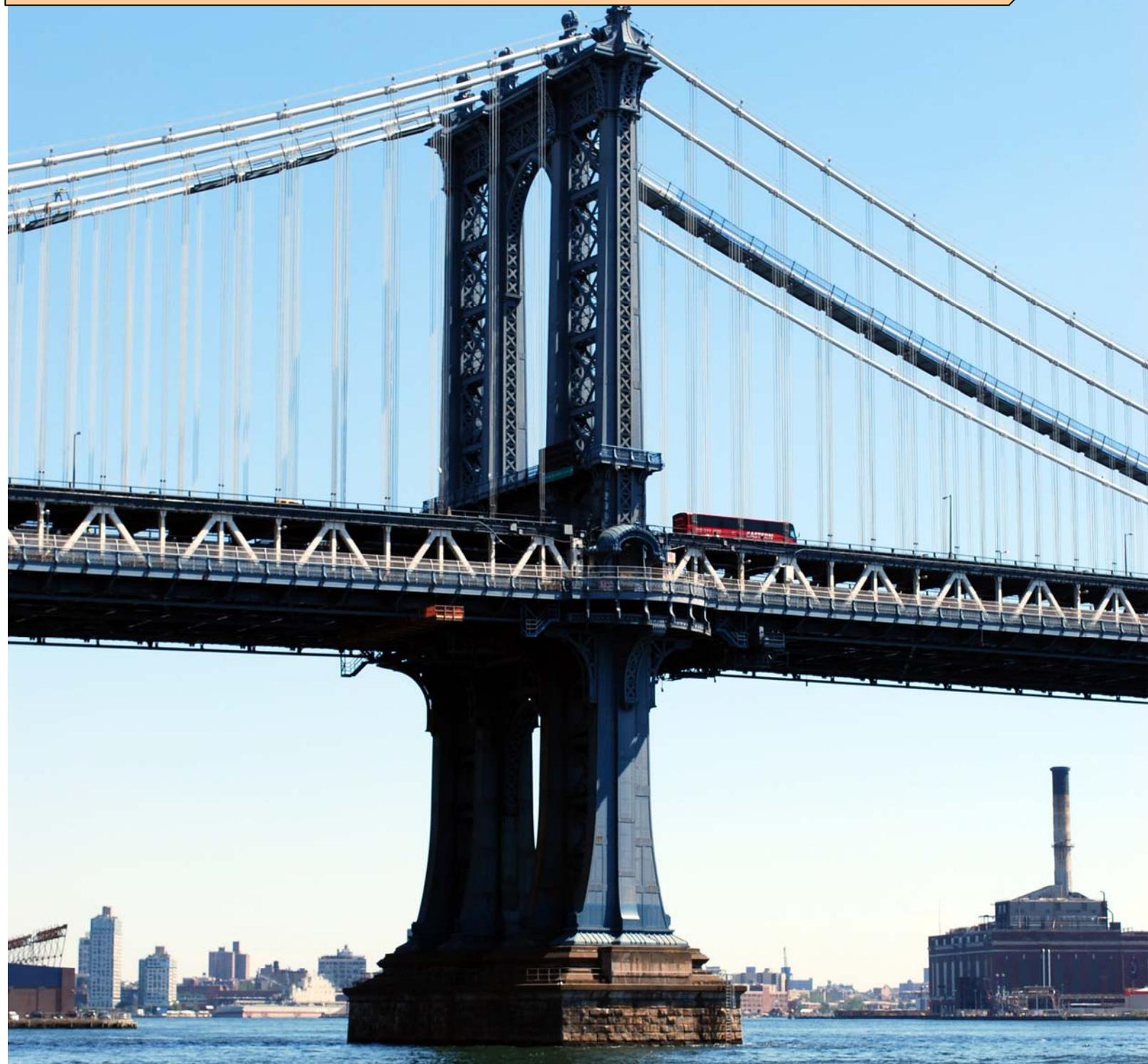


2008 Manhattan River Crossings



Michael R. Bloomberg
Mayor



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

February
2011

Manhattan River Crossings 2008

Contract D000642

2008-2009: PTDT08D00.P01

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2008 Manhattan River Crossings

24 Hour Volumes
Inbound: 922,582
Outbound: 908,325

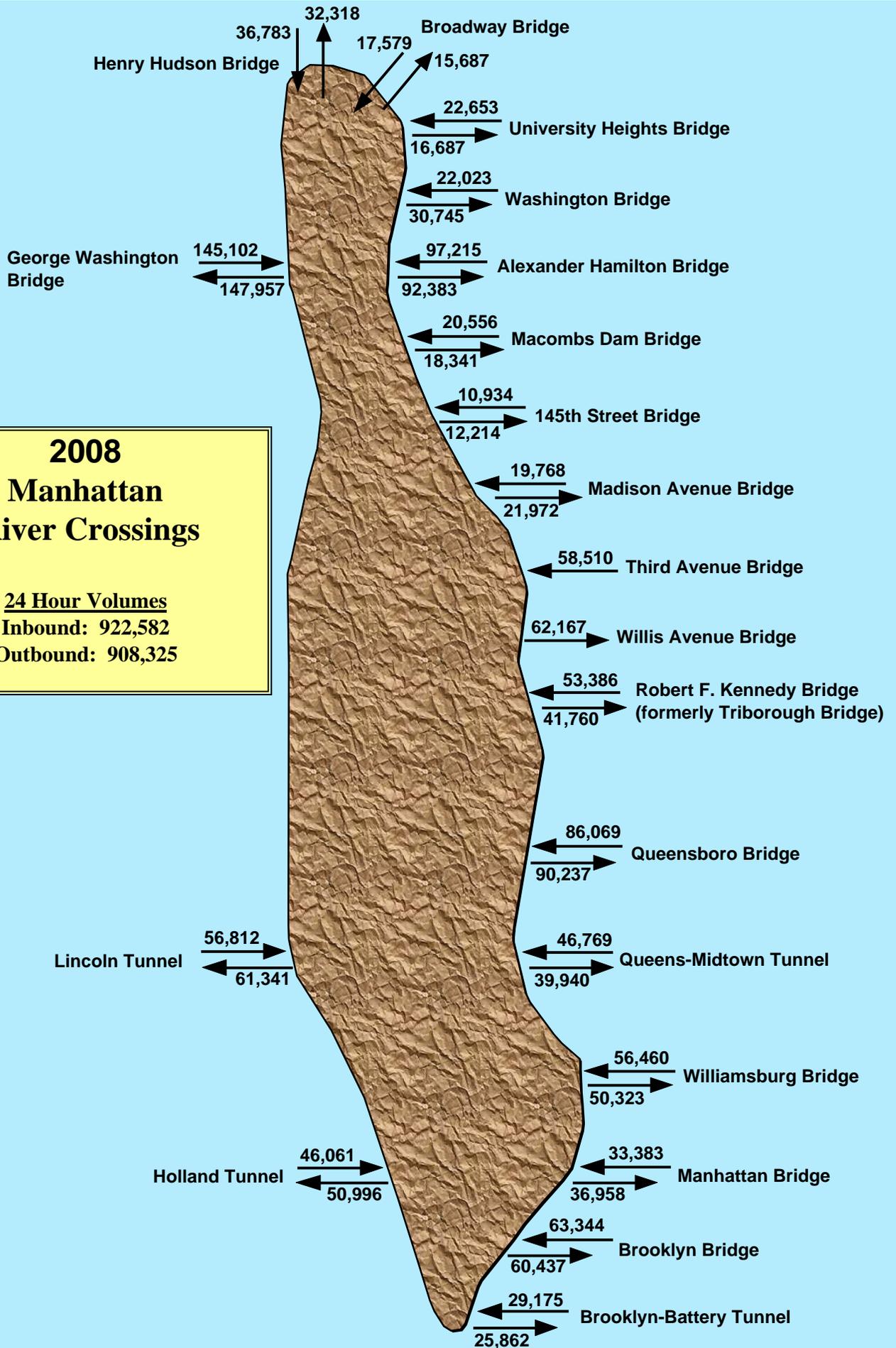


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Introduction



3rd Avenue Bridge

INTRODUCTION

The 2008 *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 2008 are presented in histograms for each facility. Trends were developed from a regression analysis of volumes from 1948 to 2008. 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 2008-2009 and 2009-2010 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 (NYC DCP), 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 ~ 2008 Daily Traffic



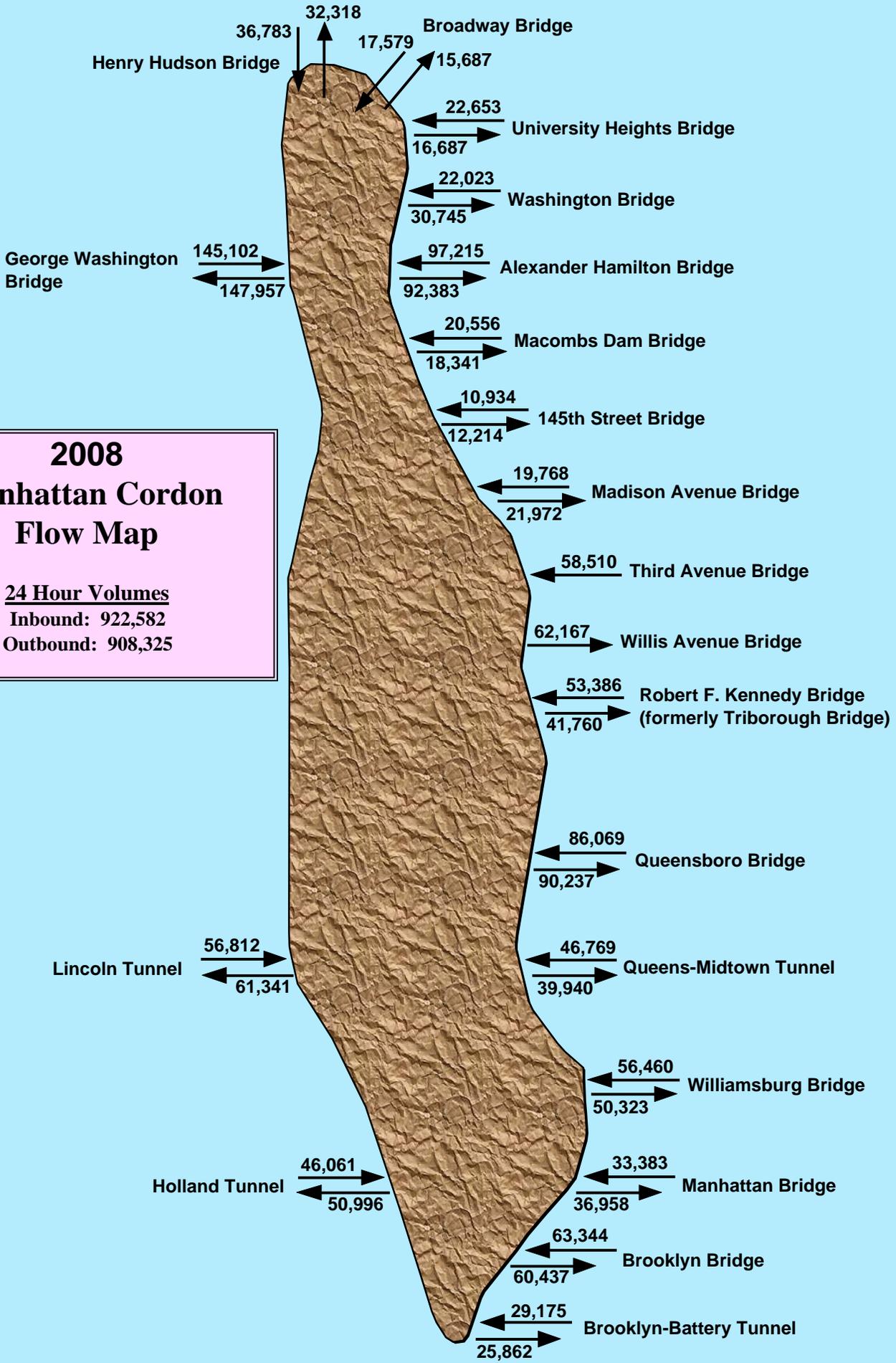
Queensboro Bridge

SUMMARY

- Daily Manhattan river crossings decreased 2.7%, to 1,830,900 in fall 2008 from 1,880,800 in fall 2007, a decrease of 49,900 daily vehicles.
- During the 7-8 am morning peak hour, 65,500 vehicles entered Manhattan. During the 5-6pm evening peak hour, 60,900 vehicles exited.
- For the 47th consecutive year, the George Washington Bridge carried more traffic than any other river crossing serving Manhattan. Some 293,100 daily vehicles used this bridge in fall 2008, which was 0.6% more than the average daily volume of 291,400 in fall 2007.
- The Alexander Hamilton Bridge was the second busiest river crossing, serving 189,600 daily vehicles in fall 2008, which was 1.6% fewer than its fall 2007 daily volume of 192,700. The Queensboro Bridge was third busiest with its fall 2008 daily volume of 176,300, a decrease of 2.8% from the 181,400 recorded in fall 2007.
- The average automobile entering Manhattan during the morning peak period carried 1.36 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 373,000 vehicles were either moving or parked on the island. This includes vehicles operating only within Manhattan as well as those entering via the river crossings.
- Annual subway ridership citywide increased 3.9% to 1.624 billion in 2008 from 1.563 billion in 2007. This was the 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 2008 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.

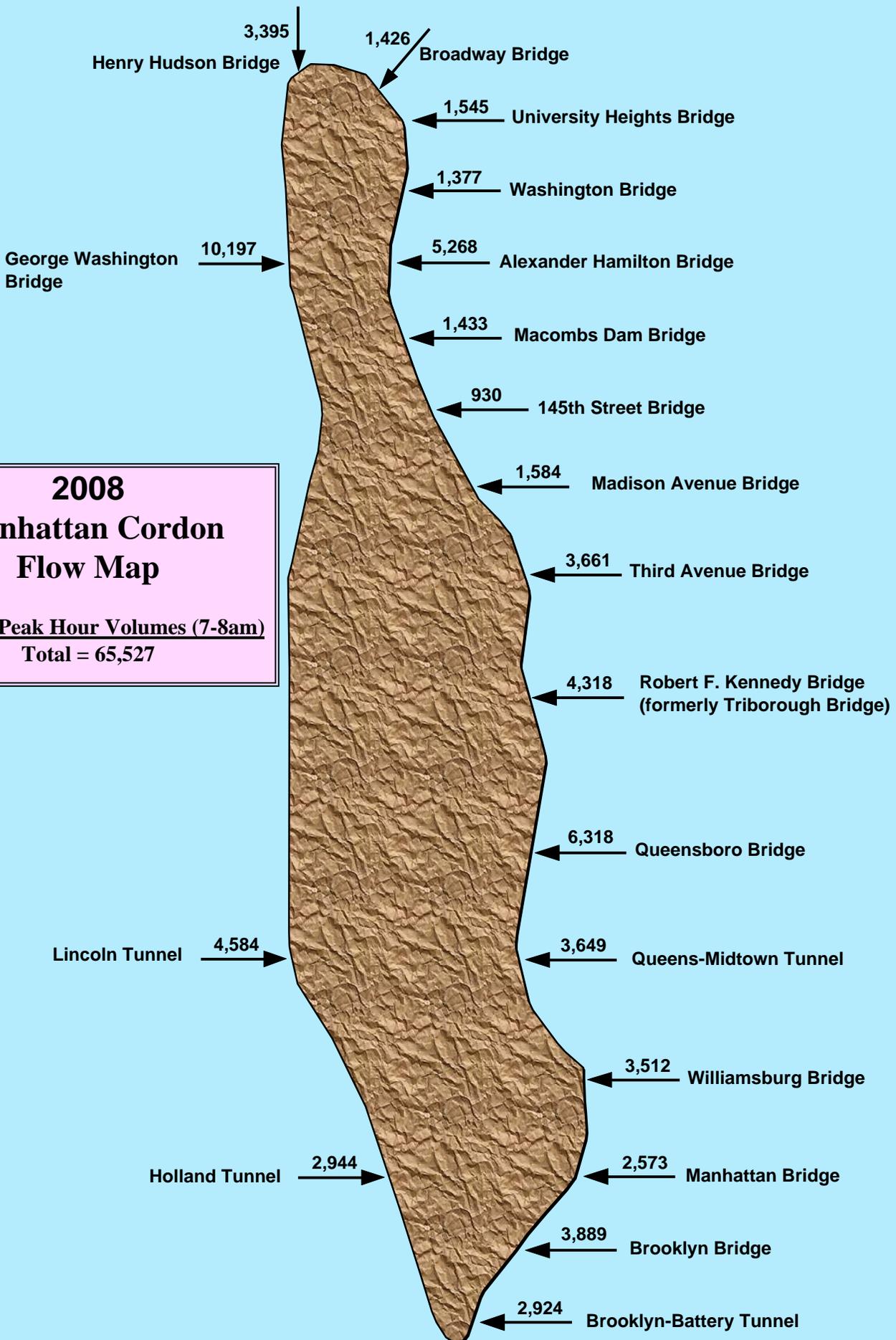
**2008
Manhattan Cordon
Flow Map**

24 Hour Volumes
Inbound: 922,582
Outbound: 908,325



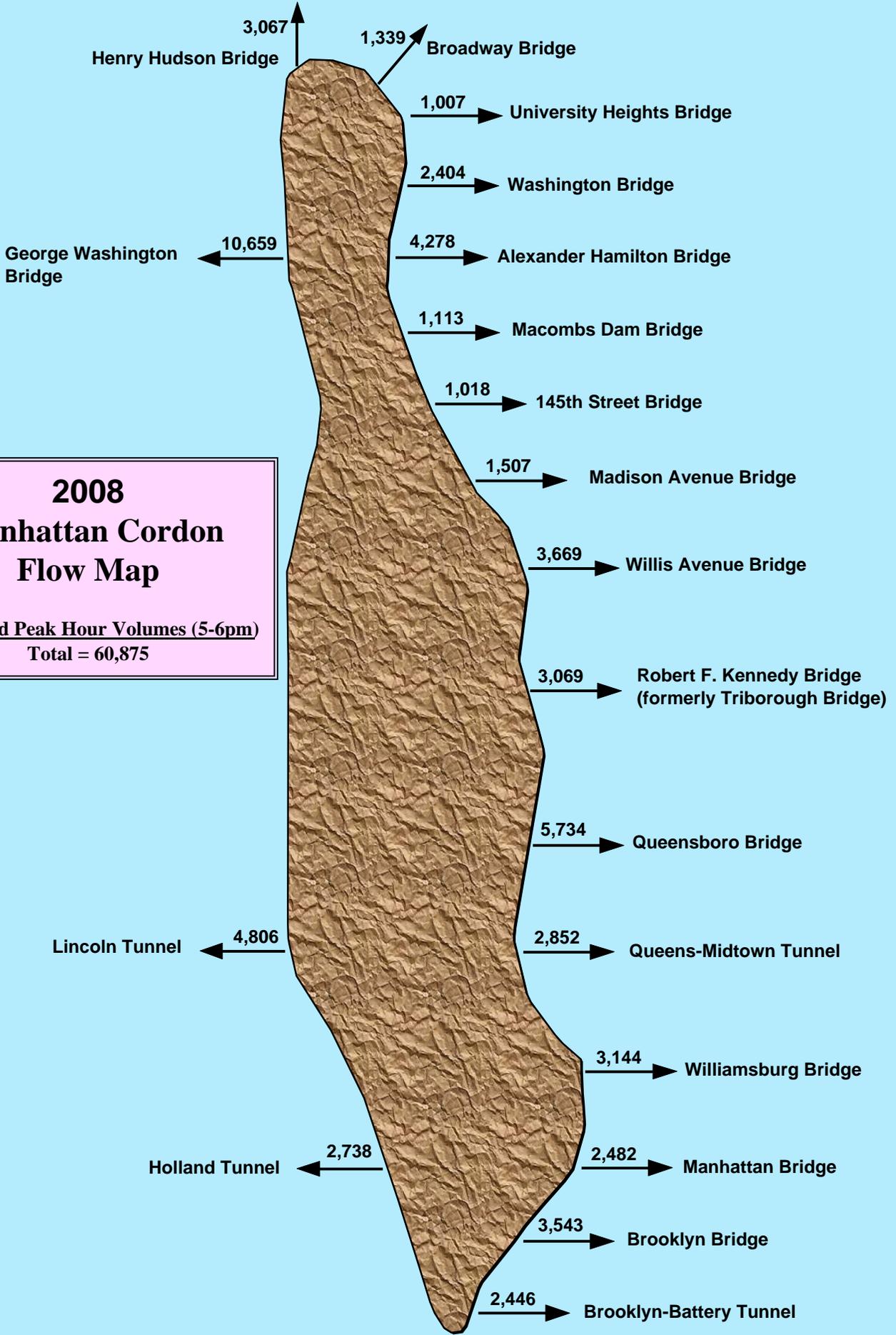
**2008
Manhattan Cordon
Flow Map**

Inbound Peak Hour Volumes (7-8am)
Total = 65,527



**2008
Manhattan Cordon
Flow Map**

Outbound Peak Hour Volumes (5-6pm)
Total = 60,875



**Manhattan Crossings
2008 Average Daily Traffic Volumes
To and From Manhattan**

<i>EAST RIVER BRIDGES</i>	To Manhattan	From Manhattan	2-way Total
Brooklyn Bridge	63,344	60,437	123,781
Manhattan Bridge	33,383	36,958	70,341
Queensboro Bridge	86,069	90,237	176,306
Williamsburg Bridge	56,460	50,323	106,783
Total East River	239,256	237,955	477,211

HARLEM RIVER BRIDGES

Alexander Hamilton Bridge	97,215	92,383	189,598
Broadway Bridge	17,579	15,687	33,266
Macombs Dam Bridge	20,556	18,341	38,897
Madison Avenue Bridge	19,768	21,972	41,740
Third Avenue Bridge	58,510	-----	58,510
University Heights Bridge	22,653	16,687	39,340
Washington Bridge	22,023	30,745	52,768
Willis Avenue Bridge	-----	62,167	62,167
145th Street Bridge	10,934	12,214	23,148
Total Harlem River	269,238	270,196	539,434

MTABT FACILITIES

Brooklyn-Battery Tunnel	29,175	25,862	55,037
Henry Hudson Bridge	36,783	32,318	69,101
Queens-Midtown Tunnel	46,769	39,940	86,709
Robert F. Kennedy Bridge	53,386	41,760	95,146
Total MTABT	166,113	139,880	305,993

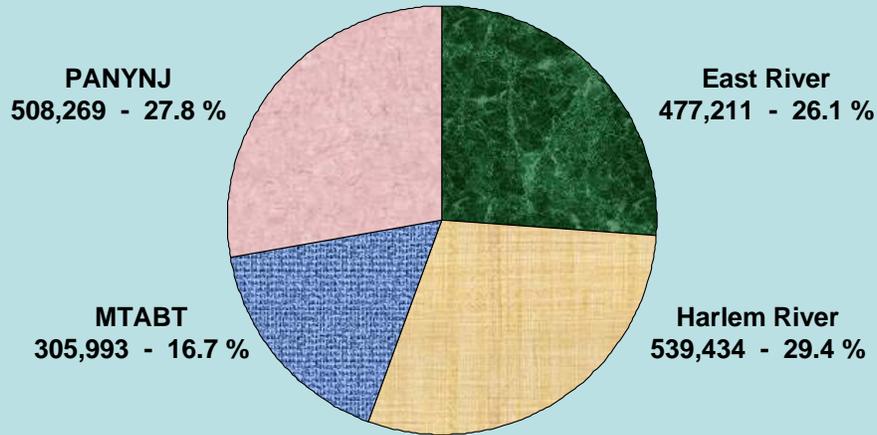
PANYNJ FACILITIES

George Washington Bridge	145,102	147,957	293,059
Holland Tunnel	46,061	50,996	97,057
Lincoln Tunnel	56,812	61,341	118,153
Total PANYNJ	247,975	260,294	508,269

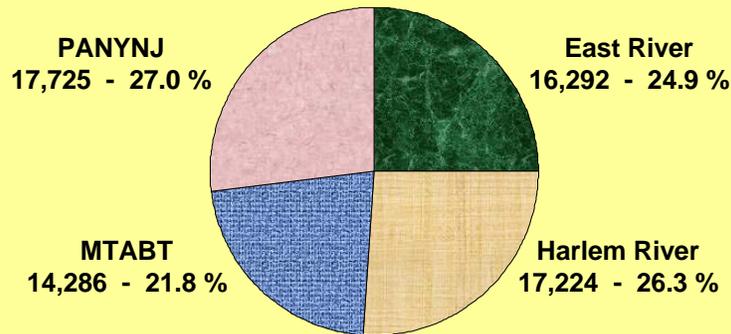
GRAND TOTAL	922,582	908,325	1,830,907
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2008 Manhattan Crossings Vehicle Volumes

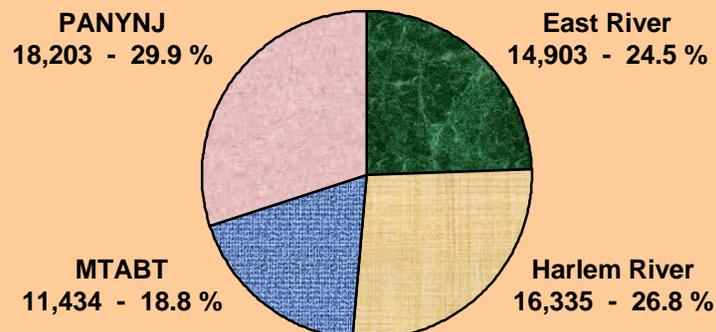
24-Hour Volumes – Both Directions



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



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



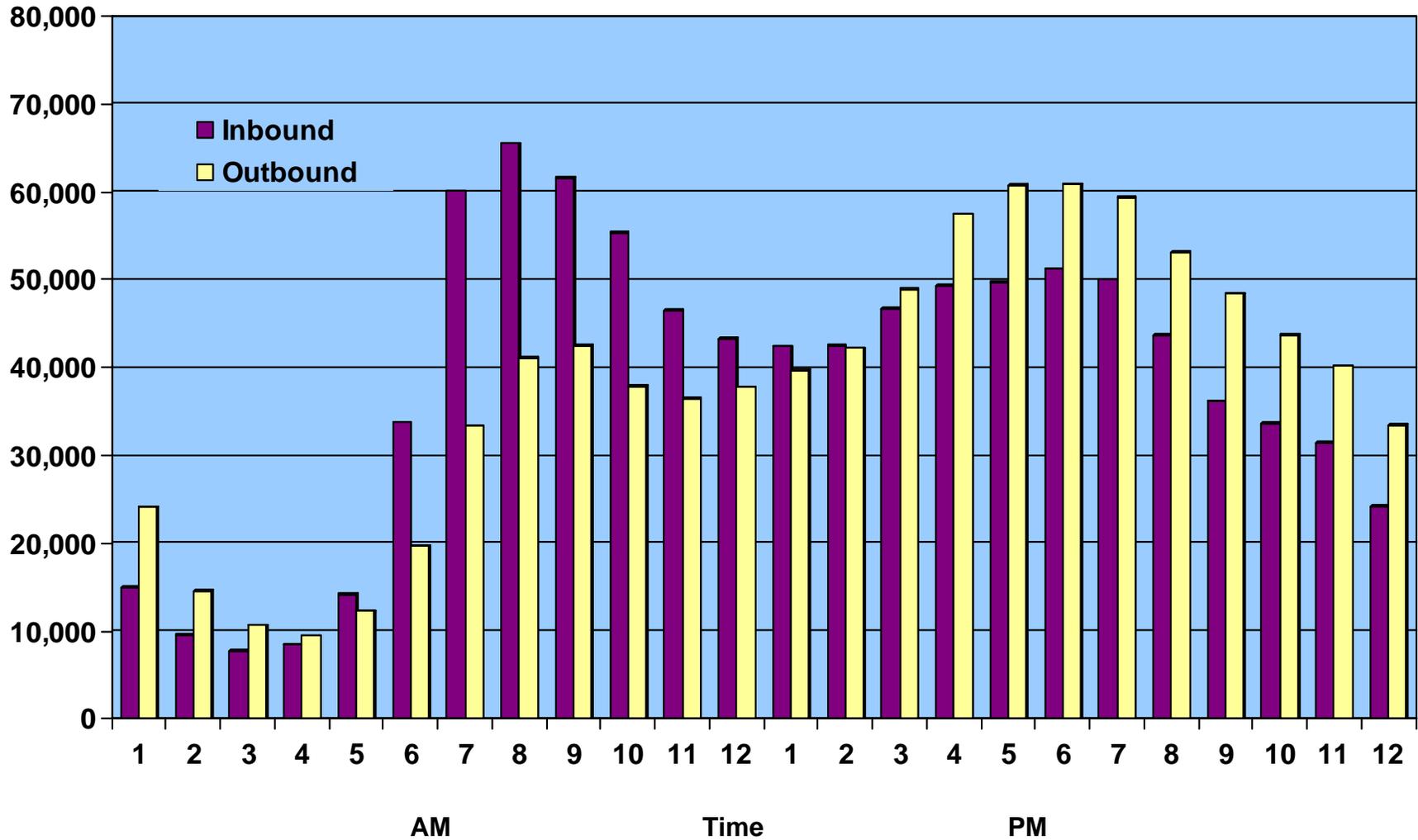
Total Manhattan Crossings 2008 Average Hourly Traffic Volumes To and From Manhattan (All Facilities)

	Entering Manhattan	Leaving Manhattan	2-Way Total
12-1am	14,960	24,125	39,085
1-2am	9,633	14,645	24,278
2-3am	7,748	10,711	18,459
3-4am	8,519	9,469	17,988
4-5am	14,174	12,268	26,442
5-6am	33,814	19,728	53,542
6-7am	60,114	33,374	93,488
7-8am	65,527 **	41,145	106,672
8-9am	61,545	42,529	104,074
9-10am	55,322	37,899	93,221
10-11am	46,501	36,487	82,988
11-12am	43,324	37,815	81,139
12-1pm	42,397	39,668	82,065
1-2pm	42,500	42,209	84,709
2-3pm	46,750	48,883	95,633
3-4pm	49,372	57,446	106,818
4-5pm	49,761	60,822	110,583
5-6pm	51,255	60,875 **	112,130
6-7pm	50,001	59,334	109,335
7-8pm	43,730	53,156	96,886
8-9pm	36,214	48,449	84,663
9-10pm	33,687	43,670	77,357
10-11pm	31,485	40,182	71,667
11-12pm	24,249	33,436	57,685
24 hrs	922,582	908,325	1,830,907
7-10am	182,394	121,573	303,967
10am-1pm	132,222	113,970	246,192
1-4pm	138,622	148,538	287,160
4-7pm	151,017	181,031	332,048
7am-7pm	604,255	565,112	1,169,367

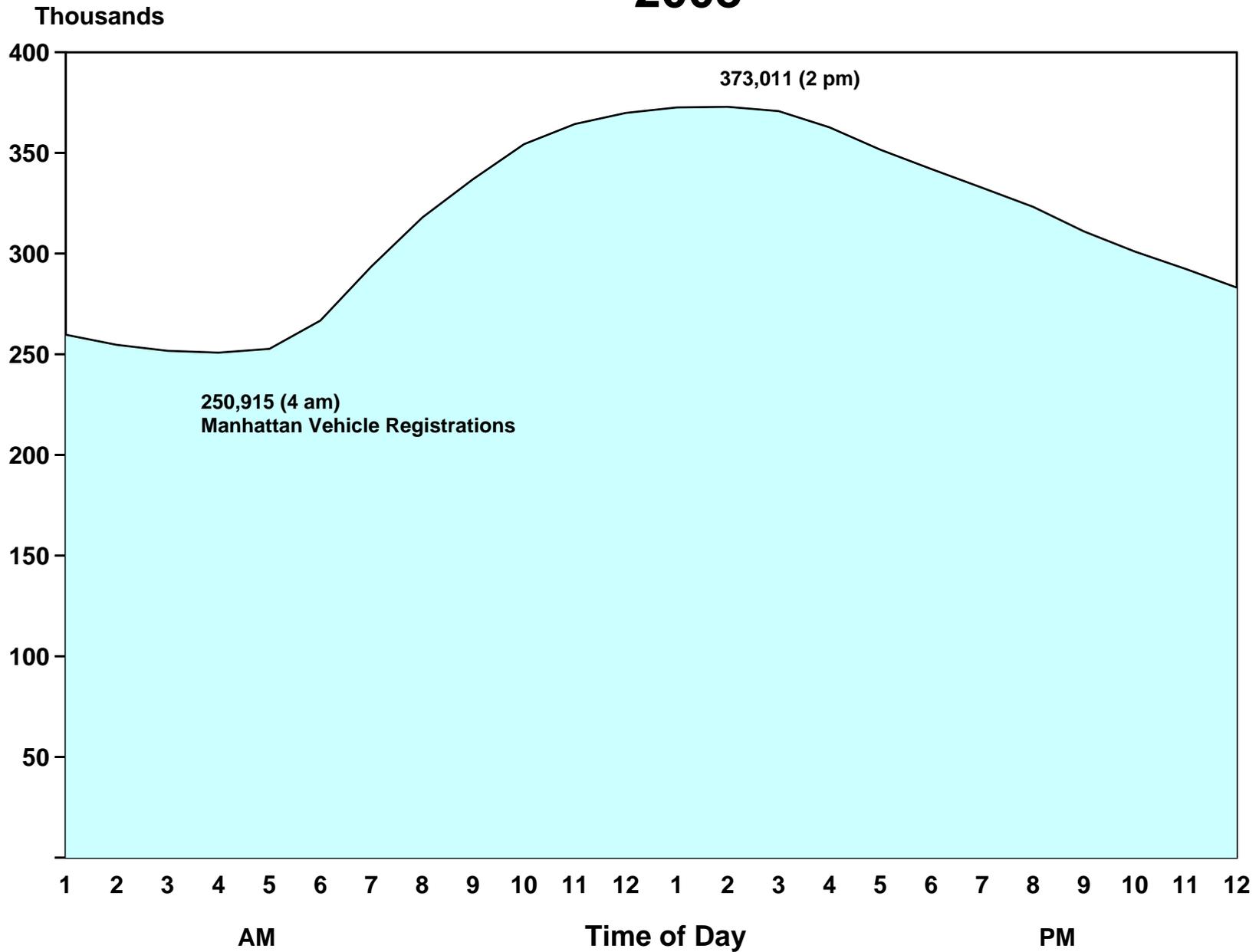
** Peak Volumes

Hourly Vehicular Volumes

Total Manhattan River Crossings - 2008



Manhattan Vehicular Accumulation 2008



Trip Characteristics



George Washington Bridge

ORIGINS AND DESTINATIONS OF MANHATTAN AUTO COMMUTERS

DESTINATIONS

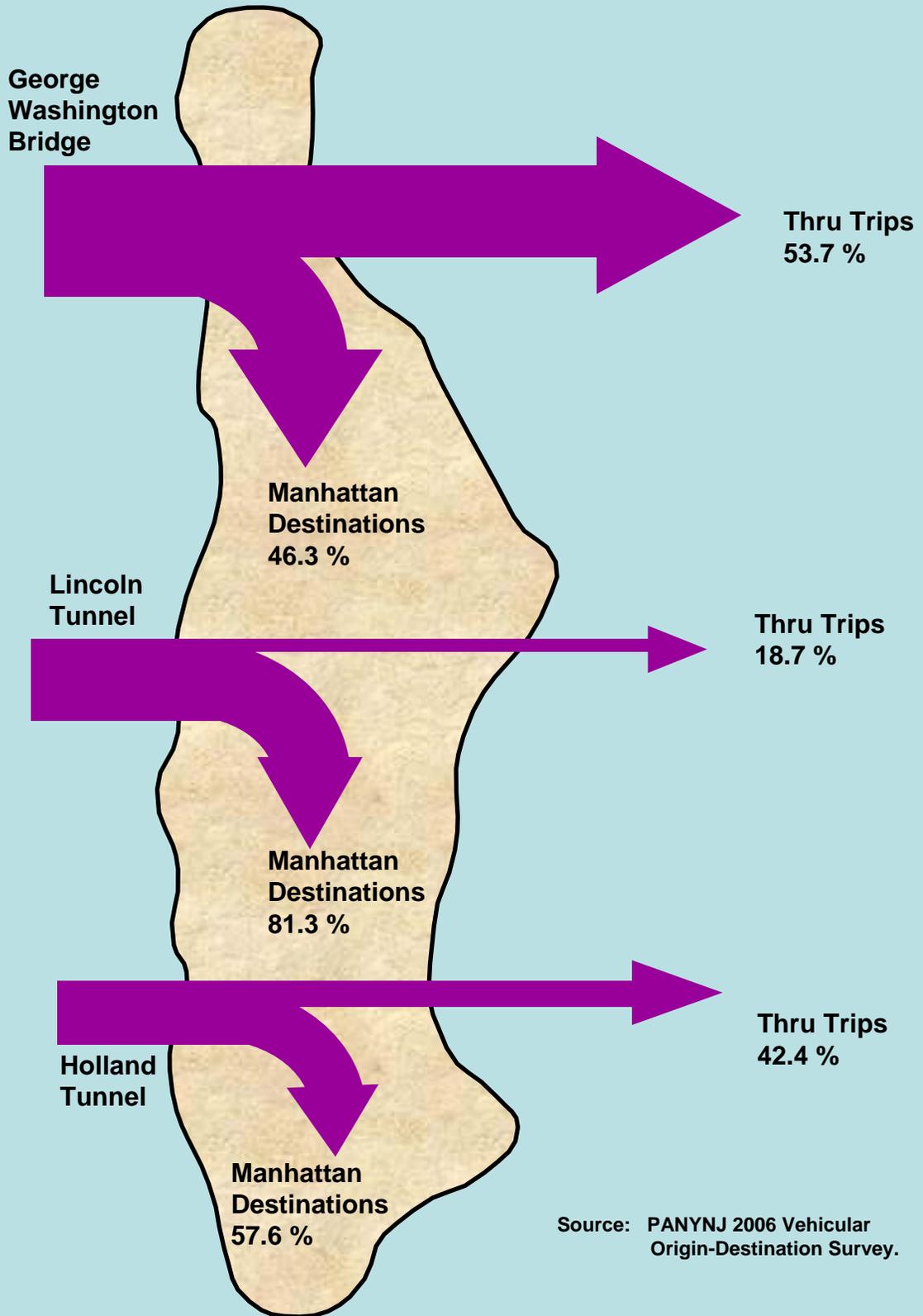
<i>ORIGINS</i>	Manhattan CBD	Upper Manhattan	Total
Bronx	6.5 %	16.5 %	9.0 %
Brooklyn	13.2 %	8.7 %	12.1 %
Manhattan	9.9 %	14.8 %	11.1 %
Queens	19.4 %	17.7 %	19.0 %
Staten Island	5.5 %	2.0 %	4.7 %
Subtotal NYC Origins	54.5 %	59.7 %	55.9 %
Long Island	10.7 %	7.1 %	9.8 %
Upstate NY	10.0 %	15.0 %	11.2 %
New 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.

2008 Thru vs. Local E/B Auto Trips via Hudson River Crossings



Source: PANYNJ 2006 Vehicular Origin-Destination Survey.

DESTINATIONS OF HUDSON RIVER CROSSINGS EASTBOUND AUTO TRAFFIC

TOTAL OF HOLLAND TUNNEL, LINCOLN TUNNEL AND GEORGE WASHINGTON BRIDGE

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

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

DESTINATIONS OF GEORGE WASHINGTON BRIDGE EASTBOUND AUTO TRAFFIC

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

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

DESTINATIONS OF HOLLAND TUNNEL EASTBOUND AUTO TRAFFIC

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

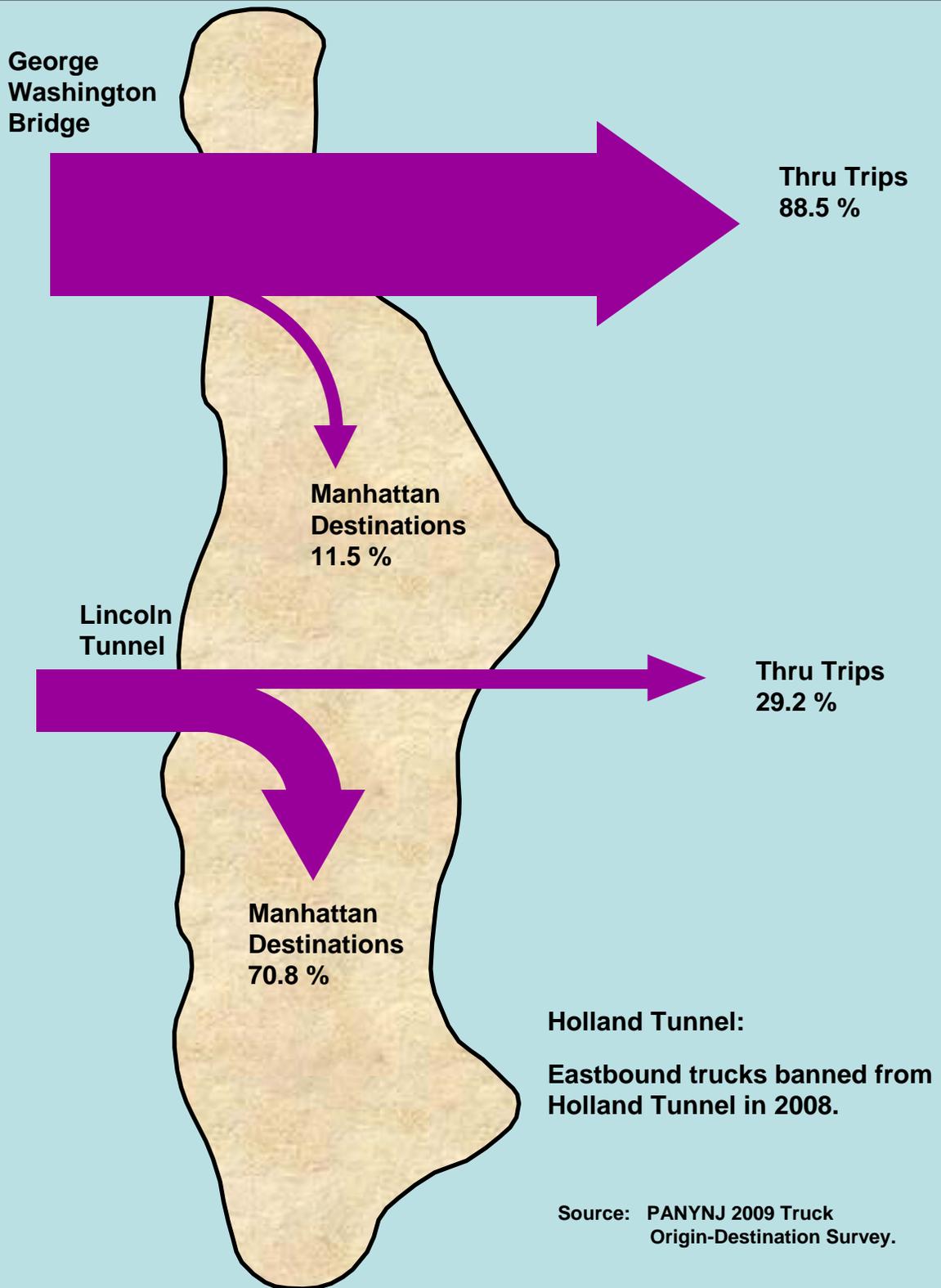
Source: Weekday data from the PANYNJ 2006 Vehicular Origin-Destination Survey.

