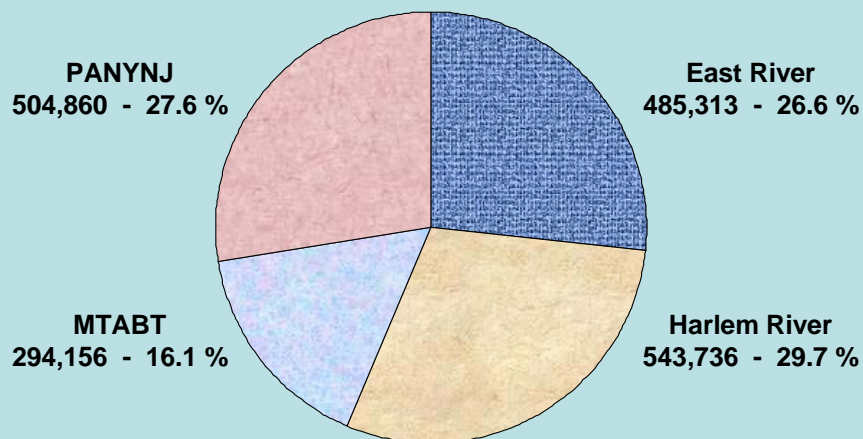
<i>PANYNJ FACILITIES</i>			
George Washington Bridge	145,105	144,589	289,694
Holland Tunnel	46,696	49,488	96,184
Lincoln Tunnel	57,507	61,475	118,982
Total PANYNJ	249,308	255,552	504,860

GRAND TOTAL	923,683	904,382	1,828,065
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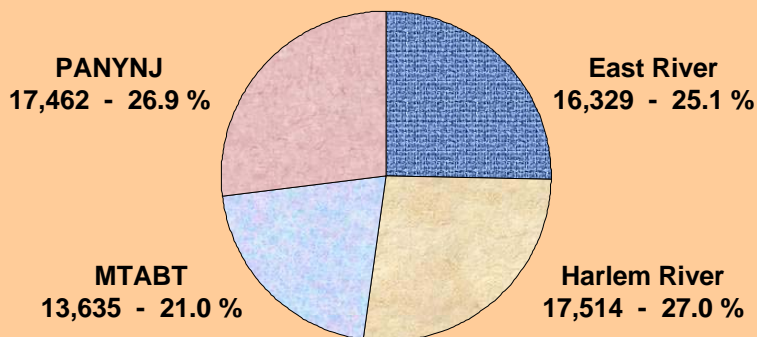
Note: Robert F. Kennedy Bridge, formerly Triborough Bridge, was renamed Nov. 19, 2008.

2009 Manhattan Crossings Vehicle Volumes

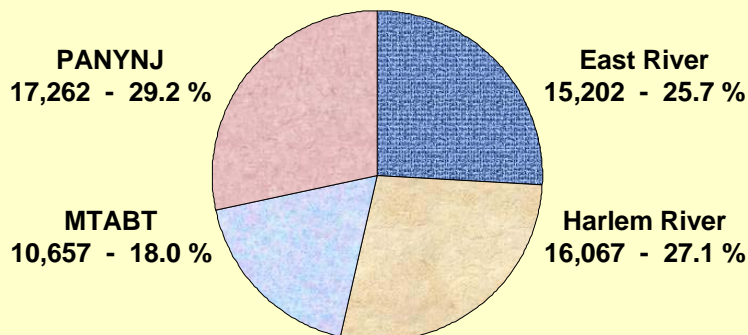
24-Hour Volumes – Both Directions



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



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



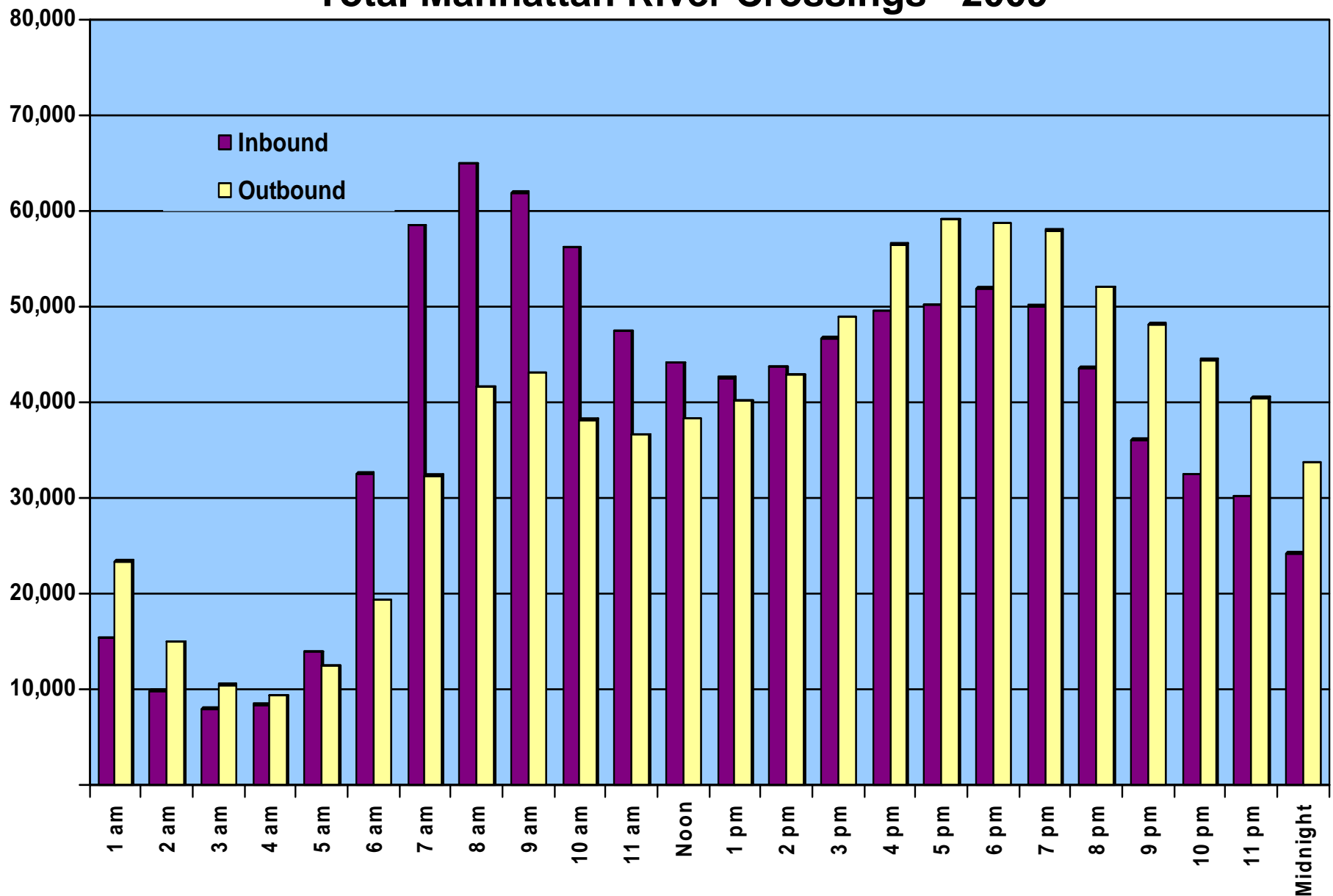
Total Manhattan Crossings 2009 Average Hourly Traffic Volumes To and From Manhattan (All Facilities)

	Entering Manhattan	Leaving Manhattan	2-Way Total
12-1am	15,415	23,501	38,916
1-2am	9,895	14,990	24,885
2-3am	8,046	10,600	18,646
3-4am	8,482	9,366	17,848
4-5am	14,026	12,544	26,570
5-6am	32,655	19,392	52,047
6-7am	58,547	32,372	90,919
7-8am	64,940 **	41,626	106,566
8-9am	61,974	43,151	105,125
9-10am	56,273	38,194	94,467
10-11am	47,470	36,679	84,149
11-12am	44,182	38,349	82,531
12-1pm	42,638	40,239	82,877
1-2pm	43,758	42,916	86,674
2-3pm	46,723	48,899	95,622
3-4pm	49,620	56,594	106,214
4-5pm	50,181	59,188 **	109,369
5-6pm	51,912	58,769	110,681
6-7pm	50,097	57,970	108,067
7-8pm	43,663	52,109	95,772
8-9pm	36,195	48,172	84,367
9-10pm	32,470	44,459	76,929
10-11pm	30,272	40,508	70,780
11-12pm	24,249	33,795	58,044
24 hrs	923,683	904,382	1,828,065
7-10am	183,187	122,971	306,158
10am-1pm	134,290	115,267	249,557
1-4pm	140,101	148,409	288,510
4-7pm	152,190	175,927	328,117
7am-7pm	609,768	562,574	1,172,342

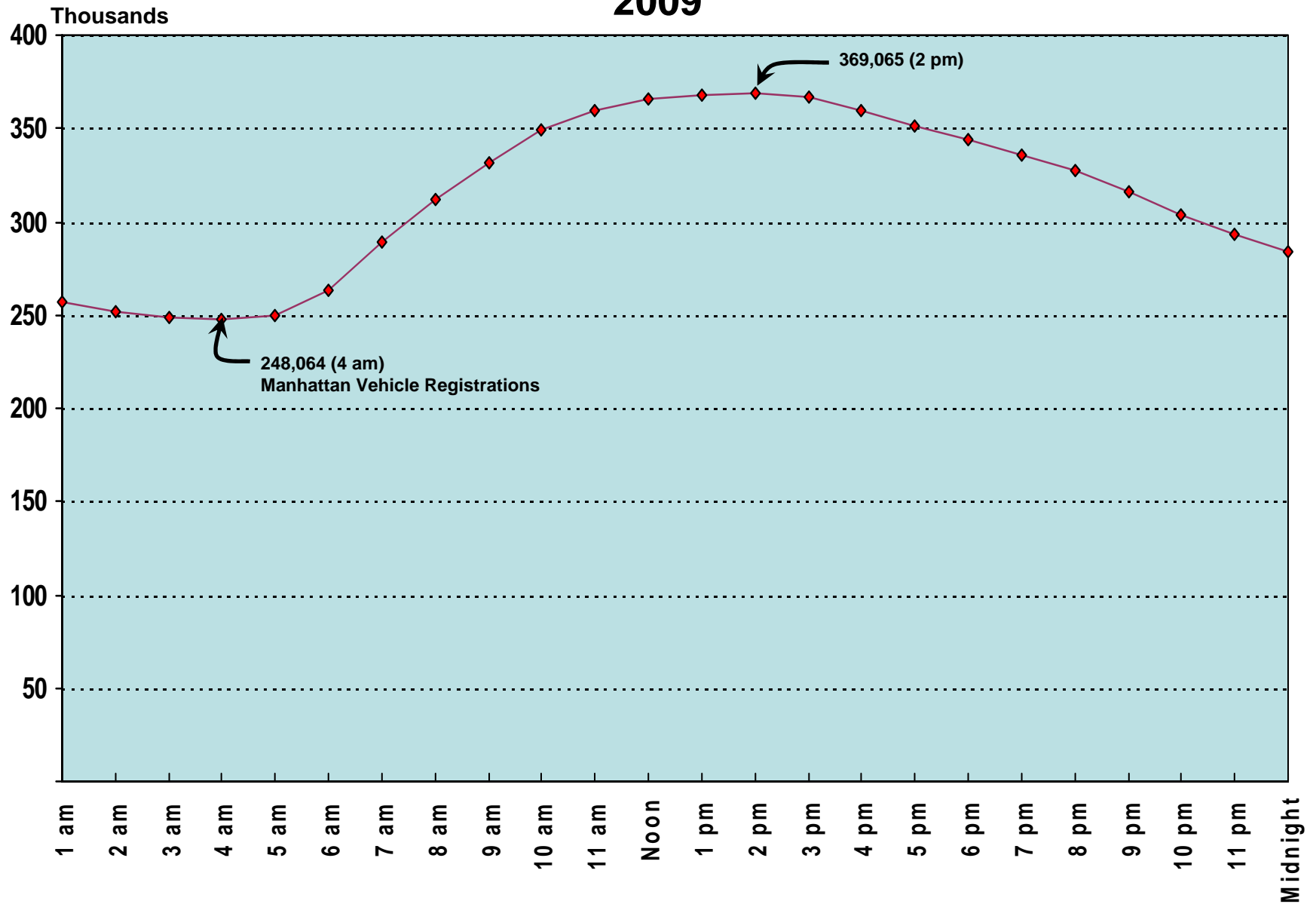
** Peak Volumes

Hourly Vehicular Volumes

Total Manhattan River Crossings - 2009



Manhattan Vehicular Accumulation 2009



Trip Characteristics



University Heights Bridge

ORIGINS AND DESTINATIONS OF MANHATTAN AUTO COMMUTERS

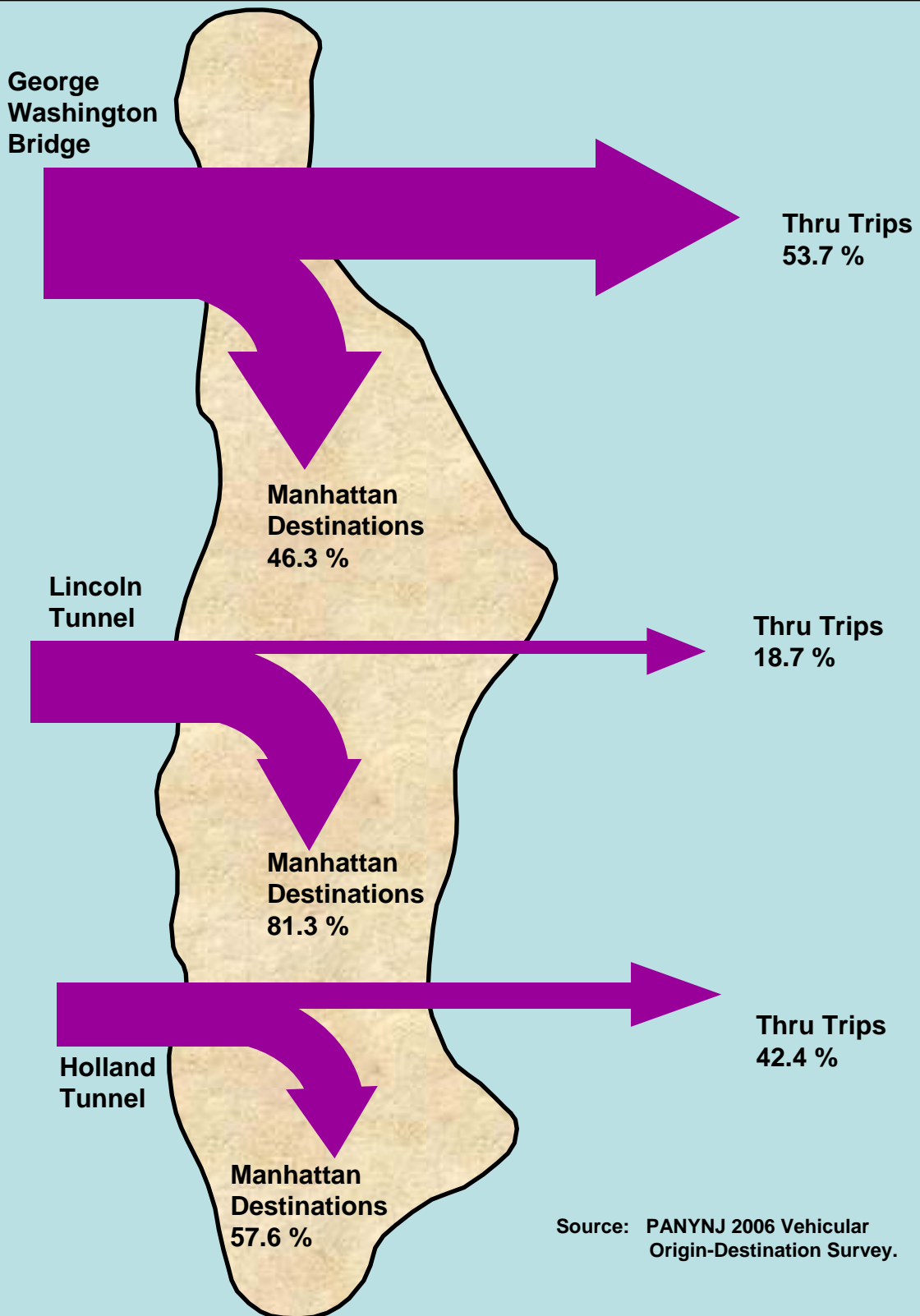
<i>DESTINATIONS</i>			
<i>ORIGINS</i>	Manhattan CBD	Upper Manhattan	Total
Bronx	6.5 %	16.5 %	9.0 %
Brooklyn	13.2 %	8.7 %	12.1 %
Manhattan	9.9 %	14.8 %	11.1 %
Queens	19.4 %	17.7 %	19.0 %
Staten Island	5.5 %	2.0 %	4.7 %
Subtotal NYC Origins	54.5 %	59.7 %	55.9 %
Long Island	10.7 %	7.1 %	9.8 %
Upstate NY	10.0 %	15.0 %	11.2 %
New Jersey	20.8 %	15.4 %	19.5 %
Connecticut	1.6 %	1.0 %	1.4 %
Pennsylvania	1.2 %	0.8 %	1.1 %
Other Origins	1.2 %	1.0 %	1.1 %
Subtotal Suburbs	45.5 %	40.3 %	44.1 %
GRAND TOTAL	100.0 %	100.0 %	100.0 %

Definitions: CBD - Manhattan Central Business District (area south of and including 60th Street).

Upper Manhattan - Area of Manhattan north of 60th Street.

Data Source: New York City Department of City Planning Website, 2000 U.S. Census Journey to Work Tables.

2009 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 %

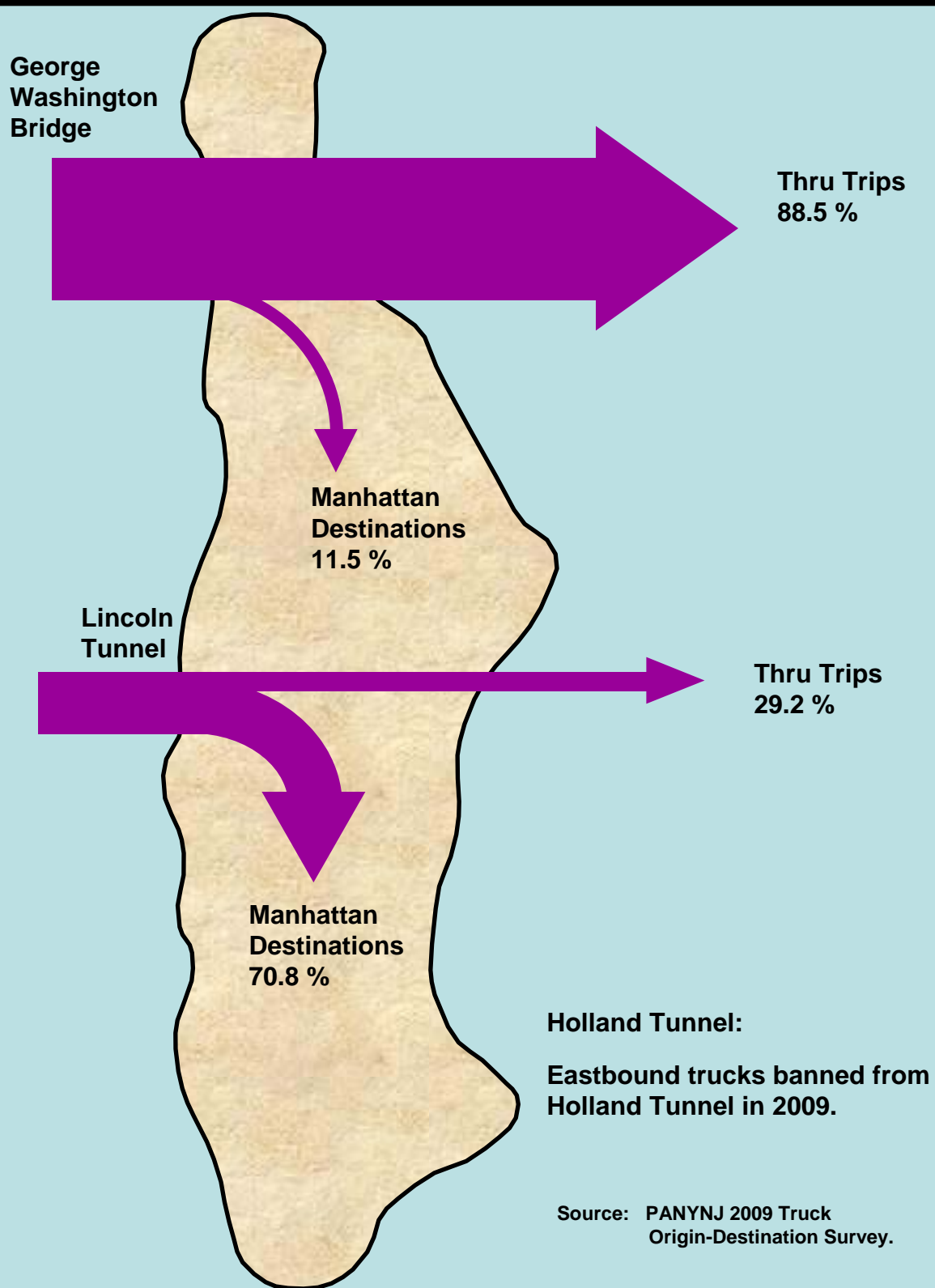
Source: Weekday data from the PANYNJ 2006 Vehicular Origin-Destination Survey.

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.

2009 Thru vs. Local E/B Truck Trips via Hudson River Crossings



DESTINATIONS OF HUDSON RIVER CROSSINGS EASTBOUND TRUCK TRAFFIC

Eastbound Truck Destinations	George Washington Bridge	Holland Tunnel	Lincoln Tunnel
Manhattan	11.5 %	See Note	70.8 %
New York City Outer Boroughs			
Bronx	21.2 %		0.3 %
Brooklyn	5.2 %		10.9 %
Queens	15.7 %		14.3 %
Staten Island	0.4 %		0.3 %
Subtotal Outer Boroughs	42.5 %		25.8 %
New York City Total	54.0 %		96.6 %
Destinations Outside NY City			
Long Island	14.5 %		2.0 %
Westchester	5.6 %		1.4 %
New England	25.7 %		0.0 %
Other	0.2 %		0.0 %
Subtotal Outside New York City	46.0 %		3.4 %
Thru Trips Total (Non-Manhattan Destinations)	88.5 %		29.2 %
GRAND TOTAL	100.0 %		100.0 %

Note: Eastbound trucks banned from Holland Tunnel during 2009.

Source: PANYNJ 2009 Truck 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	80.0 %
Williamsburg Bridge	1.17	84.6 %
Holland Tunnel	1.32	65.8 %
5 Lower Manhattan Crossings	1.25	76.9 %
Queens-Midtown Tunnel	1.24	77.6 %
Queensboro Bridge	1.44	66.5 %
Lincoln Tunnel	1.97	73.1 %
3 Midtown Manhattan Crossings	1.54	71.4 %
Robert F. Kennedy Bridge	1.18	83.2 %
Alexander Hamilton Bridge	1.16	86.0 %
Broadway Bridge	1.19	84.7 %
Macombs Dam Bridge	1.32	72.3 %
Madison Avenue Bridge	1.28	77.0 %
Third Avenue Bridge	1.22	80.7 %
University Heights Bridge	1.23	82.9 %
Washington Bridge	1.38	72.9 %
145th Street Bridge	1.32	73.7 %
Henry Hudson Bridge	1.20	88.8 %
George Washington Bridge	1.74	79.6 %
11 Upper Manhattan Crossings	1.37	81.7 %
All 19 Inbound Manhattan Crossings	1.38	78.1 %

Sources:

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

2008-2009 Trends



Broadway Bridge

2008-2009 Trends

- Daily Manhattan river crossings decreased 0.2%, to 1,828,100 in fall 2008 from 1,830,900 in fall 2008, a decrease of 2,800 daily vehicles.
- The largest percentage and numerical decrease occurred at the Brooklyn-Battery Tunnel between Manhattan and Brooklyn, where daily volume decreased by 4,300 vehicles (-7.9%), to 50,700 in fall 2009 from 55,000 in fall 2008.
- The largest percentage increase occurred on the 145th Street Bridge over the Harlem River between Manhattan and The Bronx, where daily traffic increased 6.9%, to 35,600 vehicles in 2009 from 33,300 in 2008 (+2,300 daily vehicles). The largest numerical increase was on the Queensboro Bridge over the East River between Queens and Manhattan. Traffic on the Queensboro Bridge increased by 3,900 daily vehicles, to 180,200 in fall 2009 from 176,300 in fall 2008 (+2.2%).
- Daily traffic on the four East River bridges increased 1.7%, to 485,300 in fall 2009 from 477,200 in fall 2008.
- Daily volume using the nine Harlem River bridges increased 0.8%, to 543,700 in 2009 from 539,400 in 2008.
- The four MTABT Manhattan Crossings saw a 3.9% decrease in total daily traffic, to 294,200 in 2009 from 306,000 in 2008.
- Daily traffic using the three PANYNJ Manhattan crossings decreased 0.7% to 504,900 from 508,300.
- Annual subway ridership citywide decreased 2.9% to 1.577 billion in 2009 from 1.624 billion in 2008. Nevertheless, this was still the second highest level of subway ridership since 1951.

Manhattan Crossings

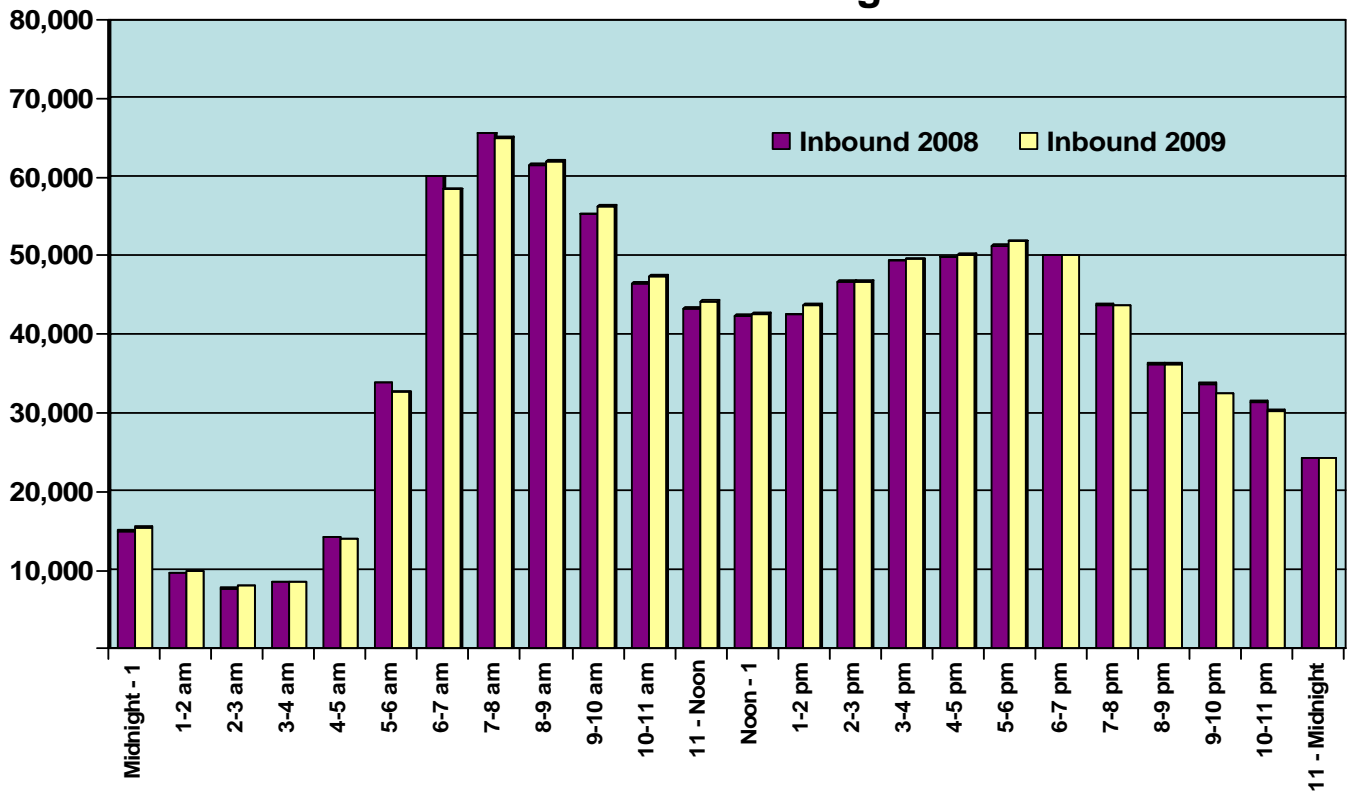
Hourly Vehicular Volumes

2009 vs 2008

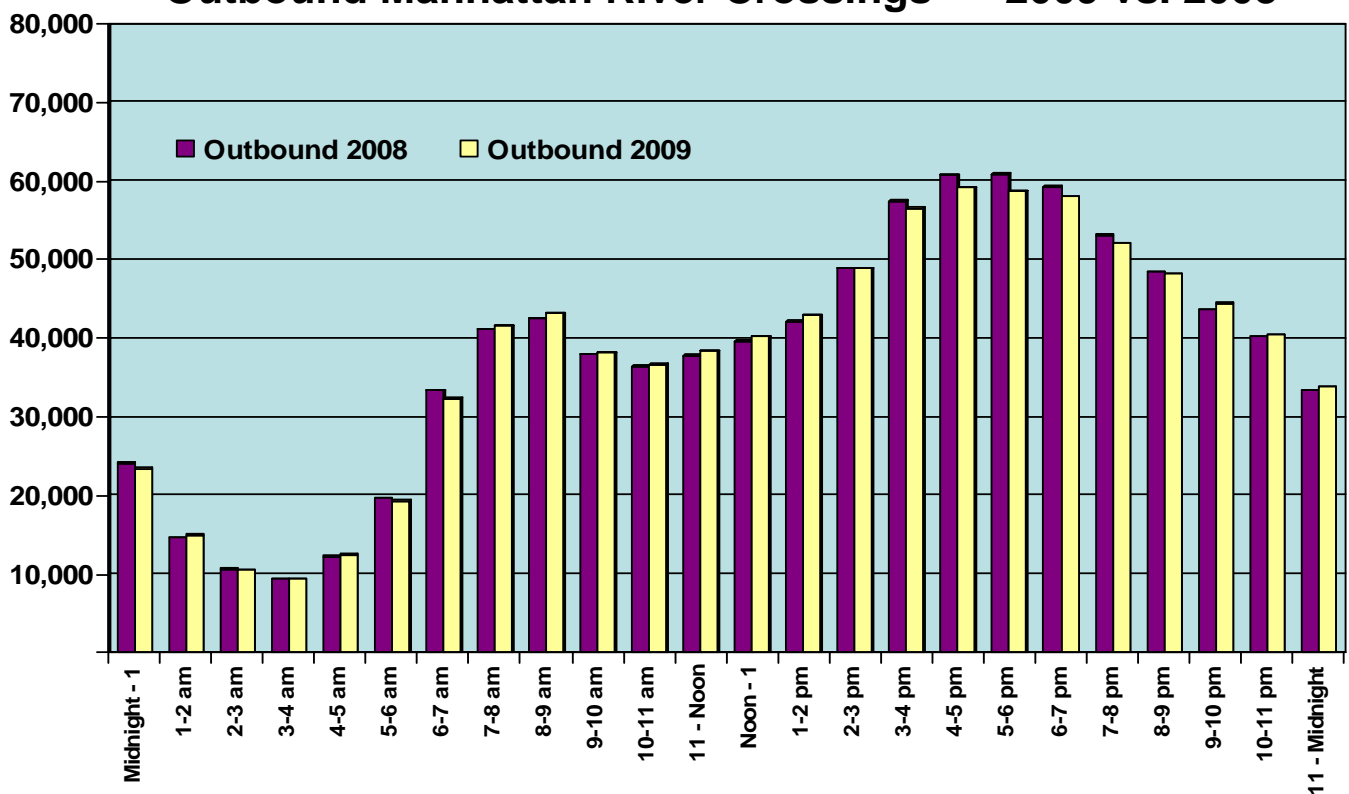
	<i>Inbound</i>			<i>Outbound</i>		
	2008	2009	Percent Change	2008	2009	Percent Change
Mid-1	14,960	15,415	3.0 %	24,125	23,501	-2.6 %
1-2 am	9,633	9,895	2.7 %	14,645	14,990	2.4 %
2-3 am	7,748	8,046	3.8 %	10,711	10,600	-1.0 %
3-4 am	8,519	8,482	-0.4 %	9,469	9,366	-1.1 %
4-5 am	14,174	14,026	-1.0 %	12,268	12,544	2.2 %
5-6 am	33,814	32,655	-3.4 %	19,728	19,392	-1.7 %
6-7 am	60,114	58,547	-2.6 %	33,374	32,372	-3.0 %
7-8 am	65,527	64,940	-0.9 %	41,145	41,626	1.2 %
8-9 am	61,545	61,974	0.7 %	42,529	43,151	1.5 %
9-10 am	55,322	56,273	1.7 %	37,899	38,194	0.8 %
10-11 a	46,501	47,470	2.1 %	36,487	36,679	0.5 %
11-Noon	43,324	44,182	2.0 %	37,815	38,349	1.4 %
Noon-1	42,397	42,638	0.6 %	39,668	40,239	1.4 %
1-2 pm	42,500	43,758	3.0 %	42,209	42,916	1.7 %
2-3 pm	46,750	46,723	-0.1 %	48,883	48,899	0.0 %
3-4 pm	49,372	49,620	0.5 %	57,446	56,594	-1.5 %
4-5 pm	49,761	50,181	0.8 %	60,822	59,188	-2.7 %
5-6 pm	51,255	51,912	1.3 %	60,875	58,769	-3.5 %
6-7 pm	50,001	50,097	0.2 %	59,334	57,970	-2.3 %
7-8 pm	43,730	43,663	-0.2 %	53,156	52,109	-2.0 %
8-9 pm	36,214	36,195	-0.1 %	48,449	48,172	-0.6 %
9-10 pm	33,687	32,470	-3.6 %	43,670	44,459	1.8 %
10-11 p	31,485	30,272	-3.9 %	40,182	40,508	0.8 %
11-Mid	24,249	24,249	0.0 %	33,436	33,795	1.1 %
Totals	922,582	923,683	0.1 %	908,325	904,382	-0.4 %
7-10am	182,394	183,187	0.4 %	121,573	122,971	1.1 %
10am-1pm	132,222	134,290	1.6 %	113,970	115,267	1.1 %
1-4pm	138,622	140,101	1.1 %	148,538	148,409	-0.1 %
4-7pm	151,017	152,190	0.8 %	181,031	175,927	-2.8 %
7am-7pm	604,255	609,768	0.9 %	565,112	562,574	-0.4 %

Hourly Vehicular Volumes

Inbound Manhattan River Crossings ~ 2009 vs. 2008



Outbound Manhattan River Crossings ~ 2009 vs. 2008



Manhattan Crossings

2008-2009 Traffic Volume Trends

Both Directions

EAST RIVER BRIDGES	Highway Functional Classification	2008	2009	Percent Change
Brooklyn Bridge	Principal Arterial	123,781	125,021	1.0 %
Manhattan Bridge	Principal Arterial	70,341	71,936	2.3 %
Queensboro Bridge	Principal Arterial	176,306	180,162	2.2 %
Williamsburg Bridge	Principal Arterial	106,783	108,194	1.3 %
Total, 4 East River Bridges		477,211	485,313	1.7 %

HARLEM RIVER BRIDGES

Alexander Hamilton Bridge	Interstate	189,598	191,646	1.1 %
Broadway Bridge	Principal Arterial	33,266	35,566	6.9 %
Macombs Dam Bridge	Principal Arterial	38,897	39,508	1.6 %
Madison Avenue Bridge	Principal Arterial	41,740	43,480	4.2 %
Third Avenue Bridge	Principal Arterial	58,510	59,039	0.9 %
University Heights Bridge	Principal Arterial	39,340	39,165	- 0.4 %
Washington Bridge	Minor Arterial	52,768	52,420	- 0.7 %
Willis Avenue Bridge	Principal Arterial	62,167	58,548	- 5.8 %
145th Street Bridge	Minor Arterial	23,148	24,364	5.3 %
Total, 9 Harlem River Bridges		539,434	543,736	0.8 %

MTABT Manhattan Facilities

Brooklyn-Battery Tunnel	Interstate	55,037	50,674	- 7.9 %
Henry Hudson Bridge	Principal Arterial	69,101	66,607	- 3.6 %
Queens-Midtown Tunnel	Interstate	86,709	85,144	- 1.8 %
R.F.K. Memorial Bridge Manhattan Plaza *	Principal Arterial	95,146	91,731	- 3.6 %
Total, 4 MTA/BT Manhattan Crossings		305,993	294,156	- 3.9 %

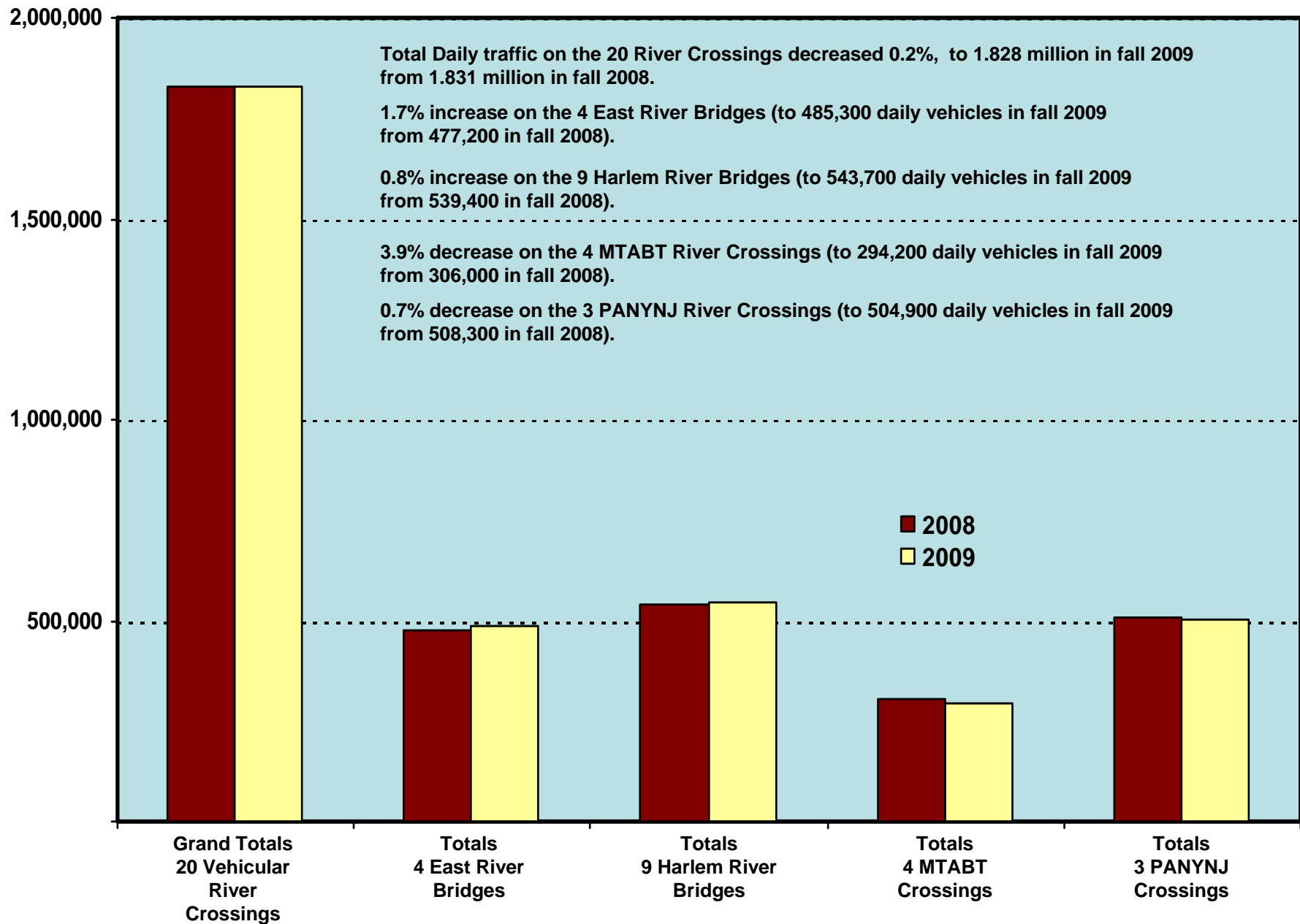
PANYNJ Manhattan Facilities

George Washington Bridge	Interstate	293,059	289,694	- 1.1 %
Holland Tunnel	Interstate	97,057	96,184	- 0.9 %
Lincoln Tunnel	Principal Arterial	118,153	118,982	0.7 %
Total, 3 PANYNJ Manhattan - New Jersey Crossings		508,269	504,860	- 0.7 %

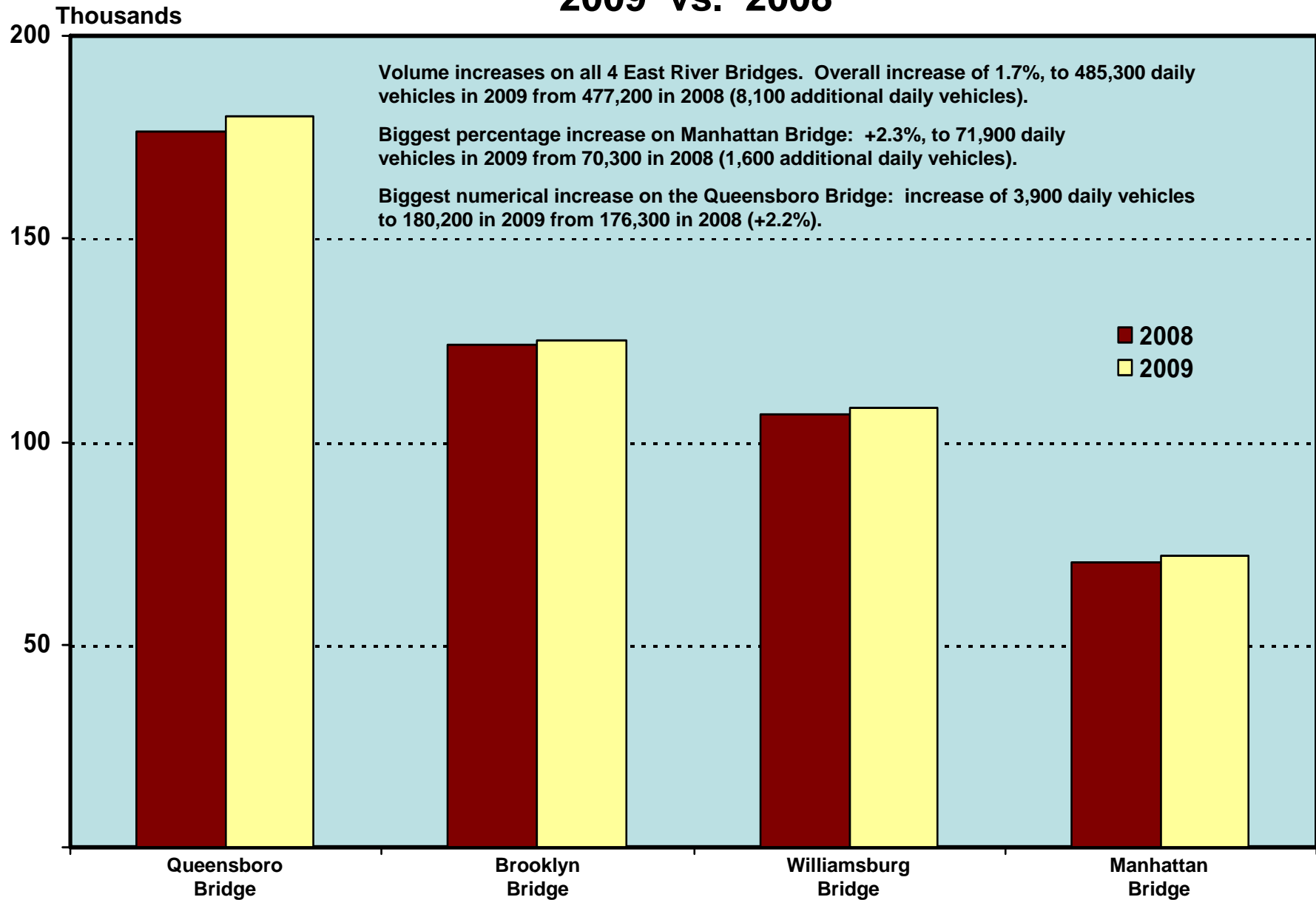
GRAND TOTALS		1,830,907	1,828,065	- 0.2 %
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* Formerly Triborough Bridge.

