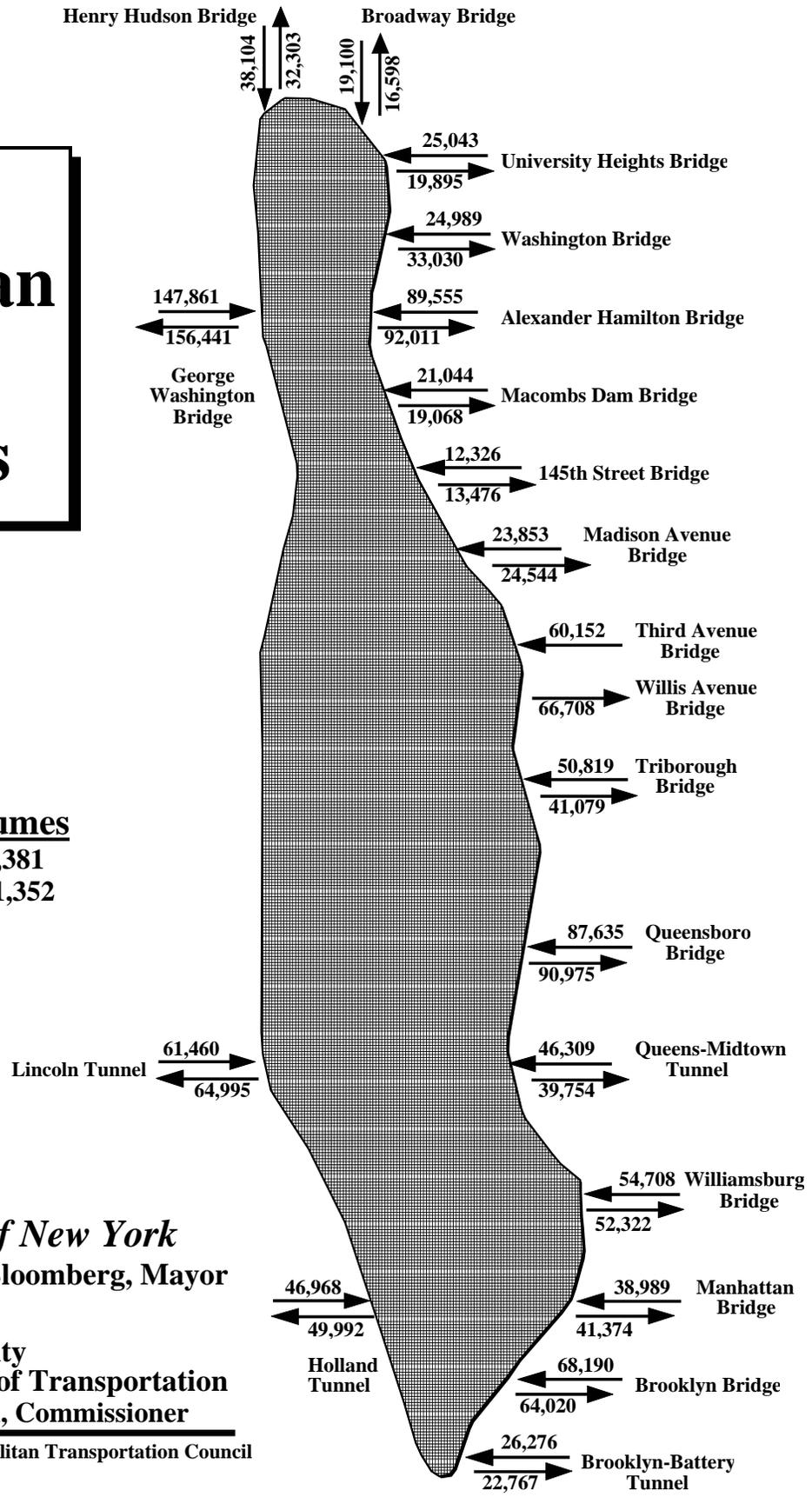


# 2005 Manhattan River Crossings



**24 Hour Volumes**  
 Inbound = 943,381  
 Outbound = 941,352



*The City of New York*  
 Michael R. Bloomberg, Mayor



New York City  
 Department of Transportation  
 Iris Weinshall, Commissioner

A member of the New York Metropolitan Transportation Council

February 2007

# **Manhattan River Crossings 2005**

**Contract D000642**

**2005-2006: PTDT05P00.01**

**2006-2007: PTDT06P00.01**

The preparation of this report was financed in part with funds from the U.S. Department of Transportation, Federal Highway Administration, under the Federal Highway Act of 1956, as amended, and the Urban Mass Transportation Act of 1964, as amended. This document is disseminated by the New York City Department of Transportation in the interest of information exchange. It reflects the views of the New York City Department of Transportation (NYCDOT), which is responsible for the facts and the accuracy of the data presented herein. The report does not necessarily reflect any official views or policies of the Federal Transit Administration, the Federal Highway Administration, or the State of New York. The report does not constitute a standard, specification, or regulation. NYCDOT is grateful to the Port Authority of New York and New Jersey (PANYNJ), the Metropolitan Transportation Authority Bridges and Tunnels (MTABT), and the New York City Department of City Planning (NYC DCP) for providing data used to develop this report.

Prepared by:  
New York City Department of Transportation

Iris Weinshall  
Commissioner

Judith E. Bergtraum  
First Deputy Commissioner

David Woloch  
Deputy Commissioner/Senior Policy Advisor

Michael Primeggia  
Deputy Commissioner

Naim Rasheed  
Director, Traffic Planning

Ann Marie Sledge-Doherty  
Deputy Director, Traffic Planning

Richard P. Roan  
Traffic Planning

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## INTRODUCTION

The 2005 *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 Transportation Equity Act of the 21<sup>st</sup> Century (TEA-21).

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 2005 are presented in histograms for each facility. Trends were developed from a regression analysis of volumes from 1948 to 2005. 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 2005-2006 and 2006-2007 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), and the New York City Department of City Planning (NYC DCP) for their assistance in the data collection process.

# SUMMARY

## 2005 Daily Traffic

- Daily Manhattan river crossings decreased 1.2%, to 1,884,700 in fall 2005 from 1,908,600 in fall 2004, a decrease of 23,900 daily vehicles.
- During the 7-8 am morning peak hour, 67,800 vehicles entered Manhattan. During the 5-6pm evening peak hour, 63,100 vehicles exited.
- For the 44th consecutive year, the George Washington Bridge carried more traffic than any other river crossing serving Manhattan. Some 304,300 daily vehicles used this bridge in fall 2005, which was 3.4% fewer than the average daily volume of 315,100 in fall 2004.
- The Alexander Hamilton Bridge was the second busiest river crossing, serving 181,600 daily vehicles in fall 2005, which was 3.6% more than its fall 2004 daily volume of 175,300. The Queensboro Bridge, which had been in second place continuously from 1997 to 2004, was third busiest, as its daily volume decreased 1.0%, to 178,600 in fall 2005 from 180,400 in fall 2004.
- The average automobile entering Manhattan during the morning peak period carried 1.4 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 360,800 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.

## Recent Trends

- In 2005, Manhattan river crossings decreased 1.2%, to 1.885 million daily vehicles. Volumes decreased on thirteen of the twenty river crossings. This decrease followed increases in each of the three preceding years, 2002, 2003, and 2004.
- The largest percentage and numerical increase occurred on the Third Avenue Bridge over the Harlem River between Manhattan and The Bronx. Average daily volume over the Third Avenue Bridge increased by 13,100 daily trips (+27.8%), to 60,200 in fall 2005 from 47,100 in fall 2004. The bridge was returned to full capacity following major reconstruction which had closed two of four lanes from October 2002 to February 2005.
- The largest percentage and numerical decrease occurred on the Willis Avenue Bridge over the Harlem River between Manhattan and The Bronx, where daily volume decreased 10.7%, to 66,700 in fall 2005 from 74,700 in fall 2004. This bridge is normally one-way Bronx-bound. During the above-described reconstruction on the nearby Third Avenue Bridge, one lane of the Willis Avenue Bridge was reversed to Manhattan-bound between 6-10am weekdays to accommodate diverted traffic. With the Third Avenue Bridge returned to full capacity, the Willis Avenue Bridge reversal was discontinued.

- Annual subway ridership citywide increased 1.6% to 1.449 billion in 2005 from 1.426 billion in 2004. This was the highest level of subway ridership since 1953.

## **Ten-Year Trends (1995-2005)**

- In the ten-year period from 1995 to 2005, Manhattan traffic volume has risen 6.9%, to 1,884,700 from 1,762,500, an increase of 122,200 daily vehicles.
- Daily vehicle trips entering Manhattan were 6.0% higher in 2005 than in 1995. The biggest increase in inbound trips occurred during the 1-4am period, which rose 27.6% during the decade. Trips leaving Manhattan increased 7.9% since 1995. The biggest outbound increase also occurred during the 1-4am period (+27.5%).
- Vehicle trips on the 13 toll-free East and Harlem River bridges grew at an average annual rate of 0.3% per year from 1995 to 2005. The highest average annual growth rate was on the Madison Avenue Bridge: +8.6% per year. The greatest volume increase also occurred on the Madison Avenue Bridge (25,700 more daily vehicles in fall 2005 than in fall 1995).
- 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 1995. The highest average annual growth rate was on the Henry Hudson Bridge (+2.3% per year). The largest volume increase was at the Queens-Midtown Tunnel (+12,200 vehicles per day).
- Traffic volumes on the three trans-Hudson Port Authority of New York and New Jersey (PANYNJ) river crossings serving Manhattan increased 0.8% per year since 1995. The highest average annual growth rate was at the George Washington Bridge (+1.5% per year), which also had the biggest volume increase (+38,300 vehicles per day).
- New York City motor vehicle registrations decreased 0.2% per year. In Manhattan, registrations increased 0.7% per year.

## **Historical 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.
- Between 1948 and 2005, daily vehicle trips to and from Manhattan rose 181%, to 1,884,700 from 670,000 (1,214,700 additional daily trips). The biggest growth was on the PANYNJ's three trans-Hudson facilities, where traffic climbed by 356%. Traffic

rose 96% on the four toll-free East River bridges, 171% on the nine toll-free Harlem River bridges, and 220% on the MTABT's four toll crossings.

- Between 1955 and 1965, daily traffic growth to and from Manhattan averaged 2.4% per year. The largest annual growth rates occurred on the Brooklyn Bridge (+7.9%), on the George Washington Bridge (+4.9%), and at the Queens-Midtown Tunnel (+4.1%). The largest annual decline was on the Madison Avenue Bridge, where daily traffic decreased 4.6% per year.
- Between 1965 and 1975, daily traffic growth to and from Manhattan averaged 1.4% per year. The largest annual growth rates occurred on the George Washington Bridge (+3.6%) and the Washington Bridge over the Harlem River (+3.5%). The biggest annual decline was at the Brooklyn-Battery Tunnel (-2.2% per year).
- Between 1975 and 1985, traffic growth on all Manhattan crossings averaged 1.9% per year. The largest annual growth rates were on the Macombs Dam Bridge (+3.7%), the Manhattan Bridge (+3.6%), and the Triborough Bridge (+3.4%). The biggest annual decline was on the Queensboro Bridge (-0.6% per year).
- Between 1985 and 1995, traffic on all Manhattan river crossings decreased 0.2% per year. The largest annual growth rates were on the Henry Hudson Bridge (+2.8%) and through the Holland Tunnel (+2.6%). The largest annual declines were on the Madison Avenue Bridge (-3.8% per year), the Macombs Dam Bridge (-2.6% per year), and the University Heights Bridge (-2.5% per year).
- During the 57-year period from 1948 to 2005, average daily Manhattan vehicular river crossings rose 181%, to 1,884,700 from 670,000. During the same period, annual citywide subway ridership declined by 29%, to 1,449,000,000 from 2,031,000,000.

## **Origin-Destination**

- 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 1989 at its trans-Hudson crossings show that 41% of all automobiles entering Manhattan from New Jersey each day have final destinations outside Manhattan. Similar surveys conducted in 1991 show that 77% of the trucks entering from New Jersey have final destinations outside Manhattan. These figures indicate that 107,375 autos and trucks entering Manhattan from New Jersey in 2005 each day were simply passing through.
- PANYNJ's O & D surveys show that 79% (84,725 vehicles) of all daily "through-Manhattan" auto and truck trips from New Jersey use the George Washington Bridge and the Trans-Manhattan Expressway. The remaining 21% (22,650 vehicles) use the Lincoln and Holland Tunnels and proceed across Manhattan along congested City streets.
- PANYNJ reports show that 67% (30,100 automobiles) of morning peak period (7-10 am) automobiles entering from New Jersey have final destinations in Manhattan.

## 2005 Bridge and Tunnel Reconstruction

### *Brooklyn Bridge*

Throughout 2005, intermittent lane closures were in effect as follows.

<u>Eastbound:</u>	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.
<u>Westbound:</u>	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.

From November 19 to November 23, between 1:00am-6:00am, the southbound FDR Drive exit ramp to the Brooklyn Bridge was closed.

On November 29, between 2:00am-5:00am, the eastbound Brooklyn-Queens Expressway exit ramp to the Brooklyn Bridge was closed.

### *Manhattan Bridge*

Throughout 2005, the following conditions were in effect on the Manhattan Bridge.

- **Bicycle access** was on the north side of the bridge and **pedestrian access** was on the south side of the Manhattan Bridge.
- One or two of the three lanes on the **reversible Lower Roadway** closed.
- **Four peak direction lanes** on weekdays (5:00-10:00am Manhattan-bound, 3:00-9:00pm Brooklyn-bound).
- **Mon-Fri 5:00am - 3:00pm.**
  - Manhattan-bound: 4 lanes: 2 on North Upper Roadway, 2 on Lower Roadway.
  - Brooklyn-bound: 2 lanes on South Upper Roadway.
  - *One Lower Roadway lane closed.*
- **Mon-Fri 3:00pm - 9:00pm.**
  - Manhattan-bound: 2 lanes on North Upper Roadway.
  - Brooklyn-bound: 4 lanes: 2 on South Upper Roadway, 2 on Lower Roadway.
  - *One Lower Roadway lane closed.*

#### Manhattan Bridge Operation: January 1 – September 9, 2005.

- **Mon-Fri 5:00am - 9:00pm.** See preceding discussion.
- **Mon-Fri 9:00pm - 5:00am.**
  - Manhattan-bound: 2 lanes on North Upper Roadway.
  - Brooklyn-bound: 3 lanes: 2 on South Upper Roadway, 1 on Lower Roadway.
  - *Two Lower Roadway lanes closed.*

- **All other times.**
  - Manhattan-bound: 3-4 lanes: 2 on North Upper Roadway, 1 or 2 on Lower Roadway.
  - Brooklyn-bound: 2 lanes on South Upper Roadway.
  - *One or two Lower Roadway lanes closed.*

**Manhattan Bridge Operation: September 10 – September 16, 2005.**

- **South Upper Roadway closed 12:01am Saturdays to 5:30am Mondays.**
- **Mon-Fri 5:00am - 9:00pm.** See preceding discussion.
- **Mon-Fri 9:00pm - 5:00am.**
  - Manhattan-bound: 2 lanes on North Upper Roadway.
  - Brooklyn-bound: 3 lanes: 2 on South Upper Roadway, 1 on Lower Roadway.
  - *Two Lower Roadway lanes closed.*
- **12:01am Sat – 5:30am Mon.**
  - Manhattan-bound: 2 lanes on North Upper Roadway,
  - Brooklyn-bound: 3 lanes on Lower Roadway.
  - *South Upper Roadway closed.*

**Manhattan Bridge Operation: September 17 – September 30, 2005.**

- **South Upper Roadway closed as follows.**
  - 12:01am Saturdays to 5:30am Mondays S. Upper Rdwy closed.
  - 11:00pm-5:00am Mon-Fri S. Upper Rdwy closed as needed.
- **Mon-Fri 5:00am - 9:00pm.** See preceding discussion.
- **Mon-Fri 9:00pm - 11:00pm.**
  - Manhattan-bound: 2 lanes on North Upper Roadway.
  - Brooklyn-bound: 3-4 lanes: 1-2 on South Upper Roadway, 1-2 on Lower Roadway.
  - *One South Upper Roadway lane and/or one Lower Roadway lane closed as needed.*
- **Mon-Fri 11:00pm - 5:00am.**
  - Manhattan-bound: 2 lanes on North Upper Roadway.
  - Brooklyn-bound: 2-4 lanes: 0-2 on South Upper Roadway, 2-3 on Lower Roadway.
  - *One or both South Upper Roadway lanes and/or one Lower Roadway lane closed as needed.*
- **12:01am Sat – 5:30am Mon.**
  - Manhattan-bound: 2 lanes on North Upper Roadway,
  - Brooklyn-bound: 3 lanes on Lower Roadway.
  - *South Upper Roadway closed.*

**Manhattan Bridge Operation: October 1 – December 31, 2005.**

- **Mon-Fri 5:00am - 9:00pm.** See preceding discussion.

- **Mon-Fri 9:00pm - 5:00am.**
  - Manhattan-bound: 2 lanes on North Upper Roadway.
  - Brooklyn-bound: 3-4 lanes: 2 on South Upper Roadway,  
1-2 on Lower Roadway.
  - *One or two Lower Roadway lanes closed.*
  
- **Sat-Sun.**
  - Manhattan-bound: 3-4 lanes 2 on North Upper Roadway,  
1-2 on Lower Roadway.
  - Brooklyn-bound: 2 lanes on South Upper Roadway,
  - *One or two Lower Roadway lanes closed.*

## ***Queensboro Bridge***

Throughout 2005, **trucks** were permitted only on the two Lower Inner Roadways.

Throughout 2005, 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 2005, the one-lane South Outer Roadway was closed intermittently weeknights from 1:00am to 6:00am, and Saturdays from 1:00am to 7:00am.

On Tuesday-Wednesday, March 8-9, the North Inner Roadway was closed from 1:00am to 5:30am, and Manhattan-bound trucks were banned from the bridge.

On Thursday, October 20, the South Upper Roadway was closed from 12:01am to 5:30am.

From October 22 to December 31, the South Upper Roadway was closed intermittently Sunday nights to Friday mornings between 1:00am and 5:30am.

From June 18 to June 30, the North Upper Roadway entrance from Queens Plaza South at 11<sup>th</sup> Street was closed overnight Sunday nights to Saturday mornings from 10:00pm to 5:00am.

From November 7 to November 11, the South Inner Roadway to Queens was closed from 1:00am to 5:30am, and Queens-bound trucks were banned from the bridge.