DESTINATIONS OF LINCOLN TUNNEL EASTBOUND AUTO TRAFFIC

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

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

2008 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 2008.

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	80.6 %
Manhattan Bridge	1.25	80.0 %
Williamsburg Bridge	1.17	84.5 %
Holland Tunnel	1.32	65.8 %
5 Lower Manhattan Crossings	1.25	76.9 %
Queens-Midtown Tunnel	1.24	77.7 %
Queensboro Bridge	1.44	66.5 %
Lincoln Tunnel	1.97	73.1 %
3 Midtown Manhattan Crossings	1.53	71.5 %
Robert F. Kennedy Bridge	1.18	83.2 %
Alexander Hamilton Bridge	1.16	86.0 %
Broadway Bridge	1.19	84.7 %
Macombs Dam Bridge	1.32	72.4 %
Madison Avenue Bridge	1.28	77.0 %
Third Avenue Bridge	1.22	80.6 %
University Heights Bridge	1.23	82.9 %
Washington Bridge	1.38	72.8 %
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	1.34	82.0 %
All 19 Inbound Manhattan Crossings	1.36	78.2 %

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.

2007-2008 Trends



145th Street Bridge

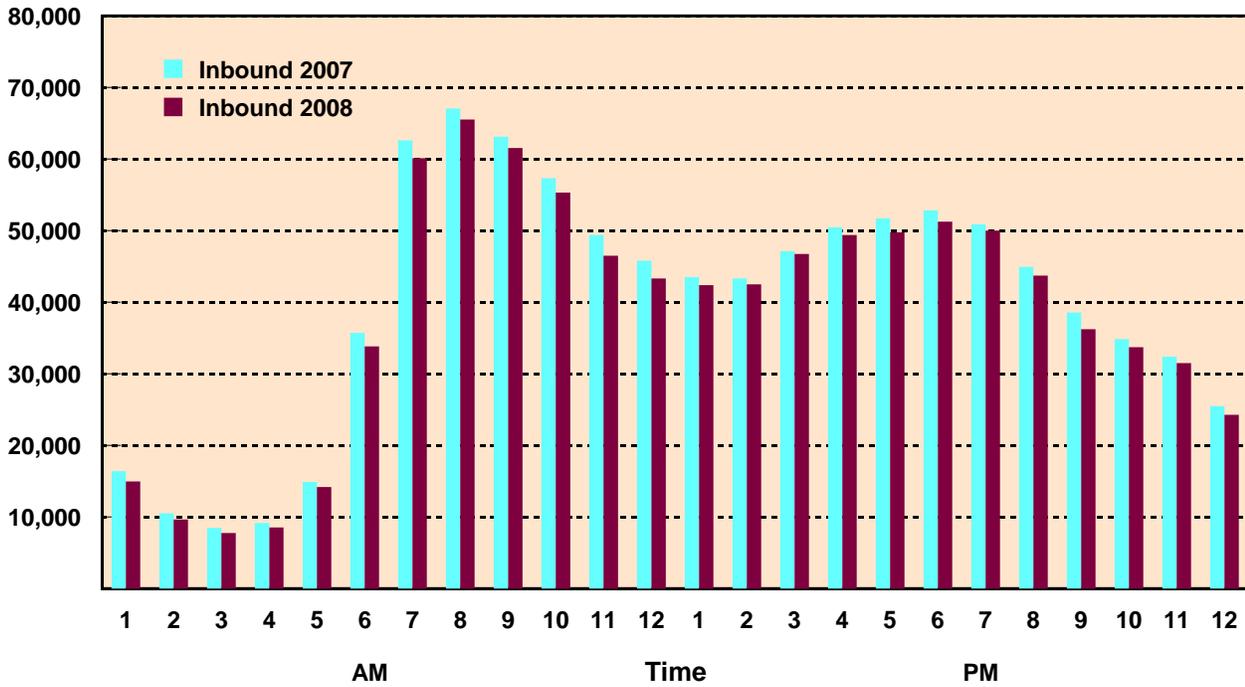
2007-2008 Trends

- Daily Manhattan river crossings decreased 2.7%, to 1,830,900 in fall 2008 from 1,880,800 in fall 2007, a decrease of 49,900 daily vehicles. Volume decreases were recorded at eighteen of the twenty river crossings.
- The largest numerical decrease occurred on the Brooklyn Bridge over the East River between Manhattan and Brooklyn, where daily volume decreased by 7,800 vehicles (-5.9%), to 123,800 in fall 2008 from 131,600 in fall 2007. The largest percentage decrease was at the Washington Bridge over the Harlem River, where daily volume decreased by 7.3% (to 52,800 in 2008 from 56,900 in 2007).
- The largest percentage and numerical increase occurred on the 145th Street Bridge over the Harlem River between Manhattan and The Bronx, where daily traffic increased 9.5%, to 23,100 vehicles in 2008 from 21,100 in 2007 (+2,000 daily vehicles).
- Daily traffic on the four East River bridges decreased 3.9%, to 477,200 in fall 2008 from 496,700 in fall 2007.
- Daily volume using the nine Harlem River bridges decreased 3.3%, to 539,400 in 2008 from 557,900 in 2007.
- The four MTABT Manhattan Crossings saw a 2.0% decrease in total daily traffic, to 306,000 in 2008 from 312,300 in 2007.
- Daily traffic using the three PANYNJ Manhattan crossings decreased 1.1% to 508,300 from 514,000.
- Annual subway ridership citywide increased 3.9% to 1.624 billion in 2008 from 1.563 billion in 2007. This was the highest level of subway ridership since 1951.

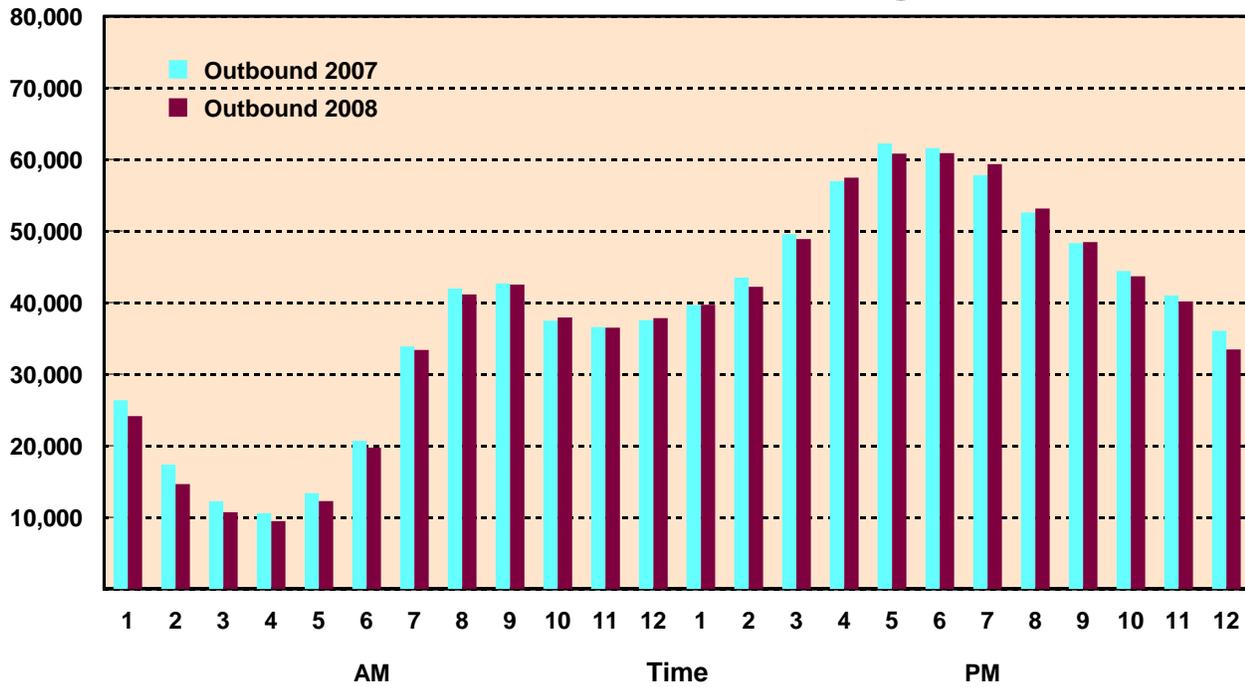
Manhattan Crossings Hourly Vehicular Volumes 2008 vs 2007

	<i>Inbound</i>			<i>Outbound</i>		
	2007	2008	Percent Change	2007	2008	Percent Change
Mid-1	16,391	14,960	-8.7 %	26,335	24,125	-8.4 %
1-2 am	10,506	9,633	-8.3 %	17,346	14,645	-15.6 %
2-3 am	8,451	7,748	-8.3 %	12,228	10,711	-12.4 %
3-4 am	9,166	8,519	-7.1 %	10,569	9,469	-10.4 %
4-5 am	14,888	14,174	-4.8 %	13,377	12,268	-8.3 %
5-6 am	35,694	33,814	-5.3 %	20,673	19,728	-4.6 %
6-7 am	62,611	60,114	-4.0 %	33,853	33,374	-1.4 %
7-8 am	67,065	65,527	-2.3 %	41,967	41,145	-2.0 %
8-9 am	63,113	61,545	-2.5 %	42,678	42,529	-0.3 %
9-10 am	57,332	55,322	-3.5 %	37,456	37,899	1.2 %
10-11 a	49,401	46,501	-5.9 %	36,572	36,487	-0.2 %
11-Noon	45,809	43,324	-5.4 %	37,530	37,815	0.8 %
Noon-1	43,532	42,397	-2.6 %	39,654	39,668	0.0 %
1-2 pm	43,333	42,500	-1.9 %	43,517	42,209	-3.0 %
2-3 pm	47,120	46,750	-0.8 %	49,567	48,883	-1.4 %
3-4 pm	50,469	49,372	-2.2 %	56,976	57,446	0.8 %
4-5 pm	51,688	49,761	-3.7 %	62,234	60,822	-2.3 %
5-6 pm	52,839	51,255	-3.0 %	61,604	60,875	-1.2 %
6-7 pm	50,876	50,001	-1.7 %	57,815	59,334	2.6 %
7-8 pm	44,931	43,730	-2.7 %	52,607	53,156	1.0 %
8-9 pm	38,553	36,214	-6.1 %	48,323	48,449	0.3 %
9-10 pm	34,838	33,687	-3.3 %	44,413	43,670	-1.7 %
10-11 p	32,388	31,485	-2.8 %	41,002	40,182	-2.0 %
11-Mid	25,489	24,249	-4.9 %	36,039	33,436	-7.2 %
Totals	956,483	922,582	-3.5 %	924,335	908,325	-1.7 %
7-10am	187,510	182,394	-2.7 %	122,101	121,573	-0.4 %
10am-1pm	138,742	132,222	-4.7 %	113,756	113,970	0.2 %
1-4pm	140,922	138,622	-1.6 %	150,060	148,538	-1.0 %
4-7pm	155,403	151,017	-2.8 %	181,653	181,031	-0.3 %
7am-7pm	622,577	604,255	-2.9 %	567,570	565,112	-0.4 %

Hourly Vehicular Volumes Inbound Manhattan Crossings



Hourly Vehicular Volumes Outbound Manhattan Crossings

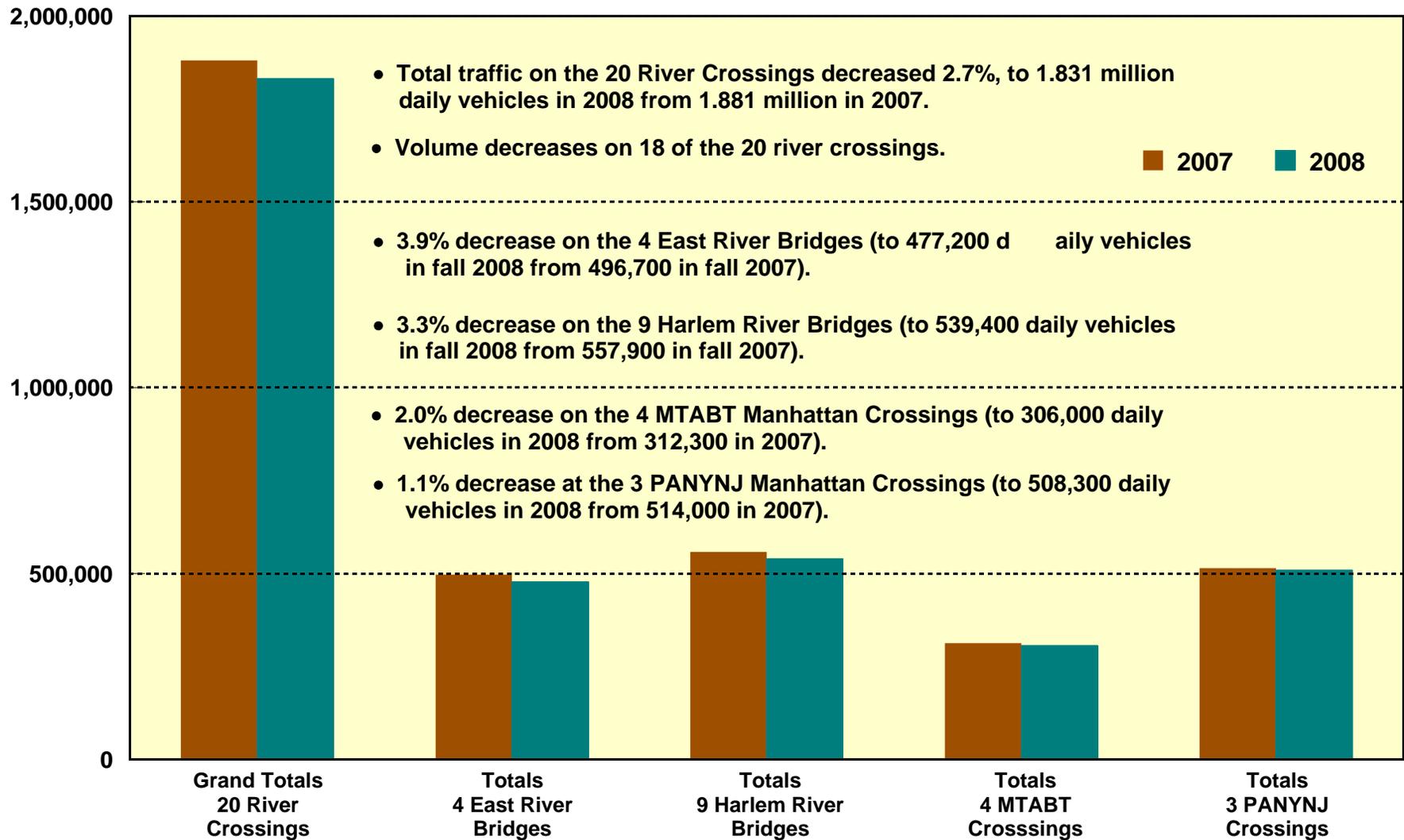


Manhattan Crossings 2007-2008 Traffic Volume Trends Both Directions

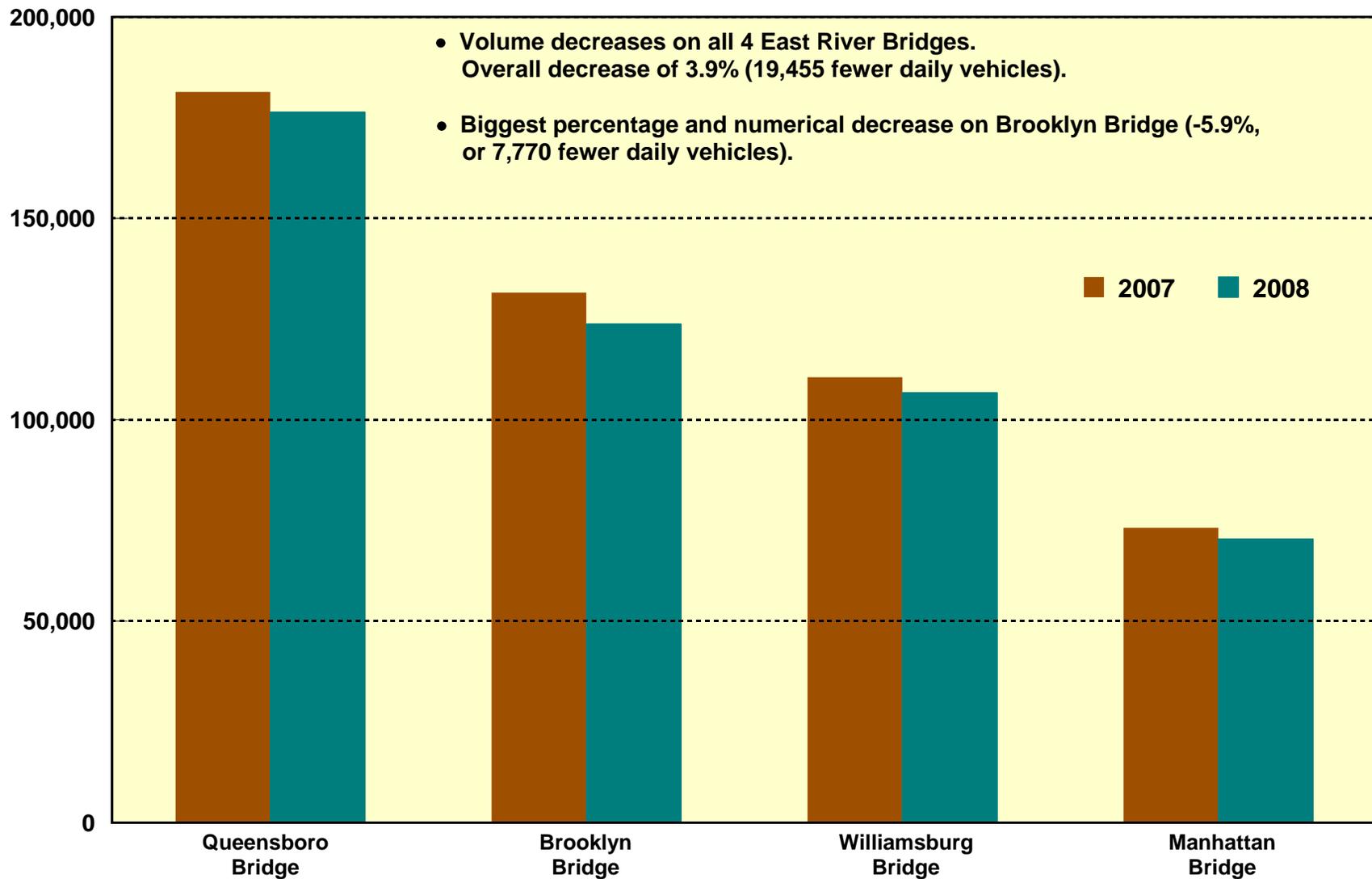
EAST RIVER BRIDGES	Highway Functional Classification	2007	2008	Percent Change
Brooklyn Bridge	Principal Arterial	131,551	123,781	- 5.9 %
Manhattan Bridge	Principal Arterial	73,205	70,341	- 3.9 %
Queensboro Bridge	Principal Arterial	181,365	176,306	- 2.8 %
Williamsburg Bridge	Principal Arterial	110,545	106,783	- 3.4 %
Total, 4 East River Bridges		496,666	477,211	- 3.9 %
HARLEM RIVER BRIDGES				
Alexander Hamilton Bridge	Interstate	192,651	189,598	- 1.6 %
Broadway Bridge	Principal Arterial	35,523	33,266	- 6.4 %
Macombs Dam Bridge	Principal Arterial	40,749	38,897	- 4.5 %
Madison Avenue Bridge	Principal Arterial	44,663	41,740	- 6.5 %
Third Avenue Bridge	Principal Arterial	59,712	58,510	- 2.0 %
University Heights Bridge	Principal Arterial	41,422	39,340	- 5.0 %
Washington Bridge	Minor Arterial	56,945	52,768	- 7.3 %
Willis Avenue Bridge	Principal Arterial	65,113	62,167	- 4.5 %
145th Street Bridge	Minor Arterial	21,147	23,148	9.5 %
Total, 9 Harlem River Bridges		557,925	539,434	- 3.3 %
MTABT Manhattan Facilities				
Brooklyn-Battery Tunnel	Interstate	56,539	55,037	- 2.7 %
Henry Hudson Bridge	Principal Arterial	70,094	69,101	- 1.4 %
Queens-Midtown Tunnel	Interstate	88,379	86,709	- 1.9 %
R.F.K. Memorial Bridge Manhattan Plaza *	Principal Arterial	97,241	95,146	- 2.2 %
Total, 4 MTABT Manhattan Crossings		312,253	305,993	- 2.0 %
PANYNJ Manhattan Facilities				
George Washington Bridge	Interstate	291,391	293,059	0.6 %
Holland Tunnel	Interstate	100,491	97,057	- 3.4 %
Lincoln Tunnel	Principal Arterial	122,092	118,153	- 3.2 %
Total, 3 PANYNJ Manhattan - New Jersey Crossings		513,974	508,269	- 1.1 %
GRAND TOTALS		1,880,818	1,830,907	- 2.7 %

* Triborough Bridge

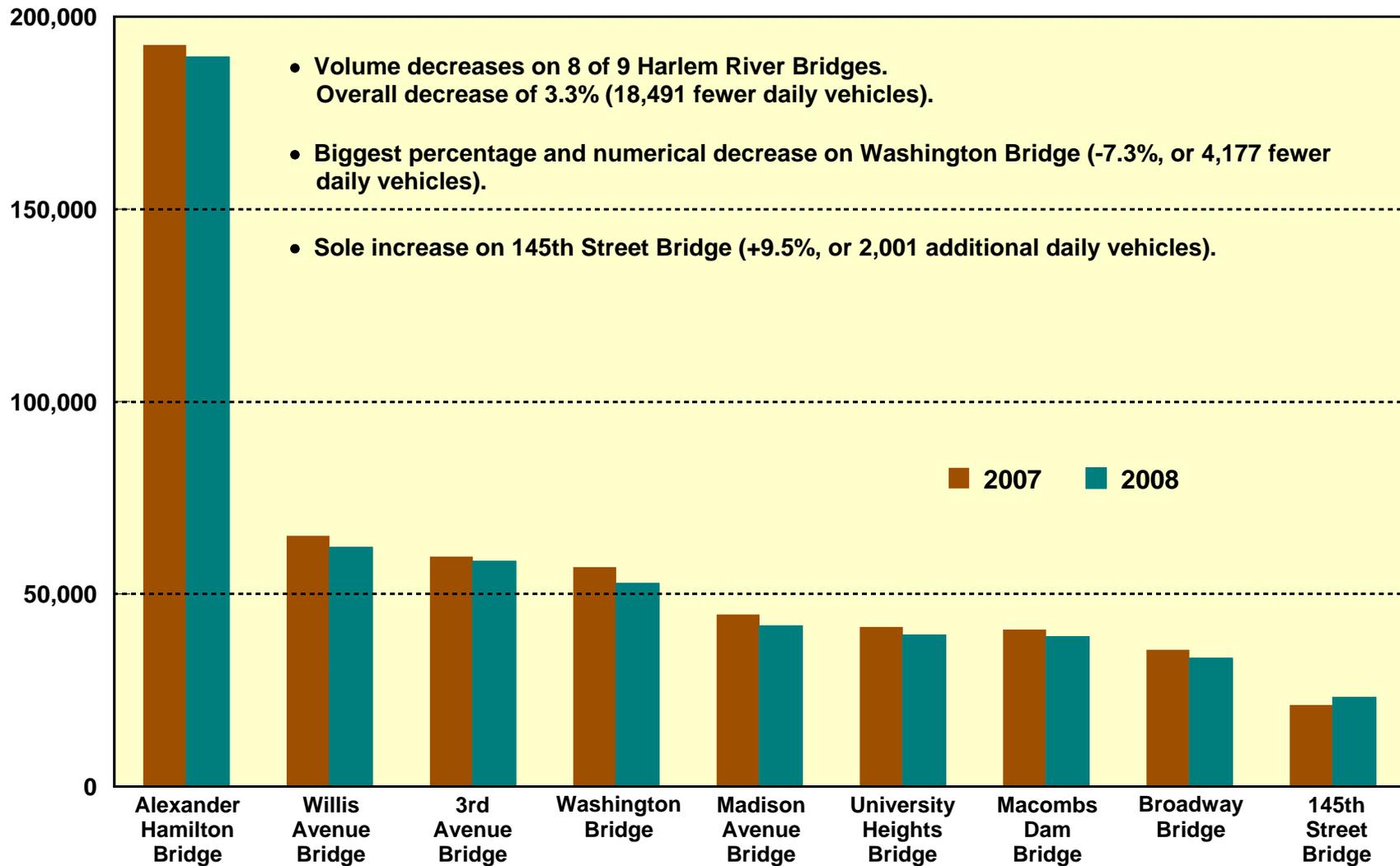
Manhattan River Crossings Daily Volumes 2008 vs. 2007



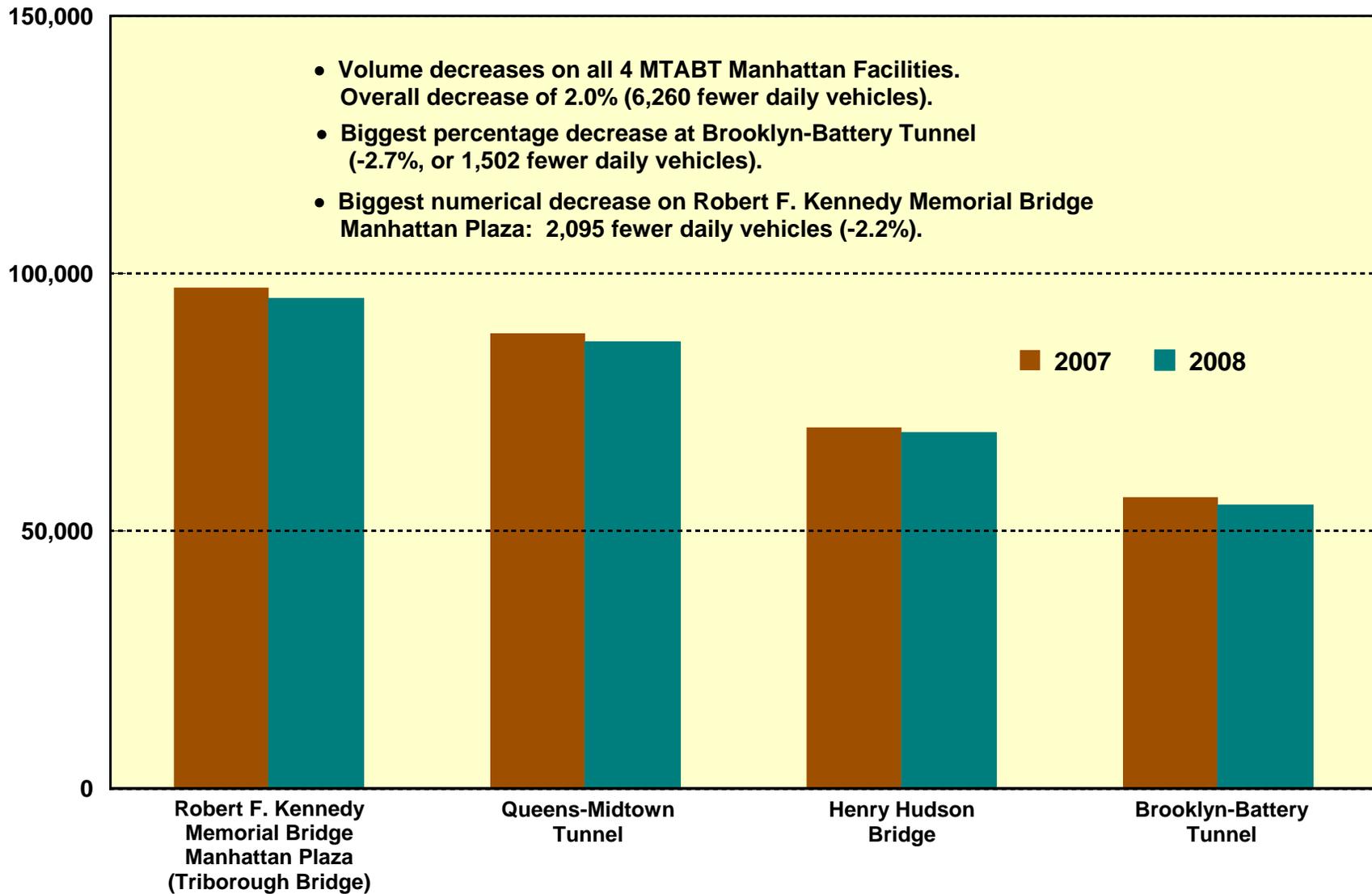
East River Bridges Daily Volumes 2008 vs. 2007



Harlem River Bridges Daily Volumes 2008 vs. 2007

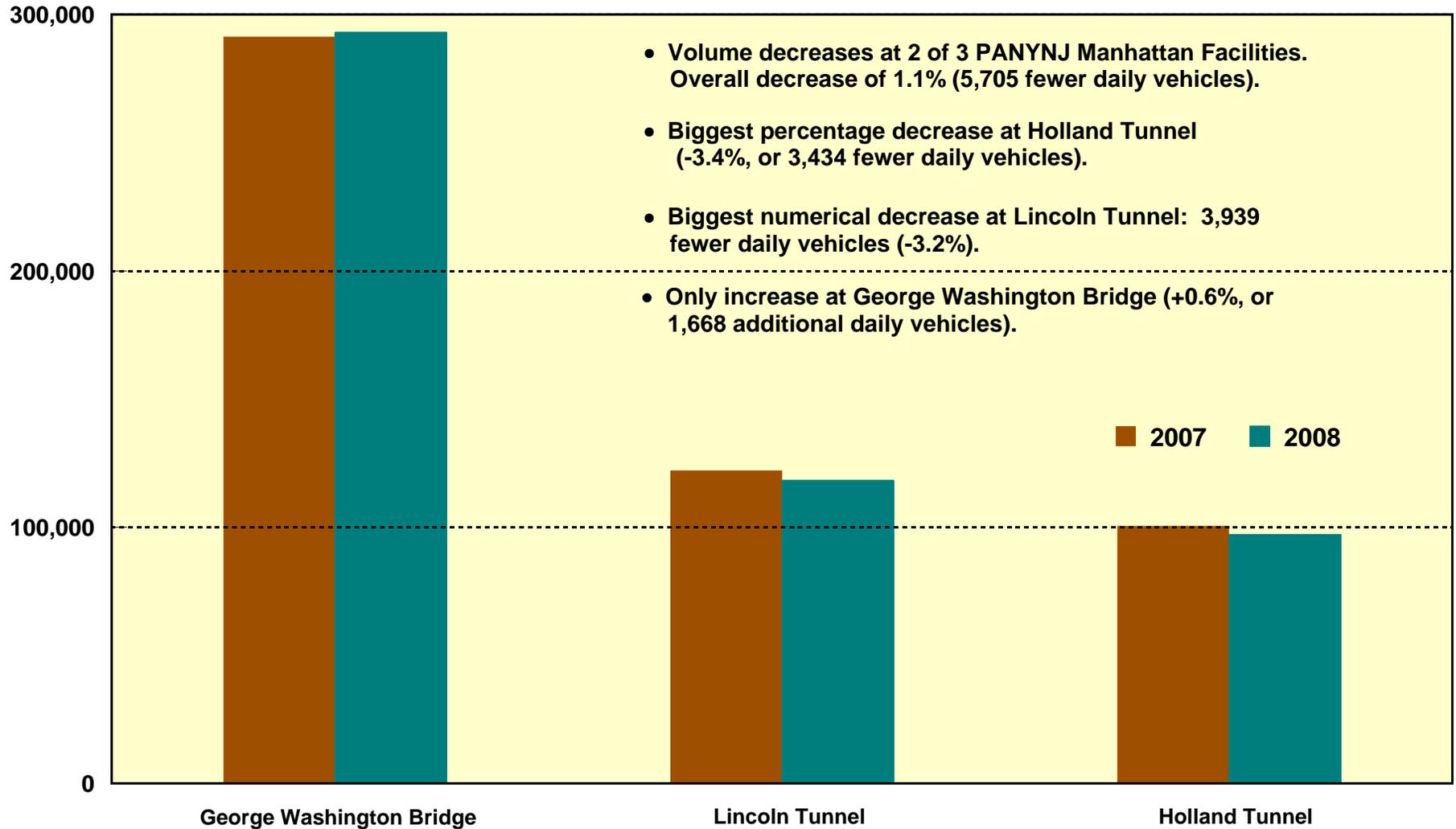


Metropolitan Transportation Authority Bridges & Tunnels (MTABT) Manhattan Facilities Daily Volumes 2008 vs. 2007



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

2008 vs. 2007



Ten-Year Trends 1998 - 2008



Broadway Bridge

Ten-Year Trends: 1998 - 2008

- In the ten-year period from 1998 to 2008, Manhattan traffic volume decreased 3.6%, to 1,830,900 daily vehicles from 1,900,300, a decrease of 69,400 daily vehicles.
- Daily vehicle trips entering Manhattan were 4.2% lower in 2008 than in 1998. The biggest decrease in inbound trips occurred during the 7-10am period, which decreased 11.1% during the decade. Trips leaving Manhattan decreased 3.0% since 1998. The biggest outbound decrease occurred during the 4-7pm period (-7.0%).
- Vehicle trips on the 13 toll-free East and Harlem River bridges decreased at an average annual rate of 0.3% per year from 1998 to 2008. The greatest rate of decline was on the 145th Street Bridge (-2.7% per year). The greatest volume decrease occurred on the Brooklyn Bridge (loss of 20,300 daily trips, to 123,800 in 2008 from 144,100 in 1998). The highest positive average annual growth rate was on the Macombs Dam Bridge: +1.5% per year. The greatest volume increase was on the Alexander Hamilton Bridge (13,000 more daily vehicles in fall 2008 than in fall 1998).
- Traffic volumes on the four MTA Bridges and Tunnels (MTABT) river crossings serving Manhattan increased at an average annual rate of 0.6% per year since 1998. The highest average annual growth rate was on the Henry Hudson Bridge (+1.4% per year), which also had the largest volume increase (+9,800 vehicles per day).
- Traffic volumes on the three trans-Hudson Port Authority of New York and New Jersey (PANYNJ) river crossings serving Manhattan decreased 0.2% per year since 1998. The biggest average annual rate of decline was at the George Washington Bridge (-0.4% per year). The Lincoln Tunnel had the biggest volume decrease (6,300 fewer vehicles per day).
- New York City motor vehicle registrations decreased 0.6% per year. In Manhattan, registrations increased by less than 0.1% per year.

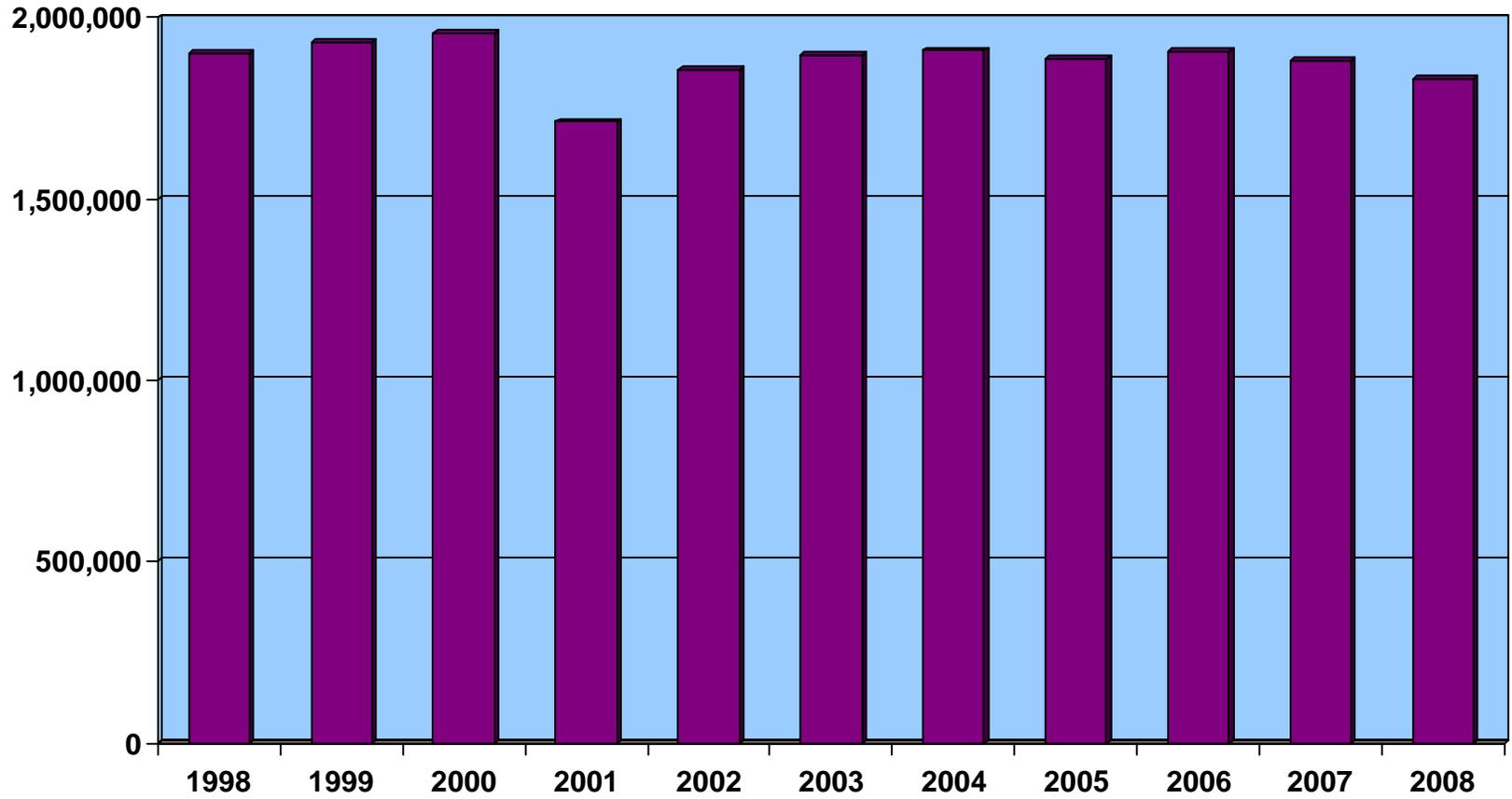
Manhattan Crossings 10-Year Traffic Volume Trends ~ 1998-2008 Both Directions

EAST RIVER BRIDGES	Highway Functional Classification	1998	2008	Percent Change
Brooklyn Bridge	Principal Arterial	144,131	123,781	- 14.1 %
Manhattan Bridge	Principal Arterial	78,172	70,341	- 10.0 %
Queensboro Bridge	Principal Arterial	192,119	176,306	- 8.2 %
Williamsburg Bridge	Principal Arterial	109,268	106,783	- 2.3 %
Total, 4 East River Bridges		523,690	477,211	- 8.9 %
HARLEM RIVER BRIDGES				
Alexander Hamilton Bridge	Interstate	176,632	189,598	7.3 %
Broadway Bridge	Principal Arterial	35,770	33,266	- 7.0 %
Macombs Dam Bridge	Principal Arterial	42,027	38,897	- 7.4 %
Madison Avenue Bridge	Principal Arterial	32,922	41,740	26.8 %
Third Avenue Bridge	Principal Arterial	70,757	58,510	- 17.3 %
University Heights Bridge	Principal Arterial	41,640	39,340	- 5.5 %
Washington Bridge	Minor Arterial	57,307	52,768	- 7.9 %
Willis Avenue Bridge	Principal Arterial	78,145	62,167	- 20.4 %
145th Street Bridge	Minor Arterial	24,862	23,148	- 6.9 %
Total, 9 Harlem River Bridges		560,062	539,434	- 3.7 %
MTABT Manhattan Facilities				
Brooklyn-Battery Tunnel	Interstate	61,091	55,037	- 9.9 %
Henry Hudson Bridge	Principal Arterial	59,339	69,101	16.5 %
Queens-Midtown Tunnel	Interstate	79,697	86,709	8.8 %
R.F.K. Memorial Bridge Manhattan Plaza *	Principal Arterial	93,863	95,146	1.4 %
Total, 4 MTABT Manhattan Crossings		293,990	305,993	4.1 %
PANYNJ Manhattan Facilities				
George Washington Bridge	Interstate	297,188	293,059	- 1.4 %
Holland Tunnel	Interstate	100,872	97,057	- 3.8 %
Lincoln Tunnel	Principal Arterial	124,452	118,153	- 5.1 %
Total, 3 PANYNJ Manhattan - New Jersey Crossings		522,512	508,269	- 2.7 %
GRAND TOTALS		1,900,254	1,830,907	- 3.6 %