Manhattan River Crossings Daily Volumes 2009 vs. 2008

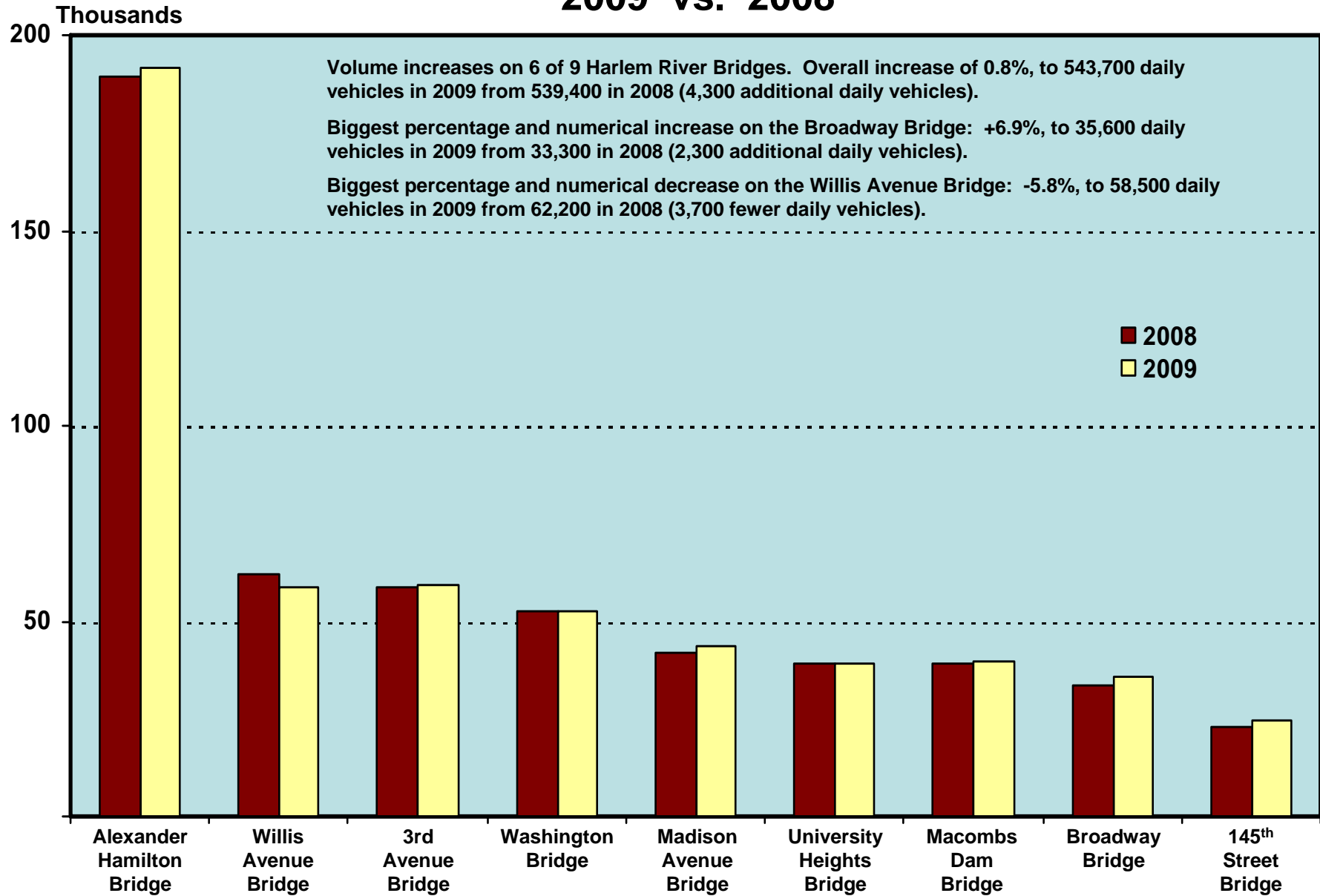


East River Bridges Daily Volumes 2009 vs. 2008

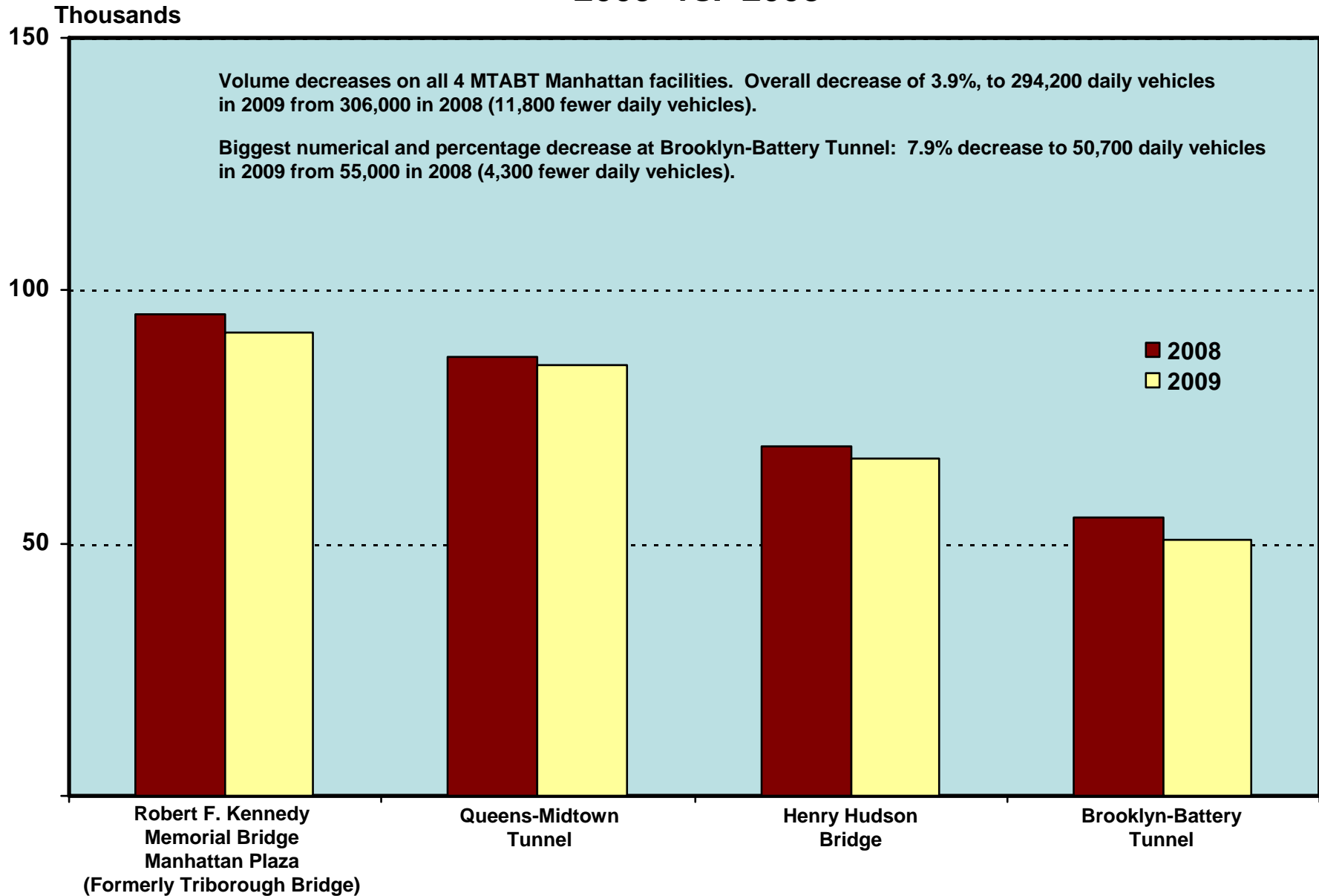


Harlem River Bridges Daily Volumes

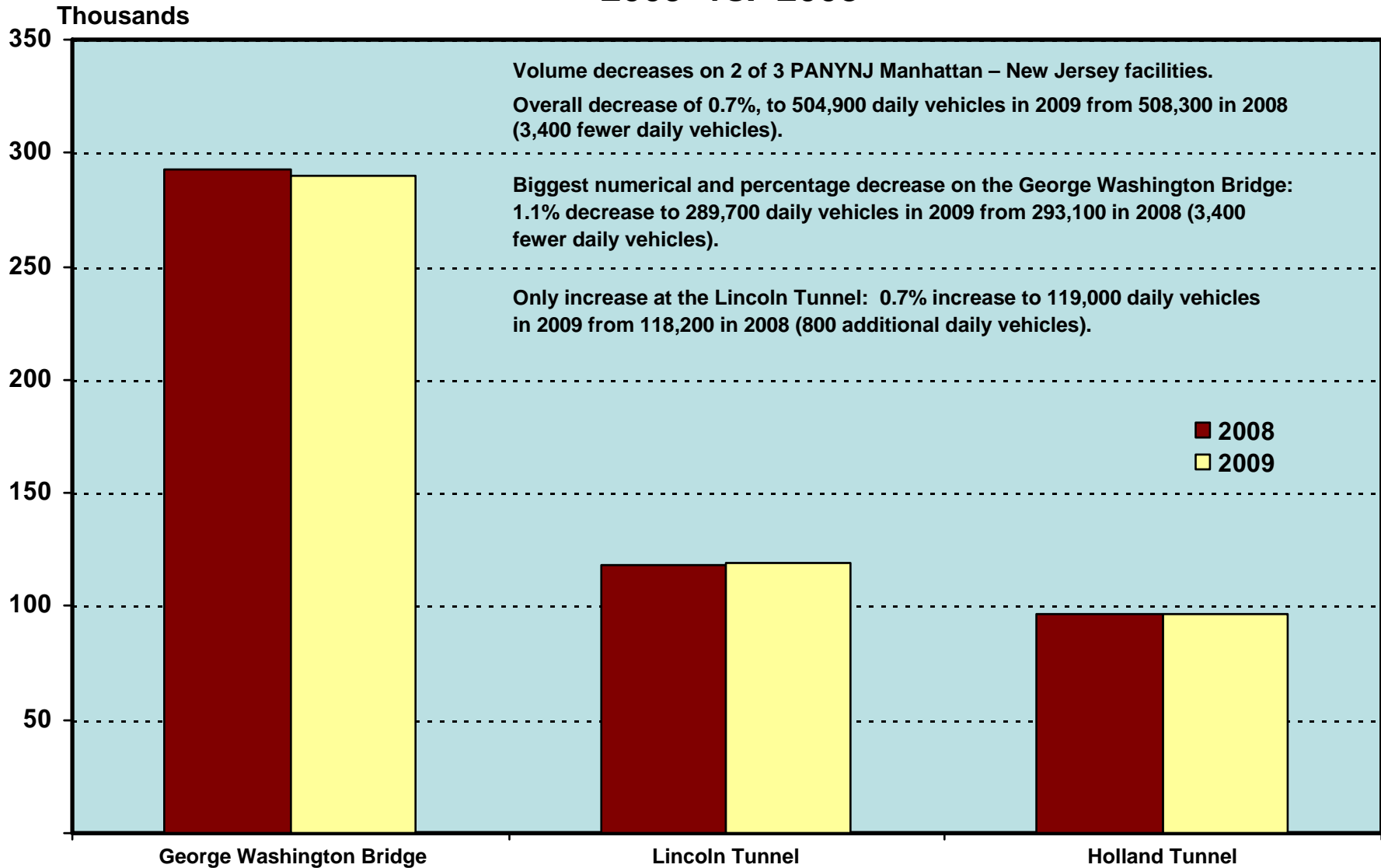
2009 vs. 2008



Metropolitan Transportation Authority Bridges & Tunnels (MTABT) Manhattan Facilities Daily Volumes 2009 vs. 2008



Port Authority of New York & New Jersey (PANYNJ) Manhattan – N.J. Facilities Daily Volumes 2009 vs. 2008



Ten-Year Trends 1999 - 2009



3rd Avenue Bridge

Ten-Year Trends: 1999 - 2009

- In the ten-year period from 1999 to 2009, Manhattan traffic volume decreased 5.4%, to 1,828,100 daily vehicles from 1,933,000, a decrease of 104,900 daily vehicles. Simultaneously, annual citywide subway ridership increased 22.9%, to 1,577,000,000 from 1,283,000,000.
- Daily vehicle trips entering Manhattan were 4.6% lower in 2009 than in 1999. The biggest decrease in inbound trips occurred during the 7-10am and 10pm-1am periods, both of which decreased 9.4% during the decade. Trips leaving Manhattan decreased 6.3% since 1999. The biggest outbound decrease occurred during the 1-4am period (-13.3%).
- Vehicle trips on the 13 toll-free East and Harlem River bridges decreased at an average annual rate of 0.3% per year from 1999 to 2009. The greatest rate of decline was on the 145th Street Bridge (-3.3% per year). The greatest volume decrease occurred on the Manhattan Bridge (loss of 20,400 daily trips, to 71,900 in 2009 from 92,300 in 1999). The highest positive average annual growth rate was on the Macombs Dam Bridge: +2.6% per year. The greatest volume increase was on the Alexander Hamilton Bridge (11,400 more daily vehicles in fall 2009 than in fall 1999).
- Traffic volumes on the four MTA Bridges and Tunnels (MTABT) river crossings serving Manhattan increased at an average annual rate of 0.3% per year since 1999. The highest average annual growth rate was on the Queens-Midtown Tunnel (+1.2% per year). The largest volume increase was at the Henry Hudson Bridge (+5,400 vehicles per day).
- Traffic volumes on the three trans-Hudson Port Authority of New York and New Jersey (PANYNJ) river crossings serving Manhattan decreased 0.4% per year since 1999. The biggest average annual rate of decline was at the George Washington Bridge (-0.9% per year), which also had the biggest volume decrease (27,900 fewer vehicles per day).
- New York City motor vehicle registrations decreased 0.56% per year. In Manhattan, registrations decreased by 0.15% per year.

Manhattan Crossings

10-Year Traffic Volume Trends ~ 1999-2009

Both Directions

EAST RIVER BRIDGES	Highway Functional Classification	1999	2009	Percent Change
Brooklyn Bridge	Principal Arterial	127,065	125,021	- 1.6 %
Manhattan Bridge	Principal Arterial	92,311	71,936	- 22.1 %
Queensboro Bridge	Principal Arterial	189,190	180,162	- 4.8 %
Williamsburg Bridge	Principal Arterial	107,941	108,194	0.2 %
Total, 4 East River Bridges		516,507	485,313	- 6.0 %

HARLEM RIVER BRIDGES

Alexander Hamilton Bridge	Interstate	180,201	191,646	6.4 %
Broadway Bridge	Principal Arterial	35,412	35,566	0.4 %
Macombs Dam Bridge	Principal Arterial	41,813	39,508	- 5.5 %
Madison Avenue Bridge	Principal Arterial	38,102	43,480	14.1 %
Third Avenue Bridge	Principal Arterial	68,544	59,039	- 13.9 %
University Heights Bridge	Principal Arterial	42,287	39,165	- 7.4 %
Washington Bridge	Minor Arterial	58,907	52,420	- 11.0 %
Willis Avenue Bridge	Principal Arterial	71,555	58,548	- 18.2 %
145th Street Bridge	Minor Arterial	26,361	24,364	- 7.6 %
Total, 9 Harlem River Bridges		563,182	543,736	- 3.5 %

MTABT Manhattan Facilities

Brooklyn-Battery Tunnel	Interstate	63,307	50,674	- 20.0 %
Henry Hudson Bridge	Principal Arterial	61,165	66,607	8.9 %
Queens-Midtown Tunnel	Interstate	80,941	85,144	5.2 %
R.F.K. Memorial Bridge Manhattan Plaza *	Principal Arterial	98,553	91,731	- 6.9 %
Total, 4 MTA/BT Manhattan Crossings		303,966	294,156	- 3.2 %

PANYNJ Manhattan Facilities

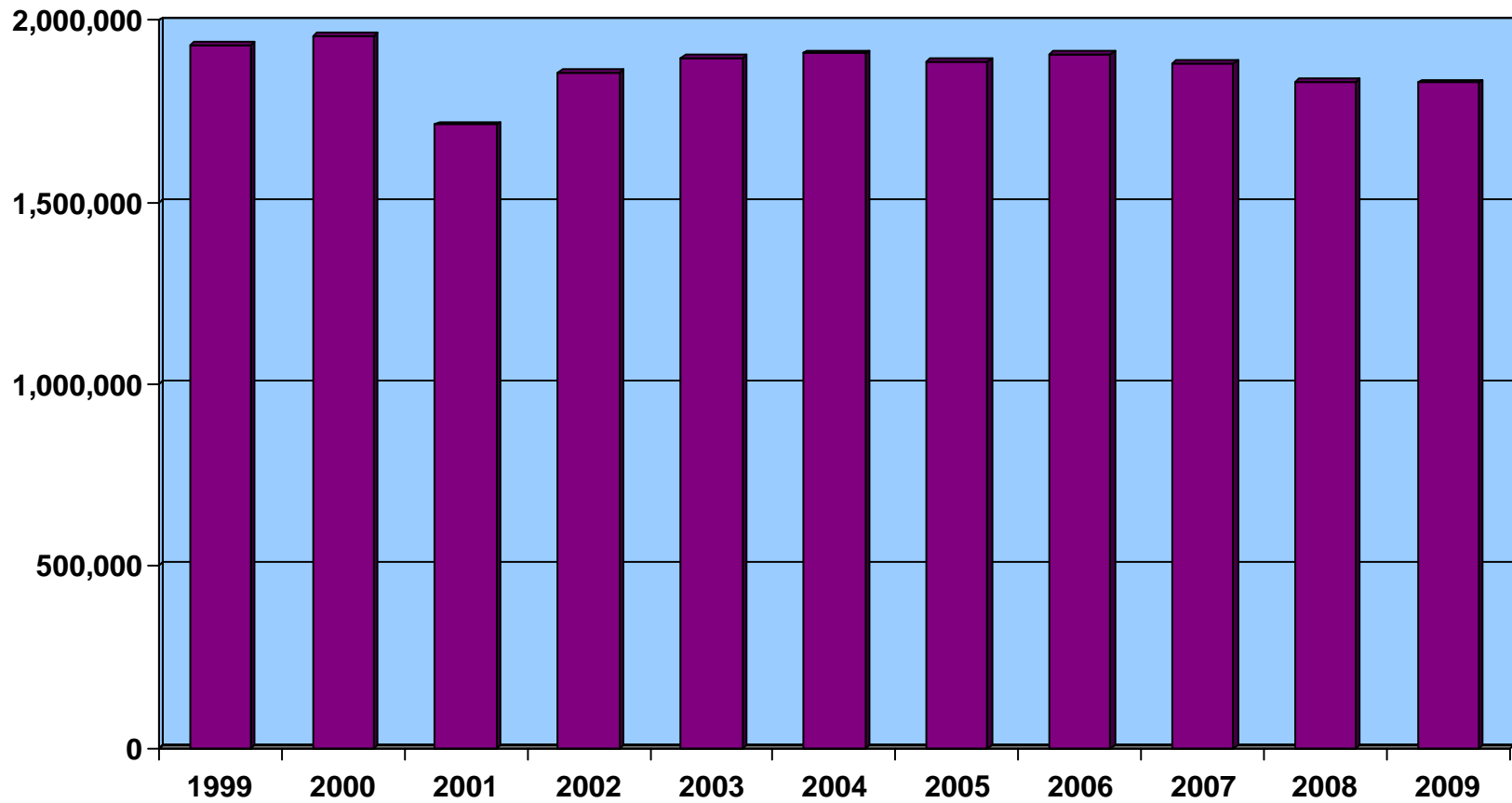
George Washington Bridge	Interstate	317,640	289,694	- 8.8 %
Holland Tunnel	Interstate	103,020	96,184	- 6.6 %
Lincoln Tunnel	Principal Arterial	128,692	118,982	- 7.5 %
Total, 3 PANYNJ Manhattan - New Jersey Crossings		549,352	504,860	- 8.1 %

GRAND TOTALS		1,933,007	1,828,065	- 5.4 %
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* Formerly Triborough Bridge.

Daily Manhattan River Crossings

1999 - 2009



Manhattan Crossings

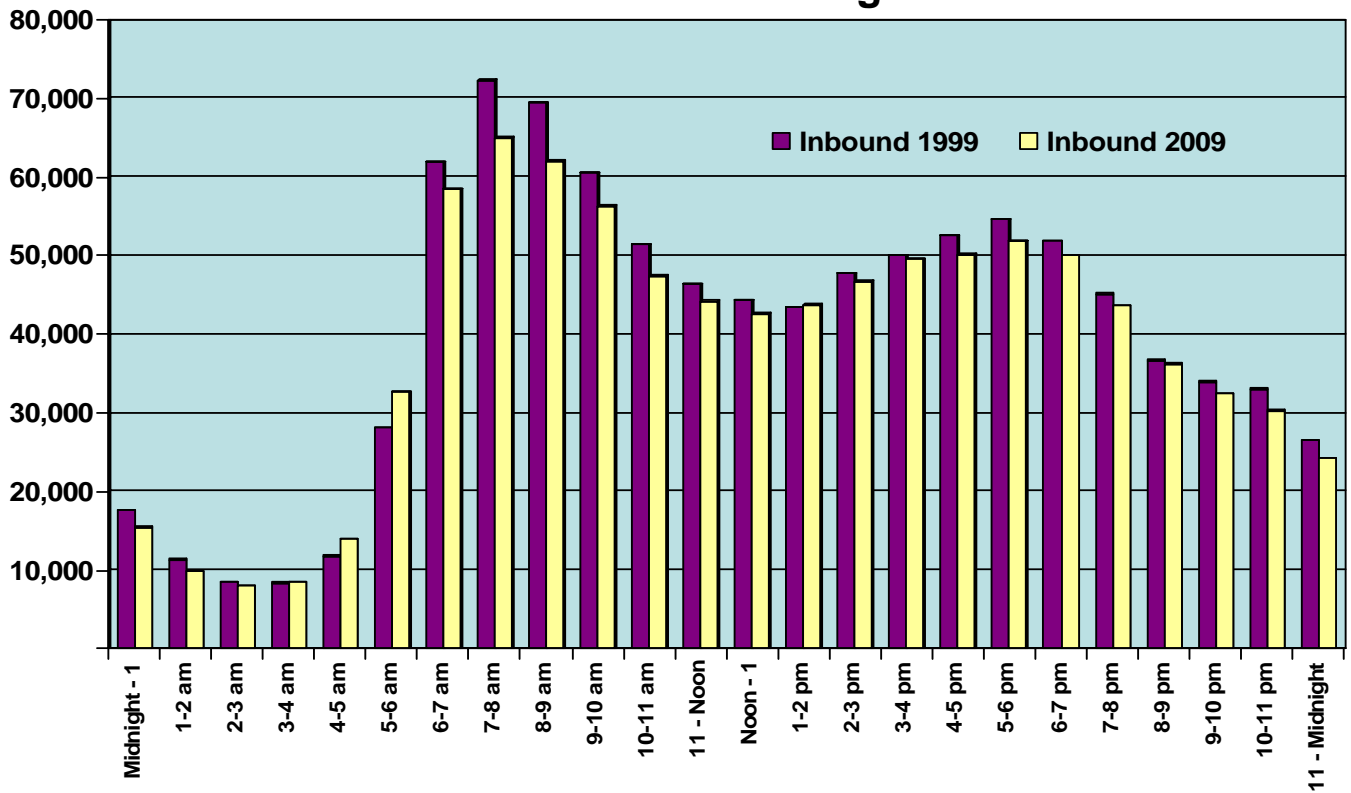
Hourly Vehicular Volumes

1999 vs 2009

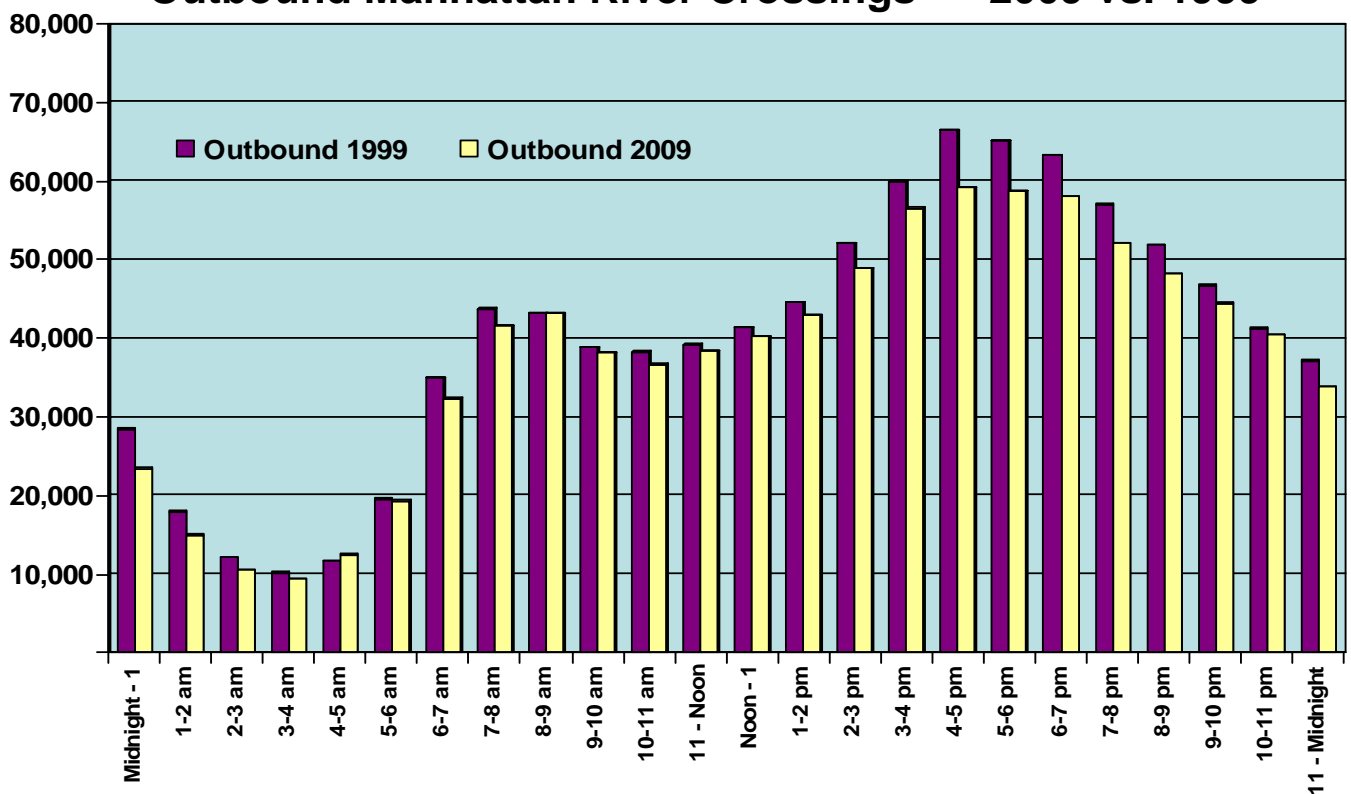
	<i>Inbound</i>			<i>Outbound</i>		
	1999	2009	Percent Change	1999	2009	Percent Change
Mid-1	17,651	15,415	-12.7 %	28,449	23,501	-17.4 %
1-2 am	11,370	9,895	-13.0 %	18,005	14,990	-16.7 %
2-3 am	8,562	8,046	-6.0 %	12,144	10,600	-12.7 %
3-4 am	8,419	8,482	0.7 %	10,171	9,366	-7.9 %
4-5 am	11,769	14,026	19.2 %	11,750	12,544	6.8 %
5-6 am	28,077	32,655	16.3 %	19,525	19,392	-0.7 %
6-7 am	61,899	58,547	-5.4 %	35,007	32,372	-7.5 %
7-8 am	72,319	64,940	-10.2 %	43,777	41,626	-4.9 %
8-9 am	69,385	61,974	-10.7 %	43,176	43,151	-0.1 %
9-10 am	60,483	56,273	-7.0 %	38,891	38,194	-1.8 %
10-11 a	51,469	47,470	-7.8 %	38,305	36,679	-4.2 %
11-Noon	46,445	44,182	-4.9 %	39,183	38,349	-2.1 %
Noon-1	44,313	42,638	-3.8 %	41,317	40,239	-2.6 %
1-2 pm	43,480	43,758	0.6 %	44,615	42,916	-3.8 %
2-3 pm	47,771	46,723	-2.2 %	52,083	48,899	-6.1 %
3-4 pm	50,024	49,620	-0.8 %	60,018	56,594	-5.7 %
4-5 pm	52,498	50,181	-4.4 %	66,490	59,188	-11.0 %
5-6 pm	54,631	51,912	-5.0 %	65,074	58,769	-9.7 %
6-7 pm	51,882	50,097	-3.4 %	63,224	57,970	-8.3 %
7-8 pm	45,110	43,663	-3.2 %	56,995	52,109	-8.6 %
8-9 pm	36,710	36,195	-1.4 %	51,890	48,172	-7.2 %
9-10 pm	33,977	32,470	-4.4 %	46,691	44,459	-4.8 %
10-11 p	32,995	30,272	-8.3 %	41,265	40,508	-1.8 %
11-Mid	26,564	24,249	-8.7 %	37,159	33,795	-9.1 %
Totals	967,803	923,683	-4.6 %	965,204	904,382	-6.3 %
7-10am	202,187	183,187	-9.4 %	125,844	122,971	-2.3 %
10am-1pm	142,227	134,290	-5.6 %	118,805	115,267	-3.0 %
1-4pm	141,275	140,101	-0.8 %	156,716	148,409	-5.3 %
4-7pm	159,011	152,190	-4.3 %	194,788	175,927	-9.7 %
7am-7pm	644,700	609,768	-5.4 %	596,153	562,574	-5.6 %

Hourly Vehicular Volumes

Inbound Manhattan River Crossings ~ 2009 vs. 1999



Outbound Manhattan River Crossings ~ 2009 vs. 1999



**Percent Difference by Period of Day
Manhattan Crossings
1999 - 2009**

<i>Time Period</i>	<i>To Manhattan</i>	<i>From Manhattan</i>
1am - 4am	- 6.8 %	- 13.3 %
4am - 7am	3.4 %	- 3.0 %
7am - 10am	- 9.4 %	- 2.3 %
10am - 1pm	- 5.6 %	- 3.0 %
1pm - 4pm	- 0.8 %	- 5.3 %
4pm - 7pm	- 4.3 %	- 9.7 %
7pm - 10pm	- 3.0 %	- 7.0 %
10pm - 1am	- 9.4 %	- 8.5 %
24 Hour Total	- 4.6 %	- 6.3 %

The Percent Difference by Period of Day compares the 2009 volume to the 1999 volume for each time period, with no consideration given to the volumes in the intervening years.

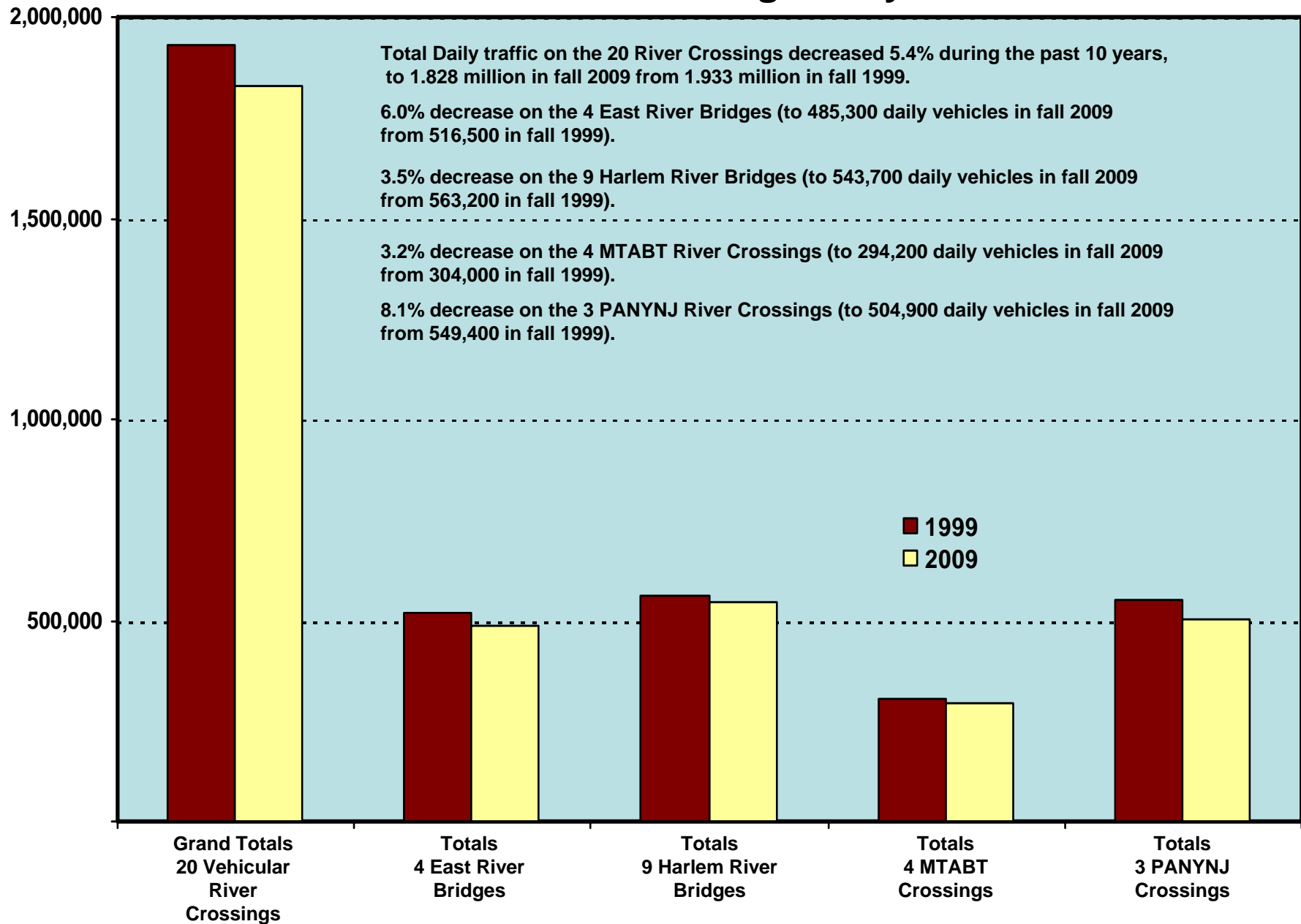
**Average Annual Growth Rate by Period of Day
Manhattan Crossings
1999 - 2009**

<i>Time Period</i>	<i>To Manhattan</i>	<i>From Manhattan</i>
1am - 4am	- 0.7 %	- 0.8 %
4am - 7am	1.1 %	0.6 %
7am - 10am	- 0.4 %	0.0 %
10am - 1pm	- 0.2 %	0.2 %
1pm - 4pm	0.1 %	- 0.1 %
4pm - 7pm	- 0.2 %	- 0.8 %
7pm - 10pm	- 0.1 %	- 0.7 %
10pm - 1am	- 0.6 %	- 0.7 %
24 Hour Total	- 0.1 %	- 0.3 %

The Average Annual Growth Rate for each time period is based on the volumes for all the years, 1999-2009, inclusive. For each period, the Average Annual Growth Rate is derived from the linear regression equation that reflects the best fitting straight line.