### **Queensboro Bridge Operation: All of 2005.**

- 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 2005, there were additional intermittent closings of single lanes on individual roadways of the Queensboro Bridge during off-peak hours.

### ***Williamsburg Bridge***

From November 14 to November 17, on weekdays, one of two lanes on the westbound Brooklyn-Queens Expressway exit ramp to the Williamsburg Bridge was closed between 10:00pm-5:00am, with full closures of the ramp between 1:00am-5:00am.

#### **Williamsburg Bridge Operation: All 2005.**

- **Four peak direction lanes available on weekdays.**
- **North foot walk open for pedestrians and bicyclists; south foot walk closed.**
- **South Inner and South Outer Roadways both closed overnight as follows.**
  - 02/28-03/04: 10:00pm - 5:00am Mon-Fri.
  - 07/25-07/29: 10:00pm - 5:00am Mon-Fri.
  - *Two lanes each way open on the north roadways during these times. Eastbound trucks banned from the bridge during these times.*
- **Mon-Fri Midnight - 5:00am.**

Manhattan-bound: 3 lanes.	<i>One lane closed in</i>
Brooklyn-bound: 3 lanes.	<i>each direction.</i>
- **Mon-Fri 5:00am - 10:00am.**

Manhattan-bound: 4 lanes.	<i>Two lanes closed in</i>
Brooklyn-bound: 2 lanes.	<i>the off-peak direction.</i>
- **Mon-Fri 10:00am - 3:00pm.**

Manhattan-bound: 3 lanes.	<i>1 westbound lane closed,</i>
Brooklyn-bound: 2 lanes.	<i>2 eastbound lanes closed.</i>
- **Mon-Fri 3:00pm – Midnight.**

Manhattan-bound: 4 lanes.	
Brooklyn-bound: 4 lanes.	
- **Sat-Sun 1:00am - 8:00am.**

Manhattan-bound: 3 lanes.	<i>One lane closed in</i>
Brooklyn-bound: 3 lanes.	<i>each direction.</i>
- **All other times.**

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

### ***Broadway Bridge***

From January 1 to June 17, one of three lanes in each direction on the Broadway Bridge was closed round-the-clock.

## ***Macombs Dam Bridge***

There were intermittent closures of one of two lanes in each direction on the Macombs Dam Bridge and the 155<sup>th</sup> Street viaduct as follows.

All 2005:	10:00am - 3:00pm	Mon-Fri.	<i>No closures within two hours of Yankee home games.</i>
	10:00pm - 6:00am	Mon-Fri.	
	12:01am - 8:00am	Sat.	
	1:00am - 9:00am	Sun.	

Full closures of the Macombs Dam Bridge also occurred (as required) during the following times.

All 2005:	12:01am - 5:00am	Mon-Fri.	<i>No closures within two hours of Yankee home games.</i>
	1:00am - 6:00am	Sat-Sun.	

## ***Madison Avenue Bridge***

Throughout 2005, lane closures were in effect as necessary on the Madison Avenue Bridge as follows:

<b>Eastbound:</b>	7:00am - 3:00pm	Mon-Fri.	1 E/B lane closed intermittently.
	11:00pm - 5:00am	Mon-Fri.	1 E/B lane closed intermittently.
	7:00am - 3:00pm	Sat-Sun.	1 E/B lane closed intermittently.

*No lane closures during Yankee home games.*

<b>Westbound:</b>	10:00am - 4:00pm	Mon-Fri.	1 W/B lane closed intermittently.
	11:00pm - 5:00am	Mon-Fri.	1 W/B lane closed intermittently.
	7:00am - 3:00pm	Sat-Sun.	1 W/B lane closed intermittently.

*No lane closures during Yankee home games.*

## ***Third Avenue Bridge (Harlem River)***

From January 1 to February 11, two of the four Manhattan-bound lanes were closed for long term bridge rehabilitation. During this time, the Bruckner Blvd. approach was also closed.

*On weekdays between 6:00-10:00am, Manhattan-bound passenger cars were accommodated in a reverse lane on the Willis Avenue Bridge.*

A third lane on the bridge was also closed as follows, leaving only one operational lane.

01/01-02/11:	12:01am - 5:00am	All Days.	3 <sup>rd</sup> lane closed intermittently.
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Throughout 2005, the Third Avenue Bridge was completely closed as needed according to the following schedule.

12:01am - 5:00am	Mon-Fri.	and	1:00am - 6:00am	Sat-Sun.
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*Full closures as needed, with one lane reversed to Manhattan-bound on the Willis Avenue Bridge. No full closures during NY Yankee home night games.*

From February 12 to December 31, there were additional intermittent closings of one of the four lanes on the Third Avenue Bridge during off-peak hours.

## ***Washington Bridge***

From January 1 to April 1, intermittent lane closures were in effect as follows.

7:00am - 3:00pm Mon-Fri 1 of 3 westbound lanes closed intermittently.

9:00am - 3:00pm Mon-Fri 1 of 3 eastbound lanes closed intermittently.

6:00am - 2:00pm Sat-Sun 1 of 3 lanes in each direction closed intermittently.

## ***Willis Avenue Bridge***

From January 1 to February 11, one lane was reversed to Manhattan-bound between 6:00-10:00am weekdays to accommodate traffic (passenger cars only) from the Third Avenue Bridge reconstruction. Direct access to the reversal lane was available from southbound Major Deegan Expressway (Exit 2), and from local streets via East 134<sup>th</sup> Street. Passenger cars using the reversal lane exited at First Avenue and 125<sup>th</sup> Street in Manhattan, and could turn left for access to southbound FDR Drive, or right for access to local streets. During these hours, there were two Bronx-bound lanes open (one lane from the First Avenue approach and one lane from the FDR Drive approach).

The reversal of one lane to Manhattan-bound was also in effect during full closures of the Third Avenue Bridge.

The First Avenue approach and two of the four lanes on the Willis Avenue Bridge were closed as follows.

05/14-05/16: 12:01am Saturday - 5:00am Monday.

05/21-05/23: 12:01am Saturday - 5:00am Monday.

06/04-06/05: 12:01am Saturday - 11:00am Sunday.

07/16-07/17: 12:01am Saturday - Noon Sunday.

08/20-08/21: 12:01am Saturday - Noon Sunday.

09/17-09/18: 12:01am Saturday - Noon Sunday.

The ramp to the Willis Avenue Bridge from the northbound FDR Drive was partially closed as follows;

07/30-08/06: 11:00pm - 5:30am Mon-Fri,

12:01am - 6:30am Sat,

1:00am - 11:00am Sun.

*One 12-foot wide traffic lane maintained on the ramp.*

Throughout 2005, there were additional intermittent closings of one of the four lanes on the Willis Avenue Bridge during off-peak hours.

## ***145<sup>th</sup> Street Bridge***

There were intermittent closures of one of two eastbound lanes as follows.

01/01-07/31 and 08/08-12/31: 7:00am - 3:00pm Mon-Fri.

*No lane closures during Yankee home games.*

There were intermittent closures of one of two westbound lanes as follows.

01/01-07/31 and 08/08-12/31: 9:00am - 5:30pm Mon-Fri.  
*No lane closures during Yankee home games.*

The South Roadway was closed round-the-clock from 7:00pm, July 31, to 5:00am, August 8. During this period, one lane in each direction was maintained on the North Roadway.

### ***Brooklyn-Battery Tunnel***

Throughout 2005, 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.

01/01-04/08: 9:00pm - 5:00am Sunday nights to Friday mornings,  
11:00pm - 11:00am Friday nights to Saturday mornings.  
*One tube closed intermittently.*  
*Two-way traffic maintained in the other tube during these closures.*

04/09-12/16: 9:00pm - 5:00am Sunday nights to Friday mornings,  
11:00pm Friday - 5:00am Monday.  
*One tube closed intermittently.*  
*Two-way traffic maintained in the other tube during these closures.*

12/16-12/31: 9:00pm - 5:00am Sunday nights to Friday mornings,  
*One tube closed intermittently.*  
*Two-way traffic maintained in the other tube during these closures.*

### ***Henry Hudson Bridge***

**Northbound** (upper level) lane closures were in effect during 2005 according to the following schedule.

01/01-11/25: Round-the-clock All days 1 of 3 northbound lanes closed.

**Southbound** (lower level) lane closures were in effect during 2005 according to the following schedule.

01/01-11/25: Round-the-clock All days 1 of 4 southbound lanes closed.

### ***Queens-Midtown Tunnel***

Throughout 2005, there were intermittent closures of single lanes in both directions during off-peak hours.

### ***Triborough Bridge***

Lane closures were in effect on the Harlem River lift span according to the following schedule.

01/01-12/16: 9:30am - 3:00pm Mon-Fri 1 Manhattan-bound lane closed.  
Round-the-clock. All Days 1 Brx/Qns-bound lane closed.

12/17-12/31: 10:00am -2:30pm Mon-Fri 1 Manhattan-bound lane closed.  
7:00am – 2:30pm. Mon-Fri 1 Brx/Qns-bound lane closed.

Lane closures were in effect on the main span according to the following schedule.

12/17-12/31: 5:00am - 3:00pm Mon-Fri 1 westbound lane closed.  
9:00pm – 5:00am. Mon-Fri 2 westbound lanes closed.

Throughout 2005, one of two lanes on the southbound Bruckner Expressway approach to the bridge was closed round-the-clock.

### ***George Washington Bridge***

Throughout 2005, **trucks** were required to use the upper level.

The westbound upper level was completely closed as follows:

07/11-08/26: 11:00pm - 5:00am Mon-Fri. w/b upper level closed.  
07/16-08/27: 12:01am - 8:00am Sat. w/b upper level closed.

From 10:00pm Friday, September 30, to 10:00am Saturday, October 1, three of the four Upper Level lanes in each direction were closed. During the working hours, there were intermittent full roadway closures in both directions as the beams were removed. Also, the Henry Hudson Parkway and Harlem River Drive ramps were diverted to the Lower Level; the 179<sup>th</sup> Street ramp was closed from 10:30pm to 5:00am; and the Palisades Parkway entrance was closed, with traffic diverted to the Lower Level through local streets.

Throughout 2005, there were additional intermittent closures of single lanes on the various George Washington Bridge roadways and ramps during off-peak hours.

### ***Holland Tunnel***

Throughout 2005, all eastbound (to Manhattan) commercial traffic was banned from the tunnel.

Throughout 2005, the tunnel was open westbound to New Jersey for two-axle and three-axle single unit trucks. Tractor trailers, and single unit trucks with more than three axles, were not permitted.

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

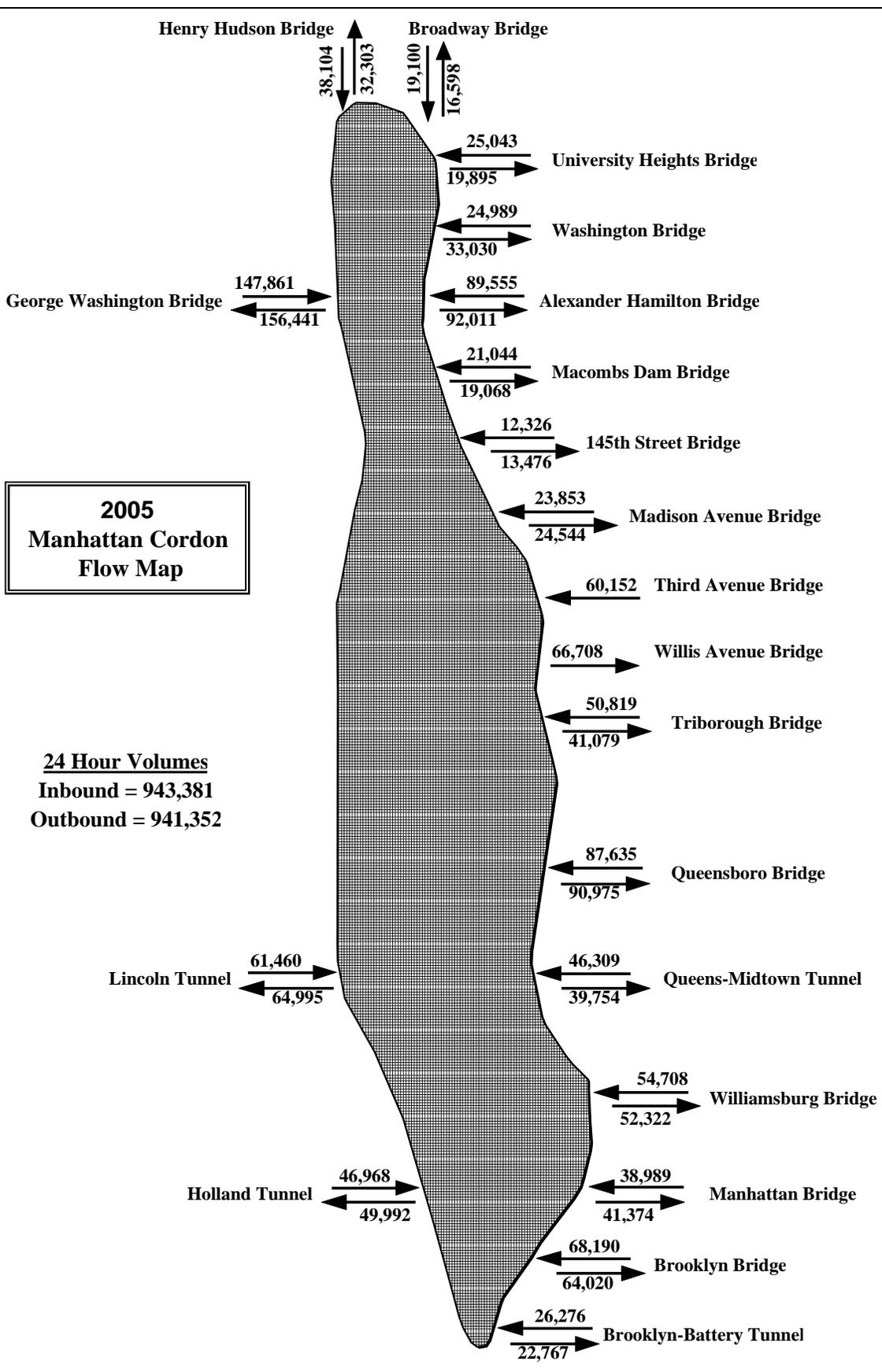
01/01-11/11: 10:30pm - 5:30am Mon-Fri. 1 w/b lane closed.  
1:00am - 7:00am Sat. 1 w/b lane closed.  
11/12-12/31: 10:30pm - 5:30am Mon-Fri. 1 w/b lane closed.  
12:01am - 8:00am Sat. 1 w/b lane closed.