* Triborough Bridge

Daily Manhattan River Crossings

1998 - 2008

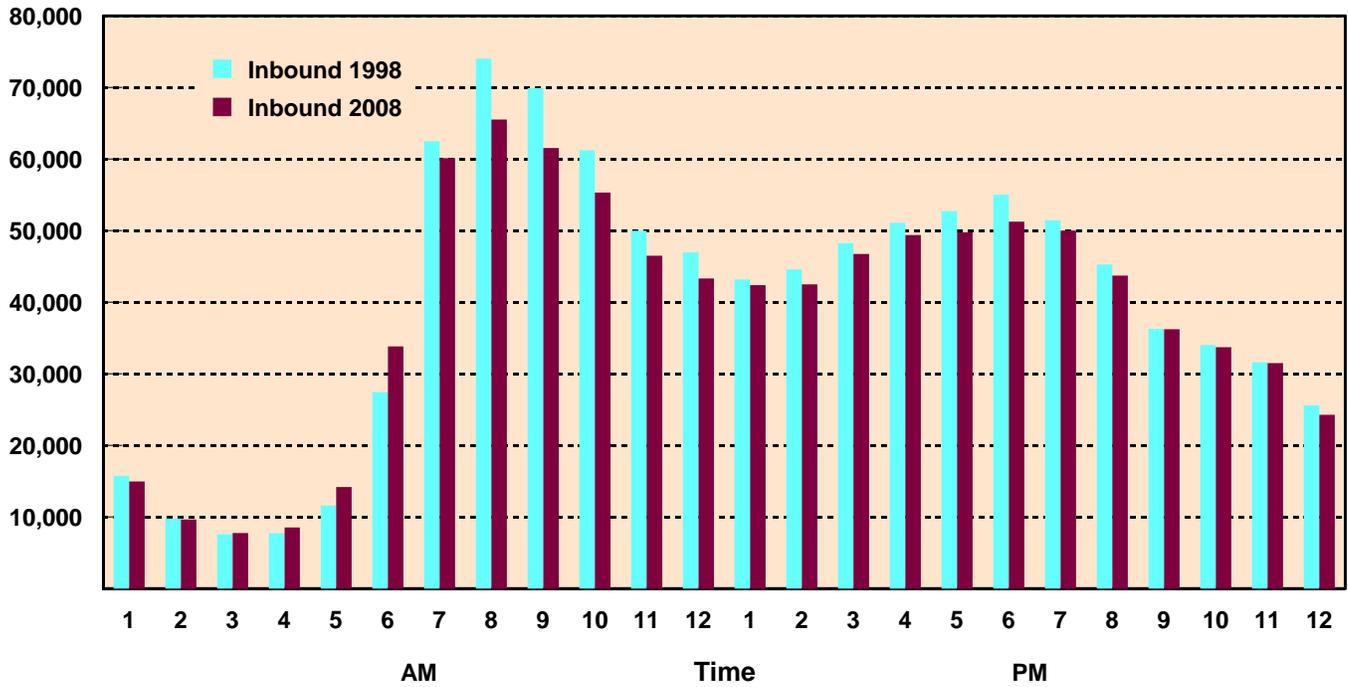


Hourly Vehicular Volumes 1998 vs 2008

	<i>Inbound</i>			<i>Outbound</i>		
	1998	2008	Percent Change	1998	2008	Percent Change
Mid-1	15,726	14,960	-4.9 %	25,671	24,125	-6.0 %
1-2 am	9,775	9,633	-1.5 %	14,981	14,645	-2.2 %
2-3 am	7,609	7,748	1.8 %	10,520	10,711	1.8 %
3-4 am	7,740	8,519	10.1 %	8,786	9,469	7.8 %
4-5 am	11,598	14,174	22.2 %	10,499	12,268	16.8 %
5-6 am	27,431	33,814	23.3 %	18,059	19,728	9.2 %
6-7 am	62,485	60,114	-3.8 %	33,018	33,374	1.1 %
7-8 am	74,024	65,527	-11.5 %	42,846	41,145	-4.0 %
8-9 am	69,916	61,545	-12.0 %	44,351	42,529	-4.1 %
9-10 am	61,223	55,322	-9.6 %	38,428	37,899	-1.4 %
10-11 a	49,985	46,501	-7.0 %	36,985	36,487	-1.3 %
11-Noon	46,964	43,324	-7.8 %	36,707	37,815	3.0 %
Noon-1	43,190	42,397	-1.8 %	38,344	39,668	3.5 %
1-2 pm	44,584	42,500	-4.7 %	42,061	42,209	0.4 %
2-3 pm	48,245	46,750	-3.1 %	48,351	48,883	1.1 %
3-4 pm	51,105	49,372	-3.4 %	59,575	57,446	-3.6 %
4-5 pm	52,739	49,761	-5.6 %	66,234	60,822	-8.2 %
5-6 pm	55,012	51,255	-6.8 %	65,292	60,875	-6.8 %
6-7 pm	51,434	50,001	-2.8 %	63,167	59,334	-6.1 %
7-8 pm	45,286	43,730	-3.4 %	58,425	53,156	-9.0 %
8-9 pm	36,250	36,214	-0.1 %	51,474	48,449	-5.9 %
9-10 pm	34,006	33,687	-0.9 %	45,286	43,670	-3.6 %
10-11 p	31,609	31,485	-0.4 %	40,745	40,182	-1.4 %
11-Mid	25,579	24,249	-5.2 %	36,934	33,436	-9.5 %
Totals	963,515	922,582	-4.2 %	936,739	908,325	-3.0 %
7-10am	205,163	182,394	-11.1 %	125,625	121,573	-3.2 %
10am-1pm	140,139	132,222	-5.6 %	112,036	113,970	1.7 %
1-4pm	143,934	138,622	-3.7 %	149,987	148,538	-1.0 %
4-7pm	159,185	151,017	-5.1 %	194,693	181,031	-7.0 %
7am-7pm	648,421	604,255	-6.8 %	582,341	565,112	-3.0 %

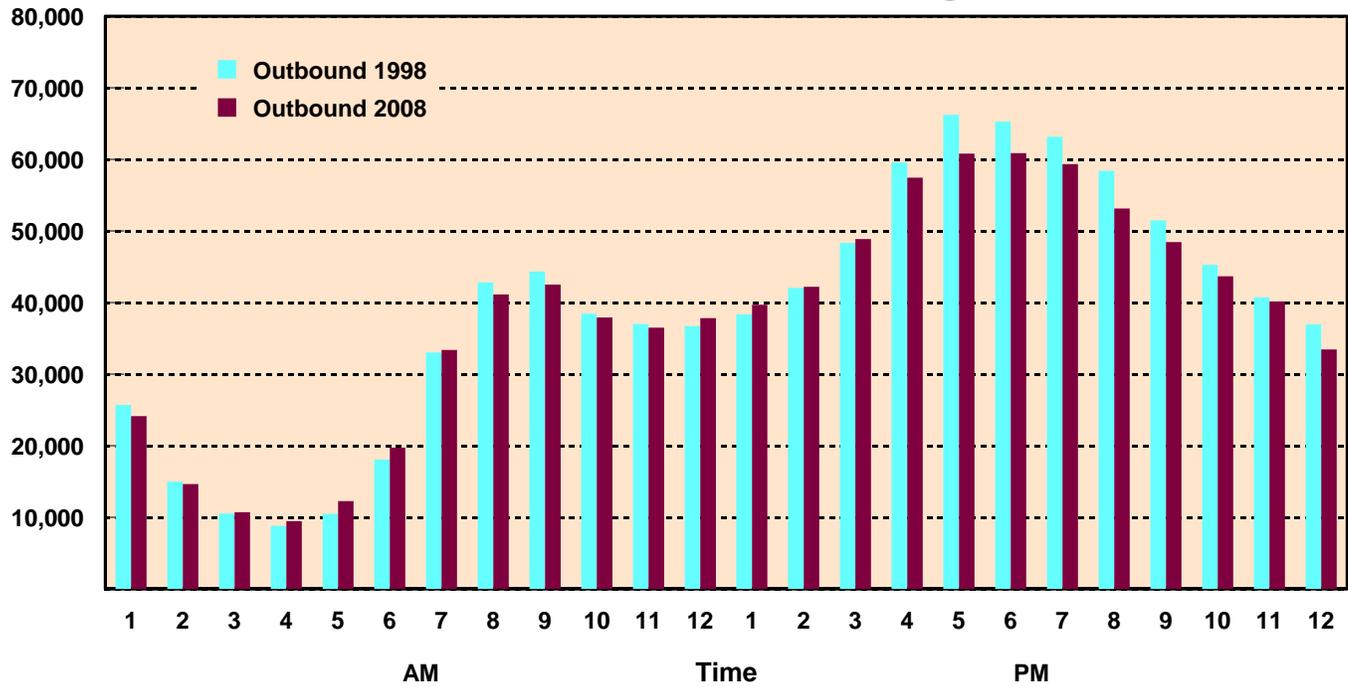
Hourly Vehicular Volumes

Inbound Manhattan Crossings



Hourly Vehicular Volumes

Outbound Manhattan Crossings



**Percent Difference by Period of Day
Manhattan Crossings
1998 - 2008**

<i>Time Period</i>	<i>To Manhattan</i>	<i>From Manhattan</i>
1am - 4am	3.1 %	1.6 %
4am - 7am	6.5 %	6.2 %
7am - 10am	- 11.1 %	- 3.2 %
10am - 1pm	- 5.6 %	1.7 %
1pm - 4pm	- 3.7 %	- 1.0 %
4pm - 7pm	- 5.1 %	- 7.0 %
7pm - 10pm	- 1.7 %	- 6.4 %
10pm - 1am	- 3.0 %	- 5.4 %
24 Hour Total	- 4.2 %	- 3.0 %

The Percent Difference by Period of Day compares the 2008 volume to the 1998 volume for each time period, with no consideration given to the volumes in the intervening years.

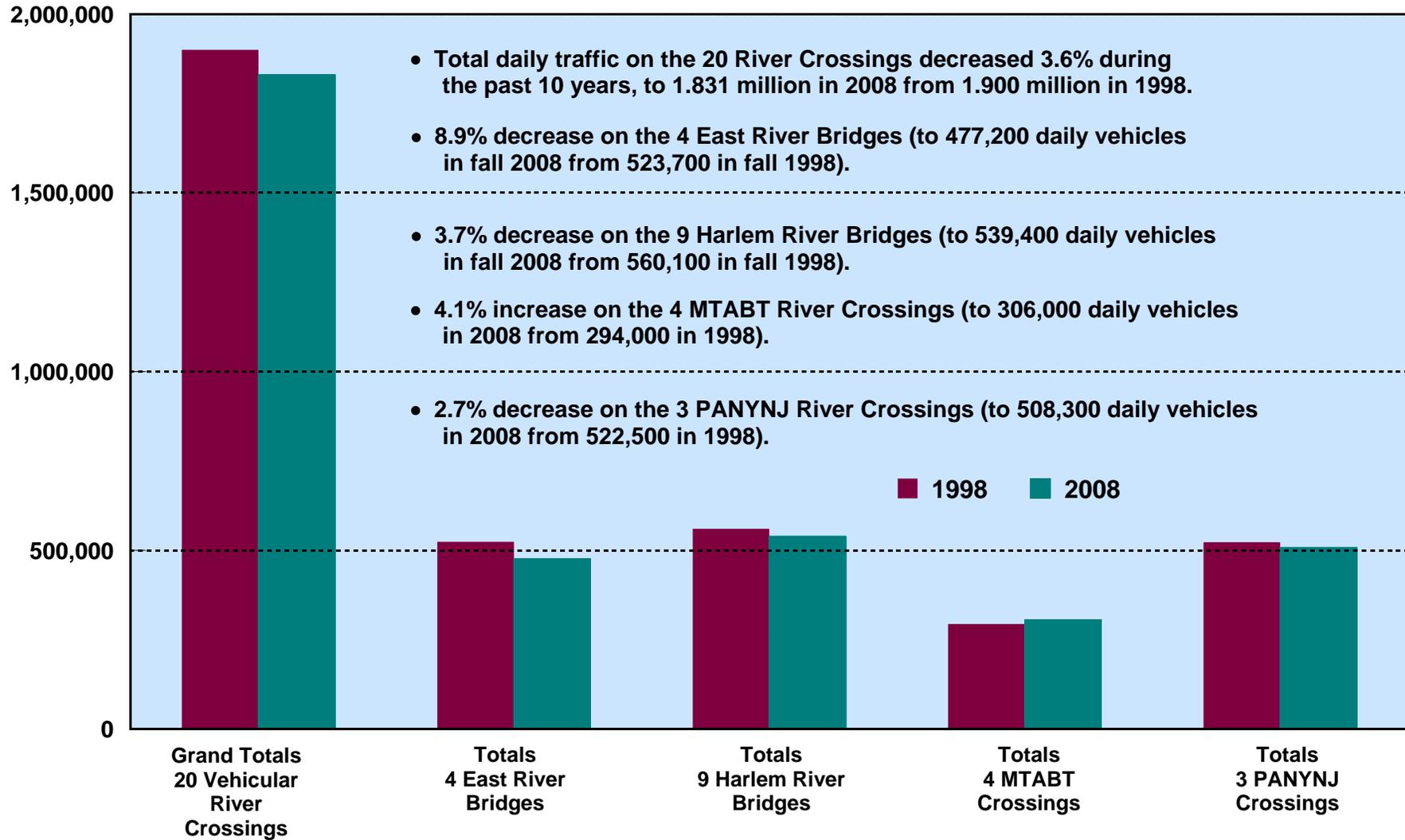
**Average Annual Growth Rate by Period of Day
Manhattan Crossings
1998 - 2008**

<i>Time Period</i>	<i>To Manhattan</i>	<i>From Manhattan</i>
1am - 4am	- 0.0 %	0.2 %
4am - 7am	1.1 %	0.9 %
7am - 10am	- 0.7 %	- 0.0 %
10am - 1pm	- 0.2 %	0.3 %
1pm - 4pm	- 0.0 %	0.0 %
4pm - 7pm	- 0.2 %	- 0.7 %
7pm - 10pm	0.1 %	- 0.6 %
10pm - 1am	- 0.3 %	- 0.5 %
24 Hour Total	- 0.1 %	- 0.2 %

The Average Annual Growth Rate for each time period is based on the volumes for all the years, 1998-2008, inclusive. For each period, the Average Annual Growth Rate is derived from the linear regression equation that reflects the best fitting straight line.

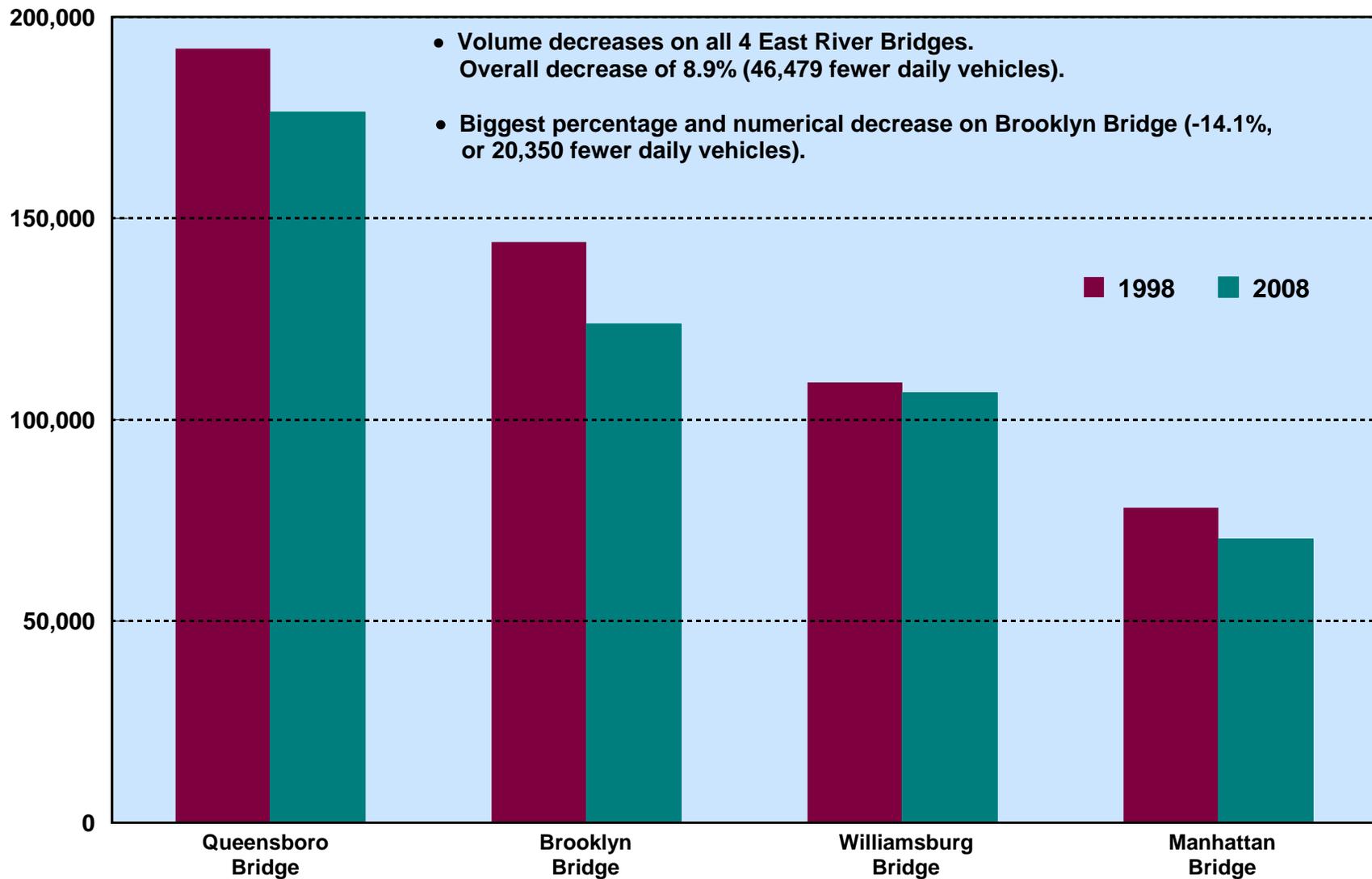
10-Year Volume Changes ~ 1998 - 2008

Manhattan River Crossings Daily Volumes



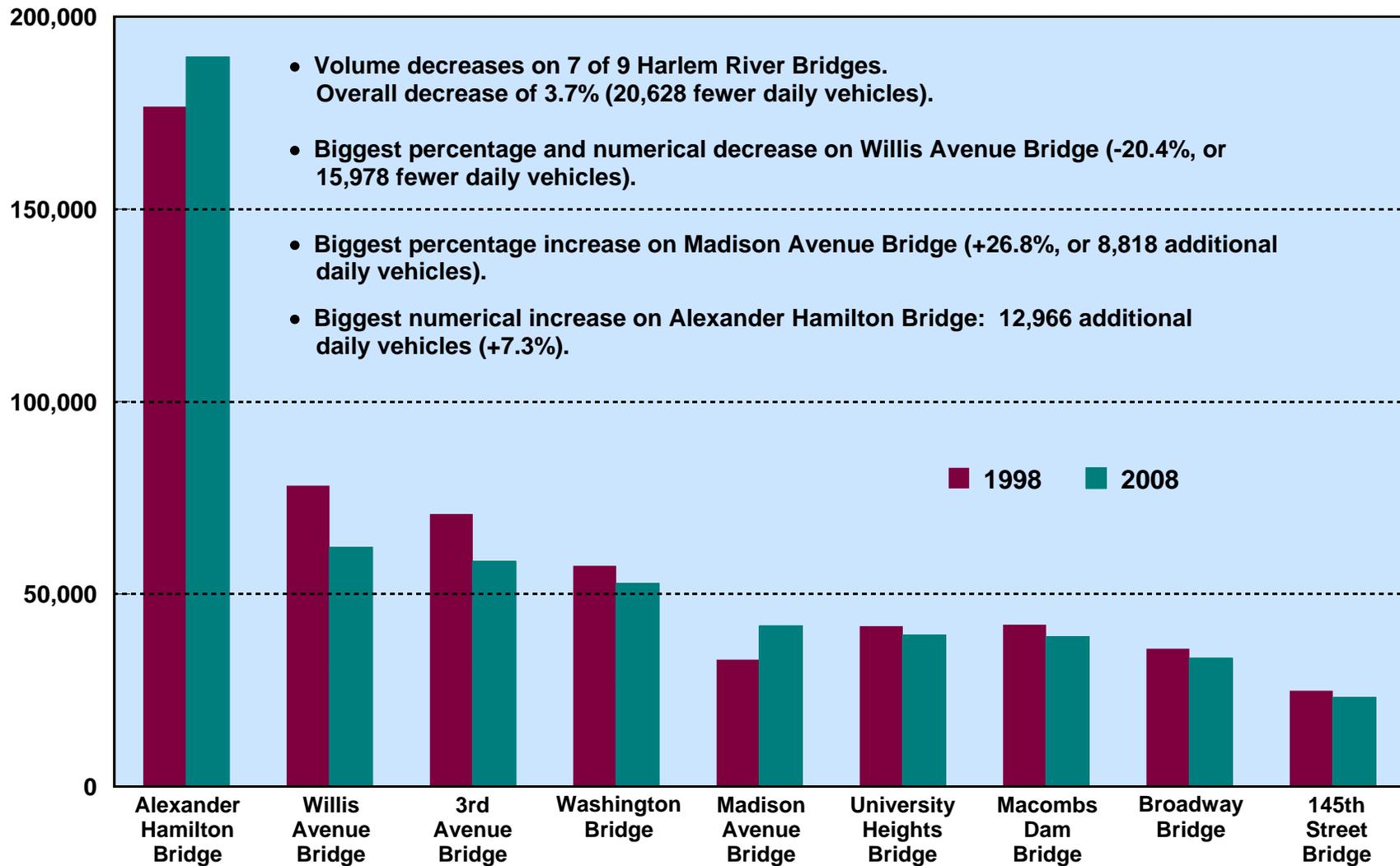
10-Year Volume Changes ~ 1998 - 2008

East River Bridges Daily Volumes



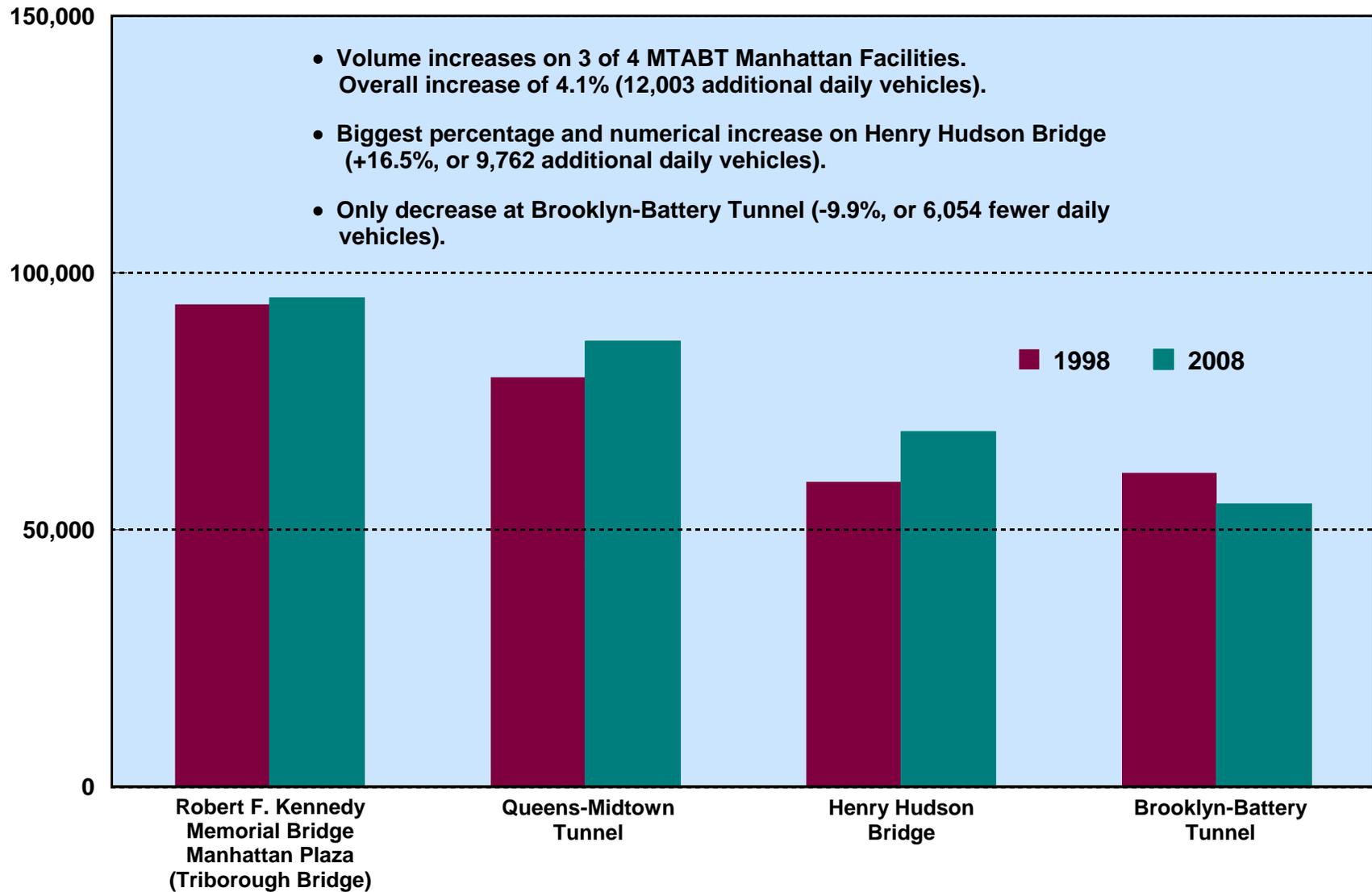
10-Year Volume Changes ~ 1998 - 2008

Harlem River Bridges Daily Volumes



10-Year Volume Changes ~ 1998 - 2008

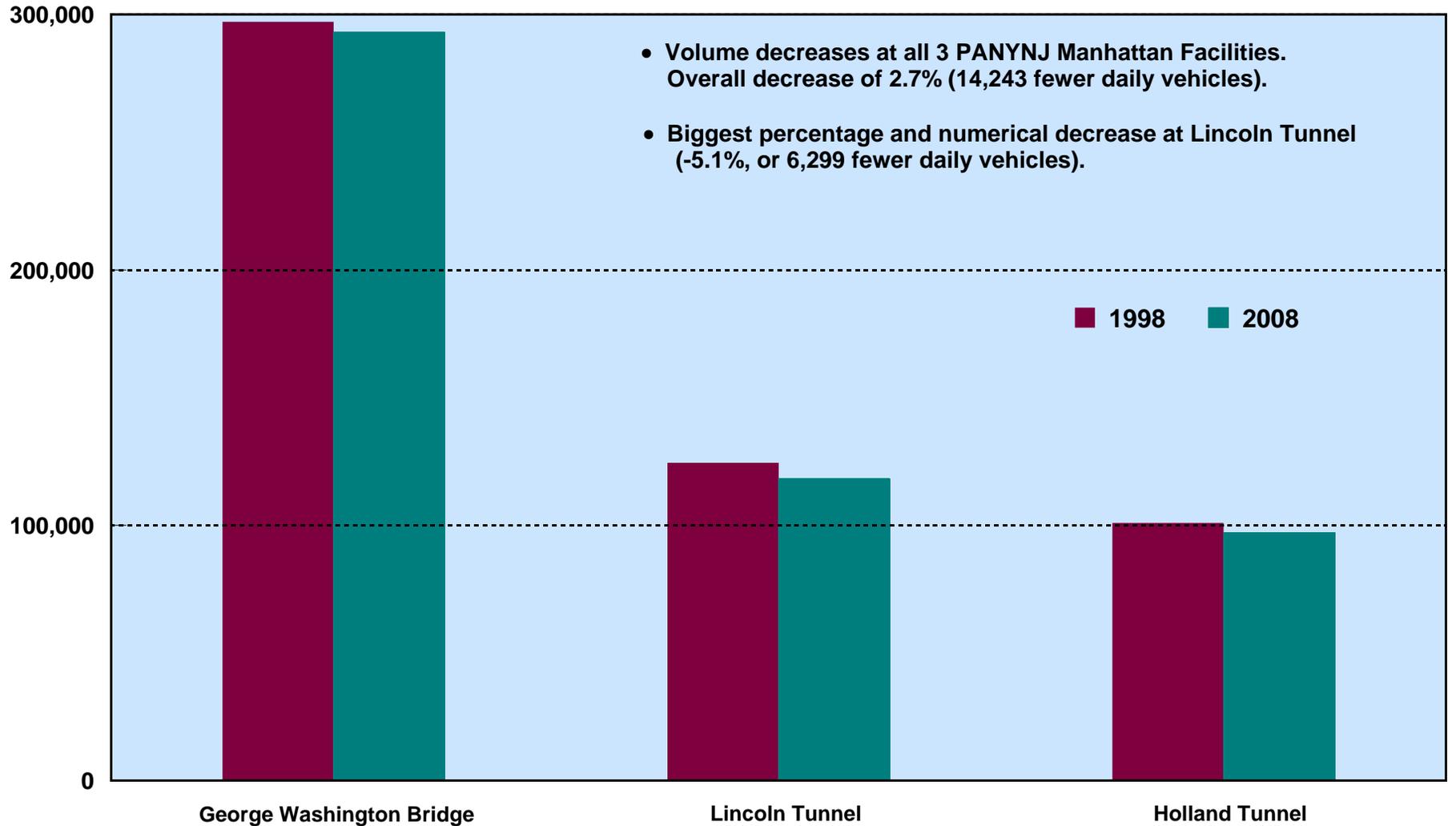
Metropolitan Transportation Authority Bridges & Tunnels (MTABT) Manhattan Facilities Daily Volumes



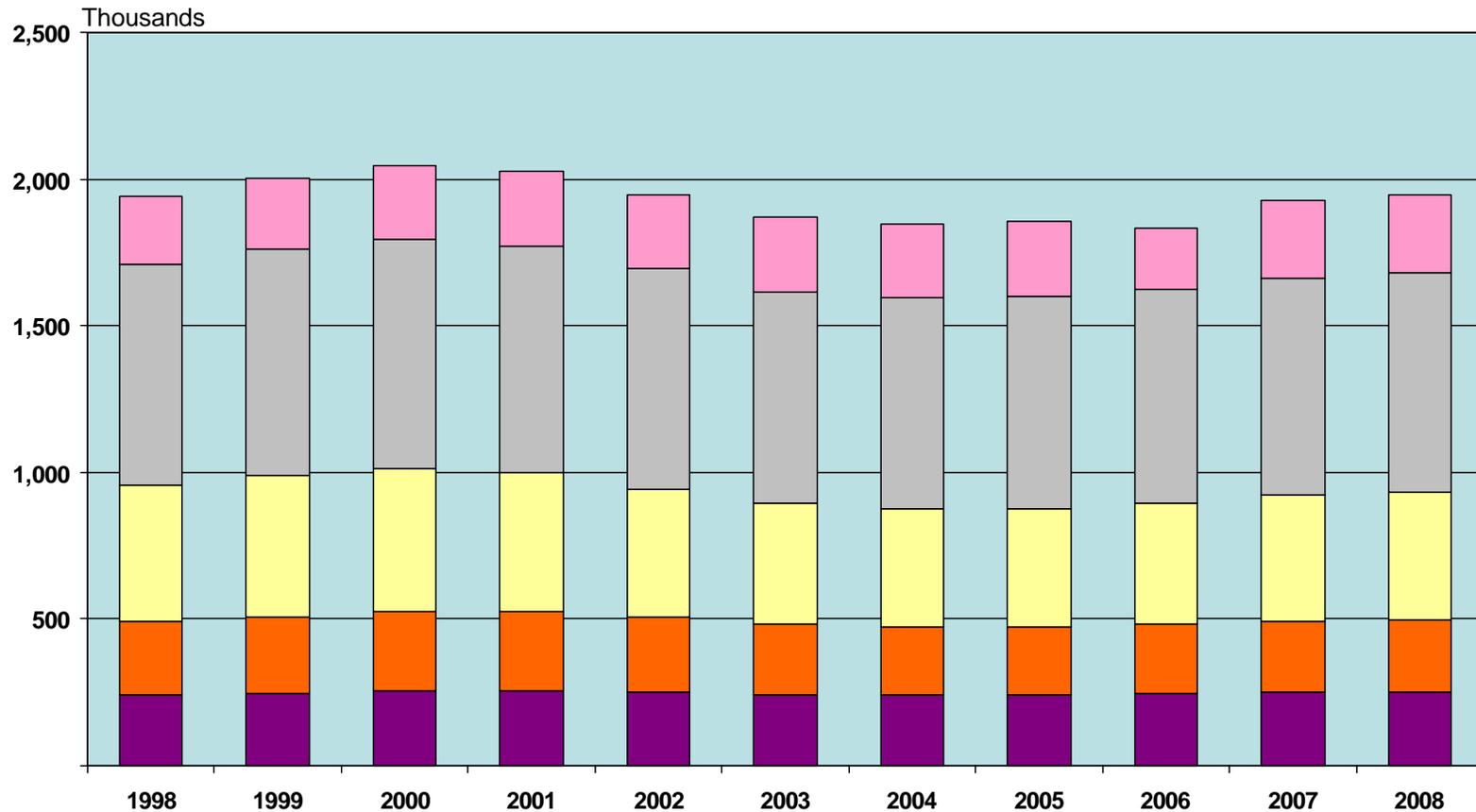
10-Year Volume Changes ~ 1998 - 2008

Port Authority of New York & New Jersey (PANYNJ)

Manhattan - N.J. Facilities Daily Volumes



New York City Motor Vehicle Registrations 1998-2008



	Staten Is.	232,790	240,258	247,848	252,657	252,542	252,422	254,108	255,794	210,182	262,318	263,633
	Queens	754,729	773,921	784,848	774,887	749,146	723,400	719,289	723,534	726,623	741,226	747,403
	Brooklyn	463,637	479,118	486,987	470,290	439,716	410,742	401,795	402,807	413,141	427,633	436,661
	Bronx	252,189	260,742	268,910	269,577	255,087	240,592	232,990	232,189	236,468	243,523	246,190
	Manhattan	239,308	247,395	255,780	257,531	249,716	241,995	240,388	242,200	246,956	251,136	250,915
	NYC Total	1,942,653	2,001,434	2,044,373	2,024,942	1,946,207	1,869,151	1,848,570	1,856,524	1,833,370	1,925,836	1,944,802

NYC Annual Growth Rate = - 0.64%
 Manhattan Annual Growth Rate = 0.02%

Historic Trends



Williamsburg 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 and fall 2008 yielded additional decreases of 1.4% and 2.7%, respectively, reducing daily volume to 1.831 million.
- Between 1948 and 1958, daily traffic growth to and from Manhattan averaged 4.9% per year. The largest annual growth rates occurred on the George Washington Bridge (+8.8%) and the R.F.K. Memorial Bridge Manhattan Plaza (+8.7%). The only annual decline was on the Manhattan Bridge, where daily traffic decreased 1.2% per year.
- Between 1958 and 1968, daily traffic growth to and from Manhattan averaged 2.2% per year. The largest annual growth rates occurred on the George Washington Bridge (+7.5%), and on the Brooklyn Bridge (+4.7%). The largest annual rate of decline was on the Washington Bridge over the Harlem River, where daily traffic decreased 5.8% per year.
- Between 1968 and 1978, daily traffic growth to and from Manhattan averaged 0.9% per year. The largest annual growth rates occurred on the Washington and Alexander Hamilton Bridges over the Harlem River (+2.9% and +2.6%, respectively). The biggest annual decline was on the Henry Hudson Bridge (-4.7% per year).
- Between 1978 and 1988, traffic growth on all Manhattan crossings averaged 2.2% per year, with positive growth rates at all twenty river crossings. The largest annual growth rate was on the Henry Hudson Bridge over the Harlem River (+6.1%). This was followed by the University Heights and Willis Avenue Bridges over the Harlem River (+3.5% each).
- Between 1988 and 1998, traffic growth all Manhattan river crossings averaged a relatively modest 0.5% per year. The largest annual growth rates were at the Queensboro Bridge over the East River (+2.7%), and the Holland Tunnel (+2.0%). The largest annual declines were on the Madison Avenue Bridge over the Harlem River (-2.5% per year), and the Williamsburg Bridge over the East River (-1.1% per year).
- Between 1948 and 2008, daily vehicle trips to and from Manhattan rose 173%, to 1,830,900 from 670,000 (1,160,900 additional daily trips). The biggest growth was on the PANYNJ's three trans-Hudson facilities, where traffic climbed by 339%. Traffic increased 88% on the four toll-free East River bridges, 160% on the nine toll-free Harlem River bridges, and 229% on the MTABT's four toll crossings.

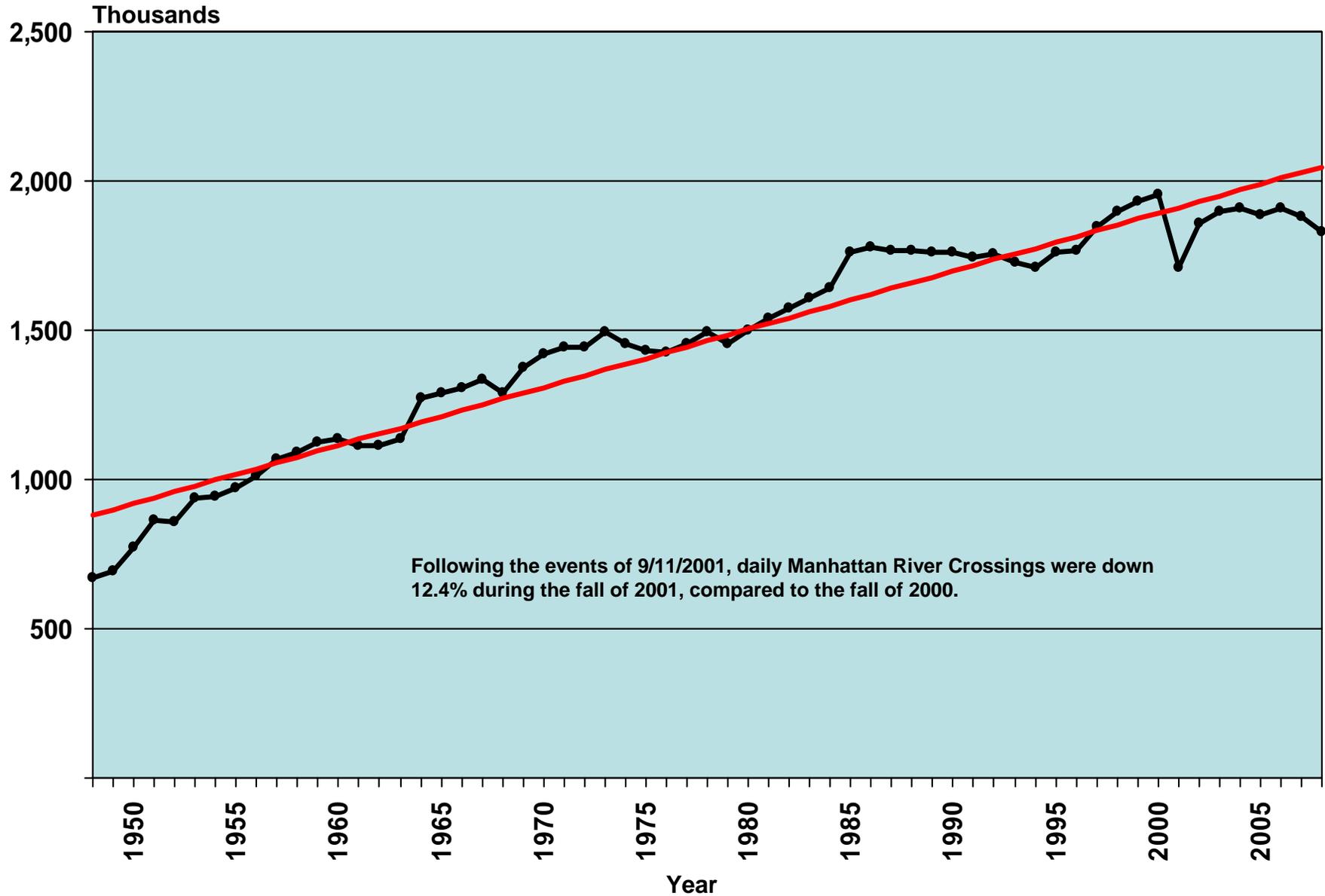
- During the same 60-year period, annual citywide subway ridership declined by 20%, to 1,624,000,000 from 2,031,000,000.