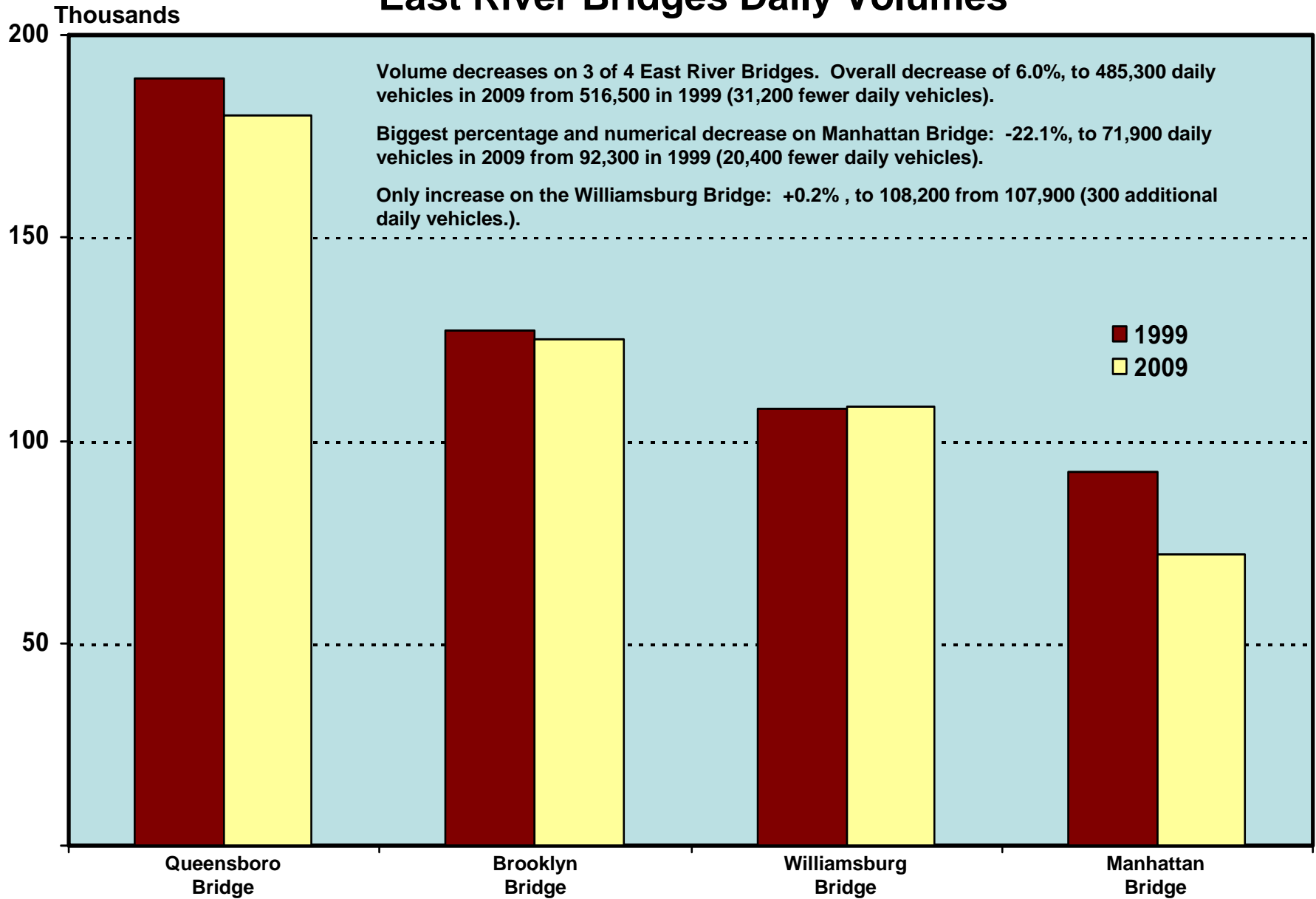
10-Year Volume Changes ~ 1999 – 2009

Manhattan River Crossings Daily Volumes



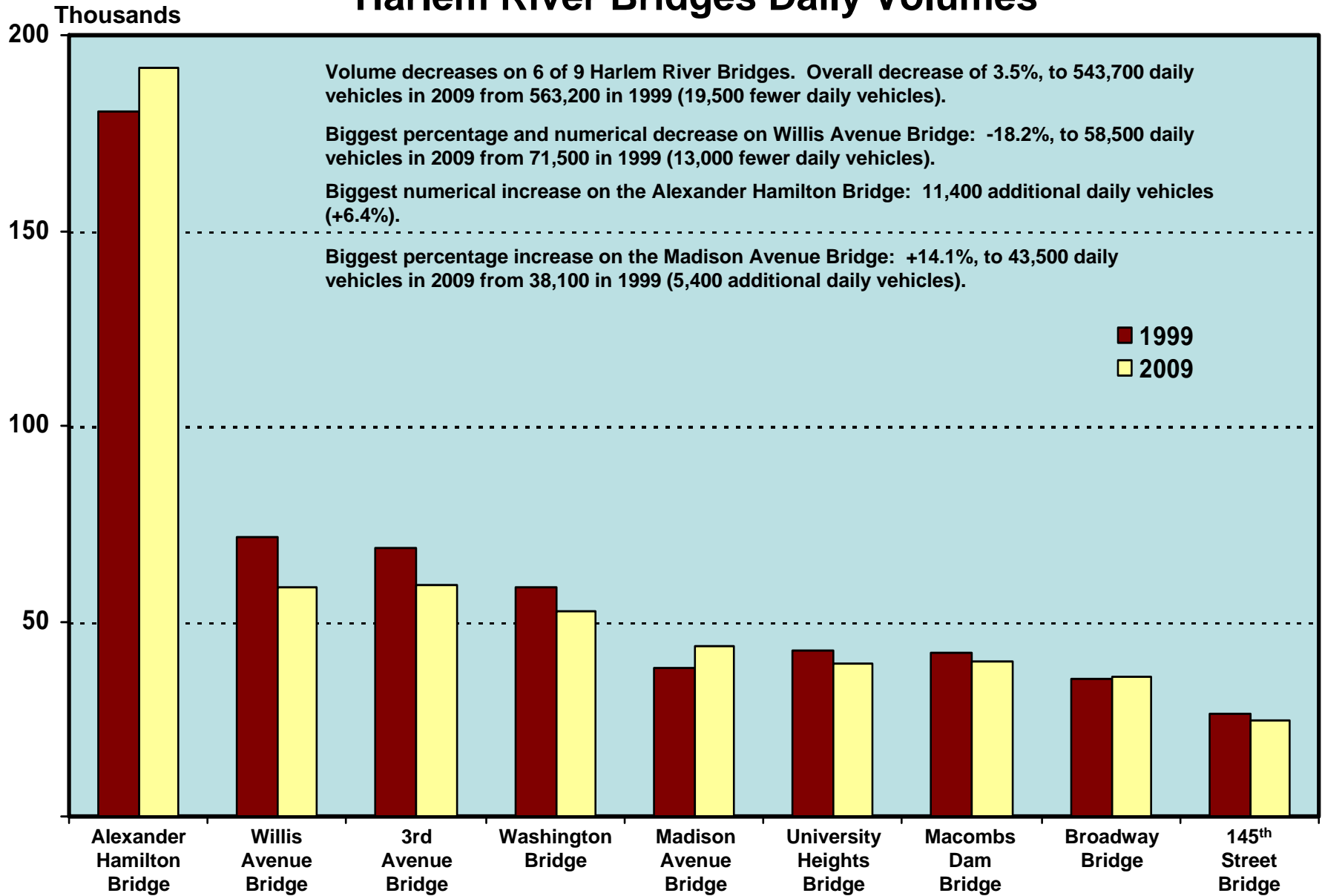
10-Year Volume Changes ~ 1999 – 2009

East River Bridges Daily Volumes



10-Year Volume Changes ~ 1999 – 2009

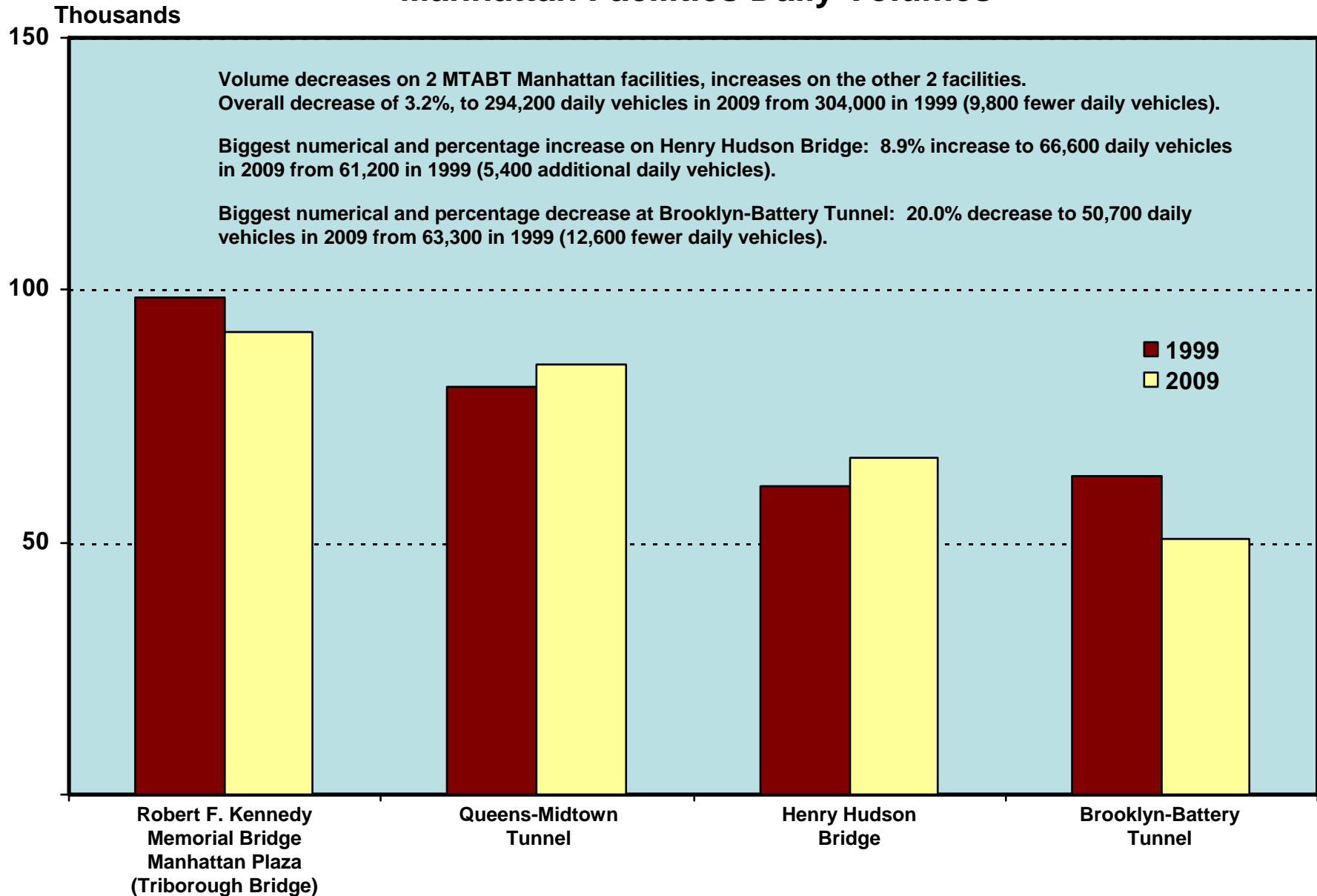
Harlem River Bridges Daily Volumes



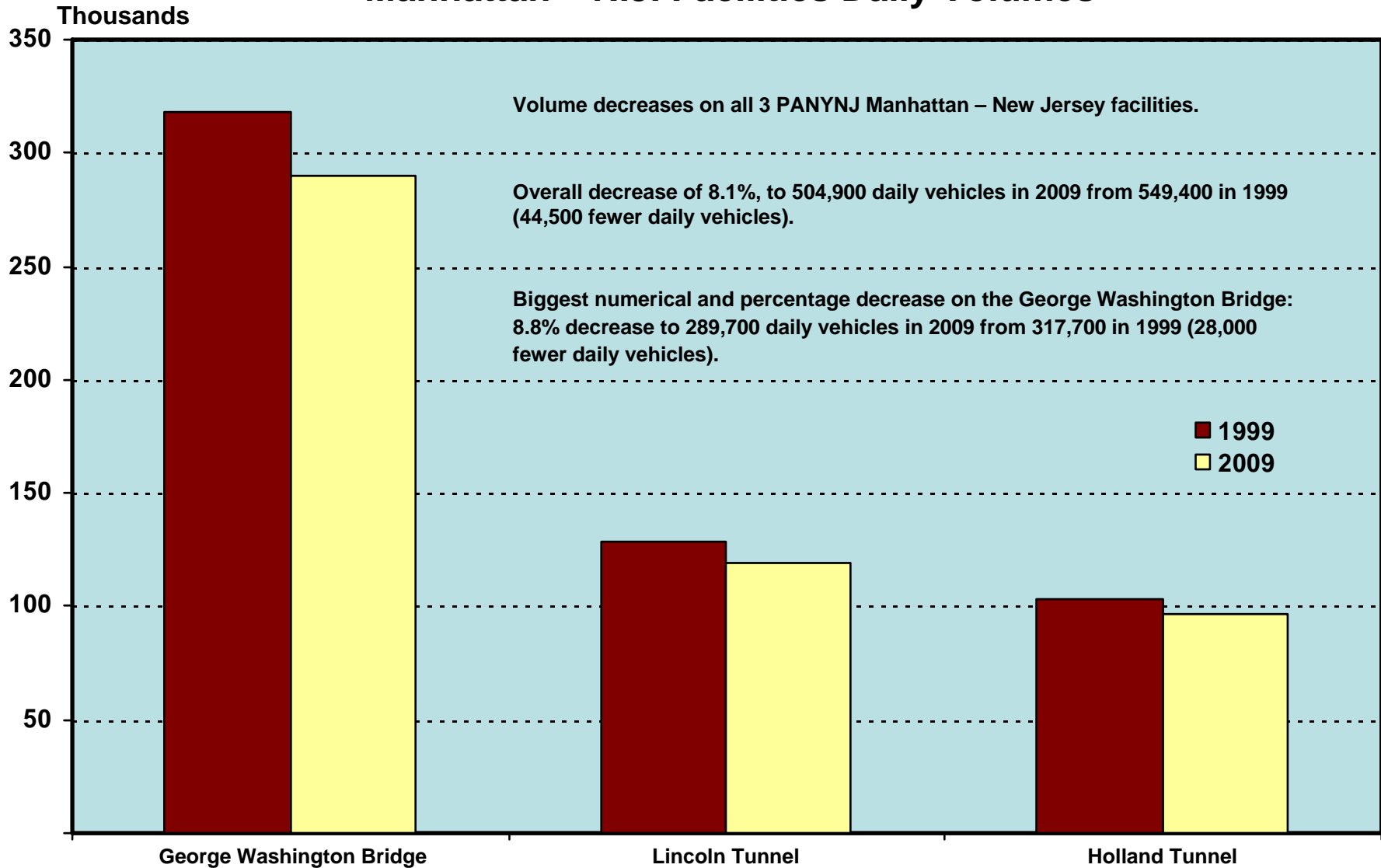
10-Year Volume Changes ~ 1999 – 2009

Metropolitan Transportation Authority Bridges & Tunnels (MTABT)

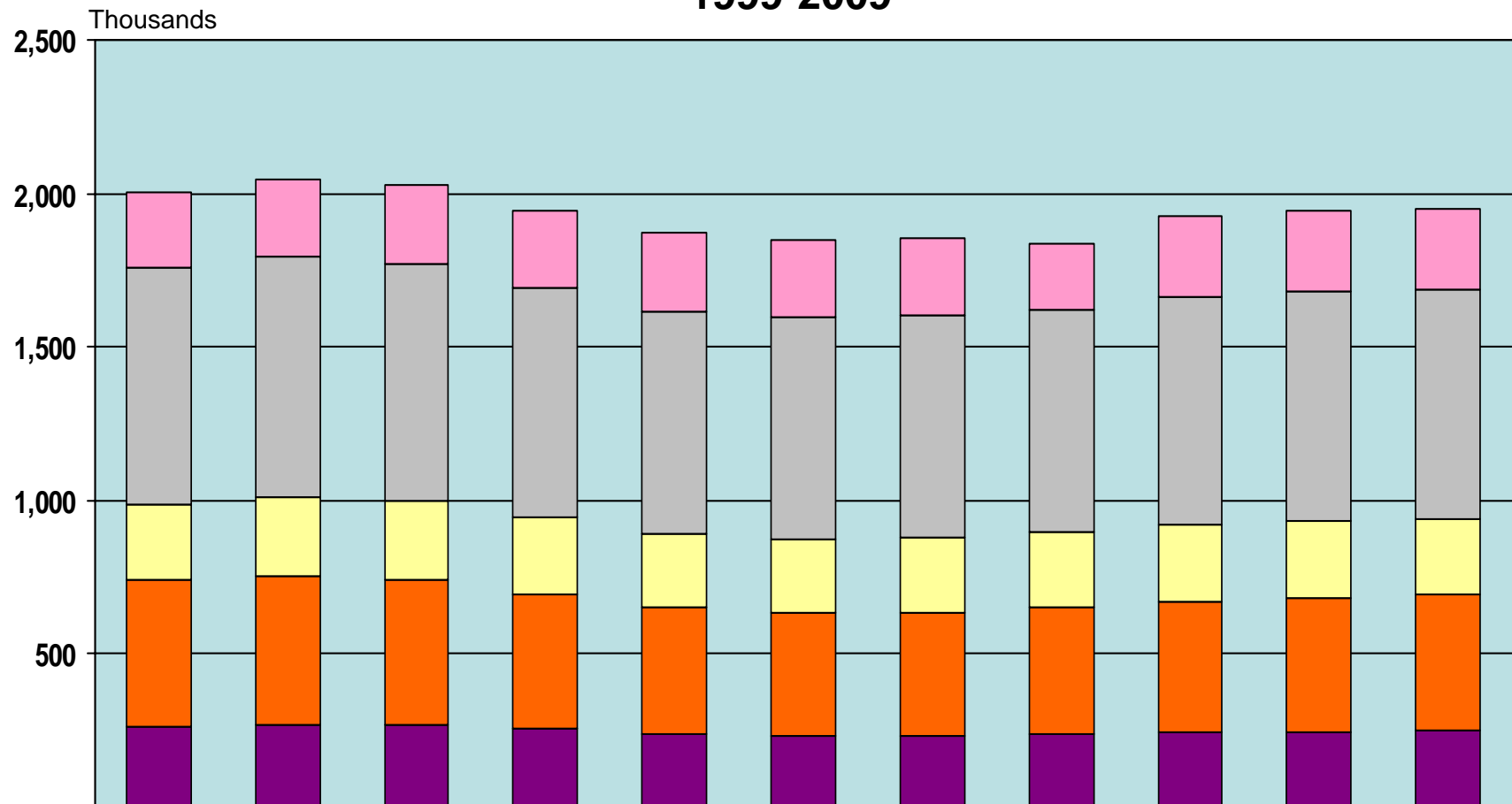
Manhattan Facilities Daily Volumes



10-Year Volume Changes ~ 1999 – 2009
Port Authority of New York & New Jersey (PANYNJ)
Manhattan – N.J. Facilities Daily Volumes



New York City Motor Vehicle Registrations 1999-2009



	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Staten Island	240,258	247,848	252,657	252,542	252,422	254,108	255,794	210,182	262,318	263,633	263,571
Queens	773,921	784,848	774,887	749,146	723,400	719,289	723,534	726,623	741,226	747,403	748,982
Manhattan	247,395	255,780	257,531	249,716	241,995	240,388	242,200	246,956	251,136	250,915	248,064
Brooklyn	479,118	486,987	470,290	439,716	410,742	401,795	402,807	413,141	427,633	436,661	442,124
Bronx	260,742	268,910	269,577	255,087	240,592	232,990	232,189	236,468	243,523	246,190	248,963

NYC Annual Growth Rate = - 0.56%

Manhattan Annual Growth Rate = - 0.15%

Historic Trends



145th Street Bridge

HISTORIC TRENDS

- During the 25 years following 1948, motor vehicle traffic to and from Manhattan increased 2.9% per year. By 1973 it had reached 1.493 million daily trips. Gasoline shortages arising from the first OPEC oil crisis contributed to traffic declining by 1.5% per year between 1973 and 1976. In 1977 and 1978, traffic growth resumed at 2.3% per year. Another OPEC crisis caused traffic to decline 2.4% in 1979. The 1980s brought new growth at 2.9% per year until 1987, when traffic volume declined by less than 1%. This slow downward trend continued through 1994. This was followed by increases of 3.0% in 1995, 0.4% in 1996, 4.4% in 1997, 2.9% in 1998, 1.7% in 1999, and 1.2% in 2000 (to an all time record of 1.956 million).
- In fall 2001, very shortly after the events of 9/11, daily volume decreased 12.4%, to 1.713 million. There were extensive restrictions on vehicle entries into Manhattan following the events of 9/11/2001. In fall 2002, daily volume rebounded by 8.4%, to 1.857 million. In fall 2003, daily volume rose an additional 2.2%, to 1.897 million. During fall 2004, daily volume rose another 0.6%, to 1.909 million. In fall 2005, daily Manhattan river crossings decreased 1.2%, to 1,885 million, but rebounded in fall 2006, rising 1.2% to 1.907 million. Fall 2007, fall 2008, and fall 2009 yielded additional decreases of 1.4%, 2.7%, and 0.2%, respectively, reducing daily volume to 1.828 million.
- Between 1949 and 1959, daily traffic growth to and from Manhattan averaged 4.4% per year. The largest annual growth rates occurred at the Brooklyn Bridge (10.5%), the Queens-Midtown Tunnel (+7.4%), the Macombs Dam Bridge over the Harlem River (+7.3%), and the George Washington Bridge over the Hudson River (+7.1%). The only annual decline was on the Manhattan Bridge over the East River, where daily traffic decreased 1.6% per year.
- Between 1959 and 1969, daily traffic growth to and from Manhattan averaged 2.3% per year. The largest annual growth rates occurred on the George Washington Bridge over the Hudson River (+7.4%), and on the Brooklyn Bridge over the East River (+3.6%). The largest annual rate of decline was on the Washington Bridge over the Harlem River, where daily traffic decreased 8.3% per year.
- Between 1969 and 1979, daily traffic growth to and from Manhattan averaged 0.4% per year. The largest annual growth rates occurred on the Washington Bridge over the Harlem River (+2.6%), and on the George Washington Bridge over the Hudson River (+1.5%). The biggest annual decline was on the Henry Hudson Bridge over the Harlem River (-4.9% per year).
- Between 1979 and 1989, traffic growth on all Manhattan crossings averaged 2.1% per year. The largest annual growth rates were on the Henry Hudson Bridge over the Harlem River (+6.5%), the Willis Avenue Bridge over the Harlem River (+3.6%), and the Williamsburg Bridge over the East River (+3.5%). The only annual decline was on the Manhattan Bridge over the East River, where daily traffic decreased 0.6% per year.
- Between 1989 and 1999, traffic growth all Manhattan river crossings averaged a relatively modest 0.9% per year. The largest annual growth rates were at the Queensboro Bridge over the East River (+3.6%), and the University Heights Bridge over the Harlem River (+3.4%). The largest annual decline was on the Madison Avenue Bridge over the Harlem River (-0.7% per year).
- Between 1948 and 2009, daily vehicle trips to and from Manhattan rose 173%, to 1,828,100 from 670,000 (1,158,100 additional daily trips). The biggest growth was on the PANYNJ's three trans-Hudson facilities, where traffic climbed by 336%. Traffic increased 91% on the four

toll-free East River bridges, 162% on the nine toll-free Harlem River bridges, and 216% on the MTABT's four toll crossings.

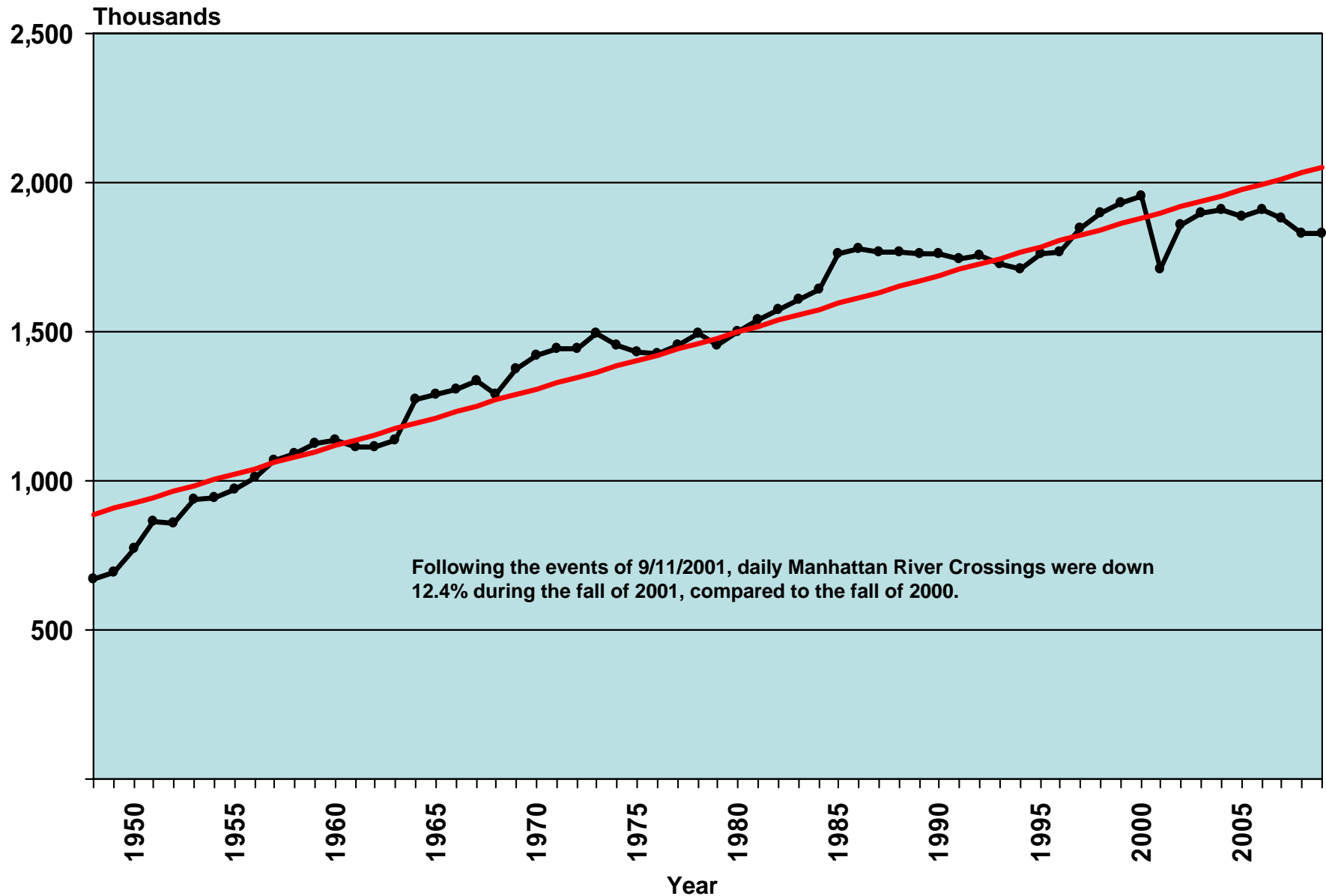
- During the same 61-year period, annual citywide subway ridership declined by 22%, to 1,577,000,000 from 2,031,000,000.

Total Manhattan Crossings
Average Daily Traffic Volumes
1948 - 2009

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

Average Daily Manhattan River Crossings

1948-2009 Average Annual Growth Rate 1.4%



10-Year Traffic Growth Rate Trends

Manhattan Crossings

1949-2009

East River Bridges	1949-1959	1959-1969	1969-1979	1979-1989	1989-1999	1999-2009
Brooklyn	10.5%	3.6%	- 0.1%	3.2%	0.7%	0.1%
Manhattan	- 1.6%	2.2%	- 0.2%	- 0.6%	2.3%	- 1.2%
Queensboro	1.4%	2.6%	1.0%	2.2%	3.6%	- 0.2%
Williamsburg	4.4%	- 1.3%	1.4%	3.5%	- 0.6%	0.8%
Total	2.2%	1.8%	0.6%	2.2%	1.6%	- 0.1%

Harlem River Bridges						
Alexander Hamilton	Opened Jan. 1963		0.9%	2.4%	- 0.6%	1.1%
Broadway	4.1%	- 0.3%	1.4%	1.8%	- 0.5%	- 1.1%
Macombs Dam	7.3%	- 2.6%	- 1.8%	1.9%	- 0.0%	2.6%
Madison Avenue	4.5%	0.9%	1.4%	1.7%	- 0.7%	0.1%
Third Avenue	6.9%	- 1.6%	0.5%	1.8%	0.9%	- 1.8%
University Heights	6.1%	- 3.9%	1.4%	3.0%	3.4%	- 1.4%
Washington	5.6%	- 8.3%	2.6%	3.2%	0.6%	- 1.7%
Willis Avenue	4.2%	0.7%	- 1.7%	3.6%	1.8%	- 1.9%
145th Street	3.4%	- 4.7%	- 1.7%	1.9%	0.5%	- 3.3%
Total	5.3%	2.4%	0.4%	2.4%	0.4%	- 0.4%

MTABT Facilities						
Brooklyn-Battery Tunnel	Opened 5/25/1950	2.9%	- 1.0%	0.3%	- 0.2%	0.5%
Henry Hudson Bridge	1.5%	- 3.3%	- 4.9%	6.5%	1.2%	0.5%
Queens-Midtown Tunnel	7.4%	1.3%	- 0.9%	0.0%	0.5%	1.2%
R. F. K. Memorial Bridge Manhattan Plaza *	6.8%	2.7%	- 0.8%	0.9%	- 0.1%	- 0.7%
Total	5.5%	1.0%	- 1.5%	1.3%	0.3%	0.3%

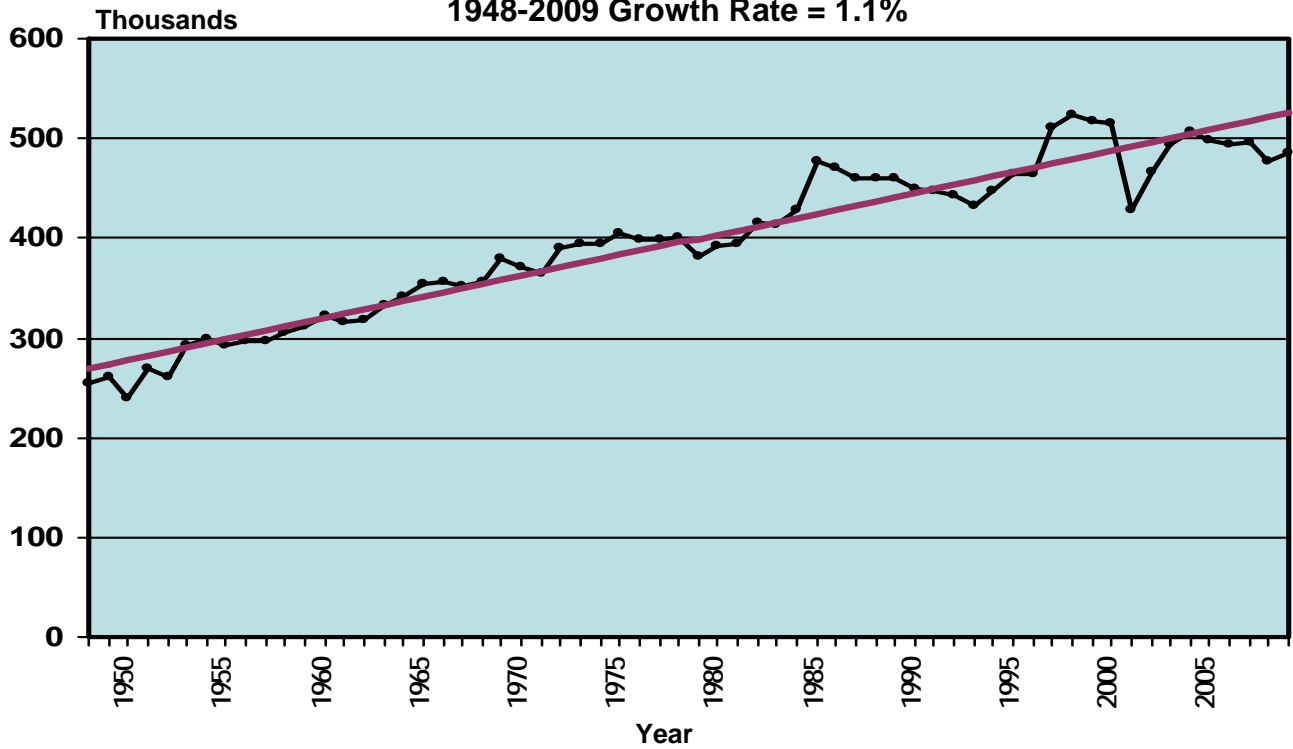
PANYNJ Facilities						
George Washington Bridge	7.1%	7.4%	1.5%	2.3%	1.2%	- 0.9%
Holland Tunnel	1.9%	- 0.8%	1.3%	2.7%	2.0%	1.3%
Lincoln Tunnel	6.1%	1.2%	1.3%	2.0%	0.5%	- 0.4%
Total	5.3%	3.8%	1.4%	2.3%	1.2%	- 0.4%

Grand Total	4.4%	2.3%	0.4%	2.1%	0.9%	- 0.2%
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* Formerly Triborough Bridge.

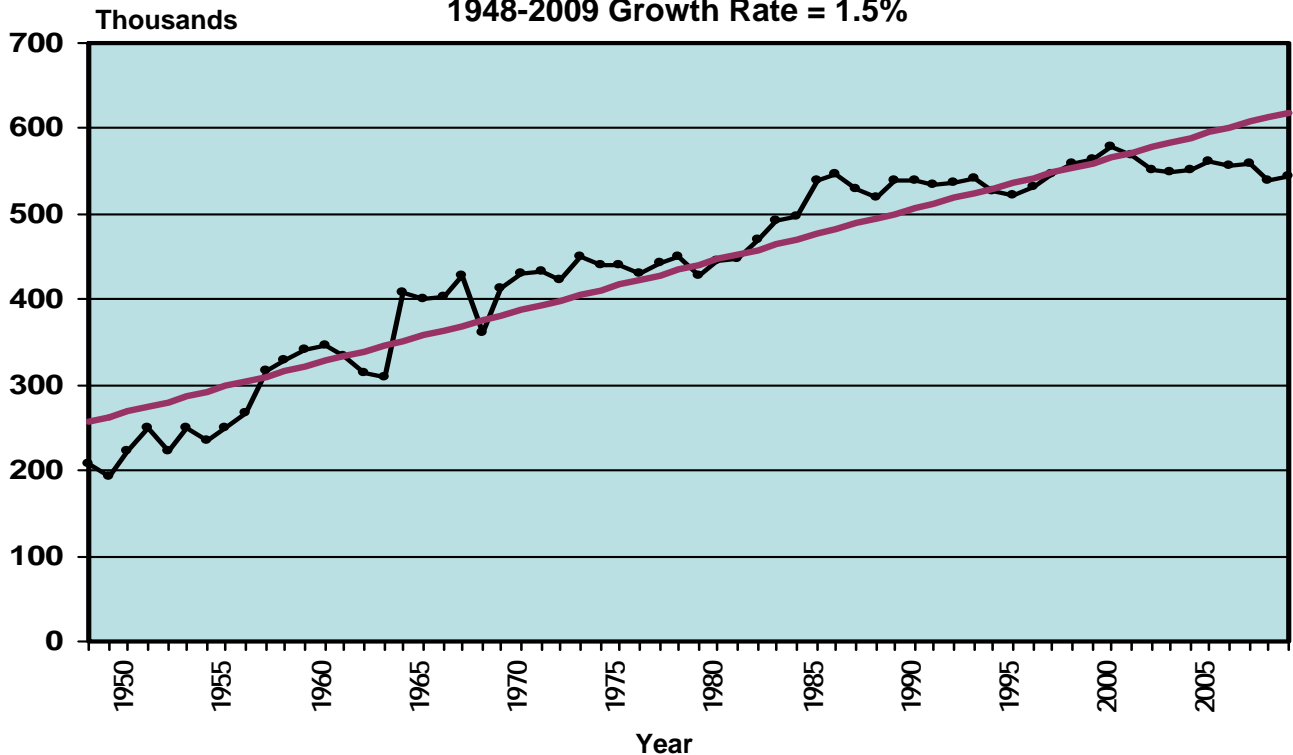
Average Daily Traffic Volumes Total of 4 East River Bridges

1948-2009 Growth Rate = 1.1%



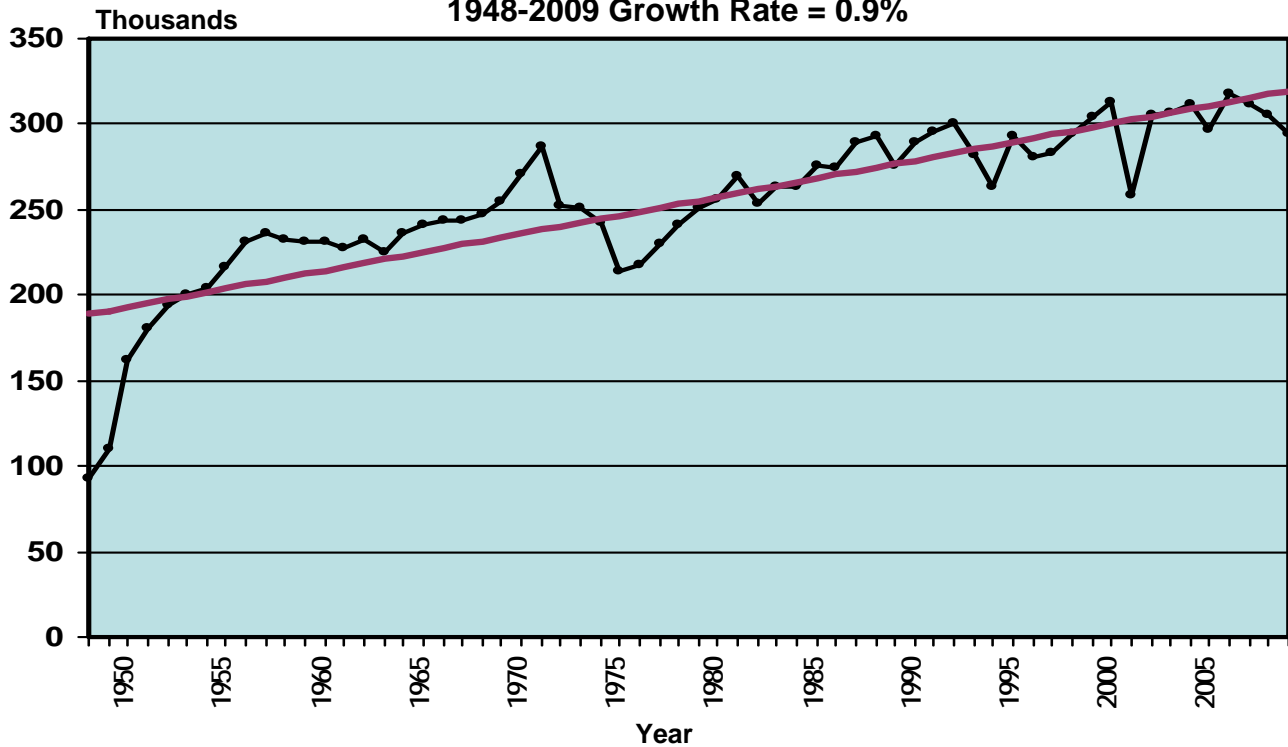
Average Daily Traffic Volumes Total of 9 Harlem River Bridges

1948-2009 Growth Rate = 1.5%



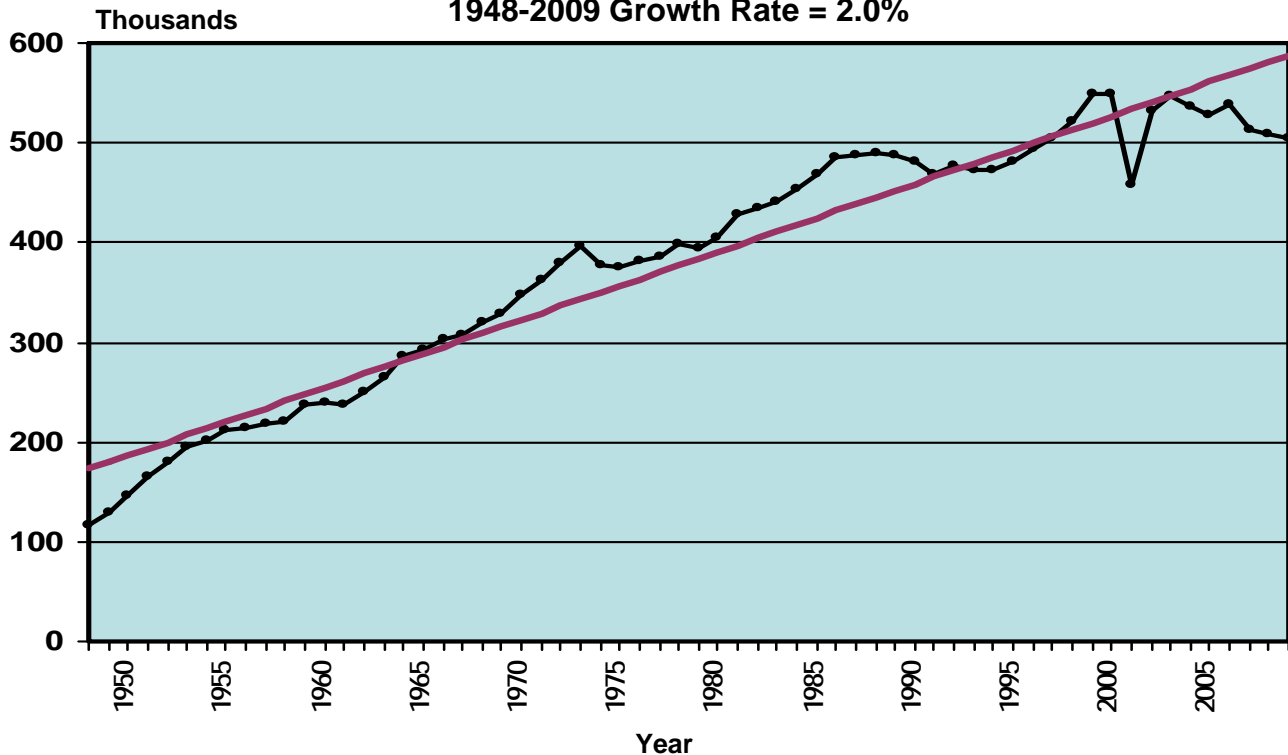
Average Daily Traffic Volumes Total of 4 Manhattan M.T.A.B.T. Facilities

1948-2009 Growth Rate = 0.9%



Average Daily Traffic Volumes Total of 3 Manhattan P.A.N.Y.N.J. Facilities

1948-2009 Growth Rate = 2.0%



Average Daily Manhattan River Motor Vehicle Crossings
vs.
Annual Subway Ridership

Year	Daily Manhattan River Crossings	Annual Subway Ridership (millions)	Year	Daily Manhattan River Crossings	Annual Subway Ridership (millions)
1948	670,007	2,031			
1949	694,457	1,764			
1950	771,407	1,681			
1951	864,973	1,636	1981	1,540,683	1,011
1952	859,480	1,574	1982	1,573,012	989
1953	936,467	1,552	1983	1,608,979	1,005
1954	940,969	1,416	1984	1,642,250	997
1955	972,633	1,378	1985	1,758,605	1,010
1956	1,009,270	1,363	1986	1,777,051	1,030
1957	1,068,524	1,355	1987	1,766,601	1,058
1958	1,088,124	1,319	1988	1,764,869	1,074
1959	1,123,302	1,324	1989	1,763,534	1,073
1960	1,138,247	1,345	1990	1,759,585	1,028
1961	1,114,350	1,363	1991	1,744,103	995
1962	1,115,056	1,370	1992	1,757,573	997
1963	1,133,673	1,362	1993	1,729,408	1,030
1964	1,271,047	1,375	1994	1,711,457	1,081
1965	1,289,065	1,363	1995	1,762,457	1,093
1966	1,305,320	1,296	1996	1,768,742	1,110
1967	1,332,871	1,298	1997	1,846,634	1,130
1968	1,287,543	1,303	1998	1,900,254	1,199
1969	1,376,394	1,330	1999	1,933,007	1,283
1970	1,420,334	1,258	2000	1,955,506	1,381
1971	1,445,020	1,197	2001	1,712,961	1,405
1972	1,444,147	1,145	2002	1,857,050	1,413
1973	1,492,756	1,102	2003	1,897,411	1,384
1974	1,453,136	1,100	2004	1,908,565	1,426
1975	1,433,560	1,054	2005	1,884,733	1,449
1976	1,426,334	1,010	2006	1,907,118	1,499
1977	1,455,119	998	2007	1,880,818	1,563
1978	1,491,541	1,042	2008	1,830,907	1,624
1979	1,455,112	1,077	2009	1,828,065	1,577
1980	1,499,344	1,009			
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 %	2000-2009	- 6.5 %	+ 14.2 %
1970-1980	+ 5.6 %	- 19.8 %	1948-2009	+172.8 %	- 22.4 %
1980-1990	+ 17.4 %	+ 1.9 %			