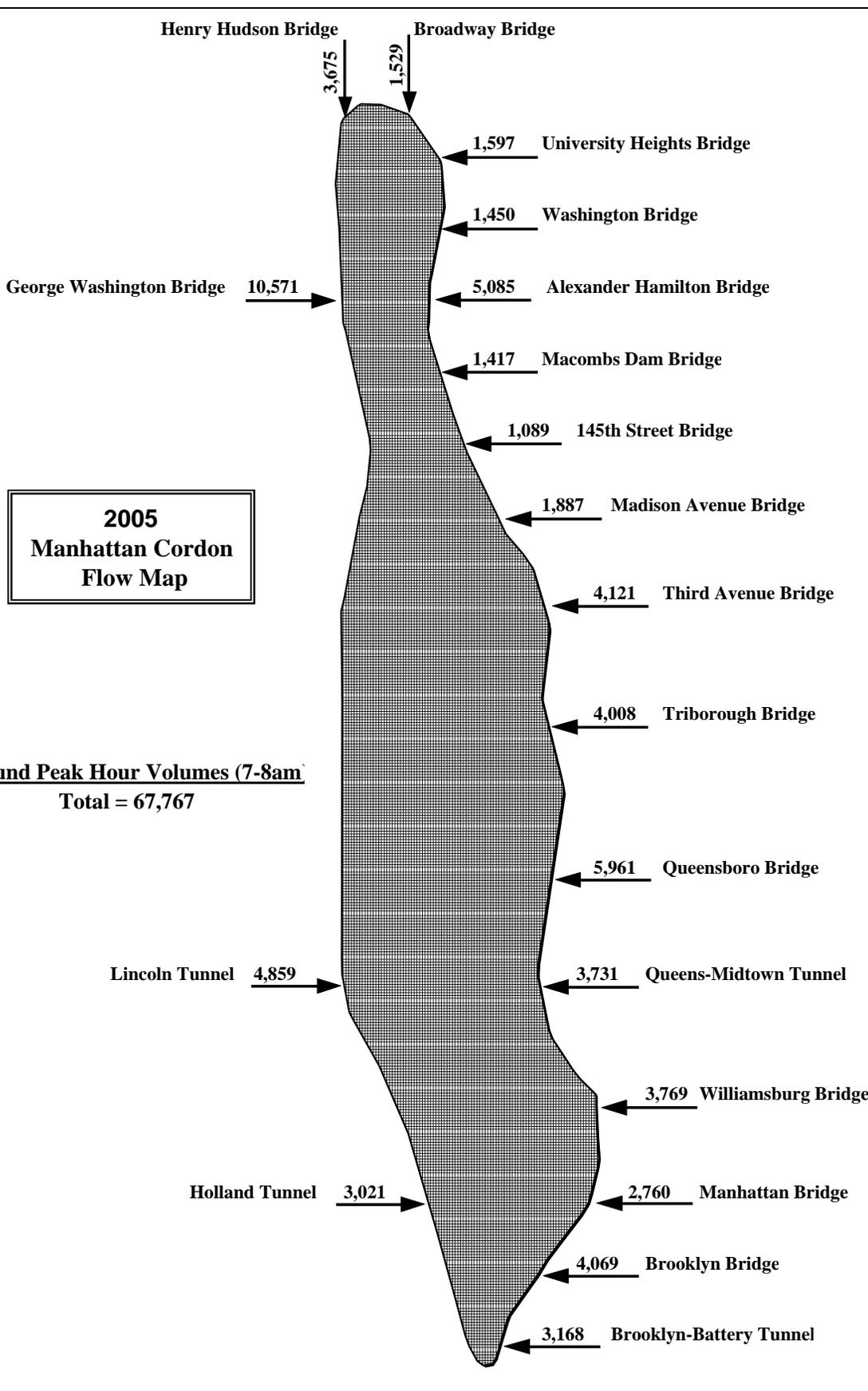
### ***Lincoln Tunnel***

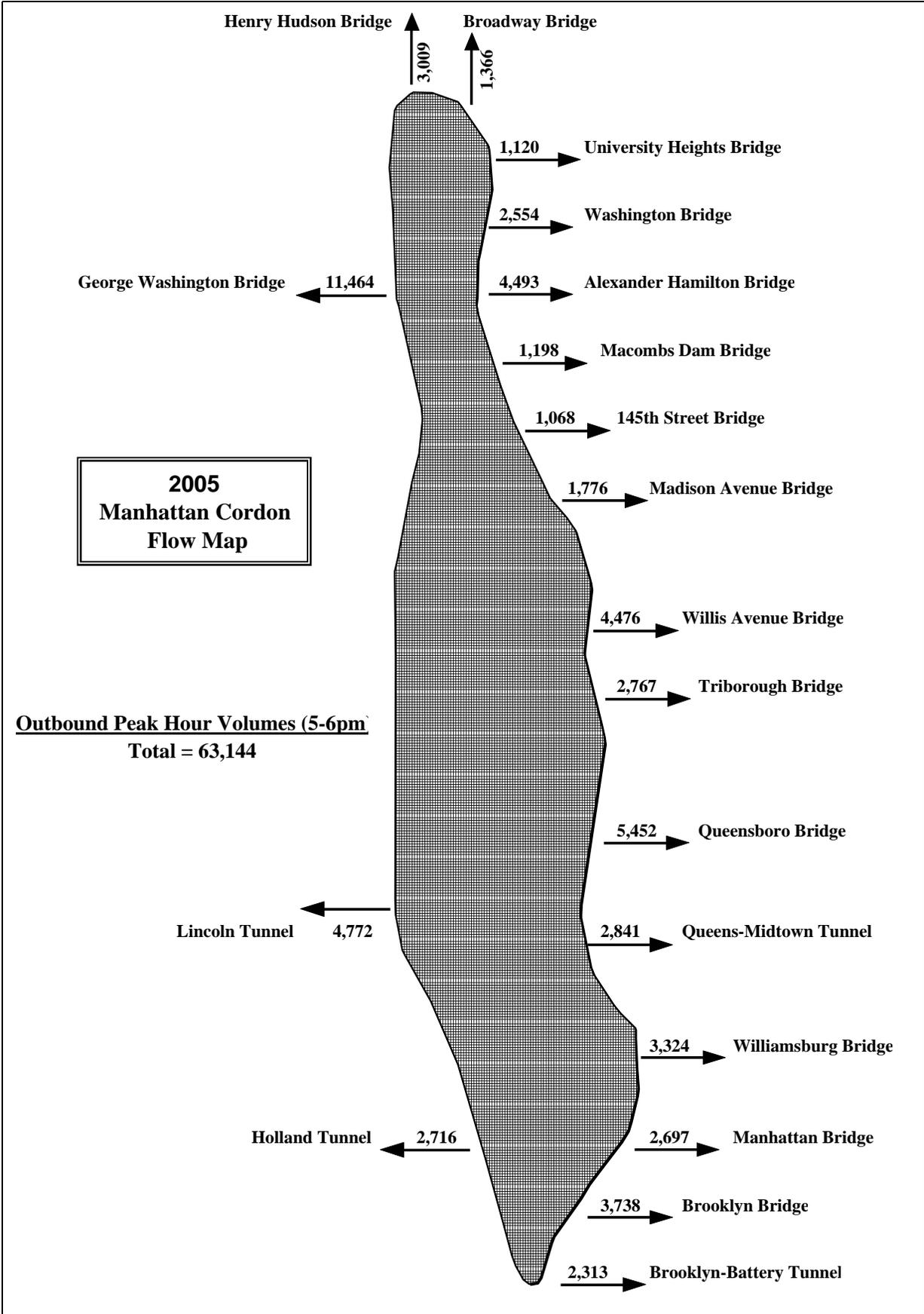
One of the three tubes of the Lincoln Tunnel was closed as follows.

01/01-11/11: 11:00pm - 5:00am Mon-Fri. *Two tubes open, providing two*  
12:01am - 8:00am Sat-Sun. *traffic lanes in each direction.*

11/12-12/31: 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.







**Manhattan Crossings  
2005 Average Daily Traffic Volumes  
To and From Manhattan**

<b><i>EAST RIVER BRIDGES</i></b>	<b>To Manhattan</b>	<b>From Manhattan</b>	<b>2-way Total</b>
Brooklyn Bridge	68,190	64,020	132,210
Manhattan Bridge	38,989	41,374	80,363
Queensboro Bridge	87,635	90,975	178,610
Williamsburg Bridge	54,708	52,322	107,030
<b>Total East River</b>	<b>249,522</b>	<b>248,691</b>	<b>498,213</b>

***HARLEM RIVER BRIDGES***

Alexander Hamilton Bridge	89,555	92,011	181,566
Broadway Bridge	19,100	16,598	35,698
Macombs Dam Bridge	21,044	19,068	40,112
Madison Avenue Bridge	23,853	24,544	48,397
Third Avenue Bridge	60,152	-----	60,152
University Heights Bridge	25,043	19,895	44,938
Washington Bridge	24,989	33,030	58,019
Willis Avenue Bridge	-----	66,708	66,708
145th Street Bridge	12,326	13,476	25,802
<b>Total Harlem River</b>	<b>276,062</b>	<b>285,330</b>	<b>561,392</b>

***MTABT FACILITIES***

Brooklyn-Battery Tunnel	26,276	22,767	49,043
Henry Hudson Bridge	38,104	32,303	70,407
Queens-Midtown Tunnel	46,309	39,754	86,063
Triborough Bridge	50,819	41,079	91,898
<b>Total MTABT</b>	<b>161,508</b>	<b>135,903</b>	<b>297,411</b>

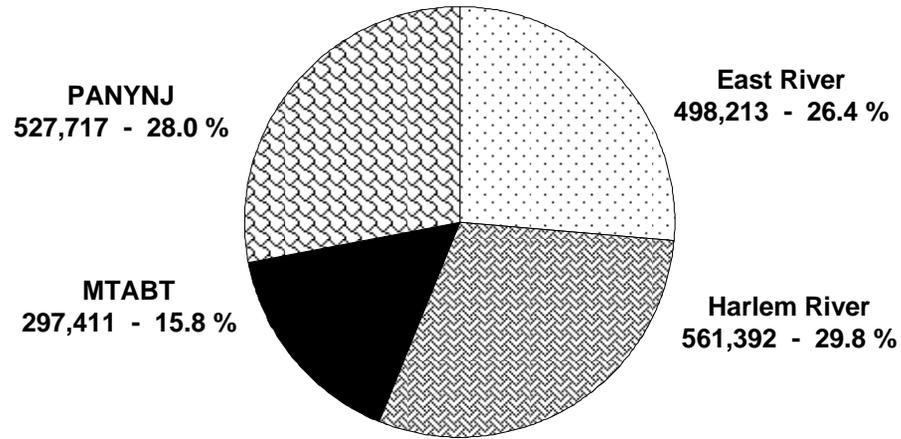
***PANYNJ FACILITIES***

George Washington Bridge	147,861	156,441	304,302
Holland Tunnel	46,968	49,992	96,960
Lincoln Tunnel	61,460	64,995	126,455
<b>Total PANYNJ</b>	<b>256,289</b>	<b>271,428</b>	<b>527,717</b>

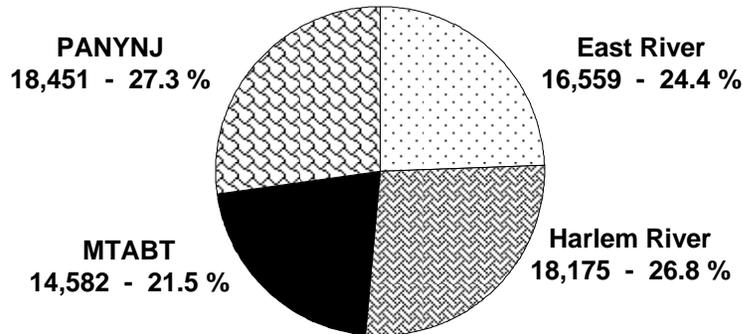
<b>GRAND TOTAL</b>	<b>943,381</b>	<b>941,352</b>	<b>1,884,733</b>
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# Manhattan Crossings Vehicle Volumes

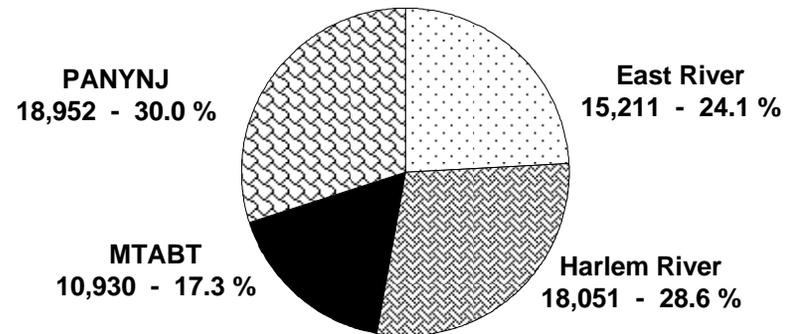
## 24-Hour Volumes – Both Directions



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



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



## Total Manhattan Crossings 2005 Average Hourly Traffic Volumes To and From Manhattan (All Facilities)

	Entering Manhattan	Leaving Manhattan	2-Way Total
12-1am	16,211	26,064	42,275
1-2am	10,867	17,074	27,941
2-3am	8,643	12,526	21,169
3-4am	9,059	10,588	19,647
4-5am	13,821	12,777	26,598
5-6am	31,718	19,621	51,339
6-7am	59,336	33,810	93,146
7-8am	67,767 **	43,231	110,998
8-9am	63,871	44,280	108,151
9-10am	56,317	39,067	95,384
10-11am	47,982	37,234	85,216
11-12am	44,207	38,667	82,874
12-1pm	42,435	40,164	82,599
1-2pm	42,749	43,831	86,580
2-3pm	46,756	51,370	98,126
3-4pm	50,218	58,923	109,141
4-5pm	51,743	62,593	114,336
5-6pm	53,237	63,144 **	116,381
6-7pm	50,665	59,265	109,930
7-8pm	45,111	54,451	99,562
8-9pm	37,854	49,985	87,839
9-10pm	34,538	45,570	80,108
10-11pm	32,134	41,584	73,718
11-12pm	26,142	35,533	61,675
24 hrs	943,381	941,352	1,884,733
7-10am	187,955	126,578	314,533
10am-1pm	134,624	116,065	250,689
1-4pm	139,723	154,124	293,847
4-7pm	155,645	185,002	340,647
7am-7pm	617,947	581,769	1,199,716

\*\* Peak Volumes

## 2005 East & Harlem River Bridges 7am-7pm Two-Way Vehicle Classification

<b>EAST RIVER BRIDGES</b>	<b>Autos</b>	<b>Buses</b>	<b>Commuter</b>		<b>Commercial</b>		<b>Total</b>
			<b>Vans</b>	<b>Trucks</b>	<b>Vans</b>	<b>Trucks</b>	
Brooklyn	72,151	247	2,751	50	3,065		78,264
Manhattan	22,044	1,116	4,566	11,079	7,783		46,588
Queensboro	79,787	2,202	5,629	5,597	9,754		102,969
Williamsburg	41,166	1,173	9,841	6,303	5,056		63,539
<b>Total East River</b>	<b>215,148</b>	<b>4,738</b>	<b>22,787</b>	<b>23,029</b>	<b>25,658</b>		<b>291,360</b>

### **HARLEM RIVER BRIDGES**

Alexander Hamilton	85,879	268	2,334	14,789	3,206		106,476
Broadway	22,940	724	370	716	884		25,634
Macombs Dam	22,939	347	282	1,143	2,014		26,725
Madison Avenue	25,947	1,401	1,334	1,546	1,940		32,168
Third Avenue	29,679	745	2,446	2,925	2,737		38,532
University Heights	25,290	337	908	998	1,539		29,072
Washington	34,302	1,016	912	1,141	1,585		38,956
Willis Avenue	34,263	723	1,184	2,522	2,967		41,659
145th Street	15,549	457	637	859	743		18,245
<b>Total Harlem River</b>	<b>296,788</b>	<b>6,018</b>	<b>10,407</b>	<b>26,639</b>	<b>17,615</b>		<b>357,467</b>

## 2005 MTABT & PANYNJ Facilities 24 Hour Two-Way Vehicle Classification

<b>MTABT FACILITIES</b>	<b>Autos*</b>	<b>Buses</b>	<b>Trucks</b>	<b>Total</b>
Brooklyn-Battery Tunnel	44,206	2,407	2,430	49,043
Henry Hudson Bridge	70,036	0	371	70,407
Queens-Midtown Tunnel	77,974	1,116	6,973	86,063
Triborough Bridge	87,660	843	3,395	91,898
<b>Total MTABT</b>	<b>279,876</b>	<b>4,366</b>	<b>13,169</b>	<b>297,411</b>

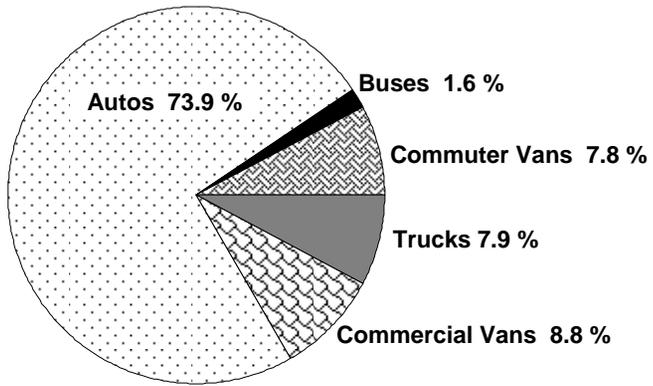
### **PANYNJ FACILITIES**

George Washington Bridge	269,460	3,478	31,364	304,302
Holland Tunnel **	93,350	1,608	2,002	96,960
Lincoln Tunnel	102,683	13,454	10,318	126,455
<b>Total PANYNJ</b>	<b>465,493</b>	<b>18,540</b>	<b>43,684</b>	<b>527,717</b>

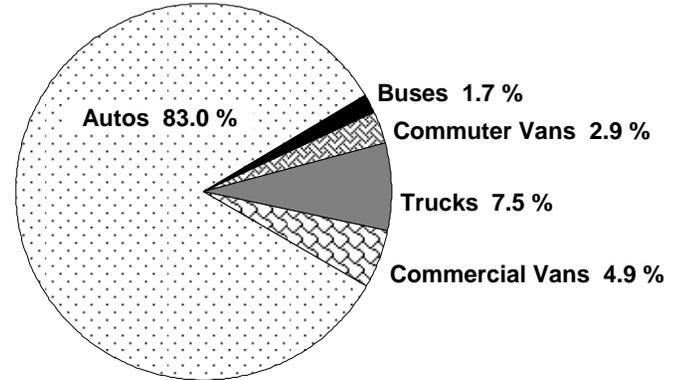
\* Light trucks & vans included with autos.

\*\* Holland Tunnel truck volume estimated. Only 2-axle and 3-axle single unit trucks allowed westbound. No trucks allowed eastbound.

## 7am – 7pm Two-Way Classification

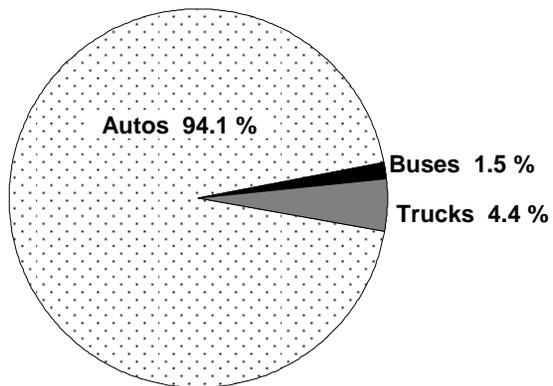


East River Bridges

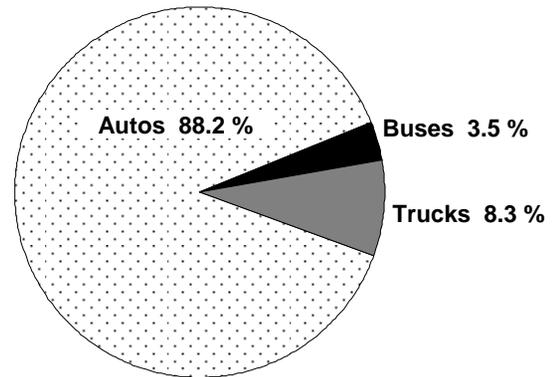


Harlem River Bridges

## 24-Hour Two-Way Classification



MTABT Facilities



PANYNJ Facilities

## ORIGINS AND DESTINATIONS OF MANHATTAN AUTO COMMUTERS

### *DESTINATIONS*

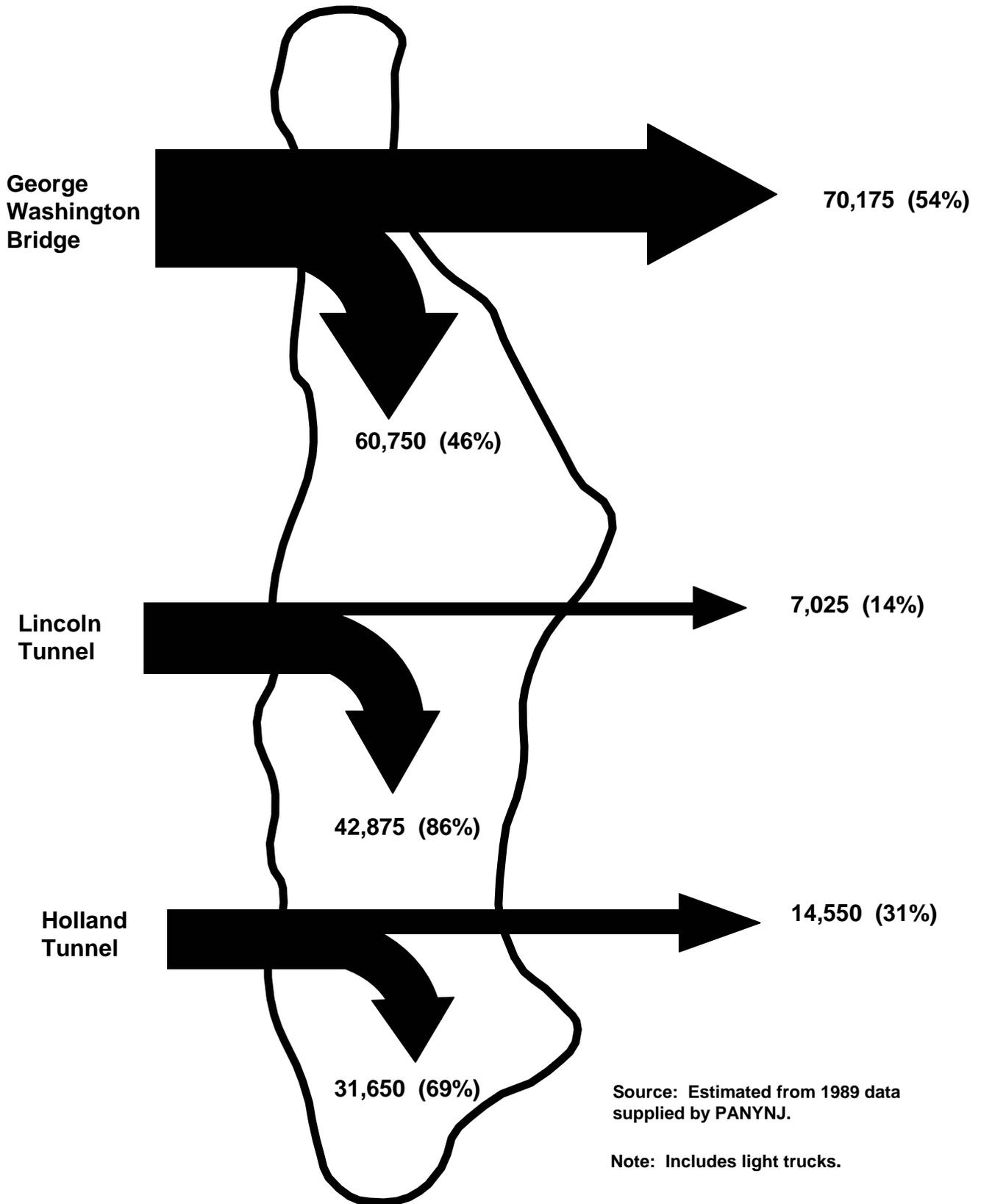
<b>ORIGINS</b>	<b>Manhattan CBD</b>	<b>Upper Manhattan</b>	<b>Total</b>
Bronx	6.5%	16.5%	9.0%
Brooklyn	13.2%	8.7%	12.1%
Manhattan	9.9%	14.8%	11.1%
Queens	19.4%	17.7%	19.0%
Staten Island	5.5%	2.0%	4.7%
<b>Subtotal NYC Origins</b>	<b>54.5%</b>	<b>59.7%</b>	<b>55.9%</b>
Long Island	10.7%	7.1%	9.8%
Upstate 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%
<b>Subtotal Suburbs</b>	<b>45.5%</b>	<b>40.3%</b>	<b>44.1%</b>
<b>GRAND TOTAL</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

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.