Total Manhattan Crossings
Average Daily Traffic Volumes
1948 - 2008

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

Average Daily Manhattan River Crossings

1948-2008 Average Annual Growth Rate 1.4%



10-Year Traffic Growth Rate Trends Manhattan Crossings 1948-2008

East River Bridges	1948-1958	1958-1968	1968-1978	1978-1988	1988-1998	1998-2008
Brooklyn	6.2%	4.7%	1.8%	2.9%	1.1%	- 0.4%
Manhattan	- 1.2%	0.4%	- 0.8%	0.6%	1.4%	- 1.1%
Queensboro	1.4%	2.6%	1.3%	1.9%	2.7%	- 0.5%
Williamsburg	5.8%	- 1.0%	1.5%	3.4%	- 1.1%	0.4%
Total	2.2%	1.7%	1.1%	2.2%	1.2%	- 0.4%

Harlem River Bridges						
Alexander Hamilton	<i>Opened Jan. 1963</i>		2.6%	2.2%	- 0.4%	0.9%
Broadway	2.6%	- 0.2%	1.3%	2.0%	0.2%	- 1.0%
Macombs Dam	5.7%	- 3.7%	- 1.1%	3.0%	- 0.2%	1.5%
Madison Avenue	5.6%	- 0.3%	1.8%	1.4%	- 2.5%	1.4%
Third Avenue	6.3%	- 1.7%	1.7%	1.8%	1.1%	- 2.5%
University Heights	5.2%	- 4.6%	2.0%	1.6%	1.5%	- 0.5%
Washington	4.3%	- 5.8%	2.9%	3.5%	0.9%	- 1.0%
Willis Avenue	4.1%	1.4%	- 1.2%	3.5%	1.8%	- 1.8%
145th Street	3.1%	- 3.5%	- 1.6%	2.5%	0.1%	- 2.7%
Total	4.8%	2.3%	1.3%	2.4%	0.3%	- 0.3%

MTABT Facilities						
Brooklyn-Battery Tunnel	<i>Opened 5/25/1950</i>		2.0%	- 1.9%	0.6%	- 0.7%
Henry Hudson Bridge	3.6%	- 3.2%	- 4.7%	6.1%	1.2%	1.4%
Queens-Midtown Tunnel	7.5%	1.6%	- 0.3%	0.4%	0.2%	1.3%
R. F. K. Memorial Bridge Manhattan Plaza *	8.7%	2.1%	- 1.2%	1.7%	- 0.7%	- 0.3%
Total	7.9%	0.8%	- 1.7%	1.7%	- 0.1%	0.6%

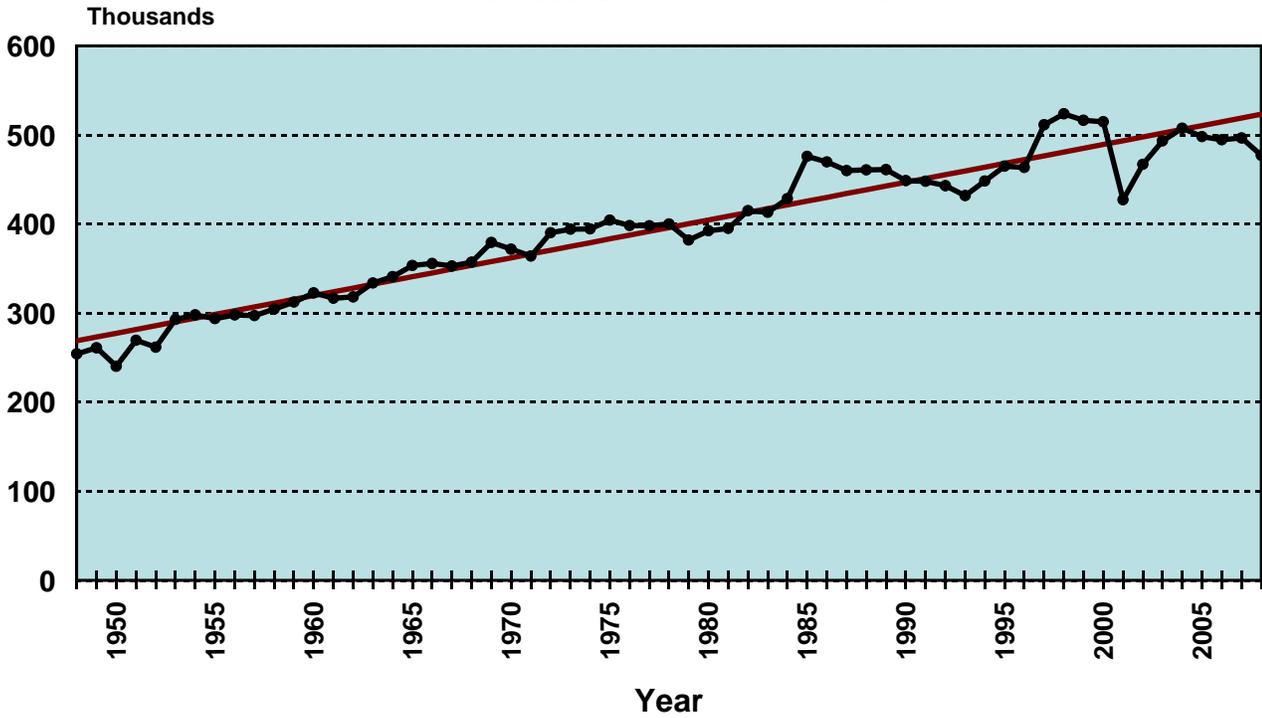
PANYNJ Facilities						
George Washington Bridge	8.8%	7.5%	1.9%	2.5%	0.2%	- 0.4%
Holland Tunnel	2.5%	- 0.5%	1.9%	2.4%	2.0%	0.7%
Lincoln Tunnel	7.0%	1.6%	1.8%	2.2%	0.2%	- 0.2%
Total	6.4%	3.9%	1.9%	2.4%	0.5%	- 0.2%

Grand Total	4.9%	2.2%	0.9%	2.2%	0.5%	- 0.1%
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* Formerly Triborough Bridge.

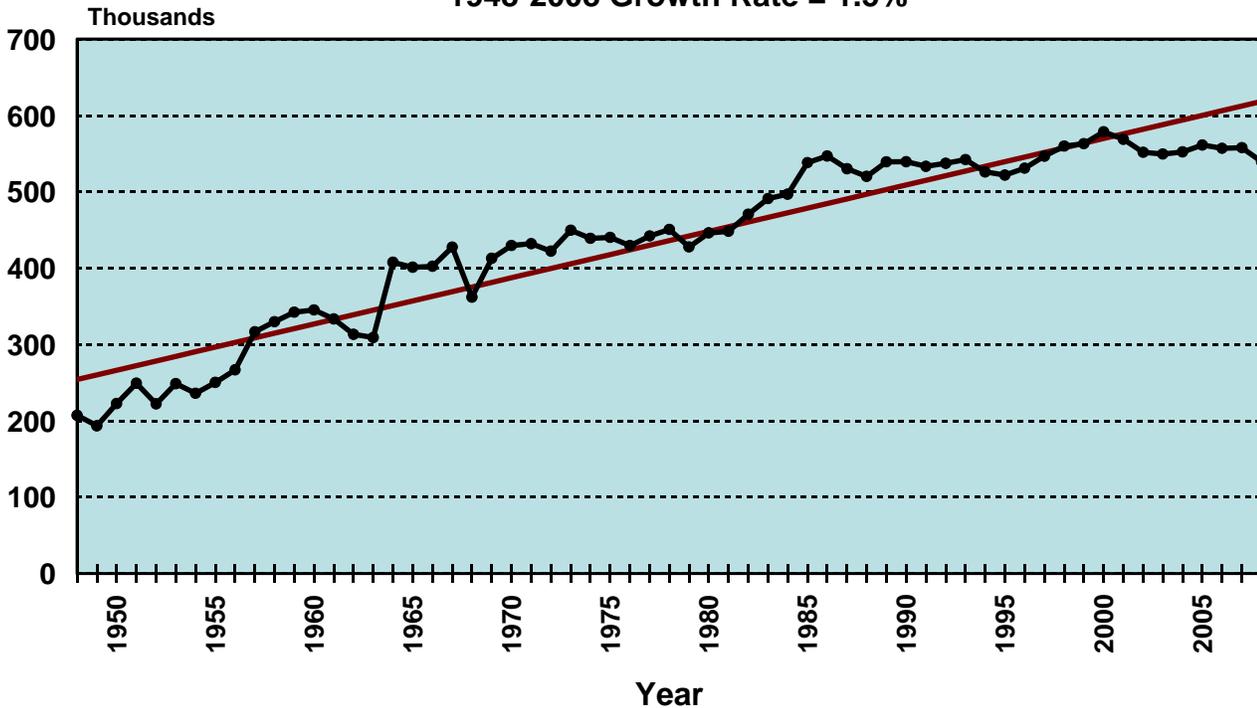
Average Daily Traffic Volumes Total of 4 East River Bridges

1948-2008 Growth Rate = 1.1%



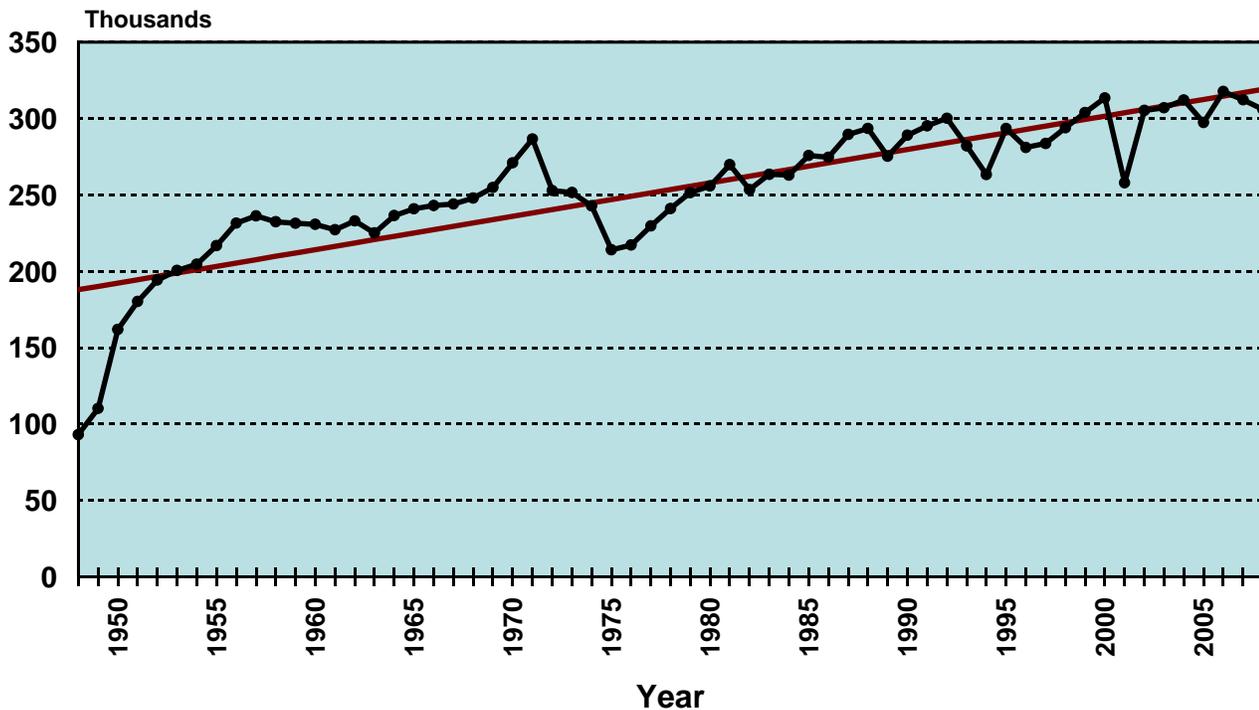
Average Daily Traffic Volumes Total of 9 Harlem River Bridges

1948-2008 Growth Rate = 1.5%



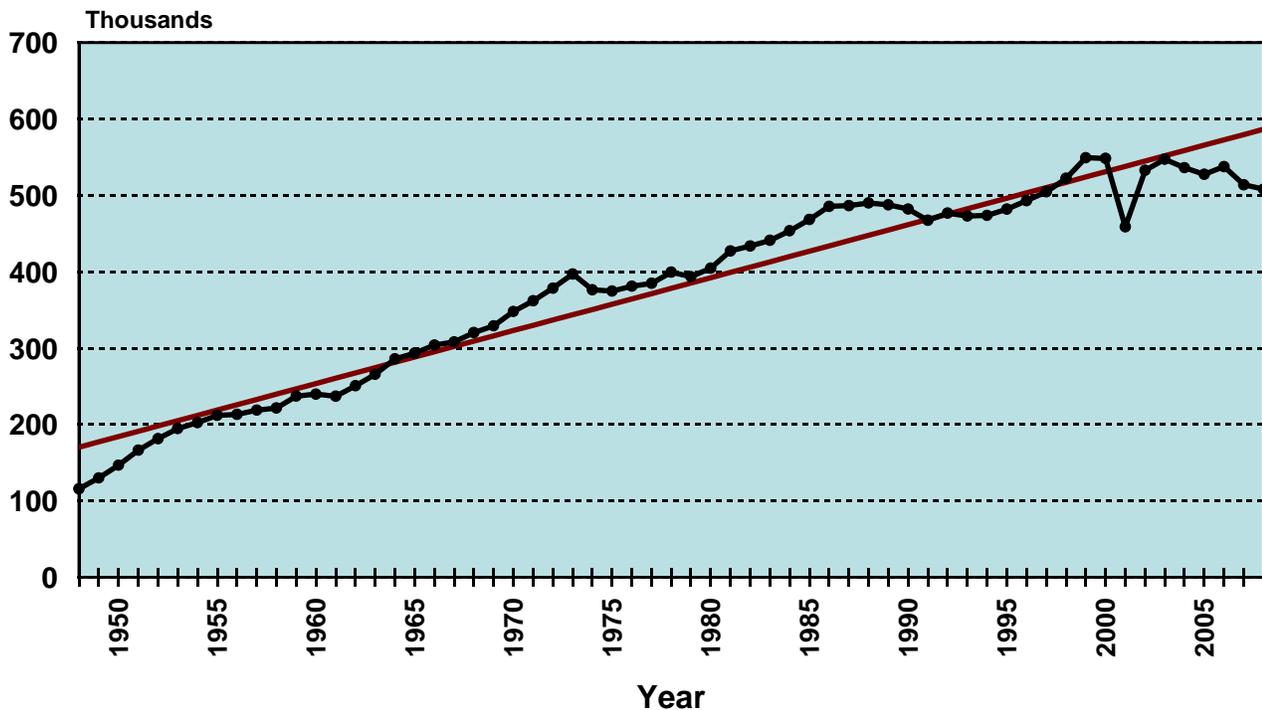
Average Daily Traffic Volumes Total of 4 Manhattan M.T.A.B.T. Facilities

1948-2008 Growth Rate = 0.9%



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

1948-2008 Growth Rate = 2.1%



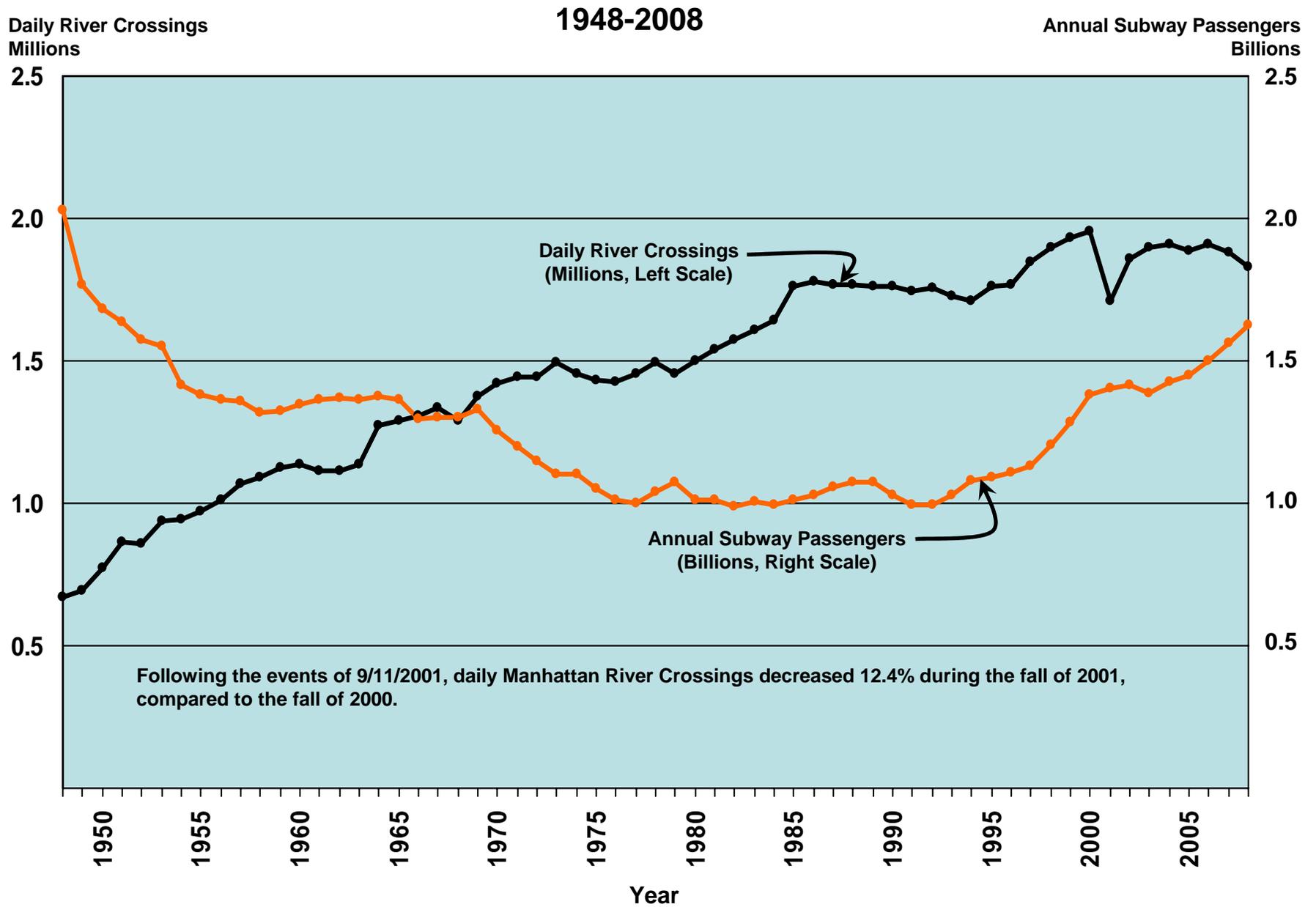
**Average Daily Manhattan River Motor Vehicle Crossings
vs.
Annual Subway Ridership**

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			
1980	1,499,344	1,009			

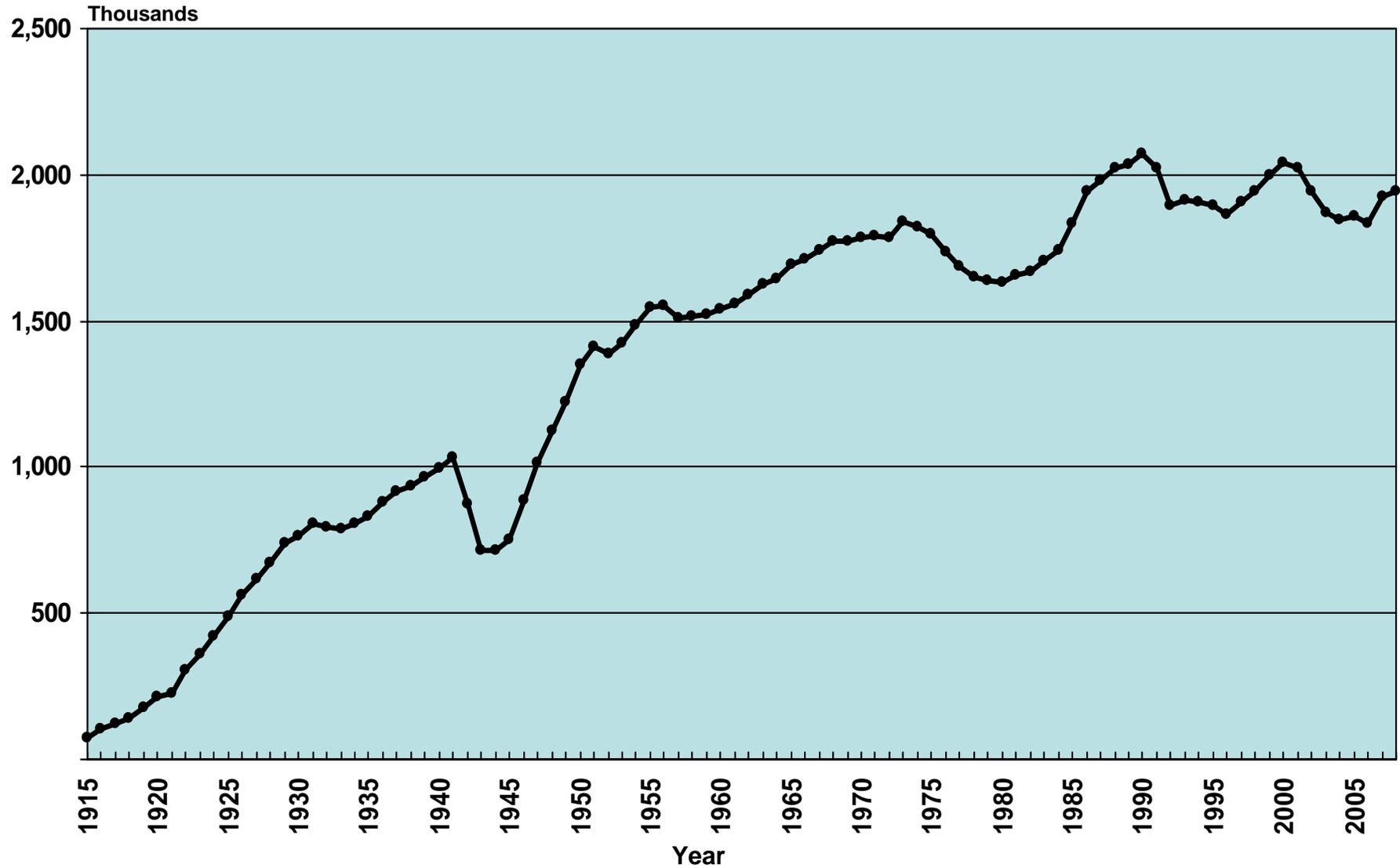
Percent Changes	Average Daily Crossings	Annual Subway Ridership	Period	Average Daily Crossings	Annual Subway Ridership
	+ 47.6 %	- 20.0 %	1950-1960	+ 11.1 %	+ 34.3 %
	+ 24.8 %	- 6.5 %	1960-1970	- 6.4 %	+ 17.6 %
	+ 5.6 %	- 19.8 %	1970-1980	+173.3 %	- 20.0 %
	+ 17.4 %	+ 1.9 %	1980-1990		

Source for Annual Subway Ridership: MTA

Vehicular River Crossings vs. Subway Ridership



New York City Motor Vehicle Registrations 1915-2008



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 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

\$ 0.85 discount on MTABT facilities with EZ Pass.

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

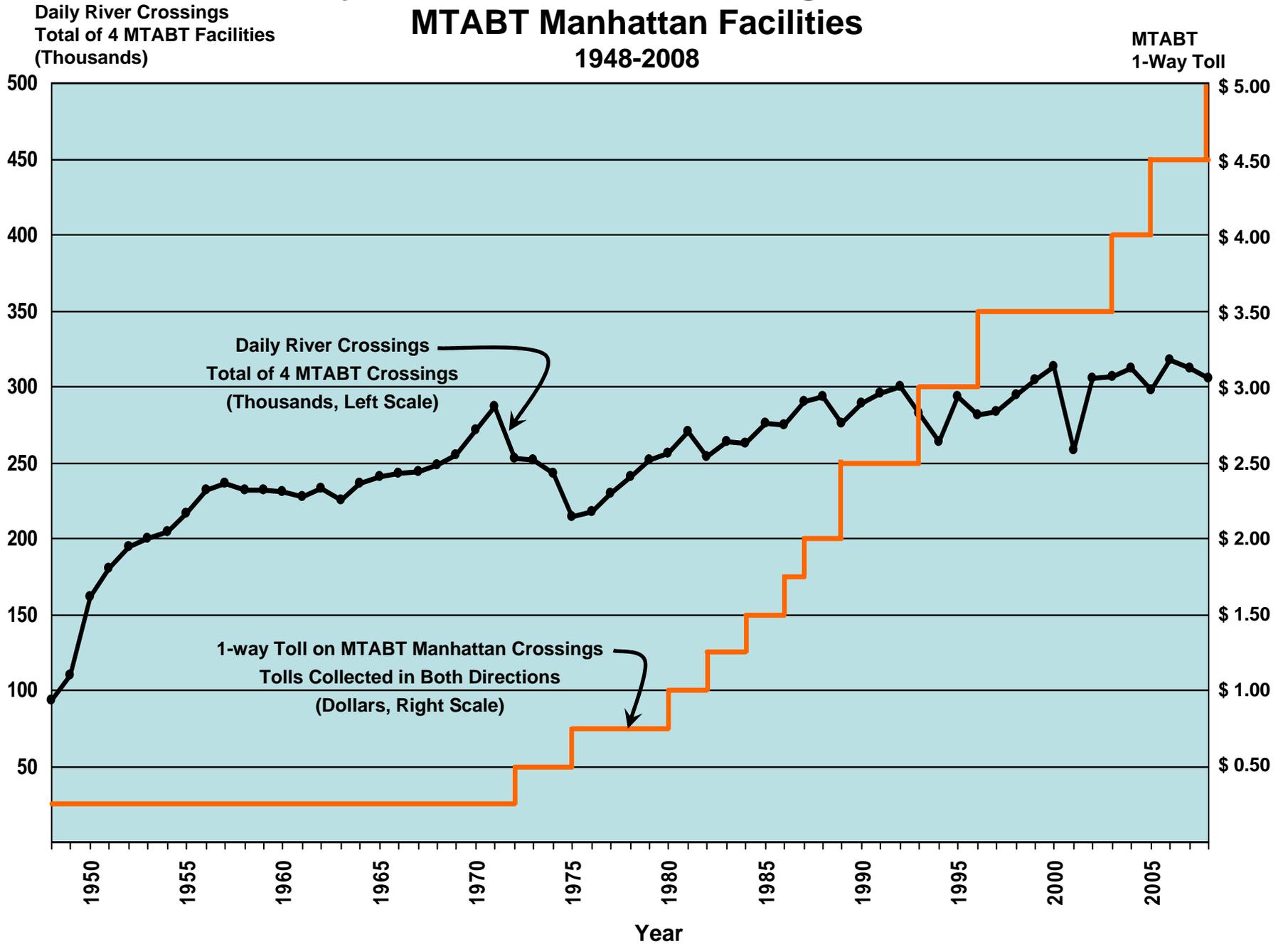
EZ-Pass discount \$ 2.00 during off-peak hours.

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

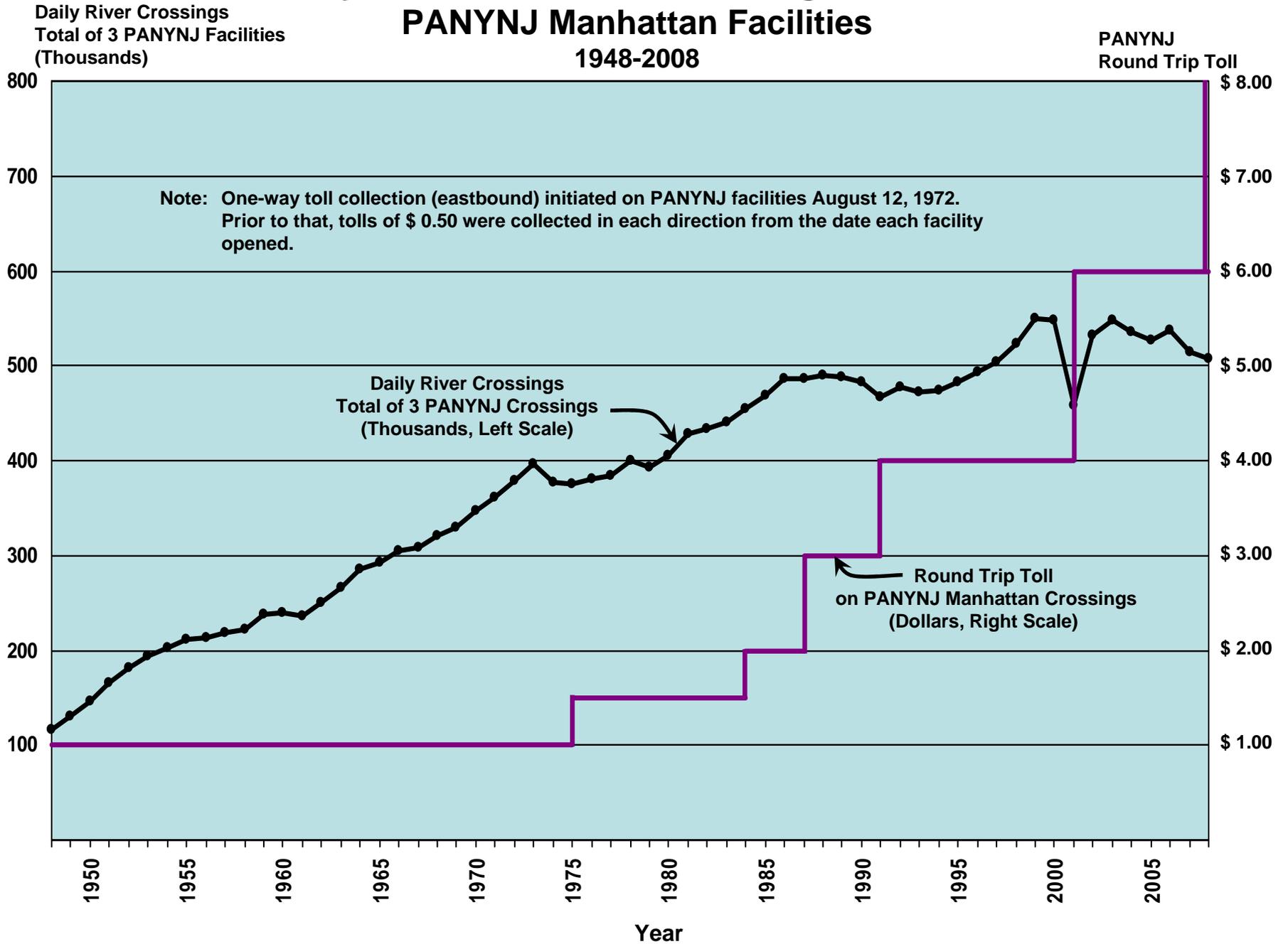
1948-2008



Daily Vehicular River Crossings vs. Tolls

PANYNJ Manhattan Facilities

1948-2008



East River Bridges



Brooklyn Bridge

East River Bridges
Average Daily Traffic Volumes
1948 - 2008

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

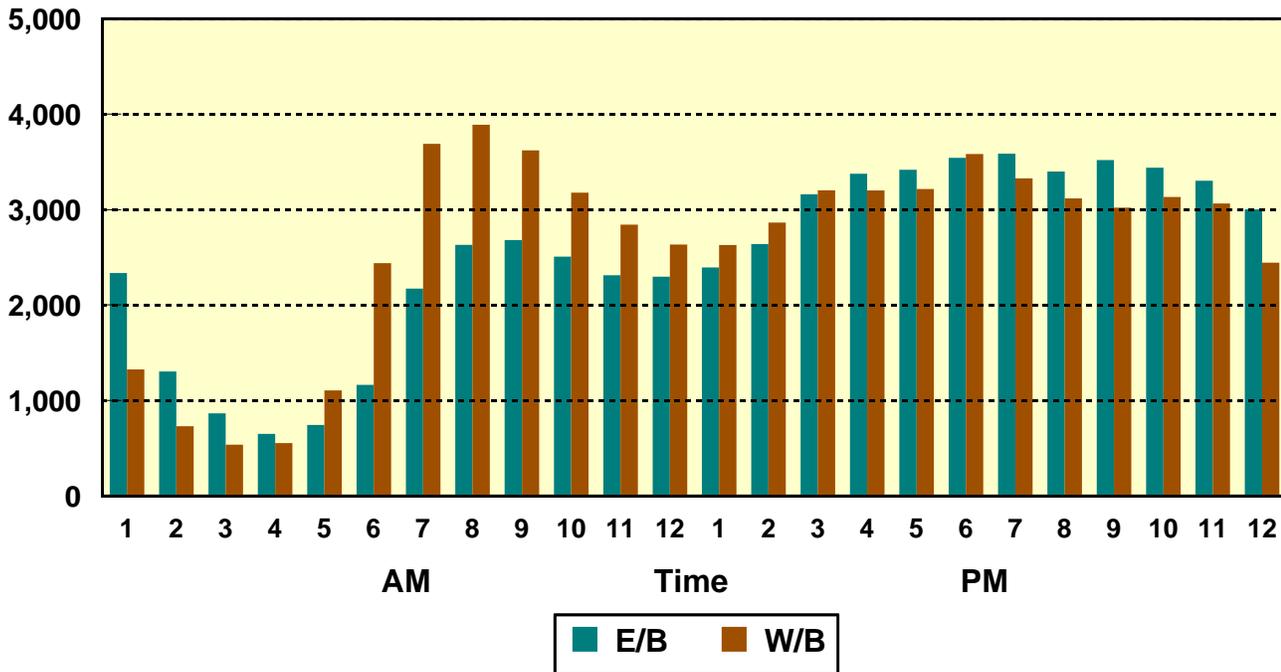
Hourly Vehicular Volumes Brooklyn Bridge - 2008

FHWA Classes ▶	<i>Eastbound to Brooklyn</i>						<i>Westbound to Manhattan</i>						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	2,332	1	1	0	0	2,334	1,308	13	0	4	0	1,325	3,659		
1-2am	1,298	5	1	0	0	1,304	726	4	0	0	0	730	2,034		
2-3am	861	4	0	0	0	865	529	6	0	2	0	537	1,402		
3-4am	642	6	1	0	0	649	543	8	0	2	0	553	1,202		
4-5am	732	9	2	0	0	743	1,092	7	2	4	0	1,105	1,848		
5-6am	1,148	14	1	0	0	1,163	2,358	42	31	7	0	2,438	3,601		
6-7am	2,130	32	9	1	0	2,172	3,561	43	84	2	0	3,690	5,862		
7-8am	2,576	34	20	1	0	2,631	3,820	25	41	3	0	3,889	6,520		
8-9am	2,616	42	22	1	0	2,681	3,579	29	10	3	0	3,621	6,302		
9-10am	2,436	44	27	1	0	2,508	3,137	26	10	6	0	3,179	5,687		
10-11am	2,268	28	16	0	0	2,312	2,802	23	12	6	0	2,843	5,155		
11-12am	2,232	43	22	0	0	2,297	2,581	33	13	7	0	2,634	4,931		
12-1pm	2,329	42	22	0	0	2,393	2,583	22	23	2	0	2,630	5,023		
1-2pm	2,571	39	29	1	0	2,640	2,766	37	51	10	0	2,864	5,504		
2-3pm	3,071	42	45	2	0	3,160	3,137	32	31	3	0	3,203	6,363		
3-4pm	3,302	35	38	0	0	3,375	3,128	36	36	1	0	3,201	6,576		
4-5pm	3,357	35	24	1	0	3,417	3,164	33	17	2	0	3,216	6,633		
5-6pm	3,484	38	21	0	0	3,543	3,540	24	16	2	0	3,582	7,125		
6-7pm	3,515	54	16	1	0	3,586	3,286	26	13	2	0	3,327	6,913		
7-8pm	3,357	37	5	0	0	3,399	3,096	15	6	0	0	3,117	6,516		
8-9pm	3,502	16	2	0	0	3,520	2,999	20	1	1	0	3,021	6,541		
9-10pm	3,424	14	1	0	0	3,439	3,104	25	3	1	0	3,133	6,572		
10-11pm	3,295	6	1	0	0	3,302	3,039	22	0	3	0	3,064	6,366		
11-12pm	2,996	6	2	0	0	3,004	2,417	20	1	4	0	2,442	5,446		
Totals	59,474	626	328	9	0	60,437	62,295	571	401	77	0	63,344	123,781		
7-10am	7,628	120	69	3	0	7,820	10,536	80	61	12	0	10,689	18,509		
10am-1pm	6,829	113	60	0	0	7,002	7,966	78	48	15	0	8,107	15,109		
1-4pm	8,944	116	112	3	0	9,175	9,031	105	118	14	0	9,268	18,443		
4-7pm	10,356	127	61	2	0	10,546	9,990	83	46	6	0	10,125	20,671		
7am-7pm	33,757	476	302	8	0	34,543	37,523	346	273	47	0	38,189	72,732		

Based on March 2006 Classification Survey Data

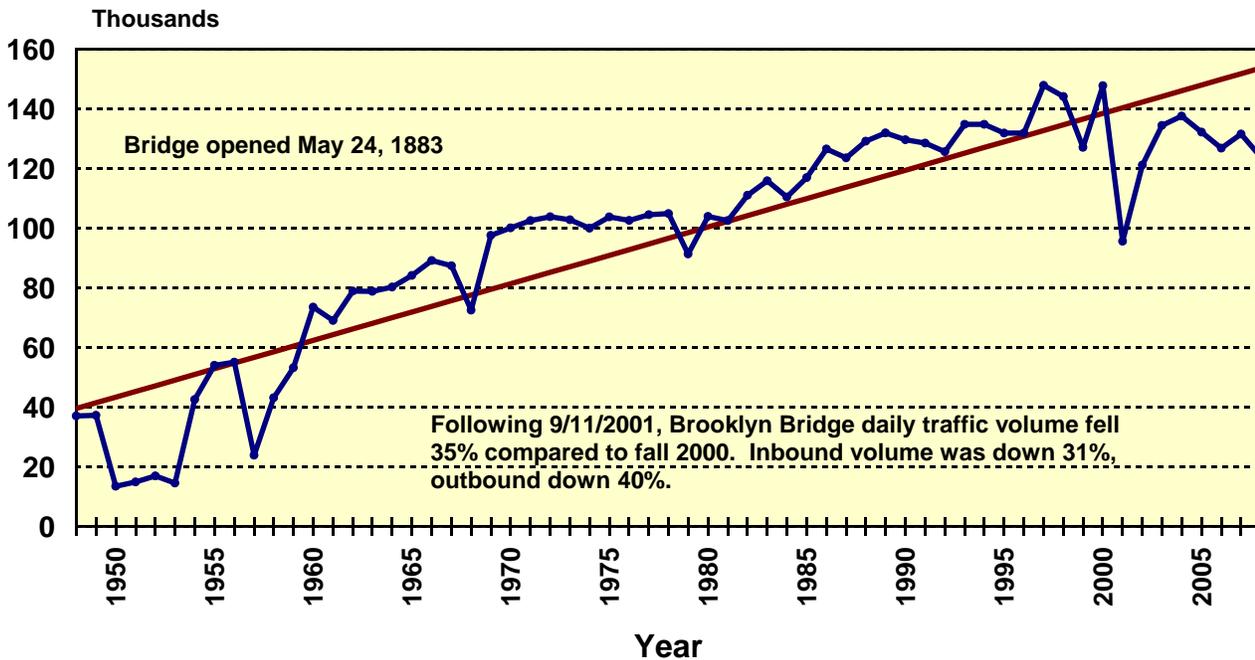
** Peak Volumes

Hourly Vehicular Volumes Brooklyn Bridge - 2008



Average Daily Traffic Volumes Brooklyn Bridge

1948-2008 Growth Rate = 2.3%



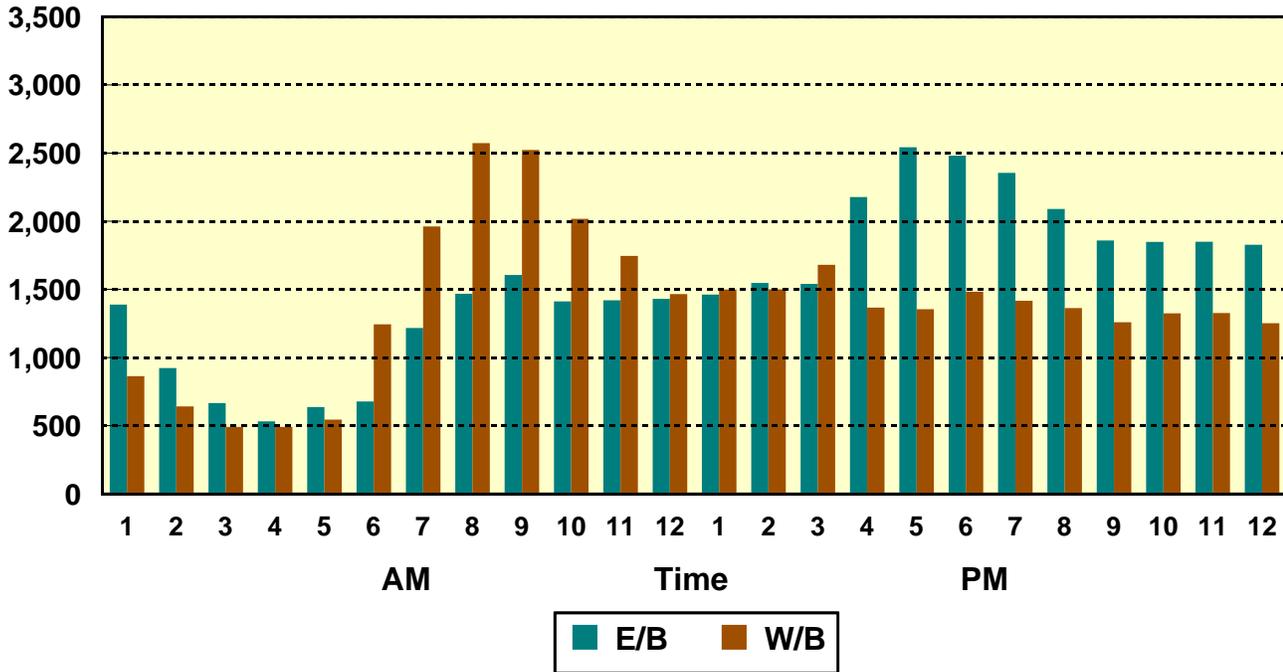
Hourly Vehicular Volumes Manhattan Bridge - 2008

FHWA Classes ▶	Eastbound to Brooklyn						Westbound to Manhattan						2-Way Grand Totals		
	Commuter Vans		Commercial Vans		Single	Tractor Trailers	Total Vehicles	Commuter Vans		Commercial Vans		Single		Tractor Trailers	Total Vehicles
	Autos & Motorcycles	Pickups Large SUVs	Buses	Unit Trucks	Autos & Motorcycles			Pickups Large SUVs	Buses	Unit Trucks					
1 & 2	3	4	5 - 7	8 - 13	1 & 2	3	4	5 - 7	8 - 13						
12-1am	1,345	17	8	15	3	1,388	850	9	1	3	0	863	2,251		
1-2am	901	11	3	7	1	923	629	9	1	2	0	641	1,564		
2-3am	644	9	2	10	1	666	480	5	1	5	0	491	1,157		
3-4am	501	10	2	14	4	531	477	7	2	5	0	491	1,022		
4-5am	610	6	2	18	1	637	528	5	4	8	0	545	1,182		
5-6am	652	6	6	13	1	678	987	20	15	189	33	1,244	1,922		
6-7am	1,083	27	31	68	8	1,217	1,536	49	56	280	40	1,961	3,178		
7-8am	1,240	42	48	130	8	1,468	2,048	55	63	388	19	2,573	4,041		
8-9am	1,355	31	52	156	12	1,606	2,069	44	48	343	19	2,523	4,129		
9-10am	1,140	31	55	174	11	1,411	1,580	38	36	343	21	2,018	3,429		
10-11am	1,161	22	49	176	12	1,420	1,326	36	36	319	28	1,745	3,165		
11-12am	1,160	31	49	178	12	1,430	1,115	38	26	273	14	1,466	2,896		
12-1pm	1,139	38	50	223	12	1,462	1,097	40	34	313	15	1,499	2,961		
1-2pm	1,213	42	53	229	10	1,547	1,069	38	43	337	14	1,501	3,048		
2-3pm	1,274	29	45	179	13	1,540	1,392	34	39	206	9	1,680	3,220		
3-4pm	1,855	46	91	180	6	2,178	1,183	25	28	119	10	1,365	3,543		
4-5pm	2,301	55	67	112	8	2,543	1,158	25	30	135	6	1,354	3,897		
5-6pm	2,287	44	62	80	9	2,482	1,294	25	41	119	3	1,482	3,964		
6-7pm	2,200	32	56	61	6	2,355	1,258	11	52	93	2	1,416	3,771		
7-8pm	1,954	27	56	48	6	2,091	1,233	18	39	73	0	1,363	3,454		
8-9pm	1,770	18	33	35	3	1,859	1,161	12	20	64	2	1,259	3,118		
9-10pm	1,778	23	22	22	4	1,849	1,257	11	14	41	1	1,324	3,173		
10-11pm	1,772	27	21	25	5	1,850	1,282	10	7	28	0	1,327	3,177		
11-12pm	1,768	15	15	25	4	1,827	1,231	4	3	13	1	1,252	3,079		
Totals	33,103	639	878	2,178	160	36,958	28,240	568	639	3,699	237	33,383	70,341		
7-10am	3,735	104	155	460	31	4,485	5,697	137	147	1,074	59	7,114	11,599		
10am-1pm	3,460	91	148	577	36	4,312	3,538	114	96	905	57	4,710	9,022		
1-4pm	4,342	117	189	588	29	5,265	3,644	97	110	662	33	4,546	9,811		
4-7pm	6,788	131	185	253	23	7,380	3,710	61	123	347	11	4,252	11,632		
7am-7pm	18,325	443	677	1,878	119	21,442	16,589	409	476	2,988	160	20,622	42,064		