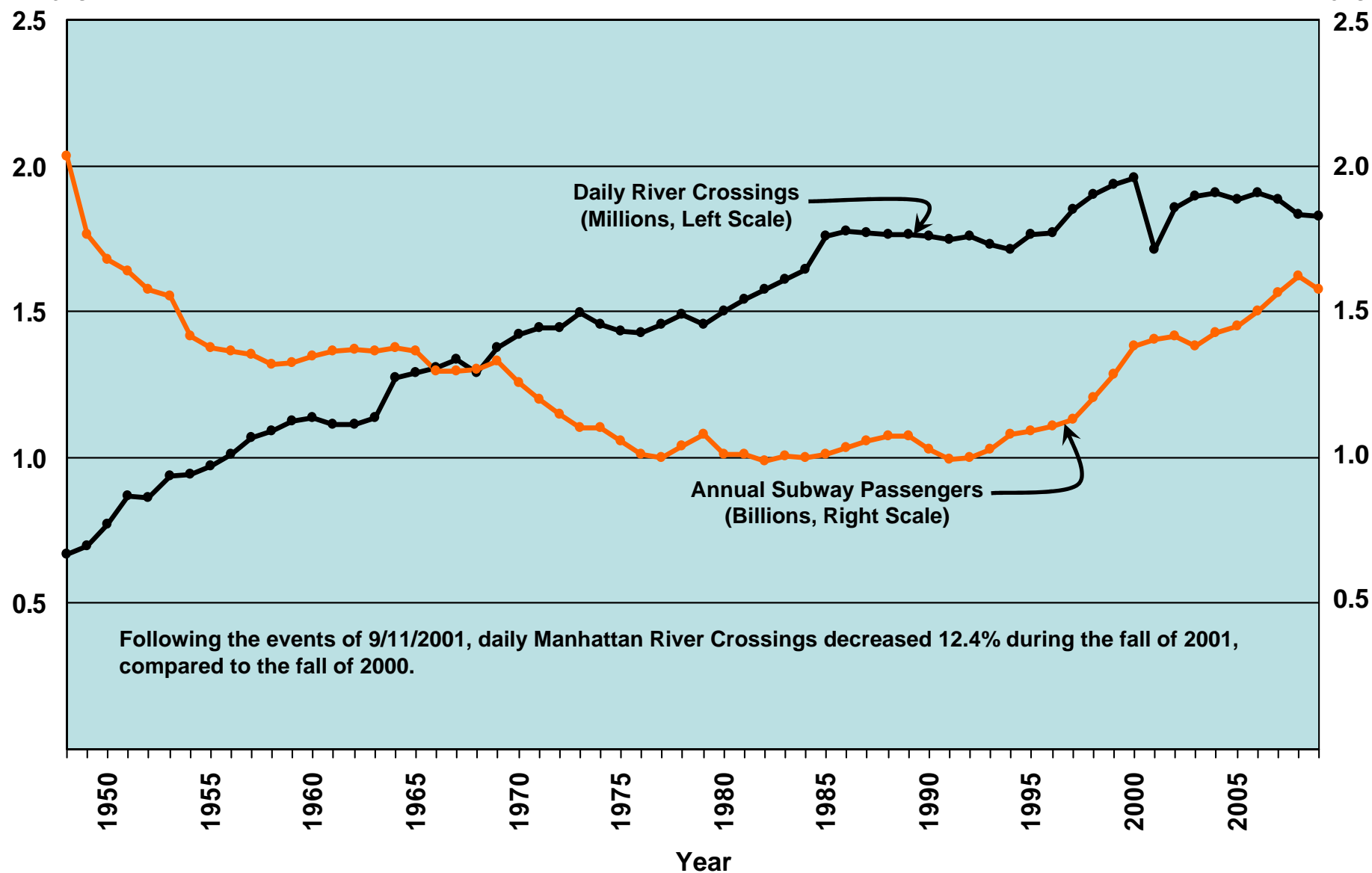
Source for Annual Subway Ridership: MTA

Vehicular River Crossings vs. Subway Ridership

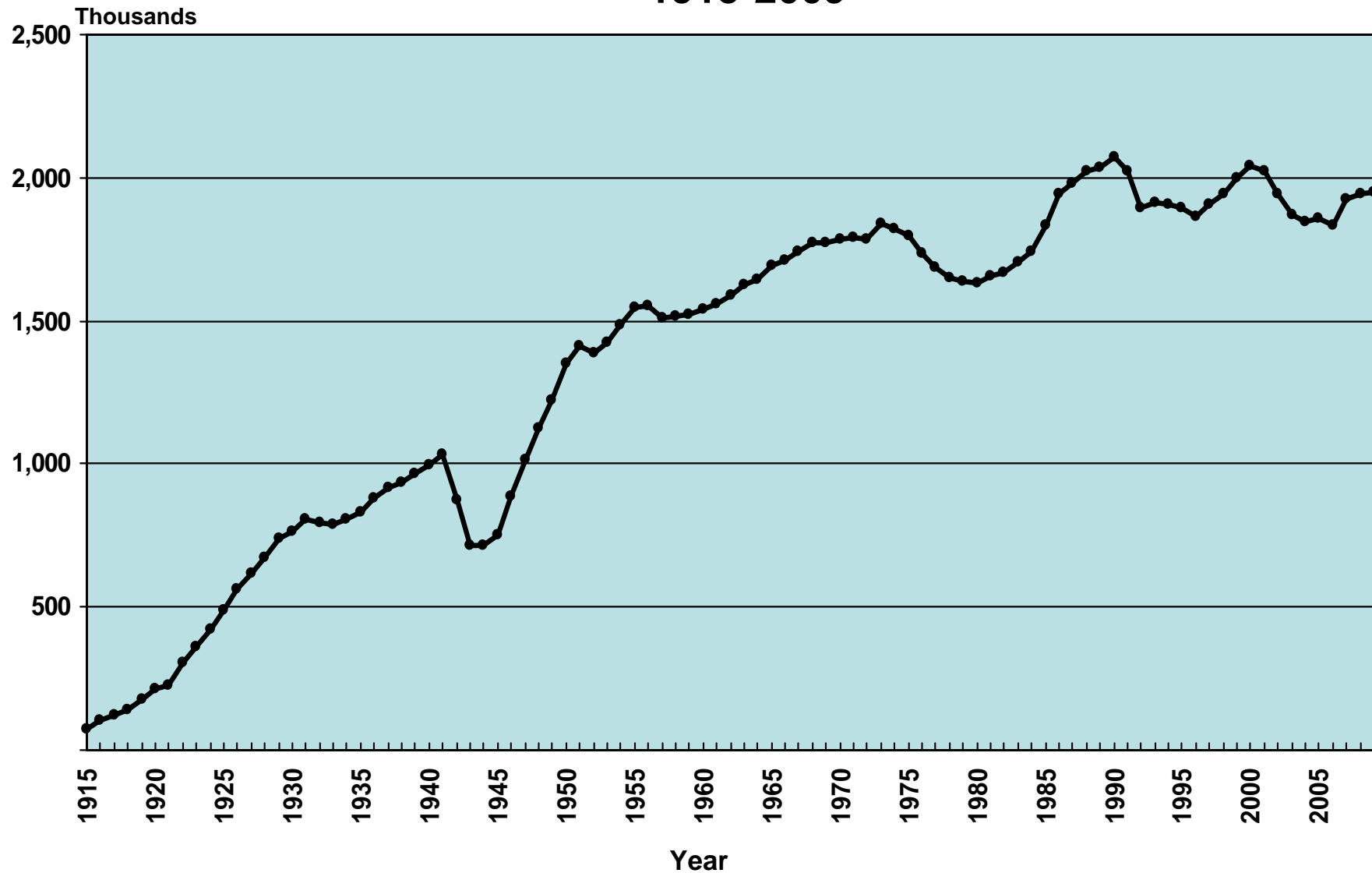
1948-2009

Daily River Crossings
Millions

Annual Subway Passengers
Billions



New York City Motor Vehicle Registrations 1915-2009



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

PAST & PRESENT PASSENGER CAR TOLL STRUCTURES

MTA BRIDGES & TUNNELS FACILITIES

Tolls collected both directions

	Brooklyn Battery Tunnel	Queens Midtown Tunnel	Triborough 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

\$ 1.70 discount EZ Pass (\$ 0.91 on Henry Hudson Bridge).

PORT AUTHORITY OF NEW YORK & NEW JERSEY

Tolls collected eastbound only

	George Washington Bridge	Holland Tunnel	Lincoln Tunnel
Effective 08/12/1970	\$ 1.00	\$ 1.00	\$ 1.00
Effective 05/05/1975	1.50	1.50	1.50
Effective 01/01/1984	2.00	2.00	2.00
Effective 04/12/1987	3.00	3.00	3.00
Effective 04/07/1991	4.00	4.00	4.00
Effective 03/25/2001	6.00	6.00	6.00
Effective 03/02/2008	8.00	8.00	8.00

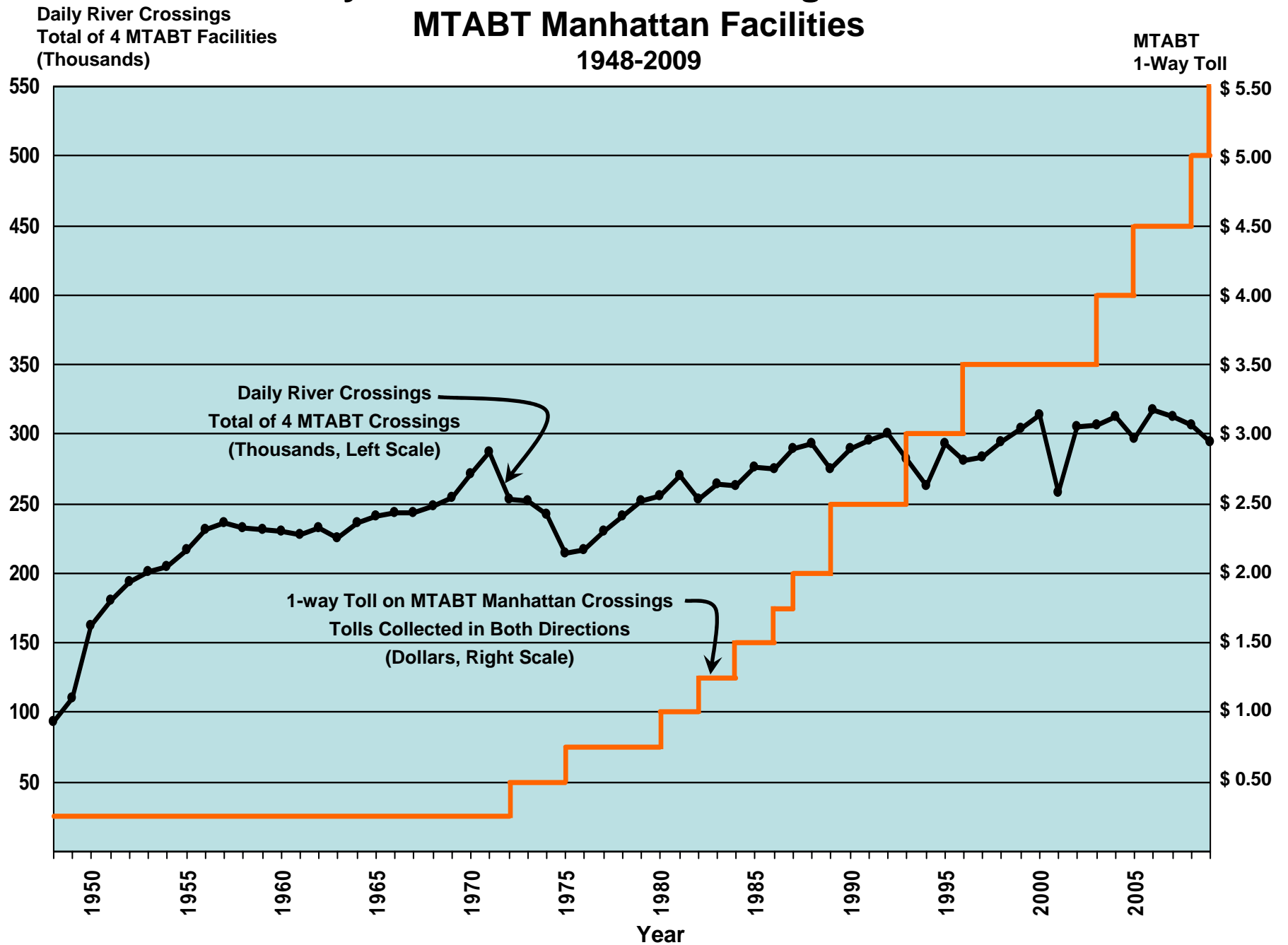
EZ-Pass discount \$ 2.00 during off-peak hours.

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

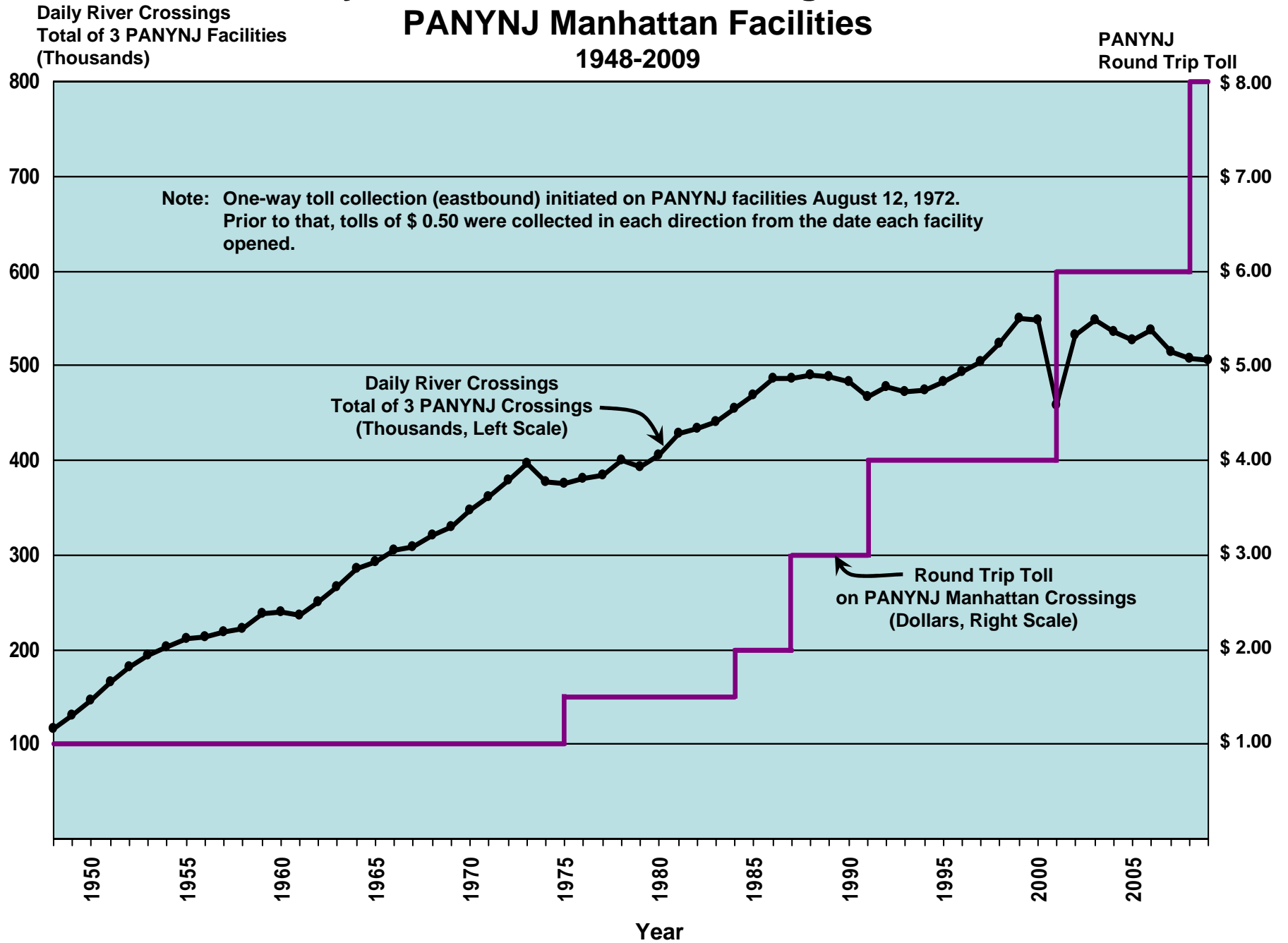
1948-2009



Daily Vehicular River Crossings vs. Tolls

PANYNJ Manhattan Facilities

1948-2009



East River Bridges



Manhattan Bridge

East River Bridges
Average Daily Traffic Volumes
1948 - 2009

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

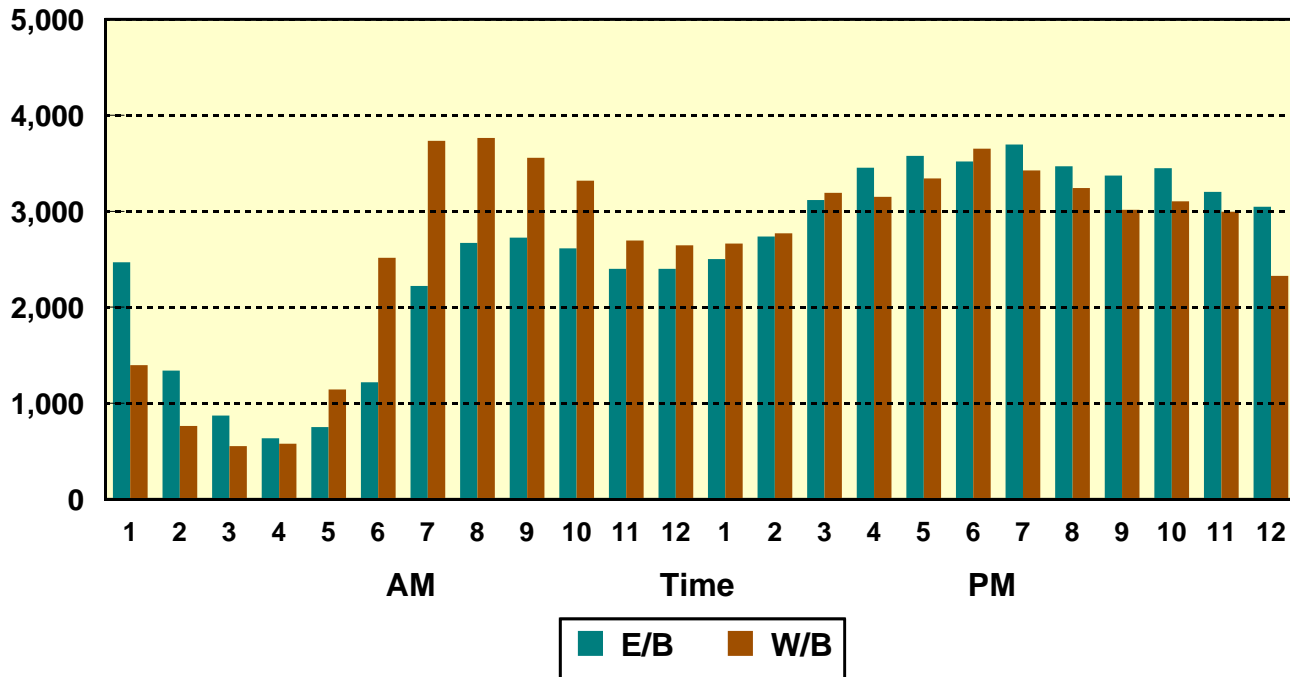
Hourly Vehicular Volumes Brooklyn Bridge - 2009

FHWA Classes ►	Eastbound to Brooklyn						Westbound to Manhattan						2-Way Grand Totals
	Commuter Vans Commercial Vans			Single Unit Trucks	Tractor Trailers	Total Vehicles	Commuter Vans Commercial 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	2,467	1	1	0	0	2,469	1,379	13	0	4	0	1,396	3,865
1-2am	1,333	5	1	0	0	1,339	759	4	0	0	0	763	2,102
2-3am	868	4	0	0	0	872	546	6	0	2	0	554	1,426
3-4am	630	5	1	0	0	636	569	8	0	2	0	579	1,215
4-5am	741	9	2	0	0	752	1,129	7	2	5	0	1,143	1,895
5-6am	1,201	15	1	0	0	1,217	2,434	43	32	7	0	2,516	3,733
6-7am	2,179	32	10	1	0	2,222	3,603	44	85	2	0	3,734	5,956
7-8am	2,617	34	20	1	0	2,672	3,699	24	39	2	0	3,764	6,436
8-9am	2,659	43	22	1	0	2,725	3,518	28	9	3	0	3,558	6,283
9-10am	2,539	46	28	1	0	2,614	3,275	27	11	7	0	3,320	5,934
10-11am	2,354	29	17	0	0	2,400	2,659	21	11	6	0	2,697	5,097
11-12am	2,331	45	23	0	0	2,399	2,593	34	13	7	0	2,647	5,046
12-1pm	2,435	44	23	0	0	2,502	2,618	22	23	2	0	2,665	5,167
1-2pm	2,667	40	30	1	0	2,738	2,679	35	49	9	0	2,772	5,510
2-3pm	3,029	41	45	2	0	3,117	3,127	32	31	3	0	3,193	6,310
3-4pm	3,380	36	39	0	0	3,455	3,078	35	36	1	0	3,150	6,605
4-5pm	3,514	37	25	1	0	3,577	3,287	35	18	2	0	3,342	6,919
5-6pm	3,461	38	21	0	0	3,520	3,609	24	17	2	0	3,652	7,172
6-7pm	3,623	56	17	1	0	3,697	3,385	26	13	2	0	3,426	7,123
7-8pm	3,427	37	6	0	0	3,470	3,220	16	6	0	0	3,242	6,712
8-9pm	3,355	16	2	0	0	3,373	2,994	20	1	1	0	3,016	6,389
9-10pm	3,434	14	1	0	0	3,449	3,076	25	3	1	0	3,105	6,554
10-11pm	3,196	6	1	0	0	3,203	2,971	22	0	3	0	2,996	6,199
11-12pm	3,040	6	2	0	0	3,048	2,302	19	1	3	0	2,325	5,373
Totals	60,480	639	338	9	0	61,466	62,509	570	400	76	0	63,555	125,021
7-10am	7,815	123	70	3	0	8,011	10,492	79	59	12	0	10,642	18,653
10am-1pm	7,120	118	63	0	0	7,301	7,870	77	47	15	0	8,009	15,310
1-4pm	9,076	117	114	3	0	9,310	8,884	102	116	13	0	9,115	18,425
4-7pm	10,598	131	63	2	0	10,794	10,281	85	48	6	0	10,420	21,214
7am-7pm	34,609	489	310	8	0	35,416	37,527	343	270	46	0	38,186	73,602

Based on March 2006 Classification Survey Data

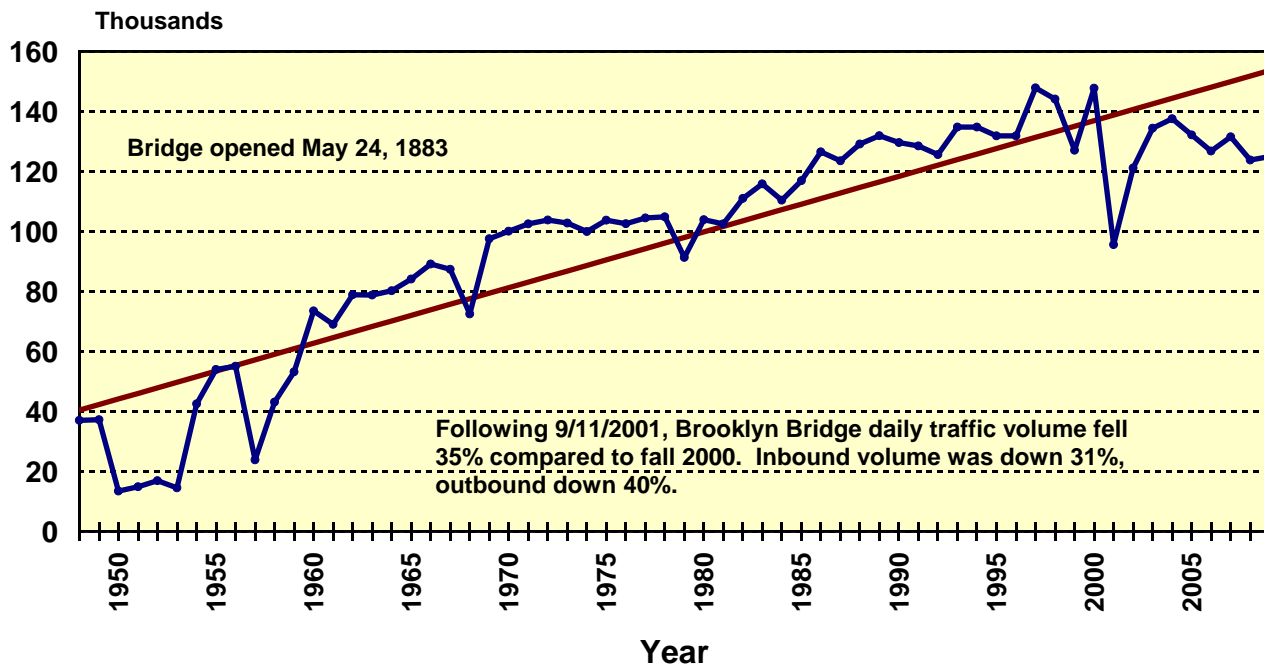
** Peak Volumes

Hourly Vehicular Volumes Brooklyn Bridge - 2009



Average Daily Traffic Volumes Brooklyn Bridge

1948-2009 Growth Rate = 2.2%



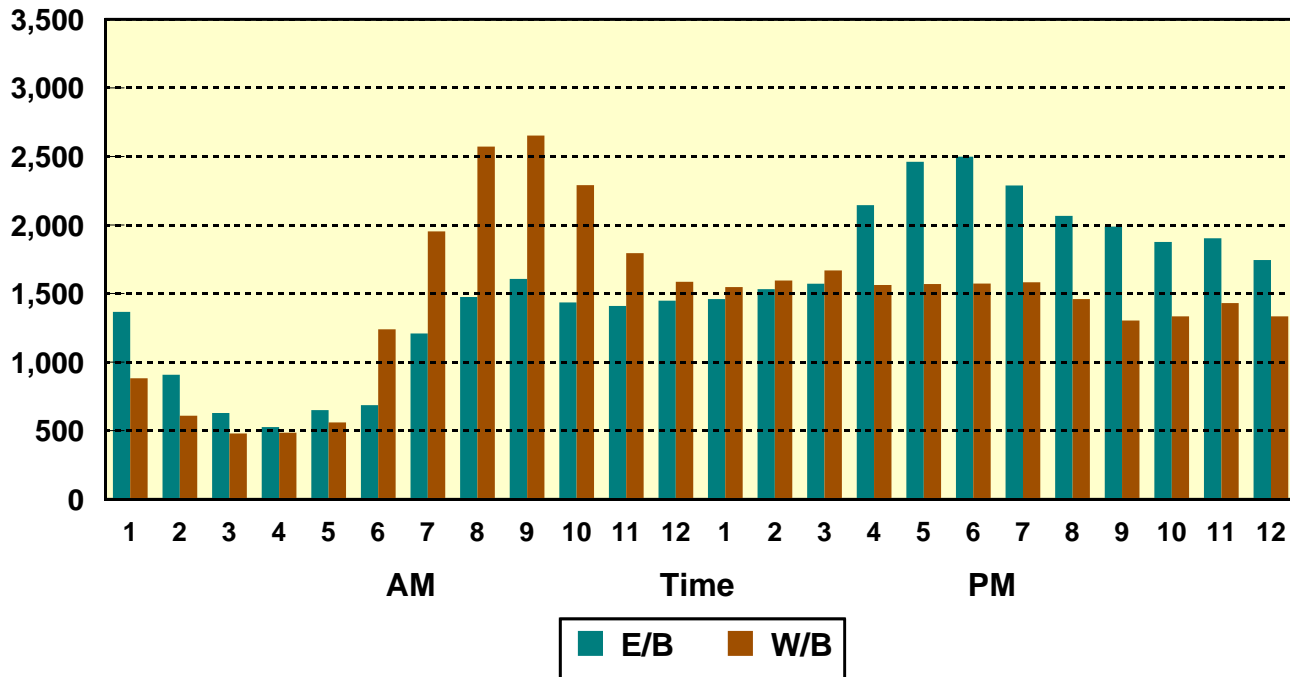
Hourly Vehicular Volumes Manhattan Bridge - 2009

FHWA Classes ►	Eastbound to Brooklyn						Westbound to Manhattan						2-Way Grand Totals
	Commuter Vans			Single Unit Trucks	Tractor Trailers	Total Vehicles	Commuter Vans			Single Unit Trucks	Tractor Trailers	Total Vehicles	
	Commercial Vans		Commercial Vans										
	Autos & Motorcycles	Pickups Large SUVs	Buses					Autos & Motorcycles	Pickups Large SUVs				
	1 & 2	3	4	5 - 7	8 - 13		1 & 2	3	4	5 - 7	8 - 13		
12-1am	1,324	17	7	14	3	1,365	868	9	1	3	0	881	2,246
1-2am	886	12	3	6	1	908	597	9	1	2	0	609	1,517
2-3am	607	9	2	10	1	629	468	5	1	5	0	479	1,108
3-4am	496	10	2	14	4	526	472	7	2	5	0	486	1,012
4-5am	622	6	2	19	1	650	543	5	4	8	0	560	1,210
5-6am	659	6	6	14	1	686	984	20	15	187	33	1,239	1,925
6-7am	1,076	27	30	67	8	1,208	1,538	48	58	272	38	1,954	3,162
7-8am	1,244	42	49	131	8	1,474	2,050	55	64	385	18	2,572	4,046
8-9am	1,356	31	52	156	12	1,607	2,179	46	50	358	20	2,653	** 4,260 **
9-10am	1,159	32	56	177	11	1,435	1,804	43	43	377	24	2,291	3,726
10-11am	1,153	21	49	174	12	1,409	1,368	37	38	325	27	1,795	3,204
11-12am	1,174	32	49	180	12	1,447	1,208	40	28	294	15	1,585	3,032
12-1pm	1,137	38	49	223	12	1,459	1,131	42	36	322	15	1,546	3,005
1-2pm	1,201	42	52	227	10	1,532	1,136	40	46	358	15	1,595	3,127
2-3pm	1,301	29	46	183	13	1,572	1,382	34	39	204	9	1,668	3,240
3-4pm	1,827	46	89	177	6	2,145	1,355	28	32	136	11	1,562	3,707
4-5pm	2,229	54	63	108	7	2,461	1,341	29	35	157	7	1,569	4,030
5-6pm	2,306	43	60	81	9	2,499	** 1,375	26	43	126	3	1,573	4,072
6-7pm	2,138	31	53	60	6	2,288	1,403	13	58	104	3	1,581	3,869
7-8pm	1,932	26	55	47	6	2,066	1,319	20	42	78	0	1,459	3,525
8-9pm	1,891	21	36	37	4	1,989	1,201	13	21	66	2	1,303	3,292
9-10pm	1,806	23	22	22	4	1,877	1,266	11	14	41	1	1,333	3,210
10-11pm	1,824	28	22	25	5	1,904	1,380	11	8	31	0	1,430	3,334
11-12pm	1,689	14	14	23	4	1,744	1,311	4	3	14	1	1,333	3,077
Totals	33,037	640	868	2,175	160	36,880	29,679	595	682	3,858	242	35,056	71,936
7-10am	3,759	105	157	464	31	4,516	6,033	144	157	1,120	62	7,516	12,032
10am-1pm	3,464	91	147	577	36	4,315	3,707	119	102	941	57	4,926	9,241
1-4pm	4,329	117	187	587	29	5,249	3,873	102	117	698	35	4,825	10,074
4-7pm	6,673	128	176	249	22	7,248	4,119	68	136	387	13	4,723	11,971
7am-7pm	18,225	441	667	1,877	118	21,328	17,732	433	512	3,146	167	21,990	43,318

Based on April 2006 Classification Survey Data

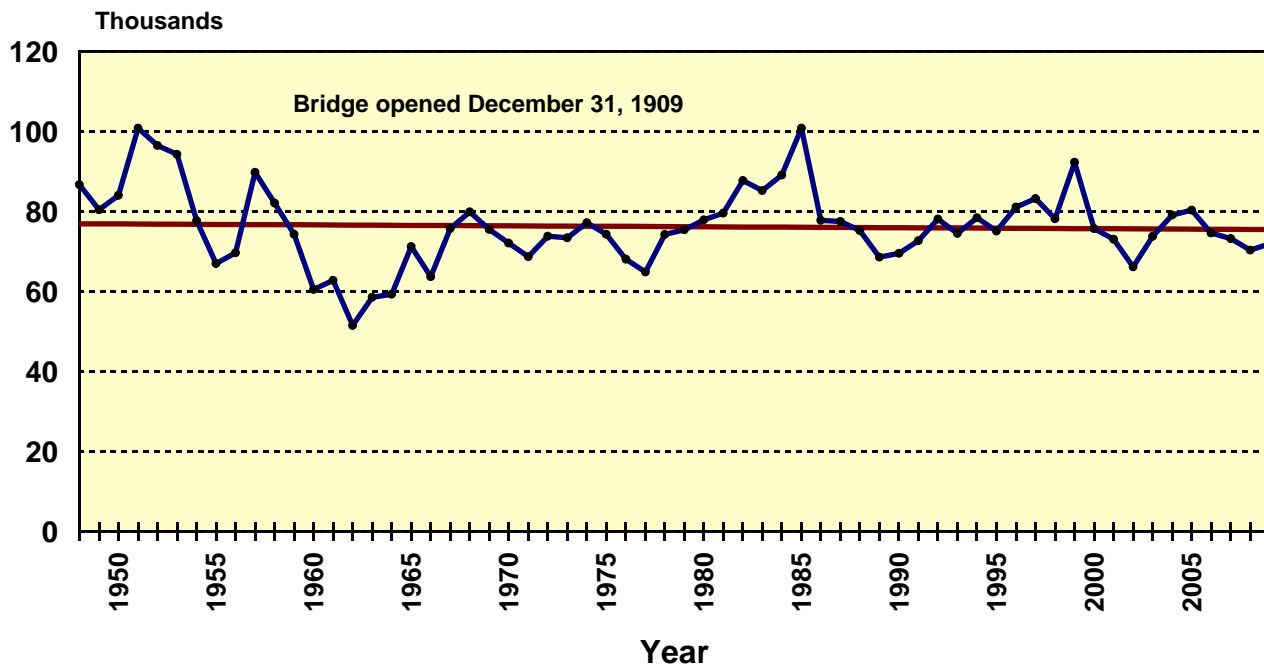
** Peak Volumes

Hourly Vehicular Volumes Manhattan Bridge - 2009



Average Daily Traffic Volumes Manhattan Bridge

1948-2009 Growth Rate = 0.0%



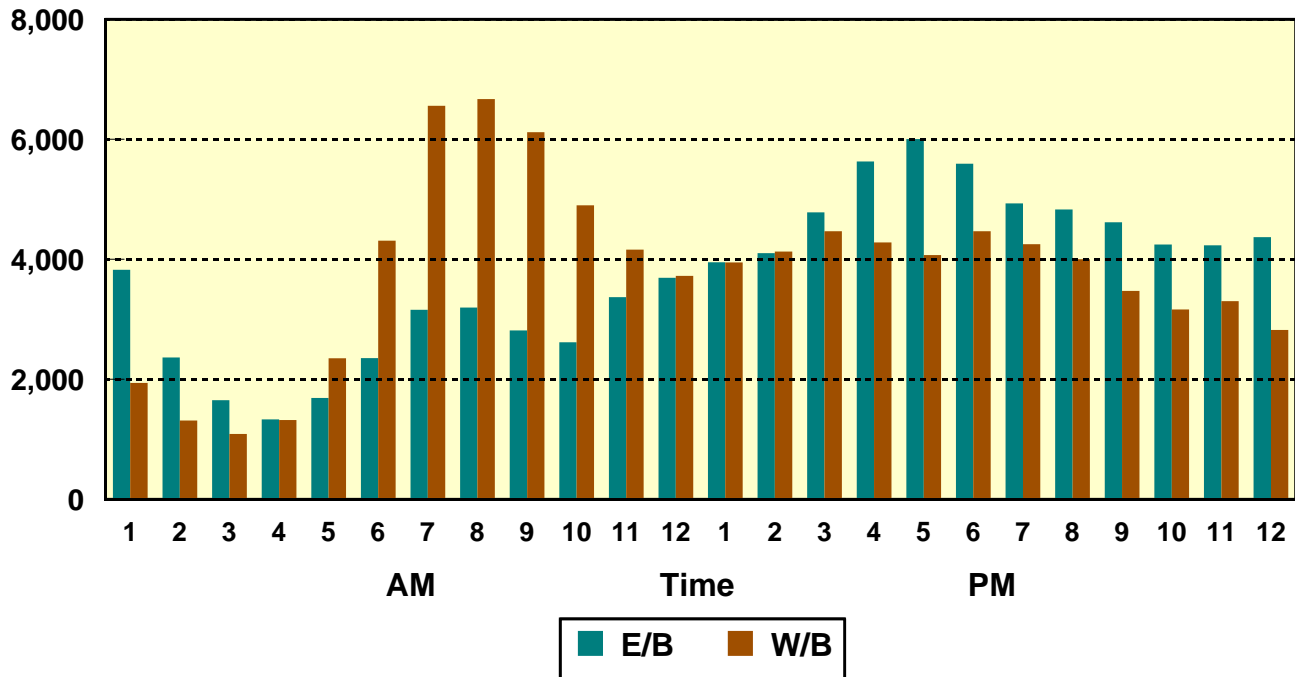
Hourly Vehicular Volumes Queensboro Bridge - 2009

FHWA Classes ►	Eastbound to Queens						Westbound to Manhattan						2-Way Grand Totals
	Commuter Vans		Single Unit Trucks	Tractor Trailers	Total Vehicles	Commuter Vans		Single Unit Trucks	Tractor Trailers	Total Vehicles			
	Commercial Vans					Commercial Vans							
	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	3,717	47	15	44	0	3,823	1,894	18	13	12	2	1,939	5,762
1-2am	2,307	21	9	25	1	2,363	1,273	16	7	15	2	1,313	3,676
2-3am	1,607	8	4	29	1	1,649	1,032	11	5	40	0	1,088	2,737
3-4am	1,279	6	2	43	0	1,330	1,226	8	13	70	1	1,318	2,648
4-5am	1,600	15	13	60	0	1,688	2,149	29	21	148	1	2,348	4,036
5-6am	2,207	36	16	93	1	2,353	3,987	52	28	222	23	4,312	6,665
6-7am	2,926	32	24	173	1	3,156	6,157	83	40	261	17	6,558	9,714
7-8am	2,902	51	28	210	4	3,195	6,193	75	56	313	36	6,673	9,868
8-9am	2,518	48	37	204	6	2,813	5,641	80	64	303	30	6,118	8,931
9-10am	2,335	38	35	204	5	2,617	4,516	76	48	223	37	4,900	7,517
10-11am	2,962	62	56	276	11	3,367	3,781	71	36	237	36	4,161	7,528
11-12am	3,319	56	43	266	5	3,689	3,421	56	26	185	36	3,724	7,413
12-1pm	3,542	70	43	286	6	3,947	3,628	41	41	198	37	3,945	7,892
1-2pm	3,673	83	47	295	5	4,103	3,852	55	37	145	41	4,130	8,233
2-3pm	4,364	85	56	271	7	4,783	4,169	72	45	143	38	4,467	9,250
3-4pm	5,196	86	59	284	8	5,633	4,022	50	42	146	22	4,282	9,915
4-5pm	5,609	90	43	255	7	6,004	3,880	47	30	102	13	4,072	10,076
5-6pm	5,228	74	44	238	10	5,594	4,303	37	35	71	21	4,467	10,061
6-7pm	4,637	61	47	181	6	4,932	4,134	33	25	46	14	4,252	9,184
7-8pm	4,530	77	56	158	9	4,830	3,887	28	31	40	13	3,999	8,829
8-9pm	4,329	83	65	136	4	4,617	3,375	31	23	34	9	3,472	8,089
9-10pm	4,015	63	49	117	3	4,247	3,080	26	17	36	5	3,164	7,411
10-11pm	3,998	61	48	126	1	4,234	3,224	24	21	31	1	3,301	7,535
11-12pm	4,231	54	27	57	2	4,371	2,760	16	19	25	1	2,821	7,192
Totals	83,031	1,307	866	4,031	103	89,338	85,584	1,035	723	3,046	436	90,824	180,162
7-10am	7,755	137	100	618	15	8,625	16,350	231	168	839	103	17,691	26,316
10am-1pm	9,823	188	142	828	22	11,003	10,830	168	103	620	109	11,830	22,833
1-4pm	13,233	254	162	850	20	14,519	12,043	177	124	434	101	12,879	27,398
4-7pm	15,474	225	134	674	23	16,530	12,317	117	90	219	48	12,791	29,321
7am-7pm	46,285	804	538	2,970	80	50,677	51,540	693	485	2,112	361	55,191	105,868