# 2005 Thru vs. Local E/B Auto Trips via Hudson River Crossings



# DESTINATIONS OF HUDSON RIVER CROSSINGS EASTBOUND AUTO TRAFFIC

## TOTAL OF HOLLAND TUNNEL, LINCOLN TUNNEL AND GEORGE WASHINGTON BRIDGE

1989

Eastbound Auto Destinations	6-7 am	7-10 am	4-7 pm	5 am - 11 pm
Manhattan				
Midtown	19.9%	23.6%	11.0%	17.5%
Valley	13.1%	13.4%	11.5%	13.4%
Downtown	12.0%	9.9%	5.8%	8.4%
CBD Total	45.0%	46.9%	28.2%	39.3%
Upper Manhattan	18.7%	19.5%	19.7%	19.9%
Manhattan Total	63.6%	66.4%	47.9%	59.2%
Bronx	9.7%	11.1%	11.3%	10.1%
Brooklyn	7.6%	4.7%	7.9%	6.3%
Queens	10.9%	8.1%	14.3%	11.3%
Westchester	3.0%	3.8%	6.4%	4.4%
Long Island	3.5%	4.2%	8.0%	5.7%
Other	1.6%	1.8%	4.2%	3.0%
Thru Trip Total	36.4%	33.6%	52.1%	40.8%
GRAND TOTAL	100.0%	100.0%	100.0%	100.0%

Source: PANYNJ, Vehicular Origin and Destination Survey - 1989, May 1990.

## DESTINATIONS OF HOLLAND TUNNEL EASTBOUND AUTO TRAFFIC

1989

Eastbound Auto Destinations	6-7 am	7-10 am	4-7 pm	5 am - 11 pm
Manhattan				
Midtown	6.8%	10.6%	6.6%	8.9%
Valley	15.3%	19.8%	23.4%	22.7%
Downtown	40.9%	38.8%	22.1%	29.9%
CBD Total	63.0%	69.1%	52.1%	61.5%
Upper Manhattan	5.1%	5.2%	7.9%	7.0%
Manhattan Total	68.1%	74.3%	60.0%	68.5%
Bronx	1.4%	0.9%	1.1%	0.9%
Brooklyn	17.6%	16.2%	22.8%	18.0%
Queens	9.7%	6.5%	12.1%	9.4%
Westchester	0.3%	0.6%	0.1%	0.2%
Long Island	2.0%	1.4%	2.7%	2.4%
Other	0.9%	0.1%	1.2%	0.6%
Thru Trip Total	31.9%	25.7%	40.0%	31.5%
GRAND TOTAL	100.0%	100.0%	100.0%	100.0%

Source: PANYNJ, Vehicular Origin and Destination Survey - 1989, May 1990.

## DESTINATIONS OF LINCOLN TUNNEL EASTBOUND AUTO TRAFFIC

1989

Eastbound Auto Destinations	6-7 am	7-10 am	4-7 pm	5 am - 11 pm
Manhattan				
Midtown	37.8%	45.8%	30.8%	38.9%
Valley	23.0%	25.5%	22.6%	23.8%
Downtown	8.9%	7.3%	4.2%	6.7%
CBD Total	69.8%	78.6%	57.6%	69.4%
Upper Manhattan	11.7%	11.3%	22.0%	16.5%
Manhattan Total	81.5%	89.9%	79.6%	85.9%
Bronx	0.8%	1.0%	1.0%	0.8%
Brooklyn	5.8%	3.0%	5.9%	4.2%
Queens	9.6%	4.1%	10.7%	7.0%
Westchester	0.2%	0.5%	0.5%	0.3%
Long Island	1.3%	1.4%	1.9%	1.4%
Other	0.8%	0.2%	0.4%	0.4%
Thru Trip Total	18.5%	10.1%	20.4%	14.1%
GRAND TOTAL	100.0%	100.0%	100.0%	100.0%

Source: PANYNJ, Vehicular Origin and Destination Survey - 1989, May 1990.

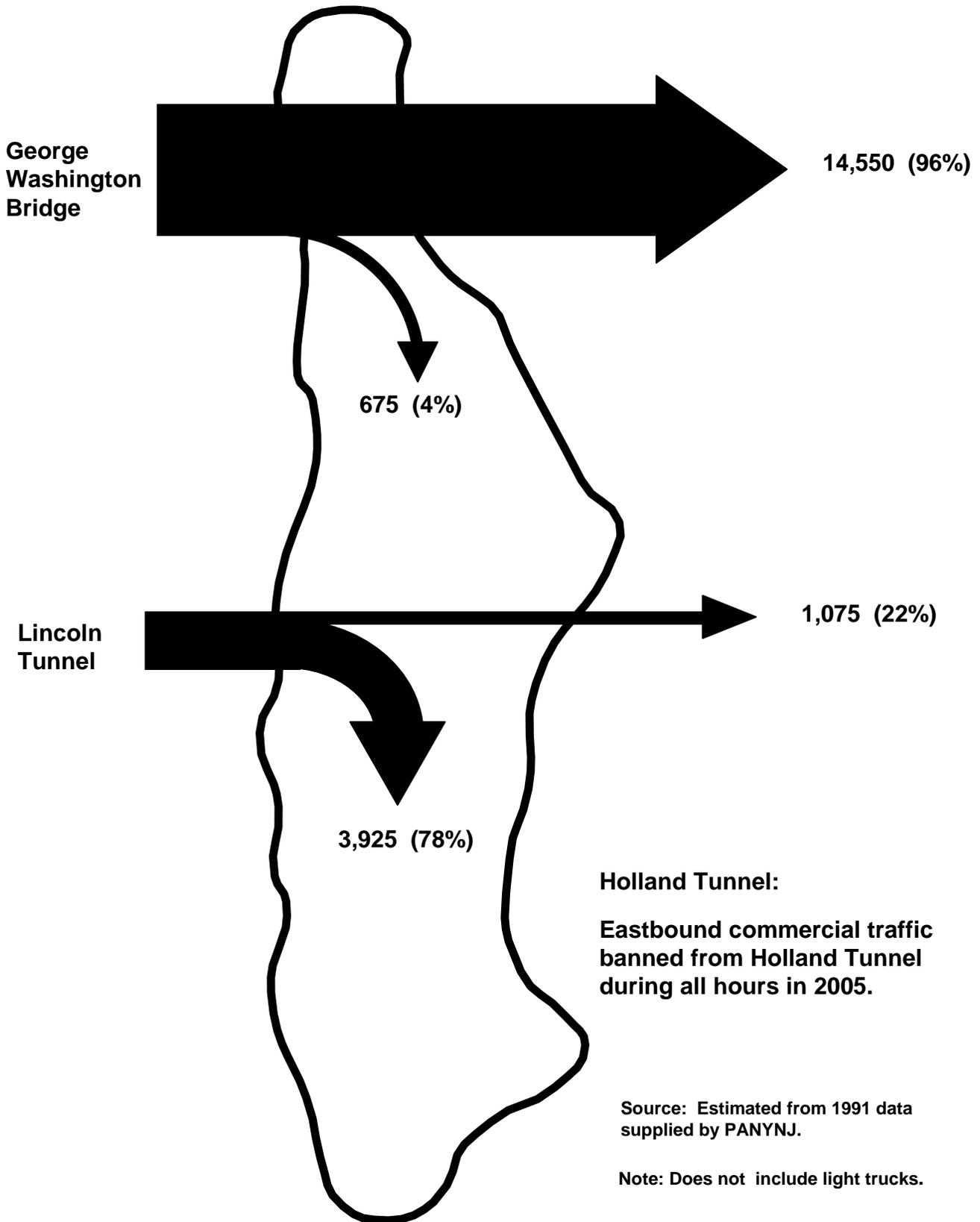
## DESTINATIONS OF GEORGE WASHINGTON BRIDGE EASTBOUND AUTO TRAFFIC

1989

Eastbound Auto Destinations	6-7 am	7-10 am	4-7 pm	5 am - 11 pm
Manhattan				
Midtown	15.6%	17.9%	7.3%	11.8%
Valley	8.5%	7.1%	5.6%	6.9%
Downtown	6.1%	4.2%	1.8%	3.0%
CBD Total	30.2%	29.2%	14.7%	21.7%
Upper Manhattan	24.9%	26.1%	22.2%	24.7%
Manhattan Total	55.1%	55.3%	36.9%	46.4%
Bronx	15.4%	17.4%	16.6%	16.2%
Brooklyn	5.9%	2.6%	4.5%	3.8%
Queens	11.8%	10.0%	15.8%	13.5%
Westchester	4.9%	5.9%	9.4%	7.2%
Long Island	4.7%	6.0%	10.9%	8.2%
Other	2.2%	2.8%	5.9%	4.7%
Thru Trip Total	44.9%	44.7%	63.1%	53.6%
GRAND TOTAL	100.0%	100.0%	100.0%	100.0%

Source: PANYNJ, Vehicular Origin and Destination Survey - 1989, May 1990.

# 2005 Thru vs. Local E/B Truck Trips via Hudson River Crossings



**DESTINATIONS OF HUDSON RIVER WEEKDAY EASTBOUND TRUCK TRAFFIC**  
**(December 1991)**

Destinations	Holland Tunnel	Lincoln Tunnel	G. Washington Bridge
Manhattan	38.91%	78.35%	4.46%
NY City outer boroughs			
Bronx	0.98%	0.29%	16.13%
Brooklyn	34.44%	9.20%	2.68%
Queens	16.67%	6.85%	10.96%
Staten Island	0.08%	0.00%	0.10%
Subtotal outer boroughs	52.18%	16.34%	29.87%
NY City Total	91.07%	94.69%	34.33%
Destinations outside NY City			
Long Island	8.32%	4.73%	17.26%
Westchester	0.21%	0.00%	7.62%
New England	0.23%	0.21%	37.87%
Other	0.16%	0.39%	2.92%
Subtotal outside NY City	8.93%	5.34%	65.67%
Thru Trips Total (non-Manhattan destinations)	61.09%	21.65%	95.54%
GRAND TOTAL	100.00%	100.00%	100.00%

Source: PANYNJ, 1991 Truck Origin-Destination Commodity Survey, March 1992.

## VEHICLE OCCUPANCY -- INBOUND TO MANHATTAN

### *Average Number of Persons per Auto*

	Peak Hour Persons Auto	7-10am Percent Autos with Driver Only
Brooklyn-Battery Tunnel	1.31	72.8 %
Brooklyn Bridge	1.22	80.6 %
Manhattan Bridge	1.25	79.9 %
Williamsburg Bridge	1.17	84.6 %
Holland Tunnel	1.67	65.8 %
<b>5 Lower Manhattan Crossings</b>	<b>1.33</b>	<b>76.2 %</b>
Queens-Midtown Tunnel	1.24	77.7 %
Queensboro Bridge	1.44	66.4 %
Lincoln Tunnel	1.51	73.1 %
<b>3 Midtown Manhattan Crossings</b>	<b>1.40</b>	<b>72.2 %</b>
Triborough Bridge	1.18	83.2 %
Alexander Hamilton Bridge	1.16	86.0 %
Broadway Bridge	1.19	84.8 %
Macombs Dam Bridge	1.32	72.3 %
Madison Avenue Bridge	1.28	77.1 %
Third Avenue Bridge	1.22	80.6 %
University Heights Bridge	1.23	82.9 %
Washington Bridge	1.38	72.9 %
145th Street Bridge	1.32	73.6 %
Henry Hudson Bridge	1.20	88.6 %
George Washington Bridge	1.74	79.5 %
<b>11 Upper Manhattan Crossings</b>	<b>1.38</b>	<b>81.5 %</b>
<b>All 19 Inbound Manhattan Crossings</b>	<b>1.37</b>	<b>78.3 %</b>

# Manhattan Crossings

## 2004-2005 Traffic Volume Trends

### Both Directions

<b>EAST RIVER BRIDGES</b>	<b>Highway Functional Classification</b>	<b>2004</b>	<b>2005</b>	<b>Percent Change</b>
Brooklyn	Principal Arterial	137,563	132,210	- 3.9 %
Manhattan	Principal Arterial	79,129	80,363	1.6 %
Queensboro	Principal Arterial	180,369	178,610	- 1.0 %
Williamsburg	Principal Arterial	110,528	107,030	- 3.2 %
<b>Total East River</b>		<b>507,589</b>	<b>498,213</b>	<b>- 1.8 %</b>

#### **HARLEM RIVER BRIDGES**

Alexander Hamilton	Interstate	175,323	181,566	3.6 %
Broadway	Principal Arterial	35,190	35,698	1.4 %
Macombs Dam	Principal Arterial	40,558	40,112	- 1.1 %
Madison Avenue	Principal Arterial	48,723	48,397	- 0.7 %
Third Avenue	Principal Arterial	47,053	60,152	27.8 %
University Heights	Principal Arterial	47,350	44,938	- 5.1 %
Washington	Minor Arterial	57,530	58,019	0.8 %
Willis Avenue	Principal Arterial	74,700	66,708	- 10.7 %
145th Street	Minor Arterial	25,994	25,802	- 0.7 %

<b>Total Harlem River</b>		<b>552,421</b>	<b>561,392</b>	<b>1.6 %</b>
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#### **MTABT Manhattan Facilities**

Brooklyn-Battery Tunnel	Interstate	54,488	49,043	- 10.0 %
Henry Hudson Bridge	Principal Arterial	73,114	70,407	- 3.7 %
Queens-Midtown Tunnel	Interstate	86,599	86,063	- 0.6 %
Triborough Bridge Manhattan Plaza	Principal Arterial	97,958	91,898	- 6.2 %

<b>Total MTABT Manhattan</b>		<b>312,159</b>	<b>297,411</b>	<b>- 4.7 %</b>
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#### **PANYNJ Manhattan Facilities**

George Washington Bridge	Interstate	315,066	304,302	- 3.4 %
Holland Tunnel	Interstate	96,171	96,960	0.8 %
Lincoln Tunnel	Principal Arterial	125,159	126,455	1.0 %

<b>Total Manhattan - New Jersey</b>		<b>536,396</b>	<b>527,717</b>	<b>- 1.6 %</b>
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<b>GRAND TOTALS</b>		<b>1,908,565</b>	<b>1,884,733</b>	<b>- 1.2 %</b>
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## Manhattan Crossings Hourly Vehicular Volumes 2004 vs 2005

	<i>Inbound</i>			<i>Outbound</i>		
	2004	2005	Percent Change	2004	2005	Percent Change
Mid-1	16,885	16,211	-4.0 %	28,784	26,064	-9.4 %
1-2 am	11,146	10,867	-2.5 %	18,244	17,074	-6.4 %
2-3 am	8,315	8,643	3.9 %	12,183	12,526	2.8 %
3-4 am	8,532	9,059	6.2 %	10,344	10,588	2.4 %
4-5 am	13,035	13,821	6.0 %	11,915	12,777	7.2 %
5-6 am	30,733	31,718	3.2 %	18,517	19,621	6.0 %
6-7 am	59,424	59,336	-0.1 %	32,828	33,810	3.0 %
7-8 am	67,376	67,767	0.6 %	42,621	43,231	1.4 %
8-9 am	65,863	63,871	-3.0 %	44,295	44,280	0.0 %
9-10 am	58,867	56,317	-4.3 %	39,103	39,067	-0.1 %
10-11 a	49,359	47,982	-2.8 %	38,050	37,234	-2.1 %
11-Noon	45,236	44,207	-2.3 %	38,176	38,667	1.3 %
Noon-1	44,287	42,435	-4.2 %	40,896	40,164	-1.8 %
1-2 pm	44,793	42,749	-4.6 %	44,212	43,831	-0.9 %
2-3 pm	48,038	46,756	-2.7 %	51,346	51,370	0.0 %
3-4 pm	51,180	50,218	-1.9 %	59,651	58,923	-1.2 %
4-5 pm	52,250	51,743	-1.0 %	65,423	62,593	-4.3 %
5-6 pm	54,130	53,237	-1.6 %	66,377	63,144	-4.9 %
6-7 pm	51,956	50,665	-2.5 %	62,232	59,265	-4.8 %
7-8 pm	45,850	45,111	-1.6 %	57,340	54,451	-5.0 %
8-9 pm	37,748	37,854	0.3 %	51,421	49,985	-2.8 %
9-10 pm	34,019	34,538	1.5 %	45,031	45,570	1.2 %
10-11 p	31,381	32,134	2.4 %	39,888	41,584	4.3 %
11-Mid	25,228	26,142	3.6 %	34,057	35,533	4.3 %
Totals	955,631	943,381	-1.3 %	952,934	941,352	-1.2 %
7-10am	192,106	187,955	-2.2 %	126,019	126,578	0.4 %
10am-1pm	138,882	134,624	-3.1 %	117,122	116,065	-0.9 %
1-4pm	144,011	139,723	-3.0 %	155,209	154,124	-0.7 %
4-7pm	158,336	155,645	-1.7 %	194,032	185,002	-4.7 %
7am-7pm	633,335	617,947	-2.4 %	592,382	581,769	-1.8 %