Based on April 2006 Classification Survey Data

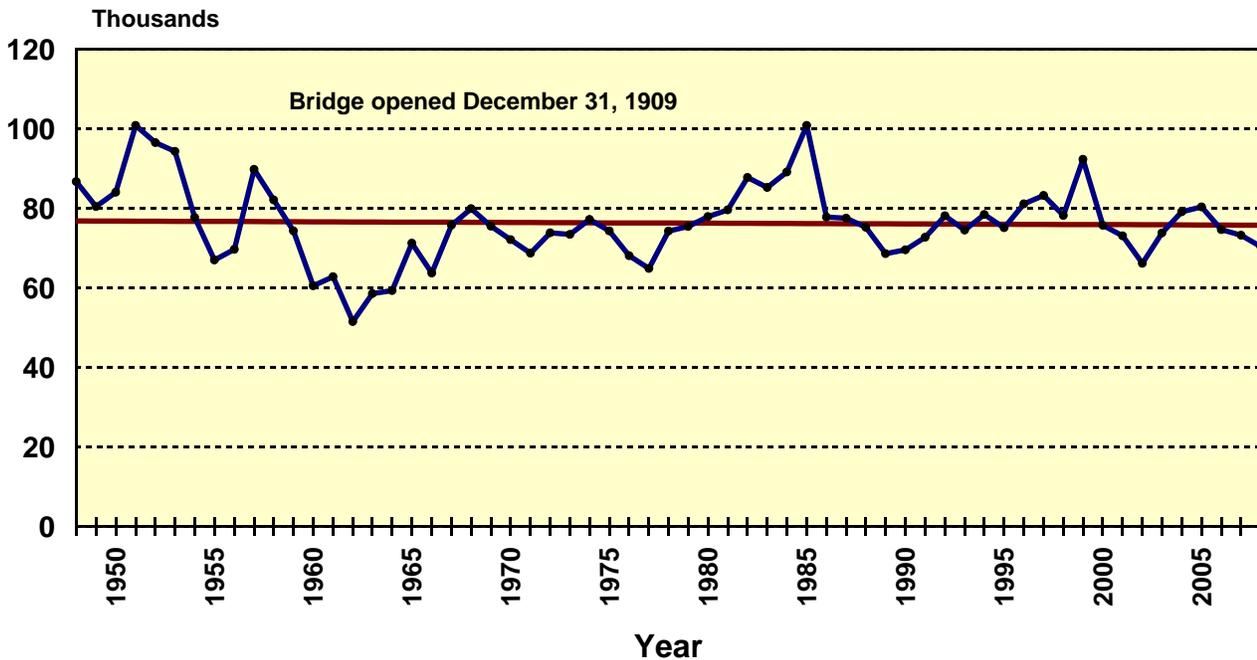
** Peak Volumes

Hourly Vehicular Volumes Manhattan Bridge - 2008



Average Daily Traffic Volumes Manhattan Bridge

1948-2008 Growth Rate = 0.0%



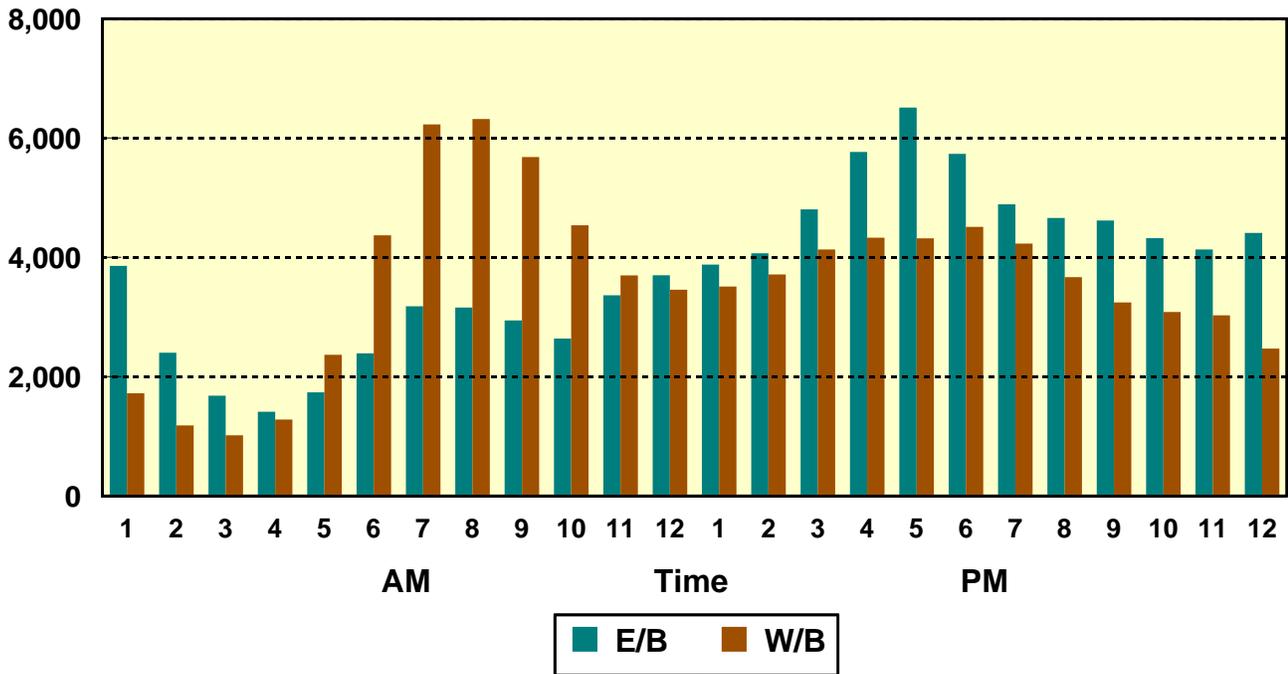
Hourly Vehicular Volumes Queensboro Bridge - 2008

FHWA Classes ▶	<i>Eastbound to Queens</i>						<i>Westbound to Manhattan</i>						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	Buses				Autos & Motorcycles	Pickups Large SUVs	Buses	Buses				
	1 & 2	3	4	5 - 7	8 - 13		1 & 2	3	4	5 - 7	8 - 13				
12-1am	3,763	44	14	36	0	3,857	1,682	16	11	9	1	1,719	5,576		
1-2am	2,342	22	10	24	1	2,399	1,147	14	6	13	1	1,181	3,580		
2-3am	1,633	9	4	31	1	1,678	964	10	5	36	0	1,015	2,693		
3-4am	1,353	7	2	49	0	1,411	1,188	8	13	68	1	1,278	2,689		
4-5am	1,638	16	14	66	0	1,734	2,167	29	21	147	1	2,365	4,099		
5-6am	2,231	37	17	104	1	2,390	4,034	53	29	230	24	4,370	6,760		
6-7am	2,949	32	24	172	1	3,178	5,852	77	37	246	16	6,228	9,406		
7-8am	2,866	51	28	208	4	3,157	5,869	69	52	294	34	6,318	** 9,475		
8-9am	2,631	50	39	215	7	2,942	5,244	73	59	277	28	5,681	8,623		
9-10am	2,354	38	35	204	5	2,636	4,166	72	44	218	37	4,537	7,173		
10-11am	2,961	61	55	276	11	3,364	3,353	63	33	214	32	3,695	7,059		
11-12am	3,321	57	43	272	5	3,698	3,155	54	26	185	36	3,456	7,154		
12-1pm	3,474	69	42	286	6	3,877	3,214	37	37	184	35	3,507	7,384		
1-2pm	3,642	82	46	293	5	4,068	3,460	49	34	132	38	3,713	7,781		
2-3pm	4,384	86	56	271	7	4,804	3,858	66	41	132	36	4,133	8,937		
3-4pm	5,326	86	59	288	8	5,767	4,063	51	43	150	23	4,330	10,097		
4-5pm	6,073	99	47	286	8	6,513	** 4,098	50	35	121	15	4,319	10,832	**	
5-6pm	5,360	76	45	243	10	5,734	4,328	40	38	79	24	4,509	10,243		
6-7pm	4,600	59	46	179	6	4,890	4,107	33	26	49	15	4,230	9,120		
7-8pm	4,366	76	54	156	9	4,661	3,563	26	29	36	12	3,666	8,327		
8-9pm	4,326	83	66	137	4	4,616	3,154	30	21	31	8	3,244	7,860		
9-10pm	4,083	65	50	119	3	4,320	3,000	25	16	35	5	3,081	7,401		
10-11pm	3,922	55	45	110	1	4,133	2,957	22	19	27	0	3,025	7,158		
11-12pm	4,282	51	27	49	1	4,410	2,421	13	14	20	1	2,469	6,879		
Totals	83,880	1,311	868	4,074	104	90,237	81,044	980	689	2,933	423	86,069	176,306		
7-10am	7,851	139	102	627	16	8,735	15,279	214	155	789	99	16,536	25,271		
10am-1pm	9,756	187	140	834	22	10,939	9,722	154	96	583	103	10,658	21,597		
1-4pm	13,352	254	161	852	20	14,639	11,381	166	118	414	97	12,176	26,815		
4-7pm	16,033	234	138	708	24	17,137	12,533	123	99	249	54	13,058	30,195		
7am-7pm	46,992	814	541	3,021	82	51,450	48,915	657	468	2,035	353	52,428	103,878		

Based on April 2006 Classification Survey Data

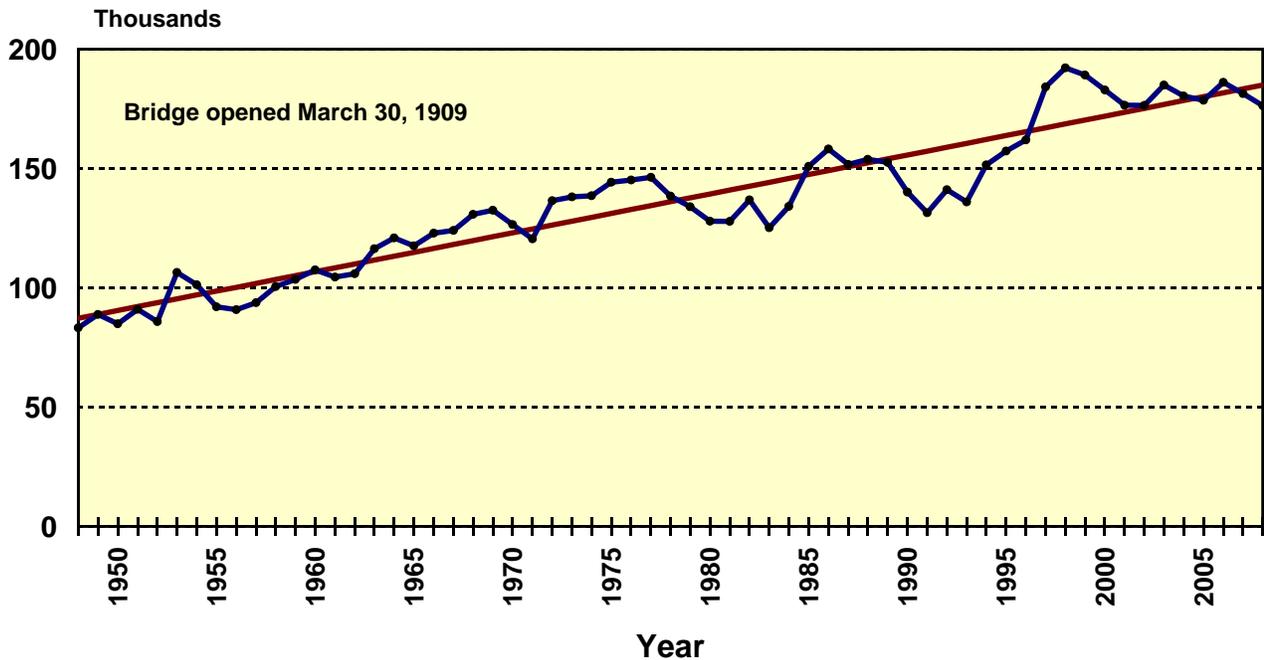
** Peak Volumes

Hourly Vehicular Volumes Queensboro Bridge - 2008



Average Daily Traffic Volumes Queensboro Bridge

1948-2008 Growth Rate = 1.3%



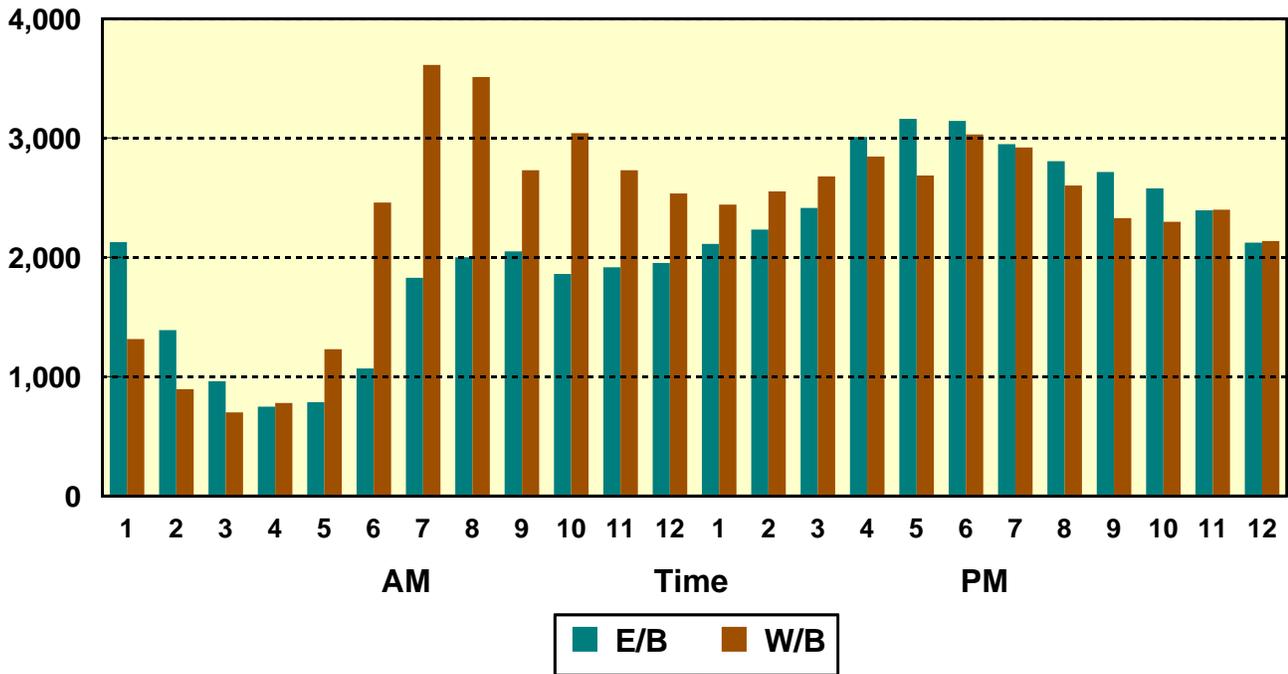
Hourly Vehicular Volumes Williamsburg Bridge - 2008

FHWA Classes ▶	<i>Eastbound to Brooklyn</i>						<i>Westbound to Manhattan</i>						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	2,118	6	1	2	0	2,127	1,310	4	1	0	0	1,315	3,442		
1-2am	1,385	3	1	0	1	1,390	889	3	1	1	0	894	2,284		
2-3am	951	5	3	2	1	962	692	5	1	2	0	700	1,662		
3-4am	732	7	3	3	2	747	772	4	0	1	1	778	1,525		
4-5am	774	6	2	3	0	785	1,221	6	1	1	1	1,230	2,015		
5-6am	1,047	6	8	6	0	1,067	2,443	7	7	1	2	2,460	3,527		
6-7am	1,756	14	30	24	3	1,827	3,568	18	18	9	0	3,613	5,440		
7-8am	1,894	22	48	36	1	2,001	3,443	33	21	15	0	3,512	5,513		
8-9am	1,951	22	44	31	3	2,051	2,666	31	19	14	1	2,731	4,782		
9-10am	1,755	27	44	31	2	1,859	2,974	29	20	14	3	3,040	4,899		
10-11am	1,779	36	61	39	1	1,916	2,664	34	19	9	4	2,730	4,646		
11-12am	1,824	31	54	41	2	1,952	2,481	28	17	8	1	2,535	4,487		
12-1pm	1,976	55	25	55	2	2,113	2,373	34	17	17	1	2,442	4,555		
1-2pm	2,089	64	28	49	3	2,233	2,483	33	20	16	1	2,553	4,786		
2-3pm	2,282	52	35	42	3	2,414	2,612	32	15	17	2	2,678	5,092		
3-4pm	2,853	64	37	52	3	3,009	2,768	30	21	23	3	2,845	5,854		
4-5pm	3,013	60	36	46	5	3,160	2,610	37	19	19	1	2,686	5,846		
5-6pm	3,020	57	34	32	1	3,144	2,941	43	26	19	2	3,031	6,175		
6-7pm	2,862	38	24	23	2	2,949	2,850	35	17	17	2	2,921	5,870		
7-8pm	2,734	29	23	19	1	2,806	2,550	26	15	12	0	2,603	5,409		
8-9pm	2,657	24	19	13	2	2,715	2,305	14	5	4	1	2,329	5,044		
9-10pm	2,546	13	12	5	2	2,578	2,277	13	4	3	1	2,298	4,876		
10-11pm	2,375	10	4	3	2	2,394	2,379	14	2	3	1	2,399	4,793		
11-12pm	2,115	6	1	2	0	2,124	2,125	8	2	2	0	2,137	4,261		
Totals	48,488	657	577	559	42	50,323	55,396	521	288	227	28	56,460	106,783		
7-10am	5,600	71	136	98	6	5,911	9,083	93	60	43	4	9,283	15,194		
10am-1pm	5,579	122	140	135	5	5,981	7,518	96	53	34	6	7,707	13,688		
1-4pm	7,224	180	100	143	9	7,656	7,863	95	56	56	6	8,076	15,732		
4-7pm	8,895	155	94	101	8	9,253	8,401	115	62	55	5	8,638	17,891		
7am-7pm	27,298	528	470	477	28	28,801	32,865	399	231	188	21	33,704	62,505		

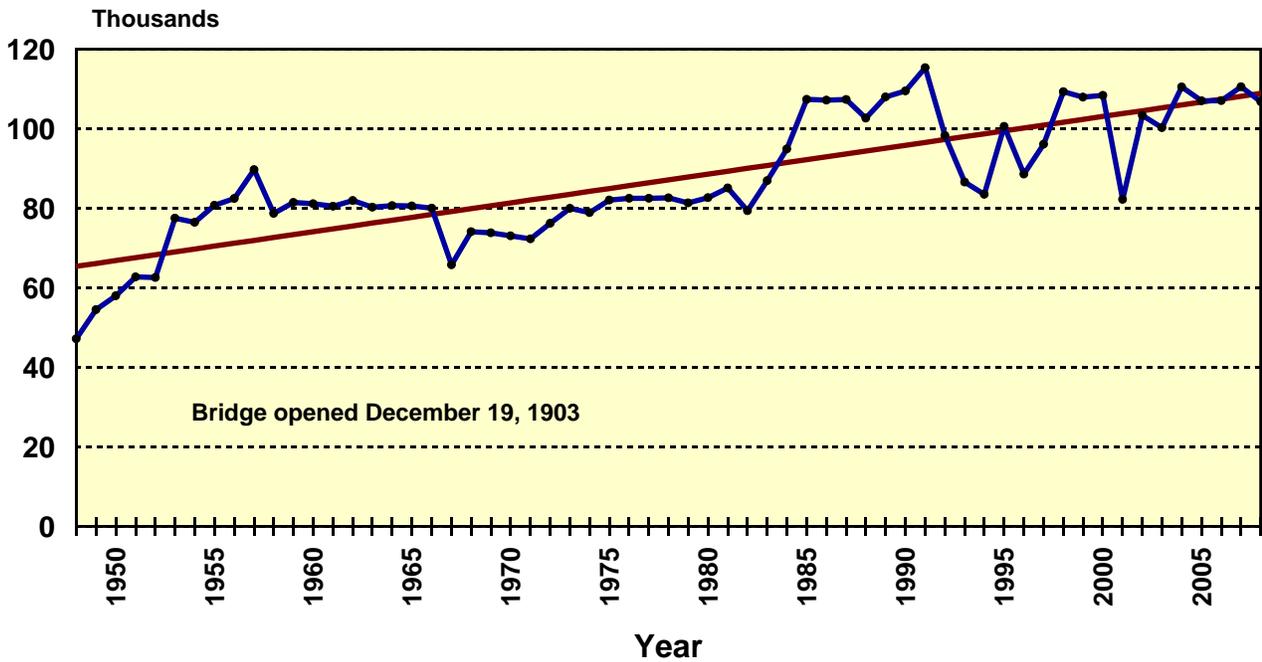
Based on March 2006 Classification Survey Data

** Peak Volumes

Hourly Vehicular Volumes Williamsburg Bridge - 2008



Average Daily Traffic Volumes Williamsburg Bridge 1948-2008 Growth Rate = 0.9%



Harlem River Bridges



University Heights Bridge

Harlem River Bridges
Average Daily Traffic Volumes
1948 - 2008

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

Harlem River Bridges (cont'd)
Average Daily Traffic Volumes
1948 - 2008

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

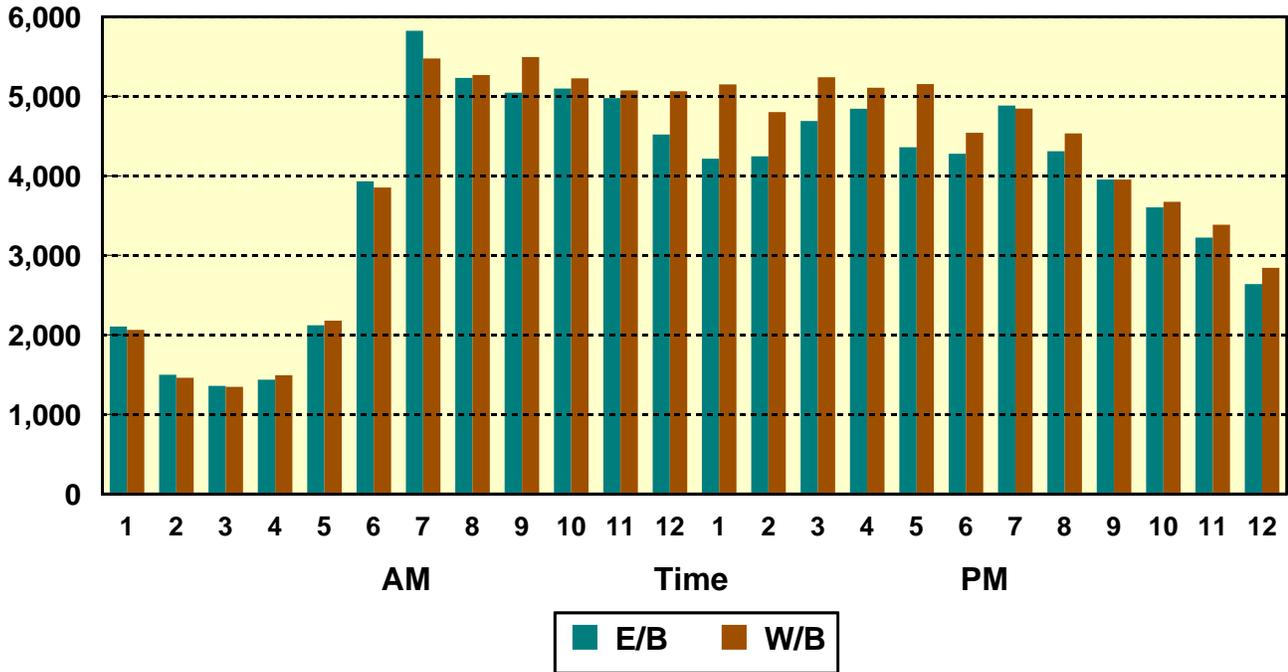
Hourly Vehicular Volumes Alexander Hamilton Bridge - 2008

	<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	---	---	---	---	---	2,105	---	---	---	---	---	2,062	4,167
1-2am	---	---	---	---	---	1,497	---	---	---	---	---	1,460	2,957
2-3am	---	---	---	---	---	1,358	---	---	---	---	---	1,346	2,704
3-4am	---	---	---	---	---	1,436	---	---	---	---	---	1,491	2,927
4-5am	---	---	---	---	---	2,120	---	---	---	---	---	2,177	4,297
5-6am	---	---	---	---	---	3,931	---	---	---	---	---	3,854	7,785
6-7am	---	---	---	---	---	5,823 **	---	---	---	---	---	5,476	11,299 **
7-8am	4,084	13	236	780	118	5,231	4,456	10	95	473	234	5,268	10,499
8-9am	3,666	5	239	921	214	5,045	4,700	38	38	545	173	5,494 **	10,539
9-10am	3,568	5	228	1,169	128	5,098	4,016	58	34	882	235	5,225	10,323
10-11am	4,469	3	106	349	50	4,977	4,391	31	19	474	159	5,074	10,051
11-12am	3,389	10	243	753	125	4,520	3,587	16	23	1,119	318	5,063	9,583
12-1pm	3,656	0	103	412	45	4,216	4,363	12	11	609	154	5,149	9,365
1-2pm	3,235	7	154	772	77	4,245	3,585	13	26	932	244	4,800	9,045
2-3pm	3,631	6	193	753	106	4,689	3,911	22	48	1,049	210	5,240	9,929
3-4pm	4,318	7	87	337	95	4,844	4,448	24	18	523	95	5,108	9,952
4-5pm	3,655	5	137	457	105	4,359	3,886	4	45	980	237	5,152	9,511
5-6pm	3,730	5	105	351	87	4,278	3,561	2	29	794	155	4,541	8,819
6-7pm	4,105	9	215	471	83	4,883	4,169	3	24	505	145	4,846	9,729
7-8pm	---	---	---	---	---	4,309	---	---	---	---	---	4,533	8,842
8-9pm	---	---	---	---	---	3,954	---	---	---	---	---	3,954	7,908
9-10pm	---	---	---	---	---	3,604	---	---	---	---	---	3,674	7,278
10-11pm	---	---	---	---	---	3,224	---	---	---	---	---	3,386	6,610
11-12pm	---	---	---	---	---	2,637	---	---	---	---	---	2,842	5,479
Totals	---	---	---	---	---	92,383	---	---	---	---	---	97,215	189,598
7-10am	11,318	23	703	2,870	460	15,374	13,172	106	167	1,900	642	15,987	31,361
10am-1pm	11,514	13	452	1,514	220	13,713	12,341	59	53	2,202	631	15,286	28,999
1-4pm	11,184	20	434	1,862	278	13,778	11,944	59	92	2,504	549	15,148	28,926
4-7pm	11,490	19	457	1,279	275	13,520	11,616	9	98	2,279	537	14,539	28,059
7am-7pm	45,506	75	2,046	7,525	1,233	56,385	49,073	233	410	8,885	2,359	60,960	117,345

Based on 1989 Classification Survey Data

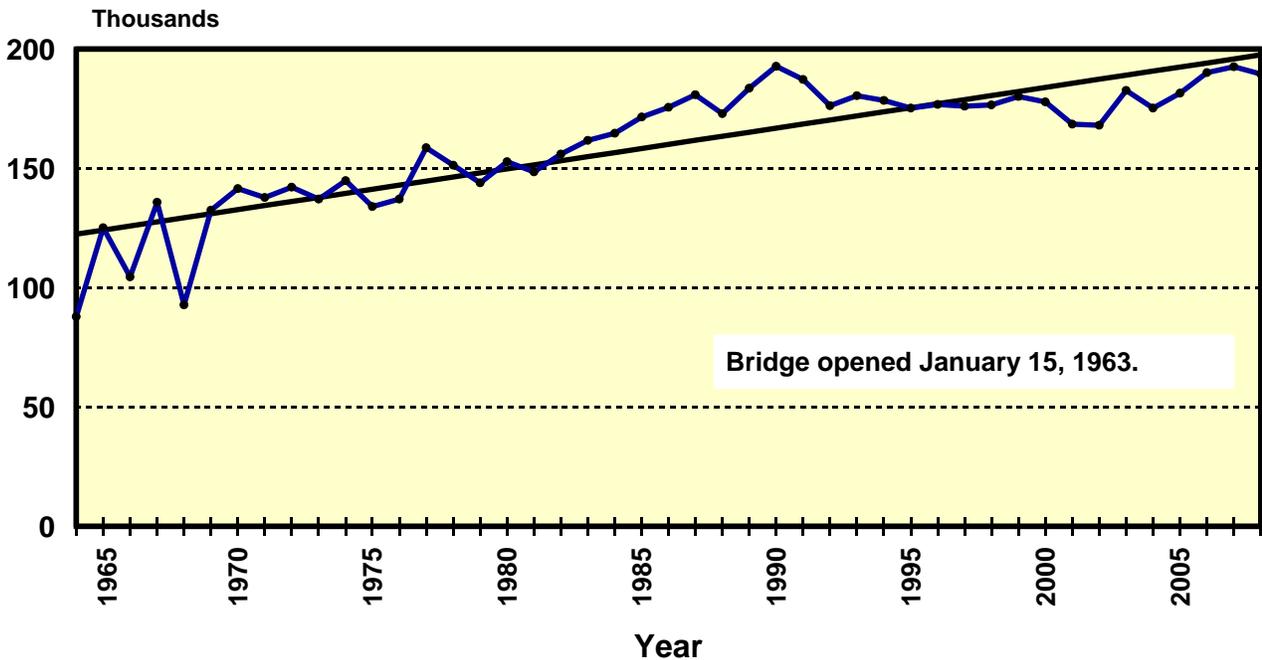
** Peak Volumes

Hourly Vehicular Volumes Alexander Hamilton Bridge - 2008



Average Daily Traffic Volumes Alexander Hamilton Bridge

1964-2008 Growth Rate = 1.1%



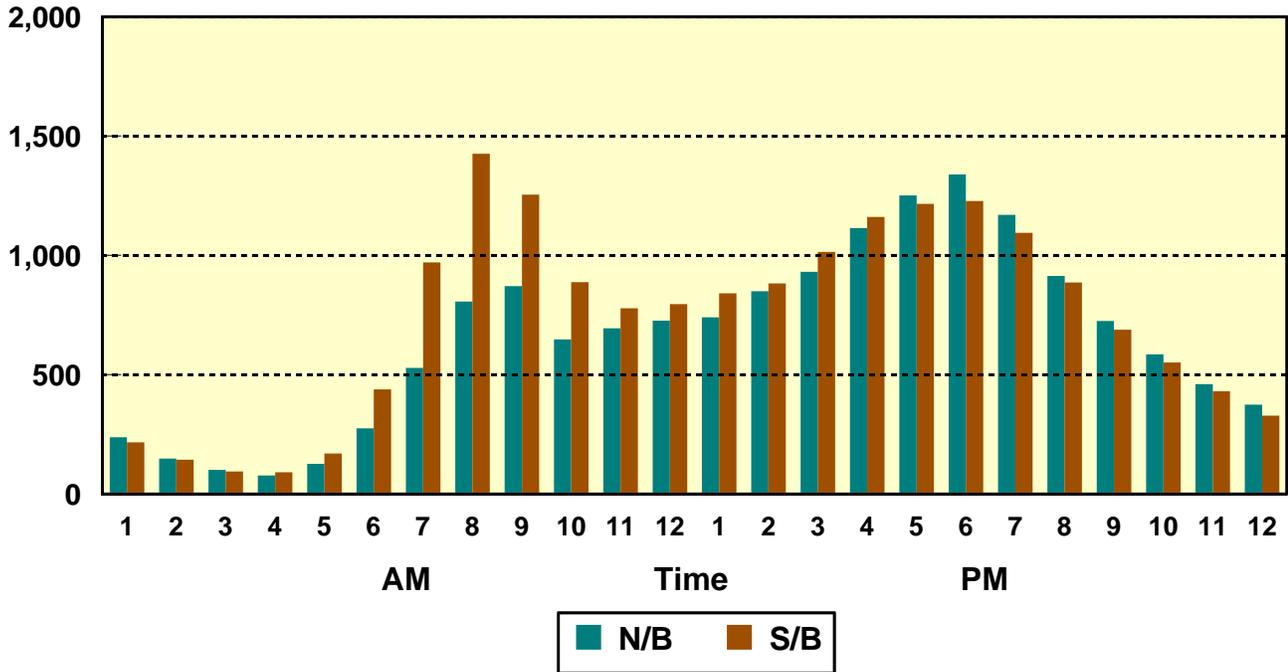
Hourly Vehicular Volumes Broadway Bridge - 2008

	Northbound to Bronx						Southbound to Manhattan						2-Way Totals
	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	
12-1am	---	---	---	---	---	237	---	---	---	---	---	216	453
1-2am	---	---	---	---	---	148	---	---	---	---	---	143	291
2-3am	---	---	---	---	---	101	---	---	---	---	---	94	195
3-4am	---	---	---	---	---	77	---	---	---	---	---	91	168
4-5am	---	---	---	---	---	126	---	---	---	---	---	169	295
5-6am	---	---	---	---	---	275	---	---	---	---	---	438	713
6-7am	---	---	---	---	---	528	---	---	---	---	---	970	1,498
7-8am	657	36	20	66	27	806	1,257	58	40	29	42	1,426 **	2,232
8-9am	741	54	19	32	25	871	1,113	38	26	39	38	1,254	2,125
9-10am	555	19	2	22	49	647	757	29	22	45	34	887	1,534
10-11am	623	15	2	32	22	694	708	19	10	33	8	778	1,472
11-12am	634	19	8	26	39	726	658	22	22	46	47	795	1,521
12-1pm	676	19	5	19	21	740	791	20	4	16	10	841	1,581
1-2pm	768	24	3	27	27	849	816	23	9	19	15	882	1,731
2-3pm	804	23	1	34	69	931	915	28	22	32	17	1,014	1,945
3-4pm	1,032	25	9	13	35	1,114	1,089	31	13	18	10	1,161	2,275
4-5pm	1,108	39	27	23	54	1,251	1,100	29	20	34	33	1,216	2,467
5-6pm	1,227	28	8	12	64	1,339 **	1,128	29	30	18	23	1,228	2,567 **
6-7pm	1,036	20	0	12	102	1,170	1,018	27	24	17	8	1,094	2,264
7-8pm	---	---	---	---	---	913	---	---	---	---	---	886	1,799
8-9pm	---	---	---	---	---	725	---	---	---	---	---	688	1,413
9-10pm	---	---	---	---	---	585	---	---	---	---	---	550	1,135
10-11pm	---	---	---	---	---	460	---	---	---	---	---	430	890
11-12pm	---	---	---	---	---	374	---	---	---	---	---	328	702
Totals	---	---	---	---	---	15,687	---	---	---	---	---	17,579	33,266
7-10am	1,953	109	41	120	101	2,324	3,127	125	88	113	114	3,567	5,891
10am-1pm	1,933	53	15	77	82	2,160	2,157	61	36	95	65	2,414	4,574
1-4pm	2,604	72	13	74	131	2,894	2,820	82	44	69	42	3,057	5,951
4-7pm	3,371	87	35	47	220	3,760	3,246	85	74	69	64	3,538	7,298
7am-7pm	9,861	321	104	318	534	11,138	11,350	353	242	346	285	12,576	23,714

Based on 1989 Classification Survey Data

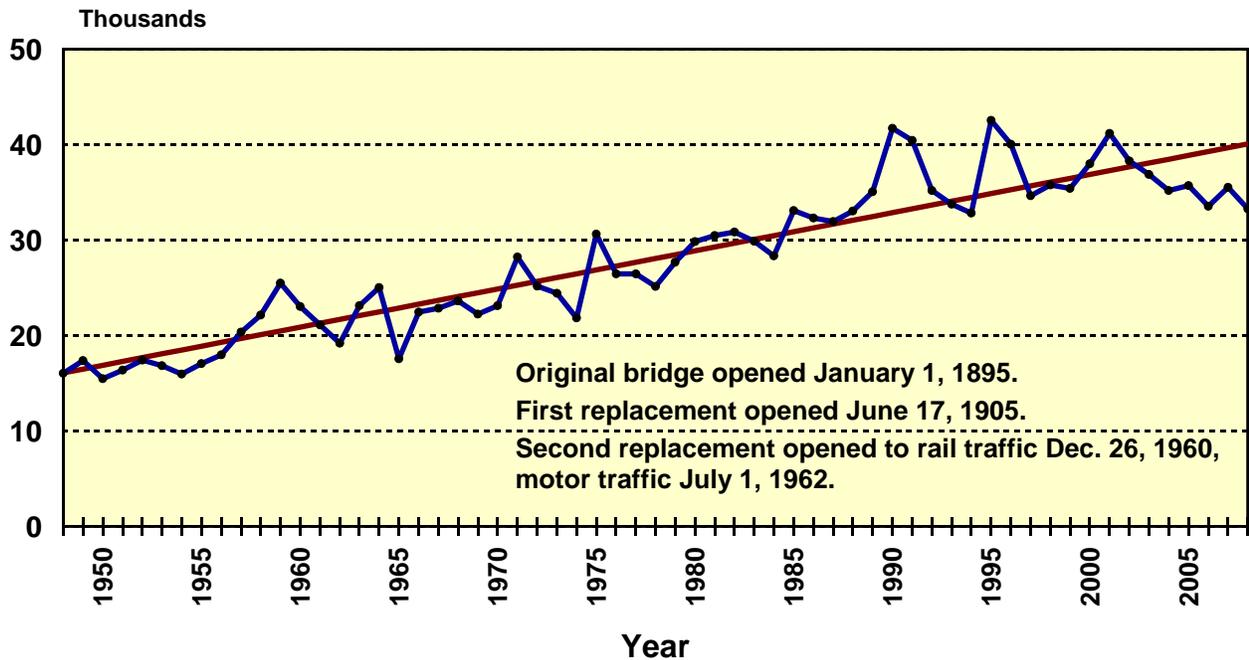
** Peak Volumes

Hourly Vehicular Volumes Broadway Bridge - 2008



Average Daily Traffic Volumes Broadway Bridge

1948-2008 Growth Rate = 1.5%



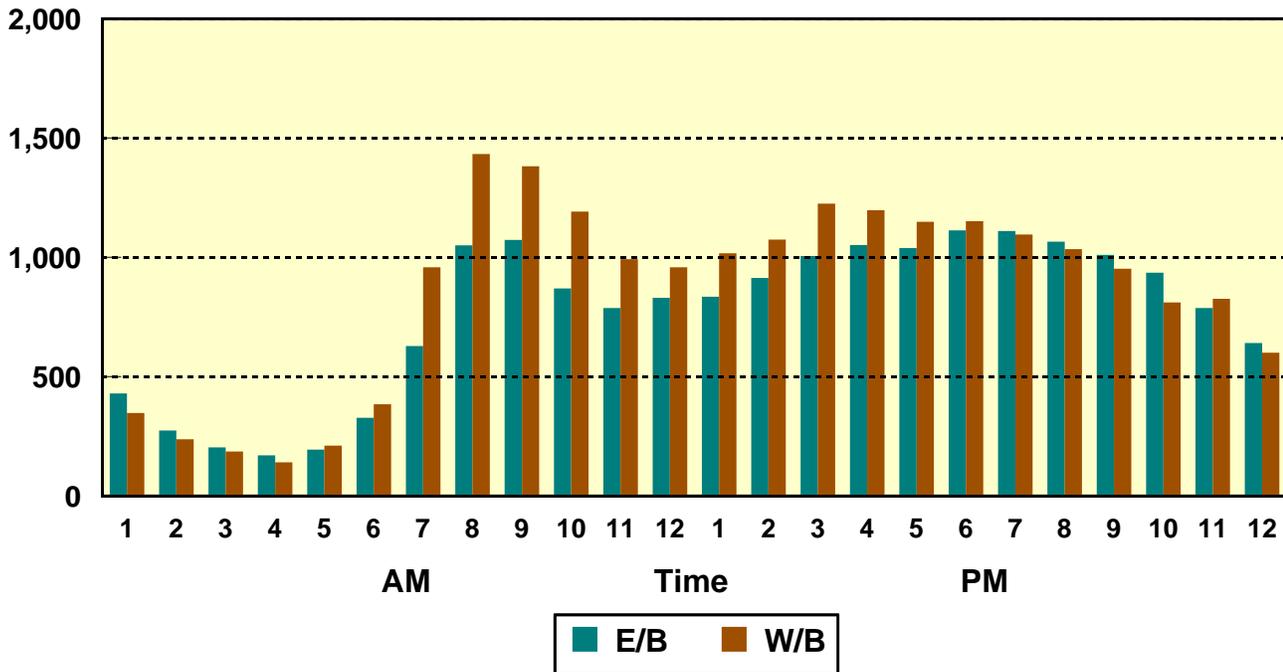
Hourly Vehicular Volumes Macombs Dam Bridge - 2008