Based on April 2006 Classification Survey Data

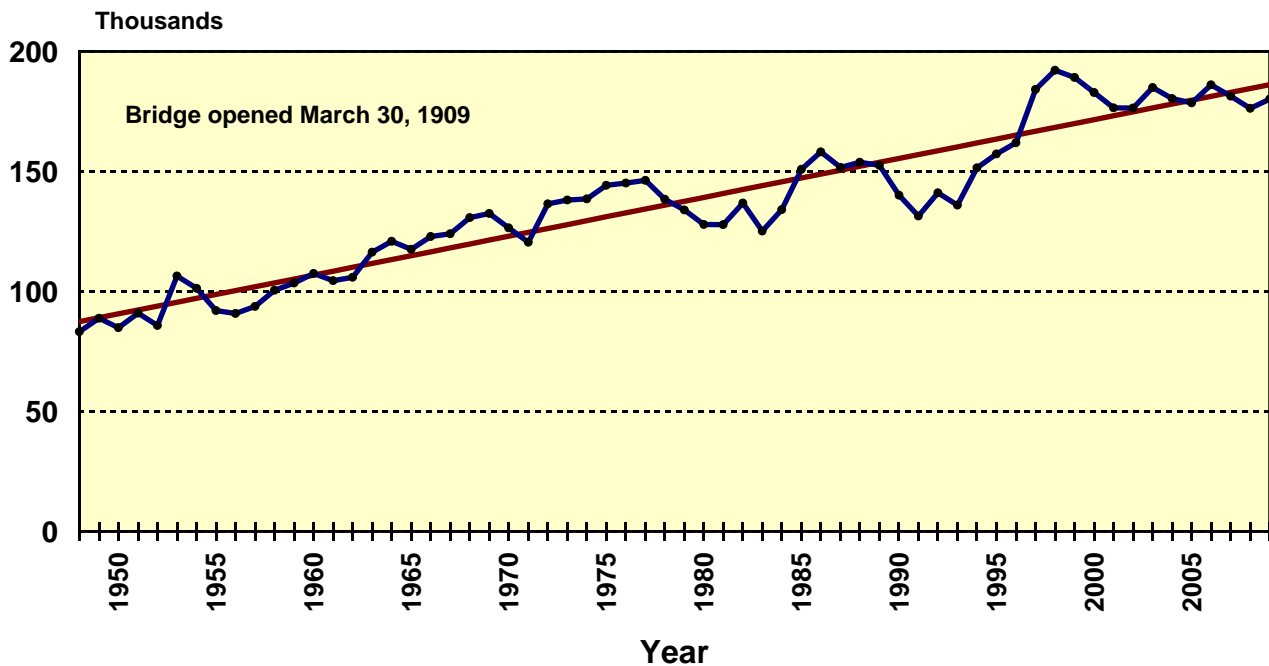
** Peak Volumes

Hourly Vehicular Volumes Queensboro Bridge - 2009



Average Daily Traffic Volumes Queensboro Bridge

1948-2009 Growth Rate = 1.2%



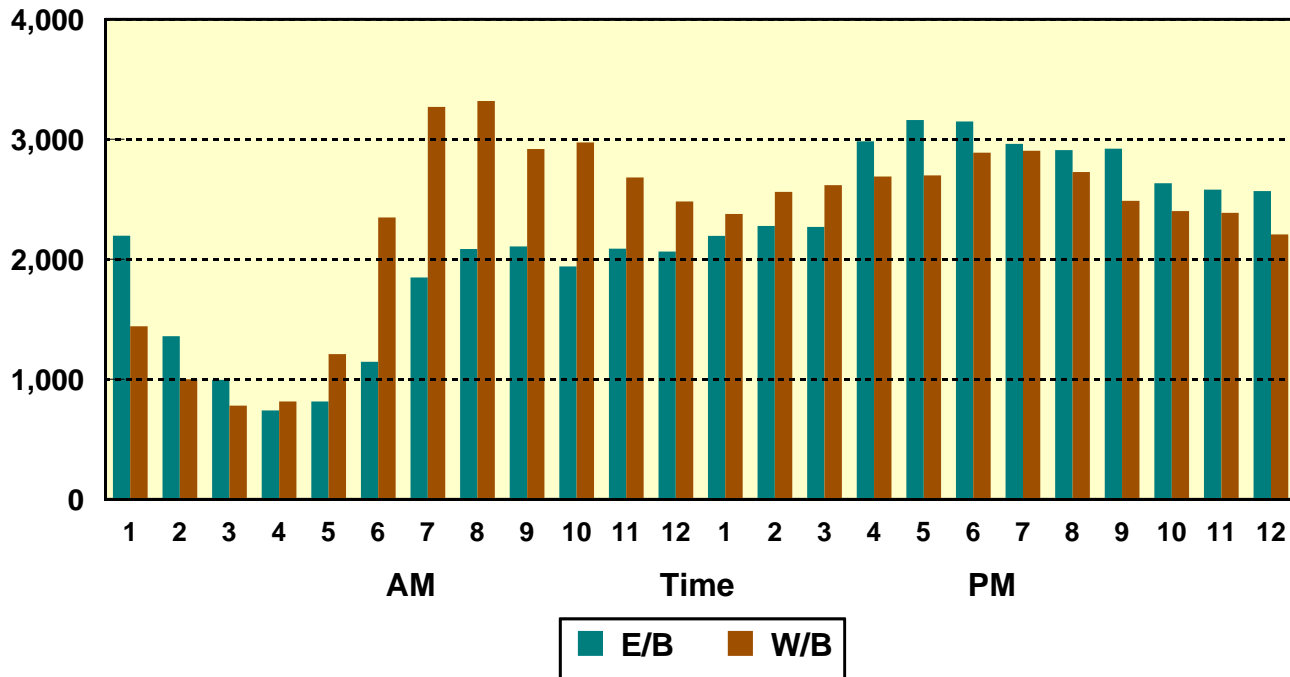
Hourly Vehicular Volumes Williamsburg Bridge - 2009

FHWA Classes ►	Eastbound to Brooklyn						Westbound to Manhattan						2-Way Grand Totals
	Commuter Vans Commercial Vans			Single Unit Trucks	Tractor Trailers	Total Vehicles	Commuter Vans Commercial 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	2,187	7	1	2	0	2,197	1,437	4	1	0	0	1,442	3,639
1-2am	1,353	3	1	0	1	1,358	994	3	1	1	0	999	2,357
2-3am	983	5	3	2	1	994	771	6	1	2	0	780	1,774
3-4am	725	7	3	3	2	740	808	4	0	1	1	814	1,554
4-5am	804	6	2	3	0	815	1,201	6	1	1	1	1,210	2,025
5-6am	1,125	6	8	6	0	1,145	2,333	6	7	1	2	2,349	3,494
6-7am	1,775	14	31	25	3	1,848	3,229	16	17	8	0	3,270	5,118
7-8am	1,974	23	50	38	1	2,086	3,255	31	20	14	0	3,320	5,406
8-9am	2,004	23	45	32	3	2,107	2,850	33	21	15	1	2,920	5,027
9-10am	1,831	28	46	32	2	1,939	2,908	29	20	14	3	2,974	4,913
10-11am	1,938	40	67	43	1	2,089	2,619	34	18	9	3	2,683	4,772
11-12am	1,930	33	57	43	2	2,065	2,429	28	17	8	1	2,483	4,548
12-1pm	2,053	57	26	57	2	2,195	2,311	33	16	17	1	2,378	4,573
1-2pm	2,131	65	29	50	3	2,278	2,493	33	20	16	1	2,563	4,841
2-3pm	2,146	49	33	39	3	2,270	2,554	31	15	16	2	2,618	4,888
3-4pm	2,828	64	37	52	3	2,984	2,618	28	20	22	2	2,690	5,674
4-5pm	3,013	60	36	46	5	3,160	2,623	37	19	19	1	2,699	5,859
5-6pm	3,024	57	34	32	1	3,148	2,804	41	25	18	1	2,889	6,037
6-7pm	2,876	38	24	23	2	2,963	2,834	35	17	17	2	2,905	5,868
7-8pm	2,835	30	24	20	1	2,910	2,671	27	16	13	0	2,727	5,637
8-9pm	2,861	26	20	14	2	2,923	2,462	15	5	4	1	2,487	5,410
9-10pm	2,602	13	12	5	2	2,634	2,381	14	4	3	1	2,403	5,037
10-11pm	2,560	11	4	4	2	2,581	2,367	14	2	3	1	2,387	4,968
11-12pm	2,556	7	2	3	0	2,568	2,191	9	3	3	1	2,207	4,775
Totals	50,114	672	595	574	42	51,997	55,143	517	286	225	26	56,197	108,194
7-10am	5,809	74	141	102	6	6,132	9,013	93	61	43	4	9,214	15,346
10am-1pm	5,921	130	150	143	5	6,349	7,359	95	51	34	5	7,544	13,893
1-4pm	7,105	178	99	141	9	7,532	7,665	92	55	54	5	7,871	15,403
4-7pm	8,913	155	94	101	8	9,271	8,261	113	61	54	4	8,493	17,764
7am-7pm	27,748	537	484	487	28	29,284	32,298	393	228	185	18	33,122	62,406

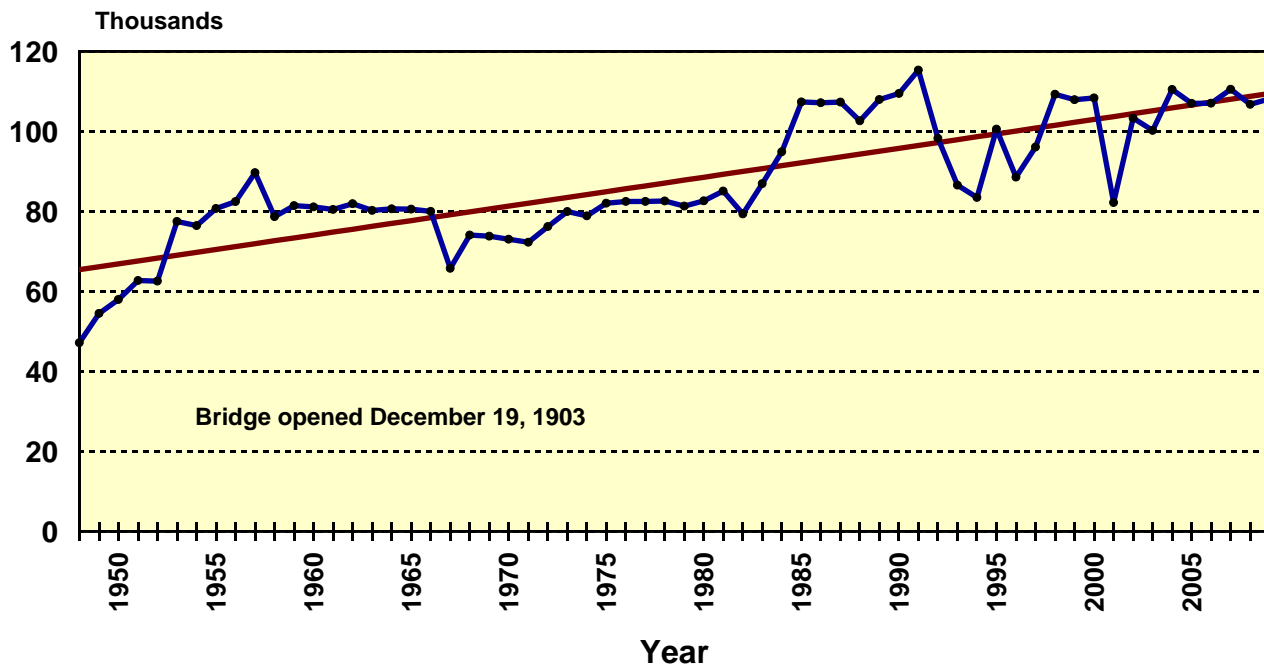
Based on March 2006 Classification Survey Data

** Peak Volumes

Hourly Vehicular Volumes Williamsburg Bridge - 2009



Average Daily Traffic Volumes Williamsburg Bridge 1948-2009 Growth Rate = 0.8%



Harlem River Bridges



Macombs Dam Bridge

Harlem River Bridges
Average Daily Traffic Volumes
1948 - 2009

<i>Year</i>	<i>Alexander Hamilton</i>	<i>Broadway</i>	<i>Macombs Dam</i>	<i>Madison Avenue</i>	<i>Third Avenue</i>
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

Harlem River Bridges (cont'd)

Average Daily Traffic Volumes

1948 - 2009

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

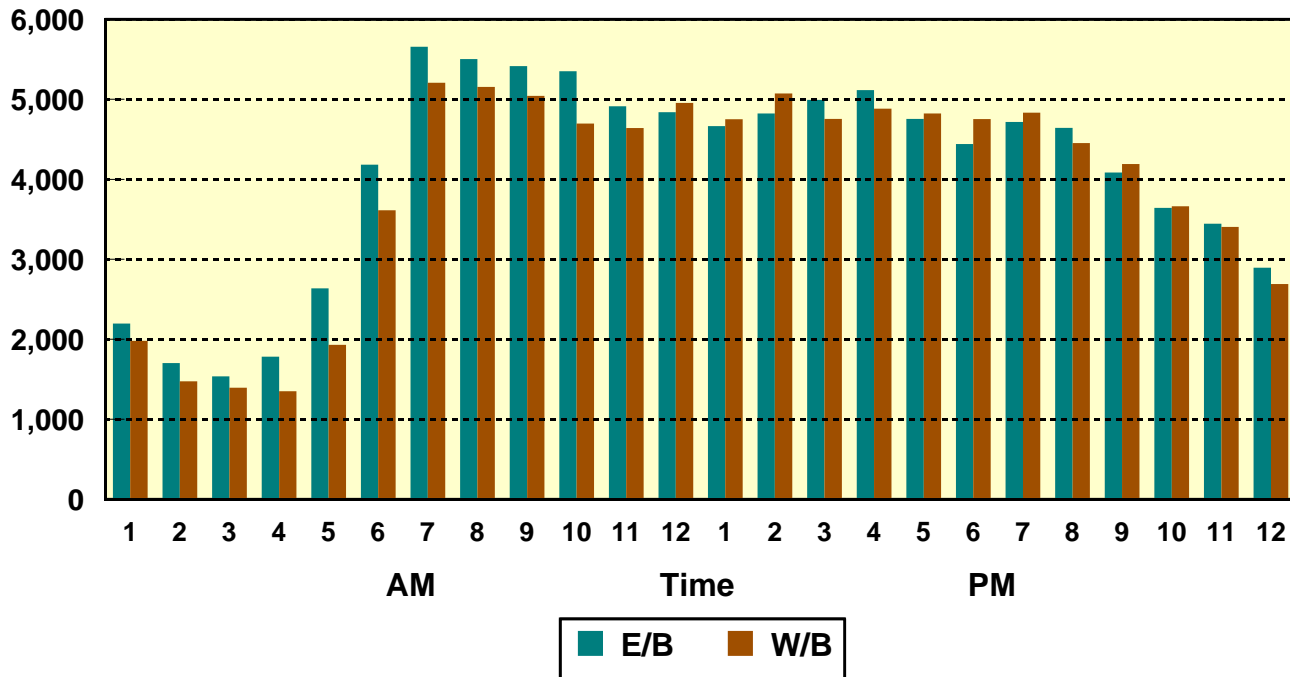
Hourly Vehicular Volumes **Alexander Hamilton Bridge - 2009**

	<i>Eastbound to Bronx</i>						<i>Westbound to Manhattan</i>						<i>2-Way Totals</i>
	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	
12-1am	---	---	---	---	---	2,195	---	---	---	---	---	1,980	4,175
1-2am	---	---	---	---	---	1,701	---	---	---	---	---	1,475	3,176
2-3am	---	---	---	---	---	1,535	---	---	---	---	---	1,394	2,929
3-4am	---	---	---	---	---	1,782	---	---	---	---	---	1,350	3,132
4-5am	---	---	---	---	---	2,636	---	---	---	---	---	1,930	4,566
5-6am	---	---	---	---	---	4,182	---	---	---	---	---	3,612	7,794
6-7am	---	---	---	---	---	5,657 **	---	---	---	---	---	5,208 **	10,865 **
7-8am	4,297	14	248	821	124	5,504	4,361	10	93	463	229	5,156	10,660
8-9am	3,936	5	257	989	229	5,416	4,314	35	35	501	159	5,044	10,460
9-10am	3,744	5	240	1,227	135	5,351	3,611	52	30	793	211	4,697	10,048
10-11am	4,409	3	105	345	50	4,912	4,016	28	18	433	146	4,641	9,553
11-12am	3,628	11	260	807	133	4,839	3,511	15	22	1,095	312	4,955	9,794
12-1pm	4,046	0	114	456	50	4,666	4,026	11	10	562	142	4,751	9,417
1-2pm	3,675	8	175	877	87	4,822	3,790	14	27	985	258	5,074	9,896
2-3pm	3,865	6	206	802	113	4,992	3,550	20	43	952	191	4,756	9,748
3-4pm	4,559	8	92	356	100	5,115	4,251	23	17	500	91	4,882	9,997
4-5pm	3,987	6	150	498	114	4,755	3,637	4	42	917	222	4,822	9,577
5-6pm	3,873	5	109	364	90	4,441	3,726	2	30	831	163	4,752	9,193
6-7pm	3,966	9	208	455	80	4,718	4,160	3	24	504	144	4,835	9,553
7-8pm	---	---	---	---	---	4,642	---	---	---	---	---	4,454	9,096
8-9pm	---	---	---	---	---	4,086	---	---	---	---	---	4,190	8,276
9-10pm	---	---	---	---	---	3,643	---	---	---	---	---	3,663	7,306
10-11pm	---	---	---	---	---	3,446	---	---	---	---	---	3,405	6,851
11-12pm	---	---	---	---	---	2,895	---	---	---	---	---	2,689	5,584
Totals	---	---	---	---	---	97,931	---	---	---	---	---	93,715	191,646
7-10am	11,977	24	745	3,037	488	16,271	12,286	97	158	1,757	599	14,897	31,168
10am-1pm	12,083	14	479	1,608	233	14,417	11,553	54	50	2,090	600	14,347	28,764
1-4pm	12,099	22	473	2,035	300	14,929	11,591	57	87	2,437	540	14,712	29,641
4-7pm	11,826	20	467	1,317	284	13,914	11,523	9	96	2,252	529	14,409	28,323
7am-7pm	47,985	80	2,164	7,997	1,305	59,531	46,953	217	391	8,536	2,268	58,365	117,896

Based on 1989 Classification Survey Data

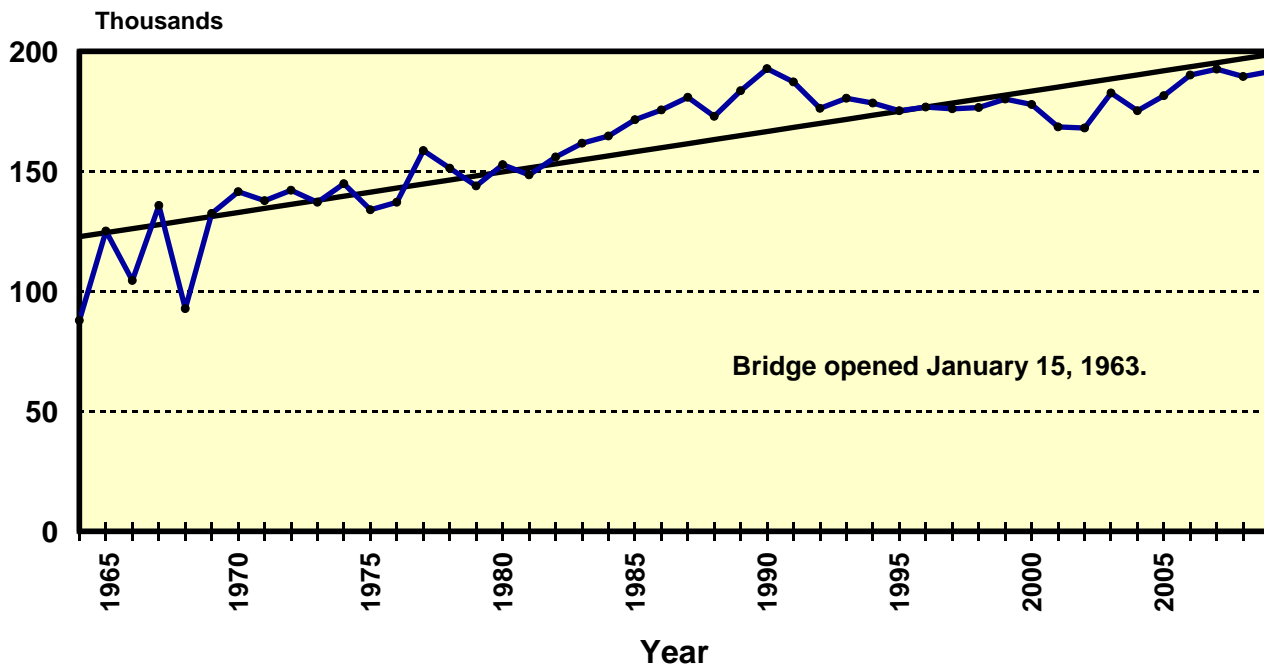
** Peak Volumes

Hourly Vehicular Volumes Alexander Hamilton Bridge - 2009



Average Daily Traffic Volumes Alexander Hamilton Bridge

1964-2009 Growth Rate = 1.1%



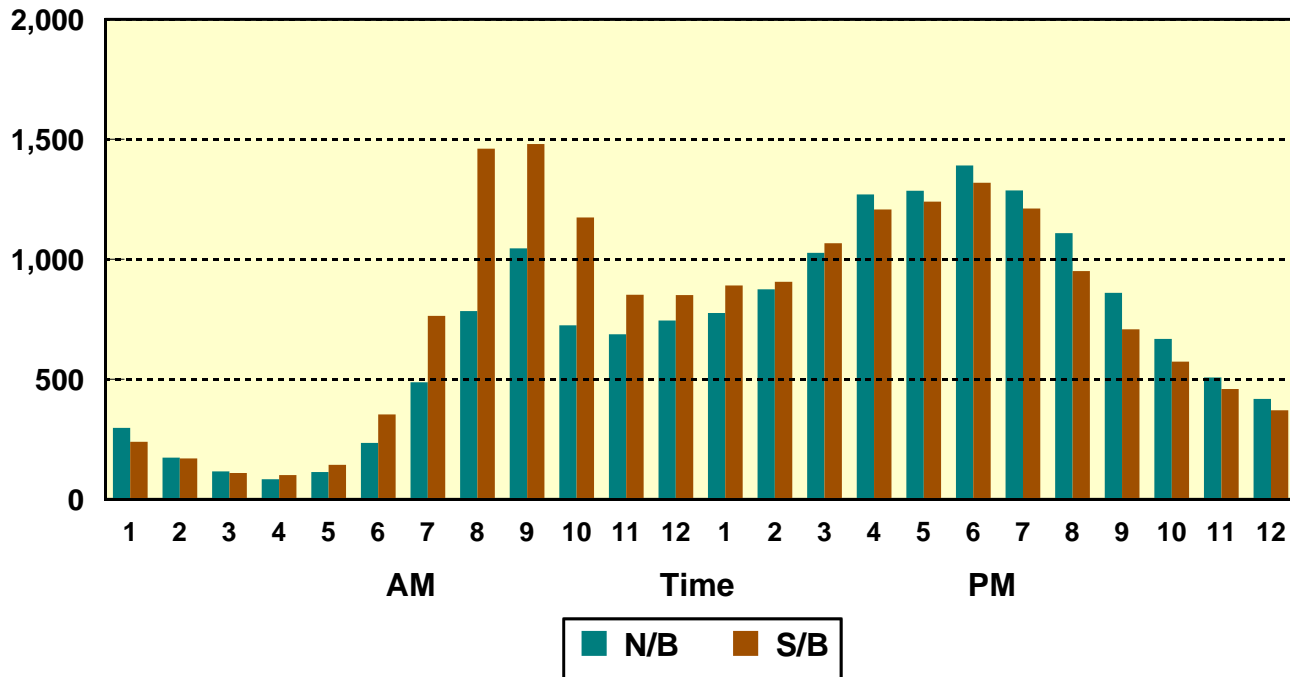
Hourly Vehicular Volumes Broadway Bridge - 2009

	<i>Northbound to Bronx</i>						<i>Southbound to Manhattan</i>						<i>2-Way Totals</i>
	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	
12-1am	---	---	---	---	---	297	---	---	---	---	---	239	536
1-2am	---	---	---	---	---	173	---	---	---	---	---	170	343
2-3am	---	---	---	---	---	116	---	---	---	---	---	109	225
3-4am	---	---	---	---	---	83	---	---	---	---	---	101	184
4-5am	---	---	---	---	---	113	---	---	---	---	---	143	256
5-6am	---	---	---	---	---	235	---	---	---	---	---	353	588
6-7am	---	---	---	---	---	487	---	---	---	---	---	764	1,251
7-8am	639	35	19	64	27	784	1,289	59	41	29	43	1,461	2,245
8-9am	890	64	23	39	30	1,046	1,314	45	30	46	45	1,480	2,526
9-10am	621	21	3	25	55	725	1,003	38	29	59	45	1,174	1,899
10-11am	618	15	2	31	21	687	776	20	11	36	9	852	1,539
11-12am	651	20	8	26	40	745	704	23	23	50	51	851	1,596
12-1pm	709	20	5	20	22	776	837	21	4	17	11	890	1,666
1-2pm	793	24	3	27	28	875	839	23	9	19	16	906	1,781
2-3pm	888	25	1	37	76	1,027	963	30	23	34	17	1,067	2,094
3-4pm	1,178	28	10	15	39	1,270	1,134	32	13	19	10	1,208	2,478
4-5pm	1,138	40	28	24	56	1,286	1,120	30	21	35	34	1,240	2,526
5-6pm	1,275	29	9	12	66	1,391	1,212	31	32	19	25	1,319	2,710
6-7pm	1,140	22	0	13	112	1,287	1,127	30	27	19	9	1,212	2,499
7-8pm	---	---	---	---	---	1,109	---	---	---	---	---	951	2,060
8-9pm	---	---	---	---	---	860	---	---	---	---	---	708	1,568
9-10pm	---	---	---	---	---	668	---	---	---	---	---	573	1,241
10-11pm	---	---	---	---	---	507	---	---	---	---	---	459	966
11-12pm	---	---	---	---	---	418	---	---	---	---	---	371	789
Totals	---	---	---	---	---	16,965	---	---	---	---	---	18,601	35,566
7-10am	2,150	120	45	128	112	2,555	3,606	142	100	134	133	4,115	6,670
10am-1pm	1,978	55	15	77	83	2,208	2,317	64	38	103	71	2,593	4,801
1-4pm	2,859	77	14	79	143	3,172	2,936	85	45	72	43	3,181	6,353
4-7pm	3,553	91	37	49	234	3,964	3,459	91	80	73	68	3,771	7,735
7am-7pm	10,540	343	111	333	572	11,899	12,318	382	263	382	315	13,660	25,559

Based on 1989 Classification Survey Data

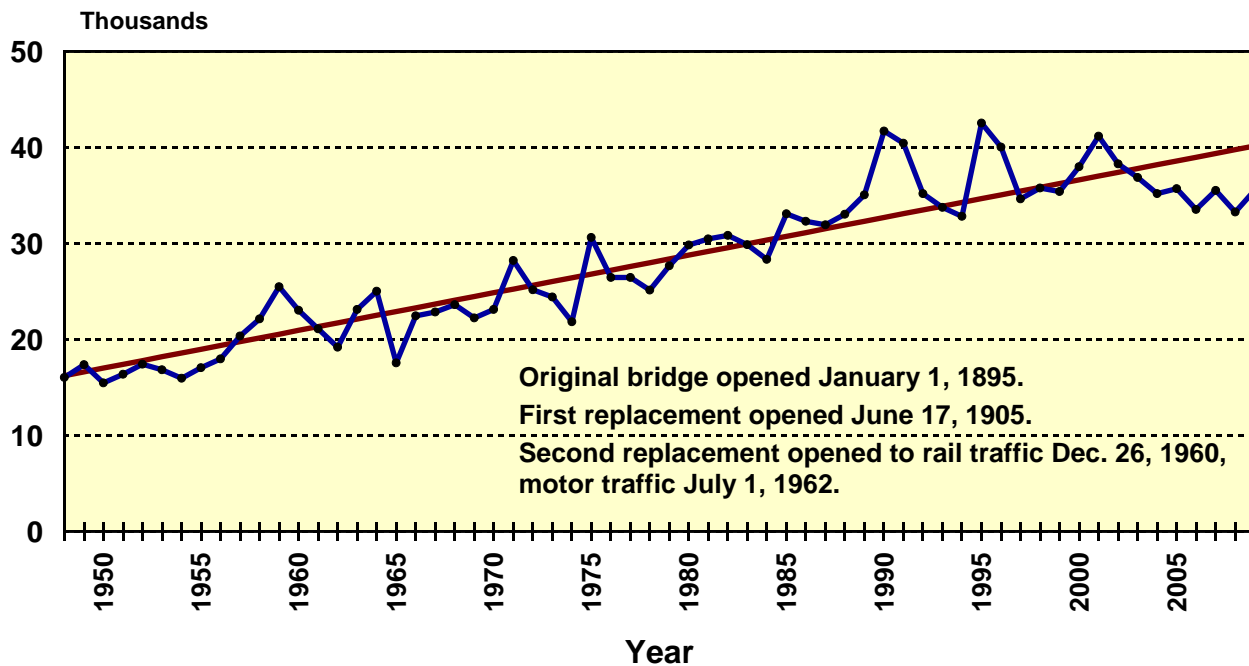
** Peak Volumes

Hourly Vehicular Volumes Broadway Bridge - 2009



Average Daily Traffic Volumes Broadway Bridge

1948-2009 Growth Rate = 1.5%



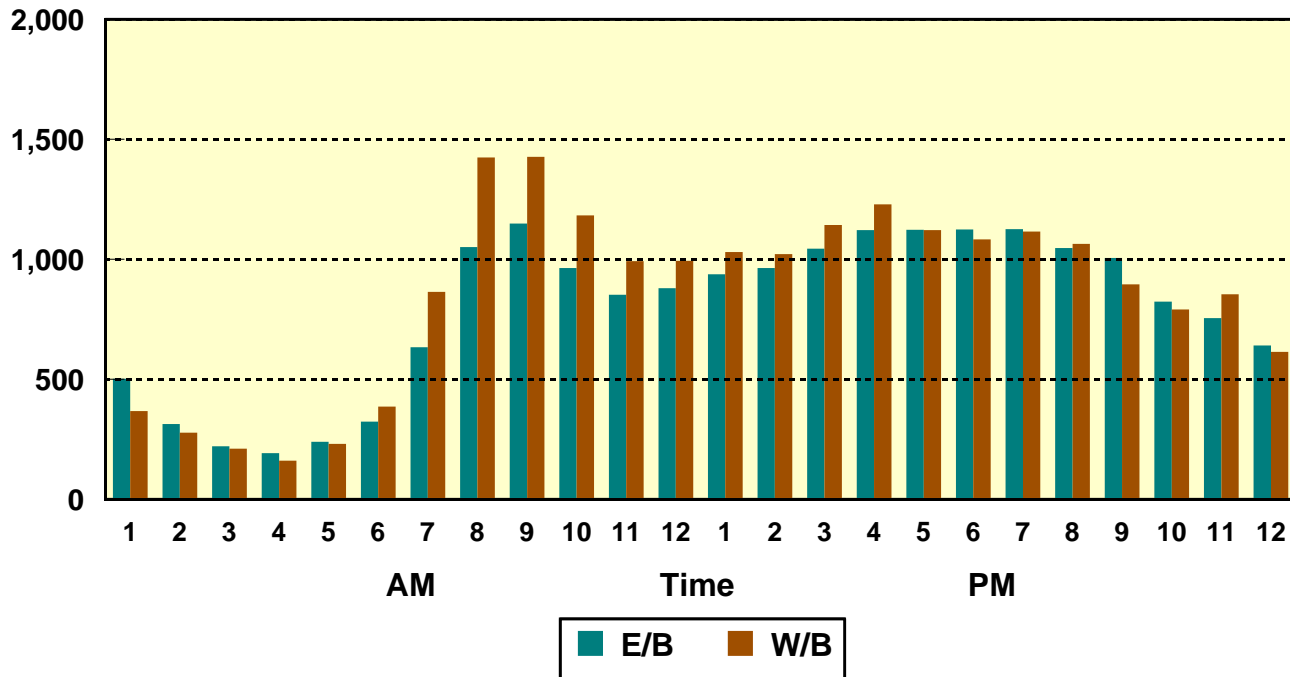
Hourly Vehicular Volumes Macombs Dam Bridge - 2009

	<i>Eastbound to Bronx</i>						<i>Westbound to Manhattan</i>						2-Way Totals
	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	
12-1am	---	---	---	---	---	502	---	---	---	---	---	367	869
1-2am	---	---	---	---	---	313	---	---	---	---	---	277	590
2-3am	---	---	---	---	---	221	---	---	---	---	---	211	432
3-4am	---	---	---	---	---	192	---	---	---	---	---	161	353
4-5am	---	---	---	---	---	239	---	---	---	---	---	231	470
5-6am	---	---	---	---	---	323	---	---	---	---	---	386	709
6-7am	---	---	---	---	---	633	---	---	---	---	---	864	1,497
7-8am	863	35	22	53	78	1,051	1,098	35	5	78	208	1,424	2,475
8-9am	962	13	17	58	99	1,149 **	1,160	10	2	91	164	1,427 **	2,576 **
9-10am	824	18	14	52	55	963	884	18	12	102	167	1,183	2,146
10-11am	768	7	3	33	41	852	885	8	7	39	53	992	1,844
11-12am	727	9	12	60	71	879	820	7	13	72	81	993	1,872
12-1pm	855	10	6	28	38	937	950	17	3	19	41	1,030	1,967
1-2pm	901	3	6	28	25	963	904	18	7	20	73	1,022	1,985
2-3pm	868	13	21	68	75	1,045	975	21	15	48	84	1,143	2,188
3-4pm	978	20	9	53	62	1,122	1,122	34	10	21	42	1,229	2,351
4-5pm	871	8	28	75	141	1,123	984	9	27	36	66	1,122	2,245
5-6pm	944	8	13	34	125	1,124	994	11	8	16	54	1,083	2,207
6-7pm	1,050	3	6	25	42	1,126	1,001	6	11	22	76	1,116	2,242
7-8pm	---	---	---	---	---	1,047	---	---	---	---	---	1,064	2,111
8-9pm	---	---	---	---	---	1,006	---	---	---	---	---	895	1,901
9-10pm	---	---	---	---	---	823	---	---	---	---	---	791	1,614
10-11pm	---	---	---	---	---	755	---	---	---	---	---	854	1,609
11-12pm	---	---	---	---	---	641	---	---	---	---	---	614	1,255
Totals	---	---	---	---	---	19,029	---	---	---	---	---	20,479	39,508
7-10am	2,649	66	53	163	232	3,163	3,142	63	19	271	539	4,034	7,197
10am-1pm	2,350	26	21	121	150	2,668	2,655	32	23	130	175	3,015	5,683
1-4pm	2,747	36	36	149	162	3,130	3,001	73	32	89	199	3,394	6,524
4-7pm	2,865	19	47	134	308	3,373	2,979	26	46	74	196	3,321	6,694
7am-7pm	10,611	147	157	567	852	12,334	11,777	194	120	564	1,109	13,764	26,098

Based on 1989 Classification Survey Data

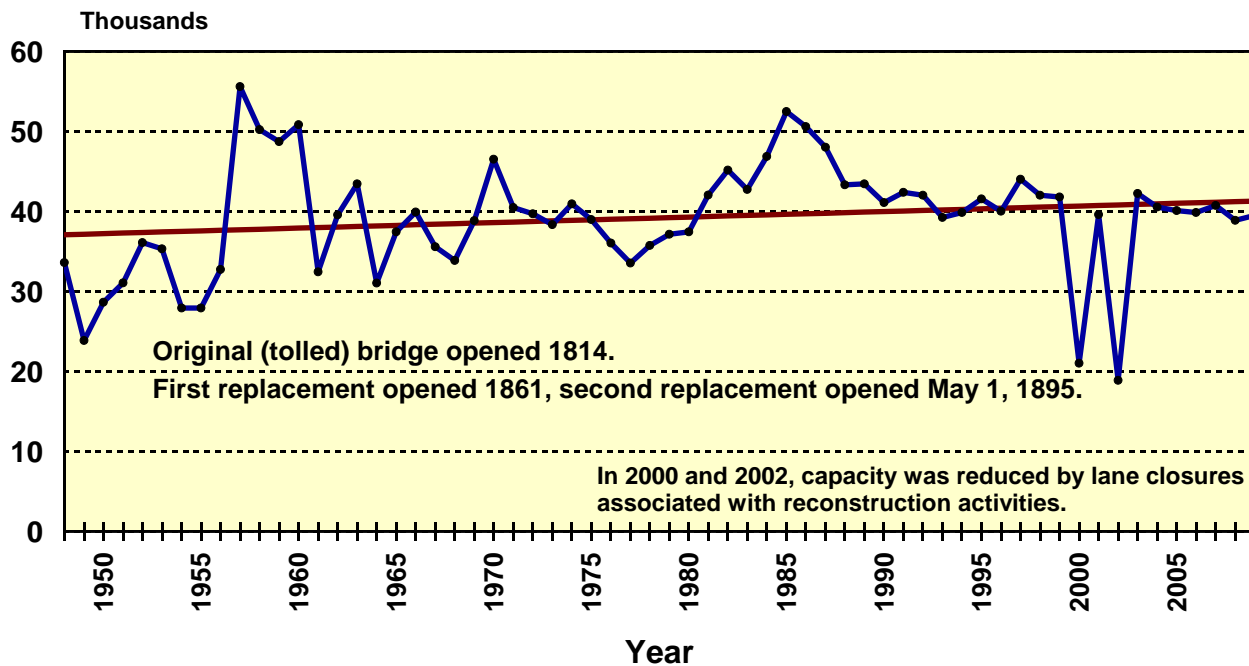
** Peak Volumes

Hourly Vehicular Volumes Macombs Dam Bridge - 2009



Average Daily Traffic Volumes Macombs Dam Bridge

1948-2009 Growth Rate = 0.2%



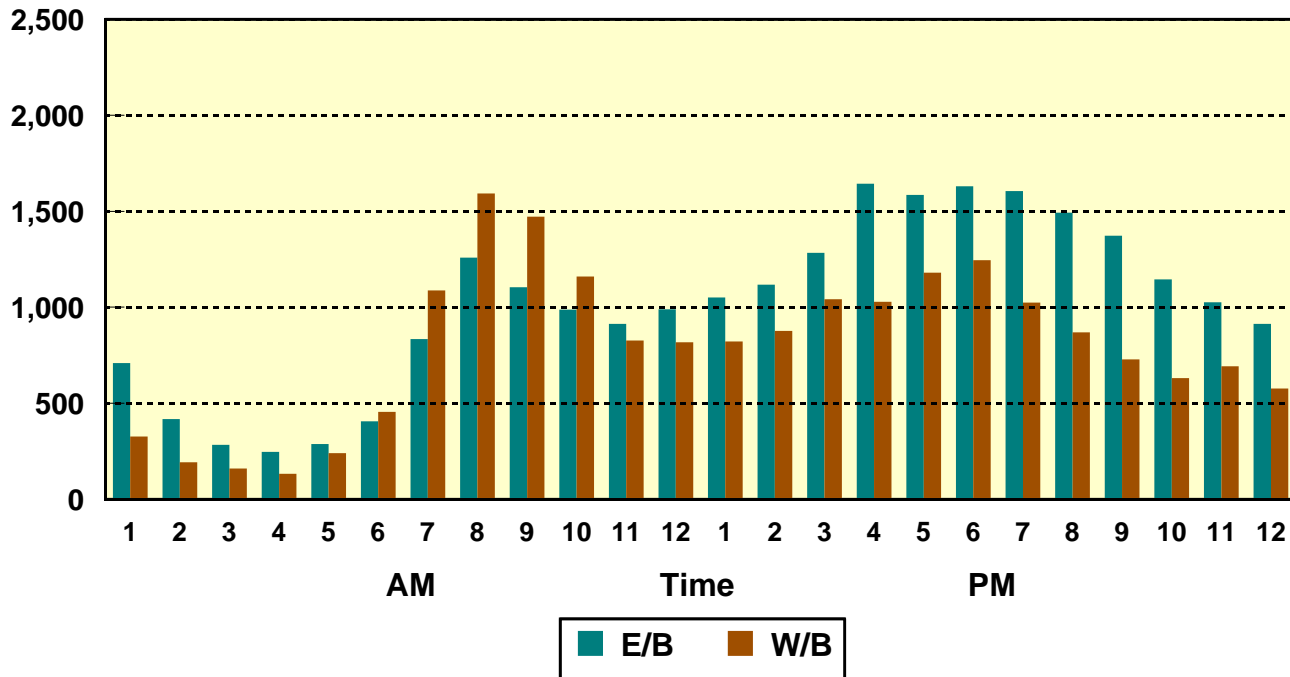
Hourly Vehicular Volumes Madison Avenue Bridge - 2009