# Manhattan Crossings

## Hourly Vehicular Volumes

### 1995 vs 2005

	<i>Inbound</i>			<i>Outbound</i>		
	1995	2005	Percent Change	1995	2005	Percent Change
Mid-1	14,297	16,211	13.4 %	24,622	26,064	5.9 %
1-2 am	8,816	10,867	23.3 %	14,501	17,074	17.7 %
2-3 am	6,830	8,643	26.5 %	9,550	12,526	31.2 %
3-4 am	6,746	9,059	34.3 %	7,473	10,588	41.7 %
4-5 am	9,593	13,821	44.1 %	8,727	12,777	46.4 %
5-6 am	22,853	31,718	38.8 %	14,494	19,621	35.4 %
6-7 am	55,578	59,336	6.8 %	29,073	33,810	16.3 %
7-8 am	69,098	67,767	-1.9 %	39,891	43,231	8.4 %
8-9 am	67,166	63,871	-4.9 %	41,917	44,280	5.6 %
9-10 am	57,008	56,317	-1.2 %	36,501	39,067	7.0 %
10-11 a	46,512	47,982	3.2 %	34,869	37,234	6.8 %
11-Noon	43,456	44,207	1.7 %	35,384	38,667	9.3 %
Noon-1	41,915	42,435	1.2 %	37,075	40,164	8.3 %
1-2 pm	40,740	42,749	4.9 %	38,908	43,831	12.7 %
2-3 pm	44,600	46,756	4.8 %	45,214	51,370	13.6 %
3-4 pm	47,838	50,218	5.0 %	55,849	58,923	5.5 %
4-5 pm	49,657	51,743	4.2 %	61,829	62,593	1.2 %
5-6 pm	50,108	53,237	6.2 %	61,336	63,144	2.9 %
6-7 pm	47,203	50,665	7.3 %	59,890	59,265	-1.0 %
7-8 pm	42,244	45,111	6.8 %	55,438	54,451	-1.8 %
8-9 pm	33,785	37,854	12.0 %	48,205	49,985	3.7 %
9-10 pm	30,686	34,538	12.6 %	41,566	45,570	9.6 %
10-11 p	29,661	32,134	8.3 %	37,998	41,584	9.4 %
11-Mid	23,836	26,142	9.7 %	31,921	35,533	11.3 %
Totals	890,226	943,381	6.0 %	872,231	941,352	7.9 %
7-10am	193,272	187,955	-2.8 %	118,309	126,578	7.0 %
10am-1pm	131,883	134,624	2.1 %	107,328	116,065	8.1 %
1-4pm	133,178	139,723	4.9 %	139,971	154,124	10.1 %
4-7pm	146,968	155,645	5.9 %	183,055	185,002	1.1 %
7am-7pm	605,301	617,947	2.1 %	548,663	581,769	6.0 %

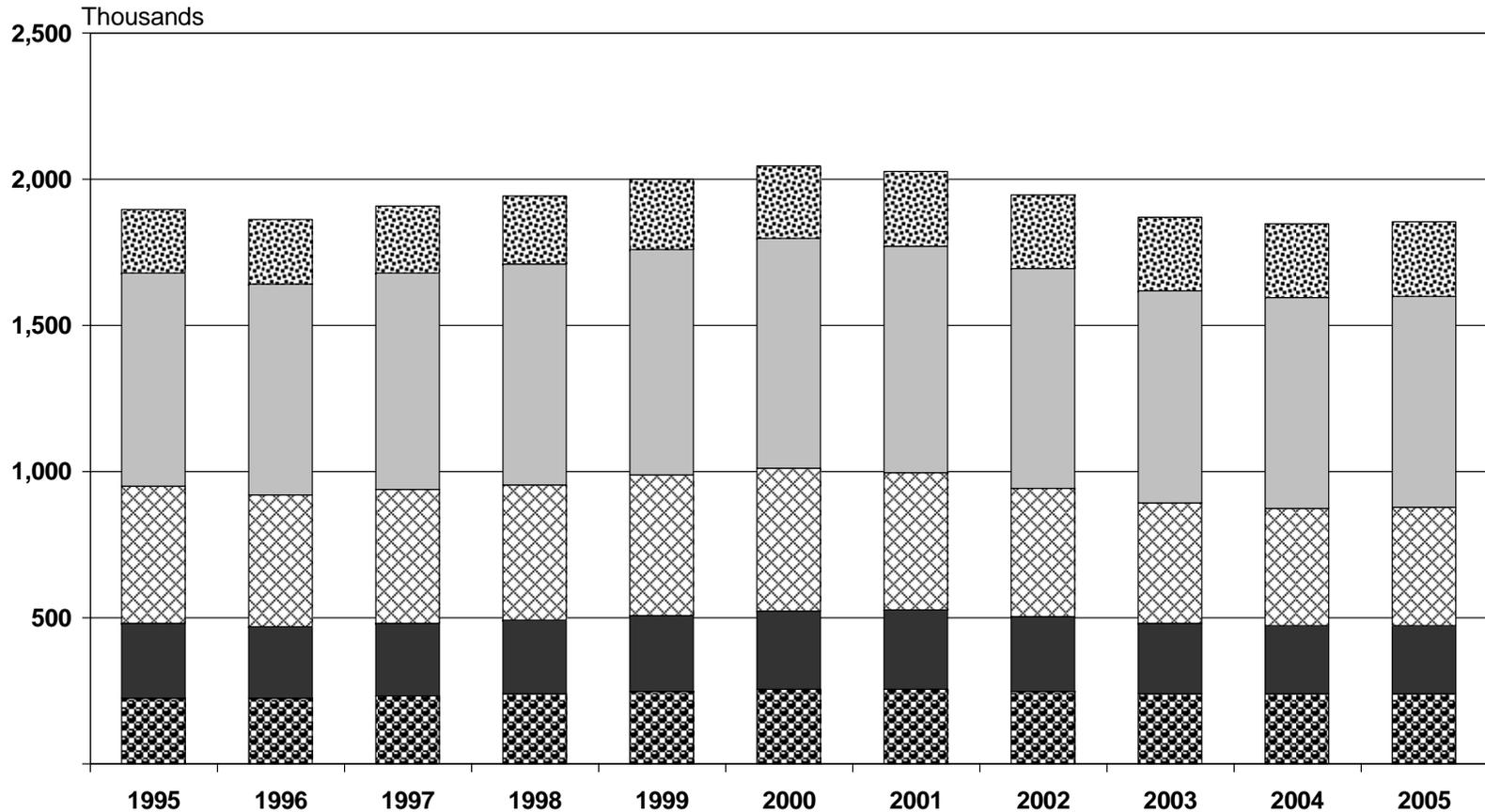
**Percent Difference by Period of Day  
Manhattan Crossings  
1995 - 2005**

<i>Time Period</i>	<i>To Manhattan</i>	<i>From Manhattan</i>
1am - 4am	27.6 %	27.5 %
4am - 7am	19.1 %	26.6 %
7am - 10am	- 2.8 %	7.0 %
10am - 1pm	2.1 %	8.1 %
1pm - 4pm	4.9 %	10.1 %
4pm - 7pm	5.9 %	1.1 %
7pm - 10pm	10.1 %	3.3 %
10pm - 1am	9.9 %	9.1 %
<b>24 Hour Total</b>	<b>6.0 %</b>	<b>7.9 %</b>

**Average Annual Growth Rate by Period of Day  
Manhattan Crossings  
1995 - 2005**

<i>Time Period</i>	<i>To Manhattan</i>	<i>From Manhattan</i>
1am - 4am	2.0 %	2.5 %
4am - 7am	1.4 %	2.1 %
7am - 10am	- 0.7 %	0.5 %
10am - 1pm	0.2 %	0.7 %
1pm - 4pm	0.5 %	0.7 %
4pm - 7pm	0.5 %	- 0.0 %
7pm - 10pm	0.9 %	0.2 %
10pm - 1am	0.4 %	0.7 %
<b>24 Hour Total</b>	<b>0.4 %</b>	<b>0.6 %</b>

# New York City Motor Vehicle Registrations 1995-2005



	Staten Is.	218,095	220,987	226,808	232,790	240,258	247,848	252,657	252,542	252,422	254,108	255,794
	Queens	727,175	721,961	742,288	754,729	773,921	784,848	774,887	749,146	723,400	719,289	723,534
	Brooklyn	469,105	448,116	455,177	463,637	479,118	486,987	470,290	439,716	410,742	401,795	402,807
	Bronx	254,944	245,225	248,191	252,189	260,742	268,910	269,577	255,087	240,592	232,990	232,189
	Manhattan	226,480	226,028	234,175	239,308	247,395	255,780	257,531	249,716	241,995	240,388	242,200
	NYC Total	1,895,799	1,862,317	1,906,639	1,942,653	2,001,434	2,044,373	2,024,942	1,946,207	1,869,151	1,848,570	1,856,524

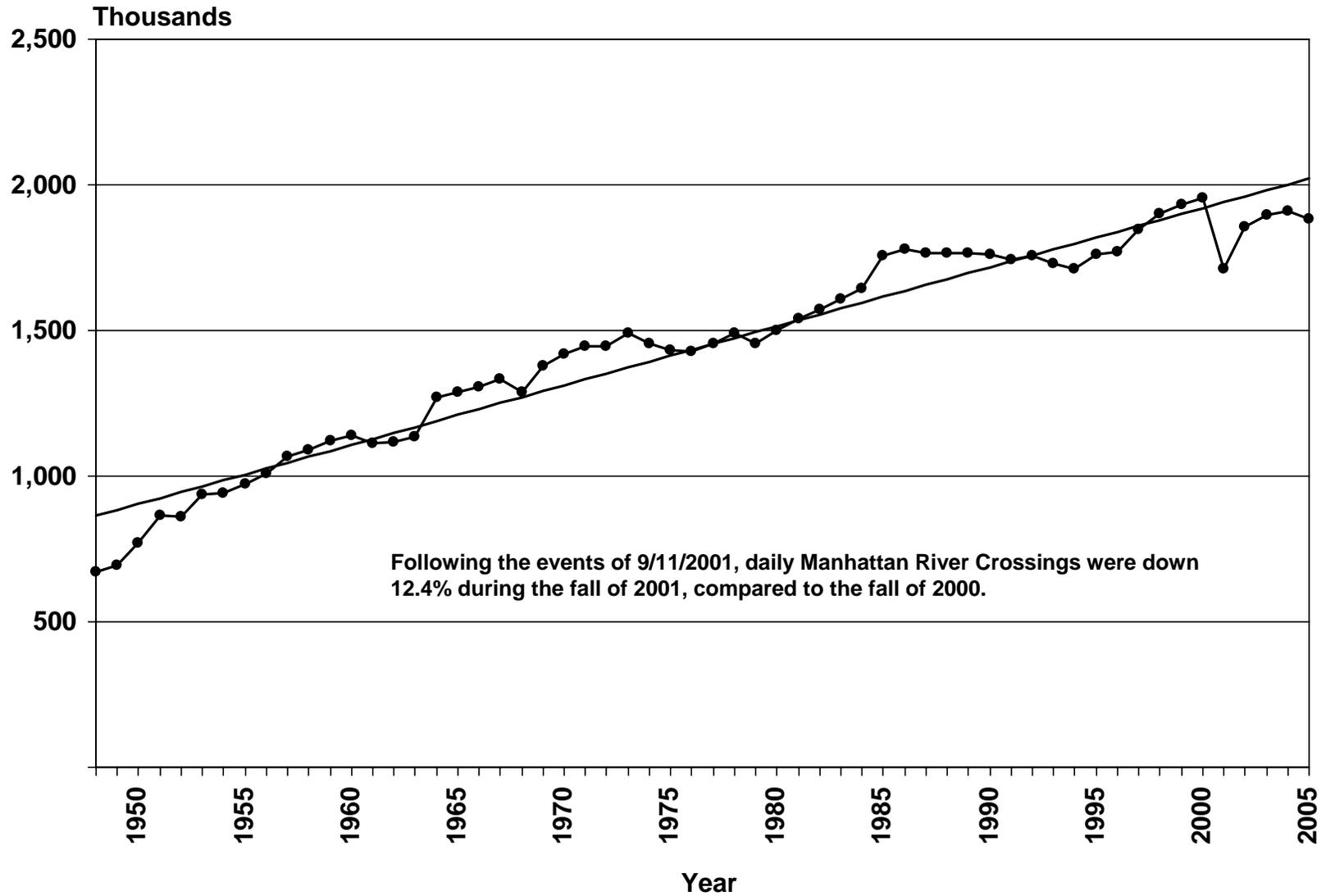
NYC Annual Growth Rate = - 0.2%  
Manhattan Annual Growth Rate = 0.7%

**Total Manhattan Crossings**  
**Average Daily Traffic Volumes**  
**1948 - 2005**

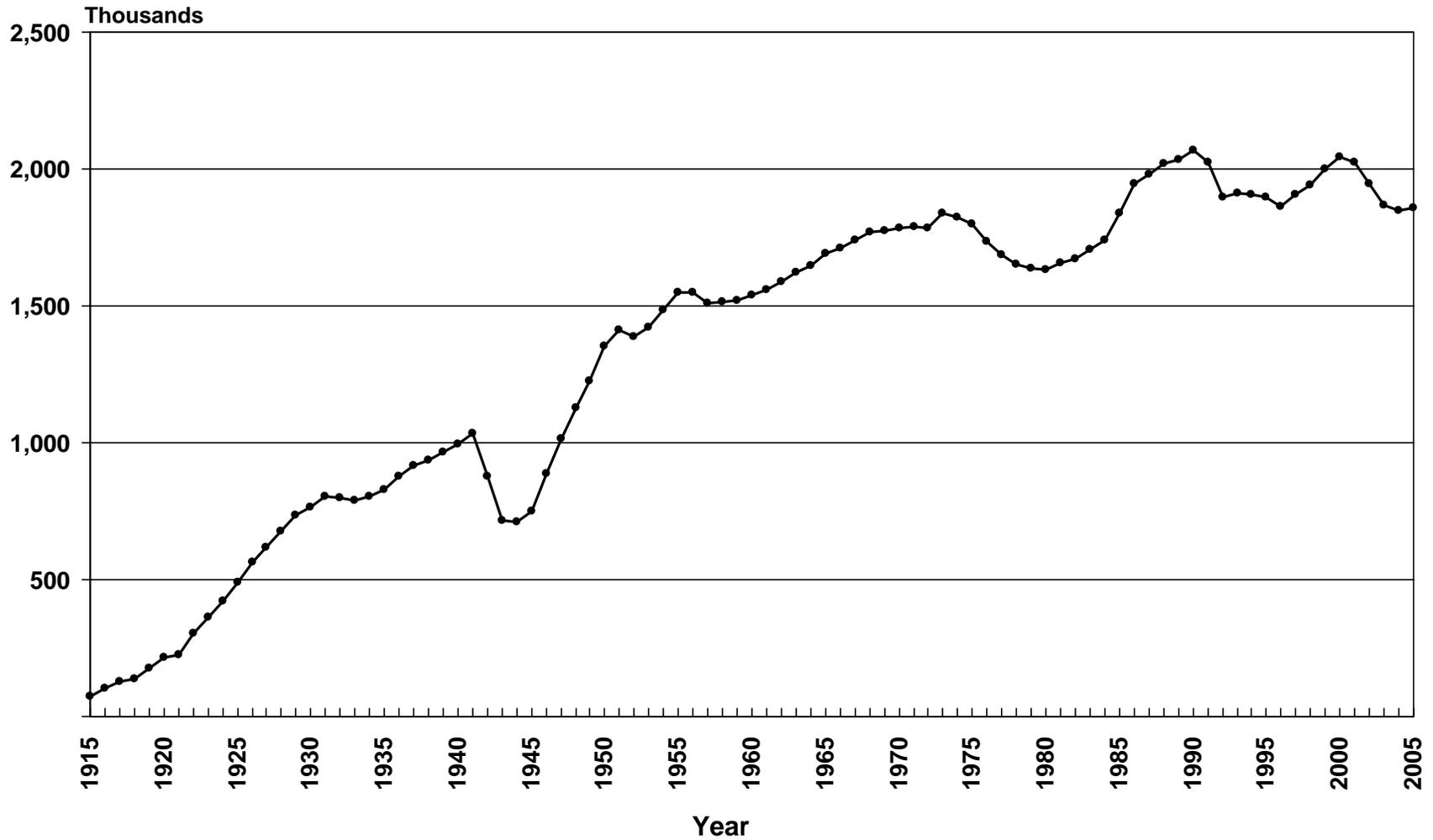
<i>Year</i>	<i>East River Bridges</i>	<i>Harlem River Bridges</i>	<i>M.T.A.B.T. Facilities</i>	<i>P.A.N.Y.N.J. Facilities</i>	<i>Totals</i>
1948	254,068	207,177	92,977	115,785	670,007
1949	260,933	193,510	110,071	129,943	694,457
1950	240,227	222,671	161,856	146,653	771,407
1951	269,352	249,199	180,272	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

# Average Daily Manhattan River Crossings

1948-2005 Average Annual Growth Rate 1.5%



# New York City Motor Vehicle Registrations 1915-2005



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.