	<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	---	---	---	---	---	429	---	---	---	---	---	347	776
1-2am	---	---	---	---	---	274	---	---	---	---	---	237	511
2-3am	---	---	---	---	---	203	---	---	---	---	---	186	389
3-4am	---	---	---	---	---	170	---	---	---	---	---	141	311
4-5am	---	---	---	---	---	194	---	---	---	---	---	211	405
5-6am	---	---	---	---	---	327	---	---	---	---	---	384	711
6-7am	---	---	---	---	---	628	---	---	---	---	---	958	1,586
7-8am	862	35	22	53	78	1,050	1,106	35	5	78	209	1,433 **	2,483 **
8-9am	897	13	16	55	92	1,073	1,122	10	2	89	159	1,382	2,455
9-10am	744	16	12	47	50	869	891	18	12	103	168	1,192	2,061
10-11am	711	7	2	30	37	787	885	8	7	39	53	992	1,779
11-12am	686	9	11	57	67	830	791	6	13	70	78	958	1,788
12-1pm	762	9	5	25	34	835	937	17	3	19	41	1,017	1,852
1-2pm	855	2	6	26	24	913	952	19	7	21	76	1,075	1,988
2-3pm	835	13	20	66	72	1,006	1,045	23	16	51	90	1,225	2,231
3-4pm	918	19	8	49	58	1,052	1,094	34	9	20	41	1,198	2,250
4-5pm	806	7	26	69	131	1,039	1,008	9	28	36	68	1,149	2,188
5-6pm	935	8	13	33	124	1,113 **	1,056	12	9	17	58	1,152	2,265
6-7pm	1,035	3	6	24	42	1,110	982	6	11	22	75	1,096	2,206
7-8pm	---	---	---	---	---	1,066	---	---	---	---	---	1,035	2,101
8-9pm	---	---	---	---	---	1,010	---	---	---	---	---	952	1,962
9-10pm	---	---	---	---	---	935	---	---	---	---	---	810	1,745
10-11pm	---	---	---	---	---	787	---	---	---	---	---	826	1,613
11-12pm	---	---	---	---	---	641	---	---	---	---	---	600	1,241
Totals	---	---	---	---	---	18,341	---	---	---	---	---	20,556	38,897
7-10am	2,503	64	50	155	220	2,992	3,119	63	19	270	536	4,007	6,999
10am-1pm	2,159	25	18	112	138	2,452	2,613	31	23	128	172	2,967	5,419
1-4pm	2,608	34	34	141	154	2,971	3,091	76	32	92	207	3,498	6,469
4-7pm	2,776	18	45	126	297	3,262	3,046	27	48	75	201	3,397	6,659
7am-7pm	10,046	141	147	534	809	11,677	11,869	197	122	565	1,116	13,869	25,546

Based on 1989 Classification Survey Data

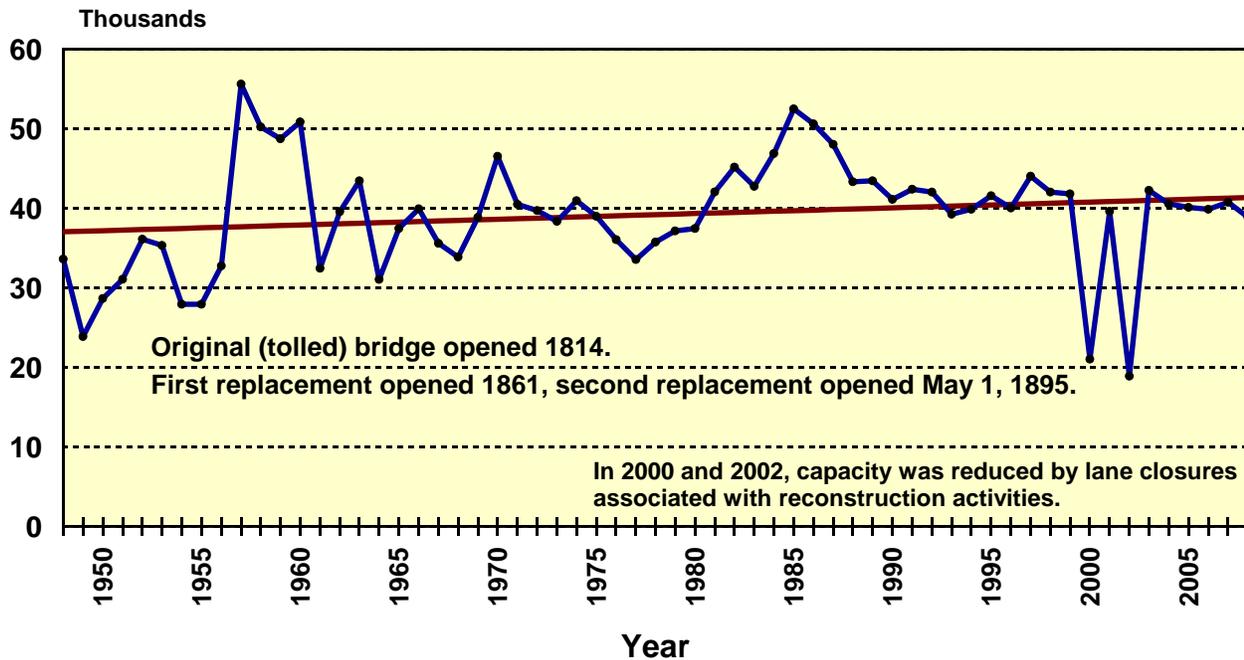
** Peak Volumes

Hourly Vehicular Volumes Macombs Dam Bridge - 2008



Average Daily Traffic Volumes Macombs Dam Bridge

1948-2008 Growth Rate = 0.2%



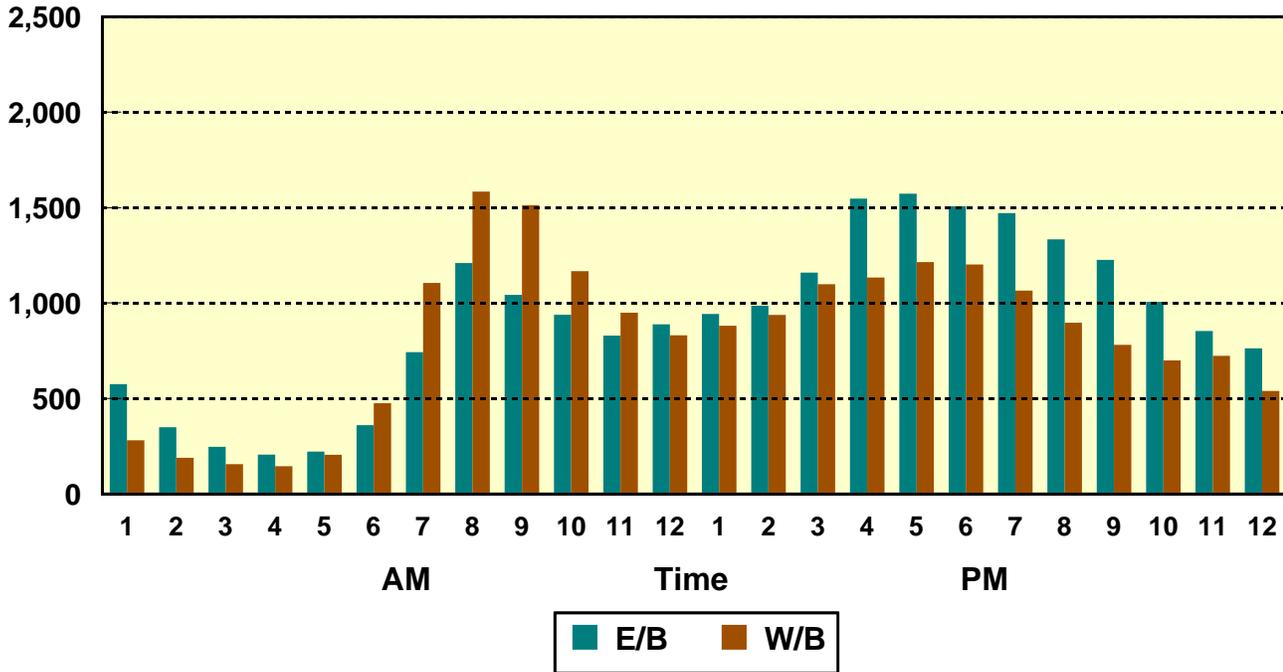
Hourly Vehicular Volumes Madison Avenue Bridge - 2008

	<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	---	---	---	---	---	575	---	---	---	---	---	281	856
1-2am	---	---	---	---	---	349	---	---	---	---	---	189	538
2-3am	---	---	---	---	---	246	---	---	---	---	---	156	402
3-4am	---	---	---	---	---	206	---	---	---	---	---	145	351
4-5am	---	---	---	---	---	222	---	---	---	---	---	205	427
5-6am	---	---	---	---	---	360	---	---	---	---	---	475	835
6-7am	---	---	---	---	---	742	---	---	---	---	---	1,105	1,847
7-8am	942	47	104	61	55	1,209	1,298	103	14	52	117	1,584 **	2,793 **
8-9am	816	56	73	43	54	1,042	1,200	99	28	63	123	1,513	2,555
9-10am	674	60	87	72	45	938	822	59	33	143	109	1,166	2,104
10-11am	689	31	41	30	38	829	773	64	21	21	70	949	1,778
11-12am	600	24	78	97	89	888	633	24	32	62	80	831	1,719
12-1pm	804	26	32	39	41	942	739	33	25	30	54	881	1,823
1-2pm	837	29	31	42	47	986	797	54	28	15	43	937	1,923
2-3pm	846	32	74	103	104	1,159	877	74	30	33	84	1,098	2,257
3-4pm	1,334	27	42	75	69	1,547	975	68	20	26	44	1,133	2,680
4-5pm	1,172	29	132	109	131	1,573 **	1,050	65	28	25	46	1,214	2,787
5-6pm	1,205	33	104	85	80	1,507	1,056	47	33	26	40	1,202	2,709
6-7pm	1,211	70	48	61	81	1,471	965	38	22	19	21	1,065	2,536
7-8pm	---	---	---	---	---	1,334	---	---	---	---	---	897	2,231
8-9pm	---	---	---	---	---	1,226	---	---	---	---	---	781	2,007
9-10pm	---	---	---	---	---	1,006	---	---	---	---	---	699	1,705
10-11pm	---	---	---	---	---	853	---	---	---	---	---	723	1,576
11-12pm	---	---	---	---	---	762	---	---	---	---	---	539	1,301
Totals	---	---	---	---	---	21,972	---	---	---	---	---	19,768	41,740
7-10am	2,432	163	264	176	154	3,189	3,320	261	75	258	349	4,263	7,452
10am-1pm	2,093	81	151	166	168	2,659	2,145	121	78	113	204	2,661	5,320
1-4pm	3,017	88	147	220	220	3,692	2,649	196	78	74	171	3,168	6,860
4-7pm	3,588	132	284	255	292	4,551	3,071	150	83	70	107	3,481	8,032
7am-7pm	11,130	464	846	817	834	14,091	11,185	728	314	515	831	13,573	27,664

Based on 1989 Classification Survey Data

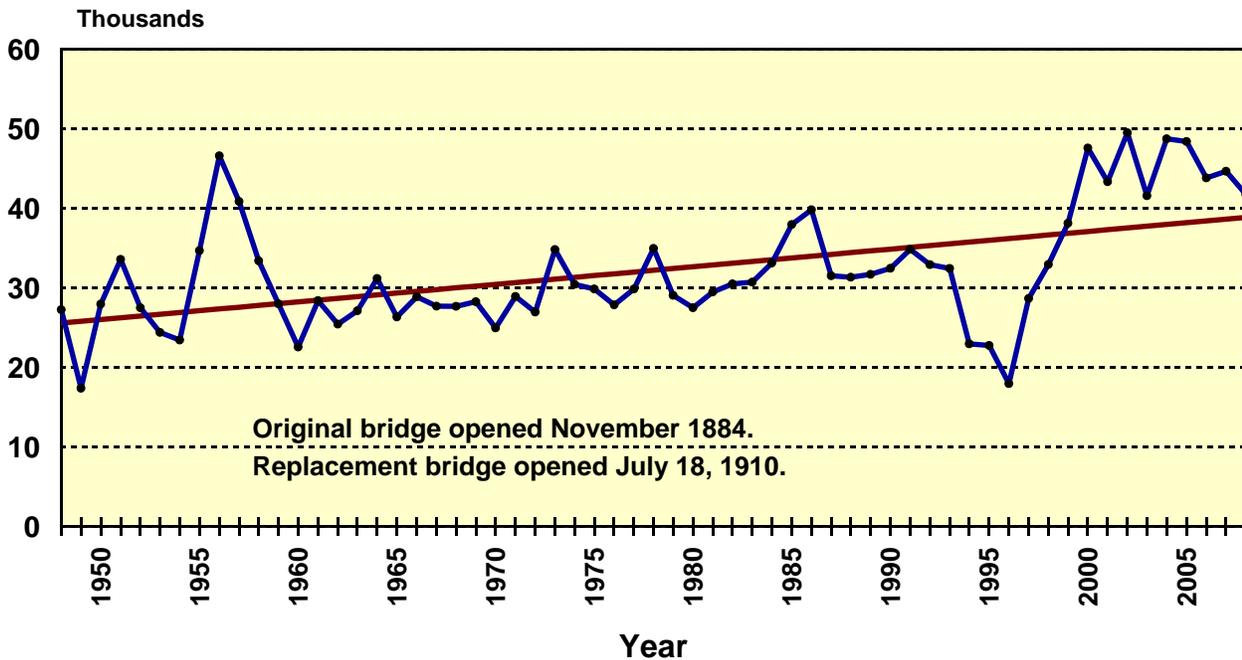
** Peak Volumes

Hourly Vehicular Volumes Madison Avenue Bridge - 2008



Average Daily Traffic Volumes Madison Avenue Bridge

1948-2008 Growth Rate = 0.7%



Hourly Vehicular Volumes Third Avenue Bridge - 2008

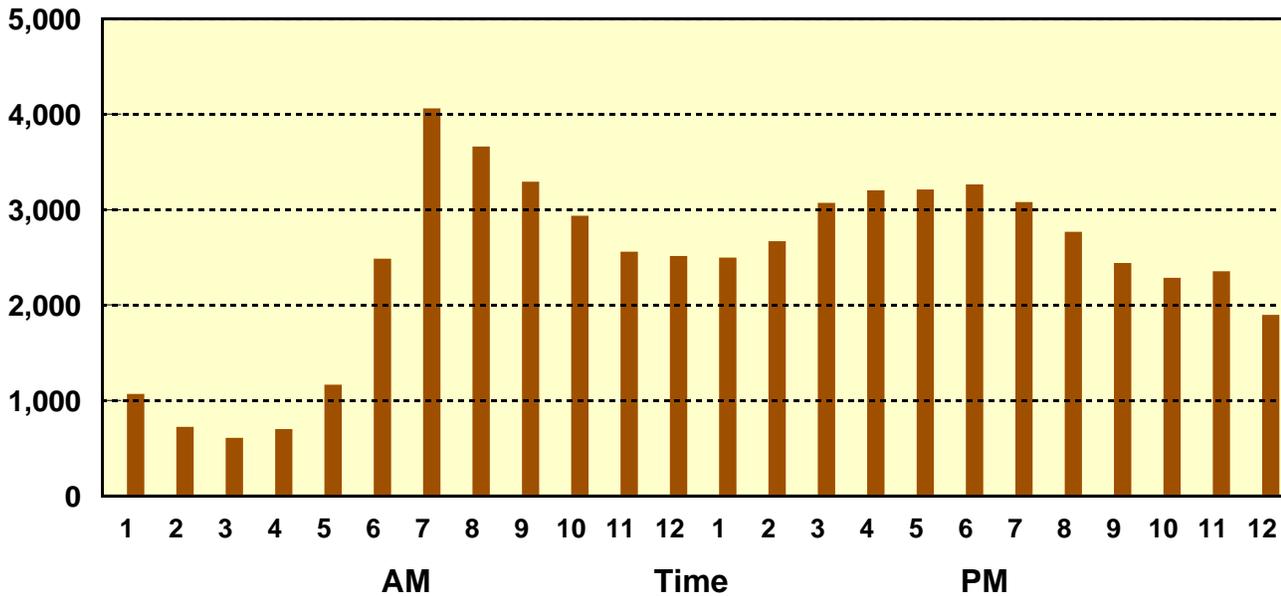
	Northbound to Bronx						Southbound to Manhattan						2-Way Totals
	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	
12-1am							---	---	---	---	---	1,067	1,067
1-2am							---	---	---	---	---	723	723
2-3am							---	---	---	---	---	608	608
3-4am							---	---	---	---	---	700	700
4-5am							---	---	---	---	---	1,164	1,164
5-6am							---	---	---	---	---	2,486	2,486
6-7am							---	---	---	---	---	4,060	4,060 **
7-8am							2,352	49	364	491	405	3,661	3,661
8-9am							2,157	31	214	436	455	3,293	3,293
9-10am							1,961	32	259	382	302	2,936	2,936
10-11am							2,140	26	142	137	114	2,559	2,559
11-12am							1,676	46	272	321	199	2,514	2,514
12-1pm							2,109	63	109	122	94	2,497	2,497
1-2pm							1,993	91	174	152	260	2,670	2,670
2-3pm							2,131	106	266	262	307	3,072	3,072
3-4pm							2,867	85	99	80	71	3,202	3,202
4-5pm							2,702	62	146	139	161	3,210	3,210
5-6pm							2,899	57	120	102	86	3,264	3,264
6-7pm							2,755	56	112	75	82	3,080	3,080
7-8pm							---	---	---	---	---	2,768	2,768
8-9pm							---	---	---	---	---	2,439	2,439
9-10pm							---	---	---	---	---	2,286	2,286
10-11pm							---	---	---	---	---	2,354	2,354
11-12pm							---	---	---	---	---	1,897	1,897
Totals							---	---	---	---	---	58,510	58,510
7-10am							6,470	112	837	1,309	1,162	9,890	9,890
10am-1pm							5,925	135	523	580	407	7,570	7,570
1-4pm							6,991	282	539	494	638	8,944	8,944
4-7pm							8,356	175	378	316	329	9,554	9,554
7am-7pm							27,742	704	2,277	2,699	2,536	35,958	35,958

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

Based on 1989 Classification Survey Data

** Peak Volumes

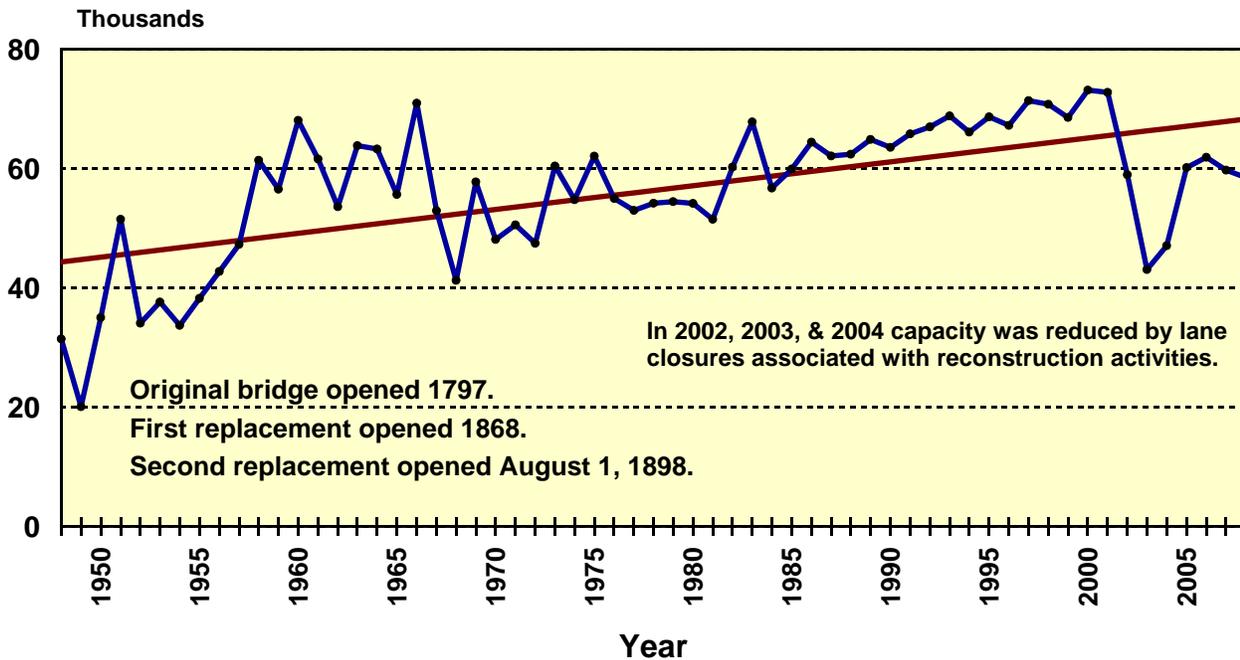
Hourly Vehicular Volumes Third Avenue Bridge (Harlem River) - 2008



Bridge is 1-way southbound to Manhattan

Average Daily Traffic Volumes Third Avenue Bridge (Harlem River)

1948-2008 Growth Rate = 0.7%



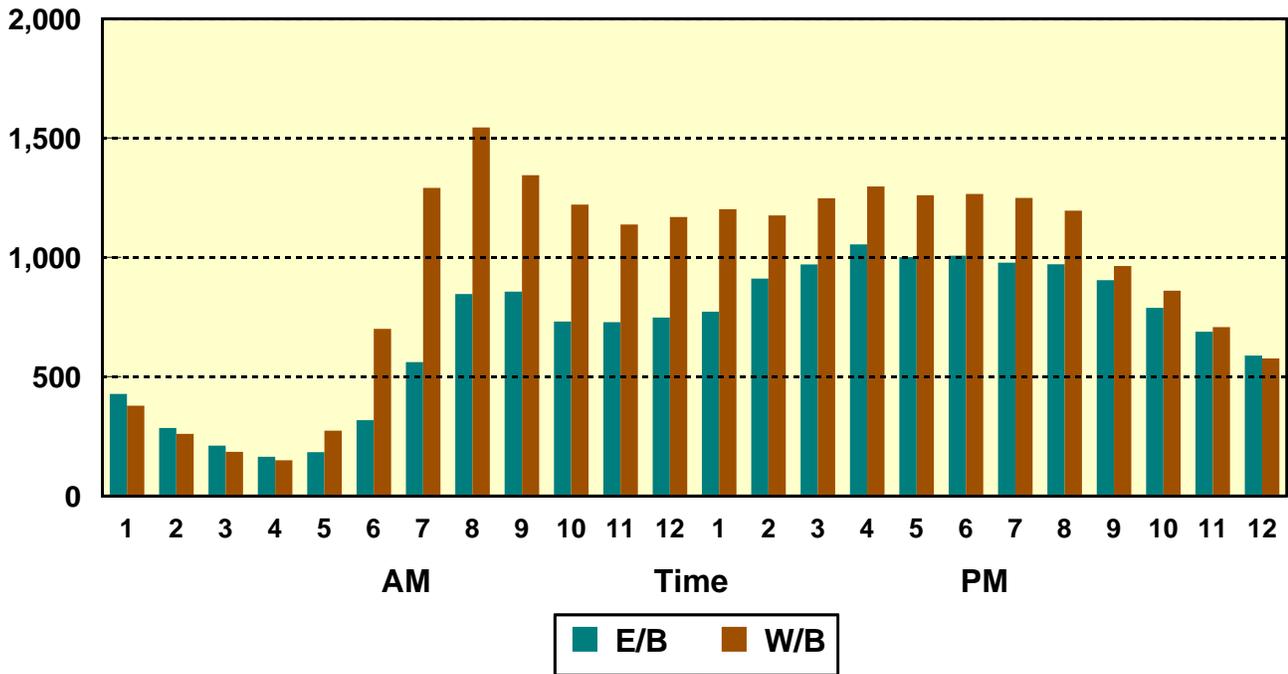
Hourly Vehicular Volumes University Heights Bridge - 2008

	<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	---	---	---	---	---	427	---	---	---	---	---	378	805
1-2am	---	---	---	---	---	285	---	---	---	---	---	260	545
2-3am	---	---	---	---	---	211	---	---	---	---	---	185	396
3-4am	---	---	---	---	---	164	---	---	---	---	---	149	313
4-5am	---	---	---	---	---	183	---	---	---	---	---	273	456
5-6am	---	---	---	---	---	317	---	---	---	---	---	700	1,017
6-7am	---	---	---	---	---	561	---	---	---	---	---	1,291	1,852
7-8am	640	45	81	39	41	846	1,341	22	34	38	110	1,545	2,391
8-9am	664	8	70	50	64	856	1,165	12	25	47	95	1,344	2,200
9-10am	545	7	54	62	63	731	1,032	14	17	53	105	1,221	1,952
10-11am	636	3	33	31	25	728	1,039	4	4	29	62	1,138	1,866
11-12am	575	7	60	70	35	747	996	7	14	63	89	1,169	1,916
12-1pm	695	12	21	24	20	772	1,112	2	5	30	53	1,202	1,974
1-2pm	781	39	38	30	23	911	1,110	4	5	20	37	1,176	2,087
2-3pm	793	13	68	49	47	970	1,068	10	21	48	101	1,248	2,218
3-4pm	961	16	22	28	27	1,054	1,173	41	6	25	52	1,297	2,351
4-5pm	872	4	54	40	31	1,001	1,121	17	16	23	83	1,260	2,261
5-6pm	883	0	56	27	41	1,007	1,186	1	14	13	52	1,266	2,273
6-7pm	853	0	53	18	53	977	1,168	7	10	9	55	1,249	2,226
7-8pm	---	---	---	---	---	971	---	---	---	---	---	1,196	2,167
8-9pm	---	---	---	---	---	904	---	---	---	---	---	963	1,867
9-10pm	---	---	---	---	---	788	---	---	---	---	---	860	1,648
10-11pm	---	---	---	---	---	688	---	---	---	---	---	707	1,395
11-12pm	---	---	---	---	---	588	---	---	---	---	---	576	1,164
Totals	---	---	---	---	---	16,687	---	---	---	---	---	22,653	39,340
7-10am	1,849	60	205	151	168	2,433	3,538	48	76	138	310	4,110	6,543
10am-1pm	1,906	22	114	125	80	2,247	3,147	13	23	122	204	3,509	5,756
1-4pm	2,535	68	128	107	97	2,935	3,351	55	32	93	190	3,721	6,656
4-7pm	2,608	4	163	85	125	2,985	3,475	25	40	45	190	3,775	6,760
7am-7pm	8,898	154	610	468	470	10,600	13,511	141	171	398	894	15,115	25,715

Based on 1989 Classification Survey Data

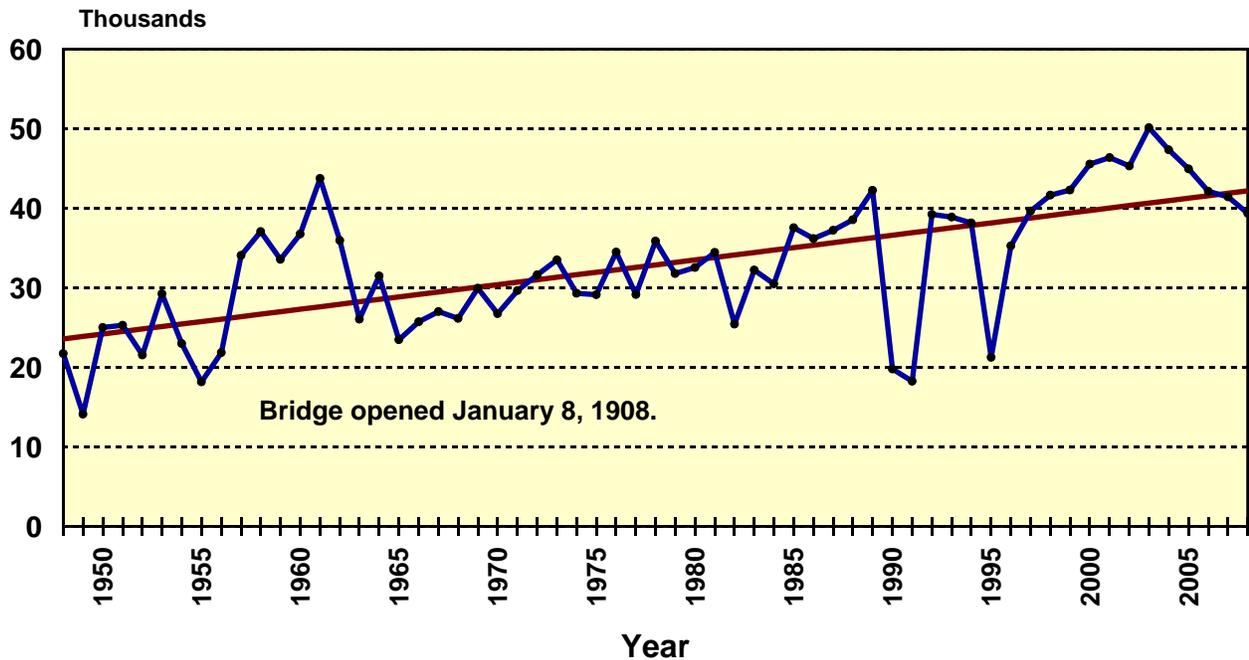
** Peak Volumes

Hourly Vehicular Volumes University Heights Bridge - 2008



Average Daily Traffic Volumes University Heights Bridge

1948-2008 Growth Rate = 1.0%



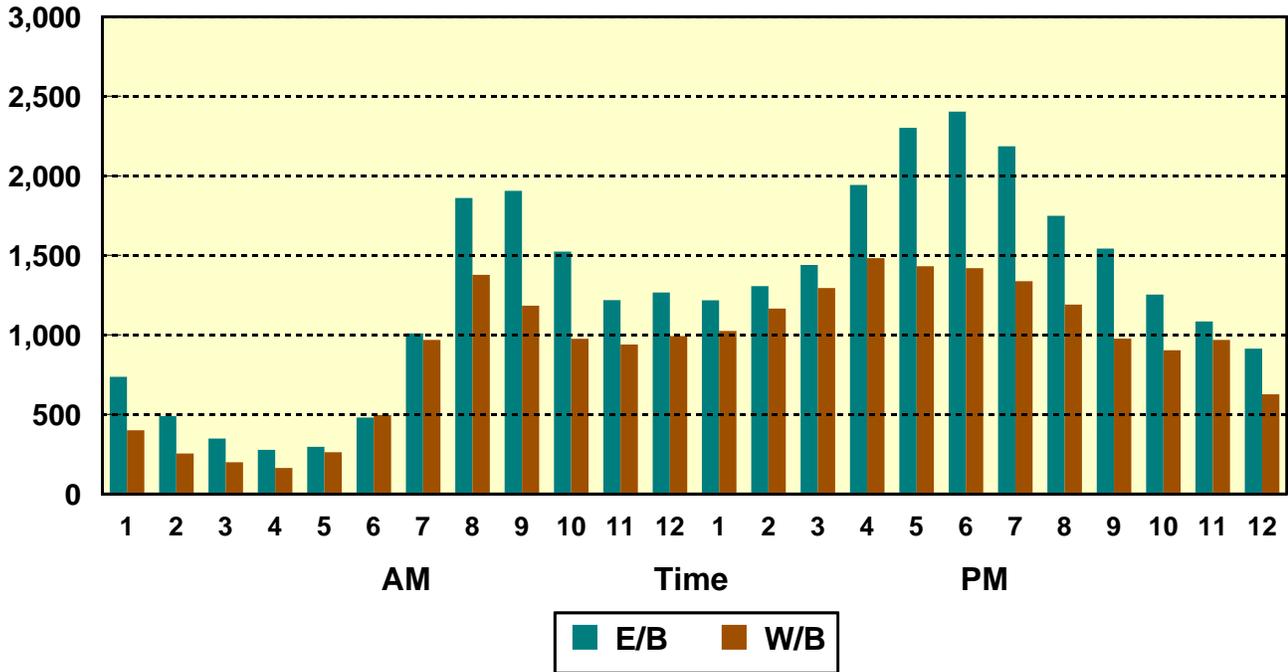
Hourly Vehicular Volumes Washington Bridge - 2008

	<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	---	---	---	---	---	736	---	---	---	---	---	400	1,136
1-2am	---	---	---	---	---	489	---	---	---	---	---	254	743
2-3am	---	---	---	---	---	348	---	---	---	---	---	199	547
3-4am	---	---	---	---	---	277	---	---	---	---	---	163	440
4-5am	---	---	---	---	---	296	---	---	---	---	---	262	558
5-6am	---	---	---	---	---	480	---	---	---	---	---	496	976
6-7am	---	---	---	---	---	1,009	---	---	---	---	---	968	1,977
7-8am	1,593	61	34	55	117	1,860	1,163	54	103	34	23	1,377	3,237
8-9am	1,595	49	29	86	146	1,905	997	55	61	46	24	1,183	3,088
9-10am	1,261	41	27	100	95	1,524	847	29	43	33	23	975	2,499
10-11am	1,106	33	7	31	41	1,218	858	30	9	23	19	939	2,157
11-12am	1,095	26	16	60	69	1,266	865	41	26	27	33	992	2,258
12-1pm	1,090	36	16	22	53	1,217	958	25	9	18	14	1,024	2,241
1-2pm	1,196	29	5	30	46	1,306	1,090	28	16	18	13	1,165	2,471
2-3pm	1,252	31	23	61	72	1,439	1,119	52	39	47	37	1,294	2,733
3-4pm	1,767	41	12	34	89	1,943	1,336	42	42	42	20	1,482	3,425
4-5pm	1,914	46	58	70	213	2,301	1,217	35	62	75	42	1,431	3,732
5-6pm	2,149	40	60	42	113	2,404	1,288	26	39	29	37	1,419	3,823
6-7pm	2,007	26	36	27	89	2,185	1,211	33	49	17	27	1,337	3,522
7-8pm	---	---	---	---	---	1,749	---	---	---	---	---	1,190	2,939
8-9pm	---	---	---	---	---	1,543	---	---	---	---	---	976	2,519
9-10pm	---	---	---	---	---	1,253	---	---	---	---	---	903	2,156
10-11pm	---	---	---	---	---	1,084	---	---	---	---	---	968	2,052
11-12pm	---	---	---	---	---	913	---	---	---	---	---	626	1,539
Totals	---	---	---	---	---	30,745	---	---	---	---	---	22,023	52,768
7-10am	4,449	151	90	241	358	5,289	3,007	138	207	113	70	3,535	8,824
10am-1pm	3,291	95	39	113	163	3,701	2,681	96	44	68	66	2,955	6,656
1-4pm	4,215	101	40	125	207	4,688	3,545	122	97	107	70	3,941	8,629
4-7pm	6,070	112	154	139	415	6,890	3,716	94	150	121	106	4,187	11,077
7am-7pm	18,025	459	323	618	1,143	20,568	12,949	450	498	409	312	14,618	35,186

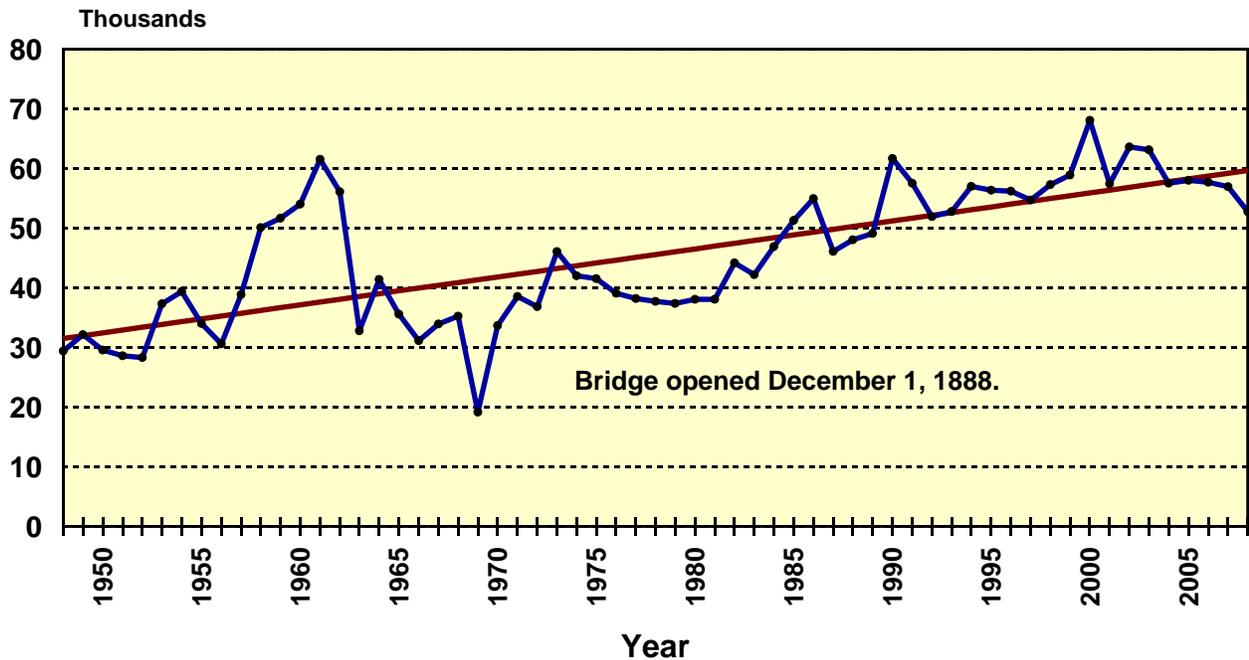
Based on 1989 Classification Survey Data

** Peak Volumes

Hourly Vehicular Volumes Washington Bridge - 2008



Average Daily Traffic Volumes Washington Bridge 1948-2008 Growth Rate = 1.1%



Hourly Vehicular Volumes Willis Avenue Bridge - 2008

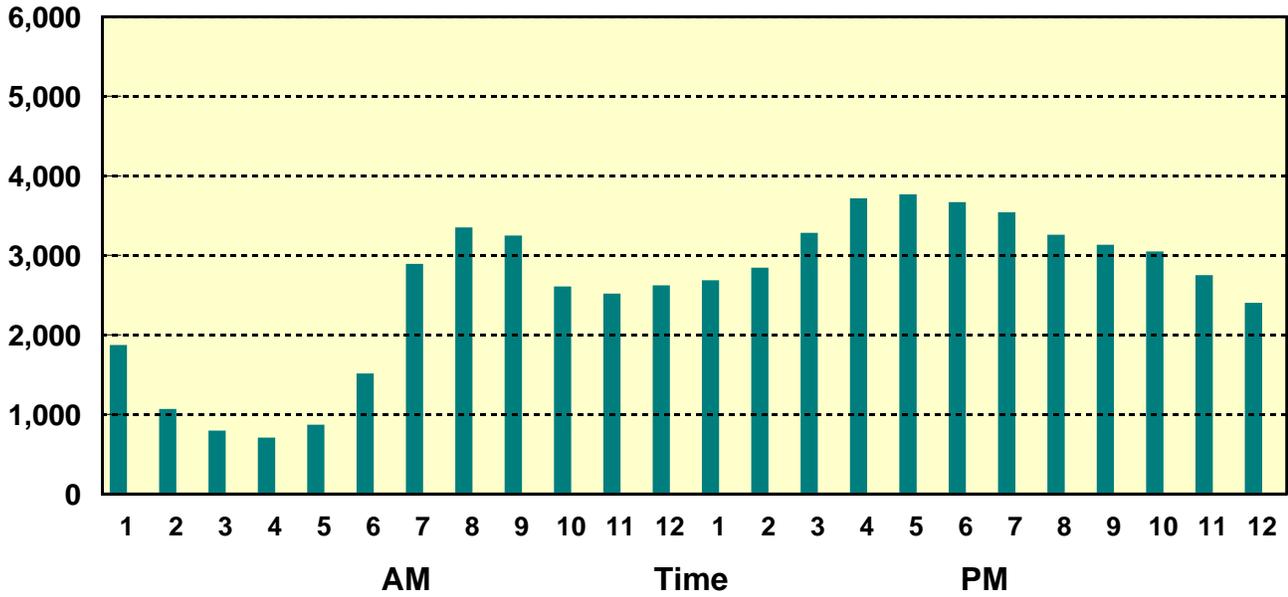
	Northbound to Bronx						Southbound to Manhattan						2-Way Totals
	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	
12-1am	---	---	---	---	---	1,872							1,872
1-2am	---	---	---	---	---	1,067							1,067
2-3am	---	---	---	---	---	796							796
3-4am	---	---	---	---	---	708							708
4-5am	---	---	---	---	---	870							870
5-6am	---	---	---	---	---	1,515							1,515
6-7am	---	---	---	---	---	2,891							2,891
7-8am	2,852	85	133	165	115	3,350							3,350
8-9am	2,622	111	97	189	230	3,249							3,249
9-10am	1,949	114	96	233	216	2,608							2,608
10-11am	2,096	49	67	157	148	2,517							2,517
11-12am	1,939	34	114	278	257	2,622							2,622
12-1pm	2,352	40	50	145	99	2,686							2,686
1-2pm	2,540	23	39	107	135	2,844							2,844
2-3pm	2,431	30	119	350	354	3,284							3,284
3-4pm	3,290	60	56	158	154	3,718							3,718
4-5pm	2,966	34	114	254	399	3,767 **							3,767 **
5-6pm	2,983	53	100	166	367	3,669							3,669
6-7pm	3,099	30	94	109	209	3,541							3,541
7-8pm	---	---	---	---	---	3,259							3,259
8-9pm	---	---	---	---	---	3,135							3,135
9-10pm	---	---	---	---	---	3,049							3,049
10-11pm	---	---	---	---	---	2,749							2,749
11-12pm	---	---	---	---	---	2,401							2,401
Totals	---	---	---	---	---	62,167							62,167
7-10am	7,423	310	326	587	561	9,207							9,207
10am-1pm	6,387	123	231	580	504	7,825							7,825
1-4pm	8,261	113	214	615	643	9,846							9,846
4-7pm	9,048	117	308	529	975	10,977							10,977
7am-7pm	31,119	663	1,079	2,311	2,683	37,855							37,855