	<i>Eastbound to Bronx</i>						<i>Westbound to Manhattan</i>						2-Way Totals
	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	
12-1am	---	---	---	---	---	709	---	---	---	---	---	327	1,036
1-2am	---	---	---	---	---	418	---	---	---	---	---	192	610
2-3am	---	---	---	---	---	283	---	---	---	---	---	160	443
3-4am	---	---	---	---	---	247	---	---	---	---	---	132	379
4-5am	---	---	---	---	---	287	---	---	---	---	---	240	527
5-6am	---	---	---	---	---	406	---	---	---	---	---	455	861
6-7am	---	---	---	---	---	834	---	---	---	---	---	1,087	1,921
7-8am	980	49	108	64	58	1,259	1,305	104	14	53	117	1,593 **	2,852
8-9am	866	59	77	45	57	1,104	1,166	97	27	62	120	1,472	2,576
9-10am	710	63	91	76	47	987	818	59	33	142	108	1,160	2,147
10-11am	759	34	45	33	42	913	672	56	19	19	61	827	1,740
11-12am	668	27	87	108	99	989	623	24	32	61	78	818	1,807
12-1pm	896	30	36	43	46	1,051	691	30	23	28	50	822	1,873
1-2pm	948	33	35	48	53	1,117	746	51	26	14	40	877	1,994
2-3pm	938	35	82	114	115	1,284	831	70	29	31	80	1,041	2,325
3-4pm	1,417	29	45	80	73	1,644 **	886	61	18	23	40	1,028	2,672
4-5pm	1,182	29	133	110	132	1,586	1,021	63	27	24	45	1,180	2,766
5-6pm	1,303	35	113	92	87	1,630	1,093	49	34	27	42	1,245	2,875 **
6-7pm	1,321	77	52	67	88	1,605	928	37	21	18	20	1,024	2,629
7-8pm	---	---	---	---	---	1,493	---	---	---	---	---	869	2,362
8-9pm	---	---	---	---	---	1,373	---	---	---	---	---	728	2,101
9-10pm	---	---	---	---	---	1,145	---	---	---	---	---	631	1,776
10-11pm	---	---	---	---	---	1,026	---	---	---	---	---	692	1,718
11-12pm	---	---	---	---	---	913	---	---	---	---	---	577	1,490
Totals	---	---	---	---	---	24,303	---	---	---	---	---	19,177	43,480
7-10am	2,556	171	276	185	162	3,350	3,289	260	74	257	345	4,225	7,575
10am-1pm	2,323	91	168	184	187	2,953	1,986	110	74	108	189	2,467	5,420
1-4pm	3,303	97	162	242	241	4,045	2,463	182	73	68	160	2,946	6,991
4-7pm	3,806	141	298	269	307	4,821	3,042	149	82	69	107	3,449	8,270
7am-7pm	11,988	500	904	880	897	15,169	10,780	701	303	502	801	13,087	28,256

Based on 1989 Classification Survey Data

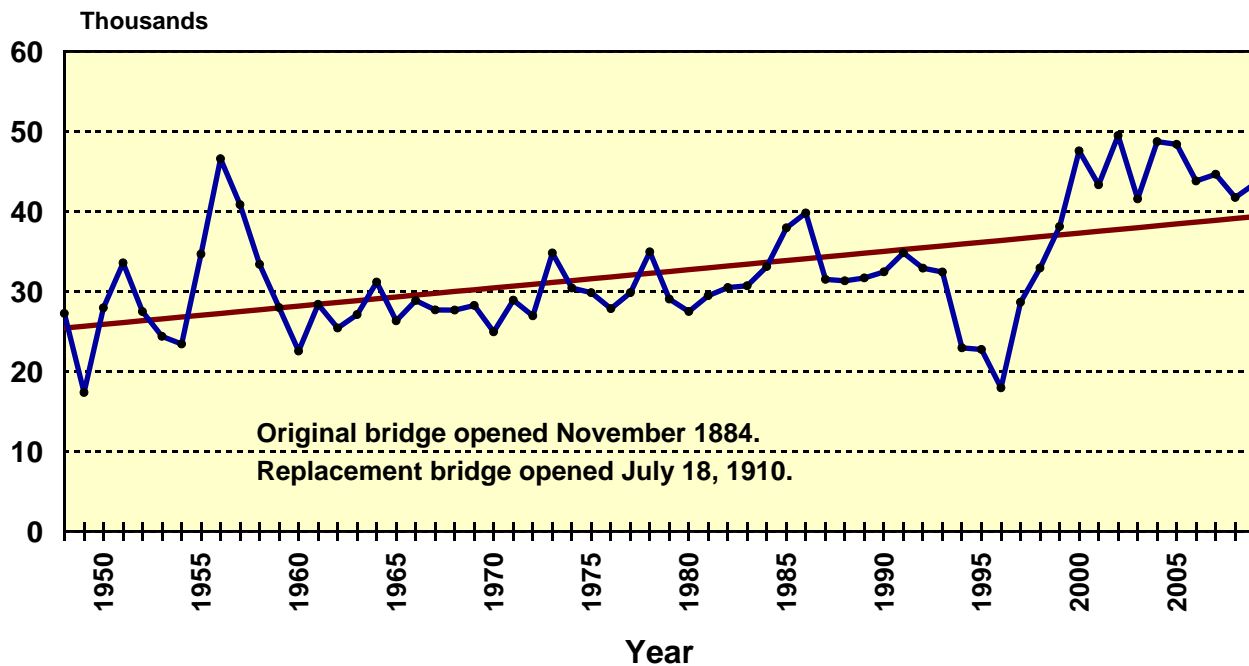
** Peak Volumes

Hourly Vehicular Volumes Madison Avenue Bridge - 2009



Average Daily Traffic Volumes Madison Avenue Bridge

1948-2009 Growth Rate = 0.7%



Hourly Vehicular Volumes Third Avenue Bridge - 2009

	<i>Northbound to Bronx</i>						<i>Southbound to Manhattan</i>						<i>2-Way Totals</i>
	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	
12-1am							---	---	---	---	---	1,097	1,097
1-2am							---	---	---	---	---	680	680
2-3am							---	---	---	---	---	618	618
3-4am							---	---	---	---	---	696	696
4-5am							---	---	---	---	---	1,212	1,212
5-6am							---	---	---	---	---	2,506	2,506
6-7am							---	---	---	---	---	4,071	4,071
7-8am							2,568	53	397	536	442	3,996	3,996
8-9am							2,013	29	199	407	424	3,072	3,072
9-10am							1,919	31	253	374	296	2,873	2,873
10-11am							2,145	26	142	138	114	2,565	2,565
11-12am							1,721	48	279	330	204	2,582	2,582
12-1pm							2,205	66	114	127	98	2,610	2,610
1-2pm							2,069	94	180	158	270	2,771	2,771
2-3pm							2,180	108	272	268	314	3,142	3,142
3-4pm							2,907	86	100	81	72	3,246	3,246
4-5pm							2,774	63	150	143	165	3,295	3,295
5-6pm							2,996	59	124	105	89	3,373	3,373
6-7pm							2,860	58	116	78	85	3,197	3,197
7-8pm							---	---	---	---	---	2,857	2,857
8-9pm							---	---	---	---	---	2,404	2,404
9-10pm							---	---	---	---	---	2,210	2,210
10-11pm							---	---	---	---	---	2,181	2,181
11-12pm							---	---	---	---	---	1,785	1,785
Totals							---	---	---	---	---	59,039	59,039
7-10am							6,500	113	849	1,317	1,162	9,941	9,941
10am-1pm							6,071	140	535	595	416	7,757	7,757
1-4pm							7,156	288	552	507	656	9,159	9,159
4-7pm							8,630	180	390	326	339	9,865	9,865
7am-7pm							28,357	721	2,326	2,745	2,573	36,722	36,722

**Bridge is 1-way southbound
to Manhattan**

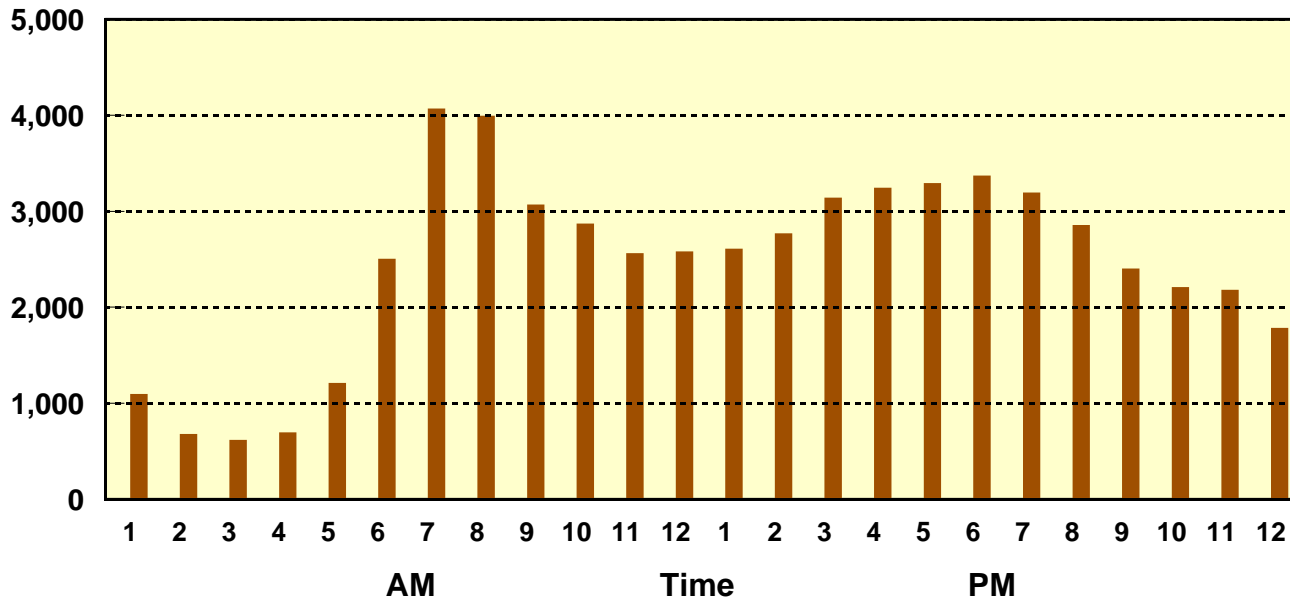
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Based on 1989 Classification Survey Data

** Peak Volumes

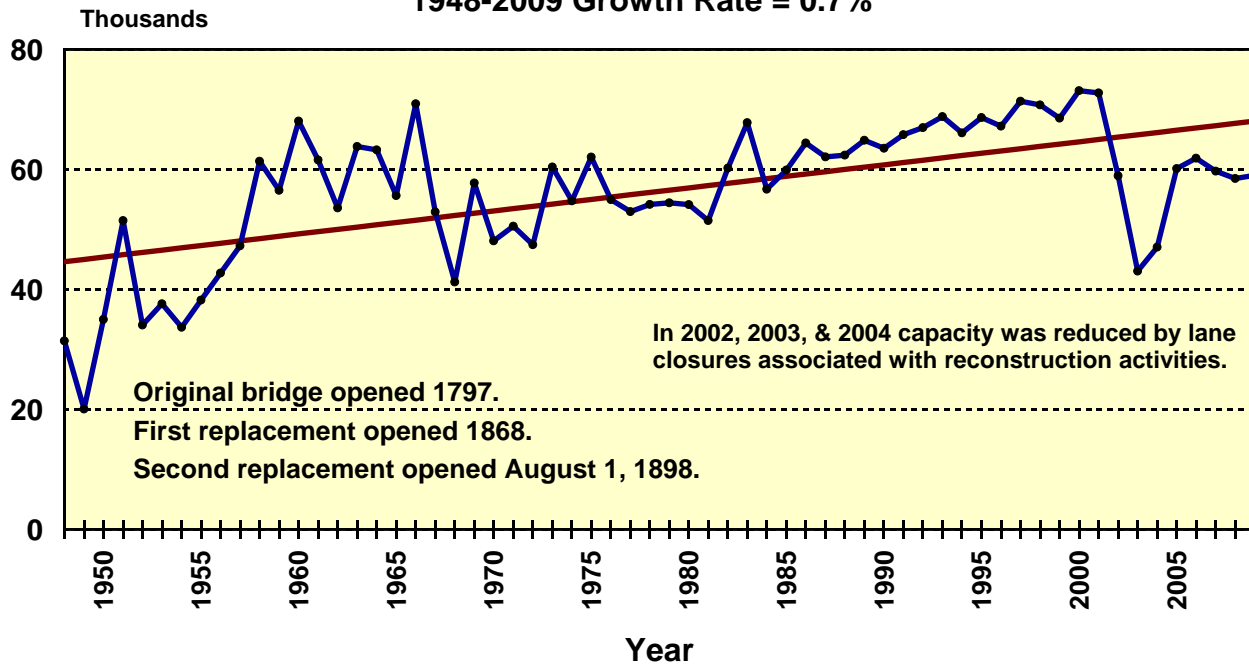
Hourly Vehicular Volumes Third Avenue Bridge (Harlem River) - 2009



Bridge is 1-way southbound to Manhattan

Average Daily Traffic Volumes Third Avenue Bridge (Harlem River)

1948-2009 Growth Rate = 0.7%



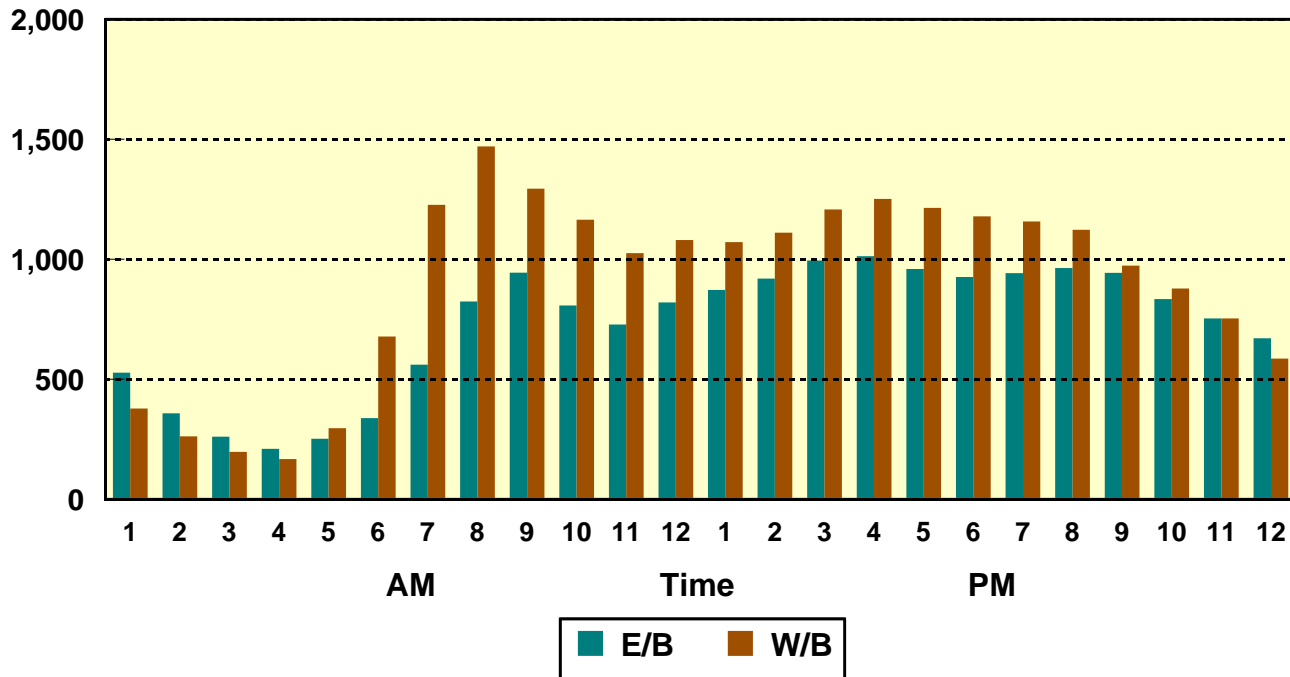
Hourly Vehicular Volumes University Heights Bridge - 2009

	<i>Eastbound to Bronx</i>						<i>Westbound to Manhattan</i>						2-Way Totals
	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	
12-1am	---	---	---	---	---	527	---	---	---	---	---	378	905
1-2am	---	---	---	---	---	358	---	---	---	---	---	262	620
2-3am	---	---	---	---	---	261	---	---	---	---	---	197	458
3-4am	---	---	---	---	---	210	---	---	---	---	---	167	377
4-5am	---	---	---	---	---	252	---	---	---	---	---	296	548
5-6am	---	---	---	---	---	338	---	---	---	---	---	678	1,016
6-7am	---	---	---	---	---	560	---	---	---	---	---	1,227	1,787
7-8am	623	44	79	38	40	824	1,274	21	33	37	105	1,470	2,294
8-9am	733	8	77	55	71	944	1,123	11	24	45	91	1,294	2,238
9-10am	600	8	60	69	70	807	986	13	16	50	100	1,165	1,972
10-11am	636	3	33	31	25	728	936	4	4	26	56	1,026	1,754
11-12am	632	7	66	77	38	820	919	7	13	58	83	1,080	1,900
12-1pm	786	13	24	27	22	872	990	2	5	27	48	1,072	1,944
1-2pm	789	39	38	30	23	919	1,049	4	4	19	35	1,111	2,030
2-3pm	815	13	69	50	48	995	1,034	10	20	46	98	1,208	2,203
3-4pm	923	16	21	27	26	1,013	1,131	40	6	25	50	1,252	2,265
4-5pm	836	4	51	39	29	959	1,080	17	15	22	80	1,214	2,173
5-6pm	812	0	51	25	38	926	1,104	1	13	12	49	1,179	2,105
6-7pm	822	0	51	17	52	942	1,083	6	9	9	51	1,158	2,100
7-8pm	---	---	---	---	---	963	---	---	---	---	---	1,123	2,086
8-9pm	---	---	---	---	---	943	---	---	---	---	---	973	1,916
9-10pm	---	---	---	---	---	834	---	---	---	---	---	878	1,712
10-11pm	---	---	---	---	---	753	---	---	---	---	---	753	1,506
11-12pm	---	---	---	---	---	670	---	---	---	---	---	586	1,256
Totals	---	---	---	---	---	17,418	---	---	---	---	---	21,747	39,165
7-10am	1,956	60	216	162	181	2,575	3,383	45	73	132	296	3,929	6,504
10am-1pm	2,054	23	123	135	85	2,420	2,845	13	22	111	187	3,178	5,598
1-4pm	2,527	68	128	107	97	2,927	3,214	54	30	90	183	3,571	6,498
4-7pm	2,470	4	153	81	119	2,827	3,267	24	37	43	180	3,551	6,378
7am-7pm	9,007	155	620	485	482	10,749	12,709	136	162	376	846	14,229	24,978

Based on 1989 Classification Survey Data

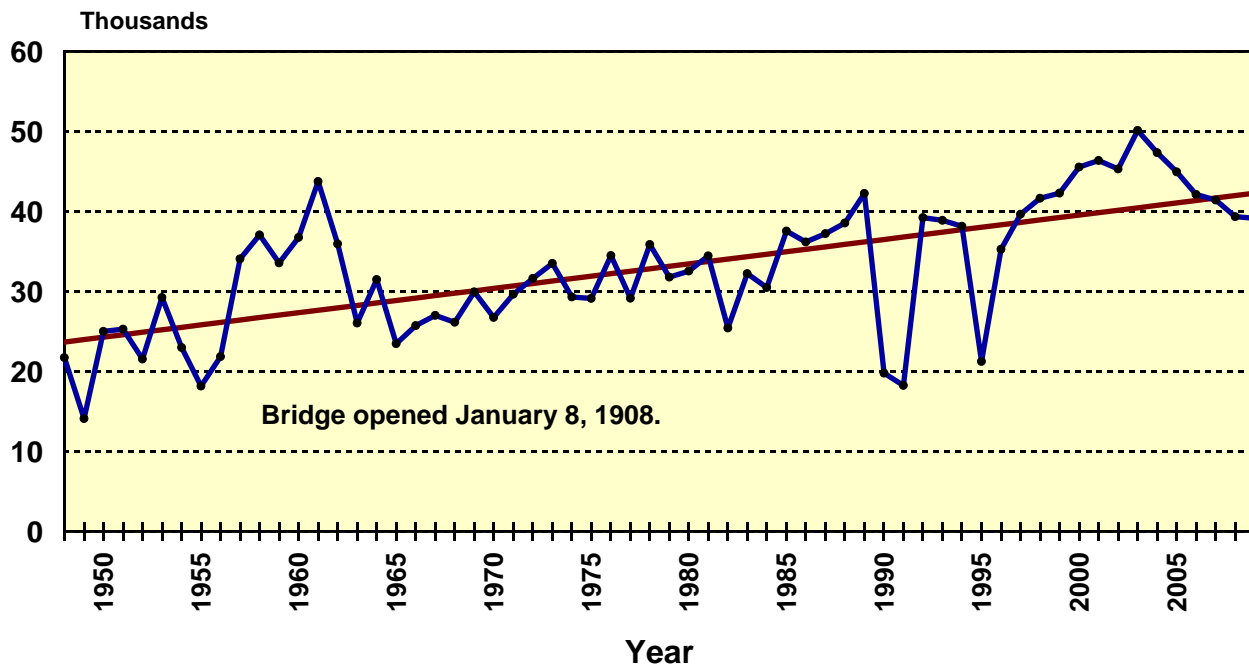
** Peak Volumes

Hourly Vehicular Volumes University Heights Bridge - 2009



Average Daily Traffic Volumes University Heights Bridge

1948-2009 Growth Rate = 1.0%



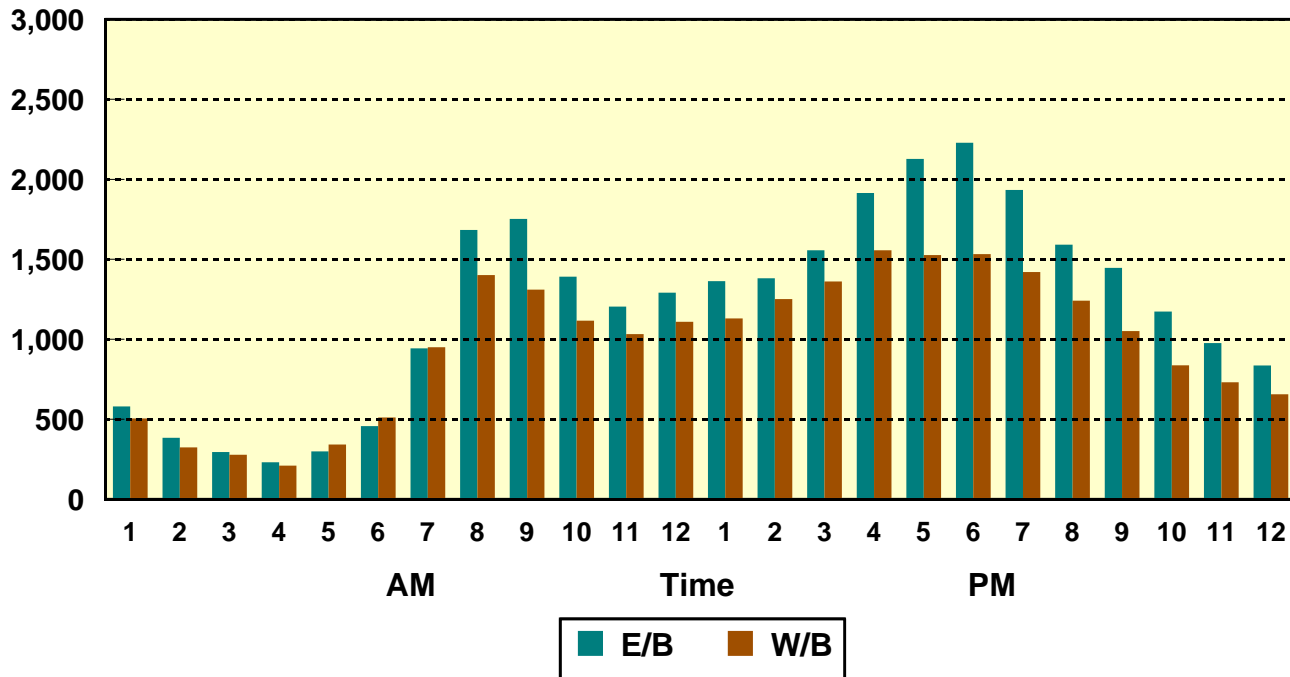
Hourly Vehicular Volumes Washington Bridge - 2009

	<i>Eastbound to Bronx</i>						<i>Westbound to Manhattan</i>						2-Way Totals
	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	
12-1am	---	---	---	---	---	580	---	---	---	---	---	505	1,085
1-2am	---	---	---	---	---	384	---	---	---	---	---	324	708
2-3am	---	---	---	---	---	295	---	---	---	---	---	278	573
3-4am	---	---	---	---	---	231	---	---	---	---	---	210	441
4-5am	---	---	---	---	---	299	---	---	---	---	---	342	641
5-6am	---	---	---	---	---	457	---	---	---	---	---	511	968
6-7am	---	---	---	---	---	943	---	---	---	---	---	950	1,893
7-8am	1,442	55	31	50	106	1,684	1,183	55	105	34	24	1,401	3,085
8-9am	1,468	45	27	79	134	1,753	1,105	61	67	50	27	1,310	3,063
9-10am	1,151	38	24	91	87	1,391	971	33	49	37	26	1,116	2,507
10-11am	1,095	32	7	30	40	1,204	942	34	10	25	21	1,032	2,236
11-12am	1,115	27	16	62	71	1,291	966	46	29	31	37	1,109	2,400
12-1pm	1,221	41	18	24	59	1,363	1,058	28	9	20	15	1,130	2,493
1-2pm	1,264	31	5	32	48	1,380	1,170	30	17	19	14	1,250	2,630
2-3pm	1,354	33	25	66	78	1,556	1,176	55	41	50	39	1,361	2,917
3-4pm	1,740	41	12	34	88	1,915	1,403	44	44	44	21	1,556	3,471
4-5pm	1,770	42	54	65	197	2,128	1,300	37	66	80	44	1,527	3,655
5-6pm	1,993	37	55	39	105	2,229	1,391	28	42	32	40	1,533	3,762
6-7pm	1,777	23	32	24	78	1,934	1,287	35	52	18	28	1,420	3,354
7-8pm	---	---	---	---	---	1,592	---	---	---	---	---	1,241	2,833
8-9pm	---	---	---	---	---	1,445	---	---	---	---	---	1,051	2,496
9-10pm	---	---	---	---	---	1,173	---	---	---	---	---	837	2,010
10-11pm	---	---	---	---	---	976	---	---	---	---	---	731	1,707
11-12pm	---	---	---	---	---	836	---	---	---	---	---	656	1,492
Totals	---	---	---	---	---	29,039	---	---	---	---	---	23,381	52,420
7-10am	4,061	138	82	220	327	4,828	3,259	149	221	121	77	3,827	8,655
10am-1pm	3,431	100	41	116	170	3,858	2,966	108	48	76	73	3,271	7,129
1-4pm	4,358	105	42	132	214	4,851	3,749	129	102	113	74	4,167	9,018
4-7pm	5,540	102	141	128	380	6,291	3,978	100	160	130	112	4,480	10,771
7am-7pm	17,390	445	306	596	1,091	19,828	13,952	486	531	440	336	15,745	35,573

Based on 1989 Classification Survey Data

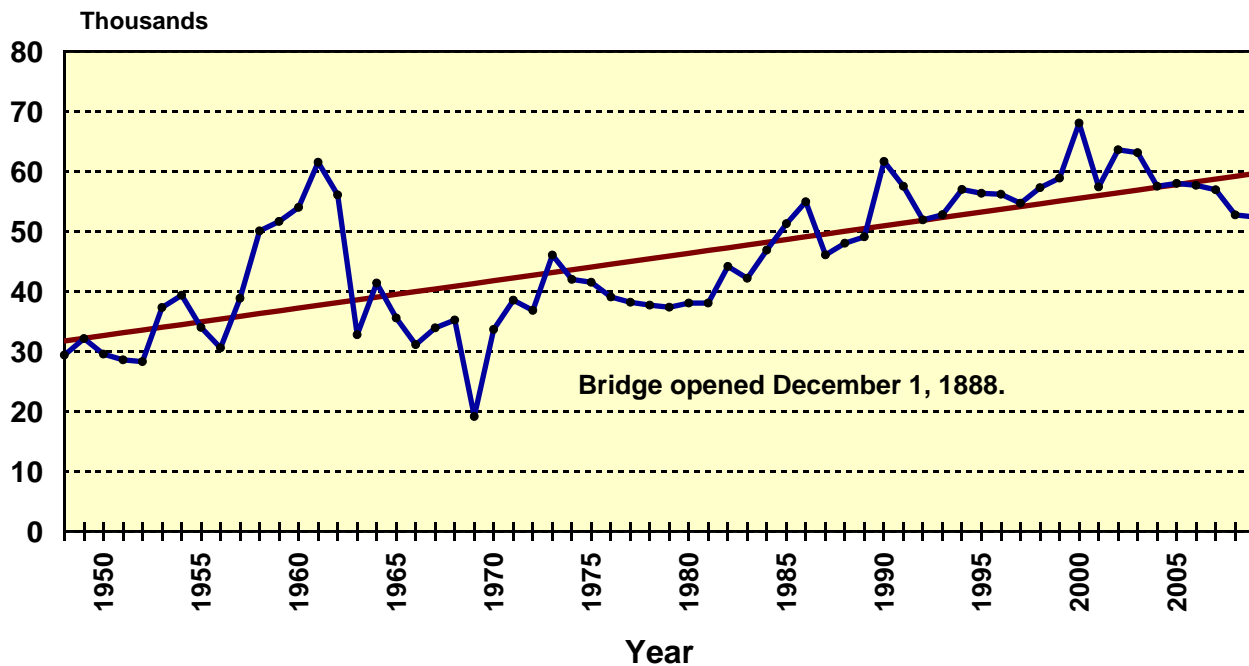
** Peak Volumes

Hourly Vehicular Volumes Washington Bridge - 2009



Average Daily Traffic Volumes Washington Bridge

1948-2009 Growth Rate = 1.0%



Hourly Vehicular Volumes Willis Avenue Bridge - 2009

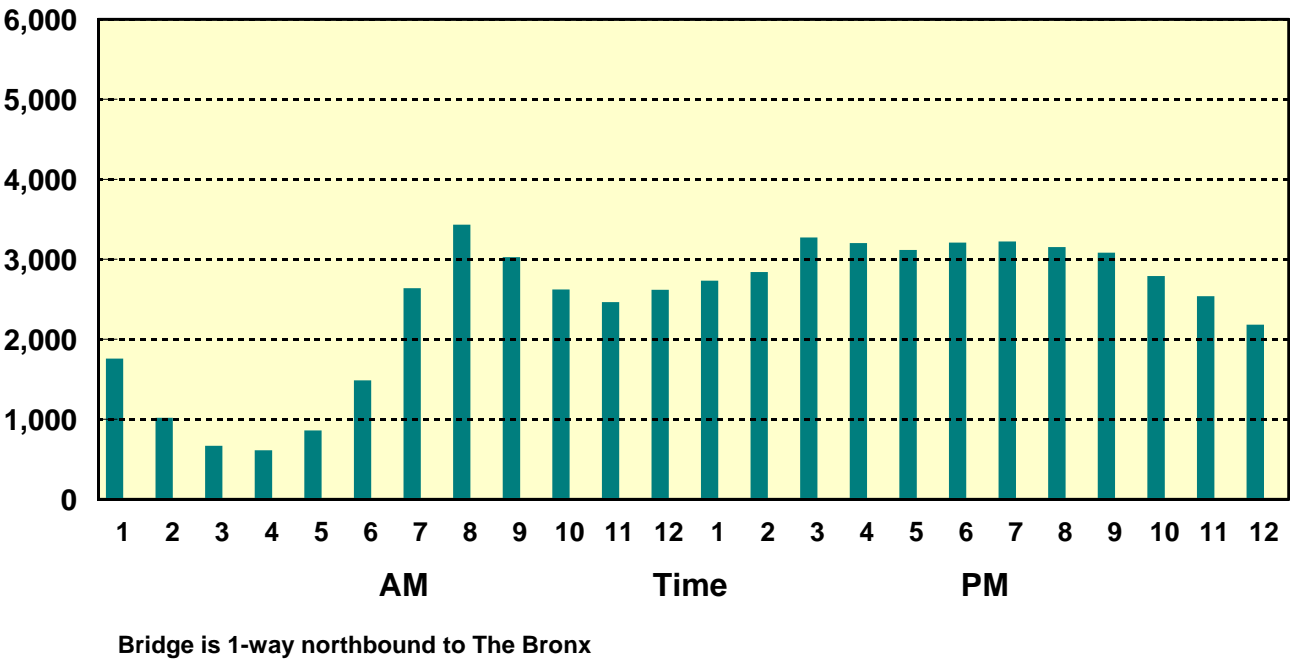
	<i>Northbound to Bronx</i>						<i>Southbound to Manhattan</i>						<i>2-Way Totals</i>
	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	
12-1am	---	---	---	---	---	1,758							1,758
1-2am	---	---	---	---	---	1,017							1,017
2-3am	---	---	---	---	---	668							668
3-4am	---	---	---	---	---	613							613
4-5am	---	---	---	---	---	859							859
5-6am	---	---	---	---	---	1,486							1,486
6-7am	---	---	---	---	---	2,637							2,637
7-8am	2,924	87	136	169	118	3,434							3,434
8-9am	2,442	104	91	176	215	3,028							3,028
9-10am	1,959	115	96	235	217	2,622							2,622
10-11am	2,052	48	66	154	145	2,465							2,465
11-12am	1,935	34	114	278	257	2,618							2,618
12-1pm	2,394	41	51	147	100	2,733							2,733
1-2pm	2,536	23	39	107	134	2,839							2,839
2-3pm	2,424	29	119	349	352	3,273							3,273
3-4pm	2,833	52	49	136	132	3,202							3,202
4-5pm	2,456	28	94	210	330	3,118							3,118
5-6pm	2,610	46	87	145	321	3,209							3,209
6-7pm	2,820	27	86	99	190	3,222							3,222
7-8pm	---	---	---	---	---	3,152							3,152
8-9pm	---	---	---	---	---	3,085							3,085
9-10pm	---	---	---	---	---	2,789							2,789
10-11pm	---	---	---	---	---	2,538							2,538
11-12pm	---	---	---	---	---	2,183							2,183
Totals	---	---	---	---	---	58,548							58,548
7-10am	7,325	306	323	580	550	9,084							9,084
10am-1pm	6,381	123	231	579	502	7,816							7,816
1-4pm	7,793	104	207	592	618	9,314							9,314
4-7pm	7,886	101	267	454	841	9,549							9,549
7am-7pm	29,385	634	1,028	2,205	2,511	35,763							35,763

**Bridge is 1-way northbound
to The Bronx**

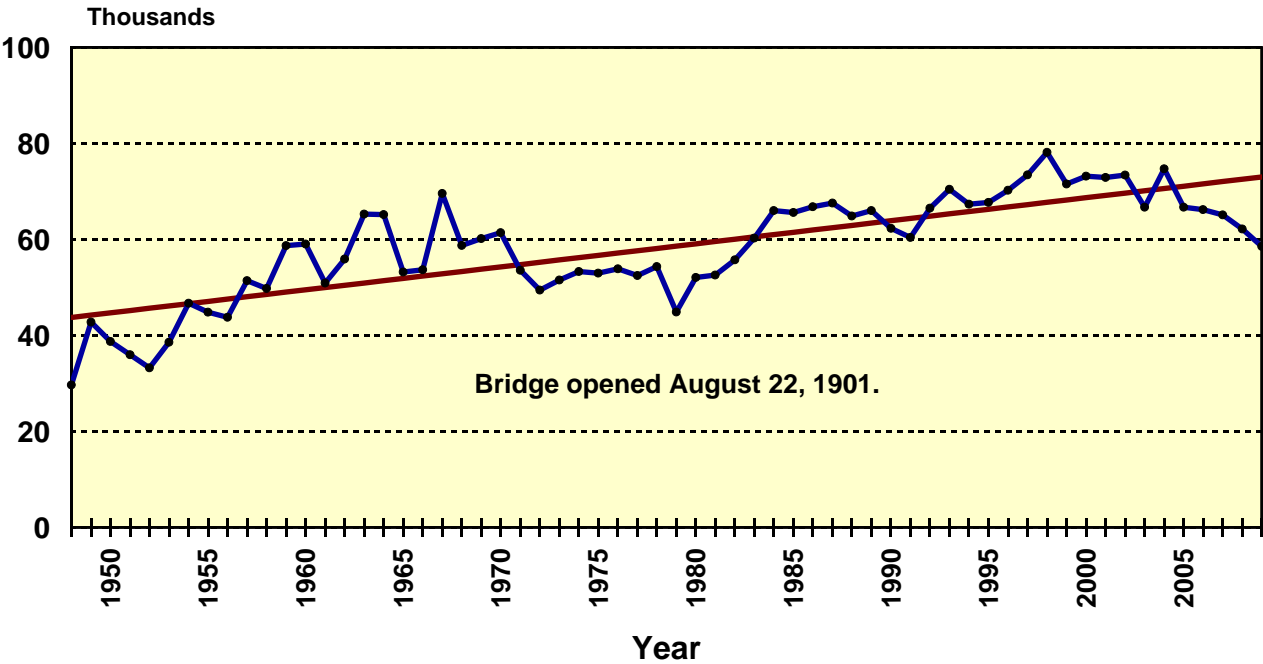
Based on 1989 Classification Survey Data

** Peak Volumes

Hourly Vehicular Volumes Willis Avenue Bridge - 2009



Average Daily Traffic Volumes Willis Avenue Bridge 1948-2009 Growth Rate = 0.8%



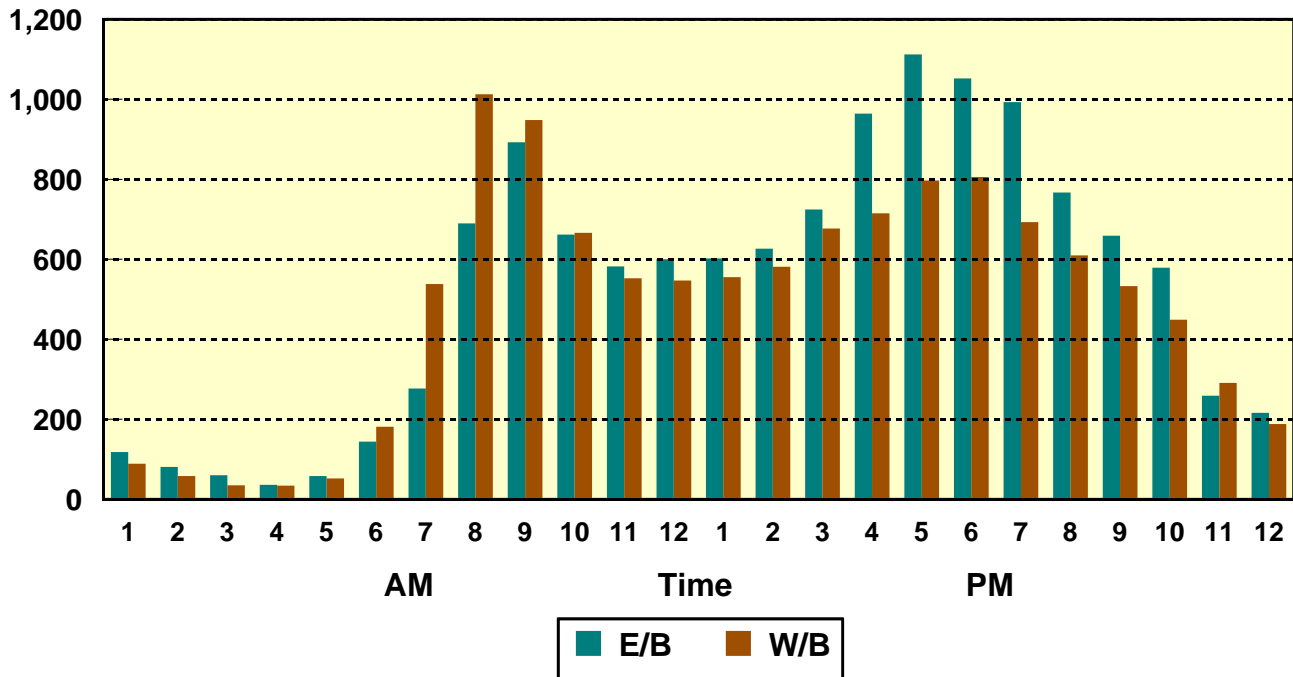
Hourly Vehicular Volumes 145th Street Bridge - 2009

	<i>Eastbound to Bronx</i>						<i>Westbound to Manhattan</i>						2-Way Totals
	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	
12-1am	---	---	---	---	---	118	---	---	---	---	---	89	207
1-2am	---	---	---	---	---	81	---	---	---	---	---	58	139
2-3am	---	---	---	---	---	60	---	---	---	---	---	35	95
3-4am	---	---	---	---	---	36	---	---	---	---	---	34	70
4-5am	---	---	---	---	---	58	---	---	---	---	---	52	110
5-6am	---	---	---	---	---	144	---	---	---	---	---	181	325
6-7am	---	---	---	---	---	277	---	---	---	---	---	538	815
7-8am	579	28	37	37	9	690	881	41	18	38	35	1,013 **	1,703
8-9am	744	27	45	49	28	893	812	28	32	27	49	948	1,841
9-10am	534	12	36	57	23	662	534	18	32	25	57	666	1,328
10-11am	510	9	14	24	25	582	440	15	30	23	44	552	1,134
11-12am	456	15	27	62	40	600	405	10	41	42	49	547	1,147
12-1pm	522	11	16	37	16	602	514	10	10	8	13	555	1,157
1-2pm	541	11	31	28	16	627	524	26	10	13	8	581	1,208
2-3pm	546	16	30	93	40	725	566	22	27	25	37	677	1,402
3-4pm	849	22	23	41	29	964	666	26	7	6	10	715	1,679
4-5pm	886	14	58	99	55	1,112 **	739	16	14	8	20	797	1,909 **
5-6pm	858	10	49	71	64	1,052	756	16	13	9	12	806	1,858
6-7pm	865	27	30	23	48	993	655	21	5	3	9	693	1,686
7-8pm	---	---	---	---	---	767	---	---	---	---	---	610	1,377
8-9pm	---	---	---	---	---	659	---	---	---	---	---	533	1,192
9-10pm	---	---	---	---	---	579	---	---	---	---	---	449	1,028
10-11pm	---	---	---	---	---	259	---	---	---	---	---	291	550
11-12pm	---	---	---	---	---	216	---	---	---	---	---	188	404
Totals	---	---	---	---	---	12,756	---	---	---	---	---	11,608	24,364
7-10am	1,857	67	118	143	60	2,245	2,227	87	82	90	141	2,627	4,872
10am-1pm	1,488	35	57	123	81	1,784	1,359	35	81	73	106	1,654	3,438
1-4pm	1,936	49	84	162	85	2,316	1,756	74	44	44	55	1,973	4,289
4-7pm	2,609	51	137	193	167	3,157	2,150	53	32	20	41	2,296	5,453
7am-7pm	7,890	202	396	621	393	9,502	7,492	249	239	227	343	8,550	18,052