# 10-Year Traffic Growth Rate Trends

## Manhattan Crossings

### 1955-2005

<b>East River Bridges</b>	<b>1955-1965</b>	<b>1965-1975</b>	<b>1975-1985</b>	<b>1985-1995</b>	<b>1995-2005</b>
Brooklyn	7.9%	2.5%	1.3%	0.9%	- 0.6%
Manhattan	- 2.5%	0.5%	3.6%	- 1.5%	- 0.6%
Queensboro	2.9%	1.7%	- 0.6%	- 0.5%	0.7%
Williamsburg	- 0.3%	0.6%	2.0%	- 1.7%	0.9%
<b>Total</b>	<b>1.8%</b>	<b>1.4%</b>	<b>1.3%</b>	<b>- 0.5%</b>	<b>0.2%</b>

#### **Harlem River Bridges**

Alexander Hamilton	<i>Opened Jan. 1963</i>	2.2%	1.9%	0.2%	0.1%
Broadway		1.2%	3.0%	1.4%	1.7%
Macombs Dam		- 0.7%	0.8%	3.7%	- 2.6%
Madison Avenue		- 4.6%	1.4%	1.7%	- 3.8%
Third Avenue		3.5%	- 0.1%	0.8%	1.1%
University Heights		1.4%	2.4%	0.5%	- 2.5%
Washington		1.1%	3.5%	2.4%	1.2%
Willis Avenue		3.0%	- 1.3%	2.4%	0.3%
145th Street		- 1.3%	- 1.5%	2.6%	- 0.7%
<b>Total</b>		<b>3.6%</b>	<b>1.2%</b>	<b>1.9%</b>	<b>- 0.2%</b>

#### **MTABT Facilities**

Brooklyn-Battery Tunnel	0.7%	- 2.2%	2.1%	- 0.6%	- 2.1%
Henry Hudson Bridge	- 3.6%	- 2.0%	1.9%	2.8%	2.3%
Queens-Midtown Tunnel	4.1%	0.6%	1.7%	- 0.1%	1.6%
Triborough (Manhattan Plz)	0.5%	1.3%	3.4%	- 0.6%	0.1%
<b>Total</b>	<b>0.4%</b>	<b>- 0.3%</b>	<b>2.4%</b>	<b>0.2%</b>	<b>0.6%</b>

#### **PANYNJ Facilities**

George Washington Bridge	4.9%	3.6%	2.4%	- 1.0%	1.5%
Holland Tunnel	0.3%	1.9%	2.2%	2.6%	- 0.7%
Lincoln Tunnel	3.7%	2.4%	2.1%	- 0.1%	0.4%
<b>Total</b>	<b>3.4%</b>	<b>3.0%</b>	<b>2.3%</b>	<b>- 0.1%</b>	<b>0.8%</b>

<b>Grand Total</b>	<b>2.4%</b>	<b>1.4%</b>	<b>1.9%</b>	<b>- 0.2%</b>	<b>0.5%</b>
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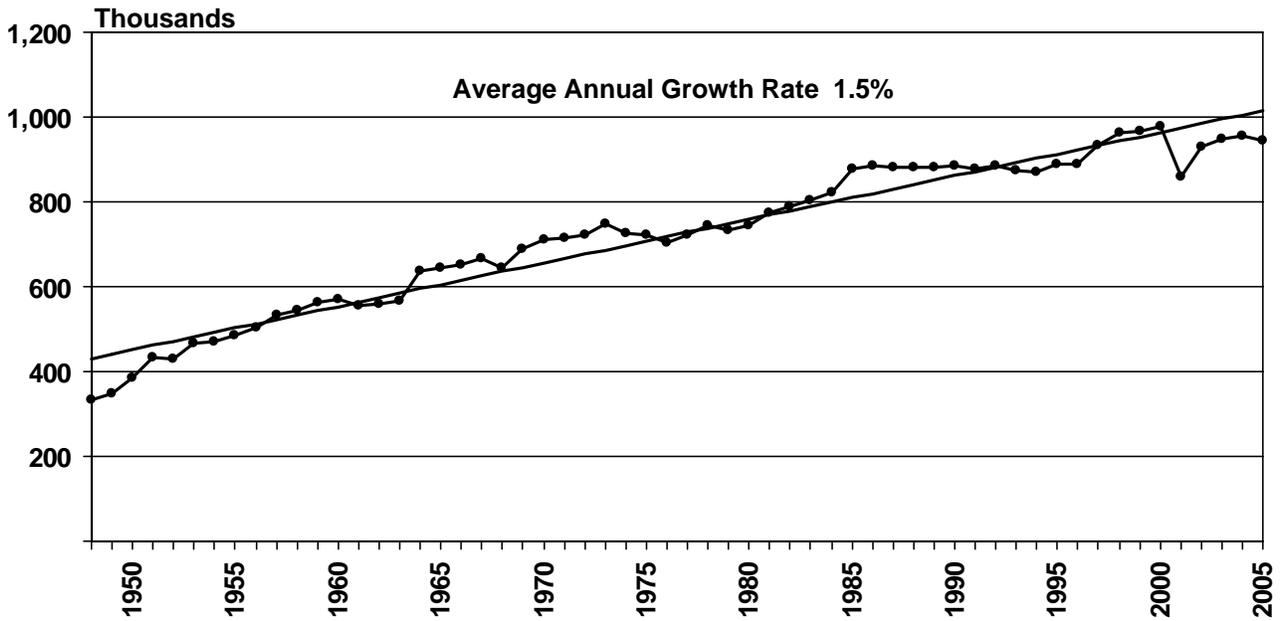
**Average Daily Manhattan River Motor Vehicle Crossings**  
**vs.**  
**Annual Subway Ridership**

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			
1977	1,455,119	998			
1978	1,491,541	1,042			
1979	1,455,112	1,077			
1980	1,499,344	1,009			

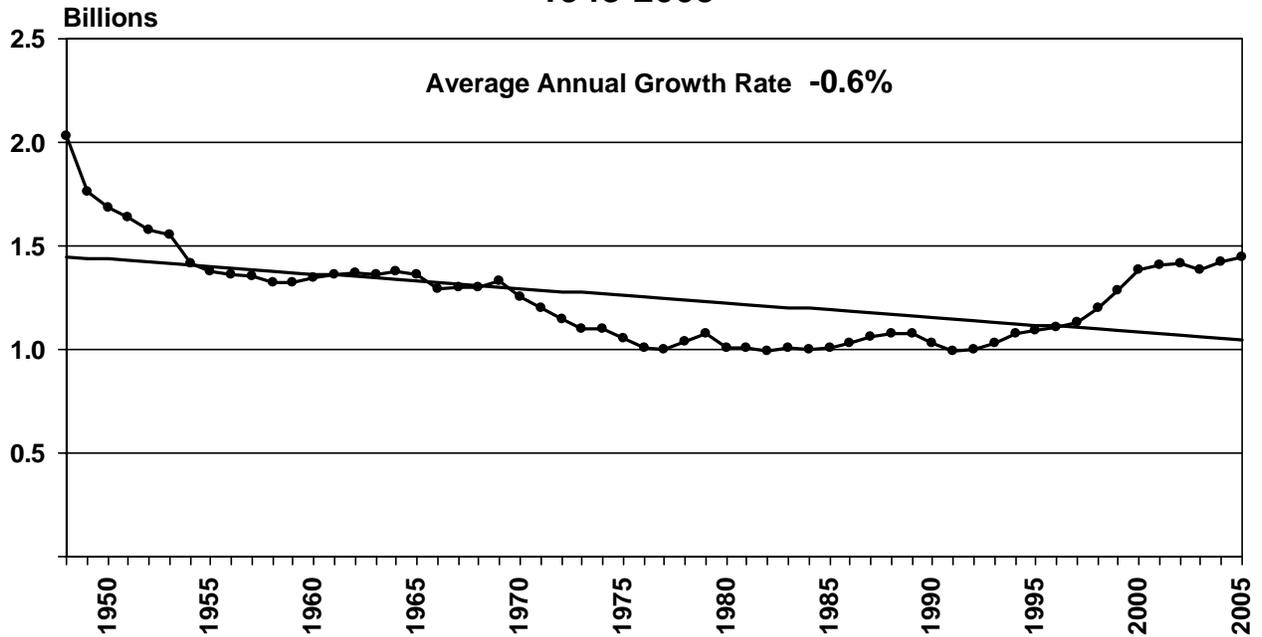
Percent Changes	Average Daily Crossings	Annual Subway Ridership	Period	Average Daily Crossings	Annual Subway Ridership
	+ 47.6 %	- 20.0 %	1950-1960	+ 11.1 %	+ 34.3 %
	+ 24.8 %	- 6.5 %	1960-1970	- 3.6 %	+ 4.9 %
	+ 5.6 %	- 19.8 %	1970-1980	+181.3 %	- 28.7 %
	+ 17.4 %	+ 1.9 %	1980-1990		

Source for Annual Subway Ridership: MTA

# Daily Traffic Flow to Manhattan 1948-2005



# N.Y.C. Annual Subway Passengers 1948-2005



## 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

\$ 0.50 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

EZ-Pass discount \$ 1.00 during peak hours, \$ 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.

**East River Bridges**  
**Average Daily Traffic Volumes**  
**1948 - 2005**

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

## Hourly Vehicular Volumes Brooklyn Bridge - 2005

	<i>Eastbound to Brooklyn</i>						<i>Westbound to Manhattan</i>						<b>2-Way Totals</b>
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	
12-1am	---	---	---	---	---	2,477	---	---	---	---	---	1,872	4,349
1-2am	---	---	---	---	---	1,642	---	---	---	---	---	1,145	2,787
2-3am	---	---	---	---	---	1,133	---	---	---	---	---	773	1,906
3-4am	---	---	---	---	---	806	---	---	---	---	---	639	1,445
4-5am	---	---	---	---	---	803	---	---	---	---	---	960	1,763
5-6am	---	---	---	---	---	1,178	---	---	---	---	---	2,051	3,229
6-7am	---	---	---	---	---	2,217	---	---	---	---	---	3,458	5,675
7-8am	2,619	2	112	1	69	2,803	3,750	19	37	3	260	4,069 **	6,872
8-9am	2,521	28	119	0	84	2,752	3,674	6	60	8	223	3,971	6,723
9-10am	2,414	20	79	2	141	2,656	3,288	6	63	5	316	3,678	6,334
10-11am	2,264	4	91	0	136	2,495	3,110	3	142	8	173	3,436	5,931
11-12am	2,309	1	95	0	73	2,478	2,641	7	148	4	165	2,965	5,443
12-1pm	2,449	1	121	3	122	2,696	2,718	0	122	3	123	2,966	5,662
1-2pm	2,683	1	157	0	113	2,954	2,809	58	140	3	151	3,161	6,115
2-3pm	3,120	11	91	1	119	3,342	2,917	5	183	1	119	3,225	6,567
3-4pm	3,626	21	65	0	77	3,789 **	3,172	11	139	0	130	3,452	7,241 **
4-5pm	3,565	11	92	0	37	3,705	3,088	6	223	1	105	3,423	7,128
5-6pm	3,616	4	93	1	24	3,738	3,122	15	164	1	153	3,455	7,193
6-7pm	3,508	3	72	4	42	3,629	3,168	4	143	1	110	3,426	7,055
7-8pm	---	---	---	---	---	3,530	---	---	---	---	---	3,393	6,923
8-9pm	---	---	---	---	---	3,662	---	---	---	---	---	3,222	6,884
9-10pm	---	---	---	---	---	3,551	---	---	---	---	---	3,246	6,797
10-11pm	---	---	---	---	---	3,369	---	---	---	---	---	3,285	6,654
11-12pm	---	---	---	---	---	2,615	---	---	---	---	---	2,919	5,534
Totals	---	---	---	---	---	64,020	---	---	---	---	---	68,190	132,210
7-10am	7,554	50	310	3	294	8,211	10,712	31	160	16	799	11,718	19,929
10am-1pm	7,022	6	307	3	331	7,669	8,469	10	412	15	461	9,367	17,036
1-4pm	9,429	33	313	1	309	10,085	8,898	74	462	4	400	9,838	19,923
4-7pm	10,689	18	257	5	103	11,072	9,378	25	530	3	368	10,304	21,376
7am-7pm	34,694	107	1,187	12	1,037	37,037	37,457	140	1,564	38	2,028	41,227	78,264

Based on October 1996 Classification Survey Data

\*\* Peak Volumes

## Hourly Vehicular Volumes Manhattan Bridge - 2005

	<i>Eastbound to Brooklyn</i>						<i>Westbound to Manhattan</i>						<b>2-Way Totals</b>
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	
12-1am	---	---	---	---	---	1,923	---	---	---	---	---	1,226	3,149
1-2am	---	---	---	---	---	1,579	---	---	---	---	---	838	2,417
2-3am	---	---	---	---	---	1,012	---	---	---	---	---	658	1,670
3-4am	---	---	---	---	---	776	---	---	---	---	---	631	1,407
4-5am	---	---	---	---	---	650	---	---	---	---	---	727	1,377
5-6am	---	---	---	---	---	589	---	---	---	---	---	1,267	1,856
6-7am	---	---	---	---	---	921	---	---	---	---	---	2,066	2,987
7-8am	692	56	139	404	137	1,428	1,553	100	226	467	414	2,760	4,188
8-9am	801	145	143	486	166	1,741	1,513	45	252	550	563	2,923 **	4,664 **
9-10am	589	93	179	535	204	1,600	1,110	38	184	674	529	2,535	4,135
10-11am	572	24	160	512	231	1,499	820	36	171	762	424	2,213	3,712
11-12am	611	26	159	522	252	1,570	713	30	157	561	362	1,823	3,393
12-1pm	580	22	110	491	338	1,541	787	37	199	507	204	1,734	3,275
1-2pm	561	26	203	478	347	1,615	771	41	162	527	196	1,697	3,312
2-3pm	678	19	224	456	346	1,723	885	30	124	438	353	1,830	3,553
3-4pm	890	69	282	493	381	2,115	888	47	195	314	267	1,711	3,826
4-5pm	1,162	57	267	456	537	2,479	945	26	110	287	244	1,612	4,091
5-6pm	1,387	46	265	425	574	2,697 **	982	37	160	206	177	1,562	4,259
6-7pm	1,412	42	364	382	385	2,585	1,142	24	131	146	152	1,595	4,180
7-8pm	---	---	---	---	---	2,414	---	---	---	---	---	1,602	4,016
8-9pm	---	---	---	---	---	2,299	---	---	---	---	---	1,415	3,714
9-10pm	---	---	---	---	---	2,128	---	---	---	---	---	1,461	3,589
10-11pm	---	---	---	---	---	2,163	---	---	---	---	---	1,585	3,748
11-12pm	---	---	---	---	---	2,327	---	---	---	---	---	1,518	3,845
Totals	---	---	---	---	---	41,374	---	---	---	---	---	38,989	80,363
7-10am	2,082	294	461	1,425	507	4,769	4,176	183	662	1,691	1,506	8,218	12,987
10am-1pm	1,763	72	429	1,525	821	4,610	2,320	103	527	1,830	990	5,770	10,380
1-4pm	2,129	114	709	1,427	1,074	5,453	2,544	118	481	1,279	816	5,238	10,691
4-7pm	3,961	145	896	1,263	1,496	7,761	3,069	87	401	639	573	4,769	12,530
7am-7pm	9,935	625	2,495	5,640	3,898	22,593	12,109	491	2,071	5,439	3,885	23,995	46,588

Based on October 1996 Classification Survey Data

\*\* Peak Volumes

## Hourly Vehicular Volumes Queensboro Bridge - 2005

	<i>Eastbound to Queens</i>						<i>Westbound to Manhattan</i>						<b>2-Way Totals</b>
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	
12-1am	---	---	---	---	---	3,583	---	---	---	---	---	1,696	5,279
1-2am	---	---	---	---	---	3,000	---	---	---	---	---	1,219	4,219
2-3am	---	---	---	---	---	2,432	---	---	---	---	---	1,045	3,477
3-4am	---	---	---	---	---	1,860	---	---	---	---	---	1,340	3,200
4-5am	---	---	---	---	---	2,326	---	---	---	---	---	2,286	4,612
5-6am	---	---	---	---	---	2,419	---	---	---	---	---	4,530	6,949
6-7am	---	---	---	---	---	3,180	---	---	---	---	---	6,076 **	9,256
7-8am	2,422	112	236	98	161	3,029	4,673	98	259	261	670	5,961	8,990
8-9am	2,166	163	234	163	144	2,870	3,871	60	267	324	811	5,333	8,203
9-10am	1,785	166	204	216	176	2,547	3,160	52	320	266	628	4,426	6,973
10-11am	2,351	75	175	214	295	3,110	2,709	55	243	339	520	3,866	6,976
11-12am	2,536	75	278	227	445	3,561	2,716	82	287	283	427	3,795	7,356
12-1pm	2,869	90	207	200	477	3,843	2,980	46	236	218	318	3,798	7,641
1-2pm	2,841	69	347	313	541	4,111	3,271	102	252	256	287	4,168	8,279
2-3pm	3,406	70	209	380	504	4,569	3,534	75	264	211	472	4,556	9,125
3-4pm	4,360	143	161	422	574	5,660	3,773	43	283	151	319	4,569	10,229
4-5pm	4,522	163	173	404	582	5,844 **	3,817	37	224	127	233	4,438	10,282 **
5-6pm	4,299	184	168	302	499	5,452	4,121	34	159	58	162	4,534	9,986
6-7pm	4,133	156	228	97	343	4,957	3,472	52	215	67	166	3,972	8,929
7-8pm	---	---	---	---	---	4,642	---	---	---	---	---	3,688	8,330
8-9pm	---	---	---	---	---	4,618	---	---	---	---	---	3,330	7,948
9-10pm	---	---	---	---	---	4,267	---	---	---	---	---	3,120	7,387
10-11pm	---	---	---	---	---	4,206	---	---	---	---	---	3,208	7,414
11-12pm	---	---	---	---	---	4,889	---	---	---	---	---	2,681	7,570
Totals	---	---	---	---	---	90,975	---	---	---	---	---	87,635	178,610
7-10am	6,373	441	674	477	481	8,446	11,704	210	846	851	2,109	15,720	24,166
10am-1pm	7,756	240	660	641	1,217	10,514	8,405	183	766	840	1,265	11,459	21,973
1-4pm	10,607	282	717	1,115	1,619	14,340	10,578	220	799	618	1,078	13,293	27,633
4-7pm	12,954	503	569	803	1,424	16,253	11,410	123	598	252	561	12,944	29,197
7am-7pm	37,690	1,466	2,620	3,036	4,741	49,553	42,097	736	3,009	2,561	5,013	53,416	102,969