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

Based on 1989 Classification Survey Data

** Peak Volumes

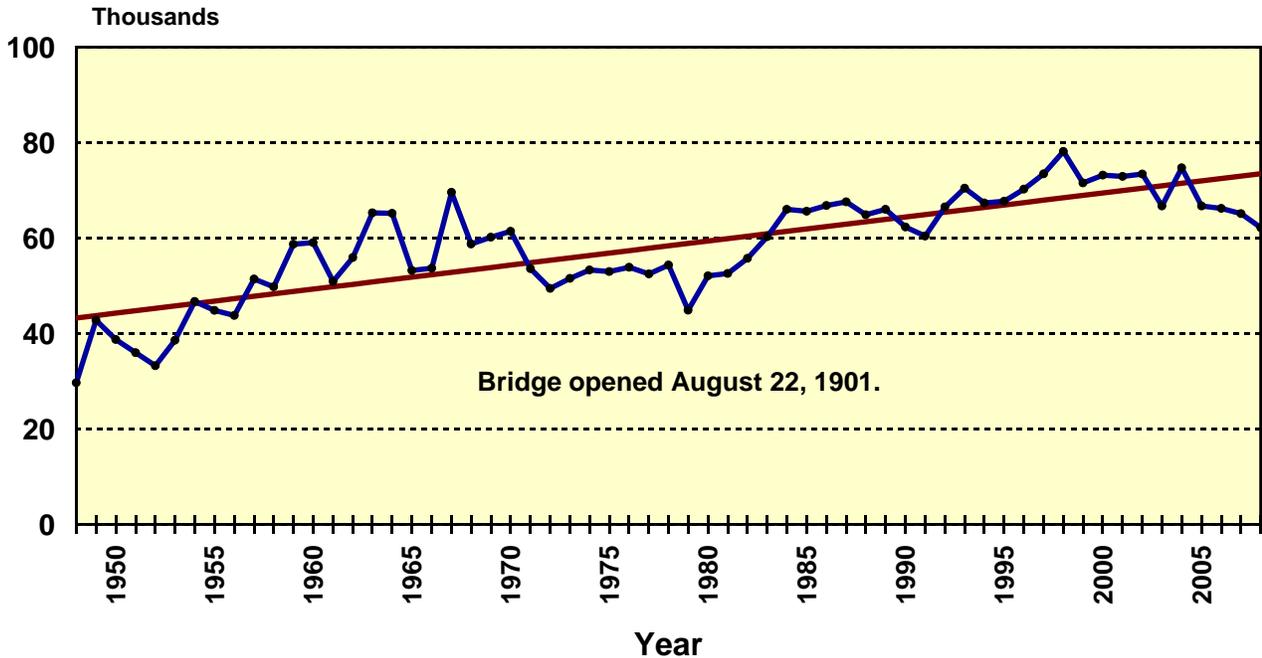
Hourly Vehicular Volumes Willis Avenue Bridge - 2008



Bridge is 1-way northbound to The Bronx

Average Daily Traffic Volumes Willis Avenue Bridge

1948-2008 Growth Rate = 0.9%



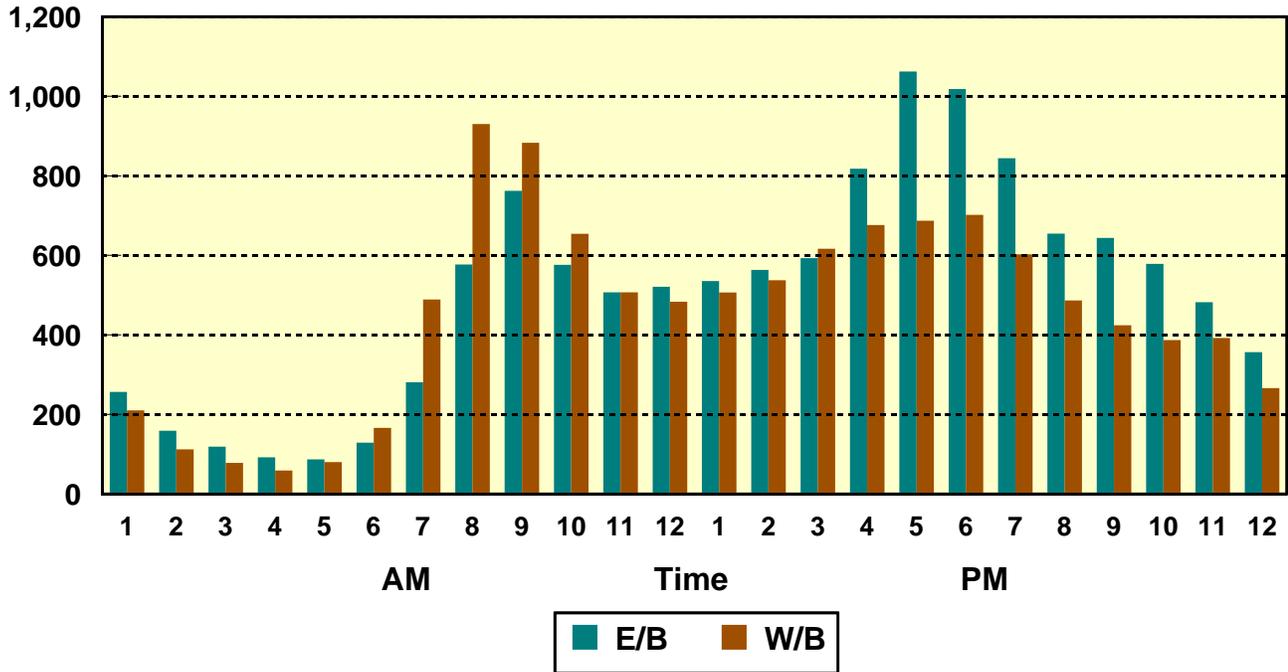
Hourly Vehicular Volumes 145th Street Bridge - 2008

	<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	---	---	---	---	---	256	---	---	---	---	---	210	466
1-2am	---	---	---	---	---	159	---	---	---	---	---	112	271
2-3am	---	---	---	---	---	119	---	---	---	---	---	78	197
3-4am	---	---	---	---	---	92	---	---	---	---	---	59	151
4-5am	---	---	---	---	---	87	---	---	---	---	---	80	167
5-6am	---	---	---	---	---	129	---	---	---	---	---	166	295
6-7am	---	---	---	---	---	281	---	---	---	---	---	489	770
7-8am	484	23	31	31	8	577	810	37	16	35	32	930	** 1,507
8-9am	635	23	39	41	24	762	757	26	29	25	46	883	1,645
9-10am	464	11	32	49	20	576	524	18	31	25	56	654	1,230
10-11am	445	7	12	21	22	507	404	14	28	21	40	507	1,014
11-12am	396	13	24	54	34	521	358	9	36	37	43	483	1,004
12-1pm	464	10	14	33	14	535	470	9	9	7	11	506	1,041
1-2pm	487	10	27	25	14	563	485	24	9	12	7	537	1,100
2-3pm	447	13	24	76	33	593	516	20	24	23	34	617	1,210
3-4pm	719	19	20	35	25	818	630	24	7	6	9	676	1,494
4-5pm	847	13	55	94	53	1,062	** 636	14	12	7	18	687	** 1,749
5-6pm	831	9	47	69	62	1,018	659	14	11	8	10	702	1,720
6-7pm	734	23	26	20	41	844	569	18	5	3	8	603	1,447
7-8pm	---	---	---	---	---	655	---	---	---	---	---	486	1,141
8-9pm	---	---	---	---	---	644	---	---	---	---	---	424	1,068
9-10pm	---	---	---	---	---	578	---	---	---	---	---	387	965
10-11pm	---	---	---	---	---	482	---	---	---	---	---	392	874
11-12pm	---	---	---	---	---	356	---	---	---	---	---	266	622
Totals	---	---	---	---	---	12,214	---	---	---	---	---	10,934	23,148
7-10am	1,583	57	102	121	52	1,915	2,091	81	76	85	134	2,467	4,382
10am-1pm	1,305	30	50	108	70	1,563	1,232	32	73	65	94	1,496	3,059
1-4pm	1,653	42	71	136	72	1,974	1,631	68	40	41	50	1,830	3,804
4-7pm	2,412	45	128	183	156	2,924	1,864	46	28	18	36	1,992	4,916
7am-7pm	6,953	174	351	548	350	8,376	6,818	227	217	209	314	7,785	16,161

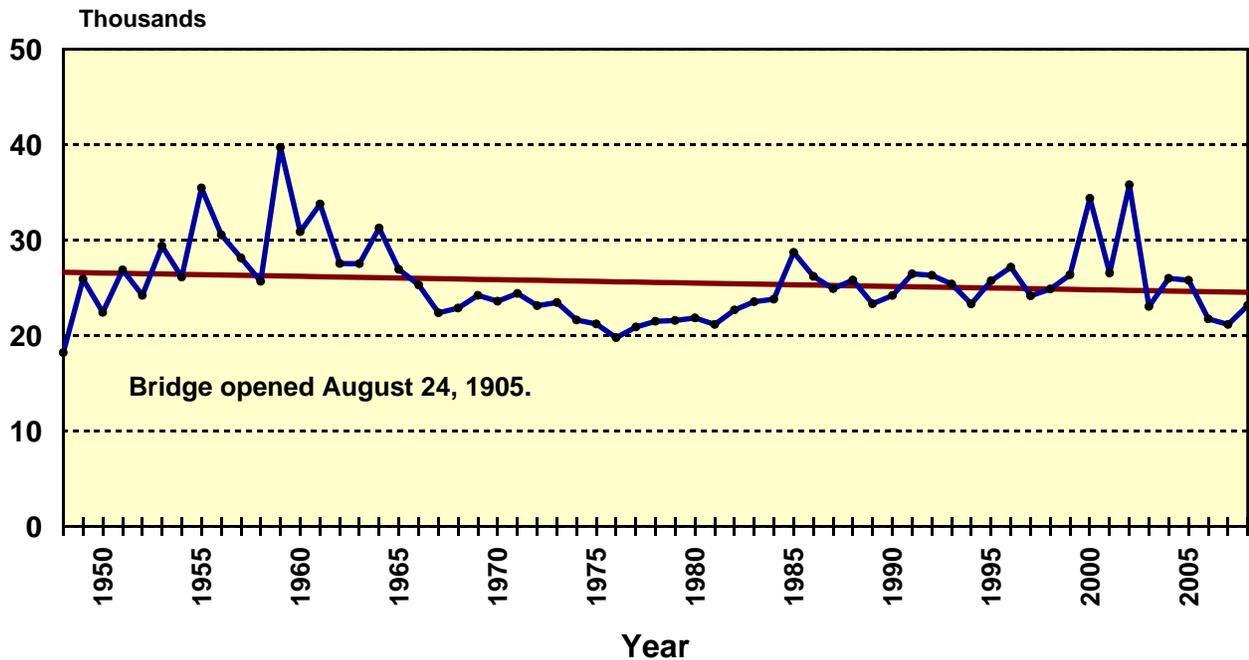
Based on 1989 Classification Survey Data

** Peak Volumes

Hourly Vehicular Volumes 145th Street Bridge - 2008



Average Daily Traffic Volumes 145th Street Bridge 1948-2008 Growth Rate = - 0.1%



MTABT Facilities



Henry Hudson Bridge

**MTABT Manhattan Facilities ~ Average Daily Traffic Volumes
1948 - 2008**

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

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.

Hourly Vehicular Volumes

Metropolitan Transportation Authority Bridges & Tunnels 2008

*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	149	511	145	460	478	999	486	510	1,258	2,480
1-2am	67	266	83	190	207	458	197	248	554	1,162
2-3am	38	128	54	102	120	261	117	182	329	673
3-4am	40	88	49	60	150	198	136	194	375	540
4-5am	128	84	103	68	266	399	283	436	780	987
5-6am	757	145	476	116	1,001	701	1,040	1,041	3,274	2,003
6-7am	2,248	371	2,199	548	2,404	1,240	3,193	1,694	10,044	3,853
7-8am	2,924	662	3,395 **	1,319	3,649	1,312	4,318 **	2,057	14,286	5,350
8-9am	2,983 **	721	3,257	1,789	4,034 **	1,274	4,096	2,122	14,370 **	5,906
9-10am	2,689	768	2,849	1,184	3,532	1,327	3,617	2,047	12,687	5,326
10-11am	1,712	816	2,247	1,001	2,522	1,542	2,966	1,912	9,447	5,271
11-12am	1,471	949	1,743	1,071	2,658	1,761	2,813	2,007	8,685	5,788
12-1pm	1,464	977	1,611	1,201	2,506	2,007	2,580	2,093	8,161	6,278
1-2pm	1,353	1,131	1,433	1,363	2,295	2,383	2,511	2,214	7,592	7,091
2-3pm	1,466	1,471	1,733	1,700	2,449	2,702	2,852	2,551	8,500	8,424
3-4pm	1,529	1,841	2,211	2,459	2,463	2,887 **	3,238	2,893	9,441	10,080
4-5pm	1,483	2,313	2,357	2,579	2,535	2,869	3,121	2,923	9,496	10,684
5-6pm	1,376	2,446 **	2,860	3,067 **	2,767	2,852	3,578	3,069 **	10,581	11,434 **
6-7pm	1,377	2,416	2,928	3,012	2,796	2,623	3,334	2,764	10,435	10,815
7-8pm	1,241	2,002	1,874	2,581	2,240	2,138	2,826	2,451	8,181	9,172
8-9pm	869	2,001	1,206	1,861	1,794	2,196	1,889	2,058	5,758	8,116
9-10pm	777	1,604	985	1,781	1,615	2,219	1,776	1,727	5,153	7,331
10-11pm	720	1,304	653	1,786	1,395	2,182	1,468	1,607	4,236	6,879
11-12pm	314	847	332	1,020	893	1,410	951	960	2,490	4,237
Totals	29,175	25,862	36,783	32,318	46,769	39,940	53,386	41,760	166,113	139,880
7-10am	8,596	2,151	9,501	4,292	11,215	3,913	12,031	6,226	41,343	16,582
10am-1pm	4,647	2,742	5,601	3,273	7,686	5,310	8,359	6,012	26,293	17,337
1-4pm	4,348	4,443	5,377	5,522	7,207	7,972	8,601	7,658	25,533	25,595
4-7pm	4,236	7,175	8,145	8,658	8,098	8,344	10,033	8,756	30,512	32,933
7am-7pm	21,827	16,511	28,624	21,745	34,206	25,539	39,024	28,652	123,681	92,447

** Peak Volumes

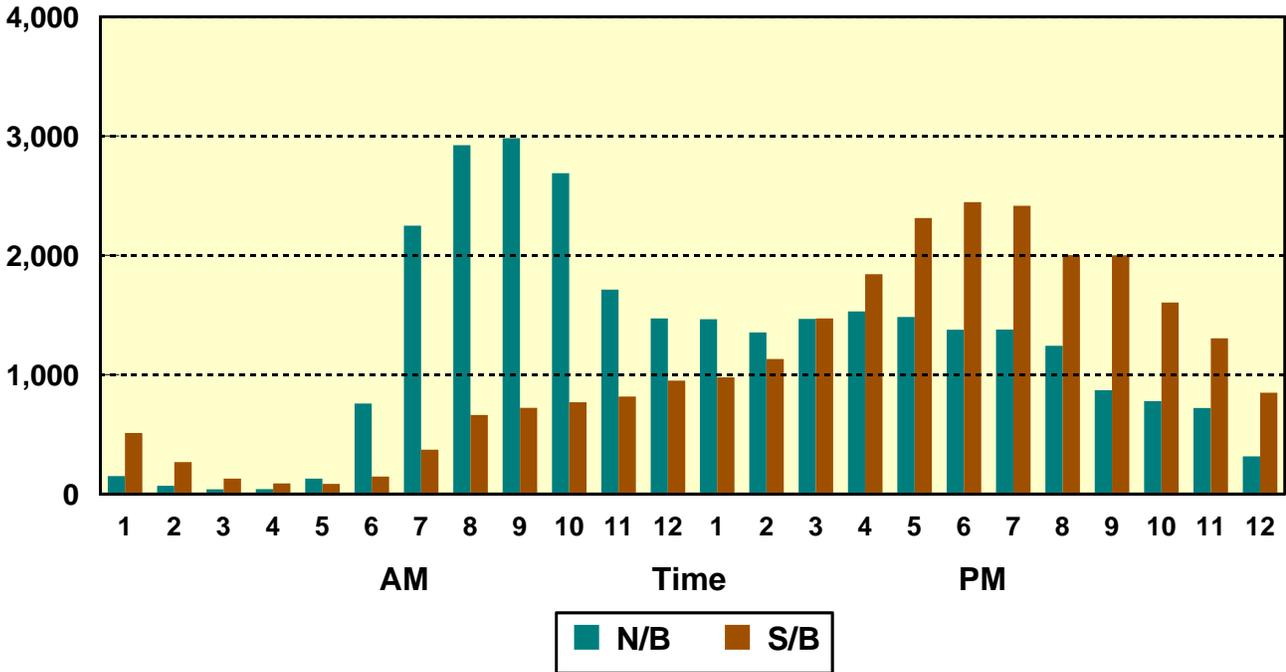
Hourly Vehicular Volumes Brooklyn Battery Tunnel - 2008

FHWA Classes ▶	Northbound to Manhattan						Southbound to Brooklyn						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	128	5	8	8	0	149	465	10	31	5	0	511	660		
1-2am	58	3	5	1	0	67	254	0	11	1	0	266	333		
2-3am	34	0	2	2	0	38	121	2	3	2	0	128	166		
3-4am	33	1	4	2	0	40	86	0	0	2	0	88	128		
4-5am	82	5	32	9	0	128	77	0	5	2	0	84	212		
5-6am	680	8	61	8	0	757	130	1	10	4	0	145	902		
6-7am	2,007	14	202	25	0	2,248	276	6	78	11	0	371	2,619		
7-8am	2,566	16	303	39	0	2,924	477	7	160	18	0	662	3,586		
8-9am	2,607	15	325	36	0	2,983 **	527	6	171	17	0	721	3,704		
9-10am	2,454	20	175	40	0	2,689	590	7	150	21	0	768	3,457		
10-11am	1,557	21	87	46	1	1,712	714	9	76	17	0	816	2,528		
11-12am	1,364	13	60	33	1	1,471	857	9	64	19	0	949	2,420		
12-1pm	1,346	15	71	31	1	1,464	899	11	49	18	0	977	2,441		
1-2pm	1,223	12	83	35	0	1,353	1,021	12	73	25	0	1,131	2,484		
2-3pm	1,318	11	111	26	0	1,466	1,346	15	84	26	0	1,471	2,937		
3-4pm	1,365	6	145	13	0	1,529	1,678	12	128	23	0	1,841	3,370		
4-5pm	1,292	5	175	10	1	1,483	2,097	7	189	20	0	2,313	3,796		
5-6pm	1,226	3	138	6	3	1,376	2,175	6	250	14	1	2,446 **	3,822 **		
6-7pm	1,278	4	86	8	1	1,377	2,219	6	179	11	1	2,416	3,793		
7-8pm	1,179	1	57	4	0	1,241	1,887	5	102	8	0	2,002	3,243		
8-9pm	826	5	32	6	0	869	1,869	9	112	11	0	2,001	2,870		
9-10pm	738	2	34	3	0	777	1,516	5	67	16	0	1,604	2,381		
10-11pm	683	1	32	4	0	720	1,252	6	36	10	0	1,304	2,024		
11-12pm	278	0	26	10	0	314	800	6	33	8	0	847	1,161		
Totals	26,322	186	2,254	405	8	29,175	23,333	157	2,061	309	2	25,862	55,037		
7-10am	7,627	51	803	115	0	8,596	1,594	20	481	56	0	2,151	10,747		
10am-1pm	4,267	49	218	110	3	4,647	2,470	29	189	54	0	2,742	7,389		
1-4pm	3,906	29	339	74	0	4,348	4,045	39	285	74	0	4,443	8,791		
4-7pm	3,796	12	399	24	5	4,236	6,491	19	618	45	2	7,175	11,411		
7am-7pm	19,596	141	1,759	323	8	21,827	14,600	107	1,573	229	2	16,511	38,338		

Based on May 2006 Classification Survey Data.

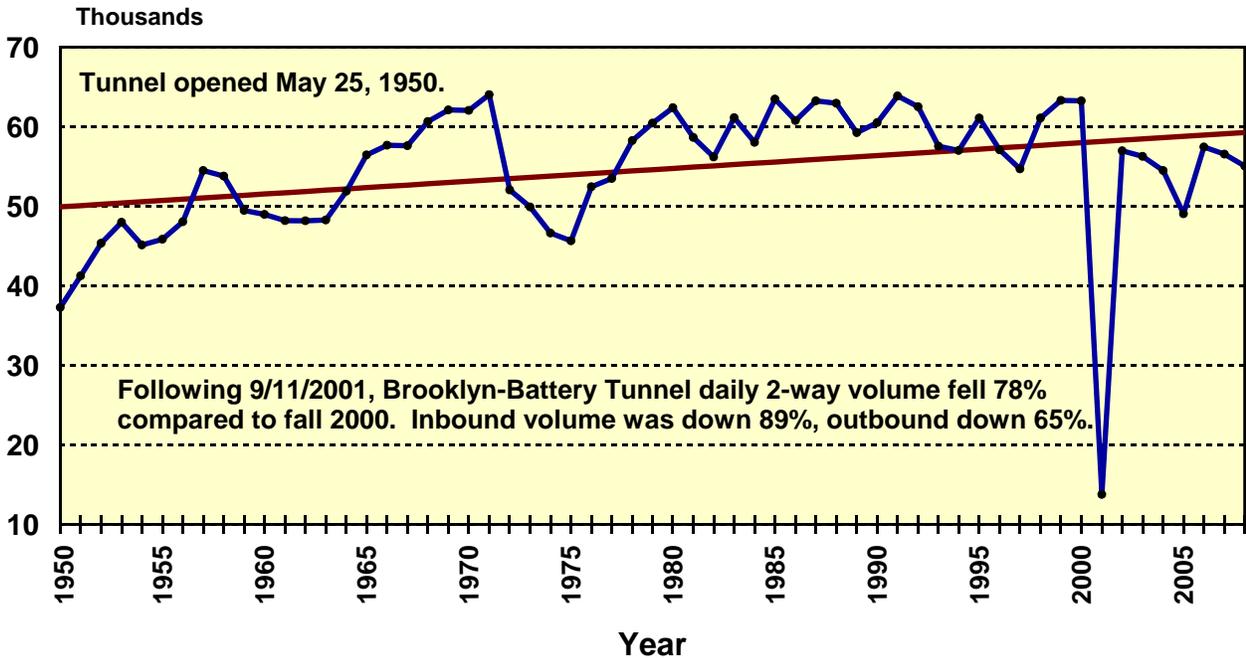
** Peak Volumes

Hourly Vehicular Volumes Brooklyn-Battery Tunnel - 2008



Average Daily Traffic Volumes Brooklyn-Battery Tunnel

1950-2008 Growth Rate = 0.3%



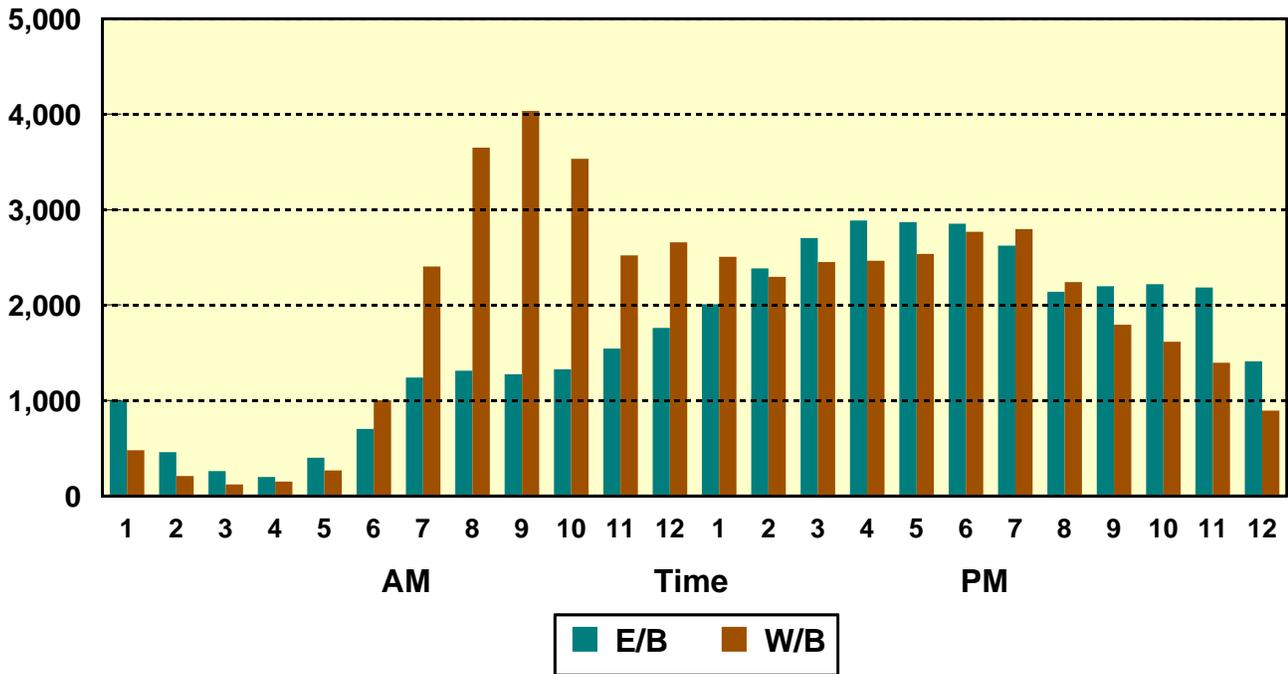
Hourly Vehicular Volumes Queens-Midtown Tunnel - 2008

FHWA Classes ▶	Westbound to Manhattan						Eastbound to Queens						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	462	2	3	11	0	478	964	9	1	25	0	999	1,477		
1-2am	198	2	0	7	0	207	437	4	0	17	0	458	665		
2-3am	112	1	1	6	0	120	245	5	0	11	0	261	381		
3-4am	136	1	3	10	0	150	177	9	0	12	0	198	348		
4-5am	214	5	14	33	0	266	328	28	4	38	1	399	665		
5-6am	873	10	49	69	0	1,001	624	18	11	48	0	701	1,702		
6-7am	2,054	84	152	114	0	2,404	1,123	34	48	35	0	1,240	3,644		
7-8am	3,146	129	230	143	1	3,649	1,167	50	62	33	0	1,312	4,961		
8-9am	3,627	114	142	151	0	4,034 **	1,112	41	77	44	0	1,274	5,308		
9-10am	3,184	90	159	96	3	3,532	1,164	50	68	45	0	1,327	4,859		
10-11am	2,289	70	85	76	2	2,522	1,338	62	74	68	0	1,542	4,064		
11-12am	2,464	66	63	65	0	2,658	1,563	60	76	62	0	1,761	4,419		
12-1pm	2,325	38	57	86	0	2,506	1,798	64	55	90	0	2,007	4,513		
1-2pm	2,094	65	68	68	0	2,295	2,116	108	61	98	0	2,383	4,678		
2-3pm	2,223	59	112	55	0	2,449	2,506	77	46	73	0	2,702	5,151		
3-4pm	2,190	51	160	62	0	2,463	2,669	65	67	86	0	2,887 **	5,350		
4-5pm	2,317	31	155	32	0	2,535	2,647	78	67	77	0	2,869	5,404		
5-6pm	2,599	18	127	23	0	2,767	2,691	45	73	43	0	2,852	5,619 **		
6-7pm	2,673	19	78	26	0	2,796	2,492	32	60	39	0	2,623	5,419		
7-8pm	2,159	14	51	16	0	2,240	2,039	21	58	20	0	2,138	4,378		
8-9pm	1,706	23	32	33	0	1,794	2,086	26	41	43	0	2,196	3,990		
9-10pm	1,552	15	19	29	0	1,615	2,128	23	23	44	1	2,219	3,834		
10-11pm	1,337	9	14	35	0	1,395	2,104	22	12	44	0	2,182	3,577		
11-12pm	867	7	4	15	0	893	1,373	4	4	29	0	1,410	2,303		
Totals	42,801	923	1,778	1,261	6	46,769	36,891	935	988	1,124	2	39,940	86,709		
7-10am	9,957	333	531	390	4	11,215	3,443	141	207	122	0	3,913	15,128		
10am-1pm	7,078	174	205	227	2	7,686	4,699	186	205	220	0	5,310	12,996		
1-4pm	6,507	175	340	185	0	7,207	7,291	250	174	257	0	7,972	15,179		
4-7pm	7,589	68	360	81	0	8,098	7,830	155	200	159	0	8,344	16,442		
7am-7pm	31,131	750	1,436	883	6	34,206	23,263	732	786	758	0	25,539	59,745		

Based on May 2006 Classification Survey Data.

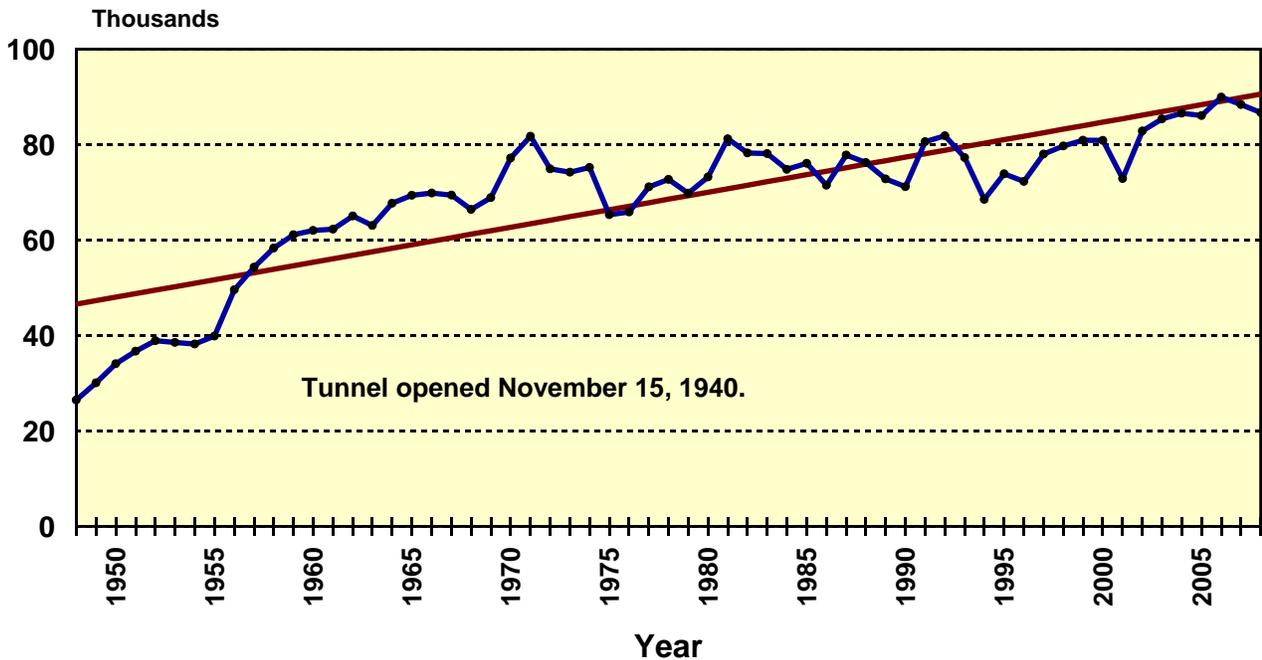
** Peak Volumes

Hourly Vehicular Volumes Queens-Midtown Tunnel - 2008

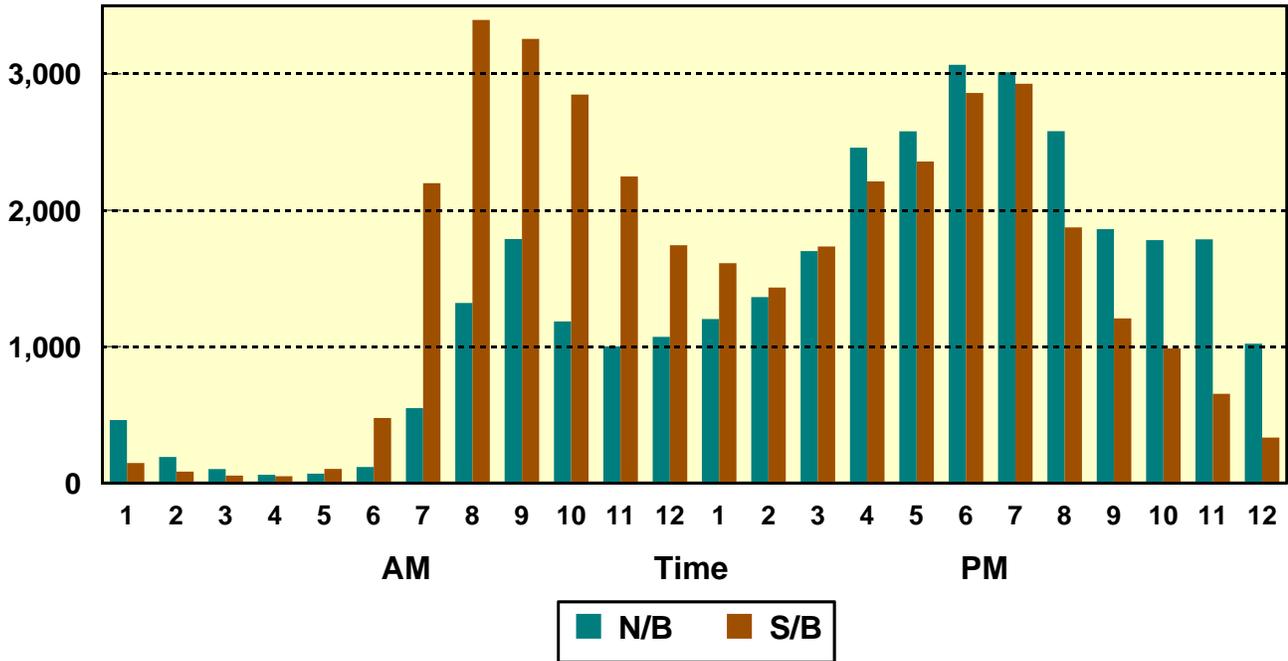


Average Daily Traffic Volumes Queens-Midtown Tunnel

1948-2008 Growth Rate = 1.1%

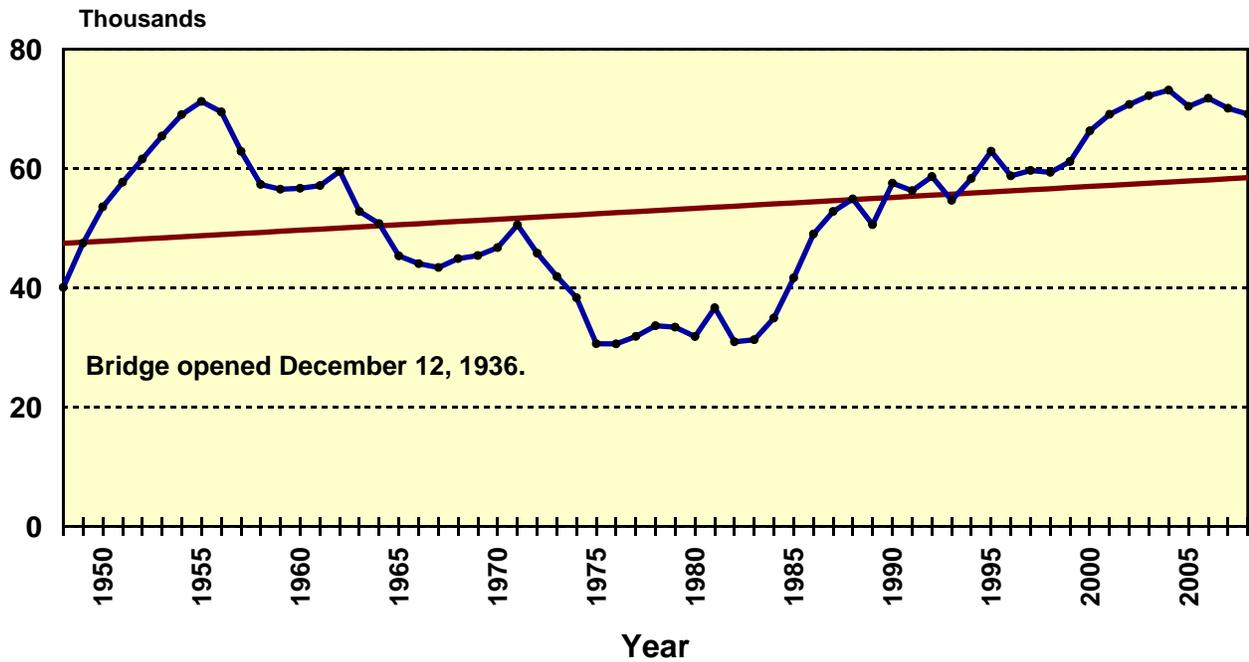


Hourly Vehicular Volumes Henry Hudson Bridge - 2008



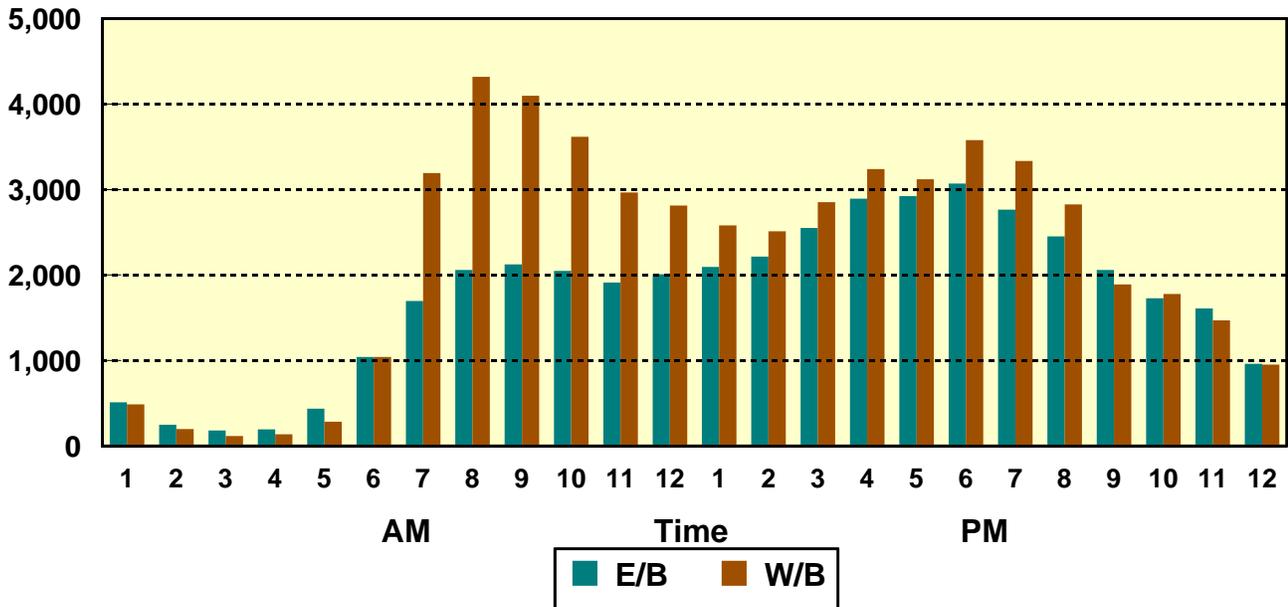
Average Daily Traffic Volumes Henry Hudson Bridge

1948-2008 Growth Rate = 0.3%



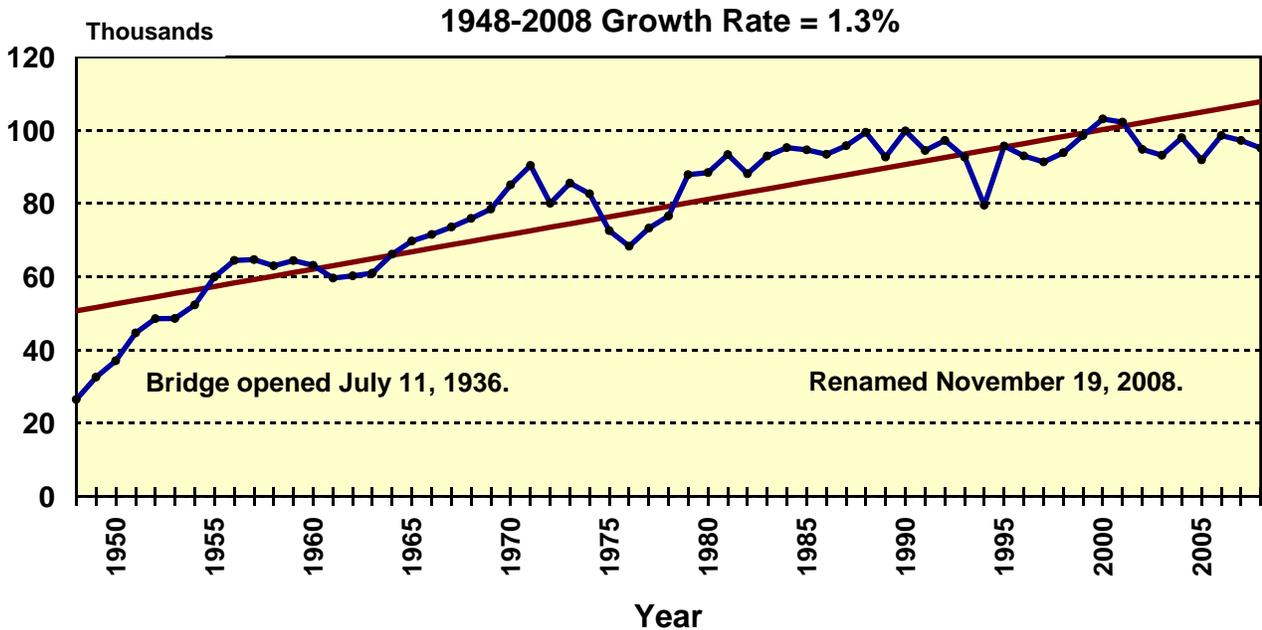
Hourly Vehicular Volumes

Robert F. Kennedy Memorial Bridge, Manhattan Plaza - 2008 (Triborough Bridge)



Average Daily Traffic Volumes

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



PANYNJ Manhattan - New Jersey Facilities
Average Daily Traffic Volumes
1948 - 2008