Based on 1989 Classification Survey Data

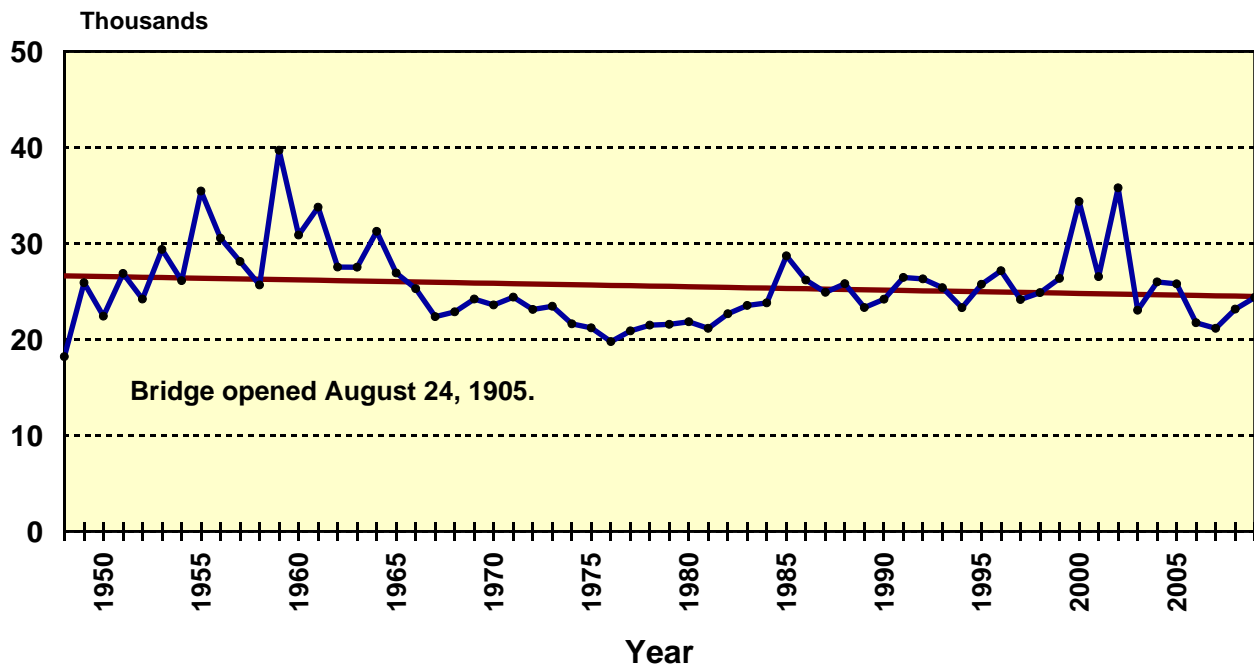
** Peak Volumes

Hourly Vehicular Volumes 145th Street Bridge - 2009



Average Daily Traffic Volumes 145th Street Bridge

1948-2009 Growth Rate = - 0.1%



MTABT Facilities



**MTABT Manhattan Facilities ~ Average Daily Traffic Volumes
1948 - 2009**

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

MTABT Toll Increases:

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

Hourly Vehicular Volumes

Metropolitan Transportation Authority Bridges & Tunnels

2009

*Robert F. Kennedy
Memorial Bridge*

	<i>Brooklyn-Battery Tunnel</i>		<i>Henry Hudson Bridge</i>		<i>Queens-Midtown Tunnel</i>		<i>Robert F. Kennedy Memorial Bridge (Triborough Bridge) Mahattan Plaza</i>		<i>Totals</i>	
	<i>N/B</i>	<i>S/B</i>	<i>S/B</i>	<i>N/B</i>	<i>W/B</i>	<i>E/B</i>	<i>W/B</i>	<i>E/B</i>	<i>Entering Manhattan</i>	<i>Leaving Manhattan</i>
12-1am	161	436	117	432	412	793	437	465	1,127	2,126
1-2am	85	193	71	218	168	391	187	234	511	1,036
2-3am	37	101	43	100	127	241	122	141	329	583
3-4am	39	64	48	67	158	183	121	164	366	478
4-5am	144	72	103	86	252	348	256	401	755	907
5-6am	640	131	426	128	923	691	961	917	2,950	1,867
6-7am	1,981	364	2,039	527	2,403	1,238	3,041	1,642	9,464	3,771
7-8am	2,853	567	3,389 **	1,359	3,302	1,339	4,091 **	1,982	13,635	5,247
8-9am	2,910 **	727	3,364	1,800	4,196 **	1,290	4,091 **	2,184	14,561 **	6,001
9-10am	2,595	725	2,748	1,152	4,013	1,288	3,668	1,964	13,024	5,129
10-11am	1,543	750	2,127	992	2,951	1,444	3,263	1,776	9,884	4,962
11-12am	1,403	804	1,794	993	2,726	1,668	2,686	1,870	8,609	5,335
12-1pm	1,386	936	1,623	1,128	2,389	1,985	2,494	2,078	7,892	6,127
1-2pm	1,424	977	1,470	1,235	2,312	2,259	2,516	2,246	7,722	6,717
2-3pm	1,526	1,358	1,630	1,717	2,409	2,609	2,842	2,549	8,407	8,233
3-4pm	1,487	1,810	2,240	2,211	2,738	2,797	3,220	2,865	9,685	9,683
4-5pm	1,334	2,204	2,455	2,646	2,836	2,870 **	3,174	2,937	9,799	10,657
5-6pm	1,364	2,558 **	2,940	3,015	2,956	2,846	3,308	2,955 **	10,568	11,374 **
6-7pm	1,127	2,387	2,663	3,078 **	2,788	2,651	3,166	2,793	9,744	10,909
7-8pm	905	1,834	1,634	2,306	1,989	2,156	2,516	2,379	7,044	8,675
8-9pm	636	1,599	975	1,840	1,563	2,060	1,815	1,865	4,989	7,364
9-10pm	508	1,287	782	1,719	1,349	2,006	1,538	1,615	4,177	6,627
10-11pm	393	1,173	546	1,523	1,209	1,855	1,209	1,327	3,357	5,878
11-12pm	453	683	264	844	818	1,149	862	798	2,397	3,474
Totals	26,934	23,740	35,491	31,116	46,987	38,157	51,584	40,147	160,996	133,160
7-10am	8,358	2,019	9,501	4,311	11,511	3,917	11,850	6,130	41,220	16,377
10am-1pm	4,332	2,490	5,544	3,113	8,066	5,097	8,443	5,724	26,385	16,424
1-4pm	4,437	4,145	5,340	5,163	7,459	7,665	8,578	7,660	25,814	24,633
4-7pm	3,825	7,149	8,058	8,739	8,580	8,367	9,648	8,685	30,111	32,940
7am-7pm	20,952	15,803	28,443	21,326	35,616	25,046	38,519	28,199	123,530	90,374

** Peak Volumes

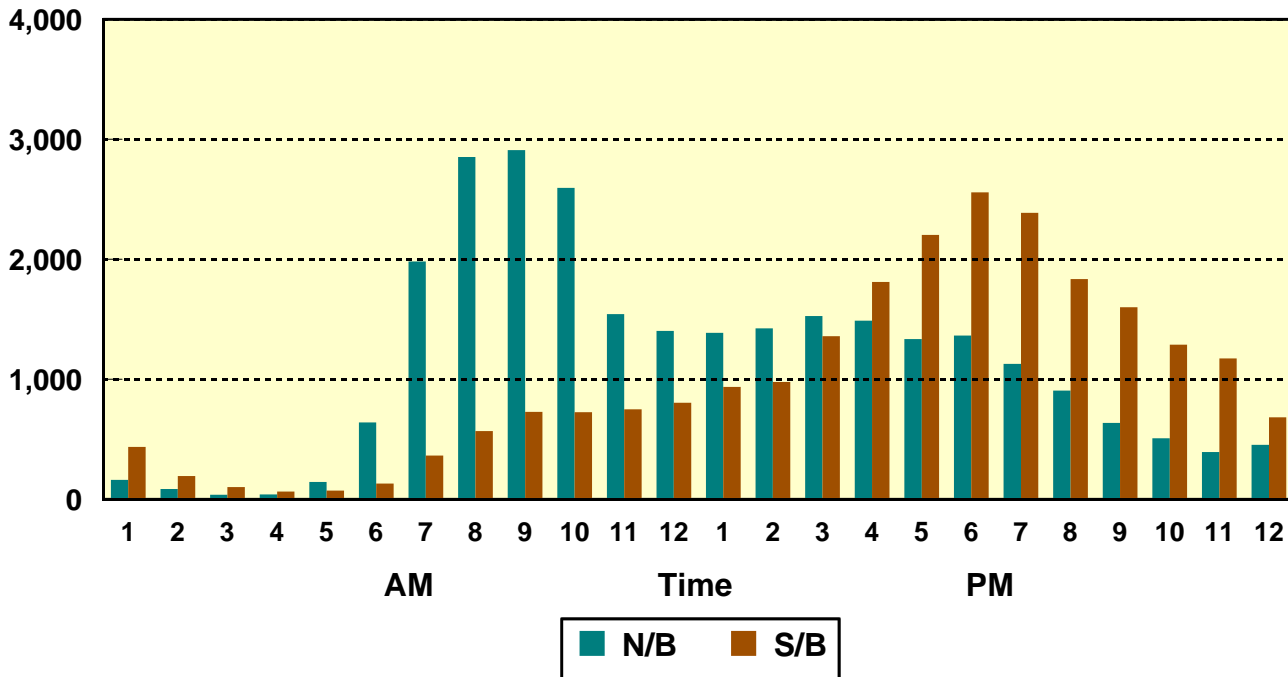
Hourly Vehicular Volumes Brooklyn Battery Tunnel - 2009

FHWA Classes ►	Northbound to Manhattan						Southbound to Brooklyn						2-Way Grand Totals
	Commuter Vans			Single Unit Trucks	Tractor Trailers	Total Vehicles	Commuter Vans			Single Unit Trucks	Tractor Trailers	Total Vehicles	
	Commercial Vans		Commercial Vans										
	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	138	5	9	9	0	161	397	9	26	4	0	436	597
1-2am	74	4	6	1	0	85	184	0	8	1	0	193	278
2-3am	33	0	2	2	0	37	97	1	2	1	0	101	138
3-4am	32	1	4	2	0	39	63	0	0	1	0	64	103
4-5am	92	5	36	11	0	144	67	0	4	1	0	72	216
5-6am	577	6	51	6	0	640	117	1	9	4	0	131	771
6-7am	1,769	12	178	22	0	1,981	271	6	76	11	0	364	2,345
7-8am	2,505	15	295	38	0	2,853	409	6	137	15	0	567	3,420
8-9am	2,543	15	317	35	0	2,910	531	6	173	17	0	727	3,637
9-10am	2,369	19	169	38	0	2,595	556	7	142	20	0	725	3,320
10-11am	1,404	19	78	41	1	1,543	655	9	70	16	0	750	2,293
11-12am	1,300	12	58	32	1	1,403	725	8	55	16	0	804	2,207
12-1pm	1,276	14	67	29	0	1,386	862	10	47	17	0	936	2,322
1-2pm	1,287	13	87	37	0	1,424	882	10	63	22	0	977	2,401
2-3pm	1,371	11	116	27	1	1,526	1,242	14	78	24	0	1,358	2,884
3-4pm	1,328	6	141	12	0	1,487	1,650	12	126	22	0	1,810	3,297
4-5pm	1,163	4	157	9	1	1,334	1,999	6	180	19	0	2,204	3,538
5-6pm	1,215	3	137	6	3	1,364	2,275	7	261	14	1	2,558	3,922
6-7pm	1,047	3	70	6	1	1,127	2,192	6	177	11	1	2,387	3,514
7-8pm	860	1	41	3	0	905	1,729	5	93	7	0	1,834	2,739
8-9pm	604	4	24	4	0	636	1,494	7	89	9	0	1,599	2,235
9-10pm	483	1	22	2	0	508	1,216	4	54	13	0	1,287	1,795
10-11pm	372	1	18	2	0	393	1,127	5	32	9	0	1,173	1,566
11-12pm	401	0	38	14	0	453	644	5	27	7	0	683	1,136
Totals	24,243	174	2,121	388	8	26,934	21,384	144	1,929	281	2	23,740	50,674
7-10am	7,417	49	781	111	0	8,358	1,496	19	452	52	0	2,019	10,377
10am-1pm	3,980	45	203	102	2	4,332	2,242	27	172	49	0	2,490	6,822
1-4pm	3,986	30	344	76	1	4,437	3,774	36	267	68	0	4,145	8,582
4-7pm	3,425	10	364	21	5	3,825	6,466	19	618	44	2	7,149	10,974
7am-7pm	18,808	134	1,692	310	8	20,952	13,978	101	1,509	213	2	15,803	36,755

Based on May 2006 Classification Survey Data.

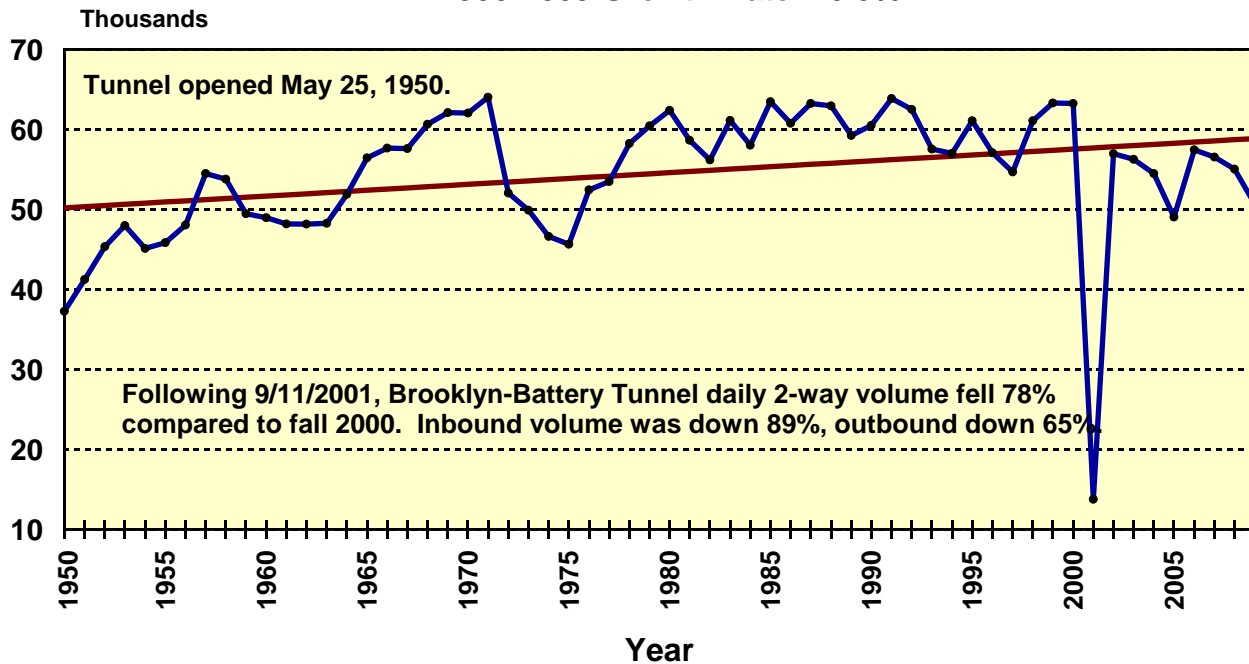
** Peak Volumes

Hourly Vehicular Volumes Brooklyn-Battery Tunnel - 2009



Average Daily Traffic Volumes Brooklyn-Battery Tunnel

1950-2009 Growth Rate = 0.3%



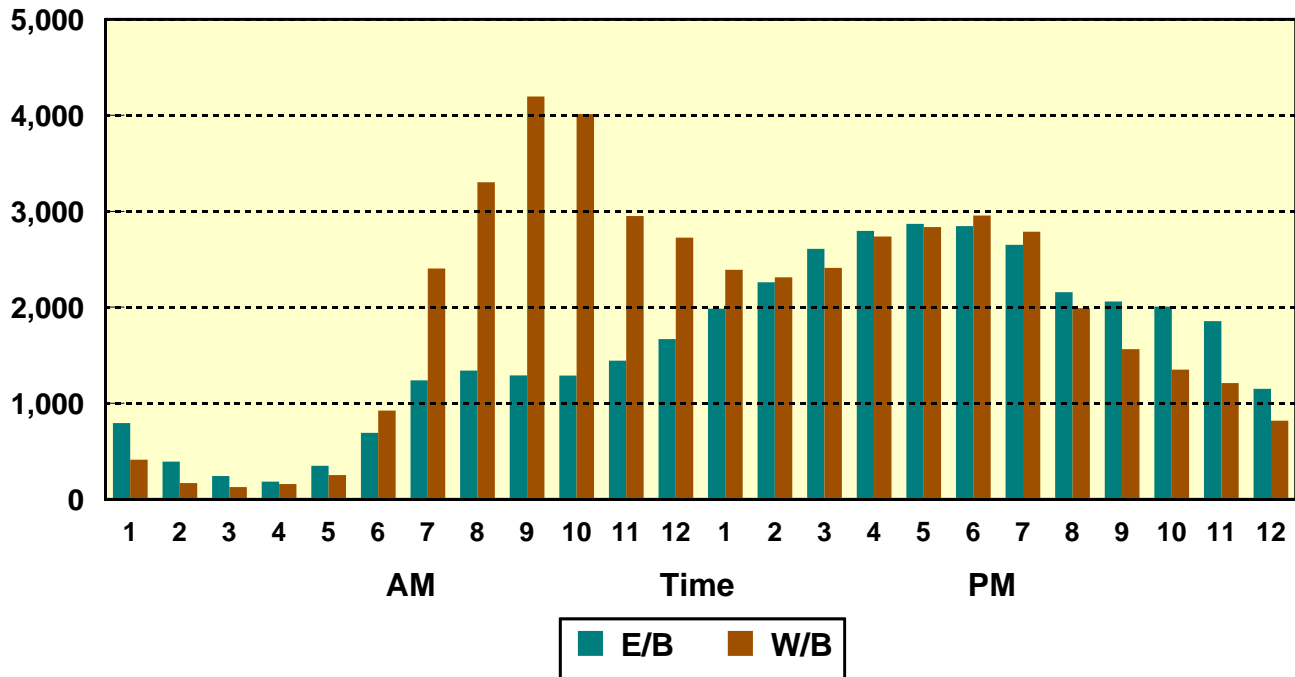
Hourly Vehicular Volumes Queens-Midtown Tunnel - 2009

FHWA Classes ►	Westbound to Manhattan						Eastbound to Queens						2-Way Grand Totals
	Commuter Vans			Single Unit Trucks	Tractor Trailers	Total Vehicles	Commuter Vans			Single Unit Trucks	Tractor Trailers	Total Vehicles	
	Commercial Vans		Commercial Vans										
	Autos & Motorcycles	Pickups Large SUVs	Buses				Pickups Large SUVs	Buses					
	1 & 2	3	4	5 - 7	8 - 13		1 & 2	3	4	5 - 7	8 - 13		
12-1am	398	2	3	9	0	412	765	7	1	20	0	793	1,205
1-2am	161	1	0	6	0	168	372	4	0	15	0	391	559
2-3am	118	1	1	7	0	127	225	5	0	11	0	241	368
3-4am	143	1	3	11	0	158	163	9	0	11	0	183	341
4-5am	202	5	14	31	0	252	287	24	3	33	1	348	600
5-6am	805	9	46	63	0	923	615	18	11	47	0	691	1,614
6-7am	2,053	84	152	114	0	2,403	1,121	34	48	35	0	1,238	3,641
7-8am	2,847	117	208	129	1	3,302	1,191	51	63	34	0	1,339	4,641
8-9am	3,773	118	148	157	0	4,196	1,127	41	78	44	0	1,290	5,486
9-10am	3,617	102	181	109	4	4,013	1,129	49	66	44	0	1,288	5,301
10-11am	2,679	82	99	89	2	2,951	1,253	58	69	64	0	1,444	4,395
11-12am	2,527	68	64	67	0	2,726	1,481	56	72	59	0	1,668	4,394
12-1pm	2,215	37	55	82	0	2,389	1,777	64	55	89	0	1,985	4,374
1-2pm	2,108	66	69	69	0	2,312	2,006	103	57	93	0	2,259	4,571
2-3pm	2,187	58	110	54	0	2,409	2,418	75	45	71	0	2,609	5,018
3-4pm	2,435	56	178	69	0	2,738	2,586	63	64	84	0	2,797	5,535
4-5pm	2,592	35	173	36	0	2,836	2,647	78	67	78	0	2,870	5,706
5-6pm	2,777	19	136	24	0	2,956	2,685	45	73	43	0	2,846	5,802
6-7pm	2,665	19	78	26	0	2,788	2,520	32	60	39	0	2,651	5,439
7-8pm	1,916	13	45	15	0	1,989	2,057	21	58	20	0	2,156	4,145
8-9pm	1,486	20	28	29	0	1,563	1,958	24	38	40	0	2,060	3,623
9-10pm	1,297	12	16	24	0	1,349	1,924	20	21	40	1	2,006	3,355
10-11pm	1,159	8	12	30	0	1,209	1,789	19	10	37	0	1,855	3,064
11-12pm	794	7	3	14	0	818	1,119	3	3	24	0	1,149	1,967
Totals	42,954	940	1,822	1,264	7	46,987	35,215	903	962	1,075	2	38,157	85,144
7-10am	10,237	337	537	395	5	11,511	3,447	141	207	122	0	3,917	15,428
10am-1pm	7,421	187	218	238	2	8,066	4,511	178	196	212	0	5,097	13,163
1-4pm	6,730	180	357	192	0	7,459	7,010	241	166	248	0	7,665	15,124
4-7pm	8,034	73	387	86	0	8,580	7,852	155	200	160	0	8,367	16,947
7am-7pm	32,422	777	1,499	911	7	35,616	22,820	715	769	742	0	25,046	60,662

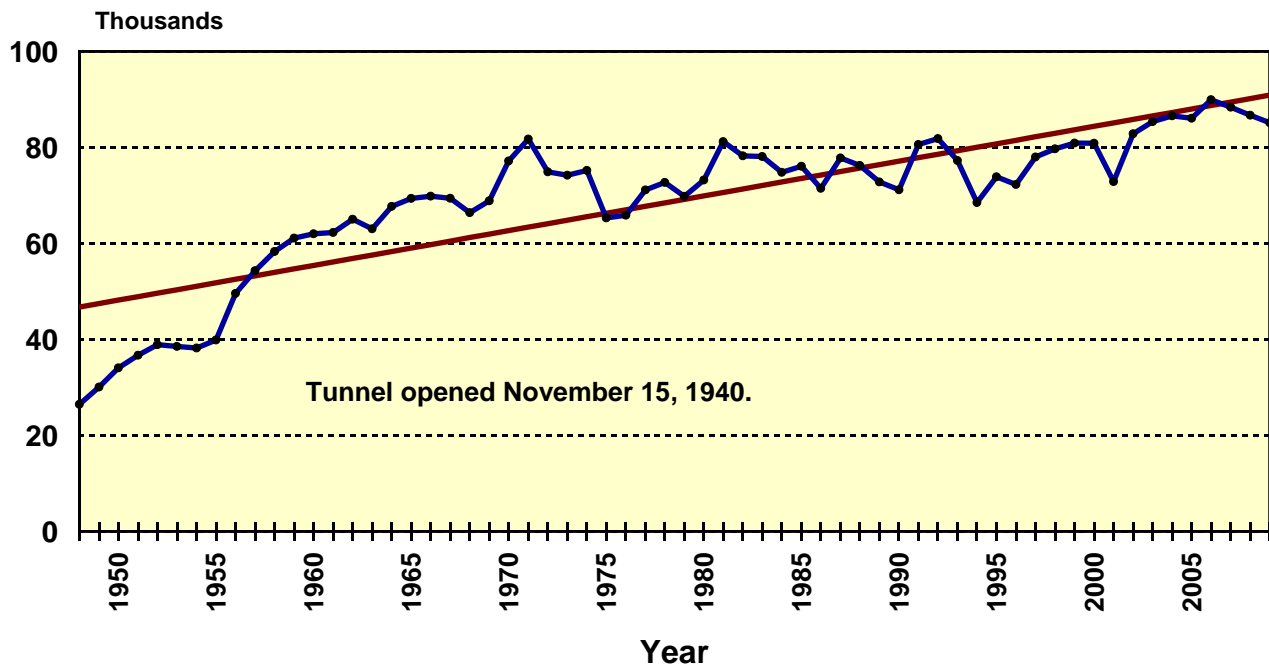
Based on May 2006 Classification Survey Data.

** Peak Volumes

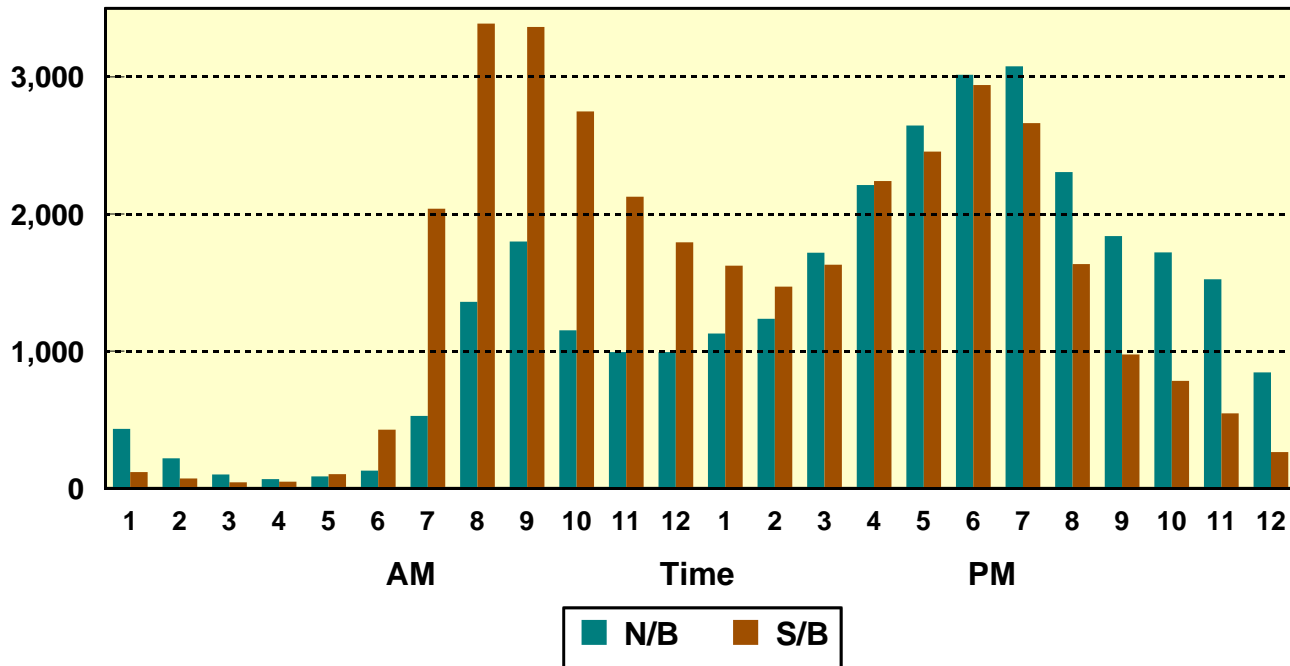
Hourly Vehicular Volumes Queens-Midtown Tunnel - 2009



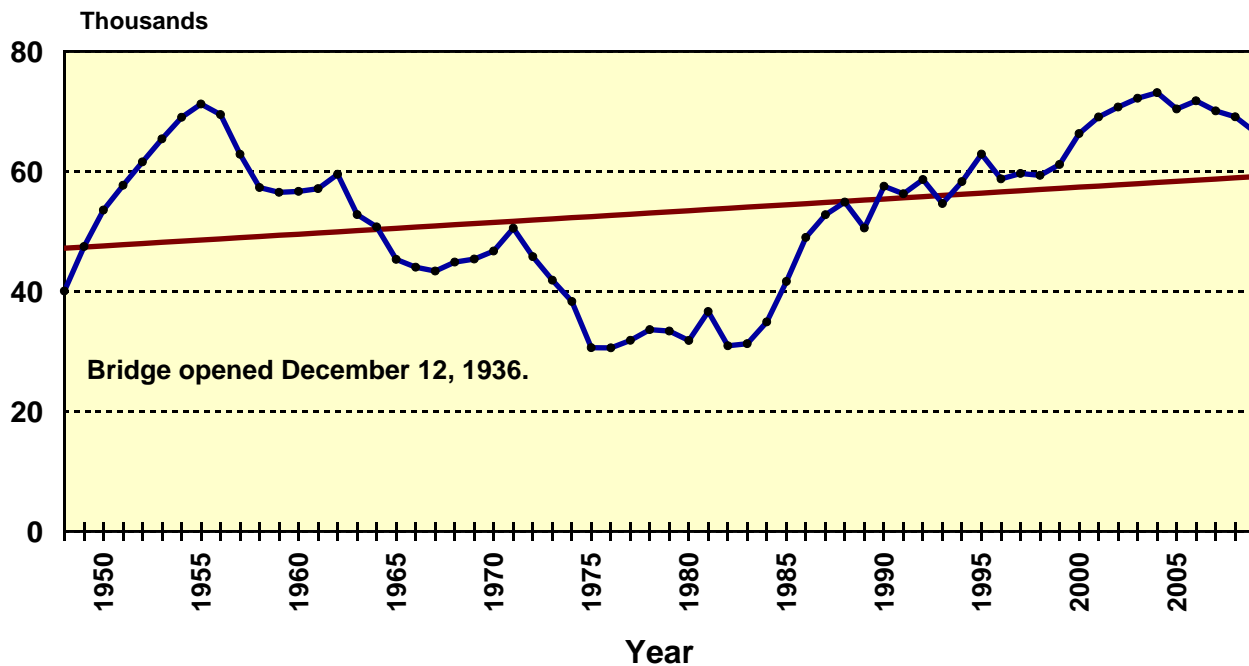
Average Daily Traffic Volumes Queens-Midtown Tunnel 1948-2009 Growth Rate = 1.1%



Hourly Vehicular Volumes Henry Hudson Bridge - 2009

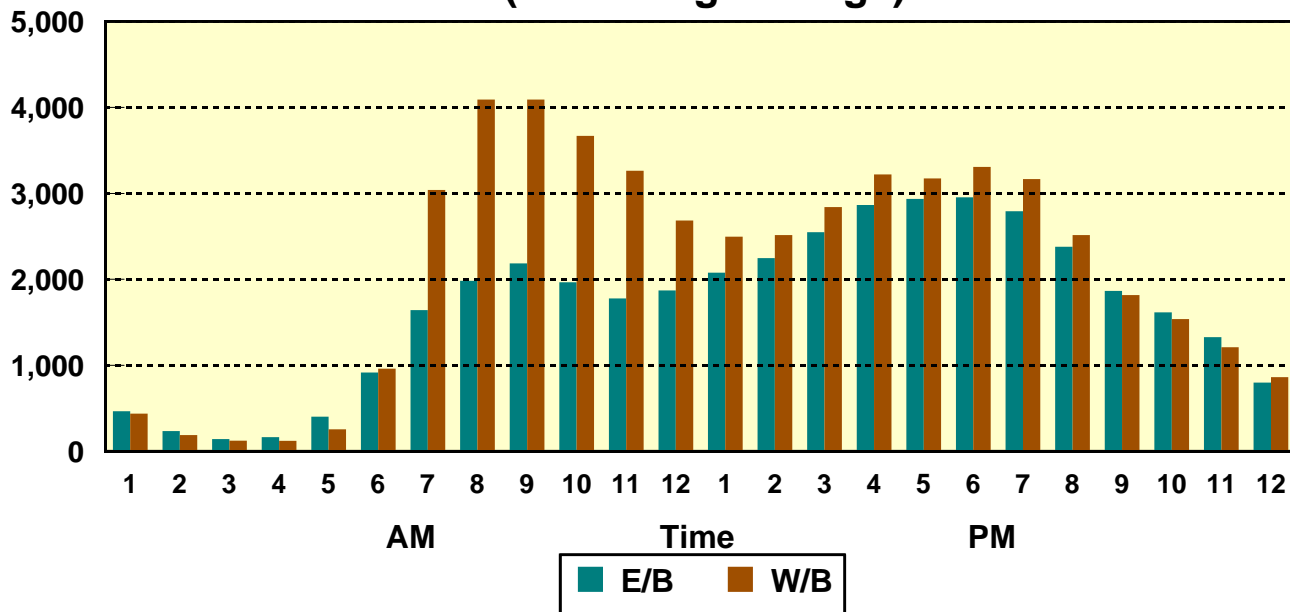


Average Daily Traffic Volumes Henry Hudson Bridge 1948-2009 Growth Rate = 0.4%



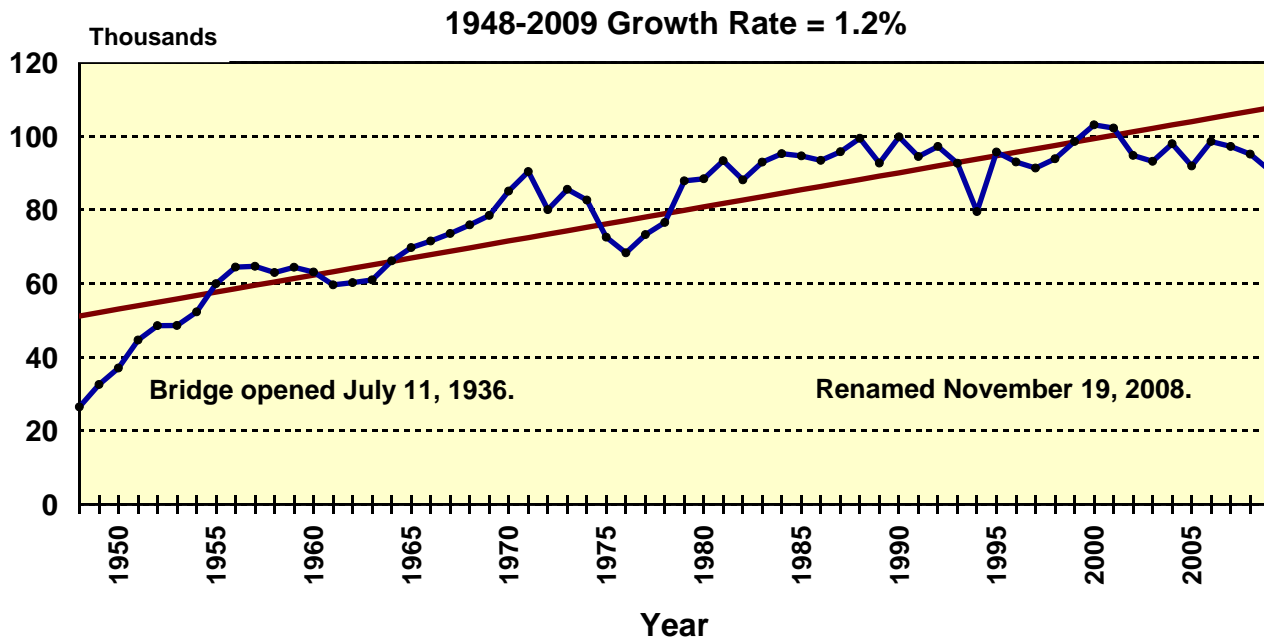
Hourly Vehicular Volumes

Robert F. Kennedy Memorial Bridge, Manhattan Plaza - 2009 (Triborough Bridge)



Average Daily Traffic Volumes

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



PANYNJ Facilities



George Washington Bridge

PANYNJ Manhattan - New Jersey Facilities

Average Daily Traffic Volumes

1948 - 2009

<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

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

PANYNJ toll increases May 1975, January 1984, April, 1987, April 1991, March 2001, March 2008.