Based on October 1996 Classification Survey Data

\*\* Peak Volumes

## Hourly Vehicular Volumes Williamsburg Bridge - 2005

	<i>Eastbound to Brooklyn</i>						<i>Westbound to Manhattan</i>						<b>2-Way Totals</b>
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	
12-1am	---	---	---	---	---	2,178	---	---	---	---	---	1,292	3,470
1-2am	---	---	---	---	---	1,387	---	---	---	---	---	874	2,261
2-3am	---	---	---	---	---	984	---	---	---	---	---	705	1,689
3-4am	---	---	---	---	---	728	---	---	---	---	---	703	1,431
4-5am	---	---	---	---	---	753	---	---	---	---	---	1,011	1,764
5-6am	---	---	---	---	---	1,212	---	---	---	---	---	2,207	3,419
6-7am	---	---	---	---	---	1,888	---	---	---	---	---	3,348	5,236
7-8am	1,556	25	254	191	117	2,143	2,375	110	522	368	394	3,769 **	5,912
8-9am	1,419	125	247	205	156	2,152	2,156	45	546	318	465	3,530	5,682
9-10am	1,159	87	339	207	138	1,930	1,937	41	473	293	313	3,057	4,987
10-11am	1,161	44	277	430	80	1,992	1,632	31	440	264	248	2,615	4,607
11-12am	1,185	23	300	441	117	2,066	1,366	30	402	258	252	2,308	4,374
12-1pm	1,255	14	354	315	175	2,113	1,389	29	370	205	253	2,246	4,359
1-2pm	1,343	24	355	351	165	2,238	1,347	65	523	229	202	2,366	4,604
2-3pm	1,597	33	492	369	66	2,557	1,750	40	424	169	217	2,600	5,157
3-4pm	2,067	75	463	382	180	3,167	1,851	33	358	176	222	2,640	5,807
4-5pm	2,272	93	425	361	203	3,354 **	1,854	35	447	121	205	2,662	6,016
5-6pm	2,307	71	435	263	248	3,324	1,968	40	464	132	221	2,825	6,149 **
6-7pm	2,372	26	390	137	195	3,120	1,848	34	541	118	224	2,765	5,885
7-8pm	---	---	---	---	---	2,893	---	---	---	---	---	2,592	5,485
8-9pm	---	---	---	---	---	2,816	---	---	---	---	---	2,215	5,031
9-10pm	---	---	---	---	---	2,588	---	---	---	---	---	2,213	4,801
10-11pm	---	---	---	---	---	2,359	---	---	---	---	---	2,227	4,586
11-12pm	---	---	---	---	---	2,380	---	---	---	---	---	1,938	4,318
Totals	---	---	---	---	---	52,322	---	---	---	---	---	54,708	107,030
7-10am	4,134	237	840	603	411	6,225	6,468	196	1,541	979	1,172	10,356	16,581
10am-1pm	3,601	81	931	1,186	372	6,171	4,387	90	1,212	727	753	7,169	13,340
1-4pm	5,007	132	1,310	1,102	411	7,962	4,948	138	1,305	574	641	7,606	15,568
4-7pm	6,951	190	1,250	761	646	9,798	5,670	109	1,452	371	650	8,252	18,050
7am-7pm	19,693	640	4,331	3,652	1,840	30,156	21,473	533	5,510	2,651	3,216	33,383	63,539

Based on October 1996 Classification Survey Data

\*\* Peak Volumes

**Harlem River Bridges**  
**Average Daily Traffic Volumes**  
**1948 - 2005**

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

**Harlem River Bridges (cont'd)**  
**Average Daily Traffic Volumes**  
**1948 - 2005**

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

## Hourly Vehicular Volumes Alexander Hamilton Bridge - 2005

	<i>Eastbound to Bronx</i>						<i>Westbound to Manhattan</i>						<b>2-Way Totals</b>
	Autos	Commuter Buses	Vans	Trucks	Commercial Vans	Totals	Autos	Commuter Buses	Vans	Trucks	Commercial Vans	Totals	
12-1am	---	---	---	---	---	2,191	---	---	---	---	---	2,260	4,451
1-2am	---	---	---	---	---	1,836	---	---	---	---	---	1,761	3,597
2-3am	---	---	---	---	---	1,621	---	---	---	---	---	1,675	3,296
3-4am	---	---	---	---	---	1,816	---	---	---	---	---	1,659	3,475
4-5am	---	---	---	---	---	2,258	---	---	---	---	---	2,061	4,319
5-6am	---	---	---	---	---	3,588	---	---	---	---	---	3,352	6,940
6-7am	---	---	---	---	---	4,983	---	---	---	---	---	5,157 **	10,140 **
7-8am	3,924	13	227	750	113	5,027 **	4,301	10	91	457	226	5,085	10,112
8-9am	3,587	4	234	901	209	4,935	4,056	33	33	471	149	4,742	9,677
9-10am	3,292	5	211	1,078	118	4,704	3,323	48	28	730	194	4,323	9,027
10-11am	3,782	3	90	296	43	4,214	3,693	26	16	398	134	4,267	8,481
11-12am	3,279	10	235	729	121	4,374	2,925	13	19	913	260	4,130	8,504
12-1pm	3,674	0	104	414	45	4,237	3,447	10	9	482	122	4,070	8,307
1-2pm	3,134	7	149	747	75	4,112	2,800	10	20	728	190	3,748	7,860
2-3pm	3,708	6	197	769	109	4,789	2,890	16	35	774	155	3,870	8,659
3-4pm	4,134	7	84	323	91	4,639	3,718	20	15	437	80	4,270	8,909
4-5pm	3,931	6	147	491	112	4,687	3,464	4	40	874	211	4,593	9,280
5-6pm	3,917	5	110	369	92	4,493	3,553	2	29	792	155	4,531	9,024
6-7pm	3,632	8	190	416	73	4,319	3,715	2	21	450	129	4,317	8,636
7-8pm	---	---	---	---	---	4,702	---	---	---	---	---	4,465	9,167
8-9pm	---	---	---	---	---	4,107	---	---	---	---	---	4,051	8,158
9-10pm	---	---	---	---	---	3,970	---	---	---	---	---	3,920	7,890
10-11pm	---	---	---	---	---	3,575	---	---	---	---	---	3,738	7,313
11-12pm	---	---	---	---	---	2,834	---	---	---	---	---	3,510	6,344
Totals	---	---	---	---	---	92,011	---	---	---	---	---	89,555	181,566
7-10am	10,803	22	672	2,729	440	14,666	11,680	91	152	1,658	569	14,150	28,816
10am-1pm	10,735	13	429	1,439	209	12,825	10,065	49	44	1,793	516	12,467	25,292
1-4pm	10,976	20	430	1,839	275	13,540	9,408	46	70	1,939	425	11,888	25,428
4-7pm	11,480	19	447	1,276	277	13,499	10,732	8	90	2,116	495	13,441	26,940
7am-7pm	43,994	74	1,978	7,283	1,201	54,530	41,885	194	356	7,506	2,005	51,946	106,476

Based on 1989 Classification Survey Data:

\*\* Peak Volumes

## Hourly Vehicular Volumes Broadway Bridge - 2005

	<i>Northbound to Bronx</i>						<i>Southbound to Manhattan</i>						<b>2-Way Totals</b>	
	Autos	Commuter		Commercial		Totals	Autos	Commuter		Commercial		Totals		
		Buses	Vans	Trucks	Vans			Buses	Vans	Trucks	Vans			
12-1am	---	---	---	---	---	288	---	---	---	---	---	241	529	
1-2am	---	---	---	---	---	180	---	---	---	---	---	181	361	
2-3am	---	---	---	---	---	116	---	---	---	---	---	105	221	
3-4am	---	---	---	---	---	83	---	---	---	---	---	96	179	
4-5am	---	---	---	---	---	125	---	---	---	---	---	143	268	
5-6am	---	---	---	---	---	218	---	---	---	---	---	369	587	
6-7am	---	---	---	---	---	479	---	---	---	---	---	879	1,358	
7-8am	646	36	19	65	27	793	1,348	62	43	31	45	1,529	** 2,322	
8-9am	697	51	18	30	24	820	1,269	44	29	45	44	1,431	2,251	
9-10am	592	20	3	24	53	692	807	31	23	48	36	945	1,637	
10-11am	627	15	2	32	22	698	791	21	11	37	9	869	1,567	
11-12am	697	21	9	28	43	798	761	25	25	54	55	920	1,718	
12-1pm	719	21	5	21	22	788	892	23	4	18	12	949	1,737	
1-2pm	852	26	3	29	30	940	950	26	10	22	18	1,026	1,966	
2-3pm	889	25	1	37	76	1,028	1,050	33	25	37	19	1,164	2,192	
3-4pm	1,171	28	10	15	39	1,263	1,211	34	14	20	11	1,290	2,553	
4-5pm	1,174	41	29	25	57	1,326	1,180	31	22	37	36	1,306	2,632	**
5-6pm	1,252	29	8	12	65	1,366	** 1,161	30	31	18	23	1,263	2,629	
6-7pm	1,128	22	0	13	110	1,273	1,076	29	26	18	8	1,157	2,430	
7-8pm	---	---	---	---	---	1,023	---	---	---	---	---	1,005	2,028	
8-9pm	---	---	---	---	---	766	---	---	---	---	---	750	1,516	
9-10pm	---	---	---	---	---	626	---	---	---	---	---	627	1,253	
10-11pm	---	---	---	---	---	514	---	---	---	---	---	487	1,001	
11-12pm	---	---	---	---	---	395	---	---	---	---	---	368	763	
Totals	---	---	---	---	---	16,598	---	---	---	---	---	19,100	35,698	
7-10am	1,935	107	40	119	104	2,305	3,424	137	95	124	125	3,905	6,210	
10am-1pm	2,043	57	16	81	87	2,284	2,444	69	40	109	76	2,738	5,022	
1-4pm	2,912	79	14	81	145	3,231	3,211	93	49	79	48	3,480	6,711	
4-7pm	3,554	92	37	50	232	3,965	3,417	90	79	73	67	3,726	7,691	
7am-7pm	10,444	335	107	331	568	11,785	12,496	389	263	385	316	13,849	25,634	

Based on 1989 Classification Survey Data:

\*\* Peak Volumes

## Hourly Vehicular Volumes Macombs Dam Bridge - 2005

	<i>Eastbound to Bronx</i>						<i>Westbound to Manhattan</i>						<b>2-Way Totals</b>
	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	
12-1am	---	---	---	---	---	466	---	---	---	---	---	389	855
1-2am	---	---	---	---	---	261	---	---	---	---	---	234	495
2-3am	---	---	---	---	---	189	---	---	---	---	---	187	376
3-4am	---	---	---	---	---	160	---	---	---	---	---	149	309
4-5am	---	---	---	---	---	180	---	---	---	---	---	206	386
5-6am	---	---	---	---	---	275	---	---	---	---	---	342	617
6-7am	---	---	---	---	---	609	---	---	---	---	---	788	1,397
7-8am	808	33	21	50	74	986	1,093	35	5	77	207	1,417	2,403
8-9am	922	13	16	56	95	1,102	1,231	10	2	97	174	1,514	2,616 **
9-10am	787	17	13	49	53	919	920	19	13	106	174	1,232	2,151
10-11am	726	7	3	31	38	805	857	8	6	37	52	960	1,765
11-12am	690	9	11	57	67	834	799	6	13	70	79	967	1,801
12-1pm	794	9	6	26	35	870	951	17	3	19	41	1,031	1,901
1-2pm	879	2	6	27	25	939	941	19	7	20	76	1,063	2,002
2-3pm	868	13	21	68	75	1,045	1,024	22	15	50	88	1,199	2,244
3-4pm	1,034	22	9	56	66	1,187	1,176	36	10	22	44	1,288	2,475
4-5pm	922	8	30	79	150	1,189	1,111	10	30	40	74	1,265	2,454
5-6pm	1,006	9	14	36	133	1,198 **	1,181	13	10	19	65	1,288	2,486
6-7pm	1,105	3	6	26	44	1,184	1,114	7	12	25	85	1,243	2,427
7-8pm	---	---	---	---	---	1,178	---	---	---	---	---	1,148	2,326
8-9pm	---	---	---	---	---	1,083	---	---	---	---	---	957	2,040
9-10pm	---	---	---	---	---	956	---	---	---	---	---	839	1,795
10-11pm	---	---	---	---	---	802	---	---	---	---	---	748	1,550
11-12pm	---	---	---	---	---	651	---	---	---	---	---	590	1,241
Totals	---	---	---	---	---	19,068	---	---	---	---	---	21,044	40,112
7-10am	2,517	63	50	155	222	3,007	3,244	64	20	280	555	4,163	7,170
10am-1pm	2,210	25	20	114	140	2,509	2,607	31	22	126	172	2,958	5,467
1-4pm	2,781	37	36	151	166	3,171	3,141	77	32	92	208	3,550	6,721
4-7pm	3,033	20	50	141	327	3,571	3,406	30	52	84	224	3,796	7,367
7am-7pm	10,541	145	156	561	855	12,258	12,398	202	126	582	1,159	14,467	26,725

Based on 1989 Classification Survey Data:

\*\* Peak Volumes

## Hourly Vehicular Volumes Madison Avenue Bridge - 2005

	<i>Eastbound to Bronx</i>						<i>Westbound to Manhattan</i>						<b>2-Way Totals</b>
	Autos	Commuter		Commercial		Totals	Autos	Commuter		Commercial		Totals	
		Buses	Vans	Trucks	Vans			Buses	Vans	Trucks	Vans		
12-1am	---	---	---	---	---	632	---	---	---	---	---	402	1,034
1-2am	---	---	---	---	---	351	---	---	---	---	---	257	608
2-3am	---	---	---	---	---	246	---	---	---	---	---	177	423
3-4am	---	---	---	---	---	189	---	---	---	---	---	208	397
4-5am	---	---	---	---	---	225	---	---	---	---	---	332	557
5-6am	---	---	---	---	---	334	---	---	---	---	---	571	905
6-7am	---	---	---	---	---	775	---	---	---	---	---	1,371	2,146
7-8am	978	49	108	63	57	1,255	1,546	123	17	62	139	1,887	3,142
8-9am	976	67	87	51	64	1,245	1,465	121	34	77	150	1,847	3,092
9-10am	767	68	99	82	51	1,067	1,048	75	42	182	138	1,485	2,552
10-11am	812	37	49	36	45	979	945	79	26	26	85	1,161	2,140
11-12am	641	26	84	104	95	950	794	30	41	78	100	1,043	1,993
12-1pm	866	29	34	42	44	1,015	864	38	29	35	63	1,029	2,044
1-2pm	934	32	35	47	52	1,100	926	63	32	18	50	1,089	2,189
2-3pm	914	35	81	112	113	1,255	1,041	88	36	39	100	1,304	2,559
3-4pm	1,405	28	44	79	73	1,629	1,135	79	23	30	52	1,319	2,948
4-5pm	1,381	34	156	129	154	1,854	1,261	78	33	30	56	1,458	3,312
5-6pm	1,419	39	123	100	95	1,776	1,311	58	41	33	50	1,493	3,269
6-7pm	1,337	78	53	68	89	1,625	1,181	47	27	23	25	1,303	2,928
7-8pm	---	---	---	---	---	1,465	---	---	---	---	---	1,130	2,595
8-9pm	---	---	---	---	---	1,408	---	---	---	---	---	906	2,314
9-10pm	---	---	---	---	---	1,193	---	---	---	---	---	771	1,964
10-11pm	---	---	---	---	---	1,022	---	---	---	---	---	683	1,705
11-12pm	---	---	---	---	---	954	---	---	---	---	---	627	1,581
Totals	---	---	---	---	---	24,544	---	---	---	---	---	23,853	48,397
7-10am	2,721	184	294	196	172	3,567	4,059	319	93	321	427	5,219	8,786
10am-1pm	2,319	92	167	182	184	2,944	2,603	147	96	139	248	3,233	6,177
1-4pm	3,253	95	160	238	238	3,984	3,102	230	91	87	202	3,712	7,696
4-7pm	4,137	151	332	297	338	5,255	3,753	183	101	86	131	4,254	9,509
7am-7pm	12,430	522	953	913	932	15,750	13,517	879	381	633	1,008	16,418	32,168

Based on 1989 Classification Survey Data

\*\* Peak Volumes

## Hourly Vehicular Volumes Third Avenue Bridge - 2005

	<b>Northbound to Bronx</b>						<b>Southbound to Manhattan</b>						<b>2-Way Totals</b>
	Autos	Commuter Buses	Commercial Vans	Trucks	Vans	Totals	Autos	Commuter Buses	Commercial Vans	Trucks	Vans	Totals	
12-1am							---	---	---	---	---	1,018	1,018
1-2am							---	---	---	---	---	618	618
2-3am							---	---	---	---	---	522	522
3-4am							---	---	---	---	---	566	566
4-5am							---	---	---	---	---	967	967
5-6am							---	---	---	---	---	2,359	2,359
6-7am							---	---	---	---	---	4,128	4,128
7-8am							2,649	55	409	552	456	4,121	4,121
8-9am							2,404	34	238	486	506	3,668	3,668
9-10am							2,187	36	288	426	337	3,274	3,274
10-11am							2,352	29	156	151	125	2,813	2,813
11-12am							1,784	49	289	342	212	2,676	2,676
12-1pm							2,260	67	116	131	100	2,674	2,674
1-2pm							2,079	95	181	158	271	2,784	2,784
2-3pm							2,149	107	268	264	310	3,098	3,098
3-4pm							2,985	89	103	83	74	3,334	3,334
4-5pm							2,815	64	152	145	168	3,344	3,344
5-6pm							3,122	61	129	109	92	3,513	3,513
6-7pm							2,893	59	117	78	86	3,233	3,233
7-8pm							---	---	---	---	---	2,858	2,858
8-9pm							---	---	---	---	---	2,393	2,393
9-10pm							---	---	---	---	---	2,259	2,259
10-11pm							---	---	---	---	---	2,145	2,145
11-12pm							---	---	---	---	---	1,787	1,787
Totals							---	---	---	---	---	60,152	60,152
7-10am							7,240	125	935	1,464	1,299	11,063	11,063
10am-1pm							6,396	145	561	624	437	8,163	8,163
1-4pm							7,213	291	552	505	655	9,216	9,216
4-7pm							8,830	184	398	332	346	10,090	10,090
7am-7pm							29,679	745	2,446	2,925	2,737	38,532	38,532