<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

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

2008

	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>	Entering Manhattan	Leaving Manhattan
12-1am	1,875	2,676	743	1,069	901	1,557	3,519	5,302
1-2am	1,271	1,487	447	802	537	910	2,255	3,199
2-3am	1,092	1,215	314	697	418	573	1,824	2,485
3-4am	1,285	1,157	338	813	482	491	2,105	2,461
4-5am	2,198	1,581	527	1,146	883	557	3,608	3,284
5-6am	6,175	2,710	2,019	1,590	2,835	793	11,029	5,093
6-7am	11,061 **	4,903	3,128 **	2,260	5,072 **	1,501	19,261 **	8,664
7-8am	10,197	7,032	2,944	2,525	4,584	2,052	17,725	11,609
8-9am	9,210	7,730	2,838	2,689	4,225	2,121	16,273	12,540
9-10am	8,998	7,017	2,782	2,261	3,825	1,890	15,605	11,168
10-11am	7,579	5,951	2,313	2,009	3,213	1,987	13,105	9,947
11-12am	6,848	6,303	2,006	2,084	2,889	2,143	11,743	10,530
12-1pm	6,515	6,924	1,946	2,330	2,580	2,348	11,041	11,602
1-2pm	6,504	6,639	1,920	2,577	2,611	2,797	11,035	12,013
2-3pm	7,016	8,141	2,105	2,844	2,627	3,485	11,748	14,470
3-4pm	7,784	10,217	2,365	2,910	2,784	3,820	12,933	16,947
4-5pm	8,289	10,776 **	2,689	2,967 **	2,393	4,409	13,371	18,152
5-6pm	8,613	10,659	2,912	2,738	2,393	4,806	13,296	18,203
6-7pm	8,378	10,728	2,813	2,808	2,111	5,022 **	13,302	18,558 **
7-8pm	6,964	9,501	2,418	2,931	2,427	4,339	11,809	16,771
8-9pm	5,512	7,888	1,859	2,662	2,055	3,932	9,426	14,482
9-10pm	4,766	6,362	1,716	2,437	2,047	3,556	8,529	12,355
10-11pm	4,037	5,588	1,652	2,208	1,959	3,501	7,648	11,297
11-12pm	2,935	4,772	1,267	1,639	1,583	2,751	5,785	9,162
Totals	145,102	147,957	46,061	50,996	56,812	61,341	247,975	260,294
7-10am	28,405	21,779	8,564	7,475	12,634	6,063	49,603	35,317
10am-1pm	20,942	19,178	6,265	6,423	8,682	6,478	35,889	32,079
1-4pm	21,304	24,997	6,390	8,331	8,022	10,102	35,716	43,430
4-7pm	25,280	32,163	8,414	8,513	6,275	14,237	39,969	54,913
7am-7pm	95,931	98,117	29,633	30,742	35,613	36,880	161,177	165,739

** 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.

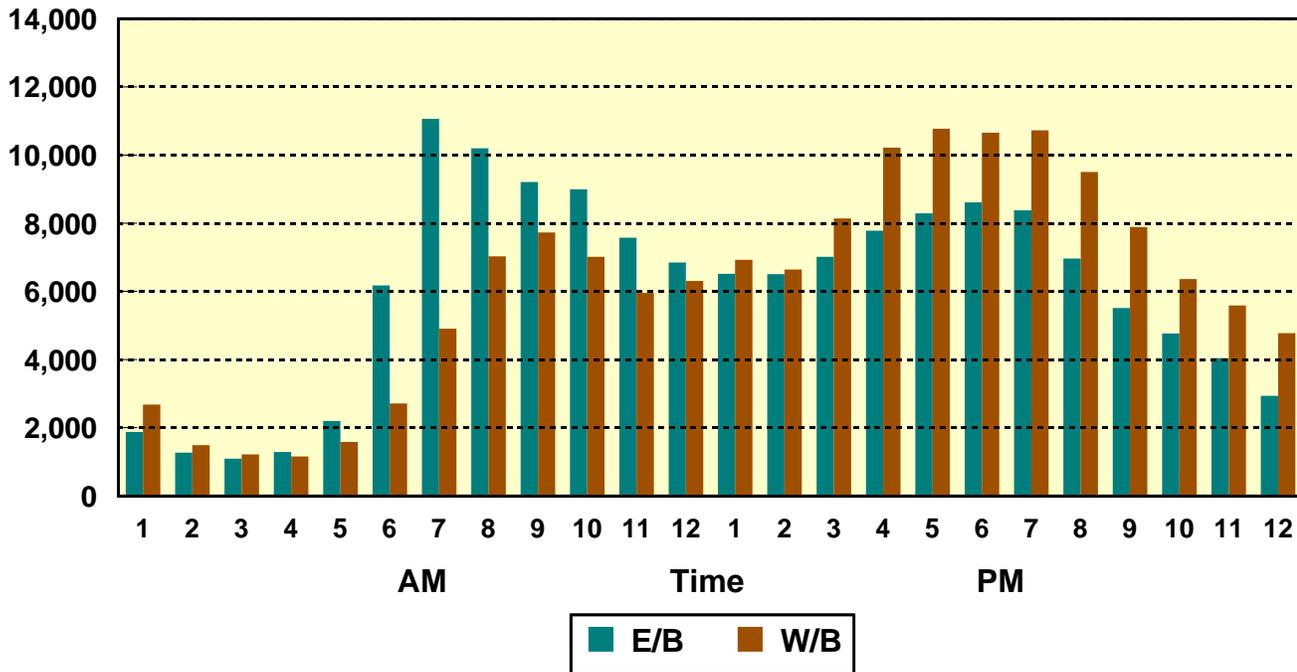
Hourly Vehicular Volumes George Washington Bridge - 2008

	<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	1,478	16	61	320	1,875	2,424	8	23	221	2,676	4,551
1-2am	823	15	70	363	1,271					1,487	2,758
2-3am	623	4	78	387	1,092					1,215	2,307
3-4am	688	7	96	494	1,285					1,157	2,442
4-5am	1,333	11	167	687	2,198					1,581	3,779
5-6am	4,973	32	349	821	6,175	1,982	7	196	525	2,710	8,885
6-7am	9,873	82	471	635	11,061 **	4,094	53	282	474	4,903	15,964
7-8am	9,270	110	389	428	10,197	6,104	100	343	485	7,032	17,229
8-9am	8,330	98	377	405	9,210	6,740	86	386	518	7,730	16,940
9-10am	8,045	93	383	477	8,998	5,798	81	450	688	7,017	16,015
10-11am	6,662	75	351	491	7,579	4,951	84	353	563	5,951	13,530
11-12am	6,005	67	323	453	6,848	5,214	57	417	615	6,303	13,151
12-1pm	5,721	69	310	415	6,515	5,662	59	451	752	6,924	13,439
1-2pm	5,772	71	288	373	6,504	5,577	44	411	607	6,639	13,143
2-3pm	6,301	84	283	348	7,016	7,112	60	385	584	8,141	15,157
3-4pm	7,097	111	255	321	7,784	9,226	66	384	541	10,217	18,001
4-5pm	7,700	114	210	265	8,289	9,935	60	332	449	10,776 **	19,065
5-6pm	8,115	106	162	230	8,613	9,872	73	297	417	10,659	19,272 **
6-7pm	7,917	91	130	240	8,378	10,050	64	231	383	10,728	19,106
7-8pm	6,509	89	99	267	6,964	8,981	48	138	334	9,501	16,465
8-9pm	5,075	66	86	285	5,512	7,367	48	105	368	7,888	13,400
9-10pm	4,357	52	78	279	4,766	5,934	46	71	311	6,362	11,128
10-11pm	3,640	36	61	300	4,037	5,112	38	71	367	5,588	9,625
11-12pm	2,578	27	52	278	2,935	4,354	22	48	348	4,772	7,707
Totals	128,885	1,526	5,129	9,562	145,102					147,957	293,059
7-10am	25,645	301	1,149	1,310	28,405	18,642	267	1,179	1,691	21,779	50,184
10am-1pm	18,388	211	984	1,359	20,942	15,827	200	1,221	1,930	19,178	40,120
1-4pm	19,170	266	826	1,042	21,304	21,915	170	1,180	1,732	24,997	46,301
4-7pm	23,732	311	502	735	25,280	29,857	197	860	1,249	32,163	57,443
7am-7pm	86,935	1,089	3,461	4,446	95,931	86,241	834	4,440	6,602	98,117	194,048

Classification based on October 2008 Data

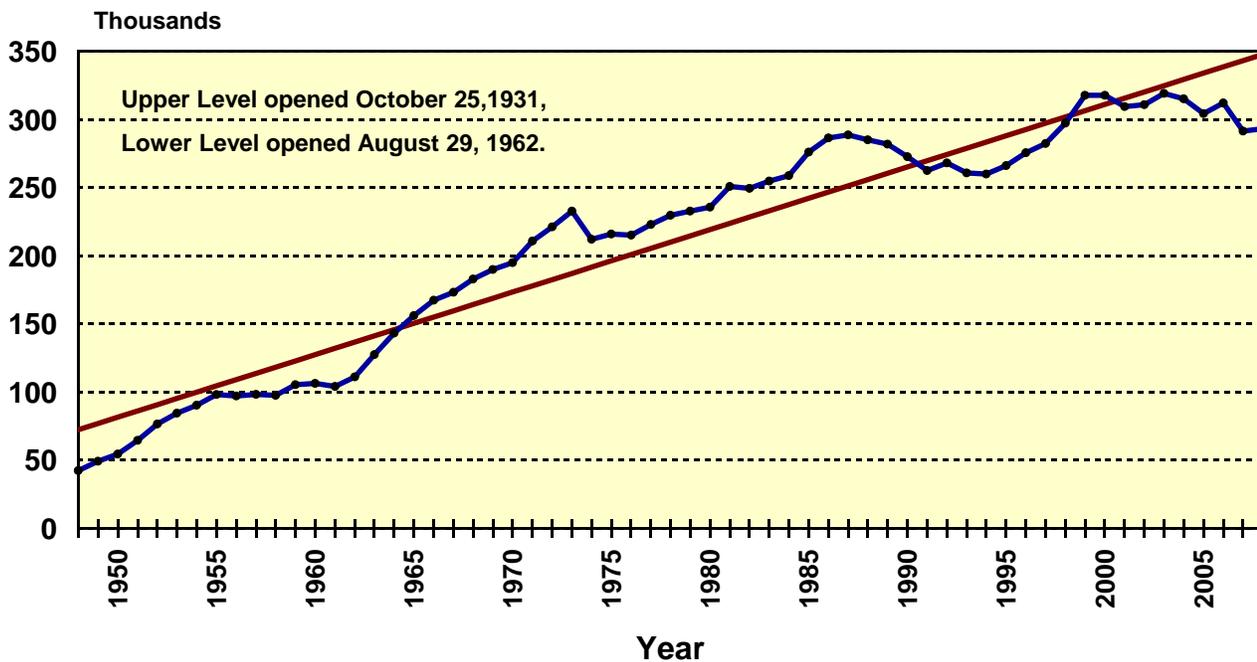
** Peak Volumes

Hourly Vehicular Volumes George Washington Bridge - 2008



Average Daily Traffic Volumes George Washington Bridge

1948-2008 Growth Rate = 2.7%



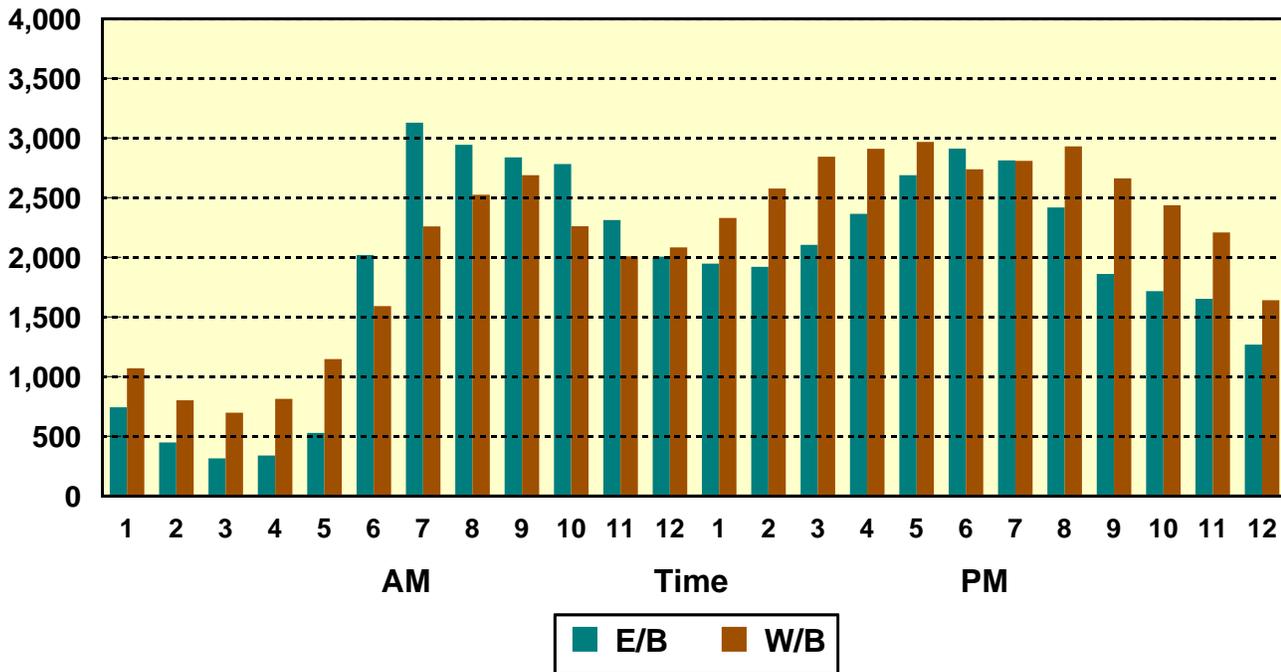
Hourly Vehicular Volumes Holland Tunnel - 2008

	Eastbound to Manhattan					FHWA Classes ▶	Westbound to New Jersey					2-Way Grand Totals	
	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles		Commuter Vans Commercial Vans			Single Unit Trucks	Tractor Trailers		Total Vehicles
							Autos & Motorcycles	Pickups Large SUVs	Buses				
						1 & 2	3	4	5 - 7	8 - 13			
12-1am	717	11	15	0	743		1,060	4	0	5	0	1,069	1,812
1-2am	420	6	21	0	447		789	5	2	6	0	802	1,249
2-3am	284	3	27	0	314		674	10	1	12	0	697	1,011
3-4am	294	3	41	0	338		749	25	5	34	0	813	1,151
4-5am	497	5	24	1	527		1,027	37	12	69	1	1,146	1,673
5-6am	1,994	14	10	1	2,019		1,497	60	15	18	0	1,590	3,609
6-7am	3,064	55	8	1	3,128	**	2,116	96	37	11	0	2,260	5,388
7-8am	2,870	66	7	1	2,944		2,370	98	46	11	0	2,525	5,469
8-9am	2,768	61	9	0	2,838		2,554	77	49	9	0	2,689	5,527
9-10am	2,726	43	12	1	2,782		2,168	60	27	6	0	2,261	5,043
10-11am	2,265	30	17	1	2,313		1,932	41	28	8	0	2,009	4,322
11-12am	1,972	23	10	1	2,006		2,013	43	21	7	0	2,084	4,090
12-1pm	1,909	29	7	1	1,946		2,267	43	5	15	0	2,330	4,276
1-2pm	1,882	31	6	1	1,920		2,489	59	15	14	0	2,577	4,497
2-3pm	2,061	38	6	0	2,105		2,755	64	6	19	0	2,844	4,949
3-4pm	2,302	57	5	1	2,365		2,835	40	15	20	0	2,910	5,275
4-5pm	2,607	75	6	1	2,689		2,882	34	30	21	0	2,967	5,656 **
5-6pm	2,827	79	5	1	2,912		2,634	48	32	24	0	2,738	5,650
6-7pm	2,737	68	7	1	2,813		2,713	51	23	21	0	2,808	5,621
7-8pm	2,373	39	5	1	2,418		2,858	35	20	18	0	2,931	5,349
8-9pm	1,829	23	7	0	1,859		2,614	35	7	6	0	2,662	4,521
9-10pm	1,690	19	7	0	1,716		2,388	36	5	6	2	2,437	4,153
10-11pm	1,629	19	4	0	1,652		2,153	47	4	3	1	2,208	3,860
11-12pm	1,252	9	6	0	1,267		1,597	38	2	2	0	1,639	2,906
Totals	44,969	806	272	14	46,061		49,134	1,086	407	365	4	50,996	97,057
7-10am	8,364	170	28	2	8,564		7,092	235	122	26	0	7,475	16,039
10am-1pm	6,146	82	34	3	6,265		6,212	127	54	30	0	6,423	12,688
1-4pm	6,245	126	17	2	6,390		8,079	163	36	53	0	8,331	14,721
4-7pm	8,171	222	18	3	8,414		8,229	133	85	66	0	8,513	16,927
7am-7pm	28,926	600	97	10	29,633		29,612	658	297	175	0	30,742	60,375

Based on October 2008 Classification Survey Data (Eastbound) and April 2006 Classification Survey Data (Westbound).

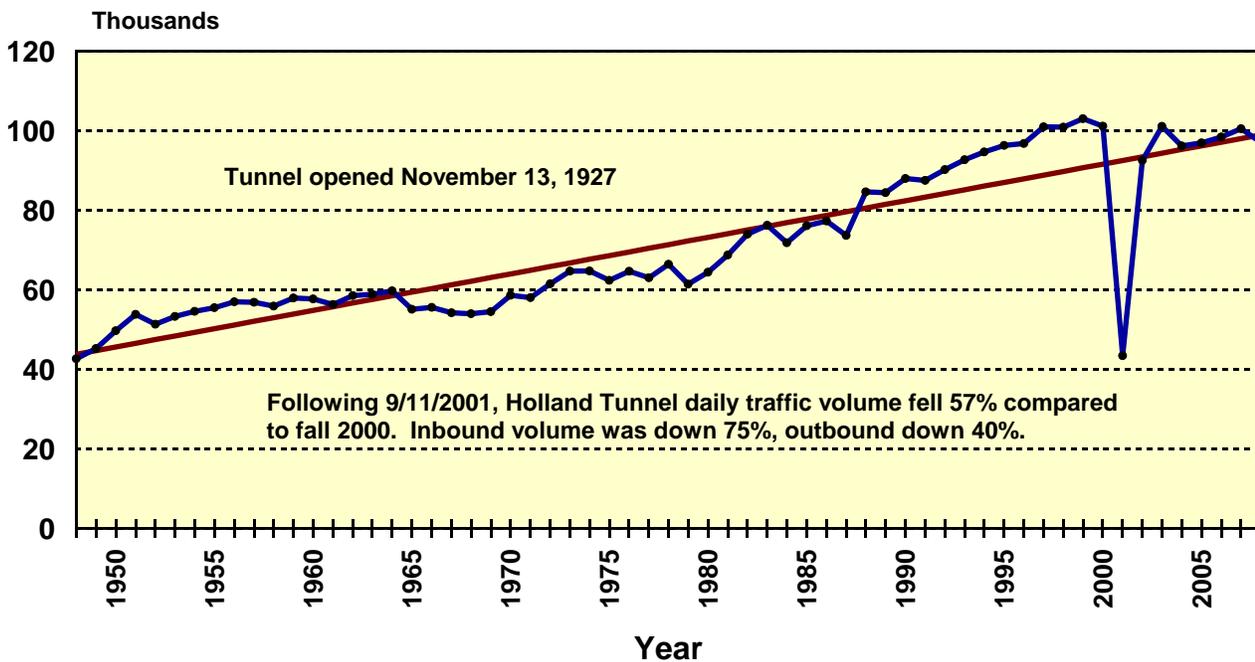
** Peak Volumes

Hourly Vehicular Volumes Holland Tunnel - 2008



Average Daily Traffic Volumes Holland Tunnel

1948-2008 Growth Rate = 1.4%



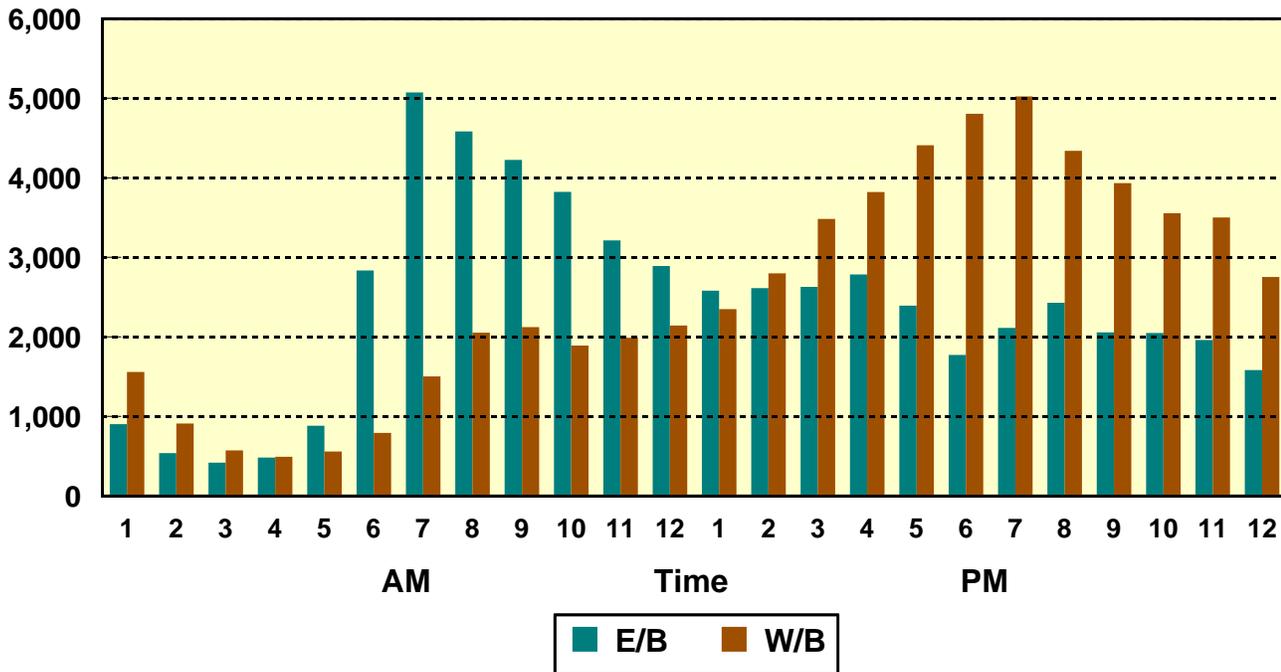
**Hourly Vehicular Volumes
Lincoln Tunnel - 2008**

PANYNJ Classes ▶	<i>Eastbound to Manhattan</i>					<i>Westbound to New Jersey</i>					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	768	55	22	41	15	901	1,459	33	44	21	1,557	2,458
1-2am	442	25	19	36	15	537					910	1,447
2-3am	330	9	20	42	17	418					573	991
3-4am	338	13	57	52	22	482					491	973
4-5am	598	24	131	88	42	883					557	1,440
5-6am	2,154	140	329	135	77	2,835	616	60	67	50	793	3,628
6-7am	4,116	416	369	122	49	5,072	1,080	278	82	61	1,501	6,573
7-8am	3,425	765	325	50	19	4,584	1,353	542	95	62	2,052	6,636
8-9am	3,041	841	292	40	11	4,225	1,229	738	101	53	2,121	6,346
9-10am	2,962	513	280	52	18	3,825	1,062	651	136	41	1,890	5,715
10-11am	2,706	239	205	47	16	3,213	1,394	352	187	54	1,987	5,200
11-12am	2,481	182	158	51	17	2,889	1,639	215	216	73	2,143	5,032
12-1pm	2,194	169	151	49	17	2,580	1,910	159	230	49	2,348	4,928
1-2pm	2,198	204	163	34	12	2,611	2,301	169	264	63	2,797	5,408
2-3pm	2,211	240	142	22	12	2,627	2,983	230	238	34	3,485	6,112
3-4pm	2,292	359	105	22	6	2,784	3,278	247	258	37	3,820	6,604
4-5pm	1,809	482	80	18	4	2,393	3,656	496	230	27	4,409	6,802
5-6pm	1,367	346	44	12	2	1,771	3,908	627	229	42	4,806	6,577
6-7pm	1,688	360	46	13	4	2,111	3,923	834	239	26	5,022	7,133 **
7-8pm	2,054	303	44	23	3	2,427	3,838	440	54	7	4,339	6,766
8-9pm	1,772	207	29	40	7	2,055	3,381	360	154	37	3,932	5,987
9-10pm	1,800	157	35	48	7	2,047	3,092	307	122	35	3,556	5,603
10-11pm	1,736	130	32	53	8	1,959	3,178	204	84	35	3,501	5,460
11-12pm	1,398	95	38	36	16	1,583	2,525	70	118	38	2,751	4,334
Totals	45,880	6,274	3,116	1,126	416	56,812					61,341	118,153
7-10am	9,428	2,119	897	142	48	12,634	3,644	1,931	332	156	6,063	18,697
10am-1pm	7,381	590	514	147	50	8,682	4,943	726	633	176	6,478	15,160
1-4pm	6,701	803	410	78	30	8,022	8,562	646	760	134	10,102	18,124
4-7pm	4,864	1,188	170	43	10	6,275	11,487	1,957	698	95	14,237	20,512
7am-7pm	28,374	4,700	1,991	410	138	35,613	28,636	5,260	2,423	561	36,880	72,493

Based on April 2006 Classification Survey Data (eastbound), and October 2008 classification data (westbound).

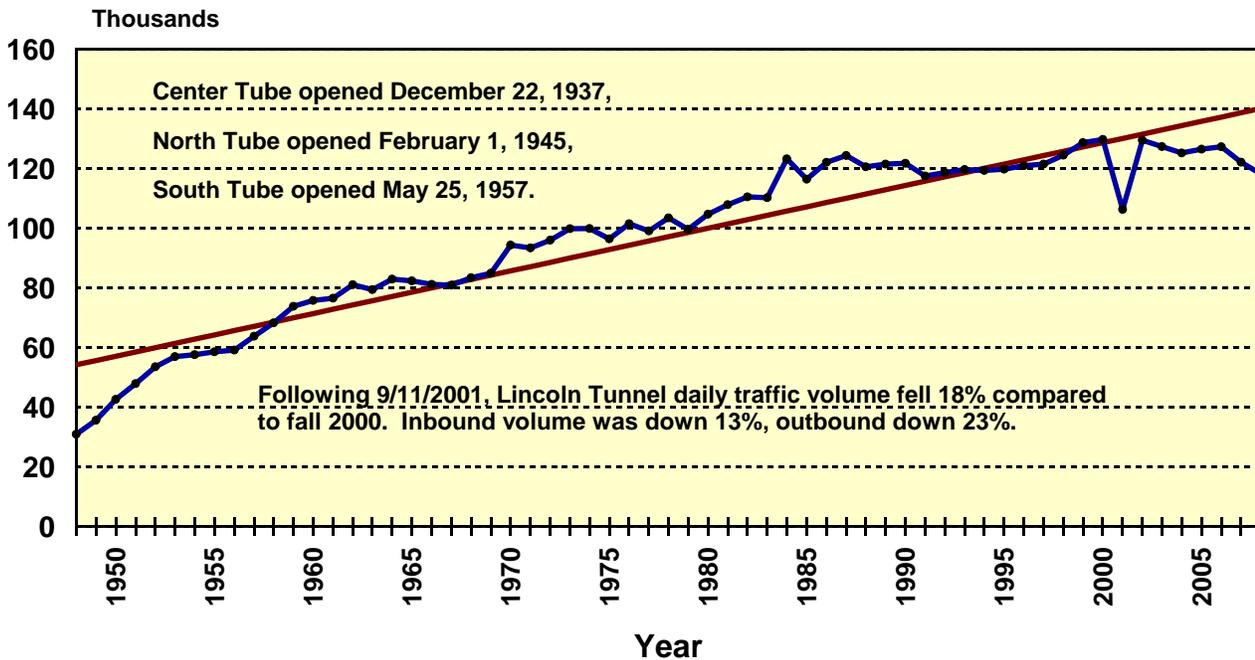
** Peak Volumes

Hourly Vehicular Volumes Lincoln Tunnel - 2008



Average Daily Traffic Volumes Lincoln Tunnel

1948-2008 Growth Rate = 1.6%



APPENDIX

2008 Bridge and Tunnel Reconstruction

APPENDIX

Major Bridge Reconstruction In 2008

Brooklyn Bridge

Eastbound lane closures were in effect as follows:

01/01–05/16:	1:00am–7:00am	Mon–Fri	1 e/b lane closed intermittently,
	10:00am–3:00pm	Mon–Fri	1 e/b lane closed intermittently,
	6:00am–2:00pm	Sat–Sun	1 e/b lane closed intermittently.
05/17–05/23:	10:00am–3:00pm	Mon–Fri	1 e/b lane closed intermittently,
	10:00pm–6:00am	Mon–Fri	1 e/b lane closed intermittently,
	6:00am–2:00pm	Sat–Sun	1 e/b lane closed intermittently.
05/24–05/30:	10:00am–3:00pm	Mon–Fri	1 e/b lane closed intermittently,
	10:00pm–6:00am	Mon–Fri	1 e/b lane closed intermittently,
	6:00am–2:00pm	Sat–Sun	1 e/b lane closed intermittently.
05/31–07/25:	11:00pm–6:00am	Mon–Fri	1 e/b lane closed intermittently,
	2:00am–2:00pm	Sat–Sun	1 e/b lane closed intermittently.
	07/26–08/08:	11:00pm–6:00am	Mon–Fri
2:00am–2:00pm		Sat–Sun	1 e/b lane closed intermittently,
2:00am–6:00am		Mon–Fri	2 e/b lanes closed intermittently.
08/09–08/15:	11:00pm–6:00am	Mon–Fri	1 e/b lane closed intermittently,
	2:00am–2:00pm	Sat–Sun	1 e/b lane closed intermittently,
	2:00am–6:00am	Mon–Fri	2 e/b lanes closed intermittently,
	2:00am–2:00pm	Sun	2 e/b lanes closed intermittently.
08/16–09/26:	11:00pm–6:00am	Mon–Fri	1 e/b lane closed intermittently,
	2:00am–2:00pm	Sat–Sun	1 e/b lane closed intermittently,
	2:00am–6:00am	Mon–Fri	2 e/b lanes closed intermittently,
	2:00am–Noon	Sun	2 e/b lanes closed intermittently.
09/27–10/17:	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.
10/18–10/31:	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,
	2:00am–6:00am	Mon–Fri	2 e/b lanes closed intermittently.
11/01–12/12:	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.

12/13–12/22:	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,
	2:00am–6:00am	Mon–Fri	2 e/b lanes closed intermittently.
12/23–12/31:	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.

Westbound lane closures were in effect as follows:

01/01–05/16:	11:00pm–6:00am	Mon–Fri	1 w/b lane closed intermittently,
	1:00am–7:00am	Sat	1 w/b lane closed intermittently,
	1:00am–9:00am	Sun	1 w/b lane closed intermittently.
05/17–05/23:	10:00am–3:00pm	Mon–Fri	1 w/b lane closed intermittently,
	10:00pm–6:00am	Mon–Fri	1 w/b lane closed intermittently,
	1:00am–7:00am	Sat	1 w/b lane closed intermittently,
	1:00am–9:00am	Sun	1 w/b lane closed intermittently.
05/24–06/01:	10:00am–3:00pm	Mon–Fri	1 w/b lane closed intermittently,
	10:00pm–6:00am	Mon–Fri	1 w/b lane closed intermittently,
	1:00am–7:00am	Sat	1 w/b lane closed intermittently,
	1:00am–9:00am	Sun	1 w/b lane closed intermittently,
	11:00pm–5:00am	Mon–Fri	2 w/b lanes closed intermittently,
	11:00pm Sat – 11:00am Sun		2 w/b lanes closed intermittently.
06/02–08/08:	11:00pm–6:00am	Mon–Fri	2 w/b lanes closed intermittently,
	11:00pm Sat – 11:00am Sun		2 w/b lanes closed intermittently.
10/18–10/31:	12:01am–5:00am	Mon–Fri	2 w/b lanes closed intermittently.
12/06–12/22:	12:01am–5:00am	Mon–Fri	2 w/b lanes closed intermittently.

On Saturday, November 15, from 7:00am until 2:00pm, the Brooklyn Bridge bicycle lanes were closed for pavement markings.

Manhattan Bridge

Manhattan Bridge Operation: January 1 – July 25, 2008.

North bikeway and south walkway open.

Note: The Brooklyn-Queens Expressway eastbound exit to the Manhattan Bridge was closed as follows.

04/21-04/29:	10:00pm – 5:00am	Mon. nights to Fri. mornings;
	12:01am – 6:00am	Saturday;
	1:00am – 7:00am	Sunday.
07/21-07/22:	11:00pm – 5:00am	Mon. night to Tue. morning.

During these times the Lower Inner Roadway was operated westbound to Manhattan.

- **6:00am – 10:00am Weekdays.**
 - Four lanes open westbound: two lanes on the north upper roadway (no trucks), and two 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.
 - Four lanes open eastbound: two lanes on the south upper roadway, and two lanes on the lower roadway.
- **9:00pm Friday – 5:00am Monday.**
 - Four lanes open westbound: two lanes on the north upper roadway, and two 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.
 - One of three lower roadway lanes closed round-the-clock.
 - Additional overnight and weekend 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 north upper roadway.
- **South Upper Roadway.**
 - Brooklyn-bound all hours for all vehicle types.
 - Overnight and weekend lane closures as needed on the south upper roadway.

Manhattan Bridge Operation: July 26 – December 31, 2008.

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

Queensboro Bridge

Throughout 2008, **trucks** were permitted only on the two Lower Inner Roadways.

Throughout 2008, 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 2008, the North Outer Roadway was reserved for **bicyclists and pedestrians**.

The North Upper Roadway was closed intermittently as follows:

All 2008:	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 2008:	10:00pm – 5:00am	All Days.
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Shuttle bus provided for pedestrians and bicyclists during closures.

The South Upper Roadway was closed intermittently as follows:

All 2008:	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:

All 2008: 1:00am – 6:00am Mon–Fri,
 1:00am – 7:00am Sat.

On Sunday, October 25, and Sunday, November 23, from 12:01am to 4:00am, there was no access to 2nd Avenue from the westbound/inbound lower level; from 4:00am to 8:00am there was no access from 2nd Avenue to the eastbound/Queens-bound lower level to facilitate NYCDOT Bridges paving. During these times trucks were restricted from the bridge.

Queensboro Bridge Operation: All 2008.

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 2008, there were additional intermittent closings of single lanes on individual roadways of the Queensboro Bridge during off-peak hours.

Williamsburg Bridge

Throughout 2008, **trucks** were permitted only on the outer roadways.

Pedestrian and bicycle access was maintained on the bridge at all times throughout 2008.

The North Outer Roadway was closed as follows:

04/26 – 04/27: 5:00am – 6:00pm Sat–Sun.
05/17 – 05/18 5:00am – 6:00pm Sat–Sun.
05/31 – 06/01 5:00am – 6:00pm Sat–Sun.
07/19 – 07/20 5:00am – 6:00pm Sat–Sun.

Manhattan-bound trucks banned from Williamsburg Bridge during these hours and advised to use Manhattan Bridge.

South inner roadway reversed to Manhattan-bound during these hours.

The South Outer Roadway was closed as follows:

05/31 – 06/01 5:00am – 6:00pm Sat–Sun.
06/14 – 06/15: 5:00am – 6:00pm Sat–Sun.
06/21 – 06/22: 5:00am – 6:00pm Sat–Sun.
07/12 – 07/13 12:01am – 6:00pm Sat–Sun.
07/26 – 07/27 5:00am – 6:00pm Sat–Sun.

Brooklyn-bound trucks banned from Williamsburg Bridge during these hours and advised to use Manhattan Bridge.

Williamsburg Bridge Operation: January 1 – March 28, 2008.

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

Williamsburg Bridge Operation: March 29 – December 31, 2008.

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:

**April 26 – 27, May 17 - 18,
May 31 - June 1, July 19 - 20.**

- **Sat–Sun 5:00am – 6:00pm.**
Manhattan-bound: 4 lanes.
Brooklyn-bound: 2 lanes.
*North outer roadway closed these hours.
Manhattan-bound trucks banned from Williamsburg Bridge and
advised to use Manhattan Bridge.
South inner roadway reversed to Manhattan-bound.*
- **Sat-Sun All other hours.**
Manhattan-bound: 4 lanes.
Brooklyn-bound: 4 lanes.

Weekend Williamsburg Bridge Operation:

**June 14 – 15, June 21 - 22
July 26 - 27.**

- **Sat–Sun 5:00am – 6:00pm.**
Manhattan-bound: 4 lanes.
Brooklyn-bound: 2 lanes.
*South outer roadway closed these hours.
Brooklyn-bound trucks banned from Williamsburg Bridge and
advised to use Manhattan Bridge.*
- **Sat-Sun All other hours.**
Manhattan-bound: 4 lanes.
Brooklyn-bound: 4 lanes.

Weekend Williamsburg Bridge Operation:

July 12 – July 13.

- **Sat–Sun 12:01am – 6:00pm.**
Manhattan-bound: 4 lanes.
Brooklyn-bound: 2 lanes.
*South outer roadway closed these hours.
Brooklyn-bound trucks banned from Williamsburg Bridge and
advised to use Manhattan Bridge.*
- **Sat-Sun All other hours.**
Manhattan-bound: 4 lanes.
Brooklyn-bound: 4 lanes.

Macombs Dam Bridge

Full closures of the Macombs Dam Bridge occurred (as required) to facilitate NYC DOT bridge work as follows.

03/18–03/28: 12:01am – 5:00am Mon–Fri;
1:00am – 6:00am Sat–Sun.

No closures on this bridge during closures on the 145th Street Bridge.

One lane in each direction was closed intermittently as follows.

03/29–07/04: 10:00am – 3:00pm Weekdays; *No lane closures within 2*
12:01am – 5:00am Weeknights. *hours of Yankee home games.*

Throughout 2008, there were additional closures of single lanes in each direction on the Macombs Dam Bridge during off-peak hours.

Third Avenue Bridge (Harlem River)

The Third Avenue Bridge was completely closed according to the following schedule.

05/29: 1:00am – 5:00am Thu. *Bridge fully closed.*

Throughout 2008, there were additional closures of single lanes on the Third Avenue Bridge during off-peak hours.

Willis Avenue Bridge

From February 2 to May 23, one of four lanes on the Bronx side as motorists exit to Willis Avenue (after the Bruckner Boulevard split) was closed round-the-clock to facilitate NYC DOT bridge work. Also, the left lane (one of four lanes) was closed to traffic approaching Bruckner Boulevard.

From May 24 to December 19, one of four lanes on the Bronx side as motorists exit to Bruckner Boulevard (after the Willis Avenue split), and also as motorists exit to Willis Avenue and the northbound Major Deegan Expressway, was closed round-the-clock to facilitate NYC DOT bridge work.

From December 20 to December 31, 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.

One of four lanes on the main bridge was closed intermittently as follows.

05/24–12/19: 12:01am – 6:00am Weeknights;
1:00am – 7:00am Sat.

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

12/20–12/31: 12:01am – 6:00am Weeknights;
1:00am – 7:00am Sat.

As of December 11, the pedestrian access at First Avenue and East 125th Street was closed, and a temporary access stairway was placed at First Avenue and East 127th Street.

145th Street Bridge

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

01/01–12/31: 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 2008, 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 2008, the inbound **exit to Trinity Place** was closed weekdays between 6:00-10:00am, and between 3:00–7:00pm.

One of the two tubes was closed intermittently according to the following schedule.

01/01-05/30: 9:00pm – 5:00am Sunday nights to Friday mornings.
05/31-12/31: 10:00pm – 5:30am Sunday nights to Friday mornings.

Two-way traffic was maintained in the other tube during these closures.

One of two lanes in each direction was closed intermittently according to the following schedule.

09/20-12/31: 10:30am – 3:00pm Weekdays

Throughout 2008, between 6:00am and 10:00am on weekdays, there were three lanes inbound and one lane outbound.

Throughout 2008, 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.

Henry Hudson Bridge

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

All 2008: 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.

05/31–12/31:	7:00am – 9:00am	Weekdays	1 Bronx-bound lane closed;
	9:00am – 2:00pm	Weekdays	2 Bronx-bound lanes closed.

Queens-Midtown Tunnel

Throughout 2008, there were intermittent closures of single lanes in both directions during off-peak hours.

One tube was closed from 12:01am Saturday, October 4, until 2:00pm Sunday, October 5. During this time, one lane in each direction was open to traffic in the other tube.

Robert F. Kennedy Bridge (formerly Triborough Bridge)

From May 31 to June 20, the following closures were in effect.

At the suspension bridge and viaduct one lane in each direction closed as needed to facilitate MTA construction activity on weekdays between 9:00am and 3:00pm.

From June 21 to September 19, 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 7:00am to 2:30pm daily.

At the suspension bridge and viaduct one of four lanes closed as needed to Queens 9:00am to 3:00pm weekdays; and 9:00pm to 5:00am Sunday nights to Friday mornings (two of four lanes closed as needed 11:00pm to 5:00am). One of four lanes closed as needed to Manhattan/Bronx 9:00am to 3:00pm weekdays.

From September 20 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, 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.

George Washington Bridge

Three of the four Upper Level eastbound lanes (to New York) were closed on weekends as follows. Also, the Palisades Parkway entrance was closed with traffic diverted to the Lower Level through Fort Lee.

06/07 – 12/05: 10:00pm Fri - 10:00am Sat,
10:00pm Sat - 10:00am Sun.
No closures the weekends of July 4 and Labor Day.

Throughout 2008, there were additional intermittent closures of single lanes during off-peak hours.

Holland Tunnel

Throughout 2008, all eastbound (to Manhattan) commercial traffic was banned from the Holland Tunnel.

Throughout 2008, 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.

The eastbound (to New York) tunnel was completely closed on weekends as follows.

10/04 -11/23: 1:00am – 8:00am Sat-Sun. Eastbound Tunnel closed.
No closure October 11-12.

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

All 2008: 11:30pm – 5:30am Mon–Fri. 1 w/b lane closed.
12:01am – 8:00am Sat. 1 w/b lane closed.

Throughout 2008, 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 2008: 11:00pm – 5:00am Mon–Fri. *Two tubes open, providing two*
1:00am – 9:00am Sat. *traffic lanes in each direction.*
1:00am – 10:00am Sun.

The westbound Tunnel Helix in New Jersey was partially and fully closed on weekends as follows.

10/25 - 12/05: 11:30pm Fri – 1:30pm Sat. *Two lanes closed on the Helix.*
1:30am – 9:30am Sat. *Helix completely closed.*