Hourly Vehicular Volumes

Port Authority of New York & New Jersey

2009

	George Washington Bridge		Holland Tunnel		Lincoln Tunnel		Totals	
	<i>E/B</i>	<i>W/B</i>	<i>E/B</i>	<i>W/B</i>	<i>E/B</i>	<i>W/B</i>	<i>Entering Manhattan</i>	<i>Leaving Manhattan</i>
12-1am	1,984	2,050	717	1,106	947	1,679	3,648	4,835
1-2am	1,267	1,851	455	778	540	912	2,262	3,541
2-3am	1,085	1,184	302	676	427	574	1,814	2,434
3-4am	1,255	981	335	789	478	492	2,068	2,262
4-5am	2,164	1,319	529	1,112	871	558	3,564	2,989
5-6am	6,043	2,319	1,873	1,393	2,691	841	10,607	4,553
6-7am	10,759 **	4,501	3,167 **	2,189	4,932 **	1,449	18,858 **	8,139
7-8am	9,855	6,806	2,986	2,808	4,621	2,108	17,462	11,722
8-9am	8,937	7,679	2,849	2,620	4,331	2,266	16,117	12,565
9-10am	8,863	6,736	2,860	2,225	4,007	1,991	15,730	10,952
10-11am	7,781	6,029	2,494	2,073	3,488	2,007	13,763	10,109
11-12am	7,056	6,359	2,112	1,997	3,031	2,277	12,199	10,633
12-1pm	6,673	6,399	1,989	2,115	2,690	2,495	11,352	11,009
1-2pm	6,722	6,692	1,987	2,496	2,675	2,818	11,384	12,006
2-3pm	7,157	7,806	2,098	2,835	2,720	3,386	11,975	14,027
3-4pm	7,869	9,665	2,456	2,968 **	2,810	3,816	13,135	16,449
4-5pm	8,403	10,207	2,740	2,356	2,360	4,699	13,503	17,262
5-6pm	8,683	9,865	2,886	1,986	1,904	4,781	13,473	16,632
6-7pm	8,388	10,249 **	2,878	2,137	2,268	4,968 **	13,534	17,354 **
7-8pm	7,032	9,824	2,565	2,517	2,426	3,052	12,023	15,393
8-9pm	5,480	8,397	1,923	2,877	2,043	3,175	9,446	14,449
9-10pm	4,672	6,630	1,639	2,651	1,945	4,690	8,256	13,971
10-11pm	3,995	5,975	1,638	2,525	1,802	3,948	7,435	12,448
11-12pm	2,982	5,066	1,218	2,259	1,500	2,493	5,700	9,818
Totals	145,105	144,589	46,696	49,488	57,507	61,475	249,308	255,552
7-10am	27,655	21,221	8,695	7,653	12,959	6,365	49,309	35,239
10am-1pm	21,510	18,787	6,595	6,185	9,209	6,779	37,314	31,751
1-4pm	21,748	24,163	6,541	8,299	8,205	10,020	36,494	42,482
4-7pm	25,474	30,321	8,504	6,479	6,532	14,448	40,510	51,248
7am-7pm	96,387	94,492	30,335	28,616	36,905	37,612	163,627	160,720

** 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.

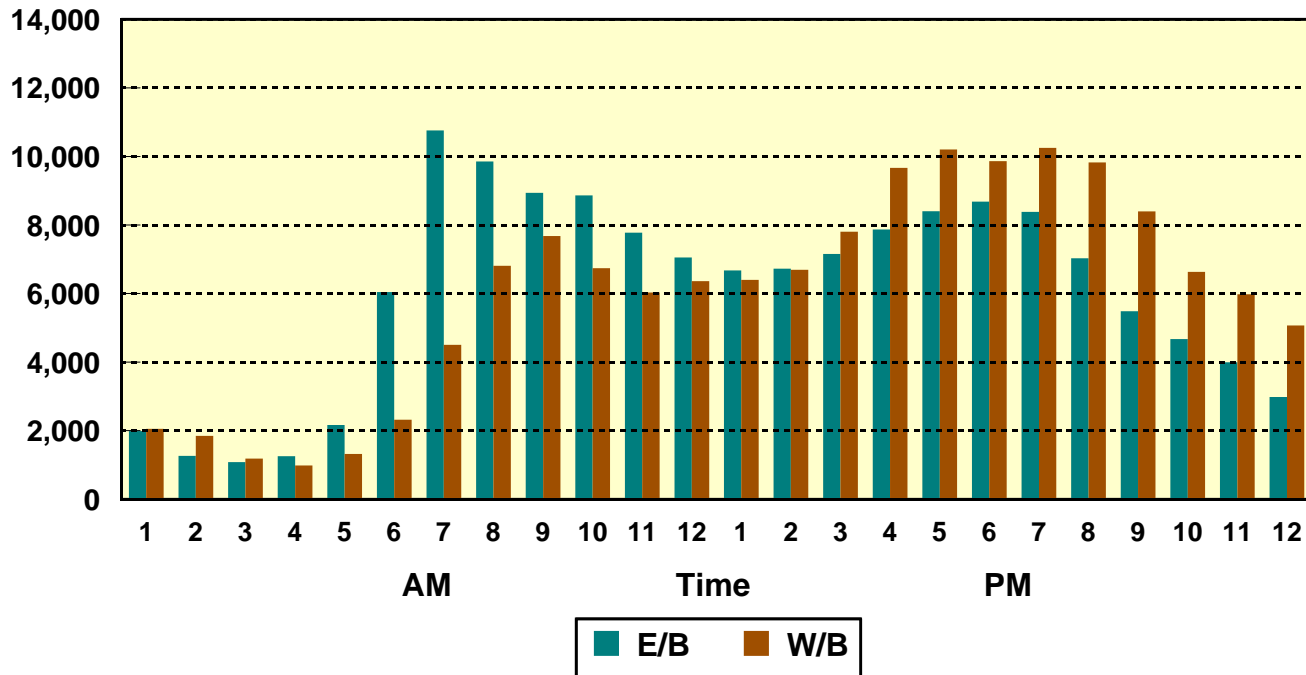
Hourly Vehicular Volumes **George Washington Bridge - 2009**

	<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	1,625	16	58	285	1,984	1,791	5	52	202	2,050	4,034
1-2am	881	10	62	314	1,267					1,851	3,118
2-3am	646	5	75	359	1,085					1,184	2,269
3-4am	695	9	91	460	1,255					981	2,236
4-5am	1,380	13	168	603	2,164					1,319	3,483
5-6am	4,937	37	326	743	6,043	1,683	5	149	482	2,319	8,362
6-7am	9,682	81	437	559	10,759 **	3,850	40	203	408	4,501	15,260
7-8am	9,029	101	355	370	9,855	5,959	85	328	434	6,806	16,661
8-9am	8,103	102	360	372	8,937	6,853	81	382	363	7,679	16,616
9-10am	7,971	94	374	424	8,863	5,727	69	343	597	6,736	15,599
10-11am	6,903	76	354	448	7,781	4,939	54	340	696	6,029	13,810
11-12am	6,239	69	326	422	7,056	5,169	25	353	812	6,359	13,415
12-1pm	5,917	74	298	384	6,673	5,152	38	407	802	6,399	13,072
1-2pm	6,022	71	290	339	6,722	5,386	42	538	726	6,692	13,414
2-3pm	6,486	81	268	322	7,157	6,680	23	460	643	7,806	14,963
3-4pm	7,245	114	234	276	7,869	8,756	38	383	488	9,665	17,534
4-5pm	7,845	123	202	233	8,403	9,272	43	221	671	10,207	18,610
5-6pm	8,235	100	151	197	8,683	9,188	37	214	426	9,865	18,548
6-7pm	7,967	92	119	210	8,388	9,717	23	88	421	10,249 **	18,637 **
7-8pm	6,612	86	100	234	7,032	9,290	28	114	392	9,824	16,856
8-9pm	5,075	68	79	258	5,480	7,764	29	173	431	8,397	13,877
9-10pm	4,275	49	79	269	4,672	6,175	44	35	376	6,630	11,302
10-11pm	3,612	35	58	290	3,995	5,464	10	70	431	5,975	9,970
11-12pm	2,632	25	45	280	2,982	4,596	17	54	399	5,066	8,048
Totals	130,014	1,531	4,909	8,651	145,105					144,589	289,694
7-10am	25,103	297	1,089	1,166	27,655	18,539	235	1,053	1,394	21,221	48,876
10am-1pm	19,059	219	978	1,254	21,510	15,260	117	1,100	2,310	18,787	40,297
1-4pm	19,753	266	792	937	21,748	20,822	103	1,381	1,857	24,163	45,911
4-7pm	24,047	315	472	640	25,474	28,177	103	523	1,518	30,321	55,795
7am-7pm	87,962	1,097	3,331	3,997	96,387	82,798	558	4,057	7,079	94,492	190,879

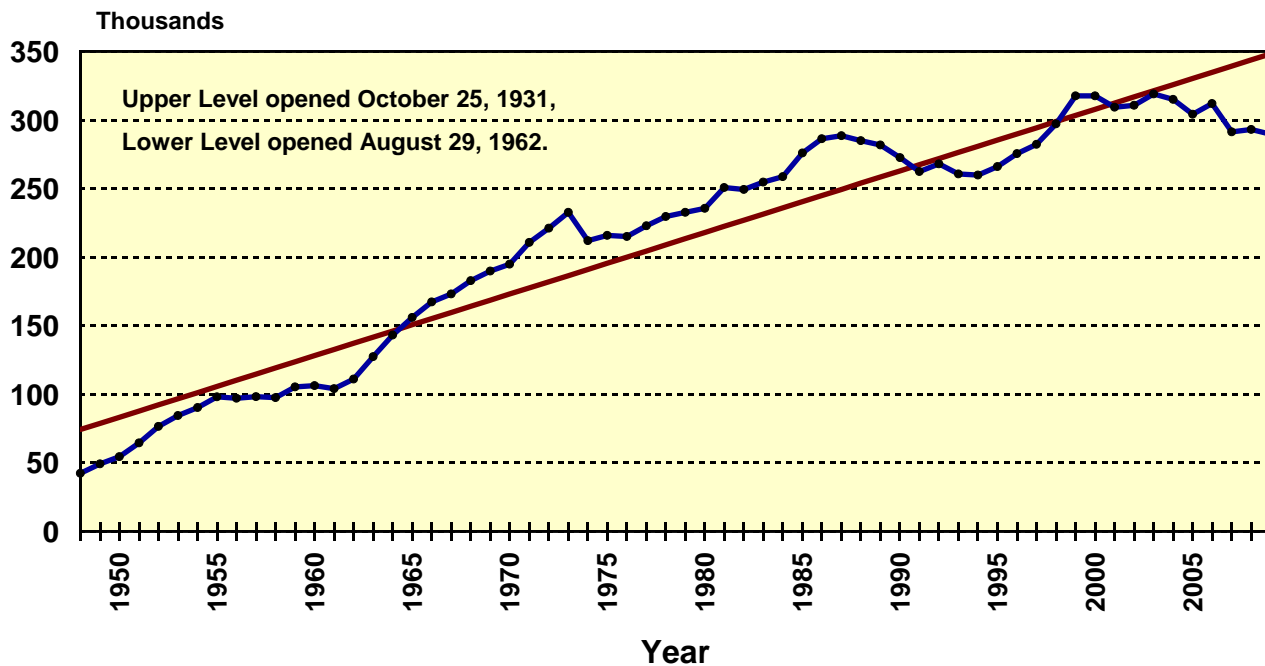
Classification based on October 2009 Data

** Peak Volumes

Hourly Vehicular Volumes George Washington Bridge - 2009



Average Daily Traffic Volumes George Washington Bridge 1948-2009 Growth Rate = 2.6%



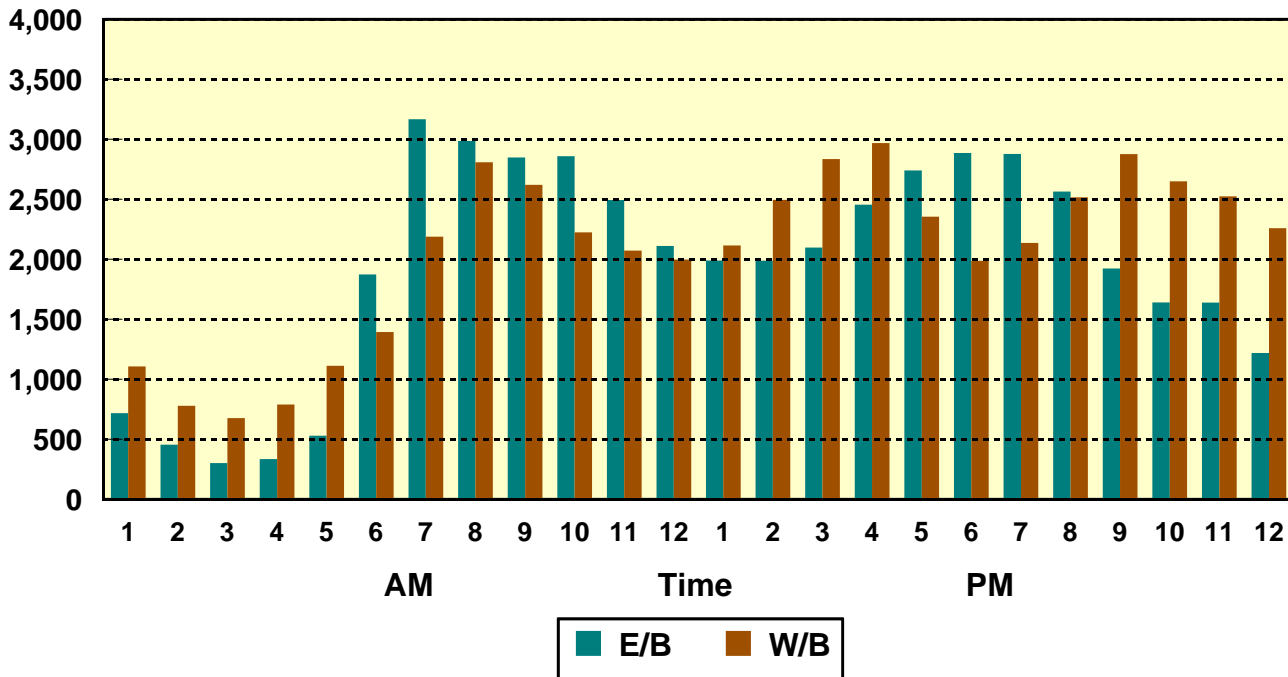
Hourly Vehicular Volumes Holland Tunnel - 2009

Eastbound to Manhattan						Westbound to New Jersey							2-Way Grand Totals
	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles	FHWA Classes ►	Commuter Vans Commercial Vans					Total Vehicles	
							Autos & Motorcycles	Pickups Large SUVs	Buses	Single Unit Trucks	Tractor Trailers		
12-1am	697	11	9	0	717		1,096	4	0	6	0	1,106	1,823
1-2am	432	5	18	0	455		766	5	2	5	0	778	1,233
2-3am	276	4	22	0	302		653	10	1	12	0	676	978
3-4am	289	4	42	0	335		727	24	5	33	0	789	1,124
4-5am	489	6	34	0	529		996	36	12	67	1	1,112	1,641
5-6am	1,849	15	9	0	1,873		1,312	53	13	15	0	1,393	3,266
6-7am	3,103	57	7	0	3,167	**	2,049	93	36	11	0	2,189	5,356
7-8am	2,912	65	9	0	2,986		2,635	109	51	13	0	2,808	5,794
8-9am	2,779	61	9	0	2,849		2,488	75	48	9	0	2,620	5,469
9-10am	2,804	47	9	0	2,860		2,134	59	26	6	0	2,225	5,085
10-11am	2,449	30	15	0	2,494		1,993	43	29	8	0	2,073	4,567
11-12am	2,075	25	11	1	2,112		1,930	41	20	6	0	1,997	4,109
12-1pm	1,956	27	6	0	1,989		2,058	39	5	13	0	2,115	4,104
1-2pm	1,953	29	5	0	1,987		2,411	57	15	13	0	2,496	4,483
2-3pm	2,055	39	4	0	2,098		2,746	64	6	19	0	2,835	4,933
3-4pm	2,395	56	5	0	2,456		2,891	41	15	21	0	2,968	**
4-5pm	2,649	86	5	0	2,740		2,288	27	24	17	0	2,356	5,096
5-6pm	2,796	86	4	0	2,886		1,911	35	23	17	0	1,986	4,872
6-7pm	2,805	69	4	0	2,878		2,065	39	17	16	0	2,137	5,015
7-8pm	2,524	37	4	0	2,565		2,454	30	18	15	0	2,517	5,082
8-9pm	1,892	24	7	0	1,923		2,826	37	8	6	0	2,877	4,800
9-10pm	1,612	20	6	1	1,639		2,597	40	5	7	2	2,651	4,290
10-11pm	1,612	20	6	0	1,638		2,463	54	4	3	1	2,525	4,163
11-12pm	1,204	11	3	0	1,218		2,201	53	2	3	0	2,259	3,477
Totals	45,607	834	253	2	46,696		47,690	1,068	385	341	4	49,488	96,184
7-10am	8,495	173	27	0	8,695		7,257	243	125	28	0	7,653	16,348
10am-1pm	6,480	82	32	1	6,595		5,981	123	54	27	0	6,185	12,780
1-4pm	6,403	124	14	0	6,541		8,048	162	36	53	0	8,299	14,840
4-7pm	8,250	241	13	0	8,504		6,264	101	64	50	0	6,479	14,983
7am-7pm	29,628	620	86	1	30,335		27,550	629	279	158	0	28,616	58,951

Based on October 2009 Classification Survey Data (Eastbound) and April 2006 Classification Survey Data (Westbound).

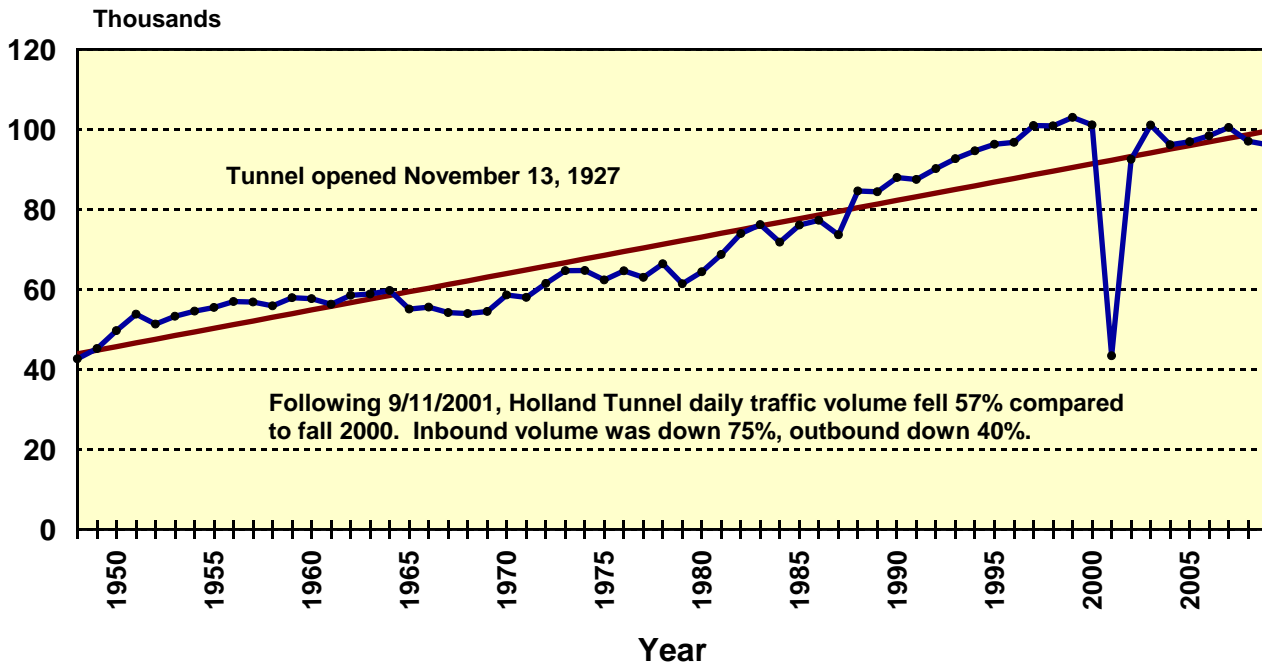
** Peak Volumes

Hourly Vehicular Volumes Holland Tunnel - 2009



Average Daily Traffic Volumes Holland Tunnel

1948-2009 Growth Rate = 1.4%



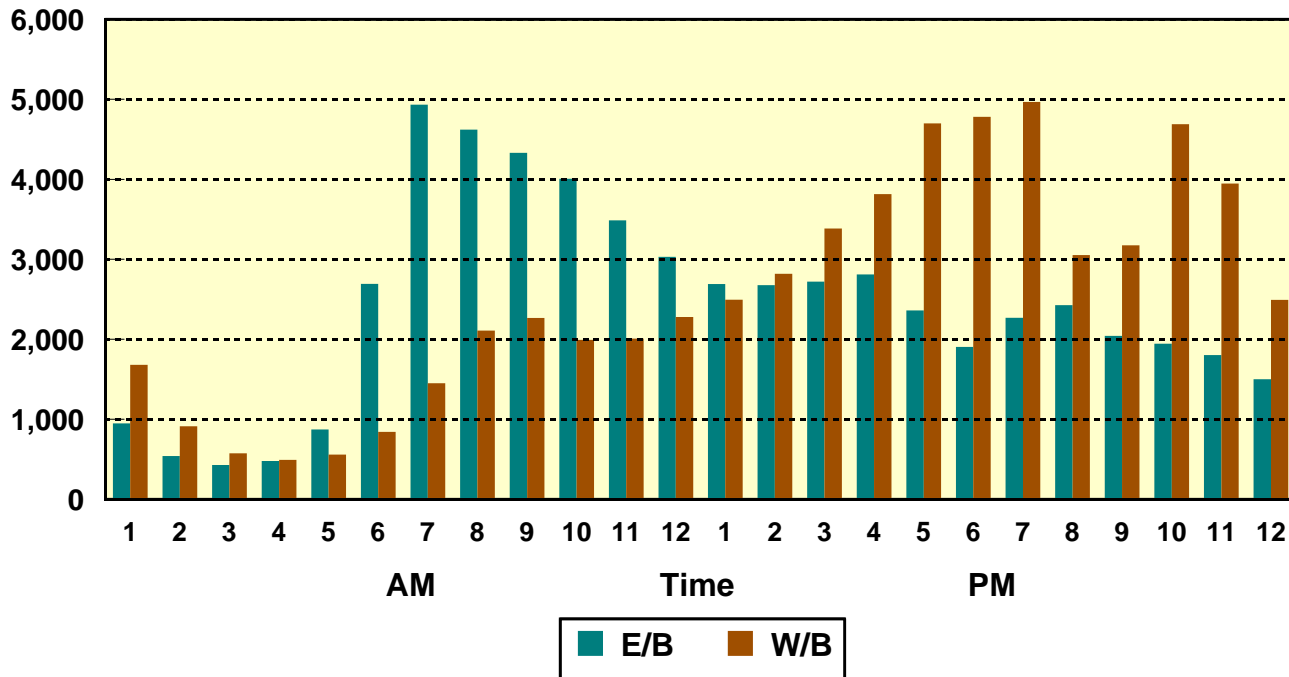
Hourly Vehicular Volumes Lincoln Tunnel - 2009

PANYNJ Classes ▶	Eastbound to Manhattan						Westbound to New Jersey					2-Way Grand Totals
	Single Rear Wheels Autos, Vans, Pickups, Motorcycles, Rec. Vehs.	All Buses & Minibuses	2 Axles Dual Rear Wheels	3 & 4 Axles Single Units & Trailers	5 or more Axles	Total Vehicles	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles	
	1, 7, & 11	8 & 9	2	3 & 4	5 & 6							
12-1am	808	58	23	43	15	947	1,505	80	64	30	1,679	2,626
1-2am	444	26	19	36	15	540					912	1,452
2-3am	337	9	21	43	17	427					574	1,001
3-4am	334	13	57	52	22	478					492	970
4-5am	591	23	129	87	41	871					558	1,429
5-6am	2,044	133	313	128	73	2,691	655	40	72	74	841	3,532
6-7am	4,002	405	359	118	48	4,932	1,051	243	105	50	1,449	6,381
7-8am	3,453	771	327	51	19	4,621	1,417	557	93	41	2,108	6,729
8-9am	3,118	862	299	41	11	4,331	1,364	753	114	35	2,266	6,597
9-10am	3,102	538	294	54	19	4,007	1,269	533	148	41	1,991	5,998
10-11am	2,938	259	223	51	17	3,488	1,470	288	220	29	2,007	5,495
11-12am	2,603	191	166	53	18	3,031	1,933	148	134	62	2,277	5,308
12-1pm	2,288	176	157	51	18	2,690	2,056	171	225	43	2,495	5,185
1-2pm	2,252	209	167	35	12	2,675	2,321	174	276	47	2,818	5,493
2-3pm	2,289	249	147	23	12	2,720	2,915	162	283	26	3,386	6,106
3-4pm	2,314	362	106	22	6	2,810	3,350	210	220	36	3,816	6,626
4-5pm	1,784	475	79	18	4	2,360	3,987	445	240	27	4,699	7,059
5-6pm	1,470	372	47	13	2	1,904	3,924	642	189	26	4,781	6,685
6-7pm	1,812	387	50	14	5	2,268	4,148	660	100	60	4,968	7,236
7-8pm	2,053	303	44	23	3	2,426	2,536	407	72	37	3,052	5,478
8-9pm	1,763	205	29	39	7	2,043	2,800	264	90	21	3,175	5,218
9-10pm	1,710	149	33	46	7	1,945	4,346	214	90	40	4,690	6,635
10-11pm	1,596	120	30	49	7	1,802	3,669	168	80	31	3,948	5,750
11-12pm	1,325	90	36	34	15	1,500	2,283	130	47	33	2,493	3,993
Totals	46,430	6,385	3,155	1,124	413	57,507					61,475	118,982
7-10am	9,673	2,171	920	146	49	12,959	4,050	1,843	355	117	6,365	19,324
10am-1pm	7,829	626	546	155	53	9,209	5,459	607	579	134	6,779	15,988
1-4pm	6,855	820	420	80	30	8,205	8,586	546	779	109	10,020	18,225
4-7pm	5,066	1,234	176	45	11	6,532	12,059	1,747	529	113	14,448	20,980
7am-7pm	29,423	4,851	2,062	426	143	36,905	30,154	4,743	2,242	473	37,612	74,517

Based on April 2006 Classification Survey Data (eastbound), and October 2009 classification data (westbound).

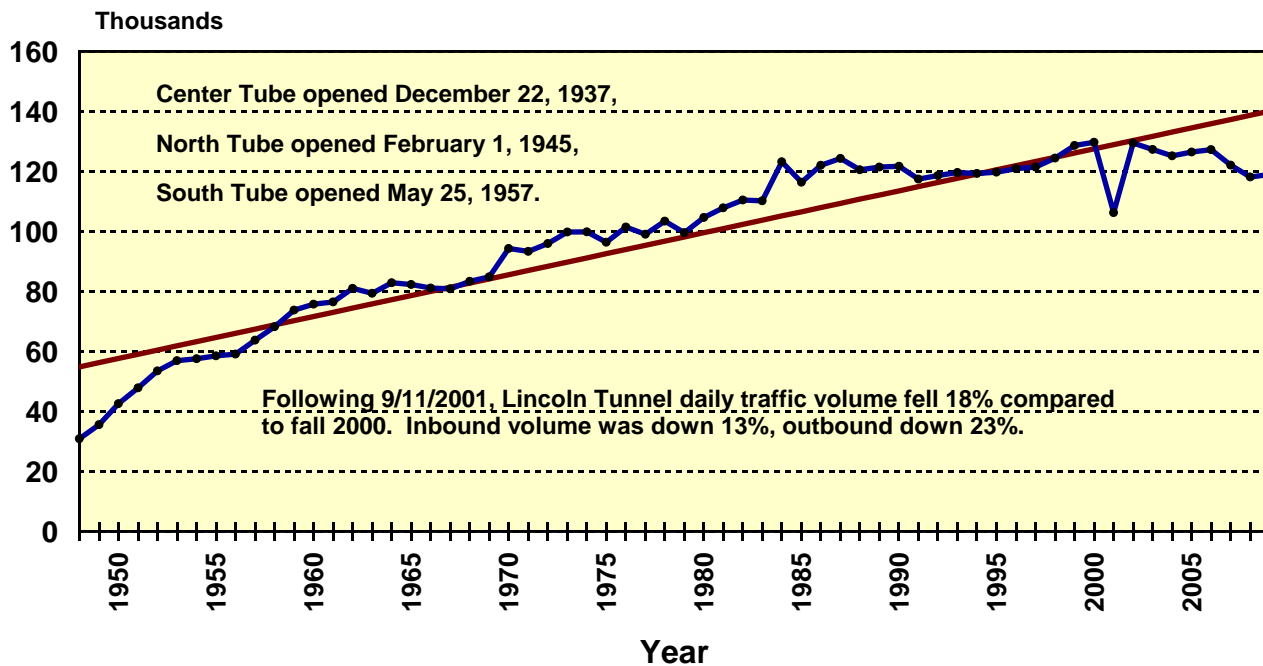
** Peak Volumes

Hourly Vehicular Volumes Lincoln Tunnel - 2009



Average Daily Traffic Volumes Lincoln Tunnel

1948-2009 Growth Rate = 1.5%



APPENDIX

2009 Bridge and Tunnel Reconstruction

APPENDIX

Major Bridge Reconstruction In 2009

Brooklyn Bridge

Eastbound lane closures were in effect as follows:

All 2009:	11:00pm–6:00am	Mon–Fri	1 e/b lane closed intermittently,
	10:00am–3:00pm	Mon–Fri	1 e/b lane closed intermittently,
	2:00am–2:00pm	Sat–Sun	1 e/b lane closed intermittently.

The Park Row entrance to the bridge was closed from 11:00pm to 5:00am Tuesday night June 2 and Thursday night June 4.

Manhattan Bridge

Manhattan Bridge Operation: All 2009.

North bikeway and south walkway open.

- **6:00am – 10:00am Weekdays.**
 - Five lanes open westbound: two lanes on the north upper roadway (no trucks), and three lanes on the lower roadway for all vehicle types.
 - Left lane of the north upper roadway reserved for **buses and HOVs**.
 - Two lanes open eastbound on the south upper roadway.
- **10:00am – 2:00pm Weekdays.**
 - Three lanes open westbound: one or two lanes on the north upper roadway (no trucks), and one or two lanes on the lower roadway for all vehicle types.
 - Two lanes open eastbound on the south upper roadway.
- **2:00pm – 3:00pm Weekdays.**
 - Two lanes open westbound on the north upper roadway.
 - Two lanes open eastbound on the south upper roadway.
 - Lower roadway closed for reversal.
- **3:00pm – 5:00am Weekdays.**
 - Two lanes open westbound on the north upper roadway.
 - Five lanes open eastbound: two lanes on the south upper roadway, and three lanes on the lower roadway.
- **9:00pm Friday – 10:00am Monday.**
 - Five lanes open westbound: two lanes on the north upper roadway, and three lanes on the lower roadway.
 - Two lanes open eastbound on the south upper roadway.

- **Lower Roadway.**
 - Available to all vehicle types at all times.
 - Manhattan-bound 5:00am – 2:00pm weekdays, and 9:00pm Friday to 5:00am Monday.
 - Closed for reversal approximately 2:00pm – 3:00pm weekdays.
 - Brooklyn-bound 3:00pm – 5:00am weekdays.
 - Manhattan-bound trucks required to use the lower roadway weekdays 5:00am – 2:00pm.
 - Access to westbound Canal Street in Manhattan.
 - Off-peak lane closures as needed on the lower roadway.
- **North Upper Roadway.**
 - Manhattan-bound all hours.
 - No trucks weekdays 5:00am – 2:00pm.
 - Left lane reserved for **buses and HOVs** weekdays 6:00am–10:00am. Access to the HOV lane is from Brooklyn–Queens Expressway eastbound exit 29A, from Nassau Street, and from Flatbush Avenue–Tillary Street.
 - Single-occupant cars permitted only in the right lane weekdays 6:00am–10:00am, with access from Brooklyn–Queens Expressway eastbound exit 29A and from Nassau Street. Single-occupant cars are not permitted to access the north upper roadway from Flatbush Avenue–Tillary Street during these hours.
 - When the lower roadway is Manhattan-bound, access in Manhattan from the north upper roadway is to northbound Chrystie Street and eastbound Canal Street only, with no access to westbound Canal Street from the north upper roadway during these hours. Drivers seeking access to westbound Canal Street during these hours must use the lower roadway.
 - Overnight and weekend lane closures as needed on the Manhattan-bound north upper roadway.
 - **As of July 26**, the right turn lane from the North Upper Roadway onto eastbound Canal Street was closed 9:00pm to 5:00am Sunday nights to Friday mornings (9:00pm to 2:00pm as of September 27), and was also closed as needed from 9:00pm Friday to 5:00am Monday. Passenger cars were still permitted to turn right from the center lane onto eastbound Canal Street. Trucks and buses were prohibited from turning right onto eastbound Canal Street, and were advised to follow the posted detour via Chrystie Street, Grand Street, and Allen Street for access to eastbound Canal Street.
- **South Upper Roadway.**
 - Brooklyn-bound all hours for all vehicle types.
 - Off-peak lane closures as needed on the south upper roadway.
 - On Sunday, October 4, from 6:00am to noon, this roadway was completely closed. During this time there were three lanes Brooklyn-bound on the Lower Roadway, and two lanes Manhattan-bound on the North Upper Roadway.

Queensboro Bridge

Throughout 2009, **trucks** were permitted only on the two Lower Inner Roadways.

Throughout 2009, a **High Occupancy Vehicle (HOV) facility** was in effect on the Queensboro Bridge. The normally Queens-bound South Upper Roadway was reversed between 6:00am and 10:00am on weekdays to accommodate Manhattan-bound HOVs (no trucks) carrying two or more occupants.

Throughout 2009, the North Outer Roadway was reserved for **bicyclists and pedestrians**.

The North Upper Roadway was closed intermittently as follows:

01/01 – 03/06: 1:00am – 5:00am Mon–Fri,
1:00am – 6:00am Sat,
1:00am – 7:00am Sun.

The North Outer Roadway was closed intermittently as follows:

All 2009: 10:00pm – 5:00am All Days.
Shuttle bus provided for pedestrians and bicyclists during closures.

The South Upper Roadway was closed intermittently as follows:

01/01 – 06/19: 1:00am – 5:30am Mon–Fri,
2:00am – 7:00am Sat,
2:00am – 8:00am Sun.

The South Outer Roadway was closed intermittently as follows:

01/01 – 06/19: 1:00am – 6:00am Mon–Fri,
1:00am – 7:00am Sat.

The South Outer Roadway was closed completely as follows:

06/06 – 06/19: 1:00am – 9:00am Sat,
1:00am – Noon Sun.

The entrance to the North Upper Roadway from 21st.Street in Queens was closed from 10:00pm Fridays until 10:00pm Sundays during all weekends in March 2009. During these times, access to the North Upper Roadway was from Queens Plaza South at 11th Street.

Queensboro Bridge Operation: All 2009.

North Inner Roadway: W/B all times; W/B trucks required to use this roadway.
South Inner Roadway: E/B all times; E/B trucks required to use this roadway.
North Upper Roadway: W/B all times.
South Upper Roadway: Closed for reversal 5:30–6:00am weekdays,
W/B HOVs 6:00–10:00am weekdays,
Closed for reversal 10:00–11:00am weekdays,
E/B all other times.
North Outer Roadway: Bicyclists and pedestrians all times.
South Outer Roadway: E/B all times (passenger cars only).

Throughout 2009, there were additional intermittent closings of single lanes on individual roadways of the Queensboro Bridge during off-peak hours.

Williamsburg Bridge

Throughout 2009, **trucks** were permitted only on the outer roadways.

Pedestrian and bicycle access was maintained on the bridge at all times throughout 2009.

Williamsburg Bridge Operation: All 2009, *Except certain weekends as noted below.*

- **Mon–Fri 6:00am – 10:00am.**
Manhattan-bound: 4 lanes.
Brooklyn-bound: 2 lanes.
- **Mon–Fri 10:00am – 3:00pm.**
Manhattan-bound: 3 lanes.
Brooklyn-bound: 2 lanes.
- **All other times.**
Manhattan-bound: 4 lanes.
Brooklyn-bound: 4 lanes.

Weekend Williamsburg Bridge Operation: June 6 – 7, 2009

- **Sat. 5:00am – 6:00pm.**
Manhattan-bound: 4 lanes.
Brooklyn-bound: 2 lanes.
- **Sat 3:00pm – Sun 8:00pm.**
Manhattan-bound: 4 lanes.
Brooklyn-bound: 3 lanes.

**Weekend Williamsburg Bridge Operation: Aug. 29 – 30, Sep. 12 – 13,
Sep. 26 - 27**

- **Sat & Sun 5:00am – 3:00pm.**
Manhattan-bound: 4 lanes.
Brooklyn-bound: 2 lanes.
*One lane closed on North Inner & North Outer Roadways;
South Inner Roadway reversed to Manhattan-bound.*
- **3:00am – 8:00pm.**
Manhattan-bound: 2 lanes.
Brooklyn-bound: 4 lanes.
One lane closed on North Inner & North Outer Roadways;
- **All other hours.**
Manhattan-bound: 4 lanes.
Brooklyn-bound: 4 lanes.

Saturday Williamsburg Bridge Operation: Saturday, Nov. 21

- **5:00am – 3:00pm.**
Manhattan-bound: 4 lanes.
Brooklyn-bound: 2 lanes.
*One lane closed on North Inner & North Outer Roadways;
South Inner Roadway reversed to Manhattan-bound.*
- **3:00am – 8:00pm.**
Manhattan-bound: 2 lanes.
Brooklyn-bound: 4 lanes.
One lane closed on North Inner & North Outer Roadways;

All other hours.

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

Macombs Dam Bridge

The bridge was completely closed as follows to facilitate NYCDOT bridge maintenance and inspection work.

02/07:	12:01am – 5:00am	Saturday.	<i>Entire bridge closed.</i>
08/28:	12:01am – 5:00am	Friday.	<i>Entire bridge closed.</i>
09/18–09/24:	12:01am – 5:00am 12:01am – 6:00am	Weeknights; Sat. & Sun.	<i>Entire bridge closed.</i>

Madison Avenue Bridge

The bridge was closed westbound (to Manhattan) as follows to facilitate NYCDOT milling and resurfacing.

10/01–10/06: 11:00pm – 5:00am Weeknights.
No closures during Yankee home night games.

Willis Avenue Bridge

Throughout 2009, one of four lanes on the north side of the bridge was closed round-the-clock, and motorists in the left lane could only proceed onto the northbound Major Deegan Expressway. The right and center lanes continued to Willis Avenue or Bruckner Boulevard.

Two of four lanes on the main bridge were closed intermittently as follows.

All 2009:	12:01am – 6:00am	Weeknights;
	1:00am – 7:00am	Sat.

On October 20, from 1:00am to 5:00am, the exit from the bridge to the northbound Major Deegan Expressway was closed.

Throughout 2009, the pedestrian access at First Avenue and East 125th Street was closed, and a temporary access stairway was available at First Avenue and East 127th Street. The temporary staircase was not accessible to disabled persons unable to climb or descend stairs; they were encouraged to use Third Avenue Bridge as alternate.

145th Street Bridge

The entire bridge was fully closed intermittently as follows for testing operations to complete the NYC DOT bridge reconstruction project:

01/01–08/07: 10:00pm – 6:00am Weeknights.
No closures on this bridge during closures on the Macombs Dam Bridge, or within 2 hours of Yankee home games.

08/08–12/31: 10:00pm – 6:00am Weeknights;
12:01am – 7:00am Sat-Sun.
No closures on this bridge during closures on the Macombs Dam Bridge, or within 2 hours of Yankee home games.

Throughout 2009, there were additional closures of single lanes in each direction on the 145th Street Bridge and its approach ramps during off-peak hours.

Brooklyn-Battery Tunnel

Throughout 2009, the inbound **exit to Trinity Place** was closed weekdays between 6:00-10:00am, and between 3:00–7:00pm.

Throughout 2009, between 6:00am and 10:00am on weekdays, there were three lanes inbound and one lane outbound.

Throughout 2009, on weekdays between 4:00pm and 7:00pm, there were two lanes outbound to Brooklyn in the south tube, plus one outbound contra-flow lane in the north tube.

Throughout 2009, one tube was closed intermittently as needed Sunday to Thursday nights from 10:00pm to 5:30am the following morning, with two-way traffic maintained in the other tube.

Throughout 2009, there were additional intermittent closures of single lanes in both directions during off-peak hours.

Henry Hudson Bridge

One of four southbound (Manhattan-bound) lanes was closed as follows.

All 2009: Round-the-clock All Days. 1 Manhattan-bound lane closed.
2nd Manhattan-bound lane closed intermittently during off-peak hours.

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

01/01–05/15: Round-the-clock All Days 1 Bronx-bound lane closed.
05/16–12/31: Off Peak Hours Weekdays 1 Bronx-bound lane closed as needed.

Queens-Midtown Tunnel

Throughout 2009, there were intermittent closures of single lanes in both directions during off-peak hours.

One tube was closed as follows.

11/08-11/16: 1:00am Sunday – 5:30am Monday. One tube closed.
2-way traffic maintained in the other tube, with truck traffic restricted from the tunnel.

Robert F. Kennedy Bridge (formerly Triborough Bridge)

From January 1 to January 23, the following closures were in effect.

At the Harlem lift span, one lane closed as needed to Manhattan 10:00am to 2:30pm, and to Queens/Bronx 6:00am to 2:30pm daily. Two lanes closed as needed from Queens to The Bronx 9:00pm to 5:00am Monday through Wednesday.

At the suspension bridge and viaduct, one of four lanes closed as needed to Queens 6:00am to 2:00pm weekdays; and 8:00pm to 6:00am Wednesday nights to Saturday

mornings (two of four lanes closed as needed 11:00pm to 5:00am) and three of four lanes closed as needed 11:00pm to 5:00am Wednesday nights to Saturday mornings. One of four lanes closed as needed to Manhattan/Bronx 10:00am to 3:00pm weekdays, and two of four lanes closed as needed 9:00pm to 5:00am Tuesday to Friday.

From January 24 to August 21, the following closures were in effect.

At the Harlem lift span, one lane closed as needed to Queens 6:00am to 2:30pm.

At the suspension bridge and viaduct, one of four lanes closed as needed to Queens 10:00am to 3:00pm weekdays (two of four lanes closed as needed 9:00pm to 5:00am Sunday to Thursday nights, and 10:00pm to 8:00am Friday and Saturday nights). Three of four lanes closed as needed 12:01am to 4:00am Sunday through Thursday, and 12:01am to 5:00am Friday and Saturday. One of four lanes to Bronx and Manhattan closed as needed 10:00am to 3:00pm weekdays, and two of four lanes closed as needed 9:00pm to 5:00am Tuesday to Friday.

NOTE: Lane closures restricted during Throgs Neck Bridge emergency repairs during summer 2009.

From August 4 to August 17, the following additional closures were in effect.

To accommodate NYCDOT roadwork on the FDR Drive southbound from East 125th Street to East 96th Street, the RFK (formerly Triborough) Bridge off-ramp from the Harlem span onto the FDR Drive southbound was closed Tuesday to Friday 12:01am to 5:00am, and Saturday and Sunday 1:00am to 9:00am. Motorists could use 2nd Avenue or Lexington Avenue as an alternate route southbound.

NOTE: The RFK Bridge and 3rd Avenue Bridge ramps were not closed simultaneously.

From August 22 to December 31, the following closures were in effect.

At the Harlem lift span, one lane closed as needed to Manhattan 10:00am to 2:30pm daily, and two lanes closed as needed 10:00pm to 5:00am Monday to Friday. One lane closed as needed to Bronx/Queens 6:00am to 2:30pm daily, and two lanes closed as needed 10:00pm to 5:00am.

At the suspension bridge and viaduct, two of four lanes closed as needed to Queens 9:00pm to midnight Monday to Friday. Three of four lanes to Queens closed as needed 12:01am to 6:00am Tuesday, and 12:01am to 5:00am Friday and Saturday. One of four lanes to Bronx and Manhattan closed as needed 10:00am to 3:00pm weekdays, and two of four lanes closed as needed 9:00pm to midnight Monday to Friday, and three of four lanes 12:01am to 6:00am.

George Washington Bridge

Throughout 2009, there were additional intermittent closures of single lanes during off-peak hours to facilitate PANYNJ maintenance work.

Holland Tunnel

Throughout 2009, all eastbound (to Manhattan) commercial traffic was banned from the Holland Tunnel.

Throughout 2009, the tunnel was open westbound to New Jersey for passenger cars, buses, and two-axle and three-axle single unit trucks. Tractor trailers, and single unit trucks with more than three axles, were not permitted.

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

01/01-04/10:	11:30pm – 5:30am	Mon–Fri.	1 w/b lane closed.
	12:01am – 8:00am	Sat.	1 w/b lane closed.
04/11-08/16:	11:30pm – 5:30am	Mon–Fri.	1 w/b lane closed.
08/17-12/31:	11:30pm – 5:30am	Mon–Fri.	1 w/b lane closed.
	12:01am – 8:00am	Sat.	1 w/b lane closed.

The tunnel was completely closed westbound (to New Jersey) as follows:

04/11-08/16:	1:00am – 8:00am	Sat-Sun.	Tunnel completely closed W/B. <i>No closures on legal holiday weekends or during inclement weather.</i>
12/05-12/13:	2:00am – 8:00am	Sat,	Tunnel completely closed W/B.
	1:00am - 8:00am	Sun.	
			<i>No closures on legal holiday weekends or during inclement weather.</i>

The tunnel was completely closed eastbound (to New York) as follows:

08/22-11/22:	1:00am – 8:00am	Sat-Sun.	Tunnel completely closed E/B. <i>No closures on legal holiday weekends or during inclement weather.</i>
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From April 13 to August 21, the approach roadways of Varick Street, Watts Street, and Canal Street leading to the tunnel were closed one at a time for repaving between 9:00am and 2:00pm on weekdays.

Throughout 2009, there were also additional intermittent lane closures during off-peak hours.

Lincoln Tunnel

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

All 2009:	11:00pm – 5:00am	Mon–Fri.	<i>Two tubes open, providing two</i>
	1:00am – 9:00am	Sat.	<i>traffic lanes in each direction.</i>
	1:00am – 10:00am	Sun.	