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

Based on 1989 Classification Survey Data

\*\* Peak Volumes

## Hourly Vehicular Volumes University Heights Bridge - 2005

	<i>Eastbound to Bronx</i>						<i>Westbound to Manhattan</i>						<b>2-Way Totals</b>
	Autos	Commuter		Commercial		Totals	Autos	Commuter		Commercial		Totals	
		Buses	Vans	Trucks	Vans			Buses	Vans	Trucks	Vans		
12-1am	---	---	---	---	---	580	---	---	---	---	---	408	988
1-2am	---	---	---	---	---	361	---	---	---	---	---	295	656
2-3am	---	---	---	---	---	255	---	---	---	---	---	203	458
3-4am	---	---	---	---	---	233	---	---	---	---	---	191	424
4-5am	---	---	---	---	---	268	---	---	---	---	---	320	588
5-6am	---	---	---	---	---	378	---	---	---	---	---	695	1,073
6-7am	---	---	---	---	---	615	---	---	---	---	---	1,209	1,824
7-8am	758	53	97	47	49	1,004	1,385	22	36	40	114	1,597 **	2,601
8-9am	812	9	86	61	79	1,047	1,221	12	26	49	100	1,408	2,455
9-10am	696	9	69	79	80	933	1,145	15	18	59	116	1,353	2,286
10-11am	817	4	42	40	32	935	1,057	4	4	29	63	1,157	2,092
11-12am	739	9	77	90	45	960	1,019	8	14	64	91	1,196	2,156
12-1pm	891	15	27	31	25	989	1,130	2	6	31	54	1,223	2,212
1-2pm	938	47	46	36	28	1,095	1,232	4	5	23	41	1,305	2,400
2-3pm	964	15	82	60	57	1,178 **	1,280	12	25	57	121	1,495	2,673 **
3-4pm	1,017	17	23	30	29	1,116	1,321	46	7	29	58	1,461	2,577
4-5pm	857	4	53	40	30	984	1,356	21	19	28	100	1,524	2,508
5-6pm	983	0	62	30	45	1,120	1,429	1	17	15	63	1,525	2,645
6-7pm	896	0	55	19	56	1,026	1,347	8	12	11	63	1,441	2,467
7-8pm	---	---	---	---	---	1,174	---	---	---	---	---	1,344	2,518
8-9pm	---	---	---	---	---	1,112	---	---	---	---	---	1,132	2,244
9-10pm	---	---	---	---	---	935	---	---	---	---	---	998	1,933
10-11pm	---	---	---	---	---	829	---	---	---	---	---	857	1,686
11-12pm	---	---	---	---	---	768	---	---	---	---	---	706	1,474
Totals	---	---	---	---	---	19,895	---	---	---	---	---	25,043	44,938
7-10am	2,266	71	252	187	208	2,984	3,751	49	80	148	330	4,358	7,342
10am-1pm	2,447	28	146	161	102	2,884	3,206	14	24	124	208	3,576	6,460
1-4pm	2,919	79	151	126	114	3,389	3,833	62	37	109	220	4,261	7,650
4-7pm	2,736	4	170	89	131	3,130	4,132	30	48	54	226	4,490	7,620
7am-7pm	10,368	182	719	563	555	12,387	14,922	155	189	435	984	16,685	29,072

Based on 1989 Classification Survey Data

\*\* Peak Volumes

## Hourly Vehicular Volumes Washington Bridge - 2005

	<i>Eastbound to Bronx</i>						<i>Westbound to Manhattan</i>						<b>2-Way Totals</b>
	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	
12-1am	---	---	---	---	---	657	---	---	---	---	---	448	1,105
1-2am	---	---	---	---	---	381	---	---	---	---	---	280	661
2-3am	---	---	---	---	---	260	---	---	---	---	---	222	482
3-4am	---	---	---	---	---	223	---	---	---	---	---	209	432
4-5am	---	---	---	---	---	283	---	---	---	---	---	294	577
5-6am	---	---	---	---	---	481	---	---	---	---	---	601	1,082
6-7am	---	---	---	---	---	1,116	---	---	---	---	---	1,091	2,207
7-8am	1,786	68	38	61	131	2,084	1,224	57	109	35	25	1,450	3,534
8-9am	1,720	53	31	92	158	2,054	1,226	67	75	56	30	1,454	3,508
9-10am	1,396	46	30	110	105	1,687	1,045	36	53	40	28	1,202	2,889
10-11am	1,344	40	9	37	50	1,480	1,021	36	11	28	23	1,119	2,599
11-12am	1,204	29	17	66	76	1,392	997	47	29	31	38	1,142	2,534
12-1pm	1,199	40	18	24	58	1,339	1,131	29	10	21	16	1,207	2,546
1-2pm	1,380	34	6	35	53	1,508	1,243	31	18	20	15	1,327	2,835
2-3pm	1,367	33	25	67	79	1,571	1,324	62	47	56	44	1,533	3,104
3-4pm	1,733	41	12	34	87	1,907	1,507	47	47	47	23	1,671	3,578 **
4-5pm	1,942	46	59	71	216	2,334	1,394	40	71	86	48	1,639	3,973
5-6pm	2,284	42	63	45	120	2,554 **	1,504	30	46	34	43	1,657	4,211 **
6-7pm	2,028	26	36	27	90	2,207	1,303	36	52	18	29	1,438	3,645
7-8pm	---	---	---	---	---	2,095	---	---	---	---	---	1,411	3,506
8-9pm	---	---	---	---	---	1,733	---	---	---	---	---	1,134	2,867
9-10pm	---	---	---	---	---	1,380	---	---	---	---	---	971	2,351
10-11pm	---	---	---	---	---	1,113	---	---	---	---	---	814	1,927
11-12pm	---	---	---	---	---	1,191	---	---	---	---	---	675	1,866
Totals	---	---	---	---	---	33,030	---	---	---	---	---	24,989	58,019
7-10am	4,902	167	99	263	394	5,825	3,495	160	237	131	83	4,106	9,931
10am-1pm	3,747	109	44	127	184	4,211	3,149	112	50	80	77	3,468	7,679
1-4pm	4,480	108	43	136	219	4,986	4,074	140	112	123	82	4,531	9,517
4-7pm	6,254	114	158	143	426	7,095	4,201	106	169	138	120	4,734	11,829
7am-7pm	19,383	498	344	669	1,223	22,117	14,919	518	568	472	362	16,839	38,956

Based on 1989 Classification Survey Data

\*\* Peak Volumes

## Hourly Vehicular Volumes Willis Avenue Bridge - 2005

	<i>Northbound to Bronx</i>						<i>Southbound to Manhattan</i>						<b>2-Way Totals</b>
	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	
12-1am	---	---	---	---	---	1,977							1,977
1-2am	---	---	---	---	---	1,180							1,180
2-3am	---	---	---	---	---	776							776
3-4am	---	---	---	---	---	692							692
4-5am	---	---	---	---	---	852							852
5-6am	---	---	---	---	---	1,485							1,485
6-7am	---	---	---	---	---	2,860							2,860
7-8am	3,079	91	143	178	124	3,615							3,615
8-9am	2,806	119	104	203	247	3,479							3,479
9-10am	2,111	124	104	253	234	2,826							2,826
10-11am	2,247	52	72	168	159	2,698							2,698
11-12am	2,055	36	121	295	273	2,780							2,780
12-1pm	2,462	42	52	151	103	2,810							2,810
1-2pm	2,766	25	42	116	147	3,096							3,096
2-3pm	2,577	31	126	371	374	3,479							3,479
3-4pm	3,603	65	62	173	168	4,071							4,071
4-5pm	3,333	39	128	285	449	4,234							4,234
5-6pm	3,640	65	121	203	447	4,476 **							4,476 **
6-7pm	3,584	34	109	126	242	4,095							4,095
7-8pm	---	---	---	---	---	3,509							3,509
8-9pm	---	---	---	---	---	3,387							3,387
9-10pm	---	---	---	---	---	3,145							3,145
10-11pm	---	---	---	---	---	2,803							2,803
11-12pm	---	---	---	---	---	2,383							2,383
Totals	---	---	---	---	---	66,708							66,708
7-10am	7,996	334	351	634	605	9,920							9,920
10am-1pm	6,764	130	245	614	535	8,288							8,288
1-4pm	8,946	121	230	660	689	10,646							10,646
4-7pm	10,557	138	358	614	1,138	12,805							12,805
7am-7pm	34,263	723	1,184	2,522	2,967	41,659							41,659

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

Based on 1989 Classification Survey Data

\*\* Peak Volumes

## Hourly Vehicular Volumes 145th Street Bridge - 2005

	<i>Eastbound to Bronx</i>						<i>Westbound to Manhattan</i>						<b>2-Way Totals</b>
	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	Autos	Buses	Commuter Vans	Commercial Trucks	Vans	Totals	
12-1am	---	---	---	---	---	262	---	---	---	---	---	189	451
1-2am	---	---	---	---	---	175	---	---	---	---	---	114	289
2-3am	---	---	---	---	---	123	---	---	---	---	---	95	218
3-4am	---	---	---	---	---	92	---	---	---	---	---	90	182
4-5am	---	---	---	---	---	107	---	---	---	---	---	110	217
5-6am	---	---	---	---	---	164	---	---	---	---	---	196	360
6-7am	---	---	---	---	---	307	---	---	---	---	---	629	936
7-8am	548	26	35	35	9	653	948	44	19	41	37	1,089 **	1,742
8-9am	684	25	42	45	26	822	874	30	34	29	53	1,020	1,842
9-10am	547	12	37	58	23	677	572	19	34	27	61	713	1,390
10-11am	512	9	14	24	25	584	453	15	31	23	45	567	1,151
11-12am	480	15	28	65	42	630	409	10	41	42	49	551	1,181
12-1pm	544	12	16	39	16	627	536	10	10	8	13	577	1,204
1-2pm	570	12	32	30	17	661	574	29	11	14	8	636	1,297
2-3pm	577	17	32	99	42	767	550	21	26	25	36	658	1,425
3-4pm	797	21	22	39	27	906	717	28	8	7	10	770	1,676
4-5pm	857	14	56	96	53	1,076 **	728	16	13	8	20	785	1,861
5-6pm	871	10	50	72	65	1,068	749	16	13	9	12	799	1,867 **
6-7pm	794	25	28	21	44	912	658	21	5	3	10	697	1,609
7-8pm	---	---	---	---	---	762	---	---	---	---	---	532	1,294
8-9pm	---	---	---	---	---	689	---	---	---	---	---	460	1,149
9-10pm	---	---	---	---	---	572	---	---	---	---	---	406	978
10-11pm	---	---	---	---	---	456	---	---	---	---	---	351	807
11-12pm	---	---	---	---	---	384	---	---	---	---	---	292	676
Totals	---	---	---	---	---	13,476	---	---	---	---	---	12,326	25,802
7-10am	1,779	63	114	138	58	2,152	2,394	93	87	97	151	2,822	4,974
10am-1pm	1,536	36	58	128	83	1,841	1,398	35	82	73	107	1,695	3,536
1-4pm	1,944	50	86	168	86	2,334	1,841	78	45	46	54	2,064	4,398
4-7pm	2,522	49	134	189	162	3,056	2,135	53	31	20	42	2,281	5,337
7am-7pm	7,781	198	392	623	389	9,383	7,768	259	245	236	354	8,862	18,245

Based on 1989 Classification Survey Data

\*\* Peak Volumes

**Manhattan MTABT Facilities**  
**Average Daily Traffic Volumes**  
**1948 - 2005**

<b>Year</b>	<b>Brooklyn- Battery Tunnel</b>	<b>Henry Hudson Bridge</b>	<b>Queens- Midtown Tunnel</b>	<b>Triborough Bridge Manh. Plz.</b>	<b>Manhattan Totals</b>
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

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.

# Hourly Vehicular Volumes

## Metropolitan Transportation Authority Bridges & Tunnels 2005

	<i>Brooklyn-Battery Tunnel</i>		<i>Henry Hudson Bridge</i>		<i>Queens-Midtown Tunnel</i>		<i>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	135	414	167	630	424	1,023	376	557	1,102	2,624
1-2am	54	206	77	215	207	458	216	280	554	1,159
2-3am	45	116	52	118	124	297	118	156	339	687
3-4am	103	72	62	82	159	203	126	171	450	528
4-5am	209	105	130	90	296	322	260	385	895	902
5-6am	763	124	514	121	957	665	942	1,066	3,176	1,976
6-7am	2,161	307	2,203	551	2,403	1,177	2,799	1,758	9,566	3,793
7-8am	3,168	577	3,675	1,340	3,731	1,354	4,008	2,168	14,582 **	5,439
8-9am	3,082	689	3,354	1,589	4,113	1,254	3,807	2,168	14,356	5,700
9-10am	2,377	715	2,643	1,183	3,549	1,290	3,221	2,097	11,790	5,285
10-11am	1,575	657	2,206	1,092	2,648	1,599	2,438	1,756	8,867	5,104
11-12am	1,168	751	1,919	1,163	2,635	1,715	2,733	1,986	8,455	5,615
12-1pm	1,062	886	1,793	1,205	2,340	1,880	2,366	2,096	7,561	6,067
1-2pm	1,063	1,048	1,674	1,379	2,278	2,136	2,326	2,104	7,341	6,667
2-3pm	1,183	1,319	1,870	1,832	2,371	2,633	2,925	2,858	8,349	8,642
3-4pm	1,235	1,745	2,300	2,285	2,456	2,916	3,157	3,076 **	9,148	10,022
4-5pm	1,313	2,142	2,571	2,647	2,531	2,945 **	3,182	2,940	9,597	10,674
5-6pm	1,407	2,313 **	2,932	3,009 **	2,795	2,841	3,420	2,767	10,554	10,930 **
6-7pm	1,034	1,925	2,882	2,772	2,679	2,658	3,317	2,457	9,912	9,812
7-8pm	871	1,647	1,967	2,258	2,146	2,210	2,573	2,249	7,557	8,364
8-9pm	853	1,408	1,221	2,105	1,794	2,278	2,234	1,932	6,102	7,723
9-10pm	632	1,437	922	1,752	1,494	2,279	1,835	1,683	4,883	7,151
10-11pm	482	1,390	621	1,813	1,271	2,156	1,522	1,379	3,896	6,738
11-12pm	301	774	349	1,072	908	1,465	918	990	2,476	4,301
<b>Totals</b>	<b>26,276</b>	<b>22,767</b>	<b>38,104</b>	<b>32,303</b>	<b>46,309</b>	<b>39,754</b>	<b>50,819</b>	<b>41,079</b>	<b>161,508</b>	<b>135,903</b>
7-10am	8,627	1,981	9,672	4,112	11,393	3,898	11,036	6,433	40,728	16,424
10am-1pm	3,805	2,294	5,918	3,460	7,623	5,194	7,537	5,838	24,883	16,786
1-4pm	3,481	4,112	5,844	5,496	7,105	7,685	8,408	8,038	24,838	25,331
4-7pm	3,754	6,380	8,385	8,428	8,005	8,444	9,919	8,164	30,063	31,416
7am-7pm	19,667	14,767	29,819	21,496	34,126	25,221	36,900	28,473	120,512	89,957

\*\* Peak Volumes

**PANYNJ Manhattan - New Jersey Facilities**  
**Average Daily Traffic Volumes**  
**1948 - 2005**

<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

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

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

## Hourly Vehicular Volumes

### Port Authority of New York & New Jersey

### 2005

	<b>George Washington Bridge</b>		<b>Holland Tunnel</b>		<b>Lincoln Tunnel</b>		<b>Totals</b>	
	<i>E/B</i>	<i>W/B</i>	<i>E/B</i>	<i>W/B</i>	<i>E/B</i>	<i>W/B</i>	<b>Entering Manhattan</b>	<b>Leaving Manhattan</b>
12-1am	1,881	3,183	791	991	996	2,052	3,668	6,226
1-2am	1,361	1,851	508	671	628	1,060	2,497	3,582
2-3am	1,118	1,480	345	534	474	678	1,937	2,692
3-4am	1,285	1,274	337	543	506	585	2,128	2,402
4-5am	2,063	1,586	552	746	894	713	3,509	3,045
5-6am	5,590	2,689	1,787	1,594	2,625	1,041	10,002	5,324
6-7am	11,169 **	5,918	3,229 **	2,412	5,172 **	1,737	19,570 **	10,067
7-8am	10,571	7,876	3,021	2,930	4,859	2,166	18,451	12,972
8-9am	9,238	8,304	3,004	2,925	4,432	2,332	16,674	13,561
9-10am	8,824	7,265	2,938	2,186	4,542	2,093	16,304	11,544
10-11am	7,772	6,290	2,431	2,208	3,869	2,143	14,072	10,641
11-12am	6,873	6,303	2,032	1,986	3,331	2,370	12,236	10,659
12-1pm	6,486	6,576	1,895	1,999	2,989	2,654	11,370	11,229
1-2pm	6,326	7,177	1,904	2,583	2,808	3,035	11,038	12,795
2-3pm	6,939	8,481	2,054	3,032 **	2,882	3,912	11,875	15,425
3-4pm	7,922	10,288	2,357	2,963	3,016	4,201	13,295	17,452
4-5pm	8,852	11,155	2,702	2,783	2,543	4,915	14,097	18,853
5-6pm	9,383	11,464 **	2,909	2,716	1,946	4,772	14,238	18,952 **
6-7pm	9,039	10,674	2,840	2,860	2,287	4,987 **	14,166	18,521
7-8pm	7,230	10,033	2,516	2,719	2,640	3,948	12,386	16,700
8-9pm	5,608	8,451	1,955	2,352	2,224	3,779	9,787	14,582
9-10pm	4,945	6,896	1,804	2,555	2,075	3,657	8,824	13,108
10-11pm	4,312	5,999	1,744	2,109	2,054	3,527	8,110	11,635
11-12pm	3,074	5,228	1,313	1,595	1,668	2,638	6,055	9,461
<b>Totals</b>	<b>147,861</b>	<b>156,441</b>	<b>46,968</b>	<b>49,992</b>	<b>61,460</b>	<b>64,995</b>	<b>256,289</b>	<b>271,428</b>
7-10am	28,633	23,445	8,963	8,041	13,833	6,591	51,429	38,077
10am-1pm	21,131	19,169	6,358	6,193	10,189	7,167	37,678	32,529
1-4pm	21,187	25,946	6,315	8,578	8,706	11,148	36,208	45,672
4-7pm	27,274	33,293	8,451	8,359	6,776	14,674	42,501	56,326
7am-7pm	98,225	101,853	30,087	31,171	39,504	39,580	167,816	172,604

\*\* Peak Volumes